

Tempest 3 (T3) Installation Instructions Yamaha Super Jet 701

The Tempest 3 Model 2717 Ignition is designed for use with Yamaha 701 Super Jet for model years 1996 through 2008.

Tools Required:

- #3 Phillips screwdriver

First Things First, For Safety...



Disconnect the battery positive cable (red) before proceeding

Installation Overview

The T3 Ignition is designed to give you trouble-free service if installed according to these instructions. Read the entire instruction procedure before beginning the installation. If you do not understand any portion of these instructions, refer installation to a qualified technician.

1. Check stator plate alignment.
2. Remove electronics module from its mounting location.
3. Unplug and remove the factory ignition.
4. Install the T3 Ignition in the electronics module.
5. Set the programming switches on the T3 to your settings.
6. Test the T3 Ignition.
7. Reattach the electronics module cover plate and mount the module in the PWC.

Installation

Check Stator Plate Alignment

1. Remove flywheel cover and the flywheel. Be sure to recover the woodruff key from crankshaft.
2. Locate the two alignment arrows - one on the engine block and the other on the stator plate. These arrows should be aligned with each other.
3. If alignment is required, loosen the two hold-down screws on the stator plate and rotate the plate until the arrows are in exact alignment.
4. Tighten the hold-down screws and check arrow alignment.
5. Install the flywheel with woodruff key in place.
6. Install the flywheel cover.

Remove Electronics Module from its Mounting Location

1. Remove the mounting bolts on each side of the electronics module.
2. Remove the module cover and set aside the screws, gasket, and case top.

Unplug and Remove the Factory Ignition

1. Using the #3 Phillips screwdriver, remove the self-tapping screw from each side of the factory ignition. Lift out the ignition and detach each of the seven wires by separating their in-line connectors. In the case of the black wire with a ring lug, remove the 10mm hold down screw, then remove the ignition's black wire from the rest of the wires with lugs. Re-install the bolt loosely.

Connect the wires and Install the T3

1. **ATTACH THIS WIRE FIRST!** On the Advent ignition, locate the **black wire** with the ring lug attached. Thread this lug along with the other ring lugs on the 10mm bolt and re-install the bolt to secure all the wires.
2. Connect all remaining wires from the Advent Ignition (except the RED wire) to the matching colored wires in the electronics box.
3. The brown/white wire in the electronics module will not be connected. Cover the connector end of this wire with electrical tape and tuck it out of the way.
4. In the electronics module, locate any red wire with an in-line connector. Separate this connector set. Now attach the mating connectors on the red wire from the Advent Ignition to each of the two separated connector halves.
5. Put the T3 Ignition in the location where the stock ignition was positioned, then install the mounting screws.

Set the Programming Switches on the T3 to Your Settings

Before proceeding with the physical installation of the Tempest 3 Ignition, set the programming switches to match the specific engine hardware configuration of your boat.

Refer to Blue “User Guide”

Test the T3 Ignition

You will now do a simple start and idle test to confirm that the T3 Ignition is properly installed and that the wiring has not been incorrectly connected.

1. Connect the red battery wire.
2. Set the electronics module in a stable position on or near the engine.
3. Depress the START button and the engine should start normally. Depress the STOP button and the engine should stop normally.
4. Start the engine once more and pull the TETHER. The engine should stop normally.

If the engine does not stop as indicated, apply the choke and the engine will stop. Recheck your installation procedures paying close attention to the wires connected to the T3 Ignition.

Installing the Water Control System

If you are installing water control then proceed to the next section, if not continue to the end of this section.

Attach the Electronics Module Cover Plate and Remount the Module

1. Replace the large O-ring in its track and place the cover in position.
2. Install all self-tapping stainless steel screws to secure the cover ensuring that the module is once again watertight.
3. Mount the module and attach the mounting nuts to secure the module in place.

Last Things Last

Start the engine then press the stop switch to ensure that everything works properly.

Attention! Severe engine damage may occur.

Do not attempt to operate the boat under any loads if you have not properly aligned the stator plate and set all the programming switches on the T3 Ignition. Follow the instructions in the next section “Ignition Switch Settings”.

Installing Water Control System

- Connecting water control solenoids to ignition module
- Setting head pipe water ON / OFF RPM
- Setting stinger pipe water ON RPM

Water Control Function Overview - The Tempest 3 Super Jet Ignition has two independent water control channels built in. This eliminates the need for separate controllers and the extra cost and complexity of installation. The T3 water controller also provides a wider range of control than any other product.

Wiring Overview

The user is responsible for the connections between the T3 Ignition and the water control solenoids. Advent does not provide the wire or the solenoids. However, we do provide the mating connectors to connect wires to the ignition.

Tools Required

- 18 or 20-gauge stranded wire (lamp cord wire may be used)
- Soldering iron
- Resin core solder
- Electrical tape or 3/16" diameter shrink tubing

Connecting Ignition Water Cable to Solenoid

1. On solenoid wires, strip the insulation to expose 1/4" of wire. Tin each wire.
2. On water control cable from Ignition, remove 1.5" of outer covering. Strip 1/4" of insulation from ends of wires you intend to use (See Figure 1). If the stinger wire pair is not being used, tape each wire end and pull wires back along cable and tape in place for possible future use.
3. The wire lengths of the cable from the Ignition and solenoid must be extended to allow for installation. Lamp zip cord is a suitable wire to use for this purpose. Cut lamp cord to proper length and strip the wires on each end 1/4". Tin each wire. Slide a 1" long piece of shrink tubing over each wire on one end. Keep the shrink tubing away from any heat generated during soldering.
4. Solder the lamp cord wires to the Red and Black wires from the ignition cable. Slide the shrink tubing over the splice and apply heat to shrink in place.
5. Solder the lamp cord wires to the black wires of the solenoid (Note: solenoid wires do not have polarity). Slide the shrink tubing over the splice and apply heat to shrink in place.

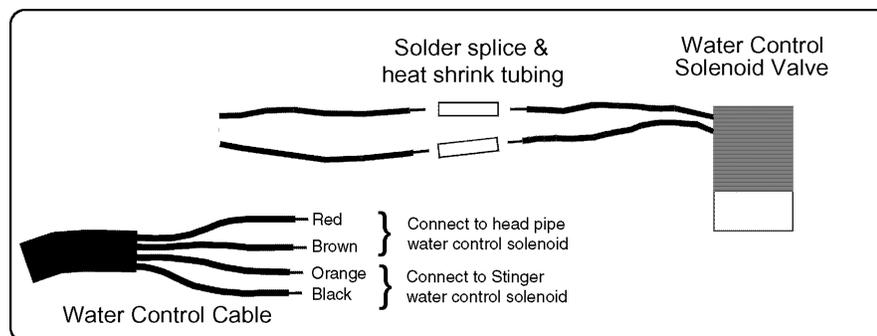


Figure 1

Attach the electronics enclosure cover plate and mount the enclosure

1. Replace the large O-ring in its track and place the enclosure cover in position.
2. Install the 10mm hex head bolts with the two mounting flanges and secure the enclosure cover ensuring that the enclosure is once again watertight.
3. Position the electronics enclosure at its original mounting location. Install the mounting hex head bolts to secure the enclosure in place.

Last Things Last

Restart the boat and repeat the test procedure above to ensure that everything works properly.

Attention! Severe engine damage may occur.

Do not attempt to operate the boat under any loads if you have not properly set all the programming switches on the T3 Ignition.

**If you have any questions or comments, please contact us by phone, FAX, or e-mail.
Be sure to reference the year and model of your boat.**

The hardware installation is now complete!

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