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For Finding Piston Top Dead Center (TDC)

See related procedures for [Finding TDC of the Piston](#) in the REF section of the Sportsterpedia.

With the Head On:

Using a Straw

This is not accurate enough to find True TDC.

However, true TDC is not always necessary to find depending on circumstance.

You can use a straw through the spark plug hole to measure when the piston is close to TDC with the rocker box on or off.

The straw is soft enough that you won't risk breaking anything if it gets squished between the piston and the head / valves.

See procedure and cautions for [Finding TDC with a straw](#) in the REF section of the Sportsterpedia.

A straw in plug hole for finding TDC ¹⁾



Using a Piston Stop and Degree Wheel

See procedure and cautions for [Finding TDC with a Piston Stop and a Degree Wheel](#) in the REF section of the Sportsterpedia.

Engine calibration and set-up kit: Includes a piston stop, gauge extender, adapters and a TDC whistle. (piston stop shown installed) ²⁾





Using a TDC Whistle

Basically, you install whistle in the spark plug hole, rotate the engine and wait for the whistle to blow. There is a distinct difference in the sound of the whistle between the 2 TDCs from your finger. Just like the finger method above, a TDC whistle only works when disassembling.

(or rather only works if the pushrods are installed)

It doesn't work when assembling.

Every up stroke has compression when assembling and the valvetrain isn't hooked up and working. See procedure for [Finding compression with a TDC whistle](#) in the REF section of the Sportsterpedia.

14 mm and 12 mm TDC whistles ³⁾	12 mm TDC whistle ⁴⁾
	

With the Head Off

Using a Dial Depth Gauge

<p>Loosen the thumbscrew to allow you to turn the face (with a slight drag) ⁵⁾</p>	<p>Place on a flat clean machined surface or a mirror, turn the face to read "zero", lock the thumbscrew. ⁶⁾</p>	<p>Set the base edges on the flats of the deck and drop the center probe on the piston to measure 'differential' from zero while turning the engine to find TDC ⁷⁾</p>
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Double check the reading before proceeding



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Spark Plug Hole Adapters

For Dial Indicators and Piston Stops:

You can break the ceramic out of a spare spark plug and drill / tap the side walls for screws. Then insert a 1" dial indicator in the middle of the plug.

The indicator is a slip fit in the middle of the hole and then snug the screw up against it to lock it in place.

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photo by Hippysmack

2)

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