



2010 43QGP Allegro Bus

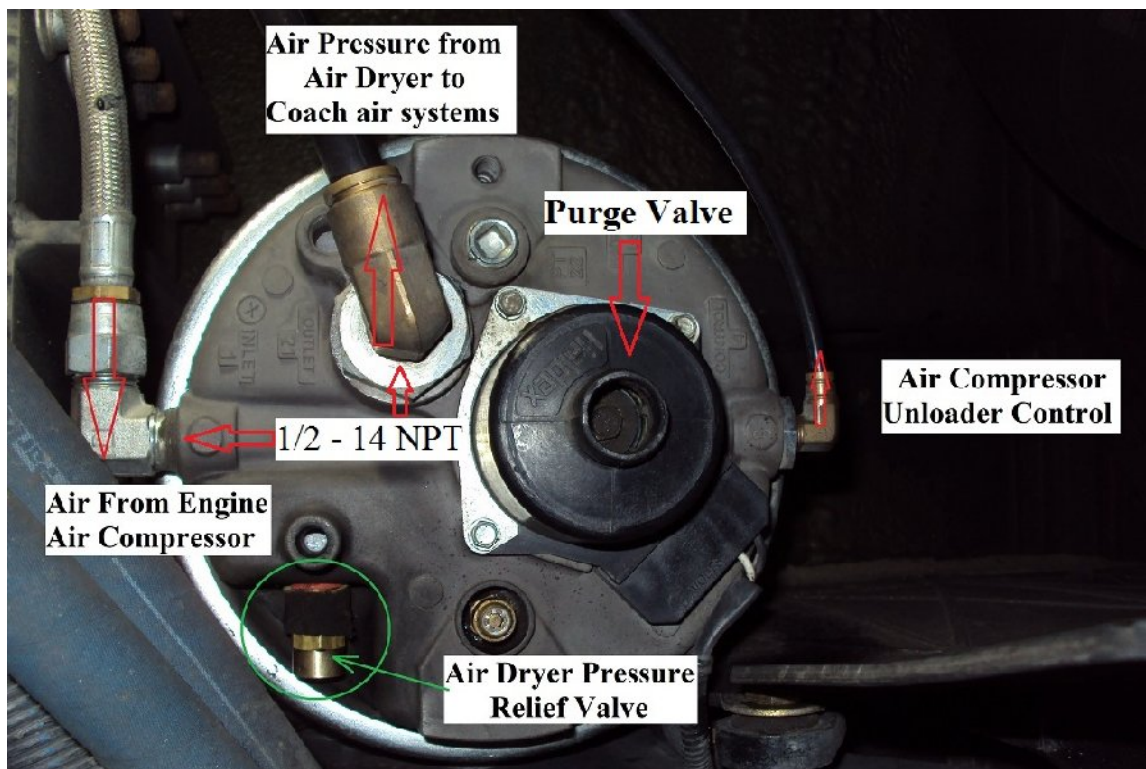
11/8/2014

116 - FYI – EMERGENCY REPAIRS TO THE HALDEX PUREST AIR DRYER. There have been many conversations over the years regarding, what can be done when the coach will not build air pressure, OR in the position of having **NO AIR PRESSURE** what can I do? The following information **MAY** save you a lot of money, at the least the information will provide you with a few options.

At your next opportunity I suggest purchasing and carrying at least these TWO pieces of hardware and a roll of Teflon tape. A 3/8" brass pipe plug and a 1/2" 14 thread per inch brass or steel coupler. Those two hardware pieces will allow you to make most **EMERGENCY** air dryer repairs.

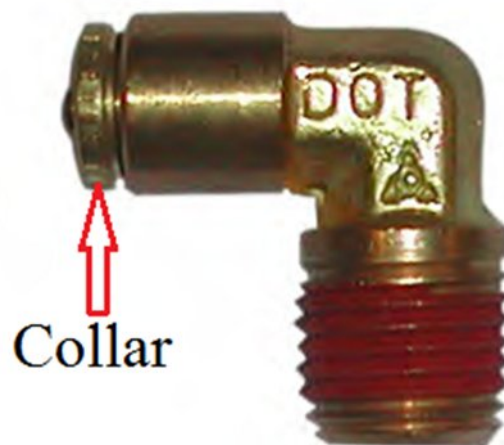
In the event your coach will not build air pressure in most cases the two above components will allow you to make emergency repairs. When I say emergency I mean to allow the coach to be moved off the highway or possibly to a nearby service facility, the following information is not intended to be a PERMANENT repair.

Looking at the bottom of the air dryer the connections have been noted.



The air pressure FROM the air compressor is routed thru a braided steel airline the length of this is airline is usually 10 feet this length allows some of the HEAT developed by compressing the air to COOL before entering the air dryer. The INLET size is $\frac{1}{2}$ " - 14 NPTF (National Pipe Thread, Female). The OUTLET size is also $\frac{1}{2}$ " - 14 NPTF. In the event the PURGE valve shown in the previous photo becomes stuck in the exhaust position the air compressor will not be able to build air pressure. The coach will not be able to move IF the air system cannot develop at least 35 PSI, the minimum air pressure required to overcome the parking brake spring pressure to the rear brake drums.

So what can be done if the purge valve is stuck OPEN? This is where the $\frac{1}{2}$ " - 14 brass or steel COUPLER comes into play. Disconnect the flare fitting on the braided steel hose at the air dryer, remove the 90 ° fitting. Next release the PTC (Push To Connect) fitting on the plastic/nylon outlet hose.



To release the hose, push the hose toward the fitting. Holding the collar against the fitting slowly rotate and pull the hose straight back and out of the fitting. Now remove the brass PTC fitting from the outlet of the air dryer. I suggest wrapping Teflon tape on the pipe fittings before making the two COUPLER connections. Screw both $\frac{1}{2}$ threaded fittings into the coupler making sure they are tight. Connect the flared braided steel hose to its flared mate fitting followed by inserting the $\frac{1}{2}$ " plastic/nylon hose fully into its PTC mate then pulled back on the hose to lock the hose in the PTC fitting. The above procedure BYPASSES the air dryer. Now the air compressor will be able to develop air pressure allowing the coach to be moved out of the road or to a safe location where permanent repairs can be made. Another problem to building air pressure occurs when the air dryer pressure relief valve is OPEN and will not re-close. Again referring to the photo on

page one. The pressure relief valve normally opens at a pressure of 175 PSI, well above the normal air pressure of 120 – 125 PSI. However it is possible for the valve to jam in the open position either by some internal debris not allowing the valve to properly close OR the foam sleeve is missing or damaged allowing external debris to prevent closure of the valve.

IF air pressure is escaping from the pressure relief valve you might be able to get the valve to re-seat by removing the foam sleeve then removing any debris caught in the valve. If clearing the valve does not allow it to close it's time to remove the pressure relief valve. I suggest using a 6 point 11/16" socket to prevent damaging the valve's soft brass shoulders which usually occurs if using a 12 point wrench or socket. Damaging (seizing) the shoulders of the valve is possible due to the two dissimilar metals, brass of the relief valve and aluminum of the air dryer body. After removing the relief valve insert the 3/8" brass pipe plug after first wrapping the plug with Teflon tape.

BOTH **EMERGENCY** repairs will allow the air compressor to build air pressure allowing the coach to be driven to a safe location for permanent repairs.

Freightliner recently has been recommending WHEN the OEM 175 PSI pressure relief valve needs to be replaced replacing it with the 200 PSI pressure relief valve. In the event the OEM pressure relief valve on our Powerglide chassis requires replacing it will be replaced with the KN31529 200 PSI closed pressure relief valve shown below.

Pressure Relief Valves



Features:

- Protects from damage due to excessive pressure
- Made of brass and stainless steel
- Will not rust or corrode

Specifications:

Approximate Weight .3 lbs.

SKU#	Product Description	Body Style	Thread Size	PSI	Notes	OEM Part Number
KN31200	Pressure Relief Valve	Short	1/4"	150		N117BAA
KN31251	Pressure Relief Valve	Short	3/8"	150	Pure Air	N117BHR
KN31300	Pressure Relief Valve	Short	1/2"	150	-	N117BAC
KN31401	Pressure Relief Valve	Long	1/4"	150	-	N117BHA
KN31450	Pressure Relief Valve	Long	3/8"	150	-	N117BCB
KN31525	Pressure Relief Valve	Closed	1/4"	200	EL Compressor	N117BDF
KN31527	Pressure Relief Valve	Closed	3/8"	175	Pure Air Plus, PURest, ModulAir®	N117BEE
KN31528	Pressure Relief Valve	Closed	1/4"	170	-	N117BEC
KN31529	Pressure Relief Valve	Closed	3/8"	200	Pure Air Plus, PURest, ModulAir® - fit and functionally the same as KN31527 but has a higher pressure rating. Has felt sleeve (not shown) to protect vent holes from road debris.	N117BEH