



Fageol Superchargers manufactures four sizes of superchargers: 33.5, 48.3, 63.2 and 70.6 cubic inch per revolution. These can cover 4 cycle engines from a .5 to 3 litre displacement with one supercharger.

Our superchargers are made from high quality materials, 4340 gears and shafts and viton rotor seals with extruded aluminum center section. All parts are precision machined to aircraft specs.

Supercharger drives are available in lengths from 2.4" to 7.9" long (casting length) 90 degree drives are also available. All drives are machined for idler mount behind pulley.

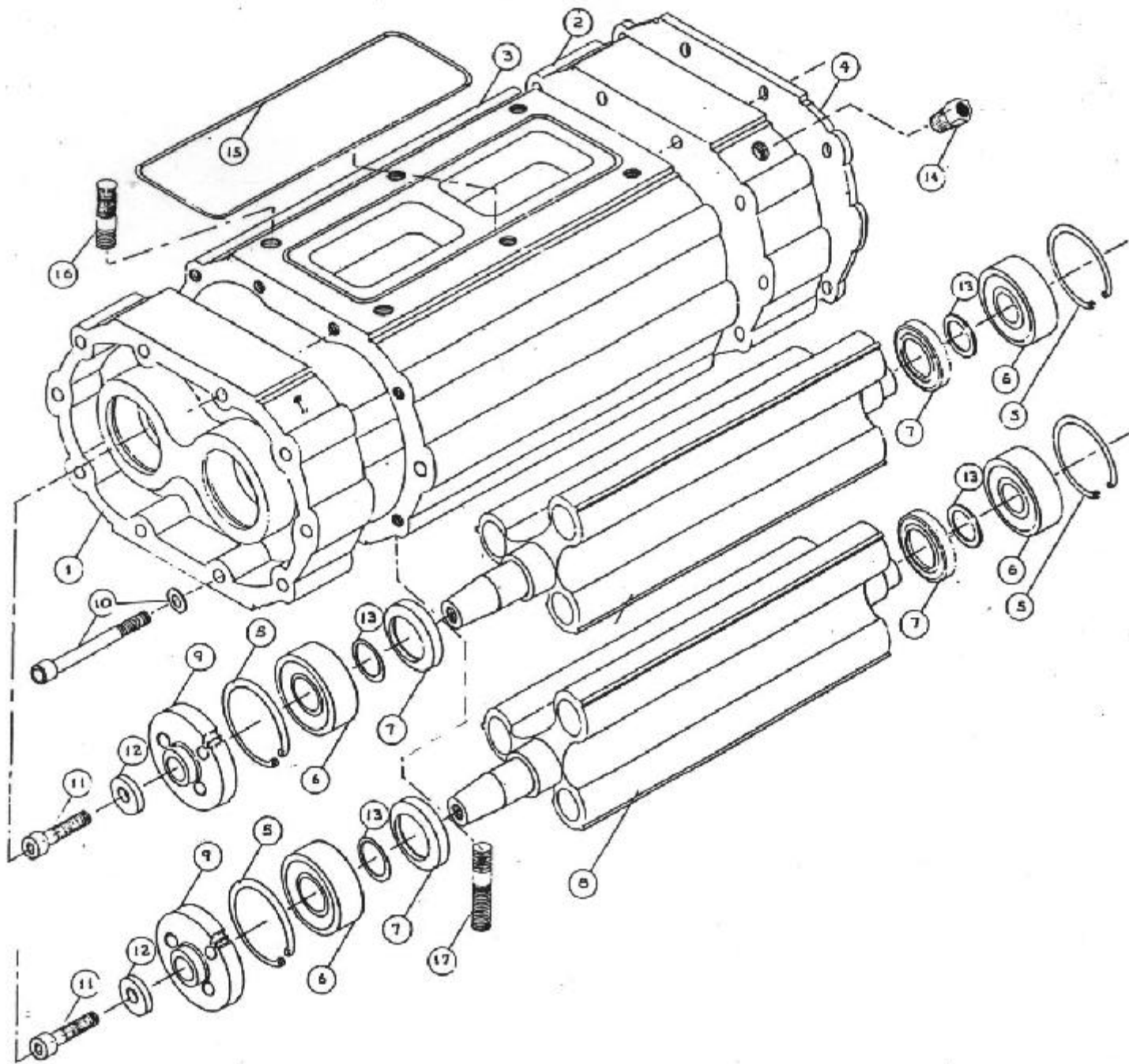
We offer idler arms and pulleys. We also have supercharger pulleys for 8 mm H.T.D. belt systems and multi-v or serpentine belt systems. Custom pulleys are also available - call for a quote.

We have supercharger inlet and outlet adapter plates and we can custom make intake manifolds for most engines.

Our kits come setup with a drive ratio for 5 pounds of boost at 5,000 RPM and provide a horsepower increase of approximately 35% at the rear wheels when bolted on a stock engine.

A complete installation manual is provided with our kits and installation can be accomplished using standard hand tools.

Free technical information is offered during business hours to customers who purchase a supercharger or kit.

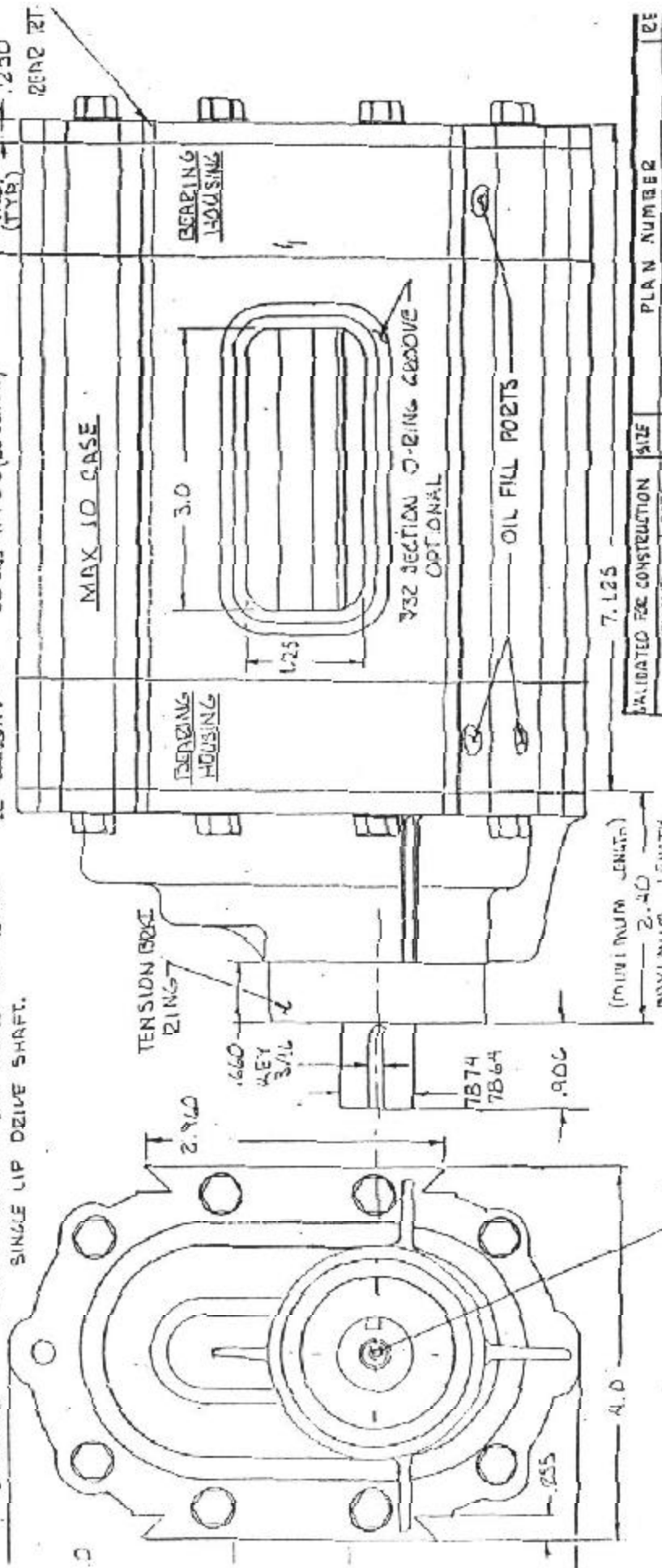


- |  |  |                                    |
|--|--|------------------------------------|
| 1. BEARING END PLATE FORWARD                       | 2. BEARING END PLATE REAR                | 3. MAIN CASE                       |
| 4. END PLATE                                       | 5. ROTOR BEARING SNAP RING<br>(4 REQ)    | 6. ROTOR BEARING (4 REQ)           |
| 7. ROTOR SEAL (HI TEMP (2) LIP)<br>(4 REQ)         | 8. ROTOR (2 REQ)                         | 9. ROTOR DRIVE GEAR (2 REQ)        |
| 10. CASE BOLT AND WASHER<br>(16 REQ)               | 11. NY-LOC GEAR MOUNTING BOLT<br>(2 REQ) | 12. GEAR RETAINER WASHER (2 REQ)   |
| 13. ROTOR SHAFT SHIM<br>.002 .003 .004 .005 AS REQ | 14. OIL FILLER BREATHER (2 REQ)          | 15. MOUNTING FLANGE O-RING (2 REQ) |
| 16. OUTLET MOUNTING STUD<br>(6 REQ)                | 17. INLET MOUNTING STUD (6 REQ)          |                                    |

# FAGEOL SUPERCHARGERS

## SPECIFICATIONS:

- 1 ROTORS - THREE LOBE, STRAIGHT CUT, EXTRUDED ALUMINUM.
- 2 MAIN CASE - EXTRUDED ALUMINUM, PRECISION MACHINED HARD AND DIZED TO .0015 THICKNESS.
- 3 GEARS - GROUND TAPER GEAR PRECISION CUT WITH AND HARDENED.
- 4 SHAFTS - 4130 STEEL HEAT TREATED WITH GROUND TAPER ON DRIVE ENDS.
- 5 BEARINGS - BALL BEARINGS HIGH CAPACITY.
- 6 SEALS - SPRING LOADED HI TEAR DOUBLE LIP ROTOR SINGLE LIP DRIVE SHAFT.
- 7 DRIVE - THREE PIN WITH BALL BEARING SUPPORT.
- 8 CASTINGS - BEARING HOUSING, NOSE DRIVE, (35/174) ALUMINUM.
- 9 LUBRICATION - INTERIOR PRESSURE (AUTOMATIC) BEARING CASE RESERVOIR JET SKI, MOTOR CYCLE, SNOW MOBILE.
- 10 DISPLACEMENT - SWEEP VOLUME 33.46 CU-IN/REV (CFM @ 3435 IN. Hg, 1800 RPM) 252 CFM @ 7925 RPM
- 11 MACHINE TRIM - ALL FASTENERS (316 SS) DRIVE SHAFT 17-4 PH 1/8"
- 12 WEIGHT - 12 LBS 9.4 OZ (AS DRAWN)



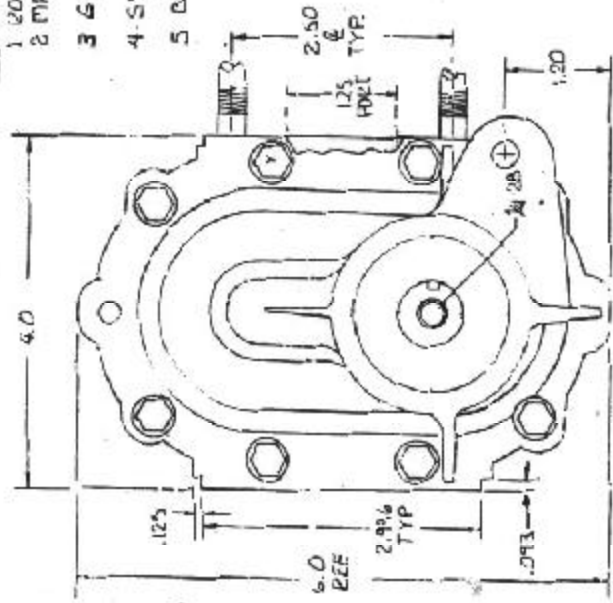
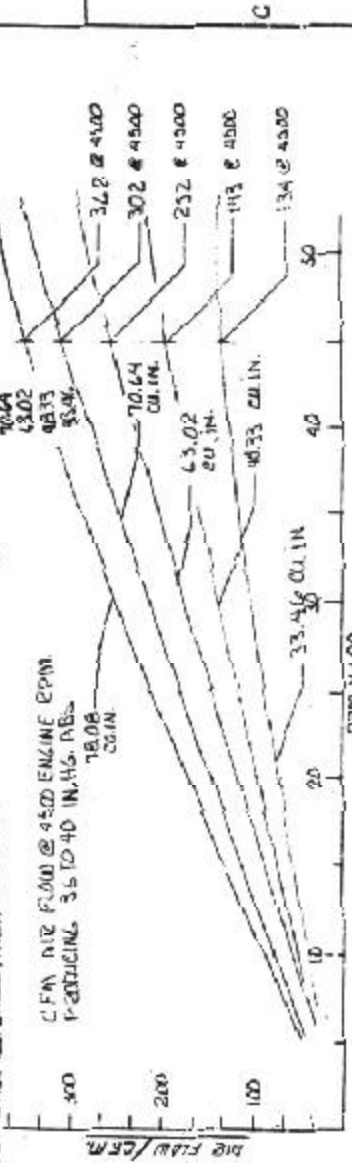
VALIDATED FOR CONSTRUCTION		DATE	PLAN NUMBER	RE
SIGNATURE	DATE		SK-510-095185-02	
APP'D	1-11-90			
D/W/N		SCALE: 1/1	SHEET 1 OF 3	

**SPECIFICATIONS:**

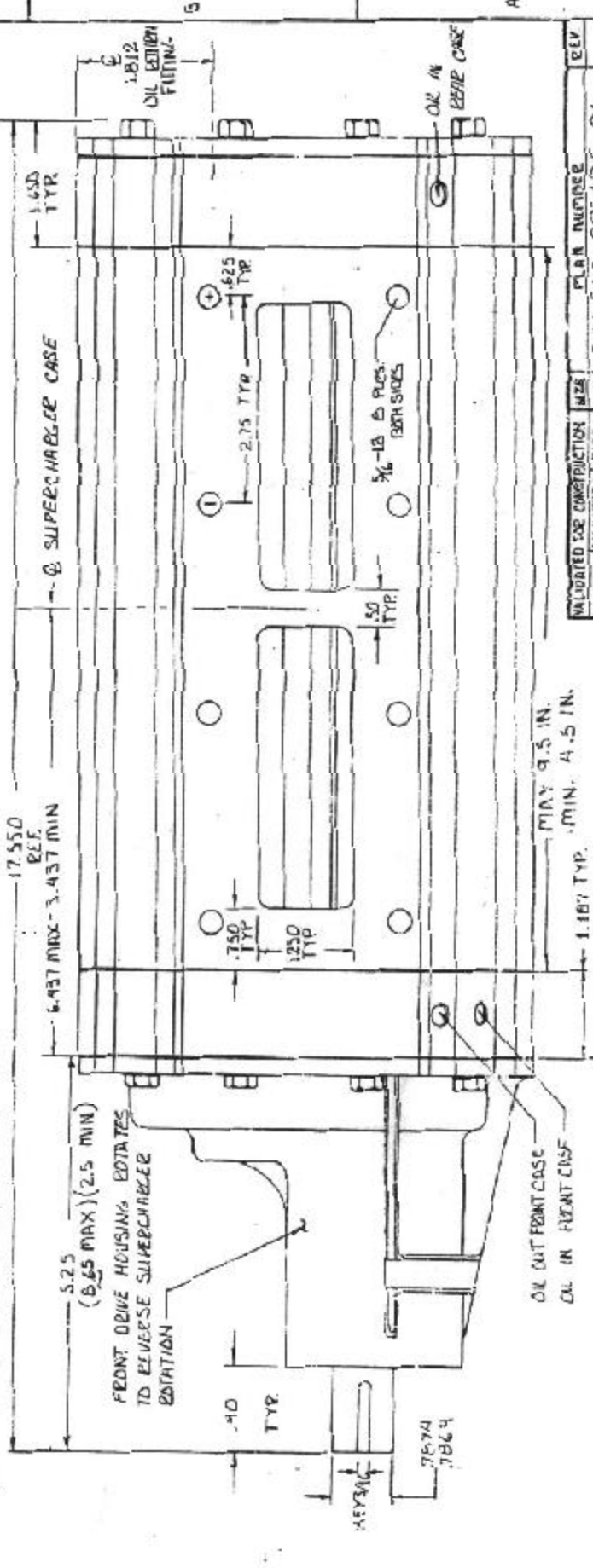
1. ROTORS - THREE CORE STRAIGHT CUT EXTRUDED ALUMINUM
2. MAIN CASE - EXTRUDED ALUMINUM PER 2150N REQUIREMENTS
3. GEARS - GROUND TAPER ROSE, PERCUSSION CUT TEETH
4. SHAFTS - 4130 STEEL, HEAT TREATED WITH GROUND TAPER
5. BEARINGS - BALL BEARINGS, HIGH CAPACITY

6. SEALS - SKIVING LOADED HI-TEMP DOUBLE LIP ROTORS, SINGLE LIP DRIVE SHAFT
7. DRIVE - THESE PIN WITH BALL BEARING SUPPORT
8. CASTINGS - 3% T4 ALUMINUM
9. LUBRICATION - METEDED OIL FROM MAIN GALLEY RETURN THROUGH ROCKER COVER
10. DISPLACEMENT - 70.06 CU. IN. / REV. SWEET VOLUME

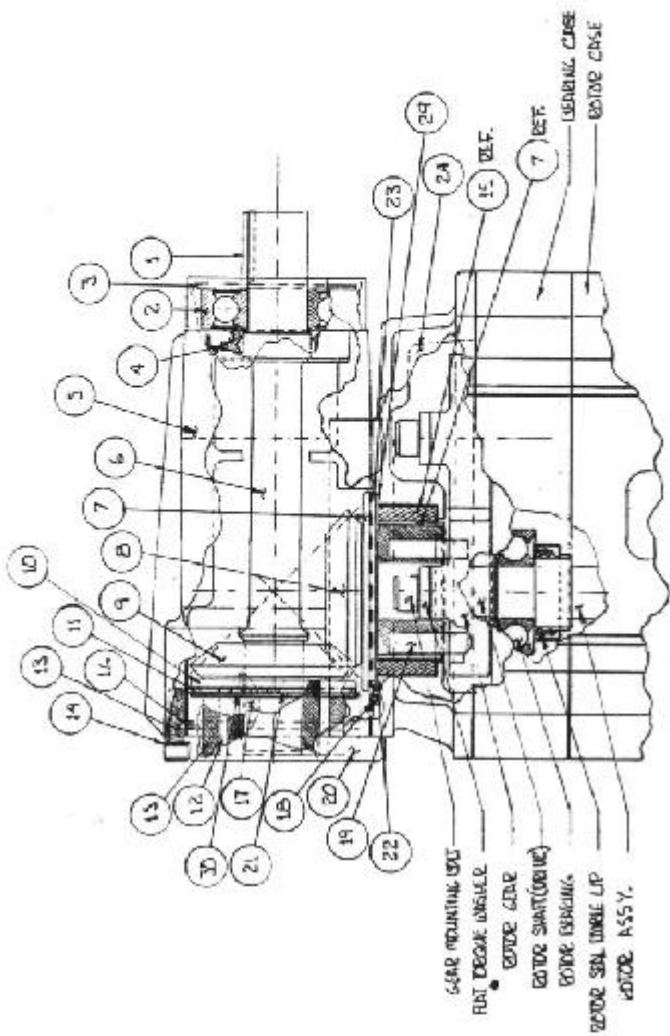
CFM AIR FLOW @ 4500 RPM  
 PRODUCING 35 TO 40 IN. Hg. ABS



**SUPERCHARGER AIR FLOW IN CU. FT./MIN.**  
**SPEED DRIVE RATIO 1.77:1 OVER**

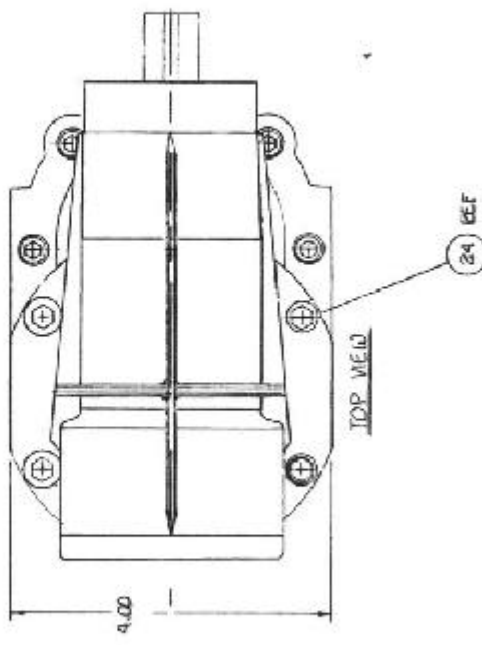


APPROV'D.	DATE	SCALE	PLAN NUMBER	REV
DMN	3-13-85	1/1	SK-510-095185-01	~

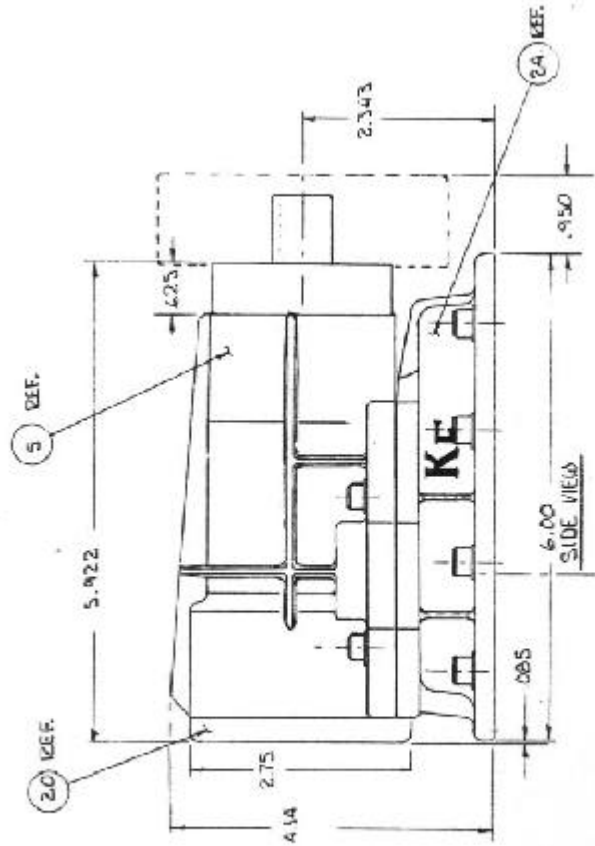


GEAR MOUNTING UG  
 FRT. BEARING ASSEMBLY  
 MOTOR GEAR  
 MOTOR SHAFT (ORIG)  
 MOTOR BEARING  
 MOTOR SEAL LIP UG  
 MOTOR ASSY.

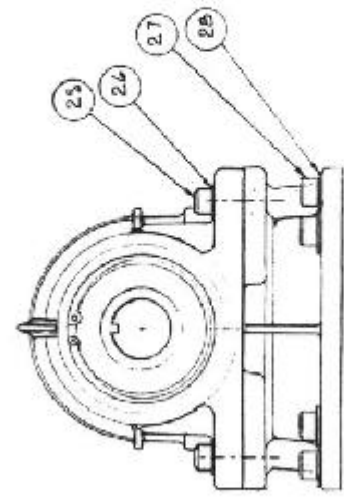
PARTS ASSEMBLY



TOP VIEW



SIDE VIEW



FRONT VIEW

UNLISTED FOR CONTRIBUTION SIZE	PLAN NUMBER	REV.
APPROV.	DATE	
DRAWN	SCALE: 1" = 1"	SHEET 2 OF 2
	-85160	

## BLOWER DRIVE RATIO GUIDE

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Because there are many variables from one engine to another such as compression ratio - cam lift, duration, and overlap - combustion chamber shape - valve size and placement - intake port shape ( siamese or separate ). The following information is for general guidance only.

The following is a general guide for matching the MAX 25 series superchargers to various engine displacements at different boost outputs. This guide does not consider air density or ambient temperature which will effect the final supercharger performance:

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Supercharger RPM ranges:

3,600 to 12,500 RPM. ( E1 ) optimum port speed is 8,750 RPM. SEE CHART 1A

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### SUPERCHARGER CONSTANTS:

a. = atmospheres @ pressure    ph. = pressure heat factor @ pressure

5 psi.= .34 atmospheres    5 psi.= .928ph. air only    5 psi.=.963ph. pump    5 psi.=.975ph. menthol

10psi.= .68 atmospheres    10 psi.=.806ph. air only    10 psi.=.868ph. fuel    10 psi.=.912ph. max.

15psi.=1.02 atmospheres    15 psi.=.644ph. air only    15 psi.=.744ph. carb    15 psi.=.837ph. 20%

20psi.=1.36 atmospheres    20 psi.=.462ph. air only    20 psi.=.600ph. only    20 psi.=.743ph. only

e. = engine breathing efficiency:    Two valve head = .8

Four valve head = .9

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### SUPERCHARGER VARIABLES:

L        = litre displacement (61.02 cu. in. per litre)

c.d.r.    = engine air requirements     $\frac{\text{cu. in. displacement}}{2 \times e}$  (4 cycle only)

bd        = supercharger displacement per revolution     $7.436 \times \text{rotor length}$

er        = engine requirements     $\frac{\text{c.d.r.} \times \text{a.}}{\text{ph.}}$

dr 1     = drive ratio     $\frac{\text{er}}{\text{bd}}$

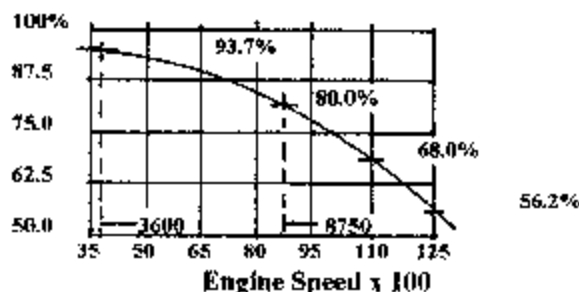
bs        = supercharger speed     $\text{dr. 1} \times \text{engine RPM}$

e 2        = actual supercharger output     $E 1 \times \text{bd} \times \text{dr. 1}$

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## CHART 1A

### E1 SUPERCHARGER PORT OUTPUT EFFICIENCY





1255 Hayden Lane  
El Cajon, California 92021

(619) 447-1092  
FAX 593-7294

PART	DESCRIPTION	LIST
<u>BLOWERS</u>		
40210	MAX 10 33.5 CID SUPERCHARGER WO/DRIVE	943.00
40215	MAX 15 48.3 CID SUPERCHARGER WO/DRIVE	977.50
40225	MAX 25 63.2 CID SUPERCHARGER WO/DRIVE	1006.25
40230	MAX 30 70.6 CID SUPERCHARGER WO/DRIVE	1075.25
<u>NOSE DRIVES</u>		
40201	4 1/8" LONG 2.8L DRIVE	138.00
40202	CUSTOM NOSE DRIVE 2 1/2 MIN. 8 1/4 MAX	200.00
<u>PARTS</u>		
40203	NOSE DRIVE IDLER SHORT ASSY.	110.00
40204	NOSE DRIVE IDLER LONG ASSY.	110.00
40205	BEARING END PLATE	75.00
40206	MAX 10 CASE	172.50
40207	MAX 15 CASE	201.25
40208	MAX 25 CASE	207.00
40209	MAX 30 CASE	227.70
40211	BEARING & SEAL SET SUPERCHARGER	75.75
40212	BEARING & SEAL DRIVE HOUSING	29.67
40213	ROTOR MAX 10 EACH	155.25
40214	ROTOR MAX 15 EACH	178.25
40216	ROTOR MAX 25 EACH	189.75
40217	ROTOR MAX 30 EACH	212.75
40218	MANIFOLD INTAKE TOYOTA 20 R	224.25
40219	MANIFOLD INTAKE TOYOTA 22 R	224.25
40210	MANIFOLD CARB TOYOTA WEBER	110.00
40221	MANIFOLD CARB TOYOTA HOLLY 2300	C U S T O M -----
40228	MANIFOLD ADAPTER TOYOTA 22 R EFI	126.50
40224	MANIFOLD INTAKE TOYOTA 22 R EFI	224.50
40226	MANIFOLD INTAKE 2.8L V6	240.00
40227	MANIFOLD CARB 2.8L V6	74.75
40228	MANIFOLD TBI 2.8L V6 GM	74.75
40229	MAX 25 SERIES GEAR SET	113.25
40231	TOYOTA BLOWER DRIVE PULLEY 5MX48 TEETH	46.50
40232	TOYOTA BLOWER DRIVE PULLEY 5MX40 TEETH	46.50
40233	TOYOTA A C DRIVE RING 5 MX89 TEETH	56.50
40234	TOYOTA 22 R EFI FUEL RAIL	86.25
40235	TOYOTA BLOWER DRIVE PULLEY WO/AR 3VX3 1/8	46.50
40236	BOOST GAUGE W/COLOR DRIVING RANGE	42.50
40237	KF TBI MANIFOLD W/FUEL RAIL INJECTORS	865.70

\*\* ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE \*\*

30200	82-86	ALL	S10/S15 AC KIT	146.35
30201	87-88	ALL	S10/S15 AC KIT	211.50
30202	84-86	ALL	JEEP AC KIT	265.65
30212*	ALL	FED	TOYOTA 20-22-22 RE EFI AC KIT	143.75
30213*	ALL	CAL	TOYOTA 20-22R CARB AC KIT	361.10
30214	82-86	ALL	S-10/S-15 JEEP BLOWER BELT	40.74
30215	ALL	ALL	TOYOTA W/AC BLOWER BELT	24.51
30215	ALL	ALL	TOYOTA WO/AC BLOWER BELT	17.48
30218	87-89	ALL	S-10/S15 WO/AC BLOWER BELT	41.34
30217	87-89	ALL	S-10/S15 W/AC BLOWER BELT	44.52
30218	ALL	ALL	S-10/S15 JEEP BLOWER CAM	158.12
30219	ALL	ALL	TOYOTA MF BLOWER CAM	113.27
30220	ALL	ALL	TOYOTA HP BLOWER CAM	119.02
30221	ALL	ALL	S-10/S15 LOW PROFILE HOOD SCOOP	155.25
30222	ALL	ALL	JEEP HOOD SCOOP	155.25
30223	82-86	ALL	S-10/S15 JEEP HI ALT PULLEY	46.50
30224	82-86	ALL	S-10/S15 JEEP ALTERNATOR B PULLEY	40.00
30225	82-86	ALL	S-10/S15 JEEP POWER STEERING PULLEY	50.00
30226	82-86	ALL	S-10/S15 JEEP CRANK PULLEY	85.40
30227	82-89	ALL	S-10/S15 JEEP CAST ROCKER COVER	143.75
30228	82-89	ALL	S-10/S15 TRACTION BARS	NOT AVAILABLE
SUFFIX P	82-89	ALL	POLISH S10-S15 MANIFOLDS ADD	250.00

Street Legal Kits for 2.8 L S-10/S-15 82-88

Toyota Kits for Off Road use only (NOT LEGAL FOR USE on any pollution controlled Vehicles in California)

- Year, Model and Month of manufacture must be identified