



400-F Commerce Circle
Yorktown, VA 23693
Phone: 757-898-5645
Fax: 757-597-7737
www.ezbore.net

Using a Piston Stop to Determine Top Dead Center

A positive piston stop is a tool that protrudes into the cylinder, or sits above the piston wrist pin, giving the ability to feel the piston reach the end of its travel.

We recommend using a positive piston stop when setting up a degree wheel on your race engine. Our OHV piston stop has 14mm threads and will work for kart, minibike, automotive and motorcycle applications. For Briggs Raptor applications, we sell a head-off dial indicator which will perform the same function. Center portion of stop is drilled all the way through for compression release while turning over engine.



Directions for use:

For Animal/Clone/Other OHV Engines:

First, insert the piston stop into the spark plug hole just deep enough to prevent the piston from reaching full top dead center. Then rotate the engine clockwise and counter clockwise gently touching the piston stop in each direction of rotation. At the end of each direction set the degree so that it reads the same amount on either side of top dead center. One direction will give X number (BTDC) before top dead center and the other rotation direction will give X degrees (ATDC) after top dead center. Each degree reading needs to be exactly the same to ensure that the degree wheel is locked to the crankshaft in a true (TDC) top dead center position. Once the piston stop tool has been removed, the crankshaft can be rotated until it shows top dead center on your degree wheel.



For Raptor Engines:

With bracket set-up to check valves, simply use a 5/16 nut and position under bracket. Use procedure above for Animal engines to find a true TDC (Top Dead Center).

This IS the most accurate method to establish top dead center allowing for slight lost motion in crankshaft, rod and piston. It is much more accurate than eye balling the piston at the top of its cylinder travel and then installing the degree wheel and setting it at top dead center.

Remember: "The real speed is in the details."