

## **2016 SGMP LATE MODEL CLASS**

### **CRATE LATE MODEL ENGINE RULES**

1. GM PART NUMBER 88958602 & GM PART NUMBER 88958604.
  
2. THESE ENGINES ARE SEALED AT THE INTAKE MANIFOLD, CYLINDER HEAD, FRONT COVER, AND OIL PAN WITH SPECIAL TWIST OFF BOLT HEADS ORIGINALLY FROM GM. CRATE USA SEALS ALLOWED, NO RM BOLTS, FOR ANY OTHER SEALING SYSTEM CONTACT CRATE RACIN USA FOR APPROVAL. CRATE ENGINES MUST NOT BE ALTERED, MODIFIED OR CHANGED FROM FACTORY SPECS.
  
3. THE SEALED ENGINES MUST REMAIN INTACT AND NOT BE TAMPERED WITH; ANY SEALS THAT HAVE BEEN REMOVED OR TAMPERED WITH WILL MAKE THE ENGINE ILLEGAL AND NOT ELIGIBLE FOR COMPETITION.
  
4. NO CHANGES ARE ALLOWED TO THE ENGINE - INTAKE MANIFOLD, HEADS, VALVE COVERS, FRONT COVER, OIL PAN, HARMONIC BALANCER OR ANY OTHER PART / OR PARTS ON / OR IN ENGINE.

A) After much research NeSmith Dirt Late Model Series officials, along with GM Officials, have determined on some cases that original factory cylinder heads and valve springs do not meet the required correct install height. To correct this, shimming will be allowed to meet the correct install heights listed in the chart below. These updates will be published in a forthcoming version of the GM Technical/ Specification Manual.

Valve Spring Specifications - New

Description 88958602 88958603 88958604

Valve Spring P/N 10212811 12551483 12551483

Valve Spring P/N -set of 16 n/a 12495494 12495494

Diameter (+/- .010") (A) 1.250" 1.340" 1.340"

Free Height (+/- .015") (B) 2.021" 2.154" 2.154"

Installed Height (Ok to shim to proper height) (C) 1.70" 1.780" 1.780"

Pressure @ Installed Height (+/- 5 lbs) (D) 80 lbs. 110 lbs. 110 lbs.

Open Height (E) 1.270" 1.300" 1.300"

Open Pressure (+/- 10 lbs) (F) 195 lbs 270 lbs. 270 lbs.

Coil Bind (G) 1.20" 1.21" 1.21"

Wire Diameter .177" .178" .178"

5. NO VACUUM PUMPS

6. ALL CRATE ENGINES MUST REMAIN STOCK AS THEY CAME SEALED FROM THE FACTORY. CRATE ENGINES MUST NOT BE ALTERED, MODIFIED OR CHANGED FROM FACTORY SPECS.

7. ENGINE'S GM SERIAL NUMBER AND WHEN APPLICABLE CRATE USA BUILD CERTIFICATION NUMBER, MUST BE CLEARLY VISIBLE TO SERIES TECHNICAL INSPECTORS.

ENGINE SETBACK RULE:

A. ENGINE SETBACK WILL BE 6" FROM CENTER OF TOP BALL JOINT TO THE #1 SPARK PLUG WITH A 1-INCH TOLERANCE ON ENGINE SETBACK. THERE WILL BE A 50 POUND PENALTY FORWARD OF THE MOTOR PLATE FOR EACH 1/2-INCH OF SET BACK BEYOND SEVEN (7) INCHES OF ENGINE SETBACK. NO CARS WITH MORE THAN AN EIGHT (8) INCH ENGINE SETBACK WILL BE ALLOWED TO COMPETE.

CARBURETOR RULES:

1. ONE FOUR-BARREL CARBURETOR ONLY OF ANY MANUFACTURE.
2. ENGINE MUST BE NATURALLY ASPIRATED.
3. 604 - MAY USE ONE CARBURETOR SPACER (1 INCH-ONE PIECE WITH .040 TOLERANCE MAXIMUM) AND TWO STANDARD PAPER GASKETS (MAXIMUM 0.070 INCH THICK), ONE GASKET BETWEEN INTAKE TO SPACER AND ONE GASKET BETWEEN SPACER TO CARBURETOR.
4. 602 - MAY USE ONE CARBURETOR SPACER (2 INCH-ONE PIECE WITH .040 TOLERANCE MAXIMUM) AND TWO STANDARD PAPER GASKETS (MAXIMUM 0.070 INCH THICK), ONE GASKET BETWEEN INTAKE TO SPACER AND ONE GASKET BETWEEN SPACER TO CARBURETOR

DISTRIBUTOR RULE:

1. ANY ELECTRONIC DISTRIBUTOR-TYPE IGNITION SYSTEM. NO CRANK TRIGGER, DISTRIBUTORLESS MULTI-COIL, OR MAGNETO IGNITION SYSTEM.

STARTER RULE:

1. ALL CARS MUST HAVE STARTER IN WORKING ORDER.

WATER PUMP RULES:

1. CAST OR ALUMINUM PERMITTED.
2. NO ELECTRIC WATER PUMP.

EXHAUST RULES:

1. COLLECTOR TYPE HEADERS REQUIRED. MUST HAVE FOUR (4) TUBES INTO ONE (1) COLLECTOR OF A CONSISTENT DIAMETER
2. MUFFLERS NOT REQUIRED UNLESS TRACK MANDATES. WHEN MANDATED MUFFLER'S MUST HAVE SOME TYPE OF INTERNAL NOISE DAMPENING CHARACTERISTICS, BAFFLES, EXTRUDED HOLES, SCREEN, CHAMBERED, ETC. MUFFLER'S MUST MEET LOCAL SPEEDWAY'S NOISE DECIBAL REQUIREMENTS.
3. NO TRI-Y HEADERS OR MERGED HEADERS ALLOWED
4. NO SQUARE-TUBE HEADERS ALLOWED

FUEL CELL - FUEL PUMP RULES:

1. AN APPROVED FUEL CELL (32 GALLON MAXIMUM) MUST BE SECURELY MOUNTED IN THE TRUNK

AREA OF THE CAR, INSIDE A .20 GAUGE METAL BOX SUPPORTED BY A MINIMUM OF TWO 2" BY 1/8" STEEL STRAPS.

2. ALL FUEL CELLS MUST BE COMPLETELY VISIBLE FROM REAR OF CAR.

3. GASOLINE OR RACING GAS ONLY - NO ETHANOL (E85, OR E105) NO METHANOL, OR ALCOHOL - NO NITROUS OXIDE. NO PROPYLENE OXIDE, OR CHEMICAL ADDITIVES. FUELS MUST HAVE A SPECIFIC GRAVITY OF LESS THAN .745. ANY FUEL WITH A SPECIFIC GRAVITY OF .745 OR GREATER WILL BE DISQUALIFIED. IT IS THE RACERS RESPONSIBILITY TO KNOW WHAT HE/SHE IS PUTTING IN THE FUEL CELL. THE NEW VP CHP RACING FUEL IS STRONGLY RECOMMENDED, AS IT IS SPECIALLY FORMULATED FOR THE GM PERFORMANCE CIRCLE TRACK ENGINES FOR MAXIMUM PERFORMANCE AND DURABILITY.

4. NO ELECTRIC FUEL PUMPS.

WEIGHT RULES:

1. GM CRATE ENGINE #88958602 - 2200 LBS. AT QUALIFYING, 12 INCH MAXIMUM REAR SPOILER OK, 1LB PER LAP BURN OFF ON HEATS, CONSYS, & FEATURE RACE. (GREEN FLAG LAPS ONLY) Nesmith body rules allowed with crate engine.

2. GM CRATE ENGINE # 88958604 - 2300 LBS. AT QUALIFYING, 12 INCH MAXIMUM REAR SPOILER OK, 1LB PER LAP BURN OFF ON HEATS, CONSYS, & FEATURE RACE. (GREEN FLAG LAPS ONLY) Nesmith body rules allowed with crate engines

3. ATTACHED WEIGHT MUST BE SECURELY BOLTED TO FRAME WITH 1/2" OR LARGER BOLTS. WEIGHT MUST BE PAINTED WHITE WITH CAR NUMBER DISPLAYED. PENALTY FOR LOSING ATTACHED WEIGHT ON THE RACE TRACK IS DISQUALIFICATION FROM THE EVENT.

Weight 2350lb at qualifying STS Built Engine. 8 inch maximum rear spoiler.

1 pound per lap burn off on heats, last chance, and feature races, green flag laps ONLY. Track scales are the Official scales of the race weekend.

#### **CHEVY ENGINE RULES**

1. Engine in car must match manufacturer of body used. Example: Ford Thunderbird must run Ford Engine: Camero must use chevy Engine: Dodge Intrepid must run Mopar Engine.

2. Chevrolet 350 cubic inch + .060.

3. Cast iron blocks ONLY. Factory production, GM Performance Parts, World Products, or Dart blocks as long as block remains same configuration of Stock Chevy blocks. NO lightening of any blocks allowed.

4. Must have stock oiling systems. No dry sump systems.

5. May have straps on stock main caps. After market steel caps-straight bolt or angle splayed caps OK.

6. No oversize valve lifter holes.

7. Oil coolers - OK

8. Accu sump OK - Pressurized accu sumps OK

#### CRANKSHAFT

1. Crank must be factory stock stroke.

2. Stock stroke for engine used. 3.48" Chevy

3. Balancing OK

4. Cross Drilling OK

5. No knife edge or winged cranks.

6. Any after market forged steel or cast production type crank stock stroke for engine used. No Billets. Mini-mum rod pin diameter 2.00 inch.

7. Crank weight 48 lbs. minimum Chevy engine.

#### CONNECTING RODS

1. Any forged steel connecting rod with the following dimensions: 7/16 rod bolt, 5.7" \*Connecting rods not to exceed \$750 cost.

"I" Beam Rods Allowed:

1. Crower 5.7 SP93205B--8 5.7

2. Eagle SIR5700BBLW 5.7

3. K-1 CF5700ALLB 8 5.7

4. Manley 14101-8 5.7

5. Pro-Comp PC 4112 5.7

6. Scat 2-ICR5700-7/16 5.7

"H" Beam Rods Allowed:

1. Eagle CRS5700BLW 5.7

2. Callies-Compstar CSA5700DS2A2AH 5.7

3. K-1 CH5700-ALL BB 5.7

4. Manley 14050-8 5.7

5. Pro-Comp PC4131 5.7

2. May polish beams.

3. May use after market rod bolts.

4. No Titanium Rods - No Carillo Rods.

5. No profiling of rods, no cnc machining of center of beam, no removing of manufacture name and rod size.

## PISTONS

- 1.Any flat top piston.

## ENGINE BALANCING

- 1.Engine balancing permitted

## HARMONIC BALANCER

- 1.Any Harmonic Balance
- 2.Balancer may be pinned.

## HEADS

- 1.Chevy, OEM or Performance cast iron heads, or Brodix "SPEC" Aluminum head, only heads permitted.
- 2.Milling heads accepted.
- 3.Multi angle valve job permitted
- 4.Maximum intake valve size 2.02", Maximum Exhaust valve size 1.6", Hollow Stem valves permitted.
- 5.NO titanium valves permitted
- 6.May use any valve spring, valve retainer, oversize valve stem, lash cap, any steel pushrod, screw in studs, guide plates, stud girdle, any stud mount roller rockers. Stud must go thru center of rockers.
- 7.NO shaft mounted rocker systems
- 8.NO porting, polishing, gasket matching, or coating on inside of head runners. No Epoxing in runners. No short side radiousing. Must be able to see and feel the defined raised lip of original bowl in the cylinder head, in all areas of the bowl, AND All bowl work must Remain concentric with the valve guide, and NO machined or grinding work more than .750" . Any work done more than .750" below bottom valve seat will be deemed port work NOT part of the valve job. Any completely smooth blends, of the bowl on the short side (even though you can see where the cutter stops) will be considered short siding, again must be able to see and feel the defined raised lip of the original bowl.
- 9.NO altered or ground off casting numbers.
- 10.Chevy Vortec head permitted casting No's. -12554290 -10125320 -12552520 -13555690 -10239906 - & 062.  
Total intake runner volume not to exceed 173CC. Total runner volume Exhaust runner not to exceed 64CC.

11. Chevy Phase II cast iron bow tie head (new style), part number 1013492, casting number 140110034 allowed.

Maximum runner volume on intake not to exceed 184CC.

12. New Chevy Vortec/Bowtie Head part #25534351 Ok. Maximum runner volume 186CC. Maximum Exhaust runner volume 69CC.

13. Dart Iron eagle 180 head permitted (part#'s 10110010, 10110010F, 10120010). 182cc Maximum intake runner volume, 77cc maximum exhaust volume. 2.02" Intake valve max, and 1.6" exhaust valve max. NO Machined cuts more than .700" below valve seat. NO Iron Eagle 200,215, or 200,215 Platinum heads allowed

14. 5/16 valve stems permitted

#### INTAKE MANIFOLD

1. Any cast iron or aluminum intake.

2. No porting, polishing, squaring/gasket matching of ports. When using SPEC aluminum heads, you may gasket match intake port opening no more than ½" (.500") deep into runner. NO MATCHING ON HEAD SIDE.

3. May run 1" spacer (1 INCH-ONE PIECE WITH .040 TOLERANCE MAXIMUM) AND TWO STANDARD PAPER GASKETS (MAXIMUM 0.070 INCH THICK), ONE GASKET BETWEEN INTAKE TO SPACER AND ONE GASKET BETWEEN SPACER TO CARBURETOR.

4. 602 - MAY USE ONE CARBURETOR SPACER (2 INCH-ONE PIECE WITH .040 TOLERANCE MAXIMUM) AND TWO STANDARD PAPER GASKETS (MAXIMUM 0.070 INCH THICK), ONE GASKET BETWEEN INTAKE TO SPACER AND ONE GASKET BETWEEN SPACER TO CARBURETOR

4. Turtle OK not altered

5. Total adapter not to exceed 1" total. Any thing mounted between carburetor and intake is considered spacer, and can not exceed 1" total.

6. Directional spacers OK.

7. All intakes must be from a recognized name brand intake manufacturer, ex Edelbrock, Brodix, Holley, Weiand, etc. MUST have manufacturers name and part number intact and unaltered. NO import manifolds allowed.

#### CAMSHAFT

1. Any flat tappet cam

2. Stock diameter lifters ONLY .842", OEM size to make of engine, NO ceramic foot lifters allowed, all lifters must have a magnetic base.

3. NO roller cams or lifters

4. Cast iron stick ONLY, NO billet cams.

#### TIMING GEARS

1. Timing chain and gears ONLY

2. NO gear drives, or belt drives

#### CARBURETOR

1. Any 750 cfm with 750 base plates with all boosters venturi throttle shafts and butterflies meeting factory specs. Will be checked with go no go gauges.

2. May remove choke butterfly.

3. Holley 3310 May drill idle holes in primary butterflies. There should be No half, or flat throttle shafts in the primary side of the carburetor's base plate.

A. The primary throttle shaft, with a 172 butterfly should be a minimum of .1868" thick

B. The secondary round shaft, with a 172 butterfly should be a minimum of .1828" thick.

C. The secondary half or flat shaft with a 172 butterfly, should be a minimum of .1228 thick

D. Billett base plate allowed must meet factory Holly specs. On throttle bores, and above throttle shaft specs.

Note: Checked with go-no-go gauges

4. May install secondary jet metering plate, Billet metering plate allowed.

5. May NOT remove choke horn on 3310.

6. NO porting or polishing.

7. Ford 735 c.f.m. OK, Secondary Throttle screw OK.

8. Four corner idle OK.

9. Carbs checked with Go-No-Go gauges.

10. stock 3/8" inside diameter boosters 3310 & 80803 Holley. Down leg Boosters OK, must remain stock Holly specs.

## FUEL PUMP AND FUEL CELL

- 1.No electric fuel pumps
- 2.Steel case on fuel cell recommended

## WATER PUMP

1. Stock mount ONLY.
2. Electric fans OK.

## IGNITION

- 1.Any battery operated.
- 2.No crank trigger ignition, & No Magnetos
- 3.NO Electronic Traction Control device!!
4. MSD Boxes may not be mounted in drivers cockpit.

## RADIATOR

- 1.Must be close to stock location, mounted in front the motor.

## STARTER

- 1.Must have operating starter.

## **FORD ENGINE RULES**

### HEADS

1.Sportsman M-6049-N351 or M6049-N352 heads allowed. NO after market heads. N351 head maximum intake runner volume 195CC, Exhaust runners 80CC maximum. N352 head maximum intake runner volume 188CC, and Maximum exhaust runner volume 77CC. Combustion chamber volume either head, 62CC. NO Tolerance. Maximum valve size 2.02" intake, & 1.65" exhaust. May use Brodix "SPEC" aluminum heads, Brodix Spec Head 60cc Minimum Combustion Chamber. Hollow Stem Valves Permitted any Head. No Angle Milling Ford Brodix Spec Head!!

2.Cylinder head must be unported. NO porting, polishing, gasket matching, or coating on inside of head runners. No Epoxy in runners. No short side radiusing. Must be able to see and feel the defined raised lip of original bowl in the cylinder head, in all areas of the bowl, AND All bowl work must Remain concentric with the valve guide, and NO machined or grinding work more than .750". Any Work done more than .750" below bottom valve seat will be deemed port work NOT part of the valve job. Any completely smooth blends, of the bowl on the short side (even though you can see where the cutter stops) will be considered short siding, again must be able to see and feel the defined raised lip of the original bowl.

3.Stud mount rockers ONLY, stud must go through center of rocker arm. No shaft mount rockers.

4. 5/16 valve stems permitted



## BLOCK

- 1.M6010-D351, M351, or N351 are acceptable blocks. N351 block will cost the racer the least amount money on machine work, and would be preferred.
2. Dart Block Part #31384195, and 31385195 allowed. World Products Block part # 087150 and 087152 allowed.
3. No lightening of engine blocks allowed.

## CRANKSHAFT

- 1.Any cast or forged steel (No Billets) crankshaft must have a stock stroke of 3.50", and weigh a minimum of 54lb. No knife edging or winging of cranks. Ford part #M-6303-G351 is a good place to start, The M-6303-G351 is to lite.
2. Ford may run after market crankshaft, but must meet all of above criteria.

## OIL PUMP

- 1.Wet sump oil system, or may use an external single stage belt driven oil pump. Oil must be pumped from, and returned to oil pan.

## CONNECTING RODS

- 1.Any forged steel rod, 6" maximum length, 7/16 rod bolts permitted.

\*Connecting rods not to exceed \$750 cost.

"I" Beam Rods Allowed:

- A. Crower 6"
- B. Eagle 6"
- C. K-1 6"
- D. Manley 6"
- E. Pro-Comp 6"
- F.Scot 6"

"H" Beam Rods Allowed:

- A. Eagle 6"
- B. Callies-Compstar 6"
- C. K-1 6"
- D. Manley 6"
- E. Pro-Comp 6"

- 2.NO Billet rods, or Carilla rods.

- 3.May polish beams, No profiling or cnc machining in center of beams.

- 4.Manufacturer's name and Rod size must remain on rod.

## PISTONS

- 1.Any flat top piston.

## ENGINE BALANCING

- 1.Engine Balancing permitted

## CAMSHAFT

- 1.Any flat tappet cam

2.Stock diameter lifters ONLY  $.875"$ , OEM size to make of engine, NO ceramic foot lifters allowed, all lifters must have a magnetic base.

- 3.NO roller cams or lifters

- 4.Cast iron stick ONLY, NO billet cams.

## TIMING GEARS

- 1.Timing chain and gears ONLY

- 2.NO gear drives, or belt drives

## INTAKE MANIFOLD

- 1.Any cast iron or aluminum intake.

2.No porting, polishing, squaring/gasket matching of ports. When using SPEC aluminum heads, you may gasket match intake port opening no more than  $\frac{1}{2}"$  (.500") deep into runner. NO MATCHING ON HEAD SIDE.

3.May run 1" spacer (1 INCH-ONE PIECE WITH .040 TOLERANCE MAXIMUM) AND TWO STANDARD PAPER GASKETS (MAXIMUM 0.070 INCH THICK), ONE GASKET BETWEEN INTAKE TO SPACER AND ONE GASKET BETWEEN SPACER TO CARBURETOR.

4. 602 - MAY USE ONE CARBURETOR SPACER (2 INCH-ONE PIECE WITH .040 TOLERANCE MAXIMUM) AND TWO STANDARD PAPER GASKETS (MAXIMUM 0.070 INCH THICK), ONE GASKET BETWEEN INTAKE TO SPACER AND ONE GASKET BETWEEN SPACER TO CARBURETOR. \*Turtle OK not altered

5.Total adapter not to exceed 1" total. Any thing mounted between carburetor and intake is considered spacer, and can not exceed 1" total.

- 6.Direction spacers OK.

7.All intakes must be from a recognized name brand intake manufacturer, ex Edelbrock, Brodix, Holley,

Weiland, etc. MUST have manufacturers name and part number intact and unaltered. NO import manifolds allowed

#### CARBURETOR

1. Any 750 cfm with 750 base plates with all boosters venturi throttle shafts and butterflies meeting factory specs. Will be checked with go no go gauges.

2. May remove choke butterfly.

3. May drill idle holes in primary butterflies. There should be No half, or flat throttle shafts in the primary side of the carburetor's base plate.

A. The primary throttle shaft, with a 172 butterfly should be a minimum of .1868" thick

B. The secondary round shaft, with a 172 butterfly should be a minimum of .1828" thick.

C. The secondary half or flat shaft with a 172 butterfly, should be a minimum of .1228" thick

D. Billett base plate allowed must meet factory Holly specs. On throttle bores, and above throttle shaft specs.

Note: Checked with go-no-go gauges

4. May install secondary jet metering plate, Billet metering plate allowed.

5. Holley 3310 May NOT remove choke horn.

6. NO porting or polishing.

7. Ford 735 c.f.m. OK, Secondary Throttle screw OK.

8. Four corner idle OK.

9. Carbs checked with Go-No-Go gauges.

10. stock 3/8" inside diameter boosters 3310 & 80803 Holley. Down leg Boosters OK, must remain stock Holly specs.

#### FUEL PUMP AND FUEL CELL

1. Belt Drive Pumps OK

2. No electric fuel pumps

3. Steel case on fuel cell recommended

#### WATER PUMP

1. Stock mount ONLY.

2. Electric fans OK.

#### IGNITION

- 1.Any battery operated.
- 2.No crank trigger ignition, & No Magnetos
- 3.NO Electronic Traction Control device!!
4. MSD Boxes may not be mounted in drivers cockpit.

#### RADIATOR

- 1.Must be close to stock location, mounted in front the motor.

#### STARTER

- 1.Must have operating starter.

### **MOPAR ENGINE RULES**

#### BLOCKS

1.360 Mopar production cast iron blocks permitted, also permitted is the Mopar performance cast iron "A" engine block or R3 block part #P4876792AB (59 degree valve tappet) or P4876672AB (48 degree valve tappet) is a good starting point World Products, or Dart Blocks allowed must remain the same configuration of stock Mopar blocks.

2.Block may ONLY have a Maximum cylinder bore of 4.030".

3.Wet sump oil system ONLY. No dry sumps.

#### CRANKSHAFT

1.Any Forged steel or cast cranks ONLY. No Billets. Mopar performance crankshafts part #P5007253A is a good start. Must have stock stroke 3.58", 50lb minimum weight. Minimum rod pin diameter 2.100". NO knife edging, or winging of crankshaft. Balancing permitted.

#### CONNECTING RODS

1.Any forged steel rod, 6" maximum length, 7/16 rod bolts permitted.

\*Connecting rods not to exceed \$750 cost.

"I" Beam Rods Allowed:

- A. Crower 6"
- B. Eagle 6"
- C. K-1 6"
- D. Manley 6"
- E. Pro-Comp 6"
- F. Scat 6"

"H" Beam Rods Allowed:

- A. Eagle 6"
- B. Callies-Compstar 6"
- C. K-1 6"
- D. Manley 6"
- E. Pro-Comp 6"

2.NO Billet rods, or Carilla rods.

3.May polish beams, No profiling of cnc machining in center of beams.

4.Manufacturer's name and Rod size must remain on rod.

#### PISTONS

1.Any flat top piston permitted.

#### HARMONIC BALANCER

1.Any harmonic balancer permitted

#### CYLINDER HEADS

1.Mopar W2 cast iron cylinder head permitted part number P5249769 (59 degree block) 180cc max intake runner volume, & 78cc max exhaust runner volume. P5007445 (48 degree block) 190cc max intake runner volume, 78cc max exhaust runner volume, or P5007445AB 196cc max intake runner volume, 78cc max exhaust runner volume, and casting numbers must remain on head unaltered. 64cc minimum combustion chamber volume. NO TOLLERANCE. May use Brodix "SPEC" aluminum heads.

2. 2.02" maximum intake valve diameter, and 1.60" maximum exhaust valve diameter. No Titanium valves, Steel or Stainless Steel valves ONLY. 11/32" minimum valve stem diameter. Multi angle valve job permitted. Hollow Stem Valves Permitted any cylinder head.

3.No porting, polishing, gasket matching, or epoxying of runners. No short side radiusing. No bowl work more than .500". Must be able to see and feel the defined raised lip of original bowl in the cylinder head, in all areas of the bowl, AND All bowl work must Remain concentric with the valve guide, and Any completely smooth blends, of the bowl on the short side (even though you can see where the cutter stops) will be considered short siding, again must be able to see and feel the defined raised lip of the original bowl. Milling of heads of accepted, (note combustion chamber limit above)

4.May use any diameter valve spring. Any Valve retainer, 11/32" minimum valve stem diameter. Any Steel push rod. Steel Valve keepers ONLY. Mopar may run shaft mounted rocker system. 5/16 valve stems permitted

#### INTAKE MANIFOLD

1.Any cast iron or aluminum intake.

2.No porting, polishing, squaring/gasket matching of ports. When using SPEC aluminum heads, you may gasket match intake port opening no more than 1/2" (.500") deep into runner. NO MATCHING ON HEAD SIDE.

3.May run 1" spacer (1 INCH-ONE PIECE WITH .040 TOLERANCE MAXIMUM) AND TWO STANDARD PAPER GASKETS (MAXIMUM 0.070 INCH THICK), ONE GASKET BETWEEN INTAKE TO SPACER AND ONE GASKET BETWEEN SPACER TO CARBURETOR.

4. 602 - MAY USE ONE CARBURETOR SPACER (2 INCH-ONE PIECE WITH .040 TOLERANCE MAXIMUM) AND TWO STANDARD PAPER GASKETS (MAXIMUM 0.070 INCH THICK), ONE GASKET BETWEEN INTAKE TO SPACER AND ONE GASKET BETWEEN SPACER TO CARBURETOR \*Turtle OK not altered

5.Total adapter not to exceed 1" total. Any thing mounted between carburetor and intake is considered spacer, and can not exceed 1" total.

6.Direction spacers OK.

7.All intakes must be from a recognized name brand intake manufacturer, ex Edelbrock, Brodix, Holley, Weiland, etc. MUST have manufacturers name and part number intact and unaltered. NO import manifolds allowed

#### CAMSHAFT

1.Any flat tappet cam

2.Stock diameter lifters ONLY .904", OEM size to make of engine, NO ceramic foot lifters allowed, all lifters must have a magnetic base.

3.NO roller cams or lifters

4.Cast iron stick ONLY, NO billet cams.

#### TIMING GEARS

1.Timing chain and gears ONLY

2.NO gear drives, or belt drives

#### CARBURETOR

1Any 750 cfm with 750 base plates with all boosters ventures throttle shafts and butterflies meeting factory specs. \*Will be checked with go no go gauges.

2.May remove choke butterfly.

3.May drill idle holes in primary butterflies. There should be No half, or flat throttle shafts in the primary side of the carburetor's base plate.

A.The primary throttle shaft, with a 172 butterfly should be a minimum of .1868" thick

B.The secondary round shaft, with a 172 butterfly should be a minimum of .1828" thick.

C.The secondary half or flat shaft with a 172 butterfly, should be a minimum of .1228 thick

D.Billet base plate allowed must meet factory Holly specs. On throttle bores, and above throttle shaft specs.\* Checked with go-no-go gauges

4.May install secondary jet metering plate, Billet metering plate allowed.

5.3310 Holley May NOT remove choke horn.

6.NO porting or polishing.

7.Ford 735 c.f.m. OK, Secondary Throttle screw OK.

8.Four corner idle OK.

9.Carbs checked with Go-No-Go gauges.

10.stock 3/8" inside diameter boosters 3310 & 80803 Holley. Down leg Boosters OK, must remain stock Holly specs.

#### FUEL PUMP AND FUEL CELL

1.Belt driven okay.

2.No electric fuel pumps

3.Steel case on fuel cell recommended

#### WATER PUMP

1.Stock mount ONLY.

2.Electric fans OK.

#### IGNITION

1.Any battery operated.

2.No crank trigger ignition, & No Magnetos

3.NO Electronic Traction Control device!!

4. MSD Boxes may not be mounted in drivers cockpit.

#### RADIATOR

1.Must be close to stock location, mounted in front the motor.

#### SUSPENSION

1. Any Late Model Chassis allowed, Stock Clip, Square tube or Round tube. NO aluminum frames or front clips on chassis, square tube frames must be a minimum of 2"x 2" tubing, round tube must be a minimum of 1 3/4" tubing.

2. Full racing roll cage mandatory, 1 1/2" OD x .090 steel tubing minimum. No chrome moly tubing.

3. Engine Location, 6 1/2" from center of cross member to #1 spark plug on stock clip cars, 6 1/2" from center of upper control arm mount to #1 spark plug on full jig cars or 25 1/2" from mid plate to center of upper control arm mount measured on left side only, 1/2" tolerance. 50lb penalty per full inch that engine

is set back to far, weight must be mounted in front of engine block. Ex. Engine set back 8" or 27" must add 50lb in front of motor, 9" or 28" 100lb in front of motor.

4. One working shock per wheel, except left rear may have 2 workable shocks ONLY. Single adjustable, or Double adjustable shocks allowed.

5. May run 1 of the following rear suspensions, 5th coil or torque link, NOT both. 1 90/10 shock allowed to be mounted top of rear end.

6. Any 14" aluminum wheel allowed. NO carbon fiber or other exotic material wheels permitted.

7. Minimum wheel base 103", 1" tolerance.

#### Tires

\*\*\*\*TIRE SAMPLES MAY BE TAKEN AT ALL EVENTS\*\*\*\*

1. Hoosier D21, D70, NRM D70 only! Racers must race the feature event with the tires they qualified or heat raced with. In the event of a tire that must be replaced due to a puncture or other similar reason a track official must approve it.

2. Racers may replace a D21 Right Rear tire before the feature event with a D70 tire if they choose. A NRM Rib D70 tire can be grooved to match the D21 groove pattern.

3. Tire cannot be Grooved, Sipped Needled, or Buffed with a buffing tool that leaves grooves in tire surface. The tire must punch 48 with track durometer. The tire can be buffed with a sanding disk of no lower grit than 24.

4. Tire cannot be treated with chemicals of any kind. Tire may be washed with a mild soap such as Simple Green or a similar cleaner.

5. Track reserves the right to lab test any racers tire at any time. If the tire is suspicious in any way it will be lab tested for compliance of tire rules. In the event of tire lab test feature winner's monies will be held until results of tire test are known.



Body:

1. Stock appearing after market accepted. May be made of steel, aluminum or fiberglass.
2. NO wedge style bodies. NO roof mounted wings or spoilers allowed.
3. Nose and roof must match body style.
4. Floor boards, and fire wall must cover the drivers area and be constructed to provide maximum safety.
5. Drivers seat must remain in same general area as the general design.
6. Windshield screen or bars are mandatory.
7. Numbers and Lettering should be neat, numbers should be at least 18" high, and are required on doors and roof.
8. NO fins, or raised lips of any kind permitted anywhere the entire length of car. Body line must be smooth and even line from front to rear.
9. NO bump bars of any kind.
10. All body measurements one inch maximum tolerance.

Nose Pieces

1. Must have stock nose. NO wedge noses.
2. Must be made of molded type material. 20" bottom to top.
3. Two piece nose must be fastened together in center, NO spacers to gain width. Must mounted not to alter original shape.
4. No cutting from bottom or sides. NO adding to bottom at frontal area to achieve lower ground clearance.
5. Stock nose piece can extend a maximum of 50" from center of front hub to farthest point extending forward.
6. Front fender flairs must be made of plastic, and can NOT alter shape of original nose piece. They can extend beyond front tire width with wheels pointed straight, and must have collapsible support. (No steel supports)

7. GM cars must run GM nose piece (ex. Monte Carlo), Ford cars must run Ford nose piece (ex Mustang), Mopar must run Mopar nose piece (ex. Charger).

#### Roofs and Roof Supports

1. Must be stock appearing and mounted level. 45" minimum height from ground.

2. Must be mounted parallel to body and near center of car.

3. minimum material 41" long by 46" wide. Maximum material 45" long by 54" wide. NO lips on rear of roof.

4. Fiberglass roofs OK.

5. All roof side panels must extend to edge body. Rear roof supports (C pillars) may be curved, no more than 3" of curve at widest point, measured with a straight edge from roof edge to body edge. Supports must be max. of 18" at top where mounts to roof, tapered to max 3" high at rear of support, with base or bottom a maximum of 40" long. If rear supports have window opening, both must be either open, or closed, NOT 1 open and 1 closed.

6. Any sun shields (4" maximum) must be hinged for easy exiting.

7. Front roof supports can be no more or less than 2" wide by 24" long must be flat, no arched roof supports on front.

#### Front Fenders and Hood

A. Must be level and flat from left to right side of car.

B. Fenders can not gain height from rear to front of car

C. NO part of fenders or hood can be below outside body line.

#### Doors

1. At NO point can door side break inward toward center of car.

#### Interior

1. Interior may be dropped inward to the middle of the car no more than 3" below the top of the doors and must be at least 12" below the roll cage, (1" tolerance).

2. Interior must gradually taper up to the quarter panel height, and be level for 32" from the rear of the quarter panel.

3. Interior (decking) must be fastened flush at the top of the doors and quarter panels, and may taper gradually towards the center of the car, not creating a lip effect, with a minimum of 8" taper.

### Quarter Panels

1. NO offset quarter panels, except equal taper towards the center of the car.
2. Tire clearance from body must be at least 2". NO wheel skirts.
3. At NO point can quarter panels break in towards center of car.
4. Quarter panels should measure a Maximum of 46" from center of rear end to rear edge of quarter panel, 52" maximum from center of rear end to top corner of quarter panel where spoiler mounts. Quarter panels must be a maximum of 38" high from ground to top rear corner of quarter panel. (all measurements 1" tolerance)

### Spoiler

1. Rear spoiler must be manufactured of a sturdy material such as lexan, or aluminum.
2. Rear spoiler material can be 8" wide maximum of total material, measured from deck to tip of material. Maximum width of spoiler is 72" wide.
3. Rear spoiler can not be mounted above the deck to create a wing effect.
4. Spoiler must begin where quarter panels end. NO extended decks.
5. Spoiler supports must be a maximum of 18" long across bottom, measured where support meets deck. Maximum 3" high in front, and a maximum of 8" at its highest point, at rear measured from top of rear deck. Supports may be squared off at top of support at the rear, 6" wide maximum. Top edge may be rolled or lipped a maximum of 1" for added strength and support.
6. Rear engine maximum 12 inch rear spoiler.

### **PROTESTS**

1. The management assumes no responsibility for detection of irregularity or violation of any rule governing mechanical specifications of racing cars. Inspection and ruling of eligibility of any car will be made upon properly presented protest.
2. A protest shall be brought to the attention of track officials in writing by a driver or car owner participating in said race only. Technical and visual protests will be filed with the Chief Technical Inspector. Scoring protests will be brought to the attention of the chief Scorer. Other safety or rule violations will be brought to the attention of the chief Pit Steward or the Race Director.
3. All visual protests shall be made in writing prior to the start of the first heat race for that division or the cars crossing the scales. All visual protests made after the start of a heat race shall be void.
4. Technical protests will be made in writing ten (10) minutes following the completion of a racing event. Only a participant of said race may file a protest. All technical protests must be paid in cash. Any car protested must be ready for inspection within sixty (60) minutes from the time the protest is filed or the

car will be disqualified. Drivers found illegal during protest or refusing to tear down will result in disqualification, forfeiture of all prize money, and points won that night.

5. Must finish in top 3 to be eligible to protest.

\* Must protest top end to protest bottom end.

\* Crate motors can be protested.

Top End \$400 Track Retains \$200

Top and Bottom \$900 Track Retains \$450

- Any situation not specifically covered in these rules will be acted upon by the official or officials in charge at the time, whose decision will be final and binding on all participants
- Any disagreement over technical questions or operations will be resolved by track officials. When decision is rendered, decision is final and binding
- Continuous developments in racing may necessitate changes which cannot be anticipated at the time rules are formulated. If necessary, rules may be updated, changed, deleted or added to at the discretion of the officials
- Officials decisions are final!