PRO-SET® AR2700 & AR2700M SERIES REFRIGERANT RECOVERY / RECYCLING SYSTEM

This Equipment has been certified by Underwriters Laboratories Inc.
to meet EPA's minimum requirements for Recovery equipment.

TO BE OPERATED
BY QUALIFIED
PERSONNEL ONLY

OPERATION MANUAL

AR2700 & AR2700M SERIES

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AR2700 & AR2700M Specifications

Models	AR2700 AR2700M	AR2700A AR2700MA	AR2700E AR2700ME
Compressor Type	2/3 HP oil less compressor		
Dimensions	22" W x 24.5" D x 42" H		
Weight	120 lbs (does not include tank weight)		
Operating Range	0˚C (32˚ F) to 49˚C (120˚)		
Power Source	115 VAC 60Hz 1Ph	220-240VAC 50/60Hz 1Ph	
Power Consumption	850 W		
Suction Pressure Gauge	-30 inch Hg to 125 PSIG		
Discharge Pressure Gauge	0 to 500 PSIG		
Filtration	16 cubic inch drier w/ moisture indicator, .7 micron oil separator		
Manual Control Valves	Ball Type Valves to control HI, LO, Recover, and Vacuum		
Charging Valve	12 VDC Solenoid Valve		
Construction	1" Heavy duty tubular frame construction 10" pneumatic wheels, 4.5" swivel casters		
Overload Protection	15A Thermal Breaker	10A Thermal Breaker	
High Pressure Shut-Off	30 bar (450 psig)		
Refrigerants*	R134a, R12, R22, R502, R404a, R402a, R401a, R407c, R409a		

* The AR2700, AR2700A, AR2700E does not contain a pump down valve and is meant for single refrigerant operation. The AR2700M, AR2700MJ, AR2700ME contains a pump down valve for mutiple refrigerant usage. Mixing of refrigerants will cause the user economic loss.

INTRODUCTION

Thank you for purchasing the CPS Pro-Set® AR2700 & AR2700M series refrigerant recovery / recycling / recharge unit. CPS is dedicated to give you the most reliable equipment to meet all your mobile refrigerant recovery/recycling requirements.

The following are features of the AR2700:

- Automatic programmable charging
- Lo side or Hi side or Hi / Lo side charging
- Non-restrictive heavy duty ball type control valves
- On board HI and LO gauges and valves for manifold function
- 16 cubic inch filter drier with moisture indicator
- .7 micron oil separator filter to collect and measure oil removed from the mobile A/C system
- 1" Heavy duty tubular steel frame with powder coated steel cabinetry
- Large 10" pneumatic wheels with 4.5" swivel casters for easy maneuverability
- R134a couplers and refill adaptors
- Can be dedicated to one of several refrigerants. See specification list for approved refrigerants
- Built in condenser for high ambient operation
- Built in evaporator to protect the compressor against flood-back
- AR2700M series includes a pump down valve for multiple refrigerant use
- Manual oil injection system (Removable)
- No maintenance, high speed 2 cylinder oil less compressor

To help you get a good start, please continue to carefully read the balance of this manual. This manual contains important information on the proper procedures for operating this equipment. Please pay close attention to the safety information, Warnings, and Cautions provided throughout this manual. Always remember "**Safety First**".

This equipment has been approved for the recovery of Class III, IV and V refrigerants by UL per the ARI740

GENERAL SAFETY INSTRUCTIONS

Only qualified service personnel should operate this unit. Most states, countries, etc… may require the user to be licensed. Please check with your local government agency.

DANGER- The recovery tank used with this unit contains liquid refrigerant. Overfilling of the recovery tank may cause a violent explosion resulting in severe injury or even death. ***Please carefully read Tank Parameters Setting section on page 4 of this manual. Do not proceed to use the unit until the tank settings have been properly set.***

DANGER- Avoid breathing refrigerant vapors and lubricant vapor or mist. Breathing high concentration levels may cause heart arrhythmia, loss of consciousness, or even cause suffocation.

DANGER- ELECTRICAL SHOCK HAZARD Always disconnect power source when servicing this equipment.

DANGER- EXPLOSION RISK. Do not recover flammable refrigerants.

CAUTION- All hoses may contain liquid refrigerant under pressure. Contact with refrigerant may cause frostbite or other related injuries. Wear proper personal protective equipment such as safety goggles and gloves. When disconnecting any hose, please use extreme caution.

CAUTION- Avoid breathing refrigerant vapors and/or lubricant mist. Exposure may irritate eyes, nose, throat, and skin. Please read the manufacturers Material Safety Data Sheet for further safety information on refrigerants and lubricants.

CAUTION- To reduce the risk of fire, avoid the use of extension cords thinner than NO. 14 awg. (1,5mm^2) to prevent the overheating of this cord please keep length to a minimum.

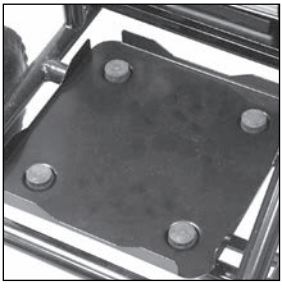
CAUTION- Do not use this equipment in the vicinity of spilled or open containers of gasoline or other flammable substances. Make certain that all safety devices are functioning properly before operating the equipment.

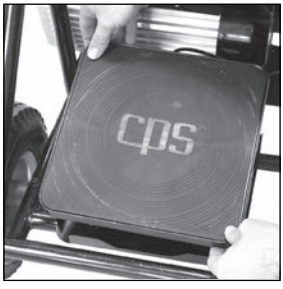
CAUTION- This equipment should be used in locations with mechanical ventilation that provides at least 4 air changes per hour or the equipment should be at least 18" above the floor.

This equipment is intended for use of one refrigerant. Mixing of different refrigerants will cause your recovered supply of refrigerant to become contaminated.
Note: Ecomonic loss will occur when disposing of mixed refrigerants.

UNIT PREPARATION

Unpack unit. Locate the scale platform contained in the accessoy box. Place scale platform onto the craddle as shown in picture below. Plug cable into scale port.





Install user (**purchased separately**) supplied tank onto scale platform. CPS sells **CRX50T** (50# DOT Tank) and **CRX390T** (92# DOT Tank) tanks that can be used with this unit. **Make sure the tank is centered on scale platform and not touching the frame or any hoses.**

Unit Consists Of:

- Pro-Set® model AR2700 R/R/R unit
- Power cord set
- 8' service hoses
- Set of R-134a service couplers
- R-134a tank refill adaptors (2)
- Vacuum pump
- Magnetic tank thermometer
- Tank purge valve w/ gauge
- Operation manual
- Manual oil injection system

UNIT PREPARATION

Setting The Tank Parameters

The **Empty Tank Weight** (ETW) and **Maximum Refrigerant Weight** (MRW) of the user provided recovery tank needs to be inputted into the AR2700 electronic database. The following are the steps required to set the ETW and MRW into the AR2700 memory.

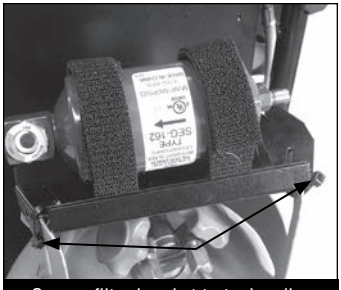
DANGER!!!! Failure to set the Tank Parameters correctly can lead to overfilling of the on board recovery cylinder. SEE GENERAL SAFETY INSTRUCTIONS for results of overfilled tank.

1. Turn the unit on while pressing the **GO/HOLD** key unit until the LCD displays the letter "**U**" on the upper left hand corner.
2. Press the "**LB/KG**" key to select between **IMPERIAL** and **METRIC** units.
3. Press the **GO/HOLD** key.
4. The display shows the letter "**E**" on the upper left hand corner for a couple of seconds.
5. The display shows the default (**ETW**) for a 50 pound tank in the units selected. (SEE CHART BELOW)
6. The user can then use the **UP ARROW** or **DOWN ARROW** keys to adjust the (**ETW**) of the tank being used.
7. The user then pushes the **GO/HOLD** key again.
8. The display shows the default Maximum Refrigerant Weight for a 50 pound tank in the units selected above.
9. The user pushes the **UP ARROW** or **DOWN ARROW** keys to adjust the (**MRW**).
10. The user pushes the **GO/HOLD** key again.
11. The display shows "**DONE**".
12. The user pushes the **GO/HOLD** key again to go to the normal display or turns the machine **OFF**.

The following table are ETW and MRW settings for tanks sold by CPS. Always refer to the tank manufacturers information stamped into the collar of the tank.

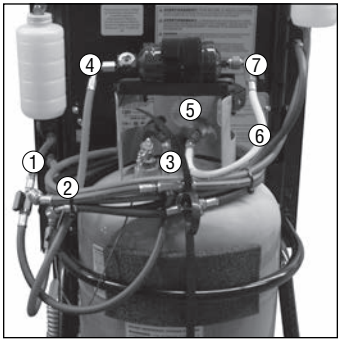
CPS Tank	ETW	MRW
CRX400T (50 lbs)	28 lbs, 10 oz	38 lbs, 0 oz
CRX390T (90 lbs)	50 lbs, 8 oz	68 lbs, 0 oz
CPS 40L (EU)	37 lbs, 15 oz	68 lbs, 5 oz
*ETW= Tare Weight (TW) on Tank Collar, **MRW=Water Capacity (WC) of tank x 0.80		

Installing Filter Bracket, Filter Drier Associated Hoses



Secure filter bracket to tank collar with the use of the provided nylon ties

Install Universal Filter / Tank bracket onto top of tank. Use the provided wire ties to hold the Universal Filter / Tank bracket to the collar of the tank. Install filter drier onto Universal Filter / Tank bracket. Use Velcro straps to secure the filter drier to the Universal Filter / Tank bracket.



The unit has three hoses that need to be installed: Blue Hose with Ball Valve, Red Hose with Ball valve, and short red hose. Connect both the Blue and Red hoses with Ball Valves to the back of the AR2700 as shown in the picture. Connect the other end of the Blue Hose to the Tank Vapor Port. Connect the other end of the Red Hose with ball valve to the Filter Drier outlet port. Install the Short Red hose from the Tank Liquid Port to the Filter Drier Inlet port as shown in the picture. Use a 9/16" wrench to tighten this fittings. Open all Tank and Hose valves.
Check for leaks.

Unit Guide:

1. Blue hose with BV
2. Red hose with BV
3. Tank vapor valve
4. Filter outlet
5. Tank liquid valve
6. Short red hose
7. Filter inlet

Check vacuum pump oil level. Add oil if necessary. Slide vacuum pump out on its tray for easier access.

Check tool drawer for accessories such as tank refill adaptors and low side charging adatpor.

Proceed to Tank Refill Function on page 10. It will be necessary to fill the refrigerant storage tank before charging operation can take place.

OPERATION

Turn main power switch ON. The power switch is located on back left hand corner of unit. The AR2700 LCD will show the current refrigerant amount in storage tank. Open both liquid and vapor tank and hose valves.

Manifold Function:

1. Connect **HI** and **LO** side service hoses to A/C system. Open service hose valves. Keep both **HI** and **LO** manifold valves in the closed (**I**) position.
2. Start A/C system. Gauges will show system pressures of the A/C.

Recover Function:

Oil Drain Port

1. Connect **HI** and **LO** Side service hoses to A/C system. Open the service hose valves.
2. Push the **TARE** key on Scale keypad unit until zero reading is shown.
3. Open (**O**) both the **HI** and **LO** manifold valves.
4. Turn **COMPRESSOR** switch to **ON**
5. Turn the **RECOVER VALVE** to open (**O**) position.
6. Monitor the gauges for A/C system pressure.
7. Once below -5" hg. vacuum, Close (**I**) the **RECOVER**, **HI** and **LO** manifold valves.
8. Turn the **COMPRESSOR** switch to **OFF**. Wait 5 minutes. If pressure rises above 0 PSIG, repeat **Step 4-8**.
9. Record weight on LCD. Push the **TARE** key to return scale to the current refrigerant weight.
10. Slowly open oil drain valve until oil/refrigerant mixture is released into the oil drain bottle. If no oil is draining, close oil drain valve. **Recovery Complete.**

Vacuum Function: Before running the vacuum pump, the A/C system must have a system pressure of 2 PSIG or lower. If pressure exists, go to Recover Function first.

1. Connect **HI** and **LO** side service hoses to A/C ports. Open the service hose valves.
2. Open (**O**) both the **HI** and **LO** manifold valves.
3. Turn the **VACUUM PUMP** switch to **ON**.
4. Open (**O**) the **VACUUM** valve.
5. Run vacuum pump until desired vacuum level is achieved.
6. Close (**I**) the **VACUUM**, **HI** and **LO** manifold valves.
7. Turn the **VACUUM PUMP** switch to **OFF**. **Vacuum Complete.**

Oil Injection Function: Oil Injection can be performed once vacuum is complete. Make sure there is a minimum of 6 ounces in the Oil Injection Bottle to ensure no air gets back into the A/C system.

1. Open the manifold valve (**HI** an/or **LO**) to choose the charge path into the car A/C system.
2. Open the oil injection valve. **Note: the oil level in the oil injection bottle.**
3. Once the required amount of oil has been injected, close injection valve.
4. Proceed immediately to **Charge Function**.

Oil Injection Port

Charge Function: Before running the charge function, the A/C system should be in a deep vacuum.

1. Connect **HI** and **LO** side service hoses to A/C system. Open the service hose valves.
2. Open the manifold valve (**HI** an/or **LO**) to choose the charge path into the car A/C system.
3. Push the **SET**/**RESET** key on scale keypad until the LCD displays "**READY**" and charge amount.
4. Push **LB**/**KG** Key on scale keypad to select **LBS** or **KGS** units of measure.
5. Use the **UP** or **DOWN** arrow keys to set the charge weight. **Note: If the unit alarms, the remaining refrigerant capacity has been reached**.
6. Push the **GO**/**HOLD** key. The unit will begin to automatically charge the A/C system.
7. The LCD will show refrigerant being dispensed.
8. Once amount shown on LCD meets the programmed amount, the charging will automatically stop and the unit will beep. **Go to Step 9**.

If the programmed charge weight is not reached (The unit will alarm if there is no refrigerant flow for more than 3 minutes) on LCD follow steps A-D:

A. Close (**I**) the **HI** manifold valve.
B. Start A/C System.
C. Open (**O**) **LO** manifold valve.
D. Once programmed charge amount is reached, the charging will automatically stop and the unit will beep.

The following is hose purge sequence to ensure no residual liquid refrigerant is left in the service hoses:

9. Remove the **HI** side service hose from the A/C system.
10. Start A/C System.
11. Open (**O**) both **LO** and **HI** manifold valves. Once **LO** and **HI** manifold gauges are reading the same pressure, hose purge is complete.
12. Disconnect **LO** side service hose from A/C System.

CHARGE CONT. / TANK REFILL OPERATION

Tank Refill Function:

1. Turn main power switch **ON**. The power switch is located on back left hand corner of unit.
2. Connect **HI** side service hoses to refrigerant supply tank. Keep supply tank upright.
3. Open the **HI** side service hose valve. Open supply tank valve.
4. Push the **GO/HOLD** key on scale keypad. LCD will show available refrigerant space in the tank. Open **HI** side manifold valve
5. Turn the **COMPRESSOR** switch to **ON**. Open (**O**) the **RECOVER** valve.
6. Turn supply tank upside down after 2 minutes of refilling.
7. The LCD will begin to count down. If the LCD countdown reaches zero, the unit will alarm with a (**RF done**) message on the LCD. The compressor will be shut off and the refill function is complete.
8. Close valve on supply tank. Close (**I**) the **RECOVER** and **HI** manifold valves.
9. Turn the **COMPRESSOR** switch to **OFF**.
10. Push the **GO/HOLD** key to return scale function to normal operation.

If the LCD countdown stops in Step 5, the supply tank is empty. Replace supply tank and continue from Step 5 or go to Step 7 to shutdown the refill function.

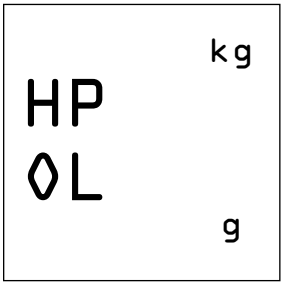
Pump Down Function (AR2700M Series Only):

1. Make sure service hoses are disconnected from AC system.
2. Turn the low and high side manifold valves to the open position.
3. Locate the pump down lever on the back of the machine and move to the **Pump Down** position (**UP**) as shown in the picture.
4. Close the liquid valve on tank.
5. Turn the compressor **ON** and turn the recovery valve to the open position.
6. Push the **SET**/**RESET** key on scale keypad.
7. Use the **UP** or **DOWN** arrow keys to program 10 lbs or 5 kgs.
8. Push the **GO**/**HOLD** key to initiate filter pumpdown.
9. Monitor the gauges until they read 10" Hg vacuum.
10. If the unit begins to beep before you have reached 10" Hg vacuum push reset and repeat steps 7-10.
11. Once the machine reads 10" Hg vacuum turn the compressor off, turn vacuum valve to the open position and start vacuum pump.
12. Run vacuum pump for a minimum of 10 min to remove any residual refrigerant.
13. Turn the vacuum pump switch **OFF** and close (**I**) the vacuum and compressor manifold valves. Pumpdown is now complete. Disconnect hoses from the tank. The unit is now ready for a new tank of an approved refrigerant. Please make sure to return the pumpdown valve to the normal position.

Pump Down Position (UP)

TROUBLE SHOOTING / OPERATION

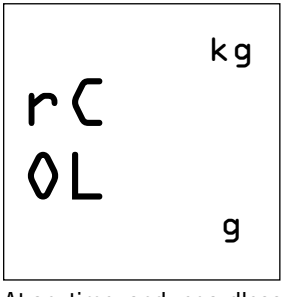
High Pressure Indication - During recovery or tank refill if a high pressure condition trips the HP limit switch, the compressor relay is deactivated, an alarm sounds and the screen shown below is displayed.



Solution: Check that both tank valves and both tank hose valves are open.

Solution: Run the air purge routine. Presence of air in recovery tank can cause high pressure to exist.

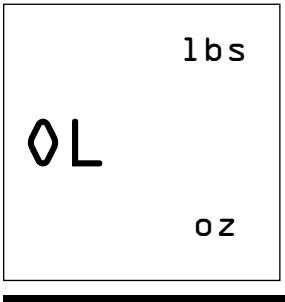
Tank Overfill Indication - During recovery if the weight of the refrigerant in the tank exceeds the maximum refill refrigerant weight the compressor relay is deactivated and power is disconnected from the compressor. The message below is displayed and the alarm is sounded.



Solution: Make sure tank settings were properly inputted.

Solution: Run Charge mode, Charge 10 lbs. of refrigerant into an evacuated cylinder. Save for future use.

At anytime, and regardless of the units chosen or the level of tare, if more than 100 kg or 220.5 lb is placed on the weighing platform, an overload message is displayed as shown below.



Solution: Make sure the tank used when full will not exceed 220 lbs maximum.

Solution: Check scale calibration

Compressor Fails To Start

Unit's Compressor Fails to Start - If the compressor is unequalized, it may not start. To equalize, open oil drain valve for 10 seconds then close. Try restarting compressor.

Recycling Maintenance - NCG Purge Procedure

It will be necessary to purge the recovery tank of non-condensable gases (NCG's). The NCG's are picked up from leaks in a/c systems when performing the Recovery Function. The best time to check for purging is first thing in the morning before using the unit or 30 minutes after the last Recovery operation. The following is a step by step of the air purge procedure:

1. Read the tank temperature via the provided magnetic thermometer.
2. Read the pressure on the purge valve assembly mount on the tank.
3. Use the NCG's purge table below to determine if the refrigerant in the recovery tank needs to be purged of NCG's. See Examples 1 and 2.
4. **If purging is required**:

A. Open the purge valve for 15 seconds to vent the NCG's. Then close valve.

B. Read purge gauge to see if the pressure of the tank falls below the NCG Gases purge table. If no, repeat step 4A.

Example 1
R-134 Tank Temperature = 76 F
R-134 Tank Pressure = 86 psig

Maximum Pressure (from Table)= **90.3** psig
No NCG purging required.

Example 2
R-134 Tank Temperature = 88 F
R-134 Tank Pressure = 120 psig

Maximum Pressure (from Table)= **110.7** psig
Purge NCG's until Tank Pressure is below 110.7 psig.

Maximum Refrigerant Vapor Pressure Chart (Temp F/C vs. Pressure psig)

Temperature		Refrigerant Vapor Pressure (psig)								
F	C	R-12	R-134a	R-22	R-502	R-404a	R-402a	R-401a	R-407c	R-409a
32.0	0.0	40.1	37.8	67.5	78.4	82.3	88.3	37.9	68.2	37.6
34.0	1.1	41.7	39.5	70.1	81.3	85.4	91.6	39.6	73.4	39.2
36.0	2.2	43.4	41.3	72.8	84.3	88.5	95.0	41.3	79.0	40.9
38.0	3.3	45.2	43.2	75.6	87.4	91.8	98.5	43.2	83.1	42.7
40.0	4.4	46.9	45.1	78.5	90.5	95.1	102.1	45.0	86.5	44.5
42.0	5.6	48.8	47.0	81.5	93.8	98.5	105.7	47.0	89.5	46.3
44.0	6.7	50.7	49.1	84.5	97.0	101.9	109.5	49.0	93.1	48.2
46.0	7.8	52.7	51.1	87.6	100.4	105.5	113.4	51.0	96.3	50.2
48.0	8.9	54.7	53.3	90.7	103.9	109.2	117.3	53.1	101.0	52.2
50.0	10.0	56.7	55.5	94.0	107.4	112.9	121.4	55.3	104.5	54.3
52.0	11.1	58.8	57.7	97.3	111.0	**119.0**	**130.0**	**70.0**	**108.2**	**73.6**
54.0	12.2	61.0	60.1	100.8	114.8	**123.0**	**134.0**	**72.0**	**112.3**	**76.2**
56.0	13.3	63.2	62.3	104.3	118.6	**127.0**	**139.0**	**75.0**	**116.5**	**78.9**
58.0	14.4	65.4	65.0	107.9	122.4	**131.0**	**143.0**	**78.0**	**120.7**	**81.6**
60.0	15.6	67.7	67.5	111.6	126.4	**135.0**	**148.0**	**80.0**	**124.9**	**84.5**
62.0	16.7	70.1	70.1	115.4	130.4	**140.0**	**152.0**	**83.0**	**129.2**	**87.3**
64.0	17.8	72.5	72.7	119.3	134.6	**144.0**	**157.0**	**86.0**	**133.5**	**90.3**
66.0	18.9	75.0	75.5	123.2	138.8	**149.0**	**162.0**	**89.0**	**138.2**	**93.3**
68.0	20.0	77.6	78.3	127.3	143.2	**154.0**	**167.0**	**92.0**	**143.0**	**96.4**
70.0	21.1	80.2	81.2	131.4	147.6	**158.0**	**170.4**	**95.0**	**147.6**	**99.5**
72.0	22.2	82.9	84.2	135.7	152.2	**163.0**	**178.0**	**99.0**	**152.2**	**102.8**
74.0	23.3	85.6	87.2	140.0	156.8	**168.0**	**183.0**	**102.0**	**157.1**	**106.0**
76.0	24.4	88.4	90.3	144.5	161.5	**174.0**	**189.0**	**105.0**	**162.0**	**109.4**
78.0	25.6	91.3	93.5	149.0	166.3	**179.0**	**194.0**	**109.0**	**168.0**	**112.9**
80.0	26.7	94.2	96.8	153.6	171.2	**184.0**	**200.0**	**112.0**	**174.1**	**116.4**
82.0	27.8	97.2	100.2	158.4	176.2	**190.0**	**203.6**	**116.0**	**180.6**	**120.0**
84.0	28.9	100.2	103.6	163.2	181.4	**195.0**	**212.0**	**119.0**	**186.6**	**123.7**
86.0	30.0	103.3	107.1	168.2	186.6	**201.0**	**218.0**	**123.0**	**192.2**	**127.4**
88.0	31.1	106.5	110.7	173.2	191.9	**207.0**	**224.0**	**127.0**	**198.4**	**131.2**
90.0	32.2	109.8	114.4	178.4	197.4	**213.0**	**230.0**	**131.0**	**204.6**	**135.1**
92.0	33.3	113.1	118.2	183.7	202.9	**219.0**	**237.0**	**135.0**	**210.6**	**139.1**
94.0	34.4	116.5	122.1	189.1	208.6	**225.0**	**244.0**	**139.0**	**216.6**	**143.2**
96.0	35.6	120.0	126.1	194.6	214.3	**232.0**	**250.0**	**143.0**	**222.6**	**147.4**
98.0	36.7	123.5	130.1	200.2	220.2	**239.0**	**257.0**	**148.0**	**228.6**	**151.6**
100.0	37.8	127.2	134.3	205.9	226.2	**245.0**	**264.0**	**152.0**	**234.6**	**156.0**
102.0	38.9	130.9	138.5	211.8	232.3	**252.0**	**271.0**	**156.0**	**240.7**	**160.4**
104.0	40.0	134.7	142.9	217.7	238.5	**259.0**	**279.0**	**161.0**	**246.8**	**164.9**
106.0	41.1	138.5	147.3	223.8	244.9	**266.0**	**286.0**	**166.0**	**252.9**	**169.5**
108.0	42.2	142.4	152.8	230.0	251.3	**274.0**	**294.0**	**170.0**	**259.0**	**174.2**
110.0	43.3	146.4	156.5	236.4	257.9	**281.0**	**302.0**	**175.0**	**265.1**	**179.0**

Bold - indicates liquid pressure due to blend

Maintenance- Filter Drier Change Procedure

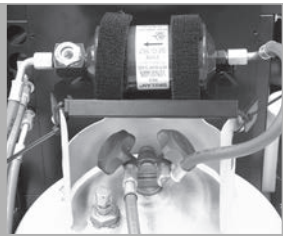
The AR2700 series is equipped with 16 cubic inch filter drier with moisture indicator. This filter should be replaced when the indicator shows **Caution** or **Wet**.

Filter Indicator

For the AR2700M series, the Pump Down instructions on page 10-11 can also be used to change the filter.

Replace the filter drier as follows:

1. Close Tank Liquid Valve.
2. Push the **SET** key on the keypad.
3. Use **UP**/**DOWN** keys to set charge amount to 2 lbs.
4. Push the **GO** key.
5. Push the **COMPRESSOR** switch to **ON**.
6. Turn the **RECOVER** valve to open (**O**) position.
7. Turn the **HI** and **LO** manifold valves to open (**O**) position. The refrigerant in the filter drier is now being recovered.
8. After 5 minutes, Check the **HI** and **LO** gauges to see if a vacuum has been reached. If vacuum has not been reached, continue running.
9. Once a vacuum has been reached, close (**I**) the **RECOVER**, **HI** and **LO** manifold valves.
10. Turn the **COMPRESSOR** switch to **OFF**.
11. Push the **RESET** key on the keypad.
12. The filter has now been pulled into a vacuum and can be safety removed and replaced. Replace the filter with **CPS p/n ARXF2**. Make sure the arrow on the new filter drier is pointing away from the tank liquid port.

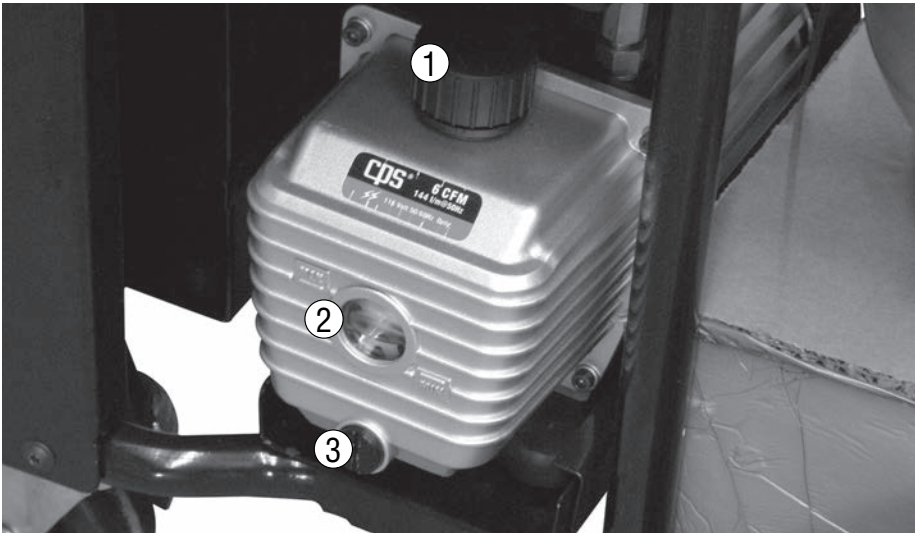


13. Open tank liquid valve and check for leaks.
14. Filter change is now complete.

MAINTENANCE

Additonal Maintenance

1. Check Vacuum Pump Oil level before using the unit. If level is low, add. If oil turns yellowish-brown, change oil.
2. Check service hose gaskets and o-rings for wear. Replace if necessary.
3. Check o-ring seal in Couplers for wear. Replace if necessary.
4. Check to make sure the oil drain system is function. Open drain valve and check for failure to perform the oil drain function after each recovery, could lead to excessive oil in the compressor and eventual compressor slugging.



1 - Exhaust / Refill Cap **2 -** Oil Sightglass **3 -** Oil Drain

Interconnection Hoses, Service Hoses and Coupler Maintenance

The AR2700 series uses brass to brass seal type fitting on the ends of the internal interconnecting hoses. No hose gasket maintenance is required on the brass to brass type of connections. Periodically inspect the refrigerant hose assembly, both service hose ends and both service couplers (if used) inner O-ring. Replace the component(s) if excessive wear or leakage is observed. Periodically leak-check all hose connection points, hose ball valves, and service couplers (if used). Since this unit does pull a vacuum in the recovery process, excessive Non-Condensable Gases (NCG's) could be sucked into the system and placed in the storage tank.

PARTS LIST

CPS P/N	Description
30-784	Low side gauge
30-785	High side gauge
39-020	115V 6” fan
39-021	230V 6” fan
54-100	Spare oil botte
AR2788SX3	Scale module
AR2788SX4	AR2788S / AR2700 compressor - 115V
AR2788SX5	AR2788S / AR2700 compressor - 230V 50Hz
AR2788SX7	Regulator, set at 50 PSIG
AR2788SX8	Discharge oil seperator
AR2788SX11	AR2788S / FA1234 tank liquid to filter hose
AR2788SX17	Black scale patch cord
AR2788SX28	Oil injection assembly
AR2788SX29	Tank filter bracket / straps
AR2788X14A	1/2” ACME tank refill adaptor
AR2788X14B	1/4” SAE tank refill adaptor
AR2788X25	Scale PCB
AR2788X32	15 amp breaker 115 VAC
AR2788X33	10 amp breaker 240 VAC
AR2788X34	ON-OFF main power switch
AR2788X40	6 ft. power cord 115 VAC
AR2788X41	6 ft. power cord 240 VAC - Europe
AR2788X45	High pressure switch 450 PSI
AR2788X53	IEC heater blanket / VAC pump outlet
AR2788X57	Gauge line repair kit
AR2788X59	Magnetic door latch
AR2788X64	4” caster with brake
AR2788X65	10” wheel

CPS P/N	Description
AR27XHB115	115 volt 300 watt heater blanket
AR27XHB230	230 volt 300 watt heater blanket
ARH63-A1	Tank vapor hose
ARH64-A1	Tank liquid to filter IN hose
ARH65-A1	Tank filter OUT to liquid feed hose
ARH68-A1	8’ Blue service hose
ARH69-A1	8’ Red service hose
ARX27CSV	Charging solenoid valve
ARX27DB	Discharge block assembly
ARX27MDB	Discharge 4 valve block (M units only)
ARX27MNF1	HI and LO manifold block
ARX27MNF2	Rec / VAC / Charge block with solenoid valve
ARX27PCB	AR2700 PCB
ARX27PS	AR2700 power supply
ARXF2	16 cu. filter with moisture sight glass
CRX390T	92 lb recovery tank
CRX400T	50 lb recovery tank
FA1234X5	AR2788S(II) FA1234 oil drain bottle
FA1234X39	IEC inlet, screw mount
QCH90	134A high side service coupler
QCL90	134A low side service coupler
VP6SE-FA	Vacuum pump 6 CFM 50 micron - 230V
VP6SU-FA	Vacuum pump 6 CFM 50 micron - 115V
VPOG	1 gallon vacuum pump oil
VPXF15	Vacuum pump fuse
VPXODP	Vacuum pump oil drain plug
VPXOMP	Vacuum pump exhaust cap

NOTES

WARRANTY / CONTACT INFORMATION

WARRANTY & REPAIR POLICY

CPS Products, Inc. guarantees that all products are free of manufacturing and material defects to the original owner for one year from the date of purchase. If the equipment should fail during the guarantee period it will be repaired or replaced (at our option) at no charge. This guarantee does not apply to equipment that have been altered, misused or solely in need of field service maintenance. All repaired equipment will carry an independent 90-day warranty. This repair policy does not include equipment that is determined to be beyond economical repair.

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