

Date: February 23, 2005 Bulletin Number: 05D-J-038

To: All Distributors and Jobbers Category: Service
From: Susan Christophersen, Product Service Line(s): 10, 15

Subject: Service Air Conditioning Refrigerant Lubricants with R-134a Refrigerant

Description

This bulletin supersedes bulletins 04D-J-072, 04D-J-073 and 04D-J-117.

Aftermarket air conditioning service requires the addition of a specific amount of approved lubricant when various system components are replaced or the system is flushed. The replacement refrigerant lubricant must meet OEM and compressor manufacturers' specifications. Use of non-approved lubricants will void the ACDelco warranty on air conditioning system components. Ester oils are not approved by ACDelco or any OEM and will void product warranty.

Vehicle and compressor manufacturers perform extensive testing to determine the correct type and quantity of lubricant approved for their systems. Critical to these lubricants are viscosity and additives. Chart #1 should be used to determine the proper lubricant for all ACDelco supplied compressors.

CHART #1

Compressor Type	Supplied through GM- ACDelco	Viscosity	ACDelco Part Number	GM Part Number
Radial R-4	All R-134a	150	15-118	12356151
A6	All R-134a	150	15-118	12356151
Compressor Type		Viscosity	ACDelco Part Number	GM Part Number
All other ACDelco supplied compressors	All R-134a	46	10-5040 (8oz. Bottle) 10-5026 (8 oz. Cartridge) (1)	89022191 88901445

(1) A/C Oil Injector, J45037, should be used with the oil cartridge.

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LUBRICATION QUANTITY

All vehicle air conditioning systems have specific total refrigeration lubrication charge requirements. Proper service procedures must be followed to maintain these charge levels. Reference manufacturer's service material or trade publications for total system requirements. When system components (i.e., compressor, evaporator, condenser, accumulator/dehydrator) are replaced or flushed, additional lubricant must be added (See Chart #2).

Mineral oil (i.e., ACDelco Part Number 15-117) should be used to lubricate O-rings and seals. Other lubricants may cause corrosion of the fittings making disassembly difficult.

Chart #2

New or Flushed Component	Amount of Oil	Procedure
Compressor	See procedure at right to determine amount for replacement compressor. (1)	Drain and measure amount of oil from old compressor. (May require rotating compressor shaft and/or removing drain plug). Drain new compressor (Note: Amount of oil drained from service compressors varies with manufacturer and model), If less than 2.5 oz. drained from old, add back 2.5 oz. to new compressor. If more than 2.5 oz. drained from old, add that amount back into the new compressor.
Condenser	1.0 oz.	Insert prior to assembly.
Evaporator	1.5 oz.	Insert prior to assembly.
Accumulator/ Dehydrator	2.0 oz. + amount drained	Drain old A/D and measure amount removed. Add 2.0 oz. to the amount drained during recovery. (2 oz. replaces oil saturated in oil desiccant bag).
Receiver/Drier	1.0 oz. + amount drained	Drain old R/D and measure amount removed. Add 1.0 oz. to the amount drained during recovery. (1 oz. replaces oil saturated in oil desiccant bag).
Muffler/Hose Assembly	1.0 oz.	
TXV/Orifice Tube	See procedure to determine amount	Add back only amount removed in the refrigerant recovery process.

(1) Oil drained from new service compressors and recovered from old components should be disposed of per local environmental requirements.

ACDelco/GM service bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer." They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely.

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