

## CYLINDER HEAD

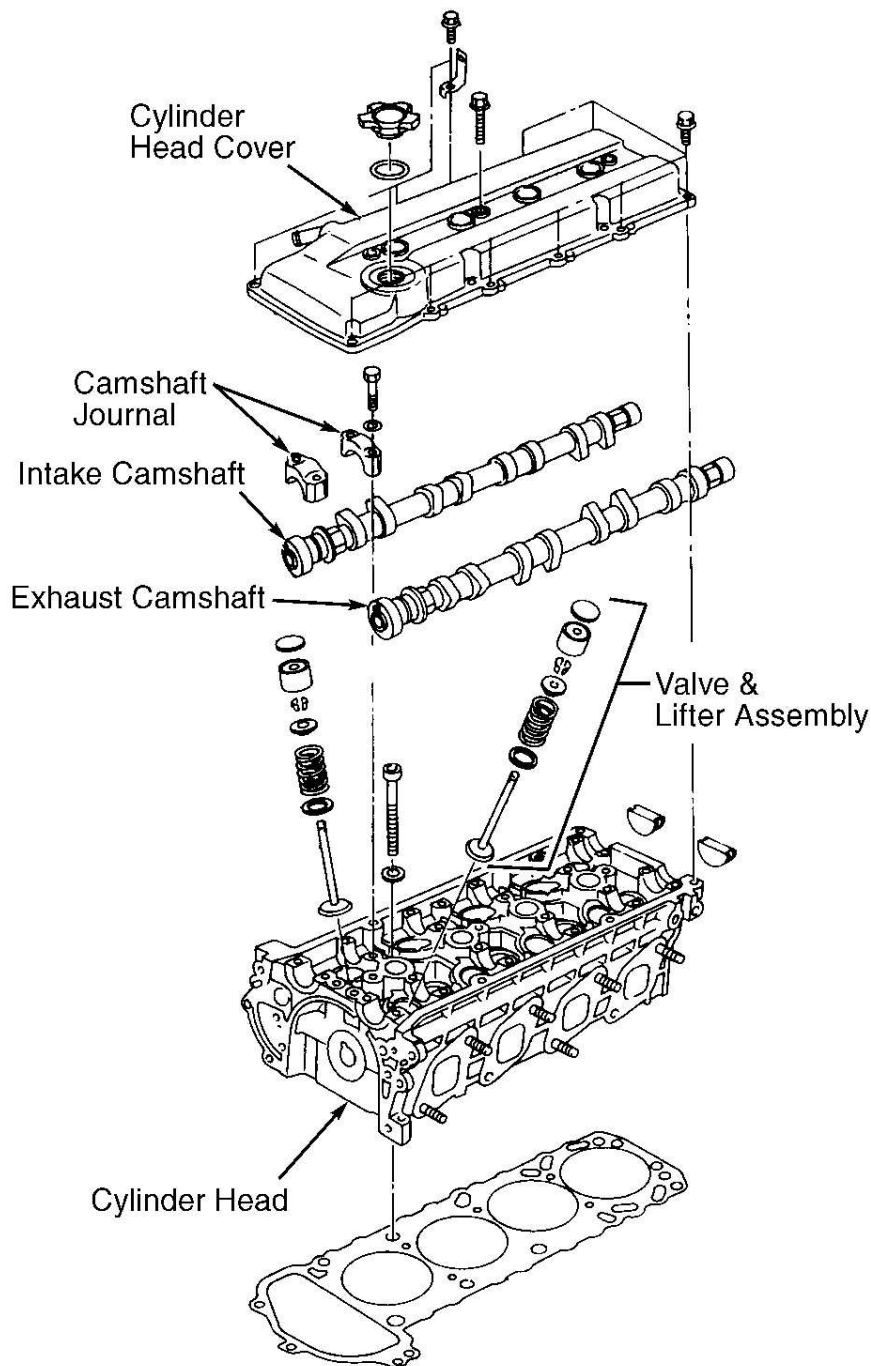
**CAUTION:** If cylinder head is installed and timing chain is disconnected, DO NOT rotate camshaft or crankshaft; valves will contact pistons, resulting in bent valves.

### Removal (240SX, Altima & Frontier)

1. Remove outer (upper) timing chain. See **TIMING CHAINS** . Remove idler sprocket and shaft. Prevent camshafts from turning, and remove camshaft sprocket bolts. Remove camshaft sprocket. Mark and remove camshaft bearing caps in reverse order of installation. See **Fig. 30** . Remove camshafts.
2. Loosen cylinder head bolts in 2 or 3 steps, in reverse order of tightening sequence. See **Fig. 31** . Remove camshaft sprocket cover. Remove outer (upper) chain tensioner and guide. Remove outer timing chain. Remove idler sprocket bolt. Remove cylinder head.

1998 Nissan Altima SE

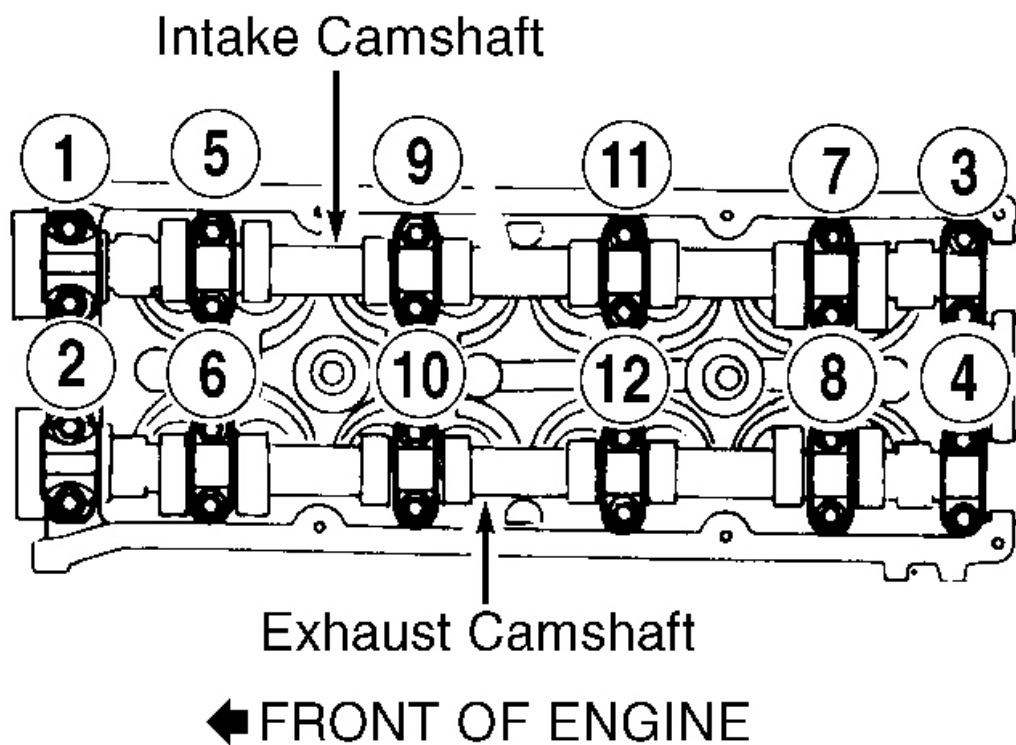
2.4L 4-CYL VINS [A,B,D,S] 1997-98 ENGINES Nissan 2.4L 4-Cylinder



G92B01566

**Fig. 29: Exploded View Of Cylinder Head (Altima & Frontier; 240SX Similar)**

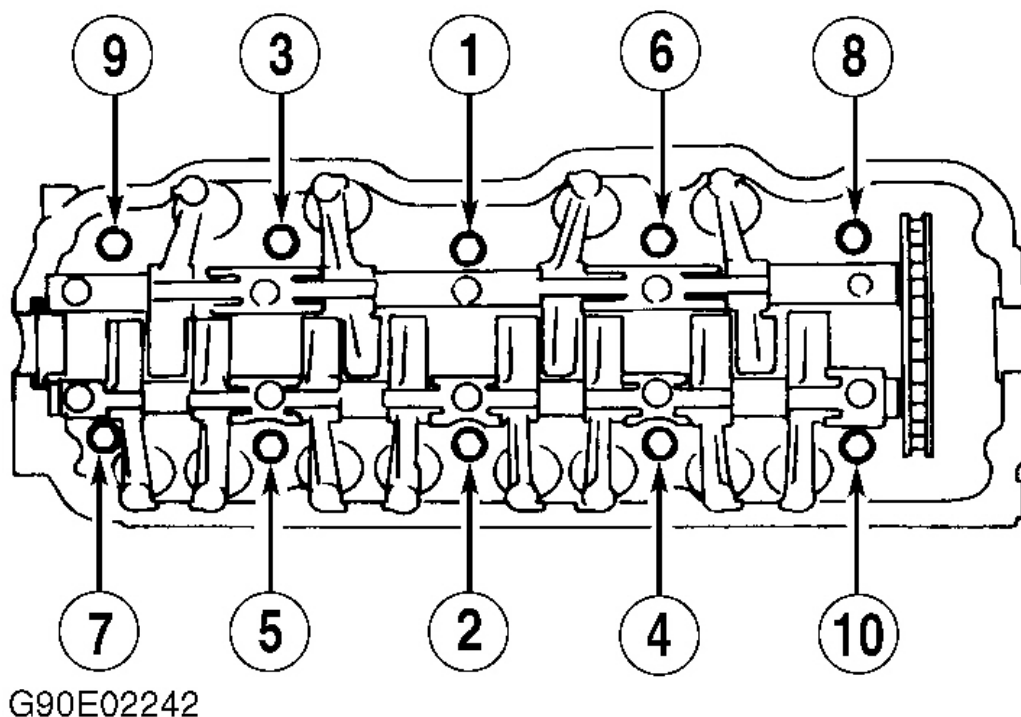
Courtesy of NISSAN MOTOR CO., U.S.A.



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**Fig. 30: Camshaft Bearing Cap Bolt Tightening Sequence**

Courtesy of NISSAN MOTOR CO., U.S.A.



**Fig. 31: Cylinder Head Bolt Tightening Sequence (Pickup Shown; Others Similar)**

Courtesy of NISSAN MOTOR CO., U.S.A.

#### Inspection (240SX, Altima & Frontier)

1. Inspect timing chain roller links. Replace timing chain if roller links are cracked or worn. Inspect cylinder head and cylinder block mating surfaces for warpage. If warpage exceeds specification, machine cylinder head. See [CYLINDER HEAD \(EXCEPT 1997 PICKUP\)](#) table under ENGINE SPECIFICATIONS.
2. If machining reduces cylinder head height to less than specification, replace cylinder head. After machining, rotate camshaft by hand. Replace cylinder head if camshaft does not rotate freely.

#### Installation (240SX, Altima & Frontier)

1. Install cylinder head and NEW gasket. Tighten cylinder head bolts in sequence shown. See [Fig. 31](#) . See [TORQUE SPECIFICATIONS](#) .
2. Install upper timing chain. See [TIMING CHAINS](#) . Tighten all fasteners to specification. See [TORQUE SPECIFICATIONS](#)