



INSTRUCTIONS & TECHNICAL DATA

IMPORTANT: Before balancing these pistons, be sure they are as you ordered. Used or altered parts cannot be returned for refund, credit, or exchange regardless of the circumstances. In the event that your pistons are not as ordered, contact the factory immediately as all credits, exchanges, or repairs must be completed within 45 days of purchase. All parts returned for credit must be in new condition - no scratches, dings, or nicks. **CLEARANCE:** If the recommended clearance of these pistons is .006 or less, set the clearance at the largest diameter on the skirt. If the clearance is .007 or more, set the clearance at the center of the pin hole.

VALVE POCKET DEPTH: Minimum acceptable valve to piston clearance is dependent upon many factors, including cam lobe lift rate, valve spring tension and valve actuation mechanism weight, etc. However, we have found that .090 intake and .110 exhaust clearance are sufficient in most instances. Check valve to piston clearance, using either clay or the light spring method, making sure the camshaft is degreed as it will be operated, as a few degrees of advanced or retard at the camshaft can radically alter the valve to piston clearance.

ROD TO COUNTERWEIGHT CLEARANCE: A minimum of .060 is acceptable. Check rod pin end to piston pin boss side clearance with the piston in the bore and the rod installed on the crankshaft to insure that the side of the rod is not contacting the side of the piston pin boss.

ROD SIDE CLEARANCE: Check ring side clearance with feeler gauges to be sure that it is between .001 and .004.

ROD END GAP: Use the ring manufacturer's recommendations.

Make	CHRY	Model	BB
Job Card #	137128	Clearance	0.007
Bore Size	4.380	Piston Wt.	608
CAM	J		
C.H.	1.600		
Ring Grooves	.0640		
Groove Depth	.1770	.0640	.1880
Groove Roots	3.986	.2040	.1960
Ring Lands	.350	3.932	3.948
Pin Dia.	1.094	.175	.100
* Lox Type DBL		Pin Length	3.000
Net dome cc's	-30.000		
Dome Height	0.000	Dish Depth	0.181
V.P. Depth	0.200		
V.P. Depth	0.200		

CLEANLINESS: Scrub pistons and cylinder walls in soap and hot water before installing. We recommend brushing a light coat of non-synthetic oil on pistons' skirts and cylinder walls for initial lubrication. Be sure to lubricate pins with lubriplate, or an assembly oil to prevent galling on initial fire-up. Check forced pin oilers for foreign matter. Spirolox installation may be facilitated by grasping each end of the lox and pulling the ends apart a MODERATE (approximately 1/2") amount. This will cause the lox to resemble a small coil spring. The lox can then be "spiraled" into place almost as if you were screwing them into the groove. Be sure that all lox are properly seated and that they exert radial pressure against the lock groove. You should not be able to spin the lox by hand after they are installed. If lox type is double (DBL) you must use four lox per piston. We recommend installing the gap on wire lox at the six o'clock position.

PLEASE KEEP THIS INSTRUCTION SHEET WITH YOUR ENGINE RECORDS. THE JOB CARD NUMBER (IN BLUE) IS CRITICAL WHEN ORDERING A REPLACEMENT OR MATCHING PISTONS.

ALWAYS USE PISTONS WITH THE OIL RING IN THE PIN HOLE MUST USE EITHER OIL RING SUPPORT RAILS OR PIN BUTTONS.

IF THERE IS ANYTHING THAT YOU DO NOT UNDERSTAND ABOUT THE ABOVE INSTRUCTIONS, PLEASE CALL THE TECHNICAL ASSISTANCE LINE

100 Douglas Street, El Segundo, CA 90245 - Phone (310) 536-0100 - Fax (310) 536-0333 - www.rosspistons.com



Pro/Engineer ROSS PISTON THICKNESS DATA

During the design process on this set of pistons the Ross Racing Pistons design department used our customized Pro/ENGINEER software to computer check certain, critical section thicknesses before the pistons were manufactured. We strongly recommend that you keep this Pro/ENGINEER report as it could be very handy if you wish to re-cut the valve pockets or make other modifications in the future. Should you have a question, feel free to call the Ross Racing Pistons technical assistant department at (310) 536-0100.

3.972 A dimension (for Ross engineering dept only)

137128 Ross Job Card (number on piston)

4/30/2014 Date Pro/Engineer program was run

ER Program run by

0.653 Deck thickness major front

0.562 Deck thickness major rear

N/A Minimum thickness under intake valve pocket

N/A Minimum thickness under exhaust valve pocket

0.321 Minimum thickness at top of flat top / dome / dish

0.311 Minimum thickness of dish to top ring groove

N/A Intake valve pocket to top ring groove

N/A Exhaust valve pocket to top ring groove

 Lox to oil ring groove

0.104 Skirt

0.093 Side relief

 Spark Plug notch

 Spark Plug slot

0.073 Pin hole to side of pin boss

0.790 Pin engagement in pin bosses (each side)

5 S. Douglas Street
Segundo, CA 90245

www.RossPistons.com

Phone (310) 536-0100
Fax (310) 536-0333

- 608.5 G WEIGHT OF PISTON A
- 608.5 G WEIGHT OF PISTON B
- 607.9 G WEIGHT OF PISTON C
- 608.3 G WEIGHT OF PISTON D
- 608.3 G WEIGHT OF PISTON E
- 608.2 G WEIGHT OF PISTON F
- 608.2 G WEIGHT OF PISTON G
- 608.6 G WEIGHT OF PISTON H
- 608.4 G WEIGHT OF PISTON I
- WEIGHT OF PISTON J

PLEASE NOTE THAT THE LETTERS "A" THROUGH "J" REFER TO THE LETTER ENGRAVED ON THE BOTTOM OF THE PISTON PIN BOSS.

ROSS RACING PISTONS WEIGHT REPORT


AS ONE OF ROSS RACING PISTONS MANY QUALITY INSPECTIONS ALL PISTONS IN THIS SET HAVE BEEN CHECKED FOR WEIGHT IN GRAMS. THESE WEIGHTS HAVE BEEN RECORDED FOR YOU ON THE ABOVE PRINT OUT.

AT ROSS WE ARE PROUD OF OUR QUALITY. FOR THIS REASON EVERY SET OF CUSTOM PISTONS COMES WITH A LAZER MIKE REPORT, A PRO ENGINEER REPORT, AND THIS WEIGHT REPORT.



THE MOST INSPECTED PISTONS IN THE INDUSTRY

ROSS RACING PISTONS
625 S. DOUGLAS
EL SEGUNDO, CA 90245
PHONE (310) 536-0100 FAX (310) 536-0333
www.rosspistons.com

JC# 137128
 INSP. BY 
 DATE 5.13.14

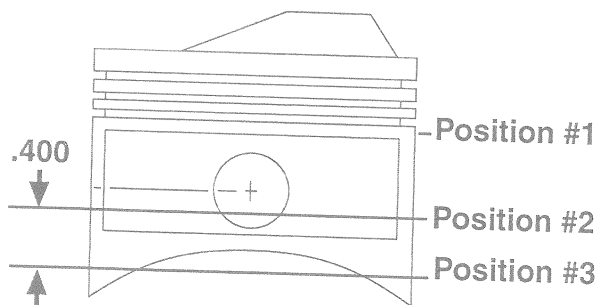
LIBRARY	1,	SAMPLE	1,	4.3715	A PISTON POSITION ONE NET DIA.
LIBRARY	1,	SAMPLE	2,	4.3733	A PISTON POSITION TWO NET DIA.
LIBRARY	1,	SAMPLE	3,	4.3733	A PISTON POSITION THREE NET DIA.
LIBRARY	1,	SAMPLE	1,	4.3724	B PISTON POSITION ONE NET DIA.
LIBRARY	1,	SAMPLE	2,	4.3734	B PISTON POSITION TWO NET DIA.
LIBRARY	1,	SAMPLE	3,	4.3733	B PISTON POSITION THREE NET DIA.
LIBRARY	1,	SAMPLE	1,	4.3713	C PISTON POSITION ONE NET DIA.
LIBRARY	1,	SAMPLE	2,	4.3732	C PISTON POSITION TWO NET DIA.
LIBRARY	1,	SAMPLE	3,	4.3732	C PISTON POSITION THREE NET DIA.
LIBRARY	1,	SAMPLE	1,	4.3724	D PISTON POSITION ONE NET DIA.
LIBRARY	1,	SAMPLE	2,	4.3733	D PISTON POSITION TWO NET DIA.
LIBRARY	1,	SAMPLE	3,	4.3734	D PISTON POSITION THREE NET DIA.
LIBRARY	1,	SAMPLE	1,	4.3720	E PISTON POSITION ONE NET DIA.
LIBRARY	1,	SAMPLE	2,	4.3732	E PISTON POSITION TWO NET DIA.
LIBRARY	1,	SAMPLE	3,	4.3732	E PISTON POSITION THREE NET DIA.
LIBRARY	1,	SAMPLE	1,	4.3721	F PISTON POSITION ONE NET DIA.
LIBRARY	1,	SAMPLE	2,	4.3731	F PISTON POSITION TWO NET DIA.
LIBRARY	1,	SAMPLE	3,	4.3730	F PISTON POSITION THREE NET DIA.
LIBRARY	1,	SAMPLE	1,	4.3723	G PISTON POSITION ONE NET DIA.
LIBRARY	1,	SAMPLE	2,	4.3733	G PISTON POSITION TWO NET DIA.
LIBRARY	1,	SAMPLE	3,	4.3733	G PISTON POSITION THREE NET DIA.
LIBRARY	1,	SAMPLE	1,	4.3721	H PISTON POSITION ONE NET DIA.
LIBRARY	1,	SAMPLE	2,	4.3732	H PISTON POSITION TWO NET DIA.
LIBRARY	1,	SAMPLE	3,	4.3731	H PISTON POSITION THREE NET DIA.
LIBRARY	1,	SAMPLE	1,	4.3725	I PISTON POSITION ONE NET DIA.
LIBRARY	1,	SAMPLE	2,	4.3733	I PISTON POSITION TWO NET DIA.
LIBRARY	1,	SAMPLE	3,	4.3734	I PISTON POSITION THREE NET DIA.
LIBRARY	1,	SAMPLE	1,	4.3725	J PISTON POSITION ONE NET DIA.
LIBRARY	1,	SAMPLE	2,	4.3733	J PISTON POSITION TWO NET DIA.
LIBRARY	1,	SAMPLE	3,	4.3734	J PISTON POSITION THREE NET DIA.

ROSS RACING PISTONS LAZER MIKE SIZE REPORT

EACH PISTON HAS BEEN MEASURED OR "SAMPLED" ON OUR ROSS LAZER MIKE IN THREE PLACES ON THE SKIRT. IGNORE THE FIRST TWO COLUMNS ON THIS SIZE REPORT (LIBRARY 1) AS THEY PERTAIN TO THE LAZER MIKE RECORDING SYSTEM ONLY.

SAMPLE 1 IS THE NET SKIRT DIA. AT POSITION #1 (IMMEDIATELY BELOW THE OIL RING GROOVE)
 SAMPLE 2 IS THE NET SKIRT DIA. AT #2 (.400 ABOVE POSITION #3)
 SAMPLE 3 IS THE NET SKIRT DIA. AT POSITION #3 (AT THE VERY BOTTOM OF THE SKIRT)

JC# 137128
 INSP. BY LV
 DATE 8-13-14



NUMBER IN QUALITY!

625 S. DOUGLAS, EL SEGUNDO, CA 90245, PHONE (310) 536-0100 • FAX (310) 536-0333