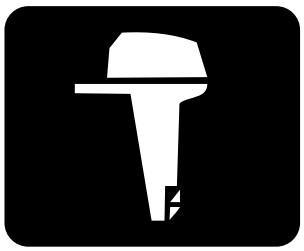
YAMAHA



2008

RIGGING GUIDE

Worldwide Edition **081097**

PREFACE

This guide has been published to help Yamaha dealers set up Yamaha outboard motors and their genuine accessories.
The information is based on 2008 years models.
For US and Canada model name, it is expressed in the parenthesis.

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

⚠ WARNING

Failure to follow WARNING instructions could result in severe injury or death to the machine operator, a bystander, or a person inspection or repairing the outboard motor.

CAUTION:

A CAUTION indicates special precautions that must be taken to avoid damage to the outboard motor.

NOTE:

A NOTE provides key information to make procedures easier or clearer.

Specifications, features and part number are subject to change without notice.

* The following contracted terms are expediently used on this guide.
ABYC: American boat & yacht council
EXT: Extension
NMEA: National marine electronic association
OP: Optional
P/N: Part number
PTT: Power trim & tilt
RCL: Remote control
SW: Switch
WOT: Wide-Open-Throttle

2008 OUTBOARD MOTOR
RIGGING GUIDE

1st edition, May 2007

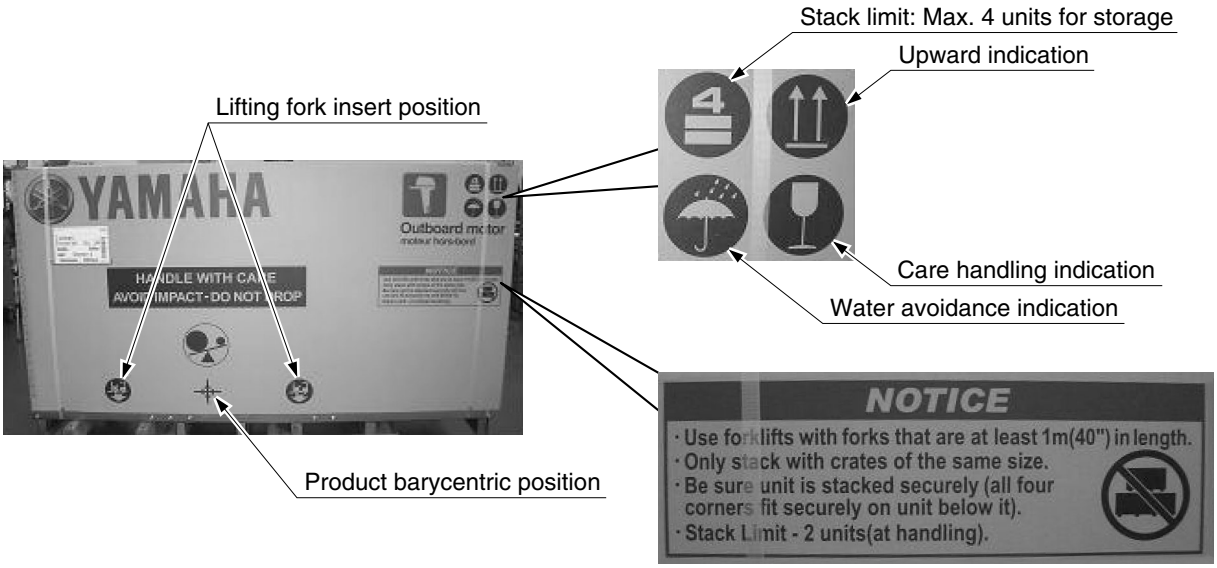
Produced in Japan

CONTENTS

INSTALLATION

TOP COVER PICTOGRAPH DESCRIPTION

The following pictographs are important sign to handle the crate.
Read the notice and understand what pictographs mean to avoid a damage to the product when handling, transporting and/or keeping the crate.



UNCRATING PROCEDURE (FOR TYPICAL STEEL FRAME)

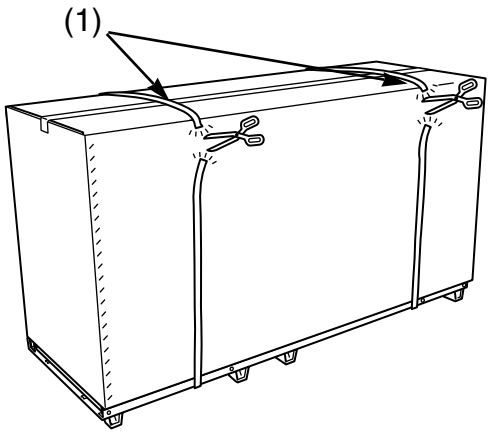
⚠ WARNING

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

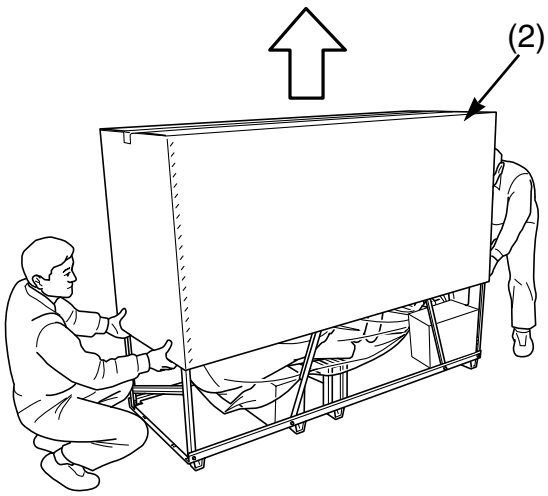
This is an example of the steel crate for V6 models.
For other steel crate models, refer to this procedure for uncrating the steel frame.

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

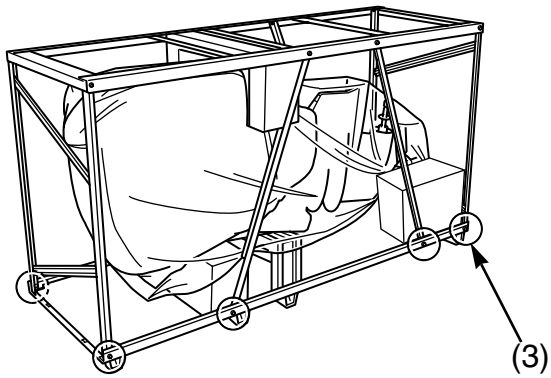
2. Cut the two straps (1).



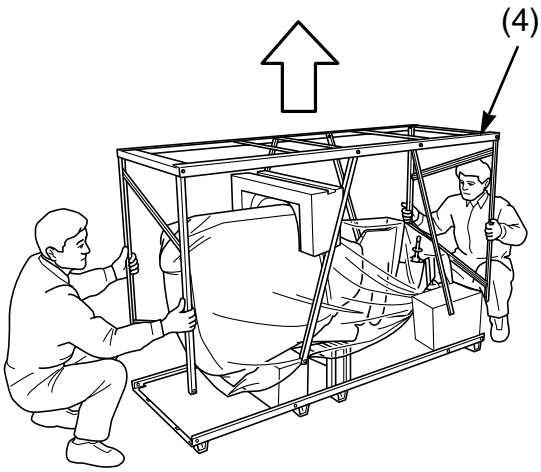
3. Lift the top cover (2) straight up to remove.



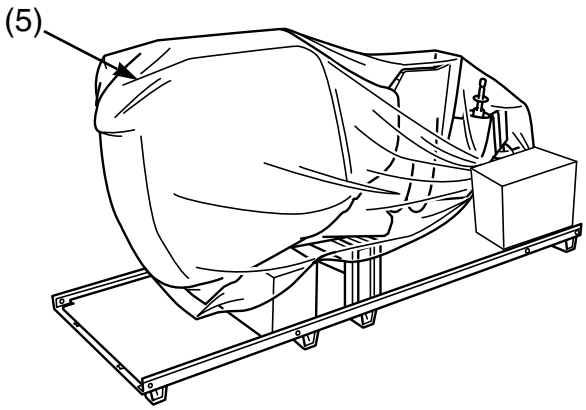
4. Remove the bottom bolts (3).



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

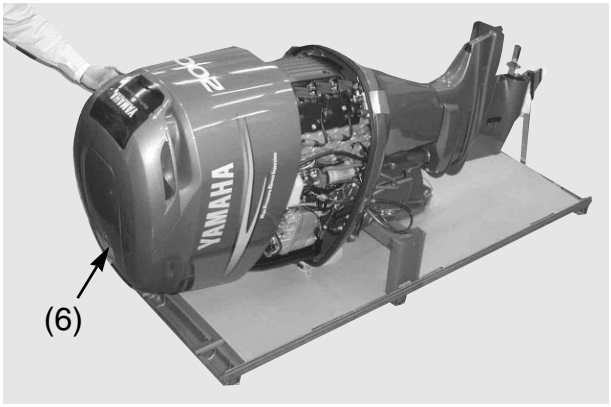


6. Remove the wrapping (5), and inspect the outboard motor for concealed damage. If any damage is found, consult your Yamaha dealer.



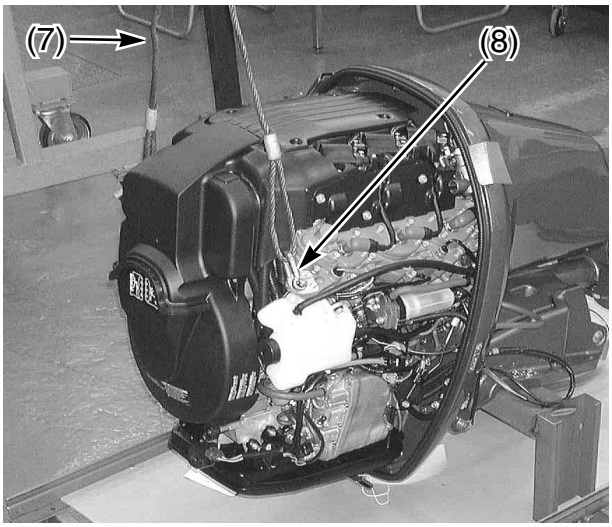
UNCRATING PROCEDURE (FOR TYPICAL STEEL FRAME)

7. Remove the top cowling (6).

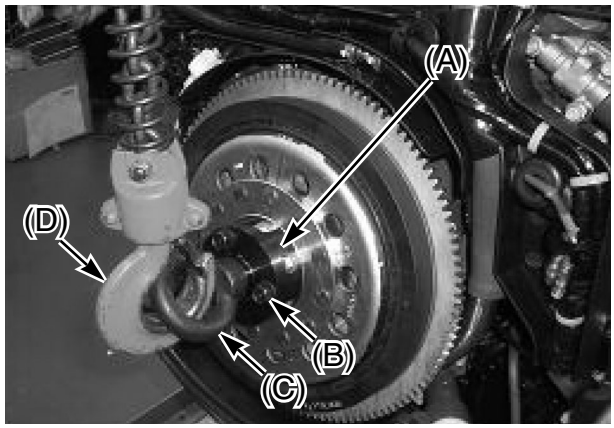


8. If the lifting points are covered by the flywheel cover, remove it.

9. Attach a lifting harness (7) securely to the lifting points (8), and tighten the harness.



For F350, 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 tighten the harness.

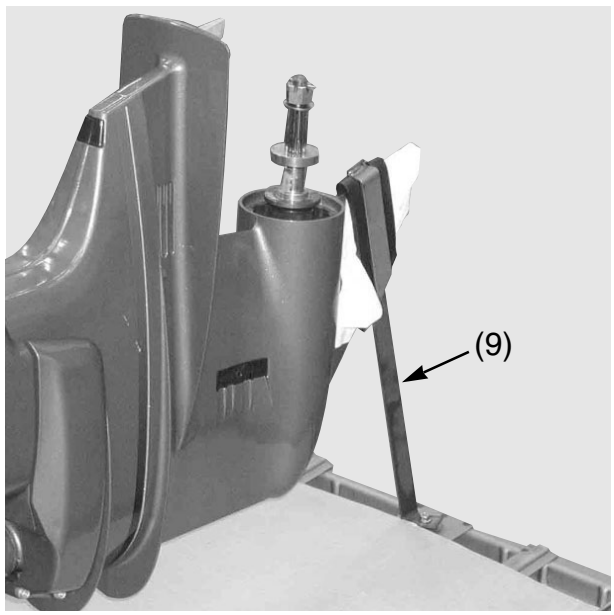


NOTE:

F350 lifting eye kit (P/N: 90890-06820) as special service tool.

Lifting eye kit contents:

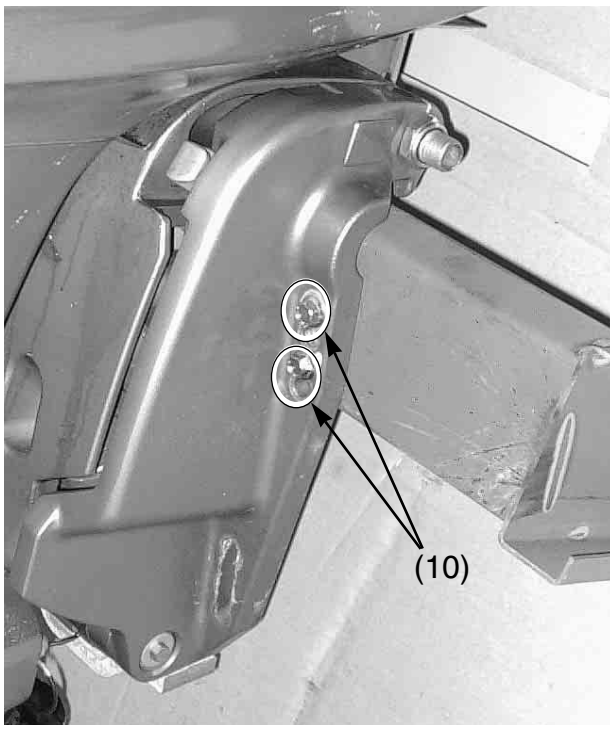
10. Remove the skeg holder (9) if it is attached.



UNCRATING PROCEDURE (FOR TYPICAL STEEL FRAME)

11. Carefully lift up the motor with the bottom crate so that the lifting-harness does not contact to the engine components.
    Have a helper hold the frame to avoid injury while lifting.

12. Remove the bracket bolts (10).



MOUNTING THE OUTBOARD MOTOR

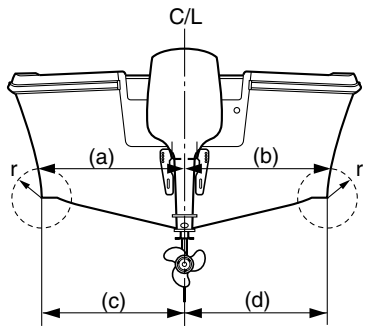
⚠ WARNING

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.

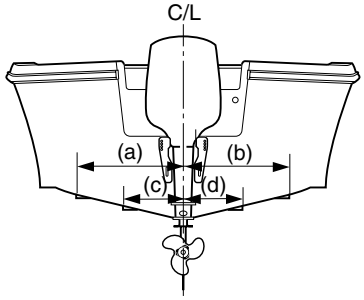
Proper mount of outboard motor will obtain better engine performance, product reliability, fuel economy, customer satisfaction, etc.
This chapter describes the brief summary of outboard motor mount.
For the first requirement, make sure the outboard motor has clearance for full movement, from port to 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 at both sides of hull, and have another measurement points.



Strakes hull
Have the measurements between port and starboard strakes.

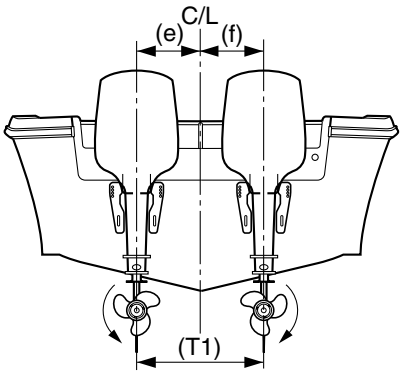


*C/L: Centerline of the transom.

MOUNTING THE OUTBOARD MOTOR

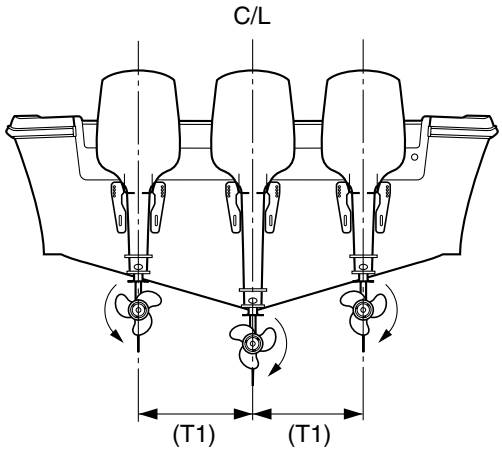
Recheck the measurements, and verify the boat transom vertical centerline is straight.
Measurements (a) and (b) should be the same, and measurement (c) and (d) should be the same.

If mounting twin motors, set the motors so that the distance between the boat transom center line and the motor center line should be equal for the both motors.

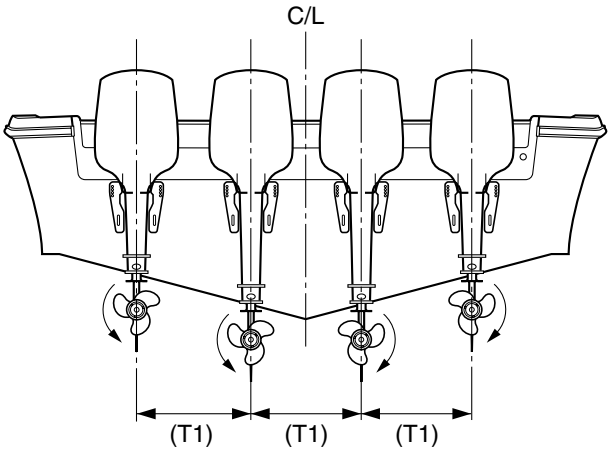


Measurements (e) and (f) should be the same.
Maintain a minimum distance (T1) that is the measurement between both vertical centerlines of outboard motor.
Minimum distance (T1) is recommended on each model, and its data is put on the dimension item.

For triple motors installation, set the motors as shown below.
If a boat has V-hull, the center motor should use longer transom motor than outside motors.



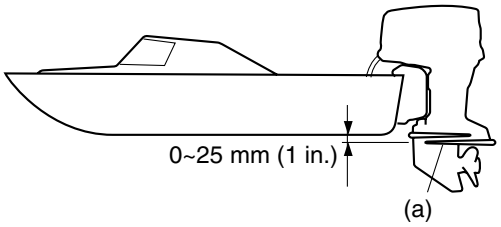
For quartet motors installation, set the motors as shown below.
If a boat has V-hull, inner twin motors should use longer transom motor than outside motors.



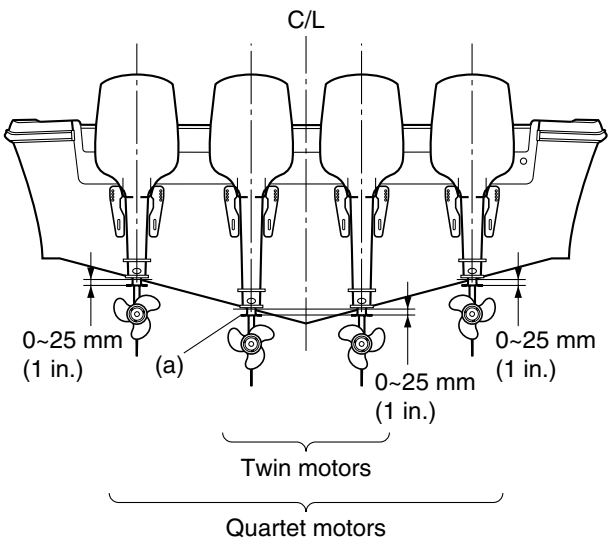
MOUNTING THE OUTBOARD MOTOR

2. 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.

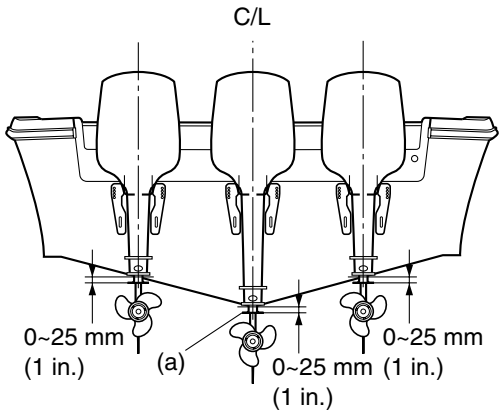
Single motor



Twin motors/ Quartet motors



Triple motors

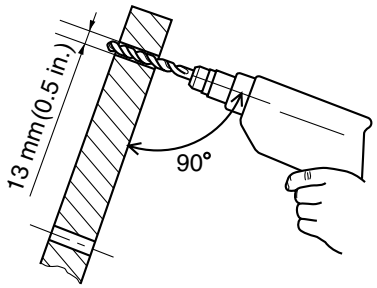


(a): Anti-cavitation plate

NOTE:

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 instruction issued by boat manufacturer, or ask to the manufacturer.

3. When the outboard motor mount position has 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.



MOUNTING THE OUTBOARD MOTOR

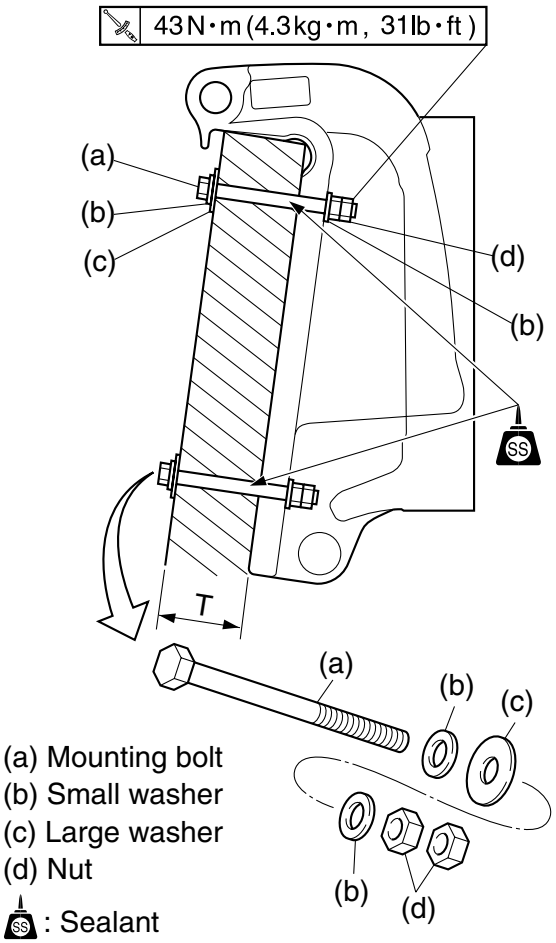
4. Apply a sealant to the mount holes, and secure the motor with supplied mount hardware.
   For tightening procedure, first tighten the inside nut, then the double nuts each other.

CAUTION:

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

NOTE:

The upper mount bolt is usually installed to the 2nd hole from top.



(a) Mounting bolt
(b) Small washer
(c) Large washer
(d) Nut
SS : Sealant

For 115 – 300 and F115 – F350, select the transom mount bolt due to the boat transom thickness.

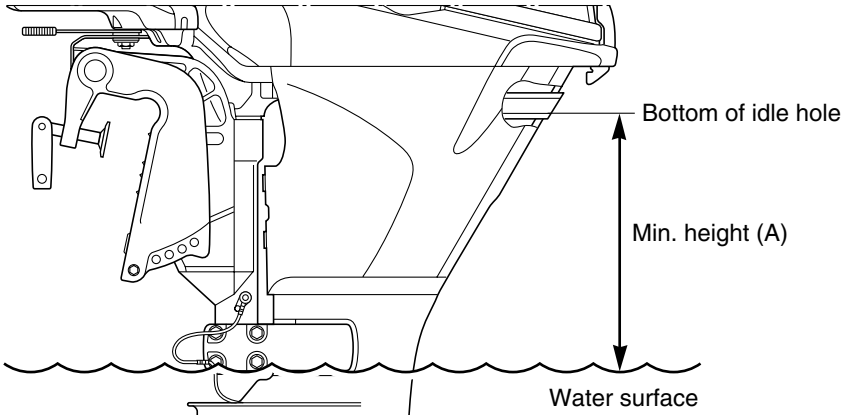
Boat transom thickness (T)	Mount bolt size	Bolt P/N
55 – 65 mm (2.17 – 2.56 in.)	M12 × 115 mm	90101-12M03
65 – 75 mm (2.56 – 2.95 in.)	M12 × 130 mm	90101-12M05
75 – 95 mm (2.95 – 3.74 in.)	M12 × 150 mm	90101-12M77
	M12 × 150 mm [High tension bolt]	90101-12031
95 – 115 mm (3.74 – 4.53 in.)	M12 × 170 mm [High tension bolt]	90101-12036

* High tension bolt is recommended to F350.

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 higher engine weight.
As a result, water line will rise and get close to the power head.
This effects a poor engine performance, and water could easily get into the engine and damage it.
Therefore, you should consider the water level guideline to reinstall 4-stroke outboard motor.
Under mooring of boat with a maximum boat load, maintain the minimum height (A) shown the illustration between water surface and the bottom of idle hole.

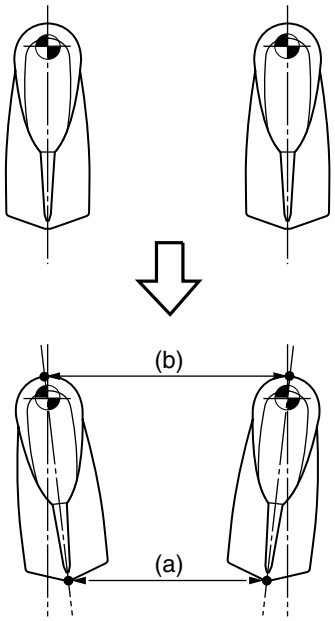


Minimum height between water surface and idle hole bottom						
Model					Min. height (A)	
F2A	F2.5A(F2.5)				80 mm	3.1 in
F4A (F4)					120 mm	4.7 in
F6A (F6)	F8C (F8)	FT8D (T8)	F9.9F(F9.9)	FT9.9G (T9.9)	100 mm	3.9 in
F9.9C (F9.9-2)	FT9.9D (T9.9-2)	F15A	F15B		130 mm	5.1 in
F20A	F25A (F25)	F25C	FT25B (T25)		135 mm	5.3 in
F30A (F30)	F40B (F40)				120 mm	4.7 in
FT50C	F50D				130 mm	5.1 in
F40D	F50F (F50)	FT50G (T50)	F60C (F60)	FT60D (T60)	80 mm	3.1 in
F75B (F75)	F80B	F90B (F90)	F100D		80 mm	3.1 in
F95A	F100B	F115A (F115)			80 mm	3.1 in
F150A (F150)					105 mm	4.1 in
F200A (F200)	F200B	F225A (F225)			75 mm	3.0 in
F200C	F225B	F250A (F250)			75 mm	3.0 in

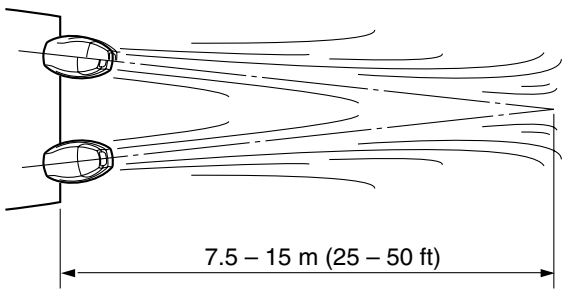
MOUNTING THE OUTBOARD MOTOR

ADJUSTING TWIN MOTORS

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.).



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



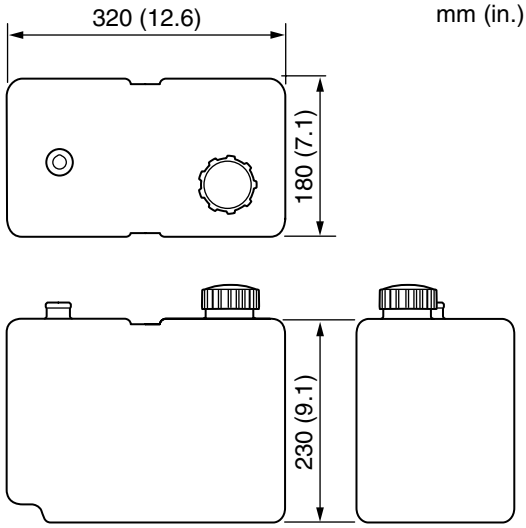
MOUNTING THE REMOTE OIL TANK

The remote oil tank is required for 2-stroke V4 and V6 oil injection engines.

REMOTE OIL TANK DIMENSIONS

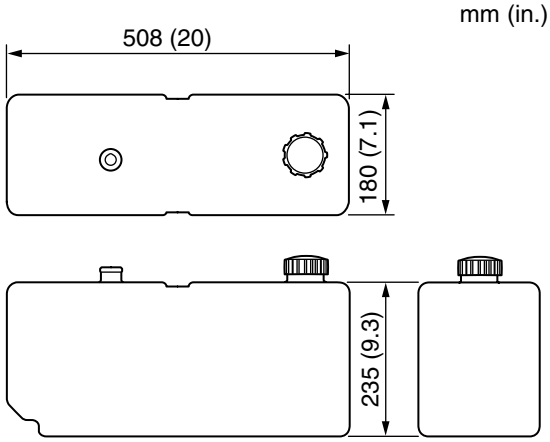
10.5 liters (2.8 US gallons) tank
P/N: 6E5-21733-20

mm (in.)



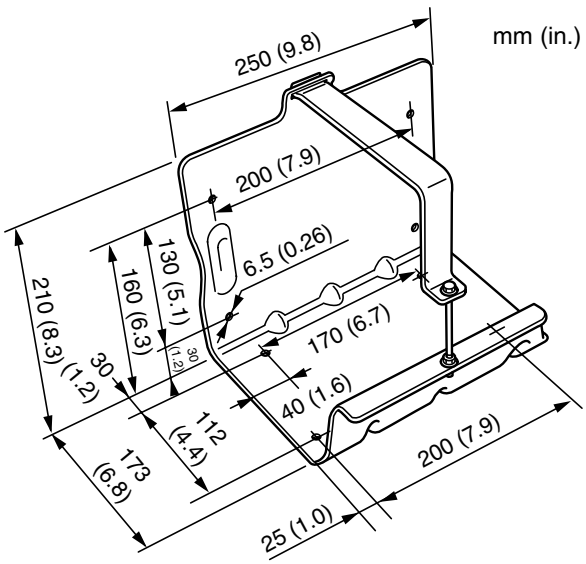
18 liters (4.8 US gallons) tank
P/N: 6E5-21733-30

mm (in.)



MOUNTING THE REMOTE OIL TANK

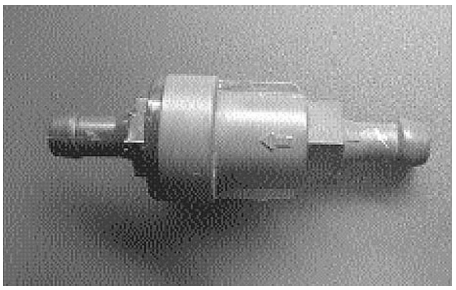
Oil tank holder



NOTICE FOR MOUNTING THE REMOTE OIL TANK

Follow the notifications below, for the remote oil tank installation.

- Mount the oil tank in as dry as possible location to avoid water entering into the oil tank.
- Mount in a location that will allow service to the filter located on the remote oil tank.
- Mount the remote oil tank lower than the engine oil tank.
  If the remote oil tank is mounted higher than the top of the engine because of a boat type, an optional check valve (P/N: 6R5-24408-00) shown below is required.



  Install it on the oil hose between the engine and remote oil tank to prevent siphoning of oil to the engine and spillage.
- Route the oil hose between the engine and the remote oil tank without pinching and kinking.

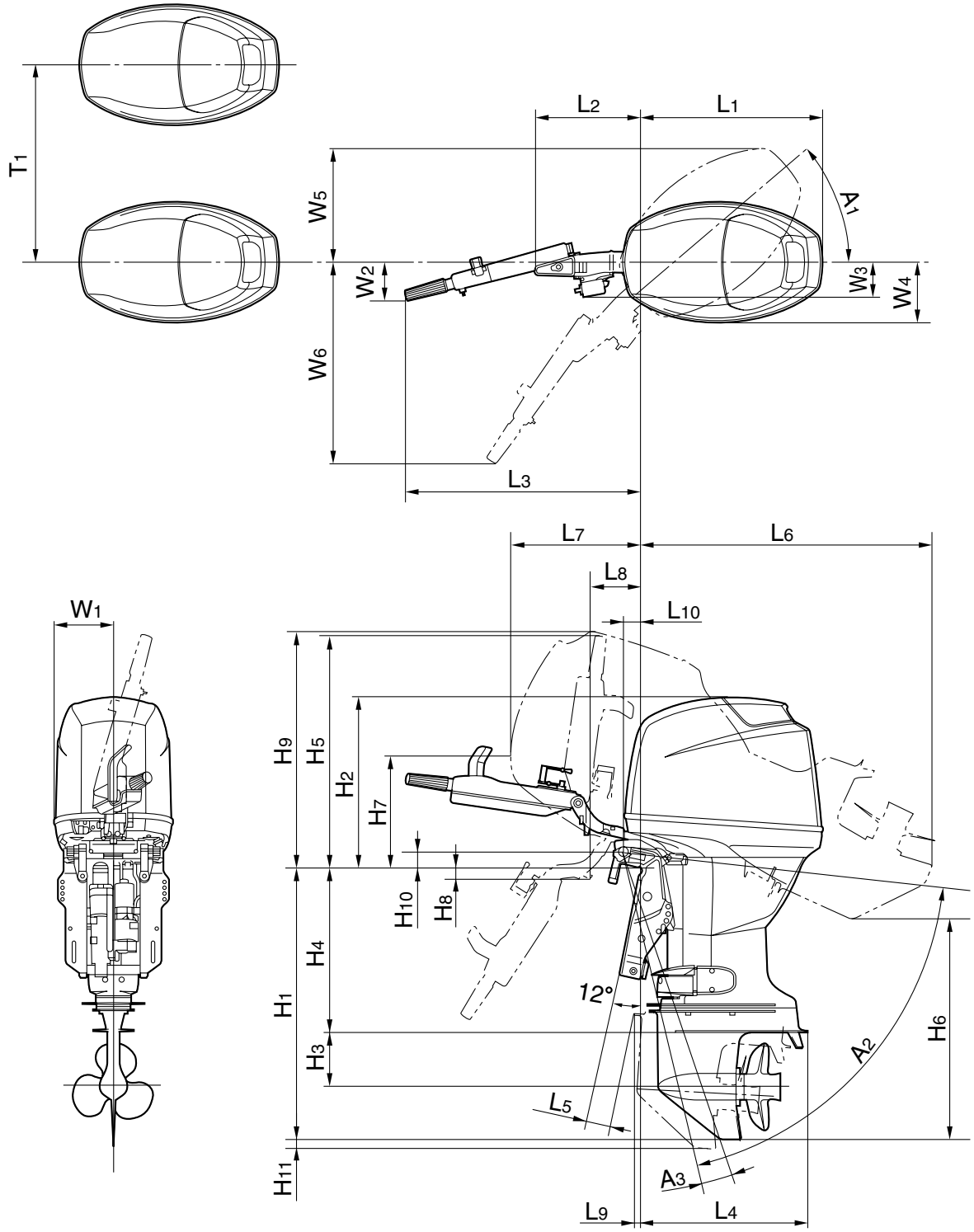
OUTBOARD MOTOR DIMENSIONS

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 (depend 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 PT/T 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 cavitation plate undersurface to propeller shaft
H4	Vertical distance from datum point to 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 the height in the standard position and with PT/T 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 motors in case of twin installation

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSION ITEMS



OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (2-STROKE)

Symbol \ Model			2CMH	3AMH	4ACMH 5CMH	5CSMH	6CMH (6MH) 8CMH (8MH)	E8DMH EK8DMH	9.9FMH (9.9MH) 15FMH (15MH)	E9.9DMH E15DMH EK9.9DMH EK15DMH EK9.9JMH EK15PMH
L1		mm (in.)	275 (10.8)	311 (12.2)	344 (13.5)	344 (13.5)	363 (14.3)	346 (13.6)	393 (15.5)	405 (15.9)
L2		mm (in.)	122 (4.8)	107 (4.2)	145 (5.7)	145 (5.7)	114 (4.5)	180 (7.1)	180 (7.1)	165 (6.5)
L3		mm (in.)	328 (12.9)	317 (12.5)	333 (13.1)	333 (13.1)	439 (17.3)	372 (14.6)	479 (18.9)	473 (18.6)
L4		mm (in.)	164 (6.5)	223 (8.8)	252 (9.9)	252 (9.9)	359 (14.1)	268 (10.6)	355 (14.0)	357 (14.0)
L5	S	mm (in.)	34 (1.3)	16 (0.6)	16 (0.6)	16 (0.6)	121 (4.8)	23 (0.9)	78 (3.1)	79 (3.1)
	L		—	16 (0.6)	24 (0.9)	24 (0.9)	126 (5.0)	23 (0.9)	104 (4.1)	78 (3.1)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	126 (5.0)	23 (0.9)	—	78 (3.1)
	U		—	—	—	—	—	—	134 (5.3)	—
L6	S	mm (in.)	589 (23.2)	636 (25.0)	635 (25.0)	635 (25.0)	705 (27.8)	657 (25.9)	718 (28.3)	708 (27.9)
	L		—	760 (29.9)	758 (29.8)	758 (29.8)	826 (32.5)	782 (30.8)	831 (32.7)	—
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	887 (34.9)	827 (32.6)	—	—
	U		—	—	—	—	—	—	957 (37.7)	—
L7		mm (in.)	276 (10.9)	311 (12.2)	331 (13.0)	331 (13.0)	287 (11.3)	354 (13.9)	314 (12.4)	334 (13.1)
L8		mm (in.)	142 (5.6)	156 (6.1)	148 (5.8)	148 (5.8)	154 (6.1)	207 (8.1)	263 (10.4)	165 (6.5)
L9	S	mm (in.)	—	—	—	—	—	—	—	—
	L		—	—	—	—	—	—	—	4 (0.2)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	—	—	—	14 (0.6)
	U		—	—	—	—	—	—	—	—
L10		mm (in.)	50 (2.0)	68 (2.7)	68 (2.7)	68 (2.7)	65 (2.5)	45 (1.8)	75 (3.0)	73 (2.9)
H1	S	mm (in.)	614 (24.2)	654 (25.7)	653 (25.7)	653 (25.7)	682 (26.9)	685 (27.0)	705 (27.8)	706 (27.8)
	L		—	781 (30.7)	780 (30.7)	780 (30.7)	809 (31.9)	825 (32.5)	832 (32.8)	833 (32.8)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	872 (34.3)	875 (34.4)	—	975 (38.4)
	U		—	—	—	—	—	—	974 (38.3)	—
H2		mm (in.)	302 (11.9)	343 (13.5)	358 (14.1)	325 (12.8)	295 (11.6)	359 (14.1)	335 (13.2)	356 (14.0)
H3		mm (in.)	100 (3.9)	103 (4.1)	105 (4.1)	105 (4.1)	123 (4.8)	122 (4.8)	135 (5.3)	34 (1.4)
H4	S	mm (in.)	417 (16.4)	441 (17.4)	444 (17.5)	444 (17.5)	436 (17.2)	442 (17.4)	440 (17.3)	441 (17.4)
	L		—	568 (22.4)	571 (22.5)	571 (22.5)	563 (22.2)	582 (22.9)	567 (22.3)	568 (22.4)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	626 (24.6)	632 (24.9)	—	710 (28.0)
	U		—	—	—	—	—	—	709 (27.9)	—
H5		mm (in.)	462 (18.2)	484 (19.1)	396 (15.6)	396 (15.6)	462 (18.2)	415 (16.3)	467 (18.4)	474 (18.7)
H6	S	mm (in.)	503 (19.8)	621 (24.4)	623 (24.5)	623 (24.5)	668 (26.3)	497 (19.6)	572 (22.5)	569 (22.4)
	L		—	717 (28.2)	719 (28.3)	719 (28.3)	758 (29.8)	574 (22.6)	641 (25.2)	638 (25.2)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	803 (31.6)	601 (23.7)	—	714 (28.1)
	U		—	—	—	—	—	—	718 (28.3)	—
H7		mm (in.)	38 (1.5)	342 (13.5)	104 (4.1)	104 (4.1)	110 (4.3)	86 (3.4)	138 (5.4)	—
H8		mm (in.)	12 (0.5)	9.0 (0.35)	30 (1.2)	30 (1.2)	2.0 (0.08)	51 (2.0)	19 (0.7)	24 (0.9)
H9		mm (in.)	397 (15.6)	419 (16.5)	459 (18.1)	459 (18.1)	470 (18.5)	465 (18.3)	526 (20.7)	555 (21.9)
H10		mm (in.)	27 (1.0)	30 (1.2)	30 (1.2)	30 (1.2)	32 (1.3)	26 (1.0)	34 (1.3)	34 (1.4)
H11	S	mm (in.)	—	—	—	—	—	—	—	17 (0.7)
	L		—	—	—	—	—	—	—	—
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	—	—	—	—
	U		—	—	—	—	—	—	—	—
W1		mm (in.)	151 (5.9)	108 (4.3)	144 (5.7)	144 (5.7)	150 (5.9)	136 (5.4)	143 (5.6)	173 (6.8)
W2		mm (in.)	125 (4.9)	181 (7.1)	178 (7.0)	178 (7.0)	193 (7.6)	192 (7.6)	189 (7.4)	—
W3		mm (in.)	89 (3.5)	105 (4.1)	134 (5.3)	134 (5.3)	137 (5.4)	129 (5.1)	143 (5.6)	—
W4		mm (in.)	—	—	—	—	—	158 (6.2)	—	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	60	360	45(P) / 40(S)	40
A2		degree	73	76	76	76	81	80	63	63
A3		degree	—	—	—	—	—	—	—	4
T1		mm (in.)	—	—	—	—	—	—	—	—

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (2-STROKE)

Symbol		Model	20DMH 20DMHO (20MH) 25NWH 25NWC 25NMH 25NMHO (25MH)	20DWO 25NW	25BMH E25BMH 25BWH 25BWC 25XMH 30HMH E30HMH 30HWH 30HWC EK25BMH EK25CMH	25BW 30HW	30DMH 30DMHO 30DEHO 30DWH	30DE 30DEO	30DETO	E40GWH E40GMH EK40GMH
L1		mm (in.)	428 (16.9)	428 (16.9)	429 (16.89)	429 (16.89)	465 (18.3)	465 (18.3)	489 (19.25)	504 (19.8)
L2		mm (in.)	0	185 (7.3)	180 (7.09)	180 (7.09)	198 (7.8)	114 (4.5)	89 (3.5)	188 (7.4)
L3		mm (in.)	508 (20.0)	—	420 (16.5)	—	497 (19.6)	—	—	493 (19.4)
L4		mm (in.)	402 (15.8)	402 (15.8)	385 (15.16)	385 (15.16)	496 (19.5)	496 (19.5)	520 (20.5)	421 (16.6)
L5	S	mm (in.)	79 (3.1)	79 (3.1)	61 (2.40)	83 (3.27)	85 (3.3)	85 (3.3)	—	94 (3.7)
	L		106 (4.2)	106 (4.2)	83 (3.27)	—	90 (3.5)	90 (3.5)	103 (4.1)	94 (3.7)
	Y		117 (4.6)	117 (4.6)	83 (3.27)	—	—	99 (3.9)	—	94 (3.7)
	X		116 (4.6)	—	83 (3.27)	—	—	—	—	—
	U		—	—		—	—	—	—	—
L6	S	mm (in.)	739 (29.1)	739 (29.1)	736 (28.98)	854 (33.62)	752 (29.6)	752 (29.6)	—	784 (30.9)
	L		852 (33.5)	852 (33.5)	854 (33.62)	—	859 (33.8)	859 (33.8)	870 (34.2)	897 (35.3)
	Y		898 (35.4)	898 (35.4)	897 (35.31)	—	—	895 (35.2)	—	943 (37.1)
	X		931 (36.7)	—	933 (36.73)	—	—	—	—	—
	U		—	—	—	—	—	—	—	—
L7		mm (in.)	337 (13.3)	337 (13.3)	405 (15.94)	405 (15.94)	387 (15.2)	375 (14.8)	356 (14.0)	427 (16.8)
L8		mm (in.)	242 (9.5)	242 (9.5)	195 (7.68)	195 (7.68)	228 (9.0)	173 (6.8)	158 (6.2)	193 (7.6)
L9	S	mm (in.)	—	—	—	—	—	—	—	—
	L		—	—	—	—	—	—	—	—
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	—	—	—	—
	U		—	—	—	—	—	—	—	—
L10		mm (in.)	78 (3.1)	78 (3.1)	74.2 (2.9)	74.2 (2.92)	73 (2.9)	73 (2.9)	65 (2.6)	72 (2.8)
H1	S	mm (in.)	703 (27.7)	S:703 (27.7)	707 (27.83)	834 (32.83)	712 (28.0)	712 (28.0)	—	771 (30.4)
	L		830 (32.7)	L:830 (32.7)	834 (32.83)	—	833 (32.8)	833 (32.8)	835 (32.9)	898 (35.4)
	Y		881 (34.7)	Y:881 (34.7)	881 (34.68)	—	872 (34.3)	874 (34.4)	—	948 (37.3)
	X		919 (36.2)	—	920 (36.22)	—	—	—	—	—
	U		—	—	—	—	—	—	—	—
H2		mm (in.)	365 (14.4)	365 (14.4)	439 (17.28)	439 (17.28)	446 (17.6)	428 (16.9)	426 (16.8)	444 (17.5)
H3		mm (in.)	144 (5.7)	144 (5.7)	144 (5.67)	144 (5.67)	148 (5.8)	148 (5.8)	148 (5.8)	162 (6.4)
H4	S	mm (in.)	419 (16.5)	419 (16.5)	423 (16.65)	550 (21.65)	424 (16.7)	424 (16.7)	—	444 (17.5)
	L		546 (21.5)	546 (21.5)	550 (21.65)	—	545 (21.5)	545 (21.5)	547 (21.5)	570 (22.4)
	Y		597 (23.5)	597 (23.5)	597 (23.50)	—	584 (23.0)	586 (23.1)	—	622 (24.5)
	X		635 (25.0)	—	636 (25.04)	—	—	—	—	—
	U		—	—	—	—	—	—	—	—
H5		mm (in.)	491 (19.3)	—	466 (18.3)	—	445 (17.5)	—	—	533 (21.0)
H6	S	mm (in.)	586 (23.1)	586 (23.1)	621 (24.45)	701 (27.60)	584 (23.0)	584 (23.0)	—	622 (24.5)
	L		655 (25.8)	655 (25.8)	701 (27.60)	—	648 (25.5)	648 (25.5)	651 (25.6)	691 (27.2)
	Y		684 (26.9)	684 (26.9)	730 (28.74)	—	668 (26.3)	670 (26.4)	—	719 (28.3)
	X		704 (27.7)	—	754 (29.68)	—	—	—	—	—
	U		—	—	—	—	—	—	—	—
H7		mm (in.)	186 (7.3)	186 (7.3)	118 (4.65)	118 (4.65)	278 (10.9)	224 (8.8)	244 (9.6)	127 (5.0)
H8		mm (in.)	24 (0.9)	24 (0.9)	30 (1.18)	30 (1.18)	29 (1.1)	9.0 (0.35)	8.7 (0.3)	30 (1.2)
H9		mm (in.)	584 (23.0)	584 (23.0)	596 (23.46)	596 (23.46)	657 (25.9)	647 (25.5)	661 (26.0)	695 (27.4)
H10		mm (in.)	41 (1.6)	41 (1.6)	40 (1.6)	40.3 (1.59)	44 (1.7)	44 (1.7)	42 (16.5)	45 (1.8)
H11	S	mm (in.)	—	—	—	—	—	—	—	—
	L		—	—	—	—	—	—	22 (0.87)	—
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	—	—	—	—
	U		—	—	—	—	—	—	—	—
W1		mm (in.)	—	—	166 (6.54)	166 (6.54)	—	154 (6.1)	154 (6.1)	190 (7.5)
W2		mm (in.)	206 (8.1)	—	233 (9.2)	—	208 (8.2)	—	152 (6.0)	294 (11.6)
W3		mm (in.)	152 (6.0)	152 (6.0)	148 (5.83)	148 (5.83)	152 (6.0)	—	—	173 (6.8)
W4		mm (in.)	177 (7.0)	—	192 (7.56)	192 (7.56)	179 (7.0)	—	—	205 (8.1)
W5		mm (in.)	296 (11.7)	296 (11.7)	302 (11.89)	302 (11.89)	310 (12.2)	310 (12.2)	310 (12.2)	360 (14.2)
W6		mm (in.)	528 (20.8)	—	472 (18.6)	217 (8.54)	522 (20.6)	—	—	602 (23.7)
A1		degree	40	40	40	40	40	40	40	45
A2		degree	67	67	68	68	70	70	61	67
A3		degree	—	—	—	—	—	—	4	—
T1		mm (in.)	—	—	—	—	—	—	—	—

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (2-STROKE)

Symbol		Model	40JMH E40JMH 40JWH E40JWH EK40JMH	E40JW	40XMH E40XMH 40XWH E40XWH	40XW E40XW	40XWT E40XWT	40VMHO 50HMHO	40VE 40VEO	40VETO 40YETO 50HEDO 50HET 50HETO (50TR)
L1		mm (in.)	504 (19.8)	504 (19.8)	533 (21.8)	553 (21.8)	533 (21.8)	490 (19.3)	490 (19.3)	528 (20.8)
L2		mm (in.)	188 (7.4)	188 (7.4)	118 (4.6)	118 (4.6)	118 (4.6)	257 (10.1)	178 (7.0)	142 (5.6)
L3		mm (in.)	493 (19.4)	—	523 (20.6)	—	—	789 (31.1)	—	—
L4		mm (in.)	421 (16.6)	478 (18.8)	522 (20.6)	522 (20.6)	522 (20.6)	493 (19.4)	493 (19.4)	529 (20.8)
L5	S	mm (in.)	94 (3.7)	94 (3.7)	65 (2.6)	65 (2.6)	91 (3.6)	—	—	78 (3.1)
	L		94 (3.7)	—	91 (3.6)	91 (3.6)	—	—	—	77 (3.0)
	Y		94 (3.7)	—	91 (3.6)	—	—	—	—	—
	X		—	—	—	—	—	—	—	77 (3.0)
	U		—	—	—	—	—	—	—	—
L6	S	mm (in.)	784 (30.9)	797 (31.4)	826 (32.5)	826 (32.5)	—	798 (31.4)	798 (31.4)	822 (32.4)
	L		897 (35.3)	910 (35.8)	940 (37.0)	940 (37.0)	935 (36.8)	910 (35.8)	910 (35.8)	937 (36.9)
	Y		943 (37.1)	—	1,043 (41.1)	—	—	—	—	—
	X		—	—	—	—	1,020 (40.2)	—	—	1,040 (40.9)
	U		—	—	—	—	—	—	—	—
L7		mm (in.)	427 (16.8)	427 (16.8)	397 (15.6)	397 (15.6)	391 (15.4)	433 (17.0)	401 (15.8)	387 (15.2)
L8		mm (in.)	193 (7.6)	193 (7.6)	294 (11.6)	—	—	273 (10.7)	179 (7.0)	153 (6.0)
L9	S	mm (in.)	—	—	3 (0.1)	3 (0.1)	—	—	—	-11 (- 0.43)
	L		—	—	8 (0.3)	8 (0.3)	8 (0.3)	—	—	10 (0.4)
	Y		—	—	16 (0.6)	—	—	—	—	—
	X		—	—	—	—	16 (0.6)	—	—	—
	U		—	—	—	—	—	—	—	—
L10		mm (in.)	72 (2.8)	72 (2.8)	65 (2.6)	65 (2.6)	65 (2.6)	72 (2.8)	72 (2.8)	63 (2.5)
H1	S	mm (in.)	771 (30.4)	764 (30.1)	767 (30.2)	767 (30.2)	—	751 (29.6)	751 (29.6)	753 (29.6)
	L		898 (35.4)	—	893 (35.2)	893 (35.2)	893 (35.2)	878 (34.6)	878 (34.6)	880 (34.6)
	Y		948 (37.3)	—	1,007 (39.6)	—	—	—	—	—
	X		—	—	—	—	1,007 (39.6)	—	—	994 (39.1)
	U		—	—	—	—	—	—	—	—
H2		mm (in.)	444 (17.5)	444 (17.5)	471 (18.5)	471 (18.5)	471 (18.5)	472 (18.6)	441 (17.4)	439 (17.3)
H3		mm (in.)	162 (6.4)	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.)	444 (17.5)	421 (16.6)	424 (16.7)	424 (16.7)	—	408 (16.1)	408 (16.1)	410 (16.1)
	L		570 (22.4)	—	550 (21.7)	550 (21.7)	550 (21.7)	535 (21.1)	535 (21.1)	537 (21.1)
	Y		622 (24.5)	—	649 (25.6)	—	—	—	—	—
	X		—	—	—	—	649 (25.6)	—	—	651 (25.6)
	U		—	—	—	—	—	—	—	—
H5		mm (in.)	533 (21.0)	533 (21.0)	—	—	532 (20.9)	731 (28.8)		—
H6	S	mm (in.)	622 (24.5)	614 (24.2)	626 (24.6)	626 (24.6)	—	579 (22.8)	579 (22.8)	635 (25.0)
	L		691 (27.2)	—	697 (27.4)	697 (27.4)	637 (25.1)	646 (25.4)	646 (25.4)	709 (27.9)
	Y		719 (28.3)	—	753 (29.6)	—	—	—	—	—
	X		—	—	—	—	709 (27.9)	—	—	775 (30.5)
	U		—	—	—	—	—	—	—	—
H7		mm (in.)	127 (5.0)	127 (5.0)	159 (6.3)	159 (6.3)	176 (6.9)	201 (7.9)	217 (8.5)	222 (8.7)
H8		mm (in.)	30 (1.2)	30 (1.2)	38 (1.5)	—	—	55 (2.2)	17 (0.7)	0.0 (0.00)
H9		mm (in.)	695 (27.4)	695 (27.4)	702 (27.6)	702 (27.6)	706 (27.8)	683 (26.9)	671 (26.4)	688 (27.1)
H10		mm (in.)	45 (1.8)	45 (1.8)	43 (1.69)	43 (1.69)	43 (1.69)	44 (1.7)	44 (1.7)	44 (1.7)
H11	S	mm (in.)	—	—	25 (0.98)	25 (0.98)	—	—	—	20 (0.8)
	L		—	—	24 (0.94)	24 (0.94)	24 (0.94)	—	—	19 (0.7)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	55 (2.2)	—	—	—
	U		—	—	—	—	—	—	—	—
W1		mm (in.)	190 (7.5)	190 (7.5)	182 (7.2)	182 (7.2)	182 (7.2)	—	180 (7.1)	180 (7.1)
W2		mm (in.)	294 (11.6)	—	220.5 (8.7)	—	—	124 (4.9)	—	—
W3		mm (in.)	173 (6.8)	173 (6.8)	182 (7.2)	182 (7.2)	182 (7.2)	175 (6.9)	175 (6.9)	175 (6.9)
W4		mm (in.)	205 (8.1)	205 (8.1)	—	—	—	—	180 (7.1)	180 (7.1)
W5		mm (in.)	360 (14.2)	360 (14.2)	369 (14.5)	369 (14.5)	369 (14.5)	340 (13.4)	340 (13.4)	340 (13.4)
W6		mm (in.)	602 (23.7)	602 (23.7)	592 (23.3)	—	—	641 (25.2)		—
A1		degree	45	45	45	45	45	40	40	40
A2		degree	67	67	64	64	61	62	62	65
A3		degree	—	—	—	—	4	—	—	4
T1		mm (in.)	—	—	—	—	—	—	—	—

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (2-STROKE)

Symbol		Model	40VMHD 40VWHDO 40VWHTO 50HMHD 50HWHD 50HWHDO 50HWHTO	E48CMH E55CMH	55BED S-transom	55BED L-transom	55BET	55DEHD	E60HMHD E60HWHD	E60HWD
L1		mm (in.)	528 (20.8)	487 (19.2)	531 (20.9)	516 (20.3)	516 (20.3)	545 (21.5)	532 (20.9)	532 (20.9)
L2		mm (in.)	221 (8.7)	298 (11.7)	159 (6.3)	174 (6.9)	174 (6.9)	180 (7.1)	269 (10.6)	269 (10.6)
L3		mm (in.)	753 (29.6)	680 (26.8)	—	—	—	790 (31.1)	651 (25.6)	651 (25.6)
L4		mm (in.)	529 (20.8)	487 (19.2)	531 (20.9)	516 (20.3)	516 (20.3)	547 (21.5)	546 (21.5)	546 (21.5)
L5	S	mm (in.)	—	54 (2.1)	87 (3.4)	—	—	—	97 (3.8)	—
	L		77 (3.0)	71 (2.8)	—	90 (3.5)	90 (3.5)	88 (3.5)	99 (3.9)	99 (3.9)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	79 (3.1)	85 (3.3)	—	—
	U		—	—	—	—	—	—	—	—
L6	S	mm (in.)	—	827 (32.6)	818 (32.2)	—	—	—	913 (35.9)	—
	L		937 (36.9)	932 (36.7)	—	919 (36.2)	919(36.2)	968(38.1)	1,020 (40.2)	1,020 (40.2)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	1,033 (40.7)	1,080 (42.5)	—	—
	U		—	—	—	—	—	—	—	—
L7		mm (in.)	418 (16.5)	437 (17.2)	392 (15.4)	400 (15.7)	400 (15.7)	—	457 (18.0)	457 (18.0)
L8		mm (in.)	246 (9.7)	280 (11.0)	154 (6.1)	164 (6.5)	164 (6.5)	164 (6.5)	256 (10.1)	256 (10.1)
L9	S	mm (in.)	—	—	—	—	—	—	—	—
	L		10 (0.4)	—	—	—	14 (0.6)	—	—	—
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	—	—	—	—
	U		—	—	—	—	—	—	—	—
L10		mm (in.)	63 (2.5)	77 (3.0)	67 (2.6)	67 (2.6)	67 (2.6)	67 (2.6)	67 (2.6)	67 (2.6)
H1	S	mm (in.)	—	809 (31.9)	758 (29.8)	—	—	—	831 (32.7)	—
	L		880 (34.6)	931 (36.7)	—	879 (34.6)	879 (34.6)	901 (35.5)	954 (37.6)	954 (37.6)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	1,006 (39.6)	1,028 (40.5)	—	—
	U		—	—	—	—	—	—	—	—
H2		mm (in.)	470 (18.5)	449 (17.7)	424 (16.7)	424 (16.7)	424 (16.7)	520 (20.5)	528 (20.8)	528 (20.8)
H3		mm (in.)	175 (6.9)	191 (7.5)	191 (7.5)	191 (7.5)	191 (7.5)	191 (7.5)	191 (7.5)	191 (7.5)
H4	S	mm (in.)	—	451 (17.8)	399 (15.7)	—	—	—	450 (17.7)	—
	L		537 (21.1)	572 (22.5)	—	520 (20.5)	520 (20.5)	520 (20.5)	538 (21.2)	538 (21.2)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	647 (25.5)	647 (25.5)	—	—
	U		—	—	—	—	—	—	—	—
H5		mm (in.)	728 (28.7)	568 (22.4)	—	—	—	—	753 (29.6)	753 (29.6)
H6	S	mm (in.)	—	591 (23.3)	636 (25.0)	—	—	—	670 (26.4)	—
	L		709 (27.9)	652 (25.7)	—	689 (27.1)	689 (27.1)	698 (27.5)	722 (28.4)	722 (28.4)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	760 (29.9)	764 (30.1)	—	—
	U		—	—	—	—	—	—	—	—
H7		mm (in.)	204 (8.0)	171 (6.7)	158 (6.2)	147 (5.8)	147 (5.8)	—	216 (8.5)	216 (8.5)
H8		mm (in.)	43 (1.7)	93 (3.7)	12 (0.5)	25 (1.0)	25 (1.0)	23 (0.9)	81 (3.2)	81 (3.2)
H9		mm (in.)	696 (27.4)	684 (26.9)	695 (27.4)	682 (26.9)	682 (26.9)	743 (29.3)	722 (28.4)	722 (28.4)
H10		mm (in.)	44 (1.7)	42 (1.7)	47 (1.9)	47 (1.9)	47 (1.9)	47 (1.9)	46 (1.8)	46 (1.8)
H11	S	mm (in.)	—	22 (0.9)	24 (0.9)	24 (0.9)	24 (0.9)	—	27 (1.1)	—
	L		19 (0.7)	21 (0.8)	—	—	—	—	27 (1.1)	27 (1.1)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	—	—	—	—
	U		—	—	—	—	—	—	—	—
W1		mm (in.)	180 (7.1)	—	166 (6.5)	166 (6.5)	166 (6.5)	211 (8.3)	—	—
W2		mm (in.)	124 (4.9)	159 (6.3)	—	—	—	—	159 (6.3)	—
W3		mm (in.)	175 (6.9)	165 (6.5)	—	—	166 (6.5)	187 (7.4)	182 (7.2)	182 (7.2)
W4		mm (in.)	180 (7.1)	—	—	—	—	—	—	—
W5		mm (in.)	340 (13.4)	268 (10.6)	271 (10.7)	271 (10.7)	271 (10.7)	331 (13.0)	322 (12.7)	322 (12.7)
W6		mm (in.)	641 (25.2)	507 (20.0)	—	—	—	—	553 (21.8)	—
A1		degree	40	30	30	30	30	30	35	35
A2		degree	65	64	68	68	68	67	67	67
A3		degree	4	—	—	—	4	—	2.8	2.8
T1		mm (in.)	—	—	—	—	—	—	—	—

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (2-STROKE)

Symbol \ Model			60FED 60FEDO S-transom	60FED 60FEDO L-transom	60FETO 70BETO (70TR) S-transom	60FET 60FETO 70BETO (70TR) L/X-transom	70BEHTO	55DEHD 75AEHD 85AEHD	75AED 85AED	75AET 85AET
L1		mm (in.)	547 (21.5)	532 (20.9)	547 (21.5)	532 (20.9)	532 (20.9)	545 (21.5)	545 (21.5)	545 (21.5)
L2		mm (in.)	151 (5.9)	166 (6.5)	151 (5.9)	166 (6.5)	267 (10.5)	180 (7.1)	180 (7.1)	180 (7.1)
L3		mm (in.)	—	—	—	—	798 (31.4)	790 (31.1)	—	—
L4		mm (in.)	562 (22.1)	547 (21.5)	562 (22.1)	547 (21.5)	547 (21.5)	547 (21.5)	547 (21.5)	547 (21.5)
L5	S	mm (in.)	113 (4.4)	—	113 (4.4)	—	—	—	—	—
	L		—	91 (3.6)	—	91 (3.6)	91 (3.6)	88 (3.5)	88 (3.5)	88 (3.5)
	Y		—	—	—	—	—	85 (3.3)	—	—
	X		—	—	—	80 (3.1)	80 (3.1)	85 (3.3)	80 (3.1)	80 (3.1)
	U		—	—	—	—	—	—	—	—
L6	S	mm (in.)	868 (34.2)	—	868 (34.2)	—	—	—	—	—
	L		—	968 (38.1)	—	968 (38.1)	968 (38.1)	968 (38.1)	968 (38.1)	968 (38.1)
	Y		—	—	—	—	—	1,015 (40.0)	—	—
	X		—	—	—	1,081 (42.6)	1,081 (42.6)	1,080 (42.5)	1,080 (42.5)	1,080 (42.5)
	U		—	—	—	—	—	—	—	—
L7		mm (in.)	403 (15.9)	411 (16.2)	403 (15.9)	411 (16.2)	411 (16.2)	459 (18.1)	459 (18.1)	459 (18.1)
L8		mm (in.)	206 (8.1)	214 (8.4)	206 (8.1)	214 (8.4)	271 (10.7)	164 (6.5)	164 (6.5)	164 (6.5)
L9	S	mm (in.)	—	—	0.0 (0.00)	—		—	—	—
	L		—	—	—	14 (0.6)	14 (0.6)	—	—	14 (0.6)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	31 (1.2)	31 (1.2)	—	—	23 (0.9)
	U		—	—	—	—	—	—	—	—
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	mm (in.)	780 (30.7)	—	780 (30.7)	—	—	—	—	—
	L		—	901 (35.5)	—	901 (35.5)	901 (35.5)	901 (35.5)	901 (35.5)	901 (35.5)
	Y		—	—	—	—	—	952 (37.5)	—	—
	X		—	—	—	1,028 (40.5)	1,028 (40.5)	1,028 (40.5)	1,028 (40.5)	1,028 (40.5)
	U		—	—	—	—	—	—	—	—
H2		mm (in.)	472 (18.6)	472 (18.6)	472 (18.6)	472 (18.6)	472 (18.6)	520 (20.5)	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	mm (in.)	400 (15.7)	—	400 (15.7)	—	—	—	—	—
	L		—	520 (20.5)	—	520 (20.5)	520 (20.5)	520 (20.5)	520 (20.5)	520 (20.5)
	Y		—	—	—	—	—	571 (22.5)	—	—
	X		—	—	—	648 (25.5)	648 (25.5)	647 (25.5)	647 (25.5)	647 (25.5)
	U		—	—	—	—	—	—	—	—
H5		mm (in.)	—	—	—	—	706 (27.8)	—	—	—
H6	S	mm (in.)	645 (25.4)	—	645 (25.4)	—	—	—	—	—
	L		—	696 (27.4)	—	696 (27.4)	696 (27.4)	698 (27.5)	698 (27.5)	698 (27.5)
	Y		—	—	—	—	—	729 (28.7)	—	—
	X		—	—	—	764 (30.1)	764 (30.1)	764 (30.1)	764 (30.1)	764 (30.1)
	U		—	—	—	—	—	—	—	—
H7		mm (in.)	262 (10.3)	249 (9.8)	262 (10.3)	249 (9.8)	249 (9.8)	199 (7.8)	199 (7.8)	199 (7.8)
H8		mm (in.)	-24 (-0.94)	-11 (-0.43)	-24 (-0.94)	-11 (-0.43)	70 (2.8)	23 (0.9)	23 (0.9)	23 (0.9)
H9		mm (in.)	719 (28.3)	706 (27.8)	719 (28.3)	706 (27.8)	731 (28.8)	743 (29.3)	743 (29.3)	743 (29.3)
H10		mm (in.)	47 (1.9)	47 (1.9)	47 (1.9)	47 (1.9)	47 (1.9)	47 (1.9)	47 (1.9)	47 (1.9)
H11	S	mm (in.)	—	—	0.0 (0.00)	—	—	—	—	—
	L		—	—	—	28 (1.1)	27 (1.1)	—	—	27 (1.1)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	27 (1.1)	27 (1.1)	—	—	27 (1.1)
	U		—	—	—	—	—	—	—	—
W1		mm (in.)	182 (7.2)	182 (7.2)	182 (7.2)	182 (7.2)	—	211 (8.3)	187 (7.4)	187 (7.4)
W2		mm (in.)	—	—	—	—	94 (3.7)	—	—	—
W3		mm (in.)	—	—	—	—	181 (7.1)	187 (7.4)	187 (7.4)	187 (7.4)
W4		mm (in.)	—	—	—	—	179 (7.0)	—	—	—
W5		mm (in.)	321 (12.6)	321 (12.6)	321 (12.6)	321 (12.6)	321 (12.6)	331 (13.0)	331 (13.0)	331 (13.0)
W6		mm (in.)	—	—	—	—	583 (23.0)	—	—	—
A1		degree	35	35	35	35	35	30	30	30
A2		degree	63	67	63	67	62	67	67	67
A3		degree	0	4	0	4	4	—	—	4
T1		mm (in.)	—	—	—	—	—	600 (23.6)	600 (23.6)	600 (23.6)

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (2-STROKE)

Symbol \ Model			E60JMHD E65AMHD E75BMHD	75CETO 90AETO (90TR)	E115AMH E115AWH	E115AE 115BE	E115AET 115BET 140BET	115CETO (115TR)	130BETO	150AET L150AET 175AET 200AET L200AET
L1		mm (in.)	545 (21.5)	545 (21.5)	539 (21.2)	539 (21.2)	539 (21.2)	542 (21.3)	554 (21.8)	543 (21.4)
L2		mm (in.)	270 (10.6)	180 (7.1)	325 (12.8)	213 (8.4)	213 (8.4)	188 (7.4)	176 (6.9)	188 (7.4)
L3		mm (in.)	652 (25.7)	—	845 (33.3)	—	—	—	—	—
L4		mm (in.)	547 (21.5)	547 (21.5)	616 (24.3)	616 (24.3)	616 (24.3)	616 (24.3)	632 (24.9)	634 (25.0)
L5	S	mm (in.)	—	—	—	—	—	—	—	—
	L		81 (3.2)	88 (3.5)	80 (3.1)	80 (3.1)	80 (3.1)	70 (2.8)	70 (2.8)	49 (1.9)
	Y		80 (3.1)	—	75 (3.0)	—	—	—	—	—
	X		70 (2.8)	80 (3.1)	85 (3.3)	85 (3.3)	85 (3.3)	61 (2.4)	61 (2.4)	62 (2.4)
	U		—	—	—	—	—	—	—	—
L6	S	mm (in.)	—	—	—	—	—	—	—	—
	L		966 (38.0)	968 (38.1)	1,005 (39.6)	1,005 (39.6)	1,005 (39.6)	1,007 (39.6)	1,007 (39.6)	1,030 (40.6)
	Y		1,011 (39.8)	—	1,055 (41.5)	—	—	—	—	—
	X		1,078 (42.4)	1,080 (42.5)	1,120 (44.1)	1,120 (44.1)	1,120 (44.1)	1,124 (44.3)	1,124 (44.3)	1,144 (45.0)
	U		—	—	—	—	—	—	—	—
L7		mm (in.)	542 (21.3)	457 (18.0)	570 (22.4)	482 (19.0)	482 (19.0)	468 (18.4)	463 (18.2)	569 (22.4)
L8		mm (in.)	256 (10.1)	164 (6.5)	270 (10.6)	214 (8.4)	215 (8.5)	173 (6.8)	159 (6.3)	173 (6.8)
L9	S	mm (in.)	—	—	—	—	—	—	—	—
	L		—	14 (0.6)	—	—	12 (0.5)	44 (1.7)	31 (1.2)	54 (2.1)
	Y		—	—	—	—	—	—	—	—
	X		—	31 (1.2)	—	—	12 (0.5)	53 (2.1)	40 (1.6)	62 (2.4)
	U		—	—	—	—	—	—	—	—
L10		mm (in.)	68 (2.7)	67 (2.6)	64 (2.5)	64 (2.5)	64 (2.5)	74 (2.9)	74 (2.9)	74 (2.9)
H1	S	mm (in.)	—	—	—	—	—	—	—	—
	L		902 (35.5)	901 (35.5)	929 (36.6)	929 (36.6)	929 (36.6)	928 (36.5)	928 (36.5)	946 (37.2)
	Y		953 (37.5)	—	982 (38.7)	—	—	—	—	—
	X		1,029 (40.5)	1,028 (40.5)	1,056 (41.6)	1,056 (41.6)	1,056 (41.6)	1,054 (41.5)	1,054 (41.5)	1,072 (42.2)
	U		—	—	—	—	—	—	—	—
H2		mm (in.)	590 (23.2)	512 (20.2)	631 (24.8)	508 (20.0)	508 (20.0)	544 (21.4)	544 (21.4)	631 (24.8)
H3		mm (in.)	191 (7.5)	191 (7.5)	190 (7.5)	190 (7.5)	190 (7.5)	191 (7.5)	191 (7.5)	210 (8.3)
H4	S	mm (in.)	—	—	—	—	—	—	—	—
	L		521 (20.5)	520 (20.5)	515 (20.3)	515 (20.3)	515 (20.3)	515 (20.3)	515 (20.3)	516 (20.3)
	Y		572 (22.5)	—	568 (22.4)	—	—	—	—	—
	X		648 (25.5)	647 (25.5)	642 (25.3)	642 (25.3)	642 (25.3)	642 (25.3)	642 (25.3)	642 (25.3)
	U		—	—	—	—	—	—	—	—
H5		mm (in.)	555 (21.9)	—	695 (27.4)	—	—	—	—	
H6	S	mm (in.)	—	—	—	—	—	—	—	—
	L		698(27.5)	698 (27.5)	735 (28.9)	735 (28.9)	735 (28.9)	764 (30.1)	764 (30.1)	762 (30.0)
	Y		725 (28.5)	—	765 (30.1)	—	—	—	—	—
	X		766 (30.2)	764 (30.1)	810 (31.9)	810 (31.9)	810 (31.9)	839 (33.0)	839 (33.0)	837 (33.0)
	U		—	—	—	—	—	—	—	—
H7		mm (in.)	253 (10.0)	226 (8.9)	150 (5.9)	150 (5.9)	150 (5.9)	180 (7.1)	191 (7.5)	205 (8.1)
H8		mm (in.)	84 (3.3)	23 (0.9)	155 (6.1)	53 (2.1)	55 (2.2)	26 (1.0)	15 (0.6)	26 (1.0)
H9		mm (in.)	778 (30.6)	730 (28.7)	780 (30.7)	730 (28.7)	730 (28.7)	730 (28.7)	741 (29.2)	788 (31.0)
H10		mm (in.)	46 (1.8)	47 (1.9)	45 (1.8)	45 (1.8)	45 (1.8)	45 (1.8)	46 (1.8)	45.4 (1.8)
H11	S	mm (in.)	—	—	—	—	—	—	—	—
	L		—	27 (1.1)	—	—	—	30 (1.2)	30 (1.2)	31 (1.2)
	Y		—	—	—	—	—	—	—	—
	X		—	27 (1.1)	—	—	—	30 (1.2)	30 (1.2)	31 (1.2)
	U		—	—	—	—	—	—	—	—
W1		mm (in.)	—	187 (7.4)	300 (11.8)	297 (11.7)	300 (11.8)	291 (11.5)	291 (11.5)	301 (11.9)
W2		mm (in.)	159 (6.3)	—	210 (8.3)	—	—	—	—	—
W3		mm (in.)	187 (7.4)	187 (7.4)	300 (11.8)	297 (11.7)	300 (11.8)	291 (11.5)	291 (11.5)	—
W4		mm (in.)	—	—	300 (11.8)	—	—	—	—	—
W5		mm (in.)	331 (13.0)	331 (13.0)	424 (16.7)	422 (16.6)	424 (16.7)	409 (16.1)	409 (16.1)	426 (16.8)
W6		mm (in.)	506 (19.9)	—	705 (27.8)	—		—	—	—
A1		degree	30	30	35	35	35	35	35	35
A2		degree	67	67	66	66	70	70	70	70
A3		degree	—	4	—	—	4	4	4	4
T1		mm (in.)	600 (23.6)	600 (23.6)	660 (26.0)	660 (26.0)	660 (26.0)	660 (26.0)	660 (26.0)	660 (26.0)

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (2-STROKE)

Symbol \ Model			150FETO (150TR) L150FETO 175DETO 200FETO L200FETO 225DET	150GETO (V150TR) 200GETO	Z150PETO (Z150TR) Z175GETO (Z175TR) Z200NETO (Z200TR)	Z150QETO (VZ150TR) Z175HETO (VZ175TR) Z200PETO (VZ200TR)	250GETO L250GETO	Z200RETO (VZ200RTR) Z225HETO (VZ225HTR) Z250FETO (VZ250FTR) Z300BETO (VZ300BTR)	Z300AETO (Z300TR) LZ300AETO (LZ300TR)
L1		mm (in.)	550 (21.7)	557 (21.9)	613 (24.1)	613 (24.1)	566 (22.3)	663 (26.1)	645 (25.4)
L2		mm (in.)	179 (17.0)	179 (7.0)	180 (7.1)	180 (7.1)	181 (7.1)	202 (8.0)	211 (8.3)
L3		mm (in.)	—	—	—	—	—	—	—
L4		mm (in.)	647 (25.5)	647 (25.5)	646 (25.4)	646 (25.4)	673 (26.5)	715 (28.1)	677 (26.7)
L5	S	mm (in.)	—	—	—	—	—	—	—
	L		61 (2.4)	61 (2.4)	53 (2.1)	53 (2.1)	—	87 (3.4)	—
	Y		—	—	—	—	—	—	—
	X		80 (3.1)	—	69 (2.7)	—	69 (2.7)	—	67 (2.6)
	U		—	—	—	—	89 (3.5)	—	86 (3.9)
L6	S	mm (in.)	—	—	—	—	—	—	—
	L		1,036 (40.8)	1,036 (40.8)	1,034 (40.7)	1,034 (40.7)	—	1,033 (40.7)	—
	Y		—	—	—	—	—	—	—
	X		1,152 (45.4)	—	1,150 (45.3)	—	1,155 (45.5)	—	1,152 (45.4)
	U		—	—	—	—	1,271 (50.0)	—	1,270 (50.0)
L7		mm (in.)	587 (23.1)	587 (23.1)	574 (22.6)	574 (22.6)	631 (24.8)	633 (24.9)	628 (24.7)
L8		mm (in.)	159 (6.3)	159 (6.3)	168 (6.6)	168 (6.6)	185 (7.3)	241 (9.5)	245 (9.6)
L9	S	mm (in.)	—	—	—	—	—	—	—
	L		41 (1.6)	41 (1.6)	42 (1.7)	42 (1.7)	—	80 (3.1)	—
	Y		—	—	—	—	—	—	—
	X		50 (2.1)	—	50 (2.0)	—	52 (2.0)	—	48 (1.9)
	U		—	—	—	—	58 (2.3)	—	55 (2.2)
L10		mm (in.)	74 (2.9)	74 (2.9)	74 (2.9)	74 (2.9)	74 (2.9)	74 (2.9)	75 (3.0)
H1	S	mm (in.)	—	—	—	—	—	—	
	L		946 (37.2)	946 (37.2)	947 (37.3)	947 (37.3)	—	932 (36.7)	—
	Y		—	—	—	—	—	—	—
	X		1,072 (42.2)	—	1,074 (42.3)	—	1,077 (42.4)	—	1,074 (42.3)
	U		—	—	—	—	1,203 (47.4)	—	1,201 (47.3)
H2		mm (in.)	670 (26.4)	691 (27.2)	708 (27.9)	746 (27.9)	710 (28.0)	783 (30.8)	757 (29.8)
H3		mm (in.)	210 (8.3)	210 (8.3)	211 (8.3)	211 (8.3)	216 (8.5)	216 (8.5)	216 (8.5)
H4	S	mm (in.)	—	—	—	—	—	—	—
	L		516 (20.3)	516 (20.3)	516 (20.3)	516 (20.3)	—	493 (19.4)	—
	Y		—	—	—	—	—	—	—
	X		642 (25.3)	—	643 (25.3)	—	642 (25.3)	—	640 (25.2)
	U		—	—	—	—	768 (30.2)	—	766 (30.2)
H5		mm (in.)	—	—	—	—	—	—	—
H6	S	mm (in.)	—	—	—	—	—	—	—
	L		773 (30.4)	773 (30.4)	774 (30.5)	774 (30.5)	—	716 (28.2)	—
	Y		—	—	—	—	—	—	—
	X		849 (33.4)	—	850 (33.5)	—	846 (33.3)	—	848 (33.4)
	U		—	—	—	—	923 (36.3)	—	925 (36.4)
H7		mm (in.)	241 (9.5)	241 (9.5)	308 (12.1)	308 (12.1)	242 (9.5)	419 (16.5)	404 (15.9)
H8		mm (in.)	15 (0.6)	15 (0.6)	14 (0.6)	14 (0.6)	21 (0.8)	20 (0.8)	32 (1.3)
H9		mm (in.)	791 (31.1)	864 (34.0)	835 (32.9)	945 (37.2)	818 (32.2)	964 (38.0)	907 (35.7)
H10		mm (in.)	46 (1.8)	46 (1.8)	44 (1.7)	44 (1.7)	45 (1.8)	44 (1.7)	45 (1.8)
H11	S	mm (in.)	—	—	—	—	—	—	—
	L		33 (1.3)	33 (1.3)	32 (1.3)	32 (1.3)	—	35 (1.4)	—
	Y		—	—	—	—	—	—	—
	X		33 (1.3)	33 (1.3)	32 (1.3)	—	25 (1.0)	—	25 (1.0)
	U		—	—	—	—	25 (1.0)	—	25 (1.0)
W1		mm (in.)	290 (11.4)	290 (11.4)	277 (10.9)	277 (10.9)	281 (11.1)	284 (11.2)	284 (11.2)
W2		mm (in.)	—	—	—	—	—	—	—
W3		mm (in.)	290 (11.4)	290 (11.4)	—	—	—	—	—
W4		mm (in.)		—	—	—	—	—	—
W5		mm (in.)	406 (16.0)	406 (16.0)	396 (15.6)	396 (15.6)	420 (16.5)	441 (17.4)	420 (16.5)
W6		mm (in.)	—	—	—	—	—	—	—
A1		degree	35	35	32	32	32	35	30
A2		degree	70	70	70	70	70	66	67
A3		degree	4	4	4	4	3	4	3
T1		mm (in.)	660 (26.0)	—	660 (26.0)	—	660 (26.0)	—	660 (26.0)

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (4-STROKE)

Symbol		Model	F2AMH F2.5AMH (F2.5MH)	F4AMH (F4MH)	F6AMH (F6MH) F8CMH (F8MH) Long handle	F6AMH F6AWH F8CMH F8CWH Short handle	FT8DMH (T8MH) FT8DWH (T8EH) Long handle	FT8DE (T8ER)	FT8DEHP (T8PH)	FT8DEP (T8PR)
L1		mm (in.)	315 (12.4)	375 (14.8)	430 (16.9)	430 (16.9)	430 (16.9)	430 (16.9)	430 (16.9)	430 (16.9)
L2		mm (in.)	93 (3.7)	141 (5.6)	122 (4.8)	122 (4.8)	122 (4.8)	122 (4.8)	122 (4.8)	122 (4.8)
L3		mm (in.)	309 (12.2)	342 (13.5)	608 (23.7)	498 (19.6)	608 (23.9)	—	608 (23.9)	—
L4		mm (in.)	215 (8.5)	259 (10.2)	355 (14.0)	355 (14.0)	367 (14.4)	367 (14.4)	367 (14.4)	367 (14.4)
L5	S	mm (in.)	57 (2.2)	71 (2.8)	72 (2.8)	72 (2.8)	—	—	—	—
	L		57 (2.2)	92 (3.6)	99 (3.9)	99 (3.9)	99 (3.9)	99 (3.9)	99 (3.9)	99 (3.9)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	99 (3.9)	99 (3.9)	99 (3.9)	99 (3.9)
	U		—	—	—	—	—	—	—	—
L6	S	mm (in.)	636 (25.0)	614 (24.2)	706 (27.8)	706 (27.8)	—	—	—	—
	L		761 (30.0)	728 (28.7)	822 (32.4)	822 (32.4)	879 (34.6)	879 (34.6)	879 (34.6)	879 (34.6)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	941 (37.0)	941 (37.0)	941 (37.0)	941 (37.0)
	U		—	—	—	—	—	—	—	—
L7		mm (in.)	366 (14.4)	342 (13.5)	271 (10.7)	271 (10.7)	271 (10.7)	271 (10.7)	271 (10.7)	271 (10.7)
L8		mm (in.)	167 (6.6)	148 (5.8)	139 (5.5)	139 (5.5)	139 (5.5)	139 (5.5)	190 (7.5)	225 (8.9)
L9	S	mm (in.)	—	—	—	—	—	—	—	—
	L		—	—	—	—	—	—	—	—
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	—	—	—	—
	U		—	—	—	—	—	—	—	—
L10		mm (in.)	75 (3.0)	63 (2.5)	67 (2.6)	67 (2.6)	67 (2.6)	67 (2.6)	67 (2.6)	67 (2.6)
H1	S	mm (in.)	645 (25.4)	643 (25.3)	682 (26.9)	682 (26.9)	—	—	—	—
	L		772 (30.4)	770 (30.3)	809 (31.9)	809 (31.9)	869 (34.2)	869 (34.2)	869 (34.2)	869 (34.2)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	937 (36.9)	937 (36.9)	937 (36.9)	937 (36.9)
	U		—	—	—	—	—	—	—	—
H2		mm (in.)	376 (14.8)	386 (15.2)	318 (12.5)	318 (12.5)	318 (12.5)	318 (12.5)	318 (12.5)	318 (12.5)
H3		mm (in.)	103 (4.1)	104 (4.1)	123 (4.8)	123 (4.8)	157 (6.2)	157 (6.2)	157 (6.2)	157 (6.2)
H4	S	mm (in.)	432 (17.0)	435 (17.1)	436 (17.2)	436 (17.2)	—	—	—	—
	L		559 (22.0)	562 (22.1)	563 (22.2)	563 (22.2)	557 (21.9)	557 (21.9)	557 (21.9)	557 (21.9)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	625 (24.6)	625 (24.6)	625 (24.6)	625 (24.6)
	U		—	—	—	—	—	—	—	—
H5		mm (in.)	470 (18.5)	583 (23.0)	673 (26.5)	563 (22.2)	673 (26.5)	—	673 (26.5)	—
H6	S	mm (in.)	642 (25.3)	498 (19.6)	594 (23.4)	594 (23.4)	—	—	—	—
	L		746 (29.4)	442 (17.4)	669 (26.3)	669 (26.3)	717 (28.2)	717 (28.2)	717 (28.2)	717 (28.2)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	757 (29.8)	757 (29.8)	757 (29.8)	757 (29.8)
	U		—	—	—	—	—	—	—	—
H7		mm (in.)	264 (10.4)	174 (6.8)	203 (8.0)	203 (8.0)	203 (8.0)	203 (8.0)	203 (8.0)	203 (8.0)
H8		mm (in.)	15 (0.6)	4 (0.2)	5 (0.2)	5 (0.2)	5 (0.2)	5 (0.2)	5 (0.2)	5 (0.2)
H9		mm (in.)	406 (16.0)	511 (20.1)	529 (20.8)	529 (20.8)	529 (20.8)	529 (20.8)	529 (20.8)	529 (20.8)
H10		mm (in.)	32 (1.3)	39 (1.5)	32 (1.3)	32 (1.3)	32 (1.3)	32 (1.3)	32 (1.3)	32 (1.3)
H11	S	mm (in.)	—	—	—	—	—	—	—	—
	L		—	—	—	—	—	—	—	—
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	—	—	—	—
	U		—	—	—	—	—	—	—	—
W1		mm (in.)	140 (5.5)	137 (5.4)	159 (6.3)	169 (6.7)	172 (6.8)	177 (7.0)	172 (6.8)	177 (7.0)
W2		mm (in.)	205 (8.1)	225 (8.0)	199 (7.8)	206 (8.1)	199 (7.8)	—	199 (7.8)	135 (5.3)
W3		mm (in.)	139 (5.5)	—	159 (6.3)	159 (6.3)	159 (6.3)	159 (6.3)	159 (6.3)	159 (6.3)
W4		mm (in.)	135 (5.3)	—	159 (6.3)	159 (6.3)	159 (6.3)	159 (6.3)	159 (6.3)	159 (6.3)
W5		mm (in.)	—	—	286 (11.3)	286 (11.3)	286 (11.3)	286 (11.3)	326 (12.8)	271 (10.7)
W6		mm (in.)	—	—	619 (24.4)	536 (21.1)	619 (24.4)	—	586 (23.1)	271 (10.7)
A1		degree	360	360	45	45	45	45	40	40
A2		degree	80	63.5	66	66	66	66	66	66
A3		degree	—	—	—	—	—	—	—	—
T1		mm (in.)	—	—	—	—	—	—	—	—

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (4-STROKE)

Symbol		Model	F9.9CMH (F9.9MH2) F9.9CWH F15AMH F15AEH F15BMH	F9.9CE (F9.9ER2) F15BM	FT9.9DMH FT9.9DWH FT9.9DEH (T9.9EH2)	FT9.9DE (T9.9ER2)	F9.9CWHP	F9.9FMH F9.9FEH F9.9FWH Short handle	F9.9FMH (F9.9MH) F9.9FEH (F9.9EH) F9.9FWH Long handle	F9.9FE (F9.9ER)
L1		mm (in.)	475 (18.7)	475 (18.7)	475 (18.7)	475 (18.7)	483 (19.0)	431 (17.0)	431 (17.0)	431 (17.0)
L2		mm (in.)	168 (6.6)	160 (6.3)	160 (6.3)	160 (6.3)	160 (6.3)	121 (4.8)	121 (4.8)	121 (4.8)
L3		mm (in.)	526 (20.7)	—	630 (24.8)	—	517 (20.4)	497 (19.6)	607 (23.9)	—
L4		mm (in.)	356 (14.0)	356 (14.0)	356 (14.0)	356 (14.0)	364 (14.3)	356 (14.0)	356 (14.0)	356 (14.0)
L5	S	mm (in.)	78 (3.1)	78 (3.1)	80 (3.1)	80 (3.1)	—	49 (1.9)	49 (1.9)	49 (1.9)
	L		105 (4.1)	105 (4.1)	107 (4.2)	107 (4.2)	113 (4.5)	67 (2.6)	67 (2.6)	67 (2.6)
	Y		—	—	—	—	—	—	—	—
	X		—	—	121 (4.8)	121 (4.8)	—	—	—	—
	U		—	—	—	—	—	—	—	—
L6	S	mm (in.)	718 (28.3)	718 (28.3)	761 (30.0)	761 (30.0)	—	708 (27.9)	708 (27.9)	708 (27.9)
	L		831 (32.7)	831 (32.7)	875 (34.4)	875 (34.4)	840 (33.1)	825 (32.5)	825 (32.5)	825 (32.5)
	Y		—	—	—	—	—	—	—	—
	X		—	—	935 (36.8)	935 (36.8)	—	—	—	—
	U		—	—	—	—	—	—	—	—
L7		mm (in.)	331 (13.0)	317 (12.5)	331 (13.0)	317 (12.5)	308 (12.1)	274 (10.8)	274 (10.8)	274 (10.8)
L8		mm (in.)	297 (11.7)	—	—	—	289 (11.4)	138 (5.4)	138 (5.4)	138 (5.4)
L9	S	mm (in.)	—	—	—	—	—	18 (0.7)	18 (0.7)	18 (0.7)
	L		—	—	—	—	—	27 (1.1)	27 (1.1)	27 (1.1)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	—	—	—	—
	U		—	—	—	—	—	—	—	—
L10		mm (in.)	75 (2.9)	75 (2.9)	75 (2.9)	75 (2.9)	66 (2.6)	66 (2.6)	66 (2.6)	66 (2.6)
H1	S	mm (in.)	706 (27.8)	706 (27.8)	752 (29.6)	752 (29.6)	—	677 (26.7)	677 (26.7)	677 (26.7)
	L		833 (32.8)	833 (32.8)	879 (34.6)	879 (34.6)	835 (32.9)	804 (31.7)	804 (31.7)	804 (31.7)
	Y		—	—	—	—	—	—	—	—
	X		—	—	947 (37.3)	947 (37.3)	—	—	—	—
	U		—	—	—	—	—	—	—	—
H2		mm (in.)	375 (14.8)	375 (14.8)	375 (14.8)	375 (14.8)	372 (14.7)	323 (12.7)	323 (12.7)	323 (12.7)
H3		mm (in.)	135 (5.3)	135 (5.3)	157 (6.2)	157 (6.2)	135 (5.3)	123 (4.8)	123 (4.8)	123 (4.8)
H4	S	mm (in.)	440 (17.3)	440 (17.3)	440 (17.3)	440 (17.3)	—	431 (17.0)	431 (17.0)	431 (17.0)
	L		568 (22.4)	568 (22.4)	567 (22.3)	567 (22.3)	570 (22.4)	558 (22.0)	558 (22.0)	558 (22.0)
	Y		—	—	—	—	—	—	—	—
	X		—	—	635 (25)	635 (25)	—	—	—	—
	U		—	—	—	—	—	—	—	—
H5		mm (in.)	549 (21.6)	—	657 (25.9)	—	547 (21.5)	568 (22.4)	679 (26.7)	—
H6	S	mm (in.)	572 (22.5)	572 (22.5)	613 (24.1)	613 (24.1)	—	604 (23.8)	604 (23.8)	604 (23.8)
	L		641 (25.2)	641 (25.2)	682 (26.9)	682 (26.9)	641 (25.2)	682 (26.9)	682 (26.9)	682 (26.9)
	Y		—	—	—	—	—	—	—	—
	X		—	—	720 (28.3)	720 (28.3)	—	—	—	—
	U		—	—	—	—	—	—	—	—
H7		mm (in.)	167 (6.6)	262 (10.3)	167 (6.6)	261 (10.3)	261 (10.3)	206 (8.1)	206 (8.1)	206 (8.1)
H8		mm (in.)	10 (0.4)	—	—	—	12(0.47)	8 (0.3)	8 (0.3)	8 (0.3)
H9		mm (in.)	589 (23.2)	589 (23.2)	589 (23.2)	589 (23.2)	587 (23.1)	533 (21.0)	609 (24.0)	533 (21.0)
H10		mm (in.)	35 (1.4)	35 (1.4)	34 (1.3)	34 (1.3)	32 (1.3)	37 (1.5)	37 (1.5)	37 (1.5)
H11	S	mm (in.)	—	—	—	—	—	19 (0.7)	19 (0.7)	19 (0.7)
	L		—	—	—	—	—	19 (0.7)	19 (0.7)	19 (0.7)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	—	—	—	—
	U		—	—	—	—	—	—	—	—
W1		mm (in.)	183 (7.2)	183 (7.2)	182 (7.2)	182.1 (7.2)	182 (7.2)	169 (6.7)	159 (6.3)	177 (7.0)
W2		mm (in.)	245 (9.6)	—	319(12.6)	—	245 (9.7)	206 (8.1)	199 (7.8)	—
W3		mm (in.)	—	—	—	—	—	159 (6.3)	159 (6.3)	159 (6.3)
W4		mm (in.)	—	—	—	—	—	159 (6.3)	159 (6.3)	159 (6.3)
W5		mm (in.)	350 (13.8)	350 (13.8)	350 (13.8)	350 (13.8)	329 (13.0)	279 (11.0)	279 (11.0)	279 (11.0)
W6		mm (in.)	567 (22.7)	—	692 (27.3)	—	575 (22.6)	524 (20.6)	603 (23.7)	603 (23.7)
A1		degree	P:45 / S:40	P:45 / S:40	P:45 / S:40	P:45 / S:40	40	43	43	43
A2		degree	63	63	63	63	63	71	71	71
A3		degree	—	—	—	—	4	4	4	4
T1		mm (in.)	—	—	—	—	—	—	—	—

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (4-STROKE)

Symbol \ Model			FT9.9GMH (T9.9MH) FT9.9GWH (T9.9EH)	FT9.9GEHP (T9.9PH)	FT9.9GE (T9.9ER)	FT9.9GEP (T9.9PR)	F15CMH (F15MH) F15CEH (F15EH) F15CWH F20BMH (F20MH) F20BEH (F20EH) F20BWH	F15CEHP (F15PH) F20BEHP (F20PH)	F15CE F20BE (F20ER)	F15CEP F20BEP (F20PR)
L1		mm (in.)	431 (17.0)	430 (16.9)	431 (17.0)	430 (16.9)	489 (19.3)	488 (19.2)	489 (19.3)	488 (19.2)
L2		mm (in.)	121 (4.8)	122 (4.8)	121 (4.8)	122 (4.8)	219 (8.6)	220 (8.7)	176 (6.9)	176 (6.9)
L3		mm (in.)	607 (23.9)	608 (23.9)	—	—	559 (22.0)	559 (22.0)	—	—
L4		mm (in.)	367 (14.4)	367 (14.4)	367 (14.4)	367 (14.4)	387 (15.2)	386 (15.2)	387 (15.2)	386 (15.2)
L5	S	mm (in.)	—	—	—	—	64 (2.5)	—	64 (2.5)	89 (3.5)
	L		67 (2.6)	35 (1.4)	67 (2.6)	35 (1.4)	82 (3.2)	82 (3.2)	82 (3.2)	82 (3.2)
	Y		—	—	—	—	—	—	—	—
	X		67 (2.6)	35 (1.4)	67 (2.6)	35 (1.4)	—	—	—	—
	U		—	—	—	—	—	—	—	—
L6	S	mm (in.)	—	—	—	—	730 (28.7)	—	730 (28.7)	727 (28.6)
	L		891 (35.1)	879 (34.6)	891 (35.1)	879 (34.6)	847 (33.3)	840 (33.1)	847 (33.3)	840 (33.1)
	Y		—	—	—	—	—	—	—	—
	X		954 (37.6)	941 (37.0)	954 (37.6)	941 (37.0)	—	—	—	—
	U		—	—	—	—	—	—	—	—
L7		mm (in.)	274 (10.8)	271 (10.7)	274 (10.8)	271 (10.7)	381 (15.0)	356 (14.0)	321 (12.6)	309 (12.2)
L8		mm (in.)	138 (5.4)	139 (5.5)	138 (5.4)	139 (5.5)	237 (9.3)	176 (6.9)	184 (7.2)	188 (7.4)
L9	S	mm (in.)	—	—	—	—	9 (0.4)	—	9 (0.4)	—
	L		27 (1.1)	62 (2.4)	27 (1.1)	62 (2.4)	18 (0.7)	18 (0.7)	18 (0.7)	18 (0.7)
	Y		—	—	—	—	—	—	—	—
	X		27 (1.1)	62 (2.4)	27 (1.1)	62 (2.4)	—	—	—	—
	U		—	—	—	—	—	—	—	—
L10		mm (in.)	66 (2.6)	67 (2.6)	66 (2.6)	67 (2.6)	66 (2.6)	67 (2.6)	66 (2.6)	67 (2.6)
H1	S	mm (in.)	—	—	—	—	701 (27.6)	—	701 (27.6)	706 (27.8)
	L		864 (34.0)	869 (34.2)	864 (34.0)	869 (34.2)	828 (32.6)	833 (32.8)	828 (32.6)	833 (32.8)
	Y		—	—	—	—	—	—	—	—
	X		932 (36.7)	937 (36.9)	932 (36.7)	937 (36.9)	—	—	—	—
	U		—	—	—	—	—	—	—	—
H2		mm (in.)	323 (12.7)	318 (12.5)	323 (12.7)	318 (12.5)	377 (14.8)	372 (14.6)	377 (14.8)	372 (14.6)
H3		mm (in.)	157 (6.2)	157 (6.2)	157 (6.2)	157 (6.2)	133 (5.2)	133 (5.2)	133 (5.2)	133 (5.2)
H4	S	mm (in.)	—	—	—	—	438 (17.2)	—	738 (29.1)	443 (17.4)
	L		552 (21.7)	557 (21.9)	552 (21.7)	557 (21.9)	565 (22.2)	570 (22.4)	565 (22.2)	570 (22.4)
	Y		—	—	—	—	—	—	—	—
	X		620 (24.4)	625 (24.6)	620 (24.4)	625 (24.6)	—	—	—	—
	U		—	—	—	—	—	—	—	—
H5		mm (in.)	678 (26.7)	673 (26.5)	—	—	570 (22.4)	566 (22.3)	—	—
H6	S	mm (in.)	—	—	—	—	616 (24.3)	—	616 (24.3)	574 (22.6)
	L		730 (28.7)	717 (28.2)	730 (28.7)	717 (28.2)	694 (27.3)	643 (25.3)	694 (27.3)	643 (25.3)
	Y		—	—	—	—	—	—	—	—
	X		771 (30.4)	757 (29.8)	771 (30.4)	757 (29.8)	—	—	—	—
	U		—	—	—	—	—	—	—	—
H7		mm (in.)	206 (8.1)	203 (8.0)	206 (8.1)	203 (8.0)	399 (15.7)	414 (16.3)	218 (8.6)	230 (9.1)
H8		mm (in.)	8 (0.3)	5 (0.2)	8 (0.3)	5 (0.2)	44 (1.7)	37 (1.5)	32 (1.3)	28 (1.1)
H9		mm (in.)	609 (24.0)	604 (23.8)	533 (21.0)	529 (20.8)	580 (22.8)	575 (22.6)	580 (22.8)	575 (22.6)
H10		mm (in.)	37 (1.5)	32 (1.3)	37 (1.5)	32 (1.3)	37 (1.5)	32 (1.3)	37 (1.5)	32 (1.3)
H11	S	mm (in.)	—	—	—	—	19 (0.7)	—	19 (0.7)	—
	L		19 (0.7)	33 (1.3)	19 (0.7)	33 (1.3)	19 (0.7)	19 (0.7)	19 (0.7)	19 (0.7)
	Y		—	—	—	—	—	—	—	—
	X		19 (0.7)	33 (1.3)	19 (0.7)	33 (1.3)	—	—	—	—
	U		—	—	—	—	—	—	—	—
W1		mm (in.)	172 (6.8)	172 (6.8)	177 (7.0)	177 (7.0)	210 (8.3)	210 (8.3)	210 (8.3)	210 (8.3)
W2		mm (in.)	199 (7.8)	199 (7.8)	—	—	210 (8.3)	210 (8.3)	—	—
W3		mm (in.)	159 (6.3)	159 (6.3)	159 (6.3)	159 (6.3)	176 (6.9)	176 (6.9)	180 (7.1)	180 (7.1)
W4		mm (in.)	159 (6.3)	159	159 (6.3)	159 (6.3)	—	—	—	—
W5		mm (in.)	279 (11.0)	264 (10.4)	279 (11.0)	264 (10.4)	341 (13.4)	320 (12.6)	341 (13.4)	320 (12.6)
W6		mm (in.)	603 (23.7)	567 (22.3)	—	—	598 (23.5)	568 (22.4)	—	—
A1		degree	43	38	43	38	45	40	45	40
A2		degree	71	74	71	74	71	67	71	S:63 / L:67
A3		degree	4	8	4	8	4	4	4	S:0 / L:4
T1		mm (in.)	—	—	—	—	—	—	—	—

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (4-STROKE)

Symbol		Model	F25AE (F25ER) F25CM	F20AET F25AET (F25TR)	F25AMH (F25MH) F25AEH (F25EH) F25AWH F25CMH	F25AEHT	FT25BET (T25TR)	F30AMHD F30AWHD F30AEHT F30AWHT F30AEHD (F30EH) F40BMHD (F40MH) F40BWHD F40BEHD (F40EH) F40BWHT	F30AET (F30TR) F40BED (F40ER) F40BET (F40TR)	F40DET F50FET (F50TR) F60CET (F60TR)
L1		mm (in.)	580 (22.8)	580 (22.8)	580 (22.8)	580 (22.8)	580 (22.8)	569 (22.4)	569 (22.4)	584 (23.0)
L2		mm (in.)	123 (4.8)	123 (4.8)	190 (7.5)	190 (7.5)	134 (5.3)	234 (9.2)	132 (5.2)	122 (4.8)
L3		mm (in.)	—	—	523 (20.6)	523 (20.6)	—	763 (30.0)	—	—
L4		mm (in.)	432 (170)	432 (17.0)	432 (17.0)	432 (17.0)	521 (20.5)	521 (20.5)	521 (20.5)	533 (21.0)
L5	S	mm (in.)	84 (3.3)	—	84 (3.3)	—	—	—	70 (2.8)	—
	L		102 (4.0)	102 (4.0)	102 (4.0)	102 (4.0)	86 (3.4)	—	87 (3.4)	97 (3.8)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	103 (4.1)	—	103 (4.1)	121 (4.8)
	U		—	—	—	—	—	—	—	—
L6	S	mm (in.)	763 (30.0)	—	763 (30.0)	—	—	813 (32.0)	813 (32.0)	—
	L		877 (34.5)	872 (34.3)	877 (34.5)	872 (34.3)	918 (36.1)	923 (36.3)	922 (36.3)	932 (36.7)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	1,015 (40.0)	—	1,023 (40.3)	1,036 (40.8)
	U		—	—	—	—	—	—	—	—
L7		mm (in.)	343 (13.5)	329 (12.9)	363 (14.3)	329 (12.9)	334 (13.2)	383 (15.1)	353 (13.9)	417 (16.4)
L8		mm (in.)	153 (6.0)	154 (6.1)	296 (11.7)	296 (11.7)	162 (6.4)	175 (6.9)	161 (6.3)	147 (5.8)
L9	S	mm (in.)	43 (1.7)	—	43 (1.7)	—	—	2.9 (0.1)	2.9 (0.1)	—
	L		34 (1.3)	34 (1.3)	34 (1.3)	34 (1.3)	64 (0.3)	12 (0.5)	12 (0.5)	0
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	14 (0.6)	—	—	0
	U		—	—	—	—	—	—	—	—
L10		mm (in.)	65 (2.5)	65 (2.5)	65 (2.5)	65 (2.5)	65 (2.6)	65 (2.6)	65 (2.6)	62 (2.4)
H1	S	mm (in.)	707 (27.8)	—	707 (27.8)	—	—	753 (29.7)	753 (29.7)	—
	L		824 (32.8)	834 (32.8)	834 (32.8)	834 (32.8)	871 (34.3)	876 (34.5)	876 (34.5)	870 (34.2)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	985 (38.8)	—	990 (39.0)	984 (38.7)
	U		—	—	—	—	—	—	—	—
H2		mm (in.)	441 (17.4)	441 (17.4)	441 (17.4)	441 (17.4)	440 (17.3)	493 (19.4)	464 (18.3)	545 (21.5)
H3		mm (in.)	144 (5.7)	144 (5.7)	144 (5.7)	144 (5.7)	175 (6.9)	175 (6.9)	175 (6.9)	175 (6.9)
H4	S	mm (in.)	423 (16.6)	—	423 (16.6)	—	—	410 (16.1)	410 (16.1)	—
	L		550 (21.6)	550 (21.6)	550 (21.6)	550 (21.6)	528 (20.8)	533 (21.0)	533 (21.0)	527 (20.7)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	642 (25.3)	—	647 (25.5)	641 (25.2)
	U		—	—	—	—	—	—	—	—
H5		mm (in.)	—	—	—	—	—	753 (29.7)	—	—
H6	S	mm (in.)	615 (24.2)	—	615 (24.2)	—	—	604 (23.8)	600 (23.6)	—
	L		686 (27.0)	648 (25.5)	686 (27.0)	648 (25.5)	663 (26.1)	671 (26.4)	666 (26.2)	708 (27.9)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	724 (28.5)	—	727 (28.6)	774 (30.5)
	U		—	—	—	—	—	—	—	—
H7		mm (in.)	311 (12.2)	308 (12.1)	184 (7.3)	308 (12.1)	320 (12.6)	293 (11.5)	286 (11.3)	354 (13.9)
H8		mm (in.)	19 (0.9)	23 (0.9)	34 (1.5)	31 (1.2)	13 (0.5)	43 (1.7)	42 (1.6)	22 (0.9)
H9		mm (in.)	698 (27.5)	698 (27.5)	698 (27.5)	698 (27.5)	698 (27.5)	727 (28.6)	708(27.9)	759 (29.9)
H10		mm (in.)	42 (1.7)	42 (1.7)	42 (1.7)	42 (1.7)	42 (1.7)	42 (1.7)	42 (1.7)	49 (1.9)
H11	S	mm (in.)	23 (0.9)	—	23 (0.9)	—	—	24 (0.9)	24 (0.9)	—
	L		22 (0.9)	22 (0.9)	22 (0.9)	22 (0.9)	24 (0.9)	24 (0.9)	24 (0.9)	24 (0.9)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	—	24 (0.9)	—	24 (0.9)	24 (0.9)
	U		—	—	—	—	—	—	—	—
W1		mm (in.)	185 (7.3)	185 (7.3)	185 (7.3)	185 (7.3)	185 (7.3)	189 (7.4)	189 (7.4)	192 (7.6)
W2		mm (in.)	—	—	188 (7.4)	188 (7.4)	188 (7.4)	124 (4.9)	—	—
W3		mm (in.)	188 (7.4)	188 (7.4)	188 (7.4)	188 (7.4)	188 (7.4)	—	—	—
W4		mm (in.)	—	—	—	—	—	—	—	—
W5		mm (in.)	400 (15.8)	400 (15.8)	400 (15.8)	400 (15.8)	376 (14.8)	313 (12.3)	313 (12.3)	360 (14.2)
W6		mm (in.)	—	—	—	—	—	687 (27.1)	—	—
A1		degree	45	45	45	45	40	40	40	40
A2		degree	64	61	64	61	62	63	62	63
A3		degree	—	4	—	4	4	4	4	4
T1		mm (in.)	—	—	—	—	—	—	—	560 (22.0)

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (4-STROKE)

Symbol \ Model			F50FED	F50DET	F50FEHD	F50FEHT (F50TH) F60CEHT (F60TH)	FT50GET (T50TR) FT60DET (T60TR)	FT50CET	FT50GEHT FT60DEHT	FT50CEHD
L1		mm (in.)	584 (23.0)	576 (22.7)	584 (23.0)	584 (23.0)	584 (23.0)	576 (22.7)	584 (23.0)	576 (22.7)
L2		mm (in.)	122 (4.8)	142 (5.6)	266 (10.5)	266 (10.5)	122 (4.8)	142 (5.6)	266 (10.5)	272 (10.7)
L3		mm (in.)	—	—	755 (29.7)	755 (29.7)	—	—	755 (29.7)	797 (31.2)
L4		mm (in.)	533 (21.0)	532 (20.9)	533 (21.0)	533 (21.0)	561(22.1)	560 (22.1)	561(22.1)	560 (22.1)
L5	S	mm (in.)	—	—	—	—	—	—	—	—
	L		97 (3.8)	97 (3.8)	97 (3.8)	97 (3.8)	98 (3.9)	98 (3.9)	98 (3.9)	98 (3.9)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	121 (4.8)	114 (4.5)	—	114 (4.5)	—
	U		—	—	—	—	—	—	—	—
L6	S	mm (in.)	—	—	—	—	—	—	—	—
	L		930 (36.6)	933 (36.7)	930 (36.6)	932 (36.7)	996 (39.2)	989 (38.9)	996 (39.2)	989 (38.9)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	1,036 (40.8)	1,099 (43.3)	—	1,099 (43.3)	—
	U		—	—	—	—	—	—	—	—
L7		mm (in.)	406	407 (16.0)	406	417 (16.4)	417 (16.4)	407 (16.0)	417 (16.4)	397 (15.6)
L8		mm (in.)	148 (5.8)	148 (5.8)	167 (6.6)	164 (6.5)	147 (5.8)	148 (5.8)	164 (6.5)	189 (7.2)
L9	S	mm (in.)	—	—	—	—	—	—	—	—
	L		0	0.6 (0.02)	0	0	0	0.8 (0.03)	0	0.8 (0.03)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	0	0	—	0	—
	U		—	—	—	—	—	—	—	—
L10		mm (in.)	62 (2.4)	63 (2.5)	62 (2.4)	62 (2.4)	62 (2.4)	63 (2.5)	62 (2.4)	63 (2.5)
H1	S	mm (in.)	—	—	—	—	—	—	—	—
	L		870 (34.2)	876 (34.5)	870 (34.2)	870 (34.2)	910 (35.8)	917 (36.1)	910 (35.8)	917 (36.1)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	984 (38.7)	1,024 (40.3)	—	1,024 (40.3)	—
	U		—	—	—	—	—	—	—	—
H2		mm (in.)	545 (21.5)	519 (20.4)	545 (21.5)	545 (21.5)	545 (21.5)	519 (20.4)	545 (21.5)	519 (20.4)
H3		mm (in.)	175 (6.9)	175 (6.9)	175 (6.9)	175 (6.9)	191 (7.5)	194 (7.6)	191 (7.5)	194 (7.6)
H4	S	mm (in.)	—	—	—	—	—	—	—	—
	L		527 (20.7)	533 (21.0)	527 (20.7)	527 (20.7)	530 (20.9)	533 (21.0)	530 (20.9)	533 (21.0)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	641 (25.2)	644 (25.3)	—	644 (25.3)	—
	U		—	—	—	—	—	—	—	—
H5		mm (in.)	—	—	758 (29.8)	758 (29.8)	—	—	758 (29.8)	680 (26.8)
H6	S	mm (in.)	—	—	—	—	—	—	—	—
	L		682 (26.9)	711 (28.0)	682 (26.9)	708 (27.9)	746 (29.4)	749 (29.5)	746 (29.4)	723 (28.5)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	774 (30.5)	812 (40.0)	—	812 (40.0)	—
	U		—	—	—	—	—	—	—	—
H7		mm (in.)	354 (13.9)	327 (12.9)	354 (13.9)	354 (13.9)	354 (13.9)	327 (12.9)	354 (13.9)	330 (13.0)
H8		mm (in.)	25 (1.0)	3.5 (0.14)	34 (1.3)	37 (1.5)	22 (0.9)	3.5 (0.14)	37	110 (4.3)
H9		mm (in.)	762 (30.0)	733 (28.9)	713 (28.1)	759 (29.9)	759 (29.9)	733 (28.9)	759 (29.9)	738 (29.1)
H10		mm (in.)	49 (1.9)	44 (1.7)	49 (1.9)	49 (1.9)	49 (1.9)	44 (1.7)	49 (1.9)	44 (1.7)
H11	S	mm (in.)	—	—	—	—	—	—	—	—
	L		24 (0.9)	24 (0.9)	24 (0.9)	24 (0.9)	24 (0.9)	28 (1.1)	24 (0.9)	28 (1.1)
	Y		—	—	—	—	—	—	—	—
	X		—	—	—	24 (0.9)	—	—	—	—
	U		—	—	—	—	—	—	—	—
W1		mm (in.)	192 (7.6)	181 (7.1)	192 (7.6)	192 (7.6)	192 (7.6)	181 (7.1)	192 (7.6)	181 (7.1)
W2		mm (in.)	—	—	124 (4.9)	124 (4.9)	—	—	124 (4.9)	213 (8.4)
W3		mm (in.)	—	181 (7.1)	—	—	—	181 (7.1)	—	181 (7.13)
W4		mm (in.)	—	—	—	—	—	—	—	—
W5		mm (in.)	360 (14.2)	345 (13.6)	360 (14.2)	360 (14.2)	360 (14.2)	345 (13.6)	360 (14.2)	345 (13.6)
W6		mm (in.)	—	—	645	645	—	—	645	738 (29.1)
A1		degree	40	40	40	40	40	40	40	40
A2		degree	63	65	63	65	65	65	65	63
A3		degree	4	4	4	4	4	4	4	4
T1		mm (in.)	560 (22.0)	560 (22.0)	—	—	560 (22.0)	560 (22.0)	—	560 (22.0)

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (4-STROKE)

Symbol		Model	FT50CED	F75BET (F75TR) F80BET F90BET (F90TR) F100DET	F75CED	F75CEHD	F95AET F100BET	F115AET (F115TR) FL115AET (LF115TR)	F150AET (F150TR) FL150AET (LF150TR)	F200AET (F200TR) FL200AET (LF200TR) F225AET (F225TR) FL225AET (LF225TR) F200BET FL200BET
L1		mm (in.)	576 (22.7)	651 (25.6)	664 (26.1)	664 (26.1)	664 (26.1)	665 (26.2)	698 (27.5)	651 (25.6)
L2		mm (in.)	142 (5.6)	171 (6.7)	161 (6.3)	324 (12.8)	161 (6.3)	161 (6.3)	164 (6.5)	219 (8.6)
L3		mm (in.)	—	—	—	844 (33.2)	—	—	—	—
L4		mm (in.)	560 (22.1)	574 (22.6)	631 (24.8)	631 (24.8)	631 (24.8)	631 (24.8)	646 (25.4)	673 (26.5)
L5	S	mm (in.)	—	—	—	—	—	—	—	—
	L		98 (3.9)	63 (2.5)	79 (3.1)	79 (3.1)	69 (2.7)	69 (2.7)	60 (2.5)	—
	Y		—	—	—	—	—	—	—	—
	X		—	63 (2.5)	87 (3.4)	87 (3.4)	76 (3.0)	89 (3.5)	80 (3.2)	59 (2.3)
	U		—	—	—	—	—	—	—	59 (2.3)
L6	S	mm (in.)	—	—	—	—	—	—	—	—
	L		989 (38.9)	998 (39.3)	1,005 (39.6)	1,005 (39.6)	1,005 (39.6)	1,005 (39.6)	1,032 (40.6)	—
	Y		—	—	—	—	—	—	—	—
	X		—	1,115 (43.9)	1,118 (44.0)	1,118 (44.0)	1,122 (44.2)	1,122 (44.2)	1,148 (45.2)	1,115 (45.5)
	U		—	—	—	—	—	—	—	1,272 (50.1)
L7		mm (in.)	397 (15.6)	527 (20.7)	504 (19.8)	504 (19.8)	536 (21.9)	555 (21.9)	629 (24.8)	618 (24.3)
L8		mm (in.)	149 (5.9)	164 (6.5)	168 (6.6)	208 (8.2)	158 (6.2)	158 (6.2)	162 (6.4)	230 (9.1)
L9	S	mm (in.)	—	—	—	—	—	—	—	—
	L		0.8 (0.03)	28 (1.1)	19 (0.7)	19 (0.7)	25 (1.0)	25 (1.0)	35 (1.4)	—
	Y		—	—	—	—	—	—	—	—
	X		—	28 (1.1)	15 (0.6)	15 (0.6)	25 (1.0)	33 (1.3)	43 (1.8)	52 (2.0)
	U		—	—	—	—	—	—	—	59 (2.3)
L10		mm (in.)	63 (2.5)	62 (2.4)	75 (3.0)	75 (3.0)	75 (3.0)	75 (3.0)	75 (3.0)	75 (3.0)
H1	S	mm (in.)	—	—	—	—	—	—	—	—
	L		917 (36.1)	917 (36.1)	929 (36.6)	929 (36.6)	929 (36.6)	929 (36.6)	946 (37.2)	—
	Y		—	—	—	—	—	—	—	—
	X		—	1,044 (41.1)	1,056 (41.6)	1,056 (41.6)	1,056 (41.6)	1,056 (41.6)	1,073 (42.2)	1,078 (42.4)
	U		—	—	—	—	—	—	—	1,205 (47.4)
H2		mm (in.)	519 (20.4)	666 (26.2)	667 (26.3)	667 (26.3)	666 (26.2)	681 (26.8)	769 (31.3)	727 (28.6)
H3		mm (in.)	194 (7.6)	191 (7.5)	191 (7.5)	191 (7.5)	191 (7.5)	191 (7.5)	210 (8.3)	216 (8.5)
H4	S	mm (in.)	—	—	—	—	—	—	—	—
	L		533 (21.0)	536 (21.1)	516 (20.3)	516 (20.3)	516 (20.3)	516 (20.3)	516 (20.3)	—
	Y		—	—	—	—	—	—	—	—
	X		—	663 (26.1)	643 (25.3)	643 (25.3)	643 (25.3)	643 (25.3)	643 (25.3)	643 (25.3)
	U		—	—	—	—	—	—	—	770 (30.3)
H5		mm (in.)	—	—	—	764 (30.1)	—	—	—	—
H6	S	mm (in.)	—	—	—	—	—	—	—	—
	L		723 (28.5)	766 (30.2)	709 (27.9)	709 (27.9)	776 (30.6)	773 (30.4)	787 (31.0)	—
	Y		—	—	—	—	—	—	—	—
	X		—	842 (33.1)	776 (30.6)	776 (30.6)	854 (33.6)	850 (33.5)	864 (34.0)	847 (33.3)
	U		—	—	—	—	—	—	—	924 (36.4)
H7		mm (in.)	330 (13.0)	366 (14.4)	401 (15.8)	401 (15.8)	388 (15.3)	406 (16.0)	455 (18.0)	361 (14.2)
H8		mm (in.)	0.5 (0.02)	27 (1.1)	4 (0.2)	93 (3.7)	14 (0.6)	14 (0.6)	16 (0.6)	39 (1.5)
H9		mm (in.)	738 (29.1)	857 (33.7)	892 (35.1)	892 (35.1)	877 (34.5)	879 (34.6)	915 (36.2)	880 (34.6)
H10		mm (in.)	44 (1.7)	49 (1.9)	44 (1.7)	44 (1.7)	44 (1.7)	44 (1.7)	45 (1.8)	45 (1.8)
H11	S	mm (in.)	—	—	—	—	—	—	—	—
	L		28 (1.1)	25 (1.0)	17 (0.7)	17 (0.7)	25 (1.0)	25 (1.0)	27 (1.1)	—
	Y		—	—	—	—	—	—	—	—
	X		—	24 (0.9)	17 (0.7)	17 (0.7)	25 (1.0)	25 (1.0)	27 (1.1)	25 (1.0)
	U		—	—	—	—	—	—	—	25 (1.0)
W1		mm (in.)	181 (7.1)	240 (9.4)	243 (9.6)	243 (9.6)	243 (9.6)	249 (9.8)	256 (10.1)	317 (12.5)
W2		mm (in.)	—	—	—	96 (3.8)	—	—	—	—
W3		mm (in.)	181 (7.13)	—	—	—	—	—	—	—
W4		mm (in.)	—	—	—	—	—	—	—	—
W5		mm (in.)	345 (13.6)	405 (15.9)	384 (15.1)	384 (15.1)	384 (15.1)	392 (15.4)	433 (17.1)	453 (17.8)
W6		mm (in.)	—	—	—	578 (22.8)	—	—	—	—
A1		degree	40	35	30	30	30	30	35	32
A2		degree	63	70	64	64	70	70	70	70
A3		degree	4	4	3	3	4	4	4	3
T1		mm (in.)	560 (22.0)	660 (26.0)	660 (26.0)	—	660 (26.0)	660 (26.0)	660 (26)	724 (28.5)

OUTBOARD MOTOR DIMENSIONS

OVERALL DIMENSIONS (4-STROKE)

Symbol \ Model			F200CET FL200CET F225BET FL225BET F250AET (F250TR) FL250AET (LF250TR)	F225CET (F225LTR)	F350AET (F350TR) FL350AET (LF350TR)
L1		mm (in.)	651 (25.6)	664 (26.1)	776 (30.6)
L2		mm (in.)	219 (8.6)	206 (8.1)	255 (10.0)
L3		mm (in.)	—	—	—
L4		mm (in.)	673 (26.5)	685 (27.0)	732 (28.8)
L5	S	mm (in.)	—	—	—
	L		—	62 (2.4)	—
	Y		—	—	—
	X		59 (2.3)	—	48 (1.9)
	U		59 (2.3)	—	48 (1.9)
L6	S	mm (in.)	—	—	—
	L		—	1,043 (41.1)	—
	Y		—	—	—
	X		1,115 (45.5)	—	1,193 (47.0)
	U		1,272 (50.1)	—	1,310 (51.6)
L7		mm (in.)	619 (24.4)	615 (24.2)	712 (28.0)
L8		mm (in.)	230 (9.1)	226 (8.9)	258 (10.2)
L9	S	mm (in.)	—	—	—
	L		—	18 (0.7)	—
	Y		—	—	—
	X		52 (2.0)	—	56 (2.2)
	U		59 (2.3)	—	62 (2.4)
L10		mm (in.)	75 (3.0)	75 (3.0)	73 (2.9)
H1	S	mm (in.)	—	—	—
	L		—	951 (37.4)	—
	Y		—	—	—
	X		1,078 (42.4)	—	1,098 (43.2)
	U		1,205 (47.4)	—	1,225 (48.2)
H2		mm (in.)	752 (29.6)	754 (29.7)	909 (35.8)
H3		mm (in.)	216 (8.5)	216 (8.5)	229 (9.0)
H4	S	mm (in.)	—	—	—
	L		—	516 (20.3)	—
	Y		—	—	—
	X		643 (25.3)	—	637 (25.1)
	U		770 (30.3)	—	764 (30.1)
H5		mm (in.)	—	—	—
H6	S	mm (in.)	—	—	—
	L		—	779 (30.7)	—
	Y		—	—	—
	X		847 (33.3)	—	864 (34.0)
	U		924 (36.4)	—	941 (37.0)
H7		mm (in.)	387 (15.2)	399 (15.7)	588 (23.1)
H8		mm (in.)	39 (1.5)	26 (1.0)	65 (2.6)
H9		mm (in.)	902 (35.5)	915 (36.0)	1,041 (41.0)
H10		mm (in.)	45 (1.8)	45 (1.8)	49 (1.9)
H11	S	mm (in.)	—	—	—
	L		—	26 (1.0)	—
	Y		—	—	—
	X		25 (1.0)	—	26 (1.0)
	U		25 (1.0)	—	26 (1.0)
W1		mm (in.)	317 (12.5)	318 (12.5)	317 (12.5)
W2		mm (in.)	—	—	—
W3		mm (in.)	—	—	—
W4		mm (in.)	—	—	—
W5		mm (in.)	453 (17.8)	464 (18.3)	476 (18.7)
W6		mm (in.)	—	—	—
A1		degree	32	35	32
A2		degree	70	67	70
A3		degree	3	4	3
T1		mm (in.)	724 (28.5)	—	724 (28.5)

OUTBOARD MOTOR DIMENSIONS

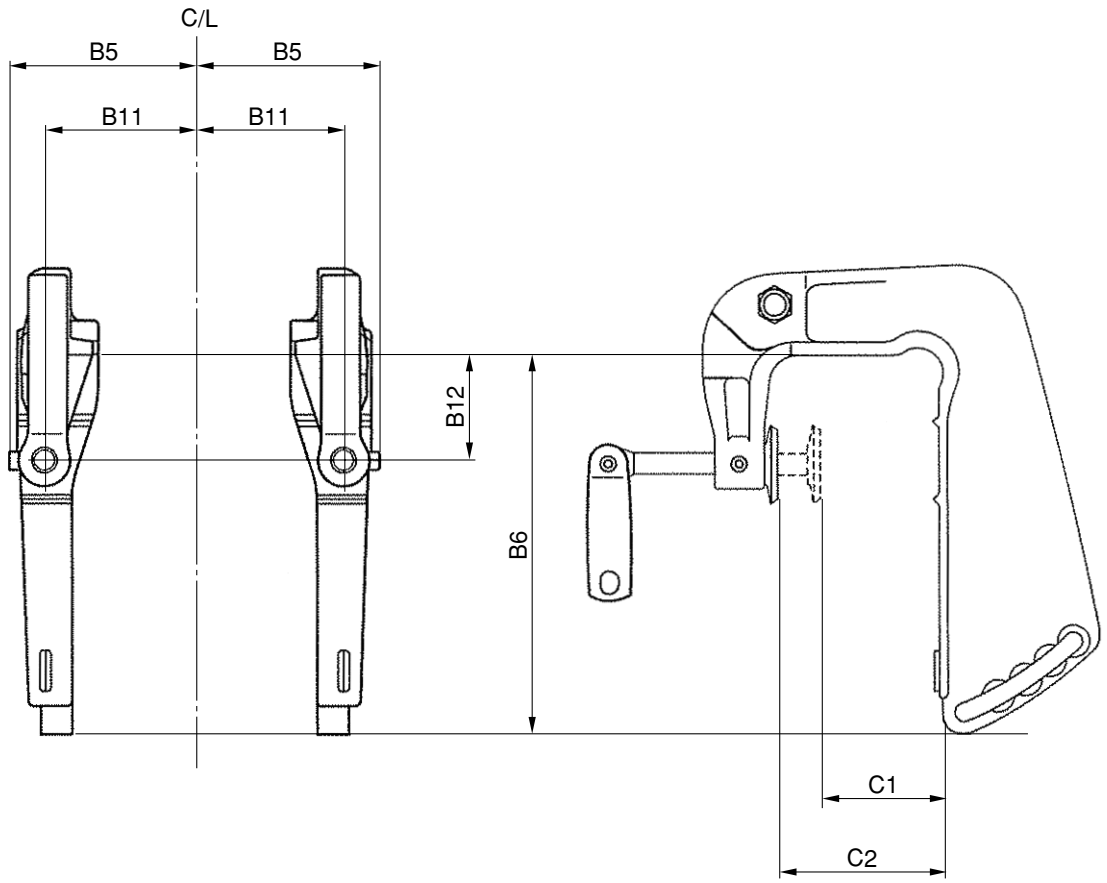
CLAMP BRACKET DIMENSION ITEMS

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

Model	F2A	F2.5A (F2.5)			
	Manual tilt				

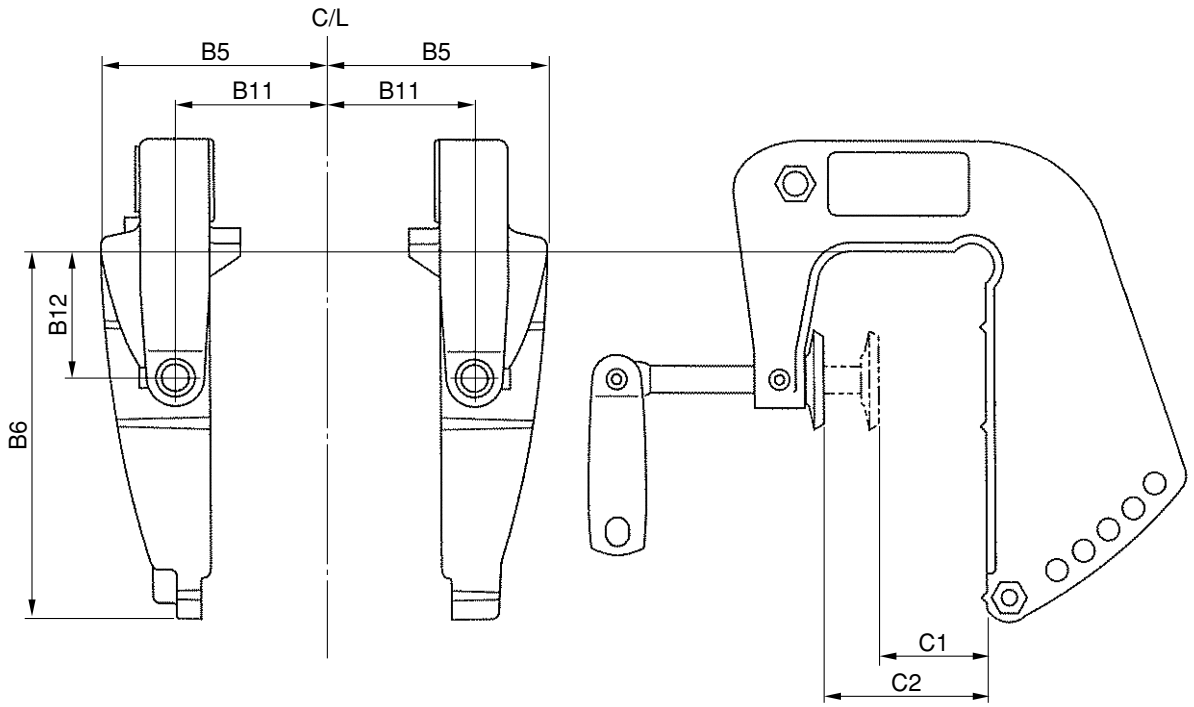


Symbol	mm (in.)	Symbol	mm (in.)
B1	—	C1	22 (0.9)
B2	—	C2	58 (2.3)
B3	—	C3	—
B4	—	D1	—
B5	69 (2.7)	D2	—
B6	143.7 (5.7)	D3	—
B7	—	D4	—
B8	—		
B9	—		
B10	—		
B11	56 (2.2)		
B12	40 (0.2)		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	4AC	5C	5CS	F4A (F4)	
	Manual tilt				

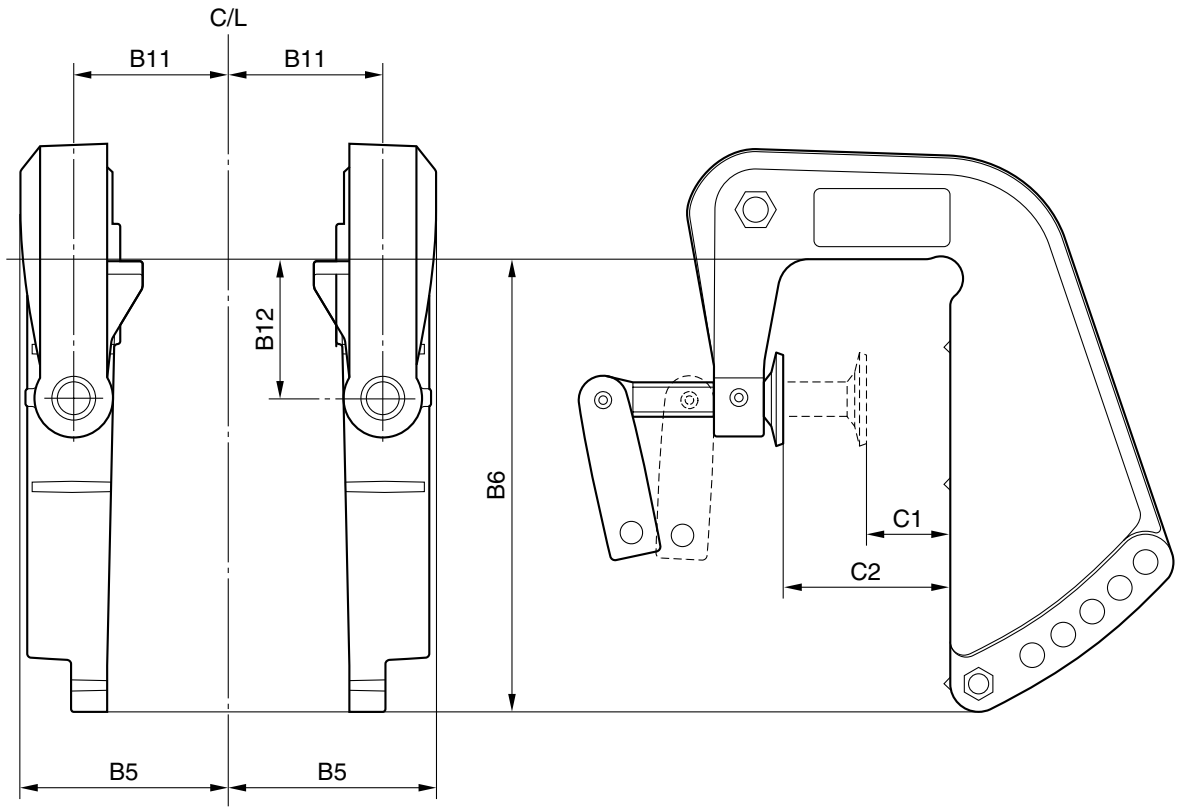


Symbol	mm (in.)	Symbol	mm (in.)
B1	—	C1	22 (0.9)
B2	—	C2	60 (2.4)
B3	—	C3	—
B4	—	D1	—
B5	83 (3.3)	D2	—
B6	136 (5.4)	D3	—
B7	—	D4	—
B8	—		
B9	—		
B10	—		
B11	55 (2.2)		
B12	48 (1.9)		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	6C (6)	8C (8)			
	Manual tilt				

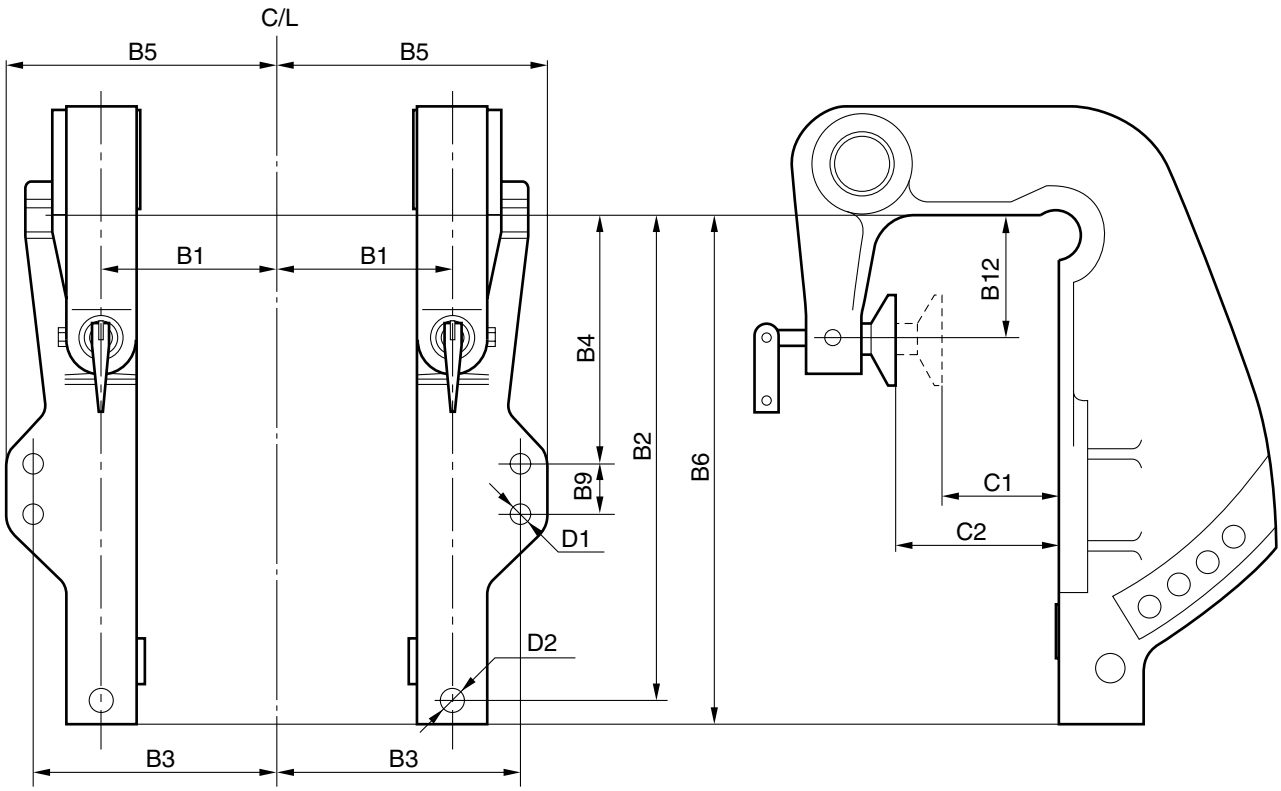


Symbol	mm (in.)	Symbol	mm (in.)
B1	—	C1	22 (0.9)
B2	—	C2	55 (2.2)
B3	—	C3	—
B4	—	D1	—
B5	75 (3.0)	D2	—
B6	164.3 (6.5)	D3	—
B7	—	D4	—
B8	—		
B9	—		
B10	—		
B11	56 (2.2)		
B12	50 (2.0)		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	F6A (F6)	F8C (F8)	FT8D (T8)		
	Manual tilt				

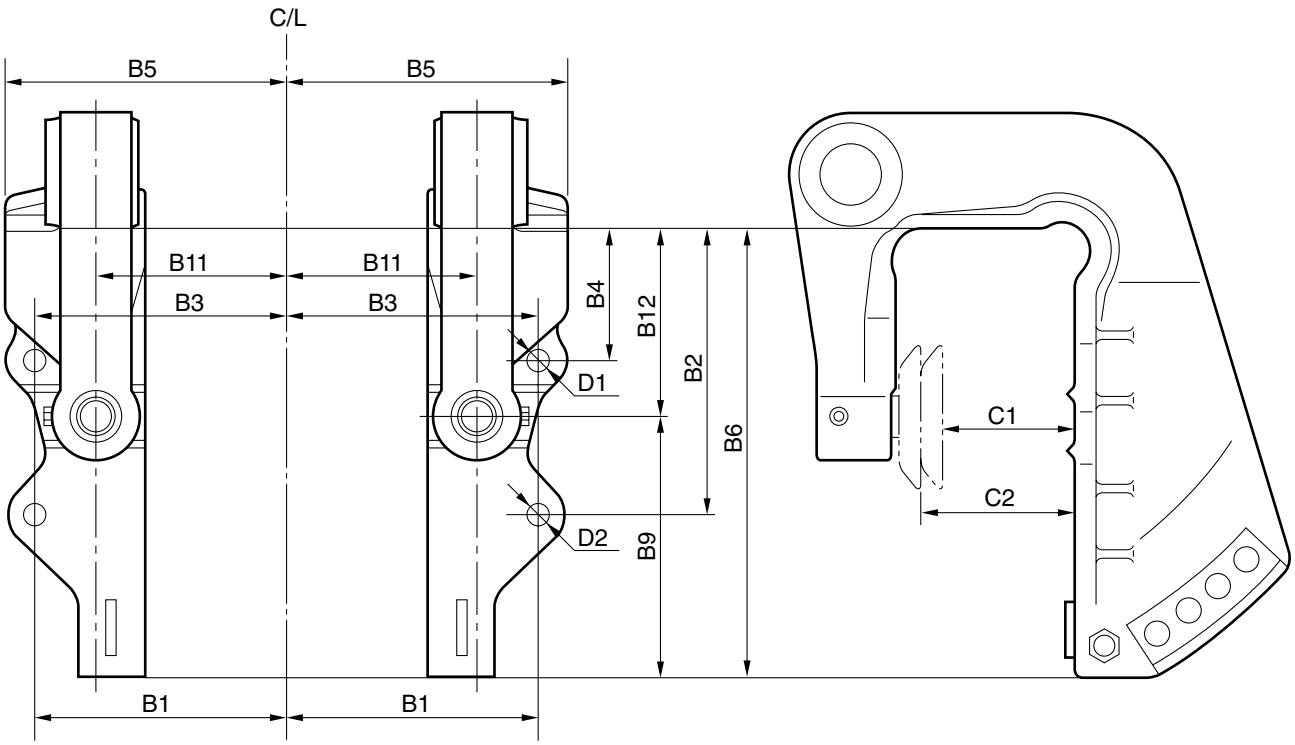


Symbol	mm (in.)	Symbol	mm (in.)
B1	70.5 (2.8)	C1	32 (1.3)
B2	180.5 (7.1)	C2	65 (2.6)
B3	95.3 (3.8)	C3	—
B4	94.5 (3.7)	D1	8.3 (0.3)
B5	105.3 (4.2)	D2	8.3 (0.3)
B6	189.5 (7.4)	D3	—
B7	—	D4	—
B8	—		
B9	18 (0.7)		
B10	—		
B11	—		
B12	48 (1.9)		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	9.9F (9.9)	15F (15)	F9.9C (F9.9-2)	F15A	FT9.9D (T9.9-2)
	F15B				
	Manual tilt				

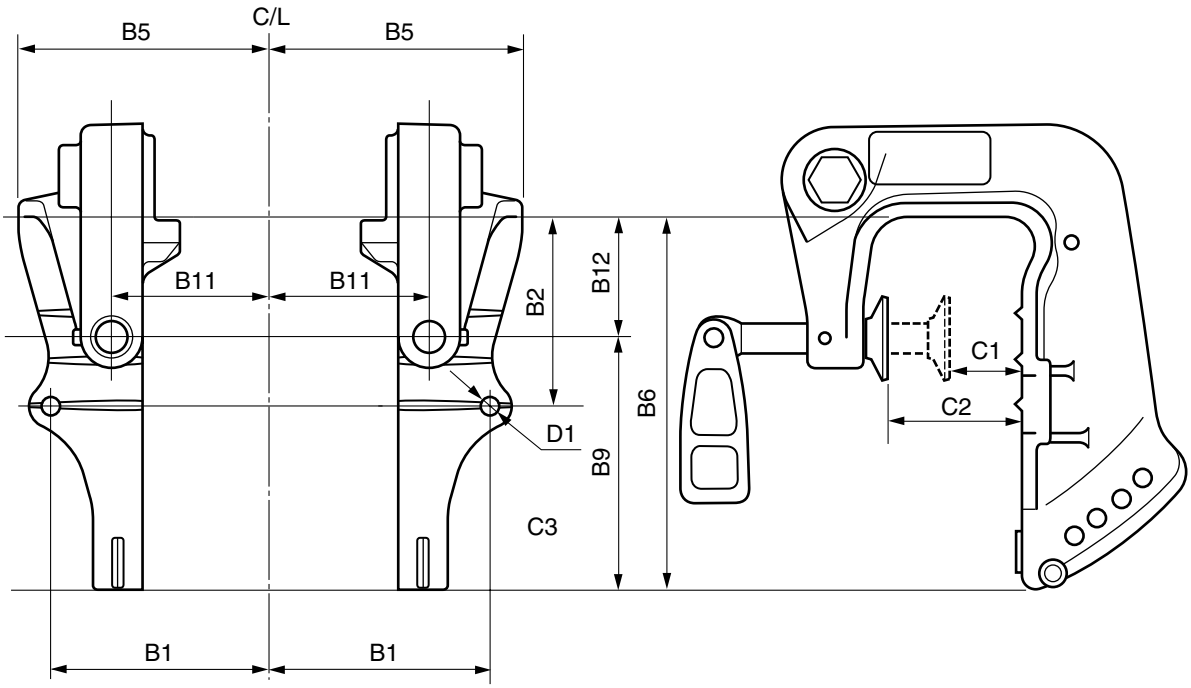


Symbol	mm (in.)	Symbol	mm (in.)
B1	92.5 (3.6)	C1	30 (1.2)
B2	103.5 (4.1)	C2	56 (2.2)
B3	92.5 (3.6)	C3	—
B4	49 (1.9)	D1	8.3 (0.3)
B5	102.5 (4.0)	D2	8.3 (0.3)
B6	176 (6.9)	D3	—
B7	—	D4	—
B8	—		
B9	54.5 (2.1)		
B10	—		
B11	70.5 (2.8)		
B12	69 (2.7)		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	E9.9D	E15D	EK9.9D	EK15D	EK9.9J
	EK15P				
	Manual tilt				

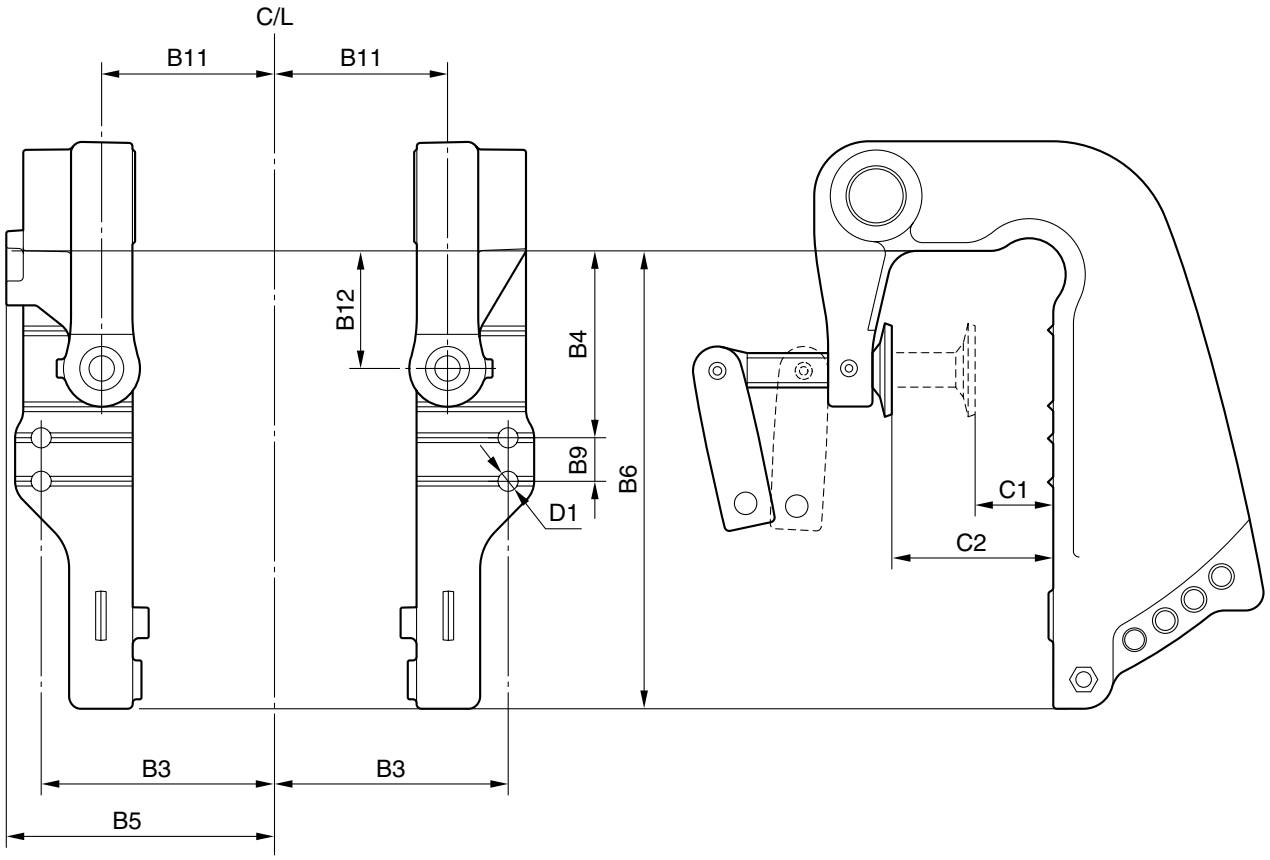


Symbol	mm (in.)	Symbol	mm (in.)
B1	92.6 (3.6)	C1	30 (1.2)
B2	79 (3.1)	C2	60 (2.4)
B3	—	C3	—
B4	—	D1	8.3 (0.32)
B5	106.3 (4.2)	D2	—
B6	157 (6.2)	D3	—
B7	—	D4	—
B8	—		
B9	107 (4.2)		
B10	—		
B11	67.3 (2.6)		
B12	50 (2.0)		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	F15C (F15)	F20B (F20)	F9.9F (F9.9)	FT9.9G (T9.9)	
	Manual tilt				

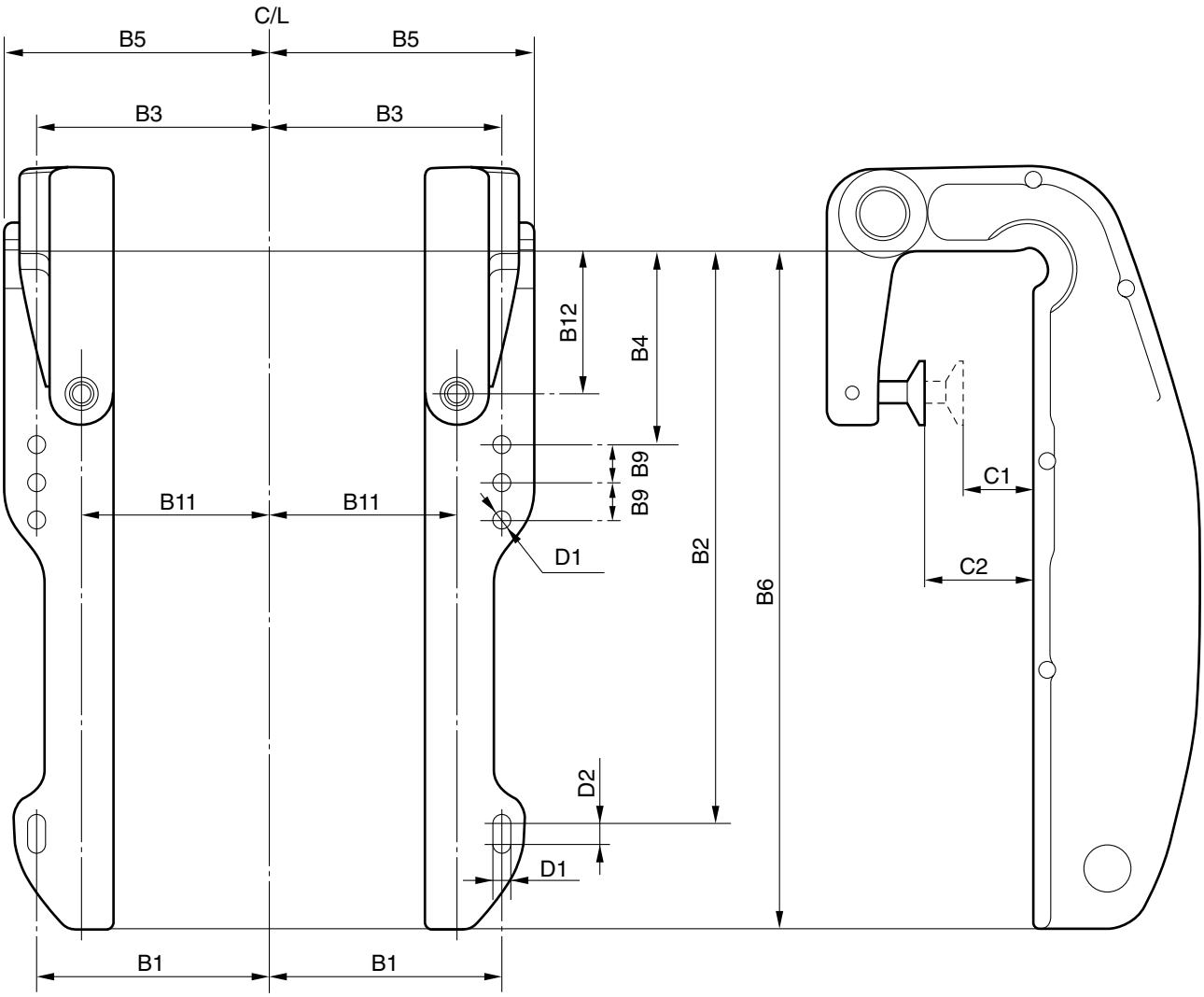


Symbol	mm (in.)	Symbol	mm (in.)
B1	—	C1	32 (1.3)
B2	—	C2	67 (2.6)
B3	95.3 (3.8)	C3	—
B4	76.5 (3.0)	D1	8.3 (0.33)
B5	110 (4.3)	D2	—
B6	187.5 (7.4)	D3	—
B7	—	D4	—
B8	—		
B9	18 (0.71)		
B10	—		
B11	70.5 (2.8)		
B12	48 (1.9)		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	F9.9C (F9.9-2)	F15A	FT8D (T8)	FT9.9D (T9.9-2)	F15C (F15)
	F20B (F20)	FT9.9G (T9.9)			
	Power tilt				

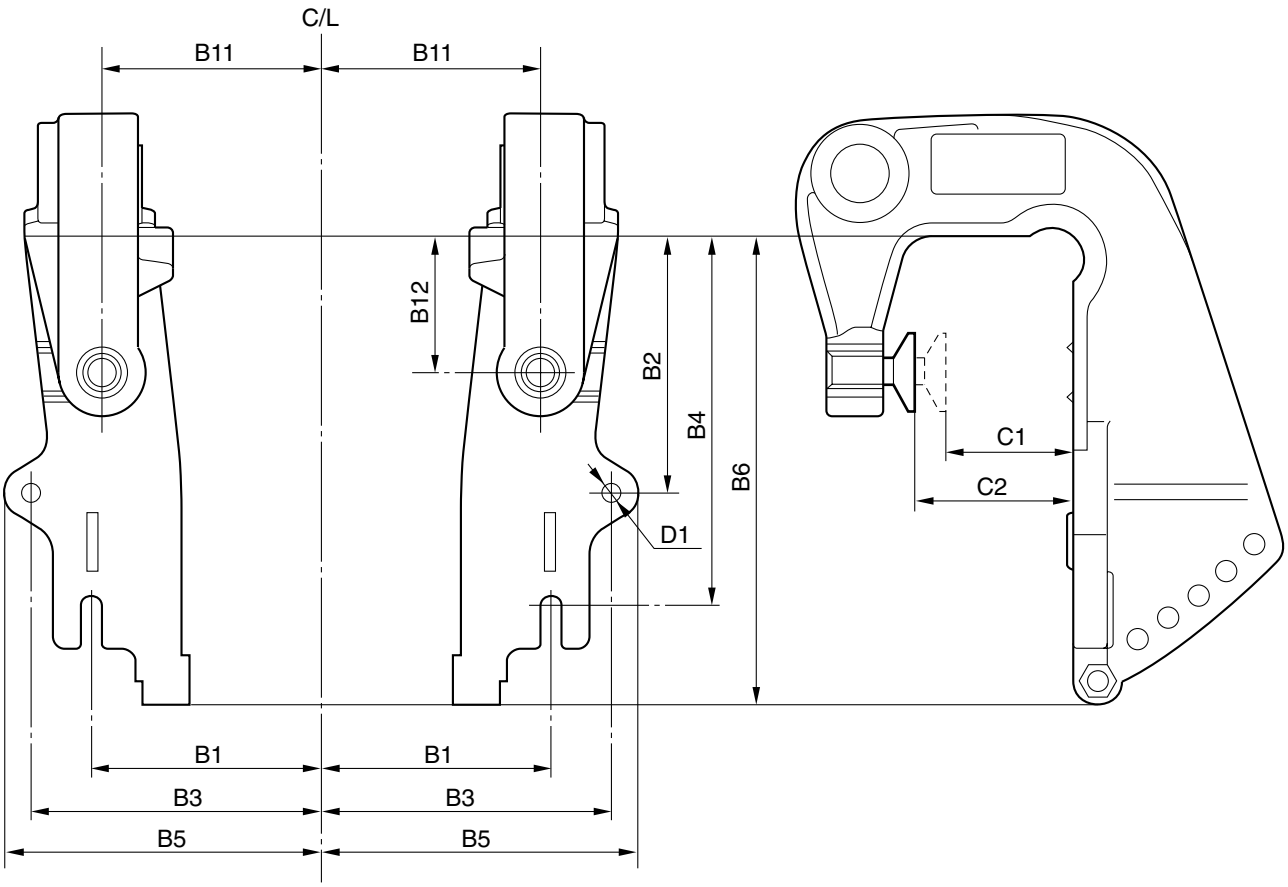


Symbol	mm (in.)	Symbol	mm (in.)
B1	95.3 (3.8)	C1	38 (1.5)
B2	275.5 (10.8)	C2	67 (2.6)
B3	95.3 (3.8)	C3	—
B4	94.5 (3.7)	D1	8.3 (0.3)
B5	111 (4.4)	D2	10 (0.4)
B6	325.5 (12.8)	D3	—
B7	—	D4	—
B8	—		
B9	18 (0.7)		
B10	—		
B11	73.5 (2.9)		
B12	69.5 (2.7)		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	25B	25X	30H	E25B	E30H
	EK25B	EK25C			
	Manual tilt				

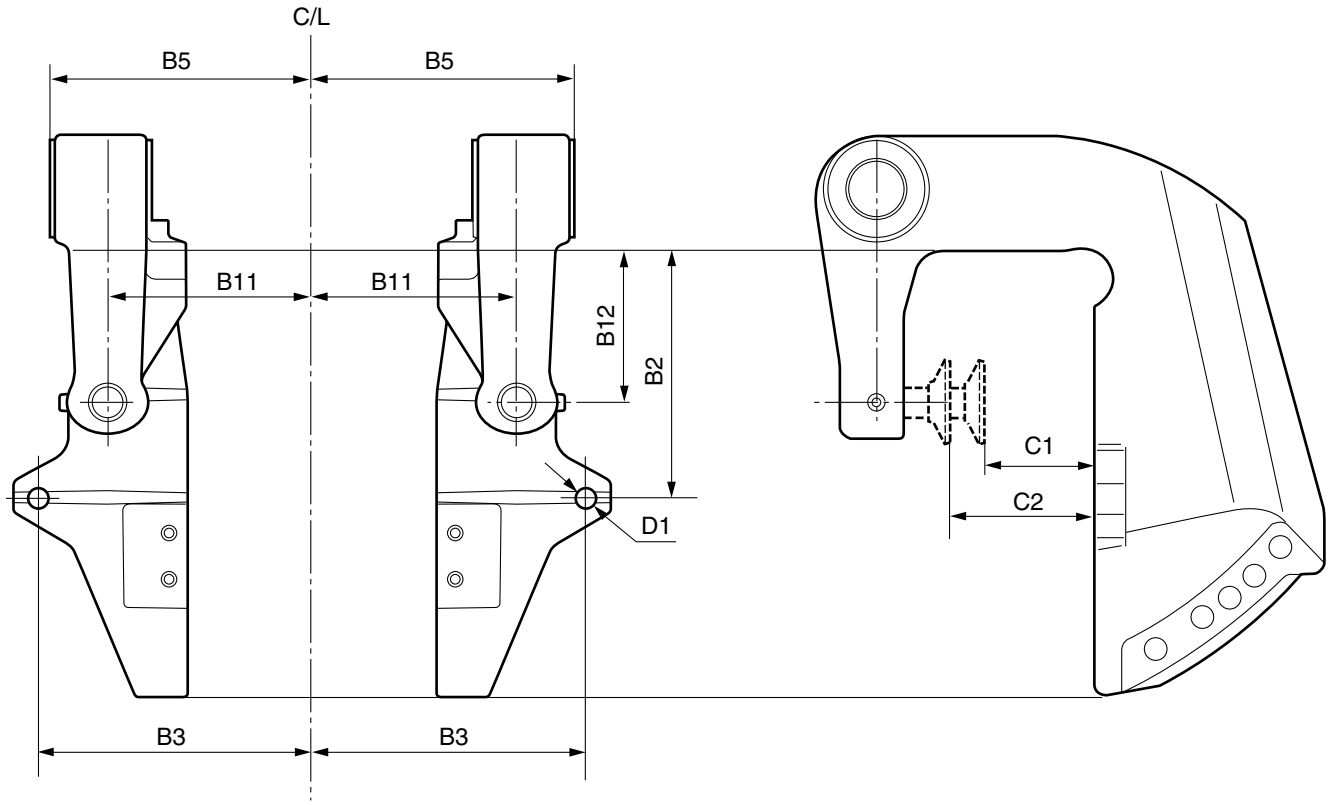


Symbol	mm (in.)	Symbol	mm (in.)
B1	89 (3.5)	C1	35 (1.4)
B2	140 (5.5)	C2	65 (2.6)
B3	112.5 (4.4)	C3	—
B4	96.5 (3.8)	D1	8.5 (0.33)
B5	122.5 (4.8)	D2	—
B6	176 (6.9)	D3	—
B7	—	D4	—
B8	—		
B9	—		
B10	—		
B11	85 (3.3)		
B12	51 (2.0)		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	20D (20)	25N (25)			
	Manual tilt				

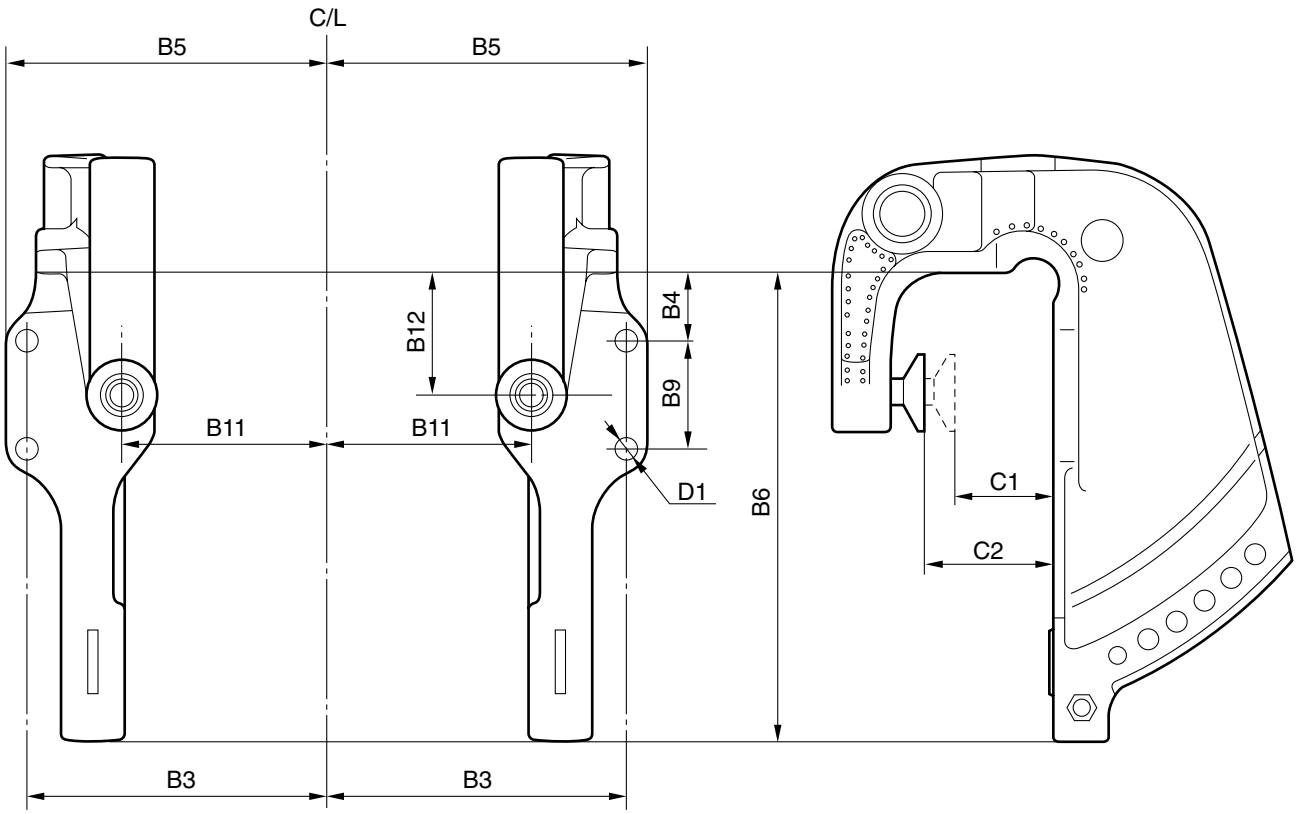


Symbol	mm (in.)	Symbol	mm (in.)
B1	—	C1	25 (1.0)
B2	97.5 (3.8)	C2	65 (2.6)
B3	114.5 (4.5)	C3	—
B4	—	D1	8.3 (0.32)
B5	122.5 (4.8)	D2	—
B6	175 (6.9)	D3	—
B7	—	D4	—
B8	—		
B9	—		
B10	—		
B11	87.5 (3.4)		
B12	84 (3.3)		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	40X	E40X	F20A	F25A (F25)	F25C
	Manual tilt				

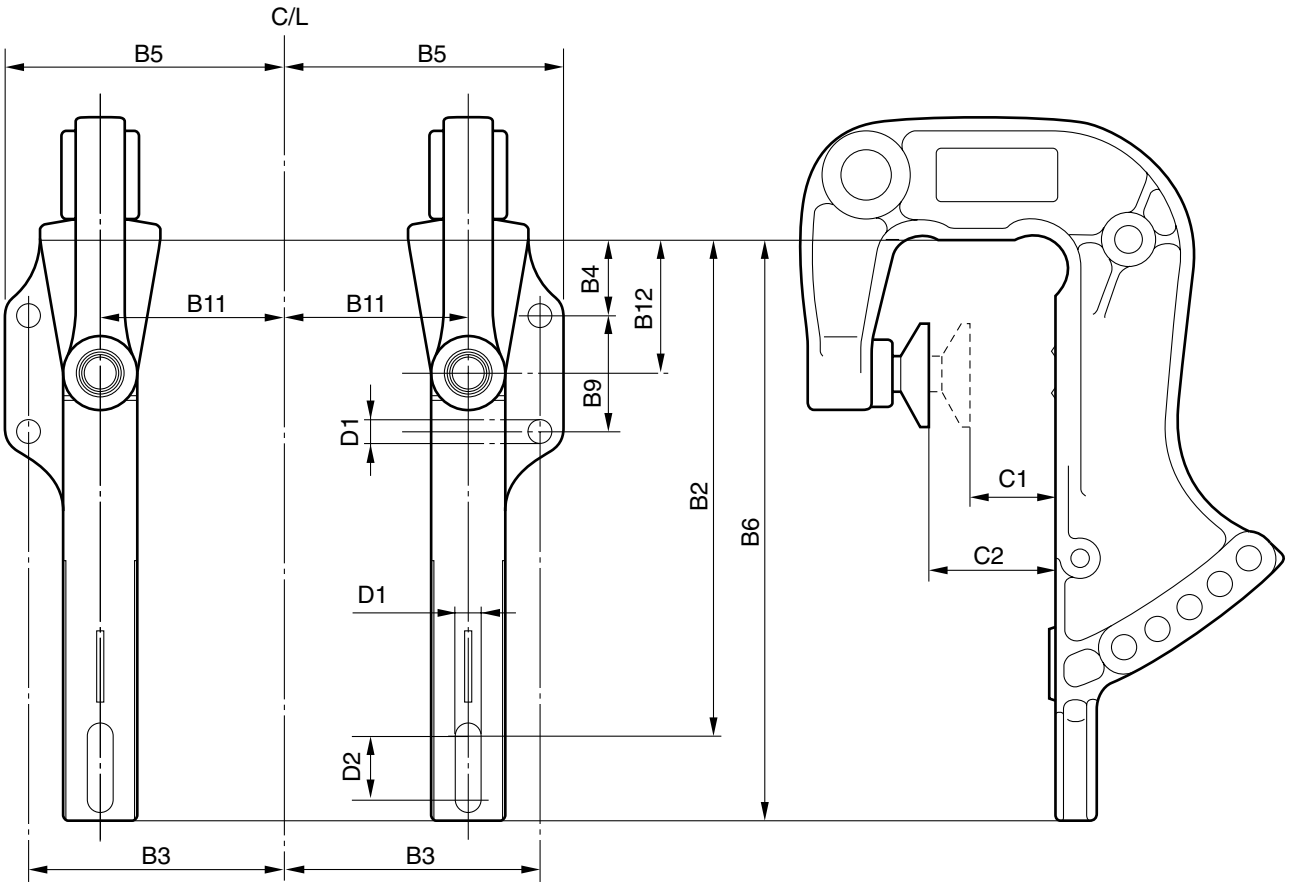


Symbol	mm (in.)	Symbol	mm (in.)
B1	—	C1	37 (1.5)
B2	—	C2	68 (2.7)
B3	140 (5.5)	C3	—
B4	32 (1.3)	D1	10.5 (0.41)
B5	150 (5.9)	D2	—
B6	218 (8.6)	D3	—
B7	—	D4	—
B8	—		
B9	50 (2.0)		
B10	—		
B11	95.5 (3.8)		
B12	57 (2.2)		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	40J	E40G	E40J	EK40G	EK40J
	Manual tilt				

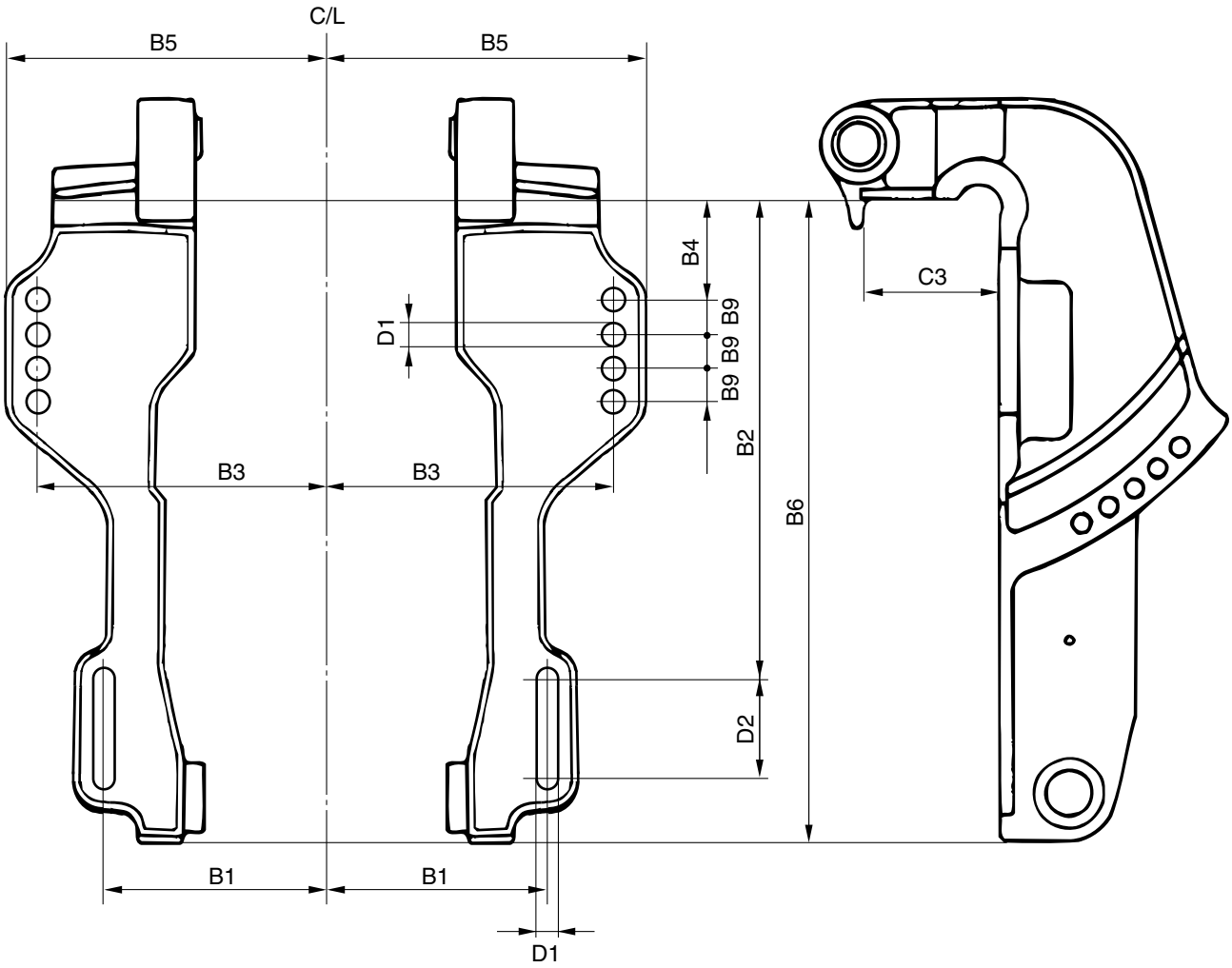


Symbol	mm (in.)	Symbol	mm (in.)
B1	—	C1	33 (1.3)
B2	212 (8.3)	C2	60 (2.3)
B3	124.5 (4.9)	C3	—
B4	32 (1.3)	D1	10.5 (0.41)
B5	134.5 (5.3)	D2	27 (1.1)
B6	249 (9.8)	D3	—
B7	—	D4	—
B8	—		
B9	50 (2.0)		
B10	—		
B11	93.5 (3.7)		
B12	57 (2.2)		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	30D	40X	E40X	F20A	F25A (F25)
	F30A (F30)	F40B (F40)	FT25B (T25)		
	PTT				

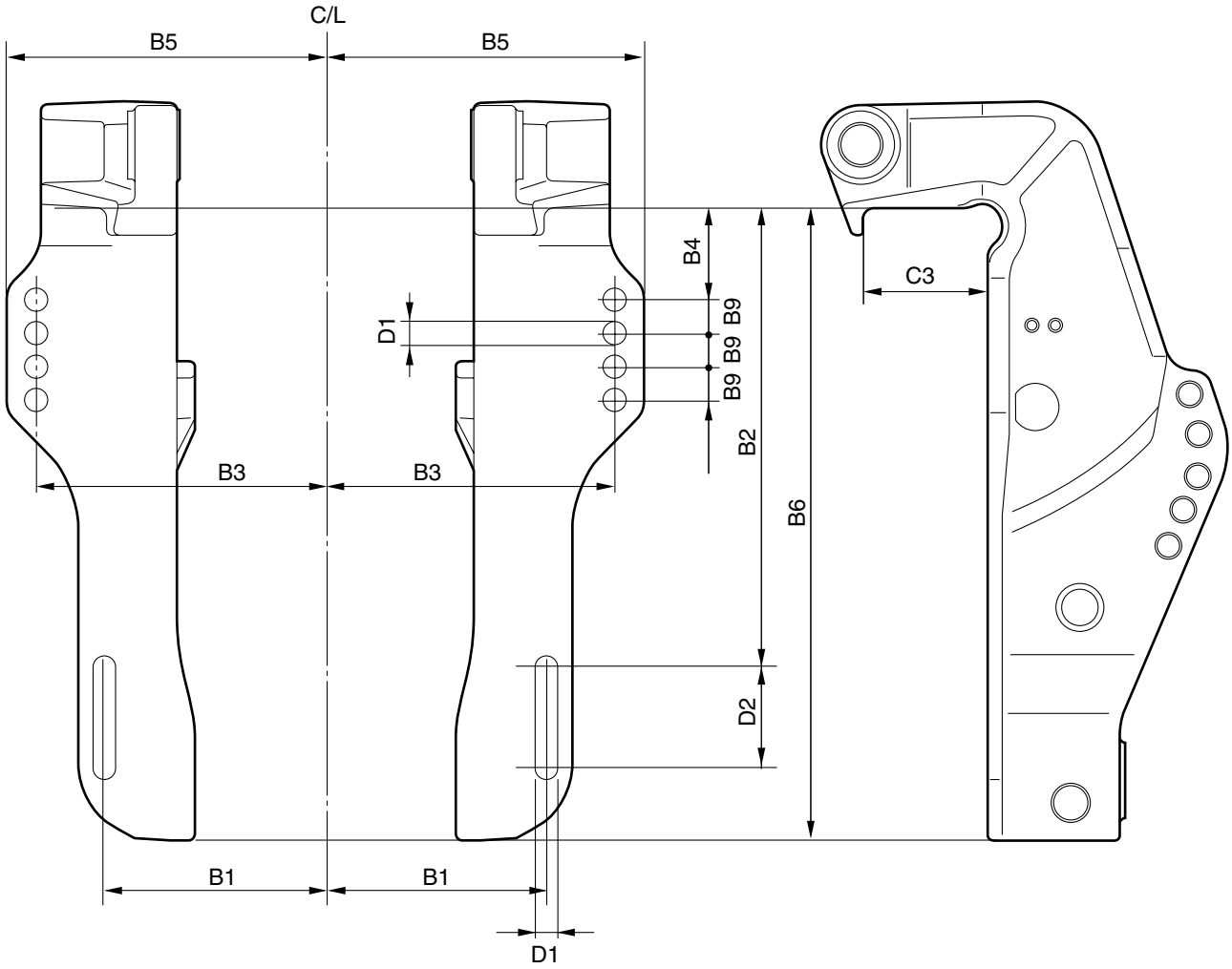


Symbol	mm (in.)	Symbol	mm (in.)
B1	126 (5.0)	C1	—
B2	251.4 (9.9)	C2	—
B3	163.5 (6.4)	C3	69 (2.7)
B4	50.8 (2.0)	D1	13 (0.5)
B5	180 (7.1)	D2	55.5 (2.2)
B6	338 (13.3)	D3	—
B7	—	D4	—
B8	—		
B9	18.5 (0.7)		
B10	—		
B11	—		
B12	—		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	F50F (F50)	FT50G (T50)	F60C (F60)	FT60D (T60)	F40D
	PTT & Hydro-tilt				

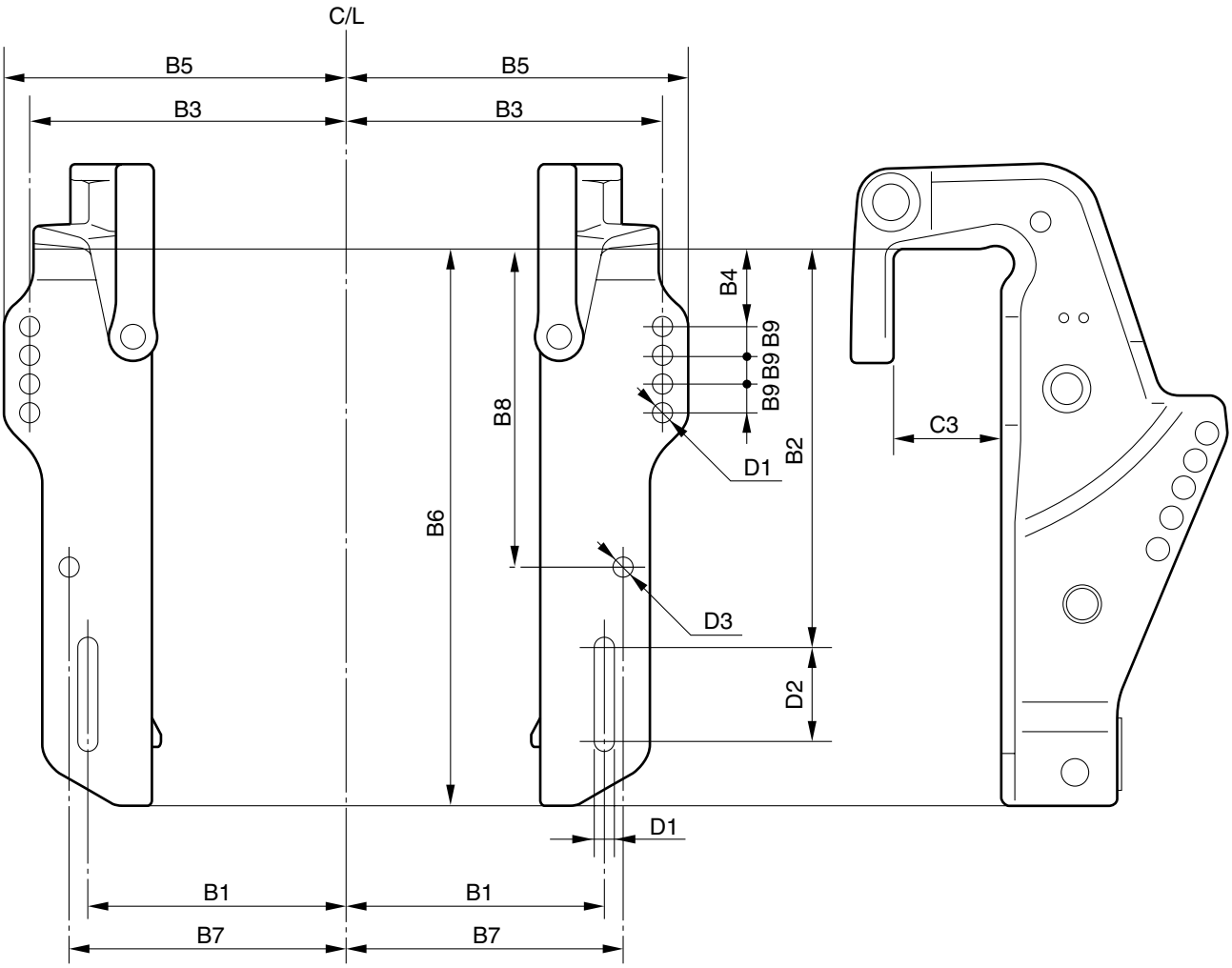


Symbol	mm (in.)	Symbol	mm (in.)
B1	126 (5.0)	C1	—
B2	254 (10.0)	C2	—
B3	163.5 (6.4)	C3	69 (2.7)
B4	50.8 (2.0)	D1	13 (0.5)
B5	180 (7.1)	D2	55.5 (2.2)
B6	350 (13.8)	D3	—
B7	—	D4	—
B8	—		
B9	18.5 (0.7)		
B10	—		
B11	—		
B12	—		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	40V	40Y	50H (50)	E60H	F50D
	FT50C				
	PTT & Hydro-tilt				

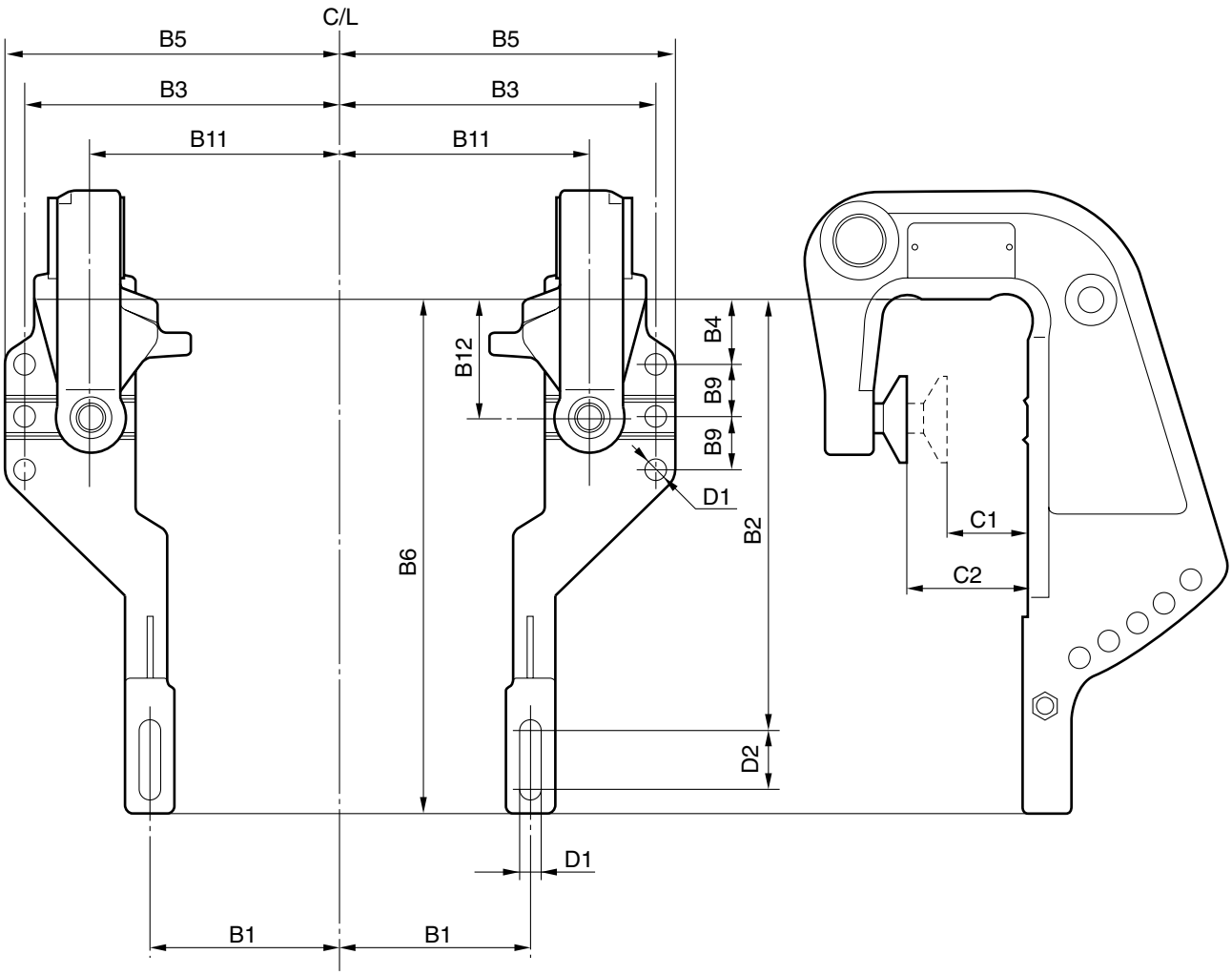


Symbol	mm (in.)	Symbol	mm (in.)
B1	126 (5.0)	C1	—
B2	254 (10.0)	C2	—
B3	163.5 (6.4)	C3	69 (2.7)
B4	50.8 (2.0)	D1	13 (0.51)
B5	180 (7.1)	D2	60.5 (2.4)
B6	355 (14.0)	D3	13 (0.51)
B7	138 (5.4)	D4	—
B8	203 (8.0)		
B9	18.5 (0.73)		
B10	—		
B11	—		
B12	—		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	30D	40V	50H		
	Manual tilt				

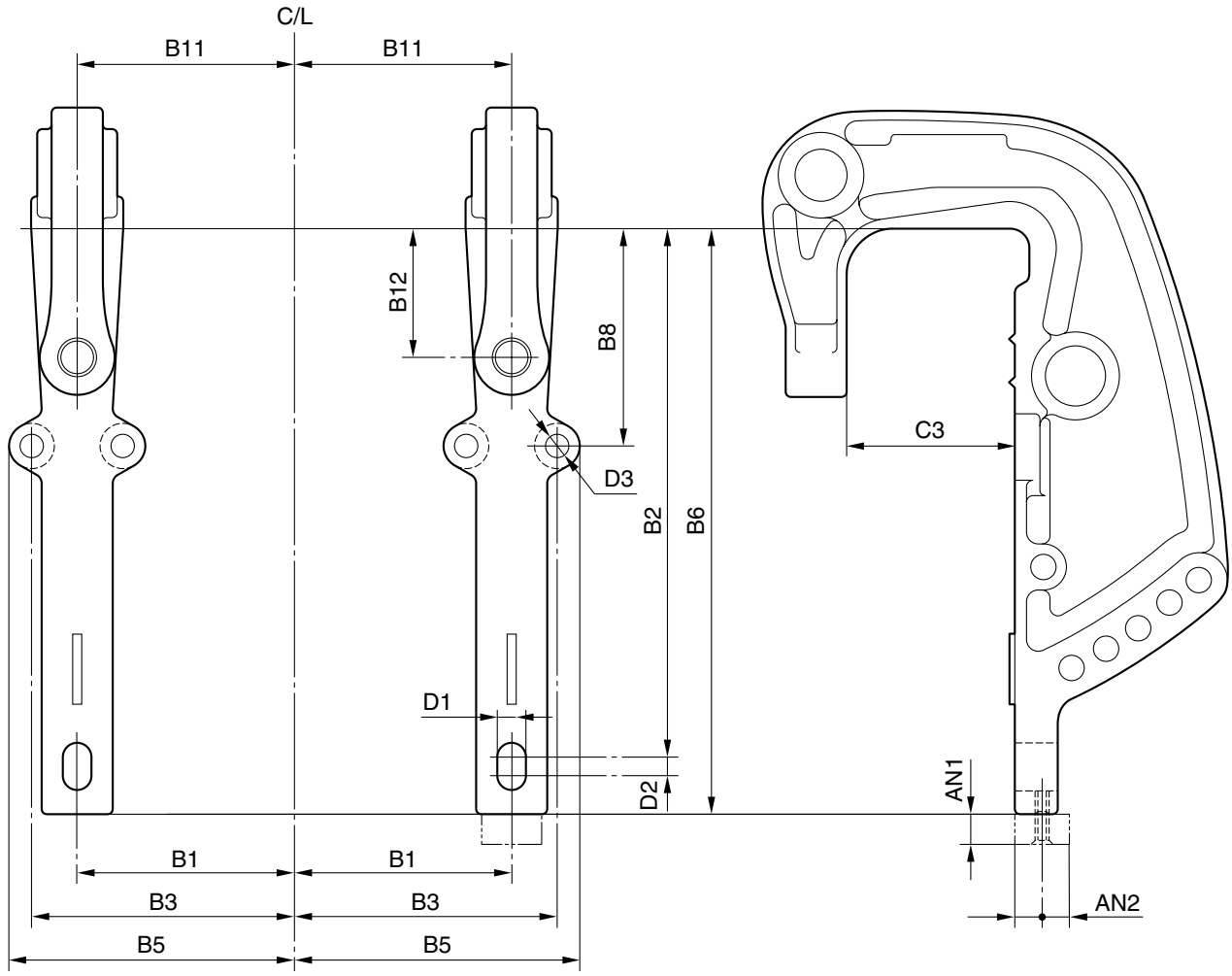


Symbol	mm (in.)	Symbol	mm (in.)
B1	62.5 (2.5)	C1	30 (1.2)
B2	208 (8.2)	C2	66 (2.6)
B3	121.5 (4.8)	C3	—
B4	32 (1.3)	D1	10.5 (0.41)
B5	131.5 (5.2)	D2	26 (1.0)
B6	245 (9.6)	D3	—
B7	—	D4	—
B8	—		
B9	25 (0.98)		
B10	—		
B11	90.5 (3.6)		
B12	57 (2.2)		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	E48C	E55C			
	Manual tilt				

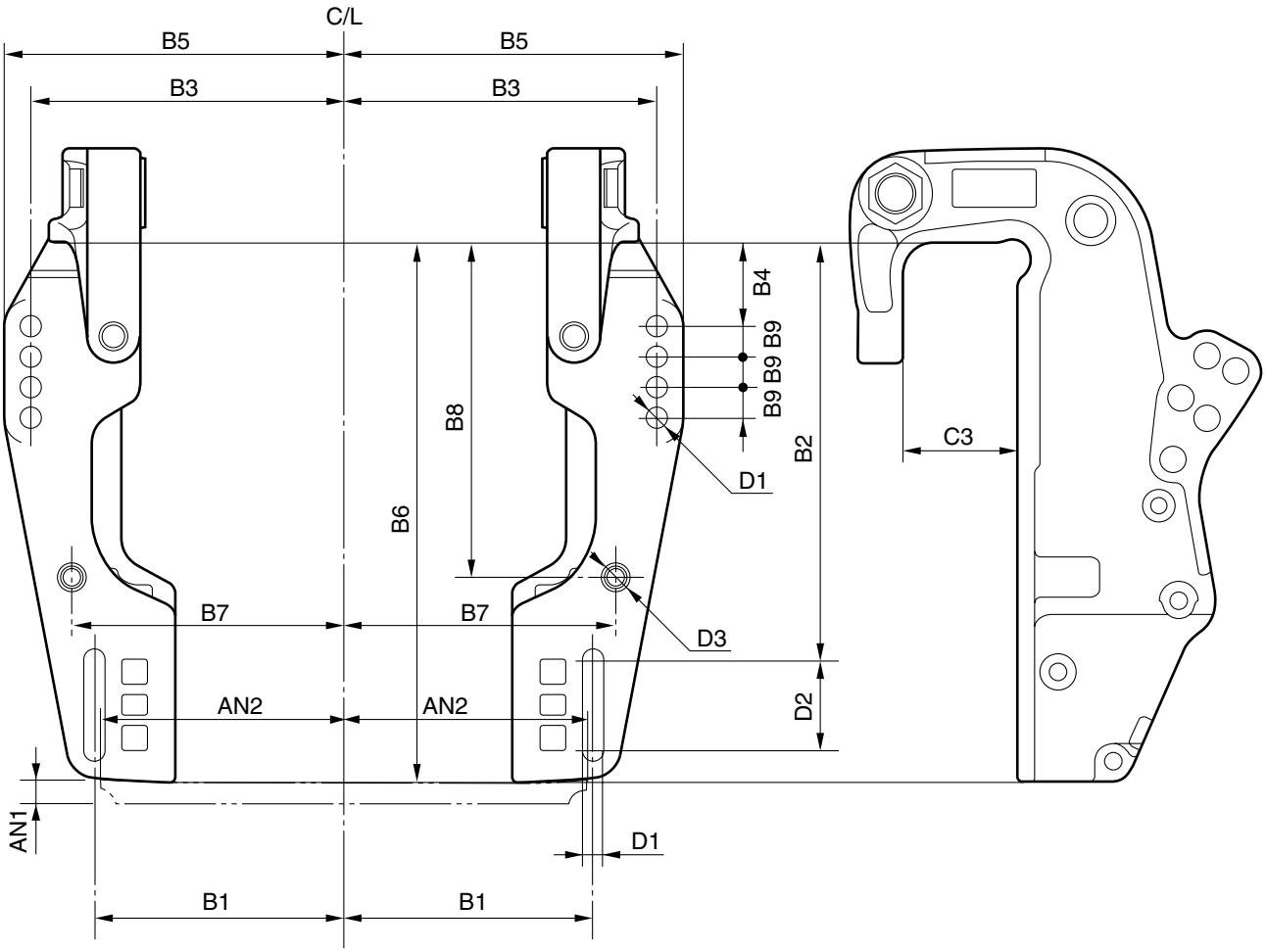


Symbol	mm (in.)	Symbol	mm (in.)
B1	96 (3.8)	C1	—
B2	230 (9.1)	C2	—
B3	119 (4.7)	C3	73 (2.9)
B4	—	D1	12 (0.47)
B5	129 (5.1)	D2	8 (0.31)
B6	254 (10.0)	D3	10.5 (0.41)
B7	—	D4	—
B8	95 (3.7)	AN1	14 (0.55)
B9	—	AN2	12 (0.47)
B10	—		
B11	96 (3.8)		
B12	57 (2.2)		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	55B	60F	E60H		
	PTT & Hydro-tilt for S transom				

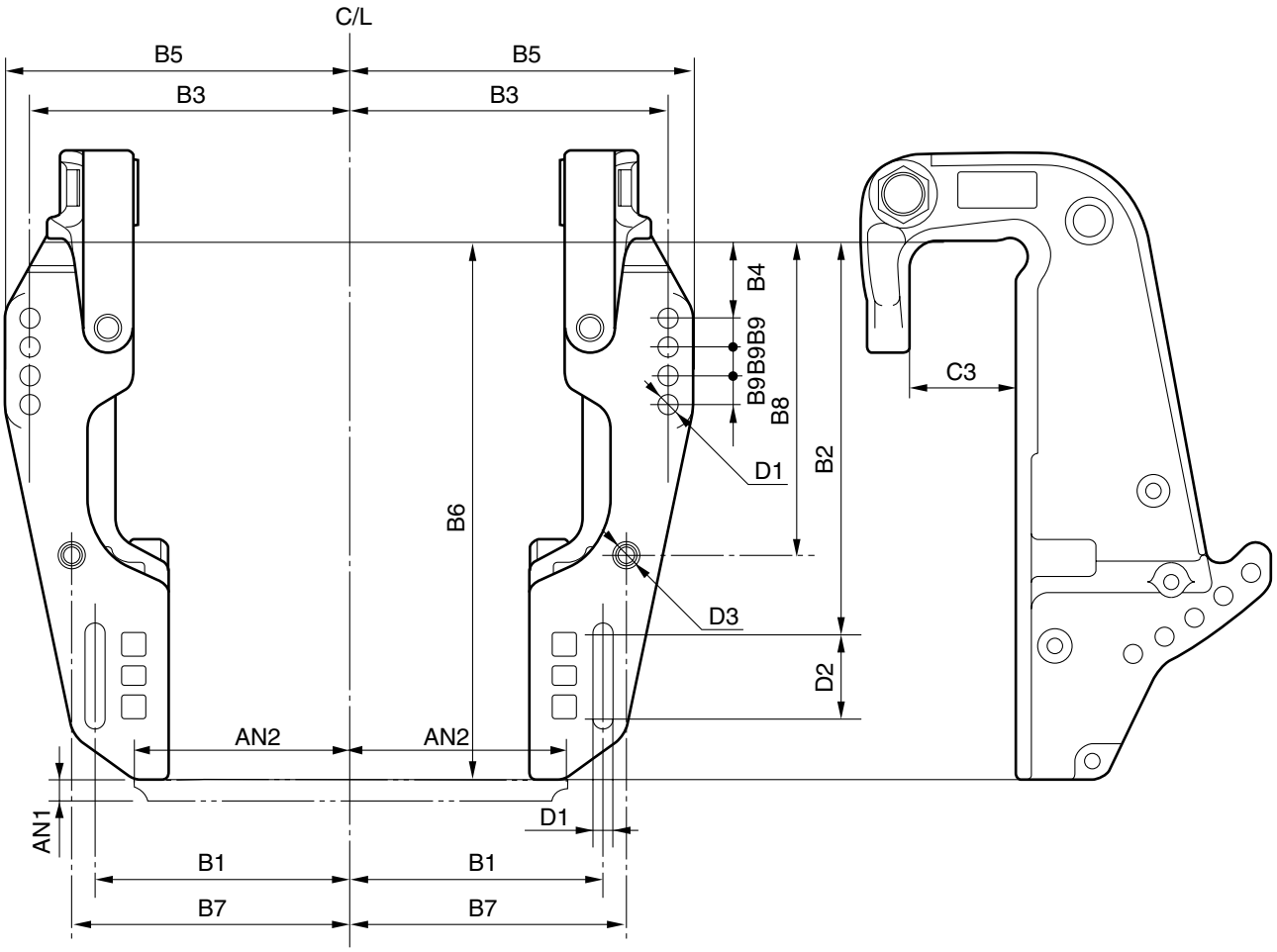


Symbol	mm (in.)	Symbol	mm (in.)
B1	125.4(4.9)	C1	—
B2	254(10.0)	C2	—
B3	163.5 (6.4)	C3	68.5 (2.7)
B4	50.8 (2.0)	D1	13 (0.51)
B5	180 (7.1)	D2	55.5 (2.2)
B6	329 (13.0)	D3	Studbolt hole: M12 X 1.25-40 deep
B7	138.1 (5.4)	D4	—
B8	203.2 (8.0)	AN1	19 (0.75)
B9	18.5 (0.73)	AN2	101.5 (4.0)
B10	—		
B11	—		
B12	—		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	55B	55D	60F	70B (70)	75A
	75C	85A	90A (90)	E60H	E60J
	E65A	E75B			
	PTT & hydro-tilt for L/X transom				

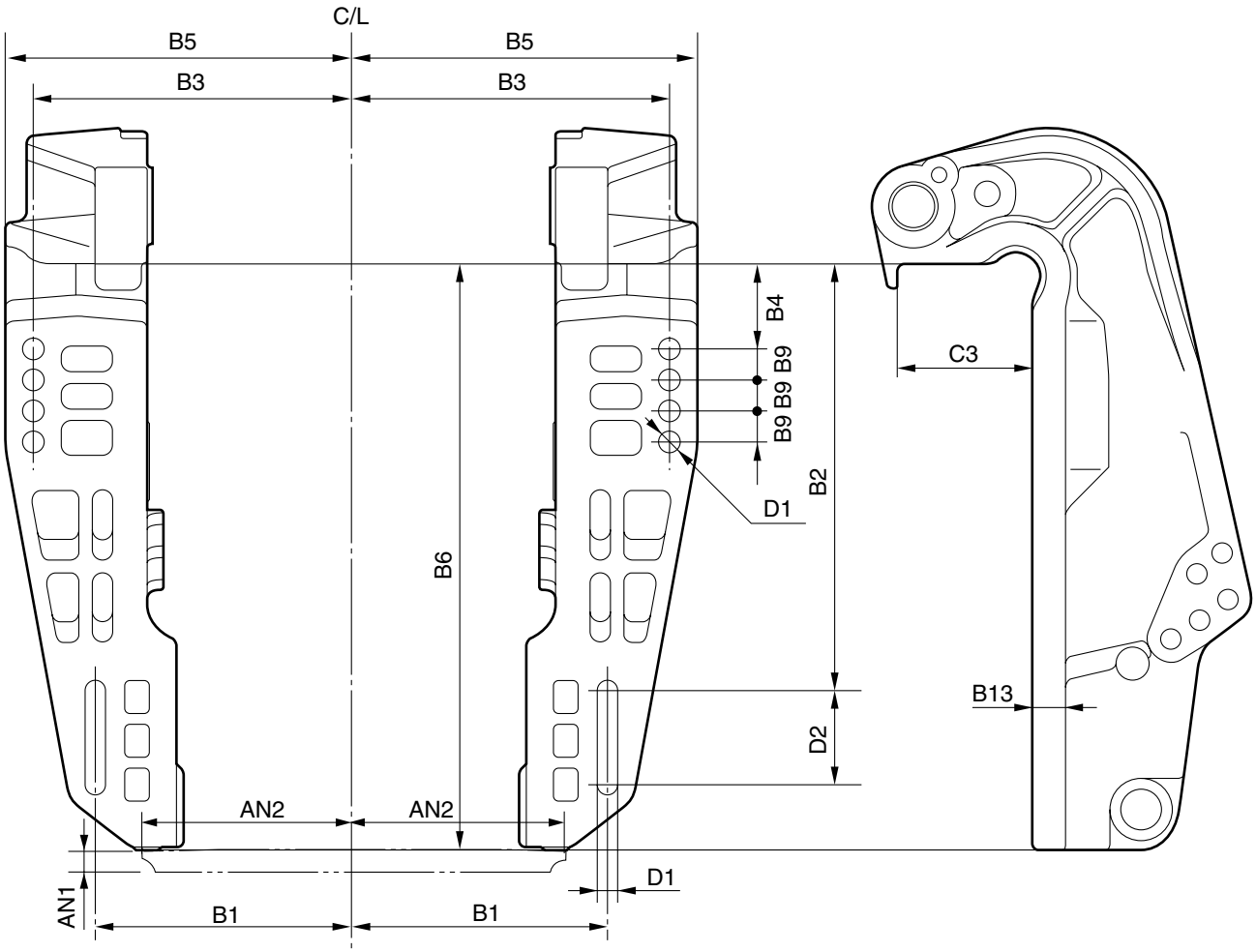


Symbol	mm (in.)	Symbol	mm (in.)
B1	125.4 (4.9)	C1	—
B2	254 (10.0)	C2	—
B3	163.5 (6.4)	C3	68.5 (2.7)
B4	50.8 (2.0)	D1	13 (0.51)
B5	180 (7.1)	D2	55.5 (2.2)
B6	352 (13.9)	D3	Studbolt hole: M12 X 1.25-40 deep
B7	138.1 (5.4)	D4	—
B8	203.2 (8.0)	AN1	19 (0.75)
B9	18.5 (0.73)	AN2	101.5 (4.0)
B10	—		
B11	—		
B12	—		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	F75B (F75)	F80B	F90B (F90)	F100D	
	PTT				

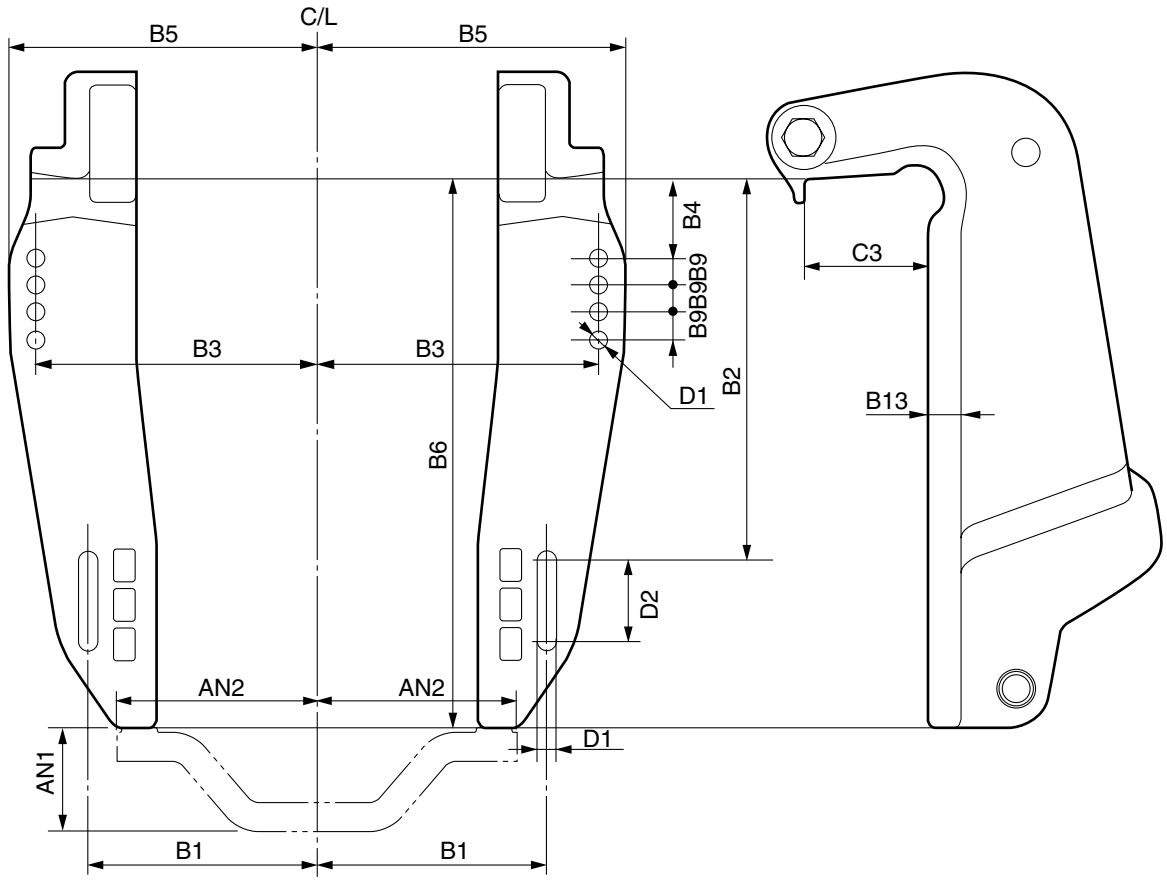


Symbol	mm (in.)	Symbol	mm (in.)
B1	125.4 (4.9)	C1	—
B2	254 (10.0)	C2	—
B3	163.5 (6.4)	C3	80 (3.1)
B4	50.8 (2.0)	D1	13 (0.51)
B5	180 (7.1)	D2	55.5 (2.2)
B6	368 (14.5)	D3	—
B7	—	D4	—
B8	—	AN1	19 (0.75)
B9	18.5 (0.73)	AN2	101.5 (4.0)
B10	—		
B11	—		
B12	—		
B13	20 (0.79)		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	E115A	115B	115C (115)	130B	140B
	150A	175A	200A	150F (150)	150G (V150)
	175D	200G	200F	225D	Z150P (Z150)
	Z150Q (VZ150)	Z175G (Z175)	Z175H (VZ175)	Z200N (Z200)	Z200P (VZ200)
	Z200R (VZ200R)	Z225H (VZ225H)	Z250F (VZ250F)	Z300B (VZ300B)	F75C
	F95A	F100B	F115A (F115)	F150A (F150)	F225C (F225L)
	PTT & Hydro tilt, * L/H rotation model has the same dimensions as R/H model.				

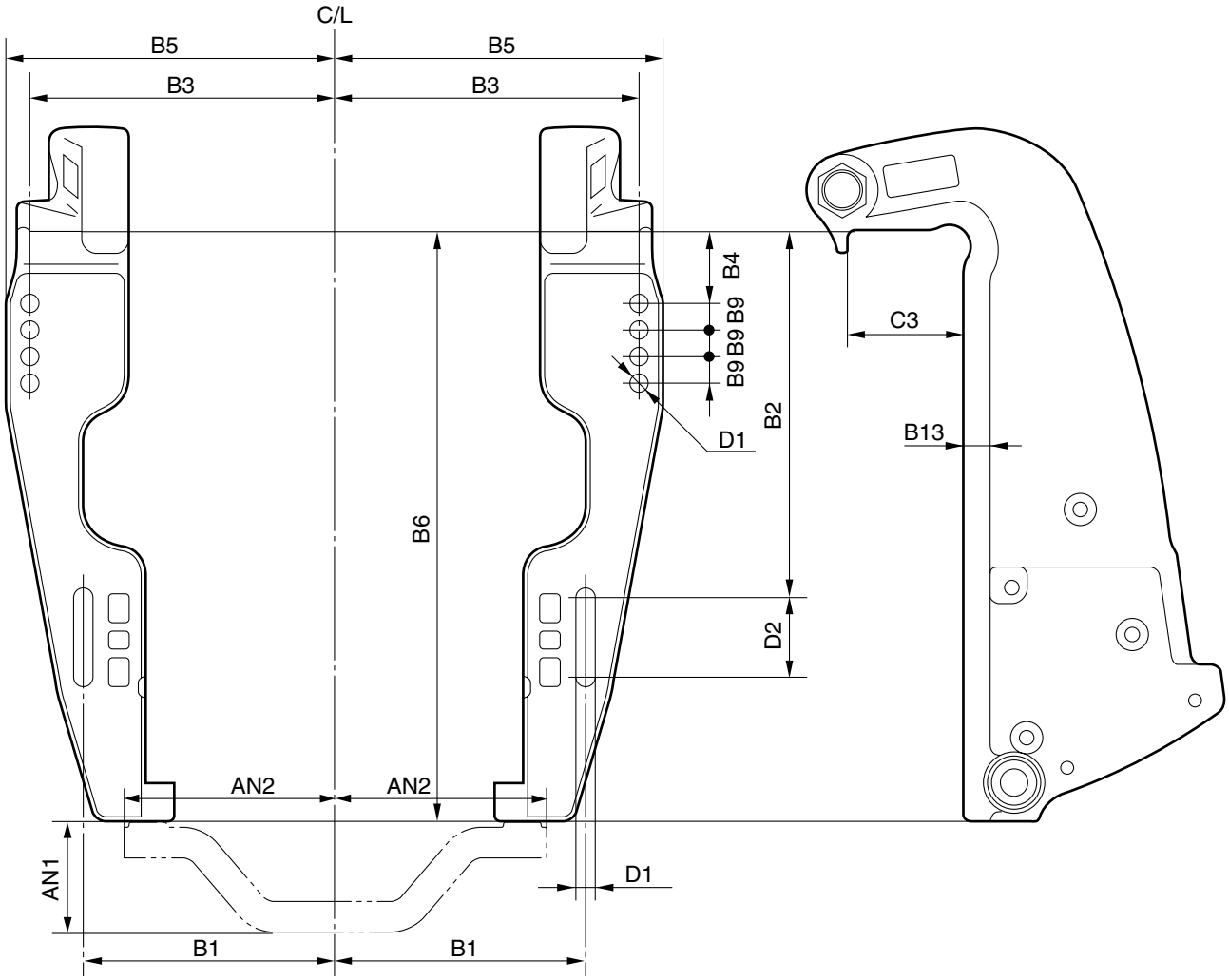


Symbol	mm (in.)	Symbol	mm (in.)
B1	125.4 (4.9)	C1	—
B2	254 (10.0)	C2	—
B3	163.5 (6.4)	C3	82 (3.2)
B4	50.8 (2.0)	D1	13 (0.51)
B5	180 (7.1)	D2	55.5 (2.2)
B6	367 (14.4)	D3	—
B7	—	D4	—
B8	—	AN1	52 (2.0)
B9	18.5 (0.73)	AN2	102 (4.0)
B10	—		
B11	—		
B12	—		
B13	24 (0.94)		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	250G	Z300A (Z300)	F200A (F200)	F225A (F225)	F200B
	F200C	F225B	F250A (F250)		
	PTT, * L/H rotation model has the same dimensions as R/H model.				

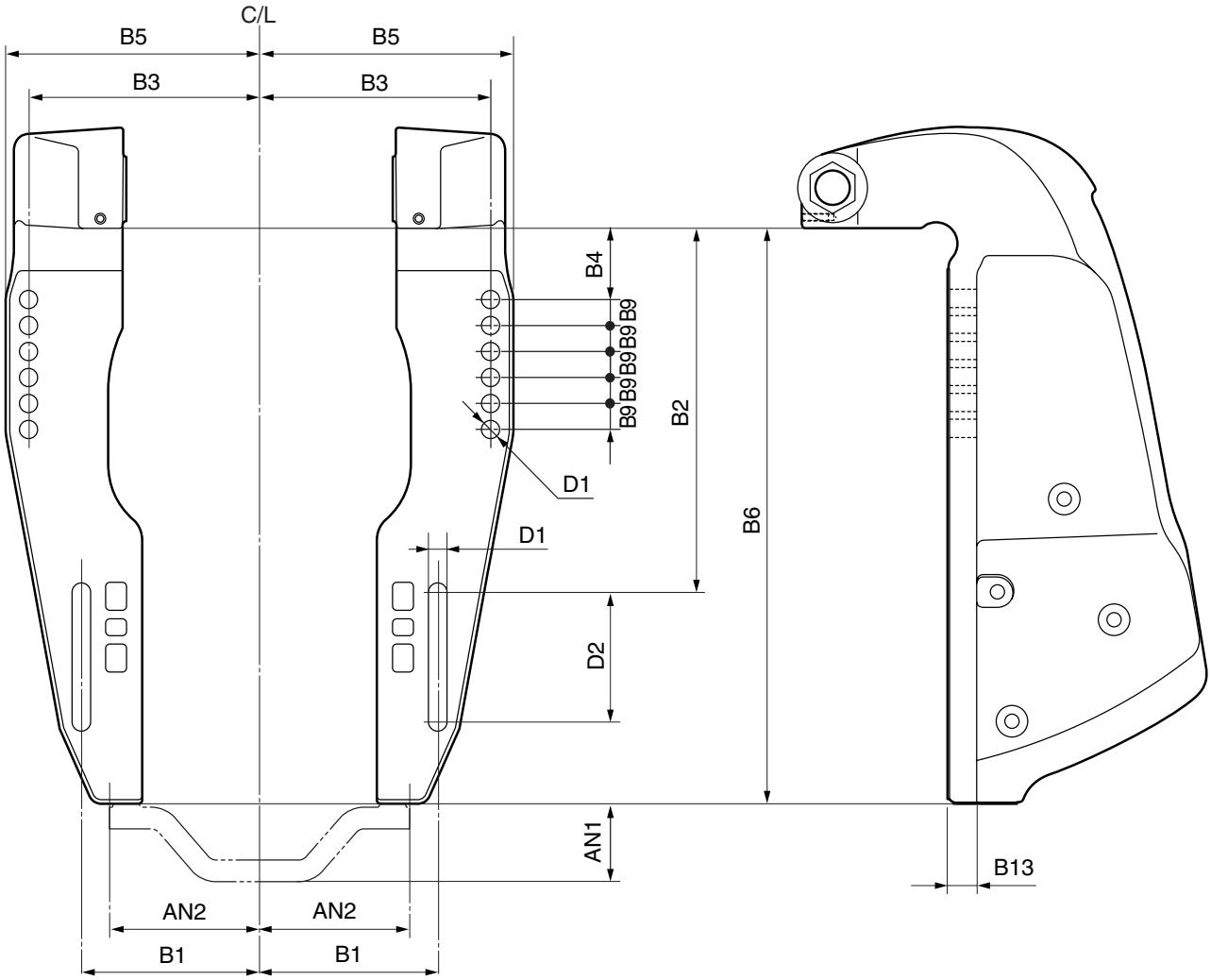


Symbol	mm (in.)	Symbol	mm (in.)
B1	125.4 (4.9)	C1	—
B2	254 (10.0)	C2	—
B3	163.5 (6.4)	C3	79 (3.1)
B4	50.8 (2.0)	D1	13 (0.51)
B5	180 (7.1)	D2	55.5 (2.2)
B6	411 (16.2)	D3	—
B7	—	D4	—
B8	—	AN1	52 (2.0)
B9	18.5 (0.73)	AN2	102 (4.0)
B10	—		
B11	—		
B12	—		
B13	20 (0.79)		

OUTBOARD MOTOR DIMENSIONS

CLAMP BRACKET DIMENSIONS

Model	F350A (F350)				
	PTT, * L/H rotation model has the same dimensions as R/H model.				



Symbol	mm (in.)	Symbol	mm (in.)
B1	125.4 (4.9)	C1	—
B2	254 (10.0)	C2	—
B3	163.5 (6.4)	C3	—
B4	50.8 (2.0)	D1	13 (0.51)
B5	180 (7.1)	D2	92.6 (3.6)
B6	406 (16.0)	D3	—
B7	—	D4	—
B8	—	AN1	52 (2.0)
B9	18.5 (0.73)	AN2	102 (4.0)
B10	—		
B11	—		
B12	—		
B13	21 (0.83)		

-MEMO-

PROPELLERS

PROPELLER SPECIFICATIONS

PROPELLER TYPES

Yamaha propellers are specifically designed to match the characteristics of Yamaha outboard motors.
There are some types of the propeller for the best matching due to operating condition.
Major types of propeller include:

STANDARD PROPELLER

This is designed as general purpose propellers for almost operating conditions.
A stainless steel or an aluminum propeller is available for your preference.
Stainless steel L/H rotation propellers are available for twin-engine applications.

RELIANCE SERIES PROPELLER

New polished stainless steel propellers are designed to provide for 150HP and bigger standard type engines.
These propellers are generally more aggressive than black standard stainless steel propellers, and will fit the engines under almost operating conditions.
L/H rotation propellers are available for twin-engine applications.

SALTWATER SERIES-II PROPELLER

This new breed of stainless steel props are designed exclusively for offshore fishing boats and feature highly polished, larger diameter design. The aggressive rake angle and extra cupping on the blades provide superior midrange fuel efficiency, along with excellent anti-cavitation performance.
L/H rotation propellers are available for twin-engine applications.

SALTWATER SERIES XL

New polished stainless steel propellers have designed for big offshore boats to obtain big impulsion power.
It features large diameter blade design, especially for F350 engine.
L/H rotation propellers are available for multi-engine applications.

PROPELLER SPECIFICATIONS

VMAX SERIES PROPELLER

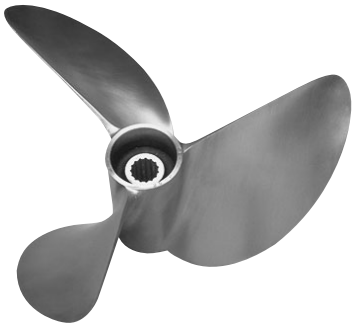
These polished stainless steel propellers are designed for a high-speed and light weight special boat with high-power engine for better performance.
These specialized propellers are generally more aggressive than the ventilated type propellers.

VENTILATION TYPE PROPELLER

These stainless steel propellers with slits for exhaust gas induction offer more cup for best acceleration, more bow lift, and improved top end performance.
It allows higher transom mounting such as bass boats, yet does not increase steering torque.

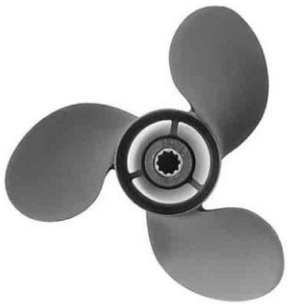
HIGH PERFORMANCE PROPELLER

The progressive pitch design, highly cupped blades, and special small hub propellers for high-performance runabout boats.
The through-hub exhaust system allows the exhaust gas to outlet the leading edge of each blade for enhanced acceleration.



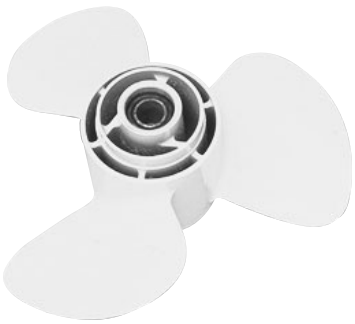
WEEDLESS PROPELLER

This is designed for use in shallow water.
It eliminates weed buildup around the propeller hub.



DUAL THRUST PROPELLER

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.



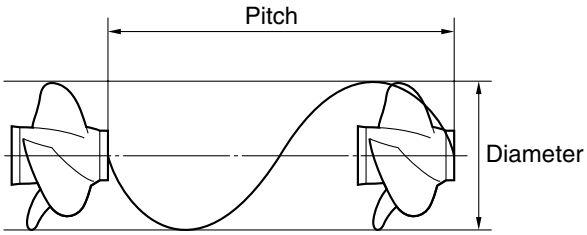
PROPELLER SPECIFICATIONS

PROPELLER IDENTIFICATION

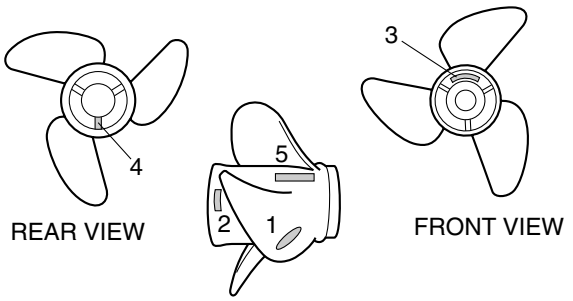
The propeller identification of the size is indicated as follows.

Propeller identification	=	Diameter (inch)	X	Pitch (inch)	–	Mark

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

NOTE:

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

Yamaha outboard motors, on the model package, are fitted with propellers chosen to perform well over a range of applications, but there may be 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.

2008 PROPELLER APPLICATIONS

2-20HP

Global Model	US & Canada Model	Diameter (in.)	Pitch (in.)	Mark	Material	Part number	Remarks
2C		7 1/4	4	A	Plastic	6A1-45943-00	Pin type
		7 1/4	4 1/2	A	Aluminum	646-45944-01-EL	Pin type
		7 1/4	5 1/2	A	Aluminum	646-45942-01-EL	
3A F2A, F2.5A	F2.5	7 1/4	5	BS	Aluminum	6L5-45949-00-EL	
		7 1/4	5 1/2	BS	Aluminum	6L5-45952-00-EL	
		7 1/4	6	BS	Aluminum	6L5-45943-00-EL	
		7 1/4	7 1/4	BS	Aluminum	6L5-45945-00-EL	
		7 1/4	8 1/4	BS	Aluminum	6L5-45947-00-EL	
4AC 5C, 5CS F4A	F4	7 1/2	6 1/2	BA	Aluminum	6E0-45949-00-EL	
		7 1/4	7	BA	Aluminum	6E0-45943-01-EL	
		7 1/4	8	BA	Aluminum	6E0-45941-01-EL	
E8D, EK8D		7 1/4	5	C	Aluminum	655-45949-00-EL	
		9	5 3/4	C	Aluminum	655-45947-01-EL	
		9	6 1/2	C	Aluminum	655-45945-00-EL	
		9	7	C	Aluminum	647-45943-00-EL	
		9	7 1/2	C	Aluminum	655-45943-00-EL	
		9	9	C	Aluminum	647-45947-00-EL	
		9 1/4	9 1/4	C	Aluminum	647-45941-00-EL	
6C, 8C F6A, F8C F9.9F	8 F6A/F6, F8C/F8 F9.9F/F9.9	9	5	N	Aluminum	6G1-W4592-00-EL	Dual thrust
		8 1/2	6 1/2	N	Aluminum	6G1-45947-00-EL	
		9	7	N	Aluminum	6G1-W4591-01-EL	Dual thrust
		8 1/2	7 1/2	N	Aluminum	6G1-45943-00-EL	
		8 1/2	8	N	Aluminum	6G1-45952-00-EL	
		8 1/2	8 1/2	N	Aluminum	6G1-45941-00-EL	
		8 1/2	9 1/4	N	Aluminum	6G1-45954-00-EL	New
FT8D FT9.9D FT9.9G	T8D/T8 T9.9-2 T9.9G/T9.9	11 3/4	5 3/4	R	Aluminum	69G-45941-00-EL	
		11 3/4	7	R	Aluminum	69G-45943-00-EL	Dual thrust (New)
		11 3/4	8 1/4	R	Aluminum	6G8-45947-00-EL	Dual thrust
		11 3/4	9 1/4	R	Plastic	6G8-45943-00	
		11 3/4	11	R	Plastic	6G8-45941-00	
		11 3/4	12 1/4	R	Plastic	6G8-45945-00	
9.9F, 15F E9.9D, E15D EK9.9J, EK15P EK9.9D, EK15D F9.9C, F15A, F15B	9.9, 15 F9.9-2	9 1/2	6 1/2	J	Aluminum	683-45949-00-EL	
		9 3/4	6 1/2	J	Aluminum	683-W4592-02-EL	Dual thrust
		9 1/4	8	J	Aluminum	63V-45947-00-EL	
		9 3/4	8	J	Aluminum	683-W4591-02-EL	Dual thrust
		9 1/4	9	J	Aluminum	63V-45945-00-EL	
		9 1/4	9 3/4	J	Aluminum	683-45952-00-EL	
		9 1/4	10	J	Aluminum	63V-45952-00-EL	
		9 1/4	10 1/2	J	Aluminum	683-45943-00-EL	
		9 1/4	11	J	Aluminum	63V-45943-00-EL	
		9 1/4	12	J	Aluminum	683-45941-00-EL	
F13.5B, F15C, F20B	F15C/F15, F20	9 1/4	8	J	Aluminum	63V-45947-00-EL	
		9 1/4	9	J1	Aluminum	63V-45945-10-EL	
		9 1/4	10	J1	Aluminum	63V-45952-10-EL	
		9 1/4	11	J1	Aluminum	63V-45943-10-EL	
		9 1/4	12	J1	Aluminum	63V-45941-10-EL	

2008 PROPELLER APPLICATIONS

20-30HP

Global Model	US & Canada Model	Diameter (in.)	Pitch (in.)	Mark	Material	Part number	Remarks
20D, 25N 25B, E25B, 25X, 30H, E30H EK25B, EK25C 30D F20A, F25A F25C	20, 25 F25	9 7/8	8	F	Aluminum	664-45943-01-EL	
		10 5/8	8 1/4	F	Aluminum	6J8-W4591-00-EL	Dual thrust
		9 7/8	9	F	Aluminum	664-45941-01-EL	
		9 7/8	10	F	Aluminum	62C-45941-00-EL	
		9 7/8	10 1/2	F	Aluminum	664-45945-00-EL	
		9 7/8	11 1/4	F	Aluminum	664-45947-01-EL	
		9 7/8	12	F	Aluminum	664-45954-01-EL	
		9 7/8	13	F	Aluminum	664-45949-02-EL	
		9 7/8	14	F	Aluminum	664-45952-00-EL	
		9 1/8	12	F	S-Steel	664-45972-00-98	Weed less
		9 1/8	13	F	S-Steel	664-45970-00-98	Weed less

30-60HP & FT25 (T25)

Global Model	US & Canada Model	Diameter (in.)	Pitch (in.)	Mark	Material	Part number	Remarks
FT25B 40V, 40Y, 50H 40J, E40J, EK40J 40X, E40X F30A, F40B F50D E48C, E55C, 55B F40D, F50F, F60C	T25 50 F30, F40B/F40 F50, F60	12 1/4	8	G	Aluminum	63D-45941-00-EL	
		12 1/4	9	G	Aluminum	68U-45941-00-EL	Dual thrust
		12 1/4	9	G	Aluminum	663-45956-01-EL	
		11 3/4	10	G	Aluminum	663-45954-01-EL	
		11 5/8	11	G	Aluminum	69W-45947-00-EL	
		11 5/8	11	G	Aluminum	69W-45A47-00	With alumite treatment (New)
		10 5/8	12	G	Aluminum	6H5-45952-00-EL	
		11 3/8	12	G	Aluminum	69W-45952-00-EL	
		11 3/8	12	G	Aluminum	69W-45A52-00	With alumite treatment (New)
		10 3/8	13	G	Aluminum	6H5-45945-00-EL	
		11 1/8	13	G	Aluminum	69W-45945-00-EL	
		11 1/8	13	G	Aluminum	69W-45945-00-EL	
		11 1/8	13	G	Aluminum	69W-45A45-00	With alumite treatment (New)
		10 1/4	14	G	Aluminum	6H5-45958-00-EL	
		11 1/4	14	G	Aluminum	69W-45958-00-EL	
		10	15	G	Aluminum	6H5-45943-00-EL	
		11	15	G	Aluminum	69W-45943-00-EL	
		10 3/4	16	G	Aluminum	663-45949-01-EL	
		10 3/4	17	G	Aluminum	663-45941-01-EL	
		12	11	G	S-Steel	663-45972-60-98	
		12	12	G	S-Steel	663-45970-60-98	
		11 1/2	13	G	S-Steel	663-45974-60-98	
		11 1/4	14	G	S-Steel	697-45970-00-98	
		10 1/4	15	G	S-Steel	663-45976-00-98	
		10 1/4	16	G	S-Steel	663-45978-00-98	
E40G, EK40G		11 3/4	7 1/2	H	Aluminum	676-45956-61-EL	Pin type
		11 3/4	8 3/4	H	Aluminum	676-45947-62-EL	
		11 3/4	10	H	Aluminum	676-45945-62-EL	
		11 1/2	11	H	Aluminum	676-45941-62-EL	
		11 1/2	12	H	Aluminum	676-45943-62-EL	
		11 1/2	13	H	Aluminum	676-45952-62-EL	
		11 1/2	13 1/2	H	Aluminum	676-45949-62-EL	

2008 PROPELLER APPLICATIONS

60-140HP, 55D & FT50 (T50)

Global Model	US & Canada Model	Diameter (in.)	Pitch (in.)	Mark	Material	Part number	Remarks
60F, 70B E60H 55D, E60J, E65A 115C, 130B FT50G, FT60D F75B, F80B, F90B, F100D F115A 75A, E75B, 85A 75C, 90A E115A, 115B, 140B FT50C F75C, F95A, F100B	70 115 T50, T60 F75, F90 F115 90	14	11	K	Aluminum	6E5-45954-00-EL	
		14	11	K	Aluminum	68S-45941-00-EL	Dual thrust
		13 5/8	13	K	Aluminum	6E5-45949-00-EL	
		13 5/8	14	K	Aluminum	6E5-45958-00-EL	New
		13 1/2	15	K	Aluminum	6E5-45947-00-EL	
		13 1/4	17	K	Aluminum	6E5-45945-01-EL	
		13	19	K	Aluminum	6E5-45941-00-EL	
		12 5/8	21	K	Aluminum	6E5-45943-00-EL	
		13	23	K	Aluminum	6E5-45952-00-EL	
		13	25	K	Aluminum	6E5-45956-00-EL	
		13 1/2	14	K	S-Steel	688-45932-60-98	
		13 1/2	16	K	S-Steel	688-45978-60-98	
		13	17	K	S-Steel	688-45930-02-98	
		13	19	K	S-Steel	688-45970-03-98	
		13	21	K	S-Steel	688-45972-02-98	
		13	23	K	S-Steel	688-45974-02-98	
		13	25	K	S-Steel	688-45976-01-98	
FL115A	LF115	13	17	KL	S-Steel	6L6-45930-01-98	
		13	19	KL	S-Steel	6L6-45970-00-98	
		13	21	KL	S-Steel	6L6-45972-00-98	
115C, 130B F115A	115 F115	13 1/2	19	K	S-Steel	62A-45974-10-00	Ventilation type
		13 1/2	21	K	S-Steel	62A-45970-10-00	
		13 1/2	23	K	S-Steel	62A-45972-10-00	
60 to 225 F75 to F225	60 to 225 F75 to F225	14	20	P	S-Steel	6E5-45970-10-00	High performance series *Propeller hub exhaust
		14	22	P	S-Steel	6E5-45976-10-00	
		14	24	P	S-Steel	6E5-45972-10-00	
		14	26	P	S-Steel	6E5-45978-10-00	
		14	28	P	S-Steel	6E5-45974-10-00	

150-300HP

Global Model	US & Canada Model	Diameter (in.)	Pitch (in.)	Mark	Material	Part number	Remarks
150A, 175A, 200A 150F, 175D, 200F Z150P, Z175G, Z200N F150A	150 Z150, Z175, Z200 F150	15 1/4	15	M	Aluminum	6G5-45941-01-98	
		14 5/8	16	M	Aluminum	6G5-45952-00-98	
		14 1/2	17	M	Aluminum	6G5-45947-02-98	
		14	19	M	Aluminum	6G5-45945-01-98	
		13 3/4	21	M	Aluminum	6G5-45943-01-98	
		13 1/2	23	M	Aluminum	6G5-45949-00-98	
L150A, L200A L150F, L200F LZ200 FL150A	LZ200 LF150	14 1/2	17	ML	Aluminum	6K1-45947-00-98	
		14	19	ML	Aluminum	6K1-45945-00-98	
150A, 175A, 200A 150F, 175D, 200F, 225D Z150P, Z175G, Z200N 250G F150A F200A, F200B, F225A F200C, F225B, F225C, F250A	150 Z150, Z175, Z200 F150 F200, F225 F225L, F250	15 3/4	13	M	S-Steel	6G5-45932-00-98	
		15 1/4	15	M	S-Steel	6G5-45970-02-98	
		13 3/4	17	M2	S-Steel	6G5-45978-03-98	
		13 3/4	19	M2	S-Steel	6G5-45974-03-98	
		13 3/4	21	M	S-Steel	6G5-45972-02-98	
		13 3/8	23	M	S-Steel	6G5-45976-01-98	
		13 3/8	25	M	S-Steel	6G5-45930-00-98	

2008 PROPELLER APPLICATIONS

150-300HP

Global Model	US & Canada Model	Diameter (in.)	Pitch (in.)	Mark	Material	Part number	Remarks
L150A, L200A L150F, L200F L250G LZ200N FL150A FL200A, FL200B, FL225A FL200C, FL225B, FL250A	LZ200 LF150 LF200, LF225 LF250	15 1/4	15	ML	S-Steel	6K1-45970-01-98	
		13 3/4	17	ML1	S-Steel	6K1-45978-02-98	
		13 3/4	19	ML1	S-Steel	6K1-45974-02-98	
		13 3/4	21	ML	S-Steel	6K1-45972-01-98	
		13 3/8	23	ML	S-Steel	6K1-45976-00-98	
150A, 175A, 200A 150F, 175D, 200F, 225D Z150P, Z175G, Z200N 250G Z300A F150A F200A, F200B, F225A F200C, F225B, F225C, F250A	150 Z150, Z175, Z200 Z300 F150 F200, F225 F225L, F250	14 1/2	15	M	S-Steel	68F-45970-00-00	Reliance series *15-pitch is not recommended to F150
		14 1/4	17	M	S-Steel	68F-45972-00-00	
		13 3/4	19	M	S-Steel	68F-45974-00-00	
		13 3/4	21	M	S-Steel	68F-45976-00-00	
L150A, L200A L150F, L200F L250G LZ200N LZ300A FL150A FL200A, FL200B, FL225A FL200C, FL225B, FL250A	LZ200 LZ300 LF150 LF200, LF225 LF250	14 1/4	17	ML	S-Steel	68G-45972-00-00	Reliance series
		13 3/4	19	ML	S-Steel	68G-45974-00-00	
		13 3/4	21	ML	S-Steel	68G-45976-00-00	
250G F200A, F200B, F225A F200C, F225B, F225C, F250A	F200, F225 F225L, F250	15	17	T	S-Steel	61A-45978-00-98	
		14 1/2	19	T	S-Steel	61A-45974-00-98	
		14 1/2	21	T	S-Steel	61A-45972-00-98	
L250G FL200A, FL200B, FL225A FL200C, FL225B, FL250A	LF200, LF225 LF250	15	17	TL	S-Steel	61B-45978-00-98	
		14 1/2	19	TL	S-Steel	61B-45974-00-98	
		14 1/2	21	TL	S-Steel	61B-45972-00-98	
250G Z300A F200A, F200B, F225A F200C, F225B, F225C, F250A	Z300 F200, F225 F225L, F250	15 1/4	15	M	S-Steel	6R4-45976-A0-00	Saltwater series
		15 1/4	17	M	S-Steel	6R4-45978-A0-00	
		15 1/4	19	M	S-Steel	6R4-45970-A1-00	
		14 7/8	21	M	S-Steel	6R4-45972-A0-00	
		14 1/2	23	M	S-Steel	6R4-45974-A0-00	
L250G LZ300A FL200A, FL200B, FL225A FL200C, FL225B, FL250A	LZ300 LF200, LF225 LF250	15 1/4	15	ML	S-Steel	6R1-45976-A0-00	Saltwater series
		15 1/4	17	ML	S-Steel	6R1-45978-A0-00	
		15 1/4	19	ML	S-Steel	6R1-45970-A1-00	
		14 7/8	21	ML	S-Steel	6R1-45972-A0-00	
		14 1/2	23	ML	S-Steel	6R1-45974-A0-00	

2008 PROPELLER APPLICATIONS

150-300HP

Global Model	US & Canada Model	Diameter (in.)	Pitch (in.)	Mark	Material	Part number	Remarks
250G Z300A F200A, F200B, F225A F200C, F225B, F225C, F250A	Z300 F200, F225 F225L, F250	15 3/4	15	T	S-Steel	6D0-45976-00-00	Saltwater series-Ⅱ
		15 1/2	17	T	S-Steel	6D0-45978-00-00	
		15 1/4	19	T	S-Steel	6D0-45970-00-00	
		15	21	T	S-Steel	6D0-45972-00-00	
L250G LZ300A FL200A, FL200B, FL225A FL200C, FL225B, FL250A	LZ300 LF200, LF225 LF250	15 3/4	15	TL	S-Steel	6D1-45976-00-00	Saltwater series-Ⅱ
		15 1/2	17	TL	S-Steel	6D1-45978-00-00	
		15 1/4	19	TL	S-Steel	6D1-45970-00-00	
		15	21	TL	S-Steel	6D1-45972-00-00	
150G, 200G Z150Q, Z175H, Z200P Z200R F150A	V150 VZ150, VZ175, VZ200 VZ200R F150	14 1/2	21	M1	S-Steel	6J9-45976-10-00	Ventilation type
150G, 200G Z150Q, Z175H, Z200P Z200R, Z225H F150A, F225C	V150 VZ150, VZ175, VZ200 VZ200R, VZ225H F150, F225L	14 1/2	23	M2	S-Steel	66K-45974-B0-00	Ventilation type
		14 1/2	25	M2	S-Steel	66K-45972-B0-00	
		14 1/2	27	M1	S-Steel	66K-45970-B0-00	
Z200R, Z225H, Z250F Z300B F225C	VZ200R, VZ225H, VZ250F, VZ300B F225L	14 1/2	23	T1	S-Steel	69L-45974-20-00	VMAX series
		14 3/4	25	T1	S-Steel	69L-45972-20-00	
		15 1/8	27	T1	S-Steel	69L-45970-20-00	
		14 3/4	29	T1	S-Steel	69L-45976-20-00	

350HP

Global Model	US & Canada Model	Diameter (in.)	Pitch (in.)	Mark	Material	Part number	Remarks
F350A	F350	16 1/4	17	X	S-Steel	6AW-45970-00	Saltwater series XL (New) *23- and 25-pitch will be released soon.
		16 1/4	19	X	S-Steel	6AW-45972-00	
		15 1/2	21	X	S-Steel	6AW-45974-00	
		15 1/4	23	X	S-Steel	6AW-45976-00	
		15 1/4	25	X	S-Steel	6AW-45978-00	
FL350A	LF350	16 1/4	17	XL	S-Steel	6AX-45970-00	Saltwater series XL (New) *23- and 25-pitch will be released soon.
		16 1/4	19	XL	S-Steel	6AX-45972-00	
		15 1/2	21	XL	S-Steel	6AX-45974-00	
		15 1/4	23	XL	S-Steel	6AX-45976-00	
		15 1/4	25	XL	S-Steel	6AX-45978-00	

For the propeller color, the final 2-digit of part number shows as follows;
EL : White
98 : Black
00 : Material original color

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	US & Canada Model	WOT range (RPM)
2C		4,000 – 5,000
3A		4,500 – 5,500
4AC, 5C, 5CS		4,500 – 5,500
6C	6	4,000 – 5,000
8C	8	4,500 – 5,500
E8D, EK8D		4,500 – 5,500
9.9F, 15F, E9.9D, E15D, EK9.9D, EK15D, EK9.9J, EK15P	9.9, 15	4,500 – 5,500
20D, 25N	20, 25	5,000 – 6,000
30D		4,500 – 5,500
E25B, 25B, E30H, 30H, 25X, EK25B, EK25C		4,500 – 5,500
EK40G, E40G, EK40J, E40J		4,500 – 5,500
E40X, 40X		4,500 – 5,500
40V, 50H, 40Y	50	4,500 – 5,500
E48C, E55C, 55B		4,500 – 5,500
E60H, 60F		4,500 – 5,500
70B	70	5,000 – 6,000
55D, E60J, E65A, 75A, E75B, 75C, 85A, 90A	90	4,500 – 5,500
E115A, 115B, 115C, 140B	115	4,500 – 5,500
130B		5,000 – 6,000
150A, 175A, 200A		4,500 – 5,500
150F, 150G, 175D, 200F	150, V150	4,500 – 5,500
Z150P, Z175G, Z200N, Z150Q, Z175H, Z200P	Z150, Z175, VZ150, VZ175, Z200, VZ200	4,500 – 5,500
200G, 225D		5,000 – 6,000
250G		4,500 – 5,500
Z200R, Z225H, Z250F	VZ200R, VZ225H, VZ250F	5,000 – 6,000
Z300A	Z300	4,650 – 5,650
Z300B	VZ300B	4,500 – 6,000

* L/H rotation model has the same RPM as R/H model.

WOT OPERATION RANGE TABLE

4-STROKE ENGINES		
Global Model	US & Canada Model	WOT range (RPM)
F2A, F2.5A	F2.5	5,250 – 5,750
F4A	F4	4,000 – 5,000
F6A	F6A/F6	4,500 – 5,500
F8C	F8C/F8	5,000 – 6,000
F9.9C, F15A, FT9.9D, F15B	F9.9-2, T9.9-2	4,500 – 5,500
F9.9F, FT9.9G	F9.9F/F9.9, T9.9G/T9.9	5,000 – 6,000
F13.5B, F15C, F20B	F15C/F15, F20	5,000 – 6,000
F20A, F25A, FT25B, F25C	F25, T25	5,000 – 6,000
F30A, F40B	F30, F40B/F40	5,000 – 6,000
FT50C, F50D		5,000 – 6,000
F40D, F50F, FT50G, F60C, FT60D	F50, T50, F60, T60	5,000 – 6,000
F95A, F100B		5,000 – 6,000
F75B, F75C, F80B, F90B, F100D	F75, F90	5,000 – 6,000
F115A	F115	5,000 – 6,000
F150A	F150	5,000 – 6,000
F200A, F200B, F225A	F200, F225	5,000 – 6,000
F200C, F225B, F225C, F250A	F225L, F250	5,000 – 6,000
F350A	F350	5,000 – 6,000

* L/H rotation model has the same RPM as R/H model.

If the engine RPM exceeds the recommended WOT range, replace to a larger pitch propeller.
If the engine RPM does not reach the recommended WOT range, replece to a smaller pitch propeller.

CAUTION:

Do not run the engine out of WOT range, the engine could cause a damage from overload or over rev.

NOTE:

- The engine RPM at WOT operation will be usually changed 200 - 300 RPM if the pitch of propeller changed one inch. However, the change of RPM varies because of engine and/or propeller types.
- The maximum engine RPM will increase when the outboard motor is trimmed out.

-MEMO-

REMOTE CONTROLS

REMOTE CONTROL APPLICATIONS

A Yamaha outboard motor has throttle control system either “Push To Open” or “Pull To Open”.
For example, “Push To Open” means the throttle valve opens when the remote control inner cable is extended and then the throttle arm is pushed.
Most models have “Push To Open” system.
However, some following models have “Pull To Open” system.

“Pull to Open” models									
20D (20)	25B E25B	25N (25)	30D	30H E30H	40J E40J	EK40J	E40G	55B	E60H

The 10-pin connector is usually used for PTT and/or PT (Power Tilt) models.
The 7-pin connector is for manual tilt models. But, F9.9F (F9.9), FT9.9G (T9.9), F15C (F15) and F20B (F20) have the 10-pin connector.
Install the remote control box so that there is sufficient clearance between steering wheel and remote control lever operation area.

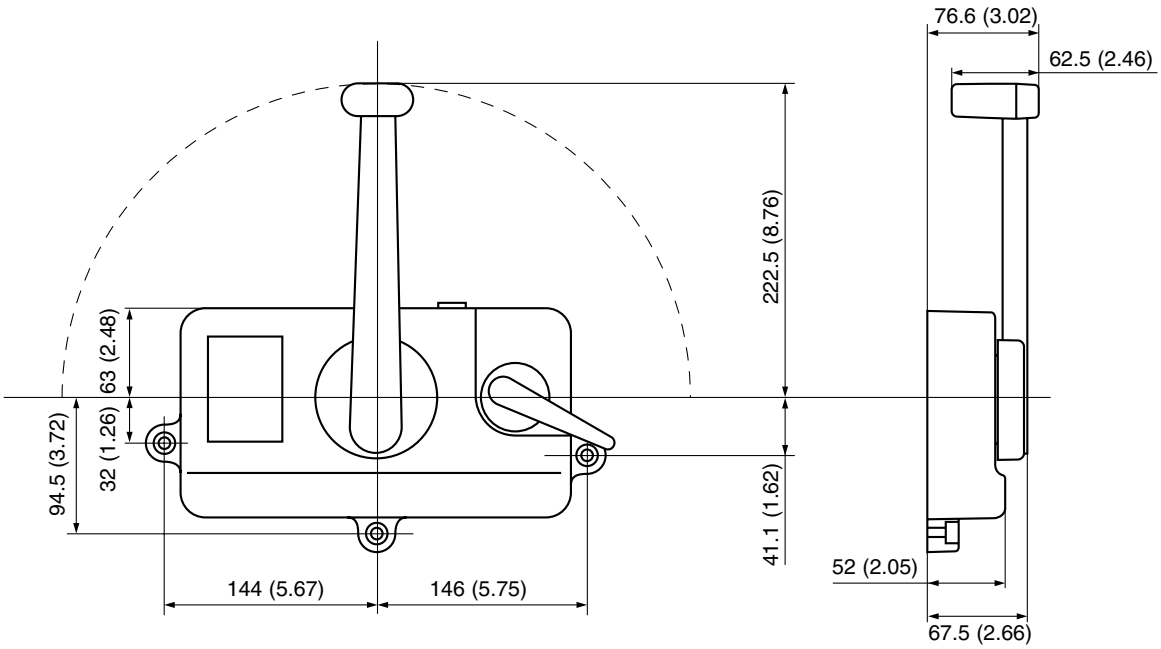
701 REMOTE CONTROL

Designed for especially for smaller models.
The attachment kit may be required to setup the remote control.

Part No.	Throttle		Lanyard stop S/W	N-lock	Mount		Remarks
	Push	Pull			R	L	
701-48101-23		1	1		1		
701-48101-51		1			1		
701-48101-E2		1	1	1	1		
701-48101-G1		1		1	1		
701-48102-23		1	1			1	
701-48102-51		1				1	
701-48102-E2		1	1	1		1	
701-48102-G1		1		1		1	
701-48130-23	1		1		1		
701-48130-E0	1		1	1	1		
701-48140-E0	1		1	1		1	

701 REMOTE CONTROL DIMENSIONS

mm (in.)



REMOTE CONTROL APPLICATIONS

703 REMOTE CONTROL

Designed for use with all electric start models.
Fitted to almost kinds of boats. Almost control functions are included in the 703 control box.

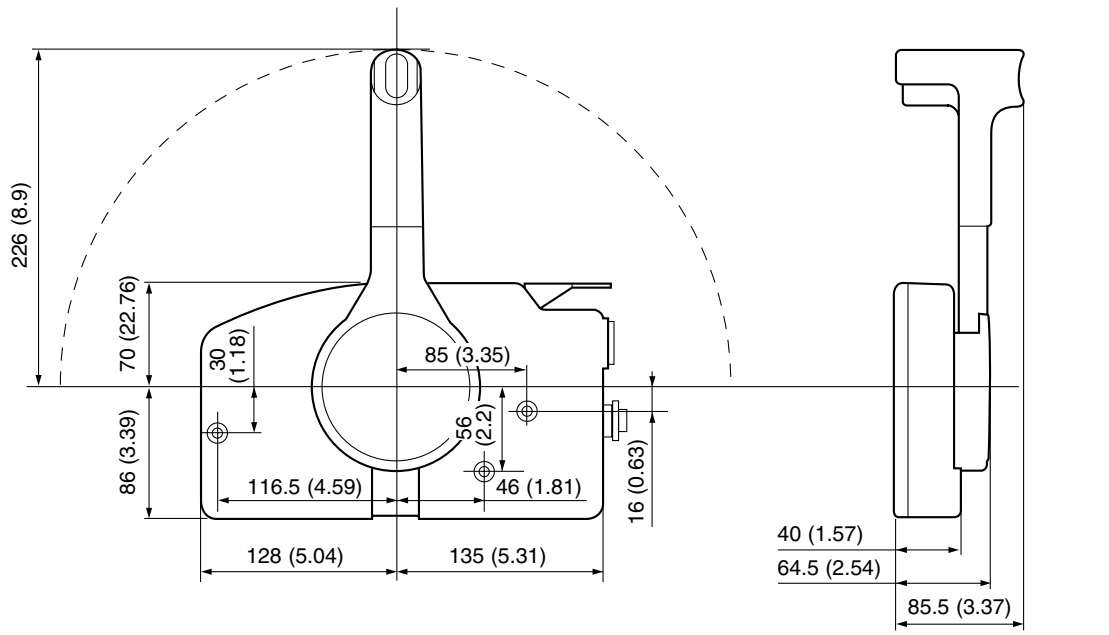
Part No.	Throttle		Choke	PT/T	Wire-harness		Mount		Remarks
	Push	Pull			7pin	10pin	R	L	
703-48201-16	1		1			1	1		
703-48201-A3	1					1	1		
703-48202-15	1		1		1		1		For Twin-application
703-48203-15	1		1		1		1		
703-48203-A3	1				1		1		For analog gauge only
703-48204-13		1	1		1			1	
703-48205-17	1		1	1		1	1		
703-48205-A5	1			1		1	1		
703-48207-17	1		1	1		1	1		
703-48207-A5	1			1		1	1		
703-48208-A4	1					1		1	For Twin-application
703-48210-16		1	1			1	1		
703-48220-15		1	1		1		1		For Twin-application
703-48230-15		1	1		1		1		For analog gauge only
703-48250-17		1	1	1		1	1		
703-48272-17		1	1	1		1	1		For additional tilt switch

NOTE:

- Throttle opening direction can be reversed.
- Control lever position can be changed to its opposite side.
- Spacer which thickness is 13 mm (0.5 in.) is included in the remote control package.
- For further information, see the instruction (P/N:703-28199-33) in the package.

703 REMOTE CONTROL DIMENSIONS

mm (in.)



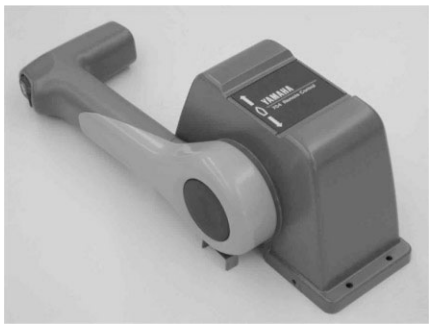
REMOTE CONTROL APPLICATIONS

704 REMOTE CONTROL

Designed for use with electric start models. Best fitted to a boat with center console.
Single lever or Twin lever is available for engine applications.
Two kinds of control box, Premium or Standard type, is selectable to match boat design, cost, etc.

Premium single lever

Standard single lever



Premium twin lever

Part No.	Throttle		PTT	Lever			Remarks
	Push	Pull		R	L	Twin	
704-48203-P1	1				1		Premium
704-48205-B1	1		1		1		Standard
704-48205-P1	1		1		1		Premium
704-48206-P1	1		1	1			Premium
704-48207-P1	1		1			1	Premium

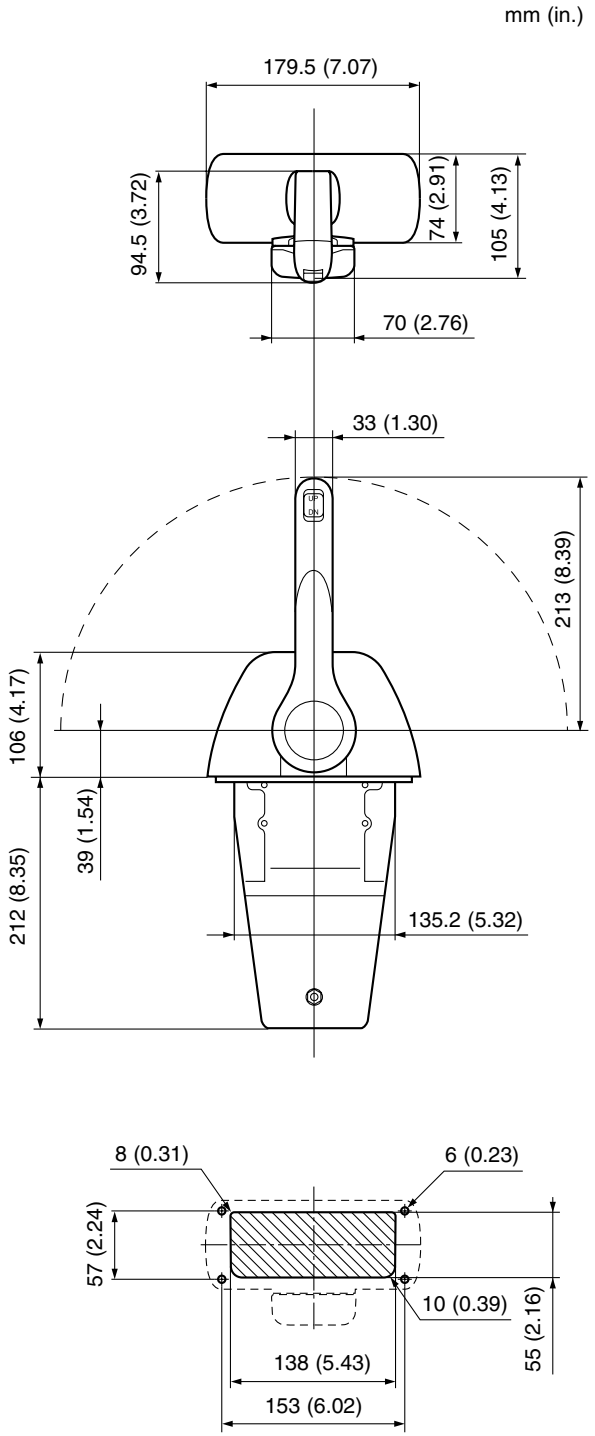
NOTE:

- 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:704-2819K-P0) in the package.

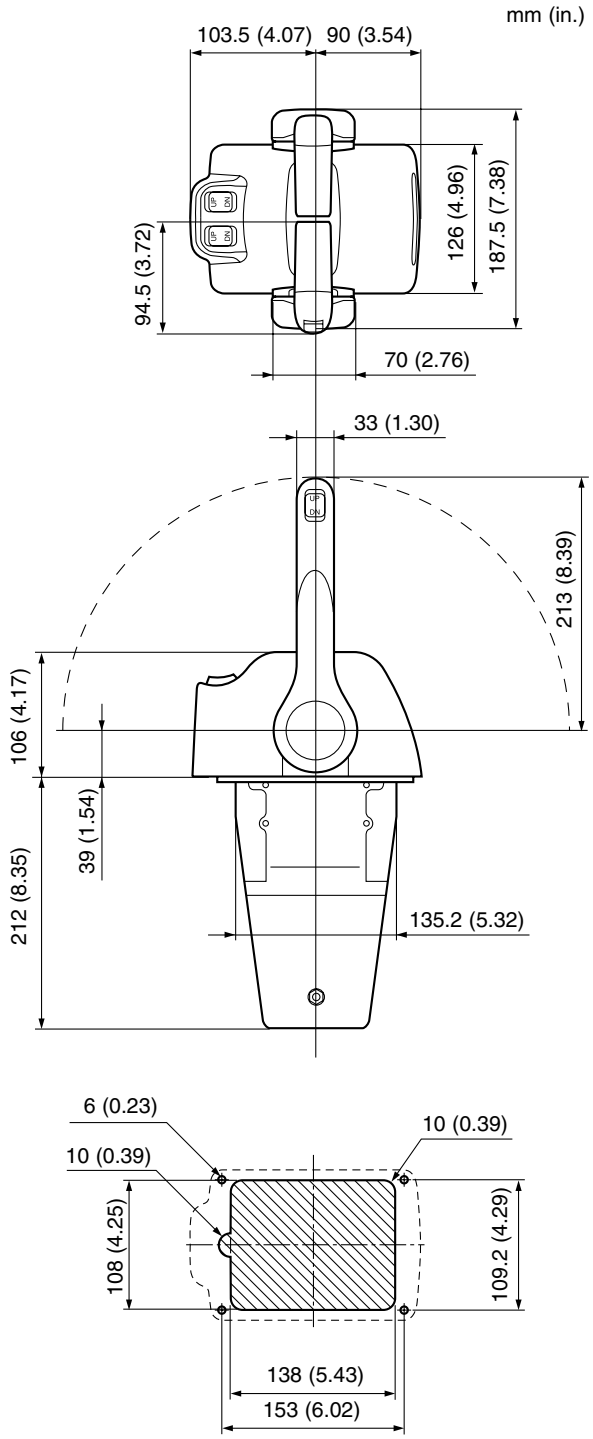
REMOTE CONTROL APPLICATIONS

704 REMOTE CONTROL DIMENSIONS

Single lever



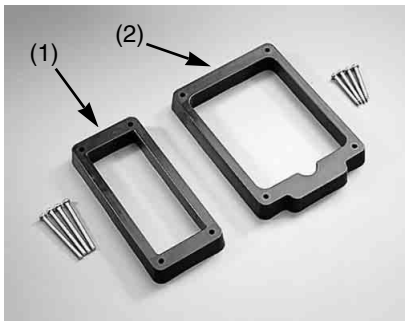
Twin lever



REMOTE CONTROL APPLICATIONS

704 REMOTE CONTROL SPACER

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



Ref. No.	Part No.	Descriptions
1	704-48293-00	For Single lever, Standard
	704-48293-20	For Single lever, Premium
2	704-48293-30	For Twin lever, Premium

6X3 REMOTE CONTROL

Designed for the electric start models. Best fitted to runabout type boats.
The mounting position can be selected from horizontal or inclined 30-degree up or down position due to boat design.

Part No.	Throttle		PTT	Mount		Remarks
	Push	Pull		R	L	
6X3-48206-01	1		1	1		With stop switch lanyard

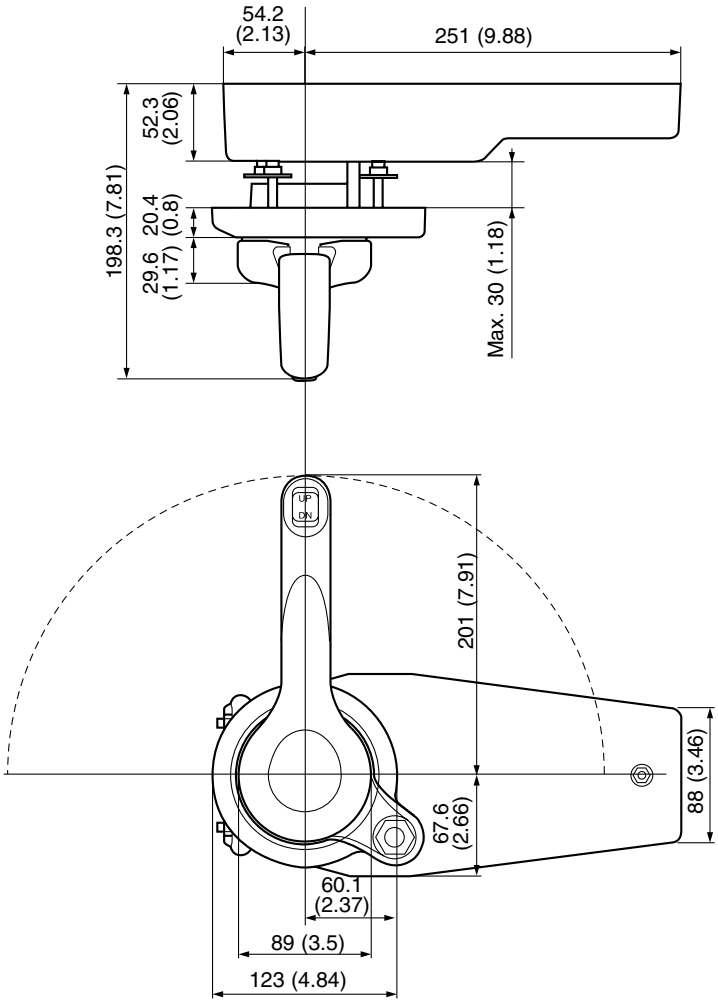
NOTE:

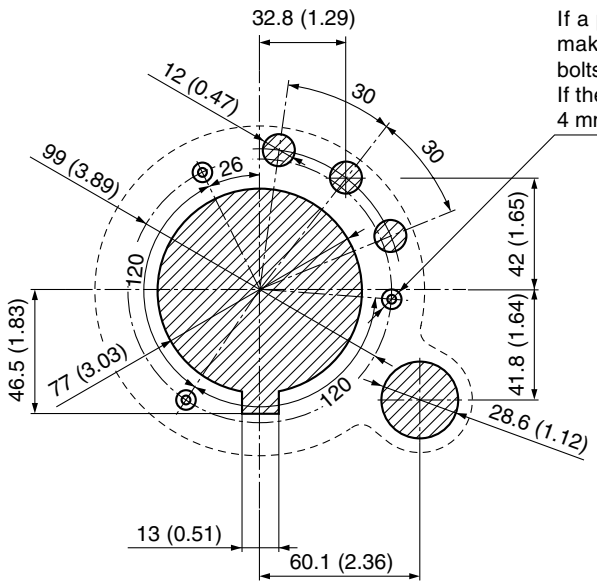
- Switch panel and extension wire-harness are required to connect to the engine.
- Throttle opening direction can be reversed.
- For further information, see the instruction (P/N:6X3-28199-Y1) in the package.

REMOTE CONTROL APPLICATIONS

6X3 REMOTE CONTROL 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 APPLICATIONS

6X5 REMOTE CONTROL (FOR US)

Unique binnacle-mount design for triple-application for F225, F250, and Z300.
Requires to combine with the genuine triple-switch panel and Digital Network Gauge System (6Y8).

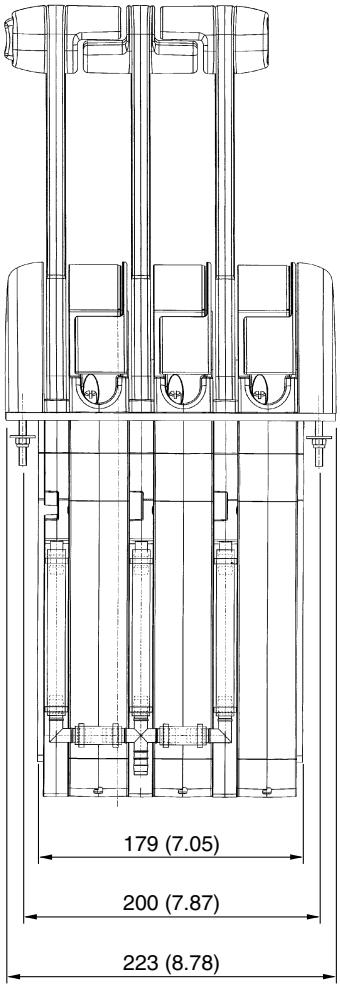
Part No.	Throttle		PTT	Mount		Remarks
	Push	Pull		R	L	
6X5-48207-01	1		1	1		

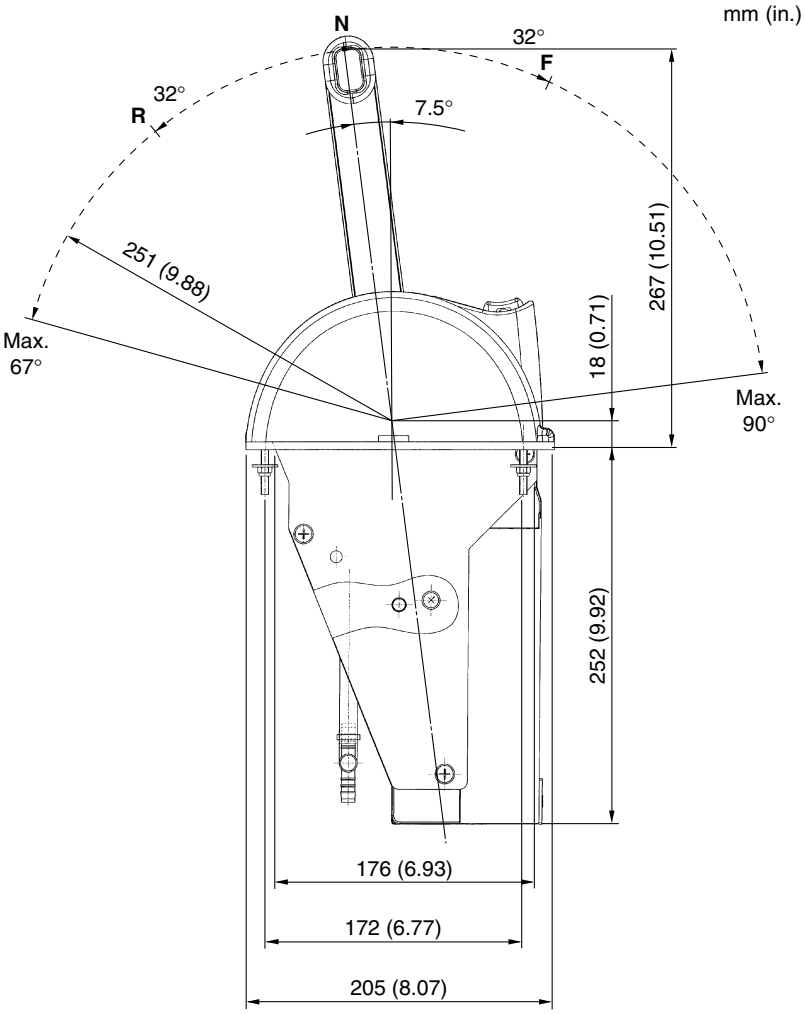
NOTE:

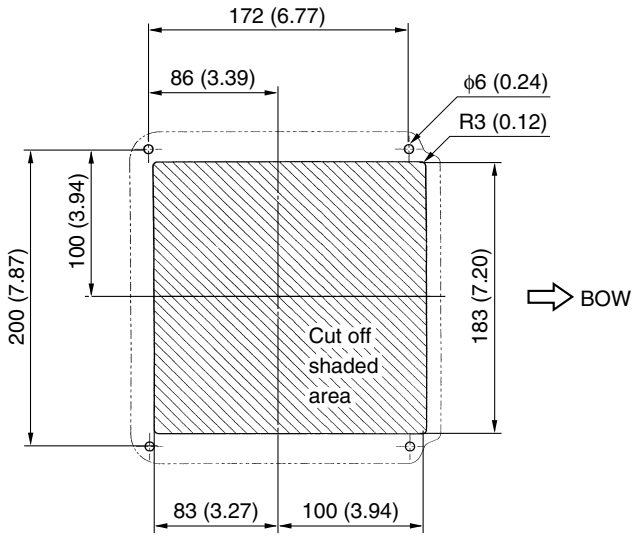
Yamaha remote control cable, Premier Series, or equivalent cable (Teleflex CC3300) is recommended for 6X5 type remote control box.
For further information, see the instruction (P/N : 6X5-28199-P0) supplied with package.

REMOTE CONTROL APPLICATIONS

6X5 REMOTE CONTROL DIMENSIONS







Template

* 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.

REMOTE CONTROL APPLICATIONS

6X6 REMOTE CONTROL (FOR F350)

Special remote control unit for F350, mechanical control cables for throttle and shift operations are not required.
Remote control operations such as throttle, shift, PTT, etc. are electrically controlled by Digital Network System.
Easier rigging and smooth remote control operation will be obtained.
Requires to combine with Digital Network Gauge (6Y8) components.

Single lever

Twin lever

Twin lever (Triple engine)

Part No.	Type code	Engine			Single station	Dual station		Remarks
		Single	Twin	Triple		Main helm	2nd helm	
6X6-48205-00	A	1			1			STD (no extension to dual-station)
6X6-48205-10	C	1			1	1		
6X6-48205-20	G	1					1	
6X6-48207-00	B		1		1			STD (no extension to dual-station)
6X6-48207-10	D		1		1	1		
6X6-48207-20	H		1				1	
6X6-48208-00	E			1	1	1		w/ cosmetic plate
6X6-48207-20	F			1	1	1		w/ ECM bracket
6X6-48207-30	K			1			1	w/ ECM bracket

NOTE:

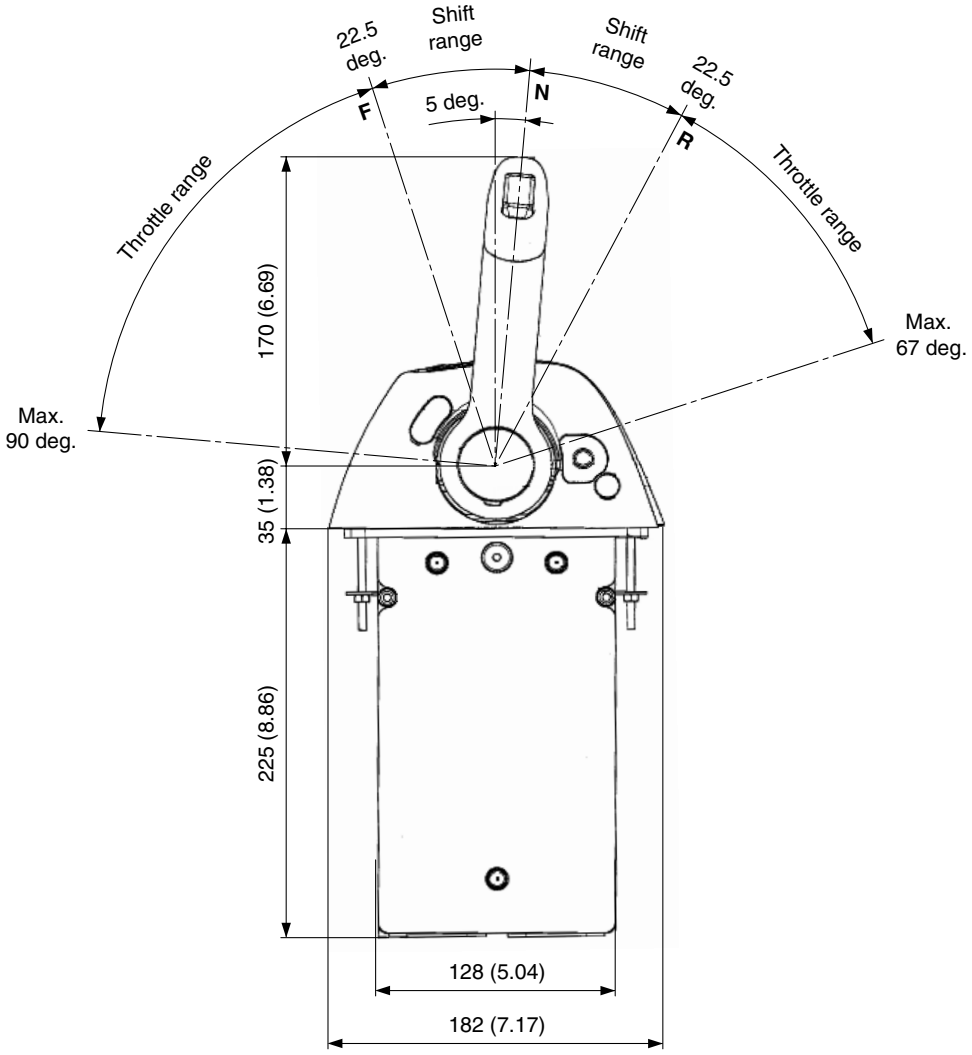
For further information, see the installation manual (P/N: 6X6-28107-P0).

REMOTE CONTROL APPLICATIONS

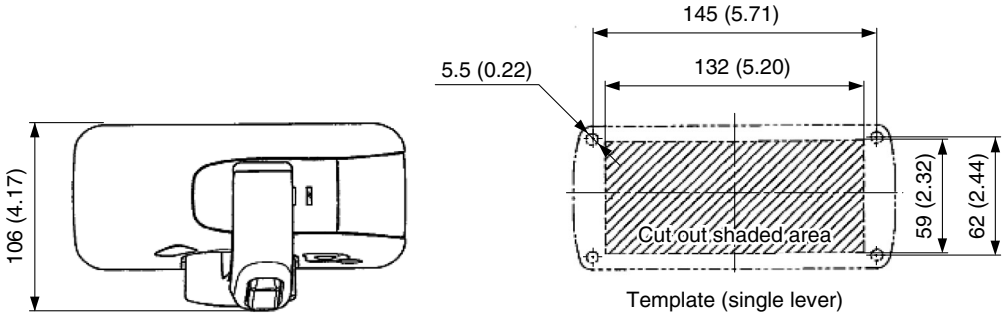
6X6 REMOTE CONTROL DIMENSIONS

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

mm (in.)



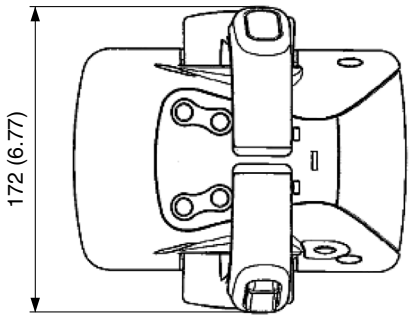
Single engine

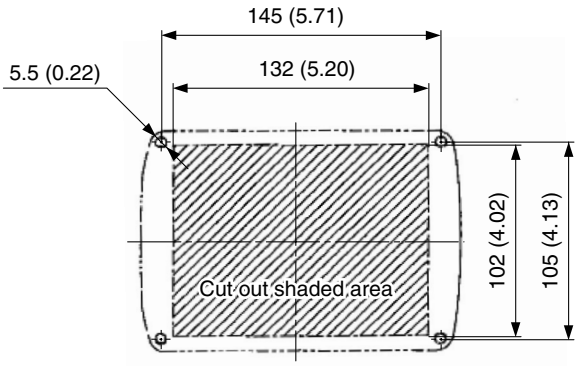


REMOTE CONTROL APPLICATIONS

Twin-engine

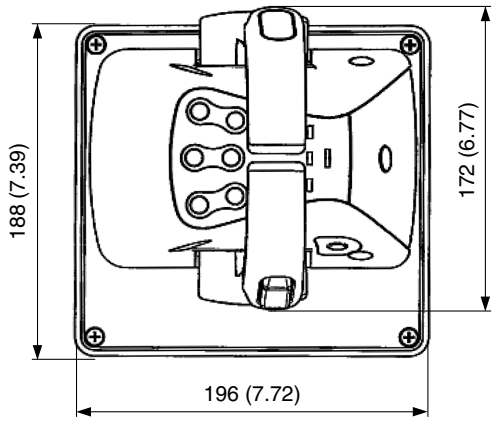
mm (in.)

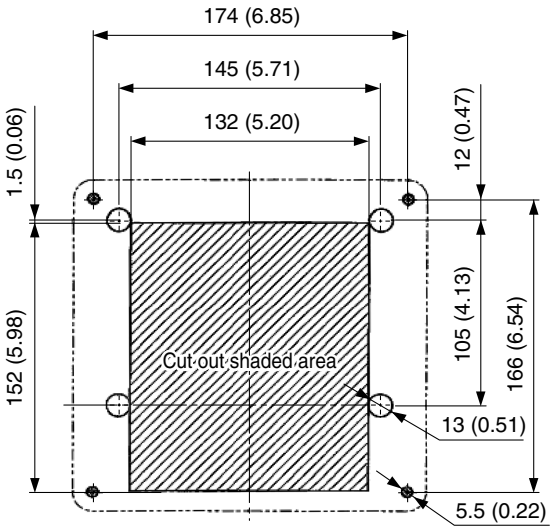




Template (twin lever)

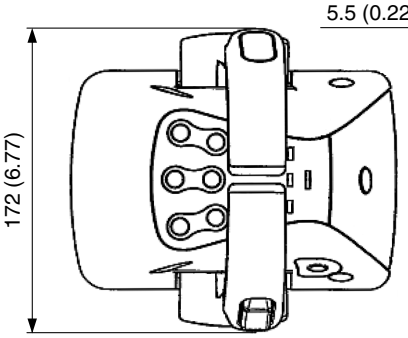
Triple-engine w/ cosmetic plate

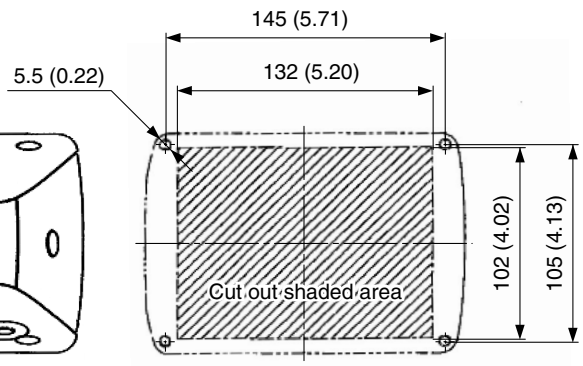




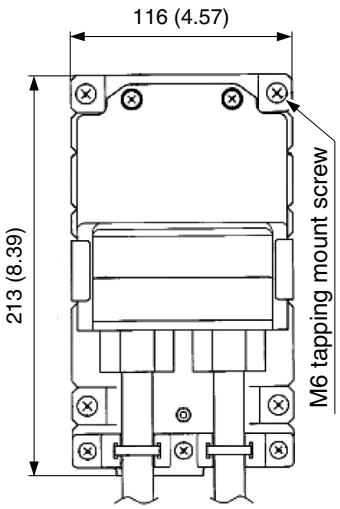
Template w/ plate (twin lever for triple-engine)

Triple-engine w/ ECM bracket





Template (same as twin engine)



Center remo-con ECM bracket

* This remote control unit will be released at the end of fall 2007.

REMOTE SWITCH APPLICATIONS

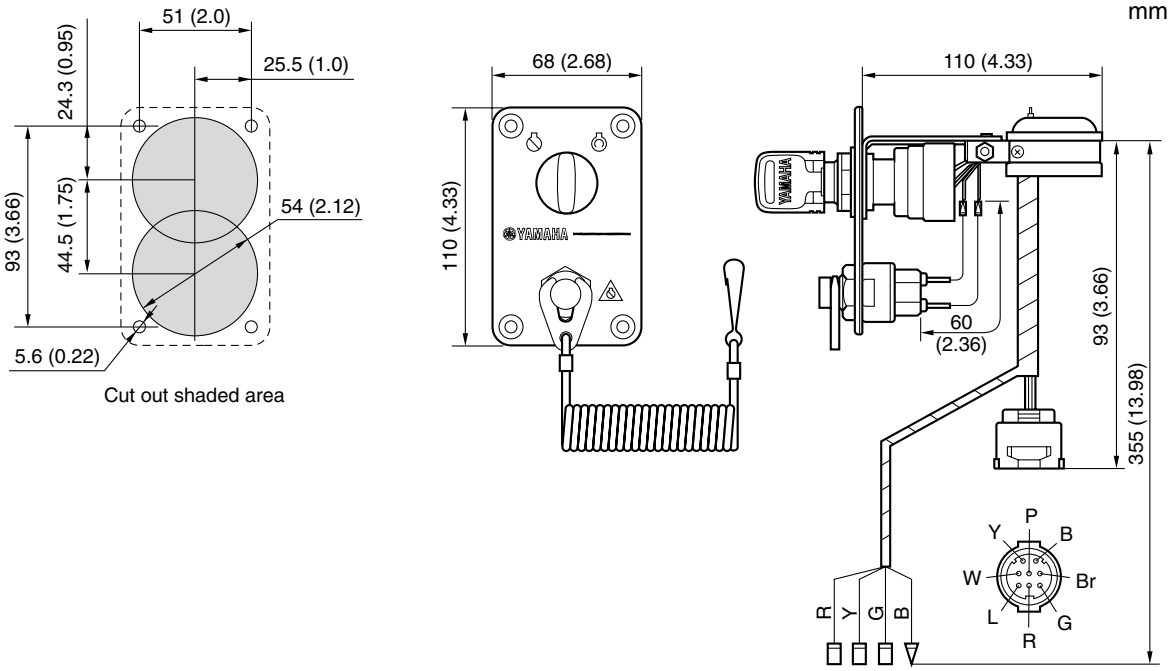
COMBINATION SWITCH PANEL (KEY AND STOP SWITCHES)

SINGLE KEY SWITCH W/ PANEL

Ref. No.	Part No.	Description
1	704-82570-08	With choke switch
	6R5-82570-05	W/o choke switch (Prime start or Digital network gauge)
2	6X6-82570-00	For F350 2nd helm (dual-station)

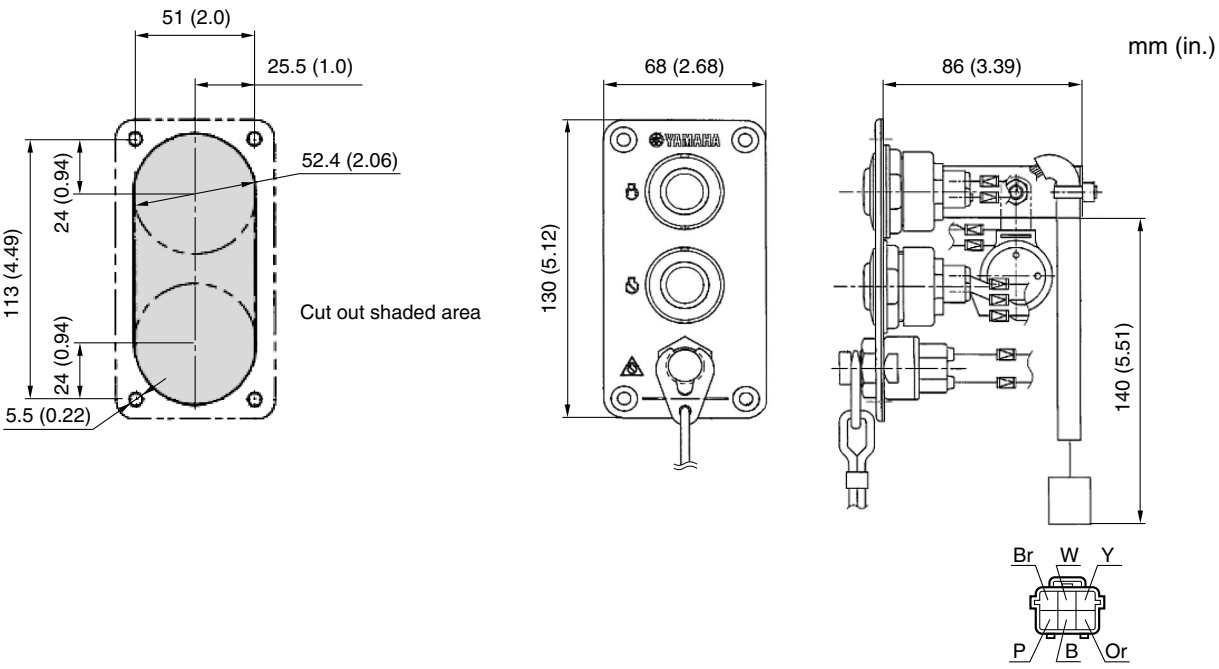
1.

mm (in.)



2.

mm (in.)



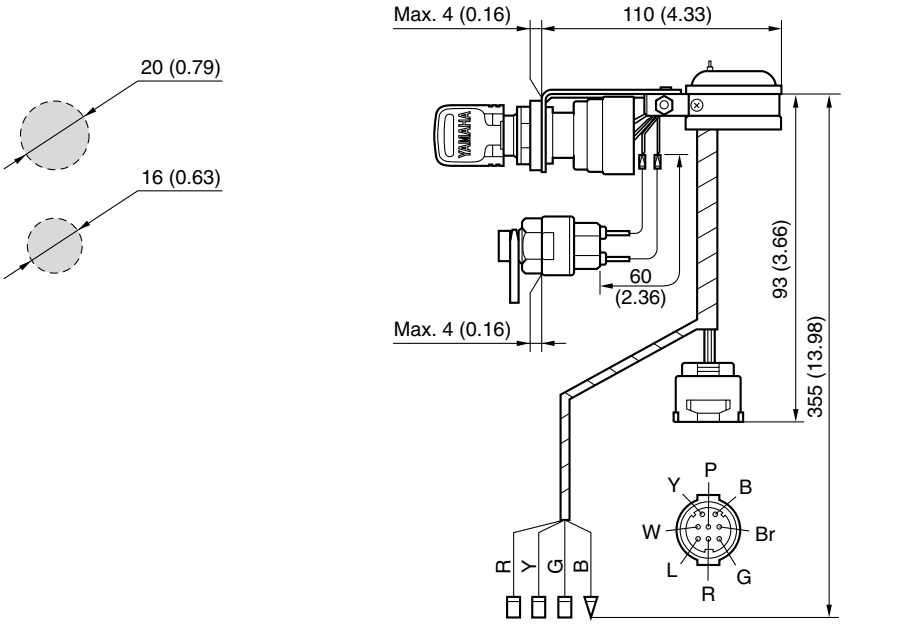
REMOTE SWITCH APPLICATIONS

SINGLE KEY SWITCH W/O PANEL

Ref. No.	Part No.	Description
1	704-8257C-00	With choke switch

1.

mm (in.)



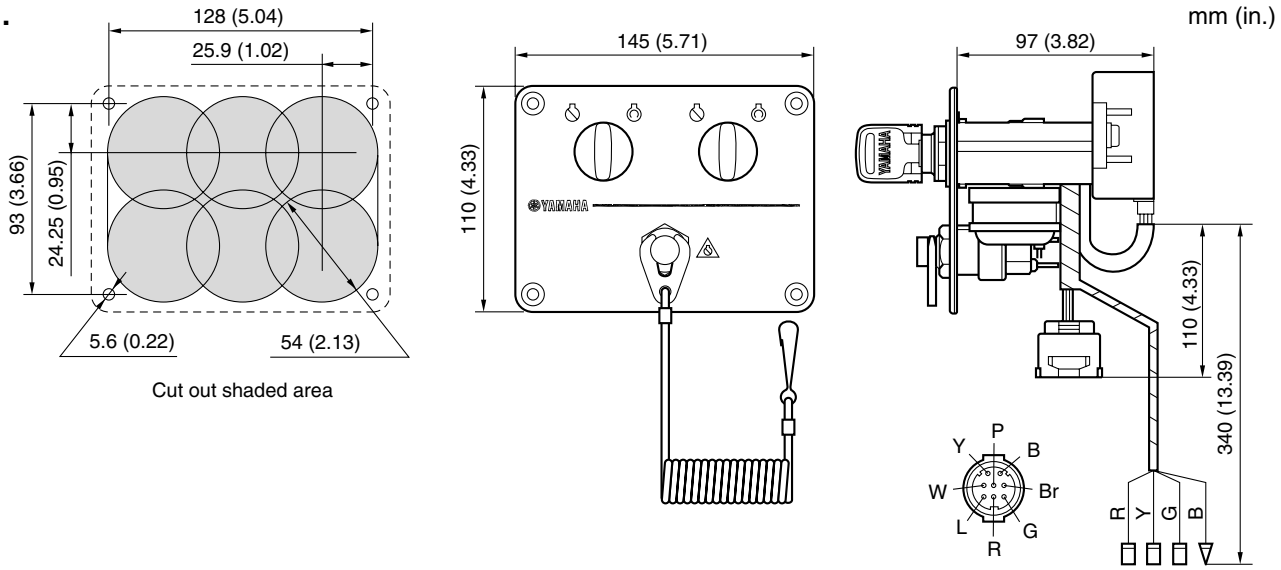
REMOTE SWITCH APPLICATIONS

TWIN KEY SWITCH

Ref. No.	Part No.	Description
1	6K1-82570-08	With choke switch
	61B-82570-03	W/o choke switch
2	6Y8-82570-02	For Digital network gauge
3	6X6-82570-10	For F350 2nd helm (dual-station)

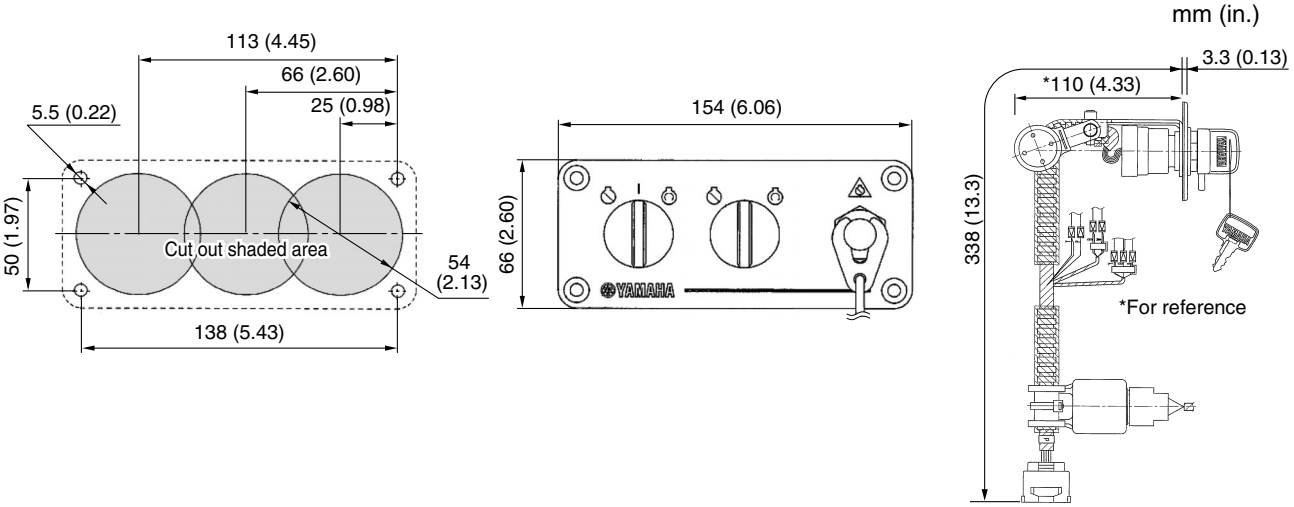
1.

mm (in.)



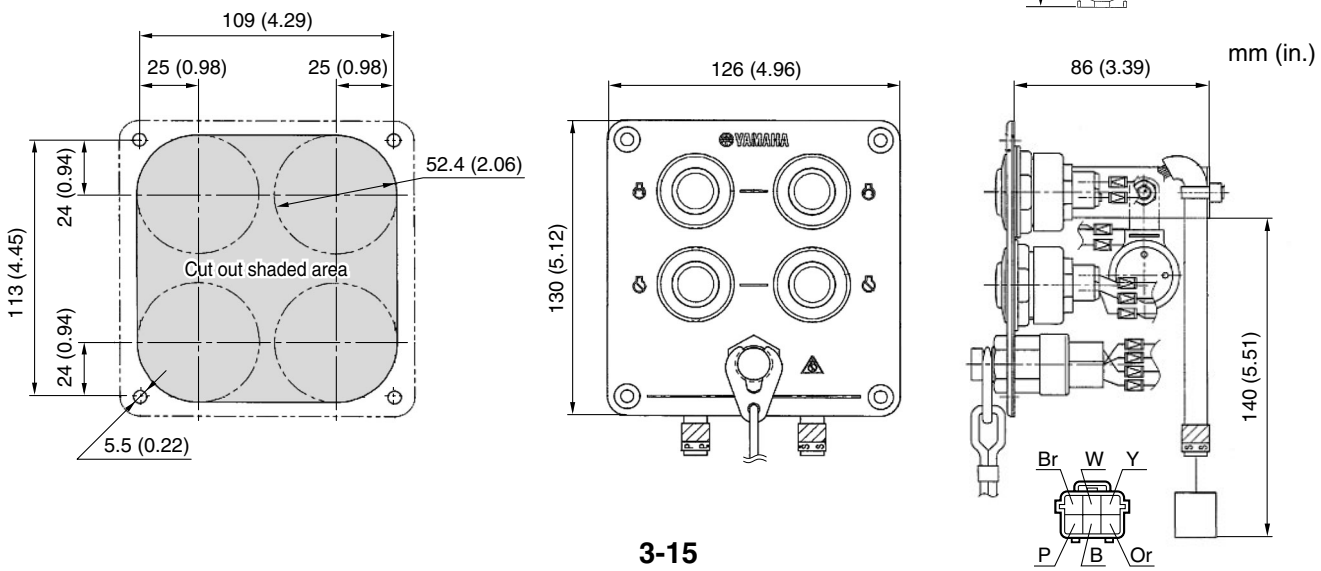
2.

mm (in.)



3.

mm (in.)



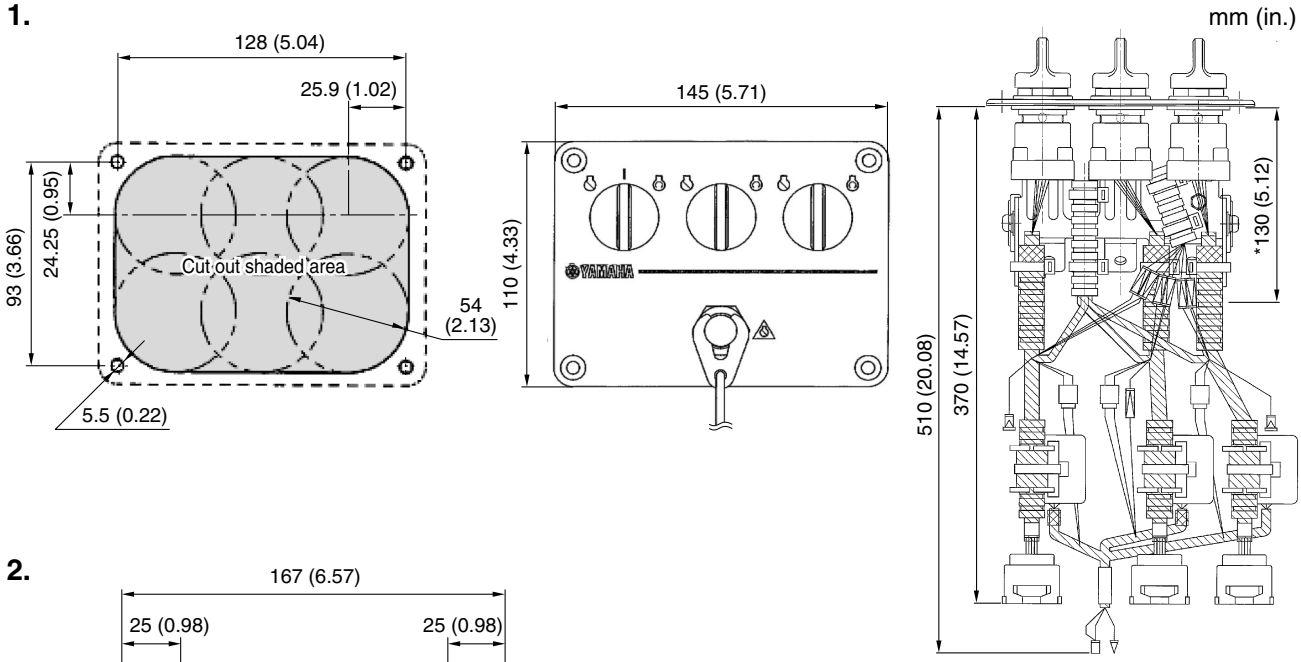
REMOTE SWITCH APPLICATIONS

TRIPLE KEY SWITCH

Ref. No.	Part No.	Description
1	6X5-82570-01	For Digital network gauge
2	6X6-82570-20	For F350 2nd helm (dual-station)

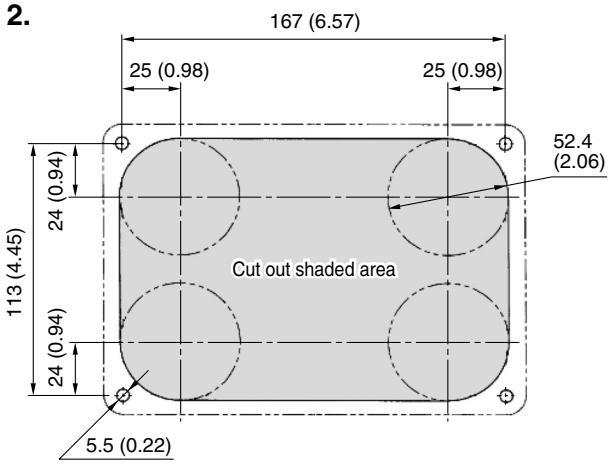
1.

mm (in.)

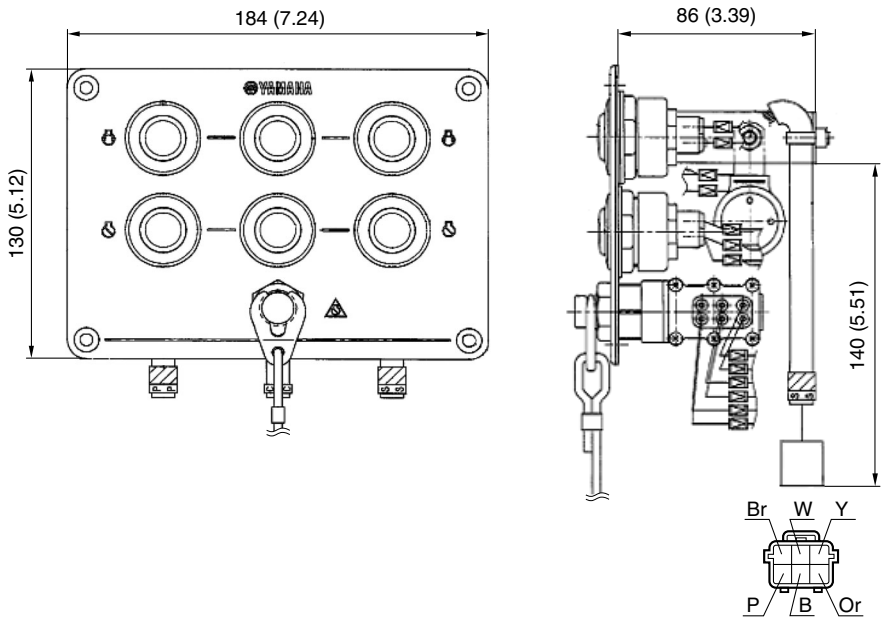


* Minimum mounting depth (for reference)

2.



mm (in.)



REMOTE SWITCH APPLICATIONS

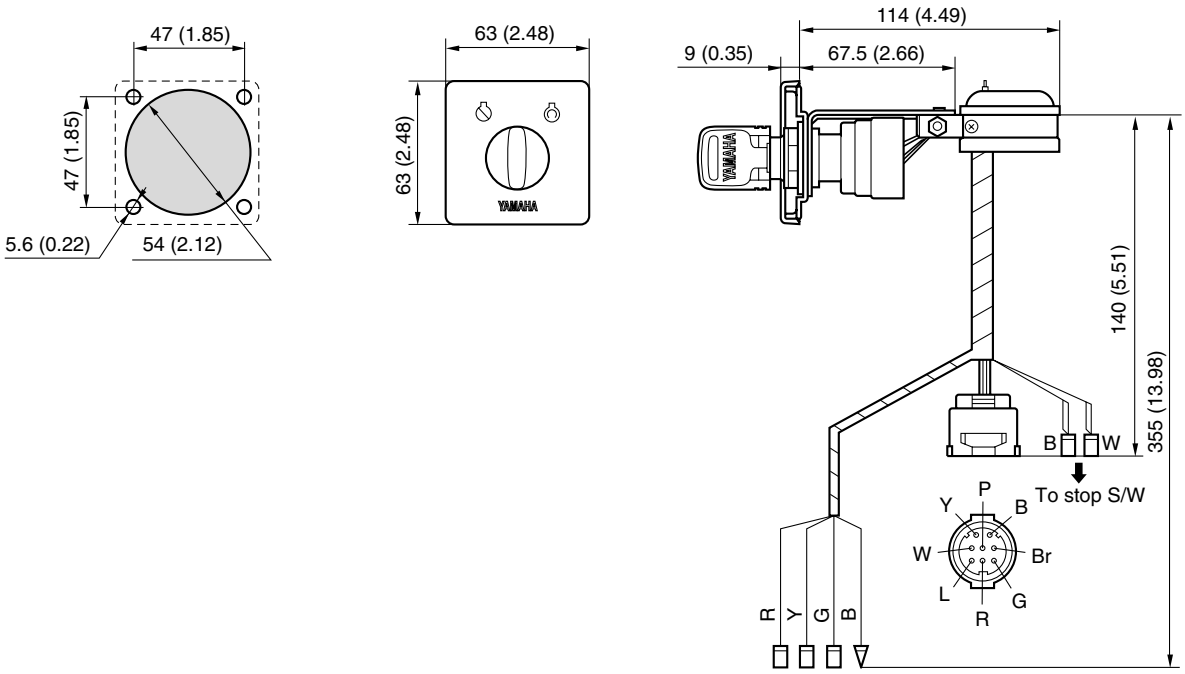
INDEPENDENT SWITCH PANEL

KEY SWITCH W/ PANEL

Ref. No.	Part No.	Description
1	64D-82570-03	With bullet connectors for stop switch
2	64D-82570-20	With 2-pin coupler for stop switch

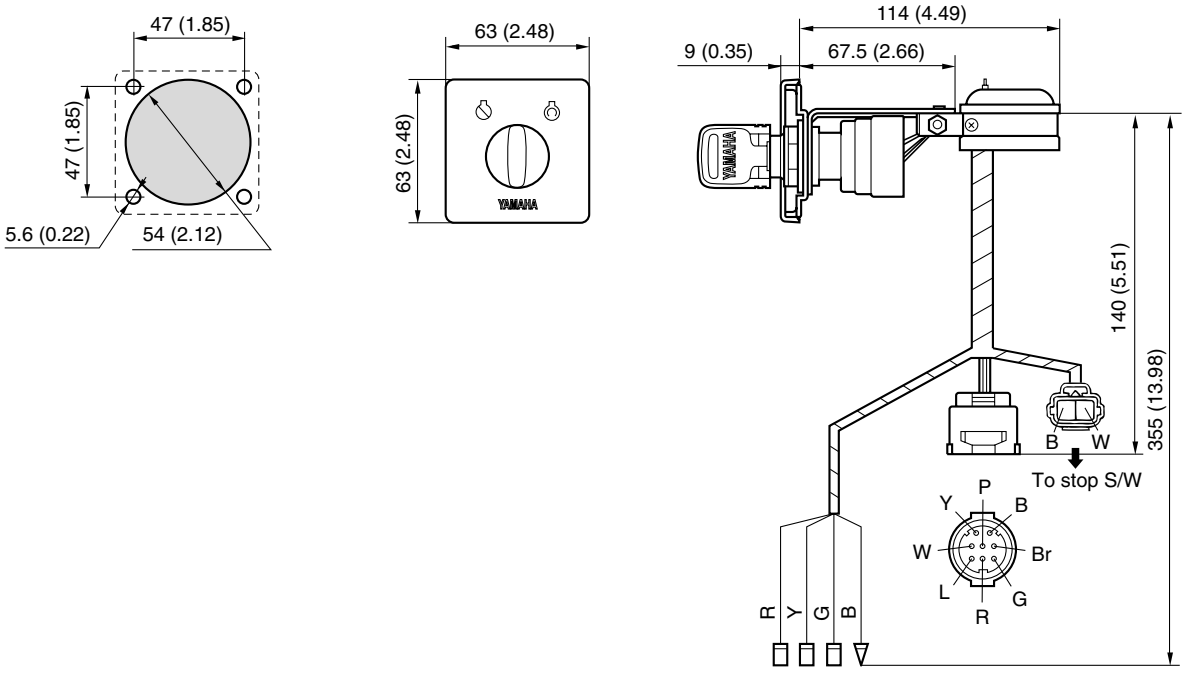
1.

mm (in.)



2.

mm (in.)



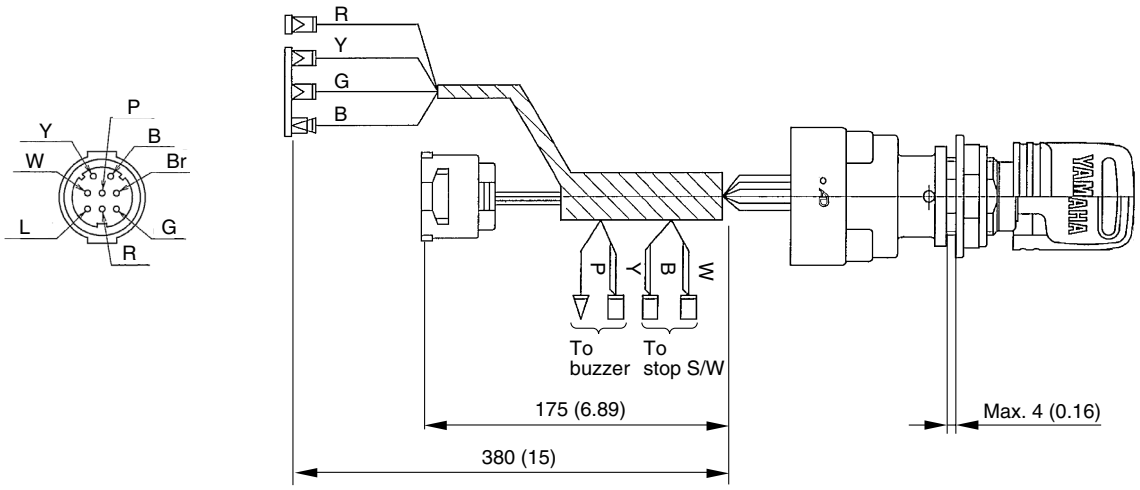
REMOTE SWITCH APPLICATIONS

KEY SWITCH W/O PANEL

Ref. No.	Part No.	Description
1	704-82510-07	With bullet connectors for stop switch
2	6X3-8257B-00	With 2-pin coupler for stop switch

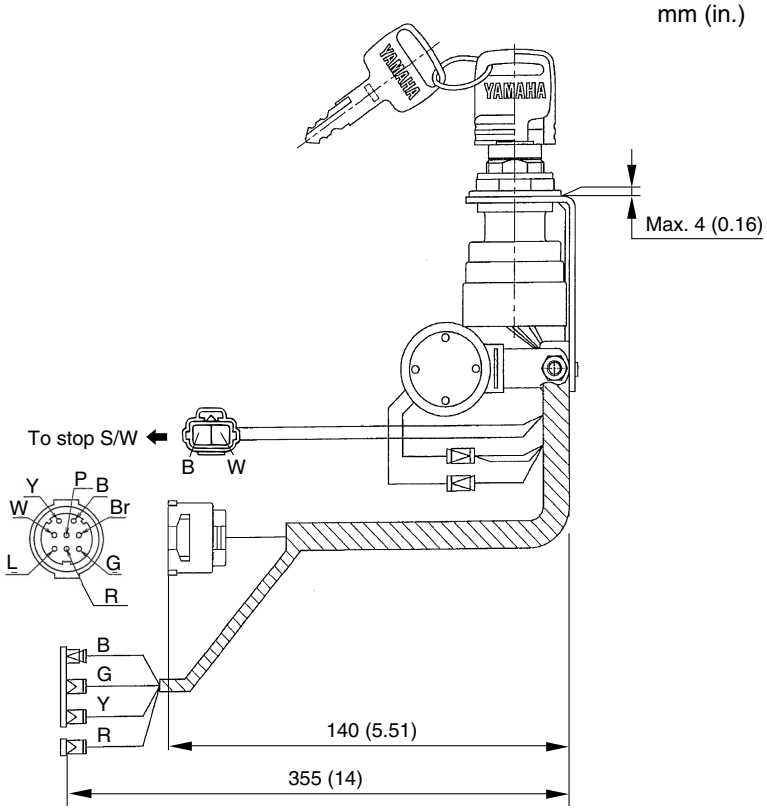
1.

mm (in.)



2.

mm (in.)

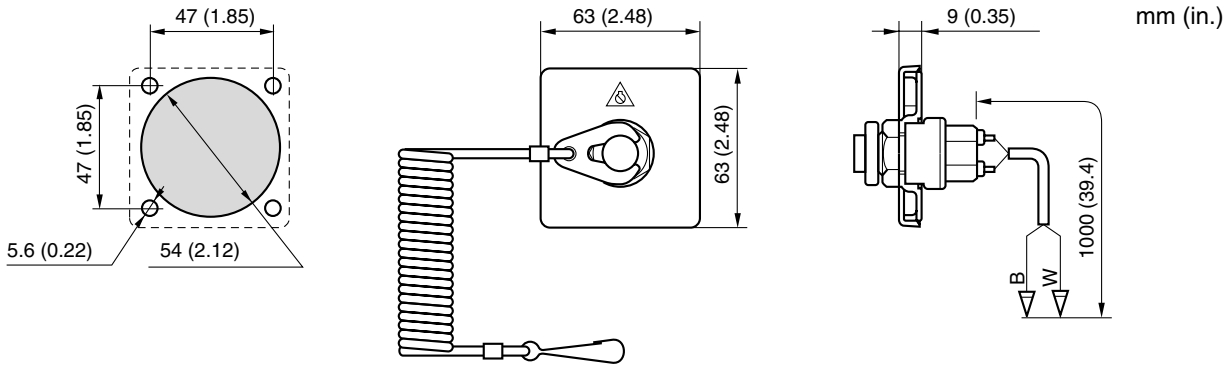


REMOTE SWITCH APPLICATIONS

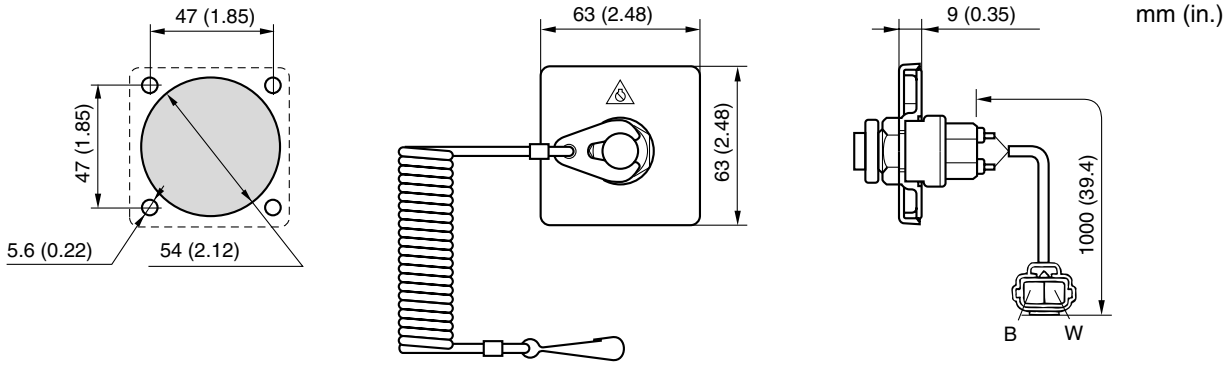
EMERGENCY STOP SWITCH W/ PANEL

Ref. No.	Part No.	Description
1	64D-82570-10	With bullet connectors for stop switch
2	64D-82570-30	With 2-pin coupler for stop switch

1.



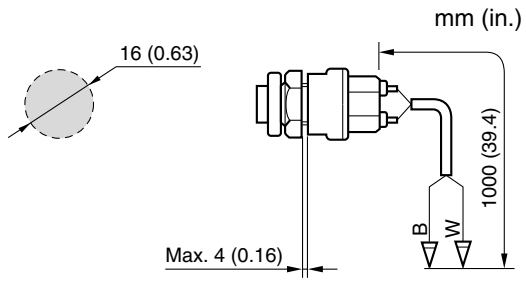
2.



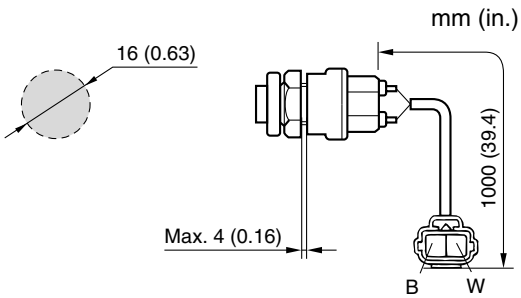
EMERGENCY STOP SWITCH W/O PANEL

Ref. No.	Part No.	Description
1	688-82575-01	With bullet connectors for stop switch
2	64D-82575-10	With 2-pin coupler for stop switch

1.



2.

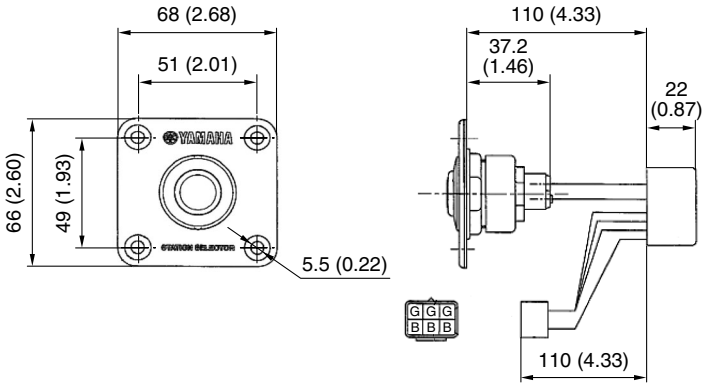


REMOTE SWITCH APPLICATIONS

STATION SELECTOR SWITCH

Part No.	Remarks
6X6-82570-A0	For F350 dual-station

mm (in.)

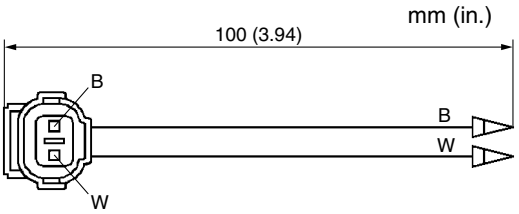


REMOTE SWITCH APPLICATIONS

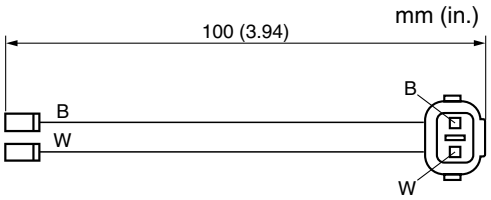
ADAPTER FOR EMERGENCY STOP SWITCH LEAD

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

1.

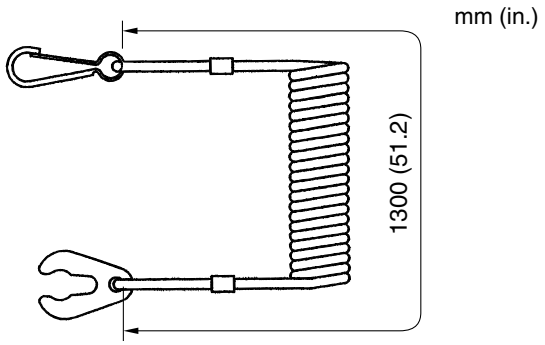


2.



ENGINE SHUT-OFF LANYARD (CORD)

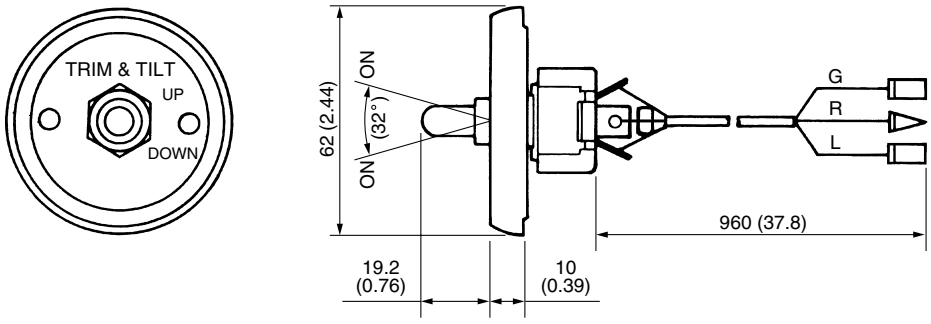
Part No.	Remarks
682-82556-00	



PT/T SWITCH PANEL

Part No.	Remarks
688-82563-10	For PT/T models

mm (in.)



REMOTE CONTROL CABLES

SELECTING THE CABLE LENGTH

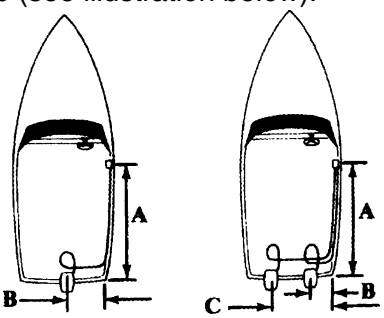
Use the following examples as a guide for measurement. Obviously, different boats will require different routing and therefore different lengths.

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.

NOTE:

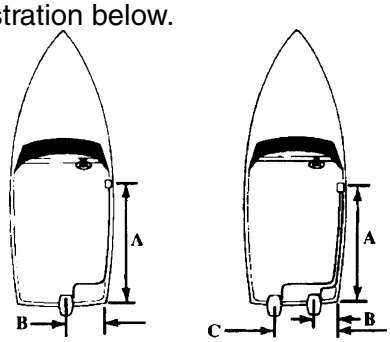
Minimum clearance below the binnacle control mounting surface for cables is 400 mm (16 in). Also, minimum clearance behind the 703 control box for the control cables is 400 mm (16 in).

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 required different routing and therefore different length.
For example, a thru-transom boat is shown in the illustration below.



Cable length = A + B + 1 foot
A + C + 1 foot

NOTE:

When the remote control cable has extended length, the neutral adjustment may be difficult because of a free play increasing.

REMOTE CONTROL CABLES APPLICATIONS

Yamaha remote control cables are available in lengths from 6 feet to 27 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

NOTE:

If Yamaha remote control cable is not available, a Teleflex Morse CC3300 (BLK)/33C (RED) type cable is recommended.

REMOTE CONTROL CABLES

ROUTING THE REMOTE CONTROL CABLES

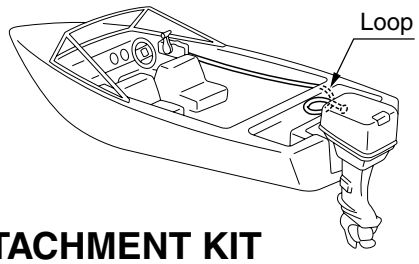
⚠ WARNING

Do not bend the remote control cable to the radius of 300 mm (1 foot) 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.

NOTE:

Refer to the instruction manual packed in the remote control box for the installation and routing of the remote control cable.

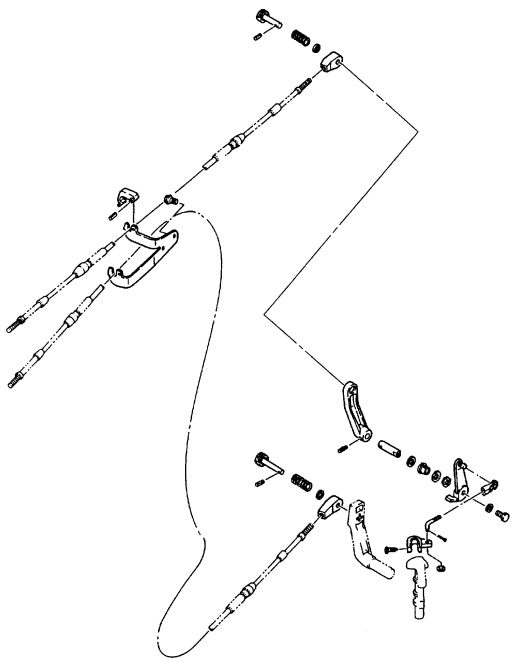


REMOTE CONTROL ATTACHMENT KIT

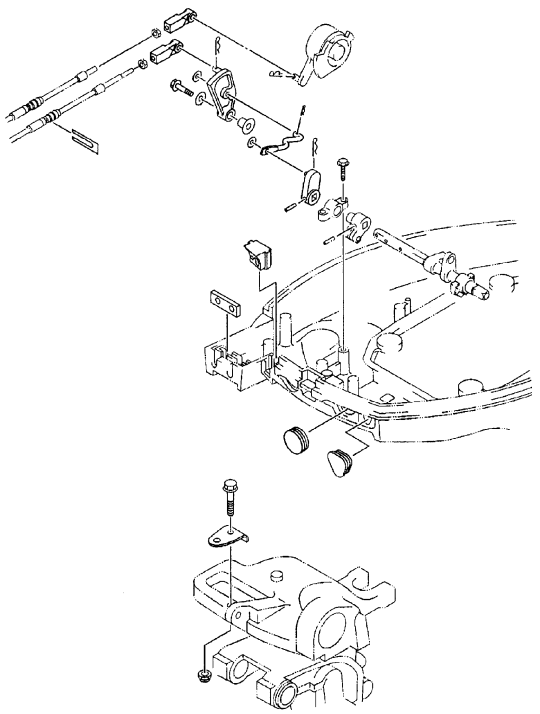
If the specified tightening torque for the bolts and nuts is not mentioned in the figure, use standard torque as follows.

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

Part No.	Applicable model
6G1-48501-50	6C (6), 8C (8)

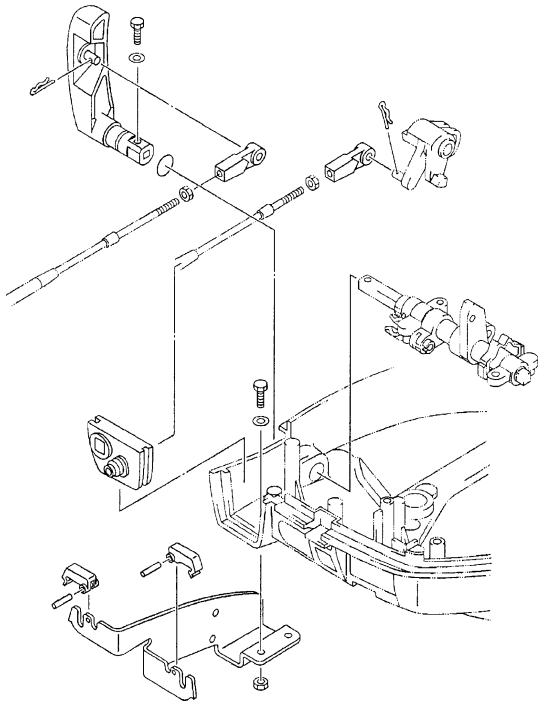


Part No.	Applicable model
66M-48501-00	F9.9C (F9.9-2), F15A

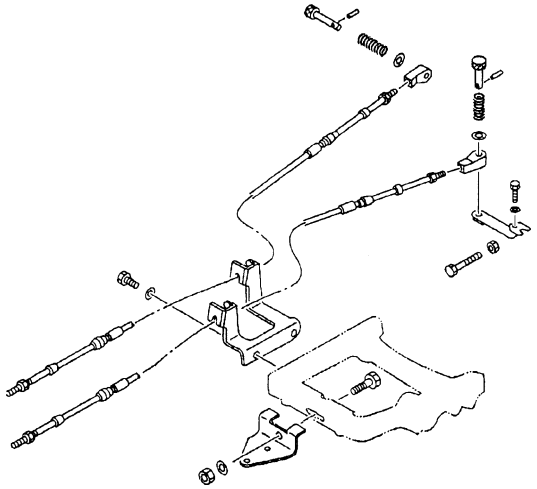


REMOTE CONTROL ATTACHMENT KIT

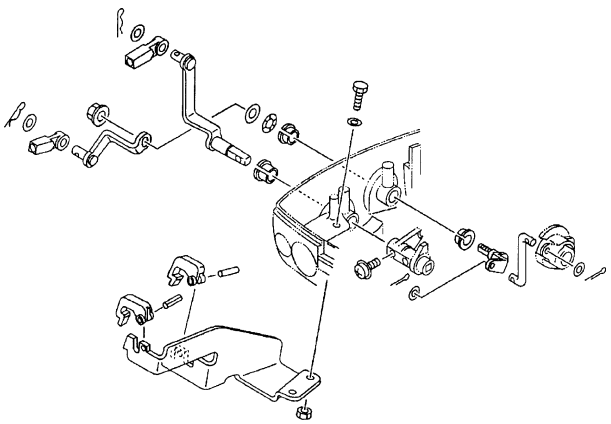
Part No.	Applicable model
60R-G8501-00	F6A (F6), F8C (F8), FT8D (T8) F9.9F (F9.9), FT9.9G (T9.9)



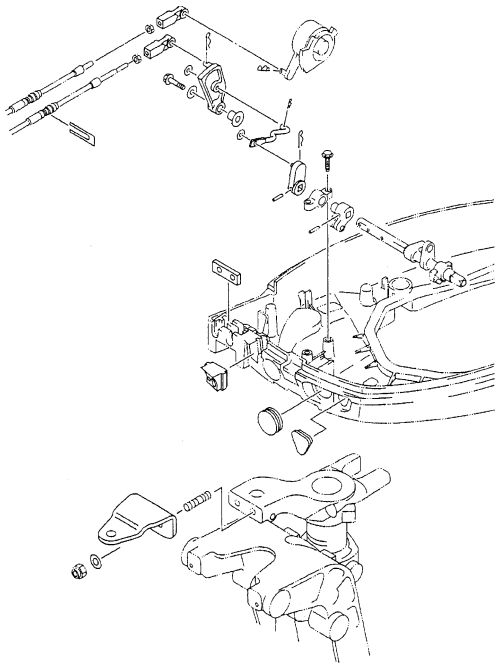
Part No.	Applicable model	Remarks
655-48501-10	E8D/EK8D	Ball post type



Part No.	Applicable model
63V-48501-00	9.9F (9.9), 15F (15)

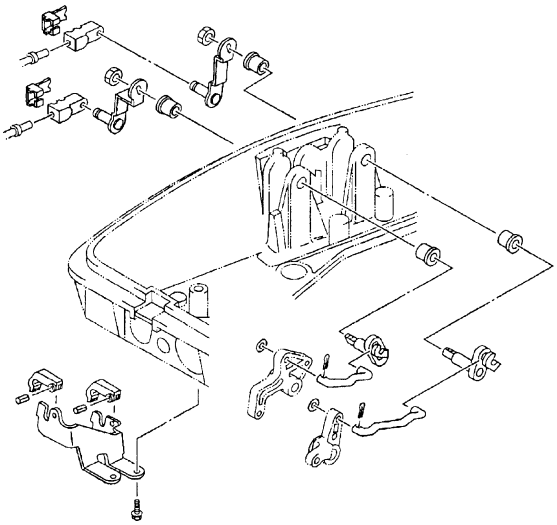


Part No.	Applicable model
65W-48501-00	F20A, F25A (F25), FT25B (T25)

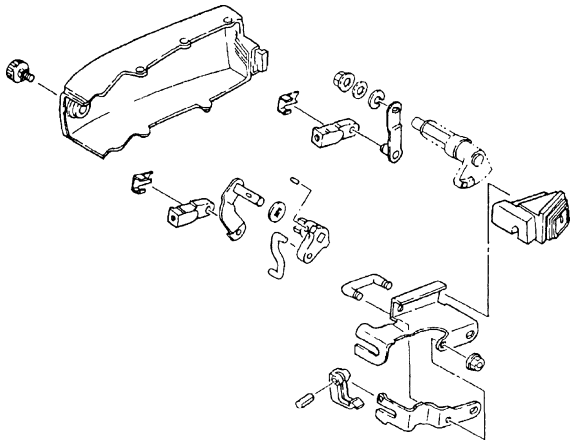


REMOTE CONTROL ATTACHMENT KIT

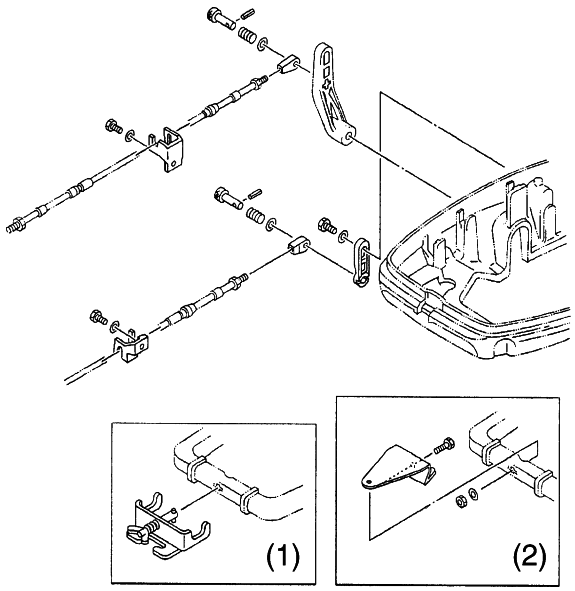
Part No.	Applicable model
6L2-48501-11	20D (20), 25N (25)



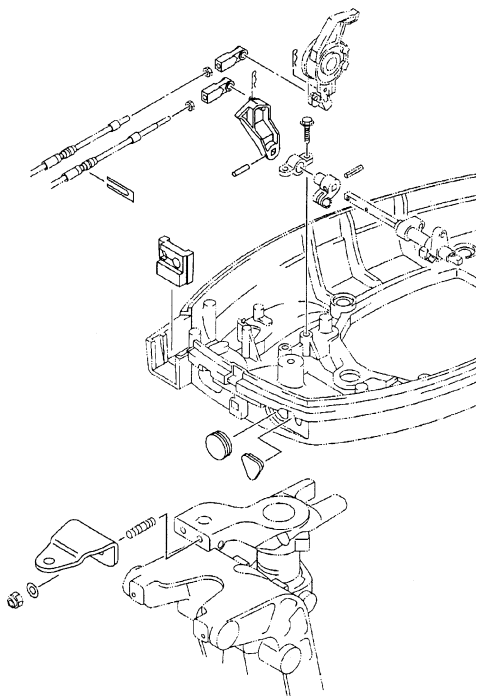
Part No.	Applicable model
6J8-48501-03	30D



Part No.	Applicable model	Remarks
689-48501-01-4D	25B, 25X, 30H E25B, E30H	Rope type (1)
689-48501-21-4D		Ball post/ Steering guide type (2)

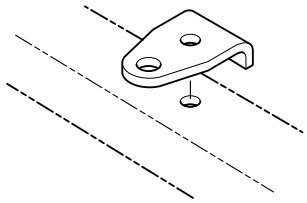


Part No.	Applicable model
66T-48501-01	40X, E40X

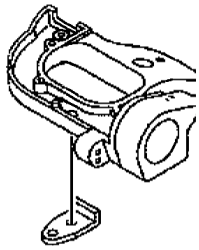


STEERING HOOK

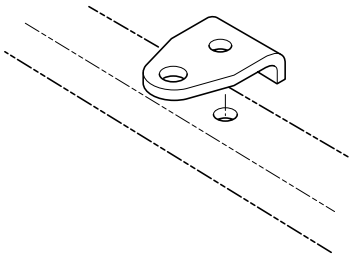
Part No.	Applicable model	Remarks
69G-48511-20	FT8D (T8)	Steering guide type



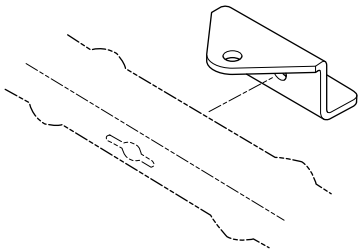
Part No.	Applicable model	Remarks
6AH-48511-00	F13.5B, F15C (F15), F20B (F20)	Steering guide type



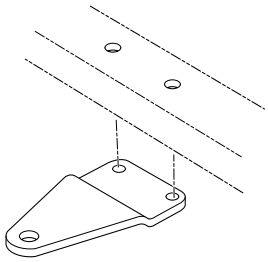
Part No.	Applicable model	Remarks
63V-48511-01	F8C (F8), FT8D (T8) F9.9C (F9.9-2) F15A, 9.9F (9.9) 15F (15)	Steering guide type



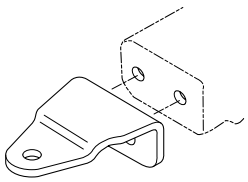
Part No.	Applicable model	Remarks
6L2-48511-00	20D (20), 25N (25)	Steering guide type



Part No.	Applicable model	Remarks
6G8-48511-10	9.9F (9.9) 15F (15), 30D	Ball post type

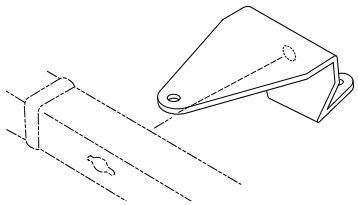


Part No.	Applicable model	Remarks
65W-48511-00	F20A, F25A (F25) FT25B (T25) F30A (F30), F40B (F40) (E) 40X, F40D F50F (F50), FT50G (T50) F60C (F60), FT60G (T60)	Steering guide type

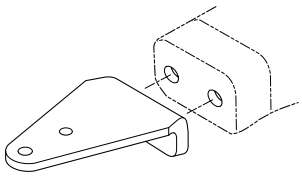


STEERING HOOK

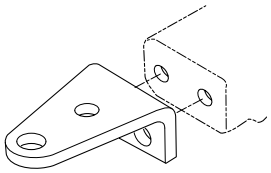
Part No.	Applicable model	Remarks
676-48511-01	40J, E40J, E40G EK40J, EK40G	Steering guide type



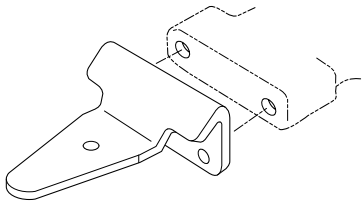
Part No.	Applicable model	Remarks
688-48511-11	75C, 90A (90) 75A, 85A	Steering guide type



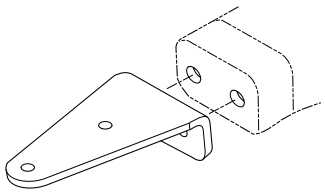
Part No.	Applicable model	Remarks
63D-48511-00	40V, 50H (50) 40Y FT50C, F50D	Steering guide type



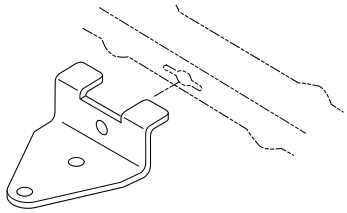
Part No.	Applicable model	Remarks
68V-48511-00	F75C, F95A, F100B F115A (F115)	Steering guide type



Part No.	Applicable model	Remarks
67F-48511-00	F75B (F75), F80B, F90B (F90) F100D	Steering guide type

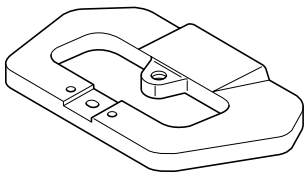


Part No.	Applicable model	Remarks
676-48511-00	6C (6), 8C (8) E8D, EK8D	Ball post type

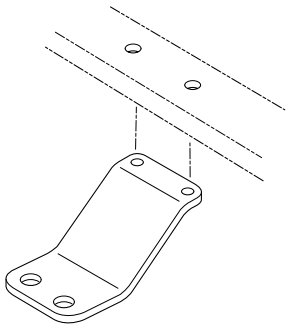


STEERING HOOK

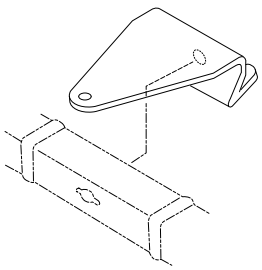
Part No.	Applicable model	Remarks
6J8-48511-01	30D	Ball post type/ Steering guide type



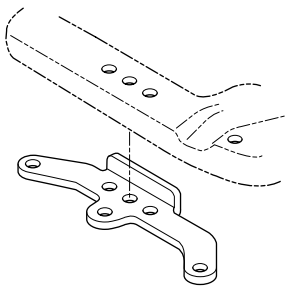
Part No.	Applicable model	Remarks
6G8-48511-00	30D	Rope type



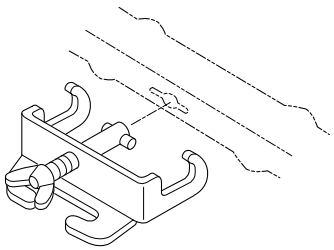
Part No.	Applicable model	Remarks
689-48511-01	25B, 25X, 30H E25B, E30H	Ball post type/ Steering guide type



Part No.	Applicable model	Remarks
69G-48511-10	FT8D (T8) FT9.9D (T9.9-2) FT9.9G (T9.9)	For Linkage to main-engine



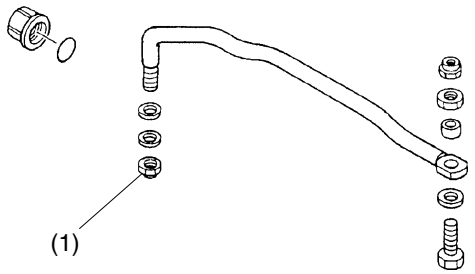
Part No.	Applicable model	Remarks
700-48511-12	6C (6), 8C (8) E8D, EK8D 25B, 30H, E25B, E30H	Rope type



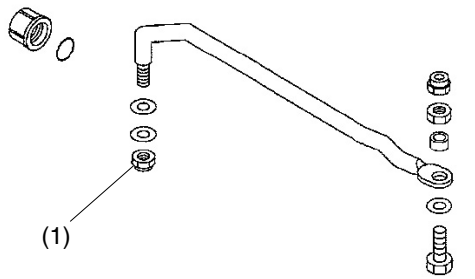
STEERING GUIDE ATTACHMENT KIT

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

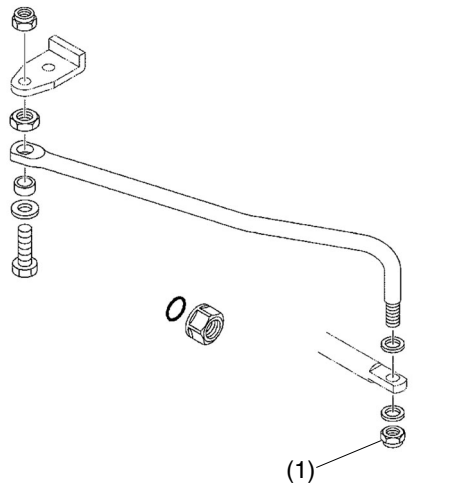
Part No.	Applicable model
63V-61350-00	9.9F (9.9), 15F (15), E9.9D, E15D F9.9C (F9.9-2), F15A, FT9.9D (T9.9-2)



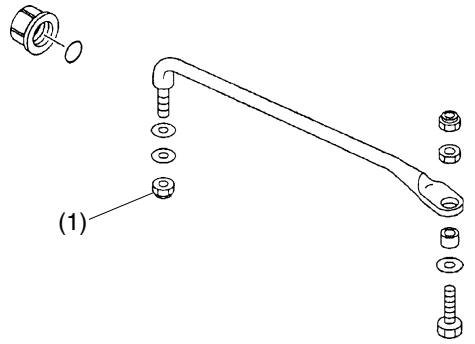
Part No.	Applicable model
68T-61350-10	F6A (F6), F8C (F8), FT8D (T8) F9.9F (F9.9), FT9.9G (T9.9)



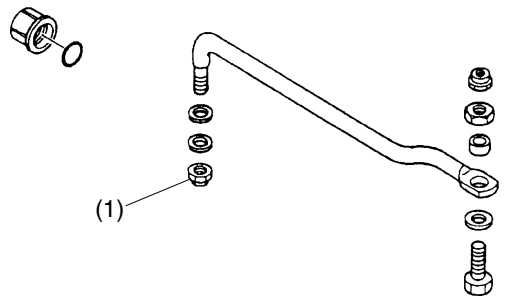
Part No.	Applicable model
6AH-61350-00	F13.5B, F15C (F15), F20B (F20)



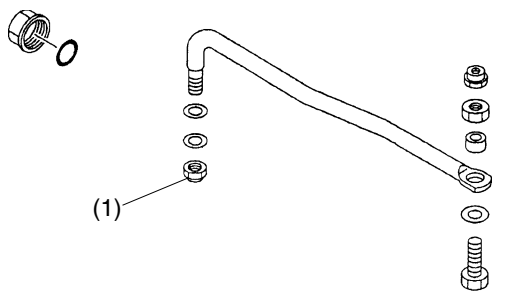
Part No.	Applicable model
689-61350-02	25B, 30H, 30D, 40J, E40G EK40J, E25B, E30H



Part No.	Applicable model
63D-61350-00	40V, 50H (50), 40Y, FT50C, F50D

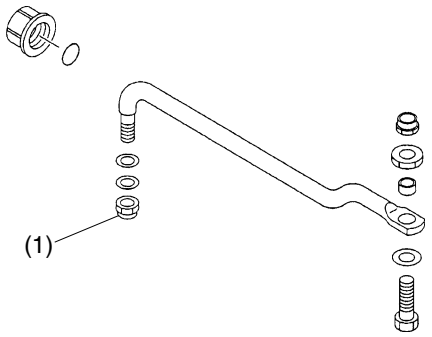


Part No.	Applicable model
65W-61350-00	E40X, 40X, F20A, F25A (F25), FT25B (T25), F30A (F30), F40B (F40), F50F (F50), FT50G (T50), F40D F60C (F60), FT60D (T60)

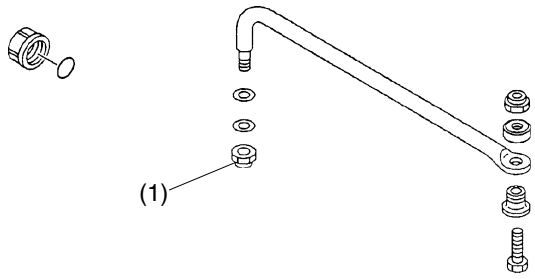


STEERING GUIDE ATTACHMENT KIT

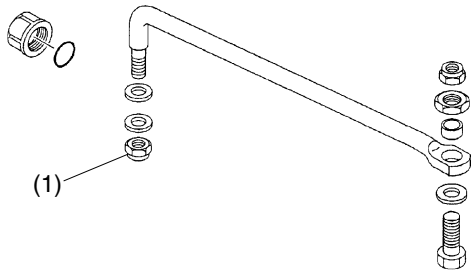
Part No.	Applicable model
697-61350-00	55B



Part No.	Applicable model
6E5-61350-02	F75C, F95A, F100B F115 – F250, 115 – 300

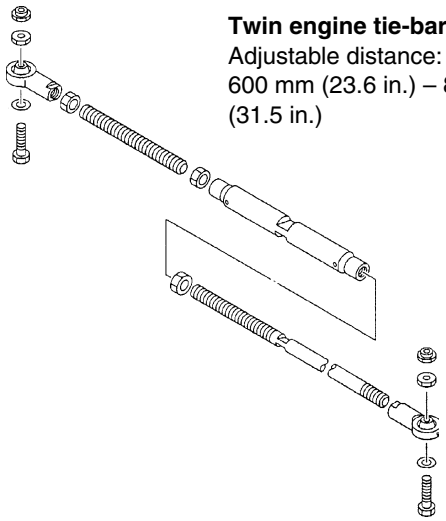


Part No.	Applicable model
67F-61350-00	F75B (F75), F80B F90B (F90), F100D

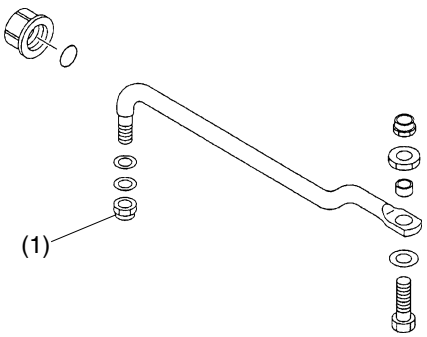


Part No.	Applicable model
6E5-61301-01	40 – 300, F30 – F250

Twin engine tie-bar kit
Adjustable distance:
600 mm (23.6 in.) – 800 mm (31.5 in.)



Part No.	Applicable model
688-61350-10	60F, 70B (70), 75C, 90A (90) 75A, 85A, E60H



WIRE HARNESS

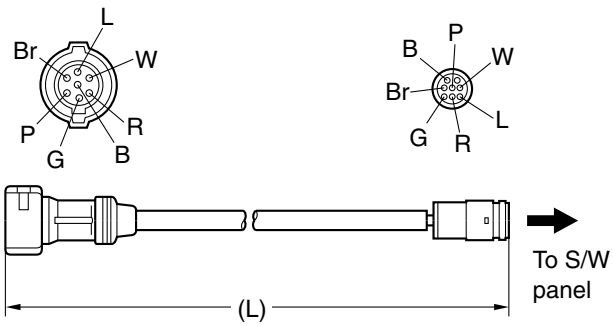
An optional wire-harness for the remote control is prepared. That will help any boats set up the remote control equipments. Choose a suitable wire-harness if necessary.

For the wire color code description, see the table on page 5-35.

SWITCH PANEL HARNESS

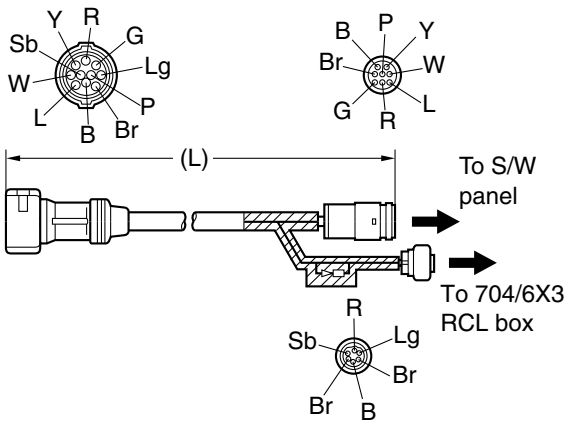
7-PIN MAIN HARNESS

Part No.	Length (L)	Remarks
688-82586-50	5 m (16.4 ft)	Without PTT



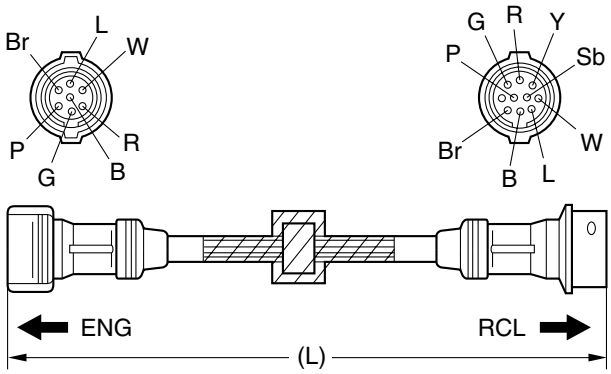
10-PIN MAIN HARNESS

Part No.	Length (L)	Remarks
688-8258A-50	5 m (16.4 ft)	
688-8258A-60	6 m (19.7 ft)	
6K1-8258A-40	8 m (26 ft)	
6X3-8258A-10	6 m (19.7 ft)	For US, Canada
6X3-8258A-00	5 m (16.4 ft)	For US, Canada
61B-8258A-01	9.5 m (31.6 ft)	



7 TO 10-PIN ADAPTER

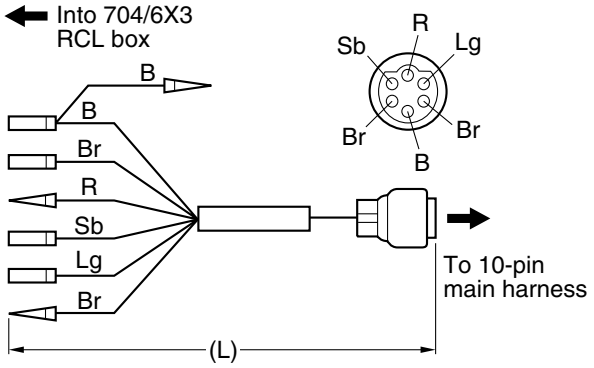
Part No.	Length (L)	Remarks
703-8258A-00	0.5 m (1.6 ft)	



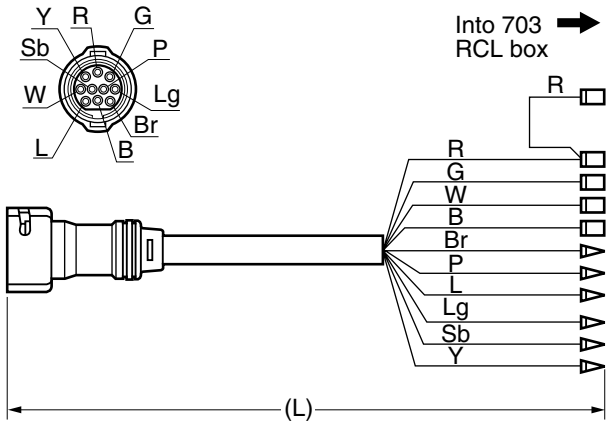
WIRE HARNESS

SUB WIRE LEAD

Part No.	Length (L)	Remarks
704-85721-00	150 mm (5.9 in.)	For 10-pin remote control main harness



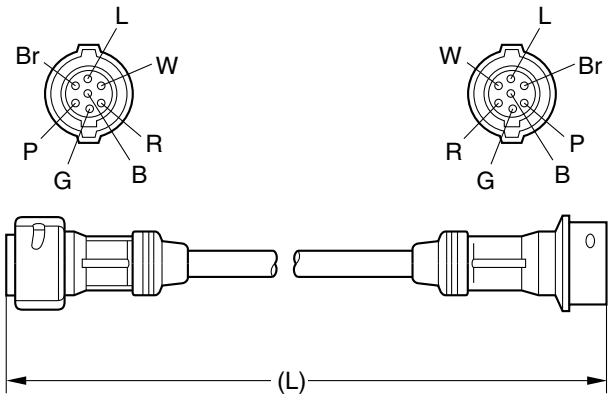
Part No.	Length (L)	Remarks
688-8258A-20	4.9 m (16 ft)	For 10-pin main harness of 703 remote control



MAIN HARNESS EXTENSION

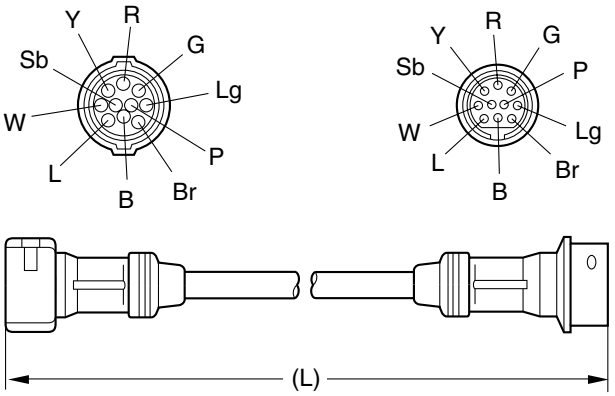
7-PIN EXTENSION HARNESS

Part No.	Length (L)	Remarks
688-82586-11	2 m (6.6 ft)	
688-82586-31	3 m (9.8 ft)	



10-PIN EXTENSION HARNESS

Part No.	Length (L)	Remarks
688-8258A-10	2 m (6.6 ft)	
688-8258A-30	3 m (9.8 ft)	

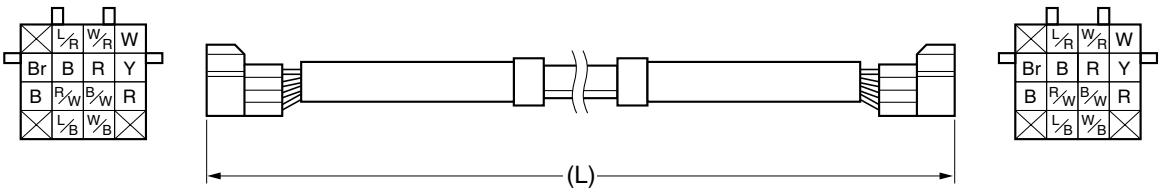


DIGITAL NETWORK REMOTE CONTROL WIRE HARNESS

MAIN WIRE HARNESS

Between engine and remote control unit

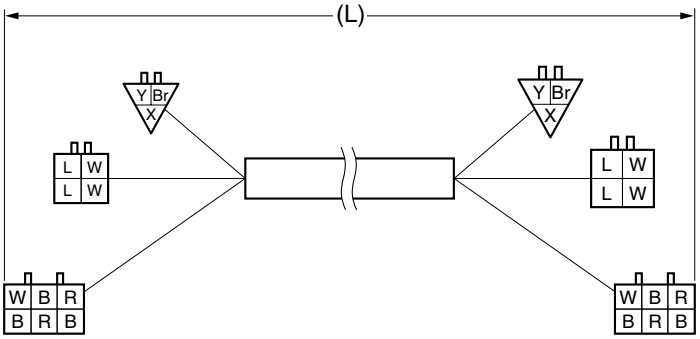
Part No.	Length (L)	Remarks
6X6-8258A-10	7 m, 23 ft	For F350
6X6-8258A-20	8 m, 26 ft	
6X6-8258A-30	10 m, 32 ft	
6X6-8258A-40	12 m, 38 ft	



DUAL STATION EXT WIRE HARNESS 1

Between main RCL and 2nd RCL

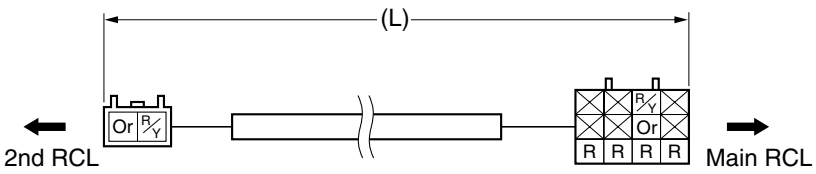
Part No.	Length (L)	Remarks
6X6-8258A-A0	5 m, 16 ft	For F350
6X6-8258A-C0	8 m, 26 ft	



DUAL STATION EXT WIRE HARNESS 2

Between main RCL and 2nd RCL

Part No.	Length (L)	Remarks
6X6-8258A-B0	5 m, 16 ft	For F350
6X6-8258A-D0	8 m, 26 ft	



-MEMO-

TILLER HANDLES

6X4 MULTI-FUNCTION TILLER HANDLE

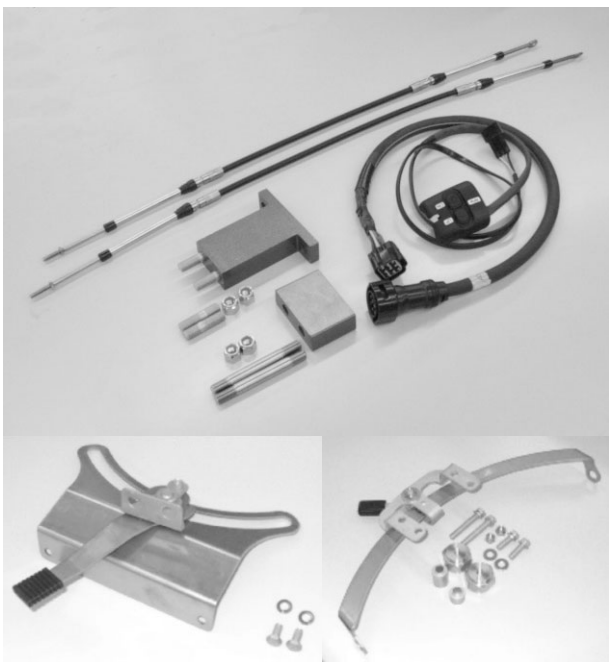
Yamaha prepares the various multi-funciton tiller handle kits for F30 to F115 and 40 to 90 engines.
For US, the tiller handle kit for F25 is specially prepared.
This handle has the electrical functions which are similar as that of 703 remote control box.
Engine key switch, Emergency stop switch, PTT 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 included 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)

Two kinds of the size for handle extension bracket, four 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 F40 to F115 and 50 to 90 engines.
The fitting kit is prepared for each engine.
Combine the tiller handle kit with the handle fitting kit due to the applicable model, except F25.
For installation procedure, see the instruction supplied with the kit.

- Tiller handle assy
- Setup manual

} Tiller handle kit (Common use for 50-90 & F40-F115)



- Handle extension
- Throttle cable
- Shift cable
- 10-pin harness
- Steering friction assy
- Installation hardware
- Troll PPM switch
- Short shift lever

} Fitting kit for each model (Differs on model)

6X4 MULTI-FUNCTION TILLER HANDLE

TILLER HANDLE KIT CONTENTS

50-90, F40-F115

KIT P/N:6X4-42101-01

Part name	Part No.	Q'ty	Remarks
Tiller handle assy	6X4-42101-01	1	With PTT switch (Top), Required fitting kit.
Setup manual	6X4-2819K-10	1	English

F25

KIT P/N:6X4-42103-01

Part name	Part No.	Q'ty	Remarks
Grommet 2	65W-42725-21	1	
Tiller handle assy	6X4-42101-21	1	With PTT switch (Top)
Lock nut	90185-10051	2	M10
Steering friction assy	65W-42508-00	1	
Setup manual	6X4-2819K-10	1	English

HANDLE FITTING KIT CONTENTS

Select the fitting kit corresponding with the model.

F115

KIT P/N:6X4-42102-00

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	6X4-42121-10	1	92 mm (Long)
10-pin main harness	6X4-82586-20	1	1250 mm (49 in.)
Stud bolt	90116-10175	2	M10-40 mm
Lock nut	90185-10051	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	
Protector	6X4-42735-00	1	
Steering friction aasy	67G-42508-10	1	

6X4 MULTI-FUNCTION TILLER HANDLE

F75, F90
KIT P/N:6X4-42102-10

Part name	Part No.	Q'ty	Remarks
Fuel pipe clamp 2	63D-24367-00	1	
Cable clamp	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	6X4-42121-00-4D	1	45 mm (Short)
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
Lock nut	90185-10051	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	
Protector	6X4-42735-00	1	
Steering friction assy	67G-42508-10	1	

F50, T50, F60, T60
KIT P/N:6X4-42102-20

Part name	Part No.	Q'ty	Remarks
Cable clamp 2	63D-48538-00	2	
Shift cable	67C-48321-10	1	707 mm (28 in.)
Throttle cable	69W-26301-00	1	610 mm (24 in.)
Grommet 2	6C5-42725-30	1	
Troll RPM switch assy	6X4-81860-00	1	
10-pin main harness	6X4-82586-10	1	950 mm (37 in.)
Lock nut	90185-10051	2	
Clamp	90464-09M42	1	
Clamp	90465-13M36	1	
Clip	90468-10005	2	
Steering friction assy	6C5-42508-00	1	

6X4 MULTI-FUNCTION TILLER HANDLE

F40
KIT P/N:6X4-42102-30

Part name	Part No.	Q'ty	Remarks
Grommet 2	62Y-42725-30	1	
Cable clamp	63D-48538-00	2	
Shift cable	67C-48321-10	1	707 mm (28 in.)
Throttle cable	69W-26301-00	1	610 mm (24 in.)
10-pin main harness	6X4-82586-00	1	700 mm (26 in.)
Lock nut	90185-10051	2	M10
Clamp	90464-09M42	1	
Clamp	90465-13M36	1	
Clip	90468-10005	2	
Steering friction assy	67C-42508-03	1	

90
KIT P/N:6X4-42102-40

Part name	Part No.	Q'ty	Remarks
Cable clamp	63D-48538-00	2	
Throttle cable	6H1-26301-01	1	610 mm (24 in.)
Shift cable	6H1-48321-10	1	726 mm (29 in.)
Ext. bracket	6X4-42121-00-4D	1	45 mm (Short)
Shift handle	6X4-44159-10-4D	1	Short type (exclusive), To replace original lever
Shift lever	6X4-44173-00	1	
Screw	97780-60920	2	
Bush	90386-26MA3	1	
10-pin main harness	6X4-82586-30	1	700 mm (26 in.)
Stud bolt	90116-10031	2	M10-70 mm
Clamp	90464-09M42	1	
Clamp	90464-15M11	1	
Clamp	90465-13M36	2	
Clip	90468-10005	2	
Bolt	97595-08540	1	
Steering friction assy	692-42508-01	1	Shaft type

6X4 MULTI-FUNCTION TILLER HANDLE

70

KIT P/N:6X4-42102-50

Part name	Part No.	Q'ty	Remarks
Throttle cable	6H3-26301-01	1	530 mm (21 in.)
Shift cable	6H3-48321-10	1	610 mm (24 in.)
Cable clamp	63D-48538-00	2	
Grommet 2	6H3-42725-30	1	
Ext. bracket	6X4-42121-00-4D	1	45 mm (short)
10-pin main harness	6X4-82586-30	1	600 mm (24 in.)
Stud bolt	90116-10031	2	M10-70 mm
Lock nut	90185-10051	2	M10
Clamp	90464-09M42	1	
Clamp	90465-13M36	2	
Clip	90468-10005	2	
Steering friction assy	692-42508-01	1	Shaft type

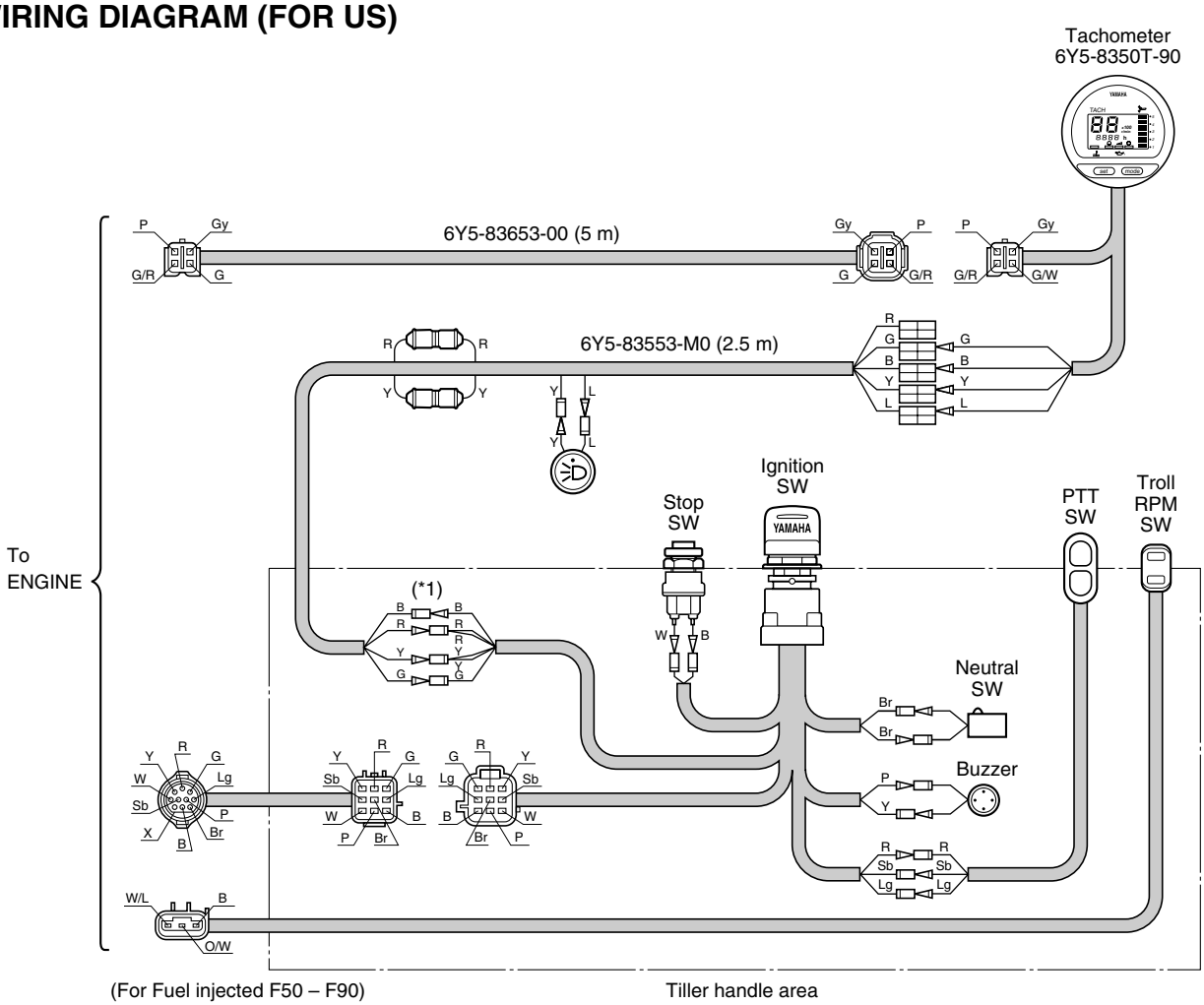
50

KIT P/N:6X4-42102-60

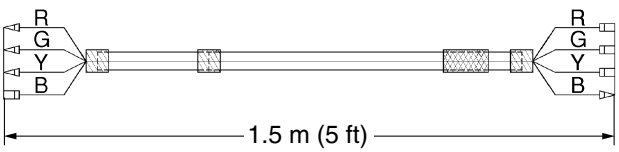
Part name	Part No.	Q'ty	Remarks
Stay	63D-24364-10	1	
Fuel pipe clamp 2	63D-24367-00	1	
Throttle cable	63D-26301-01	1	530 mm (21 in.)
Shift cable	63D-48321-10	1	610 mm (24 in.)
Clamp	63D-48538-00	2	
Clamp	63D-82361-00	1	
10-pin main harness	6X4-82586-00	1	700 mm (26 in.)
Screw	90161-06M00	1	M6-25 mm
Lock nut	90185-10051	2	M10
Coller	90387-06M26	1	
Clamp	90464-09M42	1	
Clamp	90465-13M36	2	
Clip	90468-10005	2	
Bolt	97595-06416	2	
Bolt	97595-06516	1	
Bolt	97595-06535	1	
Steering friction assy	63D-42508-00	1	

6X4 MULTI-FUNCTION TILLER HANDLE

WIRING DIAGRAM (FOR US)



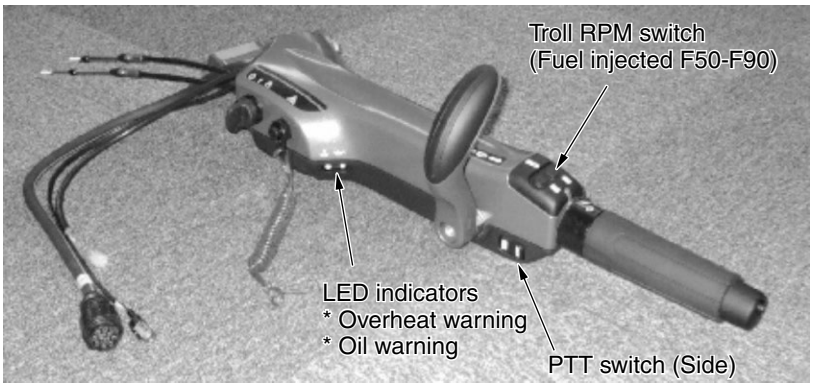
(*1) 1.5 m (5 ft) extension wire-harness (6Y5-8356N-00) is available.



6X4 MULTI-FUNCTION TILLER HANDLE

MULTI-FUNCTION TILLER HANDLE KIT (FOR JAPAN)

The tiller handle kit is prerared for F50 to F90.
For installation procedure, see the instruction supplied with the kit.



TILLER HANDLE KIT CONTENTS
F80B, F90B
KIT P/N:6X4-42103-11

Part name	Part No.	Q'ty	Remarks
Pipe 1	67G-42541-00	1	
Grommet	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	6X4-42101-31	1	With PTT switch (Side), LED indicators
Ext. bracket	6X4-42121-00-4D	1	45 mm (Short)
Stud bolt	90116-10031	2	M10-70 mm
Lock nut	90185-10051	2	M10
Corrugated tube	90447-22007	1	230 mm (9.1 in.)
Clamp	90465-13M24	5	
Clamp	90465-13M30	1	
Bolt	97595-06516	2	
Fuel pipe clamp	63D-24367-00	1	
Protector	6X4-42735-00	1	
Steering friction assy	67G-42508-10	1	
Setup manual	6X4-2819K-00	1	Japanese

F50F, FT50G, F60C, FT60D
KIT P/N:6X4-42103-21

Part name	Part No.	Q'ty	Remarks
Grommet 2	6C5-42725-30	1	
Tiller handle assy	6X4-42101-V1	1	With PTT switch (Side), LED indicators
Lock nut	90185-10051	2	M10
Clamp	90465-13M36	1	
Steering friction assy	6C5-42508-00	1	
Setup manual	6X4-2819K-00	1	Japanese

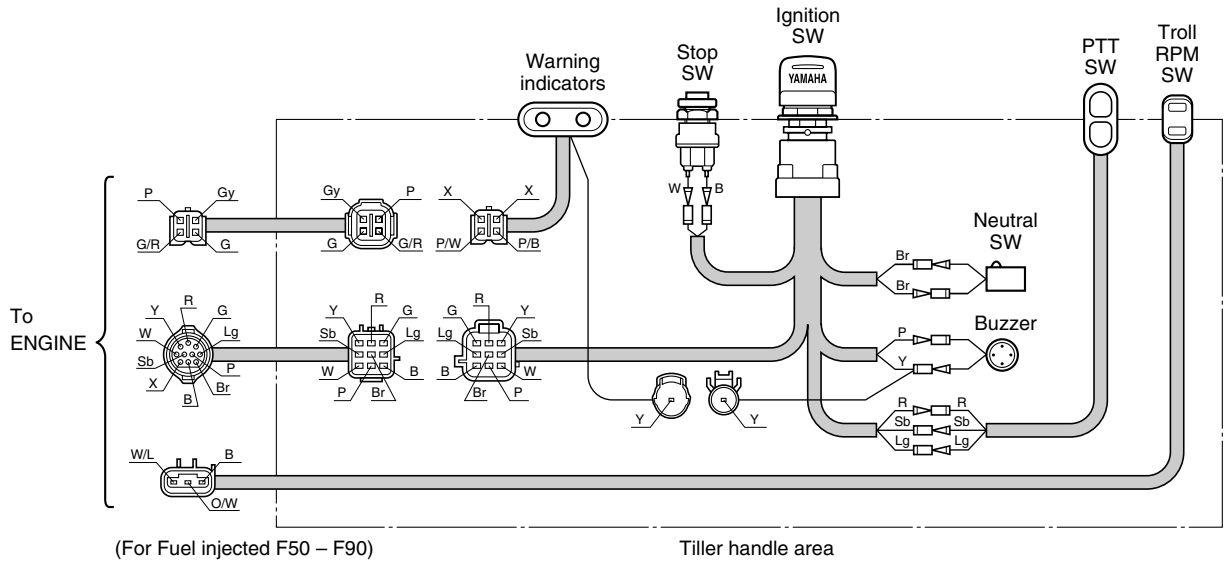
6X4 MULTI-FUNCTION TILLER HANDLE

FT50C,F50D

KIT P/N:6X4-42103-41

Part name	Part No.	Q'ty	Remarks
Grommet 2	62Y-42725-30	1	
Tiller handle assy	6X4-42101-41	1	With PTT switch (Side), LED indicators
Lock nut	90185-10051	2	M10
Clamp	90465-13M36	1	
Setup manual	6X4-2819K-00	1	Japanese

WIRING DIAGRAM (FOR JAPAN)

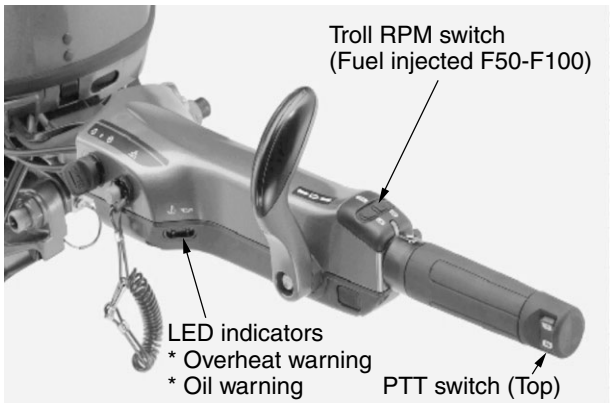


(For Fuel injected F50 – F90) Tiller handle area

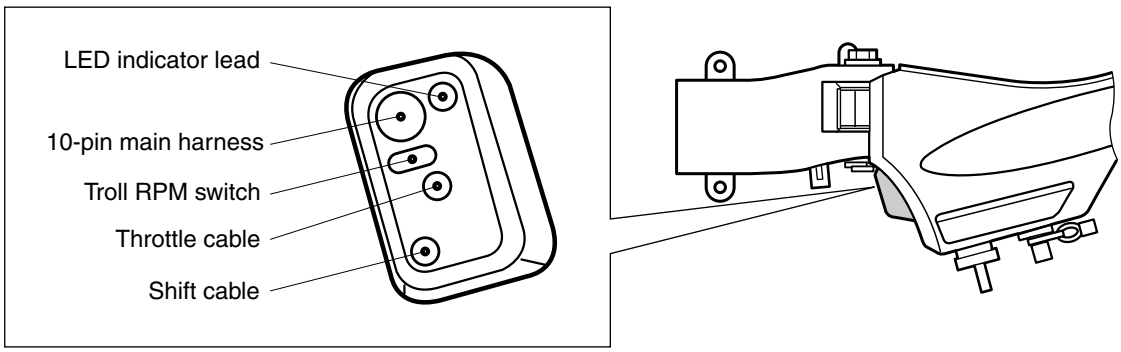
6X4 MULTI-FUNCTION TILLER HANDLE

MULTI-FUNCTION TILLER HANDLE CONTENTS (FOR OTHERS)

The tiller handle kit is not prepared for other market.
Regarding the tiller handle component parts information, see the applicable 2007 model parts catalog.



TILLER HANDLE GROMMET DESCRIPTION

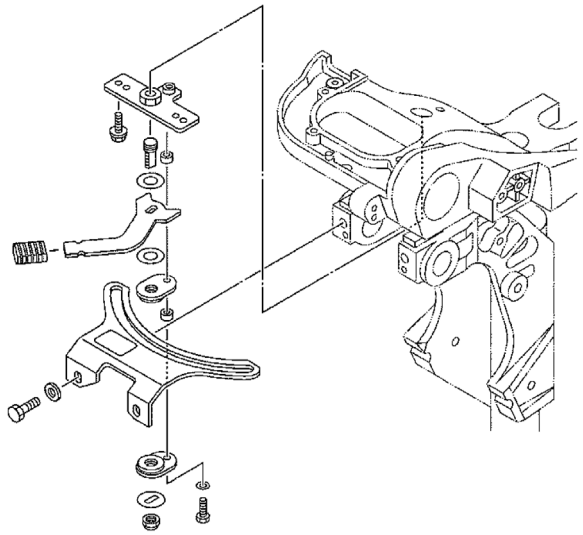


STEERING FRICTION CONTENTS

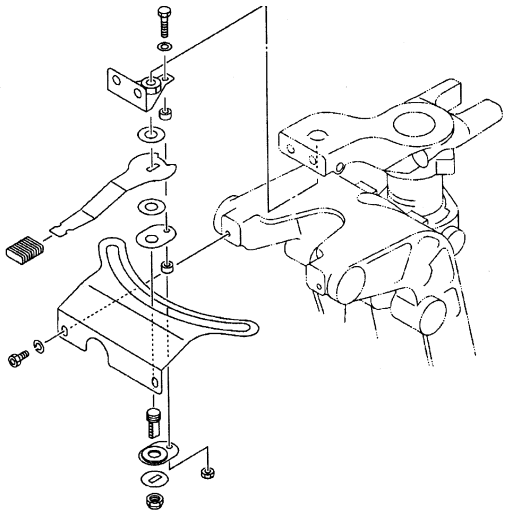
For detail installation information, see the instruction manual packed in the tiller handle kit and/or the steering friction kit.

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

Part No.	Applicable model
6AH-42508-00	F13.5B, F15C (F15), F20B (F20) MT
6AH-42508-10	F13.5B, F15C (F15), F20B (F20) PT

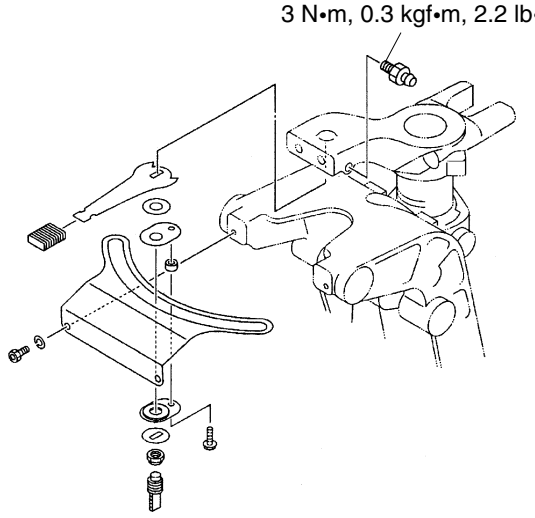


Part No.	Applicable model
67C-42508-03	F30A (F30), F40B (F40)



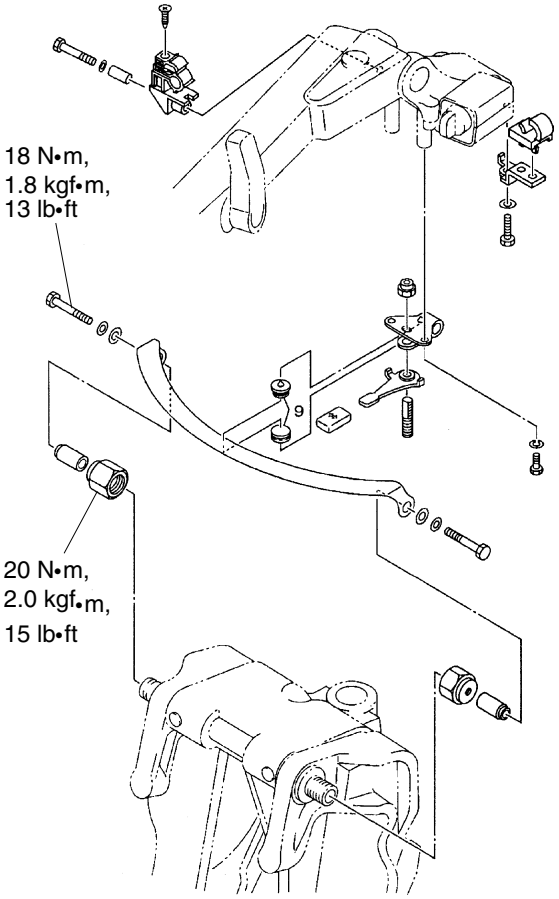
Part No.	Applicable model
65W-42508-00	F25A (F25), F20A, FT25B (T25)

3 N•m, 0.3 kgf•m, 2.2 lb•ft

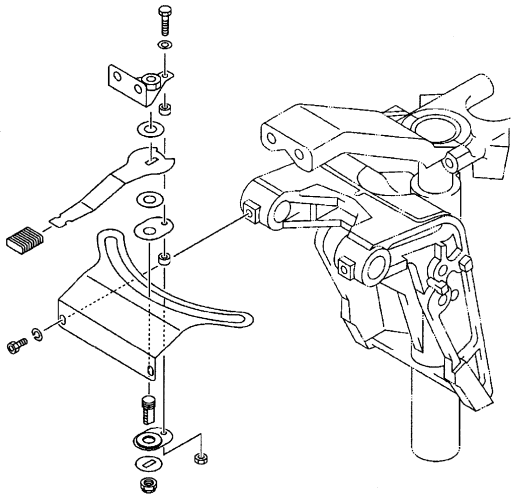


STEERING FRICTION CONTENTS

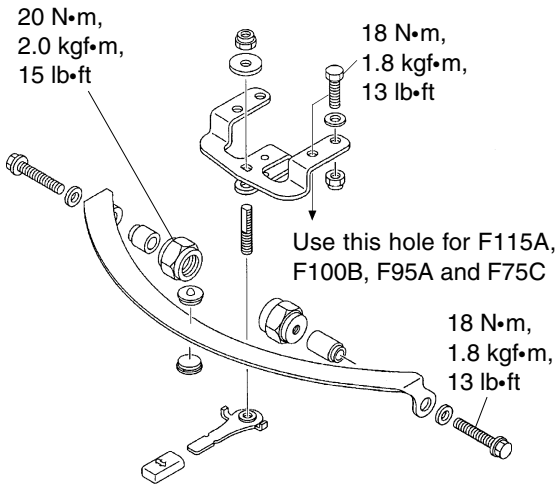
Part No.	Applicable model
63D-42508-00	FT50C, F50D 40V, 50H (50), 40Y



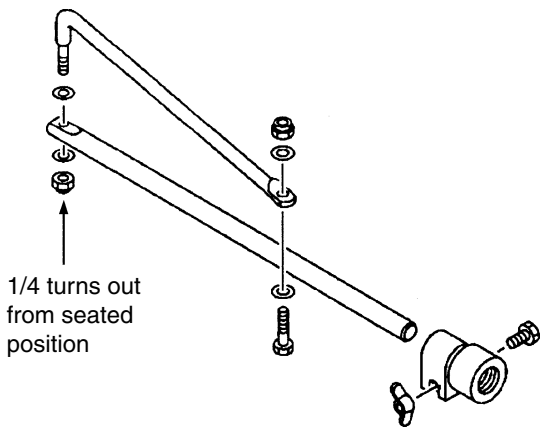
Part No.	Applicable model
6C5-42508-00	F50F (F50), FT50G (T50), F60C (F60), FT60D (T60), F40D



Part No.	Applicable model
67G-42508-10	F75B (F75), F80B, F90B (F90), F100D, F100B, F115A (F115), F75C



Part No.	Applicable model
692-42508-01	60F, 70B (70), 75C, 90A (90)



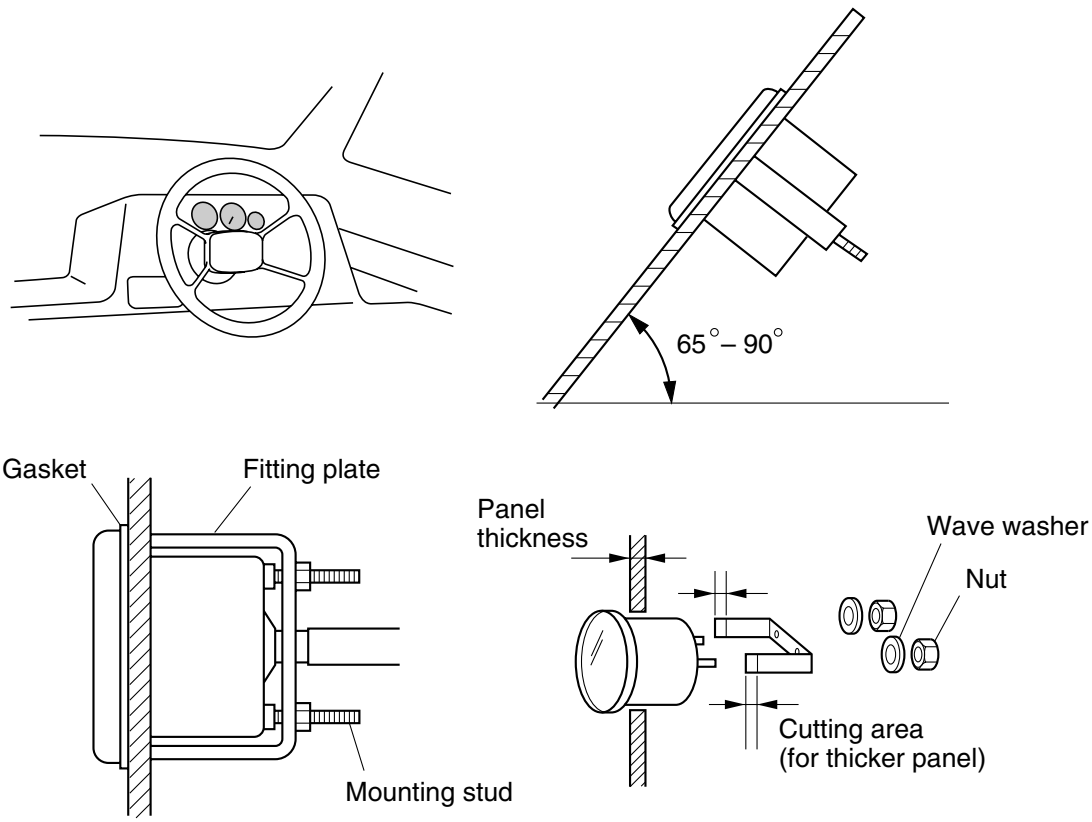
CONVENTIONAL GAUGE (6Y5 & 6Y7)

MOUNTING THE METERS

MOUNTING THE METERS

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 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 refurn to the zero position after the engine has stopped.
2. Make a hole in 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.



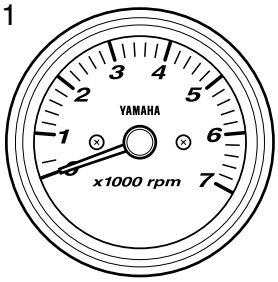
* If the gauge is mounted onto 13mm (0.5 in) or thicker board, cut out the fitting plate end so that the mount nut is enough tightened.

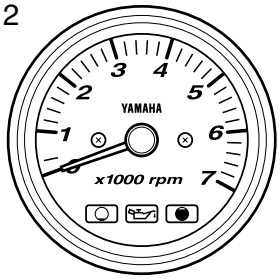
ANALOG GAUGE ILLUMINATION (6Y7 TYPE)

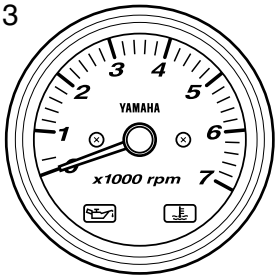
For black-face analog gauge, the faceplate illuminated with permeation light for nighttime operation.
The white-face analog gauge used an indirect clear lighting.

ANALOG TACHOMETER

A tachometer is essential for suitable outboard performance.
The engine speed can be monitored for most efficient operation.
In twin motors applications, the tachometers can be used to set the throttle of each engine accurately.

1 

2 

3 

ANALOG TACHOMETER APPLICATIONS

Ref. No.	Description	Part No.	Applicable model
1	Without indicators BLK panel	6Y7-83540-20	Pre-mixed 9.9-250 with E-start F9.9-F25, and FT8 (T8) with E-start
	Without indicators WHT panel	6Y7-83540-30	
2	With 3 oil indicators BLK panel	6Y7-83540-00	**US, Can.:** NA **Others:** 250G, L250G
	With 3 oil indicators WHT panel	6Y7-83540-10	
3	With overheat & oil indicators BLK panel	6Y7-83540-80	**US, Can.:** 40 (3-cyl.)-300 with E-start & oil injection, T25, F30-F250 with E-start **Others:** 40 (3-cyl)-300 w/ oil injection (excluded 250G/L250G), F30-F250 (E-start models)
	With overheat & oil indicators WHT panel	6Y7-83540-90	

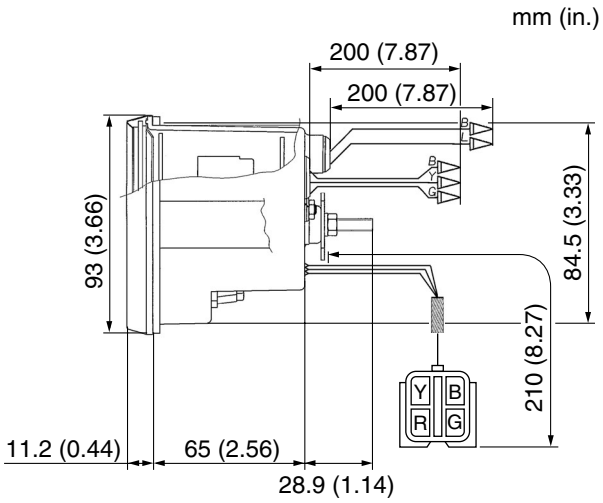
NOTE:

Tachometer with triple oil indicators (Ref. No.2) requires the relay to light the indicators.
See the wiring-diagram to connect the relay (P/N: 6Y5-81950-02).

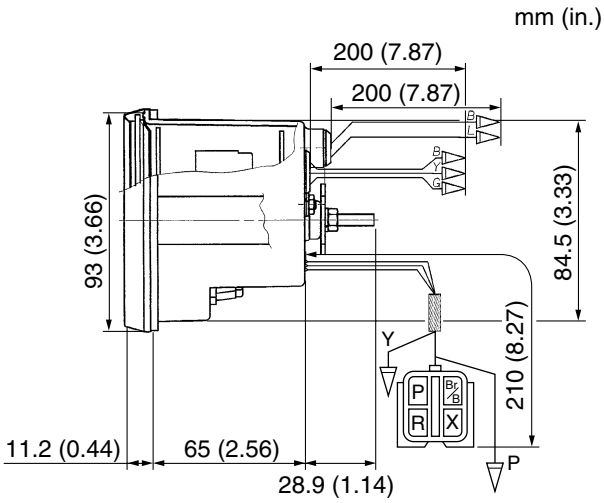
ANALOG TACHOMETER

ANALOG TACHOMETER DIMENSIONS

3-indicator for 250G & L250G



2-indicator for 4-stroke and oil injected 2-stroke engines (excluded 250G & L250G)



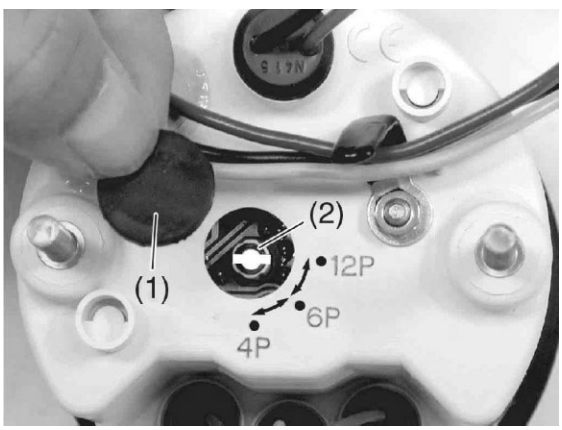
POLE NUMBER SET UP

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	6 – 15, 40G, 40J, 55B, E40G, E40J, E48C, E55C, EK40G, EK40J
6-pole	20D (20), 25N (25), 25B, 30D, 30H, 40X, 40V, 40Y, 50H (50), 60F 70B (70), E25B, EK25B, E30H, E40X, E60H, F6 – F15 (66M)
12-pole	55D, 75A, 75C, 85A, 90A (90), V4, V6, E60J, E65A, E75B, F15 (6AG) – F250

POLE NUMBER ADJUSTMENT

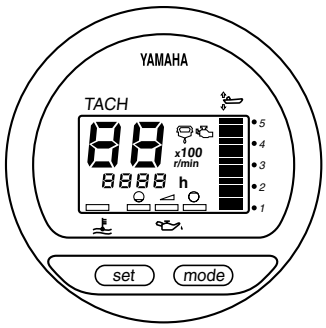
1. Remove the rubber grommet (1) from the back of meter.
2. Turn the rotating switch (2) with a slotted-head screwdriver to the required position.
3. Reinstall the grommet.



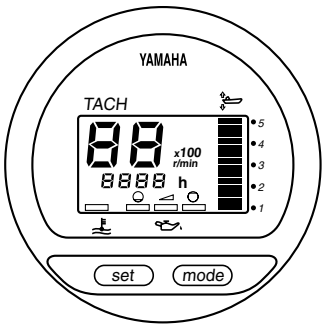
DIGITAL TACHOMETER

A tachometer is essential for suitable outboard performance.
The engine speed can be monitored for most efficient operation.
In dual-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 warning indicator.
Also, this meter can be used for both 2 and 4 stroke models by the switch settings.

1



2



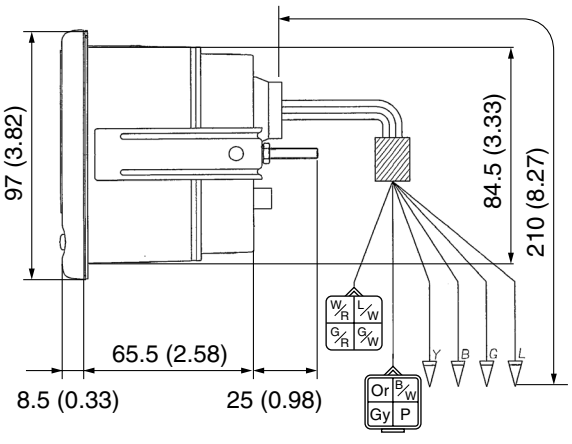
DIGITAL TACHOMETER APPLICATIONS

Ref. No.	Description	Part No.	Applicable model
1	Multifunction	6Y5-8350T-03	**US, Can.:** NA **Others:** 250G,L250G
2	Multifunction w/o “Check engine” and “Water in fuel” indicators	6Y5-8350T-90	**US, Can.:** 40-300, T25, F30-F250 PTT models **Others:** 40 (3-cyl)-300 w/ oil injection (excluded 250G/L250G), F30-F250 PTT models

DIGITAL TACHOMETER DIMENSIONS

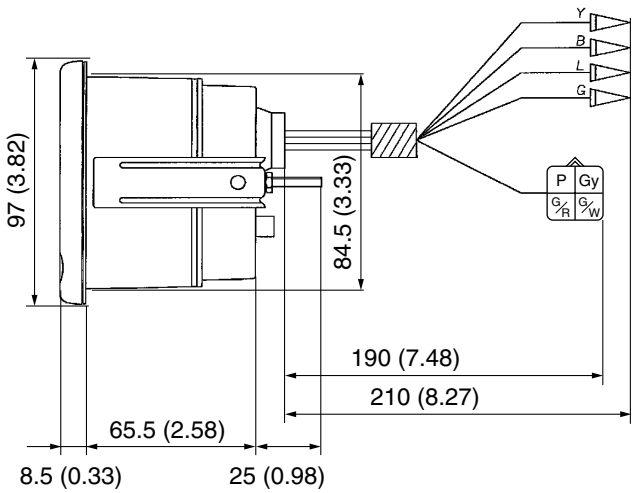
1. With twin 4-pin couplers

mm (in.)



2. With single 4-pin coupler

mm (in.)



DIGITAL TACHOMETER

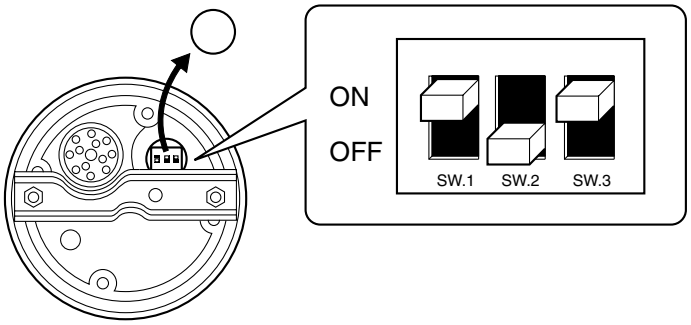
POLE NUMBER SET UP

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 (50), 40Y, 60F, 70B (70)
12-pole	75C, 90A (90), V4, V6, FT25B (T25), F30 – F250

POLE NUMBER ADJUSTMENT

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



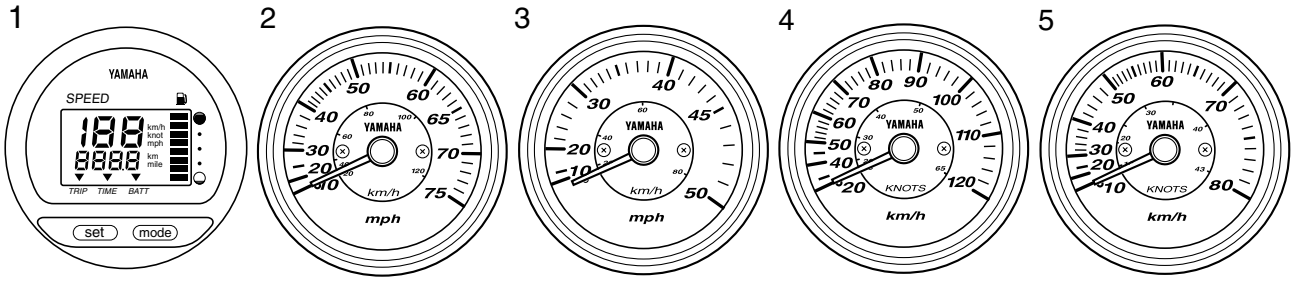
No.	SW.1	SW.2	SW.3
Dipswitch function	Trim sensor type	Generator type	Engine type
ON	2 lead	6-pole	4-stroke
OFF	3 lead	12-pole	2-stroke

NOTE:

The switch position in the illustration shows the initial setting.

SPEEDOMETER

The speedometer indicates an approximately 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 be 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 sender and its relation to the water flow off the area of the boat in front of the sender.
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.



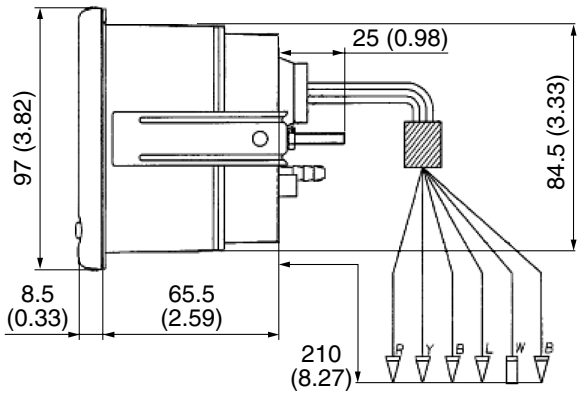
SPEEDOMETER APPLICATIONS

Ref. No.	Description	Part No.	Applicable model
1	Digital multifunction	6Y5-83570-S5	40 (3-cyl)-300 with E-start models F30-F250 with E-start models
		6Y5-83500-30	For Yamaha manufactured boats
2	Analog, BLK panel 0 – 75 mph (20 – 120 km/h)	6Y7-83510-00	40 (3-cyl)-300 F30-F250
	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

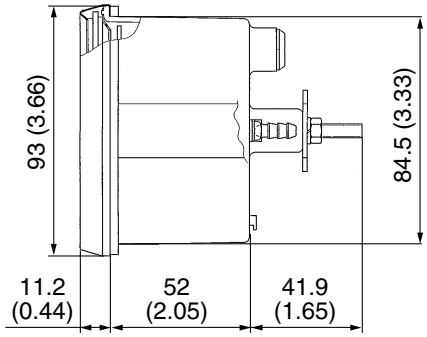
SPEEDOMETER DIMENSIONS

Digital



Analog

mm (in.)



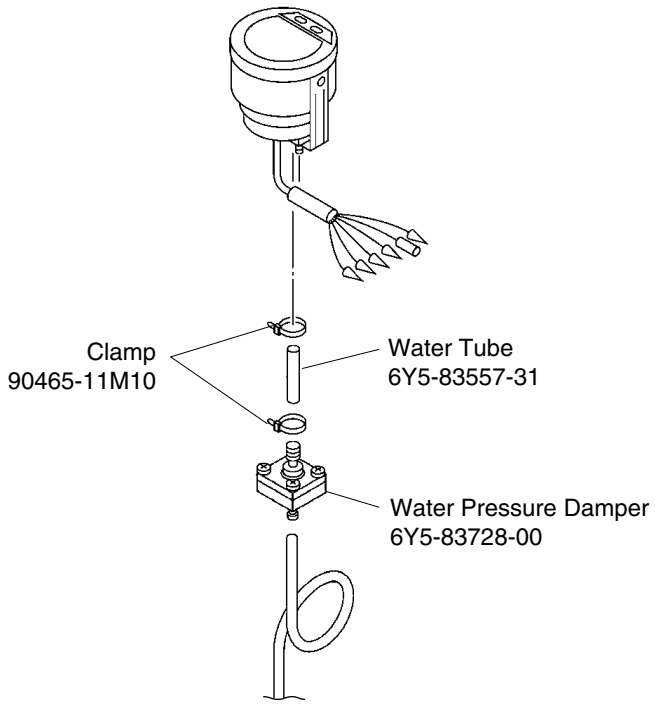
NOTE:

A 6m (19.7 ft) water tube (P/N: 688-83557-00) is included with all speedometer units, (except digital speedometer unit P/N: 6Y5-83570-S5).

WATER PRESSURE DAMPER (OP)

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

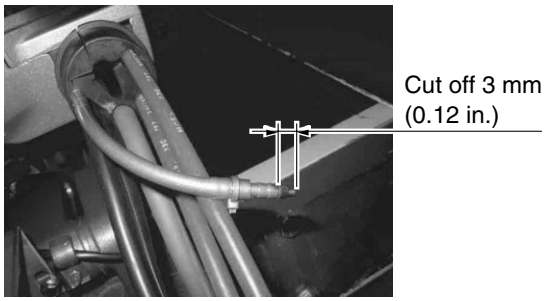
- The pointer of analog gauge is wiggled if water pressure pulsates.
- To reduce a risk if water has leaked at connector end causing the gauge damage.



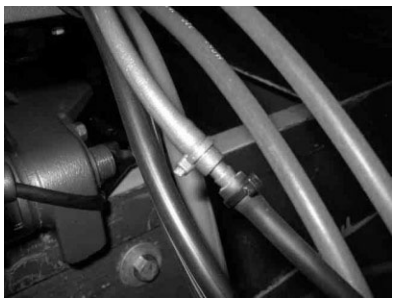
SPEEDOMETER

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.



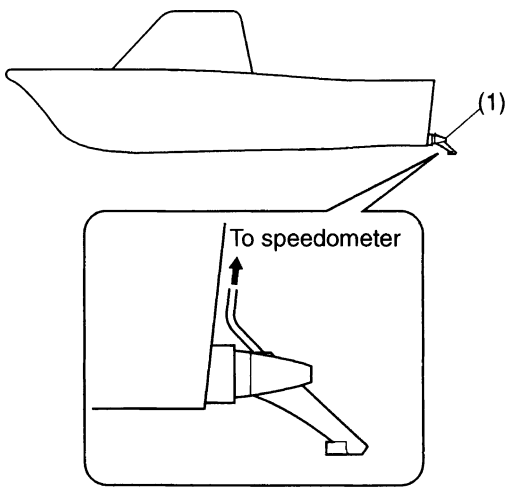
2. Route the speedometer tube carefully to avoid crimping or damage.



3. Connect the tube to the nipple.

NOTE:

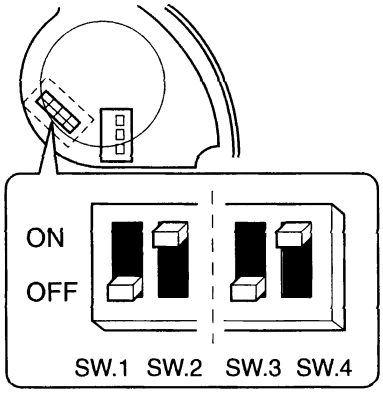
- The optional speed sender (P/N: 688-83556 -01) is required if the speedometer tube is not equipped to the clamp bracket area.
- In high-performance applications where the engine has been mounted in an elevated position, it may be necessary to use the optional speed sender to obtain a correct reading.



(1) Optional speed sender

DIGITAL SPEEDOMETER SET UP

1. Remove the rubber grommet from the back the meter.
2. Set the toggle dipswitches on 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 sender	Yamaha original 5 – 105 Ω	ABYC (US) 30 – 240 Ω	Europe 180 – 0 Ω

NOTE:

The switch position in the illustration shows the initial setting, which is the mph display and ABYC fuel sender.

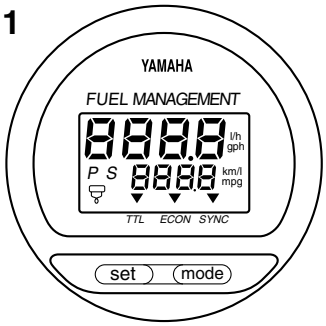
FUEL MANAGEMENT GAUGE

The fuel management gauge has the functions as a fuel flow gauge, fuel consumption gauge, fuel economy gauge, twin engine RPM synchronizer for dual installations, and an optional water separator warning indicator that detects water in the fuel filter.
The gauge can display by recieving data from the fuel flow sensor and either a NMEA 0183 compatible GPS unit or the digital speedometer.

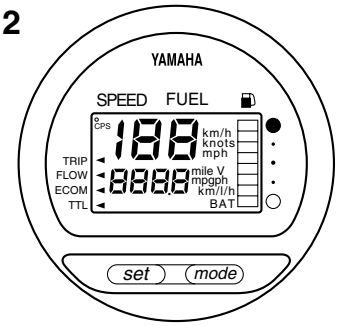
NOTE:

Fuel management gauge with speedometer does not have the function as twin engine RPM synchronizer, water detection warning, and each engine's fuel measurement.

1



2



FUEL MANAGEMENT GAUGE APPLICATIONS

Ref. No.	Description	Part No.	Applicable model
1	Fuel MGT gauge kit 1 For single-engine	6Y5-W0088-54	115-300 F115-F250
	Fuel MGT gauge kit 2 For twin-engine	6Y5-W0088-65	
2	Fuel MGT gauge with speedometer	6Y5-83500-40	

FUEL MGT GAUGE KIT CONTENTS

Description	Part No.	Q'ty		Remarks
		Kit 1	Kit 2	
Fuel MGT gauge	6Y5-83500-F2	1	1	
3-prong connector	6Y5-87122-S0	1	1	Between digital speedometer and fuel MGT gauge
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	

ADDITIONAL PARTS REQUIREMENTS (FOR FUEL MGT w/ speedometer)

Description	Part No.	Q'ty	Remarks
Fuel flow sensor	6Y5-85752-02	1	
EXT wire-harness	6Y5-83553-F1	1	8 m, 26 ft
Screw	90158-06003	2	

OPTIONAL WIRE-HARNESS

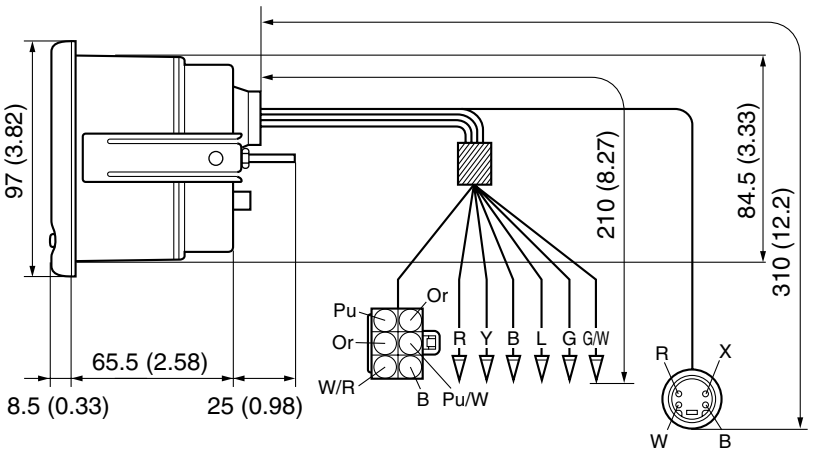
Description	Part No.	Remarks
GPS signal lead	6Y5-85721-F0	To connect a NMEA0183 compatible GPS unit

FUEL MANAGEMENT GAUGE

FUEL MANAGEMENT GAUGE DIMENSIONS

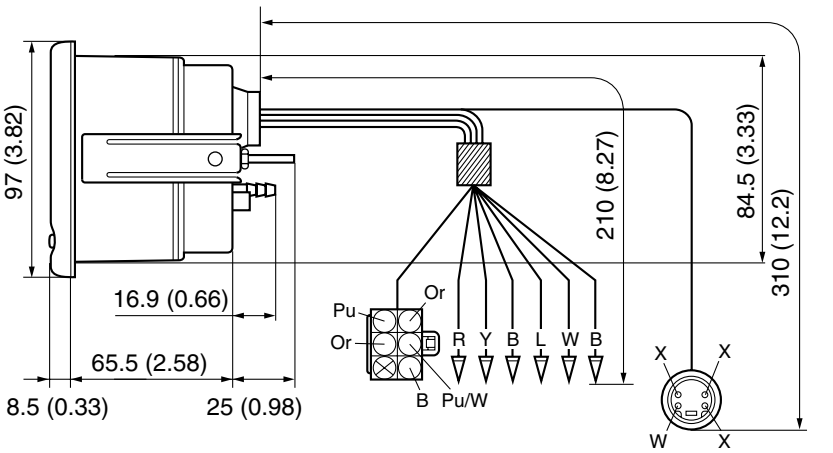
Fuel management gauge (Ref. No. 1)

mm (in.)



Fuel MGT gauge with speedometer (Ref. No. 2)

mm (in.)



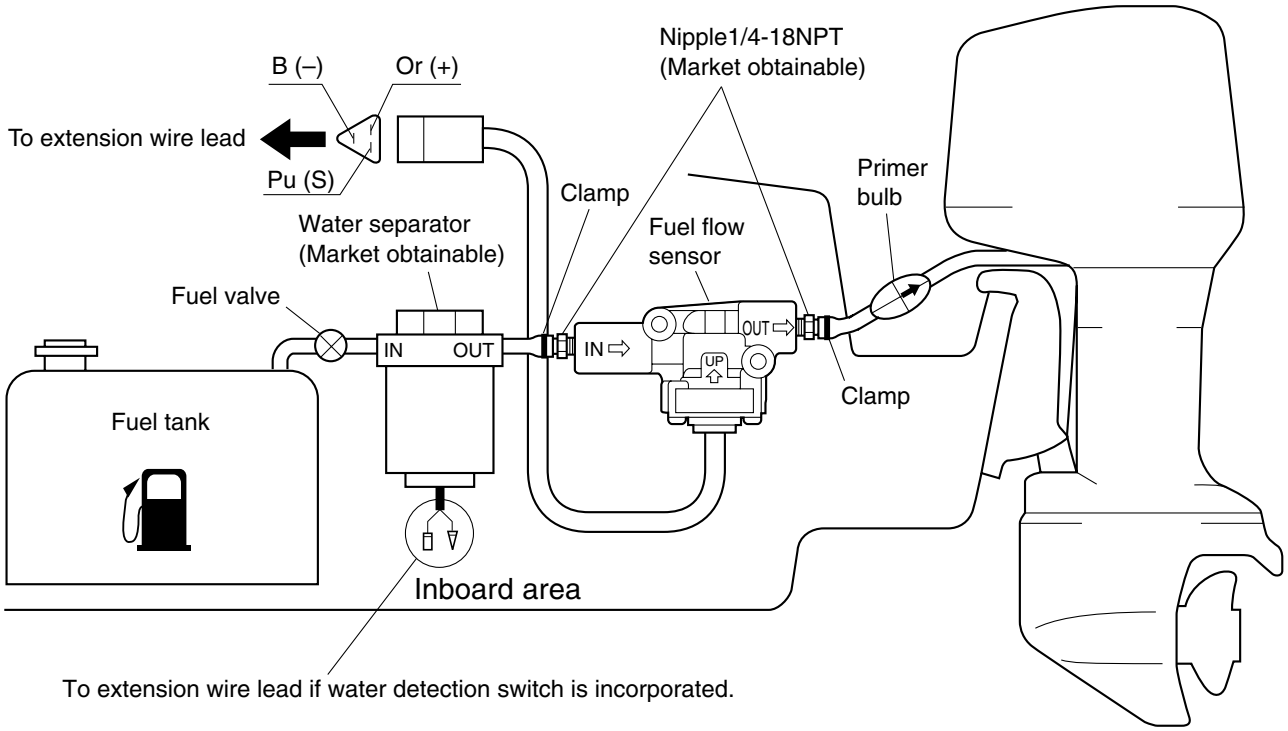
FUEL MANAGEMENT GAUGE

FUEL SENDER INSTALLATION

Follow the notifications below.
1. Locate the sender in a well ventilated area in boat between the engine and a water separator.
2. Place the sender 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 good quality hose clamp.

NOTE:

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

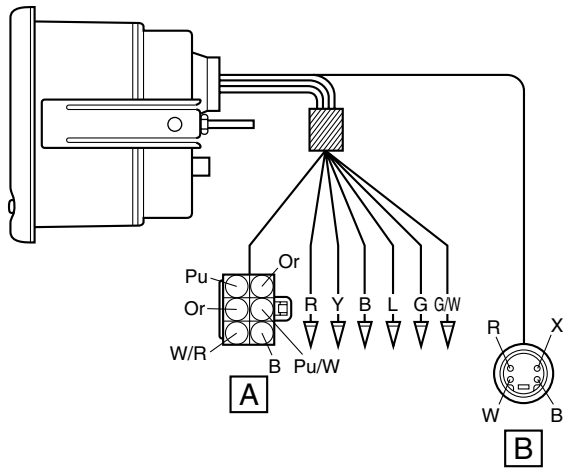


FUEL MANAGEMENT GAUGE

WIRING DESCRIPTION

Fuel management gauge

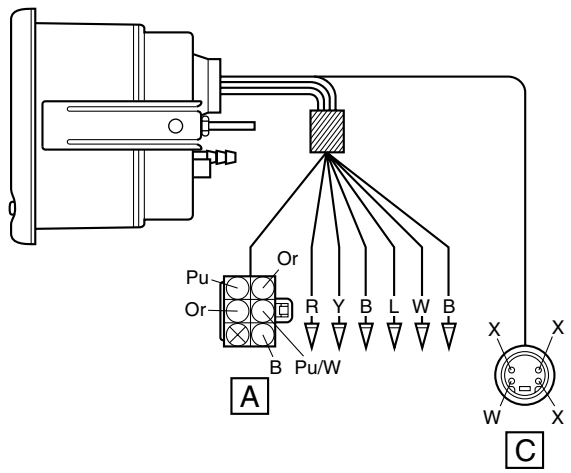
Be sure that both the fuel management gauge and speedometer yellow wires are connected to the same power source and activated at the same time.



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 the blue wire from digital speedometer
Y: To digital speedometer to the same power source
Coupler [A] : To the extension wire lead for the fuel flow sender
Coupler [B] : To the digital speedometer or a NMEA 0183 compatible GPS unit

Fuel MGT gauge with speedometer

The speed data is automatically picked up, therefore wiring to the speedometer is not needed.



R: 12 volt
W: To fuel level sender (Fuel tank)
B: To the ground
L: To light switch
Y: To power source
Coupler [A] : To the extension wire lead for the fuel flow sender
Coupler [C] : To a NMEA 0183 compatible GPS unit

FUEL MANAGEMENT GAUGE

CONNECTING TO THE DIGITAL SPEEDOMETER (FOR FUEL MANAGEMENT GAUGE)

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 meter.

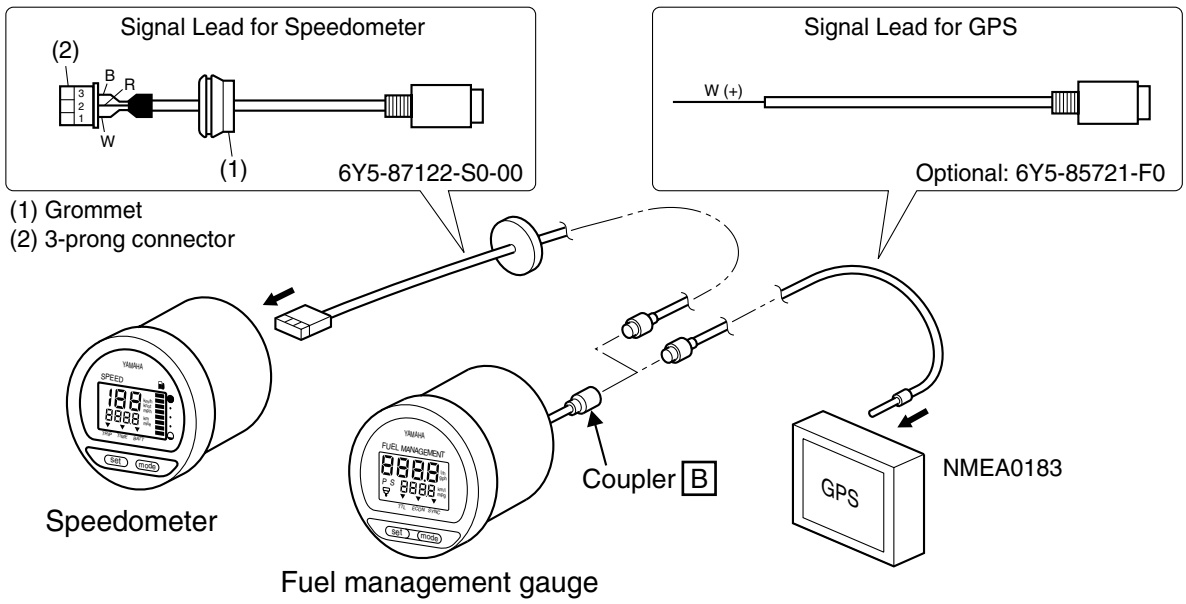
CONNECTING SPEEDOMETER TUBE (FOR FUEL MGT GAUGE WITH SPEEDOMETER)

See the speedometer section.

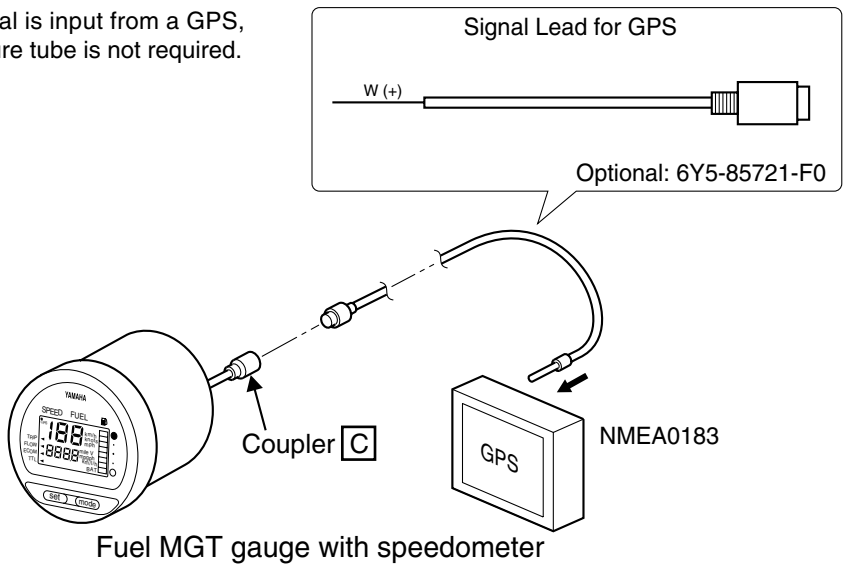
CONNECTING TO A GPS

This is to input the speed data to the fuel management gauge (with speedometer) 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 meter (with speedometer) to the same gound.



If the speed signal is input from a GPS, the speed pressure tube is not required.



FUEL MANAGEMENT GAUGE

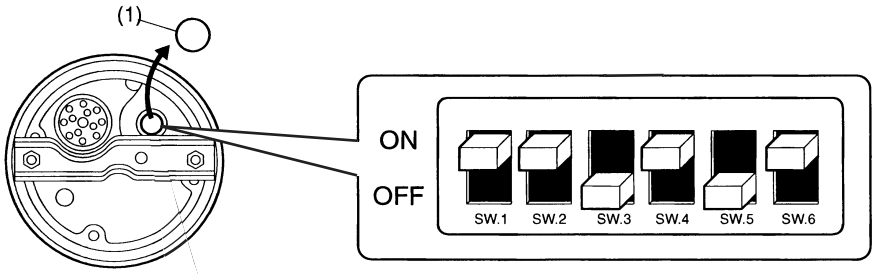
FUEL MANAGEMENT GAUGE SET UP

Follow the procedure below.

1. Remove the grommet (1) on the back of the meter.
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%

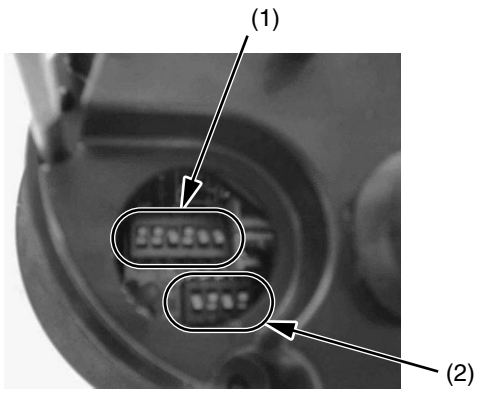


SW.1	ON	OFF	ON	OFF	ON	OFF	ON	OFF
SW.2	ON	ON	OFF	OFF	ON	ON	OFF	OFF
SW.3	ON	ON	ON	ON	OFF	OFF	OFF	OFF
Compensation	–4%	–3%	–2%	–1%	0	+1%	+2%	+3%

SW.4	OFF	ON
Unit	L/h	gph

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

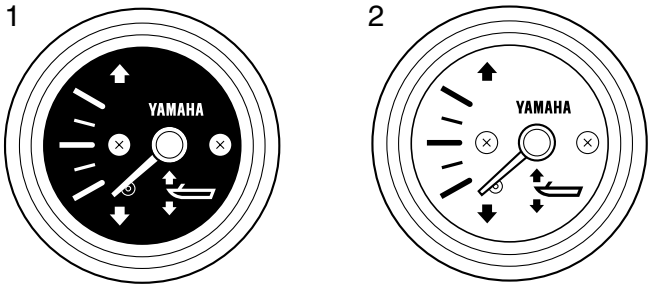
FUEL MGT GAUGE WITH SPEEDOMETER SET UP



For 6 line switches (1), see the above instruction.
Switch 6 is not used.
For 4 line switches (2), see DIGITAL SPEEDOMETER SET UP on page 5-11.

ANALOG TRIM METER

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



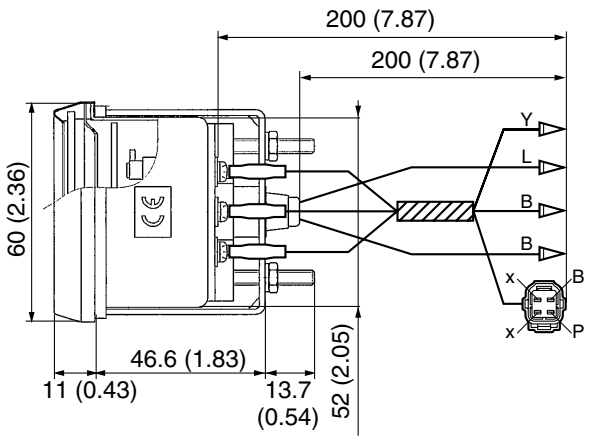
ANALOG TRIM METER APPLICATIONS

Ref. No.	Description	Part No.	Applicable model
1	4-pin coupler BLK panel	6Y7-83670-00	**US, Can.:** NA **Others:** Premixed 40 (3-cyl)-225 w/ PTT, 250G, L250G
	Bullet connector BLK panel	6Y7-83670-40	**US, Can.:** 40-300, T25, F30-F250 PTT models **Others:** 40 (3-cyl)-300 w/ oil injection (excluded 250G & L250G), F30-F250 PTT models Using as a set with tachometer, 6Y7-83540-80
2	4-pin coupler WHT panel	6Y7-83670-20	**US, Can.:** NA **Others:** Premixed 40 (3-cyl)-225 w/ PTT, 250G, L250G
	Bullet connector WHT panel	6Y7-83670-50	**US, Can.:** 40-300, T25, F30-F250 PTT models **Others:** 40 (3-cyl)-300 w/ oil injection (excluded 250G & L250G), F30-F250 PTT models Using as a set with tachometer, 6Y7-83540-90

ANALOG TRIM METER DIMENSIONS

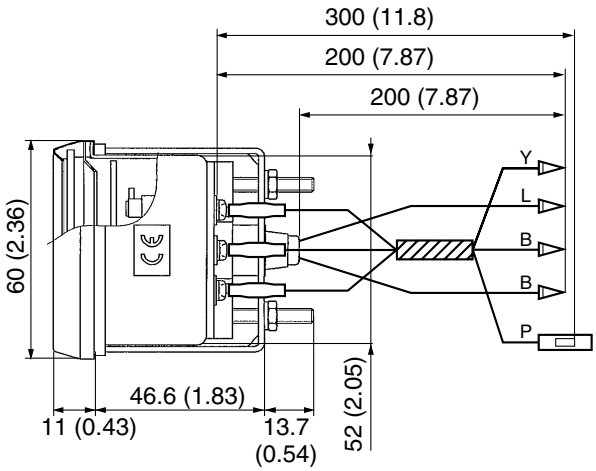
With 4-pin coupler

mm (in.)



With bullet connector

mm (in.)



TRIM SENDER ADJUSTMENT

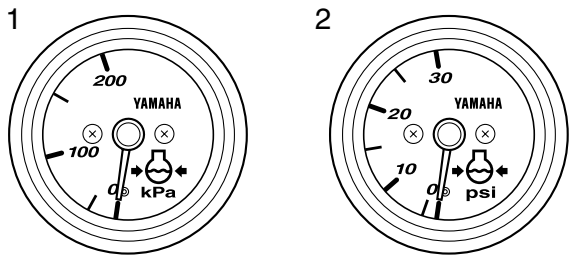
For a down position adjustment, loosen the trim sender screw and make an adjustment so that the needle aligns with the marking line indicating “DOWN”.

WATER PRESSURE METER

The water pressure meter provides a warning for the operator when there is a problem with the cooling system.

NOTE:

- For all in-line cylinder models, the position for installing the sender shares the water temperature output. Therefore, either the water temperature meter or the water pressure meter can be used for one engine.
- However, on V4, V6, and F150 models, both meters can be used for one engine.



WATER PRESSURE METER APPLICATIONS

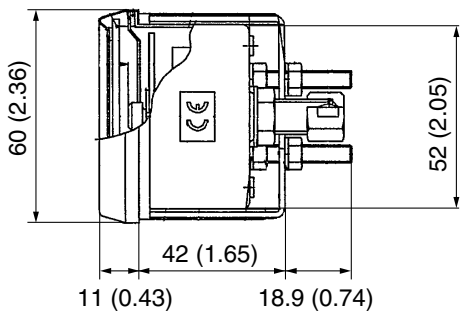
Ref. No.	Description	Part No.	Applicable model
1	kPa, Black panel	6Y7-83660-00	40 (3-cylinder) to 300 F20 (65P) to F250
	kPa, White panel	6Y7-83660-20	
2	psi, Black panel	6Y7-83660-10	
	psi, White panel	6Y7-83660-30	

ADDITIONAL PARTS REQUIREMENTS

Description	Part No.	Remarks
Sender	688-83667-00	With 10 m (32.8 ft) tube

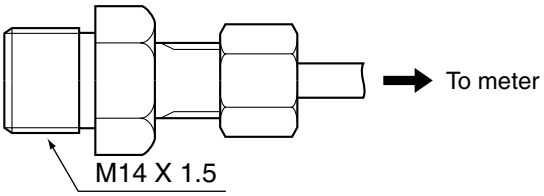
WATER PRESSURE METER DIMENSIONS

mm (in)



WATER PRESS. SENDER INSTALLATION

The method for installing the water pressure sender is the same as the water temperature sender. See the installation instruction to the sender in the water temperature meter on page 5-21.

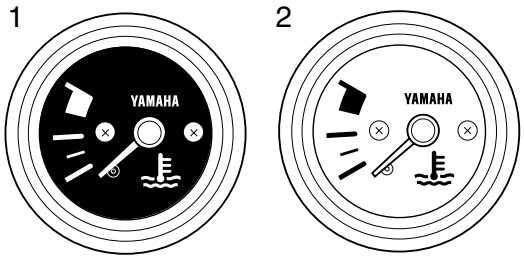


WATER TEMPERATURE METER

The water temperature meter uses a sensor on the engine unit to indicate the temperature of the cooling water inside the powerhead.
The meter has a red zone to indicate overheating so problems can be corrected before severe damage occurs.

NOTE:

- For all in-line cylinder models, the position for installing the sender shares the water pressure output. Therefore, either the water temperature meter or the water pressure meter can be used for one engine.
- However, on V4, V6, and F150 models, both meters can be used for one engine.

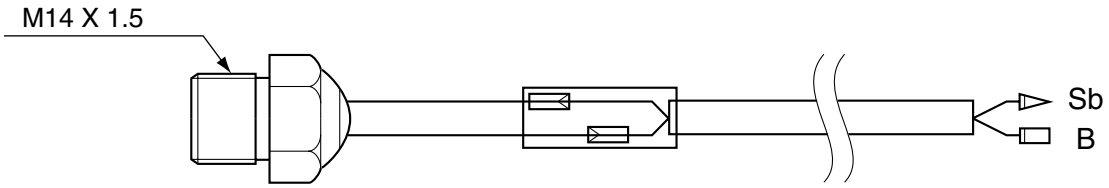


WATER TEMPERATURE METER APPLICATIONS

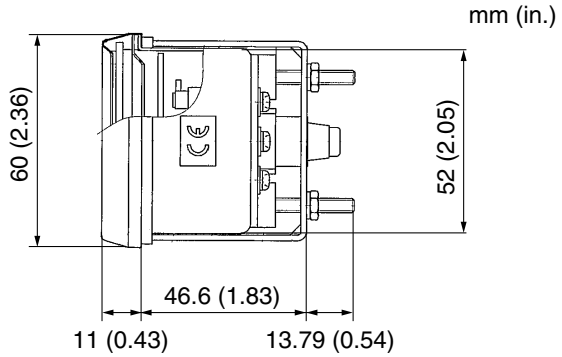
Ref. No.	Description	Part No.	Applicable model
1	Black panel	6Y7-83590-00	40 (3-cylinder) to 300
2	White panel	6Y7-83590-10	F20 (65P) to F250

ADDITIONAL PARTS REQUIREMENTS

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



WATER TEMPERATURE METER DIMENSIONS

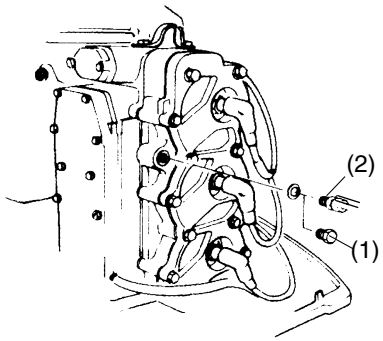


WATER TEMPERATURE METER

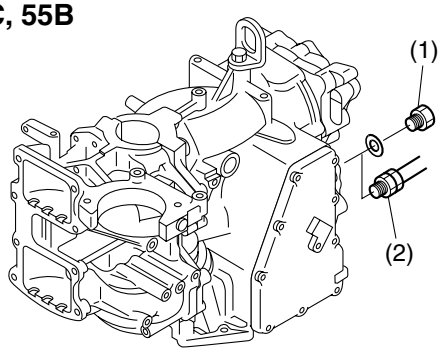
WATER PRESS. SENDER AND/OR WATER TEMP. SENDER INSTALLATION (FOR 2-STOROKE MODELS)

Remove the screw plug (1) from the cylinder head and install the sender (2) with gasket. After installing the sender, check for water leakage. [Sender (2): 20 Nm, 2.0 kgf•m, 15 ft•lb]

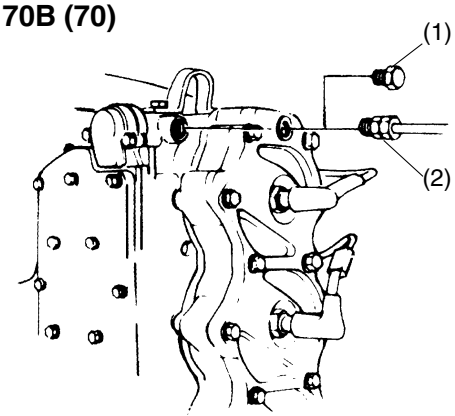
40V, 50H (50)



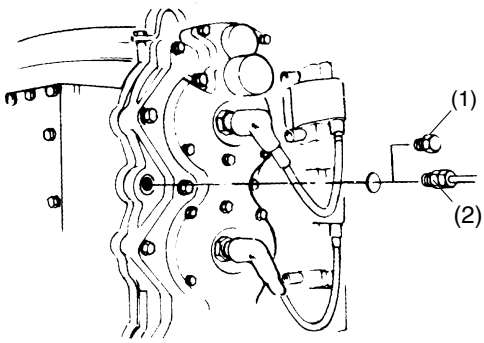
E48C, 55B



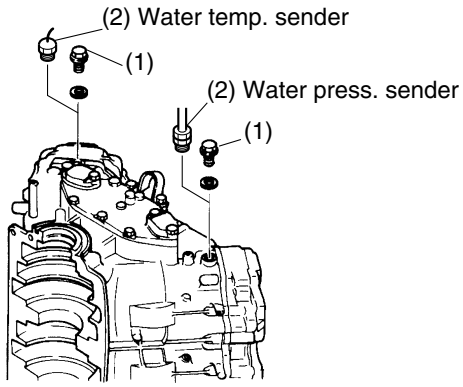
60F, 70B (70)



75C, 90A (90), 75A, 85A



V4, V6

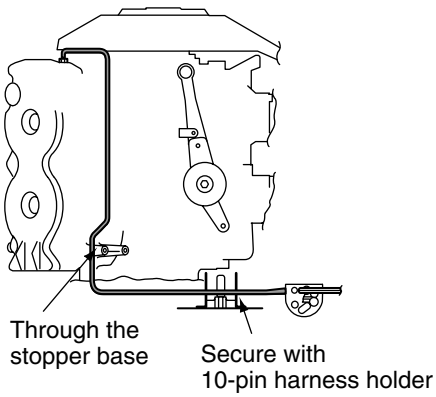


CAUTION:

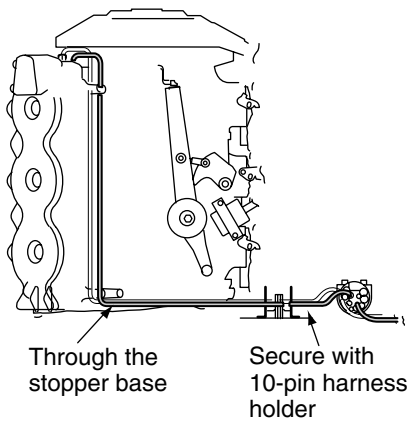
Install the water pressure sender on the port side. If it is installed on the starboard side, the sender tube could cause a damage by hard bending.

ROUTING THE WATER TEMP. LEAD

V4



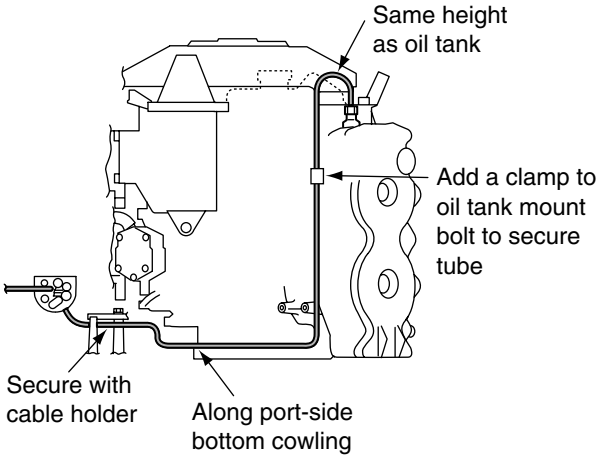
V6 (2.6)



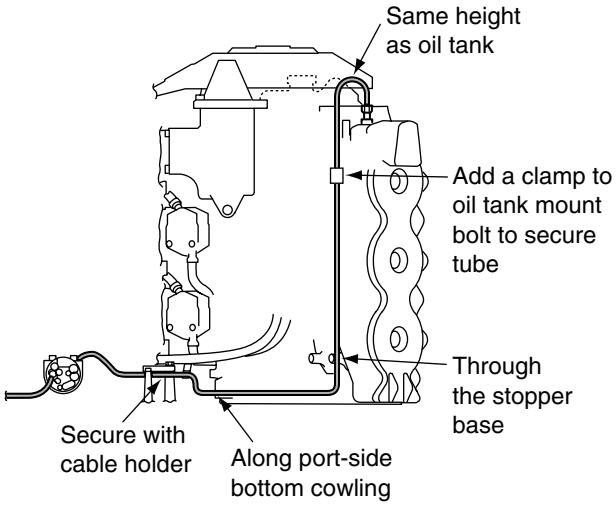
WATER TEMPERATURE METER

ROUTING THE WATER PRESS. TUBE

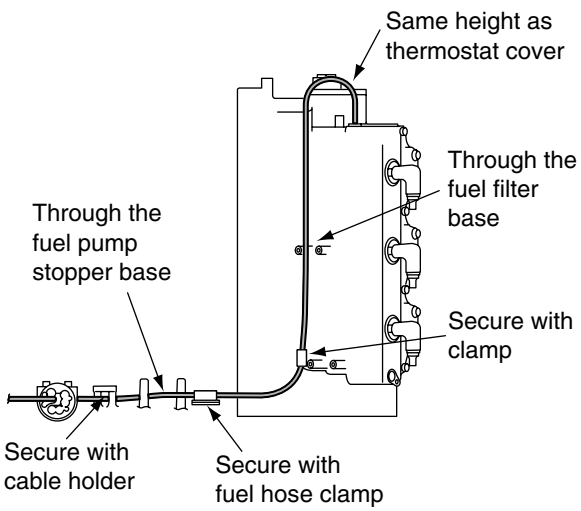
V4



V6 (2.6)

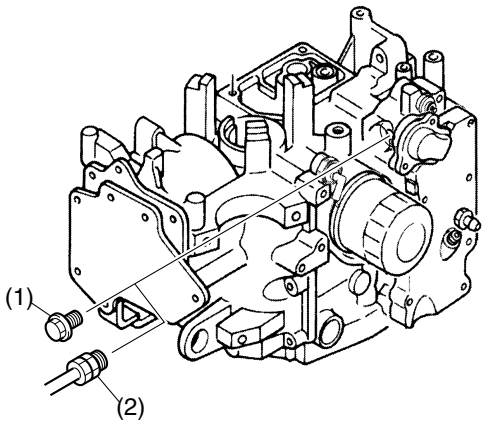


V6 (3.1)

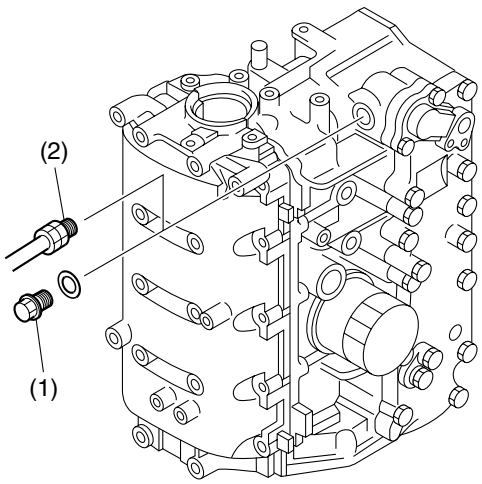


WATER PRESS. SENDER AND/OR WATER TEMP. SENDER INSTALLATION (FOR 4-STROKE MODELS)

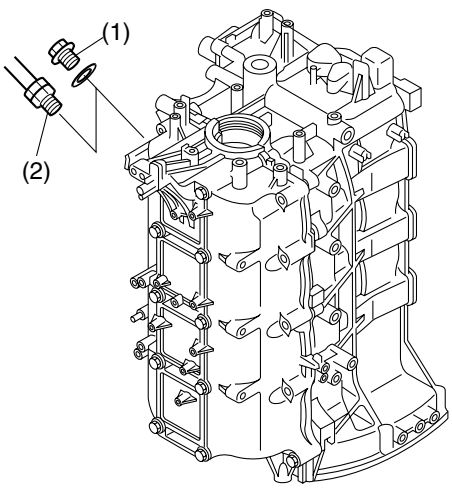
F20A, F25A (F25), FT25B (T25), F30A (F30), F40B (F40)



FT50C, F50D



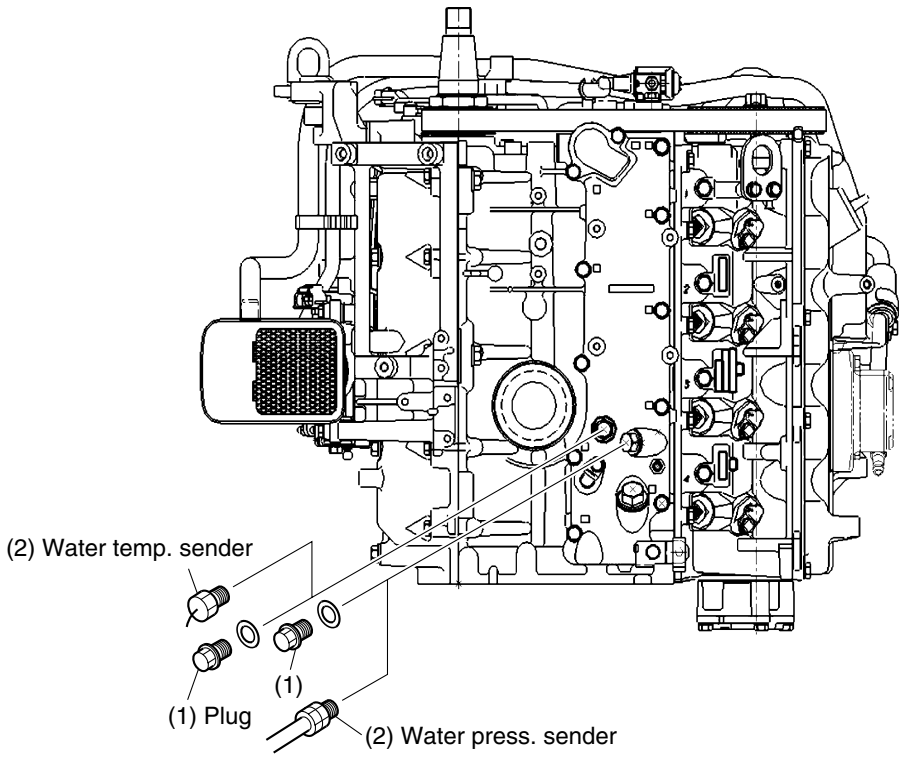
F95A, F100B, F115A (F115)



WATER TEMPERATURE METER

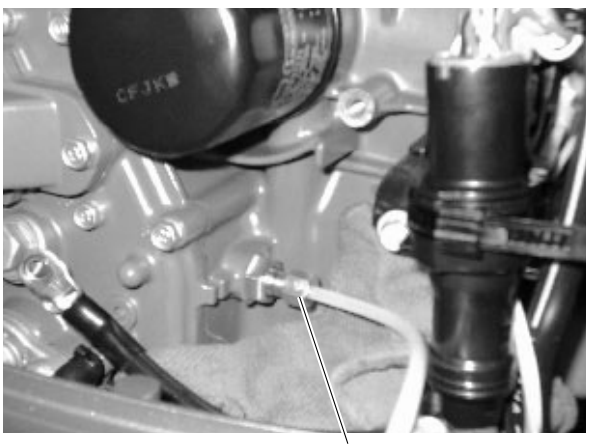
F40D, F50F (F50), FT50G (T50), F60C (F60), FT60D (T60)

Only one of coolant press sensor and coolant temp sensor can be installed, even if the engine has two points for taking out it.



F75B (F75), F80B, F90B (F90), F100D, F75C

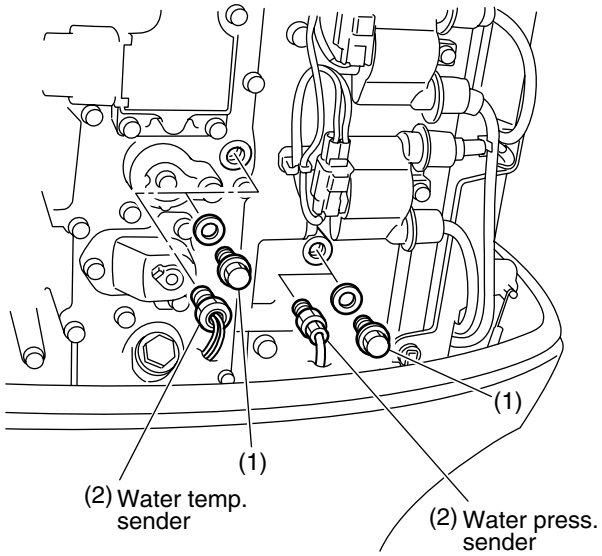
Remove the negative battery cable and oil dipstick, then put a rag on the oil filler hole to avoid dusts falling into the oil sump.



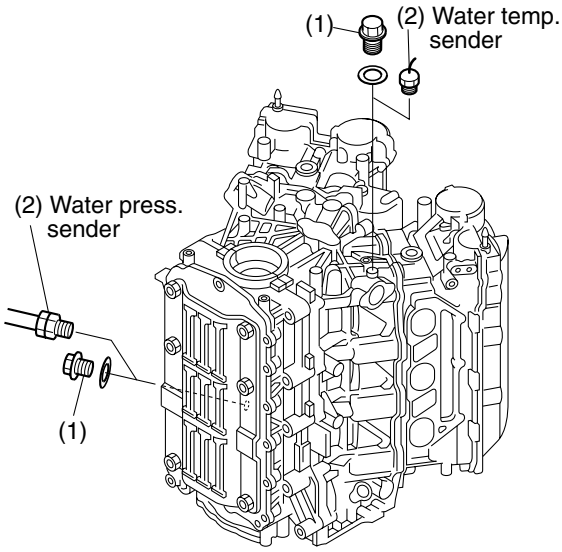
WATER TEMPERATURE METER

SENDER INSTALLATION

F150



F200, F225

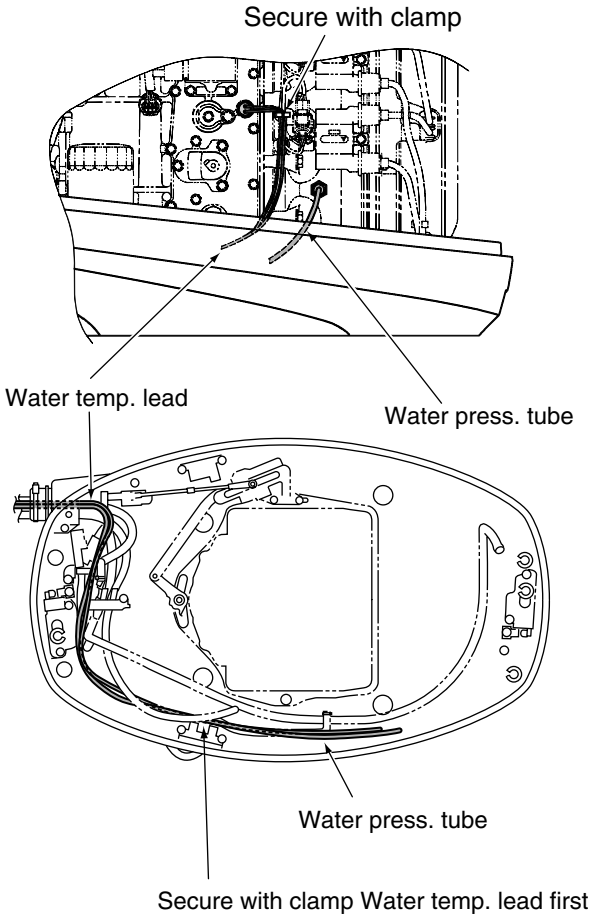


CAUTION:

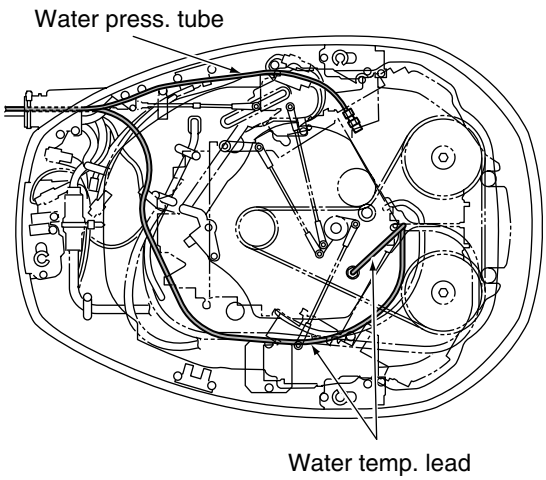
Install the water pressure sender on the port side cylinder. If it is installed on the top of the starboard side cylinder, the sender tube could cause a damage by hard bending.

ROUTING THE WATER TEMP. LEAD & WATER PRESS. TUBE

F150



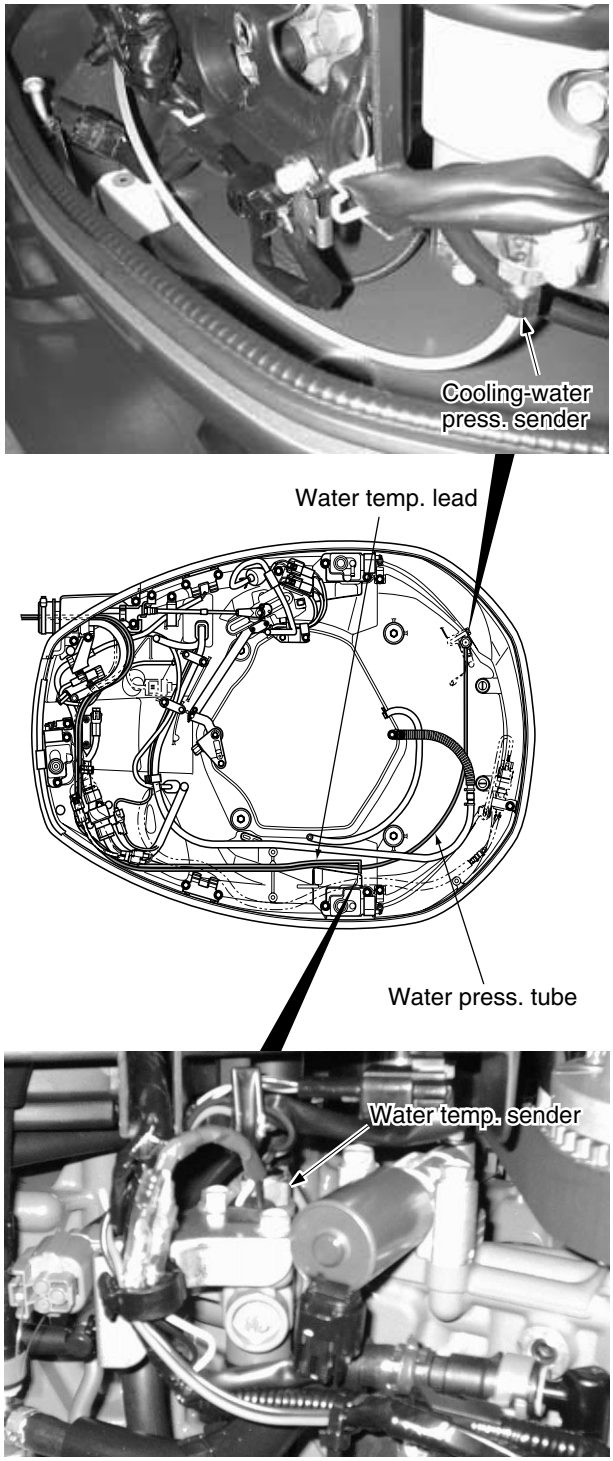
F200, F225



WATER TEMPERATURE METER

SENDER INSTALLATION AND ROUTING

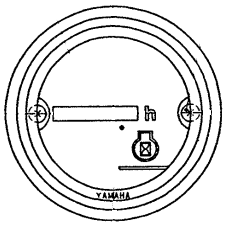
F200, F225, F250 w/ Variable Camshaft Timing



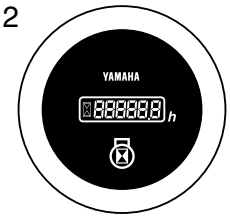
HOUR METER

The hour meter provides the operator with useful at-a-glance information.
It monitors the number of hours a motor has been used since original installation.
The transaction of time count when the engine is stopped differs on each hour-meter and YDIS, therefore the elapsed time is not always equal on their equipments.

1



2



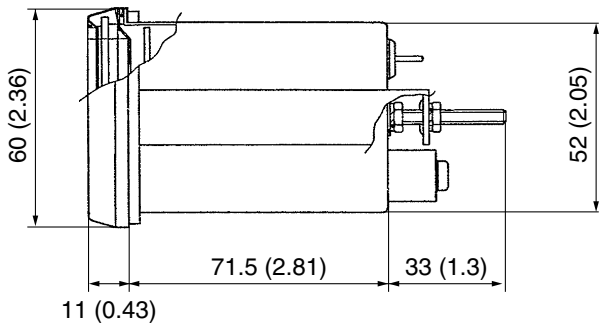
HOUR METER APPLICATIONS

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	

HOUR METER DIMENSIONS

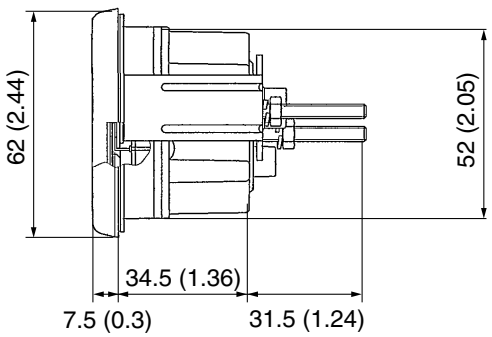
Mechanical

mm (in.)



Digital

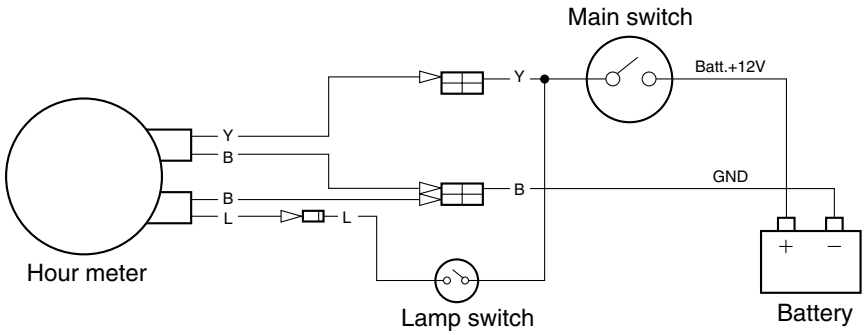
mm (in.)



HOUR METER

WIRING THE MECHANICAL HOUR METER

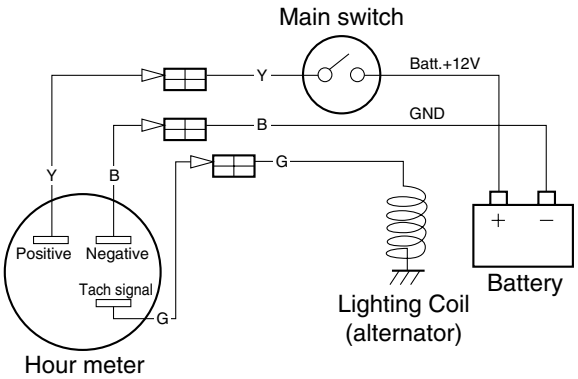
The hour meter can be counted while the main switch is “ON”.



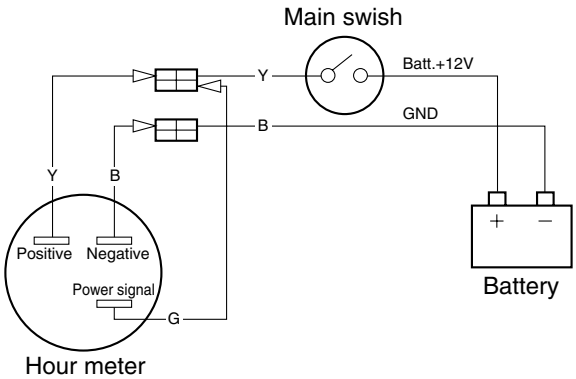
WIRING THE DIGITAL HOUR METER

Two counting method can be selected by connecting wires.

COUNTING TIME WHILE ENGINE IS RUNNING

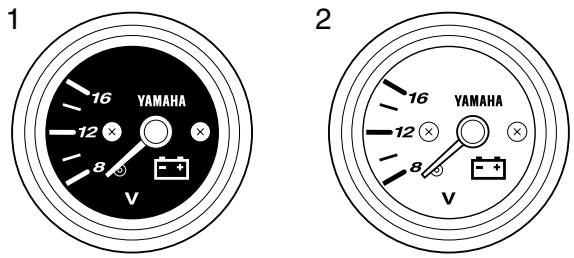


COUNTING TIME WHILE MAIN SWITCH IS “ON”



VOLTAGE METER

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

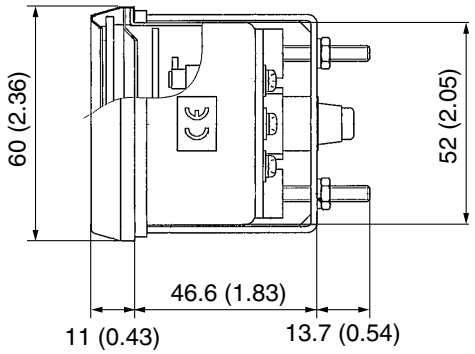


VOLTAGE METER APPLICATIONS

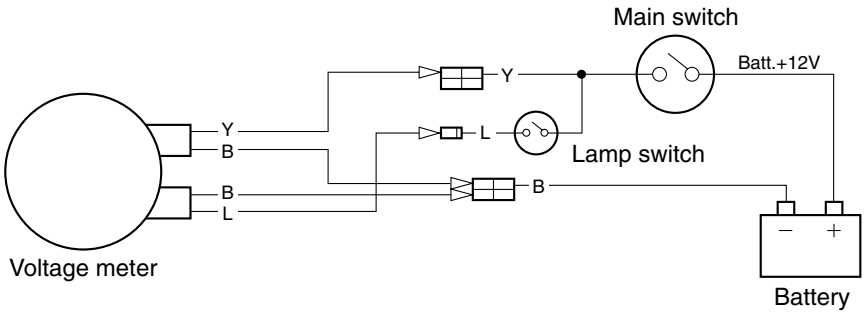
Ref. No.	Description	Part No.	Applicable model
1	DC 12 volts power supply Black panel	6Y7-83503-00	All electrical start models
2	DC 12 volts power supply White panel	6Y7-83503-10	

VOLTAGE METER DIMENSIONS

mm (in.)

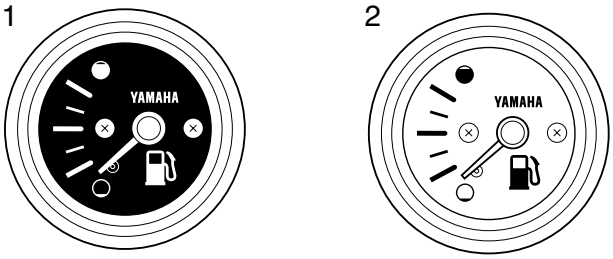


WIRING THE VOLTAGE METER



FUEL METER

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

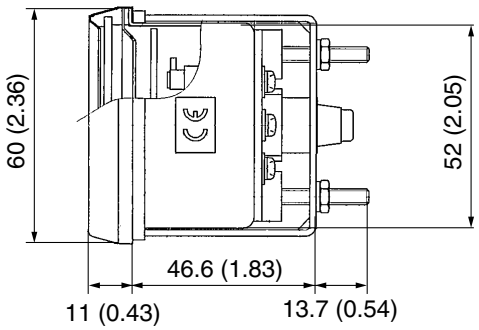


FUEL METER APPLICATIONS

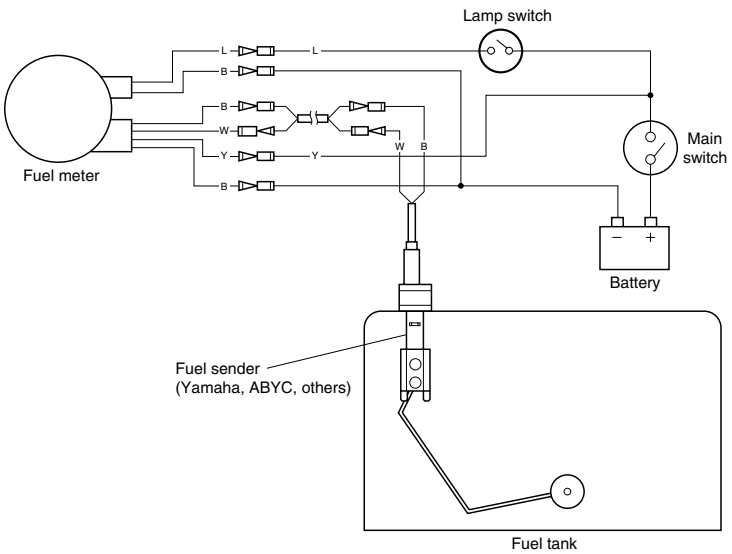
Ref. No.	Description	Part No.	Applicable model
1	For Yamaha sender (5 – 105 Ω) Black panel	6Y7-85750-00	All electrical start models
	For ABYC sender (30 – 240 Ω) Black panel	6Y7-85750-10	
2	For Yamaha sender (5 – 105 Ω) White panel	6Y7-85750-20	
	For ABYC sender (30 – 240 Ω) White panel	6Y7-85750-30	

FUEL METER DIMENSIONS

mm (in.)

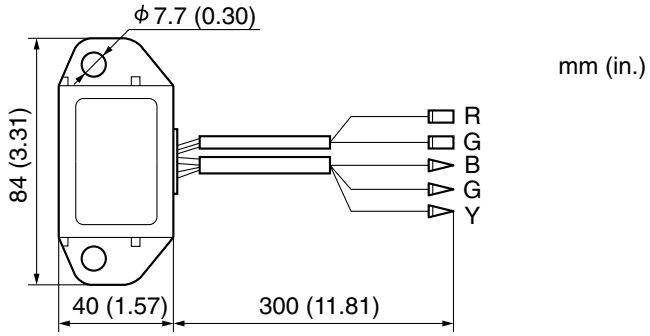


WIRING THE METER



CHARGE WARNING UNIT

The lamp of the charge warning unit indicates the status of charging the battery.
When the main switch is put into “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.



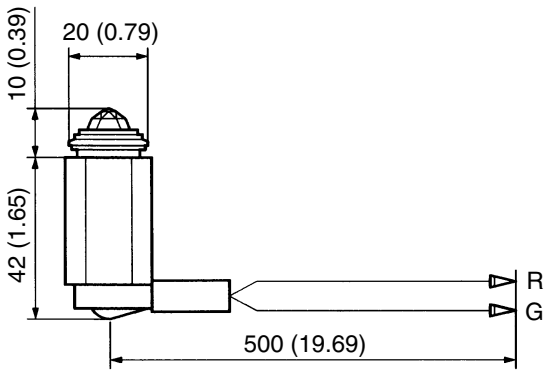
mm (in.)

CHARGE WARNING UNIT APPLICATIONS

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

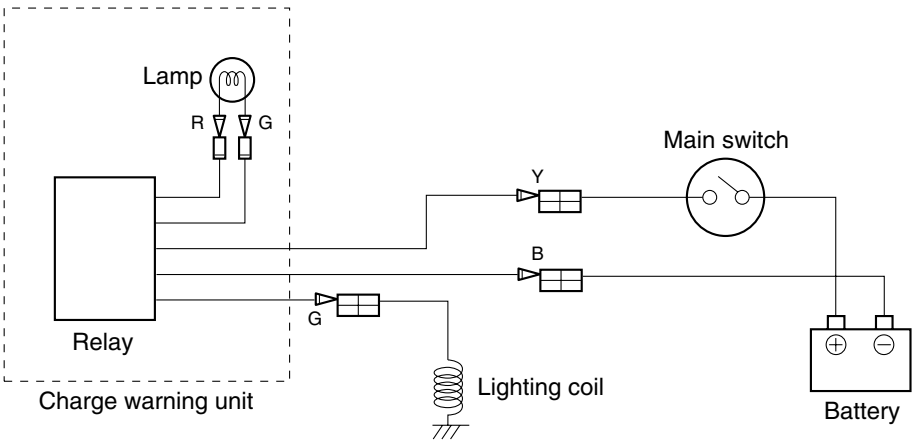
ADDITIONAL PARTS REQUIREMENTS

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



mm (in.)

WIRING THE CHARGE WARNING UNIT



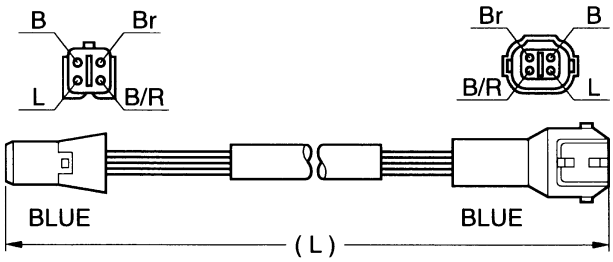
WIRE HARNESSES

An optional wire harness for the instruments is prepared. That will help any boats set up instruments. Choose a suitable wire-harness if necessary.

For the wire color description, see the table on page 5-35.

REMOTE-OIL TANK HARNESS

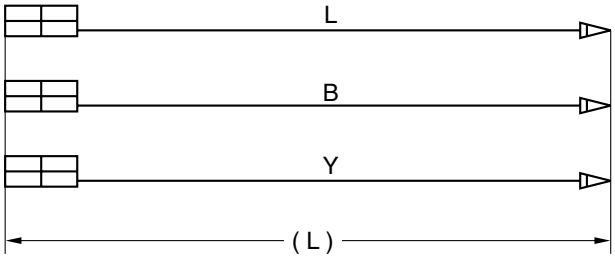
Part No.	Length (L)	Remarks
6R3-85721-30	3 m (9.8 ft)	For V4, V6 oil injection model
6R3-85721-50	5 m (16.4 ft)	
6R3-85721-80	8 m (26.2 ft)	



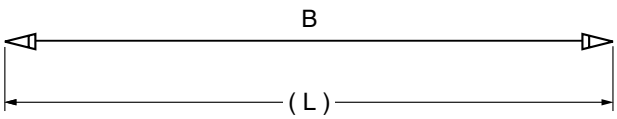
* On a model, 8m wire harness is accompanied in the engine crate.

ADDITIONAL ACCESSORY LEAD

Part No.	Length (L)	Remarks
6Y5-82149-00	30 cm (1 ft)	Blue
6Y5-82117-00	30 cm (1 ft)	Black
6R3-82521-80	30 cm (1 ft)	Yellow



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

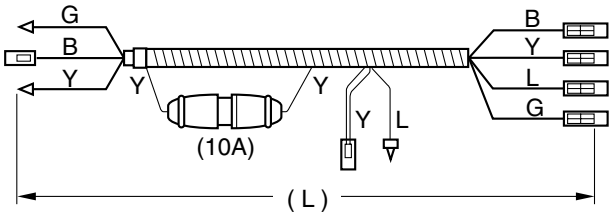


WIRE HARNESSES

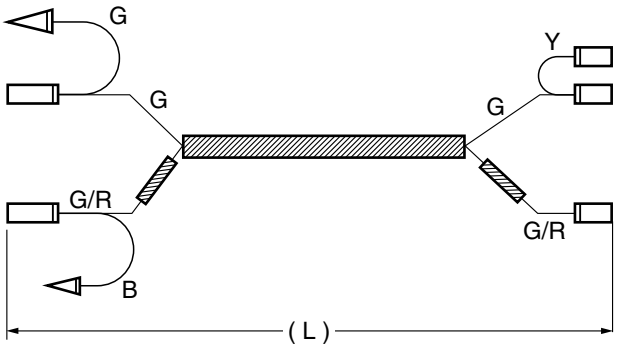
METER HARNESS

For analog meter

Part No.	Length (L)	Remarks
6Y5-83553-00	2.5 m (8.2 ft)	All except V4 / V6

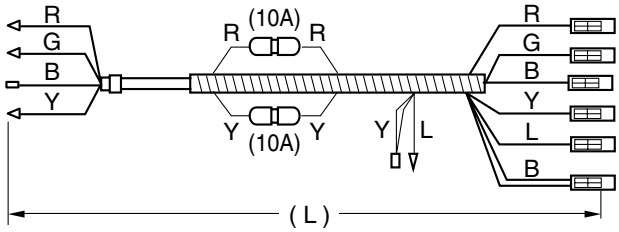


Part No.	Length (L)	Remarks
6Y5-83553-10	5 m (16.7 ft)	For pre-mixed model

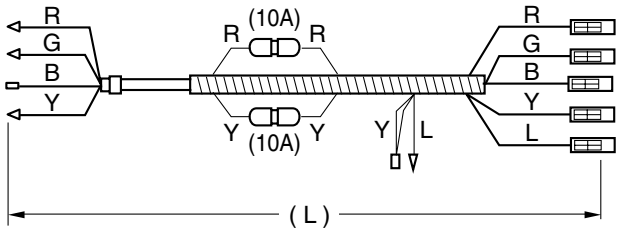


For digital meter

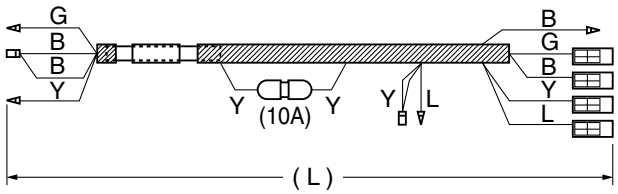
Part No.	Length (L)	Remarks
6Y5-83553-N0	2.5 m (8.2 ft)	For twin application



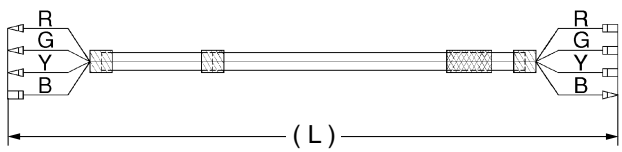
Part No.	Length (L)	Remarks
6Y5-83553-M0	2.5 m (8.2 ft)	For single application



Part No.	Length (L)	Remarks
6Y5-83553-20	2.5 m (8.2 ft)	L/H model



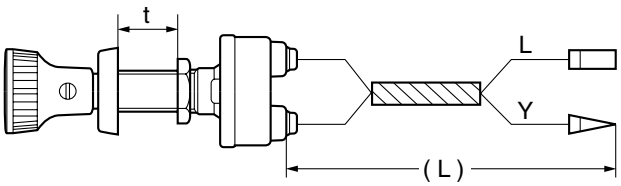
Part No.	Length (L)	Remarks
6Y5-8356N-00	1.5 m (5 ft)	Extension harness



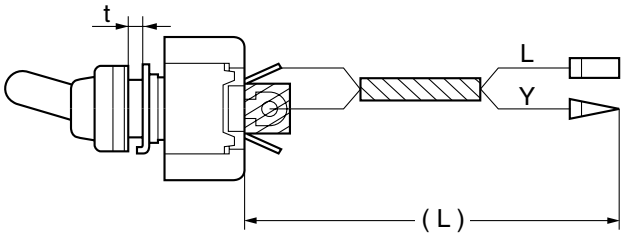
WIRE HARNESSES

LAMP SWITCH

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

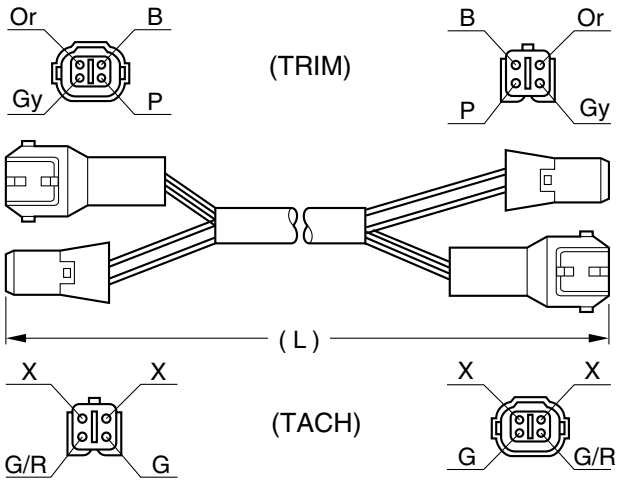


Part No.	Length (L)	Remarks
688-82526-00	10 cm (4 in)	t = Max.3 mm



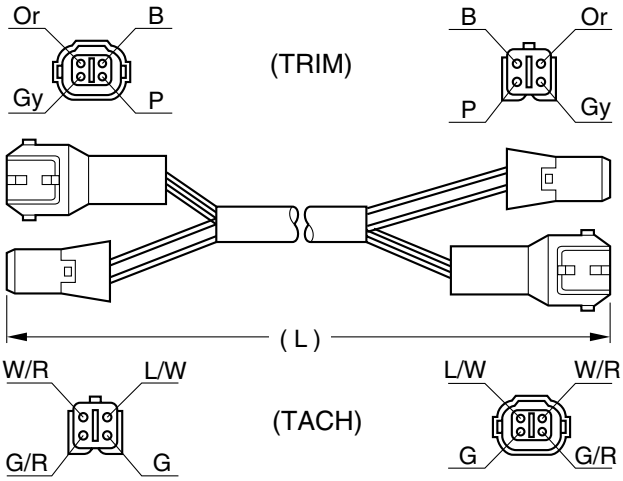
COMBINATION TRIM AND OIL LEAD 1

Part No.	Length (L)	Remarks
64D-82553-50	5 m (16.4 ft)	250G, L250G
64D-82553-70	7 m (23 ft)	
64D-82553-80	8 m (26.3 ft)	
64D-82553-90	9 m (31.2 ft)	



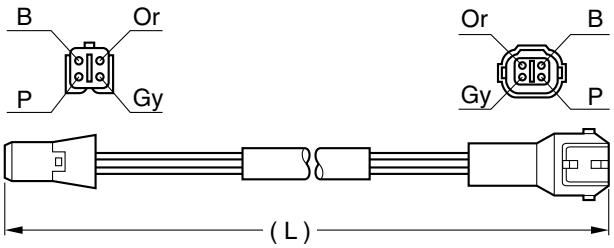
COMBINATION TRIM AND OIL LEAD 2

Part No.	Length (L)	Remarks
68F-82553-50	5 m (16.4 ft)	250G, L250G
68F-82553-70	7 m (23 ft)	
68F-82553-80	8 m (26.3 ft)	
68F-82553-90	9 m (31.2 ft)	
68F-82553-A0	10.5 m (32.8 ft)	



TRIM METER LEAD

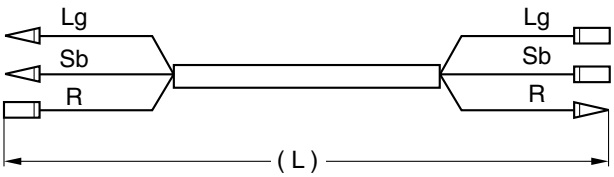
Part No.	Length (L)	Remarks
6R3-82553-30	3 m (9.8 ft)	Premixed models w/ PTT (Flat type harness)
6R3-82553-50	5 m (16.4 ft)	
6R3-82553-70	7 m (23 ft)	
6R3-82553-80	8 m (26.3 ft)	
6R3-82553-90	9 m (31.2 ft)	



WIRE HARNESSES

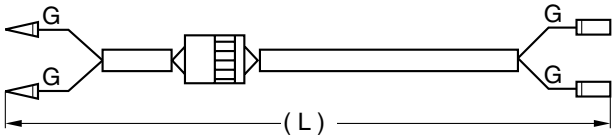
PT/T SWITCH LEAD EXTENSION

Part No.	Length (L)	Remarks
688-82586-11	2 m (6.6 ft)	



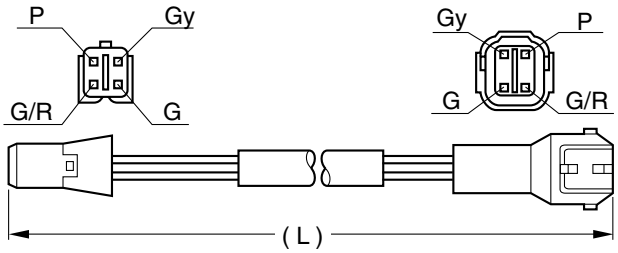
LIGHTING COIL EXTENSION HARNESS

Part No.	Length (L)	Remarks
682-84380-00	6 m (19.8 ft)	M-start model with lighting coil



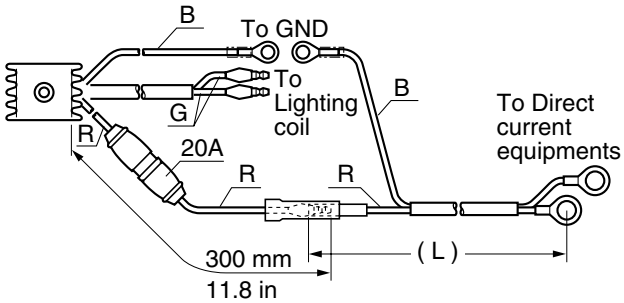
TRIM AND OIL LEAD

Part No.	Length (L)	Remarks
6Y5-83653-00	5 m (16.4 ft)	F30-F250, 40 (3-cyl)-300 w/ oil injection (Unified 4-pin coupler)
6Y5-83653-10	6 m (19.8 ft)	
6Y5-83653-20	7 m (23 ft)	
6Y5-83653-30	8 m (26.3 ft)	
6Y5-83653-40	9 m (31.2 ft)	
6Y5-83653-50	10.5 m (32.8 ft)	



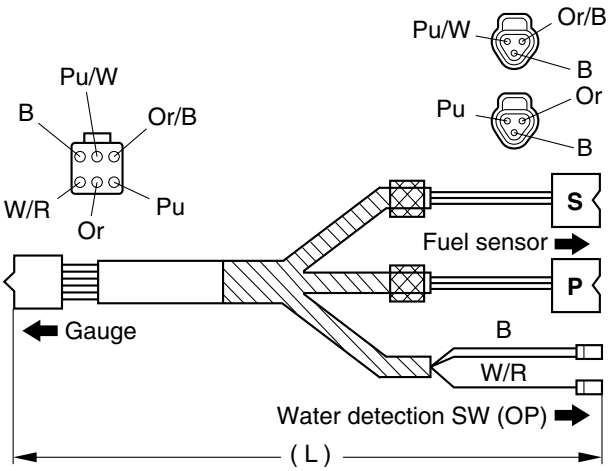
RECTIFIER KIT

Part No.	Length (L)	Remarks
676-81970-00	2 m (6.6 ft)	M-start model with lighting coil



FUEL MANAGEMENT GAUGE HARNESS

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



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 CORD

The wiring color code and the main usage for the electric wires are shown as below.
The wire color and its main usage are difference between Yamaha standard and ABYC standard.

NOTE:

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

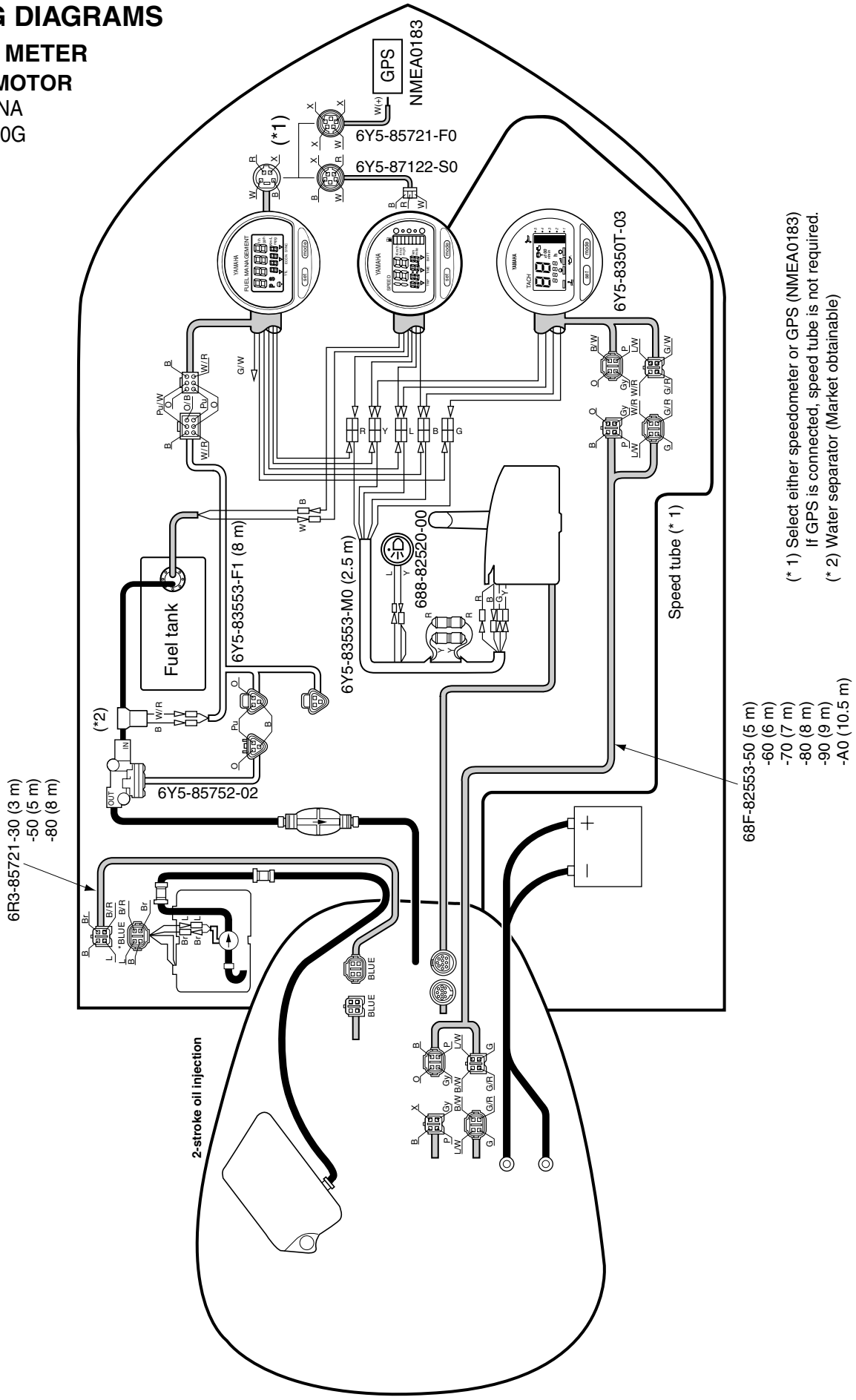
Color code	Wire color	Main usage	
		Yamaha standard	ABYC standard
B	Black	Ground, Battery (-)	Ground
B/R	Black/Red	Remote-oil tank	
B/W	Black/White	Ignition coil primary	
Br	Brown	Neutral switch	Generator
G	Green	Lighting coil 1 (tach signal 1)	Ground
G/R	Green/Red	Oil warning	
G/W	Green/White	Lighting 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, O	Orange	Trim sender	
Or/B	Orange/Black		
P	Pink	Overheat warning, Trim signal	Fuel sender
Pu	Purple	ECU	Switched 12 volts supply
Pu/W	Purple/White		
R	Red	Permanent 12 volts supply, Battery (+)	Battery (+)
Sb	Sky blue	Trim up	Oil pressure
W	White	Engine stop switch	
W/R	White/Red	Pulser coil	
X	—	Not used	
Y	Yellow	Switched 12 volts supply	
Y/R	Yellow/Red	Diagnosis	Starting motor

WIRING DIAGRAMS

DIGITAL METER

SINGLE-MOTOR

US, Can.: NA
Others: 250G

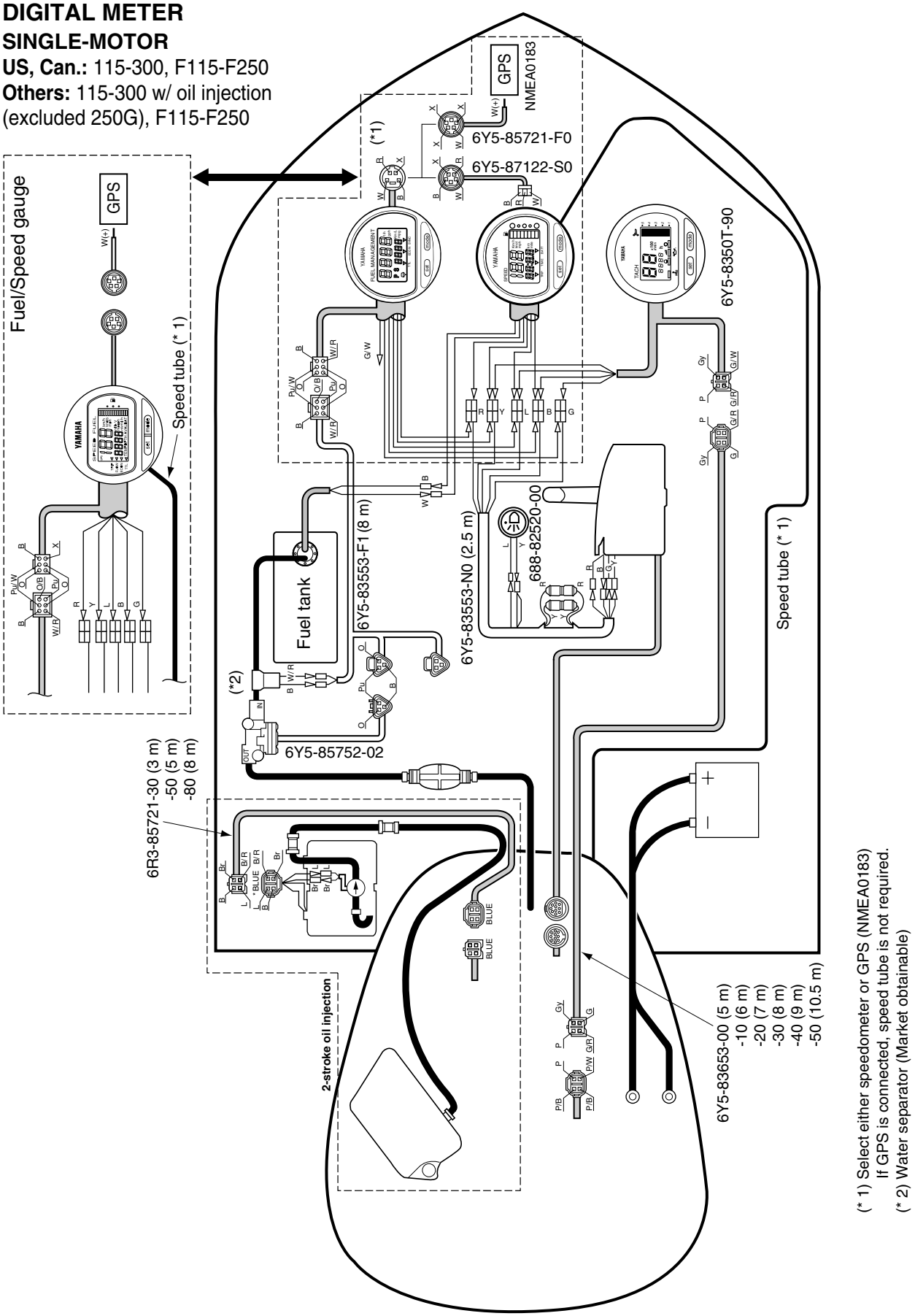


WIRING DIAGRAMS

DIGITAL METER

SINGLE-MOTOR

US, Can.: 115-300, F115-F250
Others: 115-300 w/ oil injection (excluded 250G), F115-F250



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

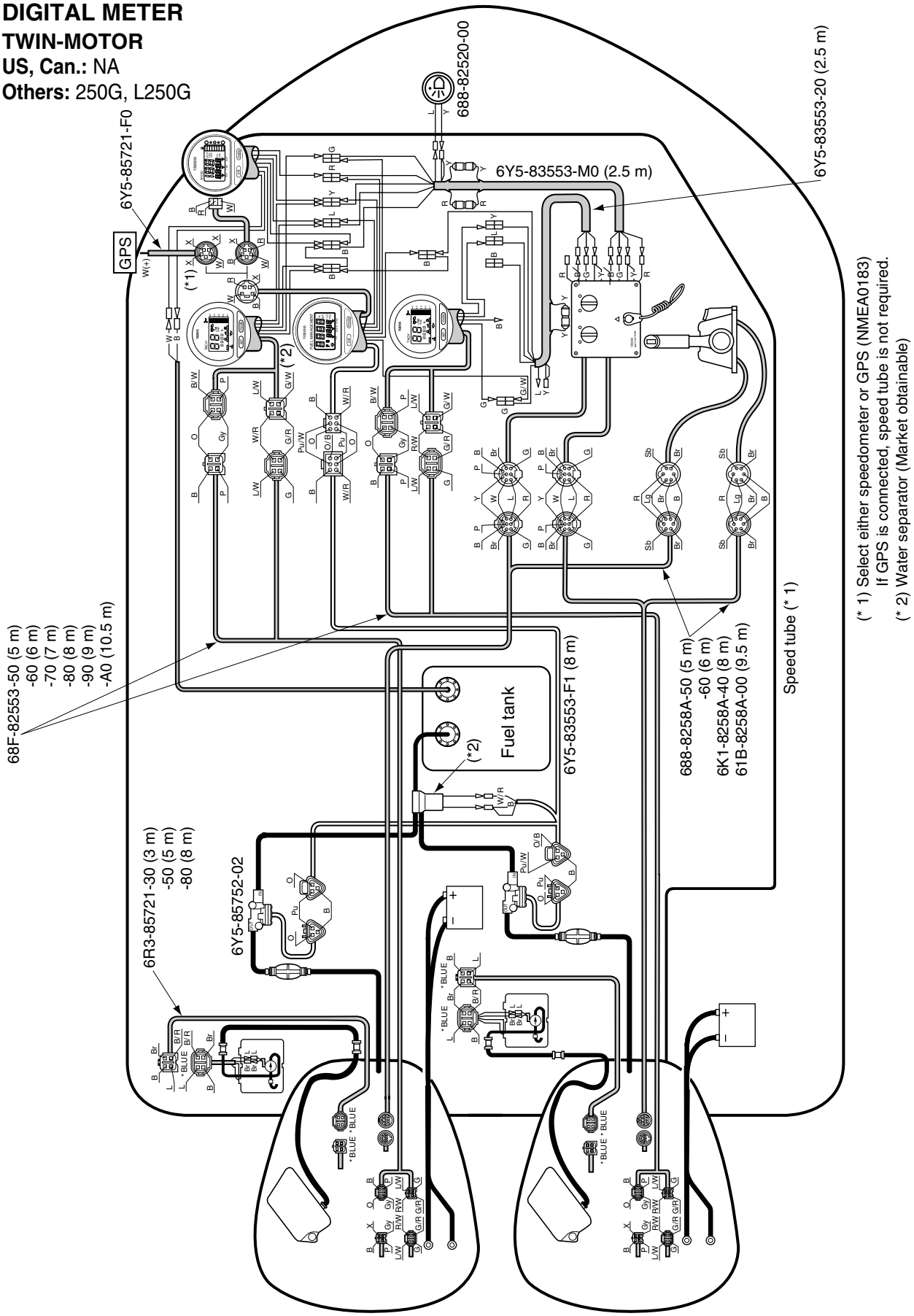
WIRING DIAGRAMS

DIGITAL METER

TWIN-MOTOR

US, Can.: NA

Others: 250G, L250G

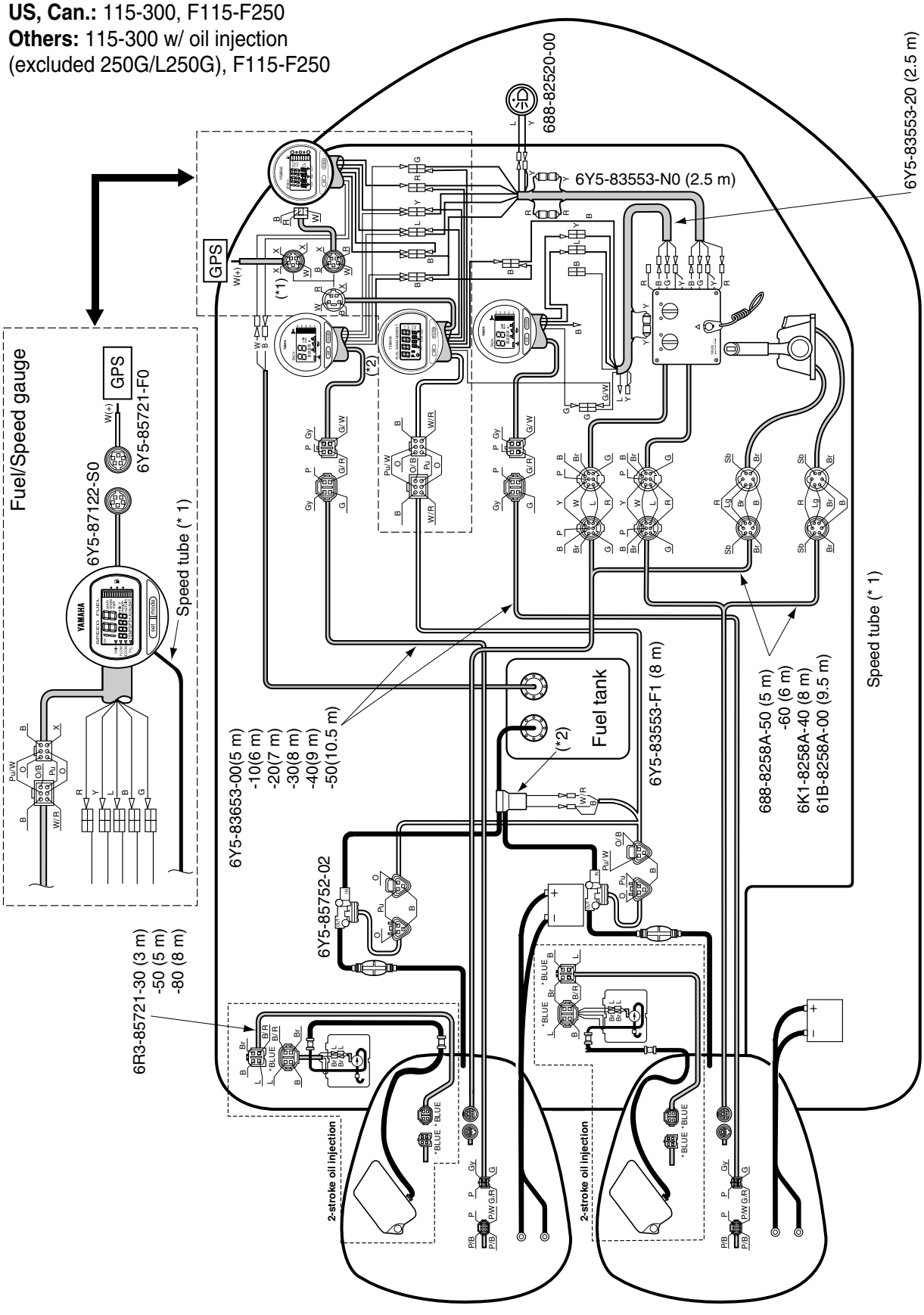


WIRING DIAGRAMS

DIGITAL METER

TWIN-MOTOR

US, Can.: 115-300, F115-F250
Others: 115-300 w/ oil injection
(excluded 250G/L250G), F115-F250



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

WIRING DIAGRAMS

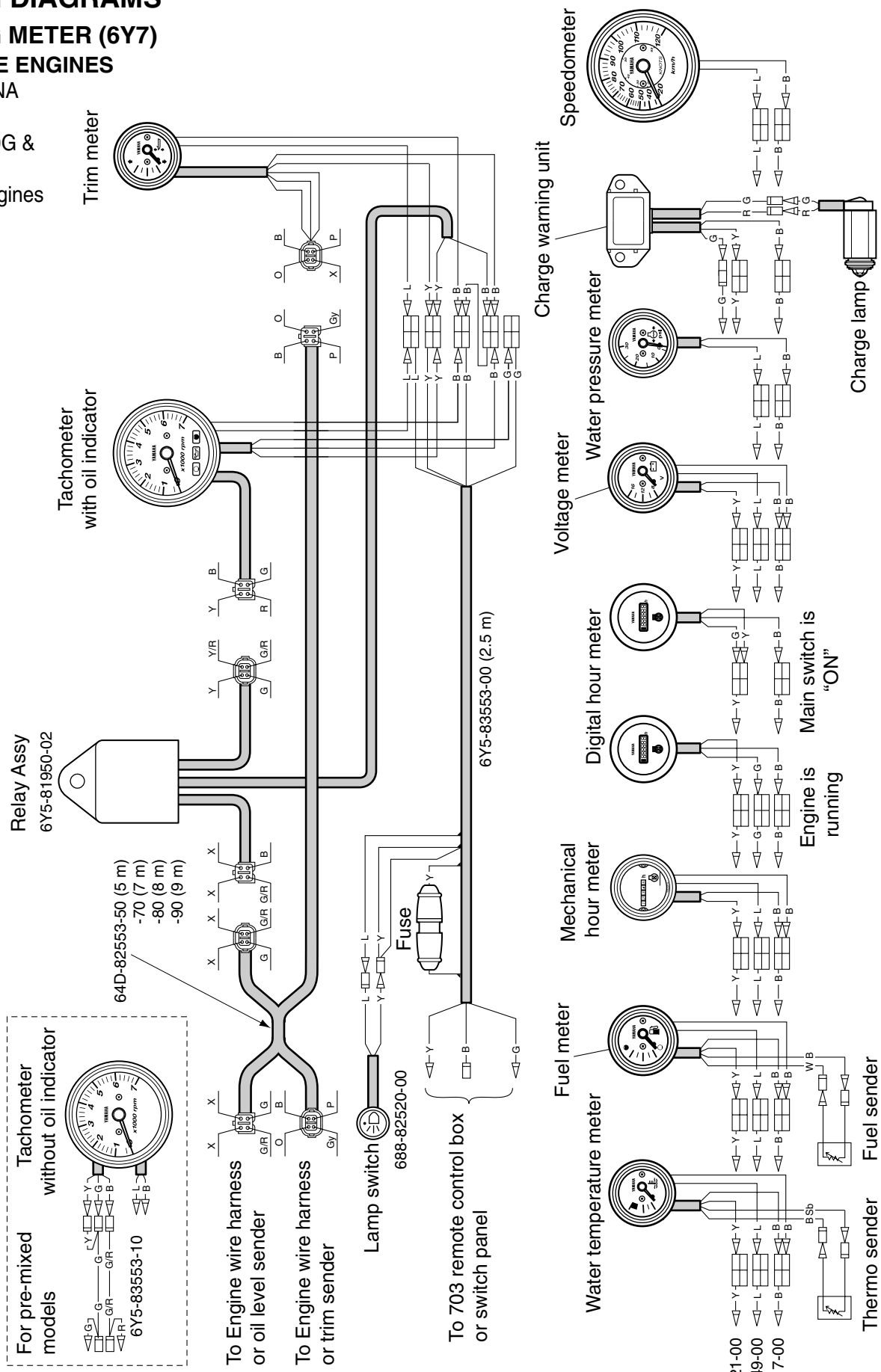
ANALOG METER (6Y7)

2-STROKE ENGINES

US, Can.: NA

Others:

250G, L250G & Premixed 2-stroke engines

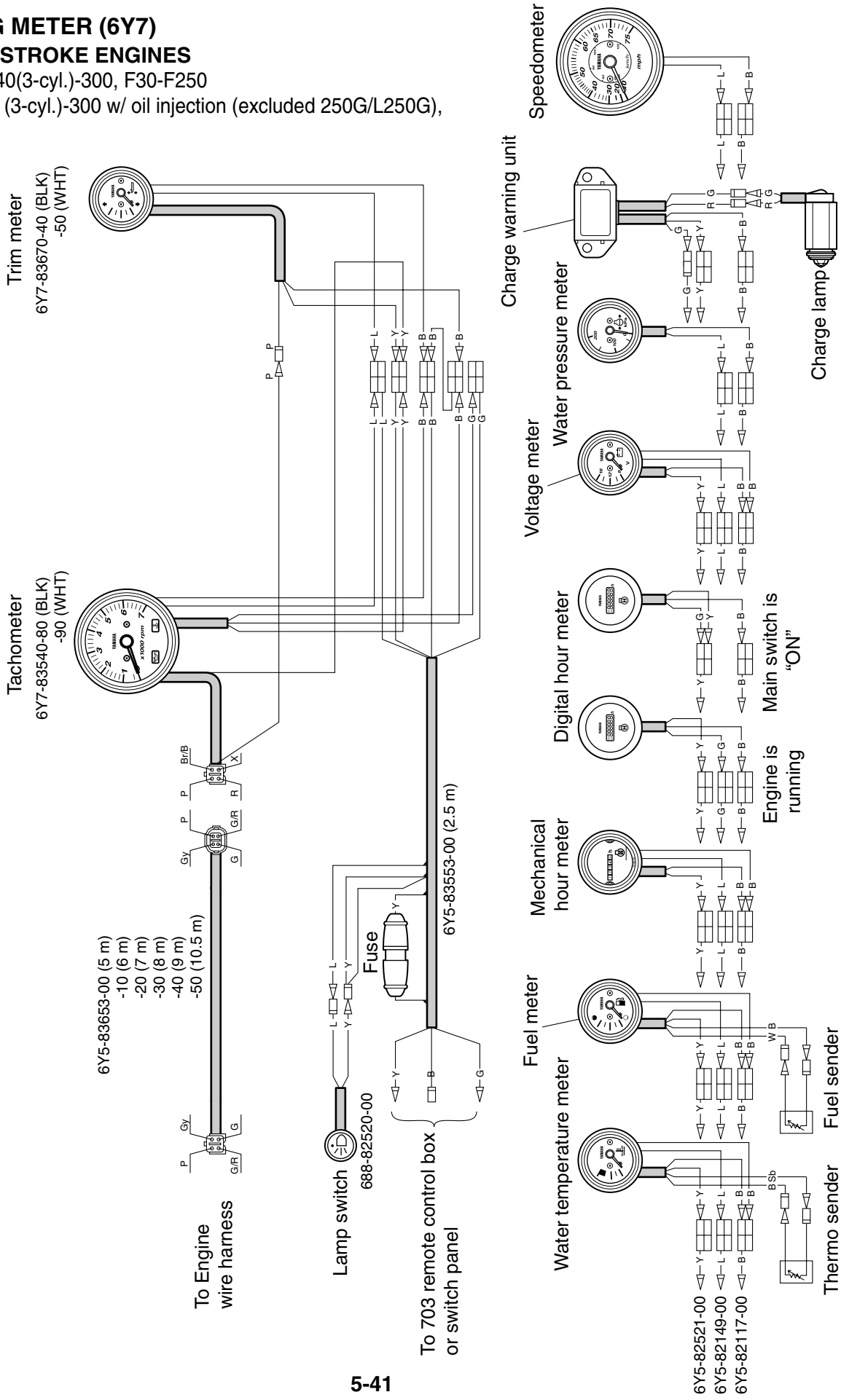


WIRING DIAGRAMS

ANALOG METER (6Y7)

2- AND 4-STROKE ENGINES

US, Can.: 40(3-cyl.)-300, F30-F250
Others: 40 (3-cyl.)-300 w/ oil injection (excluded 250G/L250G), F30-F250

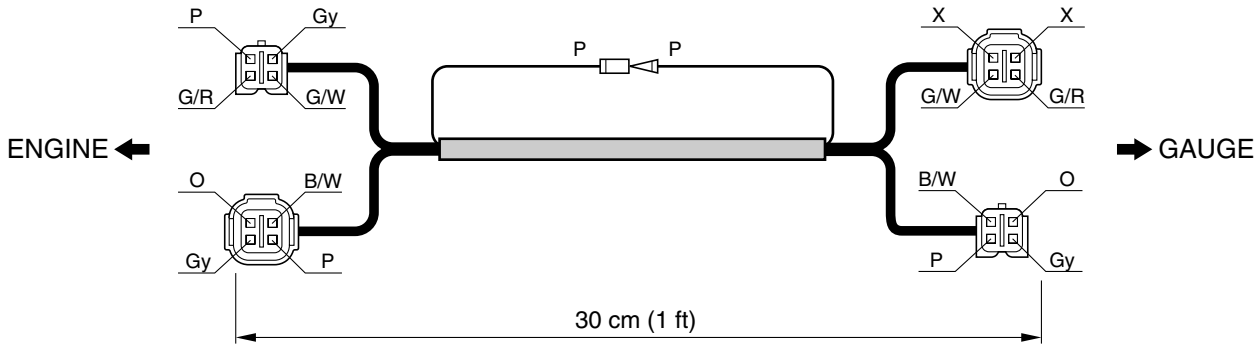


WIRING DIAGRAMS

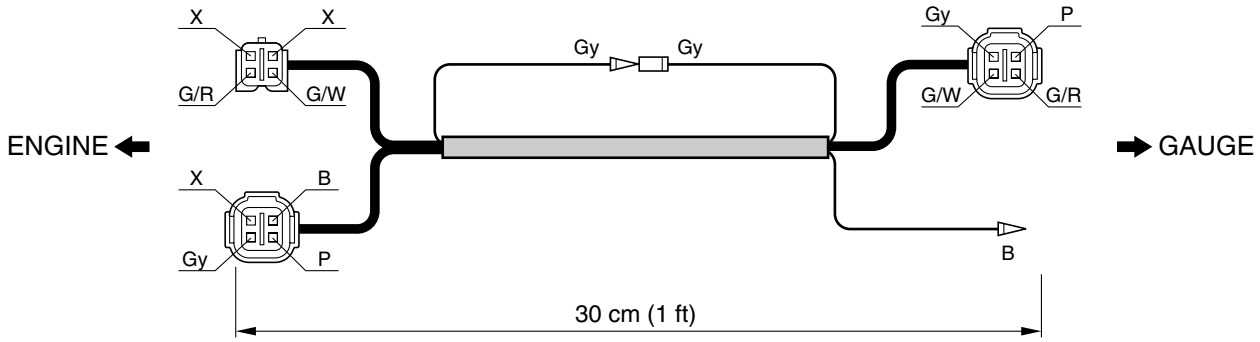
INTERCHANGEABILITY BETWEEN TACHOMETER AND ENGINE

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

Wire-harness adapter 1
P/N: 6Y5-85335-00



Wire-harness adapter 2
P/N: 6Y5-85335-10



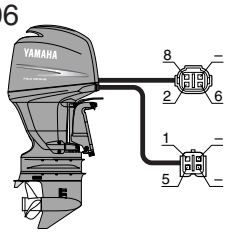
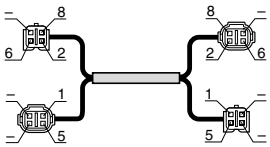
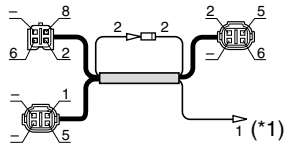
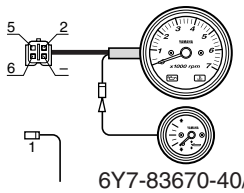
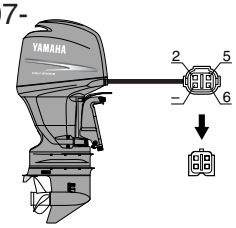
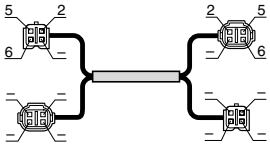
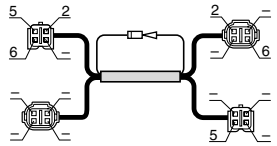
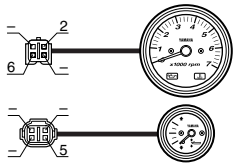
For US and Canada,
The interchangeability between engine and gauge for model year is shown in the table below,

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

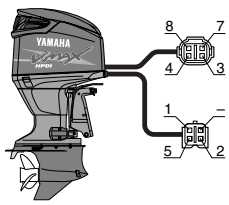
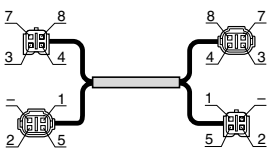
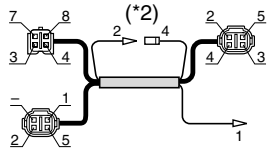
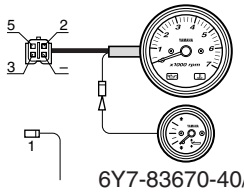
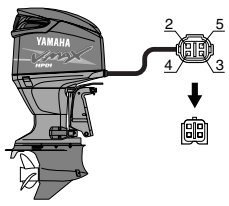
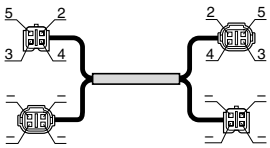
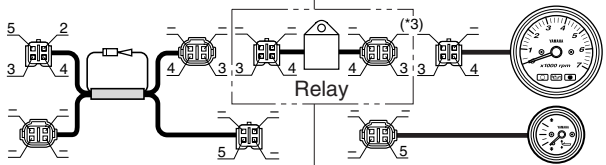
WIRING DIAGRAMS

ANALOG TACHOMETER

4-stroke engine (Fuel injected engines, F30A (F30), F40B (F40), FT50C, F50D, F95A 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)	-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	**Conventional EXT wire harness** 68F-82553-50 (5 m, 16 ft) 68F-82553-60 (6 m, 20 ft) 68F-82553-70 (7 m, 23 ft) 68F-82553-80 (8 m, 26 ft) 68F-82553-90 (9 m, 31 ft) 68F-82553-A0 (10.5 m, 33 ft)	(*1) Connect to the ground wire.	

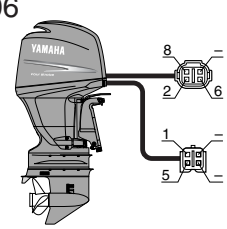
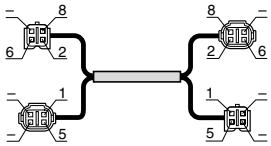
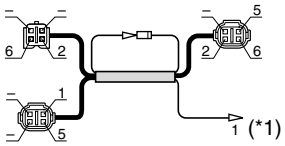
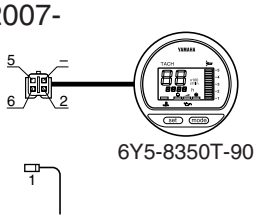
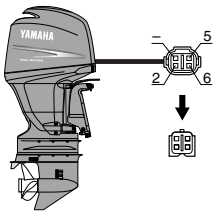
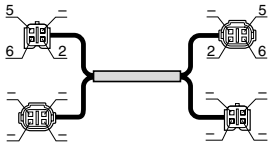
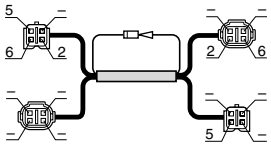
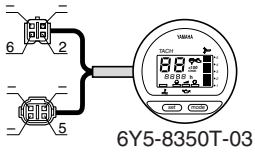
2-stroke engine (HPDI engines: 2007-, carbureted engines w/ oil injection: 2008-)

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)	-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	**Conventional EXT wire harness** 68F-82553-50 (5 m, 16 ft) 68F-82553-60 (6 m, 20 ft) 68F-82553-70 (7 m, 23 ft) 68F-82553-80 (8 m, 26 ft) 68F-82553-90 (9 m, 31 ft) 68F-82553-A0 (10.5 m, 33 ft)	(*2) Disconnect the gray wire and insulate the terminals.	(*3) Oil level signal (YLW)

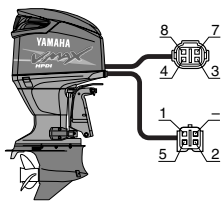
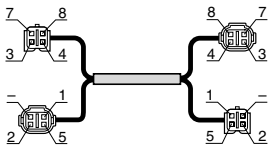
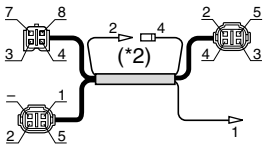
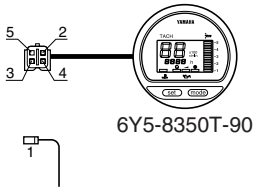
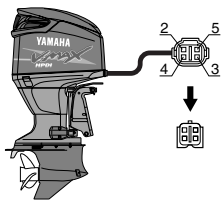
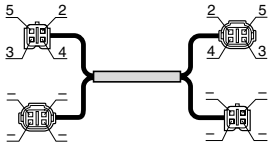
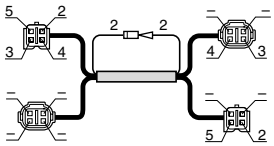
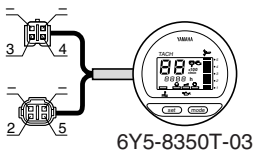
WIRING DIAGRAMS

DIGITAL TACHOMETER

4-stroke engine (Fuel injected engines, F30A (F30), F40B (F40), FT50C, F50D, F95A 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-90
2007- 		 Wire harness adapter 1 6Y5-85335-00 (30 cm, 1 ft)	-2006  6Y5-8350T-03
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	**Conventional EXT wire harness** 68F-82553-50 (5 m, 16 ft) 68F-82553-60 (6 m, 20 ft) 68F-82553-70 (7 m, 23 ft) 68F-82553-80 (8 m, 26 ft) 68F-82553-90 (9 m, 31 ft) 68F-82553-A0 (10.5 m, 33 ft)	(*1) Connect to the ground wire.	

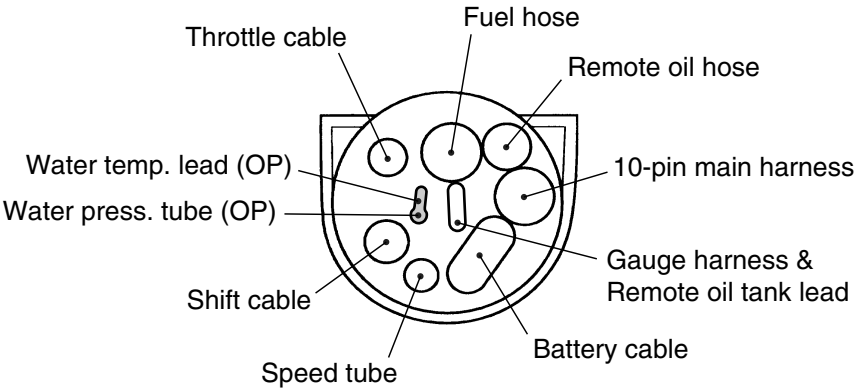
2-stroke engine (HPDI engines: 2007-, carbureted engines w/ oil injection: 2008-)

Engine	Conventional EXT wire harness	**Wire harness adapter**	Gauge
-2006 		 Wire harness adapter 2 6Y5-85335-10 (30 cm, 1 ft)	2007-  6Y5-8350T-90
2007- 		 Wire harness adapter 1 6Y5-85335-00 (30 cm, 1 ft)	-2006  6Y5-8350T-03
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	**Conventional EXT wire harness** 68F-82553-50 (5 m, 16 ft) 68F-82553-60 (6 m, 20 ft) 68F-82553-70 (7 m, 23 ft) 68F-82553-80 (8 m, 26 ft) 68F-82553-90 (9 m, 31 ft) 68F-82553-A0 (10.5 m, 33 ft)	(*2) Disconnect the gray wire and insulate the terminals.	

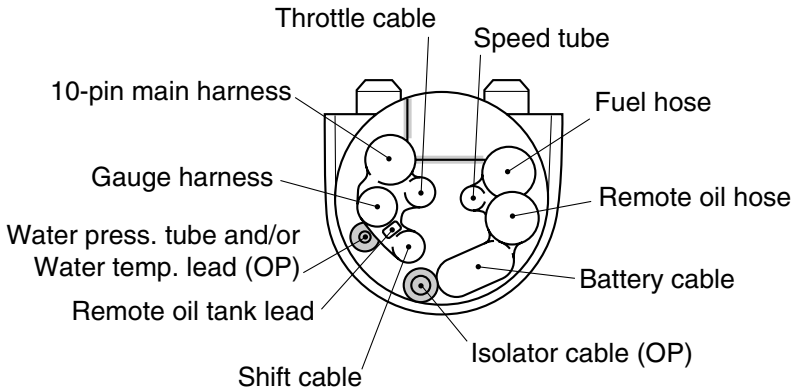
WIRING DIAGRAMS

GROMMET DESCRIPTION

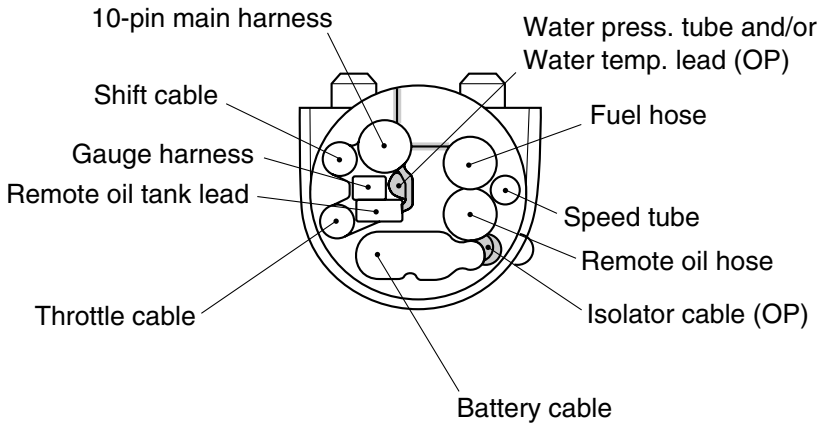
2-STROKE V4 OIL INJECTION



2-STROKE V6 (2.6L) OIL INJECTION



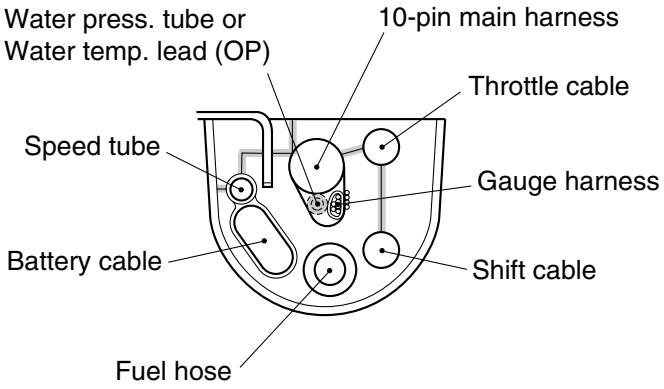
2-STROKE V6 (3.1L & 3.3L)



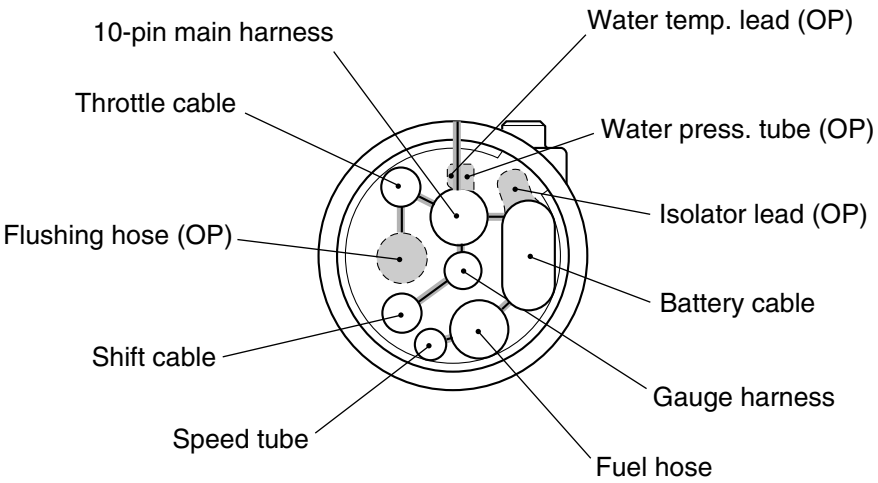
WIRING DIAGRAMS

GROMMET DESCRIPTION

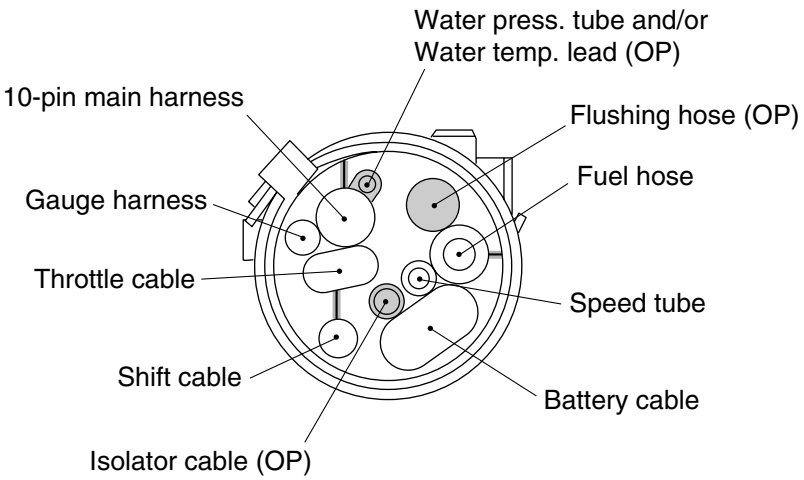
F75, F80, F90, F100, F115



F150

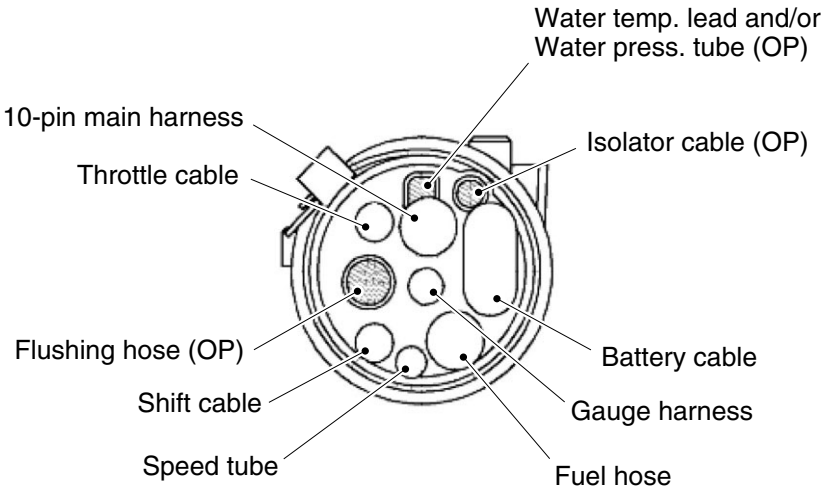


F200, F225

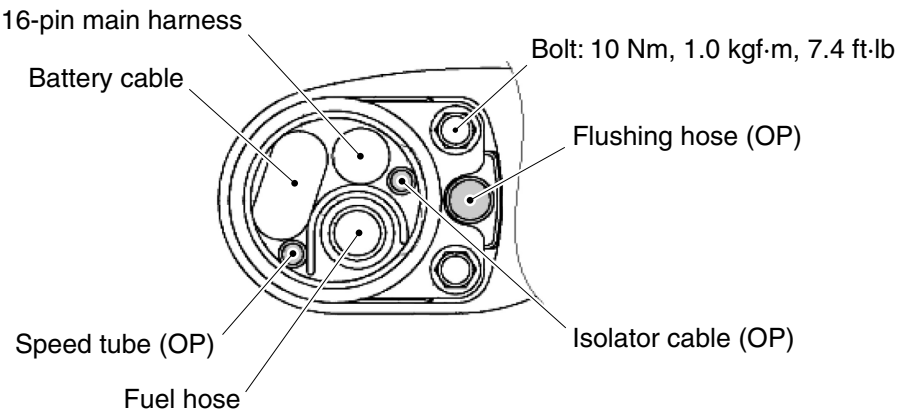


WIRING DIAGRAMS

F200, F225, F250 w/ Variable Camshaft Timing



F350



-MEMO-

DIGITAL NETWORK GAUGE (6Y8)

DIGITAL NETWORK GAUGE COMPATIBLE MODEL

The following models can accept the digital network gauges.

Electronic fuel injected F50-F350

HPDI engines

*** US & Canada: 2006 and later models**

*** Others: 2007 and later models**

Also, those engines can accept the conventional gauges (except F350).
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 APPLICATION

SQUARE STYLE GAUGE APPLICATION

Large digital display and dot matrix expression design.

1

2

3

4

Ref. No.	Part name	Part No.	Remarks
1	Tachometer	6Y8-8350T-01	
2	Speedometer	6Y8-8350S-01	Requires optional speed sensor, or NMEA compatible GPS
3	Fuel management gauge	6Y8-8350F-01	
4	Fuel MGT gauge w/speedometer	6Y8-83500-01	Requires optional speed sensor, or NMEA compatible GPS

DIGITAL NETWORK GAUGE APPLICATION

ROUND STYLE GAUGE APPLICATION

Similar shape design as conventional 6Y5 digital gauges.

1

2

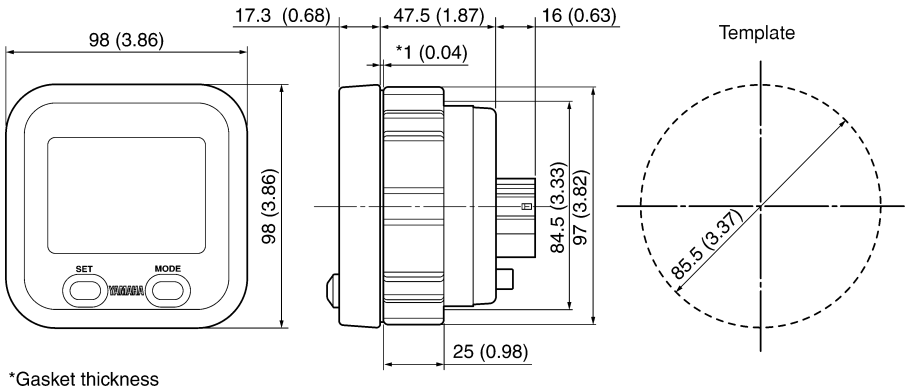
Ref. No.	Part name	Part No.	Remarks
1	Tachometer	6Y8-8350T-11	
2	Fuel MGT gauge w/ speedometer	6Y8-83500-11	Requires optional speed sensor, or NMEA compatible GPS

DIGITAL NETWORK GAUGE DIMENSIONS

SQUARE STYLE GAUGE DIMENSIONS

SURFACE MOUNT

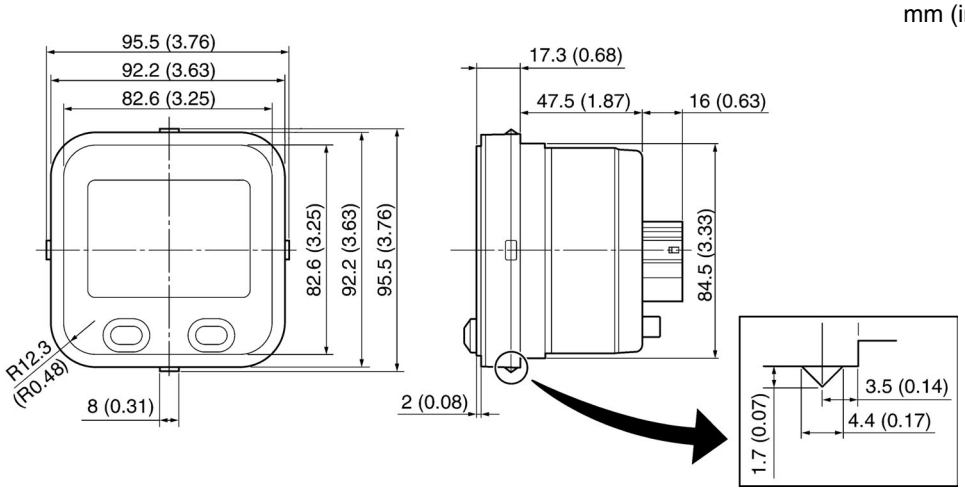
mm (in.)



*Gasket thickness

FLUSH MOUNT

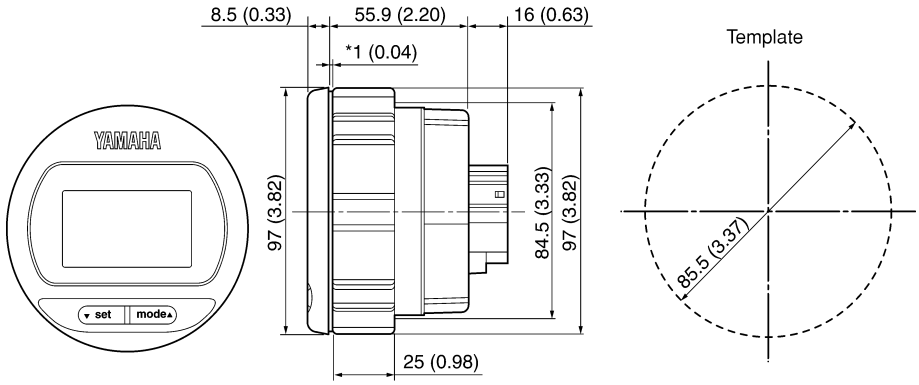
mm (in.)



DIGITAL NETWORK GAUGE DIMENSIONS

ROUND STYLE GAUGE DIMENSIONS

mm (in.)



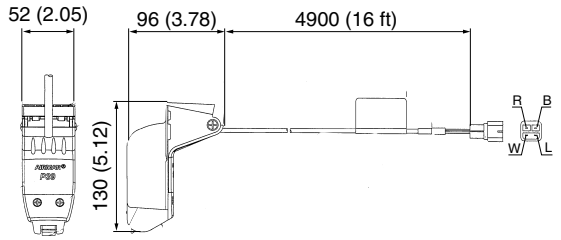
*Gasket thickness

OPTIONAL EQUIPMENTS

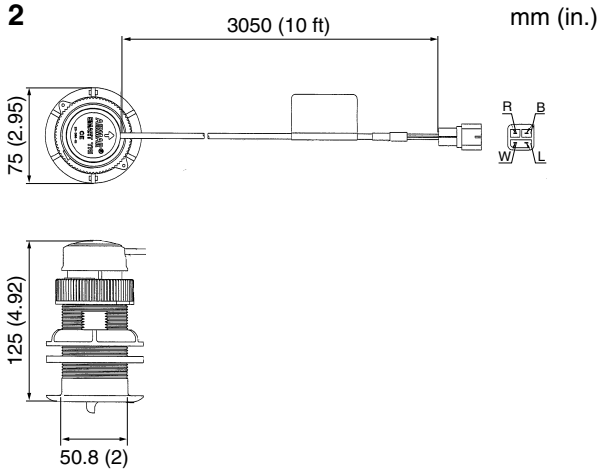
MULTI-SENSOR APPLICATION

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

1 mm (in.)



2 mm (in.)

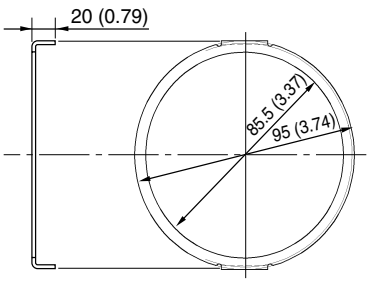


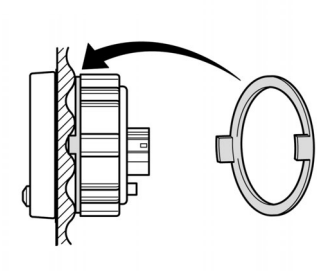
Ref. No.	Part name	Part No.	Remarks
1	Transom multi-sensor	6Y8-83688-01	
2	Thru-hull multi-sensor 1	6Y8-83688-11	Plastic body
	Thru-hull multi-sensor 2	6Y8-83688-20	Bronze body

FITTING PLATE

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

mm (in.)





t = 1.5 (0.06)

Part No.	Remarks
6Y8-83514-00	

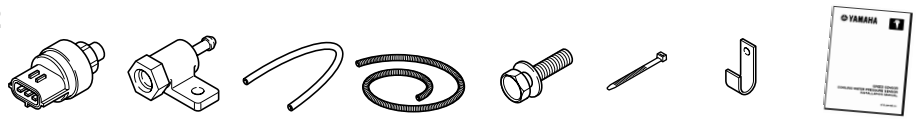
OPTIONAL EQUIPMENTS

SPEED SENSOR KIT

Uses 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 include in the rigging kit.

1

2

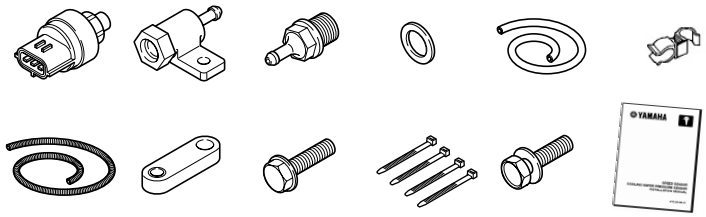


Ref. No.	Part No.	Remarks
1	60V-8A4L1-10	Fuel injected F50-F250, HPDI
2	6AW-8A4L1-00	F350 * Additional transom pitot tube (688-83556-01) and pressure tube (688-83557-00) required.

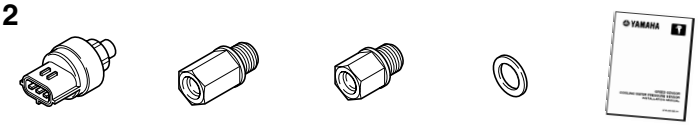
COOLANT PRESSURE SENSOR KIT

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

1



2



Ref. No.	Part No.	Remarks
1	60V-8A4L0-10	Fuel injected F50-F115, HPDI
2	69J-8A4L0-10	F150-F250

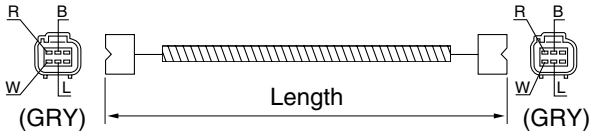
* For F350, standard installed from factory.

WIRE HARNESS

MAIN BUS WIRE

Uses to connect between the hub and hub.

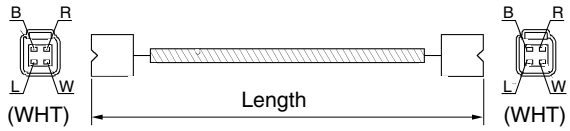
Part No.	Length	Remarks
6Y8-82553-41	30 ft, 9.1 m	
6Y8-82553-31	25 ft, 7.6 m	
6Y8-82553-21	20 ft, 6.1 m	
6Y8-82553-11	15 ft, 4.6 m	
6Y8-82553-50	10 ft, 3.0 m	
6Y8-82553-01	1 ft, 0.3 m	



PIGTAIL BUS WIRE

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

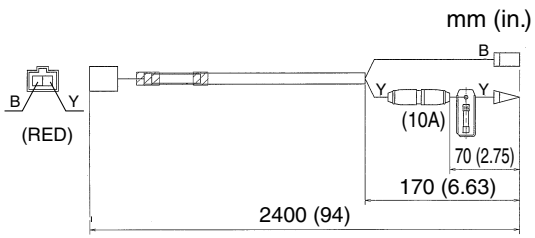
Part No.	Length	Remarks
6Y8-82521-51	12 ft, 3.6 m	
6Y8-82521-41	9 ft, 2.7 m	
6Y8-82521-31	6 ft, 1.8 m	
6Y8-82521-21	3 ft, 0.9 m	
6Y8-82521-11	2 ft, 0.6 m	
6Y8-82521-01	1 ft, 0.3 m	



POWER SUPPLY WIRE

Uses 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 amps fuse

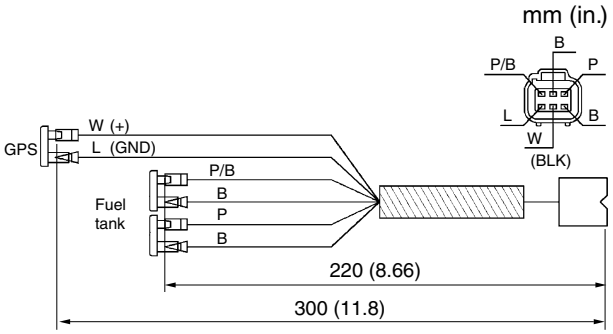


WIRE HARNESS

FUEL TANK / GPS WIRE

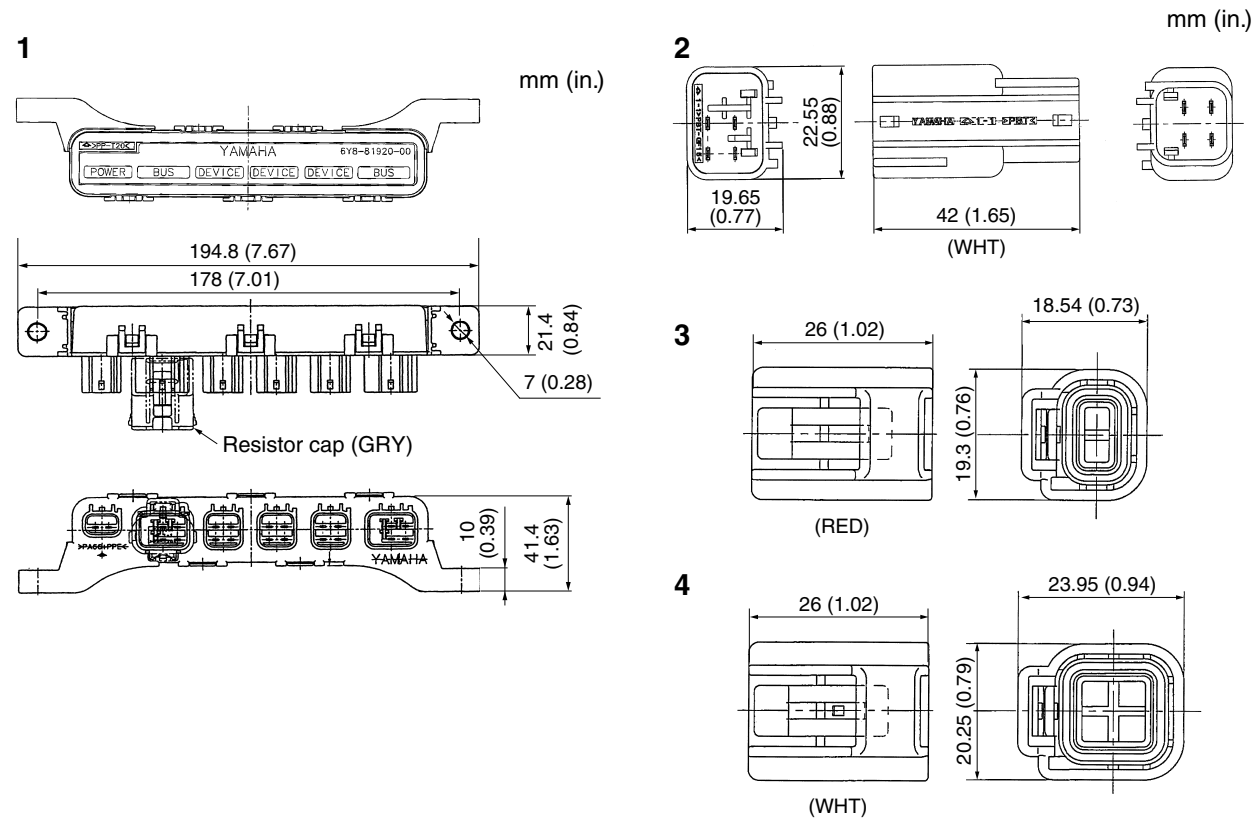
Uses to connect between a fuel tank level sensor and/or a MNEA0183 compatible GPS and the speedometer (with fuel MGT gauge).

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



HUB

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

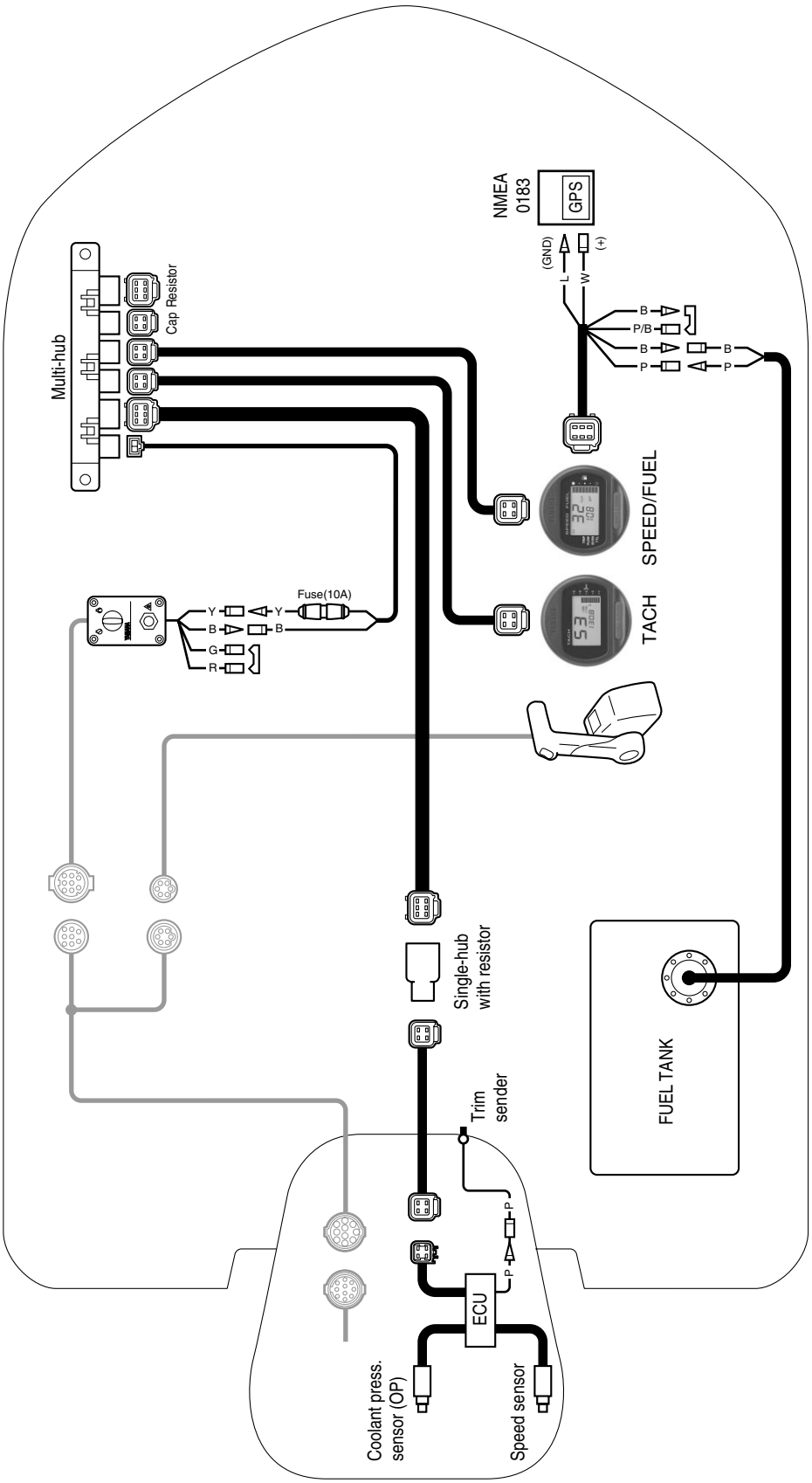


Ref. No.	Part name	Part No.	Remarks
1	Multi-hub	6Y8-81920-01	With ending resistor cap (P/N: 6Y8-85371-01)
2	Single hub	6Y8-81920-11	Included ending resistor
3	2-pin waterproof cap	6Y8-82582-01	
4	4-pin waterproof cap	6Y8-82582-11	Same as bus wire cap of engine wire harness

WIRING DIAGRAMS

FUEL INJECTED F50-F250 & HPDI ENGINES

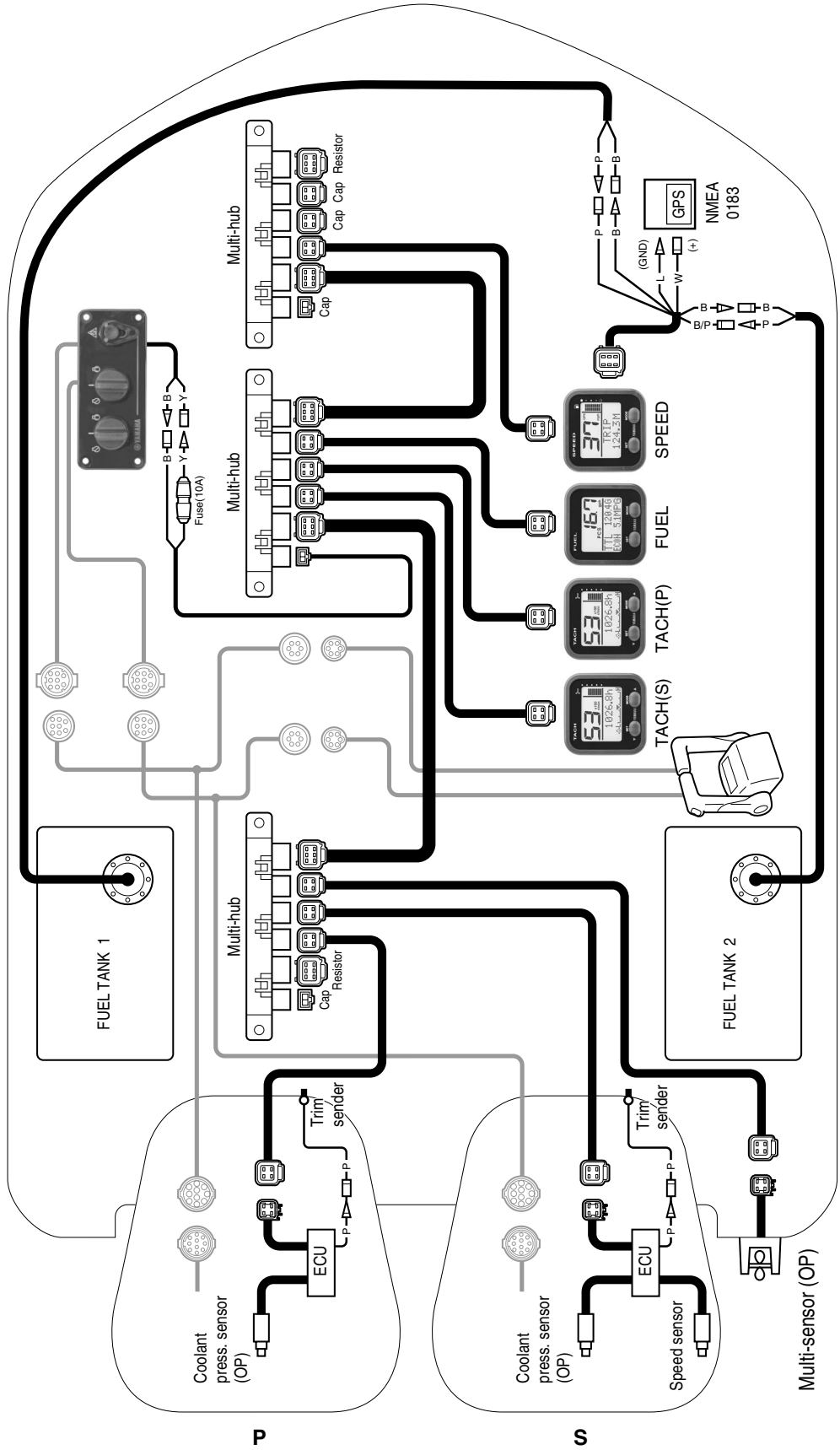
SINGLE ENGINE



WIRING DIAGRAMS

FUEL INJECTED F50-F250 & HPDI ENGINES

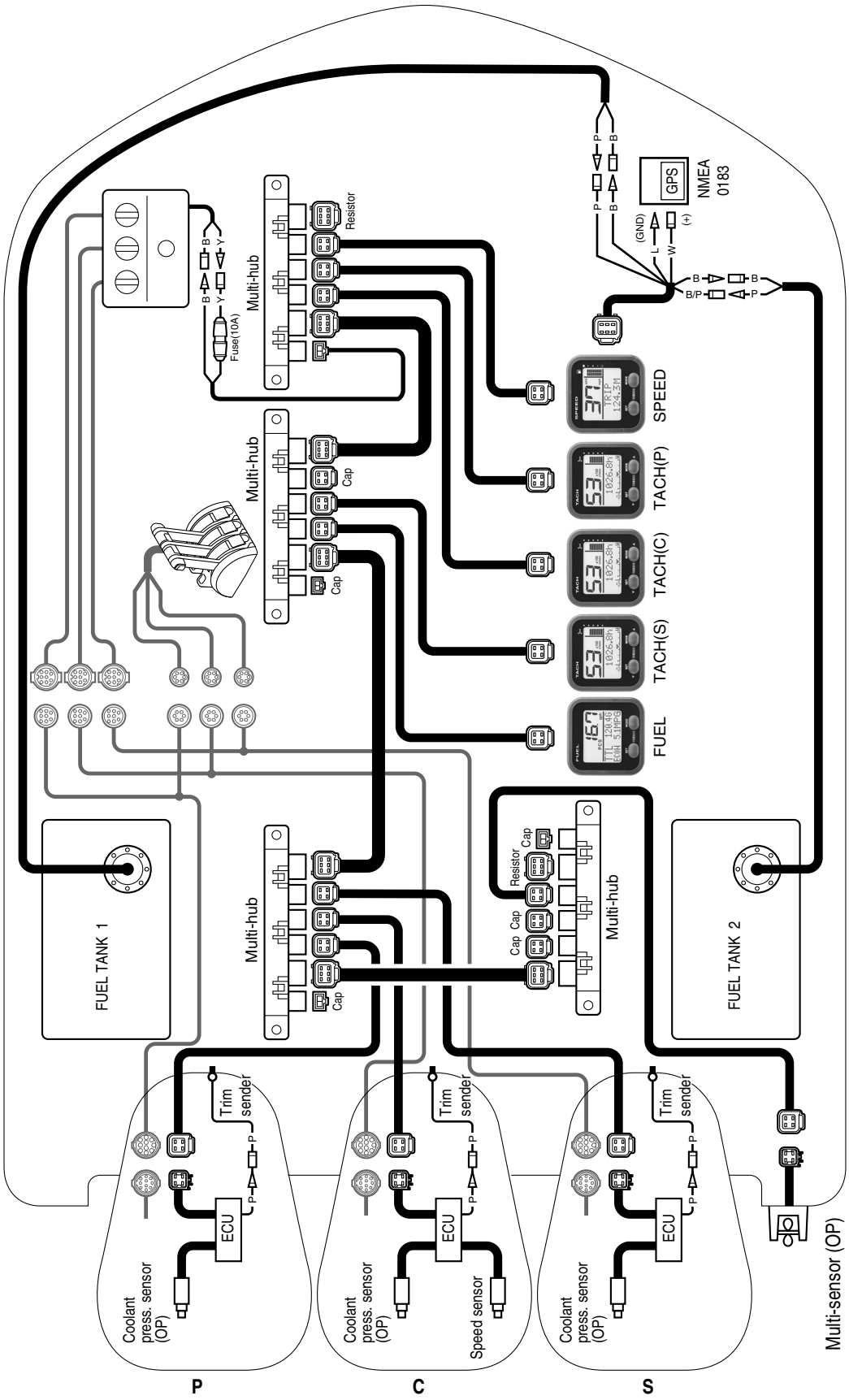
TWIN ENGINE



WIRING DIAGRAMS

FUEL INJECTED F50-F250 & HPDI ENGINES

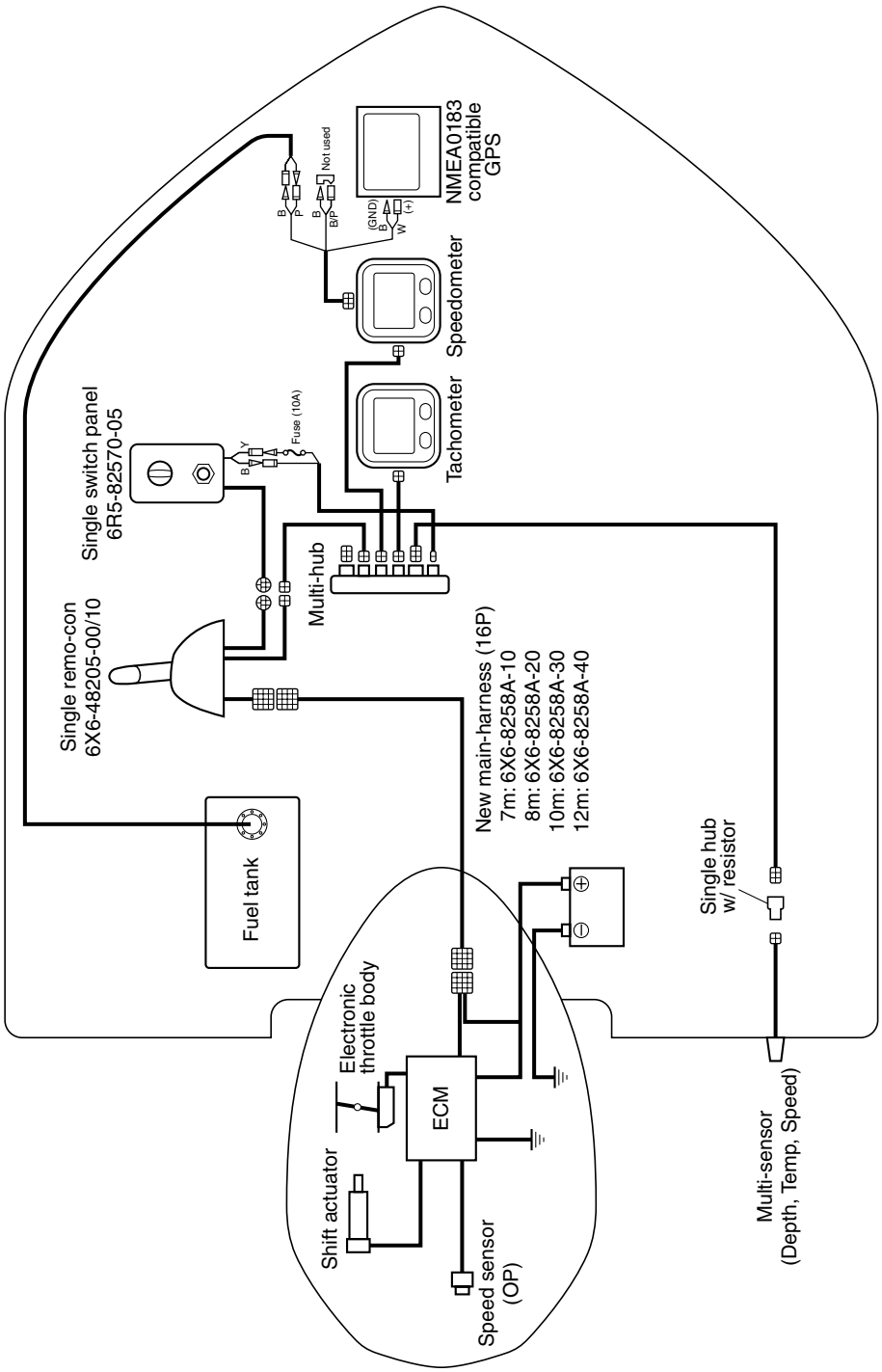
TRIPLE ENGINE



WIRING DIAGRAMS

F350

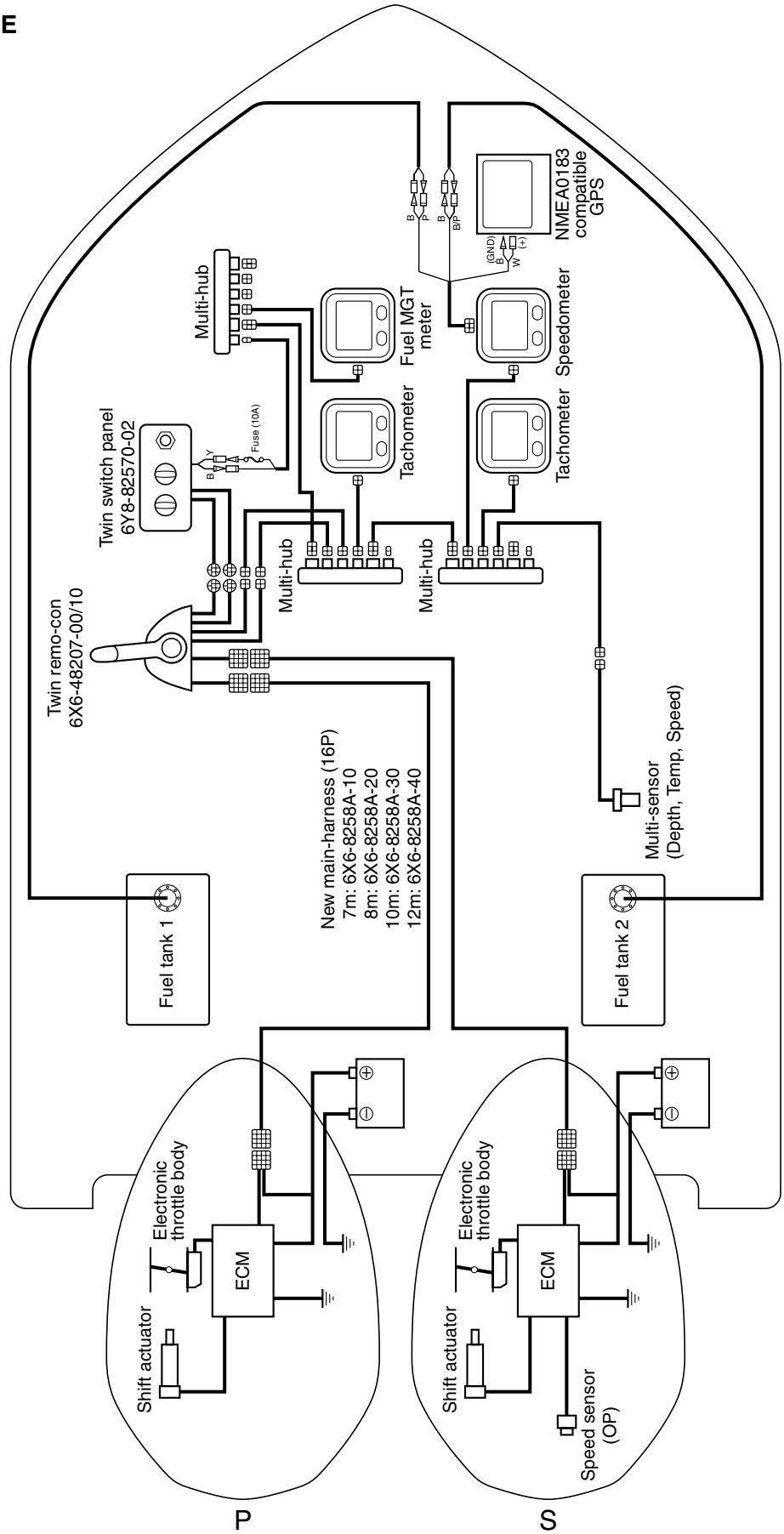
SINGLE ENGINE



WIRING DIAGRAMS

F350

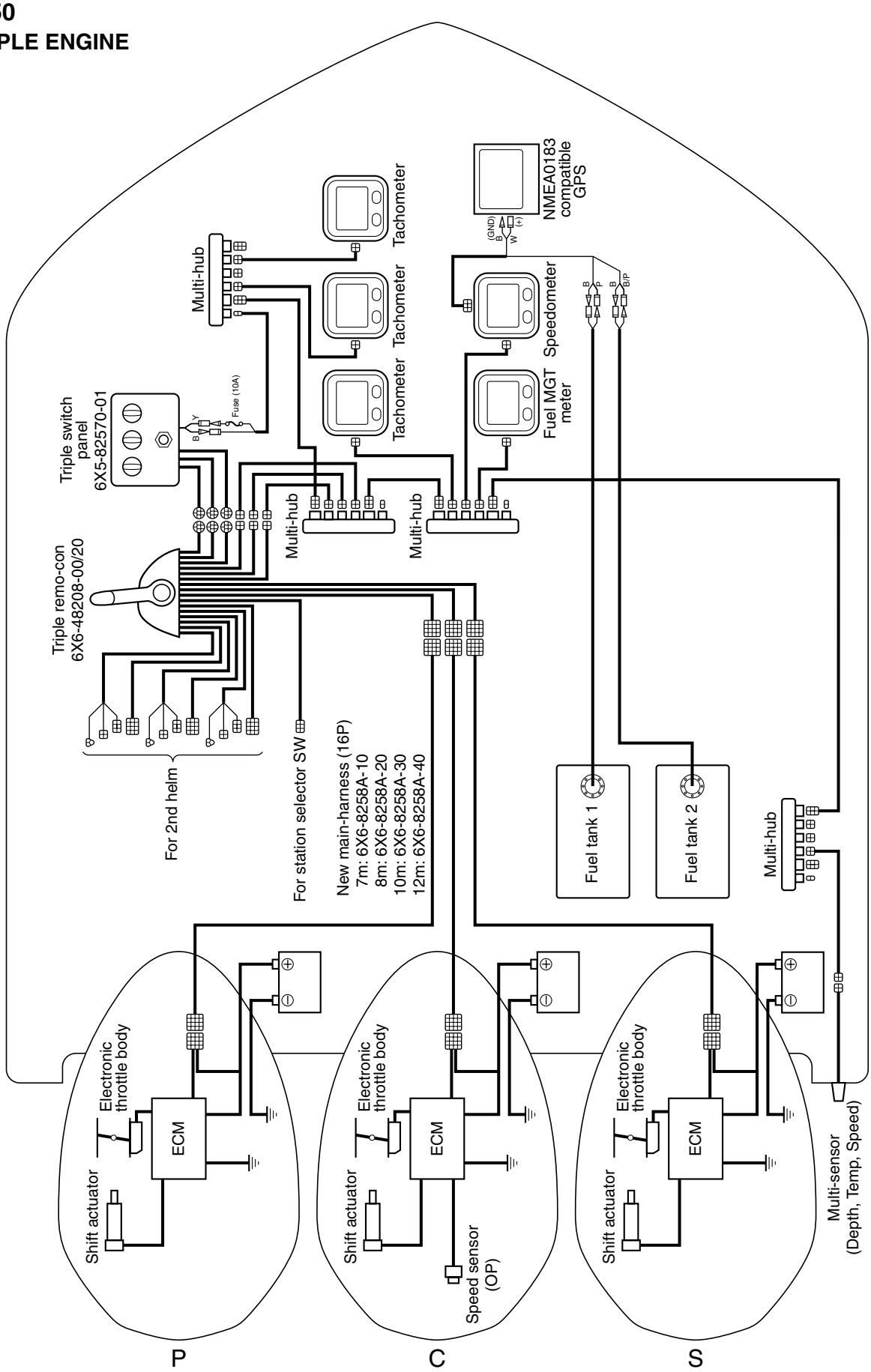
TWIN ENGINE



WIRING DIAGRAMS

F350

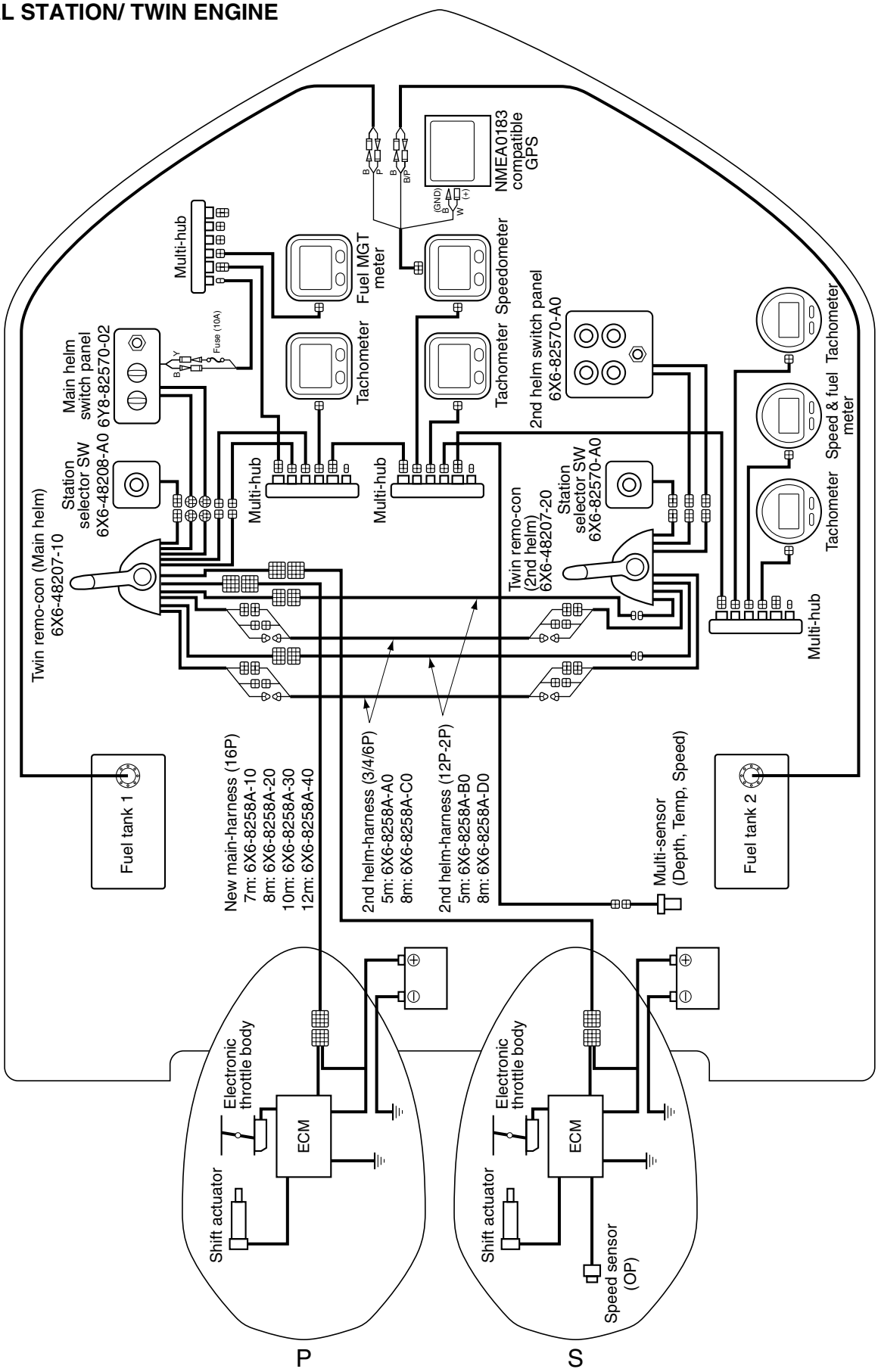
TRIPLE ENGINE



WIRING DIAGRAMS

F350

DUAL STATION/ TWIN ENGINE



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 ECU 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 with the tachometer.
For further information, see the installation manual in the rigging kit.
For 350, the digital electronic remote control system recognizes the engine number automalically, therefore the key switch ON in number order is not required.

TROUBLESHOOTING

The following table shows the main presumed troubles if the the system or gauge is incorrectly set up, incorrectly operated, or malfunctioned.
For detail information, see the applicable installation manual and/or the troubleshooting guide.

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 Custom Mode for procedure to set the engine number.
Speedometer or Comb. Speedometer & Fuel MGT gauge shows incorrect fuel level.	Fuel sensor selection is wrong.	Setup the fuel sensor to correctly resistance.	ABYC sensor: 33-240 Ω (Default) Europe sensor: 0-180 Ω YAMAHA sensor: 5-105 Ω
Fuel MGT gauge shows incorrect remaining fuel	Fuel capacity setting is wrong. (for SQR Fuel MGT Gauge)	Fill the tank with fuel, and set fuel tank capacity.	Default setting is 50 gallons.
Fuel MGT 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 amps 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 amps fuse.
Gauge shows “----”.	Digital signal is not received.	Connect the couplers securely. Replace the damaged bus wire or hub.	Verify the system with the optional 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 is included 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 optional checker.
Trim gauge always shows fully tilted up position.	Trim sender signal is not received.	Connect pink lead connectors each other.	See the installation manual.
Trim gauge shows incorrect position.	Initial position setting is wrong. Trim sender is damaged.	Put the motor in the fully trimmed-in position, and reset the initial (zero) trim angle. Replace the trim sender.	See Custom Mode for procedure to set the fully trimmed-in angle.
Boat speed and/or Coolant pressure gauge does not show.	Optional sensor has 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 Custom Mode for procedure to select the display.
Oil pressure is not shown.	Engine does not have the oil pressure sender.	NA	F50-F100 cannot show the oil pressure.
	Tachometer does not setup to show the oil pressure.	Select the oil press. display.	See Custom Mode to setup display.

BASIC REQUIREMENTS

The following basic conditions are required for the digital network gauge system to install its components 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 ECUs).	Gauge unstably shows. 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		
Bus wires distance from electrical noise equipments (Antenna cable, Generator, Radio, etc.)	30 cm (1 ft) and more		
Temperature for performing bus wires and hubs	80˚C (176˚F) or less		

NMEA0183 COMPATIBLE EQUIPMENTS CONNECTION

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

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

NOTE:

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

BATTERY

RECOMMENDED BATTERY

Battery is an important material to obtain sure engine start and to maintain engine operation performance.
Therefore, exact battery selection is required on a model.
Using maintenance-free sealed and/or gel cell batteries are not recommended, because they may not be compatible with Yamaha's charging system.
Read carefully the labels attached to the battery and follow the instruction supplied by battery manufacturer when you treat or maintain the battery.

CAUTION:

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 overloaded, causing electrical system damage.

Select a suitable battery as shown in the table below.

Global Model	US & Canada Model	Unit	Min. battery rating
6-55 (Except 40X, E40X & 55D) F6- F25 (FT25)	6-50 F6-F25 (T25)	CCA/SAE	245 amps
		MCA/ABYC	323 amps
		RC/SAE	52 min
		CCA/EN	347 amps
		20HR/IEC	40 Ah
		JIS	32C24-65D31
40X, E40X & 55D Carbureted 60-225 (2.6L) F30-F115	Carbureted 60-200 (2.6L) F30- F115	CCA/SAE	380 amps
		MCA/ABYC	502 amps
		RC/SAE	124 min
		CCA/EN	430 amps
		20HR/IEC	70 Ah
		JIS	65D31-95E41
250G HPDI (2.6L, 3.3L) F150-F250	HPDI (2.6L, 3.3L) F150-F250	CCA/SAE	512 amps
		MCA/ABYC	675 amps
		RC/SAE	182 min
		CCA/EN	711 amps
		20HR/IEC	100 Ah
		JIS	95E41-115F51
F350A	F350	CCA/SAE	700 amps
		MCA/ABYC	900 amps
		RC/SAE	170 min
		CCA/EN	670 amps
		20HR/IEC	110 Ah
		JIS	120E41-130E41

* For F350 under severe cold condition, twin or more battery with parallel wiring is required to start the engine.
* L/H rotation model has the same spec as R/H model.

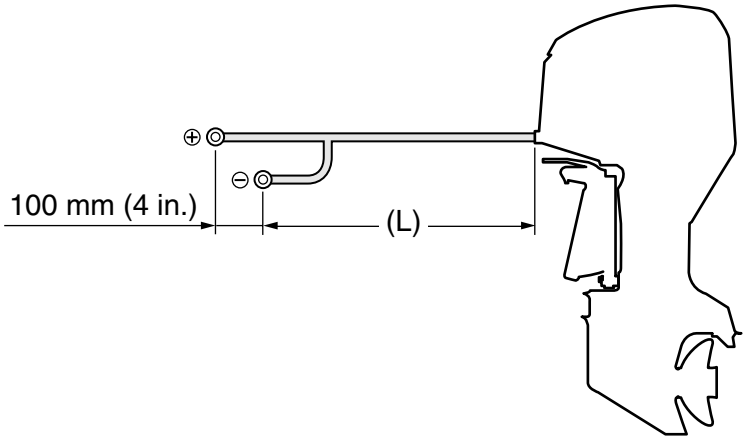
CCA : Cold Cranking Ampere
SAE : Society of Automotive Engineers
MCA : Marine Cranking Ampere
ABYC : American Boat and Yacht Council
RC : Reserve Capacity Minutes
EN : European Norm (European Standard)
IEC : International Electro-technical Commission
JIS : Japanese Industrial Standard

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	US & Canada Model	Cable length (L)		Remarks
		Meters	Feet	
40J, E40J, EK40J		1.43	4.7	
55B		1.47	4.8	
40V, 50H, 40Y F30A, F40B, FT50C, F50D F40D, F50F, FT50G, F60C, FT60D	50 F30, F40B/F40 F50, T50, F60, T60	1.64	5.4	US & ANZ: 2.24 m, 7.3 ft
40X, E40X 9.9F, 15F	9.9, 15	1.67	5.5	
F20A, F25A, FT25B	F25, T25	1.68	5.5	US & ANZ: 2.24 m, 7.3 ft
25B, E25B, 30H, E30H 30D		1.70	5.6	
6C, 8C 20D, 25N, F6A, F8C, FT8D F9.9C, F15A	6, 8 20, 25 F6A/F6, F8C/F8, T8D/T8 F9.9-2	1.75	5.7	
F13.5B, F15C, F20B	F15C/F15, F20	1.77	5.8	
60F, 70B	70	1.78	5.8	US & ANZ: 2.38 m, 7.8 ft
75C, 90A	90	2.14	7.0	
115B, 140B		2.42	7.9	
FT9.9D	T9.9-2	2.45	8.0	
Z200R, Z225H, Z250F, Z300B	VZ200R, VZ225H, VZ250F, VZ300B	2.48	8.1	
Carbureted V6 (2.6L) w/oil injection	Carbureted V6 (2.6L) w/oil injection	2.59	8.5	
HPDI V6 (2.6L) F150A	HPDI V6 (2.6L) F150A	2.61	8.6	
FT8D (RCL), FT9.9G	T8D/T8 (RCL), T9.9G/T9.9	2.65	8.7	
E115A		2.76	9.1	
F95A, F100B F75B, F80B, F90B, F100D, F75C F115A	F75, F90 F115	2.83	9.3	
115C, 130B	115	2.88	9.4	
150A, 175A, 200A		2.93	9.6	
250G		3.31	10.9	
Z300A F200A, F200B, F225A	Z300 F200, F225	3.41	11.2	
F200C, F225B, F225C, F250A	F225L, F250	3.50	11.5	Variable Camshaft Timing
F350A	F350	3.56	11.7	

* L/H rotation model has the same length as the R/H rotation model.



BATTERY WIRING

ISOLATOR EQUIPPED MODEL (FOR OVER 150 HP MODEL)

⚠ 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.

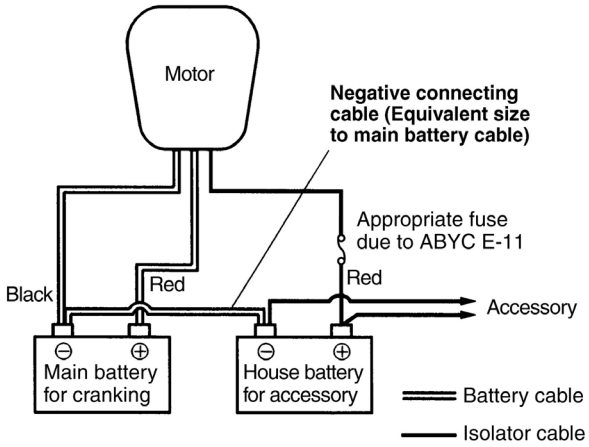
Do not coil and/or loop the battery cable even if the cable has surplus for routing.

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

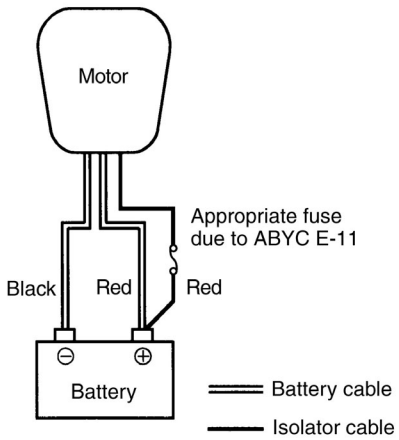
For twin-battery wiring, a battery cable for (–) terminal has to connect between the house battery and the main battery.
The battery cable size has to be equivalent to the main battery cable.

On a model, the optional isolated charging cable is available for a house battery.

Part No.	Remarks
68F-81949-01	2.7 m, 9 ft
69J-81949-01	3.8 m, 12.5 ft



When one battery is used, connect the large original red cable and the isolator cable to the (+) terminal.
The isolator cable has to connect 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 connect 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.
Follow the local rules and/or regulations if your battery is scrapped.

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.
Give solder to the connection of terminals and cables to prevent them from corroding.
Coiling and/or looping battery cable should be inhibited because of a power loss.

CAUTION:

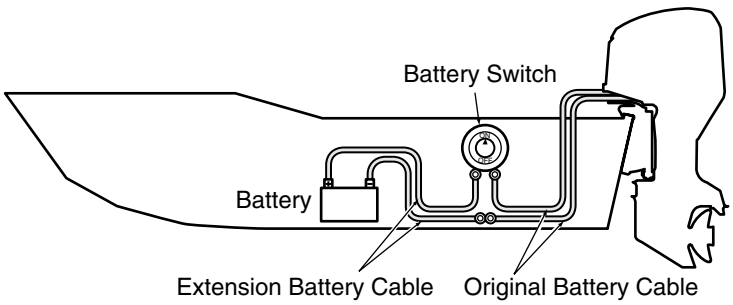
Do not exceed the recommended extension length of battery cable. Otherwise, the electrical system can allow poor performance or damage.

Atmosphere temperature is 0˚C (32˚F) and above						
Applicable models	Battery		Maximum total extension length			
	Unit	Minimum rating	AWG4 (20 mm²)	AWG2 (30 mm²)	AWG1/0 (50 mm²)	AWG2/0 (60 mm²)
Carbureted V6 (2.6L) F115	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 Minutes				
	CCA/EN	430 Amps				
	20HR/IEC	70 Ah				
	JIS	65D31				
HPDI V6 (2.6L)	CCA/SAE	512 Amps	8.3 m 27 ft	14.2 m 47 ft	22.0 m 72 ft	—
	MCA/ABYC	675 Amps				
	RC/SAE	182 Min				
	CCA/EN	711 Amps				
	20HR/IEC	100 Ah				
	JIS	95E41				
Carbureted V6 (3.1L) HPDI V6 (3.3L) F200-F250	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				
F150	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				
F350	CCA/SAE	700 amps	3.8 m 12 ft	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				

BATTERY WIRING

Atmosphere temperature is below 0˚C (32˚F)						
Applicable models	Battery		Maximum total extension length			
	Unit	Minimum rating	AWG4 (20 mm²)	AWG2 (30 mm²)	AWG1/0 (50 mm²)	AWG2/0 (60 mm²)
Carbureted V6 (2.6L) Carbureted V6 (3.1L) F115, F150			Cannot be extended			—
HPDI V6 (2.6L)	CCA/SAE	696 Amps	2.8 m 9 ft	4.8 m 16 ft	7.4 m 24 ft	—
	MCA/ABYC	856 Amps				
	RC/SAE	167 Min				
	CCA/EN	711 Amps				
	20HR/IEC	83 Ah				
	JIS	95D31				
HPDI V6 (3.3L)	CCA/SAE	696 Amps	3.9 m 13 ft	6.7 m 22 ft	10.4 m 34 ft	—
	MCA/ABYC	856 Amps				
	RC/SAE	167 Min				
	CCA/EN	711 Amps				
	20HR/IEC	83 Ah				
	JIS	95D31				
F200-F250	CCA/SAE	696 Amps	3.5 m 11 ft	6.0 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				
F350 * Twin-battery with parallel wiring is required under cold condition.	CCA/SAE	700 amps (×2)	1.2 m 4 ft	2.2 m 7 ft	3.6 m 12 ft	4.2 m 14 ft
	MCA/ABYC	900 amps (×2)				
	RC/SAE	170 min (×2)				
	CCA/EN	670 amps (×2)				
	20HR/IEC	110 Ah (×2)				
	JIS	120E41 (×2)				

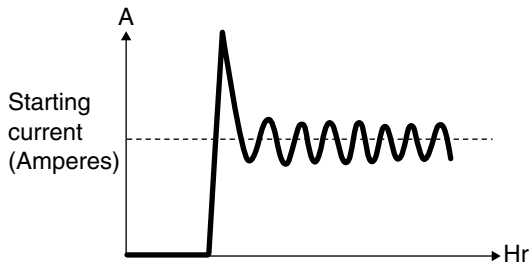
AWG : American Wire Gauge, **mm²: Conductor cross-section
CCA : Cold Cranking Ampere
SAE : Society of Automotive Engineers
MCA : Marine Cranking Ampere
ABYC : American Boat and Yacht Council
RC : Reserve Capacity Minutes
EN : European Norm (European Standard)
IEC : International Electro-technical Commission
JIS : Japanese Industrial Standard



RECOMMENDED BATTERY SWITCH CAPACITY

Select a battery switch which covers the starting ampere draw 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 and less.

Applicable models	Starting current (Amperes)
Carbureted 150 – 225 (2.6L)	195
F115	260
HPDI 150 – 200 (2.6L)	216
F200 – F250	220
HPDI 200 – 300 (3.3L)	254



-MEMO-

APPENDIX

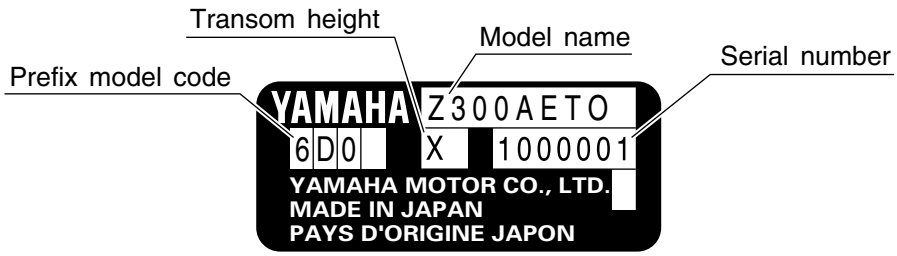
MODEL NAME DESIGNATION

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.

NOTE:

The serial number is a 7-digit sequential numbering scheme irrespective of model variation and transom length.

GLOBAL MODEL IDENTIFICATION (EXCLUDED US AND CANADA)

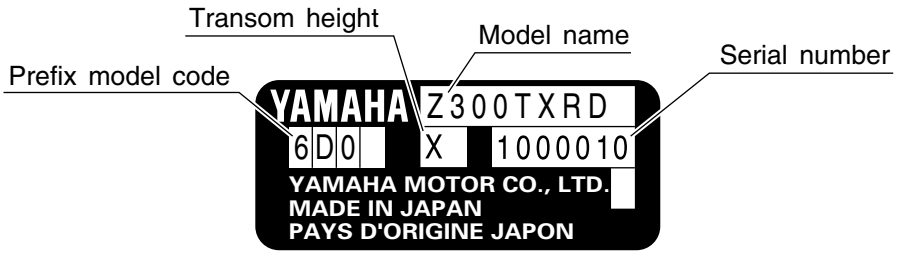


The model identification has been standardized as follows since 1998 model year.

Z	300	A	ETO	X
Model category	Output HP	Model generation	Model variation	Transom height (Drive shaft length)
Non: 2-stroke STD engine	2	A	**Level 1: Start system**	S (15”)
D: Twin rotating prop	to	B	M: Manual start	L (20”)
E: Enduro series	350	C	E: Electric start	Y (22.5”)
F: 4-stroke engine		D	W: Electric & Manual start	X (25”)
K: Kerosene engine		F		U (30”)
L: L/H rotation series		G	**Level 2: Control system**	
T: High thrust series		H	Non: Remote control	
Z: HPDI engine		J	H: Tiller handle	
		L	C: Remote control w/ tiller handle	
		N		
		P	**Level 3: Trim & Tilt system**	
		Q	Non: Manual tilt	
		R	D: Hydro tilt	
		S	P: Power tilt	
		T	T: Power trim & tilt	
		U		
		V	**Level 4: Lubrication system**	
		X	**[2-stroke engine]**	
		Y	Non: Premixed fuel engine	
		(Repeat from A)	O: Oil injection engine	

MODEL NAME DESIGNATION

US & CANADA MODEL IDENTIFICATION



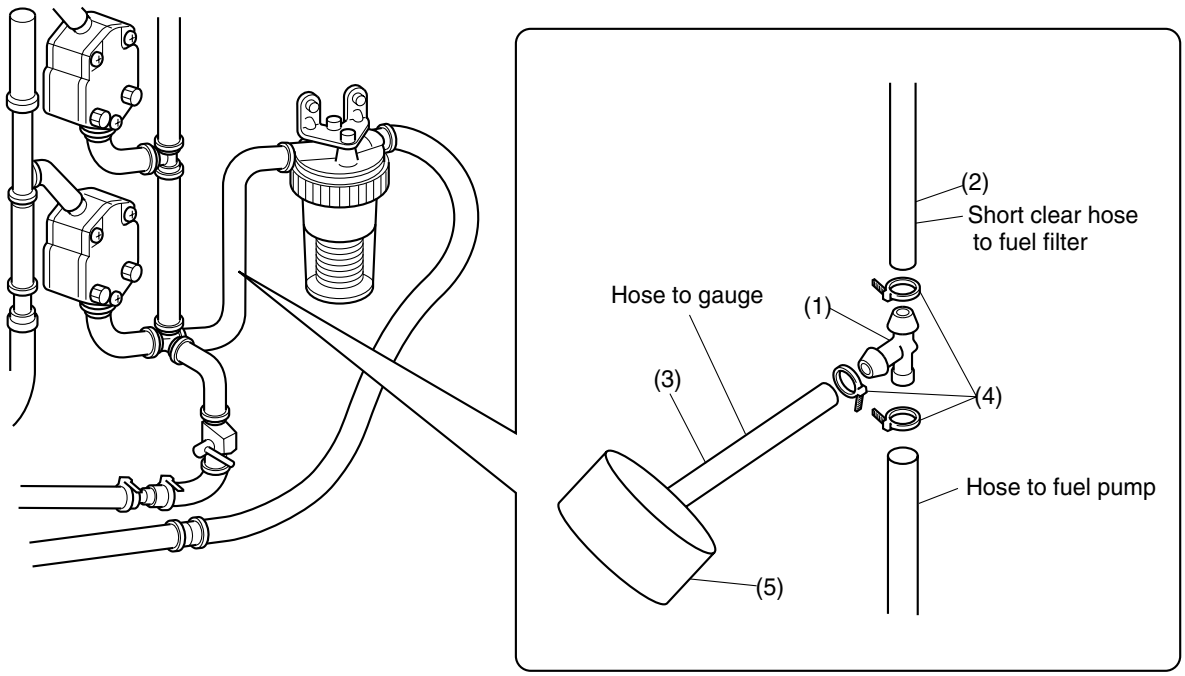
The model identification has been standardized as follows since 1984 model year.

Z	300	T	X	R	D		
Model category	Output HP	Trim & Tilt/ Starting system	Transom height (Drive shaft length)	Control system	Model year code		
					US	CA	
Non: 2-stroke STD engine	2.5	T: Power trim &	S (15")	R: Remote control	N	N	1984
B: Inshore series	to	tilt/ Eletric start	L (20")	H: Tiller handle	K	K	1985
C: Commercial	350	P: Power tilt/	X (25")		J	J	1986
(premixed fuel)		Electric start	U (30")		H	H	1987
D: Twin rotating prop		E: Manual tilt/	J (Jet drive)		G	G	1988
E: Enduro series		Electric start			F	F	1989
F: 4-stroke engine		M: Manual tilt/			D	D	1990
L: L/H rotation series		Manual start			P	P	1991
P: Pro series					Q	Q	1992
S: Saltwater series					R	R	1993
T: High thrust (4-stroke)					S	S	1994
V: VMAX series					T	T	1995
X: Electronic fuel injection					U	U	1996
engine					V	V	1997
Z: HPDI engine					W	W	1998
					X	X	1999
					Y	Y	2000
					Z	Z	2001
					A	A	2002
					B	B	2003
					C	C	2004
					D	D	2005
					—	—	2006
					—	F	2007
					—	G	2008

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 adequately inform the service network as well as the boat manufactures.

FUEL HOSE ROUTING RESISTANCE MEASURING METHOD



Ref.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) 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	90465-11M10	4	
(5)	VACUUM PRESSURE 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 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)

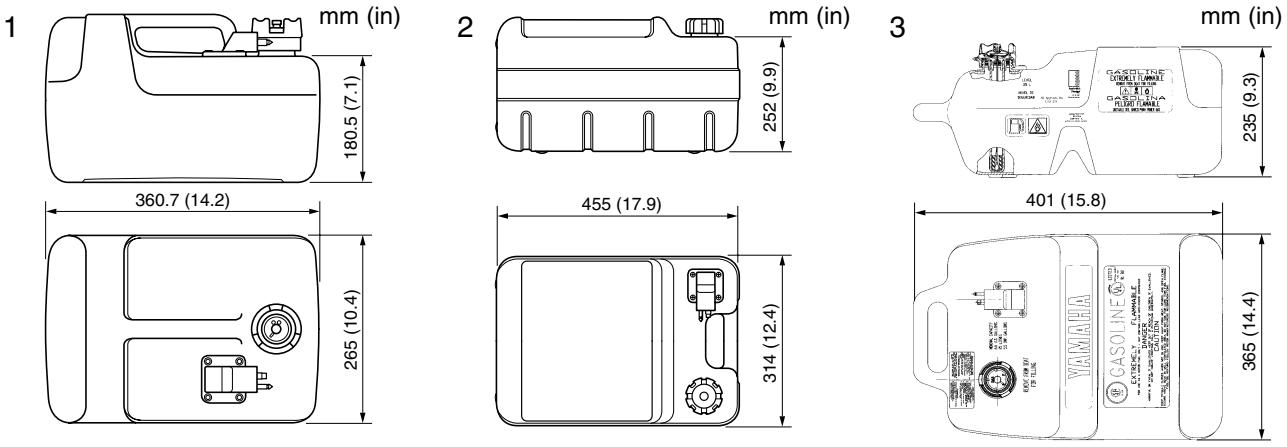
NOTE:

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

Engine breaking-in operating conditions : 10 hours
- 2-stroke carbureted models : Use a 25:1 pre-mixed fuel.
- 2-stroke electronic fuel injected models : Use a 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.

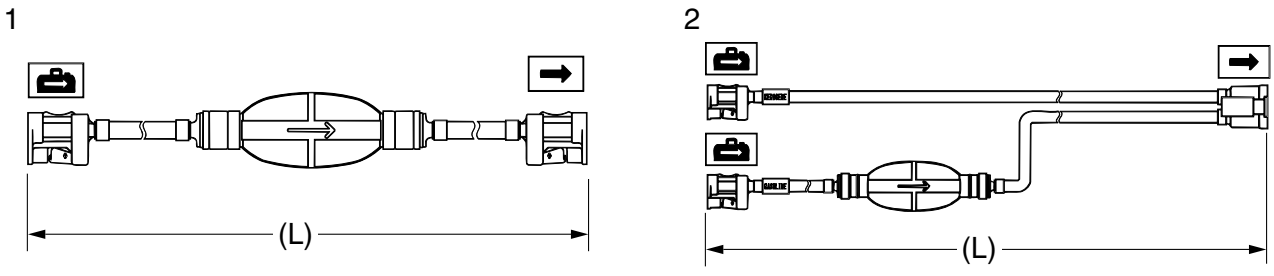
Larger fuel filters installed onto a boat may lower the fuel vacuum pressure to –20.0 kPa (–15 mmHg) and under. Therefore, follow the instructions mentioned above to rig the boat properly so that the fuel vacuum pressure is within specificaion.
If the vacuum pressure does not surpass –10.7 kPa (–80 mmHg) at wide-open throttle, use a clear hose to check fuel for air bubbles mixed.

PORTABLE FUEL TANKS (EXCERPT)



Ref. No.	Part No.	Capacity L (US gal)	Material	Description
1	6YL-24201-04	12 (3.2)	Plastic	With fuel gauge
	6YL-F4201-04			
2	6YJ-24201-00	24 (6.3)	Plastic	
	6YJ-24201-10	24 (6.3)	Plastic	With fuel gauge
	6YJ-24201-40	24 (6.3)	Plastic	For JPN, With JCI label
	6YJ-24201-50	24 (6.3)	Plastic	For CAN, With CSI label
	6YJ-24201-80	24 (6.3)	Plastic	With tag and exclusive filler structure banning use of leaded fuel
3	6YK-24201-02	25 (6.6)	Plastic	With fuel gauge
	6YK-F4201-01			
	6YK-24201-10	25 (6.6)	Plastic	With label and exclusive filler structure banning use of leaded fuel
	6YK-24201-20	25 (6.6)	Plastic	For kerosene

FUEL PIPES (EXCERPT)



Ref. No.	Part No.	Hose inside diameter	Length (L)	Remarks
1	6Y1-24306-55	6 mm	3 m (9.8 ft)	
	6Y2-24306-56	8 mm	3 m (9.8 ft)	
2	6YK-24306-04	6 mm	3 m (9.8 ft)	For kerosene models

PRE-DELIVERY INSPECTION (PDI) CHECKS

Before operation, 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

YAMAHA
Touching Your Heart

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. questioner 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 kit is controlled to supply to Yamaha dealers under Sales Division of Marine Engine Operations of Yamaha Motor Corporation.
Therefore, our Parts Operations Division is out of control.

DIGITAL TACHOMETER KIT

US, Can.: 40-300, F30-F250
Others: 40 (3-cyl)-300 w/ oil injection (excluded 250G & L250G), F30-F250

P/N: 6YR-W0035-E2

Part name	Part No.	Q'ty	Remarks
EXT wire-lead	6Y5-83653-20	1	7 m, 23 ft
Tachometer assy	6Y5-8350T-90	1	Included instruction tag
Wire-lead	6Y5-83553-20	1	2.5 m, 8 ft w/10 amps fuse

DIGITAL TACHOMETER AND SPEEDOMETER KIT

US, Can.: 40-300, F30-F250
Others: 40 (3-cyl)-300 w/ oil injection (excluded 250G & L250G), F30-F250

P/N: 6YR-W0035-F2

Part name	Part No.	Q'ty	Remarks
Wire-lead	6Y5-83553-N0	1	2.5 m, 8 ft w/10 amps twin-fuse
Tachometer assy	6Y5-8350T-90	1	Included instruction tag
EXT wire-lead	6Y5-83653-30	1	8 m, 26 ft
Speedometer assy	6Y5-83570-S5	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-T0

Part name	Part No.	Q'ty	Remarks
Wire-lead	6Y5-82117-00	1	30 cm, BLK
Tachometer assy	6Y5-8350T-90	1	Included instruction tag
Wire-lead	6Y5-83553-M0	1	2.5 m, 8 ft w/10 amps twin-fuse
Tube	6Y5-83557-10	1	8 m, 26 ft
Speedometer assy	6Y5-83570-S5	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
L150-L300, LF115-LF250

P/N: 6YR-W0035-G3

Part name	Part No.	Q'ty	Remarks
Wire-lead	6Y5-83553-20	1	2.5 m, 8 ft w/10 amps fuse
Tachometer assy	6Y5-8350T-90	1	Included instruction tag
EXT wire-lead	6Y5-83653-40	1	9 m, 31 ft
Twin-binnacle RCL box	704-48207-P1	1	Premium
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	6K1-82570-08	1	With DES control unit
Screw	90149-05M05	4	25 mm
Nut	95380-05600	4	
Plane washer	92990-05600	4	
Spring washer	92990-05100	4	
Fuel MGT gauge	6Y5-8350F-00	1	Included instruction tag
Wire-lead	6Y5-83553-F1	1	8 m, 26 ft
Fuel flow sensor	6Y5-85752-02	2	
Screw	90158-06003	4	68 mm
Instruction	61B-28107-A4	1	

CONVENTIONAL RIGGING KIT CONTENTS

REMOTE OIL TANK KIT (FOR 2-STROKE ENGINE)

10.5 L (2.8 US-GAL) TANK
Global P/N: 6YR-W0035-D0

Part name	Part No.	Q'ty	Remarks
Remote oil tank assy	6E5-21733-20	1	
Remote oil tank holder	6E5-21734-01	1	
Damper	6E5-21746-00	2	
Bracket	6E5-21798-01	1	
Fuel pipe complete	6YK-24307-42	1	
Clamp	90450-10M07	1	
Clamp	90465-11M10	1	
Clamp	90465-13M11	1	
Washer	92990-06600	2	
Nut	95380-06600	1	
Bolt	97080-06100	1	

US & Canada P/N: 6YR-W0035-92

Part name	Part No.	Q'ty	Remarks
Remote oil tank assy	6E5-21733-20	1	
Remote oil tank holder	6E5-21734-01	1	
Damper	6E5-21746-00	2	
Bracket	6E5-21798-01	1	
Fuel pipe complete	6Y2-24307-50	1	
Clamp	90450-10M07	1	
Clamp	90465-11M10	1	
Clamp	90465-13M11	1	
Washer	92990-06600	2	
Nut	95380-06600	1	
Bolt	97080-06100	1	

18 L (4.8 US-GAL) TANK
US & Canada P/N: 6YR-W0035-C0

Part name	Part No.	Q'ty	Remarks
Remote oil tank assy	6E5-21733-30	1	
Remote oil tank holder	6E5-21734-01	1	
Damper	6E5-21746-00	2	
Bracket	6E5-21798-01	1	
Fuel pipe complete	6Y2-24307-50	1	
Clamp	90450-10M07	1	
Clamp	90465-11M10	1	
Clamp	90465-13M11	1	
Washer	92990-06600	2	
Nut	95380-06600	1	
Bolt	97080-06100	1	

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

SQUARE STYLE GAUGE RIGGING KIT FOR US & CANADA

SINGLE KIT (TACH, SPEED/FUEL MGT)
Kit P/N: 6Y8-WE83S-10-00

Part No.	Part Name	Q'ty	Remarks
60V-8A4L1-10	Speed sensor kit	1	Refer to kit contents
6Y8-82521-51	Pigtail bus wire, 12 ft	1	
6Y8-81920-01	Multi-hub	2	With resistor cap, GRY
6Y8-82582-01	2-P cap, RED	1	For waterproof
6Y8-82582-11	4-P cap, WHT	3	For waterproof
6Y8-8350T-01	SQR tachometer	1	
6Y8-83500-01	SQR comb. speedometer & fuel MGT gauge	1	
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6Y8-2819U-00	Operation manual	1	
6Y8-2819K-S1	Quick installation guide	1	
6Y8-2819U-X0	Quick operation guide	1	Laminated card

TWIN KIT 1 (TACH, TACH, SPEED, FUEL MGT)
Kit P/N: 6Y8-WE83S-20-00

Part No.	Part Name	Q'ty	Remarks
60V-8A4L1-10	Speed sensor kit	1	Refer to kit contents
6Y8-82553-01	Main bus wire, 1 ft	1	
6Y8-82521-51	Pigtail bus wire, 12 ft	2	
6Y8-81920-01	Multi-hub	3	With resistor cap, GRY
6Y8-82582-01	2-P cap, RED	2	For waterproof
6Y8-82582-11	4-P cap, WHT	3	For waterproof
6Y8-8350T-01	SQR tachometer	2	
6Y8-8350S-01	SQR speedometer	1	
6Y8-8350F-01	SQR fuel management gauge	1	
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6Y8-82570-02	Twin-switch panel	1	
704-48207-P1	Twin-binnacle RCL box, Premium	1	
6K1-8258A-40	Main-harness 10-P, 26 ft	1	
61B-8258A-01	Main-harness 10-P, 32 ft	1	
6Y8-2819U-00	Operation manual	1	
6Y8-2819K-S1	Quick installation guide	1	
6Y8-2819U-X0	Quick operation guide	1	Laminated card

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

SQUARE STYLE GAUGE RIGGING KIT FOR US & CANADA

TWIN KIT 2 (TACH, TACH, SPEED/FUEL MGT)
Kit P/N: 6Y8-WE83S-30-00

Part No.	Part Name	Q'ty	Remarks
60V-8A4L1-10	Speed sensor kit	1	Refer to kit contents
6Y8-82521-51	Pigtail bus wire, 12 ft	2	
6Y8-81920-01	Multi-hub	2	With resistor cap, GRY
6Y8-82582-01	2-P cap, RED	1	For waterproof
6Y8-82582-11	4-P cap, WHT	1	For waterproof
6Y8-8350T-01	SQR tachometer	2	
6Y8-83500-01	SQR comb. speedometer & fuel MGT gauge	1	
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6Y8-82570-02	Twin-switch panel	1	
704-48207-P1	Twin-binnacle RCL box, Premium	1	
6K1-8258A-40	Main-harness 10-P, 26 ft	1	
61B-8258A-01	Main-harness 10-P, 32 ft	1	
6Y8-2819U-00	Operation manual	1	
6Y8-2819K-S1	Quick installation guide	1	
6Y8-2819U-X0	Quick operation guide	1	Laminated card

TRIPLE KIT 1 (TACH, TACH, TACH, SPEED, FUEL MGT)
Kit P/N: 6Y8-WE83S-80-00

Part No.	Part Name	Q'ty	Remarks
60V-8A4L1-10	Speed sensor kit	1	Refer to kit contents
6Y8-82553-01	Main bus wire, 1 ft	1	
6Y8-82521-51	Pigtail bus wire, 12 ft	3	
6Y8-81920-01	Multi-hub	3	With resistor cap, GRY
6Y8-82582-01	2-P cap, RED	2	For waterproof
6Y8-82582-11	2-P cap, WHT	1	For waterproof
6Y8-8350T-01	SQR tachometer	3	
6Y8-8350S-01	SQR speedometer	1	
6Y8-8350F-01	SQR fuel management gauge	1	
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6X5-82570-01	Triple-switch panel	1	
6X5-48207-00	Triple-binnacle RCL box, Premium	1	
6K1-8258A-40	Main-harness 10-P, 26 ft	1	
61B-8258A-01	Main-harness 10-P, 32 ft	2	
6Y8-2819U-X0	Quick operation guide	1	Laminated card
6Y8-2819U-00	Operation manual	1	

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

SQUARE STYLE GAUGE RIGGING KIT FOR US & CANADA

TRIPLE KIT 2 (TACH, TACH, TACH, SPEED, FUEL MGT) w/o Triple RCL Box
Kit P/N: 6Y8-WE83S-90-00

Part No.	Part Name	Q'ty	Remarks
60V-8A4L1-10	Speed sensor kit	1	Refer to kit contents
6Y8-82553-01	Main bus wire, 1 ft	1	
6Y8-82521-51	Pigtail bus wire, 12 ft	3	
6Y8-81920-01	Multi-hub	3	With resistor cap, GRY
6Y8-82582-01	2-P cap, RED	2	For waterproof
6Y8-82582-11	2-P cap, WHT	1	For waterproof
6Y8-8350T-01	SQR tachometer	3	
6Y8-8350S-01	SQR speedometer	1	
6Y8-8350F-01	SQR fuel management gauge	1	
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6X5-82570-01	Triple-switch panel	1	
6K1-8258A-40	Main-harness 10-P, 26 ft	1	
61B-8258A-01	Main-harness 10-P, 32 ft	2	
6Y8-2819U-X0	Quick operation guide	1	Laminated card
6Y8-2819U-00	Operation manual	1	

ROUND STYLE GAUGE RIGGING KIT FOR US & CANADA

SINGLE KIT 1 (TACH)
Kit P/N: 6Y8-WE83R-60-00

Part No.	Part Name	Q'ty	Remarks
6Y8-82521-51	Pigtail bus wire, 12 ft	1	
6Y8-81920-11	Single-hub	1	With resistor
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fus
6Y8-82521-11	Pigtail bus wire, 2 ft	1	
6Y8-8350T-11	RND tachometer	1	
6Y8-82582-11	4-P cap, WHT	2	For waterproof
6Y8-2819V-00	Operation manual	1	
6Y8-2819K-R1	Quick installation guide	1	
6Y8-2819V-X0	Quick operation guide	1	Laminated card

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

ROUND STYLE GAUGE RIGGING KIT FOR US & CANADA

SINGLE KIT 2 (TACH, SPEED/FUEL MGT)
Kit P/N: 6Y8-WE83S-40-00

Part No.	Part Name	Q'ty	Remarks
60V-8A4L1-10	Speed sensor kit	1	Refer to kit contents
6Y8-82521-51	Pigtail bus wire, 12 ft	1	
6Y8-81920-01	Multi-hub	2	With resistor cap, GRY
6Y8-82582-01	2-P cap, RED	1	For waterproof
6Y8-82582-11	4-P cap, WHT	3	For waterproof
6Y8-8350T-11	RND tachometer	1	
6Y8-83500-11	RND comb. speedometer & fuel MGT gauge	1	
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6Y8-2819V-00	Operation manual	1	
6Y8-2819K-R1	Quick installation guide	1	
6Y8-2819V-X0	Quick operation guide	1	Laminated card

TWIN KIT (TACH, TACH, SPEED/FUEL MGT)
Kit P/N: 6Y8-WE83S-50-00

Part No.	Part Name	Q'ty	Remarks
60V-8A4L1-10	Speed sensor kit	1	Refer to kit contents
6Y8-82521-51	Pigtail bus wire, 12 ft	2	
6Y8-81920-01	Multi-hub	2	With resistor cap, GRY
6Y8-82582-01	2-P cap, RED	1	For waterproof
6Y8-82582-11	4-P cap, WHT	1	For waterproof
6Y8-8350T-11	RND tachometer	2	
6Y8-83500-11	RND comb. speedometer & fuel MGT gauge	1	
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6Y8-82570-02	Twin-switch panel	1	
704-48207-P1	Twin-binnacle RCL box, Premium	1	
6K1-8258A-40	Main-harness 10-P, 26 ft	1	
61B-8258A-01	Main-harness 10-P, 32 ft	1	
6Y8-2819V-00	Operation manual	1	
6Y8-2819K-R1	Quick installation guide	1	
6Y8-2819V-X0	Quick operation guide	1	Laminated card

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

SQUARE STYLE GAUGE RIGGING KIT FOR EUROPE

SINGLE KIT (TACH, SPEED/FUEL MGT)
Kit P/N: 6YR-W0035-N2

Part No.	Part Name	Q'ty	Remarks
60V-8A4L1-10	Speed sensor kit	1	Refer to kit contents
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-81920-11	Single-hub	1	With resistor
6Y8-82521-11	Pigtail bus wire, 2 ft	2	
6Y8-82521-31	Pigtail bus wire, 6 ft	1	
6Y8-82553-21	Main bus wire, 20 ft	1	
6Y8-82582-11	4-pin cap, WHT	1	For waterproof
6Y8-83500-01	SQR comb. speedometer & fuel MGT gauge	1	
6Y8-8350T-01	SQR tachometer	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-2819U-X0	Quick operation guide	1	
6Y8-2819K-S1	Quick installation guide	1	
6Y8-2819U-70	Operation manual 1	1	
6Y8-2819U-80	Operation manual 2	1	

SINGLE KIT (TACH, SPEED/ FUEL MGT) w/o Transom Wire Harness
Kit P/N: 6Y8-W0035-20

Part No.	Part Name	Q'ty	Remarks
6Y8-82521-11	Pigtail bus wire, 2 ft	2	
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-82582-11	4-pin cap, WHT	1	For waterproof
6Y8-8350T-01	SQR tachometer	1	
6Y8-83500-01	SQR comb. Speedometer & fuel MGT gauge	1	
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6Y8-2819U-70	Operation manual 1	1	
6Y8-2819U-80	Operation manual 2	1	
6Y8-2819K-S1	Quick installation guide	1	
6Y8-2819U-X0	Quick operation guide	1	

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

SQUARE STYLE GAUGE RIGGING KIT FOR EUROPE

TWIN KIT (TACH, TACH, SPEED, FUEL MGT)

Kit P/N: 6YR-W0035-P1

Part No.	Part Name	Q'ty	Remarks
60V-8A4L1-10	Speed sensor kit	1	Refer to kit contents
61B-8258A-01	Main wire-harness 10-pin, 32 ft	1	
6K1-8258A-40	Main wire-harness 10-pin, 26 ft	1	
6Y8-81920-01	Multi-hub	3	With resistor cap, GRY
6Y8-82521-11	Pigtail bus wire, 2 ft	4	
6Y8-82521-31	Pigtail bus wire, 6 ft	1	
6Y8-82521-41	Pigtail bus wire, 9 ft	1	
6Y8-82553-01	Main bus wire, 1 ft	1	
6Y8-82553-31	Main bus wire, 25 ft	1	
6Y8-82582-01	2-pin cap, RED	2	For waterproof
6Y8-82582-11	4-pin cap, WHT	3	For waterproof
6Y8-8350F-01	SQR fuel MGT gauge	1	
6Y8-8350S-01	SQR speedometer	1	
6Y8-8350T-01	SQR tachometer	2	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6Y8-8356N-01	Fuel tank & GPS wire	1	
704-48207-P1	Twin-binnacle RCL box, Premium	1	
6Y8-82570-02	Twin-switch panel	1	
90149-05M05	Screw, 25 mm	4	
95380-05600	Nut	4	
92990-05600	PLN washer	4	
92990-05100	SRG washer	4	
6Y8-2819U-X0	Quick operation guide	1	
6Y8-2819K-S1	Quick installation guide	1	
6Y8-2819U-70	Operation manual 1	1	
6Y8-2819U-80	Operation manual 2	1	

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

SQUARE STYLE GAUGE RIGGING KIT FOR EUROPE

TWIN KIT (TACH, TACH, SPEED, FUEL MGT) w/o Transom Wire Harness
Kit P/N: 6Y8-W0035-30

Part No.	Part Name	Q'ty	Remarks
6Y8-82553-01	Main bus wire, 1 ft	1	
6Y8-82521-11	Pigtail bus wire, 2 ft	4	
6Y8-81920-01	Multi-hub	2	With resistor cap, GRY
6Y8-82582-01	2-pin cap, RED	1	For waterproof
6Y8-82582-11	4-pin cap, WHT	2	For waterproof
6Y8-8350T-01	SQR tachometer	2	
6Y8-8350S-01	SQR speedometer	1	
6Y8-8350F-01	SQR fuel MGT gauge	1	
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6Y8-2819U-70	Operation manual 1	1	
6Y8-2819U-80	Operation manual 2	1	
6Y8-2819K-S1	Quick installation guide	1	
6Y8-2819U-X0	Quick operation guide	1	

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

SQUARE STYLE GAUGE RIGGING KIT FOR EUROPE

F350 SINGLE KIT (TACH, SPEED/ FUEL MGT)
KIT P/N: 6X6-W0035-00

Part No.	Part Name	Q'ty	Remarks
6Y8-8350T-01	Tachometer	1	Square style
6Y8-8356N-01	GPS/ Fuel tank wire	1	
6Y8-83500-01	Comb. Speed/ fuel MGT gauge	1	Square style
6Y8-81920-01	Multi hub	1	
6Y8-85371-01	Rsesistor cap	1	Gray, 6-pin
6Y8-82521-11	Pigtail bus wire, 2ft	2	
6Y8-82521-31	Pigtail bus wire, 6ft	1	
6Y8-83553-01	PWR supply wire, 8ft	1	With 10 amps fuse
6R5-82570-05	Switch panel	1	Single
6X6-8258A-30	Main wire harness, 10m	1	
6X6-2819K-S0	Quick installation manual	1	
6Y8-2819U-X0	Quick reference guide	1	

F350 TWIN KIT (TACH, TACH, SPEED, FUEL MGT)
KIT P/N: 6X6-W0035-10

Part No.	Part Name	Q'ty	Remarks
6Y8-8350T-01	Tachometer	2	Square style
6Y8-8350S-01	Speedometer	1	Square style
6Y8-8356N-01	GPS/ Fuel tank wire	1	
6Y8-8350F-01	Fuel MGT gauge	1	Square style
6Y8-81920-01	Multi hub	2	
6Y8-82553-01	Main bus wire, 1ft	1	
6Y8-82521-11	Pigtail bus wire, 2ft	4	
6Y8-82521-31	Pigtail bus wire, 6ft	1	
6Y8-83553-01	PWR supply wire, 8ft	1	With 10 amps fuse
6Y8-82582-01	2-P cap, RED	1	For waterproof
6Y8-82582-11	4-P cap, WHT	1	For waterproof
6Y8-82570-02	Switch panel	1	Twin
6X6-8258A-40	Main wire harness, 12m	1	
6X6-2819K-S0	Quick installation manual	1	
6Y8-2819U-X0	Quick reference guide	1	

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

ROUND STYLE GAUGE RIGGING KIT FOR EUROPE

SINGLE KIT 1 (TACH)
Kit P/N: 6YR-W0035-Y1

Part No.	Part Name	Q'ty	Remarks
6Y8-82521-41	Pigtail bus wire, 9 ft	1	
6y8-82553-21	Main bus wire, 20 ft	1	
6Y8-81920-11	Single-hub	1	With resistor
6Y8-82521-11	Pigtail bus wire, 2 ft	1	
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-82582-11	4-pin cap	2	For waterproof
6Y8-8350T-11	RND tachometer	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse

SINGLE KIT 1 (TACH) w/o Transom Wire Harness
Kit P/N: 6Y8-W0035-00

Part No.	Part Name	Q'ty	Remarks
6Y8-82521-11	Pigtail bus wire, 2 ft	1	
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-82582-11	4-pin cap, WHT	2	For waterproof
6Y8-8350T-11	RND tachometer	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

ROUND STYLE GAUGE RIGGING KIT FOR EUROPE

SINGLE KIT2 (TACH, SPEED/FUEL MGT)
Kit P/N: 6YR-W0035-M3

Part No.	Part Name	Q'ty	Remarks
60V-8A4L1-10	Speed sensor kit	1	Refer to kit contents
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-81920-11	Single-hub	1	With resistor
6Y8-82521-11	Pigtail bus wire, 2 ft	2	
6Y8-82521-31	Pigtail bus wire, 6 ft	1	
6Y8-82553-21	Main bus wire, 20 ft	1	
6Y8-82582-11	4-pin cap, WHT	1	For waterproof
6Y8-83500-11	RND comb. speedometer & fuel MGT gauge	1	
6Y8-8350T-11	RND tachometer	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-2819U-X0	Quick operation guide	1	
6Y8-2819K-R1	Quick installation guide	1	

SINGLE KIT 2 (TACH, SPEED/ FUEL MGT) w/o Transom Wire Harness
Kit P/N: 6Y8-W0035-10

Part No.	Part Name	Q'ty	Remarks
6Y8-82521-11	Pigtail bus wire, 2 ft	2	
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-82582-11	4-pin cap, WHT	1	For waterproof
6Y8-8350T-11	RND tachometer	1	
6Y8-83500-11	RND comb. Speed & fuel MGT gauge	1	
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6Y8-2819K-R1	Quick installation guide	1	
6Y8-2819V-X0	Quick operation guide	1	

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

TRANSOM RIGGING KIT FOR EUROPE

SINGLE KIT 1 (SINGLE-HUB)
Kit P/N: 6Y8-W0035-40

Part No.	Part Name	Q'ty	Remarks
6Y8-82521-31	Pigtail bus wire, 6 ft	1	
6Y8-81920-11	Single-hub	1	With resistor

SINGLE KIT 2 (MULTI-HUB)
Kit P/N: 6Y8-W0035-50

Part No.	Part Name	Q'ty	Remarks
6Y8-82521-41	Pigtail bus wire, 9 ft	1	
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-82582-11	4-pin cap, WHT	2	For waterproof
6Y8-82582-01	2-pin cap, RED	1	For waterproof

TWIN KIT 1 (MULTI-HUB)
Kit P/N: 6Y8-W0035-60

Part No.	Part Name	Q'ty	Remarks
6Y8-82521-41	Main bus wire, 9 ft	1	
6Y8-82521-31	Pigtail bus wire, 6 ft	1	
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-82582-01	2-pin cap, RED	1	For waterproof
6Y8-82582-11	4-pin cap, WHT	1	For waterproof

TWIN KIT 2 (MULTI-HUB)
Kit P/N: 6Y8-W0035-70

Part No.	Part Name	Q'ty	Remarks
6Y8-82521-51	Main bus wire, 12 ft	1	
6Y8-82521-41	Pigtail bus wire, 9 ft	1	
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-82582-01	2-pin cap, RED	1	For waterproof
6Y8-82582-11	4-pin cap, WHT	1	For waterproof

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

SQUARE STYLE GAUGE RIGGING KIT FOR ANZ

SINGLE KIT (TACH, SPEED, FUEL MGT)

Kit P/N: 6YR-W0035-R1

Part No.	Part Name	Q'ty	Remarks
60V-8A4L1-10	Speed sensor kit	1	Refer to kit contents
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-81920-11	Single-hub	1	With resistor
6Y8-82521-11	Pigtail bus wire, 2 ft	3	
6Y8-82521-51	Pigtail bus wire, 12 ft	1	
6Y8-82553-31	Main bus wire, 25 ft	1	
6Y8-8350F-01	SQR fuel MGT gauge	1	
6Y8-8350S-01	SQR speedometer	1	
6Y8-8350T-01	SQR tachometer	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6Y8-8356N-01	Fuel tank & GPS wire	1	

TWIN KIT (TACH)

Kit P/N: 6YR-W0035-S1

Required the single-kit.

Part No.	Part Name	Q'ty	Remarks
61B-8258A-01	Main wire-harness 10-pin, 32 ft	1	
6K1-8258A-40	Main wire-harness 10-pin, 26 ft	1	
6Y8-81920-01	Multi-hub	2	With resistor cap, GRY
6Y8-82521-11	Pigtail bus wire, 2 ft	1	
6Y8-82521-51	Pigtail bus wire, 12 ft	1	
6Y8-82553-01	Main bus wire, 1 ft	1	
6Y8-82582-01	2-pin cap, RED	2	For waterproof
6Y8-82582-11	4-pin cap, WHT	3	For waterproof
6Y8-8350T-01	SQR tachometer	1	
704-48207-P1	Twin-binnacle RCL box, Premium	1	
6Y8-82570-02	Twin-switch panel	1	
90149-05M05	Screw, 25 mm	4	
92990-05100	SRG washer	4	
92990-05600	PLN washer	4	
95380-05600	Nut	4	

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

SQUARE STYLE GAUGE RIGGING KIT FOR JAPAN

SINGLE KIT 1 (TACH)
Kit P/N: 6YR-W0035-U0

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, 3 ft	1	
6Y8-82521-41	Pigtail bus wire, 9 ft	1	
6Y8-82553-21	Main bus wire, 20 ft	1	
6Y8-82582-11	4-pin cap, WHT	2	For waterproof
6Y8-8350T-01	SQR tachometer	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6Y8-2819U-01	Operation manual	1	
6Y8-2819K-S1	Quick installation guide	1	

SINGLE KIT 2 (TACH, SPEED/FUEL MGT)
Kit P/N: 6YR-W0035-V1

Part No.	Part Name	Q'ty	Remarks
60V-8A4L1-10	Speed sensor kit	1	Refer to kit contents
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-81920-11	Single-hub	1	With resistor
6Y8-82521-21	Pigtail bus wire, 3 ft	2	
6Y8-82521-51	Pigtail bus wire, 12 ft	1	
6Y8-82553-31	Main bus wire, 25 ft	1	
6Y8-82582-11	4-pin cap, WHT	1	For waterproof
6Y8-83500-01	SQR comb. speedometer & fuel MGT gauge	1	
6Y8-8350T-01	SQR tachometer	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-2819U-01	Operation manual	1	
6Y8-2819K-S1	Quick installation guide	1	

DIGITAL NETWORK GAUGE RIGGING KIT CONTENTS

ROUND STYLE GAUGE RIGGING KIT FOR JAPAN

SINGLE KIT 1 (TACH)
Kit P/N: 6YR-W0035-W0

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, 3 ft	1	
6Y8-82521-41	Pigtail bus wire, 9 ft	1	
6Y8-82553-21	Main bus wire, 20 ft	1	
6Y8-82582-11	4-pin cap, WHT	2	For waterproof
6Y8-8350T-11	RND tachometer	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6Y8-2819V-01	Operation manual	1	
6Y8-2819K-R1	Quick installation guide	1	

SINGLE KIT 2 (TACH, SPEED/FUEL MGT)
Kit P/N: 6YR-W0035-X1

Part No.	Part Name	Q'ty	Remarks
60V-8A4L1-10	Speed sensor kit	1	Refer to kit contents
6Y8-81920-01	Multi-hub	1	With resistor cap, GRY
6Y8-81920-11	Single-hub	1	With resistor
6Y8-82521-21	Pigtail bus wire, 3 ft	2	
6Y8-82521-51	Pigtail bus wire, 12 ft	1	
6Y8-82553-31	Main bus wire, 25 ft	1	
6Y8-82582-11	4-pin cap, WHT	1	For waterproof
6Y8-83500-11	RND comb. speedometer & fuel MGT gauge	1	
6Y8-8350T-11	RND tachometer	1	
6Y8-83553-01	PWR supply wire, 8 ft	1	With 10 amps fuse
6Y8-8356N-01	Fuel tank & GPS wire	1	
6Y8-2819V-01	Operation manual	1	
6Y8-2819K-R1	Quick installation guide	1	

2008 MANUFACTURING START SERIAL NUMBER

2-STROKE ENGINES						
Model name			Model code	Prefix code	Starting serial number	Remarks
Global	US	Canada				
2CMH			6F8	6F8K	1025349	
3AMH			6L5	6L5K	1014681	
4ACMH			6E0	6E0K	1009041	
5CMH			6E3	6E3K	1043951	
5CSMH			6E4			
6CMH		6MHG	6M8	6M8	1010726	France made
E8DMH			677	677K	1007367	
EK8DMH			680	680K	1006225	
8CMH	8MH	8MHG	6N0	6N0	1024676	France made
9.9FMH	9.9MH	9.9MHG	63V	682K	1040158	
E9.9DMH			6B3	6B3K	1005976	
EK9.9DMH			6B7	6B7K	1003303	For India
EK9.9JMH			6B9	6B9K	1002918	For Sri-Lanka
15FMH			65D	65D		Brazil made, For Brazil
15FMH	15MH	15MHG	63W	684K	1058763	
E15DMH			6B4	6B4K	1066710	
EK15DMH			6B8	6B8K	1002324	
EK15PMH			6C0	6C0K	1004685	For Sri-Lanka
20DMH		20MHG	6L3	6L3K	1008684	
20DMHO						
20DWO						
25BMH			69R	61RK	1027363	
25BW						
25BWC						
25BWH						
E25BMH			69P			
EK25BMH			69T	62CK	1003080	
25BMH			69U	69U		Brazil made, For Brazil
25XMH			69X	69XK	1000650	For ANZ
25NMH	25MH	25MHG	6L2	6L2K	1027048	
25NMHO						
25NW	25ER					For US
25NWC						
25NWH	25EH					
EK25CMH			6S6	6S6K	1000456	For Sri-Lanka
30HMH			69S	61TK	1030946	
30HW						
30HWC						
30HWH						
E30HMH			60B			
30DE			6J8	6J8K	1009221	
30DEO						
30DETO						
30DMH						
30DMHO						

2008 MANUFACTURING START SERIAL NUMBER

2-STROKE ENGINES						
Model name			Model code	Prefix code	Starting serial number	Remarks
Global	US	Canada				
40XMH			66T	66TK	1055261	
40XW						
40XWT						
E40XMH						
E40XW						
E40XWH						
E40XWT						
40XMH			67T	67T		Brazil made, For Brazil
40XW						Brazil made, For Brazil
40YETO			68P	68PK	1001432	For Italy
EK40GMH			6F5	6F5K	1012751	
E40GMH			6F6	6F6K	1042013	
E40GWH						
40VE			63C	6H4K	1014124	
40VEO						
40VETO			63D			
40VWHTO						
40VMHD			63B			
40VMHO						
EK40JMH			6H9	6H9K	1003805	
E40JMH			6J4	6J4K	1017185	
E40JW						
E40JWH						
E48CMH			696	670K	1007017	
50HEDO			62X	6H5K	1021187	
50HET						
50HETO	50TR					
50HWHD						
50HWHTO						
50HMHD			62W			
50HMHO			63G			
55DEHD			63S	63S	1001739	For Iran
55BED			697	663K	1005215	
55BET						
E55CMH			6A3			
E60JMHD			64S	64S	1000387	
60FED			6H2	6H2K	1008406	
60FEDO						
60FET						
60FETO						
E60HMHD			69D	6K5K	1013487	
E60HWD						
E60HWHD						
E65AMHD			65S	65S	1000332	
70BETO	70TR		6H3	6H3K	1010213	
75AED			692	692	1028384	
75AEHD						
75AET						
E75BMHD						
75CETO			67P			

2008 MANUFACTURING START SERIAL NUMBER

2-STROKE ENGINES						
Model name			Model code	Prefix code	Starting serial number	Remarks
Global	US	Canada				
85AED			688	688	1016694	
85AEHD						
85AET						
90AETO	90TR	90TRG	6H1	6H1	1035287	
115BET			6E5	6E5	1021119	
115CETO	115TR		6N6			
E115AE			61U			
E115AET						
E115AMH						
E115AWH						
130BETO			6N7	6L1	1004035	
140BET			6F3	6F3	1001125	
150AET			6G4	6G4	1019349	
150FETO	150TR		64C			
Z150PETO		Z150TRG	68H			
150GETO	V150TR		64K	6J9	1012795	For US
Z150QETO	VZ150TR	VZ150TRG	68J			Except JPN
				68J	1000012	For JPN
L150AET			6K0	6K0	1001174	
L150FETO			64G			
Z175HETO	VZ175TR	VZ175TRG	68M	62H	1001633	For US & Can
				68M	1000035	For JPN
175AET			6G5	6G5	1001102	
175DETO			65D			
Z175GETO			68L			
Z200PETO		VZ200TRG	60F	60F	1002017	
200GETO			64M	61H	1000439	
200AET			60H	6G6	1032843	
200FETO			64E			
Z200NETO	Z200TR	Z200TRG	68F			
L200AET			60J	6K1	1006029	
L200FETO			64H			
LZ200NETO	LZ200TR		68G			
Z200RETO	VZ200RTR		6P5	6P5	1003347	For US
Z225HETO	VZ225HTR		60Y	60Y	1005852	For US
225DET			64F	6K7	1000584	
Z250FETO	VZ250FTR		60X	60X	1005363	For US
250GETO			6S3	6S3	1000910	
L250GETO			6S4	6S4	1000522	
Z300BETO	VZ300BTR		6C9	6C9	1001078	For US
Z300AETO	Z300TR		6D0	6D0	1003810	For US
LZ300AETO	LZ300TR		6D1	6D1	1001815	For US

2008 MANUFACTURING START SERIAL NUMBER

4-STROKE ENGINES						
Model name			Model code	Prefix code	Starting serial number	Remarks
Global	US	Canada				
F2AMH			6S7	6S7	1002276	France made, For JPN
F2.5AMH	F2.5MH	F2.5MHG	69M	69M	1042954	France made
F4AMH	F4MH	F4MHG	68D	68D	1069180	France made
F6AMH	F6AMH	F6MHG	60N	60N	1008336	France made
F6AWH						France made, For JPN
F8CMH	F8CMH	F8MHG	60R	60R	1015181	France made
F8CWH						France made, For JPN
FT8DE		T8ERG	60S	60S	1018941	France made
FT8DEHP	T8DPH	T8PHG				France made, For US & Can
FT8DEP	T8DPR	T8PRG				France made
FT8DMH		T8MHG				France made
FT8DWH	T8DEH					France made, For US
F9.9CE	F9.9ER-2		66N	66NK	1003985	
F9.9CMH	F9.9MH-2					
F9.9CWH						
F9.9CWHP						
FT9.9DE	T9.9ER-2		66R	66RK	1002473	
FT9.9DEH	T9.9EH-2					For US
FT9.9DMH						
FT9.9DWH						
F9.9FE	F9.9FER		6AU	6AUK	1000001	New model
F9.9FEH		F9.9EHG				New model, For Can
F9.9FMH	F9.9FMH	F9.9MHG				New model
F9.9FWH						New model
F9.9GEHP	T9.9GPH	T9.9PHG	6AV	6AVK	1000001	New model, For US & Can
FT9.9GE		T9.9ERG				New model
FT9.9GEP	T9.9GPR	T9.9PRG				New model
FT9.9GMH		T9.9MHG				New model
FT9.9GWH	T9.9GEH	T9.9EHG				New model
F13.5BEH			6AF	6AFK	1000326	
F13.5BEP						
F13.5BMH						
F15AEH			66M	66MK	1007330	
F15AMH						
F15CE			6AG	6AGK	1005906	
F15CEH	F15CEH	F15EHG				
F15CEHP	F15CPH					
F15CEP						
F15CMH	F15CMH	F15MHG				
F15CWH						
F15BM			6D4	6D4K	1000856	
F15BMH						
F20BE	F20ER		6AH	6AHK	1008551	
F20BEH	F20EH	F20EHG				For US & Can
F20BEHP	F20PH	F20PHG				
F20BEP	F20PR	F20PRG				
F20BMH	F20MH	F20MHG				
F20BWH						

2008 MANUFACTURING START SERIAL NUMBER

4-STROKE ENGINES						
Model name			Model code	Prefix code	Starting serial number	Remarks
Global	US	Canada				
F20AET			65P	65W	1037173	For EU
F25AE			65W			For EU
F25AEH		F25EHG				For Can
F25AEHT						
F25AET		F25TRG				
F25AMH		F25MHG				
F25AWH						
FT25BET		T25TRG	68U			
F25CM			6D5	6D5	1000499	
F25CMH						
F30AEHD		F30EHG	69H	69H	1008205	For Can
F30AEHT						
F30AET						
F30AMHD						
F30AWHD						
F30AWHT						
F40BED	F40BER		67C	67C	1035037	
F40BEHD		F40EHG				For Can
F40BET	F40BTR	F40TRG				
F40BMHD	F40BMH	F40MHG				
F40BWHD						
F40BWHT						
F40DET			6AK	6AK	1002924	For Italy
F50DET			60A	60A	1000636	
FT50CED			61S	64J	1006974	
FT50CEHD						
FT50CET						
F50FED			6C1	6C1	1018489	
F50FEHD						
F50FEHT		F50THG				
F50FET	F50TR	F50TRG				
FT50GET	T50TR	T50TRG	6C2	6C2	1006660	
F60CEHT		F60THG	6C5	6C5	1024088	
F60CET	F60TR	F60TRG				
FT60DET	T60TR	T60TRG	6C6	6C6	1008344	
F75BET	F75TR	F75TRG	6D6	62P	1010402	
F75CED			6BC	6BC	1000040	
F75CEHD						
F80BET			6D7	6D7	1006029	
F90BET	F90TR	F90TRG	6D8	61P	1028830	
F95AET			6S0	6S0	1000467	For JPN
F100BET			60C	60C	1002760	
F100DET			6D9	6D9	1008405	
F115AET	F115TR	F115TRG	68V	68V	1082891	
FL115AET	LF115TR	LF115TRG	68W	68W	1003581	
F150AET	F150TR	F150TRG	63P	63P	1069194	
FL150AET	LF150TR	LF150TRG	64P	64P	1009682	

2008 MANUFACTURING START SERIAL NUMBER

4-STROKE ENGINES						
Model name			Model code	Prefix code	Starting serial number	Remarks
Global	US	Canada				
F200AET	F200TR	F200TRG	60L	60L	1009954	
FL200AET	LF200TR	LF200TRG	60M	60M	1001529	
F200CET			6AL	6AL	1000461	For EU
FL200CET			6AM	6AM	1000074	For EU
F200BET			6S1	6S1	1000686	
FL200BET			6S2	6S2	1000317	
F225AET	F225TR	F225TRG	69J	69J	1029406	
FL225AET	LF225TR	LF225TRG	69K	69K	1008932	
F225BET			6AS	6AS	1000435	For EU
FL225BET			6AT	6AT	1000094	For EU
F225CET	F225TLR		6BB	6BB	1000001	New model, For US
F250AET	F250TR	F250TRG	6P2	6P2	1021604	
FL250AET	LF250TR	LF250TRG	6P3	6P3	1009546	
F350AET	F350TR	F350TRG	6AW	6AW	1000001	New model
FL350AET	LF350TR	LF350TRG	6AX	6AX	1000001	New model

YAMAHA MOTOR CO., LTD

Produced in Japan
May 2007-0.24 × 1NP
(E)

Printed on recycled paper.