

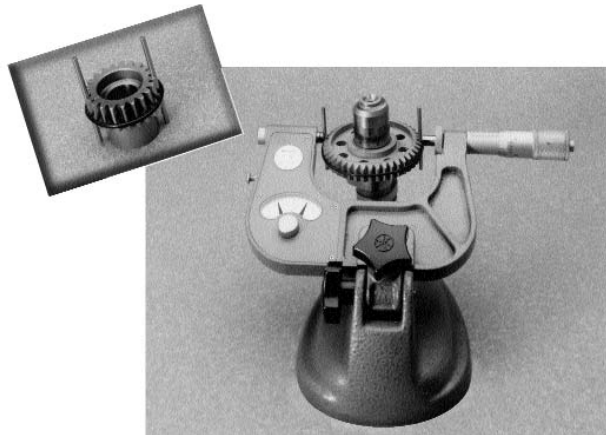
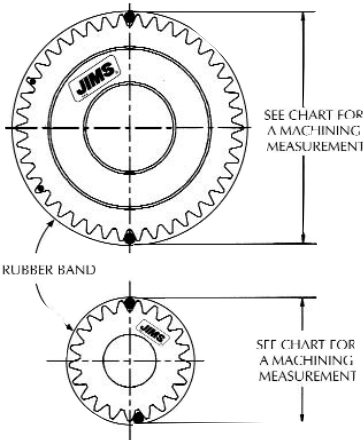


A Division of Thiessen Products, Inc.

# INSTRUCTION SHEET FOR TOOL #1110 & #1111

## CAM AND PINION GEAR GAUGE PINS FOR CHECKING CAM AND PINION GEAR SIZES.

#1110 - USE ON BIG TWIN 1954-89  
#1111 - USE ON BIG TWIN 1990 PRESENT



*Please refer to H-D® Service Manual for specifications.*

Choosing the right size pinion gear to match the cam gear is very important for a quiet, long running engine. If too much gear lash is present, you will hear a clicking noise (sounding like bad lifters), which is the cam gear falling back on the pinion gear as one valve opens and another closes. To eliminate the clicking, and have a slight whine, do the following:

1. With cam gear clean, hold gauge pins in place with a rubber band (see diagram).
2. Using a quality micrometer that reads in ten thousandths of an inch. (4 decimal places). Measure over pins.
3. Match your micrometer reading with chart A or B for 1954-1989 models.  
Use .105 pins to measure cam or pinion gears - 1954-1977 use chart A.  
Use .105 pins to measure cam or pinion gears - 1978-1989 use chart B.  
Use .108 pins to measure cam or pinion gears - 1990-present. See H-D® Service manual for more details.
4. For example if the cam gear you are checking measures between 2.7675 - 2.768, then you need a JIMS® pinion gear No. 24010-RE to make a matched set. SEE CHART A
5. If your cam gear measures between 2.7354 - 2.7364, then you need a JIMS® pinion gear No. 24043-78 to make a matched set. SEE CHART B

CHART A	Part No.	Pinion Gear Size	Cam Gear Size	Color Code
	No.24010-OR	1.4490-1.4485	2.7665-2.767	Orange
	No.24010-RE	1.4480-1.4475	2.7675-2.768	Red
	No.24010-BLU	1.4475-1.447	2.768-2.7685	Blue
	No.24010-GR	1.4470-1.4465	2.7685-2.769	Green
	No.24010-WH	1.4465-1.446	2.769-2.7695	White
	No.24010-BR	1.4460-1.4455	2.7695-2.770	Brown
	No.24010-YE	1.4455-1.445	2.770-2.7705	Yellow
	*Measured over .105" Pins, JIMS No. 1110			

CHART B	Part No.	Pinion Gear Size	Cam Gear Size	Color Code
	No.24040-78	1.4751-1.4756	2.7324-2.7334	Orange
	No.24041-78	1.4745-1.4751	2.7334-2.7344	White
	No.24042-78	1.4737-1.4745	2.7344-2.7354	Yellow
	No.24043-78	1.4729-1.4737	2.7354-2.7364	Red
	No.24044-78	1.4721-1.4729	2.7364-2.7374	Blue
	No.24045-78	1.4715-1.4721	2.7374-2.7384	Green
	No.24046-78	1.4710-1.4715	2.7384-2.7394	Black
	*Measured over .105" Pins, JIMS No. 1110			

**CAUTION:** WEAR SAFETY GLASSES. EXCESSIVE FORCE MAY DAMAGE PARTS! ,SEE JIMS® CATALOG FOR OVER 100 OTHER TOP QUALITY PROFESSIONAL TOOLS. THE LAST TOOLS YOU WILL EVER NEED TO BUY.

***"From the Track... To the Street!"***

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