

Component Procedures: Refrigerant

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Component Procedures: Refrigerant

Parts and Labor (itype_189)

Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Service	Air Conditioner > System, Service > Evacuate ?	B	1.4	0.0
Service	Air Conditioner > System, Service > Flush (co?	B	0.3	0.0
Service	Air Conditioner > System, Service > Partial R?	B	0.6	0.0
Service	Air Conditioner > System, Service > Refrigerera?	B	0.4	0.0

Specifications Quick Reference (itype_439)

Quick Specifications

- item

Refrigerant Recovery and Recharging (Belt Driven Compressor) (Article 12758)

Special Tools

- GE-48800 - CoolTech A/C Recharge Machine
- J-43600 - ACR 2000 Air Conditioning Service Center
- J-45037 - A/C Oil Injector

For equivalent regional tools, refer to Special Tools

Both the J-43600 - ACR 2000 Air Conditioning Service Center and GE-48800 - CoolTech A/C Recharge Machine are complete air conditioning service center for R-134a. Both units recovers, recycles, evacuates and recharges A/C refrigerant quickly, accurately and automatically. Both units have a display screen that contains the function controls and displays prompts that will lead the technician through the recover, recycle, evacuate and recharge operations. R-134a is recovered into and charged out of an internal storage vessel. Both units automatically replenishes this vessel from an external source tank in order to maintain a constant 5.45–6.82 kg (12–15 lbs) of A/C refrigerant.

The ACR 2000 has a built in A/C refrigerant identifier that will test for contamination, prior to recovery and will notify the technician if there are foreign gases present in the A/C system. If foreign gases are present, the ACR 2000 will not recover the refrigerant from the A/C system.

The ACR 2000 also features automatic air purge, single pass recycling and an automatic oil drain.

GE-48800 - CoolTech A/C Recharge Machine is released as a required replacement for the previously essential J-43600 - ACR 2000 Air Conditioning Service Center . The GE-48800 - CoolTech A/C Recharge Machine is SAE J2788 compliant and meets GM requirements for A/C Refrigerant System Repairs on all General Motors vehicles, including Hybrid systems with Polyolester (POE) refrigerant oil.

Refer to the J-43600 - ACR 2000 Air Conditioning Service Center or GE-48800 - CoolTech A/C Recharge Machine manual for operation and setup instruction. Always recharge the A/C System with the proper amount of R-134a.

Refer to Refrigerant System Specifications for the correct amount.

A/C Refrigerant System Oil Charge Replenishing

If oil was removed from the A/C system during the recovery process or due to component replacement, the same quantity of PAG oil must be replenished. If no oil was removed from the A/C system during recovery, do not charge any PAG oil into the A/C system. Oil can be injected into a charged system using J-45037 - A/C Oil Injector . For the proper quantities of oil to add to the A/C refrigerant system, refer to Refrigerant System Specifications .

Refrigerant System Specifications (Article 12765)

Application Specification

Metric English

PAG Oil GM P/N 12378526 for United States PAG Oil GM P/N 88900060 for Canada

Compressor Replacement

The Delphi Service Compressor CSP17 is precharged with the specified amount of PAG Oil 41 ml¹ 1.4 oz¹

- The Delphi Service Compressor CSP17 is precharged with the specified amount of PAG Oil

Condenser Replacement 40 ml¹ 1.35 oz¹

Desiccant Bag Replacement 10 ml¹ 0.34 oz¹

Evaporator Replacement 30 ml¹ 1.0 oz¹

Refrigerant Line Replacement 10 ml¹ 0.34 oz¹

Total System PAG Oil Capacity 120 ml 4.06 oz

- Total System PAG Oil Capacity

R-134a

Refrigerant Charge 0.54 kg 1.19 lb

- Refrigerant Charge

1If more than the specified amount of PAG oil was drained from a component, add the equal amount of oil drained.

All New Technical Service Bulletins (itype_432)

Tsbs

- Information on Refrigerant (R1234yf) for A/C Service (12-01-37-001G, 2024/07/24)

All Technical Service Bulletins (itype_100)

Tsbs

- Information on Refrigerant (R1234yf) for A/C Service (12-01-37-001G, 2024/07/24)

Fluids, Chemicals and Additives (itype_112)

Tsbs

- Information on Refrigerant (R1234yf) for A/C Service (12-01-37-001G, 2024/07/24)

OEM Policies and Procedures (itype_120)

Tsbs

- Information on Refrigerant (R1234yf) for A/C Service (12-01-37-001G, 2024/07/24)