Service Manual

SECTION 3

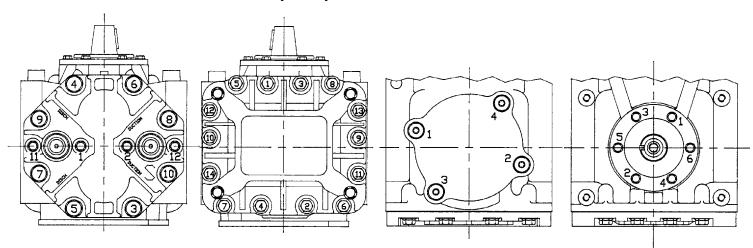
- Torque Sequence and Specifications
 - Heavy Duty and Standard Models
 - Super Compact ("Mini") Models
- Trouble Shooting
- RETRO-FIX II Retrofit Proceedure
- Shaft Detail Indicating Compressor Displacement

LAST REVISION 08/98 SUPERSEDES FORMS: 180.72-NM • 180.72-NM2 • 180.72-RP • YA77-401

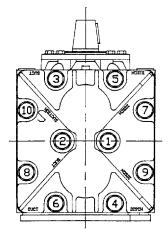


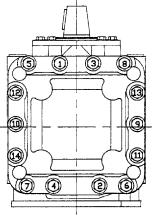
Torque Sequence and Specifications

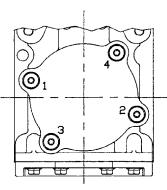
Heavy Duty and Standard Models

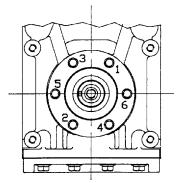


Super Compact ("Mini") Models



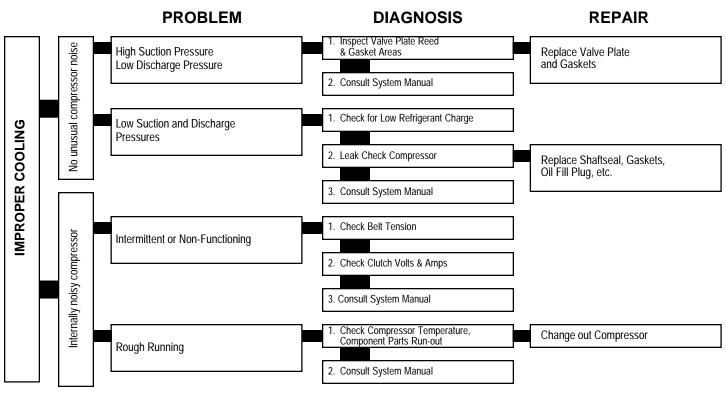


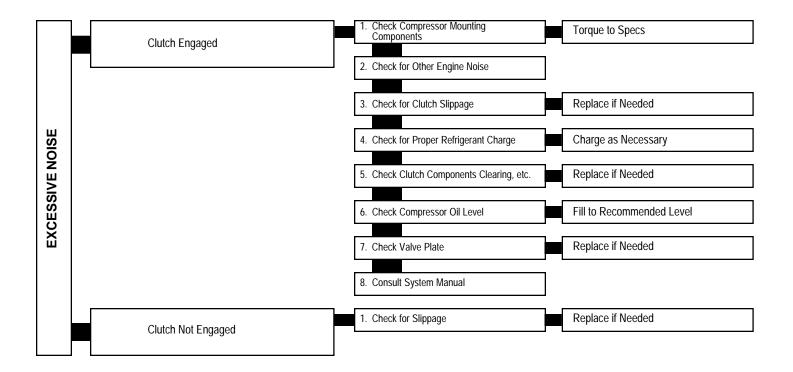




LOCATION	THREAD	HEAD	FIELD TORQUE SPECS
Baseplate	1/4" - 20 UNC	Hex	10-16 ftlb. (13.6-21.7 N-m)
Rear Bearing Cover Plate	1/4" - 20 UNC	Flat	10-16 ftlb. (13.6-21.7 N-m)
Cylinder Head	5/16" - 18 UNC	Hex	17-25 ftlb. (23.0-33.9 N-m)
Seal Plate	10-24 UNC	Hex	5-8 ftlb. (6.8-10.8 N-m)
Oil Fill Plug	3/8" - 24 UNF	Hex	5-10 ftlb. (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 ftlb. (47.5-54.2 N-m)
Flange Valve	5/16" - 18 UNC	Torx	17-25 ftlb. (23.0-33.9 N-m)
Pressure Relief Valve	3/8" - 24 UNF	Hex	5-10 ftlb. (6.8-13.6 N-m)

Trouble Shooting





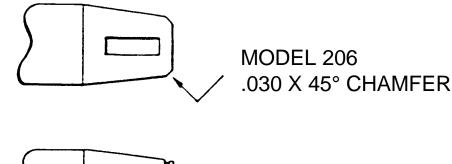
Climate Control Inc.

RETRO-FIX II Retrofit Procedure

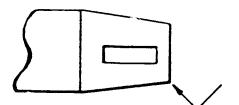
This P.O.E. (Ester) lubricant is approved for use in R-134a Climate Control 2-cylinder compressor (York) systems. It may not be suitable in other compressors. Use for oil additions in R-134a systems or for retrofitting of R-12 systems. RETRO-FIT PER VEHICLE MANUFACTURER RECOMMENDATIONS and in accordance 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.

Shaft Detail Indicating Compressor Displacement



MODEL 209 .015 DEEP GROVE



MODEL 210 SHARP CORNER



2120 N. 22nd Street Decatur, Illinois 62526 Telephone: 217-422-0055 FAX: 217-422-4323 www.ccicompressor.com

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