

2010 43QGP Allegro Bus

4/12/2013

113 - FYI – <u>HALDEX PUREST AIR DRYER PRESSURE RELIEF</u>

VALVE. In an attempt to make this file short, simple and helpful I try to be brief. The air dryer used by Tiffin on its Powerglide Chassis coaches is the Haldex PURest Air Dryer. Our coach is a tag axle coach therefor the air dryer is mounted on the driver's side of the coach on the outside of the frame rail behind the tag wheel and beside the radiator. I've found when servicing the air dryer's desiccant filter it is easier to remove the tag axle wheel which then allows me plenty of room to work.

The below photo shows be seen mounted on our 175 PSI rated pressure **RED**. There is usually side openings to from obstructing the were to open to relieve may occur. If the open and be unable to compressor would not pressure to safely



a PURest Air Dryer as it would Powerglide coach. The normal relief valve is shown circled in a foam filter over the valve's prevent dirt or other debris valve in the event the valve any excess air pressure that pressure relief valve were to re-close the coaches air be able to supply enough air operate the coach.

Several options are available in the event the pressure relief valve was to stop functioning as designed. The first option would be to purchase a replacement pressure relief valve in the event the OEM valve was to fail. Recently both Tiffin Motorhomes and Freightliner Custom Chassis Corp. have stated in the event the OEM pressure relief valve were to fail they recommend replacement with the Haldex/Midland part number N1178EH pressure relief valve which is a 200 PSI version of the OEM valve. The following is my TEMPORARY fall back plan, in the event you do not have a replacement pressure relief valve in hand, you can remove the OEM pressure relief valve, I suggest using a six point socket to remove the OEM valve thus preventing rounding the sides of the valve. Then in place of the valve screw in a 3/8" pipe plug with a couple of layers of Teflon tape around the plug, I suggest using a BRASS plug and ONLY tightening the plug to 12 ft. lbs. or 150 in. lbs. torque, any more torque may or likely will prevent the plugs removal when you go to install the replacement pressure relief valve.

Enclosed below are several styles of pressure relief valves used by Haldex/Midland in assembling the various Air Dryers.

The **CLOSED** style pressure relief valve shown in the **BLUE** box is used along with a foam outer filter over the valve's side ports to prevent dirt or debris from entering the valve in the event the valve were to OPEN to relieve excess air pressure in the air filter housing, without the foam filter any obstruction could enter the valve and prevent the valve from re-closing.

Pressure Relief Valves



Protects from damage due to excessive pressure				
•	Made of brass and stainless steel.			
 Will not rust or corrode. 				
Specificati	ions:			
pproximate	Weight .3 lbs.			

SKU#	Product Description	Body Style	Thread Size	PSI	Notes	OEM Part Number
KN31200	Pressure Relief Valve	Short	1/4"	150	-	N1 178AA
KN31250	Pressure Relief Valve	Short	3/8"	150	Pure Air	N1 178BB
KN31300	Pressure Relief Valve	Short	1/2"	150	-	N1178AC
KN31400	Pressure Relief Valve	Long	1/4"	150	-	N1178CA
KN31450	Pressure Relief Valve	Long	3/8"	150	-	N1178CB
KN31526	Pressure Relief Valve	Closed	1/4"	250	EL Compressor	N1178DF
KN31527	Pressure Relief Valve	Closed	3/8"	175	Pure Air Plus, PURest, ModulAir®	N1178EE
KN31528	Pressure Relief Valve	Closed	1/4"	170	-	N1178EC
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 setting. Has felt sleeve (not shown) to protect vent holes from road debris.	N1178EH

The standard OEM pressure relief valve is enclosed in the **RED** box however as referenced on the first page the replacement pressure relief valve has been suggested to be the pressure relief valve enclosed in the **GREEN** box. Either pressure relief valve can be purchased at any OTR (over the road) truck repair or parts supply for less than \$ 20.00, the brass plug will cost around ONE DOLLAR.