4.8 Remove all traces of old gasket material

5.2a The correct rocker arm locations (left and right) on the V8 rocker shaft - note the locations of the five bolts along the shaft that secure the shaft to the cylinder head

2B

when the covers are installed. Use a gasket scraper to remove all traces of sealant or old gasket (see illustration), then wipe the mating surfaces with a cloth saturated with lacquer thinner or acetone. If there is sealant or oil on the mating surfaces when the cover is installed, oil leaks may develop.

9 Make sure any threaded holes are clean. Run a tap into them to remove corrosion and restore damaged threads.
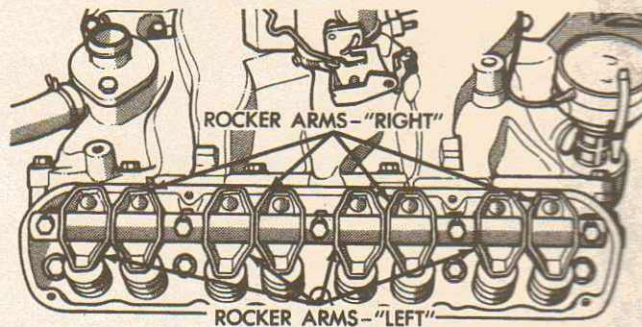
10 Mate the new gaskets to the covers before the covers are installed. Apply a thin coat of RTV sealant to the cover flange, then position the gasket inside the cover lip and allow the sealant to set up so the gasket adheres to the cover (if the sealant is not allowed to set, the gasket may fall out of the cover as it is installed on the engine). Note: *A better-sealing valve cover gasket has been available from Dodge since 1991. The new gasket is silicone and steel with compression limiters. Because it is thicker it requires different fasteners. A kit (with gaskets and fasteners) is available from Dodge for all 3.9L V6 engines, and one for all 318/360 V8 engines.*

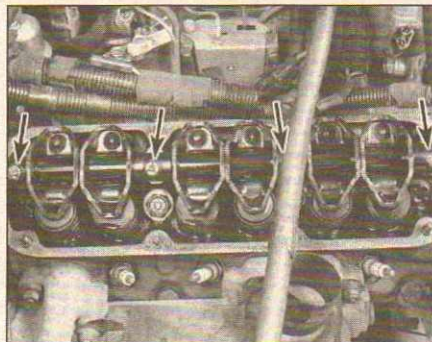11 Carefully position the cover on the head and install the nuts/bolts.

12 Tighten the bolts in three steps to the torque listed in this Chapter's Specifications. **Caution:** *DON'T over-tighten the valve cover bolts.*

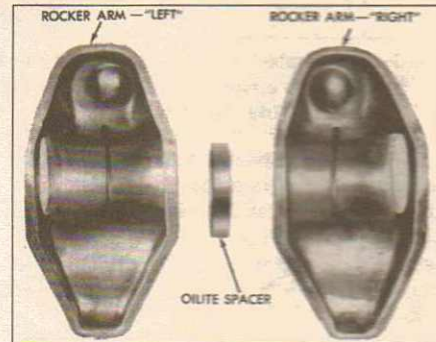13 The remaining installation steps are the reverse of removal.

14 Start the engine and check carefully for oil leaks as the engine warms up.

5.2b V6 engines have only four bolts to each rocker shaft

5.2c Big-block engines use "Oilite" spacers between rocker arms for the same cylinders

5 Rocker arms, shafts and pushrods - removal, inspection and installation
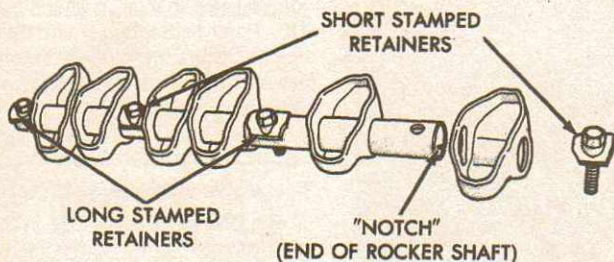
Removal

Refer to illustrations 5.2a, 5.2b, 5.2c, 5.2d and 5.3

Note: *The 1992 and 1993 "Magnum" engines have individual rocker arms instead of rocker shafts. The same cautions about keeping the parts together for each valve still apply. The pushrods, rocker arms and pivots should be kept in order, i.e. "intake 1, exhaust 1" etc.*

1 Remove the valve covers from the cylinder heads (see Section 4).

2 Loosen the rocker arm shaft bolts a little at a time (or rocker-arm bolts on Magnum

engines), working back and forth until they're all loose. Lift off the rocker arm shaft with the bolts in place and, if they are removed from the shafts, keep the rocker arms in order (the rocker arms and shafts must be reinstalled in their original positions) (see illustrations). Note 1: *We recommend removing the rocker arms from the shafts for cleaning and inspection. The best way to keep the rocker arms in order once they're removed is to tie a piece of heavy wire (such as an straightened coat-hanger wire) around a short dowel or similar object, then slide each rocker arm, starting from the engine-front end, onto the end of the wire in the same orientation as it was on the shaft. When finished, you'll have the rocker arms stored in the correct order in a way that will allow them to be cleaned and inspected easily. Just remember that the end of the wire with the dowel represents the front of the engine. Mark each dowel (as well as the rocker shaft) to indicate which side of the engine it is from. Also, mark the rocker shafts to indicate which end faces front.* Note 2: *On big-block (400 and 440) V8 engines, there is an "Oilite" spacer used between rocker arms that are on the same cylinder. On the 318 and 360, there are no "Oilite" spacers, but the spacers under the bolts are not the same size and must be reinstalled in their original locations, so note where they go and, if necessary, make a drawing showing the locations of the long and short spacers under the bolts (see illustrations).*

5.2d V6 and small-block V8 engines have different-size rocker shaft retainers - mark them for proper reassembly