FORD

2.0L 4-Cylinder - DOHC - Escape

MANUFACTURER'S SUGGESTED SCHEDULED MAINTENANCE

The manufacturer recommends the belt be replaced every 120,000 miles.

REMOVAL & INSTALLATION

CAUTION: This application is an interference engine. Do not rotate camshaft or crankshaft when timing belt is removed, or engine damage may occur.

TIMING BELT

Removal

1. Disconnect negative battery cable. Remove accessory drive belt. Remove air cleaner outlet pipe. Disconnect ignition wires from spark plugs. Remove spark plugs. Disconnect throttle cable and cruise control actuator cable. On 2002-04 models, disconnect the catalyst monitor and heated oxygen sensor connectors, and detach the connectors from the bracket. Remove wiring harness anchors from valve cover studs, and position the wiring harness aside. On all models, remove valve cover. See **Fig. 1** .
2. Remove catalytic converter. Remove coolant tube bolt and nut. Position coolant tube to side. Remove right front wheel and tire assembly. Remove right lower splash shield.
3. Rotate crankshaft to just before No. 1 cylinder TDC. See **Fig. 2** . Remove stud and install Crankshaft TDC Timing Peg (303-574). See **Fig. 3** .

NOTE: Make sure second notch in pulley is indexed to lower cylinder block. See Fig. 2 .

4. Rotate crankshaft clockwise against peg to bring it to TDC. Loosen water pump pulley bolts.
5. Loosen crankshaft pulley bolt. Rotate tensioner and remove accessory drive belt. Remove crankshaft pulley. Remove bolts and lower timing belt cover. See **Fig. 4** . Install Engine Support Bar (303-F072). See **Fig. 5** .
6. Remove ground strap and engine mount upper bracket. See **Fig. 6** . Remove upper timing belt cover studs. Disconnect the knock sensor connector from upper timing cover, if necessary. Remove upper timing belt cover bolts and cover. See **Fig. 7** .

NOTE: Installation of Camshaft Alignment Tool (303-465) into exhaust camshaft may require camshafts to be rotated slightly clockwise.

7. Remove water pump pulley and accessory drive belt idler pulley. Install Camshaft Alignment Tool (303-465) and align camshafts. See **Fig. 8** .
8. Raise and support vehicle. Remove engine mount lower bracket. See **Fig. 9** .
9. Loosen timing belt tensioner pulley, and allow it to slide down to bottom of its travel. If timing belt is going to be reused, mark direction of rotation for installation reference. Slide timing belt off of camshaft and crankshaft sprockets.

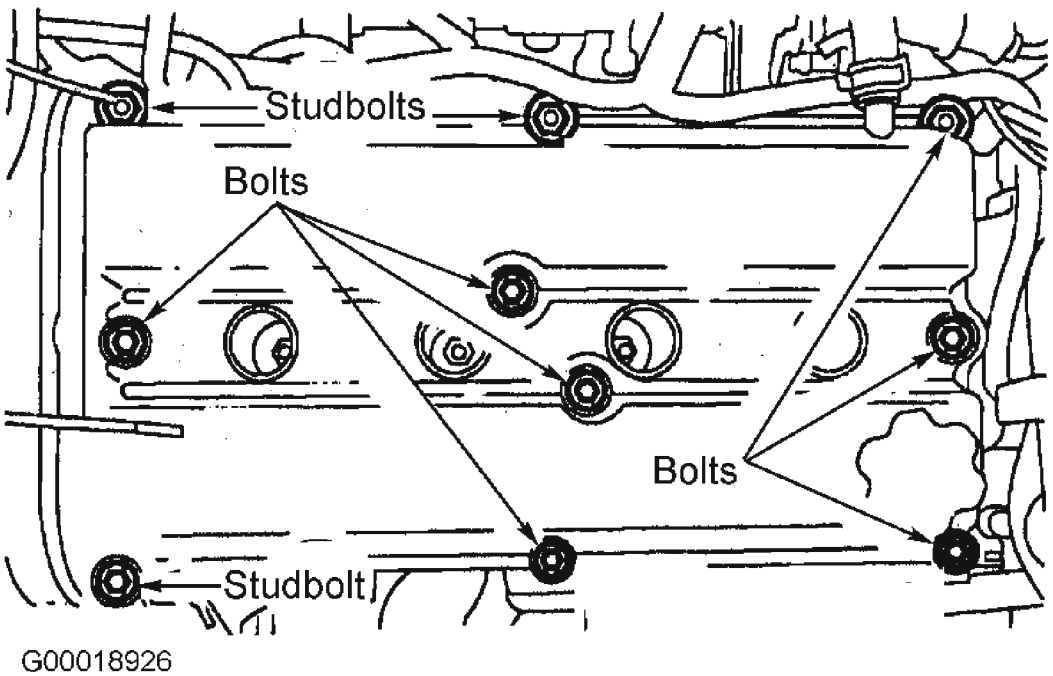

Fig. 1: Removing Valve Cover
Courtesy of FORD MOTOR CO.

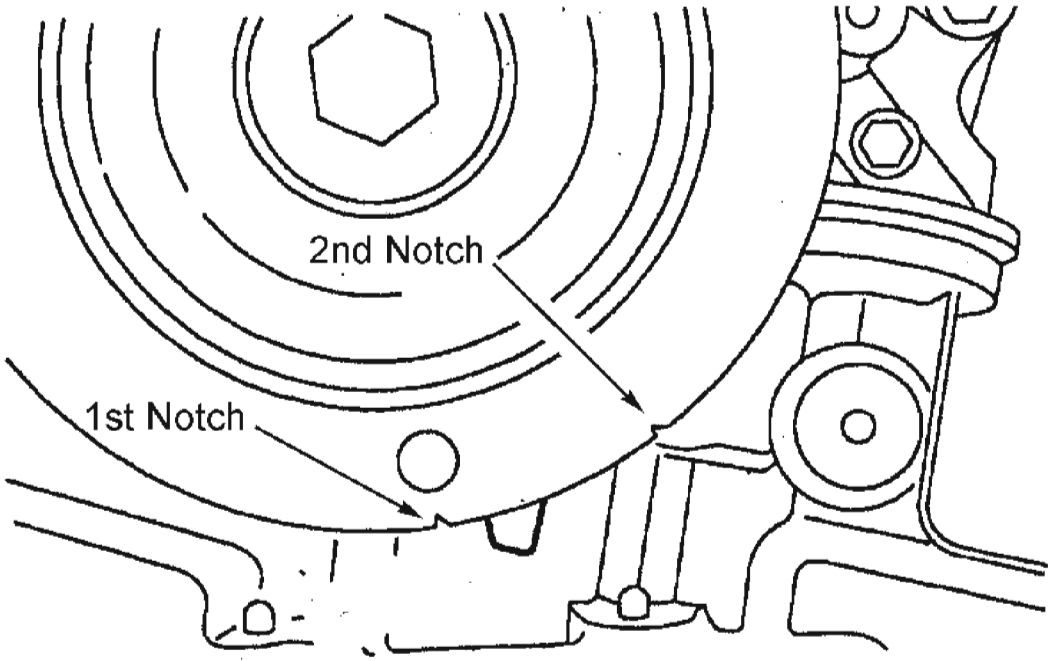

Fig. 2: Aligning Crankshaft Timing Marks Before TDC
Courtesy of FORD MOTOR CO.

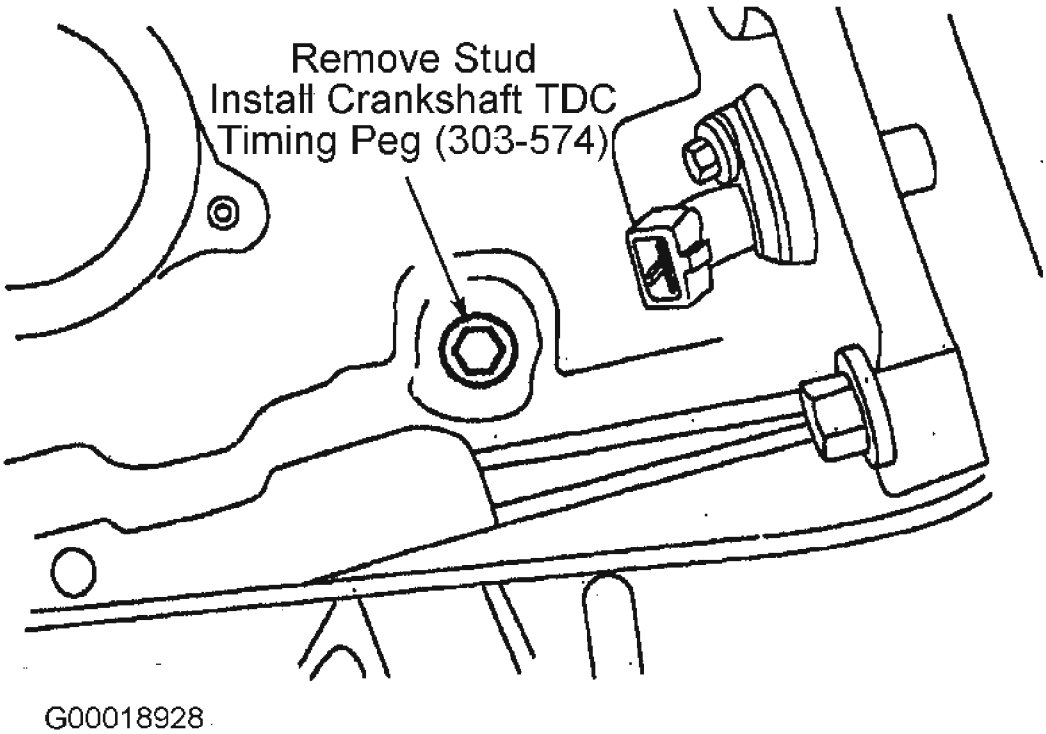

Fig. 3: Removing Stud For Installation Of Crankshaft TDC Timing Peg (303-574)
Courtesy of FORD MOTOR CO.

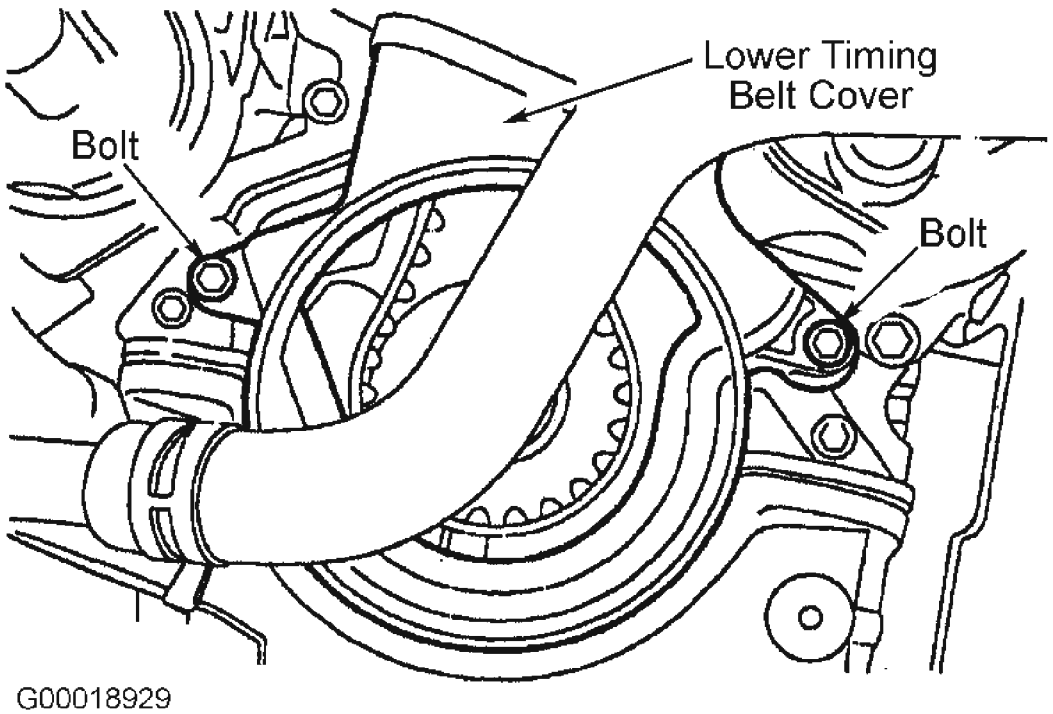

Fig. 4: Removing Lower Timing Belt Cover
Courtesy of FORD MOTOR CO.

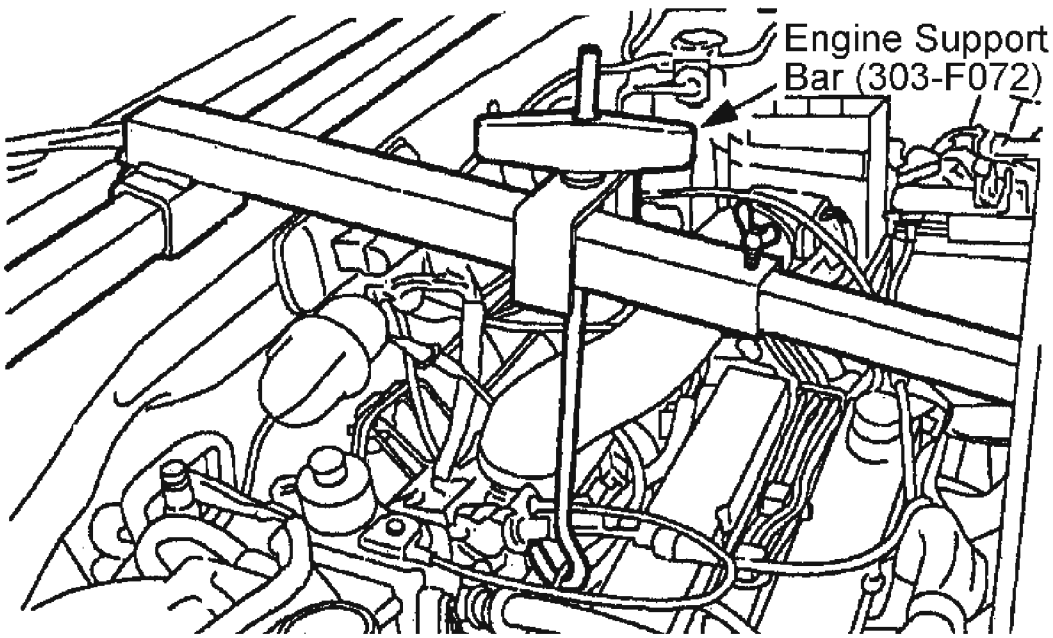

Fig. 5: Installing Engine Support Bar (303-F072)
Courtesy of FORD MOTOR CO.

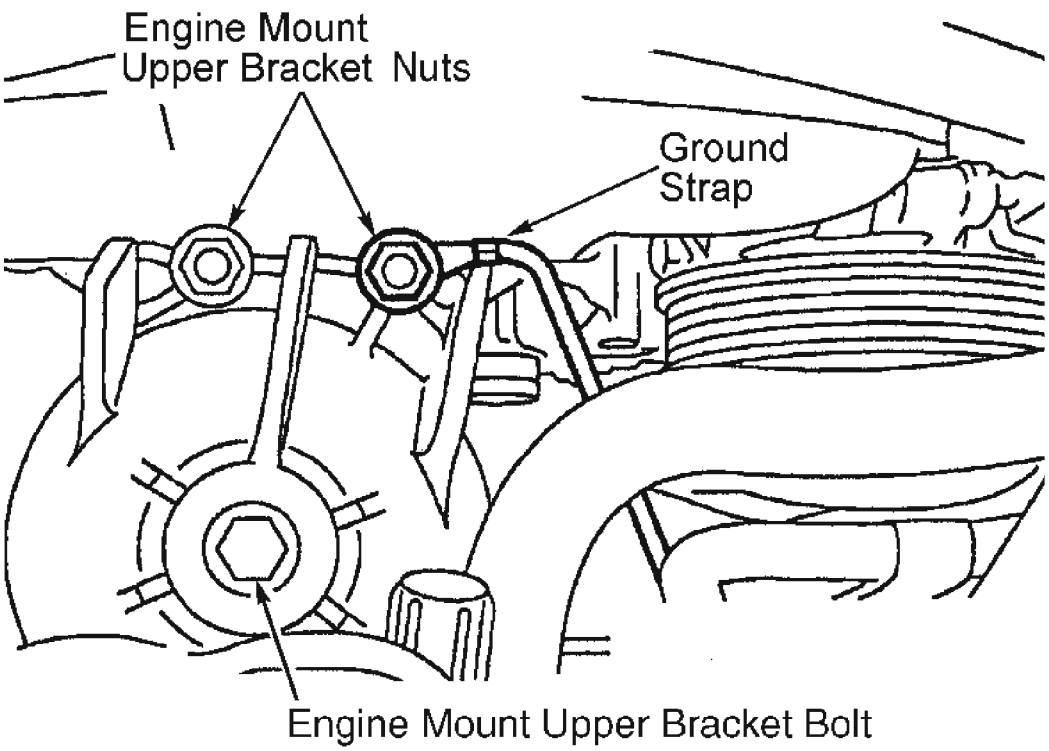

Fig. 6: Removing Engine Mount Upper Bracket
Courtesy of FORD MOTOR CO.

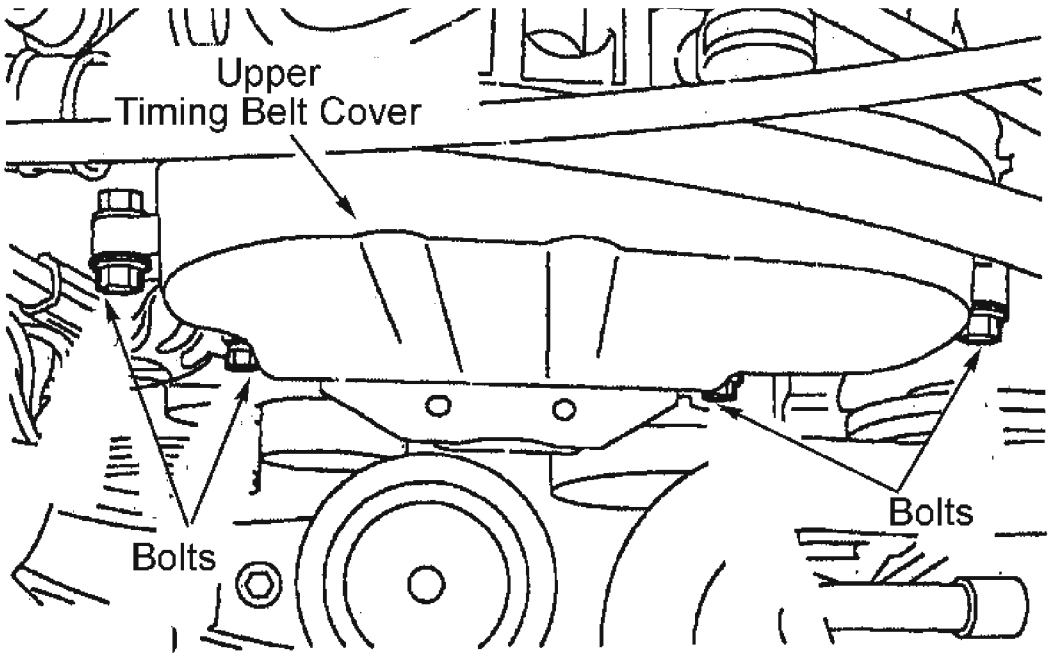

Fig. 7: Removing Upper Timing Belt Cover
Courtesy of FORD MOTOR CO.

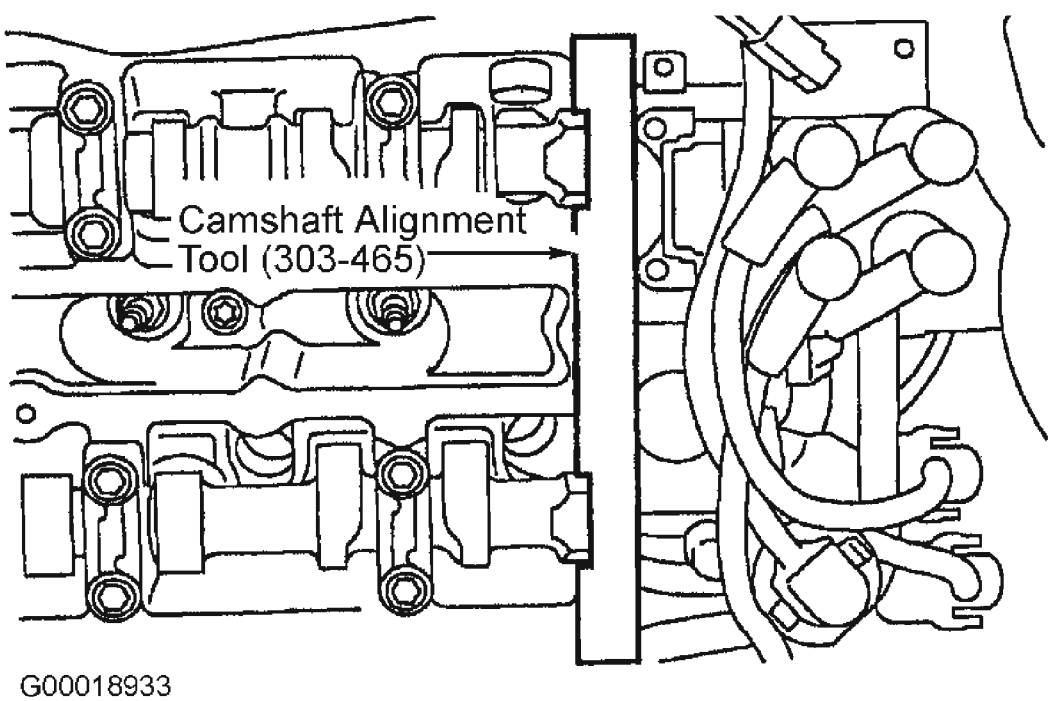

Fig. 8: Installing Camshaft Alignment Tool (303-465)
Courtesy of FORD MOTOR CO.

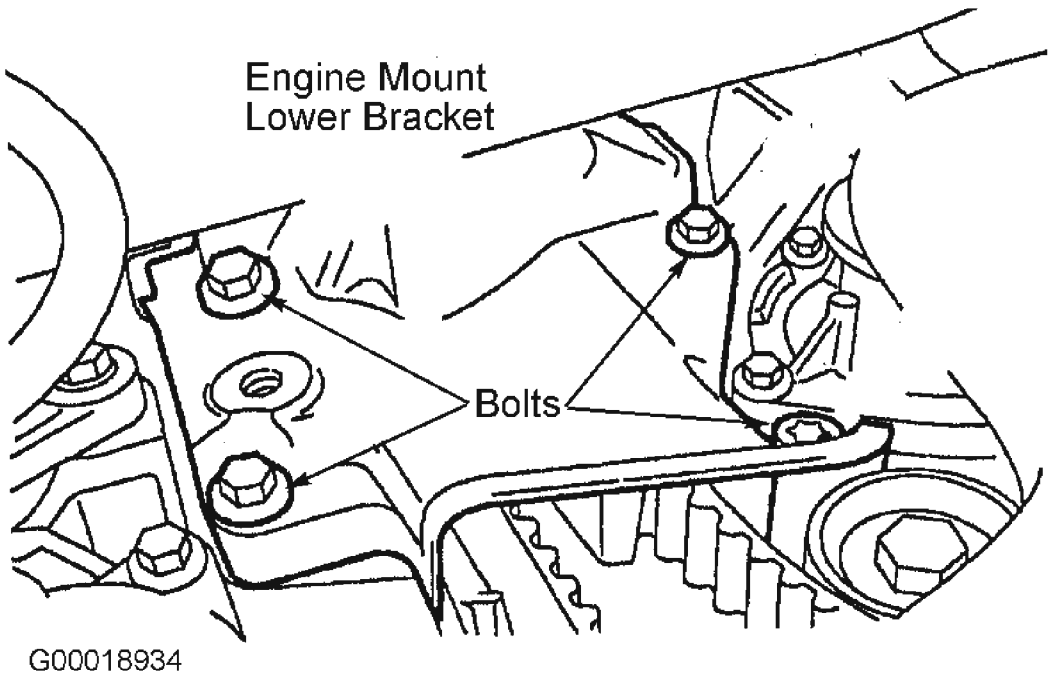

Fig. 9: Removing Engine Mount Lower Bracket
Courtesy of FORD MOTOR CO.

Installation

1. Slide crankshaft pulley onto crankshaft. Ensure crankshaft position is at No. 1 TDC by rotating it clockwise against Crankshaft TDC Timing Peg (303-574). Ensure second notch in pulley is indexed to lower cylinder block. See **Fig. 2** . Remove crankshaft pulley.
2. Ensure timing belt tensioner is installed correctly with tab positioned in slot in inner timing cover. See **Fig. 10** .
3. Starting from the crankshaft timing belt pulley and working counterclockwise, position the timing belt in place while keeping it under tension. Adjust timing belt tensioner by using a 6-mm Allen wrench to rotate adjuster counterclockwise and align marks. See **Fig. 11** and **Fig. 12** . Tighten tensioner pulley bolt to specification. See **TORQUE SPECIFICATIONS** .
4. Install front engine mount lower bracket. Install accessory drive belt idler pulley. Install water pump pulley, and hand tighten bolts. Install timing belt covers. Install crankshaft pulley. Tighten water pump pulley bolts to specification. See **TORQUE SPECIFICATIONS** .

5. Install splash shield, then wheel and tire assembly. Remove Crankshaft TDC Timing Peg (303-574). Install stud. Install engine mount upper bracket and ground strap. Remove Engine Support Bar (303-F072). Install coolant tube and catalytic converter. Remove Camshaft Alignment Tool (303-465).
6. Install valve cover and spark plugs. On 2002-04 models, connect wiring harness anchors to valve cover studs. Install and reconnect the catalyst monitor and heated oxygen sensor connectors. On all models, reconnect accelerator cable and cruise control actuator cable. Install ignition wires, air cleaner outlet pipe and accessory drive belt. Reconnect negative battery cable.

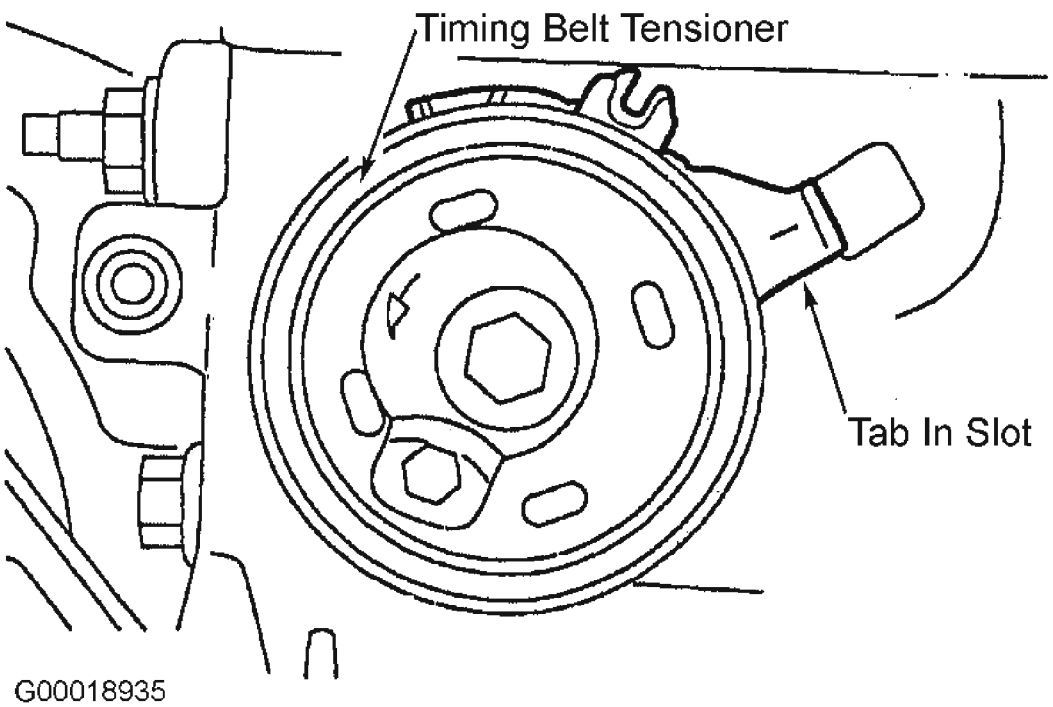

Fig. 10: Installing Timing Belt Tensioner
Courtesy of FORD MOTOR CO.

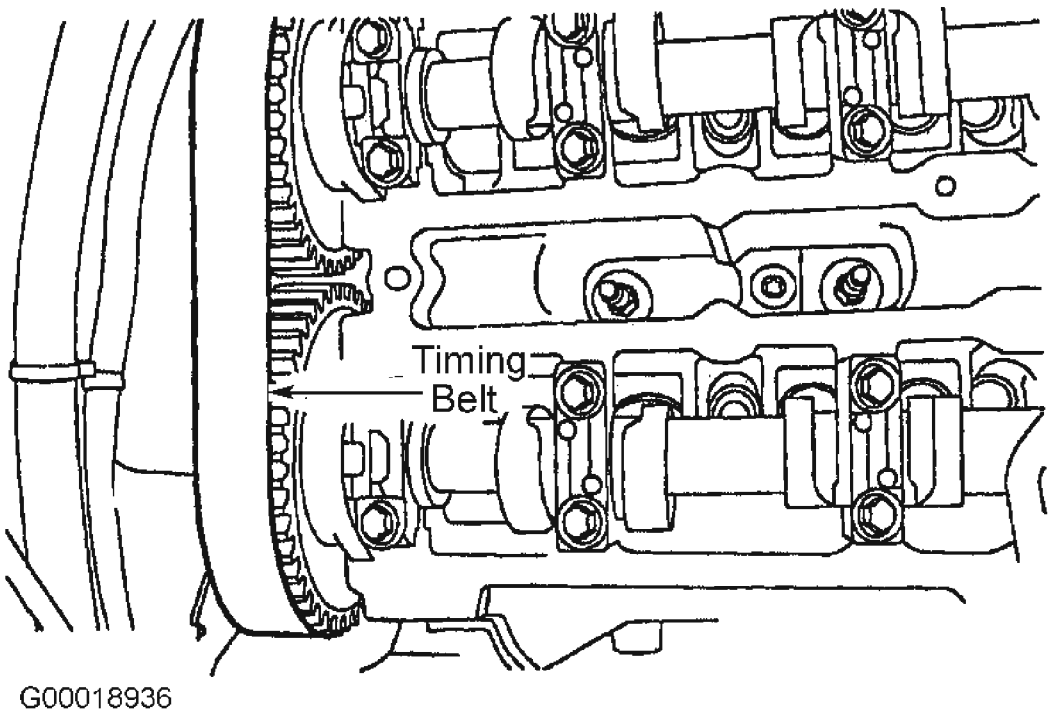

Fig. 11: Installing Timing Belt On Sprockets
Courtesy of FORD MOTOR CO.

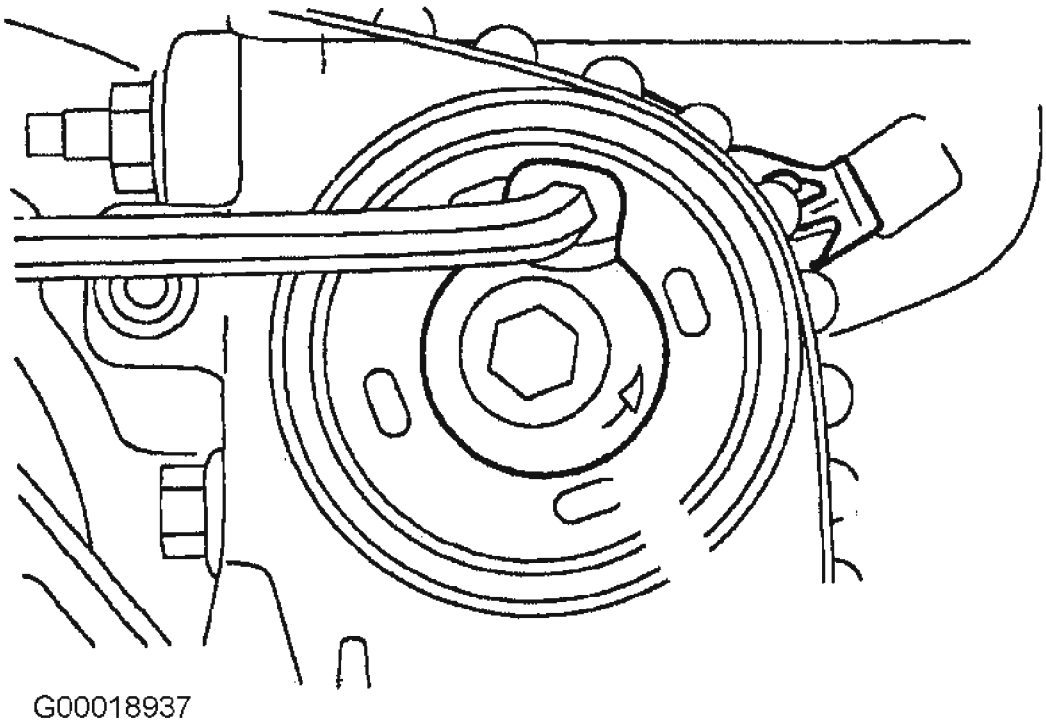

Fig. 12: Adjusting Timing Belt Tensioner
Courtesy of FORD MOTOR CO.

TORQUE SPECIFICATIONS

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Application	Ft. Lbs. (N.m)
Accessory Drive Belt Idler Pulley Bolt	35 (45)
Camshaft Sprocket Bolts	50 (68)
Catalytic Converter Bracket Bolts	18 (25)
Coolant Tube Attachments	15 (20)
Crankshaft Pulley Bolt	85 (115)
Engine Mount Lower Bracket Nuts	37 (50)
Engine Mount Upper Bracket	
Bolt	57 (77)
Nuts	72 (98)
Studs	25 (34)
Exhaust Camshaft Center Plug	27 (37)
Ground Strap	25 (34)

Spark Plugs	11 (15)
Stud (For Crankshaft TDC Timing Peg)	18 (25)
Timing Belt Idler Pulley Bolt	18 (25)
Timing Belt Tensioner Bolt	18 (25)
Water Pump Pulley Bolt	18 (25)
Wheel Lug Nuts	98 (133)
	INCH Lbs. (N.m)
Timing Belt Cover Bolts	
Inner	89 (10)
Lower	62 (7)
Upper	71 (8)
Splash Shield Bolts	80 (9)
Valve Cover Bolts	80 (9)