



Date:

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2014-2015 TAXI; AIR CONDITIONING COMPRESSOR CLUTCH REPLACEMENT

APPLIED VEHICLE: 2014-2015 Taxi

IF YOU CONFIRM

The "air conditioning" (A/C) compressor clutch needs to be replaced.

ACTION

- 1. Remove the A/C compressor assembly from the vehicle.
- 2. Inspect the A/C compressor refrigerant oil condition.
 - If the A/C compressor refrigerant oil is BROWN, replace the A/C compressor assembly.
 - If the A/C compressor refrigerant oil is LIGHT GREEN and does not have any • foreign materials replace only the A/C compressor clutch.

IMPORTANT: The purpose of **ACTION** (above) is to give you a quick idea of the work you will be performing. You MUST closely follow the SERVICE PROCEDURE (on page 2) as it contains information that is essential to successfully completing this repair.

Nissan Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. NOTE: If you believe that a described condition may apply to a particular vehicle. DO NOT assume that it does. See your Nissan dealer to determine if this applies to your vehicle.

SERVICE PROCEDURE

A/C COMPRESSOR REMOVAL

- 1. Evacuate the system's refrigerant.
 - Record the amount evacuated.

NOTE: Make sure your Robinair/Tech-Mate Air-Conditioning Machine # 48710 is calibrated.

- If the amount initially evacuated was less than 600 grams (1.32 pounds), check for leaks and repair as needed.
- 2. Place the vehicle on a lift and remove the right front wheel.
- 3. Partially remove the front fender protector (RH).
- 4. Remove the front under cover.
- 5. Remove the drive belt from the A/C compressor.

NOTE: Complete removal of the drive belt is not necessary.

6. Remove the bolt (Figure 1) that retains the high-pressure flexible hose to the A/C compressor.

CAUTION: Cap or wrap the joint of the pipe with a suitable material such as vinyl tape to avoid the entry of air.





7. Remove the bolt (Figure 2) that retains the low-pressure flexible hose to the A/C compressor.

CAUTION: Cap or wrap the joint of the pipe with a suitable material such as vinyl tape to avoid the entry of air.

8. Disconnect the harness connector from the A/C compressor.



9. Remove the A/C compressor bolts and then A/C compressor from the vehicle (Figure 3).

CAUTION:

- Do not reuse O-rings.
- Apply A/C oil to new O-rings for installation.
- Tighten compressor bolts to specification.



COMPRESSOR CLUTCH OIL CONDITION INSPECTION

- 1. Inspect a sample of the compressor refrigerant oil.
- 2. Is the refrigerant oil green as shown in Figure 4?
 - YES: Proceed to A/C CLUTCH REPLAEMENT on page 4.
 - NO: Replace the A/C compressor assembly and then proceed to A/C COMPRESSOR INSTALLATION on page 6.



Figure 4

A/C CLUTCH REPLACEMENT

- 1. Remove the center bolt by holding the A/C compressor clutch disc steady using a suitable tool.
- 2. Remove the compressor clutch disc and shims.

CAUTION: Retain all of the shims for installation.

- 3. Remove the snap ring using a suitable tool as shown (Figure 5).
- Remove the compressor pulley assembly using a suitable tool (A) as shown (Figure 6).

CAUTION: To prevent deformation of the pulley groove, the puller claws should be hooked under (not into) the pulley groove.



Figure 5



Figure 6





Inspect the following components after disassembly for damage and replace as needed:

5. Remove the three magnet coil screws using a suitable tool as shown, and then

remove the magnet coil.

- 1. Shim
- 2. Snap ring
- 3. Clutch disc
- 4. Pulley
- 5. Magnet coil
- A. Center bolt
- B. Magnet coil screws



Figure 8

Magnet Coil Inspection

Replace the magnet coil if any of the following symptoms are found:

- If the clutch disc contact surface shows signs of damage due to excessive heat.
- If the contact surface of the pulley shows signs of excessive grooving.
- If the magnet coil contains cracked insulation or a loose connection.
- Install the magnet coil by aligning the magnet coil pin (A) with the hole (B) in the A/C compressor front head as shown, then install the magnet coil screws.

CAUTION: Make sure to align the magnet coil pin with the hole in the A/C compressor front head.





- 7. Install the new pulley assembly using the Tool and a wrench as shown, and then install the snap ring using a suitable tool.
 - Tool number (J-38873-A)



- Install the new clutch disc (1) on the drive shaft, together with all of the original shim(s) (2) using a suitable tool (A).
- 9. Install the center bolt using a suitable tool.
 - After tightening the center bolt to specification, check that the pulley rotates smoothly.



- 10. Check the clearance (B) all the way around between the clutch disc (1) and pulley (2) using a suitable tool (A) as shown.
 - Clutch disc-to-pulley clearance (B)
 0.3 0.6 mm (0.012 0.024 in)
- If the specified clearance (B) is not obtained, replace the adjusting shim(s) and recheck the clearance (B) as shown.



A/C COMPRESSOR INSTALLATION



- 1. Install the compressor onto the vehicle.
- 2. Re-connect the harness connector to the compressor.
- 3. Confirm that the power steering line is in the correct position; do not disconnect the power steering line.
- 4. Install the drive belt.
- 5. Install the front under cover.
- 6. Install the front fender protector (RH).
- 7. Install the wheel.
- 8. Recharge the refrigerant.

NOTE: Do not use the charge capacity value listed in the Taxi ESMs.

- Ideal refrigerant charge amount: 750 grams (1.65 pounds)
- Acceptable charge amount: 700 grams +/- 50 grams (1.54 pounds +/- 0.11 pounds)

BREAK-IN OPERATION

When replacing compressor clutch assembly, always conduct the break-in operation. This is done by engaging and disengaging the clutch about 30 times. Break-in operation raises the level of transmitted torque.

PARTS INFORMATION

DESCRIPTION	PART #	QUANTITY
A/C Compressor Clutch	92660-JN30A	1
A/C Compressor Assembly	92600-3LN0A	1
O-Ring (High Side Hose to A/C Compressor)	92474-N8210	1
O-Ring (Low Side Hose to A/C Compressor)	92472-N8210	1

CLAIMS INFORMATION

Submit a Primary Failed Part (PP) line claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Replace A/C Compressor Clutch	(1)	TX42AA	(2)	(2)	1.0
Replace A/C Compressor Assembly	(1)	TD18AA	(2)	(2)	(3)

(1) Use the PFP for the repair actually performed.

(2) Use the Symptom and Diagnostic codes that apply to the repair actually performed.

(3) Reference the current Nissan Warranty Flat Rate Manual and use the indicated FRT.