

PREVOST

ENREGISTRÉ - REGISTERED
ISO 9001 & ISO 14001



**WARRANTY
BULLETIN**

Wb00-02

DATE : APRIL 2000	SECTION :	22 - HVAC
EXPIRATION: APRIL 2001		
SUBJECT : VALVE PLATE AND REED VALVE REPLACEMENT ON CENTRAL A/C SYSTEM COMPRESSOR		

APPLICATION

If your vehicle meet **the following three** necessary conditions, the present bulletin applies to your vehicle.

Necessary condition 1:

Model	VIN		
XL-40, XL-45 Coaches Model Year : 1994 – 1999	From 2P9L33402R1001934 up to 2PCL33490X1026773 incl.		
	except		
	2P9L33407R1001962	2PCL33499V1026087	2PCL3349XW1026536
	2P9L33409S1001435	2PCL33492V1026187	2PCL33495W1026539
	2P9L33496S1001570	2PCL33496V1026211	2PCL33492W1026563
	2P9L33495S1001589	2PCL33494V1026241	2PCL33490W1026576
	2P9L3349XS1001622	2PCL33495V1026247	2PCL33497W1026588
	2P9L33496S1001634	2PCL33404V1026290	2PCL33407W1026608
	2P9L33491S1001640	2PCL33402V1026305	2PCL33493W1026636
	2PCL33493T1025787	2PCL33498W1026356	2PCL33499W1026639
	2PCL33494T1025815	2PCL33493W1026359	2PCL33491X1026666
	2PCL33491T1025948	2PCL33495W1026363	2PCL33496X1026681
	2PCL33401V1026036	2PCL33407W1026401	2PCL33499X1026741
	2PCL33406V1026078	2PCL33496W1026422	
	2PCL33493V1026084	2PCL33491W1026473	

XL-40, XL-45 & Entertainer Bus Shells Model Year : 1994 – 1999	From 2P9M3349XR1001960 up to 2PCM33493X1026772 incl.		
	except		
	2P9E33499S1001474	2PCE33498V1026123	2PCE33491W1026448
	2P9E33494S1001477	2PCM33496V1026147	2PCE33491W1026501
	2P9M33496S1001573	2PCE33491V1026173	2PCE33499W1026505
	2P9E33497S1001599	2PCM33499W1026340	2PCE33495W1026548
	2PCE33498T1025695	2PCE33491W1026353	2PCE33497W1026602
	2PCE33498T1025728	2PCE33498W1026365	2PCE33496W1026607
	2PCE33496T1025761	2PCE33492W1026376	2PCE33498W1026611
	2PCE33496T1025789	2PCE33499W1026388	2PCE33491W1026627
	2PCE33498T1025972	2PCE33493W1026399	2PCE33493W1026628
	2PCE33490V1025999	2PCE3349XW1026416	2PCM33498X1026699
	2PCM33400V1026064	2PCE33490W1026425	2PCE33496X1026771

Necessary condition 2:

To have a Carrier 05G compressor using R134A refrigerant.

Necessary condition 3:

To have a new Carrier compressor whose serial number precedes 1198JXXXXX* or to have a rebuilt Carrier compressor whose serial number precedes 0398MAXXXX*. Rebuilt compressors are easily recognized by the “M” and “A” letters.

**Refer to figure 2 to know the compressor’s serial number location.*

Note: Compressors you might have in inventory are included in this modification if they meet the necessary condition 3.

Note: If applicable, carry out bulletin Wb00-03 "Installation of filter dryer assembly with solenoid valve on central A/C system" before this one.

DESCRIPTION

Responding to the need of bus operators to use their air conditioning systems in low outside temperatures for air moisture removal, a refrigerant R134A compressor kit has been developed that allows compressor operation in condition well below freezing. That moisture removal can now be accomplished in temperature as low as 25°F (4°C) with the update kit that contains new valve plates for both central and lateral heads.

WARNING: The serial number of your Carrier compressor is needed to obtain the reimbursement stated in the Warranty, page 5.

MATERIAL

Kit #950323 includes the following parts :

Description	Qty
Valve plate - center head	1
Valve plate - side head	2
Gasket - center head	1
Gasket - side head	2
Gasket – valve plate	3
Suction reed valve	6
Positioning spring - suction reed valve	6
Dowel pin	13
Gasket – center head outlet valve	1

Note : Material can be obtained through regular channels.

PROCEDURE

Warning : Park vehicle safely, apply parking brake, stop engine and set battery master switch(es) to the OFF position prior to working on the vehicle.

1. Open the engine R.H. side door (figure 1).
2. If you had not to carry out bulletin Wb00-03, remove the compressor internal pressure before removing the heads. To do this :
 - Frontseat the discharge and suction service valves and reclaim refrigerant contained in the compressor, until pressure is relieved. Refer to the Carrier Transicold "Operation and Service" manual included in your vehicle Maintenance Manual, section 22 for further details.
3. Clean the surface of the three compressor heads and surrounding area of all dirt, to avoid contaminating the compressor interior when the heads and valve plates are removed (see figure 3).



Figure 1 : Compartment doors

Note: Unless otherwise stated, the numbers used in the following text refer to figure 4

4. Using a 9/16 wrench or socket, loosen the head capscrews (1) a few turns, using a criss-cross pattern. If the head (2) is stuck, tap it lightly with a wooden or lead mallet to free it. Do not remove screws until the head has been unseated from the cylinder deck of compressor, and any pressure that may be contained inside the head has been relieved.

Warning: Do not unscrew capscrews all the way before breaking seal. Entrapped pressure could result in injury.

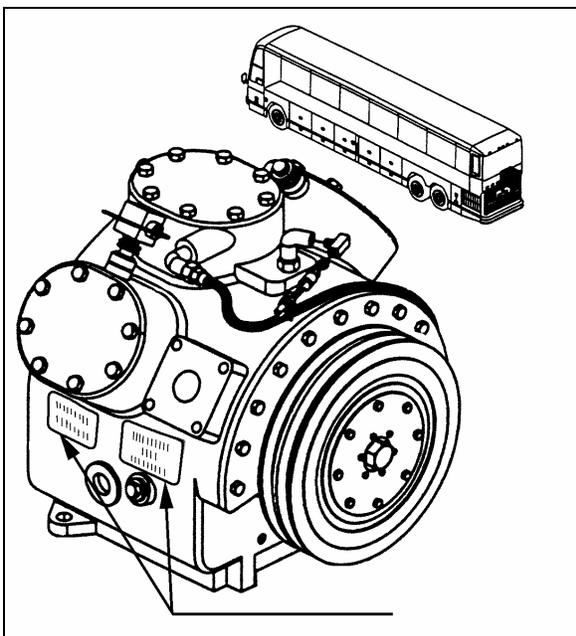


Figure 2 : Rear engine compartment. Compressor's serial number location.

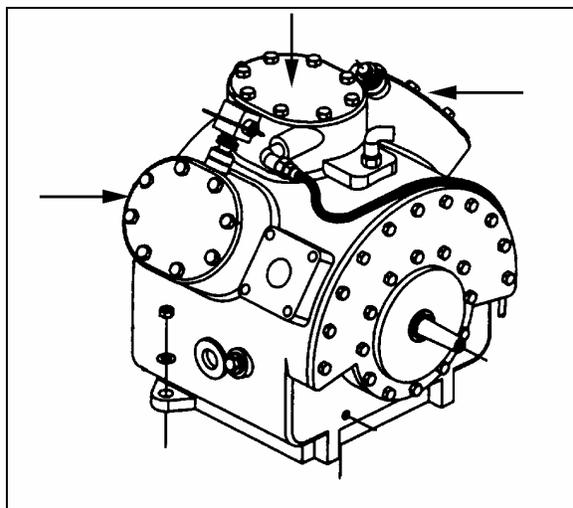


Figure 3 : Compressor three heads.

5. If the valve plate (8) did not come loose from the cylinder deck during cylinder head removal, the following procedure should be used:
 - Free the valve plates (8) from the cylinder deck by using the discharge valve capscrews, without washers, as jackscrews through the outermost tapped holes in the valve plate after the valve stops (6) and valves (7) have been removed. Remove the valve plate gasket (9).

Caution: Be certain to account for all suction valve springs and dowel pins so that they are not lost inside the compressor body.

6. Install the new suction valves (10) and valve plates (8). The side heads should have 5 dowel pins for positioning of the suction valves. Place the new suction valve springs on dowel pins and springs, with the springs bowing upward (see figure 4). Place a new gasket (9) and valve plate (8) onto the cylinder deck over the suction valves (10) and aligned with dowels pins (12).

Caution: Ensure that the suction valves remain centered on dowel pins when positioning valve plates. The center valve plate should be installed in the same manner, but it should be noted that there are 4 dowel pins on cylinder deck and there is no check valve on the center valve plate.

7. Once the valve plates (8) are in place, position the new head gaskets (3) and heads (2) onto valve plates (8) and install the capscrews (1). Using a criss-cross pattern, tighten the head bolts from the center to outside of each head. The final torque value for bolts is 40 to 50 ft-lb. This torque should be obtained by stepping up the value in two separate sequences. (Example: 25 ft-lb the first sequence, then 40-50 ft-lb on the second sequence).

Note: The side head gaskets are different from the center head gaskets and can be distinguished by a small hole at top center, which is necessary for the unloaders.

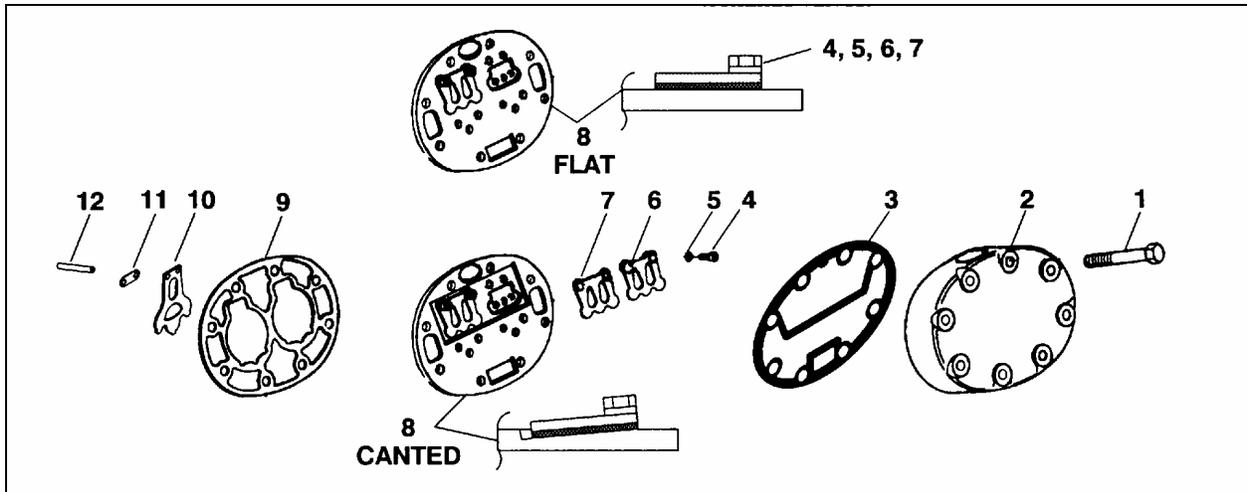


Figure 4: (1) Capscrew; (2) Cylinder head; (3) Cylinder Head Gasket; (4) Capscrew; (5) Lockwasher; (6) Discharge Valve Stop; (7) Discharge Valve; (8) Valve Plate; (9) Valve Plate Gasket; (10) Suction Valve; (11) Position Spring; (12) Dowel Pin.

Note: As shown on figure 4, some compressors use only canted valve plates.

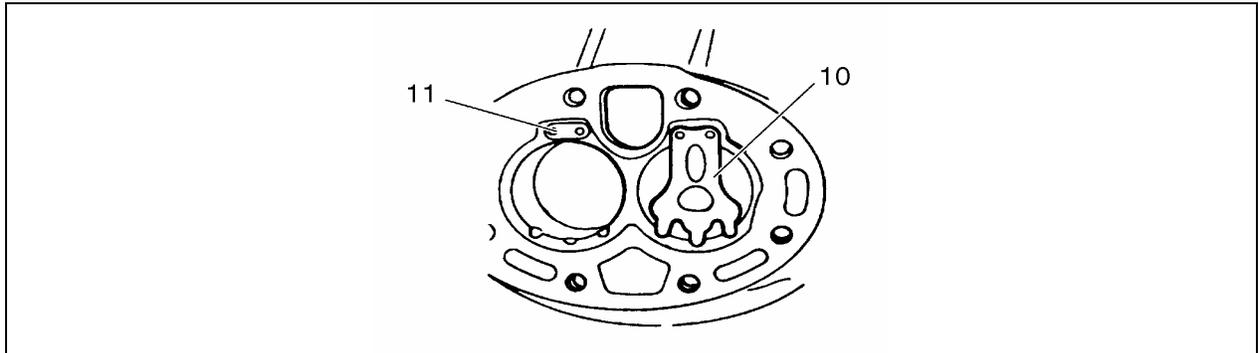


Figure 5: Suction Valve (10) and Position Spring (11).

8. Use the gasket for the center head outlet valve included in the kit.
9. In a purpose of testing the tightness of the assemblage, evacuate the compressor to a lever of 1000 Microns and verify the vacuum holds for ten minutes, with no more than a 500 Microns rise in that period.
10. If applicable, fill the system with refrigerant according to your Maintenance Manual, section 22.
11. Open the valves. Run system at fast idle for twenty minutes to verify proper compressor operation.
12. Superheated adjustment should be checked and adjusted to 14 °F for R-134A and 16 °F for R-22 systems. Refer to your vehicle Maintenance Manual, section 22-10.8 under "Superheat Adjustment".

WARRANTY

This modification is covered by Prévost Car's normal warranty. We will reimburse you the parts and two hours (2.0) of labor upon receipt of the **serial number of your Carrier compressor**, the parts and a completed A.F.A. form on which you must specify as per "Warranty Bulletin 00-02".

Parts disposition :

- Return replaced parts to Prévost Car with A.F.A. for full reimbursement.