

# CLAIMER

## PERFORMANCE PISTON SERIES

# CLAIMER PISTONS

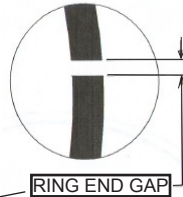
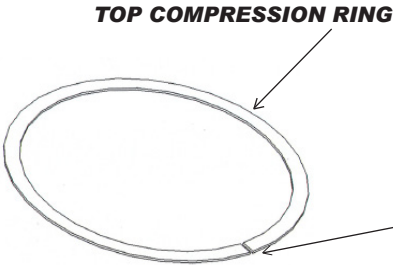
## Installation Instruction

### CALCULATING TOP RING END GAP

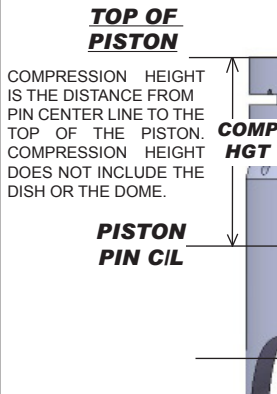
Top Ring Example - Street  
Normally Aspirated 4.000" bore x  
.004" gap factor = .016" total top  
ring end gap.

**Second Ring: Set second ring  
end gap at .004 per inch of bore  
minimum.**

TOP RING END  
GAP FACTORS  
FOR ALL APPLICA-  
TIONS LOCATED  
ON PAGE 2.



**PISTON  
PIN CIL**



### TRU-ARC LOCKRING INSTALLATION

1. KEEP OPEN END OF LOCKRING  
FACING DOWN.
2. DO NOT OVER COMPRESS LOCK.
3. DO NOT USE LOCKS WHEN  
PRESS FITTING THE PIN.

### TRU-ARC LOCKRING



### LUBE PIN HOLE

1. USE HIGH QUALITY OIL OR SUPPLIED  
LUBE. NEVER USE GREASE
2. PRESS FIT, USE ROD HEATER.
3. DO NOT USE LOCKS WHEN  
PRESS FITTING THE PIN.

DO NOT MEASURE THE SKIRT OVER THE COATING.  
PISTONS HAVE .0015" TO .002" CLEARANCE  
BUILT INTO THE OVERBORE SIZE TO MEASURE  
CORRECTLY, THE COATING MUST BE REMOVE AT  
THE DIAL POINT.

**DIAL POINT**

### Warranty Disclaimer

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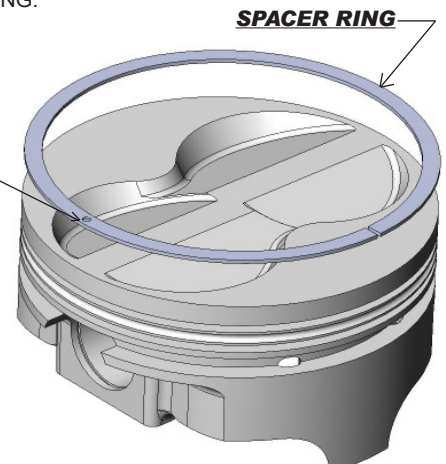
The information contained in this instruction should not be considered absolute. Final decisions concerning the installation and use of these products are ultimately the responsibility of the customer. UEM makes no guarantee of warranty on emissions.

### SPACER RING

THE SPACER RING SUPPORTS THE OIL RAIL ON LONG ROD APPLICATIONS WHEN THE WRIST PIN IS INTERSECTING THE OIL GROOVE. THE SPACER RING SHOULD BE LOCATED IN THE BOTTOM OF THE OIL GROOVE. TO INSTALL, SPIRAL THE RING INTO THE OIL GROOVE. TAKE CARE NOT TO DISTORT OR BEND THE SPACER RING.

### DIMPLE

DIMPLE SHOULD BE PLACED OVER THE OPENING FORMED BY THE PIN INTERSECTING THE OIL GROOVE. THE RAISED SECTION SHOULD BE PLACED FACING DOWN.



**United Engine & Machine Co. Inc.**

1040 CORBETT ST., CARSON CITY, NV 89706  
PHONE 775-882-7790, toll free (US only) 800-648-7970  
WEB SITE-www.uempistons.com

# General Clearance Guidelines

APPLICATION	Ring End Gap Factor	PISTON TO WALL CLEARANCE	
		4.000" - 4.100"	4.100" and up
STREET NORMALLY ASPIRATED	0.0065"	.0015" - .0020"	.0020" - .0025"
STREET TOWING	0.0080"	.0015" - .0020"	.0020" - .0025"
STREET NITROUS OR SUPERCHARGED	0.0080"	.0020" - .0025"	.0025" - .0035"
CIRCLE TRACK 2 BBL/RESTRICTOR GAS	0.0070"	.0015" - .0045"	.0020" - .0050"
CIRCLE TRACK UNRESTRICTED	0.0080"	.0025" - .0045"	.0030" - .0045"
CIRCLE TRACK ALCOHOL INJECTION	0.0080"	.0025" - .0045"	.0025" - .0050"
CIRCLE TRACK ALCOHOL CARB	0.0080"	.0030" - .0045"	.0030" - .0050"
DRAG GASOLINE	0.0075"	.0015" - .0045"	.0020" - .0045"
DRAG ALCOHOL	0.0065"	.0015" - .0045"	.0020" - .0045"
DRAG SUPERCHARGED OR NITROUS	0.0095"	.0020" - .0045"	.0025" - .0050"
DRAG SUPERCHARGED ALCOHOL	0.0085"	.0015" - .0045"	.0025" - .0045"
MARINE NORMALLY ASPIRATED	0.0080"	.0030" - .0045"	.0035" - .0050"
MARINE SUPERCHARGED	0.0090"	.0030" - .0045"	.0035" - .0050"
AIR COOLED BAJA	0.0075"	.0030" - .0045"	.0035" - .0050"
PROPANE	0.0065"	.0015" - .0045"	.0020" - .0045"

Modern piston design locates the top ring higher for improved performance. A high top ring operates at higher temperatures and requires a larger top ring end gap. To find the proper ring end gap, multiply your bore size by the ring end gap factor listed on the chart (i.e., Street Normally Aspirated 4.000" bore x .0065" gap factor = .026" total top ring end gap).

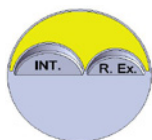
Your hypereutectic performance piston will expand less than typical cast or forged pistons. Because of this and the wear characteristics of the hypereutectic alloy, you can run tight piston-to-wall clearances.

NOTE: Hypereutectic piston engines will require 2-4 degrees less total ignition timing. One key to top performance is to have all cylinders longing for the same timing numbers. Equal air flow, fuel mix, quench, chamber temperature, swirl, and compression at each cylinder work to this end.

***Final piston clearance should be based solely on the demands of your application.***

Factors such as fuel type, altitude, outside temp., humidity, tune up, and many others factors need to be taken into account for your final clearance.

## PISTON ORIENTATION



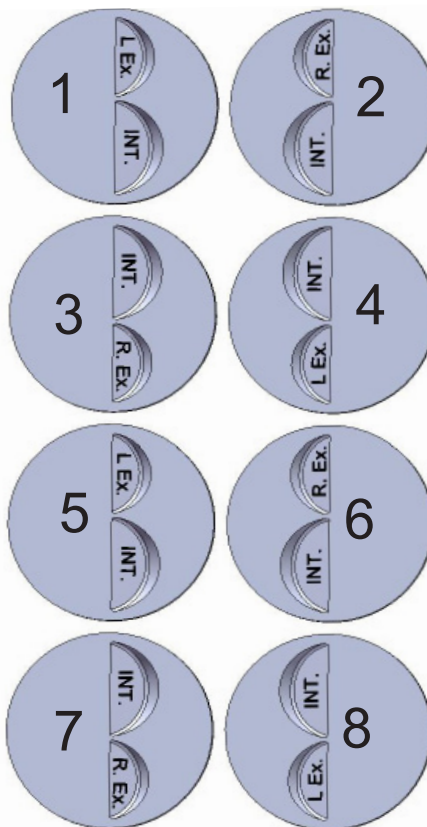
**QUENCH AREA (YELLOW):** Quench is the area behind the valves. This area should match the flat area on your cylinder head. Proper quench promotes cooling of the piston and can be effective in reducing detonation.

ALL CLAIMER PISTONS COME WITH CENTERED PINS AND SYMMETRICAL VALVE RELIEFS SO THEY MAY BE INSTALLED IN ANY CYLINDER WITHOUT THE CONCERN TO MATCH INTAKE AND EXHAUST VALVES.

**CHECKING CYLINDER HEADS:** CHECK CYLINDER HEADS WITH CLAY OR OTHER METHOD BEFORE FINAL ASSEMBLY TO ASSURE PROPER PISTON TO HEAD CLEARANCE - .040" MINIMUM.

## CHEVY V-8 350, 377, 383, 400

FRONT



## CHEVY V-6 4.3L / 262CI

FRONT

