

The TDC position of the No. 1 cylinder is most easily found by holding a finger over the spark plug hole in the first cylinder, while manually turning the flywheel counterclockwise. As soon as compression is felt, stop turning and look at the position of the roll pin in front of the crankshaft. Continue turning until the roll pin is perfectly vertical. The piston will then be at TDC.

It's very easy to overshoot the TDC position while trying to be certain of a positive indication of compression. In this case, the engine will be rotated a full 1/2 revolution before the roll pin lines up vertically again, and the piston will be at the bottom-most point in its travel (instead of TDC).

On engines where the roll pin is not visible, it is possible (with a good flash light) to see the edge of the piston through the spark plug hole as it reaches TDC. To see the edge of the piston, you will have to look away from the manifold side of the engine. When the distributor is reinstalled (at # 1 TDC), the position of the rotor should be carefully noted so that the rotor can be used to locate #1 TDC in the future.

If it is not possible to expose the flywheel to manually turn the engine, it is usually possible to turn the engine by using a pipe wrench on the prop shaft with the reversing gear in the forward mode. In this case, remove all the spark plugs (to remove compression), and I also recommend wrapping a rag around the prop shaft to prevent damage from the pipe wrench. Turning the engine in this manner will usually require the assistance of a helper.