

SOLSTICE® 456A CONVERSION AND SERVICE GUIDELINE FOR WORKSHOPS

Honeywell

SOLSTICE® 456A

Solstice[®] 456A is a next generation, lower Global Warming Potential refrigerant developed to replace R134a for servicing older vehicles in the automotive aftermarket in Europe.

INTRODUCTION

Solstice 456A has less than half of the GWP of R134a (626 vs 1430), enabling technicians to repair more cars in the future as HFC-134a availability declines.

R456A is compatible with R134a refrigerant and with R134a mobile air conditioning systems and provides similar cooling and performance. It can be used with the same compressor oil that was used originally in the 134a system.

The following information is intended to provide professional service technicians with guidelines on how to use R456A to service R134a vehicles.

CONVERSION OF SERVICE EQUIPMENT FROM R134A TO R456A

New R456A service machines are readily available for purchase from your local tool and equipment provider; however, it is possible to convert existing R134a machines to use R456A.

R456A and R134a have similar properties and because of this R134a service equipment is compatible with R456A. You should contact the manufacturer of your existing equipment for detailed procedures on how to convert 134a service machines to R456A.

Converting a vehicle's AC system from R134a to R456A

R134a systems can be easily converted to R456A utilizing the following guidelines:

Step 1: Recover the R134a charge that's in the vehicle's system

This step can be accomplished in two ways:

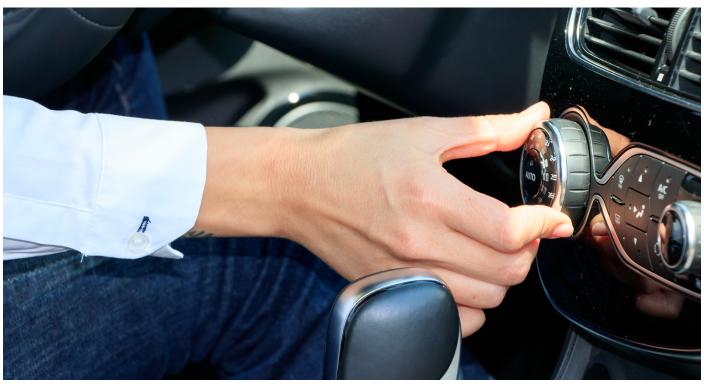
- 1. Utilize a dedicated R134a Recover/Recycle/Recharge service machine, or
- Utilize a portable recovery unit to transfer the R134a refrigerant charge from the vehicle into a dedicated R134a reclaim cylinder.

NOTE: It is important to measure the amount of oil that is recovered during this step as you will need to add this same amount of oil back into the system later.

ADDED BENEFIT: The R134a that is recovered can be sold to refrigerant reclaim companies increasing your shop's profits.

Step 2: Make any required repair to the vehicle's system

Standard practices should be utilized to find and repair any leaks and to service the AC system compressor, evaporator or any other parts of the system as needed.



*GWP=Global Warming Potential is an index used to indicate the effect on the global warming.

Step 3: Charge the system with R456A

- Following standard practices, pull the system down to vacuum.
- Hold the vacuum per the specific equipment provider's recommendation.
- Recharge the vehicle with R456A:
 - Locate the refrigerant charge amount required for the vehicle on the sticker under the hood or in the owner's manual.
 - R456A will be added into the vehicle AC system in the same amount as it was originally charged with R134a. Finally, add to the car's AC system the same amount of oil that was removed from the vehicle earlier in this process.

Note: the original R134a oil that was left in the AC system is compatible with R456A. Always use the exact same oil that was already in the system when you recharge with R456A.

Step 4: Apply labels and document the conversion

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Apply a refrigerant identification label indicating that the vehicle's AC system now contains R456A. This label should be applied under hood covering up the previous R134a label which may look like this:



This service should also be noted in the vehicle's service record for future reference.

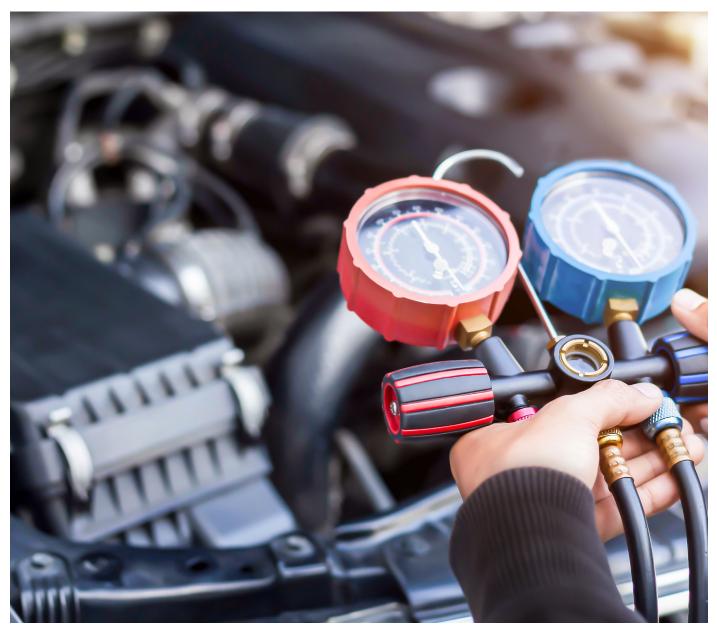
Step 5: Future service for a vehicle converted to R456A

Any future service of a vehicle converted to 456A will follow standard vehicle AC service procedures.

Additional Information

Existing R134a leak detection equipment and refrigerant dyes can be used with R456A.

It is recommended that you always maintain a minimum of 20% charge level in the internal tank of your RRR machine. By doing so the composition of Solstice® 456A will remain in specification. For example, if the internal tank has a 15 kg nominal capacity, the quantity of refrigerant in the internal tank should not go below 3 kg. Should your internal tank reach a 456A level below 20% simply add fresh 456A to the tank to bring the tank level back above 20%.





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