

# A/C COMPRESSOR SERVICING

## 1994 Toyota Celica

1994 A/C Compressor Servicing

Camry, Celica, Corolla, Land Cruiser, MR2, Paseo, Pickup,  
4Runner, Previa, Supra, Tercel, T100

### \* PLEASE READ THIS FIRST \*

NOTE: Due to late changes, always refer to underhood A/C specification label in engine compartment or A/C compressor label while servicing A/C system. If A/C Specification label and specifications in this article differ, always use label specifications.

### COMPRESSOR APPLICATION

COMPRESSOR APPLICATION TABLE

Application	Compressor
Camry .....	Nippondenso 10PA17C 10-Cyl.
Celica .....	(1) Nippondenso 10PA15C 10-Cyl.
Corolla .....	Nippondenso 10PA15 10-Cyl.
Land Cruiser .....	Nippondenso 10PA17 10-Cyl.
MR2 .....	Nippondenso 10P13C 10-Cyl.
Paseo .....	Matsushita Rotary Vane
Pickup & 4Runner .....	Nippondenso 10-Cyl.
Previas .....	Nippondenso 10PA17E 10-Cyl.
Supra .....	Nippondenso 10-Cyl.
Tercel .....	Matsushita TV10B Rotary Vane
T100 .....	Nippondenso 10PA15 10-Cyl.

(1) - A Nippondenso 10PA17C/VC 10-Cylinder compressor may also be used.

### A/C COMPRESSOR REFRIGERANT SPECIFICATIONS

#### REFRIGERANT OIL & REFRIGERANT CAPACITY

REFRIGERANT OIL & R-134a REFRIGERANT CAPACITY TABLE

Application	(1) Oil Ounces	Refrigerant Ounces
Camry .....	(2) (3) 4.9	28.2-31.7
Celica .....	(2) (3) 4.1	21.1-24.7
Corolla .....	(2) (3) 4.1	24.7-28.2
Land Cruiser .....	(2) (3) 4.1	28.2-31.7
MR2 .....	(2) (3) 4.1	25.0-26.5
Paseo .....	(4) 3.4-4.1	22.9-26.5
Pickup .....	(2) (3) 4.8	18.6-22.1
Previas		
W/o Rear A/C .....	(3) 3.4-4.1	30.0-33.5
W/ Rear A/C .....	(3) 3.4-4.1	38.8-42.3
Supra .....	(2) (3) 4.1	23.2-26.7
Tercel .....	(2) (4) 4.1	22.9-26.5
T100 .....	(3) 3.4-4.1	21.2-24.7
4Runner .....	(2) (3) 4.1	23.2-26.7

- (1) - Total system capacity, unless otherwise noted.
- (2) - Compressor refrigerant oil capacity.
- (3) - Use ND-Oil 8 (Part No. 08885-09109).
- (4) - Use ND-Oil 9 (Part No. 08885-09119).

NOTE: Due to variety of clutch and shaft seal configurations, obtain appropriate A/C compressor service tools for compressor being serviced.

## MATSUSHITA ROTARY VANE

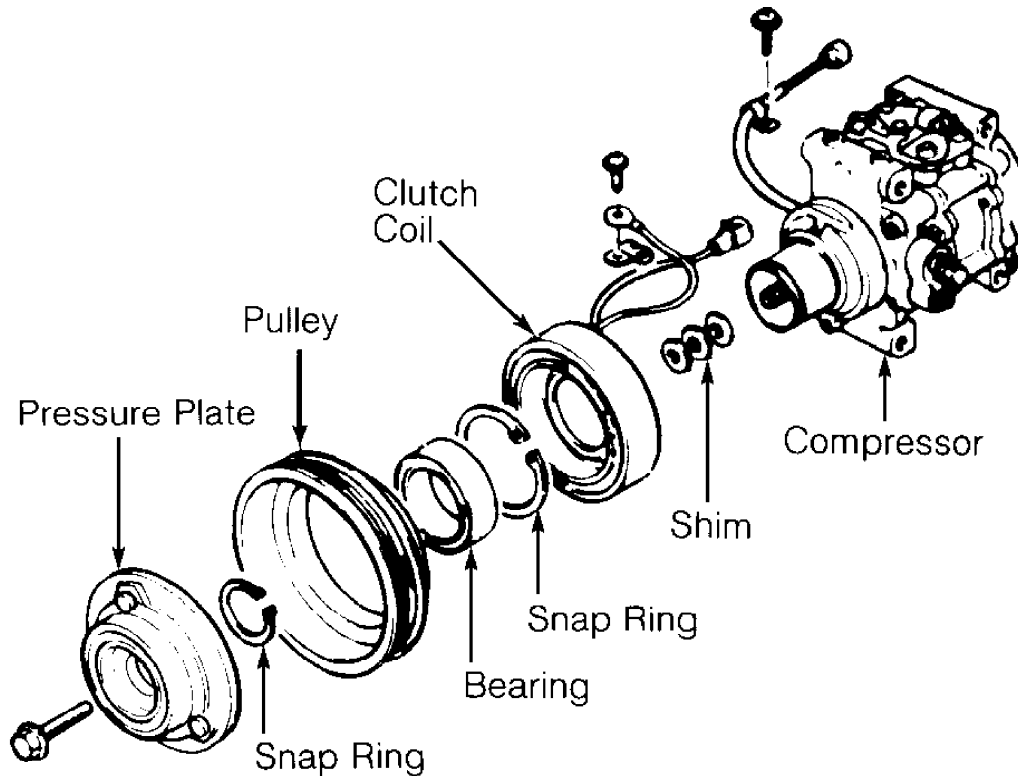
### CLUTCH COIL

#### Removal & Installation

1) Using Pressure Plate Holder (07112-76060) and socket, remove center bolt. Thread Puller (07112-66040) onto pressure plate. Hold pressure plate with pressure plate holder and tighten puller to remove pressure plate.

2) Remove shim(s) from shaft. Remove snap ring and, using a plastic hammer, tap pulley off. Remove screw for clutch coil lead. Remove snap ring and clutch coil. See Fig. 1.

3) To install, reverse removal procedure. Tighten shaft bolt to 10 ft. lbs (14 N.m). Using feeler gauge, ensure clearance between pressure plate and pulley is .014-.026" (.35-.65 mm). If clearance is incorrect, add or remove shim(s) as necessary.



93H19262

Fig. 1: View Of Matsushita Rotary Vane Compressor (Paseo & Tercel)  
 Courtesy of Toyota Motor Sales, U.S.A., Inc.

## NIPPONDENSO 10-CYLINDER

NOTE: Due to variety of clutch and shaft seal configurations, obtain appropriate A/C compressor service tools for compressor being serviced.

## CLUTCH COIL & BEARING

### Removal

1) Hold clutch plate stationary and remove shaft bolt (or nut). On all models except MR2, use a M8 x 40 mm bolt with 7/32" of the threaded end machined to a cone shape to remove clutch plate.

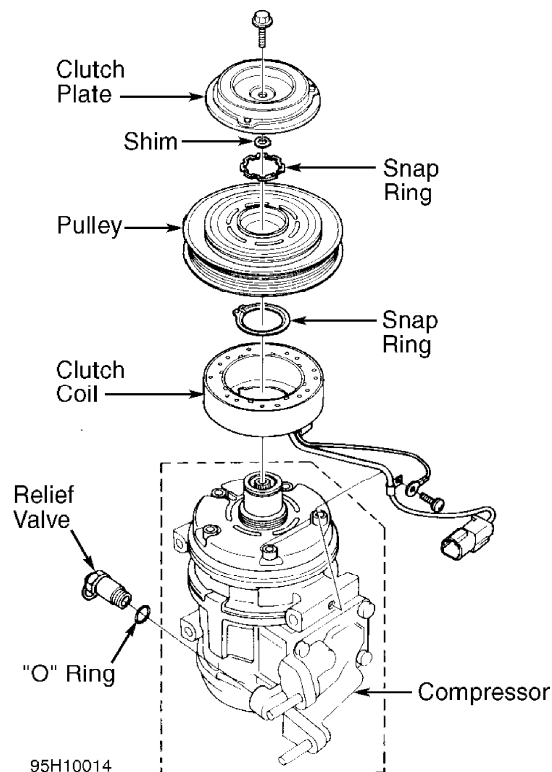
2) Remove shim(s) from shaft and snap ring. Tap pulley off shaft with plastic hammer. If pulley cannot be removed by hand, use a puller.

3) Remove snap ring, bearing, and seal (if equipped) from pulley. See Fig. 2. Remove screw for clutch coil lead. Remove snap ring and clutch coil.

### Installation

To install, reverse removal procedure. Ensure snap rings are installed with beveled side facing out. Tighten shaft bolt (or nut) to 14 ft. lbs. (19 N.m) on MR2; 10-13 ft. lbs. (14-17 N.m) on all others. Ensure air gap between clutch plate and pulley is .014-.026" (.36-.66 mm). If air gap is incorrect, add or remove shim(s) as necessary.

NOTE: On some compressors, it is necessary to use a dial indicator on clutch plate to check air gap. Apply voltage to clutch coil. Ensure air gap is as specified.



95H10014

Fig. 2: Nippondenso 10-Cyl. Compressor (Pickup, 4Runner & Supra)  
Courtesy of American Honda Motor Co., Inc.

## SHAFT SEAL

### Removal

1) Remove clutch plate and pulley. Remove shim(s) from shaft. Remove clutch coil if necessary. Remove felt and felt retainer (if equipped). See Figs. 3 and 4. Place shaft key remover on shaft and turn to remove key.

2) Remove seal plate snap ring. Engage plate remover on seal plate, and pull up to remove seal plate. Engage shaft seal remover/installer to shaft seal, and pull up to remove shaft seal from front housing.

### Installation

1) Apply clean refrigerant oil to compressor housing bore. Lubricate shaft seal with refrigerant oil and install in front housing. Lubricate seal plate and install in front housing.

2) Install shaft key, snap ring, felt retainer and felt. With clutch plate installed, ensure air gap between clutch plate and pulley is .020" (.50 mm) on Diamante Wagon; .014-.026" (.36-.66 mm) on all others. If air gap is incorrect, add or remove shim(s) as necessary.

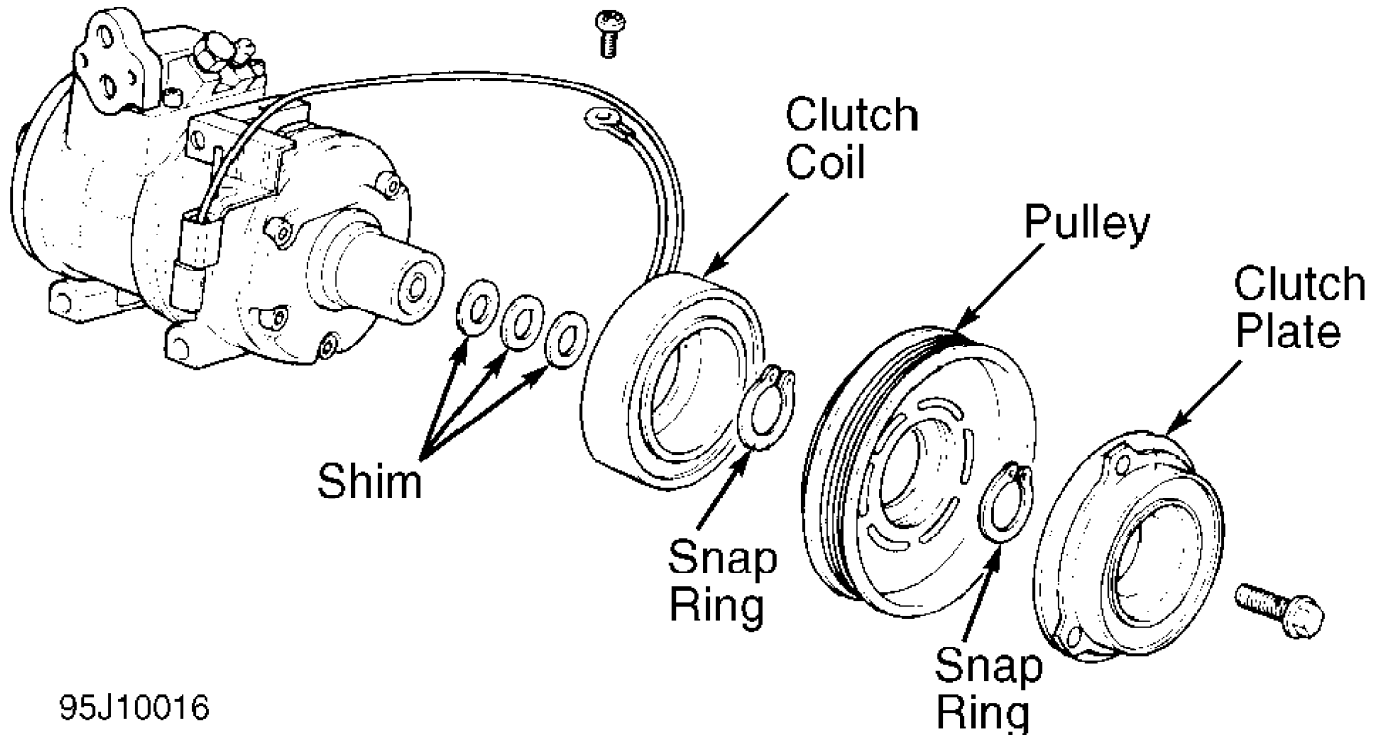


Fig. 3: Nippondenso 10PA17C 10-Cyl. Compressor (Camry & Land Cruiser)  
Courtesy of Mitsubishi Motor Sales of America.

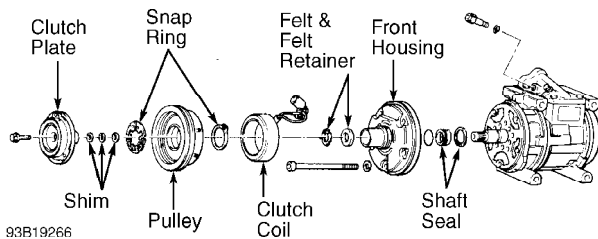


Fig. 4: Nippondenso 10PA15 10-Cyl. Compressor (Corolla & T100)  
Courtesy of Mitsubishi Motor Sales of America.