

2019 SMS Open Modified Rules

The rules herein shall refer to “Stafford Motor Speedway” as SMS. These rules shall refer to “participant” as any owner, driver, crew member, vendor or fan. Upon entry into SMS, all participants agree to be knowledgeable and bound by the contents found in these 2019 Divisional rules and the **SMS 2019 General Rules**. These rules supersede and replace any contrary rules as posted by any other sanctioning bodies.

Participants are required to register their car number for the three open modified feature events. Participants can either contact the Stafford Motor Speedway Office (860-684-2783) or register online at www.staffordspeedway.com.

A non-refundable registration fee must be submitted.

The minimum age for competition in the SMS Open Modified Division is 16 years of age (15 years of age upon approval of SMS officials).

A car may not compete in two different divisions during the same race event.

The 80-lap features will have a draw for qualifying heat starting position, and will use a plus/minus system of handicapping from the qualifying results for the 26 car (maximum) feature starting line-up.

Teams are required to use helmets for each of their five team members (maximum) that are allowed to go over the pit wall for any car service.

Drivers must have a suitable HANS, NexGen, Hutchens, or Simpson Hybrid type head and neck restraint device.

All cars must have a fire suppression system installed.

The interpretation and application of SMS Officials decisions concerning any rules or references to NWMT or MRS rules during and after each event is final.

Please see the **SMS 2019 General Rules** for additional safety rules and procedures.

- TIRES

Note- Teams that have pre-registered may call Hoosier and order their race tires to have set aside for them at the track.

The tire rule will be a Hoosier 1320 compound for left side tires and a Hoosier 1330 compound for right side tires with a quantity of six (6) registered to each team.

These six tires must be purchased at SMS on race night, and will be scanned in to our tire inventory system.

You must have four of those six registered tires on your car at all times during qualifying and feature events.

Competition tire changes are permitted, but you must use only your six inventoried tires. You are required to notify SMS Officials of your “change tires” positions on the car (right sides, rears, etc...) prior to the feature event.

Flat tires/damaged rims will be dealt with on a case by case basis, per your SMS pit road official.

– ELIGIBLE CHASSIS MODELS:

The chassis, interior tin and body must be safe, neat appearing, and acceptable to SMS Officials. Any NWMT or VMRS legal tour-type modified chassis is permitted.

The interior sheet metal and all body panels must be NWMT or VMRS legal.

An anti-intrusion magnetic steel plate must be installed over the driver side door bars, as described in the NWMT or VMRS rules.

A maximum track width of 84" is permitted, when measured at outer wheel beads.

The wheelbase must be between 104-110 inches.

Front wheel / spindle tethers must be used, and be acceptable to SMS Officials.

The minimum frame and body height is 2" at all times.

The windshield may be flat style on the (drivers side only), minimum 1/8" polycarbonate material, or the old curved type polycarbonate (drivers side only).

A fully covering hood must be used at all times.

The front spoiler / nose may be no wider than the front frame rails and may not extend forward beyond the trailing edge of the bumper bar.

The standard Modified type front bumper must be installed at spindle height, and may not extend beyond 31" from upper ball joint.

The standard Modified type rear bumper must be installed at spindle height, and can be no wider than 48".

Standard Modified type side nerf bars must be installed in accordance with NWMT or VMRS rules.

Belly pans are not permitted.

The rear spoiler mounting point (maximum height of rear quarter panels and back tail light panel) may be no higher than 36".

The rear spoiler may be a maximum of 8" tall and a maximum of 48" long clear 1/4" thick polycarbonate. It must be centered between the quarter panels.

The roof must be a minimum of 40" measured from the ground to the center line of the roof, measured 6" behind the top windshield bed. The roof may have a maximum height of 43".

Carbon fiber or titanium chassis, suspension, or body components are not permitted.

– FUEL:

Sunoco Standard Purple 110 or Sunoco Supreme Blue 112 leaded fuel must be used.

Sunoco Fuel is available at SMS.

SMS will sample your fuel as part of our technical inspection process.

Blending or mixing of any fuel type or additives is not permitted.

– FUEL CELL:

The fuel cell and its installation must be acceptable to SMS Officials.

A rubber bladder fuel cell must be used.

The fuel cell must be a maximum of 24 gallon capacity.

The fuel cell may be a maximum of 5 years old.

The top plate must have a fully functioning roll-over check valve.

A minimum ground clearance of 5" must be maintained.

– SUSPENSION:

All front and rear suspension components and their installation must be acceptable to SMS Officials.

NWMT or VMRS legal suspension components must be used.

Bump stops and travel limiters of any kind are not permitted. The suspension must compress and extend beyond the normal travel of the cars suspension, without any limit to its movement other than by the springs natural resistance.

Cockpit remote chassis adjusters are not permitted.

– **SPINDLES / HUBS:**

Spindles / Hubs and related components must be acceptable to SMS Officials.

Steel spindles only.

Aluminum or magnesium hubs may be used.

Hubs that require oil as lubricant are not permitted.

Wheel bearings must be tapered cylindrical magnetic steel (Timken type) bearings.

– **SHOCKS:**

Shocks and their installation must be acceptable to SMS Officials.

Non Adjustable or Single Adjustable Shocks must be used.

One shock per wheel permitted.

Remote or External Reservoir Shocks are not permitted.

Remote adjustable shocks are not permitted.

Shock bump stops are not permitted.

– **BRAKES:**

All brake system components and their installation must acceptable to SMS Officials.

The brake pedal must operate all 4 wheels.

Titanium, ceramic or carbon fiber components are not permitted.

A conventional “Modified” type brake system must be used.

One brake bias control valve is permitted.

Brake enhancing devices of any kind are not permitted.

– **GEAR**

Rule- 4:86 maximum gear ratio permitted.

Ring gear must be 10” diameter.

– **DRIVE TRAIN:**

All drivetrain components and their installation must be acceptable to SMS Officials.

Any traction altering device of any kind is not permitted.

DRIVESHAFT-

The driveshaft, u-joints and yoke must be magnetic steel.

The driveshaft must be a minimum of 2” in diameter.

SHIFTER-

The shifter and all of its components must be made of steel or aluminum.

All working gears (forward and reverse) must be operational via the shifter in the cockpit.

TRANSMISSION-

The transmission, its related components and its installation must be acceptable to SMS Officials.

A GM 3 or 4 speed transmission, a Richmond part # RIC70200, or a Jerico part # 2SP must be used.

The transmission will weigh a minimum of 50 lbs (dry weight).

The gearing must be 1:1 on final drive, and nothing lower than a 1:15 on any other gear.

The transmission must have a working reverse gear.

All forward and reverse gears must be operational via the cockpit shifter.

GM-

Stock GM cast iron or aluminum case 3 or 4 speed may be used.

The GM transmission must have a maximum of 4 and a minimum of 2 forward gears in working order.

Richmond part # RIC70200-

The Richmond transmission must be used, as manufactured, with no modifications permitted.

Jerico part # JEP 2SP-

The Jerico transmission must be used, as manufactured, with no modifications permitted.

– CLUTCH

The clutch assembly and its installation must be acceptable to SMS Officials.

A conventional 1, 2, or 3 disc clutch must be used.

Clutch discs must be magnetic steel.

Pressure plate may be steel or aluminum.

The clutch must be a minimum of 5-1/2" diameter.

The flywheel and pressure plate must be bolted to the crank flange of the engine

Ram coupler or direct drive assemblies are not permitted.

Carbon fiber, titanium, or composite materials are not permitted.

– REAR END ASSEMBLY

The rear end, its associated components, and its installation must be acceptable to SMS Officials.

Aftermarket straight or quick change rear must be used.

A 10" diameter ring gear must be used.

Standard type spool must be used.

Any type of ratchet, open, or slipping chuck is not permitted.

All components must be steel or aluminum.

After-market rear end allowed. No titanium or carbon fiber parts. Rear spur gear quick change only. Ten (10) inch ring gear only. No ratchet-type or limited slip differentials. Spool only.

– WHEELS

Wheels must be magnetic steel.

They may be a maximum of 15" wide.

– CAR WEIGHT

SMS reserves the right to modify total weight requirements as deemed necessary.

– POST-RACE MINIMUM WEIGHT

The post-race (qualifying or feature) minimum weight for all cars shall be 2,515 pounds, with a maximum left side weight of 56% (driver and gear in car, across scales).

Steel head engines that have compression ratio over 12:1 (maximum of 13:1) must weigh a minimum of 2,565 pounds total post-race.

You will be penalized one finishing position per pound that you are under on the total minimum post-race weight.

There is no tolerance on maximum left side total.

– ENGINES

Tour-type engines must be used.

SK type engines with 4 barrel carburetors are not permitted.

Any stock or after-market steel GM block may be used.

Lightening of the engine block is not permitted.

Engine blocks that have been lightened will be assessed a weight penalty.

Any intake is permitted.

Any ignition is permitted.

Connecting rods must be steel.

Maximum compression for all engines is 12.0:1

Steel Head engines with compression ratio over 12:1 (a maximum of 13:1) will have a 50 pound weight penalty

See –Post-Race Minimum Weight above

Maximum lift (camshaft) for steel head engine is .725 at zero lash.

Maximum (aluminum) carb spacer height is 1” for steel head engines.

– CARBURETOR:

Please see section A2 (carburetor rule) at the end of this rulebook

Boosters in all carburetors must be safety wired with minimum .020 wire.

Two (2) throttle return springs must be installed.

See carb rule listed for each engine option-

390 “open” carb specs:

Booster-

OD- .617

Bridge may be removed- .450

Length- .500

Installed height- .467

No tapering of ID or OD of booster.

Booster leg must remain unaltered.

Throttle shafts, unaltered, .197

IGNITION: One MSD 6ALN ignition box is permitted, mounted on right side of drivers compartment.

A 6 pin male/female connector is mandatory.

Crank trigger ignition is permitted, without an ignition module installed in the distributor.

A wet or dry sump oiling system is permitted. Dry sump tanks must be fully enclosed with sheet metal.

EXHAUST: Kooks MRS 350 or Flowrite MRS 351 unaltered mufflers must be used.

Headers may be standard, or stepped (1-3/4 to 1-7/8 only.)

Maximum retail price for headers is \$950/pair.

Merge collectors are not permitted.

Tri-Y headers are allowed for 18° aluminum head engines only.

See each engine package rule for header details.

23° ALUMINUM HEAD ENGINE OPTION:

The previous NWMT and MRS 23 degree rules shall be followed.

The following cylinder heads are the only cylinder heads permitted:

Air Flow Research AFR 215

All Pro AP 227

Brodix 3941075

Chevrolet 10051101

Dodge W-7 Casting #P4532442B,

Part Numbers P5249958 (Unported)

P5249850 (CNC ported)

Ford M-6049-C302 with 4 Degree Valve Cant

Pontiac 10033867

Please see section A1 (cylinder head rule) at the end of this rulebook

Any steel GM or aftermarket block is permitted.

Lightening of the block is not permitted (weight penalty may be assessed).

Any intake manifold is permitted.

Any ignition system is permitted.

Connecting rods must be steel.

Maximum compression ratio for this package is 12 to 1.

Maximum valve angle is 21 degrees

390 open booster carb, per VMRS rules. Please see section A2 (carburetor) at the end of this rulebook.

A maximum 1" tall aluminum spacer may be used.

One MSD 6ALN ignition box is permitted, mounted on right side of drivers compartment.

A 6 pin male/female connector is mandatory.

Crank trigger ignition is permitted, without an ignition module installed in the distributor.

A wet or dry sump oiling system is permitted. Dry sump tanks must be fully enclosed with sheet metal.

Kooks MRS 350 or Flowrite MRS 351 unaltered mufflers must be used.

Headers may be standard, or stepped (1-3/4 to 1-7/8 only.)

Maximum retail price for headers is \$950/pair.

Merge collectors are not permitted.

Tri-Y headers are not permitted to be used with this engine package.

18° ALUMINUM HEAD ENGINE OPTION:

Engine specs per 18 degree rules (sec 3, ref A1). Please see section A1 (cylinder head rule) at the end of this rulebook.

Carburetor- NASCAR legal square booster 390 cfm Holley, or MRS legal 390 cfm Holley (section 3, ref A2). **The NASCAR legal 390 bridged booster may be shortened to .500 in height.**

SB2 type cylinder heads are not permitted.

A maximum of a 2" tall carb spacer is permitted.

One MSD 6ALN ignition box is permitted, mounted on right side of drivers compartment.

A 6 pin male/female connector is mandatory.

Crank trigger ignition is permitted, without an ignition module installed in the distributor.

A wet or dry sump oiling system is permitted. Dry sump tanks must be fully enclosed with sheet metal.

Maximum compression ratio for this package is 12 to 1.

Kooks MRS 350 or Flowrite MRS 351 unaltered mufflers must be used.

Headers may be standard, or stepped (1-3/4 to 1-7/8 only.)

Maximum retail price for headers is \$950/pair.

Merge collectors are not permitted.

The Beyea Part# AM TY18S2 Tri-Y header or similar Tri-Y header may be used on the 18° engines only.

DART ALUMINUM HEAD OPTION:

Cylinder head part number # 11510020PF, valve job and combustion chamber work are the only modifications permitted.

Intake part number RHS 12902, as manufactured.

Stainless Steel Valves, 11/32" valve stem diameter, 2.055 Intake Max / 1.625 Exhaust Max

Flat surface cutting permitted.

Valve jobs and combustion chambers are left to the engine builder.

Maximum compression ratio for this package is 12 to 1.

Any Holley 4 barrel carb permitted.

Kooks MRS 350 or Flowrite MRS 351 unaltered mufflers must be used.

Headers may be standard, or stepped (1-3/4 to 1-7/8 only.)

Maximum retail price for headers is \$950/pair.

Merge collectors are not permitted

STEEL HEAD ENGINE OPTION:

Cast iron GM Bow-Tie part# 140-11034, part# 1248-0034, part# 1248-0053 or DART part# 105-100-20PF must be used.

STOCK steel heads may use any Holley 4 barrel carb.

Any steel stock or after-market GM block may be used.

Lightening of the engine block is not permitted.

Engine blocks that have been lightened will be assessed a weight penalty.

Any intake is permitted.

Any ignition is permitted.

Connecting rods must be steel.

Maximum lift (camshaft) for steel head engine is .725 at zero lash.

Maximum (aluminum) carb spacer height is 1" for steel head engines.

One MSD 6ALN ignition box is permitted, mounted on right side of drivers compartment.

A 6 pin male/female connector is mandatory.

Crank trigger ignition is permitted, without an ignition module installed in the distributor.

A wet or dry sump oiling system is permitted. Dry sump tanks must be fully enclosed with sheet metal.

Kooks MRS 350 or Flowrite MRS 351 unaltered mufflers must be used.

Headers may be standard, or stepped (1-3/4 to 1-7/8 only.)

Maximum retail price for headers is \$950/pair.

Merge collectors are not permitted.

Maximum compression for any steel head is 12 to1.

Steel Head engines with compression ratio over 12:1 (maximum of 13:1) will have a 50 pound weight penalty

See –Post-Race Minimum Weight above

STEEL HEAD / CARBURETOR OPTION:

Cast iron GM Bow-Tie part# 140-11034, part# 1248-0034, part# 1248-0053 and DART part# 105-100-20PF

Stock heads...see head rule. May use Any 4-barrel Holley carburetor.

Any cast iron heads that exceed head rule, 390 cfm Holley open-booster carburetor. All 390 carburetors will be checked with inspection gauges.

DART STEEL HEAD RULE:

A. Must use part # 105-100-20 PF.

Carb must be a Holley 4150, may use aftermarket metering blocks.

Please see section A2 (carburetor) at the end of this rulebook.

B. The Dart Head Part #. 105-100-20PF must remain in box stock condition with the following exceptions:

1) Combustion chamber may be polished.

2) Heads may be resurfaced as required.

3) Valve size- 2.055 max on Intake, 1.625 max on exhaust.

The maximum valve angle permitted is 21°.

4) Intake Port Work / (Stage 1):

Intake Port may be gasket matched to a max of 1.380 in width 2.380 in height. The Intake port may also be worked from the intake flange of the head inward as follows:

Port Floor 1.700 in from flange max depth.

Push Rod side of port 1.700 in from flange max depth.

Roof of port 1.700 in from flange max depth.

Divider wall side of port .750 in from flange max depth.

Port width at push rod pinch area will be 1.120 max width measured from the un-ported area of

the divider wall.

Any work beyond the max limit will be deemed illegal. No material shall be added to any part of the head including, but not limited to the roof and the push rod area.

5) Exhaust port must remain stock as cast, with the exception being you may work the area below the bottom cut of the valve seat into the bowl area 1" (1 inch) 360° max/limit. (Example: bottom cut of 45° seat in toward valve guide 1" (1 inch) 360°.) The roof and side walls of the exhaust port from exhaust mounting flange of head .950 minimum in towards the short side radius must remain untouched as cast. Max and minimum being the limit. Any work done outside the limit will be deemed illegal.

C. Any intake may be used with these heads. Normal intake porting is allowed, but intake must remain in its original exterior dimensions.

D. Steel type stock replacement valve seats only when required.

E. Work allowed on the valve seat, ledge or factory undercut area of Intake Bowl is as follows: No angle cuts, metal removal, or enlarging of ports allowed below the top of the valve seat that would allow the gauge to drop below the seats as follows:

.250 + 1/32" from top of the valve seat on intake of DART heads.

F. Measurements will be strictly enforced by the use of SMS Go/No Go inspection gauge.

G. Intake 1.875" OD of gauge on intake.

H. Stainless steel valves only.

I. 11/32 Valve stems

STOCK STEEL HEAD RULE:

May run any 4 barrel carburetor with this option-

A. Stock cast iron GM Bow Tie heads will be subject to a runner volume test. Runner volume 190 cc maximum.

B. Any intake may be used with these heads. Normal intake porting is allowed but intake must remain in its original exterior dimensions.

C. Heads may be milled: angled or straight cut allowed on both block and intake surfaces.

D. All manufacturers' identification numbers are to be visible and unaltered on cast iron heads.

E. Combustion chambers may be polished; cc'd, but must maintain stock shape and appearance.

F. Any intake and exhaust valves allowed. 2.055 maximum intake valve head diameter, 1.625 maximum exhaust valve head diameter.

G. Flashing may be removed from heads anywhere except in the intake and exhaust runners and ports.

H. No removal or smoothing of metal will be allowed in the intake or exhaust runners.

I. Ports and runners cannot be reworked in any way to increase flow.

J. Reworking the heads in any way to match intake and exhaust manifolds will not be allowed.

K. Any valve guides. Valve guides must be left at stock height in the intake and exhaust ports and no grinding or smoothing in this area will be allowed.

L. Work allowed on the valve seat, ledge or factory undercut area of the heads is as follows: angle cuts, metal removal, or enlarging of the ports allowed below the top of the valve seat that would allow the gauge to drop below the seats as follows:

1) 1/2" + 1/32" from top of the valve seat on intake of Chevy Bow Tie heads.

2) 1/2" + 1/32" from top of the valve seat to the top of the gauge on exhaust of Bow Tie heads.

M. Measurements will be strictly enforced by the use of SMS Go/NoGo inspection gauge.

N. Exhaust: 1.350" OD of the gauge on exhaust.

O. Intake 1.718" OD of gauge on intake.

P. Any Cylinder head that you want to race with must be pre-approved in order to run.

A1. Cylinder Head-

The NWMT / MRS approved cylinder heads must be acceptable to SMS Officials and meet the following requirements:

(1) The valve angle and valve location for General Motors, Dodge and Ford cylinder heads must remain as approved by the NWMT / MRS.

Spacing between valves is 1.935 inches, center to center, for the General Motors cylinder heads, 1.936 inches, center to center, for the Dodge W-8 cylinder heads, and 1.900 Inches, center to center, for the Ford cylinder heads.

Valves must remain in the approved location in relation to the cylinder bore centerline.

(2) The top of the intake ports must remain in the approved location.

(3) The vertical centerline of the intake port entrance must be straight and perpendicular to the cylinder head gasket surface. The vertical centerline of the intake port must remain in the approved location. The horizontal centerline of the intake port must be straight and parallel to the cylinder head gasket surface.

(4) The vertical and horizontal centerlines of the exhaust port exit must remain in the approved location. The vertical and horizontal centerlines must be straight lines. The horizontal centerline must be parallel to, and the vertical centerline must be perpendicular to, the cylinder head gasket surface. If material is removed from the top or side of the exhaust port, the same amount must be removed from the bottom or opposite side of the port.

(5) The rocker arm fastener bolt holes must remain in the approved location.

(6) Only steel or titanium valves are permitted.

(7) Only magnetic steel valve springs are permitted.

(8) Only two (2) valves per cylinder will be permitted.

(9) There are no restrictions on the valve size.

(10) Internal polishing and porting will be permitted.

(11) Spark plug holes must remain in the approved location.

(12) Angle cutting of the cylinder head to the engine block mating surface will not be permitted.

(13) Milling of the heads will be permitted, but not to exceed 0.175 inch.

(14) "O" rings will not be permitted for sealing the cylinder head to the engine block.

(15) Only steel or titanium valves may be used.

(16) Only magnetic steel valve springs may be used.

(17) Only two valves per cylinder may be used.

(18) There are no restrictions on valve size.

(19) Internal porting and polishing will be permitted.

(20) Spark plug holes must remain in approved location.

(21) Valve angle must remain within two degrees of the approved cylinder heads manufacturing.

(22) Valves must remain in the approved location in relation to the cylinder bore centerline.

(23) O-rings will not be permitted for sealing the cylinder head to the engine block.

A2. Carburetor-

The carburetor must be NWMT / SMS approved. SMS Officials may use a carburetor provided by the respective manufacturer as a guide in determining whether a Competitor's carburetor conforms to the specifications of this Rule Book.

The following carburetors are eligible for use.

A. The Holley 4150HP Series, list number 80507, and Holley 4150 Series, list number 6895, four (4) barrel carburetors with a maximum venturi size of 1-1/16 inches and a maximum throttle bore size of 1-7/16 inches are approved for use on all engines. The venturis must retain a circular (round) cross section. These are the only carburetors eligible for use at NASCAR Whelen Modified / Whelen Southern Modified Tour Events. Only Holley replacement or service parts can be used in any carburetor rework. All carburetor modifications must be acceptable to NASCAR Officials. Carburetors and/or carburetor components machined from billet materials will not be permitted.

B. Holley 4150HP Series and 4150 Series rework guidelines are as follows:

(1) Carburetor Main Body

The only carburetor main body that will be permitted for the Holley 4150HP Series will be the Holley main body with casting number 6R-7879B. The Holley casting numbers must remain legible on the top of the main body. Main bodies must remain as manufactured. Machining, reshaping, grinding, polishing, or drilling holes will not be permitted. The addition of material(s) such as but not limited to, epoxies, sleeves, inserts, or tubes will not be permitted to the carburetor main body.

(2) Carburetor Boosters

One (1), one-piece singular discharge booster per venturi must be used. The type of booster must not be changed. The Holley booster part number 45R-107-1, with the casting number 45R-312 are the only boosters that will be permitted. The Holley casting numbers must remain legible on the top of all booster stems. Size and shape must not be altered. Height and location of the boosters must remain as manufactured. All boosters must maintain a minimum outside diameter of 0.616 inch. The addition of material will not be permitted to the boosters. A bonding agent may be used to assist in adhering the carburetor booster to the carburetor main body, but it must not extend past the carburetor main body booster mounting hole into the carburetor venturis. Each carburetor booster must be secured by a steel wire not less than 0.025 inch in diameter. The wire must be installed in such a manner that in the case of a carburetor booster failure, the carburetor booster should remain suspended in the carburetor without any interference to the operation of the throttle shaft and the throttle plates (butterflies). A minimal size hole, acceptable to SMS Officials, must be drilled through the top of the booster barrel, inboard of the booster attaching stem. The 0.025 inch steel wire must loop through the hole in the booster barrel and then be tied to the respective float bowl vent tube. As an alternative to drilling a hole in the booster, the 0.025 in steel wire must pass through the booster barrel from top to bottom and then be tied to the respective float bowl vent tube.

(3) Carburetor Venturis

The venturi is defined as a constricted throat in the main body air passage. The location of the venturi must remain as produced by the manufacturer. The venturis must not be raised or lowered in the body of the carburetor. The venturis must maintain a circular (round) cross section. The maximum diameter of the venturis must not exceed 1.064 inches. Altering or reshaping of the venturi in any manner will not be permitted.

(4) Carburetor Throttle Body (base plate)

The only throttle bodies permitted will be the Holley throttle bodies with casting numbers 12R-6236B or 12R11524B. The Holley casting number must remain legible on the left secondary "ear" of the carburetor throttle body with casting number 12R-6236B, and on the right secondary "ear" of the carburetor throttle body with casting number 12R-11524B. The carburetor throttle body must be used as provided by the manufacturer. The positioning of the throttle bores in the carburetor throttle body must be the same as provided by the manufacturer. Throttle bores must be completely round. The throttle bores must not be larger than 1.438 inches. The throttle bores must be straight without taper from top to bottom. The throttle bores must remain perpendicular to the top and bottom of the carburetor throttle body. The carburetor throttle body must not be altered in shape or size.

(5) Throttle Plates (butterflies)

The throttle plates (butterflies) must be magnetic steel and must not be thinned or tapered. The type of screw used to retain the throttle plates (butterflies) to the throttle shafts must be pan head type either straight slotted, phillips head or allen type head. Idle holes may be drilled in the throttle plates. The throttle plates (butterflies) must be mounted to the throttle shaft in the approved location.

(6) Throttle Shafts

Holley magnetic steel throttle shafts must be used. Shafts must remain standard production size and must not be thinned or cut in any manner. Throttle shaft rotation must be in the same

position as produced by the manufacturer. The combined thickness of the throttle shaft and the throttle plate (butterflies) must not be less than 0.197 inch. Throttle shaft seals that prevent air leakage must be used on all throttle shafts where the shaft exit the carburetor throttle body. The primary and secondary throttle shafts must each have an independent travel stop to prevent the throttle plates (butterflies) from opening beyond vertical.

(7) Carburetor Metering Blocks

Only Holley metering blocks will be permitted. Surfacing of the metering blocks for improved gasket seal will be permitted.

(8) Alterations that, in the judgment of SMS Officials, were made to allow additional air to be picked up below the opening of the venturi, such as but not limited to, altered gaskets, throttle bodies, drilling or machining holes into the carburetor will not be permitted.

(9) External modifications and/or alterations to the carburetor will not be permitted.

(10) Choke Horn (List Number 6895)

Choke horn may be removed with a square cut, no taper or bevel, but must not be cut into the body of the carburetor. The air filter housing gasket ring must remain standard.