

Neutral Safety Interfacing Instructions: T-Handle Remote Controls

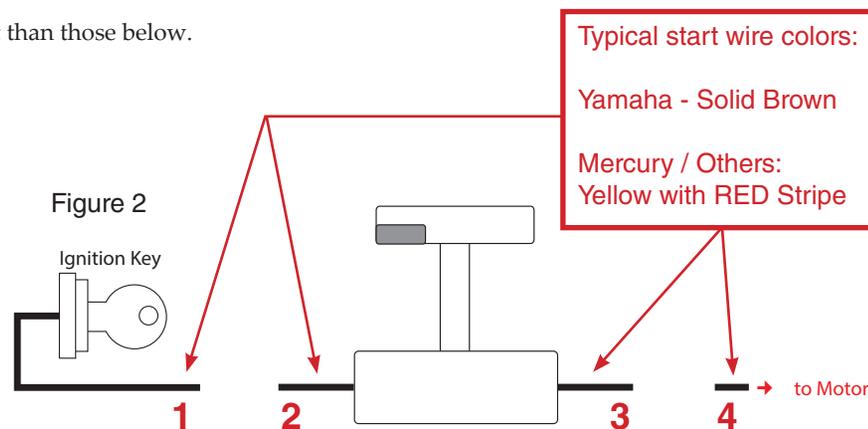
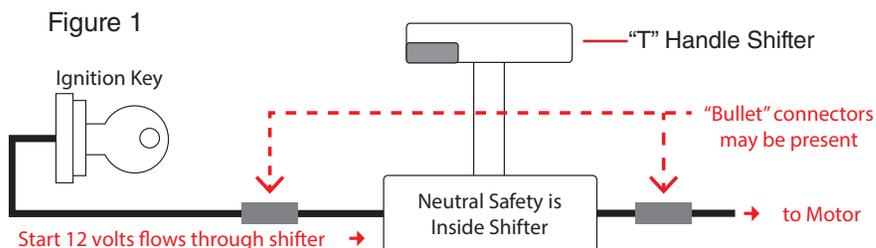
These instructions are the general steps necessary to interface iTroll with the remote controls of a typical boat. In order to perform the interfacing, your boat must have an EXISTING safety feature that allows the motor to be started ONLY when the shifter is in NEUTRAL. Test your boat for this feature! If your boat varies from the circuit in Figure 1, you may have to seek a qualified mechanic to perform the interfacing.

Step 1:

Fig 1 - This is a description on how the typical neutral safety is wired - wire colors in boat may be different than those below.

A: Turning the key sends the starting 12 volt signal to the shifter.

B: The shifter has a switch inside that only allows the start signal to pass to the motor when in NEUTRAL.



Step 2:

2.1: Gain access to back of shifter

2.2: Put shifter in gear (to engage "no start in gear" safety feature).

2.3: Test wires with electrical tester to find wire that gives +12V input to shifter when key is in start position. This wire should ONLY be live when key is in CRANKING position. Tag wire for future use.

2.4: Put shifter in Neutral. Use tester to find +12V output start wire from shifter to motor.

Note: If motor starts, immediately turn it OFF!

2.5: Confirm that wire found in step 2.4 does NOT output +12V when shifter is in gear and key is in cranking position. Tag wire for future use.

Step 3:

Isolate shifter from key and motor wires by unplugging bullet connectors or cut wires as shown in Fig. 2. Please note that you will now have four (4) wire ends.

Step 3: **Refer to Fig 2 for wire numbers described below. Connect wires as shown in Fig 3.**

3.1: Wire #1 - Use bullet or butt connector, connect to RED wire of interface.

3.2: Wire #2 - Use bullet or butt connector, connect to BLACK wire of interface.

3.3: Wire #3 - Use bullet or butt connector, connect to supplied black wire with ring connector.

3.4: Ground ring connector.

3.5: Wire #4 - Use bullet or butt connector, connect to YELLOW wire of interface.

3.6: Connect blue wire of interface to blue wire of iTroll power module.

3.7: Turn iTroll on (Boat motor is OFF) and test neutral safety feature - see owner's manual if necessary.

3.8: Use cable ties to secure wires in a neat and tidy manner.

