

Ride Height Valve rear removal and installation

After ordering a replacement valve from CCI parts dept, I received a Haldex Type EGP IR 90555105 which Haldex is using to replace IR 90554241 valve (Napa KN27000) which will no longer be available. Haldex cautions that when used in pairs as in the rear location that the old IR should not be used with an EGP. CCI PN is 24691 for the Type EGP. (CCI parts – Ken at 800 547 8015, Ext 8210)

Preparation for removal

The Haldex installation is a 6 step procedure with good sketches(cartoons). After driving the coach up 6 inch ramps (4x6s and 2x4s stacked up to made a ramp) on level ground and removing most of the air (down to 10-20psi) from the system with the 3 valves under the front of the driver's side, remove the rear ride height valves as provided below. Do one side at a time – removal and installation. If you forget something, you can look at the other side. The valve internally comes pre-adjusted so no need to remove the rubber cover on the bottom and attempt the neutral position adjustment which is part of the installation procedure that comes with the valve.

Parts each rear valve.

¼ NPT brass plug - 1

9mm or 3/8 grade 8 NF bolt x 2 ½ long and locking nut – 2

Loctite pst565 – smallest tube

Yellow nail polish

Removal.

Mark the rod intersections with yellow nail polish as a reference, remove the horizontal rod after removing the vertical rod at the bottom plate (note threaded end depth with respect to nut), cut the plastic tie wrap on the 3 hoses located above the valve and out about a foot, note the hose connections and the plug locations on each valve - they are 180 deg difference between right and left, remove the 2 bolts and let the valve hang down, clean the air hose protectors about a foot, peel back the hose protectors and clean the air hoses, marked the top hose(air supply inlet), remove the coupling with an end wrench (will require 2 wrenches if valve is black plastic), wiggle the hose out and, blue tape the hose ends to keep debris out. The steel inserts may or may not stay with the hose - be sure to reinsert them into the hose or leave them in the coupling if they are in tight. Note that the new black valves do NOT have the 3 air port nuts with the holes in the center tightened - they should be 1 turn loose - they are O-ringed.

New Valve Preparation.

On the bench, removed the 90 deg and straight nipples from the old valve using 2 wrenches, scrape off the rust colored pipe gunk and clean, gunk the nipple sparingly with Loctite pst565 (do not use any other type of paste or Teflon) and insert the nipples into the new valve - 90 deg on top and straight on the side. Be sure you read the directions for rotating the valve wheel as there is a 180 deg difference between left rear and right rear, and which side you insert the straight nipple. Use a new 1/4 NPT brass plug with pst565 applied to the threads and insert in the hole apposite the straight nipple. Be use you do not apply the pst565 to the bottom of the thread or inside. Tighten the nipples and plug to the old red rust depth indication.

Installation.

Verify that the actuator shaft wheel alignment identifier is pointed in the right direction – reference the Haldex installation procedure sketch.

Insert the hoses into the valve - air supply inlet on top, tighten couplings (you have to have done this in the past to get the right feel for tightness), put the hose protectors back, if you can't find 9mm grade 8 bolts 2 ½ inches long , use 3/8 NF grade 8 and lock nuts (do not use lock washers), use the flat washers from the old bolts (do not use the old bolts and nuts – only the washers), push the valve down while tightening the bolts - do not over torque, ¼ turn past snug. I use a slotted popsicle stick and tongue depressor and to put the washer and nut on the bolt, respectively. Reattach the rods using the yellow markings to start with.

Adjustment – Rear. Both valves replaced.

I made a measuring device using ¾ inch aluminum right angle – one 18 inches long with two 3-inch right angle pieces attached with a bolt and locking nut at the required distance. For the 2000 Allure the front bags are at 9 inches and the rears at 10 13/16 inches. Consult the CCO Yahoo Group Files for your respective coach. If your coach is newer than 2003, then please call CCI tech support for your coach bag height at the phone number above and ask for tech support.

With the engine set to 1000 rpm, under the coach rear, measure the bag height with the measuring device, if too low, loosen the 2 hose clamps at the rod horizontal and vertical intersection T (not too loose but just enough to move the rubber hose) and raise the rubber hose T up about 1 inch, the bag should rise, keep raising the T until you overshoot slightly, then lower the rubber hose T about 1/4 inch and tighten the 2 hose clamps. This may take several tries to adjust to the center of the dead zone. If you run out of vertical rod, then move the T in about ½ inch on the horizontal rod towards the valve. Try to keep the T as far away horizontally from the valve as possible. The closer it is to the valve results in more valve inflate and exhaust activity. This could lead to less valve, governor, control rod, T and pop-off valve life. Do the other bag. The valves will leak some fluid after a couple of up and down movements – it's OK.

Ride Height Valve Front removal and installation

Parts - front valve

Same as rear except no plug is used. The same valve 90555105 is used.

Removal, preparation and installation – front valve

Similar to rear valve procedure

Adjustment – Front valve. Engine at 1000 rpm.

There is only one valve in front and its installation has a different mechanical linkage setup. The rod from the valve actuator shaft wheel is fitted into a dual slot, in travel mode with the front bags at the right height, the rod end with the plastic spool is to be in the center of the dual slots. With the front bags empty, the plastic spool should be at least 1/8 inch from the upper part of the dual slots. If the bags are too low in travel mode, go to

manual mode and completely lower the front (bags empty – takes 25 seconds). Loosen the U-clamp on the vertical plate that is attached to the round cross arm and rotate the vertical plate forward but keeping it about 1/4 inch away from the IFS or other fixed metal. Tighten U-clamp and select travel mode. Measure front bags for proper height. Recheck that the plastic spool is in center of the dual slots – loosen the bolt on valve wheel and adjust rod so spool is centered if necessary.

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