

TIMING BELT

Removal (Avenger & Sebring Coupe)

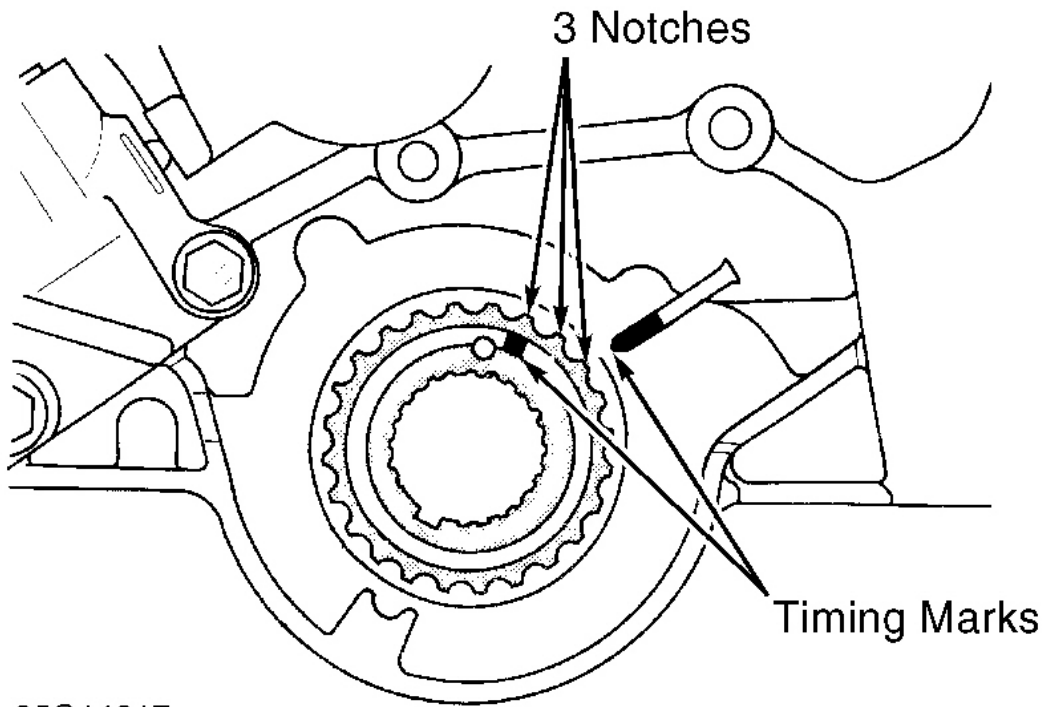
1. Disconnect negative battery cable. Remove coolant reservoir bottle. On models with cruise control, remove cruise control actuator and set aside.
2. On all models, raise and support vehicle. Remove right front wheel. Remove side panel from right wheelwell.
3. Remove accessory drive belts. Remove generator and bracket from engine block, and set aside. Remove crankshaft vibration damper.
4. Lower vehicle. Place floor jack under vehicle to support weight of engine and transaxle assembly. Remove engine mount-to-frame through-bolt. Remove engine mount-to-engine bracket nuts and bolt. Remove engine mount.
5. Remove 3 bolts attaching engine support bracket to engine block. Top reamer bolt may be heat seized on engine support bracket. Spray lubricant on bolt while removing.

NOTE: Reamer bolt head will have a "R" marking for identification.

6. Remove power steering pump (hoses attached) and bracket from engine block, and set aside. Remove timing belt covers.
7. Rotate crankshaft to align camshaft and crankshaft timing marks. See **Fig. 1** and **Fig. 2**.
8. If reusing old timing belt, mark timing belt direction of rotation for installation reference. Loosen timing belt tensioner pulley bolt. Remove timing belt. Remove automatic tensioner.

CAUTION: DO NOT rotate crankshaft or camshaft with timing belt removed.

NOTE: When automatic tensioner is removed from engine, it is necessary to compress plunger into tensioner body.



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Fig. 1: Crankshaft Sprocket - Timing Belt Installation Position (This Is Not TDC Checking Position)
Courtesy of CHRYSLER CORP.

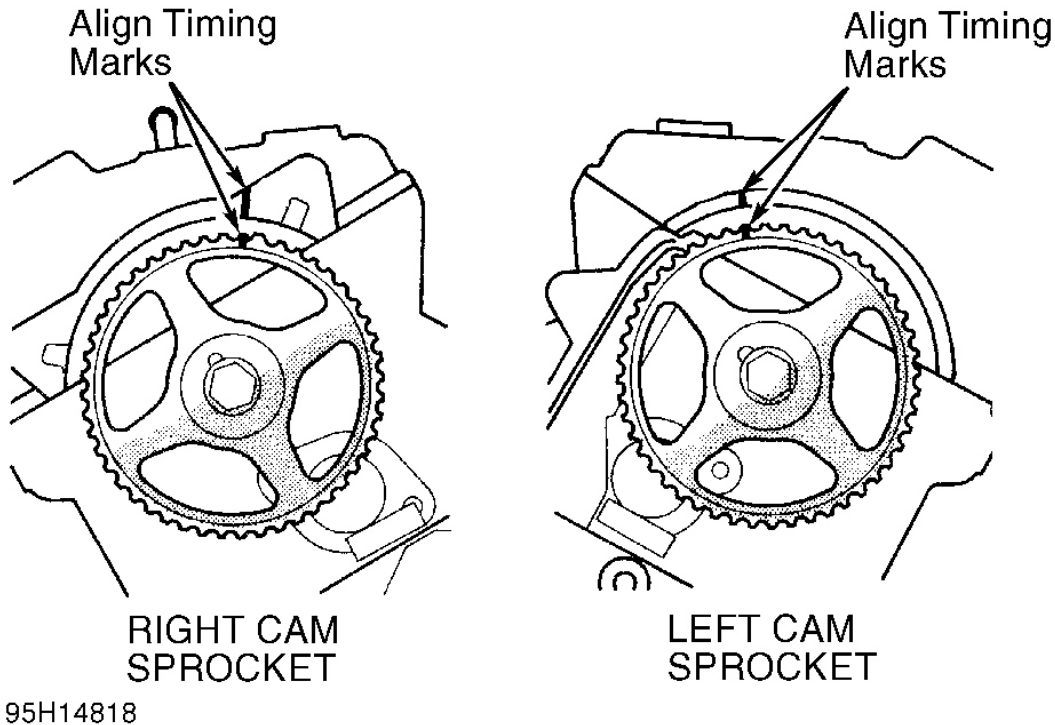


Fig. 2: Aligning Camshaft Sprockets
 Courtesy of CHRYSLER CORP.

Removal (Cirrus, Sebring Convertible & Stratus)

1. Disconnect negative battery cable from jumper terminal. Raise and support vehicle. Remove right front wheel. Remove accessory drive belt splash shield from right wheelwell.
2. Remove accessory drive belts. Remove right engine support assembly vertical bolts from bottom side of frame rail (timing belt end of engine).
3. Lower vehicle. Place floor jack under vehicle to support weight of engine and transaxle assembly. Remove 3 bolts attaching engine support assembly to engine block bracket.
4. Move the A/C drier aside with hoses attached. Remove coolant reservoir tank. Remove right engine support assembly. Remove 3 bolts attaching engine support bracket to engine block, and remove bracket.
5. Remove crankshaft vibration damper. Remove power steering pump (hoses attached) and bracket from engine block. Remove timing belt covers.
6. Rotate crankshaft to align camshaft and crankshaft timing marks. See **Fig. 1** and **Fig. 2**.
7. If reusing old timing belt, mark timing belt direction of rotation for installation reference. Loosen timing belt automatic tensioner bolts. Remove timing belt. Remove automatic tensioner.

CAUTION: DO NOT rotate crankshaft or camshaft with timing belt removed.

NOTE: When automatic tensioner is removed from engine, it is necessary to compress plunger into tensioner body.

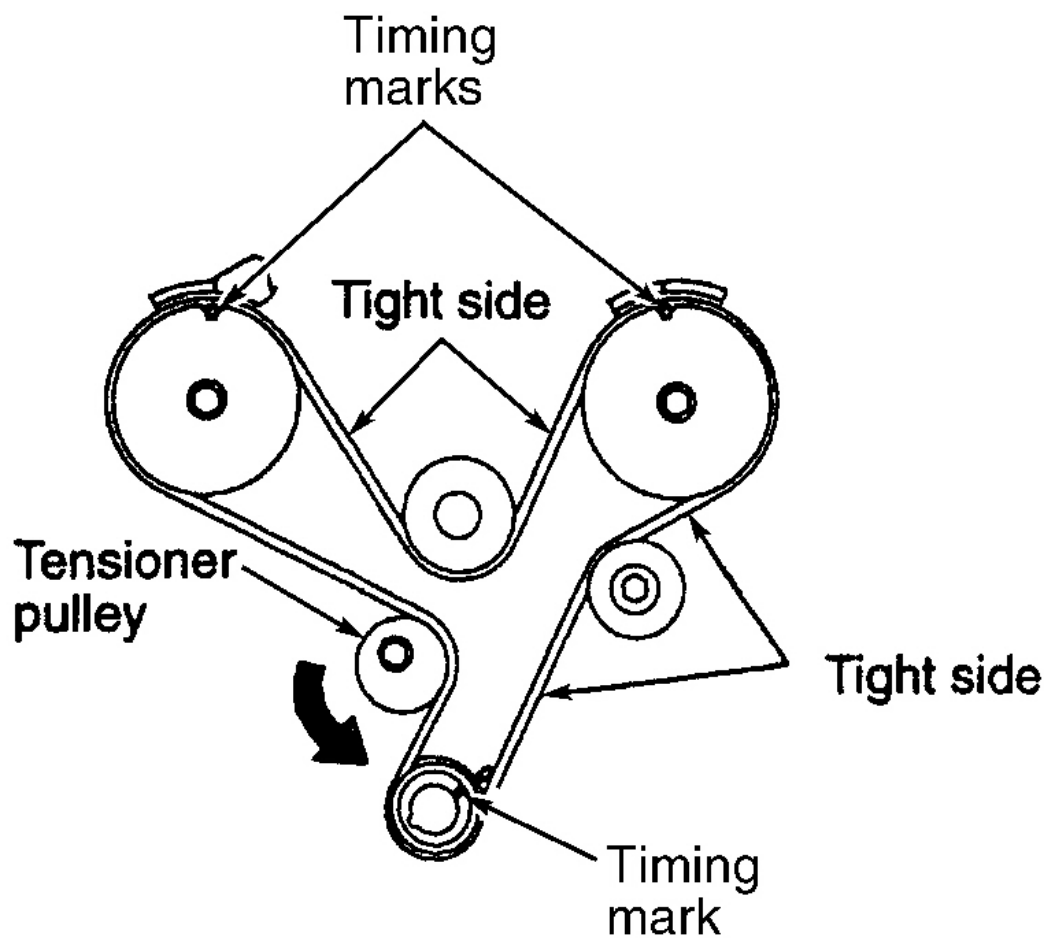
Installation (All Models)

1. Place automatic tensioner into vise, and SLOWLY compress plunger. When plunger is compressed into tensioner body, install locking pin through body and plunger holes to retain plunger until tensioner is installed. See **Fig. 4** .
2. Index tensioner in vise the same direction as installed. This will ensure proper pin orientation when tensioner is installed in engine. See **Fig. 4** .
3. Align crankshaft mark with timing mark on oil pump housing, then back off 3 notches before TDC. See **Fig. 1** . This will position the crankshaft for timing belt installation. Set camshaft sprockets by aligning timing marks on sprockets with marks on rear timing belt cover. See **Fig. 2** .

NOTE: If reusing old timing belt, install in original direction of rotation.

4. Install timing belt on right (next to firewall) camshaft sprocket first. Install a spring clip to keep belt in position. Keeping belt taught, install belt under water pump pulley and then around front camshaft sprocket. Install spring clip on front sprocket and belt.
5. Rotate crankshaft clockwise to TDC position. This will take the installation slack out of the timing belt and align the crankshaft timing marks to the TDC position. Continue routing belt around idler pulley, crankshaft sprocket, and tensioner pulley. Apply rotating force to crankshaft sprocket in clockwise direction to tension belt. Ensure camshaft timing marks and crankshaft TDC timing marks are aligned. See **Fig. 3** .

CAUTION: Ensure crankshaft has been rotated clockwise from the timing belt installation position to remove slack from timing belt and crankshaft timing marks are **ALIGNED**.



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Fig. 3: Aligning Crankshaft & Camshaft Timing Marks After Removing Slack From Timing Belt
 Courtesy of DAIMLERCHRYSLER CORP.

6. Loosen tensioner pulley center bolt. Position tensioner pulley with pin holes facing down. Install Adapter (MD998767) or equivalent, and torque wrench, to tensioner pulley. See **Fig. 5** . Apply 39 INCH lbs. (4.4 N.m) in a counterclockwise direction to tensioner. Tighten tensioner bolt to specification, without letting tensioner pulley rotate.
7. With torque being applied to tensioner pulley, install automatic tensioner (with locking pin in place) to tensioner pulley bracket. Tighten bolts to specification. See **TORQUE SPECIFICATIONS** . Pull tensioner plunger locking pin.
8. Rotate crankshaft 2 revolutions clockwise, and check alignment of timing marks. Install tensioner locking pin into automatic tensioner. Pin should slide in and out with no resistance. Even if locking pin cannot be easily inserted, belt tension is okay if automatic tensioner plunger projection is within .149-.177" (3.8-4.5 mm). Projection is measured between top edge of automatic tensioner housing and arm of tensioner

pulley bracket. Retension timing belt, if necessary.

9. Install timing belt covers. Install crankshaft vibration damper. Tighten crankshaft damper bolt to specification. See **TORQUE SPECIFICATIONS**.

NOTE: Reamer bolt head will have a "R" marking for identification.

10. Install engine mount bracket. On Avenger and Sebring Coupe, when installing engine support bracket to engine block, tighten top reamer bolt slowly while spraying it with lubricant. Attach engine mount so arrow on side plate points toward engine.
11. On all models, reverse removal procedure to complete installation. Adjust drive belts to proper tension.

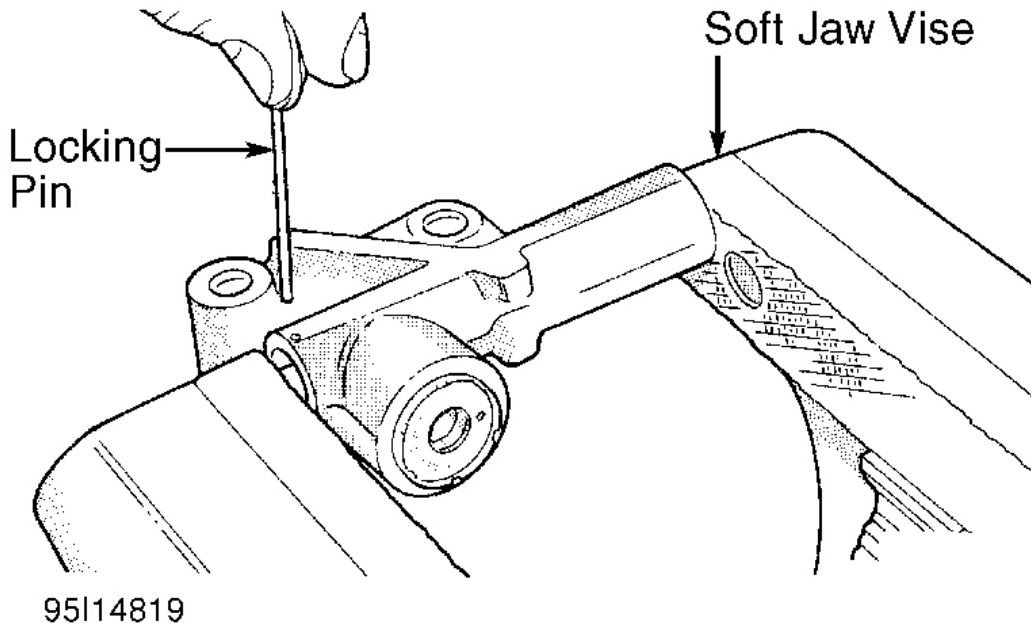
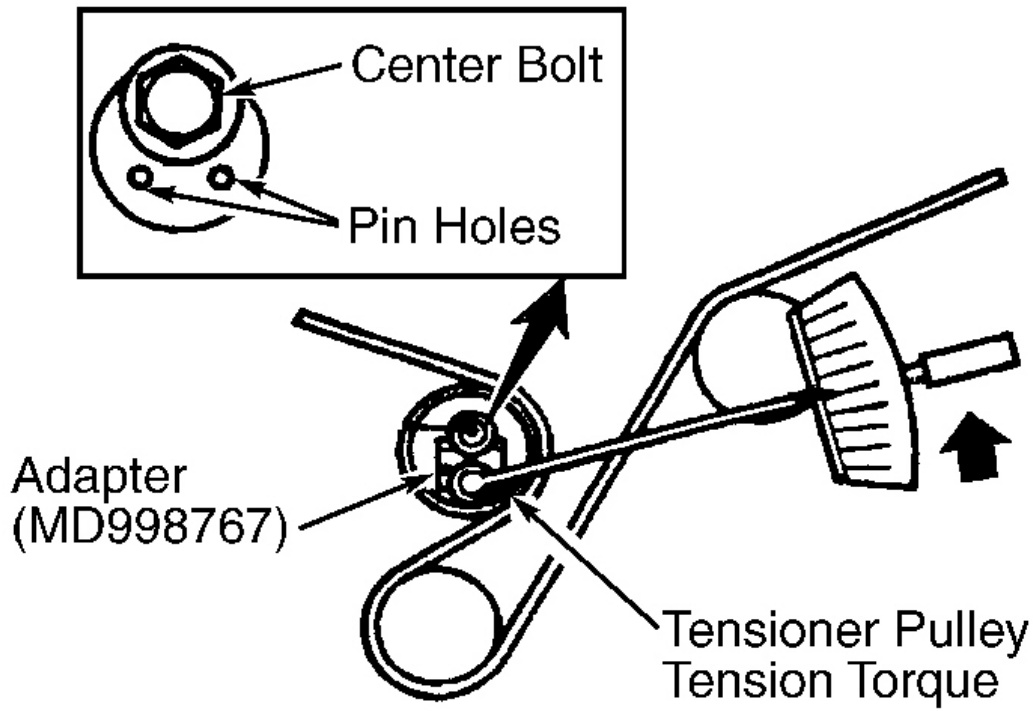


Fig. 4: Compressing Tensioner
Courtesy of CHRYSLER CORP.



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Fig. 5: Tensioning Timing Belt
Courtesy of DAIMLERCHRYSLER CORP.
