

# Compressor

## Shaft Seal Replacement

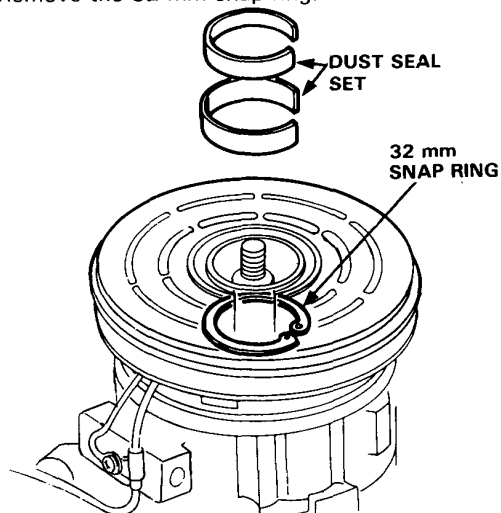
### Removal

NOTE: Make sure the suction and discharge joints are plugged with caps.

1. Remove the pressure plate (page 15-79).

NOTE: Removal of the clutch pulley and coil is not necessary.

2. Remove the dust seal set.  
Remove the 32 mm snap ring.

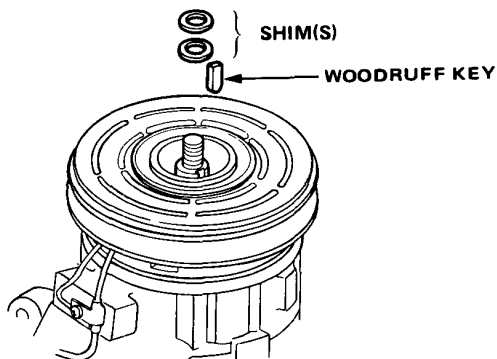


3. Remove the woodruff key from the key way.

NOTE: If the woodruff key is to be reused, be careful not to damage it.

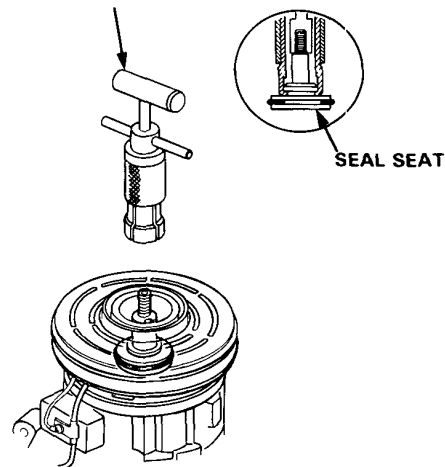
4. Remove the shim(s).

NOTE: After removing, store shim(s) safely in a parts rack.

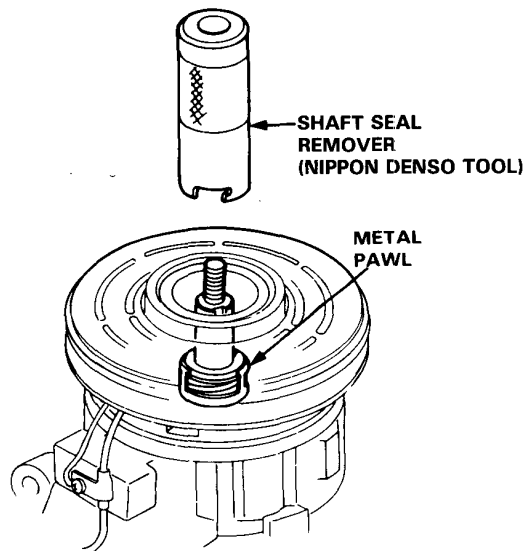


5. Seat the seal plate into the groove of the shaft seal remover.
6. Pull out the seal seat.

### SHAFT SEAL REMOVER (NIPPON DENSO TOOL)



7. Insert the shaft seal remover into the compressor aligning the cutout of the remover with the metal pawl of the seal case.
8. Rotate the Shaft Seal Remover clockwise or counterclockwise to make sure that the cutout is engage with the metal pawl.





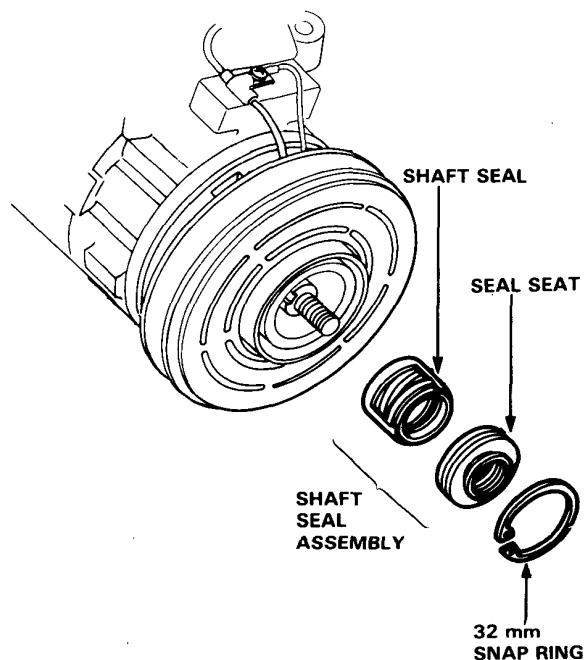
9. Press the remover until it bottoms, then turn it counterclockwise as far as it will go.

10. Withdraw the remover.

11. Lay down the compressor and clean the shaft seal contacting face of the compressor with cleaning solvent.

#### CAUTION:

- Keep the cleaning solvent and dirt out of the compressor.
- Use only a lint free cloth for cleaning.
- Do not spill the refrigerant oil from the compressor. Refill the same amount of the oil if the oil is spilled out.



#### Installation

NOTE: Install the shaft seal assembly after the cleaning solvent is dried out.

1. Clean the new shaft seal thoroughly with cleaning solvent.
2. Lubricate the shaft seal with refrigerant oil (SUNISO 5GS or equivalent) and install it on the shaft seal remover.

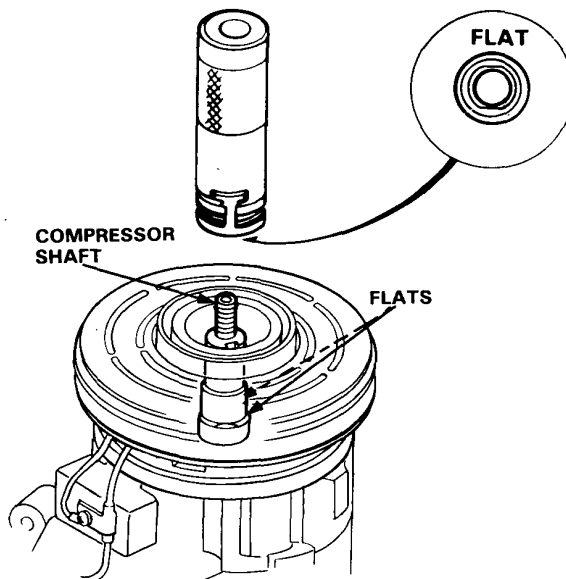
#### NOTE:

- Use only clean refrigerant oil.
- Do not touch the sealing surfaces of the shaft seal after lubricating.



SHAFT SEAL REMOVER  
(NIPPON DENSO TOOL)

3. Liberally lubricate the compressor shaft with refrigerant oil.
4. Install the shaft seal onto the compressor shaft aligning the seal case flats with the shaft flats.



(cont'd)

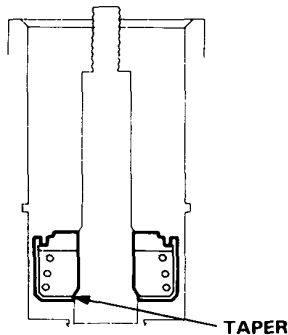
# Compressor

## Shaft Seal Replacement (cont'd)

5. Press the remover until it bottoms, then turn it counterclockwise as far as it will go.

NOTE: The remover will go lower when the flats are aligned.

6. Turn the remover clockwise, then pull it out.  
7. Slide the shaft seal onto the shaft until it seats on the shaft taper as shown.



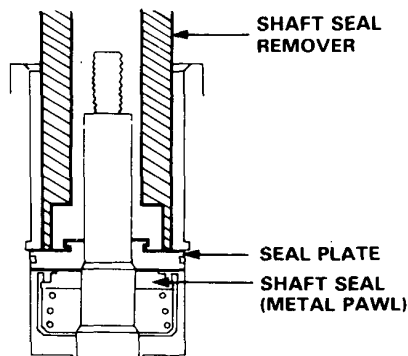
8. Check the inside diameter of the compressor for score marks or foreign particles.  
9. Clean the seal seat with cleaning solvent, then lubricate the seal seat with refrigerant oil (SUNISO 5GS or equivalent).

NOTE:

- Use only clean refrigerant oil.
- Do not touch the sealing surface of the seal plate after lubricated.

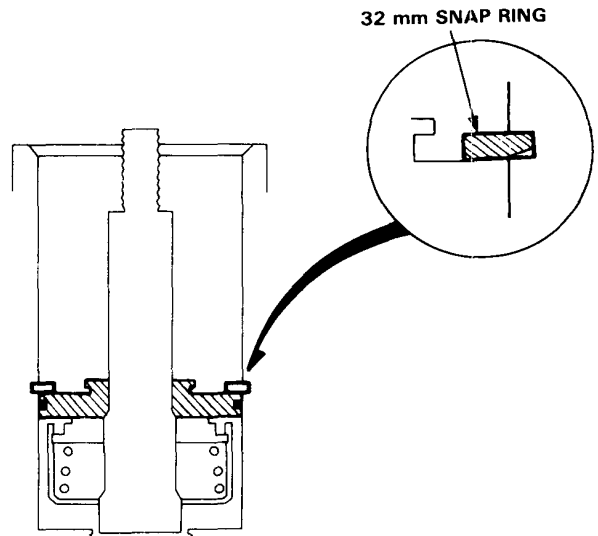
10. First slide the seal plate into the compressor by hand as far as possible.  
11. Press the seal plate with the grip side of the remover.

**CAUTION:** Be careful not to damage the compressor.

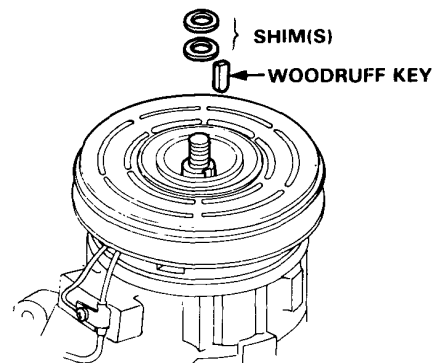


12. Install the 32 mm snap ring with its chamfered edge inside.

13. Press the snap ring with the grip side of the remover.



14. Install the shim(s) and woodruff key.



15. Evacuate and charge the compressor and then perform a leak test.

16. Install the pressure plate. Measure the clearance between the pulley and pressure plate all the way around. If the clearance is not within the specified limits, [0.4–0.7 mm (0.016–0.028 in)] shims must be added or removed as required.