

# BDS

39 YEARS OF SERVICE  
1969-2008



# BDS

"We deliver Horsepower!"

## GENERAL WARRANTY

Blower Drive Service Co. (BDS) strives to supply our customers with the highest quality parts and service available in the supercharger industry. BDS warrants and will repair or replace, at our option and after inspection in our facility, each new manufactured product, to the Original Purchaser (proof required), to be free from defects in material and/or workmanship for a period of 90 days from the invoice date of the product(s) purchased. "Original Purchaser" is defined as the person(s) or company name appearing in the "Bill To" section of the original BDS invoice.

The return of any item to BDS for warranty purposes must include the following:

1. Return Authorization Number, provided by the BDS Customer Service Department.
2. Letter of Explanation of the problem.
3. Copy of the Original Invoice.
4. Product(s) must be returned Freight Prepaid. In the event that the product(s) is/are found to be defective, BDS will credit the surface transportation freight charges, within the continental United States, for the return of the warranted product(s) by the customer. Credit will not be extended without a copy of the prepaid freight bill. Warranted parts will be returned by ground U.P.S. only. Upgrading to air services will be the responsibility of the purchaser and must be prepaid.

This warranty is for a specific time period only and does not apply to actual operational time or distance. It does not cover products which fail due to alteration, disassembly, accident, racing, misuse, neglect, improper installation, abuse, or when used in applications for which they were not designed or approved. BDS makes no representation as to the suitability of any product purchased for uses implied by the customer. Removal, installation, transportation, labor, loss of time, inconvenience, destruction of other components, and personal damages are not covered. Blower Drive Service Co. shall not be liable for all and/or any consequential damages occasioned by the breach of any written or implied warranty pertaining to this sale in excess of the purchase price of the product sold.

### 24 MONTH LIMITED WARRANTY

BDS warrants and will repair or replace, at our option and after inspection in our facility, each new manufactured product, that is part of a COMPLETE SUPERCHARGING KIT, to the original purchaser (as defined above), to be free from defects in material and/or workmanship for a period of 24 MONTHS from the invoice date of the kit purchased. A "COMPLETE SUPERCHARGING KIT" is defined as follows:

**Carburetor Adapter Plate, Stage 1 Supercharger, Intake Manifold, and Drive Assembly.**

Products not purchased as a COMPLETE SUPERCHARGER KIT are not covered by the 24 month limited warranty. All other warranty conditions apply as stated above.

## 20 MOST ASKED QUESTIONS ABOUT BLOWER MOTORS



Ford 460



Chevy SB

**1) Q: What cam works best with a supercharger?**

**A:** A camshaft profile that has been designed to work with a supercharger system will provide more horsepower and torque. If you have a street application, BDS recommends a hydraulic or flat tappet profile cam shaft.

**2) Q: What carbs do I need to run on my blown system?**

**A:** The size of carb(s) or CFM required for a given application can be calculated by the following formula:  $\{(CID \times RPM) \div 3456\} \times \{(Boost \div 14.7) + 1\} =$  CFM required. The amount of CFM required will determine carburetor size and quantity. If you try to use a carb with less CFM than required, performance and economy may be greatly reduced. If you try to use a carb with less CFM than required, performance and economy may be greatly reduced. Bigger is not always better when selecting carbs that are 30% over what is required, you may encounter problems in fuel distribution.

**3) Q: When do I start making boost?**

**A:** The amount of boost and the RPM at which boost starts is controlled by the throttle, blower size and drive ratio, engine size, camshaft profile, and exhaust system. All of these factors determine the breathing capability of the blown engine. Boost should only be measured at wide open throttle when you reach 6,000 R.P.M. The BDS boost charts are great tools, all the boost levels in these charts are based at 6000 R.P.M. If there is only part throttle, the blower cannot get enough air to overcome the demands of the engine. Only when the blower can get enough air will there be boost.

**4) Q: Why are my exhaust pipes red hot?**

**A:** Exhaust pipes get red hot for two basic reasons. Either the ignition timing is incorrect or the engine is overly rich. There are other causes but these are the two most common. Ignition timing is extremely critical. Blown motors love advance. Without enough initial timing advance, blown motors will run hot and the exhaust pipes will glow in the dark. Blown motors should run as little as 16 degrees or as much as 26 degrees initial advance with the total advance of about 32-36 degrees at 2800 R.P.M. to 3000 R.P.M. Specific timing requirements depend on compression, blower drive ratio, engine load, camshaft, and fuel octane.

**5) Q: Why do you recommend such low compression for supercharged applications?**

**A:** Low compression enables two things to be accomplished. One, the lower compression lets us run higher blower boost producing more torque and horsepower and two, when the engine does not have boost from the blower, the engine runs coolly and effortlessly making the engine last a long time.

**6) Q: Why does my engine run hot?**

**A:** Supercharged motors can run very high operating temperatures caused by too high compression ratio, too high blower drive ratio, improper timing, poor water flow through manifold, or an inadequate and inefficient cooling system.

**7) Q: Why does retarded timing attribute to overheating?**

**A:** Ignition timing deals with the time at which ignition occurs during the compression stroke. Retarded timing ignites the air/fuel mixture closer to maximum compression than advanced timing. Higher cylinder pressure at the point of ignition means greater temperatures during combustion, which translates into hotter running temperatures.

## 20 MOST ASKED QUESTIONS (CONTINUED)

- 8) **Q: Which is stronger, 1/2 pitch or 8mm drives?**  
**A:** The 8mm, round tooth profile is capable of transferring as much as 40% more power than the 1/2" pitch, square tooth profile. As a general rule 1/2" pitch is good up to 12-15% overdrive on most blower applications. Large blowers and high drive ratios should use the 8mm or 14mm, round tooth design.
- 9) **Q: How much space does a blower drive take in front of the engine?**  
**A:** The amount of space in front of the motor for the blower drive system depends on the width of the blower pulleys and the number of accessory vee groove pulleys needed for each application. An easy rule of thumb is to add the width of the blower pulleys to the front edge of the stock vee pulley furthest from the engine block.
- 10) **Q: When I start my car it backfires, why?**  
**A:** There are many reasons why an engine will backfire but the most common problem with blown motors is holding the throttle open while cranking the engine over. It is better to give the throttle a few pumps (2), and take your foot off the accelerator before turning the engine over and count slowly to ten. When the engine does fire and begin to run, quickly catch the throttle and raise the engine idle at about 1500-2000 R.P.M. until some heat can be built in the motor, about two minutes. Trying to engage the engine before enough heat is built usually results in an engine that spits, sputters, backfires, and/or dies.
- 11) **Q: What type of oil do I put in my blower?**  
**A:** We recommend that 80-90 weight gear oil be used in the blower front cover. If you have a BDS blower, there is a sight gauge to help determine the level of the oil, and a pressure relief valve to use to fill the front cover, otherwise it will take approximately 16-20 ounces to fill the front cover to the right level. This oil will need to be changed every two or four years depending how many times a year you use your vehicle. If you do not add oil when it is needed, it will cause the gears to get hot and eventually fail.
- 12) **Q: Should I use gapless rings?**  
**A:** Testing with gapless rings in a supercharged engine shows excellent increase in performance.
- 13) **Q: Steel or aluminum rods, which are better?**  
**A:** Both style of rods are well suited for blown applications. Steel rods are generally used in motors that must produce a long service life. Aluminum rods are generally used for engines seeking high horsepower output and not long service lives.
- 14) **Q: Can blower whine be eliminated or made louder?**  
**A:** Blower whine can be increased or decreased by tightening or loosening the blower belt tension. CAUTION! Improper belt tension can cause severe belt, blower, and engine damage. It is not recommended to adjust the belt to get the sound you want. Worn pulleys and belts as well as mis-machined pulleys can contribute to blower whine.
- 15) **Q: What kind of headers should I use?**  
**A:** Most supercharger applications require larger than stock size to facilitate better exhaust flow. Steel, or stainless steel headers may be used. Engines with 400 CID or less should have exhaust tubes at least 1 3/4" to 1 7/8" diameter and larger engines should use 2" and bigger. Forcing more air in with the blower requires more exhaust to be passed through the exhaust system.
- 16) **Q: My engine builder is determined not to use a crank hub on my blown motor, only a harmonic balancer, What do you say?**  
**A:** We do not recommend any type of cast iron balancer because they break easily. Any hi-quality heat treated after market steel harmonic balancer with two key ways (one 3/16" and the second a 1/4" key way located 180 degrees apart) will perform very well. Be sure to notify BDS at the time you order your blower kit if you will be using an after market harmonic balancer. BDS will accommodate this kit change when ordered initially. On any large cubic inch high horsepower system we recommend that you use our heat treated heavy duty 4130 chromally steel crank hubs.
- 17) **Q: My car won't idle?**  
**A:** Idling problems with blown motors is usually a result of a severe vacuum leak, improper ignition timing, or improperly adjusted carbs or fuel injection.
- 18) **Q: My plugs are black?**  
**A:** Black sooty spark plugs are the result of the motor burning too much fuel, usually at idle! This is caused by ignition timing being set incorrectly at idle. The carbs or fuel injection is not properly adjusted or set up for your engine, you'll need to correct your fuel delivery system.
- 19) **Q: With the pump gasoline available today, 91-92 octane, can I run a blower on my engine?**  
**A:** With today's low octane pump gasoline, make sure to keep your final engine compression between 12:2 and 12:4 to 1 (refer to the BDS Final Compression Ratio Chart). You may want to build an effective quench factor into your engine, because it will have a reduced requirement for octane. Quench is the distance between the top of the piston and the flat part of the combustion chamber. This design limits the detonation potential of your engine.
- 20) **Q: What type of pistons and compression should I be running on my blower?**  
**A:** In the last decade as the octane rating of gasoline decreases and the demand for more horsepower increase, there is more of a possibility for detonation. The greater the octane the more resistance the gasoline is to detonation. Forged piston made for blown systems are highly recommended. Also using 8.5 to 9.1 compression ratio and less blower boost will keep the engine cooler. When you run a lower compression engine and raise the boost levels, this elevates the temperature of the air charge to your engine, requiring you to buy higher octane gasoline to suppress detonation.

# **BDS ENGINE RECOMMENDATIONS**

The following information as compiled from over 38 years of supercharging experience on a wide variety of engines. The suggestions and recommendations below are for gasoline engines to be used on the street unless otherwise specified. The information is broad in nature and intended to be used as guidelines only.

## **Engine Blocks**

BDS suggests that the engine block be in good condition and not overbored excessively. Two bolt mains are adequate for most mild applications with boost levels up to about 7 lbs. Four bolt mains are recommended and are considered a must for high performance systems. O-ringing is recommended for engines running 12 lbs. of boost or more. When rebuilding, the block should be thoroughly checked as you would in any high performance engine build up.

## **Crankshaft**

Steel cranks are recommended whenever possible and are a requirement for high performance engines spinning high RPM's. Cast cranks are only recommended when the boost levels are below 7 lbs. and the engine is limited to 6000 RPM. When rebuilding, cranks should not be less than a 10/10 grind with both stock and 1/4" keys, and should have all the trick work as you would for any high performance engine.

## **Rods**

Most factory rods will work well for mild blower systems up to 8-10 lbs. of boost. Factory and after market steel rods with heavy duty rod bolts are recommended and required for high performance applications. After market aluminum rods are recommended for high performance racing applications. The rods should be magnafluxed for cracks, shot peened, beams polished, balanced, and bushed to size for full floating pins.

## **Pistons**

Factory cast pistons are not recommended but may be used in very low boost (3-5 lbs.) applications. Forged, low compression pistons (8:5 - 9:1) are the best choice for performance applications. Higher compression ratios are not recommended because of overheating and excessive final compression ratios (see the final Compression Ratio chart in this catalog). Pistons should use full floating pins and double spiro locks or buttons for high performance applications. For street applications, standard rings will perform well on pump gas, for high performance engines, we recommend stainless steel rings. In cases where alcohol is used, the compression ratio of the engine should be between 10-12:1.

## **Heads**

Factory heads work well in most blower applications. The heads should be in good condition or have a three angle valve job. After market heads will provide increased performance. Stainless steel valves are recommended. Head modifications (porting, polishing, etc.) are not required unless high performance is the desired result. Resurfaced or shaved heads can cause problems with the blower and manifold. The secret to horsepower is cylinder head air flow. More air flow equals more "horsepower".

## **Cams**

Choosing the proper camshaft would be the most important requirement for a blower motor. An improper cam will cause a variety of problems that can easily be avoided by following a few simple guidelines. Hydraulic cams are recommended if you intend to drive the vehicle frequently, require little or no maintenance, and the maximum engine RPM's are kept around 6500 or lower. Roller rocker arms are recommended. Flat tappet and roller cams are recommended for high performance applications especially where the engine will see high RPM's. Exact camshaft specifications vary depending on the performance level you wish to attain. BDS offers different types or stages of cam grinds specifically made for blower motors. Refer to the camshaft section in this catalog for BDS camshaft specifications and their intended uses.

## **BDS ENGINE RECOMMENDATIONS (CONTINUED)**

If you wish to purchase your cam from one of the many fine camshaft manufacturers, we suggest using our camshaft specs as a guideline. Extremely high lift and long duration cams are recommended for high RPM, high performance racing only.

The lobe center of the cam will play an important role in determining the performance characteristics of an engine. Wide lobe centers (112 to 114 degrees etc.) will create higher cylinder pressure providing more horsepower with cooler burning fuel such as alcohol and methanol. We have found 110° lobe centers to produce the best overall power on gasoline.

Whatever cam you choose, make sure that it will operate and perform properly in the RPM range required for your application.

### **Carbs and Fuel Injection**

The overall performance of the entire engine package will be determined by the fuel induction system. Carbs work very well in most applications as long as the carbs have been calibrated or blue printed by BDS or another reputable company. Refer to the carburetor section in this catalog for help in determining the correct carbs for your needs.

Mechanical fuel injection will provide greater performance and throttle response than carbs. However, these mechanical injection systems can be quite temperamental and are recommended for the experienced racing enthusiast only.

BDS Electronic Fuel Injection offers you the best of both worlds. Retaining all of the drive characteristics of a carburetor system with the performance and looks of mechanical fuel injection system. We deliver the 'Best of the Best', Performance-Looks-Economy with the driveability and ease of operation in a single package. For more information, please refer to the BDS Electronic Fuel Injection literature, also available on our web site.

### **Ignition**

The ignition system and advance curve are very important to a blower motors longevity and performance. The general rule for ignition timing in a blower motor is as follows: Initial advance at idle should be set at 16-26 degrees with the total advance of approximately 32-36 degrees, all in by 2500-3000 RPM. It is very important to verify the advance curve. Locked out magnetos or distributors are recommended for racing applications only. Improper curves may cause a variety of problems including overheating. Spark plugs should be one or two heat ranges colder than the recommended stock factory plug (never use extended tip spark plugs). This is due to the higher cylinder pressure created by supercharging. Higher cylinder pressure means more heat. Ignition management systems that can vary the timing according to engine requirements are a good idea to help keep the engine from killing itself with detonation and to keep performing at its maximum.

### **Cooling Systems**

The cooling system for a blower motor should be in good general operating condition. Inadequate air flow across the entire radiator at low speeds is one of the most common causes for overheating. Mechanical fans and shrouds are highly recommended. In a recent study of electric fans, especially anything from 18 to 20 amps with a 3000/4500 cfm capability, these fans seem to work efficiently on blower engines, but it may still require some experimenting with location to find the best operating position. A 180 degree thermostat is recommended. Water flow restrictors may also be used ,however, you will have to experiment to find the size that works best with your system. Stock factory water pumps are recommended and required in most applications. After market "High Performance" water pumps work best in the mid to upper RPM ranges and therefore may not have adequate water flow at lower RPM's to keep a blower motor cool. Three core radiators or larger are recommended for most applications. Higher performance engines will require better cooling systems because of the additional heat generated by these types of engines.

### **Exhaust Systems**

Exhaust systems are very important to the overall performance of the blower motor. The blower forces more air into the engine than it would normally take therefore the engine must be able to get rid of more air through the exhaust. Small restrictive exhausts will cause excessive back pressure, robbing the engine of power and causing additional heating problems as well as unusually high boost readings. Large free flowing exhaust and headers are recommended choices.



## **BDS ENGINE RECOMMENDATIONS (CONTINUED)**

### **Fuel Requirements**

The fuel requirements for a blower motor may vary greatly depending on the application and engine/blower specifications. Unleaded fuel is okay as long as the engine is setup for unleaded fuel. The "Final Compression Ratio" of the engine/blower combination is the determining factor in fuel octane requirements. Refer to the chart in this catalog to determine your final compression ratio (Pg. 14). As a general rule, the maximum final compression ratio should not exceed 12.4 to 1 for 92 octane fuel. Octane boosters and higher octane racing fuel will allow you to run a higher final compression ratio. Final compression ratios should not exceed approximately 24-26:1 for racing gas.

### **Marine Systems**

BDS blower kits and components are directly applicable to most marine systems. There are minor differences between the requirements for marine and non-marine applications.

Small pleasure crafts on up to offshore racing engines will benefit from the increases in torque and horsepower supplied by a blower system.

## **■ BDS STREET BLOWER BOOST CHARTS ■**

The boost levels listed in our charts are based upon an average that was determined by 38 years of experience testing superchargers. These boost readings were measured at wide open throttle and with the engine under load at 6000 RPM using a large bore blower unless otherwise specified.

There are two different 671 blowers commonly used. They are the larger diameter blower and the small diameter blower. The large bore blower (case thickness 1/2"-) is approximately 11 percent larger in volume than the small bore. The small bore blower (case thickness 3/4"+) is recommended for 370 CID engines or less for street applications. The large bore blower is recommended for 371-500 CID engines in high performance, racing applications.

The actual boost readings from your system may vary greatly from the figures shown here. Aside from the possible difference in blower diameters, there are numerous things that will determine maximum boost levels.

#### **Six most basic items that affect boost are listed below:**

1. Cubic inches of the engine - more cubic inches means less boost.
2. Cam Shaft specifications - lift, duration, and lobe center play a big part in boost levels.
3. Size of the exhaust system - a small, restrictive exhaust can cause high boost readings.
4. CFM available to the blower - carbs that are too small will keep the blower from making maximum boost.
5. Blower size and drive ratio - larger blowers and higher drive ratios can create more boost.
6. Blower efficiency - blower efficiency is determined by the materials used and the methods of assembly.

*For more specific information on blower efficiency, see the "Blowers" section of this catalog.*

# THESE CHARTS ARE FOR "BDS" STAGE 1 & 2 BLOWERS ONLY

All BDS Blower Boost Charts shown are generic in nature. Variations in motor components used, will affect the actual boost achieved!

## 471 BLOWER

Cubic Inches	-20%	-15%	-10%	-5%	1:1	+5%	+10%	+15%	+20%	+25%	+30%	+35%	+40%
231			11.5lbs	13lbs	14.5lbs	15lbs	16lbs	17lbs	18lbs				
262			9.5lbs	11lbs	12.5lbs	13lbs	14lbs	15lbs	16lbs				
289			5lbs	7lbs	8lbs	9lbs	10lbs	11lbs	13lbs				
350			3lbs	4lbs	6lbs	7lbs	8lbs	9lbs	11lbs				
400			1lbs	2lbs	4lbs	5lbs	6lbs	7lbs	9lbs				

## 671 BLOWER (SMALL BORE)

Cubic Inches	-20%	-15%	-10%	-5%	1:1	+5%	+10%	+15%	+20%	+25%	+30%	+35%	+40%
289	3lbs	5lbs	7lbs	9lbs	11lbs	13lbs	15lbs	17lbs					
327	1lbs	3lbs	5lbs	7lbs	8.5lbs	10lbs	12lbs	14lbs	15lbs	17lbs			
350		1lbs	3lbs	5lbs	7lbs	9lbs	11lbs	12lbs	14lbs	15lbs	17lbs		
400			1lbs	3lbs	4lbs	6lbs	8lbs	10lbs	12lbs	14lbs	16lbs		
427				2lbs	3lbs	5lbs	7lbs	8.5lbs	10lbs	11lbs	13lbs		
454					2lbs	4lbs	5lbs	7lbs	8lbs	9lbs	10lbs		
500						2lbs	4lbs	6lbs	7lbs	8lbs	9lbs		

## 671 BLOWER (LARGE BORE)

Cubic Inches	-20%	-15%	-10%	-5%	1:1	+5%	+10%	+15%	+20%	+25%	+30%	+35%	+40%
289	9lbs	11lbs	15lbs	17lbs	21lbs	23lbs	25lbs	27lbs					
327	7lbs	9lbs	11lbs	13lbs	15lbs	16lbs	18lbs	21lbs	24lbs				
350	5lbs	7lbs	9lbs	11lbs	12lbs	14lbs	16lbs	18lbs	20lbs	22lbs			
400	3lbs	5lbs	7lbs	8lbs	10lbs	12lbs	14lbs	16lbs	19lbs	22lbs	24lbs		
427	2lbs	4lbs	6lbs	7lbs	9lbs	11lbs	13lbs	15lbs	17lbs	19lbs	21lbs	24lbs	
454	1lbs	2lbs	4lbs	6lbs	8lbs	10lbs	12lbs	14lbs	16lbs	18lbs	20lbs	22lbs	24lbs
500			1lbs	2lbs	4lbs	6lbs	8lbs	10lbs	12lbs	14lbs	18lbs	20lbs	22lbs
550						2lbs	4lbs	6lbs	8lbs	10lbs	14lbs	16lbs	18lbs

## 871 BLOWER

Cubic Inches	-20%	-15%	-10%	-5%	1:1	+5%	+10%	+15%	+20%	+25%	+30%	+35%	+40%
289	11lbs	13lbs	15lbs	17lbs	19lbs	21lbs	24lbs	26lbs					
327	8lbs	10lbs	12lbs	14lbs	16lbs	18lbs	20lbs	22lbs	25lbs				
350	6lbs	8lbs	10lbs	12lbs	14lbs	16lbs	18lbs	20lbs	23lbs	26lbs	29lbs		
400	5lbs	7lbs	9lbs	11lbs	13lbs	15lbs	17lbs	19lbs	21lbs	23lbs	25lbs	27lbs	29lbs
427	4lbs	6lbs	8lbs	10lbs	12lbs	14lbs	16lbs	18lbs	20lbs	22lbs	24lbs	26lbs	28lbs
454	2lbs	4lbs	6lbs	8lbs	10lbs	12lbs	14lbs	16lbs	18lbs	20lbs	22lbs	24lbs	26lbs
500		2lbs	4lbs	6lbs	8lbs	10lbs	12lbs	14lbs	16lbs	18lbs	20lbs	22lbs	24lbs
550			2lbs	4lbs	6lbs	8lbs	10lbs	12lbs	14lbs	16lbs	18lbs	20lbs	22lbs



## THESE CHARTS ARE FOR "BDS" STAGE 2 BLOWERS ONLY

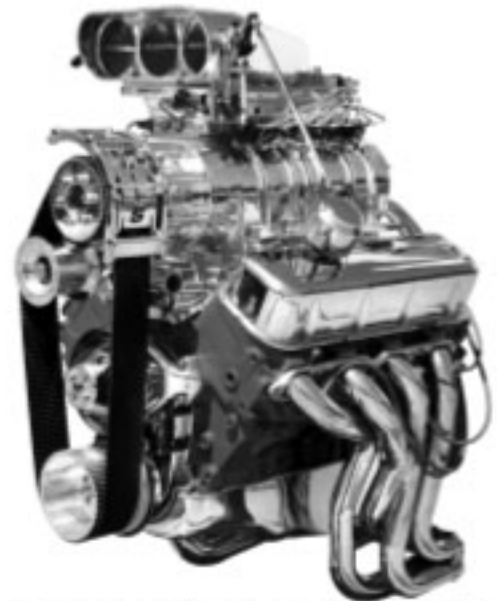
### 871 BLOWER

Cubic Inches	-20%	-15%	-10%	-5%	1:1	+5%	+10%	+15%	+20%	+25%	+30%	+35%	+40%
289	13lbs	15lbs	17lbs	19lbs	21lbs	23lbs	26lbs	28lbs	/	/	/	/	/
327	10lbs	12lbs	14lbs	16lbs	18lbs	20lbs	22lbs	24lbs	27lbs	/	/	/	/
350	8lbs	10lbs	12lbs	14lbs	16lbs	18lbs	20lbs	22lbs	25lbs	28lbs	31lbs	/	/
400	7lbs	9lbs	11lbs	13lbs	15lbs	17lbs	19lbs	21lbs	23lbs	25lbs	27lbs	29lbs	31lbs
427	6lbs	8lbs	10lbs	12lbs	14lbs	16lbs	18lbs	20lbs	22lbs	24lbs	26lbs	28lbs	30lbs
454	4lbs	6lbs	8lbs	10lbs	12lbs	14lbs	16lbs	18lbs	20lbs	22lbs	24lbs	26lbs	28lbs
500	/	4lbs	6lbs	8lbs	10lbs	12lbs	14lbs	16lbs	18lbs	20lbs	22lbs	24lbs	26lbs
550	/	/	4lbs	6lbs	8lbs	10lbs	12lbs	14lbs	16lbs	18lbs	20lbs	22lbs	24lbs

## PHOTO GALLERY PIT STOP



Blower Drive Service is at its best when it is meeting the challenges of manufacturing a new blower kit. Early testing on our Chevy small block blown (stock 4.8) LS1 engine produced 488 horsepower on the Dyno.



Chevy BB Blown Electronic Fuel Injection engine (Shown in 2007 Dell commercial)



Chevy V6, 471 with 1/2" pitch drive, 4 barrel throttle body.



871 Blower Kit for the 500 Cadillac engine

# BDS BLOWER DRIVE RATIO CHARTS

The drive ratio charts listed below show upper and lower pulley combinations and drive ratios for 1/2 pitch, 8mm, 13.9mm, and 14mm blower drive pulleys. These charts also provide information for help in determining the correct belt size to use with pulley combination for the desired drive ratios.

There are two numbers in the box at the intersection of the two pulleys chosen. The larger number represents the actual drive ratio of the pulley combination either in positive (overdrive) or negative (underdrive) figures. The smaller number represents the total tooth count of the number of teeth on each pulley added together. This total tooth count is to be used with the engine belt size chart to determine the proper belt length for your specific engine and blower pulley combination.

## DRIVE CHARTS FOR 1/2" PITCH PULLEYS

		UPPER PULLEY											
		30	31	32	33	34	35	36	37	38	39	40	41
LOWER PULLEY	30	<sup>60</sup> 1	<sup>61</sup> -3.2	<sup>62</sup> -6.2	<sup>63</sup> -9.1	<sup>64</sup> -11.7	<sup>65</sup> -14.2	<sup>66</sup> -18.9	<sup>67</sup> -20.0	<sup>68</sup> -21.0	<sup>69</sup> -23.1	<sup>70</sup> -25.0	<sup>71</sup> -26.8
	31	<sup>61</sup> +3.3	<sup>62</sup> 1	<sup>63</sup> -3.1	<sup>64</sup> -6.0	<sup>65</sup> -8.8	<sup>66</sup> -11.4	<sup>67</sup> -13.8	<sup>68</sup> -16.2	<sup>69</sup> -18.2	<sup>70</sup> -20.5	<sup>71</sup> -22.5	<sup>72</sup> -24.4
	32	<sup>62</sup> +6.6	<sup>63</sup> +3.2	<sup>64</sup> 1	<sup>65</sup> -3.0	<sup>66</sup> -5.9	<sup>67</sup> -8.6	<sup>68</sup> -11.1	<sup>69</sup> -13.5	<sup>70</sup> -15.8	<sup>71</sup> -17.9	<sup>72</sup> -20.0	<sup>73</sup> -21.9
	33	<sup>63</sup> +10.0	<sup>64</sup> +6.4	<sup>65</sup> +3.1	<sup>66</sup> 1	<sup>67</sup> -2.9	<sup>68</sup> -5.7	<sup>69</sup> -8.3	<sup>70</sup> -10.8	<sup>71</sup> -13.1	<sup>72</sup> -15.4	<sup>73</sup> -17.5	<sup>74</sup> -19.5
	34	<sup>64</sup> +13.3	<sup>65</sup> +9.6	<sup>66</sup> +6.3	<sup>67</sup> +3.0	<sup>68</sup> 1	<sup>69</sup> -2.8	<sup>70</sup> -5.5	<sup>71</sup> -8.1	<sup>72</sup> -10.5	<sup>73</sup> -12.8	<sup>74</sup> -15.0	<sup>75</sup> -17.0
	35	<sup>65</sup> +16.6	<sup>66</sup> +12.9	<sup>67</sup> +9.4	<sup>68</sup> +6.1	<sup>69</sup> +2.9	<sup>70</sup> 1	<sup>71</sup> -2.8	<sup>72</sup> -5.4	<sup>73</sup> -7.9	<sup>74</sup> -10.2	<sup>75</sup> -12.5	<sup>76</sup> -14.6
	36	<sup>66</sup> +20.0	<sup>67</sup> +16.1	<sup>68</sup> +12.5	<sup>69</sup> +9.1	<sup>70</sup> +5.9	<sup>71</sup> +2.8	<sup>72</sup> 1	<sup>73</sup> -2.7	<sup>74</sup> -5.2	<sup>75</sup> -7.7	<sup>76</sup> -10.0	<sup>77</sup> -12.2
	37	<sup>67</sup> +23.3	<sup>68</sup> +19.3	<sup>69</sup> +15.6	<sup>70</sup> +12.1	<sup>71</sup> +8.8	<sup>72</sup> +5.7	<sup>73</sup> +2.8	<sup>74</sup> 1	<sup>75</sup> -2.6	<sup>76</sup> -5.1	<sup>77</sup> -7.5	<sup>78</sup> -9.7
	38	<sup>68</sup> +26.6	<sup>69</sup> +22.6	<sup>70</sup> +18.7	<sup>71</sup> +15.2	<sup>72</sup> +11.7	<sup>73</sup> +8.5	<sup>74</sup> +5.6	<sup>75</sup> +2.7	<sup>76</sup> 1	<sup>77</sup> -2.5	<sup>78</sup> -5.0	<sup>79</sup> -7.3
	39	<sup>69</sup> +30.0	<sup>70</sup> +25.8	<sup>71</sup> +21.9	<sup>72</sup> +18.2	<sup>73</sup> +14.7	<sup>74</sup> +11.4	<sup>75</sup> +8.3	<sup>76</sup> +5.4	<sup>77</sup> +2.6	<sup>78</sup> 1	<sup>79</sup> -2.5	<sup>80</sup> -4.9
	40	<sup>70</sup> +33.3	<sup>71</sup> +29.0	<sup>72</sup> +25.0	<sup>73</sup> +21.2	<sup>74</sup> +17.6	<sup>75</sup> +14.2	<sup>76</sup> +11.1	<sup>77</sup> +8.1	<sup>78</sup> +5.3	<sup>79</sup> +2.6	<sup>80</sup> 1	<sup>81</sup> -2.4
	41	<sup>71</sup> +36.6	<sup>72</sup> +32.2	<sup>73</sup> +28.1	<sup>74</sup> +24.2	<sup>75</sup> +20.6	<sup>76</sup> +17.1	<sup>77</sup> +13.9	<sup>78</sup> +10.8	<sup>79</sup> +7.9	<sup>80</sup> +5.1	<sup>81</sup> +2.5	<sup>82</sup> 1

# 8 MM DRIVE RATIO CHART

## LOWER PULLEY

	UPPER PULLEY																											
	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
43	0	-2.0	4.5	-6.6	-8.6	-10.5	-12.3	-14.0	-15.9	-17.4	-18.9	-20.4	-21.9	-23.3	-24.6	-25.9	-	-	-	-	-	-	-	-	-	-	-	-
44	+2.3	0	-2.3	-4.4	-6.4	-8.4	-10.3	-12.0	-13.8	-15.9	-17.0	-18.6	-20.0	-21.5	-22.9	-24.2	-25.5	-	-	-	-	-	-	-	-	-	-	-
45	+4.6	+2.2	0	-2.2	-4.3	-6.3	-8.2	-9.9	-11.8	-13.5	-15.1	-16.7	-18.2	-19.7	-21.1	-22.5	-23.8	-25.0	-	-	-	-	-	-	-	-	-	-
46	+6.9	+4.5	+2.2	0	-2.1	-4.2	-6.2	-8.0	-9.9	-11.6	-13.3	-14.9	-16.4	-17.9	-19.3	-20.7	-22.1	-23.4	-24.6	-	-	-	-	-	-	-	-	-
47	+9.3	+6.8	+4.4	+2.1	0	-2.1	-4.1	-6.0	-7.9	-9.7	-11.4	-13.0	-14.6	-16.1	-17.6	-19.0	-20.4	-21.7	-23.0	-24.2	-	-	-	-	-	-	-	-
48	+11.6	+9.0	+6.6	+4.3	+2.1	0	-2.0	-4.0	-5.9	-7.7	-9.5	-11.2	-12.8	-14.3	-15.8	-17.3	-18.7	-20.0	-21.4	-22.6	-23.9	-	-	-	-	-	-	-
49	+13.9	+11.3	+8.8	+6.5	+4.2	+2.0	0	-2.0	-4.0	-5.8	-7.6	-9.3	-11.0	-12.5	-14.1	-15.6	-17.0	-18.4	-19.7	-21.0	-22.3	-23.5	-	-	-	-	-	-
50	+16.3	+13.6	+11.1	+8.7	+6.4	+4.2	+2.0	0	-2.0	-3.8	-5.7	-7.4	-9.0	-10.7	-12.3	-13.8	-15.3	-16.7	-18.0	-19.4	-20.0	-21.9	-23.1	-	-	-	-	-
51	+18.6	+15.9	+13.3	+10.9	+8.5	+6.3	+4.1	+2.0	0	-1.9	-3.8	-5.6	-7.3	-9.0	-10.5	-12.1	-13.6	-15.0	-16.4	-17.7	-19.0	-20.3	-21.5	-22.7	-	-	-	-
52	+20.9	+18.2	+15.6	+13.0	+10.6	+8.3	+6.1	+4.0	+2.0	0	-1.9	-3.7	-5.5	-7.1	-8.8	-10.3	-11.9	-13.3	-14.8	-16.1	-17.5	-18.8	-20.0	-21.2	-22.4	-	-	-
53	+23.2	+20.5	+17.8	+15.2	+12.6	+10.4	+8.2	+6.0	+3.9	+1.9	0	-1.9	-3.6	-5.4	-7.1	-8.6	-10.2	-11.7	-13.1	-14.5	-15.9	-17.2	-18.5	-19.7	-20.9	-22.1	-	-
54	+25.5	+22.7	+20.0	+17.4	+14.9	+12.5	+10.2	+8.0	+5.9	+3.8	+1.9	0	-1.8	-3.6	-5.3	-6.9	-8.5	-10.0	-11.5	-12.9	-14.3	-15.6	-16.9	-18.2	-19.4	-20.6	-21.7	-22.9
55	+27.9	+25.0	+22.2	+19.6	+17.0	+14.6	+12.2	+10.0	+7.8	+5.8	+3.8	+1.9	0	-1.8	-3.5	-5.4	-6.8	-8.3	-9.8	-11.3	-12.7	-14.1	-15.4	-16.7	-17.9	-19.1	-20.3	-21.4
56	+30.2	+27.3	+24.4	+21.7	+19.1	+16.7	+14.3	+12.0	+9.8	+7.7	+5.7	+3.7	+1.8	0	-1.8	-3.5	-5.1	-6.7	-8.2	-9.7	-11.1	-12.5	-13.8	-15.2	-16.4	-17.6	-18.6	-20.0
57	+32.5	+29.6	+26.7	+23.9	+21.3	+18.8	+16.3	+14.0	+11.8	+9.6	+7.5	+5.6	+3.6	+1.8	0	-1.7	-3.4	-5.0	-6.6	-8.1	-9.5	-10.9	-12.3	-13.6	-14.9	-16.2	-17.4	-18.6
58	+34.8	+31.9	+29.0	+26.1	+23.4	+20.8	+18.4	+16.0	+13.7	+11.5	+9.4	+7.4	+5.5	+3.6	+1.8	0	-1.7	-3.3	-4.9	-6.5	-8.0	-9.4	-10.8	-12.1	-13.4	-14.7	-15.9	-17.1
59	+37.2	+34.1	+31.3	+28.3	+25.5	+22.9	+20.4	+18.0	+15.7	+13.5	+11.3	+9.3	+7.3	+5.4	+3.5	+1.7	0	-1.7	-3.3	-4.8	-6.3	-7.8	-9.2	-10.6	-11.9	-13.2	-14.5	-15.7
60	+39.5	+36.4	+33.3	+30.4	+27.7	+25.0	+22.4	+20.0	+17.6	+15.4	+13.2	+11.1	+9.1	+7.1	+5.3	+3.4	+1.7	0	-1.6	-3.2	-4.8	-6.3	-7.7	-9.1	-10.4	-11.8	-13.0	-14.3
61	+41.8	+38.6	+35.6	+32.6	+29.8	+27.1	+24.5	+22.0	+19.6	+17.3	+15.1	+13.0	+10.9	+8.9	+7.0	+5.2	+3.4	+1.7	0	-1.6	-3.2	-4.7	-6.2	-7.6	-9.0	-10.3	-11.6	-12.9
62	+40.9	+37.8	+34.8	+31.9	+29.2	+26.5	+24.0	+21.5	+19.2	+17.0	+14.8	+12.7	+10.7	+8.8	+6.9	+5.1	+3.3	+1.6	0	-1.6	-3.1	-4.6	-6.1	-7.5	-8.8	-10.1	-11.4	-12.7
63	+40.0	+37.0	+34.0	+31.1	+28.6	+26.0	+23.5	+21.2	+18.9	+16.7	+14.5	+12.5	+10.5	+8.6	+6.8	+5.0	+3.3	+1.6	0	-1.6	-3.1	-4.5	-6.0	-7.4	-8.7	-10.0	-11.3	-12.6
64	+39.1	+36.2	+33.3	+30.4	+27.7	+25.0	+22.5	+20.1	+17.8	+15.6	+13.4	+11.4	+9.4	+7.5	+5.7	+3.9	+2.1	+0.4	-1.3	-2.9	-4.4	-5.9	-7.3	-8.6	-9.9	-11.2	-12.5	-13.8
65	+38.3	+35.4	+32.7	+30.0	+27.3	+24.5	+22.0	+19.6	+17.3	+15.1	+13.0	+10.9	+8.9	+7.0	+5.2	+3.4	+1.7	0	-1.5	-3.1	-4.6	-6.1	-7.5	-8.8	-10.1	-11.4	-12.7	-14.0
66	+37.5	+34.7	+32.0	+29.4	+26.9	+24.5	+22.2	+20.0	+17.9	+15.8	+13.6	+11.5	+9.5	+7.6	+5.8	+4.0	+2.2	+0.5	-1.2	-2.8	-4.3	-5.8	-7.2	-8.5	-9.8	-11.1	-12.4	-13.7
67	+36.7	+34.0	+31.4	+28.8	+26.4	+24.1	+21.8	+19.6	+17.5	+15.5	+13.4	+11.3	+9.3	+7.4	+5.6	+3.8	+2.0	+0.3	-1.4	-3.0	-4.5	-6.0	-7.4	-8.7	-10.0	-11.3	-12.6	-13.9
68	+36.0	+33.3	+30.8	+28.3	+25.9	+23.6	+21.4	+19.3	+17.2	+15.3	+13.3	+11.2	+9.2	+7.3	+5.5	+3.7	+1.9	+0.2	-1.5	-3.1	-4.6	-6.1	-7.5	-8.8	-10.1	-11.4	-12.7	-14.0
69	+35.3	+32.7	+30.2	+27.8	+25.5	+23.2	+21.0	+18.9	+16.9	+15.0	+13.1	+11.1	+9.1	+7.2	+5.4	+3.6	+1.8	+0.1	-1.6	-3.2	-4.7	-6.2	-7.6	-9.0	-10.3	-11.6	-12.9	-14.2
70	+34.6	+32.1	+29.6	+27.1	+24.8	+22.5	+20.3	+18.2	+16.2	+14.3	+12.4	+10.5	+8.5	+6.6	+4.8	+3.0	+1.2	-0.5	-2.1	-3.7	-5.2	-6.7	-8.1	-9.4	-10.7	-12.0	-13.3	-14.6

# DRIVE RATIO CHARTS

## 13.9mm & 14m Pulleys

	25	26	27	28	29	30	31	32	33	34	35	36	37
<b>25</b>	1	-3.9	-7.5	-10.8	-13.8	-16.7	-19.4	-21.4	-24.3	-26.5	-28.6	-30.6	-32.5
<b>26</b>	+4.0	1	-3.8	-7.2	-10.4	-13.4	-16.2	-18.8	-21.3	-23.6	-25.8	-27.8	-29.8
<b>27</b>	+8.30	+3.8	1	-3.6	-6.9	-10.0	-13.0	-15.7	-18.2	-20.6	-22.9	-25.0	-27.1
<b>28</b>	+12.0	+7.7	+3.7	1	-3.6	-6.7	-9.7	-12.5	-15.2	-17.7	-20.0	-22.3	-24.4
<b>29</b>	+16.0	+11.5	+7.4	+3.6	1	-3.4	-6.5	-9.4	-12.2	-14.8	-17.2	-19.5	-21.7
<b>30</b>	+20.0	+15.4	+11.1	+7.1	+3.4	1	-3.3	-6.3	-9.1	-11.8	-14.3	-16.7	-19.0
<b>31</b>	+24.0	+19.2	+14.8	+10.7	+6.9	+3.3	1	-3.2	-6.1	-8.9	-11.5	-13.9	-16.3
<b>32</b>	+28.0	+23.1	+18.5	+14.3	+10.3	+6.7	+3.2	1	-3.1	-5.9	-8.6	-11.2	-13.6
<b>33</b>	+32.0	+26.9	+22.2	+17.9	+13.8	+10.0	+6.5	+3.1	1	-3.0	-5.8	-8.4	-10.9
<b>34</b>	+36.0	+30.8	+25.9	+21.4	+17.2	+13.3	+9.7	+6.3	+3.0	1	-2.9	-5.6	-8.2
<b>35</b>	+40.0	+34.6	+29.6	+25.0	+20.7	+16.7	+12.9	+9.4	+6.7	+2.9	1	-2.8	-5.5
<b>36</b>	+44.0	+38.5	+33.3	+28.6	+24.1	+20.0	+16.1	+12.5	+9.1	+5.9	+2.9	1	-2.8
<b>37</b>	+48.0	+42.3	+37.0	+32.1	+27.6	+23.3	+19.4	+15.6	+12.1	+8.8	+5.7	+2.8	1
<b>38</b>	+52.0	+46.2	+40.7	+35.7	+31.0	+26.7	+22.6	+18.8	+15.2	+11.8	+8.6	+5.6	+2.7
<b>39</b>	+56.0	+50.0	+44.4	+39.3	+34.5	+30.0	+25.8	+21.9	+18.2	+14.7	+11.4	+8.3	+5.4
<b>40</b>	+60.0	+53.8	+48.1	+42.9	+37.9	+33.3	+29.0	+25.0	+21.2	+17.6	+14.3	+11.1	+8.1
<b>41</b>	+64.0	+57.7	+51.9	+46.4	+41.4	+36.7	+32.3	+28.1	+24.2	+20.6	+17.1	+13.9	+10.8
<b>42</b>	+68.0	+61.5	+55.6	+50.0	+44.8	+40.0	+35.5	+31.3	+27.3	+23.5	+20.0	+16.7	+13.5
<b>43</b>	+72.0	+65.4	+59.3	+53.6	+48.3	+43.3	+38.7	+34.4	+30.3	+26.5	+22.9	+19.4	+16.2
<b>44</b>	+76.0	+69.2	+63.0	+57.1	+51.7	+46.7	+41.9	+37.5	+33.3	+29.4	+25.7	+22.2	+18.9
<b>45</b>	+80.0	+73.1	+66.7	+60.7	+55.2	+50.0	+45.2	+40.6	+36.4	+32.4	+28.6	+25.0	+21.6

# FINAL COMPRESSION RATIO CHART

This chart shows the final compression ratio by combining the static compression ratio of an engine and the maximum blower boost from the blower system. It is to be used as a guideline in determining the proper maximum boost level for a specific application. Final compression ratios in excess of 12.4:1 are not recommended for use with "pump gas". The higher the final compression ratio, the higher the octane rating of the fuel must be in order to help prevent detonation and serious engine damage.

The formula for calculating your exact final compression ratio is as follows:

$$\text{Final Compression Ratio (FCR)} = [ (\text{Boost} \div 14.7) + 1 ] \times \text{CR}$$

Boost = Maximum blower boost  
 14.7 = psi at sea level  
 CR = engine compression ratio

Altitude plays an important role in determining compression ratios. If the altitude in the area where you normally drive is significantly higher than sea level, then your compression ratios will also vary. To determine the effects of the altitude on a calculated compression ratio, use the following formula:

$$\text{Corrected Compression Ratio} = \text{FCR} - [ (\text{altitude} / 1000) \times 0.2 ]$$

## FINAL COMPRESSION RATIO CHART

### BLOWER BOOST

COMP RATIO	2	4	6	8	10	12	14	16	18	20	22	24
6.5	7.4	8.3	9.2	10	10.9	11.8	12.7	13.6	14.5	15.3	16.2	17.0
7	8	8.9	9.9	10.8	11.8	12.7	13.6	14.5	15.3	16.2	17.0	17.9
7.5	8.5	9.5	10.6	11.6	12.6	13.6	14.6	15.7	16.7	17.8	18.6	19.5
8	9.1	10.2	11.3	12.4	13.4	14.5	15.6	16.7	17.8	18.9	19.8	20.9
8.5	9.7	10.8	12	13.1	14.3	15.4	16.6	17.8	18.9	19.8	20.9	21.9
9	10.2	11.4	12.7	13.9	15.1	16.3	17.6	18.8	20.0	21.2	22.4	23.6
9.5	10.8	12.1	13.4	14.7	16	17.3	18.5	19.8	21.1	22.4	23.6	24.8
10	11.4	12.7	14.1	15.4	16.8	18.2	19.5	20.9	22.2	23.6	24.8	26.0
10.5	11.9	13.4	14.8	16.2	17.6	19.1	20.5	21.9	23.4	24.8	26.2	27.6
11	12.5	14.0	15.5	17.0	18.5	20.0	21.5	22.9	24.5	26.0	27.5	28.9

 Pump Gas

 Good Gas

# BDS ENGINE BELT SIZE CHART

This chart will enable you to correctly determine the belt length required for a specific engine and pulley combination utilizing standard BDS blower systems. These charts may not be accurate for custom blower systems and systems not manufactured by BDS. To find the belt you need for your application, you must have four items of information:

- 1) Make and model of engine.
- 2) Style of pulleys (1/2 pitch, 8mm, etc.)
- 3) Total tooth count of both pulleys.
- 4) Center to center distance between upper and lower blower pulley.

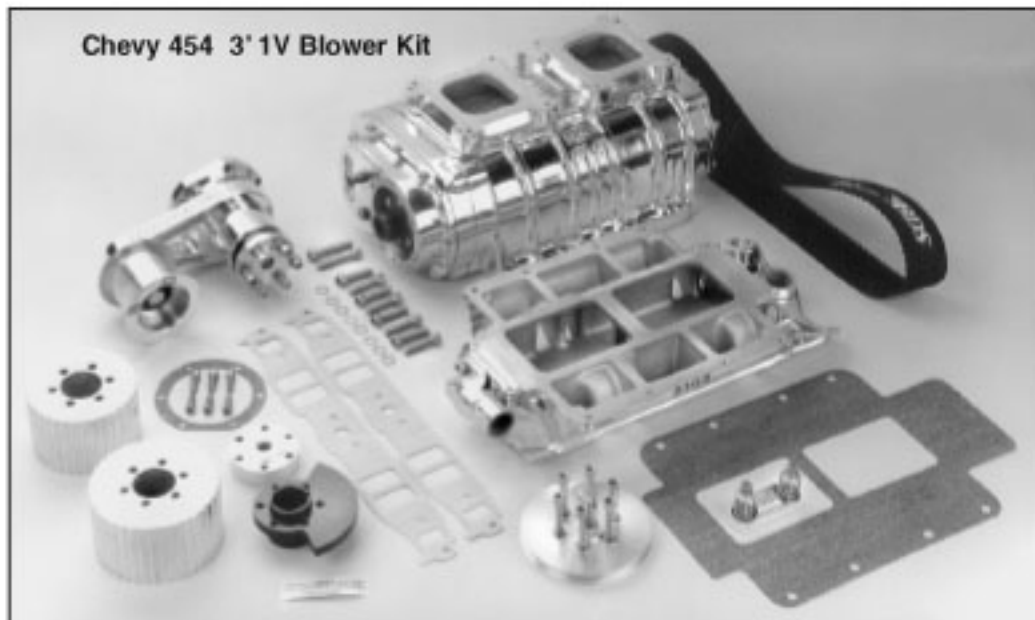
If you do not have a complete standard BDS blower system, you will need to measure the center to center distance from the drive snout on the blower to the crankshaft of the engine. Look at the belt chart to find a measurement that comes closest to your measurement. If you cannot decide which belt will work for your application, we suggest calling the BDS customer service department.

**Locate your engine and belt style in the chart below. This chart will give a total teeth range for a specific belt length.**

ENGINE	CENTER TO CENTER	1/2 PITCH	8MM	13.9 / 14 MM
AMC (all)	19.00"	61-68 TEETH = 555H300	112-117 TEETH = 14408M75	SPECIAL ORDER
BUICK V6	19.00"	61-68 TEETH = 555H300	112-117 TEETH = 14408M75	SPECIAL ORDER
BUICK V8	19.50"	60-67 TEETH = 570H300	103-110 TEETH = 14408M75	SPECIAL ORDER
	21.00"	61-66 TEETH = 585H300	96-105 TEETH = 15208M75	_____
<b>CHEVROLET</b>				
229-292 V6	17.60"	65-71 TEETH = 540H300	86-90 TEETH = 12808M75	62-68 TEETH = 140014M75
285-400 V8	17.60"	65-71 TEETH = 540H300	96-112 TEETH = 13608M75	62-68 TEETH = 140014M75
			123-133 TEETH = 14408M75	_____
w/INTERCOOLER	21.60"	60-64 TEETH = 600H300	116-122 TEETH = 16008M75	68-71 TEETH = 161014M75
LS-1	18.250"	61-68 TEETH = 540H300	121-127 TEETH = 14408M75	_____
#8007-M	18.825"	63-70 TEETH = 540H300	97-108 TEETH = 13608M75	62-67 TEETH = 140014M75
CHEVY 409	19.375"	62-69 TEETH = 570H300	101-108 TEETH = 14408M75	_____
396-454-V8				
STREET INTAKE	19.06"	68-74 TEETH = 570H300	112-117 TEETH = 14408M75	75-81 TEETH = 1543-75HT
w/INTERCOOLER	23.06"	60-67 TEETH = 630H300	95-106 TEETH = 16008M75	13.9MM N/A
		74-80 TEETH = 660H300	137-140 TEETH = 17608M75	55-60 TEETH = 161014M75
#8026T	19.80"	60-67 TEETH = 570H300	92-103 TEETH = 14408M75	_____
#8027S	19.70"	63-69 TEETH = 570H300	97-107 TEETH = 14408M75	68-76 TEETH = 1543-75HT
				73-86 TEETH = 161014M75
w/INTERCOOLER	23.70"	69-75 TEETH = 660H300	91-101 TEETH = 16008M75	51-54 TEETH = 161014M75
			128-139 TEETH = 17608M75	63-67 TEETH = 1543-75HT
#8027T	20.30"	64-69 TEETH = 585H300	91-100 TEETH = 14408M75	63-75 TEETH = 1543-75HT
			132-140 TEETH = 16008M75	68-76 TEETH = 177814M75
w/INTERCOOLER	24.30"	62-68 TEETH = 660H300	86-89 TEETH = 16008M75	59-65 TEETH = 169414M75
			119-131 TEETH = 17608M75	68-76 TEETH = 177814M75
<b>CHRYSLER</b>				
318 - 340	19.50"	66-72 TEETH = 600H300	102-110 TEETH = 14408M75	66-74 TEETH = 1543-75HT
360	20.75"	61-68 TEETH = 585H300	86-93 TEETH = 14408M75	_____
			102-113 TEETH = 15208M75	_____
#8386-H	20.75"	66-72 TEETH = 600H300	102-113 TEETH = 15208M75	SPECIAL ORDER
#8386-W	18.89"	70-76 TEETH = 570H300	112-119 TEETH = 14408M75	73-80 TEETH = 1543-75HT
354	21.10"	64-70 TEETH = 600H300	98-109 TEETH = 15208M75	SPECIAL ORDER
426 HEMI	18.89"	70-76 TEETH = 570H300	112-119 TEETH = 14408M75	73-80 TEETH = 1543-75HT
440	18.25"	61-68 TEETH = 540H300	121-127 TEETH = 14408M75	77-84 TEETH = 1543-75HT
<b>FORD</b>				
289,302,351W	18.50"	66-73 TEETH = 585H300	92-103 TEETH = 14408M75	63-73 TEETH = 1543-75HT
351C	19.65"	64-71 TEETH = 570H300	106-112 TEETH = 14408M75	71-76 TEETH = 1543-75HT
#8446-H	20.80"	66-72 TEETH = 600H300	102-113 TEETH = 15208M75	SPECIAL ORDER
#8456	21.25"	61-68 TEETH = 600H300	97-107 TEETH = 15208M75	SPECIAL ORDER
			118-128 TEETH = 16008M75	67-73 TEETH = 161014M75
w/INTERCOOLER	25.25"	71-76 TEETH = 700H300	105-113 TEETH = 17608M75	60-66 TEETH = 177814M75
<b>OLDSMOBILE</b>				
350-455	19.75"	61-68 TEETH = 570H300	100-107 TEETH = 14408M75	SPECIAL ORDER
<b>PONTIAC</b>				
350-455	17.17"	60-64 TEETH = 510H300	93-100 TEETH = 12808M75	SPECIAL ORDER
		72-78 TEETH = 540H300	108-119 TEETH = 13608M75	_____
			134-140 TEETH = 14408M75	_____
<b>CAD</b>				
427-500	19.75"	62-68 TEETH = 570H300	96-106 TEETH = 14408M75	67-75 TEETH = 1543-75HT
				72-84 TEETH = 161014M75

## BDS BLOWER KITS

BDS Blower Kits are designed and manufactured for a wide variety of engines, using the highest quality materials available. Each blower kit has been designed to deliver outstanding performance with a "long service life" and show winning appearance. Backed by an unprecedented 24 month limited warranty, you will enjoy the satisfaction of knowing that your blower components have been utilized by race teams in classes such as door slammers, monster trucks, mud buggers, nostalgic cars, offshore boats and wheel standers.



Each blower kit comes unpolished and includes all the necessary parts, along with installation instructions and diagrams to enable you to bolt the blower kit onto your engine. Polishing is available as an option. If you can change an intake manifold on your engine, you will be able to install the BDS blower kit. There are the number of options available to customize your blower system to meet your exact needs.

BDS Blower Kits include:

- Carb Adapter
- Blower Stage 1
- Billet End Plates
- PR Valve
- Sight Gauge
- Blower Manifold
- Backfire Valve
- Idler Arm or Bracket
- Drive Kit 1/2" pitch
- Blower Pulleys
- Gaskets • Bolts
- Blower Belt
- Steel Crank Hub
- Accessory Vee Groove(s)
- Idler Pulley
- Snout • Gear Coupler

*(For more information on the specific items listed above, please refer to the appropriate sections in this catalog)*

### Unpolished



The 471, 671 and 871 **STANDARD** blower kits are available for most V6 and V8 engines manufactured by Chevrolet. Special manifolds must be ordered for use with some after market heads. The drive kit includes a neutral balance or counter weighted steel crank hub. All systems require a short water pump. Accessory drive vee grooves are available for water pump, alternator, power steering, and air conditioning. Some factory brackets may need to be moved or modified for clearance of the blower system. An option to show polish blower only or blower kit can be easily added. If you want a more competitive edge to your drive kit, you can upgrade to 8mm pulleys and belt.

Part No.	Description
304-3S1/1	Chevy 229-262 V6 3" 1V 471 Blower Kit
304-3S2/1	Chevy 229-262 V6 3" 2V 471 Blower Kit
304-3S3/1	Chevy 229-262 V6 3" 3V 471 Blower Kit
316-3S1/2	Chevy 265-350 3" 1V 671 Blower Kit (Specify if using 1206 Gaskets)
316-3S2/2	Chevy 265-350 3" 2V 671 Blower Kit (Specify if using 1206 Gaskets)
316-3S3/2	Chevy 265-350 3" 3V 671 Blower Kit (Specify if using 1206 Gaskets)
328-3S1/2	Chevy 396-427 3" 1V 871 Blower Kit
328-3S2/2	Chevy 396-427 3" 2V 871 Blower Kit
328-3S3/2	Chevy 396-427 3" 3V 871 Blower Kit
348-3S1/2	Chevy 454 3" 1V 871 Blower Kit
348-3S2/2	Chevy 454 3" 2V 871 Blower Kit
348-3S3/2	Chevy 454 3" 3V 871 Blower Kit





## CHRYSLER

The 871 **STANDARD** blower kits are available for most V8 engines manufactured by Chrysler. The year of manufacturer for the heads must be supplied in order for BDS to supply the proper manifold. Special manifolds must be ordered for use with some after market heads. Customers with externally balanced engines are required to send their stock factory balancer along with their order so that it may be converted for use with the blower system. The drive kit includes a neutral balance steel crank hub. Customer must provide specifications on heads in order to choose the proper intake in kit. Accessory drive vee grooves are available for water pump, alternator, power steering, and air conditioning. Some factory brackets may need to be moved or modified for clearance of the blower system. Options for show polish blower only or blower kit can be easily added. We can change your 1/2" pitch pulleys and belt to 8mm for a more competitive edge. This can be upgraded to your kit.

Part No.	Description
428-3S1/2	Chrysler 426 Hemi 3" 1V 871 Blower Kit
428-3S2/2	Chrysler 426 Hemi 3" 2V 871 Blower Kit
428-3S3/2	Chrysler 426 Hemi 3" 3V 871 Blower Kit
438-3S1/2	Chrysler 440 3" 1V 871 Blower Kit
438-3S2/2	Chrysler 440 3" 2V 871 Blower Kit
438-3S3/2	Chrysler 440 3" 3V 871 Blower Kit



## FORD

The 871 **STANDARD** blower kits are available for most V8 engines manufactured by Ford. The year of manufacture for the heads must be supplied in order for BDS to supply the proper manifold. Special manifolds must be ordered for use with some after market heads. Due to the locations of the distributor, Ford motors require a flat cap style distributor (not supplied with kit) for proper manifold clearance. This kit can be easily upgraded to 8mm pulleys and belt. You can add show polish to blower only or blower kit. The kit includes a neutral balance steel crank hub. Accessory drive vee grooves are available for water pump, alternator, power steering, and air conditioning. Some factory brackets may need to be moved or modified for clearance of the blower system.

**NEW**

Part No.	Description
598-3S1/2	Ford 429-460 3" 1V 871 Blower Kit
598-3S2/2	Ford 429-460 3" 2V 871 Blower Kit
598-3S3/2	Ford 429-460 3" 3V 871 Blower Kit



## PONTIAC

The 871 **STANDARD** blower kits are available for most V8 engines manufactured by Pontiac. The year of manufacture for the heads must be supplied in order for BDS to supply the proper manifold. Special manifolds must be ordered for use with some after market heads. The blower kit utilizes stock vee grooves to be used in conjunction with BDS pulleys. You can add show polish to blower only or blower kit. The drive kit includes a neutral balance steel crank hub. Some factory brackets may need to be moved or modified for clearance of the blower system.

Part No.	Description
708-3S1/2	Pontiac 400-455 3" 1V 871 Blower Kit
708-3S2/2	Pontiac 400-455 3" 2V 871 Blower Kit
708-3S3/2	Pontiac 400-455 3" 3V 871 Blower Kit

**Custom Blower kits are sold as individual components. Use chart to convert previous blower kit part numbers to new component part numbers. Also priced separately are systems using racing blowers.**


## AMC KITS (CUSTOM)

The 871 **CUSTOM** blower kits are available for V8 engines manufactured by AMC. The drive kit includes a neutral steel harmonic balancer. Some factory brackets may need to be modified for clearance of the blower system. Accessory drive vee grooves are available for water pump, alternator, and power steering. See BDS pricing for upgrade options.

Old Part No.	Description	New Drive Kit (Polish)	Manifolds	Blower (Polish)	Carb Adptr. (Polish)
108-3S1/2	AMC V8 3" 1V 871 Blower Kit	106-3S1	8106A	871	24B6-2
108-3S2/2	AMC V8 3" 2V 871 Blower Kit	106-3S2	8106A	871	24B6-2
108-3S3/2	AMC V8 3" 3V 871 Blower Kit	106-3S3	8106A	871	24B6-2






**BUICK (CUSTOM)**

The 471 and 871 **CUSTOM** blower kits are available for most V6 and V8 engines manufactured by Buick. Special manifolds must be ordered for use with heads other than stock. Accessory drive vee grooves are available for water pump, alternator, power steering, and air conditioning. Some factory brackets may need to be modified for clearance of the blower system. See BDS pricing for upgrade options.

Old Part No.	Description	New Drive Kit (Polish)	Manifolds	Blower (Polish)	Carb Adptr. (Polish)
214-3S1/1	Buick Even V6 3" 1V 471 Blower Kit	214-3S1	8204A	471	14B4-2
214-3S2/1	Buick Even V6 3" 2V 471 Blower Kit	214-3S2	8204A	471	14B4-2
214-3S3/1	Buick Even V6 3" 3V 471 Blower Kit	214-3S3	8204A	471	14B4-2
228-3S1/2	Buick 401-425 3" 1V 871 Blower Kit	228-3S1	8216	871	24B6-2
228-3S2/2	Buick 401-425 3" 2V 871 Blower Kit	228-3S2	8216	871	24B6-2
228-3S3/2	Buick 401-425 3" 3V 871 Blower Kit	228-3S3	8216	871	24B6-2
238-3S1/2	Buick 400-455 3" 1V 871 Blower Kit	238-3S1	8256	871	24B6-2
238-3S2/2	Buick 400-455 3" 2V 871 Blower Kit	238-3S2	8256	871	24B6-2
238-3S3/2	Buick 400-455 3" 3V 871 Blower Kit	238-3S3	8256	871	24B6-2


**CHEVROLET (CUSTOM)**

The 671 **CUSTOM** blower kits are available for most V8 engines manufactured by Chevrolet. Special manifolds must be ordered for use with some after market heads. All systems require a short water pump. Accessory drive vee grooves are available for water pump, alternator, power steering, and air conditioning. Some factory brackets may need to be moved or modified for clearance of the blower system. See BDS pricing for upgrade options.

Old Part No.	Description	New Drive Kit (Polish)	Manifolds	Blower (Polish)	Carb Adptr. (Polish)
358-3S1/2	Chevy 348-409 3" 1V 671 Blower Kit	358-3S1	8036	671	24B6-2
358-3S2/2	Chevy 348-409 3" 2V 671 Blower Kit	358-3S2	8036	671	24B6-2
358-3S3/2	Chevy 348-409 3" 3V 671 Blower Kit	358-3S3	8036	671	24B6-2


**FORD (CUSTOM)**

The 671 and 871 **CUSTOM** blower kits are available for most V6 and V8 engines manufactured by Ford. The year of manufacture for the heads must be supplied in order for BDS to supply the proper manifold. Special manifolds must be ordered for use with some after market heads. Due to the locations of the distributor, Ford motors require a flat cap style distributor (not supplied with kit) for proper manifold clearance. Accessory drive vee grooves are available for water pump, alternator, power steering, and air conditioning. Kit does not include stock crank seal sleeve. Some factory brackets may need to be moved or modified for clearance of the blower system. See BDS pricing for upgrade options.

Old Part No.	Description	New Drive Kit (Polish)	Manifolds	Blower (Polish)	Carb Adptr. (Polish)
526-3S1/2	Ford 289-302 3" 1V 671 Blower Kit	526-3S1	8406	671	24B6-2
526-3S2/2	Ford 289-302 3" 2V 671 Blower Kit	526-3S2	8406	671	24B6-2
526-3S3/2	Ford 289-302 3" 3V 671 Blower Kit	526-3S3	8406	671	24B6-2
536-3S1/2	Ford 351C 3" 1V 671 Blower Kit	536-3S1	8416A/8416B	671	24B6-2
536-3S2/2	Ford 351C 3" 2V 671 Blower Kit	536-3S2	8416A/8416B	671	24B6-2
536-3S3/2	Ford 351C 3" 3V 671 Blower Kit	536-3S3	8416A/8416B	671	24B6-2
566-3S1/2	Ford 351W 3" 1V 671 Blower Kit	566-3S1	8426/8427	671	24B6-2
566-3S2/2	Ford 351W 3" 2V 671 Blower Kit	566-3S2	8426/8427	671	24B6-2
566-3S3/2	Ford 351W 3" 3V 671 Blower Kit	566-3S3	8426/8427	671	24B6-2
588-3S1/2	Ford 390-428 3" 1V 871 Blower Kit	588-3S1	8446-H/1002	871	24B6-2
588-3S2/2	Ford 390-428 3" 2V 871 Blower Kit	588-3S2	8446-H/1002	871	24B6-2
588-3S3/2	Ford 390-428 3" 3V 871 Blower Kit	588-3S3	8446-H/1002	871	24B6-2
598B3S1/2	429 Boss Ford 871 3" 1V Blower Kit	598B3S1	8466B	871	24B6-2
598B3S2/2	429 Boss Ford 871 3" 2V Blower Kit	598B3S2	8466B	871	24B6-2
598B3S3/2	429 Boss Ford 871 3" 3V Blower Kit	598B3S3	8466B	871	24B6-2


**CHRYSLER (CUSTOM)**

The 671 **CUSTOM** blower kits are available for most V6 and V8 engines manufactured by Chrysler. The year of manufacturer for the heads must be supplied in order for BDS to supply the proper manifold. Special manifolds must be ordered for use with some after market heads. Customers with externally balanced engines are required to send their stock factory balancer along with their order so that it may be converted for use with the blower system. Accessory drive vee grooves are available for water pump, alternator, power steering, and air conditioning. Some factory brackets may need to be moved or modified for clearance of the blower system. See BDS pricing for upgrade options.

Old Part No.	Description	New Drive Kit (Polish)	Manifolds	Blower (Polish)	Carb Adptr. (Polish)
406A3S1/2	Chrys 273-318 66+ 3" 1V 671 Bl. Kit	406-3S1	8306A	671	24B6-2
406A3S2/2	Chrys 273-318 66+ 3" 2V 671 Blower Kit	406-3S2	8306A	671	24B6-2
406A3S3/3	Chrys 273-318 66+ 3" 3V 671 Blower Kit	406-3S3	8306A	671	24B6-2
406-3S1/2	273 Chrys 671 65- 3" 1V Blower Kit	406-3S1	8306B	671	24B6-2
406-3S2/2	273 Chrys 671 65- 3" 2V Blower Kit	406-3S2	8306B	671	24B6-2
406-3S3/2	273 Chrys 671 65- 3" 3V Blower Kit	406-3S3	8306B	671	24B6-2
406B3S1/2	Chrys 340-360 Early 3" 1V 671 Blower Kit	406-3S1	8306C	671	24B6-2
406B3S2/2	Chrys 340-360 Early 3" 2V 671 Blower Kit	406-3S2	8306C	671	24B6-2
406B3S3/3	Chrys 340-360 Early 3" 3V 671 Blower Kit	406-3S3	8306C	671	24B6-2
416-3S1/2	Chrys 383-400 3" 1V 671 Blower Kit	416-3S1	8356	671	24B6-2
416-3S2/2	Chrys 383-400 3" 2V 671 Blower Kit	416-3S2	8356	671	24B6-2
416-3S3/2	Chrys 383-400 3" 3V 671 Blower Kit	416-3S3	8356	671	24B6-2
446H3S1/2	Chrys 330-392 (H) Hemi 3" 1V 671 Blower Kit	446-3S1	8386-H	671	24B6-2
446H3S2/2	Chrys 330-392 (H) Hemi 3" 2V 671 Blower Kit	446-3S2	8386-H	671	24B6-2
446H3S3/2	Chrys 330-392 (H) Hemi 3" 3V 671 Blower Kit	446-3S3	8386-H	671	24B6-2
446W3S1/2	Chrys 330-392 (W) Hemi 3" 1V 671 Blower Kit	446-3S1	8386	671	24B6-2
446W3S2/2	Chrys 330-392 (W) Hemi 3" 2V 671 Blower Kit	446-3S2	8386	671	24B6-2
446W3S3/2	Chrys 330-392 (W) Hemi 3" 3V 671 Blower Kit	446-3S3	8386	671	24B6-2


**OLDSMOBILE (CUSTOM)**

The 471, 671 and 871 **CUSTOM** blower kits are available for most V6 and V8 engines manufactured by Oldsmobile. The year of manufacture for the heads must be supplied in order for BDS to supply the proper manifold. Special manifolds must be ordered for use with some after market heads. Customers with externally or neutral balanced engines are required to send their stock factory balancer along with their order so that it may be converted for use with the blower system. Accessory drive vee grooves are available for water pump, alternator, power steering, and air conditioning. Some factory brackets may need to be moved or modified for clearance of the blower system. See BDS pricing for upgrade options.

Old Part No.	Description	New Drive Kit (Polish)	Manifolds	Blower (Polish)	Carb Adptr. (Polish)
606-3S1/2	Oldsmobile 350-403 3" 1V 671 Blower Kit	606-3S1	8506	671	24B6-2
606-3S2/2	Oldsmobile 350-403 3" 2V 671 Blower Kit	606-3S2	8506	671	24B6-2
606-3S3/2	Oldsmobile 350-403 3" 3V 671 Blower Kit	606-3S3	8506	671	24B6-2
618-3S1/2	Oldsmobile 455-3" 1V 871 Blower Kit	616-3S1	8556	871	24B6-2
618-3S2/2	Oldsmobile 455 3" 2V 871 Blower Kit	616-3S2	8556	871	24B6-2
618-3S3/2	Oldsmobile 455 3" 3V 871 Blower Kit	616-3S3	8556	871	24B6-2
624-3S1/1	Oldsmobile 215 3" 1V 471 Blower Kit	624-3S1	8514	471	14B4-2
624-3S2/1	Oldsmobile 215 3" 2V 471 Blower Kit	624-3S2	8514	471	14B4-2
624-3S3/1	Oldsmobile 215 3" 3V 471 Blower Kit	624-3S3	8514	471	14B4-2

## Show Polish



BDS Drive Kits are manufactured from aircraft aluminum and steel alloys to ensure maximum performance and durability. A number of options are available to customize your drive kit for your specific requirements (see the Blower Kits and Drive Kits Options section in this catalog). Accessory vee grooves can be provided to drive the water pump, alternator, power steering, and air conditioning accessories. All drive kits utilizes a steel crank hub or harmonic balancer to replace the stock factory harmonic balancer. For more information on harmonic balancers and crank hubs, please refer to the "Blower Crank Hub" section in this catalog.

### The complete BDS Drive Kit comes polished and includes:

- Blower Gear Coupler
- Drive Snout
- 1/2 pitch Upper Blower Pulley
- Idler Pulley
- Idler Mounting Assembly
- 1/2 pitch Blower Belt
- Steel Crank Hub or Harmonic Balancer
- Accessory Vee Groove (s)
- 1/2 pitch Lower Blower Pulley
- Bolts
- Spacers
- Gaskets
- Instructions

The drive kits are listed below in alphabetical order by engine manufacturer. If your engine/blower combination is not listed, BDS may be able to build a custom drive kit specifically designed to meet your needs. Contact the BDS customer service department for additional details.

## AMC DRIVE KITS

Drive kits for the 871 are available for all AMC V8's. Whether your engine is externally balanced or internally balanced, a steel harmonic balancer will be provided in your kit. Some factory brackets may need to be modified for clearance of the blower system. Accessory drive vee grooves are available for water pump, alternator, and power steering. See BDS pricing for upgrades options.

Part No.	Description
108-3S1	AMC 3" 1V 871 Drive Kit
108-3S2	AMC 3" 2V 871 Drive Kit
108-3S3	AMC 3" 3V 871 Drive Kit

## BUICK

Drive kits for the 471, 671 and 871 are available for most V6 and V8 engines manufactured by Buick. Customers with externally balanced V6 - V8 engines are required to send their stock factory balancer along with their order so that it may be converted for use with the blower system. Accessory drive vee grooves are available for water pump, alternator, power steering, and air conditioning. Some factory brackets may need to be modified for clearance of the blower system. See BDS pricing for upgrades options.

Part No.	Description
214-3S1	Buick Even V6 3" 1V 471 Drive Kit
214-3S2	Buick Even V6 3" 2V 471 Drive Kit
214-3S3	Buick Even V6 3" 3V 471 Drive Kit
228-3S1	Buick 401-425 3" 1V 871 Drive Kit
228-3S2	Buick 401-425 3" 2V 871 Drive Kit
228-3S3	Buick 401-425 3" 3V 871 Drive Kit
238-3S1	Buick 400-455 3" 1V 871 Drive Kit
238-3S2	Buick 400-455 3" 2V 871 Drive Kit
238-3S3	Buick 400-455 3" 3V 871 Drive Kit

## CADILLAC

Drive kits for the 671-871 are available for most V8 engines manufactured by Cadillac. Accessory drive vee grooves are available for water pump, alternator, and power steering. This drive kit includes a steel crank hub. Some factory brackets may need to be modified for clearance of the blower system. See BDS pricing for upgrades options.

Part No.	Description
808-3S1	500 Cadillac 671-871 3" 1V Drive Kit
808-3S2	500 Cadillac 671-871 3" 2V Drive Kit

## BLOWER KIT AND DRIVE UPGRADE OPTIONS

A number of options are listed below and are available to customize your blower kit to meet the exact requirements of your installation.

Part No.	Description
6000-B	Add for serpentine accessories in kit for Chevy BB only.
6000-S	Add for serpentine accessories in kit for Chevy SB only.
6200	Add for cutting to 2" wide drive.
6400	Add for 400 Chevy crank hub to kit.
6451	Add for steel balancer to Chevy 427.
6452	Add for steel balancer to Chevy 454.
6453	Add for steel balancer to Chevy 350.
C7059HAR	Hard anodized blower case in kit. Stage 2 option
C7059HAC	Hard anodized blower rotors in kit. Stage 2 option

## CHEVROLET

Drive kits for the 471, 671, and 871 are available for V6 and V8 engines manufactured by Chevrolet. All systems required a short water pump. This drive kit includes neutral or counter weighted crank hub. Accessory vee grooves are available for water pump, alternator, power steering, and air conditioning. Some factory brackets may need to be moved or modified for clearance of the blower system. See BDS pricing for upgrade options.

Part No.	Description
304-3S1	Chevy 229-262 V6 3" 1V 471 Drive Kit
304-3S2	Chevy 229-262 V6 3" 2V 471 Drive Kit
304-3S3	Chevy 229-262 V6 3" 3V 471 Drive Kit
314-3S1	Chevy 265-350 3" 1V 471 Drive Kit
314-3S2	Chevy 265-350 3" 2V 471 Drive Kit
314-3S3	Chevy 265-350 3" 3V 471 Drive Kit
316-3S1	Chevy 265-350 3" 1V 671 Drive Kit
316-3S2	Chevy 265-350 3" 2V 671 Drive Kit
316-3S3	Chevy 265-350 3" 3V 671 Drive Kit
328-3S1	Chevy 396-427 3" 1V 871 Drive Kit
328-3S2	Chevy 396-427 3" 2V 871 Drive Kit
328-3S3	Chevy 396-427 3" 3V 871 Drive Kit
328-380	Chevy 396-427 3" 8mm Competition Drive Kit
348-3S1	Chevy 454-3" 1V 871 Drive Kit
348-3S2	Chevy 454-3" 2V 871 Drive Kit
348-3S3	Chevy 454 3" 3V 871 Drive Kit
348-380	Chevy 454 3" 8mm Competition Drive Kit
348-3M3	Chevy 427- 454 3" 3V Marine Drive Kit
358-3S1	Chevy 348-409 3" 1V 671-871 Drive Kit
358-3S2	Chevy 348-409 3" 2V 671-871 Drive Kit
358-3S3	Chevy 348-409 3" 3V 671-871 Drive Kit

## CHRYSLER

Drive kits for the 671 and 871 are available for V8 engines manufactured by Chrysler. This drive kit includes a neutral balance crank hub. Accessory vee grooves are available for water pump, alternator, power steering, and air conditioning. Some factory brackets may need to be moved or modified for clearance of the blower system. See BDS pricing for upgrade options.

Part No.	Description
406-3S1	Chrysler 318-340-360 3" 1V 671 Drive Kit (Early or Late)
406-3S2	Chrysler 318-340-360 3" 2V 671 Drive Kit (Early or Late)
406-3S3	Chrysler 318-340-360 3" 3V 671 Drive Kit (Early or Late)
416-3S1	Chrysler 383-400 3" 1V 671 Drive Kit
416-3S2	Chrysler 383-400 3" 2V 671 Drive Kit
416-3S3	Chrysler 383-400 3" 3V 671 Drive Kit
428-3S1	Chrysler 426 Hemi 3" 1V 871 Drive Kit
428-3S2	Chrysler 426 Hemi 3" 2V 871 Drive Kit
428-3S3	Chrysler 426 Hemi 3" 3V 871 Drive Kit
438-3S1	Chrysler 440 3" 1V 871 Drive Kit
438-3S2	Chrysler 440 3" 2V 871 Drive Kit
438-3S3	Chrysler 440 3" 3V 871 Drive Kit
446-3S1	Chrysler 392 Hemi 3" 1V 671 Drive Kit (H or W)
446-3S2	Chrysler 392 Hemi 3" 2V 671 Drive Kit (H or W)
446-3S3	Chrysler 392 Hemi 3" 3V 671 Drive Kit (H or W)

## FORD

Drive kits for the 671 and 871 are available for V8 engines manufactured by Ford. This drive kit includes a neutral or counter weighted steel crank hub. Accessory drive vee grooves are available for water pump, alternator, power steering, and air conditioning. Kit does not include stock crank seal sleeve. Some factory brackets may need to be moved or modified for clearance of the blower system. See BDS pricing for upgrade options.

<b>Part No.</b>	<b>Description</b>
526-3S1	Ford 289-302 3" 1V 671 Drive Kit
526-3S2	Ford 289-302 3" 2V 671 Drive Kit
526-3S3	Ford 289-302 3" 3V 671 Drive Kit
536-3S1	Ford 351C 3" 1V 671 Drive Kit
536-3S2	Ford 351C 3" 2V 671 Drive Kit
536-3S3	Ford 351C 3" 3V 671 Drive Kit
546-3S1	Ford Boss 302 3" 1V 671 Drive Kit
546-3S2	Ford Boss 302 3" 2V 671 Drive Kit
546-3S3	Ford Boss 302 3" 3V 671 Drive Kit
566-3S1	Ford 351W 3" 1V 671 Drive Kit
566-3S2	Ford 351W 3" 2V 671 Drive Kit
566-3S3	Ford 351W 3" 3V 671 Drive Kit
578-3S1	Ford 400M 3" 1V 871 Drive Kit
578-3S2	Ford 400M 3" 2V 871 Drive Kit
578-3S3	Ford 400M 3" 3V 871 Drive Kit
588-3S1	Ford 390-428 3" 1V 871 Drive Kit
588-3S2	Ford 390-428 3" 2V 871 Drive Kit
588-3S3	Ford 390-428 3" 3V 871 Drive Kit
598-3S1	Ford 429-460 3" 1V 871 Drive Kit
598-3S2	Ford 429-460 3" 2V 871 Drive Kit
598-3S3	Ford 429-460 3" 3V 871 Drive Kit
598B3S1	429 Boss Ford 671-871 3" 1V Drive Kit
598B3S2	429 Boss Ford 671-871 3" 2V Drive Kit
598B3S3	429 Boss Ford 671-871 3" 3V Drive Kit

## OLDSMOBILE

Drive kits for the 671 and 871 are available for most V8 engines manufactured by Oldsmobile. Customers with external or neutral balanced engines are required to send their stock factory balancer along with their order so that it may be converted for use with the blower system. Accessory vee grooves are available for water pump, alternator, power steering, and air conditioning. Some factory brackets may need to be moved or modified for clearance of the blower system. See BDS pricing for upgrade options.

<b>Part No.</b>	<b>Description</b>
606-3S1	Oldsmobile 350-403 3" 1V 671 Drive Kit
606-3S2	Oldsmobile 350-403 3" 2V 671 Drive Kit
606-3S3	Oldsmobile 350-403 3" 3V 671 Drive Kit
618-3S1	Oldsmobile 455 3" 1V 871 Drive Kit
618-3S2	Oldsmobile 455 3" 2V 871 Drive Kit
618-3S3	Oldsmobile 455-3" 3V 871 Drive Kit

## PONTIAC

Drive kits for the 871 are available for most V8 engines manufactured by Pontiac. This drive kit includes neutral balance steel crank hub. The drive kit utilizes stock vee grooves in conjunction with BDS pulleys. Some factory brackets may need to be moved or modified for clearance of the blower system. See BDS pricing for upgrade options.

<b>Part No.</b>	<b>Description</b>
708-3S1	Pontiac 400-455 3" 1V 871 Drive Kit
708-3S2	Pontiac 400-455 3" 2V 871 Drive Kit
708-3S3	Pontiac 400-455 3" 3V 871 Drive Kit

# BDS BLOWER BELTS



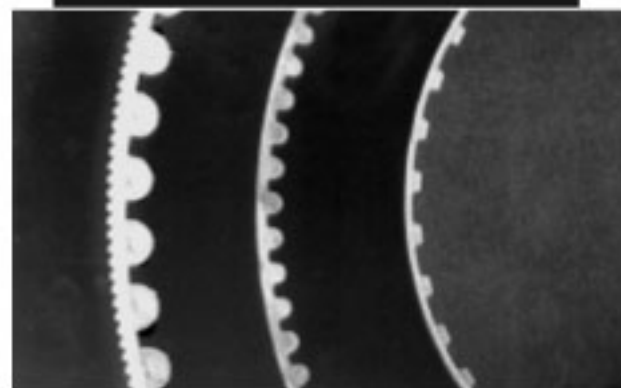
BDS offers one of the widest selection of blower belt sizes and styles available. Replacement belts are available for almost any application. There are three basic belt designs and a variety of different lengths and widths. The correct belt style and length are critical to belt performance and life. To determine the correct style of belt for your application, refer to the picture and explanations. Once you have determined the correct style for your application, please refer to the BDS Engine Belt size chart in this catalog.

## 1/2 PITCH, SQUARE TOOTH STYLE

This is the most common rubber belt style and has been in use since the 1950's on blower systems. Commonly referred to as a "Gilmer" belt. It is designed to be used in mild applications with 471 and 671 blowers with drive ratios up to 15% overdrive. Higher drive ratios and larger blowers may cause this style of belt to jump teeth and or break.

## 8mm, ROUND GT TOOTH STYLE

The 8mm rounded tooth style rubber power grip belt is capable of transferring more horsepower than the 1/2 pitch style. The 8mm belt is used for looks as well as performance. BDS recommends that the 8mm style belt be used in all blower applications running 15% and up to approximately 35% overdrive. When higher drive ratios are used it can shortened belt life expectancy.



13.9/14mm      8mm      1/2" Pitch

## 13.9mm & 14mm ROUND GT TOOTH STYLE

The 13.9mm and 14mm rounded tooth polychain is the strongest style blower belt available. These belts are designed for high performance competition style blower systems and are used on the majority of top alcohol and top fuel racers. These belts are manufactured from a special polyurethane material lined with kevlar for maximum strength. You should never use a 13.9mm pulley with a 14mm belt, or a 14mm pulley with a 13.9mm belt.

## 1/2 PITCH BELTS

Part No.	Description
480H200	96T, 48" x 2", 1/2" Pitch Blower Belt
480H300	96T, 48" x 3", 1/2" Pitch Blower Belt
510H200	102T, 51" x 2", 1/2" Pitch Blower Belt
510H300	102T, 51" x 3", 1/2" Pitch Blower Belt
540H200	108T, 54" x 2", 1/2" Pitch Blower Belt
540H300	108T, 54" x 3", 1/2" Pitch Blower Belt
555H200	111T, 55.5" x 2", 1/2" Pitch Blower Belt
555H300	111T, 55.5" x 3", 1/2" Pitch Blower Belt
560H200	112T, 56" x 2", 1/2" Pitch Blower Belt
560H300	112T, 56" x 3", 1/2" Pitch Blower Belt
570H200	114T, 57" x 2", 1/2" Pitch Blower Belt
570H300	114T, 57" x 3", 1/2" Pitch Blower Belt
585H200	117T, 58.5" x 2", 1/2" Pitch Blower Belt
585H300	117T, 58.5" x 3", 1/2" Pitch Blower Belt
600H200	120T, 60" x 2" 1/2" Pitch Blower Belt
600H300	120T, 60" x 3" 1/2" Pitch Blower Belt
630H200	126T, 63" x 2" 1/2" Pitch Blower Belt
630H300	126T, 63" x 3" 1/2" Pitch Blower Belt
660H200	132T, 66" x 2" 1/2" Pitch Blower Belt
660H300	132T, 66" x 3" 1/2" Pitch Blower Belt
700H200	140T, 70" x 2" 1/2" Pitch Blower Belt
700H300	140T, 70" x 3" 1/2" Pitch Blower Belt
6350	Cut Belt Width to Size

## 8mm BLOWER BELTS

Part No.	Description
10408M30	130T, 40.9" x 1 3/8" 8mm Blower Belt
10408M50	130T, 40.9" x 2" 8mm Blower Belt
10408M75	130T, 40.9" x 3" 8mm Blower Belt
11208M30	140T, 44.1" x 1 3/8" 8mm Blower Belt
12008M30	150T, 47.2" x 1 3/8" 8mm Blower Belt
12008M50	150T, 47.2" x 2" 8mm Blower Belt
12008M75	150T, 47.2" x 3" 8mm Blower Belt
12808M30	160T, 50.4" x 1 3/8" 8mm Blower Belt
12808M50	160T, 50.4" x 2" 8mm Blower Belt
12808M75	160T, 50.4" x 3" 8mm Blower Belt
13608M50	170T, 50.4" x 2" 8mm Blower Belt
13608M75	170T, 53.54" x 3" 8mm Blower Belt
14408M50	180T, 56.89" x 2" 8mm Blower Belt
14408M75	180T, 56.89" x 3" 8mm Blower Belt
15208M50	190T, 59.84" x 2" 8mm Blower Belt
15208M75	190T, 59.84" x 3" 8mm Blower Belt
16008M50	200T, 62.99" x 2" 8mm Blower Belt
16008M75	200T, 62.99" x 3" 8mm Blower Belt
GT16008M50	200T, 62.99" x 2" 8mm Blower Belt, Polychain
GT16008M75	200T, 62.99" x 3" 8mm Blower Belt, Polychain
16968M50	212T, 66.7" x 2" 8mm Blower Belt
16968M75	212T, 66.7" x 3" 8mm Blower Belt
17608M50	220T, 69.29" x 2" 8mm Blower Belt
17608M75	220T, 69.29" x 3" 8mm Blower Belt
GT17608M50	220T, 69.29" x 2" 8mm Blower Belt, Polychain
GT17608M75	220T, 69.29" x 3" 8mm Blower Belt, Polychain
18008M50	225T, 70.87" x 2" 8mm Blower Belt
18008M75	225T, 70.87" x 3" 8mm Blower Belt
20008M75	250T, 78.4" x 3" 8mm Blower Belt
6350	Cut Belt Width to Size

## 13.9mm BLOWER BELTS

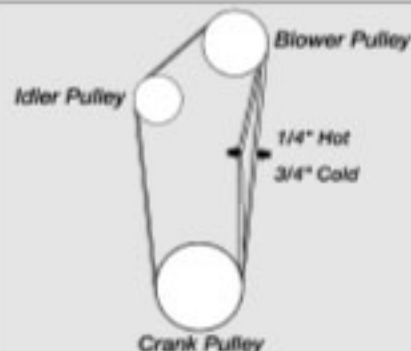
Part No.	Description
1543-65HT	111T, 60.75" x 2.56" 13.9mm Blower Belt, Polychain
1543-75HT	111T, 60.75" x 3" 13.9mm Blower Belt, Polychain

## 14mm BLOWER BELTS

Part No.	Description
140014M75	100T, 55.12" x 3" 14mm Blower Belt, Polychain
1568-75GT	112T, 61.73" x 3", 14mm Blower Belt, Polychain
161014M75	115T, 63.68" x 3" 14mm Blower Belt, Polychain
169414M75	121T, 66.89" x 3" 14mm Blower Belt, Polychain
177814M75	127T, 70.00" x 3" 14mm Blower Belt, Polychain
189014M75	135T, 74.4" x 3" 14mm Blower Belt, Polychain
6350	Cut Belt Width to Size

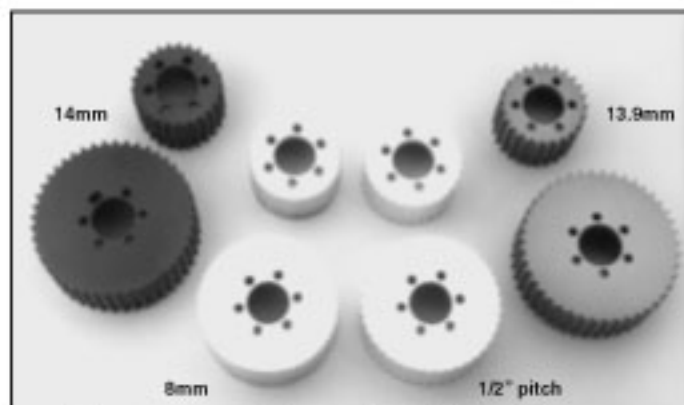
### BELT TENSION

Proper belt tension is essential to the longevity of the blower belt and pulleys utilized in the BDS drive systems. The diagram shows the proper method for checking belt tension. Final belt tension should be checked and verified only when the motor has reached its normal operating temperature. If the belt is too tight, it puts excessive strain on the crank shaft and drive snout, resulting in the failure of one or both parts as well as causing excessive belt and pulley wear. If the belt is too loose it may cause the belt to ratchet or jump teeth causing belt failure.





# BDS BLOWER PULLEYS



BDS offers one of the largest selections of blower pulley styles and sizes available. All blower pulleys are manufactured from billet aircraft aluminum alloy 6061 and are T6 heat treated ensuring performance and durability. Manufactured to the tightest tolerances in the industry. BDS blower pulleys are guaranteed to mesh properly with the belt, reducing excessive wear and drag on the entire drive system. The pulleys are polished on the face and edge for show quality appearance. 13.9mm and 14mm style pulleys are hard anodized for additional wear resistance. Hard anodizing is available as an option on the 1/2 pitch and the 8mm style pulleys. Each pulley is stamped with the number of teeth for easy identification and is manufactured 3.5" wide with a two inch diameter register and a six hole bolt pattern, with a 2.760" BDS bolt pattern. This design allows the BDS pulleys to be used as replacement parts for a majority of the blower systems manufactured today. Some blower manufacturers' pulley designs are not compatible with the standard BDS pulleys, however, in most cases, the BDS pulleys can be modified to work with almost any system.

## 1/2 PITCH PULLEYS

Part No.	Description
6300	Cut Pulley to size
6330	30T x 3-1/2", 1/2" Pitch Billet Aluminum Blower Pulley
6331	31T x 3-1/2", 1/2" Pitch Billet Aluminum Blower Pulley
6332	32T x 3-1/2", 1/2" Pitch Billet Aluminum Blower Pulley
6333	33T x 3-1/2", 1/2" Pitch Billet Aluminum Blower Pulley
6334	34T x 3-1/2", 1/2" Pitch Billet Aluminum Blower Pulley
6335	35T x 3-1/2", 1/2" Pitch Billet Aluminum Blower Pulley
6336	36T x 3-1/2", 1/2" Pitch Billet Aluminum Blower Pulley
6337	37T x 3-1/2", 1/2" Pitch Billet Aluminum Blower Pulley
6338	38T x 3-1/2", 1/2" Pitch Billet Aluminum Blower Pulley
6339	39T x 3-1/2", 1/2" Pitch Billet Aluminum Blower Pulley
6340	40T x 3-1/2", 1/2" Pitch Billet Aluminum Blower Pulley
6341	41T x 3-1/2", 1/2" Pitch Billet Aluminum Blower Pulley

## 8mm PULLEYS

Part No.	Description
6300	Cut Pulley to size
6843	43T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6844	44T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6845	45T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6846	46T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6847	47T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6848	48T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6849	49T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6850	50T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6851	51T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6852	52T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6853	53T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6854	54T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6855	55T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6856	56T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6857	57T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6858	58T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6859	59T x 3-1/2" 8mm Billet Aluminum Blower Pulley

**BDS BLOWER PULLEYS (CONTINUED)**

Part No.	Description
6860	60T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6861	61T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6862	62T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6863	63T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6864	64T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6865	65T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6866	66T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6867	67T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6868	68T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6869	69T x 3-1/2" 8mm Billet Aluminum Blower Pulley
6870	70T x 3-1/2" 8mm Billet Aluminum Blower Pulley

**13.9mm PULLEYS (Grey Hard Anodized)**

Part No.	Description
6300	Cut Pulley to size
6925	25T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6926	26T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6927	27T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6928	28T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6929	29T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6930	30T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6931	31T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6932	32T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6933	33T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6934	34T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6935	35T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6936	36T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6937	37T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6938	38T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6939	39T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6940	40T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6941	41T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6942	42T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6943	43T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6944	44T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley
6945	45T x 3-1/2" 13.9mm Billet Aluminum Blower Pulley

NOTE: 13.9mm pulleys should never be used with a 14mm belt

**14mm PULLEYS (Black Hard Anodized)**

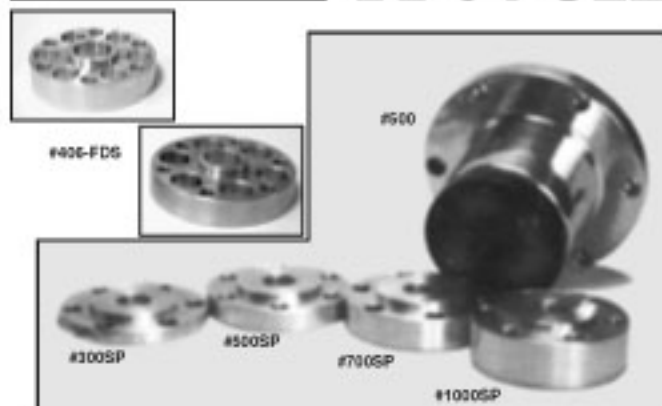
Part No.	Description
6300	Cut Pulley to size
6725	25T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6726	26T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6727	27T x 3-1/2" 14mm Billet Aluminum Blower Pulley

## BDS BLOWER PULLEYS (CONTINUED)

Part No.	Description
6728	28T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6729	29T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6730	30T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6731	31T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6732	32T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6733	33T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6734	34T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6735	35T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6736	36T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6737	37T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6738	38T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6739	39T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6740	40T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6741	41T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6742	42T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6743	43T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6744	44T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6745	45T x 3-1/2" 14mm Billet Aluminum Blower Pulley
6746	46T x 3-1/2" 14mm Billet Aluminum Blower Pulley

NOTE: 14mm pulleys should never be used with a 13.9mm belt

## BDS PULLEY SPACERS



BDS pulley spacers are manufactured from the same high quality aircraft aluminum alloy as the blower pulleys. Machined to precise specifications, there are a variety of sizes that may be mixed and stacked together to provide the necessary spacing for almost any application. The spacers have the same two inch register and six hole universal pattern as our blower pulleys. Spacers longer than two inches in total length are not recommended due to the additional stresses induced on the drive assembly. Extreme care should be used when installing pulley spacers, making sure they are installed flat and straight, eliminating excessive "pulley wobble".

### BLOWER DRIVE PULLEY SPACERS

Part No.	Description
300SP	.300" Blower Pulley Spacer.
400SP	.400" Blower Pulley Spacer, Special order.
406-FDS	Gear coupler spacers for front discharge blowers.
500SP	.500" Blower Pulley Spacer.
600SP	.600" Blower Pulley Spacer, Special order.
700SP	.700" Blower Pulley Spacer.
800SP	.800" Blower Pulley Spacer, Special order.
900SP	.900" Blower Pulley Spacer, Special order.
1000SP	1.000" Blower Pulley Spacer.
1400SP	1.400" Blower Pulley Spacer, Special order.

# BDS BLOWER DRIVE COMPONENTS



BDS high performance street blower drive components are designed with the toughness and durability required for the most demanding of blower drive systems. The drive snouts utilize a heavy-duty double ball bearing and heavy-duty oil seal. The snout housing is made from aircraft billet aluminum and the snout shaft is made from 4100 series heat treated steel. The 1-1/8" -48 male spline of the shaft connects to the blower gear coupler bolted to the face of the blower gear. Designed to bolt directly to a stock style blower gear cover, the drive snouts are available in three standard lengths and combined with our pulley spacers, there is a wide variety of drive spacing available to accommodate almost any application.

## BDS DRIVE SNOUITS

Part No.	Description
500	3-3/4" billet aluminum blower short drive snout with 2.760" BDS bolt pattern two inch diameter pulley register has a 1-1/8" -48 spline shaft. The snout comes with mounting bolts (5/16-18 thread), o-ring, and instructions. This snout requires the #407 Gear Coupler.
501	5-3/4" billet aluminum blower medium drive snout with 2.760" BDS bolt pattern and two inch diameter pulley register has a 1-1/8" -48 spline shaft. The snout comes with mounting bolts (5/16-18 thread), o-ring, and instructions. This snout requires the #407 Gear Coupler.
502	8-1/8" billet aluminum blower long drive snout with 2.760" BDS bolt pattern and two inch diameter pulley register has a 1-1/8" -48 spline shaft. The snout comes with mounting bolts (5/16-18 thread), o-ring, and instructions. This snout requires the #402 Gear Coupler.
510	3.930" competition short super snout with 2.76" BDS bolt pattern and two inch diameter pulley register has a 1-1/4" -48 spline shaft. The snout comes with mounting bolts (5/16-18 thread), o-ring, and instructions. This snout requires #410 gear coupler. Specify street or race application.
511	5.700" competition medium super snout with 2.76" BDS bolt pattern and two inch diameter pulley register has a 1-1/4" -48 spline shaft. The snout comes with mounting bolts (5/16-18 thread), o-ring, and instructions. This snout requires #411 gear coupler. Specify street or race application.
512	7.125" competition long super snout with 2.76" BDS bolt pattern and two inch diameter pulley register has a 1-1/4" -48 spline shaft. The snout comes with mounting bolts (5/16-18 thread), o-ring, and instructions. This snout requires #412 gear coupler. Specify street or race application.

## BDS DRIVE SNOUIT REPLACEMENT PARTS

Part No.	Description
500BK	Bearing and seal kit for #500, 501 and 502 drive snout. Includes bearing, seal, shaft snap ring, and housing snap ring.
500BG	Snout bolts and gasket for #500, 501, 502, 510 and 511.
500G	Drive snout gasket for #500, 501 and 502 drive snout.
500-1	Billet aluminum drive snout housing for #500 drive snout.
500-2	Drive snout housing snap ring for #500, 501 and 502 drive snout.
500-3	Drive snout oil seal for #500, #501 and #502 drive snout.
500-4	Drive snout bearing for #500, #501 and #502 drive snout.
500-5	Steel drive shaft 1 1/8"-48 splines for the #500 drive snout.

## BDS DRIVE SNOOT REPLACEMENT PARTS (CONTINUED)

Part No.	Description
500-6	Drive snout shaft snap ring.
500-7	Snout housing o-ring.
501-1	Billet aluminum snout housing for the #501 drive snout.
501-5	Steel drive shaft 1 1/8"-48 splines for the #501 and #502 drive snout.
502-1	Billet aluminum snout housing for the #502 drive snout.
510-1	Super Snout Housing, Short
510-2	Super Snout Housing Snap Ring
510-3	Super Snout Seal
510-4	Super Snout Bearing (2 required)
510-5	Super Snout Shaft 1 1/4"-48 splines, Short
510-6	Super Snout Shaft Snap Ring
511-1	Super Snout Housing, Medium
511-5	Super Snout Shaft 1 1/4"-48 splines, Medium
512-1	Super Snout Housing, Long
512-5	Super Snout Shaft 1 1/4"-48 splines, Long

## BDS BLOWER DRIVE GEAR COUPLERS

Part No.	Description
402	Steel gear coupler 4.250" long, 1 1/8"-48 male splines bolts to the face of the blower gear and connects the #502 snout shaft to the blower. Includes bolts, washers, and instructions.
407	Steel gear coupler fits 1 1/8"-48 male splines 1.800" long, with dual bolt patterns 1.750", bolts to the face of the blower gear and connects the #500-5 and the #501-5 snout shaft to the blower. Includes bolts, washers and instructions. Available for front discharge blowers gear coupler spacer (.700"). Use Part # 406FDS.
410	Competition short steel gear coupler, fits 1 1/4-48 male splines that bolts to the face of the blower gear and connects the #510-2 snout shaft to the blower, includes bolts, washers and instructions.
411	Competition medium steel gear coupler, fits 1 1/4-48 male splines that bolts to the face of the blower gear and connects the #511-5 snout shaft to the blower includes bolts, washers and instructions.
412	Competition long steel gear coupler, fits 1 1/4-48 male splines that bolts to the face of the blower gear and connects the #512-5 snout shaft to the blower includes bolts, washers and instructions.
425	2.8" Long Gear Coupler, fits 1 1/4-48 male splines.
426	3.8" Long Gear Coupler, fits 1 1/4-48 male splines.
430	4.2" Long Gear Coupler, fits 1 1/4-48 male splines.

## BDS TIMING ACCESSORIES

Part No.	Description
#198-S	Chevy SB timing pointer for BDS degree wheel.
#198-B	Chevy BB timing pointer for BDS degree wheel.
#199	BDS timing degree wheel for supercharged motors. Only 1/16 of an inch thick overall, add 0.050 thousands thick in spacing, this 7 inch diameter black anodized "Lazer Etched" degree wheel installs between the first vee pulley and the crank hub. With marks every 2 degrees and with larger marks every 10 degrees, using this wheel eases the chore of setting the ignition timing.
#199K	Timing pointer and degree wheel kit. (Specify SB/BB)



## ■ BDS ACCESSORY VEE GROOVE PULLEYS ■

BDS accessory vee grooves are made from billet 6061 aircraft aluminum and T6 heat treated for durability. The vee groove pulleys are sold individually and are designed to stack together along with the pulley spacers to allow the use of multiple vee grooves and special spacing, when required. The vee grooves are .700" wide with a diameter of 6.25".



Part No.	Description
150-12	Aluminum vee groove pulley with 1/2" center hole for the crank bolt. (Chevy)
150-12-BB-1	Aluminum vee groove pulley for Chevy BB with stock bolt pattern.
150-12-BB-2	Aluminum 2 vee groove pulley for Chevy BB with stock bolt pattern.
150-12-SB-1	Aluminum vee groove pulley for Chevy SB with stock bolt pattern.
150-12-SB-2	Aluminum 2 vee groove pulley for Chevy SB with stock bolt pattern.
150-34	Aluminum vee groove pulley with 3/4" center hole for the crank bolt. (Chrysl)
150-58	Aluminum vee groove pulley with 5/8" center hole for the crank bolt. (Ford)
150-73	Aluminum 3 vee groove pulley for marine applications only. Black hard anodized and they are 2.250" wide with a diameter of 5".
150-SP	Aluminum accessory serpentine 6 ribbed pulley, 1-1/4" wide with a 6-7/8" diameter. The pulley has a dual bolt pattern, stock and BDS.



#150-SP

## ■ BDS IDLER PULLEYS ■



BDS Idler Pulleys are made from billet 6061 aircraft aluminum and T6 heat treated for outstanding durability and performance. The 2" and 3" idler pulleys utilize two, single row, factory lubricated, rubber sealed ball bearings pressed into the idler housing. The belt running surface of the idler has been "crowned" in the center to help keep the blower belt centered in the idler pulley and on track. The 5/8" idler pulley mounting bolt is not supplied with the idler pulley due to the various length requirements for different mounting applications.

Part No.	Description
2002	2" wide, 4.3" diameter, polished billet aluminum idler pulley assembly. Includes 2 sealed bearings, idler pulley standoff and heavy duty washer.
2002-0	2" wide, 4.3" diameter, polished billet aluminum idler pulley housing.
3002	3" wide, 4.3" diameter, polished billet aluminum idler pulley assembly. Includes 2 sealed bearings, idler pulley standoff, and heavy duty washer.
3002-0	3" wide, 4.3" diameter, polished billet aluminum idler pulley housing.
3002-1	Black hard anodized billet aluminum idler pulley standoff for 2" and 3" wide idler pulleys.
3002-2	Heavy duty hardened steel washer for 2" and 3" idler pulleys.
3002-3	Snap ring for the 2" and 3" idler pulley housing.
3002-4	Single row, rubber sealed, factory lubricated idler pulley bearing. Two are required for each idler pulley.
3002HA	Same as 3002 except it is black hard anodized.

## BDS IDLER BRACKETS & HARDWARE

BDS idler brackets and idler arms are made from billet 6061 aircraft aluminum plate and T6 heat treated for added strength. There is a blower mounted bracket, a snout mounted idler arm, and a block mounted bracket available for various idler mounting requirements. The brackets are available by themselves or as a complete bracket kit that includes all the necessary mounting hardware.



#600KD-1



#605K



#606K



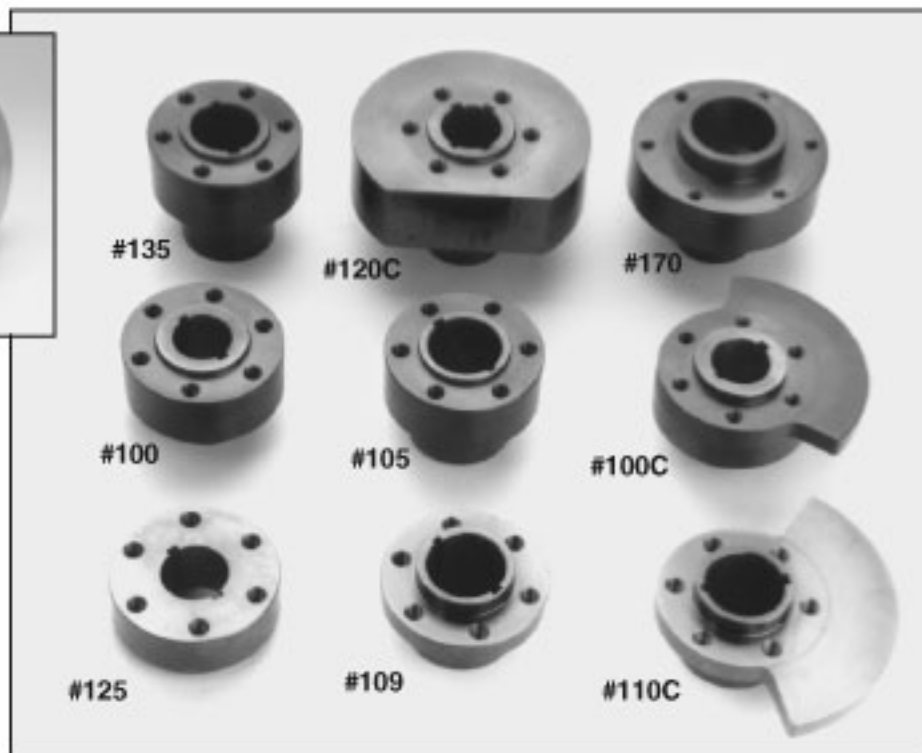
#607

Part No.	Description
312-40591	5/16-18 x 4 1/2" Socket head bolts.
600	Idler pulley bracket mounting plate that is designed to bolt directly to the blower.
600-1	.200" Aluminum idler bracket spacer for blower mounted idler bracket.
600-1-BB	New BDS Chevy SB/BB billet idler bracket only. This bracket has extra thickness design to support higher horsepower application. (Photo pg 59)
600-1-BB-2	BDS new polished Chevy BB snout and front cover mounted billet idler bracket. (Photo pg 59)
600-2	1.250" Aluminum idler bracket spacer for blower mounted idler bracket.
625-40081	5/8-11 x 4" Idler pulley mounting bolt for idler arm.
625-40082	5/8-18 x 4" Hex bolts for brackets with tee nuts.
625-40581	5/8-11 x 4-1/2" Idler pulley mounting bolt for idler arm.
625-40582	5/8-18 x 4 1/2" Hex bolts for brackets with tee nuts.
625-50081	5/8-11 x 5" Idler pulley mounting bolt for idler arm.
625-50581	5/8-11 x 5-1/2" Idler pulley mounting bolt for idler arm.
600KD-1	Billet idler bracket assembly that bolts to the front of the blower for 1V drive assemblies. Includes plate, mounting bolts, washers, spacers, idler mounting bolt, and tee nut.
600-KD-2	Billet idler bracket assembly that bolts to the front of the blower for 2V drive assemblies. Includes plate, mounting bolts, washers, spacers, idler mounting bolt, and tee nut.
600-KD-1-BB	New BDS polished Chevy BB front cover mounted billet idler bracket kit. Includes polished plate, mounting bolts, washers, spacers, idler mounting bolt and tee nut. (Photo pg 59)
600-KD-1-BB-2	BDS new polished snout and front cover mounted billet idler bracket kit. Includes polished plate, stand offs, mounting bolts, washers, idler mounting bolts and tee nut. (Photo pg 59)
606	Small block Chevy competition billet idler bracket.
606K	Small block Chevy competition billet idler bracket kit. Designed to bolt to the block. Includes spacers, bolts and tee nut.

Part No.	Description
325-30091	3/8-16 x 3" Socket head bolts.
602-2	Water pump block off plate for 454 Chevy. For use with #602 idler bracket.
604K	Chevy BB competition billet idler bracket designed to bolt to the block. Includes spacers, bolts and tee nut.
605	Billet idler pulley mounting bracket for 454 Chevy that is designed to bolt to the block.
605K	Billet idler pulley mounting bracket kit for 454 Chevy designed to bolt to the block. Includes spacers, bolts and tee nut.
610	.400" Idler pulley spacer designed to mount between the idler pulley standoff and the idler bracket or arm.
620	.700" Idler pulley spacer design to mount between the idler pulley standoff and the idler bracket or arm.
630	1" Idler pulley spacer designed to mount between the idler pulley standoff and the idler bracket or arm.
640	1.4" Idler pulley spacer designed to mount between the idler pulley standoff and the idler bracket or arm.
690	Idler pulley tee nut with 5/8-18 thread for mounting the idler pulley to the bracket.

Part No.	Description
607	Billet aluminum idler arm with 5/8-11 thread that is designed to clamp to the #500, 501, or 502 drive snout. To mount the arm onto any other drive snout, the snout diameter where the arm is to clamp, must be machined to 3.370".
375-20591	3/8-16 x 2-1/2" Socket head bolt for mounting the idler arm.
609BG	New BDS belt guard. (Photo pg 40).

# BDS CRANK HUBS



BDS crank hubs are made from 4100 series aircraft alloy hardened steel, designed to replace the stock factory harmonic balancer for blower applications only, and are necessary for proper operation and longevity of the complete blower drive assembly. Factory harmonic balancers are not designed to handle the additional stress of driving a super-charger along with other accessories. They will normally crack or break near the keyway, and come off the engine causing severe damage. The crank shaft, water pump, radiator, fenders are all subject to damage, including anything else near the front of the motor.

After market harmonic balancers are capable of withstanding the additional stress of a blown motor even in high performance applications. These highly effective harmonic dampeners are considerably heavier than the BDS steel crank hubs and therefore may not be desirable for all applications. Some modifications to the blower drive system are required in order for the lower drive assembly to bolt directly to the after market balancer. Since there are numerous configurations of after market balancers available, you will be required to send your after market balancer to us so that we may make the necessary modifications to the blower drive assembly.

BDS also recommends using two keys along with the crank hub to prevent the hub from spinning on the crank snout. All BDS crank hubs come equipped with a stock size keyway and a 1/4" keyway located 180 degrees from the stock size keyway. Key stock material is not supplied. Stock single keys are not adequate, especially if the blower drive ratio and RPM's of the motor are high. Using the stock keyway and a second 1/4" keyway is highly recommended for all applications, and a requirement for high performance or racing systems.

Part No.	Description
100	265-350 Chevy crank hub, neutrally balanced with six evenly spaced 3/8-16 bolt holes on a 2.760" bolt circle and a 2" center male register for pulley mounting. Includes timing tape.
100C	400 Chevy crank hub, counter-weighted, with six evenly spaced 3/8-16 bolt holes on a 2.760" bolt circle and a 2" center male register for pulley mounting. Includes timing tape.
105	265-350 Chevy crank hub with BB Chevy crank, neutrally balanced with six evenly spaced 3/8-16 bolt holes on a 2.760" bolt circle and a 2" center male register for pulley mounting. Includes timing tape.
109	396-427 Chevy crank hub, neutrally balanced with six evenly spaced 3/8-16 bolt holes on a 2.760" bolt circle and a 2" center male register for pulley mounting. Includes timing tape.
110C	454 Chevy crank hub, counter-weighted, with six evenly spaced 3/8-16 bolt holes on a 2.760" bolt circle and a 2" center male register for pulley mounting. Includes timing tape.
111	Chevy SB harmonic balancer with six evenly spaced 3/8-16" bolt holes on a 2.760" bolt circle and a 2" center male register for drive pulley mounting. Made to replace the factory unit, it is fully degeered, (60° BTDC to 10° ATDC). Has 2 keyways, one is stock, and the other is 1/4" located 180° from the stock size.
111C	Same as #111 except counterweighted.



**BDS CRANK HUBS (CONTINUED)**

112	427 Chevy neutrally balanced harmonic balancer with six evenly spaced 3/8-16" bolt holes on a 2.760" bolt circle and a 2" center male register for pulley mounting. This pro series all steel harmonic balancer with high grade neoprene elastomer is designed to be street safe and race legal (SFI 18-1). Made to replace the factory unit, it is fully degreed, (60 degree BTDC to 10 degree ATDC) with an overall diameter of 6 3/16". It is equipped with a stock size keyway and a 1/4" keyway located 180 degrees from the stock size. (Photo on page 33).
112C	454 Chevy counter-weighted harmonic balancer, same as part #112 except designed for externally balanced engines. (Photo on page 33).
115	AMC neutrally balanced harmonic balancer has six evenly spaced 3/8-16 bolt holes on a 2.760" bolt circle and a 2" center male register for pulley mounting. Includes timing tape.
120C	289-302, 351C, 351M, 351W, 400M Ford crank hub, counter-weighted, with evenly spaced 3/8-16 bolt holes on a 2.760" bolt circle and a 2" center male register for drive pulley mounting. Includes timing tape.
125	390-428 & 429-460 Ford crank hub, neutrally balanced with six evenly spaced 3/8-16 bolt holes on a 2.760" bolt circle and a 2" center male register for drive pulley mounting. Includes timing tape.
135	318, 340, 360, 383, 440 Chrysler crank hub, neutrally balanced with six evenly spaced 3/8-16 bolt holes on a 2.760" bolt circle and a 2" center male register for drive pulley mounting. Includes timing tape. For street and competition applications. Specify application.
*136	426 Hemi Chrysler Comp. crank hub, neutrally balanced with six evenly spaced 3/8-16 bolt holes on a 2.760" bolt circle and 2" center male register for drive pulley mounting. Includes timing tape. Specify street or competition.
*139	392 Hemi Chrysler crank hub, neutrally balanced with six evenly spaced 3/8-16 bolt holes on a 2.760" bolt circle and a 2" center male register for drive pulley mounting. Includes timing tape. Specify street or competition.
145C	Buick V8 steel harmonic balancer counter with counterweight.
170	350-455 Pontiac crank hub, neutrally balanced and will accept the stock factory steel vee groove pulleys with the Pontiac six (5/16-18) bolt pattern.
180	Cadillac 500 steel crank hub with six evenly spaced 3/8-16 bolt holes on a 2.76" bolt circle and a 2" center male register for drive pulley mounting. This crank hub has two keyways.

**CUSTOM CRANK HUB ADAPTORS: Specially modify crank hub adaptors are available to convert stock harmonic balancer to be used on blown systems. Customer will need to supply harmonic balancer to complete the conversion.**

115C	AMC V8 crank hub adaptor, counterweighted. Customer is to supply a stock balancer for modification.
*140	231 Buick V6, counter-weighted crank hub adaptor with six evenly spaced 3/8-16 bolt holes on a 2.760" bolt circle and a 2" center male register for pulley mounting. Customer is to supply a stock balancer for modifications.
*145	350-455 Buick V8, counter-weighted crank hub adaptor with six evenly spaced 3/8-16 bolt holes on a 2.760" bolt circle and a 2" center male register for drive pulley mounting. Customer is to supply a stock balancer for modifications.
160	350 Oldsmobile crank hub adaptor, neutrally balanced with six evenly spaced 3/8-16" bolt holes on a 2.760" bolt circle and a 2" center male register for drive pulley mounting. Includes timing tape. Customer is to supply a stock balancer for modifications.
165	455 Oldsmobile crank hub adaptor, neutrally balanced with six evenly spaced 3/8-16 bolt holes on a 2.760" bolt circle and a 2" center male register for drive pulley mounting. Includes timing tape. Customer is to supply a stock balancer for modifications.
165C	455 Oldsmobile counter-weighted crank hub adaptor, with six evenly spaced 3/8-16 bolt holes on a 2.760" bolt circle and a 2" center male register for drive pulley mounting. Includes timing tape. Customer to supply a stock balancer for modifications.
166	215 Oldsmobile crank hub adaptor neutrally balanced. Customer is to supply a stock balancer for modifications.

\* CUSTOM ORDER.

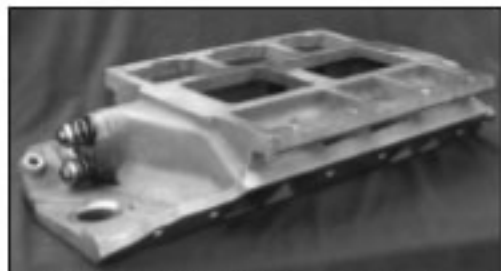
# BDS BLOWER MANIFOLDS



#8014 Chevy V-6 Manifold



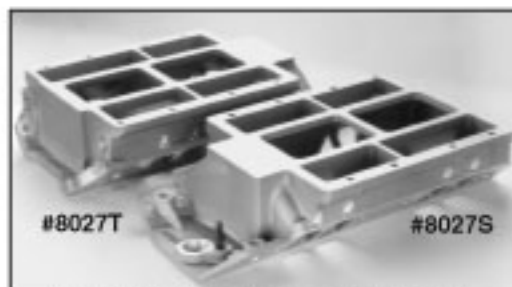
#8006 Chevy SB Street Manifold



#8026 Chevy BB Street manifold



#8026T Chevy BB Street Manifold



#8027T

#8027S

Chevy BB Tall Block and Standard Competition Manifold

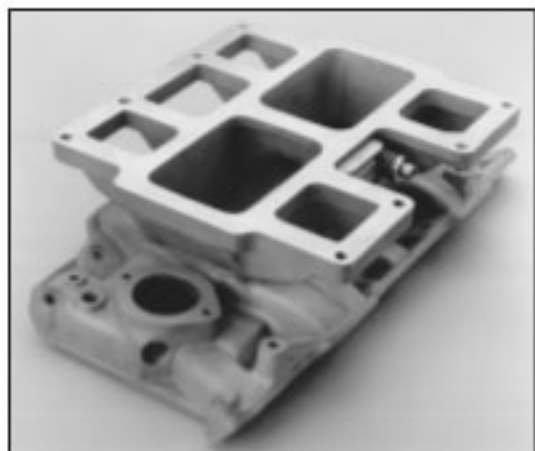
## Part No. Description

- 8006 265-400 Chevy 671 blower manifold, includes back fire valve, thermostat housing with 180° thermostat, water neck gasket and intake gaskets. The manifold is 3.9" high and has solid sides for added strength and rigidity, tented floor for improved airflow and is capable of accepting up to an 871 blower. An HEI distributor will not work, small diameter distributor required for 871 blower. Designed for stock factory heads. Will not fit Vortech heads. Specify if using a Fel Pro gasket #1206. The 471 adaptor #10004 to fit on S.B. is available. (see page 59).  
Polish option: Part #C7080P.
- 8006-LS1 New LS1 671-871 modified intake base and adaptor plate, this intake includes a backfire valve. It is 4.5" tall. If you would like to have show polish on this part, use Part# C7080P-LS1.
- 8007-M Chevy 265-400, 671-871 competition blower manifold. The manifold is 4.10" tall and has two 3/8" NPT water outlets on the front. It can be opened up to accept 1071 blower, and will need an offset distributor with this size blower. Designed for rectangle port heads. This manifold can be machined for backfire valve or burst panel. Specify if using a Fel Pro gasket #1206. Polish option: Part#C7081P. (See photo on page 72.)
- 8014 229-292 V6 Chevy 471 blower manifold includes back fire valve, thermostat housing with 180° thermostat, and water neck gasket. An HEI distributor will work with minor modifications. The manifold is 3.9" high and designed for stock factory heads. Polish option: Part #C7080P.
- 8026 396-454 Chevy 671/871 blower manifold, includes back fire valve, thermostat housing with 180° thermostat, water neck gasket and intake gaskets. The manifold is 4.4" high and has solid sides for added strength and rigidity, tented floor for improved airflow, and is capable of accepting up to a 1071 blower with set back plate. An HEI distributor will not work, offset distributor required for 1071 and larger blowers. Designed for stock factory rectangle port heads. Extra material has been added around the ports to allow port matching. Will not fit Vortech heads. Polish option: Part #C7080P.
- 8026T Same as #8026 except the manifold is designed to fit the Chevy BB tall deck style block without the use of spacers. The intake is 4.10" tall. Includes backfire valve, thermostat housing, with 180° thermostat and water neck gasket. Polish option: Part #C7080P.
- 8027S 396-454 Chevy competition blower manifold. The manifold is 4.9" tall, has 3/4" NPT water outlets in the front, 1/2" on back, solid sides for extra strength and rigidity, tented floor for improved airflow and is drilled and tapped 1/8" NPT for port nozzle injection. The manifold comes with the standard 671-871 opening and can be opened up to accept 1071, 1271 and 1471 blowers. Offset distributor required for 1071 to 1471 blowers. Designed for rectangle port heads. Polish option: Part #C7081P.
- 8027T Same as #8027 except it is designed to fit the Chevy big block tall deck style blocks without the use of manifold spacers. The intake is 5.2" tall. Requires standard deck height distributor. Polish option: Part #C7081P.
- 8036 348-409 Chevy 671-871 manifold is 5 3/4" tall and includes factory style water outlet and backfire valve. Designed for small port heads. Water neck not included. Polish option: Part #C7091P. (See photo on page 36.)
- 8106A AMC V8 671/871 blower manifold. The manifold is 6.2" tall and includes factory style water outlet and backfire valve. Polish option: Part #C7091P. (See photo on page 72.)

## BDS BLOWER MANIFOLDS (CONTINUED)



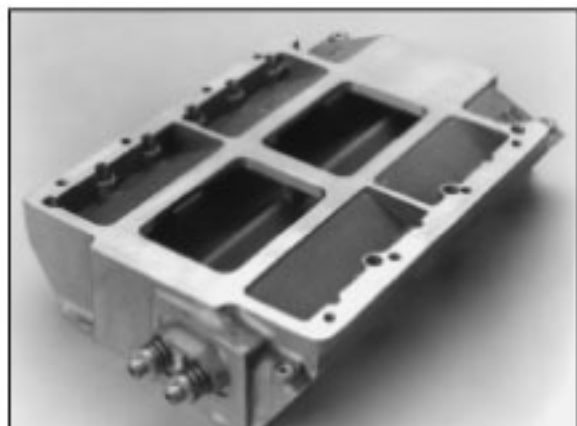
#8036 Chevy 348-409 (671-871) Manifold



#8306 (A) (B) Chrysler 318-340 Manifold



#8366 Chrysler 440 Manifold



#8376 Chrysler 426 Manifold

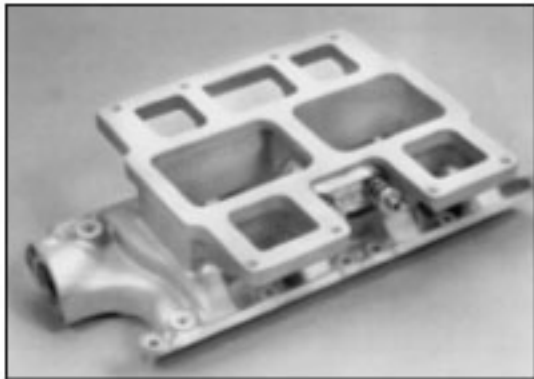
### Part No. Description

- |       |   |
|-------|---|
| 8204A | Buick oddfire V6 471 blower manifold is 5.9" tall and includes factory style water outlet and back fire valve. Designed to fit stock factory heads. Water neck not included. Polish option: Part # /C7091P. (See page 72) |
| *8216 | 425 Buick V8 671-871 blower manifold. SPECIAL ORDER. Polish option: Part # /C7091P.   |
| 8256  | 455 Buick V8 671-871 blower manifold. The manifold is 5.7" tall and includes factory style water outlet and back-fire valve. Designed for stock factory heads. Water neck not included. Polish option: Part # /C7091P.    |

*NOTE: Specifications on head must be provided to choose proper intake.*

- |        |   |
|--------|---|
| 8306A  | 273-318 Chrysler V8 66+ 671-871 blower manifold. The manifold is 5.7" tall and includes factory style water outlet and backfire valve. Designed for large port stock factory heads. Water neck not included. Polish option: Part # /C7091P.                                 |
| 8306B  | 273 Chrysler V8 65- 671-871 blower manifold. The manifold is 5.7" tall and includes factory style water outlet and backfire valve. Designed for small port stock factory heads. Water neck not included. Polish option: Part # /C7091P.                                     |
| 8306C  | 340-360 Chrysler V8 671-871 blower manifold. The manifold is 6.960" tall and includes factory style water outlet and backfire valve. Designed for large port stock factory heads. The port size is 2.2" x 1.060". Polish option: Part # /C7091P.                            |
| 8356   | 383 Chrysler V8 671-871 blower manifolds. The manifold is 5.4" tall and includes factory style water outlet and backfire valve. Designed for stock factory heads. Water neck not included. Polish option: Part # /C7091P.   |
| 8366   | 440 Chrysler V8 671-871 blower manifold. Competition style manifold is 3.3' tall and has a tented floor for exceptional air flow. Includes backfire valve. Polish option: Part # /C7080P.   |
| 8376   | 426 Hemi Chrysler V8 671-871 blower manifold is 4.1" tall. Competition style manifold has tented floor and back-fire valve. Designed for factory cast iron heads. Accepts 1071-1471. Polish option: Part # /C7080P.   |
| 8386   | 392 Hemi Chrysler 671-871 blower manifold is 3.8" tall. Competition style manifold includes backfire valve. Accepts 1071-1471. Polish option: Part # /C7081P.   |
| 8386-H | 331,354 & 392 Hemi "Hot Heads" Chrysler 671-871 blower is 6.250" tall. Runner style intake includes back-fire valve. Designed for factory cast iron heads. Accepts 671-1071. Please specify street or competition style. Polish option: Part # /C7084P. (Photo on page 72). |
| *8404  | 289-302 Ford V8 471 blower manifold. The manifold is 5.7" tall and includes factory style water outlet and back-fire valve. Requires Flat Cap style distributor (BDS#8555102 / #8570402). Water neck not included. Polish option: Part # /C7089P.                           |

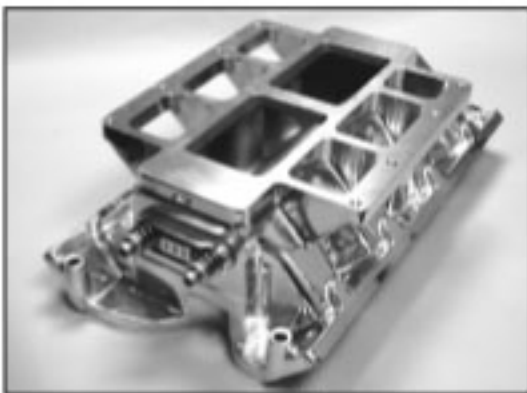
## BDS BLOWER MANIFOLDS (CONTINUED)



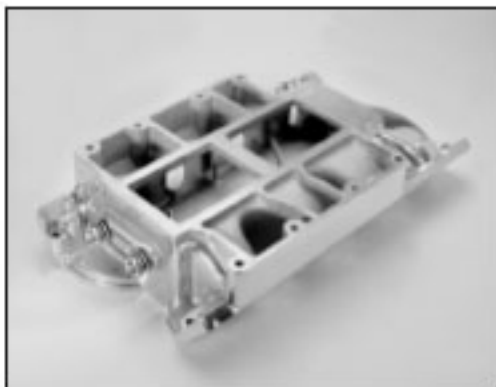
#8406 Ford 289-302 Manifold



#8416A Ford 351C Manifold



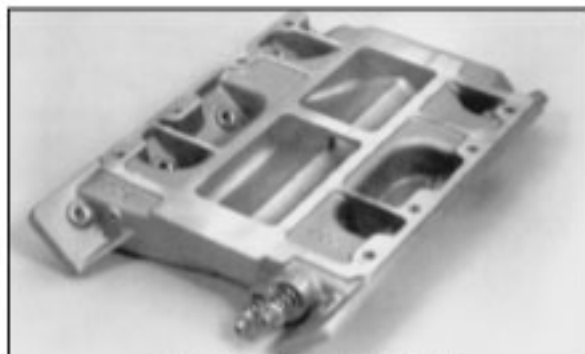
#8456 Ford 460 Manifold (Shown polished)



#8466B Ford manifold

Part No.	Description
8406	289-302 Ford V8 671-871 blower manifold. The manifold is 5.7" tall and includes factory style water outlet and backfire valve. Requires flat cap style distributor (BDS #8555102 or #8570402). Water-neck not included. Polish option: Part # /C7089P.
8416A	351C Ford V8 671-871 blower manifold. The manifold is 5.8" tall and includes a backfire valve. Requires Flat Cap style distributor (BDS #8556702). Designed for 4 barrel factory heads. Available for 2 barrel heads. Part #8416B. Polish option: Part # /C7089P.
8426	351W Ford V8 671-871 blower manifold. The manifold is 6.3" tall and includes a factory style water outlet and backfire valve. Requires flat cap style distributor (BDS #8555402). Designed for stock factory heads. Specify 6 or 8 bolt. (Use Part # 8427 for 8 bolt). Polish option: Part # /C7089P.
8436	400M Ford V8 671-871 Blower Manifold. The manifold is 6.4" tall and includes a backfire valve. Requires flat cap style distributor (special order). Designed for factory heads. Polish option: Part # /C7089P.
8446-H	390-428 Ford V8 671-871 'Blue Thunder' Blower manifold. The manifold is 6.6" tall includes factory style water outlet and comes o-ringed. It is drilled and tapped 1/8" npt for port nozzle injection. Requires flat cap style distributor. Design for factory heads. Water neck not included. Backfire valve optional: #C7015BF. Polish option: Part # /C7087P.
8456	New BDS 429-460 Ford V8 671-871 blower manifold. This runner style intake has a tented floor for better fuel delivery. The manifold is 6.9" tall and includes a backfire valve and factory style water outlet. Designed for factory CJ heads. Water neck not included. Polish option: Part #7090-2P.
8466B	Boss 429 Ford V8 671-871 blower manifold. The competition style manifold is 5.1" tall and includes a backfire valve. Requires crank trigger ignition. Designed for factory heads. Accepts 671-1471. Polish option: Part # /C7082P.
8506	350 Oldsmobile V8 671-871 blower manifold. The manifold is 5.9" tall and includes factory style water outlet and backfire valve. Designed for stock factory heads. Water neck not included. Polish option: Part # /C7091P.
8514	215 Oldsmobile V8 471 blower manifold. The manifold is 5.3" tall and includes factory style water outlet and backfire valve. Designed for stock factory heads. Water neck not included. Polish option: Part # /C7091P.
8556	455 Oldsmobile V8 671 Blower Manifold. The manifold is 5.7" tall and includes factory style water outlet and backfire valve. Designed for stock factory heads. Water neck not included. Polish option: Part# /C7092P.

## BDS BLOWER MANIFOLDS (CONTINUED)

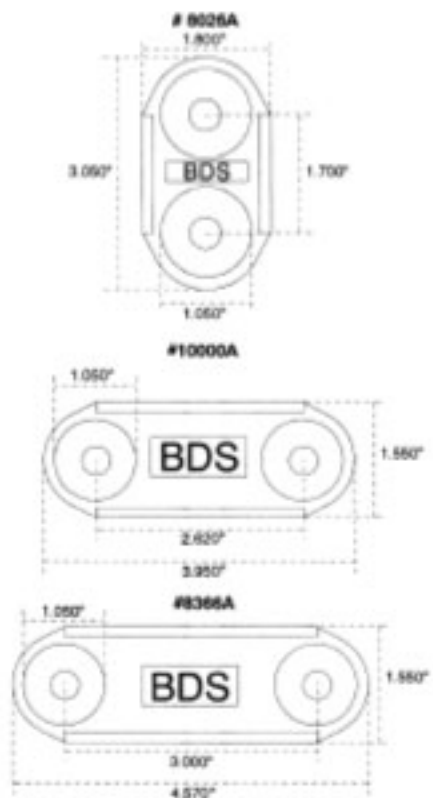


#8607 Pontiac Manifold

Part No.	Description
8607	326-455 Pontiac V8 671 Blower Manifold. The manifold is 2.6" tall and includes the water neck, backfire valve, belly pan, intake gaskets, and necessary mounting hardware. Polish option: Part# /C7080P.
8708	Cadillac 500 Modified intake base, Specially designed to accept adaptor plate #10003 to be used with 671-871 blower. This manifold and plate is 4.8" tall and comes with backfire valve. If you would like to show polish, use Part# C7091P. (See complete engine photo on pg. 10)

## BLOWER MANIFOLD BACKFIRE VALVES

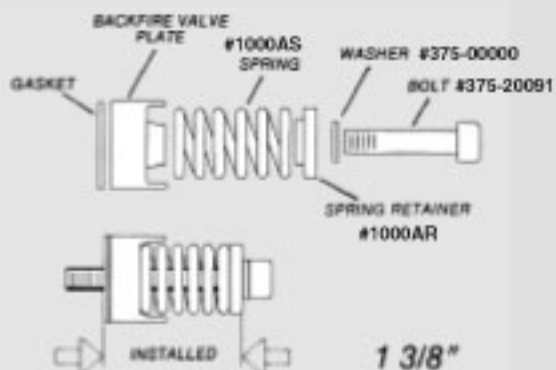
The following list includes all the parts and pieces, as well as complete blower manifold backfire valve kits. These spring loaded valves are designed to relieve the excess pressure caused by mild engine backfires. This helps prevent damage to the blower and other related components. The proper assembly and the setting of the spring pressure are shown in the following diagram.



Part No.	Description
8026A	Small Backfire Valve Plate
8026AG	Small Backfire Valve Gasket
8026AK	Small Backfire Valve Kit
8366A	Large Backfire Valve Plate
8366AG	Large Backfire Valve Gasket
8366AK	Large Backfire Valve Kit
10000A	Medium Backfire Valve Plate
10000AG	Medium Backfire Valve Gasket
10000AK	Medium Backfire Valve Kit
10000AR	Aluminum Spring Retainer, universal 2 required
10000AS	Backfire Valve Spring, universal 2 required
8027SBP	Burst Panel Kit - SF1-23.1
375-00000	Washer, 3/8 AN, can be used with all backfire valves, universal 2 required
375-20091	Backfire Valve Bolt, 3/8-16 x 2" Socket head, can be used with all backfire valves, universal 2 required

### BACKFIRE VALVE INSTRUCTIONS

1. Install backfire valve on the intake after the intake manifold is installed on the motor.
2. Install gasket, backfire valve plate springs and spring retainers with 3/8" - USS x 2 inch bolts supplied.
3. The "Installed Spring Height" should be 1-3/8 inches from the intake manifold, to the top of the spring retainer.



## BLOWER MANIFOLD ACCESSORIES



Part No	Description
125OR	1/8" Viton O-ring material. Sold by the foot.
316OR	3/16" Viton O-ring material. Sold by the foot.
671-8	671 Set back adapter plate, polished for front discharge blower. Includes machine work on intake or inter-cooler and o-ringing the plate. Also supplied with custom fitted 8 studs, (7/16" x 2 1/2"), washers, nuts, and 8 socket bolts (7/16" x 5"). SPECIAL ORDER.
871-8	871 Set back adapter plate, polished for front discharge blower. Includes machine work on intake or inter-cooler and o-ringing the plate. Also supplied with custom fitted 8 studs, (7/16" x 2 1/2"), washers, nuts, and 8 socket bolts (7/16" x 5"). SPECIAL ORDER.
1000-1	Mechanical Vacuum/Boost Gauge, 2" dash mounted, round dial, 0-30" vacuum and 0-20 psi boost, has 1/8" and 1/4" NPT male connection, includes 6 foot nylon tubing.
10002-B	New BDS 2" tall aluminum blower spacer plate. Blanchard ground on both sides. Includes 1/8" O-ring. Use part# C70921P for polish option.
10003	Cadillac 1/2" tall polished adapter plate with backfire valve. To be used with part#8708
10004	471 Adapter plate is designed to fit 671 opening to 471 blower to be used with part #8006, unpolished. (Photo on page 59).
1071-8	1071 Set back adapter plate, polished for front discharge blower. Includes machine work on intake or inter-cooler and o-ringing the plate. Also supplied with custom fitted 8 studs, (7/16" x 2 1/2"), washers, nuts, and 8 socket bolts (7/16" x 5"). SPECIAL ORDER.
1400	Externally mounted thermostat housing. Accepts GM thermostat and water neck. Designed for use with manifolds that do not have provisions for a thermostat or water neck. Has three 3/4" NPT and one 1/4" NPT outlets.
1401	BDS polished aluminum water neck designed for use with Chevy and Pontiac BDS blower manifolds. Includes thermostat 180°, water neck, mounting bolts, and gasket.
1471-8	1471 Set back adapter plate, polished. Includes machine work on intake or inter-cooler and o-ringing the plate. Also supplied with custom fitted 8 studs, (7/16" x 2 1/2"), washers, nuts, and 8 socket bolts (7/16" x 5"). SPECIAL ORDER.
1671-8	1671 Set back adapter plate, polished for front discharge blower. Includes machine work on intake or inter-cooler and o-ringing the plate. Also supplied with custom fitted 8 studs, (7/16" x 2 1/2"), washers, nuts, and 8 socket bolts (7/16" x 5"). SPECIAL ORDER.
8006IG	Intake manifold gaskets for BDS small block Chevy blower manifold #8006.
8026IG	Intake manifold gaskets for BDS big block Chevy blower manifold #8026.
8366IG	Chrysler 440 intake gaskets for part #8366.
8607IG	Pontiac intake manifold gaskets for part# 8607.
8027SBP	Blower intake burst panel kit certified for SFI 23-1. Includes frame with counter sunk screws and panel.
8027SBP-1	Burst panel only certified for SFI 23-1.
8027SBP-2	Burst panel frame with 24 counter sunk screws, measures 3-1/8" tall by 6-1/8" wide. (See photo pg 59 )



#1401

#1400



## BLOWER MANIFOLD OPTIONS

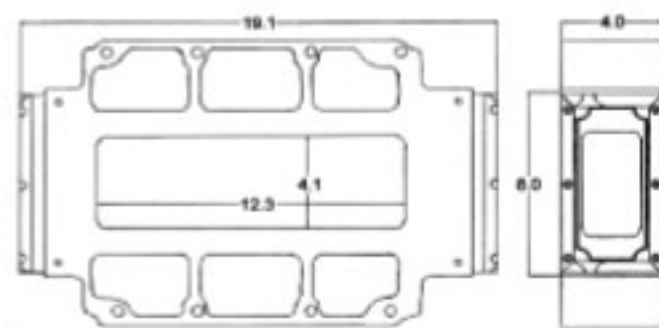
Part No.	Description
C7027	Machine custom opening in manifold will need template.
C7028	Machine O-Ring groove.
C7030	Machine intake for burst panel.

## BLOWER INTERCOOLERS

The concept of intercooling has been around for many years. Intercooling refers to the use of a heat exchanger to reduce the engine inlet air/fuel temperature thereby increasing the AIR DENSITY. Air density refers to the amount of oxygen present in each cubic foot of air consumed by the engine. When the air is compressed by the supercharger, the air is heated. The heated air expands or it takes up more space. Cooler air takes up less space. Therefore by cooling, more air (oxygen) can be delivered to the engine. More air means more fuel, more fuel means more horsepower.

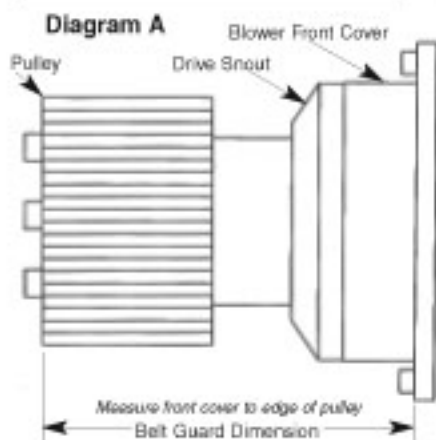
The net horsepower gain by supercharging an engine can be substantially increased by cooling the boosted air charge delivered by the supercharger. Independent testing has shown increases of 100 horsepower or more with the use of an intercooler.

These intercoolers are designed to be placed between the intake manifold and the blower. The intercooler assembly will increase the overall height of the blower system by four inches. Installation requires longer blower mounting studs, longer belts and possibly different blower pulleys. Obviously a cool water source is also required. The cooler the water going into the intercooler, the more gain in horsepower.



Part No.	Description
8910	Intercooler/Blower steel mounting stud. 6 3/4" long, 7/16-14 on one end and 7/16-20 on the other.
8911	Same as #8910 except it is 7-3/8" long.
8950	Intercooler polished housing with end plates.
8950-0	Intercooler housing, aluminum.
8961-12	End plate (1) is 1/2" thick and is polished.
8961-34	End plate (1) is 3/4" thick and is polished.
8955	Intercooler core. Copper and brass construction for sea water compatibility, furnace braised for strength and durability.
8956	671-871 blower intercooler. The intercooler is 4" tall and has (2) 1/2" NPT inlets in the front and (2) 1/2" NPT outlets in back, O-ring sealed, gaskets (2), 8 S.S. studs with nuts and pressure tested. Designed for water/antifreeze coolant.
8958	1071-1471 blower intercooler. Specify opening size when ordering. The intercooler is 4" tall and has (2) 1/2" NPT inlets in the front and (2) 1/2" NPT outlets in back. O-ring sealed, gaskets (2), 8 S.S. studs with nuts and pressure tested. Designed for water/antifreeze coolant.
8959	1671 Blower intercooler. The intercooler is 4" tall and has (2) 1/2" NPT inlets in the front and (2) NPT outlets in back. O-ring sealed, gaskets (2), 8 S.S. studs with nuts and pressure tested. Designed for water/antifreeze coolant.

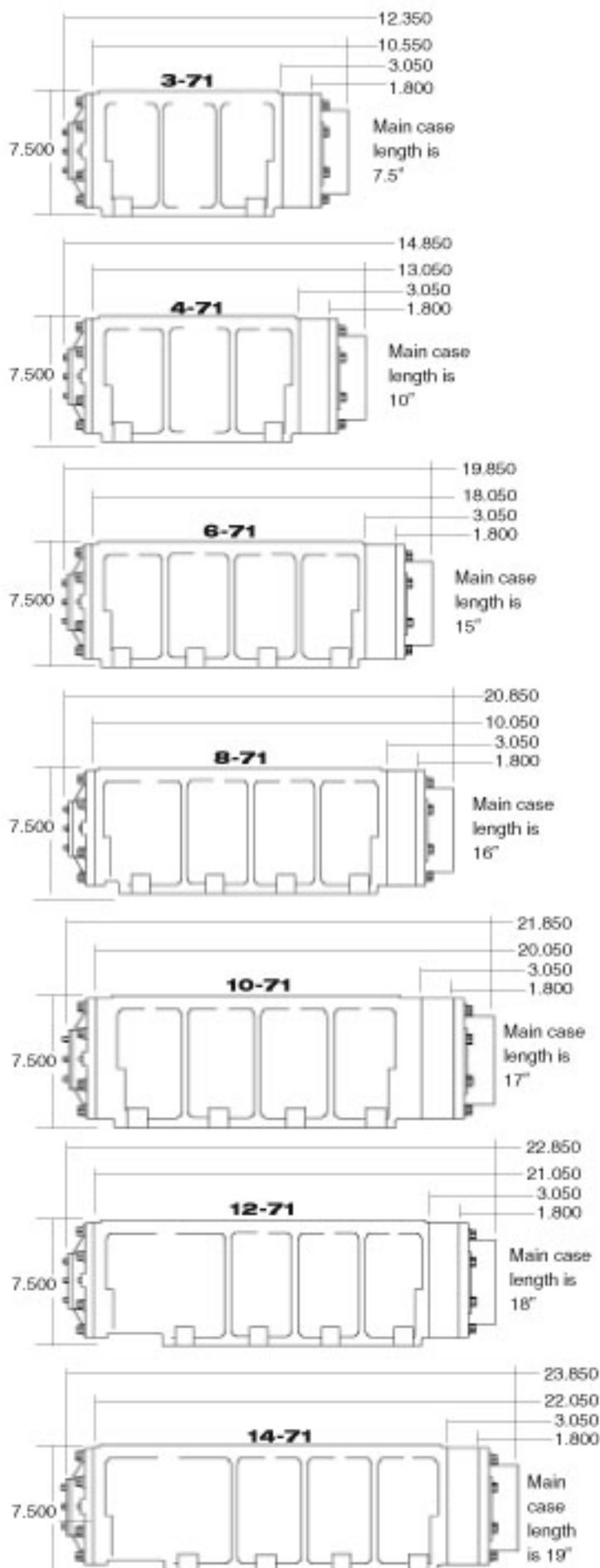
## BDS BELT GUARD



NEW BDS Blower Belt Guard, polished, includes 4 stand off's with studs, BDS face plate, front and rear plate with bolts. Covering most of the upper pulley it can protect against unwanted interference from outside of the system. This guard is designed to offer protection from the blower belt. This unique guard is universal and will fit most blower systems when you provide the dimensions of your system. (See diagram A)



Part #609BG



All BDS blowers are assembled by hand with heavy duty competition components. The same parts used to assemble our racing blowers are the same parts used in all of our blowers. Heavy duty bearings and special double lipped teflon seals are used to ensure long life. The heavy duty bearing plates and cases are machined to precise specifications that produce the most efficient blower possible. All BDS blowers are fully show polished as a standard feature. Unpolished blowers are a special order.

## Blower Efficiency and Specific Blower Applications

In order for a supercharger to perform up to its maximum potential, it must be assembled, clearanced, and setup specifically for the application for which it will be used. BDS categorizes these differences by "Stages". Specify which Stage suits your requirements when you place your order or let the experts at BDS determine the correct Stage for you. CAUTION: failure to follow the guidelines outlined below could result in blower failure. BDS is not responsible for failures due to the improper use of blowers. The different Stages and their intended uses are as follows:

### Stage 1

Used in almost all street applications using "pump gas". Capable of producing a maximum of 12-15 lbs. of boost in most systems, not exceeding engine speeds in excess of 7000 RPM.

### Stage 2

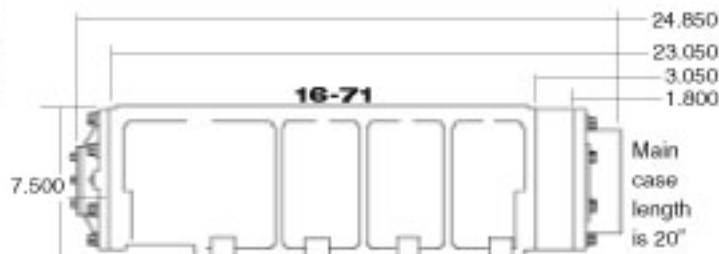
Used in high performance street systems, bracket racing, marine and/or dirty racing environments using high octane gas. The interior of the blower is hard anodized for added strength and efficiency. Capable of producing 15 lbs. of boost and more on engines turning in excess of 7500 RPM.

### Stage 3

Used for high performance racing applications on gas. Hard anodized and Teflon stripped on the lips of the rotors. This blower is capable of very high boost levels and high engine RPM. Designed for street, strip and off shore systems.

### Stage 4

Used for high performance racing applications using alcohol and/or nitro-methane for fuel. Hard anodized and stripped with both Nylatron and Teflon, this blower is capable of extremely high boost levels and engine RPM's. Intended for competition use only.





## BDS BLOWERS (CONTINUED)



BDS pre-bench tests stage 3 & 4 blowers before shipping. They are tested to guarantee that they are mechanically ready to run.

Part No.	Description
471	471 Stage 1 Blower, Polished.
471-BP	471 Stage 1 Blower with billet end plates, polished.
471HA	471 Stage 2 Blower with cast end plates, polished.
471HA-BP	471 Stage 2 Blower with billet end plates, polished.
471HAT	471 Stage 3 Blower with cast end plates, polished.
471HAT-BP	471 Stage 3 Blower with billet end plates, polished.
471HATT	471 Stage 4 Blower with cast end plates, polished.
671	671 Stage 1 Blower with cast end plates, polished. Available in small or large bore.
671-BP	671 Stage 1 Blower with billet end plates, polished.
671-BDS	BDS 671 Stage 1 Blower with billet end plates, polished. Only in large bore profile.
671-AL	671 Stage 1 Blower with Air-Loc rotors and billet end plates, polished.
671HA	671 Stage 2 Blower with cast end plates, polished.
671HA-BP	671 Stage 2 Blower with billet end plates, polished.
671HA-BDS	671 Stage 2 BDS Blower with billet end plates, polished.
671HA-AL	671 Stage 2 BDS Blower with Air-Loc rotors and billet end plates, polished.
671HAT	671 Stage 3 Blower with cast end plates, polished.
671HAT-BP	671 Stage 3 Blower with billet end plates, polished.
671HAT-BDS	671 Stage 3 BDS Blower with billet end plates, polished.
671HAT-AL	671 Stage 3 BDS Blower with Air-Loc rotors and billet end plates, polished.
671HATT	671 Stage 4 Blower with cast end plates, polished.
671HATT-BP	671 Stage 4 Blower with billet end plates, polished.
671HATT-BDS	671 Stage 4 BDS Blower with billet end plates, polished.
671HATT-AL	671 Stage 4 BDS Blower with Air-Loc rotors and billet end plates, polished.
871	871 Stage 1 Blower with cast end plates, polished.
871-BP	871 Stage 1 Blower with billet end plates, polished.
871-AL	871 Stage 1 Blower with Air-Loc rotors and billet end plates, polished.
871HA	871 Stage 2 Blower with cast end plates, polished.
871HA-BP	871 Stage 2 Blower with billet end plates, polished.
871HA-AL	871 Stage 2 Blower with Air-Loc rotors and billet end plates, polished.
871HAT	871 Stage 3 Blower with cast end plates, polished.
871HAT-BP	871 Stage 3 Blower with billet end plates, polished.
871HAT-AL	871 Stage 3 Blower with Air-Loc rotors and billet end plates, polished.
871HATT	871 Stage 4 Blower with cast end plates, polished.
871HATT-BP	871 Stage 4 Blower with billet end plates, polished.
871HATT-AL	871 Stage 4 Blower with Air-Loc rotors and billet end plates, polished.

Part No.	Description
1071HA-AL	1071 Stage 2 Blower with Air-Loc rotors and billet end plates, polished.
1071HAT-AL	1071 Stage 3 Blower with Air-Loc rotors with billet end plates, polished.
1071HATT-AL	1071 Stage 4 Blower with Air-Loc rotors with billet end plates, polished.
1471 HA-AL	1471 Stage 2 Blower with Air-Loc rotors with billet end plates, polished.
1471HAT-AL	1471 Stage 3 Blower with Air-Loc rotors with billet end plates, polished.
1471HATT-AL	1471 Stage 4 Blower with Air-Loc rotors with billet end plates, polished.
1671HA-AL	1671 Stage 2 Blower with Air-Loc rotors with billet end plates, polished.
1671HAT-AL	1671 Stage 3 Blower with Air-Loc rotors with billet end plates, polished.
1671HATT-AL	1671 Stage 4 Blower with Air-Loc rotors with billet end plates, polished.

## ■ CUSTOM MARINE & COMPETITION BLOWERS ■

BDS pre-bench tests these blowers before shipping. They are tested to guarantee that they are mechanically ready to run.

These blowers are for high performance racing applications using alcohol or nitro methane fuel. They are hard anodized and the Air-Loc rotors are teflon. The front inlet and discharge bearing plate is installed with oversized heavy duty dual angular bearings to reduce heat in prolonging bearing life. The front discharge and front inlet pocket are machined into the front bearing plate to increase efficiency through the rotors breathing and discharge cycle. This modification to the blowers will require a set back plate to re-position its mounting location on the intake delivering the most performance from the front discharge. When concentrating the discharge port opening between the front and rear intake runners, it helps air and fuel distribution throughout the intake manifold.

### Recommend for Nostalgia Top Fuel and Funny Car

Part No.	Description
671HAT-FD	BDS 671 Stage 3 Blower, front discharge, Air-Loc rotors and billet end plates, polished.
671HATT-FD	BDS 671 Stage 4 Blower, front discharge, Air-Loc rotors and billet end plates, polished. Recommended for nostalgia top fuel and funny car.
671NHATT-FD	BDS Nostalgia 671 Stage 4 Blower, front discharge, Air-Loc rotors and billet end plates, black hard anodized on the outside.

### Recommend for Monster Trucks, Pro Comp, Quick 8's and 16's

871HAT-FD	BDS 871 Stage 3 Blower, front discharge, Air-Loc rotors and billet end plates, polished.
871HATT-FD	BDS 871 Stage 4 Blower, front discharge, Air-Loc rotors and billet end plates, polished.
871MHATT-FD	BDS Monster Truck 871 Stage 4 Blower, front discharge, Air-Loc rotors and billet end plates, black hard anodized on the outside of case.

### Recommend for all racing applications.

1071HAT-FD	BDS 1071 Stage 3 Blower, front discharge, Air-Loc rotors and billet end plates, polished.
1071HATT-FD	BDS 1071 Stage 4 Blower, front discharge, Air-Loc rotors and billet end plates, polished.

### Recommend for Poker Run, Offshore Boats, Drag Boats, and 600+CID's

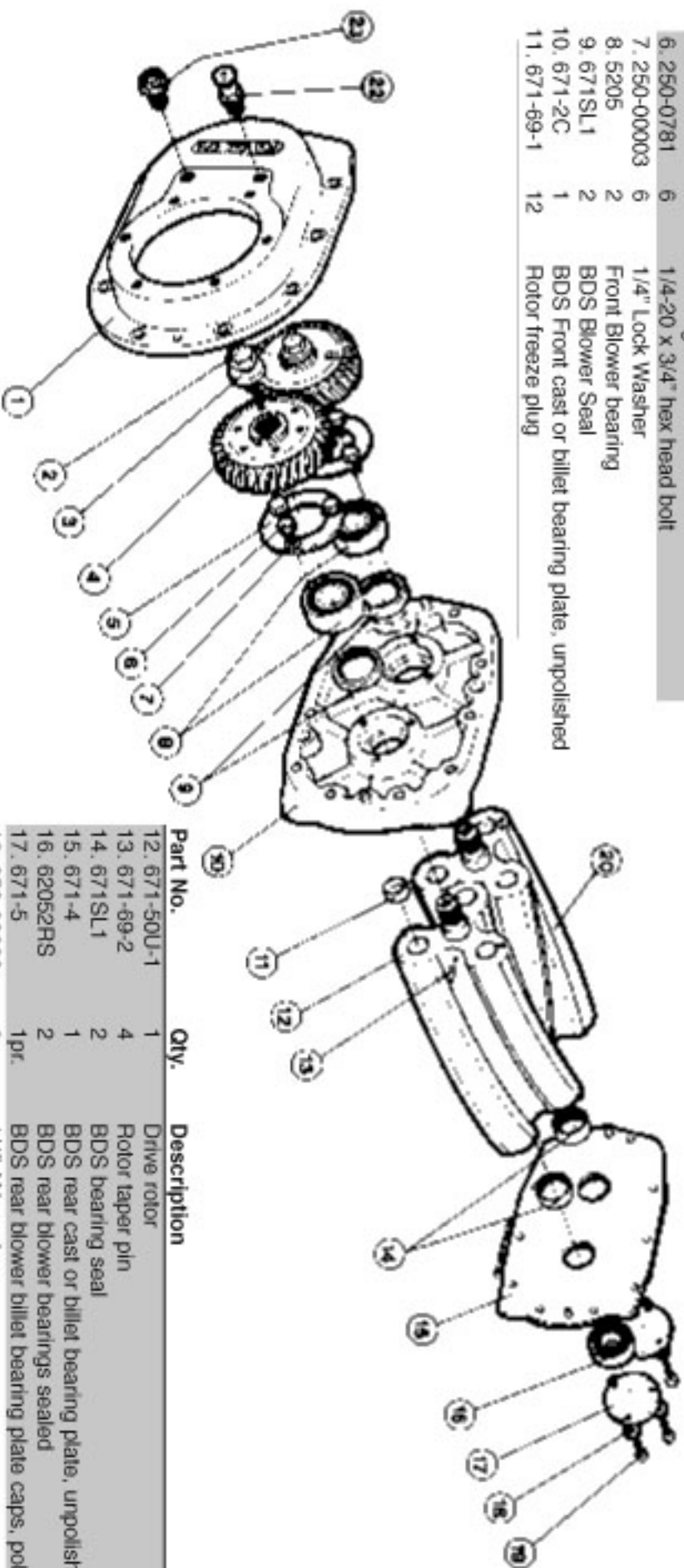
Special blower top opening is fully machined from front to rear to displace the Dominator carburetors inline, it allows fuel to evenly spray down resulting in a cooler discharge. Our customers have seen an increase of 50 horsepower. This modification requires our Marine top (part#24B6DIL).

1471HAT-FD	BDS 1471 Stage 3 Blower, front discharge, Air-Loc rotors and billet end plates, polished.
1471HATT-FD	BDS 1471 Stage 4 Blower, front discharge, Air-Loc rotors and billet end plates, polished.
1471MHATT-FD	BDS 1471 Stage 4 Marine Blower, front discharge, Air-Loc rotors and billet end plates, polished.
1671HAT-FD	BDS 1671 Stage 3 Blower, front discharge, Air-Loc rotors and billet end plates, polished.
1671HATT-FD	BDS 1671 Stage 4 Blower, front discharge, Air-Loc rotors and billet end plates, polished.
1671MHATT-FD	BDS 1671 Marine Stage 4 Blower, front discharge, Air-Loc rotors and billet end plates, polished.

### NEW PRO-LOC BLOWERS Listed on page 65

## BDS INTERNAL BLOWER PARTS LIST

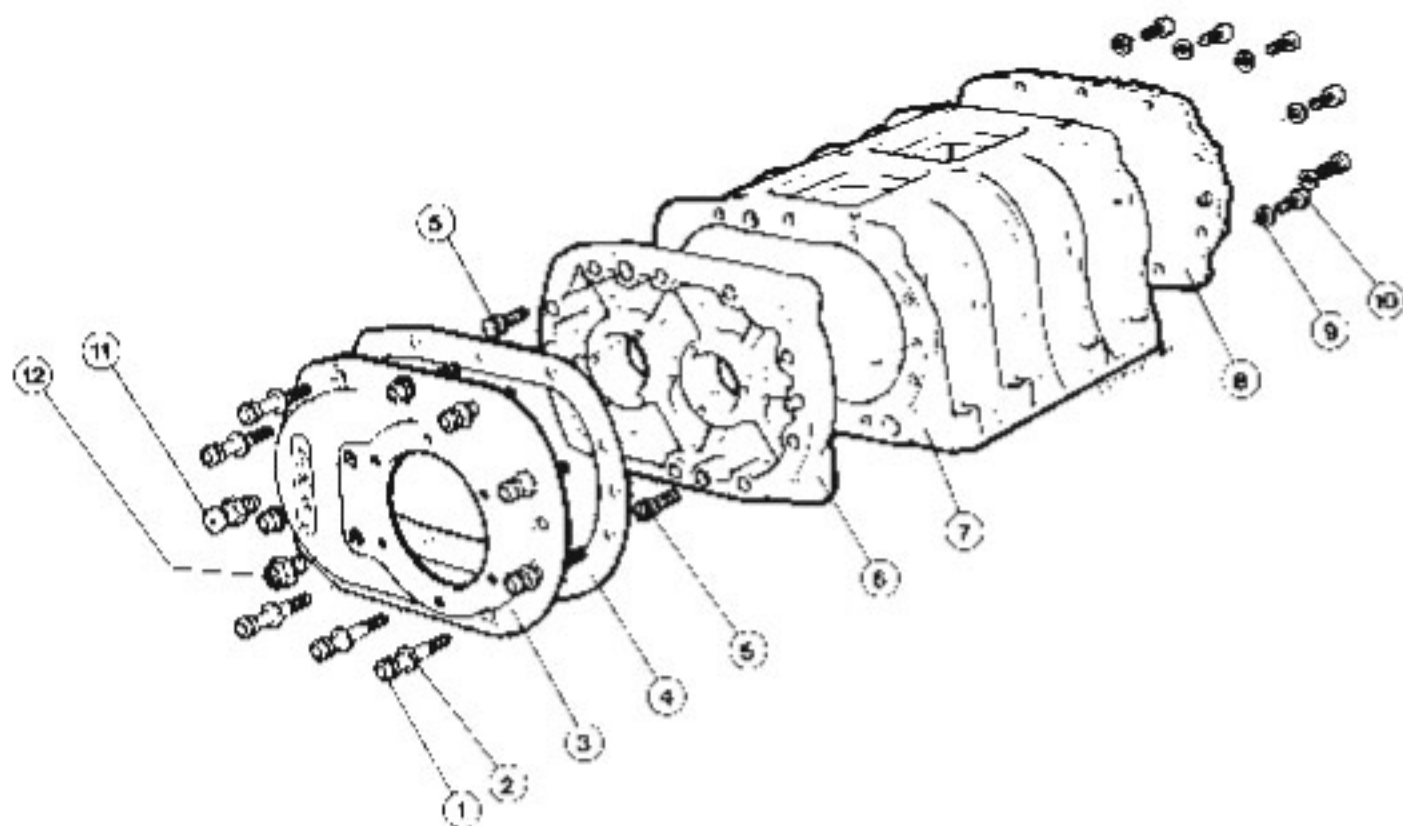
Part No.	Qty.	Description
1. 671-1C	1	BDS cast or billet front cover, unpolished
2. 500-10282	2	1/2-20 x 1-1/4" hex head bolt
3. 671-38	2	Bds Gear Washer
4. 671-34	1pr.	Bds blower gear set (used)
5. 671-22	2	Bearing Retainer
6. 250-0781	6	1/4-20 x 3/4" hex head bolt
7. 250-00003	6	1/4" Lock Washer
8. 5205	2	Front Blower bearing
9. 671SL1	2	BDS Blower Seal
10. 671-2C	1	BDS Front cast or billet bearing plate, unpolished
11. 671-69-1	12	Rotor freeze plug



Part No.	Qty.	Description
12. 671-50U-1	1	Drive rotor
13. 671-69-2	4	Rotor taper pin
14. 671SL1	2	BDS bearing seal
15. 671-4	1	BDS rear cast or billet bearing plate, unpolished
16. 62052RS	2	BDS rear blower bearings sealed
17. 671-5	1pr.	BDS rear blower billet bearing plate caps, polished
18. 250-00000	6	1/4" AN washer
19. 250-00791	6	1/4-20 x 3/4" socket head bolt
20. 671-50U-2	1	Driven rotor
22. 555	1	BDS pressure relief valve
23. 556	1	BDS oil sight gauge

# BDS EXTERNAL BLOWER PARTS LIST

Part No.	Qty.	Description
1. 312-20291	10	5/16-18 x 2 1/4" socket head bolt
2. 312-00000	10	5/16" AN washer
3. 671-1C	1	BDS front cast or billet cover, unpolished
4. 671-1SG	1	BDS front cover gasket
5. 312-10591	2	5/16-18 x 1-1/2" socket head bolt
6. 671-2C	1	BDS front cast or billet bearing plate, unpolished



Part No.	Qty.	Description
7. 671-30	1	BDS blower case, unpolished
8. 671-4	1	BDS rear cast or billet bearing plate, unpolished
9. 312-00000	10	5/16" AN washer
10. 312-10291	10	5/16-18 x 1-1/4" socket head bolt
11. 555	1	BDS pressure relief valve
12. 556	1	BDS oil sight gauge

## BDS BLOWER PARTS



BDS offers a complete line of high quality, heavy duty replacement blower parts and accessories for all 471 thru 1671 blowers. These replacement parts are designed to exceed the original manufacturers specifications for strength and durability. BDS uses the highest quality material and components in their manufacturing process to produce the finest blower replacement parts available in the industry. The BDS cast or billet front covers are made from aircraft aluminum and are available in both early and late GM styles, polished or unpolished, individually, or as a complete front cover kit.

## BLOWER FRONT COVERS

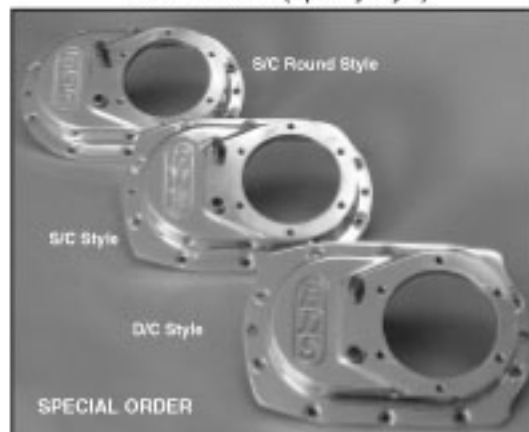
The BDS front covers are made from aircraft aluminum and are available in both early and late GM styles, polished or unpolished, individually or as a complete front cover kit.

Part No.	Description
671-1C	BDS cast front cover unpolished. Specify early or late GM style.
671-1C-2	New BDS billet aluminum front cover, unpolished. Designed for after market blowers.
671-1CK	BDS cast front cover, unpolished. Includes mounting bolts, gasket, pressure relief valve (Part #555), and oil sight gauge (Part #556).
671-1CK-2	New BDS billet aluminum front cover, unpolished. Includes mounting bolts, gasket, pressure relief valve. (Part# 555) and oil sight gauge. (Part# 556). (photo pg 47)
671-1CKP	BDS cast front cover, polished. Includes mounting bolts, gasket, pressure relief valve (Part #555), and oil sight gauge (Part #556).
671-1CKP-2	Same as Part #671-1CK-2 except polished.
671-1CP	Same as Part #671-1C except polished.
671-1CP-2	Same as Part #671-1C-2 except polished.

Part #671-5



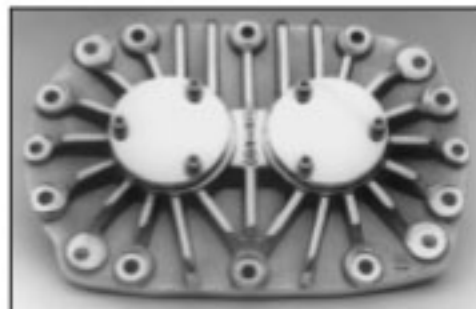
Part #671-1CKP (Specify style)



## BDS BLOWER BEARING PLATES



#671-2CP



#671-4P

Part No.	Description
671-2C	BDS HD cast front bearing plate kit, unpolished.
671-2C-2	New BDS billet aluminum HD front bearing plate kit, unpolished. Designed for aftermarket blowers.
671-2CP	BDS heavy duty cast front bearing plate, polished.
671-2CP-2	New BDS heavy duty billet aluminum front bearing plate, polished. (photo pg 47)
671-22	Heavy duty steel bearing retainer washer. Two required per front bearing plate only.
671-4	BDS heavy duty finned cast rear bearing plate, unpolished. Includes two rear bearing plate caps with bolts and washers.
671-4-2	New BDS billet aluminum rear bearing plate, unpolished. Designed for aftermarket blowers.
671-4P	BDS heavy duty finned cast rear bearing plate, polished. Includes two rear bearing plate caps with counter sunk bolts.
671-4P-2	New BDS billet polished rear bearing plate. Includes two bearing plate caps with counter sunk bolts. (photo pg 47)
671-5	New billet rear bearing caps (2), polished. Includes mounting bolts and washers. (see photo above)



#671-1CKP-2



#671-2CP-2

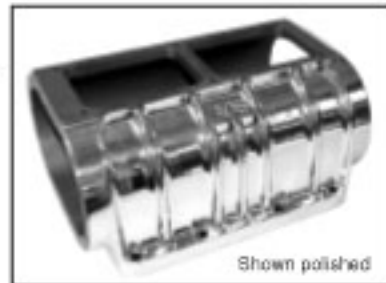


#671-4P-2 (includes #671-5)

## BDS BLOWER CASES

BDS Blower Cases are made from aircraft aluminum and machined to our rigid specifications for high blower efficiency. The blower cases are listed unpolished and ready for assembly. The 471 and 671 cases listed below come from cores and are unprocessed. Specify small or large bore.

Part No.	Description
471-30	471 Blower Case, unpolished.
671-30	671 Blower Case, unpolished.
671-BDS-30	671 BDS Blower Case, unpolished. <small>Large bore only.</small>
871-30	871 BDS Blower Case, machined, unpolished.
1071-30	1071 BDS Blower Case, machined, unpolished.
1471-30	1471 BDS Blower Case, machined, unpolished.
1671-30	1671 BDS Blower Case, machined, unpolished.

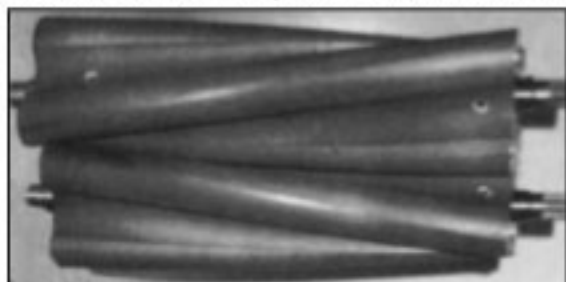


New BDS cases 671-1671

## BDS GM ROTORS

The GM 471 thru 871 rotor has had a long history in the blower industry, it has always been a durable and resilient part. The availability in the last 5 years has been greatly reduced due to demand. These rotors are thoroughly inspected for flaws when they are stocked. Available right out of the core or we can process them at the time of purchase, some may require welding and or minor machine work in order to be ready to assemble in your blower case. The GM rotors are sold in sets only, if you want a single rotor, we'll check inventory for availability.

Part No.	Description
471-30U	471 GM Rotors (2), core components
671-50U	671 GM Rotors (2), core components
871-50U	871 GM Rotors (2), core components



NEW AIR-LOC ROTORS Listed on page 64

## BDS BLOWER GEARS



#671-34



#671-34S

Part No.	Description
671-34	Used high quality, 30 degree stock steel blower gear sets. Designed for all inline 71 series blowers. Limited availability. Specify size of blower.
671-34S	New straight cut steel gears. Engineered for competition applications. Made to handle higher boost and maximum horsepower.
671-36	Heavy duty, hardened steel blower gear washer. Made from 4140 heat treated steel. (871 to 1671)
671-38	Heavy duty, hardened steel blower gear washer. Made from 4140 heat treated steel. (471 to 671)

## BDS BLOWER BEARINGS AND SEALS

Part No.	Description
5205	Blower double row ball bearing. Designed for street applications.
5205HD	Competition heavy duty front blower bearing. Precision double row ball bearing designed for extremely high loads and RPM.
62052RS	Heavy duty rear blower bearing. Precision single row ball bearing, pre-lubricated with grease and sealed.
671SL1	Heavy duty, dual lip teflon blower seal. Designed for extreme temperature and pressure to maximum efficiency.
671SL2	Over-sized rotor shaft seal. To be used with seal savers part #671-SS.
671BK	Complete blower bearing and seal kit. Includes two heavy duty front blower bearings, two heavy duty rear blower bearings, two single row rear blower bearings, and four heavy duty dual lip teflon seals.
671HDBK	Complete competition blower bearing and seal kit. Includes four competition heavy duty double row front and rear bearings, and four heavy duty dual lip teflon seals.
671SS	Seal Savers, to be used with part # 671SL2.

## BDS BLOWER GASKETS

Part No.	Description
1471G	1471 Blower base gasket, measures .060 thick, competition.
1471GK	1471 Competition blower gasket kit.
333G	Front cover triangular cover plate gasket.
471G	471 Blower base gasket.
471GK	471 Blower gasket kit, includes blower base gasket, two front cover gaskets, snout gasket, tri-plate gasket, back fire valve gasket, and screened inlet gasket. (Specify intake)
500G	Blower drive snout gasket.
671-1CG	Competition front cover gasket.
671-1DG	Die cast front blower cover gasket, late style.
671-1SG	Sand cast front blower cover gasket, early style.
671G	671 Blower base gasket.
671GK	671 Blower complete gasket kit. Includes blower base gasket, two front cover gaskets, snout gasket, tri-plate gasket, back fire valve gasket, and screened inlet gasket. (Specify intake)
871G	871-1471 universal blower base gasket. This gasket has extra material front and rear and comes with a standard 671 size opening. It may be trimmed to size for larger blower openings.
871GK	871-1471 universal blower gasket kit. Includes blower base gasket, two front cover gaskets, snout gasket, tri-plate gasket, back fire valve gasket, and screened inlet gasket. The base gasket has extra material front and rear and comes with a standard 671 size opening. It may be trimmed to size for larger blower openings. (Specify intake)



#471K-871K Gasket Kit

## PHOTO GALLERY PIT STOP



#671-BR



#671-BRK



Boost & Pulley Charts  
Booklet

## BDS BLOWER ACCESSORIES



Part No.	Description
333K	BDS front cover billet tri-plate. Comes polished and includes the gasket and three 5/16-18 x 3/4" socket head mounting bolts and washers.
471-8C	471 Aluminum stud kit. Includes four (2 1/2") studs with nuts, and washers.
555	BDS front cover pressure relief valve. This red anodized valve with o-ring seal, is designed to be able to manually relieve the pressure build up in the front cover of the blower. Requires a 7/16-20 tapped hole for mounting. Instructions and diagram are included.
556	BDS front cover oil sight gauge. Special red anodized fitting with a glass window and o-ring seal for the front blower cover, that enables you to check the oil level in the front of the blower without removing any fittings. Requires 1/2-20 tapped hole for mounting. Instructions and diagram are included.
671B	671-1471 Steel mounting bolt kit. Includes (8) 7/16-14 x 1 3/4" bolts and (2) 7/16-14 x 2 1/4" long bolts and washers.
671-8C	Aluminum 671-1471 blower studs. Includes eight (2 1/2") studs and 2 longer studs (3"), with nuts, and washers.
671BR	671-1471 SFI 14-1 Universal Blower Restraint. This restraint meets SFI, NHRA, MTRA specifications. Includes top plate with gaskets for both sides, four straps with SFI compliance patches, four fire sleeves, four header mounting brackets, and four quick release pins. Some modifications are required on plate and brackets. (See photo pg 48)
671BRK	New Nostalgia blower restraints kit, includes blower bag, upper with straps, lower plate with straps, and injection restraint. (See photo pg 48)

## BDS BLOWER REPAIR SERVICE

BDS Blower Repair Service is available for all roots style blowers. Our repair facility is capable of rebuilding, repairing, or remanufacturing virtually any kind of blower for almost any application. Each blower rebuild or repair is based on the needs of the customer and the condition of the blower. All blowers submitted for repair or rebuild must be disassembled and inspected at our facility before a price is determined. Customers are then notified by phone or mail as to the cost of the repair or rebuild. The customer may then approve or not approve the repair or rebuild. If approved the repair is expedited. If not approved there will be a minor charge for the labor involved in disassembly and estimating the repair or rebuild.

The following list shows a large cross section of available services and features in relation to blower repairing or rebuilding. Please refer to other sections in this catalog for individual replacement components.

Part No	Description
-1RS	Resurface Bearing Plate
-6CD	Hand Dress and Clean Rotors
-6KS	Knurl Rotor Shaft to Size
-6M	Re-Machine Two Rotors
-6PR	Install 2 Pins in Pair of Rotors
-6RT	Re-cut and re-teflon rotor pair, 6 point.
-6RTT	Re-cut and re-teflon rotor pair, 18 point.
-6T	Cut and teflon rotor pair, 6 point.
-6TT	Cut and teflon rotor pair, 18 point.
-6W	Weld and dress one rotor.



## BDS BLOWER REPAIR SERVICE (CONTINUED)

Part No	Description
-CLN	Clean customers blower.
-HAZ	Hazardous material surcharge. (Net)
-IBG	Install blower bearing. (4)
-IBS	Install blower seals. (4)
-ISG	Install sight gauge.
-IPR	Install P.R. valve.
-MCB	Machine blower bottom.
-MCH	Hone case I.D.
-MD	Set bottom clearance.
-MR	Set front clearance.
-MS	Set rear clearance.
-INS	Inspect and estimate blower repair.
-DINS	Disassemble, inspect & estimate blower repair.
-RA	Reassemble blower.
-T	Install blower gears and set timing.
-TR	Threaded hole repair.
3002RR	Remove and replace idler bearings.
500RR	Remove and replace snout bearing and seal.

## BDS BLOWER OPTIONS

Part No	Description
C7020P-2	Show polish 471-871 blower complete.
C7020P-3	Show polish 1071-1671 blower complete.
C7020RP-1	Re-polish 471-871 blower case.
C7020RP-2	Re-polish 1071-1671 blower case.
C7021P-1	Show polish 471-871 blower case only.
C7021P-2	Show polish 1071-1671 blower case only.
C7059HAC	Hard anodize case. Stage 2 process.
C7059HAR	Hard anodize rotors. Stage 2 process.
671-6110	.110 rotor teflon strip, per foot.
671-6121	.121 rotor teflon strip, per foot.
671-6125	.125 rotor teflon strip, per foot.
671-6250	Nylatron rotor strip, per foot.
671BWK	Blower bolt kit
671SSBWK	Stainless steel bolt set for blower.

## BDS CUSTOM CARB SERVICE



Let BDS recalibrate your carbs for your specific application. You can save yourself money by sending in the carbs for your system. The carbs should be new or in excellent used condition. All carbs are subject to our inspection as to the suitability for the intended application. Used carbs require extra work so there will be an additional charge for all used carbs sent to us for blueprinting.

In order for us to properly blueprint the carb(s), we will need specific information concerning the engine and vehicle. We require a completed engine form with all the requested information. Failure to supply the information requested may result in miscalibrated carbs. BDS is not responsible for carbs that are blueprinted without supplying a completed engine information form. The engine information form may be found

on page 52 of this catalog. As an additional service, BDS can also supply chrome fuel bowls and paint the carb bodies to give the carbs a custom show quality appearance. Send in sample or supply a Dupont color number. This service is special order only. Dual carbs are recommended for most blower applications. Choosing the correct size carb is essential for the proper operation of the blown motor. The following formula below will help you determine the correct size carbs for any blown application.

## BDS CUSTOM CARB SERVICE (CONTINUED)

$$[(D \times R) \div 3456] \times [(B \div 14.7) + 1] = C$$

**D = Cubic inch displacement of the motor**  
**R = Maximum engine RPM**  
**B = Maximum blower boost**  
**C = Maximum CFM required**

BDS offers three different stages of recalibration to cover the requirements of most blown engines. The different stages and their intended applications are listed below:

### Stage 1

Carb recalibration service for mild blown applications. Provides for mild performance, good drivability and favorable fuel economy. For use with pump gas.

### Stage 2

Carb recalibration for high performance and bracket racing blown applications. Provides high performance, improved throttle response, and good drivability. For use with race gas, Cam II, etc.

### Stage 3

Carb recalibration for competition racing applications only. Provides maximum power and throttle response. Special order only! For use with alcohol.

Part No.	Description
C5000	Custom paint and chrome dress up two carbs. Customer will need to supply Dupont color code number or sample. Special Order!
C5000-C	Prepare carbs and install chrome kits.
C5001	Stage 1 recalibrate one customer's new carb. (vacuum secondaries or double pumps).
C5002	Stage 2 recalibrate one customer's new carb. (vacuum secondaries or double pumps).
C5003	Stage 3 recalibrate one customer's new carb. (vacuum secondaries or double pumps).
C5002-DEM	Stage 2 blue print new Demon Carb.
C5003-DOM	Stage 3 blue print new Dominator Carb.
C5004-DOM	Stage 4 blue print new Dominator Carb.

*All used carbs sent in will be inspected for repairs and replacement of parts, a quote will be submitted to you for approval.*

## BDS NEW CUSTOM CARBS

New BDS custom carbs are hand assembled from new premium modular parts. The metering plate are machined for symmetry and balance. Special booster and bleeds are installed. These custom carbs are calibrated to your specific application. All stage two and all 750CFM Carbs have the air horns (choke) removed. A complete engine information form (on page 52) will need to be submitted with your order. We also offer paint service and chrome kits. (see price list)

Part No.	Description
600S-1	600CFM Stage 1 Custom Carb, Vacuum secondaries
600HS-2	600CFM Stage 2 Custom Carb, Vacuum secondaries
600DS-1	600CFM Stage 1 Custom Carb, Double Pump
600DHS-2	600CFM Stage 2 Custom Carb, Double Pump
650DS-1	650CFM Stage 1 Custom Carb, Double Pump
650DHS-2	650CFM Stage 2 Custom Carb, Double Pump
750DS-1	750CFM Stage 1 Custom Carb, Double Pump
750DHS-2	750CFM Stage 2 Custom Carb, Double Pump
850DS-1	850CFM Stage 1 Custom Carb, Double Pump
850DHS-2	850CFM Stage 2 Custom Carb, Double Pump

### CUSTOM ORDER

1050HS-3	1050CFM Stage 3 Custom Carb, Dominator
1150HS-3	1150CFM Stage 3 Custom Carb, Dominator
1250HS-3	1250CFM Stage 3 Custom Carb, Dominator



# ENGINE INFORMATION FORM

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Phone: \_\_\_\_\_ Altitude of Normal Operation \_\_\_\_\_

## VEHICLE

Car Make: \_\_\_\_\_ Body Style: \_\_\_\_\_ Weight: \_\_\_\_\_

Boat Length: \_\_\_\_\_ Hull Type: \_\_\_\_\_ Weight: \_\_\_\_\_

Vee Drive Ratio \_\_\_\_\_ Prop Size: \_\_\_\_\_ Jet Type: \_\_\_\_\_

## ENGINE

Make: \_\_\_\_\_ CID: \_\_\_\_\_ Overbore: \_\_\_\_\_

Max RPM: \_\_\_\_\_ Compression Ratio: \_\_\_\_\_ Pistons:  Forged  Cast

Heads: \_\_\_\_\_ Intake: \_\_\_\_\_ Exhaust: \_\_\_\_\_ Ported:  Yes  No

Cam Make: \_\_\_\_\_ Grind No.: \_\_\_\_\_  Hydraulic  Solid  Roller

Valve Lift

Duration

@ .050"

Intake: \_\_\_\_\_ Exhaust: \_\_\_\_\_ Intake: \_\_\_\_\_ Intake: \_\_\_\_\_

Lobe Centerline: \_\_\_\_\_ Exhaust: \_\_\_\_\_ Exhaust: \_\_\_\_\_

Ignition Make: \_\_\_\_\_ Advanced Idle: \_\_\_\_\_ Total: \_\_\_\_\_ at \_\_\_\_\_ RPM

## DRIVE TRAIN

Automatic: \_\_\_\_\_ Stall Speed: \_\_\_\_\_

Manual: \_\_\_\_\_  3 Speed  4 Speed  5 Speed  Other

Rear End Ratio: \_\_\_\_\_ Tire Height: \_\_\_\_\_ inches

## BLOWER SYSTEM

Make: \_\_\_\_\_ Size: \_\_\_\_\_ Drive Ratio: \_\_\_\_\_

Max Boost \_\_\_\_\_ at \_\_\_\_\_ Max RPM

## CARBS & FUEL

Make: \_\_\_\_\_ Model No: \_\_\_\_\_ CFM Rating \_\_\_\_\_

Quantity \_\_\_\_\_  Side Saddle  Inline Stage: \_\_\_\_\_

Gas Octane \_\_\_\_\_  Alcohol  Nitro  Other: \_\_\_\_\_

NEW:  yes  no CUSTOMER'S:  yes  no CHROME & PAINT:  yes  no color \_\_\_\_\_

## APPLICATION

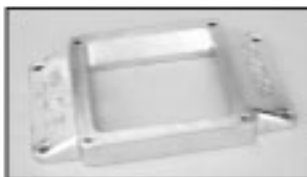
Driver  Show  Mild Racer  Competition  Other

## COMMENTS

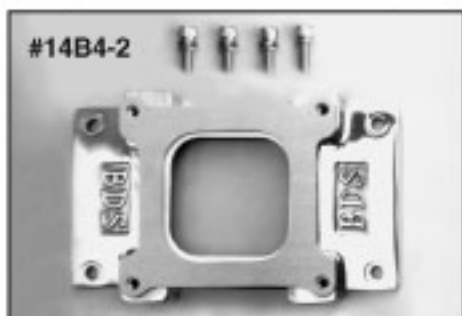
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# BDS BLOWER CARB ADAPTERS



#14B4D-2



#14B4-2



#14B6-2



#24B4-2



#24B6-2



#24B6D-2

## Part No.

## Description

14B4-2

Single four barrel billet carb adapter, polished to mount onto a 471 blower. Includes blower inlet safety screen (BDS #14B4G), special heat resistant carb base gasket (BDS #24B6C), mounting bolts and instructions. Accepts standard Holley and Carter four barrel carbs.

14B4D-2

Single dominator billet carb adapter, polished to mount onto a 471 blower. Includes blower inlet safety screen (Part # 14B4G) special heat resistant carb base gaskets (Part# 14B4CD). Mounting bolts and instructions. Accepts standard Holly Dominator.

14B6-2

Single four barrel billet polished aluminum carb adapter, to mount onto a 671-871 blower. Includes blower inlet safety screen (BDS #14B6G), special heat resistant carb base gasket (BDS #14B6C), mounting bolts and instructions. Accepts standard Holley and Carter four barrel carbs.

24B4-2

Dual Carter billet carb adapter, polished to mount onto a 471 blower. Accepts two Carter carbs mounted inline at 6.75" center to center. Includes blower inlet safety screen (Part# 14B4G), special heat resistant carb base gaskets (Part#14B4C). Mounting bolts and instructions.

24B6-2

Dual four barrel polished billet aluminum carb adapter, to mount onto a 671-871 blower. Includes blower inlet safety screen gasket (BDS #24B6G), four special heat resistant carb base gaskets (BDS #24B6C), two 1/8" NPT vacuum outlets, mounting bolts and instructions. Accepts two standard four barrel Holley carbs sidesaddle or Carter carbs inline on an 8-5/8" center to center. Holley carbs without secondary metering plates may be run inline.

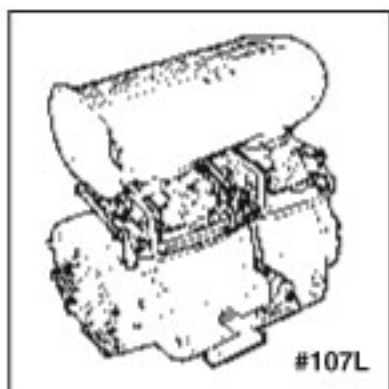
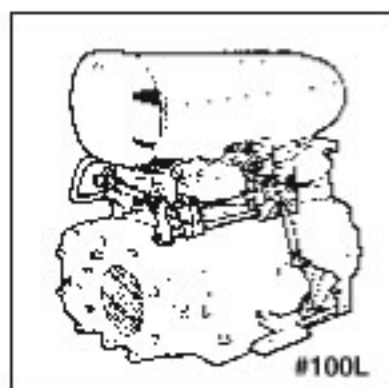
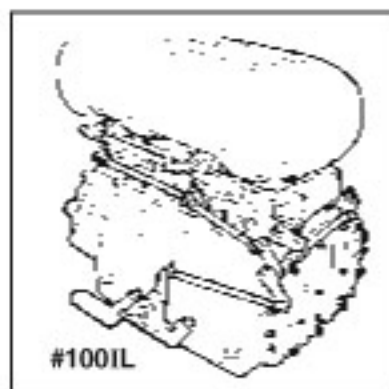
24B6D-2

Dual Holley Dominator polished billet aluminum carb adaptor to mount onto a 671-871 blower. Includes blower inlet safety screen gasket (BDS #24B6G), special heat resistant carb base gaskets (Part#24B6CD), mounting bolts, and instructions. Accepts two Holley Dominator carbs mounted sidesaddle at 8-3/4" center to center.

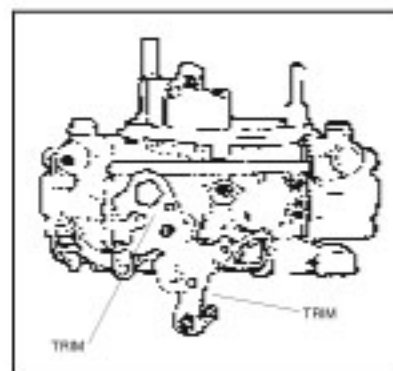
24B6D-IL

1671 Dual inline dominator billet carb adaptor kit, polished. To be used with BDS 1471 - 1671 blowers. Includes carb base gaskets, and mounting bolts.

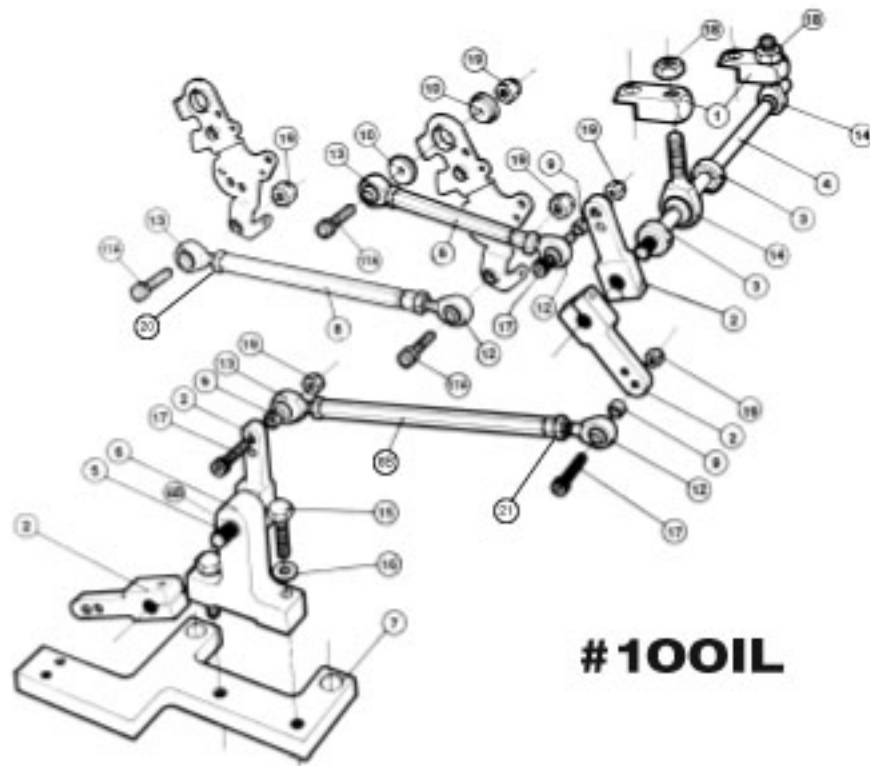
# ■ BDS CARB LINKAGE KITS & ACCESSORIES ■



Part No.	Description
100IL	Linkage kit for dual Holley vacuum secondary carbs and Predators mounted inline on an 8-9/16" center to center distance. Available for other distances by special order only. Includes adjustable heim end design and needle bearings for smooth throttle operation with splined shafts and arms. Accepts BDS #107T throttle cable.
100IL-471	Linkage kit for dual Carter carbs mounted inline on an 6.75" center to center distance. Includes adjustable heim end design and needle bearings for smooth throttle operation with splined shafts and arms.
100L	Linkage Kit for dual Holley vacuum secondary carbs mounted sidesaddle. Includes adjustable heim end design and needle bearings for smooth throttle operation. Accepts BDS #107T throttle cable.
100LT	Same as #100L but designed for tunnel rams. Specify engine when ordering. Some minor modifications may be required for use on some engines.
107EFI	Electronic fuel injection linkage kit. Specify for bugcatcher or birdcatcher. Also available for mechanical fuel injection style.
107K	Specially designed high tech transmission kickdown cable for TH350 and TH400 transmissions. (Also available for Ford and Chrysler). This is universal, you cut to fit, assembly is designed to work with BDS #107T and is made from the same hi-tech stainless steel components. Specify engine when ordering.
107L	Linkage Kit for dual Holley double pump carbs, Dominators, Predators & Carters mounted sidesaddle. Includes adjustable heim end design and needle bearings for smooth throttle operation. Accepts BDS #107T throttle cable.
107LT	Same as #107L but designed for tunnel rams. Specify engine when ordering. Some minor modifications may be required for use on some engines.
107T	BDS hi-tech universal throttle cable kit. 24" of braided stainless outer housing and teflon inner housing with stainless steel cable and brackets provides for smooth throttle operation when used with BDS linkage kits. Specially designed with a clevis connection, the kit uses no cotter pins or set screws. Adapts to factory and after market throttle pedals. You cut to fit.
100L-B	New upgrade to linkage kit, this replaces stock base bracket and tower to billet polished units.
100L-6-2	New billet tower polished with bearing, replacement part.
100L-7-2	New billet base bracket polished, replacement part.



# BDS LINKAGE COMPONENTS



## #100IL

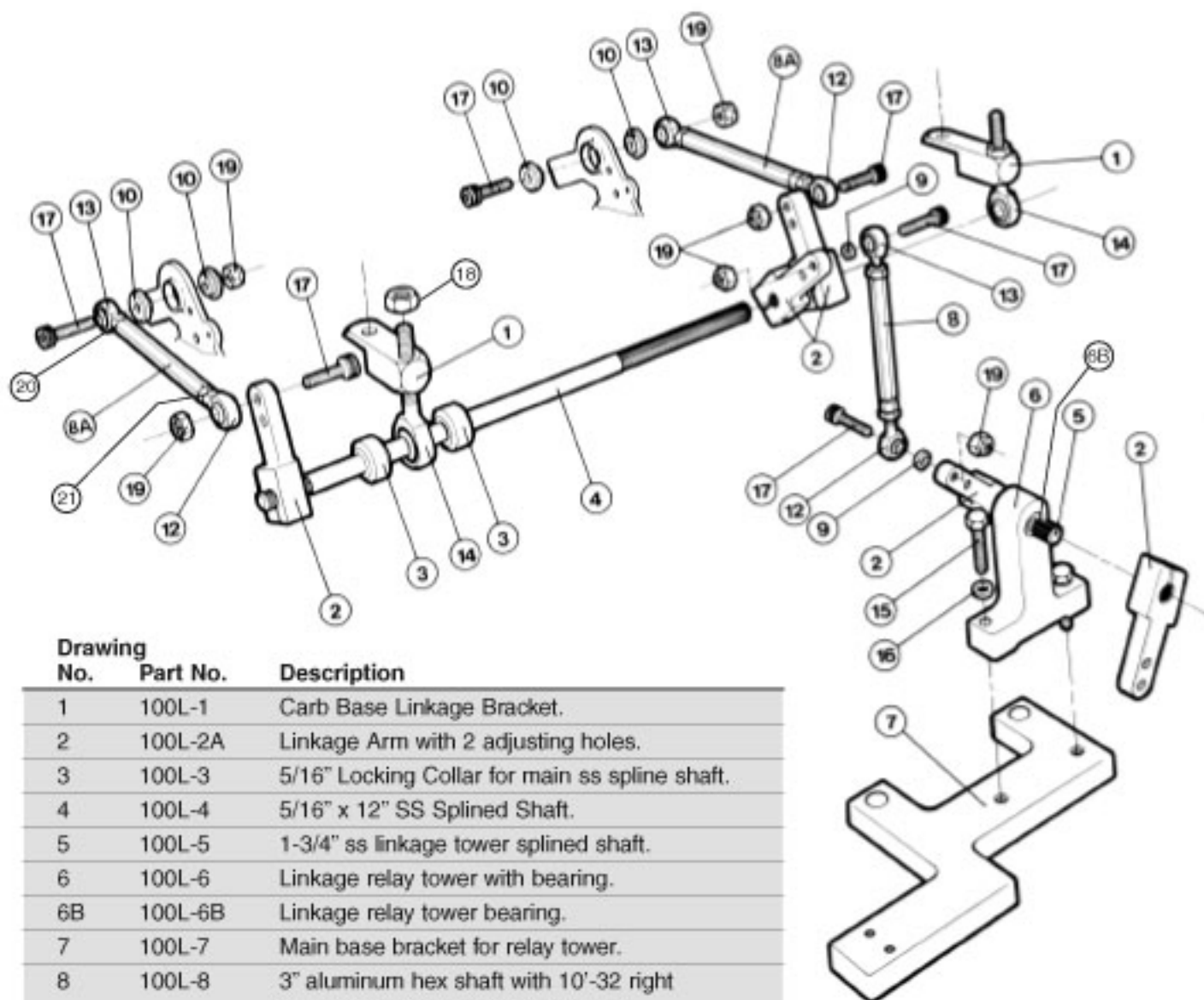
**Drawing  
No.**

**Part No.**

**Description**

Drawing No.	Part No.	Description
1	100L-1	Bracket that mounts to the carb base to hold the main stainless steel splined shaft.
2	100L-2A	Carb linkage arm with two adjusting holes.
3	100L-3	5/16" locking collar for the main stainless steel splined shaft.
4	100L-4	5/16" x 12" stainless steel splined main shaft.
5	100L-5	1-3/4" stainless steel linkage tower splined shaft.
6	100L-6	Linkage relay tower with needle bearing.
6B	100L-6B	Relay tower needle bearing.
7	100L-7	Main linkage bracket for the relay tower.
8	100L-8	3" aluminum hex shaft with 10-32 right hand and left hand female threads.
8B	100L-8B	7" aluminum hex shaft with 10-32 right hand and left hand female threads.
9	100L-9	3/16" x 1/8" brass heim end spacer. Stands heim end away from connection to keep from binding.
10	100L-10	Carb linkage brass adapter. Provides a pivoting connection to Holley carb linkage. (2 required per carb.)
12	100L-13	10-32 Left hand thread male heim end.
13	100L-12	10-32 Right hand thread male heim end.
14	100L-11	5/16" Right male heim end.
15	250-10081	1/4-20 x 1" hex bolt.
16	250-00000	1/4" AN washer.
17	1024-10091	10-24 x 1" socket head bolt.
17A	1024-00891	10-24 x 7/8" socket head bolt.
18	312-00182	5/16-24 SAE Nut.
19	1024-0002	10-24 Lock Nut
20	100L-14	10-32 Right hand jam nut.
21	100L-15	10-32 Left hand jam nut.

# BDS LINKAGE KIT #107L PARTS LIST



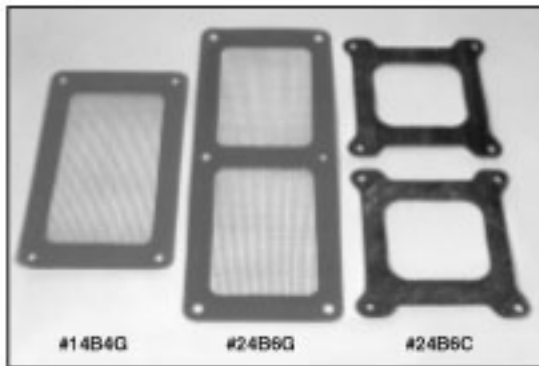
**Drawing No.**

**Part No.**

**Description**

Drawing No.	Part No.	Description
1	100L-1	Carb Base Linkage Bracket.
2	100L-2A	Linkage Arm with 2 adjusting holes.
3	100L-3	5/16" Locking Collar for main ss spline shaft.
4	100L-4	5/16" x 12" SS Splined Shaft.
5	100L-5	1-3/4" ss linkage tower splined shaft.
6	100L-6	Linkage relay tower with bearing.
6B	100L-6B	Linkage relay tower bearing.
7	100L-7	Main base bracket for relay tower.
8	100L-8	3" aluminum hex shaft with 10'-32 right hand and left hand female threads.
8A	100L-8A	4" aluminum hex shaft.
9	100L-9	3/16" x 1/8" Carb linkage brass heim end spacer.
10	100L-10	Carb linkage brass adapter.
12	100L-13	10/32 left hand male heim end.
13	100L-12	10/32 right hand male heim end.
14	100L-11	5/16" right male heim end.
15	250-00781	1/4"-20 x 3/4" Hex head bolt.
16	250-00000	1/4" AN Washer.
17	1024-00891	10/24 x 7/8" Soc head bolt.
18	312-00182	5/16-24 SAE nut.
19	1024-0002	10/24 Lock Nut.
20	100L-14	10/32 Right hand jam nut.
21	100L-15	10/32 Left hand jam nut.

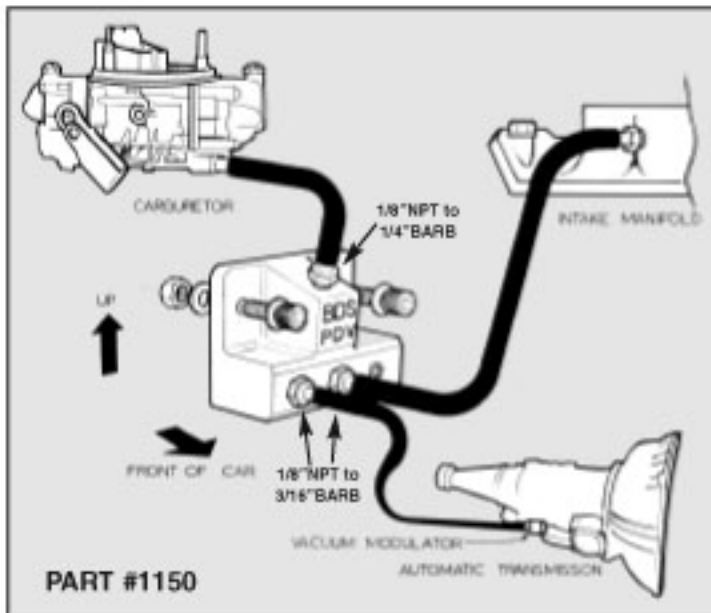
## BDS CARB ADAPTER GASKETS



Part No.	Description
14B4G	Blower inlet safety screen gasket for 471 blower.
24B6C	Special 1/8" thick, heat resistant standard four barrel carb base gasket. One is required per carb for linkage clearance when using #24B6 adapter and sidesaddle mounting.
24B6CD	Special 1/8" thick, heat resistant standard Dominator carb base gasket.
24B6G	Blower inlet safety screen gasket for 671-871 blower.
24B6GNS	Blower inlet gasket for 671-871 blower, no screen.
24B6BG	Buzzard catcher inlet safety screen gasket.

## BDS CARB PLUMBING COMPONENTS

Part No.	Description
-6FPG	-6 Fuel pressure gauge blue fitting. Use with part # 1015.
-6N	-6AN Tube nut, blue anodized.
-6S	-6AN Tube sleeve, blue anodized.
-6SS	3/8" Stainless steel tubing, sold by the foot.
-6T	-6AN tee fitting, blue anodized.
1015	0-15 psi liquid filled fuel pressure gauge.
56143-66	New BDS -6AN x -6AN fuel pump fitting, o-ring.
56143-68	New BDS -6AN x -8AN fuel pump fitting, o-ring.



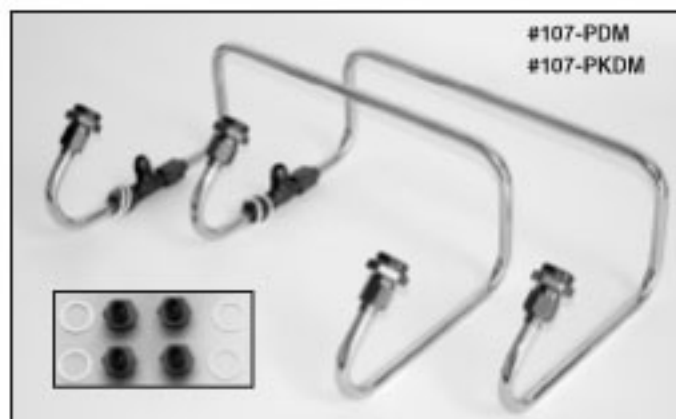
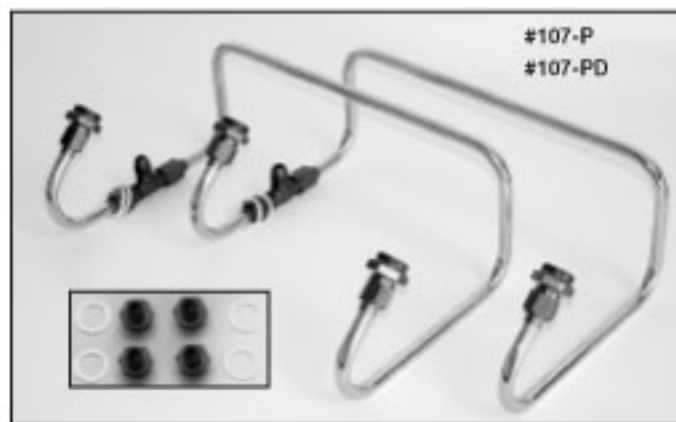
## PRESSURE DIVERSION VALVE

The BDS PDV is a simple control valve that will give the vacuum modulator on the transmission the correct vacuum signal from beneath the blower until there is boost. This means that the tranny will receive a true motor signal that is required for proper shifting. As soon as the valve senses boost beneath the blower, it switches the valve to show zero vacuum for the tranny modulator. Zero vacuum tells the tranny there is a high load, wide open throttle condition and the tranny will increase line pressure to minimize the amount of slippage. Without this valve the tranny modulator would see boost instead of vacuum if connected

below the blower and too much vacuum if connected above the blower causing radical shifting and or excessive slippage which could burn up the tranny. Top line hooks up to vacuum port above blower (not ported vacuum). The fittings are 3/16" and 1/4".



# BDS CARB PLUMBING KITS

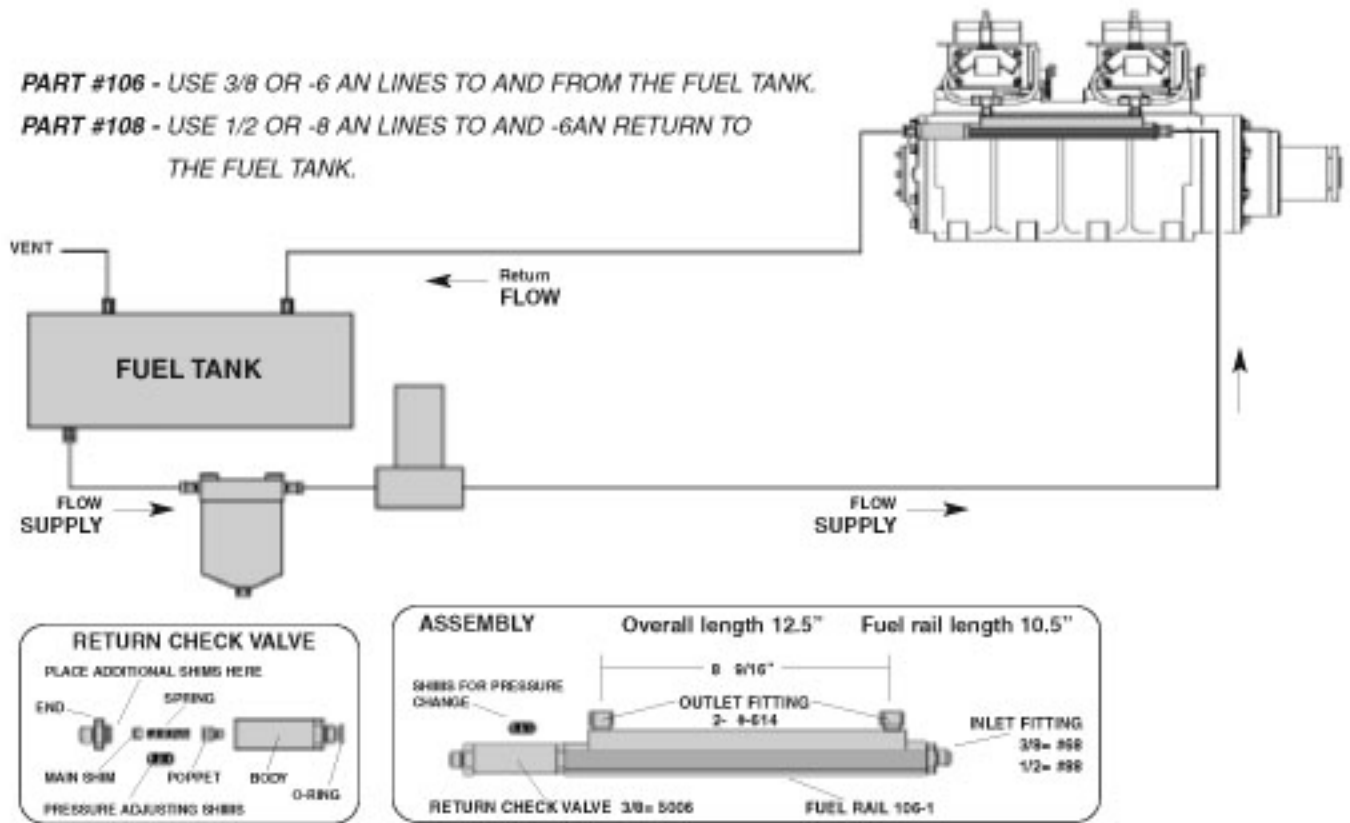


Part No.	Description
100-P	3/8" seamless stainless steel polished tubing with red anodized fittings for two Holley single feed carbs mounted sidesaddle. Includes Holley carb fuel inlet to -6AN fittings. A single -6AN connection supplies fuel to both carbs. Use BDS carb adapter #24B6 or carbs must be mounted 8-9/16" center to center.
106	Power Bar Regulator mounts into #107-P, uses -6AN (3/8") fuel inlet and return lines. Good up to 850HP fuel flow.
107-P	3/8" Seamless stainless steel polished tubing with red anodized fittings for two Holley double feed carbs mounted sidesaddle. Includes Holley carb fuel inlet to -6AN fittings and provides a single fuel connection per carb to supply fuel to both carb bowls. Use with any standard four barrel double pump Holley carb. Great for tunnel ram systems.
107-PD	3/8" Seamless stainless steel polished tubing with red anodized fittings for two Holley Dominator carbs mounted sidesaddle. Includes Holley carb fuel inlet to -6AN fittings and provides a single fuel connection per carb to supply fuel to both carb bowls.
107-PDM	Same as Part# 107P but designed for Demon carbs.
107-PKDM	Dual King Demon same as part# 107-P but designed for King Demon Carbs.
107-PDFL	3/8" Stainless steel fuel line with red anodized AN fittings that provides a single fuel connection to BDS #107-PD at the front or rear of the blower base for the carb fuel supply.
107-PFL	3/8" Stainless steel fuel line with red anodized AN fittings that provides a single fuel connection to BDS #107-P at the front or rear of the blower base for the carb fuel supply.
108	Power Bar Regulator mounts into #107-P, uses -8AN (1/2") fuel inlet and -6AN (3/8") return line. Good up to 1200HP fuel flow.

# Carburetor Fuel Flow Diagram

**PART #106** - USE 3/8 OR -6 AN LINES TO AND FROM THE FUEL TANK.

**PART #108** - USE 1/2 OR -8 AN LINES TO AND -6AN RETURN TO THE FUEL TANK.



This BDS Pro-Fuel System provides your motor with **MAXIMUM FUEL DELIVERY** under any performance condition. The check valve may be installed either at the front or back. This fuel delivery system is similar to that used in fuel injection. The fuel pressure is set to 7 or 8 psi and adjustment is made by adding or removing shims.

## PHOTO GALLERY PIT STOP



#8027SBP Burst panel Kit



Blowers in stock, ready to ship



#600KD-1BB-1



#10004 471 Adapter plate



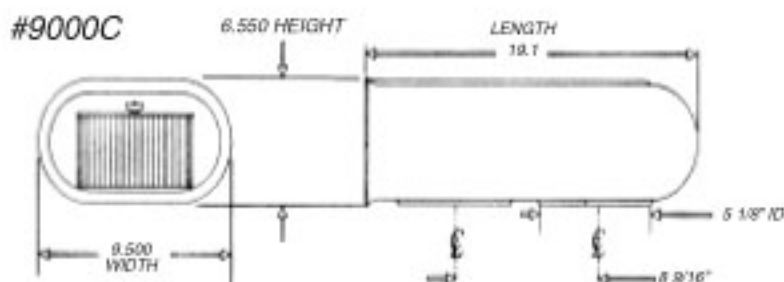
#600KD-1BB 2

# ■ BDS CARB SCOOPS, FILTERS, & ARRESTORS ■

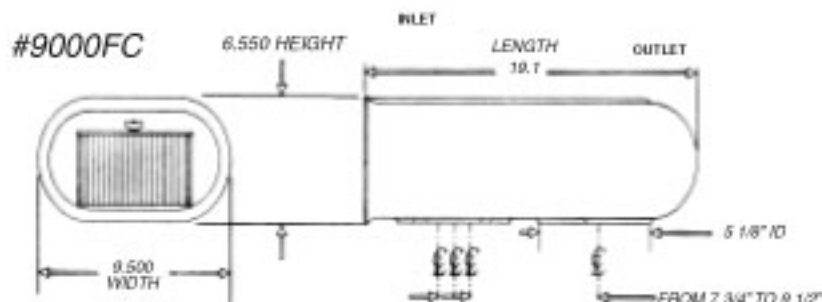
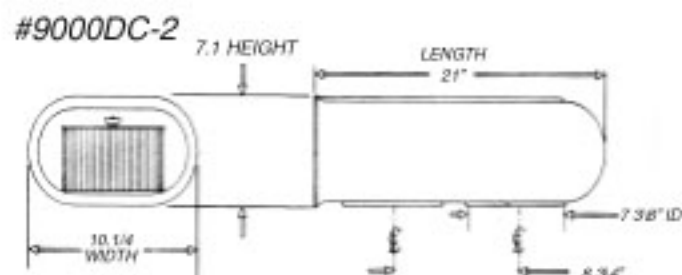
Part No.	Description
9000	Polished aluminum dual carb scoop for standard four barrel style carbs mounted inline or sidesaddle on an 8-9/16" center to center distance. Use BDS #24B6-2 Carb Adapter.
9000C	Polished aluminum dual carb scoop for standard four barrel style carbs mounted inline or sidesaddle on an 8-9/16" center to center distance. Use BDS #24B6-2 Carb Adapter. Includes two re-useable K&N air filters, polished SS filter tops, and mounting hardware.



#9000C shown with scoop cover.

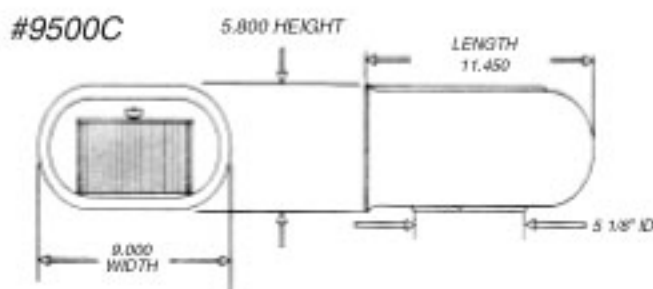


Part No.	Description
9000B	Polished aluminum dual carb scoop for standard four barrel carbs. Mounted sidesaddle on 6.75" center to center distance (471). Includes (2) re-useable K&N air filters. Polished S.S. filter tops, and mounting hardware. To be used with Part# 24B4-2 carb adapter.



Part No.	Description
9000DC-2	Custom polished aluminum MONSTER dual carb scoop for dominators mounted sidesaddle up to 8-3/4" center to center. Kit includes air filters (8" diameter by 4-5/8" tall, with polished stainless steel filter tops and mounting hardware. The Dominator scoop measures 21-1/8" long with an overall height of 7-3/4". The oval opening measures 7-1/4" by 10-1/2". Use part# 24B6D-2 carb adapter. This scoop can be used on double pump carbs by using part# 9000D-2A, to reduce carb opening.
9000FC	Custom made polished aluminum dual carb scoop for standard 4bbl style carbs. Produced as a special order only, the custom scoop may accommodate dual carbs with center to center distances up to 9-1/2". Air filters and mounting hardware are not included. (See line drawing above).
9000M	Polished aluminum dual carb scoop for standard four barrel style carbs mounted inline or sidesaddle on an 8-5/8" center to center distance. Use BDS #24B6-2 carb adapter. Includes two Coast Guard approved flame arrestors and mounting hardware.
9000D-2A	Polished aluminum adapters (2), to be used with Pt#9000DC-2. Adapts Monster scoop to Vac. Sec./double pumps.
9000DFC-2	Custom Center to Center MONSTER dominator scoop with filters, polished.

## BDS CARB SCOOPS, FILTERS, & ARRESTORS (CONTINUED)



#9500C shown  
with scoop cover.



### Part No. Description

9001	Vinyl scoop cover embroidered with BDS logo. Available in black (9001), blue (9002), red (9006), yellow (9007), silver (9008), purple (9009), and aqua (9011). Specify color when ordering.
9000D1	New Vinyl scoop cover dominator embroidered with B.D.S. logo. Available in blue (9000D2), red (9000D6), yellow (9000D7), and silver (9000D8). Specify color when ordering.
9100	BDS re-useable K&N air filter element. This air element is 5-1/2" diameter by 3.0" tall. It will flow 414 CFM.
9100D	New Dominator re-usable K&N air filter with metal mesh reinforce on the inside for extra strength, it is 8" in diameter by 4-5/8" tall, will flow 929 CFM.
9100H	Polished Stainless Steel air filter top with 14-20 x 4 1/2" stud, washer, and wing nut.
9100HD	Polished stainless air filter top with 5/16-18" x 6" stud, washer and wing nut.
9100K	Air filter assembly. Includes filter element, polished SS top, stud and wing nut.
9100KD	New dominator air filter assembly (1). Includes filter element, polished SS top, stud and wing nut.
9200	Coast Guard approved flame arrestor, stud, and wing nut. (5 1/2" dia. x 3.0" tall)
9500	Polished aluminum single carb scoop for standard four barrel carbs. Fits almost any blown or unblown single carb system.
9500C	Polished aluminum single carb scoop for standard four barrel carbs. Includes K&N air filter, polished SS top and mounting hardware. Fits almost any blown or unblown single carb system.
9500D	Polished aluminum single carb scoop for Dominator carb. Used with Part# 14B4D-2.
9500M	Polished aluminum single carb scoop for standard four barrel carbs. Includes Coast Guard approved flame arrestor and mounting hardware. Fits almost any blown or unblown single carb system.

## **BDS FUEL INJECTION AIR FILTERS**

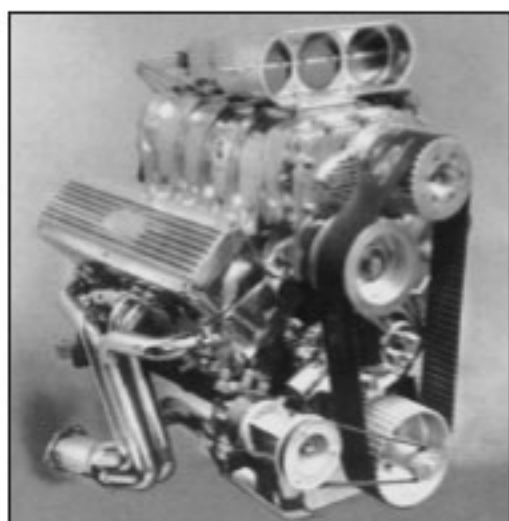


### Part No. Description

5300C	Air Filter Kit for use with a Bugcatcher Hat. Includes K&N re-useable 5" tall element and necessary mounting hardware. Also available with 10" tall element. Machine finish! Polish option: Part # C7093P.
5300C-5	Replacement 5" tall Air Filter element for use with BDS #5300C Filter.
5400C	Air Filter Kit for use with a Birdcatcher Hat. Includes K&N re-useable 5" tall element and necessary mounting hardware. Also available with 10" tall element. Machine finish! Polish option: Part # C7093P.
5400C-5	Replacement 5" tall Air Filter element for use with BDS #5400C Filter.

Air filter kits are also available for buzzard catchers by special order.  
Outerwear available in assorted colors for all filter kits.

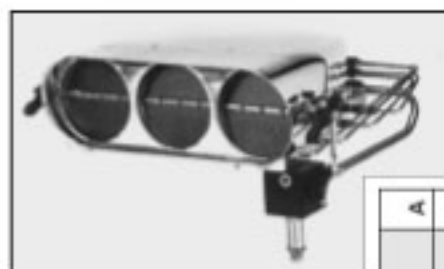
# BDS MECHANICAL FUEL INJECTION



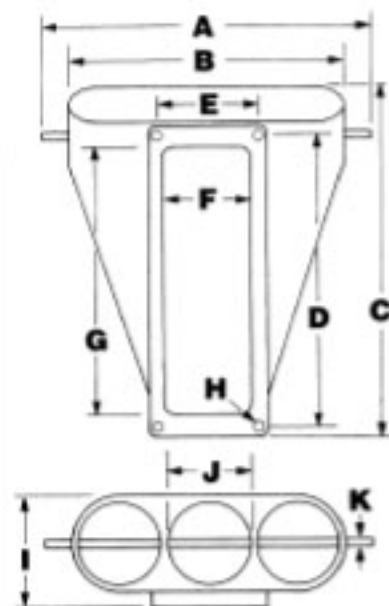
Chevy SB shown with #5300K, belt driven fuel pump.

BDS offers a variety of mechanical fuel injection components and complete injection kits. These systems are designed to be used for high performance racing applications and are available for gas, methanol, and nitro-methane fuels. When purchasing hats or complete kits, information about the engine and the vehicle must be supplied in order for the systems to be initially set up with the proper components. BDS recommends that the customer be familiar with this style of constant flow racing fuel injection for optimum results. After gathering information about your application, we can then recommend components to make up a custom kit to work on your engine. These systems are not intended for the novice.

## BDS FUEL INJECTION HATS



	A	B	C	D	E	F	G	H	I	J	K
	OVERALL WIDTH	CASTING WIDTH	LENGTH	BOLT CENTER LENGTH	BOLT CENTER WIDTH	OUTLET WIDTH	OUTLET LENGTH	BOLT HOLE DIAMETER	OVERALL HEIGHT	BUTTERFLY DIAMETER	BUTTERFLY SHAFT DIA.
BUGCATCHER	14.88	12.37	15.30	13.25	4.44	4.00	12.25	.40	5.20	3.69	.31
BIRDCATCHER	18.00	14.60	17.25	13.25	4.44	4.00	12.25	.40	5.80	4.38	.44
BUZZARD-CATCHER	20.50	16.50	20.00	15.31	4.44	4.43	15.06	.44	6.44	5.00	.44



Part No.	Description
5300	Enderle polished aluminum Bugcatcher Fuel Injection Hat (gas) that includes shaft, butterflies, throttle stops, barrel valve, stainless steel fuel lines, distribution block nozzles and nozzle bodies.
5350	Same as Part #5300, except hat is calibrated for alcohol.
5400	Enderle polished aluminum Birdcatcher Fuel Injection Hat (gas) that includes shaft, butterflies, throttle stops, barrel valve, stainless steel fuel lines, distribution block, nozzles and nozzle bodies.
5450	Same as Part #5400 except hat is calibrated for alcohol.
5500	Enderle polished aluminum Buzzardcatcher Fuel Injection Hat that includes shaft, butterflies, throttle stops, barrel valve, stainless steel fuel lines, distribution block, nozzles and nozzle bodies.
5550	Same as Part #5500, except hat is calibrated for alcohol.

## MECHANICAL FUEL INJECTION PUMP DRIVES



Part No.	Description
5009	Small block and big block Chevy hex drive cam adapter. Designed to work with BDS #5009E.
5009E	Enderle, 6" long fuel pump extension for cam driven fuel pump. Includes bearings, housing, and hex shaft. Adjustable mount enables the pump to be mounted in a number of positions for pump and fuel line clearance.
5010-31C	Chevy SB aluminum front timing cover, unpolished.
5010-34C	Chevy BB aluminum front timing cover, unpolished.

5010C	Cam driven fuel pump drive kit for most engines. Includes hex drive cam coupler, engine front cover, and fuel pump extension. Pump not included. For SB Chevy use #-31, for BB Chevy use #-34.
5010-3A	27" x 1/2", 3/8" pitch fuel pump drive belt.
5010-3B	28-1/2" x 1/2", 3/8" pitch fuel pump drive belt.
5010-3C	32" x 1/2", 3/8" pitch fuel pump drive belt.
5010-3D	34-1/2" x 1/2", 3/8" pitch fuel pump drive belt.

## FUEL INJECTION COMPONENTS AND FUEL PUMPS

Part No.	Description	Part No.	Description
5001	3 way -6AN fuel shutoff valve w/ fittings.	5000-80A	Cam driven, gas fuel inj. pump (7gpm @ 4000 rpm).
5003	3 way -8AN fuel shutoff valve w/ fittings.	5000-80A0	Cam driven, gas fuel inj. pump (4gpm @ 4000 rpm).
5006	-6AN fuel check valve.	5000-80A1	Cam driven, gas or alky fuel inj. pump.
56006HS	-6AN high speed fuel check valve.		(Hilborn replacement part)
5008	-8AN fuel check valve.	5000-110	Cam driven, alky fuel inj. pump (13gpm @ 4000 rpm).
5008HS	High speed lean out valve.	5000-990	Cam driven large alky or nitro fuel inj.
5011	Main fuel injection bypass valve.		pump (15.5gpm @ 4000 rpm).
5012	Secondary bypass valve.	5001-80A	Belt driven, gas fuel inj. pump.
5017	High speed lean-out valve.	5001-80A0	Same as #5000-80A0 except belt driven.
5018	Injector nozzle jet. Specify size.	5001-80A1	Same as #5000-80A1 except belt driven.
5018BP	Injector nozzle body port.	5001-110	Same as #5000-110 except belt driven.
5019E	Enderle style fuel pills.	5001-990	Belt driven large alky or nitro fuel inj. pump.

## XCELERATOR ADAPTOR

Ideal for nostalgia racing, monster trucks, competition, or street applications, giving the optimum in fuel/air delivery with it's accelerated angle. This is specifically engineered to gain higher air/fuel volume to ram the increase into your blower system resulting in more horsepower. The Xcelerator adaptor is made from a 6061-T6 billet aluminum and is available in hard black anodized or polished. It's 2" tall and is o-ringed for a total seal on top and bottom, also included is the hardware. This adaptor will fit most blowers, and will accommodate a bugcatcher or birdcatcher.

Part #5400-14  
Part #5300-6-8



XCELERATOR ADAPTOR

## OUTLAW BLOWER



## New BDS "Outlaw" 871 Blower

with hard anodized coating on the case outside and inside. It includes machine finish billet end plates. We offer a reward when you order, call in for yours!

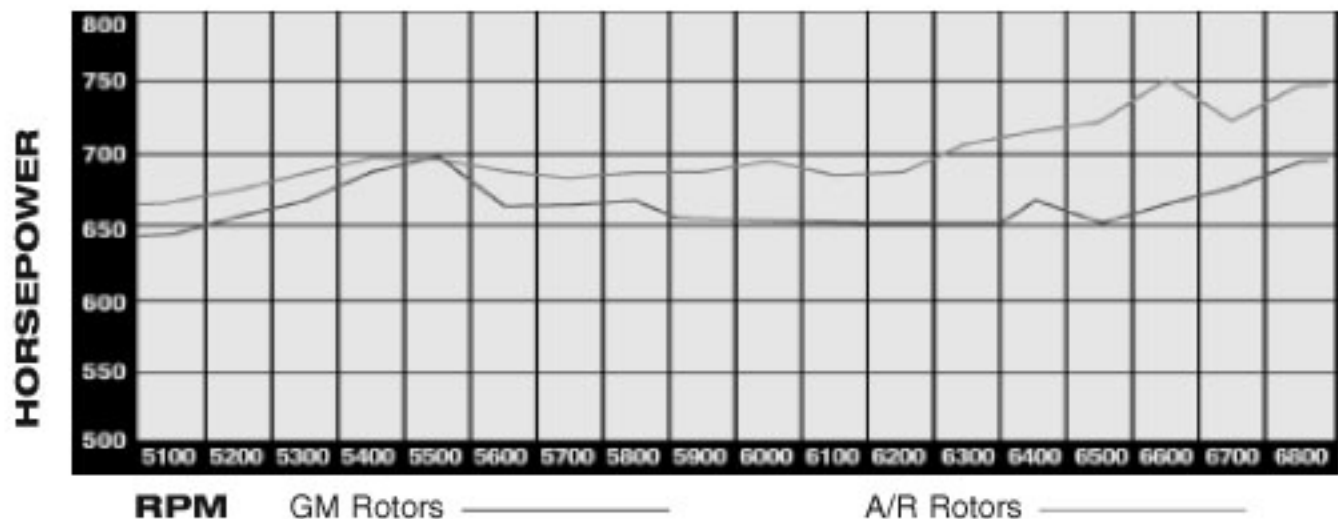
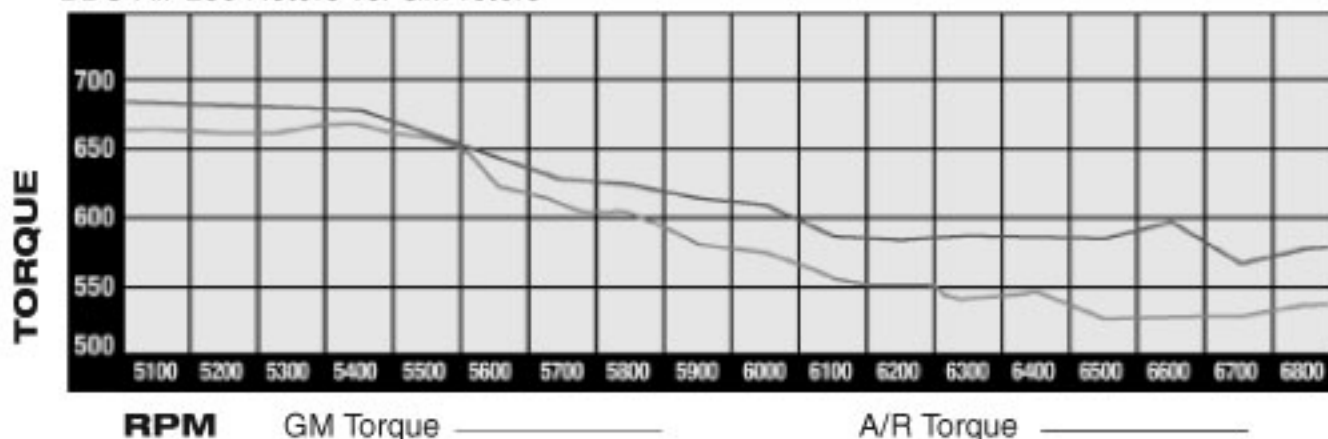
## BDS AIR-LOC ROTORS

The new BDS 671 thru 1671 Air-Loc rotors are a replacement part for the GM rotors. They are machined to unique clearance that creates cooler air by 10 degrees. When dyno tested against the GM rotor, they showed an increase of 100 horsepower. Designed for street or race applications the Air-Loc rotor profile has proven that it will increase your horsepower and make your engine more efficient.

Part No.	Description
671-50-AL	BDS Air-Loc rotors, (2) standard helix
871-50-AL	BDS Air-Loc rotors, (2) standard helix
1071-50-AL	BDS Air-Loc rotors, (2) standard helix
1471-50-AL	BDS Air-Loc rotors, (2) standard helix
1671-50-AL	BDS Air-Loc rotors, (2) standard helix



BDS Air-Loc Rotors vs. GM rotors



## **BDS PRO-LOC ROTORS**

Introducing the new BDS Pro-Loc billet rotors in standard and high helix profiles. Available for the 671 thru 1671 blowers, the Pro-Loc rotor is machined from 6061-T6 billet material. They are engineered with unique clearances to suit all aspects of forced induction. Following the outline of NHRA regulations they are specially designed for nitro and alcohol race vehicles. Applying current race technology to the new BDS Pro-Loc rotor, we are committed to delivering more horsepower and in turn increasing your engine efficiency. They can be used on vehicles that run on good gas or pump gas by changing the drive ratio to suit the application.

**Currently these rotors are being Dyno tested and will be available soon. Custom orders only.**



## **BDS PRO-LOC BLOWERS**

**Specify standard or high helix profile. Polish or hard anodized color options available.**

Introducing the new BDS Pro-Loc competition blower for high performance racing applications using alcohol or nitro methane. These custom blowers are available for Pro-Mod, IHRA Alcohol Funny Car and drag boats. The front inlet and front discharge bearing plate is installed with an oversized heavy-duty angular bearing to reduce heat which leads to longer bearing life span. The blower case and the Pro-Loc rotors are hard anodized, then the rotors are teflon. Equipped with a front discharge and front inlet pocket that has been machined into the front bearing plate to increase efficiency through the rotors breathing and discharge cycle. This modification to the blower will require a set back plate to re-position its mounting location on the intake. We recommend setting the blower, as far back, as the rules allow. When concentrating the discharge port opening between the front and rear intake runners, it helps to distribute air and fuel throughout the intake manifold.

### **NEW PRO-LOC BLOWERS**

**Specify standard or high helix profile, polish or hard anodized options available.**

- 671-PRO .....New BDS 671 Blower, front discharge, Pro-Loc rotors with billet end plates.
- 871-PRO .....New BDS 871 Blower, front discharge, Pro-Loc rotors with billet end plates.
- 1471-PRO .....New BDS 1471 Blower, front discharge, Pro-Loc rotors with billet end plates.
- 1671-PRO .....New BDS 1671 Blower, front discharge, Pro-Loc rotors with billet end plates.



The blowers pictured above are available from 671 to 1671 profiles, they are custom fabricated for carburetion or injection on your racing application.



## BDS BLOWER DISTRIBUTORS



BDS offers a complete line of distributors specifically designed for use with BDS blower systems. These distributors are already curved and set up for a blower system and are equipped with electronic trigger. Ford engines require a flat cap or "crab cap" style distributor for proper clearance between the distributor and blower. Distributors for engines other than those listed below are available by special order only.

Part No.	Description
8548202	Chevy V8 unilite standard cap distributor. Curved for blower applications.
8555102	289-302 Ford (1962-80) flat cap electronic trigger distributor. Curved for blower applications.
8555302	390-428, 428 Ford flat cap electronic trigger distributor. Curved for blower applications.
8555402	351W Ford (1969-80) flat cap electronic distributor. Curved for blower applications.
8556702	351C, 429-460 Ford flat cap electronic trigger distributor. Curved for blower applications.
8568702	351W Ford (1981-87) flat cap electronic trigger distributor. Curved for blower applications.
8570402	302 Ford (1981-87) flat cap electronic trigger distributor. Curved for blower applications.



Ford 302 Distributor Clearance

## BDS BLOWER CAMS

Blower Drive Service Co. is a developer of products as well as a user of these same products. Working for years with camshaft technology, we have perfected numerous camshaft profiles specifically engineered for the performance enthusiast. Too often, a recommended "blower cam" is simply a "cam", called a blower cam. These profiles do not optimize performance. Camshafts are "application sensitive", and the needs of a given motor are best satisfied with proper camshaft selection. With over thirty years of blower experience, the BDS technical staff will assist you in selecting a camshaft to maximize your performance needs.

Each of our "maximum effort-blower camshaft designs" develop high torque at the front end of the RPM scale and extend this torque throughout the RPM range. The hydraulic "blower cam" profiles provide the luxury of maintenance free operation, providing rough and controllable idle characteristics with the broad torque band and excellent power. All of this performance is available without over-taxing the valve train. Fuel economy is always possible if you control your enthusiasm with the gas pedal! *(continued on next page)*



Our solid lifter profiles offer improved performance over hydraulic designs while extending the RPM range and maximizing both torque and horsepower. Rough and controllable idle is normal, while use of automatic transmissions with higher than stock stall speeds work well with this design. There are numerous profiles for both the hydraulic and solid lifter camshafts. Extended "valve train life" with "optimum performance" becomes reality with these blower cam profiles. View the list of camshafts, and read their descriptions. You will notice the cam lift of the intake valve is lower than that of the exhaust valve. This is true with the intake and exhaust valve duration as well. This relationship extends the exhaust valve breathing. This extended exhaust valve breathing is required in a supercharged motor.

Roller camshaft profiles allow maximum performance! Rapidly opening valves and higher valve lift is possible with a roller camshaft design. More life and duration, combined with faster opening and closing valves, mean greater air flow. Greater air flow means more power is possible. We recommend you use this type of camshaft profile in any all out performance efforts. These roller cams reduce valve train friction, but usually require very heavy valve spring pressures. This increase in spring pressure make higher RPM and faster acceleration possible. This added valve train load shortens over all valve train life, and increases valve guide wear. Reduced spring life is common as well. These symptoms are expected and common in any high performance or racing application. Due to the high maintenance and short life expectancy, BDS recommends that you limit the use of these roller camshaft designs to maximum effort applications only!

## **BDS CAM**

Grind No.	Cam Type	Application	Idle	Max RPM	Power Range	Converter
<b>HYDRAULIC</b>						
4000	Hyd	EFI, normally aspirated, mild street. Designed for daily driver.	good	6000	2000/5500	1800-2000
4100	Hyd	Blown, mild street performance. Designed for everyday driving.	good	6500	2000/6000	1800-2200
4200	Hyd	Blown. Moderate street usage. Good overall performance & drivability.	good	6500	2000/6200	2200-2500
4600	Hyd	Blown EFI, mild street. Designed for blown EFI street.	good	6500	2400/5400	2200-2500
5300	Hyd	Blown, hi-performance street & strip: Pro-street.	fair	6800	2800/6500	2600-2800
5400	Hyd	Blown, hi-performance street & strip. Designed for Pro-street/Bracket Racing.	fair	7200	3400/7200	3000-3200
<b>HYDRAULIC ROLLER</b>						
4300HR	HRllr	Blown, performance street Great balance of power and torque.	fair	7000	2800/6800	2600-2800
<b>SOLID LIFTER</b>						
4100S	Solid	Blown, mild street. Solid version of 4100.	fair	7000	2500/6800	2300-2600
4200S	Solid	Blown, performance street Solid version of 4200.	fair	7000	2800/7000	2400-2800
4300S	Solid	Blown, hi-performance street. Solid version of 4300.	fair	7400	3000/7400	2800-3000
4400S	Solid	Blown, hi-performance street/strip. Designed for Pro-street, Bracket Racing. Solid version of 4400R.	rough	7500	3400/7500	3000-3200
4500S	Solid	Blown, hi-performance strip use only. Solid version of 4500R.	rough	7500	3400/7500	3200-3500
4700S	Solid	Blown, hi-performance: marine use only. Solid version of 4700R.	fair	7200	2800/6800	na
<b>ROLLER</b>						
4100R	Rllr	Blown, mild performance street. Roller version of 4100.	good	6500	2500/6500	2200-2500
4200R	Rllr	Blown, performance street. Roller version of 4200.	fair	7000	2700/6800	2400-2800
4300R	Rllr	Blown, hi-performance street. Roller version of 4300.	fair	7000	3000/7200	2800-3000
4400R	Rllr	Blown, hi-performance street & strip. Roller version of 4400.	rough	7500	3200/7500	3200-3500
4500R	Rllr	Blown, hi-performance strip/comp. Designed for all out racing.	rough	7800	3500/7800	3400-3800

# BDS BLOWER CAM SPECIFICATIONS

	Grind No.	Valve Lift Int/Exh	Advert Dur. Int/Exh	Dur. @ 50 Int/Exh	Lobe Center
<b>HYDRAULIC CAMS</b>					
AMC, Buick, OLDS	4100	.480/.495	264/270	214/221	110°
Ford 302/351W	4200	.495/.515	270/280	221/232	110°
Chevy 262, 350	4000	.465/.490	270/274	221/226	110°
Chrysler, Pontiac	4100	.450/.465	264/270	214/226	110°
	4200	.465/.485	270/280	221/232	110°
	4600	.490/.485	274/280	226/232	110°
	5300	.484/.505	280/292	232/244	110°
	5400	.505/.525	292/304	244/256	110°
Chevy 454	4000	.527/.527	270/280	221/224	110°
	4100	.510/.525	264/270	214/221	110°
	4200	.525/.545	270/280	221/232	110°
	4600	.495/.495	286/296	224/234	110°
	5300	.549/.573	280/292	232/244	110°
	5400	.573/.595	292/304	244/256	110°
Ford 351C, 390-428	4100	.525/.540	264/270	214/221	110°
429, 460	4200	.540/.565	270/280	221/232	110°
<b>HYDRAULIC ROLLER</b>					
Chevy 350	4300	.530/.550	282/294	234/246	110°
454	4300	.578/.608	284/294	238/248	110°
<b>SOLID LIFTER</b>					
Chevy 262,350	4100S	.495/.501	276/286	242/252	110°
Chrysler, Pontiac	4200S	.507/.525	282/288	247/254	110°
	4300S	.525/.555	288/296	254/264	110°
	4400S	.555/.570	296/306	264/272	110°
	4500S	.570/.585	320/330	274/284	110°
Chevy 454	4100S	.561/.568	276/286	242/252	110°
	4200S	.570/.580	282/288	247/254	110°
	4300S	.580/.590	288/294	254/260	110°
	4400S	.630/.645	296/306	264/272	110°
	4500S	.646/.663	320/330	274/284	110°
	4700S	.605/.620	290/294	250/260	114°
Ford 351C, 429-460	4400S	.645/.665	296/306	264/272	110°
<b>ROLLER</b>					
Chevy 262, 350	4100R	.482/.525	278/280	234/240	110°
Chrysler, Pontiac	4200R	.525/.531	280/290	240/248	110°
	4300R	.570/.602	290/300	250/260	110°
	4400R	.615/.630	300/310	266/276	110°
	4500R	.630/.630	318/322	282/290	110°
			<i>FOR USE WITH ALCOHOL - AVAILABLE IN 112°-114°</i>		
Chevy 350	4100R	.485/.525	278/280	234/240	110°
	4200R	.525/.531	280/290	240/248	110°
	4300R	.570/.602	290/300	250/260	110°
	4400R	.615/.630	300/310	266/276	110°
	4500R	.630/.630	318/322	282/290	110°
			<i>FOR USE WITH ALCOHOL - AVAILABLE IN 112°-114°</i>		
Chevy 454	4100R	.550/.560	278/284	236/244	110°
	4200R	.560/.602	284/290	244/250	110°
	4300R	.602/.640	290/294	250/260	110°
	4400R	.621/.631	304/318	264/274	110°
	4500R	.714/.714	318/322	284/292	110°
			<i>FOR USE WITH ALCOHOL - AVAILABLE IN 112°-114°</i>		

BDS offers a variety of high quality shirts that enable you to be a part of the BDS team. The shirts are made from 100% cotton and are available in sizes small to triple extra large. Make sure to specify the style and size of shirt you want when ordering.

Part No.	Description
AP-1	BLACK APRON, BDS ENGINE LOGO.
BAN-1	BDS BANNER with ENGINE LOGO, 3FT. X 8FT.
BAN-3	"BLOWN TO BE WILD" Banner, 2.5FT. x 4FT.
D-1	BDS CUT OUT DECAL, 2" X 6", red, yellow, black, and white.
D-3	BDS DECAL, 4" X 12", white, blue, and black.
KEYRING	BDS Nostalgia keyring, anodized in Blue, red, and black
PIN-1	NOSTALGIA LAPEL PIN.
PLA-1	NOSTALGIA ENGINE LOGO METAL WALL PLAQUE. in black and grey. (Measures 23.5" x 18")
PLA-2	New Color BLOWN ENGINE LOGO METAL WALL PLAQUE. (Measures 21.5" x 14")
HAT-1	BDS BASEBALL HAT, 1 COLOR, 2003 LOGO.
JKT-1	NOSTALGIA BLACK RACING LOGO, WINDBREAKER.
SWEAT-1	BDS RACING, SWEATSHIRT.
SHIRT-1	"INJECTION IS NICE...", T-SHIRT
SHIRT-2	BDS ENGINE LOGO, T-SHIRT, grey only.
SHIRT-3	"ALL THROTTLE...", T-SHIRT, black only.
SHIRT-4AL	BDS RACING AIR-LOC LOGO, T-SHIRT, black only.
SHIRT-00	2000 LOGO, T-SHIRT, white only
SHIRT-02	2002 CLASSIC ENGINE LOGO, T-SHIRT
SHIRT-03	2003 BDS LOGO, T-SHIRT, white only.
SHIRT-05	EFI LOGO T-SHIRT white only
SHIRT-07	38th ANNIVERSARY, T-SHIRT, "BLOWN TO BE WILD" Logo, grey only.

**NO EXCHANGES OR RETURNS ON WASHED OR WORN APPAREL.**



#Ban-3



#PLA-2

**LIMITED WARRANTY**

BDS manufactured products are warranted to be free from defects in material and workmanship for a period 90 days. This warranty is extended to the original consumer. There are no other warranties, which extend beyond those stated here. Any implied warranty determined to be applicable is limited in duration of this warranty.

**NON-BDS PRODUCT WARRANTIES**

On non BDS product warranties: final warranty determination will be in the sole discretion of the manufacturer. BDS shall not be responsible for (a) actual or alleged labor, transportation or other incidental charges; or (b) actual or alleged consequential or damages incurred by use of any products purchased from BDS. To make a warranty claim, contact BDS Customer Service Department for a R.A.#, which needs to be visible on the outside of the box. No C.O.D.'s will be accepted. All shipping charges are the responsibility of the customer. When we receive the part it will be returned to the manufacturer for inspection. They will advise us on their decision to either repair or replace the part. While waiting, you may purchase a replacement part, it can not be returned if it has been used, even if the manufacturer warranted your part.

**PRICES**

BDS catalogs and price sheets contain unique and specific information related to the products we manufacture. However, specifications and prices are subject to change without notice. BDS is not responsible for printing errors. All prices are quoted in U.S. dollars and are F.O.B. Blower Drive Service warehouse, Whittier California.

**PRODUCT UPGRADES/CHANGES**

BDS reserves the right at any time and without prior notification or liability to change or improve the design of any products, to add products or to discontinue products. Any such acts will not give rise to obligation to accept returns or to update the design of any such prior product.

**PAYMENT**

**DEPOSITS:** Deposits may be made using credit cards, personal and company checks, money orders, cashiers checks, certified checks, and of course cash. We strongly recommend that you do not send cash by mail. Personal and company checks are a handy way to pay however, some delay may occur due to bank clearance time. Also if your order comes to an amount in excess of the check amount (price increase, freight discrepancy, etc.) the balance due may be sent C.O.D.

**CREDIT CARDS:** We accept Visa, Master Card, American Express, and Discover. When paying with a credit card, please have your card number and expiration date available or include them with your order in the spaces provided.

**C.O.D:** All C.O.D.'s will be sent cashiers check or money order unless other arrangements are made and approved prior to shipping. Whenever possible, you will be mailed an order "Confirmation" showing all items ordered and their prices along with other pertinent order information

**FOREIGN ORDERS**

All foreign orders require payment in advance. Payment must be made with Visa, Master Card, American Express, or Discover credit cards only. Where available, orders will be shipped via U.P.S. Otherwise Parcel Post or an air freight company.

**DAMAGED SHIPMENT**

Upon receipt of an obviously damaged package, you have the option of refusing delivery and the order will be returned to Blower Drive Service Co. or you may receive the order and make note of the visible damage, in writing, to the carrier. If upon inspection of the parts you find them damaged due to the carrier's handling, you then have 48 hours to file a formal claim with the carrier. **DO NOT RETURN DAMAGED PARTS TO US.** Keep the package and parts in the condition in which you received them. Without the package, the carrier will void your claim.

**SHORTAGES**

Any Shortages and/or discrepancies must be reported within 10 days from the receipt of merchandise.

**RETURN PARTS AUTHORIZATION**

A.R.A. number does not guarantee a replacement or refund, but only that we will inspect the merchandise based on your claim. Electrical parts are not returnable. Returns after 60 days will not be accepted, exchanged or refunded. Merchandise shipped in error will be exchanged or refunded, at no charge. We cannot be responsible for unauthorized returns. **NO RETURNS ACCEPTED ON SPECIAL ORDER MERCHANDISE.**

**REFUSED SHIPMENTS**

Any customer who refuses delivery of an order (damaged shipment excluded) will be required to pay the additional return freight charges and/or 20% restock fee. These charges must be paid in full before any future orders will be shipped.

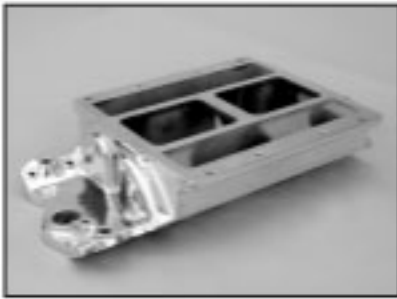
**BACK ORDERS**

If any item in your order happens to be out of stock at the time your order is shipped, those items will be placed on back order for you and duly noted on your invoice/packing slip. If after 30 days your back order is not filled, you will receive an inquiry to determine if you still want the parts to remain on back order or funds returned and the parts taken off of the back order list. No back orders will be kept on orders shipped outside the United States.

**SHIPPING**

All orders are sent via United Parcel Service. Next day or second day air service is also available. Some items may be too large or too heavy to ship via U.P.S. therefore these items will be sent via common carrier or air freight. Shipping and handling charges are billed at the prevailing rate and added to the invoice.

# PHOTO GALLERY PIT STOP



#8007-M Chevy (671-871)  
Competition Manifold



#8204A Buick 231 (471)  
manifold



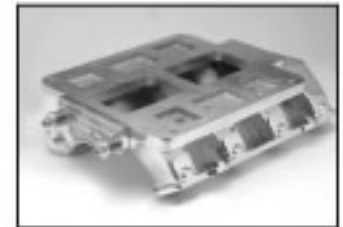
Chevrolet SB Distributor  
Clearance (671)



#8106A AMC  
(671-871) Manifold



#8006 with #10004



#8386-H Manifold  
(671-871)

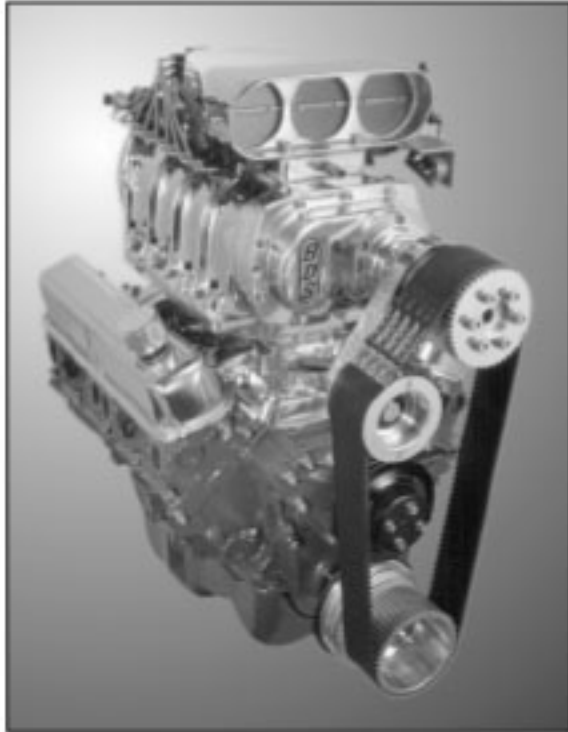


BB Chevy 871 Big & Ugly  
E.F.I. 16 Nozzle Kit.



Oldsmobile 455, 871, 8mm drive kit,  
dual carbs with scoop.  
(right view)

## PHOTO GALLERY PIT STOP



Chrysler 318-360, 671, 8mm drive kit,  
bugcatcher 16 nozzle EFI system.



Ford 351C, 671, 1/2" pitch drive kit,  
dominator carbs with scoop.



Chevy SB 671, 8mm drive kit,  
bugcatcher 16 nozzle EFI system, fuel rails,  
color add option. (right view)



Chevy 350, 671, 1/2" pitch drive,  
dual carbs with scoop  
(right view)

# BLOWER DRIVE SERVICE

## QUALITY SUPERCHARGER MANUFACTURING

Welcome to the world of supercharging. We appreciate you giving us the opportunity to present supercharging at its finest. Blower Drive Service Co. (BDS) is dedicated to supercharging and horsepower, that's what we do.

BDS has been building blowers and related supercharging equipment for over 30 years. Recognized as the world's foremost authority on quality aftermarket supercharging systems, BDS is continually developing new ideas and products to enhance and simplify the supercharged engine. The "Hands On" experience BDS has gained over the years with such a wide variety of applications, enables BDS to supply you with information and products specifically tailored to meet your supercharging needs.

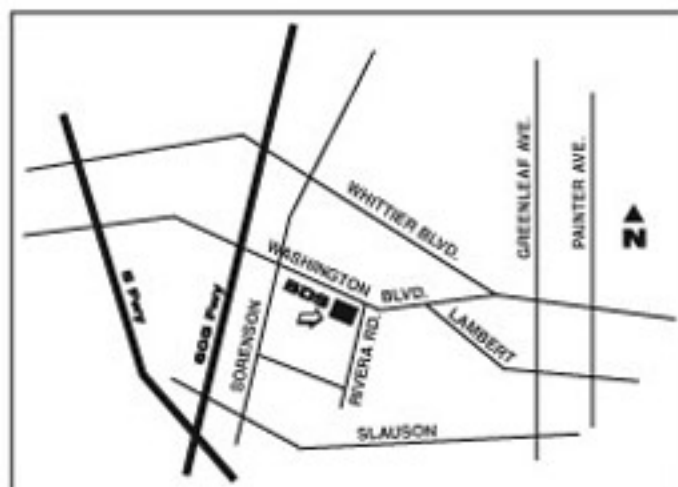
The quality and reliability of BDS superchargers is legendary. BDS equipped vehicles seem to be in a class by themselves, delivering not only the looks, but the performance to back it up. Show after show, race after race, BDS has what it takes to keep you on top. Blower Drive Service, the *supercharging specialists!*



Chrysler 440



Ford 302



471-1671 Blowers



# BOOST CHART WORKSHEET

Name: \_\_\_\_\_ Vehicle: \_\_\_\_\_ Blower size: \_\_\_\_\_ Date: \_\_\_\_\_

Cubic Inches	-20%	-15%	-10%	-5%	1:1	+5%	+10%	+15%	+20%	+25%	+30%	+35%	+40%
289													
327													
350													
400													
427													
454													
500													
550													

**NOTES:**

Name: \_\_\_\_\_ Vehicle: \_\_\_\_\_ Blower size: \_\_\_\_\_ Date: \_\_\_\_\_

Cubic Inches	1:1	+5%	+10%	+15%	+20%	+25%	+30%	+35%	+40%	+45%	+50%	+55%	+60%
400													
450													
500													
550													
600													
650													
700													
750													

**NOTES:**