

DESCRIPTION AND OPERATION (Continued)

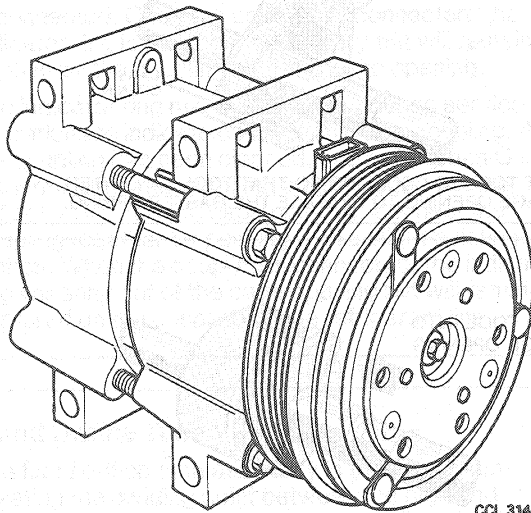
Compressor and Magnetic Clutch Assembly

FX-15 Compressor

NOTE: Whenever a compressor is replaced, it will be necessary to replace the suction accumulator / drier and orifice tube.

The FX-15 compressor is used in all Taurus / Sable vehicles equipped with a base 3.0L or 3.8L engine.

FX-15 Compressor



CCL 3141-A

The FX-15 compressor is manufactured by Ford and has a displacement of 171 cc (10.4 cu. in.). It is a ten cylinder axial design requiring a 7 ounce charge of Motorcraft YN-9 refrigerant oil.

The hose manifold is attached to the compressor rear head with one screw. A pressure relief valve is threaded into a hole in the manifold that is connected to the discharge port.

The clutch is unique to the FX-15 compressor and consists of three basic components: the pulley, the hub and the field coil. The field coil is pressed on the compressor front head and the pulley is retained with a snap ring. The compressor shaft and the clutch hub are splined for positive engagement and a screw is used to retain the hub on the compressor shaft.

The FX-15 is a swashplate design 10 cylinder aluminum compressor utilizing the tangential design mounting system.



CCL 3141-A

10P15F Compressor

NOTE: Whenever a compressor is replaced, it will be necessary to replace the suction accumulator / drier and orifice tube.

The 10P15F compressor is used in Taurus SHO models. The compressor is a swashplate 10 cylinder axial design, driven by the accessory drive belt. Refer to Section 12-03B for 10P15F compressor and clutch service procedures.

High-Pressure Relief Valve

A pressure relief valve is used to prevent excessive high-pressure buildups of 3102 kPa and above (450 psi and above) and to prevent damage to the compressor and other system components. The pressure relief valve is located on the side of the discharge manifold on top of the compressor.

Condenser

NOTE: Whenever a condenser is replaced, it will be necessary to replace the suction accumulator / drier.

The air conditioning condenser is an aluminum fin and tube design heat exchanger located in front of vehicle radiator. It cools compressed refrigerant gas by allowing air to pass over fins and tubes to extract heat, and condenses gas to liquid refrigerant as it is cooled.

The condenser inlet and outlet connections are the male fitting of a spring lock coupling and require a special service tool to disconnect the refrigerant lines from the condenser. The procedure to disconnect and reconnect the spring lock coupling is shown in.

Spring Lock Coupling

The spring lock coupling is a refrigerant line coupling held together by a garter spring inside a circular cage. When the coupling is connected together, the flared end of the female fitting slips behind the garter spring inside the cage of the male fitting. The garter spring and cage then prevent the flared end of the female fitting from pulling out of the cage.



FLARED END OF FEMALE FITTING
CHECK TO BE SURE GARTER SPRING IS OVER
TO REPAIR COUPLING EXPANDMENT, USUALLY