iTroll
Precision Speed Controller
www.iTroll.us

Made in USA

Installation Instructions - Fit Kit M2

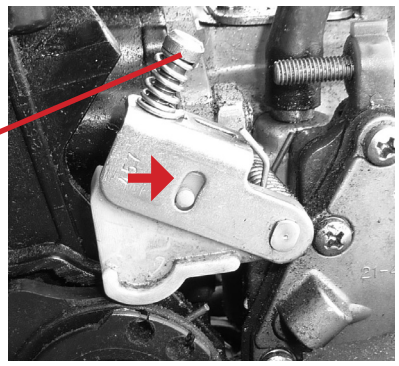

Figure 1

Step 1:
- Make sure motor is NOT running!
- Remove cowl (cover) from motor.

Step 2: See Fig. 1
- On right side of motor measure gap (see arrow) at idle adjustment plate.

Step 3: See Fig. 2
- Remove screw ("A") and nut ("B") from pull rope assembly.

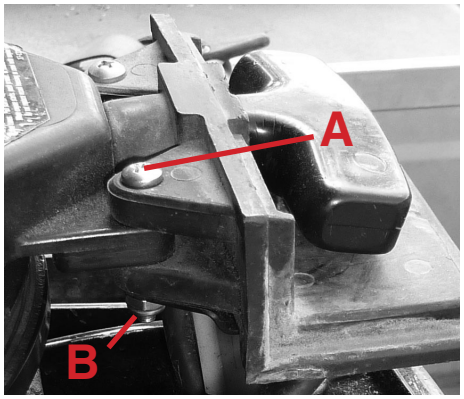

Figure 2

Step 4:
- Fig. 3 - Mount servo bracket to motor using supplied bolt, locking nut and spacer.
- Fig. 4 - Use supplied screws and locking nuts to attach servo to bracket.
  DO NOT attach servo arm and cable until Steps 11 & 12!

Step 5: See Fig. 1 & 4
- Remove idle adjustment screw and spring. Store spring in a safe place so motor can be returned to stock configuration,
- Thread idle adjust screw into TOP of nut that was removed in Step 3.
- Reinstall idle screw into idle adjustment plate.
- Match gap you measured in Step 2.
- Lock idle adjustment screw position by holding it with a screwdriver and then tightening the nut with a wrench.

Step 6:
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.

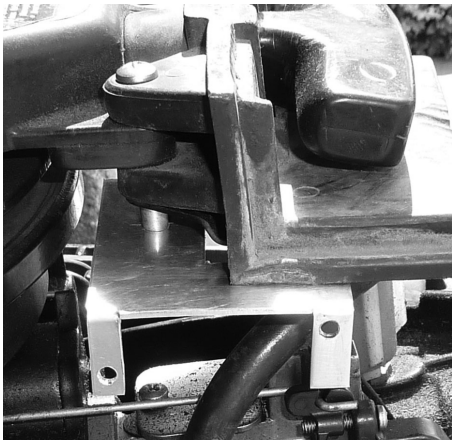
Figure 3

Step 7:
- 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 8:
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 9:
Plug data cable from iTroll into power module.

Step 10:
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.

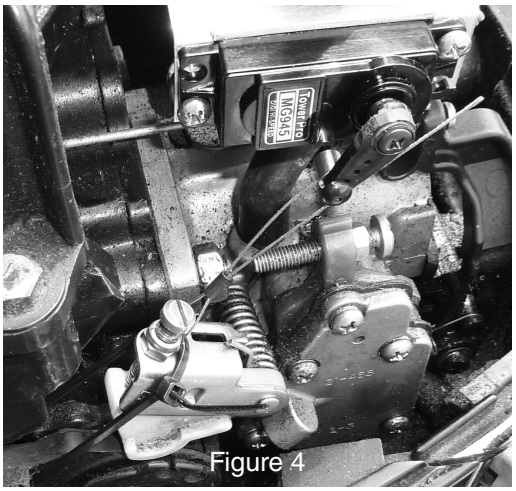
Figure 4

Step 11:
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 10, 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 12:
- 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.
- Install servo arm as shown in Fig. 4 & 5. Install fixing screw to servo arm.

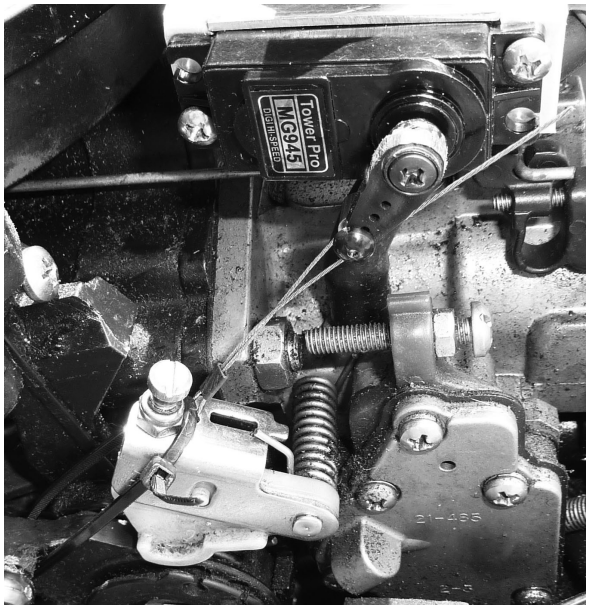

Figure 5

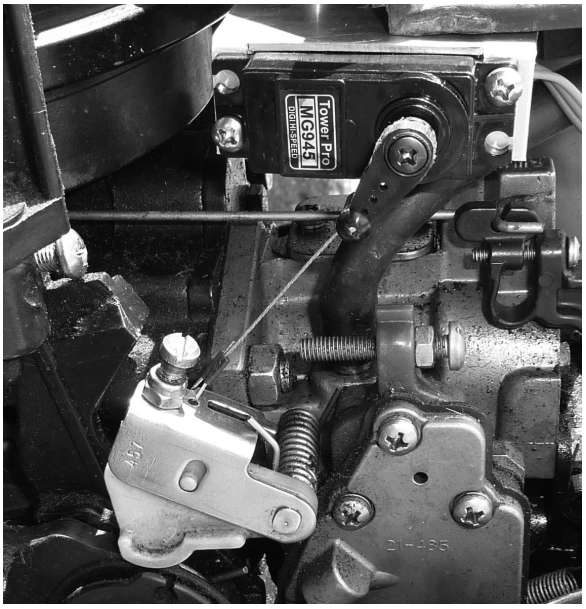

Figure 6
Complete Installation

Step 13: See Fig. 4, 5 & 6
- Use supplied 8 inch cable tie to lash adjustment plate at idle position.
- Thread crimp sleeve onto cable from servo arm.
- Thread cable through hole in idle adjustment plate and back through crimp sleeve as shown in pictures.

Step 14:
- Use a pair of pliers to remove slack on cable by pulling on free end of cable that comes out of crimp sleeve.
- Note: DO NOT compress crimp sleeve in this step: Use another pair of pliers to push crimp sleeve as close as possible to adjustment plate - see pictures.
- When crimp sleeve matches position in pictures, you can then crimp it. Use a LOT of pressure on your pliers to insure a tight crimp.
- REMOVE cable tie installed in Step 13.

Step 15:
- Push iTroll's Run button and operate dial. Check for movement of throttle without sticking or binding.
- Trim free end of cable.

Step 16:
- Proceed with permanent installation of iTroll (see electronics installation manual).