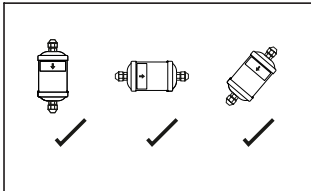

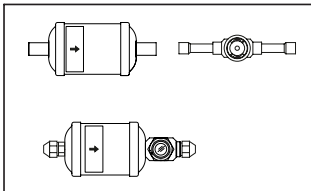
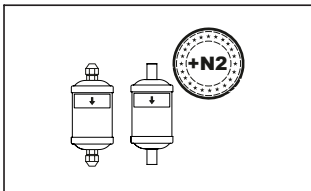
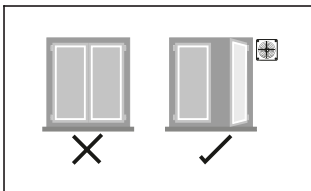
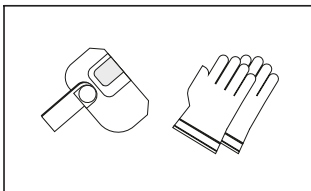
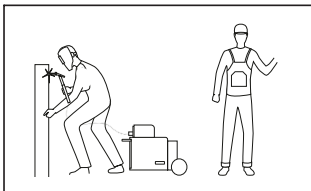




# Filter Drier Installation Instructions

## General Instructions

- 1.**  1. Installation Positions
- 2.**  2. Do Installation work in normal, clean and safe atmospheric conditions. Please do not do any work in hazardous and unsafe conditions.
- 3.**  3. To check saturation levels of filter drier in working condition, install sight glass or use filter drier with built-in sight glass and check periodically.
- 4.**  4. To prevent moisture from entering the filter drier while in transit and storage, it is charged with positive nitrogen pressure. Open only when ready to use.
- 5.**  5. When working, make sure that the area has enough ventilation or exhaust fans.
- 6.**  6. Use face shield or dark goggles as protection for eyes. Use heat resistance gloves.
- 7.**  7. Wear impervious coverall clothing with breathable fabrics.

## Filter Drier With Spectroline TW

Recommendation on use of drier model with



MODEL SERIES CUBIC INCH	EXAMPLE OF MODEL NO.	REC. FOR TONNAGE (TR)	APPROX. OIL CHARGE THAT SPECTROLINE TW IN THIS DRIER WILL TREAT
3"	032, 033	1,4 to 3.3 TR	Up to 1L
5"	052, 053	1.8 to 4.8 TR	1.4 to 2.0L
8"	083, 084	1.9 to 7.7 TR	1.5 to 3.5L
16"	163, 164, 165	3 to 10.9 TR	2.0 to 4.0L
30"	303, 304, 305, 306	3.5 to 21.5 TR	2.0 to 6.0L
41"	414, 415, 416, 417	7.3 to 30.5 TR	2.5 to 7.5L

*500:1 is Lubricant to dye deletion ration recommended for effective fluroscent leak detection*

### How it works

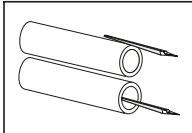
- Spectroline Tracer Wafer (TW) charged with fluorescent dye has been placed inside the desiccant/core.
- When the system starts, the dye in the wafer will release and mix with lubricant and will circulate with the refrigerant
- In case of leak, dye will escape with the refrigerant, leaving a mark at the point of leak
- Exact point of leak will be easily visible by UV flashlight through yellow glasses
- After repair wipe off the dye using a cleaner

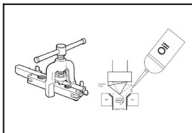


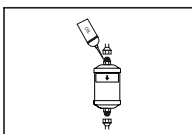


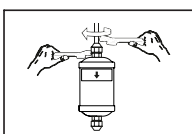
# Filter Drier Installation Instructions

## Threaded joint technique (SAE / O Ring / MIO / ORFS)

- 

1. Remove all burrs and clean all residue from the tubing.
- 

2. Place a drop of refrigeration oil on the flaring tool to get a smooth flare.
- 

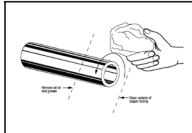
3. Place a drop of refrigerant oil on both back and front surface of the flare before tightening the nut.
- 

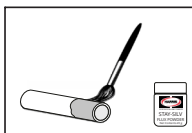
4. To prevent twisting of the refrigerant line, use backup wrench on flat supplied on SAE connection of filter drier.

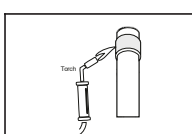
TIGHTENING TORQUE OF FLARED JOINTS (SAE)		
NOMINAL DIAMETER	OUTER DIAMETER (MM)	TIGHTENING TORQUE N.M (KGF.CM)
1/4"	6.35	14 to 18 (140 TO 180)
3/8"	9.52	33 to 42 (330 TO 420)
1/2"	12.70	50 to 62 (500 TO 620)
5/8"	15.88	63 to 77 (630 TO 770)
3/4"	19.06	90 to 110 (900 TO 1100)

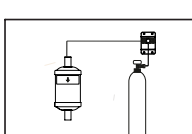
TIGHTENING TORQUE OF FLARED JOINTS (SAE)		
NOMINAL DIAMETER	OUTER DIAMETER (MM)	TIGHTENING TORQUE N.M (KGF.CM)
9/16" - 18	14.28	14 to 16 (140 TO 160)
11/16" - 16	17.46	24 to 27 (240 TO 270)
3/4" - 16	19.05	40 to 50 (400 TO 500)
13/16" - 16	20.63	43 to 47 (430 TO 470)
1" - 14	25.40	70 to 80 (700 TO 800)
1" - 3/16 - 12	30.16	90 to 95 (900 TO 950)
1" - 1/4 - 12	31.75	120 to 135 (1200 TO 1350)
1" - 7/16 - 12	36.51	125 to 135 (1250 TO 1350)
1" - 11/16 - 12	42.86	170 to 190 (1700 TO 1900)
1" - 3/4 - 12	44.45	135 to 160 (1350 TO 1600)
2"-12	50.80	200 to 225 (2000 TO 2250)
2" - 1/4 - 12	57.15	165 to 190 (1650 TO 1900)

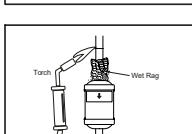
## Brazing

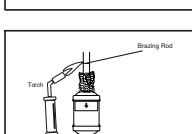
- 

1. Clean the mating parts with cleaning pad or special wire brush.
- 

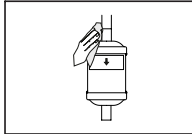
2. Apply flux to the male connection after cleaning operation.
- 

3. Use a torch tip which is large enough to provide uniform heating on the mating parts.
- 

4. To prevent oxidation, flow dry nitrogen through the tube during brazing. Nitrogen is inert, (non-reactive), and will displace the oxygen to prevent scale formation.
- 

5. Place cold, wet rag on Filter Drier body and direct the flame of torch away from end of the shell to avoid damaging the shell and paint due to excessive heating.
- 

6. Use copper or high silver brazing rod as required.
- | DRIER CONNECTION | MATING PART | RECOMMENDED HARRIS MAKE BRAZING ALLOY OR EQUIVALENT   |
|------------------|-------------|---|
| Copper           | Copper      | Most common used is Harris-0. For higher vibration joints you may use Harris - Stay-Silv 2 / Stay-Silv 15 / Dynaflo |
| Copper           | Steel       | 33 to 42 (330 TO 420)   |
| Steel            | Steel       | 50 to 62 (500 TO 620)   |

Use Brazing Flux as required
- 

8. After brazing the joint, wipe the solder joint with a rag and allow it to cool. Clean to remove excess flow (to improve the appearance) of flux if any.

