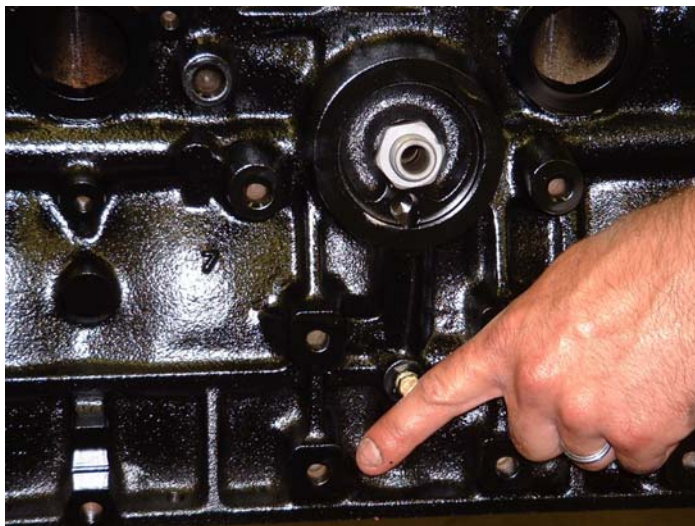


Knock Sensor Relocation

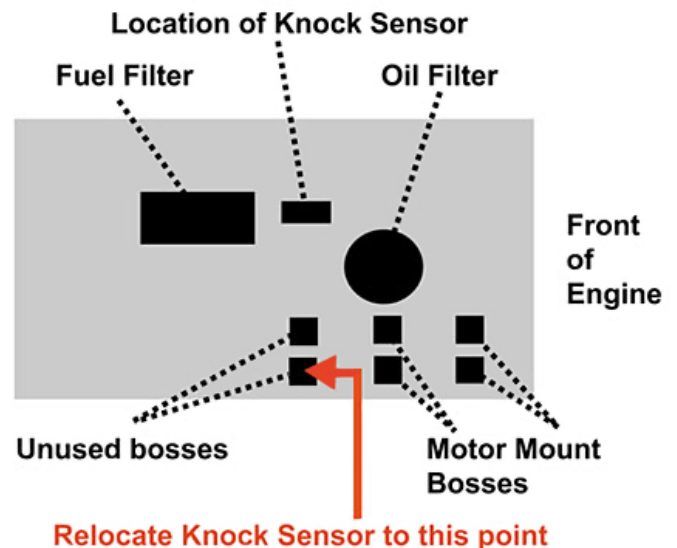
The 22R/RE Pro (forged piston) engines require relocation of the knock sensor. Why? Here's the reason. The forged pistons create a high-pitched knock when they are cold. The sensor hears this knock and instructs the computer to take ignition timing away and add fuel to the motor in order to combat detonation, which is not really happening.

In order to prevent this, we relocate the knock sensor lower on the block below the bore line. The sensor will still hear a detonation on lean condition and react correctly, however, it is low enough on the block to not hear forged piston's rocking.

Relocate the knock sensor by drilling and tapping one of the un-used lower bosses on the right side of the engine block. Use a .422 or 27/64" sized drill bit and a 12mm x 1.25mm tap. **PAY SPECIAL ATTENTION WHEN DRILLING THE BLOCK. Do not drill any deeper than the current hole in the boss. By going too far, you will drill through the block.** Now you can relocate the knock sensor to the lower boss.



Right side of engine block - Fan to front



If you use cast pistons in your rebuild, the knock sensor relocation is not necessary. The cast pistons grow with heat faster than forged pistons and do not rock in the bores.

****Remember, removal of the knock sensor is not an option: this will cause the computer to go into an open loop operation. Not Good!****

Any questions, give our tech line a call at 928-505-2501.
SHOP @ LCEperformance.com