# Installation Instructions for 514000 to 514006 Small Block Chevy 180cc Cylinder Heads

#### **Materials**

Casting Valve Guides Valve Seats

#### Intake

Port Volume Valve Diameter Valve Length Valve Stem Diameter Valve Stem Seal Diameter Port Dimension Flow Rate Gasket

### <u>Exhaust</u>

Port Volume Valve Diameter Valve Length Valve Stem Diameter Valve Stem Seal Diameter Port Dimension Flow Rate Gasket

#### Valve Train

Stud Size 3/8"-24 (555-20580) Guide Plates 5/16" Flat (555-202000) Pushrods 5/16" Hardened, Must Check Length - Use 555-80670 Pushrod Length Checker Retainers Chrome Moly Steel 7 Degree 7 Degree Valve Locks I.D. Locator - 1.490" x .060" Spring Locator Springs 1.250" OD Single Spring - 0.525" Max Lift 1.250" Spring - 100# @ 1.775" / 320# @ 1.200" - Coil Bind - 1.160" Spring Pressure

#### Accessories

Head Bolts555-83400 or equivalent (Use 555-28011 or similar sealant on the threads)Head StudsStandard SB-Chevy

NOTE: The head bolt washer located in between the two middle exhaust valve springs may require trimming due to spring locator interference. The edges should be "Clipped" to allow the washer to lay flat without contacting the spring locator.

Spark Plug14mm x 3/4" Reach - Gasket Seat - 5/8" HexStud GirdleJEGS 555-20510 or equivalentRocker ArmsStock Size HP SB-Chevy for 3/8"-24 Studs (i.e. extruded aluminum or HD Steel)Head Gasket555-210041 or equivalentAccessory Bolt LocationsStock Placement

#### **Torque Specifications**

Rocker Studs45 ftManifold Bolts35 ftHead Bolts or StudsPer Stude

45 ft/lbs. 35 ft/lbs. Per Specifications of the Fastener Manufacturer

## NOTE: Piston to valve clearance should always be checked!



A356-A Virgin Grade, Heat Treated to T-6 Manganese Bronze Alloy, For use with Unleaded Gasoline

180cc 2.020" Stainless Steel 4.910" 11/32" 0.530", Teflon 2.200" Tall x 1.300" Wide 263 CFM @ 0.600" Lift - 28" H2O JEGS 555-210000 or equivalent

85cc 1.600" Stainless Steel 4.910" 11/32" 0.530" Teflon 1.530" Tall x 1.545" Wide "D" Shape 213 CFM @ 0.600" Lift - 28" H2O 555-210052 or equivalent Adjusting the Guide Plates: The guide plates have some extra clearance around the holes to allow adjustment for optimum alignment (loosen the rocker studs and adjust the guide plates for best fit when assembling the valve-train on your engine). Make sure the pushrods don't rub on the heads and that rocker tip has adequate contact on the top of the valve stem. Re-torque the rocker studs to 45 ft/lbs.

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