

Zero Off Installation Information Rev A, Jan. 2020

Compatibility

Most wakeboard and ski boats with marine engines manufactured by PCM, Ilmor, Indmar, and Volvo equipped with an E-Controls engine computer manufactured after 2007 will be compatible with Zero Off. Always verify the engine computer module bears the E-Controls logo on the label.



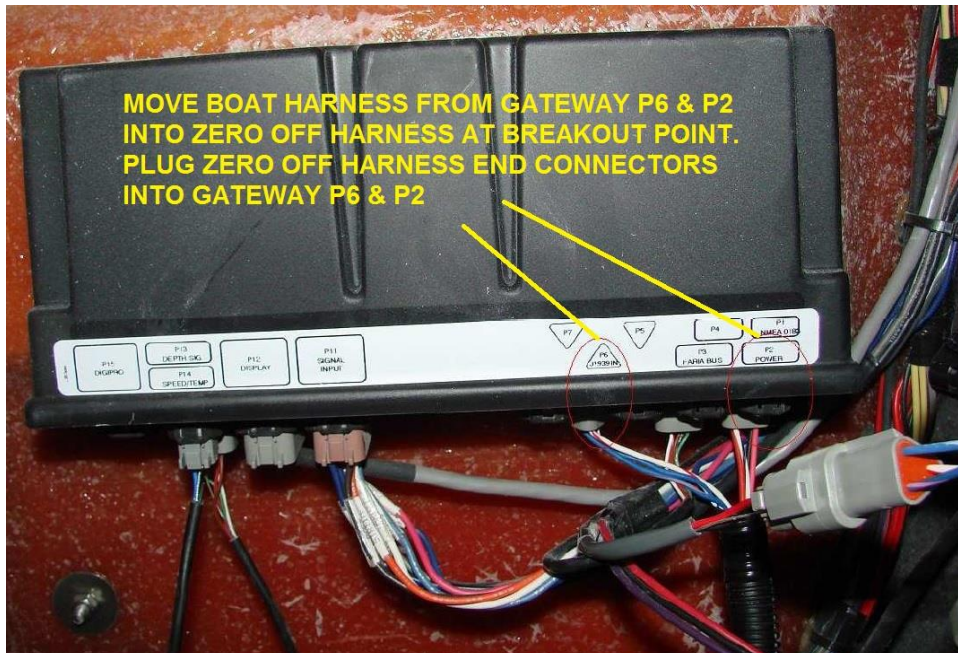
E-Controls logo

Mercury/Mercruiser engines are a special exception with limited compatibility. See Plug & Play section below for more details.

Plug and Play Boats

On a plug-n-play boat, the boat manufacturer has made provisions in their harness to directly plug in the Zero Off main harness. The location and method will be different between manufacturers.

Correct Craft – On early 2007 and up models verify there is a Gateway Box mounted under the dash, not all models had this. See Gateway Picture and Complete Kit picture to see where to make connections. If there is no Gateway box then see the non- plug and play section.



Mastercraft – 2009 and newer boats should be equipped with a Zero Off connection in the boat harness. Verify there is a triangular and rectangular Deutsch Connector present in the boat harness near the dash.

Malibu – The Malibu ZO kit uses a special harness with a power and data in single 6-pin connector that will plug into the mating connector on the boat harness under the dash.

HeyDay – The connection is available from the side of the drivers console by removing the access panel.

Please view the following video for installation instructions.

<https://www.youtube.com/watch?v=QpEQMSVWb1Y>

Mercury/Mercruiser – Requires using the Mercury Wakeboard kit part number E1886011A (5") or E1886012A (3-1/2") that has a special harness to plug into the Mercury J-Box and software to communicate over the SmartCraft data bus.

Compatibility: 2015 and newer

DTS (digital throttle and shift) 6.2L Mercruiser

DTM (digital throttle mechanical shift) 6.2L Mercruiser

DTS Gen5 Verado

Required Accessories: **SCAD** (secure Authentication Device) must be purchased separately from Mercury.

NON- Plug and Play Boats

If your boat year and model is **NOT** equipped from the factory with provisions to plug in Zero Off then it will be necessary to connect to the engines CAN data network and obtain power and ground from the most convenient point. Splicing into the boats harness is sometimes necessary to make the connections.

PCM Engines – You will need to purchase a CAN bus extension cable (PCM) **P/N E2381140A** that plugs into the engines 20-pin circular connector to bring data to the front of the boat. The other end will plug into the triangular data cable on the Zero Off main Harness. You will also need the Power Extension cable **P/N E2381150A** to connect to the boats power and ground at the most convenient location.

Volvo Engines – We do not have extension cables that will plug into the Volvo engine harness to pickup CAN data. The ZO CAN data wires must be connected to the engine harness CAN data using customer supplied wiring. You will also need the Power Extension cable **P/N E2381150A** to connect to the boats power and ground at the most convenient location.

EGC – Connect CAN Data to 14-way boat connector pins 13 (CAN1 Hi) and 14 (CAN1 Low)

EVC - Connect CAN Data to 14-way boat connector pins 13 (CAN2 Hi) and 14 (CAN2 Low)

Indmar Engines - We do not have extension cables that will plug into the Indmar engine harness to pickup CAN data. The ZO CAN data wires must be connected to the engine harness CAN data using customer supplied wiring. You will also need the Power Extension cable **P/N E2381150A** to connect to the boats power and ground at the most convenient location.

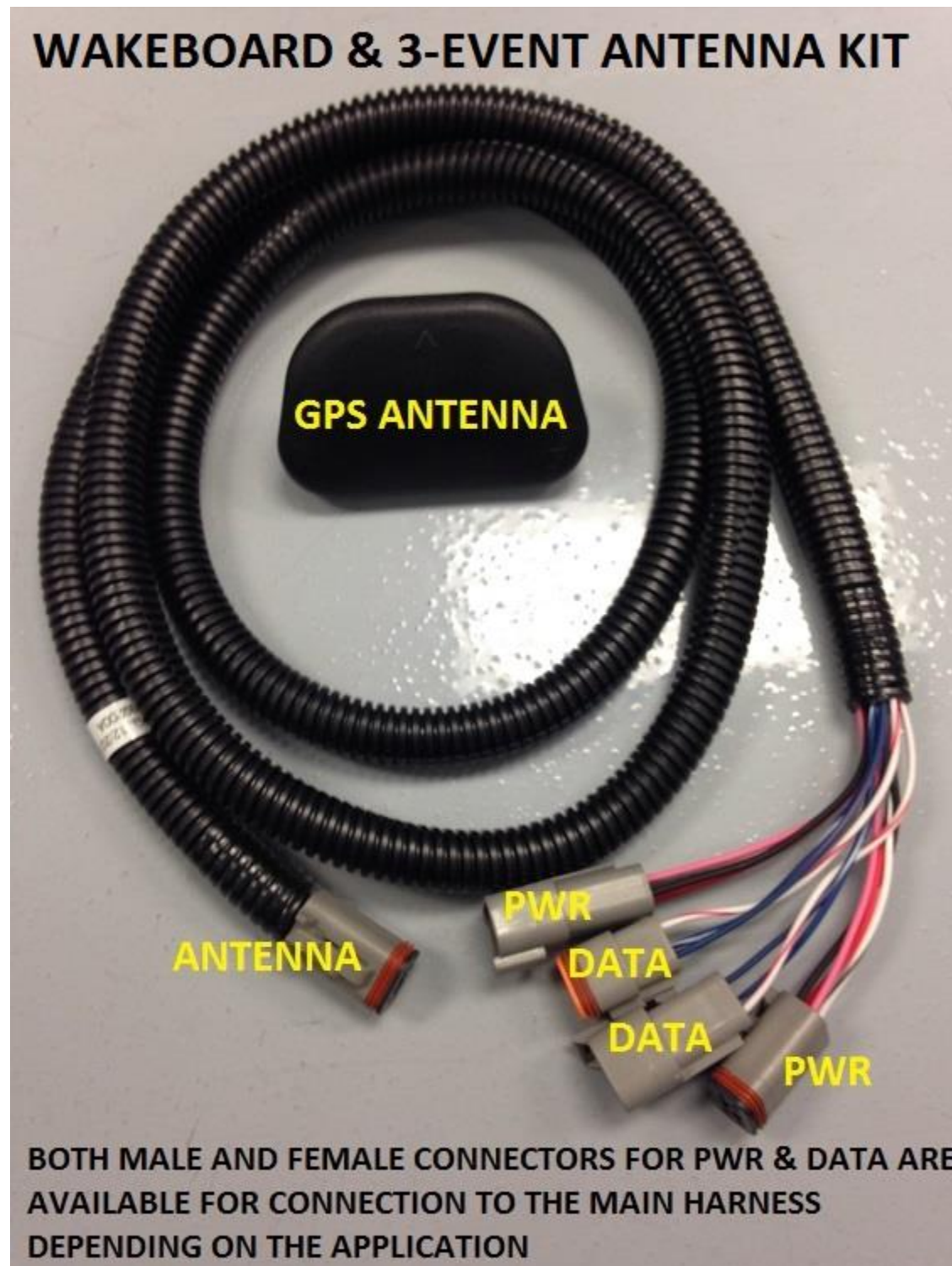
Connect CAN Data to the 16 Pin Boat Connector – pin K = CAN Hi, pin L = CAN Low

General Wiring Instructions

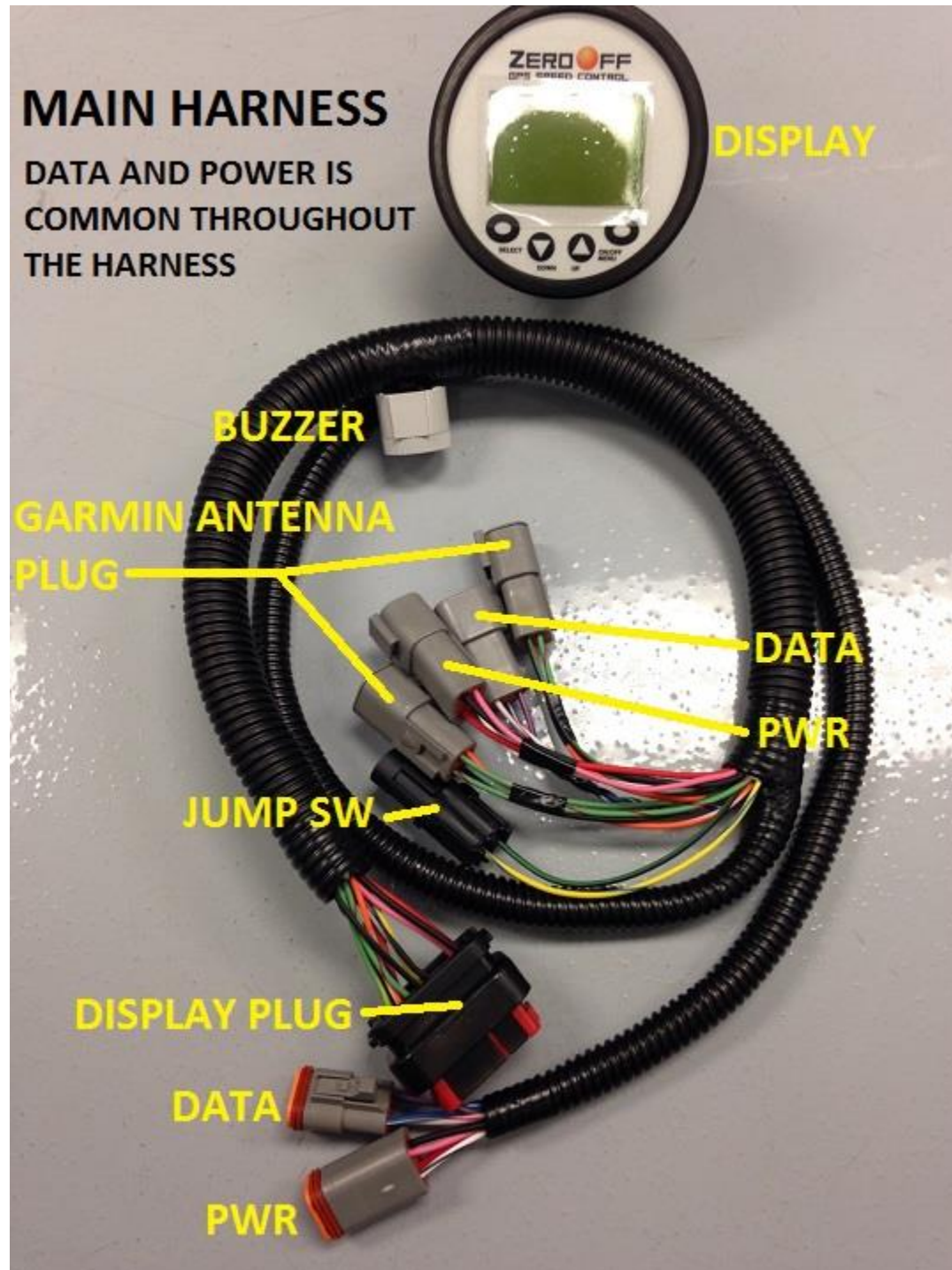
There are only five wires that need to be connected to connect the Zero Off system to the boat. These are CAN data and Power as listed below. The wire colors and signals run consistent throughout the ZO harness system. CAN and Power can be connected to any available connector after installing the antenna.

- 1) CAN Hi (+) = Blue/Pink wire
- 2) CAN Low (-) = Blue/White wire
- 3) Constant Battery Power = Red wire
- 4) Ignition Power = Pink wire
- 5) Ground = Black wire

R2 and 3-Event Antenna Kit



Standard Zero Off Main Harness



Standard Zero Off Kit Connection

The following picture shows the main harness connected to the antenna harness. This applies to the all 3-Event and Wakeboard kits except Malibu and Mercury Kits.

