17.1.10. MODIFED TOURING 2 CATEGORY

These specifications are part of the SCCA General Competition Rules (GCR) and all automobiles shall conform with GCR Section 17., Automobiles.

NOTE: the following changes are based on the published 2002 ITCS and do not incorporate changes that subsequently appeared in FasTrack. All future FasTrack bulletins will apply to Modified Touring 2, except in cases where they contradict these rules. Should the need arise clarifications will be issues per the interpretation and publication process described in C. Specifications.

A. PURPOSE

Modified Touring 2 is intended to provide the membership with the opportunity to compete in four-cylinder normally-aspirated cars manufactured starting with the 1990 model year, with quoted power between 120 and 150hp and with a delivered curb weight in the range of 2200 to 2800 pounds. Generally speaking, "sports" or "GT" cars - those without back seats - will not be eligible. Cars must be models as offered for sale in the United States only (no Euro- or JDM-spec-only models, for instance).

No car older than a 1990 model of any listed vehicle will be accepted for Modified Touring 2 competition; older models will be considered if these models are identical to the 1990 model. Cars need not be eligible for state license or registration.

Limited modifications suitable for racing competition are allowed, and tend to follow the direction towards professional Touring car series such as SCCA Pro World Challenge Touring. Modified Touring 2 cars will be prepared to manufacturer's specifications except for modifications permitted by these rules.

B. INTENT

Cars expected to compete in Modified Touring 2 make up a large proportion of the vehicles sold since 1990 and form the basis of a growing performance enthusiast market. Due to their economy and popularity with young drivers, these cars will be increasingly available in coming years, even as used-up, damaged or theft-recovered vehicles - and aftermarket performance parts for them are common.

This class will incorporate a specification process that actively considers the physical attributes of each make and model, in an effort to equalize performance potential to the greatest practical extent. The rules structure for Modified Touring 2 will be nearly identical to that of SCCA Improved Touring, but with a limited amount of additional modifications and a statistics-based spec weight formula that considers physical characteristics of each car such as engine type and displacement. Similar to Improved Touring, entrants shall not be guaranteed the competitiveness of any car; efforts to equalize the competitiveness of all cars shall be solely via the application of the published spec weight formula.

This is a participant-based initiative, intended to demonstrate the interest in and potential of this class and is currently not endorsed by the SCCA® or any of its regions. These rules closely follow the SCCA Improved Touring

Category Specifications, and every effort will be made to not allow modifications that will permanently remove any car's eligibility for IT.[1]

Once accepted, the general expectation for Modified Touring 2 would be to resist future changes to the allowable modifications. Other than for the purposes of clarifications or for safety issues, rules will not be altered within a calendar year; any proposed changes will be subject to a lengthy discussion period and review process.

C. SPECIFICATIONS

The Modified Touring 2 rules committee shall publish the Modified Touring 2 Category Specifications (MT2CS) containing the officially recognized specifications of the cars eligible to compete in the Modified Touring 2 Category during the calendar year. Additions of cars during the calendar year will be considered on a case-by-case basis.

To maintain the stock basis of Modified Touring 2, updating and/or backdating of components is only permitted within cars of the same make, model, body type. Any updated/backdated components shall be substituted as a complete assembly (e.g., engine long block, transmission/transaxle, induction system, differential/axle housing. Note that this list is not intended to be definitive). No interchange of parts between assemblies is permitted, and all parts of an assembly shall be as originally produced for that assembly. While it is permitted to "create" a model or type of car by updating or backdating assemblies, the car's subsequent race weight will be determined by the assembly with the most performance potential (i.e., installation of an SR20DE engine and/or transmission into a Sentra SE will require that the car weigh the same as the SR20DE-powered Sentra SE-R, regardless of other equipment/assemblies installed). Parts or assemblies which the manufacturer lists in factory service manuals or parts guides for a particular model which supersede or replace original parts or assemblies are permitted.

To establish the originality and configuration of the vehicle, each driver/ entrant shall have a factory shop manual for the specific make, model, and year of the automobile, including the one for any changed up- or back-dated assemblies. This manual shall be presented when so requested at any technical inspection. A minimum of two (2) VIN plates and/or stampings is required to verify eligibility.

The Modified Touring 2 rules committee shall specify the minimum weight for each classified car as qualified or raced, with driver, as defined by a prescribed, published formula that considers the physical attributes of that car.

Other than those specifically allowed by these rules, no component or part normally found on a stock example of a given vehicle may be disabled, altered, or removed. "If it doesn't say you can, then you cannot." These rules were written with clear intent and no hidden agenda, and the organizers Modified Touring 2 rules committee will not tolerate "creative interpretation" of the rules. A web site with specific competitors' questions will be maintained; if any competitor has any question about what is and is not allowed, these should be directed to the rules committee for formal interpretation and publication. "Creative interpreters" run significant risk of having their modifications nullified without prior notification.

Finally, the Modified Touring 2 rules committee reserves the right to establish processes or mechanisms to encourage rule compliance or sanction those found out of compliance, beyond the limits of the SCCA GCR or other sanctioning body rules.

D. AUTHORIZED MODIFICATIONS

The following modifications are authorized on all Modified Touring 2 Category cars. Modifications shall not be made unless authorized herein. No permitted component/modification shall additionally perform a prohibited function.

1) Reciprocating Engines (only)

a. No carbureted cars are expected to be classified in Modified Touring 2, therefore all cars shall run as equipped with the OEM fuel injection system, except as noted:
   1) The original, standard intake manifold shall be maintained. No porting or polishing of the manifold is permitted except as allowed by rule D.1.l.
   2) All air entering the intake tract shall pass through the carburetor or fuel injection air inlet.
   3) Fuel-injected cars may alter fuel mixture through the modification of the resistance values of the sensors which feed the computer. Air induction/orifice size(s) shall not be altered, and no new orifices shall be created by disconnecting standard equipment. External throttle linkage to the standard fuel injection may be modified or changed.
   4) Adjustable fuel pressure regulators are permitted.

b. Any fuel pump(s)/filter(s) may be used. Pump(s) may be relocated, but shall not be located in the driver/passenger compartment. If a mechanical pump is replaced, a blanking plate may be used to cover the original mounting location. Fuel line(s) may be replaced, relocated, and given additional protection. If the relocated line(s) passes through the driver/ passenger compartment, it/they shall be metal or metal braided, and shall be securely fastened. An external fuel pump pressure regulator may be installed.

c. Air filter assemblies may be modified, removed or replaced. Velocity stacks, ram air or cowl induction are not permitted unless fitted as original equipment. Air intake hoses, tubes, pipes, resonators, intake mufflers, housings, etc., located ahead of the air metering/measuring device (i.e. air flow meter, air mass meter) may be removed or substituted. In applications that do not incorporate an air metering/measuring device ahead of the carburetor / throttle body (i.e. speed density injection system), these items may be removed or substituted.

d. Exhaust emission control equipment such as air pumps, associated lines, nozzles, and electrical/mechanical EGR devices may be removed. If such items are not removed, they shall not be modified in any way. If EGR devices/nozzles are removed from a cylinder head or manifold, any holes remaining shall be completely plugged. Water to an intake manifold may be blocked or removed as part of the emission system.
   1) If fitted, Catalytic converter(s) may be removed.
   2) Any gasoline meeting the requirements of GCR Section 17.4., Fuel, is allowed[2].

e. Any ignition system which utilizes the original distributor for spark timing and distribution is permitted. Internal distributor components and

distributor cap may be substituted. Crankfire ignition systems are prohibited unless fitted as original equipment. Any spark plugs and ignition wires may be used. Ignition timing is unrestricted. Any battery of the same type, size, and voltage as the original may be used, provided it is fitted in the standard location. Additional battery hold-down devices may be used, and are strongly recommended.

f. Any camshaft timing gears may be substituted with alternatives, including adjustable gears, provided that the general dimensions and purpose remain as stock.

g. Alternate camshafts are allowed. Camshaft timing is free and may be adjusted via the use of offset key at the camshafts and/or crankshaft gears. **All other stock valvetrain components (e.g., rocker arms, lifters, valve springs, followers, pushrods, adjusters, keepers, retainers, guides) must remain stock[3].**

h. Any exhaust header and exhaust system may be used. Exhaust shall exit behind the driver, and shall be directed away from the car body. Original exhaust system heat shields may be removed. A suitable muffler may be necessary to meet sound control requirements (see GCR Section 15).

i. Oil pans, pan baffles, scrapers, windage trays, oil pickups, lines, and filters are unrestricted. Oil and power steering hoses may be replaced with metal braided hose (i.e. Aeroquip). A pressure accumulator/"Accusump" may be fitted. The location of the filter and accumulator are unrestricted, but they shall be securely mounted within the bodywork. All oil lines that pass into or through the driver/passenger compartment shall be metal or metal braided hose. Dry sump systems are prohibited unless fitted as standard equipment. Engine oil and oil additives are unrestricted.

j. Oil catch tanks are permitted. All engine breathers or vapor recirculation lines, if disconnected, shall vent to a catch tank of one (1) quart minimum capacity. Such catch tanks shall not be mounted in the driver/passenger compartment. Original valve cover(s) may be modified to alter or to add breather/filler.

k. Engines may be bored to a maximum of .040 inch over standard bore size. Factory oversize replacement pistons or their exact equivalent shall be used. Equivalent pistons shall provide the same dome/dish/valve relief configuration, ring thickness and spacing, pin height relationship, weight, and compression ratio as factory replacement oversize pistons. Piston rings are unrestricted.

l. Balancing and "blueprinting" of the engine assembly are permitted. Lightening of parts beyond the minimum material removal necessary to balance is prohibited.

m. Manifold and cylinder head port matching is permitted. No material may be removed further than one (1) inch in from the manifold to cylinder head mounting face(s). Two-piece manifolds are not intended to be port matched at their intermediate point. Valve guide material is unrestricted. Where a factory specification for original cylinder head thickness can be proven, a tolerance of .025 inch less than the service limit will be permitted. Under no circumstances may the compression ratio be increased by more than one-half (.5) point.

n. Any clutch disc and pressure plate of stock diameter may be used, provided that they shall be bolted directly to an unmodified stock flywheel. Balancing of the flywheel/clutch/ pressure plate assembly is permitted. Lightening of the flywheel beyond the minimum material removal necessary to balance is prohibited. The addition of an external scattershield per GCR 17.24., is permitted and recommended.

o. Alternate crankshaft, water pump, alternator and power steering pulleys of any diameter or material may be used. Type of accessory drive (e.g., V-belt, toothed belt, etc.) shall remain as stock.

p. Hardware items (nuts, bolts, etc.) may be replaced with similar items performing the same fastening function(s). Cylinder head gasket(s) may be replaced with any gasket(s) having the same compressed thickness as stock. Other engine gaskets are unrestricted. Engine drive belts may be replaced with others of equivalent OEM specifications with the exception of length, which may differ to accommodate allowed alternate pulleys.

q. All engine components not otherwise listed in these rules shall meet factory specifications for stock parts. Where factory specifications are absent or unclear, e.g., cylinder head thickness and/or combustion chamber depth, etc., the Modified Touring 2 rules committee may establish an acceptable dimension and/or allowable tolerance from stock. Engine compartment cosmetic trim pieces may be removed.

r. The application and/or use of any painting, coating, plating, or impregnating substance (i.e. anti-friction, thermal barrier, oil shedding coatings, chrome, anodizing, etc.) to any internal engine surface, including intake manifolds, is prohibited.

s. Engine stayrod(s) may be added.

t. The engine management computer or ECU may be altered or replaced. External controls and piggy-back type components are allowed.

u. Engine and transmission/transaxle bushing material is unrestricted[4].

2) Rotary engines (only)

Rotary -engined- cars are not within the philosophy of Modified Touring 2 and will not be classified.

3) Cooling System

a. Any radiator may be used, provided it is mounted in the original location, maintains the same plane as the original core and requires no body or structure modifications to install.

b. Oil cooler(s) may be added or substituted. Location within the bodywork is unrestricted, provided that it/they are not mounted within the driver/passenger compartment.

c. Cooling fans may be removed or replaced. Electrically operated fans with manual or automatic actuation may be fitted.

d. Thermostats may be modified, removed, or replaced with blanking sleeves or restrictors.

e. Air conditioning systems may be removed in whole or in part.

f. Screens of one-fourth (1/4) inch minimum mesh may be mounted in front of the radiator and/or oil cooler(s) and contained within the bodywork.

g. Engine coolant fluid, coolant/heater hoses and clamps may be substituted. Heater hoses may be plugged. Heater water control valve(s) may be added or substituted. Heater core and hoses shall not be removed.

4) Transmission/Final Drive

a. Any final drive ratio is permitted provided it fits the stock differential/transaxle housing without modification to the housing.

b. Any limited-slip or locked differential is permitted.

c. No alteration to the stock transmission gear ratios for the make, model, type and engine size of automobile is allowed.

d. Hardware items (nuts, bolts, etc.) may be replaced by similar items

performing the same fastening function(s).

e. Alternate shift lever and short-shift kits are allowed.

5) Chassis

a. Ride Height

1) Minimum ride height is five (5) inches, to be measured without driver at the lowest point of the rocker panel or any part allowed by 17.D.8.d of these rules, but not to include welded seams or fasteners.

b. Springs and Shock Absorbers

1) Shock absorbers may be replaced provided they attach to the original mounting points. The number and type (e.g., tube, lever, etc.) of shock absorbers shall be the same as stock. The interchange of gas and hydraulic shock absorbers is permitted. Remote reservoir shock absorbers are permitted; the mounting location of the reservoir(s) is unrestricted. No shock absorber may be capable of adjustment while the car is in motion.

2) MacPherson strut equipped cars may substitute struts, and/or may use any insert. Spring seat ride height location may be altered from stock.

3) Springs of any origin may be used, provided they are of the same number and type as originally fitted, i.e., coil, leaf, torsion bar, and that they shall be installed in the original location using the original system of attachment. The joining of two or more coil springs by any means is prohibited. The use of tender springs (designed to capture the spring within the perches at full droop) is permitted provided the tender springs are completely compressed when the car is at static ride height. Shackles or spacers may be used to adjust leaf spring ride height. Spacers, including threaded units with adjustable spring seats, may be used with coil springs, provided the spacers are not permanently attached to the shock/strut housing.

4) Spacers or lowering blocks may be used between leaf springs and the point(s) of attachment to the axle housing.

5) Coil-over struts or shock absorbers, where a threaded sleeve is permanently attached to, incorporated into, or where threads are machined into a housing, are allowed.

c. Suspension Control

1) Any anti-roll bar(s), traction bar(s), panhard rod or watts linkage may be added or substituted, provided its/their installation serves no other purpose. The mounts for these devices may be welded or bolted to the structure of the vehicle. No suspension control mount or component shall be located in the trunk or driver/passenger compartment unless installed by the manufacturer as original equipment. Traction bars used to control axle rotation shall be one piece solid bar or tube. Heim rod ends may be fitted.

2) On those cars where an anti-roll bar also acts as a suspension locating device, the diameter of the bar may be changed. Bar attachment and pivot points on the chassis and control arms shall remain as stock, except as provided for in these Rules, Sections D.5.d.1., and 3.

d. Suspension Mounting Points

1) Cars equipped with MacPherson strut suspension may decamber wheels by the use of eccentric bushings at control arm pivot points, by the use of eccentric bushings at the strut-to-bearing-carrier joint, and/or by use of slotted adjusting plates at the top mounting point. If slotted plates are used, they shall be located on existing chassis structure and

may not serve as a reinforcement for that structure. Material may be added or removed from the top of the strut tower to facilitate installation of adjuster plate.

2) On other forms of suspension, camber adjustment may be achieved by the use of shims and/or eccentric bushings.
3) All forms of suspension may adjust caster by means of shims or eccentric bushings. Additionally, MacPherson strut-equipped cars may adjust caster at the upper strut mounting point/plate.
4) Independent rear suspension mounting holes may be slotted and reinforced for purposes of camber and/or toe adjustment. Material may be removed from the top of the strut tower to facilitate installation of adjuster plate.
5) Cars may add any front and/or rear stayrod(s)[5], located in one of the following areas:
    a) Between lower suspension mounting points.
    b) Between the upper strut towers on MacPherson strut equipped cars.
    c) Between upper front shock absorber mounts on cars with other forms of suspension.
6) Bushing material, including that used to mount a suspension subframe to the chassis, is unrestricted. Spherical or other type bearings may be used, as long as suspension components and chassis mounts remain unmodified (e.g., no welding or machining of stock parts).
7) Rubber bump stops may be removed, but their chassis mounts, brackets, etc., may not be altered in any way.
8) No other relocation or reinforcement of any suspension component or mounting point is permitted.
9) Hardware items (nuts, bolts, etc.) may be replaced by similar items performing the same fastening function(s).

6) Brakes[6]

a. Competitors may choose from one of the following front brake systems:
    1) Stock OEM braking system
        a) Unmodified Antilock Braking System (ABS) is allowed.
        b) Alternate brake rotors may be used as long as they are ferrous, of the same type (e.g., one piece), and are the exact same dimensions as stock. Slotting, drilling, and other similar forms of modification to rotors are allowed.
    2) Aftermarket braking system
        a. Four-piston (maximum) calipers of any origin and design
        b. Maximum 12-inch" diameter ferrous metal rotor of any origin and design, maximum 1.25" thickness
        c. Alternate components must mount onto unmodified suspension and steering components and fit within allowable wheels
        d. Cars using this alternate braking system must have the antilock braking system (ABS) disabled as specified in GCR 11.2.1.E.
b. Brake pads, brake linings, and brake fluid are unrestricted.
c. Backing plates and dirt shields may be ventilated or removed. Air ducts may be fitted to the brakes, provided that they extend in a forward direction only, and that no changes are made in the body/structure for their use.

d. Brake lines may be replaced with steel lines or Teflon lined metal braided hose. Lines/hoses may be relocated and may be given additional protection. Brake fittings, adaptors, and connectors are unrestricted. Brake system circuitry may be revised, but no modification or substitution of the original master cylinder, its location, or mounting is permitted.
e. Brake proportioning valves may be used provided that they are of the in-line, pressure limiting type.
f. Parking brakes, mechanisms, and actuating components may be removed.
g. Rear brake system must be stock, except alternate brake rotors or drums may be used as long as they are ferrous, of the same type (e.g., one piece, two-piece), and are the exact same dimensions as stock. Slotting, drilling, and other similar forms of modification is allowed

7) Wheels/Tires

a. Any wheel/tire may be used within the following limitations:
   1) The standard wheels may be replaced with direct, bolt-on aftermarket wheels. Maximum diameter is 17" and maximum width is 7".
   2) Wheels must be made of metal and mount onto unmodified stock wheel hubs.
   3) All competitors must utilize the Toyo Proxes T1-S ultra high-performance street tire. Tires may be shaved[7]. Tire size is unrestricted, within the limitations of all pertinent wheel and bodywork rules.
   4) Track may be changed to accommodate larger tires, provided that there is safe tire/fender/chassis clearance under all conditions of steer, bump, and rebound. Wheel spacers are permitted.
   5) Tire tread (that portion of the tire that contacts the ground under static conditions) shall not protrude beyond the fender opening when viewed from the top perpendicular to the ground. To determine compliance, the vehicle should be rolled through a powdered substance, as raced with driver, in order to indicate the tire tread contact patch under static conditions.
   6) Any wheel stud, bolt, and or nut is permitted.

8) Body/Structure

a. Fenders and wheel openings shall remain unmodified. It is permitted to roll under or flatten any interior lip on the wheel opening for tire clearance. Cars with plastic/composite fenders may remove any interior wheel opening lip, but the resulting material edge shall be no thinner than the basic fender material thickness. Non-metallic inner fender liners may be removed.
b. A front spoiler/air dam/splitter is permitted. It shall not protrude beyond the overall outline of the body when viewed from above perpendicular to the ground, or aft of the forward most part of the front fender opening. This body outline includes bumpers and/or bumper mounts. The spoiler/air dam shall be mounted to the body, and may extend no higher than four (4) inches above the horizontal centerline of the front wheel hubs. It shall not cover the normal grille opening(s) at the front of the car. Openings are permitted for the purposes of ducting air to the brakes, cooler, and radiator. Dealer installed or limited production front/rear spoilers/air dams/wings are prohibited. The spoiler shall have no support or reinforcement extending aft of the forward most part of the front fender wheel opening.

NOTE: Integrated bumper assemblies are defined as those designs where an external non-metallic bumper cover completely encloses the primary energy-absorbing bumper and where this cover could be installed in its normal position with the underlying bumper removed. On cars with integrated bumpers, the front spoiler or airdam may be attached to the bumper cover.

Openings may be cut in the front valance to allow the passage of up to a three (3) inch diameter duct leading to each front brake. These openings shall serve no other purpose.

c. A rear wing is permitted. The only approved rear bodywork/wing is HP Motorsports 48" WCT wing, part number HPM-9000-AU and HPM mounting kit, available from HPM Motorsport, (402) 731-7301, or http://www.hpmotorsport.com/wings.htm. Rear wing must be mounted 6" below the roof peak and within the profile of the bodywork. The trailing edge of the wing may be mounted no further rearward than then the rearward most part of the rear deck, hatch/, or taillight assembly. The wing must be rigidly mounted to a sprung part of the chassis.

d. Side and rear aftermarket bodywork (side skirts, "sill kits", rear valence, etc) is permitted. All added bodywork must conform to 17.D.5.a.1 and 17.D.8.e and must not protrude beyond the overall outline of the body when viewed from above perpendicular to the ground.

e. No part of the car, except for the exhaust system and suspension components, shall be lower than the lowest part of the wheel rims.

f. Windshield clips and rear window straps per the GCR Section 17.33. are required[8].

g. Hood and trunk pins, clips, or positive action external latches are permitted. Stock hood and trunk latches may be disabled or removed; if so, some positive action external fastening method shall be used. Engine compartment insulation may be removed.

h. Manual and electric sunroofs, original or aftermarket, where the panel is not normally removable shall be retained and run in the closed position. Components (motors, cables, rails) may be removed provided the panel is securely retained. Removable sunroof or T-top may be retained if bolted or welded in, or removed completely. Glass sunroofs must be removed. All sunroofs may be replaced with panel or replacement skin of the same material as the original surrounding roof material.

i. Alternate paint schemes and markings meeting GCR Section 17., specifications are not only permitted, they are encouraged To reinforce the idea that dynamic, colorful graphics compliment the concept of Modified Touring 2, one entrant will be rewarded for outstanding graphic presentation at each event, as judged by a local committee endorsed by the Modified Touring 2 rules committee.

j. All chassis/structural/electrical repair, if performed, shall be in concurrence with factory procedures, specifications, and dimensions. Unless specifically authorized by the manufacturer for repair or allowed by these rules, no reinforcement, i.e., seam welding, material addition, etc., is permitted.

k. Body repair shall be performed using every reasonable effort to maintain stock body contours, lips, etc.. Any body repair modification having as its purpose increased clearance is prohibited. Cars shall meet the requirements of GCR Section 11.2.1.C., Appearance, at all times.

l. Radio antennas may be removed. Antennas for two-way radio may be added.

m. Body side moldings, rocker panel moldings and wheel opening trim pieces (not stock flares) may be removed. Resulting holes may be filled

9) Driver/Passenger Compartment - Trunk

a. The driver's seat must be replaced with an FIA-approved one-piece bucket-type race seat[8]. All seat mountings shall be reinforced per GCR Section 18.3.5 and Section 18.1.2. Factory seat tracks/brackets may be modified, reinforced, and/or removed to facilitate replacement mountings provided they perform no other function. All other seats must be removed.

b. Any steering wheel except wood rimmed types may be used. Any shift knob may be used.

c. Gauges and instruments may be added, replaced, or removed. They may be installed in the original instrument(s) location using a mounting plate(s), or any other location using a secure method of attachment. Other than modifications made to mount instruments and provide for roll cage installation, the remainder of the dash "board" or panel shall remain intact.

d. Any interior or exterior mirrors may be used.

e. Front passenger seat, rear seat back, rear seat bottom cushion(s), sun visors, seat belts and their attaching hardware and bracketry must be removed[8]. In those automobiles where the rear seat back provides the only solid bulkhead between the driver/passenger compartment and an exposed stock gas tank, a metal bulkhead completely filling the exposed seat back opening shall be installed.

f. In those automobiles where rear seat back removal does not expose the stock gas tank directly to the driver/passenger compartment, a metal (only) bulkhead is optional.

g. Carpets, center consoles, floor mats, headliners, sun roof liner and frame, dome lights, grab handles, and their insulating, attaching or operating mechanisms must be removed[8]. Door interior trim panels may be replaced with 0.060" aluminum securely attached to the door. All other interior trim panels, except the dashboard, may be removed. Other than to provide for the installation of required safety equipment or other authorized modifications, no other driver/passenger compartment alterations or gutting are permitted. The driver's door window glass, window operating mechanism, and inside door latch/lock operating mechanism may be removed and the inner door structural panel may be modified, but not removed. The stock side impact beam, if equipped, and the outside door latch/lock operating mechanism shall not be removed or modified. This gutting of the door shall only be made to the driver's door and shall only be made if roll cage incorporates NASCAR-style side protection bars extending into the door.

h. Any removable covers used to cover spare tires, tools, bins, etc., must be removed along with attaching hardware and bracketry. Carpets, mats, and their insulating or attaching materials may be removed from the floor and recesses of the cargo/ trunk/spare tire area[8].

i. Dead pedal/foot rest and heel stop may be added.

j. Ducting may be added to provide fresh air to the driver/passenger compartment. This ducting shall be located in the driver and/or passenger window area, with no modifications to the bodywork. Only the cooling duct is permitted in the window area. It is not permitted to otherwise fill in the window area.

k. Radio receivers may be removed or replaced. Two-way radios are permitted.

l. Modifications may be made to the foot pedals to improve the comfort of and control accessibility to the driver.

m. Ballast may be added. All ballast shall be located in the passengers' floor area.

10) Safety

a. All cars shall have a roll cage installed. The cage shall meet GCR Section 18., requirements for Showroom Stock cage configuration, tubing size, and material, except as provided for in these rules.

On cars where the rear window/bulkhead prohibits the installation of rear braces, the main hoop shall be attached to the body by plates welded to the cage and bolted to the stock shoulder harness mounting points. This installation design must also incorporate a diagonal bar connecting the top of the main hoop to the lower front passenger side mounting point ("Petty Bar"). Alternatively, the rear window may be removed and a clear, Plexiglas replacement installed. The rear cage braces may pass through this replacement window and through the engine cover or bodywork to allow connection to the frame or unibody. Such allowances shall be noted on the car's specification line.

1) The cage need not be removable. It shall be bolted and/or welded to the car.
   a. Mounting plates shall be welded or bolted to the car.
      i) Each mounting plate shall be at least .080" thick if welded and 3/16" thick (with appropriate backing plates) if bolted. There shall be a minimum of three (3) bolts per mounting plate.
      ii) Each mounting plate shall not be greater than 100 square inches and shall be no greater than 12 inches or less than 2 inches on a side. Cars registered prior to 10/1/95 are exempt from this rule.
      iii) Whenever possible, mounting plates shall extend onto a vertical section of the structure (such as a rocker box).
      iv) The mounting plate may be multi-angled but must not exceed these dimensions in a flat plane.
      v) Any number of tubes may attach to the plate or each other which shall be considered one point.
2) It shall attach to the car at no more than eight (8) points, consisting of the basic cage with six (6) points and two optional braces.
3) The forward part of the cage shall be mounted to the floor of the vehicle. In addition, if the two optional braces referred to in 10.a.2 are utilized they shall be mounted, one on either side, from the forward section of the cage to the firewall or front fender wells (see GCR Section 18.2, Figure 1). No braces shall pass through the front firewall.
4) Main hoop braces may be mounted at the rear shock mounts/towers or suspension pickup points. Such rear braces may pass through any mandatory or optional bulkhead or panel separating the driver/passenger compartment from the trunk/cargo area/fuel tank/fuel cell area, provided the bulkhead is sealed around said cage braces.
5) A lateral, diagonal main hoop brace illustrated in Figure 1, GCR Section 18., is required. Any number of additional reinforcing bars is permitted within the structure of the cage, provided they meet the minimum tubing size per GCR Sections 18.1.6.C. Such reinforcing tubes may pass

through any mandatory or optional bulkhead or panel separating the driver/ passenger compartment from the trunk/cargo area/fuel tank/fuel cell area, provided the bulkhead is sealed around such reinforcing tubes.

b. Steering lock mechanisms shall be removed.
c. The stock fuel tank shall be replaced with a fuel cell[8]. The fuel cell shall be located within twelve (12) inches of the original fuel tank location. Additional reinforcement may be added to support the fuel cell, but such reinforcement shall not attach to the roll cage.. Floor pan may be modified for installation. See GCR Sections 17.12., and 19., for requirements.
d. An electrical master ("kill") switch is required. See GCR Section 17.27., for requirements.
e. Installation of a fire extinguisher or fire system as specified in GCR 17.22., is required.
f. Safety harness systems, window nets, and fire extinguishers shall meet or exceed all requirements for Showroom Stock vehicles.
g. Exposed headlights, parking lights, and side marker lights shall be taped. OEM light assemblies mounted on or below (but not in) the bumper shall be removed, and all resulting holes shall be covered to prevent air passage through said holes.
h. Towing eyes per GCR Section 17., shall be fitted.[8]
i. Spare wheels and tires shall be removed.
j. Air bags shall be disarmed and removed.

E. CAR CLASSIFICATION

No vehicle with an automatic transmission shall compete in the Modified Touring 2 Category.

F. MEASUREMENT STANDARDS

Measurement standards shall be as specified in GCR 11.4. with the following exceptions: Wheelbase has a tolerance of + 2"/- 1".

Endnote References

[1] Note that the intent is to not offer any modifications that will permanently and irreversible remove a vehicle's eligibility for Improved Touring (e.g., additional rollcage parts, internal engine modifications). All allowed modifications will be limited to bolt-on items wherever possible.

[2] It is assumed that SCCA limited fuel selection on emissions-equipped cars due to concerns with damage to the emissions system using race fuel. The Touring Lite rules committee is leaving those decisions to the vehicle preparer.

[3] This is a non-inclusive list. In other words, all other head and valvetrain parts must remain stock. The intent of this rule is to allow alternate camshafts, but limit performance potential to that attainable with the stock valvetrain. This should discourage the use of "killer" aggressive camshafts.

[4] Not intended to allow repositioning of the drivetrain, simply to allow aftermarket bushings. If you want steel inserts or Heim joints, knock yourself (and your teeth) out.

[5] The intention is to allow multiple stayrods instead of having to choose one of those listed. It also allows rear stayrods to be installed.

[6] The rules committee wishes to allow factory ABS. The addition of alternate brakes "tosses a bone" to those cars that may not be equipped with ABS. The competitors will be free to choose which is best suited for them.

[7] A spec tire for the purposes of minimizing consumable costs is under discussion; this spec may either be a particular tire or it may be a retail price limit

[8] This rule is expected to be subject to a two-year grandfathering for existing IT cars with logbooks.