

MATERIAL	A601 (356) Heat treated to T6 specs
CHAMBER VOLUME (For 48/54/57/60cc take 0.00575" off Per cc from 64cc Heads)	64cc -standard option
OPTIONS (specify when ordering or 64cc will be supplied)	48/54/57/60/64/68/70cc
RUNNER VOLUME	2V Intake 200cc/ Exhaust 130cc SP4VS Intake 220cc/ Exhaust 130cc SP4VR Intake 245cc/Exhaust 130cc
VALVE GUIDES	Manganese Bronze by C.H.E (USA)
VALVE GUIDE ANGLES	Intake 10 x 4 degrees Exhaust 9.5 x 3.0 degrees
ROCKER STUDS	7/16 unc screw in studs ARP100-7101 or ARP200-7101 (Pro Series)
HEAD STUDS/BOLTS (Standard Cleveand)	Studs ARP154-4004 (HEX) ARP154-4202 (12 POINT)
Follow manufactures torque specs	Bolts ARP154-3604 (hex) ARP254-3704 (12 point)
SPARK PLUGS (DO NOT use factory iron head spark plugs)	NGK BCPR 6ES or Champion C59C
5/8 hex,long reach,washer seat only	(Required Heat range may vary)
VALVE SEAT INSERTS (Unleaded Fuel Friendly)	Intake 2.250" x 1.900" x .375" Ductile Iron
All inserts are C.H.E products	Exhaust 1.750" x 1.470" x .375" Ductile iron
VALVE SIZE OPTIONS	2V Intake:Manley 2.100" 12172FA Race Master, 11800 (turn down 90thou) Severe Duty 2V Exhaust:Manley 1.65" 12173FA Race Master, 11807 Severe Duty 4V Intake:Manley 2.190 11872 Race Master,11800 Severe Duty. 4V Exhaust:Manley 1.710 11873 Race Master,11805 Severe Duty.
VALVE STEM SEALS	.530" o.d x 11/32" Howards Cams HC-93315
HEAD GASKETS	Cleveland: Fel-Pro FP1013 Windsor/Boss Fel-Pro FP1046
ROLLER ROCKERS	Howards Cams HC-90083 1.73 RR
GUIDE PLATES	Manley 42163 - 5/16 pushrods 42156 - 3/8 pushrods
RECOMMENDED VALVE SPRINGS,RETAINERS,LOCKS	Hyd Flat Tappet - Manley 22407-16 Springs, 23635-16 Retainers,13194-16 Locks, 42126-16 Locators Mech Flat Tappet - Manley 22429-16 Springs, 23656-16 Retainers,13194-16 Locks, 42122-16 Locators Hyd Roller -Manley 22429-16 Springs, 23656-16 Retainers, 13194-16 Locks, 42122-16 Locators Mech Roller -Manley 221442-16, 23643-16 (Titanium Retainers) 13194 Locks, 42343-16 Locators
CAMSHAFT	
Howards Hydraulic Flat Tappet	230011 (204/214 @ 50) 232171 (208/208 @ 50) 231031/230931 (214/214 @ 50)
Howards Mechanical Flat Tappet	230021 (214/224 @ 50) 230041 (224/234 @ 50) 230961 (228/228 @ 50)
Howards Mechanical Roller Tappet	232181 (244/254 @ 50) 232371 (250/256 @ 50) 232361 (252/260 @ 50)
	232191 (260/260 @ 50) 232321 (260/268 @ 50)
	239993 (Custom Grinds To Suit Customers Requirements)
LIFTERS	
Howards	91211 (Hyd. Flat) 91212 (Hyd. Flat Anti Pump) 91218 (Hyd. Flat Direct Lube) 91215 (Flat Solid)
	91217 (Mechanical Racing Roller with Vertical Bar)
	20202 (Hyd. Flat) 21202 (Hyd. Flat Anti Pump) 20204 (Flat Solid)
Clevite	Manley 42104
LASH CAPS	
VALVE COVER BOLT/STUD KITS	Studs ARP200-7620 Bolts ARP100-7504 (hex) ARP100-7508 (12 point)
HEADER BOLT KIT	ARP100-1102 (Hex) ARP100-1202 (12 point)
INTAKE MANIFOLD BOLT KIT (check manifold bolt length requirements)	ARP154-2004 (Hex) ARP154-2104 (12 point)
MANIFOLD	2V - Any Normal Manifold or TFC-41110-2V + FP1240 Felpro, 4V - TFC-41110-4V