

The UltraRide® Chassis Air Suspension, as with any other air operated system, requires regular maintenance to remain in good operating condition and free from conditions that could cause premature failure of system components. It is very important for this maintenance to take place on the Air Kit to reduce the wear on the compressors.

Three basic tips that can help prolong the life of your UltraRide:

1. Drain the water from the Air Tank: Because the Air Compressor pulls air from an outside source, the compressed air can build up excess water in the air tank. Link provides a drain valve on the end of the Air Tank that can be used to drain this excess water out of the Air Tank. This should be done on a daily basis depending on the outside atmosphere and frequency of compressor run.

**Option: Link does have an automatic drain valve that can be installed on the Air Tank to help drain water from the Air Tank.*

2. Clean/Replace the Air Filter on the compressors: Attached to the compressors intake port is an Air Filter that will help to keep particulates out of the head of the compressor. This filter should be checked during regular vehicle maintenance.

3. Regular Inspection of Components, Brackets & Fasteners: Because you are driving a vehicle which is in a very dynamic environment, it is important to continually inspect all components, brackets and fasteners during regular maintenance of the vehicle. This should include the following:

- **Component checks:** Check to see that all components are operating correctly with no signs of wear or leaks. Check for possible wear marks, fluid leaks, and use soapy water to check for air leaks.
- **Bracket checks:** Ensure that brackets are mounted correctly and securely. Also, check for cracks on the brackets and signs of movement between the brackets and mount surfaces.
- **Fastener Checks:** Ensure all fasteners are tightened to the appropriate torque. This should be done within the first 1,000 miles, and periodically thereafter. A quick visual check can be done if the fasteners are marked with a paint mark to show if the fasteners have moved since they were torqued.

Now that we have reviewed maintenance, what do you do if you find some problems during the inspection? There are several options for handling these issues:

- 1. Review the Owners Manual:** Search for possible tips and troubleshooting suggestions for the problem. If you do not have a copy of the Owners Manual, they are available on our website, www.linkmfg.com. Please make sure you have the model number of the Suspension or Air Kit you are working on.
- 2. Contact the Installer of the suspension:** Check to see if they can help diagnosis the problem and come up with a solution.
- 3. Contact a local Authorized Service Dealer or Truck Service Center:** They may be able to diagnosis the problem, and work with Link Mfg. to find a solution.
- 4. Contact Link Mfg. Directly:** Link will help to troubleshoot the issue and find a solution.

Here are some tips on how to address the issue of the suspension losing or leaking air: First apply soapy water to check all fittings, airline connections, and components to see if there is a leak that will be evident with bubbling. Upon finishing the bubble testing and fixing any of the leaks found, it is still possible to have a larger leak that could be connected to one of the following three components:

- 1. 3-Way Dump Solenoid:** This is the valve in the air kit that sends the air signal to the dump module on the height control valve in order to dump the air out of the air springs and drop the back end of the vehicle.
 - It is possible for the valve to stick open after turning off the dump and have air leak out the bottom exhaust port of the valve.
 - In time, this will drain the air out of the reserve air tank and lead to excessive compressor run time.

- 2. Height Control Valve (HCV):** The HCV is the valve (or valves for dual HCV setup) that is used to control the ride height of the suspension, by filling or exhausting air from the Air Springs.
 - It is possible for air to leak around the ports where the airlines attach to the HCV.
 - It is possible for air to leak between the different sections of the HCV.
 - It is also possible that the valve could leak air straight through the exhaust port. In time, this type of leak can be seen as one side of the vehicle dropping (with the dual HCV setup) or the entire vehicle dropping to the bumpers (with a single HCV setup). This leak may start slowly and eventually can lead to excessive run times for the compressor.

- 3. Air Line Check Valve:** The Check Valve is the valve located between the compressor and the air tank that prevents air from flowing back into the compressor after the compressor shuts off. This valve may be part of a Braided Hose Assembly or may be a separate valve.
 - A sign of the check valve being faulty would be air coming back through the hose assembly into the compressor head (evidence as bubbling on the head of the compressor when soaped down).
 - Another sign of a faulty check valve could be an Air Kit that can not build enough pressure to keep the suspension inflated and, as a result, when an air pressure reading is taken at the tank, it is below the activation pressure of the pressure switch. This may start as a slow leak that drains the air tank as the vehicle sits, and can eventually lead to the failure of the compressor as it attempts to run against the pressure of the air tank.