



# INSTRUCTION BULLETIN

No. 9005785  
Machine: 5680  
Published: 11-2008  
Rev. 00

Installation instructions for **kit number 9005784 - Actuator Replacement [5680]**

## SYNOPSIS:

This kit contains the parts needed to replace an actuator on 5680 machines.

## SPECIAL TOOLS / CONSIDERATIONS: Amp Meter, Measuring Device

(Estimated time to complete: 1 hour)

**Carefully read and follow these instructions. The actuator can be easily damaged if not installed as instructed.**

## PREPARE MACHINE FOR INSTALLATION:

1. Empty the recovery tank.
2. Fill the solution tank with 3 to 5 gallons / 11 to 19 liters of water. This water will be used later when testing the actuator down pressure.
3. Park the machine on a clean level surface.
4. Remove pads or brushes.
5. Lower the scrub head.

**NOTE:** If the scrub head is stuck in the raised position, place a block under the scrub head.

6. Turn off the machine.
7. To access the actuator, carefully lift the solution tank and remove the front shroud.

## REMOVE OLD ACTUATOR:

1. Unplug the actuator from the main wire harness (Fig. 1).

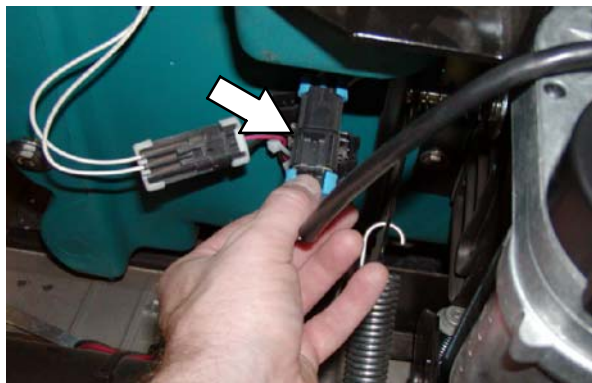


FIG. 1

2. Remove the lower clevis pin and spring from the actuator (Fig. 2). Set all hardware aside. If a block was used to support the scrub head, remove the block and carefully lower the scrub head to the floor.

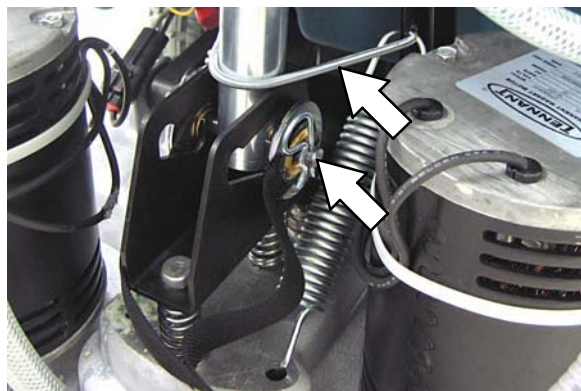


FIG. 2

3. Remove the top clevis pin that mounts the actuator bracket to the machine (Fig. 3a). Then remove the actuator bracket from the old actuator (Fig. 3b). Set all mounting hardware aside.



FIG. 3a

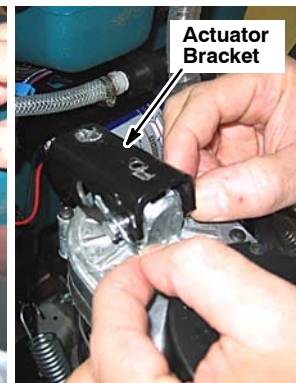


FIG. 3b

## INSTALL NEW ACTUATOR:

1. Connect the top end of the actuator to the machine using existing hardware (Fig. 4a). Do not connect the lower end of the actuator at this time.
2. Plug the actuator into the main wire harness (Fig. 4b)

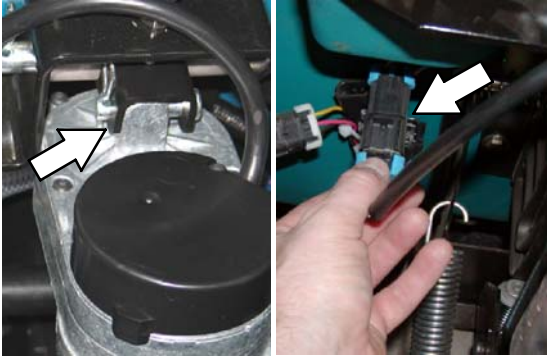


FIG. 4a

FIG. 4b

3. The actuator is factory set at the upper limit switch position. A packaging spacer is inserted between the tube and gearbox to hold the setting. Remove spacer. **Do not rotate tube.** (Fig. 5)

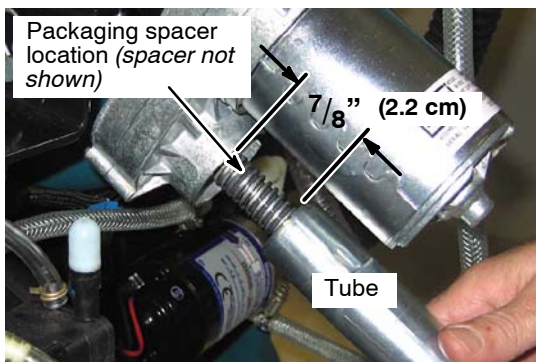


FIG. 5

4. With the key turned off, press the top half of the scrub switch, down position (Fig. 6).



FIG. 6

- 4a. This step may require an assistant. Firmly grip the actuator tube with your right hand and turn on the key with your left hand (Fig. 7). As the tube begins to extend, guide it down into the mounting bracket. Turn off key.

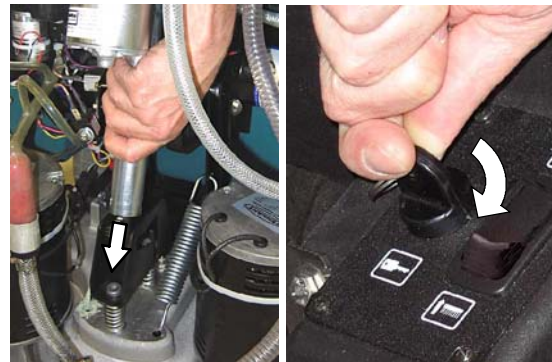


FIG. 7

- 4b. Align the tube holes with the mounting bracket (Fig. 8a). Reinstall the lower clevis pin, cotter pin, washers, scrub head strap handle and spring (Fig. 8b).

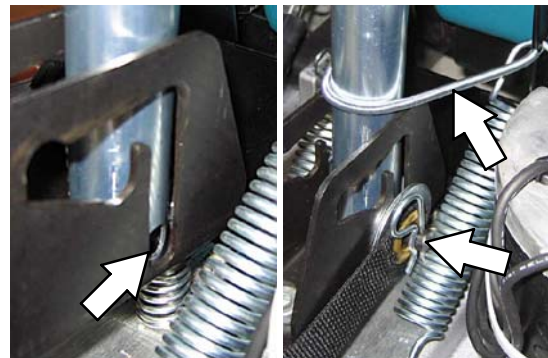


FIG. 8a

FIG. 8b

## TEST ACTUATOR FOR PROPER OPERATION:

1. For Disk Model: Turn key on and raise the scrub head to up position. Reinstall pads or brushes with key off. Pull the scrub head handle strap to set the scrub head in heavy down pressure (Fig. 9).

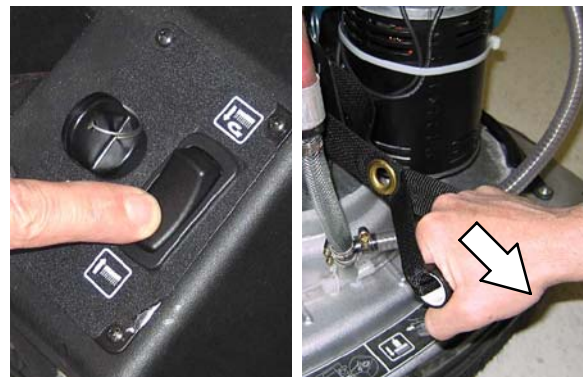
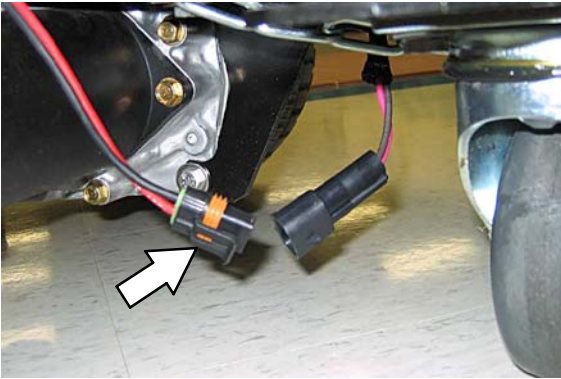


FIG. 9

2. Park the machine on a smooth floor. Turn off the key.



- Unplug the transaxle wire harness connector to keep machine stationary while testing (Fig. 10).



**FIG. 10**

- Turn on the key and lower the scrub head.
  - Using an amp meter, measure the amp reading at the positive battery cable while rotating the control handle (Fig. 11).
- The measurement must read below 26 amps for a disk model or 38 amps for a cylindrical brush model.



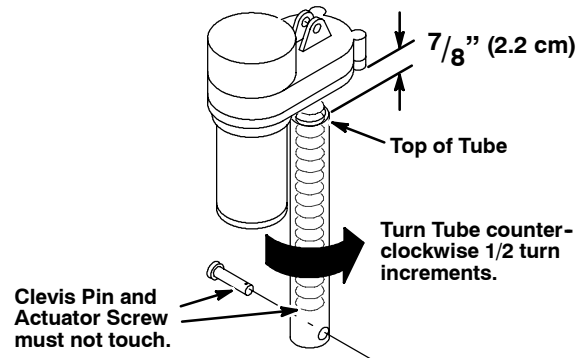
**FIG. 11**

**NOTE:** Machine must be tested with water on a smooth surface to ensure accurate reading.

**If the amp reading exceeds the specified measurement or if the drive wheels slip during scrubbing, decrease the brush pressure as described below:**

Lower the scrub head and disconnect the lower clevis pin. Turn the actuator tube *counter-clockwise* in half turn increments and repeat the test procedure until correct measurement is achieved (Fig. 12).

**NOTE:** The clevis pin must not touch the bottom of the actuator screw and the top of the tube must not be closer than 7/8" (2.2 cm) from gear box .

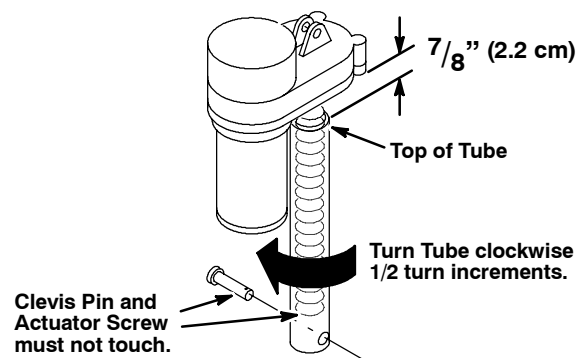


**FIG. 12**

**If the amp reading is too low, increase the brush pressure as described below:**

Lower the scrub head and disconnect the lower clevis pin. Turn the actuator tube *clockwise* in half turn increments and repeat the test procedure until correct measurement is achieved (Fig. 13).

**NOTE:** The clevis pin must not touch the bottom of the actuator screw and the top of the tube must not be closer than 7/8" (2.2 cm) from gear box .



**FIG. 13**

- Reconnect the transaxle wire connector and reinstall the front shroud.