## Motor for hydraulics for slide movement inoperative

Part: HWH Motor RAP90311

**Purpose:** Motor drives the hydraulic pump that moves the slides in and out.

**Problem:** Front slide came in about 2" and stopped. Red light on control panel ON indicating the pump is running. However, the pump was not running.

**Diagnosis:** Test light between positive lug and ground should indicate 12 volts when slide Extend/Retract button on the key pad is pressed (assumes seal is deflated and all is ready). In our case there was 12 volts, but the motor would not run.

Cause of failure: High resistance open on internal ground lug.

**Motor:** 12 volt, CCW rotation, 4,000 RPM, 1/4" slotted shaft, grounded through housing, cost about \$150.



Front slide came in about 2" and stopped. Red light on control panel ON indicating the pump is running. However, the pump was not running.

It was the motor. Replacement is pretty simple.

- 1. Loosen the hose clamp that hold the solenoids and slip it off the end of the motor.
- 2. Remove the RED 12VDC cable. Two long screws that go through the motor from end to end secure it to the pump housing. The motor shaft is slotted.
- 3. Pull the motor straight out, no fluid will leak out. **Note the orientation** of the shaft slot and align the shaft of the new pump to match. You do have to remove the large positive wire. It is not energized unless the Extend or Retract button is depressed on the slide control panel, so it's not a problem. The motor is grounded through the housing I guess; at any rate there is not a separate ground wire.

## 4. Reinstall. Slide problem fixed!

Also, on ours the solenoid mounted closest to the bay door is the one that switches power to the motor when the button on the control is pressed. I could hear and feel it activate when DW used the control.

HWH Part # for motor is RAP 90311. The repair shop here in Vancouver, WA ordered the motor from HWH and shows it as \$276.90, which includes \$76.79 shipping for 2nd day air. FOT quoted me \$316.46 with my Motorcade discount plus shipping. I think I saw them on eBay as well for \$300 or so. I will repair the old one as a spare.



