

Rev.	Date	ECN No.	Comment	Title
0	11/19/2019	E-1183	Initial Release	Level-It Pneumatic Sway Assist Installation & Tuning
1	3/27/2020	E-1195	Instructions Revised	

Procedure

1 **WARNING!** Vent pressure from shock/strut upper chambers before installation. Lower chamber pressures, if so equipped, do not need to be vented.

2 Installation

2.1 Mount Level-It unit either to a horizontal bar or crossbar using the mounts provided. Hose fittings must be on the bottom side of the Level-It unit.

Or you can weld tabs to your frame. Drill clearance for 3/8" cap screws.



2.2 Level vehicle and Level-It to within $\pm 1^\circ$ before final tightening of the Level-It unit.

2.3 Tighten mounting brackets to vehicle bar and brackets to Level-It unit in an alternating pattern to relieve any binding. Recheck unit level.

2.4 Attach T-fittings either at the strut upper caps or at the Level-It unit, depending where you would like to have the Schrader valves located for easiest access. The Schrader valve will be installed into the T-fitting.



2.5 For integral or remote reservoir (*not piggyback*) struts, order PA-235-D adapter kit to provide needed clearance between T-fitting and compression damping knob.

Rev.	Date	ECN No.	Comment	Title
0	11/19/2019	E-1183	Initial Release	Level-It Pneumatic Sway Assist Installation & Tuning
1	3/27/2020	E-1195	Instructions Revised	

The vent tube installed in the reservoir Schrader valve will need to be removed and reinstalled into the adapter kit pipe nipple. [Remove reservoir Schrader valve with strut upside-down to avoid losing oil from the reservoir.](#)

- 2.6 Remove the caps from the two elbow fittings at bottom of Level-It unit. The elbow fittings can be replaced with the provided T-fittings if you choose to mount the Schrader valves at the Level-It unit instead of at the strut.
- 2.7 Install and tighten the fittings and hoses, left-side hose to left-side Level-It cylinder, then right side in same manner.
- Use high-pressure thread sealant or Teflon tape on taper pipe fittings.
 - No sealant or tape at the metal-to-metal seal of the swivel hose end and flare fitting. [Do not overtighten the JIC flare fittings to avoid cracking them.](#)
- 2.8 Secure hoses with zip ties or other suitable method. Coil any excess hose length.
- Warning!**
- *Keep hoses away from direct contact with hot components.*
 - *Do not cross hoses from left-side shock/strut to right-side Level-It cylinder.*

3 Pressurize Shocks/Struts

- 3.1 With all fittings and hoses secured, pressurize both right and left-side shocks/struts evenly to lift vehicle to desired ride height.
- 3.1.1 **Warning!** *If vehicle is raised unevenly, one side higher or more than the opposite side, the low-side Level-It valve will close and not allow gas pressure into its cylinder, making it difficult to achieve level ride. [If a nitrogen fill kit that can pressurize and raise both sides simultaneously and evenly is not available, use a floor jack or lift to raise the vehicle, then pressurize each side.](#)*
- 3.1.2 With vehicle now at desired ride height, it is best that right and left-side pressures be shared and open to each other to properly level the vehicle.

Rev.	Date	ECN No.	Comment	Title
0	11/19/2019	E-1183	Initial Release	Level-It Pneumatic Sway Assist Installation & Tuning
1	3/27/2020	E-1195	Instructions Revised	

3.1.3 With shared pressure between right and left sides, rock or hold the vehicle level until piston shaft extension is equal. Then block and isolate right side from left side pressures. *It is important that both gas pressure and gas volume be equal. If using equipment that can only pressurize one side at a time, you will need to experiment and adjust until both gas pressure and gas volume are equal and ride is level.*



3.1.4 Once pressurized and level, 160cc oil (included in Level-It) from each Level-It cylinder will transfer automatically to each shocks/struts while driving and cycling of the suspension.

4 Tuning

4.1 The Level-It unit comes with the proper amount of oil (160cc in each cylinder); however, oil can be added or removed to tune the spring rate of the shock/strut.

4.1.1 Add up to 100cc oil to each shock/strut to stiffen spring rate and increase resistance to body roll.

4.1.2 Any amount, or all oil may be removed from the Level-It unit or strut to soften the spring rate and soften overall ride; however, this will lessen the leveling performance and increase body roll.

4.1.3 Oil in the Level-It cylinders will automatically transfer to the shock/strut after a few pumps of the piston shaft, but only if the hose fittings are oriented at the bottom of the unit.

5 End