

Ps2 Adjustment for ILAS III Automatic Only

Note. The Ps2 setting of the valve must be higher than the unloaded air bag pressure of the trailer with all axles on the ground. If this guideline is not followed the Ps2 will not activate and the axle will remain down.

1. The ILAS III factory setting for Ps2 is approximately 20 PSI. If adjustment is necessary, remove red cap and with fingers back out white nut until face of nut is at the end of the threads. DO NOT REMOVE WHITE NUT FROM STUD! The Ps2 has a setting range of 10 PSI to 45 PSI, this is dependent on the Ps1 set point. See Figure 5 on previous page for the adjustable range of the valve.
2. Connect a regulated air pressure line to port 11 and set at 80 PSI. Connect the gauge and air switch to the test port. Close air switch and allow the two gauges to equalize (may take several minutes to equalize). The Ps1 setting must trigger in order to adjust the Ps2 setting.
3. Once the two gauges are equalized to the same pressure (80 PSI), regulate the pressure down to the new desired Ps2 setting pressure. May take several minutes to equalize again.
4. To change the Ps2 setting accurately, the test port gauge must equal the regulated pressure gauge of Port 11 – EXTREMELY IMPORTANT for precise setting of the valve. Once equalized pressure is reached between both gauges (may take several minutes), very slowly turn the adjustment nut in (turn to the right) until the exhaust of the valve is heard. Stop the adjustment when the exhaust is heard. The valve is now set precisely to the regulated pressure that was supplied to Port 11. Repeat Steps 1-6 from the Functional Check to verify that the Ps2 setting is at the desired pressure setting.

NOTE: When making an Automatic ILAS III valve adjustment to the Ps1 setting or PS2 setting, this may result in changes to other settings. Example: An adjustment to increase Ps2 could cause an increase in Ps1. Always Repeat Steps 1-6 from the Functional Check to verify the settings are correct before operating the vehicle.

Troubleshooting

Test port gauge does not respond after waiting several minutes:

- Check with soap and water for leaks around all fittings connected to the test port.
- If an adapter is being used over the metric M16x1.5 thread verify that the white check valve is being engaged by the adapter. If the check valve is not engaged, no air will pass by the gauge.
- Check to see if adequate air is being supplied to the regulator and Port 11.

Ps1 can not be set correctly:

- Perform a Functional Check to verify that the Ps1 triggers and is above the desired set point use the adjustment wrench to turn in (turn to the right) the adjustment nut until it stops. DO NOT TORQUE! Back nut out four turns.
- Verify that the desired Ps1 set point is within the adjustable range from 45 to 75 PSI.

Ps2 can not be set correctly:

- Perform a Functional Check to verify that the Ps1 has been triggered prior to the adjustment of Ps2 and that the current Ps2 setting is below the desired Ps2 setting.
- If an adjustment is made to both Ps1 and Ps2 the settings may change slightly as one is dependent on the other. If needed repeat setting procedures until the desired settings are achieved.

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L31248
US 9/09
Web Only

ILAS III Instructions for Adjustment of Ps1 and Ps2

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9/09

Haldex

General Information

The Haldex ILAS III Valve is used to lower and lift one or more axles on a vehicle. The ILAS III Valve activates the lift axle as the load is applied to the vehicle. This is achieved by the Ps1 and Ps2 pressure settings in the valves. The Ps1 pressure setting lowers the axle(s) to the ground and is found on both the Automatic (90555288) and Manual (90555293) Valves under the yellow cap. The adjustment to Ps1 is made by using the ILAS Wrench (904053001). The Ps2 pressure setting is used for returning the axle to the up position and is only found on the Automatic Valves. The Ps2 adjustment is located underneath the red cap and can be adjusted by hand. Refer to Figure 1 for the Automatic port locations and Ps1 and Ps2 adjustment features. Refer to Figure 2 for the Manual port locations and the Ps1 adjustment feature. The following instructions will define the correct procedure to set Ps1 and Ps2 pressure settings and how to check that the valve is functioning properly.

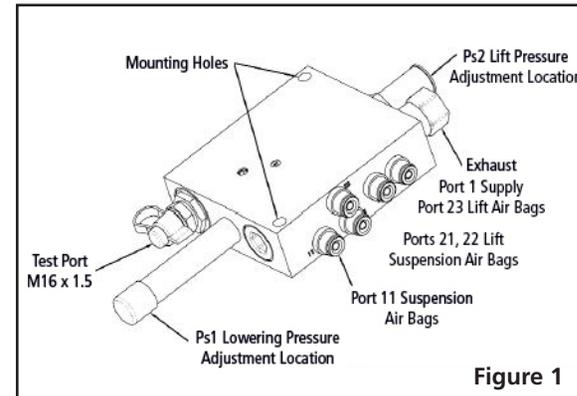


Figure 1

Prior to setting Ps1 and Ps2 pressures, you must first determine pressure in the air suspension system as follows:

1. Determine the pressure in the air suspension at max. load with the axle in the up position and also with the axle in the down position.
2. Determine the pressure in the air system at empty or no load with the lift axle in the down position and again with the lift axle in the up position.

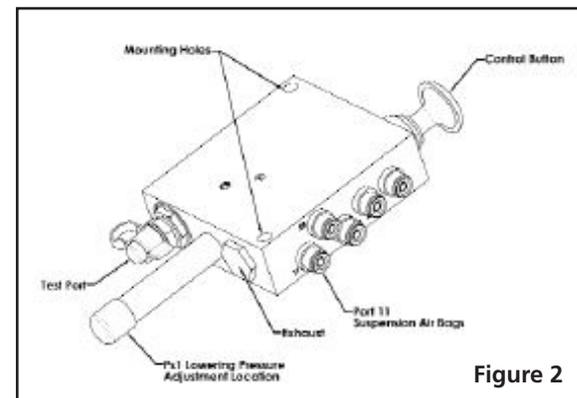


Figure 2

These four pressure readings will show the range of pressures the air suspension is moving through and will assist in setting the ILAS III Valve properly for the vehicle.

Note: Before choosing the set points for the Ps1 and Ps2 familiarize yourself with local and state (or providence) regulations that may require a lift axle to be lowered or raised at a specified load weight. To determine these set points, a pressure reading at the desired trigger load will be needed.

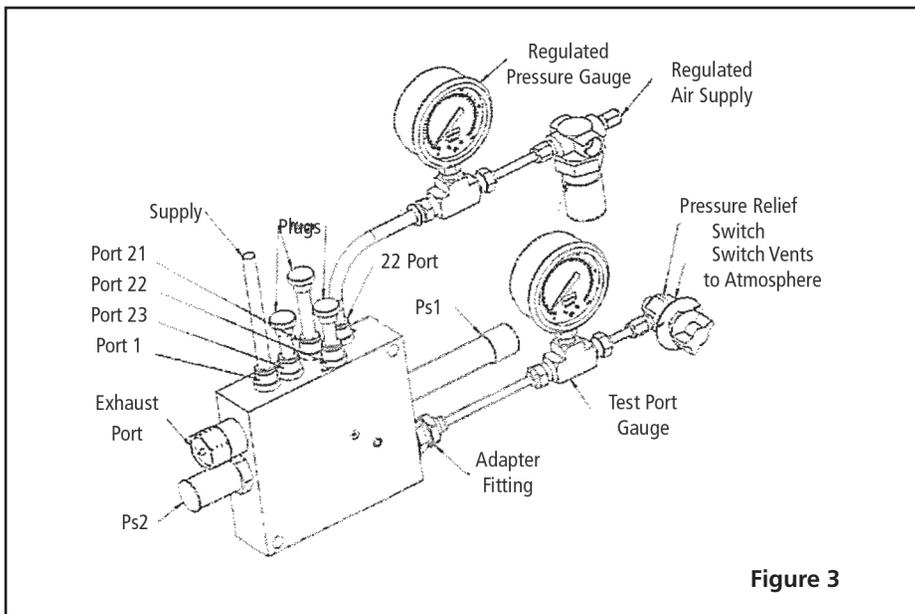


Figure 3

Functional Check for ILAS III Valve - Manual and Automatic

Refer to Figure 3 for proper setup of the test equipment. The line connected to Port 11 will require regulated air. Ports 21, 22 and 23 will need to be plugged and supply air will need to be connected to Port 1. For on the vehicle testing, leave all Ports connected except for Port 11, a regulated pressure line will be needed and the Height Control Valve (HCV) line will need to be pluggged.

WARNING: Wheels should be blocked and proper support of the vehicle should be used. Lift axles will cycle up and down during Functional check. Extreme caution should be used when testing the ILAS III on the vehicle.

1. Connect regulated air pressure line to Port 11. connect the air switch and gauge to the test port as shown in Figure 3. A test port adapter fitting may need to be installed into the test port to properly connect the gauge.
2. Set the regulated pressure to 80 PSI entering Port 11. Check all ports with a soapy water solution for air leaks.
3. Close the air switch connected to the test port. Pressure can be seen building in the test port via the test port gauge. the test port gauge shows you the response of the valve. The test port gauge will be used to identify the pressure settings of the valve.
4. As the pressure increases in the test port gauge watch and listen for the exhaust of the valve when the Ps1 setting is triggered. Caution: If the valve is on the vehicle, the axle(s) will drop when Ps1 is reached. Factory setting is approximately 62 PSI. For the manual valve, the air switch can be used to release pressure and to repeat Steps 1-4. For the automatic valve, proceed to Steps 5 and 6.
5. Once the Ps1 has triggered and the test port gauge has equalized to Port 11 gauge, the pressure on the regulated gauge can be turned down to 10 PSI. Do not open the air switch until Ps2 has triggered and the gauges have equalized.
6. The pressure in the test port gauge will begin to decrease slowly, watch and listen closely again for the exhaust of the valve when the Ps2 is triggered. Caution: If the valve is on the vehicle the axle(s) will raise when Ps2 is reached. The factory setting is approximately 20 PSI.

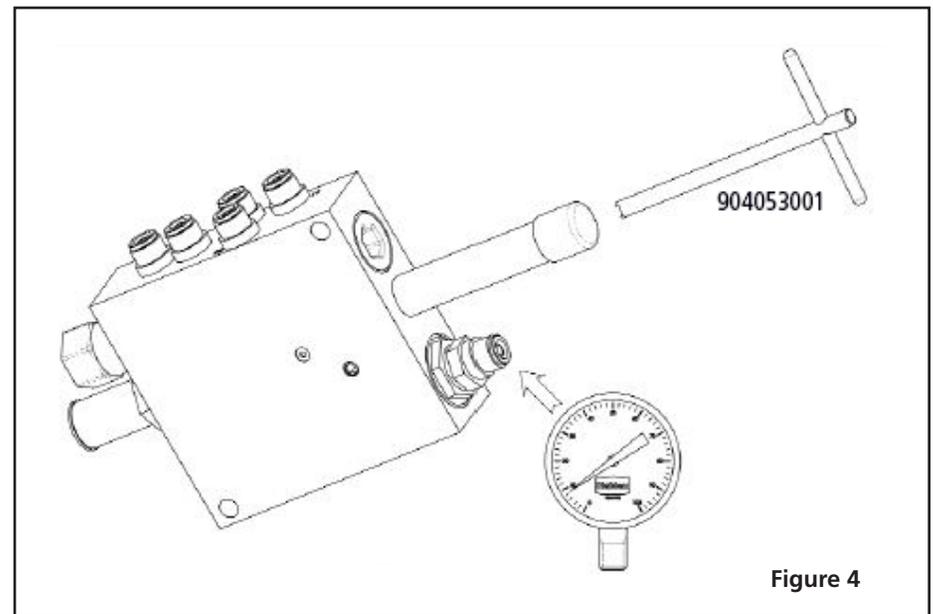


Figure 4

Ps1 Adjustment for ILAS III Valves - Manual (90555293) and Automatic (90555288)

IMPORTANT NOTE: The Ps1 setting of the valve must be lower than the fully loaded airbag pressure of the suspension with the lift axle in the up position. If this guideline is not followed, the Ps1 will not trigger and the lift axle will remain in the up position.

1. The ILAS III Ps1 setting is factory set at 62 PSI. If adjustment is necessary, use the adjustment wrench shown in Figure 4. Turn in the adjustment nut (under the yellow cap) until it stops, then back nut out four turns. **DO NOT TORQUE!** Repeat Steps 1-4 of the Functional Check to verify the Ps1 setting is now above the desired new setting for Ps1. The Ps1 has a setting range of 45 PSI minimum to 75 PSI maximum. (See Figure 5 for adjustment range.)
2. Connect a regulated air pressure line to Port 11. Connect the gauge and the air switch to the test port as shown in Figure 3.
3. Set the regulated pressure in Port 11 to the desired Ps1 setting. Allow the test port gauge to equalize to the regulated pressure in Port 11 (may take several minutes).
4. To change the Ps1 setting accurately, the test port gauge must equal the regulated pressure gauge of Port 11 (**EXTREMELY** important for precise setting of the valve). Very slowly back the adjustment nut out (turn to the left) until the exhaust of the valve is heard. Caution: If valve is on the vehicle, the axle(s) will drop. Stop adjustment when exhaust is heard. The valve is now set to the regulated pressure supplied to Port 11. Repeat Steps 1-4 of the Functional Check to verify that the Ps1 setting is at the desired pressure setting.

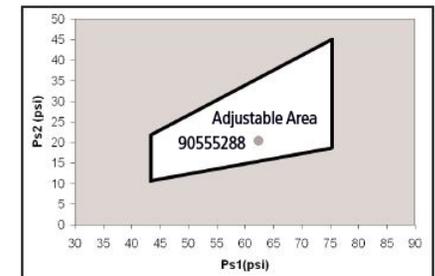


Figure 5