



## Air Conditioning Refrigerant R1234yf Introduction

### MODEL

F54 (Cooper Clubman, Cooper S Clubman)	F55 (Cooper Hardtop 4dr, Cooper S Hardtop 4dr)	F56 (Cooper Hardtop 2dr, Cooper S Hardtop 2dr)	F57 (Cooper Convertible, Cooper S Convertible)
Vehicles produced from July 2016			

### SITUATION

New, incompatible refrigerant being introduced.

	<ul style="list-style-type: none"> <li>• From July 2016 production, MINI vehicles will be introducing a new Air Conditioning refrigerant R1234yf (Hydrofluoroolefins) to replace the currently utilized R134a.</li> <li>• The picture shows label on underside of hood indicating the refrigerant type and PAG oil specification.</li> <li>• <b>Different refrigerant and oil types should never be mixed. Always check the label under the hood for the proper refrigerant and oil type.</b></li> </ul>
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### INFORMATION

Highlights of R-1234yf

- Meets SAE J2888\_201301

*“This SAE Standard covers fittings, couplers, and hoses intended for connecting service hoses from mobile air- conditioning Systems to service equipment such as charging, recovery and recycling equipment”.*

- New tools and equipment are required.

To service vehicles equipped with R-1234yf refer to [SI M04 01 16](#).

- Air conditioning technician certification is required to work on system.

Refer to your State Law.

- Unique low and high side fittings.
- Revised evaporator core as per SAE J2842.
- System will use about 5% more refrigerant than a comparable R134a system.
- System oil is a specific PAG oil.

Refer to ISTA repair recommendation.

- Do not interchange components between systems using other refrigerants.

Do not reuse Seals / O-ring material from another system.

- The system piping has internal heat exchangers (IHX or IWT).

#### SAFETY INFORMATION

Several precautions need to be observed when working on automotive air conditioning systems:

- Always wear eye protection and gloves while handling refrigerant or servicing air conditioning system.
- Avoid breathing R1234yf lubricant vapor or mist.
- Use only approved service equipment to discharge A/C systems.
- If refrigerant or compressor oil contacts the skin or eyes, large quantities of cool water should be used to flush the affected area.
- **Never heat a refrigerant container with an open flame. Keep all refrigerant away from open flames.**
- **Under no circumstances should R1234yf service equipment or vehicle A/C systems be pressure tested or leak tested with air/R1234yf mixtures.**

NOTE: The use of compressed air (shop air) for leak detection in an R1234yf system can contaminate the system and/or refrigerant with moisture.

- Leak detection equipment that meets the SAE J2791 standard will work with R1234yf
- **Never use fittings for an R12 or R134a system on an R1234yf system.**

Any difficulty in connecting service equipment may be an indication of refrigerant/equipment incompatibility with the vehicle's system.

- **Always carefully ascertain the type of refrigerant used in the vehicle's system before performing service.**

Labels on underside of hood, will detail which refrigerant is used in the air conditioning system. Service the vehicle with compatible recycling equipment ONLY. Attempts to adapt

and use incompatible service tools will destroy both the vehicle's air conditioning system and the service tool.

- **Never use any R-12/R134a service tools on R1234yf systems.**

Tools, such as manifold gauge sets, retain small amounts of refrigerant and lubricant. Attempting to use the same equipment on both R-12/R134a and R1234yf vehicles will contaminate the air conditioning systems.

- **Obtain and use the correct type of refrigerant recovery/recycling machine.**

Follow the directions included in the machine's instruction manual.

#### **WARRANTY INFORMATION**

Not applicable.

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