



## Hobby Stock

### 2009 Season

#### 1. SAFETY EQUIPMENT

- a. Rules apply at all times car is on track. Snell-rated SA2000, SA2005 or SFI 31.1/2005 helmet required.
- b. Roll bar padding required in driver compartment (*Fire retardant recommended*).
- c. SFI-approved full fire suit required.
- d. Fire retardant neck brace, gloves and shoes required. *Recommended: Fire retardant head sock and underwear; head and neck restraints; collapsible steering shaft.*
- e. Driver-side window net required, minimum 16 inch by 20 inch ribbon or mesh style, and must be mounted so latch is at top front of window.
- f. Minimum three inch wide SFI-approved five point safety belt assembly required (Y-type shoulder harness not allowed), must be mounted securely to roll cage, recommended to be no more than one year old.
- g. Kill switch required within easy reach of driver and must be clearly marked "OFF" and "ON".

#### 2. FRAME:

- a. Any American OEM full body rear wheel drive passenger car, 1964 or newer, full frame or unibody.
- b. Frame must match body.
- c. Minimum 107.5 inch wheelbase, maximum one inch difference from side to side.
- d. Rear of frame behind rear tires, no further forward than one inch behind factory seam, may be replaced in OEM location with two inch by three inch steel tubing with minimum 0.095 inch wall thickness, same length as material removed. Factory seam must remain visible.
- e. Unibodies must tie rear frame to front frame.
- f. Frames may be "X" braced.
- g. No Station Wagons, Camaros, Firebirds, or Mustangs.

#### 3. ROLL CAGE

- a. Main cage must consist of continuous hoops, minimum 1.75 inch O.D. tubing, with wall thickness of at least 0.095 inch, *low carbon or mild steel recommended*.

- b. Four-post roll cage required, front down bars and rear hoop must be welded to OEM frame.
- c. Driver's head must not protrude outside cage with helmet on.
- d. Rear hoop must have "X" brace, consisting of one full horizontal and one full diagonal bar, minimum 1.25 inch O.D. with 0.083 inch wall thickness.
- e. Front down bars must be tied together, passenger side front down bars must be maximum 11 inches in from top of door.
- f. Must be minimum 40 inches between front and rear down bars at top of door panel.
- g. Maximum 41 inches from top center of windshield to front edge of rear hoop; maximum 13 inches to front edge of top halo.
- h. Top halo must be minimum 40 inches across, outside to outside.
- i. Rear hoop may be maximum 12 inches in from bottom of opera window.
- j. Minimum one cross bar in top halo.
- k. May have maximum two horizontal bars, (in addition to bar tying front frame horns together) for radiator protection; must be behind bumper, within confines of body, no wider than OEM frame horns.
- l. Rear kickers (down bars) and engine hoop required, and must be minimum 1.25 inch O.D. tubing with 0.083 inch wall thickness.
- m. Fuel cell protection required, must be mounted frame rail to frame rail, no higher than fuel cell, inside trunk area with maximum 1.75 inch O.D. tubing.
- n. All bars must be inside body.

#### 4. DOOR BARS

- a. All door bars and uprights must be minimum 1.75 inch O.D. with 0.095 inch wall thickness.
- b. Minimum three door bars, both sides, parallel to ground, and perpendicular to driver.
- c. Minimum four uprights tied from frame to top door bar on driver side, and minimum three uprights on passenger side.
- d. Steel door plates, 18 gauge or 0.049 inch minimum thickness, must be securely welded to outside of door bars on driver's side.
- e. Plate must cover area from top door bar to rocker panel and from rear down post to five inches in front of seat. Must be visible for inspection.

#### 5. BODY

- a. All bodies must be unaltered OEM, or OEM replacement, in OEM location and match frame.
- b. Front body mounts must be visible.
- c. Sunroofs and T-tops must be enclosed.
- d. Aftermarket plastic nose piece allowed, *recommended to match body*.
- e. No spoilers, hood scoops, ground effects or skirting altering OEM appearance. OEM **STEEL** hood only, hood may be gutted.
- f. OEM **STEEL** trunk lid only, no gutting.
- g. Hood and trunk must be securely fastened and back of hood must be sealed off from driver compartment with metal.

- h. Hood must be separate from fenders.
- i. Front inner wheel wells may be removed, rear wheel wells may be removed to middle seam.
- j. Trunk floor directly over rear end housing must be removed.
- k. No overlapping or shortening of body panels.
- l. All glass must be removed, all windows in body must remain open; maximum seven inch metal sun visor allowed across top of windshield opening.
- m. All doors must be securely fastened.
- n. Fenders and quarter panels may be trimmed for tire clearance, ONLY. No reflective body panels.

#### **6. DRIVER COMPARTMENT**

- a. Minimum three windshield bars in front of driver.
- b. Aluminum high-back seat only and must be bolted in, using minimum 0.375 inch bolts.
- c. Driver seat may be no further back than rear edge of B-pillar.
- d. Driver must be sealed off from track, driveline, engine and fuel cell.
- e. Dash not to extend more than 24 inches back from center of lower windshield opening.
- f. Dash must be flat, rear can be no higher than front, except for cowl in front of driver.
- g. No other interior tin or covers.
- h. Inside rear quarter panels, below window level, may be cut out.
- i. Doors may be gutted.
- j. No cutting out of firewalls, roof, floor, kick panels, rocker panels, except for roll cage clearance.
- k. All holes in firewalls and floor must be covered with metal.
- l. Rear firewall and speaker deck must be metal and be of OEM design for that make and model.
- m. No mirrors of any kind.

#### **7. FRONT SUSPENSION**

- a. All components and mounts must be steel, unaltered OEM, in OEM location and match frame.
- b. OEM rubber A-frame bushings only.
- c. No aftermarket ball joints.
- d. No sway bars, spring spacers, chains or cables.
- e. Exceptions are: for 1978-1987 GM mid-sized metric frame, OEM upper A-frame may be replaced using aftermarket upper A-frame (steel or aluminum cross shaft allowed), must display "IMCA approved" decal on top of rear tube of A-frame; bolt on spindle savers allowed.
- f. Upper A-frame mount must remain OEM and cannot be moved.

#### **8. STEERING**

- a. All components must be steel unaltered OEM, in OEM location and match frame.
- b. OEM steering column may be replaced with steel steering shafts (*collapsible steering shaft recommended*).
- c. Steel knuckles only.

- d. No steering quickeners, or remote power steering reservoirs.
- e. Steering wheel and quick release (required) may be aluminum.

#### **9. SHOCKS**

- a. One unaltered steel, nonadjustable, OEM-mount shock, in OEM location, per wheel.
- b. No coil-over shocks, air shocks, remote reservoir shocks.
- c. No Schrader or bladder type valve allowed.
- d. No coil-over eliminators. Rear OEM shock location is 4.5 inches from bottom of housing to center of bolt hole, and centered on control arm bracket.
- e. \$50 claim on any shock. One or all shocks on car may be claimed per event, counting as one claim on card, following shock claim procedures and penalties (Refer to IMCA Operations and Inspection Manual or General Rules).

#### **10. SPRINGS**

- a. One steel spring per wheel only in OEM location.
- b. All coil springs must be minimum 4.5 inches O.D. and non-progressive.

#### **11. REAR SUSPENSION**

- a. All components and mounts must be steel, unaltered, OEM, in OEM location and match frame.
- b. OEM rubber control arm bushings only.
- c. Center of rear lower control arm bolt hole must be 2.25 to 2.5 inches from bottom of housing.
- d. No independent rear suspension.
- e. No sway bars, panhard bars, spring spacers, chains or cables.
- f. Spring rubbers are allowed.

#### **12. REAR END**

- a. No floater rear ends.
- b. OEM, or OEM replacement (*recommended*) solid steel axles only.
- c. Nine inch Ford rear end allowed, but must be mounted like OEM rear end (centered) for that make and model.
- d. One inch inspection hole in housing required.
- e. No lightened ring gears.
- f. Must be welded spider gears, or mini spool.
- g. No torque dividing differentials.

#### **13. BUMPERS/RUB RAILS**

- a. Bumpers must be approved OEM in OEM location, capped to fender with steel, welded or bolted.
- b. Maximum one inch wide by two inch tall steel or lexan rub rails allowed - bolted flush to body.
- c. Front and rear tow hooks mandatory.
- d. No sharp edges allowed on bumpers, rub rails or bolts.
- e. No bars past outside edge of body other than rub rails.

#### **14. TIRES/WHEELS**

- a. Unaltered OEM 205/75, or 205/70, 14 inch or 15 inch passenger car tires only.

- b. All four tires and wheels must be same size.
- c. Tires must be inside body.
- d. No racing, snow, or all-terrain tires.
- e. No softening, conditioning, siping/grinding or grooving (Refer to IMCA Operations and Inspection Manual or General Rules for automatic penalties).
- f. Maximum seven inch wide, three to four inch offset, unaltered, D.O.T.-stamped steel wheels with standard bead bump - must weigh minimum 21 pounds.
- g. No wheel spacers. One inch O.D. steel lug nuts required.
- h. No bleeder valves.
- i. 60 Series Tires 8" wheel (Any offset)

#### **15. BRAKES**

- a. Steel, unaltered OEM, or unaltered OEM replacement, operative four wheel, disc (front) and drum (rear) brakes, must match frame or rear end.
- b. Full OEM backing plates, no aftermarket.
- c. Master cylinder must be in OEM location.
- d. No antilock brake systems.
- e. No aftermarket brake pedal assemblies, brake shut-off or bias adjuster.
- f. Steel brake lines only, must be visible.
- g. Hubs/rotors, axle flanges and drums may be changed to different bolt pattern and larger studs.

#### **16. EXHAUST**

- a. OEM cast iron exhaust manifolds only.
- b. No center dump type manifolds.
- c. Exhaust must extend past firewall and turn towards ground.
- d. Maximum two inch O.D. exhaust pipes.
- e. Must remain dual exhaust, no crossover or 'Y' pipes.
- f. No exhaust sensors.
- g. *Mufflers recommended.*

#### **17. FUEL SYSTEM**

- a. Mechanical OEM type push rod fuel pumps only.
- b. Unaltered OEM two barrel carburetor for that engine, except: booster I.D. may be machined to 0.25 inch and venturi I.D. machined to 1.375 inch on Rochester carburetor.
- c. Must remove carburetor choke plate.
- d. No carburetor spacers.
- e. One 0.25 inch (maximum) thickness gasket only. \$50 cash claim on carburetor, following carburetor claim procedures and penalties (Refer to IMCA Operations and Inspection Manual or General Rules).
- f. Air cleaner top/stud cannot direct air into carburetor.
- g. No top flow air cleaner housings, cold air boxes or air cleaner duct work.
- h. Maximum 22 gallon racing fuel cell required, must be in minimum 20 gauge steel container.

- i. Must be securely fastened in trunk above level of OEM trunk floor, behind rear tires, no further forward than factory seam where rear frame rail can be replaced, with minimum two solid steel straps around entire cell, two inches wide and .125 inch thick.
- j. No fuel cells allowed over rear end housing.
- k. Metal firewall must be between driver and fuel cell.
- l. All cell mounts must be steel, securely welded to frame/cage.
- m. No adjustable fuel cell mounts.
- n. Fuel cell vents, including cap vent, must have check valves.
- o. If fuel cell does not have aircraft style positive seal filler neck/cap system - a flapper, spring or ball type filler rollover valve is required.
- p. Fuel lines through driver compartment must run through metal pipe or metal conduit.
- q. One fuel filter only, cannot be in driver's compartment.
- r. No cool cans.

#### **18. FUEL**

- a. Gasoline only. Racing fuel allowed.
- b. No E85.
- c. No performance enhancing or scented additives.
- d. Fuel must pass both dielectric meter and chemical tests (Refer to IMCA Operations and Inspection Manual or General Rules for automatic penalties).

#### **19. WEIGHT**

- a. No ballast allowed.
- b. Any item deemed as ballast will be required to be replaced - i.e. fuel cell straps, fuel cell cans, battery boxes, etc.
- c. No titanium, magnesium or carbon fiber products.
- d. No gun-drilled, tubular, hollow bolts or studs.
- e. Steel fasteners only.

#### **20. BATTERY/STARTER**

- a. One 12 volt passenger car battery only, must be securely mounted between and above frame rails, and positive terminal must be covered.
- b. Battery must be in Marine type case if mounted in driver compartment.
- c. Starter must bolt in OEM location.
- d. Car must have capability of starting without being pushed or pulled.
- e. Car must leave initial staging area on demand, unaided, or go to rear of that race.

#### **21. GAUGES/ELECTRONICS**

- a. No unapproved cameras, transmitting or listening devices.
- b. No timing retard controls, or digital gauges (including tach).
- c. No electronic monitoring computer devices capable of storing or transmitting information except analog tach.
- d. No ignition control boxes.
- e. OEM ignition only.
- f. All ignition rotors, caps, coils and modules must remain OEM-appearing.
- g. No alternators.

- h. No electronic traction control devices (Refer to IMCA Operations and Inspection Manual or General Rules for automatic penalties).

## **22. TRANSMISSION/DRIVE SHAFT**

- a. All forward and reverse gears must be operational.
- b. **Manual**
  - i. Must be unaltered OEM three or four speed, with minimum 10.5 inch steel/organic single disc-type clutch and steel pressure plate assembly inside an explosion-proof steel bellhousing - minimum 270 degrees around top of clutch and flywheel area.
  - ii. No lightweight bellhousings.
  - iii. No hydraulic clutch release bearing.
  - iv. Steel unaltered flywheel only - 16 pound minimum - \$150 fine if illegal.
- c. **Automatic:**
  - i. Must be unaltered OEM, with unaltered OEM pump, original bellhousing and minimum 10 inch diameter torque converter containing a minimum of three quarts of fluid - \$150 fine if illegal.
  - ii. Torque converter must have a minimum 0.125 inch plug.
  - iii. Must have approved scatter shield constructed of minimum 0.125 inch by three inch steel, 270 degrees around flexplate.
  - iv. Flexplate must be full, unaltered OEM, or OEM replacement.
  - v. No manual bump starts allowed.
- d. **Drive shaft**
  - i. Steel drive shaft (minimum 2.5 inch diameter) and slip-yokes only.
  - ii. Drive shaft must be painted white. 360-degree driveshaft loop required and must be constructed of minimum 0.25 inch by two inch solid steel, or one inch tubing, mounted six inches back from front U-joint.

## **23. ENGINE COMPARTMENT**

- a. Engine must be in OEM location.
- b. On GM metric frame, center of fuel pump must be located minimum 1.75 inches in front of cross member (measured at frame).
- c. Ford metric frames must have back of fuel pump in front of cross member.
- d. Frame and cross member may not be altered for engine placement.
- e. Engine mount holes cannot be removed or altered on block.
- f. Aftermarket steel engine mounts allowed.
- g. No mid-plate allowed.
- h. Engine must be OEM appearing, must be able to be used in conventional passenger car without alteration.
- i. GM with GM, Ford with Ford, Chrysler with Chrysler.
- j. Minimum two-core radiator, must be mounted in front of engine.
- k. Overflow tubes must be directed to ground.

- l. Steel or aluminum V-belt pulleys only.
- m. No electric fans.

#### **24. ENGINE SPECIFICATIONS**

- a. Any American make engine allowed.
- b. Steel heads, block and oil pan only.
- c. OEM passenger vehicle production block only.
- d. No GM Bowtie, Ford SVO or Chrysler W blocks.
- e. GM approved block numbers are: 3892657, 3914660, 3914678, 3932388, 3932386, 3956618, 3970000, 3970006, 3970010, 3970014, 10066033, 10066036, 10243880, 14010207, 14010209, 14010287, 14016376, 14016379, 10054727, 14088528, 14088548, 14088552, 14093638, 14101148.
- f. Stroke must match block.
- g. No 400 or larger cubic inch parts allowed.
- h. Maximum 361 cubic inches (GM); 363 cubic inches (Ford); 370 cubic inches (Chrysler).  
Violation of cubic inch limit must be verified by removal of head and will result in disqualification, loss of all IMCA points for the season, \$1,000 fine and a 30-day suspension.
- i. Maximum compression ratio is 9.0 to 1, no tolerance.
- j. Compression ratio checked using Whistler and cubic inches checked using pump, OR by visual inspection, such as part/casting numbers and flat top or dish pistons (track option which method is used).
- k. Flat top or dish pistons only, no gas ported pistons.
- l. Cylinder heads must be unaltered approved OEM and minimum 76 cc combustion chamber.
- m. Only GM OEM approved head numbers are: 14079267, 3986336, 3986339, 3986339X, 3986388, 3932441, 376445, 3928454, 3932454, 3876487, 3973487, 3973487X, 3973493, 3951598, 468642, 330862, 333882, 3998920, 3998991, 3998993, 3998997, 3970126 or may use Engine Quest (EQ) Stock Replacement (SR) cylinder head, part number CH350I, head must remain as produced, valve sizes can not be changed; Ford - no after market or SVO heads; Chrysler - no after market or W-2 heads, 360 cubic inch heads only.
- n. No porting, polishing or alterations of any kind to heads or intake, disqualification and \$250 fine if illegal.
- o. Must use unaltered OEM cast iron two barrel intake.
- p. No hi-rise or marine intake manifolds.
- q. Flat tappet cam/lifters only.
- r. No mushroom lifters.
- s. Cannot alter lifter bores.
- t. OEM non-roller rocker arms only.
- u. No beehive valve springs allowed.
- v. Guide plates and screw-in shouldered studs (0.375 inch max) allowed.
- w. No stud girdles. Poly locks allowed.
- x. Unaltered OEM type harmonic balancer only.

- y. OEM firing order cannot be changed.
- z. OEM type steel or aluminum water pumps only.
- aa. 'Wet' sump oiling system only.
- bb. Racing oil pans allowed. One inch inspection hole recommended in all oil pans (mandatory effective Jan.1 2010) - no obstructions to crank and rods.
- cc. Accumulator allowed, must be mounted under hood.

## **25. ENGINE CLAIM**

- a. Refer to IMCA Operations and Inspection Manual or General Rules for claim eligibility requirements.
  - i. (A) \$550 cash claim on engine, \$25 goes to wrecker for pulling engine and \$25 goes to official.
  - ii. (B) Claim does not include - 1. flywheel, 2. clutch, 3. pressure plate, 4. bellhousing, 5. breathers, 6. carburetor, 7. starter, 8. motor mounts, 9. oil/temp. sending units, 10. fan and pulleys, 11. clutch ball, 12. clutch arm, 13. throw out bearing, 14. dip stick, 15. water pump, 16. fuel pump, rod and plate, 17. distributor, 18. plug wires, 19. water outlet and restrictor. 20. exhaust manifold and pipes.
- b. NOTE: During engine claim, intake should be visually inspected, exhaust manifold must be removed to inspect heads, and one spark plug must be removed to check flat top or dish pistons prior to transfer of engine to claiming driver. If, at this time, engine is found illegal, claimed driver is disqualified and suspended from all IMCA sanctioned events until such time as a \$250 fine is paid, for first offense, second offense penalties will be \$500 fine and/or suspension. Claimer then has option to accept or decline engine - if declined, driver is not charged with claim.