

# Installation Instructions

## 5" 7k Tachometer, 3-in-1

### with Trim & Oil Pressure

**CAUTION:** Disconnect the battery during installation. Tighten nuts on the back clamp only slightly more than you can tighten with your fingers. Six inch-pounds of torque is sufficient. Over tightening could result in damage to the instrument and may void your warranty.

1. Location: The tachometer should be located at least 18" from a magnetic compass. Some interference (erratic operation) may be noticed on the tachometer during radio transmissions. This will neither damage a Faria® tachometer nor affect accuracy when not transmitting.
2. Be certain to use stranded, insulated wire not lighter than 18AWG that is approved for marine use. It is recommended that ring type, terminals be used on all connections to the instrument.
3. Using a small screwdriver, SLIGHTLY depress and turn the selector switch on the back of the tachometer to the correct position to match the number of poles in the alternator of the outboard engine or the number of cylinders on the inboard engine.  
(see label on the side of the tachometer).

Depressing the switch too hard may cause damage to the tachometer! Be sure the selector switch has locked into the detent at the correct position by slightly rotating the switch back and forth with the screwdriver. If the number of poles is not known, consult the "Outboard Tachometer Application" chart or call Faria® Marine Instruments at (860) 848-9271 with make, model, HP, and year of the motor.

4. Cut a 4-3/8" dia hole in the dash and mount the tachometer with the backclamp supplied. If required ut a .175" wide by .115" deep notch to accept the key on the case. See detail on next page.  
(See diagram on the next page for connections)
5. For Outboard applications: Connect a wire to the stud marked "1" (Tach signal) and secure with a nut and lockwasher. Connect the opposite end to a terminal or wire originating from the unrectified side of the alternator. On most late model outboards, a tach hook-up wire can be found at the control box. Tach plug-in harnesses are sometimes available from the engine manufacturer to simplify the hook-up
6. For Inboard Applications: Connect a wire to the stud marked "1" (Tach signal) and secure with a nut and lock washer. Connect the opposite end to a terminal or wire providing the Tach signal from inboard. See engine manufacturer's literature for signal location.
7. Stud location marked "2" is NOT Connected)

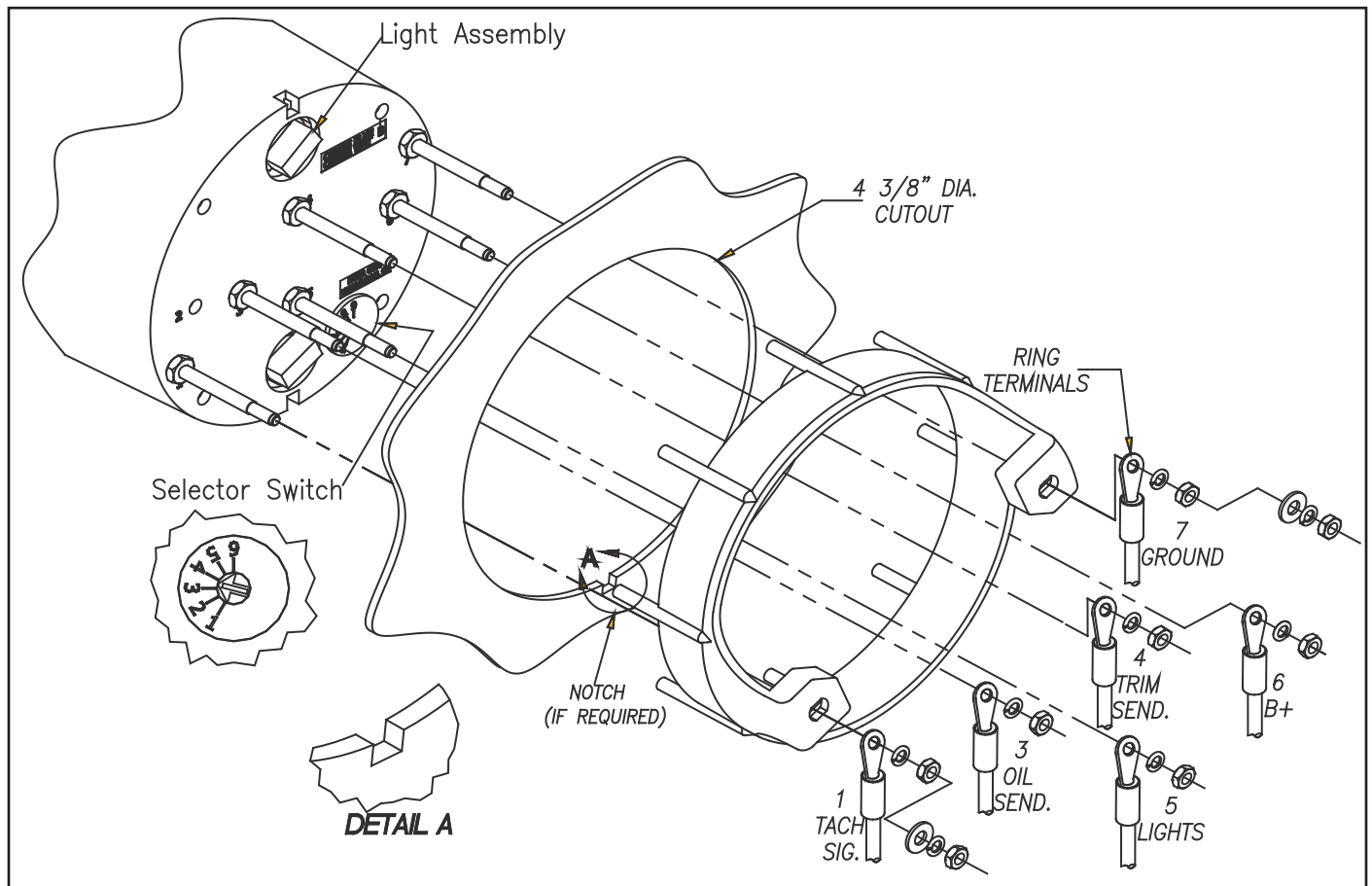
**WARNING:** Different outboard and I/O manufacturers may not use the same trim sender values. Be sure you have selected the proper trim gauge for your application.\*

8. Connect a wire to the stud marked "3"(trim send) and secure with a nut and lockwasher. Connect opposite end to the stud on the signal terminal or wire and secure with lockwasher.
9. Connect a wire to the stud marked "4"(oil send) and secure with a nut and lockwasher. Connect opposite end to the stud on the sensing unit and secure with lockwasher.
10. Connect a wire to the stud marked "5"(lighting) and secure with a nut and lockwasher. Connect opposite end to positive the "+" side of the boats instrument lightong panel. No additional ground required.
11. Connect a wire to the stud marked "6"(B+) and secure with a nut and lockwasher. Connect opposite end to a 12VDC curcuit that is activated by the ignition switch.
12. Connect a wire to the stud marked "7"(ground) and secure with a nut and lockwasher. Connect opposite end to boats electrical ground, generally available in several locations near the instrument panel.
13. Reconnect the battery.

**CAUTION:** Ensure wire insulation is not in danger of melting from engine exhaust heat or interfering with moving mechanical parts when connecting sensors..

**NOTE:** To change light bulb, twist out black socket assembly one-eighth turn counterclockwise until it pops out. Bulb pulls straight out of assembly. It is a GE No. 194 instrument lamp. (See diagram above for connections)

# Standard 5" Case Wire connections



Make / Year	Model	# of Poles
<b>Chrysler</b>	35 HP, 70 HP & up	12
1968 - 1983	55 & 60 HP	20
<b>Force</b>	50 HP through early 1987 (A,B models)	8
1984 - 1999	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)	
Some older Force engines are 20 pole (see note f.)	145 HP L-Drive (1991 & later)	
<b>Honda</b>	BF 75/100A, BF 8A, BF 9.9/15A HP	4
Through 2008	BF 25/30, BF 75/90 HP	
Older tiller models require Honda jumper wire 32197-ZH8-003, BF 40/50 HP require 06383-ZV5-316	BF 40/50 (2006 and later)	
Tach Kit (thru 2005)	BF 115 /130 HP	
	BF 135/150 HP, BF 200/225 HP	6
	BF 35/45, BF 40/50 HP (thru 2005)	12
	BF 8D/9.9D, BF 15D/ 20D (Includes Power Thrust Models)	
<b>Mercury/Mariner</b>	18,25,48,60HP Mariner through 1983	4
1977 - 2008	8, 9.9, 15 and 25 HP (4 stroke)(after 1998-2004)	
(See note "e")	Less than 40 HP - All Before 1999	
*Use Tach adapter #17461A9	40 HP(serial # 582399 and before)	6
Service #17461T9	8, 9.9(Before 1999 and after 2005)& 50HP(4 stroke)	10
**Use Tach adapter MM #17461A8 or A10	6 to 25 HP 1999 & up, *2002 & up	
Service #56-883040A1	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)	
SmartCraft requires AGI converter for Analog Gauges.	135, 150, 200, 225 HP, DI 3.0L EFI 225 & 250 HP Pro Max 3.0L 300 HP EFI	

### Notes:

a. Electrical pulses per revolution are equal to 1/2 the number of alternator poles.

b. 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.

c. 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.

<b>Evinrude/Johnson</b> 1977 - 2008 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
<b>Suzuki</b> through 2008 A System Monitor Tach or 2" gauge is required	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>Tohatsu / Nissan</b> through 2008 (See note "e").	Less than 55 HP - All	4
	60 HP, 65 HP thru 1985	6
	50 - 60 HP Cabrea	
	DF 4 through 30 (4 stroke)	12
	25 HP & 30 HP (1993 & later)	
55 HP & 65 HP (1985 & later)		
<b>Yamaha</b> 1984 - 2008  V8 four stroke will not support a conventional tachometer.	75 HP & up (1985 & later)	12
	75 HP and up (Cabrea)	
	115 HP and up (1988 & later)	
	DF 40 through DF 250, DFV6 (4 stroke)	
<b>Tohatsu / Nissan</b> through 2008 (See note "e").	(2 strokes) 8 HP, 9.8, 9.9, 15, 18, 25, 30, 40C (all 2 cylinder)	4
	All TLDI 40 through 115	6
	(2 strokes) M40D,40D2, 50D, 50D2, 70B and C, 90A (all 3 cylinder)	12
	(2 strokes) 115 HP, 120 HP, 140 HP (all 4 cyl.) (4 strokes) 8, 9.8, 9.9, 15, 18, 25 & 30 HP, EFI 25, 30	
<b>Yamaha</b> 1984 - 2008  V8 four stroke will not support a conventional tachometer.	6 HP - 25 HP (2 cyl '84-'87), F/T 9.9 ('85-'91)	4
	C25 - C55 (2 cyl) Except C30 (2cyl '93-'97)	6
	F/T 9.9 (MID '92 on), C30-C70 (3 cyl)	
	C30 (2 cyl '93-'97), 25 HP (3 cyl), 25 HP (2 cyl, '88-'05)	12
	C/P/E 30-70, F15, F20 F/T 25-F250, HPDI 150-300, 80-SX250 F/T 9.9 (early '92), C75-C150, P75-P200 V/VX 150-250, F15C/F20	

### 7000 RPM Inboard /Outboard Tach

#### SWITCH SETTING

- 1 - 4 POLE / CYL
- 2 - 6 POLE / CYL
- 3 - 8 POLE / CYL
- 4 - 10 POLE
- 5 - 12 POLE

SLIGHTLY DEPRESS WHILE TURNING

For technical assistance, contact Faria® Marine Instruments Customer Service between 8:30 AM and 5:30 PM Eastern time weekdays at (860) 848-9271 or (800) 473-2742.