

2010 STAFFORD SPEEDWAY 602 LTD. LATE MODEL SPEC ENGINE RULES

OP 20F- 4 GENERAL OPTIONAL SPEC ENGINE REQUIREMENTS — As an option for the Limited Late Model division a 602 spec motor based on the GM Performance Factory Sealer Circle Track Crate Engine is permitted. The engine that will be used will be the GM Part Number 88958602 GMR 350/350 Circle Track Engine with spec modifications that can be done only through a Stafford Motor Speedway approved service center. The engines will be teched and resealed upon completion, from the Stafford tech staff. All engine seals must remain intact and un-tampered with. Any service work requiring the removal of any seal bolts must also be scheduled with, and approved by Stafford Motor Speedway BEFORE the seal bolts are tampered with. Tampering with seals will result in severe penalties and loss of eligibility of the engine to compete in the Limited Late Model division.

Stafford Motor Speedway approved service centers for the GM Performance Factory Sealed Circle Track Crate Engines are:

RaD Automachine	Ludlow, MA	1-413-583-4414
T/A Engines	Plainville, CT	1-860-747-6713

OP 20F- 5 DETAILED OPTIONAL SPEC ENGINE REQUIREMENTS

OP20E- 5.5 PISTONS – The only approved pistons for competition will be the GM Piston P/N 12361371 or the Mahle/Clevite Piston P/N 224-3544. The Mahle/Clevite piston is a .020" over bore. This is the only machining that will be allowed. Any Mahle/Clevite piston found to be over the .020" over bore limit will be deemed illegal.

OP 20F- 5.5.4 OIL PAN — The only approved oil pan for the GM Performance Factory Sealer Circle Track Crate Engine (GM Part Number 88958602) is the factory OEM GM Part Number 25534353 oil pan. Additionally the oil pan seals and or seal bolts must remain in tact. Tampering with seals or seal bolts will result in severe penalties and loss of eligibility of the engine to compete in the Limited Late Model division.

OP 20F- 5.6.1 VALVE SPRINGS - The only approved alternative valve springs for the SMS 602 LLM Spec Engine are the Comp Cams P/N 981-16. Additional valve spring devices of any kind are not permitted.

OP 20F- 5.7 HARMONIC BALANCER - The approved Harmonic Balancer is OEM GM Part Number 12555879. Alterations of any kind to the factory OEM GM Part Number 12555879 Harmonic balancer are not permitted. The approved alternate aftermarket Harmonic Balancer is Power Bond P/N PB1012SS.

OP 20F- 5.8.2 PUSH RODS — The only approved Push Rods for the GM Performance Factory Sealer Circle Track Spec Engine (GM Part Number 88958602) are the factory OEM GM Part Number 14095256. Alterations of any kind to factory OEM GM Part Number 14095256 Push Rods are not permitted. The addition of guide plates or any other Push Rod devices of any kind are not permitted.

OP 20F- 5.8.4 ROCKER ARM NUTS — The only approved rocker arm nut for the GM Performance Factory Sealer Circle Track Spec Engine (GM Part Number 88958602) is the factory OEM KOOL NUT KIT GM Part Number 25534352. Additional Rocker Arm Stud support or strengthening devices of any kind are not permitted.

20F- 5.9 INTAKE MANIFOLD SPEC - The only approved alternative Intake Manifold will be the Edelbrock P/N 2913. You are required to have an UNALTERED manifold. NO porting, polishing, acid dipping, deburring, de-flashing, abrasive cleaning, internal painting, milling, cutting, drilling holes, enlarging bolt holes, matching of ports or welding. Absolutely no modifications of any kind. Absolutely no coolant lines in the intake manifold, engine block or sides of head.

20F- 5.10 CARBURETOR SPEC -The only approved alternative carburetor will be the Holley 650 cfm four-barrel P/N 80541-1.

ALL PARTS MUST BE A HOLLY PART FOR THE 80541-1.

- (1) Body of Carburetor: No polishing, grinding or drilling of holes permitted.
- (2) The choke may be removed, but all screw holes must be permanently sealed.
- (3) Choke Horn: Choke horn may not be removed.
- (4) Boosters: Boosters may not be changed. Size or shape must no be altered. Height must remain standard.
- (5) Venturi: Venturi area must not be altered in any manner. Casting ring must not be removed.
- (6) Alterations to allow additional air to be picked up below the opening of the venturi such as altered gaskets; base plates and drilling holes into the carburetor will not be permitted.
- (7) Base Plate: Base plate must not be altered in shape or size.
- (8) Butterflies: Stock butterflies must not be thinned or tapered. Idle holes may be drilled in butterflies. Screw ends may be cut even with shaft but screw heads must remain standard.
- (9) Throttle Shaft: Shaft must remain standard and must not be thinned or cut in any manner.

20F-9 ENGINE EXHAUST SYSTEM (SPEC):

There will be two optional headers for the crate motor they are, the Kooks P/N- 15055, and the Flow Right P/N- FR275FF.

E. Exhaust pipes for spec engine cars only may be a maximum of 3" diameter exhaust tubing from header to muffler and from muffler to 12" behind the rear end. Tail pipes must have a minimum of a 45-degree downturn at the end if not exiting out the side of the car. Both exhaust pipes must be independent with no connection between them.

F. 602 Spec Engine mufflers will be the LOBAK RCM 30-12-30 or the stainless kooks #R300-10 mufflers. Modifications or repairs of any type are not permitted on the muffler. Both muffler flanges must be intact. Stainless steel mufflers are not permitted. Mufflers must be removable for inspection. **NOTE: ALL OWNERS ARE RESPONSIBLE TO MAKE SURE THEIR MUFFLERS ARE IN PROPER WORKING ORDER. IF FOUND NOT TO BE, THE MUFFLER WILL BE DEEMED ILLEGAL.(I.E. MISSING ANY OF THE INTERNAL CONSTRUCTION.)**

G. Thermal wrap is not permitted anywhere on exhaust system.

H. Only one muffler and exhaust pipe allowed per side of the engine is permitted.

I. Exhaust system subject to approval by Track Officials.

20F- 10 ENGINE DRIVE TRAIN - FLYWHEEL AND CLUTCH (SPEC & NON-SPEC) - Stock OEM dimension steel flywheel for engine type. Replacement billet flywheel of OEM stock dimensions may be used. OEM type steel pressure plate and steel disc only. Solid type disc only, no paddle or button type discs. Minimum 10" clutch and pressure plate. Drilling or lightening of any part is not permitted. Steel bolts only. Flat surface machining allowed only on the face of the flywheel, any cutting on the backside of the flywheel will deem the part illegal.

The following weights are the minimum allowed for each part:

Flywheel only (no bolts) spec & non-spec 12.5 LBS.
Note: The spec motor will take an externally balanced flywheel.
Pressure plate, Cover, & Solid Disc (no bolts) 16 LBS.

The steel solid disc (no bolts) must maintain a minimum weight of 2.5 pounds and a maximum weight of 3.8 pounds after the combined weight has been determined.

20F- 10.6.1 REAR GEAR — The rear ring and pinion gears must be stock type. The ring gear must weigh a minimum of 12 lbs. The spool with 2 bearings only (less bearing cups) must be of standard weight.

RECOMMENDED GEAR RULE FOR SPEC ENGINE:

3:23 to 1 MAXIMUM for GM Rear Ends.

3:25 to 1 MAXIMUM for Ford Rear Ends.

Transmission is recommended to have a 1:50 gear ratio for these gear ratios to be utilized.

This 602 spec engine with parts upgrades and an exhaust system has been dyno'd at 400 ft/lbs. of torque at a peak of 380 horsepower.
GM Part Number 88958602 GMR 350/350 Circle Track Engine with spec modifications.

The 602 spec engine is available for a base price of \$3,500.00 from Patrick Townsend at Central Chevrolet.

Central Chevrolet's Parts Department can be contacted at 413-781-1410.

The cost for the 602 spec motor part upgrades will be \$1,600, bringing the total price for a 602 spec engine from intake to pan to \$4,800. This \$4,800 price is the same price from all three Stafford Motor Speedway approved service centers. A 602 Limited Late Model spec engine must be serviced and sealed through one of the three approved service centers to be eligible for competition in 2009. Tampering with seals will result in severe penalties and loss of eligibility of the engine to compete in the Limited Late Model division.

The 602 Spec Engine package includes the following upgrades.

- Edelbrock 2913 4-Barrel Intake Manifold

- #80541-1 Holley 650 cfm carburetor

- Harmonic Balancer Power Bond P/N PB1012SS

- Comp Cams P/N 981-16 valve springs

- 3" exhaust

- Kooks Stainless Steel Headers P/N 15055 or Flow Rite Stainless Steel Headers P/N FR275FF

- Gear Ratio: It is recommended to have a 3:25 to 1 ratio for GM Rear Ends and a 3:25 to 1 ratio for Ford Rear Ends. It is recommended that the transmission have a 1:50 ratio when utilizing the recommended gear ratios.

- The use of an ARP New Era Adjustable Rear Wing

- 2009 Mid-American NGB body with New Era Adjustable Wing (Note: These bodies have two more inches of clearance under the hood, designed for the high intakes on the crate motors.) The ARP website can be found at www.arpbodies.com. The following NGB bodies are approved for any Limited Late Model car that is running the 602 spec engine package:

Pontiac G8

Chevrolet Malibu

Cadillac CTS

Dodge Charger

Lincoln MKS

All other Limited Late Model rules will remain the same at this time. These 602 Spec Engine rules are not intended to antiquate the existing engine, but are being developed as a cost savings option. We will continue to monitor this program and make adjustments if needed.