

INSTALLATION - SERVICE INSTRUCTIONS

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Bulletin #6

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Pinion Depth Tool

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PART NUMBERS :

PCMW.....Pinion depth setting tool for MW 9" cases.

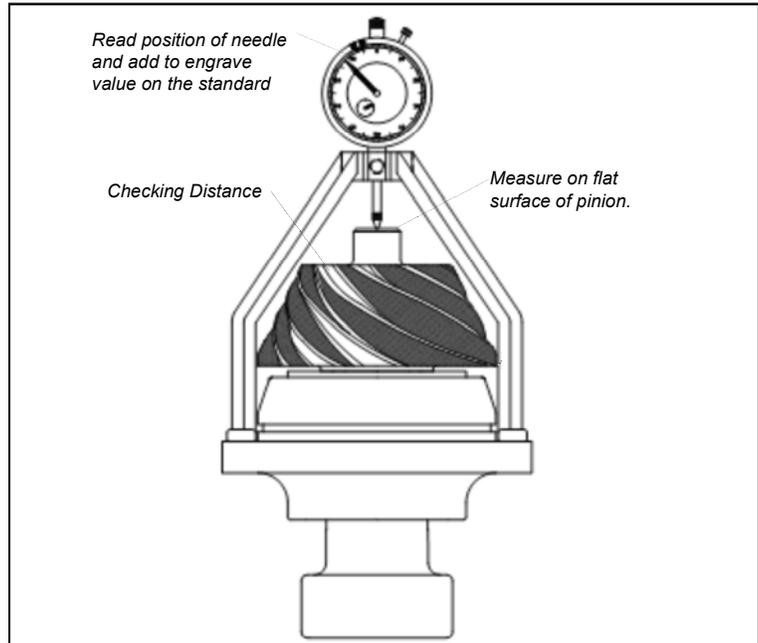
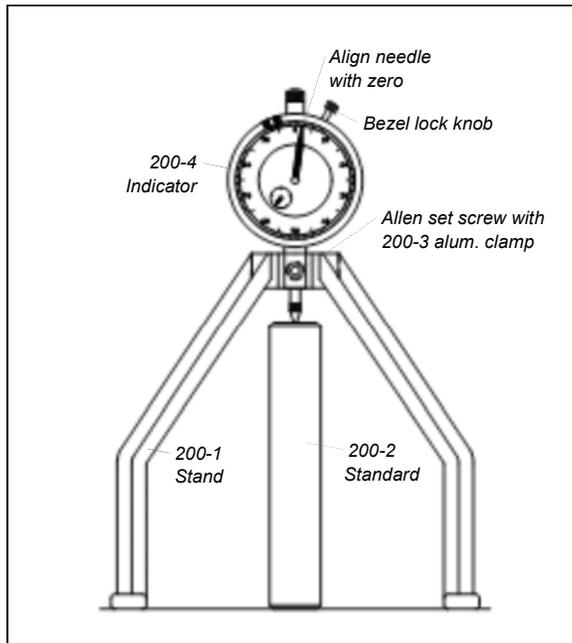
DESCRIPTION :

PARTS INCLUDED :

1 - 200-1.....Indicator Stand
1 - 200-2.....Calibration Standard
1 - 200-3.....Aluminum Indicator Clamp and Set Screw
1 - 200-4.....0"-1" Dial Indicator

PRIMARY APPLICATION :

This tool is designed to determine the proper shim thickness needed for setting the pinion depth on a 9" Ford ring & pinion. The instructions below should be carefully followed to insure proper set up. This tool was designed primarily for use with MW 9" Ford Aluminum and Nodular iron cases.



OPERATION INSTRUCTIONS :

- 1) Insert the 200-4 indicator into the 200-1 stand. Lightly tighten the set screw (make sure 200-3 aluminum clamp is in place under set screw).
- 2) Place stand and indicator on a flat surface, then place the 200-2 standard under the tip of the indicator. Loosen set screw and move the indicator up or down in the stand until the small needle is on 5 or 6 with the large needle roughly in the 12 o'clock position. Lightly tighten the set screw to secure the indicator. Note: **Do not over tighten!** Make sure the plunger on the indicator moves freely. Loosen the small serrated knob on the indicator and rotate the face of the indicator to align the large needle with 0 and tighten. The checker is now set to the value engraved on the 200-2 standard (reference depth).
- 3) Place the gauge on the assembled pinion support. Note the position of the needle on the indicator, this number will be added to the standard engraved reference depth. This will give you the calculated pinion depth, example, $4.890" + .083" = 4.973"$.
- 4) At this point the total from step 3 will be added to the checking distance engraved on the pinion, example, $4.973 + 1.038"$ (checking distance) = $6.011"$. Now the case thickness is subtracted from the new total, example, $6.011" - 6.000" = .011"$. This is the shim thickness required to set the pinion to the proper depth for this gear set. All MW cases are $6.000" \pm .001$ from the face to the center of the carrier bearings.

NOTE FOR USING PCMW WITH NON-MW CASES:

In order to use the PCMW with a case from another manufacturer, an accurate measurement of the case thickness (distance from front of case to center of carrier bores) will need to be made. MW recommends that this measurement be made with a precision measuring instrument such as a CMM or electronic height gauge to ensure the accuracy.