

# Service Manual

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## **SECTION 3**

- **Torque Sequence and Specifications**
    - Heavy Duty and Standard Models
    - Super Compact (“Mini”) Models
  - **Trouble Shooting**
  - **RETRO-FIX II Retrofit Procedure**
  - **Shaft Detail Indicating Compressor Displacement**
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**LAST REVISION 08/98**

SUPERSEDES FORMS: 180.72-NM • 180.72-NM2 • 180.72-RP • YA77-401



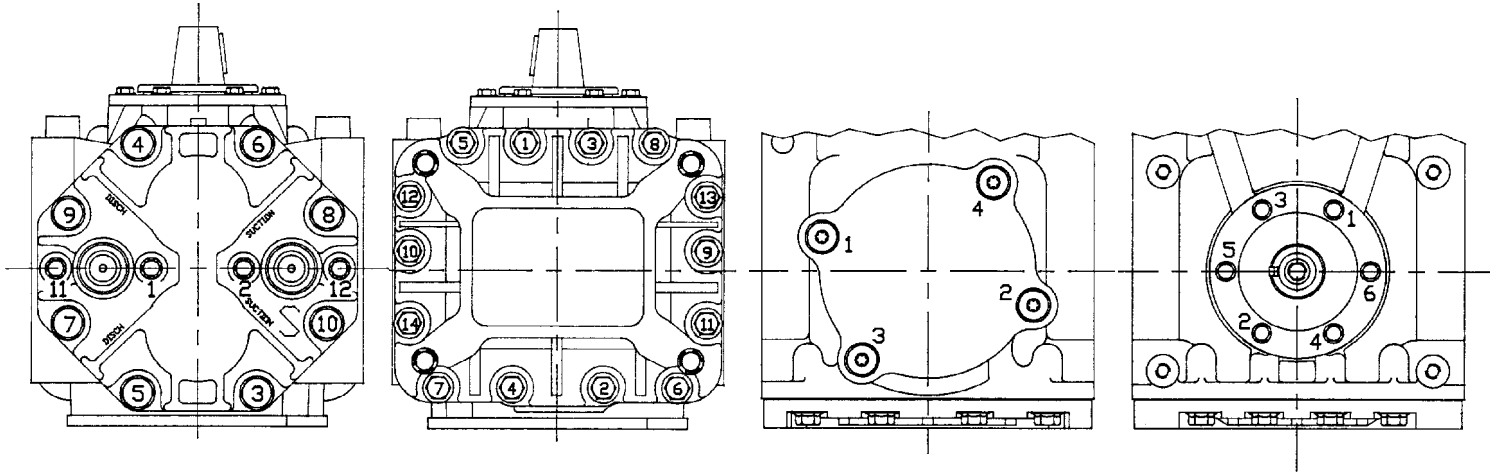
**Climate Control Inc.**

**A DEMIRCO COMPANY**

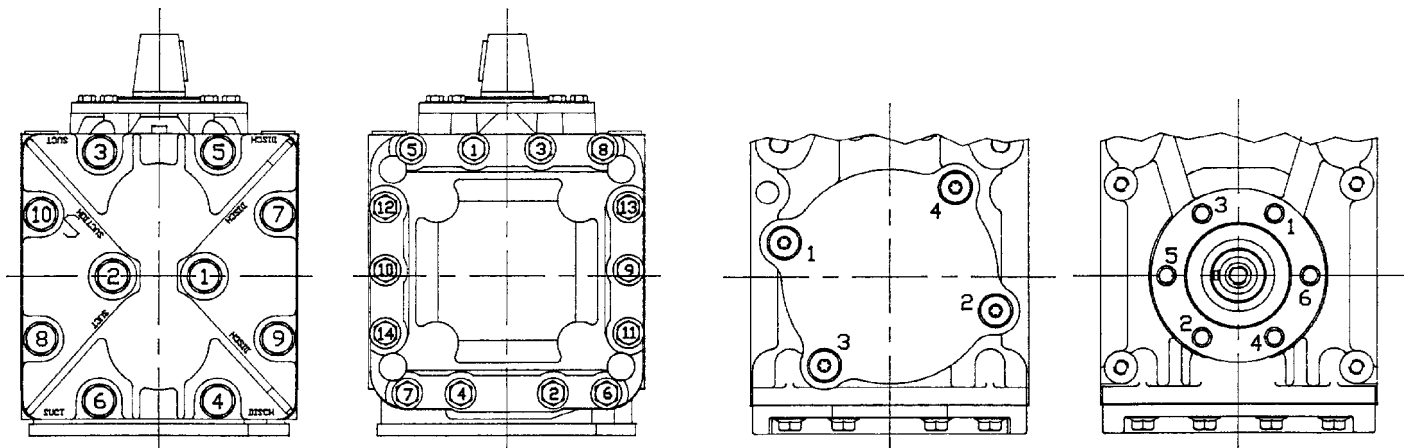


# Torque Sequence and Specifications

## Heavy Duty and Standard Models



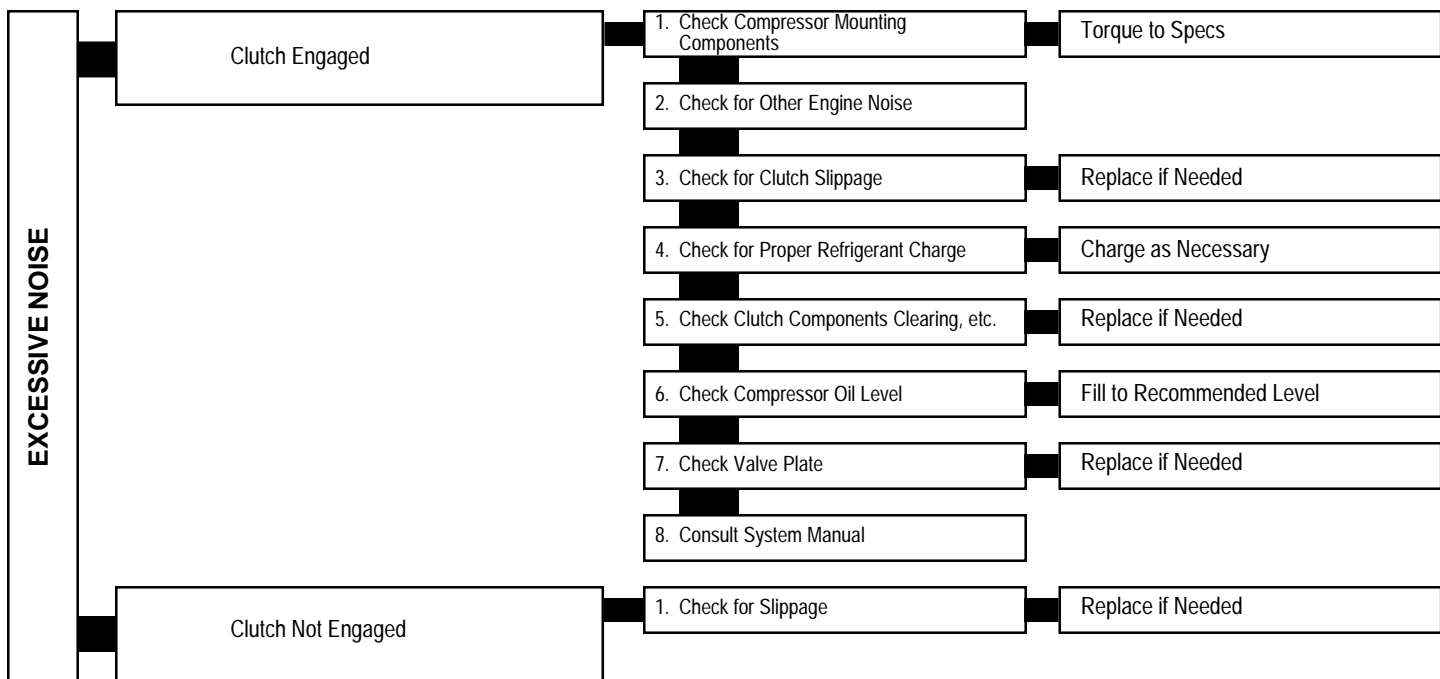
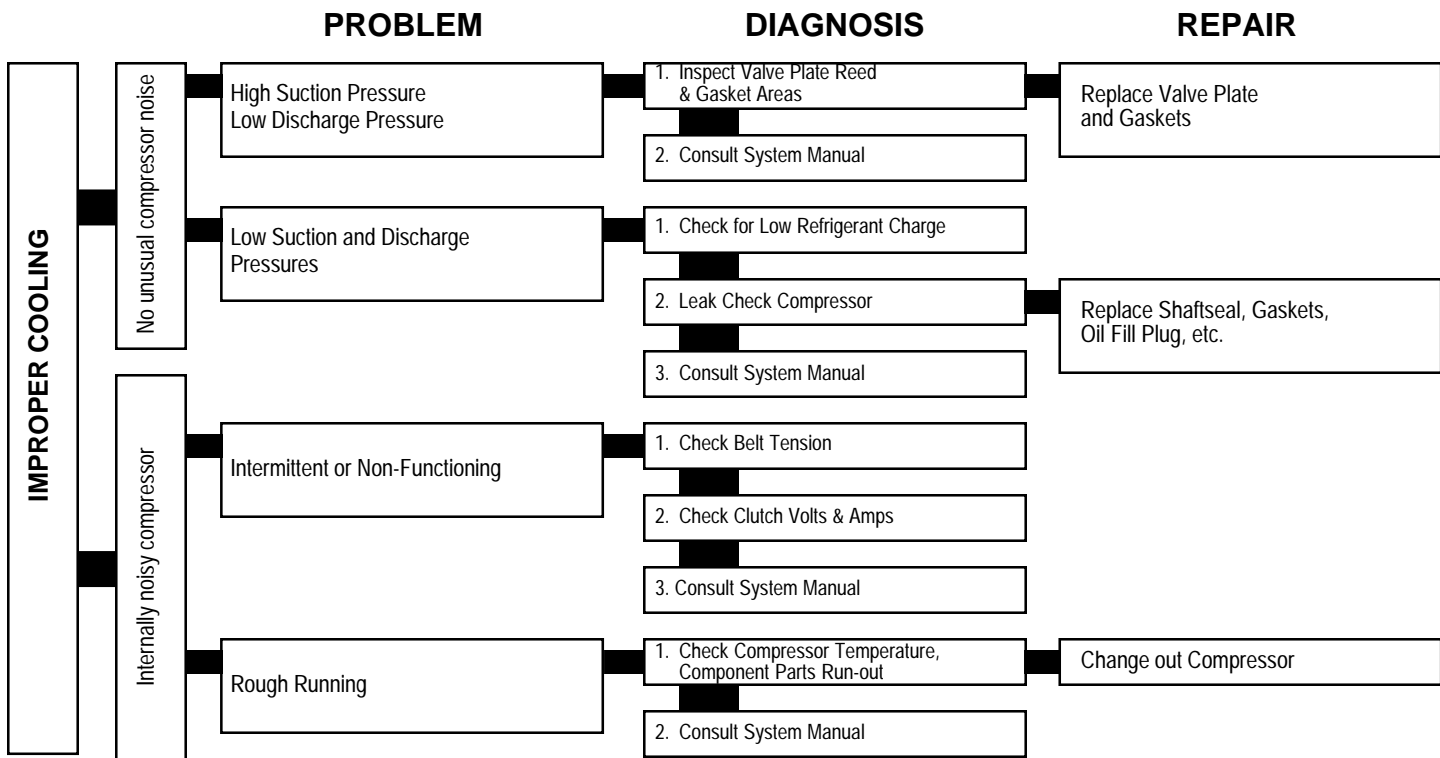
## Super Compact ("Mini") Models



LOCATION	THREAD	HEAD	FIELD TORQUE SPECS
Baseplate	1/4" - 20 UNC	Hex	10-16 ft.-lb. (13.6-21.7 N-m)
Rear Bearing Cover Plate	1/4" - 20 UNC	Flat	10-16 ft.-lb. (13.6-21.7 N-m)
Cylinder Head	5/16" - 18 UNC	Hex	17-25 ft.-lb. (23.0-33.9 N-m)
Seal Plate	10-24 UNC	Hex	5-8 ft.-lb. (6.8-10.8 N-m)
Oil Fill Plug	3/8" - 24 UNF	Hex	5-10 ft.-lb. (6.8-13.6 N-m)
Clutch Mounting Screw	1/4" - 20 UNC	Hex	13-19 ft. lb. (17.6-25.8 N-m)
Clutch Center Bolt	5/16" - 24 UNF	Hex	20-25 ft. lb. (27.1-33.9 N-m)
Rotalock Valve	1" - 14 UNS	Hex	35-40 ft. lb. (47.5-54.2 N-m)
Tube 'O' Valve	1" 14 UNS	Hex	35-40 ft.-lb. (47.5-54.2 N-m)
Flange Valve	5/16" - 18 UNC	Torx	17-25 ft.-lb. (23.0-33.9 N-m)
Pressure Relief Valve	3/8" - 24 UNF	Hex	5-10 ft.-lb. (6.8-13.6 N-m)



# Trouble Shooting





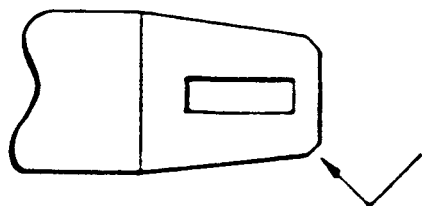
# **RETRO-FIX II Retrofit Procedure**

This P.O.E. (Ester) lubricant is approved for use in R-134a Climate Control 2-cylinder compressor (York) systems. It may not be suitable in other compressors. Use for oil additions in R-134a systems or for retrofitting of R-12 systems. RETRO-FIT PER VEHICLE MANUFACTURER RECOMMENDATIONS and in accordance with SAE J1661, J1660, J1639, J1629, J2197 and J1989. Barrier hoses are required for R-134a systems. Heavy-duty vehicles equipped with these hoses can normally be retrofit by following these guidelines:

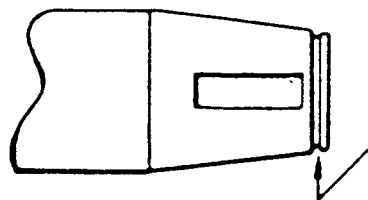
1. Diagnose and repair all A/C system malfunctions, (Flush system only if contamination exists).
2. Recover the R-12 refrigerant.
3. Remove compressor and drain oil from sump.
4. Replace receiver/dryer with one containing XH-7 or XH-9 desiccant.
5. Change high and low side service ports to R-134a type by using adapters, new service valves, etc., per SAE J1660.
6. Add 14 fl. ounces of RETRO-FIX II P.O.E. (Ester) oil to compressor and install on vehicle.
7. Evacuate system (45 minutes, minimum).
8. Charge system with R-134a. (Usually 15-20% less R-134a by weight will fully charge an R-12 system.)
9. Leak test system.
10. Run system to confirm normal operation.
11. Install label to identify that the system has been retrofit per SAE J1660.

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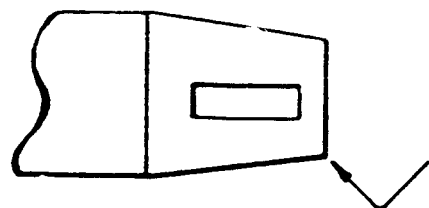
## **Shaft Detail Indicating Compressor Displacement**



MODEL 206  
.030 X 45° CHAMFER



MODEL 209  
.015 DEEP GROOVE



MODEL 210  
SHARP CORNER



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