



98-12, *Publication Date: JUNE 22, 1998*

Air Conditioning - Filtering Refrigerant After A/C Compressor Replacement - Service Tips

**Article No.
98-12-5**

FORD:

1980-98 CROWN VICTORIA
1981-98 ESCORT
1982-83 FAIRMONT
1982-88 EXP
1982-97 THUNDERBIRD
1982-98 MUSTANG
1983-86 LTD
1984-94 TEMPO
1986-98 TAURUS
1988-93 FESTIVA
1989-97 PROBE
1994-98 ASPIRE
1995-98 CONTOUR

LINCOLN-MERCURY:

1980-98 GRAND MARQUIS, TOWN CAR
1982-83 ZEPHYR
1982-86 CAPRI
1982-87 LN7
1982-97 COUGAR
1982-98 CONTINENTAL
1983-86 MARQUIS
1984-92 MARK VII
1984-94 TOPAZ
1986-98 SABLE
1991-94 CAPRI
1991-98 TRACER
1993-98 MARK VIII
1995-98 MYSTIQUE
1999 COUGAR

LIGHT TRUCK:

1980-96 BRONCO
1980-97 F SUPER DUTY
1980-98 ECONOLINE, F-150, F-250, F-350
1983-98 RANGER
1984-90 BRONCO II
1986-97 AEROSTAR
1988-97 F-47
1991-98 EXPLORER
1993-98 VILLAGER
1995-98 WINDSTAR
1997-98 EXPEDITION, MOUNTAINEER
1999 SUPER DUTY F SERIES

This TSB article is being republished in its entirety to revise the Service Procedure and to update the model years.

ISSUE:

Vehicles that have an inoperative A/C compressor, due to internal causes, MUST have the refrigerant system cleaned to remove any debris or contaminants that may be present to prevent damage to the replacement compressor.

ACTION:

Install a Service Filter Kit in the refrigerant system prior to installing the replacement compressor. Refer to the following Service Procedure for details.

SERVICE PROCEDURE

NOTE:

THIS PROCEDURE IS OPTIONAL IF THE SYSTEM IS FLUSHED USING THE ROTUNDA A/C FLUSHER.

CAUTION:

THIS FILTERING PROCEDURE MAY BE USED FOR EITHER R-12 OR R-134a REFRIGERANT SYSTEMS. BECAUSE THE TWO (2) SYSTEMS USE DIFFERENT REFRIGERANT OILS AND BECAUSE THE COMPRESSOR COULD BE DAMAGED IF THE WRONG OIL IS USED, SYSTEM IDENTIFICATION IS VERY IMPORTANT. BE SURE SYSTEM IS CORRECTLY IDENTIFIED BEFORE STARTING THE FILTERING PROCEDURE.

Each Service Filter Kit includes the following items:

- One (1) Pancake Filter (to be installed in the liquid line between the condenser and the orifice tube)
- One (1) Instruction Sheet

NOTE:

ON 1993-94 RANGER/EXPLORER VEHICLES, TECHNICIANS MAY EXPERIENCE DIFFICULTY WHEN CONNECTING THE PANCAKE FILTER HOSE FITTINGS TO THE EVAPORATOR INLET WITH THE ORIFICE TUBE INSTALLED. REMOVE THE ORIFICE TUBE AND RUN THE SYSTEM FOR 1 HOUR AS DESCRIBED IN THE FILTERING PROCEDURE. REINSTALL THE ORIFICE TUBE AFTER FILTERING IS COMPLETE.

CAUTION:

FOLLOW ALL REFRIGERANT SYSTEM SAFETY AND SERVICE PRECAUTIONS OUTLINED IN THE APPROPRIATE SERVICE OR WORKSHOP MANUAL.

1. Before removing any refrigerant system components, recover the refrigerant from the system following the recycling methods outlined in the appropriate Service/Workshop Manual.
2. Remove the suction accumulator/drier assembly and drain the oil into a calibrated container.
3. Install a new suction accumulator/drier and add new refrigerant oil to replace the old oil. The quantity of the new oil to be added is the amount to match that drained from the old accumulator plus 60 mL (2 oz). Refer to the Dealer Master Parts Catalog for the correct suction accumulator/drier part number.

CAUTION:

REMEMBER TO USE MOTORCRAFT YN-9-A REFRIGERANT COMPRESSOR OIL WITH R-12 SYSTEMS AND MOTORCRAFT YN-12-C REFRIGERANT COMPRESSOR OIL WITH R-134a SYSTEMS. FAILURE TO USE THE CORRECT REFRIGERANT OIL MAY RESULT IN DAMAGE TO

SYSTEM COMPONENTS.

4. Install a new orifice tube. Refer to the Dealer Master Parts Catalog for the correct orifice tube part number. If the orifice tube in the vehicle is located in the liquid line between the condenser and the evaporator, replace the liquid line assembly.
5. Install pancake filter in the liquid line between the condenser and the orifice tube, Figure 1.

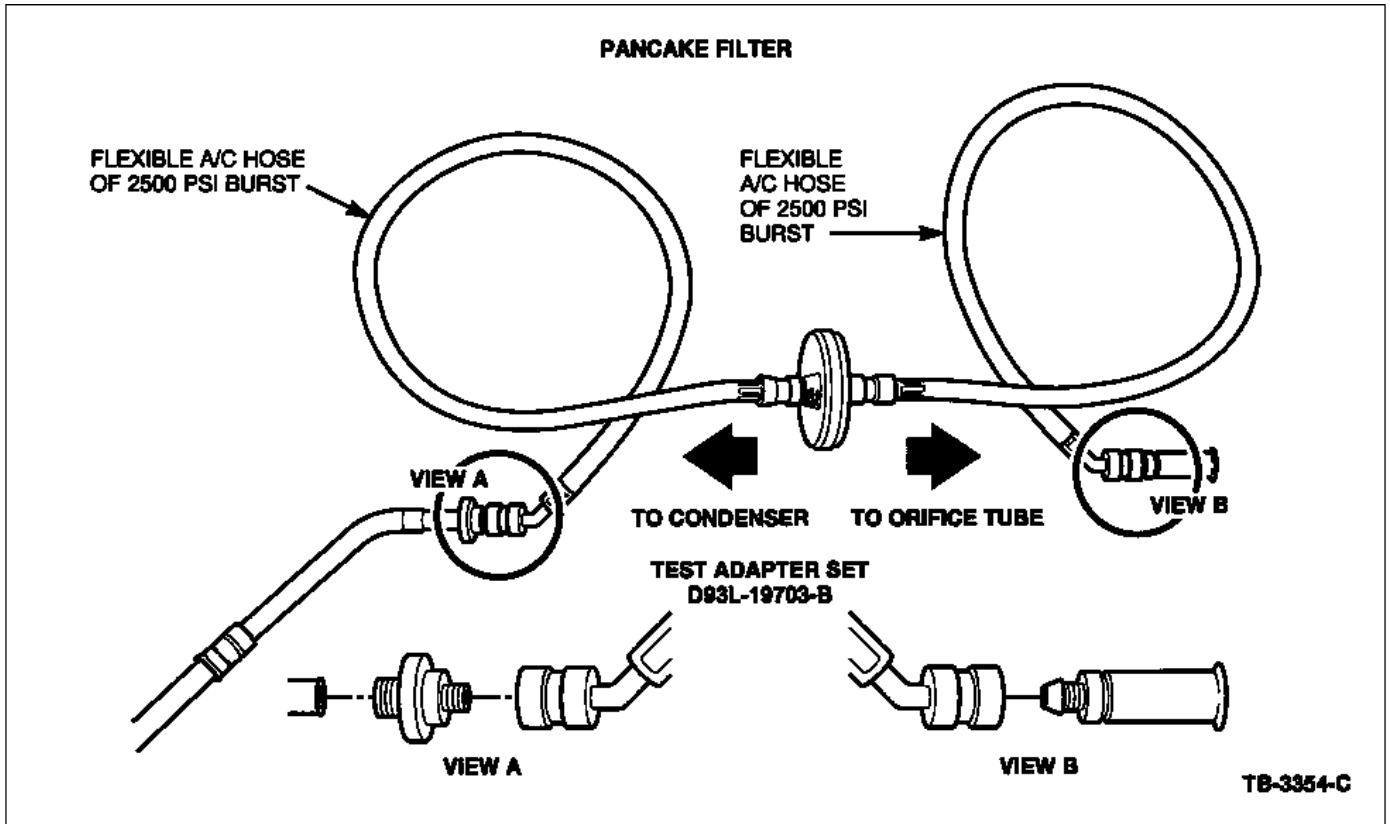


Figure 1 - Article 98-12-5

- a. Be sure orifice inlet is toward the condenser.
 - b. Connections can be made using Test Adapter Set D93L-19703-B, or equivalent, and flexible refrigerant hose of 2500 psi burst rating. Individual fittings are also available.
6. Remove the old compressor following Service/Workshop Manual procedures. Drain the oil into a calibrated container.
 7. Drain the oil from the replacement compressor into a clean calibrated container.

NOTE:

IT WILL BE NECESSARY TO TRANSFER THE MAGNETIC CLUTCH FROM THE OLD COMPRESSOR TO THE REPLACEMENT COMPRESSOR. FOLLOW SERVICE/WORKSHOP MANUAL PROCEDURES.

8. A new FX-15 service compressor contains 207 mL (7 oz) of R-12 refrigerant oil. A new FS-10 service compressor does not contain any oil and can be used with an R-12 or an R-134a system.

CAUTION:

REMEMBER TO USE YN-9-A (MINERAL) OIL WITH R-12 SYSTEMS AND YN-12-C (PAG) OIL WITH R-134a SYSTEMS. FAILURE TO USE THE CORRECT REFRIGERANT OIL MAY RESULT IN

DAMAGE TO SYSTEM COMPONENTS.

- If the amount of oil drained from the removed compressor is between 90 and 148 mL (3-5 oz), pour the same amount of clean refrigerant oil into the new compressor.
 - If the amount of oil drained from the old compressor is greater than 148 mL (5 oz), pour 148 mL (5 oz) of clean refrigerant oil into the new compressor.
 - If the amount of oil drained from the old compressor is less than 90 mL (3 oz), pour 90 mL (3 oz) of clean refrigerant oil into the new compressor.
9. Install the new compressor following Service/Workshop Manual procedures. Make sure all mounting bolts are tightened properly. Check the tension of the compressor drive belt. Adjust if necessary.
 10. Evacuate, charge and leak test the system, following Service/Workshop Manual procedures.
 11. Check all refrigerant system hoses, lines and the position of the newly-installed filters to make sure they do not interfere with other engine compartment components. If necessary, use tie straps to make adjustments.
 12. Set the A/C control on Max A/C, high blower and temperature control at full cold.
 - a. Start engine and let idle briefly.
 - b. Be sure A/C system is operating properly.
 13. Gradually bring the engine up to 1200 rpm by running it at lower rpms for short periods (first at 800 rpm, then at 1000 rpm). Set the engine at 1200 rpm and run it for an hour with the A/C system operating.
 14. Stop the engine.

NOTE:

IT WILL BE NECESSARY TO RECOVER THE SYSTEM REFRIGERANT CHARGE BEFORE PROCEEDING.

15. Allow the engine to cool sufficiently to remove the fittings, flexible hoses and pancake filter from the liquid line.
16. Discard the filter. It can be used one (1) time only.
17. Reconnect the liquid line back into the system.
18. Evacuate, charge and leak test the system. Make any necessary adjustments.
19. Check the operation of the system in all modes.

PART NUMBER	PART NAME
F8VZ-19E773-AA	Filter Kit
F73Z-19577-AA	Refrigerant Oil - Motorcraft YN-9-A (For R-12 Refrigerant Systems Only)
F7AZ-19589-DA	Refrigerant Oil - Motorcraft YN-12-C (PAG-Type Oil For R-134a Refrigerant Systems Only)

NOTE:

THE TOTAL REPAIR TIME IS FOR INSTALLING SERVICE FILTER KIT PER INSTRUCTIONS. THIS INCLUDES INSTALLATION OF AND DISCARD OF FILTER. REFER TO SERVICE LABOR TIME STANDARDS MANUALS IF ADDITIONAL LABOR OPERATIONS ARE REQUIRED.

OTHER APPLICABLE ARTICLES: NONE

SUPERSEDES: 96-15-5

WARRANTY STATUS: Eligible Under The Provisions Of Bumper To Bumper Warranty Coverage For 1992-99 Models And 1991 Lincolns, Basic Warranty Coverage For All Other Models And Major Component Warranty Coverage For All Other Lincolns

LABOR ALLOWANCE

OPERATION	DESCRIPTION	TIME
981205A	Kit Installation	1.2 Hrs.
981205B	Extra Time For Refrigerant (R-12) Recovery	0.4 Hr.

DEALER CODING

BASIC PART NO.	CONDITION CODE
19703	49

OASIS CODES: 208000, 208999
