# OPERATION & MAINTENANCE MANUAL

# AC2880

**Refrigerant Handling System** 



Manual P/N 035-80751-00

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## CONGRATULATIONS

You have purchased one of the finest Recovery, Recycling, and Charging Machines available!

Your AC2880 was proudly manufactured for MATCO Tools by RTI Technologies Inc., York, PA.

Fill out and return the Warranty Card within 90 days to activate the warranty and free lifetime technical support.

**TECHNICAL SUPPORT** 

800-468-2321 (Ext. 259)

tech@rtitech.com

# **STARTUP & SAFE OPERATION**

- Do not use a damaged unit. Check for shipping damage and place a claim with carrier if damage is discovered.
- □ Return the Warranty Card to activate technical support service and warranty coverage.
- □ The AC2880 should not be operated or serviced by any person who has not read all the contents of this manual.
- □ This manual describes normal operation and maintenance for the AC2880. Failure to read and comply with these instructions or any one of the limitations noted herein can result in serious injury and/or property damage. The instructions should not be interpreted to anticipate every possible contingency.
- □ It is the responsibility of the owner/user to operate the AC2880 in accordance with all laws and specifications which may apply.
- □ Recover, recycle, and charge only the refrigerants for which the AC2880 is configured.
- □ Avoid breathing refrigerant or lubricant vapor. Exposure may irritate eyes, nose and throat. Ventilate work area if accidental system discharge occurs.
- Wear safety glasses and protective gloves. Refrigerant has a very low boiling point and can cause frostbite.
- □ Follow the AC2880 operating procedures sequentially to avoid prematurely disconnecting hoses or opening valves which may release refrigerant to the atmosphere.
- Do not expose the AC2880 to moisture or operate in wet areas.
- □ Use the AC2880 in locations with ventilation that provides at least four air changes per hour.
- □ Hoses must have shutoff devices within 12 inches of the connection point to the A/C to minimize the introduction of air into the AC2880 and the release of refrigerant when being disconnected.
- □ Avoid using an extension cord with the AC2880. If necessary use a good condition, three wire grounded, #14 AWG or larger extension cord of the shortest possible length.
- Disconnect power before performing any maintenance or service on the AC2880.
- □ Do not connect the red or blue hoses to the liquid port of a cylinder of refrigerant to fill the charge cylinder. Doing so may cause the compressor to fail and void the warranty.
- □ Do not connect the AC2880 to the liquid side of any A/C with a capacity greater than 4 lbs. Refrigerant in A/C Systems having larger capacities must be recovered from the vapor side only.

# **Special Considerations with R134a**

R134a has been shown to be nonflammable at ambient temperature and atmospheric pressure. However, tests under controlled conditions have indicated that at pressures above atmospheric and with air concentrations greater than 60 percent by volume, R134a can form combustible mixtures.

While it is recognized that an ignition source is also required for combustion to occur, the presence of combustible mixtures is a potentially dangerous situation and should be avoided.

Under no circumstances should any equipment be pressure tested or leak tested with air and R134a mixtures. Do not use compressed air for leak detection in R134a systems.

# **INTRODUCTION TO THE AC2880**

The AC2880 is a complete dual refrigerant management center featuring state-of-the-art electronic control with digital weight scale measuring of refrigerant. Operation of the AC2880 is intuitive and very easy to master. Operational functions of the AC2880 can be performed individually or in an automatic sequence.

This Operation Manual first describes each of the functions and then gives an overview of combining the functions into an automatic sequence. Some functions have options where the controller display will prompt the technician for input during the setup programming.

Following is an overview of the operation and features of the AC2880:

## FILL CHARGE CYLINDER

Liquid recycled or new refrigerant is quickly transferred from a cylinder on the rear of the AC2880 to the internal charge cylinder. Following the first setup filling or a calibration procedure, 1.1 lbs. more refrigerant than displayed is used due to priming of internal components.

## RECYCLE

Refrigerant is recovered from the A/C, impurities (particulates, oil, moisture and air) are removed and the refrigerant is stored in the internal charge cylinder. The recovery process stops when the AC2880 senses an 8 InHg vacuum at the A/C. A programmable wait time (minimum of two minutes) then starts. If pressure in the A/C rises during this time period due to vaporization of residual liquid refrigerant, the AC2880 will restart to recover this refrigerant. When the AC2880 stays off continually for the full wait time, the recovery procedure is complete.

### DEEP VACUUM

The length of time for the deep vacuum procedure is programmable. The time remaining is displayed during the deep vacuum procedure. An optional vacuum leak test and add oil function are available during the programming of the deep vacuum procedure. The technician is prompted for a Yes/No response to each. The vacuum leak test starts after the vacuum process is completed. The amount of time the vacuum is held is displayed so the technician can monitor the pressure for any increase due to a leak in the A/C. The add oil process prompts the technician to add oil after the vacuum and/or vacuum leak test procedure.

### PURGE AIR - DRAIN OIL

Excess air and recovered oil must be removed from the AC2880 after all refrigerant has been recovered from the A/C. Temperature and pressure readings are examined and air is released using the purge switch. Oil is drained into the oil drain bottle for measuring to determine the need to replenish the A/C.

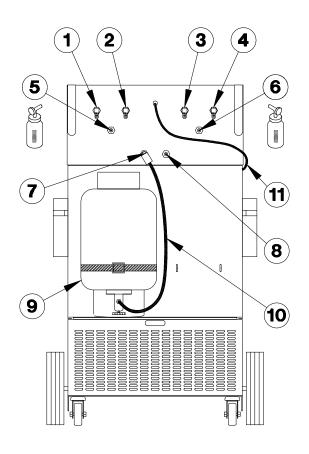
### STORED DATA

The AC2880 monitors filter life and will prompt the technician when filters need to be replaced. Recycled and charged refrigerant amounts are recorded and totaled during each A/C service procedure. These totals can be monitored to manage refrigerant usage. Refrigerant transferred directly into the charge cylinder from the fill port is not added to the total recycled refrigerant.

#### OVER CHARGE AMOUNT

A one ounce over charge is added during each charge procedure to compensate for refrigerant loss in the service hoses. This can be programmed to accommodate different operating conditions.

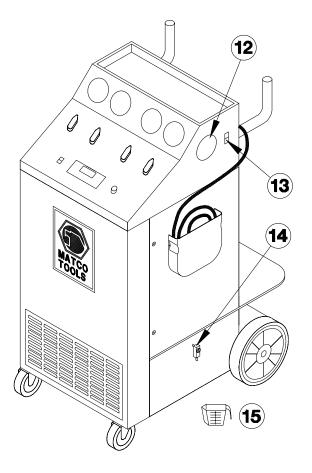
# CONFIGURATION





- 2 Port for R134a Low Side Blue Hose
- 3 Port for R12 High Side Red Hose
- 4 Port for R12 Low Side Blue Hose
- 5 Port for Oil Charge R134a High Side
- 6 Port for Oil Charge R12 High Side
- 7 Fill Port for R134a (Attach Anti-Blowback Valve end of Yellow Hose to port)
- 8 Fill Port for R12 (Attach Ball Valve end of Yellow Hose to port)
- 9 Cylinder of New Refrigerant
- Notes: Item 9 Cylinder of new or recycled refrigerant must be connected to put LIQUID refrigerant into the Fill Port.

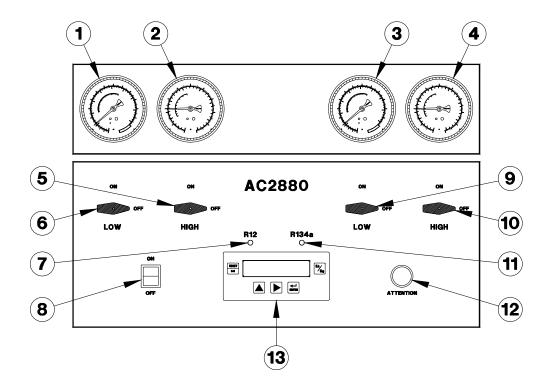
Item 7 & 8 - End of Yellow Hose with anti-blowback valve (R134a) or ball valve (R12) must be connected to the respective Fill Port to prevent release of refrigerant when the hose is disconnected.



10 Yellow Hose

- 11 Power Cord
- 12 Purge Gauge R134a
- 13 Purge Switch
- 14 Oil Drain Valve
- 15 Oil Measuring Cup

# **CONTROL PANEL**



- 1 Low Pressure Gauge R12
- 2 High Pressure Gauge R12
- 3 Low Pressure Gauge R134a
- 4 High Pressure Gauge R134a
- 5 High Side In/Out Valve R12
- 6 Low Side In/Out Valve R12
- 7 Function Indicator Light R12 selected with Cursor Key
- 8 Power Switch Illuminated
- 9 Low Side In/Out Valve R134a
- 10 High Side In/Out Valve R134a
- 11 Function Indicator Light R134a selected with Cursor Key
- 12 Attention Indicator Light
- 13 Keypad

# **KEYPAD FUNCTIONS**

RESET 0.0	RTI TECHNOLOGIES 2780/2880 SERIES	

Scroll Key

Press to scroll through function options or to increase numeric values shown on the display.

$\left[ \right]$	

Cursor Key F

Press to scroll flashing cursor on the display prior to numeric or Yes/No entries. Also used to select R12 or R134a refrigerant.



Enter Key

**y** Press to confirm data entry.

RESET
0.0

**Reset Key** Press to halt program sequence and return to Main Menu.



Units Key Press to o weight disp

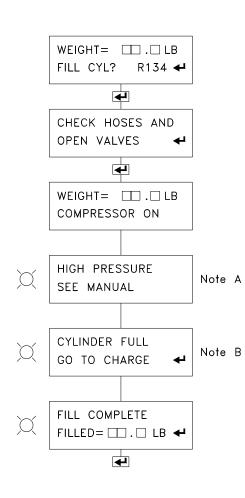
Press to change unit of measure for weight displays.

# - CAUTION -

Always use fingers to operate keypad.

Use of sharp objects will cause damage.

# FILL CHARGE CYLINDER



## **PROBLEMS**?

Refer to Page 19 should problems be encountered using the Fill Cylinder procedure.

Pressure differential between the cylinder of new refrigerant and the internal AC2880 charge cylinder greatly affect the efficiency and speed of the Fill Charge Cylinder procedure.

### \* \* \* EXTREMELY IMPORTANT \* \* \*

Always connect Yellow Hose (10) to Cylinder (9) **first** and **then** connect other end of hose with anti-blowback valve to Fill Port (7 or 8) on AC2880.

This procedure is used to quickly transfer refrigerant from a cylinder of recycled or new refrigerant into the AC2880 charge cylinder. The fill process will continue until the charge cylinder fills to 13 lbs. Press the [RESET] key during the fill process if a smaller total amount of refrigerant is desired.

1. Connect a cylinder of recycled or new refrigerant to the appropriate fill port on the rear of AC2880 using the yellow hose. An adapter is provided to permit connection to a cylinder of R134a having a 1/4 flare fitting.

Liquid refrigerant must be transferred into the charge cylinder. Therefore, connect to the liquid port of a DOT cylinder of recycled refrigerant and leave cylinder upright or connect to the port of new refrigerant and invert cylinder.

- 2. Open valve on cylinder connected to the fill port.
- 3. Turn on power.
- 4. Press [\*] key four times.
- 5. Observe displays as shown to the left and enter data when prompted.
- 6. Press [←] key to move from one display to the next.

# Data Entry & Error Messages

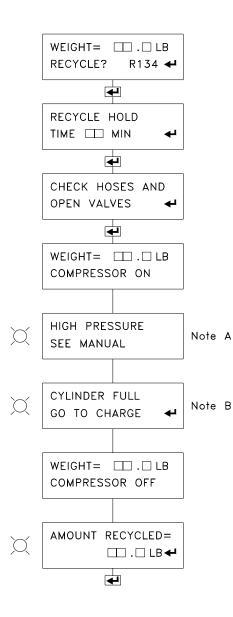
The fill process will stop if the cylinder of recycled or new refrigerant is emptied. Press the [RESET] key to return to the main menu.

#### HIGH PRESSURE - SEE MANUAL (Note A)

This message will be displayed periodically during the fill process. Do not be concerned as this is normal.

#### CYLINDER FULL - GO TO CHARGE (Note B)

If the charge cylinder fills to the maximum capacity of 17.5 lbs. during the fill process this message will be displayed. Press the  $[\leftarrow]$  key to return to the main menu and go to the charge procedure to transfer refrigerant to an A/C or an external cylinder.



# RECYCLE

- 1. Connect red and blue hoses to A/C and open valves.
- 2. Turn on power.
- 3. Press [\*] key one time.
- 4. Observe displays as shown to the left and enter data when prompted.
- 5. Press [←] key to move from one display to the next.

# **Data Entry & Error Messages**

## **RECYCLE HOLD TIME**

The AC2880 will recover refrigerant from the A/C until a stable vacuum is sensed for at least two minutes. Times greater than two minutes can be entered for the recycle hold time. The time entered will be saved as the default.

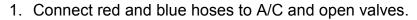
## HIGH PRESSURE - SEE MANUAL (Note A)

A condition of high pressure during the recycle process will cause this message to be displayed. Turn the power off and contact RTI Technical Service for assistance.

## CYLINDER FULL - GO TO CHARGE (Note B)

If the charge cylinder fills to a maximum capacity of 17.5 lbs. during the recycle process this message will be displayed. Press the [ $\leftarrow$ ] key to return to the main menu and go to the charge procedure to transfer refrigerant to an external cylinder.





- 2. Turn on power.
- 3. Press [\*] key two times.
- 4. Observe displays as shown to the left and enter data when prompted.
- 5. Press [←] key to move from one display to the next.

## **Data Entry & Error Messages**

#### A/C HAS PRESSURE - GO TO RECYCLE (Note A)

This message will be displayed if there is still refrigerant in the A/C. This refrigerant must be recycled before a deep vacuum can be performed.

### ENTER VACUUM TIME

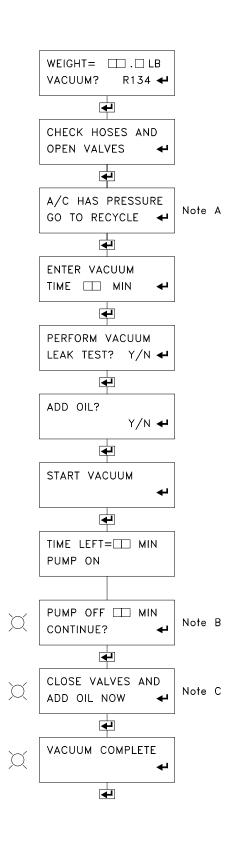
Sets total time a vacuum will be drawn on the A/C.

#### PERFORM VACUUM LEAK TEST (Note B)

Yes - process will stop to allow checking for leaks. The display will show total time since the vacuum pump shut off. A leak is indicated if by an increasing pressure on the gauges.

### CLOSE VALVES AND ADD OIL NOW (Note C)

Yes - process will stop so that oil can be added. Attach a filled oil charge bottle to the oil charge port. When prompted, close In/Out valves and open the valve on the bottle until the desired amount of oil is drawn into the A/C. Go immediately to the charge process.



$\begin{array}{cccccccccccccccccccccccccccccccccccc$	٥F	R12	R134a
Purge Chart	32 34 38 40 44 46 80 52 46 80 24 66 80 72 46 80 80 92 46 80 24 68 90 24 100 24 100 24 100 24 100 24 100 20 24 100 20 24 100 20 24 100 20 20 20 20 20 20 20 20 20 20 20 20 2	4468024791466924778888899991008258258379146692477888889999100825837058837005065838839999100825837058370111111111111111111111111111111111111	42 446 91 546 591 47 67 77 68 25 88 99 97 107 04 83 70 50 50 50 50 77 68 25 88 99 97 107 04 114 112 135 05 167 30 50 50 167 70 268 258 99 97 107 04 114 112 1135 145 157 30 50 50 147 77 78 88 88 99 97 107 01 114 112 1135 1157 37 30 50 50 114 1157 20 78 20 88 99 97 107 114 114 1157 1157 1157 1157 1157 1157

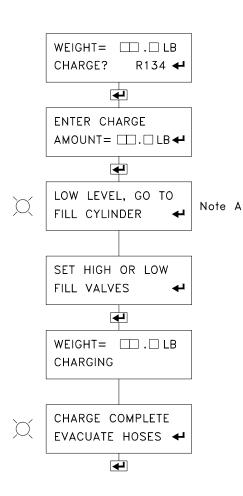
# **PURGE AIR - DRAIN OIL**

IMPORTANT: Air must be purged and oil drained after each recycle procedure. Failure to do so will cause excess air to be introduced into the A/C during charge and the AC2880 will fill with excess oil causing serious operational problems.

During automatic operation only, the AC2880 will stop after the deep vacuum procedure and display PURGE AIR AND DRAIN OIL as a reminder.

- 1. Turn on power.
- 2. Press the purge switch for five seconds.
- 3. **Slowly** open oil drain valve and drain oil into measuring cup. Leave valve open and go to next step.
- 4. Measure the room temperature.
- 5. Find the corresponding pressure for this temperature on the appropriate R12 or R134a purge chart.
- 6. Compare this pressure from the chart with that indicated on the purge gauge on the side of the AC2880. If the gauge shows a higher pressure, press the purge switch until the pressure drops to the pressure shown in the chart.
- 7. Close oil drain valve.
- 8. Press the purge switch for five seconds to complete the purge procedure.

**Purge Chart** 



# CHARGE

- 1. Connect red and blue hoses to A/C and open both hose valves.
- 2. Open either the low or high side In/Out valve on the AC2880 according to the A/C manufacturer's recommendation for charging the system.
- 3. Do not run the A/C during the charge procedure.
- 4. Turn on power.
- 5. Press [•] key three times.
- 6. Observe displays as shown to the left and enter data when prompted.
- 7. Press [⊷] key to move from one display to the next.

# Data Entry & Error Messages

## ENTER CHARGE AMOUNT

Enter the charge amount according to the manufacturer's specification.

## LOW LEVEL, GO TO FILL CYLINDER (Note A)

This message will be displayed if the amount of refrigerant in the AC2880 charge cylinder is less than the charge amount entered.

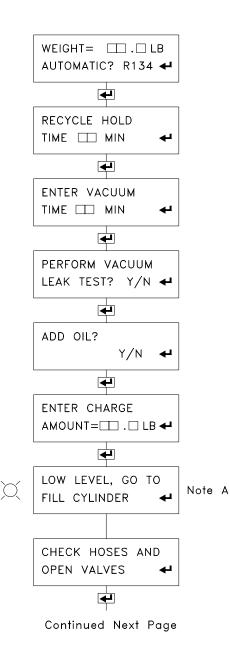
Press [ $\leftarrow$ ] key to return to the main menu. Go to the Fill Cylinder procedure to add refrigerant to the charge cylinder.

## **CHARGE COMPLETE - EVACUATE HOSES**

This screen is displayed at the completion of the charge procedure. Press [ $\leftarrow$ ] key to return to the main menu.

Both high and low In/Out valves on the AC2880 can now be closed. Start the A/C and monitor the performance.

Close both hose valves when A/C performance monitoring is complete. Disconnect hoses from A/C. A recycle procedure should be performed to evacuate refrigerant from the hoses.



# AUTOMATIC

- 1. Connect red and blue hoses to A/C and open valves.
- 2. Turn on power.
- 3. Press [←] key to select automatic mode.
- 4. Observe displays as shown to the left and enter data when prompted.
- 5. Press [←] key to move from one display to the next.

# **Data Entry & Error Messages**

## **RECYCLE HOLD TIME**

The AC2880 will recover refrigerant from the A/C until a stable vacuum is sensed for at least two minutes. Times greater than two minutes can be entered for the recycle hold time. The time entered will be saved as the default.

## ENTER VACUUM TIME

Sets total time a vacuum will be drawn on the A/C.

## PERFORM VACUUM LEAK TEST

Yes - process will stop to allow checking for leaks.

## ADD OIL

Yes - process will stop so that oil can be added.

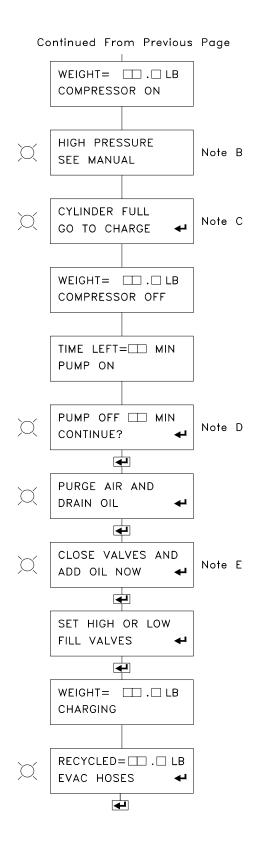
## ENTER CHARGE AMOUNT

Enter the charge amount according to the manufacturer's specification.

## LOW LEVEL, GO TO FILL CYLINDER (Note A)

This message will be displayed if the amount of refrigerant in the AC2880 charge cylinder is less than the charge amount entered.

Press [ $\leftarrow$ ] key to return to the main menu. Go to the Fill Cylinder procedure to add refrigerant to the charge cylinder.



# AUTOMATIC (Continued)

## HIGH PRESSURE - SEE MANUAL (Note B)

A condition of high pressure during the recycle process will cause this message to be displayed. Turn the power off and contact RTI Technical Service for assistance.

## CYLINDER FULL - GO TO CHARGE (Note C)

If the charge cylinder fills to a maximum capacity of 17.5 lbs. during the recycle process this message will be displayed. Press the [-] key to return to the main menu and go to the charge procedure to transfer refrigerant to an external cylinder.

## PUMP OFF DD MIN - CONTINUE (Note D)

Process will stop to allow checking for leaks if Y was entered at PERFORM VACUUM LEAK TEST on previous page. The display will show total time since the vacuum pump shut off. A leak is indicated if by an increasing pressure on the gauges.

## PURGE AIR AND DRAIN OIL

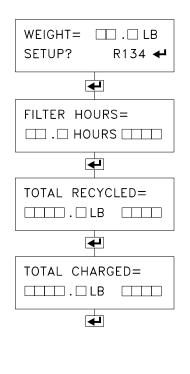
Process will stop so that air can be purged and oil drained. Refer to previous section on purging air and draining oil for instructions.

IMPORTANT: Air must be purged and oil drained. Failure to do so will cause excess air to be introduced into the A/C during charge and the AC2880 will fill with excess oil causing serious operational problems.

## CLOSE VALVES AND ADD OIL NOW (Note E)

Process will stop so that oil can be added if Y was entered at ADD OIL? on previous page. Attach a filled oil charge bottle to the appropriate oil charge port. When prompted, close In/Out valves and open the valve on the bottle until the desired amount of oil is drawn into the A/C.

# **STORED DATA**



CHANGE	
FILTERS	R134 🕂

- 1. Turn on power.
- 2. Press [•] key five times.
- 3. Observe displays as shown to the left.
- 4. Press [←] key to move from one display to the next.

# **Information Displayed**

## FILTER HOURS

This display shows total hours that refrigerant has been recycled through the filtering system of the AC2880.

After every 25 hours, the display (shown to the left) will remind the technician that one or both filters should be changed as soon as possible. This will be displayed continually, prior to the main menu until reset.

Refer to the section on maintenance for instructions on changing filters.

The CHANGE FILTER message should then be reset as follows:

While the FILTER HOURS message is displayed, press and hold the [+] key and then press the [RESET] key.

## TOTAL RECYCLED

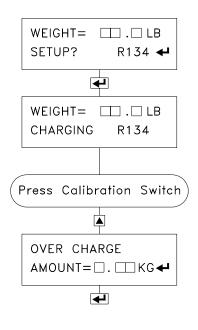
The total refrigerant recycled by the AC2880 is displayed. This total can not be reset to zero.

This total does not include refrigerant added directly to the charge cylinder through the rear fill port using the fill cylinder procedure.

## TOTAL CHARGED

The total refrigerant charged by the AC2880 is displayed. This total can not be reset to zero.

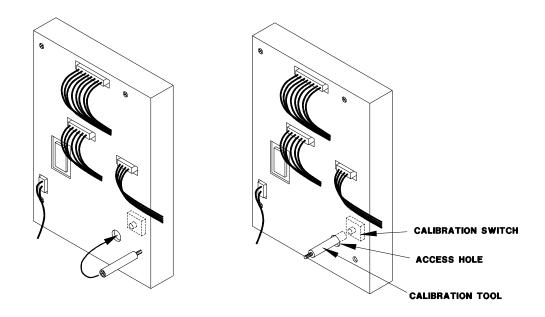
# SET OVER CHARGE AMOUNT



A one ounce over charge is added during each charge procedure to compensate for refrigerant loss in the service hoses. This can be programmed to accommodate different operating conditions as follows:

- 1. Remove rear panel by releasing the two black latches on each side of the AC2880.
- 2. Close all valves and turn on power.
- 3. Press [•] key five times.
- 4. Observe displays as shown to the left and refer to the illustration below for the following steps.
- 5. Look into the AC2880 from the R12 side and locate metal covered circuit board mounted on the underside of the top panel.
- 6. Remove calibration tool.
- 7. Insert un-threaded end of calibration tool into access hole and GENTLY PRESS the calibration switch.
- 8. Press [•] key one time.
- 9. Enter amount desired for over charge note the unit of measure is kg. (1 ounce = 0.02835 kg)
- 10. Press [←] key to accept the new value for over charge.
- 11. Replace calibration tool and rear panel.

Calibration Tool Part Number 360-81214-00



# MAINTENANCE

The AC2880 will provide many years of faithful service if properly maintained. Following is a checklist of items which will ensure the AC2880 performs at peak efficiency and presents an image to your customers that your shop performs high tech A/C service.

- Use tool tray for storage of tools and accessory adapters. Do not place tools on the front surface of the unit.
- □ Coil and store hoses in the storage pockets on the side of the AC2880 when not in use. Avoid hanging hoses over the top of the unit.
- □ Keep the exterior surfaces clean. Use a mild all purpose cleaner to wipe oil and dirt off the cabinet.
- Do not allow the unit to sit outside in direct sunlight or inclement weather. Excessive moisture may cause damage and will void the warranty.
- □ The AC2880 is not intended to be used for mobile A/C service where the unit is transported to customer sites. Excessive vibration will shorten component life.
- Be gentle when moving the AC2880 around the shop. Tip the unit and ease the front casters over any obstacles such as door jams and potholes.
- Periodically remove the rear cover and check for refrigerant leaks inside the AC2880 using a leak detector. A small leak found early will prevent future undetected loss of refrigerant.
- □ Use regulated, clean shop air to remove debris from the fins of the condenser coils. Be careful and do not disturb any internal components.
- Periodically remove front louvered panel and check oil levels in both compressors. Oil should be visible in the oil sight tube when the compressor is not operating. If oil is not visible, call RTI Technical Support 800-468-2321.
- □ Change filters when the display indicates a filter change is due.

# FILTER CHANGE

After every 25 hours, the display will remind the technician that filters should be changed as soon as possible. This will be displayed continually, prior to the main menu until reset. There are two filters on each side of the AC2880. The large inlet filters must be changed after every 25 hours while the smaller outlet filters must be changed after every 50 hours.

Turn power off and remove rear cover to change filters. The foam insulation on the smaller outlet filter must be removed from the old filter and installed on the new one.

Check for leaks after replacing filters.

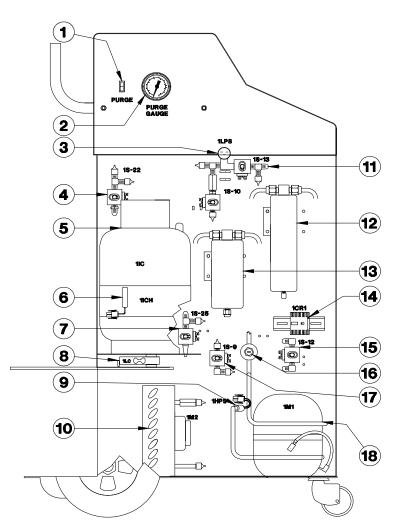
Reset the change filter message as described in the stored data section.

Inlet Filter P/N 026-80077-00

Outlet Filter P/N 026-80069-00

# PARTS LIST - R12 SIDE

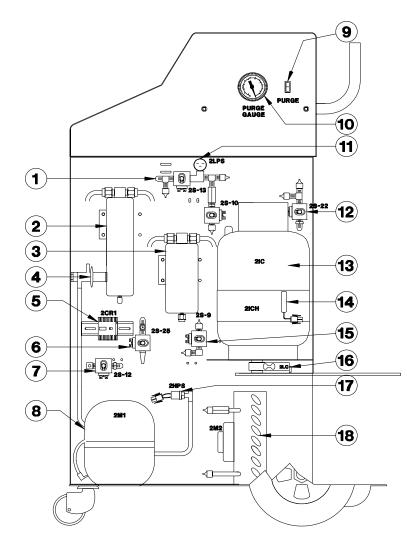
# AC2880



	P/N	DESCRIPTION
1	024-80035-00	Rocker Switch SPST (Mom-On)
2	026-80071-02	Purge Gauge 0-500 psig
3	360-81309-00	Low Pressure Switch 3psig - 8InHg
4	360-81436-00	Solenoid 1S22 Assy
5	360-81428-00	Internal Cylinder Assy (DOT)
6	360-81426-01	Assy Heater Belt 120V
7	360-81385-00	Solenoid 1S25 Assy
8	031-80000-00	Load Cell 35Kg
9	360-81307-00	High Pressure Switch 261 psig
10	360-80280-00	Condenser Assy
11	360-81434-00	Manifold Assy R12
12	026-80077-00	Combo Filter 3/8 Flare (Long)
13	026-80069-00	Combo Filter 3/8 Flare (Short)
14	024-80037-00	Contactor 1/2 HP 120V 3 NO & 1 NC
15	360-81381-00	Solenoid 1S12 Assy
16	360-81389-00	Tube Assy Compressor Inlet R12
17	360-81379-00	Solenoid 1S9 Assy
18	360-81356-01	Compressor Assy 120V

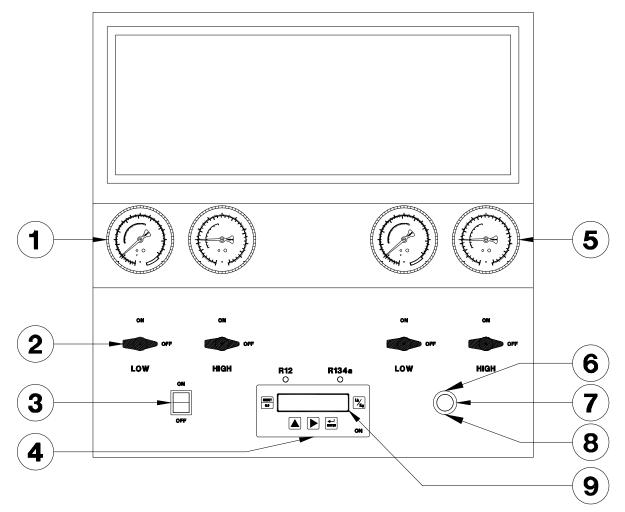
# PARTS LIST - R134a SIDE

# AC2880



	P/N	DESCRIPTION
1	360-81435-00	Manifold Assy R134a
2	026-80077-00	Combo Filter 3/8 Flare (Long)
3	026-80069-00	Combo Filter 3/8 Flare (Short)
4	360-81391-00	Tube Assy Compressor Inlet R134a
5	024-80037-00	Contactor ½ HP 120V 3 NO & 1 NC
6	360-81386-00	Solenoid 2S25 Assy
7	360-81382-00	Solenoid 2S12 Assy
8	360-81356-01	Compressor Assy 120V
9	024-80035-00	Rocker Switch SPST (Mom - On)
10	026-80071-02	Purge Gauge 0-500 psig
11	360-81309-00	Low Pressure Switch 3psig - 8InHg
12	360-81437-00	Solenoid 2S22 Assy
13	360-81428-00	Internal Cylinder Assy (DOT)
14	360-81426-01	Assy Heater Belt 120V
15	360-81380-00	Solenoid 2S9 Assy
16	031-80000-00	Load Cell 35Kg
17	360-81307-00	High Pressure Switch 261 psig
18	360-80280-00	Condenser Assy

# PARTS LIST - CONTROL PANEL - AC2880



	P/N	DESCRIPTION
1	026-80065-03	Low Gauge 30 InHg - 120 psig
2	022-80027-00	In/Out Valve 2-Way Open CCW
3	024-80040-00	Rocker Switch SPDT - Amber 125V
4	024-80059-00	Keypad Membrane
5	026-80071-03	High Gauge 0"-500 psig
6	025-80128-00	Lamp Holder w/Clear Bulb 120V
7	025-80131-00	Lens Assy Amber
8	025-80127-00	Clear Bulb Bayonet Base 120V
9	024-80067-01	Circuit Board (2780E/2880) 120V

# TROUBLESHOOTING FILL CYLINDER PROCEDURE

- The cylinder of new refrigerant should be at ambient temperature or greater for best performance of the Fill Cylinder procedure. Make sure the cylinder was not recently moved from an air-conditioned storage room to a warm work area. Place the cylinder on a block of wood if necessary to elevate it from a cool concrete floor. Application of a heat belt to the cylinder will greatly enhance the speed.
- 2. Verify that the cylinder of new refrigerant is up-side-down as shown in the figure on page 4 and that the cylinder valve is open.
- 3. If filling the Charge Cylinder from a DOT Cylinder, make sure the hose is connected to the liquid port and the DOT Cylinder is right-side-up.
- 4. If the yellow hose was connected to the Fill Port the first time the AC2880 was used, there may be excessive air in the AC2880 Charge Cylinder. At least 4 lbs. of refrigerant must be recovered/recycled into the AC2880 Charge Cylinder following the Recover/Recycle procedure on Page 6. During this process, the air in the AC2880 Charge Cylinder will be automatically purged.
- 5. Verify that the cylinder of new refrigerant has liquid refrigerant in it by shaking the cylinder or weighing the contents. A minimum of 4 lbs. of liquid is required.
- 6. Verify that the Yellow Hose is connected correctly from the Cylinder to the Fill Port.

R12 Side (Port 8) ...

The Fill Port is equipped with a valve core. A Depressor must be present in the end of the hose (see figure) closest to the shutoff valve. This end of the hose with the shutoff valve must be connected to fill port 8 on the AC2880.

The depressor in the hose may be adjustable, so extend the depth of the depressor by using needle-nose pliers.

Depressor

R134a (Port 7)

Make sure the end of the hose with the anti-blowback valve is connected to fill port 7.

There may be a machine fault if the above steps do not result in a successful increase of weight shown on the display after running the Fill Cylinder procedure for a minimum of 15 minutes.

Contact RTI Technical Support at 800-468-2321 (Ext.259) for help.