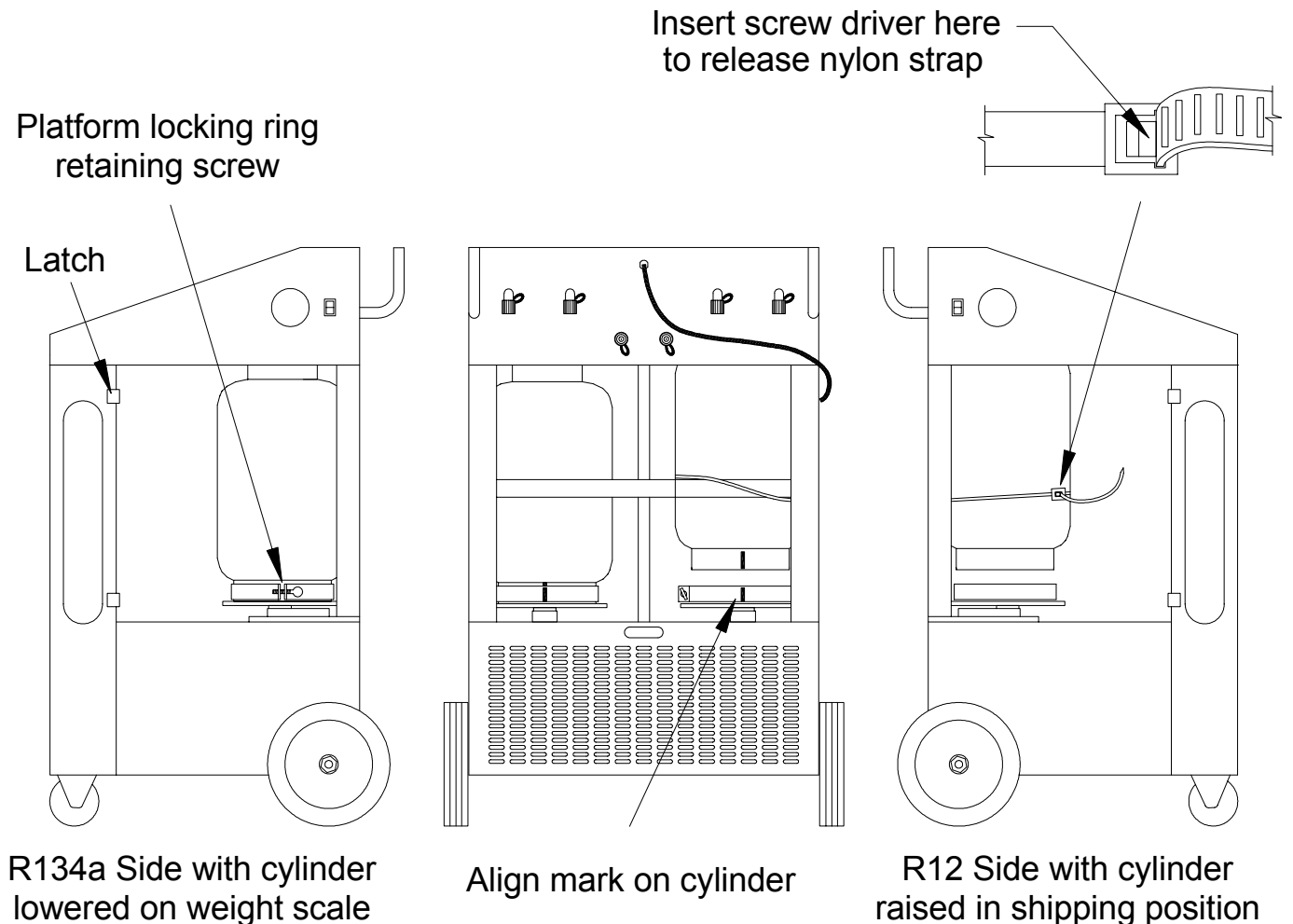


Unpacking - RHS2780

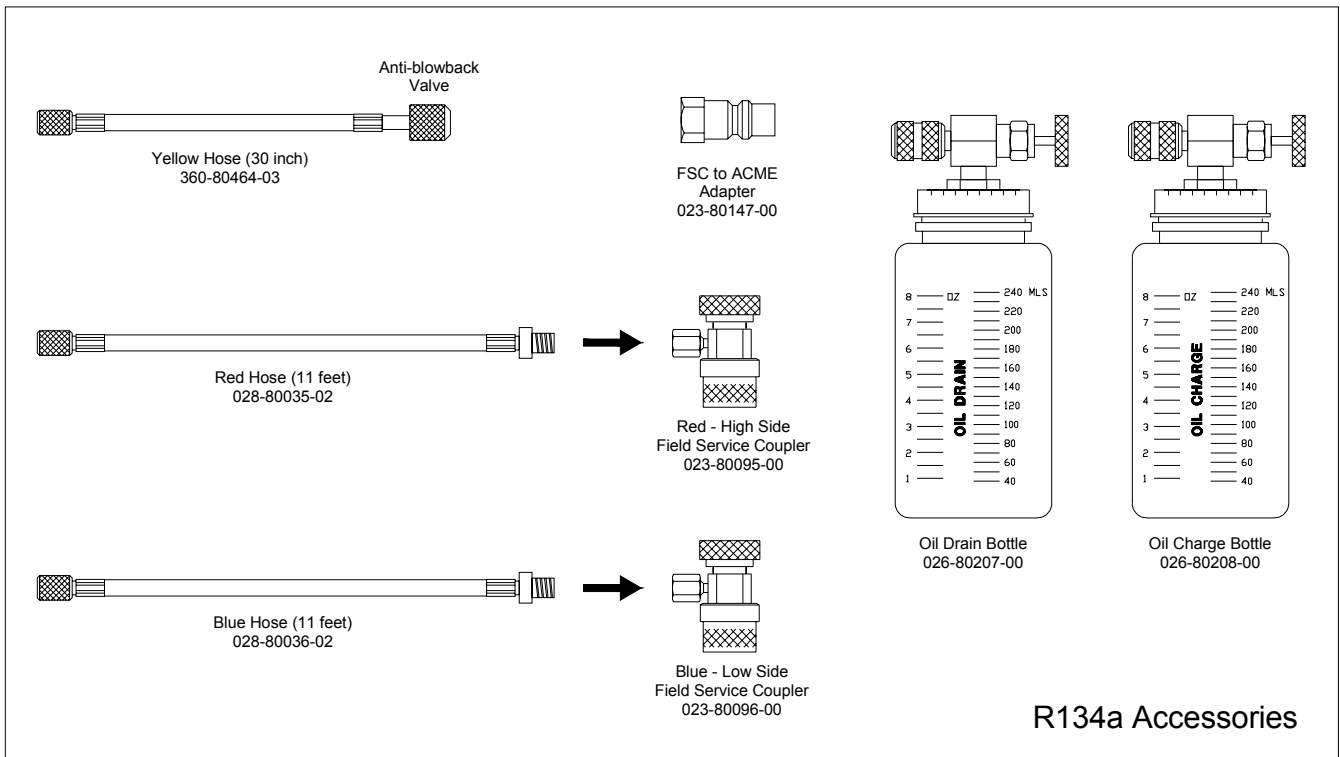
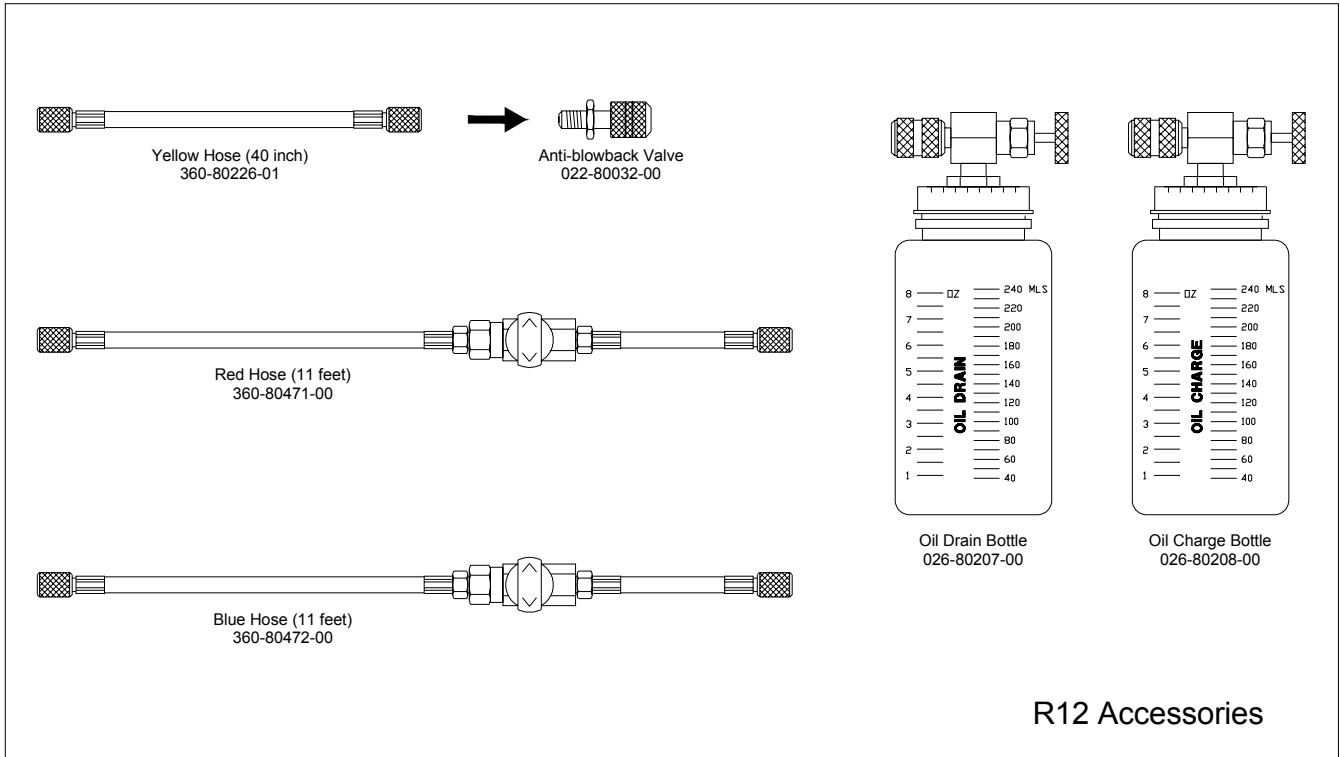
Thank you for opening the envelope and reading this documentation. Your new RHS2780 was carefully assembled and will begin generating profits for you in just a few minutes.

1. Please follow these simple instructions to ensure your new machine survived any rough handling it may have experienced during transport.
2. Immediately report any visible damage to the unit. Save the shipping carton for inspection by a claims adjuster. Call RTI Technologies at 800-468-2321 (ext 259) for instructions.
3. Cut and remove all hold-down straps.
4. Remove protective plastic cover.
5. Carefully tip unit and remove cardboard blocks from underneath.
6. GENTLY ease the unit off the pallet.
7. Release four latches (two on each side) and remove middle wrap-around cover. Release nylon ties and lower both cylinders onto the weight platforms. Align the mark on each cylinder with the mark on the locking ring. Tighten the retaining screws on the platform locking rings.



Unpacking

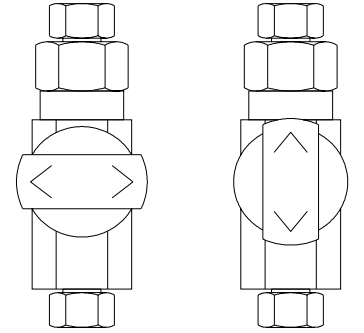
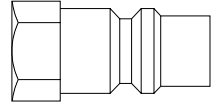
Refer to the illustration below and verify that all accessories were received.



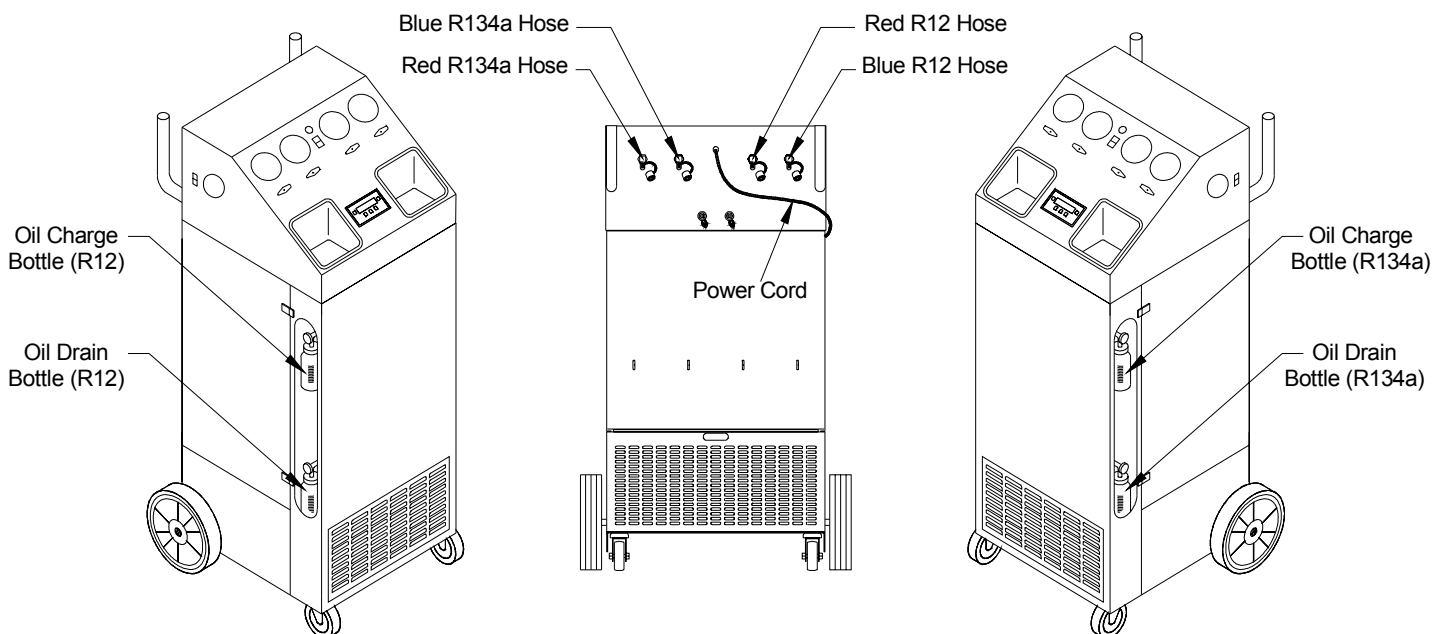
Setup - RHS2780

Refer to the illustration and attach accessories as follows:

1. Store the FSC to ACME Adapter in a secure place. This adapter is used to connect the Blue Field Service Coupler to a tank with a 0.500 ACME fitting.
2. Install Red Field Service Coupler on end of Red R134a Hose.
3. Connect other end of Red R134a Hose to left port (when facing rear of unit) on rear of RHS2780.
4. Install Blue Field Service Coupler on end of R134a Blue Hose.
5. Connect other end of Blue Hose to second from the left port (when facing rear of unit) on rear of RHS2780.
6. Connect end furthest from shut off valve of the R12 Red Hose to second from the right port (when facing rear of unit) on rear of RHS2780. Close valve.
7. Connect end furthest from shut off valve of the R12 Blue Hose to the right port (when facing rear of unit) on rear of RHS2780. Close valve.
8. Install an Oil Charge Bottle on either of the top ports on each side of the RHS2780. Oil can be charged into the low or high side hoses as desired by the technician. Close the valves by turning knobs clockwise.
9. Install an Oil Drain Bottle on the lower port on each side of the RHS2780. Close the valves by turning knobs clockwise.
10. Make sure caps are screwed onto the un-used oil charge ports on each side and the two ports in the center of the rear of the RHS2780.



Valve Closed Valve Open



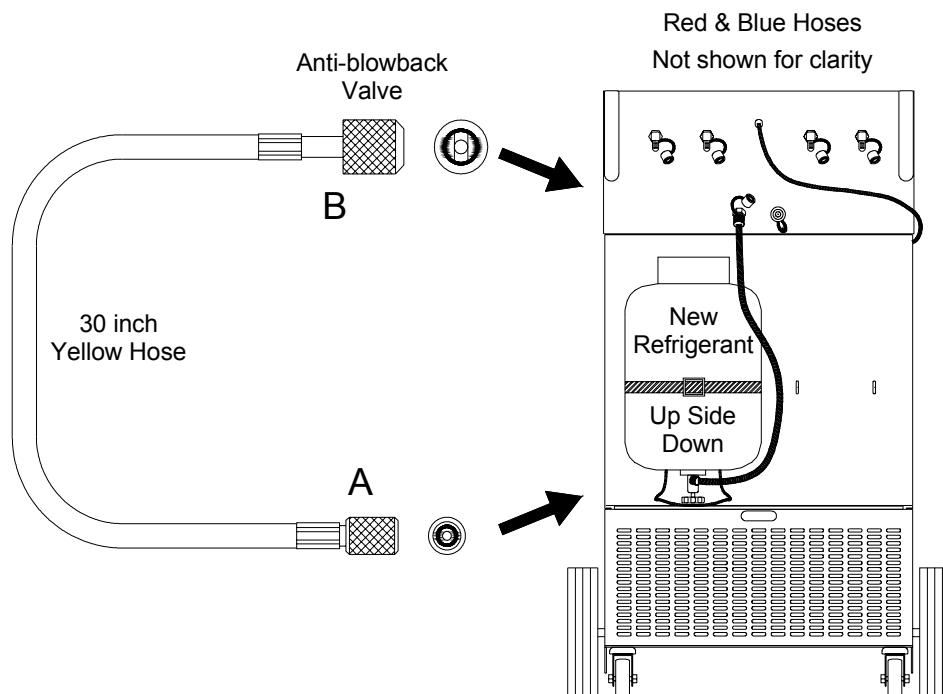
Filling Internal Cylinder

The RHS2780 has two internal cylinders, each with a maximum capacity of 17.5 lbs. Refrigerant (R12 or R134a) is recovered from A/C systems, filtered and stored in the corresponding cylinder. This refrigerant is then available for charging into A/C systems.

Typically, it is also necessary to add new refrigerant to the internal cylinders. The RHS2780 will transfer refrigerant directly into each of the internal cylinders from tank of new refrigerant.

FIRST TIME SETUP

The RHS2780 is shipped from the factory without refrigerant. The following steps must be followed to transfer new refrigerant into the internal cylinder. The following instructions assume R134a is to be transferred into the unit.



EXTREMELY IMPORTANT

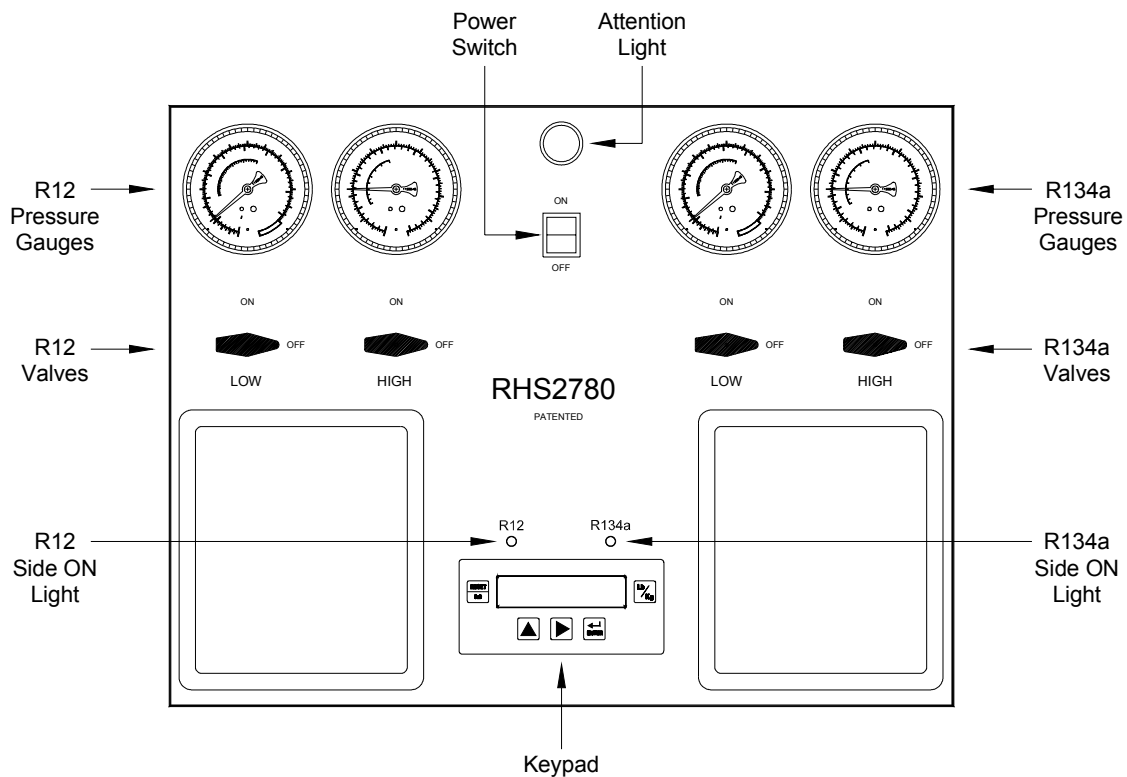
ALWAYS connect the yellow hose to the tank of new refrigerant (Step 1) **BEFORE** connecting the other end to the port on the RHS2780 (Step 2).

1. Turn all valves on the control panel to OFF.
2. Begin with preferably a full tank of new refrigerant. Connect the end (A) of the 30 inch yellow hose to the port on the tank of new refrigerant. Turn tank of new refrigerant up-side-down.
2. Connect the anti-blowback valve end (B) of the 30 inch yellow hose to the appropriate fill port on the rear of the RHS2780. The anti-blowback valve must be attached to the R12 hose. It's built in to the R134a hose.
3. Plug in power cord and press top of power selector switch. The display will show **WEIGHT = XX.X LB - AUTOMATIC? R134.**

Note: If R12 is displayed instead of R134a, press the [▶] key one time.

4. Press [▲] key four times. The display will show **WEIGHT = 00.0 LB - FILL CYL R134?**
5. Press [ENTER] key. The display will show **CHECK HOSES AND OPEN VALVES.**
6. Open valve on tank of new refrigerant.

7. Press **[ENTER]** key. Refrigerant will transfer from the tank of new refrigerant into the RHS2780 internal cylinder. The display will show the weight increasing in the internal cylinder and display **WEIGHT = XX.X LB - COMPRESSOR ON**. The display may periodically show **HIGH PRESSURE - SEE MANUAL**. This is normal and part of the fill cylinder procedure.
8. Two options are available to control the amount of refrigerant transferred into the internal cylinder:
 - (A) Press **[RESET]** key when the desired amount is displayed.
 - (B) Let the process continue until the internal cylinder fills to about 13 lbs and stops automatically. The display will show **FILL COMPLETE - FILLED = 13.0 LB**. Press **[ENTER]**.
9. Close valve on tank of new refrigerant.
10. Disconnect yellow hose from RHS2780.
11. Put plastic cap on fill port of RHS2780.



Function Tests

It's a good idea to perform the following function tests to ensure the RHS2780 is operating correctly prior to using it to service an A/C system. These tests will also demonstrate some of the basic operating functions.

The R12 and R134a side should both be tested. The following instructions describe testing the R134a side. Testing the R12 side is similar.

The technical support group at RTI Technologies should be contacted if any problems or questions arise during the following tests. Call 800-468-2321 (ext. 259) for assistance.

Function Tests

EVACUATE HOSES AND TEST VACUUM PROCESS:

1. The RHS2780 should be set up and refrigerant transferred into the internal cylinder as described previously. The tank of new refrigerant (with hose attached) should have been disconnected from the RHS2780 and the plastic cap installed on the port.
2. Plug in power cord and press top of power selector switch. The display will show **WEIGHT = XX.X LB - AUTOMATIC? R134.**

Note: If R12 is displayed instead of R134a, press the [▶] key one time.

3. Press [▲] key two times. The display will show **WEIGHT = XX.X LB - VACUUM? R134.**
4. Press [ENTER] key. The display will show **CHECK HOSES AND - OPEN VALVES.**
5. Turn the Low and High valves to ON.
6. Press [ENTER] key. The display will show **ENTER VACUUM - TIME XX MIN.**
7. Press the [▶] key one time to move the blinking cursor one position to the right. Press [▲] key two times until the display shows **ENTER VACUUM - TIME 02 MIN.**
8. Press [ENTER] key. The display will show **PERFORM VACUUM - LEAK TEST? Y/N.** Press [▶] key as required until **N** is flashing to indicate that a leak test is not desired.
9. Press [ENTER] key. The display will show **ADD OIL? - Y/N.** Press [▶] key as required until **N** is flashing to indicate that adding oil is not desired.
10. Press [ENTER] key. The display will show **START VACUUM?.**
11. Press [ENTER] key. The display will show **TIME LEFT = XX MIN - PUMP ON.** The vacuum pump will start running. Watch the High and Low pressure gauges to verify that the pressure drops into a vacuum as the red and blue hoses are evacuated. The display will show **PUMP OFF XX MIN - CONTINUE?** at the end of two minutes.
12. Turn the Low and High valves to OFF.
13. Press [ENTER] key. The display will show **VACUUM COMPLETE.**
14. Press [ENTER] key. The display will show **WEIGHT = XX.X LB - AUTOMATIC? R134.**

FILL HOSES AND TEST CHARGE PROCESS:

1. Press [▲] key three times. The display will show **WEIGHT = XX.X LB - CHARGE? R134.**
2. Press [ENTER] key. The display will show **ENTER CHARGE - AMOUNT = XX.X LB.**
3. Press the [▶] key one time to move the blinking cursor to the right one position. Press the [▲] key one time until the display shows **ENTER CHARGE - AMOUNT = 01.0 LB.**
4. Press [ENTER] key. The display will show **SET HIGH OR LOW - FILL VALVES.**
5. Turn the Low valve to ON.
6. Press [ENTER] key. Refrigerant will fill the blue low side hose. The low pressure gauge will show the pressure rise from a vacuum to the pressure of the refrigerant charged into the hose. Next turn the High valve to ON. Refrigerant will fill the red high side hose. The high pressure gauge will show the pressure rise from a vacuum to the pressure of the refrigerant charged into the hose. The display will show **WEIGHT = XX.X LB - CHARGING.** The amount may or may not change as the two hoses are filled.
7. Press [RESET] key. The display will show **WEIGHT = XX.X LB - AUTOMATIC? R134.**
8. Turn High and Low valves to OFF. Continue to next test.

Function Tests

RECOVER REFRIGERANT FROM HOSES TO TEST RECYCLE PROCESS:

1. Press **[▲]** key ONE time. The display will show **WEIGHT = XX.X LB - RECYCLE? R134**.
2. Press **[ENTER]** key. The display will show **RECYCLE HOLD - TIME 02 MIN**. The default minimum time is two minutes. Do not make any change.
3. Press **[ENTER]** key. Display will show **CHECK HOSES AND - OPEN VALVES**.
4. Turn Low and High valves to ON.
4. Press **[ENTER]** key. Display will show **WEIGHT = XX.X LB - COMPRESSOR ON**. The refrigerant in the high and low side hoses will be recovered. The high and low pressure gauges will show the pressure decrease until a vacuum is reached. The compressor will shut off and the display will show **WEIGHT = XX.X LB - COMPRESSOR OFF**. The two minute recycle hold timer will start. The display will show **AMOUNT RECYCLED = XX.X LB** after the two minutes has elapsed.
5. Press **[ENTER]** key to end the process.
6. Turn Low and High valves to OFF.

CONGRATULATIONS

THANKS

Performing these tests demonstrated that the RHS2780 is operating correctly.

NOW IT'S TIME TO MAKE SOME MONEY

The best suggestion we can offer is that you quickly browse the Operation Manual before using the RHS2780 to perform an actual A/C service. Then, during the first few uses, refer to the Operation Manual and follow the instructions as each process is performed.

The RHS2780 was carefully designed to be intuitive to use. The display screens prompt for input as required and always ask for confirmation before starting a process.

It's very important that you follow the Operation Manual the first few times to become familiar with the techniques of using the RHS2780 for A/C service. Then you will find that the display screens will give you adequate prompts for future use.

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