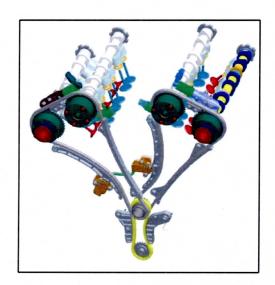


GROUP	MODEL
ENG	2014~2015MY Cadenza (VG)
NUMBER	DATE
148	September 2015

## TECHNICAL SERVICE BULLETIN

SUBJECT: CHATTER/RATTLE NOISE FROM ENGINE AFTER COLD SOAK

This bulletin provides information about the timing chain tensioner and tensioner arm replacement of some 2014~15MY Cadenza (VG) vehicles, which may experience a brief chattering or rattling noise concern from the engine on start-up, after a cold soak. After confirming the noise concern, follow the procedures outlined in this TSB to resolve the concern.



## \* NOTICE

Due to initial limited parts availability, do NOT order parts unless you have an affected in-stock vehicle or a customer vehicle that requires the repair.

File Under: <Engine>

Circulate To:

**◯** General Manager

**☒** Service Manager

**☒** Parts Manager

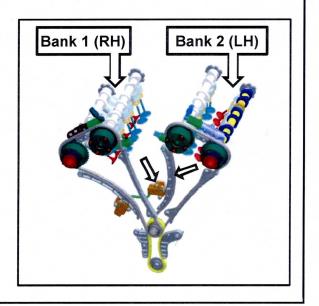
Service Advisor(s)

▼ Technician(s) ▼ Body Shop Manager ▼ Fleet Repair

#### Service Procedure:

### \* NOTICE

This Service procedure should <u>ONLY</u> be performed on engine bank 2 (LH), as shown.

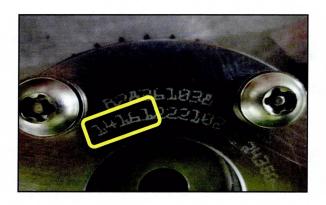


- 1. Refer to the "Engine Mechanical System

  → Timing System → Timing Chain"
  section in the applicable Workshop
  Manual on KGIS, to install the improved
  parts. NOTE: prior to installation, refer
  to steps 2~4 for supplementary
  inspection/installation information.
- 2. After removal of timing chain cover, inspect CVVT's on both engine banks to ensure the first five (5) digits of the eleven (11) digit serial number is equal or greater than "14111", on both Intake and Exhaust CVVTs. If the serial number is greater than 14111, proceed to step 4. If the serial number is less than "14111", replace the CVVT(s) prior to performing the remainder of this TSB procedure.

### \* NOTICE

Additionally, inspect the replacement CVVTs to ensure the first five (5) digits of the serial number are greater than "14111".



### SUBJECT: CHATTER/RATTLE NOISE FROM ENGINE AFTER COLD SOAK

### \* NOTICE

Prior to removing chain tensioners/adjusters, note position of the timing chain tensioner pawl to the rack grooves and count the number of teeth/grooves extending from the tensioner, as shown below. <u>Make sure to record the count for later reference</u>.

3. After installing the new tensioner, and timing chain guide, manually rotate the crankshaft three (3) full revolutions to securely seat the tensioner, then, check the number of grooves extending from the tensioner. When compared to the initial count, it should now be one (1) groove further out towards timing chain.

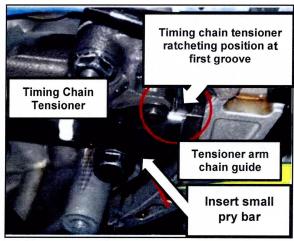


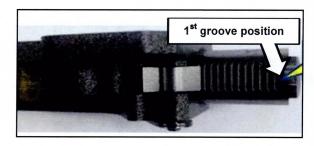
Image shown for illustration <u>ONLY</u> purposes. Actual conditions may vary.

4. If after tensioner and guide replacement the tensioner pawl rack is not extended one tooth/groove further out than before the repair, use a small pry bar to extend the tensioner out one (1) tooth/groove further towards timing chain, as shown.

# **A** CAUTION

Do <u>NOT</u> extend the tensioner pawl rack out more than one tooth/groove or damage to timing chain may occur.

- Once proper tensioner/guide installation has been completed, re-install all removed components by reversing the order of removal.
- After confirming proper engine oil and coolant levels, start the engine and verify the rattle concern has been resolved.



# SUBJECT CHATTER/RATTLE NOISE FROM ENGINE AFTER COLD SOAK

### **REQUIRED PARTS:**

Part Name	Part Number	Figure
Timing Chain Tensioner	24000 3CGA0FFF	
Tensioner Arm	24000 00 0AUTT	

## \* NOTICE

Due to initial limited parts availability, do NOT order parts unless you have an affected in-stock vehicle or a customer vehicle that requires the repair.

#### **RELATED PARTS:**

Part Name	Part Number	Comments	
Gasket – Rocker Cover	22453 3CGA2		
Gasket – Rocker Cover	22241 3CGA1		
Gasket – Outlet, LH	21354 3C510		
Gasket – Outlet, RH	21354 3C520		
Gasket – ETC Actuator	35101 3C000		
Gasket – Water Pump, RH	21355 3C530	Metal	
Gasket – Water Pump, LH	21355 3C520	Rubber	
Gasket – Surge Tank	29215 3CFA1		

# SUBJECT: CHATTER/RATTLE NOISE FROM ENGINE AFTER COLD SOAK

### AFFECTED VEHICLE RANGE:

Model	Production Date Range		
Cadenza (VG)	2014~2015MY		

#### WARRANTY INFORMATION:

N CODE: Q72 C CODE: ZZ3

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	24461 2G350	0	(ENG 148) Timing Chain Tensioner and Tensioner Arm Replace (LH side)	24410F00	6.0 M/H	24000 3CGA0FFF	1