

TECO Coolant Re-Charge Instructions

RA-200, RA-240, RA680, RA2000, TR5, TR10, TR15, TR20, TR30 & TR60

- 1) Remove Chiller Top Cover.
- 2) Determine if the system is completely discharged by unscrewing the Schrader valve cap and press the pin inside. (See Picture.1).
- 3) Properly and completely discharge the line through the Schrader valve and follow the steps below.
 - a.) You will need to replace the inline filter. To remove the filter, cut the capillary pipe at the end of the filter-heat the filter at the joint and remove the old filter.(See Pict. 2)
 - b.) The new filter will be welded with the copper pipe and with the capillary pipe. When reattaching the capillary pipe inside the filter do not slide the capillary pipe more than 5 mm. Weld (Solder) the capillary pipe. (See Pict. 3)
- Note:** TR30 and TR60 owners do not have an inline filter so you can go directly to step 4. (See Pict. 8)
- c.) TR5-TR10-TR15-TR20 owner can go to step 4..
- d.) RA owners must cut dead-end pipe that exits from compressor and insert a Schrader valve to charge their chillers (See Pict.4 and Pict.5).

Note: when this valve is welded, unscrew the pin inside with cap because the heat will break the small components inside.

- 4) Voiding (vacuum) the System.
Connect vacuum pump to Schrader valve and let it vacuum for about 30-45 minutes.
Note: Install a valve between the vacuum pump and Schrader valve (for ex. Tap valve) in order to prevent air suction when vacuum pump is disconnected. (See Pict.6 and Pict.7)
- 5) When the void (vacuum) is complete, close the tap valve, disconnect the vacuum pump. Attach the refrigerant gas cylinder. Place the gas cylinder on an accurate scale and write down the cylinder weight.
- 6) Read gas in grams on compressor/chiller label and then open the tap valve to fill the compressor. Charge until the proper weight has exited the cylinder and close the tap valve.

Chiller Model Coolant Requirement:

TR5 --> 135g of R134a

TR10 --> 185g of R134a

TR15 --> 195g of R134a

TR20 --> 195g of R134a

TR30 --> 430g of R22

TR60 --> 585g of R22

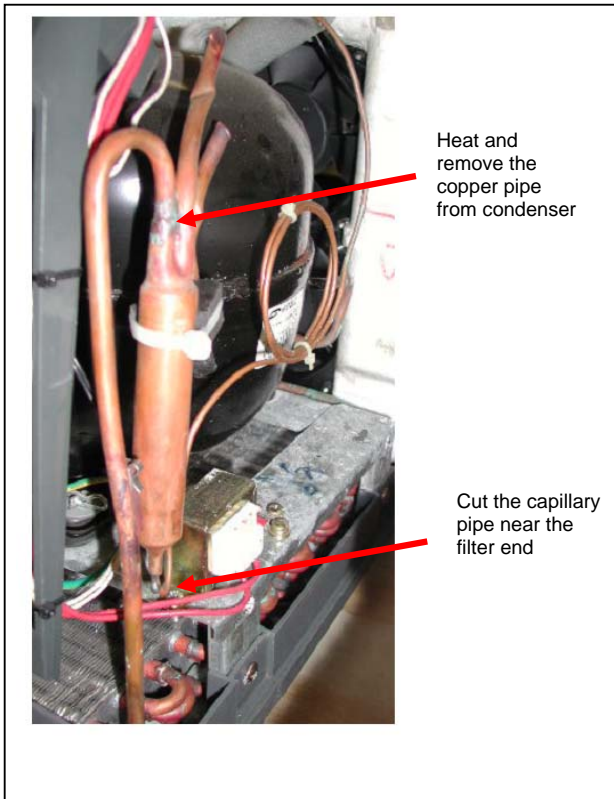
- 7) Disconnect all pipes and put the cap on the Schrader valve.

8) Check all joint welds with gas leak detector.

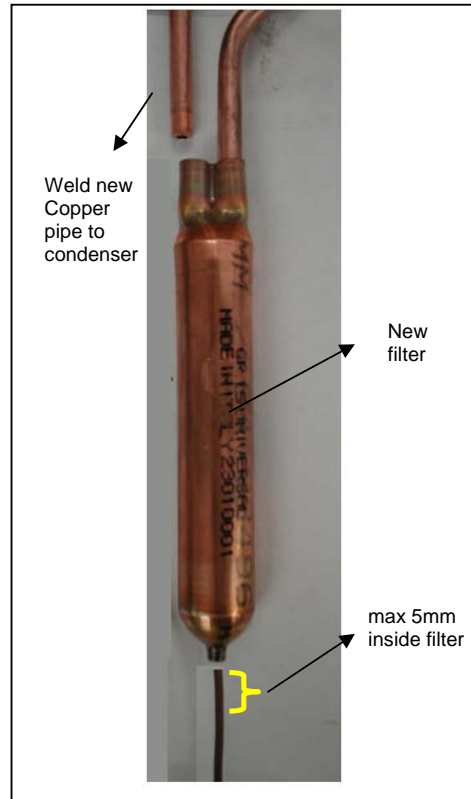
9) Replace the cover on the chiller and restart it.



Pict.1: This picture shows the pin inside the valve hole.



Pict.2: This picture shows which parts you must cut or heated and removed in order to substitute the filter.



Pict.3: This picture shows the fittings to the new filter.



Pict.4: This picture shows the Schrader valve.



Pict.5: This picture shows the Schrader valve components: body valve, pin and cap.



Pict.6: This picture shows the tap valve.

Pict.7: This picture shows the air and gas flow when is connected vacuum pump before and gas cylinder after.

When the vacuum pump is connected the tap valve needs to be open.

After 30-45 minutes the void is completed and you must close the tap.

Disconnect the pump and join gas cylinder to the tap valve and then you can newly open the tap in order to charge the system.



Pict.8: Y joint for service pipe and there isn't any dry filter.