

1967 289 C.I.D. MUSTANG COMPETITION ENGINE SPECIFICATIONS

Piston to bore	.0058 - .0065
Top of block to top of piston	.015 - .028"
Connecting rod, vertical clearance	.0018 - .0022
Side clearance, Total 2 rods	.014 - .028
Main bearings vertical clearance	.002 - .0024
End clearance	.006 - .009
Head volume in C.C.'s	58 - 62
Compression ratio	10.5 - 10.8:1
Carburetors (2)	Holley No. 2804-2805
Primary Venturi	1 1/4
Secondary Venturi	1 5/16
Throttle Bore	1 11/16
Nominal Flow @	
1 1/2 in. hg.	2 x 600 CFM
Primary Jets	#67-70 #64-66
Secondary Jet Plates	#13-16
Float Bowls	Side Pivot, with Half Moon Floats.

Note: High numbered jets are high flow, low numbered jets are low flow. (This does not apply to jet plates)

Valve spring pressures - 120 - 130 @ 1.740"

Valve clearance - int. .016" - ex. .018" (hot) #156 camshaft.

Spark plugs - Autolite BF601
Ignition timing - 10° - 12° initial 36° - 38° total
Initial timing to be checked or reset, static.

Point clearance - .016 - .018
Dwell - 25° each point, 33° total

Recommended oil - S.A.E. 40 non-detergent
Castrol R-40

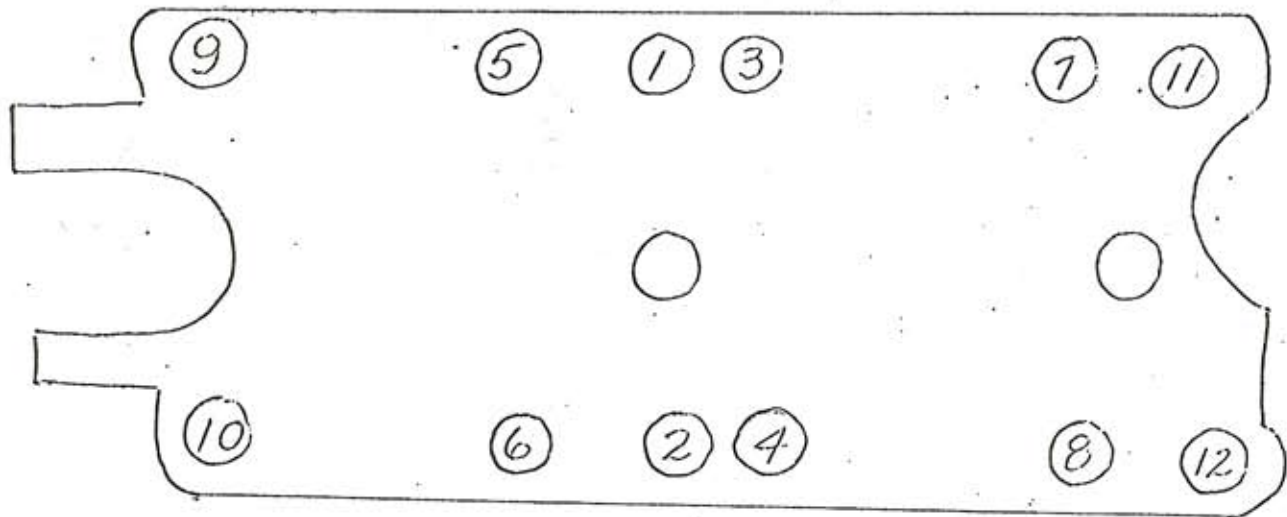
GENERAL TORQUING SPECIFICATIONS

<u>THREAD SIZE</u>	<u>TORQUE FT. LBS.</u>	<u>THREAD SIZE</u>	<u>TORQUE FT. LBS.</u>
1/4 - 20	7 - 9	7/16 - 14	45 - 50
1/4 - 28	6 - 9	7/16 - 20	50 - 60
1/4" Pipe	23 - 28		
5/16 - 18	12 - 15	1/2 - 13	60 - 70
5/16 - 24	15 - 18	1/2 - 20	70 - 80
3/8 - 16	23 - 28	9/16 - 18	85 - 95
3/8 - 24	30 - 35	5/8 - 18	120 - 145

TORQUING SPECIFICATIONS

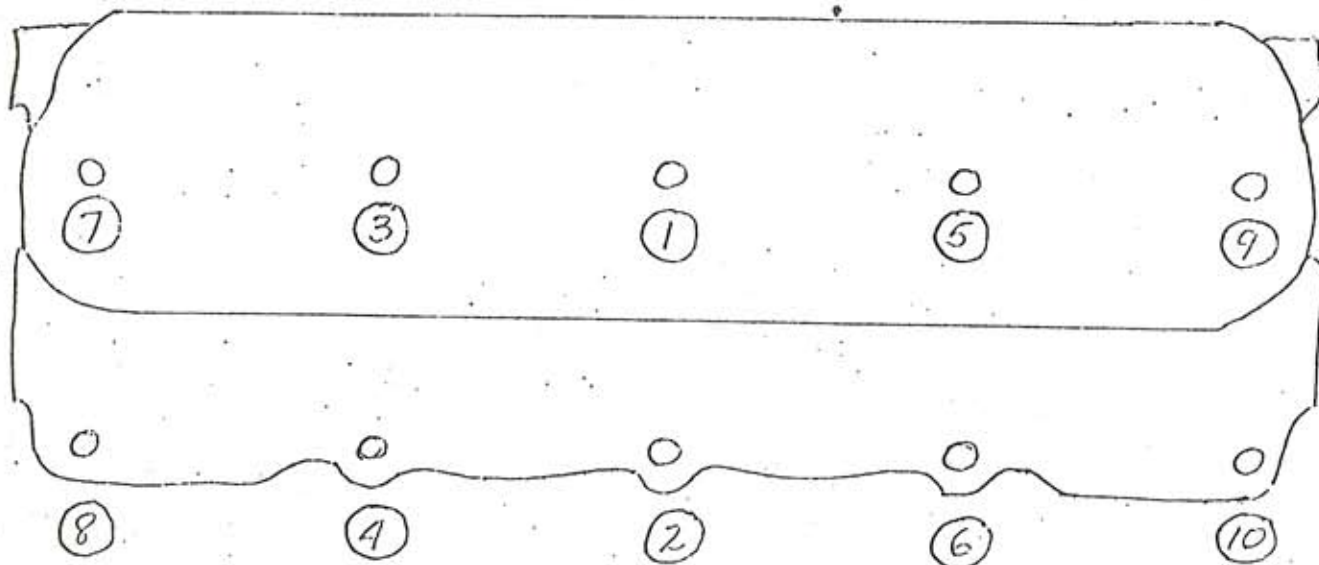
<u>OPERATION</u>	<u>THREAD SIZE</u>	<u>INSTALLATION TORQUE</u>
Bolt - rocker arm cover to cylinder head	1/4 - 20	3 - 5 ft. lbs.
Bolt - oil pan		
Bolt - pressure plate to flywheel	5/16 - 18	12 - 20 ft. lb
Bolt - cam sprocket to camshaft	3/8 - 16	30 - 35 ft. lb
Nut - rocker arm adjusting		
Bolt - flywheel to crankshaft	7/16 - 20	75 - 85 ft. lbs
Bolt - main bearing cap	7/16 - 14	70 ft. lbs.
Plug - oil pan drain	1/2 - 20	15 - 20 ft. lbs
Bolt - crankshaft damper to crankshaft	5/8 - 18	120-140 ft. lbs
Spark plug	18MM	12 - 25 ft. lbs
Oil filter cartridge	Tighten 1/2 turn after Gasket contact	
Insert - oil filter mounting - to block	1-1/16-12	60-100 ³ ft. lbs.
Bolt - exhaust manifold to cylinder head	3/8 - 16	13 - 18 ft. lbs
Nut - carburetor mounting	5/16 - 24	12 - 15 ft. lbs
Bolt - distributor hold down	5/16 - 18	12 - 15 ft. lbs
Bolt - generator mounting bracket to cyl. head	3/8 - 16	30 - 35 ft. lbs
Bolt - front cover	5/16 - 18	12 - 15 ft. lbs
Bolt - oil filler tube bracket to generator bracket (hand start run-down with impact wrench)	1/4 - 20	6 - 9 ft. lbs.
Nut - connecting rod		
Hand torque 40 - 45 lbs.	3/8 - 24	42 - 45 ft. lbs ref.

INTAKE MANIFOLD TORQUING PROCEDURE



Use guide pins in holes 10, 11, and 12, pins - .366 - .367 dia.
Torque bolts in pairs 1 & 2, 3 & 4, 5 & 6, 7 & 8, to 9 - 11 ft. lbs.
Remove guide pins and torque bolts 9 & 10, 11 & 12, as above.
Hand torque bolts in pictured sequence to 15 - 18 ft. lbs.

289 C.I.D. COBRA ENGINE



Bolt Torque Procedure: Using Oiled Threads

Tighten cylinder head bolts in the numerical sequence shown torquing of all cylinder bolts in the above sequence to be progressively increased in four steps.

1st Step - Torque to 20 ft. lb.

2nd Step - Torque to 40 - 45 ft. lb.

3rd Step - Torque to 50 - 60 ft. lb.

4th Step - Torque to 75 ft. lb.