



Cylinder Heads • Engine Blocks • Intake Manifolds

The following information should be helpful in the installation of these heads.

Recommended Gaskets:

Head:	350 Block	- Fel-Pro 1003
	400 Block	- Fel-Pro 1014
Intake:	180cc	- Fel-Pro 1204
	200cc	- Fel-Pro 1205
	215/230cc	- Fel-Pro 1206
Exhaust:	All except	- Fel-Pro 1404 or 1405
	230cc	- Fel-Pro 1405

Recommended Spark Plug:

.750" Reach Gasketed 5/8" Hex

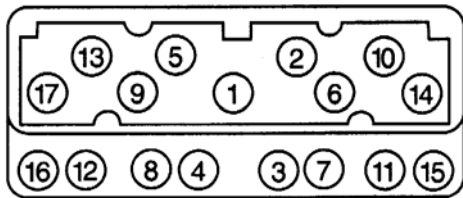
Autolite# 3933 Std tip, race

Note: Always consult the manufacturer's catalog for correct heat range.

Torque Specifications: w/oil

Head Bolts & Studs	70 ft lb
Rocker Arm Studs	45 ft lb
Manifold bolts	35 ft lb

Torque Sequence:



Valve Springs on our assemblies:

Cam Type / OD / type / pres / install ht / max lift

Hydraulic - 1.250" single, 110lb @ 1.700" .520"
Solid Lifter - 1.437" dual, 135lb @ 1.800" .600"
& Hyd Roller
Roller - 1.550" dual, 195lb @ 1.900" .650"*

*-When using this spring it may be necessary to check rocker arm interference with the retainer.



180cc/200cc/215cc/227cc/230cc Aluminum Small Block Chevy Cylinder Heads



Pro1 Aluminum cylinder heads are designed to produce optimum performance "Out of the Box". Several important features have been incorporated in the Pro1 heads. The finish and wall integrity are a result of the latest improved casting techniques. Bronze guides are a standard feature on all Pro1 heads. The latest technology in port design produces an "as cast" port that performs as if it were fully ported.

INTAKE MANIFOLDS



are found on race engines around the world. They are designed to develop maximum power for the intended purpose. The following manifolds are designed specifically for the Pro1 heads:

Part# 42811000	Dual plane, 4150 carb.
Part# 42411000	Single plane, 4150 carb.
Part# 42421000	Single plane, 4500 carb.

PUSH RODS:

Standard length push rods should be used except with our 1.550" diameter roller cam springs. These valves are .100" longer and require longer pushrods. Length should always be measured before ordering. You must use 5/16" hardened push rods.

VALVE COVERS



DART cast aluminum Pro valve covers are available for your **PRO 1** aluminum heads. The cast Dart logo is the same one that's found on Pro Stock and Pro Mod cars in winners circles everywhere.

Part# 68000010

PORTING INFORMATION

The intake and exhaust ports are very efficient on these heads "as cast". We recommend that if any porting is done it should only be done by a qualified head porter. As with any cylinder head, once it is modified from its' *as sold* condition, the manufacturer, Dart, takes no responsibility for the cylinder head. *This is done entirely at your own risk.*

Iron Eagle Block for SBC

- Raised cam
- 9.025" & 9.325" deck height
- 350 & 400 mains
- Spread pan rails
- Priority main oiling
- 4 bolt billet caps
- Wet or dry sump

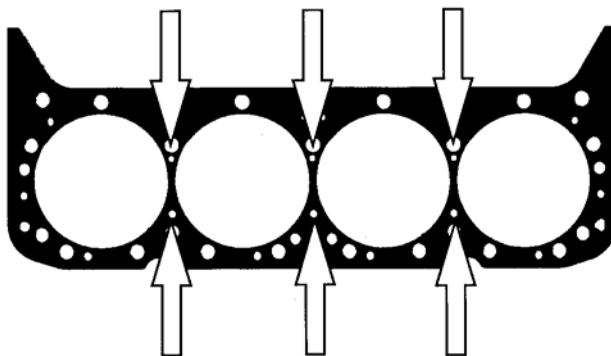
Little M Block for SBC

- Standard cam location & size
- 9.025" deck height
- 350 mains - 4 bolt billet caps
- Uses standard pan
- Priority main oiling
- Oil filter provision

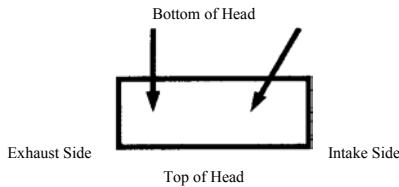
400 STEAM HOLES

In applications where a 400 engine block is used, you must drill six 9/64" steam holes in the cylinder heads. With the head upside down use the 400 head gasket as a template to mark the locations of the holes to be drilled. The three holes on the intake side should be drilled at a 30 degree angle towards the center of the head and may need to be over one inch deep. The remaining three holes are drilled straight down towards the top of the head.

Intake Side - Drill these 3 holes at 30° angle towards the exhaust side of head.



Exhaust Side - Drill these 3 straight holes



WARRANTY: Dart Machinery Ltd. (from hereon referred to as Dart) warrants to the original purchaser that the products will be free from defects in material and workmanship under normal use. Dart's obligation under this warranty shall be limited to the repair or replacement, at its' option, of any parts or products which may prove defective under normal use within six (6) months from the date of sale, and which the examination of Dart reveals to its' satisfaction that the products in question are in fact defective.

This warranty is expressly in lieu of all other warranties expressed or implied including the warranties of merchantability and fitness for use and of all other obligations or liabilities on the part of Dart. The purchaser acknowledges that he is not relying on Dart's skill or judgment to select or furnish goods suitable for any particular purpose and that are no warranties, which extend beyond the description on the face hereof. The warranty contained herein shall not apply to any part or product, which has been subject to accident, negligence, alteration, abuse or misuse. Dart makes no warranty whatsoever in respect to accessories or parts not supplied by Dart Machinery Ltd. This warranty shall apply only within the boundaries of the continental United States. Any affirmation of fact or promise made by Dart shall not be deemed to create an express warranty that the product shall conform to the affirmation or promise; any description of the product is for the sole purpose of identifying it and shall not be deemed to create an express warranty that the product shall conform to such description; any sample or model is for illustrative purposes only and shall not be deemed to create an express warranty that the product shall conform to the sample or model; and no affirmation or promise, or description, or sample or model shall be deemed part of the basis of the bargain.

Limitation of Liability: The sole liability of Dart under the warranties contained herein shall be the repair or replacement of parts or products sold. Dart shall not be held liable for any delays caused by circumstances beyond its' control including, without limitation, fire, labor problems, shortage of supplies or materials, and any other conditions which are beyond Dart's control. Dart products may not be considered "street legal", may adversely affect the original manufacturer's warranty and may violate State and Federal laws for vehicles equipped with pollution control devices. Purchaser bears full risk of any such violation.

If the purchaser brings any action by law or equity against Dart, no cause of action by purchaser shall include a claim, nor may recovery be had against Dart, for any punitive, incidental or consequential damages, including but not limited to damages to persons, property, for loss of use, loss of time, loss of profits or income. Under no circumstances shall the liability of Dart, to purchaser exceed twice the cost of the product purchased and, in that event, only when the remedy of repair or replacement is inadequate.