

## Premium Gauge Panel Installation Instructions

Thank you for your purchase of the PontoonStuff.com Premium Gauge Panel. This OEM quality panel is engineered to be easy to install, long lasting, and trouble free.

### Preliminary

- Disconnect all connections to the battery.
- Unwrap your new gauge panel being careful not to cut or damage any wires or switches.
- Locate the following connections:
  - Black - ground
  - Purple - "key on" power
  - Gray - tachometer signal

### Mounting Location

- Your new gauge panel measures 15  $\frac{7}{8}$ " wide at the top, 14  $\frac{1}{4}$ " wide at the bottom, and 5  $\frac{7}{8}$ " high in the middle. This panel needs at minimum an area that is 15  $\frac{7}{8}$ " wide at the top, 14  $\frac{1}{8}$ " wide at the bottom, and 5  $\frac{7}{8}$ " high in the middle and requires a mounting depth of 3  $\frac{1}{2}$ ". Even though the components only require 2  $\frac{7}{8}$ " of depth, another  $\frac{5}{8}$ " is required for the wires and connectors.
- The panel should be mounted in an area that is easily viewed by the captain. Centering the panel in the helm with easy access to the depth sounder buttons is the preferred location.

### Installation

- Use the attached cutout template to mark your helm for cutting. The cutout is not rectangular. It is 4" tall with a 2" radius on each end. The overall width of the cutout is 14  $\frac{3}{8}$ ". Print both pages of the template and align them at the alignment marks.
- To ensure proper printing scale, please take time to measure the printed scale on the drawing.
- Test fit the switch panel. If panel fits flat and straight, mark the eight mounting holes using either the panel or the cutout template. If not, slightly increase the hole size until the panel fits properly.
- Drill  $\frac{1}{8}$ " holes and secure panel using #8 pan head screws (not included).

### Wiring

- The electrical connection for your new gauge panel is fairly simple (only three wires).
  - The purple wire connects to your boat's "key on" power wire. This wire can usually be found using the wiring code below or by using a digital multimeter. If a "key on" power wire is not available, the purple wire be connected to an On/Off toggle switch.
  - The black wire connects to your boat's battery (-) ground system. Usually there is either a ground bus in the helm or a connection point in the engine harness to connect the black wire from your new gauge panel. If one cannot be located, run a new ground wire from the helm back to the battery. To help reduce confusion, it is recommended that a black wire is used.

- The gray wire connects to your engine's tachometer signal wire. The best way to locate this wire is by using the wire color code below.
- Engine wiring color code
  - Mercury
    - Purple - "key on" power
    - Black - ground battery (-)
    - Gray - tachometer signal
  - BRP
    - Purple - "key on" power
    - Black - ground battery (-)
    - Gray - tachometer signal
  - Yamaha
    - Yellow - "key on" power
    - Black - ground battery (-)
    - Green - tachometer signal
  - Suzuki
    - Gray - "key on" power
    - Black - ground battery (-)
    - Yellow - tachometer signal
  - Honda
    - Black/yellow - "key on" power
    - Black - ground battery (-)
    - Gray - tachometer signal
- Depth sounder transducer
  - Before installing the transducer, uncoil the transducer cable and test the cable routing to ensure adequate cable length.
  - Install the transducer per the included instructions. Take care in cable routing to prevent chaffing and accidental snagging. Use the included crimp connectors to connect the plug to the transducer cable.
- Tachometer setting - Use the attached "Outboard Tachometer Applications" sheet to set the tachometer to the proper setting for your engine.

#### Final Steps

- Reconnect the battery.
- Test all gauges. Gauges will illuminate and power up with "key on" power. The voltmeter should read around 12 volts when the engine is off and around 14 volts when the engine is running. The GPS will read the boat speed as soon as the boat is moving. The tachometer should read below 1,000 rpms when the engine is idling and between 5,000 and 6,000 rpms at full throttle. The depth sounder will begin reading depth as soon as "key on" power is applied. A flashing depth means the transducer has temporarily lost track of the bottom. This is a very common reading when not in the water.
- Tie up all excess wire. Connections will pull loose if excess slack is allowed to pull on them when the boat is underway.



# Outboard Tachometer Applications

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Make / Year	Model	# of Poles
<b>Chrysler</b> 1968 - 1983	35 HP, 70 HP & up	12
	55, 60, 85 & 125 HP	20
<b>Force</b> 1984 - 1999  Some older Force engines are 20 pole (see note f.)	50 HP through early 1987 (A,B models)	8
	35 HP (1986 & later)	12
	40 HP (1991 & later)	
	50 HP (1992 B models & later)	
	70 HP (1991 & later)	
90 - 120 HP L-Drive (1991 B & later)		
145 HP L-Drive (1991 & later)		
<b>Honda</b> to Present Older tiller models require Honda jumper wire 32197-ZH8-003, BF 40/50 HP require 06383-ZV5-315 Tach Kit (thru 2005)	BF 75/100A, BF 8A, BF 9.9/15A HP	4
	BF 25/30, BF60, BF 75/90 HP	
	BF 40/50 (2006 and later)	
	BF 115 /130 HP	6
	BF 135/150 HP, BF 200/225 HP	12
BF 35/45, BF 40/50 HP (thru 2005)		
BF 8D/9.9D, BF 15D/ 20D (Includes Power Thrust Models)		
<b>Mercury/Mariner</b> 1977 to Present (See note "e") *Use Tach adapter #17461A9 Service #17461T9 **Use Tach adapter MM #17461A8 or A10 Service #56-883040A1  SmartCraft requires AGI converter for Analog Gauges.	18, 25, 48, 60 HP Mariner through 1983	4
	8, 9.9, 15 and 25 HP (4 stroke)(after1998-2004) Less than 40 HP - All Before 1999	
	40 HP (serial # 582399 and before)	6
	8, 9.9 (Before 1999 and after 2005) & 50HP (4 stroke)	
	6 to 25 HP 1999 & up, *2002 & up	
	25 HP & 30 HP (4 stroke)	12
40 HP (after serial # 582399)		
45 HP (1987), 50-60 HP (4 stroke EFI)		
50 HP & above, ** 75, 90,115 HP (4 stroke EFI)		
135, 150, 200, 225 HP, DI 3.0L EFI 225 & 250 HP Pro Max 3.0L 300 HP EFI		
<b>Evinrude/Johnson</b> 1977 to Present for 88 HP (90) & 112 HP {115} a voltage reg. kit is recommended. A System Check Tach or 2" gauge is required	9.9 HP -15 HP 4 stroke after 2001	6
	All 2 cylinders less than 70 HP	10
	9.9 HP & 15 HP (2 cylinder) (4 stroke)	12
	25-35 HP 3 CYL	
	40-50 HP, 2 cylinder (1993 & later)	
60 HP, 3 cylinder (1985 & later)		
70 HP & greater, including sea drives All FICHT models All E-Tech 40 HP - 250 HP		
<b>Suzuki</b> to Present A System Monitor Tach or 2" gauge is required	Less than 55 HP - All, DT55, 2-Stroke Models	4
	60 HP, 65 HP thru 1985, DT 2-Stroke Models	6
	50 - 60 HP Cabrea, DT 2-Stroke Models	
	DF 2.5 through DF 15, DF 25 V(TWIN) 2006 & later	
	25 HP & 30 HP (1993 & later) DT 2-Stroke Models	12
55 HP & 65 HP (1985 & later) DT 2-Stroke Models		
75 HP & up (1985 & later) DF 25 through DF 30 (3 Cyl Models), DT 2-Stroke Models		
75 HP and up (Cabrea ) DT 2-Stroke Models		
115 HP and up (1988 & later), DT 2-Stroke Models		
DF 40 through DF 250, (4 stroke) ALL		
<b>Tohatsu / Nissan</b> to Present (See note "e").	(2 strokes) 8 HP, 9.8, 9.9, 15, 18, 25, 30, 40C, M40C or less (all 2 cylinder) All TLDI 40 through 115	4
	(2 strokes) M40D, 40D2, 50D, 50D2, 70B and CM90A (all 3 cylinder) (4 strokes) MFS20 or less	6
	(2 strokes) 115 HP, 120 HP, 140 HP, M115A-M140A (all 4 cyl.) (4 strokes) 8, 9.8, 9.9, 15, 18, 25 & 30 HP, EFI 25, 30, MFS25/30 (3 cyl)	12
<b>Yamaha</b> 1984 to Present  S250B and V8 four stroke will not support a conventional tachometer.	6 HP - 25 HP (2 cyl '84-'87), F/T 9.9 ('85-'91) C25 - C55 (2 cyl) Except C30 (2cyl '93-'97)	4
	F/T 9.9 (MID '92 on), C30-C70 (3 cyl)	6
	C30 (2 cyl '93-'97), 25 HP (3 cyl), 25 H P (2 cyl, '88-'05)	
	C/P/E 30-70, F8, F15, F20	
	F/T 25-F250, HPDI 150-300, 80-SX250 F/T 9.9 (early '92), C75-C150, P75-P200 V /V X 150-250, F15C/F20	12

**Notes:**

- a. 6000 RPM tachs are for Inboard & I/O gas engine applications only
- b. 7000 RPM & 8000 RPM tachs are for all outboard motor applications only. 20 Pole Tachs are no longer available.
- c. Electrical pulses per revolution are equal to 1/2 the number of alternator poles.
- d. Older model outboards (prior to 1977) may have the tach signal wire originating at the ignition system though they are alternator equipped. All alternator tachometers may be used on these systems by disconnecting the tach signal wire at the engine and connecting that wire to the unrectified alternator signal at the rectifier. Be certain the number of alternator poles match the tachometer pole setting of the tach.
- e. TOHATSU recommends, when using aftermarket tachs on TLDI engines, using inductor light kit part number 3Y9762510 and Harness 3T5710420. Strong alternator interference on some TOHATSU / NISSAN outboards and some pre 2001 Mercury 90HP outboards may require wiring a .1mf, 100 volt non-polarized capacitor between the signal and ground stud terminals.
- f. Faria no longer makes a 20 pole tach.

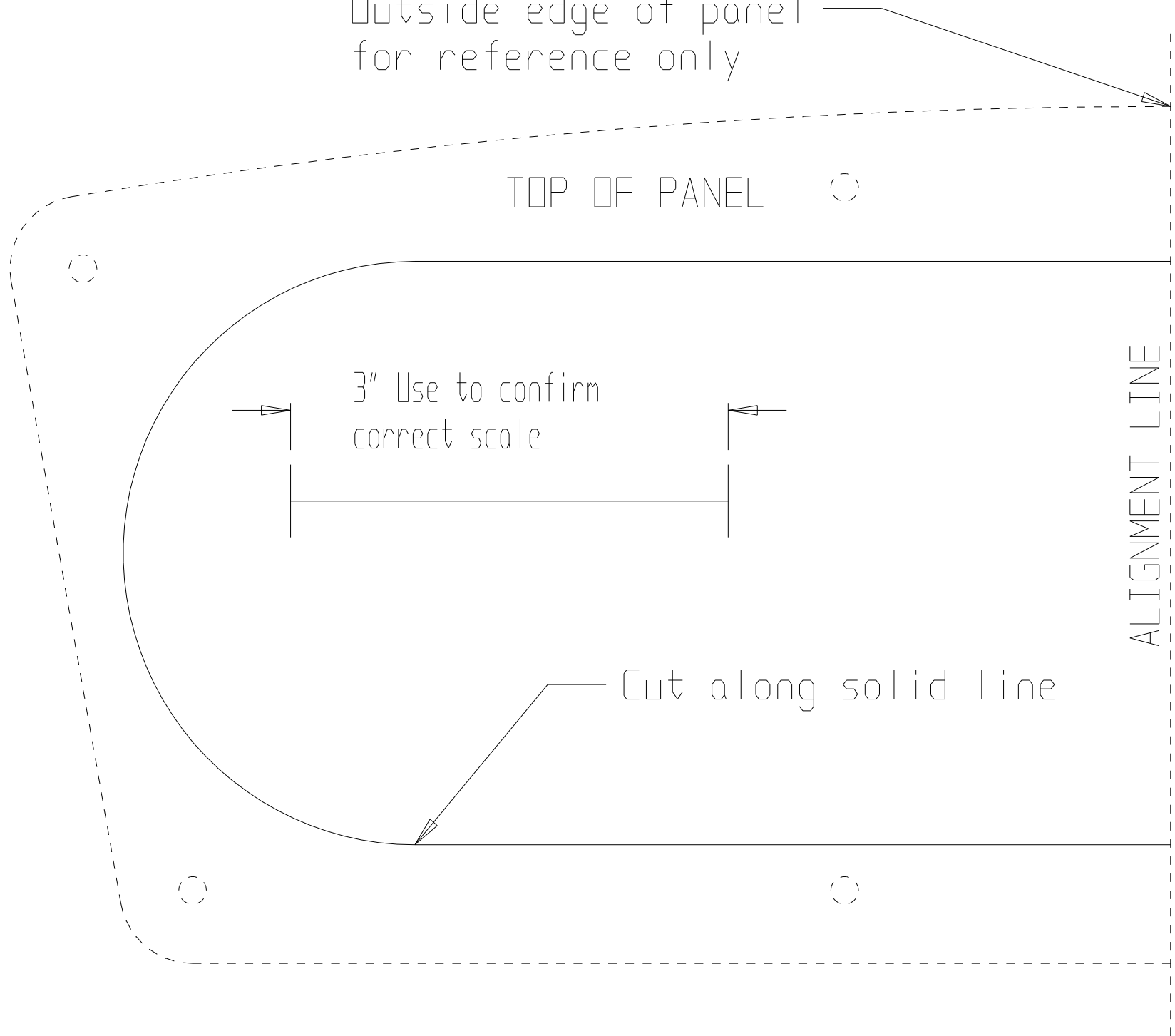
**7000 RPM Outboard Tach**

OB ALT SWITCH SETTING
1 - 4 POLE
2 - 6 POLE
3 - 8 POLE
4 - 10 POLE
5 - 12 POLE
<b>SLIGHTLY DEPRESS WHILE TURNING</b>

**6000 RPM w/12 Pole option**

ENG. CYL. SWITCH SETTING
1 - 4 CYL
2 - 6 CYL
3 - 8 CYL
4 - 12 POLE OB ALT
<b>SLIGHTLY DEPRESS WHILE TURNING</b>

Outside edge of panel  
for reference only



TOP OF PANEL

3" Use to confirm  
correct scale

ALIGNMENT LINE

Cut along solid line

Outside edge of panel  
for reference only

TOP OF PANEL

ALIGNMENT LINE

3" Use to confirm  
correct scale

Cut along solid line

