# Installation Instructions - Fit Kit H1

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

**Step 2:** Power tilt + trim motors only!
A: There is a wiring harness located in the area "W" as shown in Fig. 2.
B: Slide wiring harness towards rear of motor to release it from mounting bracket.
C: Relocate wiring harness - use cable ties in kit to secure it ABOVE hose "H" in Fig. 1,
D: Remove wiring harness mounting bracket and bolt that is mounted on post "P" in Fig. 2. Save bracket and bolt to allow motor to be returned to stock.

**Step 3:** TILLER MOTORS ONLY - See Fig 1, 2 & 3
A: Remove bolt "A" with 10mm wrench.
B: If motor does NOT have post ("P" - Fig. 2) on intake manifold, install servo bracket "C" as shown in Fig. 3 using factory bolt removed above.
C: If post "C" is present, use kit's spacer, washers and longer bolt to raise servo bracket to clear this post.


Figure 1

**Step 4:** REMOTE CONTROL MOTORS ONLY - See Fig 1, 2 & 3
A: Where bolt "A" (Fig 1) is located, there is a plastic plug. Remove this plug.
B: Use supplied thread cutting bolt to mount servo bracket "C" (Fig. 3).
**When cutting threads, put kit's spacer, 3 flat washers and servo bracket under bolt head. Cut only enough threads to secure servo. Attempting to cut threads too deep can result in breaking the thread cutting bolt!**

**Step 5:**
A: Remove nut and lock washer "B" (Fig. 1) from carb arm with 8mm wrench.
B: Install throttle plate assembly "D" (Fig. 3) as shown. Reinstall / tighten lock washer and nut.
Make sure "hooks" in throttle plate are positioned as shown in red circle in Fig 4.

**Step 6:** See Fig 4 & 5
•Attach servo motor to mounting bracket with stainless steel screws and locking nuts.
DO NOT attach arm to servo until later steps!


Figure 2

**Step 7:**
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 8:**
• 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 9:**
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 10:**
Plug data cable from iTroll into power module.


Figure 3

**Step 11:**
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 12:**
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.
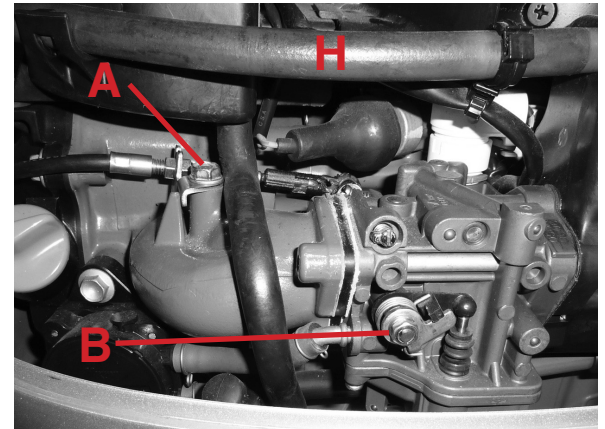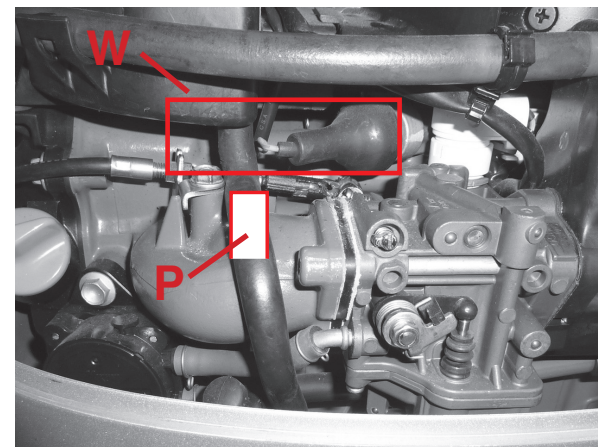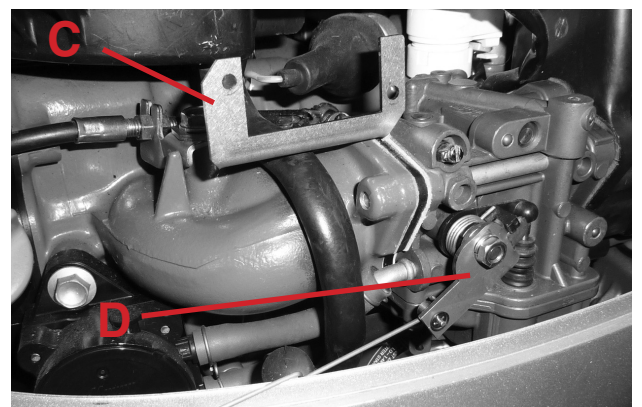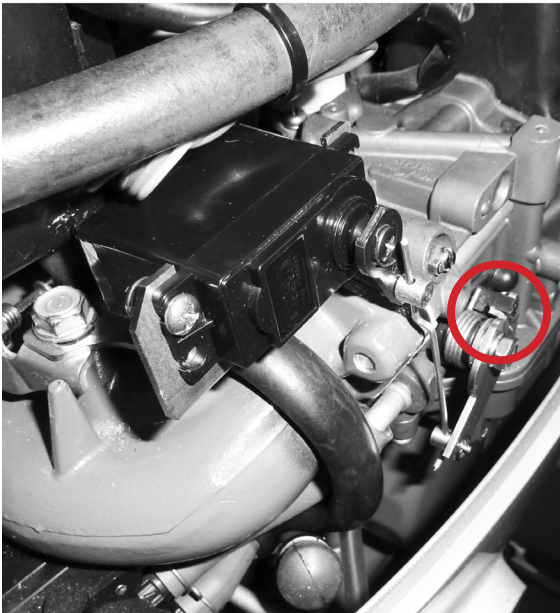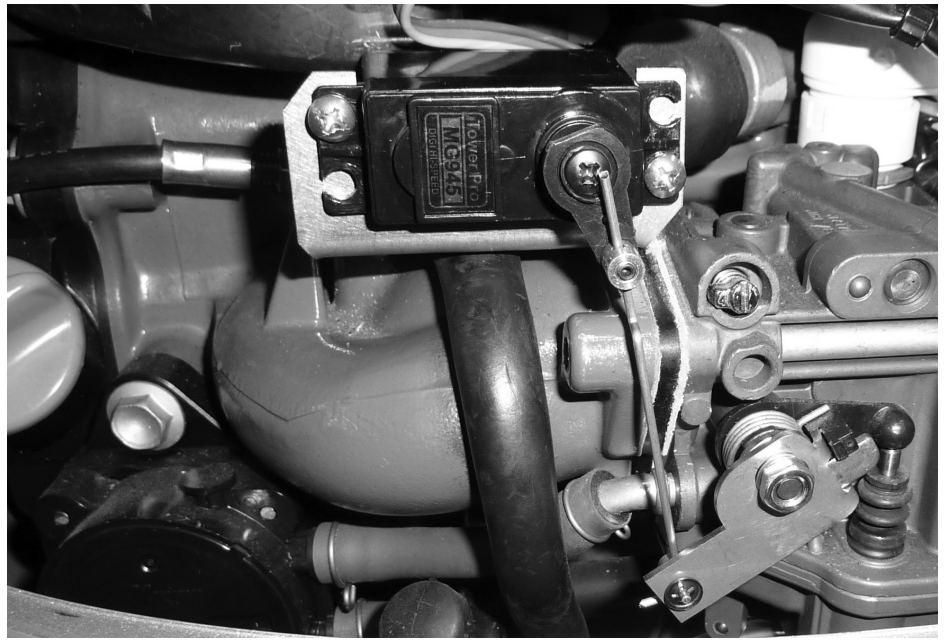
Figure 4


Figure 5
Complete Installation

Step 13 - See Fig 3 & 4
Put tiller to START position, if motor is remote put shifter in 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.
• Slide rod of throttle plate assembly through brass fitting in servo arm.
• Gently PULL rod from throttle plate to it's highest position WITHOUT moving the carb arm.
• Use supplied Allen wrench to tighten set screw in brass fitting on servo arm.
• Install Philips head screw in center of servo arm to fix it to servo.

Step 14:
Push iTroll's Run button and operate dial. Check for movement of throttle without sticking or binding.
• Cut excess rod that is sticking out of brass servo arm fitting - leave approximately 1/2 inch to allow for adjustments if needed - see Fig 5.
• Proceed with permanent installation of iTroll (see electronics installation manual).