

TO: #: BDTECB203
FROM: John Cabral
SUBJECT: 6.5L Diesel TDC OFFSET LEARN Procedure

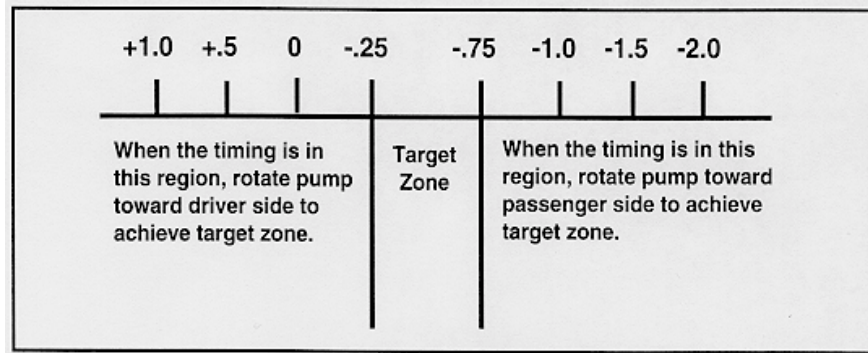
WARNING!

Engine MUST be off when the injection pump is being moved. Severe engine/pump and personal injury could result from adjusting the pump while the engine is running.

To reprogram TDC Offset into the PCM:

1. Make sure the vehicle battery is fully charged.
2. The engine must be at idle.
3. The vehicle must be at operating temperature.
4. Connect the diagnostic scan tool.
5. Refer to the diagnostic scan tool manual to perform TDC OFFSET LEARN.
6. Activate TDC LEARN. The PCM will learn the engine's top dead center offset value. This procedure takes about 20 seconds.
7. If the learned TDC offset is between $-.25$ and $-.75$ degrees, procedure is complete. If not, slightly rotate* pump and retighten mounting nuts. Repeat steps 5 through 7 until TDC OFFSET value is between $-.25$ and $-.75$ degrees.

*** Note:** To achieve a negative (-) number, rotate pump toward driver side. To achieve a positive (+) number, rotate pump toward passenger side. 1mm pump movement = approximately 2 degrees.



IMPORTANT:

Failure to correctly program TDC Offset will result in DTC 88.

DTC 88 – “TDC Offset Error”

DTC 88 sets when TDC Offset is greater than $\pm 2.0^\circ$. This code also sets when a new PCM is installed.