

PREVOST

Instruction Sheet

IS-97146

LOW PRESSURE UNLOADER SWITCH ADDITION ON HVAC SYSTEM COMPRESSOR FOR LOW PRESSURE OPERATION.

MATERIAL

Kit #064698 includes the following parts. (For vehicles using R134A refrigerant)

Part No.	Description	Qty
064671	New switch wiring harness	1
950249	Spring valve fitting	1
501894	Bronze T-shaped fitting	1
950245	Low pressure unloader switch (23 Psig)	1
D450113	Components installation diagram	1
IS-97133	Instruction Sheet	1
FI-97133	Feuille d'instructions	1

Kit #064699 includes the following parts. (For vehicles using R22 refrigerant)

Part No.	Description	Qty
064671	New switch wiring harness	1
950249	Spring valve fitting	1
501894	Bronze T-shaped fitting	1
950299	Low pressure unloader switch (50 Psig)	1
D450113	Components installation diagram	1
IS-97133	Instruction Sheet	1
FI-97133	Feuille d'instructions	1

PROCEDURE

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

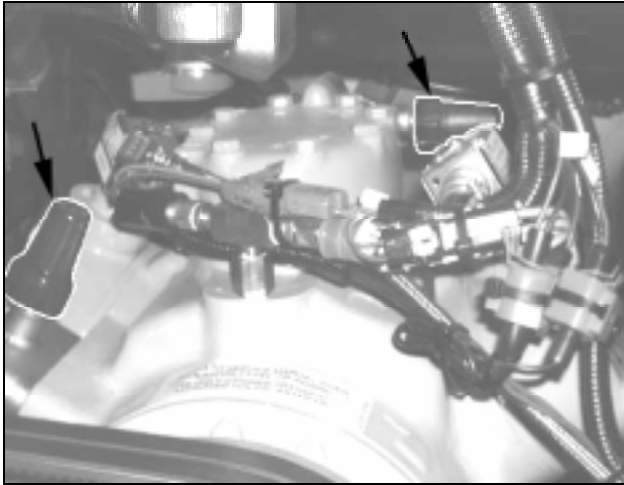


FIGURE 1: SERVICE VALVES (SEEN FROM VEHICLE BACK).

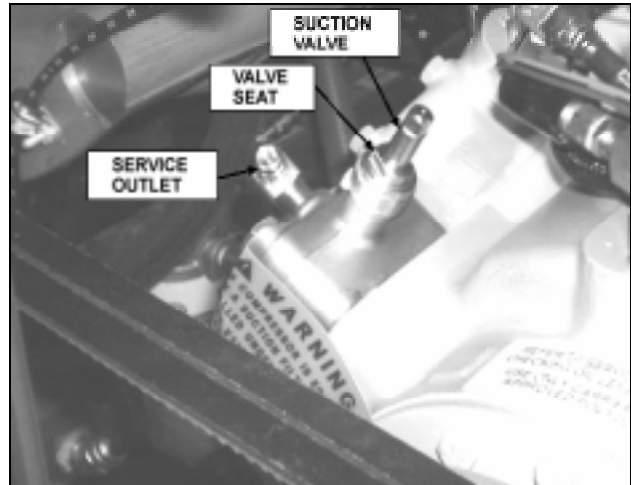


FIGURE 2: SUCTION VALVE (PROTECTIVE CAPS REMOVED).

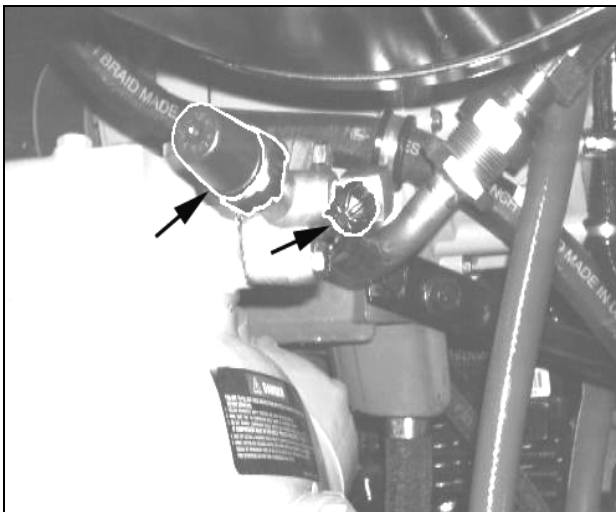


FIGURE 3: DISCHARGE VALVE (ACCESS FROM RIGHT HAND SIDE).

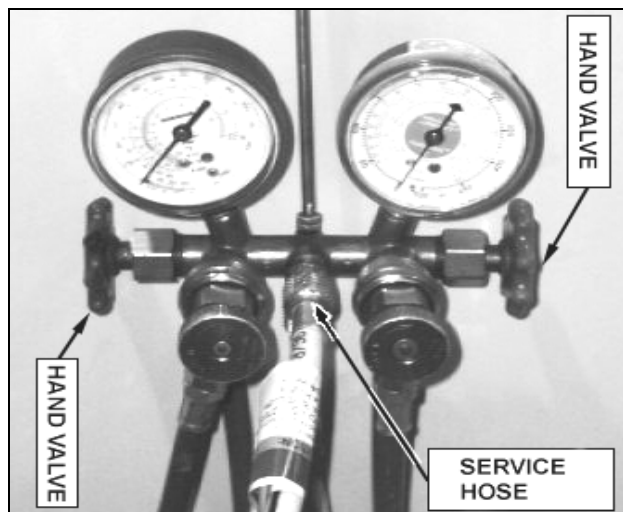


FIGURE 4: SPECIFIC MANIFOLD GAUGES (R-134-A).

1. Open the engine rear compartment door and open the engine compartment right hand side door.
2. Unscrew the four (4) caps which cover the A/C compressor two (2) service valves and two services outlets. (Fig 1) (Fig 2) (Fig 3)

Caution: The manifold gauges two (2) hand valves must be properly closed before installation (Fig 4).

3. Install specific manifold gauges (Fig 4) on each corresponding service outlets (Fig 2) (Fig 3) beside compressor service valves. (suction and discharge).

4. Select minimal temperature on the HVAC system ambient temperature electronic console.
5. Start the engine and let it run at idle speed.

Warning: Fit clothing and tied hairs are mandatory prior to the next procedure steps which expose technician to a belt-driven transmission system without safety guards.

6. Screw-in the suction valve (Fig. 2) to end of travel (front-seated) and wait for compressor pulley de-clutching which is usually made after a few seconds.
7. Screw-in the other service valve (discharge valve) to end of travel (front-seated), then the engine must be stopped.
8. Install a gas recovering system on the manifold gauges service hose (Fig 4), open the two (2) hand valves and drain residual gas left in the compressor. Close the manifold gauges two (2) hand valves and disconnect the gas recovering system.
9. Disconnect plug #413 (Fig. 5). This is the high pressure unloader switch connector. Also disconnect plug #132 which is the connector of the pressure switch directly mounted on the compressor.
10. Unscrew the O-Ring fitted adapter which is directly screwed on the compressor. On this adapter is mounted a spring valve fitting followed by an existing pressure switch. Separate the O-Ring fitted adapter from the two parts mentioned above. It is recommended to fit the adapter with a new O-Ring if the existing one seems stretched, cracked or too compressed.

Caution: "Teflon" type sealant must be applied over every pressurized connections threads.

11. Referring to the annexed diagram, install the O-ring fitted adapter on the T-shaped fitting base (Part #4). Mount this assembly on the compressor tightening the T-shaped fitting to a 15 degrees angle as illustrated on the annexed diagram. A properly tightened installation at 18 degrees, for instance here is prior to a slack installation at 15 degrees.
12. Screw-in the spring valve fitting, (on which is mounted the existing pressure switch) on the T-shaped fitting right hand side (Part #4). Reconnect the #132 connector as originally.

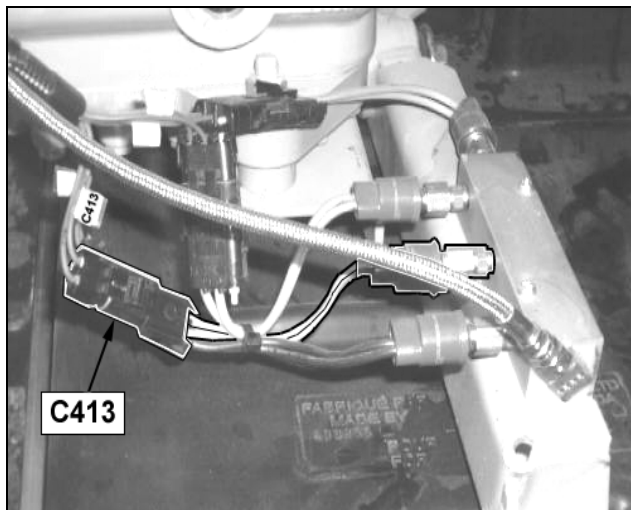


FIGURE 5: ORIGINAL CONNECTION.

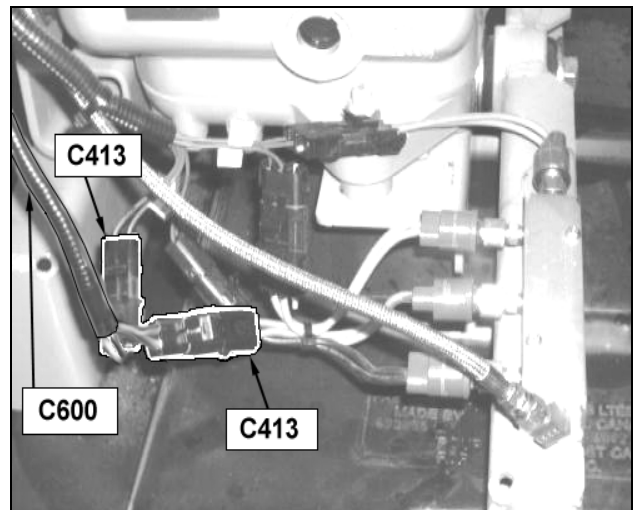


FIGURE 6: NEW ADDED CONNECTION.

-
13. Mount the new spring valve fitting (Part #3) on the new pressure switch (Part #2).
 14. Mount this new assembly (Part #2 & #3) on the T-shaped fitting (Part #4) left side.
 15. Connect the identified as "C600" new wiring harness plug (Part #1) on the new mounted pressure switch .
 16. Referring to figure #5 and #6, connect the new harness two (2) identified as "C413" plugs on the existing "C413" disconnected plug. Install wire ties for the new wiring harness routing along the existing wiring.
 17. Connect a vacuum system on the manifold gages service hose (Fig 4). Open the manifold gauges two (2) hand valves and vacuum the air inside the compressor. Close the two (2) manifold gauges hand valves and disconnect the vacuum system.
 18. Verify if the two (2) service valves seats are properly tightened (Fig. 2) and unscrew the suction service valve to end of travel (back seated). Unscrew then the discharge service valve to end of travel (back seated). Disconnect the manifold gauges and reinstall all the four (4) black protective caps on the two (2) service outlets and the two (2) service valves.
 19. Verify gas level in HVAC system, (refer to maintenance manual if necessary) and proceed to a test in order to verify if HVAC system is operable.