

## TIMING BELT

### Removal

**CAUTION:** Obtain the radio anti-theft code before disconnecting the battery.

**NOTE:** Lock carrier is slid forward onto alignment tools. This will allow servicing of front engine components. Lock carrier can be removed at technicians discretion.

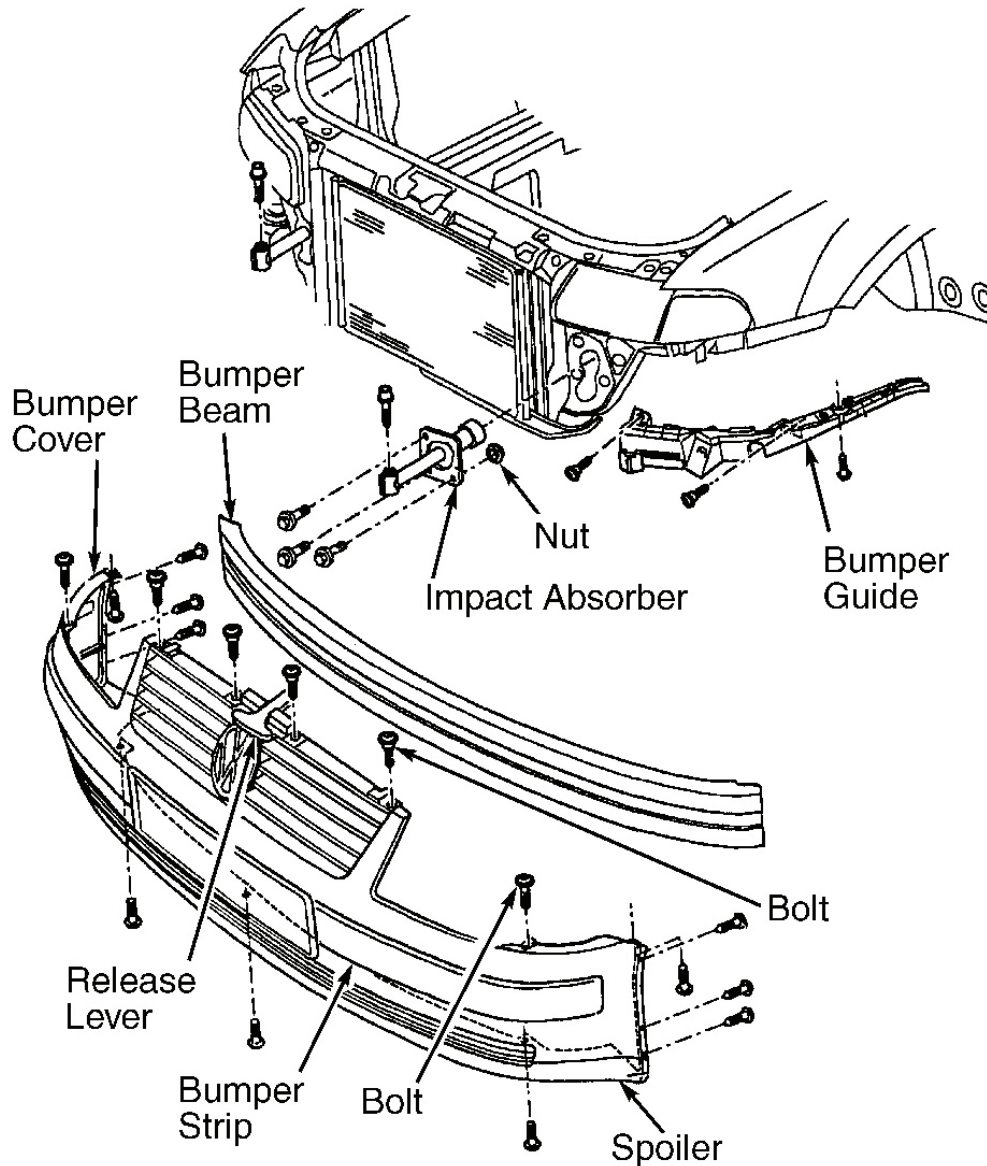
1. Disconnect negative battery cable. Remove engine top cover. Remove noise insulation panel from under front of vehicle.
2. For vehicles manufactured up to September, 2000, disconnect front turn signal light assembly wiring harnesses. Separate hood release lever from bumper cover. Remove front bumper cover. See **Fig. 1** . Remove bumper beam. Remove air intake duct from air cleaner housing. Remove support bolts from lock carrier assembly. See **Fig. 2** . Install Support Tool (3369) through lock carrier to body. Remove oil cooler from lock carrier assembly. Move lock carrier forward on support tools.
3. For vehicles manufactured from October, 2000, remove bumper cover from bumper carrier. See **Fig. 3** . Remove noise insulation panel from under engine compartment. Remove air intake duct at lock carrier. Remove bolts from front of bumper carrier. See **Fig. 4** . Install guide rods on right and left sides. Pull lock carrier forward about 4" (10 cm) on guide rods into service position.
4. Hold cooling fan pulley with spanner wrench (3312). See **Fig. 5** . Unscrew and remove viscous cooling fan clutch from pulley. Viscous cooling fan is LEFT-HAND threaded.
5. Use a long 17-mm box wrench to turn serpentine belt tensioner clockwise and relieve belt tension. Secure tensioning roller with pin 3204 when both holes are positioned over one another. Remove serpentine belt. If reusing belt, mark belt rotation direction with arrow for reassembly reference.
6. Unclip timing belt guard on front of both camshafts and remove. Position crankshaft to top dead center No. 3 cylinder. Mark on toothed belt guard must align with notch on belt pulley. See **Fig. 6** .
7. Note securing plate on front end of each camshaft sprocket. If large hole in each plate does not face inward, toward center of engine, rotate crankshaft one revolution. See **Fig. 7** . Ensure crankshaft timing marks are still aligned. See **Fig. 6** .
8. Remove sealing plug from left side of engine block. See **Fig. 8** . TDC mark on crankshaft must be visible or be felt through sealing hole. Install Crankshaft Holding Tool (Audi 3242) into sealing plug hole.
9. Remove serpentine belt tensioner. Remove center and left timing belt covers.
10. Using an 8-mm hex wrench, SLOWLY turn timing belt tensioner pulley clockwise to compress timing belt tensioner. See **Fig. 9** . Compress timing belt tensioner just enough so a 2-mm pin can be inserted through the holes in top of tensioner body and push rod. This will hold the tensioner in the compressed position.

**CAUTION:** If reusing old timing belt, mark an arrow indicating direction of rotation on accessory drive belt or timing belt. Damage may result if belts are installed in opposite direction of rotation.

11. Remove crankshaft vibration damper from crankshaft. It is NOT necessary to remove center bolt. If center bolt is removed, manufacturer recommends using NEW bolt on reassembly. Remove serpentine

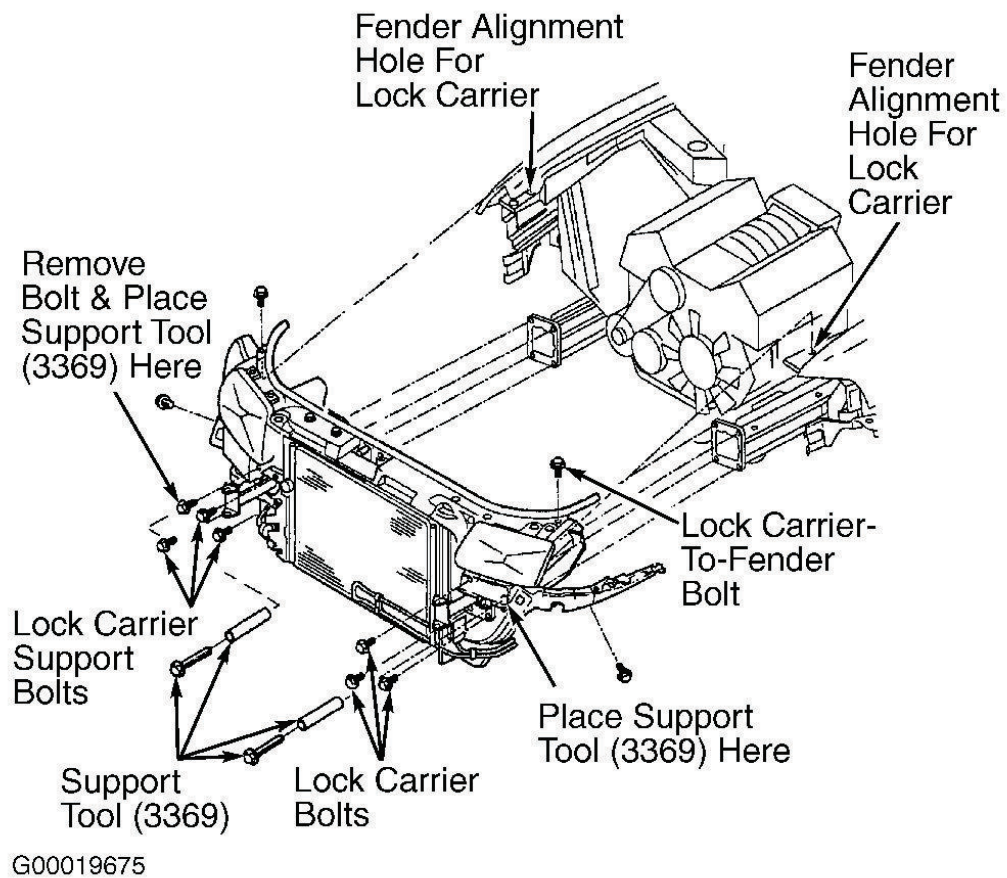
belt idler pulley.

12. Remove fan retainer and belt pulley toothed belt protection. Remove timing belt.



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**Fig. 1: Removing Front Bumper Cover (Up To September, 2000)**  
 Courtesy of VOLKSWAGEN UNITED STATES, INC.



**Fig. 2: Moving Lock Carrier To Service Position (Up To September, 2000)**  
Courtesy of VOLKSWAGEN UNITED STATES, INC.