

CRANKSHAFTS & ROTATING ASSEMBLIES

SMALL BLOCK CHEVROLET CRANKSHAFTS (2 PIECE REAR SEAL) 4340 NON-TWIST FORGINGS LIGHTWEIGHT DESIGN FOR INTERNAL BALANCE

- ✓ Heat Treated, Stress Relieved, Shot Peened, Nitrided and 100% Magnafluxed
- ✓ Micro Polished Large Radius Journals (Narrowed Rod Bearings Required)

Part No.	Stroke	Minimum Rod Length	Main Journal Diameter	Rod Journal Diameter	Bobweight (grams)	Total Weight (lbs.)
350 MAIN JOURNAL DIAMETER						
190190	3.480"	5.700"	2.450"	2.100"	1750	44-46
190150	3.750"	5.700"	2.450"	2.100"	1800	49-51
190130	4.000"	6.000"	2.450"	2.100"	1800	49-51

SMALL BLOCK CHEVROLET ROTATING ASSEMBLIES

- ✓ Lightweight 4340 Forged Steel Crankshaft
- ✓ 4340 Forged Steel "H" Beam Connecting Rods with 7/16" ARP 8740 or optional ARP 2000 Cap Screws*
- ✓ 2618 Forged Aluminum Platinum Series Pistons with Premium Chrome Moly Wrist Pins
- ✓ Total Seal® Piston Rings & High Performance Clevite® "H" Series Rod (narrowed) and "P" or "H" Series Main Engine Bearings
- ✓ Horsepower range is 750 with the ARP 8740 and 1,500 with the optional ARP 2000 Cap Screws

* Kit number 2908 is supplied with our Pro Series Lightweight I Beam with 7/16" ARP 2000 Cap Screws

NOTE: The 350 and 400 Small Block rotating assemblies listed below are unbalanced. For a precision balanced assembly please also order part number 04000

Part No.	Stroke	CID @.030	Crank Number	Rod Length	Rod Number	Piston Type	STD. Bore	Piston Number	Bore Sizes Available	Compression Ratio			Piston Ring Numbers	Piston Ring Package
										58cc	64cc	76cc		
350 BLOCK WITH 350 MAIN JOURNAL DIAMETER														
2907__	3.480"	355	190190	6.000"	14054	Flat -4cc	4.000"	5906	30 35 40 60	9.8	9.2	8.2	4635 3546	1/16", 3/16"
2908__	3.480"	355	190190	6.000"	14354	Flat -4cc	4.000"	5906	30 35 40 60	9.8	9.2	8.2	4635 3546	1/16", 3/16"
2900__	3.750"	383	190150	6.000"	14054	Dish -15cc	4.000"	5909	30 35 40	10.4	9.8	8.8	4635 354	1/16", 3/16"
2901__	3.750"	383	190150	6.000"	14054	Flat -4cc	4.000"	5908	30 35 40	11.9	11.0	9.7	4635 354	1/16", 3/16"
2909__	3.750"	383	190150	6.000"	14054	Dome +10cc (Gas Ported)	4.000"	5914	30 35 40	14.5	13.2	11.3	4622 354	.043", 3mm
400 BLOCK WITH 350 MAIN JOURNAL DIAMETER														
2902__	4.000"	434	190130	6.000"	14054	Dish -20cc	4.125"	5939	00 30	11.0	10.4	9.3	4616 03	1/16", 3/16"
2903__	4.000"	434	190130	6.000"	14054	Dome +4cc (Gas Ported)	4.125"	5938	00 30	14.7	13.6	11.8	4626 03	.043", 3mm

Note: Specify desired bore size to complete the six digit part number, i.e. P/N 290735

Add an "R" to the assembly part number to order the optional ARP 2000 rod bolt upgrade.

Add an "H" to the assembly part number to order the optional "H" Series main bearings.

BEARING CHART

Clevite® "H" Series Rod Bearings	Clevite® "P" Series Main Bearings	Clevite® "H" Series Main Bearings
30010	33010	33010H



CRANKSHAFTS & ROTATING ASSEMBLIES

BIG BLOCK CHEVROLET CRANKSHAFTS (2 PIECE REAR SEAL) 4340 NON-TWIST FORGINGS DESIGNED FOR INTERNAL BALANCE

- ✓ Heat Treated, Stress Relieved, Shot Peened, Nitrided and 100% Magnafluxed
- ✓ Micro Polished Large Radius Journals (Narrowed Rod Bearings Required)

Part No.	Stroke	Minimum Rod Length	Main Journal Diameter	Rod Journal Diameter	Bobweight (grams)	Total Weight (lbs.)
454 MAIN JOURNAL DIAMETER WITHOUT CENTER COUNTERWEIGHTS						
190170	4.000"	6.135"	2.750"	2.200"	2350	64-66
190140	4.250"	6.385"	2.750"	2.200"	2350	64-66
190250	4.375"	6.385"	2.750"	2.200"	2350	64-66
454 MAIN JOURNAL DIAMETER WITH CENTER COUNTERWEIGHTS						
190220	4.500"	6.700"	2.750"	2.200"	2425	74-76
190280	4.750"	6.700"	2.750"	2.200"	2425	74-76

BIG BLOCK CHEVROLET ROTATING ASSEMBLIES

- ✓ 4340 Forged Steel Crankshaft
- ✓ 4340 Forged Steel "H" Beam Connecting Rods with 7/16" ARP 8740 or optional ARP 2000 Cap Screws
- ✓ 2618 Forged Aluminum Platinum Series Pistons with Premium Chrome Moly Wrist Pins
- ✓ Total Seal® Piston Rings & High Performance Clevite® "H" Series Rod (narrowed) and "P" or "H" Series Main Engine Bearings
- ✓ Horsepower range is 900 with the ARP 8740 and 1,500 with the optional ARP 2000 Cap Screws

NOTE: All the BB Chevy rotating assemblies listed below are factory balanced to within +/- 1% of bobweight. Order part number **04000** for precision balancing to within 5 grams

Part No.	Stroke	CID	Crank P/N	Rod Length	Rod P/N	Bore Size	Piston P/N	Piston Type	Compression Ratio			Piston Ring Package	Piston Ring P/N
									112cc	118cc	124cc		
29516	4.000"	516	190170	6.135"	14060	4.530"	696830	Dome +2cc	9.4	9.0	8.7	1/16", 3/16"	46453
28548	4.250"	548	190140	6.385"	14062	4.530"	696730	Dish -20cc	8.7	8.4	8.1	1/16", 3/16"	46453
28555	4.250"	555	190140	6.385"	14062	4.560"	696360	Flat -3cc	9.8	9.4	9.0	1/16", 3/16"	46456
29555	4.250"	555	190140	6.385"	14062	4.560"	697860*	Dome +42cc	14.5	13.6	12.8	.043", 3/16"	46556
28565	4.250"	565	190140	6.385"	14062	4.600"	696380	Flat -3cc	9.9	9.5	9.1	1/16", 3/16"	46458
29565	4.250"	565	190140	6.385"	14062	4.600"	697880*	Dome +42cc	14.8	13.8	13.0	.043", 3/16"	46558
28572	4.250"	572	190140	6.385"	14062	4.625"	696390	Flat -3cc	10.0	9.6	9.2	1/16", 3/16"	46459
29572	4.250"	572	190140	6.385"	14062	4.625"	697890*	Dome +42cc	14.7	13.8	13.0	.043", 3/16"	46559
28582	4.375"	582	190250	6.385"	14062	4.600"	696980	Flat -3cc	10.2	9.8	9.4	1/16", 3/16"	46458
29582	4.375"	582	190250	6.385"	14062	4.600"	698280*	Dome +42cc	15.0	14.1	13.3	.043", 3/16"	46558
28598	4.500"	598	190220	6.700"	14072	4.600"	698080	Flat -3cc	10.5	10.0	9.7	1/16", 3/16"	46458
29598	4.500"	598	190220	6.700"	14072	4.600"	697680*	Dome +42cc	15.5	14.5	13.7	.043", 3/16"	46558
28632	4.750"	632	190280	6.700"	14072	4.600"	698180	Flat -3cc	11.0	10.5	10.1	1/16", 3/16"	46458
29632	4.750"	632	190280	6.700"	14072	4.600"	697980	Dome +42cc	16.3	15.3	14.4	.043", 3/16"	46558

Add an "R" to the assembly part number to order the optional ARP 2000 rod bolt upgrade.

Add an "H" to the assembly part number to order the optional "H" Series main bearings.

*NOTE: All Dome +42cc pistons are lateral gas ported

Dome fits Pro 1 and BB-3 heads @ 118cc with no additional modifications needed

Other applications or smaller combustion chambers must be checked

BEARING CHART

Clevite® "H" Series Rod Bearings	Clevite® "P" Series Main Bearings	Clevite® "H" Series Main Bearings
30040	33040	33040H

Note: New part numbers are **ITALICIZED**.

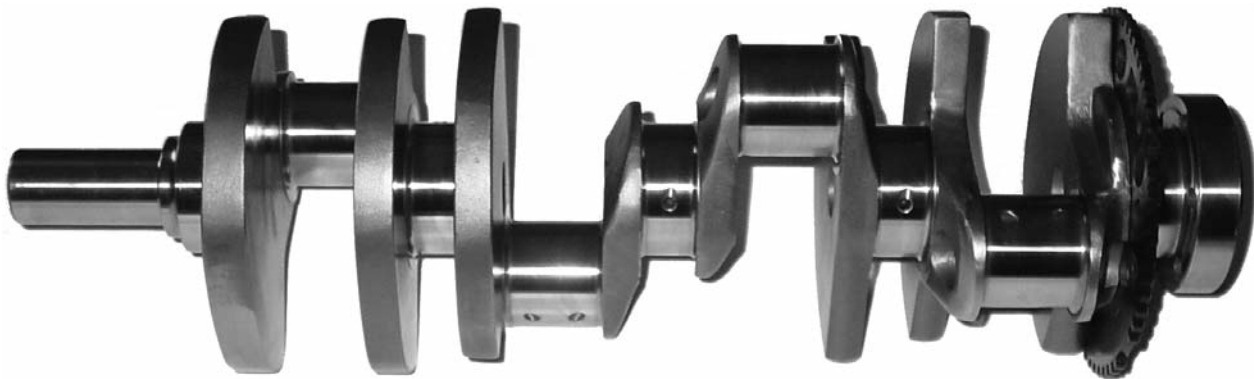
CRANKSHAFTS

CHEVROLET "LS" CRANKSHAFTS

Manley Performance's line of "PRO SERIES" crankshafts specifically designed for the CHEVROLET LS market... The perfect compliment to our wide range of LS pistons and connecting rods. Why shop anywhere else when you can bullet-proof your LS engine's bottom-end with quality Manley components?

- ✓ Lightweight (LW) and Super Lightweight (SLW) designs
- ✓ 4340 material forgings
- ✓ Multi-step heat treatment process and Nitrided for added strength
- ✓ Stress relieved, shot-peened, and 100% magnafluxed
- ✓ Micro polished large radius journals (narrowed bearings required)
- ✓ Available with either 24 or 58 tooth reluctor wheel
- ✓ Gun drilled mains and lightened rod journals for weight reduction
- ✓ Counterweights fully profiled

Part No.	Design LW or SLW	Reluctor Wheel 24 or 58 Tooth	Stroke	Minimum Rod Length	Main Journal Diameter	Rod Journal Diameter	Bobweight (grams)	Total Weight (lbs.)
LIGHTWEIGHT								
190024	LW	24	4.000"	6.125"	2.559"	2.100"	1755	50-52
190058	LW	58	4.000"	6.125"	2.559"	2.100"	1755	50-52
192124	LW	24	4.000"	6.125"	2.559"	2.100"	1800	51-53
192158	LW	58	4.000"	6.125"	2.559"	2.100"	1800	51-53
190124	LW	24	4.100"	6.125"	2.559"	2.100"	1755	50-52
190158	LW	58	4.100"	6.125"	2.559"	2.100"	1755	50-52
LIGHTWEIGHT WITH LONG SNOOT (LS-7)								
192658	LW	58	4.000"	6.125"	2.559"	2.100"	1800	51-53
192758	LW	58	4.100"	6.125"	2.559"	2.100"	1800	51-53
SUPER LIGHTWEIGHT								
190324	SLW	24	4.000"	6.125"	2.559"	2.100"	1686	46-48
190358	SLW	58	4.000"	6.125"	2.559"	2.100"	1686	46-48



Note: New part numbers are **ITALICIZED**.

CUSTOM ROTATING ASSEMBLIES

CHEVROLET "LS" ROTATING ASSEMBLIES

Ordering a Manley LS rotating assembly is as easy as 1-2-3.....

1. Choose your crankshaft part number based on stroke, weight, and reluctor wheel and order the corresponding Rod and Main bearing part numbers shown.
2. Choose your connecting rod part number.
3. Choose your piston part number based on bore size and desired compression ratio and the corresponding piston ring part number.

Ordering all of the required components for your LS rotating assembly from Manley will result in extra \$ savings. Please contact your Manley representative for more details.

Order P/N **04000** for precision balancing within 5 grams

CRANKS

- ✓ Super Lightweight and Lightweight 4340 material forgings
- ✓ Multi-step heat treatment process and Nitrided for added strength
- ✓ Stress relieved, shot-peened, and 100% magnafluxed
- ✓ Micro polished large radius journals
- ✓ Available with either 24 or 58 tooth reluctor wheels
- ✓ Gun drilled mains and lightened rod journals for weight reduction
- ✓ Counterweights fully profiled

RODS

- ✓ Lightweight design 4340 material forgings
- ✓ Fully machined, heat treated, stress relieved, shot peened and 100% magnafluxed
- ✓ Big and small end bores are final honed to a tolerance of $\pm .0002$ "
- ✓ Bend and twist is tightly controlled
- ✓ Weight matched to +/- 1.5 grams
- ✓ H-Lite comes standard with 3/8" ARP 2000 bolts
- ✓ H-Beam comes standard with low profile 7/16" ARP 8740 bolts providing additional block and oil pan clearance (affix an R suffix for ARP 2000 bolt upgrade)
- ✓ I-Beam comes standard with 7/16" ARP 2000 bolts (affix an R6 suffix for ARP 625+ bolt upgrade)

PISTONS

- ✓ High strength 2618 alloy forgings
- ✓ Exacting ring groove squareness to cylinder wall provides maximum horsepower.
- ✓ Offset wrist pin design
- ✓ Moly coated skirts

RINGS

- ✓ 1.5 x 1.5 x 3mm Total Seal (moly in-lay tops standard)
- ✓ Premium steel top rings are optional (affix ST suffix)
- ✓ Total Seal Gapless® steel top ring sets also available (affix GT suffix)

BEARINGS

- ✓ Premium Clevite® "H" Series narrowed rod bearings and "P" Series or "H" Series main bearings

SMALL BLOCK CHEVROLET LS SERIES

SUPER LIGHTWEIGHT 1686gm. BOBWEIGHT 4.000" STROKE CRANKS

Crank P/N Reluctor Wheel	Piston Part No.	Piston Description	Ring Part No.	Compression Ratio				Balance Req. (Y/N) H-Lite
				64cc	66cc	70cc	72cc	
190324 24 Tooth or 190358 58 Tooth	592207C-8	3.905/-4cc F/T	46107-8	11.2	11.0	10.4	10.2	Y
	592605C-8	4.005/-4cc F/T	46110-8	11.7	11.4	10.9	10.7	Y
Rod P/N Description	592610C-8	4.010/-4cc F/T	46111-8	11.7	11.5	11.0	10.7	Y
	592630C-8	4.030/-4cc F/T	46113-8	11.9	11.6	11.1	10.9	N*
Bearing P/N Description	592665C-8	4.065/-4cc F/T	46116-8	12.1	11.8	11.3	11.1	N*
	592670C-8	4.070/-4cc F/T	46117-8	12.1	11.8	11.3	11.1	N*
14031-8 6.125" H-Lite	592701C-8	4.001/-10cc Dish	46110-8	10.8	10.6	10.1	9.9	Y
	592705C-8	4.005/-10cc Dish	46110-8	10.9	10.7	10.2	10.0	Y
30010 Rod & 33030 or 33030H Main	592730C-8	4.030/-10cc Dish	46113-8	11.1	10.8	10.3	10.1	N*
	592765C-8	4.065/-10cc Dish	46116-8	11.3	11.0	10.5	10.3	N*
592770C-8	592770C-8	4.070/-10cc Dish	46117-8	11.4	11.1	10.6	10.4	N*
	596207C-8	3.905/-18cc Dish	46107-8	9.7	9.5	9.2	9.0	Y
	596205C-8	4.005/-18cc Dish	46110-8	10.1	9.9	9.5	9.4	N*
596230C-8	596230C-8	4.030/-18cc Dish	46113-8	10.2	10.0	9.6	9.5	N*
	596265C-8	4.065/-18cc Dish	46116-8	10.4	10.2	9.8	9.6	N*
596270C-8	596270C-8	4.070/-18cc Dish	46117-8	10.4	10.2	9.8	9.6	N*

*N = Factory balanced to +/- 1% of bobweight
Order part number **04000** for precision balancing to within 5 grams

CUSTOM ROTATING ASSEMBLIES

SMALL BLOCK CHEVROLET LS SERIES

LIGHTWEIGHT 1755gm. BOBWEIGHT 4.000" STROKE CRANKS

Crank P/N Reluctor Wheel	Piston Part No.	Piston Description	Ring Part No.	Compression Ratio				Balance Req. (Y/N)	
				64cc	66cc	70cc	72cc	H-Beam	I-Beam
190024 24 Tooth or 190058 58 Tooth	592207C-8	3.905/-4cc F/T	46107-8	11.2	11.0	10.4	10.2	Y	Y
	592605C-8	4.005/-4cc F/T	46110-8	11.7	11.4	10.9	10.7	N*	Y
	592610C-8	4.010/-4cc F/T	46111-8	11.7	11.5	11.0	10.7	N*	Y
	592630C-8	4.030/-4cc F/T	46113-8	11.9	11.6	11.1	10.9	N*	Y
	592665C-8	4.065/-4cc F/T	46116-8	12.1	11.8	11.3	11.1	N*	Y
Rod P/N Description	592670C-8	4.070/-4cc F/T	46117-8	12.1	11.8	11.3	11.1	N*	Y
14051-8 6.125" H-Beam or 14359-8 6.125" I-Beam	592701C-8	4.001/-10cc Dish	46110-8	10.8	10.6	10.1	9.9	N*	Y
	592705C-8	4.005/-10cc Dish	46110-8	10.9	10.7	10.2	10.0	N*	Y
	592730C-8	4.030/-10cc Dish	46113-8	11.1	10.8	10.3	10.1	N*	Y
	592765C-8	4.065/-10cc Dish	46116-8	11.3	11.0	10.5	10.3	N*	Y
	592770C-8	4.070/-10cc Dish	46117-8	11.4	11.1	10.6	10.4	N*	Y
Bearing P/N Description	596207C-8	3.905/-18cc Dish	46107-8	9.7	9.5	9.2	9.0	Y	Y
	596205C-8	4.005/-18cc Dish	46110-8	10.1	9.9	9.5	9.4	N*	Y
30010 Rod & 33030 or 33030H Main	596230C-8	4.030/-18cc Dish	46113-8	10.2	10.0	9.6	9.5	N*	Y
	596265C-8	4.065/-18cc Dish	46116-8	10.4	10.2	9.8	9.6	N*	Y
	596270C-8	4.070/-18cc Dish	46117-8	10.4	10.2	9.8	9.6	N*	Y
	592807C-8	3.905/-29cc Dish	46107-8	8.7	8.5	8.2	8.1	Y	Y
	592805C-8	4.005/-29cc Dish	46110-8	9.1	8.9	8.6	8.5	N*	Y
	592830C-8	4.030/-29cc Dish	46113-8	9.2	9.0	8.7	8.6	N*	Y
	592865C-8	4.065/-29cc Dish	46116-8	9.3	9.1	8.8	8.7	N*	Y
	592870C-8	4.070/-29cc Dish	46117-8	9.4	9.2	8.9	8.8	N*	Y

*N = Factory balanced to +/- 1% of bobweight
Order part number 04000 for precision balancing to within 5 grams

SMALL BLOCK CHEVROLET LS SERIES

LIGHTWEIGHT 1755gm. BOBWEIGHT 4.100" STROKE CRANKS

Crank P/N Reluctor Wheel	Piston Part No.	Piston Description	Ring Part No.	Compression Ratio				Balance Req. (Y/N)	
				64cc	66cc	70cc	72cc	H-Beam	I-Beam
190124 24 Tooth or 190158 58 Tooth	596505C-8	4.005/-10cc Dish	46110-8	11.1	10.9	10.5	10.3	N*	Y
	596565C-8	4.065/-10cc Dish	46116-8	11.4	11.2	10.7	10.5	N*	Y
	596570C-8	4.070/-10cc Dish	46117-8	11.5	11.3	10.8	10.6	N*	Y
Rod P/N Description	596600C-8	4.125/-11cc Dish	46360-8	11.6	11.4	10.9	10.7	Y	N*
	596605C-8	4.130/-11cc Dish	46361-8	11.7	11.5	11.0	10.8	Y	N*
14051-8 6.125" H-Beam or 14359-8 6.125" I-Beam	596005C-8	4.005/-20cc Dish	46110-8	10.1	9.9	9.6	9.4	N*	Y
	596065C-8	4.065/-20cc Dish	46116-8	10.4	10.2	9.8	9.6	N*	N*
	596070C-8	4.070/-20cc Dish	46117-8	10.4	10.2	9.8	9.7	N*	N*
Bearing P/N Description	596400C-8	4.125/-20cc Dish	46360-8	10.6	10.4	10.1	9.9	Y	N*
	596405C-8	4.130/-20cc Dish	46361-8	10.7	10.5	10.1	9.9	Y	N*
30010 Rod & 33030 or 33030H Main	596705C-8	4.005/-31cc Dish	46110-8	9.1	9.0	8.7	8.5	N*	Y
	596765C-8	4.065/-31cc Dish	46116-8	9.3	9.2	8.9	8.7	N*	Y
	596770C-8	4.070/-31cc Dish	46117-8	9.4	9.3	9.0	8.8	N*	N*
	596800C-8	4.125/-31cc Dish	46360-8	9.6	9.4	9.1	9.0	Y	N*
	596805C-8	4.130/-31cc Dish	46361-8	9.7	9.5	9.2	9.1	Y	N*

*N = Factory balanced to +/- 1% of bobweight
Order part number 04000 for precision balancing to within 5 grams

CUSTOM ROTATING ASSEMBLIES

SMALL BLOCK CHEVROLET LS SERIES

LIGHTWEIGHT 1800gm. BOBWEIGHT 4.000" STROKE CRANKS

Crank P/N Reluctor Wheel	Piston Part No.	Piston Description	Ring Part No.	Compression Ratio				Balance Req. (Y/N)	
				64cc	66cc	70cc	72cc	H-Beam	I-Beam
192124 24 Tooth or 192158 58 Tooth	592300C-8	4.125/-5cc F/T	46360-8	12.3	12.0	11.5	11.3	N*	Y
	592305C-8	4.130/-5cc F/T	46361-8	12.4	12.1	11.6	11.4	N*	Y
Rod P/N Description	592400C-8	4.125/-11cc Dish	46360-8	11.5	11.3	10.8	10.6	N*	Y
	592405C-8	4.130/-11cc Dish	46361-8	11.6	11.4	10.9	10.5	N*	Y
14051-8 6.125" H-Beam or 14359-8 6.125" I-Beam	596300C-8	4.125/-18cc Dish	46360-8	10.6	10.4	10.0	9.8	N*	Y
	596305C-8	4.130/-18cc Dish	46361-8	10.6	10.4	10.0	9.9	N*	Y
Rod P/N Description	592900C-8	4.125/-29cc Dish	46360-8	9.6	9.4	9.1	9.0	N*	Y
	592905C-8	4.130/-29cc Dish	46361-8	9.7	9.5	9.2	9.1	N*	Y
Bearing P/N Description	30010 33030 or 33030H	Rod Main	*N = Factory balanced to +/- 1% of bobweight Order part number 04000 for precision balancing to within 5 grams						

SMALL BLOCK CHEVROLET LS-7 (LONG SNOUT)

LIGHTWEIGHT 1800gm. BOBWEIGHT 4.000" STROKE CRANKS

Crank P/N Reluctor Wheel	Piston Part No.	Piston Description	Ring Part No.	Compression Ratio				Balance Req. (Y/N)	
				64cc	66cc	70cc	72cc	H-Beam	I-Beam
192658 24 Tooth	592300C-8	4.125/-5cc F/T	46360-8	12.3	12.0	11.5	11.3	N*	Y
	592305C-8	4.130/-5cc F/T	46361-8	12.4	12.1	11.6	11.4	N*	Y
Rod P/N Description	592400C-8	4.125/-11cc Dish	46360-8	11.5	11.3	10.8	10.6	N*	Y
	592405C-8	4.130/-11cc Dish	46361-8	11.6	11.4	10.9	10.5	N*	Y
14051-8 6.125" H-Beam or 14359-8 6.125" I-Beam	596300C-8	4.125/-18cc Dish	46360-8	10.6	10.4	10.0	9.8	N*	Y
	596305C-8	4.130/-18cc Dish	46361-8	10.6	10.4	10.0	9.9	N*	Y
Rod P/N Description	592900C-8	4.125/-29cc Dish	46360-8	9.6	9.4	9.1	9.0	N*	Y
	592905C-8	4.130/-29cc Dish	46361-8	9.7	9.5	9.2	9.1	N*	Y
Bearing P/N Description	30010 33030 or 33030H	Rod Main	*N = Factory balanced to +/- 1% of bobweight Order part number 04000 for precision balancing to within 5 grams						

SMALL BLOCK CHEVROLET LS-7 (LONG SNOUT)

LIGHTWEIGHT 1800gm. BOBWEIGHT 4.100" STROKE CRANKS

Crank P/N Reluctor Wheel	Piston Part No.	Piston Description	Ring Part No.	Compression Ratio				Balance Req. (Y/N)	
				64cc	66cc	70cc	72cc	H-Beam	I-Beam
192758 58 Tooth	596600C-8	4.125/-11cc Dish	46360-8	11.6	11.4	10.9	10.7	N*	Y
	596605C-8	4.130/-11cc Dish	46361-8	11.7	11.5	11.0	10.8	N*	Y
Rod P/N Description	596400C-8	4.125/-20cc Dish	46360-8	10.6	10.4	10.1	9.9	N*	Y
	596405C-8	4.130/-20cc Dish	46361-8	10.7	10.5	10.1	9.9	N*	Y
14051-8 6.125" H-Beam or 14359-8 6.125" I-Beam	596800C-8	4.125/-31cc Dish	46360-8	9.6	9.4	9.1	9.0	N*	Y
	596805C-8	4.130/-31cc Dish	46361-8	9.7	9.5	9.2	9.1	N*	Y
Bearing P/N Description	30010 33030 or 33030H	Rod Main	*N = Factory balanced to +/- 1% of bobweight Order part number 04000 for precision balancing to within 5 grams						

CRANKS & KITS

CRANKSHAFTS & ROTATING ASSEMBLIES

CHRYSLER 5.7L/6.1L HEMI

4340 FORGED CRANKSHAFTS

Manley Performance "PRO SERIES" stroker crankshaft designed for the small block HEMI engine... Manufactured from a premium 4340 steel forging, these cranks feature a 4.050" stroke which can turn your 5.7L into a 392 c.i. engine and your 6.1L into a 426 c.i. engine. The Manley 4.050" stroke HEMI crankshaft features small block Chevy small journal (2.000") crank pin diameters and widths. This provides taller "side walls" on the crankshaft rod journals for better oil control and reduced windage. The counterweights are profiled for 6.125" length connecting rods. All crankshafts are shipped with either a 32 tooth or 58 tooth reluctor wheel installed.

- ✓ 4340 material forging
- ✓ Multi-step heat treatment process and Nitrided for added strength
- ✓ Stress relieved, shot-peened, and 100% magnafluxed
- ✓ Micro polished large radius journals (narrowed rod bearings required)
- ✓ Dual keyed post for supercharger drive pulleys
- ✓ Gun drilled mains and lightened rod journals for weight reduction
- ✓ Counterweights fully profiled

Part No.	Reluctor Wheel 32 or 58 Tooth	Stroke	Bobweight (grams)	Total Weight (lbs.)
191832	32	4.050"	1700	49-51
191858	58	4.050"	1700	49-51

NOTE: All 2008 and earlier 5.7L and all 6.1L have a 32 tooth reluctor wheel. All 2009 and later 5.7L have a 58 tooth reluctor wheel.



With our "PRO SERIES" 4.050" stroke small block HEMI crankshafts, we have the ability to offer our customers complete rotating assemblies utilizing Manley Platinum Series pistons and Manley H-Beam or Pro Series I-Beam connecting rods.

ORDERING INFORMATION

Ordering a Manley SB HEMI rotating assembly is as easy as 1-2-3...

1. Choose your crankshaft part number based on required reluctor wheel for your vehicle and order the corresponding rod and main bearing part numbers shown.
2. Choose your connecting rod part number.
3. Choose your piston part number based on bore size and desired compression ratio and the corresponding piston ring part number.

Ordering all of the required components for your SB HEMI rotating assembly from Manley will result in extra \$ savings. Please contact your Manley representative for more details.

Order P/N **04000** for precision balancing within 5 grams.

CUSTOM ROTATING ASSEMBLIES

CHRYSLER 5.7L/6.1L ROTATING ASSEMBLIES

CRANKS

- ✓ Lightweight 4340 material forging
- ✓ Multi-step heat treatment process and Nitrided for added strength
- ✓ Stress relieved, shot-peened, and 100% magnafluxed
- ✓ Micro polished large radius journals
- ✓ Available with either 32 or 58 tooth reluctor wheels
- ✓ Gun drilled mains and lightened rod journals for weight reduction
- ✓ Counterweights fully profiled

RODS

- ✓ Lightweight design 4340 material forgings
- ✓ Fully machined, heat treated, stress relieved, shot peened and 100% magnafluxed
- ✓ Big and small end bores are final honed to a tolerance of $\pm .0002$ "
- ✓ Bend and twist is tightly controlled
- ✓ Weight matched to +/- 1.5 grams
- ✓ H-Beam comes standard with 7/16" ARP 8740 bolts (affix an R suffix for ARP 2000 bolt upgrade)
- ✓ I-Beam comes standard with 7/16" ARP 2000 bolts (affix an R6 suffix for ARP 625+ bolt upgrade)

PISTONS

- ✓ High strength 2618 alloy forgings
- ✓ Exacting ring groove squareness to cylinder wall provides maximum horsepower.
- ✓ Offset wrist pin design
- ✓ Moly coated skirts

RINGS

- ✓ 1.5 x 1.5 x 3mm Total Seal (moly in-lay tops standard)
- ✓ Premium steel top rings are optional (affix ST suffix)
- ✓ Total Seal Gapless® steel top ring sets also available (affix ST suffix)

BEARINGS

- ✓ Premium Clevite® "H" Series narrowed rod bearings and "P" Series or "H" Series main bearings

Order part number 04000 for precision balancing to within 5 grams

SMALL BLOCK CHRYSLER 5.7L HEMI SERIES

LIGHTWEIGHT 1700gm. BOBWEIGHT 4.050" STROKE CRANKS

Crank P/N Reluctor Wheel	Piston Part No.	Piston Description	Ring Part No.	Compression Ratio			Balance Req. (Y/N)	
				85cc	65cc	74.5cc	H-Beam	LW I-Beam
191832 32 Tooth or 191858 58 Tooth	597200C-8	3.917/-1.5cc F/T	46120-8	9.63	12.00	10.73	N*	N*
	597205C-8	3.922/-1.5cc F/T	46121-8	9.65	12.03	10.75	N*	N*
	597220C-8	3.937/-1.5cc F/T	46122-8	9.72	12.11	10.83	N*	N*
Rod P/N Description	597300C-8	3.917/-14cc Dish	46120-8	8.60	10.39	9.45	N*	Y
	597305C-8	3.922/-14cc Dish	46121-8	8.62	10.41	9.47	N*	Y
	597320C-8	3.937/-14cc Dish	46122-8	8.68	10.48	9.53	N*	Y
14056-8 6.125" H-Beam or 14455-8 6.125" LW I-Beam	598500C-8	3.917/-23cc Dish	46120-8	8.00	9.49	8.71	N*	Y
	598505C-8	3.922/-23cc Dish	46121-8	8.02	9.51	8.73	N*	Y
	598520C-8	3.937/-23cc Dish	46122-8	8.07	9.58	8.79	N*	Y
Bearing P/N Description	30020	Rod		*N = Factory balanced to +/- 1% of bobweight Order part number 04000 for precision balancing to within 5 grams				
	33050 or 33050H	Main						

SMALL BLOCK CHRYSLER 6.1L HEMI SERIES

LIGHTWEIGHT 1700gm. BOBWEIGHT 4.050" STROKE CRANKS

Crank P/N Reluctor Wheel	Piston Part No.	Piston Description	Ring Part No.	Compression Ratio		Balance Req. (Y/N)	
				74.5cc		H-Beam	LW I-Beam
191832 32 Tooth or 191858 58 Tooth	597860C-8	4.060/-1.5cc F/T	46116-8		11.07	Y	N*
	597865C-8	4.065/-1.5cc F/T	46116-8		11.10	Y	N*
	597880C-8	4.080/-1.5cc F/T	46118-8		11.17	Y	Y
Rod P/N Description	598660C-8	4.060/-11.5cc Dish	46116-8		10.02	Y	N*
	598665C-8	4.065/-11.5cc Dish	46116-8		10.04	Y	N*
	598680C-8	4.080/-11.5cc Dish	46118-8		10.11	Y	N*
14056-8 6.125" H-Beam or 14455-8 6.125" LW I-Beam	597960C-8	4.060/-31cc Dish	46116-8		8.49	N*	N*
	597965C-8	4.065/-31cc Dish	46116-8		8.50	N*	N*
	597980C-8	4.080/-31cc Dish	46118-8		8.56	Y	N*
Bearing P/N Description	30020	Rod		*N = Factory balanced to +/- 1% of bobweight Order part number 04000 for precision balancing to within 5 grams			
	33050 or 33050H	Main					

CRANKSHAFTS

MITSUBISHI 4G63/4G64 7 BOLT CRANKSHAFTS

FORGED "RACE SERIES" FOR STREET / STRIP

- ✓ Premium heat treated forgings
- ✓ Special teardrop, diagonal oiling features not found on stock OEM style cranks
- ✓ Better performance at High RPM
- ✓ Stress Relieved & Shot Peened
- ✓ Nitrided
- ✓ 100% Magnafluxed

FULLY MACHINED "TURBO TUFF SERIES" BILLET FOR HIGH HORSEPOWER / HIGH BOOSTED APPLICATIONS

- ✓ 4340 Billet
- ✓ Multi-step heat treatment process
- ✓ Stress Relieved and Shot Peened
- ✓ Nitrided
- ✓ 100% Magnafluxed
- ✓ Special teardrop diagonal oiling
- ✓ Knife-edged counterweights



Forged Part No.	Stroke	Weight
190100	88mm	33.5 lbs
190120	100mm	37 lbs

Billet Part No.	Stroke	Weight
190110B	94mm	32.5 lbs
190120B	100mm	33.5 lbs

MITSUBISHI 4B11T (EVO X) STROKER CRANKSHAFTS

FULLY MACHINED "TURBO TUFF SERIES" BILLET FOR HIGH HORSEPOWER / HIGH BOOSTED APPLICATIONS

- ✓ 4340 Billet
- ✓ Multi-step heat treatment process
- ✓ Stress Relieved and Shot Peened
- ✓ Nitrided
- ✓ 100% Magnafluxed
- ✓ Special teardrop diagonal oiling
- ✓ Knife-edged counterweights

Billet Part No.	Stroke	Weight
190230B	94mm	37 lbs



CRANKS & KITS

CUSTOM ROTATING ASSEMBLIES

Ordering a Manley Mitsubishi Rotating Assembly is as easy as 1-2-3....

1. Choose your Crankshaft part number based on stroke and style either Forged Race Series or Turbo Tuff Billet and order the corresponding Rod and Main bearing part numbers shown.
2. Choose your connecting rod part number.
3. Choose your piston part number based on desired bore size and compression ratio (piston pins, locks and rings are included).

Ordering all of the required components for your rotating assembly from Manley will result in extra \$ savings. Please contact your Manley representative for more details.

CRANKS

- ✓ Premium heat treated forgings or lightweight 4340 billet
- ✓ Multi-step heat treatment process and Nitrided for added strength
- ✓ Stress relieved, shot-peened, and 100% magnafluxed
- ✓ Fully profiled knife-edged counterweights on the billet forgings

RODS

- ✓ 4340 material forgings or aircraft quality 300M alloy for extreme boost
- ✓ Fully machined, heat treated, stress relieved, shot peened and 100% magnafluxed
- ✓ Big and small end bores are final honed to a tolerance of $\pm .0002$ "
- ✓ Bend and twist is tightly controlled
- ✓ Weight matched to +/- 1.5 grams
- ✓ H-Beam comes standard with 3/8" ARP 2000 bolts
- ✓ H-Plus comes standard with 3/8" ARP 625+ bolts
- ✓ I-Beam and 300M comes standard with 3/8" ARP 2000 bolts (affix an R6 suffix for ARP 625+ bolt upgrade)

PISTONS

- ✓ High strength 2618 alloy forgings
- ✓ Exacting ring groove squareness to cylinder wall provides maximum horsepower
- ✓ Offset wrist pin design
- ✓ Moly coated skirts

RINGS

- ✓ 1.2 x 1.2 x 2.8mm
- ✓ Total Seal steel tops standard
- ✓ Rings included in piston kits

BEARINGS

- ✓ Premium ACL Race Series with narrowed rod bearings

MITSUBISHI 4G63 7 BOLT STD STROKE SERIES 2.0L FORGED "RACE SERIES" 88MM STROKE CRANK W/I 50MM RODS

Crank P/N Type	Rod P/N Description	Bearing P/N Description	Piston P/N	Piston Description	Compression Ratio	
					47cc DSM	43cc EVO
190100 Forged	14022-4 150mm H-Beam or 14022R6-4 150mm H-Plus or 14400-4 150mm LW I-Beam or 14403-4 150mm TT I-Beam or 15403-4 150mm 300M I-Beam	30060 Rod & 33060 Mains Only or 33060T Mains w/ Thrusts	60600C-4	85mm/-12cc Dish	8.5	9.0
			606005C-4	85.5mm/-12cc Dish	8.5	9.0
	606010C-4	86mm/-12cc Dish	8.5	9.0		
	606015C-4	86.5mm/-12cc Dish	8.5	9.0		
	606020C-4	87mm/-12cc Dish	8.5	9.0		
	606100C-4	85mm/-8cc Dish	9.0	9.5		
	606105C-4	85.5mm/-8cc Dish	9.0	9.5		
	606110C-4	86mm/-8cc Dish	9.0	9.5		
	606115C-4	86.5mm/-8cc Dish	9.0	9.5		
	606120C-4	87mm/-8cc Dish	9.0	9.5		
	606200C-4	85mm/-2.5cc Flat Top	10.0	10.5		
	606205C-4	85.5mm/-2.5cc Flat Top	10.0	10.5		
	606210C-4	86mm/-2.5cc Flat Top	10.0	10.5		
	606215C-4	86.5mm/-2.5cc Flat Top	10.0	10.5		
	606220C-4	87mm/-2.5cc Flat Top	10.0	10.5		

MITSUBISHI 4G63 7 BOLT STD STROKE SERIES 2.0L FORGED "RACE SERIES" 88MM STROKE CRANK W/I 56MM RODS

Crank P/N Type	Rod P/N Description	Bearing P/N Description	Piston P/N	Piston Description	Compression Ratio	
					47cc DSM	43cc EVO
190100 Forged	14020-4 156mm H-Beam or 14020R6-4 156mm H-Plus or 14421-4 156mm TT I-Beam	30060 Rod & 33060 Mains Only or 33060T Mains w/ Thrusts	617000C-4	85mm/-12cc Dish	8.5	9.0
			617005C-4	85.5mm/-12cc Dish	8.5	9.0
			617010C-4	86mm/-12cc Dish	8.5	9.0
			617015C-4	86.5mm/-12cc Dish	8.5	9.0
			617020C-4	87mm/-12cc Dish	8.5	9.0

NOTE: "LW" signifies "Lightweight" design rod and "TT" signifies "Turbo Tuff" design rod

CUSTOM ROTATING ASSEMBLIES

MITSUBISHI 4G63 7 BOLT STROKER SERIES 2.1L

"TURBO TUFF" BILLET 94MM STROKE CRANKS W/ 150MM RODS

Crank P/N Type	Rod P/N Description	Bearing P/N Description	Piston P/N	Piston Description	Compression Ratio	
					47cc DSM	43cc EVO
190110B Billet	14022-4 150mm H-Beam or 14022R6-4 150mm H-Plus or 14400-4 150mm LW I-Beam or 14403-4 150mm TT I-Beam or 15403-4 150mm 300M I-Beam	30060 Rod & 33060 Mains Only or 33060T Mains w/ Thrusts	618000C-4	85mm/-17cc Dish	8.5	9.0
			618005C-4	85.5mm/-17cc Dish	8.5	9.0
			618010C-4	86mm/-17cc Dish	8.5	9.0
			618015C-4	86.5mm/-17cc Dish	8.5	9.0
			618020C-4	87mm/-17cc Dish	8.5	9.0
			618200C-4	85mm/-8cc Dish	10.0	10.5
	618205C-4	85.5mm/-8cc Dish	10.0	10.5		
	618210C-4	86mm/-8cc Dish	10.0	10.5		
	618215C-4	86.5mm/-8cc Dish	10.0	10.5		
	618220C-4	87mm/-8cc Dish	10.0	10.5		

MITSUBISHI 4G63 7 BOLT STROKER SERIES 2.1L

"TURBO TUFF" BILLET 94MM STROKE CRANKS W/ 156MM RODS

Crank P/N Type	Rod P/N Description	Bearing P/N Description	Piston P/N	Piston Description	Compression Ratio	
					47cc DSM	43cc EVO
190110B Billet	14020-4 156mm H-Beam or 14020R6-4 156mm H-Plus or 14421-4 156mm TT I-Beam	30060 Rod & 33060 Mains Only or 33060T Mains w/ Thrusts	619000C-4	85mm/-17cc Dish	8.5	9.0
			619005C-4	85.5mm/-17cc Dish	8.5	9.0
			619010C-4	86mm/-17cc Dish	8.5	9.0
			619015C-4	86.5mm/-17cc Dish	8.5	9.0
			619020C-4	87mm/-17cc Dish	8.5	9.0
			619200C-4	85mm/-8cc Dish	10.0	10.5
	619205C-4	85.5mm/-8cc Dish	10.0	10.5		
	619210C-4	86mm/-8cc Dish	10.0	10.5		
	619215C-4	86.5mm/-8cc Dish	10.0	10.5		
	619220C-4	87mm/-8cc Dish	10.0	10.5		

MITSUBISHI 4G63 7 BOLT STROKER SERIES 2.3L

FORGED "RACE SERIES" & "TURBO TUFF" BILLET 100MM STROKE CRANKS W/ 150MM RODS

Crank P/N Type	Rod P/N Description	Bearing P/N Description	Piston P/N	Piston Description	Compression Ratio	
					47cc DSM	43cc EVO
190120 Forged or 190120B Billet	14022-4 150mm H-Beam or 14022R6-4 150mm H-Plus or 14400-4 150mm LW I-Beam or 14403-4 150mm TT I-Beam or 15403-4 150mm 300M I-Beam	30060 Rod & 33060 Mains Only or 33060T Mains w/ Thrusts	608000C-4	85mm/-22cc Dish	8.5	9.0
			608005C-4	85.5mm/-22cc Dish	8.5	9.0
			608010C-4	86mm/-22cc Dish	8.5	9.0
			608015C-4	86.5mm/-22cc Dish	8.5	9.0
			608020C-4	87mm/-22cc Dish	8.5	9.0
			617000C-4	85mm/-12cc Dish	10.0	10.5
	617005C-4	85.5mm/-12cc Dish	10.0	10.5		
	617010C-4	86mm/-12cc Dish	10.0	10.5		
	617015C-4	86.5mm/-12cc Dish	10.0	10.5		
	617020C-4	87mm/-12cc Dish	10.0	10.5		

CUSTOM ROTATING ASSEMBLIES

MITSUBISHI 4G64 7 BOLT DE-STROKED SERIES 2.1L FORGED "RACE SERIES" 88MM STROKE CRANK W/ 156MM RODS

Crank P/N Type	Rod P/N Description	Bearing P/N Description	Piston P/N	Piston Description	Compression Ratio	
					47cc DSM	43cc EVO
190100 Forged	14020-4 156mm H-Beam or	30060 Rod & 33060 Mains Only or 33060T Mains w/ Thrusts	606015C-4	86.5mm/-12cc Dish	8.5	9.0
			606020C-4	87mm/-12cc Dish	8.5	9.0
	14020R6-4 156mm H-Plus or		606115C-4	86.5mm/-8cc Dish	9.0	9.5
			606120C-4	87mm/-8cc Dish	9.0	9.5
	14421-4 156mm TT I-Beam		606215C-4	86.5mm/-2.5cc Flat Top	10.0	10.5
			606220C-4	87mm/-2.5cc Flat Top	10.0	10.5

MITSUBISHI 4G64 7 BOLT DE-STROKED SERIES 2.1L FORGED "RACE SERIES" 88MM STROKE CRANK W/ 162MM RODS

Crank P/N Type	Rod P/N Description	Bearing P/N Description	Piston P/N	Piston Description	Compression Ratio	
					47cc DSM	43cc EVO
190100 Forged	14422-4 162mm TT I-Beam	30060 Rod & 33060 Mains Only or 33060T Mains w/ Thrusts	617015C-4	86.5mm/-12cc Dish	8.5	9.0
			617020C-4	87mm/-12cc Dish	8.5	9.0

MITSUBISHI 4G64 7 BOLT DE-STROKED SERIES 2.2L "TURBO TUFF" BILLET 94MM STROKE CRANK W/ 156MM RODS

Crank P/N Type	Rod P/N Description	Bearing P/N Description	Piston P/N	Piston Description	Compression Ratio	
					47cc DSM	43cc EVO
190110B Billet	14020-4 156mm H-Beam or	30060 Rod & 33060 Mains Only or 33060T Mains w/ Thrusts	618015C-4	86.5mm/-17cc Dish	8.5	9.0
			618020C-4	87mm/-17cc Dish	8.5	9.0
	14020R6-4 156mm H-Plus or		618215C-4	86.5mm/-8cc Dish	10.0	10.5
			618220C-4	87mm/-8cc Dish	10.0	10.5
	14421-4 156mm TT I-Beam		618215C-4	86.5mm/-8cc Dish	10.0	10.5
			618220C-4	87mm/-8cc Dish	10.0	10.5

MITSUBISHI 4G64 7 BOLT DE-STROKED SERIES 2.2L "TURBO TUFF" BILLET 94MM STROKE CRANK W/ 162MM RODS

Crank P/N Type	Rod P/N Description	Bearing P/N Description	Piston P/N	Piston Description	Compression Ratio	
					47cc DSM	43cc EVO
190110B Billet	14422-4 162mm TT I-Beam	30060 Rod & 33060 Mains Only or 33060T Mains w/ Thrusts	619015C-4	86.5mm/-17cc Dish	8.5	9.0
			619020C-4	87mm/-17cc Dish	8.5	9.0
	619215C-4		86.5mm/-8cc Dish	10.0	10.5	
				619220C-4	87mm/-8cc Dish	10.0

NOTE: "TT" signifies "Turbo Tuff" design rod

CUSTOM ROTATING ASSEMBLIES

MITSUBISHI 4G64 7 BOLT STD STROKE SERIES 2.4L

FORGED "RACE SERIES" & "TURBO TUFF" BILLET 100MM STROKE CRANKS W/ 150MM RODS

Crank P/N Type	Rod P/N Description	Bearing P/N Description	Piston P/N	Piston Description	Compression Ratio		
					47cc DSM	43cc EVO	
190120 Forged or 190120B Billet	14022-4 150mm H-Beam	30060 Rod &	613000C-4	86.5mm/-23.5cc Dish	8.5	9.0	
	or		613005C-4	87mm/-23.5cc Dish	8.5	9.0	
	14022R6-4 150mm H-Plus	33060 Mains Only or 33060T Mains w/ Thrusts	606015C-4	86.5mm/-12cc Dish	10.0	10.5	
	or		606020C-4	87mm/-12cc Dish	10.0	10.5	
	14400-4 150mm LW I-Beam						
	or						
14403-4 150mm TT I-Beam							
or							
15403-4 150mm 300M I-Beam							

MITSUBISHI 4G64 7 BOLT STD STROKE SERIES 2.4L

FORGED "RACE SERIES" & "TURBO TUFF" BILLET 100MM STROKE CRANKS W/ 156MM RODS

Crank P/N Type	Rod P/N Description	Bearing P/N Description	Piston P/N	Piston Description	Compression Ratio		
					47cc DSM	43cc EVO	
190120 Forged or 190120B Billet	14020-4 156mm H-Beam	30060 Rod &	608015C-4	86.5mm/-22cc Dish	8.6	9.1	
	or		608020C-4	87mm/-22cc Dish	8.6	9.1	
	14020R6-4 156mm H-Plus	33060 Mains Only or 33060T Mains w/ Thrusts	617015C-4	86.5mm/-12cc Dish	10.0	10.5	
	or		617020C-4	87mm/-12cc Dish	10.0	10.5	
	14421-4 156mm TT I-Beam						

MITSUBISHI 4B11T (EVO X) STROKER SERIES 2.2L

"TURBO TUFF" BILLET 94MM STROKE CRANKS W/ 143.66MM RODS

Crank P/N Type	Rod P/N Description	Bearing P/N Description	Piston P/N	Piston Description	Compression Ratio
					49cc
190230B Billet	14029-4 143.66mm H-Beam	30090 Rod &	624000C-4	86mm/-11cc Dish	9.0
	or		624005C-4	86.5mm/-11cc Dish	9.0
	14029R6-4 143.66mm H-Plus	33090 Mains Only or 33090T Mains w/ Thrusts			
	or				
	14409-4 143.66mm TT I-Beam				

NOTE: "LW" signifies "Lightweight" design rod and "TT" signifies "Turbo Tuff" design rod

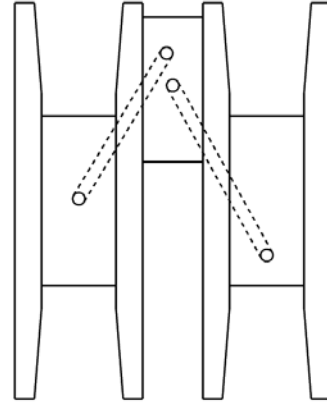
SUBARU EJ20/EJ25 CRANKSHAFTS

FULLY MACHINED "TURBO TUFF SERIES"

BILLET FOR HIGH HORSEPOWER/HIGH BOOSTED APPLICATIONS

- ✓ 4340 Billet
- ✓ Multi-step heat treatment process
- ✓ Stress Relieved and Shot Peened
- ✓ Nitrided
- ✓ 100% Magnafluxed
- ✓ Knife-edged counterweights
- ✓ Center gun drilled
- ✓ "Direct Shot" dual main priority rod journal oiling
- ✓ Gun drilled crank pin and counterweights

Part No.	Stroke	Weight
190160B	75mm	19.5 lbs
190040B	79mm	19.75 lbs
190060B	83mm	21 lbs



"Direct Shot" dual main priority rod journal oiling



Create your own "Bullet-Proof" Subaru Rotating Assemblies with Manley H-Beam, H-Plus or Turbo Tuff Connecting Rods and Manley Platinum Series Pistons on pages 162 and 163.

CUSTOM ROTATING ASSEMBLIES

Ordering a Manley Subaru Rotating Assembly is as easy as 1-2-3....

1. Choose your Crankshaft part number based on stroke and order the corresponding Rod and Main bearing part numbers shown.
2. Choose your connecting rod part number.
3. Choose your piston part number based on desired bore size and compression ratio (piston pins, locks and rings are included).

Ordering all of the required components for your rotating assembly from Manley will result in extra \$ savings. Please contact your Manley representative for more details.

CRANKS

- ✓ Premium heat treated lightweight 4340 billet
- ✓ Multi-step heat treatment process and Nitrided for added strength
- ✓ Stress relieved, shot-peened, and 100% magnafluxed
- ✓ Fully profiled knife-edged counterweights on the billet forgings

RODS

- ✓ 4340 material forgings for extreme boost
- ✓ Fully machined, heat treated, stress relieved, shot peened and 100% magnafluxed
- ✓ Big and small end bores are final honed to a tolerance of $\pm .0002$ "
- ✓ Bend and twist is tightly controlled
- ✓ Weight matched to +/- 1.5 grams
- ✓ H-Beam comes standard with 3/8" ARP 2000 bolts
- ✓ H-Plus comes standard with 3/8" ARP 625+ bolts
- ✓ I-Beam comes standard with 3/8" ARP 2000 bolts (affix an R6 suffix for ARP 625+ bolt upgrade)

PISTONS

- ✓ High strength 2618 alloy forgings
- ✓ Exacting ring groove squareness to cylinder wall provides maximum horsepower
- ✓ Offset wrist pin design
- ✓ Moly coated skirts

RINGS

- ✓ 1.2 x 1.2 x 2.8mm EJ20
- ✓ 1.2 x 1.2 x 2.0mm EJ25
- ✓ Total Seal steel tops standard
- ✓ Rings included in piston kits

BEARINGS

- ✓ Premium ACL Race Series with narrowed rod bearings
- ✓ Standard and "HX" clearance bearings are both available



CUSTOM ROTATING ASSEMBLIES

SUBARU EJ20 STD STROKE SERIES

"TURBO TUFF" BILLET 75MM STROKE CRANK

Crank P/N Type	Rod P/N Description	Bearing P/N Description	Piston P/N	Piston Description	Compression Ratio 48cc
190160B Billet	14024-4 130.5mm H-Beam	30070 or 30070X* Rod	615000C-4	92mm/-12cc Dish	8.5
	or 14024R6-4 130.5mm H-Plus	& 33070 or 33070X* Mains w/ #5 Thrust	615005C-4	92.5mm/-12cc Dish	8.5
	or 14416-4 130.5mm TT I-Beam	or 33080 Mains w/ #3 Thrust	615010C-4	93mm/-12cc Dish	8.5

SUBARU EJ20 STROKER SERIES

"TURBO TUFF" BILLET 79MM STROKE CRANK

Crank P/N Type	Rod P/N Description	Bearing P/N Description	Piston P/N	Piston Description	Compression Ratio 48cc
190040B Billet	14024-4 130.5mm H-Beam	30070 or 30070X* Rod	620000C-4	92mm/-16cc Dish	8.5
	or 14024R6-4 130.5mm H-Plus	& 33070 or 33070X* Mains w/ #5 Thrust	620005C-4	92.5mm/-16cc Dish	8.5
	or 14416-4 130.5mm TT I-Beam	or 33080 Mains w/ #3 Thrust	620010C-4	93mm/-16cc Dish	8.5

SUBARU EJ25 DE-STROKED SERIES

"TURBO TUFF" BILLET 75MM STROKE CRANK

Crank P/N Type	Rod P/N Description	Bearing P/N Description	Piston P/N	Piston Description	Compression Ratio 51cc
190160B Billet	14024-4 130.5mm H-Beam or 14024R6-4 130.5mm H-Plus or 14416-4 130.5mm TT I-Beam	30070 or 30070X* Rod & 33070 or 33070X* Main	621000C-4	99.5mm/-18cc Dish	8.5
			621002C-4	99.75mm/-18cc Dish	8.5
			621005C-4	100mm/-18cc Dish	8.5
	621100C-4	99.5mm/-6cc Dish	9.8		
	621102C-4	99.75mm/-6cc Dish	9.8		
	621105C-4	100mm/-6cc Dish	9.8		

SUBARU EJ25 STD STROKE SERIES

"TURBO TUFF" BILLET 79MM STROKE CRANK

Crank P/N Type	Rod P/N Description	Bearing P/N Description	Piston P/N	Piston Description	Compression Ratio 51cc
190040B Billet	14024-4 130.5mm H-Beam or 14024R6-4 130.5mm H-Plus or 14416-4 130.5mm TT I-Beam	30070 or 30070X* Rod & 33070 or 33070X* Main	612000C-4	99.5mm/-22cc Dish	8.5
			612002C-4	99.75mm/-22cc Dish	8.5
			612005C-4	100mm/-22cc Dish	8.5
	612100C-4	99.5mm/-10cc Dish	9.8		
	612102C-4	99.75mm/-10cc Dish	9.8		
	612105C-4	100mm/-10cc Dish	9.8		

SUBARU EJ25 STROKER SERIES

"TURBO TUFF" BILLET 83MM STROKE CRANK

Crank P/N Type	Rod P/N Description	Bearing P/N Description	Piston P/N	Piston Description	Compression Ratio 51cc
190060B Billet	14024-4 130.5mm H-Beam or 14024R6-4 130.5mm H-Plus or 14416-4 130.5mm TT I-Beam	30070 or 30070X* Rod & 33070 or 33070X* Main	622000C-4	99.5mm/-26cc Dish	8.5
			622002C-4	99.75mm/-26cc Dish	8.5
			622005C-4	100mm/-26cc Dish	8.5
	622100C-4	99.5mm/-14cc Dish	9.8		
	622102C-4	99.75mm/-14cc Dish	9.8		
	622105C-4	100mm/-14cc Dish	9.8		

NOTE: "TT" signifies "Turbo Tuff" design rod

* HX Series Bearings