# **Installation Instructions**

## **KIT CONTENTS**



IN-DASH DISPLAY



OR EXTERNAL DISPLAY WITH MOUNTING POST





MASTER MODULE AND GPS RECEIVER

CONTROL HARNESS (ENGINE BOX TO DASH AREA)

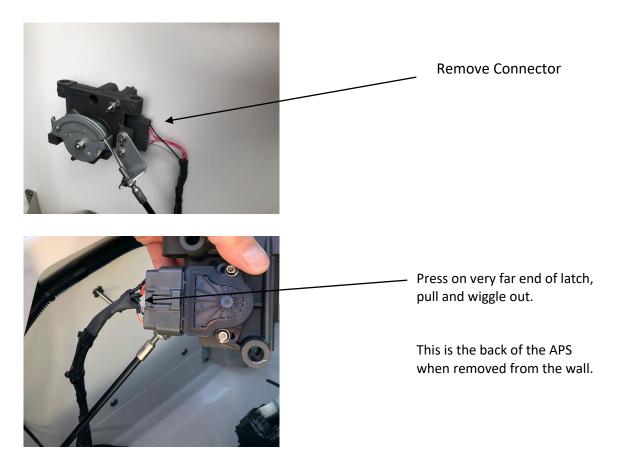
THROTTLE INTERFACE MODULE HARNESS

### Turn main battery switch off during install.

**Step. 1** Run the long 15 ft. Control Harness from the engine box area to the dash. The large **Black 14 Pin Plug** will connect to the Master Module in the dash area later. This harness will be run along the outside wall on driver's side. The use of a "wire fish" or cable may be helpful. Access to this area is available under the cup holders and storage box if removed to help guide the cable.

### Step. 2 Install the THROTTLE INTERFACE MODULE Harness

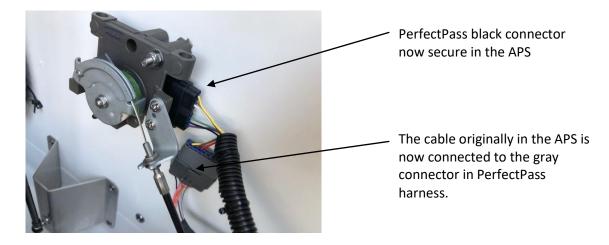
Remove the Connector from the starboard side APS. There is a latch on the back side. When pressed on the far end, the connector can be wiggled and pulled out.



NOTE: These connectors can be unusually tight so removing the APS from the side wall (2 nuts) using a 7/16 nut driver gives much easier access to removing the connector.

Once the connector is removed, <u>securely</u> install the matching corresponding PerfectPass BLACK connector into the APS in the same orientation. Reinstall APS to side wall if it was removed.

The connector originally removed from the APS will plug into the GRAY Connector in the PerfectPass Harness. Make sure you hear the "click" to ensure a solid connection.



The seven foot harness will be routed carefully across to the Port side where you will repeat this process on twin engine boats.

The 6 pin gray/orange connector on the Harness can be plugged into the main Control Harness from Step 1. The Throttle Interface Module box can be secured to the wall of the boat using screws (for carpet) or 3M Adhesive for a fiberglass wall.

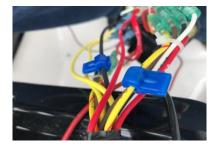
Make sure all wires are secure and neatly tie wrapped and away from anything hot and where they are secure from others servicing the boat, etc.



Shows Throttle Interface Module mounted to starboard side wall and cables connected.

Use tie wraps to secure all wires.

**Step. 3 12 Volt Power/ Ground** – On newer boats behind the Key Switch plate you will see two YELLOW WIRES with a Red Stripe. (These are switched 12 volt power) You may be able to access from behind, if not remove the key switch plate for easy access.



Shows T-Tap connectors in place



Make sure wire is in the metal slot and squeeze with pliers.

Squeeze a Blue T TAP Connector to either of the Yellow Wires (red stripe) with pliers. This will be for 12v power. (Just one wire is required).

Squeeze a Blue T TAP Connector on the large Black Wire which will be Ground.

You will connect the purple power wire and the ground to these later.

**Step. 4** Mount the **Master Module** on any wall, panel, etc. under the dash area where accessible and dry.



Shows Master Module after both engine control harness and display gauge are connected.

#### Step. 5 Dash Display

Depending on the boat model, you will release the dash panel by removing the visible screws on the front so you can move it forward to access the back of the Gauges. Newer models may have posts and nuts holding this panel in from behind.

**Round In-Dash** – Simply unplug and remove the speedometer (clamp or zip tie any old pitot tube if present). Tape off any removed electrical connections to prevent shorts. Install the PerfectPass Gauge using the hardware provided and connect firmly to Master Module.



**IN-DASH** Remove speedometer and mount the in-dash display. **External Mount Display** – With the adjustable mounting post there are numerous options on where you can install it on a hard fiberglass surface. The Wire and plug can be routed under/beside the dash panel when it is removed to be connected to the Module. Make sure the wire is not pinched when the panel is tightened back up. A "slit" may need to be drilled into the dash panel or fiberglass wall underneath to allow proper clearance of the cable. (Do not reinstall dash until GPS is routed.)

Once you have carefully selected where you want to mount the Display, clean the area properly and use the industrial strength 3M Adhesive. Press firmly and allow it to cure for 24 hours. (This adhesive will get stronger over time).

Connect firmly to Master Module.





Shows GPS in preferred position.

Shows wires leading behind panel.

Optional mounting position for boats with a flat dash area.

### Step. 6

- Connect the 14 Pin Black Engine Connector to Master Module, press firmly until it clicks.
- Connect the Purple Wire (12v) spade connector to the T-Tap connector placed on the yellow wire.
- Connect the spade connector on the Black Wire to the T-Tap connector for ground.

Note: Make sure the spade slides into the slot and does not get pushed aside.

#### Step. 7 GPS

The GPS is ideally installed on the top of the dash looking up through the windshield as shown in photo above. Secure with Velcro and route wire in behind dash. It can also be installed under the dash on a flat shelf area or anywhere where it is secure and the top is <u>facing up</u>.

**Note:** An unsecure GPS will result in surging.

Connect GPS cable to the engine connector harness at the Master Module.

Turn main battery switch on. With everything connected, turn key(s) to ON to power up and the PerfectPass screen should be fully active. (If not, check your 12v power and ground connection.

**Start Engine(s)** – If all connected properly there should not be any engine warning buzzers/trouble lights on boat dash.



#### LIMITED WARRANTY

During the first 12 months from date of original retail purchase, any PerfectPass component that fails due to defects in materials or workmanship will be repaired or replaced at the option of PerfectPass at no charge.

All warranty claims must be authorized in advance and a Return Authorization (R/A #) issued. All packages, correspondence, documents and packing slips must reference this R/A #.

Warranty <u>excludes</u> components damaged my improper installation or improper use of boat. Servo Motors are water resistant, but not water proof. Servo motors may become damaged if excess water is run in a boats bilge and this may void warranty. Ensure your boat is properly "bilged" prior to operating.

#### Warranty Service:

- 1. If your PerfectPass was factory installed, any warranty issues should be directed to your authorized dealer. PerfectPass encourages all customers to contact us prior to visiting your dealer for "technical support" as many issues may be easily handled direct with customer.
- 2. If your PerfectPass was purchased and installed by a dealer you may contact your dealer direct or initiate a warranty claim with PerfectPass.
- 3. If your PerfectPass was purchased directly from the Company, contact us at the number below.

Warranty Service / Technical Support PerfectPass Control Systems Inc. 14 Trider Crescent Dartmouth, Nova Scotia CANADA B3B 1R6 (902) 468-2150

(Hours: Monday to Friday, 8:00 am – 4:00 pm EST)

