iTroll
Precision Speed Controller
www.iTroll.us

Installation Instructions - Fit Kit S2T

Made in USA

Tools Required:
#2 Phillips Screwdriver / 10 mm Open End Wrench / Socket Wrench with 13mm socket / Pliers (2 pair) / Heavy wire cutters

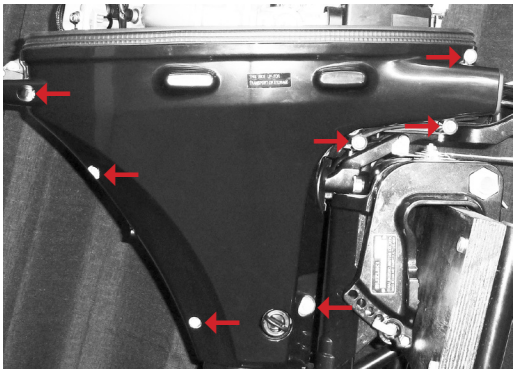

Fig 1

Step 1:
- Make sure motor is NOT running! Remove cover from motor
- Put motor into NEUTRAL and stock throttle controls to IDLE!

Step 2: See Fig. 1
In this step, you are removing the starboard (right) side cover of motor.
- Use #2 Phillips screwdriver to remove (7) screws at indicated positions.
- Remove side cover of motor.

Step 3: See Fig. 2
- Mark or tag throttle cables so they can be reinstalled in proper positions.
- Use 10mm wrench to loosen nuts at positions indicated by arrows.
- Do NOT move nuts directly under black cable seals.
- Slide throttle cables out of cable hanger (A) and remove cables from throttle assembly.

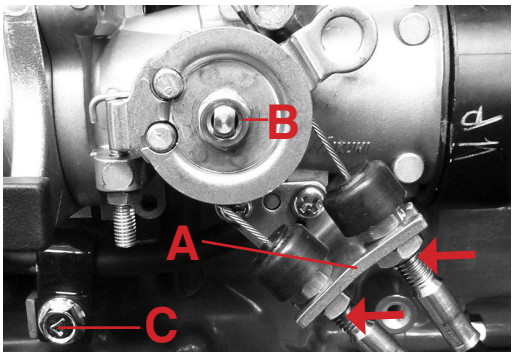

Fig 2

Step 4: See Fig. 3
- Remove stock screws from cable hanger. Save screws so motor can be returned to stock.
- Use supplied screws (A), lock washers (B) and spacers (C) to reinstall cable hanger as shown.

Step 5: See Fig. 2 & 4
- Install servo motor onto servo bracket with supplied screws and lock washers.
- Remove bolt from hose retainer - See "C" in Fig 2. Save bolt so motor can be returned to stock.
- Fig 4: Use supplied bolt (A), lock washer (B) and spacer (C) to install servo bracket as shown.

Step 6: See Fig. 2 & 5
- Remove Suzuki nut and lock washer from throttle assembly - See Fig 2 "B". Save parts so motor can be returned to stock.
- Fig 5: Install iTroll throttle cable (A) as shown.
- Place supplied small lock washer (B) and nylon washer (C) on throttle assembly.

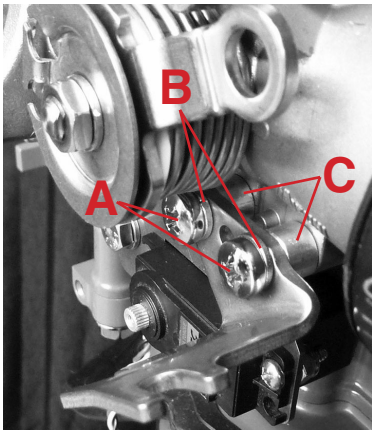

Fig 3

Step 7: See Fig. 5
- Place "JT Disc" (A) over nylon washer. Make sure pin (B) on JT disc is in position shown in picture.
- Secure JT Disc with supplied shoulder nut (C). Nut requires 13 mm socket.

Step 8: See Fig. 5 & 7
- Install ends of throttle cables into JT Disc.
- Install cables onto cable hanger. Tighten lower nuts (loosened in Step 2) to secure cables to cable hanger.
- See Fig 5 to insure that throttle is in closed position.

If throttle is open, adjust cables so that throttle is fully closed.

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.

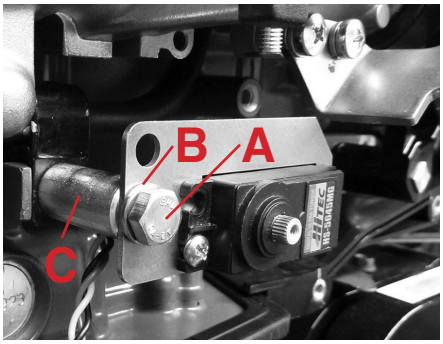

Fig 4

Throttle Fully Closed

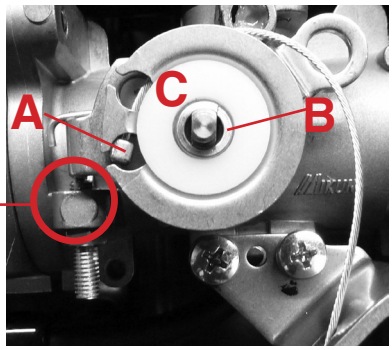

Fig 5

Cable Tie used in Step 15

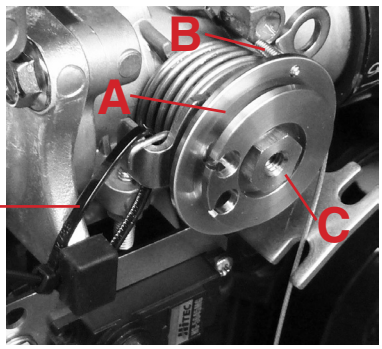

Fig 6

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.

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).
Note: Ultimate travel of throttle when opened by the servo will be LESS than that of factory throttle control.

If the servo is rotating in the correct direction as determined in Step 13, 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: See Fig. 7
Note: It may be helpful to recruit a helper for this step.
• See Fig 6: Use supplied cable tie to lash throttle at IDLE position.
• 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.
• See Fig 7: Install servo arm (A) as shown. Install Phillips head screw in center of servo arm!
• Thread end of stainless cable from Suzuki throttle disc through brass servo arm fitting.
• Slide supplied cable sleeve (B) onto throttle cable.
• Use pliers to pull down on end of stainless cable with moderate pressure to tension it.
• Grab cable sleeve with another pair of pliers, apply upward pressure so it touches brass servo arm fitting and then crimp it onto cable.
• Use as much pressure as possible when applying crimp to sleeve to insure that it is securely attached!
• REMOVE cable tie that is lashing throttle shut!

Step 17: See Fig. 7
• Push iTroll's Run button and operate dial. Check for movement of throttle without sticking or binding.
• You can remove slack from cable by loosening bolt on servo bracket and rotating servo in a clockwise direction.
• Trim excess cable below cable sleeve.

Step 18:
• Reinstall side panel of motor. Make sure seal (C) in picture meets groove on side panel.
• Proceed with permanent installation of iTroll (see electronics installation manual).

Servo Arm moves in this direction (←) when throttle increased with iTroll.

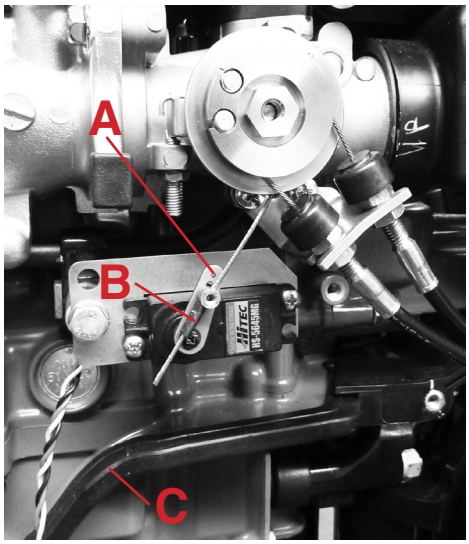

Fig 7
Complete Installation