How to install a CAM (Civic)

USE AT YOUR OWN RISK, SKILLS AND ABILITIES STRONGLY RECOMMENDED. If you don't have a HELMS OR OTHER EQUVILANT, GET ONE!!!

1. Remove the negative battery post, ground strap attached to the valve cover, the PCV connection, spark plug wires and spark plugs. You might find it helpful to tie up the clutch cable, to get it out of your way. Removing the spark plugs will help facilitate turning the engine over by hand.

2. Remove the valve cover and turn the engine by hand so that Cylinder One is at TDC. ONLY turn the engine counter clockwise! (Looking at the cam pulley from the drivers' side.) Remove the valve cover and loosen the timing belt tensioner; CAREFULLY slip the timing belt off the cam pulley. If your timing belt is due for replacement, now is the time to do it!

3. Unbolt the rocker arm assembly according to your service manual. There is a specific torque sequence to follow so that you don't warp the rocker mounting shafts. Lift out the entire assembly; we found it helpful to leave the mounting bolts in the holes so the rockers don't slide off the mounting shafts.

4. Lift out the stock camshaft, and place it in a clean area along with the rocker assembly. Depending on where you bought your cam, the stock one may need to be returned in order to get your core charge refunded.

5. The cam and rocker assemblies.

6. The cylinder head sans camshaft and rockers. Note the oil bath that the cam resides in.

7. Coat the new cam with assembly lube, and place it into the cylinder head. The Honda distributor only allows you to install the cam one of two ways; make sure the word "UP" on the cam pulley is indeed pointed up!

8. Place the rocker assembly back on the head and camshaft. Torque the bolts to 16 ft-lbs using the torque pattern from the manual.

9. Reinstall the timing belt and tighten to factory spec. Adjust the valves and turn the engine over two times by hand, making sure there is no valve-to-piston contact. The valves will be WAY out of spec; the JG cam is a factory regrind, which means you'll be adjusting the valves into the cam lobe, which provides the additional valve lift. When you are finished, put Piston One at TDC and make sure the reference mark on the cam pulley lines up with the reference mark on the valve cover. (There are two marks for Honda 1.5L engines.)

10. Reinstall the valve cover, negative battery post, ground strap, PCV, spark plugs and spark plug wires.

11. When you are finished, start the engine. You may have to re-set the base timing to get the engine started. The idle will erratic; you can correct this by adjusting your idle speed, disconnecting/ reconnecting the idle air control and finally resetting the ECU by removing its' fuse for at least 10 seconds.

TDC = TOP DEAD CENTER