

PREMIUM QUALITY BUILT IN AMERICA PERFORMANCE ACCESSORIES



Alternators • Starters • Water Pumps • Power Steering Pumps Master Cylinders • Power Brake Boosters • A/C Compressors

FACTORY CAST PLUS+

The FOREVER Finish!

Guaranteed to NEVER
Corrode, Oxidize
or Tarnish!



The FOREVER Finish

Exclusively from Tuff Stuff

Plain aluminum fini\$h FACTORY
CAST PLUS+
Finish

After 90 days exposure to a Cleveland winter!

What's NEW!





HIGH AMP ALTERNATORS

Many alternator have been upgraded to higher amp output and have a custom voltage regulator for use with OEM wiring or as a 1-wire hookup. Pages 3-12.



FINISHES

The new **Black Chrome** finish provides a distinctive look and the **Factory Cast PLUS+** finish will never oxidize or discolor and will look like NEW forever!



CHROME PLATED ALUMINUM TYPE II POWER STEERING PUMPS

Great looking, compact size with a variety of port and mounting options. Pages 38-39.

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ALTERNATOR ACCESSORIES

Solid state external voltage regulators, fan & pulley kits, heavy gauge charge wires and more. Pages 13-14.







PERFECT

For high horsepower muscle cars, hot rods, show cars, custom trucks and daily drivers.

OEM or 1-Wire

Whether you prefer an OEM plug-in or a clean 1-wire installation, most Tuff Stuff alternators are available in either configuration - or both!

FINISHES

Include chrome plated, polished aluminum, black chrome, stealth black, powder coated in a variety of colors and Factory Cast PLUS+.

ALL TUFF STUFF ALTERNATORS

Are built in USA and feature heavy duty copper wound coils, spike-resistant diodes, low idle cut-in internal voltage regulator - except where noted - cooling fan and pulley.

Why Tuff Stuff Alternators?

All Tuff Stuff alternators are hand built in Cleveland, Ohio and are tested to meet or exceed OEM specifications. All Tuff Stuff alternators are made from 100% new components and carry a one year limited warranty. Tuff Stuff has alternator applications for virtually all muscle cars, hot rods, customs and light trucks in just about every finish imaginable. Many enthusiasts prefer the clean, simple 1-wire alternator which features a low idle cut-in internal regulator that provides plenty of charging at low RPM's.

You can buy a cheaper alternator, but you cannot buy a better alternator!

UNIVERSAL FIT 10SI GM STYLE ALTERNATORS W/INTERNAL REGULATOR 7127 7139 7140

Most 1971-86	971-86 GM cars and light trucks, 1-Wire or OEM hookup, 10-32 grounding tab					ng tab	Silver B	ullet
Finish	Pulley	65 A	MP	80 AMP	100 AMP	140 AMP	100 AMP	140 AMP
Chrome	V	7127NG*	7127NJ	7127NB	7127ND	7127NK	7139ABULL	7140ABULL
Chrome	6G			7127NB6G	7127ND6G	7127NK6G	7139ABULL6G	7140ABULL6G
Polished	V		7127NJP	7127NBP	7127NDP	7127NKP	7139BBULL	7140BBULL
Polished	6G			7127NBP6G	7127NDP6G	7127NKP60	7139BBULL6G	7140BBULL6G
Black chrome	V			≺NEW≻	7127ND7	7127NK7	7139ABULL7	7140ABULL7
Black chrome	6G			≺NEW≻	7127ND6G7	7127NK6G7	7 7139ABULL6G7	7140ABULL6G7
Stealth black	V	7127NH*		7127NE	7127NF	7127NKB	7139FBULL	7140FBULL
Stealth black	6G			7127NE6G	7127NF6G	7127NKB60	7139FBULL6G	7140FBULL6G
Black wrinkle	V				7127NFBW	7127NKBW		
Black wrinkle	2V				7127NFBWDP	7127NKBW	DP 📉	↑
Black wrinkle	6G				7127NFBW6G	7127NKBW	6G —	
Black primer	V				7127RATBLK		10 SI Plug	
Gray primer	V				7127RATGRAY			14011
Yellow	V				7127NFYELLOW		7139FBULLY	
Orange	V				7127NFORANGE		7139FBULLOR	
Red	V				7127NFRED		7139FBULLRED	6.600"
Red oxide	V				7127RATRED			_ 7102, 7127, 7139, 7140
Blue	V				7127NFBLUE		7139FBULLBLU	1.02,2.,00,0
Cast PLUS+	V			7127	7127D	7127K N	EW≻ 7127DBULL	7127KBULL
Cast PLUS+	6G				7127D6G	7127K6G N	EW≻ 7127DBULL6G	7127KBULL6G
* 6 Volt negative	* 6 Volt negative ground with a 1-wire voltage regulator - not an OEM hookup. Case depth: 4.85", lower mount boss: 2.00" long.							

⁶ Volt negative ground with a 1-wire voltage regulator - not an OEM hookup. Case depth: 4.85", lower mount boss: 2.00" long.

DIRECT FIT 10SI GM STYLE ALTERNATORS w/INTERNAL REGULATOR 7127 7139 7140

These alternators are for specific fit applications per the Year-Make-Model lookup on Tuffstuffperformance.com. They are indexed to OEM specifications and are a direct fit OEM replacement. They can be used with the OEM wiring plug or as a 1-wire alternator.

Clocked		<u>6 o'Clo</u>	<u>ck</u>	<u>9 o'Cloc</u>	:k	12 o'Clo	ock
Finish	Pulley	100 AMP	140 AMP	100 AMP	140 AMP	100 AMP	140 AMP
Chrome	1G	7127ND6	7127NK6	7127ND9	7127NK9	7127ND12	7127NK12
Chrome	6G					7127ND6G12	7127NK6G12
Polished	1G	7127NDP6	7127NKP6	7127NDP9	7127NKP9	7127NDP12	7127NKP12
Polished	6G					7127NDP6G12	7127NKP6G12
Stealth Black	1G	7127NF6	7127NKB6	7127NF9	7127NKB9	7127NF12	7127NKB12
Stealth Black	6G					7127NF6G12	7127NKB6G12
Cast PLUS+	1G	7127D6	7127K6	7127D9	7127K9	7127D12	7127K12
Cast PLUS+	6G					7127D6G12	7127K6G12
Bilver Bullet" —							
Chrome	1G	7139ABULL6	7140ABULL6	7139ABULL9	7140ABULL9	7139ABULL12	7140ABULL12
Chrome	6G					7139ABUL6G12	7140ABUL6G12
Polished	1G	7139BBULL6	7140BBULL6	7139BBULL9	7140BBULL9	7139BBULL12	7140BBULL12
Polished	6G					7139BBUL6G12	7140BBUL6G12
Stealth Black	1G	7139FBULL6	7140FBULL6	7139FBULL9	7140FBULL9	7139FBULL12	7140FBULL12
Stealth Black	6G					7139FBUL6G12	7140FBUL6G12

10DN GM STYLE EXTERNAL REGULATOR

Most 1963-70 GM cars and light trucks

Must be used with a solid state external voltage regulator like Tuff Stuff 7635. OEM wire hookup. 10-32 grounding tab.

Finish P	ulley	80 AMP	100 AMP	140 AMP	3
Chrome	V	7102NA	7102NC	7102NK ≺NE	w 🎒
Polished	V	7102NAP	7102NCP	7102NPK ≪NE	w 🦠
Stealth black	٠V	7102NF	7102NE	7102NFK ≺NE \	N S
Black wrinkle	e V	7102BW	7102NFBW	7102NKBW	-
Yellow	V	7102NFYELLOW			
Orange	V	7102NFORANGE			
Red	V	7102NFRED			
Blue	V	7102NFBLUE			
Cast PLUS+	V	7102	7102C	7102K ≺NEW	10DN Plug







Dimensions and specifications available at TuffStuffPerformance.com





7860F6G







CS130 GM STYLE ALTERNATORS INTERNAL REGULATOR

Fits most 1987-94 GM cars and light trucks, 1-wire or OEM hookup.

Features internal and external cooling fans.

Dimensions and specifications available at TuffStuffperformance.com

Differsions and specifications available at Tunotunperformance.com					NEW
Finish	Pulley	105 AMP	160 AMP	160A Silver Bullet	160 AMP Bullet
Chrome	V	7860D	7860F	7860ABULL	Fan & Pulley
Chrome	6G	7860D6G	7860F6G	7860ABULL6G	7860F6G22
Polished	V	7860DP	7860FP	7860BBULL	
Polished	6G	7860DP6G	7860FP6G	7860BBULL6G	7860FP6G22
Stealth blac	ck V	7860E	7860G	7860CBULL	
Stealth blac	ck 6G	7860E6G	7860G6G	7860CBULL6G	7860G6G22
Cast PLUS	+ 6G	7860-16G	7860K-16G		7860K-16G22



Finish	Pulley	105 AMP	160 AMP	160A Silver Bullet	NEW 160 AMP Bullet
Chrome	V	7861D	7861F	7861ABULL	Fan & Pulley
Chrome	6G	7861D6G	7861F6G	7861ABULL6G	7861F6G22
Polished	V	7861DP	7861FP	7861BBULL	
Polished	6G	7861DP6G	7861FP6G	7861BBULL6G	7861FP6G22
Stealth blac	k V	7861E	7861G	7861CBULL	
Stealth blac	k 6G	7861E6G	7861G6G	7861CBULL6G	7861G6G22
Cast PLUS-	+ V		7861K1G		
Cast PLUS-	+ 6G	7861-16G	7861K-16G		7861K-16G22



	- ·	105 115	400 4445	4004.0%	NEW
Finish	Pulley	105 AMP	160 AMP	160A Silver Bullet	160 AMP Bullet
Chrome	V	7866D	7866F	7866ABULL	Fan & Pulley
Chrome	6G	7866D6G	7866F6G	7866ABULL6G	7866F6G22
Polished	V	7866DP	7866FP	7866BBULL	
Polished	6G	7866DP6G	7866FP6G	7866BBULL6G	7866FP6G22
Stealth blac	k V	7866E	7866G		
Stealth blac	k 6G	7866E6G	7866G6G		7866G6GS22
Cast PLUS-	+ 6G	7866-16G	7866K-16G		7866K-16G22

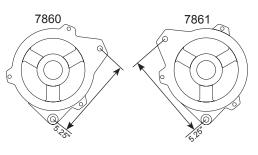


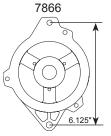
					NEW
Finish	Pulley	105 AMP	160 AMP	160A Silver Bullet	160 AMP Bullet
Chrome	V	7935D	7935F	7935ABULL	Fan & Pulley
Chrome	6G	7935D6G	7935F6G	7935ABULL6G	7935F6G22
Polished	V	7935DP	7935FP	7935BBULL	
Polished	6G	7935DP6G	7935FP6G	7935BBULL6G	7935FP6G22
Stealth blac	ck V	7935E	7935G	7935CBULL	
Stealth blac	ck 6G	7935E6G	7935G6G	7935CBULL6G	7935G6G22
Cast PLUS	+ V	7935-11G	7935K-11G		
Cast PLUS	+ 6V	7935-16G	7935K-16G		7935K-16G22
Cast PLUS	+ V		7935H16V <	16 volt 1-wire regulator)

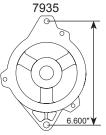
All CS130 alternators can be used as a 1-wire or OEM hookup!

MORE CLEARANCE!

Silver Bullet 160 amp 1-wire alternators have a smooth, flat back and a side post battery terminal for tight, against the block applications. Case depth is 4.36" and the lower mounting boss is 2.00" long.









CS144 GM STYLE INTERNAL REGULATOR

1984-90 GM Cars & light trucks, incl pigtail, OEM wiring Include a universal wire harness that converts a CS144 connector to a 10SI connector

Finish	Pulley	170 AMP	250 AMP
Chrome	V	7290NA	7290NE
Chrome	6G	7290NA6G	7290NE6G
Polished	V	7290NAP	7290NEP
Polished	6G	7290NAP6G	7290NEP6G
Stealth black	V	7290NB	7290NF
Stealth black	6G	7290NB6G	7290NF6G
Cast PLUS+	V	7290NC	7290ND < NEW
Cast PLUS+	6G	7290NC6G	7290ND6G < NEW



Finish	Pulley	170 AMP	250 AMP
Chrome	6G	7864A	7864D
Polished	6G	7864AP	7864DP
Stealth black	6G	7864B	7864C
Cast PLUS+	6G	7864ND	7864NK ≺NEW

1994-96 Corvette 350 LT1, OEM wiring

Finish	Pulley	170 AMP	250 AMP
Chrome	6G	8173NA	8173NE
Polished	6G	8173NAP	8173NEP
Stealth black	6G	8173NB	8173NF
Cast PLUS+	6G	8173ND	8173NK ∢ NEW

1994-96 Impala 350 LT1, OEM wiring

Finish	Pulley	170 AMP	250 AMP
Chrome	6G	8112NA	8112NE
Polished	6G	8112NAP	8112NEP
Stealth black	6G	8112NB	8112NF
Cast PLUS+	6G	8112ND	8112NK ≺NFW

1998-00 GM light trucks & SUV, OEM wiring

Finish	Pulley	170 AMP	250 AMP	
Chrome	6G	8219NA	8219NE	
Polished	6G	8219NAP	8219NEP	
Stealth black	6G	8219NB	8219NF	
Cast PLUS+	6G	8219ND	8219NK ∢NEW	

REPLACEMENT ALTERNATOR PLUG

Fits CS130 and CS144 alternators

Ideal replacement for worn or damaged plug 7520C





TECH TIP

If your alternator plug is damaged or missing, Tuff Stuff offers new replacements, complete with color coded wire pigtails. See page 14 for details.









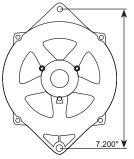


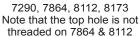


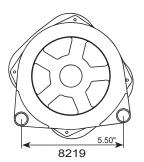


















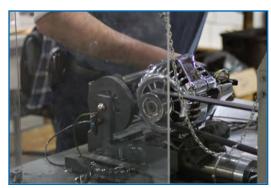






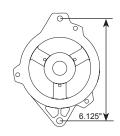






Every alternator is load tested to meet or exceed stated output!

16 VOLT VERSION ALSO AVAILABLE!



CORVETTE LATE MODELValeo style alternator, OEM wiring 1997-00 all, 2001 w/manual trans Internal voltage regulator, 6" bolt spacing.

Finish	Pulley	110 AMP
Chrome	6G	7721NA
Polished	6G	7721NAP
Stealth black	6G	7721NB
Cast Plus+	6G	7721

2001 w/auto trans, OEM wiring

Finish	Clutched p	ulley 110 AMP
Chrome	6GC	7723NA
Stealth black	6GC	7723NB
Cast Plus+	6GC	7723N

2002-04 w/auto trans, 2005-09 all, OEM

Finish	Clutched pulley	150 AMP
Chrome	6GC	7722NA
Polished	6GC	7722NAP
Stealth black	6GC	7722NB
Cast Plus+	6GC	7722N

2002-04 w/manual trans, OEM wiring Finish Pulley 150 AMP Chrome 6G 7724NA Stealth black 6G 7724NB

CS121 GM STYLE MINI

Designed for tight configurations such as high performance, street rods or race cars. Internal and external cooling fans, internal voltage regulator. Note that the 12 volt alternators can be used as a 1-wire or OEM hookup, the 16 volt alternators are a 1-wire only.

-		12 Volt	16 Volt*
Finish	Pulley	110 AMP	110 AMP
Chrome	V	7937A	7937A16V
Chrome	V	7937AST	≺NEW
Chrome	6G	7937A6G	
Polished	V	7937AP	7937AP16V
Polished	V	7937APS1	√NEW
Stealth blac	k V	7937B	7937B16V
Stealth blac	k V	7937BST	≺NEW
Stealth blac	k 6G	7937B6G	
Cast PLUS+	+ V	7937	793716V
Cast PLUS+	+ V	7937ST	≪NEW
Cast PLUS+	- 6G	79376G	≪NEW

A slightly larger CS130 alternator with a Factory Cast PLUS+ finish and a 16 volt regulator, 160 amp output, 1-wire with a single groove pulley is available, part number 7935H16V.

TECH TIP

A 1-wire alternator requires a single wire to connect the alternator to the battery. It does away with the factory alternator wiring harness and cleans up under hood wiring.

CS130D LATE MODEL GM STYLE INTERNAL REG

1996-02 GM pickup trucks & vans, 1-wire or OEM hookup

		Back I	Post	Side I	Post ≺NEW
Finish	Pulley	125 AMP	175 AMP	125AMP	175 AMP
Chrome	6G	8206NA	8206NC	8206NA1	8206NC1
Polished	6G	8206NAP	8206NCP	8206NAP1	8206NCP1
Stealth black	6G		8206NB		8206NB1
Cast PLUS+	6G	8206	8206ND	82061	8206ND1

1998-02 Camaro & Firebird 350, 1-wire or OEM hookup, std back post

Finish	Pulley	125 AMP	175 AMP
Chrome	6G	8242NA	8242NC
Polished	6G	8242NAP	8242NCP
Stealth black	6G		8242NB
Cast PLUS+	6G	8242	8242ND



1998-03 GM pickup trucks & vans, standard back post

		OEM v	viring	1-wir	e ≺NEW
Finish	Pulley	125 AMP	175 AMP	125 AMP	175 AMP
Chrome	6G	8233NA	8233NC	8233NA1	8233NC1
Polished	6G	8233NAP	8233NCP	8233NAP1	8233NCP1
Stealth black	6G		8233NB		8233NB1
Cast PLUS+	6G	8233	8233ND	82331	8233ND1

2001-05 GM pickup trucks, standard back post

		OEM v	wiring	1-wii	re <u>∢NEW</u>
Finish	Pulley	125 AMP	175 AMP	125 AMP	175 AMP
Chrome	6G	8283NA	8283NC	8283NA1	8283NC1
Polished	6G	8283NAP	8283NCP	8283NAP1	8283NCP1
Stealth black	6G		8283NB		8283NB1
Cast PLUS+	6G	8283	8283ND	82831	8283ND1

AD230 & AD244 GM TRUCK & SUV INTERNAL REG

1999-04 GM Truck & SUV, 1-wire or OEM, back post, 4 pin regulator Pulley 180 AMP 230 AMP 230 AMP S-BULLET **Finish** Chrome 8237A 8237CBULL 6G 8237C 8237AP 8237CPBULL Polished 6G 8237CP Stealth black 6G 8237B Cast PLUS+ 6G 8237 8237D

1999 Silverado, 1-wire or OEM hookup

<u>Finish</u>	Pulley	105 AMP
Chrome	6G	8238A
Polished	6G	8238AP
Stealth black	6G	8238B
Cast PLUS+	6G	8238



2004-05 GM SSR all, 2006 manual only, OEM wire

Finish	Pulley	180 AMP	230 AMP	-
Chrome	6G	8292A	8292D	
Polished	6G	8292AP	8292DP	
Cast PLUS+	6G	8292B	8292C	

2006 GM SSR w/automatic trans & clutch pulley, OEM wire

Finish	Pulley	180 AMP	230 AMP
Chrome	6GC	8299A	8299D
Polished	6GC	8299AP	8299DP
Stealth black	6GC	8299E	8299F
Cast PLUS+	6GC	8299B	8299C ≪NEW

2005-07 GM Truck & SUV, OEM wiring w/2 pin regulator

2005-07 GIVI	Truck o	: 3UV, ∪⊏	ivi wiririg w/z	z pin regulator	
Finish	Pulley	180 AMP	230 AMP	230 AMP S-BUL	LLET
Chrome	6G	8302A	8302C	8302CBULL6G	
Polished	6G	8302AP	8302CP		
Stealth black	6G	8302B	8302D		
Cast PLUS+	6G	8302 <	NEW		
					8302 Only

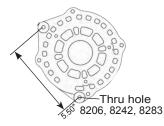
For trucks, SUV's, high performance street machines, street rods, show cars, extreme stereo/video, RV's and hydraulics

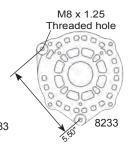




















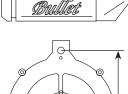




Dimensions and specifications available at TuffStuffPerformance.com









6.875" ¥

Cast PLUS+

6G

FORD "SMOOTH BACK" 1-WIRE HYBRID INTERNAL REGULATOR

Most 1961-85 small case applications						
Finish	Pulley	100 AMP	140 AMP	100 AMP Silver Bullet	140 AMP Silver	r Bullet
Chrome	V	7068RD		7068ABULL	7069ABULL	
Chrome	6G	7068RD6G		7068ABULL6G	7069ABULL6G	
Polished	V	7068RDP		7068BBULL	7069BBULL	
Polished	6G	7068RDP6G		7068BBULL6G	7069BBULL6G	
Black chrome	V	7068RD7	≺NEW≻	7068ABULL7	7069ABULL7	
Black chrome	6G	7068RD6G7	≺NEW≻	7068ABULL6G7	7069ABULL6G	7
Stealth black	V	7068RF		7068FBULL	7069FBULL	
Stealth black	6G	7068RF6G		7068FBULL6G	7069FBULL6G	
Black wrinkle	V	7068NGBW	7068NKBW			
Yellow	V	7068RDYELLOW		7068FBULLY		
Yellow	6G	7068RF6GY		7068FBULL6GY		
Red	V	7068RFRED		7068FBULLRED		
Red	6G	7068RF6GRED		7068FBULL6GR		
Blue	V	7068RDBLUE		7068FBULLBLU		
Blue	6G	7068RF6GBLUE		7068FBULL6GB		
Cast PLUS+	V	7068	7068K	7068BULL	7068KBULL	≺NEW





70686G





7078

7068KBULL6G ≺NEW



Use 7771 for 150 or 200 amp upgrade



Most 1961-85 small case alternators

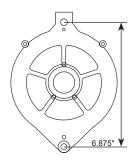
OEM Wire 1-Wire Hybrid OEM Wire Hybrid Finish **Pulley 70 AMP 70 AMP** 100 AMP 100 AMP 140 AMP Chrome 7078NA 7078NB 7078ND 7078NC 7078NK Chrome 6G 7078NC6G Polished 7078NAP 7078NBP 7078NDP 7078NCP 7078NKP V 7078NG Stealth black 7078NH 7078NE 7078NF 7078NKB V Stealth black 6G 7078NF6G Black wrinkle 7078NGBW 7078NKBW V Yellow 7078NHYELLOW 7078NHRED Red V 7078NHBLUE V Blue 7078 7078NJ As cast

1-Wire alternators have an internal voltage regulator, OEM wire style require the use of an external regulator, not included. Hybrid alternators feature a case that is 1/4" longer than the stock Ford small OE case. Can substitute 7068 or 7069 for 1-wire applications. 7078NC and 7078NC6G include wiring harness.



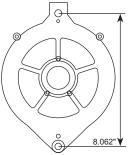




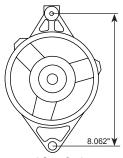


FORD 1G - 3G LARGE CASE 7074

Most 1973-91 large case alternators, OEM wiring					
Internal regulator 1G Series 3G Series					
Finish	Pulley	100 AMP	225 AMP		
Chrome	V	7074RA	7074RD		
Stealth black	V	7074RI	7074RK ≺NEW		
Cast PLUS+	V	7074RF	7074RG <new< b=""></new<>		



1Gen Series Requires External Regulator 7074RA, RF, RI



3Gen Series Internal regulator 7074RD, RG, RK



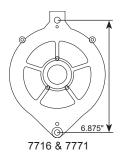


FORD 2G INTERNAL REGULATOR

1987-95 5.0L, OEM wiring

Finish	Pulley	75 AMP	100 AMP
Chrome	6G Bullet	7716ABULL	
Chrome	6G	7716A	7716B
Polished	6G	7716AP	7716BP
Stealth black	6G		7716C
Cast PLUS+	6G	7716	7716E ≺NEW

See 7771 for 150 or 200 amp upgrade - see page 9 See 7068 or 7069 for 1 wire version - see page 8









FORD 3G INTERNAL REGULATOR 7771

Most 1993-00 5.0L, OEM wiring - includes early model harness

Finish Pulley 150 AMP 225 AMP 225 AMP SILVER BULLET Chrome 7771A 7771D 7771DBULL 6G 7771A6G 7771D6G 7771DBULL6G Chrome 7771AP Polished 7771DPBULL Polished 6G 7771AP6G 7771DPBULL6G 7771C 7771CBULL Stealth black V 7771B 7771C6G 7771B6G 7771CBULL6G Stealth black 6G

Stealth black 6G 7771BW <1-wire regulator) 7771AYELLOW 7771DYELLOW Yellow Yellow 6G 7771A6GY 7771D6GY Red 7771ARED **7771DRED** Red 6G 7771A6GRED 7771D6GRED 7771DBLUE Blue 7771ABLUE Blue 6G 7771A6GBLUE 7771D6GBLUE

Cast PLUS+ V 7771 7771F 7771FBULL Cast PLUS+ 6G 77716G 7771F6G



∢NFW 7771FBULL6G ≺NEW































Product dimensions and specifications available at TuffStuffPerformance.com

FORD 3G INTERNAL REGULATOR

4.6L, 5.4L	& 6.8L,	SILVER BULLET		
Finish	Pulley	150 AMP	225 AMP	225 AMP
Chrome	7G	7764A	7764D	7764DBULL
Polished	7G	7764AP	7764DP	7764DPBULL
Stealth blac	k 7G	7764B	7764C	7764CBULL
As cast	7G	7764	7764E	7764EBULL < NEW

1997-02 Pick up trucks vans & SIIV's OFM wiring

1001-02 1 lck	upui	acks, valis t	x 00 v 3, 0	Livi wiiiig
Chrome	8G	7791A	7791D	7791DBULL
Polished	8G	7791AP	7791DP	7791DPBULL
Stealth black	8G	7791B	7791C	7791CBULL
Cast PLUS+	8G	7791E	7791F	7791FBULL ≺NEW

1992-04 Pick up trucks, vans & SUV's, OEM wiring

1992-04 FICK	1992-04 Fick up trucks, varis & 30V s, OEM Willing						
Chrome	8G	7768A	7768D	7768DBULL			
Polished	8G	7768AP	7768DP	7768DPBULL			
Stealth black	8G	7768B	7768C	7768CBULL			
Cast PLUS+	8G	7768E	7768F <	NEW			



FORD 4G INTERNAL REGULATOR

1996-03 4.0 & 5.0L Explorer, OEM wiring

Finish	Pulley	130 AMP	225 AMP
Chrome	6G	7787A	7787D
Polished	6G	7787AP	7787DP
Stealth black	6G	7787B	7787C
Cast PLUS+	6G	7787E	7787F ∢ NEW

1995-04 4.6L Full size cars & SUV's, OEM wiring

Finish	Pulley	150 AMP	225 AMP
Chrome	6G	7773A	7773D
Polished	6G	7773AP	7773DP < NEW
Stealth black	6G	7773B	7773C
Cast PLUS+	6G	7773 ≪NEW	

1999-04 5.4L F-series Lightening only, OEM wiring

Finish	Pulley	130 AMP	225 AMP
Chrome	8G	8251A	8251D
Polished	8G	8251AP	8251DP
Stealth black	8G	8251B	8251C
Cast PLUS+	8G	8251	8251E ≺NEW

1996-02 4.6L DOHC and Bullitt GT, OEM wiring

Finish	Pulley	150 AMP	225 AMP
Chrome	6G	7781A	7781D
Polished	6G	7781AP	7781DP
Stealth black	6G	7781B	7781C
Yellow	6G	7781AYELLOW	7781DYELLOW
Red	6G	7781ARED	7781DRED
Blue	6G	7781ABLUE	7781DBLUE
Cast PLUS+	6G	7781	7781N

2003-04 Cobra & Mach 1 4.6L DOHC

w/o supercharger, w/clutched pulley, OEM willing					
Finish	Pulley	135 AMP	225 AMP		
Chrome	6GC	8436A	8436D		
Polished	6GC	8436AP	8436DP		
Stealth black	6GC	8436B	8436C		
Cast PLUS+	6GC	8436E	8436K ∢NFW		

FORD 6G INTERNAL REGULATOR

1999-02 Ford F series diesel w/single or dual alternators, top position 2000-03 Ford Excursion w/7.3L diesel, OEM wiring

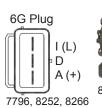
Finish	Pulley	150 AMP	200 AMP
Chrome	8G	7796A	7796D < NEW
Polished	8G	7796AP	7796DP < NEW
Stealth black	8G	7796B	7796C ∢NEW
Cast PLUS+	8G	7796	7796F ≪NEW





1999-04 4.6L SOHC, OEM wiring

Finish	Pulley	135 AMP	225 AMP
Chrome	6G	8252A	8252D
Polished	6G	8252AP	8252DP
Stealth black	6G	8252B	8252C
Yellow	6G	8252AYELLOW	8252DYELLOW
Red	6G	8252ARED	8252DRED
Blue	6G	8252ABLUE	8252DBLUE
Cast PLUS+	6G	8252	8252E ≺NEW







2001-04 Mustang 3.8L w/o supercharger, OEM wiring

Finish	Pulley	110 AMP	225 AMP
Chrome	6G	8266A	8266D
Polished	6G	8266AP	8266DP
Stealth black	6G	8266B	8266C
Cast PLUS+	6G	8266E	8266F ≪NEW





2003-04 Mustang 4.6L Cobra Supercharged DOHC, OEM wiring

Zooo-o- mastang	2000-04 Musiang 4.02 Cobia Caperenaigea Dorio, OEM Wining					
Finish	Pulley	110 AMP	225 AMP			
Chrome	8G	8266A8G	8266D8G			
Polished	8G	8266AP8G	8266DP8G			
Stealth black	8G	8266B8G	8266C8G			
Cast PLUS+	8G	8266E8G▲	8266F8G ≪NEW			
		A Dullatassa	.II a			

▲ Bullet nose pulley





2004-06 F-series 4.6L, 5.4L & Lincoln 5.4L Mark Series, OEM wiring

Finish	Pulley	135 AMP	225 AMP
Chrome	6G	8318A	8318D
Polished	6G	8318AP	8318DP
Stealth black	6G	8318B	8318C
Cast PLUS+	6G	8318	8318E ∢NEW





2005-08 Mustang 4.0L V6 and others, OEM wiring

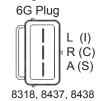
Finish	Pulley	135 AMP	225 AMP
Chrome	6G	8437A	8437D
Polished	6G	8437AP	8437DP
Stealth black	6G	8437B	8437C
Cast PLUS+	6G	8437E	8437F ≪ NEW





2005-08 Mustang 4.6L V8 and others w/clutch pulley, OEM wiring

Finish	Pulley	135 AMP	225AMP
Chrome	6GC	8438A	8438D
Chrome Roush SC	6GC	8438ASC	8438DSC
Polished	6GC	8438AP	8438DP
Stealth black	6GC	8438B	8438C
Cast PLUS+	6GC	8438E	8438F







Product dimensions and specifications available at TuffStuffPerformance.com

Chrysler Alternators





CHRYSLE	CHRYSLER OEM STYLE ALTERNATORS 8509/9509						
Early 1960-88	3	OEM Wire	1-Wire	OEM Wire	1-Wire	OEM Wire	1-Wire
Finish	Pulley	60 AMP	60 AMP	100 AMP	100 AMP	130 AMP	130 AMP≺NEW
Chrome	1G	8509RASP	8509RBSP	8509RCSP	8509RDSP	9509RCSP	9509RDSP
Chrome	2G	8509RADP	8509RBDP	8509RCDP	8509RDDP	9509RCDP	9509RDDP
Polished	1G	8509RAPSP	8509RBPSP	8509RCPSP	8509RDPSP	9509RCPSP	9509RDPSP
Polished	2G	8509RAPDP	8509RBPDP	8509RCPDP	8509RDPDP	9509RCPDP	9509RDPDP
Black chrome	1G	≺NEW≻	8509RBSP7	8509RCSP7	8509RDSP7		9509RDSP7
Black chrome	2G	≺NEW≻	8509RBDP7		8509RDDP7		9509RDDP7
Stealth black	1G	8509RJSP	8509RGSP	8509RFSP	8509RESP	9509RFSP	9509RESP
Stealth black	2G	8509RJDP	8509RGDP	8509RFDP	8509REDP	9509RFDP	9509REDP
Cast PLUS+	1G	8509SP		8509CSP	8509DSP	9509CSP	9509DSP
Cast PLUS+	2G	8509		8509DP	8509DDP	9509DP	9509DDP

OEM wire hookup requires an external voltage regulator, not included, see page 14 for regulators. 1-Wire alternators include regulator.















CHRYSLER INTERNAL REGULATOR 7510

1988-96 Dodge Dakota, Ram Charger, Ram pickup & B-series van 1991-98 Cherokee, Grand Cherokee & Grand Cherokee Limited 1991-96 Jeep Wrangler, Denso style, OEM wiring

		.,	,,
Finish	Pulley	90 AMP	175 AMP
Chrome	7G	7510A	7510C
Polished	7G	7510AP	7510CP
Stealth black	7G	7510F	7510E < NEW
Cast PLUS+	7G	7510B	7510D



			EGULATOR	7511		
1999-01 Dodge & Jeep, Denso style, OEM wiring						
Finish	Pulley	90 AMP	175 AMP			
Chrome	7G	7511A	7511C			
Stealth black	7G	7511F	7511E ∢ NEW			
Cast PLUS+	7G	7511B	7511D			

 Jeep CJ w/2.2L, 3.7L, 3.8L, 4.2L, 5.0L, Hybrid style, 1-wire

 Finish
 Pulley
 100 AMP
 140 AMP

 Black Wrinkle
 1G
 7091NFBW
 7091NKBW





MINI ALTERNATOR INTERNAL REGULATOR 7512

Performance cars, street rods and show cars with low amp requirements **Denso style**, compact design, lightweight 6 lb, 1-wire hookup

Finish	Pulley	75 AMP
Chrome	1G	7512A
Stealth black	1G	7512B
Cast PLUS+	1G	7512C ≺NEW

Alternator Parts

CHROME ALTERNATOR CASE KITS

Use our famous "Tuff Stuff" finish on your own alternator. Kits include both front and rear housings, fan, pulley, nut, lockwashers and thru bolts

Application	Item
GM 10DN and Tuff Stuff 7102	7500B
GM 10SI and Tuff Stuff 7127	7500A
GM 12SI and Tuff Stuff 7294	7500J
GM CS130 w/6G pulley & TS 7860	75001
GM CS130 w/6G pulley & TS 7861	7500F
GM CS130 w/6G pulley & TS 7866	7500G
GM CS130 w/6G pulley & TS 7935	7500H
GM CS130D w/6G pulley & TS 8206	7500L
GM CS144 and Tuff Stuff 8219	7500M
GM CS144 and Tuff Stuff 8173	7500P
Ford 1GEN and Tuff Stuff 7078	7500C
Ford 2GEN and Tuff Stuff 7716	7500E
Ford 3GEN and Tuff Stuff 7771	7500K
Ford 3GEN and Tuff Stuff 8252	7500N
Chrysler - early w/2G pulley & TS 8509	7500D







FAN DISC - TURBO STYLE

Increases airflow through alternator to better cool the internal circuitry. 5.5" diameter with a .670" center hole.

Fits Tuff Stuff 10SI 7127, 7102, 7139, 7140, 7068, 7069

Finish	Item	Finish	Item
Chrome	7601A	Nickel	7601B
Stealth black	7601AB ≪NEW	Cast PLUS+	7601AC ≺NEW



FAN AND PULLEY KITS

 $Fits\ Tuff\ Stuff\ 7102,\ 7127,\ 7139,\ 7140,\ 7068,\ 7069$

Includes fan, pu	ulley, lockwasi	her & nut	NEW	
Finish	1 Groove	2 Groove	5 Groove	6 Groove
Chrome	7600A	7600B	7600C	7600D
Stealth black	7600AB	7600BB	7600CB	7600DB
Gold zinc	7600AD	7600BD	7600CD	7600DD
Cast DI LIS+	7600AC	7600BC	760000	760000



BULLET NOSE FAN AND PULLEY KITS

Billet aluminum construction, includes lockwasher and nut.

Fits Tuff Stuff C	S130, CS144	4	Fits Tuff Stu	iff 7102, 7127
7860, 7861, 786	66, 7935, 729	90	7139, 7140,	7068, 7069
Finish/Pulley	1 Groove	6 Groove	1 Groove	6 Groove
Chrome	7666A	7666C	7679A	7679C
Polished	7666B	7666D	7679B	7679D
Stealth Black	7666BC	7666DC	7679BC	7679DC ≺NEW
Cast PLUS+	7666BD	7666DD	7679BD	7679DD < NEW



BULLET NOSE PULLEY KITS

Fits Tuff Stuff 7102, 7127, 7139, 7140, 7068, 7069, CS130, CS144 & Hy-Brid

i ito ran otan	1 102, 1 121	, , , , , , , , ,	10, 1000, 10	00, 00100,	00111411	Dila
Finish	1 Groove	2 Groove	5 Groove	6 Groove	7 Groove	8 Groove
Chrome	7650A	7651A	7652A	7653A	7654A	7655A
Polished	7650B	7651B	7652B	7653B	7654B	7655B ≺NEW
Stealth black	7650C	7651C	7652C	7653C	7654C	7655C ≺NEW
Cast PLUS+	7650D	7651D	7652D	7653D	7654D	7655D ≪NEW





INDIVIDUAL PULLEYS

Fits Tuff Stuff 7102, 7127, 7139, 7140, 7068, 7069, CS130, CS144 & Hy-Brid						
Finish	1 Groove	2 Groove	5 Groove	6 Groove	7 Groove	8 Groove
Chrome	7610E	7610F	7610B	7610A	7610C	7610D
Stealth black	7610EB	7610FB	7610BB	7610AB	7610CB	7610DB < NEW
Gold zinc	7610ED	7610FD	7610BD	7610AD	7610CD	7610DD ≺NEW
Cast PLUS+	7610EC	7610FC	7610BC	7610AC	7610CC	7610DC ≪NEW



7655C

7610A

Alternator Parts





NEW> HEAVY DUTY CHARGE WIRES

Premium quality 8-gauge finely stranded copper wire with 5/16" copper ring terminals. Bright red oil and water resistant wire covering. Ideal for high amp alternators. Made in USA.

Length	Item	Length	Item
24"	754624	36"	754636
48"	754648	60"	754660

NEW> SOLID STATE VOLTAGE REGULATORS

External solid state voltage regulators are far more accurate and dependable than old style mechanical regulators. Features OEM style plug in connectors.

Application	on	Years	Item
GM	10DN	1962 - 1972	7635
Chrysler	Mechanical regulator	1970 - 1992	7524
Chrysler	Electronic regulator	1969 - 1992	7545
Ford	External	1963 - 1990	7540

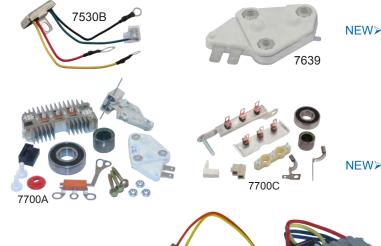
1-WIRE VOLTAGE REGULATORS

Heavy duty voltage regulator resists voltage spikes Description *Item* NEW> Fits GM 10SI 7127, 7139 & 7140, 1-wire or OEM 7639 Fits 7078 Ford 1-wire alternators 7530A Fits 8509 & 9509 Chrysler 1-wire alternators 7530B



Includes all of the small parts needed to rebuild an alternator including bearings

Application	Tuff Stuff Alternator	Item
GM 10SI OEM or 1-wire	7127, 7139, 7140	7700A
GM CS130 OEM or 1-wire	7860, 7861, 7866, 7935	7700F
Chrysler - early	8509, 9509	7700C
Ford 1GEN	7078, 7078NA	7700D
Ford 2GEN	7716	7700E



ALTERNATOR CONVERSION PIGTAILS

Allows the use of a GM CS alternator on a GM SI harness Description **Item** Converts 7127 to 7935 with indicator lamp 7625A Converts 7127 to 7935 without indicator lamp 7625B



7625A

ALTERNATOR REPLACEMENT PIGTAILS

Adapts CS130 to a CS130D wire harness

Replace worn or broken alternator connectors with Tuff Stuff's replacement pigtails to eliminate any electrical issues

Application	Tuff Stuff Alternator	Item
GM 10DN	7102, 7078NC (only)	7520B
GM 10SI	7127, 7139, 7140	7520A
GM CS130, CS144	7860, 7861, 7866, 7935, 8173	7520C
GM CS130D, AD244	8206, 8237	7520H
Ford 1GEN	7074	7520D
Ford 2GEN	7716 spade side	7520E
Ford 2GEN & 3GEN	7716 pin side	7520F
Ford 3GEN	7771	7520I



7520D

7625B



7520E



7520F

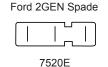


75201

7520G









7520G

A/C Compressors

- Small Peanut and Sanden style compressors utilize R12 or R134A refrigerant depending upon series
- Dedicated-fit compressors replace factory OEM units
- Available finishes include chrome plated, polished aluminum, painted or Cast PLUS+ Compressors include a 2V-groove, 4-groove or 6-groove pulley
- Optional chrome plated, polished or plain clutch cover and hard lines available below

PEANUT STYLE R-134A SD7							
Finish	Series	2V-Groove	6-Groove				
Chrome	Peanut	4517NADP	4517NA6G				
Polished	Peanut	4517NBDP	4517NB6G				
Black chrome	Peanut	4517NADP7	4517NA6G7				
Stealth black	Peanut		4517NC6GBLA				
Cast PLUS+	Peanut	4517NCDP	4517NC6G				
High pressure 1/2" male flare fitting, low pressure 5/8" male flare.							
Overall length is	6.75", requ	ires 3.4 oz of 100 PA	\G oil				







4517NCDP 4517NADP

4517NA6G7

SANDEN STYL	E SD508
-------------	---------

Chrome	R12	4505NADP	4505NA6G	
Polished	R12	4505NBDP	4505NB6G	
Cast PLUS+	R12	4505NCDP	4505NC6G	
Requires 6 oz of mineral oil				





4505NADP



NEW>

Chrome R134A 4515NADP 4515NA6G NEW> Black chrome R134A 4515NADP7 4515NA6G7 NEW➤ Stealth black 4515NKDP 4515NK6G R134A Polished 4515NB6G R134A 4515NBDP Orange R134A 4515NCDPOR Red R134A 4515NCDPRED Cast PLUS+ R134A 4515NCDP 4515NC6G Requires 7.2 oz of 100 PAG or Castrol ester oil







CAMARO FIREBIRD w/LS

1998-02 Camaro & Firebird w/LS1 engine							
Finish	Series	Pulley	Item				
Chrome	LS1	4-Groove	4510NA				
Polished	LS1	4-Groove	4510NB				
Cast PLUS+	LS1	4-Groove	4510NC				



4515NADP

4515NA6G

8417A

8417B

8417C

CAMARO FIREBIRD CAPRICE W/LT 1993-97 Camaro & Firebird w/LT1 engine 1994-96 Caprice & Impala w/LT1 engine

		~ ···/ = · · · · · · · · · · · · · · ·	
Chrome	LT1	6-Groove	4511NA
Polished	LT1	6-Groove	4511NB
Cast PLUS+	LT1	6-Groove	4511NC





4510NC

4510NA





DODGE RAM

Chrome

Polished

Plain

1994-01 OE style R-134A w/3.9, 5.2, 5.9, & 8.0L

Peanut SD7

Peanut SD7

Peanut SD7

10mm suction port, 8MM discharge port

Chrome	Ram	6-Groove	4605NA
Polished	Ram	6-Groove	4605NB
Cast PLUS+	Ram	6-Groove	4605NC

HARD LINES FOR 4517 PEANUT COMPRESSOR





4605NC



8417C



8490A

MACHINED ALUMINUM A/C CLUTCH COVER

Chrome	Sanden SD508	8490A
Polished	Sanden SD508	8490B
Plain	Sanden SD508	8490C

15



Mini Gear Reduction & Full Size Starters



HIGH TORQUE

Ideal for high horsepower muscle cars, hot rods, trucks and daily drivers.

FINISHES

Include chrome plated, zinc plated, stealth black and powder coated in a variety of colors and Factory Cast PLUS+.

INDEXABLE

Gear reduction starters are considerably smaller and lighter than OE starters and most incorporate a mounting block that can be indexed to gain additional clearance.

HARDWARE

All starters include mounting bolts and shims where applicable.

TYPE	SERIES
Full size GM starter	10MT
Permanent Magnet Gear Reduction	PMGR
Hitachi gear reduction starter	HI-OSGR
Full size Ford starter	4.5"
Tuff Torque Premium starter	Mini Denso

Tuff Stuff starters are hand made from premium quality new components - not remanufactured - and are quality built in USA

Chevrolet Starters

CHEVROLET SMALL & BIG BLOCK

1955-2000 With OFFSET mounting and 168 tooth flywheel							
Finish	Style	Series	HP	Index	Item		
Chrome	GR 18:1	Mini denso	3	Υ	13510A		
Zinc	GR 18:1	Mini denso	3	Υ	13510		
Chrome	GR 4.4:1	PMGR 1.7kw	2.3	N	6510NA		
Zinc	GR 4.4:1	PMGR 1.7kw	2.3	N	6510NB		
Chrome	OEM	10MT 1.4kw	1.9	N	3510A		
Chrome nose	OEM	10MT 1.4kw	1.9	N	3510AC		
Stealth black	OEM	10MT 1.4kw	1.9	N	3510B		
Blue	OEM	10MT 1.4kw	1.9	N	3510BBLUE		
Orange	OEM	10MT 1.4kw	1.9	N	3510BORANGE		
Red	OEM	10MT 1.4kw	1.9	N	3510BRED		
Yellow	OFM	10MT 14kw	1 0	N	3510RYFLLOW		

OFFSET MOUNT



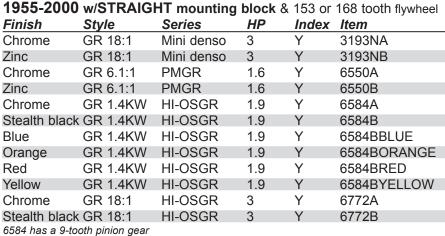
1957-81 With OFFSET mounting for manual transmission,

168 tooth flywheel, cast iron nose

Finish	Style	Series	HP	Index	Item	
Chrome	OEM	10MT 1.4k\	v 1.9	Ν	3689A	
Stealth black	k OEM	10MT 1.4kv	v 1.9	N	3689B	

3689B

STRAIGHT MOUNT





CHEVROLET & OLDSMOBILE

STRAIGHT mounting holes, 153 tooth flywheel, 1 long & 1 short bolt, Chrome 10MT 1.4kw 1.9 OEM Ν 3631A Stealth black OEM 10MT 1.4kw 1.9 3631B

CAMARO & FIREBIRD

1993-95 W/5./L, STRAIGHT mounting noies							
Chrome	GR 4.4:1	PMGR 1.4kw 1.9	Ν	6631NA			
Zinc	GR 4.4:1	PMGR 1.4kw 1.9	N	6631NB			

CHEVROLET V8 & I-6

1957-63 V8	cars and 1	962-82	2 1-6 &	V8 truc	cks w/	3 bolt mounting
Chrome	OEM	10MT	1.4kw	1.9	Ν	3686A
Stealth black	OEM	10MT	1.4kw	1.9	Ν	3686B



GM-Chrysler Starters





CORVETTE CAMARO & FIREBIRD

1998-01 Camaro & Firebird w/LS1, 168 tooth flywheel 1997-01 Corvette w/LS1 & LS6

Finish	Style	Series	HP	Index	k Item
Chrome	GR	PMGR	1.9	Ν	6492A
Zinc	GR	PMGR	1.9	Ν	6492B
Chrome	GR	Mini denso	3	Υ	13310A
Zinc	GR	Mini denso	3	Υ	13310

13310 has an 11-tooth pinion gear



CHEVROLET BUICK OLDS PONTIAC V6 1995-07 With 3.4 or 3.8L V6, 1 long and 1 short bolt

1333-07	WILLI J.T	JI J.UL	v 0, 1	iong	and i si	ioit boit
Finish	Style	Series		HP	Index	Item
Chrome	GR	PMGR	1.6kw	2.2	N	6431NA
Zinc	GR	PMGR	1.6kw	2.2	N	6431NB



OLDSMOBILE PONTIAC

1965-80 With STRAIGHT mounting, 2 long bolts

168 tooth flywheel, driver side engine block mounting *Finish Style Series HP Index Item*

Chrome OEM 10MT 1.4kw 1.9 N 3570A
Stealth black OEM 10MT 1.4kw 1.9 N 3570B
Chrome GR Mini denso 3 Y 13186A
Zinc GR Mini denso 3 Y 13186

3570 has a 9-tooth pinion gear, 13186 has an 11-tooth pinion gear



AMC JEEP

1976-77 AMC Gremlim, Hornet 3.8L, 4.2L, 5.0L

1976-77 AMC Matador 4.2L, 5.0L, 5.9L

1976-77 AMC Pacer 3.8L, 4.2L

1974-75 Jeep Grand Wagoneer 5.9L, 6.6L

1974-77 Jeep CJ Series 3.8L, 4.2L, 5.0L

1974-77 Jeep J Series Pickup 4.2L, 5.9L, 6.6L

1974-77 Jeep Cherokee 4.2L, 5.9L, 6.6L

1976-77 Jeep Wagoneer 5.9L, 6.6L

FinishStyleSeriesIndexItemChromeOEM4.5"N3211NAStealth blackOEM4.5"N3211NB9-tooth pinion gear



CHRYSLER

1965-83 225, 273, 318, 340, 360, 361, 383, 400, 426, 440

op to 15.1 compression, 9 tooth pillion gear							
Finish	Style	Series	HP	Index	Item		
Chrome	GR 4.4:1	Mini denso 1.61kw	2.5	N	6084A		
Gray	GR 4.4:1	Mini denso 1.61kw	2.5	N	6084B		

Ford Starters

FORD

1963-91 289	9, 302, 351 v	w/automatic trans	missi	on, 2 bo	lt mounting
Finish	Style	Series	HP	Index	Item
Chrome	OEM	4.5" 1.4kw	1.9	N	3124A
Stealth black	OEM	4.5" 1.4kw	1.9	N	3124B
Blue	OEM	4.5" 1.4kw	1.9	N	3124BBLUE
Yellow	OEM	4.5" 1.4kw	1.9	N	3124BYELLOW
Chrome	GR	HI-PMGR 1.6kw	2.1	Υ	6551A < NEW
Zinc	CP	HI DMCD 1 6kw	2.1	V	6551D ANDW







1963-91 289, 302, 351 w/automatic transmission, 2 bolt mounting and Arias/Root 429 big block

Finish	Style	Series	HP	Index	Item
Chrome	GR 3.75:1	HI-OSGR 1.4kw	1.9	Υ	6585A
Stealth black	GR 3.75:1	HI-OSGR 1.4kw	1.9	Υ	6585B
Blue	GR 3.75:1	HI-OSGR 1.4kw	1.9	Υ	6585BBLUE
Red	GR 3.75:1	HI-OSGR 1.4kw	1.9	Υ	6585BRED
Yellow	GR 3.75:1	HI-OSGR 1.4kw	1.9	Υ	6585BYELLOW
Chrome	GR 3.75:1	HI-OSGR 2.0kw	2.6	Υ	6785A
Stealth black	GR 3.75:1	HI-OSGR 2.0kw	2.6	Υ	6785B
6785 has a 9-tooth pinion gear					





1963-91 289, 302, 351 w/automatic transmission, 2 bolt mounting 1991-93 Thunderbird 5.0L w/auto trans, 2 bolt mtg, 4.084" reg bore 1992-95 Mustang 5.0L w/automatic transmission, 2 bolt mounting

Finish	Style	Series		Index	_
Chrome	GR	PMGR 1.4kw	1.9	N	6124A
Zinc	GR	PMGR 1.4kw	1.9	N	6124B

6124 has a 9-tooth pinion gear, upgrade to 6585 or 6785 - see above



1963-91 289, 302, 351 w/auto or manual transmission, 2 bolt mounting

Finish	Style	Series	HP	Index	Item
Chrome	GR	Mini denso	3	Υ	13124A
Zinc	GR	Mini denso	3	Υ	13124



1965-74 289, 302, 351 w/manual transmission, 2 bolt mounting

1303-74 209, 302, 331 Williamual transmission, 2 bolt mounting								
Finish	Style	Series	HP	Index	Item			
Chrome	OEM	4.5" 1.4kw	1.9	N	3132A			
Stealth black	OEM	4.5" 1.4kw	1.9	N	3132B			
Chrome	GR	Mini denso	3	Υ	13132A			
Zinc	GR	Mini denso	3	Υ	13132			
Chrome	GR	PMGR 1.4kw	1.9	N	6132A			
Stealth black	GR	PMGR 1.4kw	1.9	N	6132B			



6132B

13132A

FORD MUSTANG

1966-81 255 V8 & 1992-93 2.3L Mustang, 3 bolt mounting								
Finish	Style	Series	HP	Index	Item			
Chrome	GR	PMGR 1.4kw	1.9	N	6131A			
Stealth black	GR	PMGR 1.4kw	1.9	N	6131B			



Ford Starters





FORD

1992-09 Crown Victoria 4.6L 1996-04 Mustang 4.6L 1997-98 F Pickup 4.6L, 5.4L 1993-98 Lincoln Mark VIII 4.6L 1992-09 Lincoln Town Car 4.6L 1994-97 Mercury Cougar 4.6L 3 bolt mounting

1994-97 Ford Thunderbird 4.6L 1997-98 Expedition 4.6L, 5.4L 1997-09 E Van 4.6L, 5.4L, 6.8L 1992-09 Grand Marquis 4.6L 2003-04 Mercury Marauder 4.6L 1998 Lincoln Navigator 5.4L

Finish	Style	Series	HP	Index	Item
Chrome	GR 3.75:1	PMGR 1.4kw	1.9	N	6221A
Black	GR 3.75:1	PMGR 1.4kw	1.9	N	6221B



FORD

2005-09 Ford Mustang 4.6L 1999-04 Ford Expedition 4.6L 2000-05 Ford Excursion 5.4L, 6.8L 1999-08 Ford F Series Pickup 4.6L 1999-09 F Pickup 5.4L, 6.8L 2002 Lincoln Blackwood 5.4L Noseless 3 bolt mounting

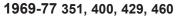
2007-09 Ford Mustang 5.4L 1999-09 Ford Expedition 5.4L 2006-08 Lincoln Mark LT 5.4L 1999-09 Lincoln Navigator 5.4L

Finish	Style	Series	HP	Index	Item
Chrome	GR	PMGR 1.4kw	1.9	N	6646A
Zinc	GR	PMGR 1.4kw	1.9	N	6646B



1978-80 L6 200 w/automatic transmission, 2 bolt mounting

Finish	Style	Series	HP	Index	Item	
Stealth black	OEM	4.5" 1.4kv	/ 1.9	N	3160B	



2 hole mounting, automatic or manual, one hole is threaded

Finish	Style	Series	HP	Index	Item
Chrome	OEM	4.5" 1.4kw	1.9	N	3149A
Stealth black	OEM	4.5" 1.4kw	1.9	N	3149B
Chrome	GR	Mini denso	3	Υ	13149A
Zinc	GR	Mini denso	3	Υ	13149

13149 has an 11-tooth pinion



1968-81 255, 352, 390, 427, 428 FE

3 bolt mounting, automatic or manual

o boil initiality, automatic or manaar							
Finish	Style	Series	HP	Index	Item		
Chrome	OEM	4.5" 1.4kw	1.9	N	3131A		
Stealth black	OEM	4.5" 1.4kw	1.9	N	3131B		
Chrome	GR	Mini denso	3	Υ	13131A		
Zinc	GR	Mini denso	3	Υ	13131		

3131B

Accessories

HOT START KIT

Give your starter an extra 12 volt boost. Eliminates slow cranking due to excessive engine heat. Ideal for Ford 6124 and GM full size OEM starters.

Description	Item		
Complete hot start kit	7629		
Remote solenoid side terminal	7311	≪NEW	
Remote solenoid top post	7312	≺NEW	



CHROME PLATED STARTER KIT

Fits most Chevy, Buick, Cadillac, Olds & Pontiac OEM starters and Tuff Stuff 3510, 3570, 3631 & 3689

Chrome plate your original starter with that awesome Tuff Stuff chrome plated finish. Provides the look of a chrome plated starter without having to buy a new starter.

Description	Item
Chrome plated starter kit	7550A
Chrome plated starter solenoid only	7550C
Silver zinc (not chrome) starter solenoid	7310G
Chrome plated solenoid cover only	7624



STARTER REPAIR KIT

Rebuild parts kit for Tuff Stuff 6584 mini starter Complete kit includes full-spline pinion

Description	Item
Complete rebuild kit, full spline	7584A
Full spline pinion	7584C
Clutch assembly	7584E
Mounting block	7584F
Solenoid - zinc plated	7584G
Chrome solenoid	7584GA

Rebuild parts for Tuff Stuff 6550 gear Clutch/pinion gear assembly	≺NEW	
Mounting block	7550F	
Solenoid - zinc plated	7550G	
Bolt and shim kit	7550E	







REPLACEMENT STARTER BOLT KITS

Fits most full size Chevy, Buick, Olds, Pontiac and Tuff Stuff 3510 & 3570 starters with 3/8-16" x 4-5/8" bolts.

Original style starter mounting bolts provides correct starter to engine alignment. Frequently eliminates chattering problems arising from worn-out bolts. 2 bolts per kit.

Finish	ltem
Chrome	7623A
Gold zinc	7623B



REPLACEMENT SHIM AND BOLT KIT

Same shim kit that is included with most Tuff Stuff mini starters. Ensures proper flywheel ring gear clearance on Chevrolet 6584 and 6772 starters. Includes 2 starter mounting bolts, 2 starter shims and 2 motor shims.

Description	Item	
Shim and bolt kit	7633	



Water Pumps



Every water pump is hand finished, assembled and individually tested to exceed OEM specifications



BUILT IN USA

Tuff Stuff water pumps are hand made from premium quality new components — not remanufactured - and are quality built in the USA.

FINISHES

Available in chrome plated, polished aluminum, black chrome, stealth black, powder coated, painted or Factory Cast PLUS+ finishes. Tuff Stuff has the widest assortment of water pump finishes available.

SUPERCOOL

SuperCool option includes a custom water impeller that flows 30% more coolant to reduce water temperature by up to 20 degrees.

PREMIUM QUALITY

Precision-made ball/roller bearings and spin-balanced fan hub sustain higher RPM's. Lightweight aluminum castings provide increased heat dissipation and are up to 50% lighter than cast iron.

LONG TERM DEPENDABILITY

From muscle cars and hot rods to custom trucks and daily drivers, these pumps provide great looks, long term dependability and are a terrific value

You can buy a cheaper pump but you cannot buy a better pump!

Chevrolet Water Pumps

CHEVROLET SMALL BLOCK - SHORT STYLE PUMP

1955-1971 5.625" Hub Height, 5/8" Pilot

Finish	Casting	Flow	Style	Standard Rotation	Reverse Rotation
Chrome	Alum	SuperCool	Smoothie	1353NA	
Polished	Alum	SuperCool	Smoothie	1353NB	
Black chrome	Alum	SuperCool	Smoothie	1353NA7 < NEW	
Stealth black	Alum	SuperCool	Smoothie	1353NC	
Cast PLUS+	Alum	SuperCool	Smoothie	1353	1353REV
Chrome	Alum	SuperCool	Platinum	1394NA	1394NAREV
Polished	Alum	SuperCool	Platinum	1394NB	1394NBREV
Blue	Alum	SuperCool	Platinum	1394NCBLUE	
Orange	Alum	SuperCool	Platinum	1394NCORANGE	
Red	Alum	SuperCool	Platinum	1394NCRED	
Yellow	Alum	SuperCool	Platinum	1394NCYELLOW	
Cast PLUS+	Alum	SuperCool	Platinum	1394NC	1394NCREV
Polished	Alum	Standard	Standard	1635EB	
Cast PLUS+	Alum	Standard	Standard	1635E	
Chrome	Iron	Standard	Standard	1354NA	1354NAREV
Chrome	Iron	Standard	Smoothie	1354NAS	1354NASREV
Chrome	Iron	SuperCool	Standard	1354NB	1354NBREV
Chrome	Iron	SuperCool	Smoothie	1354NBS	1354NBSREV
Stealth black	Iron	SuperCool	Standard	1354NC	1354NCREV
Stealth black	Iron	SuperCool	Smoothie	1354NCS	1354NCSREV
Blue	Iron	SuperCool	Standard	1354NCBLUE	
Orange	Iron	SuperCool	Standard	1354NCORANGE	
Red	Iron	SuperCool	Standard	1354NCRED	
Yellow	Iron	SuperCool	Standard	1354NCYELLOW	
As cast	Iron	SuperCool	Standard	1354N	
As cast	Iron	SuperCool	Smoothie	1354NS	

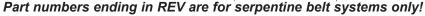
Smoothie pumps have a flat, smooth top and no top threaded water port. Standard pumps have a threaded water port. 1635 Pumps have a 3/8"-16 threaded hole.

Part numbers ending in REV are for serpentine belt systems only!



CORVETTE SMALL BLOCK - SHORT STYLE PUMP

5.812" H	Hub Height, 3	3/4" Pilot		
Casting	Flow	Style	Standard Rotation	Reverse Rotation
Alum	SuperCool	Platinum		1394NG
Alum	SuperCool	Platinum		1394NH
Alum	SuperCool	Platinum		1394NI
Alum	SuperCool	Standard		1635NG
Alum	Standard	Standard		1635NE
Alum	SuperCool	Standard		1635ND
Alum	Standard	Standard		1635NB
Alum	SuperCool	Standard		1635N
Alum	Standard	Standard		1635NA
5.843" H	Hub Height, 3	3/4" Pilot		
Alum	SuperCool	Platinum	1394ND	
Alum	SuperCool	Platinum	1394NE	
Alum	SuperCool	Platinum	1394NF	
5.843"	Hub Height,	3/4" Pilot		
Iron	SuperCool	Standard	1534NB	
Iron	Standard	Standard	1534NA	1534NAREV
Iron	SuperCool	Standard	1534NC	
Iron	SuperCool	Standard	1534N	
	Alum Alum Alum Alum Alum Alum Alum Alum	Alum SuperCool Alum SuperCool Alum SuperCool Alum SuperCool Alum SuperCool Alum Standard Alum SuperCool Alum Standard Alum SuperCool Alum Standard Alum SuperCool Alum Standard 5.843" Hub Height, 3 Alum SuperCool Alum SuperCool Alum SuperCool Alum SuperCool Iron SuperCool Iron SuperCool Iron SuperCool	Alum SuperCool Platinum Alum SuperCool Platinum Alum SuperCool Platinum Alum SuperCool Platinum Alum SuperCool Standard Alum Standard Standard Alum Standard Standard Alum Standard Standard Alum SuperCool Standard Alum Standard Standard Alum SuperCool Platinum Alum SuperCool Standard Iron SuperCool Standard Iron Standard Standard Iron SuperCool Standard Iron SuperCool Standard	Alum SuperCool Platinum Alum SuperCool Platinum Alum SuperCool Platinum Alum SuperCool Platinum Alum SuperCool Standard Alum Standard Standard Alum SuperCool Standard Alum Standard Standard Alum SuperCool Platinum Alum SuperCool Standard Alum SuperCool Standard Alum SuperCool Standard Alum S





Chevrolet Water Pumps TURNING PERFORMANCE ACCESSORIES





CHEVROLET SMALL BLOCK - LONG STYLE PUMP						
		on 89-95 trucks		b Height, 5/8" Pilot		
Finish	Casting	Flow	Style	Standard Rotation	Reverse Rotation	
Chrome	Alum	SuperCool	Platinum	1511NA	1511NAREV	
Polished	Alum	SuperCool	Platinum	1511NB	1511NBREV	
Blue	Alum	SuperCool	Platinum	1511NCBLUE		
Orange	Alum	SuperCool	Platinum	1511NCORANGE		
Red	Alum	SuperCool	Platinum	1511NCRED		
Yellow	Alum	SuperCool	Platinum	1511NCYELLOW	4544NODEN	
Cast PLUS+	Alum	SuperCool	Platinum	1511NC	1511NCREV	
1969-96 NO	T for use or			Height, 5/8" Pilot		
Chrome	Alum	SuperCool	Smoothie	1448NA		
Polished	Alum	SuperCool	Smoothie	1448NB < NEW		
Black chrome	Alum	SuperCool	Smoothie	1448NA7		
Cast PLUS+	Alum	SuperCool	Smoothie	1448NC		
Chrome	Iron	Standard	Standard	1449NA	1449NAREV	
Chrome	Iron	SuperCool	Standard	1449NB	1449NBREV	
Stealth black	Iron	SuperCool	Standard	1449NC	1449NCREV	
Blue	Iron	SuperCool	Standard	1449NCBLUE		
Orange	Iron	SuperCool	Standard	1449NCORANGE		
Red	Iron	SuperCool	Standard	1449NCRED		
Yellow	Iron	SuperCool	Standard	1449NCYELLOW		
As cast	Iron	SuperCool	Standard	1449N		
1987-95 Tr	uck V6-V	'8TBI 6.937"	Hub Heiaht.	5/8" Pilot		
Chrome	Alum	SuperCool	Smoothie		1675AA	
Polished	Alum	SuperCool	Smoothie		1675AB	
Stealth black	Alum	SuperCool	Smoothie		1675AC	
Cast PLUS+	Alum	SuperCool	Smoothie		1675A	
Chrome	Iron	Standard	Standard		1675NA	
Chrome	Iron	SuperCool	Standard		1675NB	
Stealth black	Iron	SuperCool	Standard		1675NC	
As cast	Iron	SuperCool	Standard		1675N	
	011	5 apo. 5 5 5 1	Canadia			

Part numbers ending in REV are for serpentine belt systems only!







CHEVROL	ET RIA	BI OCK	SHOPT (STYLE PUMP	
		Height, 5/8" F			
Finish	Casting	Flow	Style	Standard Rotation	Reverse Rotation
Chrome	Alum	SuperCool	Smoothie	1496NA	
Polished	Alum	SuperCool	Smoothie	1496NB	
Black chrome	Alum	SuperCool	Smoothie	1496NA7 ∢NEW	
Stealth black	Alum	SuperCool	Smoothie	1496NC	
Cast PLUS+	Alum	SuperCool	Smoothie	1496	
Chrome	Alum	SuperCool	Platinum	1495AA	1495AAREV
Polished	Alum	SuperCool	Platinum	1495AB	1495ABREV
Black chrome	Alum	Supercool	Platinum	1495NA7 ≺NEW	
Blue	Alum	SuperCool	Platinum	1495ACBLUE	
Orange	Alum	SuperCool	Platinum	1495ACORANGE	
Red	Alum	SuperCool	Platinum	1495ACRED	
Yellow	Alum	SuperCool	Platinum	1495ACYELLOW	
Cast PLUS+	Alum	SuperCool	Platinum	1495AC	1495ACREV
Chrome	Iron	Standard	Standard	1494NA	1494NAREV
Chrome	Iron	SuperCool	Standard	1494NB	1494NBREV
Stealth black	Iron	SuperCool	Standard	1494NC	1494NCREV
Blue	Iron	SuperCool	Standard	1494NCBLUE	
Orange	Iron	SuperCool	Standard	1494NCORANGE	
Red	Iron	SuperCool	Standard	1494NCRED	
Yellow	Iron	SuperCool	Standard	1494NCYELLOW	
As cast	Iron	SuperCool	Standard	1494N	

Part numbers ending in REV are for serpentine belt systems only!

Product dimensions and specifications available at TuffStuffPerformance.com

Premium Chevrolet Water Pumps

CORVETTE BIG BLOCK - SHORT STYLE PUMP

1965-72	5.750" Hub Height, 3/4" Pilot						
Finish	Casting	Rotation	Flow	Style	Item		
Chrome	Iron	Standard	Standard	Standard	1484NA		
Chrome	Iron	Standard	SuperCool	Standard	1484NB		
Stealth black	Iron	Standard	SuperCool	Standard	1484NC		
As cast	Iron	Standard	SuperCool	Standard	1484N		
Chrome	Alum	Standard	SuperCool	Platinum	1485AA		
Polished	Alum	Standard	SuperCool	Platinum	1485AB		
As cast	Alum	Standard	SuperCool	Platinum	1485AC		













		VIO DI COI	7 1 0 1/0	OTVI E BULL	
CHEVROL	4 3 17 6	IG BLOCK	C-LONG	STYLE PUMP	
1969-96	Not for	87-95 trucks	or Corvettes	7.281" Hub Height,	5/8" Pilot
Finish	Castin	g Flow	Style	Standard Rotation	Reverse Rotation
Chrome	Alum	SuperCool	Platinum	1461AA	
Polished	Alum	SuperCool	Platinum	1461AB	
As cast	Alum	SuperCool	Platinum	1461AC	
Chrome	Iron	Standard	Standard	1461NA	1461NAREV
Chrome	Iron	SuperCool	Standard	1461NB	1461NBREV
Stealth black	Iron	SuperCool	Standard	1461NC	1461NCREV
Blue	Iron	SuperCool	Standard	1461NCBLUE	
Orange	Iron	SuperCool	Standard	1461NCORANGE	
Red	Iron	SuperCool	Standard	1461NCRED	
Yellow	Iron	SuperCool	Standard	1461NCYELLOW	
As cast	Iron	SuperCool	Standard	1461N	
1969-94	7.281"	Hub Height, 5/	8" Pilot		
Chrome	Alum	SuperCool	Smoothie	1459NA	
Polished	Alum	SuperCool	Smoothie	1459NB	
Black chrome	Alum	SuperCool	Smoothie	1459NA7 ≺NEW	
Stealth black	Alum	SuperCool	Smoothie	1459NC	
Cast PLUS+	Alum	SuperCool	Smoothie	1459	
1988-95	151 pi	ماد بیم احساماد	7 004" Llub	Height, 5/8" Pilot	
Chrome	Alum	ck-up truck, SuperCool	Smoothie	Height, 5/6 Filot	1493ANA
Polished	Alum	SuperCool	Smoothie		1493ANB
Stealth black	Alum	SuperCool	Smoothie		1493ANC
As cast	Alum	SuperCool	Smoothie		1493ANC
no casi	Aluill	Supercool	Sillootille		ITOOMIN
Chrome	Iron	SuperCool	Smoothie		1493NB
Black	Iron	SuperCool	Smoothie		1493NC
As cast	Iron	SuperCool	Smoothie		1493N

Part numbers ending in REV are for serpentine belt systems only!

CHEVROLET 194 230 250 INLINE 6								
1963-84		3.875" Hub	Height,	5/8" Pilot				
Finish	Casting	Rotation	Flow	Style	Item			
Chrome	Iron	Standard	Standard	Standard	1529A			
Stealth black	Iron	Standard	Standard	Standard	1529B			
As cast	Iron	Standard	Standard	Standard	1529N			

www.Tuffstuffperformance.com

Be sure to check our website for the latest new products, installation instructions and videos

GM Water Pumps

















GM LS	1 & LS6					
1998-02 Camaro/Firebird 1997-04 Corvette						
2004-06	GTO					
Finish	Casting	Rotation	Flow	Style	Item	
Chromo	A Luna	Ctandard	Ctandar	Distinum	12101	

Finish	Casting	Rotation	Flow	Style	Item
Chrome	Alum	Standard	Standard	Platinum	1310A
Polished	Alum	Standard	Standard	Platinum	1310B
Stealth black	Alum	Standard	Standard	Platinum	1310D
Cast PLUS+	Alum	Standard	Standard	Platinum	1310C

CM LT1 5.7L1993-97 Camaro/Firebird 1992-1996 Corvette 1994-96 Caprice/Impala

Finish	Casting	Rotation	Flow	Style	Item
Chrome	Alum	Standard	Standard	Platinum	1362A
Polished	Alum	Standard	Standard	Platinum	1362B
Cast PLUS+	Alum	Standard	Standard	Platinum	1362C

OLDSMC					
1968-70 w <i>Finish</i>		-85 w/o air Rotation	5.562" Hub Flow	Height, 5/8" Style	Pilot <i>Item</i>
Chrome	Iron	Standard	Standard	Standard	1444NA
Stealth black	Iron	Standard	Standard	Standard	1444NB
As cast	Iron	Standard	Standard	Standard	1444N
1971-90 4	.3, 5.0, 6.0	6, 7.5L w/air	5.937" Hul	b Height, 5/8	8" Pilot
Chrome	Iron	Standard	Standard	Standard	1504NA
Stealth black	Iron	Standard	Standard	Standard	1504NB
As cast	Iron	Standard	Standard	Standard	1504N
1968-69 3	50, 400, 4	55 w/o air	5.109" Hub	Height, 5/8"	Pilot
Chrome	Iron	Standard	Standard	Standard	1504NA-

PONTIA	C					
1969-81 4	.3, 5.7, 6.	6L & 455, 1	1 bolt 4.468	3" Hub Heigh	nt, 5/8" Pilot	
Finish		Rotation	Flow	Style	Item	
Chrome	Alum	Standard	SuperCool	Platinum	1475AA	
Polished	Alum	Standard	SuperCool	Platinum	1475AB	
Stealth black	Alum	Standard	SuperCool	Platinum	1475AC	
Cast PLUS+	Alum	Standard	SuperCool	Platinum	1475	
Chrome	Iron	Standard	Standard	Standard	1475NA	
Stealth black	Iron	Standard	Standard	Standard	1475NB	
As cast	Iron	Standard	Standard	Standard	1475N	
1966-69 5.7 , 6.6L , 8 bolt 3.625" Hub Height, 5/8" Pilot						
Chrome	Iron	Standard	Standard	Standard	1445ΝΔ	

Standard

Standard

Standard

Standard

1445NB

1445N

Standard

Standard

Stealth black Iron

As cast

Ford Water Pumps

FORD									
1965-73 289 , 302 , 351W w/pass side inlet 5.437" Hub Height, 5/8" Pilot									
Finish	Casting		Style	Standard Rotation	Reverse Rotation				
Chrome	Alum	SuperCool	Platinum	1432AA					
Polished	Alum	SuperCool	Platinum	1432AB					
Stealth black	Alum	SuperCool	Platinum	1432AC					
Cast PLUS+	Alum	SuperCool	Platinum	1432					
Chrome	Iron	Standard	Standard	1432A 1432B	1432AREV				
Chrome	Iron	SuperCool	Standard		1422CDEV				
Stealth black Blue Red Yellow	Iron Iron Iron	SuperCool SuperCool SuperCool	Standard Standard	1432C 1432CBLUE 1432CRED 1432CYELLOW	1432CREV				
As cast	Iron	SuperCool	Standard	1432N					

Part numbers ending in REV are for serpentine belt systems only!

1970-78 Windsor w/driver side inlet	5.687" Hub Height, 5/8" Pilot
-------------------------------------	-------------------------------

<u>Finish</u>	Casting	Rotation	Flow	Style	Item
Chrome	Iron	Standard	Standard	Standard	1468A
Chrome	Iron	Standard	SuperCool	Standard	1468B
Stealth black	Iron	Standard	SuperCool	Standard	1468C
Blue	Iron	Standard	SuperCool	Standard	1468CBLUE
Red	Iron	Standard	SuperCool	Standard	1468CRED
Yellow	Iron	Standard	SuperCool	Standard	1468CYELLOW
As cast	Iron	Standard	SuperCool	Standard	1468N

1970-78 Cleveland w/driver side inlet, 5.687" Hub Height, 5/8" Pilot									
Chrome	Iron	Standard	Standard	Standard	1469A				
Chrome	Iron	Standard	SuperCool	Standard	1469B				
Stealth black	Iron	Standard	SuperCool	Standard	1469C				
Blue	Iron	Standard	SuperCool	Standard	1469CBLUE				
Red	Iron	Standard	SuperCool	Standard	1469CRED				
Yellow	Iron	Standard	SuperCool	Standard	1469CYELLOW				
As cast	Iron	Standard	SuperCool	Standard	1/60NI				

1970-78 w	indsor &	5.687" Hub Height, 5/8" Pilot				
Chrome	Alum	Standard	SuperCool	Platinum	1467AA	
Polished	Alum	Standard	SuperCool	Platinum	1467AB	
Cast PLUS+	Alum	Standard	SuperCool	Platinum	1467AC	

1994-95 5.0L 4.125" Hub Height, 3/4" Pilot

100+000.0	L 7.120	Tiub Ticigiit,	5/ + 1 110t		
Chrome	Alum	Standard	Standard	Platinum	1548NA
Stealth black	Alum	Standard	Standard	Platinum	1548NC
Cast PLUS+	Alum	Standard	Standard	Platinum	1548

MUSTANG 5.0L

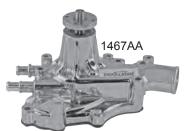
1986-93 Mustang 5.0L w/driver side inlet, 5.735" Hub Height, 5/8" Pilot, Reverse Rot									
<u>Finish</u>	Casting	Rotation	Flow	Style	Item				
Chrome	Alum	Reverse	SuperCool	Standard	1594NA				
Chrome	Alum	Reverse	SuperCool	Platinum	1594ND				
Polished	Alum	Reverse	SuperCool	Platinum	1594NE				
Stealth black	Alum	Reverse	SuperCool	Standard	1594NC				
Stealth black	Alum	Reverse	SuperCool	Platinum	1594NF				
Blue	Alum	Reverse	SuperCool	Platinum	1594NCBLUE				
Red	Alum	Reverse	SuperCool	Platinum	1594NCRED				
Yellow	Alum	Reverse	SuperCool	Platinum	1594NCYELLOW				
Cast PLUS+	Alum	Reverse	SuperCool	Standard	1594AC				
Cast PLUS+	Alum	Reverse	SuperCool	Platinum	1594N				

1979-85 M	lustang 5.	0L w/driver s	side inlet, 5.750	" Hub Height,	5/8" Pilot, Standard Rot
Chrome	Alum	Standard	SuperCool	Standard	1625NA
Chrome	Alum	Standard	SuperCool	Platinum	1625ND
Polished	Alum	Standard	SuperCool	Platinum	1625NE
Stealth black	Alum	Standard	SuperCool	Standard	1625NC
Stealth black	Alum	Standard	SuperCool	Platinum	1625NF
Blue	Alum	Standard	SuperCool	Platinum	1625NCBLUE
Red	Alum	Standard	SuperCool	Platinum	1625NCRED
Yellow	Alum	Standard	SuperCool	Platinum	1625NCYELLOW
Cast PLUS+	Alum	Standard	SuperCool	Standard	1625AC
Cast PLUS+	Alum	Standard	SuperCool	Platinum	1625N















Ford Water Pumps









Chrome

As cast

Stealth black Iron

Iron

Iron





NEW)







FORD 5.0L 302 & 351W SHORTY

1979-93 w/driver side inlet, 4.312" Hub Height, 3/4" Pilot Replaces Ford Racing water pump M-8501-E351S. Must use with long style (3.950") 4-bolt crankshaft damper and requires custom pulleys - not included. Provides up to 1.5" of additional water pump clearance for tight engine compartments.

Finish	Casting	Rotation	Flow	Style	Item
Chrome	Alum	Standard	SuperCool	Platinum	1625NG
Polished	Alum	Standard	SuperCool	Platinum	1625NH
Stealth black	Alum	Standard	SuperCool	Platinum	1625NI
Cast PLUS+	Alum	Standard	SuperCool	Platinum	1625NJ

FORD					
1970-77 4	29, 460	5.562" Hu	b Height, 3/	4" Pilot	·
Finish			Flow		Item
Chrome	Iron	Standard	Standard	Standard	1470NA
Stealth black	Iron	Standard	Standard	Standard	1470NC
Blue	Iron	Standard	Standard	Standard	1470NCBLUE
Red	Iron	Standard	Standard	Standard	1470NCRED
Yellow	Iron	Standard	Standard	Standard	1470NCYELLOW
As cast	Iron	Standard	Standard	Standard	1470N
4005 50					
<u> 1965-76 з</u>	90, 427, ₋	428 FE	7.578" Hul	o Height,	5/8" Pilot
Chrome	Alum	Standard	SuperCool	Platinum	1421AA
Polished	Alum	Standard	SuperCool	Platinum	1421AB
Stealth black	Alum	Standard	SuperCool	Platinum	1421AC
As cast	Alum	Standard	SuperCool	Platinum	1421
Chrome	Iron	Standard	Standard	Standard	1421A

FORD					
1974-82	2 2.3L	3/4" pilot			
Finish	Casting	Rotation	Item		
As cast	Iron	Standard	1538N	≺NEW	

Standard Supercool Standard 1421B

Standard Supercool Standard 1421C Standard Supercool Standard 1421N

1958-79 38	33, 440 3	.078" Hub	Height, 5/8" I	Pilot	
Finish	Casting	Rotation	Flow	Style	Item
Chrome	Iron	Standard	Standard	Standard	1317NA
Chrome	Iron	Standard	SuperCool	Standard	1317NB
Stealth black	Iron	Standard	SuperCool	Standard	1317NC
As cast	Iron	Standard	SuperCool	Standard	1317N

			0000 40		
Cast PLUS+	Alum	Reverse	SuperCool	Platinum	1465NAREV
Cast I LOC	Alum	Otaridard	Oupcioooi	i latilitalli	THOUTHA

2005-08	5.7L Hemi	1	2006-10	6.1L Hemi	
As cast	Alum	Standard	Standard	Platinum	1476MC

FORD AIR PUMP ELIMINATOR KIT

1979-93 Ford Mustang w/302 or 351 engine

This kit is a direct bolt-on replacement for the air (smog) pump found on 1979-93 Ford Mustangs with a 302 or 351 engine. For use with the stock serpentine belt. Kit includes an aluminum bracket, plastic idler pulley with bearing, pulley mounting bolt and special washer. May not be legal for sale or use in California on any pollution controlled motor vehicle.

Description	Item	Description	Item
Chrome	1700A	Stealth black	1700C
Polished	1700B	As cast	1700

Accessories

HIGH FLOW THERMOSTATS

Standard thermostats flow about 37 gallons of coolant per minute. With Tuff Stuff's High-Flow thermostat, that number jumps to 56 gallons per minute. That's almost a 50 percent increase in coolant flow! The increased coolant flow will reduce the delay in engine warm-up times, allows trapped air in the cooling system to escape and stabilizes the pressure of the cooling system overall. These thermostats also have a bypass valve that allows a small amount of coolant to circulate before fully opening.

Application	Temp Fahrenheit	Item
1946-1995 GM, Ford, AMC, Jeep	160°	900160
	180°	900180
	195°	900195
1953-1980 Chrysler	180°	910180

GM CHROME HOSE NIPPLES	
Description	Item
For 3/4" hose, 3" long, 1/2-14 NPT	4450A
For 3/4" hose, 1.5" long, 1/2-14 NPT	4450B
For 5/8" hose, 1.5" long, 1/2-14 NPT	4450C
3/4-14 NPT plug	4450D

WATER PUMP SHIMS

Helps with belt alignment issues. For use on 1449 and 1461 water pumps. 1/16" thick, two shims per kit.

Description	Item
Water pump shims	7620

SB CHEVY WATER PUMP EXTENSIONS

Changes a Chevy small block short pump such as a 1354 to the same height as a 1449 long pump hub height - from 5.625" to 6.937". Kit includes 2 extensions and 2 gaskets.

Finish	<i>Item</i>
Chrome plated	2254A
Polished aluminum	2254B
Plain aluminum	2254C

CHEVY WATER PUMP BOLT KITS

Available in chrome plated or zinc finishes with hex or socket heads.

Small block w/short water pump, 1354, 1534 & 1635 series Kit includes one 3/8"-16 x 1-3/4", two 3/8"-16 x 2".

one 3/8"-16 x 2-3/4" bolts, 4 lock and 4 flat washers.

 Chrome Hex
 Zinc Hex
 Chrome Socket
 Zinc Socket

 7675A
 7675B
 7675C
 7675D

Small block w/short water pump, 1394 series Kit includes two 3/8"-16 x 1-3/4", one 3/8"-16 x 2", one 3/8"-16 x 2-1/2" bolts, 4 lock and 4 flat washers.

 Chrome Hex
 Zinc Hex
 Chrome Socket
 Zinc Socket

 7677A
 7677B
 7677C
 7677D

Small & big block w/long water pump, 1449, 1461 & 1511 series Kit includes four 3/8"-16 x 2-1/4" bolts, 4 lock and 4 flat washers.

Chrome HexZinc HeadChrome SocketZinc Socket7678A7678B7678C7678D

Big block w/short water pump, 1484 & 1494 series

Kit includes four 3/8"-16 x 2" bolts, 4 lock and 4 flat washers.

Chrome HexZinc HexChrome SocketZinc Socket7676A7676B7676C7676D

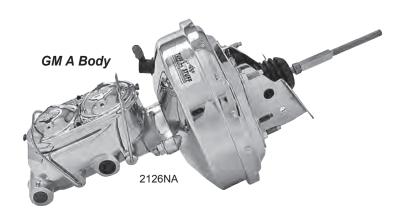






Booster w/Master Cylinder





GM A & F Body
2127NB



See page 43 for booster and master cylinder dimensions

Specific fit applications available in beautiful chrome plated, gold zinc or black powder coated finishes. 1" and 1-1/8" master cylinder bores work with disc/disc, disc/drum and drum/drum brake set-ups. Single and dual diaphragm styles available in 7", 8", 9" and 11" diameters to fit virtually all hot rods, customs and muscle cars. 100% all new components - and every unit is vacuum tested to insure reliability. Works with many stock mounting bracket set-ups and with Tuff Stuff bracket kits on page 36.

GM A BODY 1964 - 66

2126

9" Single Diaphragm Booster Combo, 3/8"-16 studs
7-1/8" long pedal rod, 1-1/2" vertical mount hole spacing
Master Cylinder Bore Chrome Gold Zinc
2071 Dual reservoir 1-1/8" 2126NA 2126NB
2020 Dual reservoir 1" 2126NA-1 2126NB-1
2018 Dual reservoir 1" 2126NA-2 2126NB-2

GM A & F BODY 1966 - 72 2127

11" Single Diaphragm Booster Combo, 3/8"-16 studs

Master Cylinder Bore Chrome Gold Zinc

2072 Dual reservoir 1-1/8" 2127NA 2127NB

2021 Dual reservoir 1" 2127NA-1 2127NB-1

2019 Dual reservoir 1" 2127NA-2 2127NB-2

CHEVY II NOVA 1962 - 67 2133

9" Single Diaphragm Booster Combo, three 3/8"-16 mounting studs

 Master Cylinder
 Bore
 Chrome
 Gold Zinc

 2071 Dual reservoir
 1-1/8" 2133NA 2133NB
 2133NB

 2020 Dual reservoir
 1" 2133NA-1 2133NB-1
 2133NB-1

 2018 Dual reservoir
 1" 2133NA-2 2133NB-2
 2133NB-2

GM TRUCK 1973 - 92

4132

11" Dual Diaphragm Combo, 10x1.5 metric studs, 3/8" -16 pedal rod threads

 Master Cylinder
 Bore
 Chrome
 Stealth Black

 2071 Dual reservoir
 1"-1/8" 2132NA
 2132NB

 2020 Dual reservoir
 1" 2132NA-1
 2132NB-1

 2018 Dual reservoir
 1" 2132NA-2
 2132NB-2



CORVETTE 1963 - 67 2130

9" Single Diaphragm Booster Combo, 3/8"-16 studs			
Master Cylinder	Bore	Chrome	Gold Zinc
2071 Dual reservoir*	1-1/8"	2130NA	2130NB
2020 Dual reservoir	1"	2130NA-1	2130NB-1
2018 Dual reservoir	1"	2130NA-2	2130NB-2

*With four wheel disc brakes

CORVETTE 1968 - 82 2129

9" Dual Diaphragm E	Booster (Combo, 10x1	.5 metric studs
Master Cylinder	Bore	Chrome	Gold Zinc
2071 Dual reservoir	1-1/8"	2129NA	2129NB
2020 Dual reservoir	1"	2129NA-1	2129NB-1
2018 Dual reservoir	1"	2129NA-2	2129NB-2
With four wheel disc b	rakes, 3/	8-24 pedal ro	d threads

FORD MUSTANG 1967 - 70 2125

9" Single Diaphragm	Booster	Combo, 3/8"-	-16 studs
Master Cylinder	Bore	Chrome	Gold Zinc
2071 Dual reservoir	1-1/8"	2125NA	2125NB
2020 Dual reservoir	1"	2125NA-1	2125NB-1
2018 Dual reservoir	1"	2125NA-2	2125NB-2
2017 Dual reservoir	1"	2125NA-3	2125NB-3

5 Mounting studs - one is offset

JEEP CJ 1974 - 86

9" Single Slim Line Diaphragm Booster Combo			
Master Cylinder	Bore	Chrome	Gold Zinc
2071 Dual reservoir	1-1/8"	2131NAJ	2131NBJ
2020 Dual reservoir	1"	2131NAJ-1	2131NBJ-1
2018 Dual reservoir	1"	2131NAJ-2	2131NBJ-2
Includes mounting bra	icket		

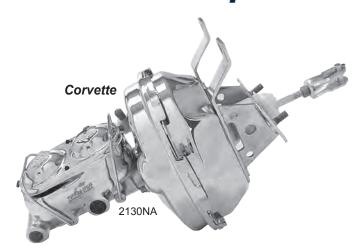
2131



TECH TIP

A vacuum operated power brake booster requires at least 18" of vacuum to work properly. Big cam engines may not make enough vacuum to safely operate a vacuum power booster and could require a vacuum assist pump for safety.

100% New Components







Every power brake booster unit is hand assembled and tested to assure quality and long life dependability.

Booster w/Master Cylinder





Universal fit applications available in beautiful chrome plated or gold zinc finishes. 1" and 1-1/8" master cylinder bores work with disc/disc, disc/drum, and drum/drum brake set-ups. Single and dual diaphragm styles available in 7", 8", 9" and 11" diameters fit virtually all hot rods, customs and muscle cars. 100% all new components - and every unit is vacuum tested to insure reliability. Includes 3/8"-16 mounting studs and nuts. Works with many stock mounting bracket set-ups and with Tuff Stuff bracket kits on page 36.



7" UNIVERSAL BOOSTER COMBO

		Single Diap	ohragm	Dual Diaph	ragm
Master Cylinder	Bore	Chrome	Gold Zinc	Chrome	Gold Zinc
2071 Dual reservoir	1-1/8"	2121NA	2121NB	2122NA	2122NB
2020 Dual reservoir	1"	2121NA-1	2121NB-1	2122NA-1	2122NB-1
2018 Dual reservoir	1"	2121NA-2	2121NB-2	2122NA-2	2122NB-2



		Dual Diaph	ıragm
Master Cylinder	Bore	Chrome	Gold Zinc
2071 Dual reservoir	1-1/8"	2123NA	2123NB
2020 Dual reservoir	1"	2123NA-1	2123NB-1
2018 Dual reservoir	1"	2123NA-2	2123NB-2
2150 Single reservoir	1"	2123NA-4	



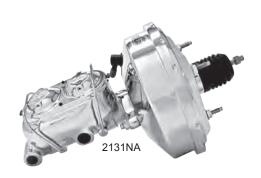
9" UNIVERSAL BOOSTER COMBO

		Single Slim	i Diaphragm	Dual Diaph	ragm
Master Cylinder	Bore	Chrome	Gold Zinc	Chrome	Gold Zinc
2071 Dual reservoir	1-1/8"	2131NA	2131NB	2124NA	2124NB
2020 Dual reservoir	1"	2131NA-1	2131NB-1	2124NA-1	2124NB-1
2018 Dual reservoir	1"	2131NA-2	2131NB-2	2124NA-2	2124NB-2

11" UNIVERSAL BOOSTER COMBO

		Single Diap	ohragm
Master Cylinder	Bore	Chrome	Gold Zinc
2072 Dual reservoir	1-1/8"	2128NA	2128NB
2021 Dual reservoir	1"	2128NA-1	2128NB-1
2019 Dual reservoir	1"	2128NA-2	2128NB-2

See page 43 for booster and master cylinder dimensions







Power Brake Boosters

Available in chrome plated, gold zinc and a variety of colors. Single and dual diaphragm styles available in 7", 8", 9" and 11" diameters fit virtually all hot rods and customs. Includes 3/8"-16 mounting studs & nuts where applicable. Works with many stock mounting brackets and with Tuff Stuff bracket kits on page 36. Most booster rods have a 3/8"-24 fine thread.

7" & 8" UNIVERSAL

		ш	
Finish	7" Single	7" Dual	8" Dual
Chrome	2221NA	2222NA	2223NA
Black chrome	2221NA7	2222NA7	2223NA7 ≺NEW
Gold zinc	2221NB	2222NB	2223NB
Stealth black	2221NC	2222NC	2223NC
Yellow		2222NCYELLOW	2223NCYELLOW
Orange		2222NCORANGE	2223NCORANGE
Red		2222NCRED	2223NCRED
Blue		2222NCBLUE	2223NCBLUE

9" UNIVERSAL

Finish	Single	Slim Line	Dual	Dual
Chrome	2226NA	2231NA	2224NA	2229NA
Gold zinc	2226NB	2231NB	2224NB	2229NB
Stealth black			2224NC	2229NC
Yellow	2226NBY	ELLOW	2224NCYEL	LOW
Orange	2226NBO	RANGE	2224NCORA	ANGE
Red	2226NBR	ED	2224NCRED)
Blue	2226NBBI	LUE	2224NCBLU	E

11" UNIVERSAL

	<i>1</i> L		
Finish	Single	Single w/studs	
Chrome	2227NA	2228NA	
Gold zinc	2227NB	2228NB	
Stealth black	2227NC	≺NEW	
Yellow	2227NBYEL	LOW	
Orange	2227NBOR	ANGE	
Red	2227NBRED)	
Blue	2227NBBLU	ΙE	
2227N includes booster mounting bracket			

9" CORVETTE 1963 - 67

Finish	Single	
Chrome	2230NA	
Gold zinc	2230NB	
Includes booster mounting bracket		

9" CHEVY II NOVA 1962 - 67

Finish	Single	
Chrome	2233NA	
Gold zinc	2233NB	

9" MUSTANG 1967 - 70

Finish	Single
Chrome	2225NA
Gold zinc	2225NB

Use with 2017 master cylinder, includes mounting bracket

9" JEEP CJ 1974 - 86

Finish	Single Slim	
Chrome	2231NAJ	
Gold zinc	2231NBJ	
Includes booster mounting bracket		

11" GM TRUCK 1973 - 93

	4 1010	00
Finish	Dual	
Chrome	2232NA	
Stealth black	2232NB	
Includes booster mo	unting brac	cket

100% New Parts





2223NCBLUE























Master Cylinders







TECH TIP

1" Bore recommended for disc/drum and drum/drum brake set-ups. 1-1/8" Bore recommended for most disc/disc brake set-ups. See TuffStuffPerformance.com for master cylinder dimensions.

















UNIVERSAL DUAL RESERVOIR

Stock style cast iron master cylinders fit virtually all hot rods, customs & muscle cars. Available in a variety of finishes including chrome plated, powder coated or as cast. 100% new components - not remanufactured. 3-3/8" mounting hole spacing.

1" bore, 9/16" rear & 1/2" front driver side ports

Finish	Shallow	Deep
Chrome	2018NA	2019NA
Black chrome	2018NA7	2019NA7 ≺ NEW
Stealth black	2018NC	2019NC
As cast	2018NB	2019NB

1-1/8" bore, 9/16" rear & 1/2" front driver side ports

Chrome	2071NA	2072NA
Black chrome	2071NA7	2072NA7 < NEW
Stealth black	2071NC	2072NC
Yellow	2071NCYELLOW	
Orange	2071NCORANGE	
Red	2071NCRED	
Blue	2071NCBLUE	
As cast	2071NB	2072NB

HEAVY DUTY CORVETTE

1" bore, two 3/8"-24 inverted flare ports on both sides 3-3/8" mounting hole spacing

3-3/6 mounting note spacing				
Finish	Shallow	Deep		
Chrome	2020NA	2021NA		
Black chrome	2020NA7	2021NA7	≺NEW	
Stealth black	2020NC			
Yellow	2020NCYELLOW			
Orongo	2020NICODANICE			

Orange 2020NCORANGE Red **2020NCRED** Blue 2020NCBLUE As cast 2020NB

2021NB

GM 1955 - 64

Single reservoir for drum/drum brakes, fruit jar style 1" bore, two 7/16"-24 ports 3-3/8" mounting hole spacing Chrome 2150NA As cast 2150NB

MUSTANG 1967 - 74

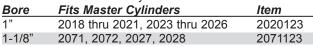
1" bore, 3/8"-24 rear & 1/2"-20 front ports

3-1/8" mounting hole spacing 2017NA Chrome

Yellow 2017NBYELLOW Red **2017NBRED** Blue 2017NBBLUE As cast 2017NB



rebuild Tuff Stuff master cylinders





Master Cylinders

SMOOTHIE MASTER CYLINDERS

Aluminum Smoothie master cylinders fit virtually all hot rods, customs & muscle cars. Beautiful chrome plated or polished aluminum finish. Dual reservoir with 3-3/8" mounting bolt spacing. 100% New components – not remanufactured.

1" bore, 9/16" rear & 1/2" front driver side ports

Finish	Shallow hole	Deep hole
Chrome	2023NC	2024NC
Black chrome	2023NC7	2024NC7 ∢ NEW
Polished	2023NA	2024NA

1" bore, two 3/8"-24 inverted flare ports on both sides

Chrome	2025NC	2026NC
Black chrome	2025NC7	2026NC7 < NEW
Polished	2025NA	2026NA

1-1/8" bore, 9/16" rear & 1/2" front driver side ports

Chrome	2027NC	2028NC
Black chrome	2027NC7	2028NC7 ≪NEW
Polished	2027NA	2028NA

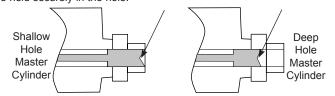
100% New Components



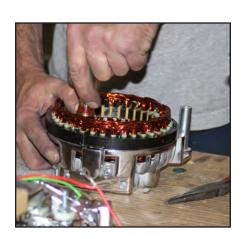


TECH TIP

A **shallow hole** master cylinder, usually used with a power brake booster, refers to the piston end being nearly flush with the back end of the master cylinder. A **deep hole** master cylinder, usually used on non-power manual brake systems, has a recessed piston end allowing the brake pedal rod to be held securely in the hole.



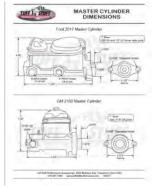
All polishing, chrome plating and powder coating are done in house by Matt Hurst and crew in Cleveland, Ohio, along with assembly and Tuff Testing of every unit!







PRODUCT INFORMATION



Tuff Stuff has a complete listing of product instructions, product dimensions, Year/Make/Model lookup, new product information and technical videos on the web

Instructions

Videos

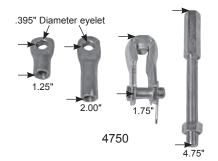
Flvers



www.Tuffstuffperformance.com

Booster Brackets





BOOSTER EXTENSION ROD & CLEVIS KIT

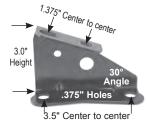
Universal kit adapts most factory brake setups to Tuff Stuff boosters. Rod length is 4.75" and has 3/8"-24 fine threads.

Finish Item Plain finish 4750



GM 1967-72 BRAKE BOOSTER BRACKETS

1967-72 GM booster combos 2121, 2122, 2123 & 2124 1967-72 GM boosters 2221, 2222 & 2223, 2228, 2229, 2231 Available in chrome, black chrome, gold zinc and colors. Made from heavy gauge steel. Includes left and right brackets



Finish	Item
Chrome	4650A
Black chrome	4650A7 ≺NEW
Gold zinc	4650B
Stealth black	4650C
Yellow	4650BYELLOW
Orange	4650BORANGE
Red	4650BRED
Blue	4650BBLUE





GM 1955-64 BRAKE BOOSTER BRACKETS

1955-64 GM booster combos 2121, 2122 & 2123 1955-64 GM power brake boosters 2221, 2222 &2223

Available in chrome, black chrome, gold zinc and colors Made from heavy gauge steel, includes left and right brackets



Finish	Item
Chrome	4651A
Black chrome	4651A7 ≺NEW
Gold zinc	4651B
Stealth black	4651C
Yellow	4651BYELLOW
Orange	4651BORANGE
Red	4651BRED
Blue	4651BBLUE



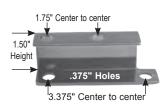
GM 1955-58 BRAKE BOOSTER BRACKETS

1955-58 GM booster combos 2121, 2122 & 2123

1955-58 GM power brake boosters 2221, 2222 & 2223 Available in chrome, black chrome, gold zinc and colors

Available in chrome, black chrome, gold zinc and colors

Made from heavy gauge steel, includes left and right brackets



includes left and i	igiii biackets
Finish	Item
Chrome	4652A
Black chrome	4652A7 ≺NEW
Gold zinc	4652B
Stealth black	4652C
Yellow	4652BYELLOW
Orange	4652BORANGE
Red	4652BRED
Blue	4652BBLUE

Product dimensions and specifications available at TuffStuffPerformance.com

Booster Brackets

GM TRUCK 1960-72 BRAKE BOOSTER BRACKETS

1960-72 GM truck booster combos 2122, 2123, 2124 & 2128 1960-72 GM truck power brake boosters 2222, 2223, 2224 & 2228 Works with 2 hole OEM bracket setups from late 1960 through 72

Includes pedal rod

FinishItemChrome4653AStealth black4653B

FORD MUSTANG BRAKE BOOSTER BRACKETS

1964 - 1966 Ford Mustang Includes pedal rod assembly

FinishItemChrome4655AStealth black4655B

JEEP CJ 1974-86 BRAKE BOOSTER BRACKETS

1974-86 Jeep CJ booster combo 2131

1974-86 Jeep CJ power brake booster 2231

Includes pedal rod assembly Finish Item
Chrome 4656A
Stealth black 4656B

PROPORTIONING VALVE KITS

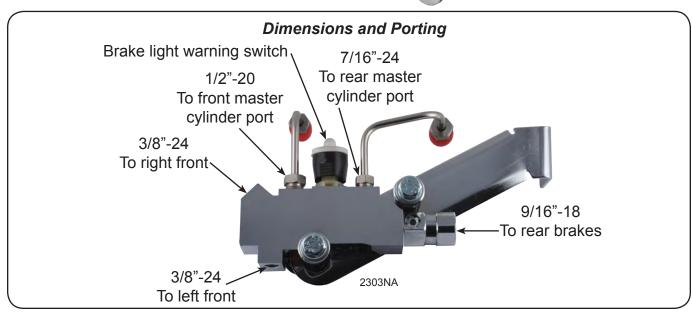
Includes OE style mounting bracket, two short brake lines, proportioning valve with brake light switch, wire terminal and fasteners.

100% pressure front, 70% pressure rear.

Match your master cylinder number to the proportioning valve

Master Cylinders>	2020, 2021	2018, 2019	2027, 2028
	2025, 2026	2023, 2024	2071, 2072
Valve Ports	3/8"	1/2" & 9/16"	1/2" & 9/16"
Finish	Disc/Drum	Disc/Drum	Disc/Disc
Finish Chrome	Disc/Drum 2301NA	Disc/Drum 2302NA	Disc/Disc 2303NA





Power Steering Pumps



TYPE II POWER STEERING PUMPS w/TOP PRESSURE PORT







6175ALD-6 6175ALB-4





6169AL

- Compact size aluminum pumps are ideal for tight installations.
- Available in chrome plated, polished aluminum, black chrome, stealth black, various colors and Factory Cast PLUS+ finishes.
- 1200 PSI rating, 3 GPM. Optional 850 PSI rating 2GPM valve sold separately.
- Top facing pressure port, clockwise rotation only.
- Pumps have a 17mm (0.669") shaft except LS1 applications which have a 19mm (0.748") shaft. Overall pump height 4".
- For use with factory or remote reservoir tank depending upon part number.
- Overall pump height is 4".
- Press fit pulley installation kit included requires a press on pulley, not included.
- Perfect for street rods and custom vehicles with limited engine space.
- 100% New not remanufactured.

Direct Fit Applications	Chrome	Polished	Stealth Black	Cast PLUS +
1992-97 Corvette, Camaro, Impala, Caprice w/LT-1, stock i	replacement			6169AL ≺NEW
1998-02 Camaro & Firebird w/LS1, stock replacement	6175ALD-6	6175ALP-6	6175ALB-6	6175AL-6
M16-1.5 & GM pressure slip port, M8 x 1.25 threaded mou	nting holes			

Universal Fit Applications		NEW				NFW
Ports - Fittings	Mounting	Chrome	Polished	Stealth Black	Cast PLUS+	Black Chrome
AN-6 & AN-10	8mm through holes	6175ALD	6175ALP	6175ALB	6175AL	6175ALP77
AN-6 & AN-10	M8 x 1.25 threaded holes	6175ALD-2	6175ALP-2	6175ALB-2	6175AL-2	6175ALP-27
M16-1.50 & GM pressure slip	8mm through holes	6175ALD-7	6175ALP-7	6175ALB-7	6175AL-7	
M16-1.50 & GM pressure slip	M8 x 1.25 threaded holes	6175ALD-1	6175ALP-1	6175ALB-1	6175AL-1	
M16-1.5 & 5/8" OD return tube	8mm through holes	6175ALD-3	6175ALP-3	6175ALB-3	6175AL-3	
M16-1.5 & 5/8" OD return tube	M8 x 1.25 threaded holes	6175ALD-4	6175ALP-4	6175ALB-4	6175AL-4	
M16-1.5 & 5/8" OD 90° return	M8 x 1.25 threaded holes	6175ALD-5	6175ALP-5	6175ALB-5	6175AL-5	

Universal Fit - Colors

Ports - Fittings	Mounting	Blue	Orange	Red	Yellow
AN-6 & AN-10	8mm through holes	6175ALBLUF	6175ALORANGE	6175ALRED	6175ALYFLLOW





Reservoir shown mounted on Type II pump. Reservoir and pump are sold separately

TYPE II POWER STEERING PUMP RESERVOIR

Fits Tuff Stuff 6170 and 6175 GM pressure slip series pumps OE Style plastic reservoir includes a twist cap with a built-in dipstick, two mounting clips and an O-ring for quick, easy attachment. Return tube is 3/8" OD and mounts to the following pumps:

6170AL-1, ALB-1, ALP-1, ALD-1, AL-7, ALB-7, ALP-7, ALD-7 6175AL-1, ALB-1, ALP-1, ALD-1, AL-7, ALB-7, ALP-7, ALD-7 Type II power steering pump reservoir 6175ARES

Power Steering Pumps

TYPE II POWER STEERING PUMPS W/BOTTOM PRESSURE PORT









Same pump specifications as the Type II pumps on page 38 except that these pumps have a bottom pressure port.

Ports - Fittings	Mounting NEW	Chrome	Polished	Stealth Black	Cast PLUS+
AN-6 & AN-10	8mm through holes	6170ALD	6170ALP	6170ALB	6170AL
AN-6 & AN-10	M8 x 1.25 threaded holes	6170ALD-2	6170ALP-2	6170ALB-2	6170AL-2
M16-1.50 & GM pressure slip	8mm through holes	6170ALD-7	6170ALP-7	6170ALB-7	6170AL-7
M16-1.50 & GM pressure slip	M8 x 1.25 threaded holes	6170ALD-1	6170ALP-1	6170ALB-1	6170AL-1
M16-1.50 & 5/8" OD return tube	8mm through holes	6170ALD-3	6170ALP-3	6170ALB-3	6170AL-3
M16-1.50 & 5/8" OD return tube	M8 x 1.25 threaded holes	6170ALD-4	6170ALP-4	6170ALB-4	6170AL-4
M16-1.50 & 5/8" OD 90° return	M8 x 1.25 threaded holes	6170ALD-5	6170ALP-5	6170ALB-5	6170AL-5 <nev< td=""></nev<>

TYPE II PRESSURE VALVES AND FITTINGS

Replacement AN fittings are CNC machined from billet aluminum and includes a washer with O-ring. Fittings sold individually. Low pressure valve reduces the pressure to 850PSI for use with Mustang II style rack and pinion steering systems. Pressure valves *do not fit* LS or LT pumps and are exclusively for use with Tuff Stuff aluminum Type II pumps.

Description	ltem
Pressure fitting, AN-6 x M16-1.5 x 1.25" long	5550P
Return fitting, AN-10 x 7/8"-14	5551P
850 PSI low pressure valve	5552
1200 PSI high pressure valve	5555 ≺NEW





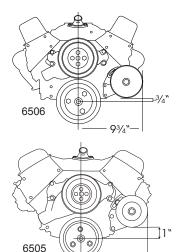


TYPE II PUMP BRACKETS

Fits all Tuff Stuff Type II power steering pumps. Eliminates the hassles of adapting stock mounting brackets. Laser cut from 1/4" plate steel. Pump not included with bracket kit.

Finish	Chevy SR Short	Chevy BB Short
Chrome	6506A	6505A
Stealth black	6506B	6505B
Yellow	6506BYELLOW	6505BYELLOW
Orange	6506BORANGE	6505BORANGE
Red	6506BRED	6505BRED
Blue	6506BBLUE	6505BBLUE





10 1/4"

FORD POWER STEERING PUMP

Fits 1990-99 Mustang, 1991-94 Explorer, 1990-97 Mercury Cougar and 1990-97 Thunderbird. OE style with reservoir. Requires a press-on pulley, not included. Three threaded hole mounts.

Finish Power Steering Pump
As cast 6168N



Power Steering Pumps



BANJO STYLE











DIRECT FIT SAGINAW STYLE POWER STEERING PUMPS

- GM Saginaw style pump features all new components including reservoir and pump assembly.
- Includes billet chrome cap, dipstick and hardware. Pressure port is 5/8"-18 SAE inverted flare.
- Specific pumps include an AN-6 adapter fitting. Press fit shafts are 3/4" OD and requires a press fit pulley.
 5/8" keyed shafts require a bolt-on pulley: pulley not included. Woodruf key for 5/8" shaft is 1/8" x 7/16".
- 3/4" press-fit pumps include a pulley installation kit. 1200 PSI rated to work with most gearbox systems.
- 850 PSI valve sold separately for Mustang II systems. Flows 1.6 to 2.1 GPM. Clockwise rotation only.

Direct Fit Applications	Shaft	Mounting	Chrome	S Black
1968-74 AMC, 1972-74 Jeep	5/8" keyed	3/8"-16	6196A	6196B
1961-66 Chevrolet V8 full size cars	5/8" keyed	3/8"-16	6190A	6190B
1961-69 Chevrolet cars and light trucks	5/8" keyed	3/8"-16	6198A	6198B
1965-74 Chevrolet Corvette big block	5/8" keyed	3/8"-16	6199A	6199B
1966-74 Chevrolet Corvette <new< td=""><td>5/8" keyed</td><td>3/8"-16</td><td>6196A</td><td>6196B</td></new<>	5/8" keyed	3/8"-16	6196A	6196B
1968 Camaro V8 & 1967-68 V8 Chevy II	5/8" keyed	3/8"-16	6197A	6197B
1969 Camaro & Nova V8	5/8" keyed	3/8"-16	6191A	6191B
1969 Camaro, Chevelle & Nova V8	5/8" keyed	3/8"-16	6195A	6195B
1969 Chevrolet V8	5/8" keyed	3/8"-16	6194A	6194B
1970 Chevrolet V8	5/8" keyed	3/8"-16	6193A	6193B
1970-74 Camaro, Chevelle, El Camino V8	5/8" keyed	3/8"-16	6183A	6183B
1970-74 Malibu, Monte Carlo V8	5/8" keyed	3/8"-16	6183A	6183B
1971-74 Vega and 1969-72 Buick	5/8" keyed	3/8"-16	6192A	6192B
1975-79 Corvette	3/4" press fit	3/8"-16	6178A	6178B
1978-79 Chevelle, El Camino	3/4" press fit	3/8"-16	6181A	6181B
1978-79 Malibu, Monte Carlo V8	3/4" press fit	3/8"-16	6181A	6181B
1978-79 Grand Prix, 305, 350 only	3/4" press fit	3/8"-16	6181A	6181B
1979 Camaro, Firebird, TransAm, all V8	3/4" press fit	3/8"-16	6181A	6181B
1980-81 Grand Prix all V8's (80-81 305, 350 only)	3/4" press fit	M10 x 1.5	6180A	6180B
1980-81 Grand Prix all V8's (80-81 305, 350 only)	3/4" press fit	3/8"-16	6182A	6182B
1980-82 Corvette	3/4" press fit	M10 x 1.5	6177A	6177B
1980-88 Chevelle, El Camino, Malibu, Monte Carlo	3/4" press fit	3/8"-16	6182A	6182B
1980-88 Chevelle, El Camino, Malibu, Monte Carlo	3/4" press fit	M10 x 1.5	6180A	6180B
1982-87 Camaro, Firebird, TransAm, all V8	3/4" press fit	M10 x 1.5	6179A	6179B
1988-92 Camaro, Firebird, TransAm, all V8	3/4" press fit	M10 x 1.5	6184A	6184B







6188





UNIVERSAL FIT SAGINAW STYLE PUMPS

Same features and benefits as the above pumps. Pumps have 5/8-18 SAE inverted flare pressure fitting and have 3/8"-16 mounting holes/studs. Pulley not included.

Pressure	1200 PSI	850 PSI	1200 PSI
Shaft	5/8" Keyed	5/8" Keyed	3/4" Press-fit
Chrome	6176A	6174A	6188A
Black chrome	6176A7 ≪NEW		
Stealth black	6176B	6174B	6188B
Yellow	6176BYELLOW		
Orange	6176BORANGE		
Red	6176BRED		
Blue	6176BBLUE		
Pump unit only, of	does not include reservoir		6188

ADAPTER FITTING FOR SAGINAW PUMPS

Adapts 5/8"-18 inverted flare to 9/16"-18 AN-6. This is the same fitting that is included in certain Saginaw style power steering pumps. Fitting sold individually.

Finish Chrome 5553A Plain 5553

Power Steering Parts

PULLEYS FOR SAGINAW POWER STEERING PUMPS

Bolt-on pulleys fit all Tuff Stuff Saginaw pumps with 5/8" keyed shaft, includes washer. Press-on pulleys fit all Tuff Stuff Saginaw pumps that require a 3/4" press fit pulley. Bolt-on pulleys are machined from aluminum, press on pulleys are steel construction. Pulleys require 3/8" wide V-belt(s).

,	Bolt-on style pulley	Press-on	style pulley	≺NEW
	5.80" Diameter, 0.625" ID	5.80" Dian	neter, 0.747" II	D
Finish	1-Groove	Finish	1-Groove	2-Groove
Chrome	8488A	Chrome	8485A	8486A
Polished	8488B	Black	8485B	8486B
Plain	8488C			





8586A 8485B

PRESSURE VALVES FOR SAGINAW PUMPS 850PSI

Low pressure valve reduces the pressure to 850PSI for use with Mustang II style rack and pinion steering systems. Exclusively for use with Tuff Stuff Saginaw pumps.

Description	Item	
850 PSI low pressure valve (replaces 850PSI VALVE)	5556	≺NEW
1200 PSI high pressure valve	5554	≺NEW



Top Quality 100% New Built in USA

POWER STEERING PUMP CANS / RESERVOIRS

Replace your damaged Saginaw style Tuff Stuff reservoir instead of replacing the complete pump.

Fits Tuff Stuff 61 pumps w/tube o			Fits Tuff Stuff 6177 & 6178 pumps w/center tube		
Finish	Item	Finish	Item		
Chrome	6501A	Chrome	6502A		
Stealth black	6501B	Stealth black	6502B		
Raw steel	6501C	Raw steel	6502C		





BILLET STYLE ALUMINUM POWER STEERING CAP & DIPSTICK

Fits all Tuff Stuff Saginaw style power steering pumps. Will not fit Type II pumps.

Finish Chrome 6500A Polished 6500B



POWER STEERING PUMP BRACKETS

Bracket kits for Saginaw style pumps are laser cut from 1/4" plate steel. Eliminates the hassle of adapting stock mounting brackets. Chrome plated or 5 powder coated colors. Fits all Tuff Stuff Saginaw pumps except 6179, 6180 & 6181. Pump not included with bracket kit.

Chevy Small Block		Chevy Big Blo	ck	
Water pump	Short	Long	Short	Long
Chrome	6504A	6508A	6503A	6507A
Stealth black	6504B	6508B	6503B	6507B
Yellow	6504BYELLOW	6508BYELLOW	6503BYELLOW	6507BYELLOW
Orange	6504BORANGE	6508BORANGE	6503BORANGE	6507BORANGE
Red	6504BRED	6508BRED	6503BRED	6507BRED
Blue	6504BBLUE	6508BBLUE	6503BBLUE	6507BBLUE
6504 Kits will NOT fit 1964-68 Chevelle, Malibu and El Camino due to steering linkage interference				

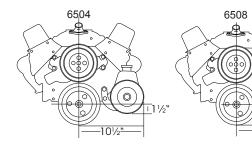
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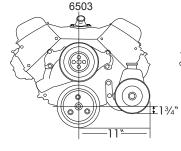


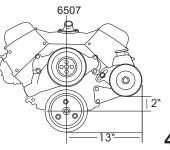


6503A

- 63







Booster Dimensions

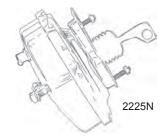














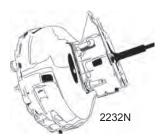












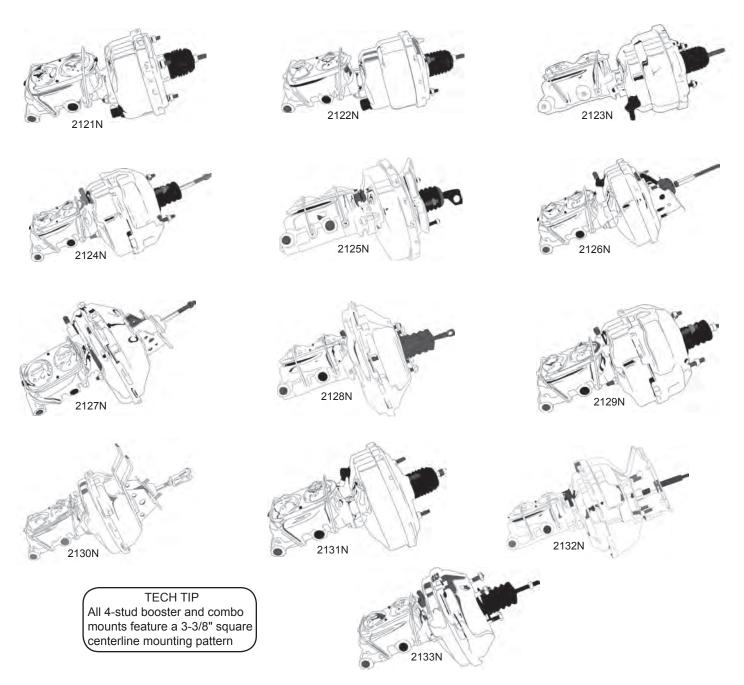


POWER BOOSTER DIMENSIONS

All boosters have a 3-3/8" square mounting footprint except 2225N, 2230N and 2233N.

			Booster	Rod		
Item	Description	Dia	Length	Length	Mounting	Details
2221N	7" Single diaphragm	7"	3.50"	4.00"	4 studs	M8-1.5 metric studs
2222N	7" Dual diaphragm	7"	5.25"	4.00"	4 studs	M8-1.5 metric studs
2223N	8" Dual diaphragm	8"	5.25"	4.00"	4 studs	M8-1.5 metric studs
2224N	9" Dual diaphragm	9"	6.00"	5.25"	4 studs	1-1/2" long studs
2225N	Ford Mustang 67-70, 9" single diaphragm	9"	3.75"	3.12"	4 studs	M6-1.0 x 1.25" offset studs
2226N	GM A & F body 64-66, 9" single diaphragm	9"	6.50"	1.50"	4 holes	1.5" past bracket
2227N	GM A & F body 66-72, 11" single, w/bracket	11"	6.50"	7.12"	4 holes	Angle booster bracket
2228N	11" Single diaphragm w/studs	11"	4.25"	4.62"	4 studs	4.62" mounting surface to center of eyelet
2229N	Corvette 68-82, 9" dual diaphragm	9"	6.00"	4.12"	4 studs	1-1/2" long studs
2230N	Corvette 63-67, 9" single diaphragm	9"	6.25"	3.12"	2 studs	With bracket
2231N	9" Single diaphragm Slim line	9"	4.00"	3.81"	4 studs	
2232N	GM Truck 73-92, 11" dual diaphragm	11"	8.50"	3.25"	4 holes	1-1/2" long studs
2233N	Chevy II Nova 62-67, 9" single diaphragm	9"	4.25"	5.25"	3 studs	

Premium Booster / Master Dimensions Quality



B00	STER / MASTER COMBO DIMENSIONS						
Univer	sal master cylinder w/power brake booster combo		MC	Booster	r Rod		
Item	Description	Dia	Length	Length	Length	Mounting	Details
2121N	7" Single diaphragm combo	7"	8.00"	3.50"	4.00"	4 studs	M8-1.5 metric studs
2122N	7" Dual diaphragm combo	7"	8.00"	5.25"	4.00"	4 studs	M8-1.5 metric studs
2123N	8" Dual diaphragm combo	8"	8.00"	5.25"	4.00"	4 studs	M8-1.5 metric studs
2124N	9" Dual diaphragm combo	9"	8.00"	6.00"	5.25"	4 studs	M10-1.5 x 1-1/2" long studs
2128N	11" Single w/studs diaphragm combo	11"	8.00"	4.25"	4.62"	4 studs	4.62" from mtg surface to center of eyelet
2131N	9" Single diaphragm Slim line w/studs combo	9"	8.00"	4.00"	3.81"	4 studs	
.							
	ted master cylinder w/power brake booster combo						
2125N	Mustang 67-70, 9" single diaphragm w/bracket combo	9"	7.50"	3.75"	3.12"	4 studs	Offset studs
2126N	GM A & F body 64-66, 9" single diaphragm w/bracket combo	9"	8.00"	6.50"	1.50"	4 holes	1.5" past bracket
2127N	GM A & F body 66-72, 11" single diaphragm w/bracket combo	11"	8.00"	6.50"	7.12"	4 holes	Angle booster bracket
2129N	Corvette 68-82, 9" dual diaphragm	9"	8.00"	6.00"	4.12"	4 studs	1-1/2" long studs
2130N	Corvette 63-67, 9" single diaphragm w/bracket combo	9"	8.00"	6.25"	3.12"	bracket	With 2 studs
2132N	GM Truck 73-92, 11" dual diaphragm, 1-1/2" long studs	11"	8.00"	8.50"	3.25"	4 holes	Angled from 2.75" at top to 3.0" at bottom
2133N	Chevy II Nova 62-67, 9" single diaphragm combo	9"	8.00"	4.25"	3.25"	4 holes	

Alternator FAQ'S





If you have a technical issue or a product question, give us a call at 800-331-6562 Monday through Friday, 7:00 am to 4:00 pm.

How do I hook up a one wire alternator?

Run a wire from the battery terminal on the alternator to the positive terminal on the battery. You may also consider running the wire to the starter solenoid (main lug). Your battery cable is connected to this lug. This may hide the charge wire for a cleaner look.

When to use a one wire alternator?

One wire alternators will simplify your build up. If you are starting a project from scratch, then there is no longer a need for the messy wiring harness from an externally mounted fender wall regulator. In many instances you can remove your existing external regulator and harness and replace it with a one wire. One wire alternators can be purchased for GM, Ford and Mopar applications. Please note: If your vehicle was originally equipped with a dash indicator lamp in some GM applications it will be necessary to remove the black rubber regulator cover and plug in your existing two spade plug. This procedure can be performed when installing our models 7127, 7139 and 7140.

Is it true that one wire alternators don't charge at idle?

Tuff Stuff's 40 years of experience have enabled us to develop alternator internal components that will keep your battery charged at a crawl. No other manufacturer in the industry has been able to produce more amps at low RPM's than us. There is no need to worry about the use of underdrive pulley systems or ignition regulator turn on with the use of a Tuff Stuff one wire alternator.

Does chrome plating on a alternator retain heat?

We have tested our alternators through the most rigorous conditions and there is no proven fact that we have been able to produce, that will support this rumor.

What is the largest amp alternator I can install in my vehicle?

The sky is the limit. The more amperage the better. As long as the alternator can fit into your brackets, you can put any size alternator on your vehicle. The voltage regulator will control the amount of amperage that the battery needs to run your accessories. Please Note: It is imperative that you increase the size of your charge wire if you are upgrading to a higher amp alternator. Insufficient wire gauge size can cause fire due to heat created by resistance.

Do I need to buy a reverse rotation alternator for a serpentine system?

No. Tuff Stuff alternators are bi-directional and will work properly if installed on the left or right side of the engine or with serpentine or "V" groove pulley systems.

How do I know if my alternator is charging?

If you have access to a multi meter, (can be bought for \$10.00) turn the dial to DCV. Hold the black probe on the negative battery terminal and the red probe on the right. With the vehicle's engine running, the battery voltage should read between 13.5 and 14 volts. Battery voltage without the engine running should read 12.6 volts.

Water Pump FAQ's

I installed a new water pump in my car but it's still running hot.

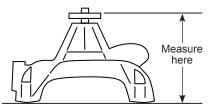
Engines that have been modified for more horsepower generally run hotter than stock engines. SuperCool water pumps are designed to provide 30% more flow. If combined with the proper thermostat and radiator, your engine's overheating can be resolved.

How do I know when I need a reverse rotation water pump?

If you are ordering a water pump by application, you will be certain that the water pump will be an exact replacement for your vehicle. In this case you need not worry about whether it is a reverse flow. If you are building an engine or upgrading from a "V" belt pulley to serpentine, you need to assess your situation. Most serpentine systems require a reverse water pump. You can determine this by how the belt travels around the water pump pulley. If the back of the serpentine belt travels around the water pump pulley you will require a reverse water pump. If the inside of the belt travels on the water pump pulley you will require a standard rotation water pump. Most pulley and bracket manufacturers can tell you what style of water pump you need for their system.

Why should I install an aluminum water pump? Some water pumps are available as aluminum rather than cast iron. Aluminum pumps are much lighter than cast iron and can be polished to a high luster without rusting.

How do you measure the height of a water pump?



Measure from the top fan hub surface to the water pump mounting surface

The industry term for measuring a water pump height is the "hub height". The hub height is a critical belt alignment dimension determining where the water pump pulley belt groove(s) fall in relation to your crank, alternator, power steering pump and air conditioning pulley grooves. The dimension from the mounting gasket surface to the outside face of the hub (where the pulley is bolted) is the hub height. It is especially helpful to know what the hub height dimension is to determine if your Chevy water pump is a long or a short style. A long or short water pump may be used on any Chevy V8 (Gen I SB - Gen II BB) engine as long as the correct pulleys are used and the belts are in alignment. In the catalog "water pump" section you will find the hub height next to each model. Never attempt to press or pull the hub to change its dimension. This may result in an unbalanced fan blade that can explode the pump causing serious injury! Waterpumps can be special ordered with a specified hub height or #7620 shims can be purchased to adjust the pulley outward in 1/16" increments.

The Custom Shop requests Tuff Stuff products by name for their project vehicles!





Starter FAQ'S



Why does my starter make a whining or grinding noise?

This could mean that your starter needs shimming. There are different methods of shimming a starter, depending on which direction the starter needs to be adjusted. If the starter to ring gear tolerance is too tight, you will need to shim the starter away from the ring gear. If the tolerance is loose, your ring gear may be worn or defective. Our industry has become familiar with brand new defective aftermarket flywheels. Don't rule this out as a possible cause. If the model #6584 or #6772 pinion is engaging in too far, the washer shim may need to be installed behind the mounting block. Refer to installation instructions (supplied with your new starter) for tolerances.

Why does the full size starter use the "R" terminal and the gear reduction does not?

The "R" terminal sends 12V to the coil when a ballast resistor is part of your ignition system. In most cases the "R" terminal connection can be discarded. The gear reduction starter motor draws half the amperage of the full size starter, therefore it's not robbing the engine's spark. You may also want to consider upgrading to a modern ignition system that does not consist of a ballast resistor.

Why won't my starter crank when it's hot?

This is common with full size starters. Excessive heat against the starter solenoid builds resistance in the coil. There are a few solutions for this problem. (1) You can install our Model #7629 hot start kit. (2) Install a heat shield on the solenoid. (3) Replace your full size starter with a gear reduction. The smaller body and variable clocking provides more clearance between the exhaust and the starter solenoid.

Why do I keep cracking noses on my full size starters?

Refer to the first paragraph in this section. (whining and grinding noise) These can all be factors. If you are not installing the starter with original equipment bolts the starter will become loose causing misalignment. Install with Tuff Stuff #7623 knurled starter bolts. Backfire while starting causes backlash which creates sudden excessive impact to the aluminum casting. If your engine is not tuned properly do not continue to crank your engine until your timing is set. The Hitachi style gear reduction starters have a solid mounting block and pinion that will withstand backfire better than the full size starter. Full size starters are not recommended for high compression engines.

Power Steering Pump FAQ'S

Is the PSI the same in all pumps?

No, at Tuff Stuff we currently carry pumps that are valved at 1200-PSI and at 850-PSI. Most applications will accept the 1200-PSI pump, with exception of the Mustang II rack, which uses an 850 PSI valve. 850 PSI valves are sold separately or you can buy a Tuff Stuff #6174A or 6174B Saginaw style pump that is factory set to 850 PSI.

How do I mount the power steering pump when the bracketry is missing from my engine?

Tuff Stuff has a wide variety of power steering pump mounting bracket kits for both the Saginaw and Type II pumps. The brackets are laser cut from ¼" steel plate and are available in either chrome plated or a variety of powder coated colors and are complete with fasteners.

What is the difference between keyed shaft power steering pumps and press on power steering pumps? Most early vehicle pumps came with a keyed pulley which was nut retained. Most late vehicles were revised to a press fit pulley. The nut retained style pulley can be easily removed and reinstalled. Once the press fit pulley is installed, it is not recommended to remove it and reinstall it because the pulley I.D. becomes stretched and it may slide off the shaft. Car builders prefer the universal keyway fit #6176A because of its flexibility.

What is the difference between a metric pump and a SAE pump? There are two differences between these pumps. The SAE pumps use a flared fitting for the pressure line and the mounting bolts are Standard American Equipment. The metric pumps use an O-ring.

Booster/Master FAQ'S

What is the difference between a single and a dual diaphragm booster?

Dual diaphragm booster provide more power assist to the brakes.

Do I need a bracket to install the brake booster to the firewall?

Your original booster may have had a bracket already attached to it. If you wish to install one of our universal boosters (#2221, #2222, #2223, #2224, #2231), then you may need to install a bracket (#4650, #4651, #4652) to most closely match your original booster setup or needs.

Will I have to do any modifications when installing a universal brake booster?

There is always a chance that you will have to make some modifications when installing a universal brake booster. Normally the pedal rod length will have to be adjusted and that is why purchasing a pedal rod extension kit (Tuff Stuff #4750) is always a wise choice.

Do I need a proportioning valve if I am converting over to power brakes?

Yes, when converting to power brakes you must use a proportioning valve (#2301, #2302, #2303). They come complete with bracket and the lines from the master cylinder to the proportioning valve.

What if my engine has a radical cam?

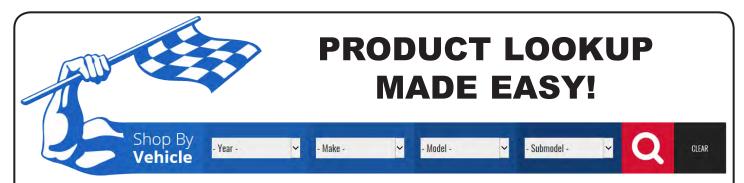
In this case you will have to check that you are producing at least 18" of vacuum. Your system may require a vacuum assist pump if your vacuum is inadequate, causing a hard pedal.

Do I need a 1" bore or a 1-1/8" bore master cylinder?

It all depends on the brakes you are running. If you are using a factory disc/disc application then you would use a 1-1/8" bore master cylinder, but if they are aftermarket calipers you would use a 1" bore master cylinder. Aftermarket calipers are bigger than original equipment and require more pressure to open. In most cases with disc/drum applications on earlier models you would use a 1" bore master cylinder. There are always exceptions when building a street rod. Tuff Stuff technicians can guide you through the process of ordering the proper brake booster and master cylinder to complete your project.

Why would I need a dual ported master cylinder?

We build our dual ported master cylinder so you can redirect your brake lines from the opposite side of the master cylinder. The ports on the other side of the master cylinder are then plugged.



With over 1,700 products that have over 1.5 million vehicle fitments, the fastest way to find what you are looking for is to enter your **YEAR**, **MAKE**, **MODEL** and **SUBMODEL** into our web site to see all the applicable Tuff Stuff products for your vehicle!

www.Tuffstuffperformance.com





T-SHIRTS

Premium quality black T-shirt features a large Tuff Stuff logo on the front and a smaller logo on the back. 100% cotton.

Size	<i>Item</i>
Large	99007
X Large	99008
XX Large	99009



BASEBALL CAPS

Available in black or white, both caps feature a black bill with the words Tuff Stuff printed around the front edge. The Tuff Stuff logo is direct embroidered on the front and the web address and phone number is embroidered on the back. Cap features cotton construction with an adjustable back strap. One size fits all

White 99003 Black 99010



DECALS

Tuff Stuff decals are four color self adhesive and stick to any clean, dry surface. Nominal size is 2-1/2" X 5".

Sold individually 99004



BANNERS

Ideal for performance and custom shops, retailers and garages. Made from heavy gauge plastic material and measure 24" X 60". Designed for indoor or outdoor usage.

Tuff Stuff Logo banner 99005

Winners use Tuff Stuff products!

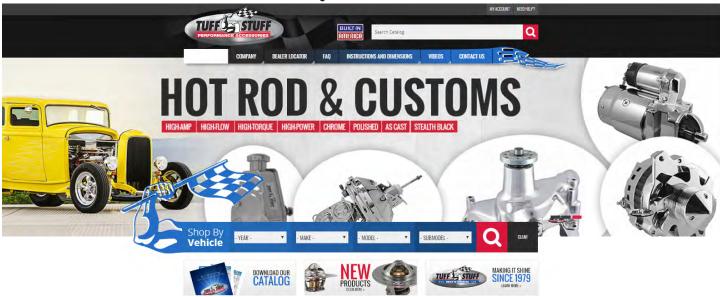


Specifically:

- · Mini 75 amp alternator
- Aluminum water pump
- Gear reduction starter
- Type II power steering pump

Brian Matthei - owner

www.tuffstuffperformance.com



Web Site Features:

- Up-to-the minute new product information
- Year/Make/Model product lookup
- Downloadable instruction sheets
- Tech information and product dimensions
- Local dealer listings
- · New product flyers and catalog
- 360° product images
- · Frequently asked questions
- · Product and factory tour videos
- Tech request submission form

Premium Quality

All Tuff Stuff products feature 100% new, NOT remanufactured components. All polishing, chrome plating and powder coating are done in house – in Cleveland, Ohio – along with assembly and Tuff Testing of every unit.

Technical Service

Tuff Stuff technical service is available Monday through Friday, 7:00 am to 4:00 pm Eastern. Whether you have a tech issue or just need a product recommendation, give us a call at 216-961-1800 or 800-331-6562.

Limited Warranty

All Tuff Stuff Performance Accessories are covered by a one year limited warranty. Complete warranty information is available on the web site.

Tuff Stuff Dealers

If you stock and sell Tuff Stuff Performance Accessories and want to be listed on the Tuff Stuff web site, call 800-331-6562 or send an email to sales@tuffstuffperformance.com with your business contact information.

Product specifications and pricing are subject to change without notice or obligation, Tradenames are used for reference only.

About Tuff Stuff Performance Accessories

Tuff Stuff Performance Accessories has been in business for nearly 40 years. Tuff Stuff products are quality built in Cleveland, Ohio using 100% new components. From chrome plated high output alternators to high torque gear reduction starters, Tuff Stuff has a complete line of under hood accessories including water pumps, power steering pumps, air conditioning compressors, master cylinders and power brake boosters for the custom and hot rod markets.

Available in chrome, black chrome, polished aluminum, powder coated or Factory Cast PLUS+ finishes, all Tuff Stuff products meet or exceed OEM specifications.

For more information visit Tuffstuffperformance.com or call 800-331-6562



Frank Hurst Sr. began building alternators and starters out of his garage in 1976. Tuff Stuff is a continuing product of the Hurst Family's hard work and dedication.



BUILT IN USA FOR YOUR HOT ROD!



SILVER BULLET ALTERNATORS
CHARGE UP TO 225 AMPS

TUFF TORQUE STARTERS CRANK UP TO 18:1 COMPRESSION ENGINES



IDEAL FOR CUSTOM AND MUSCLE CARS TOO!

SAGINAW STYLE OR TYPE II POWER STEERING PUMPS AVAILABLE IN 850 OR 1200 PSI RATINGS







SMOOTH ALUMINUM MASTER
SYLINDERS AND BRAKE BOOSTERS



SUPER COOL WATER PUMPS PROVIDE 30% MORE FLOW FOR OPTIMUM COOLING

PEANUT A/C COMPRESSORS





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Authorized Dealer

