



INSTALLATION AND OPERATION MANUAL

Installation Instructions

Head Timer, Head Timer II, III, IV and Single Inlet Combo

I Location:

A. The Head Timer can be mounted anywhere onboard, in any position, however the closer to the Head Motor Solenoid saves long wire routing. Keep in mind to have access to the power and test switches, fuse, and terminal block and to remove the front cover to access the adjusting knob.

B. Try to locate the unit away from engines heat. The unit is splash proof.

II Installing the Unit:

A. Remove the four cover screws (see Figure 1) and remove the front cover. Inside each installation hole, are the screws to attach the unit to any wall, fire wall, bulk head, ceiling and under counter or floor.

B. Use four pan head screws # 6 X $\frac{3}{4}$ " (provided).

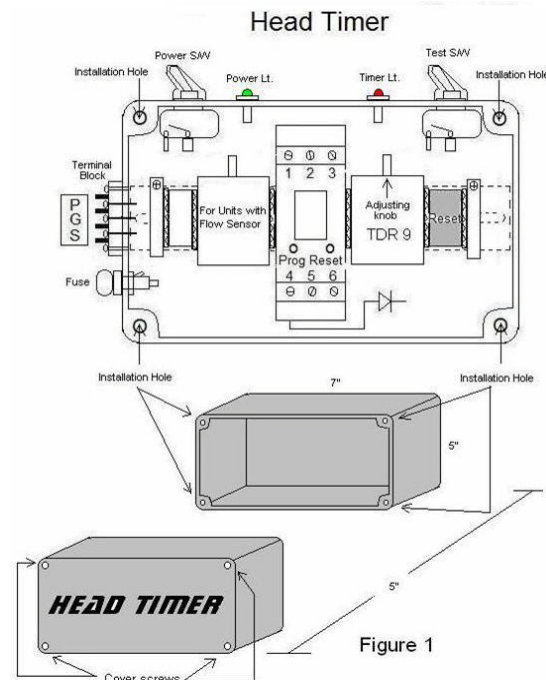


Figure 1

III Installation of Head Motor Solenoid, if not already on board. (See Fig.3)

If Head Motor Solenoid is installed continue to step IV

Head Timer will operate the solenoid only; do not connect the pump positive wire to the S terminal. This will blow the fuse.

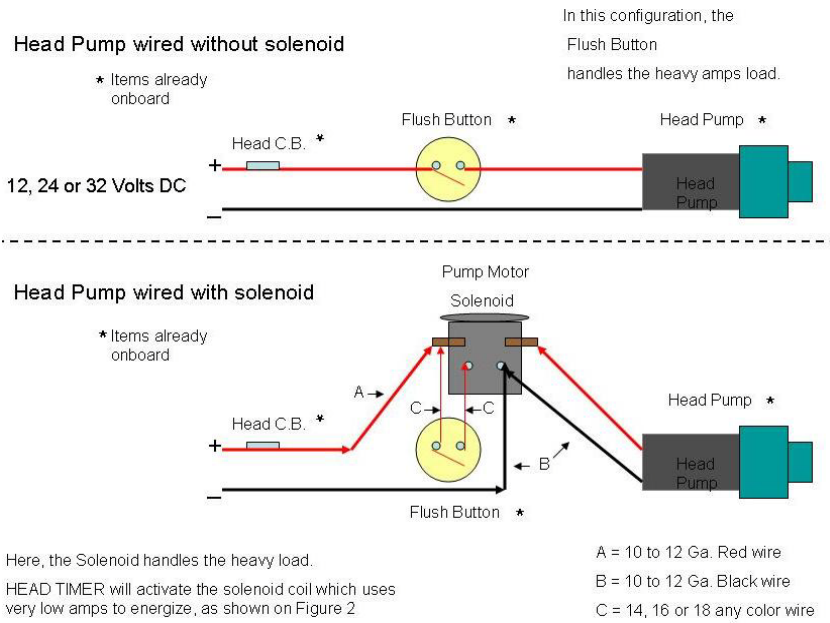


Figure 3

IV Wiring: All Head Timers

To simplify this installation, an AWG18-3 triplex wire is recommended, this cable has 3 wires inside, where **White** is **P**ower, **Black** is **G**round and **Green** is **S**ignal. Since the main wiring comes from the Head Motor Solenoid and goes straight to the Head Timer Unit, a heavy wire is not needed, 18 Ga. is more than enough for any wire length.

A. Turn **OFF** the Head Circuit Breaker on the accessory breaker panel of the vessel.

B. Locate the Head Motor Solenoid.

Use bold numbers in parenthesis to locate the connections in Figure 2

- (1.) Connect the **White** wire on the Battery positive side of the solenoid that comes from the Circuit Breaker, using the 5/16" ring terminal supplied.
- (2.) Connect the **Black** wire on the ground terminal of the Head Motor Solenoid coil. (One of the

small terminals on the solenoid)

Use one of the # 10 ring terminals supplied.

- (3.) Connect the **Green** wire on the other Head Motor Solenoid coil terminal, where power from the push button Flush switch inside the bathroom, activates the solenoid. (One of the small terminals on the solenoid)

Use one of the # 10 ring terminals supplied.

- (4.) On the HEAD TIMER terminal block, connect, **White to P**, **Black to G** and **Green to S**.

Use spade terminals supplied for each wire.

Leave all current wiring installed as they are.

If the Head Timer is turned off, the head will work as before.

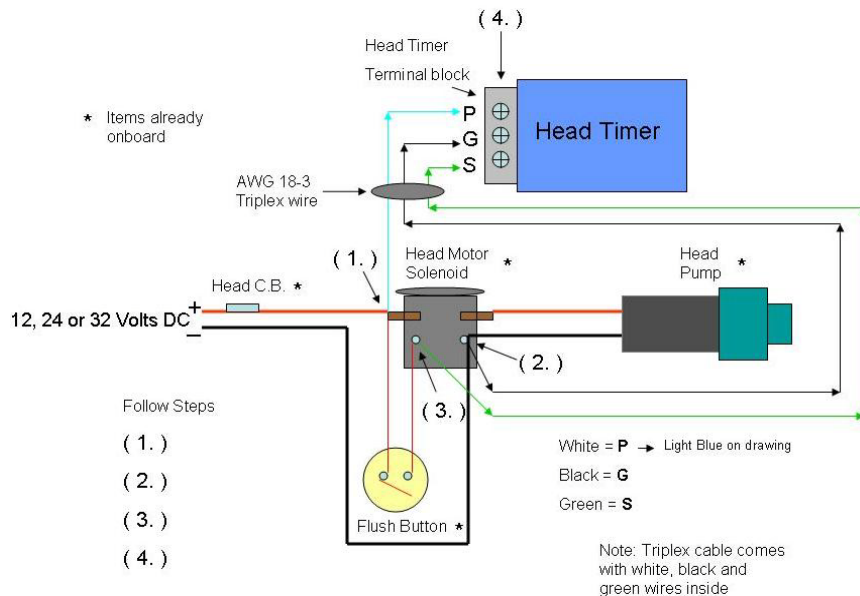


Figure 2

V Units with Flow sensor: (See figure 4)

A. Installing flow sensor:

1. Sensor is installed on the discharge hose (1 1/2" I.D.). It

should be as leveled as possible after the
 Head Pump Discharge.
 2. Close the overboard discharge valve.
 3. Locate and cut the discharge hose and install the flow
 sensor with the arrow pointing in the
 direction of the water flow. Use double clamps on
 both ends.

B. Flow sensor wiring:

1. Connect a AWG18-2 wire, to each lead from the sensor
 (polarity does not matter) to each **F/S**
 connections on the Head Timer terminal block.

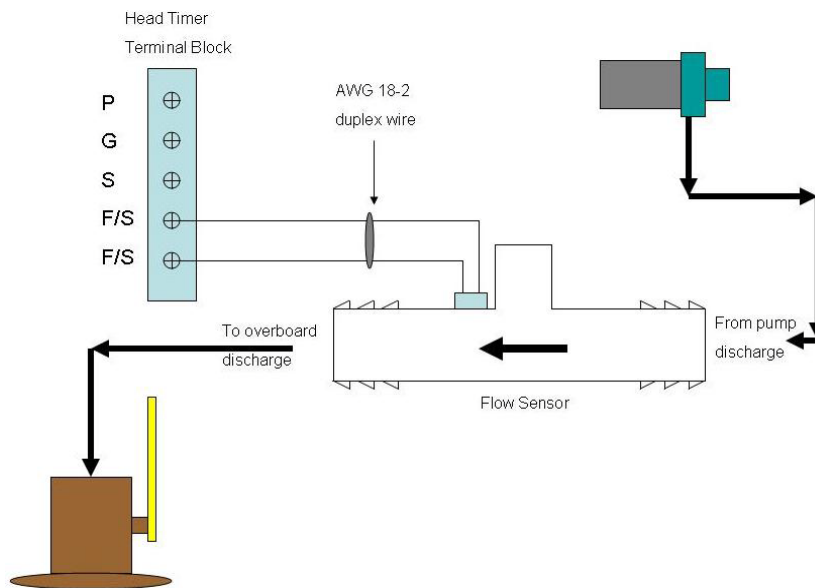


Figure 4

VI Units with Holding Tank sensor: (See figure 5)

A. Installing holding tank sensor:

1. Most holding tanks have port holes on the top. On the port
 hole cap or the tank top wall, drill a 5/16" hole and insert the level switch as
 supplied. Place the rubber washers, one on the inside and one on the
 outside, place the plastic nut hand tight.

2. If the holding tank does not have any access, a port hole
 should be installed.

B. Holding Tank sensor wiring:

1. Connect a AWG18-2 wire, to each lead from the sensor (polarity does not matter) to each **H/Ts** connections on the Head Timer terminal block. (Heat shrink connectors recommended)

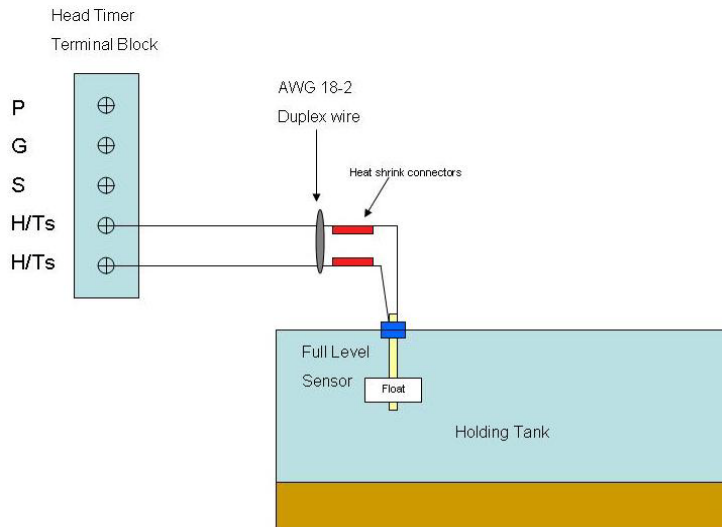


Figure 5

VII Check list:

- A. All electrical connections revised according to the instructions and figures.
- B. Make sure that the water inlet and discharge valves are open.
- C. Turn **OFF** the Head Timer power switch.
- D. Turn **ON** the head circuit breaker on the accessory panel.

VIII Turning on the Head Timer power switch:

1. When powering on, Head Timer will start flushing at a factory preset time of 20 seconds.
2. Head Timer has a manual standby period of 2 minutes for manual flushing when operated from the bathroom push button switch. This means that after the first power up, the Head Timer will flush 20 seconds and for the next 2 minutes the head pump will run for as long as you press the flush button manually.
3. If the test switch is used, the 2 minutes standby period will be overridden, so use the test switch only when

adjusting the flush time, to save time when adjusting.
If you don't want the head pump running while setting the
adjusting knob , just disconnect the signal wire
(Green) from **S** on the Head Timer terminal block. Now use
the Timer Lt. (Red LED) next to the test switch
to adjust to the desire flush time.

4. To adjust flush time: 20 Seconds flush time is factory preset.
Locate **TDR 9** inside the unit (see Figure 1), the
knob adjusts flush time, **clockwise** increases flush time,
counter clockwise decreases flush time.

The amount of flush time should be adjusted depending on the
length of the intake hose run, from the sea
valve to the head bowl, longer hose runs requires more flush
time, remember that foul odor comes from
the water trapped inside the intake hose and not from the
discharge side. Thinking that more flush time will
damage the pump sooner is not true. Lack of use ruins more
systems on board than the opposite.

5. A 12 Hours automatic flush interval is factory preset. Remember
that it resets itself to the beginning of the
12 hours every time the flush button or the test switch is operated.

6. Reconnect the GREEN wire on terminal **S** after adjusting the flush
time.

7. If you wish to adjust the Automatic Flush Interval of 12 hours,
check our website for detailed information, or
call us.

Have a happy and fun trip

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