



2018

RIGGING GUIDE

Worldwide Edition

6YR-2819Y-E2

PREFACE

This guide is based on the latest information on 2018 model specifications available just before publication.

Throughout this guide, Global model names are given first, then followed by the unified model names in parentheses for descriptive purpose.

Unified models are for US and Canada, including F25 (6FM) and larger models for Australia and New Zealand.

In this guide, particularly important information is distinguished in the following ways.

⚠ WARNING

A WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

NOTICE

A NOTICE indicates special precautions that must be taken to avoid damage to the products or other property.

TIP:

Specifications and descriptions are subject to change without notice.

The following contracted terms are expediently used in this guide.

ASSY: assembly

DEC: Digital Electronic Remote Control

ECM: Electronic Control Module

EXT: extension

GND: ground, (–)

IG: ignition

LED: light emitting diode

MGT: management

NA: not applicable, not available

NOA: North America (US and CA)

OP: optional

P/N: part number

PTT: power trim & tilt

PWR: power

RC: remote control

STD: standard

STR: steering

SW: switch

TBD: to be determined

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INSTALLATION

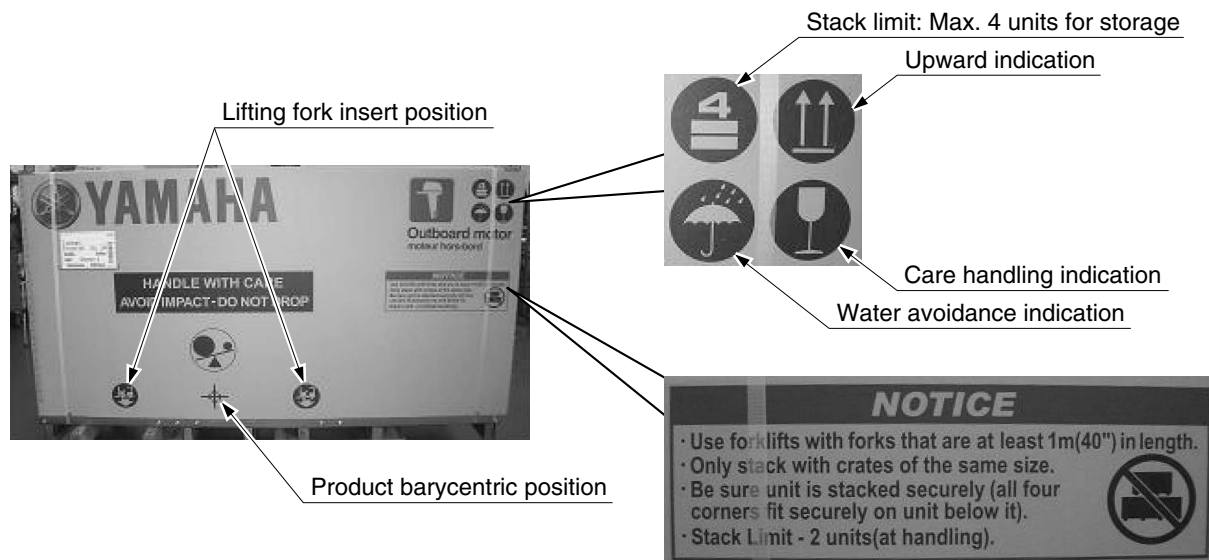
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TOP COVER PICTOGRAPH DESCRIPTION

The following pictographs and icons are important sign to handle the crate.

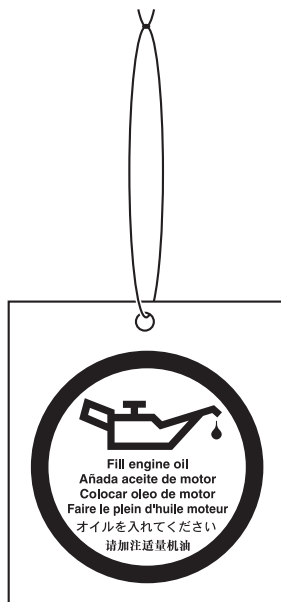
Read the NOTICE and understand what pictographs and icons mean to avoid a damage to the product when handling, transporting and/or keeping the crate.

* Photo shows F350.



ENGINE OIL REMINDER TAG (4-STROKE ENGINES)

This tag is hung around the bottom cowling or the bracket to indicate that there is no engine oil in the oil pan when the outboard motor is uncrated.



UNCRATING PROCEDURE (FOR TYPICAL STEEL FRAME)

⚠ WARNING

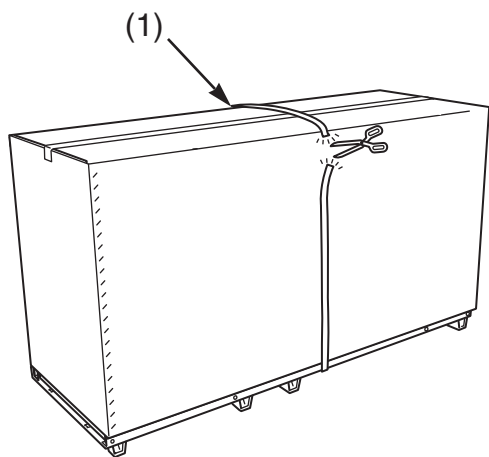
Wear gloves to avoid injury by sharp steel edges while uncrating.

This is an example of steel crate for 4-stroke V6 engines.

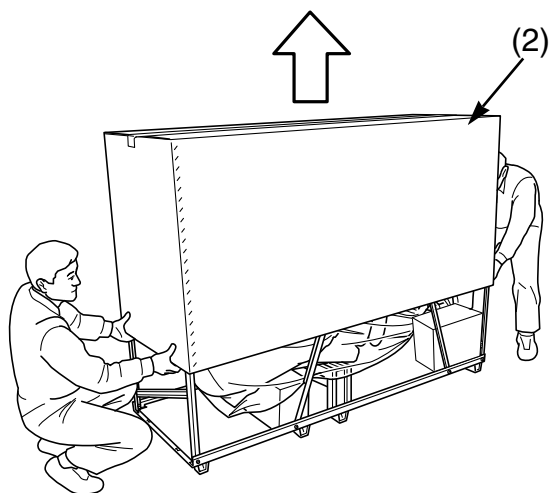
For other steel crate, refer to this procedure for uncrating.

1. Inspect the crate for shipping damage. If any damage has been found, consult your Yamaha dealer.

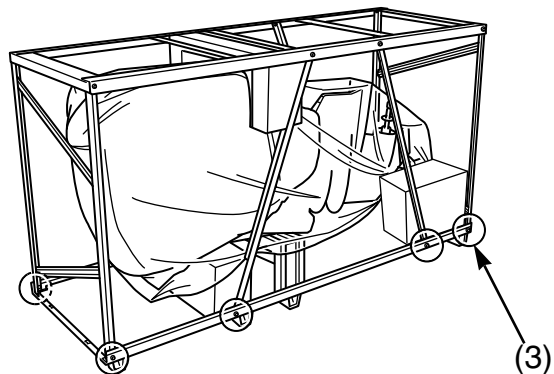
2. Cut the strap (1).



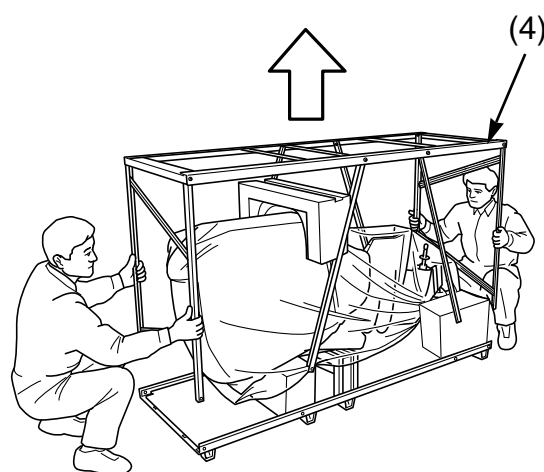
3. Lift the top cover (2) straight up to remove.



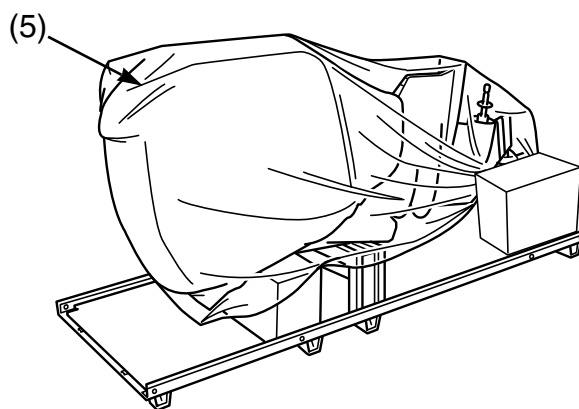
4. Remove the bottom bolts (3).



5. Lift the top frame (4) straight up.



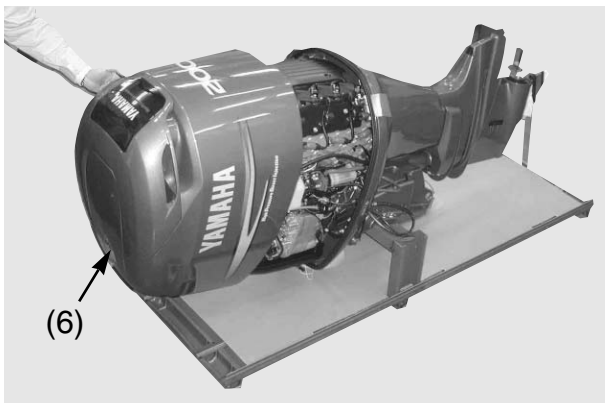
6. Remove the wrapping (5), and inspect the outboard motor for concealed damage. If any damage is found, consult your Yamaha dealer.



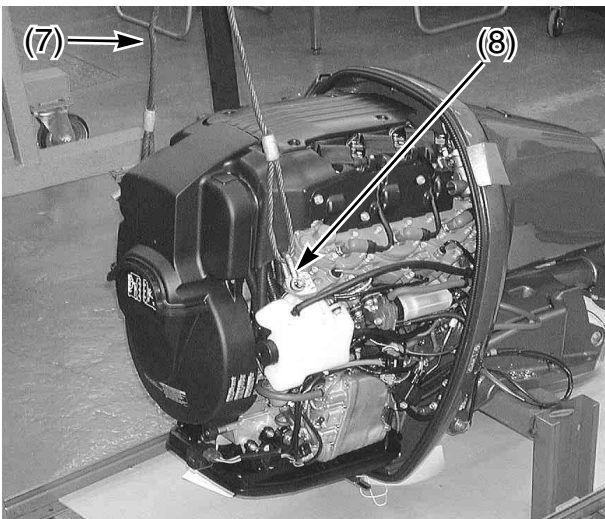
To be continued.

UNCRATING PROCEDURE (FOR TYPICAL STEEL FRAME)

7. Remove the top cowling (6).



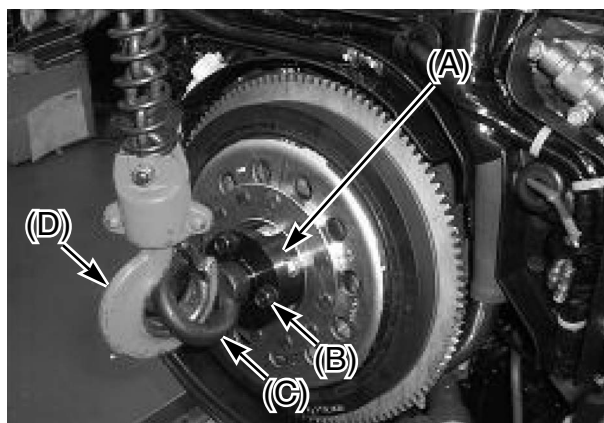
8. If the lifting points are covered by the flywheel cover, remove it.
9. Attach a lifting harness (7) securely to the lifting points (8), and tighten the harness.



For 4-stroke V8-5.3L, V6-4.2L, L4-2.8L and L4-1.8L engines, install the lifting attachment (A) to the flywheel using the exclusive 3 bolts (B), insert the eye bolt (C) to the attachment, attach a lifting harness (D) to the eye bolt, and tension the harness.



M10 bolt (B) torque:
36 Nm, 3.6 kgf·m, 27 ft·lb



* Special service tool: Lifting eye kit (P/N: 90890-06820)

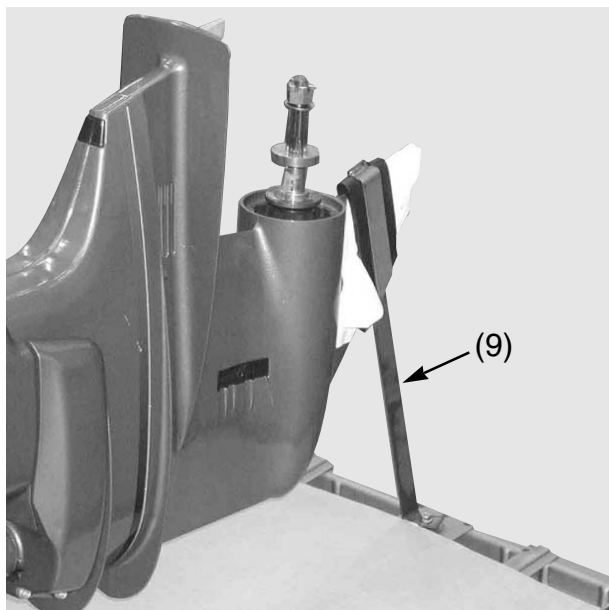
Lifting eye kit contents:



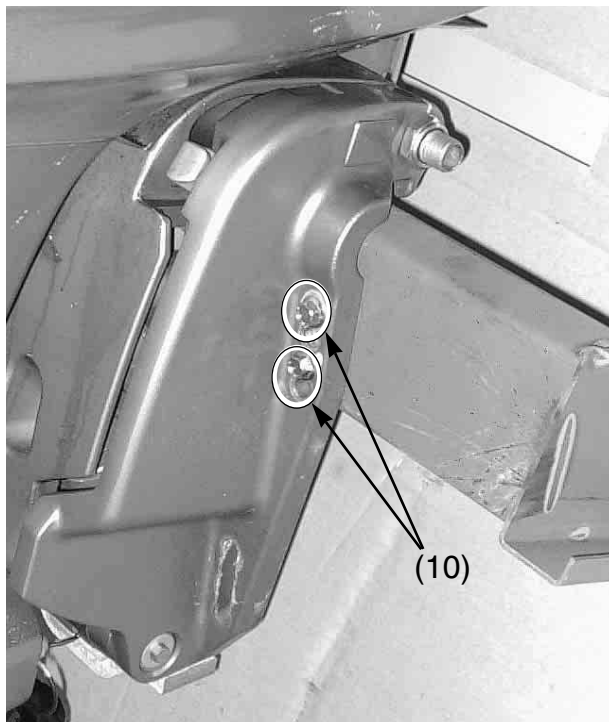
To be continued.

UNCRATING PROCEDURE (FOR TYPICAL STEEL FRAME)

10. Carefully lift up the motor with the bottom crate so that the lifting-harness does not contact the engine components. Have a helper hold the frame to avoid injury while lifting.
11. Remove the skeg holder (9) if it is attached.



12. Remove the bracket bolts (10).



MOUNTING THE OUTBOARD MOTOR

⚠ WARNING

Overpowering a boat may cause severe instability. Never install an outboard motor that exceeds the maximum boat horsepower rating capacity. If a boat does not have the capacity plate, ask to the boat manufacturer.

Proper mount of outboard motor will obtain better engine performance, product reliability, fuel economy, customer satisfaction, etc.

This chapter describes the brief summary of outboard motor mount.

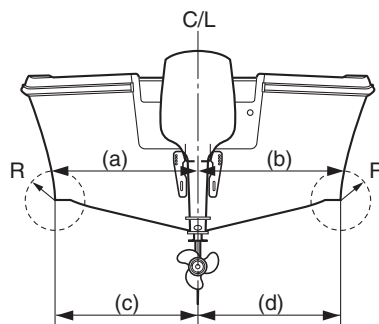
For the first requirement, make sure the outboard motor has clearance for full movement, from port to starboard, as well as during tilt operation.

For the motor dimensions, see the later pages.

1. Set an outboard motor on the vertical center line of boat transom. Measurement points are shown in the illustration.

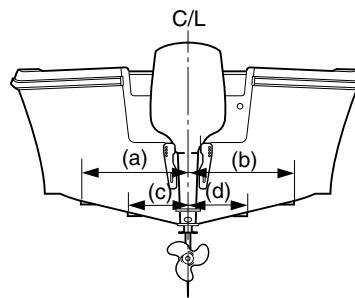
No strakes hull

Make a same radius (R) at both sides of hull, and have another measurement points.



Strakes hull

Make measurements between port and starboard strakes.



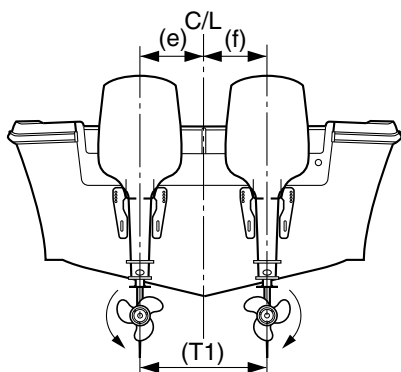
*C/L: Centerline of the transom.

To be continued.

MOUNTING THE OUTBOARD MOTOR

Recheck the measurements, and verify the boat transom vertical centerline is straight. Measurements (a) and (b) should be the same, and measurement (c) and (d) should be the same.

For twin engine application, set the engines so that the distance between the boat transom center line and the motor center line should be equal for the both engines.

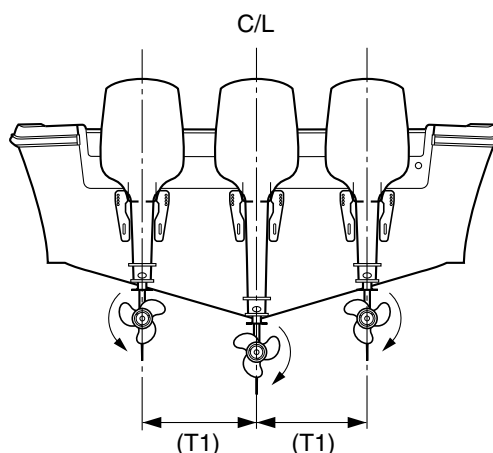


Measurements (e) and (f) should be the same. Maintain a minimum distance (T1) that is the measurement between both vertical center-lines of outboard motor.

Minimum distance (T1) is recommended on each model, and its data is put on the dimension item.

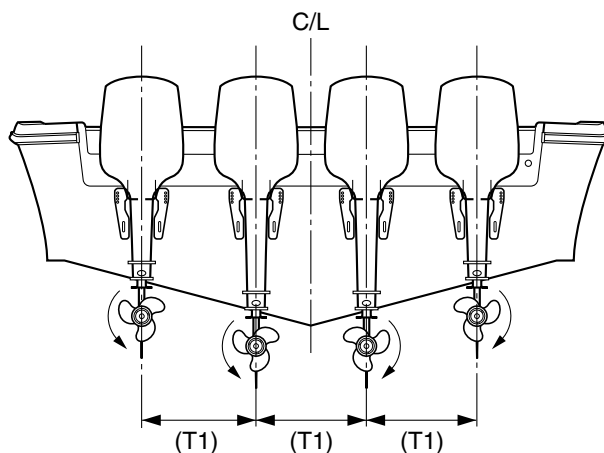
For triple engine application, set the engines as shown below.

If a boat has V-hull, the center motor should use longer transom motor than outside engines.



For quad engine application, set the engines as shown below.

If a boat has V-hull, inner twin engine should use longer transom motor than outside engines.



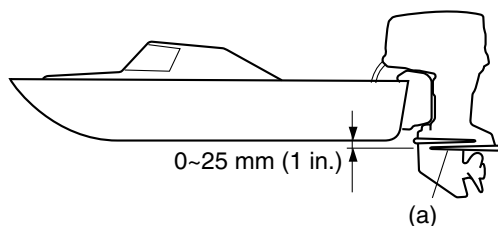
To be continued.

MOUNTING THE OUTBOARD MOTOR

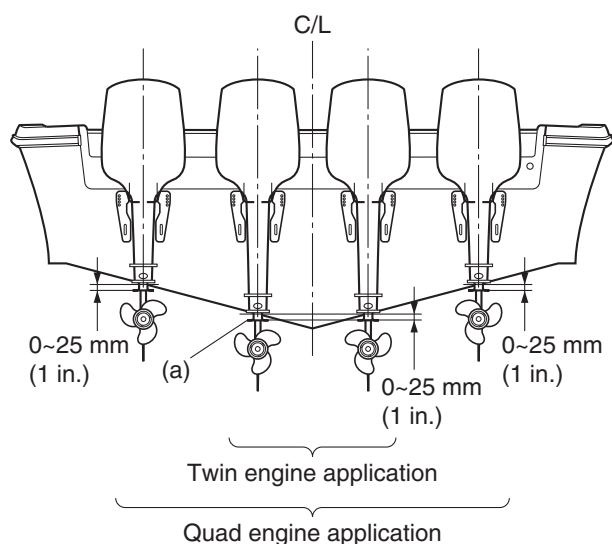
- Adjust the height of outboard motor so that the anti-cavitation plate is positioned to the boat transom bottom, or lowered within 25 mm (1 in.).

For planing boats, the anti-cavitation plate should be positioned to the boat transom bottom or slightly higher.

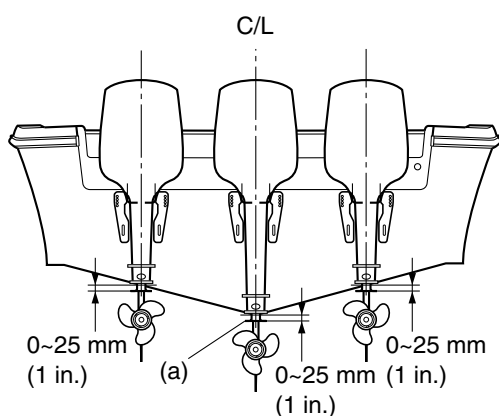
Single engine application



Twin engine application/Quad engine application



Triple engine application

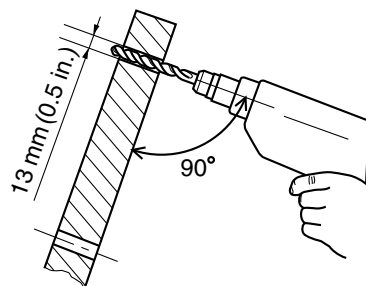


(a): Anti-cavitation plate

* Due to combination of a boat type and an engine type, the mount height of outboard motor varies. Therefore, the complete information is impossible to describe here.

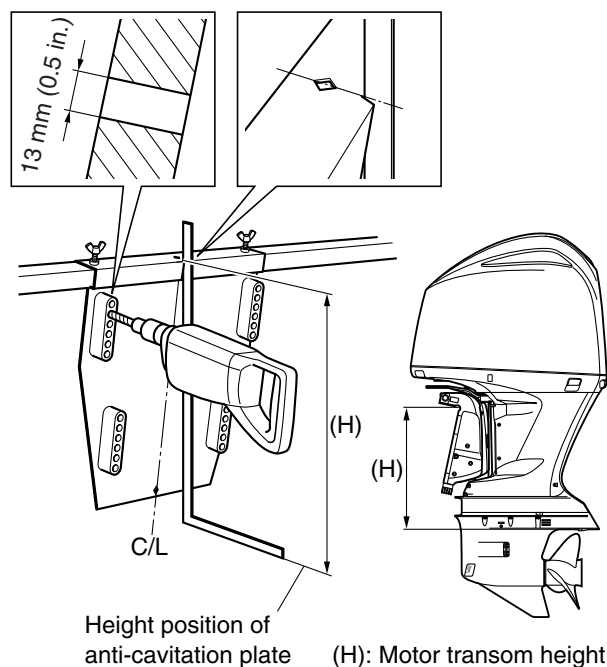
For further information, see the instructions issued by boat manufacturer, or ask to the manufacturer.

- When the outboard motor mount position has been determined, mark the 4 symmetrical mount hole positions onto the boat transom. Make the mount holes of 13 mm (0.5 in.) vertically on the marking points.



* To make the mounting holes easier, use the drilling plate (P/N: 90890-06783 or YB-34465 for US).

Ex: Drilling plate (90890-06783)



To be continued.

MOUNTING THE OUTBOARD MOTOR

4. Apply sealant to the mount holes, and secure the motor with supplied mount hardware.

For tightening procedure, first tighten the inside nut, then the double nuts each other.

NOTICE

Make sure there is no clearance between boat transom and motor clamp bracket. Otherwise, the clamp bracket could break.

TIP:

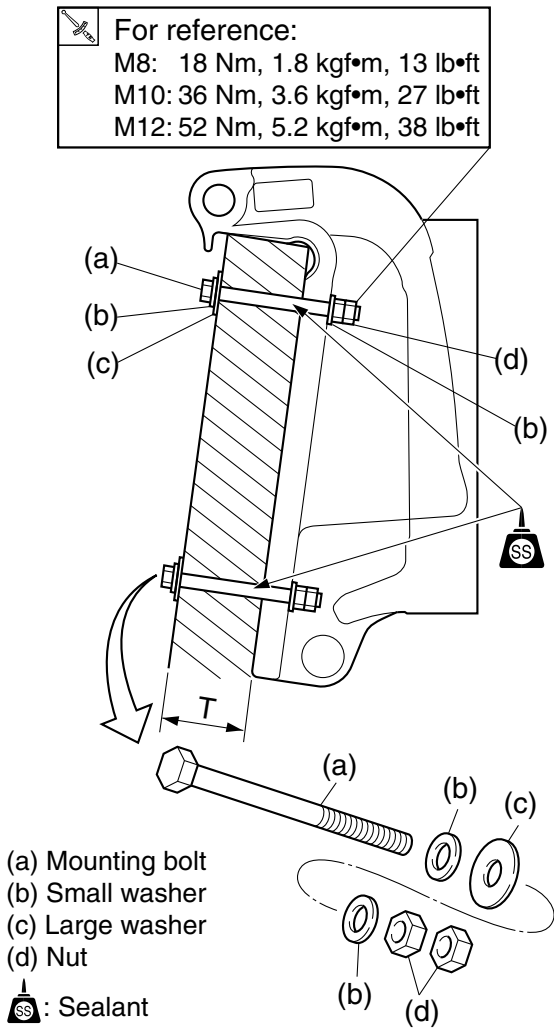
- The upper mount bolt is usually installed to the 2nd hole from top.
- Tighten the mounting bolts/nuts to suitable torque depending on the boat transom structure, material, design, etc.

For above 115 (V4) and F75, select the transom mount bolt depending on the boat transom thickness.

Boat transom thickness (T)	Mount bolt size	Bolt P/N	
– 55 mm (2.2 in.)	M12 × 85 mm	90101-12051	*
55 – 65 mm (2.2 – 2.6 in.)	M12 × 110 mm	90101-12053	*
	M12 × 115 mm	90101-12M03	
65 – 75 mm (2.6 – 3.0 in.)	M12 × 130 mm	90101-12M05	
75 – 95 mm (3.0 – 3.7 in.)	M12 × 150 mm	90101-12M77	
		90101-12031	*
95 – 115 mm (3.7 – 4.5 in.)	M12 × 170 mm	90101-12036	*
115 mm (4.5 in.) –	M12 × 180 mm	90101-12054	*
	M12 × 200 mm	90101-12055	*
	M12 × 210 mm	90101-12056	*
	M12 × 230 mm	90101-12057	*

TIP:

High-tension bolt marked (*) is recommended to V8 engine.



MOUNTING THE OUTBOARD MOTOR

WATER LEVEL GUIDELINE (4-STROKE ENGINES)

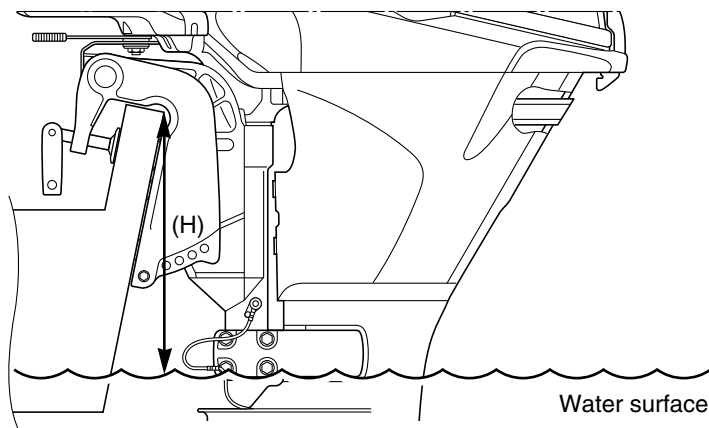
If you replaced 2-stroke engine to 4-stroke engine which has the same horse power, a boat tends to become “stern heavy” because of heavier engine weight.

As a result, water line will rise and get close to the power head.

This causes poor engine performance, and water could easily enter into the cylinder(s) and damage the engine.

Therefore, you should consider the water level guideline when installing a 4-stroke outboard motor.

When mooring a boat with a maximum boat load, maintain the minimum height (H) shown in the illustration between the water surface and the clamp bracket seating point.

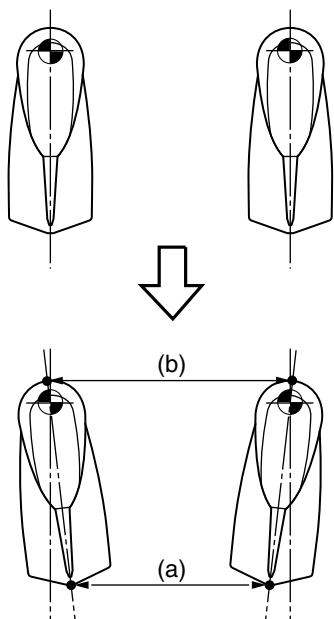


Minimum height between water surface and bracket seating point		
Model	Min. height (H)	
Carbureted F2 – F60	150 mm	5.9 in
Fuel injected F30/F40 (L3)	165 mm	6.5 in
Fuel injected F40 (L4) – F70	100 mm	3.9 in
F75 and above	100 mm	3.9 in

MOUNTING THE OUTBOARD MOTOR

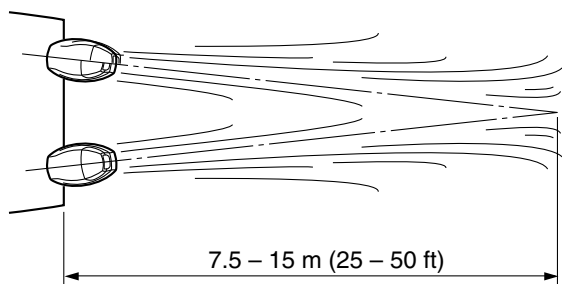
ADJUSTING TWIN ENGINES

Set the engines in the toe-out position, and measure the distances between the two engines at the center point of the rear (a) and front (b) of the lower casing. The difference between measurement (a) and measurement (b) should not exceed 25 mm (1 in.).



* Adjustment: (b) – (a) = Within 25 mm (1 in)

For best result, your toe-out distance should be set so that the twin engines wake meets approximately 7.5 – 15 m (25 – 50 ft) past the stern of the boat.



MAX. BOAT SPEED ESTIMATION

Depending on the engine power, boat length and boat weight, the maximum boat speed can be generally estimated with the calculation formula as below.

$$V = 1.398 \sqrt{L} (PS/\Delta)^{0.623}$$

V = Estimated maximum boat speed (km/h)

L = Boat length (m) *water line

PS = Prop shaft output power

Δ = Displacement volume (ton)

For example:

Boat length = 8 m (27 ft) *water line

Engine power = 250 ps

Displacement volume = 3 ton (3000 kg)

$$\text{Max. boat speed [V]} = 1.398 \sqrt{8} (250/3)^{0.623} \\ = 62.2 \text{ km/h (38.6 mph)}$$

This should be only used as a reference.

The maximum boat speed varies depending on the hull design, rigging state, passengers weight, engine weight, engine position, etc.

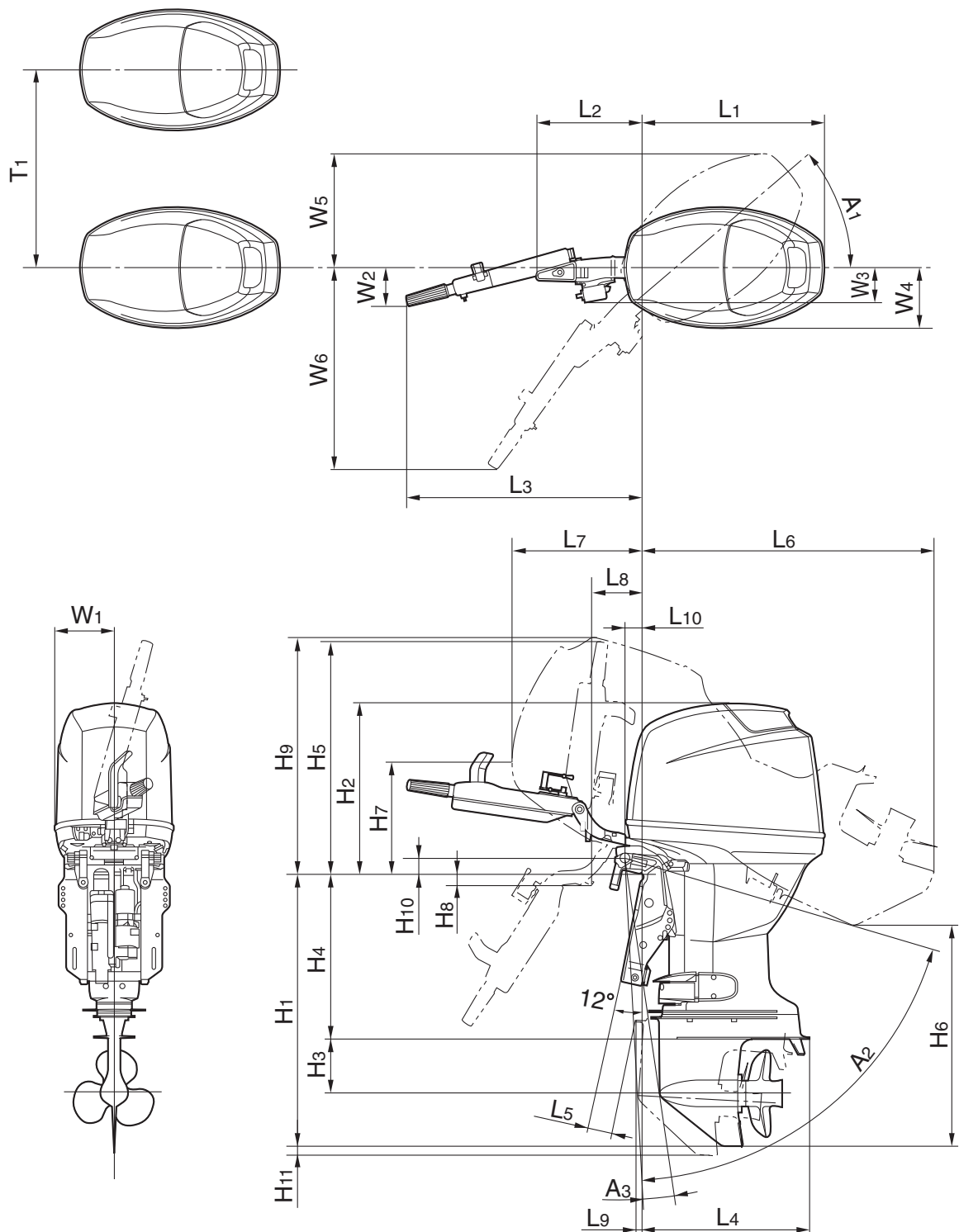
Confirm the actual boat speed by test run.

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSION ITEMS

Symbol	Definition and Description
L1	Horizontal distance from datum point to rearmost point of power unit
L2	Horizontal distance from datum point to forefront (depends on the model) of power unit
L3	Distance from datum point to farthest point on tiller handle, when the handle is in horizontal position (in use)
L4	Horizontal distance from datum point to rearmost point of the lower case
L5	Minimum distance from transom board or its extension to forefront of the lower case, with motor fully trimmed down and steered to the full
L6	Horizontal distance from datum point to rearmost point of protrusion when motor is tilted up (over-tilt position)
L7	Horizontal distance from datum point to protruded forefront when motor is tilted up (over-tilt position)
L8	Horizontal distance from datum point to lowest point of protrusion when motor is tilted up (over-tilt position)
L9	Horizontal forward protrusion of lower case from the datum line when PTT is fully trimmed down
L10	Horizontal distance from datum point to bracket shaft (bolt) center
H1	Vertical distance from datum point to lowest point of motor
H2	Vertical distance from datum point to highest point of power head
H3	Vertical distance from anti-cavitation plate undersurface to the center of propeller shaft
H4	Vertical distance from datum point to anti-cavitation plate undersurface
H5	Vertical distance from datum point to tiller handle tip when the handle is in vertical position
H6	Vertical distance from skeg tip at H1 to the lowest point of lower unit when motor is tilted up (over-tilt position)
H7	Vertical distance from datum line to protruded forefront when motor is tilted up (over-tilt position)
H8	Vertical distance from datum line to lowest point of protrusion when motor is tilted up (over-tilt position)
H9	Vertical distance to the highest point of the motor when it is tilted up (over-tilt position)
H10	Vertical distance from datum point to bracket shaft (bolt) center
H11	Difference in the height of lower unit lowest point comparing to the height in the standard position and with PTT in the fully trimmed down position
W1	Leftward protrusion from center line of motor body when looking at the front face
W2	Distance from tiller handle tip to centerline of motor body when looking at the front face
W3	Distance from centerline to left or right edge of motor body, except for levers and handles
W4	Distance from centerline to left or right end of motor body protrusion, except for levers and handles
W5	Distance from centerline to the farthest point on the body when steered to the maximum angle
W6	Distance from centerline to the farthest point on the tiller handle when steered to the maximum angle
A1	Maximum steering angle each way (symmetrical), from centerline of motor body
A2	Tilt up angle (whole rotating range to over-tilt angle including negative trim angle)
A3	Maximum negative trim angle from the vertical line through the datum point
T1	Centerline-to-centerline minimum distance of the engines in case of twin installation

OUTBOARD MOTOR DIMENSIONS
OVERALL DIMENSION ITEMS



OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (4-STROKE)

Global model (Unified model)			F2BMH F2.5BMH	(F2.5MHB) w/ EPA cap	F4BMH F5AMH F6CMH	(F4MHA) (F6MHA) w/ EPA cap	F8FWH	F8FMH (F8MHB) F9.9JMH (F9.9MHB) F9.9JEH (F9.9EHB) F9.9JWH	F9.9JE (F9.9EB)	FT8GMH FT9.9LMH (T9.9MHB) FT9.9LWH (T9.9EHB)
Symbol										
L1	mm (in)		316 (12.4)	316 (12.4)	409 (16.1)	409 (16.1)	436 (17.2)	436 (17.2)	436 (17.2)	436 (17.2)
L2	mm (in)		80 (3.1)	80 (3.1)	130 (5.1)	130 (5.1)	124 (4.9)	124 (4.9)	121 (4.8)	121 (4.8)
L3	mm (in)		309 (12.2)	309 (12.2)	341 (13.4)	341 (13.4)	547 (21.5)	547 (21.5)	—	607 (23.9)
L4	mm (in)		214 (8.4)	214 (8.4)	259 (10.2)	259 (10.2)	356 (14.0)	356 (14.0)	356 (14.0)	367 (14.4)
L5	S L X U	mm (in)	57 (2.2)	57 (2.2)	71 (2.8)	71 (2.8)	—	49 (1.9)	49 (1.9)	—
			57 (2.2)	57 (2.2)	93 (3.7)	93 (3.7)	67 (2.6)	67 (2.6)	67 (2.6)	67 (2.6)
			—	—	—	—	—	—	—	67 (2.6)
			—	—	—	—	—	—	—	—
L6	S L X U	mm (in)	633 (24.9)	633 (24.9)	635 (25.0)	635 (25.0)	—	707 (27.8)	707 (27.8)	—
			753 (29.6)	753 (29.6)	753 (29.6)	753 (29.6)	823 (32.4)	823 (32.4)	823 (32.4)	880 (34.6)
			—	—	—	—	—	—	—	943 (37.1)
			—	—	—	—	—	—	—	—
L7	mm (in)		332 (13.1)	348 (13.7)	383 (15.1)	401 (15.8)	276 (10.9)	276 (10.9)	276 (10.9)	276 (10.9)
L8	mm (in)		142 (5.6)	142 (5.6)	134 (5.3)	134 (5.3)	141 (5.6)	141 (5.6)	138 (5.4)	138 (5.4)
L9	S L X U	mm (in)	—	—	—	—	—	18 (0.7)	18 (0.7)	—
			—	—	—	—	27 (1.1)	27 (1.1)	27 (1.1)	27 (1.1)
			—	—	—	—	—	—	—	27 (1.1)
			—	—	—	—	—	—	—	—
L10	mm (in)		57 (2.2)	57 (2.2)	63 (2.5)	63 (2.5)	66 (2.6)	66 (2.6)	66 (2.6)	66 (2.6)
H1	S L X U	mm (in)	645 (25.4)	645 (25.4)	644 (25.4)	644 (25.4)	—	677 (26.7)	677 (26.7)	—
			772 (30.4)	772 (30.4)	771 (30.4)	771 (30.4)	804 (31.7)	804 (31.7)	804 (31.7)	864 (34.0)
			—	—	—	—	—	—	—	932 (36.7)
			—	—	—	—	—	—	—	—
H2	mm (in)		383 (15.1)	404 (15.9)	395 (15.6)	410 (16.1)	331 (13.0)	331 (13.0)	331 (13.0)	331 (13.0)
H3	mm (in)		102 (4.0)	102 (4.0)	104 (4.1)	104 (4.1)	123 (4.8)	123 (4.8)	123 (4.8)	157 (6.2)
H4	S L X U	mm (in)	433 (17.0)	433 (17.0)	435 (17.1)	435 (17.1)	—	431 (17.0)	431 (17.0)	—
			560 (22.0)	560 (22.0)	562 (22.1)	562 (22.1)	558 (22.0)	558 (22.0)	558 (22.0)	552 (21.7)
			—	—	—	—	—	—	—	620 (24.4)
			—	—	—	—	—	—	—	—
H5	mm (in)		470 (18.5)	470 (18.5)	430 (16.9)	430 (16.9)	614 (24.2)	614 (24.2)	—	678 (26.7)
H6	S L X U	mm (in)	551 (21.7)	551 (21.7)	555 (21.9)	555 (21.9)	—	604 (23.8)	604 (23.8)	—
			637 (25.1)	637 (25.1)	637 (25.1)	637 (25.1)	682 (26.9)	682 (26.9)	682 (26.9)	730 (28.7)
			—	—	—	—	—	—	—	771 (30.4)
			—	—	—	—	—	—	—	—
H7	mm (in)		298 (11.7)	309 (12.2)	191 (7.5)	194 (7.6)	216 (8.5)	216 (8.5)	216 (8.5)	216 (8.5)
H8	mm (in)		27 (1.1)	27 (1.1)	1 (0.0)	1 (0.0)	7 (0.3)	7 (0.3)	8 (0.3)	8 (0.3)
H9	mm (in)		419 (16.5)	419 (16.5)	503 (19.8)	503 (19.8)	527 (20.8)	527 (20.8)	527 (20.7)	609 (24.0)
H10	mm (in)		31 (1.2)	31 (1.2)	39 (1.5)	39 (1.5)	37 (1.5)	37 (1.5)	37 (1.5)	37 (1.5)
H11	S L X U	mm (in)	—	—	—	—	—	19 (0.7)	19 (0.7)	—
			—	—	—	—	19 (0.7)	19 (0.7)	19 (0.7)	19 (0.7)
			—	—	—	—	—	—	—	19 (0.7)
			—	—	—	—	—	—	—	—
W1	mm (in)		150 (5.9)	150 (5.9)	181 (7.1)	181 (7.1)	—	156 (6.1)	177 (7.0)	172 (6.8)
W2	mm (in)		213 (8.4)	213 (8.4)	222 (8.7)	222 (8.7)	188 (7.4)	188 (7.4)	—	189 (7.4)
W3	mm (in)		145 (5.7)	145 (5.7)	—	—	156 (6.1)	156 (6.1)	156 (6.1)	156 (6.1)
W4	mm (in)		145 (5.7)	145 (5.7)	153 (6.0)	153 (6.0)	156 (6.1)	156 (6.1)	156 (6.1)	156 (6.1)
W5	mm (in)		262 (10.3)	262 (10.3)	325 (12.8)	325 (12.8)	284 (11.2)	284 (11.2)	284 (11.2)	284 (11.2)
W6	mm (in)		417 (16.4)	417 (16.4)	425 (16.7)	425 (16.7)	562 (22.1)	562 (22.1)	—	603 (23.7)
A1	degree		360	360	90	90	43	43	43	43
A2	degree		79	79	69	69	71	71	71	71
A3	degree		8	8	—	—	4	4	4	4
T1	mm (in)		—	—	—	—	—	—	—	—

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (4-STROKE)

Global model (Unified model)		Symbol	FT9.9LEHP (T9.9PHB)	FT8GE FT9.9LE (T9.9EB)	FT8GEP FT9.9LEP (T9.9PB)	F9.9HMH F15CMH (F15MHA) F15CEH (F15EHA) F15CWH F20BMH (F20MHA) F20BEH (F20EHA) F20BWH F20CMH	F15CEHP (F15PHA) F20BEHP (F20PHA)	F9.9HE F15CE F20BE (F20EA) F20CE	F15CEP F20BEP (F20PA)	F25DMH (F25MHA) F25DEH (F25EHA) F25DWH
L1	mm (in)		435 (17.1)	436 (17.2)	435 (17.1)	489 (19.3)	488 (19.2)	489 (19.3)	488 (19.2)	601 (23.7)
L2	mm (in)		122 (4.8)	121 (4.8)	122 (4.8)	219 (8.6)	220 (8.7)	176 (6.9)	176 (6.9)	—
L3	mm (in)		608 (23.9)	—	—	559 (22.0)	559 (22.0)	—	—	580 (22.8)
L4	mm (in)		367 (14.4)	367 (14.4)	367 (14.4)	387 (15.2)	386 (15.2)	387 (15.2)	386 (15.2)	433 (17.0)
L5	S L X U	mm (in)	—	—	—	64 (2.5)	—	64 (2.5)	89 (3.5)	85 (3.3)
			35 (1.4)	67 (2.6)	35 (1.4)	82 (3.2)	82 (3.2)	82 (3.2)	82 (3.2)	103 (4.1)
			35 (1.4)	67 (2.6)	35 (1.4)	—	—	—	—	115 (4.5)
			—	—	—	—	—	—	—	—
L6	S L X U	mm (in)	—	—	—	730 (28.7)	—	730 (28.7)	727 (28.6)	761 (30.0)
			879 (34.6)	880 (34.6)	879 (34.6)	847 (33.3)	840 (33.1)	847 (33.3)	840 (33.1)	880 (34.6)
			941 (37.0)	943 (37.1)	941 (37.0)	—	—	—	—	960 (37.8)
			—	—	—	—	—	—	—	—
L7	mm (in)		273 (10.7)	276 (10.9)	273 (10.7)	381 (15.0)	356 (14.0)	321 (12.6)	309 (12.2)	378 (14.9)
L8	mm (in)		139 (5.5)	138 (5.4)	139 (5.5)	237 (9.3)	176 (6.9)	184 (7.2)	188 (7.4)	189 (7.4)
L9	S L X U	mm (in)	—	—	—	9 (0.4)	—	9 (0.4)	18 (0.7)	15 (0.6)
			62 (2.4)	27 (1.1)	62 (2.4)	18 (0.7)	18 (0.7)	18 (0.7)	18 (0.7)	6 (0.2)
			62 (2.4)	27 (1.1)	—	—	—	—	—	1 (0.05)
			—	—	—	—	—	—	—	—
L10	mm (in)		67 (2.6)	66 (2.6)	67 (2.6)	66 (2.6)	67 (2.6)	66 (2.6)	67 (2.6)	65 (2.6)
H1	S L X U	mm (in)	—	—	—	701 (27.6)	—	701 (27.6)	706 (27.8)	707 (27.8)
			869 (34.2)	864 (34.0)	869 (34.2)	828 (32.6)	833 (32.8)	828 (32.6)	833 (32.8)	834 (32.8)
			937 (36.9)	932 (36.7)	937 (36.9)	—	—	—	—	920 (36.2)
			—	—	—	—	—	—	—	—
H2	mm (in)		326 (12.8)	331 (13.0)	326 (12.8)	377 (14.8)	372 (14.6)	377 (14.8)	372 (14.6)	450 (17.7)
H3	mm (in)		157 (6.2)	157 (6.2)	157 (6.2)	133 (5.2)	133 (5.2)	133 (5.2)	133 (5.2)	144 (5.7)
H4	S L X U	mm (in)	—	—	—	438 (17.2)	—	438 (17.2)	443 (17.4)	423 (16.7)
			557 (21.9)	552 (21.7)	557 (21.9)	565 (22.2)	570 (22.4)	565 (22.2)	570 (22.4)	550 (21.7)
			625 (24.6)	620 (24.4)	625 (24.6)	—	—	—	—	635 (25.0)
			—	—	—	—	—	—	—	—
H5	mm (in)		673 (26.5)	—	—	570 (22.4)	566 (22.3)	—	—	—
H6	S L X U	mm (in)	—	—	—	616 (24.3)	—	616 (24.3)	574 (22.6)	667 (26.3)
			717 (28.2)	730 (28.7)	717 (28.2)	694 (27.3)	643 (25.3)	694 (27.3)	643 (25.3)	748 (29.4)
			757 (29.8)	771 (30.4)	757 (29.8)	—	—	—	—	803 (31.6)
			—	—	—	—	—	—	—	—
H7	mm (in)		213 (8.4)	216 (8.5)	273 (10.7)	399 (15.7)	414 (16.3)	218 (8.6)	230 (9.1)	258 (10.2)
H8	mm (in)		5 (0.2)	8 (0.3)	5 (0.2)	44 (1.7)	37 (1.5)	32 (1.3)	28 (1.1)	41 (1.6)
H9	mm (in)		604 (23.8)	527 (20.7)	522 (20.6)	580 (22.8)	575 (22.6)	580 (22.8)	575 (22.6)	705 (27.8)
H10	mm (in)		32 (1.3)	37 (1.5)	32 (1.3)	37 (1.5)	32 (1.3)	37 (1.5)	32 (1.3)	43 (1.7)
H11	S L X U	mm (in)	—	—	—	19 (0.7)	—	19 (0.7)	19 (0.7)	23 (0.9)
			33 (1.3)	19 (0.7)	33 (1.3)	19 (0.7)	19 (0.7)	19 (0.7)	19 (0.7)	22 (0.9)
			33 (1.3)	19 (0.7)	33 (1.3)	—	—	—	—	22 (0.9)
			—	—	—	—	—	—	—	—
W1	mm (in)		172 (6.8)	177 (7.0)	177 (7.0)	210 (8.3)	210 (8.3)	210 (8.3)	210 (8.3)	199 (7.8)
W2	mm (in)		189 (7.4)	—	—	210 (8.3)	210 (8.3)	—	—	213 (8.4)
W3	mm (in)		156 (6.1)	156 (6.1)	156 (6.1)	176 (6.9)	176 (6.9)	180 (7.1)	180 (7.1)	—
W4	mm (in)		156 (6.1)	156 (6.1)	156 (6.1)	—	—	—	—	—
W5	mm (in)		265 (10.4)	284 (11.2)	265 (10.4)	341 (13.4)	320 (12.6)	341 (13.4)	320 (12.6)	387 (15.2)
W6	mm (in)		567 (22.3)	—	—	598 (23.5)	568 (22.4)	—	—	604 (23.8)
A1	degree		38	43	38	45	40	45	40	42
A2	degree		74	71	74	71	67	71	S:63 / L:67	73
A3	degree		8	4	8	4	4	4	S:0 / L:4	4
T1	mm (in)		—	—	—	—	—	—	—	—

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (4-STROKE)

Global model (Unified model)		F25DMHD (F25MHB) F25DEHD (F25EHB) F25DWH	F25DEHT	F25DEH w/6X4 tiller handle	F25DE (F25EA)	F25DET (F25A)	F25GMH (F25MHC) F25GWH (F25WHC)	F25GE (F25WC)	F25GET (F25C)
Symbol									
L1	mm (in)	601 (23.7)	601 (23.7)	601 (23.7)	601 (23.7)	601 (23.7)	495 (19.5)	495 (19.5)	511 (20.1)
L2	mm (in)	—	—	255 (10.0)	123 (4.8)	123 (4.8)	—	138 (5.4)	122 (4.8)
L3	mm (in)	580 (22.8)	580 (22.8)	769 (30.3)	—	—	635 (25.0)	—	—
L4	mm (in)	433 (17.0)	433 (17.0)	433 (17.0)	433 (17.0)	433 (17.0)	414 (16.3)	414 (16.3)	422 (16.6)
L5	S L X U	mm (in)	—	—	103 (4.1)	—	34 (1.3)	34 (1.3)	—
			111 (4.4)	111 (4.4)	103 (4.1)	111 (4.4)	85 (3.4)	85 (3.4)	103 (4.1)
			124 (4.9)	124 (4.9)	—	—	—	—	—
			—	—	—	—	—	—	—
L6	S L X U	mm (in)	—	—	880 (34.6)	—	750 (29.5)	750 (29.5)	—
			875 (34.4)	875 (34.4)	880 (34.6)	875 (34.4)	868 (34.2)	868 (34.2)	875 (34.4)
			951 (37.4)	951 (37.4)	—	—	—	—	—
			—	—	—	—	—	—	—
L7	mm (in)	353 (13.9)	353 (13.9)	378 (14.9)	378 (14.9)	353 (13.9)	344 (13.5)	344 (13.5)	318 (12.5)
L8	mm (in)	197 (7.8)	197 (7.8)	159 (6.3)	147 (5.8)	150 (5.9)	202 (8.0)	137 (5.4)	128 (5.0)
L9	S L X U	mm (in)	—	—	6 (0.2)	—	34 (1.3)	34 (1.3)	—
			14 (0.6)	14 (0.6)	—	14 (0.6)	14 (0.6)	14 (0.6)	3.0 (0.1)
			10 (0.4)	10 (0.4)	—	—	—	—	—
			—	—	—	—	—	—	—
L10	mm (in)	65 (2.6)	65 (2.6)	65 (2.6)	65 (2.6)	65 (2.6)	66 (2.6)	66 (2.6)	65 (2.6)
H1	S L X U	mm (in)	—	—	834 (32.8)	—	707 (27.8)	707 (27.8)	—
			834 (32.8)	834 (32.8)	834 (32.8)	834 (32.8)	834 (32.8)	834 (32.8)	838 (33.0)
			920 (36.2)	920 (36.2)	—	—	—	—	—
			—	—	—	—	—	—	—
H2	mm (in)	450 (17.7)	450 (17.7)	450 (17.7)	450 (17.7)	450 (17.7)	399 (15.7)	399 (15.7)	395 (15.6)
H3	mm (in)	144 (5.7)	144 (5.7)	144 (5.7)	144 (5.7)	144 (5.7)	146 (5.8)	146 (5.8)	146 (5.8)
H4	S L X U	mm (in)	—	—	423 (16.7)	—	424 (16.7)	424 (16.7)	—
			550 (21.7)	550 (21.7)	550 (21.7)	550 (21.7)	551 (21.7)	551 (21.7)	553 (21.8)
			636 (25.0)	636 (25.0)	—	—	—	—	—
			—	—	—	—	—	—	—
H5	mm (in)	—	—	766 (30.2)	—	—	625 (24.6)	—	—
H6	S L X U	mm (in)	—	—	748 (29.4)	—	629 (24.8)	629 (24.8)	—
			665 (26.2)	665 (26.2)	748 (29.4)	665 (26.2)	708 (27.9)	708 (27.9)	667 (26.3)
			711 (28.0)	711 (28.0)	—	—	—	—	—
			—	—	—	—	—	—	—
H7	mm (in)	282 (11.1)	282 (11.1)	258 (10.2)	258 (10.2)	282 (11.1)	199 (7.8)	199 (7.8)	234 (9.2)
H8	mm (in)	26 (1.0)	26 (1.0)	47 (1.9)	12 (0.5)	22 (0.9)	39 (1.5)	11 (0.4)	10 (0.4)
H9	mm (in)	706 (27.8)	706 (27.8)	705 (27.8)	705 (27.8)	706 (27.8)	591 (23.3)	591 (23.3)	607 (23.9)
H10	mm (in)	43 (1.7)	43 (1.7)	43 (1.7)	43 (1.7)	43 (1.7)	37 (1.5)	37 (1.5)	42 (1.7)
H11	S L X U	mm (in)	—	—	22 (0.9)	—	21 (0.8)	21 (0.8)	—
			18 (0.7)	18 (0.7)	22 (0.9)	18 (0.7)	20 (0.8)	20 (0.8)	16 (0.6)
			17 (0.7)	17 (0.7)	—	—	—	—	—
			—	—	—	—	—	—	—
W1	mm (in)	199 (7.8)	199 (7.8)	199 (7.8)	199 (7.8)	199 (7.8)	189 (7.4)	189 (7.4)	189 (7.4)
W2	mm (in)	213 (8.4)	213 (8.4)	128 (5.0)	—	213 (8.4)	143 (5.6)	—	—
W3	mm (in)	—	—	—	—	—	—	—	—
W4	mm (in)	—	—	—	—	—	—	—	—
W5	mm (in)	387 (15.2)	387 (15.2)	387 (15.2)	387 (15.2)	387 (15.2)	352 (13.9)	352 (13.9)	352 (13.9)
W6	mm (in)	604 (23.8)	604 (23.8)	665 (26.2)	—	604 (23.8)	595 (23.4)	—	—
A1	degree	42	42	42	42	42	45	45	45
A2	degree	66	66	73	73	66	71	71	66
A3	degree	3	3	4	4	3	4	4	3
T1	mm (in)	—	—	—	—	—	—	—	—

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (4-STROKE)

Global model (Unified model)		Symbol	FT25FET (T25A)	F30BEHT F40FEHT	F30BEHD (F30EHA) F40FEHD (F40EHA)	F30BET (F30A) F40FET (F40A)	F40FED (F40EA)	F40HET F50HET (F50B) F60FET (F60B)	F40JMHD	F50HED
L1		mm (in)	601 (23.7)	583 (23.0)	583 (23.0)	583 (23.0)	583 (23.0)	584 (23.0)	572 (22.5)	584 (23.0)
L2		mm (in)	134 (5.3)	235 (9.3)	235 (9.3)	134 (5.3)	134 (5.3)	122 (4.8)	297 (11.7)	122 (4.8)
L3		mm (in)	—	779 (30.7)	779 (30.7)	—	—	—	669 (26.3)	—
L4		mm (in)	522 (20.6)	522 (20.6)	522 (20.6)	522 (20.6)	522 (20.6)	533 (21.0)	522 (20.6)	533 (21.0)
L5	S	mm (in)	—	—	77 (3.0)	77 (3.0)	77 (3.0)	—	—	—
	L		66 (2.6)	66 (2.6)	66 (2.6)	66 (2.6)	66 (2.6)	97 (3.8)	66 (2.6)	97 (3.8)
	X		66 (2.6)	—	66 (2.6)	66 (2.6)	—	121 (4.8)	—	—
	U		—	—	—	—	—	—	—	—
L6	S	mm (in)	—	—	816 (32.1)	817 (32.2)	816 (32.1)	—	—	—
	L		924 (36.4)	925 (36.4)	923 (36.3)	924 (36.4)	923 (36.3)	932 (36.7)	923 (36.3)	930 (36.6)
	X		1025 (40.4)	—	1024 (40.3)	1025 (40.4)	—	1036 (40.8)	—	—
	U		—	—	—	—	—	—	—	—
L7		mm (in)	338 (13.3)	345 (13.6)	342 (13.5)	345 (13.6)	342 (13.5)	417 (16.4)	397 (15.6)	406 (16.0)
L8		mm (in)	158 (6.2)	177 (7.0)	178 (7.0)	158 (6.2)	158 (6.2)	147 (5.8)	297 (11.7)	148 (5.8)
L9	S	mm (in)	—	—	29 (1.1)	29 (1.1)	29 (1.1)	—	—	—
	L		29 (1.1)	29 (1.1)	29 (1.1)	29 (1.1)	29 (1.1)	0 (0.0)	29 (1.1)	0 (0.0)
	X		29 (1.1)	—	29 (1.1)	29 (1.1)	—	0 (0.0)	—	—
	U		—	—	—	—	—	—	—	—
L10		mm (in)	65 (2.6)	65 (2.6)	65 (2.6)	65 (2.6)	65 (2.6)	62 (2.4)	65 (2.6)	62 (2.4)
H1	S	mm (in)	—	—	757 (29.8)	757 (29.8)	757 (29.8)	—	—	—
	L		879 (34.6)	879 (34.6)	879 (34.6)	879 (34.6)	879 (34.6)	870 (34.3)	879 (34.6)	870 (34.3)
	X		993 (39.1)	—	993 (39.1)	993 (39.1)	—	984 (38.7)	—	—
	U		—	—	—	—	—	—	—	—
H2		mm (in)	433 (17.0)	471 (18.5)	471 (18.5)	471 (18.5)	471 (18.5)	545 (21.5)	493 (19.4)	545 (21.5)
H3		mm (in)	175 (6.9)	175 (6.9)	175 (6.9)	175 (6.9)	175 (6.9)	175 (6.9)	175 (6.9)	175 (6.9)
H4	S	mm (in)	—	—	414 (16.3)	414 (16.3)	414 (16.3)	—	—	—
	L		536 (21.1)	536 (21.1)	536 (21.1)	536 (21.1)	536 (21.1)	527 (20.7)	536 (21.1)	527 (20.7)
	X		650 (25.6)	—	650 (25.6)	650 (25.6)	—	641 (25.2)	—	—
	U		—	—	—	—	—	—	—	—
H5		mm (in)	—	770 (30.3)	770 (30.3)	—	—	—	550 (21.7)	—
H6	S	mm (in)	—	—	594 (23.4)	606 (23.9)	594 (23.4)	—	—	—
	L		667 (26.3)	667 (26.3)	660 (26.0)	667 (26.3)	660 (26.0)	708 (27.9)	660 (26.0)	682 (26.9)
	X		728 (28.7)	—	720 (28.3)	728 (28.7)	—	774 (30.5)	—	—
	U		—	—	—	—	—	—	—	—
H7		mm (in)	274 (10.8)	306 (12.0)	304 (12.0)	306 (12.0)	304 (12.0)	354 (13.9)	209 (8.2)	354 (13.9)
H8		mm (in)	14 (0.6)	44 (1.7)	43 (1.7)	14 (0.6)	15 (0.6)	22 (0.9)	94 (3.7)	25 (1.0)
H9		mm (in)	698 (27.5)	695 (27.4)	695 (27.4)	695 (27.4)	695 (27.4)	759 (29.9)	728 (28.7)	762 (30.0)
H10		mm (in)	43 (1.7)	43 (1.7)	43 (1.7)	43 (1.7)	43 (1.7)	49 (1.9)	43 (1.7)	49 (1.9)
H11	S	mm (in)	—	—	19 (0.7)	19 (0.7)	19 (0.7)	—	—	—
	L		19 (0.7)	19 (0.7)	19 (0.7)	19 (0.7)	19 (0.7)	24 (0.9)	19 (0.7)	24 (0.9)
	X		19 (0.7)	—	19 (0.7)	19 (0.7)	—	24 (0.9)	—	—
	U		—	—	—	—	—	—	—	—
W1		mm (in)	199 (7.8)	192 (7.6)	192 (7.6)	192 (7.6)	192 (7.6)	192 (7.6)	189 (7.4)	192 (7.6)
W2		mm (in)	—	128 (5.0)	128 (5.0)	—	—	—	162 (6.4)	—
W3		mm (in)	—	—	—	—	—	—	—	—
W4		mm (in)	—	—	—	—	—	—	—	—
W5		mm (in)	376 (14.8)	364 (14.3)	364 (14.3)	364 (14.3)	364 (14.3)	360 (14.2)	358 (14.1)	360 (14.2)
W6		mm (in)	—	654 (25.7)	654 (25.7)	—	—	—	612 (24.1)	—
A1		degree	40	40	40	40	40	40	40	40
A2		degree	66	66	65	66	65	69	65	67
A3		degree	3	3	3	3	3	4	3	4
T1		mm (in)	—	—	—	—	—	560 (22.0)	—	560 (22.0)

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (4-STROKE)

Global model (Unified model)		Symbol	F50DET	F50HEHD	F50HEHT (F50HB) F60FEHT (F60HB)	FT50JET (T50B) FT60GET (T60B)	FT50CET	FT60GEHT	FT50CEHD	FT60GEHD
L1	mm (in)		576 (22.7)	584 (23.0)	584 (23.0)	584 (23.0)	576 (22.7)	584 (23.0)	576 (22.7)	584 (23.0)
L2	mm (in)		142 (5.6)	225 (8.9)	225 (8.9)	122 (4.8)	142 (5.6)	225 (8.9)	272 (10.7)	225 (8.9)
L3	mm (in)		—	788 (31.0)	788 (31.0)	—	—	788 (31.0)	797 (31.2)	778 (30.6)
L4	mm (in)		532 (20.9)	533 (21.0)	533 (21.0)	561 (22.1)	560 (22.1)	561 (22.1)	560 (22.1)	561 (22.1)
L5	S L X U	mm (in)	—	—	—	—	—	—	—	—
			97 (3.8)	97 (3.8)	97 (3.8)	98 (3.9)	98 (3.9)	98 (3.9)	98 (3.9)	67 (2.6)
			—	—	—	114 (4.5)	85 (3.4)	—	85.0 (3.35)	98 (3.9)
			—	—	—	—	—	—	—	—
L6	S L X U	mm (in)	—	—	—	—	—	—	—	—
			933 (36.7)	930 (36.6)	932 (36.7)	996 (39.2)	991 (39.0)	996 (39.2)	989 (38.9)	995 (39.2)
			—	—	—	1099 (43.3)	1095 (43.1)	—	1092 (43.0)	1097 (43.2)
			—	—	—	—	—	—	—	—
L7	mm (in)		407 (16.0)	406 (16.0)	417 (16.4)	417 (16.4)	407 (16.0)	417 (16.4)	397 (15.6)	407 (16.0)
L8	mm (in)		148 (5.8)	168 (6.6)	165 (6.5)	147 (5.8)	148 (5.8)	165 (6.5)	189 (7.2)	168 (6.6)
L9	S L X U	mm (in)	—	—	—	—	—	—	—	—
			0.6 (0.02)	0 (0.0)	0 (0.0)	0 (0.0)	1.0 (0.04)	0 (0.0)	0.8 (0.03)	0 (0.0)
			—	—	0 (0.0)	0 (0.0)	16.0 (0.63)	0 (0.0)	16 (0.63)	0 (0.0)
			—	—	—	—	—	—	—	—
L10	mm (in)		63 (2.5)	62 (2.4)	62 (2.4)	62 (2.4)	63 (2.5)	62 (2.4)	63 (2.5)	62 (2.4)
H1	S L X U	mm (in)	—	—	—	—	—	—	—	—
			876 (34.5)	870 (34.3)	870 (34.3)	910 (35.8)	917 (36.1)	910 (35.8)	917 (36.1)	910 (35.8)
			—	—	—	1024 (40.3)	1026 (40.4)	—	1026 (40.4)	1025 (40.4)
			—	—	—	—	—	—	—	—
H2	mm (in)		519 (20.4)	545 (21.5)	545 (21.5)	545 (21.5)	519 (20.4)	545 (21.5)	519 (20.4)	545 (21.5)
H3	mm (in)		175 (6.9)	175 (6.9)	175 (6.9)	191 (7.5)	194 (7.6)	191 (7.5)	194 (7.6)	191 (7.5)
H4	S L X U	mm (in)	—	—	—	—	—	—	—	—
			533 (21.0)	527 (20.7)	527 (20.7)	530 (20.9)	536 (21.1)	530 (20.9)	533 (21.0)	530 (20.9)
			—	—	—	644 (25.4)	645 (25.4)	—	645 (25.4)	644 (25.4)
			—	—	—	—	—	—	—	—
H5	mm (in)		—	790 (31.1)	790 (31.1)	—	—	790 (31.1)	680 (26.8)	790 (31.1)
H6	S L X U	mm (in)	—	—	—	—	—	—	—	—
			711 (28.0)	682 (26.9)	708 (27.9)	746 (29.4)	750 (29.5)	746 (29.4)	723 (28.5)	720 (28.3)
			—	—	—	812 (32.0)	813 (32.0)	—	783 (30.8)	782 (30.8)
			—	—	—	—	—	—	—	—
H7	mm (in)		327 (12.9)	354 (13.9)	354 (13.9)	354 (13.9)	327 (12.9)	354 (13.9)	330 (13.0)	354 (13.9)
H8	mm (in)		3.5 (0.14)	33 (1.3)	37 (1.5)	22 (0.9)	3.5 (0.14)	37 (1.5)	110 (4.3)	34 (1.3)
H9	mm (in)		733 (28.9)	713 (28.1)	759 (29.9)	759 (29.9)	733 (28.9)	759 (29.9)	738 (29.1)	763 (30.0)
H10	mm (in)		44 (1.7)	49 (1.9)	49 (1.9)	49 (1.9)	44 (1.7)	49 (1.9)	44 (1.7)	49 (1.9)
H11	S L X U	mm (in)	—	—	—	—	—	—	—	—
			24 (0.9)	24 (0.9)	24 (0.9)	24 (0.9)	28 (1.1)	24 (0.9)	28 (1.1)	29 (1.1)
			—	—	—	24 (0.9)	27 (1.0)	—	27 (1.0)	24 (0.9)
			—	—	—	—	—	—	—	—
W1	mm (in)		181 (7.1)	192 (7.6)	192 (7.6)	192 (7.6)	181 (7.1)	192 (7.6)	181 (7.1)	192 (7.6)
W2	mm (in)		—	137 (5.4)	137 (5.4)	—	—	137 (5.4)	213 (8.4)	137 (5.4)
W3	mm (in)		181 (7.1)	—	—	—	181 (7.1)	—	181 (7.13)	—
W4	mm (in)		—	—	—	—	—	—	—	—
W5	mm (in)		345 (13.6)	360 (14.2)	360 (14.2)	360 (14.2)	345 (13.6)	360 (14.2)	345 (13.6)	360 (14.2)
W6	mm (in)		—	672 (26.5)	672 (26.5)	—	—	672 (26.5)	738 (29.1)	672 (26.5)
A1	degree		40	40	40	40	40	40	40	40
A2	degree		65	67	69	69	65	69	63	67
A3	degree		4	4	4	4	4	4	4	4
T1	mm (in)		560 (22.0)	—	—	560 (22.0)	560 (22.0)	—	—	—

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (4-STROKE)

Global model (Unified model)		Symbol	F70AET (F70A) F40GET	F70AET (F70A) F40GET w/6X4 tiller handle	F80BET F90BET F100DET	F80BET F90BET F100DET w/6X4 tiller handle	F75DET (F75B) F80DET F90CET (F90B) F90DET (VF90A) F100FET	F75DET (F75B) F80DET F90CET (F90B) F90DET (VF90A) F100FET w/6X4 tiller handle	F75CED	F75CEHD F100BEHT F100BEHD
L1	mm (in)		591 (23.3)	591 (23.3)	651 (25.6)	651 (25.6)	683 (26.9)	683 (26.9)	664 (26.1)	664 (26.1)
L2	mm (in)		122 (4.8)	225 (8.9)	171 (6.7)	247 (9.7)	120 (4.7)	300 (11.8)	161 (6.3)	324 (12.8)
L3	mm (in)		—	788 (31.0)	—	822 (32.4)	—	864 (34.0)	—	844 (33.2)
L4	mm (in)		582 (22.9)	582 (22.9)	574 (22.6)	574 (22.6)	631 (24.8)	631 (24.8)	631 (24.8)	631 (24.8)
L5	S L X U	mm (in)	—	—	—	—	—	—	—	—
			67 (2.6)	67 (2.6)	63 (2.5)	63 (2.5)	63 (2.5)	63 (2.5)	79 (3.1)	79 (3.1)
			67 (2.6)	67 (2.6)	63 (2.5)	63 (2.5)	81 (3.2)	81 (3.2)	87 (3.4)	87 (3.4)
			—	—	—	—	—	—	—	—
L6	S L X U	mm (in)	—	—	—	—	—	—	—	—
			1000 (39.4)	1000 (39.4)	998 (39.3)	998 (39.3)	1006 (39.6)	1006 (39.6)	1005 (39.6)	1005 (39.6)
			1103 (43.4)	1103 (43.4)	1115 (43.9)	1115 (43.9)	1122 (44.2)	1122 (44.2)	1118 (44.0)	1118 (44.0)
			—	—	—	—	—	—	—	—
L7	mm (in)		421 (16.6)	421 (16.6)	527 (20.7)	527 (20.7)	544 (21.4)	544 (21.4)	504 (19.8)	504 (19.8)
L8	mm (in)		152 (6.0)	165 (6.5)	164 (6.5)	108 (4.3)	135 (5.3)	121 (4.8)	168 (6.6)	208 (8.2)
L9	S L X U	mm (in)	—	—	—	—	—	—	—	—
			26 (1.0)	26 (1.0)	28 (1.1)	28 (1.1)	32 (1.3)	32 (1.3)	19 (0.7)	19 (0.7)
			26 (1.0)	26 (1.0)	28 (1.1)	28 (1.1)	41 (1.6)	41 (1.6)	15 (0.6)	15 (0.6)
			—	—	—	—	—	—	—	—
L10	mm (in)		62 (2.4)	62 (2.4)	62 (2.4)	62 (2.4)	75 (3.0)	75 (3.0)	75 (3.0)	75 (3.0)
H1	S L X U	mm (in)	—	—	—	—	—	—	—	—
			915 (36.0)	915 (36.0)	917 (36.1)	917 (36.1)	929 (36.6)	929 (36.6)	929 (36.6)	929 (36.6)
			1029 (40.5)	1029 (40.5)	1044 (41.1)	1044 (41.1)	1056 (41.6)	1056 (41.6)	1056 (41.6)	1056 (41.6)
			—	—	—	—	—	—	—	—
H2	mm (in)		561 (22.1)	561 (22.1)	666 (26.2)	666 (26.2)	693 (27.3)	693 (27.3)	667 (26.3)	667 (26.3)
H3	mm (in)		191 (7.5)	191 (7.5)	191 (7.5)	191 (7.5)	191 (7.5)	191 (7.5)	191 (7.5)	191 (7.5)
H4	S L X U	mm (in)	—	—	—	—	—	—	—	—
			534 (21.0)	534 (21.0)	536 (21.1)	536 (21.1)	516 (20.3)	516 (20.3)	516 (20.3)	516 (20.3)
			648 (25.5)	648 (25.5)	663 (26.1)	663 (26.1)	643 (25.3)	643 (25.3)	643 (25.3)	643 (25.3)
			—	—	—	—	—	—	—	—
H5	mm (in)		—	790 (31.1)	—	784 (30.9)	—	782 (30.8)	—	764 (30.1)
H6	S L X U	mm (in)	—	—	—	—	—	—	—	—
			749 (29.5)	749 (29.5)	766 (30.2)	766 (30.2)	764 (30.1)	764 (30.1)	709 (27.9)	709 (27.9)
			815 (32.1)	815 (32.1)	842 (33.1)	842 (33.1)	840 (33.1)	840 (33.1)	776 (30.6)	776 (30.6)
			—	—	—	—	—	—	—	—
H7	mm (in)		371 (14.6)	371 (14.6)	366 (14.4)	366 (14.4)	476 (18.7)	476 (18.7)	401 (15.8)	401 (15.8)
H8	mm (in)		26 (1.0)	37 (1.5)	27 (1.1)	49 (1.9)	15 (0.6)	53 (2.1)	4 (0.2)	93 (3.7)
H9	mm (in)		741 (29.2)	741 (29.2)	857 (33.7)	857 (33.7)	878 (34.6)	878 (34.6)	892 (35.1)	892 (35.1)
H10	mm (in)		49 (1.9)	49 (1.9)	49 (1.9)	49 (1.9)	45 (1.8)	45 (1.8)	44 (1.7)	44 (1.7)
H11	S L X U	mm (in)	—	—	—	—	—	—	—	—
			29 (1.1)	29 (1.1)	25 (1.0)	25 (1.0)	31 (1.2)	31 (1.2)	17 (0.7)	17 (0.7)
			29 (1.1)	29 (1.1)	24 (0.9)	24 (0.9)	31 (1.2)	31 (1.2)	17 (0.7)	17 (0.7)
			—	—	—	—	—	—	—	—
W1	mm (in)		193 (7.6)	193 (7.6)	240 (9.4)	240 (9.4)	244 (9.6)	244 (9.6)	243 (9.6)	243 (9.6)
W2	mm (in)		—	137 (5.4)	—	137 (5.4)	—	137 (5.4)	—	96 (3.8)
W3	mm (in)		—	—	—	—	—	—	—	—
W4	mm (in)		—	—	—	—	—	—	—	—
W5	mm (in)		363 (14.3)	363 (14.3)	405 (15.9)	405 (15.9)	411 (16.2)	411 (16.2)	384 (15.1)	384 (15.1)
W6	mm (in)		—	676 (26.6)	—	633 (24.9)	—	665 (26.2)	—	578 (22.8)
A1	degree		40	40	35	35	35	35	30	30
A2	degree		65	65	70	70	70	70	64	64
A3	degree		4	4	4	4	4	4	3	3
T1	mm (in)		560 (22.0)	—	660 (26.0)	—	—	—	660 (26.0)	—

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (4-STROKE)

Global model (Unified model)		Symbol		F100BET	F/FL115BET (F/LF115B) F115CET (VF115A) F125AET F130AET (F130A)	F115BEHT	F/FL150DET (F/LF150B) F/FL150FET	F150CET (VF150LA) F165AET F175BET (VF175LA) F185AET L-transom	F150CET (VF150XA) X-transom	F/FL150GET (F/LF150CA) F/FL175CET (F/LF175CA) F175AET (F175A) F/FL200FET (F/LF200B) F/FL200GET (F/LF200CA)	F/FL200CET (F/LF200A) F/FL225BET (F/LF225A) F/FL250AET (F/LF250A) F/FL200BET F/FL250HET
L1	mm (in)			664 (26.1)	690 (27.2)	690 (27.2)	722 (28.4)	722 (28.4)	722 (28.4)	722 (28.4)	651 (25.6)
L2	mm (in)			161 (6.3)	136 (5.4)	300 (11.8)	198 (7.8)	198 (7.8)	198 (7.8)	198 (7.8)	219 (8.6)
L3	mm (in)			—	—	—	—	—	—	—	—
L4	mm (in)			631 (24.8)	631 (24.8)	631 (24.8)	646 (25.4)	646 (25.4)	646 (25.4)	646 (25.4)	673 (26.5)
L5	S L X U	mm (in)		—	—	—	—	—	—	—	—
				69 (2.7)	63 (2.5)	63 (2.5)	60 (2.4)	53 (2.1)	—	53 (2.1)	—
				76 (3.0)	81 (3.2)	81 (3.2)	80 (3.2)	—	63 (2.5)	63 (2.5)	59 (2.3)
				—	—	—	—	—	—	—	59 (2.3)
L6	S L X U	mm (in)		—	—	—	—	—	—	—	—
				1005 (39.6)	1006 (39.6)	1006 (39.6)	1032 (40.6)	1033 (40.7)	—	1033 (40.7)	—
				1122 (44.2)	1122 (44.2)	1122 (44.2)	1148 (45.2)	—	1149 (45.2)	1149 (45.2)	1115 (45.5)
				—	—	—	—	—	—	—	1272 (50.1)
L7	mm (in)			536 (21.9)	561 (22.1)	561 (22.1)	639 (25.2)	639 (25.2)	639 (25.2)	639 (25.2)	619 (24.4)
L8	mm (in)			158 (6.2)	135 (5.3)	121 (4.8)	163 (6.4)	163 (6.4)	163 (6.4)	163 (6.4)	230 (9.1)
L9	S L X U	mm (in)		—	—	—	—	—	—	—	—
				25 (1.0)	32 (1.3)	32 (1.3)	35 (1.4)	42 (1.7)	—	42 (1.7)	—
				25 (1.0)	41 (1.6)	41 (1.6)	43 (1.7)	—	51 (2.0)	51 (2.0)	52 (2.0)
				—	—	—	—	—	—	—	59 (2.3)
L10	mm (in)			75 (3.0)	75 (3.0)	75 (3.0)	75 (3.0)	75 (3.0)	75 (3.0)	75 (3.0)	75 (3.0)
H1	S L X U	mm (in)		—	—	—	—	—	—	—	—
				929 (36.6)	929 (36.6)	929 (36.6)	946 (37.2)	946 (37.2)	—	946 (37.2)	—
				1056 (41.6)	1056 (41.6)	1056 (41.6)	1073 (42.2)	—	1073 (42.2)	1073 (42.2)	1078 (42.4)
				—	—	—	—	—	—	—	1205 (47.4)
H2	mm (in)			666 (26.2)	700 (27.6)	700 (27.6)	796 (31.3)	796 (31.3)	796 (31.3)	796 (31.3)	752 (29.6)
H3	mm (in)			191 (7.5)	191 (7.5)	191 (7.5)	210 (8.3)	210 (8.3)	210 (8.3)	210 (8.3)	216 (8.5)
H4	S L X U	mm (in)		—	—	—	—	—	—	—	—
				516 (20.3)	516 (20.3)	516 (20.3)	516 (20.3)	516 (20.3)	—	516 (20.3)	—
				643 (25.3)	643 (25.3)	643 (25.3)	643 (25.3)	—	643 (25.3)	643 (25.3)	643 (25.3)
				—	—	—	—	—	—	—	770 (30.3)
H5	mm (in)			—	—	782 (30.8)	—	—	—	—	—
H6	S L X U	mm (in)		—	—	—	—	—	—	—	—
				776 (30.6)	764 (30.1)	764 (30.1)	787 (31.0)	774 (30.5)	—	774 (30.5)	—
				854 (33.6)	840 (33.1)	840 (33.1)	864 (34.0)	—	849 (33.4)	849 (33.4)	847 (33.3)
				—	—	—	—	—	—	—	924 (36.4)
H7	mm (in)			388 (15.3)	429 (16.9)	429 (16.9)	501 (19.7)	501 (19.7)	501 (19.7)	501 (19.7)	387 (15.2)
H8	mm (in)			14 (0.6)	15 (0.6)	53 (2.1)	14 (0.6)	14 (0.6)	14 (0.6)	14 (0.6)	39 (1.5)
H9	mm (in)			877 (34.5)	877 (34.5)	877 (34.5)	928 (36.5)	928 (36.5)	928 (36.5)	928 (36.5)	902 (35.5)
H10	mm (in)			44 (1.7)	45 (1.8)	45 (1.8)	45 (1.8)	45 (1.8)	45 (1.8)	45 (1.8)	45 (1.8)
H11	S L X U	mm (in)		—	—	—	—	—	—	—	—
				25 (1.0)	31 (1.2)	31 (1.2)	27 (1.1)	33 (1.3)	—	33 (1.3)	—
				25 (1.0)	31 (1.2)	31 (1.2)	27 (1.1)	—	32 (1.3)	32 (1.3)	25 (1.0)
				—	—	—	—	—	—	—	25 (1.0)
W1	mm (in)			243 (9.6)	262 (10.3)	262 (10.3)	256 (10.1)	274 (10.8)	274 (10.8)	274 (10.8)	317 (12.5)
W2	mm (in)			—	—	137 (5.4)	—	—	—	—	—
W3	mm (in)			—	—	—	—	—	—	—	—
W4	mm (in)			—	—	—	—	—	—	—	—
W5	mm (in)			384 (15.1)	422 (16.6)	422 (16.6)	433 (17.1)	425 (16.7)	425 (16.7)	425 (16.7)	453 (17.8)
W6	mm (in)			—	—	665 (26.2)	—	—	—	—	—
A1	degree			30	35	35	35	32	32	32	32
A2	degree			70	66	66	70	66	66	66	70
A3	degree			4	4	4	4	4	4	4	3
T1	mm (in)			660 (26.0)	660 (26.0)	660 (26.0)	660 (26.0)	—	—	660 (26.0)	724 (28.5)

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (4-STROKE)

Global model (Unified model)		F200DET (VF200LA) F225DET (VF225LA) F250CET (VF250LA) F225GET F250FET F275AET L-transom	F250JETX (VF250XA) X-transom	F/FL225HET (F/LF225B) F/FL250LET (F/LF250B) F/FL300CET (F/LF300A)	F/FL225FET (F/LF225CA) F/FL250DET (F/LF250CA) F/FL300BET (F/LF300CA)	F/FL350AET (F/LF350CC)
Symbol						
L1	mm (in)	741 (29.2)	729 (28.7)	728 (28.7)	728 (28.7)	776 (30.6)
L2	mm (in)	218 (8.6)	230 (9.1)	230 (9.1)	230 (9.1)	255 (10.0)
L3	mm (in)	—	—	—	—	—
L4	mm (in)	688 (27.1)	673 (26.5)	673 (26.5)	673 (26.5)	732 (28.8)
L5	S L X U	mm (in)	—	—	—	—
			54 (2.1)	—	—	—
			—	59 (2.3)	59 (2.3)	48.4 (1.9)
			—	—	59 (2.3)	48.4 (1.9)
L6	S L X U	mm (in)	—	—	—	—
			1033 (40.7)	—	—	—
			—	1155 (45.5)	1155 (45.5)	1193 (47.0)
			—	—	1272 (50.1)	1310 (51.6)
L7	mm (in)	651 (25.6)	662 (26.1)	639 (25.2)	639 (25.2)	712 (28.0)
L8	mm (in)	237 (9.3)	240 (9.4)	240 (9.4)	240 (9.4)	258 (10.2)
L9	S L X U	mm (in)	—	—	—	—
			81 (3.2)	—	—	—
			—	53 (2.1)	53 (2.1)	56 (2.2)
			—	—	59 (2.3)	62 (2.4)
L10	mm (in)	75 (3.0)	75 (3.0)	75 (3.0)	75 (3.0)	73 (2.9)
H1	S L X U	mm (in)	—	—	—	—
			932 (36.7)	—	—	—
			—	1078 (42.4)	1078 (42.4)	1098 (43.2)
			—	—	1205 (47.4)	1225 (48.2)
H2	mm (in)	817 (32.2)	815 (32.1)	812 (32.0)	812 (32.0)	909 (35.8)
H3	mm (in)	216 (8.5)	216 (8.5)	216 (8.5)	216 (8.5)	229 (9.0)
H4	S L X U	mm (in)	—	—	—	—
			493 (19.4)	—	—	—
			—	—	643 (25.3)	637 (25.1)
			—	—	770 (30.3)	764 (30.1)
H5	mm (in)	—	—	—	—	—
H6	S L X U	mm (in)	—	—	—	—
			715 (28.1)	—	—	—
			—	847 (33.3)	847 (33.3)	864 (34.0)
			—	—	924 (36.4)	941 (37.0)
H7	mm (in)	507 (20.0)	500 (19.7)	510 (20.1)	510 (20.1)	588 (23.1)
H8	mm (in)	33 (1.3)	48 (1.9)	48 (1.9)	48 (1.9)	65 (2.6)
H9	mm (in)	1008 (39.7)	990 (39.0)	951 (37.4)	951 (37.4)	1041 (41.0)
H10	mm (in)	45 (1.8)	45 (1.8)	45 (1.8)	45 (1.8)	49 (1.9)
H11	S L X U	mm (in)	—	—	—	—
			35 (1.4)	—	—	—
			—	25 (1.0)	25 (1.0)	26 (1.0)
			—	—	25 (1.0)	26 (1.0)
W1	mm (in)	332 (13.1)	332 (13.1)	317 (12.5)	317 (12.5)	317 (12.5)
W2	mm (in)	—	—	—	—	—
W3	mm (in)	—	—	—	—	—
W4	mm (in)	—	—	—	—	—
W5	mm (in)	496 (19.5)	483 (19.0)	454 (17.9)	454 (17.9)	476 (18.7)
W6	mm (in)	—	—	—	—	—
A1	degree	35	32	32	32	32
A2	degree	66	70	70	67	70
A3	degree	4	3	3	3	3
T1	mm (in)	—	—	724 (28.5)	724 (28.5)	724 (28.5)

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (2-STROKE)

Global model (Unified model)		2DMH	3BMH	4CMH	4DMH	E8DMH EK8DMH	8FMH	15FMH	E9.9DMH E15DMH EK9.9DMH EK15DMH EK9.9JMH EK15PMH
Symbol									
L1	mm (in)	277 (10.9)	310 (12.2)	344 (13.5)	344 (13.5)	346 (13.6)	363 (14.3)	393 (15.5)	405 (15.9)
L2	mm (in)	129 (5.1)	105 (4.1)	145 (5.7)	145 (5.7)	180 (7.1)	114 (4.5)	180 (7.1)	165 (6.5)
L3	mm (in)	332 (13.1)	316 (12.4)	333 (13.1)	333 (13.1)	372 (14.6)	439 (17.3)	479 (18.9)	473 (18.6)
L4	mm (in)	164 (6.5)	218 (8.6)	252 (9.9)	252 (9.9)	268 (10.6)	359 (14.1)	355 (14.0)	357 (14.0)
L5	S L Y X U	mm (in)	36 (1.4)	17.0 (0.7)	16 (0.6)	16 (0.6)	23 (0.9)	72 (2.8)	78 (3.1)
			—	—	24 (0.9)	24 (0.9)	23 (0.9)	72 (2.8)	104 (4.1)
			—	—	—	—	—	—	—
			—	—	—	—	23 (0.9)	—	78 (3.1)
			—	—	—	—	—	134 (5.3)	—
L6	S L Y X U	mm (in)	592 (23.3)	634 (25.0)	635 (25.0)	635 (25.0)	657 (25.9)	704 (27.7)	718 (28.3)
			—	—	758 (29.8)	758 (29.8)	782 (30.8)	826 (32.5)	831 (32.7)
			—	—	—	—	—	—	—
			—	—	—	—	—	—	947 (37.3)
			—	—	—	—	—	—	—
L7	mm (in)	281 (11.1)	316 (12.4)	331 (13.0)	331 (13.0)	354 (13.9)	286 (11.3)	314 (12.4)	334 (13.1)
L8	mm (in)	142 (5.6)	156 (6.1)	148 (5.8)	148 (5.8)	207 (8.1)	153 (6.0)	263 (10.4)	165 (6.5)
L9	S L Y X U	mm (in)	—	—	—	—	65 (2.6)	—	0 (0.0)
			—	—	—	—	65 (2.6)	—	4 (0.2)
			—	—	—	—	—	—	—
			—	—	—	—	—	—	14 (0.5)
			—	—	—	—	—	—	—
L10	mm (in)	50 (2.0)	69 (2.7)	68 (2.7)	68 (2.7)	45 (1.8)	—	75 (3.0)	73 (2.9)
H1	S L Y X U	mm (in)	616 (24.3)	652 (25.7)	653 (25.7)	653 (25.7)	685 (27.0)	681 (26.8)	705 (27.8)
			—	—	780 (30.7)	780 (30.7)	825 (32.5)	808 (31.8)	832 (32.8)
			—	—	—	—	—	—	—
			—	—	—	—	—	—	975 (38.4)
			—	—	—	—	—	—	—
H2	mm (in)	304 (12.0)	347 (13.7)	358 (14.1)	325 (12.8)	359 (14.1)	295 (11.6)	335 (13.2)	356 (14.0)
H3	mm (in)	100 (3.9)	103 (4.1)	105 (4.1)	105 (4.1)	122 (4.8)	123 (4.8)	135 (5.3)	34 (1.4)
H4	S L Y X U	mm (in)	419 (16.5)	440 (17.3)	444 (17.5)	444 (17.5)	442 (17.4)	435 (17.1)	440 (17.3)
			—	—	571 (22.5)	571 (22.5)	582 (22.9)	562 (22.1)	567 (22.3)
			—	—	—	—	—	—	—
			—	—	—	—	—	—	710 (27.9)
			—	—	—	—	—	—	—
H5	mm (in)	455 (17.9)	485 (19.1)	396 (15.6)	396 (15.6)	415 (16.3)	462 (18.2)	467 (18.4)	474 (18.7)
H6	S L Y X U	mm (in)	506 (19.9)	620 (24.4)	623 (24.5)	623 (24.5)	497 (19.6)	668 (26.3)	572 (22.5)
			—	—	719 (28.3)	719 (28.3)	574 (22.6)	758 (29.8)	641 (25.2)
			—	—	—	—	—	—	—
			—	—	—	—	—	—	714 (28.1)
			—	—	—	—	—	—	—
H7	mm (in)	32 (1.3)	342 (13.5)	104 (4.1)	104 (4.1)	86 (3.4)	109 (4.3)	138 (5.4)	—
H8	mm (in)	15 (0.6)	15 (0.6)	30 (1.2)	30 (1.2)	51 (2.0)	3 (0.1)	19 (0.7)	24 (0.9)
H9	mm (in)	398 (15.7)	422 (16.6)	459 (18.1)	459 (18.1)	465 (18.3)	470 (18.5)	526 (20.7)	555 (21.9)
H10	mm (in)	28 (1.1)	30 (1.2)	30 (1.2)	30 (1.2)	26 (1.0)	32 (1.3)	34 (1.3)	34 (1.3)
H11	S L Y X U	mm (in)	—	—	—	—	34 (1.3)	—	—
			—	—	—	—	33 (1.3)	—	—
			—	—	—	—	—	—	—
			—	—	—	—	—	—	—
			—	—	—	—	—	—	—
W1	mm (in)	—	109 (4.3)	144 (5.7)	144 (5.7)	136 (5.4)	150 (5.9)	143 (5.6)	173 (6.8)
W2	mm (in)	154 (6.1)	190 (7.5)	178 (7.0)	178 (7.0)	192 (7.6)	192 (7.6)	189 (7.4)	—
W3	mm (in)	90 (3.5)	105 (4.1)	134 (5.3)	134 (5.3)	129 (5.1)	136 (5.4)	143 (5.6)	—
W4	mm (in)	—	—	—	—	158 (6.2)	163 (6.4)	—	185 (7.3)
W5	mm (in)	—	—	—	—	—	283 (11.1)	280 (11.0)	280 (11.0)
W6	mm (in)	—	—	—	—	—	551 (21.7)	497 (19.6)	493 (19.4)
A1	degree	360	360	360	360	360	60	45(P)/40(S)	40
A2	degree	69	76	76	76	80	81	63	63
A3	degree	—	—	—	—	—	8	—	4
T1	mm (in)	—	—	—	—	—	—	—	—

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (2-STROKE)

Global model (Unified model)		E/25BMH 25BWC 25XMH E/30HMH 30HWH 30HWC EK25BMH EK25CMH	25BW 30HW	E40GWH E40GMH EK40GMH	E40JMH E40JWH EK40JMH	E40JW	E/40XMH E40XWH	E/40XW	E/40XWT
Symbol									
L1	mm (in)	429 (16.9)	429 (16.9)	504 (19.8)	504 (19.8)	504 (19.8)	553 (21.8)	553 (21.8)	553 (21.8)
L2	mm (in)	180 (7.1)	180 (7.09)	188 (7.4)	188 (7.4)	188 (7.4)	118 (4.6)	118 (4.6)	118 (4.6)
L3	mm (in)	420 (16.5)	—	493 (19.4)	493 (19.4)	—	523 (20.6)	—	—
L4	mm (in)	385 (15.2)	385 (15.2)	421 (16.6)	421 (16.6)	478 (18.8)	522 (20.6)	522 (20.6)	522 (20.6)
L5	S	61 (2.4)	—	94 (3.7)	94 (3.7)	—	65 (2.6)	65 (2.6)	—
	L	83 (3.3)	83 (3.3)	94 (3.7)	94 (3.7)	94 (3.7)	91 (3.6)	91 (3.6)	91 (3.6)
	Y	—	—	—	94 (3.7)	—	—	—	—
	X	83 (3.3)	—	—	—	—	91 (3.6)	—	—
	U	—	—	—	—	—	—	—	—
L6	S	736 (29.0)	—	784 (30.9)	784 (30.9)	—	826 (32.5)	826 (32.5)	—
	L	854 (33.6)	854 (33.6)	897 (35.3)	897 (35.3)	910 (35.8)	940 (37.0)	940 (37.0)	935 (36.8)
	Y	—	—	—	943 (37.1)	—	—	—	—
	X	933 (36.7)	—	—	—	—	1043 (41.1)	—	935 (36.8)
	U	—	—	—	—	—	—	—	—
L7	mm (in)	405 (16.0)	405 (15.9)	427 (16.8)	427 (16.8)	427 (16.8)	397 (15.6)	397 (15.6)	391 (15.4)
L8	mm (in)	195 (7.7)	195 (7.7)	193 (7.6)	193 (7.6)	193 (7.6)	294 (11.6)	—	—
L9	S	—	—	—	—	—	3 (0.1)	3 (0.1)	—
	L	—	—	—	—	—	8 (0.3)	8 (0.3)	8 (0.3)
	Y	—	—	—	—	—	—	—	—
	X	—	—	—	—	—	16 (0.6)	—	8 (0.3)
	U	—	—	—	—	—	—	—	—
L10	mm (in)	74.2 (2.9)	74.2 (2.9)	72 (2.8)	72 (2.8)	72 (2.8)	65 (2.6)	65 (2.6)	65 (2.6)
H1	S	707 (27.8)	—	771 (30.4)	771 (30.4)	—	767 (30.2)	767 (30.2)	—
	L	834 (32.8)	834 (32.8)	898 (35.4)	898 (35.4)	891 (35.1)	893 (35.2)	893 (35.2)	893 (35.2)
	Y	—	—	—	948 (37.3)	—	—	—	—
	X	920 (36.2)	—	—	—	—	1007 (39.6)	—	893 (35.2)
	U	—	—	—	—	—	—	—	—
H2	mm (in)	439 (17.3)	439 (17.3)	444 (17.5)	444 (17.5)	444 (17.5)	471 (18.5)	471 (18.5)	471 (18.5)
H3	mm (in)	144 (5.7)	144 (5.7)	162 (6.4)	162 (6.4)	175 (6.9)	175 (6.9)	175 (6.9)	175 (6.9)
H4	S	423 (16.6)	—	444 (17.5)	444 (17.5)	—	424 (16.7)	424 (16.7)	—
	L	550 (21.6)	550 (21.6)	570 (22.4)	570 (22.4)	548 (21.6)	550 (21.7)	550 (21.7)	550 (21.7)
	Y	—	—	—	622 (24.5)	—	—	—	—
	X	636 (25.0)	—	—	—	—	664 (26.1)	—	550 (21.7)
	U	—	—	—	—	—	—	—	—
H5	mm (in)	466 (18.3)	—	533 (21.0)	533 (21.0)	533 (21.0)	—	—	532 (20.9)
H6	S	621 (24.4)	—	622 (24.5)	622 (24.5)	—	626 (24.6)	626 (24.6)	—
	L	701 (27.6)	701 (27.6)	691 (27.2)	691 (27.2)	683 (26.9)	697 (27.4)	697 (27.4)	637 (25.1)
	Y	—	—	—	719 (28.3)	—	—	—	—
	X	754 (29.7)	—	—	—	—	761 (30.0)	—	637 (25.1)
	U	—	—	—	—	—	—	—	—
H7	mm (in)	118 (4.6)	118 (4.65)	127 (5.0)	127 (5.0)	127 (5.0)	159 (6.3)	159 (6.3)	176 (6.9)
H8	mm (in)	30 (1.2)	30 (1.2)	30 (1.2)	30 (1.2)	30 (1.2)	38 (1.5)	—	—
H9	mm (in)	596 (23.5)	596 (23.5)	695 (27.4)	695 (27.4)	695 (27.4)	702 (27.6)	702 (27.6)	706 (27.8)
H10	mm (in)	40 (1.6)	40.3 (1.6)	45 (1.8)	45 (1.8)	45 (1.8)	43 (1.7)	43 (1.7)	43 (1.7)
H11	S	—	—	—	—	—	25 (1.0)	25 (1.0)	—
	L	—	—	—	—	—	24 (0.9)	24 (0.9)	24 (0.9)
	Y	—	—	—	—	—	—	—	—
	X	—	—	—	—	—	24 (0.9)	—	24 (0.9)
	U	—	—	—	—	—	—	—	—
W1	mm (in)	166 (6.5)	166 (6.54)	190 (7.5)	190 (7.5)	190 (7.5)	182 (7.2)	182 (7.2)	182 (7.2)
W2	mm (in)	233 (9.2)	—	294 (11.6)	294 (11.6)	—	220.5 (8.7)	—	—
W3	mm (in)	148 (5.8)	148 (5.83)	173 (6.8)	173 (6.8)	173 (6.8)	182 (7.2)	182 (7.2)	182 (7.2)
W4	mm (in)	192 (7.6)	192 (7.56)	205 (8.1)	205 (8.1)	205 (8.1)	—	—	—
W5	mm (in)	302 (11.9)	302 (11.89)	360 (14.2)	360 (14.2)	360 (14.2)	369 (14.5)	369 (14.5)	369 (14.5)
W6	mm (in)	472 (18.6)	217 (8.54)	602 (23.7)	602 (23.7)	602 (23.7)	592 (23.3)	—	—
A1	degree	40	40	45	45	45	42	42	42
A2	degree	68	68	67	67	67	64	64	61
A3	degree	—	—	—	—	—	—	—	4
T1	mm (in)	—	—	—	—	—	—	—	—

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (2-STROKE)

Global model (Unified model)		40VMHO 50HMH0	40VEO	40VETO 50HETO	40VMHD 40VWHD0 40VWHTO 50HMH0 50HWHD 50HWHTO	E48CMH	55BED S-transom	55BED L-transom	55BET
Symbol									
L1	mm (in)	490 (19.3)	490 (19.3)	528 (20.8)	528 (20.8)	487 (19.2)	531 (20.9)	516 (20.3)	516 (20.3)
L2	mm (in)	257 (10.1)	178 (7.0)	142 (5.6)	221 (8.7)	298 (11.7)	159 (6.3)	174 (6.9)	174 (6.9)
L3	mm (in)	789 (31.1)	—	—	753 (29.6)	680 (26.8)	—	—	—
L4	mm (in)	493 (19.4)	493 (19.4)	529 (20.8)	529 (20.8)	487 (19.2)	531 (20.9)	516 (20.3)	516 (20.3)
L5	S L Y X U	mm (in)	—	—	—	54 (2.1)	87 (3.4)	—	—
			—	—	77 (3.0)	71 (2.8)	—	90 (3.5)	90 (3.5)
			—	—	—	—	—	—	—
			—	—	—	—	—	—	—
L6	S L Y X U	mm (in)	798 (31.4)	798 (31.4)	—	827 (32.6)	818 (32.2)	—	—
			910 (35.8)	910 (35.8)	937 (36.9)	937 (36.9)	—	919 (36.2)	919 (36.2)
			—	—	—	—	—	—	—
			—	—	—	—	—	—	—
L7	mm (in)	433 (17.0)	401 (15.8)	387 (15.2)	418 (16.5)	437 (17.2)	392 (15.4)	400 (15.7)	400 (15.7)
L8	mm (in)	273 (10.7)	179 (7.0)	153 (6.0)	246 (9.7)	280 (11.0)	154 (6.1)	164 (6.5)	164 (6.5)
L9	S L Y X U	mm (in)	—	—	—	—	—	—	—
			—	—	10 (0.4)	10 (0.4)	—	—	14 (0.6)
			—	—	—	—	—	—	—
			—	—	—	—	—	—	—
L10	mm (in)	72 (2.8)	72 (2.8)	63 (2.5)	63 (2.5)	77 (3.0)	67 (2.6)	67 (2.6)	67 (2.6)
H1	S L Y X U	mm (in)	751 (29.6)	751 (29.6)	—	809 (31.9)	758 (29.8)	—	—
			878 (34.6)	878 (34.6)	880 (34.6)	880 (34.6)	931 (36.7)	879 (34.6)	879 (34.6)
			—	—	—	—	—	—	—
			—	—	—	—	—	—	—
H2	mm (in)	472 (18.6)	441 (17.4)	439 (17.3)	470 (18.5)	449 (17.7)	424 (16.7)	424 (16.7)	424 (16.7)
H3	mm (in)	175 (6.9)	175 (6.9)	175 (6.9)	175 (6.9)	191 (7.5)	191 (7.5)	191 (7.5)	191 (7.5)
H4	S L Y X U	mm (in)	408 (16.1)	408 (16.1)	—	451 (17.8)	399 (15.7)	—	—
			535 (21.1)	535 (21.1)	537 (21.1)	537 (21.1)	572 (22.5)	520 (20.5)	520 (20.5)
			—	—	—	—	—	—	—
			—	—	—	—	—	—	—
H5	mm (in)	731 (28.8)	—	—	728 (28.7)	568 (22.4)	—	—	—
H6	S L Y X U	mm (in)	579 (22.8)	579 (22.8)	—	591 (23.3)	636 (25.0)	—	—
			646 (25.4)	646 (25.4)	709 (27.9)	709 (27.9)	652 (25.7)	689 (27.1)	689 (27.1)
			—	—	—	—	—	—	—
			—	—	—	—	—	—	—
H7	mm (in)	201 (7.9)	217 (8.5)	222 (8.7)	204 (8.0)	171 (6.7)	158 (6.2)	147 (5.8)	147 (5.8)
H8	mm (in)	55 (2.2)	17 (0.7)	0 (0.0)	43 (1.7)	93 (3.7)	12 (0.5)	25 (1.0)	25 (1.0)
H9	mm (in)	683 (26.9)	671 (26.4)	688 (27.1)	696 (27.4)	684 (26.9)	695 (27.4)	682 (26.9)	682 (26.9)
H10	mm (in)	44 (1.7)	44 (1.7)	44 (1.7)	44 (1.7)	42 (1.7)	47 (1.9)	47 (1.9)	47 (1.9)
H11	S L Y X U	mm (in)	—	—	20 (0.8)	—	22 (0.9)	24 (0.9)	24 (0.9)
			—	—	19 (0.7)	19 (0.7)	21 (0.8)	—	—
			—	—	—	—	—	—	—
			—	—	—	—	—	—	—
W1	mm (in)	—	180 (7.1)	180 (7.1)	180 (7.1)	—	166 (6.5)	166 (6.5)	166 (6.5)
W2	mm (in)	124 (4.9)	—	—	124 (4.9)	159 (6.3)	—	—	—
W3	mm (in)	175 (6.9)	175 (6.9)	175 (6.9)	175 (6.9)	165 (6.5)	—	—	166 (6.5)
W4	mm (in)	—	180 (7.1)	180 (7.1)	180 (7.1)	—	—	—	—
W5	mm (in)	340 (13.4)	340 (13.4)	340 (13.4)	340 (13.4)	268 (10.6)	271 (10.7)	271 (10.7)	271 (10.7)
W6	mm (in)	641 (25.2)	—	—	641 (25.2)	507 (20.0)	—	—	—
A1	degree	40	40	40	40	30	30	30	30
A2	degree	62	62	65	65	64	68	68	68
A3	degree	—	—	4	4	—	—	—	4
T1	mm (in)	—	—	—	—	—	—	—	—

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (2-STROKE)

Global model (Unified model)		Symbol	E60HMH E60HWH	E60HWD	60FED S-trans	60FED L-trans	60FET 70BET S-trans	60FET 60FET 70BET L-trans	E55DE E75BE 85AE	E75BE 85AE
L1	mm (in)		532 (20.9)	532 (20.9)	547 (21.5)	532 (20.9)	547 (21.5)	532 (20.9)	545 (21.5)	545 (21.5)
L2	mm (in)		269 (10.6)	269 (10.6)	151 (5.9)	166 (6.5)	151 (5.9)	166 (6.5)	180 (7.1)	180 (7.1)
L3	mm (in)		651 (25.6)	651 (25.6)	—	—	—	—	790 (31.1)	—
L4	mm (in)		546 (21.5)	546 (21.5)	562 (22.1)	547 (21.5)	562 (22.1)	547 (21.5)	547 (21.5)	547 (21.5)
L5	S L Y X U	mm (in)	97 (3.8)	—	113 (4.4)	—	113 (4.4)	—	—	—
			99 (3.9)	99 (3.9)	—	91 (3.6)	—	91 (3.6)	88 (3.5)	88 (3.5)
			—	—	—	—	—	—	85 (3.3)	—
			—	—	—	—	—	—	85 (3.3)	80 (3.1)
			—	—	—	—	—	—	—	—
L6	S L Y X U	mm (in)	913 (35.9)	—	868 (34.2)	—	868 (34.2)	—	—	—
			1020 (40.2)	1020 (40.2)	—	968 (38.1)	—	968 (38.1)	968 (38.1)	968 (38.1)
			—	—	—	—	—	—	1015 (40.0)	—
			—	—	—	—	—	—	1080 (42.5)	1080 (42.5)
			—	—	—	—	—	—	—	—
L7	mm (in)		457 (18.0)	457 (18.0)	403 (15.9)	411 (16.2)	403 (15.9)	411 (16.2)	459 (18.1)	459 (18.1)
L8	mm (in)		256 (10.1)	256 (10.1)	206 (8.1)	214 (8.4)	206 (8.1)	214 (8.4)	164 (6.5)	164 (6.5)
L9	S L Y X U	mm (in)	-6 (-0.2)	—	—	—	0.0 (0.0)	—	—	—
			4 (0.16)	—	—	—	—	14 (0.6)	—	—
			—	—	—	—	—	—	—	—
			—	—	—	—	—	—	—	—
			—	—	—	—	—	—	—	—
L10	mm (in)		67 (2.6)	67 (2.6)	67 (2.6)	67 (2.6)	67 (2.6)	67 (2.6)	67 (2.6)	67 (2.6)
H1	S L Y X U	mm (in)	831 (32.7)	—	780 (30.7)	—	780 (30.7)	—	—	—
			954 (37.6)	954 (37.6)	—	901 (35.5)	—	901 (35.5)	901 (35.5)	901 (35.5)
			—	—	—	—	—	—	952 (37.5)	—
			—	—	—	—	—	—	1028 (40.5)	1028 (40.5)
			—	—	—	—	—	—	—	—
H2	mm (in)		528 (20.8)	528 (20.8)	472 (18.6)	472 (18.6)	472 (18.6)	472 (18.6)	520 (20.5)	520 (20.5)
H3	mm (in)		191 (7.5)	191 (7.5)	191 (7.5)	191 (7.5)	191 (7.5)	191 (7.5)	191 (7.5)	191 (7.5)
H4	S L Y X U	mm (in)	450 (17.7)	—	400 (15.7)	—	400 (15.7)	—	—	—
			538 (21.2)	538 (21.2)	—	520 (20.5)	—	520 (20.5)	520 (20.5)	520 (20.5)
			—	—	—	—	—	—	571 (22.5)	—
			—	—	—	—	—	—	647 (25.5)	647 (25.5)
			—	—	—	—	—	—	—	—
H5	mm (in)		753 (29.6)	753 (29.6)	—	—	—	—	—	—
H6	S L Y X U	mm (in)	670 (26.4)	—	645 (25.4)	—	645 (25.4)	—	—	—
			722 (28.4)	722 (28.4)	—	696 (27.4)	—	696 (27.4)	698 (27.5)	698 (27.5)
			—	—	—	—	—	—	729 (28.7)	—
			—	—	—	—	—	—	764 (30.1)	764 (30.1)
			—	—	—	—	—	—	—	—
H7	mm (in)		216 (8.5)	216 (8.5)	262 (10.3)	249 (9.8)	262 (10.3)	249 (9.8)	199 (7.8)	199 (7.8)
H8	mm (in)		81 (3.2)	81 (3.2)	- 24 (-0.9)	-11 (-0.4)	-24 (-0.9)	-11 (-0.4)	23 (0.9)	23 (0.9)
H9	mm (in)		722 (28.4)	722 (28.4)	719 (28.3)	706 (27.8)	719 (28.3)	706 (27.8)	743 (29.3)	743 (29.3)
H10	mm (in)		46 (1.8)	46 (1.8)	47 (1.9)	47 (1.9)	47 (1.9)	47 (1.9)	47 (1.9)	47 (1.9)
H11	S L Y X U	mm (in)	27 (1.1)	—	—	—	0 (0.0)	—	—	—
			27 (1.1)	27 (1.1)	—	—	—	28 (1.1)	—	—
			—	—	—	—	—	—	—	—
			—	—	—	—	—	—	—	—
			—	—	—	—	—	—	—	—
W1	mm (in)		—	—	182 (7.2)	182 (7.2)	182 (7.2)	182 (7.2)	211 (8.3)	187 (7.4)
W2	mm (in)		159 (6.3)	—	—	—	—	—	—	—
W3	mm (in)		182 (7.2)	182 (7.2)	—	—	—	—	187 (7.4)	187 (7.4)
W4	mm (in)		—	—	—	—	—	—	—	—
W5	mm (in)		322 (12.7)	322 (12.7)	321 (12.6)	321 (12.6)	321 (12.6)	321 (12.6)	331 (13.0)	331 (13.0)
W6	mm (in)		553 (21.8)	—	—	—	—	—	—	—
A1	degree		35	35	35	35	35	35	30	30
A2	degree		67	67	63	67	63	67	67	67
A3	degree		2.8	2.8	0	4	0	4	—	—
T1	mm (in)		—	—	—	—	—	—	—	600 (23.6)

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (2-STROKE)

Global model (Unified model)		85AET	E75BMHD	90AETO	E115AMH E115AWH	E115AE	E115AET	L/150AET L/200AET
Symbol								
L1	mm (in)	545 (21.5)	545 (21.5)	545 (21.5)	539 (21.2)	539 (21.2)	539 (21.2)	543 (21.4)
L2	mm (in)	180 (7.1)	270 (10.6)	180 (7.1)	325 (12.8)	213 (8.4)	213 (8.4)	188 (7.4)
L3	mm (in)	—	652 (25.7)	—	845 (33.3)	—	—	—
L4	mm (in)	547 (21.5)	547 (21.5)	547 (21.5)	616 (24.3)	616 (24.3)	616 (24.3)	634 (25.0)
L5	S	—	—	—	—	—	—	—
	L	88 (3.5)	81 (3.2)	88 (3.5)	80 (3.1)	80 (3.1)	80 (3.1)	49 (1.9)
	Y	—	80 (3.1)	—	75 (3.0)	—	—	—
	X	80 (3.1)	70 (2.8)	80 (3.1)	85 (3.3)	85 (3.3)	85 (3.3)	62 (2.4)
L6	U	—	—	—	—	—	—	—
	S	—	—	—	—	—	—	—
	L	968 (38.1)	966 (38.0)	968 (38.1)	1005 (39.6)	1005 (39.6)	1005 (39.6)	1030 (40.6)
	Y	—	1011 (39.8)	—	1055 (41.5)	—	—	—
L7	X	1080 (42.5)	1078 (42.4)	1080 (42.5)	1120 (44.1)	1120 (44.1)	1120 (44.1)	1144 (45.0)
	U	—	—	—	—	—	—	—
	S	459 (18.1)	542 (21.3)	457 (18.0)	570 (22.4)	482 (19.0)	482 (19.0)	569 (22.4)
	L	164 (6.5)	256 (10.1)	164 (6.5)	270 (10.6)	214 (8.4)	215 (8.5)	173 (6.8)
L8	mm (in)	—	—	—	—	—	—	—
L9	S	14 (0.6)	—	14 (0.6)	—	—	12 (0.5)	54 (2.1)
	L	—	—	—	—	—	—	—
	Y	23 (0.9)	—	31 (1.2)	—	—	12 (0.5)	62 (2.4)
	X	—	—	—	—	—	—	—
L10	mm (in)	67 (2.6)	68 (2.7)	67 (2.6)	64 (2.5)	64 (2.5)	64 (2.5)	74 (2.9)
H1	U	—	—	—	—	—	—	—
	S	901 (35.5)	902 (35.5)	901 (35.5)	929 (36.6)	929 (36.6)	929 (36.6)	946 (37.2)
	L	—	953 (37.5)	—	982 (38.7)	—	—	—
	Y	1028 (40.5)	1028 (40.5)	1028 (40.5)	1056 (41.6)	1056 (41.6)	1056 (41.6)	1072 (42.2)
H2	mm (in)	520 (20.5)	590 (23.2)	512 (20.2)	631 (24.8)	508 (20.0)	508 (20.0)	631 (24.8)
H3	mm (in)	191 (7.5)	191 (7.5)	191 (7.5)	190 (7.5)	190 (7.5)	190 (7.5)	210 (8.3)
H4	U	—	—	—	—	—	—	—
	S	520 (20.5)	521 (20.5)	520 (20.5)	515 (20.3)	515 (20.3)	515 (20.3)	516 (20.3)
	L	—	572 (22.5)	—	568 (22.4)	—	—	—
	Y	647 (25.5)	648 (25.5)	647 (25.5)	642 (25.3)	642 (25.3)	642 (25.3)	642 (25.3)
H5	mm (in)	—	555 (21.9)	—	695 (27.4)	—	—	—
H6	U	—	—	—	—	—	—	—
	S	698 (27.5)	698 (27.5)	698 (27.5)	735 (28.9)	735 (28.9)	735 (28.9)	762 (30.0)
	L	—	725 (28.5)	—	765 (30.1)	—	—	—
	Y	764 (30.1)	766 (30.2)	764 (30.1)	810 (31.9)	810 (31.9)	810 (31.9)	837 (33.0)
H7	mm (in)	199 (7.8)	253 (10.0)	226 (8.9)	150 (5.9)	150 (5.9)	150 (5.9)	205 (8.1)
H8	mm (in)	23 (0.9)	84 (3.3)	23 (0.9)	155 (6.1)	53 (2.1)	55 (2.2)	26 (1.0)
H9	mm (in)	743 (29.3)	778 (30.6)	730 (28.7)	780 (30.7)	730 (28.7)	730 (28.7)	788 (31.0)
H10	mm (in)	47 (1.9)	46 (1.8)	47 (1.9)	45 (1.8)	45 (1.8)	45 (1.8)	45.4 (1.8)
H11	U	—	—	—	—	—	—	—
	S	27 (1.1)	—	27 (1.1)	—	—	—	31 (1.2)
	L	—	—	—	—	—	—	—
	Y	27 (1.1)	—	27 (1.1)	—	—	—	31 (1.2)
W1	mm (in)	187 (7.4)	—	187 (7.4)	300 (11.8)	297 (11.7)	300 (11.8)	301 (11.9)
W2	mm (in)	—	159 (6.3)	—	210 (8.3)	—	—	—
W3	mm (in)	187 (7.4)	187 (7.4)	187 (7.4)	300 (11.8)	297 (11.7)	300 (11.8)	—
W4	mm (in)	—	—	—	300 (11.8)	—	—	—
W5	mm (in)	331 (13.0)	331 (13.0)	331 (13.0)	424 (16.7)	422 (16.6)	424 (16.7)	426 (16.8)
W6	mm (in)	—	506 (19.9)	—	705 (27.8)	—	—	—
A1	degree	30	30	30	35	35	35	35
A2	degree	67	67	67	66	66	70	70
A3	degree	4	—	4	—	—	4	4
T1	mm (in)	600 (23.6)	—	600 (23.6)	—	660 (26.0)	660 (26.0)	660 (26.0)

OUTBOARD MOTOR DIMENSIONS

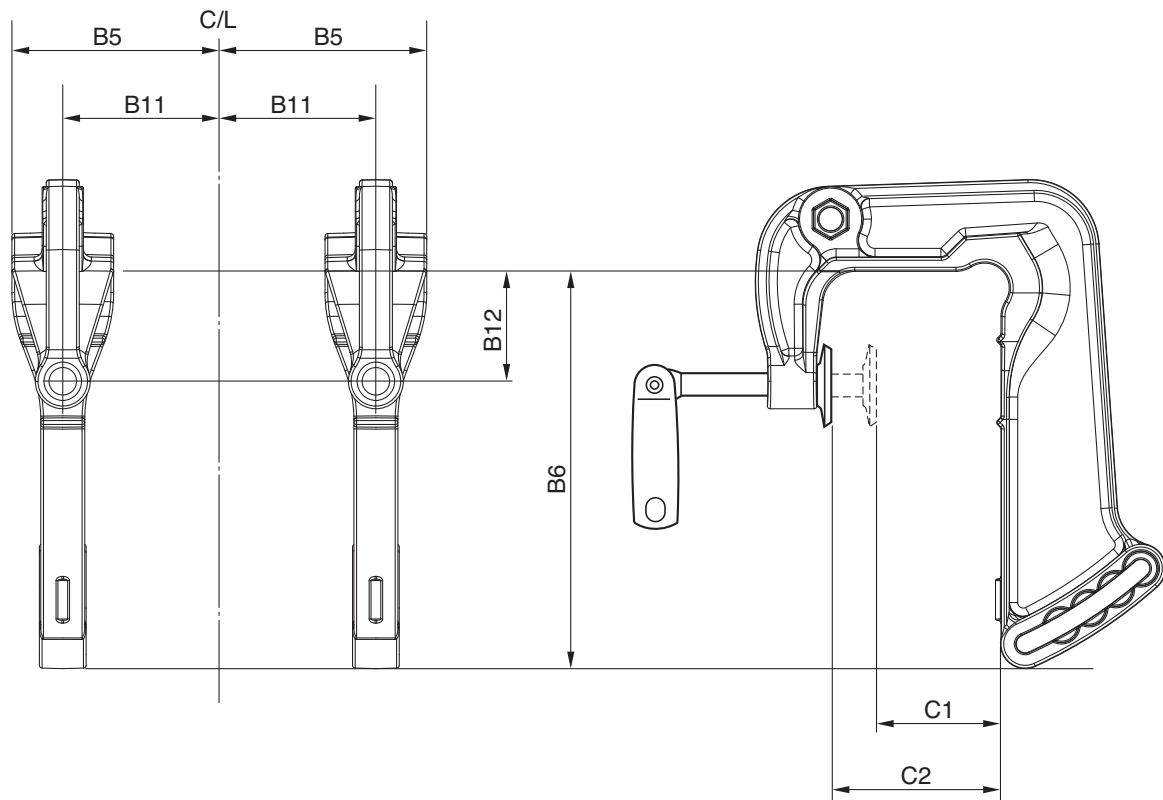
CLAMP BRACKET DIMENSION ITEMS

Symbol	Definition and Description
B1	Horizontal dimension from centerline of motor body to lower bracket mounting hole (slot)
B2	Vertical dimension from transom top to lower bracket mounting hole (slot)
B3	Horizontal dimension from centerline of motor body to the center of upper bracket mounting hole
B4	Vertical dimension from transom top to the center of upper bracket mounting hole
B5	Horizontal dimension from centerline of motor body to the point of largest width on the bracket
B6	Vertical dimension from transom top to lowest point on the bracket
B7	Horizontal dimension from centerline of motor body to the center of lower extra bracket mounting hole
B8	Vertical dimension from transom top to the center of extra hole at the lower part of bracket
B9	Dimensions between the upper bracket mounting bolts (when holes are at even intervals)
B10	Dimensions between the upper bracket mounting bolts (when holes are not at even intervals)
B11	Horizontal dimensions from centerline of motor body to the clamping bolt center
B12	Vertical dimensions from transom top to the clamping bolt center
B13	Mount flange thickness of clamp bracket
C1	Allowable transom board thickness when clamping screw is driven-in to the least extent
C2	Allowable transom board thickness when clamping screw is driven-in to the full extent
C3	Maximum allowable transom plate thickness for mounting the motor
D1	Diameter of bracket (main) lower mounting hole, or screw
D2	Diameter of bracket (main) mounting hole, or screw (lower mounting hole diameter, or, for slot, center-to-center distance of both end circles)
D3	Diameter of bracket mounting (sub) hole
D4	Diameter of central bracket mounting extra hole or the screw size
AN1	Vertical dimension from bottom of clamp bracket to the bottom end of anode
AN2	Horizontal dimension from centerline of motor (anode) to the point of largest width of anode

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	F2B	F2.5B						
Unified model		F2.5B						
Manual tilt								

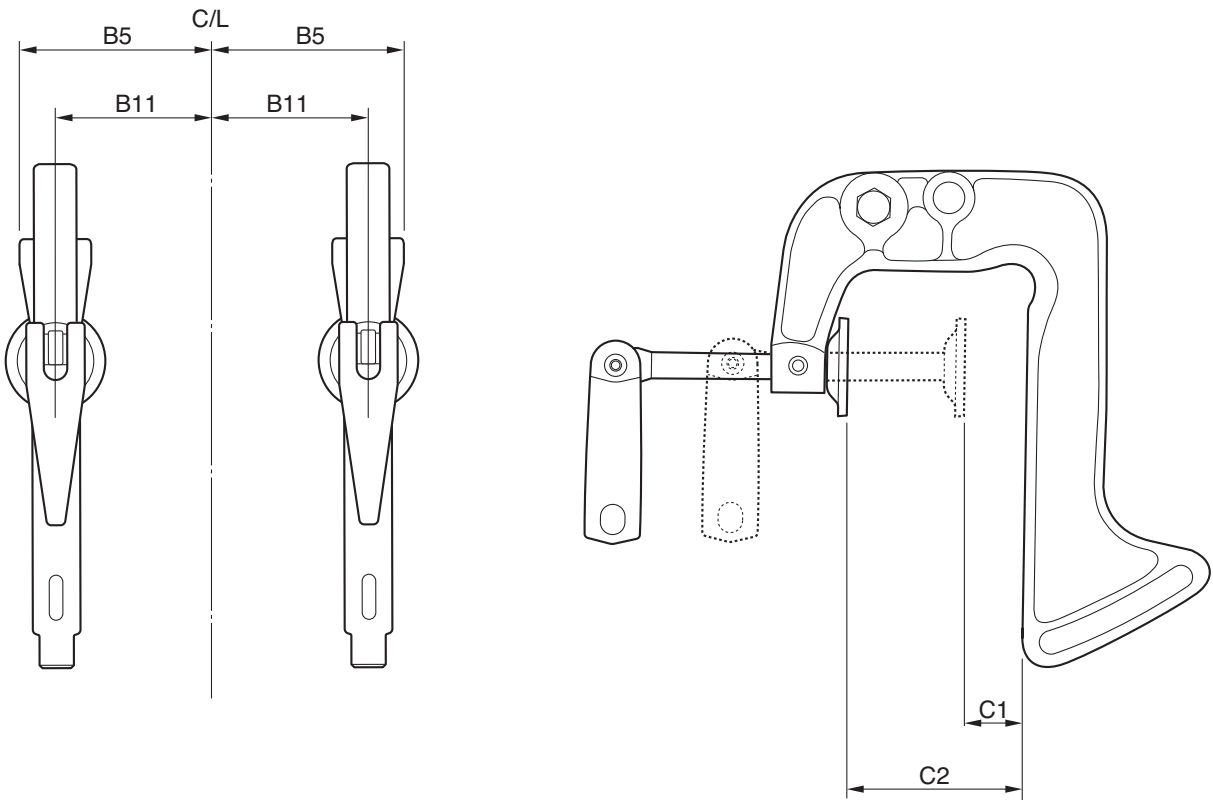


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	—	B8	—	C1	21 (0.9)	D1	—
B2	—	B9	—	C2	58 (2.3)	D2	—
B3	—	B10	—	C3	—	D3	—
B4	—	B11	54.5 (2.1)			D4	—
B5	73 (2.9)	B12	40 (1.6)				
B6	145 (5.7)						
B7	—						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	2D							
Unified model								
Manual tilt								

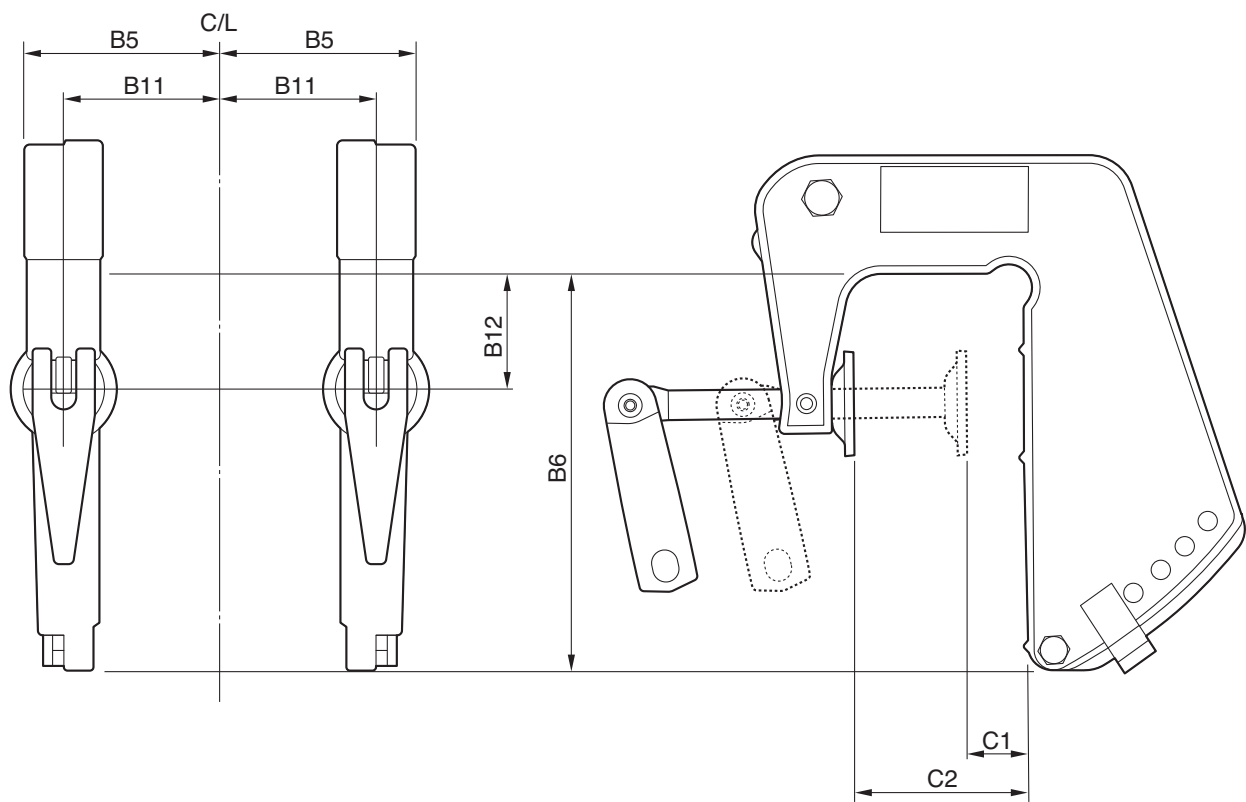


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	—	B8	—	C1	23 (0.9)	D1	—
B2	—	B9	—	C2	60 (2.4)	D2	—
B3	—	B10	—	C3	—	D3	—
B4	—	B11	40 (1.6)			D4	—
B5	52 (2.0)	B12	—				
B6	—						
B7	—						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	3B							
Unified model								
Manual tilt								

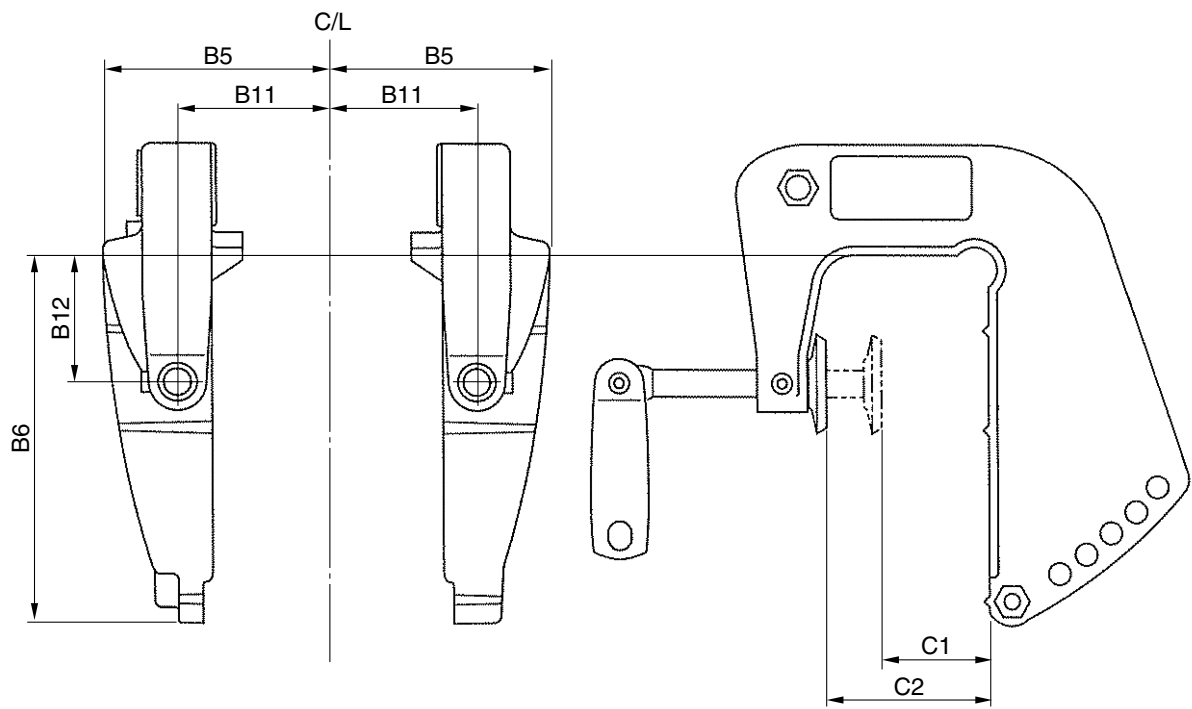


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	—	B8	—	C1	22 (0.9)	D1	—
B2	—	B9	—	C2	60 (2.4)	D2	—
B3	—	B10	—	C3	—	D3	—
B4	—	B11	57.1 (2.2)			D4	—
B5	70.6 (2.8)	B12	45 (1.8)				
B6	136 (5.4)						
B7	—						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	F4B	F5A	F6C	4C	4D			
Unified model	F4A		F6A					
Manual tilt								

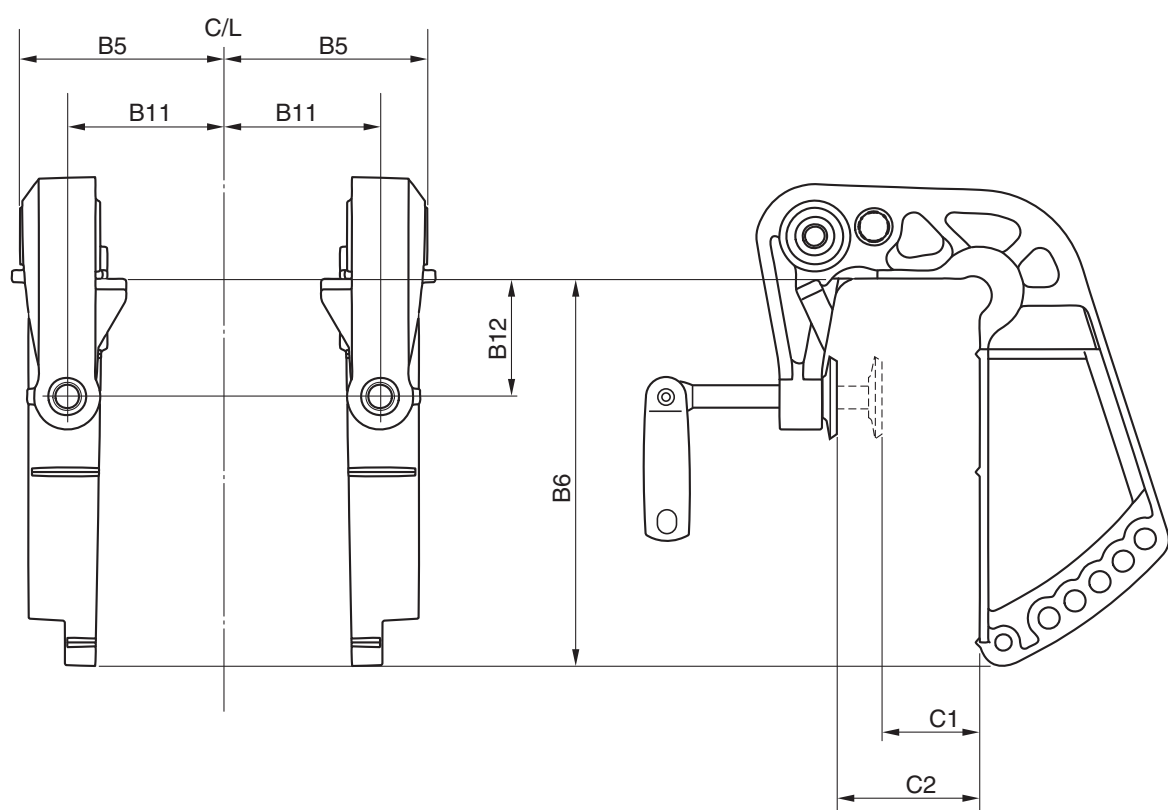


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	—	B8	—	C1	22 (0.9)	D1	—
B2	—	B9	—	C2	58 (2.3)	D2	—
B3	—	B10	—	C3	—	D3	—
B4	—	B11	55 (2.2)			D4	—
B5	83 (3.3)	B12	48 (1.9)				
B6	136 (5.4)						
B7	—						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	8F							
Unified model								
Manual tilt								

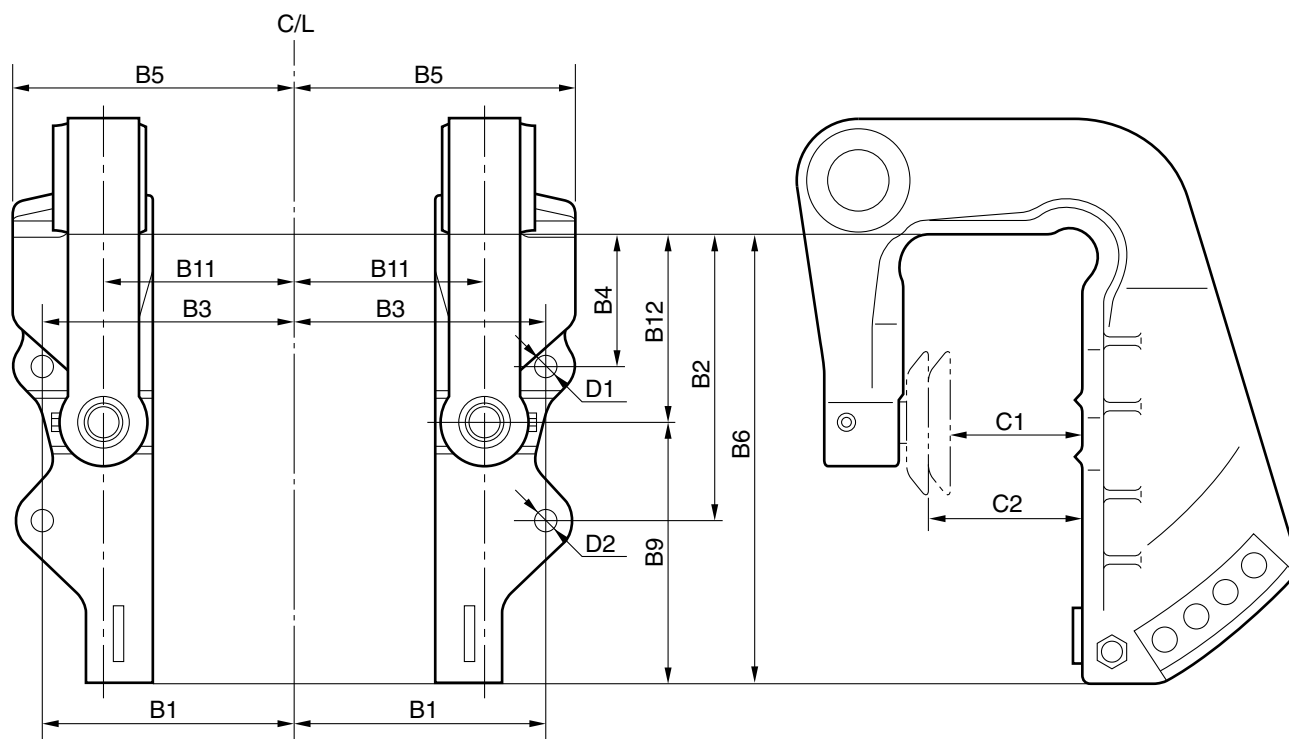


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	—	B8	—	C1	19 (0.8)	D1	—
B2	—	B9	—	C2	60 (2.4)	D2	—
B3	—	B10	—	C3	—	D3	—
B4	—	B11	62 (2.4)			D4	—
B5	81 (3.2)	B12	50 (2.0)				
B6	164 (6.5)						
B7	—						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

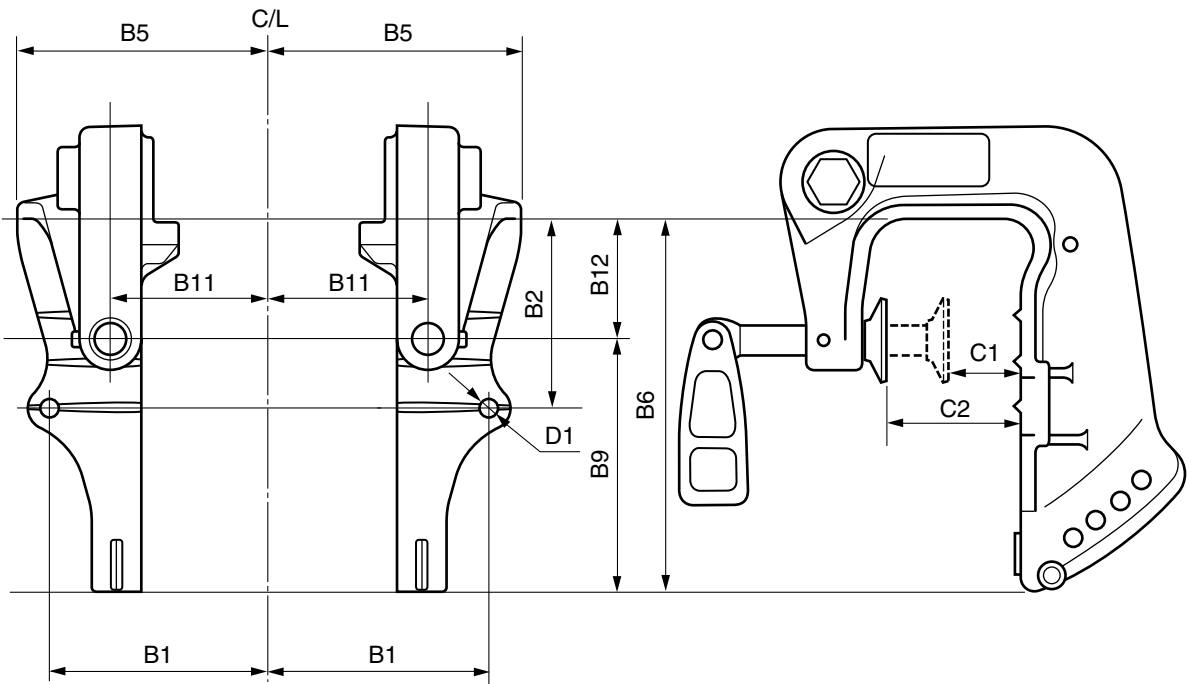
Global model	9.9F	15F						
Unified model								
Manual tilt								



Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	92.5 (3.6)	B8	—	C1	30 (1.2)	D1	8.3 (0.3)
B2	103.5 (4.1)	B9	54.5 (2.1)	C2	56 (2.2)	D2	8.3 (0.3)
B3	92.5 (3.6)	B10	—	C3	—	D3	—
B4	49 (1.9)	B11	70.5 (2.8)			D4	—
B5	102.5 (4.0)	B12	69 (2.7)				
B6	176 (6.9)						
B7	—						

OUTBOARD MOTOR DIMENSIONS **CLAMP BRACKET DIMENSIONS**

Global model	E9.9D	E15D	EK9.9D	EK15D	EK9.9J	EK15P		
Unified model								
Manual tilt								

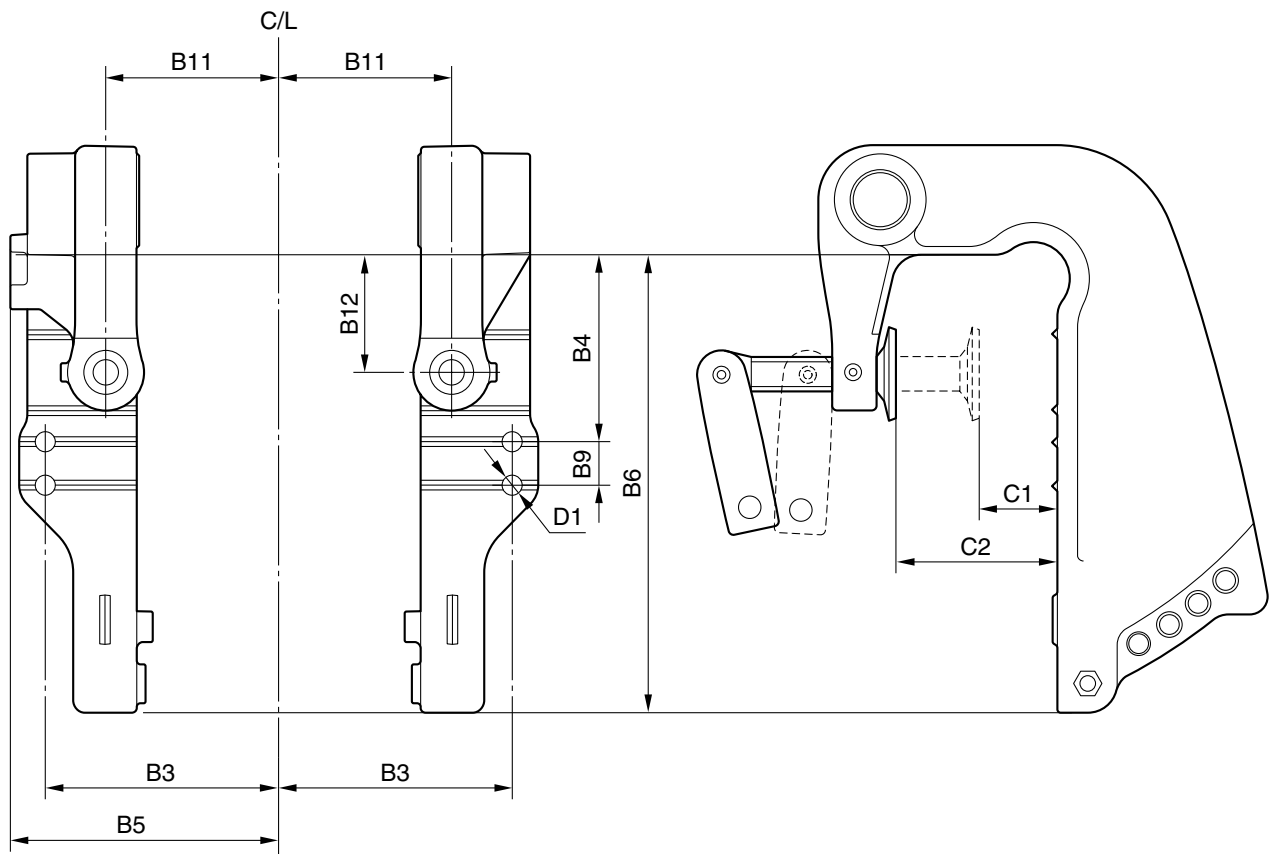


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	92.6 (3.6)	B8	—	C1	30 (1.2)	D1	8.3 (0.32)
B2	79 (3.1)	B9	107 (4.2)	C2	60 (2.4)	D2	—
B3	—	B10	—	C3	—	D3	—
B4	—	B11	67.3 (2.6)			D4	—
B5	106.3 (4.2)	B12	50 (2.0)				
B6	157 (6.2)						
B7	—						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	F8F	FT8G	F9.9H	F15C	F20B	F20C	F9.9J	FT9.9L
Unified model	F8B			F15A	F20A		F9.9B	T9.9B
Manual tilt								

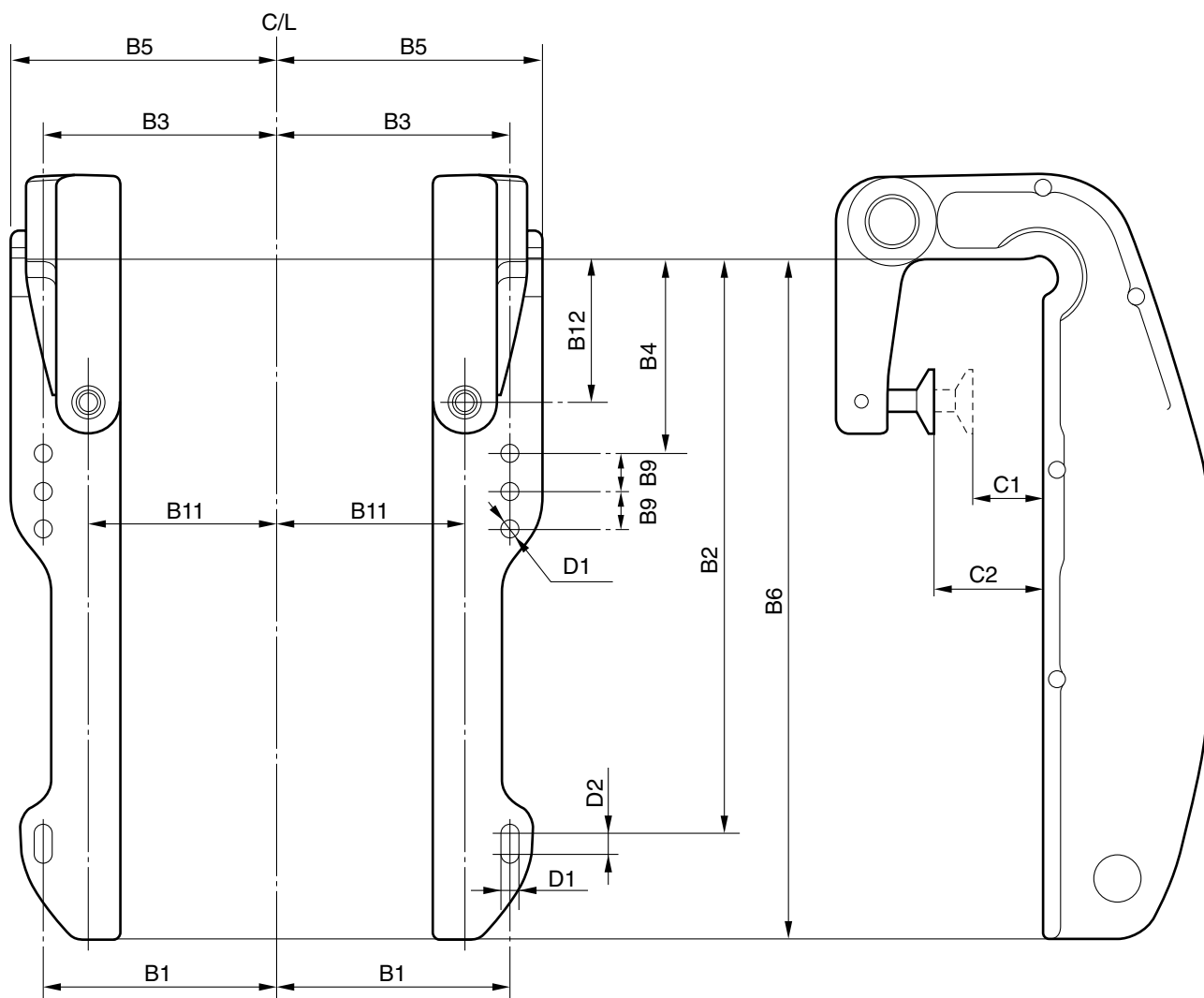


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	—	B8	—	C1	32 (1.3)	D1	8.3 (0.33)
B2	—	B9	18 (0.71)	C2	67 (2.6)	D2	—
B3	95.3 (3.8)	B10	—	C3	—	D3	—
B4	76.5 (3.0)	B11	70.5 (2.8)			D4	—
B5	110 (4.3)	B12	48 (1.9)				
B6	187.5 (7.4)						
B7	—						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	FT8G	F15C	F20B	FT9.9L				
Unified model		F15A	F20A	T9.9B				
Power tilt								

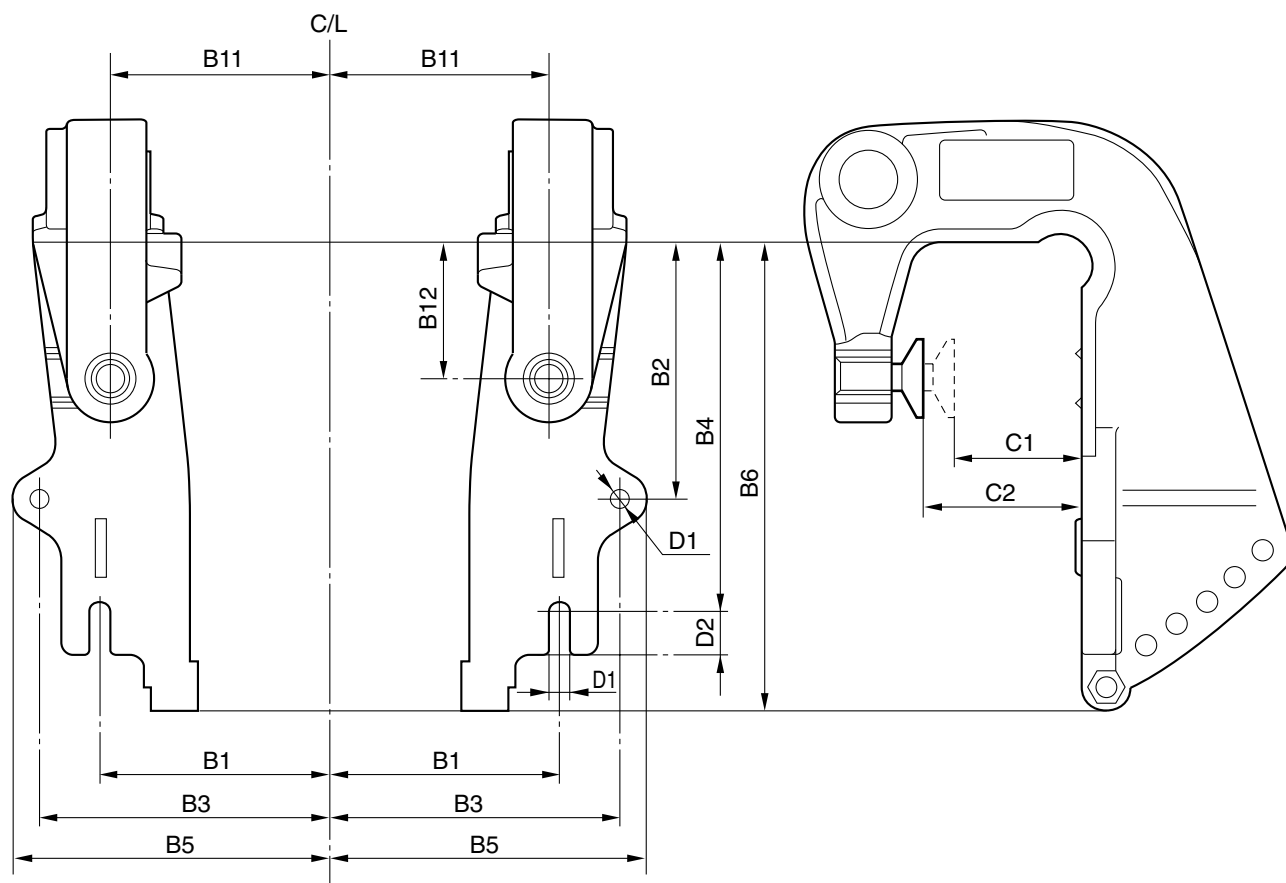


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	95.3 (3.8)	B8	—	C1	38 (1.5)	D1	8.3 (0.3)
B2	275.5 (10.8)	B9	18 (0.7)	C2	67 (2.6)	D2	10 (0.4)
B3	95.3 (3.8)	B10	—	C3	—	D3	—
B4	94.5 (3.7)	B11	73.5 (2.9)			D4	—
B5	111 (4.4)	B12	69.5 (2.7)				
B6	325.5 (12.8)						
B7	—						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	E/25B	25X	E/30H	EK25B	EK25C			
Unified model								
Manual tilt								

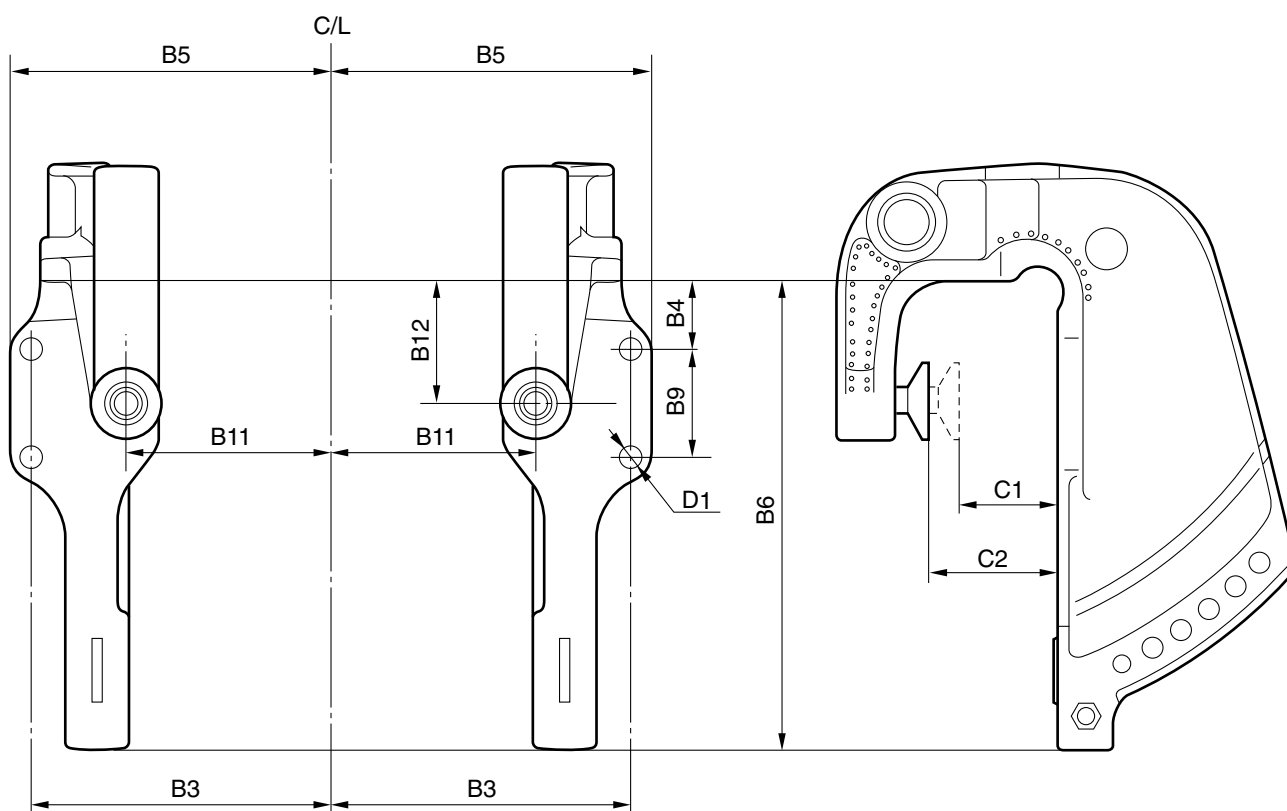


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	89 (3.5)	B8	—	C1	35 (1.4)	D1	8.5 (0.33)
B2	96.5 (3.8)	B9	—	C2	65 (2.6)	D2	15 (0.59)
B3	112.5 (4.4)	B10	—	C3	—	D3	—
B4	140 (5.5)	B11	85 (3.3)			D4	—
B5	122.5 (4.8)	B12	51 (2.0)				
B6	176 (6.9)						
B7	—						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	E/40X	F25D						
Unified model		F25A						
Manual tilt								

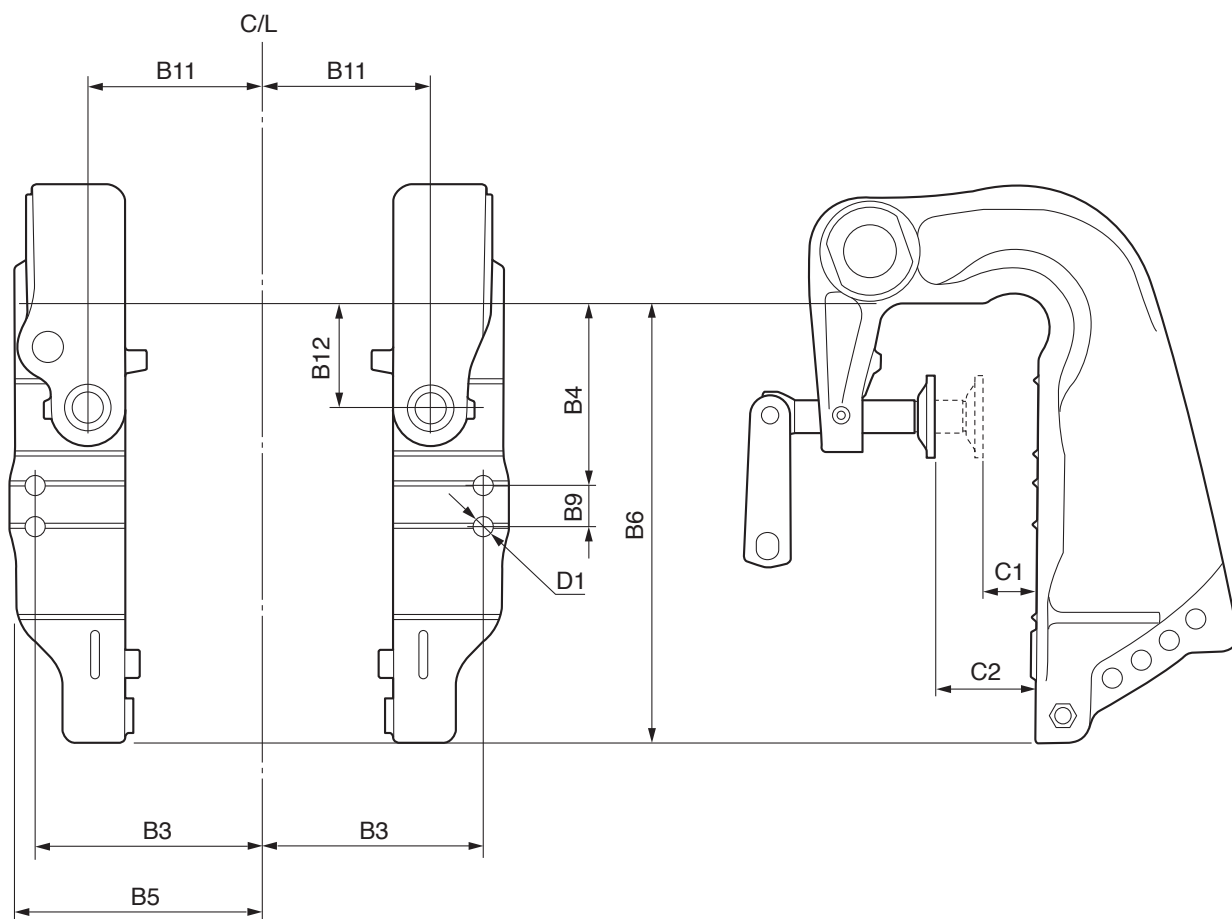


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	—	B8	—	C1	37 (1.5)	D1	10.5 (0.41)
B2	—	B9	50 (2.0)	C2	68 (2.7)	D2	—
B3	140 (5.5)	B10	—	C3	—	D3	—
B4	32 (1.3)	B11	95.5 (3.8)			D4	—
B5	150 (5.9)	B12	57 (2.2)				
B6	218 (8.6)						
B7	—						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	F25G							
Unified model	F25C							
Manual tilt								

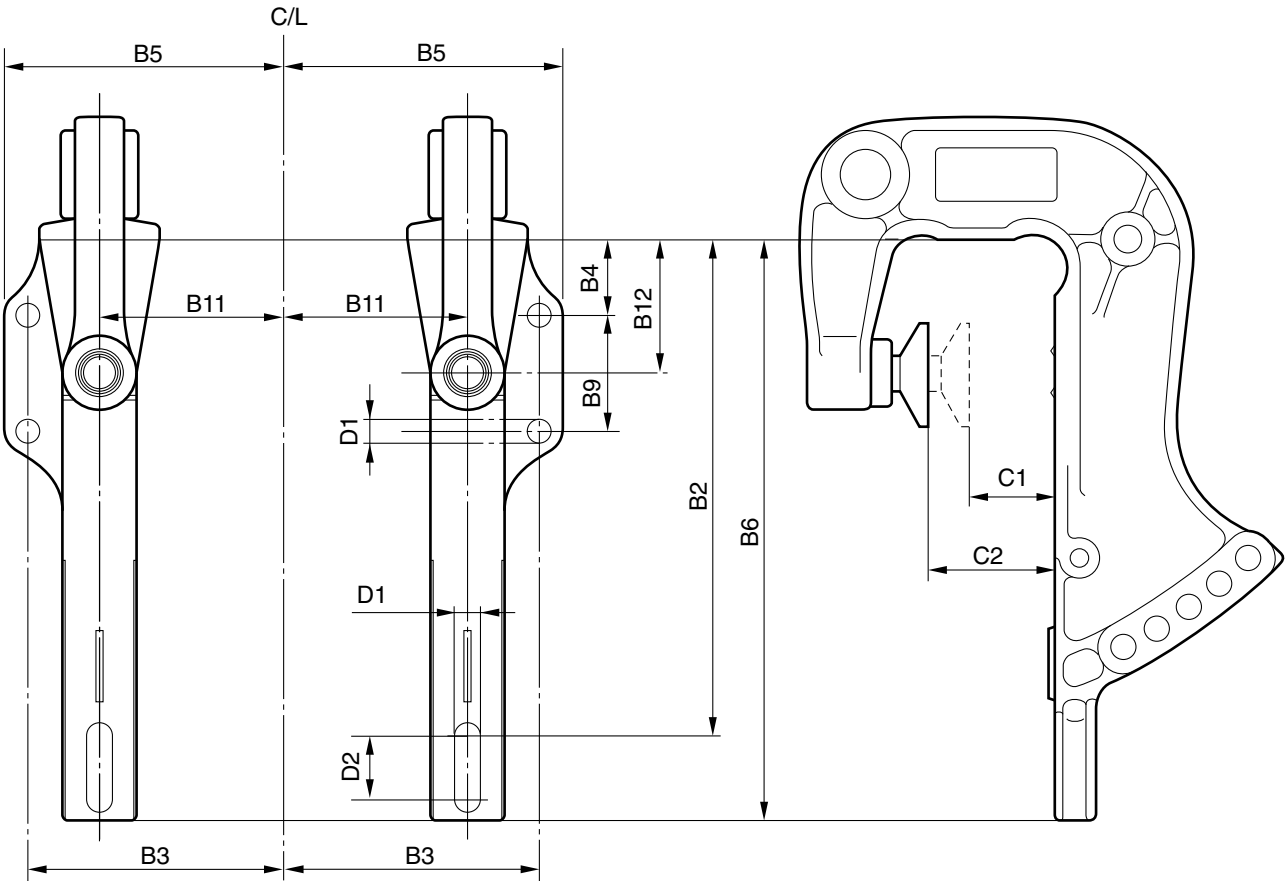


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	—	B8	—	C1	32 (1.3)	D1	8.3 (0.33)
B2	—	B9	18 (0.7)	C2	67 (2.6)	D2	—
B3	95 (3.8)	B10	—	C3	—	D3	—
B4	76.5 (3.0)	B11	73.5 (2.9)			D4	—
B5	106 (4.2)	B12	48 (1.9)				
B6	188 (7.4)						
B7	—						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	E40G	E40J	EK40G	EK40J				
Unified model								
Manual tilt								

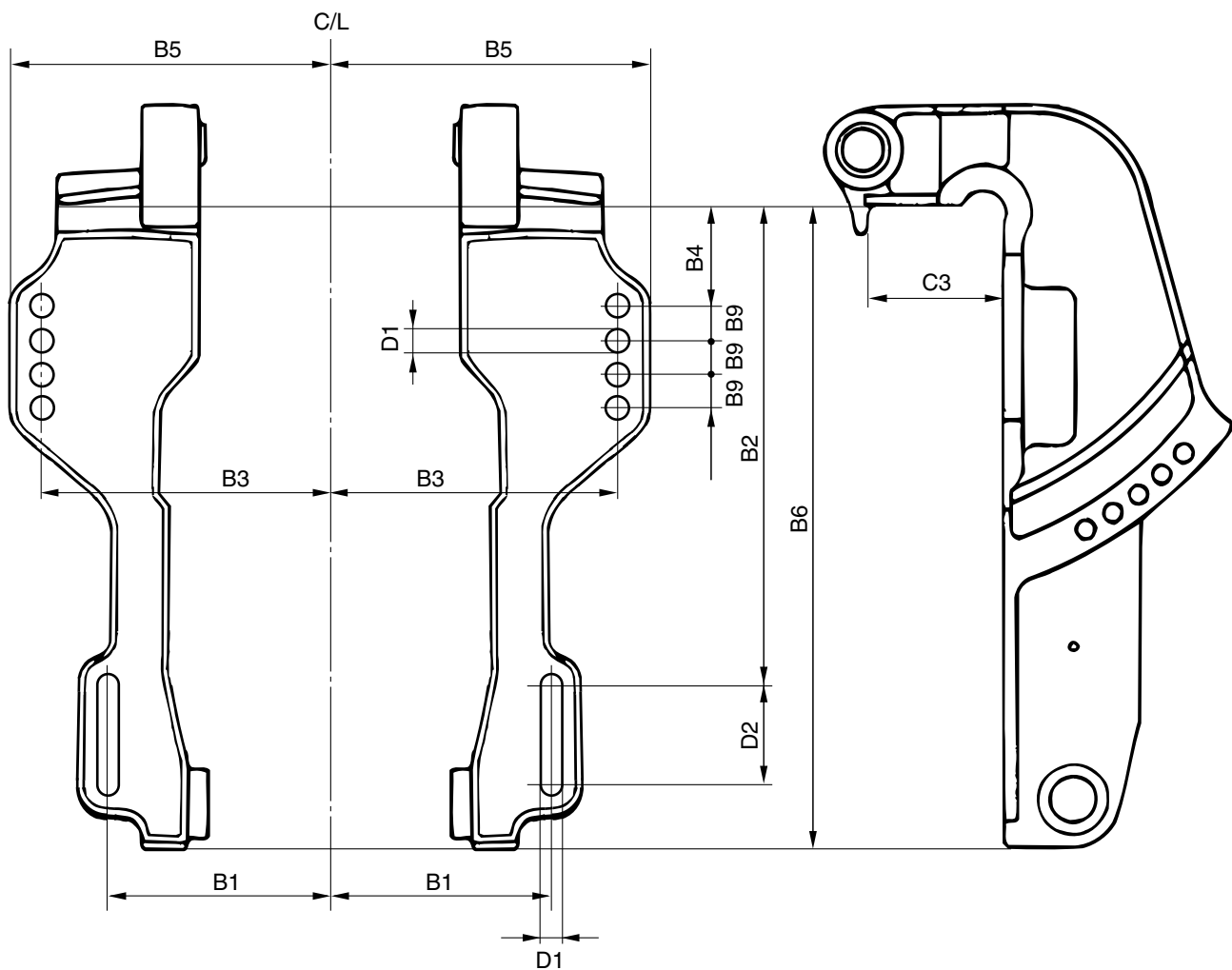


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	—	B8	—	C1	33 (1.3)	D1	10.5 (0.41)
B2	212 (8.3)	B9	50 (2.0)	C2	60 (2.3)	D2	27 (1.1)
B3	124.5 (4.9)	B10	—	C3	—	D3	—
B4	32 (1.3)	B11	93.5 (3.7)			D4	—
B5	134.5 (5.3)	B12	57 (2.2)				
B6	249 (9.8)						
B7	—						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	E/40X	F25D	FT25F	F25G				
Unified model		F25A/B	T25A	F25C				
Global model	F30B	F40F						
Unified model	F30A	F40A						
PTT & Hydro-tilt								

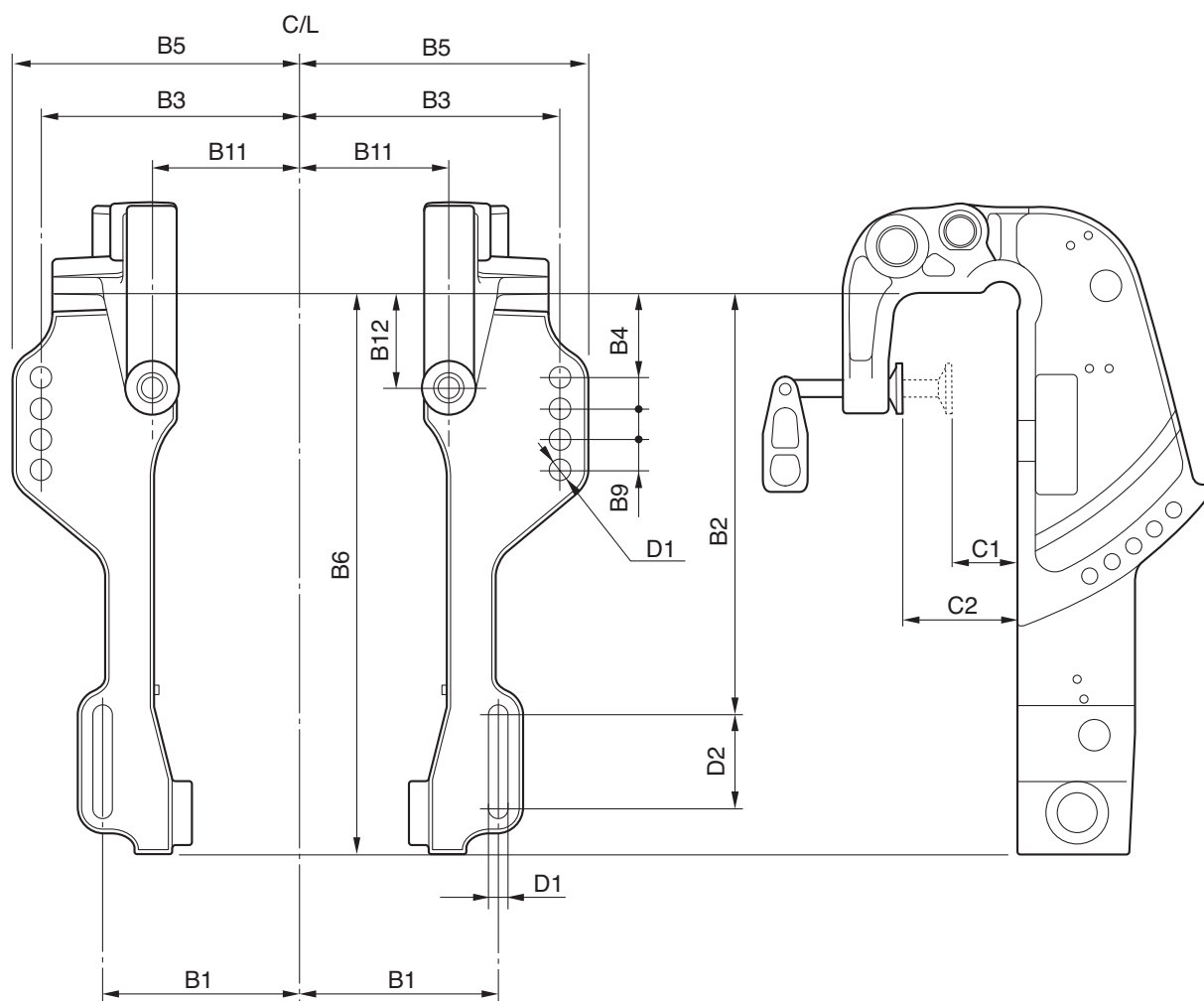


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	126 (5.0)	B8	—	C1	—	D1	13 (0.5)
B2	254 (10.0)	B9	18.5 (0.7)	C2	—	D2	55.5 (2.2)
B3	163.5 (6.4)	B10	—	C3	69 (2.7)	D3	—
B4	50.8 (2.0)	B11	—			D4	—
B5	180 (7.1)	B12	—				
B6	338 (13.3)						
B7	—						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	F40J							
Unified model								
Hydro-tilt								

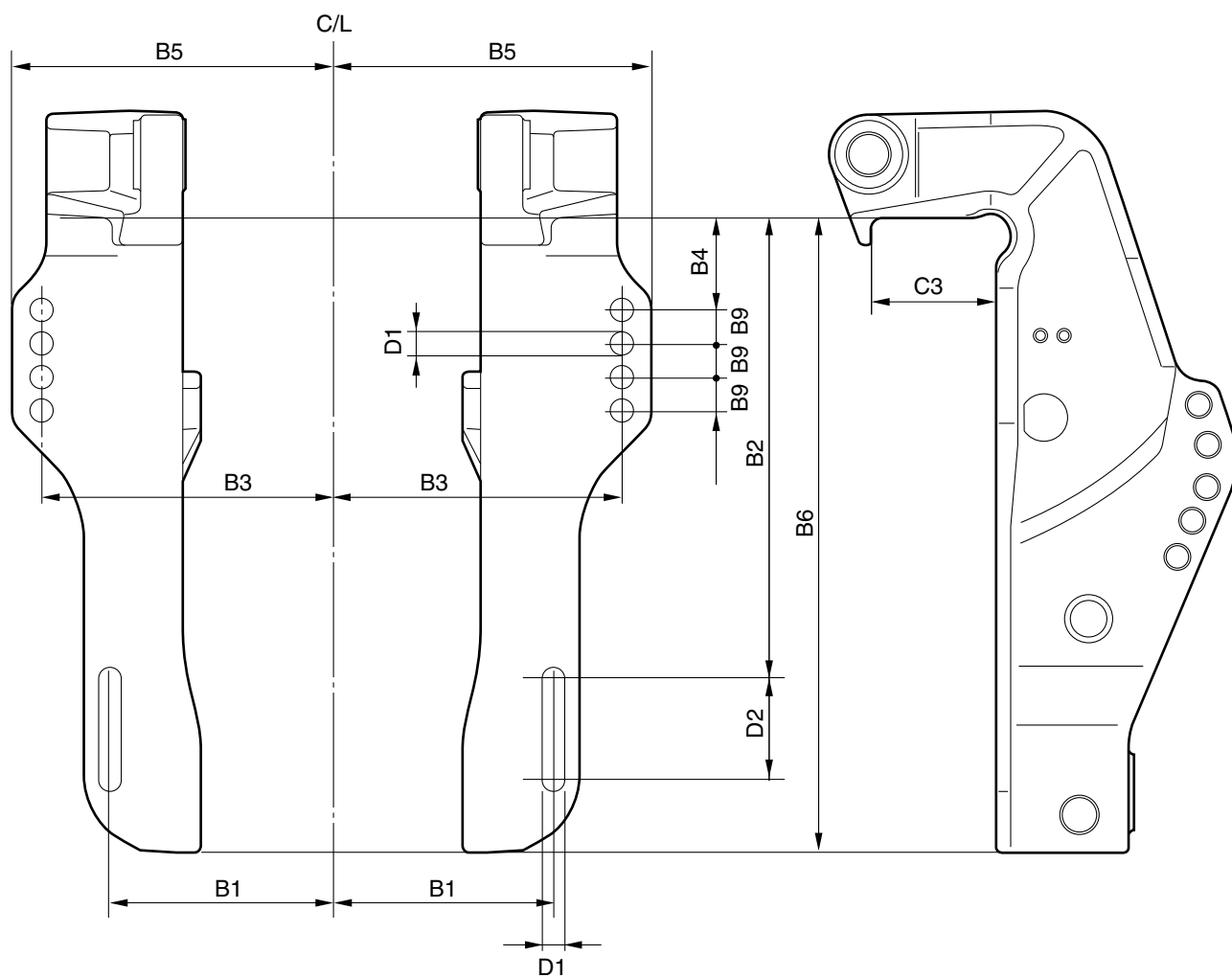


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	126 (5.0)	B8	—	C1	33.5 (1.3)	D1	13 (0.5)
B2	254 (10.0)	B9	18.5 (0.7)	C2	70.5 (2.8)	D2	55.5 (2.2)
B3	163.5 (6.4)	B10	—	C3	—	D3	—
B4	50.8 (2.0)	B11	95.5 (3.8)			D4	—
B5	180 (7.1)	B12	57 (2.2)				
B6	338 (13.3)						
B7	—						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	F40H	F40G	F50H	FT50J	F60F	FT60G	F70A	
Unified model			F50B	T50B	F60B	T60B	F70A	
PTT & Hydro-tilt								

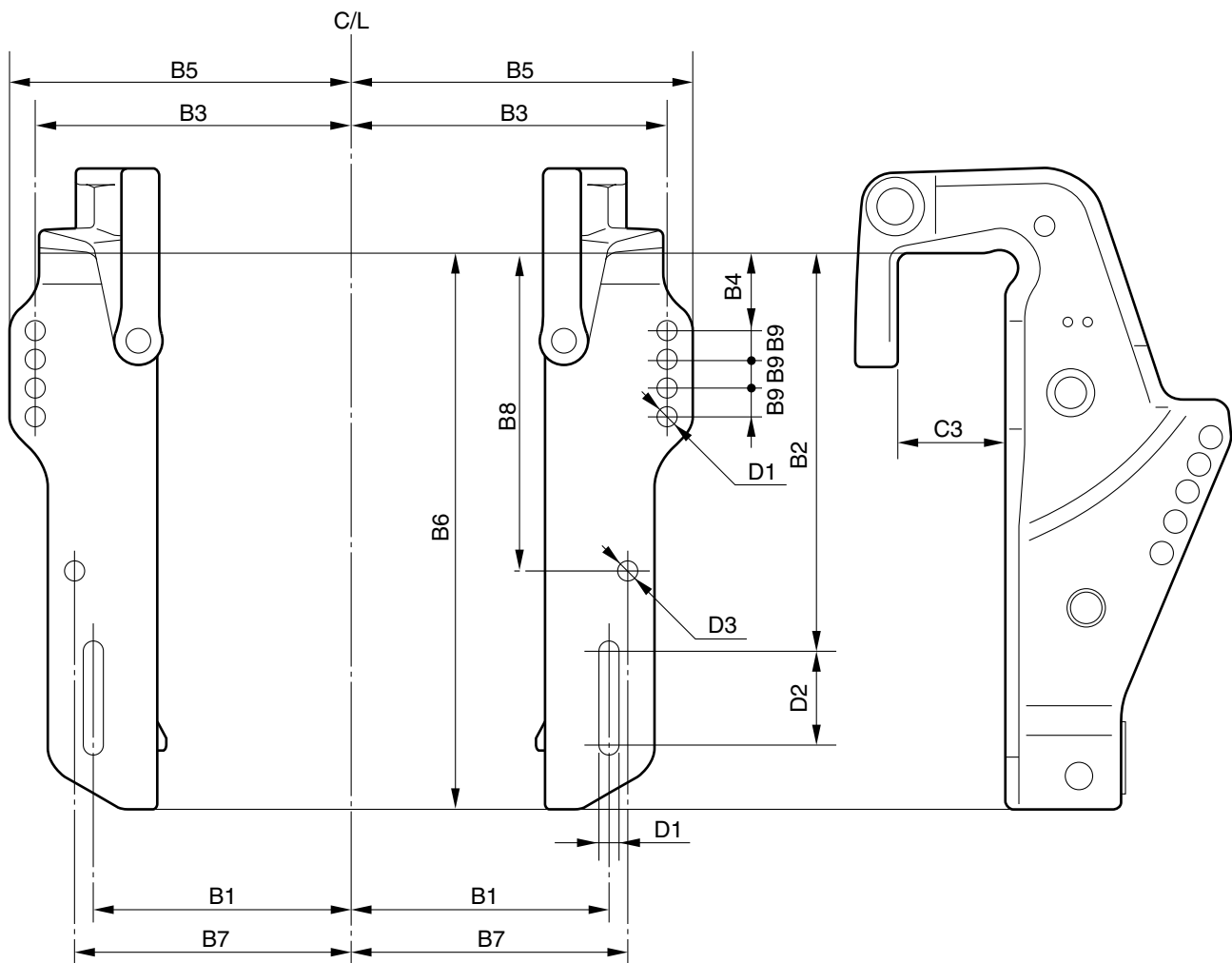


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	126 (5.0)	B8	—	C1	—	D1	13 (0.5)
B2	254 (10.0)	B9	18.5 (0.7)	C2	—	D2	55.5 (2.2)
B3	163.5 (6.4)	B10	—	C3	69 (2.7)	D3	—
B4	50.8 (2.0)	B11	—			D4	—
B5	180 (7.1)	B12	—				
B6	350 (13.8)						
B7	—						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	40V	50H	E60H	F50D	FT50C			
Unified model								
PTT & Hydro-tilt								

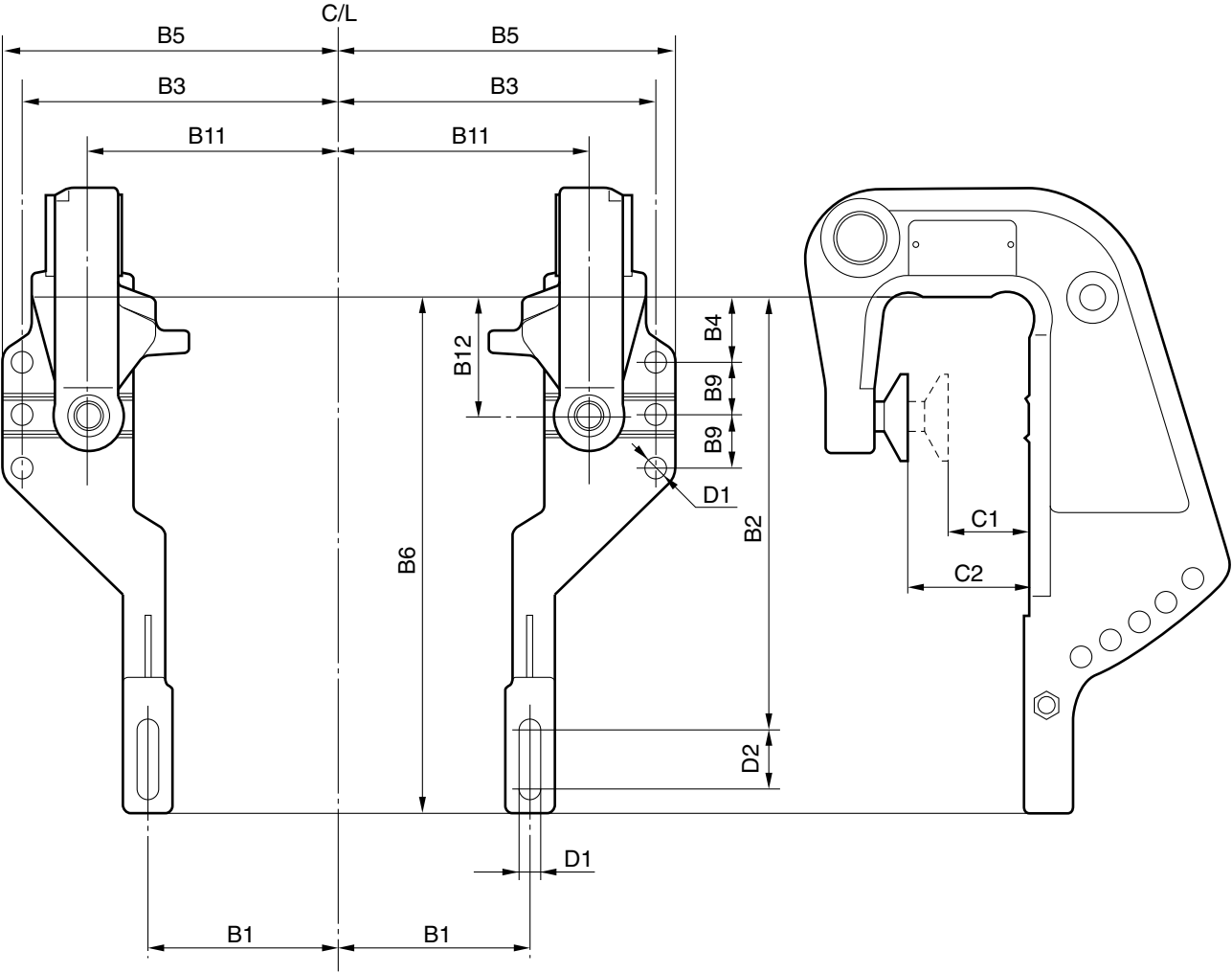


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	126 (5.0)	B8	203 (8.0)	C1	—	D1	13 (0.51)
B2	254 (10.0)	B9	18.5 (0.73)	C2	—	D2	60.5 (2.4)
B3	163.5 (6.4)	B10	—	C3	69 (2.7)	D3	13 (0.51)
B4	50.8 (2.0)	B11	—			D4	—
B5	180 (7.1)	B12	—				
B6	355 (14.0)						
B7	138 (5.4)						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	40V	50H						
Unified model								
Manual tilt								

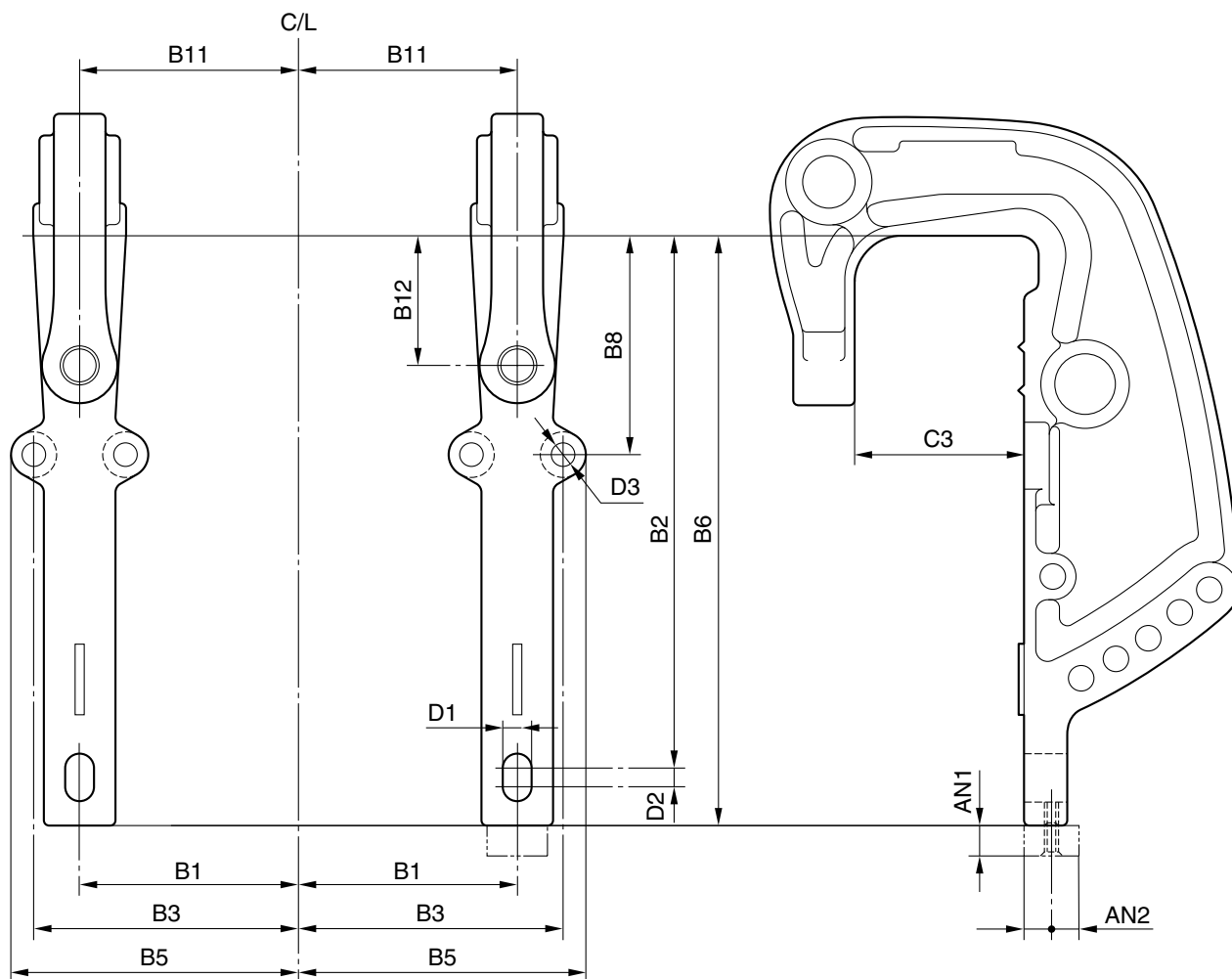


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	62.5 (2.5)	B8	—	C1	30 (1.2)	D1	10.5 (0.41)
B2	208 (8.2)	B9	25 (0.98)	C2	66 (2.6)	D2	26 (1.0)
B3	121.5 (4.8)	B10	—	C3	—	D3	—
B4	32 (1.3)	B11	90.5 (3.6)			D4	—
B5	131.5 (5.2)	B12	57 (2.2)				
B6	245 (9.6)						
B7	—						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	E48C							
Unified model								
Manual tilt								

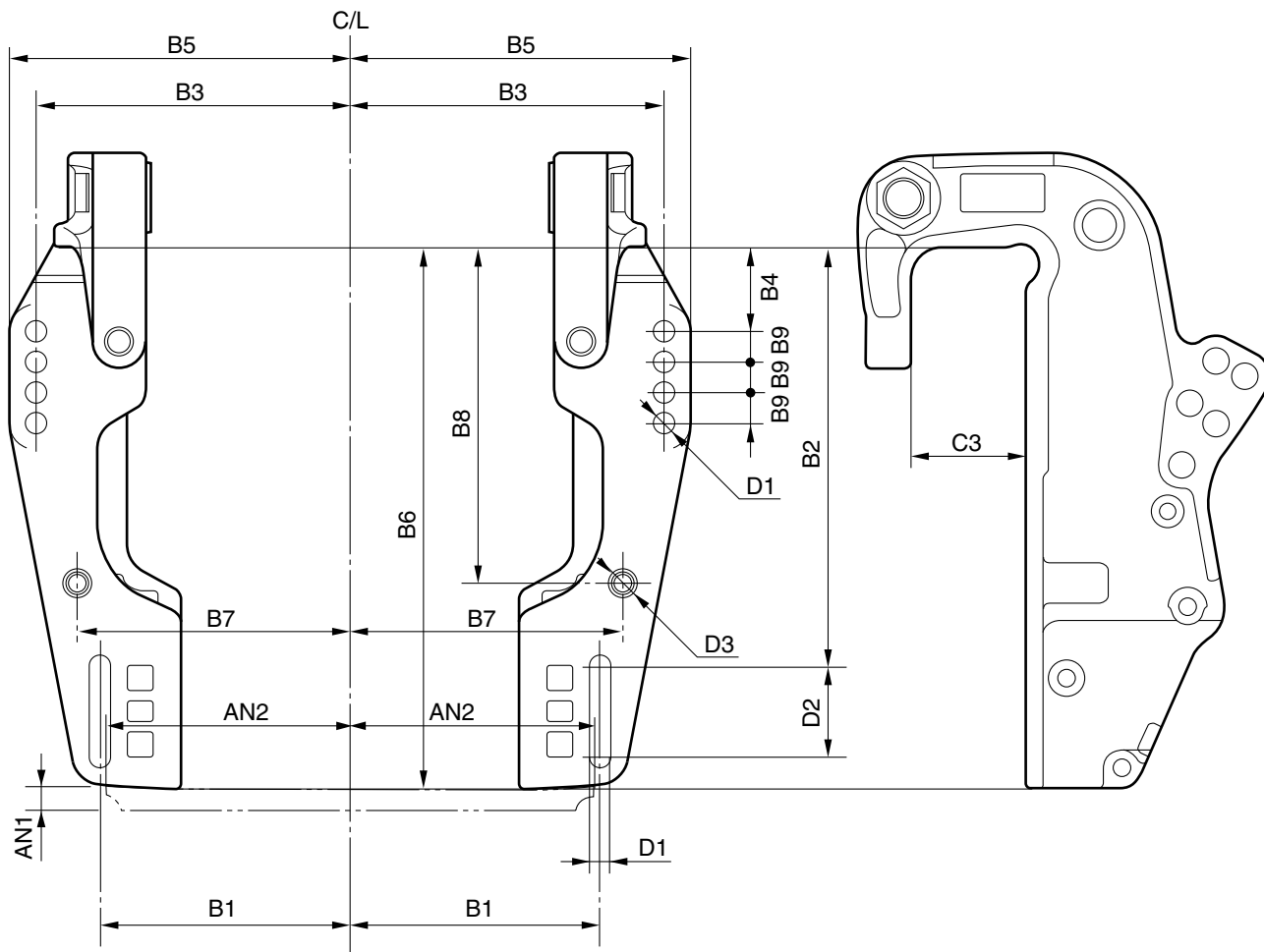


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	96 (3.8)	B8	95 (3.7)	C1	—	AN1	14 (0.55)
B2	230 (9.1)	B9	—	C2	—	AN2	12 (0.47)
B3	119 (4.7)	B10	—	C3	73 (2.9)		
B4	—	B11	96 (3.8)	D1	12 (0.47)		
B5	129 (5.1)	B12	57 (2.2)	D2	8 (0.31)		
B6	254 (10.0)			D3	10.5 (0.41)		
B7	—			D4	—		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	55B	60F	E60H					
Unified model								
PTT & Hydro-tilt for S-transom								

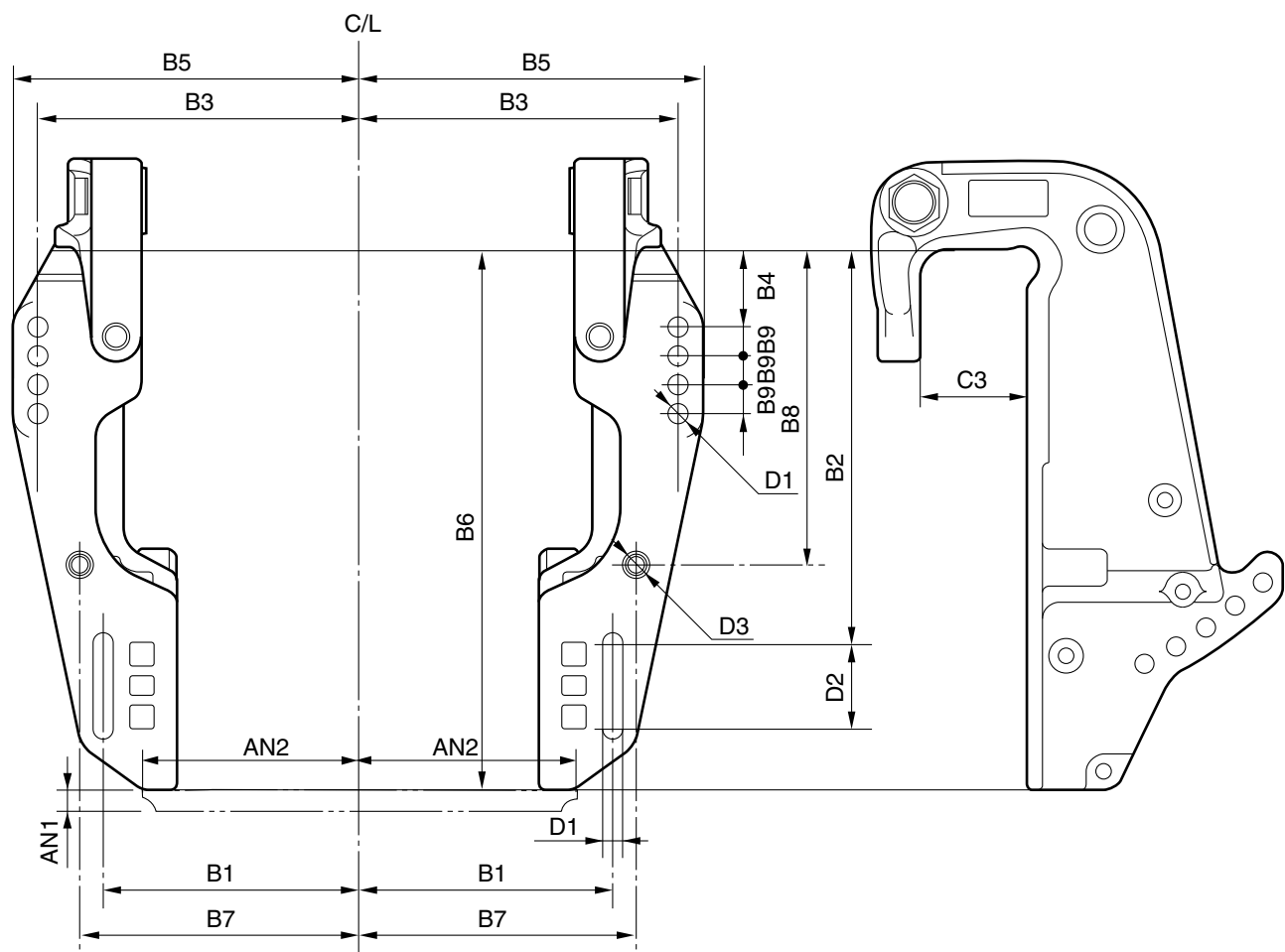


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	125.4 (4.9)	B8	203.2 (8.0)	C1	—	D1	13 (0.51)
B2	254 (10.0)	B9	18.5 (0.73)	C2	—	D2	55.5 (2.2)
B3	163.5 (6.4)	B10	—	C3	68.5 (2.7)	D3	—
B4	50.8 (2.0)	B11	—			D4	—
B5	180 (7.1)	B12	—			AN1	17.5 (0.69)
B6	329 (13.0)					AN2	102 (4.0)
B7	138.1 (5.4)						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	55B	E55D	60F	70B	85A	90A		
Unified model								
Global model	E60H	E75B						
Unified model								
PTT & Hydro-tilt for L/X-transom								

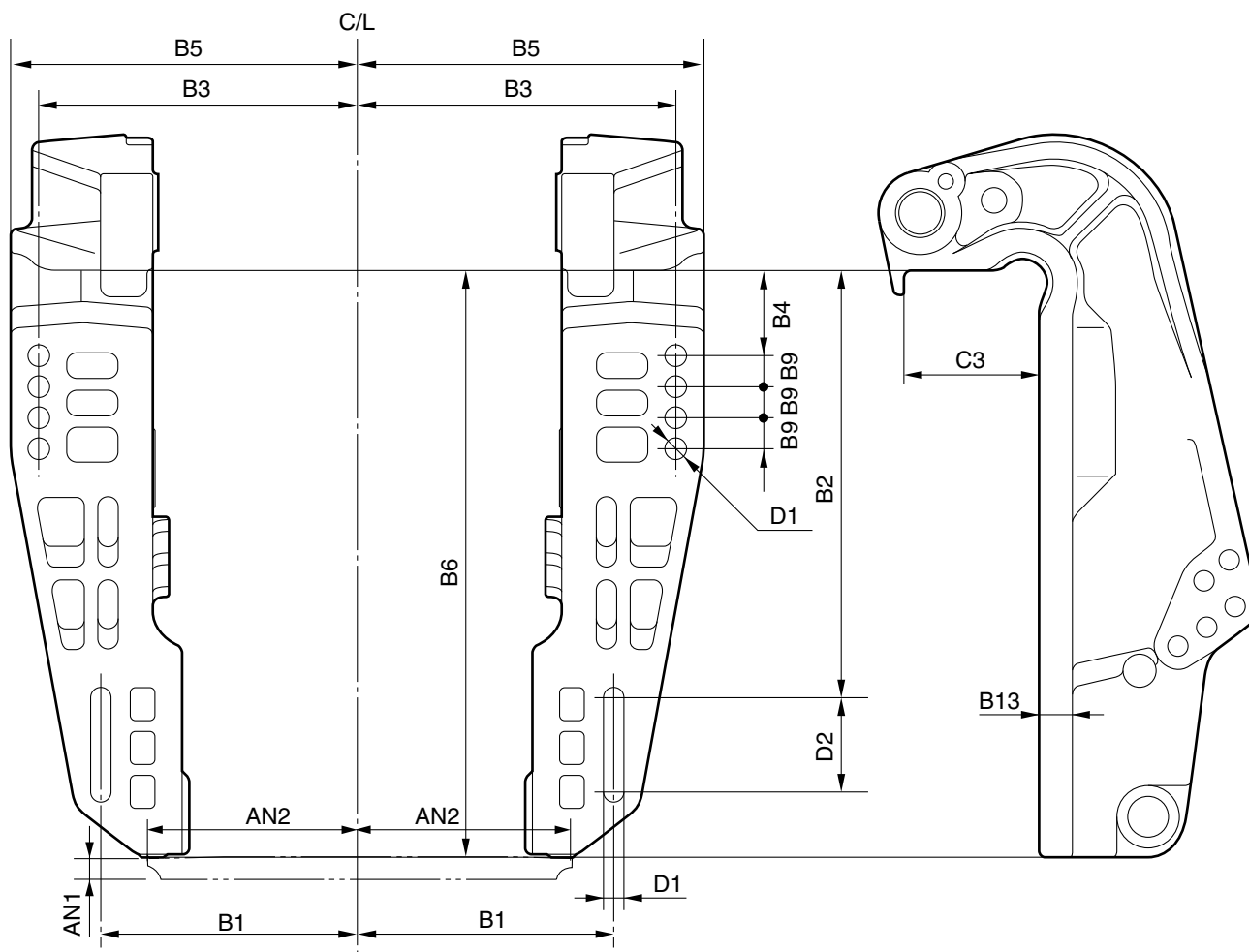


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	125.4 (4.9)	B8	203.2 (8.0)	C1	—	D1	13 (0.51)
B2	254 (10.0)	B9	18.5 (0.73)	C2	—	D2	55.5 (2.2)
B3	163.5 (6.4)	B10	—	C3	68.5 (2.7)	D3	—
B4	50.8 (2.0)	B11	—			D4	—
B5	180 (7.1)	B12	—			AN1	17.5 (0.69)
B6	352 (13.9)					AN2	102 (4.0)
B7	138.1 (5.4)						

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	F80B	F90B	F100D					
Unified model								
PTT								

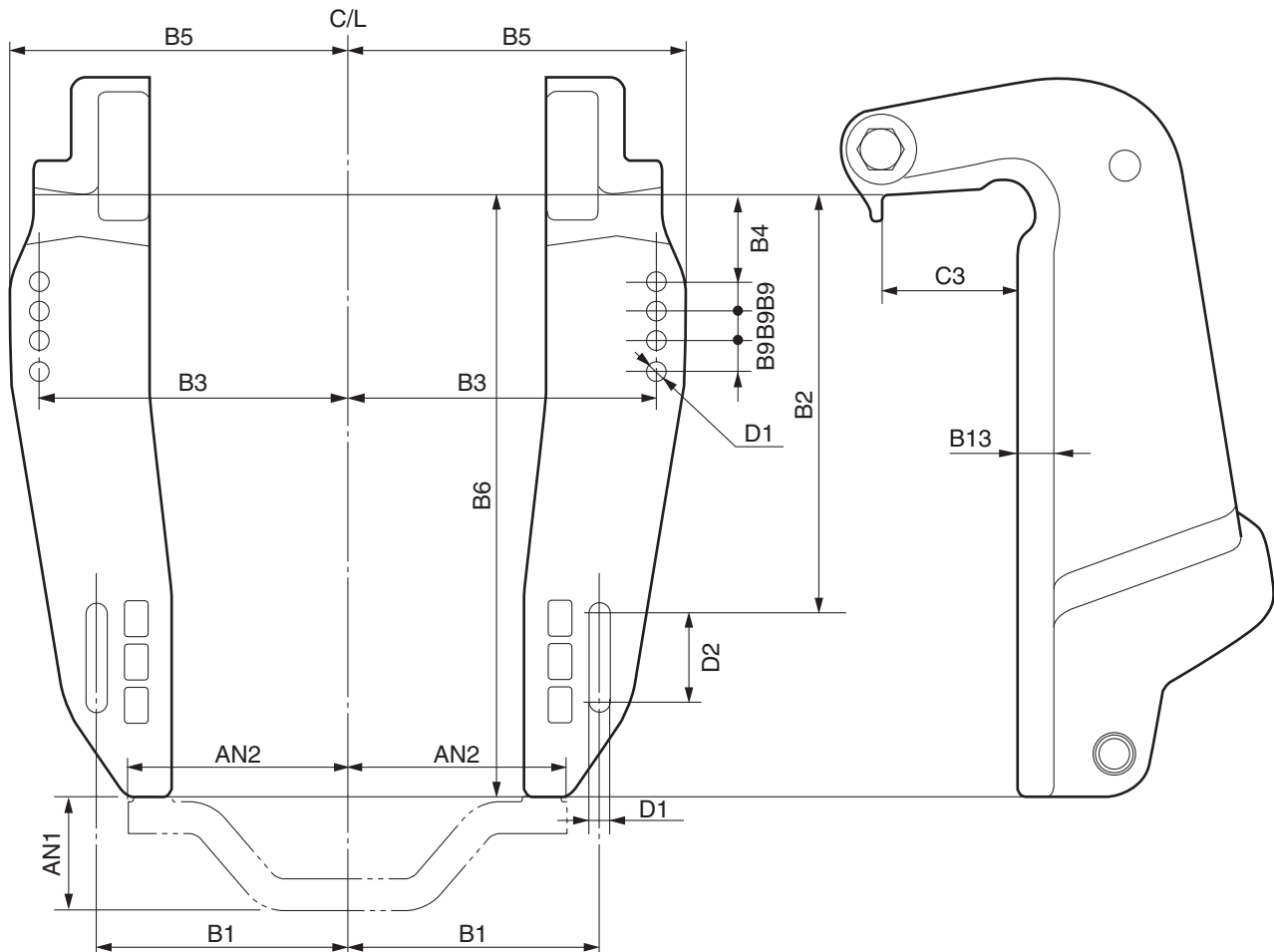


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	125.4 (4.9)	B8	—	C1	—	AN1	17.5 (0.69)
B2	254 (10.0)	B9	18.5 (0.73)	C2	—	AN2	102 (4.0)
B3	163.5 (6.4)	B10	—	C3	80 (3.1)		
B4	50.8 (2.0)	B11	—	D1	13 (0.51)		
B5	180 (7.1)	B12	—	D2	55.5 (2.2)		
B6	368 (14.5)	B13	20 (0.79)	D3	—		
B7	—			D4	—		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	E115A	L/150A	L/200A					
Unified model								
Global model	F75C	F100B	F/FL115A	F/FL150D	F/FL150F			
Unified model				F/LF150B				
PTT & Hydro tilt								

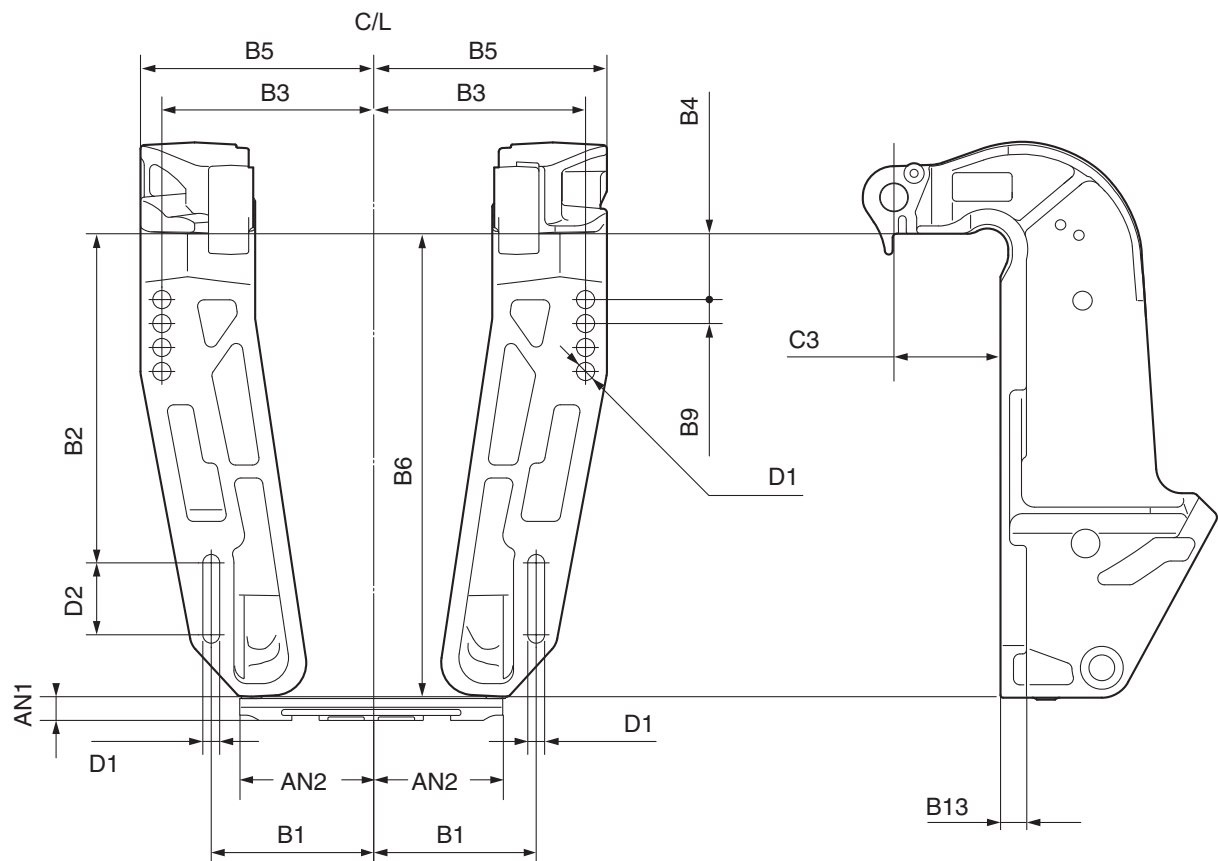


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	125.4 (4.9)	B8	—	C1	—	AN1	52 (2.0)
B2	254 (10.0)	B9	18.5 (0.73)	C2	—	AN2	102 (4.0)
B3	163.5 (6.4)	B10	—	C3	82 (3.2)		
B4	50.8 (2.0)	B11	—	D1	13 (0.51)		
B5	180 (7.1)	B12	—	D2	55.5 (2.2)		
B6	367 (14.4)	B13	24 (0.94)	D3	—		
B7	—			D4	—		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	F/FL115B	F115C	F130A	F90C	F100F	F75D	F80D	F90D
Unified model	F/LF115B	VF115A	F130A	F90B		F75B		VF90A
Global model	F125A							
Unified model								
PTT								

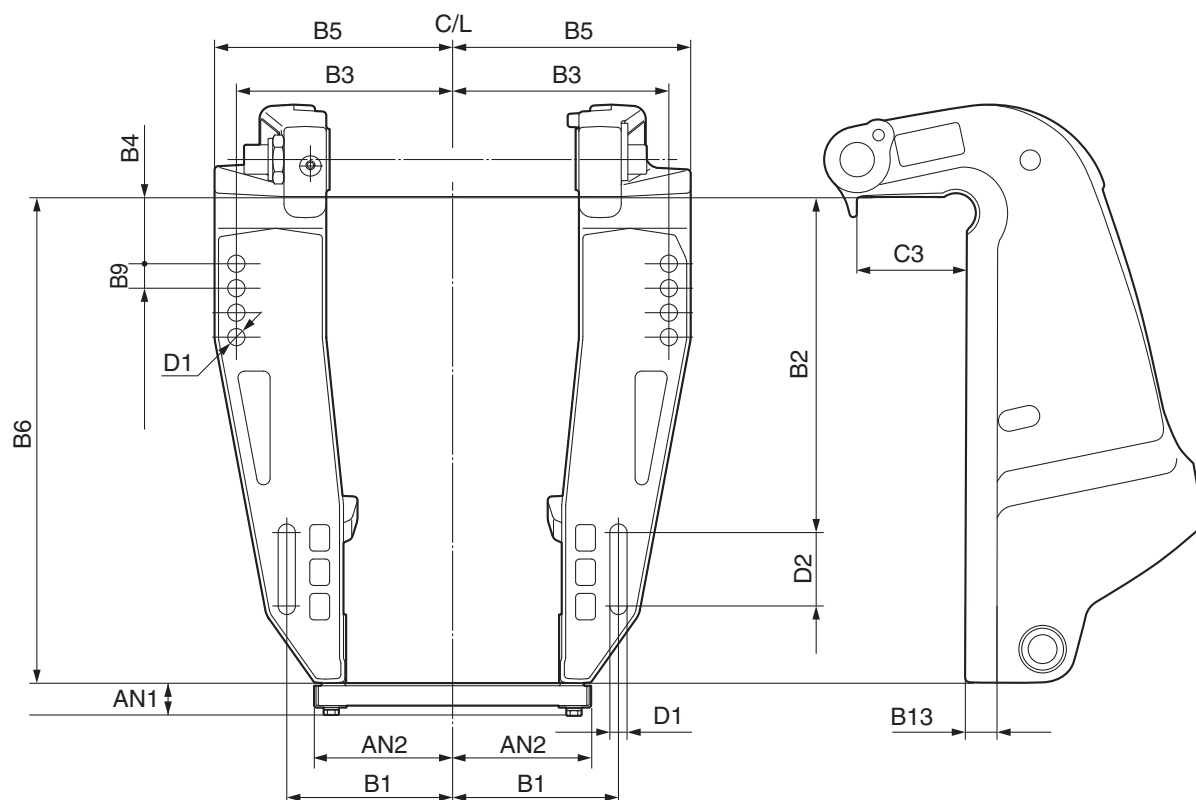


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	125.4 (4.9)	B8	—	C1	—	AN1	17.5 (0.69)
B2	254 (10.0)	B9	18.5 (0.73)	C2	—	AN2	102 (4.0)
B3	163.5 (6.4)	B10	—	C3	82 (3.2)		
B4	50.8 (2.0)	B11	—	D1	13 (0.51)		
B5	180 (7.1)	B12	—	D2	55.5 (2.2)		
B6	357.2 (14.1)	B13	20 (0.79)	D3	—		
B7	—			D4	—		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	F150C-X	F175A	F/FL200F	F/FL200G	F/FL175C	F/FL150G		
Unified model	VF150XA	F175A	F/LF200B	F/LF200CA	F/LF175CA	F/LF150CA		
PTT								

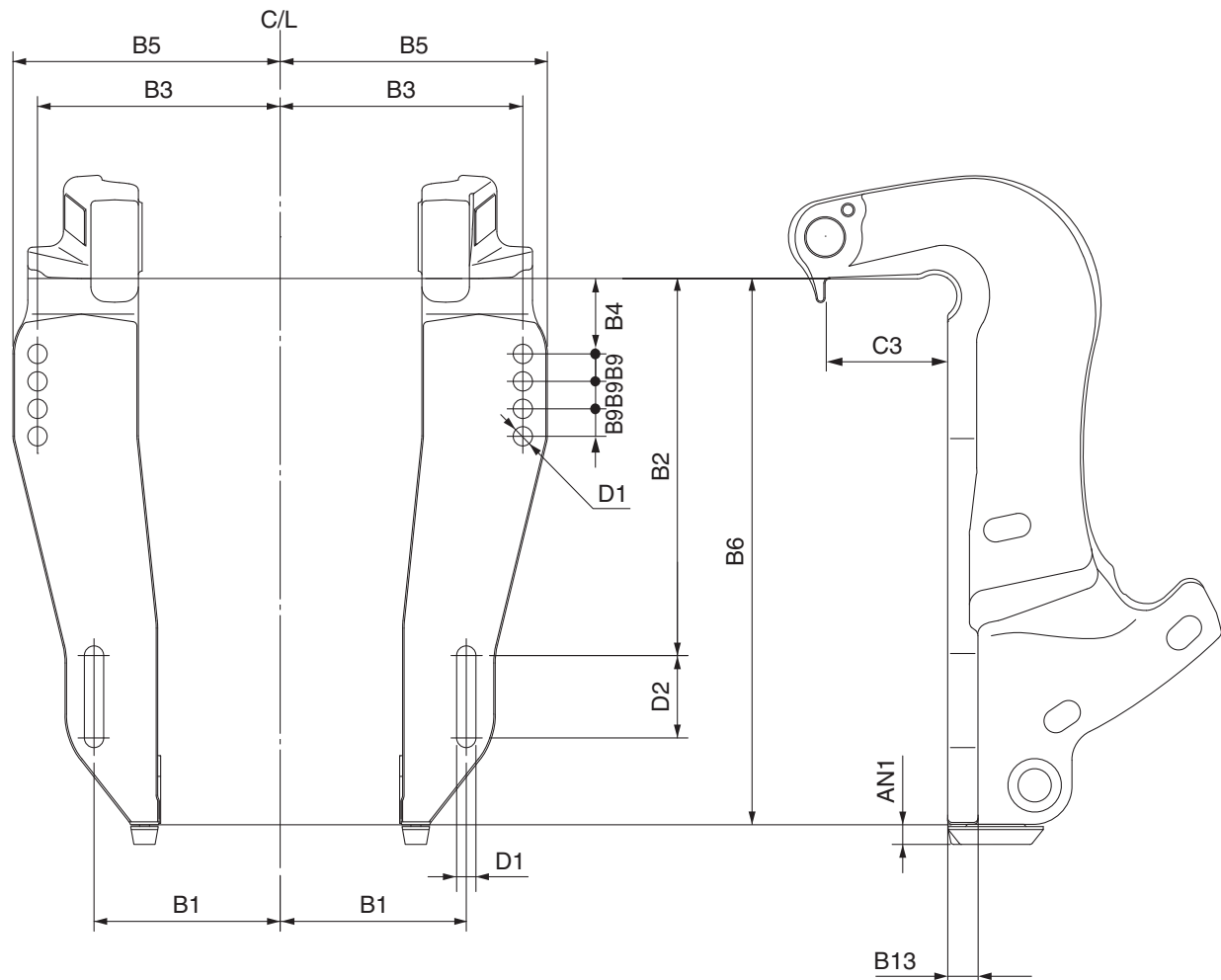


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	125.4 (4.9)	B8	—	C1	—	AN1	25 (1.0)
B2	254 (10.0)	B9	18.5 (0.73)	C2	—	AN2	102 (4.0)
B3	163.5 (6.4)	B10	—	C3	82 (3.2)		
B4	50.8 (2.0)	B11	—	D1	13 (0.51)		
B5	180 (7.1)	B12	—	D2	55.5 (2.2)		
B6	367 (14.4)	B13	24 (0.94)	D3	—		
B7	—			D4	—		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Global model	F150C-L	F165A	F175B	F185A	F200D	F225D	F250C	F225G
Unified model	VF150LA		VF175LA		VF200LA	VF225LA	VF250LA	
Global model	F250F	F275A						
Unified model								
PTT								

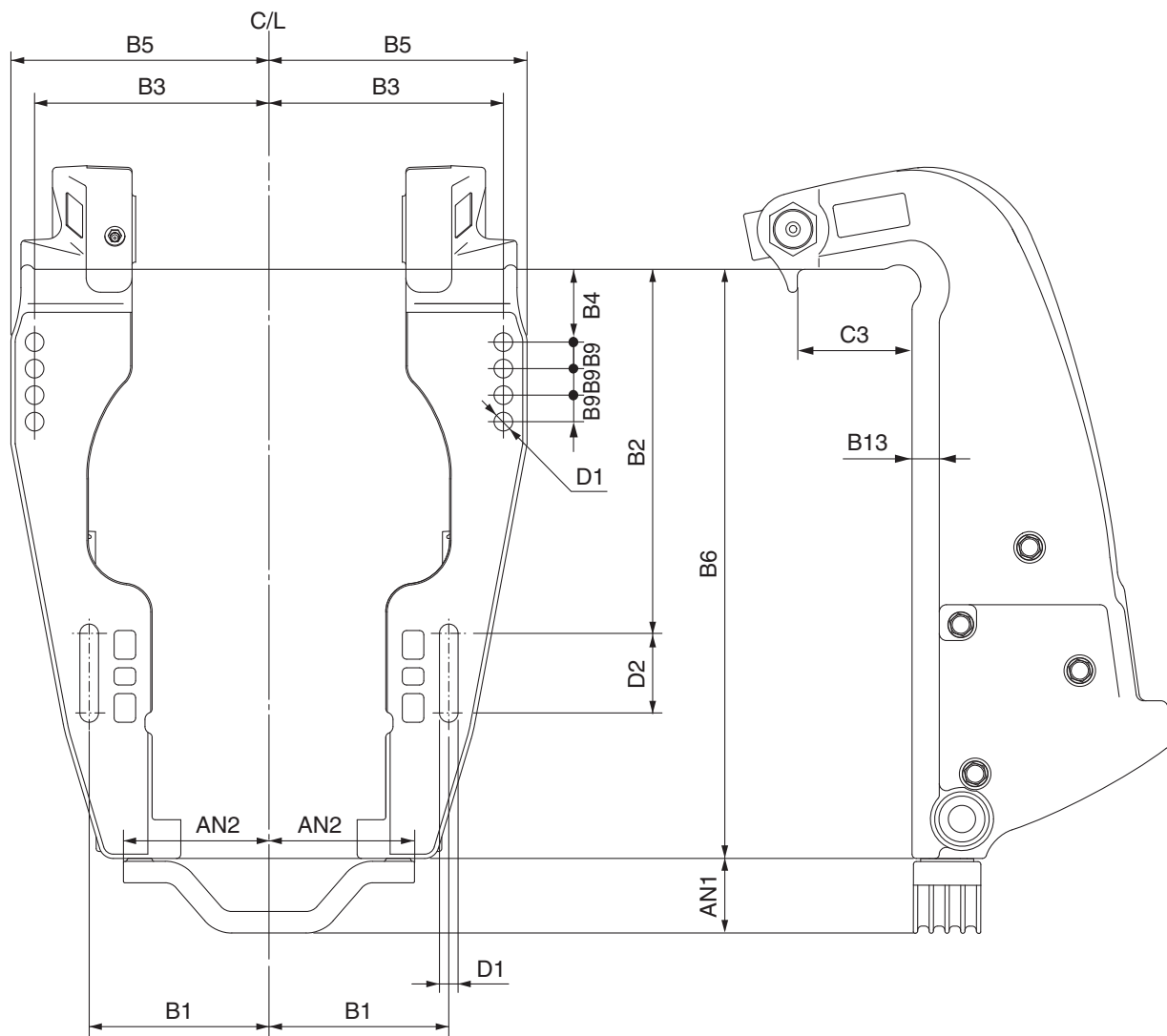


Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	125.4 (4.9)	B8	—	C1	—	AN1	13.5 (0.5)
B2	254 (10.0)	B9	18.5 (0.7)	C2	—	AN2	—
B3	163.5 (6.4)	B10	—	C3	82 (3.2)		
B4	50.8 (2.0)	B11	—	D1	13 (0.5)		
B5	180 (7.1)	B12	—	D2	55.5 (2.2)		
B6	368 (14.5)	B13	20 (0.79)	D3	—		
B7	—			D4	—		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

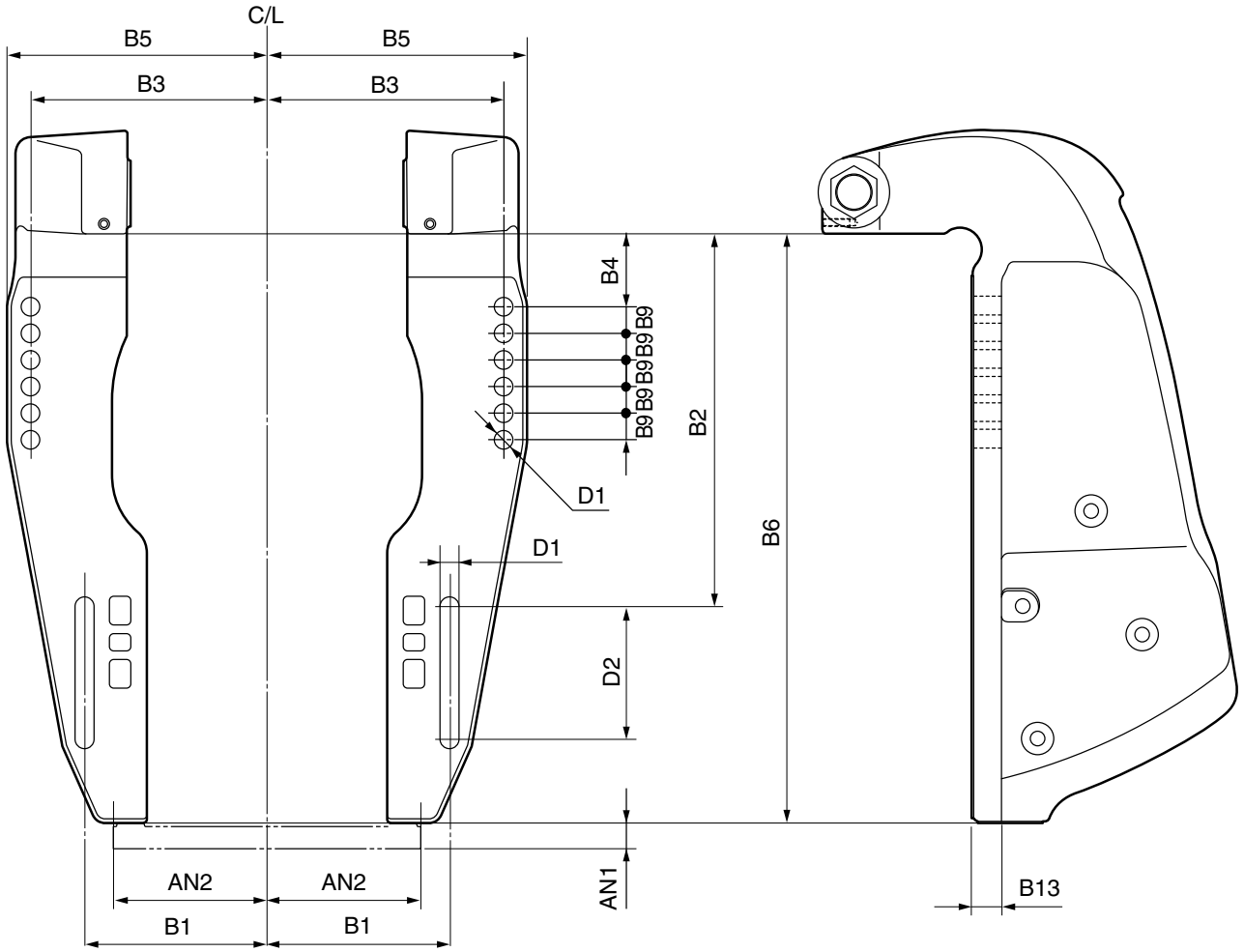
Global model	F/FL200B	F/FL200C	F/FL225B	F/FL250A	F/FL250H	F/FL225F	F/FL250D	F/FL300B
Unified model		F/LF200A	F/LF225A	F/LF250A		F/LF225CA	F/LF250CA	F/LF300CA
Global model	F250J-X	F/FL225H	F/FL250L	F/FL300C				
Unified model	VF250XA	F/LF225B	F/LF250B	F/LF300A				
PTT								



Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	125.4 (4.9)	B8	—	C1	—	AN1	52 (2.0)
B2	254 (10.0)	B9	18.5 (0.7)	C2	—	AN2	102 (4.0)
B3	163.5 (6.4)	B10	—	C3	79 (3.1)		
B4	50.8 (2.0)	B11	—	D1	13 (0.5)		
B5	180 (7.1)	B12	—	D2	55.5 (2.2)		
B6	411 (16.2)	B13	20 (0.79)	D3	—		
B7	—			D4	—		

OUTBOARD MOTOR DIMENSIONS **CLAMP BRACKET DIMENSIONS**

Global model	F/FL350A							
Unified model	F/LF350CC							
PTT								



Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)	Symbol	mm (in.)
B1	125.4 (4.9)	B8	—	C1	—	AN1	17.5 (0.69)
B2	254 (10.0)	B9	18.5 (0.73)	C2	—	AN2	102 (4.0)
B3	163.5 (6.4)	B10	—	C3	—		
B4	50.8 (2.0)	B11	—	D1	13 (0.51)		
B5	180 (7.1)	B12	—	D2	92.6 (3.6)		
B6	406 (16.0)	B13	21 (0.83)	D3	—		
B7	—			D4	—		

PROPELLERS

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PROPELLER SPECIFICATIONS

PROPELLER TYPES

Yamaha propellers are specifically designed to match the characteristics of Yamaha outboard motors.

There are some types of propellers for the best matching depending on the operating condition.

Major types of propellers include:

STANDARD

This propeller series is designed for general use to match a wide range of operating conditions.

A stainless steel or an aluminum propeller can be selected to suit the preference of the user.

A stainless steel, counter rotation propeller is available for twin engine applications.

Newly designed Shift Dampener System (SDS) propellers, Talon Series, have been provided for K-series fitting propeller boss.



TALON SERIES

Shift Dampener System (SDS) greatly reduce shift shock and prop rattle.

New blade design controls ventilation and provides smooth acceleration.

White painted aluminium and polished stainless steel finishing propellers available.

Right hand rotation only.



RELIANCE SERIES

New polished stainless steel propellers are designed to provide for 150PS and bigger standard type engines.

These propellers are generally more aggressive than black standard stainless steel propellers, and will fit the engines under almost all operating conditions.

Shift Dampener System (SDS) propellers and L/H rotation propellers are available.



SALTWATER SERIES II

This new breed of stainless steel props is designed exclusively for offshore fishing boats and features highly polished, larger diameter design. The aggressive rake angle and extra cupping on the blades provide superior mid-range fuel efficiency, along with excellent anti-cavitation performance.

Shift Dampener System (SDS) propellers and L/H rotation propellers are available.



PROPELLER SPECIFICATIONS

SALTWATER SERIES XL

New polished stainless steel propellers have been designed for big offshore boats to obtain big impulsion power.

Newly designed Shift Dampener System (SDS) and polished treatment feature.

Shift Dampener System (SDS) has been adopted to reduce the shock and noise when shifting, and become possible to replace the propeller damper.

L/H rotation propellers are available for multi-engine applications.



SALTWATER SERIES HS4

Polished stainless steel propellers with 4-blade for V6 offshore engines.

Compared with the conventional three blades propeller, four blades make larger propeller blade surface area, which can catch much more water and obtain higher thrust performance.

As a result, this propeller will obtain better acceleration, and stable operation under rough water.

However, generally boat top speed performance is slightly lower than three blades propeller.

Shift Dampener System (SDS) has been adopted to reduce the shock and noise when shifting, and it is possible to replace the propeller damper.

L/H rotation propellers are available for twin application.



PROPELLER SPECIFICATIONS

SALTWATER SERIES XL4

Designed for the F350 (V8), this stainless steel four blade prop is intended for large offshore boats—such as express cruisers or walk arounds—that require massive thrust-to-plane and additional propeller grip for maximum operational efficiency.

Newly designed SDS (Shift Dampener System) and polished treatment feature.



TIP:

Shift Dampener System (SDS) uses a special new design and high-strength components, and much of the resulting force of an outboard shifting into forward or reverse gear is absorbed, resulting in far quieter and smoother operation. Besides, the propeller damper can be replaced.

VMAX SERIES

These polished stainless steel propellers are designed for a high-speed and light weight special boat with high-power engine for better performance.

These specialized propellers are generally more aggressive than the ventilated type propellers.



PERFORMANCE

These stainless steel propellers with vents for exhaust gas induction offer the best acceleration and top end performance causing the engine rpm rapidly increasing with a high rake, progressive pitch and more cup.

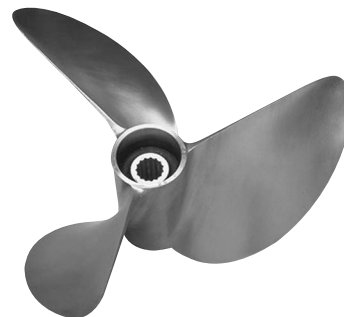
It allows higher transom mounting such as bass boats, yet does not increase steering torque.



HIGH PERFORMANCE

With the progressive pitch design and highly cupped blades, these special small hub propellers are designed for high-performance run-about boats.

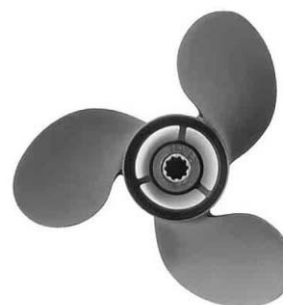
The through-hub exhaust system allows the exhaust gas to outlet the leading edge of each blade for enhanced acceleration.



WEEDLESS

This is designed for use in shallow water.

It eliminates weed buildup around the propeller hub.

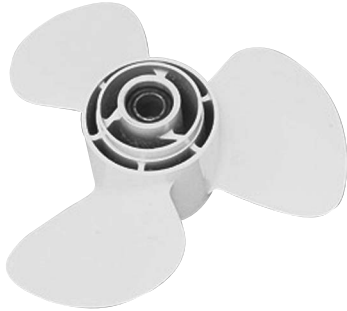


PROPELLER SPECIFICATIONS

DUAL THRUST

This is designed for sailboat or other large displacement boats.

This redirects the exhaust gases so that the blades cut through “clean” water, for higher efficiency.



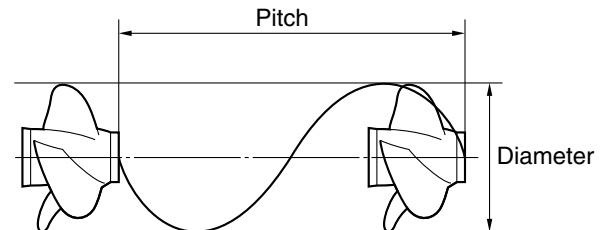
PROPELLER IDENTIFICATION

The propeller identification of the size is indicated as follows.

Propeller identification	=	Diameter (inch)	×	Pitch (inch)	-	Mark
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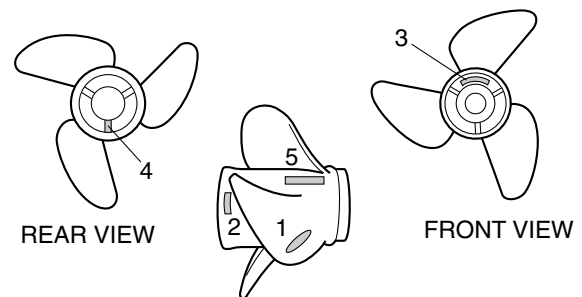
Diameter: Diameter of propeller rotating circle.

Pitch: Logical advancing distance when propeller rotated one time.



The location of the propeller identification varies.

Refer to the illustration as shown.



Example:

- (1) 7-1/4 X 6 - BS
- (2) 21 - ML (Pitch - Mark)
- (3) 13 X 17 - K2
- (4) 19K (Pitch and Mark)
- (5) 9-1/4 X 9 - J

* Calculation formula of the logical boat speed is as below.

- Boat speed (km/h) = propeller pitch (inch) X engine speed (r/min) X 0.001524 X propeller efficiency / gear ratio.
- Propeller efficiency = Actual advancing distance when propeller rotated one time / Logical advancing distance when propeller rotated one time.

PROPELLER SELECTION

Depending on the model, Yamaha outboard motors are fitted with the propellers which are chosen to perform well over a range of applications, but there may be the uses where a propeller with a different pitch would be more appropriate.

For a greater operating load, a smaller pitch propeller is more suitable as enables the correct engine speed at WOT (Wide-Open-Throttle) to be maintained.

Conversely, a larger pitch propeller is more suitable for a smaller operating load.

For details, see the WOT operation range table in this chapter.

Besides, select the best matched propeller series that meet the purpose of use depending on the classification and/or type of boat.

2018 PROPELLER APPLICATIONS

STANDARD PROPELLER

2 ps

Global model				2D						
Unified model										
Blade	Dia. (in)	Pitch (in)	Mark	Material	Part number	Remarks				
3	7 1/4	4	A	Plastic	6A1-45943-00	Fitted with shear pin				
3	7 1/4	4 1/2	A	Aluminum	646-45944-01	Fitted with shear pin				
3	7 1/4	5	A	Aluminum	6F8-45942-01	Fitted with shear pin				
3	7 1/4	5 1/2	A	Aluminum	646-45942-01	Fitted with shear pin				

2 – 3 ps

Global model				3B	F2B	F2.5B				
Unified model						F2.5B				
Blade	Dia. (in)	Pitch (in)	Mark	Material	Part number	Remarks				
3	7 1/4	5	BS	Aluminum	6L5-45949-00					
3	7 1/4	5 1/2	BS	Aluminum	6L5-45952-00					
3	7 1/4	6	BS	Aluminum	6L5-45943-00					
3	7 1/4	7 1/4	BS	Aluminum	6L5-45945-00					
3	7 1/4	8 1/4	BS	Aluminum	6L5-45947-00					

* Use the thrust washer (68D-G5987-00) for 4-stroke mode, and (6L5-45987-01) for 2-stroke model.

4 – 6 ps

Global model				F4B	F5A	F6C	4C	4D		
Unified model				F4A		F6A				
Blade	Dia. (in)	Pitch (in)	Mark	Material	Part number	Remarks				
3	7 1/4	6 1/2	BA	Aluminum	6E0-45949-00					
3	7 1/2	7	BA	Aluminum	6E0-45943-01					
3	7 1/2	8	BA	Aluminum	6E0-45941-01					
3	7 1/4	8 1/4	BA	Aluminum	6E0-45952-00					
3	7 1/2	9	BA	Aluminum	6E0-45954-00					

2018 PROPELLER APPLICATIONS

STANDARD PROPELLER

8 ps

Global model				E8D	EK8D						
Unified model											
Blade	Dia. (in)	Pitch (in)	Mark	Material	Part number	Remarks					
3	7 1/4	5	C	Aluminum	655-45949-00	Fitted with shear pin					
3	9	5 3/4	C	Aluminum	655-45947-01	Fitted with shear pin					
3	9	6 1/2	C	Aluminum	655-45945-00	Fitted with shear pin					
3	9	7	C	Aluminum	647-45943-00	Fitted with shear pin					
3	9	7 1/2	C	Aluminum	655-45943-00	Fitted with shear pin					
3	9	9	C	Aluminum	647-45947-00	Fitted with shear pin					
3	9 1/4	9 1/4	C	Aluminum	647-45941-00	Fitted with shear pin					

8 – 9.9 ps

Global model				F8F	F9.9J	8F					
Unified model				F8B	F9.9B						
Blade	Dia. (in)	Pitch (in)	Mark	Material	Part number	Remarks					
3	8 1/2	6 1/2	N	Aluminum	6G1-45947-00						
3	8 1/2	7 1/2	N	Aluminum	6G1-45943-00						
3	8 1/2	8	N	Aluminum	6G1-45952-00						
3	8 1/2	8 1/2	N	Aluminum	6G1-45941-00						
3	8 1/2	9 1/4	N	Aluminum	6G1-45954-00						

9.9 – 15 ps

Global model				9.9F	15F	E9.9D	E15D	EK9.9J	EK15P	EK9.9D	EK15D
Unified model											
Global model				F9.9H	F15C						
Unified model					F15A						
Blade	Dia. (in)	Pitch (in)	Mark	Material	Part number	Remarks					
3	9 1/2	6 1/2	J	Aluminum	683-45949-00						
3	9 1/4	8	J	Aluminum	63V-45947-00						
3	9 1/4	9 3/4	J	Aluminum	683-45952-00						
3	9 1/4	10	J	Aluminum	63V-45952-00						
3	9 1/4	10 1/2	J	Aluminum	683-45943-00						
3	9 1/4	11	J	Aluminum	63V-45943-00						
3	9 1/4	12	J	Aluminum	683-45941-00						

* Use the thrust washer (6B8-45987-00) for kerosene model, avoiding propeller damper damage.

9.9 – 20 ps

Global model				F9.9H	F15C	F20B	F20C				
Unified model					F15A	F20A					
Blade	Dia. (in)	Pitch (in)	Mark	Material	Part number	Remarks					
3	9 1/4	9	J1	Aluminum	63V-45945-10						
3	9 1/4	10	J1	Aluminum	63V-45952-10						
3	9 1/4	11	J1	Aluminum	63V-45943-10						
3	9 1/4	12	J1	Aluminum	63V-45941-10						

2018 PROPELLER APPLICATIONS

STANDARD PROPELLER

20 – 30 ps

Global model				E/25B	25X	E/30H	EK25B/C	F25D	F25G		
Unified model								F25A/B	F25C		
Blade	Dia. (in)	Pitch (in)	Mark	Material	Part number		Remarks				
3	10 5/8	6 3/4	F	Aluminum	6FM-45942-00						
3	9 7/8	8	F	Aluminum	664-45943-01						
3	9 7/8	9	F	Aluminum	664-45941-01						
3	9 7/8	10	F	Aluminum	62C-45941-00						
3	9 7/8	10 1/2	F	Aluminum	664-45945-00						
3	9 7/8	11 1/4	F	Aluminum	664-45947-01						
3	9 7/8	12	F	Aluminum	664-45954-01						
3	9 7/8	13	F	Aluminum	664-45949-02						
3	9 7/8	14	F	Aluminum	664-45952-00						
3	9 7/8	12	F	S-Steel	664-45973-00						
3	9 7/8	13	F	S-Steel	664-45971-00						

FT/T25 & 30 – 60 ps

Global model				40V	50H	E40J	EK40J	E/40X	E48C	55B	
Unified model											
Global model				FT25F	F50D	F40H	F40J				
Unified model				T25A							
Global model				F30B	F40F	F50H	F60F				
Unified model				F30A	F40A	F50B	F60B				
Blade	Dia. (in)	Pitch (in)	Mark	Material	Part number		Remarks				
3	12 1/4	8	G	Aluminum	63D-45941-00						
3	12 1/4	9	G	Aluminum	663-45956-01						
3	11 3/4	10	G	Aluminum	663-45954-01						
3	11 5/8	11	G	Aluminum	69W-45947-00						
3	10 5/8	12	G	Aluminum	6H5-45952-00						
3	11 3/8	12	G	Aluminum	663-45952-02						
3	11 3/8	12	G	Aluminum	69W-45952-00						
3	10 3/8	13	G	Aluminum	6H5-45945-00						
3	11 1/8	13	G	Aluminum	69W-45945-00						
3	10 1/4	14	G	Aluminum	6H5-45958-00						
3	11 1/4	14	G	Aluminum	69W-45958-00						
3	11 1/4	14	G	Aluminum	663-45958-01						
3	10	15	G	Aluminum	6H5-45943-00						
3	11	15	G	Aluminum	69W-45943-00						
3	10 3/4	16	G	Aluminum	663-45949-01						
3	10 3/4	17	G	Aluminum	663-45941-01						
3	12	11	G	S-Steel	663-45972-60						
3	11 3/4	12	G	S-Steel	663-45970-60						
3	11 1/2	13	G	S-Steel	663-45974-60						
3	10 1/4	14	G	S-Steel	663-45930-00						
3	11 1/4	14	G	S-Steel	697-45970-00						
3	10 1/4	15	G	S-Steel	663-45976-00						
3	10 1/4	16	G	S-Steel	663-45978-00						

2018 PROPELLER APPLICATIONS

STANDARD PROPELLER

40 ps

Global model				E40G	EK40G						
Unified model											
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	11 3/4	7 1/2	H	Aluminum		676-45956-61		Fitted with drive pin			
3	11 3/4	8 3/4	H	Aluminum		676-45947-62		Fitted with drive pin			
3	11 3/4	10	H	Aluminum		676-45945-62		Fitted with drive pin			
3	11 1/2	11	H	Aluminum		676-45941-62		Fitted with drive pin			
3	11 1/2	12	H	Aluminum		676-45943-62		Fitted with drive pin			
3	11 1/2	13	H	Aluminum		676-45952-62		Fitted with drive pin			

55 – 130 ps

Global model				60F	70B	E60H	E55D	E75B	85A		
Unified model											
Global model				90A	E115A	F40G	FT50C	FT50J	FT60G	F70A	
Unified model								T50B	T60B	F70A	
Global model				F75C	F80B	F90B	F100B	F100D	F115B		
Unified model									F115B		
Global model				F115C	F130A	F90C	F100F	F75D	F80D	F90D	
Unified model				VF115A	F130A	F90B		F75B		VF90A	
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	14	11	K	Aluminum		6E5-45954-00					
3	13 5/8	13	K	Aluminum		6E5-45949-00					
3	13 5/8	14	K	Aluminum		6E5-45958-00					
3	13 1/2	15	K	Aluminum		6E5-45947-00					
3	13 1/4	17	K	Aluminum		6E5-45945-01					
3	13	19	K	Aluminum		6E5-45941-00					
3	12 5/8	21	K	Aluminum		6E5-45943-00					
3	13	23	K	Aluminum		6E5-45952-00					
3	13	25	K	Aluminum		6E5-45956-00					
3	13 1/2	14	K	S-Steel		688-45932-60					
3	13 1/2	16	K	S-Steel		688-45978-60					
3	13	17	K	S-Steel		688-45930-02					
3	13	19	K	S-Steel		688-45970-03					
3	13	21	K	S-Steel		688-45972-02					
3	13	23	K	S-Steel		688-45974-02					
3	13	25	K	S-Steel		688-45976-01					

L115 ps

Global model				FL115B							
Unified model				LF115B							
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	13	17	KL	S-Steel		6L6-45930-01					
3	13	19	KL	S-Steel		6L6-45970-00					
3	13	21	KL	S-Steel		6L6-45972-00					

2018 PROPELLER APPLICATIONS

STANDARD PROPELLER

150 – 200 ps

Global model				150A	200A	F150G	F175C				
Unified model						F150CA	F175CA				
Global model				F150D	F150F	F150C-X	F175A	F200B	F200C	F200F	F200G
Unified model				F150B		VF150XA	F175A		F200A	F200B	F200CA
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	15 1/4	15	M	Aluminum		6G5-45941-00					
3	14 5/8	16	M	Aluminum		6G5-45952-00					
3	14 1/2	17	M	Aluminum		6G5-45947-01					
3	14	19	M	Aluminum		6G5-45945-01					
3	13 3/4	21	M	Aluminum		6G5-45943-01					
3	13 1/2	23	M	Aluminum		6G5-45949-00					

L150 – L200 ps

Global model				L150A	L200A	FL150D	FL150F	FL200B	FL200C	FL200F	FL200G
Unified model						LF150B			LF200A	LF200B	LF200CA
Global model				FL150G	FL175C						
Unified model				LF150CA	LF175CA						
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	14 1/2	17	ML	Aluminum		6K1-45947-00					
3	14	19	ML	Aluminum		6K1-45945-00					

150 – 250 ps

Global model				150A	200A	F150D	F150F	F150C-X*	F175A*	F200B	F200C
Unified model						F150B		VF150XA*	F175A*		F200A
Global model				F200F	F200G	F225B	F250A	F250H	F150G	F175C	
Unified model				F200B	F200CA	F225A	F250A		F150CA	F175CA	
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	15 3/4	13	M	S-Steel		6G5-45932-00		Not recommended for * mark. (*1)			
3	15 1/4	15	M	S-Steel		6G5-45970-02		Not recommended for * mark. (*1)			
3	13 3/4	17	M2	S-Steel		6G5-45978-03					
3	13 3/4	19	M2	S-Steel		6G5-45974-03					
3	13 3/4	21	M	S-Steel		6G5-45972-02					
3	13 3/8	23	M	S-Steel		6G5-45976-01					
3	13 3/8	25	M	S-Steel		6G5-45930-00					

(*1) Use with these models may cause a rattling sound.

2018 PROPELLER APPLICATIONS

STANDARD PROPELLER

L150 – L250 ps

Global model				L150A	L200A	FL150D	FL150F	FL200B	FL200C	FL200F	FL200G
Unified model						LF150B			LF200A	LF200B	LF200CA
Global model				FL225B	FL250A	FL250H	F150G	F175C			
Unified model				LF225A	LF250A		F150CA	F175CA			
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	15 1/4	15	ML	S-Steel		6K1-45970-01					
3	13 3/4	17	ML1	S-Steel		6K1-45978-02					
3	13 3/4	19	ML1	S-Steel		6K1-45974-02					
3	13 3/4	21	ML	S-Steel		6K1-45972-01					
3	13 3/8	23	ML	S-Steel		6K1-45976-00					

200 – 250 ps

Global model				F200B	F200C	F225B	F250A	F250H			
Unified model					F200A	F225A	F250A				
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	15	17	T	S-Steel		61A-45978-00					
3	14 1/2	19	T	S-Steel		61A-45974-00					
3	14 1/2	21	T	S-Steel		61A-45972-00					

L200 – L250 ps

Global model				FL200B	FL200C	FL225B	FL250A	FL250H			
Unified model					LF200A	LF225A	LF250A				
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	15	17	TL	S-Steel		61B-45978-00					
3	14 1/2	19	TL	S-Steel		61B-45974-00					
3	14 1/2	21	TL	S-Steel		61B-45972-00					

2018 PROPELLER APPLICATIONS

STANDARD PROPELLER (SDS: Shift Dampener System)

150 – 250 ps

Global model				150A	200A	F150D	F150F	F150C-X	F175A	F200B	F200C
Unified model						F150B		VF150XA	F175A		F200A
Global model				F200F	F200G	F225B	F250A	F250H	F150G	F175C	
Unified model				F200B	F200CA	F225A	F250A		F150CA	F175CA	
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number			Remarks		
3	14 1/4	22	M	S-Steel		60H-45978-00					
3	14 1/4	20	M	S-Steel		60H-45976-00					
3	14 1/4	18	M	S-Steel		60H-45974-00					
3	14 1/4	16	M	S-Steel		60H-45972-00					
3	14 1/4	14	M	S-Steel		60H-45970-00					

L150 – L250 ps

Global model				L150A	L200A	FL150D	FL150F	FL200B	FL200C	FL200F	FL200G
Unified model						LF150B			LF200A	LF200B	LF200CA
Global model				FL225B	FL250A	FL250H	F150G	F175C			
Unified model				LF225A	LF250A		F150CA	F175CA			
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number			Remarks		
3	14 1/4	22	ML	S-Steel		60J-45978-00					
3	14 1/4	20	ML	S-Steel		60J-45976-00					
3	14 1/4	18	ML	S-Steel		60J-45974-00					
3	14 1/4	16	ML	S-Steel		60J-45972-00					
3	14 1/4	14	ML	S-Steel		60J-45970-00					

2018 PROPELLER APPLICATIONS

TALON SERIES PROPELLERS (SDS: Shift Dampener System)

40 – 130 ps

Global model				E55D	60F	E60H	70B	E75B	85A		
Unified model											
Global model				90A	E115A	F90C	F100F	F75D	F80D	F90D	
Unified model						F90B		F75B		VF90A	
Global model				F40G	FT50C	FT50J	FT60G	F70A	F75C	F80B	
Unified model						T50B	T60B	F70A			
Global model				F90B	F100B	F100D	F115B	F115C	F125A	F130A	
Unified model							F115B	VF115A		F130A	
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number			Remarks		
3	13 1/2	9	K	Aluminum		6EK-45941-00					
3	13 1/2	10 1/2	K	Aluminum		6EK-45943-00					
3	13 1/2	12	K	Aluminum		6EK-45945-00					
3	13 1/2	14	K	Aluminum		6EK-45947-00					
3	13 5/8	14	K	Aluminum		6FP-45941-00					
3	13 1/2	15	K	Aluminum		6FP-45943-00					
3	13 1/4	16	K	Aluminum		6EK-45949-00					
3	13 1/4	16	K	Aluminum		6FP-45945-00					
3	13 1/8	17	K	Aluminum		6FP-45947-00					
3	13	18	K	Aluminum		6FP-45949-00					
3	14	9	K	S-Steel		6H1-45970-00					
3	14	10	K	S-Steel		6H1-45972-00					
3	14	11	K	S-Steel		6H1-45974-00					
3	14	12	K	S-Steel		6H1-45976-00					
3	14	13	K	S-Steel		6H1-45978-00					
3	13 1/8	14	K	S-Steel		6N7-45970-00					
3	13 1/8	16	K	S-Steel		6N7-45972-00					
3	13 1/8	18	K	S-Steel		6N7-45974-00					
3	13 1/8	19	K	S-Steel		6N7-45976-00					
3	13 1/8	20	K	S-Steel		6N7-45978-00					
3	13 1/8	22	K	S-Steel		6N7-45930-00					
3	13 1/8	24	K	S-Steel		6N7-45932-00					

L115 ps

Global model				FL115A	FL115B						
Unified model					LF115B						
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number			Remarks		
3	13 1/8	14	KL	S-Steel		6N4-45970-00					
3	13 1/8	16	KL	S-Steel		6N4-45972-00					
3	13 1/8	18	KL	S-Steel		6N4-45974-00					
3	13 1/8	20	KL	S-Steel		6N4-45978-00					

2018 PROPELLER APPLICATIONS

TALON 4 SERIES PROPELLERS (SDS: Shift Dampener System)

40 – 130 ps

Global model				E55D	60F	E60H	70B	E75B	85A		
Unified model											
Global model				90A	E115A	F90C	F100F	F75D	F80D	F90D	
Unified model						F90B		F75B		VF90A	
Global model				F40G	FT50C	FT50J	FT60G	F70A	F75C	F80B	
Unified model						T50B	T60B	F70A			
Global model				F90B	F100B	F100D	F115B	F115C	F125A	F130A	
Unified model							F115B	VF115A		F130A	
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number			Remarks		
4	13 1/4	14	K	S-Steel		6N6-45B70-00					
4	13 1/4	16	K	S-Steel		6N6-45B72-00					
4	13 1/4	18	K	S-Steel		6N6-45B74-00					
4	13 1/4	20	K	S-Steel		6N6-45B76-00					
4	13 1/4	22	K	S-Steel		6N6-45B78-00					
4	13 1/4	23	K	S-Steel		6N6-45B80-00					

2018 PROPELLER APPLICATIONS

DUAL THRUST PROPELLERS

8 – 9.9 ps

Global model				F8F	F9.9J	8F					
Unified model				F8B	F9.9B						
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	9	5	N	Aluminum		6G1-W4592-00					
3	9	7	N	Aluminum		6G1-W4591-01					

8 – 9.9 ps

Global model				FT8G	FT9.9L						
Unified model					T9.9B						
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	11 3/4	5 3/4	R	Aluminum		69G-45941-00					
3	11 3/4	7	R	Aluminum		69G-45943-00					
3	11 3/4	9 1/4	R	Aluminum		6G8-45947-00					

9.9 – 15 ps

Global model				9.9F	15F	E9.9D	E15D	EK9.9J	EK15P	EK9.9D	EK15D
Unified model											
Global model				F9.9H	F15C						
Unified model					F15A						
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	9 3/4	6 1/2	J	Aluminum		683-W4592-02					
3	9 3/4	8	J	Aluminum		683-W4591-02					

* Use the thrust washer (6B8-45987-00) for kerosene model, avoiding propeller damper damage.

20 – 30 ps

Global model				F25D	F25G						
Unified model				F25A/B	F25C						
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	10 5/8	8 1/4	F	Aluminum		6J8-W4591-00		For PT/PTT/Hydro model.			

25 ps

Global model				FT25F							
Unified model				T25A							
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	12 1/4	9	G	Aluminum		68U-45941-00					

50 – 70 ps

Global model				F40G	FT50C	FT50J	FT60G	F70A			
Unified model						T50B	T60B	F70A			
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	14	11	K	Aluminum		68S-45941-00					

2018 PROPELLER APPLICATIONS

WEEDLESS PROPELLERS

4 – 6 ps

Global model				F4B	F5A	F6C	4C	4D			
Unified model				F4A		F6A					
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number			Remarks		
3	7 1/4	8 1/4	BA	Aluminum		6E0-45952-00					

20 – 30 ps

Global model				E/25B	25X	E/30H	EK25B/C	F25D	F25G		
Unified model								F25A/B	F25C		
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number			Remarks		
3	9 1/8	12	F	S-Steel		664-45972-00					
3	9 1/8	13	F	S-Steel		664-45970-00					

RELIANCE SERIES PROPELLERS (STD)

150 – 250 ps

Global model				150A	200A						
Unified model											
Global model				F150D/F	F200B	F200C	F225B	F250A	F250H		
Unified model				F150B		F200A	F225A	F250A			
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number			Remarks		
3	14 1/4	17	M	S-steel		68F-45972-00					
3	14 1/4	18	M	S-steel		68F-45978-00					
3	13 3/4	19	M	S-steel		68F-45974-00					
3	13 3/4	21	M	S-steel		68F-45976-00					

L150 – L250 ps

Global model				L150A	L200A	FL150D/F	FL200B	FL200C	FL225B	FL250A	FL250H
Unified model						LF150B		LF200A	LF225A	LF250A	
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number			Remarks		
3	14 1/4	17	ML	S-steel		68G-45972-00					
3	14 1/4	18	ML	S-steel		68G-45978-00					
3	13 3/4	19	ML	S-steel		68G-45974-00					
3	13 3/4	21	ML	S-steel		68G-45976-00					

2018 PROPELLER APPLICATIONS

RELIANCE SERIES PROPELLERS (SDS: Shift Dampener System)

150 – 300 ps

Global model				F150D/F	F150C-X	F175A	F200B	F200C	F200F	F200G	F225B
Unified model				F150B	VF150XA	F175A		F200A	F200B	F200CA	F225A
Global model				F225F	F250J-X	F250A	F250D	F250H	F300B	150A	200A
Unified model				F225CA	VF250XA	F250A	F250CA		F300CA		
Global model				F225H	F250L	F300C					
Unified model				F225B	F250B	F300A					
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	14 1/2	13	M	S-steel		68F-45932-20					
3	14 1/2	14	M	S-steel		68F-45930-20					
3	14 1/2	15	M	S-steel		68F-45970-20					
3	14 1/4	17	M	S-steel		68F-45972-20					
3	14 1/4	18	M	S-steel		68F-45978-20					
3	13 3/4	19	M	S-steel		68F-45974-20					
3	13 3/4	21	M	S-steel		68F-45976-20					

L150 – L300 ps

Global model				FL150D/F	FL200B	FL200C	FL200F	FL200G	FL225B	FL225F	FL250A
Unified model				LF150B		LF200A	LF200B	LF200CA	LF225A	LF225CA	LF250A
Global model				FL250H	FL250D	FL300B	L150A	L200A	FL225H	FL250L	FL300C
Unified model					LF250CA	LF300CA			LF225B	LF250B	LF300A
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	14 1/2	14	ML	S-steel		68G-45930-20					
3	14 1/2	15	ML	S-steel		68G-45970-20					
3	14 1/4	17	ML	S-steel		68G-45972-20					
3	14 1/4	18	ML	S-steel		68G-45978-20					
3	13 3/4	19	ML	S-steel		68G-45974-20					
3	13 3/4	21	ML	S-steel		68G-45976-20					

2018 PROPELLER APPLICATIONS

SALTWATER SERIES PROPELLERS

150 – 250 ps

Global model				150A	200A						
Unified model											
Global model				F150D/F	F200B	F200C	F225B	F250A	F250H		
Unified model				F150B		F200A	F225A	F250A			
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number			Remarks		
3	15 1/4	15	M	S-Steel		6R4-45976-A0					
3	15 1/4	17	M	S-Steel		6R4-45978-A0					
3	15 1/4	19	M	S-Steel		6R4-45970-A1					
3	14 7/8	21	M	S-Steel		6R4-45972-A0					
3	14 1/2	23	M	S-Steel		6R4-45974-A0					

L150 – L250 ps

Global model				L150A	L200A						
Unified model											
Global model				FL150D/F	FL200B	FL200C	FL225B	FL250A	FL250H		
Unified model				LF150B		LF200A	LF225A	LF250A			
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number			Remarks		
3	15 1/4	15	ML	S-Steel		6R1-45976-A0					
3	15 1/4	17	ML	S-Steel		6R1-45978-A0					
3	15 1/4	19	ML	S-Steel		6R1-45970-A1					
3	14 7/8	21	ML	S-Steel		6R1-45972-A0					
3	14 1/2	23	ML	S-Steel		6R1-45974-A0					

2018 PROPELLER APPLICATIONS

SALTWATER SERIES II PROPELLERS (STD)

150 – 250 ps

Global model				150A	200A	F150D/F	F150C-X	F200B	F200C	F225B	
Unified model						F150B	VF150XA		F200A	F225A	
Global model				F250A	F250B	F250H					
Unified model				F250A							
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	15 3/4	15	T	S-Steel		6D0-45976-00		For 4-stroke V6 models. (*1)			
3	15 1/2	17	T	S-Steel		6D0-45978-00					
3	15 1/4	19	T	S-Steel		6D0-45970-00					
3	15	21	T	S-Steel		6D0-45972-00					

(*1) The blade contacts 6J9 lower-case.

L150 – L250 ps

Global model				L150A	L200A						
Unified model											
Global model				FL150D/F	FL200B	FL200C	FL200F	FL225B	FL250A	FL250H	
Unified model				LF150B		LF200A	LF200B	LF225A	LF250A		
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	15 3/4	15	TL	S-Steel		6D1-45976-00		For 4-stroke V6 models. (*1)			
3	15 1/2	17	TL	S-Steel		6D1-45978-00					
3	15 1/4	19	TL	S-Steel		6D1-45970-10					
3	15	21	TL	S-Steel		6D1-45972-10					

(*1) The blade contacts 6J9 lower-case.

2018 PROPELLER APPLICATIONS

SALTWATER SERIES II PROPELLERS (SDS: Shift Dampener System)

150 – 300 ps

Global model				F150D/F	F150C-X	F175A	F200B	F200C	F200F	F200G	F225B
Unified model				F150B	VF150XA	F175A		F200A	F200B	F200CA	F225A
Global model				F225F	F250J-X	F250A	F250H	F250D	F300B	150A	200A
Unified model				F225CA	VF250XA	F250A		F250CA	F300CA		
Global model				F150G	F175C	F225H	F250L	F300C			
Unified model				F150CA	F175CA	F225B	F250B	F300A			
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	15 3/4	13	T	S-Steel		6CE-45930-20		For 4-stroke V6 models. (*1)			
3	15 3/4	15	T	S-Steel		6CE-45976-20		For 4-stroke V6 models. (*1)			
3	15 1/2	16	T	S-Steel		6CE-45938-20					
3	15 1/2	17	T	S-Steel		6CE-45978-20					
3	15 1/4	18	T	S-Steel		6CE-45934-20					
3	15 1/4	19	T	S-Steel		6CE-45970-20					
3	15	20	T	S-Steel		6CE-45932-20					
3	15	21	T	S-Steel		6CE-45972-20					
3	14 3/4	22	T	S-Steel		6CE-45936-20					
3	14 3/4	23	T	S-Steel		6CE-45974-20					

(*1) The blade contacts 6J9 lower-case.

L150 – L300 ps

Global model				FL150D/F	FL200B	FL200C	FL200F	FL200G	FL225B	FL225F	FL250A
Unified model				LF150B		LF200A	LF200B	LF200CA	LF225A	F225CA	LF250A
Global model				FL250H	FL250D	FL300B	L150A	L200A	FL150G	FL175C	FL225H
Unified model					LF250CA	LF300CA			LF150CA	LF175CA	LF225B
Global model				FL250L	FL300C						
Unified model				LF250B	LF300A						
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	15 3/4	13	TL	S-Steel		6CF-45930-20		For 4-stroke V6 models. (*1)			
3	15 3/4	15	TL	S-Steel		6CF-45976-20		For 4-stroke V6 models. (*1)			
3	15 1/2	17	TL	S-Steel		6CF-45978-20					
3	15 1/4	18	TL	S-Steel		6CF-45934-20					
3	15 1/4	19	TL	S-Steel		6CF-45970-20					
3	15	20	TL	S-Steel		6CF-45932-20					
3	15	21	TL	S-Steel		6CF-45972-20					
3	14 3/4	22	TL	S-Steel		6CF-45936-20					
3	14 3/4	23	TL	S-Steel		6CF-45974-20					

(*1) The blade contacts 6J9 lower-case.

2018 PROPELLER APPLICATIONS

SALTWATER SERIES HS4 PROPELLERS (STD)

150 – 250ps

Global model				150A	200A	F150D/F	F150C-X	F200B	F200C	F225A	F225B
Unified model						F150B	VF150XA		F200A		F225A
Global model				F250A	F250J-X	F250H					
Unified model				F250A	VF250XA						
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
4	15	21	T	S-Steel		6BR-45B70-00					
4	15	22	T	S-Steel		6BR-45B72-00					
4	15	23	T	S-Steel		6BR-45B74-00					

L150 – L250 ps

Global model				L150A	L200A						
Unified model											
Global model				FL150D/F	FL200B	FL200C	FL200F	FL225B	FL250A	FL250H	
Unified model				LF150B		LF200A	LF200B	LF225A	LF250A		
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
4	15	21	TL	S-Steel		6BS-45B70-00					
4	15	22	TL	S-Steel		6BS-45B72-00					
4	15	23	TL	S-Steel		6BS-45B74-00					

SALTWATER SERIES HS4 PROPELLERS (SDS: Shift Dampener System)

150 – 300 ps

Global model				150A	200A	F150D/F	F200B	F200C	F200F	F200G	F225B
Unified model						F150B		F200A	F200B	F200CA	F225A
Global model				F225F	F250J-X	F250A	F250H	F250D	F300B	F150G	F175C
Unified model				F225CA	VF250XA	F250A		F250CA	F300CA	F150CA	F175CA
Global model				F225H	F250L	F300C					
Unified model				F225B	F250B	F300A					
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
4	15	21	T	S-Steel		6CE-45B70-20					
4	15	22	T	S-Steel		6CE-45B72-20					
4	15	23	T	S-Steel		6CE-45B74-20					

L150 – L300 ps

Global model				FL150D/F	FL200B	FL200C	FL200F	FL200G	FL225B	FL225F	FL250A
Unified model				LF150B		LF200A	LF200B	LF200CA	LF225A	LF225CA	LF250A
Global model				FL250H	FL250D	FL300B	L150A	L200A	FL150G	FL175C	FL225H
Unified model					LF250CA	LF300CA			LF150CA	LF175CA	LF225B
Global model				FL250L	FL300C						
Unified model				LF250B	LF300A						
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
4	15	21	TL	S-Steel		6CF-45B70-20					
4	15	22	TL	S-Steel		6CF-45B72-20					
4	15	23	TL	S-Steel		6CF-45B74-20					

2018 PROPELLER APPLICATIONS

SALTWATER SERIES XL PROPELLERS (SDS: Shift Dampener System)

350 ps (V8 engine)

Global model				F350A							
Unified model				F350CC							
Blade	Dia. (in)	Pitch (in)	Mark	Material	Part number	Remarks					
3	16 1/4	15	X	S-Steel	6AW-45970-20						
3	16 1/4	17	X	S-Steel	6AW-45972-20						
3	15 1/2	19	X	S-Steel	6AW-45974-20						
3	15 1/4	21	X	S-Steel	6AW-45976-20						
3	15 1/4	23	X	S-Steel	6AW-45978-20						

L350 ps (V8 engine)

Global model				FL350A							
Unified model				LF350CC							
Blade	Dia. (in)	Pitch (in)	Mark	Material	Part number	Remarks					
3	16 1/4	15	XL	S-Steel	6AX-45970-20						
3	16 1/4	17	XL	S-Steel	6AX-45972-20						
3	15 1/2	19	XL	S-Steel	6AX-45974-20						
3	15 1/4	21	XL	S-Steel	6AX-45976-20						
3	15 1/4	23	XL	S-Steel	6AX-45978-20						

SALTWATER SERIES XL4 PROPELLERS (SDS: Shift Dampener System)

350 ps (V8 engine)

Global model				F350A							
Unified model				F350CC							
Blade	Dia. (in)	Pitch (in)	Mark	Material	Part number	Remarks					
4	16 1/8	15	X	S-Steel	6AW-45B70-20						
4	16 1/8	17	X	S-Steel	6AW-45B72-20						
4	15 3/8	22	X	S-Steel	6AW-45B76-20						
4	15 3/8	24	X	S-Steel	6AW-45B74-20						

L350 ps (V8 engine)

Global model				FL350A							
Unified model				LF350CC							
Blade	Dia. (in)	Pitch (in)	Mark	Material	Part number	Remarks					
4	16 1/8	15	XL	S-Steel	6AX-45B70-20						
4	16 1/8	17	XL	S-Steel	6AX-45B72-20						
4	15 3/8	22	XL	S-Steel	6AX-45B76-20						
4	15 3/8	24	XL	S-Steel	6AX-45B74-20						

2018 PROPELLER APPLICATIONS

VMAX SERIES PROPELLERS

150 – 275 ps (SHO engine)

Global model				F150C-L	F165A	F175B	F185A	F200D	F225D	F250C	F225G
Unified model				VF150LA		VF175A		VF200A	VF225A	VF250A	
Global model				F250F	F275A						
Unified model											
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	15 1/8	22	T2	S-Steel		6CB-45932-11		Ventless			
3	15 1/8	23	T2	S-Steel		6CB-45974-11		Ventless			
3	15 1/8	24	T2	S-Steel		6CB-45930-11		Ventless			
3	15 1/8	25	T2	S-Steel		6CB-45972-11		Ventless			
3	15 1/8	26	T2	S-Steel		6CB-45978-11		Ventless			
3	15 1/8	27	T2	S-Steel		6CB-45970-11		Ventless			

PERFORMANCE SERIES PROPELLERS

50 – 130 ps

Global model				E55D	60F	E60H	70B	85A	E75B	90A	E115A
Unified model											
Global model				F40G	FT50C	FT50J	FT60G	F70A	F75C	F80B	
Unified model						T50B	T60B	F70A			
Global model				F90B	F100B	F100D	F115B	F115C	F125A	F130A	F90C
Unified model							F115B	VF115A		F130A	F90B
Global model				F75D	F80D	F90D	F100F				
Unified model				F75B		VF90A					
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	13 1/2	17	K	S-Steel		62A-45976-00					
3	13 1/2	19	K	S-Steel		62A-45974-10					
3	13 1/2	21	K	S-Steel		62A-45970-10					
3	13 1/2	23	K	S-Steel		62A-45972-10					

150 – 185 ps

Global model				F150C-L	F175B	F185A					
Unified model				VF150LA	VF175A						
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	14 1/2	21	M	S-Steel		66K-45976-B0					
3	14 1/2	23	M	S-Steel		66K-45974-B0					
3	14 1/2	25	M	S-Steel		66K-45972-B0					
3	14 1/2	27	M	S-Steel		66K-45970-B0					

2018 PROPELLER APPLICATIONS

HIGH PERFORMANCE SERIES PROPELLERS

60 – 200 ps

Global model				60F	70B	85A	90A	150A	200A		
Unified model											
Blade	Dia. (in)	Pitch (in)	Mark	Material		Part number		Remarks			
3	14	20	P	S-Steel		6E5-45970-10		Special purpose			
3	14	22	P	S-Steel		6E5-45976-10		Special purpose			
3	14	24	P	S-Steel		6E5-45972-10		Special purpose			
3	14	26	P	S-Steel		6E5-45978-10		Special purpose			
3	14	28	P	S-Steel		6E5-45974-10		Special purpose			

* For L-transom engine matching sports boat.

WOT OPERATION RANGE TABLE

With WOT (Wide-Open-Throttle) operation and under a maximum boat load, the engine RPM should be within the upper half of the WOT speed range.

Select a propeller which fulfills this requirement.

2-stroke engines		
Global Model	Unified model	WOT range (rpm)
2D		4,000 – 5,000
3B		4,500 – 5,500
4C, 4D		4,500 – 5,500
8F		4,500 – 5,500
E8D, EK8D		4,500 – 5,500
9.9F, 15F, E9.9D, E15D, EK9.9D, EK15D, EK9.9J, EK15P		4,500 – 5,500
E/25B, E/30H, 25X, EK25B, EK25C		4,500 – 5,500
EK40G, E40G, EK40J, E40J		4,500 – 5,500
E/40X		4,500 – 5,500
40V, 50H		4,500 – 5,500
E48C, 55B		4,500 – 5,500
E60H, 60F		4,500 – 5,500
70B		5,000 – 6,000
E55D, E75B, 85A, 90A		4,500 – 5,500
E115A		4,500 – 5,500
L/150A, L/200A		4,500 – 5,500

4-stroke engines		
Global Model	Unified model	WOT range (rpm)
F2B, F2.5B	F2.5B	5,250 – 5,750
F4B	F4A	4,000 – 5,000
F5A, F6C	F6A	4,500 – 5,500
F8F, FT8G, F9.9J, FT9.9L	F8B, F9.9B, T9.9B	5,000 – 6,000
F9.9H, F15C, F20B, F20C	F15A, F20A	5,000 – 6,000
F25D, FT25F	F25A/B, T25A	5,000 – 6,000
F25G	F25C	5,000 – 6,000
F75D, F80D, F90C, F90D, F100F	F75B, F90B, VF90A	5,000 – 6,000
F30B, F40F	F30A, F40A	5,000 – 6,000
FT50C, F50D		5,000 – 6,000
F40H, F50H, FT50J, F60F, FT60G	F50B, T50B, F60B, T60B	5,000 – 6,000
F70A, F40G	F70A	5,300 – 6,300
F100B		5,000 – 6,000
F75C, F80B, F90B, F100D		5,000 – 6,000
F/FL115B, F115C, F125A, F130A	F/LF115B, VF115A, F130A	5,300 – 6,300
F/FL150D	F/LF150B	5,000 – 6,000
F/FL150F		4,500 – 5,500
F150C, F165A, F175B, F185A	VF150A, VF175A	5,000 – 6,000
F175A, F/FL150G, F/FL175C, F/FL200B, F/FL200C, F/FL200F, F/FL200G, F/FL225B, F/FL250A, F/FL250H	F175A, F/LF150CA, F/LF175CA, F/LF200A, F/LF200B, F/LF200CA, F/LF225A, F/LF250A	5,000 – 6,000
F200D, F225D, F250C, F225G, F250F, F275A, F250J-X	VF200LA, VF225LA, VF250LA, VF250XA	5,000 – 6,000
F/FL225F, F/FL250D, F/FL300B	F/LF225CA, F/LF250CA, F/LF300CA	5,000 – 6,000
F/FL350A	F/LF350CC	5,000 – 6,000
F/FL225H, F/FL250L, F/FL300C	F/LF225B, F/LF250B, F/LF300A	5,000 – 6,000

WOT OPERATION RANGE TABLE

If the engine RPM exceeds the recommended WOT range, replace with a larger pitch propeller.

If the engine RPM does not reach the recommended WOT range, replace with a smaller pitch propeller.

NOTICE

Do not run the engine at a speed which exceeds WOT range, as the engine could be damaged from overload or over rev.

- * The engine rpm at WOT operation will be usually changed about 150 rpm if the pitch of propeller has been changed one inch.
However, the change of rpm varies due to the propeller type, water type (salt or freshwater), boat type (weight or hull shape), etc.
- * The maximum engine RPM will increase when the outboard motor is trimmed out.

REMOTE CONTROLS

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REMOTE CONTROL TYPES AND APPLICATIONS

Yamaha outboard motors have two types for throttle control system “PUSH to OPEN” and “PULL to OPEN”.

For example, “PUSH to OPEN” type opens the throttle valve when the remote control cable is extended and the throttle arm is pushed.

“PULL to OPEN” type pulls the arm to open the throttle valve.

Most models have “Push To Open” system.

However, some following models have “Pull To Open” system.

“Pull to Open” models						
25B E25B	30H E30H	E40J	EK40J	E40G	55B	E60H

10-pin connector wire-harness for remote control is usually used for PTT and PT models.

7-pin connector is for manual tilt models, especially for small engines.

However, recent 4-stroke 8 to 20 HP models have 10-pin connector.

Install the remote control box so that the control lever does not interfere with steering wheel, any rigging components, etc. when the lever is fully opened.

Have a sufficient clearance for the remote control lever.

REMOTE CONTROL TYPES AND APPLICATIONS

703 SIDE MOUNT REMOTE CONTROL

Designed to be compatible with most of the Yamaha Outboard motor models.

This remote control will be fitted in almost every type of boat.

The basic control functions are contained in the 703 remote control box.



Part No.	Throttle		Choke	PTT	Coupler			Mount		Remarks
	Push	Pull			7-pin	10-pin	2-pin	R	L	
703-48201-21	1		1			1		1		
703-48201-B1	1					1		1		
703-48203-21	1		1		1			1		For analog gauge only
703-48205-22	1		1	1		1		1		
703-48205-B2	1			1		1		1		
703-48207-22	1		1	1		1		1		For additional trim SW
703-48210-21		1	1			1		1		
703-48230-21		1	1		1			1		For analog gauge only
703-48250-22		1	1	1		1		1		
703-48272-22		1	1	1		1		1		For additional trim SW
703-48206-20	1						1	1		Successor model of 701 RC
703-48260-20		1					1	1		Successor model of 701 RC
703-48290-01	Twin attachment kit									For twin engine application

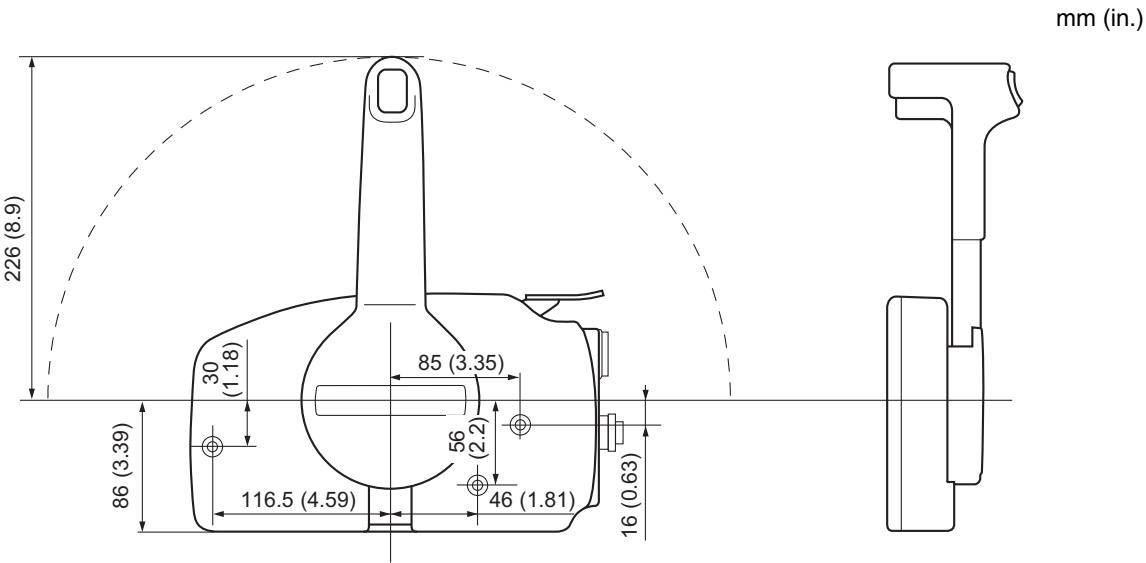
TIP:

- Throttle opening direction (PUSH-PULL) can be reversed.
- Control lever position (R-L) can be changed to its opposite side. The grip with PTT switch can be reversed.
- 13 mm (0.5 in) thickness spacer is included in the remote control package.
- A 4.5 m (15 ft) wire harness (10-pin) is attached to the remote control box.
- For further information, see the instruction (P/N:703-28199-P0) in the package.

REMOTE CONTROL TYPES AND APPLICATIONS

703 SIDE MOUNT REMOTE CONTROL

Dimensions



REMOTE CONTROL TYPES AND APPLICATIONS

704 BINNACLE MOUNT REMOTE CONTROL

Designed for use with electric start models. Best fitted to a boat with center console.

Two types of levers, Single lever or Twin lever, are available to match the purpose of use and engine applications.



Part No.	Throttle		PTT	Lever			Remarks
	Push	Pull		R	L	Twin	
704-48205-R0	1		1		1		
704-48206-R0	1		1	1			
704-48207-R0	1		1			1	

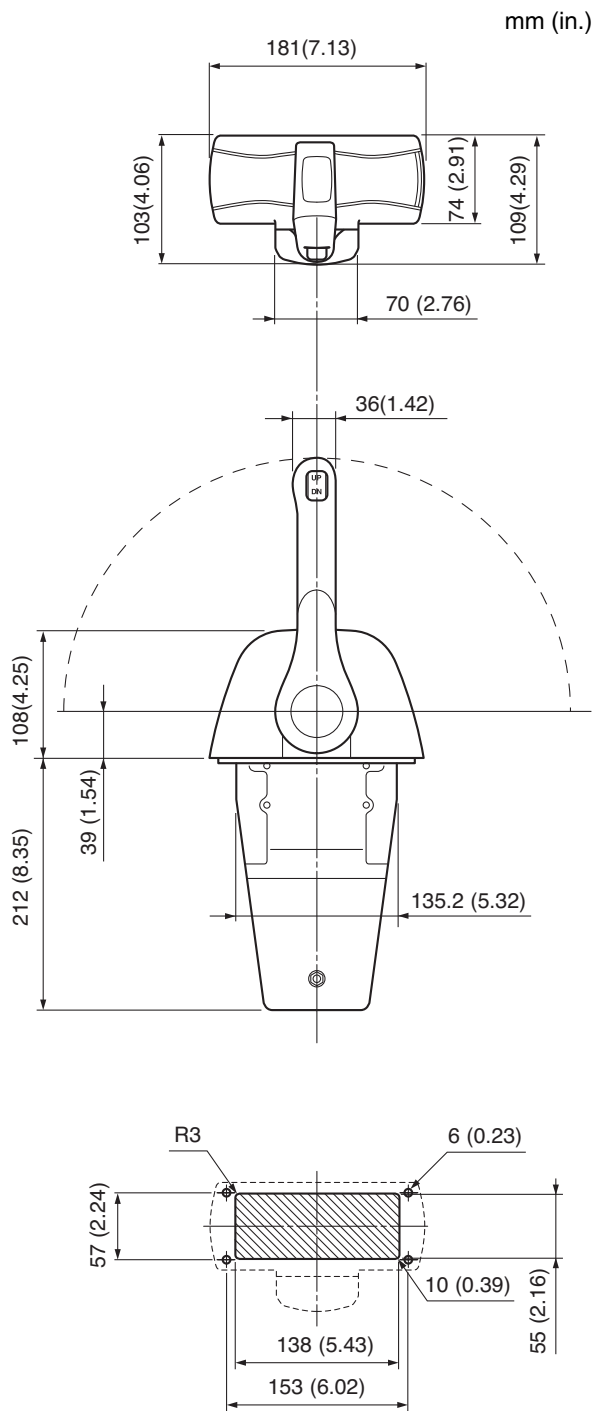
TIP:

- Switch panel and extension wire-harness are required to connect to the engine 10-pin harness.
- Throttle opening direction can be reversed.
- Lever location can be changed to its opposite position.
- For further information, see the instruction (P/N:704-28199-R0) in the package.

REMOTE CONTROL TYPES AND APPLICATIONS

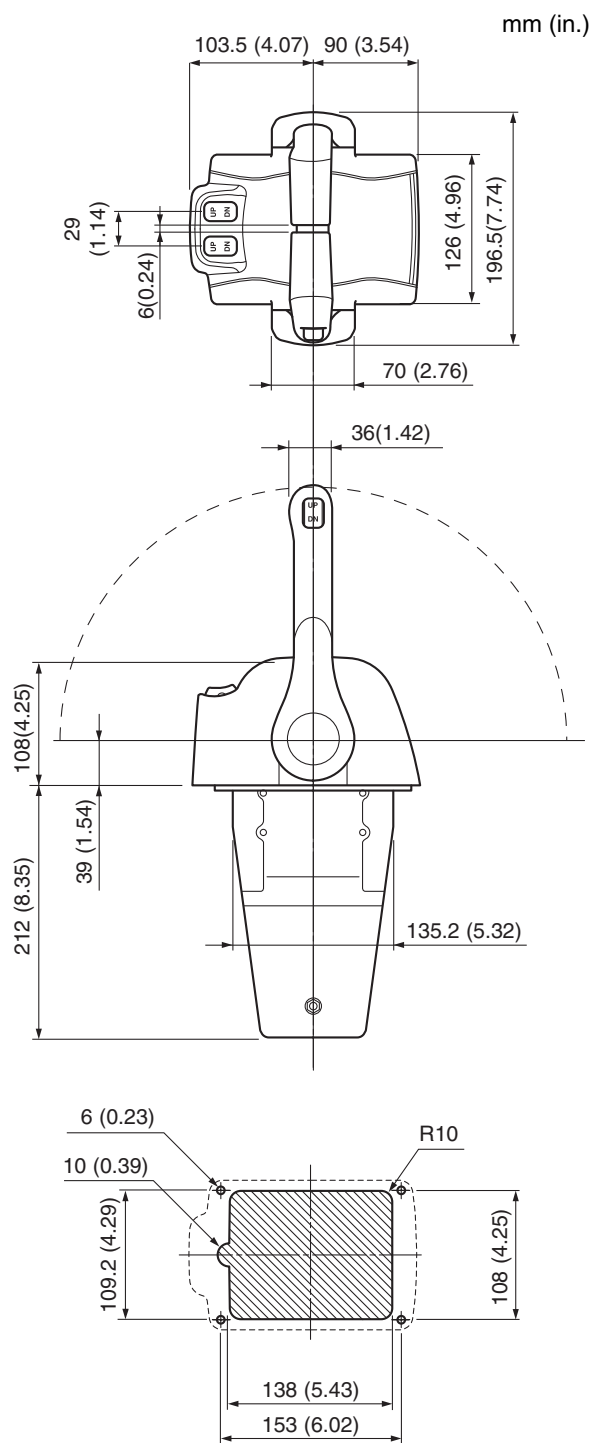
704 BINNACLE MOUNT REMOTE CONTROL

Single lever dimensions



Cut out the shaded area

Twin lever dimensions



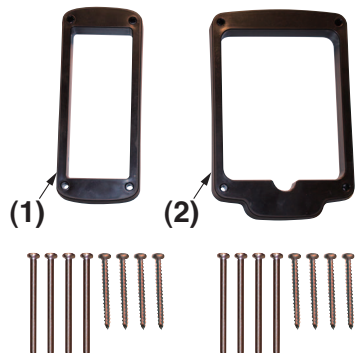
Cut out the shaded area

REMOTE CONTROL TYPES AND APPLICATIONS

704 BINNACLE MOUNT REMOTE CONTROL

Mounting spacer

Designed to raise the control box 22 mm (0.9 in.) to make more clearance between the lever and the dash board when the lever is in the WOT position.



Ref. No.	Part No.	Descriptions
1	704-48293-20	Single
2	704-48293-30	Twin

6X3 CONCEALED REMOTE CONTROL

Designed for the electric start models. Best fitted to runabout type boats.

The mounting angle can be selected from horizontal or inclined 30-degree up or down position depending on the boat design.

1

2



Ref. No.	Part No.	Throttle		PTT	Mount		Remarks
		Push	Pull		R	L	
1	6X3-48206-10	1		1	1		With emergency shut-off cord (2-pin coupler)
2	6X3-48206-20	1		1		1	

TIP:

- The ignition switch panel and 10-pin main harness are required to connect to the engine.
- Throttle opening direction can be reversed.
- For further information, see the instruction in the package.

R-mount dimensions

[illegible]

If the board is thicker than 20 mm (0.79 in.), make three 4 mm (5/32 in.) holes and use supplied screws.

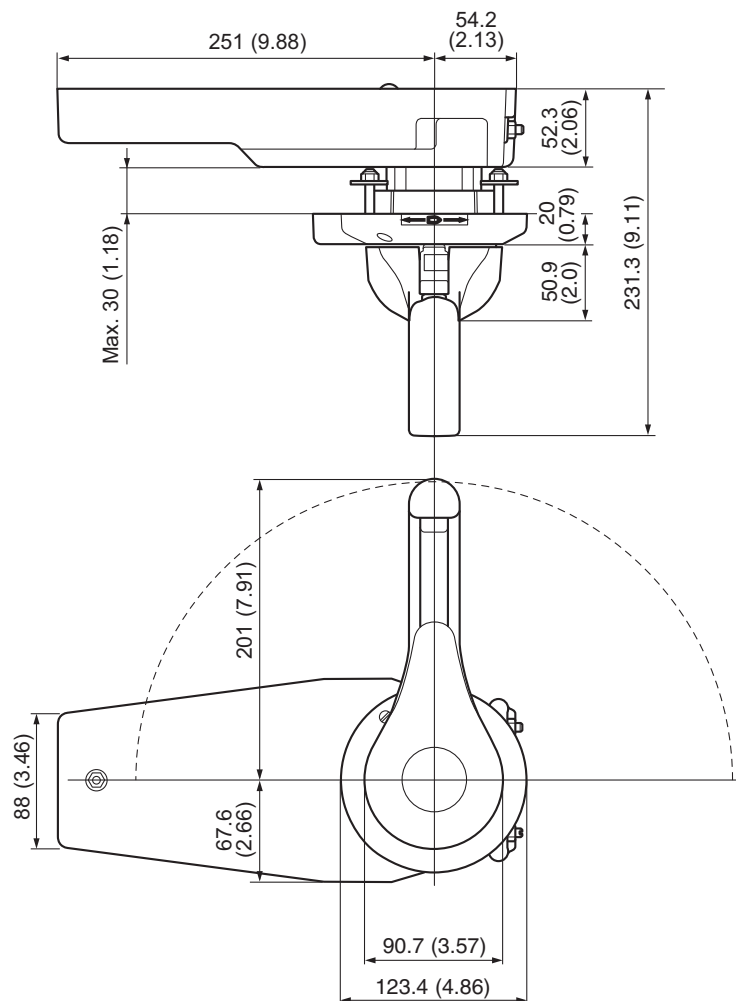
Cut out the shaded area.

REMOTE CONTROL TYPES AND APPLICATIONS

6X3 CONCEALED REMOTE CONTROL

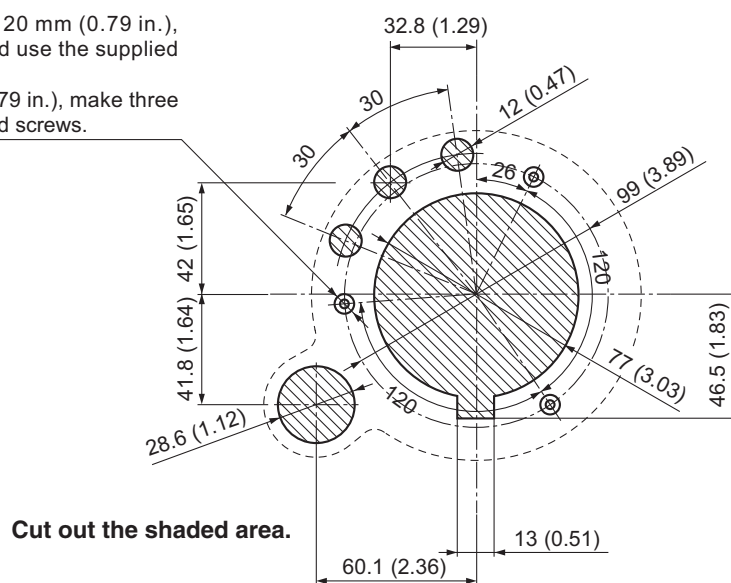
L-mount dimensions

mm (in.)



If a panel board thickness is below 20 mm (0.79 in.), make three 7 mm (9/32 in.) holes and use the supplied bolts and nuts.

If the board is thicker than 20 mm (0.79 in.), make three 4 mm (5/32 in.) holes and use supplied screws.

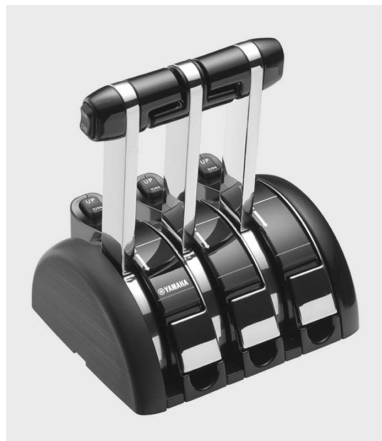


REMOTE CONTROL TYPES AND APPLICATIONS

6X5 BINNACLE MOUNT REMOTE CONTROL (FOR US)

This unique binnacle-mount remote control is designed for triple engine application for 4-stroke V6 engines with mechanical remote control.

Can be used only in conjunction with the genuine triple-switch panel and Digital Network Gauge System (6Y8).



Part No.	Throttle		PTT	Mount		Remarks
	Push	Pull		R	L	
6X5-48207-03	1		1	1		No wood tone

TIP:

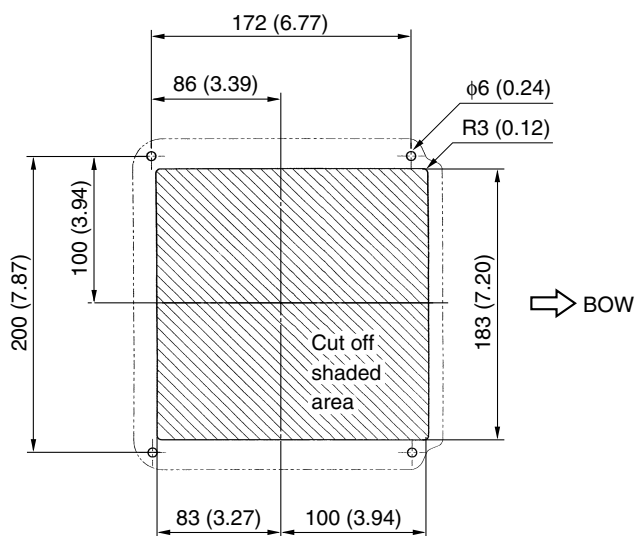
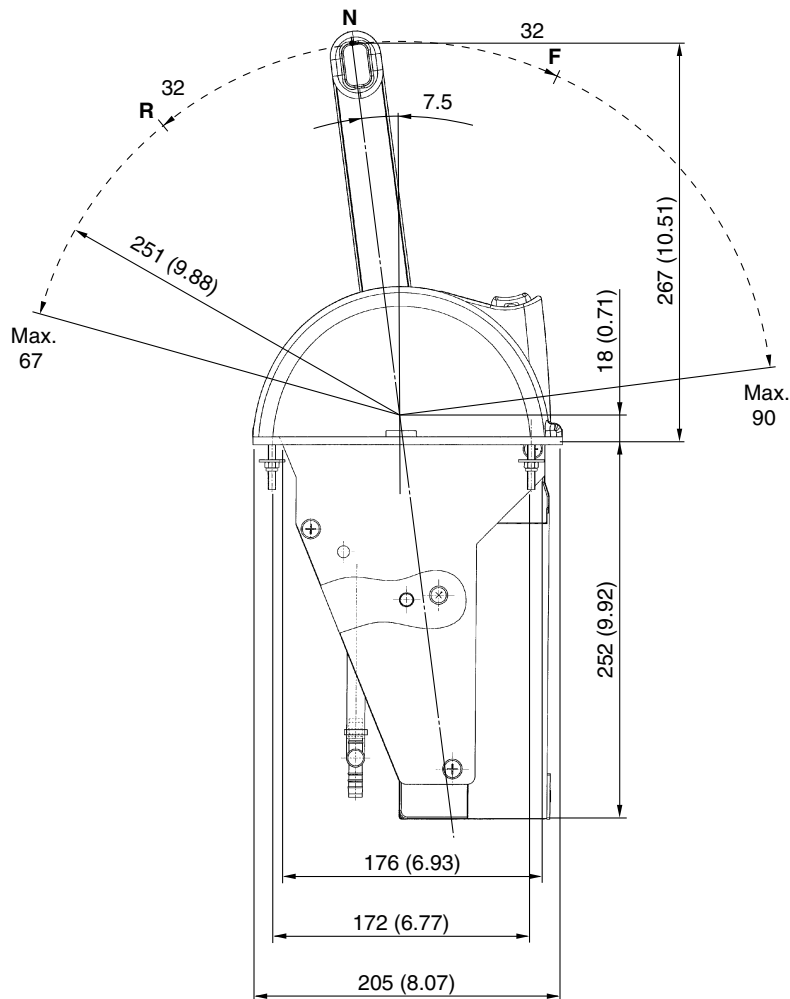
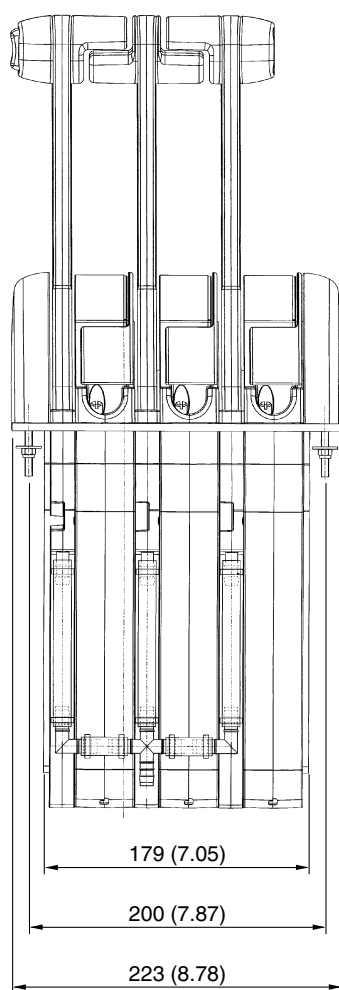
- Yamaha remote control cable, Premier Series, or equivalent cable (SeaStar 33HPC) is recommended for 6X5 remote control box.
- Premier Series is handled by Yamaha Motor Corporation, USA.
- For further information, see the instruction (P/N: 6X5-28199-P0) included in the package.

REMOTE CONTROL TYPES AND APPLICATIONS

6X5 BINNACLE MOUNT REMOTE CONTROL (FOR US)

Dimensions

mm (in.)



* If the mounting board is thinner than 20 mm (0.8 in.), make four 6 mm (0.24 in.) diameter holes and secure the remote control box with the supplied bolts and nuts. If the supplied tapping screws are used, make four 3.5 mm (0.14 in.) diameter holes.

Template

REMOTE CONTROL TYPES AND APPLICATIONS

6X6 BINNACLE MOUNT REMOTE CONTROL [DEC]

This exclusive binnacle remote control unit requires no mechanical remote control cables.

The throttle and shift operations are electrically controlled by 6Y9 Digital Network System, which will obtain smoother remote control operation without cable friction.

Rigging has been simplified, because the mechanical cable installation and adjustment are not required.

These remote control units cover single, twin, triple and quad engine applications.



Ref. No.	Part No.	Variation code	Engine				Single station	Dual station		Remarks
			Single	Twin	Triple	Quad		Main helm	2nd helm	
1	6X6-48205-61	A	1				1			Single station only
	6X6-48205-71	C	1				1	1		
	6X6-48205-81	G	1						1	
2	6X6-48207-61	B		1			1			Single station only
	6X6-48207-71	D		1			1	1		
	6X6-48207-81	H		1					1	
3	6X6-48208-61	F			1		1	1		
	6X6-48208-71	K			1				1	
4	6X6-48209-21	L				1	1	1		w/ PTT SW panel
	6X6-48209-31	M				1			1	w/ PTT SW panel

TIP:

- For further information, see the instruction which is included in the remote control package.
- Quad engine RC is applicable to V6-4.2 L off-shore and V8 engines for US.

REMOTE CONTROL TYPES AND APPLICATIONS

6X6 BINNACLE MOUNT REMOTE CONTROL [DEC]

DEC engine selection

This RC unit accepts all DEC engines.

The initial setting is for new DEC engines which accept the push button start/stop switches.

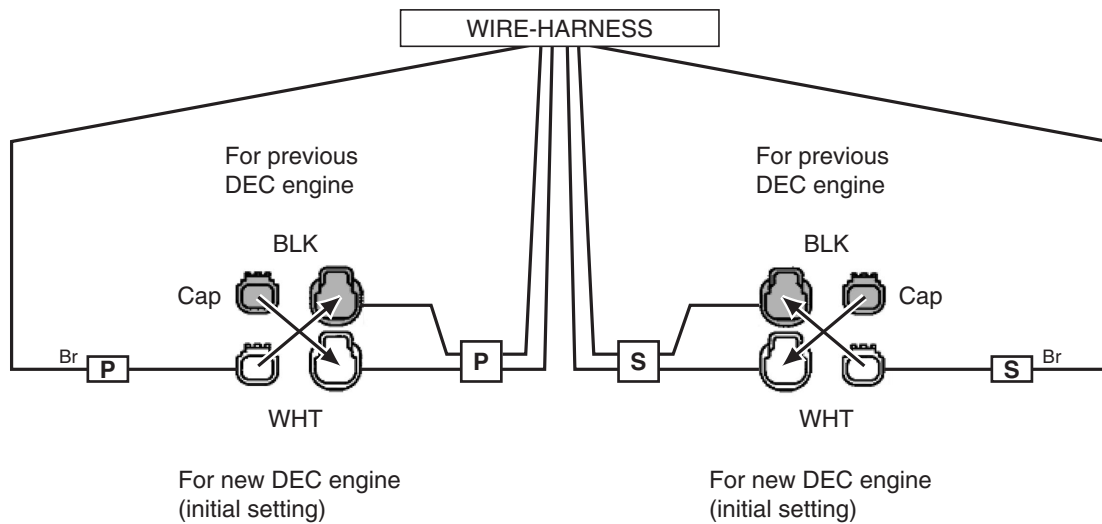
If this RC unit is used for previous DEC engines such as F250B and F300A (V8) for 2011 model, follow the procedure below.

1. Remove the black cap.
2. Disconnect the white coupler, and connect it to the black coupler.
3. Attach the black cap to the white coupler for waterproofing.

TIP:

- If the re-setting is wrong, the engine will not start.
- The RC unit with variation code [A] is not required for setting to select the engine.

Example: twin engine application



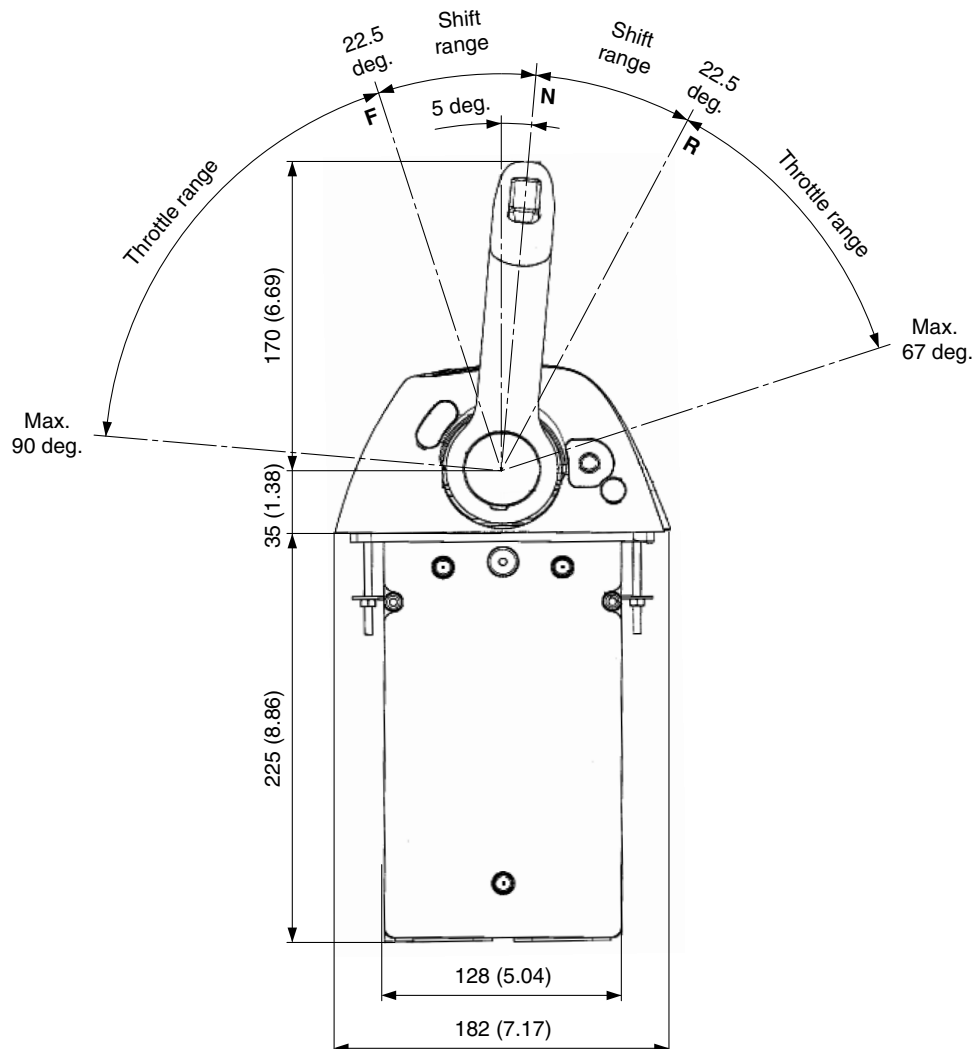
REMOTE CONTROL TYPES AND APPLICATIONS

6X6 BINNACLE MOUNT REMOTE CONTROL [DEC]

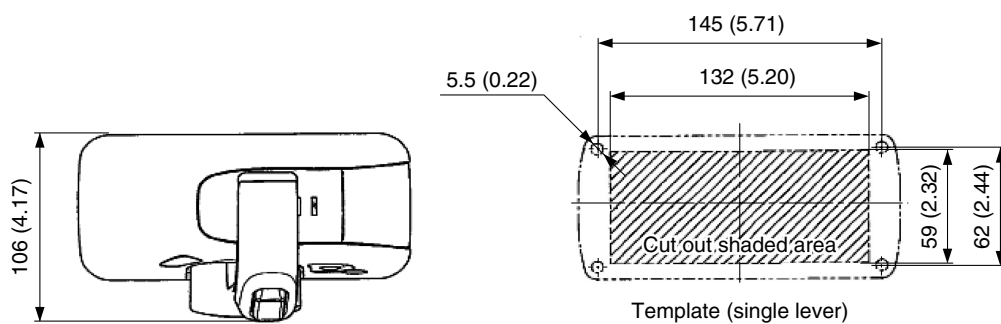
Dimensions for all variation

The side view is the same among all remote control unit variation.

mm (in.)



Dimensions for single application



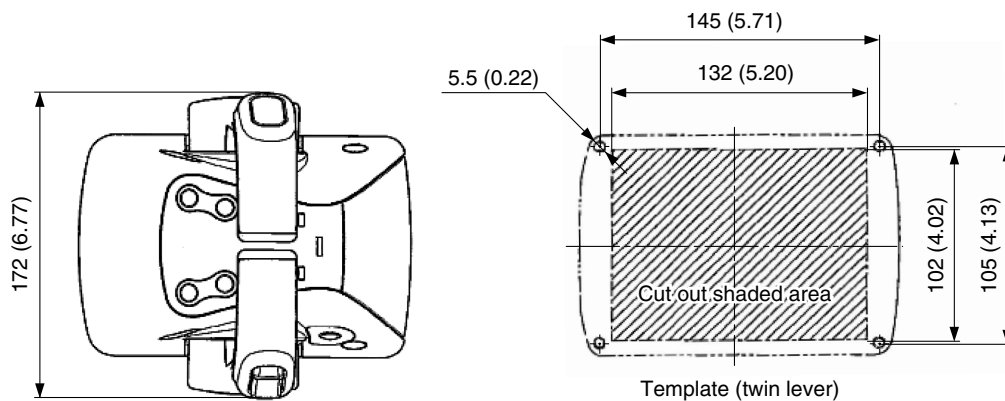
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REMOTE CONTROL TYPES AND APPLICATIONS

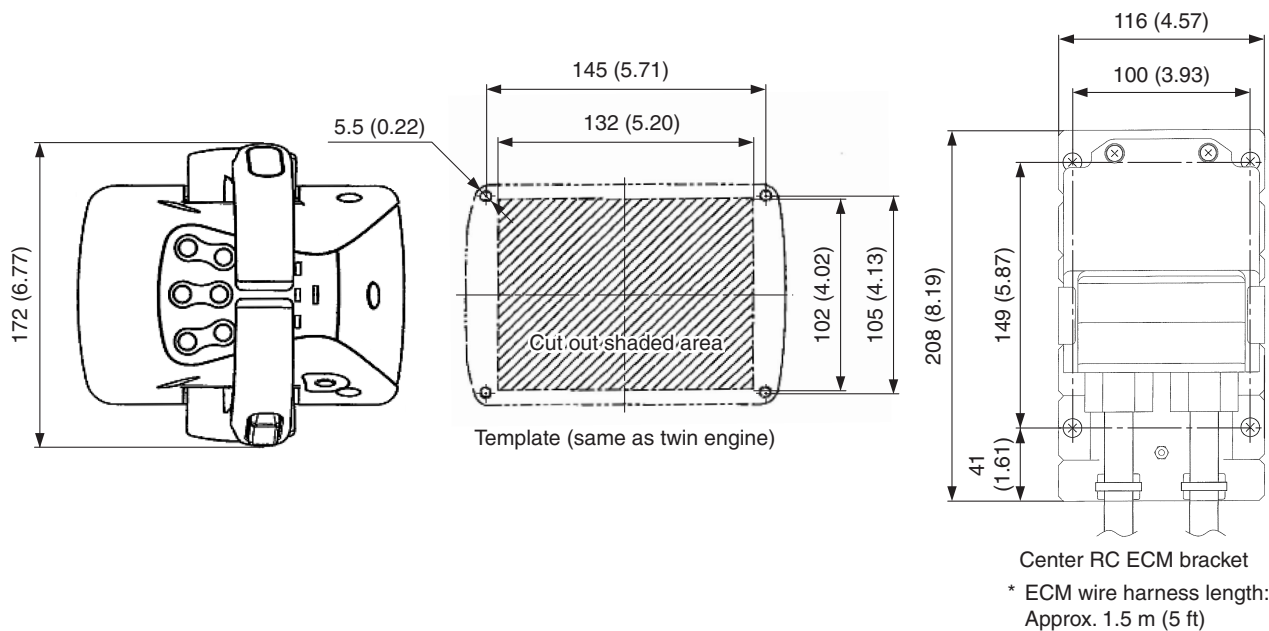
6X6 BINNACLE MOUNT REMOTE CONTROL [DEC]

Dimensions for twin application

mm (in.)



Dimensions for triple application



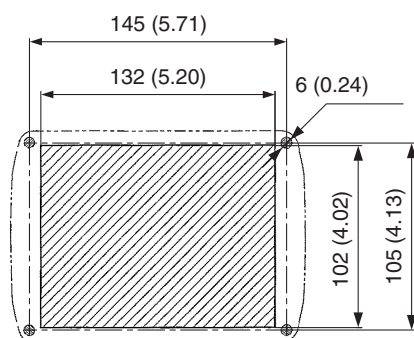
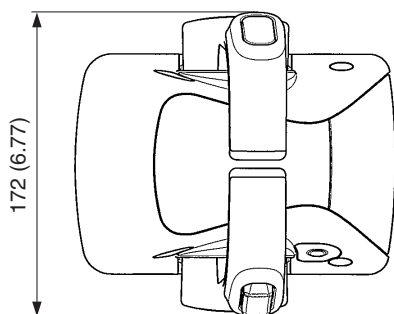
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REMOTE CONTROL TYPES AND APPLICATIONS

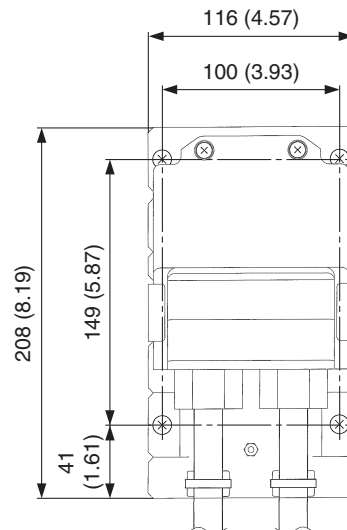
6X6 BINNACLE MOUNT REMOTE CONTROL [DEC]

Dimensions for quad application

mm (in.)

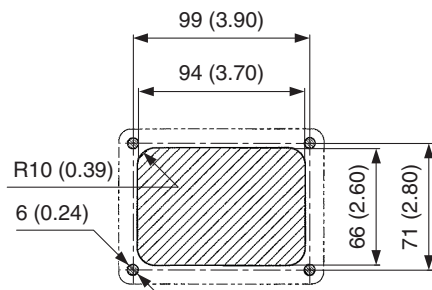
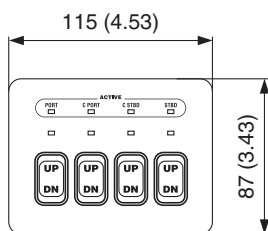


Template for RC unit

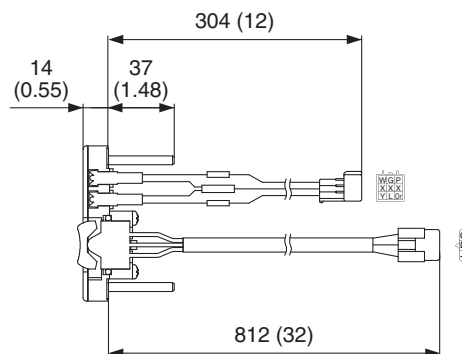


ECM for C-PORT/ C-STBD

* ECM wire harness length:
Approx. 1.5 m (5 ft)



Template for PTT SW



REMOTE CONTROL TYPES AND APPLICATIONS

6X7 CONCEALED REMOTE CONTROL [DEC]

This exclusive concealed remote control unit requires no mechanical remote control cables.

The throttle and shift operations are electrically controlled by new Digital Network System, which will obtain smoother remote control operation without cable friction.

Rigging has been simplified, because the mechanical cable installation and adjustment are not required.



Part No.	Variation code	Single station	Dual station		Remarks
			Main helm	2nd helm	
6X7-48206-21	A	1			Single station only
6X7-48206-31	C	1	1		Replaceable to 6X6 RC
6X7-48206-41	G			1	

TIP:

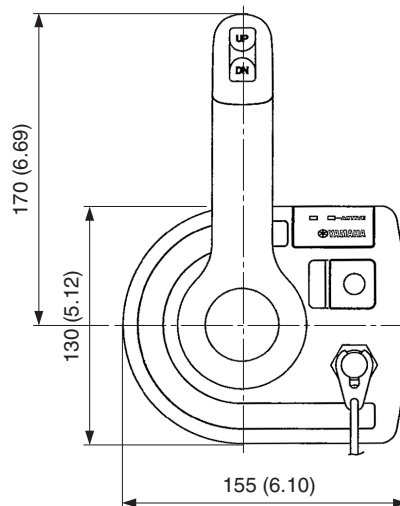
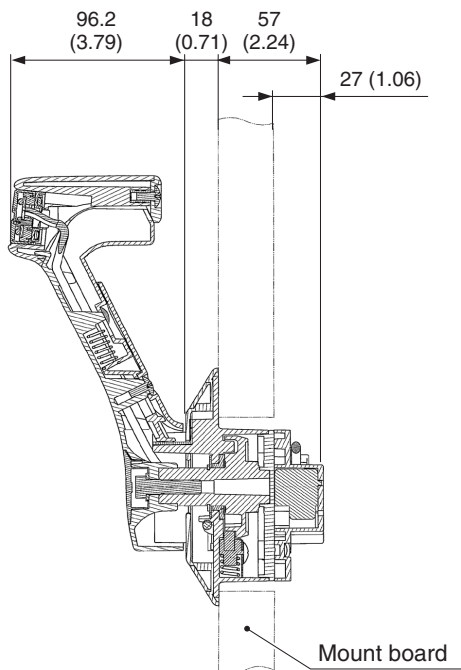
- Ignition switch panel (P/N: 64D-82570-22) is required.
- Multi-engine application is not accepted.
- For further information, see the instruction which is included in the remote control unit package.

REMOTE CONTROL TYPES AND APPLICATIONS

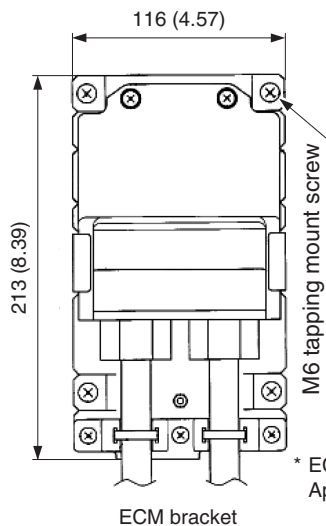
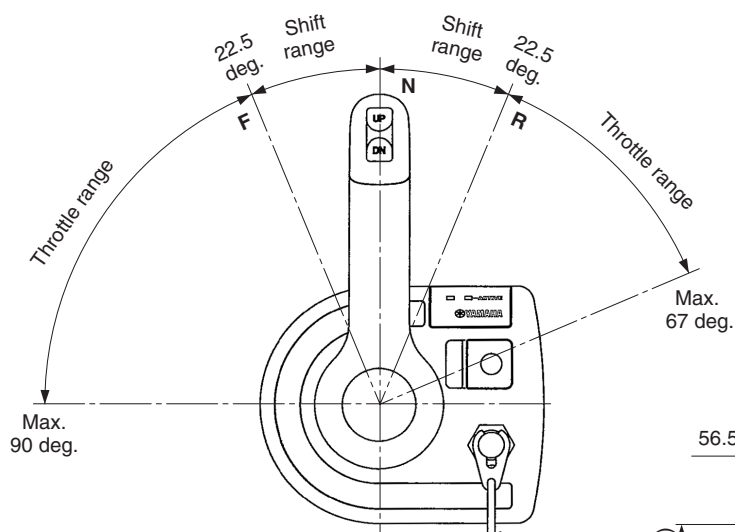
6X7 CONCEALED REMOTE CONTROL [DEC]

Dimensions

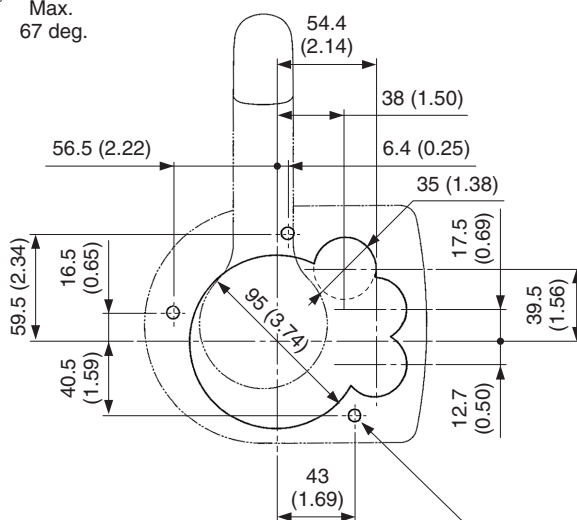
mm (in.)



* Stop SW wire harness length:
Approx. 2 m (6.5 ft)



* ECM wire harness length:
Approx. 1.5 m (5 ft)



Make three 7 mm (9/32 in) holes for mounting with bolts and nuts.
Drill 4 mm (5/32 in) holes for tapping screws, if the board is thicker
than 20 mm (0.79 in).

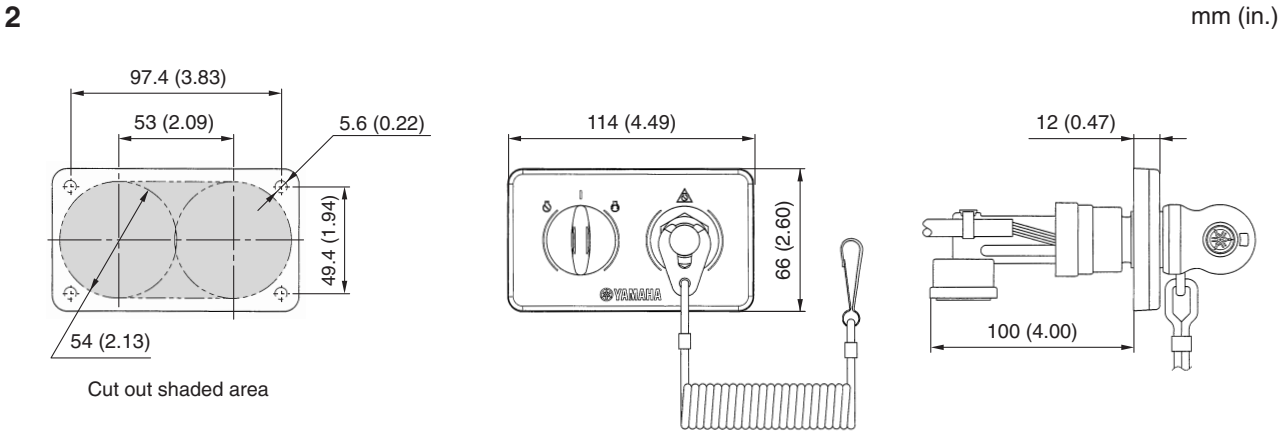
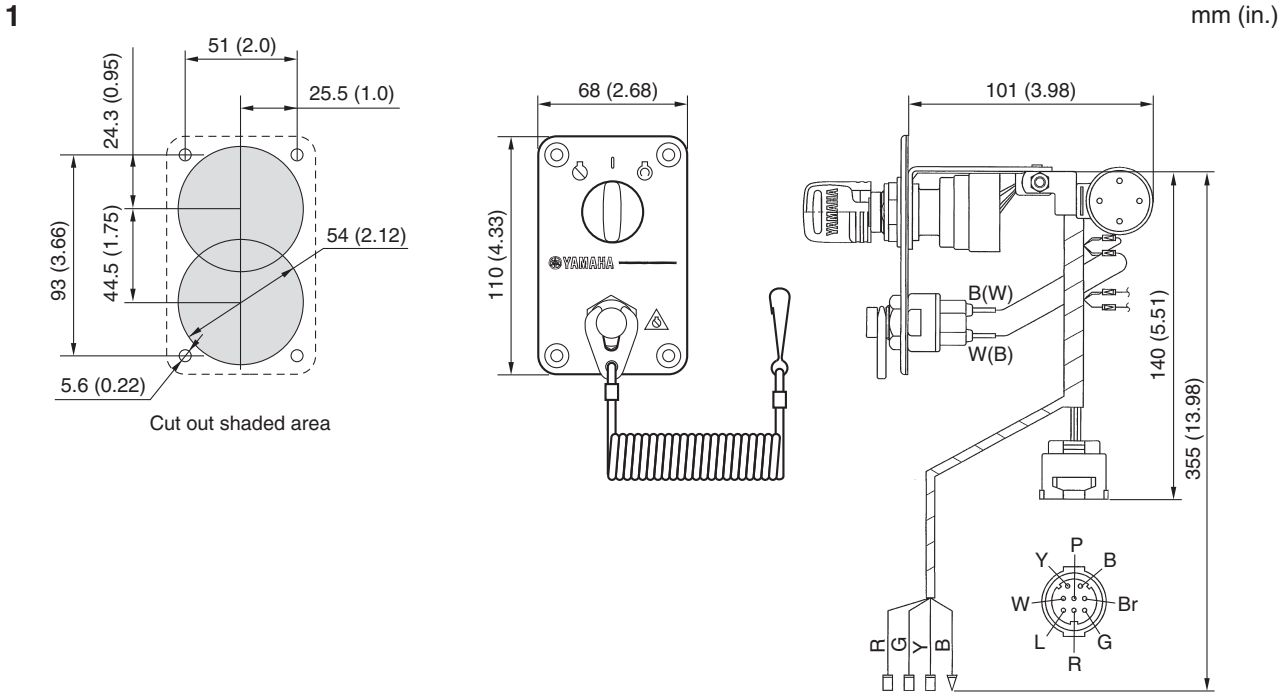
Template

REMOTE SWITCH TYPES AND APPLICATIONS

COMBINATION SWITCH PANEL (IG SWITCH AND EMERGENCY STOP SWITCH)

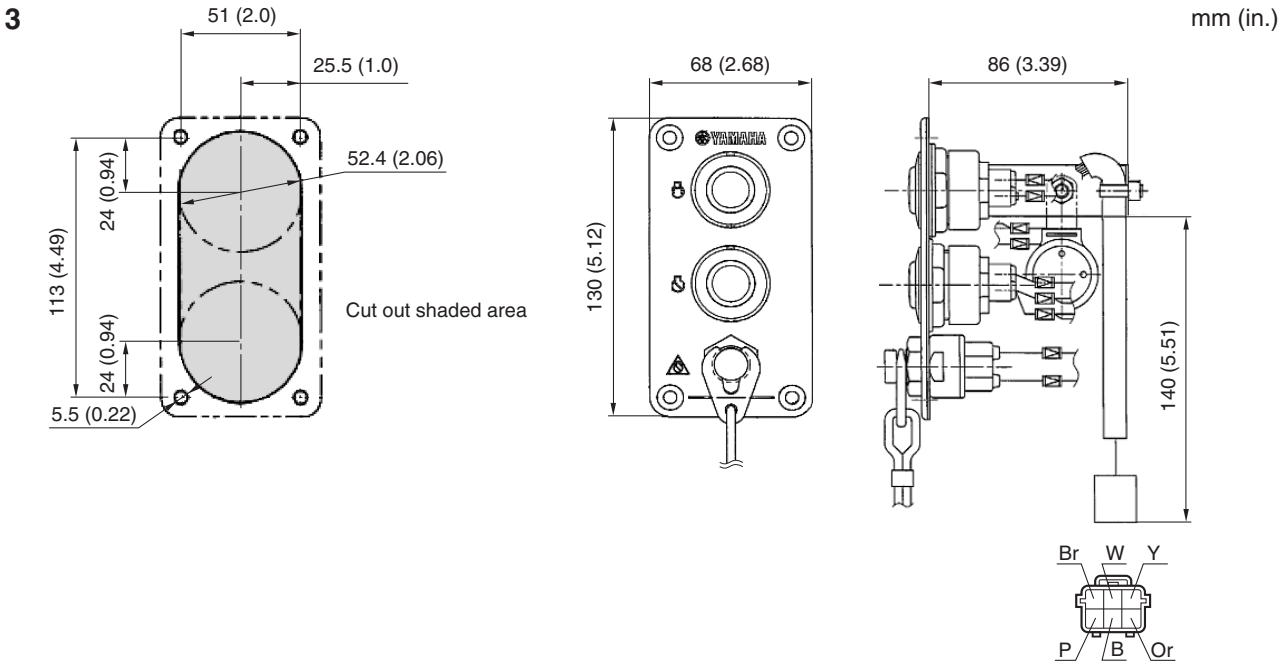
SINGLE IG SWITCH W/ PANEL

Ref. No.	Part No.	Description
1	704-82570-12	w/ choke SW
	6R5-82570-06	w/o choke SW, For Prime start model or Digital Network System (6Y8)
2	6X6-82570-32	For Digital Network System (6Y9), Main station helm
3	6X6-82570-01	For Digital Network System (6Y8), 2nd station helm



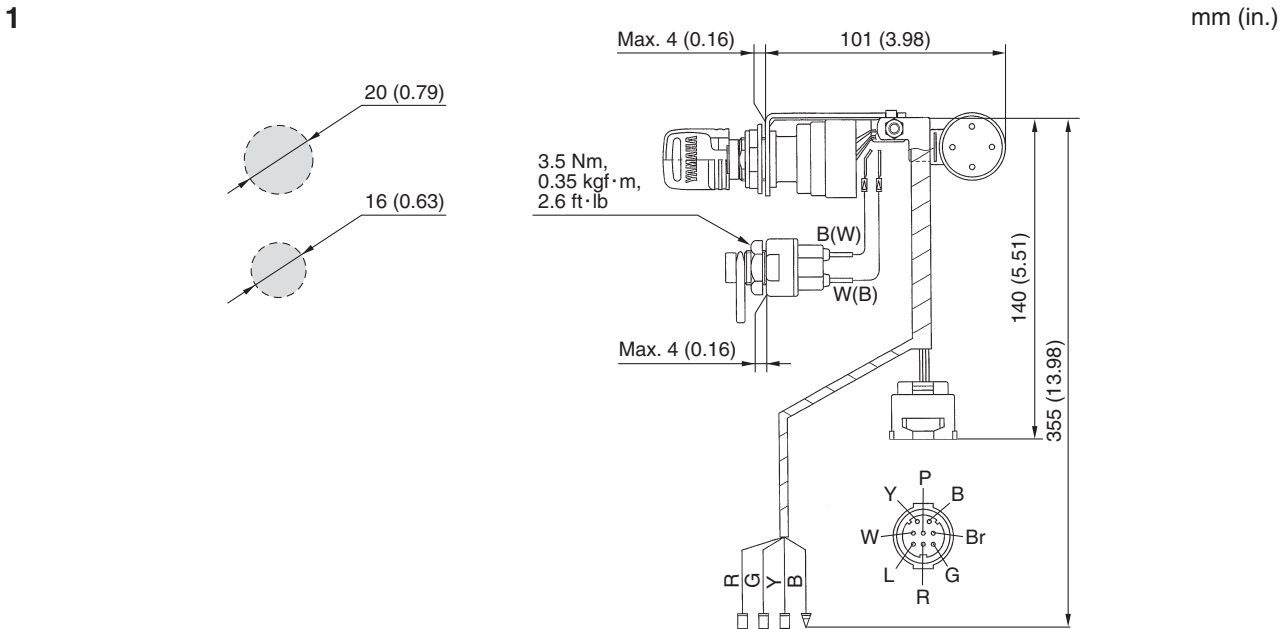
To be continued.

REMOTE SWITCH TYPES AND APPLICATIONS SINGLE IG SWITCH W/ PANEL



SINGLE IG SWITCH W/O PANEL

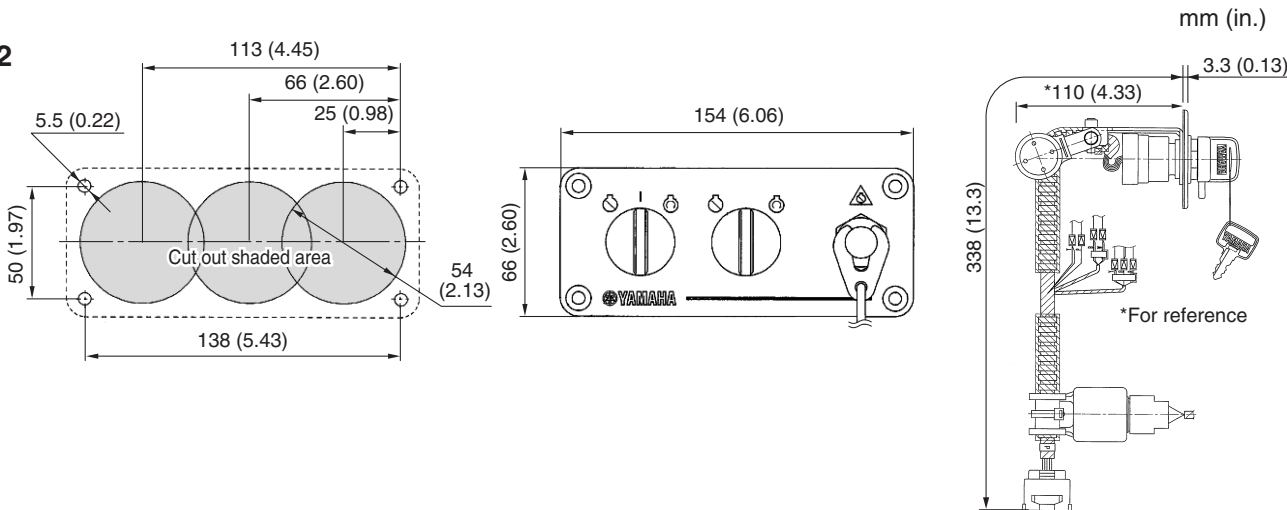
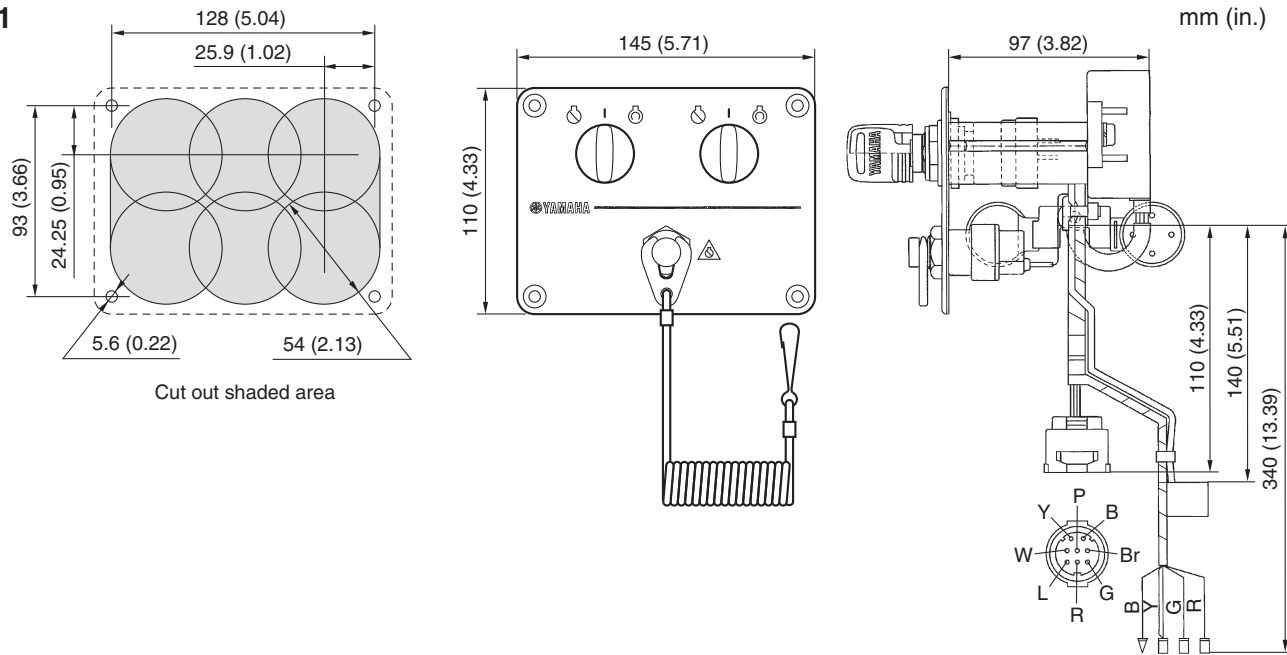
Ref. No.	Part No.	Description
1	704-8257C-01	With choke switch



REMOTE SWITCH TYPES AND APPLICATIONS

TWIN IG SWITCH

Ref. No.	Part No.	Description
1	6K1-82570-13	w/ choke SW
	61B-82570-06	w/o choke SW
2	6Y8-82570-04	For Digital Network System (6Y8), Main station helm
3	6X6-82570-40	For Digital Network System (6Y9), Main station helm
4	6X6-82570-11	For Digital Network System (6Y8), 2nd helm
5	6X6-82570-60	For Digital Network System (6Y9), main station helm, w/o buzzer, Requires [No.3]
	6X6-82570-E0	For Digital Network System (6Y9), 2nd station helm, w/ buzzer



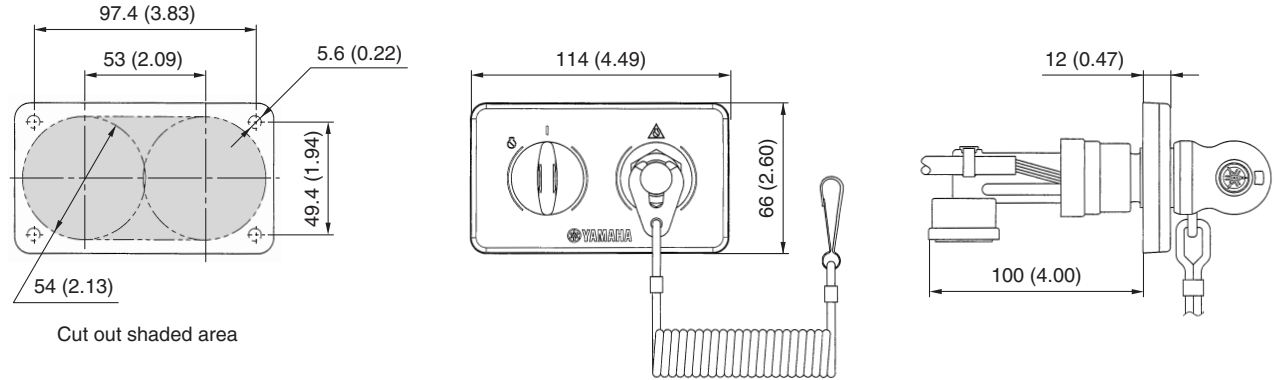
To be continued.

REMOTE SWITCH TYPES AND APPLICATIONS

TWIN IG SWITCH

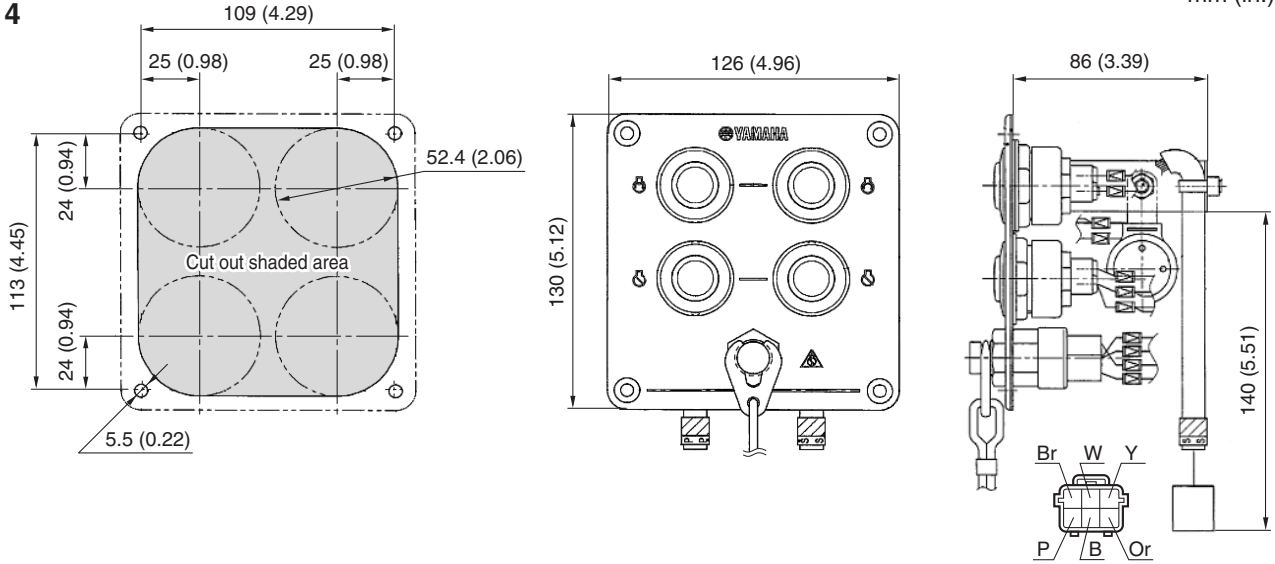
3

mm (in.)



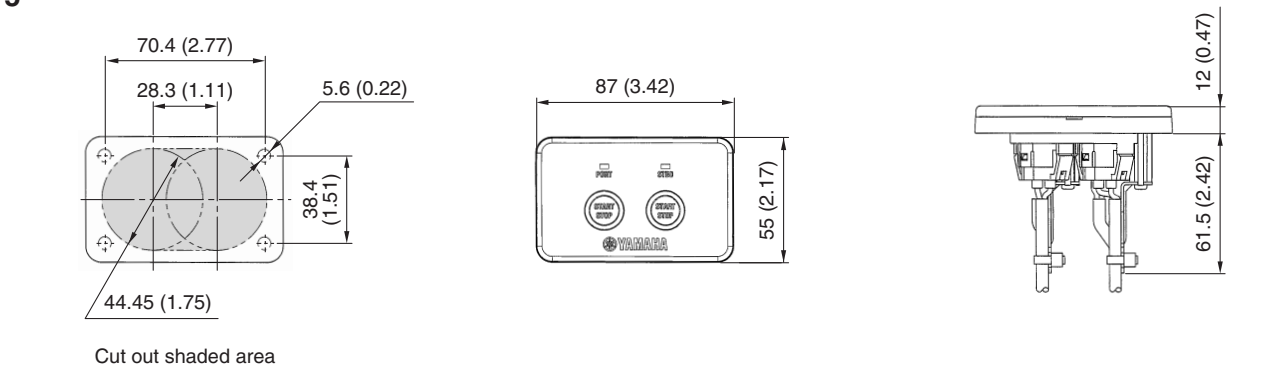
4

mm (in.)



5

mm (in.)

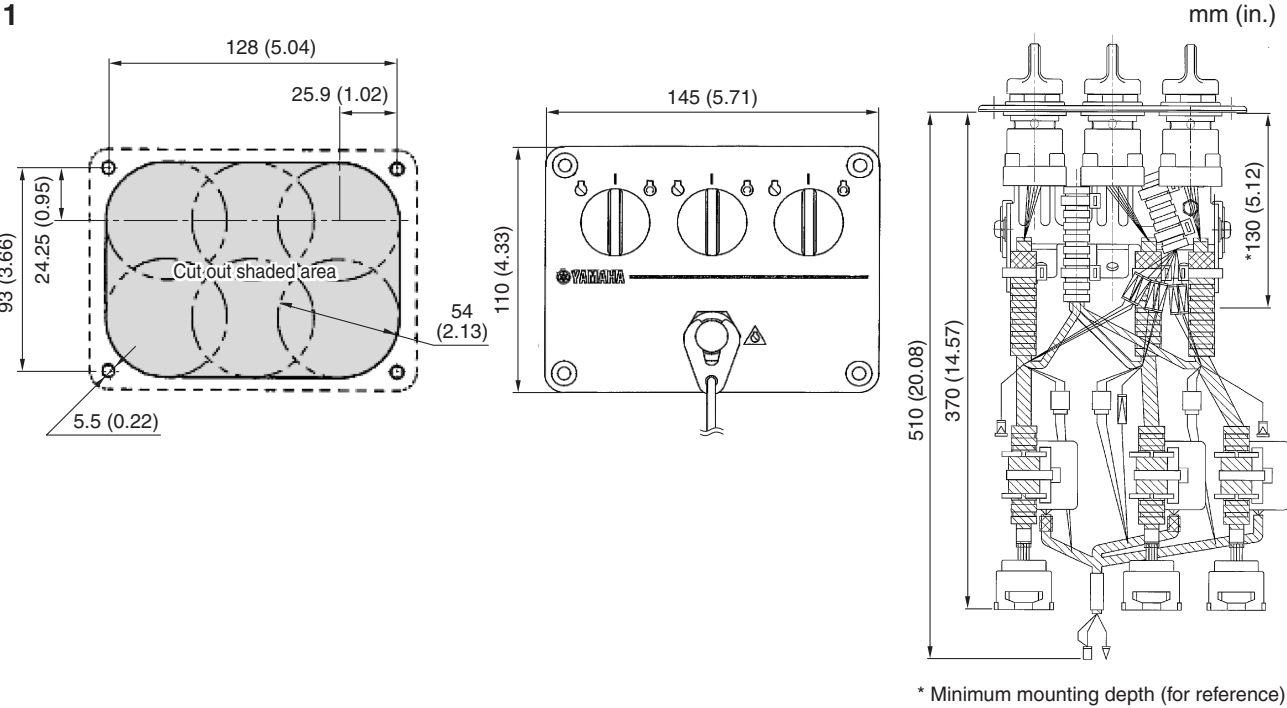


REMOTE SWITCH TYPES AND APPLICATIONS

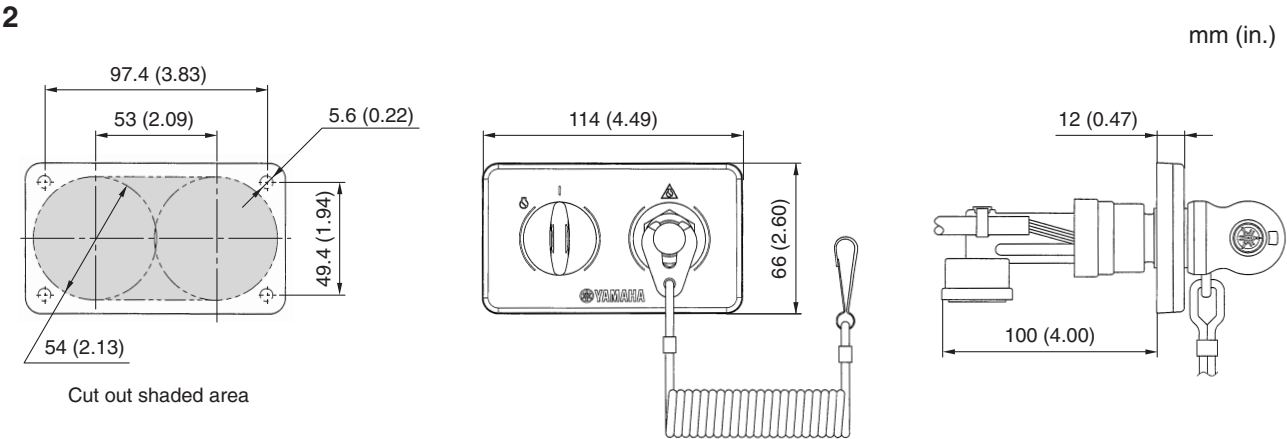
TRIPLE IG SWITCH

Ref. No.	Part No.	Description
1	6X5-82570-02	For Digital Network System (6Y8), Main station helm
2	6X6-82570-50	For Digital Network System (6Y9), Main station helm
3	6X6-82570-20	For Digital Network System (6Y8), 2nd station helm
4	6X6-82570-70	For Digital Network System (6Y9), main station helm, w/o buzzer, Requires [No.2]
	6X6-82570-F0	For Digital Network System (6Y9), 2nd station helm, w/ buzzer

1



2

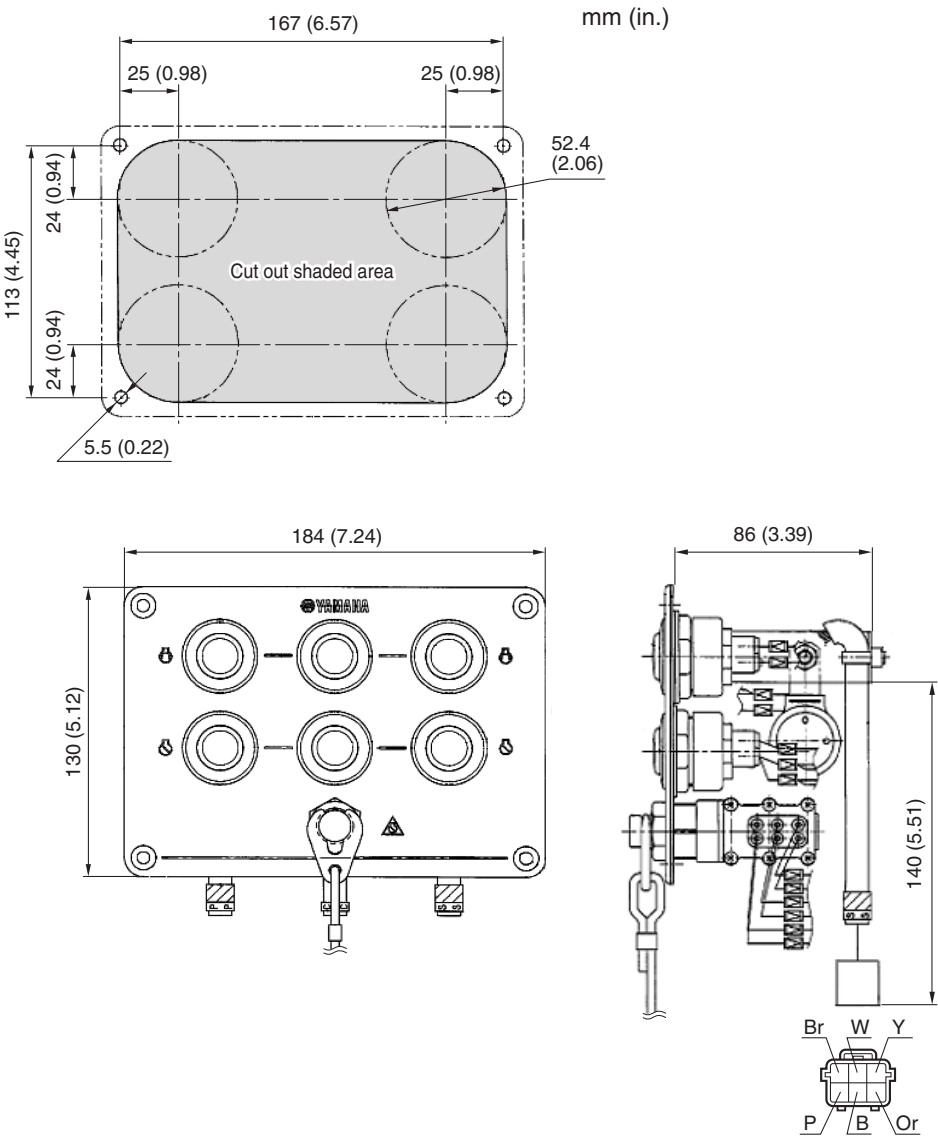


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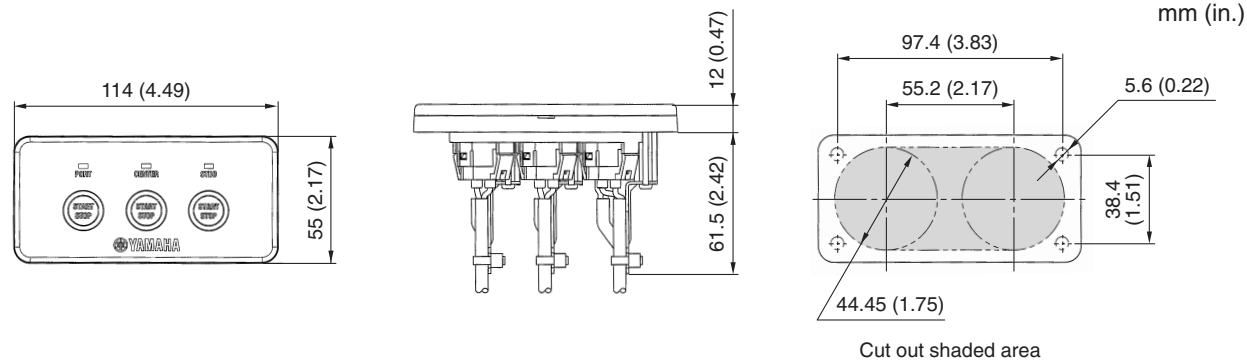
REMOTE SWITCH TYPES AND APPLICATIONS

TRIPLE IG SWITCH

3



4



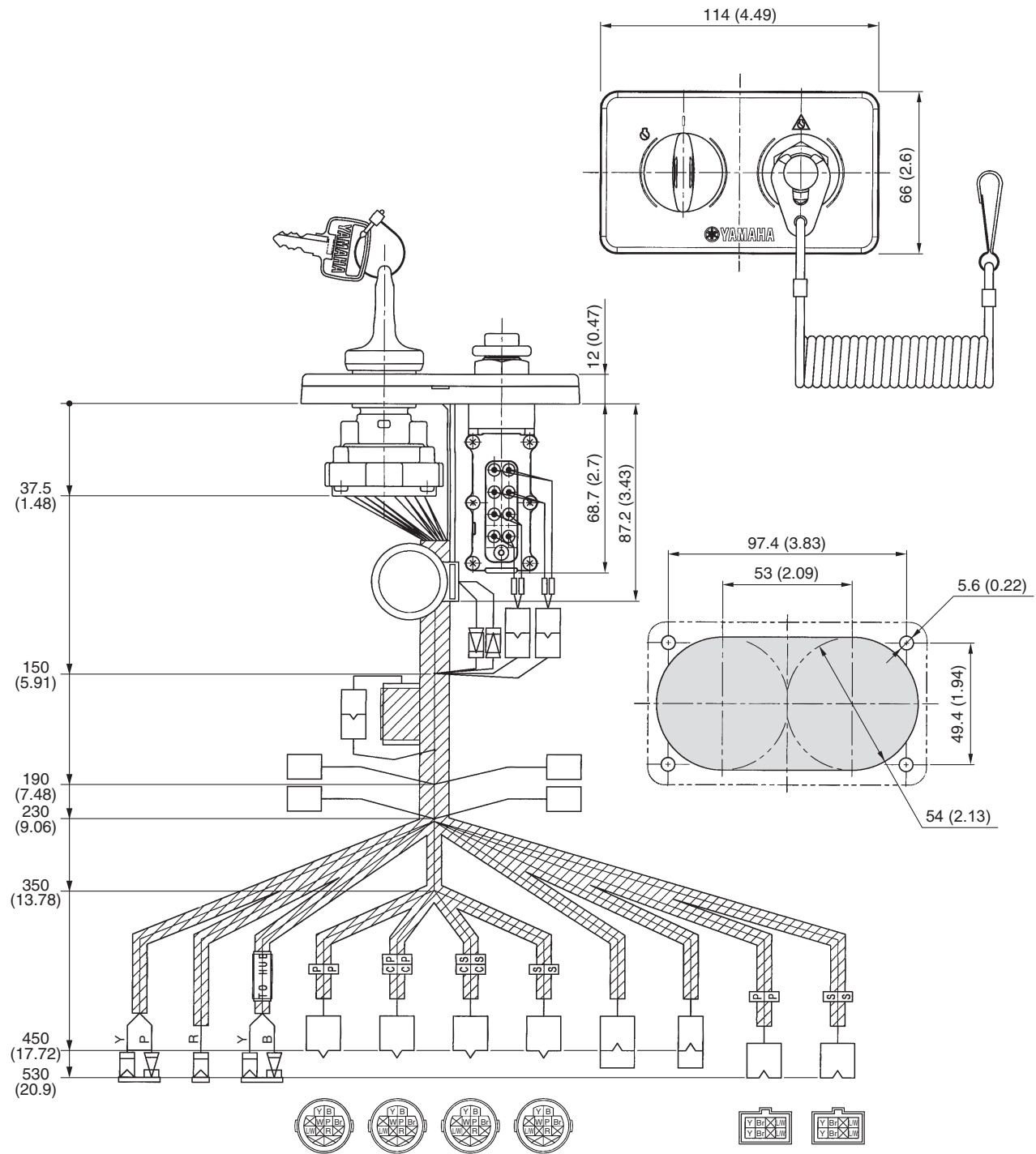
REMOTE SWITCH TYPES AND APPLICATIONS

QUAD IG SWITCH

Ref. No.	Part No.	Description
1	6X6-82570-G0	For Digital Network System (6Y9), Main helm
2	6X6-82570-J0	For Digital Network System (6Y9), Main/2nd helm, P/CP engine
	6X6-82570-K0	For Digital Network System (6Y9), Main/2nd helm, CS/S engine

1

mm (in.)

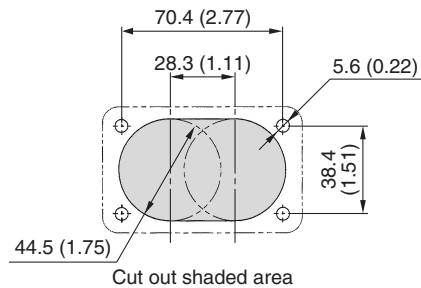
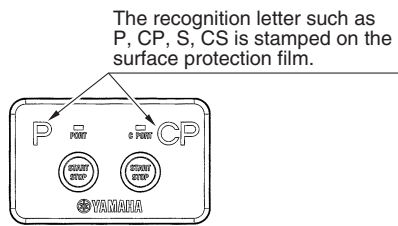
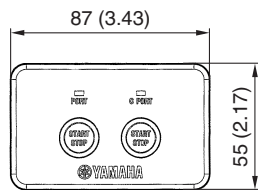
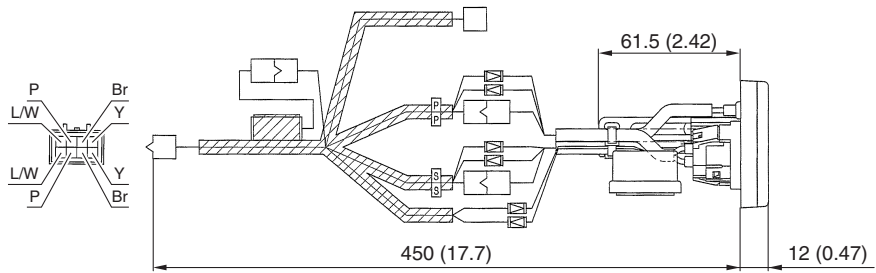


REMOTE SWITCH TYPES AND APPLICATIONS

QUAD IG SWITCH

2 EX: P/CP SW panel

mm (in.)



REMOTE SWITCH TYPES AND APPLICATIONS

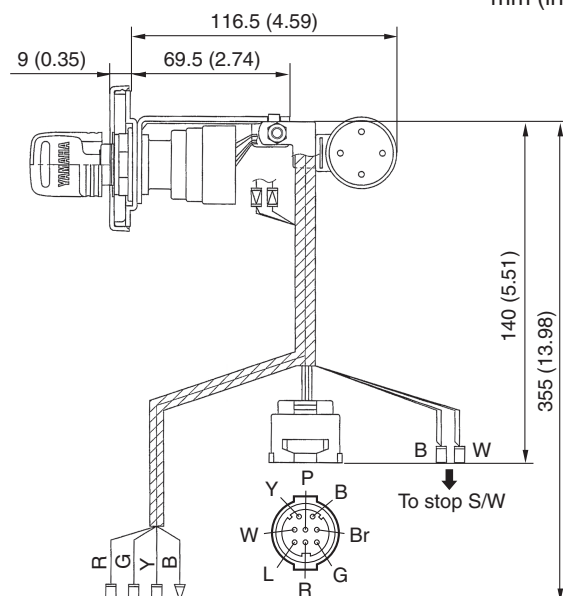
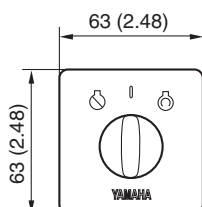
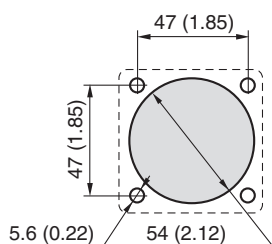
INDEPENDENT SWITCH PANEL

IG SWITCH W/ PANEL

Ref. No.	Part No.	Description
1	64D-82570-05	w/ bullet connectors for emergency stop SW
2	64D-82570-22	w/ 2P coupler for emergency stop SW, For 6X3 & 6X7 RC
3	6X6-82570-80	For Digital Network System (6Y9), 2nd station helm, Single engine application
4	6X6-82570-D0	For Digital Network System (6Y9), Multi engine application (All engine start/stop)

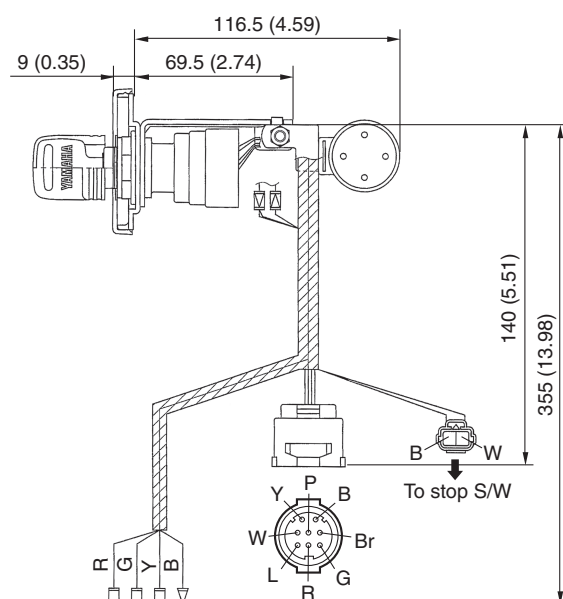
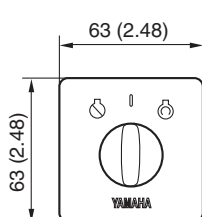
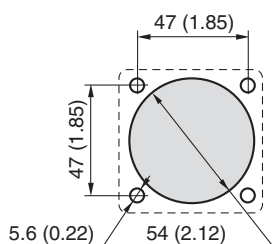
1

mm (in.)



2

mm (in.)



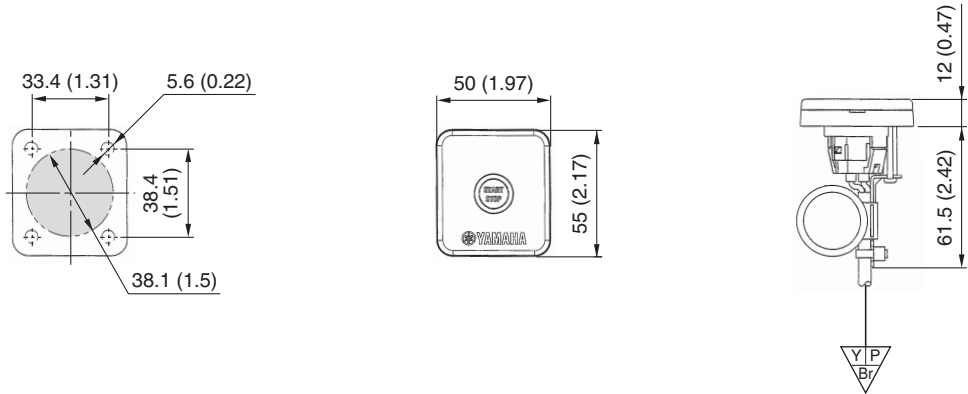
To be continued.

REMOTE SWITCH TYPES AND APPLICATIONS

IG SWITCH W/ PANEL

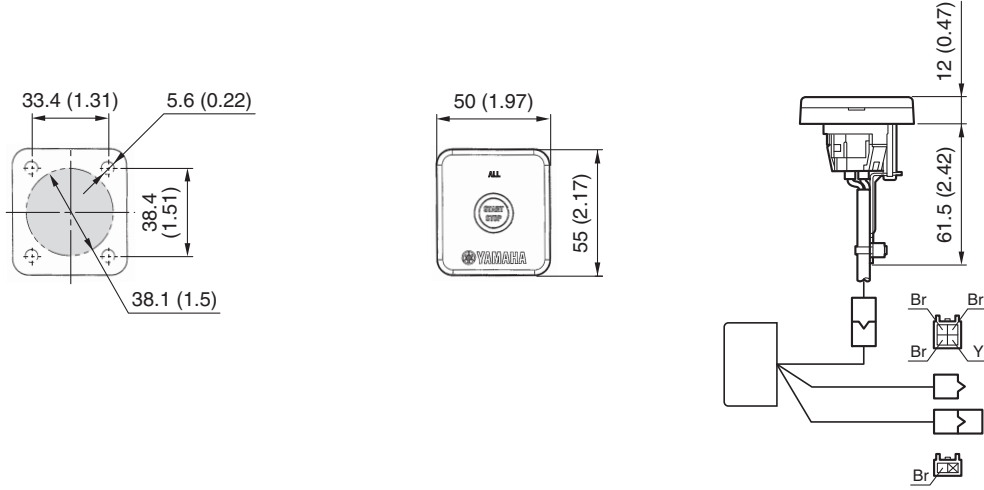
3

mm (in.)



4

mm (in.)



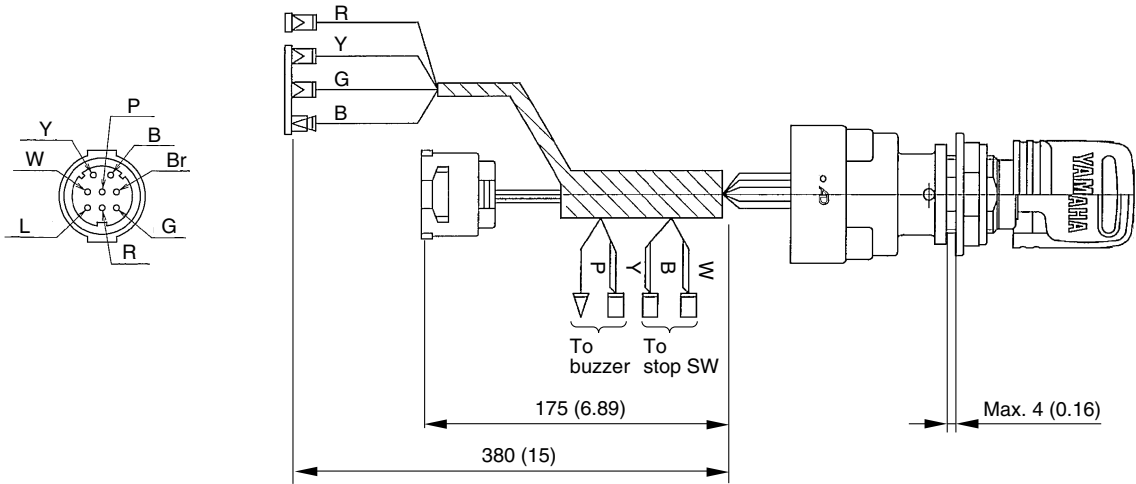
REMOTE SWITCH TYPES AND APPLICATIONS

IG SWITCH W/O PANEL

Ref. No.	Part No.	Description
1	704-82510-07	w/bullet connectors for stop switch
2	6X3-8257B-01	w/2-pin coupler for stop switch, For 6X3 and 6X7 RC

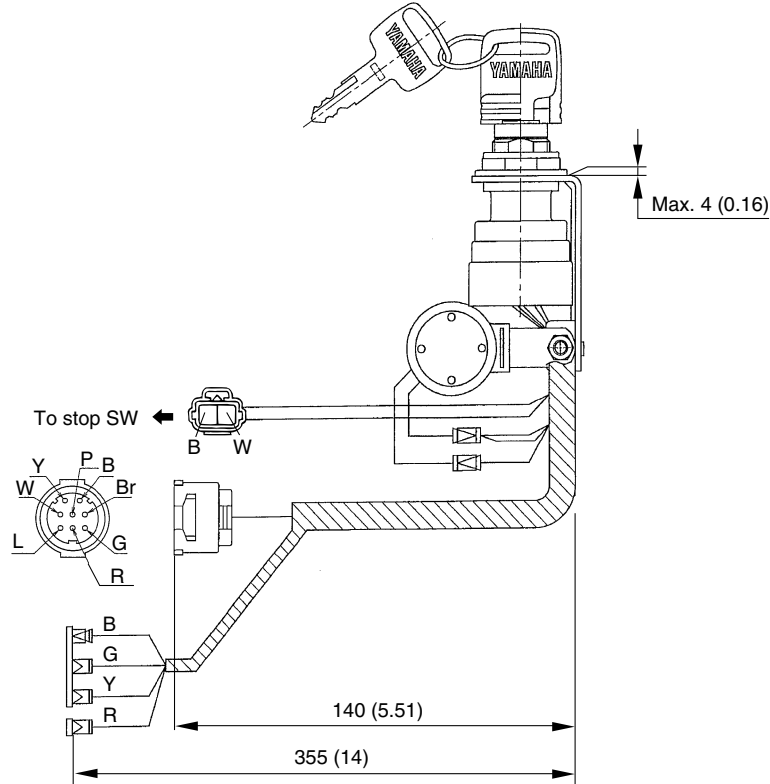
1

mm (in.)



2

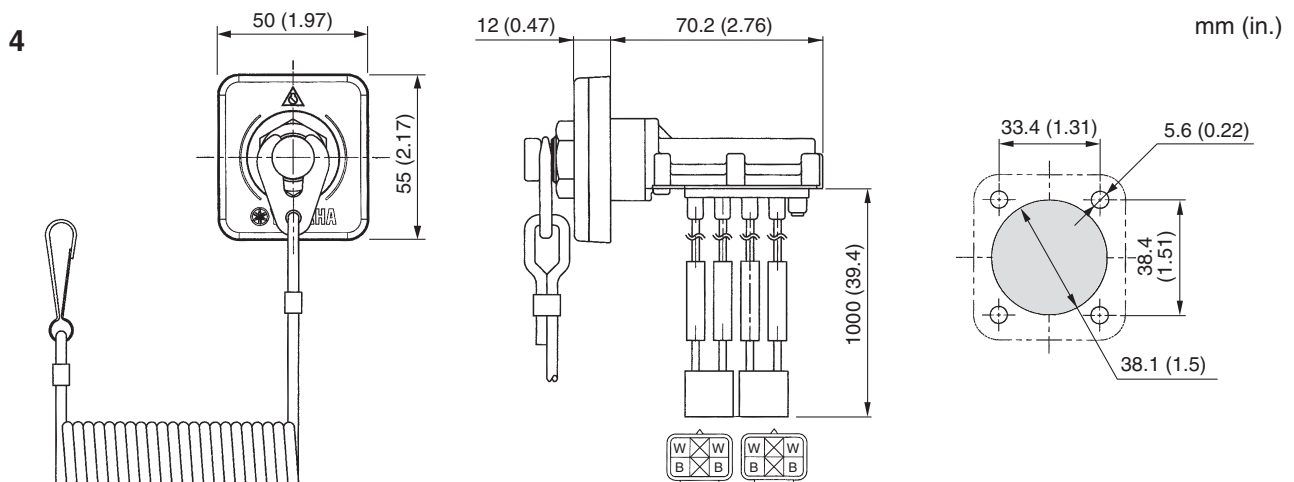
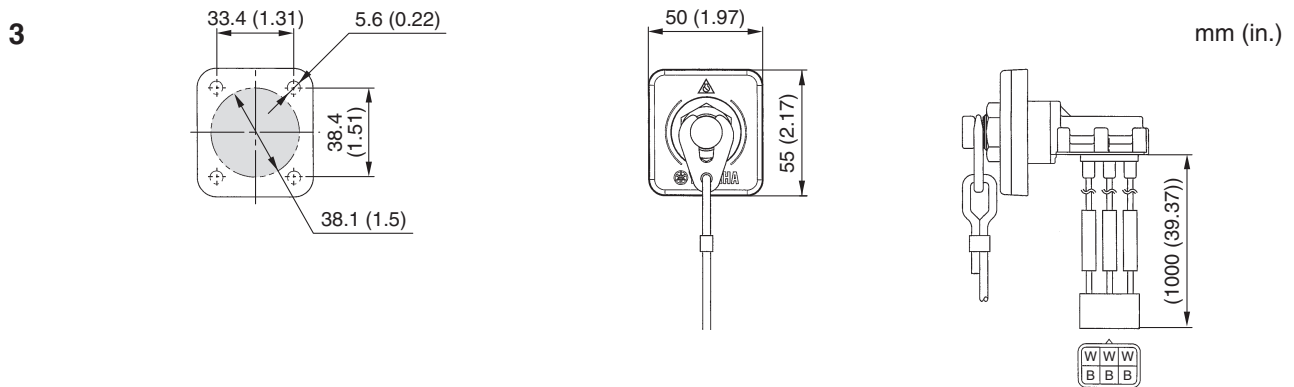
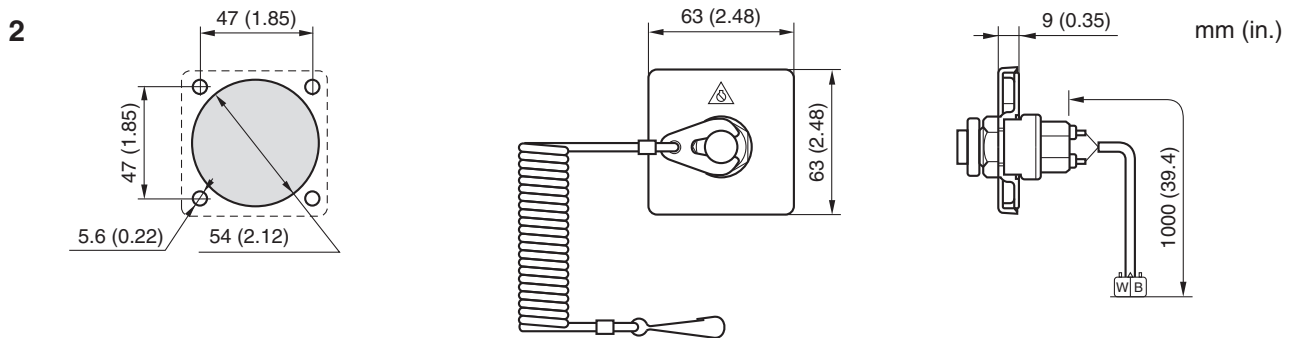
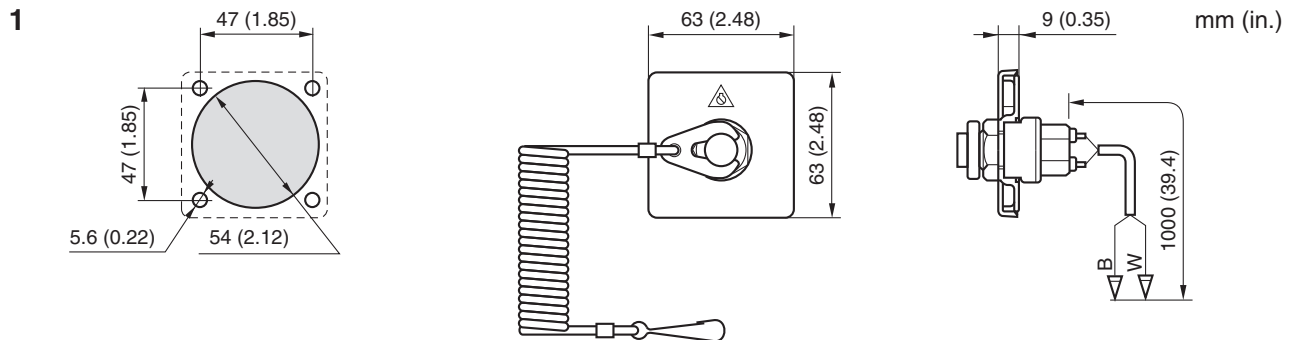
mm (in.)



REMOTE SWITCH TYPES AND APPLICATIONS

EMERGENCY STOP SWITCH W/ PANEL

Ref. No.	Part No.	Description
1	64D-82570-10	w/bullet connectors for stop SW
2	64D-82570-30	w/2P coupler for stop SW
3	6X6-82570-90	For Digital Network System (6Y9), 2nd helm, Single/Twin/Triple engine application
4	6ES-82570-00	For Digital Network System (6Y9), 2nd helm, Quad engine application only

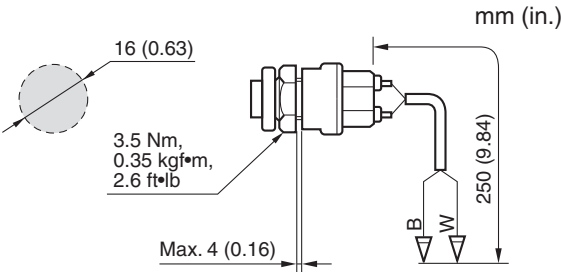


REMOTE SWITCH TYPES AND APPLICATIONS

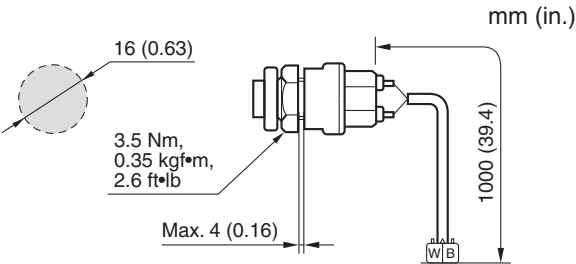
EMERGENCY STOP SWITCH W/O PANEL

Ref. No.	Part No.	Description
1	688-82575-10	w/bullet connectors for stop switch
2	64D-82575-10	w/2-pin coupler for stop switch

1



2



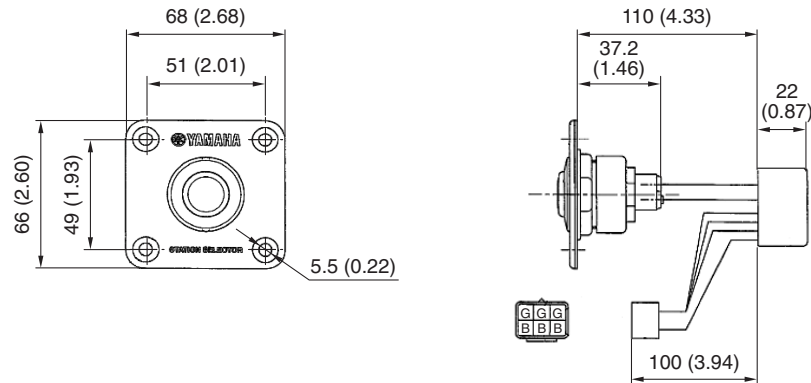
REMOTE SWITCH TYPES AND APPLICATIONS

STATION SELECTOR SWITCH

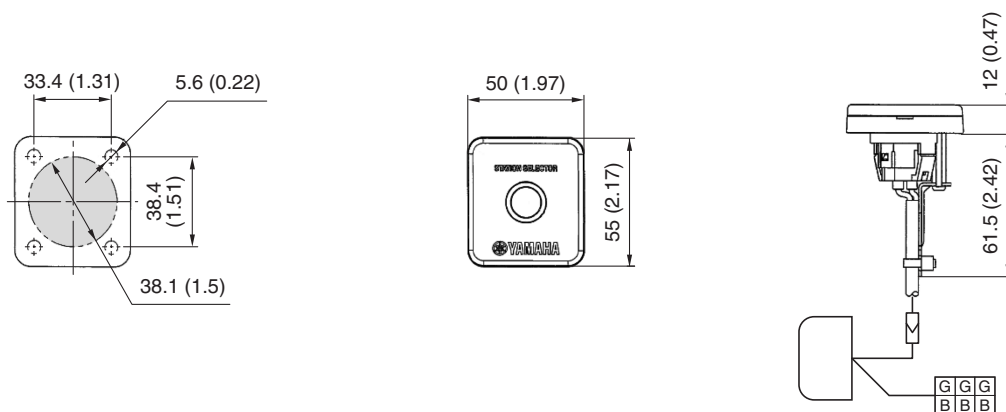
Ref. No.	Part No.	Description
1	6X6-82570-A0	For Digital Network System (6Y8), Dual station
2	6X6-82570-B0	For Digital Network System (6Y9), Dual station, Single/Twin/Triple engine application
3	6X6-82570-L0	For Digital Network System (6Y9), Dual station, Quad engine application only

1

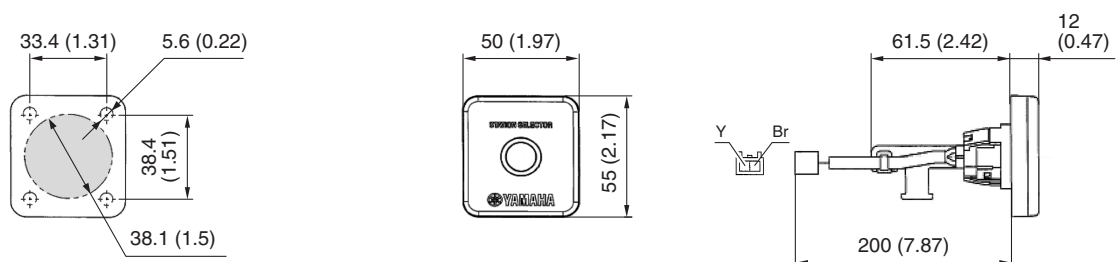
mm (in.)



2



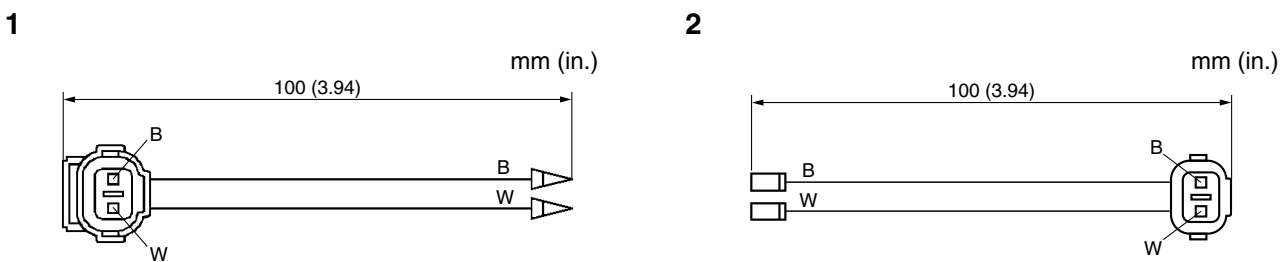
3



REMOTE SWITCH TYPES AND APPLICATIONS

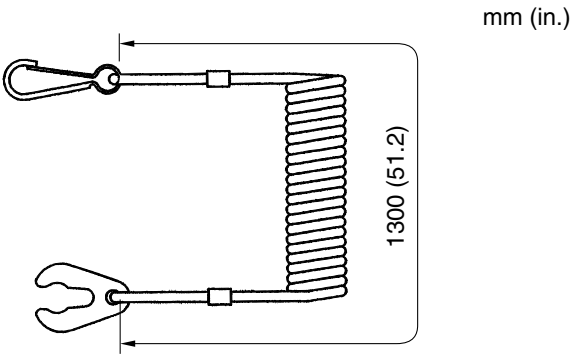
ADAPTER FOR EMERGENCY STOP SWITCH LEAD

Ref. No.	Part No.	Description
1	6X3-81971-00	2-pin coupler - bullet connector
2	6X3-81971-10	Bullet connector - 2-pin coupler



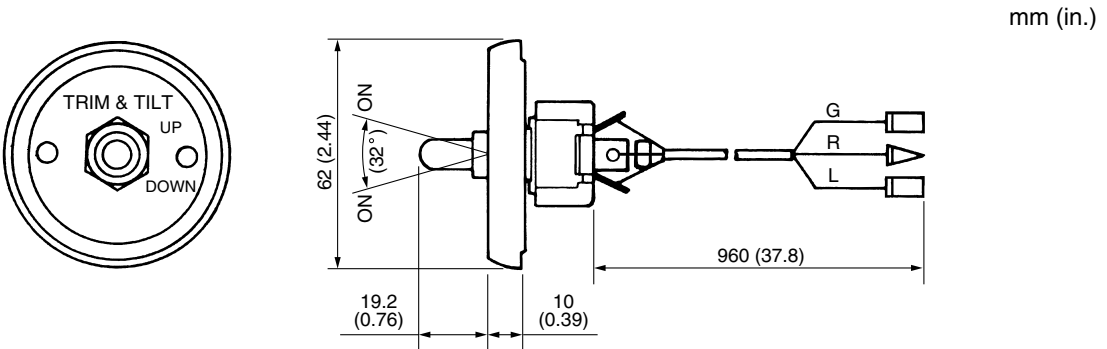
ENGINE SHUT-OFF LANYARD (CORD)

Part No.	Description
682-82556-00	



PTT SWITCH PANEL

Part No.	Description
688-82563-10	For PTT models



REMOTE CONTROL CABLES

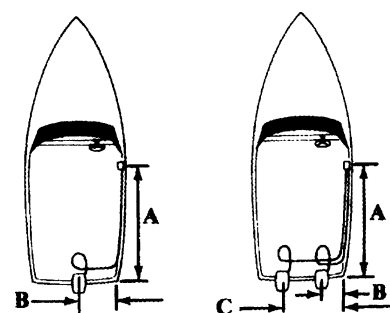
SELECTING THE CABLE LENGTH

Use the following examples as a guide for measurement. Obviously, different boats will require different routing, therefore different lengths are required.

1. Choose a mounting location for the remote control box which will provide comfortable operation and unobstructed movement of the hand lever and control mechanism.

* Minimum clearance below the 704 binnacle mount remote control mounting surface for cables is 400 mm (16 in). Also, minimum clearance behind the 703 side mount remote control box for the control cables is 400 mm (16 in).

2. Measure from the control box position along an unobstructed path to shift and throttle connections in the motor. The cable lengths are overall length. When a measurement is in feet and inches, specify next whole foot. Add 3 feet for loop (see illustration below).

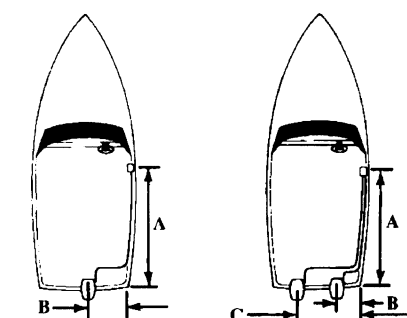


Cable length = $A + B + 3$ feet

$A + C + 3$ feet

Obviously, different boats will require different routing, therefore different lengths are required.

For example, a thru-transom boat is shown in the illustration below.



Cable length = $A + B + 1$ foot

$A + C + 1$ foot

* When the remote control cable is too long, neutral adjustment may be difficult due to increased free play.

REMOTE CONTROL CABLES

CABLE TYPE

Yamaha remote control cables are available in lengths from 6 feet to 31 feet. The cables utilize 10 – 32 threaded ends.

Part No.	Cable length	
	Feet	Meters
701-48310-10	6	1.8
701-48310-20	7	2.1
701-48310-40	8	2.4
701-48310-60	9	2.7
701-48310-80	10	3.0
701-48310-90	11	3.4
701-48320-00	12	3.7
701-48320-20	13	4.0
701-48320-30	14	4.3
701-48320-50	15	4.6
701-48320-60	16	4.9
701-48320-80	17	5.2
701-48320-90	18	5.5
701-48320-40	19	5.8
701-48320-70	20	6.1
701-48350-00	21	6.4
701-48350-10	22	6.7
701-48350-20	23	7.0
701-48350-30	24	7.3
701-48350-40	25	7.6
701-48350-50	26	7.9
701-48350-60	27	8.2
701-48350-70	31	9.3

* If Yamaha remote control cable is not available, a SeaStar 33HPC (BLK)/33C (RED) type cable is recommended.

REMOTE CONTROL CABLES

ROUTING THE REMOTE CONTROL CABLES

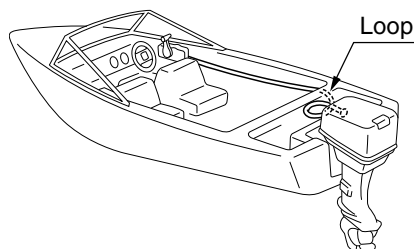
⚠ WARNING

Do not bend the remote control cable to a diameter of 400 mm (1.31 feet) or smaller. Additional friction will impair the control ability.

1. Route the cable along an unobstructed path of the hull from the remote control box to the engine.
2. Take 3 feet (approximately 1 m) of cable to make a loop in the motor well. This is to prevent the cables from hard bend when the outboard motor is fully tilted up and steered. See the illustration below for a typical cable routing.

TIP:

Refer to the instruction in the remote control box package for further information.



REMOTE CONTROL THROTTLE CABLE FREE-PLAY ADJUSTMENT

The mechanical remote control cable free-play adjustment is required for proper remote throttle control operation.

For the first, install the remote control cables to the remote control box, and put the remote control lever into the neutral/ idle position.

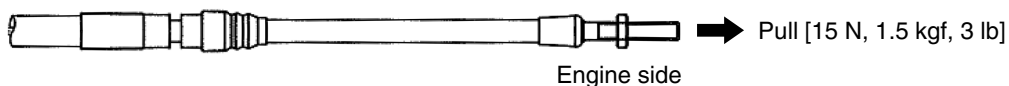
TIP:

Refer to the instruction in the remote control box package or applicable service manual for further information for remote control cables installation.

Adjust the inner cable free-play as follows:

PUSH-TO-OPEN TYPE

1. Pull out the inner cable by the force of 15 N (1.5 kgf, 3 lb) to remove the cable free-play.
2. Set the throttle valve control arm to contact onto its stop plate.
3. Install the cable joint, and adjust it to align with the pin of throttle arm.
4. Connect the joint to the pin, and then secure it using the clips and nuts.
5. Check the throttle for proper operation.



PULL-TO-OPEN TYPE

1. Push in the inner cable by the force of 15 N (1.5 kgf, 3 lb) to remove the cable free-play.
2. Set the throttle valve control arm to the fully closed (idle) position.
3. Install the cable joint, and adjust it to align with the pin of throttle arm.
4. Connect the joint to the pin, and then secure it using the clips and nuts.
5. Check the throttle for proper operation.



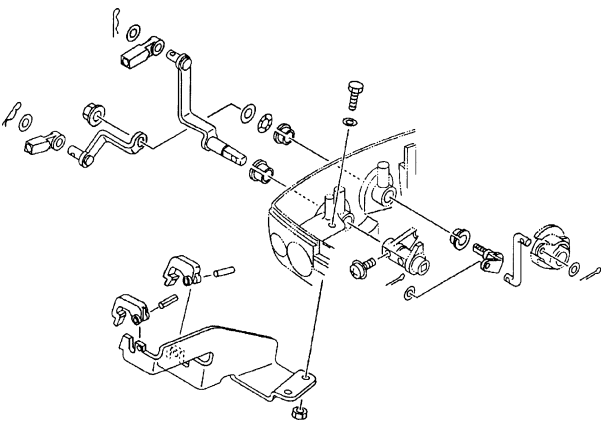
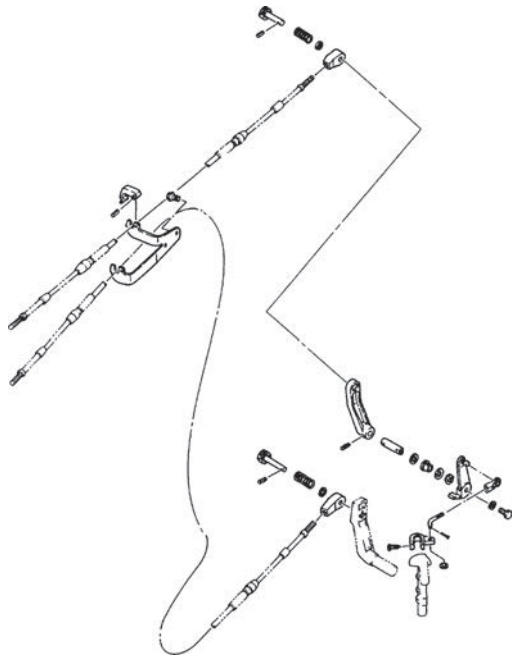
REMOTE CONTROL ATTACHMENT KIT

If the specific tightening torque for bolts and/or nuts is not mentioned in the figure, use general torque as below.

General torque table			
Bolt size	Nm	kgf•m	lb•ft
M5	5	0.5	4
M6	8	0.8	6
M8	18	1.8	13

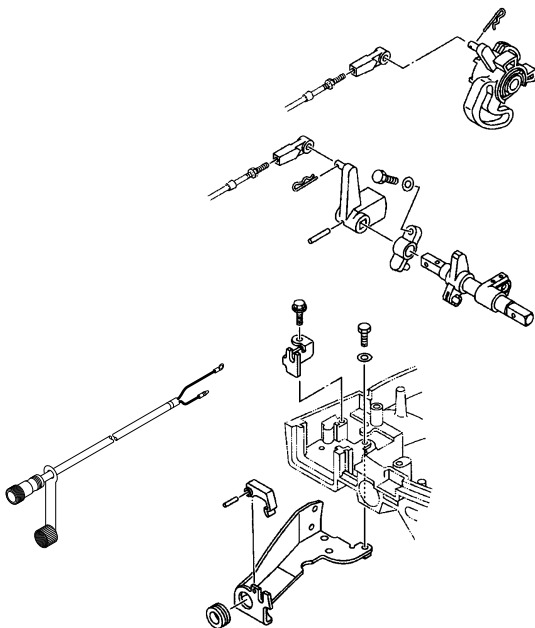
Part No.	6G1-48501-50				
Global model	8F				
Unified model					

Part No.	63V-48501-00				
Global model	9.9F	15F			
Unified model					



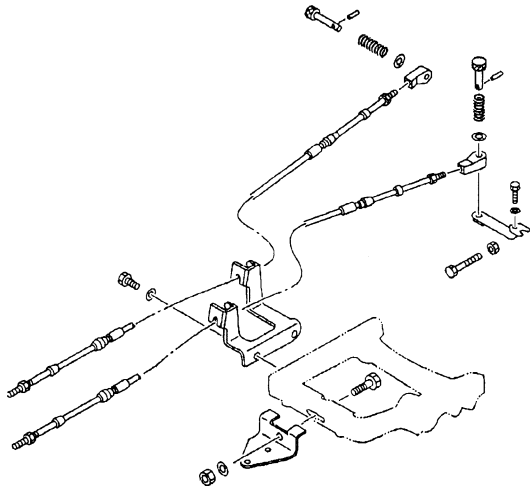
Part No.	6AH-48501-00				
Global model	F9.9H	F15C	F20B	F20C	
Unified model		F15A	F20A		

To be continued.

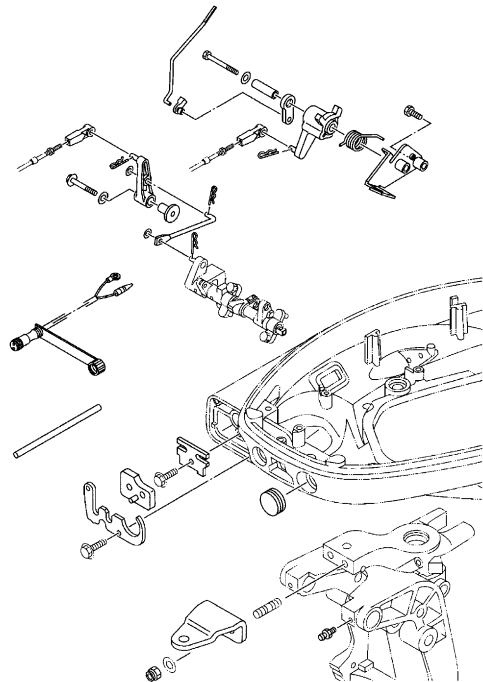


REMOTE CONTROL ATTACHMENT KIT

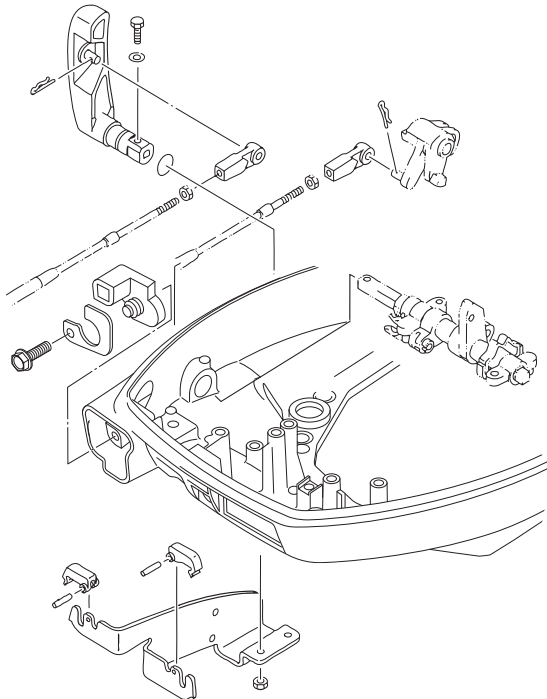
Part No.	655-48501-10				
Global model	E8D	EK8D			
Unified model					
For ball post					



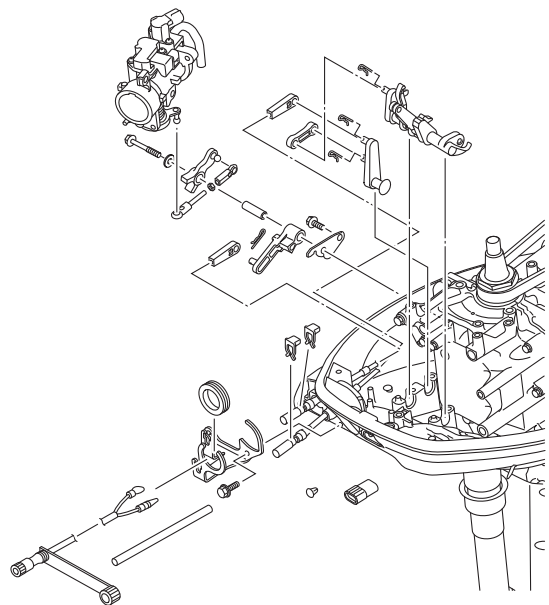
Part No.	6BL-48501-00				
Global model	F25D				
Unified model	F25A/B				



Part No.	6DR-48501-00				
Global model	F8F	FT8G	F9.9J	FT9.9L	
Unified model	F8B		F9.9B	T9.9B	



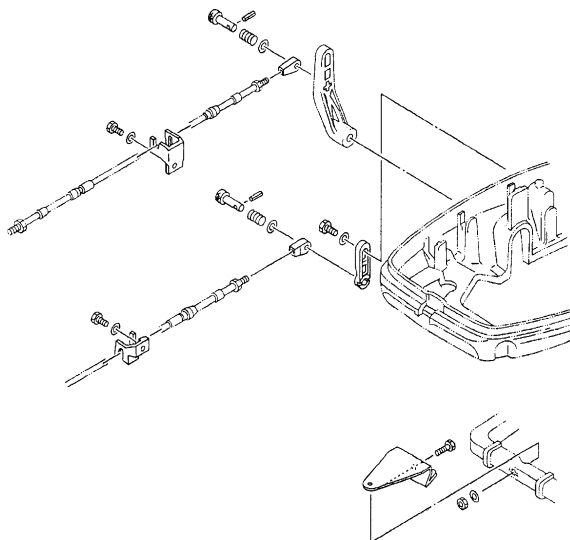
Part No.	6FM-48501-00				
Global model	F25G				
Unified model	F25C				



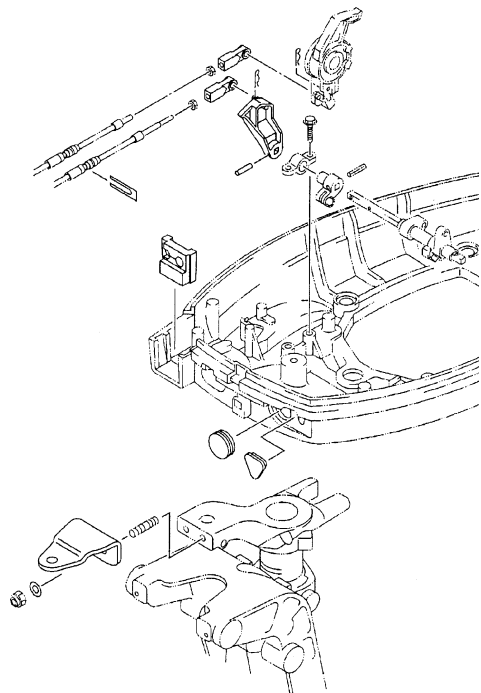
To be continued.

REMOTE CONTROL ATTACHMENT KIT

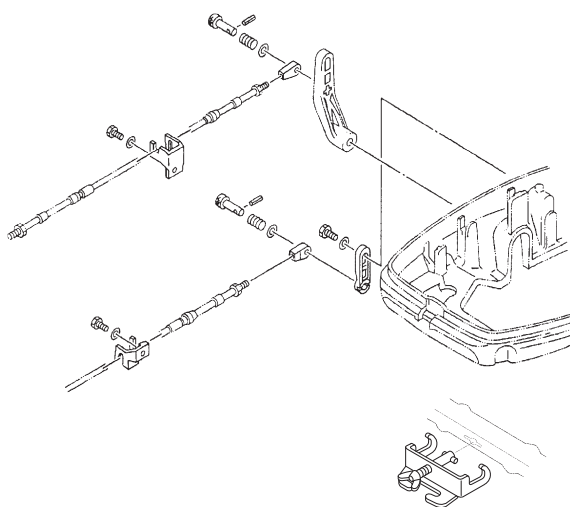
Part No.	69R-48501-00				
Global model	E/25B	25X	E/30H		
Unified model					
For ball post/ STR guide					



Part No.	66T-48501-01				
Global model	E/40X				
Unified model					

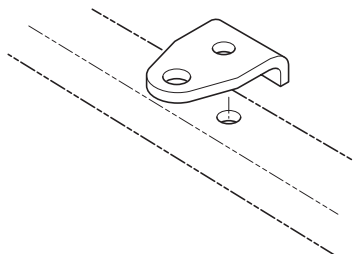


Part No.	69R-48501-10				
Global model	E/25B	25X	E/30H		
Unified model					
For rope					

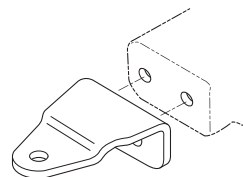


STEERING HOOK

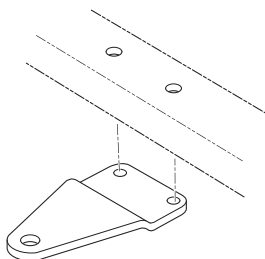
Part No.	63V-48511-01				
Global model	F8F	FT8G	F9.9J	FT9.9L	
Unified model	F8B		F9.9B	T9.9B	
For STR guide					



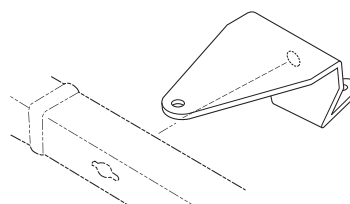
Part No.	65W-48511-01				
Global model	E/40X	F25D	FT25F	F25G	
Unified model		F25A	T25A	F25C	
Global model	F30B	F40F	F40H	F40G	F50H
Unified model	F30A	F40A			F50B
Global model	FT50J	F60F	FT60G	F70A	
Unified model	T50B	F60B	T60B	F70A	
For STR guide					



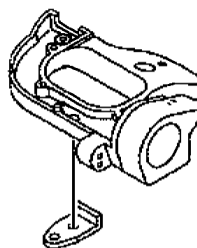
Part No.	6G8-48511-10				
Global model	9.9F	15F			
Unified model					
For ball post					



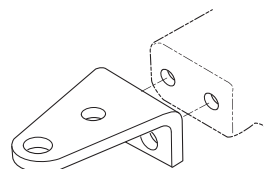
Part No.	676-48511-02				
Global model	E40J	E40G	EK40J	EK40G	
Unified model					
For STR guide					



Part No.	6AH-48511-01				
Global model	F9.9H	F15C	F20B	F20C	
Unified model		F15A	F20A		
For STR guide					



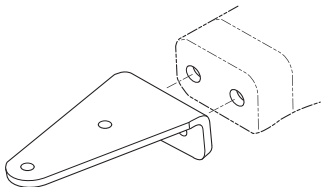
Part No.	63D-48511-01				
Global model	40V	50H	FT50C	F50D	
Unified model					
For STR guide					



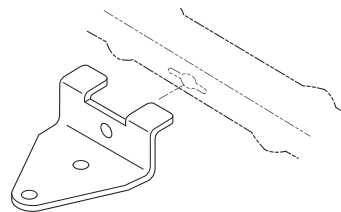
To be continued.

STEERING HOOK

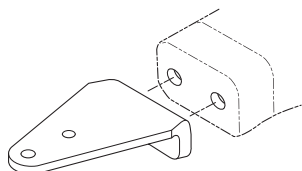
Part No.	67F-48511-01				
Global model	F80B	F90B	F100D		
Unified model					
For STR guide					



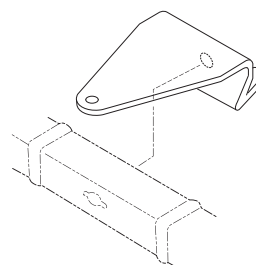
Part No.	676-48511-02				
Global model	E8D	EK8D	8F		
Unified model					
For ball post					



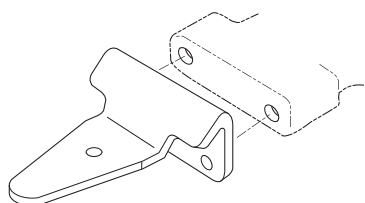
Part No.	688-48511-12				
Global model	85A	90A			
Unified model					
For STR guide					



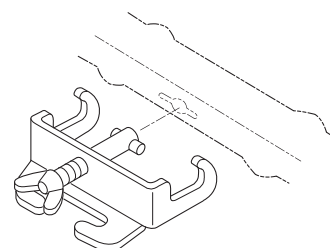
Part No.	689-48511-02				
Global model	E/25B	25X	E/30H		
Unified model					
For ball post/ STR guide					



Part No.	68V-48511-01				
Global model	F75C	F100B			
Unified model					
For STR guide					



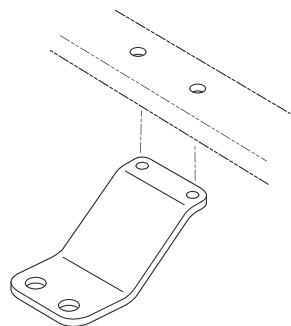
Part No.	700-48510-12				
Global model	E8D	EK8D	E/25B	25X	E/30H
Unified model					
Global model	8F				
Unified model					
For rope					



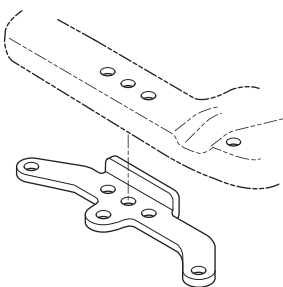
To be continued.

STEERING HOOK

Part No.	6G8-48511-00				
Global model	9.9F	15F			
Unified model					
For rope					



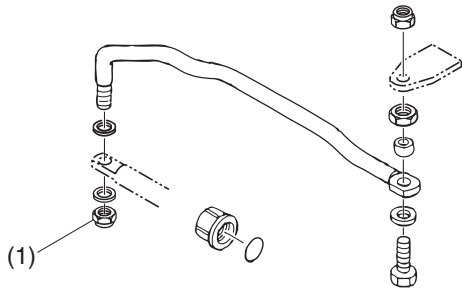
Part No.	69G-48511-10				
Global model	FT8G	FT9.9L			
Unified model		T9.9B			
For linkage to main engine					



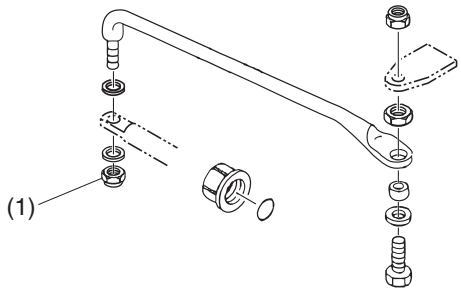
STEERING GUIDE ATTACHMENT KIT

The locknut (1) for the steering cable joint should be loosened 1/4 turns from its seated position. This is to prevent the joint from friction when the outboard motor is steered.

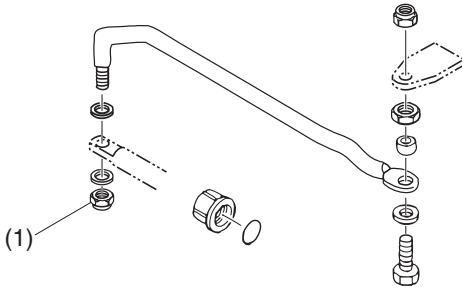
Part No.	63V-61350-00				
Global model	9.9F	15F	E9.9D	E15D	
Unified model					



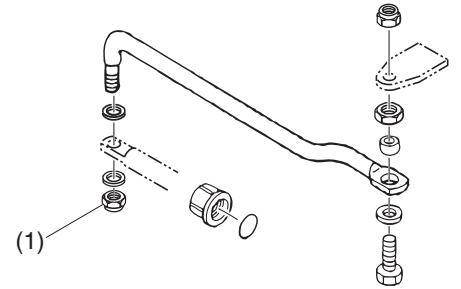
Part No.	689-61350-02				
Global model	E/25B	E/30H	EK40J	E40G	
Unified model					



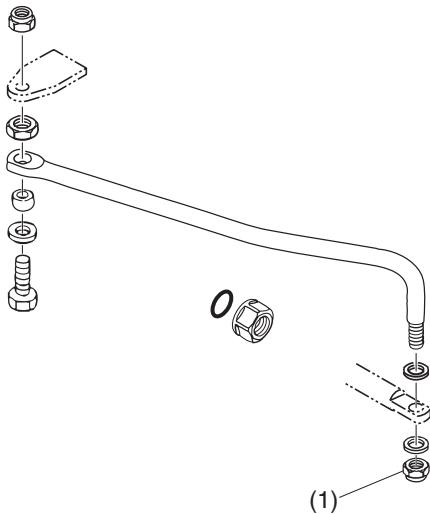
Part No.	68T-61350-10				
Global model	F8F	FT8G	F9.9J	FT9.9L	
Unified model	F8B		F9.9B	T9.9B	



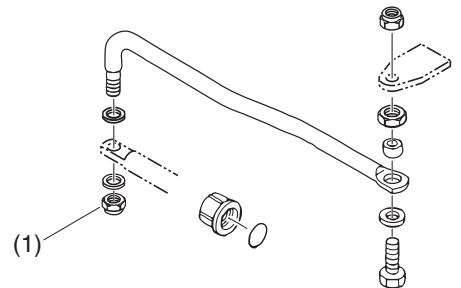
Part No.	63D-61350-00				
Global model	40V	50H	FT50C	F50D	
Unified model					



Part No.	6AH-61350-00				
Global model	F15C	F20B	F20C		
Unified model	F15A	F20A			



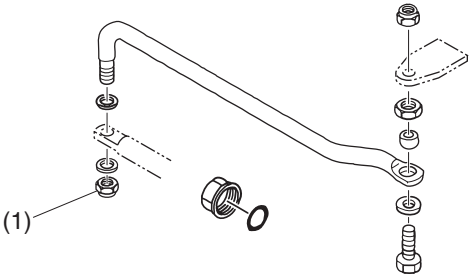
Part No.	65W-61350-00				
Global model	F40H	F40G	F50H	FT50J	F60F
Unified model			F50B	T50B	F60B
Global model	FT60G	F70A			
Unified model	T60B	F70A			



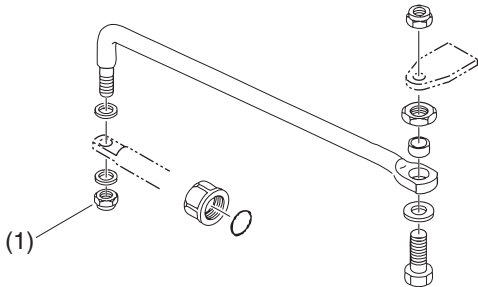
To be continued.

STEERING GUIDE ATTACHMENT KIT

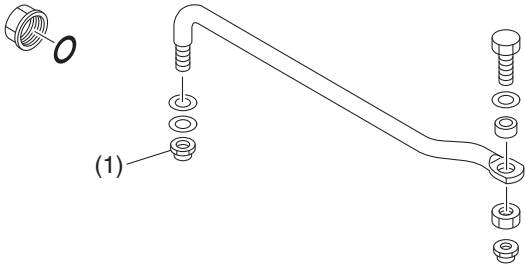
Part No.	6BG-61350-00				
Global model	F25D	FT25F	F30B	F40F	
Unified model	F25A	T25A	F30A	F40A	



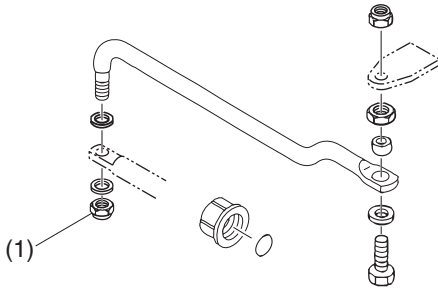
Part No.	67F-61350-00				
Global model	F80B	F90B	F100D		
Unified model					



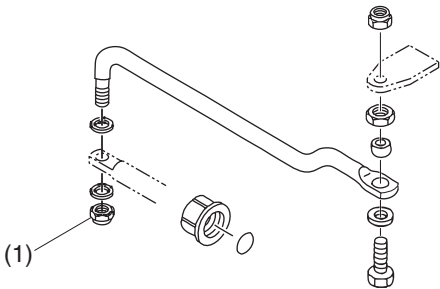
Part No.	6FM-61350-00				
Global model	F25G				
Unified model	F25C				



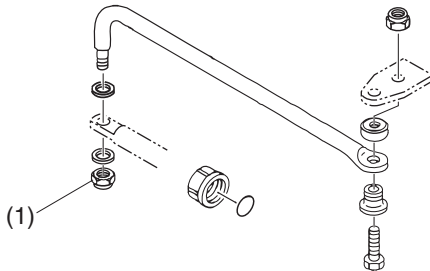
Part No.	688-61350-10				
Global model	60F	70B	90A		
Unified model					
Global model	85A	E60H			
Unified model					



Part No.	697-61350-00				
Global model	55B				
Unified model					



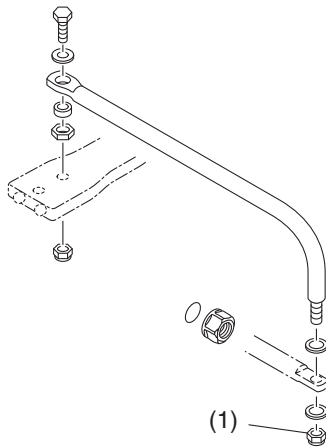
Part No.	6E5-61350-02				
Global model	F75C	F100B			
Unified model					
Global model	115 and larger				
Unified model	F150 – F300 (V6)				



To be continued.

STEERING GUIDE ATTACHMENT KIT

Part No.	6EK-61350-00				
Global model	F115B	F115C	F130A	F90C	F100F
Unified model	F115B	VF115A	F130A	F90B	
Global model	F75D	F80D	F90D		
Unified model	F75B		VF90A		



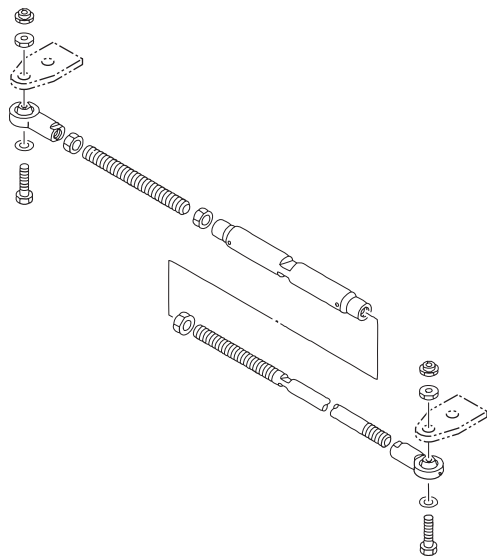
TIE-BAR KIT

This kit is used to link the steering arm for twin engine.

Adjustable distance:

600 mm (23.6 in) – 800 mm (31.5 in)

Part No.	6E5-61301-01
Global model	40 and larger
Unified model	F30 – F300 (V6)



CONVENTIONAL WIRE HARNESS

Various optional wire-harnesses are available for remote control.

Use the suitable wire-harnesses to fit boat specifications as necessary.

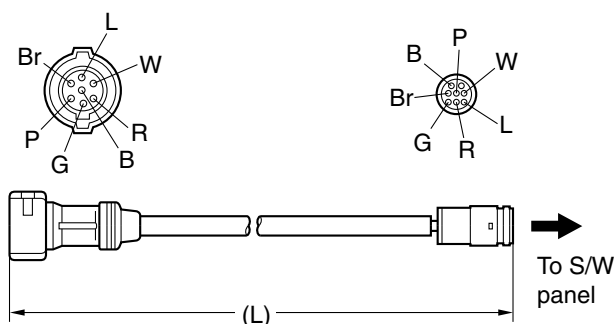
TIP:

For the wire color code description, see the table on page 5-34.

SWITCH PANEL HARNESS

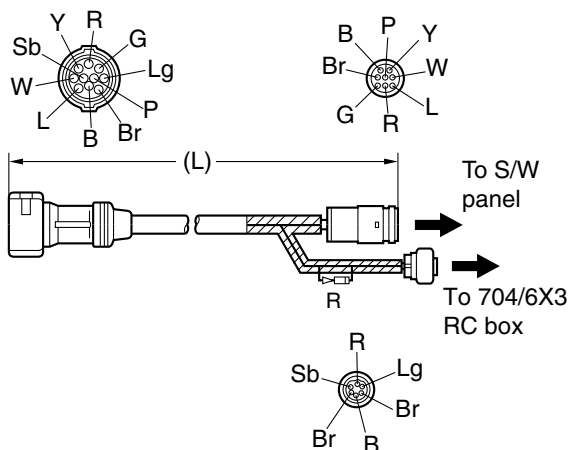
7-PIN MAIN HARNESS

Part No.	Length (L)	Remarks
688-82586-50	5 m (16 ft)	Without PTT



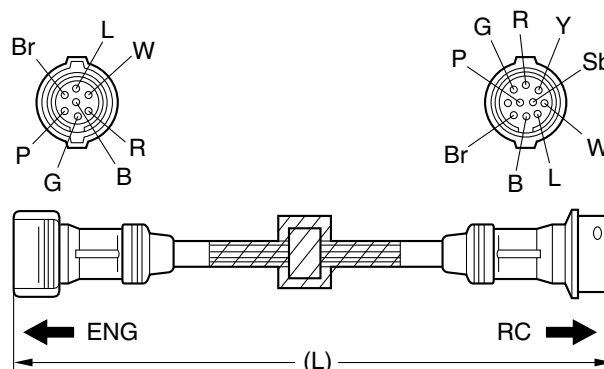
10-PIN MAIN HARNESS

Part No.	Length (L)	Remarks
688-8258A-50	5 m (16 ft)	
688-8258A-60	6 m (19 ft)	
688-8258A-70	7 m (23 ft)	
6K1-8258A-40	8 m (26 ft)	
61B-8258A-01	9.5 m (32 ft)	



7- TO 10-PIN ADAPTER

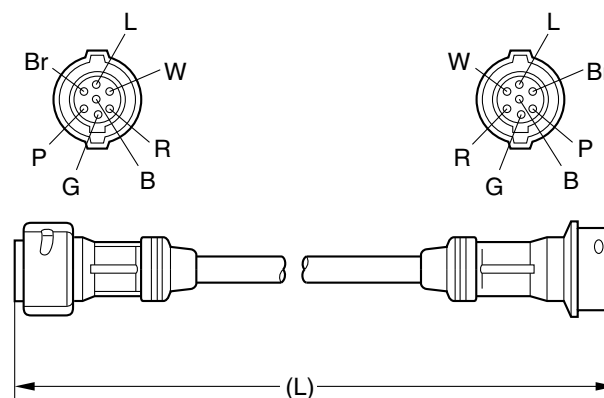
Part No.	Length (L)	Remarks
703-8258A-00	0.5 m (2 ft)	



MAIN HARNESS EXTENSION

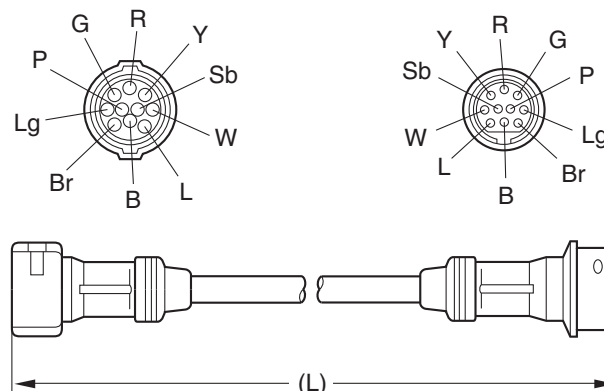
7-PIN EXTENSION HARNESS

Part No.	Length (L)	Remarks
688-82586-11	2 m (7 ft)	
688-82586-31	3 m (10 ft)	



10-PIN EXTENSION HARNESS

Part No.	Length (L)	Remarks
688-8258A-10	2 m (7 ft)	
688-8258A-30	3 m (10 ft)	

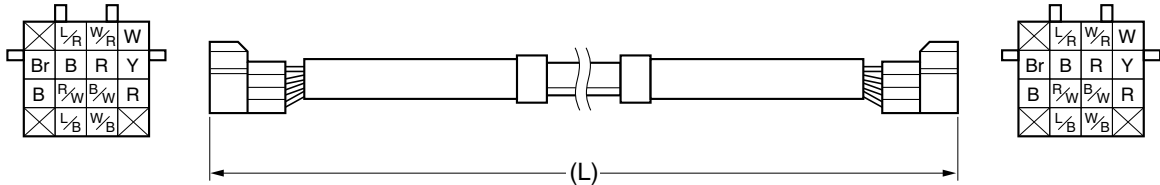


DIGITAL ELECTRONIC REMOTE CONTROL WIRE HARNESS

MAIN WIRE HARNESS

Used to connect between engine and remote control unit.

Part No.	Length (L)	Remarks
6X6-8258A-50	3.7 m (12 ft)	For DEC unit
6X6-8258A-60	5 m (17 ft)	
6X6-8258A-00	6 m (20 ft)	
6X6-8258A-10	7 m (23 ft)	
6X6-8258A-20	8 m (26 ft)	
6X6-8258A-30	10 m (32 ft)	
6X6-8258A-40	12 m (38 ft)	



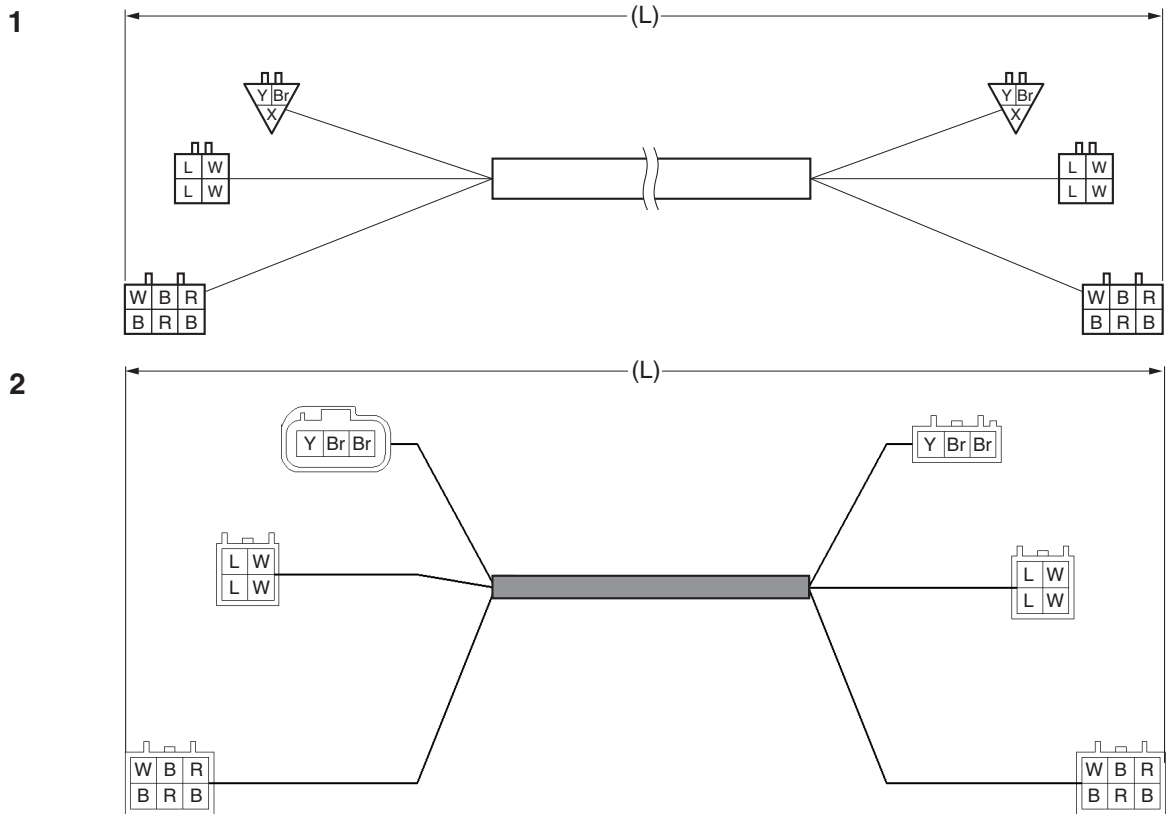
DUAL STATION WIRE-HARNESS (3-4-6P)

Used to connect between main RC and 2nd RC.

TIP:

New DEC unit accepts the push start/stop button switch system.

Ref. No.	Part No.	Length (L)	Remarks
1	6X6-8258A-A1	5 m (16 ft)	For previous DEC unit
	6X6-8258A-C1	8 m (26 ft)	
	6X6-8258A-E1	12 m (38 ft)	
2	6X6-8258A-G1	5 m (16 ft)	For new DEC unit (Push start/stop button)
	6X6-8258A-H1	8 m (26 ft)	
	6X6-8258A-J1	12 m (38 ft)	

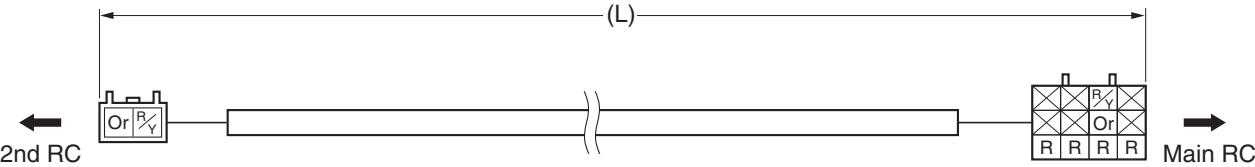


DIGITAL ELECTRONIC REMOTE CONTROL WIRE HARNESS

DUAL STATION WIRE-HARNESS (2-12P)

Used to connect between main RC and 2nd RC.

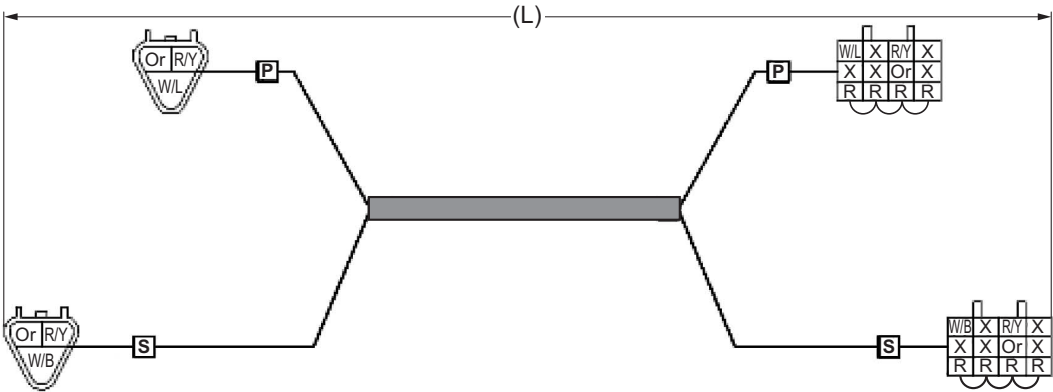
Part No.	Length (L)	Remarks
6X6-8258A-B1	5 m (16 ft)	For DEC unit
6X6-8258A-D1	8 m (26 ft)	
6X6-8258A-F1	12m (38 ft)	



DUAL STATION WIRE-HARNESS (3-12P)

Used to connect between main RC and 2nd RC (Quad engine special).

Part No.	Length (L)	Remarks
6X6-8258A-R0	5 m (16 ft)	For new DEC unit
6X6-8258A-S0	8 m (26 ft)	
6X6-8258A-T0	12 m (38 ft)	

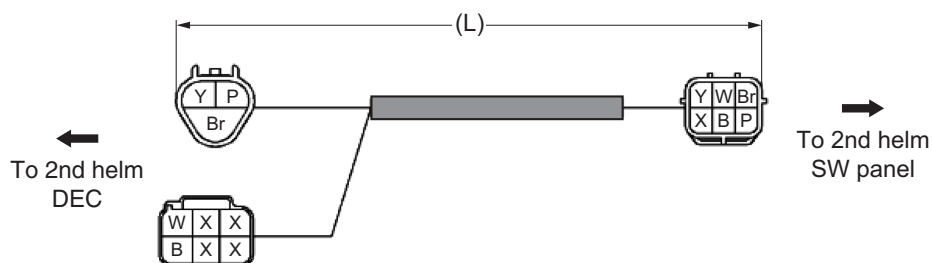


DIGITAL ELECTRONIC REMOTE CONTROL WIRE HARNESS

CONVERSION HARNESS M

Used to connect between 2nd helm new DEC and 2nd helm previous start/stop SW. (Single engine application)

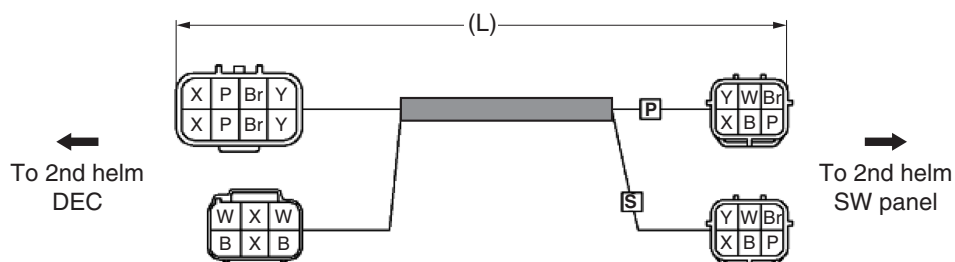
Part No.	Length (L)	Remarks
6X6-8258A-M0	200 mm (8 in)	For 2nd station helm, Single engine application



CONVERSION HARNESS N

Used to connect between 2nd station helm new DEC and 2nd helm previous start/stop SW. (Twin engine application)

Part No.	Length (L)	Remarks
6X6-8258A-N0	240 mm (9 in)	For 2nd station helm, Twin engine application

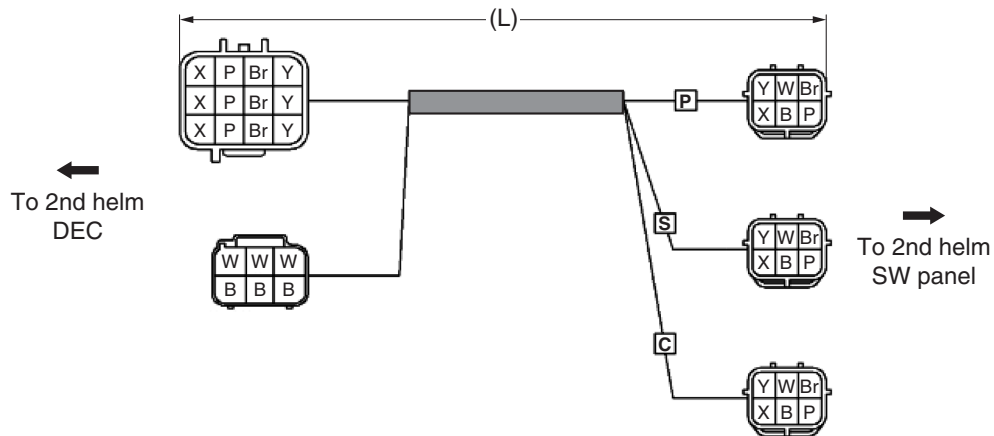


DIGITAL ELECTRONIC REMOTE CONTROL WIRE HARNESS

CONVERSION HARNESS P

Used to connect between 2nd helm new DEC and 2nd helm previous start/stop SW. (Triple engine application)

Part No.	Length (L)	Remarks
6X6-8258A-P0	240 mm (9 in)	For 2nd station helm, Triple engine application



MEMO



TILLER HANDLES

6X4 MULTI-FUNCTION TILLER HANDLE.....	4-2
MULTI-FUNCTION TILLER HANDLE KIT (FOR US).....	4-2
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WIRING DIAGRAM (FOR EU & ANZ)	4-17
STEERING FRICTION CONTENTS	4-18

6X4 MULTI-FUNCTION TILLER HANDLE

Yamaha prepares the various multi-function tiller handle kits for F25 (6FM) to F130 engines. For US, the tiller handle kit for F25 (6BP) is specially prepared.

This handle has the electrical functions which are similar to those of 703 side mount remote control box.

Engine IG switch, Emergency stop switch, PTT switch (top or side location), Neutral switch, Throttle friction adjuster, Shift lever, Throttle control grip, Variable troll RPM switch, LED warning indicators, and Warning buzzer are built into the handle.

The 10-pin main harness in the handle will allow to easily connect the electrical system to the engine.

MULTI-FUNCTION TILLER HANDLE KIT (FOR US)

Some kinds of the size for handle extension bracket, some kinds of the length for 10-pin wire harness and some kinds of the length for control cables are prepared to install the handle according to the various engine specifications.

The tiller handle kit (only one specification) is prepared for F25 (6FM) to F130 engines.

The fitting kit is prepared for each engine.

Combine the tiller handle kit with the handle fitting kit depending on the applicable model, except F25 (6BP).

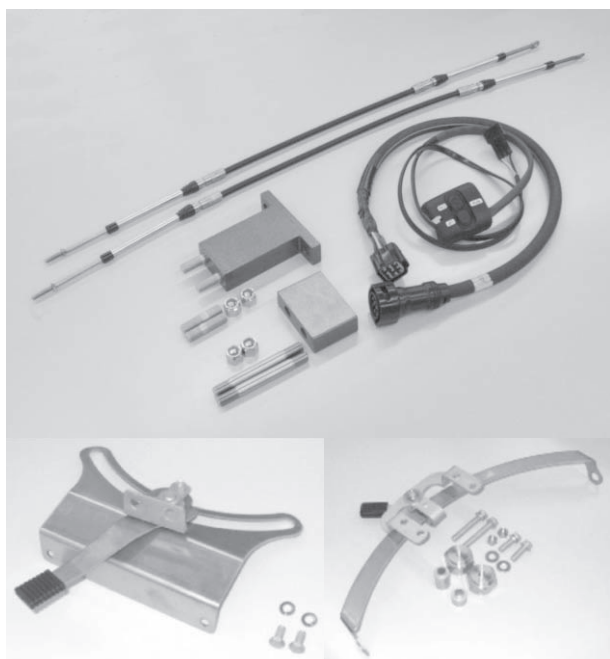
For installation procedure, see the instruction supplied with the kit.



Tiller handle ASSY

Setup manual

Tiller handle kit
(Common use for
F25 (6FM) to F130)



Handle extension
bracket

Throttle cable

Shift cable

10-pin main
harness

Steering friction ASSY

Installation hardware

Troll RPM switch

Short shift lever

Fitting kit for each
model
(Differs by model)

6X4 MULTI-FUNCTION TILLER HANDLE

TILLER HANDLE KIT CONTENTS

F25C (6FM)-F130

KIT P/N:6X4-42103-58

Part name	Part No.	Q'ty	Remarks
Tiller handle ASSY	6X4-42101-04	1	With PTT switch (Top), Requires fitting kit.
Setup manual	6X4-2819K-19	1	English

F25A (6BP)

KIT P/N:6X4-42103-0B

Part name	Part No.	Q'ty	Remarks
Tiller handle ASSY	6X4-42101-25	1	With PTT switch (Top)
locknut	90185-10027	2	M10
Steering friction ASSY	65W-42508-00	1	
Setup manual	6X4-2819K-17	1	English

6X4 MULTI-FUNCTION TILLER HANDLE

HANDLE FITTING KIT CONTENTS

Select the fitting kit that matches the model.

F115B, VF115A, F130A

KIT P/N: 6X4-42102-H0

Part name	Part No.	Q'ty	Remarks
Steering friction ASSY	67G-42508-10	1	
Stud bolt	90116-10063	2	
Locknut	90185-10027	2	M10
Bracket	6EK-42121-00	1	
Shift cable	6EK-48321-00	1	850 mm (33.5 in)
Clip	90468-10005	2	
Cable clamp	63D-48538-00	2	
Throttle cable	6EK-26301-00	1	740 mm (29.1 in)
Clamp	90464-09M42	1	
10-pin main harness	6X4-82586-10	1	950 mm (37.4 in)
Clamp	90465-13M24	1	
Troll RPM switch ASSY	6X4-81860-00	1	
Branch wire	6X4-82521-00	1	For PTT

F75A, F90A

KIT P/N:6X4-42102-11

Part name	Part No.	Q'ty	Remarks
Fuel pipe clamp 2	63D-24367-00	1	
Cable clamp 1	63D-48538-00	2	
Throttle cable	67G-26301-10	1	895 mm (35 in.)
Shift cable	67G-48321-20	1	965 mm (40 in.)
Grommet 2	68V-42725-10	1	
Corrugated tube	6G5-83557-00	1	85 mm (3.3 in.)
Corrugated tube	6K3-83557-00	1	65 mm (2.6 in.)
Stay	6X4-24364-00	1	
Ext. bracket (Short)	6X4-42121-00-8D	1	45 mm (1.8 in.)
Protector	6X4-42735-00	1	
Troll RPM switch ASSY	6X4-81860-00	1	
10-pin main harness	6X4-82586-20	1	1250 mm (49 in.)
Stud bolt	90116-10031	2	M10-70 mm
Locknut	90185-10027	2	M10
Corrugated tube	90447-22007	1	230 mm (9.1 in.)
Clamp	90464-09M42	1	
Clamp	90465-13M24	5	
Clamp	90465-13M30	1	
Clip	90468-10005	2	
Bolt	97595-06516	2	
Steering friction ASSY	67G-42508-10	1	

6X4 MULTI-FUNCTION TILLER HANDLE

HANDLE FITTING KIT CONTENTS

F75B, F90B

KIT P/N:6X4-42102-J0

Part name	Part No.	Q'ty	Remarks
Cable clamp 1	63D-48538-00	2	
Bracket	6EK-42121-00	1	
Shift cable	6EK-48321-00	1	
Throttle cable	6FP-26301-00	1	
Troll rpm SW ASSY	6X4-81860-00	1	
10-pin main harness	6X4-82586-10	1	
Stud bolt	90116-10063	2	
Locknut	90185-10027	2	M10
Clamp	90464-09M42	1	
Clamp	90465-13M24	1	
Clip	90468-10005	2	
Steering friction ASSY	67G-42508-10	1	
Branch wire	6X4-82521-00	1	For PTT

6X4 MULTI-FUNCTION TILLER HANDLE

HANDLE FITTING KIT CONTENTS

F50B, T50B, F60B, T60B, F70A

KIT P/N:6X4-42102-23

Part name	Part No.	Q'ty	Remarks
Cable clamp 1	63D-48538-00	2	
Shift cable	67C-48321-11	1	707 mm (28 in.)
Throttle cable	69W-26301-00	1	610 mm (24 in.)
Troll RPM switch ASSY	6X4-81860-00	1	
10-pin main harness	6X4-82586-10	1	1250 mm (49 in.)
Locknut	90185-10027	2	M10
Clamp	90464-09M42	1	
Clamp	90465-13M36	1	
Clip	90468-10005	2	
Steering friction ASSY	6C5-42508-01	1	

F30A, F40A

KIT P/N:6X4-42102-71

Part name	Part No.	Q'ty	Remarks
Cable clamp 1	63D-48538-00	2	
Shift cable	67C-48321-11	1	687 mm (27 in.)
Throttle cable	69W-26301-00	1	610 mm (24 in.)
Troll RPM switch ASSY	6X4-81860-00	1	
10-pin main harness	6X4-82586-10	1	950 mm (37 in.)
Locknut	90185-10027	2	M10
Clamp	90464-09M42	1	
Clamp	90465-13M36	1	
Clip	90468-10005	2	
Steering friction ASSY	67C-42508-04	1	

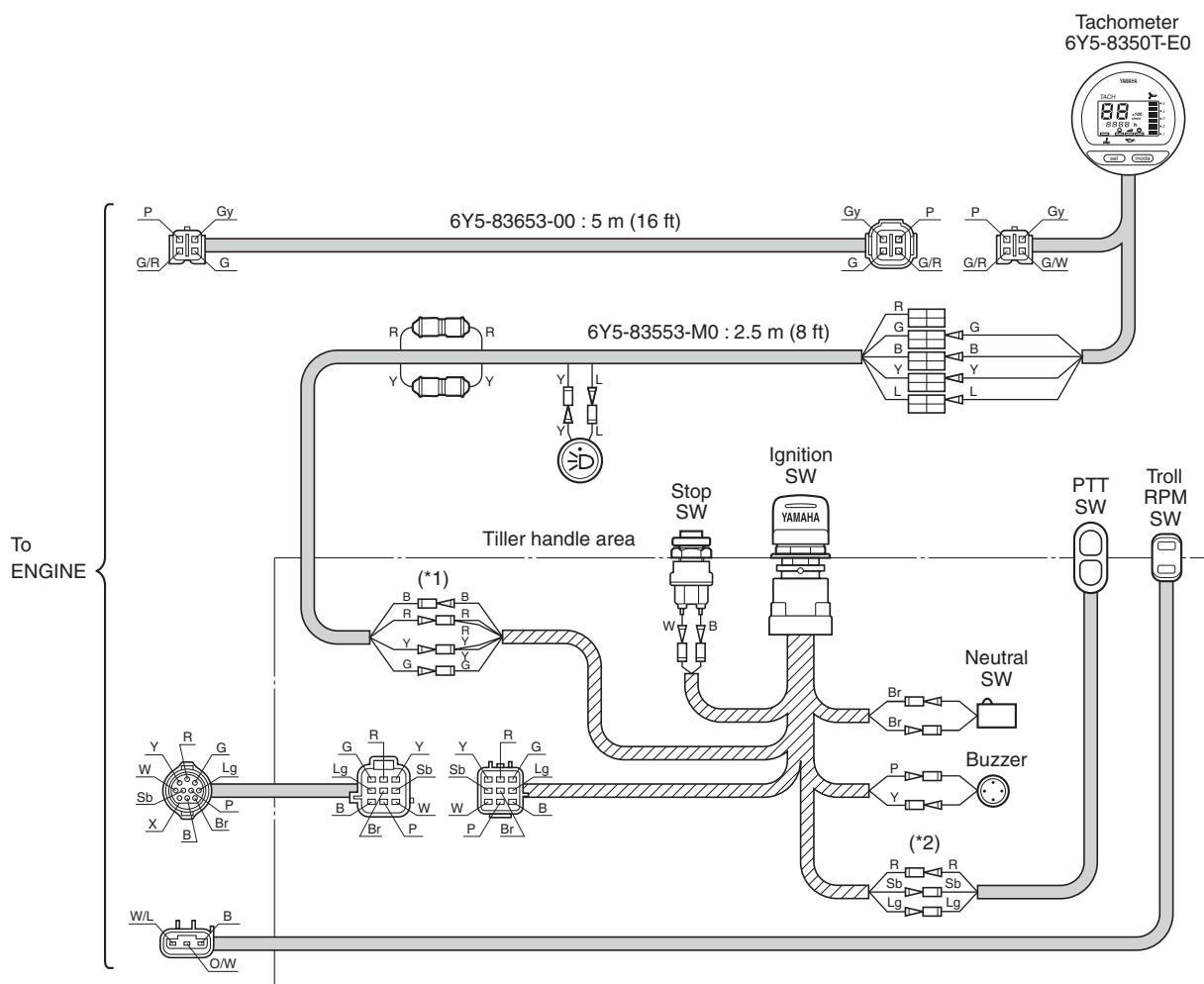
F25C (6FM)

KIT P/N:6X4-42102-E0

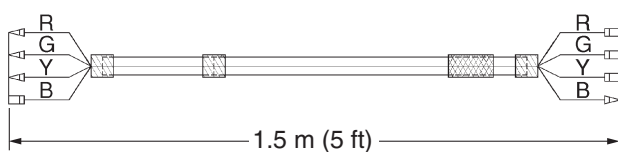
Part name	Part No.	Q'ty	Remarks
Cable clamp 1	63D-48538-00	2	
Shift cable	63D-48321-11	1	628 mm (25 in.)
Throttle cable	6FM-26301-10	1	588 mm (23 in.)
Troll RPM switch ASSY	6X4-81860-00	1	
10-pin main harness	6X4-82586-10	1	950 mm (37 in.)
Locknut	90185-10027	2	M10
Clamp	90464-09M42	1	
Clamp	90465-13M39	1	
Clip	90468-10005	2	
Steering friction ASSY	6FM-42508-10	1	

6X4 MULTI-FUNCTION TILLER HANDLE

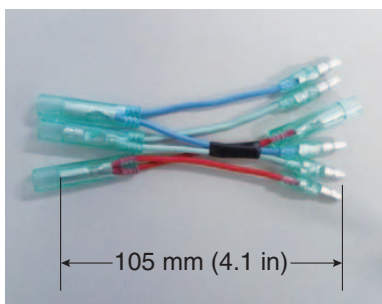
WIRING DIAGRAM (FOR US)



(*1) 1.5 m (5 ft) extension wire-harness (6Y5-8356N-00) is available.



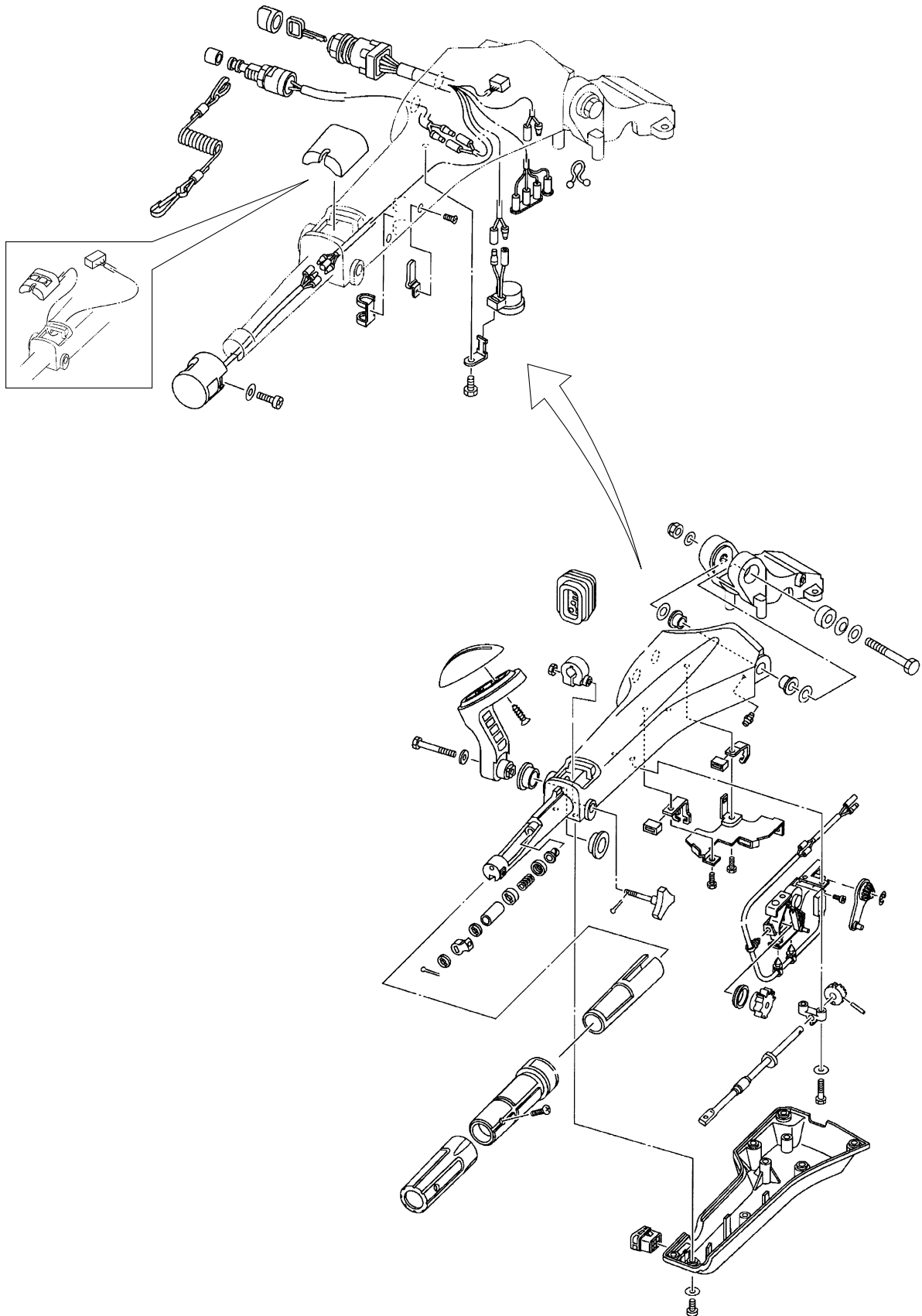
(*2) For F75 - F130, 105 mm (4.1 in.) branch wire (6X4-82521-00) is included in the fitting kit for connecting market obtainable PTT switch.



6X4 MULTI-FUNCTION TILLER HANDLE

EXPLODED DIAGRAM (FOR US)

EX: F50B/F60B/F70A

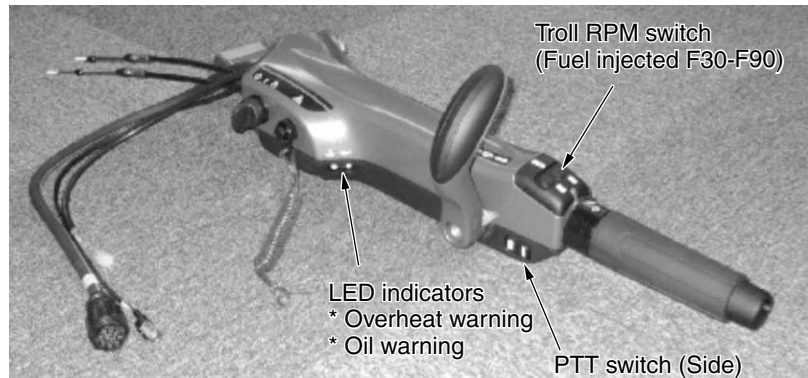


6X4 MULTI-FUNCTION TILLER HANDLE

MULTI-FUNCTION TILLER HANDLE KIT (FOR JAPAN)

The tiller handle kit is prepared for F50 to F130.

For installation procedure, see the instruction supplied with the kit.



TILLER HANDLE KIT CONTENTS

F25G

KIT P/N:6X4-42103-80

Part name	Part No.	Q'ty	Remarks
Tiller handle ASSY	6BC-42101-60	1	With PTT switch (Side)
Locknut	90185-10027	2	M10
Clamp	90465-13M33	1	
Steering friction ASSY	6FM-42508-10	1	
Setup manual	6X4-2819K-06	1	Japanese

F80B, F90B

KIT P/N:6X4-42103-18

Part name	Part No.	Q'ty	Remarks
Fuel pipe clamp 2	63D-24367-00	1	
Grommet 2	68V-42725-10	1	
Corrugated tube	6G5-83557-00	1	85 mm (3.3 in.)
Corrugated tube	6K3-83557-00	1	65 mm (2.6 in.)
Stay	6X4-24364-00	1	
Tiller handle ASSY	6X4-42101-34	1	With PTT switch (Side), LED indicators
Ext. bracket (Short)	6X4-42121-00-8D	1	45 mm (1.8 in.)
Protector	6X4-42735-00	1	
Stud bolt	90116-10031	2	
Locknut	90185-10027	2	M10
Corrugated tube	90447-22007	1	230 mm (9.1 in.)
Clamp	90465-13M24	5	
Clamp	90465-13M30	1	
Bolt	97595-06516	2	
Steering friction ASSY	67G-42508-10	1	
Setup manual	6X4-2819K-06	1	Japanese

6X4 MULTI-FUNCTION TILLER HANDLE

TILLER HANDLE KIT CONTENTS

F50H, FT50J, F60F, FT60G, F70A

KIT P/N:6X4-42103-2A

Part name	Part No.	Q'ty	Remarks
Grommet 2	6C5-42725-30	1	
Tiller handle ASSY	6X4-42101-V5	1	With PTT switch (Side), LED indicators
Locknut	90185-10027	2	
Clamp	90465-13M36	1	
Steering friction ASSY	6C5-42508-01	1	
Setup manual	6X4-2819K-06	1	Japanese

F90C

KIT P/N:6X4-42103-90

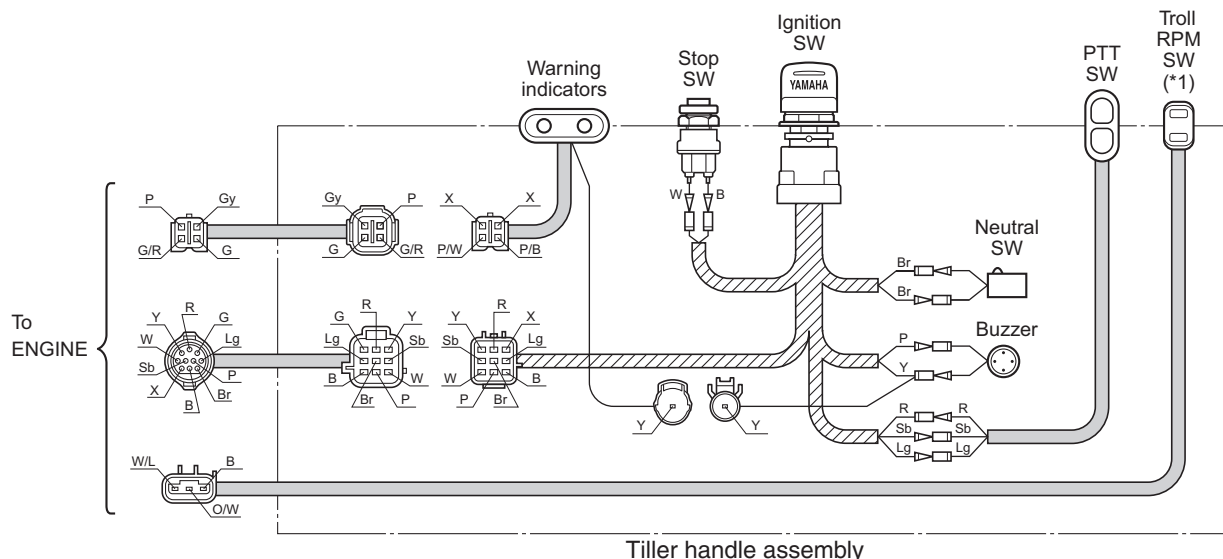
Part name	Part No.	Q'ty	Remarks
Tiller handle ASSY	6BC-42101-80	1	With PTT switch (Side), LED indicators
Bracket	6EK-42121-00	1	
Stud bolt	90116-10063	2	
Locknut	90185-10027	2	M10
Steering friction ASSY	67G-42508-10	1	
Clamp	90465-13M24	1	
Setup manual	6X4-2819K-06	1	Japanese

F115B, F115C, F130A

KIT P/N:6X4-42103-72

Part name	Part No.	Q'ty	Remarks
Tiller handle ASSY	6BC-42101-50	1	With PTT switch (Side), LED indicators
Bracket	6EK-42121-00	1	
Stud bolt	90116-10063	2	
Locknut	90185-10027	2	M10
Steering friction ASSY	67G-42508-10	1	
Clamp	90465-13M24	1	
Setup manual	6X4-2819K-06	1	Japanese

WIRING DIAGRAM (FOR JAPAN)

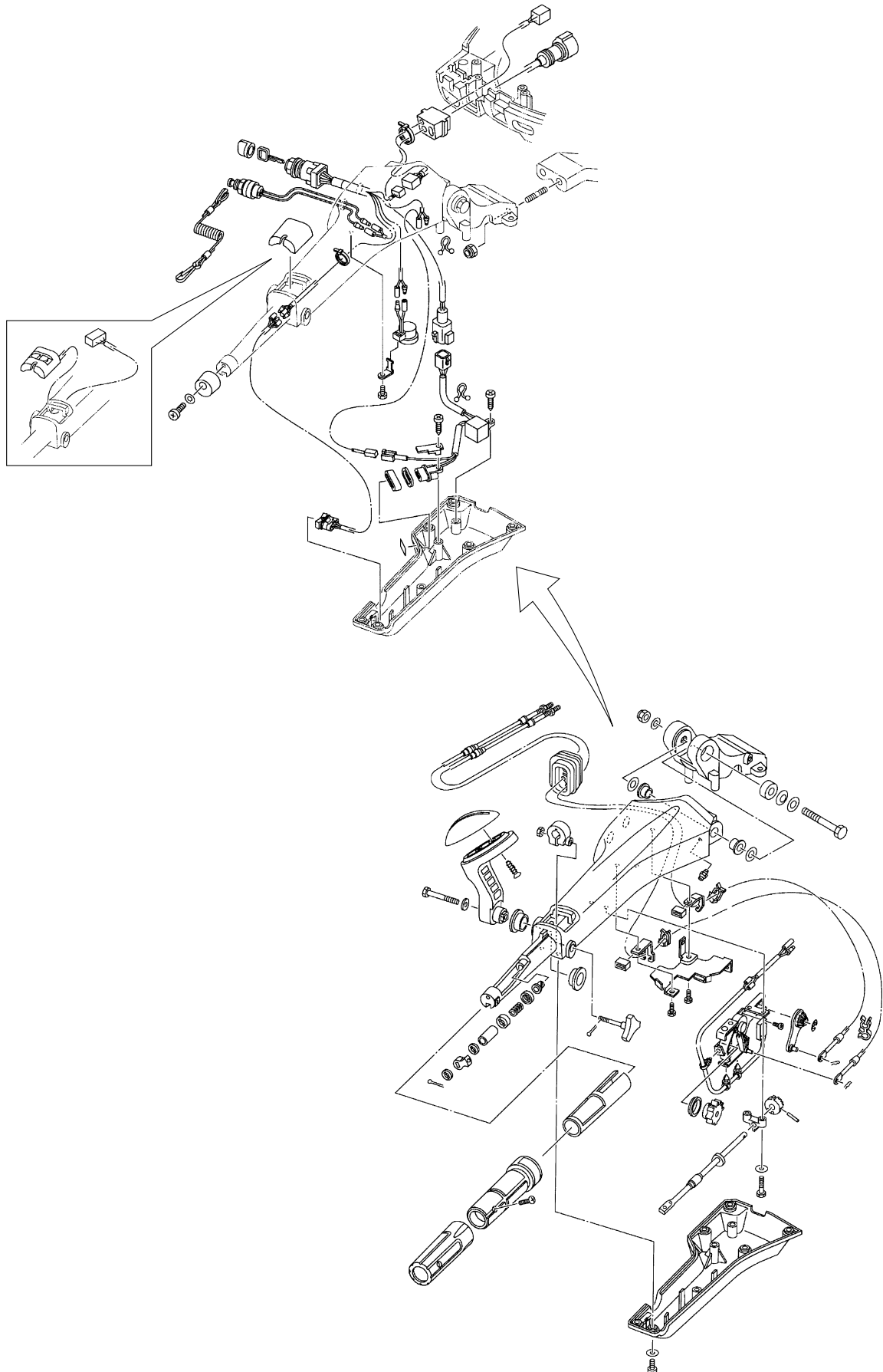


(*1) Depends on the engine specification.

6X4 MULTI-FUNCTION TILLER HANDLE

EXPLODED DIAGRAM (FOR JAPAN)

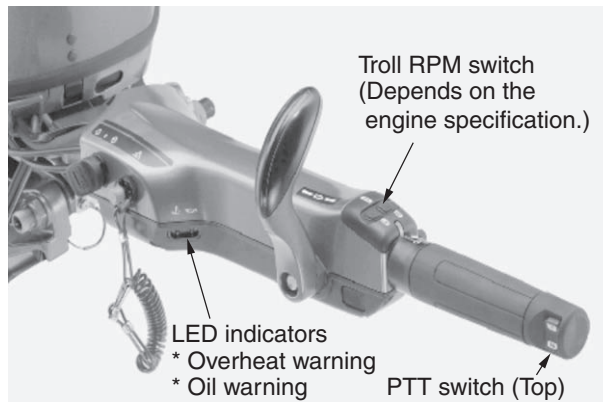
EX: F50H/F60F/F70A



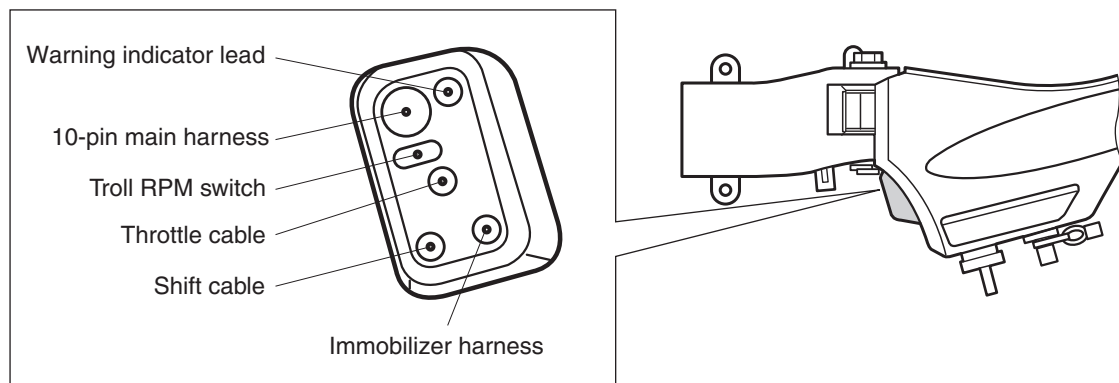
6X4 MULTI-FUNCTION TILLER HANDLE

MULTI-FUNCTION TILLER HANDLE CONTENTS (FOR OTHERS)

The tiller handle kit is not prepared for other market, except some region.
Regarding the tiller handle component parts information, see the applicable years model parts catalog.



TILLER HANDLE GROMMET DESCRIPTION



6X4 MULTI-FUNCTION TILLER HANDLE

MULTI-FUNCTION TILLER HANDLE KIT (FOR EU & ANZ)

Both tiller handle kit and fitting kit are required for installation.

TILLER HANDLE KIT CONTENTS

F25 (6FM)– F130

KIT P/N: 6X4-42103-66

Part name	Part No.	Q'ty	Remarks
Tiller handle ASSY	6BC-42101-23	1	w/ Troll RPM SW. Requires fitting kit.
Setup manual	6X4-2819K-K9	1	English, French, Spanish

HANDLE FITTING KIT CONTENTS

F25G (6FM)

KIT P/N: 6X4-42102-F0

Part name	Part No.	Q'ty	Remarks
Cable clamp 1	63D-48538-00	2	
Shift cable	63D-48321-11	1	
Throttle cable	6FM-26301-10	1	
Grommet	6H3-42727-00	1	
Troll rpm SW ASSY	6X4-81860-00	1	
Wire harness	6X4-82586-10	1	
Locknut	90185-10027	2	M10
Clamp	90464-09M42	1	
Clamp	90465-13M39	1	
Clip	90468-10005	2	
Steering friction ASSY	6FM-42508-10	1	

F30 – F40

KIT P/N: 6X4-42102-82

Part name	Part No.	Q'ty	Remarks
Cable clamp 1	63D-48538-00	2	
Shift cable	67C-48321-11	1	
Throttle cable	69W-26301-00	1	
Cap	6X4-42728-00	1	For PTT SW
Troll rpm SW ASSY	6X4-81860-00	1	
Wire harness	6X4-82586-10	1	
Locknut	90185-10027	2	M10
Clamp	90464-09M42	1	
Clamp	90465-13M36	1	
Clip	90468-10005	2	
Steering friction ASSY	67C-42508-04	1	

6X4 MULTI-FUNCTION TILLER HANDLE

MULTI-FUNCTION TILLER HANDLE KIT (FOR EU & ANZ)

HANDLE FITTING KIT CONTENTS

F50 – F70

KIT P/N: 6X4-42102-92

Part name	Part No.	Q'ty	Remarks
Cable clamp 1	63D-48538-00	2	
Shift cable	67C-48321-11	1	
Throttle cable	69W-26301-00	1	
Cap	6X4-42728-00	1	For PTT SW
Troll rpm SW ASSY	6X4-81860-00	1	
Wire harness	6X4-82586-10	1	
Locknut	90185-10027	2	M10
Clamp	90464-09M42	1	
Clamp	90465-13M36	1	
Clip	90468-10005	2	
Steering friction ASSY	6C5-42508-01	1	

F80B (6D7) – F100D (6D9)

KIT P/N: 6X4-42102-A1

Part name	Part No.	Q'ty	Remarks
Fuel pipe clamp 2	63D-24367-00	1	
Cable clamp 1	63D-48538-00	2	
Throttle cable	67G-26301-10	1	
Shift cable	67G-48321-20	1	
Grommet 2	68V-42725-10	1	
Corrugated tube	6G5-83557-00	1	85 mm (3.3 in.)
Corrugated tube	6K3-83557-00	1	65 mm (2.6 in.)
Stay	6X4-24364-00	1	
Bracket	6X4-42121-00-8D	1	45 mm (short)
Protector	6X4-42735-00	1	
Troll rpm SW ASSY	6X4-81860-00	1	
Wire harness	6X4-82586-20	1	1250 mm (49.2 in.)
Wire lead	6X4-83653-00	1	L=1250 mm (49.2 in.)
Stud bolt	90116-10031	2	
Locknut	90185-10027	2	M10
Corrugated tube	90447-22007	1	230 mm (9.1 in.)
Clamp	90464-09M42	1	
Clamp	90465-13M24	5	
Clamp	90465-13M30	1	
Clip	90468-10005	2	
Bolt	97595-06516	2	
Steering friction ASSY	67G-42508-10	1	

6X4 MULTI-FUNCTION TILLER HANDLE

MULTI-FUNCTION TILLER HANDLE KIT (FOR EU & ANZ)

HANDLE FITTING KIT CONTENTS

F90C (6FP), F100F (6HJ)

KIT P/N: 6X4-42102-G0

Part name	Part No.	Q'ty	Remarks
Cable clamp 1	63D-48538-00	2	
Bracket	6EK-42121-00	1	
Shift cable	6EK-48321-00	1	
Throttle cable	6FP-26301-00	1	
Troll rpm SW ASSY	6X4-81860-00	1	
10-pin main harness	6X4-82586-10	1	
Stud bolt	90116-10063	2	
Locknut	90185-10027	2	M10
Clamp	90464-09M42	1	
Clamp	90465-13M24	1	
Clip	90468-10005	2	
Steering friction ASSY	67G-42508-10	1	

F115A

KIT P/N: 6X4-42102-B1

Part name	Part No.	Q'ty	Remarks
Fuel pipe clamp 2	63D-24367-00	1	
Cable clamp 1	63D-48538-00	2	
Throttle cable	67G-26301-10	1	
Shift cable	67G-48321-20	1	
Grommet 2	68V-42725-10	1	
Corrugated tube	6G5-83557-00	1	85 mm (3.3 in.)
Corrugated tube	6K3-83557-00	1	65 mm (2.6 in.)
Stay	6X4-24364-00	1	
Bracket	6X4-42121-11-8D	1	92 mm (Long)
Protector	6X4-42735-00	1	
Wire harness	6X4-82586-20	1	1250 mm (49.2 in.)
Wire lead	6X4-83653-00	1	L=1250 mm (49.2 in.)
Stud bolt	90116-10062	2	
Locknut	90185-10027	4	M10
Corrugated tube	90447-22007	1	230 mm (9.1 in.)
Clamp	90464-09M42	1	
Clamp	90465-13M24	5	
Clamp	90465-13M30	1	
Clip	90468-10005	2	
Bolt	97595-06516	2	
Steering friction ASSY	67G-42508-10	1	

6X4 MULTI-FUNCTION TILLER HANDLE

MULTI-FUNCTION TILLER HANDLE KIT (FOR EU & ANZ)

HANDLE FITTING KIT CONTENTS

F115B, F115C, F130A

KIT P/N: 6X4-42102-C0

Part name	Part No.	Q'ty	Remarks
STR friction ASSY	67G-42508-10	1	
Stud bolt	90116-10063	2	
Locknut	90185-10027	2	M10
Bracket	6EK-42121-00	1	
Shift cable	6EK-48321-00	1	850 mm (33.5 in)
Clip	90468-10005	2	
Cable clamp	63D-48538-00	2	
Throttle cable	6EK-26301-00	1	740 mm (29.1 in)
Clamp	90464-09M42	1	
10-pin main harness	6X4-82586-10	1	950 mm (37.4 in)
Clamp	90465-13M24	1	
Troll RPM switch ASSY	6X4-81860-00	1	

HANDLE IMMOBILIZER KIT CONTENTS

F30B – F130A

KIT P/N: 6Y8-W0035-C0

Part name	Part No.	Q'ty	Remarks
Wire harness	6Y5-83553-M0	1	2.5 m (8 ft)
Single hub	6Y8-81920-11	2	
Wire lead	6Y8-82117-00	1	For system PWR
Pigtail bus wire	6Y8-82521-51	1	3.6 m (12 ft)
Main bus wire	6Y8-82553-01	1	0.3 m (1 ft)

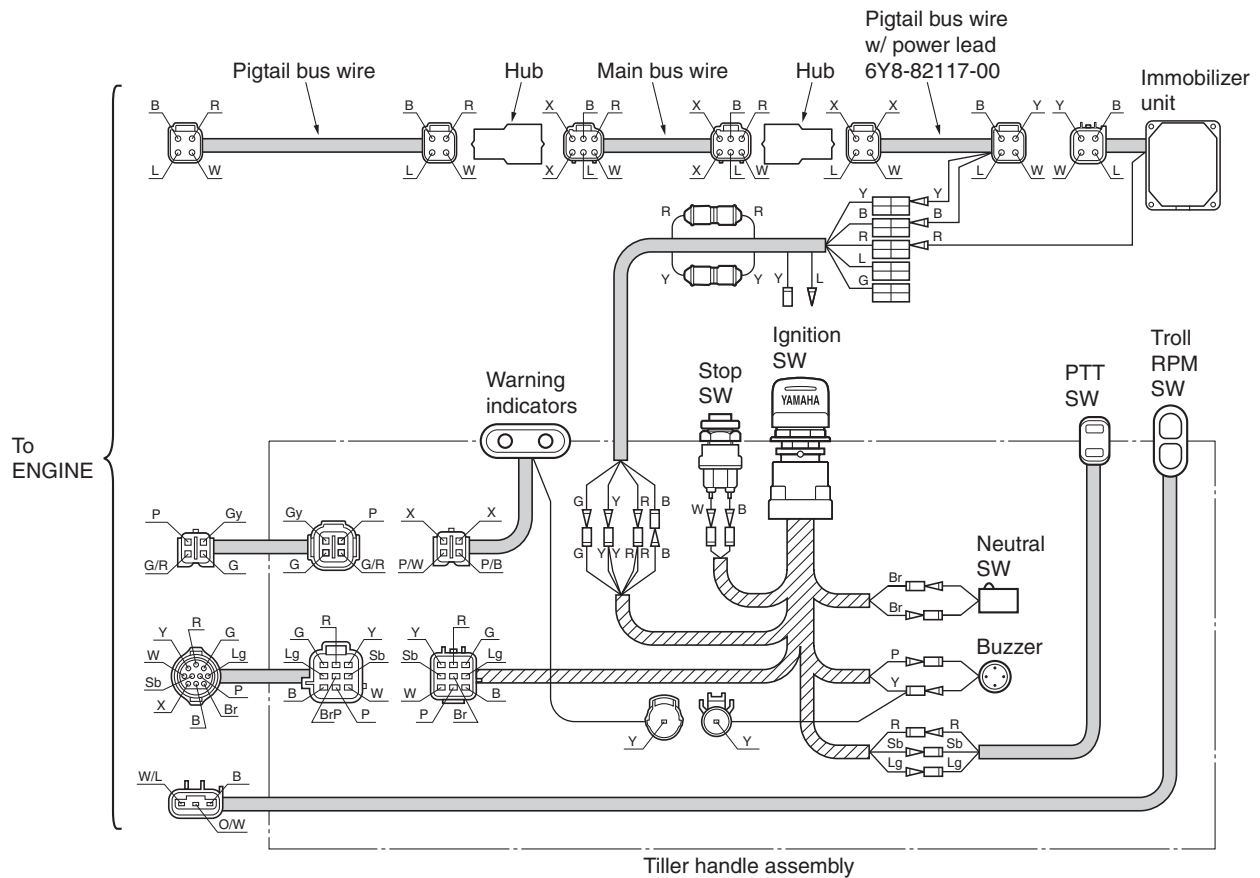
* Requires to replace the rigging grommet as follows.

F50 up to F60: 6C5-42725-50

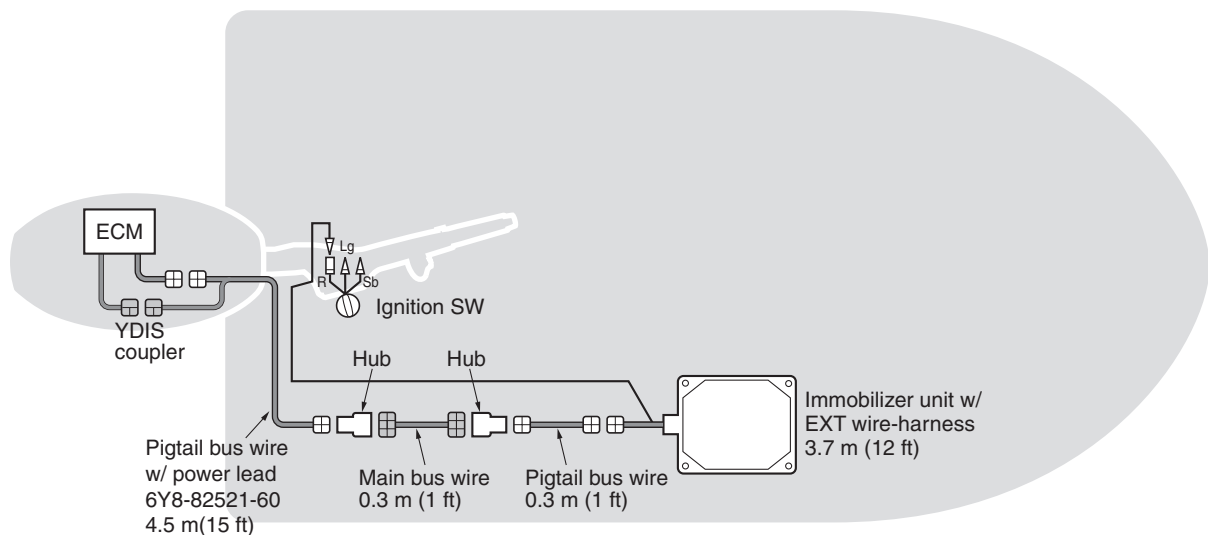
F75 up to F115 (68V): 68V-42725-20

6X4 MULTI-FUNCTION TILLER HANDLE

WIRING DIAGRAM (FOR EU & ANZ) AFTER JAN. 2012



UP TO DEC. 2011



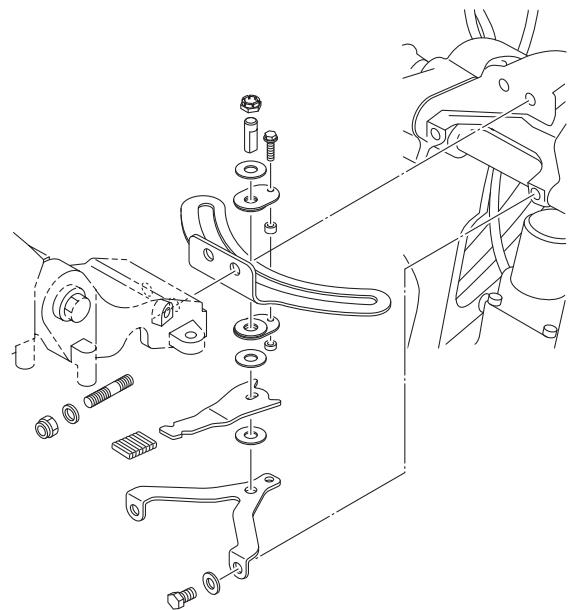
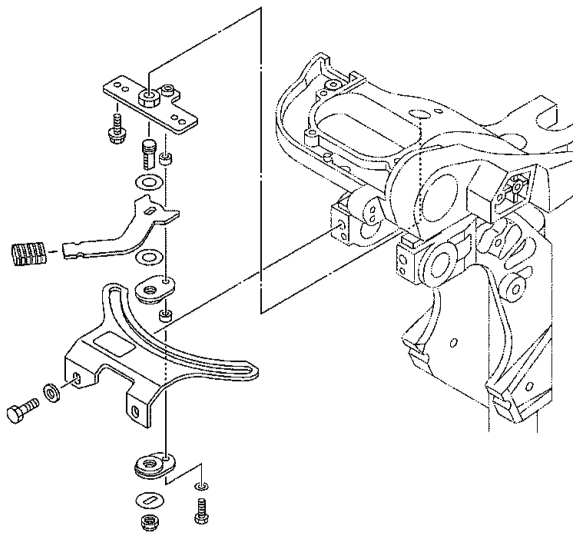
STEERING FRICTION CONTENTS

For detailed installation information, see the instruction manual packed in the tiller handle kit and/or the steering friction kit.

General torque table			
	Nm	kgf•m	lb•ft
M10 locknut	4	0.4	3
M6 bolt	8	0.8	6
M5 bolt	5	0.5	4

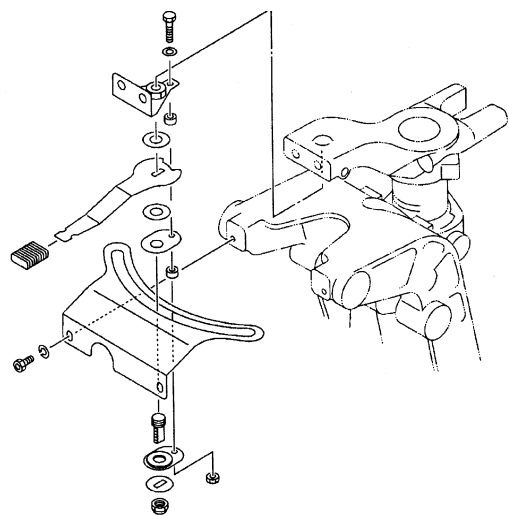
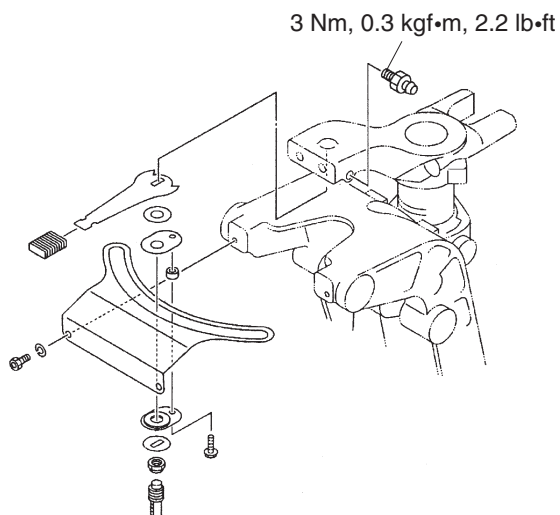
Part No.	6AH-42508-01 (for manual tilt)				
	6AH-42508-11 (for power tilt)				
Global model	F8F	FT8G	F9.9J	FT9.9L	F9.9H
Unified model	F8B		F9.9B	T9.9B	
Global model	F15C	F20B	F20C		
Unified model	F15A	F20A			

Part No.	6FM-42508-10				
Global model	F25G				
Unified model	F25C				



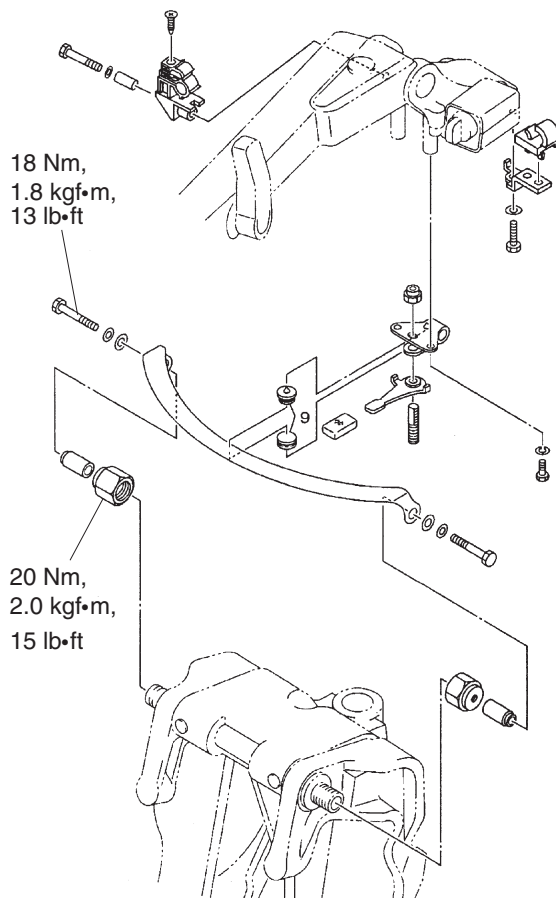
Part No.	65W-42508-00				
Global model	F25D	E/40X			
Unified model	F25A/B				

Part No.	67C-42508-04				
Global model	F30B	F40F			
Unified model	F30A	F40A			

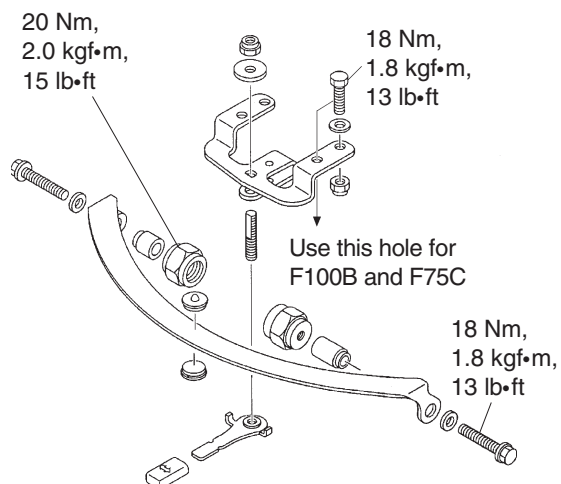


STEERING FRICTION CONTENTS

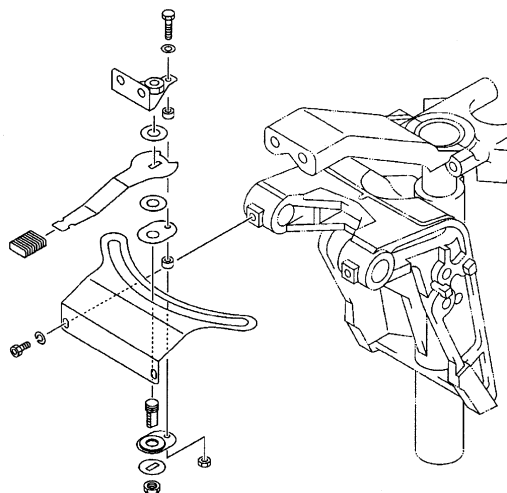
Part No.	63D-42508-00				
Global model	40V	50H	FT50C	F50D	
Unified model					



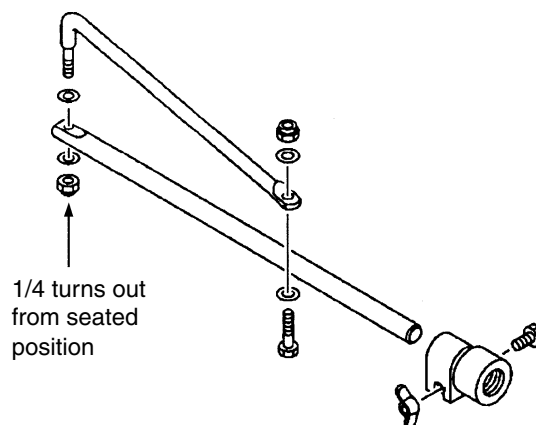
Part No.	67G-42508-10				
Global model	F80B	F100D	F75C	F100B	
Unified model					
Global model	F90B	F115B	F130A		
Unified model		F115B	F130A		
Global model	F75D	F80D	F90C	F100F	
Unified model	F75B		F90B		



Part No.	6C5-42508-01				
Global model	F40H	F50H	FT50J	F60F	FT60G
Unified model		F50B	T50B	F60B	T60B



Part No.	692-42508-01				
Global model	60F	70B	90A		
Unified model					
Part No.	6E5-42508-01				
Global model	E115A				
Unified model					



MEMO



CONVENTIONAL GAUGE (6Y5 & 6Y7)

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To be continued.

CONVENTIONAL GAUGE (6Y5 & 6Y7)

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CONVENTIONAL GAUGE (6Y5 & 6Y7)

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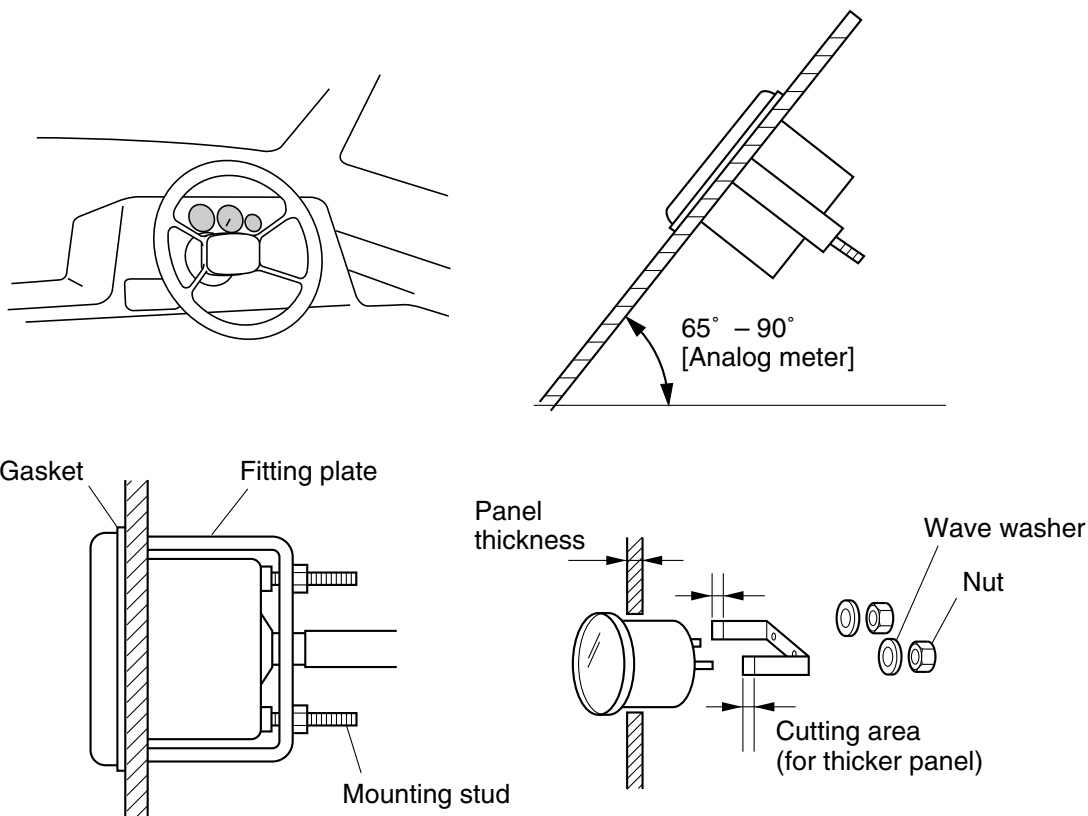
MOUNTING THE METERS

The meters can be installed to electrical start models because power source is required for the operation.

METER MOUNTING PROCEDURE

Follow the procedures below for mounting the gauges.

1. Select a mounting location so that the meter is easy to read from the operating position.
Be sure that there is sufficient clearance behind the panel for the meter.
For analog meters, be sure that the angle for mounting the meter is 65 to 90 degrees.
If the analog gauge is mounted onto horizontal surface, the pointer may not return to the zero position after the engine has stopped.
2. Make a hole at the desired position.
3. Remove the fitting plate from the meter, fit the meter into the panel, and install the fitting plate over the mounting studs.
4. Place the washers over the studs, and then evenly tighten the mounting nuts until the meter can no longer be rotated by hand.
5. Connect the wire-harnesses to the gauges, and secure them into a boat.



TIP:

For 6Y7 gauges;

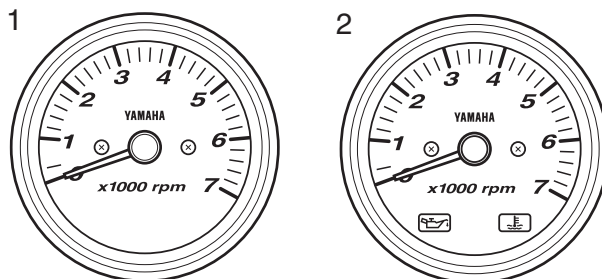
- If the gauge is mounted onto a 13 mm (0.5 in) or thicker board, cut out the fitting plate end so that the mount nut is enough tightened.
- The black face uses the permeation light and the white face has indirect clear light for night operation.

ANALOG TACHOMETER

A tachometer is essential for proper outboard performance.

The engine speed can be monitored to obtain most efficient operation.

In twin engine applications, the tachometers can be used to set the throttle of each engine accurately.



ANALOG TACHOMETER APPLICATIONS

Ref. No.	Description	Part No.	Applicable model
1	Without indicators BLK panel	6Y7-83540-20	Above 9.9 (Pre-mixed) FT8 (T8), F9.9 – F25 (FT/T25)
	Without indicators WHT panel	6Y7-83540-30	
2	With overheat & oil indicators BLK panel	6Y7-83540-80	Above 40 (3-cyl) w/ oil injection Above F30 [Mechanical RC]
	With overheat & oil indicators WHT panel	6Y7-83540-90	

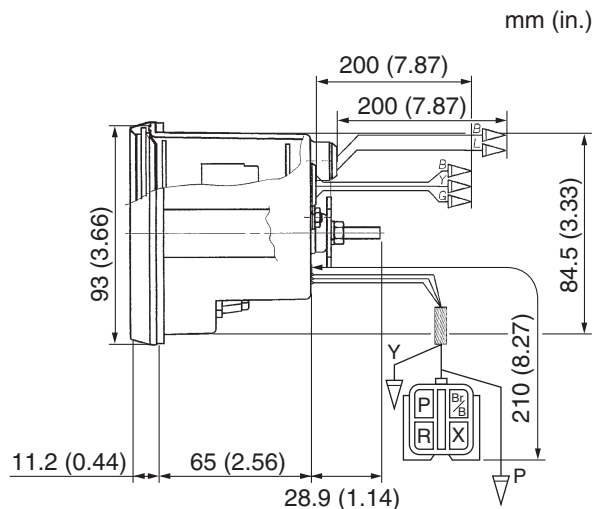
TIP:

If the current tachometer does not fit the older engine, use the wire-harness adapter which is shown in page 5-39.

ANALOG TACHOMETER

ANALOG TACHOMETER DIMENSIONS

2 alert indicators for 4-stroke and 2-stroke oil injection engines



POLE NUMBER SET UP

Yamaha tachometer shows the engine RPM by receiving the pulse signal from lighting coil.

The flywheel magneto used on Yamaha outboard motors varies in number of poles used: 4-pole, 6-pole and 12-pole.

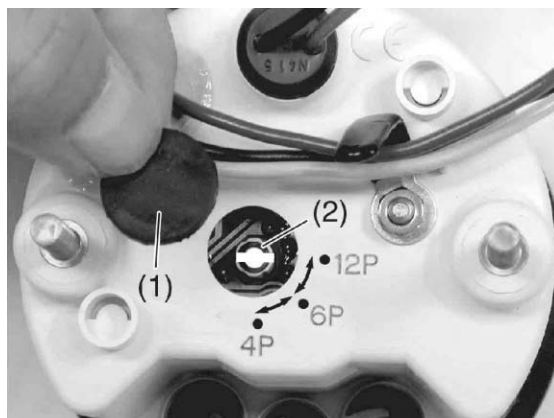
It is necessary to adjust the calibration switch on the back of gauge to correspond to the particular motor being used.

The initial setting is 12-pole. Adjust if necessary.

Description	Applicable model
4-pole	9.9 – 15, 55B, E/40G, E40J, E48C, EK40G, EK40J
6-pole	20D, 25N, 30D, 40V, 50H, 60F 70B, E/25B, EK25B, E/30H, E/40X, E60H, F8F (F8B), FT8G, F9.9J (F9.9B), FT9.9L (T9.9B)
12-pole	E55D, 75A, 75C, 85A, 90A, V4, V6, E75B, F15 (6AG) – F250 (Mechanical RC)

POLE NUMBER ADJUSTMENT

1. Remove the rubber grommet (1) from the back of meter.
2. Turn the rotating switch (2) with a slotted-head screwdriver to the required position.
3. Reinstall the grommet.



DIGITAL TACHOMETER

A tachometer is essential for proper outboard performance.
The engine speed can be monitored to obtain most efficient operation.
In twin engine applications, the tachometers can be used to set the throttle of each engine accurately.
The digital tachometer includes the elapsed hour meter, the trim meter and the oil and overheat warning indicator.
Also, this meter can be used for both 2 and 4 stroke models by switching the settings.

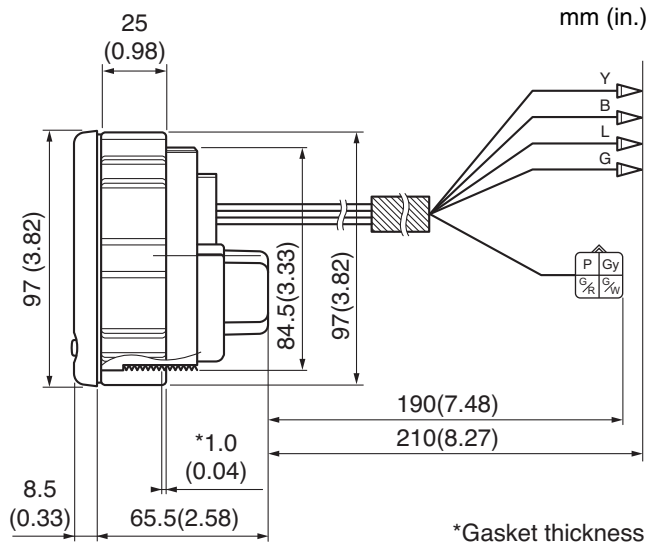


DIGITAL TACHOMETER APPLICATIONS

Ref. No.	Description	Part No.	Applicable model
1	Multifunction w/o “Check engine” and “Water in fuel” indicators	6Y5-8350T-E0	Above 40 (3-cyl) w/ oil injection Above F30 [Mechanical RC]

TIP: _____
If the current tachometer does not fit the older engine, use the wire-harness adapter which is shown on page 5-39.

DIGITAL TACHOMETER DIMENSIONS



DIGITAL TACHOMETER

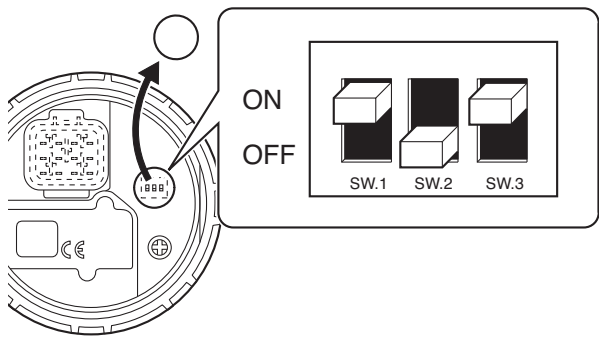
POLE NUMBER SET UP

The tachometer indicates the engine speed by receiving the pulses from the lighting coil. The flywheel magnets used in Yamaha outboards vary in number of poles used: 6-pole and 12-pole. It is necessary to change the calibration switch on the back of the meter to correspond to the particular motor being used. Also, the selection of the engine type and the trim sensor type is required.

Description	Applicable model
6-pole	40V, 50H, 60F, 70B
12-pole	75C, 90A, V4, V6, F30 – F250 [Mechanical RC]

POLE NUMBER ADJUSTMENT

1. Remove the rubber grommet from the back of the meter.
2. Set the toggle dipswitches in the chart as shown.
3. Reinstall the grommet.



No.	SW.1	SW.2	SW.3
Dipswitch function	Trim sensor type	Generator type	Engine type
ON	2 lead	6-pole	4-stroke
OFF	3 lead	12-pole	2-stroke

TIP: _____
The switch position in figure shows the default settings.

SPEEDOMETER

The speedometer indicates an approximate speed of the boat through the water by measuring the impact force of the water with a pressure gauge.

This impact force will vary with the density of the water and the speed of the impact.

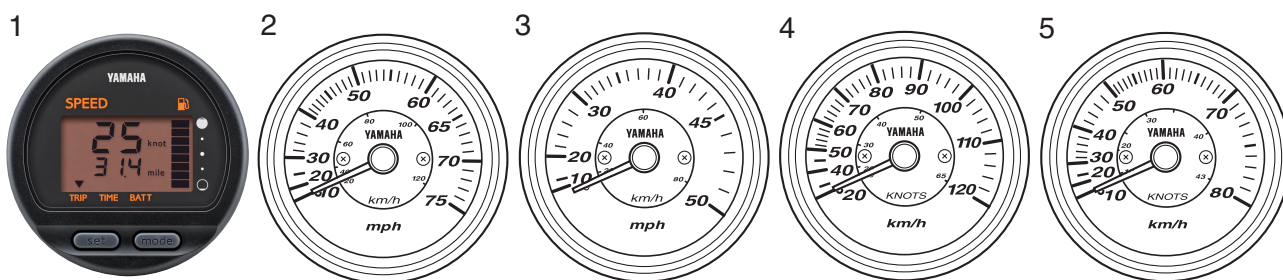
The density can vary by the purity of the water and the temperature of water.

The speed of water impact can vary by the location of the speed sensor and its relation to the water flow off the area of the boat in front of the sensor.

Because of these variables, the true speed of a boat can vary from the indicated speed on the meter.

Especially, the digital speedometer uses LCD readouts for speed, clock, trip distance, fuel tank level, and warning information for low fuel level and abnormal battery voltage.

The speed can be calibrated for mph, km/h, and knots.



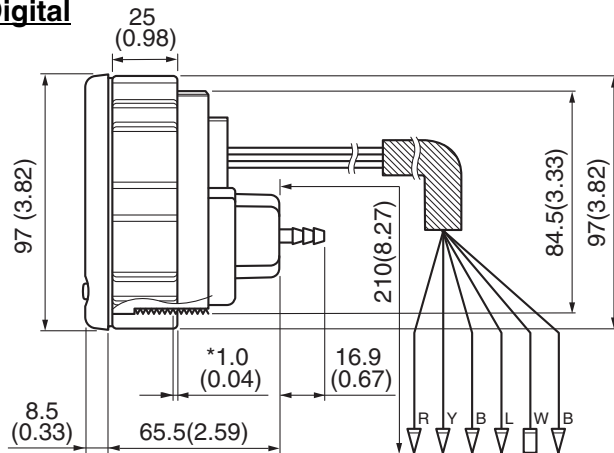
SPEEDOMETER TYPES AND APPLICATIONS

Ref. No.	Description	Part No.	Applicable model
1	Digital multifunction	6Y5-83570-A0	Above 40 (3-cyl) Above F30 [Mechanical RC]
2	Analog, BLK panel 0 – 75 mph (20 – 120 km/h)	6Y7-83510-00	
	Analog, WHT panel 0 – 75 mph (20 – 120 km/h)	6Y7-83510-10	
3	Analog, BLK panel 0 – 50 mph (20 – 80 km/h)	6Y7-83510-20	
	Analog, WHT panel 0 – 50 mph (20 – 80 km/h)	6Y7-83510-30	
4	Analog, BLK panel 0 – 120 km/h (15 – 65 knot)	6Y7-83510-40	
	Analog, WHT panel 0 – 120 km/h (15 – 65 knot)	6Y7-83510-50	
5	Analog, BLK panel 0 – 80 km/h (10 – 43 knot)	6Y7-83510-60	
	Analog, WHT panel 0 – 80 km/h (10 – 43 knot)	6Y7-83510-70	

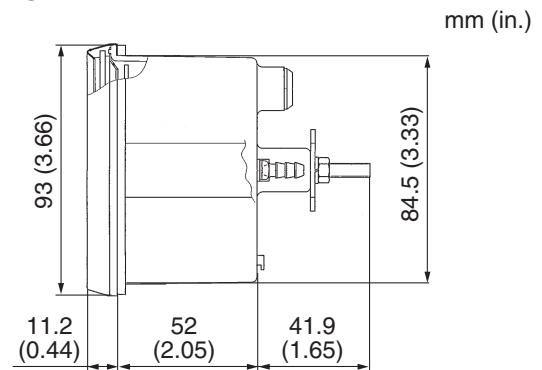
SPEEDOMETER

SPEEDOMETER DIMENSIONS

Digital



Analog



*Gasket thickness

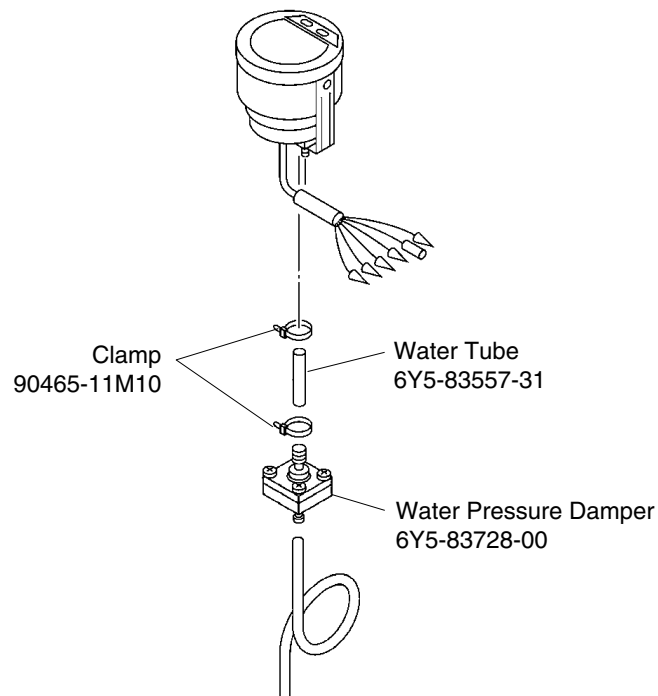
TIP:

A 6 m (19 ft) water tube (P/N: 688-83557-00) is included in all speedometer units (except digital speedometer unit P/N: 6Y5-83570-A0).

WATER PRESSURE DAMPER (OP)

Installing the water pressure damper between the gauge and water tube is recommended under following condition.

- To reduce a risk if water has leaked at connector end causing the gauge damage.
- The pointer of analog gauge is wiggled if water pressure pulsates.



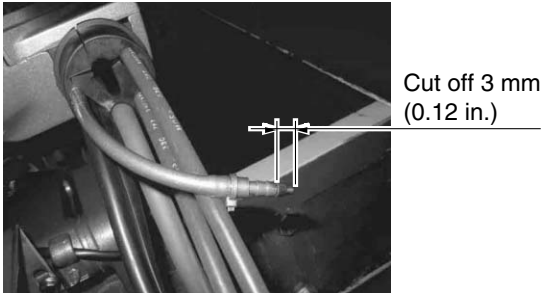
TIP:

Speedometer unit (speedometer with water pressure damper) is available. P/N: 6Y5-83500-G0.

SPEEDOMETER

SPEEDOMETER TUBE ROUTING

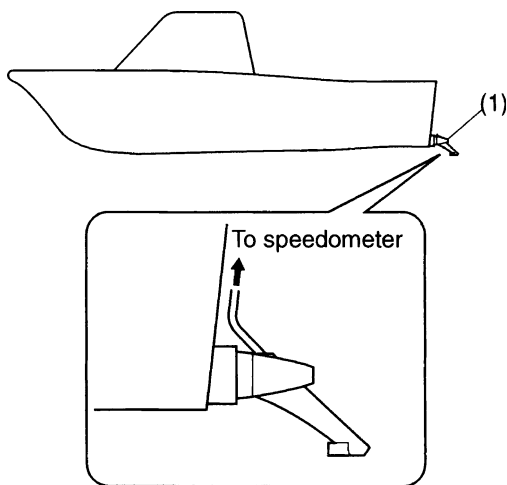
1. Cut off about 3 mm (0.12 in.) from the end of the nipple of the speedometer tube to open it.



2. Route the speedometer tube carefully to avoid crimping or damage.



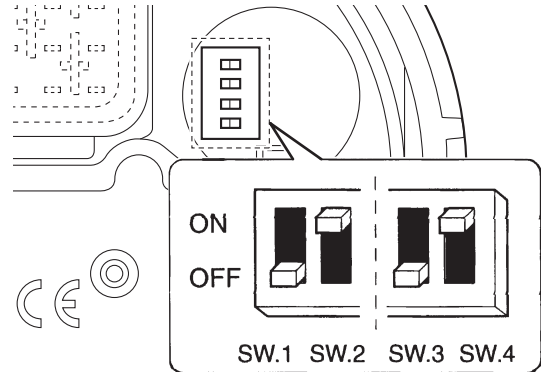
3. Connect the tube to the nipple.
 - * The optional speed sensor (P/N: 688-83556-01) is required if the speedometer tube is not equipped to the clamp bracket area.
 - * In high-performance applications where the engine has been mounted in an elevated position, it may be necessary to use the optional speed sensor to obtain a correct reading.



(1) Optional speed sensor

DIGITAL SPEEDOMETER SET UP

1. Remove the rubber grommet from the back of the meter.
2. Set the toggle dipswitches in the chart as below.
3. Reinstall the grommet.



SW.1	ON	OFF	OFF
SW.2	ON	ON	OFF
Display	km/h	mph	knot/h

SW.3	ON	OFF	OFF
SW.4	ON	ON	OFF
Fuel sensor	Yamaha original 5 – 105 Ω	ABYC (US) 33 – 240 Ω	Europe 180 – 0 Ω

TIP: _____
The switch position in figure shows the default settings (mph and ABYC).

FUEL MANAGEMENT GAUGE

The fuel management gauge has the functions as a fuel flow gauge, fuel consumption gauge, fuel economy gauge, twin engine RPM synchro gauge, and water detection indicator (icon) in case of a market optional water separator with water detection switch installed.

This gauge can display by receiving fuel data from fuel flow sensor and speed data from a GPS unit or 6Y5 digital speedometer.



FUEL MANAGEMENT GAUGE TYPES AND APPLICATIONS

Ref. No.	Description	Part No.	Applicable model
1	Fuel mgt gauge kit For single-engine	6Y5-W0088-55	Above 115 HP engines
	Fuel mgt gauge kit For twin-engine	6Y5-W0088-66	

TIP:

For smaller engines than 115 HP, the accident error for counting fuel flow will become larger as the fuel flow is very low.

Therefore, not recommended for smaller engines.

FUEL MGT GAUGE KIT CONTENTS

Description	Part No.	Q'ty		Remarks
		Single-engine	Twin-engine	
Fuel mgt gauge	6Y5-8350F-B0	1	1	w/ 3-prong connector
EXT wire-harness	6Y5-83553-F1	1	1	8 m (26 ft)
Fuel flow sensor	6Y5-85752-02	1	2	
EXT wire-lead	6Y5-82117-00	1	1	30 cm (1 ft) (BLK)
Screw	90158-06003	2	4	
Wire-lead	703-82531-00	—	1	70 cm (2.3 ft) (BLK)
Installation manual	6Y5-2819K-F0	1	1	

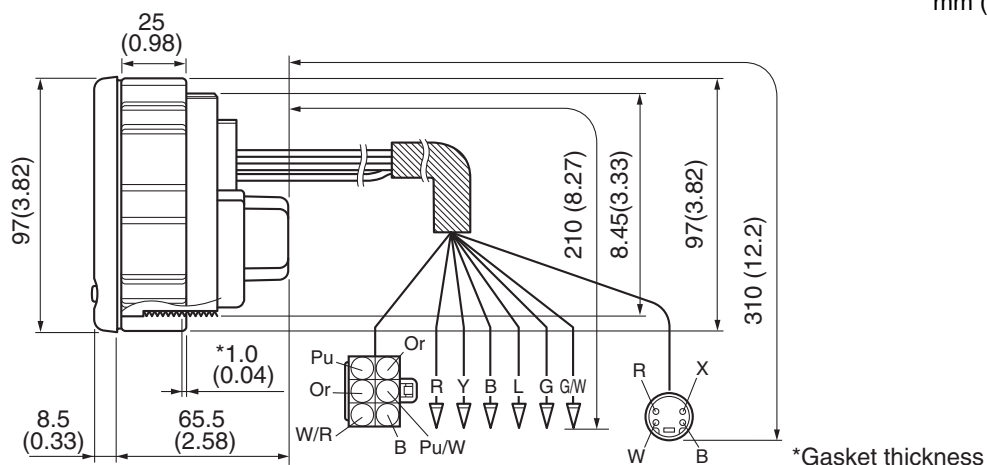
OPTIONAL WIRE-HARNESS

Description	Part No.	Remarks
GPS signal lead	6Y5-85721-F0	To connect an NMEA0183 compatible GPS unit

FUEL MANAGEMENT GAUGE

FUEL MANAGEMENT GAUGE DIMENSIONS

mm (in.)



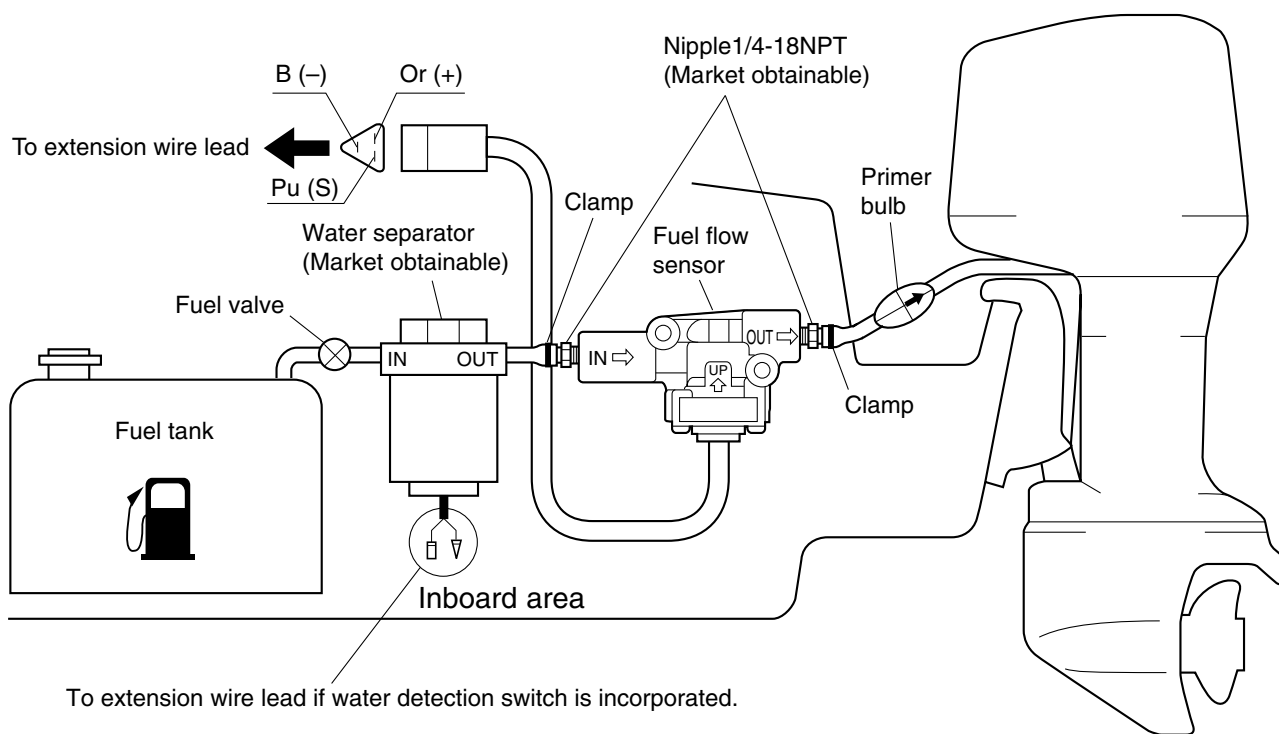
FUEL SENSOR INSTALLATION

Follow the notifications below.

1. Locate the sensor in a well ventilated area in boat between the engine and a water separator.
2. Place the sensor with the "UP" mark facing upward.
3. Use a fuel joint that is fitted to the fuel hose of the outboard motor.
4. Secure all fuel hose ends with a hose clamp with good anti-corrosion performance.

TIP:

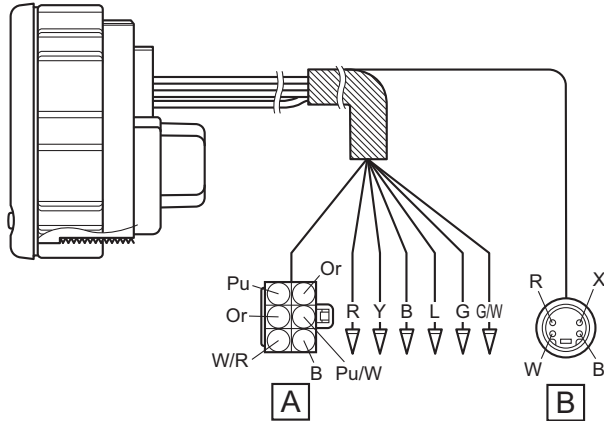
For twin engine application, refer to Wiring diagram in this chapter.
See the installation manual in the package for further information.



FUEL MANAGEMENT GAUGE

WIRING DESCRIPTION

Be sure that both the fuel management gauge and speedometer yellow wires are connected to the same power source and activated at the same time.



R: 12 volt

G: To the green wire from "STBD" digital tachometer

G/W: To the green wire from "PORT" digital tachometer for twin motor installations

B: To the ground

L: To light switch

Y: To digital speedometer to the same power source

Coupler **A**: To the extension wire lead for the fuel flow sensor

Coupler **B**: To the digital speedometer or an NMEA 0183 compatible GPS unit

Connecting to 6Y5 digital speedometer

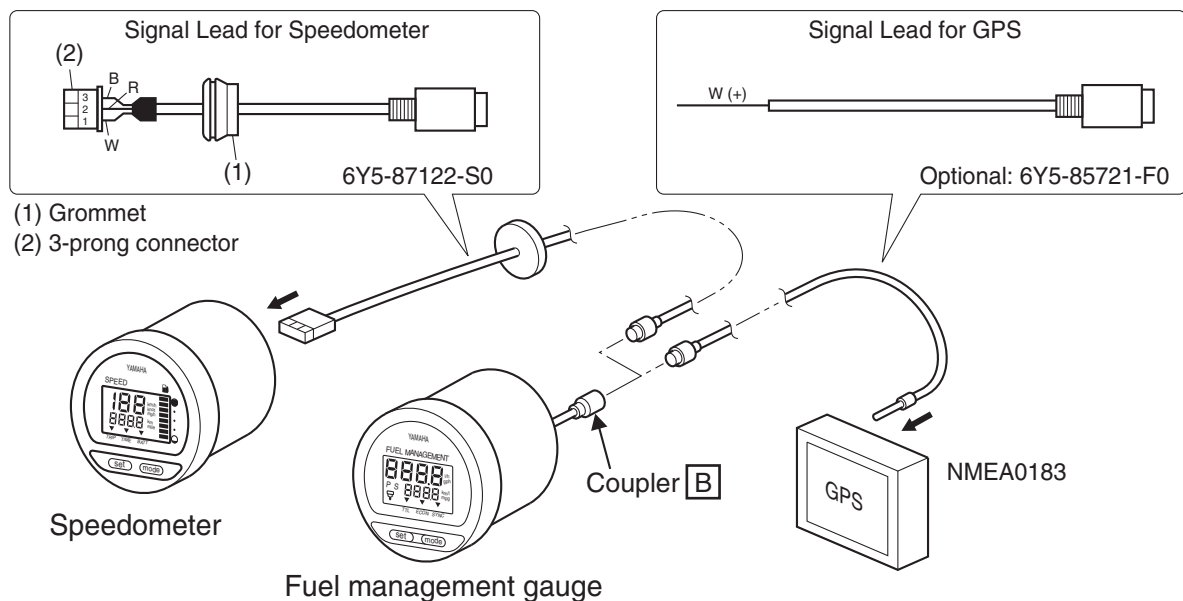
This calculates the fuel economy and fuel consumption, inputting the speed data to the fuel management gauge from the digital speedometer.

1. Remove the black grommet in the back of the digital speedometer.
2. Install the 3-prong connector (P/N: 6Y5-87122-S0) to the digital speedometer.
3. Connect the 3-prong connector to the fuel management gauge.

Connecting to a GPS

This is to input the speed data to the fuel management gauge from a GPS unit.

1. Connect the optional signal lead (P/N: 6Y5-85721-F0) to a NMEA 0183 compatible GPS unit.
2. Connect the signal lead to the fuel management gauge.
3. Connect the ground lead for GPS and fuel management gauge to the same ground.



FUEL MANAGEMENT GAUGE

FUEL MANAGEMENT GAUGE SET UP

1. Remove the grommet (1) on the back of the gauge.
2. Select the fuel measurement switch 4 for either gallons per hour (gph) or liters per hour (L/h).
3. Select the signal input switch 5 and 6 for either the digital speedometer or a GPS.
4. Set the compensator switch 1, 2 and 3 if there is a difference of fuel consumption between the actual amount and meter reading.

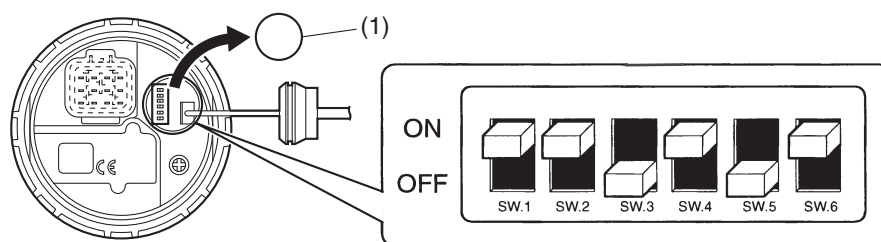
For example:

Actual amount of fuel used: 50 gallons

Fuel management gauge indicates: 51 gallons

Different = + 1 gallon

1 gallon / 50 gallons = 0.02 or 2%



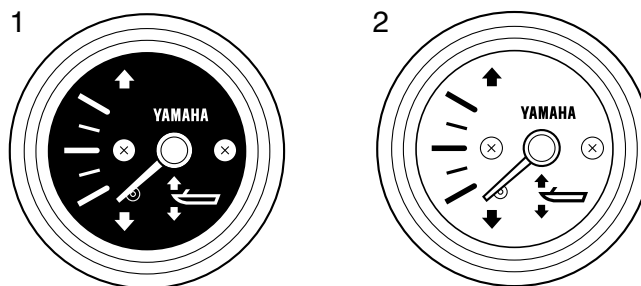
SW.1	ON	OFF	ON	OFF	ON	OFF	ON	OFF
SW.2	ON	ON	OFF	OFF	ON	ON	OFF	OFF
SW.3	ON	ON	ON	ON	OFF	OFF	OFF	OFF
Compensation	-4%	-3%	-2%	-1%	0	+1%	+2%	+3%

SW.4	OFF	ON
Unit	L/h	gph

SW.5	OFF	ON
SW.6	ON	OFF
Input source	Speedometer	GPS

ANALOG TRIM METER

The trim meter shows the trim angle of the outboard motor.

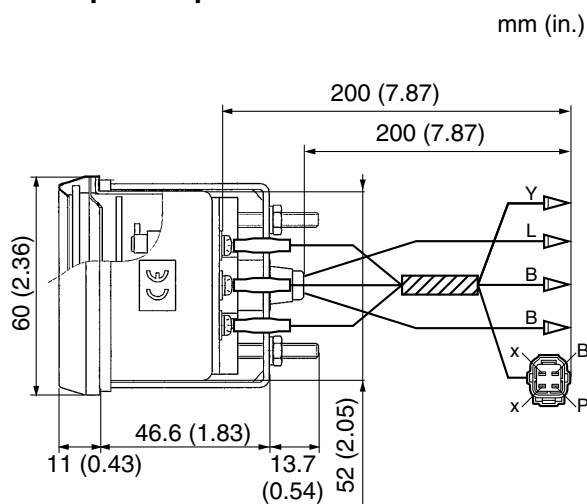


ANALOG TRIM METER APPLICATIONS

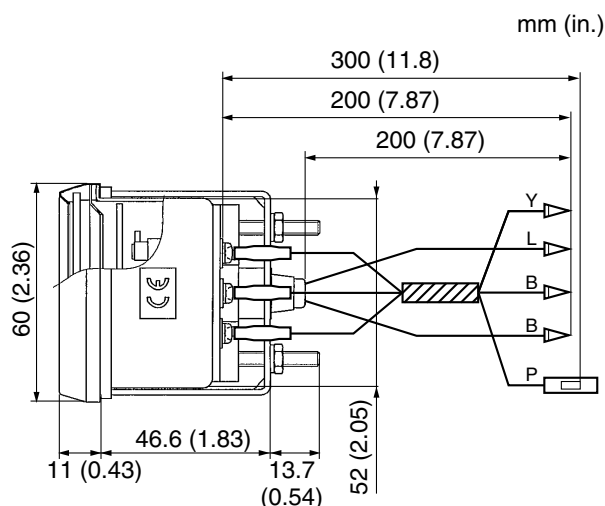
Ref. No.	Description	Part No.	Applicable model
1	4-pin coupler BLK panel	6Y7-83670-00	Pre-mixed w/ PTT
	Bullet connector BLK panel	6Y7-83670-40	Above 40 (3-cyl) w/ oil injection & PTT, Above F30 w/ PTT [Mechanical RC], T25 (NOA) Use as a set with tachometer, 6Y7-83540-80
2	4-pin coupler WHT panel	6Y7-83670-20	Pre-mixed w/ PTT
	Bullet connector WHT panel	6Y7-83670-50	Above 40 (3-cyl) w/ oil injection & PTT, Above F30 w/ PTT [Mechanical RC], T25 (NOA) Using as a set with tachometer, 6Y7-83540-90

ANALOG TRIM METER DIMENSIONS

With 4-pin coupler



With bullet connector



TRIM SENSOR ADJUSTMENT

If the trim meter does not show the correct trim angle, adjust the trim sensor cam position.

1. Fully trim down the engine.
2. Loosen the trim sensor screw.
3. Adjust the cam position so that pointer needle shows the lowest position.
4. Tighten the screw to secure the sensor.

COOLANT PRESSURE METER

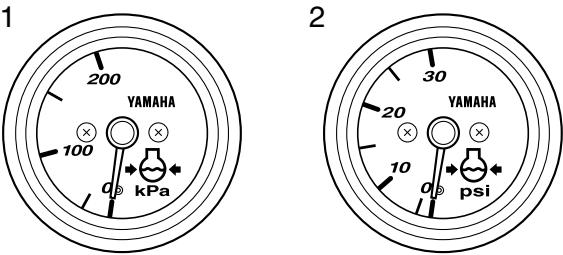
The coolant pressure meter shows the water pressure of cooling water passage, and an operator can easily know a problem for the cooling system.

TIP: _____

On some in-line cylinder models, the installation point is shared between the coolant pressure sensor and the coolant temperature sensor.

Therefore, either the coolant temperature meter or the coolant pressure meter can be used for these engines.

Both the coolant temperature meter and the coolant pressure meter can be installed on V4, V6, and 4-stroke L4 (2.7/2.8L) engines.



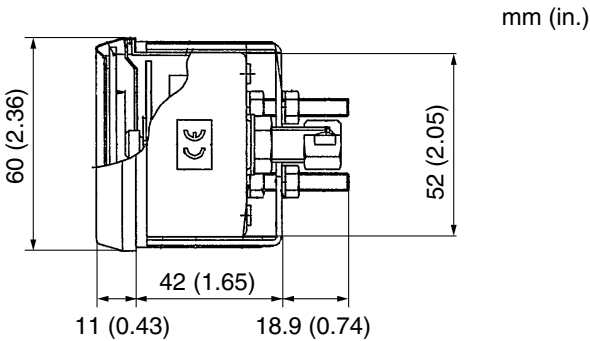
COOLANT PRESSURE METER APPLICATIONS

Ref. No.	Description	Part No.	Applicable model
1	kPa, Black panel	6Y7-83660-00	Above 40 [3-cyl] Above F25 (FT/T25) [Mechanical RC]
	kPa, White panel	6Y7-83660-20	
2	psi, Black panel	6Y7-83660-10	
	psi, White panel	6Y7-83660-30	

ADDITIONAL PARTS REQUIREMENTS

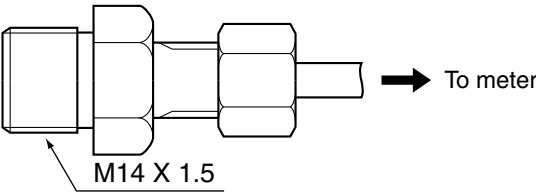
Description	Part No.	Remarks
Coolant pressure attachment	688-83667-00	With 10 m (32 ft) tube

COOLANT PRESSURE METER DIMENSIONS



COOLANT PRESS. ATTACHMENT INSTALLATION

The method for installing the coolant pressure attachment is the same as the coolant temperature sensor. See the installation instruction to the sensor in the coolant temperature meter on page 5-19.



COOLANT TEMP. METER

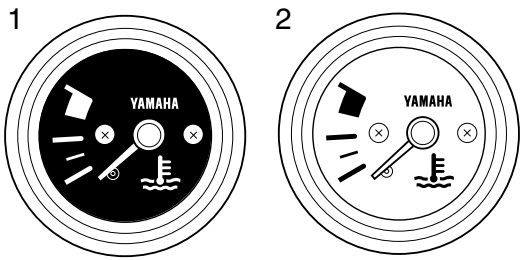
The coolant temperature meter shows the water temperature of cooling water passage. This meter has a red zone, and an operator can easily know the engine overheat.

TIP: _____

On some in-line cylinder models, the installation point is shared between the coolant pressure sensor and the coolant temperature sensor.

Therefore, either the coolant temperature meter or the coolant pressure meter can be used for these engines.

Both the coolant temperature meter and the coolant pressure meter can be installed on V4, V6, and 4-stroke L4 (2.7/2.8L) engines.

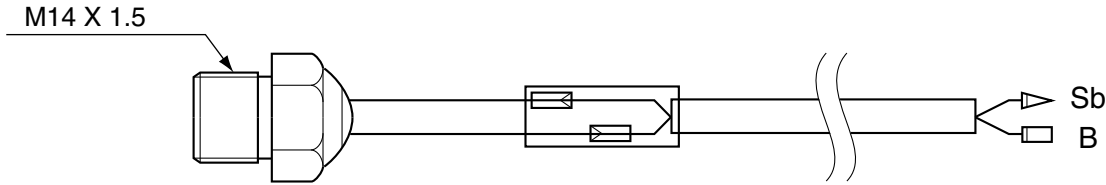


COOLANT TEMP. METER TYPES AND APPLICATIONS

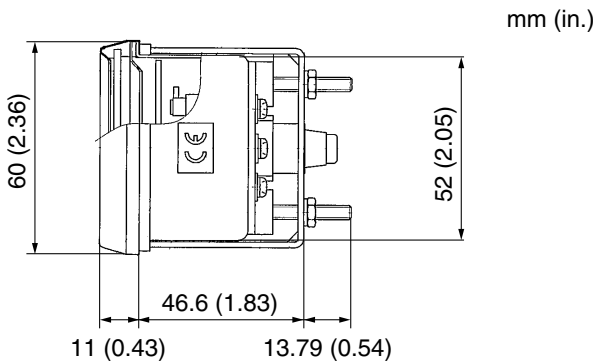
Ref. No.	Description	Part No.	Applicable model
1	Black panel	6Y7-83590-00	Above 40 [3-cylinder]
2	White panel	6Y7-83590-10	Above F25 (FT/T25) [Mechanical RC]

ADDITIONAL PARTS REQUIREMENTS

Description	Part No.	Remarks
Coolant temp. sensor	688-83591-00	With 7 m (23 ft) leads



COOLANT TEMP. METER DIMENSIONS



COOLANT TEMP. METER

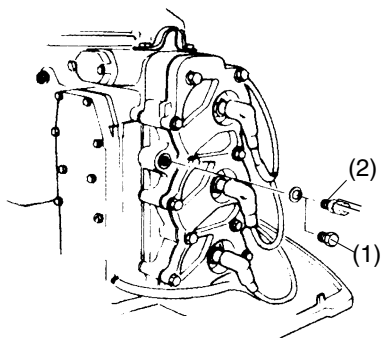
COOLANT PRESS. ATTACHMENT AND/OR COOLANT TEMP. SENSOR INSTALLATION (FOR 2-STROKE MODELS)

Remove the screw plug (1) from the cylinder head and install the sensor/attachment (2) with a new gasket.

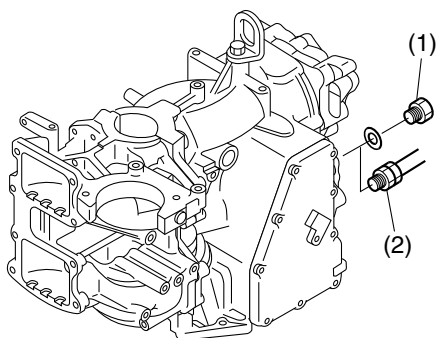
After installing the sensor/attachment, check coolant for leakage.

Tightening torque	N•m	kgf•m	ft•lb
Sensor/attachment (M14)	20	2.0	15

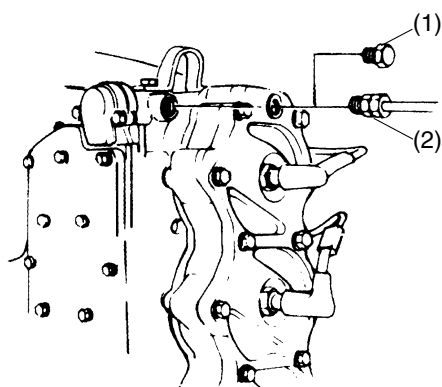
40V, 50H



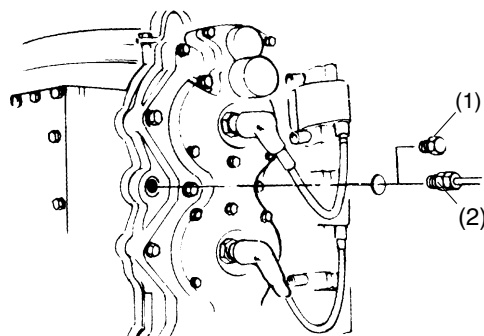
E48C, 55B



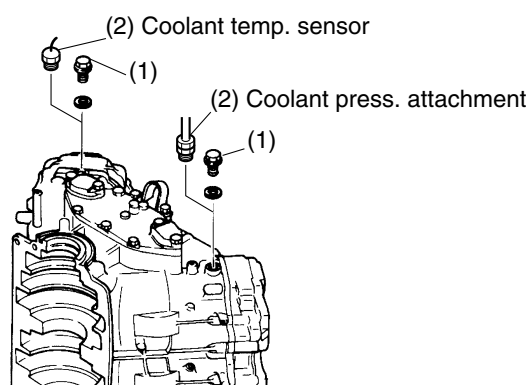
60F, 70B



85A, 90A



E115A, L/150A, L/200A



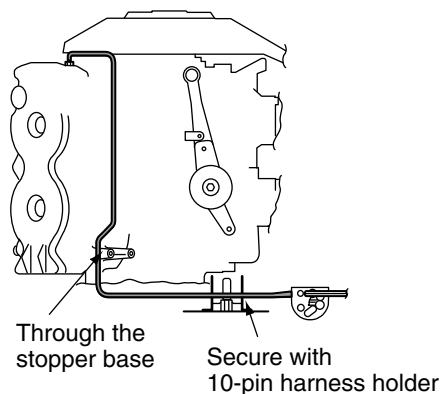
NOTICE

Install the coolant pressure attachment on the port side. If it is installed on the star-board side, the tube could cause damage by hard bending.

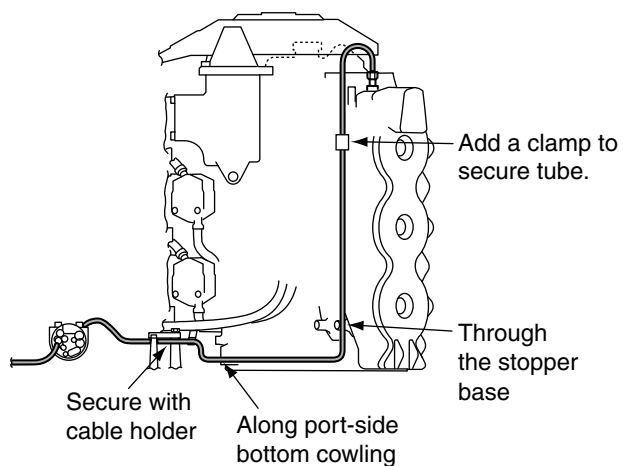
COOLANT TEMP. METER

ROUTING COOLANT TEMP. LEAD

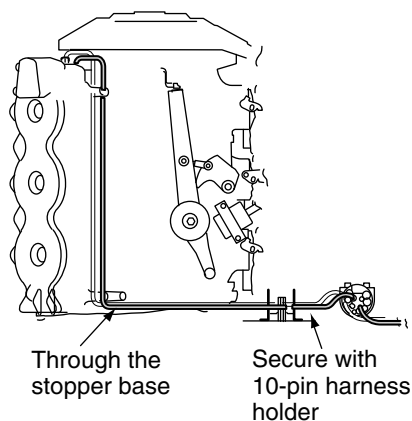
E115A



L/150A, L/200A

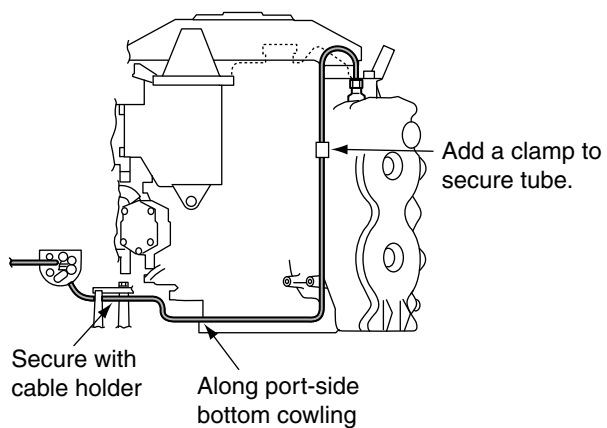


L/150A, L/200A



ROUTING THE COOLANT PRESS. TUBE

E115A



COOLANT TEMP. METER

COOLANT TEMP. SENSOR AND/OR COOLANT PRESS. ATTACHMENT INSTALLATION

(FOR 4-STROKE MODELS)

F25D, FT25F, F30B, F40F (F25A, T25A,
F30A, F40A)



Coolant temp. sensor

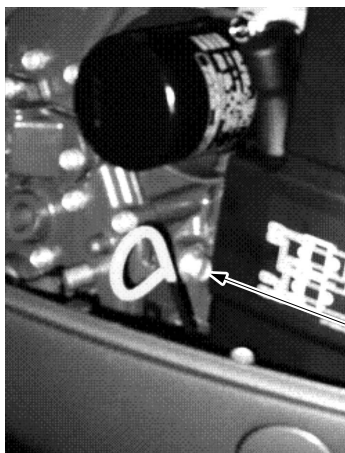
Coolant pressure attachment

FT50C, F50D



Coolant temp. sensor, or
coolant pressure attachment

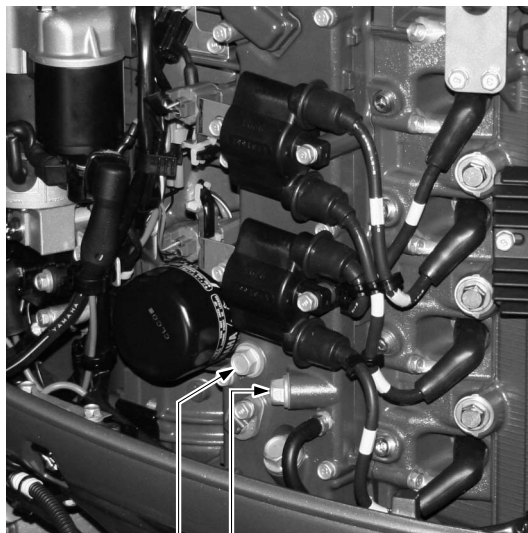
F100B



Coolant temp.
sensor, or
coolant pressure
attachment

F40H, F50H, FT50J, F60F, FT60G, F40G,
F70A (F50B, T50B, F60B, T60B, F70A)

Only one of the coolant press. attachment or
coolant temp. sensor can be installed, even if
the engine has two points for installation.



Coolant pressure attachment

Coolant temp. sensor

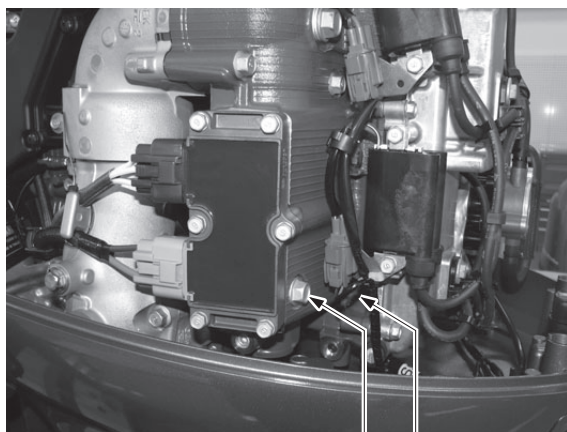
COOLANT TEMP. METER

COOLANT TEMP. SENSOR AND/OR COOLANT PRESS. ATTACHMENT INSTALLATION

(FOR 4-STROKE MODELS)

F75D, F80D, F90C, F100F, F90D, F/FL115B,
F115C, F130A (F75B, F90B, VF90A, F/LF115B,
VF115A, F130A)

Only one of the coolant press, attachment or
coolant temp. sensor can be installed.



F115-F130

F75-F100

Coolant temp. sensor, or coolant pressure attachment

F80B, F90B, F100D, F75C

Remove the negative battery cable and oil dipstick, then put a rag on the oil filler hole to prevent dust etc. from falling into the oil sump.



Coolant temp. sensor

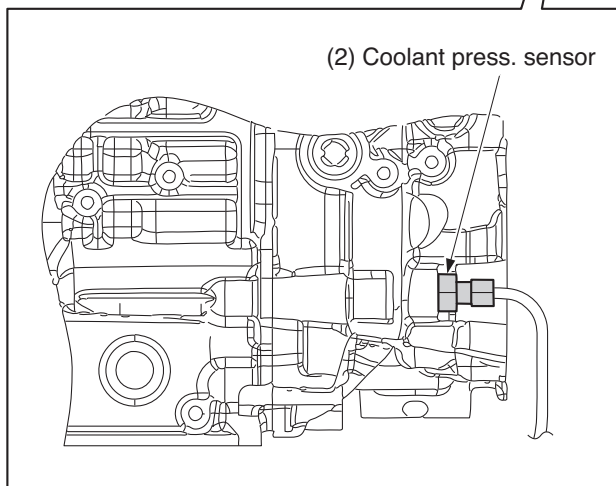
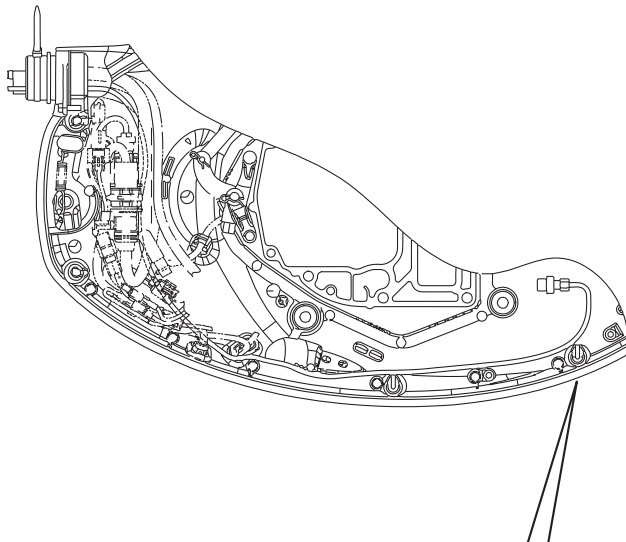


Coolant press. attachment

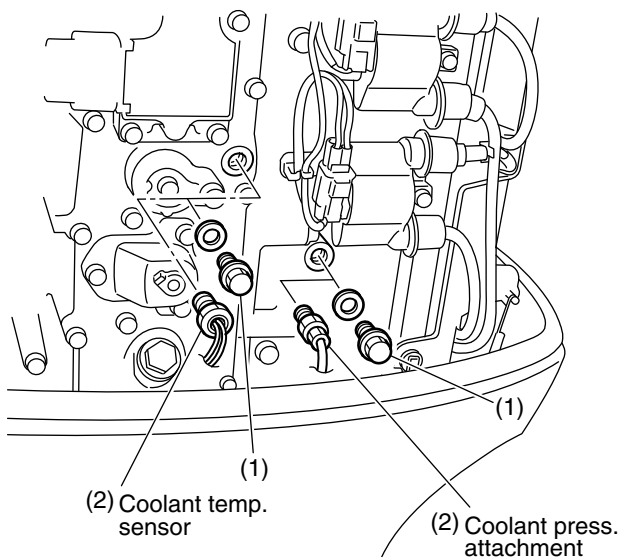
COOLANT TEMP. METER

COOLANT TEMP. SENSOR AND/OR COOLANT PRESS. ATTACHMENT INSTALLATION (FOR 4-STROKE MODELS)

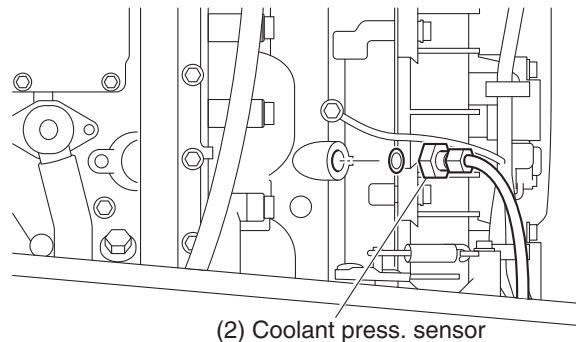
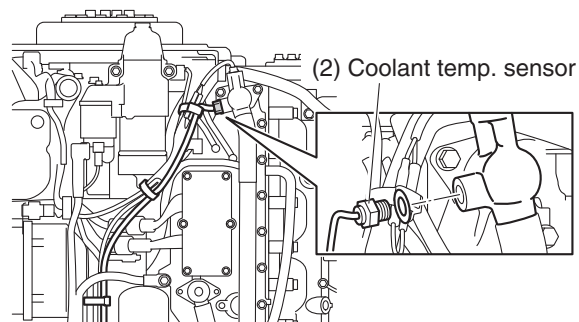
F90C, F100F (F90B)



F150 (L4-2.7L)

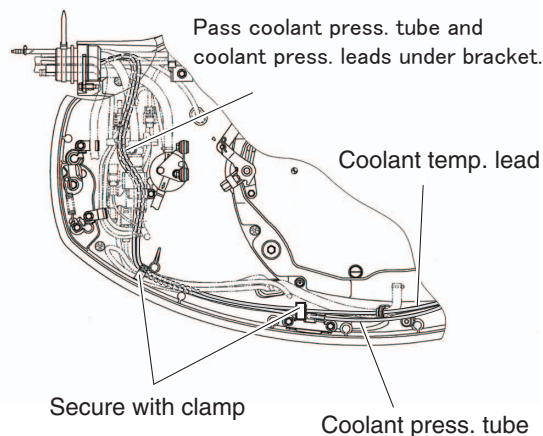
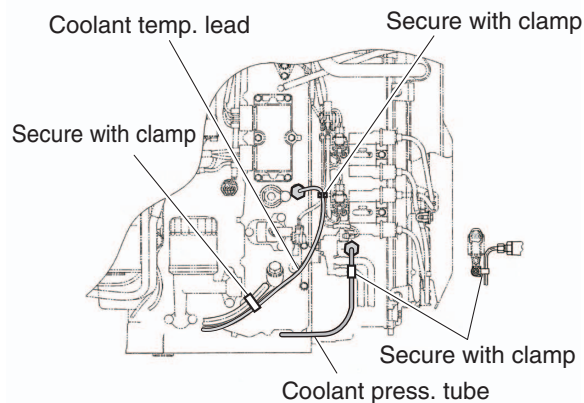


F150-F200 (L4-2.8L)



ROUTING THE COOLANT TEMP. LEAD & COOLANT PRESS. TUBE

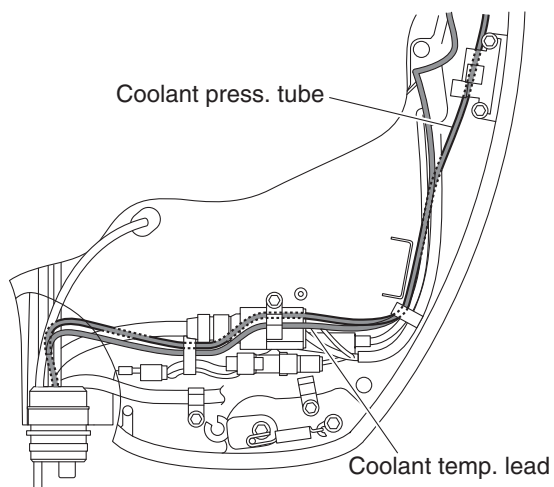
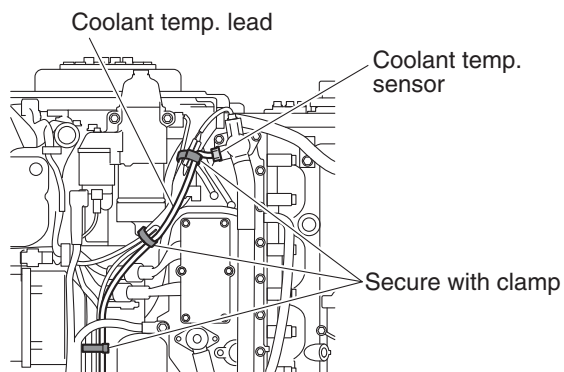
F150 (L4-2.7L)



COOLANT TEMP. METER

ROUTING THE COOLANT TEMP. LEAD & COOLANT PRESS. TUBE

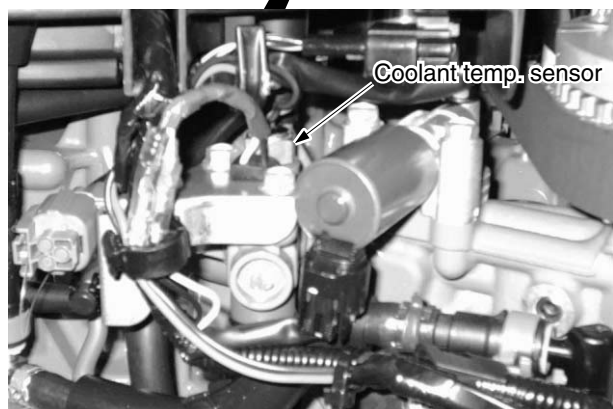
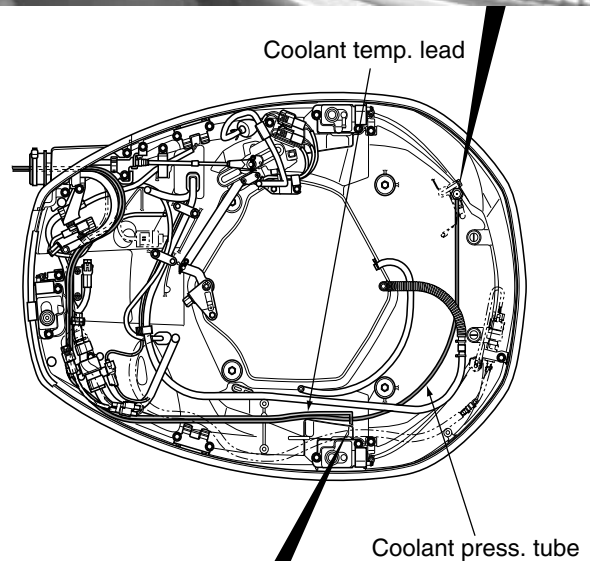
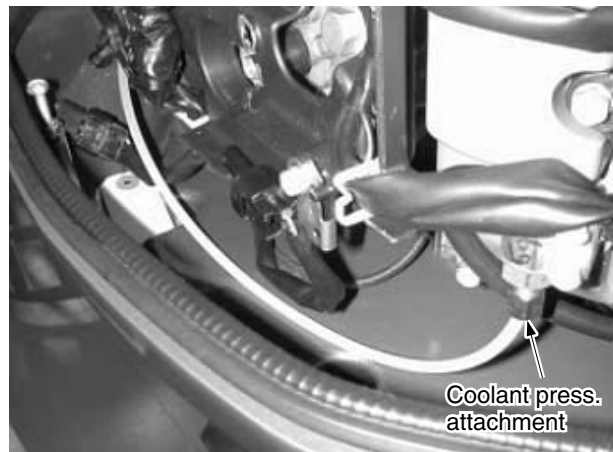
F150-F200 (L4-2.8L)



SENSOR/ATTACHMENT

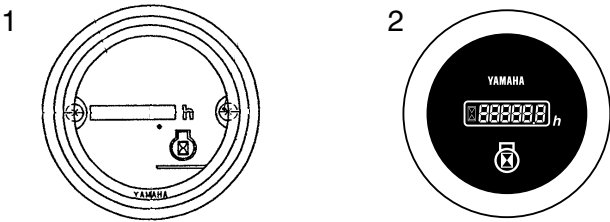
INSTALLATION AND ROUTING

F200-F250 (V6-3.3L, VCT)

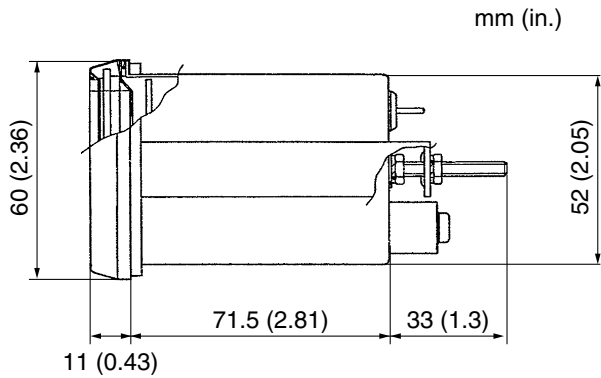


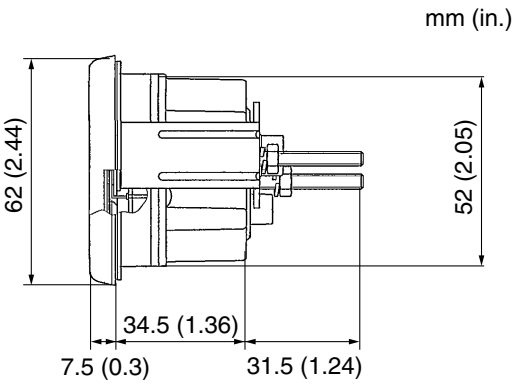
The hour meter shows the elapsed operation hours after the engine is first operated, and is very useful to maintain the periodical maintenance interval.

TIP: _____
The processing method of time count differs between the hour meter and engine ECM, therefore the elapsed time is not always equal on them.



Ref. No.	Description	Part No.	Applicable model
1	Mechanical	6Y5-83504-01	All electrical start models
2	Digital, Black panel	6Y7-83504-00	
	Digital, White panel	6Y7-83504-10	

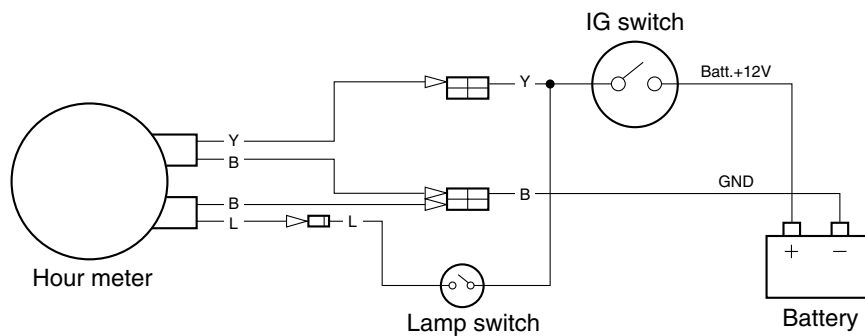




HOURL METER

WIRING THE MECHANICAL HOUR METER

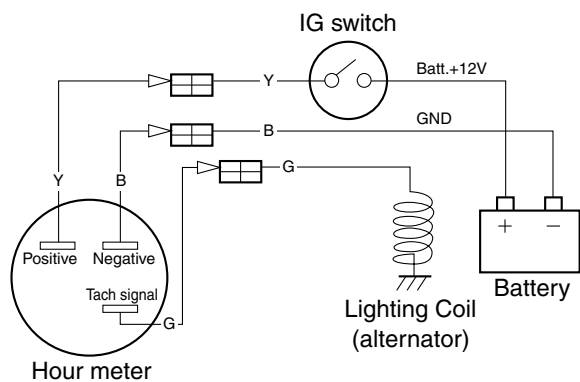
The hour meter counts while the ignition switch is "ON".



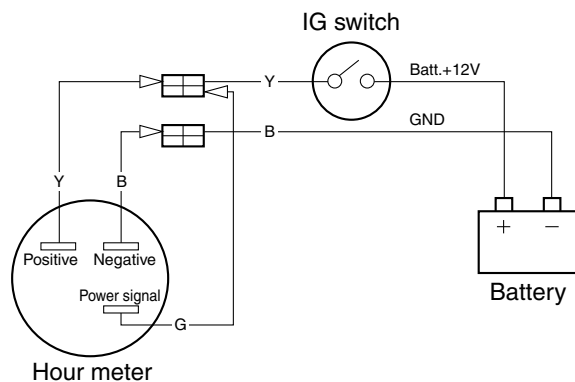
WIRING THE DIGITAL HOUR METER

Two counting methods can be selected by connecting wires.

Counting time while engine is running

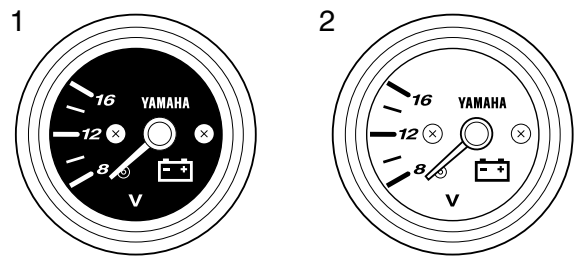


Counting time while IG switch is ON



VOLTAGE METER

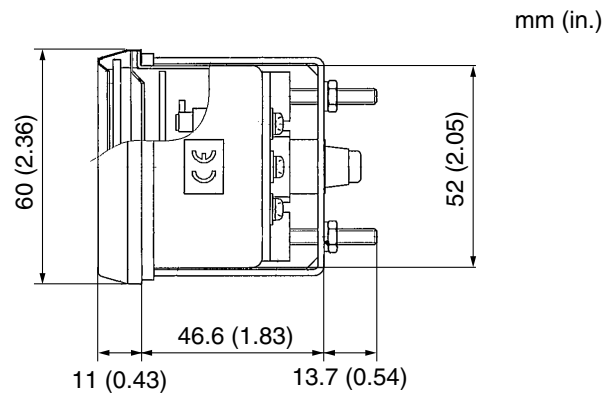
The voltage meter provides information about the charging condition of the battery.



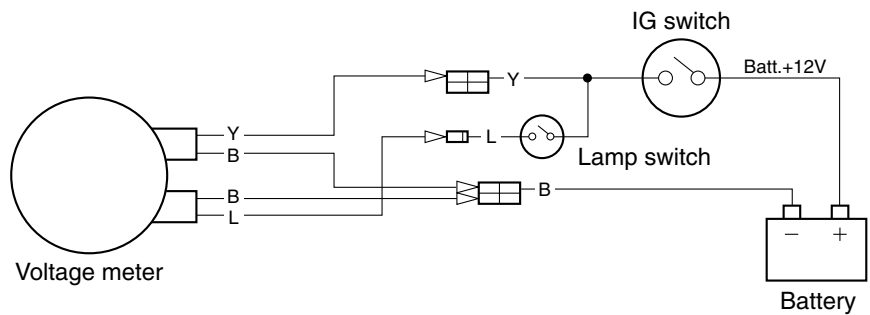
VOLTAGE METER TYPES AND APPLICATIONS

Ref. No.	Description	Part No.	Applicable model
1	DC 12 volt power supply Black panel	6Y7-83503-00	All electrical start models
2	DC 12 volt power supply White panel	6Y7-83503-10	

VOLTAGE METER DIMENSIONS

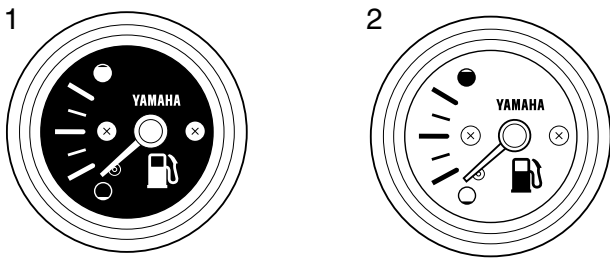


WIRING THE VOLTAGE METER



FUEL METER

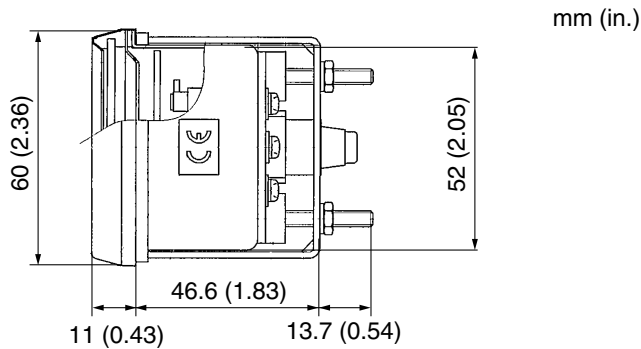
The fuel meter indicates the amount of fuel remaining in the fuel tank. However, a difference between the indication and actual remaining fuel may occur due to the fuel tank shape, design, etc.



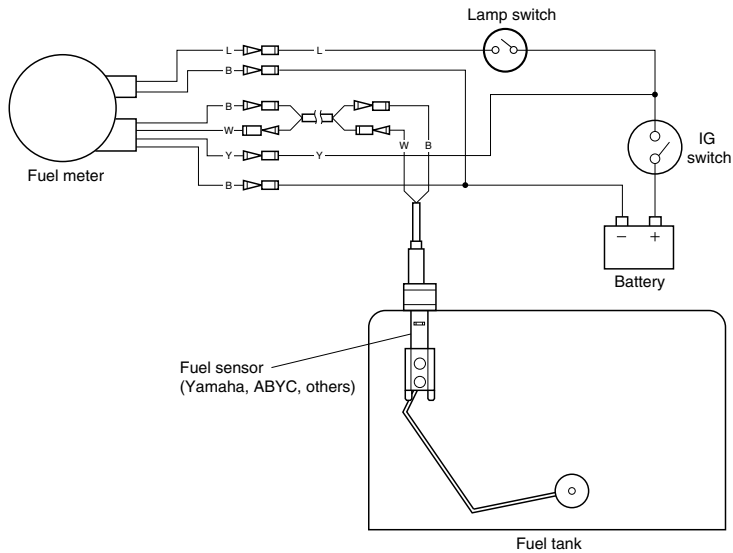
FUEL METER TYPES AND APPLICATIONS

Ref. No.	Description	Part No.	Applicable model
1	For Yamaha sensor (5 – 105 Ω) Black panel	6Y7-85750-00	All electrical start models
	For ABYC sensor (30 – 240 Ω) Black panel	6Y7-85750-10	
2	For Yamaha sensor (5 – 105 Ω) White panel	6Y7-85750-20	
	For ABYC sensor (30 – 240 Ω) White panel	6Y7-85750-30	

FUEL METER DIMENSIONS

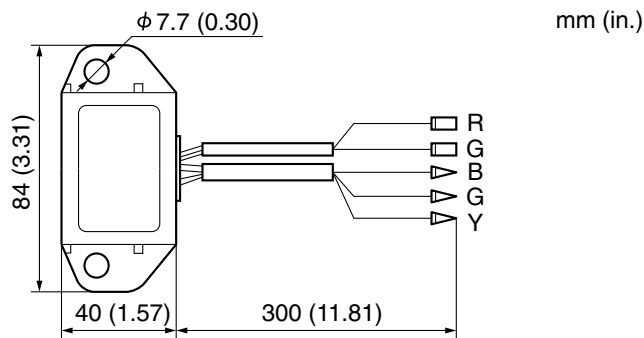


WIRING THE FUEL METER



CHARGE WARNING UNIT

The lamp of the charge warning unit indicates the status of charging the battery.
When the main switch is turned to “ON” position, the red lamp lights.
After the engine starts, the lamp will go off.
If the charging system has malfunctioned, the lamp will light.

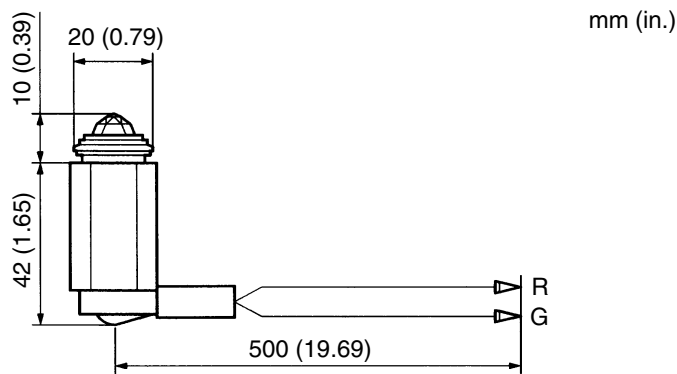


CHARGE WARNING UNIT TYPES AND APPLICATIONS

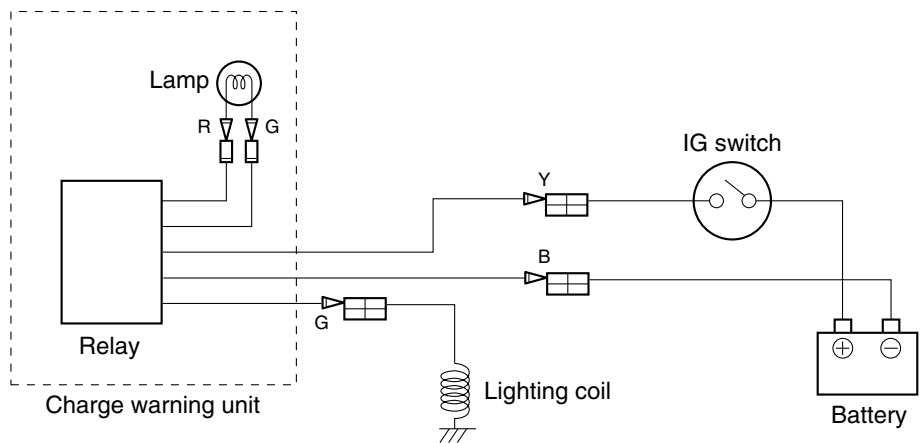
Description	Part No.	Remarks
Relay	697-81901-60	All electrical start models with a rectifier/regulator

ADDITIONAL PARTS REQUIREMENTS

Description	Part No.	Remarks
Red lamp	663-84301-01	12V



WIRING THE CHARGE WARNING UNIT



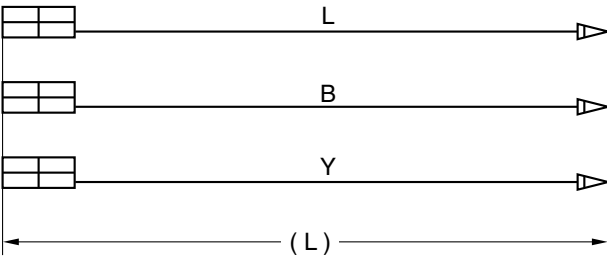
WIRE HARNESSSES

An optional wire-harnesses will be available to help setup the instruments to a various boat. Select a suitable wire-harness as necessary.

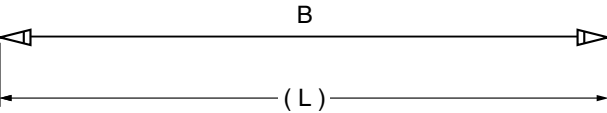
TIP: _____
For the wire color description, see the table on page 5-34.

ADDITIONAL ACCESSORY LEAD

Part No.	Length (L)	Remarks
6Y5-82149-00	30 cm (1 ft)	Blue
6Y5-82117-00	30 cm (1 ft)	Black
6Y5-82521-00	30 cm (1 ft)	Yellow



Part No.	Length (L)	Remarks
703-82531-00	0.7 m (28 in)	L/H model GND for gauges

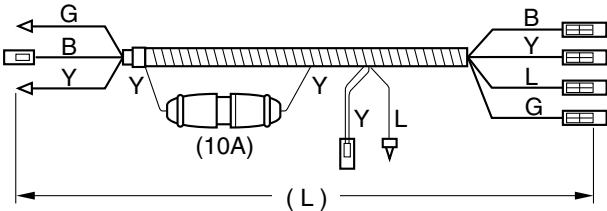


WIRE HARNESSSES

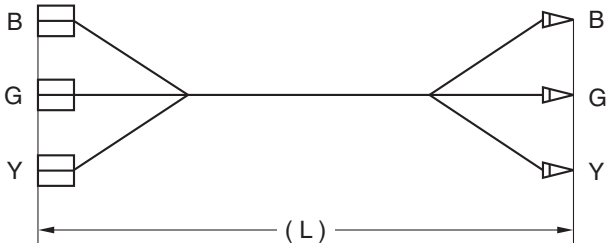
METER HARNESS

For analog meter

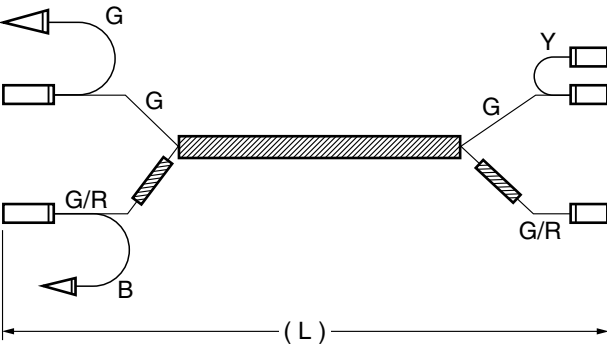
Part No.	Length (L)	Remarks
6Y5-83553-00	2.5 m (8 ft)	For all models except V4/V6



Part No.	Length (L)	Remarks
6Y5-8350U-00	200 mm (8 in)	

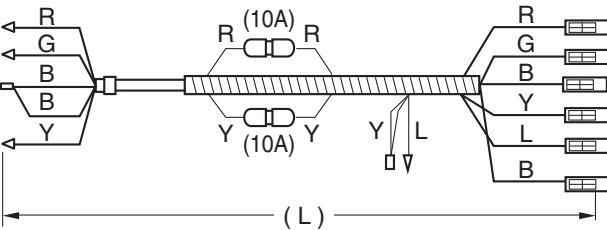


Part No.	Length (L)	Remarks
6Y5-83553-10	5 m (16 ft)	For pre-mixed model

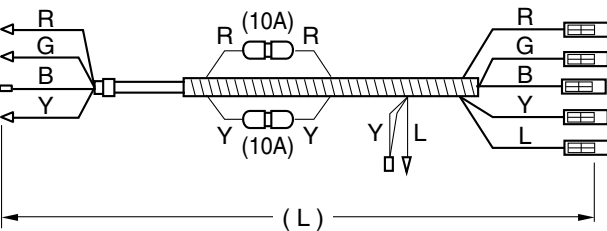


For digital meter

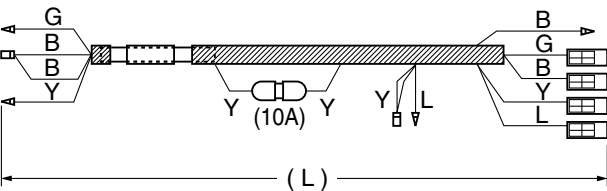
Part No.	Length (L)	Remarks
6Y5-83553-N0	2.5 m (8 ft)	For twin engine application



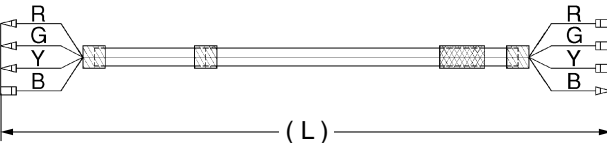
Part No.	Length (L)	Remarks
6Y5-83553-M0	2.5 m (8 ft)	For single engine application



Part No.	Length (L)	Remarks
6Y5-83553-20	2.5 m (8 ft)	L/H model



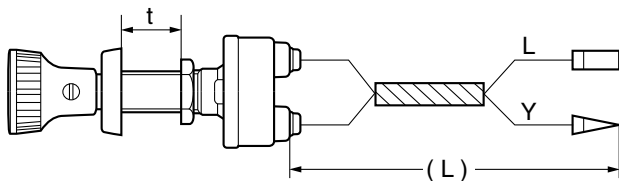
Part No.	Length (L)	Remarks
6Y5-8356N-00	1.5 m (5 ft)	Extension harness



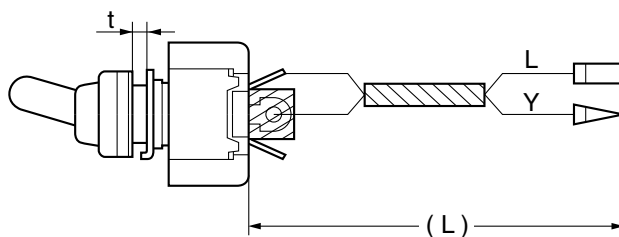
WIRE HARNESSSES

LAMP SWITCH

Part No.	Length (L)	Remarks
688-82520-00	10 cm (4 in)	t = Max.15 mm

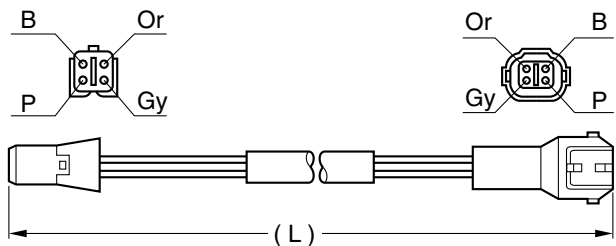


Part No.	Length (L)	Remarks
688-82526-00	10 cm (4 in)	t = Max.3 mm



TRIM METER LEAD

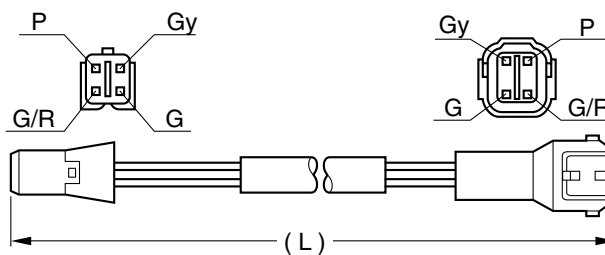
Part No.	Length (L)	Remarks
6R3-82553-30	3 m (10 ft)	Premixed models w/ PTT (Flat type harness)
6R3-82553-50	5 m (16 ft)	
6R3-82553-70	7 m (23 ft)	
6R3-82553-80	8 m (26 ft)	
6R3-82553-90	9 m (29 ft)	



TRIM AND OIL LEAD

Part No.	Length (L)	Remarks
6Y5-83653-00	5 m (16 ft)	Above F30 (*1), Above 40 (3-cyl) w/ oil injection (Unified 4-pin cou- pler)
6Y5-83653-10	6 m (19 ft)	
6Y5-83653-20	7 m (23 ft)	
6Y5-83653-30	8 m (26 ft)	
6Y5-83653-40	9 m (29 ft)	
6Y5-83653-50	10.5 m (34 ft)	

(*1) Mechanical RC

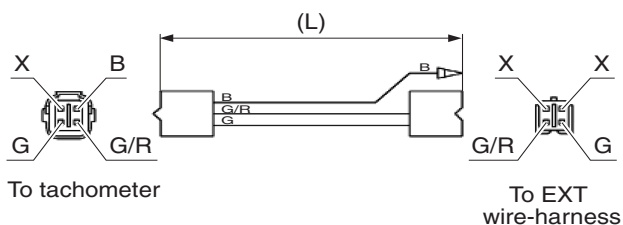


WIRE HARNESSSES

CONVERSION HARNESS 1

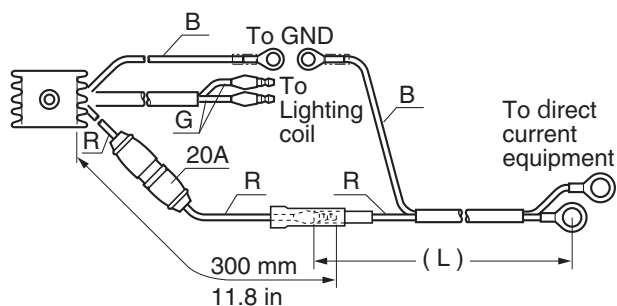
Part No.	Length (L)	Remarks
6Y5-8350U-10	150 mm (6 in)	To freeze trim-gauge ^(*) for hydro-tilt model

(*) For tachometer 6Y5-8350T-E0



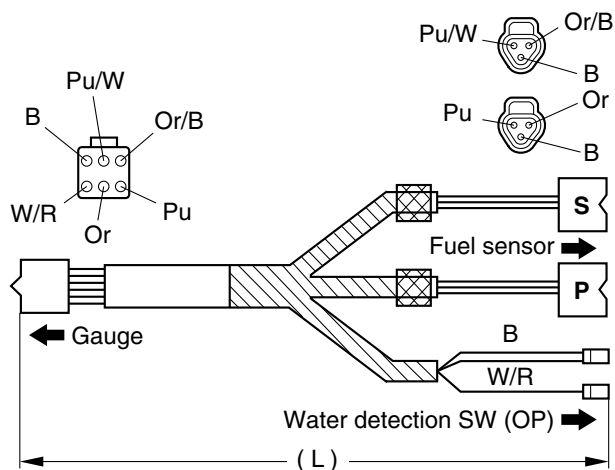
RECTIFIER KIT

Part No.	Length (L)	Remarks
676-81970-01	2 m (7 ft)	M-start model with lighting coil



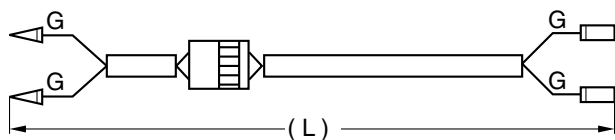
FUEL MANAGEMENT GAUGE HARNESS

Part No.	Length (L)	Remarks
6Y5-83553-F1	8 m (26 ft)	



LIGHTING COIL EXTENSION HARNESS

Part No.	Length (L)	Remarks
682-84380-00	6 m (19 ft)	M-start model with lighting coil



WIRING DIAGRAMS

Some representative wiring diagram samples for Yamaha genuine remote controls and instruments are shown here. These diagrams will cover most common configurations.

WIRE COLOR CODE

The wiring color code and the main usage for the electric wires are shown below.

The wire color and its main usage are different between Yamaha standard and ABYC standard.

TIP:

For the wires which use tracer stripes, the main color is followed by a slash then the tracer color.

For example:

R/G = Red wire with a green tracer stripe

Pu/W = Purple wire with a white tracer stripe

Color code	Wire color	Color sample	Main usage	
			Yamaha standard	ABYC standard
B	Black		Ground, Battery (-)	Ground
B/R	Black/Red		Remote-oil tank	
B/W	Black/White		Ignition coil primary	
Br	Brown		Neutral switch	Generator
Ch	Chocolate			
Dg	Dark green			
G	Green		Lighting coil 1 (tach signal 1)	
G/R	Green/Red		Oil warning	
G/W	Green/White		Lighting coil 2 (tach signal 2)	
Gy	Gray		Warning signal	Tacho signal
L	Blue		Instrument light, Remote choke	Instrument light
Lg	Light green		Trim down	
Or	Orange			Accessory feed
Or/B	Orange/Black			
P	Pink		Overheat warning, Trim signal	Fuel sensor
Pu	Purple		ECM	Ignition
Pu/W	Purple/White			
R	Red		Battery (+)	Battery (+)
Sb	Sky blue		Trim up	Oil pressure
V	Violet			
W	White		Engine stop switch	
W/R	White/Red		Pulser coil	
X	—		Not used	
Y	Yellow		Accessory feed	
Y/R	Yellow/Red		Diagnosis	Starting motor

**DIGITAL METER (6Y5)
SINGLE ENGINE W/ 703 RC
Above 115 ps (Mechanical RC)**



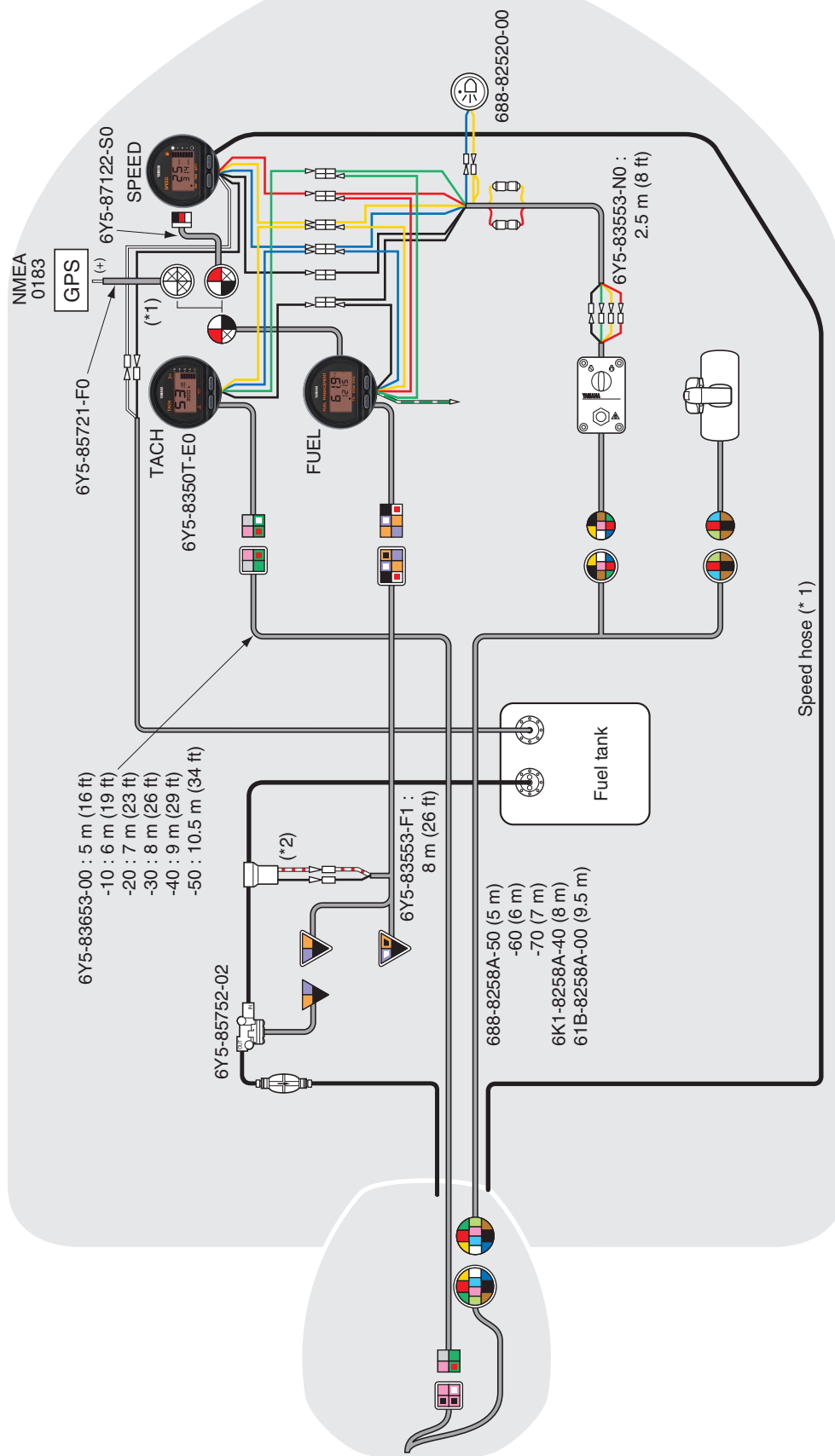
WIRING DIAGRAMS

DIGITAL METER (6Y5)

SINGLE ENGINE W/ 704 RC

Above 115 ps (Mechanical RC)

- (* 1) Select either speedometer or GPS (NMEA0183)
If GPS is connected, speed hose is not required.
(* 2) Water separator (Market obtainable)



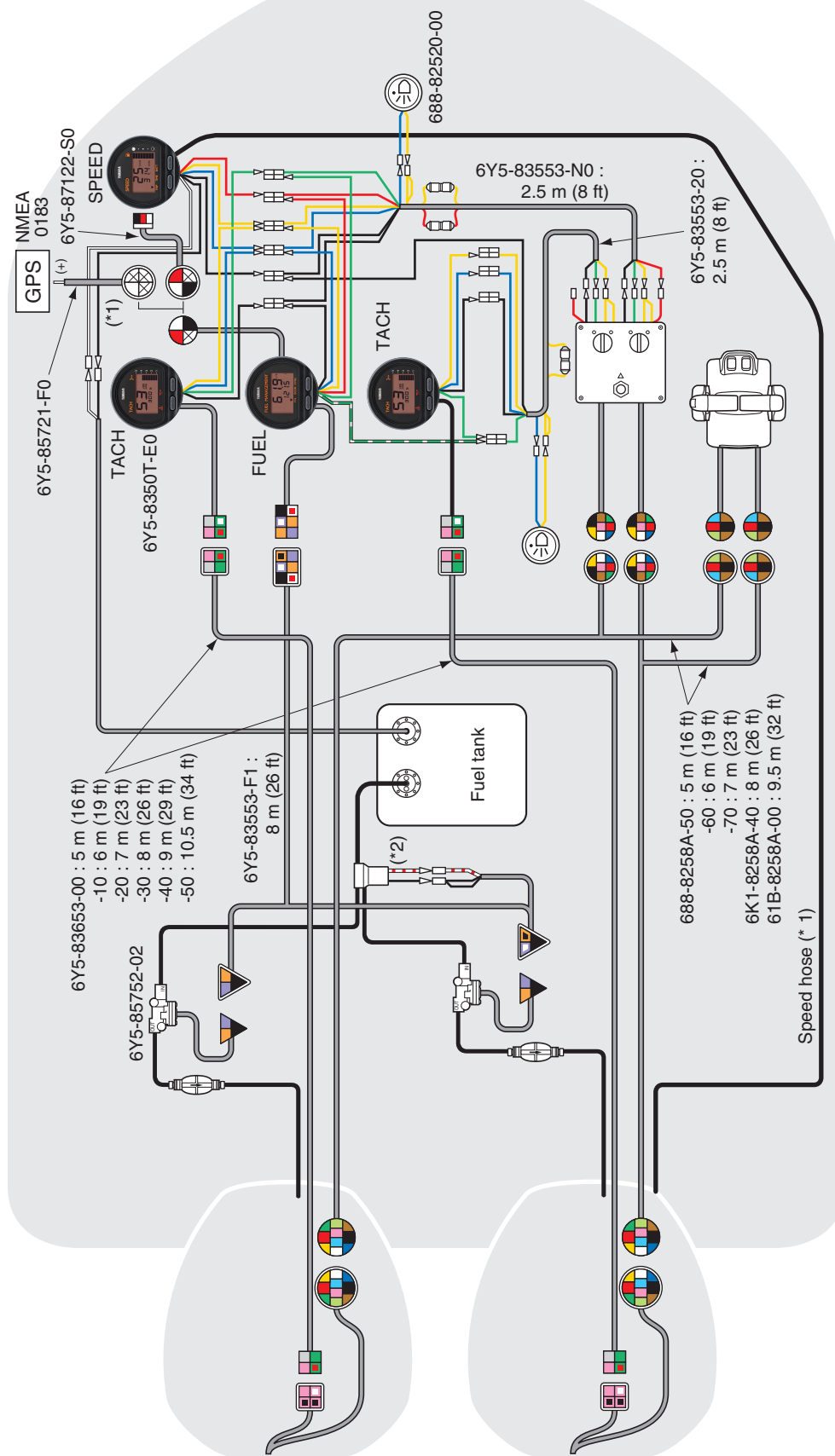
WIRING DIAGRAMS

DIGITAL METER (6Y5)

TWIN ENGINE W/ 704 RC

Above 115 ps (Mechanical RC)

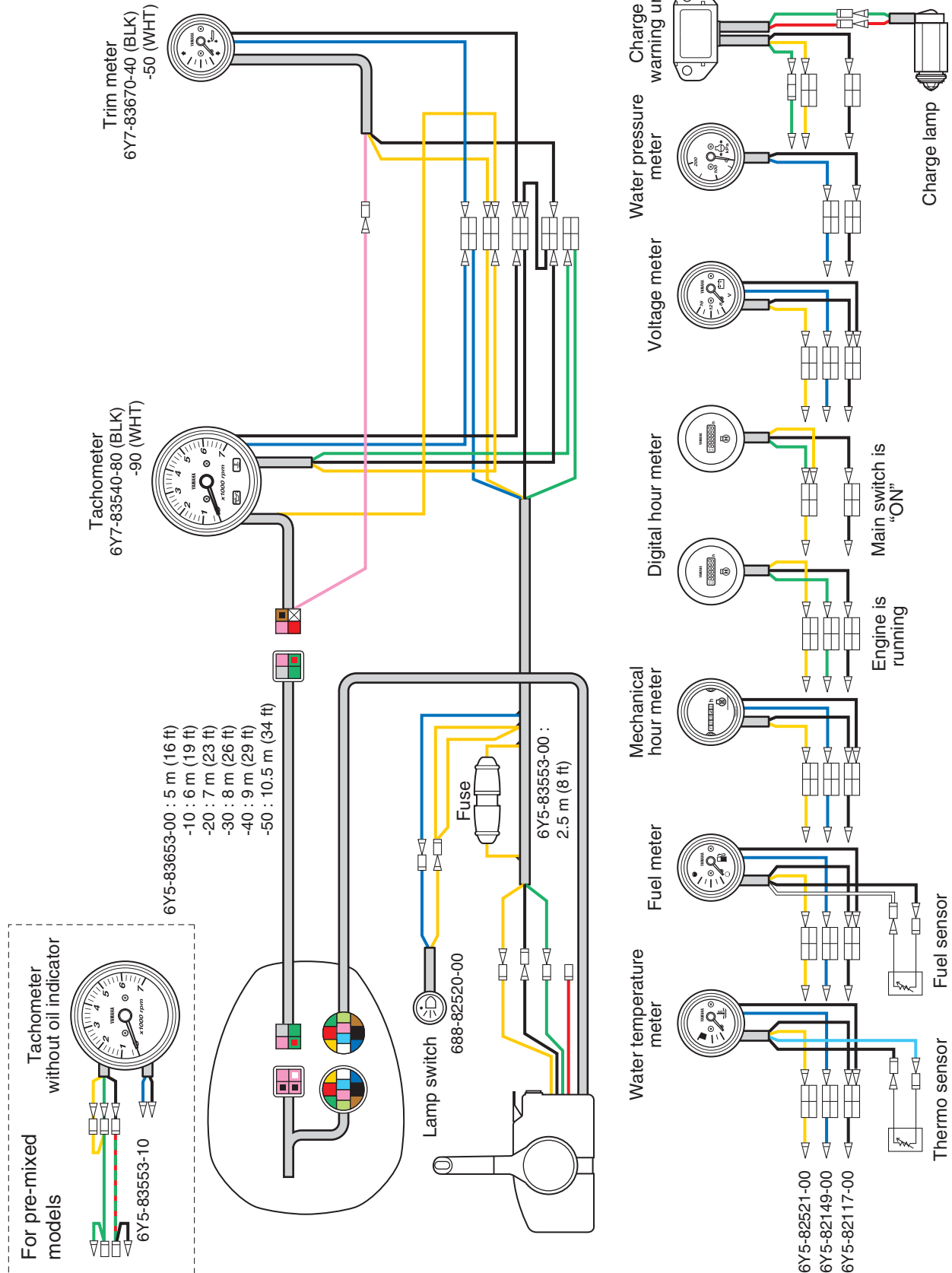
- (* 1) Select either speedometer or GPS (NMEA0183)
If GPS is connected, speed hose is not required.
(* 2) Water separator (Market obtainable)



WIRING DIAGRAMS

ANALOG METER (6Y7)

Above 40 w/ oil injection,
Above F30 (Mechanical RC)



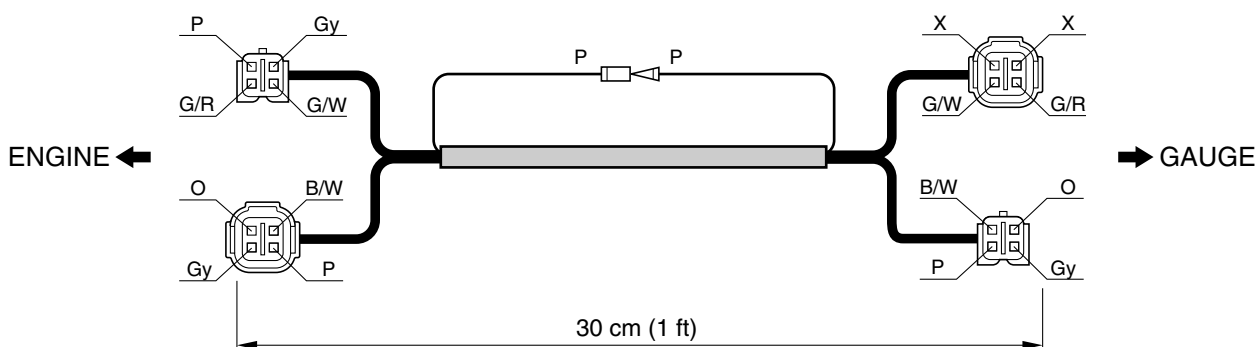
WIRING DIAGRAMS

INTERCHANGEABILITY BETWEEN TACHOMETER AND ENGINE (up to 2006 and after 2007)

The wire-harness adapter is available for connection between 2006 and former engines and 2007 and later gauges or between 2006 and former gauges and 2007 and later engines. The water detection warning and check engine warning are no longer activated if either 2007 and later engines or 2007 and later gauges are installed.

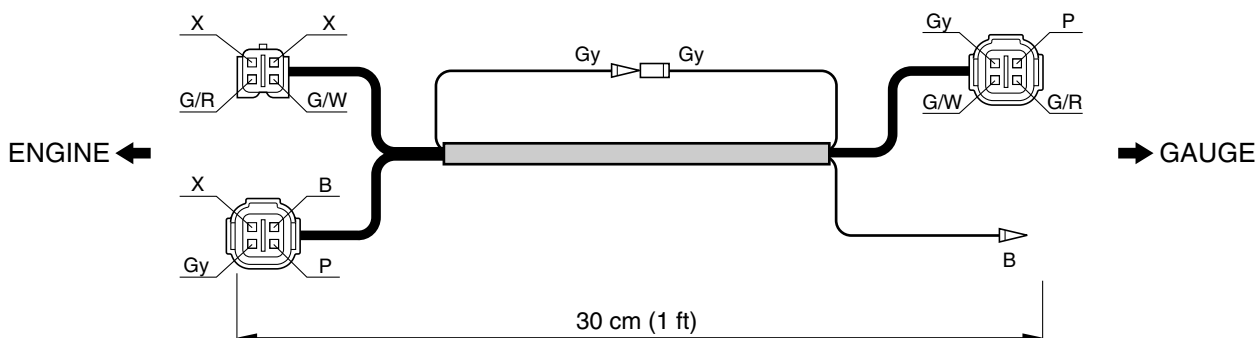
Wire-harness adapter 1

P/N: 6Y5-85335-00



Wire-harness adapter 2

P/N: 6Y5-85335-10



For US and Canada

The interchangeability between engine and gauge for model year is shown in the table below.

Engine	Gauge	Interchangeability
- 2003	- 2003	OK
	2004 - 2006	OK
	2007 -	Requires 6Y5-85335-10
2004 -	- 2003	Requires 6Y5-85335-00
	2004 - 2006	OK
	2007 -	OK

WIRING DIAGRAMS

ANALOG TACHOMETER

4-stroke engine (Fuel injected engines, F30A (F30), F40B (F40), FT50C, F50D and F100B)

Engine	Conventional EXT wire harness	Wire harness adapter	Gauge
-2006 		Wire harness adapter 2 6Y5-85335-10 : 30 cm (1 ft)	2007- 6Y7-83540-80/90 6Y7-83670-40/50
2007- 		Wire harness adapter 1 6Y5-85335-00 : 30 cm (1 ft) (*1) Connect to the ground wire.	-2006 6Y7-83540-40/50 6Y7-83670-00/20
Signal description (1) Trim GND (2) Overheat signal (3) Oil level signal (RED) (4) Oil level signal (GRN) (5) Trim signal (6) Oil press. signal (7) Water detection signal (8) Check engine signal (–) Not used	Combination trim and oil lead 68F-82553-50 : 5 m (16 ft) 68F-82553-60 : 6 m (19 ft) 68F-82553-70 : 7 m (23 ft) 68F-82553-80 : 8 m (26 ft) 68F-82553-90 : 9 m (29 ft) 68F-82553-A0 : 10.5 m (34 ft)		

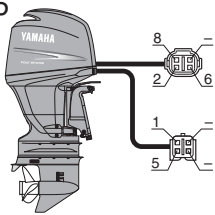
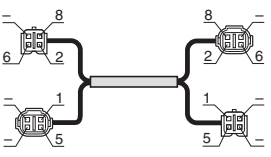
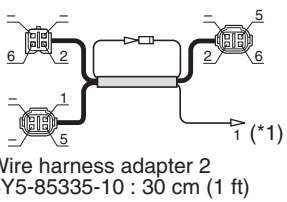
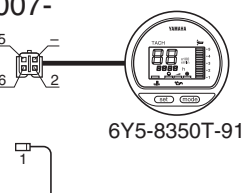
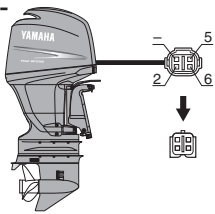
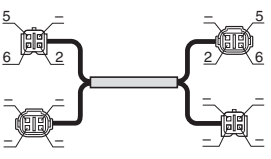
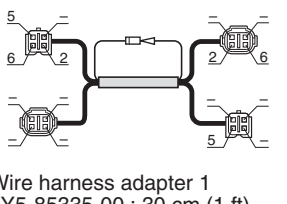
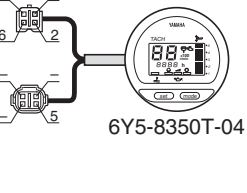
2-stroke engine (HPDI: 2007- Carbureted engines w/ oil injection: 2008-)

Engine	Conventional EXT wire harness	Wire harness adapter	Gauge
-2006 		Wire harness adapter 2 6Y5-85335-10 : (30 cm, 1 ft)	2007- 6Y7-83540-80/90 6Y7-83670-40/50
2007- 		Wire harness adapter 1 6Y5-85335-00 : 30 cm (1 ft) (*2) Disconnect the gray wire and insulate the terminals.	-2006 6Y7-83540-00/10 6Y7-83670-00/20
Signal description (1) Trim GND (2) Overheat signal (3) Oil level signal (RED) (4) Oil level signal (GRN) (5) Trim signal (6) Oil press. signal (7) Water detection signal (8) Check engine signal (–) Not used	Combination trim and oil lead 68F-82553-50 : 5 m (16 ft) 68F-82553-60 : 6 m (19 ft) 68F-82553-70 : 7 m (23 ft) 68F-82553-80 : 8 m (26 ft) 68F-82553-90 : 9 m (29 ft) 68F-82553-A0 : 10.5 m (34 ft)		(*3) Oil level signal (YLW)

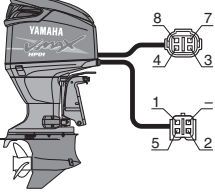
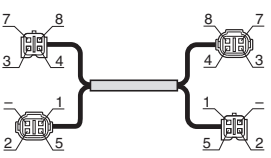
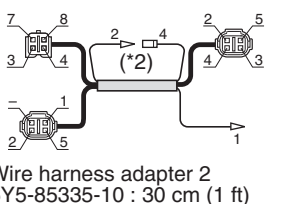
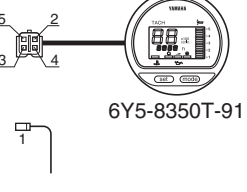
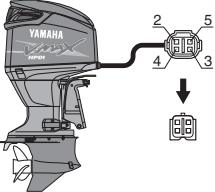
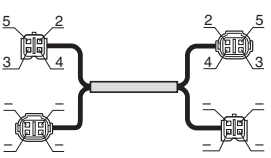
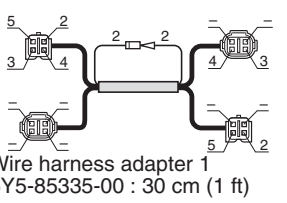
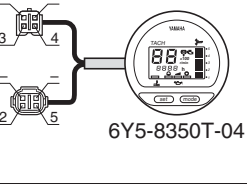
WIRING DIAGRAMS

DIGITAL TACHOMETER

4-stroke engine (Fuel injected engines, F30A (F30), F40B (F40), FT50C, F50D and F100B)

Engine	Conventional EXT wire harness	Wire harness adapter	Gauge
-2006 		 Wire harness adapter 2 6Y5-85335-10 : 30 cm (1 ft)	2007-  6Y5-8350T-91
2007- 		 Wire harness adapter 1 6Y5-85335-00 : 30 cm (1 ft)	-2006  6Y5-8350T-04
Signal description (1) Trim GND (2) Overheat signal (3) Oil level signal (RED) (4) Oil level signal (GRN) (5) Trim signal (6) Oil press. signal (7) Water detection signal (8) Check engine signal (–) Not used	Combination trim and oil lead 68F-82553-50 : 5 m (16 ft) 68F-82553-60 : 6 m (19 ft) 68F-82553-70 : 7 m (23 ft) 68F-82553-80 : 8 m (26 ft) 68F-82553-90 : 9 m (29 ft) 68F-82553-A0 : 10.5 m (34 ft)	(*1) Connect to the ground wire.	

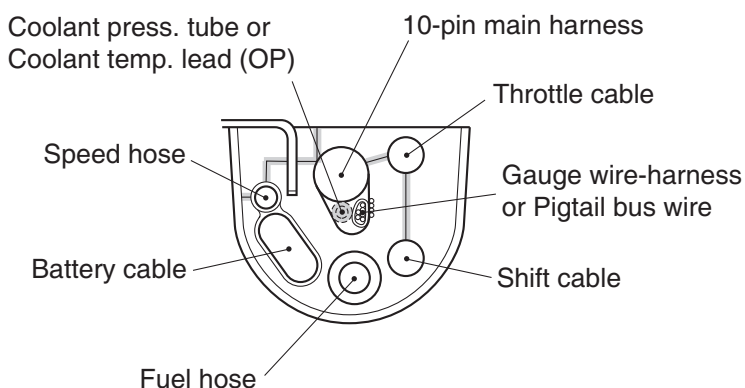
2-stroke engine (HPDI: 2007- Carbureted engines w/ oil injection: 2008-)

Engine	Conventional EXT wire harness	Wire harness adapter	Gauge
-2006 		 Wire harness adapter 2 6Y5-85335-10 : 30 cm (1 ft)	2007-  6Y5-8350T-91
2007- 		 Wire harness adapter 1 6Y5-85335-00 : 30 cm (1 ft)	-2006  6Y5-8350T-04
Signal description (1) Trim GND (2) Overheat signal (3) Oil level signal (RED) (4) Oil level signal (GRN) (5) Trim signal (6) Oil press. signal (7) Water detection signal (8) Check engine signal (–) Not used	Combination trim and oil lead 68F-82553-50 : 5 m (16 ft) 68F-82553-60 : 6 m (19 ft) 68F-82553-70 : 7 m (23 ft) 68F-82553-80 : 8 m (26 ft) 68F-82553-90 : 9 m (29 ft) 68F-82553-A0 : 10.5 m (34 ft)	(*2) Disconnect the gray wire and insulate the terminals.	

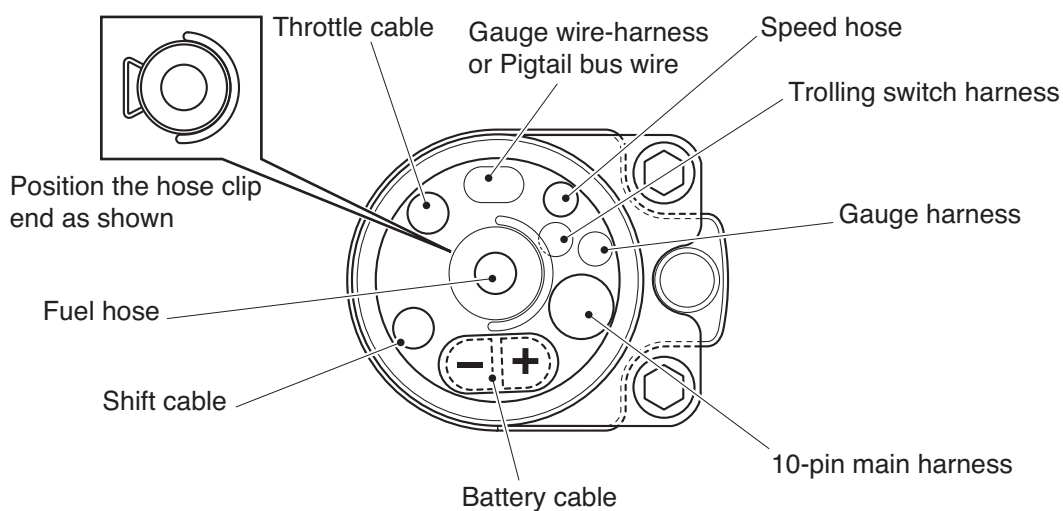
RIGGING GROMMET DESCRIPTION

If an optional equipment will be installed, cut out the surface skin on the prescribed position of rigging grommet.

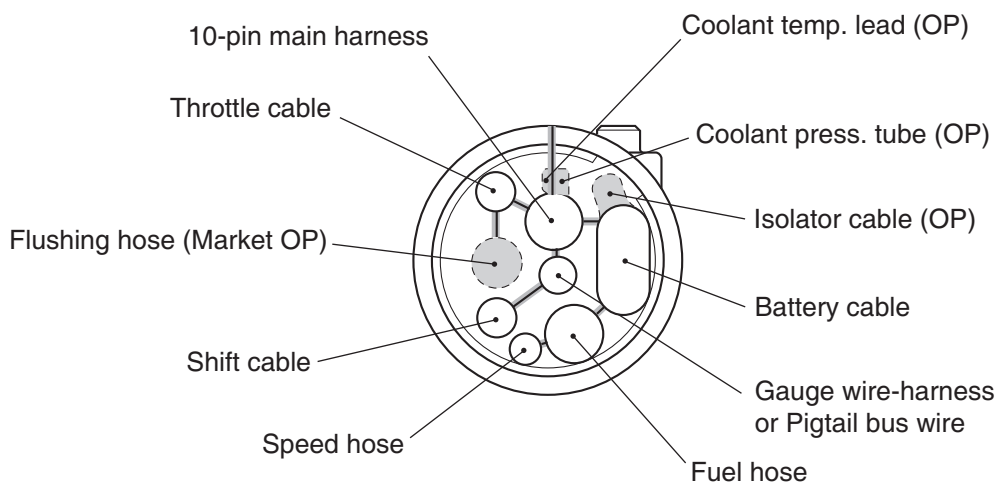
F80B, F90B, F100D



F75D, F80D, F90C, F90D, F100F, F/FL115B, F130A (F75B, F90B, VF90A, F/LF115B, VF115A, F130A)

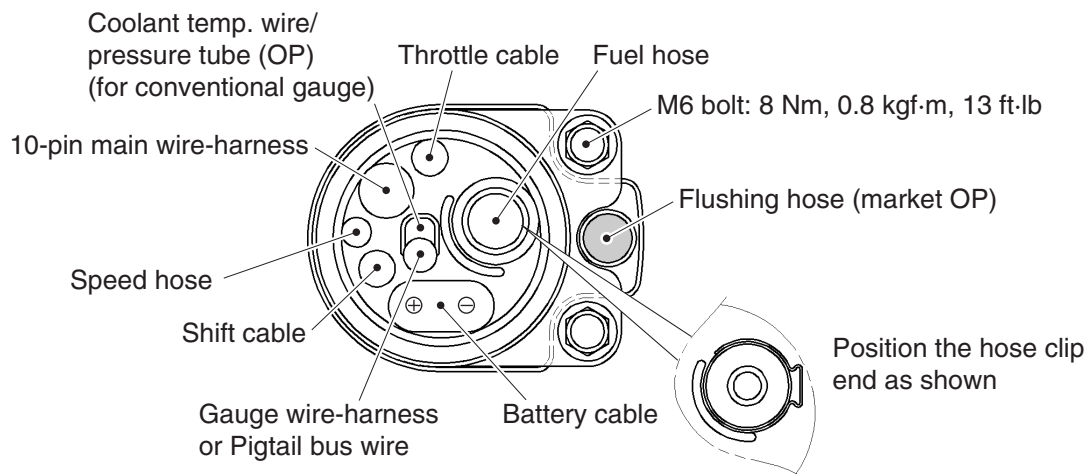


F200, F225, F250 (V6-3.3L, VCT)

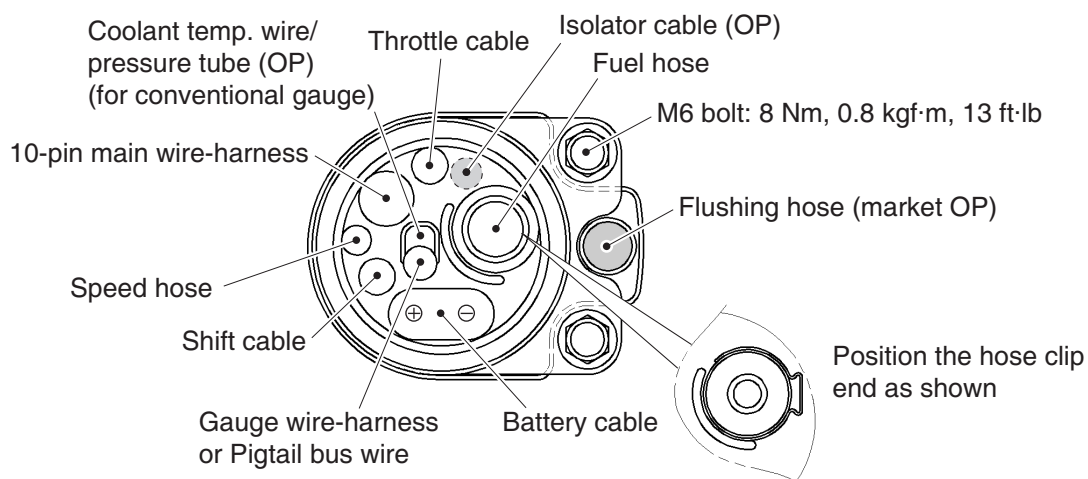


RIGGING GROMMET DESCRIPTION

F200-F300 (V6-4.2L, Mechanical RC)

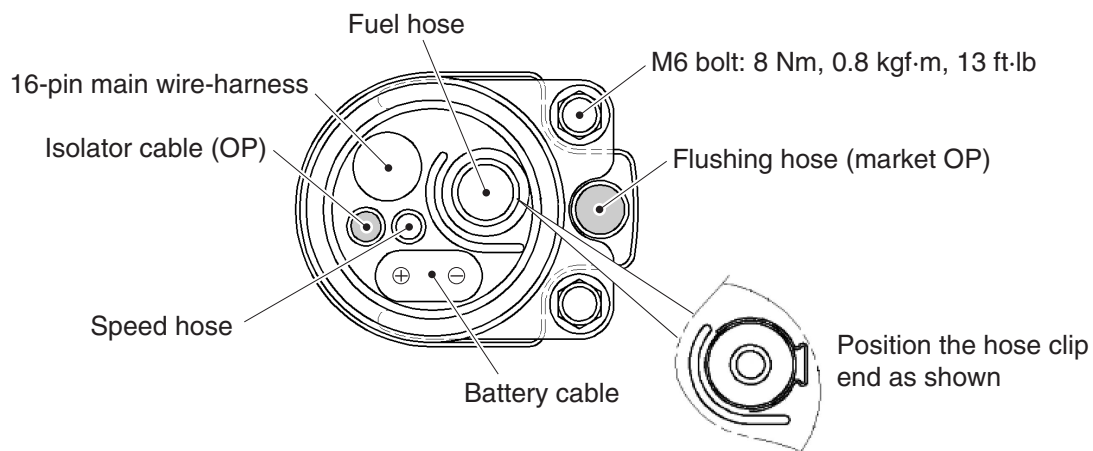


F150-F200 (L4-2.8L, Mechanical RC)

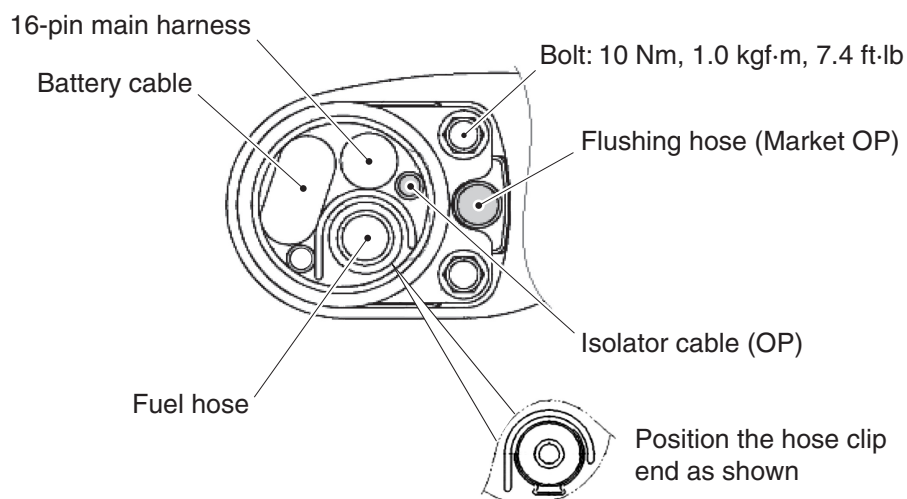


RIGGING GROMMET DESCRIPTION

F200 (L4-2.8L, DEC), F225-F300 (V6-4.2L, DEC)



F350 (V8-5.3L, DEC)



DIGITAL NETWORK GAUGE (6YC & 6Y8)

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DIGITAL NETWORK GAUGE (6YC, 6Y8) COMPATIBLE MODELS

The following models can accept the digital network gauges.

Electronic fuel injected 4-stroke engines

- * **US & Canada: 2006 and later models**
- * **Others: 2007 and later models**

Also, those engines can accept the conventional 6Y5 and 6Y7 gauges.

Therefore, you must select one of two gauge systems.

If you select the digital network gauge system, see the information below.

For further information, see the applicable service guide, installation manual, etc.

DIGITAL NETWORK GAUGE (6Y8)

Similar shape design as conventional 6Y5 digital gauges.

Compatible with both 6Y8 and 6Y9 networks.

1



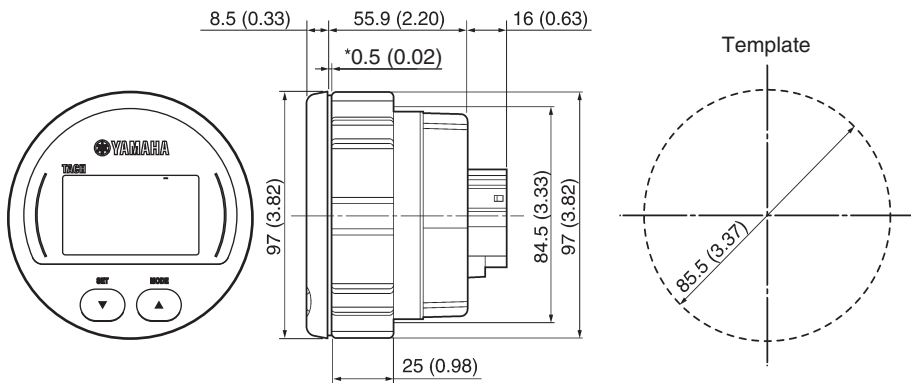
2



Ref. No.	Part name	Part No.	Remarks
1	Tachometer	6Y8-8350T-20	
2	Speedometer and Fuel meter unit	6Y8-83500-20	Requires optional speed sensor, or NMEA compatible GPS

Dimensions

mm (in.)

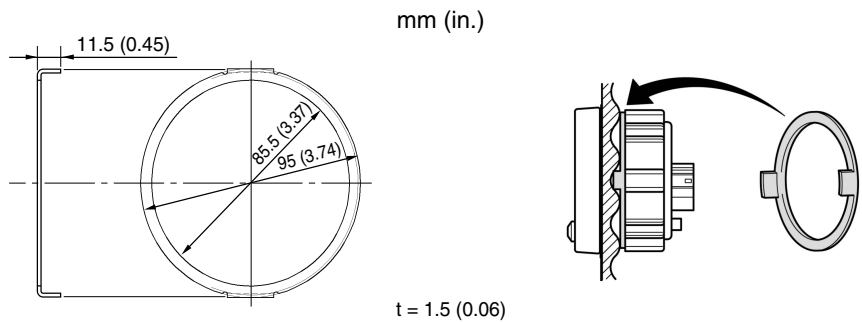


* Gasket thickness

DIGITAL NETWORK GAUGE (6Y8)

FITTING PLATE

If the fitting surface is rough, insert the plate between a board and the ring nut of gauge.



Part No.	Remarks
6Y8-83514-00	For 6Y8 meters

DIGITAL NETWORK GAUGE (6YC)

LCD color screen, arrow key, acceptable for twin engine application.
Tachometer, speedometer, and fuel meter are all integrated into one unit.
Compatible with both 6Y8 and 6Y9 networks.

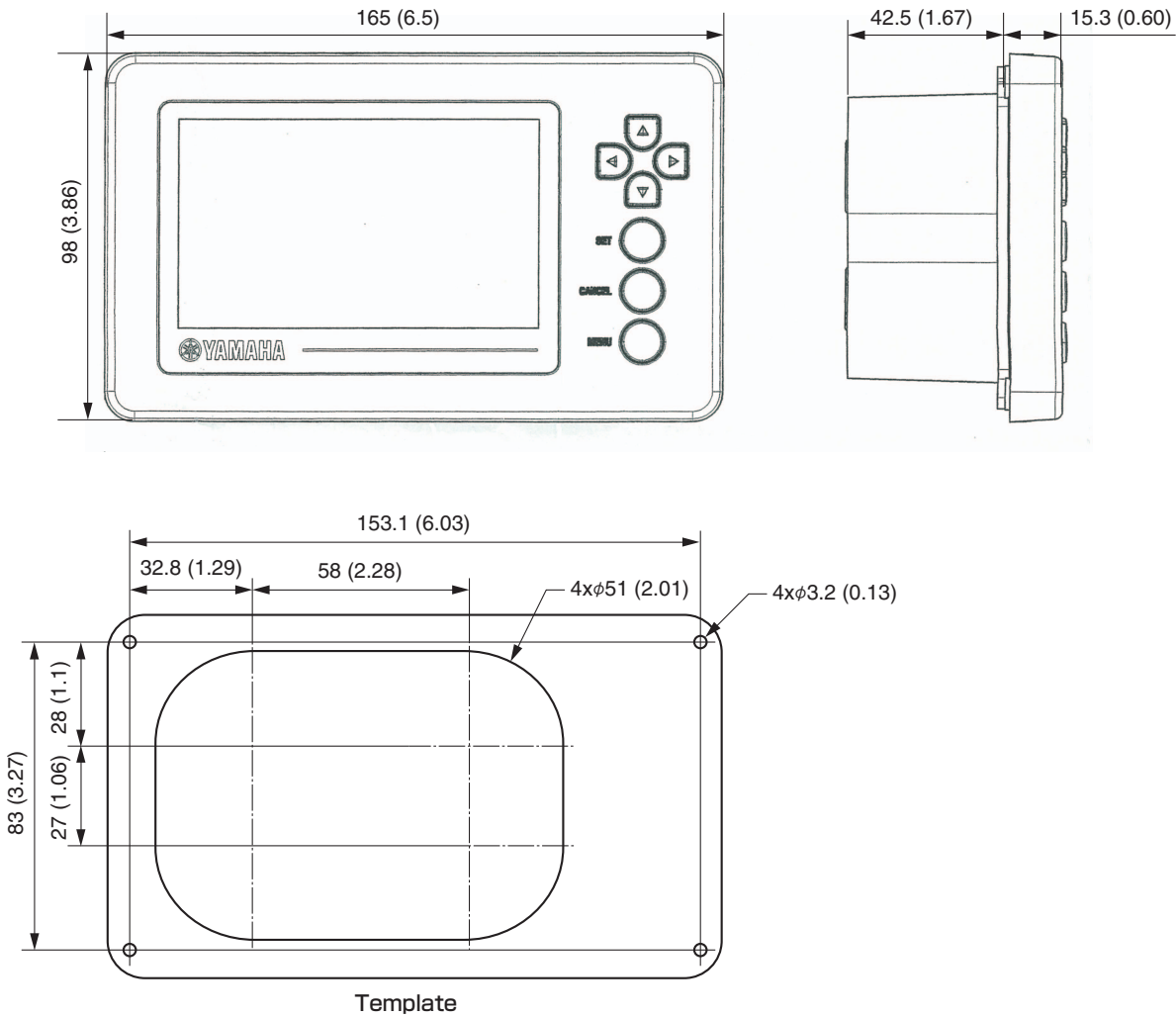
1



Ref. No.	Part name	Part No.	Remarks
1	Multifunction gauge ASSY	6YC-83710-02	w/ screen cover (6YC-87278-00)

Dimensions

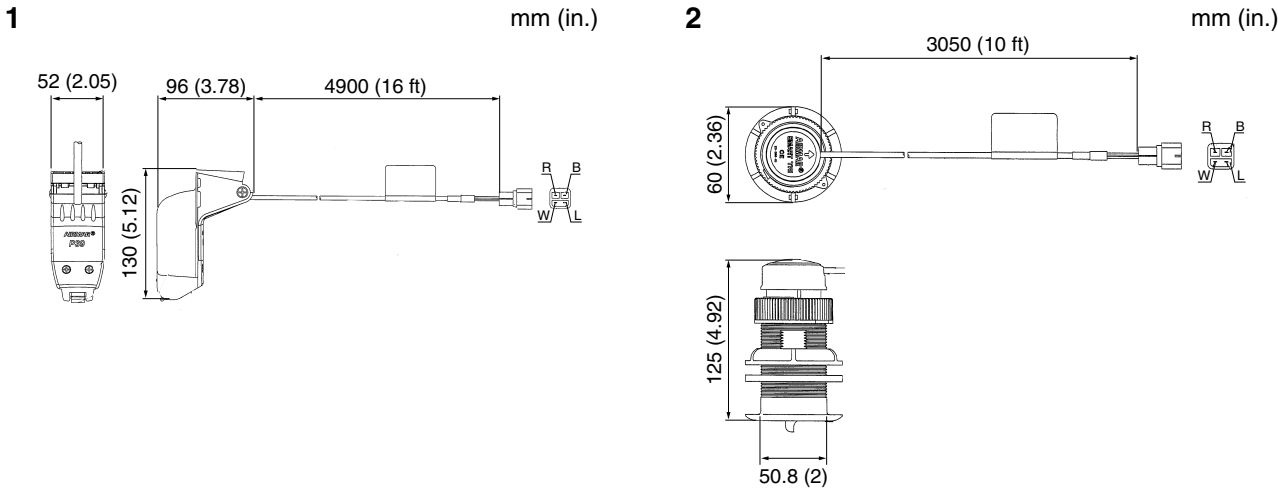
mm (in.)



OPTIONAL EQUIPMENT

MULTI-SENSOR APPLICATION

Boat speed, water depth and water surface temperature can be obtained.
For installation, see the instruction which is accompanied with the sensor.



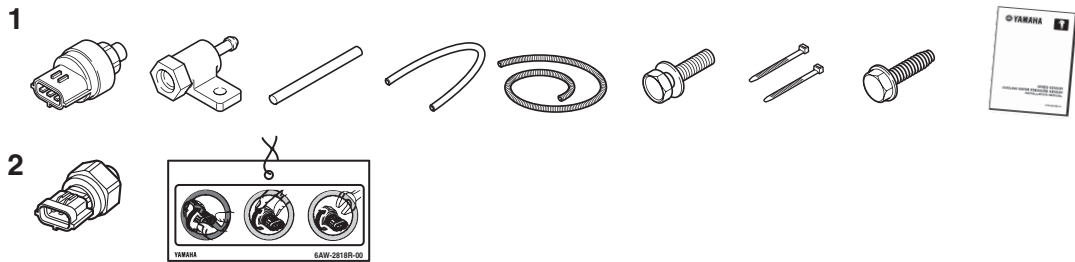
Ref. No.	Part name	Part No.	Remarks
1	Transom multi-sensor	6Y8-83688-01	
2	Thru-hull multi-sensor 1	6Y8-83688-11	Plastic body
	Thru-hull multi-sensor 2	6Y8-83688-20	Bronze body

TIP: _____
Discontinued, available for stock only. After sold out, 6Y9-83688-00 will be supplied. Refer to 6-17 for setting.

SPEED SENSOR KIT

Used to pick up the pitot tube pressure for water speed. For installation and connection, see the instruction in the kit.

The speed sensor kit may be included in the rigging kit.

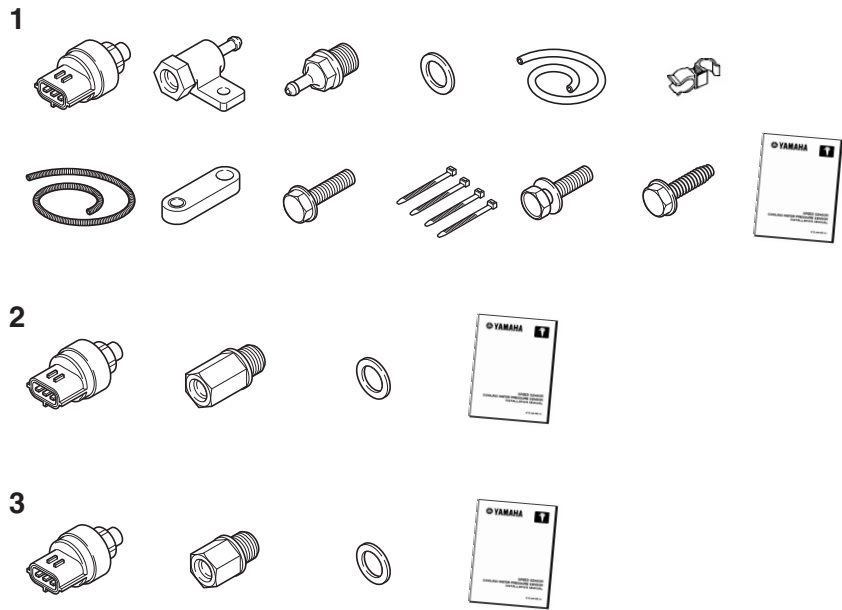


Ref. No.	Kit Part No.	Remarks
1	60V-8A4L1-17	Fuel injected F30-F300 (V6)
2	6AW-W0035-00	Fuel injected F30-F300 (V6)

OPTIONAL EQUIPMENT

COOLANT PRESSURE SENSOR KIT

Used to pick up the coolant pressure of engine. For installation and connection, see the instruction in the kit.

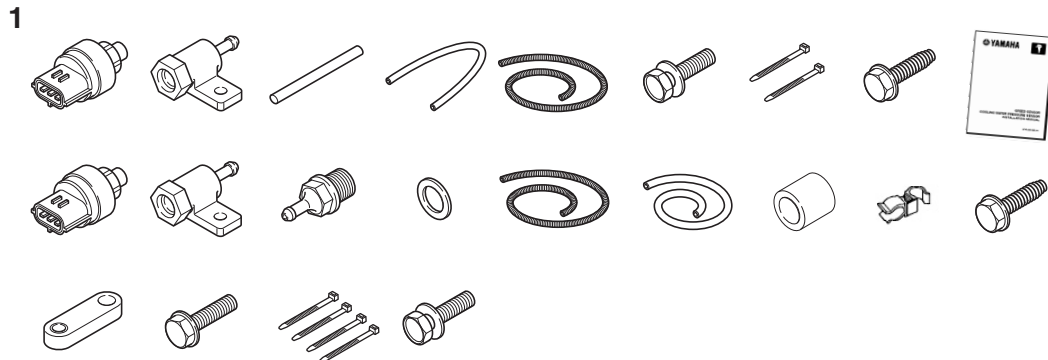


Ref. No.	Kit Part No.	Remarks
1	60V-8A4L0-17	Fuel injected F30-F115 (68V)
2	69J-8A4L0-23	F200-F225 (V6-3.3L)
3	63P-8A4L0-03	F150-F200 (L4-2.8L), F200-F250 (V6-3.3L, VCT), F225-F300 (V6-4.2L, DEC)

* For F350, factory-installed as standard.

SPEED/COOLANT PRESSURE SENSORS KIT

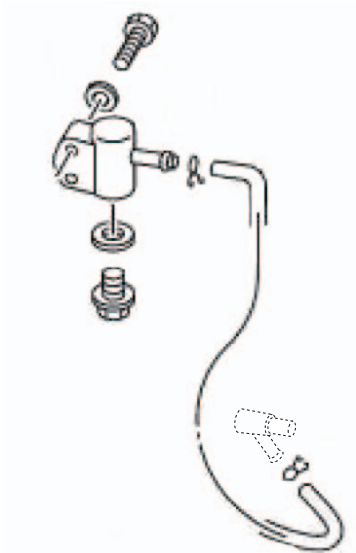
Ref. No.	Kit Part No.	Remarks
1	60V-8A4L2-03	F115 (L4-1.7L), F115-F130 (L4-1.8L)



OPTIONAL EQUIPMENT

COOLANT PRESSURE SENSOR CONNECTOR KIT

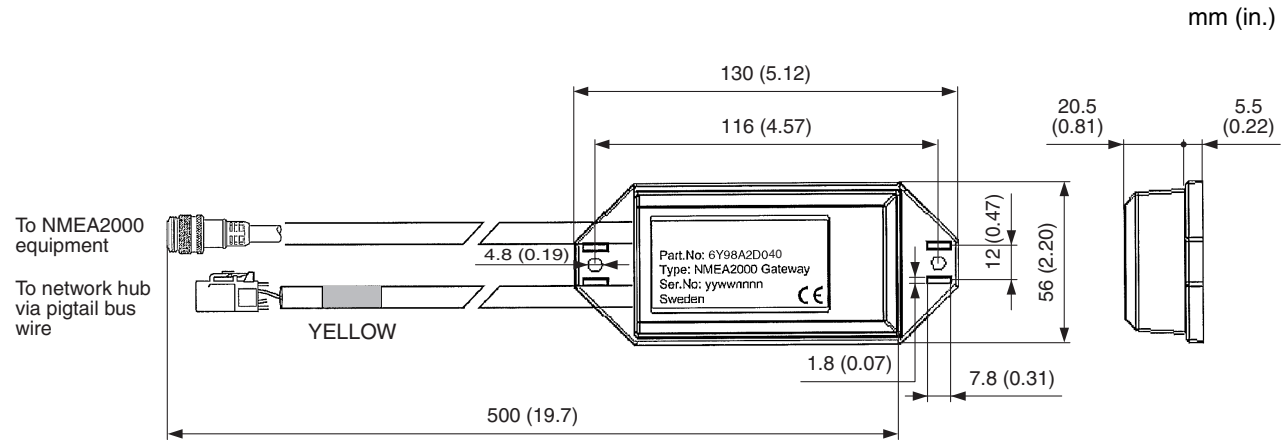
Ref. No.	Kit Part No.	Remarks
1	6P2-83728-00	As a set with COOLANT PRESSURE SENSOR KIT for F200–F250 (V6-3.3L)



NMEA2000 GATEWAY

Used to connect between NMEA2000 compatible equipment and network hub.

Part No.	Remarks
6Y9-8A2D0-40	Compatible with 6Y8 and 6Y9 protocols

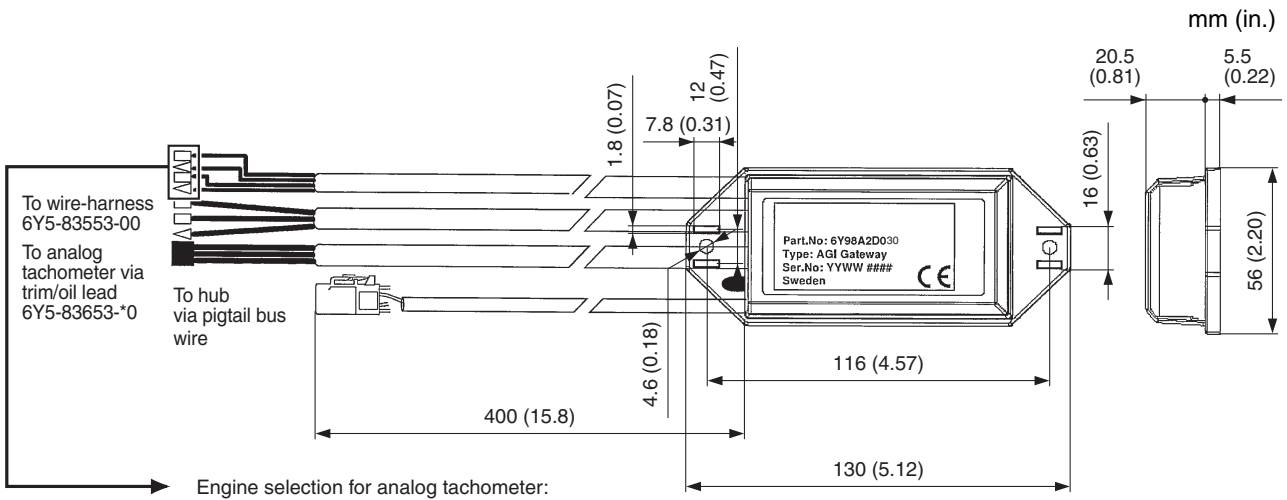


OPTIONAL EQUIPMENT

ANALOG GAUGE INTERFACE (AGI)

Used to connect between analog gauge and network hub.

Part No.	Remarks
6Y9-8A2D0-30	Compatible with 6Y8 and 6Y9 protocols, Required for each engine.



Engine selection for analog tachometer:

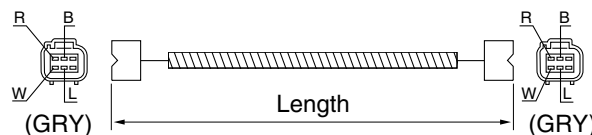
Single engine	PORT engine	—	—	—
Twin engine	PORT engine	—	—	STBD engine
Triple engine	PORT engine	CENTER engine	—	STBD engine
Quad engine	PORT engine	CENTER PORT engine	CENTER STBD engine	STBD engine
L B Or B L B Or B L B Or B L B Or B				

WIRE HARNESS

MAIN BUS WIRE

Used to connect between hub and hub.

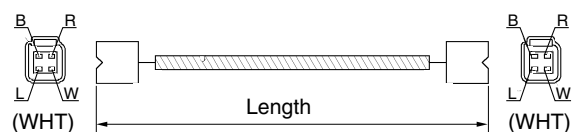
Part No.	Length	Remarks
6Y8-82553-41	9.1 m (30 ft)	
6Y8-82553-31	7.6 m (25 ft)	
6Y8-82553-21	6.1 m (20 ft)	
6Y8-82553-11	4.6 m (15 ft)	
6Y8-82553-50	3.0 m (10 ft)	
6Y8-82553-01	0.3 m (1 ft)	



PIGTAIL BUS WIRE

Used to connect between the hub and gauge and/or between the engine and the hub.

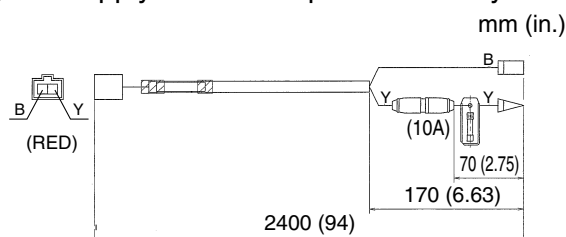
Part No.	Length	Remarks
6Y8-82521-51	3.6 m (12 ft)	
6Y8-82521-41	2.7 m (9 ft)	
6Y8-82521-31	1.8 m (6 ft)	
6Y8-82521-21	0.9 m (3 ft)	
6Y8-82521-11	0.6 m (2 ft)	
6Y8-82521-01	0.3 m (1 ft)	



SYSTEM POWER SUPPLY WIRE

Used to connect between the switch panel and the hub, and supply the electric power to the system.

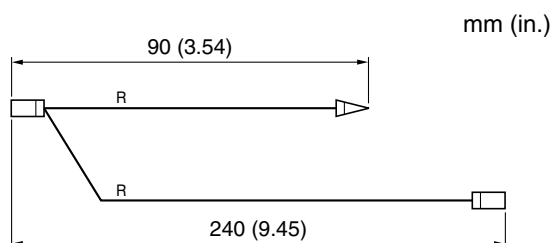
Part No.	Remarks
6Y8-83553-01	With 10 amp fuse



IMMOBILIZER POWER DISTRIBUTION WIRE 1

This wire lead is used to supply permanent electric power to the immobilizer unit in case of multi-application.

Part No.	Remarks
6H5-81315-00	For fuel injection four stroke multi-application w/ immobilizer

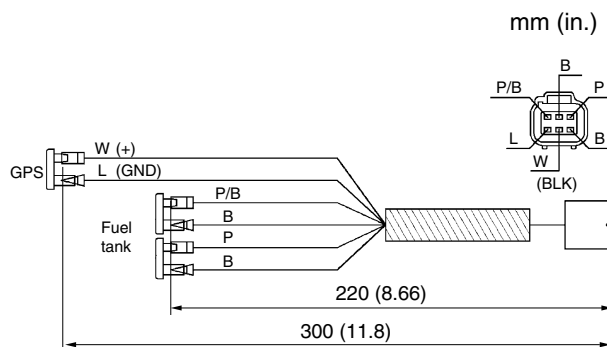


WIRE HARNESS

FUEL TANK / GPS WIRE

Used to connect between a fuel tank level sensor and/or an MNEA0183 compatible GPS and the gauge (speedometer).

Part No.	Remarks
6Y8-8356N-01	Twin fuel tanks acceptable



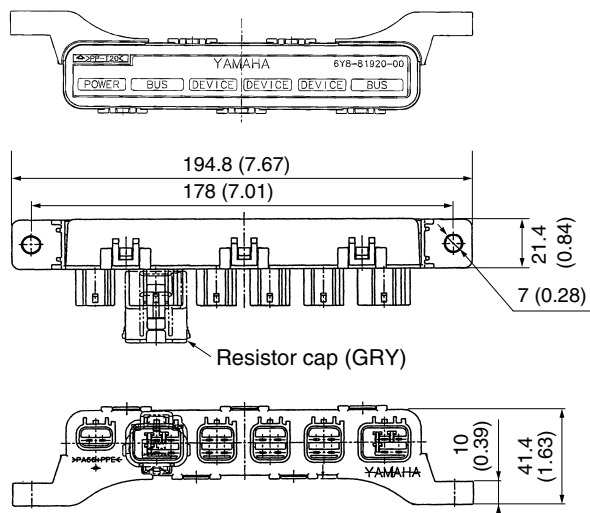
NETWORK HUB

Used to distribute the digital signal and electric power to the gauges and the other hubs.

Ref. No.	Part name	Part No.	Remarks
1	Multi-hub	6Y8-81920-01	With ending resistor cap (P/N: 6Y8-85371-01)
2	Single hub (Inline hub)	6Y8-81920-11	Included ending resistor
3	2-pin sealing cap, RED	6Y8-82582-01	
4	4-pin sealing cap, WHT	6Y8-82582-11	Same as bus wire cap of engine wire harness

1

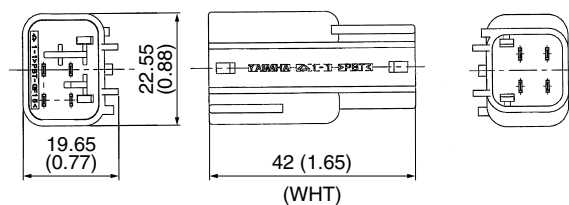
mm (in.)



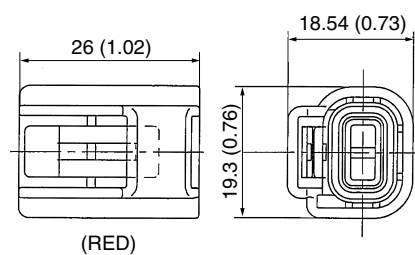
* Face the connectors downward for installation.

2

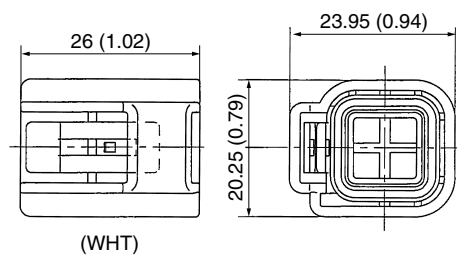
mm (in.)



3



4



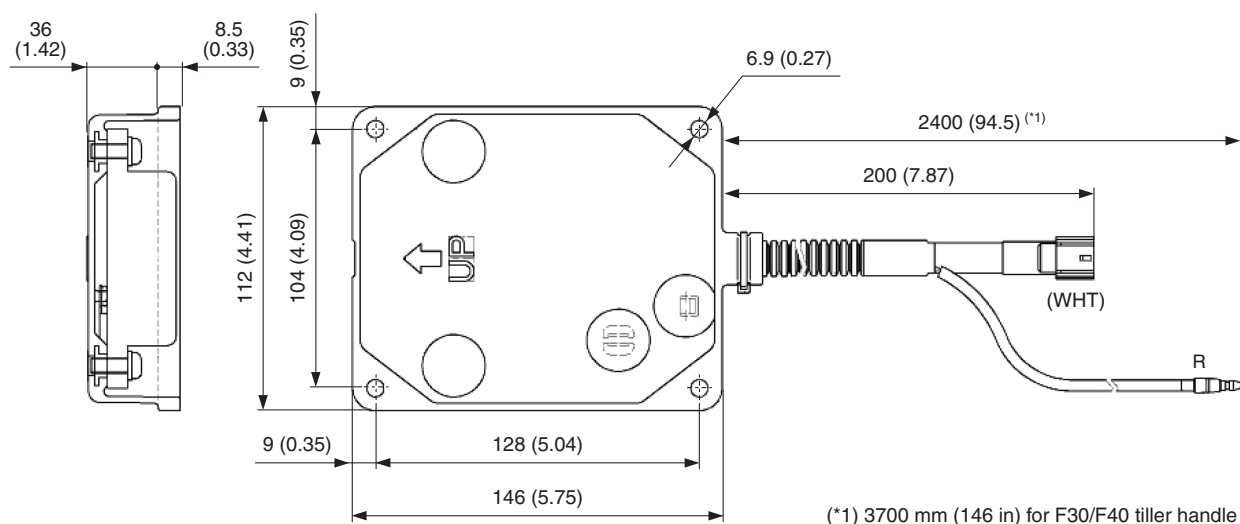
IMMOBILIZER UNIT

Immobilizer acceptable model:

Fuel injected F25 (E)
Fuel injection F30 and F40
Fuel injection F40(4-cyl) up to F100 (2010 and later model)
F/FL115 (2011 and later model), F115C (VF115A), F130A
F/FL150 (manufactured after January 2012)
F/FL150-F/FL200 (L4-2.8L), F/FL225-F/FL300 offshore (V6-4.2L), VF200-VF250 SHO and F225-F275 SHO (V6-4.2L)
F/FL350 (2011 and later model)

Yamaha Security System limits the engine speed to the specified level even when the Y-COP circuit is disconnected.

Part No.	Remarks
6Y8-86254-03	For EU, RC
6Y8-86254-12	For EU, F30/F40 tiller handle
6Y8-86254-22	For US/ANZ, RC
6Y8-86254-30	For JPN, RC

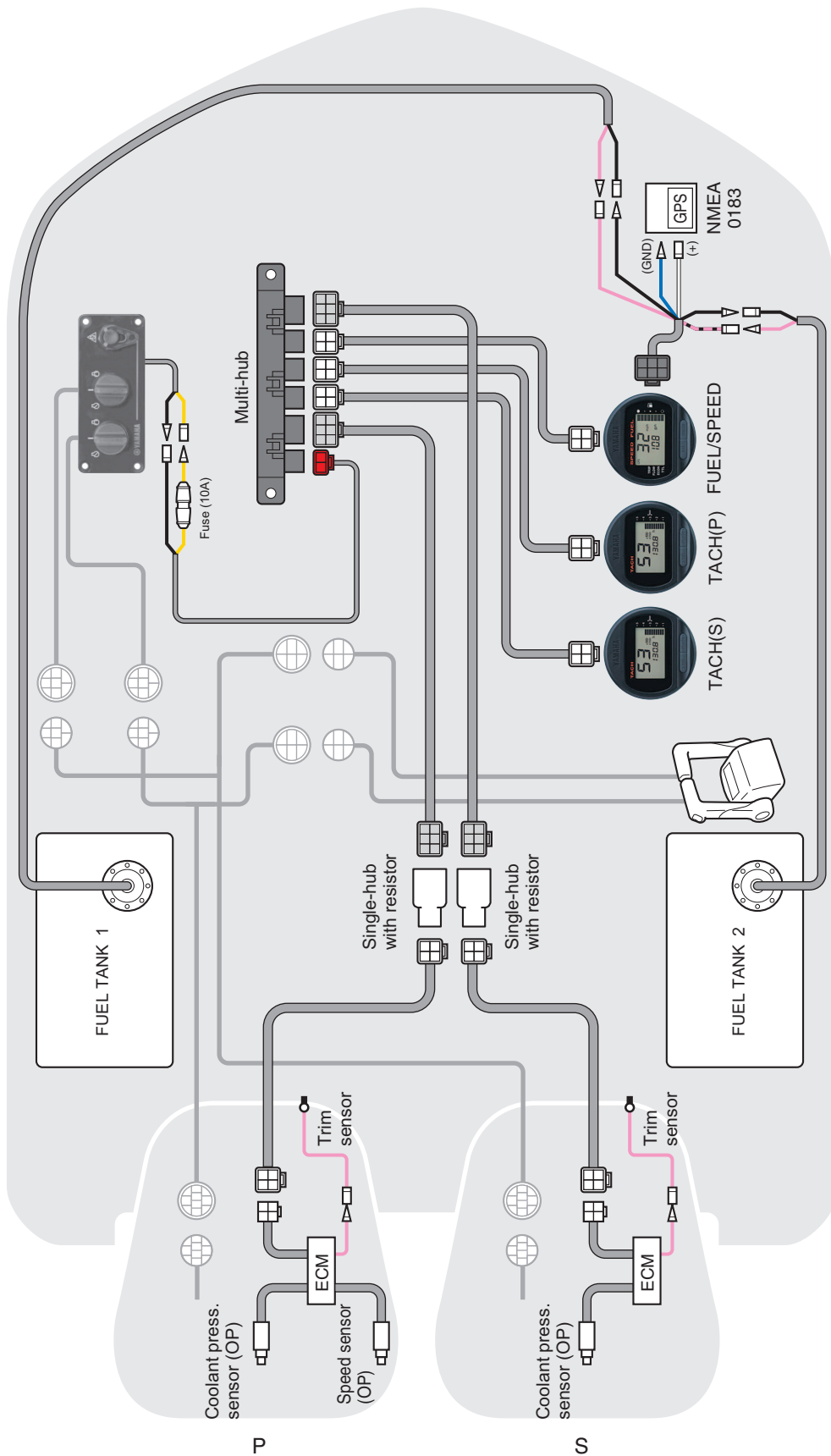


FUEL INJECTED F25-F250 [Mechanical RC] SINGLE ENGINE APPLICATION



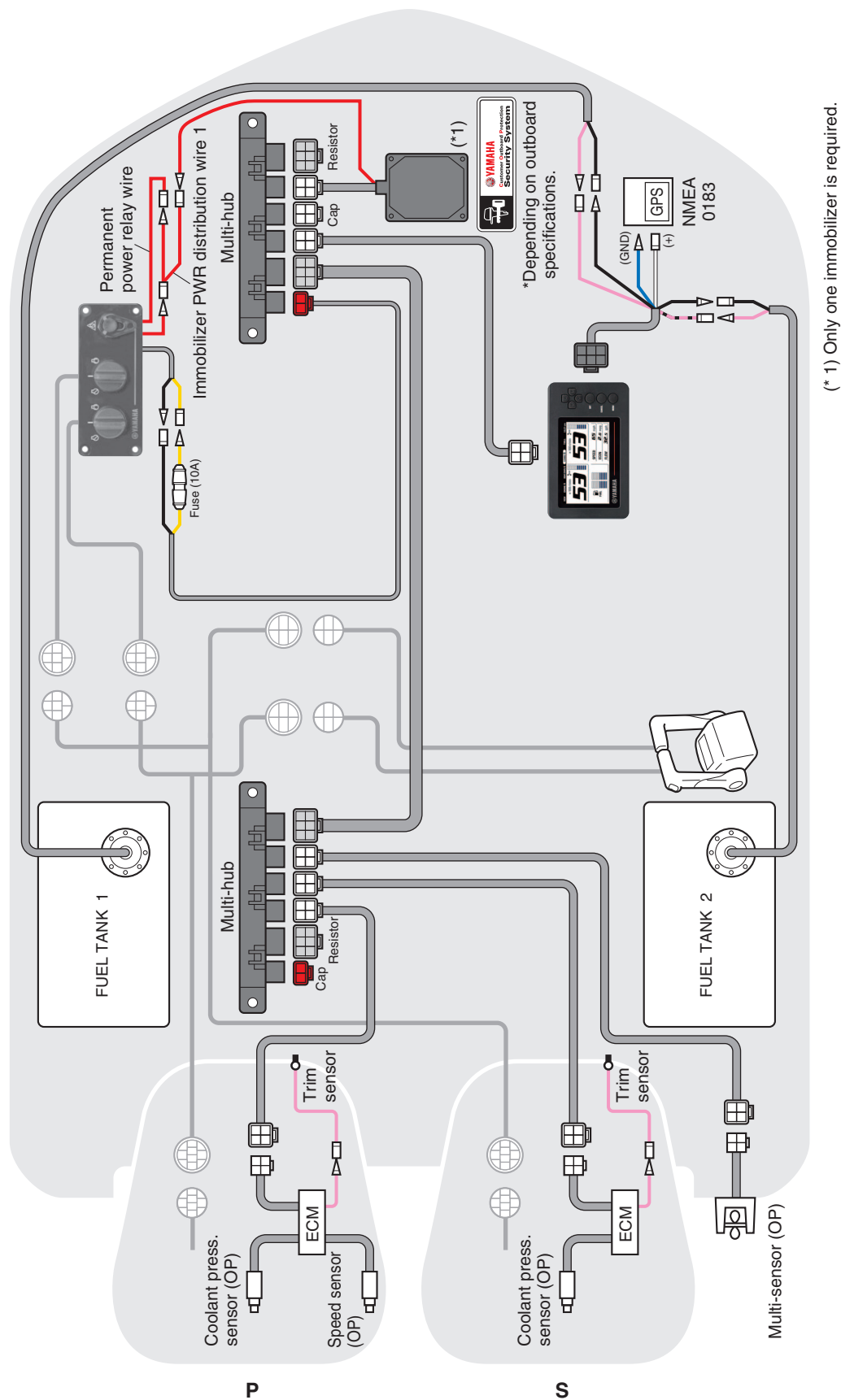
NETWORK WIRING DIAGRAMS

FUEL INJECTED F115-F250 [Mechanical RC] TWIN ENGINE APPLICATION (Simple)



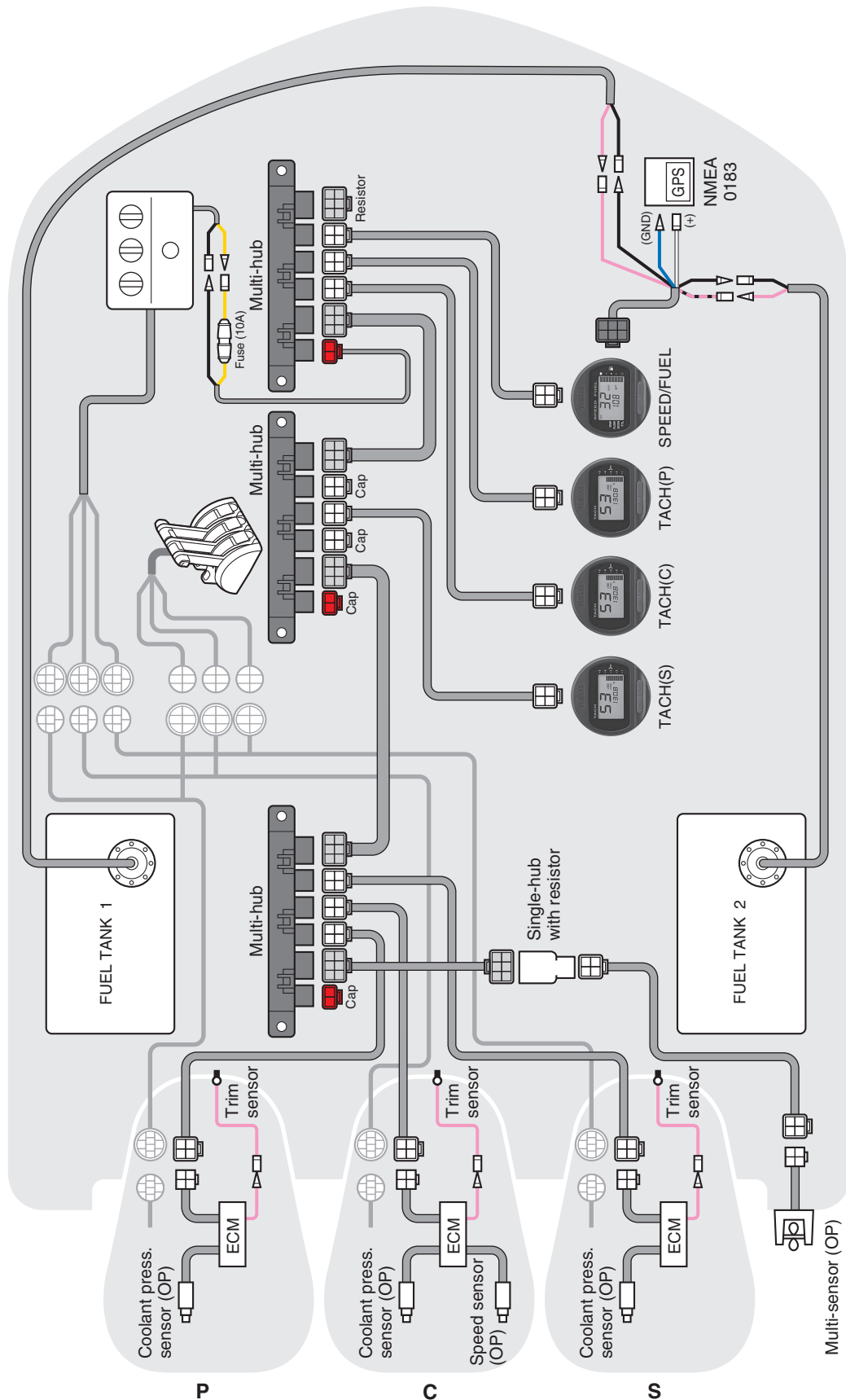
NETWORK WIRING DIAGRAMS

FUEL INJECTED F115-F250 [Mechanical RC] TWIN ENGINE APPLICATION (STD)



NETWORK WIRING DIAGRAMS

FUEL INJECTED F115-F250 [Mechanical RC] TRIPLE ENGINE APPLICATION



INITIAL GAUGE SETUP

If two or more engines with digital network gauges are installed, the initial setup is required for proper gauge operation.

The ignition switches have to be turned to ON in order from Port to Starboard in 2 seconds or more interval, which can memorize the engine number into each ECM by a rule.

The 1st turned on ignition switch is memorized as No.1 engine.

The 2nd turned on is memorized as No.2 engine.

This can obtain easier engine number recognition for gauge setup.

When the initial recognition setup has been stumbled, reset the engine number and perform it again.

For further information, see the installation manual in the rigging kit.

For DEC engines, the Digital Electronic Control system recognizes the engine number automatically, therefore the key switch ON in number order is not required.

To be continued.

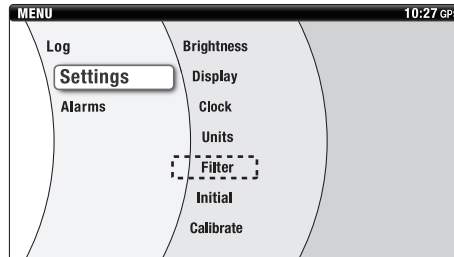
INITIAL GAUGE SETUP

SETTING FOR GAUGE WHEN 6Y9 MULTI-SENSOR IS CONNECTED

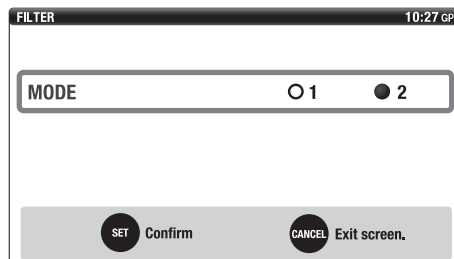
If the 6Y9 multi-sensor (6Y9-83688-00) is connected to the 6YC multifunction meter or 6Y8 multi-function speed/fuel meter (6Y8-83500-20), set the gauge as shown below to enable the sensor.

Digital Network Gauge (6YC)

1. While [Setting] is selected on the menu screen, press and hold the [SET] button and [MENU] button simultaneously for 10 seconds. [Filter] will appear on the menu screen. Select [Filter] and press the [SET] button.



2. Use the directional keypad to select "2".



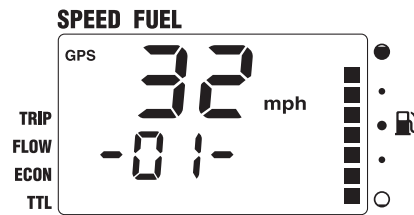
3. Press the [SET] button. The setting for the sensor is enabled. The display returns to the menu screen.

To be continued.

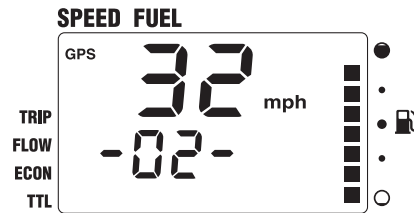
INITIAL GAUGE SETUP

Digital Network Gauge (6Y8)

1. Press and hold the [SET] button for 10 seconds on the normal display. The mode "01" screen will appear.



2. Press the [MODE] button to select the mode "02".



3. Press the [SET] button for 1 second to finalize the setting and return to the normal display.

TIP: _____

If no button operation is made for 30 seconds while setting, the setting will be automatically cancelled and return to the normal display.

TROUBLESHOOTING

The following table shows major troubles presumed if the setup is not done correctly.

Symptom	Cause	Measure	Note
Tachometer shows incorrect engine RPM.	Engine recognition is wrong. (for multi-applications)	Push SET for 10 seconds to default the engine number. Memorize each engine number again.	See the operation manual and rigging manual.
Fuel meter shows incorrect fuel level.	Fuel sensor selection is wrong.	Setup the fuel sensor to correct resistance.	ABYC sensor: 33-240 Ω (Default) Europe sensor: 180-0 Ω YAMAHA sensor: 5-105 Ω
Gauge shows incorrect remaining fuel	Remaining fuel setting is wrong. (for 6YC Gauge)	Calibrate the tank sensor correctly.	See the operation manual and rigging manual.
Gauge shows incorrect fuel consumption	Engine recognition is wrong. (for multi-applications)	Default the engine number, and turn the key switch on in order from portside engine to rememorize each engine number.	See Custom Mode of Tachometer for procedure to setup the engine number.
Gauge display does not wakeup.	Electric power is not supplied. Gauge is damaged.	Replace fuse. Connect the couplers securely. Replace the damaged wire or hub. Replace the gauge.	Be sure to use 10 amp fuse.
Illumination does not light.	Electric power is not supplied. Gauge is damaged.	Replace fuse. Connect the couplers securely. Replace the damaged wire or hub. Replace the gauge.	Be sure to use 10 amp fuse.
Gauge shows "----".	Digital signal is not received.	Connect the couplers securely. Replace the damaged bus wire or hub.	Verify the system with the checker.
Gauge unstably operates.	Resistor is not connected to the ending hubs.	Connect the gray 6-pin cap to the ending multi-hubs.	Single hub has a built-in resistor.
Gauge response is poor or down.	Market obtainable unit connected to the system is failed. Signal volume has exceeded 50% of the capacity.	Replace the unit. Remove the heavy signal output unit.	Verify the system with the checker.
Trim gauge always shows fully tilted up position.	Trim sensor signal is not received.	Connect pink lead connectors with each other.	See the installation manual.
Trim gauge shows incorrect position.	Initial position setting is wrong. Trim sensor is damaged.	Put the motor in the fully trimmed-in position, and reset the initial (zero) trim angle. Replace the trim sensor.	See the operation manual and rigging manual.
Boat speed and/or Coolant pressure gauge does not show.	Optional sensor is not installed.	Install the optional sensor.	See the instruction supplied with the sensor kit.
	Monitor display (of tachometer) remains in the default setting.	Select the coolant pressure display.	See the operation manual and rigging manual.
Oil pressure is not shown.	Engine does not have the oil pressure sensor.	NA	—
	Tachometer is not setup to show the oil pressure.	Select the oil press. display.	See the operation manual and rigging manual.

BASIC REQUIREMENTS

The following basic conditions are required to install the digital network gauge system onto a boat.

Item	Conditions	Symptom	Note
Total amount quantity of unit for connecting to the system	50 units or less (Including market obtainable units, exclusive gauges and engine ECMs).	Gauge display is unstable. Gauge response is poor.	Check the system with the optional checker. Verify the conditions of system.
Total amount length of the main bus wires.	50 meter (164 feet) or less		
Acceptable volume of digital communication signals	50% or less of overall signal capacity		
Distance from noise sources (generator, radio, antenna wire, etc.)	Keep the meter away from noise sources.		
Ambient temperature	Avoid exposure to high temperatures.		
Connection of NMEA2000 device(s)	Connect the device(s) via Gateway hub.		

NMEA0183 COMPATIBLE EQUIPMENT CONNECTION

The digital network gauge system accepts the signal of NMEA0183 version 2.0, 2.1, or 3.01 with following sentences.

Data	Sentence
Speed and Time	RMC
Water depth	DBT
Water surface temp.	MTW

TIP:

If the signal sentence is not shown on an electrical hardware unit or its instruction, ask its manufacturer.

DIGITAL NETWORK GAUGE (6YC, 6Y8) FUNCTION TABLE

Global model	Unified model	Coolant pressure sensor (OP)	Speed sensor (OP) *For R/H model	Immobilizer icon	Oil pressure gauge	Variable troling RPM (r/min)
F25G	F25C	NO	NO	YES (E)	NO	750-1050
F30B	F30A	YES	YES	YES	NO	650-900
F40H		YES	YES	YES	NO	600-900
F40F	F40A	YES	YES	YES	NO	650-900
F40G		YES	YES	YES	NO	600-900
F50F, F50H	F50A, F50B	YES	YES	YES	NO	600-900
FT50G, FT50J	T50A, T50B	YES	YES	YES	NO	600-900
F60C, F60F	F60A, F60B	YES	YES	YES	NO	600-900
FT60D, FT60G	T60A, T60B	YES	YES	YES	NO	600-900
F70A	F70A	YES	YES	YES	NO	600-900
F80B		YES	YES	YES	NO	550-1000
F90B		YES	YES	YES	NO	550-1000
F75D, F80D, F90C, F90D, F100F	F75B, F90B, VF90A	YES	YES	YES	NO	550-1000
F100D		YES	YES	YES	NO	550-1000
F/FL115B	F/FL115B	YES	YES	YES	NO	600-1000
F115C	VF115A	YES	YES	YES	NO	600-1000
F130A	F130A	YES	YES	YES	NO	600-1000
F/FL150D	F/FL150B	YES	YES	YES	YES	650-900
F/FL150F		YES	YES	YES	YES	650-900
F150C	VF150A	YES	YES	YES	YES	650-900
F165A		YES	YES	YES	YES	650-900
F175B	VF175A	YES	YES	YES	YES	650-900
F185A		YES	YES	YES	YES	650-900
F/FL200B		YES	YES	NO	YES	NA
F/FL200C	F/FL200A	YES	YES	NO	YES	NA
F/FL200F	F/FL200B	YES	YES	YES	YES	650-900
F/FL150G, F/FL175C, F/FL200G	F/FL150CA, F/FL175CA, F/FL200CA	YES	YES	YES	YES	650-900
F200D, F225G	VF200A	YES	YES	YES	YES	600-1000
F/FL225B	F/FL225A	YES	YES	NO	YES	NA
F/FL225F	F/FL225CA	YES	YES	YES	YES	600-1000
F225D, F250F	VF225A	YES	YES	YES	YES	600-1000
F/FL250A	F/FL250A	YES	YES	NO	YES	NA
F/FL250D	F/FL250CA	YES	YES	YES	YES	600-1000
F/FL250H		YES	YES	NO	YES	NA
F250C, F275A	VF250A	YES	YES	YES	YES	600-1000
F250J	VF250XA	YES	YES	YES	YES	NA
F/FL225H, F/FL250L, F/FL300C	F/FL225B, F/FL250B, F/FL300A	YES	YES	YES	YES	NA
F/FL300B	F/FL300CA	YES	YES	YES	YES	600-1000
F/FL350A	F/FL350CC	YES (STD)	NO (2015-)	YES	YES	600-1000

MEMO



CL7 DISPLAY (6YD)

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To be continued.

CL7 DISPLAY (6YD)

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CL7 DISPLAY

Multi-function display features as follows,

- 7 inch touch screen (color display)
- Displays up to 4 engines
- Supports 6 tanks
- Internal chart (Market dependent)
- Internal Wi-Fi (Market dependent)
- NMEA 2000 compatible (for 3rd party MFD)

* Programmable function

Ref. No.	Part name	Part No.	US chart	Wi-Fi	Remarks
1	CL7 Display	6YD-83710-01	No	Installed	US, CA, EU, JP, RUS, UAE, OCE, CRB, BRA
		6YD-83710-11	Installed	Installed	US only
		6YD-83710-21	No	No	Others

1



CL7 DISPLAY COMPATIBLE ENGINES

All 4-stroke fuel injection engines with DEC and mechanical remote control.

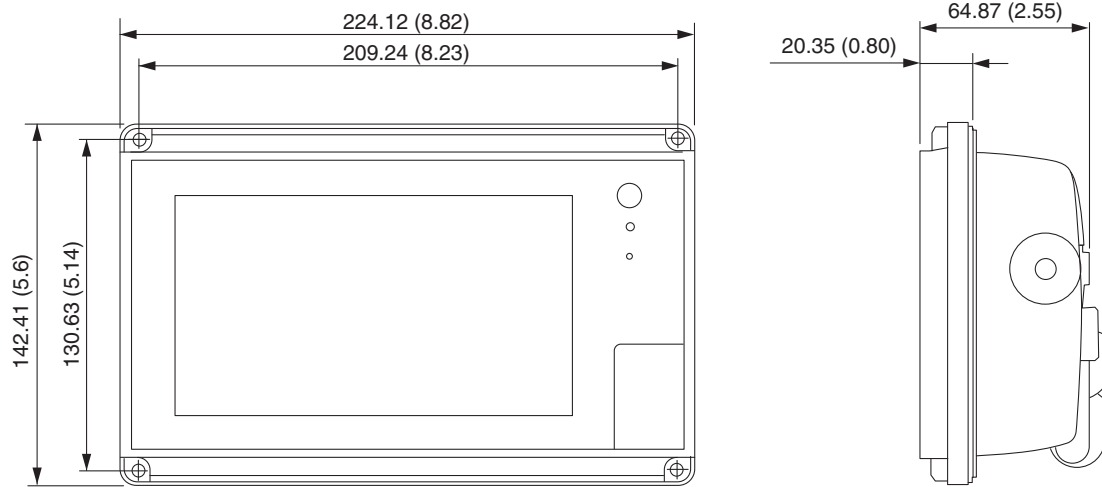
TIP: _____

2017 year's CL7 display is only compatible with DEC engines.

CL7 DISPLAY

Dimensions

mm (in.)



CL7 DISPLAY SETUP KIT FOR 6X6 & 6X7 REMOTE CONTROL P/N: 6YD-762A0-00

Part name	Part No.	Q'ty	Remarks
Wire lead for CL7 Display	6YD-83553-00	1	PWR, GPS, Network
Fuel tank wire	6YD-8356N-00	1	6 tanks
Multi-hub	6Y8-81920-01	1	With resister cap
Conversion harness	6Y9-83553-00	1	Between R/C and main bus wire
Main bus wire	6Y8-82553-01	1	0.3 m (1 ft)
Pigtail bus wire	6Y8-82521-31	1	1.8 m (6 ft)
PWR supply wire	6Y8-83553-01	2	2.4 m (8 ft)
4-pin waterproof cap	6Y8-82582-11	1	White

FOR 703, 704 & 6X3 REMOTE CONTROL (SINGLE) P/N: 6YD-762A0-10

Part name	Part No.	Q'ty	Remarks
Fuel tank wire	6YD-8356N-00	1	6 tanks
Multi-hub	6Y8-81920-01	1	With resister cap
Single hub	6Y8-81920-11	1	In-line hub
Main bus wire	6Y8-82553-31	1	7.6 m (25 ft)
Pigtail bus wire	6Y8-82521-01	1	0.3 m (1 ft)
Pigtail bus wire	6Y8-82521-51	1	3.6 m (12 ft)
Wire lead for CL7 display	6YD-83553-00	1	PWR, GPS, Network
PWR supply wire	6Y8-83553-01	1	2.4 m (8 ft)
4-pin waterproof cap	6Y8-82582-11	2	White

CL7 DISPLAY

CL7 DISPLAY SETUP KIT

FOR 704 REMOTE CONTROL (TWIN)

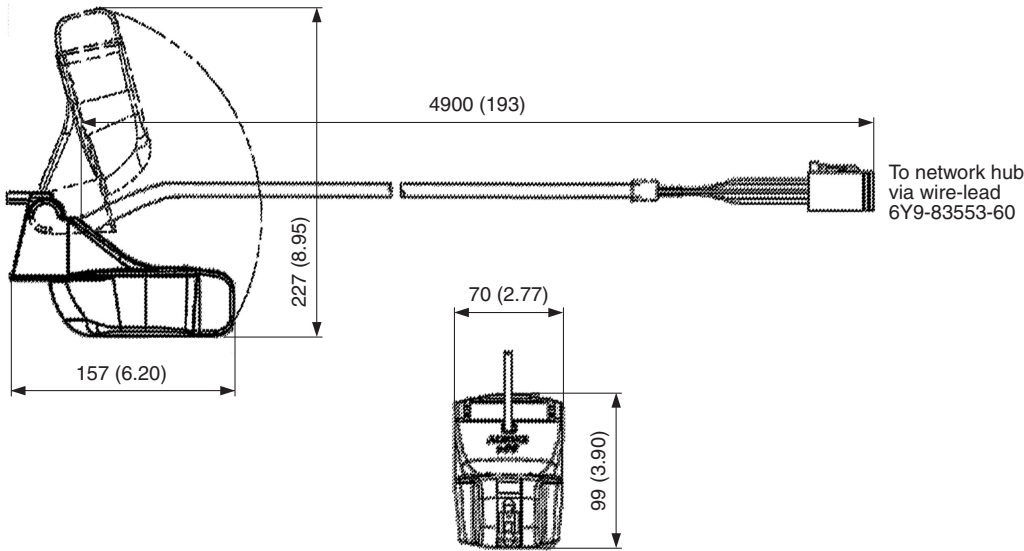
P/N: 6YD-762R0-00

Part name	Part No.	Q'ty	Remarks
Fuel tank wire	6YD-8356N-00	1	6 tanks
Multi-hub	6Y8-81920-01	2	With resister cap
Main bus wire	6Y8-82553-31	1	7.6 m (25 ft)
Pigtail bus wire	6Y8-82521-11	1	0.6 m (2 ft)
Pigtail bus wire	6Y8-82521-01	1	0.3 m (1 ft)
Pigtail bus wire	6Y8-82521-31	1	1.8 m (6 ft)
Pigtail bus wire	6Y8-82521-41	1	2.7 m (9 ft)
Wire lead for CL7 display	6YD-83553-00	1	PWR, GPS, Network
4-pin waterproof cap	6Y8-82582-11	3	White
2-pin waterproof cap	6Y8-82582-01	1	Red
PWR supply wire	6Y8-83553-01	1	2.4 m (8 ft)
SW panel assy	6Y8-82570-04	1	
Remote control assy	704-48207-R0	1	
10-pin main harness	6K1-8258A-40	1	8 m (26 ft)
10-pin main harness	61B-8258A-01	1	9.5 m (32 ft)
Screw	90149-05M05	4	
Nut	95380-05600	4	
Washer	92990-05600	4	
Spring washer	92990-05100	4	

OPTIONAL EQUIPMENT **TRANSOM MULTI-SENSOR (6Y9)**

Part No.	Remarks
6Y9-83688-00	Depth, speed, water surface temp

mm (in.)

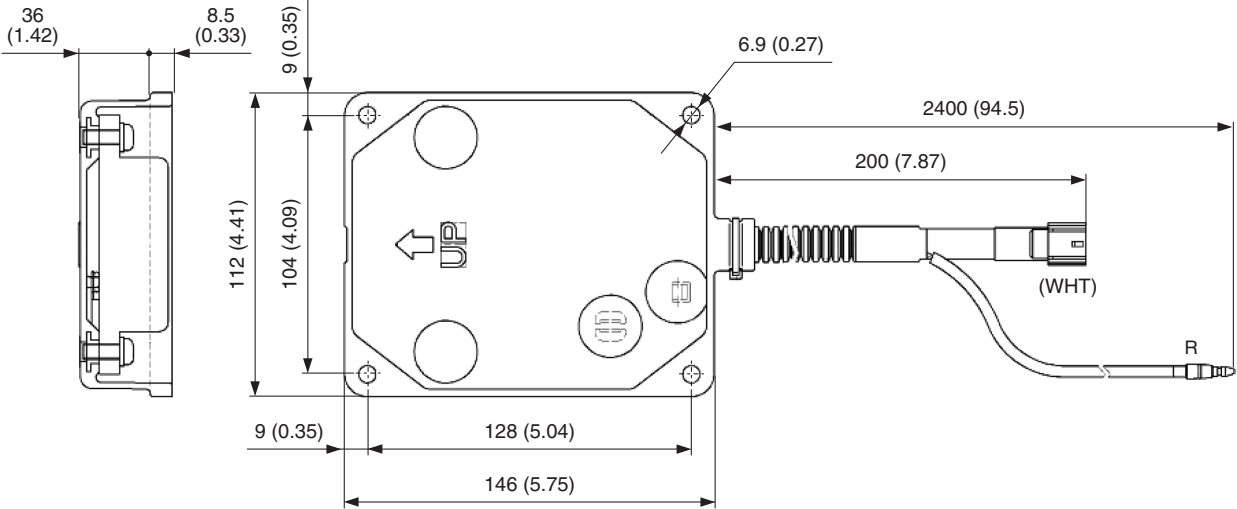


IMMOBILIZER UNIT

Yamaha Security System limits the engine speed to the specified level even when the Y-COP coupler is disconnected.

Part No.	Remarks
6Y8-86254-03	For EU (STD)
6Y8-86254-22	For US, ANZ
6Y8-86254-30	For JPN

mm (in.)



OPTIONAL EQUIPMENT

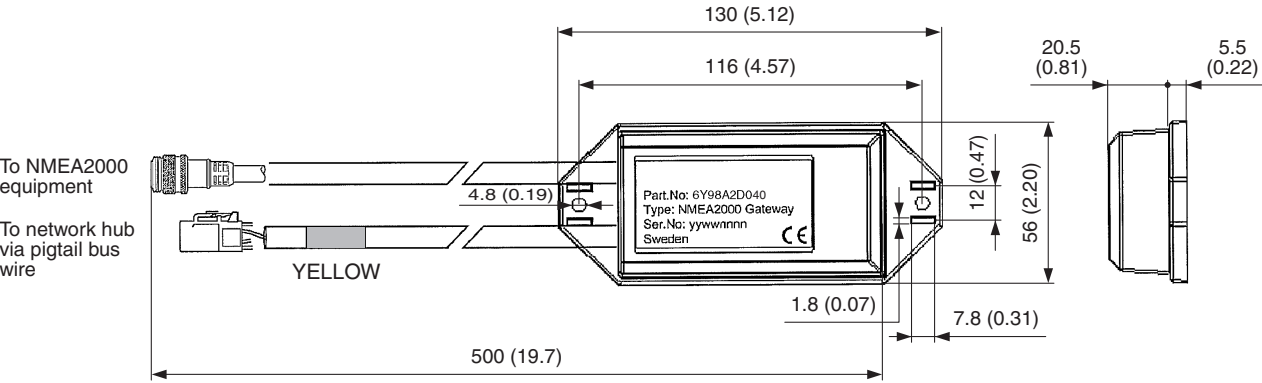
NMEA2000 GATEWAY

Used to connect between NMEA2000 compatible equipment and network hub.

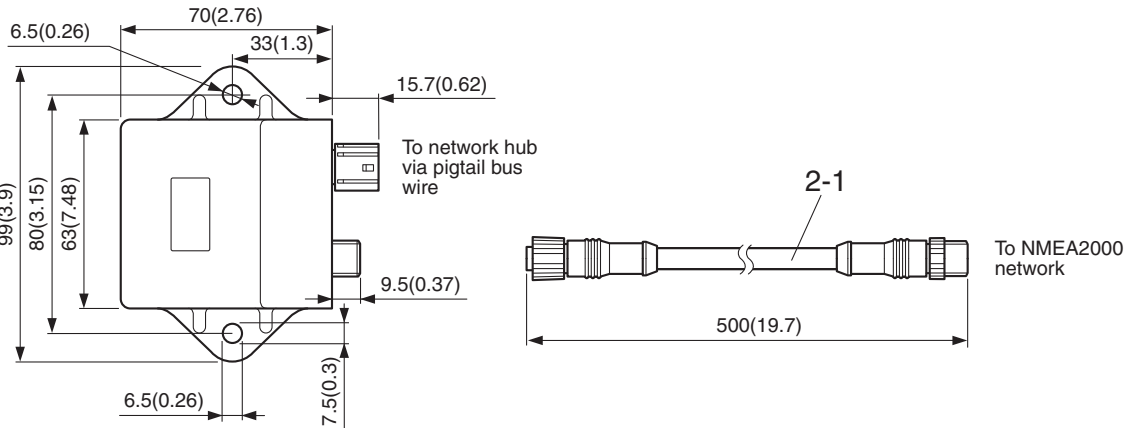
Ref. No.	Part No.	Remarks
1	6Y9-8A2D0-40	Compatible with 6Y8 and 6Y9 protocols
2	6YG-8A2D0-00	Re-programmable
2-1	6YG-82521-00	NMEA cable (♂ – ♀)

1

mm (in.)



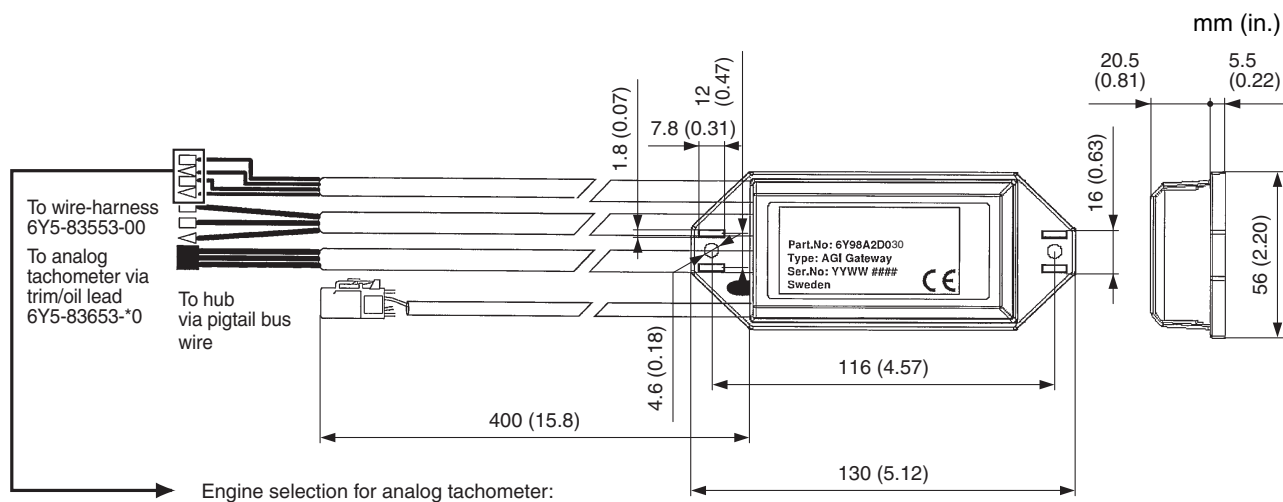
2



ANALOG GAUGE INTERFACE (AGI)

Used to connect between analog gauge and network hub.

Part No.	Remarks
6Y9-8A2D0-30	Compatible with 6Y8 and 6Y9 protocols, Required for each engine.



Single engine	PORT engine	—	—	—
Twin engine	PORT engine	—	—	STBD engine
Triple engine	PORT engine	CENTER engine	—	STBD engine
Quad engine	PORT engine	CENTER PORT engine	CENTER STBD engine	STBD engine

OPTIONAL EQUIPMENT

SPEED SENSOR KIT

Used to pick up the pitot tube pressure for water speed.

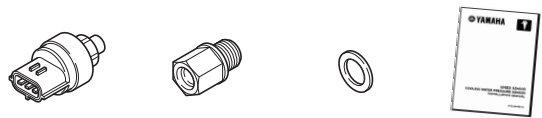
Kit Part No.	Remarks
60V-8A4L1-17	Shared with 6Y8 network system



COOLANT PRESSURE SENSOR KIT

Used to pick up the coolant pressure of engine.

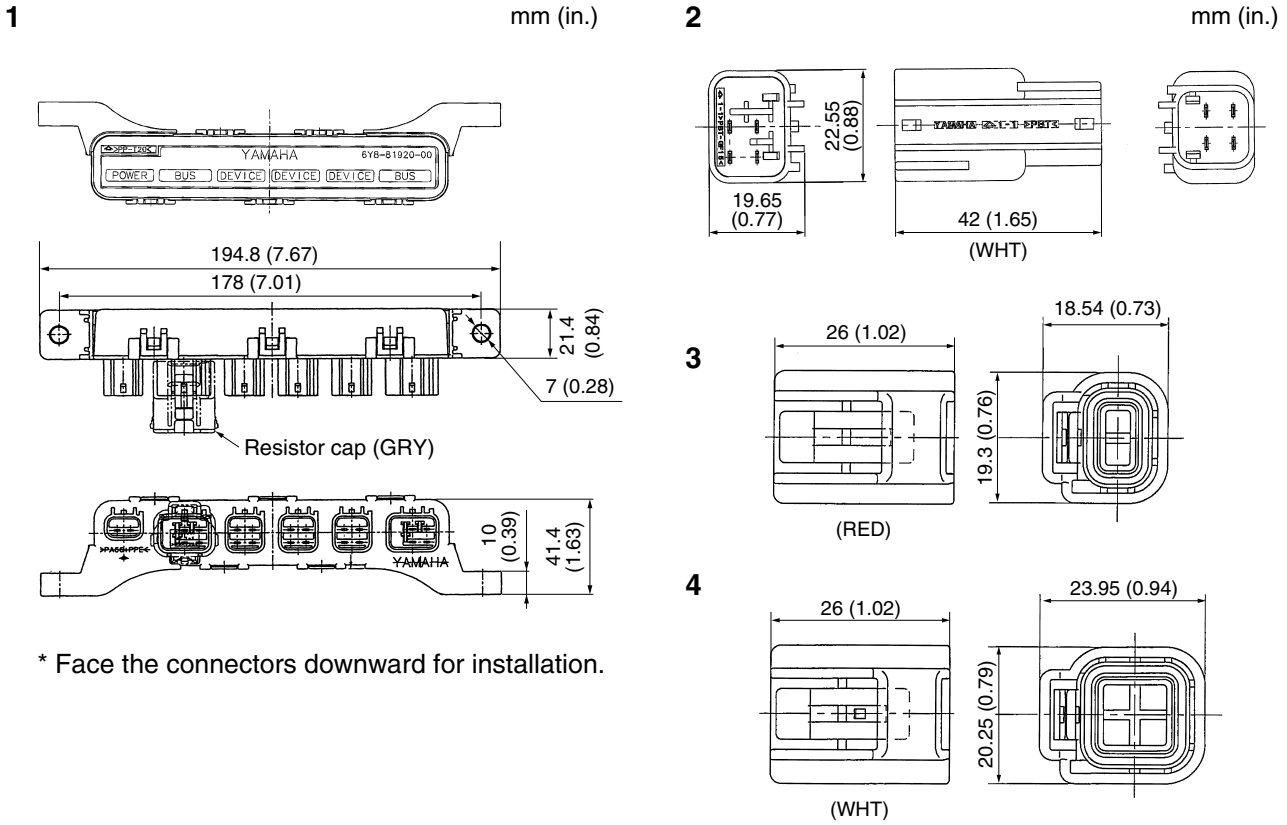
Kit Part No.	Remarks
63P-8A4L0-03	Shared with 6Y8 network system



NETWORK HUB

Shared between 6Y8 and 6Y9 network systems.

Ref. No.	Part name	Part No.	Remarks
1	Multi-hub	6Y8-81920-01	w/ ending resistor cap (P/N: 6Y8-85371-01)
2	Single hub (Inline hub)	6Y8-81920-11	Included ending resistor
3	2P sealing cap, RED	6Y8-82582-01	
4	4P sealing cap, WHT	6Y8-82582-11	

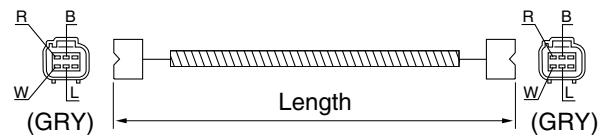


WIRE HARNESS

MAIN BUS WIRE

Used to connect between the hub and hub, between the RC and hub, etc. (shared with 6Y8 network system)

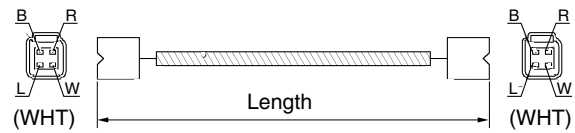
Part No.	Length	Remarks
6Y8-82553-41	9.1 m (30 ft)	
6Y8-82553-31	7.6 m (25 ft)	
6Y8-82553-21	6.1 m (20 ft)	
6Y8-82553-11	4.6 m (15 ft)	
6Y8-82553-50	3.0 m (10 ft)	
6Y8-82553-01	0.3 m (1 ft)	



PIGTAIL BUS WIRE

Used to connect between the hub and gauge, between the hub and equipment (IF, gateway), etc. (shared with 6Y8 network system)

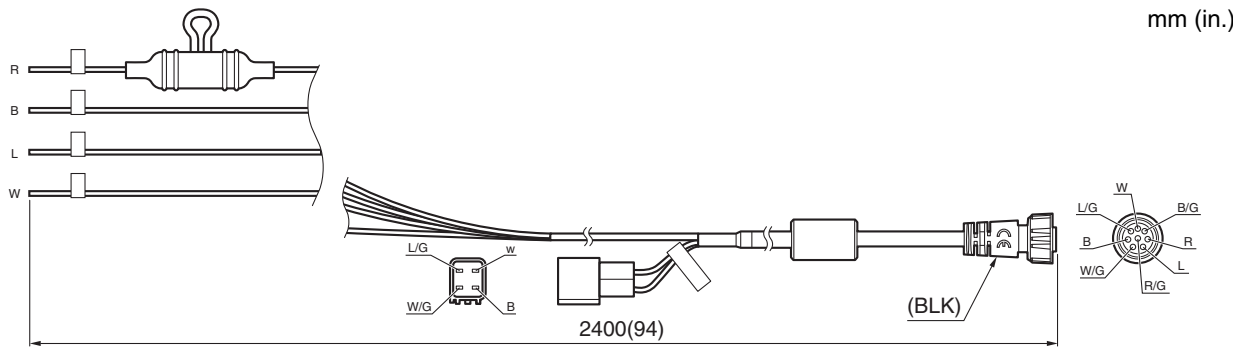
Part No.	Length	Remarks
6Y8-82521-51	3.6 m (12 ft)	
6Y8-82521-41	2.7 m (9 ft)	
6Y8-82521-31	1.8 m (6 ft)	
6Y8-82521-21	0.9 m (3 ft)	
6Y8-82521-11	0.6 m (2 ft)	
6Y8-82521-01	0.3 m (1 ft)	



WIRE LEAD FOR CL7 DISPLAY

Used to connect between CL7 Display and hub.

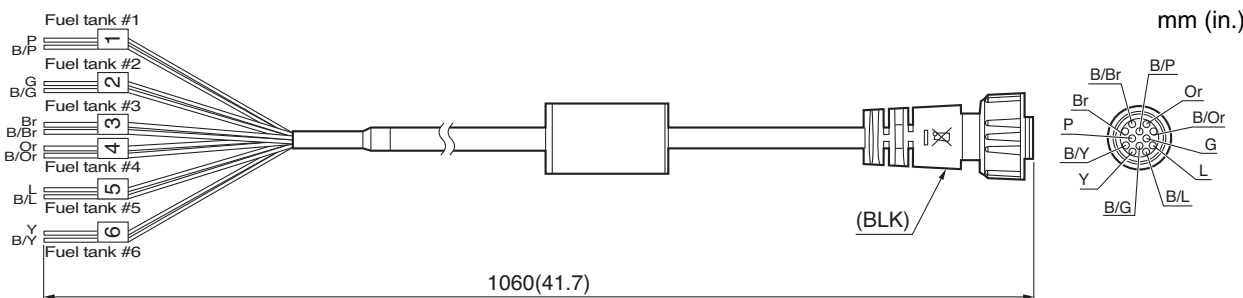
Part No.	Remarks
6YD-83553-00	12 V power supply, NMEA 0183 GPS



TANK WIRE

Used to connect between CL7 Display and a fuel tank, fresh water tank, sewage tank, etc.

Part No.	Remarks
6YD-8356N-00	6-tank acceptable

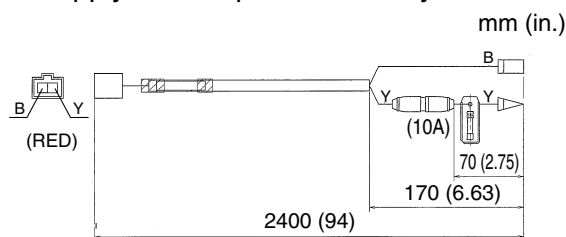


WIRE HARNESS

SYSTEM POWER SUPPLY WIRE

Used to connect between the SW panel and the hub, and supply electric power to the system.

Part No.	Remarks
6Y8-83553-01	Shared with 6Y8 network system



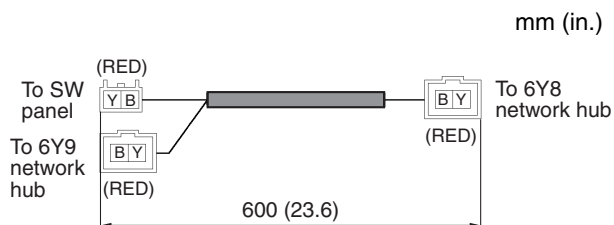
SYSTEM POWER DISTRIBUTION WIRE

Used to supply electric power to each network hub, if 6Y9 and 6Y8 network systems are simultaneously used.

NOTICE

Do not connect with the main bus wire between 6Y9 network and 6Y8 network.

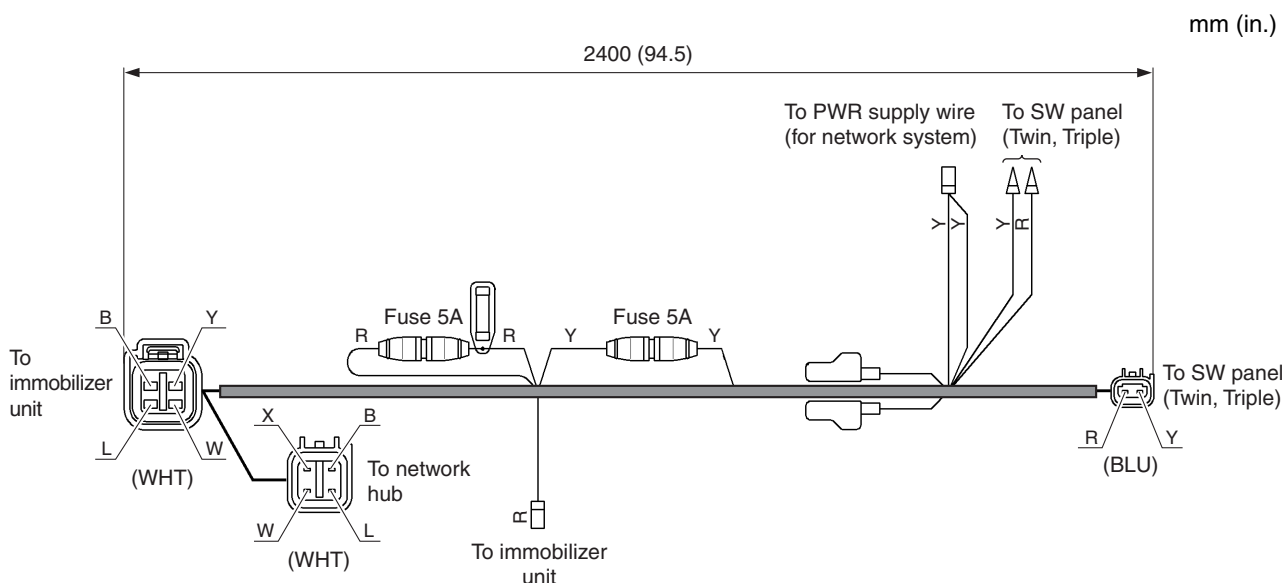
Part No.	Remarks
6Y9-83553-20	



IMMOBILIZER POWER DISTRIBUTION WIRE 2

Supplies electric power to activate the immobilizer system in case of multi-engine application.

Part No.	Remarks
6Y8-81315-00	For start/stop button SW panel

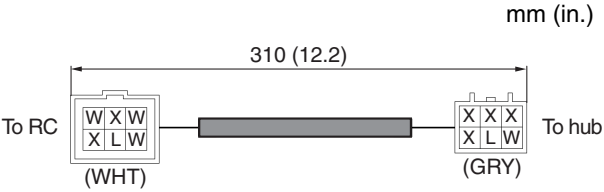


WIRE HARNESS

CONVERSION HARNESS

Used to connect between DEC and network hub.

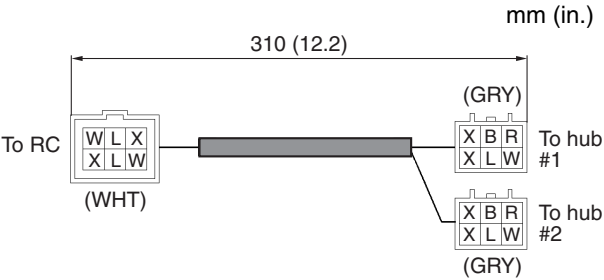
Part No.	Remarks
6Y9-83553-00	For 6Y9 network system



CONVERSION HARNESS 1

Used to connect between DEC and network hub if dual station system is used and multi-sensor is connected.

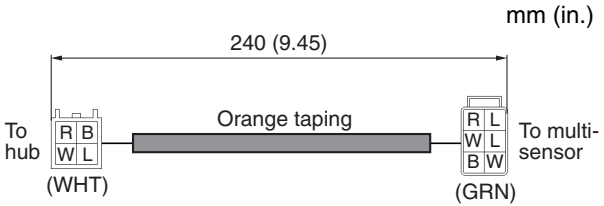
Part No.	Remarks
6Y9-83553-10	For 6Y9 network system



CONVERSION HARNESS 6

Used to connect between multi-sensor and network hub.

Part No.	Remarks
6Y9-83553-60	For 6Y9 network system

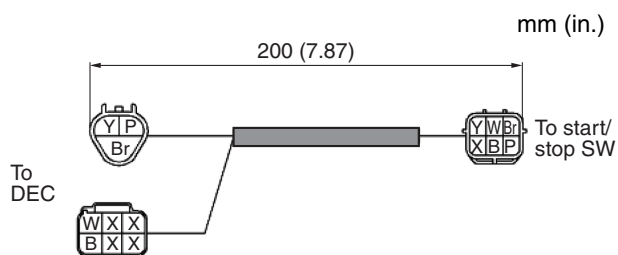


WIRE HARNESS

CONVERSION HARNESS M (FOR 2ND HELM)

Used to connect between 2nd helm new DEC and 2nd helm previous start/stop SW. (Single engine application)

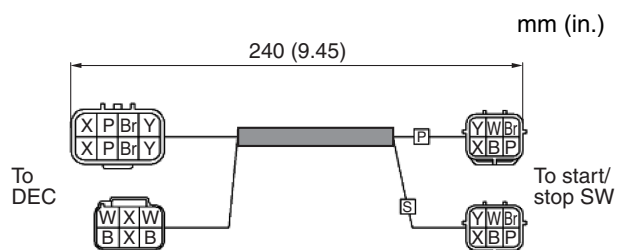
Part No.	Remarks
6X6-8258A-M0	



CONVERSION HARNESS N (FOR 2ND HELM)

Used to connect between 2nd station helm new DEC and 2nd helm previous start/stop SW. (Twin engine application)

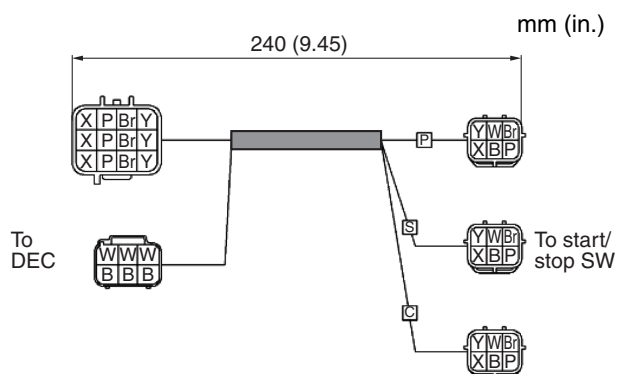
Part No.	Remarks
6X6-8258A-N0	



CONVERSION HARNESS P (FOR 2ND HELM)

Used to connect between 2nd helm new DEC and 2nd helm previous start/stop SW. (Triple engine application)

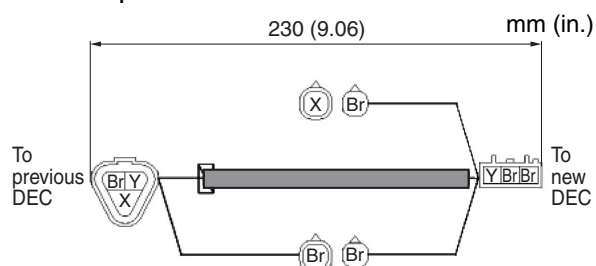
Part No.	Remarks
6X6-8258A-P0	



CONVERSION HARNESS K (FOR DUAL STATION)

Used to connect between main helm new DEC and 2nd helm previous DEC.

Part No.	Remarks
6X6-8258A-K0	



[illegible]

SINGLE STATION W/ CL7 DISPLAY SINGLE ENGINE APPLICATION (6X6 binnacle mount Digital Electronic Control)



NETWORK WIRING DIAGRAMS

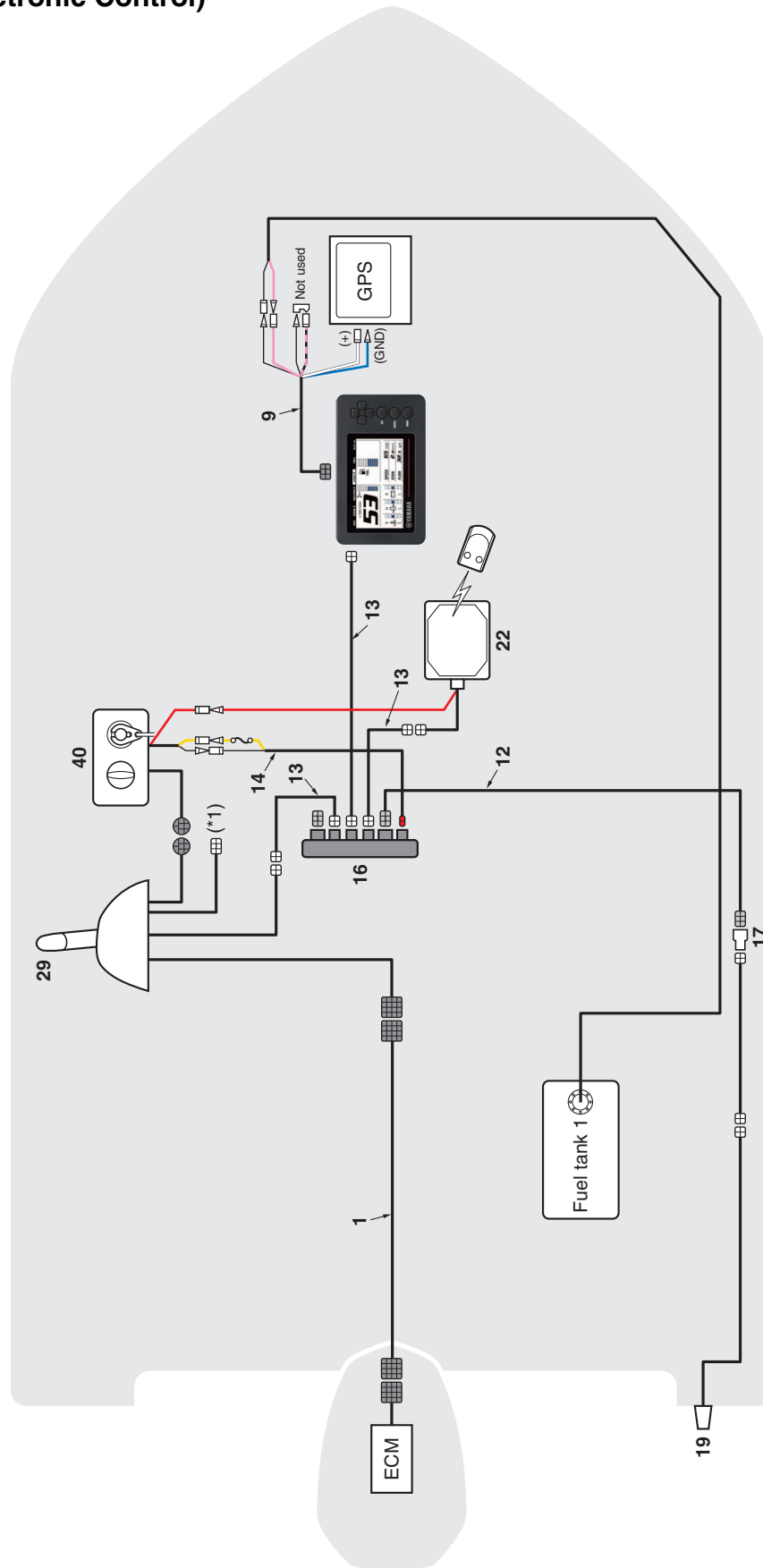
SINGLE STATION W/ CL7 DISPLAY SINGLE ENGINE APPLICATION (6X6 binnacle mount Digital Electronic Control)

Ref. No.	Part name	Part No.	Remarks
16	Multi-hub	6Y8-81920-01	w/ resistor cap, GRY
17	Single (inline) hub	6Y8-81920-11	w/ resistor, 4-6P, White
18	CL7 Display	6YD-83710-01	Wi-Fi
		6YD-83710-11	Chart/Wi-Fi
		6YD-83710-21	NA
19	Transom multi-sensor	6Y9-83688-00	Depth, speed, water temp, w/ 4.9 m (16 ft) wire
20	NMEA 2000 gateway	6YG-8A2D0-00	Cable:6YG-82521-00
21	Analog gauge interface	6Y9-8A2D0-30	
		6Y8-86254-03	EU
22	Immobilizer unit	6Y8-86254-22	US, ANZ
		6Y8-86254-30	JP
23	Analog tachometer	6Y7-83540-80	Black panel
		6Y7-83540-90	White panel
24	Analog trim gauge	6Y7-83670-40	Black panel
		6Y7-83670-50	White panel
25	Analog meter harness	6Y5-83553-00	2.5 m (8 ft)
		6Y5-83653-00	5 m (16 ft)
		6Y5-83653-10	6 m (19 ft)
26	Analog meter trim/oil lead	6Y5-83653-20	7 m (23 ft)
		6Y5-83653-30	8 m (26 ft)
		6Y5-83653-40	9 m (29 ft)
		6Y5-83653-50	10.5 m (34 ft)
29	6X6 binnacle mount Digital Electronic Control	6X6-48205-61	Single station
40	Main switch	6X6-82570-32	For 6X6 binnacle mount Digital Electronic Control, Main station helm

Ref. No.	Part name	Part No.	Remarks
		6X6-8258A-50	3.7 m (12 ft)
		6X6-8258A-60	5 m (17 ft)
		6X6-8258A-00	6 m (20 ft)
1	Main-harness (16P)	6X6-8258A-10	7 m (23 ft)
		6X6-8258A-20	8 m (26 ft)
		6X6-8258A-30	10 m (32 ft)
		6X6-8258A-40	12 m (38 ft)
2	Conversion harness	6Y9-83553-00	0.3 m (1 ft)
4	Wire lead for CL7 Display	6YD-83553-00	2.4 m (8 ft)
6	Conversion harness 6	6Y9-83553-60	0.24 m (0.8 ft)
11	Tank wire	6YD-8356N-00	1.06 m (3 ft)
		6Y8-82553-01	0.3 m (1 ft)
		6Y8-82553-50	3 m (10 ft)
12	Main bus wire	6Y8-82553-11	4.6 m (15 ft)
		6Y8-82553-21	6.1 m (20 ft)
		6Y8-82553-31	7.6 m (25 ft)
		6Y8-82553-41	9.1 m (30 ft)
		6Y8-82521-01	0.3 m (1 ft)
		6Y8-82521-11	0.6 m (2 ft)
13	Pigtail bus wire	6Y8-82521-21	0.9 m (3 ft)
		6Y8-82521-31	1.8 m (6 ft)
		6Y8-82521-41	2.7 m (9 ft)
		6Y8-82521-51	3.6 m (12 ft)
14	System power supply wire	6Y8-83553-01	w/ 10-amp fuse, 2.4 m (8 ft)

NETWORK WIRING DIAGRAMS

SINGLE STATION W/ 6YC GAUGE SINGLE ENGINE APPLICATION (6X6 binnacle mount Digital Electronic Control)



(*1) For 6Y9 network system

NETWORK WIRING DIAGRAMS

SINGLE STATION W/ 6YC GAUGE SINGLE ENGINE APPLICATION (6X6 binnacle mount Digital Electronic Control)

Ref. No.	Part name	Part No.	Remarks
14	System power supply wire	6Y8-83553-01	w/ 10-amp fuse, 2.4 m (8 ft)
16	Multi-hub	6Y8-81920-01	w/ resistor cap, GRY
17	Single (inline) hub	6Y8-81920-11	w/ resistor, 4-6P, White
19	Transom multi-sensor	6Y8-83688-01	Depth, speed, water temp, w/ 4.9 m (16 ft) wire
		6Y8-86254-03	EU
22	Immobilizer unit	6Y8-86254-22	US, ANZ
		6Y8-86254-30	JP
29	6X6 binnacle mount Digital Electronic Control	6X6-48205-61	Single station
40	Main switch	6X6-82570-32	For 6X6 binnacle mount Digital Electronic Control, Main station helm

Ref. No.	Part name	Part No.	Remarks
1	Main-harness (16P)	6X6-8258A-50	3.7 m (12 ft)
		6X6-8258A-60	5 m (17 ft)
		6X6-8258A-00	6 m (20 ft)
		6X6-8258A-10	7 m (23 ft)
		6X6-8258A-20	8 m (26 ft)
		6X6-8258A-30	10 m (32 ft)
		6X6-8258A-40	12 m (38 ft)
9	Fuel tank/ GPS wire	6Y8-8356N-01	0.3 m (1 ft)
		6Y8-82553-01	0.3 m (1 ft)
12	Main bus wire	6Y8-82553-50	3 m (10 ft)
		6Y8-82553-11	4.5 m (15 ft)
		6Y8-82553-21	6.1 m (20 ft)
		6Y8-82553-31	7.6 m (25 ft)
		6Y8-82553-41	9.1 m (30 ft)
13	Pigtail bus wire	6Y8-82521-01	0.3 m (1 ft)
		6Y8-82521-11	0.6 m (2 ft)
		6Y8-82521-21	0.9 m (3 ft)
		6Y8-82521-31	1.8 m (6 ft)
		6Y8-82521-41	2.7 m (9 ft)
		6Y8-82521-51	3.6 m (12 ft)

SINGLE STATION W/ CL7 DISPLAY SINGLE ENGINE APPLICATION (6X7 concealed Digital Electronic Control)



NETWORK WIRING DIAGRAMS

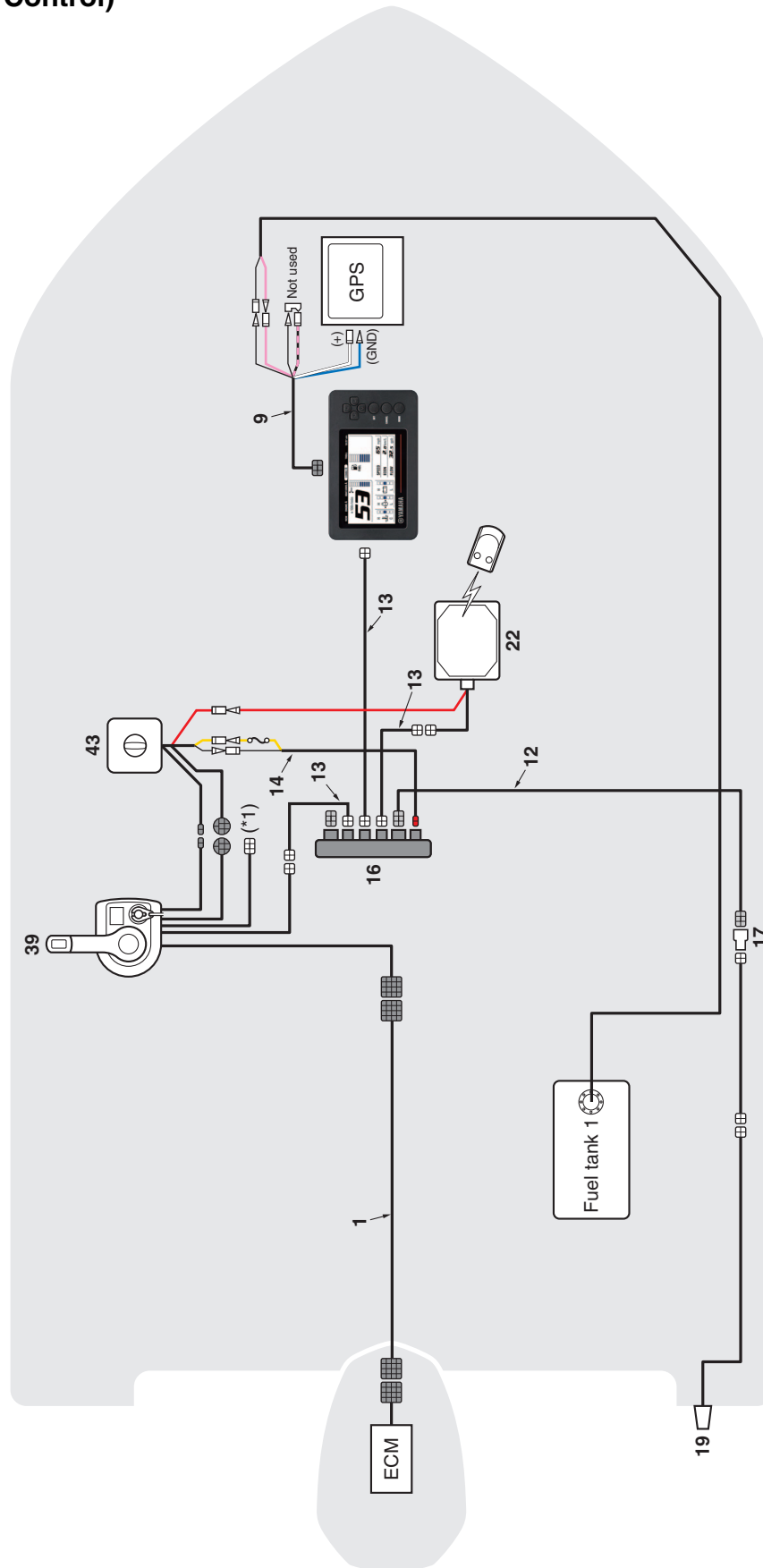
SINGLE STATION W/ CL7 DISPLAY SINGLE ENGINE APPLICATION (6X7 concealed Digital Electronic Control)

Ref. No.	Part name	Part No.	Remarks
16	Multi-hub	6Y8-81920-01	w/ resistor cap, GRY
		6YD-83710-01	Wi-Fi
18	CL7 Display	6YD-83710-11	Chart/Wi-Fi
		6YD-83710-21	NA
19	Transom multi-sensor	6Y9-83688-00	Depth, speed, water temp, w/ 4.9 m (16 ft) wire
20	NMEA 2000 gateway	6YG-8A2D0-00	Cable:6YG-82521-00
21	Analog gauge interface	6Y9-8A2D0-30	
		6Y8-86254-03	EU
22	Immobilizer unit	6Y8-86254-22	US, ANZ
		6Y8-86254-30	JP
23	Analog tachometer	6Y7-83540-80	Black panel
		6Y7-83540-90	White panel
24	Analog trim gauge	6Y7-83670-40	Black panel
		6Y7-83670-50	White panel
25	Analog meter harness	6Y5-83553-00	2.5 m (8 ft)
		6Y5-83653-00	5 m (16 ft)
		6Y5-83653-10	6 m (19 ft)
26	Analog meter trim/oil lead	6Y5-83653-20	7 m (23 ft)
		6Y5-83653-30	8 m (26 ft)
		6Y5-83653-40	9 m (29 ft)
		6Y5-83653-50	10.5 m (34 ft)
39	6X7 concealed Digital Electronic Control	6X7-48206-21	Single station
43	Main switch	64D-82570-22	For 6X7 concealed Digital Electronic Control

Ref. No.	Part name	Part No.	Remarks
		6X6-8258A-50	3.7 m (12 ft)
		6X6-8258A-60	5 m (17 ft)
		6X6-8258A-00	6 m (20 ft)
1	Main-harness (16P)	6X6-8258A-10	7 m (23 ft)
		6X6-8258A-20	8 m (26 ft)
		6X6-8258A-30	10 m (32 ft)
		6X6-8258A-40	12 m (38 ft)
2	Conversion harness	6Y9-83553-00	0.3 m (1 ft)
4	Wire lead for CL7 Display	6YD-83553-00	2.4 m (8 ft)
6	Conversion harness 6	6Y9-83553-60	0.24 m (0.8 ft)
11	Tank wire	6YD-8356N-00	1.06 m (3 ft)
		6Y8-82553-01	0.3 m (1 ft)
		6Y8-82553-50	3 m (10 ft)
12	Main bus wire	6Y8-82553-11	4.5 m (15 ft)
		6Y8-82553-21	6.1 m (20 ft)
		6Y8-82553-31	7.6 m (25 ft)
		6Y8-82553-41	9.1 m (30 ft)
		6Y8-82521-01	0.3 m (1 ft)
		6Y8-82521-11	0.6 m (2 ft)
13	Pigtail bus wire	6Y8-82521-21	0.9 m (3 ft)
		6Y8-82521-31	1.8 m (6 ft)
		6Y8-82521-41	2.7 m (9 ft)
		6Y8-82521-51	3.6 m (12 ft)
14	System power supply wire	6Y8-83553-01	w/ 10-amp fuse, 2.4 m (8 ft)

NETWORK WIRING DIAGRAMS

SINGLE STATION W/ 6YC GAUGE SINGLE ENGINE APPLICATION (6X7 concealed Digital Electronic Control)



(*1) For 6Y9 network system

NETWORK WIRING DIAGRAMS

SINGLE STATION W/ 6YC GAUGE SINGLE ENGINE APPLICATION (6X7 concealed Digital Electronic Control)

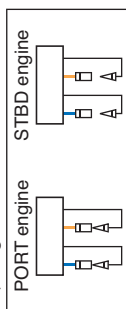
Ref. No.	Part name	Part No.	Remarks
14	System power supply wire	6Y8-83553-01	w/ 10-amp fuse, 2.4 m (8 ft)
16	Multi-hub	6Y8-81920-01	w/ resistor cap, GRY
17	Single (inline) hub	6Y8-81920-11	w/ resistor, 4-6P, White
19	Transom multi-sensor	6Y8-83688-01	Depth, speed, water temp, w/ 4.9 m (16 ft) wire
		6Y8-86254-03	EU
22	Immobilizer unit	6Y8-86254-22	US, ANZ
		6Y8-86254-30	JP
39	6X7 concealed Digital Electronic Control	6X7-48206-21	Single station
43	Main switch	64D-82570-22	For 6X7 concealed Digital Electronic Control

Ref. No.	Part name	Part No.	Remarks
1	Main-harness (16P)	6X6-8258A-50	3.7 m (12 ft)
		6X6-8258A-60	5 m (17 ft)
		6X6-8258A-00	6 m (20 ft)
		6X6-8258A-10	7 m (23 ft)
		6X6-8258A-20	8 m (26 ft)
		6X6-8258A-30	10 m (32 ft)
		6X6-8258A-40	12 m (38 ft)
9	Fuel tank/ GPS wire	6Y8-8356N-01	0.3 m (1 ft)
		6Y8-82553-01	0.3 m (1 ft)
12	Main bus wire	6Y8-82553-50	3 m (10 ft)
		6Y8-82553-11	4.5 m (15 ft)
		6Y8-82553-21	6.1 m (20 ft)
		6Y8-82553-31	7.6 m (25 ft)
		6Y8-82553-41	9.1 m (30 ft)
13	Pigtail bus wire	6Y8-82521-01	0.3 m (1 ft)
		6Y8-82521-11	0.6 m (2 ft)
		6Y8-82521-21	0.9 m (3 ft)
		6Y8-82521-31	1.8 m (6 ft)
		6Y8-82521-41	2.7 m (9 ft)
		6Y8-82521-51	3.6 m (12 ft)

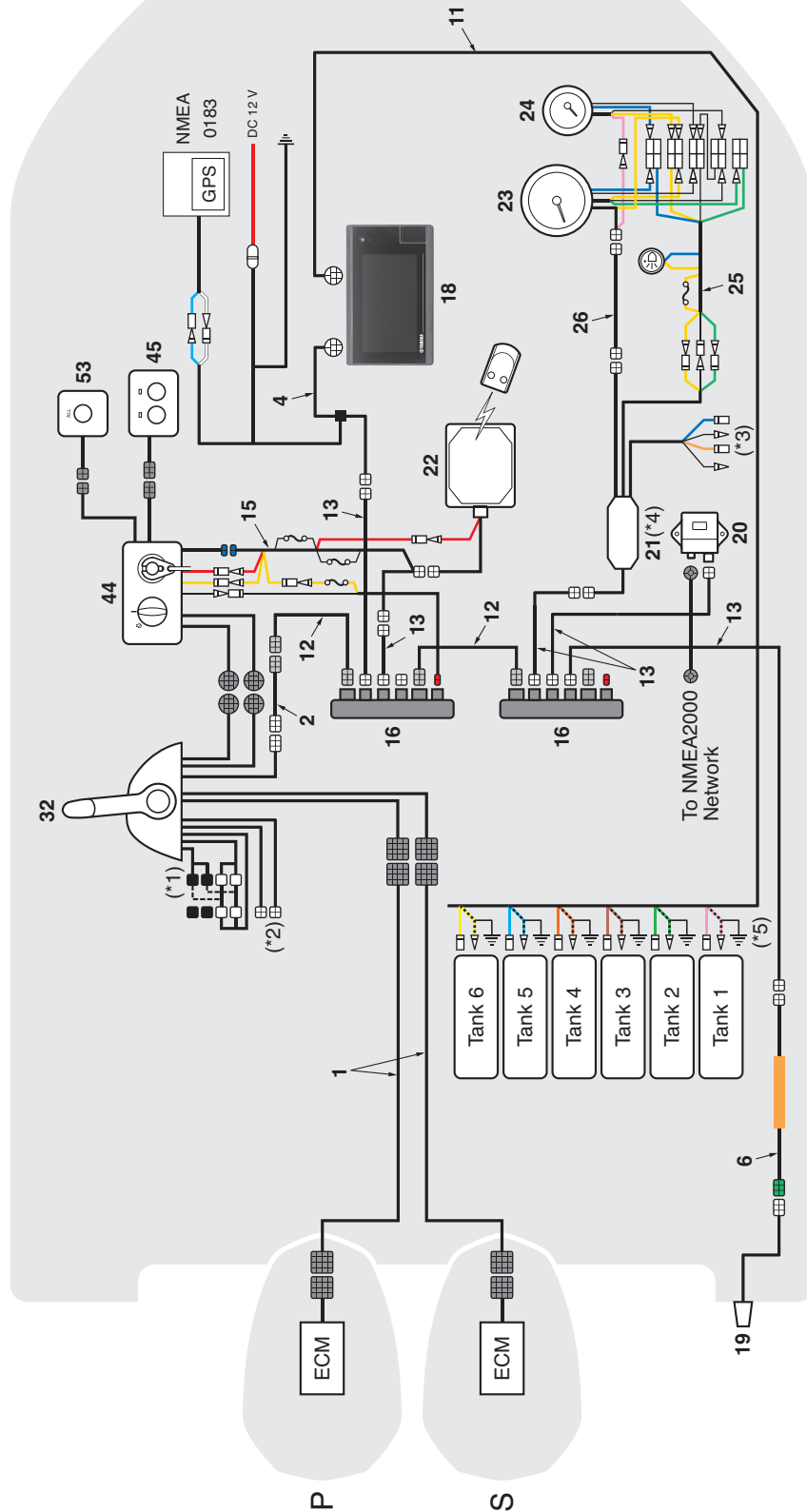
NETWORK WIRING DIAGRAMS

SINGLE STATION W/ CL7 DISPLAY TWIN ENGINE APPLICATION

- (*1) For previous digital electronic controlled engine
 (*2) For previous network system (6Y8)
 (*3) Engine selection for tachometer



- (*4) Requires 2 pcs including its related parts
 (*5) Connect the sensor ground leads to the ground
 (negative circuit on the battery)



NETWORK WIRING DIAGRAMS

SINGLE STATION W/ CL7 DISPLAY TWIN ENGINE APPLICATION

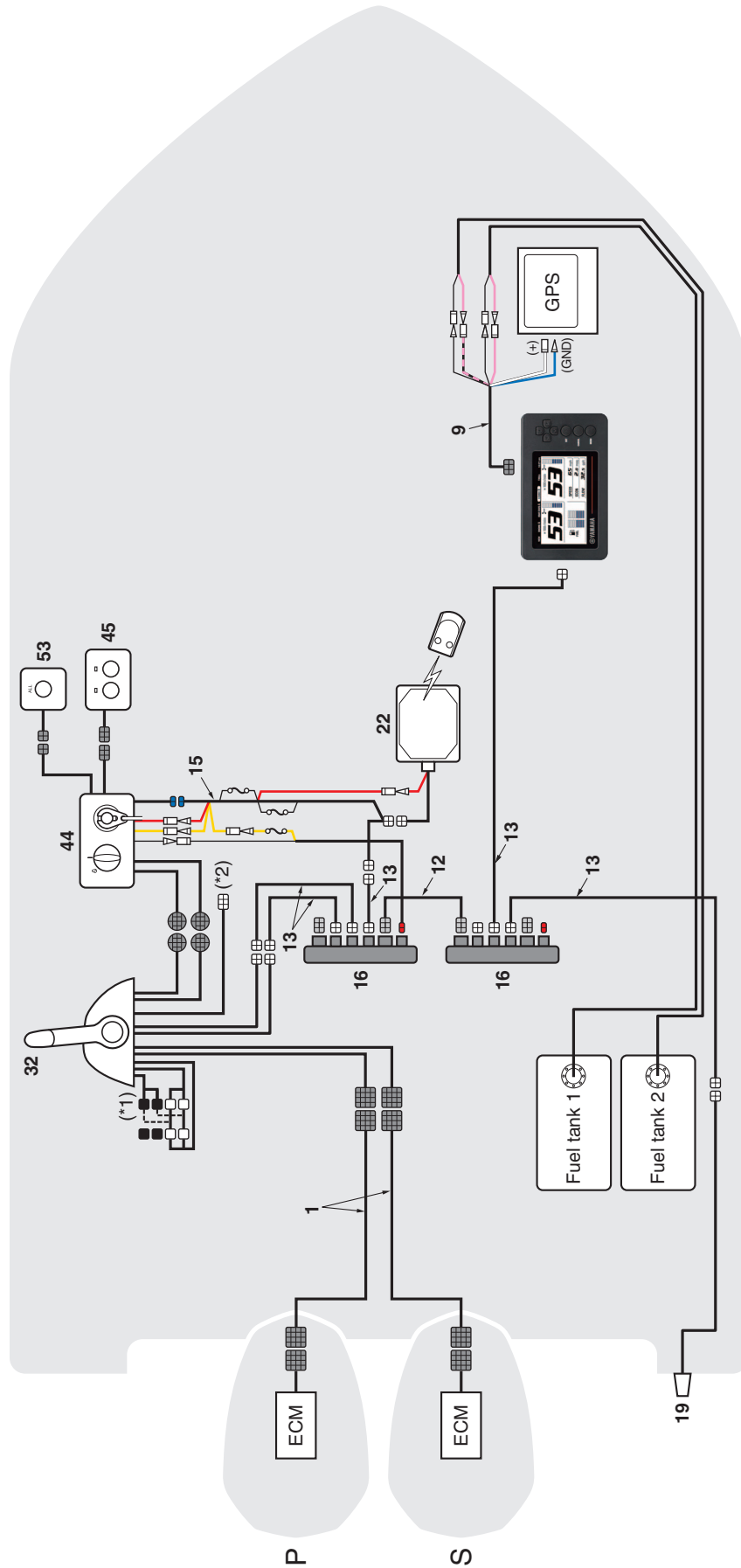
Ref. No.	Part name	Part No.	Remarks
16	Multi-hub	6Y8-81920-01	w/ resistor cap, GRY
		6YD-83710-01	Wi-Fi
18	CL7 Display	6YD-83710-11	Chart/Wi-Fi
		6YD-83710-21	NA
19	Transom multi-sensor	6Y9-83688-00	Depth, speed, water temp, w/ 4.9 m (16 ft) wire
20	NMEA 2000 gateway	6YG-8A2D0-00	Cable:6Y8-82521-00
21	Analog gauge interface	6Y9-8A2D0-30	
		6Y8-86254-03	EU
22	Immobilizer unit	6Y8-86254-22	US, ANZ
		6Y8-86254-30	JP
23	Analog tachometer	6Y7-83540-80	Black panel
		6Y7-83540-90	White panel
24	Analog trim gauge	6Y7-83670-40	Black panel
		6Y7-83670-50	White panel
25	Analog meter harness	6Y5-83553-00	2.5 m (8 ft)
		6Y5-83653-00	5 m (16 ft)
		6Y5-83653-10	6 m (19 ft)
26	Analog meter trim/oil lead	6Y5-83653-20	7 m (23 ft)
		6Y5-83653-30	8 m (26 ft)
		6Y5-83653-40	9 m (29 ft)
		6Y5-83653-50	10.5 m (34 ft)
32	6X6 binnacle mount Digital Electronic Con- trol	6X6-48207-61	Single station
44	Main switch	6X6-82570-40	Main station helm
45	Start/stop button	6X6-82570-60	Main station helm
53	All start/stop button	6X6-82570-D0	

Ref. No.	Part name	Part No.	Remarks
		6X6-8258A-50	3.7 m (12 ft)
		6X6-8258A-60	5 m (17 ft)
		6X6-8258A-00	6 m (20 ft)
1	Main-harness (16P)	6X6-8258A-10	7 m (23 ft)
		6X6-8258A-20	8 m (26 ft)
		6X6-8258A-30	10 m (32 ft)
		6X6-8258A-40	12 m (38 ft)
2	Conversion harness	6Y9-83553-00	0.3 m (1 ft)
4	Wire lead for CL7 Display	6YD-83553-00	2.4 m (8 ft)
6	Conversion harness 6	6Y9-83553-60	0.24 m (0.8 ft)
11	Tank wire	6YD-8356N-00	1.06 m (3 ft)
		6Y8-82553-01	0.3 m (1 ft)
		6Y8-82553-50	3 m (10 ft)
12	Main bus wire	6Y8-82553-11	4.5 m (15 ft)
		6Y8-82553-21	6.1 m (20 ft)
		6Y8-82553-31	7.6 m (25 ft)
		6Y8-82553-41	9.1 m (30 ft)
		6Y8-82521-01	0.3 m (1 ft)
		6Y8-82521-11	0.6 m (2 ft)
13	Pigtail bus wire	6Y8-82521-21	0.9 m (3 ft)
		6Y8-82521-31	1.8 m (6 ft)
		6Y8-82521-41	2.7 m (9 ft)
		6Y8-82521-51	3.6 m (12 ft)
15	Immobilizer PWR distribution wire	6Y8-81315-00	w/ 5-amp fuses, 2.4 m (8 ft)

NETWORK WIRING DIAGRAMS

SINGLE STATION W/ 6YC GAUGE TWIN ENGINE APPLICATION

(*1) For previous digital electronic controlled engine
 (*2) For 6Y9 network system



NETWORK WIRING DIAGRAMS

SINGLE STATION W/ 6YC GAUGE TWIN ENGINE APPLICATION

Ref. No.	Part name	Part No.	Remarks
15	Immobilizer PWR distribution wire	6Y8-81315-00	w/ 5-amp fuses, 2.4 m (8 ft)
16	Multi-hub	6Y8-81920-01	w/ resistor cap, GRY
19	Transom multi-sensor	6Y8-83688-01	Depth, speed, water temp, w/ 4.9 m (16 ft) wire
22	Immobilizer unit	6Y8-86254-03	EU
		6Y8-86254-22	US, ANZ
		6Y8-86254-30	JP
32	6X6 binnacle mount Digital Electronic Control	6X6-48207-61	Single station
44	Main switch	6X6-82570-40	Main station helm
45	Start/stop button	6X6-82570-60	Main station helm
53	All start/stop button	6X6-82570-D0	

Ref. No.	Part name	Part No.	Remarks
1	Main-harness (16P)	6X6-8258A-50	3.7 m (12 ft)
		6X6-8258A-60	5 m (17 ft)
		6X6-8258A-00	6 m (20 ft)
		6X6-8258A-10	7 m (23 ft)
		6X6-8258A-20	8 m (26 ft)
		6X6-8258A-30	10 m (32 ft)
		6X6-8258A-40	12 m (38 ft)
9	Fuel tank/GPS wire	6Y8-8356N-01	0.3 m (1 ft)
12	Main bus wire	6Y8-82553-01	0.3 m (1 ft)
		6Y8-82553-50	3 m (10 ft)
		6Y8-82553-11	4.5 m (15 ft)
		6Y8-82553-21	6.1 m (20 ft)
		6Y8-82553-31	7.6 m (25 ft)
		6Y8-82553-41	9.1 m (30 ft)
		6Y8-82521-01	0.3 m (1 ft)
13	Pigtail bus wire	6Y8-82521-11	0.6 m (2 ft)
		6Y8-82521-21	0.9 m (3 ft)
		6Y8-82521-31	1.8 m (6 ft)
		6Y8-82521-41	2.7 m (9 ft)
		6Y8-82521-51	3.6 m (12 ft)

SINGLE STATION W/ CL7 DISPLAY TRIPLE ENGINE APPLICATION



NETWORK WIRING DIAGRAMS

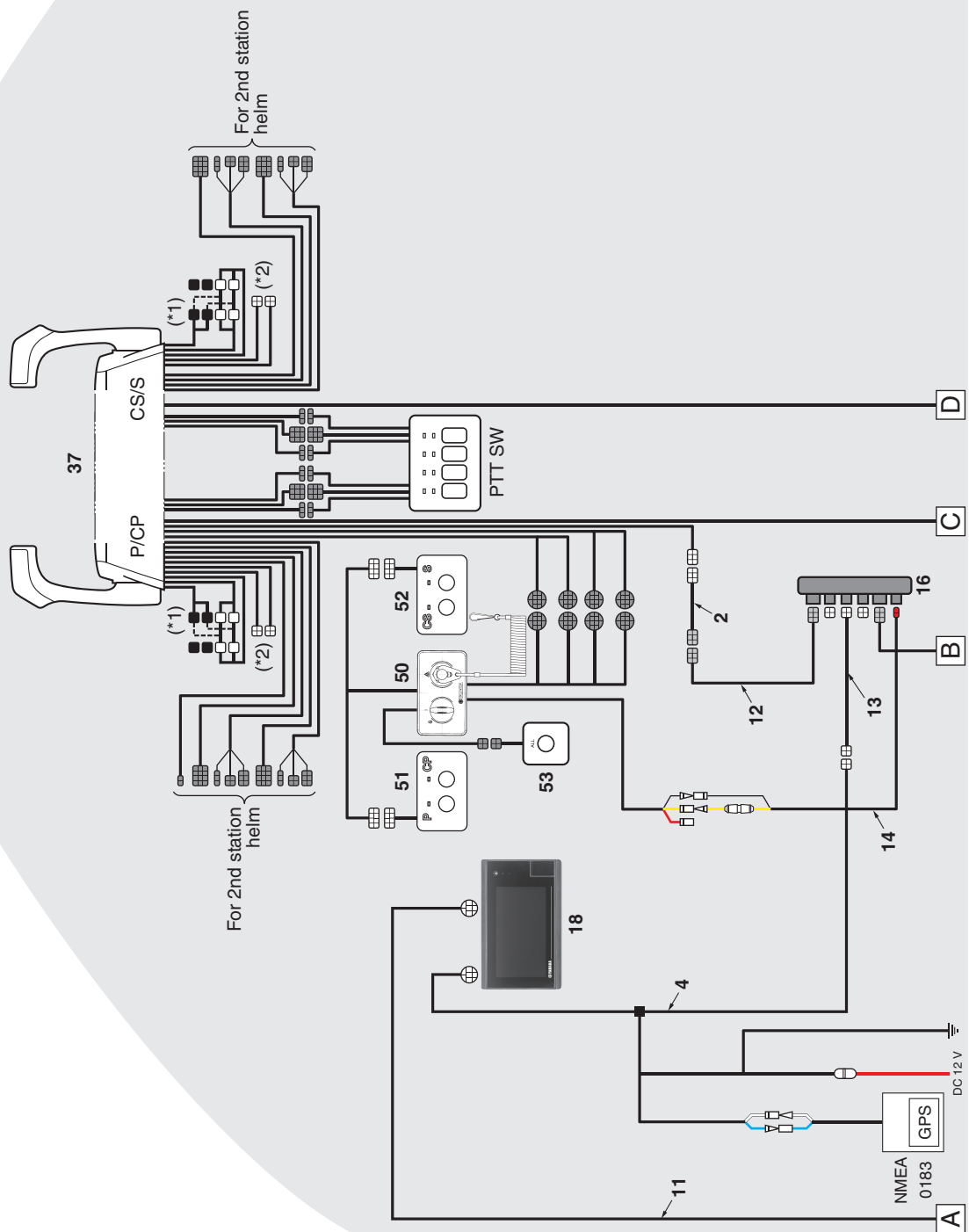
SINGLE STATION W/ CL7 DISPLAY TRIPLE ENGINE APPLICATION

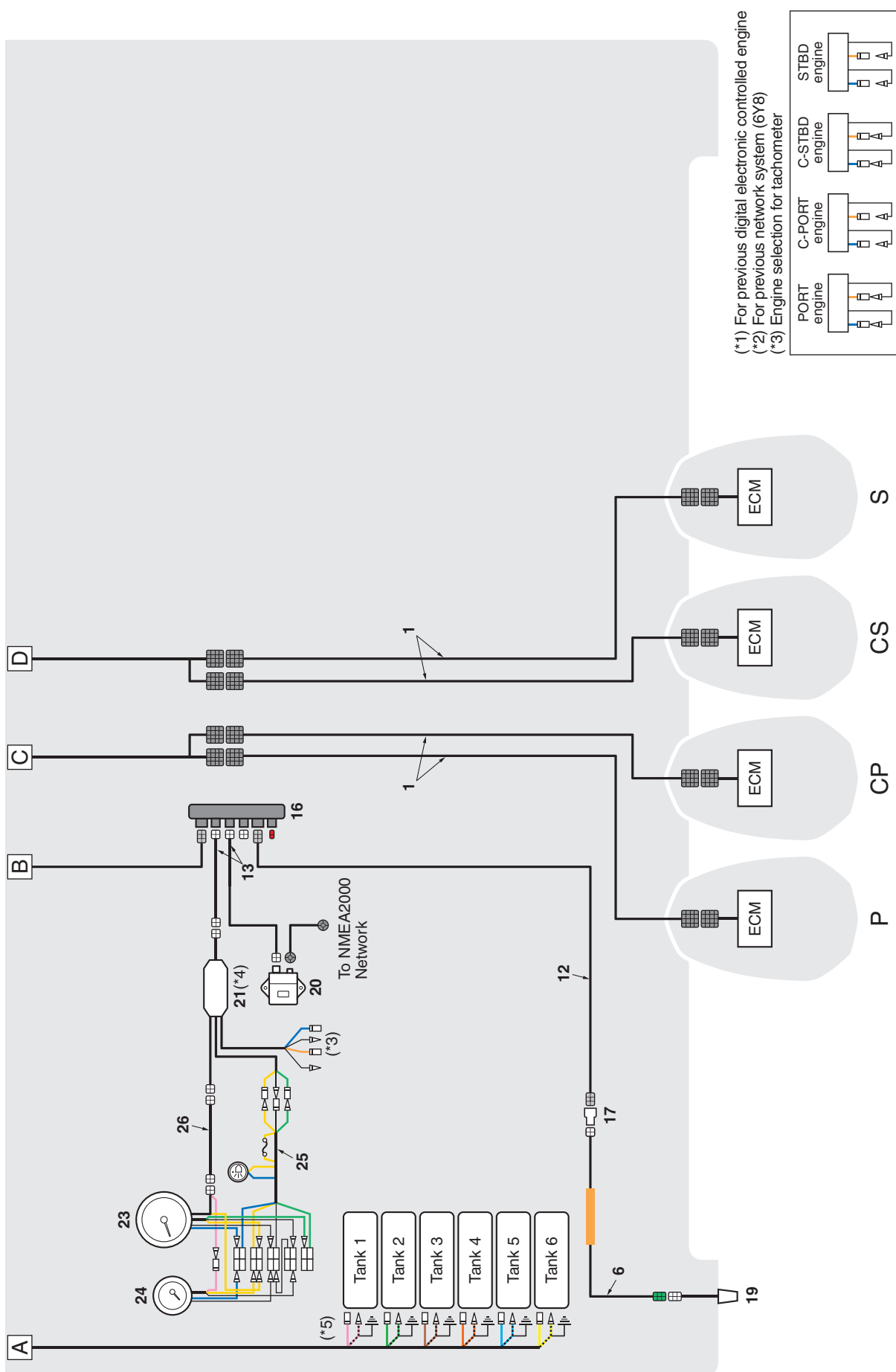
Ref. No.	Part name	Part No.	Remarks
16	Multi-hub	6Y8-81920-01	w/ resistor cap, GRY
		6YD-83710-01	Wi-Fi
18	CL7 Display	6YD-83710-11	Chart/Wi-Fi
		6YD-83710-21	NA
19	Transom multi-sensor	6Y9-83688-00	Depth, speed, water temp, w/ 4.9 m (16 ft) wire
20	NMEA 2000 gateway	6YG-8A2D0-00	Cable:6Y8-82521-00
21	Analog gauge interface	6Y9-8A2D0-30	
		6Y8-86254-03	EU
22	Immobilizer unit	6Y8-86254-22	US, ANZ
		6Y8-86254-30	JP
23	Analog tachometer	6Y7-83540-80	Black panel
		6Y7-83540-90	White panel
24	Analog trim gauge	6Y7-83670-40	Black panel
		6Y7-83670-50	White panel
25	Analog meter harness	6Y5-83553-00	2.5 m (8 ft)
		6Y5-83653-00	5 m (16 ft)
		6Y5-83653-10	6 m (19 ft)
26	Analog meter trim/oil lead	6Y5-83653-20	7 m (23 ft)
		6Y5-83653-30	8 m (26 ft)
		6Y5-83653-40	9 m (29 ft)
		6Y5-83653-50	10.5 m (34 ft)
35	6X6 binnacle mount Digital Electronic Control	6X6-48208-61	Single & dual station/ Main station helm
47	Main switch	6X6-82570-50	Main station helm
48	Start/stop button	6X6-82570-70	Main station helm
53	All start/stop button	6X6-82570-D0	

Ref. No.	Part name	Part No.	Remarks
		6X6-8258A-50	3.7 m (12 ft)
		6X6-8258A-60	5 m (17 ft)
		6X6-8258A-00	6 m (20 ft)
1	Main-harness (16P)	6X6-8258A-10	7 m (23 ft)
		6X6-8258A-20	8 m (26 ft)
		6X6-8258A-30	10 m (32 ft)
		6X6-8258A-40	12 m (38 ft)
2	Conversion harness	6Y9-83553-00	0.3 m (1 ft)
4	Wire lead for CL7 Display	6YD-83553-00	2.4 m (8 ft)
6	Conversion harness 6	6Y9-83553-60	0.24 m (0.8 ft)
11	Tank wire	6YD-8356N-00	1.06 m (3 ft)
		6Y8-82553-01	0.3 m (1 ft)
		6Y8-82553-50	3 m (10 ft)
12	Main bus wire	6Y8-82553-11	4.5 m (15 ft)
		6Y8-82553-21	6.1 m (20 ft)
		6Y8-82553-31	7.6 m (25 ft)
		6Y8-82553-41	9.1 m (30 ft)
		6Y8-82521-01	0.3 m (1 ft)
		6Y8-82521-11	0.6 m (2 ft)
13	Pigtail bus wire	6Y8-82521-21	0.9 m (3 ft)
		6Y8-82521-31	1.8 m (6 ft)
		6Y8-82521-41	2.7 m (9 ft)
		6Y8-82521-51	3.6 m (12 ft)
15	Immobilizer PWR distribution wire	6Y8-81315-00	w/ 5-amp fuses, 2.4 m (8 ft)

NETWORK WIRING DIAGRAMS

SINGLE STATION W/ CL7 DISPLAY QUAD ENGINE APPLICATION (FOR F/LF225CA, F/LF250CA, F/LF300CA, F/LF350CA/B/C)





NETWORK WIRING DIAGRAMS

SINGLE STATION W/ CL7 DISPLAY QUAD ENGINE APPLICATION (FOR F/LF225CA, F/LF250CA, F/LF300CA, F/LF350CA/B/C)

Ref. No.	Part name	Part No.	Remarks
16	Multi-hub	6Y8-81920-01	w/ resistor cap, GRY
17	Single (inline) hub	6Y8-81920-11	w/ resistor, 4-6P, White
18	CL7 Display	6YD-83710-01	Wi-Fi
		6YD-83710-11	Chart/Wi-Fi
		6YD-83710-21	NA
19	Transom multi-sensor	6Y9-83688-00	Depth, speed, water temp, w/ 4.9 m (16 ft) wire
20	NMEA 2000 gateway	6YG-8A2D0-00	Cable:6YG-82521-00
21	Analog gauge interface	6Y9-8A2D0-30	
23	Analog tachometer	6Y7-83540-80	Black panel
		6Y7-83540-90	White panel
24	Analog trim gauge	6Y7-83670-40	Black panel
		6Y7-83670-50	White panel
25	Analog meter harness	6Y5-83553-00	2.5 m (8 ft)
		6Y5-83653-00	5 m (16 ft)
		6Y5-83653-10	6 m (19 ft)
26	Analog meter trim/oil lead	6Y5-83653-20	7 m (23 ft)
		6Y5-83653-30	8 m (26 ft)
		6Y5-83653-40	9 m (29 ft)
		6Y5-83653-50	10.5 m (34 ft)
37	6X6 binnacle mount Digital Electronic Control	6X6-48209-21	Single & dual station/ Main station helm
50	Main switch	6X6-82570-G0	Main helm
51	Start/stop button	6X6-82570-J0	Main/2nd helm, P/CP
52	Start/stop button	6X6-82570-K0	Main/2nd helm, CS/S
53	All start/stop button	6X6-82570-D0	

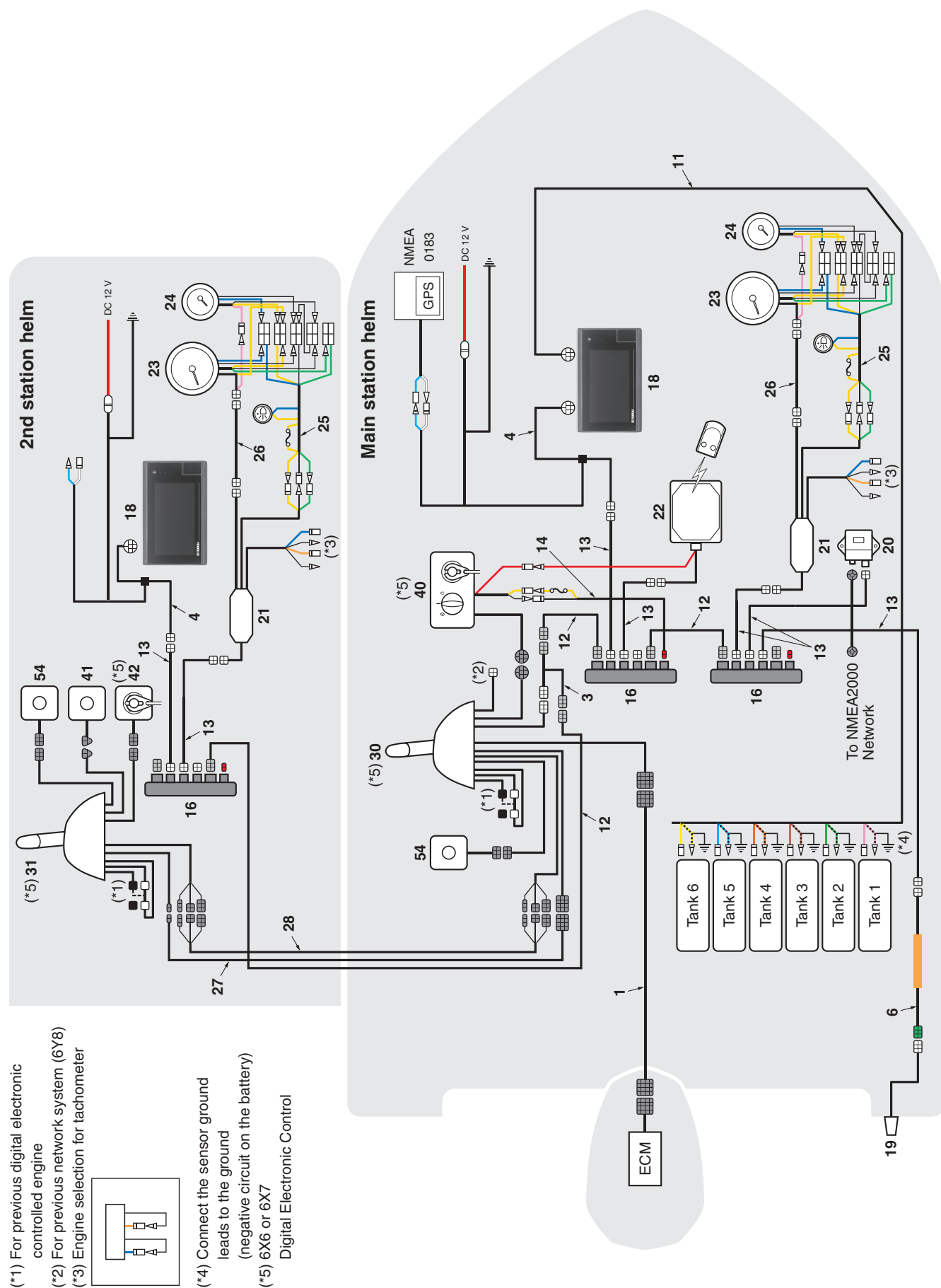
Ref. No.	Part name	Part No.	Remarks
1	Main-harness (16P)	6X6-8258A-50	3.7 m (12 ft)
		6X6-8258A-60	5 m (17 ft)
		6X6-8258A-00	6 m (20 ft)
		6X6-8258A-10	7 m (23 ft)
		6X6-8258A-20	8 m (26 ft)
		6X6-8258A-30	10 m (32 ft)
		6X6-8258A-40	12 m (38 ft)
2	Conversion harness	6Y9-83553-00	0.3 m (1 ft)
4	Wire lead for CL7 Display	6YD-83553-00	2.4 m (8 ft)
6	Conversion harness 6	6Y9-83553-60	0.24 m (0.8 ft)
11	Tank wire	6YD-8356N-00	1.06 m (3 ft)
		6Y8-82553-01	0.3 m (1 ft)
		6Y8-82553-50	3 m (10 ft)
12	Main bus wire	6Y8-82553-11	4.5 m (15 ft)
		6Y8-82553-21	6.1 m (20 ft)
		6Y8-82553-31	7.6 m (25 ft)
		6Y8-82553-41	9.1 m (30 ft)
		6Y8-82521-01	0.3 m (1 ft)
		6Y8-82521-11	0.6 m (2 ft)
13	Pigtail bus wire	6Y8-82521-21	0.9 m (3 ft)
		6Y8-82521-31	1.8 m (6 ft)
		6Y8-82521-41	2.7 m (9 ft)
		6Y8-82521-51	3.6 m (12 ft)
14	System power supply wire	6Y8-83553-01	w/ 10-amp fuse, 2.4 m (8 ft)

MEMO



NETWORK WIRING DIAGRAMS

DUAL STATION W/ CL7 DISPLAY SINGLE ENGINE APPLICATION



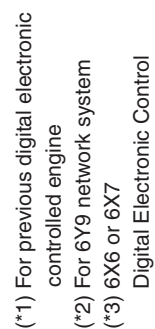
NETWORK WIRING DIAGRAMS

DUAL STATION W/ CL7 DISPLAY SINGLE ENGINE APPLICATION

Ref. No.	Part name	Part No.	Remarks
23	Analog tachometer	6Y7-83540-80	Black panel
		6Y7-83540-90	White panel
24	Analog trim gauge	6Y7-83670-40	Black panel
		6Y7-83670-50	White panel
25	Analog meter harness	6Y5-83553-00	2.5 m (8 ft)
		6Y5-83653-00	5 m (16 ft)
		6Y5-83653-10	6 m (19 ft)
26	Analog meter trim/oil lead	6Y5-83653-20	7 m (23 ft)
		6Y5-83653-30	8 m (26 ft)
		6Y5-83653-40	9 m (29 ft)
		6Y5-83653-50	10.5 m (34 ft)
27	2nd station helm harness (2-12P)	6X6-8258A-B1	5 m (16 ft)
		6X6-8258A-D1	8 m (26 ft)
		6X6-8258A-F1	12 m (38 ft)
28	2nd station helm harness (3/4/6P)	6X6-8258A-G1	5 m (16 ft)
		6X6-8258A-H1	8 m (26 ft)
		6X6-8258A-J1	12 m (38 ft)
30	6X6 binnacle mount Digital Electronic Control	6X6-48205-71	Dual station/ Main helm
	6X7 concealed Digital Electronic Control	6X7-48206-31	
31	6X6 binnacle mount Digital Electronic Control	6X6-48205-81	Dual station/ 2nd helm
	6X7 concealed Digital Electronic Control	6X7-48206-41	
40	Main switch	6X6-82570-32	For 6X6 binnacle mount Digital Electronic Control
		64D-82570-22	For 6X7 concealed Digital Electronic Control
41	Start/stop button	6X6-82570-80	2nd station helm
42	Engine shut-off switch	6X6-82570-90	For 6X6 binnacle mount Digital Electronic Control
		NA	For 6X7 concealed Digital Electronic Control
54	Station selector switch	6X6-82570-B0	For dual station, single/twin/triple engine application

Ref. No.	Part name	Part No.	Remarks
1	Main-harness (16P)	6X6-8258A-50	3.7 m (12 ft)
		6X6-8258A-60	5 m (17 ft)
		6X6-8258A-00	6 m (20 ft)
		6X6-8258A-10	7 m (23 ft)
		6X6-8258A-20	8 m (26 ft)
		6X6-8258A-30	10 m (32 ft)
		6X6-8258A-40	12 m (38 ft)
3	Conversion harness 1	6Y9-83553-10	0.3 m (1 ft)
4	Wire lead for CL7 Display	6YD-83553-00	2.4 m (8 ft)
6	Conversion harness 6	6Y9-83553-60	0.24 m (0.8 ft)
11	Tank wire	6YD-8356N-00	1.06 m (3 ft)
		6Y8-82553-01	0.3 m (1 ft)
		6Y8-82553-50	3 m (10 ft)
12	Main bus wire	6Y8-82553-11	4.5 m (15 ft)
		6Y8-82553-21	6.1 m (20 ft)
		6Y8-82553-31	7.6 m (25 ft)
		6Y8-82553-41	9.1 m (30 ft)
		6Y8-82521-01	0.3 m (1 ft)
		6Y8-82521-11	0.6 m (2 ft)
13	Pigtail bus wire	6Y8-82521-21	0.9 m (3 ft)
		6Y8-82521-31	1.8 m (6 ft)
		6Y8-82521-41	2.7 m (9 ft)
		6Y8-82521-51	3.6 m (12 ft)
14	System power supply wire	6Y8-83553-01	w/ 10-amp fuse, 2.4 m (8 ft)
16	Multi-hub	6Y8-81920-01	w/ resistor cap, GRY
		6YD-83710-01	Wi-Fi
18	CL7 Display	6YD-83710-11	Chart/Wi-Fi
		6YD-83710-21	NA
19	Transom multi-sensor	6Y9-83688-00	Depth, speed, water temp, w/ 4.9 m (16 ft) wire
20	NMEA 2000 gateway	6YG-8A2D0-00	Cable:6YG-82521-00
21	Analog gauge interface	6Y9-8A2D0-30	
		6Y8-86254-03	EU
22	Immobilizer unit	6Y8-86254-22	US, ANZ
		6Y8-86254-30	JP

DUAL STATION W/ 6YC GAUGE SINGLE ENGINE APPLICATION



NETWORK WIRING DIAGRAMS

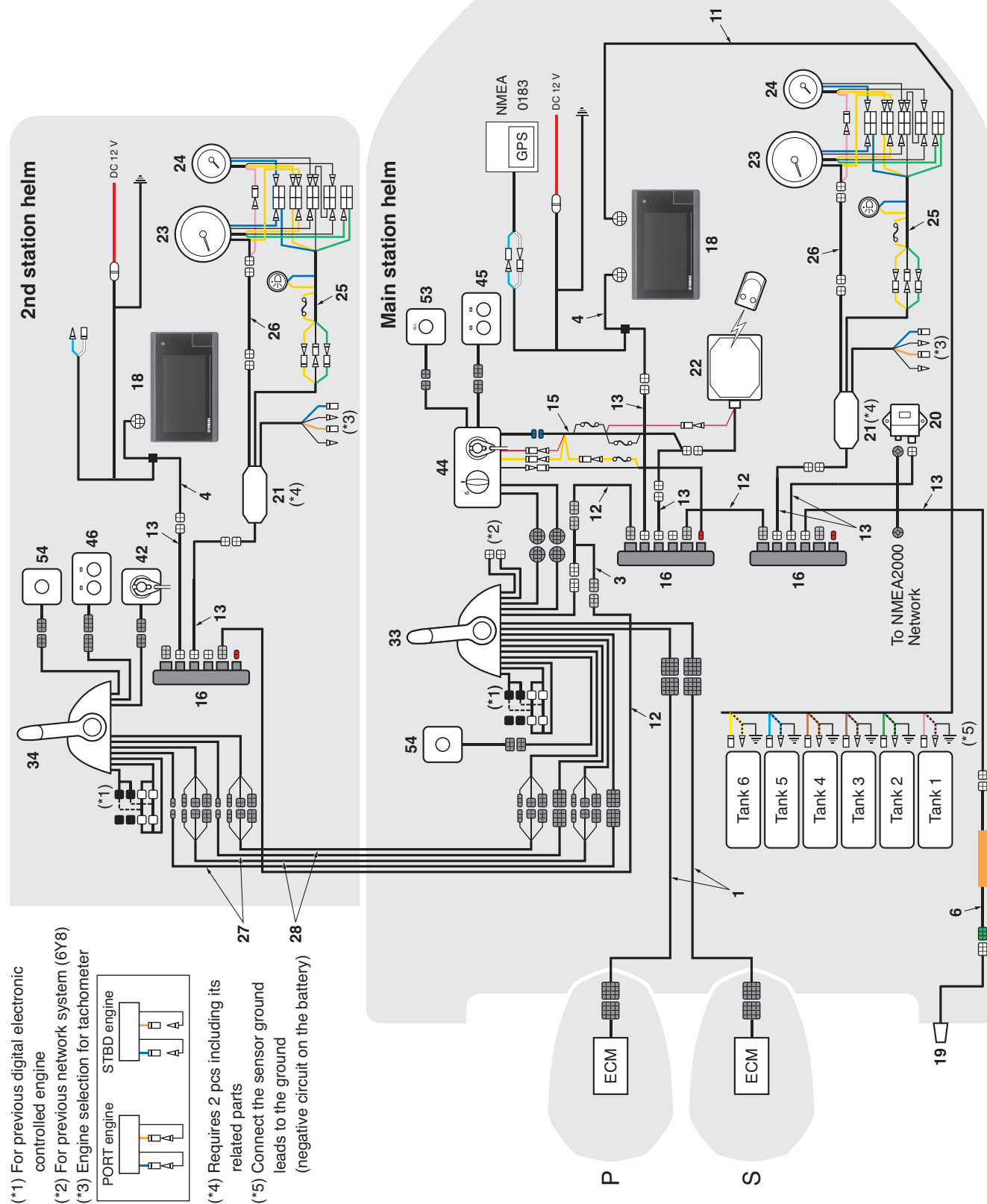
DUAL STATION W/ 6YC GAUGE SINGLE ENGINE APPLICATION

Ref. No.	Part name	Part No.	Remarks
27	2nd helm harness (2-12P)	6X6-8258A-B1	5 m (16 ft)
		6X6-8258A-D1	8 m (26 ft)
		6X6-8258A-F1	12 m (38 ft)
28	2nd helm harness (3/4/6P)	6X6-8258A-G1	5 m (16 ft)
		6X6-8258A-H1	8 m (26 ft)
		6X6-8258A-J1	12 m (38 ft)
30	6X6 binnacle mount Digital Electronic Control	6X6-48205-71	Dual station/ Main helm
	6X7 concealed Digital Electronic Control	6X7-48206-31	
31	6X6 binnacle mount Digital Electronic Control	6X6-48205-81	Dual station/ 2nd helm
	6X7 concealed Digital Electronic Control	6X7-48206-41	
40	Main switch	6X6-82570-32	For 6X6 binnacle mount Digital Electronic Control
		64D-82570-22	For 6X7 concealed Digital Electronic Control
41	Start/stop button	6X6-82570-80	2nd station helm
42	Engine shut-off switch	6X6-82570-90	For 6X6 binnacle mount Digital Electronic Control
		NA	For 6X7 concealed Digital Electronic Control
54	Station selector switch	6X6-82570-B0	For dual station, single/twin/triple engine application

Ref. No.	Part name	Part No.	Remarks
1	Main-harness (16P)	6X6-8258A-50	3.7 m (12 ft)
		6X6-8258A-60	5 m (17 ft)
		6X6-8258A-00	6 m (20 ft)
		6X6-8258A-10	7 m (23 ft)
		6X6-8258A-20	8 m (26 ft)
		6X6-8258A-30	10 m (32 ft)
9	Fuel tank/GPS wire	6X6-8258A-40	12 m (38 ft)
		6Y8-8356N-01	0.3 m (1 ft)
12	Main bus wire	6Y8-82553-01	0.3 m (1 ft)
		6Y8-82553-50	3 m (10 ft)
		6Y8-82553-11	4.6 m (15 ft)
		6Y8-82553-21	6.1 m (20 ft)
		6Y8-82553-31	7.6 m (25 ft)
		6Y8-82553-41	9.1 m (30 ft)
13	Pigtail bus wire	6Y8-82521-01	0.3 m (1 ft)
		6Y8-82521-11	0.6 m (2 ft)
		6Y8-82521-21	0.9 m (3 ft)
		6Y8-82521-31	1.8 m (6 ft)
		6Y8-82521-41	2.7 m (9 ft)
		6Y8-82521-51	3.6 m (12 ft)
14	System power supply wire	6Y8-83553-01	w/ 10-amp fuse, 2.4 m (8 ft)
16	Multi-hub	6Y8-81920-01	w/ resistor cap, GRY
17	Single (inline) hub	6Y8-81920-11	w/ resistor, 4-6P, White
19	Transom multi-sensor	6Y8-83688-01	Depth, speed, water temp, w/ 4.9 m (16 ft) wire
22	Immobilizer unit	6Y8-86254-03	EU
		6Y8-86254-22	US, ANZ
		6Y8-86254-30	JP

NETWORK WIRING DIAGRAMS

DUAL STATION W/ CL7 DISPLAY TWIN ENGINE APPLICATION



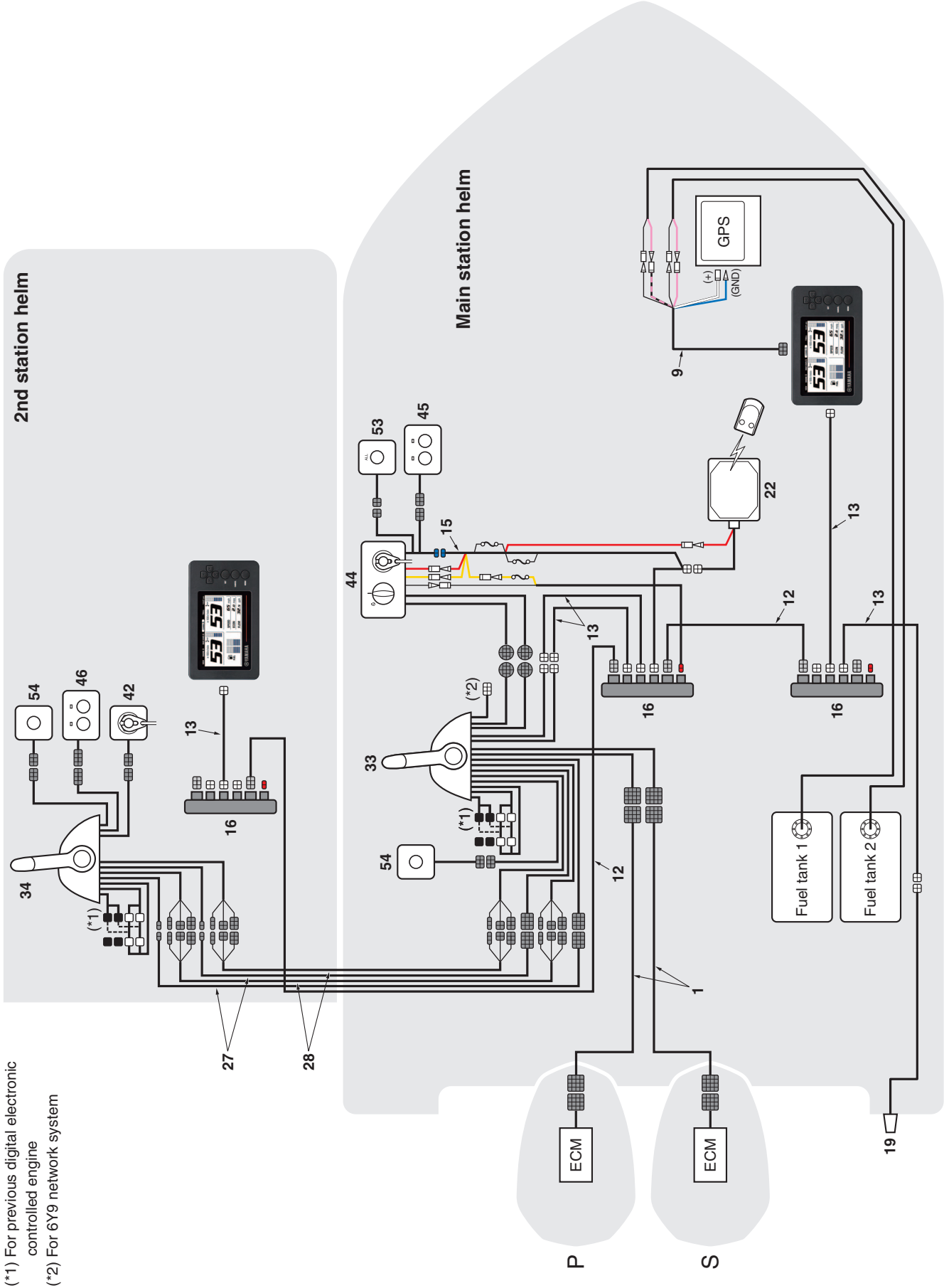
NETWORK WIRING DIAGRAMS

DUAL STATION W/ CL7 DISPLAY TWIN ENGINE APPLICATION

Ref. No.	Part name	Part No.	Remarks
22	Immobilizer unit	6Y8-86254-03	EU
		6Y8-86254-22	US, ANZ
		6Y8-86254-30	JP
23	Analog tachometer	6Y7-83540-80	Black panel
		6Y7-83540-90	White panel
24	Analog trim gauge	6Y7-83670-40	Black panel
		6Y7-83670-50	White panel
25	Analog meter harness	6Y5-83553-00	2.5 m (8 ft)
		6Y5-83653-00	5 m (16 ft)
		6Y5-83653-10	6 m (19 ft)
26	Analog meter trim/oil lead	6Y5-83653-20	7 m (23 ft)
		6Y5-83653-30	8 m (26 ft)
		6Y5-83653-40	9 m (29 ft)
		6Y5-83653-50	10.5 m (34 ft)
27	2nd station helm harness (2-12P)	6X6-8258A-B1	5 m (16 ft)
		6X6-8258A-D1	8 m (26 ft)
		6X6-8258A-F1	12 m (38 ft)
28	2nd station helm harness (3/4/6P)	6X6-8258A-G1	5 m (16 ft)
		6X6-8258A-H1	8 m (26 ft)
		6X6-8258A-J1	12 m (38 ft)
33	6X6 binnacle mount Digital Electronic Control	6X6-48207-71	Dual station/Main station helm
34	6X6 binnacle mount Digital Electronic Control	6X6-48207-81	Dual station/2nd station helm
42	Engine shut-off switch	6X6-82570-90	2nd station helm
44	Main switch	6X6-82570-40	Main station helm
45	Start/stop button	6X6-82570-60	Main station helm
46	Start/stop button	6X6-82570-E0	2nd station helm
53	All start/stop button	6X6-82570-D0	
54	Station selector switch	6X6-82570-B0	For dual station, single/twin/triple engine application

Ref. No.	Part name	Part No.	Remarks
1	Main-harness (16P)	6X6-8258A-50	3.7 m (12 ft)
		6X6-8258A-60	5 m (17 ft)
		6X6-8258A-00	6 m (20 ft)
		6X6-8258A-10	7 m (23 ft)
		6X6-8258A-20	8 m (26 ft)
		6X6-8258A-30	10 m (32 ft)
		6X6-8258A-40	12 m (38 ft)
3	Conversion harness 1	6Y9-83553-10	0.3 m (1 ft)
4	Wire lead for CL7 Display	6YD-83553-00	2.4 m (8 ft)
6	Conversion harness 6	6Y9-83553-60	0.24 m (0.8 ft)
11	Tank wire	6YD-8356N-00	1.06 m (3 ft)
		6Y8-82553-01	0.3 m (1 ft)
		6Y8-82553-50	3 m (10 ft)
12	Main bus wire	6Y8-82553-11	4.5 m (15 ft)
		6Y8-82553-21	6.1 m (20 ft)
		6Y8-82553-31	7.6 m (25 ft)
		6Y8-82553-41	9.1 m (30 ft)
		6Y8-82521-01	0.3 m (1 ft)
		6Y8-82521-11	0.6 m (2 ft)
		6Y8-82521-21	0.9 m (3 ft)
		6Y8-82521-31	1.8 m (6 ft)
		6Y8-82521-41	2.7 m (9 ft)
		6Y8-82521-51	3.6 m (12 ft)
15	Immobilizer PWR distribution wire	6Y8-81315-00	w/ 5-amp fuses, 2.4 m (8 ft)
16	Multi-hub	6Y8-81920-01	w/ resistor cap, GRY
18	CL7 Display	6YD-83710-01	Wi-Fi
		6YD-83710-11	Chart/Wi-Fi
		6YD-83710-21	NA
19	Transom multi-sensor	6Y9-83688-00	Depth, speed, water temp, w/ 4.9 m (16 ft) wire
20	NMEA 2000 gateway	6YG-8A2D0-00	Cable:6YG-82521-00
21	Analog gauge interface	6Y9-8A2D0-30	

NETWORK WIRING DIAGRAMS DUAL STATION W/ 6YC GAUGE TWIN ENGINE APPLICATION



NETWORK WIRING DIAGRAMS

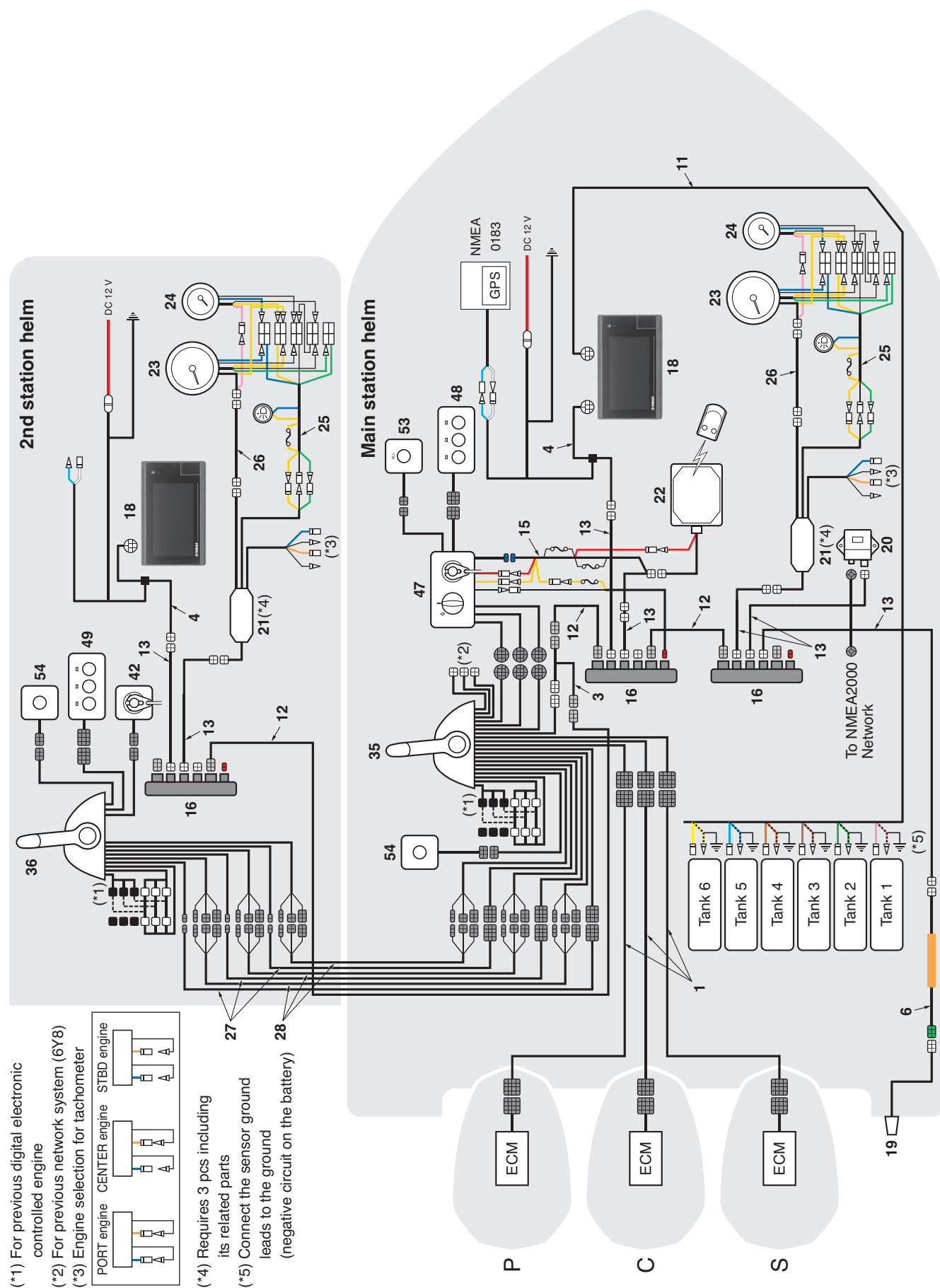
DUAL STATION W/ 6YC GAUGE TWIN ENGINE APPLICATION

Ref. No.	Part name	Part No.	Remarks
22	Immobilizer unit	6Y8-86254-03	EU
		6Y8-86254-22	US, ANZ
		6Y8-86254-30	JP
27	2nd helm harness (2-12P)	6X6-8258A-B1	5 m (16 ft)
		6X6-8258A-D1	8 m (26 ft)
		6X6-8258A-F1	12 m (38 ft)
28	2nd helm harness (3/4/6P)	6X6-8258A-G1	5 m (16 ft)
		6X6-8258A-H1	8 m (26 ft)
		6X6-8258A-J1	12 m (38 ft)
33	6X6 binnacle mount Digital Electronic Control	6X6-48207-71	Dual station/ Main station helm
34	6X6 binnacle mount Digital Electronic Control	6X6-48207-81	Dual station/ 2nd station helm
42	Engine shut-off switch	6X6-82570-90	2nd station helm
44	Main switch	6X6-82570-40	Main station helm
45	Start/stop button	6X6-82570-60	Main station helm
46	Start/stop button	6X6-82570-E0	2nd station helm
53	All start/stop button	6X6-82570-D0	
54	Station selector switch	6X6-82570-B0	For dual station, single/twin/ triple engine application

Ref. No.	Part name	Part No.	Remarks
1	Main-harness (16P)	6X6-8258A-50	3.7 m (12 ft)
		6X6-8258A-60	5 m (17 ft)
		6X6-8258A-00	6 m (20 ft)
		6X6-8258A-10	7 m (23 ft)
		6X6-8258A-20	8 m (26 ft)
		6X6-8258A-30	10 m (32 ft)
9	Fuel tank/ GPS wire	6X6-8258A-40	12 m (38 ft)
		6Y8-8356N-01	0.3 m (1 ft)
		6Y8-82553-01	0.3 m (1 ft)
12	Main bus wire	6Y8-82553-50	3 m (10 ft)
		6Y8-82553-11	4.5 m (15 ft)
		6Y8-82553-21	6.1 m (20 ft)
		6Y8-82553-31	7.6 m (25 ft)
		6Y8-82553-41	9.1 m (30 ft)
13	Pigtail bus wire	6Y8-82521-01	0.3 m (1 ft)
		6Y8-82521-11	0.6 m (2 ft)
		6Y8-82521-21	0.9 m (3 ft)
		6Y8-82521-31	1.8 m (6 ft)
		6Y8-82521-41	2.7 m (9 ft)
		6Y8-82521-51	3.6 m (12 ft)
15	Immobilizer PWR distribution wire	6Y8-81315-00	w/ 5-amp fuses, 2.4 m (8 ft)
16	Multi-hub	6Y8-81920-01	w/ resistor cap, GRY
19	Transom multi-sensor	6Y8-83688-01	Depth, speed, water temp, w/ 4.9 m (16 ft) wire

NETWORK WIRING DIAGRAMS

DUAL STATION W/ CL7 DISPLAY TRIPLE ENGINE APPLICATION



NETWORK WIRING DIAGRAMS

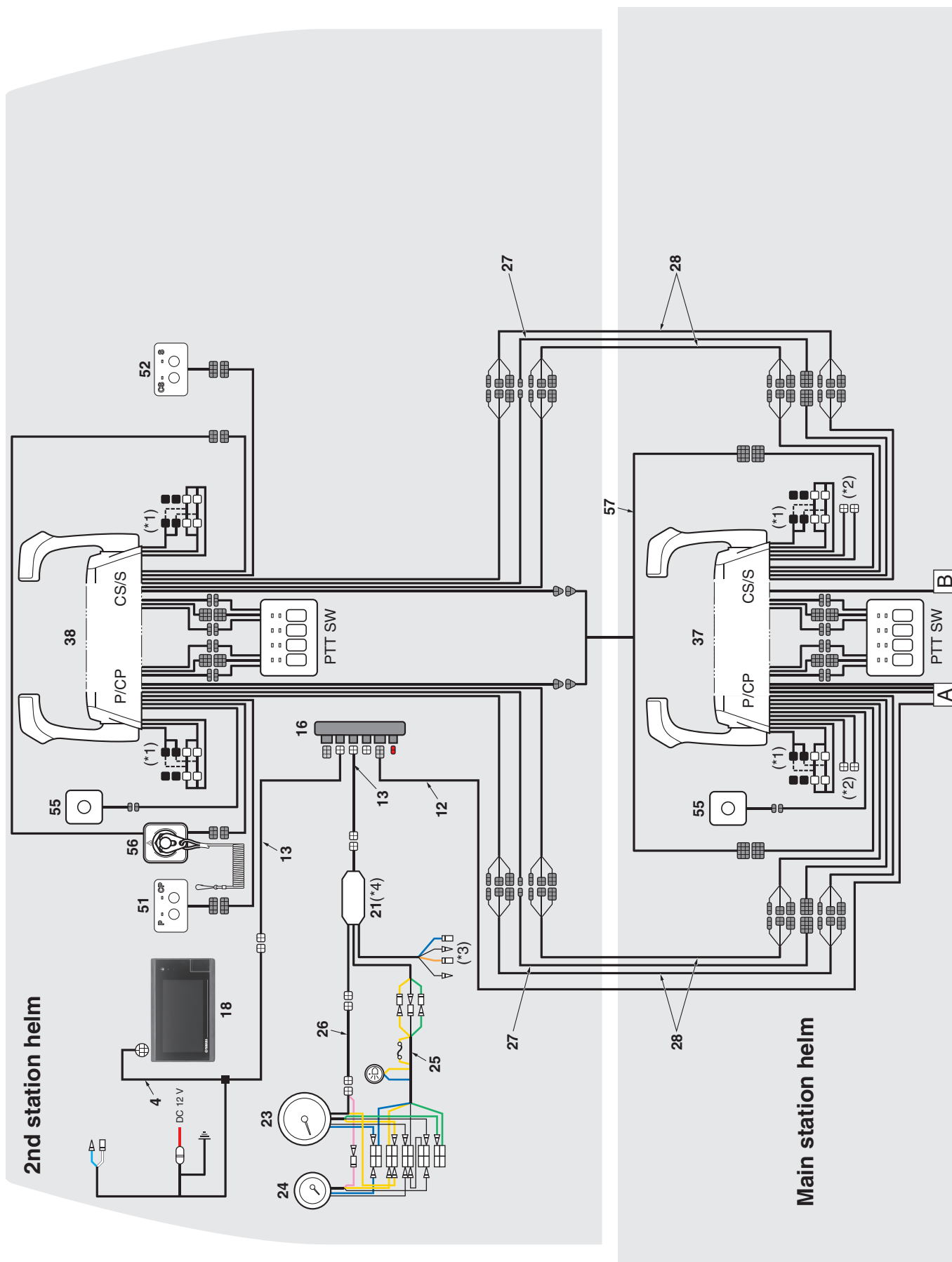
DUAL STATION W/ CL7 DISPLAY TRIPLE ENGINE APPLICATION

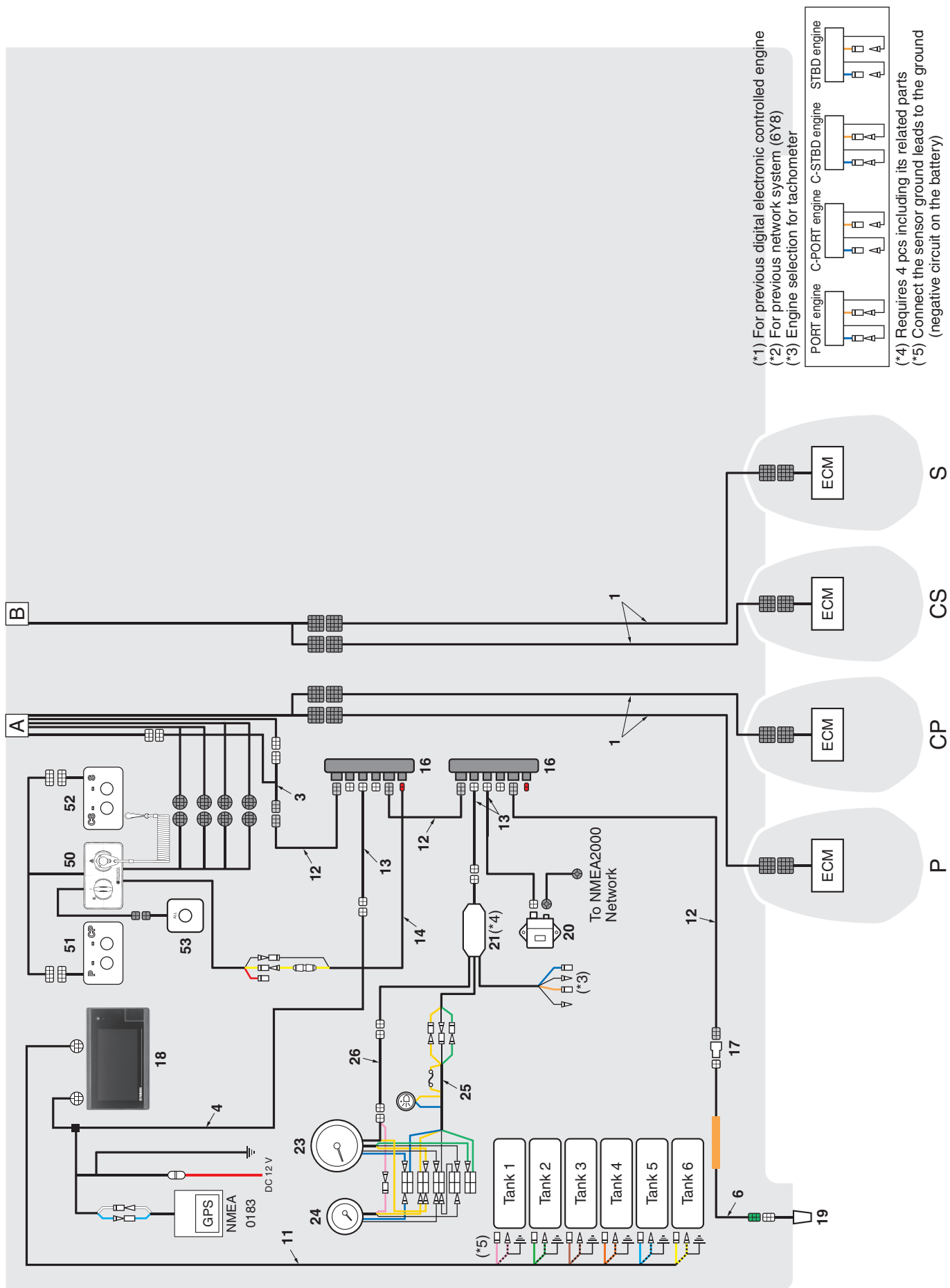
Ref. No.	Part name	Part No.	Remarks
22	Immobilizer unit	6Y8-86254-03	EU
		6Y8-86254-22	US, ANZ
		6Y8-86254-30	JP
23	Analog tachometer	6Y7-83540-80	Black panel
		6Y7-83540-90	White panel
24	Analog trim gauge	6Y7-83670-40	Black panel
		6Y7-83670-50	White panel
25	Analog meter harness	6Y5-83553-00	2.5 m (8 ft)
26	Analog meter trim/oil lead	6Y5-83653-00	5 m (16 ft)
		6Y5-83653-10	6 m (19 ft)
		6Y5-83653-20	7 m (23 ft)
		6Y5-83653-30	8 m (26 ft)
		6Y5-83653-40	9 m (29 ft)
		6Y5-83653-50	10.5 m (34 ft)
27	2nd helm station harness (2-12P)	6X6-8258A-B1	5 m (16 ft)
		6X6-8258A-D1	8 m (26 ft)
		6X6-8258A-F1	12 m (38 ft)
28	2nd helm station harness (3/4/6P)	6X6-8258A-G1	5 m (16 ft)
		6X6-8258A-H1	8 m (26 ft)
		6X6-8258A-J1	12 m (38 ft)
35	6X6 binnacle mount Digital Electronic Control	6X6-48208-61	Single & dual station/Main station helm
36	6X6 binnacle mount Digital Electronic Control	6X6-48208-70	Single & dual station/2nd station helm
42	Engine shut-off switch	6X6-82570-90	2nd station helm
47	Main switch	6X6-82570-50	Main station helm
48	Start/stop button	6X6-82570-70	Main station helm
49	Start/stop button	6X6-82570-F0	2nd station helm
53	All start/stop button	6X6-82570-D0	
54	Station selector switch	6X6-82570-B0	For dual station, single/twin/triple engine application

Ref. No.	Part name	Part No.	Remarks
1	Main-harness (16P)	6X6-8258A-50	3.7 m (12 ft)
		6X6-8258A-60	5 m (17 ft)
		6X6-8258A-00	6 m (20 ft)
		6X6-8258A-10	7 m (23 ft)
		6X6-8258A-20	8 m (26 ft)
		6X6-8258A-30	10 m (32 ft)
		6X6-8258A-40	12 m (38 ft)
3	Conversion harness 1	6Y9-83553-10	0.3 m (1 ft)
4	Wire lead for CL7 Display	6YD-83553-00	2.4 m (8 ft)
6	Conversion harness 6	6Y9-83553-60	0.24 m (0.8 ft)
11	Tank wire	6YD-8356N-00	1.06 m (3 ft)
12	Main bus wire	6Y8-82553-01	0.3 m (1 ft)
		6Y8-82553-50	3 m (10 ft)
		6Y8-82553-11	4.5 m (15 ft)
		6Y8-82553-21	6.1 m (20 ft)
		6Y8-82553-31	7.6 m (25 ft)
		6Y8-82553-41	9.1 m (30 ft)
13	Pigtail bus wire	6Y8-82521-01	0.3 m (1 ft)
		6Y8-82521-11	0.6 m (2 ft)
		6Y8-82521-21	0.9 m (3 ft)
		6Y8-82521-31	1.8 m (6 ft)
		6Y8-82521-41	2.7 m (9 ft)
		6Y8-82521-51	3.6 m (12 ft)
15	Immobilizer PWR distribution wire	6Y8-81315-00	w/ 5-amps fuses, 2.4 m (8 ft)
16	Multi-hub	6Y8-81920-01	w/ resistor cap, GRY
18	CL7 Display	6YD-83710-01	Wi-Fi
		6YD-83710-11	Chart/Wi-Fi
		6YD-83710-21	NA
19	Transom multi-sensor	6Y9-83688-00	Depth, speed, water temp, w/ 4.9 m (16 ft) wire
20	NMEA 2000 gateway	6YG-8A2D0-00	Cable:6YG-82521-00
21	Analog gauge interface	6Y9-8A2D0-30	

NETWORK WIRING DIAGRAMS

DUAL STATION W/ CL7 DISPLAY QUAD ENGINE APPLICATION (FOR F/LF225CA, F/LF250CA, F/LF300CA, F/LF350CA/B/C)





NETWORK WIRING DIAGRAMS

DUAL STATION W/ CL7 DISPLAY QUAD ENGINE APPLICATION (FOR F/LF225CA, F/LF250CA, F/LF300CA, F/LF350CA/B/C)

Ref. No.	Part name	Part No.	Remarks
21	Analog gauge interface	6Y9-8A2D0-30	
23	Analog tachometer	6Y7-83540-80	Black panel
		6Y7-83540-90	White panel
24	Analog trim gauge	6Y7-83670-40	Black panel
		6Y7-83670-50	White panel
25	Analog meter harness	6Y5-83553-00	2.5 m (8 ft)
		6Y5-83653-00	5 m (16 ft)
		6Y5-83653-10	6 m (19 ft)
26	Analog meter trim/oil lead	6Y5-83653-20	7 m (23 ft)
		6Y5-83653-30	8 m (26 ft)
		6Y5-83653-40	9 m (29 ft)
		6Y5-83653-50	10.5 m (34 ft)
		6X6-8258A-B1	5 m (16 ft)
27	2nd station helm harness (2-12P)	6X6-8258A-D1	8 m (26 ft)
		6X6-8258A-F1	12 m (38 ft)
		6X6-8258A-G1	5 m (16 ft)
28	2nd station helm harness (3/4/6P)	6X6-8258A-H1	8 m (26 ft)
		6X6-8258A-J1	12 m (38 ft)
37	6X6 binnacle mount Digital Electronic Control	6X6-48209-21	Single & dual station/Main station helm
38	6X6 binnacle mount Digital Electronic Control	6X6-48209-30	Single & dual station/2nd station helm
50	Main switch	6X6-82570-G0	Main helm
51	Start/stop button	6X6-82570-J0	Main/2nd helm, P/CP
52	Start/stop button	6X6-82570-K0	Main/2nd helm, CS/S
53	All start/stop button	6X6-82570-D0	
55	Station selector switch	6X6-82570-L0	For dual station, quad engine application
56	Engine shut-off switch	6ES-82570-00	For 2nd helm
		6X6-8258A-R0	5 m (16 ft)
57	2nd station helm harness (3-12P)	6X6-8258A-S0	8 m (26 ft)

Ref. No.	Part name	Part No.	Remarks
1	Main-harness (16P)	6X6-8258A-50	3.7 m (12 ft)
		6X6-8258A-60	5 m (17 ft)
		6X6-8258A-00	6 m (20 ft)
		6X6-8258A-10	7 m (23 ft)
		6X6-8258A-20	8 m (26 ft)
		6X6-8258A-30	10 m (32 ft)
		6X6-8258A-40	12 m (38 ft)
3	Conversion harness 1	6Y9-83553-10	0.3 m (1 ft)
4	Wire lead for CL7 Display	6YD-83553-00	2.4 m (8 ft)
6	Conversion harness 6	6Y9-83553-60	0.24 m (0.8 ft)
11	Tank wire	6YD-8356N-00	1.06 m (3 ft)
		6Y8-82553-01	0.3 m (1 ft)
		6Y8-82553-50	3 m (10 ft)
12	Main bus wire	6Y8-82553-11	4.5 m (15 ft)
		6Y8-82553-21	6.1 m (20 ft)
		6Y8-82553-31	7.6 m (25 ft)
		6Y8-82553-41	9.1 m (30 ft)
		6Y8-82521-01	0.3 m (1 ft)
		6Y8-82521-11	0.6 m (2 ft)
13	Pigtail bus wire	6Y8-82521-21	0.9 m (3 ft)
		6Y8-82521-31	1.8 m (6 ft)
		6Y8-82521-41	2.7 m (9 ft)
		6Y8-82521-51	3.6 m (12 ft)
14	System power supply wire	6Y8-83553-01	w/ 10-amps fuse, 2.4 m (8 ft)
16	Multi-hub	6Y8-81920-01	w/ resistor cap, GRY
17	Single (inline) hub	6Y8-81920-11	w/ resistor, 4-6P, White
		6YD-83710-01	Wi-Fi
18	CL7 Display	6YD-83710-11	Chart/Wi-Fi
		6YD-83710-21	NA
19	Transom multi-sensor	6Y9-83688-00	Depth, speed, water temp, w/ 4.9 m (16 ft) wire
20	NMEA 2000 gateway	6YG-8A2D0-00	Cable:6YG-82521-00

BATTERY

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RECOMMENDED BATTERY

Battery is an important element to ensure proper engine start-up and to maintain engine operation performance.

Therefore, exact battery selection is required depending on the model.

Read carefully the labels attached to the battery and follow the instruction supplied by battery manufacturer when you treat or maintain the battery.

Use the battery charging voltage listed in the table below only as a reference when selecting a battery. The charging voltage may vary depending on the ambient temperature or the electrical load to the battery.

NOTICE

- **Do not use a battery which does not meet with the specified capacity.**
If different battery from the specification is used, the electrical system may perform poorly and/or be overloaded, causing electrical system damage.
- **Do not use a battery which exceeds the maximum CCA rating.**
If the batteries are used in parallel circuit, use new batteries of the same type and make sure that the total battery rating never exceeds the maximum CCA rating.

Select a suitable battery as shown in the table below.

4-stroke engines	Battery charging voltage	Unit	Battery rating	
			Minimum	Maximum
4-stroke 25 and smaller	15.0 V	CCA/SAE	245 amps	433 amps
		MCA/ABYC	323 amps	520 amps
		RC/SAE	52 min	—
		CCA/EN	347 amps	411 amps
		20HR/IEC	40 Ah	—
		JIS	28B17	55B24
4-stroke 30 to 130	15.0 V	CCA/SAE	380 amps	1150 amps
		MCA/ABYC	502 amps	1370 amps
		RC/SAE	124 min	—
		CCA/EN	430 amps	1080 amps
		20HR/IEC	70 Ah	—
		JIS	55B24	195G51
4-stroke 150 (L4-2.7L) 4-stroke 200 to 250 (V6-3.3L)	14.5 V	CCA/SAE	512 amps	1150 amps
		MCA/ABYC	675 amps	1370 amps
		RC/SAE	124 min	—
		CCA/EN	510 amps	1080 amps
		20HR/IEC	80 Ah	—
		JIS	80D26	195G51
4-stroke 150 to 200 (L4-2.8L) 4-stroke 200 to 300 (V6-4.2L)	14.5 V	CCA/SAE	680 amps	1150 amps
		MCA/ABYC	770 amps	1370 amps
		RC/SAE	160 min	—
		CCA/EN	640 amps	1080 amps
		20HR/IEC	80 Ah	—
		JIS	105D31	195G51
4-stroke 350 (V8-5.3L)	14.7 V	CCA/SAE	700 amps	1150 amps
		MCA/ABYC	900 amps	1370 amps
		RC/SAE	170 min	—
		CCA/EN	670 amps	1080 amps
		20HR/IEC	110 Ah	—
		JIS	120E41	195G51

RECOMMENDED BATTERY

2-stroke engines	Battery charging voltage	Unit	Battery rating	
			Minimum	Maximum
2-stroke 55 and smaller (Except E/40X, E55D)	No maximum limit (*1)	CCA/SAE	245 amps	433 amps
		MCA/ABYC	323 amps	520 amps
		RC/SAE	52 min	—
		CCA/EN	347 amps	411 amps
		20HR/IEC	40 Ah	—
		JIS	28B17	55B24
2-stroke carburetor 60 to 200 E/40X, E55D	15.0 V E/40X, E/ 60H: No maximum limit (*1)	CCA/SAE	380 amps	610 amps
		MCA/ABYC	502 amps	730 amps
		RC/SAE	124 min	—
		CCA/EN	430 amps	579 amps
		20HR/IEC	70 Ah	—
		JIS	55B24	85D26

*1. Using maintenance-free sealed and/or gel cell batteries are not recommended for no maximum limit of battery charge voltage, because they may not be compatible with Yamaha's charging system for these models.

CCA: Cold Cranking Ampere
SAE: Society of Automotive Engineers
MCA: Marine Cranking Ampere
ABYC: American Boat and Yacht Council

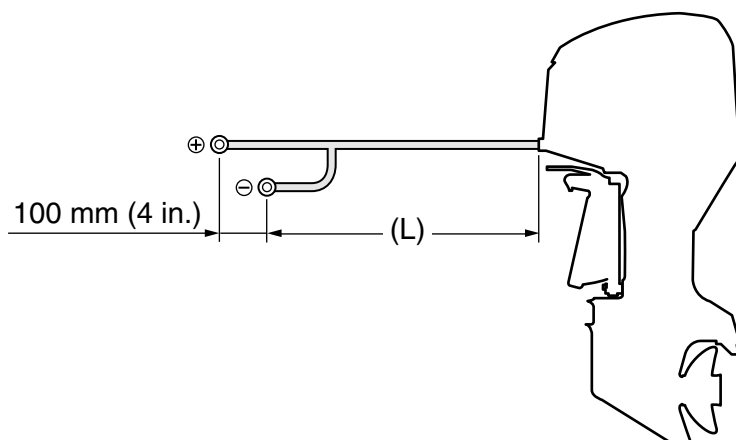
RC: Reserve Capacity Minutes
EN: European Norm (European Standard)
IEC: International Electro-technical Commission
JIS: Japanese Industrial Standard

BATTERY CABLE LENGTH

The following table shows the battery cable length to the (–) terminal from the grommet of outboard motor.

The (+) terminal is usually 100 mm (4 inches) longer than the (–) terminal.

Global Model	Unified model	Cable length (L)		Conductor cross-sectional area		Remarks
		m	ft	AWG	mm ²	
E40J, EK40J		1.43	4.7	5	15	
55B		1.47	4.8	5	15	
40V, 50H, FT50C, F50D		1.64	5.4	8	8	
E/40X, 9.9F, 15F		1.67	5.5	8	8	
F25D	F25A/B	1.67	5.5	5	15	JP: 2.08 m (6.7 ft)
FT25F	T25A	2.24	7.3	5	15	
E/25B, E/30H		1.70	5.6	8	8	
F15C, F20B	F15A, F20A	1.77	5.8	8	8	
60F, 70B		1.78	5.8	5	15	ANZ: 2.38 m (7.8 ft)
F8F	F8B	1.85	6.1	5	15	
90A		2.14	7.0	5	15	
FT8G, F9.9J, FT9.9L	F9.9B, T9.9B	2.75	9	8	8	JP: 1.85 m (6 ft)
E115A		2.76	9.1	5	15	
L/150A, L/200A		2.93	9.6	5	15	
F30B, F40F	F30A, F40A	1.64	5.4	5	15	NOA, ANZ & JP: 2.24 m (7.3 ft)
F70A, F40G	F70A	2.24	7.3	8	8	
F40H, F50H, FT50J, F60F, FT60G	F50B, T50B, F60B, T60B	2.29	8	8	8	
F/FL150D, F/FL150F, F150C, F165A, F175A, F175B, F185A, F/FL200F, F/FL200G	F/LF150B, VF150A, F175A, VF175A, F/LF200B, F/FL200G	2.61	8.6	2	30	
F80B, F90B, F100B, F100D, F75C, F/FL115A, F/FL115B, F115C, F130A, F90C, F100F, F75D, F80D, F90D	F/LF115B, VF115A, F130A, F90B, F75B, VF90A	2.83	9.3	5	15	
F/FL200B, F/FL200C, F/FL225B, F/FL250A, F/FL250H, F200D, F225D, F250C, F225G, F250F, F275A, F/FL225F, F/FL250D, F250J, F/FL300B, F/FL225H, F/FL250L, F/FL300C	F/LF200A, F/LF225A, F/LF250A, VF200LA, VF225LA, VF250LA, VF250XA, F/LF225CA, F/LF250CA, F/LF300CA, F/LF225B, F/LF250B, F/LF300A	3.50	11.5	2	30	
F/FL350A	F/LF350CC	3.56	11.7	2/0	60	
F25G	F25C	1.73	5.7	8	8	



BATTERY WIRING

ISOLATOR EQUIPPED MODELS

⚠ WARNING

Battery electrolyte is poisonous and dangerous, causing severe burns, etc. It contains sulfuric acid. Avoid contact with skin, eyes, or clothing.
Read the safety and maintenance instructions which are accompaniment to your battery.

Do not coil and/or loop the battery cable even if the cable has surplus for routing.

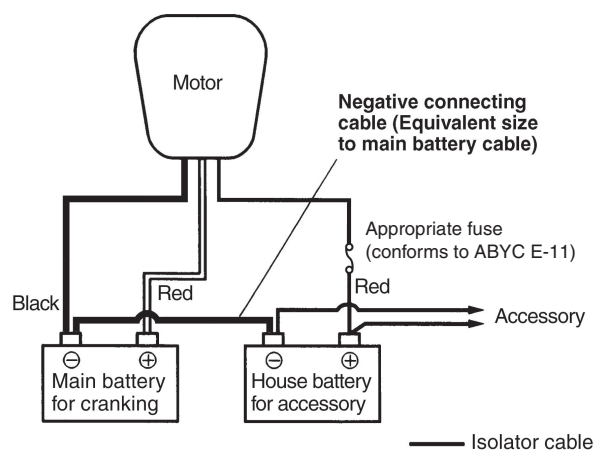
When using a house battery, recommended the same capacity as the main battery is for cranking the engine.

For twin-battery wiring, a battery cable for (–) terminal connects between the house battery and the main battery.
The battery cable size needs to be equivalent to the main battery cable.

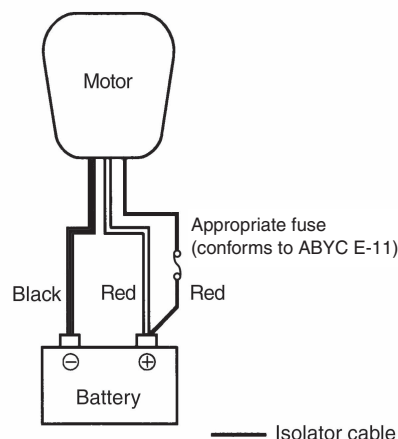
The isolated charging cable is optionally available for a house battery.



Part No.	Length	Conductor cross-sectional area		Remarks
		AWG	mm ²	
68F-81949-02	2.7 m 9 ft	10	5	4-stroke 150 and larger * Except below offshore engines
69J-81949-02	3.8 m 13 ft	10	5	
6CE-81949-00	3.8 m 13 ft	5	15	4-stroke offshore 225 to 300 (V6-4.2L)



When one battery is used, connect the red cable with large diameter and the isolator cable with small diameter to the (+) terminal. The isolator cable needs to be connected to (+) battery terminal, because an accidental contact of the isolator cable to the ground will form a short circuit and may cause a fire.



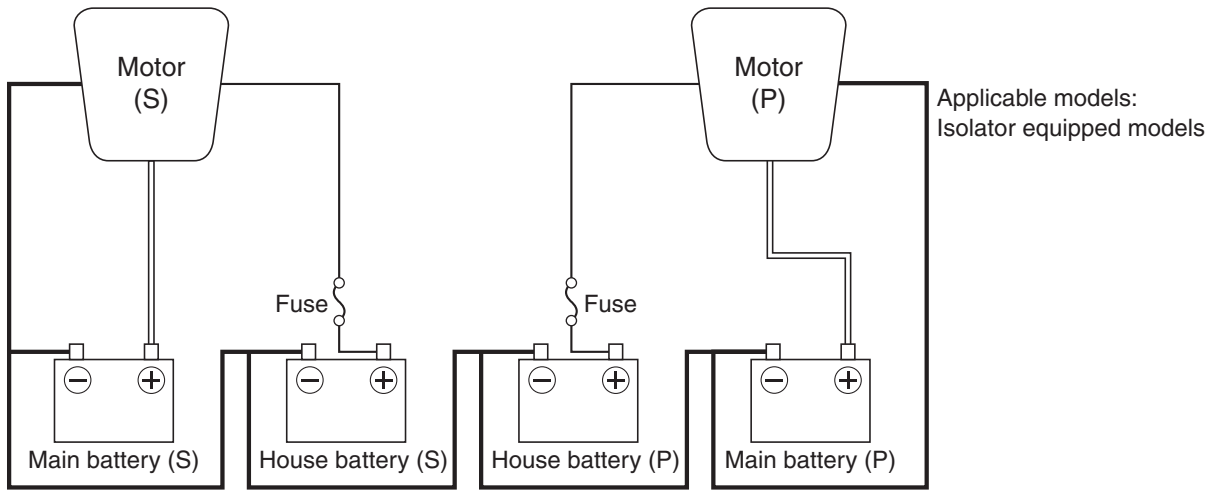
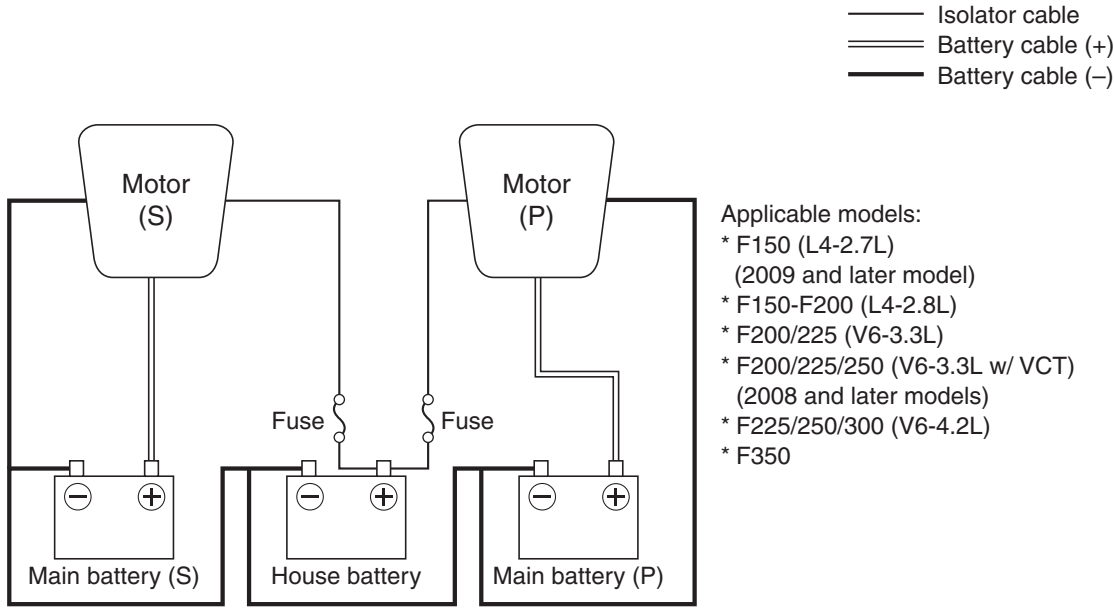
If plural batteries are used for multi-engine installation, all (–) terminals should be connected to the same ground. Obey the local over-current protection compliance such as ABYC part E-11 for wiring the battery cables and connecting to a conductor.

TIP:

Follow the local rules and/or regulations if your battery is scrapped.

BATTERY WIRING

EXAMPLE FOR BATTERY CABLE WIRING (TWIN ENGINE APPLICATION)



BATTERY WIRING

RECOMMENDED EXTENSION LENGTH OF BATTERY CABLES

If the battery cables are extended, follow the requirements in the table due to the battery capacity, cable size and atmosphere temperature.

The length of extension battery cable means the total length of (+) and (–) cables.

Be sure to select an extension battery cable and a terminal that meet ABYC requirements or equivalents.

Use a best-suited stud to the terminal size.

Solder the connection of terminals and cables to prevent them from corroding.

Coiling and/or looping battery cables should be inhibited because of a power loss.

NOTICE

Do not exceed the recommended extension length of battery cable.

Otherwise, the electrical system can result in poor performance or damage.

Atmosphere temperature is 0°C (32°F) and above						
Applicable models	Battery		Maximum total extension length			
	Unit	Rating	AWG4 20 mm ²	AWG2 30 mm ²	AWG1/0 50 mm ²	AWG2/0 60mm ²
Carburetor 150, 200 (V6-2.6L) 4-stroke 115, 130	CCA/SAE	380 amps	3.9 m (13 ft)	6.7 m (22 ft)	10.3 m (34 ft)	—
	MCA/ABYC	502 amps				
	RC/SAE	124 min				
	CCA/EN	430 amps				
	20HR/IEC	70 Ah				
	JIS	65D31				
4-stroke 150 (L4-2.7L)	CCA/SAE	512 amps	6.0 m (20 ft)	10.0 m (33 ft)	16.0 m (52 ft)	—
	MCA/ABYC	675 amps				
	RC/SAE	182 min				
	CCA/EN	711 amps				
	20HR/IEC	100 Ah				
	JIS	95E41				
4-stroke 150-200 (L4-2.8L)	CCA/SAE	680 amps	2.9 m (10 ft)	4.4 m (14 ft)	7.3 m (24 ft)	8.8 m (29 ft)
	MCA/ABYC	770 amps				
	RC/SAE	160 min				
	CCA/EN	640 amps				
	20HR/IEC	80 Ah				
	JIS	105D31				
	CCA/SAE	800 amps	3.2 m (11 ft)	4.8 m (16 ft)	8.0 m (26 ft)	9.6 m (32 ft)
	MCA/ABYC	960 amps				
	RC/SAE	230 min				
	CCA/EN	750 amps				
	20HR/IEC	120 Ah				
	JIS	130E41				

To be continued.

BATTERY WIRING

RECOMMENDED EXTENSION LENGTH OF BATTERY CABLES

Atmosphere temperature is 0°C (32°F) and above						
Applicable models	Battery		Maximum total extension length			
	Unit	Rating	AWG4 20 mm ²	AWG2 30 mm ²	AWG1/0 50 mm ²	AWG2/0 60mm ²
4-stroke 200, 225, 250 (V6-3.3L)	CCA/SAE	512 amps	5.4 m (18 ft)	9.2 m (30 ft)	14.2 m (47 ft)	—
	MCA/ABYC	675 amps				
	RC/SAE	182 min				
	CCA/EN	711 amps				
	20HR/IEC	100 Ah				
	JIS	95E41				
VMAX-SHO 200-275 (V6-4.2L)	CCA/SAE	700 amps	4.2 m (12 ft)	6.3 m (21 ft)	10.5 m (35 ft)	12.6 m (42 ft)
	MCA/ABYC	900 amps				
	RC/SAE	220 min				
	CCA/EN	670 amps				
	20HR/IEC	110 Ah				
	JIS	120E41				
4-stroke 225, 250, 300 (V6-4.2L)	CCA/SAE	700 amps	5 m (17 ft)	7.6 m (25 ft)	12.6 m (42 ft)	15.2 m (51 ft)
	MCA/ABYC	900 amps				
	RC/SAE	220 min				
	CCA/EN	670 amps				
	20HR/IEC	110 Ah				
	JIS	120E41				
	CCA/SAE	800 amps	5.5 m (18 ft)	8.3 m (28 ft)	13.8 m (46 ft)	16.6 m (55 ft)
	MCA/ABYC	960 amps				
	RC/SAE	230 min				
	CCA/EN	750 amps				
	20HR/IEC	120 Ah				
	JIS	130E41				
4-stroke 350 (V8-5.3L)	CCA/SAE	700 amps	—	6.4 m (21 ft)	10.0 m (33 ft)	11.8 m (39 ft)
	MCA/ABYC	900 amps				
	RC/SAE	170 min				
	CCA/EN	670 amps				
	20HR/IEC	110 Ah				
	JIS	120E41				

To be continued.

BATTERY WIRING

RECOMMENDED EXTENSION LENGTH OF BATTERY CABLES

Atmosphere temperature is below 0°C (32°F)						
Applicable models	Battery		Maximum total extension length			
	Unit	Rating	AWG4 20 mm ²	AWG2 30 mm ²	AWG1/0 50 mm ²	AWG2/0 60mm ²
Carburetor 150, 200 (V6-2.6L) 4-stroke 115, 130, 150 VMAX-SHO (V6-4.2L)			Cannot be extended			—
4-stroke 150-200 (L4-2.8L)	CCA/SAE	800 amps	1.8 m (5.9 ft)	2.7 m (8.9 ft)	4.5 m (14.8 ft)	5.4 m (17.7 ft)
	MCA/ABYC	960 amps				
	RC/SAE	230 min				
	CCA/EN	750 amps				
	20HR/IEC	120 Ah				
	JIS	130E41				
4-stroke 200, 225, 250 (V6-3.3L)	CCA/SAE	696 amps	3.5 m (11 ft)	6 m (20 ft)	9.2 m (30 ft)	—
	MCA/ABYC	856 amps				
	RC/SAE	167 min				
	CCA/EN	711 amps				
	20HR/IEC	83 Ah				
	JIS	95D31				
4-stroke 225, 250, 300 (V6-4.2L)	CCA/SAE	700 amps	2.1 m (7 ft)	3.2 m (11 ft)	5.3 m (18 ft)	6.4 m (21 ft)
	MCA/ABYC	900 amps				
	RC/SAE	220 min				
	CCA/EN	670 amps				
	20HR/IEC	110 Ah				
	JIS	120E41				
	CCA/SAE	800 amps	2.3 m (8 ft)	3.5 m (12 ft)	5.8 m (19 ft)	7 m (23 ft)
	MCA/ABYC	960 amps				
	RC/SAE	230 min				
	CCA/EN	750 amps				
	20HR/IEC	120 Ah				
	JIS	130E41				
4-stroke 350 (V8-5.3L)	CCA/SAE	700 amps	—	2.9 m (9 ft)	4.4 m (15 ft)	5.2 m (16 ft)
	MCA/ABYC	900 amps				
	RC/SAE	170 min				
	CCA/EN	670 amps				
	20HR/IEC	110 Ah				
	JIS	120E41				
	CCA/SAE	800 amps	—	3.1 m (10 ft)	4.7 m (15 ft)	5.7 m (18 ft)
	MCA/ABYC	960 amps				
	RC/SAE	230 min				
	CCA/EN	750 amps				
	20HR/IEC	120 Ah				
	JIS	130E41				

To be continued.

BATTERY WIRING

RECOMMENDED EXTENSION LENGTH OF BATTERY CABLES

AWG : American Wire Gauge, **mm²: Conductor cross-section

CCA : Cold Cranking Ampere

SAE : Society of Automotive Engineers

MCA : Marine Cranking Ampere

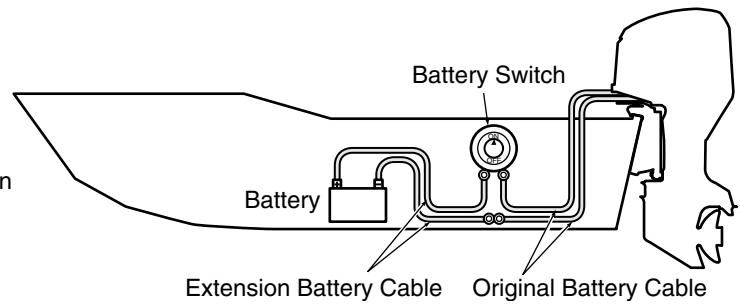
ABYC : American Boat and Yacht Council

RC : Reserve Capacity Minutes

EN : European Norm (European Standard)

IEC : International Electro-technical Commission

JIS : Japanese Industrial Standard



BATTERY WIRING

RECOMMENDED BATTERY SWITCH CAPACITY

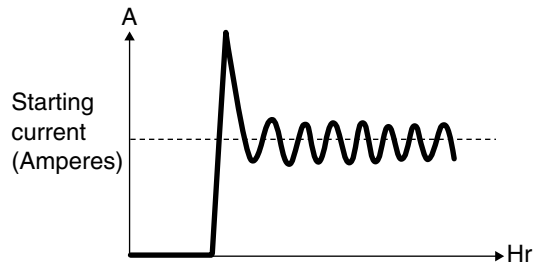
Select a battery switch which covers the starting ampere given in the table.

If the battery cable connection points are increased, electric resistance will increase and performance for starting will decrease.

If a lot of connections such as an automatic battery distribution system is used, the total electric resistance of connections has to be 0.5 MΩ or less.

(reference)

Applicable models	Starting current (Amperes)
Carburetor 150, 200 (V6-2.6L)	195
4-stroke 115 (L4-1.7L)	260
4-stroke 115, 130 (L4-1.8L)	285
4-stroke 200, 225, 250 (V6-3.3L)	220
4-stroke 150 (L4-2.7L)	250
4-stroke 150-200 (L4-2.8L)	200
4-stroke 350 (V8-5.3L)	410
4-stroke 200-300 (V6-4.2L)	250



BATTERY CHARGING CAPABILITY

The following chart shows the net capability to charge a battery.

In case of an isolator equipped model, the capability is the total of main and isolator lines.

* When the temperature of stator coil has risen, the battery charging capability tends to drop.

Global model	Unified model	Net capability	Note
F25D, FT25F	F25A, T25A/B	13 amps	
F30B, F40F	F30A, F40A	13 amps	
F70A, F40G	F70A	8.5 amps	
F40H, F50H, FT50J, F60F, FT60G	F50B, T50B, F60B, T60B	9 amps	
F75C, F80B, F90B, F100D		19 amps	
F/FL115A		16 amps	L4-1.7L
F/FL115B, F115C, F130A	F/LF115B, VF115A, F130A	27 amps	L4-1.8L
F/FL150D, F/FL150F	F/LF150B	21 amps	L4-2.7L
F/FL200B, F/FL200C, F/FL225B, F/FL250A, F/FL250B, F/FL250H	F/LF200A, F/LF225A, F/LF250A	27 amps	V6-3.3L (VCT)
F200D, F225D, F250C, F225G, F250F, F275A, F250J, F225H, F250L, F300C	VF200LA, VF225LA, VF250LA, VF250XA, F225B, F250B, F300A	35 amps	VMAX (SHO)
F150C, F165A, F175A, F175B, F185A, F/FL200F, F/FL200G	VF150A, VF175A, F175A, F/LF200B, F/LF200CA	42 amps	L4-2.8L
F/FL225F, F/FL250D, F/FL300B	F/LF225CA, F/LF250CA, F/LF300CA	55 amps	V6-4.2L
F/FL350A	F/LF350CC	33 amps	V8-5.3L
F90C, F100F, F75D, F80D, F90D	F90B, F75B, VF90A	23 amps	
F25G	F25C	11 amps	

MEMO



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To be continued.

APPENDIX

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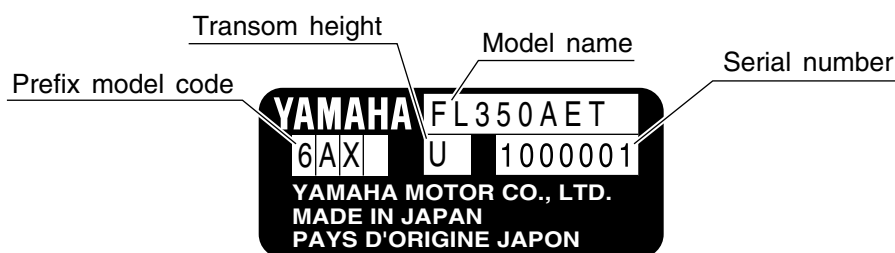
MODEL NAME DESIGNATION

The model primary ID that consists of the model name, prefix model code, transom length and serial number is stamped on the label attached to the clamp bracket.

TIP:

The serial number is a 7-digit sequential numbering scheme regardless of model variation and motor transom height.

GLOBAL MODELS IDENTIFICATION

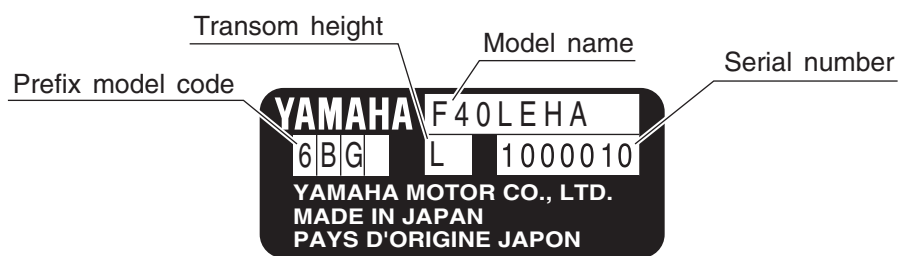


The model identification has been standardized as follows since 1998 model year.

FL	350	A	ET	U
Model category	Output (PS)	Model generation	Model variation	Transom height (Drive shaft length)
Blank: 2-stroke STD engine D: Twin rotating prop E: Enduro series F: 4-stroke engine K: Kerosene engine L: L/H rotation series T: High thrust (4-stroke)	2 to 350	A B C D F G H J L N P Q R S T U V X Y (Repeat from A)	Level 1: Start system Blank: Manual start M: Manual start E: Electric start W: Electric & Manual start Level 2: Steering system Blank: Remote control H: Tiller handle C: Remote control w/ tiller handle Level 3: Trim & Tilt system Blank: Manual tilt D: Hydro tilt P: Power tilt T: Power trim & tilt Level 4: Lubrication system [2-stroke engine] Blank: Premixed fuel engine O: Oil injection engine	S (15") L (20") Y (22.5") X (25") U (30") E (35")

MODEL NAME DESIGNATION

UNIFIED MODELS IDENTIFICATION



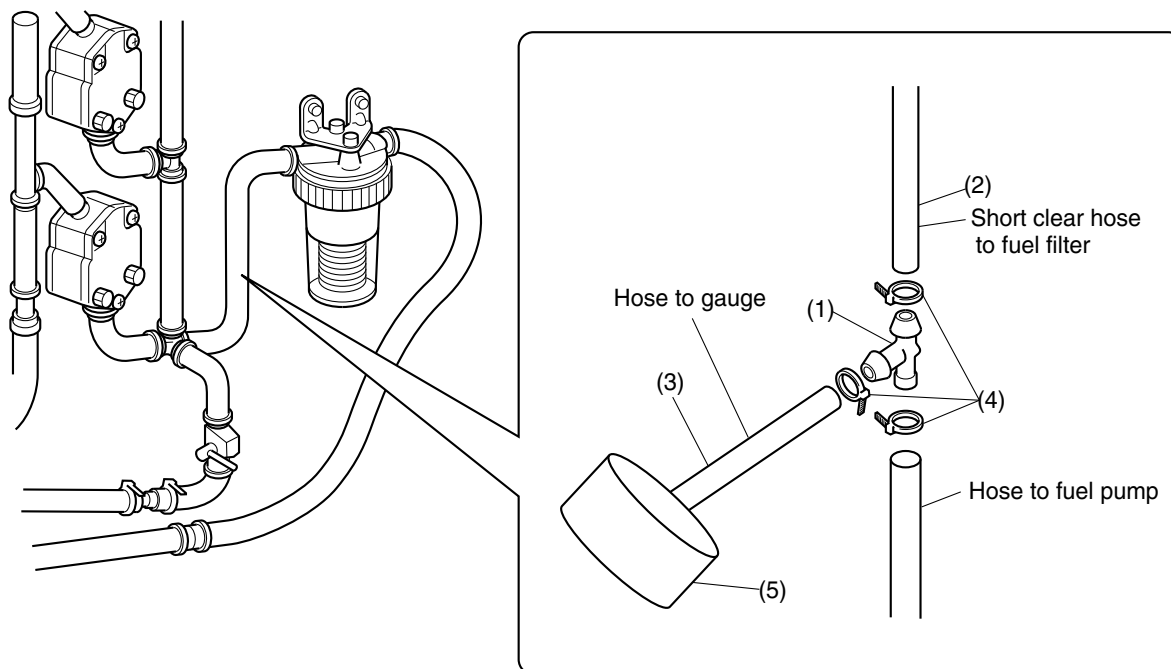
The unified model names are described in a simplified form as shown below.
 For the model names for previous models, see applicable edition of the Rigging guide.

F	40	L	E	H	A
Model category	Power output	Driveshaft length	Starting method PT/T	Control method	Model generation
F: 4-stroke engine L: L/H rotation V: VMAX series T: High thrust	2.5 to 350	S: 15" L: 20" X: 25" U: 30" E: 35" J: Jet drive N: w/o lower-case	Blank: PTT & E-start P: PT & E-start E: Electric start M: Manual start	Blank: Remote control H: Tiller handle C: Command Link Control (DEC)	A: New model (1st change on motor) B: 2nd change on motor C: 3rd change on motor etc.

FUEL SYSTEM VACUUM PRESSURE STANDARD

In high-horsepower V6 models, the required fuel flow volume at normal operation may become insufficient and the engine's reliability may decrease, due to the routing resistance of the fuel hoses and the installation of a larger fuel filter. For the fuel hose routing standard, be sure to consult the service network as well as the boat manufactures.

FUEL HOSE ROUTING RESISTANCE MEASURING METHOD



No.	Description	Part No.	Q'ty	Remark
(1)	HOSE JOINT	6E5-24378-00	1	
(2)	HOSE	Commercially obtainable	1	50 mm (2.0 in.) clear hose (inside diameter is 8 mm (0.3 in.)) used to check for air bubbles
(3)	HOSE	61A-24313-00	1	L = 300 mm (11.8 in.) (250 to 400 mm (9.8 to 15.7 in.) is acceptable)
(4)	CLAMP	90465-10098	4	
(5)	VACUUM PRES-SURE GAUGE	Commercially obtainable	1	Specified pressure range: -101 kPa (-760 mmHg) to 0

1. Connect a 50 mm (2.0 in.) clear hose (market obtainable) (2) to the top nipple of the hose joint (1).
2. Connect the other end of the clear hose (2) to the engine fuel filter outlet.
3. Connect the fuel hose (3) to the center nipple of the hose joint, and the other end of the fuel hose to a vacuum gauge (commercially obtainable) (5).
4. Connect the fuel pump hose to the hose joint, and then fasten all hose connections with clamps (4).
5. Start the engine, let it warm up, and then measure the vacuum pressure at idle and wide-open throttle, after the breaking-in period has been completed.
6. Measure and check that the vacuum pressure is within specification, and then route the fuel hoses to their original positions.

FUEL SYSTEM VACUUM PRESSURE STANDARD

LOWEST VACUUM PRESSURE STANDARD

The lowest vacuum pressure must be fulfilled as below at an atmospheric temperature of 20°C (68°F) and higher.

	Idle: 0 kPa to -10.7 kPa (-80 mmHg) WOT: -10.7 kPa (-80 mmHg) to -20 kPa (-150 mmHg)
---	---

* Be sure to measure and check that the vacuum pressure is within specification at idle and wide-open throttle, after the breaking-in period has been completed.

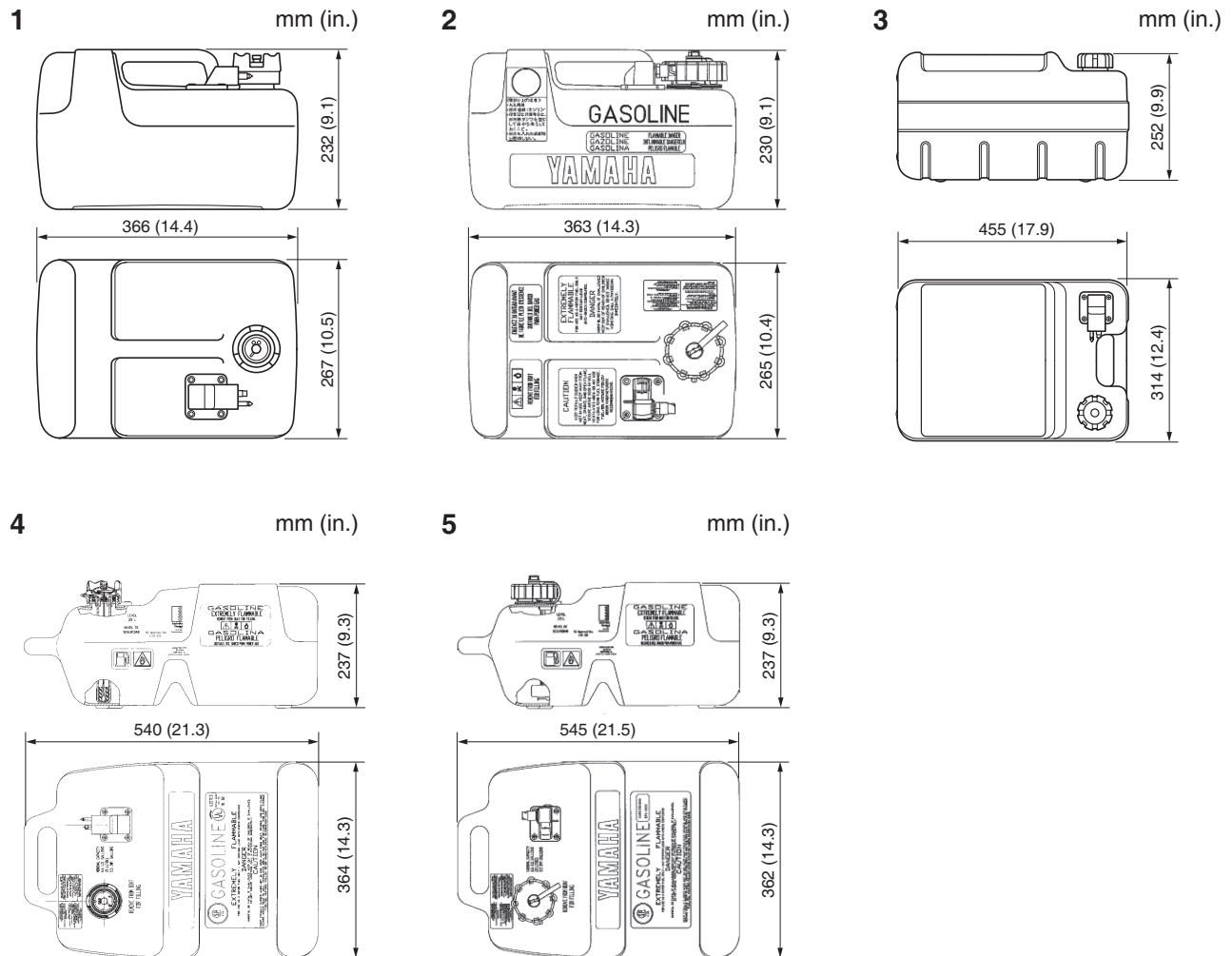
Engine breaking-in operating conditions : 10 hours

- 2-stroke carbureted models : Use 25:1 pre-mixed fuel.
- 2-stroke electronic fuel injected models : Use 50:1 pre-mixed fuel, and supply with oil injection.
- HPDI models : Use straight gasoline (only supply with oil injection)
- 4-stroke models : Use straight gasoline.

Larger fuel filters installed onto a boat may lower the fuel vacuum pressure to -20.0 kPa (-150 mmHg) and under. Therefore, follow the instructions mentioned above to rig the boat properly so that the fuel vacuum pressure is within specification.

If the vacuum pressure does not surpass -10.7 kPa (-80 mmHg) at wide-open throttle, use a clear hose to check that air bubbles are not mixed in the fuel.

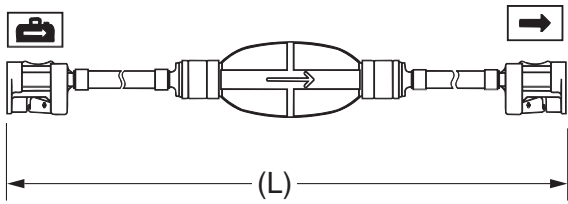
PORTABLE FUEL TANKS (TYPICAL)



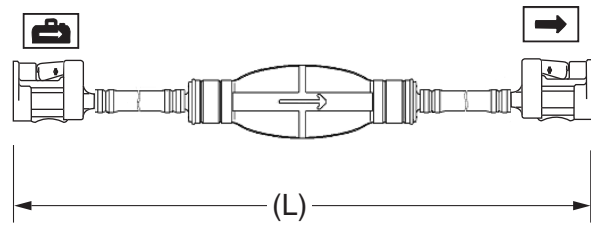
No.	Part No.	Capacity L (US gal)	Material	Description
1	6YL-24201-06	12 (3.2)	Plastic	With fuel gauge
2	6YL-24201-24	12 (3.2)	Plastic	Meeting EPA/CARB regulations, w/ fuel gauge
3	6YJ-24201-00	24 (6.3)	Plastic	
	6YJ-24201-80	24 (6.3)	Plastic	With tag to avoid leaded fuel, exclusive filler neck
4	6YK-24201-04	25 (6.6)	Plastic	With fuel gauge
	6YK-24201-10	25 (6.6)	Plastic	With label to avoid leaded fuel, exclusive filler neck
	6YK-24201-22	25 (6.6)	Plastic	For kerosene
5	6YK-24201-44	25 (6.6)	Plastic	Meeting EPA/CARB regulations, w/ fuel gauge

FUEL PIPES (TYPICAL)

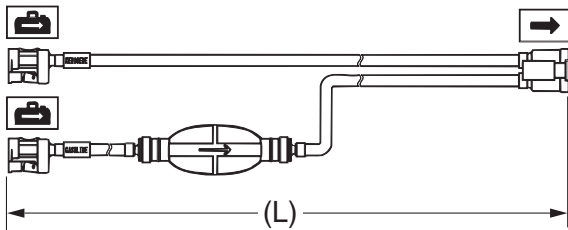
1



2

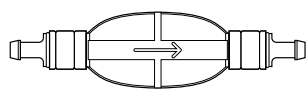


3



No.	Part No.	Hose inside diameter	Length (L)	Remarks
1	6Y1-24306-55	6 mm (0.24 in)	3 m (10 ft)	For small engines
2	6YK-24306-64	8 mm (0.31 in)	3 m (10 ft)	Meeting EPA/CARB
3	6YK-24306-04	6 mm (0.24 in)	3 m (10 ft)	For kerosene models

PRIMARY PUMP (TYPICAL)



Part No.	Hose inside diameter	Remarks
6YK-24360-73	8 mm (0.31 in)	Meeting EPA/CARB regulations, Above F75
6YL-24360-51	6 mm (0.24 in)	

PRE-DELIVERY INSPECTION (PDI)

Before delivery, go over the checklist below to enhance customer satisfaction.

Fill in the information required.

Perform the static and dynamic checks following the items on the sheet.

SAMPLE

OUTBOARD MOTOR



Pre-Delivery Inspection Check List 2- and 4-Stroke engines

Trained personnel should check that the unit has been pre-delivered in accordance with the relevant Yamaha Outboard Manual. The following points must be confirmed at pre-delivery and during the water test.

Ref No: _____

MODEL	PRIMARY ID (Port)	PRIMARY ID (Center)	PRIMARY ID (Starboard)	HULL ID NUMBER (HIN)
BOAT MAKER/MODEL	IGNITION KEY NUMBER (Port)	IGNITION KEY NUMBER (Center)	IGNITION KEY NUMBER (Starboard)	TRAILER NUMBER

CHECK BEFORE OPERATION

- ☐ All Standard Items Supplied (Defect, Breakage, Missing parts)
- ☐ Engine Mounting (High, Width, Proper hardware, Secured)
- ☐ Harness and hoses installation (Secured and Properly Dressed)
- ☐ Main Wire Harness Installation ☐ Extended _____ ft ☐ No Extended
- ☐ Multifunction Gauge Dip Switch Setting for Application
- ☐ Instrument Operation/Connections
- ☐ Tiller Handle Installation/Secure
- ☐ Remote Control Operation/Adjustments Type: _____
- ☐ Cable Stroke and Routing Length: _____ m Min. radius: _____ cm
- ☐ Shift Throttle Operation
- ☐ Cable Stroke and Routing Length: _____ m Min. radius: _____ cm
- ☐ Mechanical Steering Operation/Installation Maker: _____
- ☐ Hydraulic Steering Operation/Bleeding Maker: _____
- ☐ Primer Bulb Installed Properly (Arrow pointing up)
- ☐ Fuel Line/Tank Installation/Connections Routing Sealed/Secured
- ☐ Inner Diameter: _____ m Length: _____ m Height: _____ m
- ☐ Boat Fuel Filter Type: _____
- ☐ Fuel Vacuum Test Result: _____ Kpa @ WOT _____ rpm (V4 & V6)
- ☐ Battery Meets/Exceeds Engine Specifications Type: _____
- ☐ Battery Charged/Secured/Connections Tight
- ☐ Battery Cable Installation and Routing
- ☐ Battery Cable Type: _____ Cable Length: _____
- ☐ Battery Switch Installation (Secured, Properly Connections)
- ☐ Manual Tilt Operation
- ☐ Power Trim/Tilt Operation
- ☐ Lower Case Oil Level
- ☐ Overheat Warning System (Ground sensor lead on applicable models)
- ☐ Visual Inspection of Engine
- ☐ <2-Stroke engine Fuel and Oil Setup>
- ☐ Break-In Premix Ratio (Except HPDI models) _____ :
- ☐ Oil in Remote and Engine Tank
- ☐ Yamalube TC-W3 ☐ Equivalent Quality Oil Brand: _____
- ☐ Breed Oil Injection Pump / No air oil Injection Lines
- ☐ Electric Oil Pump Function
- ☐ <4-Stroke engine Oil Setup>
- ☐ Check Engine Oil Level (Ensure engine is not overfilled)
- ☐ Engine Oil Classification: Brand: _____
- ☐ <Carbureted 2- and 4-Stroke engines>
- ☐ Manual/Electric Choke Operation

CHECK DURING OPERATION

- ☐ Electric Starter Operation (Start in gear protection functions)
- ☐ Manual/Electric Choke Operation
- ☐ Neutral Switch function
- ☐ Stop Switch/Emergency lanyard Switch Operation
- ☐ Steering Operation
- ☐ Throttle Operation/Friction Adjustment Neutral/Cruising
- ☐ Proper Shift Cable Adjustment/Operation (F-N-R)
- ☐ Cooling System Water Flow
- ☐ Fuel/Oil/Water/Exhaust leaks
- ☐ Oil Warning system Check (Equipped models)
- ☐ Warning Indicator and Buzzer
- ☐ Oil and Overheat Warning functions (Equipped models)
- ☐ Engine reaches operating temperature
- ☐ Power Trim/Tilt Operation
- ☐ Instrument Operation
- ☐ Trim Tab Adjustment (retorque after operation)
- ☐ Propeller Selection: Brand: ☐ YAMAHA ☐ Other: _____
- ☐ Material: ☐ SST ☐ AL ☐ Plastic
- ☐ Model: _____ Dia: _____ Pitch: _____
- ☐ Idle RPM Single/P: _____ rpm S: _____ rpm C: _____ rpm
- ☐ In gear idle RPM Single/P: _____ rpm S: _____ rpm C: _____ rpm
- ☐ Factory-recommended W.O.T. RPM Range: _____ rpm
- ☐ W.O.T. RPM Single/P: _____ rpm S: _____ rpm C: _____ rpm
- ☐ No Cavitation/Ventilation

Remarks: _____

INSPECTOR'S SIGNATURE	DATE
DEALER NAME	PHONE NUMBER
DEALERSHIP ADDRESS	

CUSTOMER DELIVERY CHECKLIST

- ☐ Operation of Equipment/Boat Accessories Explained (Proper Trim and Tilt operation demonstrated)
- ☐ Operation/Orientation Ride with Dealership Personnel
- ☐ Warranty/Owner's Manual and Keys Given to Customer by Dealer.
- ☐ Customer Introduced to Service Manager/Writer
- ☐ Return-to-Port Operations (Oil Injection System, RPM Reduction)
- ☐ Gauge Operation/Warning Symbols Explained
- ☐ 2-Stroke: Use of Yamalube 2M/TC-W3 or Equivalent Rated Oil
- ☐ 4-Stroke: Use of Yamalube 4M or Equivalent Rated Oil
- ☐ YDIS Download Provided on Applicable Models
- ☐ 4-Stroke: Show Customer Proper Checking Procedures and Proper Level of Engine Oil
- ☐ Engine Break-in Procedure Explained
- ☐ Maintenance/Care Schedule Explained
- ☐ Advised of First Scheduled Maintenance
- ☐ Warranty Coverage Explained to Customer's Satisfaction, Including Customer Responsibilities
- ☐ Service Maintenance Package benefits explained
- ☐ C.S.I. questionnaire explained
- ☐ Customer questions Answered by Dealership Personnel
- ☐ Break-in Time Placed on Engine by Dealership Personnel

Hours: _____ Minutes: _____

The above material has been explained and/or provided to me by dealership personnel.
My questions were answered and explained to my satisfaction.

CUSTOMER NAME	PHONE NUMBER
CUSTOMER ADDRESS	
CUSTOMER SIGNATURE	DATE

CONVENTIONAL RIGGING KIT CONTENTS

The rigging kits are handled by Yamaha Motor Corporation Sales division, NOT Parts division.
To importers, purchase the rigging kits from your sales because it is not available as repair parts.

DIGITAL TACHOMETER KIT

F30 and larger, 40 and larger w/ oil injection

P/N: 6YR-W0035-E4

Part name	Part No.	Q'ty	Remarks
EXT wire-lead	6Y5-83653-20	1	7 m (23 ft)
Tachometer ASSY	6Y5-8350T-E0	1	Included instruction tag
Wire-lead	6Y5-83553-20	1	2.5 m (8 ft) w/10 amp fuse

DIGITAL TACHOMETER AND SPEEDOMETER KIT

F30 and larger, 40 and larger w/ oil injection

P/N: 6YR-W0035-F4

Part name	Part No.	Q'ty	Remarks
Wire-lead	6Y5-83553-N0	1	2.5 m (8 ft) w/10 amp twin-fuse
Tachometer ASSY	6Y5-8350T-E0	1	Included instruction tag
EXT wire-lead	6Y5-83653-30	1	8 m (26 ft)
Speedometer ASSY	6Y5-83570-A0	1	Included instruction tag
Tube	6Y5-83557-10	1	8 m (26 ft)
Clamp	90465-11M10	2	
Clamp	90465-13M18	10	
Instruction	61A-28107-A4	1	

ANZ: Fuel injected F50-F100

P/N: 6YR-W0035-T1

Part name	Part No.	Q'ty	Remarks
Wire-lead	6Y5-82117-00	1	30 cm (1 ft), BLK
Tachometer ASSY	6Y5-8350T-E0	1	Included instruction tag
Wire-lead	6Y5-83553-M0	1	2.5 m (8 ft) w/10 amp twin-fuse
Tube	6Y5-83557-10	1	8 m (26 ft)
Speedometer ASSY	6Y5-83570-A0	1	Included instruction tag
EXT wire-lead	6Y5-83653-30	1	8 m (26 ft)
Clamp	90465-11M10	2	

CONVENTIONAL RIGGING KIT CONTENTS

TWIN-MOTOR KIT

FL/LF115 and larger, L150 and larger

P/N: 6YR-W0035-GA

Part name	Part No.	Q'ty	Remarks
Wire-lead	6Y5-83553-20	1	2.5 m (8 ft) w/10 amp fuse
Tachometer ASSY	6Y5-8350T-E0	1	Includes instruction tag
EXT wire-lead	6Y5-83653-40	1	9 m (31 ft)
Twin-binnacle RCL box	704-48207-R0	1	
Main wire-harness, 10-pin	6K1-8258A-40	1	8 m (26 ft)
Main wire-harness, 10-pin	61B-8258A-01	1	9.5 m (32 ft)
Clamp	90465-13M18	10	
Twin-switch panel	6K1-82570-13	1	With multi-engine system
Screw	90149-05M05	4	25 mm (0.1 in)
Nut	95380-05600	4	
Plane washer	92990-05600	4	
Spring washer	92990-05100	4	
Fuel mgt gauge	6Y5-8350F-B0	1	With 3-prong connector
Wire-lead	6Y5-83553-F1	1	8 m (26 ft)
Fuel flow sensor	6Y5-85752-02	2	
Screw	90158-06003	4	68 mm (2.7 in)
Instruction	61B-28107-A4	1	

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

TIP:

6YC and 6Y8 gauge rigging kit for US is available from Yamaha Motor Corporation, USA.

6YC GAUGE RIGGING KIT (FOR EU)

SINGLE KIT (Mechanical RC) w/o Speed Sensor Kit

Kit P/N: 6Y8-762G0-30

Part No.	Part name	Q'ty	Remarks
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-81920-11	Single-hub	1	With resistor
6Y8-82521-11	Pigtail bus wire, 0.6 m (2 ft)	1	
6Y8-82521-31	Pigtail bus wire, 0.6 m (2 ft)	1	
6Y8-82553-21	Main bus wire, 6.1 m (20 ft)	1	
6Y8-82582-11	4-pin waterproof cap	2	White
6YC-83710-02	Multifunction gauge	1	w/ screen cover
6Y8-83553-01	PWR supply wire, 2.4 m (8 ft)	1	With 10 amp fuse
6Y8-8356N-01	Fuel tank & GPS wire	1	
6YC-2819U-70	Operation Manual 1	1	
6YC-2819U-80	Operation Manual 2	1	

TWIN KIT (Mechanical RC) w/o Speed Sensor Kit

Kit P/N: 6Y8-762R0-00

Part No.	Part name	Q'ty	Remarks
61B-8258A-01	Main wire-harness 10-pin, 8 m (26 ft)	1	
6K1-8258A-40	Main wire-harness 10-pin, 9.8 m (32 ft)	1	
6Y8-81920-01	Multi-hub	2	With resistor cap, GRY
6Y8-82521-11	Pigtail bus wire, 0.6 m (2 ft)	1	
6Y8-82521-31	Pigtail bus wire, 1.8 m (6 ft)	1	
6Y8-82521-41	Pigtail bus wire, 2.7 m (9 ft)	1	
6Y8-82553-31	Main bus wire, 7.6 m (25 ft)	1	
6Y8-82582-01	2-pin waterproof cap	1	Red
6Y8-82582-11	4-pin waterproof cap	3	White
6YC-83710-02	Multifunction gauge	1	w/ screen cover
6Y8-83553-01	PWR supply wire, 2.4 m (8 ft)	1	With 10 amp fuse
6Y8-8356N-01	Fuel tank & GPS wire	1	
704-48207-R0	Twin-binnacle RCL box	1	
6Y8-82570-04	Twin-switch panel	1	
90149-05M05	Screw, 25 mm (1 in)	4	
95380-05600	Nut	4	
92990-05600	PLN washer	4	
92990-05100	SRG washer	4	
6YC-2819U-70	Operation Manual 1	1	
6YC-2819U-80	Operation Manual 2	1	

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

6YC GAUGE RIGGING KIT (FOR EU)

SINGLE ENGINE GAUGE KIT (DEC)

P/N: 6Y8-762G0-20

Part No.	Part name	Q'ty	Remarks
6X6-8258A-30	Main wire-harness, 10 m (33 ft)	1	16-pin
6Y8-81920-01	Multi-hub	1	
6Y8-85371-01	Resistor 1	1	
6Y8-82521-11	Pigtail bus wire, 0.6 m (2 ft)	1	
6Y8-82521-31	Pigtail bus wire, 1.8 m (6 ft)	1	
6Y8-82582-11	4-pin waterproof cap	1	White
6YC-83710-02	Multifunction gauge	1	w/ screen cover
6Y8-83553-01	PWR supply wire	1	w/ 10 amp fuse
6Y8-8356N-01	Fuel tank & GPS wire	1	
6YC-2819U-70	Operation Manual 1	1	
6YC-2819U-80	Operation Manual 2	1	

TWIN ENGINE GAUGE KIT (DEC)

P/N: 6Y8-762G0-10

Part No.	Part name	Q'ty	Remarks
6YC-83710-02	Multifunction gauge	1	w/ screen cover
6Y8-81920-01	Multi-hub	2	w/ resistor
6Y8-82553-01	Main bus wire, 0.3 m (1 ft)	1	
6Y8-82582-11	4-pin waterproof cap	3	White
6Y8-82582-01	2-pin waterproof cap	1	Red
6Y8-82521-11	Pigtail bus wire, 0.6 m (2 ft)	1	
6Y8-82521-31	Pigtail bus wire, 1.8 m (6 ft)	2	
6Y8-8356N-01	Fuel tank & GPS wire	1	NMEA0183
6Y8-83553-01	PWR supply wire	1	w/ 10 amp fuse
6X6-82570-40	IG switch, twin	1	OFF-ON
6X6-82570-60	Start/stop SW, twin	1	
6X6-8258A-40	Main wire-harness, 12.2 m (40 ft)	2	16-pin
6YC-2819U-70	Operation Manual 1	1	
6YC-2819U-80	Operation Manual 2	1	

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

6YC GAUGE RIGGING KIT

SINGLE KIT (Mechanical RC)

Kit P/N: 6YR-762G0-00

Part No.	Part name	Q'ty	Remarks
60V-8A4L1-18	Speed sensor kit	1	
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-81920-11	Single-hub	1	With resistor
6Y8-82521-11	Pigtail bus wire, 0.6 m (2 ft)	1	
6Y8-82521-51	Pigtail bus wire, 3.6 m (12 ft)	1	
6Y8-82553-31	Main bus wire, 7.6 m (25 ft)	1	
6Y8-82582-11	4-pin waterproof cap	2	White
6YC-83710-02	Multifunction gauge	1	w/ screen cover
6Y8-83553-01	PWR supply wire, 2.4 m (8 ft)	1	With 10 amp fuse
6Y8-8356N-01	Fuel tank & GPS wire	1	
6YC-2891U-70	Operation Manual	1	

SINGLE KIT (DEC)

P/N: 6Y8-762G0-00

Part No.	Part name	Q'ty	Remarks
60V-8A4L1-18	Speed sensor kit	1	
6YC-83710-01	Multifunction gauge	1	w/ screen cover
6Y8-81920-01	Multi-hub	1	w/ resistor
6Y8-85371-01	Resistor 1	1	
6Y8-82582-11	4-pin waterproof cap	1	White
6Y8-82521-11	Pigtail bus wire, 0.6 m (2 ft)	1	
6Y8-82521-31	Pigtail bus wire, 1.8 m (6 ft)	1	
6Y8-8356N-01	Fuel tank & GPS wire	1	NMEA0183
6Y8-83553-01	PWR supply wire	1	w/ 10 amp fuse
6X6-82570-33	IG switch panel, single	1	OFF-ON-START
6X6-8258A-30	Main wire-harness, 10 m (33 ft)	1	16-pin
6YC-2819U-70	Operation Manual	1	

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

6YC GAUGE RIGGING KIT

TWIN KIT (Mechanical RC)

Kit P/N: 6YR-762R0-00

Part No.	Part name	Q'ty	Remarks
60V-8A4L1-18	Speed sensor kit	1	
61B-8258A-01	Main wire-harness 10-pin, 8 m (26 ft)	1	
6K1-8258A-40	Main wire-harness 10-pin, 9.8 m (32 ft)	1	
6Y8-81920-01	Multi-hub	2	With resistor cap, GRY
6Y8-82521-11	Pigtail bus wire, 0.6 m (2 ft)	1	
6Y8-82521-31	Pigtail bus wire, 1.8 m (6 ft)	1	
6Y8-82521-41	Pigtail bus wire, 2.7 m (9 ft)	1	
6Y8-82553-31	Main bus wire, 7.6 m (25 ft)	1	
6Y8-82582-01	2-pin waterproof cap	1	Red
6Y8-82582-11	4-pin waterproof cap	3	White
6YC-83710-02	Multifunction gauge	1	w/ screen cover
6Y8-83553-01	PWR supply wire, 2.4 m (8 ft)	1	With 10 amp fuse
6Y8-8356N-01	Fuel tank & GPS wire	1	
704-48207-R0	Twin-binnacle RCL box	1	
6Y8-82570-04	Twin-switch panel	1	
90149-05M05	Screw, 25 mm (1 in)	4	
95380-05600	Nut	4	
92990-05600	PLN washer	4	
92990-05100	SRG washer	4	
6YC-2819U-70	Operation Manual	1	

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

6YC GAUGE RIGGING KIT

TWIN KIT (DEC)

Kit P/N: 6Y8-762G0-40

Part No.	Part name	Q'ty	Remarks
60V-8A4L1-18	Speed sensor kit	1	
6X6-82570-40	IG switch, twin	1	OFF-ON
6X6-82570-60	Start/stop SW, twin	1	
6X6-8258A-40	Main wire-harness, 12.2 m (40 ft)	2	
6Y8-81920-01	Multi-hub	2	With resistor cap, GRY
6Y8-82521-11	Pigtail bus wire, 0.6 m (2 ft)	1	
6Y8-82521-31	Pigtail bus wire, 1.8 m (6 ft)	2	
6Y8-82553-01	Main bus wire, 0.3 m (1 ft)	1	
6Y8-82582-01	2-pin waterproof cap	1	Red
6Y8-82582-11	4-pin waterproof cap	3	White
6Y8-83553-01	PWR supply wire, 2.4 m (8 ft)	1	With 10 amp fuse
6Y8-8356N-01	Fuel tank & GPS wire	1	
6YC-2819U-70	Operation manual 1	1	
6YC-83710-02	Multifunction gauge	1	w/ screen cover

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

6YC GAUGE RIGGING KIT (FOR ANZ)

TWIN KIT (Mechanical RC)

Kit P/N: 6YR-W0035-S6

Requires the single-kit.

Part No.	Part name	Q'ty	Remarks
61B-8258A-01	Main wire-harness 10-pin, 9.8 m (32 ft)	1	
6K1-8258A-40	Main wire-harness 10-pin, 8 m (26 ft)	1	
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-82521-51	Pigtail bus wire, 3.6 m (12 ft)	1	
6Y8-82582-01	2-pin waterproof cap	1	Red
6Y8-82582-11	4-pin waterproof cap	1	White
704-48207-R0	Twin-binnacle RCL box	1	
6Y8-82570-04	Twin-switch panel	1	
90149-05M05	Screw, 25 mm (1 in)	4	
92990-05100	SRG washer	4	
92990-05600	PLN washer	4	
95380-05600	Nut	4	

6YC GAUGE RIGGING KIT (FOR JPN)

SINGLE KIT (Mechanical RC)

Kit P/N: 6YR-762G0-10

Part No.	Part name	Q'ty	Remarks
60V-8A4L1-18	Speed sensor kit	1	
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-81920-11	Single-hub	1	With resistor
6Y8-82521-21	Pigtail bus wire, 0.9 m (3 ft)	1	
6Y8-82521-51	Pigtail bus wire, 3.6 m (12 ft)	1	
6Y8-82553-31	Main bus wire, 7.5 m (25 ft)	1	
6Y8-82582-11	4-pin waterproof cap	2	White
6YC-83710-01	Multifunction gauge	1	w/ screen cover
6Y8-83553-01	PWR supply wire, 2.4 m (8 ft)	1	With 10 amp fuse
6Y8-8356N-01	Fuel tank & GPS wire	1	
6YC-2819U-00	Operation Manual	1	

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

6YC GAUGE RIGGING KIT (FOR JPN)

SINGLE KIT (DEC)

Kit P/N: 6X6-762G0-00

Part No.	Part name	Q'ty	Remarks
6YC-83710-02	Multifunction gauge	1	w/ screen cover
6Y8-81920-01	Multi-hub	1	
6Y8-82582-11	4-pin waterproof cap	1	White
6Y8-85371-01	Resistor cap	1	Gray, 6-pin
6Y8-82521-11	Pigtail bus wire, 0.6 m (2.5 ft)	1	
6Y8-82521-31	Pigtail bus wire, 1.8 m (6 ft)	1	
6Y8-83553-01	PWR supply wire, 2.4 m (8 ft)	1	With 10 amp fuse
6Y8-8356N-01	Fuel tank & GPS wire	1	
6X6-82570-33	Single-switch panel	1	
6X6-8258A-30	Main wire-harness, 10 m (32 ft)	1	16-pin
6YC-2819U-00	Operation Manual	1	Japanese
60V-8A4L1-18	Speed sensor kit	1	

TWIN KIT (DEC)

Kit P/N: 6X6-762G0-10

Part No.	Part name	Q'ty	Remarks
6YC-83710-02	Multifunction gauge	1	w/ screen cover
6Y8-81920-01	Multi-hub	2	
6Y8-82553-01	Main bus wire, 0.3 m (1 ft)	1	
6Y8-82582-11	4-pin waterproof cap	3	White
6Y8-82582-01	2-pin waterproof cap	1	Red
6Y8-82521-11	Pigtail bus wire, 0.6 m (2 ft)	1	
6Y8-82521-31	Pigtail bus wire, 1.8 m (6 ft)	2	
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-83553-01	PWR supply wire, 2.4 m (8 ft)	1	
6X6-82570-40	IG switch, twin	1	OFF-ON
6X6-82570-60	Start/ stop SW, twin	1	
6X6-8258A-40	Main wire-harness, 12.2 m (40 ft)	2	16-pin
6YC-2819U-00	Operation manual	1	Japanese
60V-8A4L1-18	Speed sensor kit	1	

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

6Y8 GAUGE RIGGING KIT (FOR EU)

SINGLE KIT 1 (TACH)

Kit P/N: 6YR-W0035-Y3

Part No.	Part name	Q'ty	Remarks
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-81920-11	Single-hub	1	With resistor
6Y8-82521-11	Pigtail bus wire, 0.6m (2 ft)	1	
6Y8-82521-41	Pigtail bus wire, 2.7 m (9 ft)	1	
6Y8-82553-21	Main bus wire, 6.1 m (20 ft)	1	
6Y8-82582-11	4-pin waterproof cap	2	White
6Y8-8350T-20	RND tachometer	1	
6Y8-83553-01	PWR supply wire, 2.4 m (8 ft)	1	
6Y8-2819W-70	Operation Manual	1	
6Y8-2819W-80	Operation Manual	1	

SINGLE KIT 2 (TACH, SPEED/FUEL) w/o Speed Sensor Kit

Kit P/N: 6Y8-W0035-E2

Part No.	Part name	Q'ty	Remarks
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-81920-11	Single-hub	1	With resistor
6Y8-82521-11	Pigtail bus wire, 0.6m (2 ft)	2	
6Y8-82521-31	Pigtail bus wire, 1.8 m (6 ft)	1	
6Y8-82553-21	Main bus wire, 6.1 m (20 ft)	1	
6Y8-82582-11	4-pin waterproof cap	1	White
6Y8-83500-20	RND comb. speedometer & fuel MGT gauge	1	
6Y8-8350T-20	RND tachometer	1	
6Y8-83553-01	PWR supply wire, 2.4 m (8 ft)	1	With 10 amp fuse
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-2819W-70	Operation Manual	1	
6Y8-2819W-80	Operation Manual	1	

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

6Y8 GAUGE RIGGING KIT

SINGLE KIT 2 (TACH, SPEED/FUEL)

Kit P/N: 6YR-W0035-MH

Part No.	Part name	Q'ty	Remarks
60V-8A4L1-18	Speed sensor kit	1	
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-81920-11	Single-hub	1	With resistor
6Y8-82521-11	Pigtail bus wire, 0.6 m (2 ft)	2	
6Y8-82521-31	Pigtail bus wire, 1.8 m (6 ft)	1	
6Y8-82553-21	Main bus wire, 6.1 m (20 ft)	1	
6Y8-82582-11	4-pin waterproof cap	1	White
6Y8-83500-20	RND comb. speedometer & fuel MGT gauge	1	
6Y8-8350T-20	RND tachometer	1	
6Y8-83553-01	PWR supply wire, 2.4 m (8 ft)	1	
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-2819W-70	Operation Manual	1	

6Y8 GAUGE RIGGING KIT (FOR JPN)

SINGLE KIT 1 (TACH)

Kit P/N: 6YR-W0035-W2

Part No.	Part name	Q'ty	Remarks
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-81920-11	Single-hub	1	With resistor
6Y8-82521-21	Pigtail bus wire, 0.9 m (3 ft)	1	
6Y8-82521-41	Pigtail bus wire, 2.7 m (9 ft)	1	
6Y8-82553-21	Main bus wire, 6.1 m (20 ft)	1	
6Y8-82582-11	4-pin waterproof cap	2	White
6Y8-8350T-20	RND tachometer	1	
6Y8-83553-01	PWR supply wire, 2.4 m (8 ft)	1	With 10 amp fuse
6Y8-2819W-00	Operation Manual	1	

SINGLE KIT 2 (TACH, SPEED/FUEL)

Kit P/N: 6YR-W0035-XE

Part No.	Part name	Q'ty	Remarks
60V-8A4L1-18	Speed sensor kit	1	
6Y8-81920-01	Multi-hub	1	
6Y8-81920-11	Single-hub	1	
6Y8-82521-21	Pigtail bus wire, 0.9 m (3 ft)	2	
6Y8-82521-51	Pigtail bus wire, 3.6 m (12 ft)	1	
6Y8-82553-31	Main bus wire, 7.6 m (25 ft)	1	
6Y8-82582-11	4-pin waterproof cap	1	White
6Y8-83500-20	RND comb. speedometer & fuel MGT gauge	1	
6Y8-8350T-20	RND tachometer	1	
6Y8-83553-01	PWR supply wire, 2.4 m (8 ft)	1	With 10 amp fuse
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-2819W-00	Operation Manual	1	

IMMOBILIZER RIGGING KIT CONTENTS

IMMOBILIZER KIT 1 (FOR US, ANZ, CRB*)

Kit P/N: 6Y8-W0035-87

Part No.	Part name	Q'ty	Remarks
6Y8-86254-22	Immobilizer unit	1	Conformed to local frequency band
90167-06M00	Screw	4	
97880-06035	Screw	4	
90201-06M30	Washer	8	
95780-06300	Nut	4	
6Y8-82521-11	Pigtail bus wire	1	0.3 m (1 ft)
6Y8-48277-00	Symbol graphic	4	
6Y8-28107-98	Instruction	1	

* Some region of CRB

IMMOBILIZER KIT 2 (FOR JPN)

Kit P/N: 6Y8-W0035-96

Part No.	Part name	Q'ty	Remarks
6Y8-86254-30	Immobilizer unit	1	Conformed to local frequency band
90167-06M00	Screw	4	
97880-06035	Screw	4	
90201-06M30	Washer	8	
95780-06300	Nut	4	
6Y8-82521-11	Pigtail bus wire	1	0.3 m (1 ft)
6Y8-48277-00	Symbol graphic	3	
6Y8-28107-98	Instruction	1	

IMMOBILIZER KIT 3 (FOR EU)

Kit P/N: 6Y8-W0035-J2 (For remote control)

Part No.	Part name	Q'ty	Remarks
6Y8-86254-03	Immobilizer unit	1	Conformed to local frequency band
90167-06M00	Screw	4	
97880-06035	Screw	4	
90201-06M30	Washer	8	
95780-06300	Nut	4	
6Y8-82521-11	Pigtail bus wire	1	
6Y8-48277-00	Symbol graphic	4	
6Y8-28107-98	Instruction	1	

TIP:

For multi-engine, power distribution wire is required as below.

- DEC (push start/stop switch): 6Y8-81315-00
- Others: 6H5-81315-00

Kit P/N: 6Y8-W0035-C0 (For tiller handle)

Required remote control kit, 6Y8-W0035-J2.

Part No.	Part name	Q'ty	Remarks
6Y8-82521-51	Pigtail bus wire	1	
6Y8-81920-11	In-line hub	2	
6Y8-82553-01	Main bus wire	1	
6Y5-83553-M0	Accessory harness	1	
6Y8-82117-00	Pigtail bus wire w/ power lead	1	

DIGITAL NETWORK PREMIUM GAUGE RIGGING KIT CONTENTS

SINGLE ENGINE PREMIUM GAUGE KIT

P/N: 6Y9-762G0-00 (w/ IG SW panel)

Part No.	Part name	Q'ty	Remarks
6Y9-83710-14	Premium gauge ASSY	1	5" color display, w/ screen cover
6Y8-81920-01	Multi-hub	1	w/ resistor cap
6Y8-82582-11	4-pin waterproof cap	2	White
6Y8-82553-01	Main bus wire, 0.3 m (1 ft)	1	
6Y8-82521-31	Pigtail bus wire, 1.8 m (6 ft)	1	
6Y9-83553-40	Conversion harness 4, 0.15 m (0.5 ft)	1	Hub to premium gauge
6Y9-83553-00	Conversion harness, 0.3 m (1 ft)	1	RC to hub
6Y8-83553-01	PWR supply wire	1	w/ 10 amp fuse
6Y9-8356N-01	GPS wire	1	NMEA0183
6Y9-8356N-10	Fuel tank wire	1	4 fuel tanks acceptable
6X6-82570-33	IG switch panel, single	1	OFF-ON-START
6X6-8258A-30	Main wire-harness, 10 m (33 ft)	1	16-pin
6Y9-2819K-E0	Set up manual	1	
6Y9-2819U-73	Operation manual 1	1	
6Y9-2819U-83	Operation manual 2	1	

P/N: 6Y9-762G0-20 (w/o IG SW panel)

Part No.	Part name	Q'ty	Remarks
6X6-8258A-30	Main wire-harness, 10 m (33 ft)	1	16-pin
6Y8-81920-01	Multi-hub	1	w/ resistor cap
6Y8-82521-31	Pigtail bus wire, 1.8 m (6 ft)	1	
6Y8-82553-01	Main bus wire, 0.3 m (1 ft)	1	
6Y8-82582-11	4-pin waterproof cap	2	White
6Y8-83553-01	PWR supply wire	1	w/ 10 amp fuse
6Y9-2819K-E0	Set up manual	1	
6Y9-83553-00	Conversion harness, 0.3 m (1 ft)	1	RC to Hub
6Y9-83553-40	Conversion harness 4, 0.15 m (0.5 ft)	1	Hub to premium gauge
6Y9-8356N-01	GPS wire	1	NMEA0183
6Y9-8356N-10	Fuel tank wire	1	4 fuel tanks acceptable
6Y9-83710-14	Premium gauge ASSY	1	5" color display, w/ screen cover
6Y9-2819U-73	Operation manual 1	1	
6Y9-2819U-83	Operation manual 2	1	

ADDITIONAL PREMIUM GAUGE KIT (EU, ANZ, GEN)

P/N: 6Y9-762G0-30

Part No.	Part name	Q'ty	Remarks
6Y9-83710-14	Premium gauge ASSY	1	5" color display, w/ screen cover
6Y8-82521-31	Pigtail bus wire, 1.8 m (6 ft)	1	
6Y9-83553-40	Conversion harness, 0.15 m (0.5 ft)	1	Hub to premium gauge

DIGITAL NETWORK PREMIUM GAUGE RIGGING KIT CONTENTS

TWIN ENGINE PREMIUM GAUGE KIT

P/N: 6Y9-762G0-10

Part No.	Part name	Q'ty	Remarks
6Y9-83710-14	Premium gauge ASSY	1	5" color display, w/ screen cover
6Y8-81920-01	Multi-hub	1	w/ resistor cap
6Y8-82582-11	4-pin waterproof cap	2	White
6Y8-82553-01	Main bus wire, 0.3 m (1 ft)	1	
6Y8-82521-31	Pigtail bus wire, 1.8 m (6 ft)	1	
6Y9-83553-40	Conversion harness, 0.15 m (0.5 ft)	1	Hub to premium gauge
6Y9-83553-00	Conversion harness, 0.3 m (1 ft)	1	RC to hub
6Y8-83553-01	PWR supply wire	1	w/ 10 amp fuse
6Y9-8356N-01	GPS wire	1	NMEA0183
6Y9-8356N-10	Fuel tank wire	1	4 fuel tanks acceptable
6X6-82570-40	IG switch, twin	1	OFF-ON
6X6-82570-60	Start/stop SW, twin	1	
6X6-8258A-40	Main wire-harness, 12.2 m (40 ft)	2	16-pin
6Y9-2819K-E0	Set up manual	1	
6Y9-2819U-73	Operation manual 1	1	
6Y9-2819U-83	Operation manual 2	1	

TRIPLE ENGINE PREMIUM GAUGE KIT (FOR EU, ANZ, GEN)

P/N: 6Y9-762G0-40

Part No.	Part name	Q'ty	Remarks
6X6-2819K-E0	Setup manual	1	
6X6-82570-50	IG switch panel, Main helm	1	
6X6-82570-70	Start/stop SW panel, Main helm	1	
6X6-8258A-40	Main wire-harness, 12.2 m (40 ft)	3	16-pin
6Y8-81920-01	Multi-hub	1	
6Y8-82521-31	Pigtail bus wire, 1.8 m (6 ft)	1	
6Y8-82553-01	Main bus wire, 0.3 m (1 ft)	1	
6Y8-82582-11	4-pin waterproof cap	2	White
6Y8-83553-01	PWR supply wire	1	w/ 10 amp fuse
6Y9-83553-00	Conversion harness, 0.3 m (1 ft)	1	RC to hub
6Y9-83553-40	Conversion harness, 0.15 m (0.5 ft)	1	Hub to premium gauge
6Y9-8356N-01	GPS wire	1	NMEA0183
6Y9-8356N-10	Fuel tank wire	1	4 fuel tanks acceptable
6Y9-83710-14	Premium gauge ASSY	1	5" color display, w/ screen cover
6Y9-2819U-73	Operation manual 1	1	
6Y9-2819U-83	Operation manual 2	1	

MAIN HELM SW PANEL TWIN ENGINE KIT (FOR NOA)

P/N: 6X6-W0035-50

Part No.	Part name	Q'ty	Remarks
6X6-82570-40	IG switch, twin	1	OFF-ON
6X6-82570-60	Start/stop SW, twin	1	

DIGITAL NETWORK PREMIUM GAUGE RIGGING KIT CONTENTS

MAIN HELM SW PANEL TRIPLE ENGINE KIT (FOR NOA)

P/N: 6X6-W0035-60

Part No.	Part name	Q'ty	Remarks
6X6-82570-50	IG switch, triple	1	OFF-ON
6X6-82570-70	Start/stop SW, triple	1	

2ND HELM SW PANEL SINGLE ENGINE KIT (FOR NOA)

P/N: 6X6-W0035-70

Part No.	Part name	Q'ty	Remarks
6X6-82570-80	Start/stop SW, single	1	
6X6-82570-B0	Station selector SW	2	
6X6-82570-90	Emergency stop SW	1	

2ND HELM SW PANEL TWIN ENGINE KIT (FOR NOA)

P/N: 6X6-W0035-80

Part No.	Part name	Q'ty	Remarks
6X6-82570-E0	Start/stop SW, twin	1	
6X6-82570-B0	Station selector SW	2	
6X6-82570-90	Emergency stop SW	1	

2ND HELM SW PANEL TRIPLE ENGINE KIT (FOR NOA)

P/N: 6X6-W0035-90

Part No.	Part name	Q'ty	Remarks
6X6-82570-F0	Start/stop SW, triple	1	
6X6-82570-B0	Station selector SW	2	
6X6-82570-90	Emergency stop SW	1	

OTHER RIGGING KIT CONTENTS

TILT LIMIT SWITCH KIT (FOR NOA, EU, ANZ, RUS, JPN)

P/N: 63P-825EY-01

Applicable models:

Global model	F/FL115A	F/FL115B	F115C	F125A	F130A	F/FL150D	F150C	F165A
Unified model		F/LF115B	VF115A			F/LF150B	VF150A	
Global model	F175A	F175B	F185A	F200D	F/FL200F	F225D	F250C	F225G
Unified model		VF175A		VF200LA	F/LF200B	VF225LA	VF250LA	
Global model	F250F	F275A	F250J	F90C	F100F	F75D	F80D	F90D
Unified model			VF250XA	F90B		F75B		VF90A
Global model	F/FL225H	F/FL250L	F/FL300C					
Unified model	F/LF225B	F/LF250B	F/LF300A					

Kit contents:

Part No.	Part name	Q'ty	Remarks
63P-825E0-01	Tilt limit SW ASSY	1	
97595-06516	Bolt w/ washer	2	
90159-05059	Screw	1	
90387-05004	Collar	1	
90465-11M10	Clamp	5	

* For installation, see the service manual and/or installation manual.



TILT LIMIT SWITCH KIT 2 (FOR NOA, EU, ANZ, JPN, RUS, TUR)

P/N: 6CE-825EY-00

Applicable models:

Global model	F/FL200G	F/FL225F	F/FL250D	F/FL300B				
Unified model	F/LF200CA	F/LF225CA	F/LF250CA	F/LF300CA				

Kit contents:

Part No.	Part name	Q'ty	Remarks
6CE-825E0-00	Tilt limit SW ASSY	1	
97595-06516	Bolt w/ washer	2	
90159-05059	Screw	1	
90387-05004	Collar	1	
90465-11M10	Clamp	8	
90465-13M18	Clamp	1	

* For installation, see the service manual and/or installation manual.

OTHER RIGGING KIT CONTENTS

TILT LIMIT SWITCH KIT 3 (FOR NOA, EU, ANZ, JPN, RUS, TUR)

P/N: 6D8-825EY-00

Applicable models:

Global model	F80B	F90B	F100D
Unified model			

Kit contents:

Part No.	Part name	Q'ty	Remarks
6D8-825E0-00	Tilt limit SW ASSY	1	
97595-06512	Bolt w/ washer	2	
90159-05059	Screw	1	
90387-05004	Collar	1	
90465-11M10	Clamp	4	

* For installation, see the service manual and/or installation manual.

TILT LIMIT SWITCH KIT 4 (FOR NOA, EU, ANZ, JPN, RUS, TUR)

P/N: 6C5-825EY-00

Applicable models:

Global model	F40G	F40H	F50H	FT50J	F60F	FT60G	F70A
Unified model			F50B	T50B	F60B	T60B	F70A

Kit contents:

Part No.	Part name	Q'ty	Remarks
6C5-825E0-00	Tilt limit SW ASSY	1	
90109-06M88	Bolt	2	
92990-06100	Washer	2	
90159-05059	Screw	1	
90387-05004	Collar	1	
90465-11M10	Clamp	5	
90465-13M18	Clamp	3	

* For installation, see the service manual and/or installation manual.

OTHER RIGGING KIT CONTENTS

LIGHTING COIL KIT (FOR EU, CA, JPN)

P/N: 6BX-W8130-A0

Applicable models:

Global model	F4B	F5A	F6C
Unified model	F4A		F6A

Kit contents:

Part No.	Part name	Q'ty	Remarks
6BX-81949-00	Wire lead	1	
6BX-81960-00	Rectifier/ regulator	1	
6BX-82388-00	Plate	1	
6BX-82581-00	Stay	1	
6BX-85510-A0	Stator ASSY	1	
6BX-85550-A0	Rotor ASSY	1	
90109-06M80	Bolt	1	
90464-30009	Clamp	1	
90465-08371	Clamp	1	
97595-06516	Bolt	2	
97595-06520	Bolt	3	

* For installation, see the service manual and/or service guide.





YAMAHA

CL7 DISPLAY

Installation Instructions

Important Safety Information

WARNING

See the *Important Safety and Product Information* guide in the product box for product warnings and other important information.

When connecting the power cable, do not remove the in-line fuse holder. To prevent the possibility of injury or product damage caused by fire or overheating, the appropriate fuse must be in place as indicated in the product specifications. In addition, connecting the power cable without the appropriate fuse in place voids the product warranty.

Always wear safety goggles, ear protection, and a dust mask when drilling, cutting, or sanding.

NOTICE

When drilling or cutting, always check what is on the opposite side of the surface.

To obtain the best performance and to avoid damage to your boat, install the device according to these instructions.

Read all installation instructions before proceeding with the installation. If you experience difficulty during the installation, contact your Yamaha® dealer.

Tools Needed

- Appropriate pigtail bus wire for engine network connection
- Drill and drill bits
 - 3.2 mm ($1/8$ in.) drill bit, if using wood screws
 - 3.6 mm ($9/64$ in.) drill bit, if using the nut plates (optional accessory)
 - 7.2 mm ($9/32$ in.) drill bit, if using the nut plates (optional accessory)
- Mounting hardware
 - 4 Wood screws (included)
 - 4 M4 machine screws if using the nut plates (included with nut plate accessory)
 - 4 M3 machine screws if using the nut plates (included with nut plate accessory)
- #2 Phillips screwdriver
- Jigsaw or rotary tool
- File and sandpaper
- Marine sealant (recommended)

Mounting Considerations

NOTICE

This device should be mounted in a location that is not exposed to extreme temperatures or conditions. The temperature range for this device is listed in the product specifications. Extended exposure to temperatures exceeding the specified temperature range, in storage or operating conditions, may cause device failure. Extreme-temperature-induced damage and related consequences are not covered by the warranty.

When selecting a mounting location, you should observe these considerations.

- The location should provide optimal viewing as you operate your boat.
- The location should allow for easy access to all device interfaces, such as the keypad, touchscreen, and card reader, if applicable.
- The location must be strong enough to support the weight of the device and protect it from excessive vibration or shock.
- To avoid interference with a magnetic compass, the device should not be installed closer to a compass than the compass-safe distance value listed in the product specifications.
- The location must allow room for the routing and connection of all cables.
- The location must not be a flat, horizontal surface. The location should be in a vertical angle.

The location and viewing angle should be tested before you install the device. High viewing angles from above and below the display may result in a poor image.

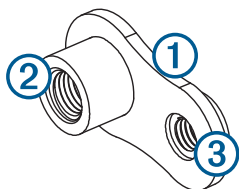
Mounting the Device

NOTICE

Be careful when cutting the hole to flush mount the device. There is only a small amount of clearance between the case and the mounting holes, and cutting the hole too large could compromise the stability of the device after it is mounted.

There are different options for hardware based on the mounting surface material. You may need additional hardware depending on the mounting option selected.

- You can drill pilot holes and use the included wood screws.
 - You can drill holes and use nut plates and machine screws (optional accessory). The nut plates can add stability to a thinner surface.
- 1 Trim the template and make sure it fits in the location where you want to mount the device.
 - 2 Secure the template to the selected location.
 - 3 Using a 13 mm ($1/2$ in.) drill bit, drill one or more of the holes inside the corners of the solid line on the template to prepare the mounting surface for cutting.
 - 4 Using a jigsaw or a rotary tool, cut the mounting surface along the inside line on the template.
 - 5 Place the device in the cutout to test the fit.
 - 6 If necessary, use a file and sandpaper to refine the size of the cutout.
 - 7 After the device fits correctly in the cutout, ensure the mounting holes on the device line up with the larger holes in the corners of the template.
 - 8 If the mounting holes on the device do not line up, mark the new hole locations.
 - 9 Based on your mounting surface, drill or punch and tap the larger holes:
 - Drill 3.2 mm ($1/8$ in.) pilot holes for wood screws, and skip to step 17.
 - Drill 7.2 mm ($9/32$ in.) holes for the nut plate and machine screws, and continue to the next step.
 - 10 If using the nut plates (optional accessory), starting in one corner of the template, place a nut plate ① over the larger hole ② drilled in step 9.



The smaller hole ③ on the nut plate should line up with the smaller hole on the template.

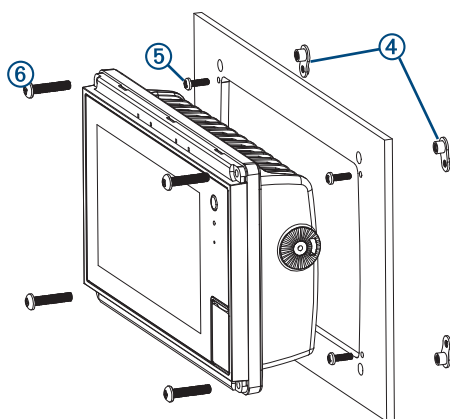
11 If the smaller 3.6 mm ($\frac{9}{64}$ in.) hole on the nut plate does not line up with the smaller hole on the template, mark the new location.

12 Repeat steps 10 and 11 for each nut plate.

13 Using a 3.6 mm ($\frac{9}{64}$ in.) drill bit, drill the smaller holes.

14 Starting in one corner of the mounting location, place a nut plate ④ on the back of the mounting surface, lining up the large and small holes.

The raised portion of the nut plate should fit into the larger hole.



15 Secure the nut plate to the mounting surface by fastening an M3 screw ⑤ through the smaller 3.6 mm ($\frac{9}{64}$ in.) hole.

16 Repeat steps 14 and 15 for each of the nut plates along the top and bottom of the device.

17 Remove the template from the mounting surface.

18 If you will not have access to the back of the device after you mount it, connect all necessary cables to the device before placing it into the cutout.

19 To prevent corrosion of the metal contacts, cover unused connectors with the attached weather caps.

20 Apply marine sealant between the mounting surface and the device to properly seal and prevent leakage behind the dashboard.

21 If you will have access to the back of the device, apply marine sealant around the cutout.

22 Place the device into the cutout.

23 Secure the device to the mounting surface using M4 screws ⑥ or wood screws, depending on the mounting method.

24 Wipe away all excess marine sealant.

25 Install the decorative bezel by snapping it in place around the edges of the device.

Connection Considerations

When connecting this device to power and to other Garmin® devices, you should observe these considerations.

- The power and ground connections to the battery must be checked to make sure they are secured and cannot become loose.

- The cables may be packaged without the locking rings installed. The cables should be routed before the locking rings are installed.
- After installing a locking ring on a cable, you should make sure the ring is securely connected and the o-ring is in place so the power or data connection remains secure.

Connecting to Power

⚠ WARNING

When connecting the power cable, do not remove the in-line fuse holder. To prevent the possibility of injury or product damage caused by fire or overheating, the appropriate fuse must be in place as indicated in the product specifications. In addition, connecting the power cable without the appropriate fuse in place voids the product warranty.

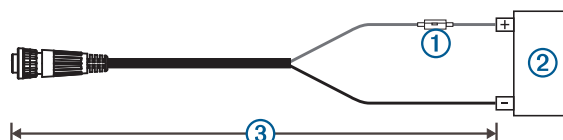
- Route the power cable to the power source and to the device.
- Connect the red wire to the positive (+) battery terminal, and connect the black wire to the negative (-) battery terminal.
- Connect the power cable to the device, and turn the locking ring clockwise to tighten it.

Additional Grounding Considerations

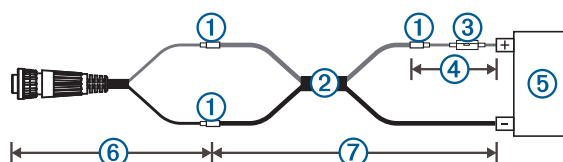
This device should not need any additional chassis grounding in most installation situations. If interference is experienced, the grounding screw on the housing can be used to connect the device to the water ground of the boat to help avoid the interference.

Power Cable Extensions

If necessary, the power cable can be extended using the appropriate wire gauge for the length of the extension.



Item	Description
①	Fuse
②	12 Vdc power source
③	7.9 ft. (2.4 m) no extension



Item	Description
①	Splice
②	10 AWG (5.26 mm²) extension wire, up to 15 ft. (4.6 m) 8 AWG (8.36 mm²) extension wire, up to 23 ft. (7 m) 6 AWG (13.29 mm²) extension wire, up to 36 ft. (11 m)
③	Fuse
④	8 in. (20.3 cm)
⑤	12 Vdc power source
⑥	39.4 in. (1.0 m)
⑦	36 ft. (11 m) maximum extension

Command Link Plus® and Helm Master® Bus Network Connection Considerations

NOTICE

If you have an existing engine network on your boat, it should already be connected to power.

This display connects to the Command Link Plus or Helm Master engine network on your boat to read data from compatible devices such as certain engines. The engine network follows a standard and uses proprietary messages.

The Furukawa connector on the end of the power cable connects the display to the existing engine network, using the appropriate length pigtail bus wire. You must route the cable within 6 m (20 ft.) of the engine network backbone.

For more information on connecting to your engine network, see the engine documentation.

NMEA 2000® Considerations

NOTICE

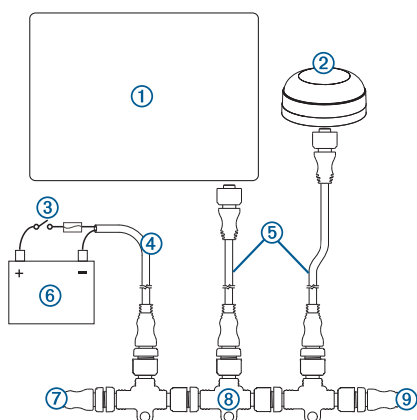
If you are installing a NMEA 2000 power cable, you must connect it to the boat ignition switch or through another in-line switch. NMEA 2000 devices will drain your battery if the NMEA 2000 power cable is connected to the battery directly.

NOTE: If you are connecting this device to an existing NMEA 2000 network, the NMEA 2000 network should already be connected to power.

If you are connecting this device to an existing NMEA 2000 network by another manufacturer, you should install a NMEA 2000 Power Isolator (010-11580-00) between the existing network and this device.

This device can connect to a NMEA 2000 network on your boat to share data from NMEA 2000 compatible devices such as a GPS antenna or a VHF radio. If you do not have an existing NMEA 2000 network, you can create a basic one. For more information, go to www.nmea.org.

The port labeled NMEA 2000 is used to connect the device to a standard NMEA 2000 network.



Item	Description
①	CL7 display
②	GPS antenna
③	Ignition or in-line switch
④	NMEA 2000 power cable
⑤	NMEA 2000 drop cable
⑥	12 Vdc power source
⑦	NMEA 2000 terminator or backbone cable
⑧	NMEA 2000 T-connector
⑨	NMEA 2000 terminator or backbone cable

Garmin Marine Network Considerations

NOTICE

A Garmin Power over Ethernet (PoE) Isolation Coupler (P/N 010-10580-10) must be used when connecting any third-party device, such as a FLIR® camera, to a Garmin Marine Network. Connecting a PoE device directly to a Garmin Marine Network chartplotter damages the Garmin chartplotter and may damage the PoE device. Connecting any third-party device directly to a Garmin Marine Network chartplotter will cause abnormal behavior on the Garmin devices, including the devices not properly turning off or the software becoming inoperable.

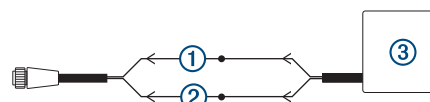
This device can connect to additional Garmin Marine Network devices to share data such as radar, sonar, and detailed mapping. When connecting Garmin Marine Network devices to this device, observe these considerations.

- All devices connected to the Garmin Marine Network must be connected to the same ground.
- A Garmin Marine Network cable must be used for all Garmin Marine Network connections.
 - Third-party CAT5 cable and RJ45 connectors must not be used for Garmin Marine Network connections.
 - Additional Garmin Marine Network cables and connectors are available from your Garmin dealer.
- The ETHERNET ports on the device each act as a network switch. Any compatible device can be connected to any ETHERNET port to share data with all devices on the boat connected by a Garmin Marine Network cable.

Differential NMEA® 0183 Connection Considerations

This device can receive differential NMEA 0183 information from a compatible device.

- See the installation instructions for the NMEA 0183 device to identify the wires.
- See the table and wiring diagram when connecting the data cable to NMEA 0183 devices.
- You must use 28 AWG, shielded, twisted-pair wiring for extended runs of wire. Solder all connections and seal them with heat-shrink tubing.
- See [Differential NMEA 0183 Receive Information, page 4](#) for a list of NMEA 0183 sentences that can be received by this device.
- The internal NMEA 0183 ports and communication protocols are configured on the connected display. See the NMEA 0183 section of the display owner's manual for more information.
- Do not connect either NMEA 0183 data wire from this device to power ground.
- The power cable from this device and the NMEA 0183 device must be connected to a common power ground.



①	N0183+, white
②	N0183-, blue
③	NMEA 0183 device

Tank Level Sensor Connection Considerations

You can connect up to six tank level sensors to the device.

NOTICE

You must connect fuel sensors to inputs 1, 2, 3, or 4. If you connect a fuel sensor to input 5 or 6, the fuel management system will not working properly.

Wire Color	Description
Pink	Input 1
Black/Pink	Ground 1
Green	Input 2
Black/Green	Ground 2
Brown	Input 3
Black/Brown	Ground 3
Orange	Input 4
Black/Orange	Ground 4
Blue	Input 5

Wire Color	Description
Back/Blue	Ground 5
Yellow	Input 6
Black/Yellow	Ground 6

Composite Video Considerations

This chartplotter allows video input from composite video sources using the port labeled CVBS IN. When connecting composite video, you should observe these considerations.

- The CVBS IN port uses a BNC connector. You can use a BNC to RCA adapter to connect a composite-video source with RCA connectors to the CVBS IN port.
- Video is shared across the Garmin Marine Network, but it is not shared across the NMEA 2000 network.

Specifications

Dimensions (W × H × D)	222 × 142 × 66 mm (8.75 × 5.6 × 2.6 in.)
Display size (W × H)	155 × 86 mm (6.1 × 3.4 in.)
Weight	1.13 kg (2.5 lbs)
Compass-safe distance	800 mm (31.5 in.)
Operating temperature range	From -15° to 55°C (from 5° to 131°F)
Material	Die-cast aluminum and polycarbonate plastic
Water rating	IEC 60529 IPX7*
NMEA 2000 LEN	2
NMEA 2000 Draw	75 mA max.
Input power	From 10 to 32 Vdc
Max. power usage at 10 Vdc	24 W
Typical current draw at 12 Vdc	1.5 A
Max. current draw at 12 Vdc	2.0 A
Fuse	10 A, 125/250 V fast-acting

Differential NMEA 0183 Receive Information

Sentence	Description
DPT	Depth
DBT	Depth below transducer
MTW	Water temperature
VHW	Water speed and heading
WPL	Waypoint location
DSC	Digital selective calling information
DSE	Expanded digital selective calling
HDG	Heading, deviation, and variation
HDM	Heading, magnetic
MWD	Wind direction and speed
MDA	Meteorological composite
MWV	Wind speed and angle
VDM	AIS VHF data-link message

You can purchase complete information about National Marine Electronics Association (NMEA) format and sentences from www.nmea.org.

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2018 YEAR MODELS MANUFACTURE STARTING SERIAL NUMBERS

4-STROKE ENGINES					
Model name		Model code	Prefix code	Starting serial number	Remarks
Global	Unified				
F8FMH	F8MHB	6FW	6FWK	1009529	
F8FWH					For JPN
F8FE					For EUR
FT8GMH		6FX	6FXK	1000699	
FT8GE					For EUR
FT8GEP					For EUR
F9.9HMH		6CA	6CAK	1013321	For EUR
F9.9HE					For EUR
F9.9HWH					For EUR
F9.9JMH	F9.9MHB	6DR	6AUK	1058964	
F9.9JEH	F9.9EHB				For CAN
F9.9JE	F9.9EB				
F9.9JWH					For JPN
FT9.9LMH	T9.9MHB	6EA	6AVK	1045161	
FT9.9LE	T9.9EB				
FT9.9LWH	T9.9WHB				
FT9.9LEHP	T9.9PHB				For USA/CAN
FT9.9LEP	T9.9PB				
F15CMH	F15MHA	6AG	6AGK	1054123	
F15CEH	F15EHA				
F15CEHP	F15PHA				
F15CEP					For EUR
F15CE					For EUR
F15CWH					For JPN
F20BMH	F20MHA	6AH	6AHK	1070152	
F20BEH	F20EHA				
F20BEHP	F20PHA				
F20BE	F20EA				
F20BEP	F20PA				
F20BWH					For JPN
F20CMH		6AJ	6AJK	1004668	
F20CE					For CHN
F20FET		6GX	6GXK	1000071	For FIN
FT25FET	T25A	6BL	6BLK	1004594	
F25DMH	F25MHA	6BP	6BPK	1039818	
F25DEH	F25EHA				For USA/CAN
F25DWH					For JPN
F25DEHT					For JPN
F25DE	F25EA				
F25DET	F25A				
F25DWDH					For JPN
F25DMHD	F25MHB				For USA/CAN
F25DEHD	F25EHB				For USA/CAN
F25GMH	F25MHC	6FM	6FMK	1012591	
F25GWH	F25WHC				
F25GE					
F25GW	F25WC				For USA/CAN/ANZ
F25GET	F25C				
F25GWT	F25WTC				For USA/CAN/ANZ
F30BET	F30A	6BT	6BT	1016971	
F30BEHD	F30EHA				
F30BEHT	F30HA				

2018 YEAR MODELS MANUFACTURE STARTING SERIAL NUMBERS

4-STROKE ENGINES					
Model name		Model code	Prefix code	Starting serial number	Remarks
Global	Unified				
F40FET	F40A	6BG	6BG	1067572	
F40FED					
F40FEHT	F40HA				
F40FEHD	F40EHA				
F40HET		6AK	6AK	1017150	For EUR
F40GET		6CY	6CY	1006026	For EUR
F40JMHD		6GL			For NGA
F50DET		60A	60A	1002964	
FT50CET		61S	64J	1020776	
FT50CEHD					
F50HET	F50B	6C1	6C1	1076795	
F50HEHT	F50HB				For USA/CAN/ANZ
F50HED					For EUR
F50HEHD					
FT50JET	T50B	6C2	6C2	1026078	
F60FET	F60B	6C5	6C5	1082606	
F60FEHT	F60HB				
FT60GET	T60B	6C6	6C6	1031992	
FT60GEHT					For MEX
FT60GEHD					For MEX
F70AET	F70A	6CJ	6CJ	1074711	
F75CEHD		6BC	6BC	1005107	
F75CED					For CAR
F75CEHT					For MEX
F75DET	F75B	6HW	6HW	1000372	For USA/CAN/ANZ
F80BET		6D7	6D7	1019696	
F80DET		6HV	6HV	1000556	
F90BET		6D8	61P	1089947	
F90CET	F90B	6FP	6FP	1009003	
F90DET	VF90A	6HK	6HK	1000001	For USA/CAN/ANZ
F100BET		60C	60C	1013821	
F100DET		6D9	6D9	1029105	
F100FET		6HJ	6HJ	1001936	
F115BET	F115B	6EK	6EK	1053511	
F115BEHT					For MEX
FL115BET	LF115B	6EL	6EL	1001254	
F115CET	VF115A	6FN	6FN	1009857	For USA/CAN/ANZ
F125AET		6HN	6HN	1000034	For JPN
F130AET	F130A	6EM	6EM	1004869	
F150DET	F150B	63P	63P	1203895	
FL150DET	LF150B	64P	64P	1022342	
F150FET		6BM	6BM	1007493	
FL150FET		6BN	6BN	1001427	
F150CET	VF150A	6EH	6EH	1005185	For USA/CAN/ANZ
F150GET	F150CA	6HP	6HP	1000965	
FL150GET	LF150CA	6HR	6HR	1000420	
F165AET		6FC	6FC	1000095	For JPN
F175AET	F175A	6FA	6FA	1005062	
F175BET	VF175A	6FH	6FH	1001528	For USA/CAN/ANZ
F175CET	F175CA	6HS	6HS	1000167	
FL175CET	LF175CA	6HT	6HT	1000050	
F185AET		6GC	6GC	1000029	For JPN
F200BET		6S1	6S1	1008231	

2018 YEAR MODELS MANUFACTURE STARTING SERIAL NUMBERS

4-STROKE ENGINES					
Model name		Model code	Prefix code	Starting serial number	Remarks
Global	Unified				
FL200BET		6S2	6S2	1002613	
F200CET	F200A	6AL	6AL	1006439	
FL200CET	LF200A	6AM	6AM	1000682	
F200DET	VF200A	6CD	6CD	1005140	For USA/CAN/ANZ
F200FET	F200B	6DA	6DA	1034427	
FL200FET	LF200B	6DB	6DB	1002514	
F200GET	F200CA	6DV	6DV	1008411	
FL200GET	LF200CA	6DW	6DW	1004581	
F225BET	F225A	6AS	6AS	1005341	
FL225BET		6AT	6AT	1000520	
F225DET	VF225A	6CC	6CC	1005065	For USA/CAN/ANZ
F225FET	F225CA	6CL	6CL	1004251	
FL225FET	LF225CA	6CM	6CM	1000915	
F225GET		6DM	6DM	1000113	For JPN
F225HET	F225B	6HB	6HB	1000304	
FL225HET	LF225B	6HC	6HC	1000005	
F250AET	F250A	6P2	6P2	1042871	
FL250AET	LF250A	6P3	6P3	1015174	
F250CET	VF250LA	6CB	6CB	1018106	For USA/CAN/ANZ
F250DET	F250CA	6CG	6CG	1015976	
FL250DET	LF250CA	6CH	6CH	1003506	
F250FET		6DL	6DL	1000106	For JPN
F250JET	VF250XA	6FR	6FR	1005068	For USA/CAN/ANZ
F250LET	F250B	6HD	6HD	1002653	
FL250LET	LF250B	6HE	6HE	1000327	
F250HET		6FJ	6DX	1008020	
FL250HET		6FK	6DY	1003204	
F275AET		6DK	6DK	1000322	For JPN
F300BET	F300CA	6CE	6CE	1048305	
FL300BET	LF300CA	6CF	6CF	1013876	
F300CET	F300A	6JA	6JA	1000467	
FL300CET	LF300A	6JB	6JB	1000192	
F350AET	F350CC	6AW	6AW	1016679	
FL350AET	LF350CC	6AX	6AX	1007719	

2018 YEAR MODELS MANUFACTURE STARTING SERIAL NUMBERS

2-STROKE ENGINES					
Model name		Model code	Prefix code	Starting serial number	Remarks
Global	Unified				
4CMH		6GP	6GPK	1002467	
4DMH		6GV	6GVK	1000475	
8FMH		6GH	6GHK	1001361	
E8DMH		677	677K	1025516	
EK8DMH		680	680K	1010776	
EK9.9DMH		6B7	6B7K	1016449	For IND
EK9.9JMH		6B9	6B9K	1003670	For LKA
EK15DMH		6B8	6B8K	1006559	For AFR
EK15PMH		6C0	6C0K	1005969	For LKA
EK25BMH		69T	62CK	1004525	For OTH
EK25CMH		6S6	6S6K	1001913	For LKA
EK40GMH		6F5	6F5K	1024130	
EK40JMH		6H9	6H9K	1006471	For LKA
9.9FMH		63V	682K	1063205	
9.9GMH			63VK	1014722	For RUS
15FMH		63W	684K	1160075	
E9.9DMH		6B3	6B3K	1022810	
E15DMH		6B4	6B4K	1305279	
E25BMH		69P	61RK	1075871	
25BMH		69R			
25BW					
25BWC					For RUS
25XMH		69X	69XK	1001019	For ANZ
E30HMH		60B	61TK	1107484	For MYS
30HMH		69S			
30HW					
30HWH					
30HWC					For RUS
E/40XMH		6GK	66TK	1222251	
E/40XW					
E/40XWT					
E40XWH					
E40GMH		6F6	6F6K	1114820	
E40GWH					
E40JMH		6J4	6J4K	1069298	
E40JW					For OTH
E40JWH					
E48CMH		696	670K	1016179	
55BED		697	663K	1011318	
55BET					
40VMHO		63B	6H4K	1027624	For EUR
40VMHD					For ANZ
40VEO		63C			
40VETO		63D			For ANZ
40VWHTO					For ANZ
50HMHDO		62W	6H5K	1034536	For ANZ
50HMHDO					
50HETO		62X			
50HWHTO					For ANZ
50HMHO		63G			
E60HMHDO		69D	6K5K	1063575	
E60HWD					
E60HWHD					

2018 YEAR MODELS MANUFACTURE STARTING SERIAL NUMBERS

2-STROKE ENGINES					
Model name		Model code	Prefix code	Starting serial number	Remarks
Global	Unified				
60FETO		6CU	6H2K	1018513	
60FET					
70BETO		6H3	6H3K	1016478	
E55DEHD		63S	63SK	1000062	For OTH
E75BMHD		6GJ	6GJK	1006460	
E75BED					For BGD
E75BEHD					
85AED		688	688K	1003451	
85AET					
85AEHD					
90AETO		6H1	6H1K	1000691	
E115AMH		61U	6E5	1038179	
E115AE					
E115AET					
E115AWH					For OTH
150AET		6G4	6G4	1025183	
L150AET		6K0	6K0	1001399	For NME
200AET		60H	6G6	1066297	
L200AET		60J	6K1	1012808	



Produced in Japan
Mar. 2018 – 
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