

**L31186**  
**(94100535)**  
**Rev. 10/04**



## **Immediate Response Height Control Valve**

### **GENERAL INFORMATION**

The Haldex EGP Height Control Valve (HCV) automatically adds air to, or exhausts air from air suspension to maintain a constant static design ride height.

- The Haldex EGP can be used for right or left and long or short control arm applications. Refer to installation instructions herein for proper hook-up.
- The integral dump valve is **NOT** sold separately and **CAN NOT** be interchanged on valves in the field.

Lever arm and link assemblies can be purchased by ordering 48100267 from your Haldex Distributor.

**NOTE:** The Haldex EGP valve can be interchanged with other brands of height control valves.

### **PERIODIC AIR CONTROL MAINTENANCE**

Drain all moisture from air reservoir at regular intervals. Normal air system maintenance should be practiced.

The air filter in the Haldex Pressure Protection Valve is removable and can be cleaned or replaced, if necessary.

### **PRE-INSTALLATION WARNINGS**

**IMPORTANT:** It is extremely important that the original equipment manufacturers specifications are followed when installing a new valve. Refer to vehicle and suspension manufacturers instructions for location of the valve. Stop engine when working under a vehicle. Always block the vehicle wheels to prevent a fore or aft roll. Bleeding off system air pressure may cause the vehicle to roll. Keep hands away from brake chamber push rods and brake adjusters; they may apply as system pressure drops. Never exceed recommended working air pressure and always wear safety glasses when working with air pressure. Never look directly into component ports or direct a pressurized air flow at anyone. Never attempt to disassemble a component until you have read and understood all recommended procedures. Some components contain powerful springs and injury can result if not properly disassembled. Use only proper tools and observe all precautions pertaining to the use of those tools.

**CAUTION:** Prior to disconnecting or connecting any airlines or valves, bleed off all air pressure from the air supply system. Failure to do so can result in severe injury.

**DO NOT** install a single height control valve of any type if the suspension or vehicle manufacturer specifies a two (2) height control valve system.

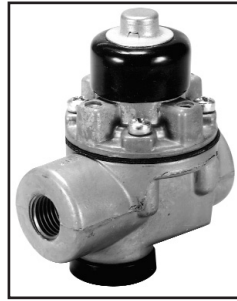
**DO NOT** use a time delay valve with a EGP valve on the same vehicle.

**DO NOT** use antifreeze or other solvents in air supply line. Use of solvents or antifreeze can damage seals and void the valve warranty.

**ALWAYS** use a Pressure Protection Valve (PPV) and filter such as Haldex 90554107. Attach PPV directly to the air reservoir for supply to the EGP.

## PRE-INSTALLATION WARNINGS (Cont'd)

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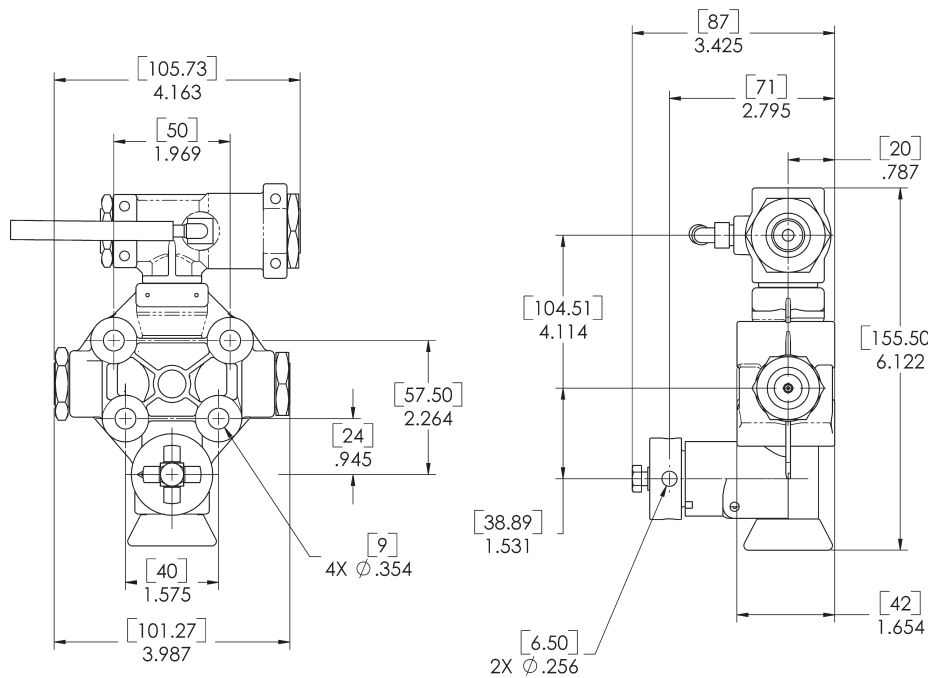


## INSTALLATION INSTRUCTIONS

Part Number	Replaces	Dump Valve	Ports
90555105	90554241	-	1/4" NPT
	90554243	-	1/4" NPT
90555106	90554271	Normally Open*	1/4" NPT
	90554273	Normally Open*	1/4" NPT

\* Needs air pressure to activate dump valve

**Figure 1. EGP Reference Dimension Details**



## INSTALLATION INSTRUCTIONS (continued)

1. **Prepare the vehicle for installation.** A Haldex EGP can be installed in a vertical or horizontal position with the control arm in either right-hand or left-hand position.

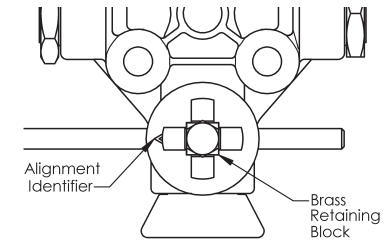
**Important:** Direction arrow must be in proper position for valve to function properly (Figure 2).

2. Install the EGP in the recommended position by bolting it to the specified surface using 5/16" diameter or 9 mm mounting bolts (For mounting bolt spacing see Figure 1).

3. Connect the air supply line to the air supply port of the EGP. If using 90555106, supply port is the top port 1 (Figure 3).

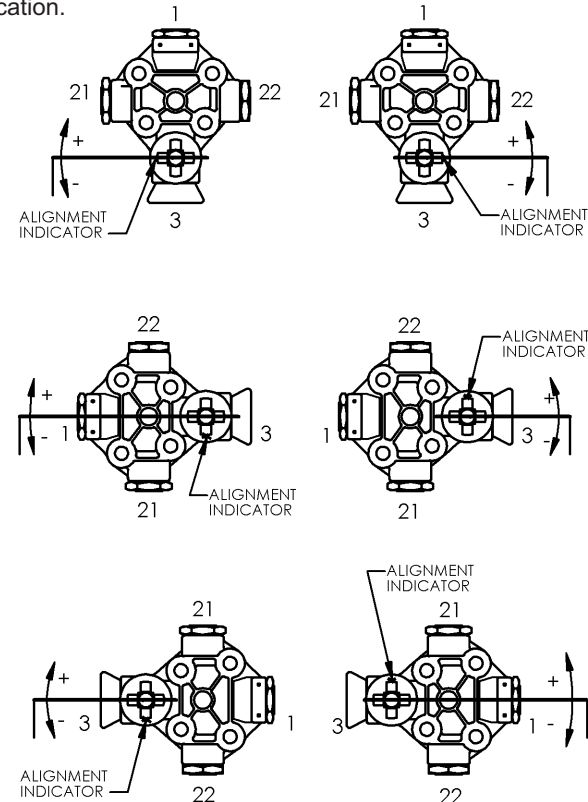
### Actuator Shaft Detail

Remove brass retaining block by pulling retaining clip at corner. Rotate 90° and reinsert into housing for (left or right) horizontal shaft installation.



**Figure 2 - Vertical & Horizontal Installation**

Insert Control Arm in EGP Height Control Valve with direction arrow on shaft in proper location.



## INSTALLATION INSTRUCTIONS (continued)

- Connect the air spring port(s) to the air spring(s) port(s) (as shown in Figure 3) for either vertical or horizontal position. If only one air spring port is used, other port must be plugged.
- Install the EGP control arm. Refer to Figure 2 for proper control arm installation.

**Note:** Correct position of the direction arrow on the valve actuator shaft to the direction of the control arm is critical. Incorrect installation will impair suspension and vehicle performance. (Refer to Figure 2.)

- To insure that the control arm is properly installed, temporarily supply air pressure to the EGP and rotate the control arm up (approximately 20° above horizontal) and check if air pressure begins to inflate the air spring(s). If the air springs are not being inflated, recheck the air lines for proper port connection and the control arm and actuation shaft for proper position.

If the EGP properly inflates the air spring(s), rotate control arm down (approximately 20° below horizontal) to check if air pressure is being exhausted from the air spring(s) through the exhaust port of the EPG. Once it has been determined that the control arm is in the proper position torque the locking bolt to 6-8 ft/lbs. (Refer to Figure 5).

## SETTING THE NEUTRAL POSITION

- Place vehicle on level ground.
- Build and maintain a minimum of 70 PSI air pressure.
- Disconnect the lower anchor of the vehicle link from the axle mount.
- Place the lever arm into the horizontal position by aligning the arrow and hole on the shaft with the slot in the housing.
- Place a 4mm pin in the hole to hold this position temporarily. **NOTE: IF THE VALVE IS OUT OF ADJUSTMENT, THE VALVE WILL BE EXHAUSTING AIR OR SUPPLYING AIR TO THE AIR SPRINGS.**
- Remove rubber cap, loosen the locking nut. (Figure 4)
- Using a screw driver, turn the adjustment screw clockwise until the valve will begin supplying air to the air bags. (Figure 4)
- Turning the adjustment screw counter-clockwise, count the number of turns until the valve begins to exhaust air.
- Turn the adjustment screw clockwise 1/2 the number of turns between filling and exhausting to set proper neutral position.
- Treat the lock nut with Loctite 290 or equivalent and tighten it hand tight, using the screw driver to maintain neutral position.
- Replace rubber cap.

## INSTALLATION INSTRUCTIONS (continued)

- Insert the lower anchor of the vertical link to the axle mount, loosen the jam nut(s) and turn until the vehical kink is free from binding.
- Remove the 4mm pin holding the neutral position.
- Install and tighten the lock washer and nut.

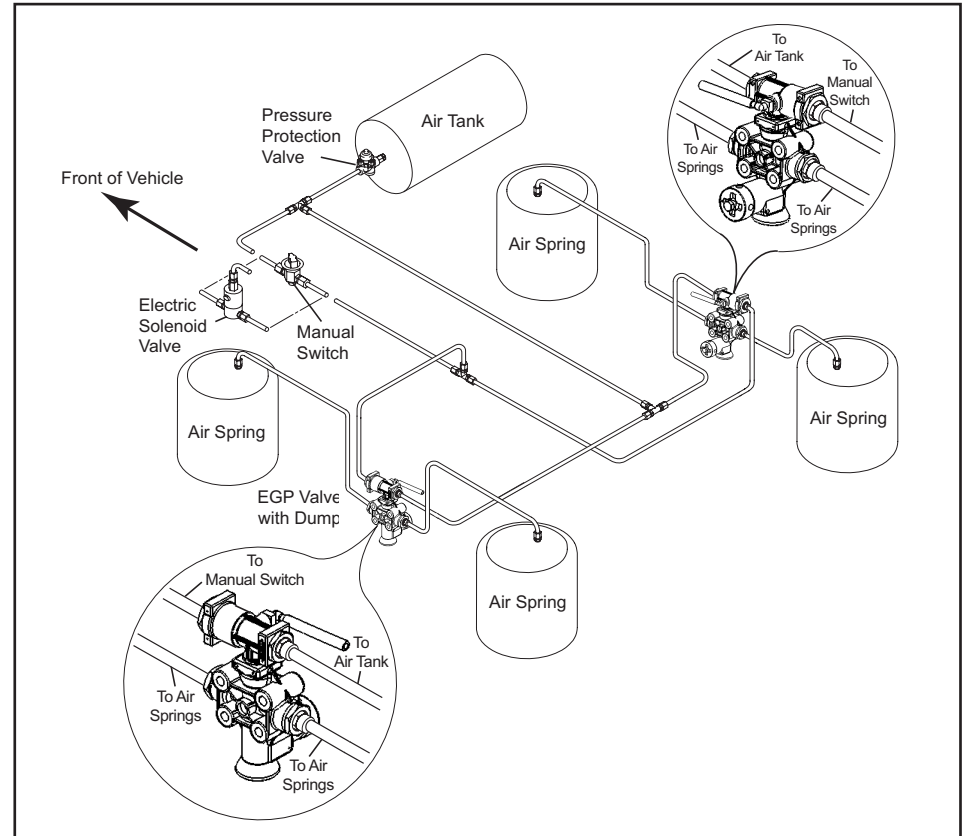


Figure 3.

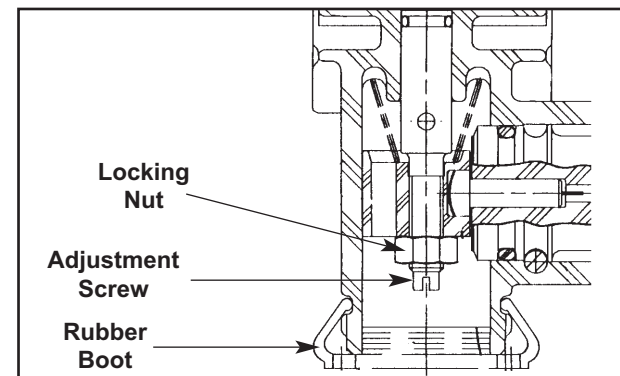
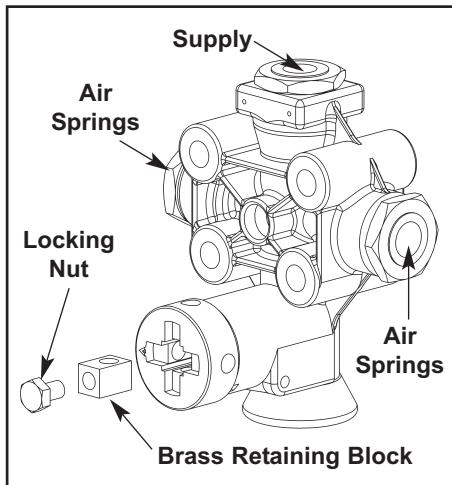
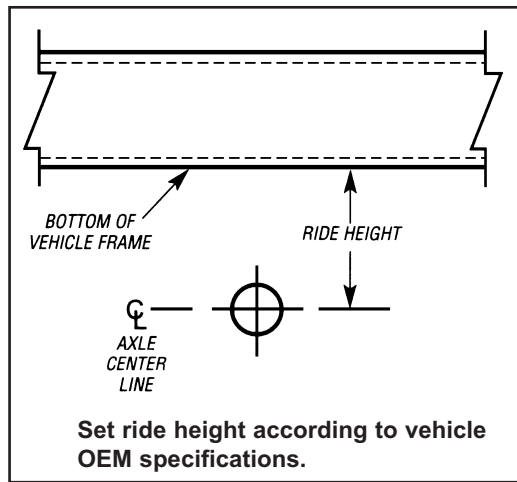


Figure 4.

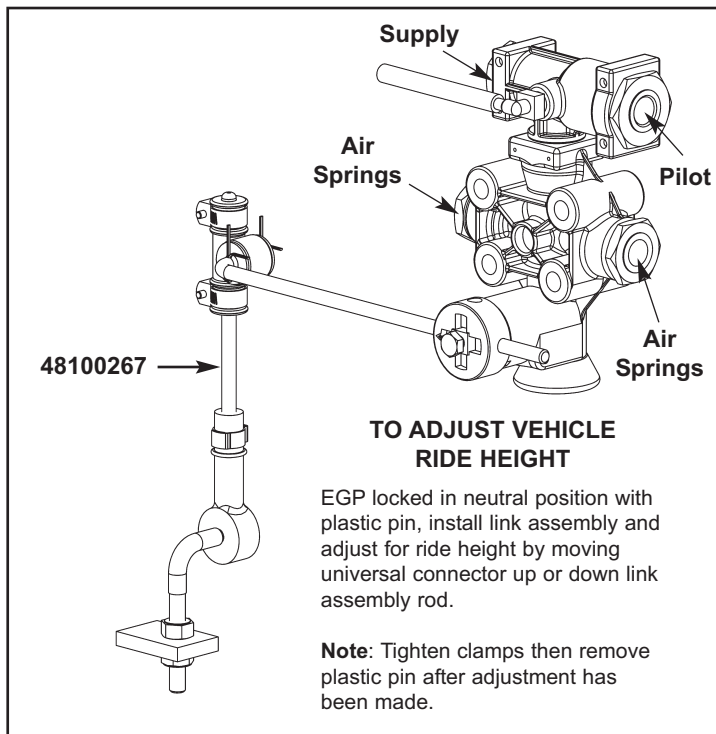


**Figure 5.**



**Figure 6.**

**Set ride height according to vehicle OEM specifications.**



**Figure 7.**

**TO ADJUST VEHICLE RIDE HEIGHT**

EGP locked in neutral position with plastic pin, install link assembly and adjust for ride height by moving universal connector up or down link assembly rod.

**Note:** Tighten clamps then remove plastic pin after adjustment has been made.

**These Additional Parts Available From Haldex Will Enable You To:**

**Upgrade your Pressure Protection Valve to include an inline filter.**

Part No.	Description
90554107	.... PPV With Inline Filter

**Add a suspension dump feature to your truck or trailer.**

Part No.	Description
90054088	.... For Switch To Pilot Manual Dump Valves
90554615	.... For Remote Mounted "Auto" or Manual Dump Installations

**Weigh your vehicle.**

Part No.	Description
42123039	.... SM130 Economic Pressure Gauge and Decal
42123040	.... SM140 Robust Pressure Gauge and Decal; Mounted in a Weatherproof Fiberglass Box
42123041	.... SM240 Robust Pressure Gauge and Decal; Mounted in a Weatherproof Fiberglass Box

**Or both weigh your vehicle and lower your suspension.**

Part No.	Description
42123026	.... SMD111 Robust Pressure Gauge, Pilot Valve, Switch and Decal; Mounted in a Weatherproof Fiberglass Box
42123031	.... SM115 Robust Pressure Gauge, Switch and Decal; Mounted in a Weatherproof Fiberglass Box



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