



FEULING®

LIFTER BORE MEASURING KIT INSTRUCTIONS

PART #: 9004

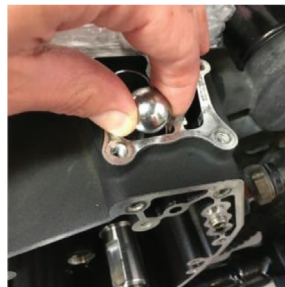
These precision ground steel balls accurately measure the engine's lifter bore sizes and roundness. **Feuling recommended a lifter to lifter bore clearance of 0.001"-0.0015" for optimum lifter performance, oil flow to top end and overall engine/lifter sound.** The closer you can get to this clearance the better. Some bore and lifter size combinations may not allow you to be within this range. Slightly above is acceptable, never below!



Included ball sizes: 0.8430", 0.8435", 0.8440", 0.8445", 0.8450"

INSTRUCTIONS

1. Clean all bores and inspect for any damage.
2. Start with the smallest ball (0.8430") and work your way up in size. The ball should pass through "snugly." This will give you the correct bore size taking roundness of the bore into account. **If the bore is out of round, the ball may only pass part of the way through. If this happens, use the next size smaller that passes through as your reference.**
3. Record all the bore sizes and find which size lifter is closest to 0.001"-0.0015" clearance without going under.



Example:

0.8440" fits halfway through the bore (bore is tapered or out of round).

0.8435" fits through the bore completely so this will be our reference bore size.

0.8435" (Lifter ball) **minus** 0.8423" (Std. OD Feuling lifter) = 0.0012". This is within ideal clearance.

See back side for lifter part numbers and sizes available.

*Feuling recommends a maximum of 0.0035" crankshaft runout + play in the crankshaft bearings for maximum horsepower/torque and engine longevity.

IMPORTANT NOTICE:

Damage to Feuling oil pump corporation products from excessive pinion shaft run out and or valve spring coil bind will void manufacturer's warranty.

IMPORTANT NOTICE

This installation should be done by an experienced mechanic who has access to a factory service manual and all required tools.

CAUTION

Incorrect installation can cause engine damage not covered under warranty. Failure to install components correctly can cause engine seizure. Engine seizure may result in serious injury to motorcycle, operator, passenger, and/or others.

CAUTION

Improperly torqued bolts may result in oil leaks and distortion of components. If replacing the engines head bolts or studs always use new head & base gaskets. Some fastener kits may include fasteners not applicable to your model.

RECORD LIFTER BORE SIZE

FRONT CYLINDER		REAR CYLINDER	
INTAKE BORE SIZE:		INTAKE BORE SIZE:	
EXHAUST BORE SIZE:		EXHAUST BORE SIZE:	



HP+ SERIES LIFTERS

PART NUMBER	FITMENT & SIZE
#4000 (DRAG #0929-0005)	M8/TC/XL STD. OD 0.8418" - 0.8422"
#4000-1	*SINGLE #4000 LIFTER
#4061 (DRAG #0929-0018)	84-99 EVO STD OD 0.8423"
#4025 (DRAG #0929-0017)	91-99 XL/BUELL STD. OD 0.9034" - 0.9036"



RACE SERIES LIFTERS (FULL TRAVEL)

PART NUMBER	FITMENT & SIZE
#4017 (DRAG #0929-0072)	M8/TC/XL STD. OD 0.8420" - 0.8423"
#4017-1	*SINGLE #4017 LIFTER
#4018 (DRAG #0929-0073)	M8/TC/XL +0.001" OD 0.843" - 0.8435"
#4018-1	*SINGLE #4018 LIFTER
#4019 (DRAG #0929-0074)	M8/TC/XL +0.0015" OD 0.8435" - 0.8440"
#4019-1	*SINGLE #4019 LIFTER
#4062 (DRAG #0929-0022)	EVO 84-99 STD. OD 0.8423"



RACE SERIES LIFTERS (SHORT TRAVEL)

PART NUMBER	FITMENT & SIZE
#4017ST (DRAG #0929-0081)	M8/TC/XL STD. OD 0.8420" - 0.8423"
#4017ST-1	*SINGLE #4017ST LIFTER
#4018ST (DRAG #0929-0082)	M8/TC/XL +0.001" OD 0.843" - 0.8435"
#4018ST-1	*SINGLE #4018ST LIFTER
#4019ST (DRAG #0929-0083)	M8/TC/XL +0.0015" OD 0.8435" - 0.8440"
#4019ST-1	*SINGLE #4019ST LIFTER



RACE SERIES LIFTERS (SOLID)

PART NUMBER	FITMENT & SIZE
#4055 (DRAG #0929-0024)	M8/TC/XL STD. OD 0.8420" - 0.8423"
#4056 (DRAG #0929-0090)	M8/TC/XL +0.001" OD 0.843 - 0.8435"
#4057 (DRAG #0929-0091)	M8/TC/XL +0.0015" OD 0.8435" - 0.8440"

*** STANDARD 1 YEAR WARRANTY:**

- WARRANTY COVERS MANUFACTURE DEFECTS
- DOES NOT COVER PARTS THAT HAVE FAILED DUE TO IMPROPER INSTALLATION, MAINTENANCE, EXCESSIVE CRANKSHAFT RUNOUT, OR MISUSE
- DOES NOT COVER ANY CONSEQUENTIAL DAMAGE RESULTING FROM A FAILURE OF A FEULING PRODUCT

*** OPTIONAL 2 YEAR WARRANTY:**

- ADDITIONAL YEAR WARRANTY IS ONLY AVAILABLE IF PARTS ARE INSTALLED BY A PROFESSIONAL INSTALLER
- THE ONLINE WARRANTY FORM MUST BE COMPLETED BY THE DEALER PRIOR TO BIKE DELIVERY
- OIL TANK MUST BE DROPPED & CLEANED
- CRANKSHAFT RUNOUT MUST BE BELOW 0.005"



FOR FULL WARRANTY INFORMATION VISIT FEULINGPARTS.COM/WARRANTY

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