Component Procedures: Variable Valve Timing Actuator

Table of Contents

Component Procedures: Variable Valve Timing Actuator

Parts and Labor (itype_189)

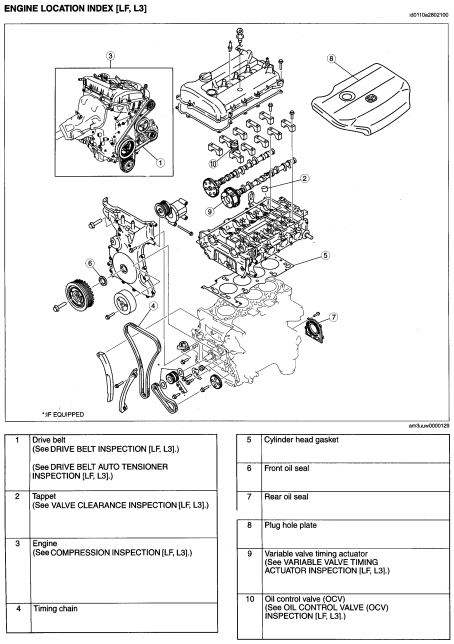
Parts

Qualifier	Part #	Name	Price	Note
Actuator > From 9/1/06	LF94124X0B	13-actuator	433.73	

Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Replace	Variable Valve Timing Actuator	B	3.9	0.0

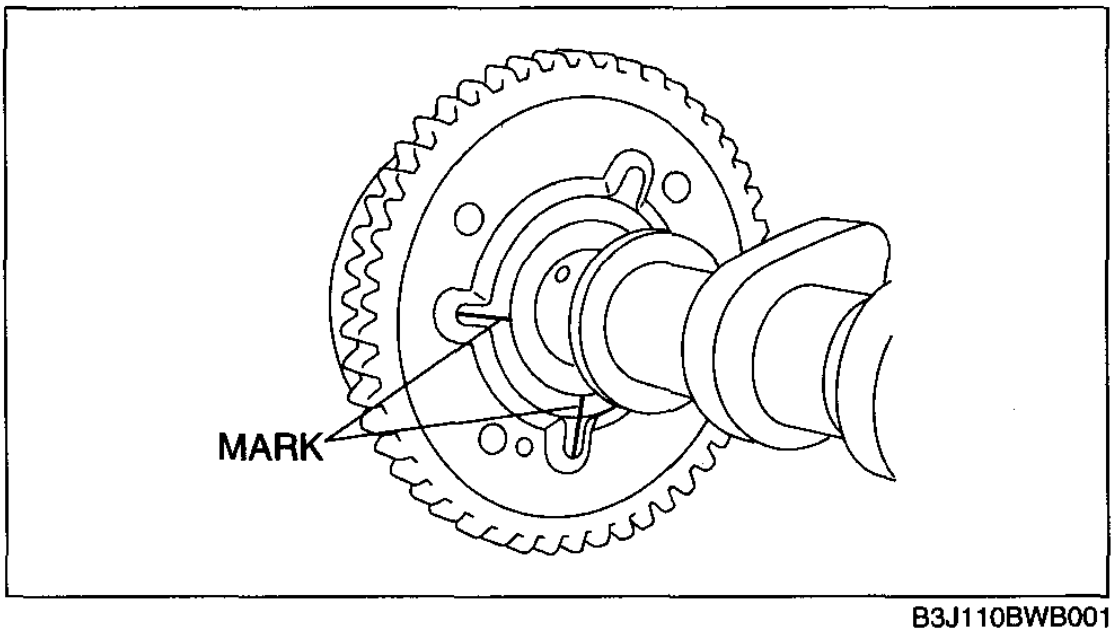
Engine Location Index (Article 1421661)

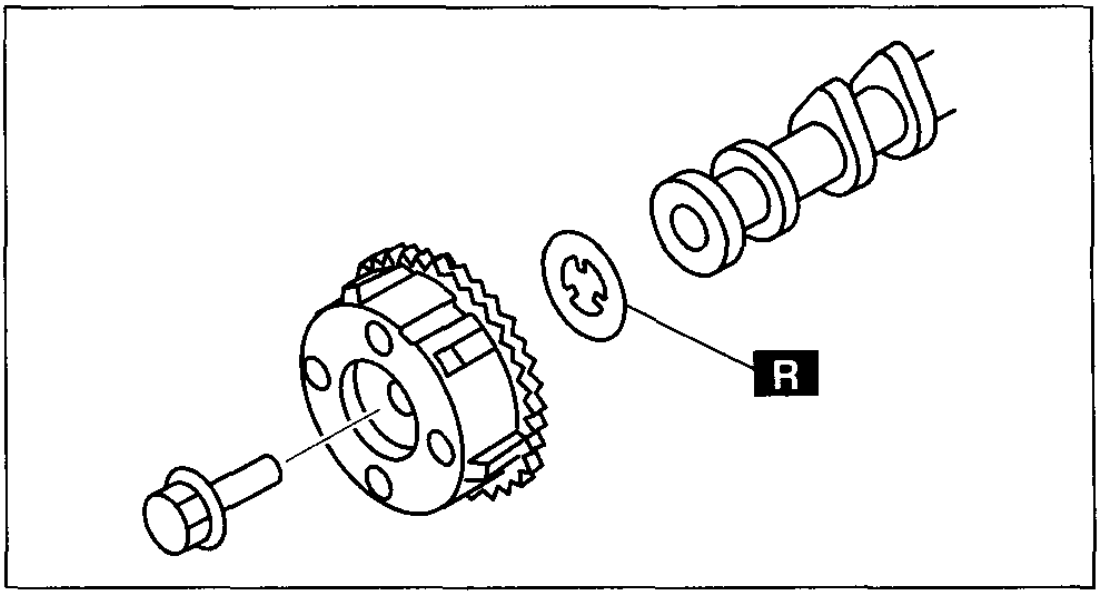


1	Drive belt (See DRIVE BELT INSPECTION [LF, L3].) (See DRIVE BELT AUTO TENSIONER INSPECTION [LF, L3].)
2	Tappet (See VALVE CLEARANCE INSPECTION [LF, L3].)
3	Engine (See COMPRESSION INSPECTION [LF, L3].)
4	Timing chain

5	Cylinder head gasket
6	Front oil seal
7	Rear oil seal
8	Plug hole plate
9	Variable valve timing actuator (See VARIABLE VALVE TIMING ACTUATOR INSPECTION [LF, L3].)
10	Oil control valve (OCV) (See OIL CONTROL VALVE (OCV) INSPECTION [LF, L3].)

Variable Valve Timing Actuator Removal/Installation (Article 1420664)





CPJ110WZB005

All Technical Service Bulletins (itype_100)

Tsbs
- Engine - VVT Noise At Engine Start Up (0101011, 2011/12/21)
- Computers/Controls KAM Memory Clearing After VVT R & R (MTIP-09-01-3, 2009/01/01)

Customer Interest Bulletins (itype_109)

Tsbs
- Engine - VVT Noise At Engine Start Up (0101011, 2011/12/21)

Repair Tips (itype_110)

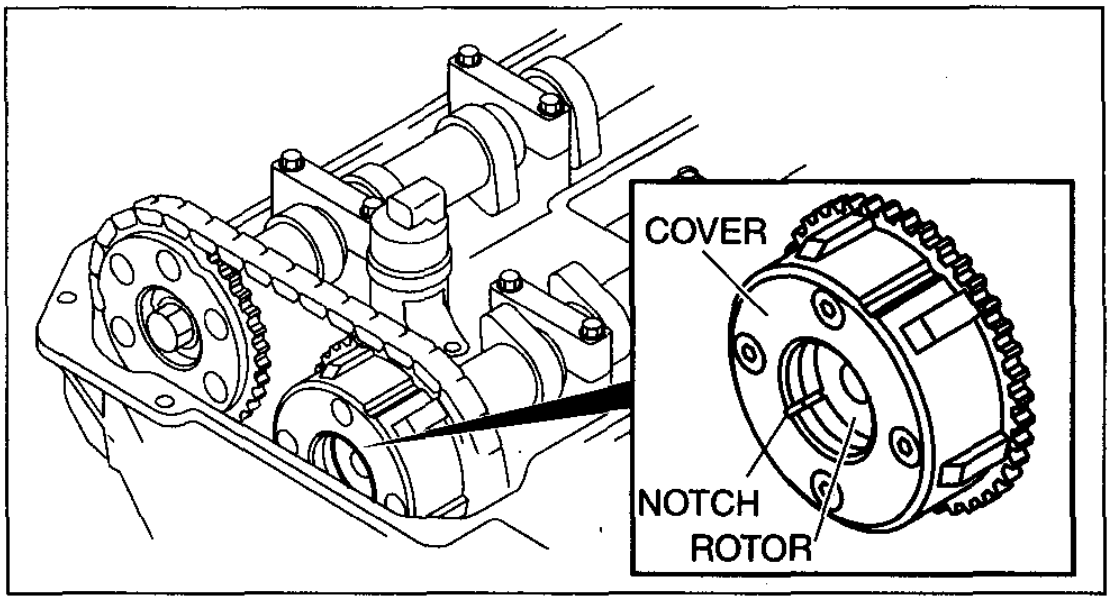
Tsbs
- Computers/Controls KAM Memory Clearing After VVT R & R (MTIP-09-01-3, 2009/01/01)

Variable Valve Timing Control System Operation Inspection (Article 1420665)

Variable Valve Timing
Control System Operation Inspection
When idling cannot be continued
1. Remove the
oil control valve
(
OCV
) and verify that the spool valve is at maximum retard position.
2. Connect the oil control valve(OCV).
3. Turn the
ignition switch
to the ON position.
4. Verify that the spool valve is at maximum retard position.
- If the spool valve is stuck in the advance direction, inspect for the following:
- Short circuit in wiring harnesses or connectors between the oil control valve (OCV) and the
PCM
.
5. Inspect the
variable valve timing actuator
. (See VARIABLE VALVE TIMING ACTUATOR INSPECTION [LF, L3].)
When idling
can
be continued

1. Disconnect oil control valve (OCV) connector.
2. Warm up the engine and idle it.
3. Apply battery voltage to the oil control valve (OCV) and verify that the engine idles roughly or stalls.
- If the engine idles roughly or stalls, inspect the
timing chain
component (valve timing deviation).
- If the engine does not idle roughly or stalls, go to the next step.
4. Remove the oil control valve (OCV) and perform spool valve operation inspection. (See OIL CONTROL VALVE (OCV) INSPECTION [LF, L3].)
- If not as specified, inspect the following:
- Oil control valve (OCV)
- Harnesses and connectors between oil control valve (OCV) and PCM open or short.
- If as specified, inspect the following hydraulic passages for clogging or leakage or both:
-
Oil pressure switch
- oil control valve (OCV)
- Oil control valve (OCV) -
camshaft
- Camshaft internal passage
5. If they are normal, replace the
camshaft pulley
(with built-in variable valve timing actuator).

Variable Valve Timing Actuator Inspection (Article 1364256)



am3uuw0000142

Noise (itype_156)

Tsbs
- Engine - VVT Noise At Engine Start Up (0101011, 2011/12/21)