Air Conditioning (A/C) Odor Treatment - Vehicles With: R134A Refrigerant

Special Tool(s) / General Equipment

A/C Odor Remover Flexible Applicator

Materials

Name	Specification
Motorcraft® A/C Cooling Coil Coating YN-29	-

Inspection

NOTE: *There are typically 4 types of objectionable odors found in a vehicle:*

- *chemical odors*
- *environmental odors*
- *human and other interior-generated odors*
- *microbiological odors*

Before determining that A/C odor treatment is required, determine the source and the circumstances under which the odor occurs.

NOTE: *Chemical odors are usually constant regardless of the climate control system setting although they may be enhanced by A/C operation. Most chemical odors are caused by fluid leaks or incorrectly cured adhesives. Chemical odors can be eliminated by repairing the leaking component and removing any residue.*

NOTE: *Environmental odors usually occur for a short time and diminish after the vehicle passes through the affected area. These odors are typically only detected when the vehicle windows are open, or when the climate control system is operating in a mode that allows for fresh air. Environmental odors cannot be eliminated because they are external in source, but they may be minimized by switching to a climate control setting that uses recirculated air.*

NOTE: *Human and other interior-generated odors occur while the source is present and may linger for a short time after. These odors may be more noticeable during A/C operation. Human odors may be eliminated by removing the source and cleaning the affected area.*

NOTE: *Microbiological odors, if in the A/C system, usually last for about 30 seconds after the system is turned on. They are detected while the A/C is turned on and using either outside or recirculated air. Microbiological odors that occur in areas other than the A/C system (for example, water in doors or wet carpeting) may last indefinitely and are more intense when recirculated air is used. Microbiological odors are not present at temperatures at or below 10° C (50° F).*

Microbiological odors can be eliminated by removing the source and treating the affected area. Allow standing water to drain and dry out. A/C systems may be treated by using Motorcraft® A/C Cooling Coil Coating (YN-29) as described in the service procedure below.

NOTE: *Microbiological odors result from microbial growth supported by warm temperatures and moisture. Microbiological odors are described as musty/mildew type smells and may occur on/in:*

- *foam seals*
- *rubber seals*
- *adhesives*
- *standing water*
- *water soaked carpet/trim*

1. Identify the type of odor present in the vehicle. Do not proceed with A/C odor treatment if the odor source is found to be outside of the A/C system. Refer to the following list for examples.

Odor Source	Odor Description
Chemical Odors	
Coolant	Sweet smell
Fuel	Gasoline or diesel fuel smell
Oil	Oil type or burning smell
Power Steering Fluid	Oil type or burning smell
Transmission Fluid	Oil type or burning smell
Washer Fluid	Alcohol type smell
Gear Lube	Garlic/sulfur smell
Refrigerant Oil	Ether type smell
Carpet/trim Adhesives	Fishy, urine or sweet smell
Evaporator Core Coating	Wet cement type smell
Environmental Odors	
Exhaust	Exhaust, fuel or burning type smell
Industrial Pollutants	Various smells
Dust	Musty, mildew or wet cement type smell
Pollen	Sweet smell
Tobacco	Burning, tar smell
Human and Other Interior Generated Odors	
Body Secretions	Body odor
Perfuming Agents	Sweet or fragrance smell
Clothing	Musty, mildew or body odors
Food/Beverage	Sweet, musty, mildew or fishy smell
Microbiological Odors	
Microbiological Odors Occurring Inside of A/C System	Musty, mildew smell lasting about 30 seconds after A/C is turned on
Microbiological Odors Occurring Outside of A/C System	Musty, mildew smell lasting indefinitely and possibly more pronounced when using recirculated air

Repair

1. **NOTE:** *Identify the source of the odor.*

   - Check the evaporator core drain tube for restriction.
   - Check the passenger and driver side carpet for moisture. If moisture is found, A/C odor treatment is not necessary. Diagnose for a water leak as needed.
   - Check the cabin air filter and cabin air filter cover for moisture resulting from water bypassing the cowl baffling system. If moisture is found, A/C odor treatment is not necessary. Diagnose for a water leak as needed.
   - Check the cowl top panel and air inlet screen for standing water or foreign material. If necessary, remove the wiper cowl panel to remove any standing water and clean the air inlet screen using a wet/dry vacuum. Refer to appropiate section in Group 501 for the procedure.

2. Open all vehicle windows and doors.

3. Make sure the A/C is off.

4. Select REGISTER mode (A/C off).

5. Adjust the temperature setting to full warm.

6. Adjust the blower motor speed to HI.
7. Run the engine for 25 minutes to dry out the A/C system.
8. Turn the ignition OFF.
9. Remove the cabin air filter. Refer to the appropriate section in Group 412 for the procedure.
10. **NOTICE: To avoid damage, do not spill or spray this product on the blower motor speed control.**

    Remove the blower motor speed control. Refer to the appropriate section in Group 412 for the procedure.
11. **NOTICE: To avoid damage to the vehicle interior, do not spill or spray this product on any interior surface.**

    NOTE: *Only Motorcraft® A/C Cooling Coil Coating (YN-29) is approved for use on Ford vehicles. No other coating is approved. Use of other coatings may cause damage to the factory coating and more odor issues.*

    Add one full bottle of Motorcraft® A/C Cooling Coil Coating (YN-29) to the A/C Odor Remover Flexible Applicator tool.
    - 258-62644 A/C Odor Remover Flexible Applicator
      Use the General Equipment: A/C Odor Remover Flexible Applicator
      Material: Motorcraft® A/C Cooling Coil Coating / YN-29
12. Insert the nozzle into the evaporator housing and direct the spray toward the evaporator core face. Spray the entire evaporator core face until empty.
13. Install the blower motor speed control. Refer to the appropriate section in Group 412 for the procedure.
14. Repeat Steps 4 through 8 to cure the cooling coil coating.
15. Install the cabin air filter. Refer to the appropriate section in Group 412 for the procedure.