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REPAIR INSTRUCTIONS

DRIVE BELTS: EXPLODED VIEW



1.	Drive belt	2.	Power steering oil pump pulley	3.	Generator pulley
4.	Crankshaft pulley	5.	A/C compressor	6.	Cooling fan pulley
7.	Idler pulley	8.	Drive belt tensioner		

Fig. 6: Exploded View Of Drive Belt (VQ40DE) Courtesy of SUZUKI OF AMERICA CORP.

CHECKING DRIVE BELTS

WARNING: Be sure to perform when the engine is stopped.

- 1. Remove air duct and resonator assembly when inspecting drive belt. Refer to <u>AIR CLEANER AND</u> <u>AIR DUCT: REMOVAL AND INSTALLATION</u>
- 2. Make sure that the auto tensioner indicator is within the allowable working range (A) as shown.

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Fig. 7: Identifying Auto Tensioner Indicator Allowable Working Range Courtesy of SUZUKI OF AMERICA CORP.

- 3. Visually check entire belt for wear, damage or cracks.
- 4. If the indicator is out of allowable working range or drive belt is damaged, replace the drive belt. Refer to **DRIVE BELTS: REMOVAL AND INSTALLATION**

DRIVE BELTS: ADJUSTMENT

There is no manual drive belt tension adjustment. The drive belt tension is automatically adjusted by the drive belt auto tensioner.

DRIVE BELTS: REMOVAL AND INSTALLATION

REMOVAL

- 1. Remove air duct and resonator assembly. Refer to [AIR CLEANER AND AIR DUCT: REMOVAL AND INSTALLATION].
- 2. Rotate the drive belt auto tensioner in the direction of arrow (loosening direction of tensioner) as shown, using suitable tool.

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Fig. 8: Rotating Drive Belt Auto Tensioner Courtesy of SUZUKI OF AMERICA CORP.

WARNING: Avoid placing hand in a location where pinching may occur if the tool accidentally comes off.

3. Remove the drive belt.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION: Make sure belt is securely installed around all pulleys.

DRIVE BELT AUTO TENSIONER AND IDLER PULLEY: REMOVAL AND INSTALLATION

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Fig. 9: Identifying Drive Belt Auto Tensioner And Idler Pulley Courtesy of SUZUKI OF AMERICA CORP.

REMOVAL

- 1. Remove air duct and resonator assembly. Refer to [AIR CLEANER AND AIR DUCT: REMOVAL AND INSTALLATION].
- 2. Remove drive belt. Refer to [DRIVE BELTS: REMOVAL AND INSTALLATION].
- 3. Remove auto tensioner and idler pulley using power tool.

INSTALLATION

Installation is in the reverse order of removal.

AIR CLEANER FILTER: EXPLODED VIEW

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Fig. 10: Exploded View Of Air Cleaner (VQ40DE) Courtesy of SUZUKI OF AMERICA CORP.

AIR CLEANER FILTER: REMOVAL AND INSTALLATION

REMOVAL

- 1. Disconnect air duct and resonator from the air cleaner case (upper).
- 2. Disconnect MAF/IAT sensor.
- 3. Unhook clips, and lift air cleaner case (upper).
- 4. Remove air cleaner filter.

INSTALLATION

Installation is in the reverse order of removal.

CAMSHAFT VALVE CLEARANCE

INSPECTION

- NOTE: Perform the following inspection after removal, installation or replacement of camshaft or valve-related parts, or if there are unusual engine conditions due to changes in valve clearance over time (starting, idling, and/or noise).
 - 1. Remove the engine room cover. Refer to [ENGINE ROOM COVER: REMOVAL AND INSTALLATION].
 - 2. Remove the air cleaner and air duct assembly. Refer to [AIR CLEANER AND AIR DUCT:

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EXPLODED VIEW].

- 3. Remove rocker covers (RH and LH banks). Refer to [ROCKER COVER: REMOVAL AND INSTALLATION].
- 4. Measure the valve clearance as follows:
 - a. Set No. 1 cylinder at TDC of its compression stroke.
 - Rotate crankshaft pulley clockwise to align timing mark (A) (grooved line without color) with timing indicator (B).



Fig. 11: Aligning Timing Mark With Timing Indicator Courtesy of SUZUKI OF AMERICA CORP.

• Make sure that intake and exhaust cam noses on No. 1 cylinder (engine front side of RH bank) are located as shown.

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Fig. 12: Identifying Intake And Exhaust Cam Noses On No. 1 Cylinder Courtesy of SUZUKI OF AMERICA CORP.

- If not, rotate crankshaft one revolution (360°) and align as shown.
- b. Use feeler gauge, measure the clearance between valve lifter and camshaft.



Fig. 13: Measuring Clearance Between Valve Lifter And Camshaft