

# Installation Instructions - Fit Kit T1

# Step 1:

- Make sure motor is NOT running!
- Remove cowl (cover) from motor.

### Step 2: - See Fig. 1

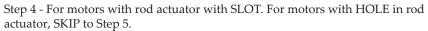
A: Remove bolt from cable assembly with 10mm wrench.

B: Free <u>rod actuator</u> from <u>cable assembly</u> by lifting it. Note: There is a second style of rod actuator that has a hole instead of a slot, see Fig. 5.

C: Remove stock throttle rod from both actuator and carb arm.

### Step 3 - See Fig. 2

- Find two "JT Link" slip connectors in hardware kit. Each slip connector has a LOCKING sleeve (small hole with set screw) and a SLIP sleeve (large hole, NO set screw).
  Note: Do NOT tighten sleeves rigidly together make sure you can see a small gap between the sleeves.
- Find iTroll throttle rod with collar attached and thread "S" bend into hole in carb arm.
- Hang JT Links and second iTroll throttle rod from one installed in step above.
  DO NOT tighten set screws on JT Links.



- Use the iTroll throttle rod that has THREE bends and does NOT have the circular clip attached.
- Hang rod actuator removed in step 2B on lower throttle rod as shown.
- SKIP to step 6.

# Step 5 - For motors with rod actuator with HOLE. See Fig 5.

It is recommended that you place a towel under work area to catch circular clip if it is dropped.

- Use the iTroll throttle rod that has TWO bends and has the circular clip attached.
- Remove circular clip and thread throttle rod through FLAT side of rod actuator.
- Use needle nose pliers to replace circular clip on throttle rod so rod actuator cannot fall off.

### Step 6:

- Rotate rod actuator so HOLE is ABOVE slot.
- Put rod actuator back onto cable assembly See Figs 3 & 4.
- Make sure alignment key on top of cable assembly engages slot in bottom of rod actuator.
- Reinstall & tighten bolt into cable assembly.

# Step 7 - See Fig 3

- Fix servomotor to mounting bracket with stainless steel screws and locking nuts.
- Use 10 mm wrench and supplied bolt to secure servo and bracket to motor.

### Step 8:

- Make sure tiller handle is at IDLE throttle position
- Pinch JT link and sleeve at carb fitting together.
- HOLD pinch Use supplied Allen wrench to tighten set screw on this JT Link. Note: Set screws have thread locking compound pre-applied.

### Step 9

In this step, you are temporarily hooking iTroll's power module to your 12 Volt battery:

- Connect Red wire to (+) battery terminal. 5 amp fuse has been installed at factory.
- Connect Black wire to (-) battery terminal.

# Step 10:

• Plug servo motor into iTroll's servo control harness. Note that iTroll's 3 pin connector has a polarizing "DOT" on it. This dot corresponds to the servo's signal wire that is Orange, Yellow or White, depending on the brand of servo.

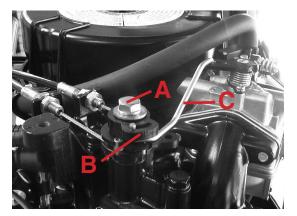


Figure 1

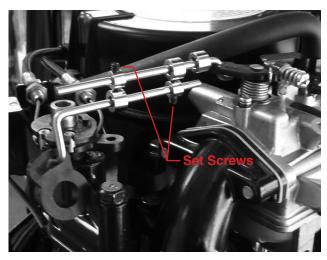


Figure 2



Figure 3

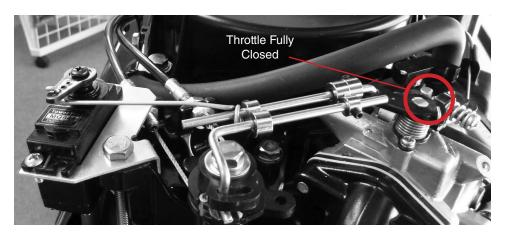


Figure 4

### Step 11:

Use an Ink Marker to make a mark on the servo's geared shaft so you can positively see the direction that the shaft is rotating.

### Step 12:

Plug data cable from iTroll into power module.

### Step 13:

Turn iTroll on (see owner's manual if required), then operate dial to turn servomotor. OBSERVE mark you made on servo's shaft to see if servo is turning COUNTER CLOCKWISE as you advance the throttle with iTroll's knob.

### Step 14

See "Reference 2" section on page 3 of regular iTroll installation instructions. Follow programming instructions to set servo Travel and Rotation. Set servo travel for "S" (90 degrees). If the servo is rotating in the correct direction as determined in Step 11, leave rotation direction the same as the indicated "old" direction in the rotation set menu. If you need to reverse the servo's rotation, change it in the rotation set menu.

### Step 15:

- Turn iTroll ON.
- After iTroll starts up, press IDLE button to put servo at idle position. Confirm that iTroll is at idle by reading it's display.
- Slide pushrod's loop over throttle rod that is attached to carb fitting.
- Install servo arm as shown in Fig. 5.
- Install set screw into servo arm.

# Step 16 - See Fig. 4

- Pinch slip connector and loop end of pushrod together.
- HOLD the pinch, make sure that the carb is fully closed and tighten set screw in JT Link that is touching push rod.
- Check throttle to confirm that it is FULLY CLOSED. If throttle is open, readjust position of JT Link.

### Step 17:

Push iTroll's Run button and operate dial. Check for movement of throttle without sticking or binding.

### Step 18:

- Use supplied cable tie to lash stock throttle rod somewhere on motor so it can be found if motor is returned to stock. Note: Make sure lashed rod does not interfere with moving parts!
- Proceed with permanent installation of iTroll (see electronics installation manual).