



Troubleshooting Guide for Slide-Out (S) Extending (Drifting) from Stowed Position

**This Troubleshooting Guide Assumes that There are No External Fluid Leaks
And the Fluid Level in Pump Reservoir is at the Proper Level.**

The Slide-Out Extending (drifting) from Stowed Position is an Indication of a Loss of System Pressure in The Common Retract Circuit. This Retraction Pressure Holds the Leveling Jacks Stowed and the Slide-Out Rooms Closed.

See Equalizer Systems warranty and Pre-Authorized Diagnostic Schedule for labor Allowances.

Step 1: Bleed the hydraulic system

The Leading Cause of this Condition is Trapped Air. In most cases, Bleeding the Hydraulic System will Resolve the Issue.

Bleed the Leveling System:

- On a Hard Level Surface, run the leveling jacks to full extension. Extend all jacks until they touch the ground. Using the DOWN▼ jack buttons, a little at a time, alternate extending the front jacks and the rear jacks. Try to lift the coach as evenly as possible to avoid undue stress. When the jacks get to full extension, the sound from the pump will change pitch. This means the pump is in bypass or over pressure relief mode.

Note: This Procedure will Lift the Unit Off The Wheels. Make Sure to Extend the Jacks Evenly to Avoid Damaging the Unit.

- One at a Time Press and Continue to hold each of the DOWN▼ jack buttons. Hold the button running the pump in bypass for 10 -15 seconds. Do this for all four jacks.
- Allow the Fluid in the reservoir tank to settle: 15 -20 minutes.
- Retract the Jacks. Use either the UP▲ jack buttons or the RETRACT ALL button.
- Once Retracted, one at a time press and continue to hold each of the UP▲ jack buttons. Hold the button, running the pump in bypass for 10 -15 seconds. Do this for all four jacks.
- Allow the Fluid in the reservoir tank to settle: 15 - 20 minutes.
- Repeat this Process.

Bleed the Slide-Out circuits.

- Fully Extend each Slide - Out.
- With the Slide - Out Fully Extended, continue to hold the extend button for 10 -15 seconds.
- Allow the Fluid in the reservoir tank to settle: 15 - 20 minutes.
- Fully Retract each Slide - Out.
- With the Slide - Out Fully Retracted, continue to hold the retract button for 10 -15 seconds.

If Bleeding Does Not Resolve the Issue, Perform the following Test, Gather all the Requested Information, Contact Equalizer Systems Tech Desk at 1-800-846-9659 ext: 339

Step 2: Perform Hose Routing Test

This section outlines the test procedure for assuring proper hydraulic hose connections. Proper hose connections are critical to system operation to ensure full retract path pressure. Identify the type of pump assembly either Unidirectional or Bi-rotational, and perform the appropriate test.

Unidirectional

Note: This guide only applies to coaches equipped with a unidirectional pump assembly.

- 1) Run all slide-outs to a one-half extended position.
- 2) Manually open valve labeled as DV1 on the power unit manifold. This valve will be equipped with red manual override knob. To shift the valve: pull out on the knurled knob and then rotate the knob $\frac{1}{4}$ turn to hold in the open position. This operation must be done by hand: No Tools!
- 3) Individually operate each slide-out via its wall switch. If the valve has been properly shifted, each slide-out will only run in one direction. It will not matter what direction the wall switch is pressed. Take note of the only direction each slide-out will move: either **Extend** or **Retract**.
- 4) After testing, return DV1 to the normal operational position. Rotate the red knurled knob on DV1 until it “snaps” back into the “IN” position.
- 5) Record Your Results and Report to the Equalizer Systems Tech Desk.

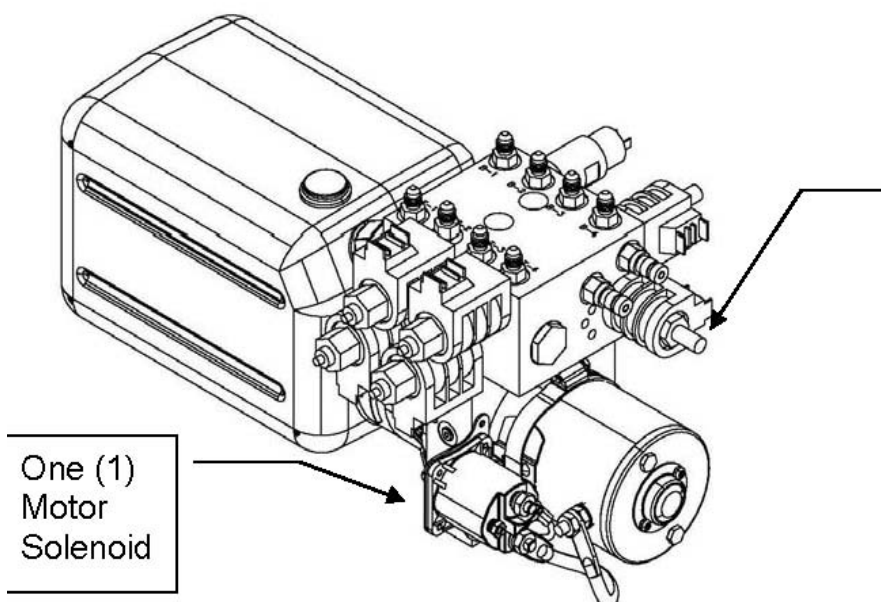
Note: Depending on the Model of Unit being Tested, Slide - Outs, even Properly Plumbed, may Operate in Different Directions. This makes it very important to Consult with the Equalizer Systems Tech Desk before making any Plumbing Changes.

DV1

Identified By:

- “DV1” stamped into manifold
- Coil wires: (1) Green, (1) Black
- Red Knurled Knob

One (1) Motor Solenoid



Bi-Rotational Pumps are Identified by Two (2) Motor Solenoids Attached to the Pump Motor. Three (3) Vertical Buttons on the Left Side of the Control Panel Identify "Old" Platform Controllers. This Style Integrates Controller and Keypad into One Unit.

Bi-rotational

Note: This Guide Only Applies to Coaches Equipped with Bi-Rotational Pump Assembly.

- 1) With all leveling jacks retracted, run all hydraulically operated slide-outs to the one-half extended position.
- 2) Manually open cartridge valves for slide rooms on the pump manifold. These will be the valves located in the V-5, V-6, V-7, V-8, etc. positions (V-1 through V-4 are for the leveling jacks). The valves are opened by turning the Stem Screw (Flat Blade Screwdriver or Allen Screw) all the way Clockwise until Lightly Seated (approximately 2 - 3 turns).
- 3) Press the **UP** arrow key on the leveling system keypad corresponding with the Left Front Leveling Jack to Manually Retract the Left Front Jack (even though it is already retracted).
Do Not Press the ALL RETRACT Button.
- 4) Note which Direction each Individual Slide Operates (**EXTEND** or **RETRACT**). Smaller / Lighter Slides May Operate before the Heavier Ones. Once the Lighter Slide(s) reach the Limit of their travel, the Larger Slides will Begin to Move.
- 5) Record Your Results and Report to the Equalizer Systems Help Desk.
- 6) When Finished Testing, Make Sure to Return Valves to Operating Position.

Note: Depending on the Model of Unit, Slide - Outs, Even Properly Plumbed, May Operate in Different Directions When Tested. This Makes it Very Important to Consult with the Equalizer Systems Tech Desk Before Making Any Plumbing Changes.

HOSE IDENTIFICATION

B = RETRACT FUNCTION

B1 = LEFT FRONT JACK BROWN/BLACK

B2 = RIGHT FRONT JACK WHITE/BLACK

B3 = LEFT REAR JACK ORANGE/BLACK

B4 = RIGHT REAR JACK YELLOW/BLACK

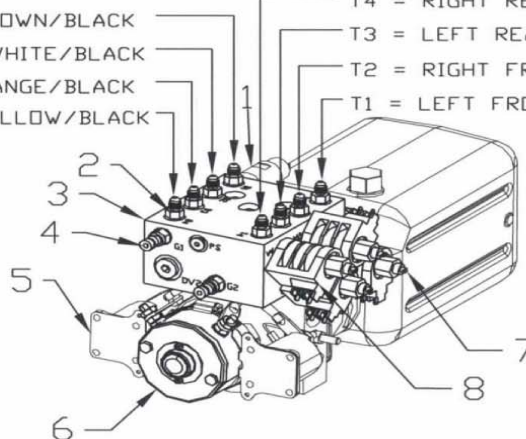
T = EXTEND FUNCTION

T4 = RIGHT REAR JACK YELLOW

T3 = LEFT REAR JACK ORANGE

T2 = RIGHT FRONT JACK WHITE

T1 = LEFT FRONT JACK BROWN



HYDRAULIC COMPONENTS

#	PART #	DESCRIPTION	QTY
1	2047	PRESSURE SWITCH 1000 PSI	1
2	1122	#4 JIC X #4 O-RING MALE	8
3	2547	MANIFOLD BIROT 4 FUNCTION	1
4	1735	DIAGNOSTIC TIP	2
5	1444	HD PLATED SOLENOID	2
6	2605	MOTOR MTE BIROT	1
7	1716	CARTRIDGE VALVE MANUAL OVERRIDE	4
8	1130	DDS12 COIL	4
9	6689BR	PUMP HARNESS (NOT SHOWN)	1

Step 3: Check for Paint on Hydraulic Cylinder Rods

Paint Overspray / Undercoating on the Chrome Cylinder Rod can flake off inside the cylinder and Cause damage to the internal seals. This seal damage could lead to an internal bypass.

Check for Body Paint / Undercoating or Overspray on Room Slide Cylinder Rod and the Slide Out Inner Track. Check the Entire Length of the Extended Rod. Paint may cause the Chrome Surface Finish to Feel Rough / Look Pitted. The Cylinder may Show signs of Overspray Residue collecting On the Outer Tube at the Rod Gland. Black Paint / Undercoating near or on the Threaded Portion At the End of the Cylinder Rod is Normal. This Black Paint is Applied to the Cylinder during It's Manufacturing Process.



Paint On: Slide - Out Track



Paint On: Cylinder (Ram) Shaft



**Paint
Overspray**



**Paint Residue
Collected at gland
seal.**

Step 3: Gather System Information

Please Gather the Following Information and Call Equalizer Systems.

Coach Info:

- Year :
- Model :
- Floor Plan :
- Unit Serial Number- Note: this is usually not the VIN #:

Leveling System:

- Pump Assembly Model #: Starts with a S10?T*????.....
- Leveling Controller part # and version #, example (2730 V1.16)
- Pressure Switch Type: Old or New ?

Pressure Switch Identification

Old Platform Style



New Platform Style



New Style Pressure Switch, Equalizer Systems Part # 2047

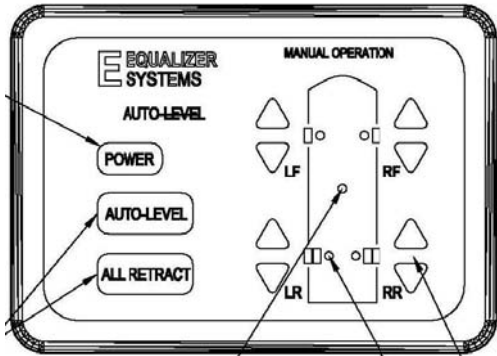
- Approx. 1.75 inches in diameter, Black plastic outer case construction
- Two Threaded Studs for wire attachment.
- Backwards compatible with old switch.

Old Style Pressure Switch, Obsolete

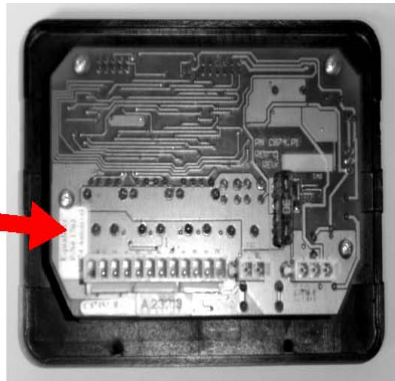
- Approx. 1.25 inches in diameter
- Half gold metal, half black plastic outer case construction
- Two Spade Connectors for wire attachment.

How to Find Auto-Level Controller Part Number

Five (5) Vertical LED Lights on the Left Side of the Keypad Identify “New” Platform Controllers. The Controller is a Remotely Mounted Box. Usually Located Between the Main Frame Rails and Between the Front and Rear Axles. The Controller (Black Box) is approx. 10” x 5” x 1.5”. The Part Number and Version Code are included on the Label.

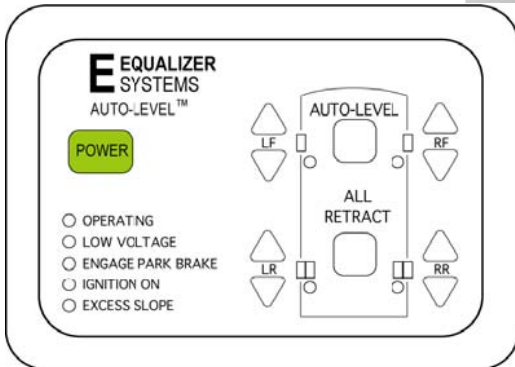


Controller



The part number is located on a white label adjacent to the 12-pin harness connector.

m Style



Black Box



The part number and version code are included on the label.