


2002 Ford Explorer Sport Trac 4.0L Eng

ENGINE - 4.0L SOHC

SPECIFICATIONS > TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS

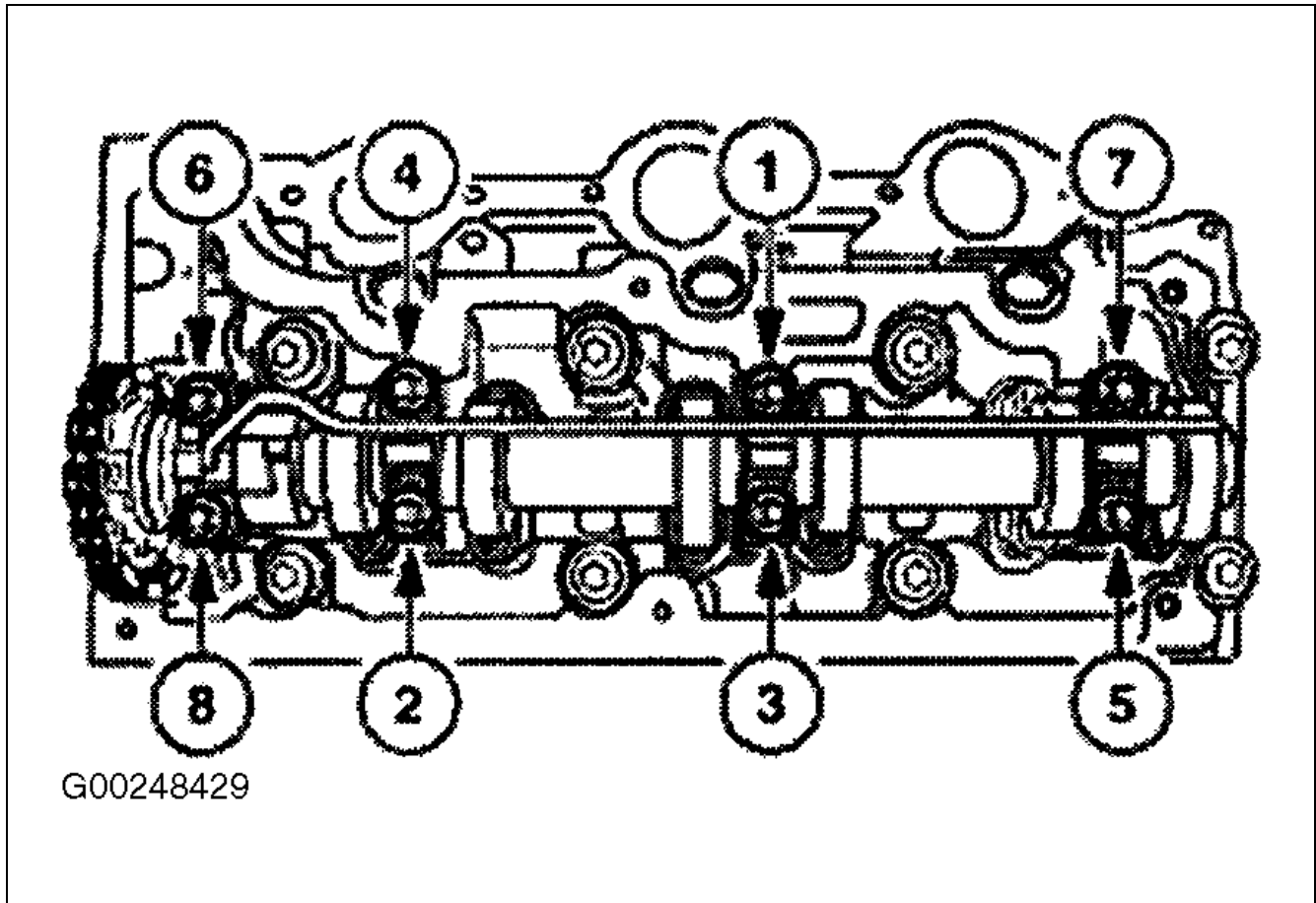
Application	Ft. Lbs. (N.m)
A/C Compressor Manifold Bolt	15 (20)
A/C Line Bracket Nut	15 (20)
Accessory Bracket Bolts	31 (42)
Balance Shaft Assembly Bolt	19-21 (26-28)
Balance Shaft Tensioner Bolt	21-22 (28-30)
Camshaft Bearing Caps Bolts ⁽¹⁾	
Step 1	4.4 (6)
Step 2	12 (16)
Camshaft Sprocket Bolt	63 (85)
Camshaft Sprocket Bolt (With SST)	45 (61)
Cassette Bolt	
Left	14 (19)
Right	9 (12)
Cassette & Sprocket-To-Jackshaft Bolt	
Step 1	33 (45)
Step 2	Additional 90 Degrees
Connecting Rod Bolts ⁽²⁾	
Step 1	15 (20)
Step 2	Additional 90 Degrees
Crankshaft Main Bearing Cap Bolts ⁽³⁾	
Step 1	26 (35)
Step 2	Additional 57 Degrees
Crankshaft Pulley Bolts	
Step 1	37 (50)
Step 2	Additional 90 Degrees
Cylinder Block Cradle Bolts ⁽⁴⁾	11 (15)

Cylinder Head Bolts ⁽⁵⁾	
8-mm Bolts	24 (32)
12-mm Bolts	
Step 1	26 (35)
Step 2	Additional 90 Degrees
Step 3	Additional 90 Degrees
EGR Valve Tube Fittings	25 (34)
Engine Front Cover Bolts	14 (19)
Engine Lifting Eye Bolts	21 (28)
Engine Mount Bracket Nuts (Lower)	59 (80)
Engine Mount Bracket Nuts (Upper)	81 (110)
Exhaust Manifold Nut	16 (22)
Exhaust Manifold-To-Exhaust Pipe Bolts	30 (40)
Flywheel Bolts ⁽⁶⁾	
Step 1	10 (13)
Step 2	52 (71)
Front Cassette Bolt	14 (19)
Fuel Injection Supply Manifold Bolts	17 (23)
Generator Bracket Bolt	31 (42)
Heater Hose Bracket Bolts	17 (23)
Hydraulic Camshaft Tensioner	32 (44)
Jackshaft Chain Guide Bolts	14 (19)
Knock Sensor Bolt	18 (25)
Oil Bypass Filter	10 (13)
Oil Drain Plug	18 (25)
Oil Filter Adapter Bolt	42 (57)
Oil Level Indicator Tube Bracket Bolt	18 (25)
Oil Pan Ladder Frame Bolts (Inside)	
Step 1	13 (17)
Step 2	27 (36)
Oil Pressure Sensor	10 (14)
Oil Pump Bolts	14 (19)

Oil Pump Drive Assembly	14 (19)
Power Steering Pressure Line Nut	13 (18)
Rear Cassette Bolt	13 (18)
Spark Plug	15 (20)
Transmission Cooler Line Bracket Bolt	35 (47)
Transmission-To-Engine Bolts	35 (47)
Torque Converter-To-Flywheel Nuts	35 (47)
VMV Hose Bracket	11 (15)
INCH Lbs. (N.m)	
Accelerator Control Splash Shield Bolts	35 (4)
Balance Shaft Chain Guide Bolt	89 (10)
ECT Sensor	89 (10)
Engine Electrical Connector	53 (6)
Electrical Harness Retainer Bolt	89 (10)
Fuel Line Bracket-To-Valve Cover Bolt	89 (10)
Ground Wire Bolt	89 (10)
Intake Manifold Bolts	89 (10)
Jackshaft Chain Tensioner Bolts	80 (9)
Jackshaft Thrust Plate Bolts	97 (11)
Oil Pan Bolts	80 (9)
Oil Pan Ladder Frame Bolts/Nuts (Outside)	89 (10)
Oil Pan Ladder Frame Inserts	27 (3)
Oil Pan Ladder Frame TORX Bolts	71 (8)
Oil Pump Screen Cover & Tube Bolts	89 (10)
PCM Bolt	53 (6)
PCM Ground Wire Nut	89 (10)
Thermostat Housing Bolts	97(11)
Valve Cover Bolts	89 (10)
Water Pump Bolts	89 (10)
Water Temperature Indicator Sender Unit	89 (10)
Wiring Harness Retainer Nuts	89 (10)

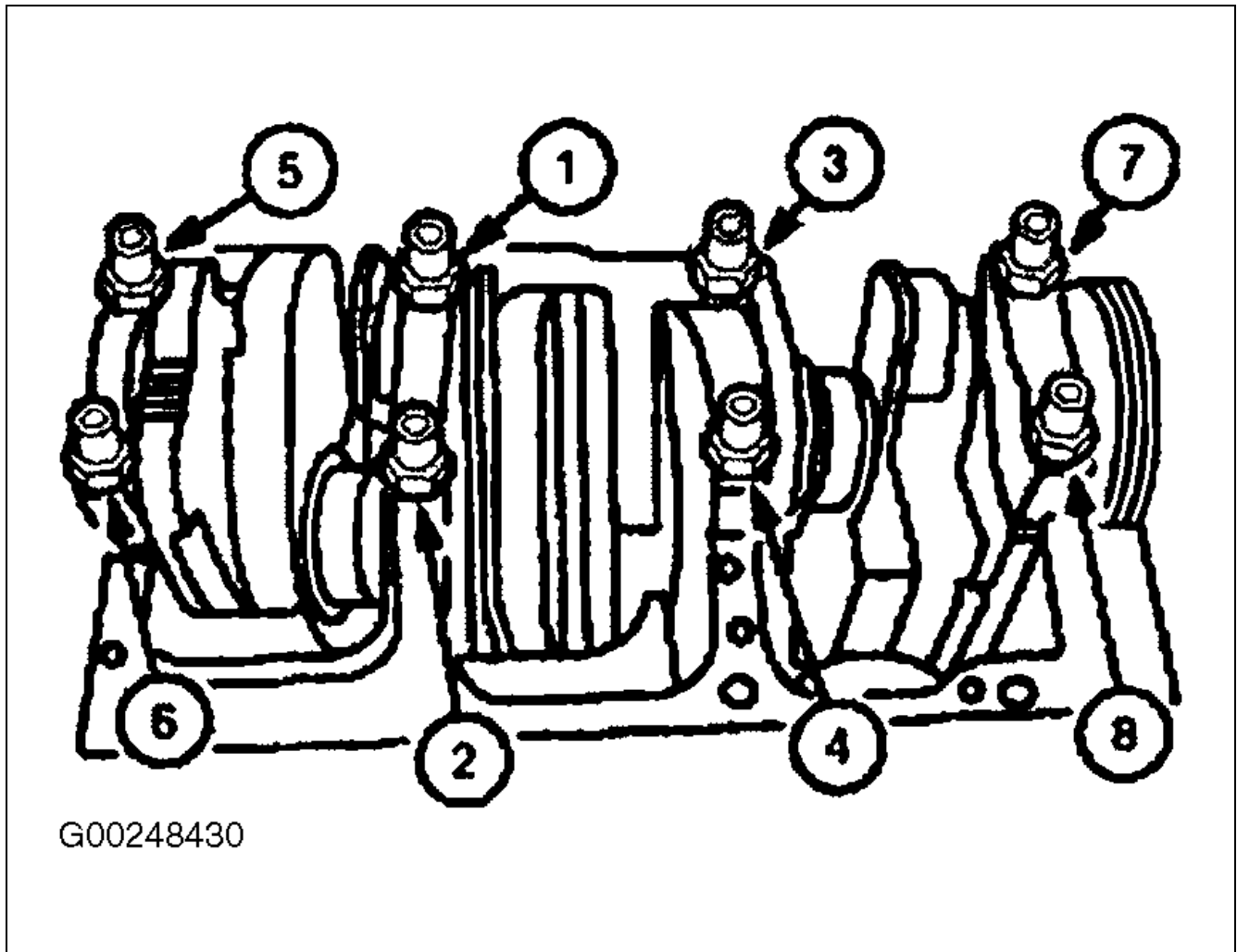
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|-----|--|
| (1) | Tighten according to specifications. See Fig 1 |
| (2) | Tighten in Pairs. |
| (3) | Tighten according to specifications. See Fig 2 |
| (4) | Tighten according to specifications. See Fig 3 |
| (5) | Tighten according to specifications. See Fig 4 |
| (6) | Tighten according to specifications. See Fig 5 |

Fig 1: Camshaft Bearing Cap Bolt Tightening Sequence



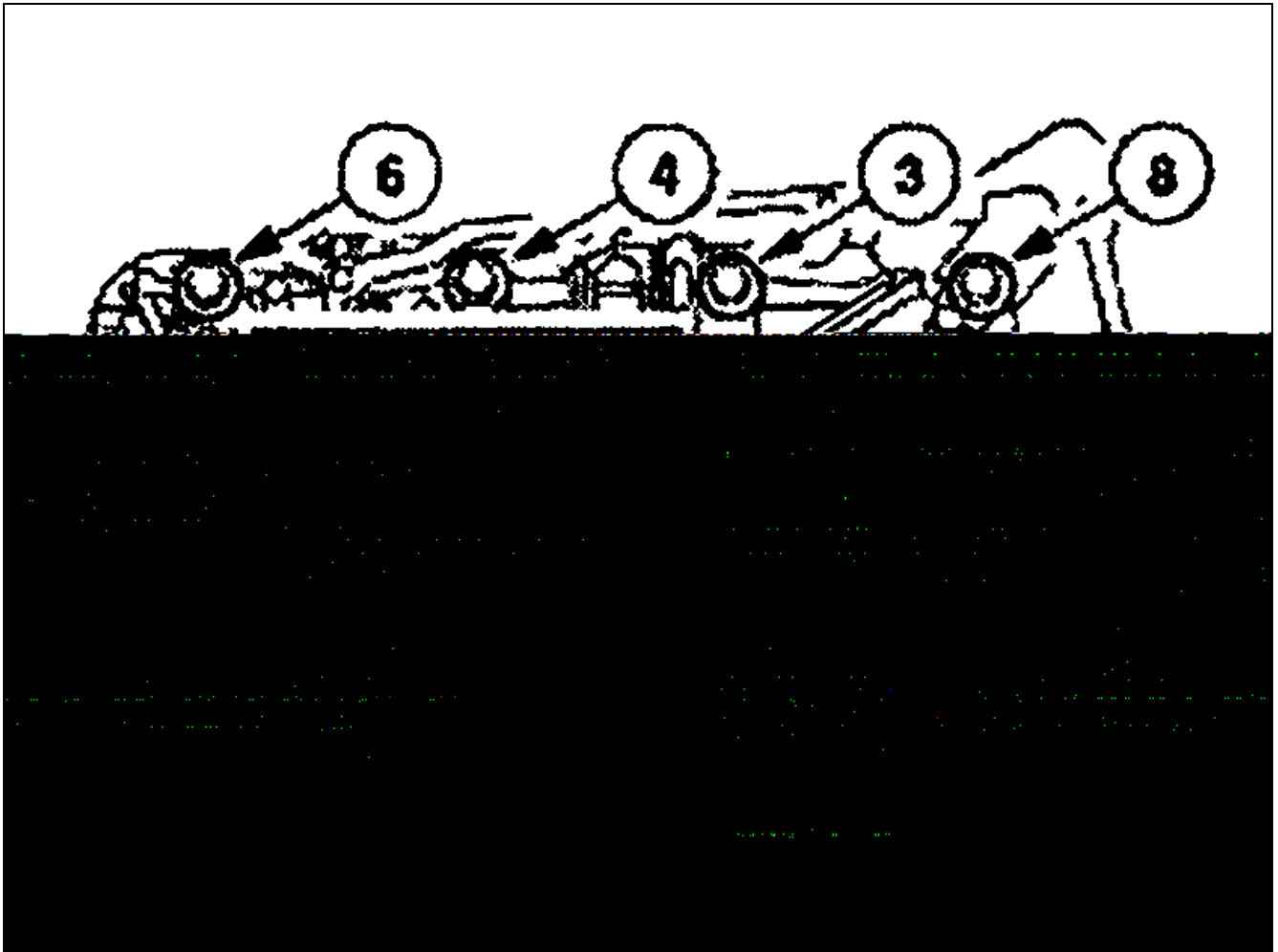
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Fig 2: Crankshaft Main Bearing Cap Bolt Tightening Sequence



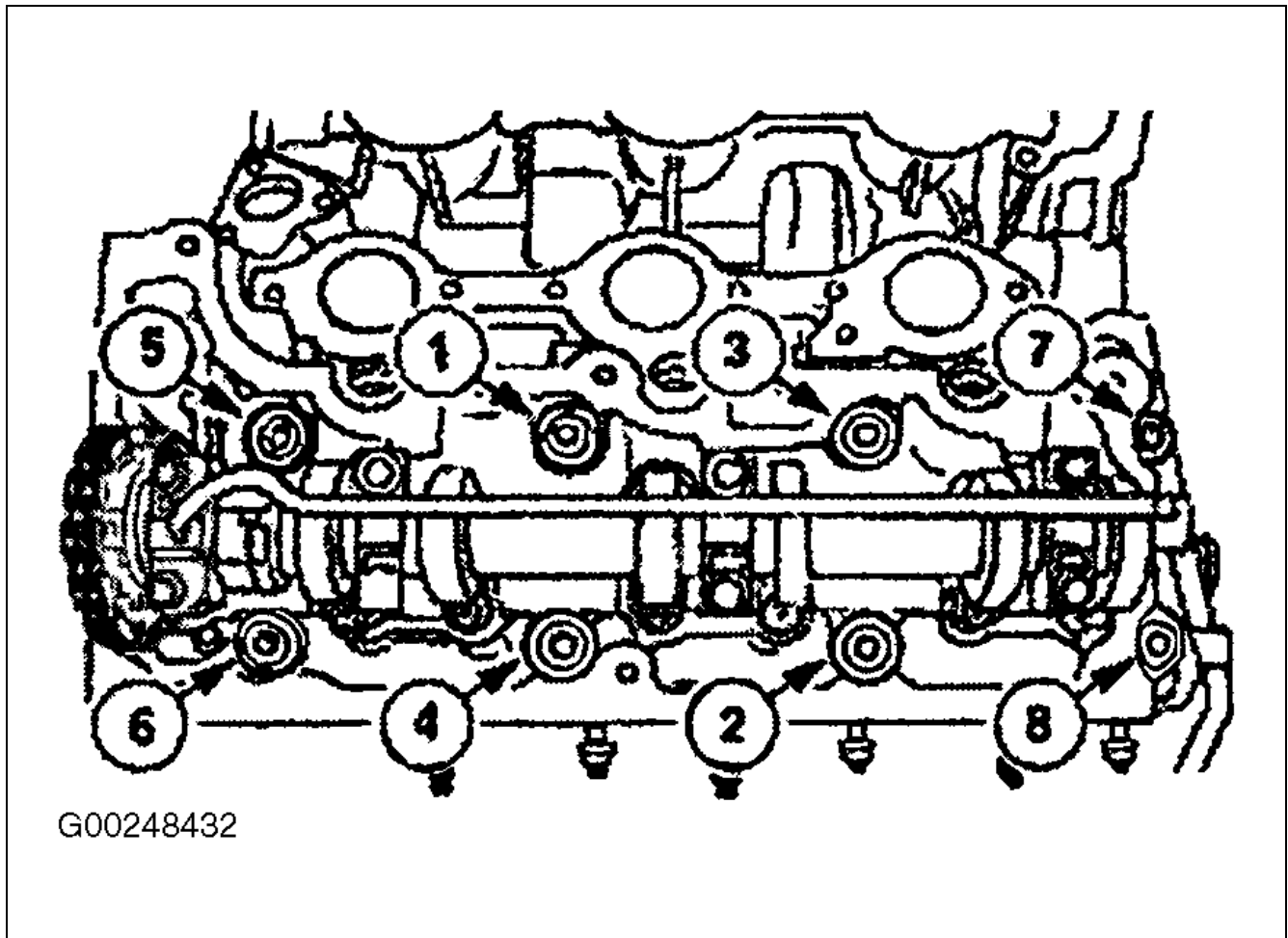
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Fig 3: Cylinder Block Cradle Bolt Tightening Sequence



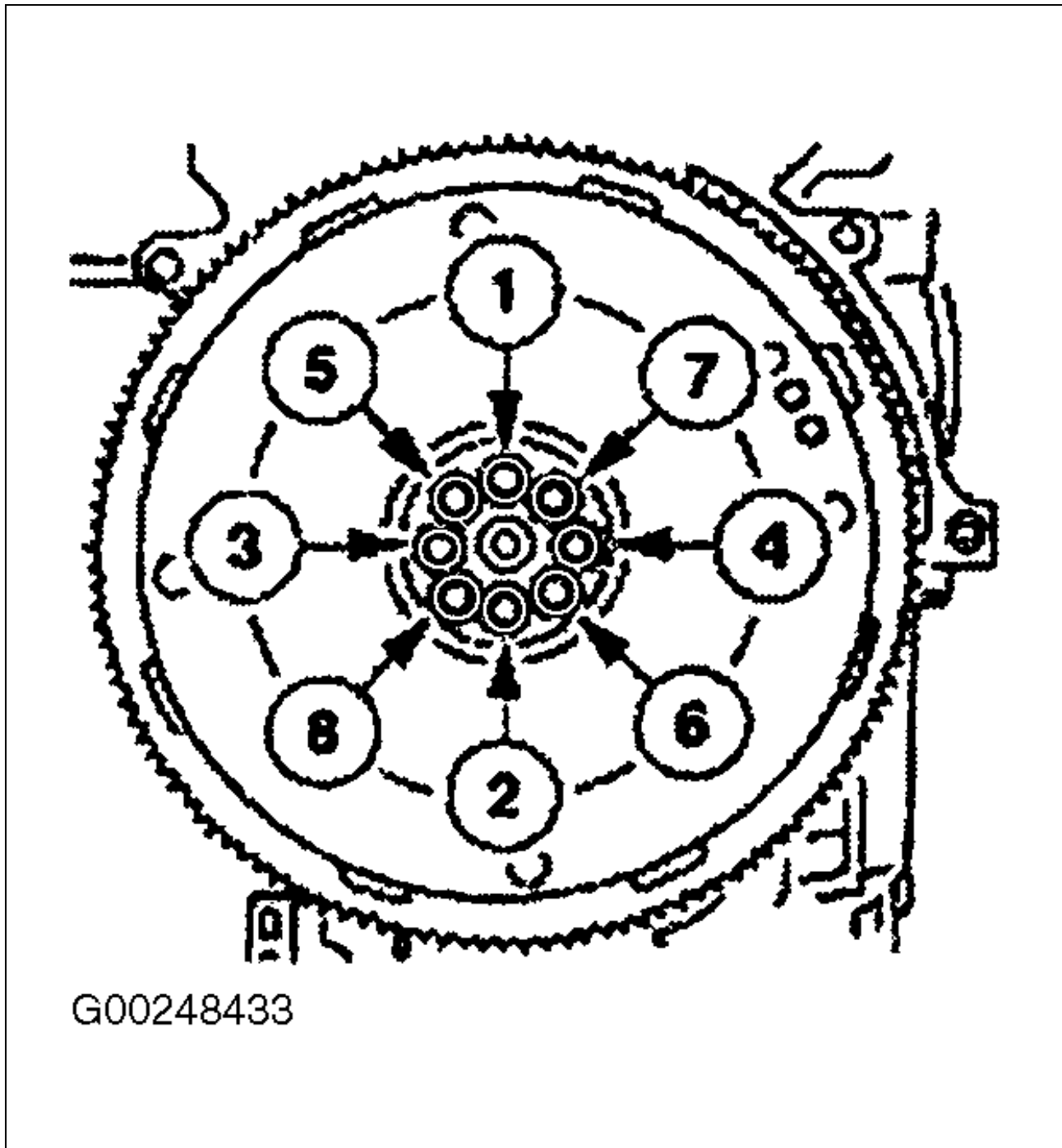
Courtesy of FORD MOTOR CO.

Fig 4: Cylinder Head Bolt Tightening Sequence



Courtesy of FORD MOTOR CO.

Fig 5: Flywheel Bolt Tightening Sequence



Courtesy of FORD MOTOR CO.