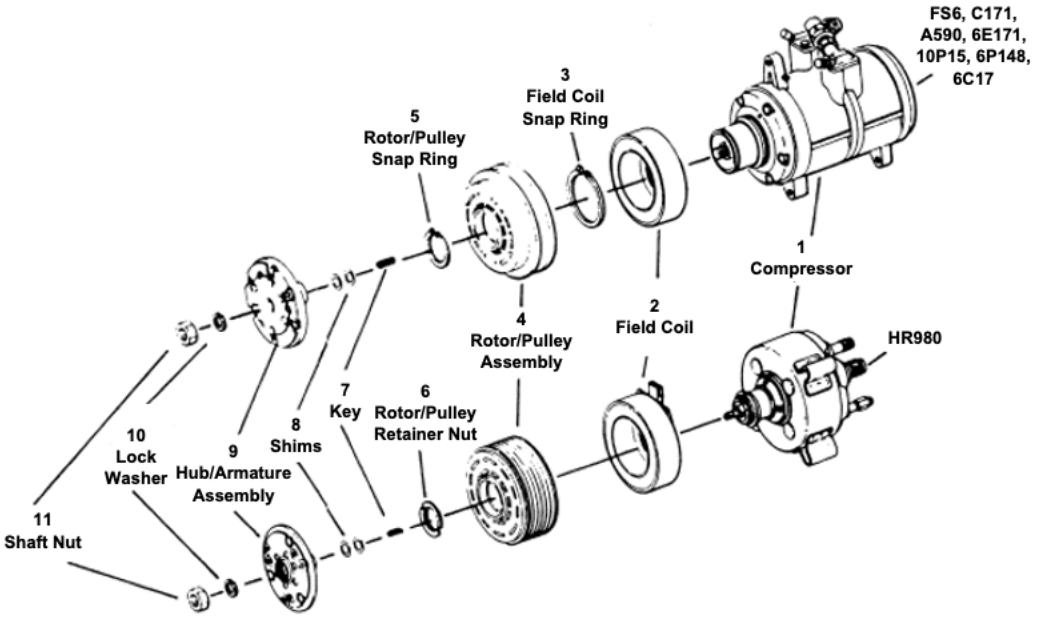
COMPRESSOR CLUTCH REPLACEMENT PROCEDURE

FOR FORD FS-6; CHRYSLER C-171 & A-590; NIPPINDENSO 6E171, 10P15, 6P148, AND 6C17

Warning: Failure to follow these instructions when installing this clutch will void factory warranty.



COMPRESSOR CLUTCH REMOVAL

DO NOT pound on the clutch or compressor as damage will result.

- **Removal of Hub/Armature Assembly (9)**

  Remove shaft nut (11) with a 13mm socket wrench and spanner wrench.

  Remove hub/armature (9) with a hub/armature removal tool.

  Remove shims (8) from the hub/armature and shaft.

- **Removal of Rotor/Pulley Assembly (4)**

  Remove rotor/pulley snap ring (5).

  Slide rotor/pulley assembly (4) off the compressor (1) nose.

- **Removal of Field Coil Assembly (2)**

  Remove field coil snap ring (3) retaining the field coil.

  Slide the field coil (2) off the compressor housing.

  INSTALLING CLUTCH ON COMPRESSOR

Replace the complete clutch to ensure required performance is achieved and warranty requirements are met.

- **Preparation of Compressor**

  Clean compressor nose of all dirt, grease or debris. Check for evidence of oil leakage from the front seal and through bolts of compressor. Repair or replace compressor as appropriate.

  Check mounting surfaces for nicks, burrs and scratches (See Fig. 1). Smooth with a file or emery cloth, if necessary.

- **Installing the Field Coil (2)**

  NOTE: Failure to install snap rings per these instructions can be verified and will void the compressor clutch warranty.

  Align the hole in the back plate of the field coil (2) with the anti-rotation pin in the compressor end housing. Place the field coil into position. Make sure the lead are routed directly to the retaining clip on top of the compressor.

  Install field coil snap ring (3).

  With a snap ring pliers, spread the field coil snap ring (3) and insert it into the groove on the compressor nose per Figure 2. To assure assembly retention, the ring bevel must face away from the compressor, reference Figures 3 and 4.

  Verify that the snap ring is fully seated in the groove around its circumference to assure assembly retention, reference Figure 4.

  The field coil assembly must be tight on the compressor or failure will result

Location of Clutch Snap Rings

Figure 3

Snap Ring Bevel

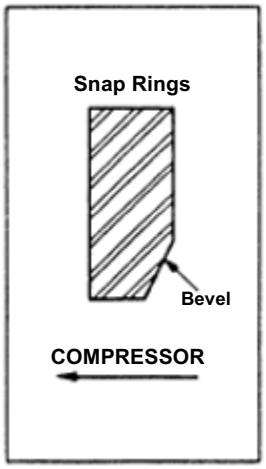
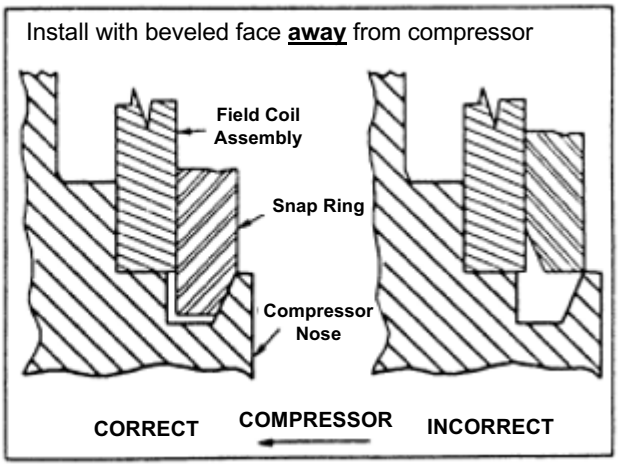


Figure 4

Correct and Incorrect Installation



- **Installing the Rotor/Pulley (4)**

a. Install the rotor/pulley assembly (4) onto the compressor (1). If the rotor/pulley does not slide on easily check the compressor nose for nicks or burrs and remove. If the rotor/pulley still does not slide on easily, rock the rotor/pulley back and forth by hand until it slides completely onto the compressor (1).
b. Make sure there is no interference between the field coil (2) or lead wires and the rotating rotor/pulley (4).
c. Install the rotor/pulley snap ring (5). With a snap ring pliers, spread the snap ring and insert into the groove on the compressor nose per Figure 2. To assure assembly and retention, the snap ring bevel must face away from the compressor, reference Figures 3 and 4.
d. Verify that the snap ring (5) is fully seated in the groove around its circumference to assure assembly retention. Reference Figure 4.

- **Installing the Hub/Armature Assembly (9)**
  a. Align the hub keyway with the shaft key (7) and slide the hub/armature (9) onto the compressor shaft
  b. Set the rotor/pulley to hub/armature air gap at 0.020 to 0.040 inches by adding or removing shims (8). Measure using a feeler gauge at 3 locations 120o apart.
  c. Install the lockwasher (1) and shaft nut (11). Torque to 155 lb. in. using a torque wrench and a spanner wrench
  d. **IMPORTANT: Burnish as follows**. Run the clutch at 2500 to 3000 RPM. Cycle the Clutch ON and OFF at a rate of 10 to 15 times per minute maximum for a total of 50 cycles minimum. This should bring the clutch up to operating torque capacity.

Cycle the clutch using the controls inside the car or electrical damage could result.