## 14. STREET TOURING® CATEGORY

The Street Touring® category of vehicle modifications is meant to fit between the current Street and Street Prepared categories. This category provides a natural competition outlet for auto enthusiasts using affordable sports cars and sedans equipped with common suspension and engine modifications compatible with street use.

Under the provisions of Section 1.1 of these rules, SCCA® Regions are free to allow any other version of the Street Touring® concept which meets the local needs. In particular, some leeway in the area of bodywork allowances (e.g., wings/spoilers beyond those allowed in Section 14.2.F) is encouraged at SCCA® Regional Solo® events.

See Sections 3.8 and 8.3.1 for documentation requirements.

## 14.1 AUTHORIZED MODIFICATIONS

All Solo® Rules Street Category allowances, plus all allowances contained in Section 14.

## 14.2 BODYWORK

- A. Pedal cover kits and other interior cosmetic accessories may be added. "Dress-up" items such as chrome dipsticks and non-standard filler caps are permitted, provided they serve no other purpose.
- B. The driver and front passenger seats may be replaced with the following restrictions. The seating surface must be fully upholstered. The top of the seat, or an attached headrest, may not be below the center of the driver's head. The seat, including mounting hardware, must weigh at least 25 pounds and must be attached using the OE body mounting holes/studs. Additional mounting points may be added.
- C. Factory rub strips, emblems, mud flaps, bolt-on front valance lips/spoilers, and fog lights (except those integral to a headlight or turn signal) may be removed. Rear wings may be removed so long as the vehicle retains any federally-mandated third brake light.
- D. Alternate steering wheels are allowed except that steering wheels with an integral airbag may not be changed.
- E. Fenders may not be cut or flared but the inside lip may be rolled to gain additional tire clearance. (The outer fender contour may not be changed.) Plastic and rubber wheel well splash shields may be modified for tire clearance and to accommodate a rolled inside fender lip. The modifications may serve no other purpose (e.g., air intake, brake ducts, etc). No other changes to the standard fenders or wheel wells are permitted.
- F. Addition of spoilers, splitters, rear wings, bumper covers, valances, side skirts, and non-functional sccops/vents is allowed provided that either:
  - 1. It is a production part which is standard or optional equipment of a US model of the vehicle. ("Model" is defined in Section 12.3.)
  - 2. It is listed in the vehicle manufacturer's US accessory catalog for that vehicle for normal highway use. This does not allow for parts sold through a manufacturer's performance catalog (e.g., Ford Racing,

HPD, Mazdaspeed, Mopar Performance, Mugen, NISMO, SPT, TRD, etc).

Parts must be installed as directed by the manufacturer. Exact replicas, including weight, from alternate sources are also permitted.

- G. Strut bars per Section 12.18 are permitted with all types of suspension, subject to the following constraints:
  - 1. A 2-point strut bar may be added, removed, modified, or substituted, but only with another 2-point strut bar.
  - 2. A triangulated (3-point) strut bar may be removed, modified, or substituted; substitution may be with either a triangulated or a 2-point strut bar. The connection to the chassis (e.g., firewall, bulkhead) must be in the standard location.
  - 3. Lower suspension braces must be attached to the lower suspension pickup point locations on the chassis within 2" (50.8mm) in any direction of the actual suspension attachment to the chassis.
  - 4. Except for standard parts, no connections to other components are permitted.

Additional holes may be drilled for mounting bolts. Only "bolt-on" attachment is permitted. Interior trim panels may be modified to allow installation of strut bars. Holes or slots may be no larger than necessary and may serve no other purpose. This does not permit any modifications to the frame or unibody beyond the allowed mounting holes.

- H. Longitudinal (fore-aft) subframe connectors ("SFCs") are permitted with the following restrictions:
  - 1. They must only connect previously unconnected boxed frame rails on unibody vehicles.
  - 2. Each SFC must attach at no more than 3 points on the unibody (e.g., front, rear, and one point in between such as a seat mount brace or rocker box brace).
  - 3. SFCs must be bolted in place and not welded.
  - 4. No cutting of OE subframes or floorpan stampings is permitted. Drilling is permitted for mounting bolts only.
  - 5. No cross-car/lateral/triangulated connections directly between the driver's side and passenger's side SFCs are permitted. Connections to OE components such as tunnel braces or closure panels via bolts are allowed and count as the third point of attachment. No alteration to the OE components is permitted.
  - 6. SFCs may not be used to attach other components (including but not limited to torque arm front mounts or driveshaft loops) and may serve no other purpose.

### **14.3 TIRES**

Tires must meet the eligibility requirements of the Street category with the following additional restrictions:

Tires shall have a section width up to and including the following:

STF, STS, STR (AWD)	225 mm
STX, STU (AWD)	245 mm
STR (2WD)	255 mm
STX (2WD)	265 mm
STU (2WD)	285 mm

## **14.4 WHEELS**

Any wheels are allowed with widths up to the following (OE wheels exceeding these maximums are not permitted):

STF, STS, STR (AWD)	7.5"
STX (AWD)	8.0"
STX, STR (2WD)	9.0"
STU	unlimited

### 14.5 SHOCK ABSORBERS

- A. Shock absorber bump stops may be altered or removed.
- B. Any shock absorbers may be used. Shock absorber mounting brackets which serve no other purpose may be altered, added, or replaced, provided that the attachment points on the body/frame/subframe/chassis/suspension member are not altered. This installation may incorporate an alternate upper spring perch/seat and/or mounting block (bearing mount). The system of attachment may be changed. The number of shock absorbers shall be the same as standard. No shock absorber may be capable of adjustment while the car is in motion, unless fitted as original equipment. MacPherson strut equipped cars may substitute struts and/or may use any insert. This does not allow unauthorized changes in suspension geometry or changes in attachment points (e.g., affecting the position of the lower ball joint or spindle). It is intended to allow the strut length changes needed to accommodate permitted modifications which affect ride height and suspension travel.

### **14.6 BRAKES**

A. Non-standard brake rotors may be used provided they are of equal or larger dimensions (diameter and thickness) and made of ferrous material (e.g., iron). Thickness includes the individual plates of a vented rotor, as well as the overall dimension. The diameter for replacement rotors is measured at the minimum outside dimension. Aluminum rotor hats are allowed. Cars originally equipped with solid (non-vented) rotors may utilize vented rotors. Cross-drilled and/or slotted brake rotors may be fitted provided all such voids are within the disc area and comprise no more than 10% of that area. Brake calipers and mounting brackets may be replaced provided they bolt to the standard locations and the number of pistons is equal to or greater than standard. A functioning emergency brake of the same type, operation, and actuation as OE must be present. Drum brakes may be replaced with disc brakes of a diameter equal to or greater than the inside diameter of the standard drum. Such conversions must be bolted, not welded, to the axle/trail-

- ing arm/upright and must include an integral, redundant emergency brake. Changes to backing plates/dust shields/brake lines to accommodate these changes are permitted but may serve no other purpose.
- B. Brake lines may be substituted with alternate DOT-approved flexible brake lines.
- C. 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. They may serve no other purpose.
- D. Original equipment ABS braking systems may be electrically disabled but may not be removed or altered in any other way.

# 14.7 ANTI-ROLL (SWAY) BARS

Substitution, addition, or removal of any anti-roll bar(s) is permitted. Bushing material, method of attachment, and locating points are unrestricted. This does not authorize the cutting of holes to route the bar(s) or links. Components such as anti-roll bars and strut housings that serve dual purposes by also functioning as suspension locators may not be modified in ways that change the suspension geometry or steering geometry. Nonstandard lateral members which connect between the brackets for the bar, including allowed strut bars per Section 14.2.G, are permitted.

## 14.8 SUSPENSION

- A. Ride height may only be altered by suspension adjustments, the use of spacing blocks, leaf spring shackles, torsion bar levers, or change or modification of springs or coil spring perches. This does not allow the use of spacers that alter suspension geometry, such as those between the hub carrier and lower suspension arm. Springs must be of the same type as the original (e.g., coil, leaf, torsion bar, bellows) and except as noted herein, must use the original spring attachment points. This permits multiple springs, as long as they use the original mount locations. Coil spring perches originally attached to struts or shock absorber bodies may be changed or altered and their position may be adjustable. Spacers are allowed above or below the spring. Coil springs may incorporate spring rubbers. Suspension bump stops may be altered or removed.
- B. Suspension bushings may be replaced with bushings of any materials (except metal) as long as they fit in the original location. Offset bushings may be used. In a replacement bushing, the amount of metal relative to the amount of non-metallic material may not be increased. This does not authorize a change in type of bushing (e.g., ball and socket replacing a cylindrical bushing) or use of a bushing with an angled hole whose direction differs from that of the original bushing. If the standard bushing accommodated multi-axis motion via compliance of the component material(s), the replacement bushing may not be changed to accommodate such motion via a change in bushing type, for example to a spherical bearing or similar component involving internal moving parts. Pins or keys may be used to prevent the rotation of alternate

- bushings but may serve no other purpose than that of retaining the bushing in the desired position.
- C. The following allowances apply to strut-type suspensions. Adjustable camber plates may be installed at the top of the strut and the original upper mounting holes may be slotted. The drilling of holes in order to perform the installation is permitted. The center clearance hole may not be modified. Any type of bearing or bushing may be used in the adjustable camber plate attachment to the strut. The installation may incorporate an alternate upper spring perch/seat and/or mounting block (bearing mount). Any ride height change resulting from installation of camber plates is allowed. Caster changes resulting from the use of camber plates are permitted.
- D. Differential mount bushings may be replaced but must attach in the standard location(s) without additional modification or changes. Differential position may not be changed. The amount of metal in a replacement bushing may not be increased relative to the amount of metal found in a standard bushing for the particular application. Solid metal bushings are specifically prohibited.
- E. Steering rack bushings may be replaced but must attach in the factory location(s) without additional modification or changes. Steering rack position may not be changed. The amount of metal in a replacement bushing may not be increased relative to the amount of metal found in a standard bushing for the particular application. Solid metal bushings are specifically prohibited. This does NOT allow shimming or otherwise relocating the steering rack.
- F. Camber bolts may be installed providing these parts use the original, unmodified mounting points and meet the restrictions specified in Section 14.5.B. Caster changes resulting from the use of camber bolts are permitted.
- G. Solid axle rear wheel drive (RWD) suspension allowances:
  - Addition or replacement of suspension stabilizers (linkage connecting the axle housing or DeDion to the chassis, which controls lateral suspension location) is permitted.
  - 2. Traction bars or torque arms may be added or replaced.
  - 3. A Panhard rod may be added or replaced.
  - 4. The upper arm(s) may be removed, replaced, or modified and the upper pickup points on the rear axle housing may be relocated.
  - 5. The lower arms may be replaced or modified and the lower pickup points on the rear axle housing may be relocated.
  - 6. Differential covers and attaching hardware may be replaced.
  - 7. Methods of attachment and attachment points are unrestricted but may serve no other purpose (e.g., chassis stiffening). This does not authorize removal of a welded on part of a subframe to accommodate the installation.

- H. Camber kits (also known as camber compensators) may be installed. These kits consist of either adjustable length arms or arm mounts (including ball joints) that provide a lateral adjustment to the effective length of a control arm. Alignment outside the factory specifications is allowed. The following restrictions apply:
  - 1. On double/unequal arm (e.g., wishbone, multi-link) suspensions, only the upper arms OR lower arms may be modified or replaced, but not both. Non-integral longitudinal arms that primarily control fore/aft wheel movement (e.g., trailing arm(s) or link(s) of a multi-link suspension) may not be replaced, changed, or modified.
  - On arm-and-strut (MacPherson/Chapman) suspensions, the lower arms may be modified/replaced OR other methods of camber adjustment as allowed by Sections 14.8.B, C, or G may be used, but NOT both.
  - On swing or trailing arm suspensions, the main arms may not be modified or replaced, but lateral locating links/arms may be modified or replaced.
  - 4. Front wheel drive (FWD) cars with rear beam axles may use shims between the rear axle and hubs.
  - 5. The replacement arms or mounts must attach to the original standard mounting points. All bushings must meet the requirements of Section 14.8.B. Intermediate mounting points (e.g., shock/spring mounts) may not be moved or relocated on the arm, except as incidental to the camber adjustment. The knuckle/bearing housing/spindle assembly cannot be modified or replaced.
  - 6. Changes in suspension geometry are not allowed except as incidental to the effective arm length change.

Note: Many modern suspension designs known by other names, actually function as double A-arm designs. These include the rear suspensions on 1988-on Honda Civic/Integra, Chrysler/Plymouth/Dodge Neon, BMW E36, and most "multi-link" and are covered by Section 14.8.H.1.

- I. On strut-equipped cars, the strut's lower integral mounting bracket, for attachment to the upright or spindle, is unrestricted provided it attaches to the standard location. Any resulting change to the position of the strut centerline is allowed. Such brackets shall serve no other purpose. This does not allow for changes to the integral steering arm on cars that have the steering arm integrated with the strut body.
- J. Changes in alignment parameters that result directly from the use of the allowed components are permitted. For example, the dimensional changes resulting from the use of a cylindrical offset bushing that meets the restrictions of Section 14.8.B are allowed, including those resulting from a change in the pivoting action to:
  - (1) about the mounting bolt, or
  - (2) about the bushing itself.

K. Subframe mount bushings may be replaced, but must attach in the standard location(s) without additional modification or changes. Subframe position may not be changed. The amount of metal in a replacement bushing may not be increased relative to the amount of metal found in a standard bushing for the particular application. Solid metal bushings are specifically prohibited.

# 14.9 ELECTRICAL SYSTEM

- A. The make, model number, and size of the battery may be changed but not its voltage. Relocation of the battery or batteries is permitted but not into the passenger compartment. If the battery is relocated and the original battery tray can be removed by simply unbolting it, the tray may be removed or relocated with the battery. Holes may be drilled for mounting or passage of cables. Longer cables may be substituted to permit relocation. The number of battery or batteries may not be changed from standard. The area behind the rearmost seat is not considered to be within the passenger compartment. The area under the rearmost seat is considered to be within the passenger compartment. Battery allowances do not apply to electric and hybrid-electric vehicles.
- B. The addition of electrical grounding cables and associated distribution blocks/terminals is permitted. Holes may be drilled for mounting only. This does not permit the use of electrical enhancement components such as condensers, voltage controllers, etc.

## 14.10 ENGINE AND DRIVETRAIN

- A. Oil pans and pickups may be modified or substituted. Addition or modification of windage trays or crankshaft scrapers is not allowed. *Engine oil, transmission fluid, and power steering fluid coolers may be added or substituted (including oil to coolant heat exchangers) but may not serve any additional purpose.*
- B. Original equipment traction control systems may be electrically disabled, but not removed or altered in any other way.
- C. The air intake system up to, but not including, the engine inlet may be modified or replaced. The engine inlet is the throttle body, carburetor, compressor inlet, or intake manifold, whichever comes first. The existing structure of the car may not be modified for the passage of ducting from the air cleaner to the engine inlet. Holes may be drilled for mounting. Emissions or engine management components in the air intake system, such as a PCV valve or mass airflow sensor, may not be removed, modified, or replaced, and must retain their original function along the flow path.
- D. Exhaust manifolds, headers, downpipes, and associated EGR tubes may be replaced with alternate units. Exhaust exit may be relocated provided it meets Section 3.3.3.B.15. Relocation of the oxygen sensor on the header is permitted. Exhaust heat shields which cover only, and attach solely to, these parts may also be replaced, removed, or modified. All other exhaust heat shields may be modified the minimum amount necessary to accommodate allowed alternate exhaust components. Mount-

- ing brackets/hardware which serve no other purpose are considered part of the exhaust components.
- E. Catalytic converters: Any catalytic converters are allowed, but must attach within 6" (152.4 mm) of the original unit. Multiple catalytic converters may be replaced by a single unit. The inlet of the single replacement converter may be located no further downstream than 6" (152.4 mm) along the piping flow path from the original exit of the final OE converter. The extents of an OE converter are defined by the expansion chamber in which the catalyst is contained, regardless of placement within larger exhaust sections. Replacement converters must have a minimum catalyst density of 100 cells per inch and minimum substrate length of 3" (76.2 mm).
- F. The engine management system parameters and operation *of internal combustion engines* may be modified only via the methods listed below. These allowances also apply to forced induction cars, except that no changes to standard boost levels, intercoolers, or boost controls are permitted. Boost changes indirectly resulting from allowed modifications are permissible but directly altering or modifying the boost or turbo controls, either mechanically or electronically, is strictly prohibited. Traction control parameters may not be altered. Any OE OBD2 or newer communications port functionality must remain. The Check Engine Light (CEL) or Malfunction Indicator Light (MIL) may be disabled via software. Alternate software maps which violate these restrictions may not be present during competition, regardless of activation. Only OE sensors may be used for engine management.
  - 1. Reprogrammed ECU/PCM (via hardware and/or software) may be used in the standard housing.
  - 2. Supplementary ("Piggyback") ECU may be used subject to the following restrictions:
    - a. Connects between the standard ECU/PCM and its wiring harness only.
    - b. Must be plug-compatible with the standard ECU/PCM (no splices).
  - 3. Electronic components may be installed in-line between an engine's sensors and ECU/PCM. These components may alter the signal coming from the sensor in order to affect the ECU/PCM operation of engine management system. EXAMPLE: Fuel controllers that modify the signal coming from an airflow sensor.
  - 4. Fuel pressure regulators may be replaced in lieu of electronic alterations to the fuel system. It is not permitted to electronically modify the fuel system AND replace a fuel pressure regulator.
  - 5. Ignition timing may be set at any point on factory adjustable distributor ignition systems.
  - 6. VTEC controllers and other devices may be used which alter the timing of factory standard electronic variable valve timing systems.
- G. Any mechanical shift linkage may be used.

- H. Any accessory pulleys and belts of the same type (e.g., V-belt, serpentine) as standard may be used. This allowance applies to accessory pulleys only (e.g., alternator, water pump, power steering pump, and crankshaft drive pulleys). It does not allow replacement, modification, or substitution of pulleys, cogs, gears, or belts which are part of cam, layshaft, or ignition drive or timing systems, etc. Any crankshaft damper or pulley may be used. SFI-rated dampers are recommended. Supercharged cars may not change the effective diameter of any pulley which drives the supercharger.
- I. Upper engine shields made of plastic material, the purpose of which is to hide mechanical components in the engine compartment, may be removed if they have a solely aesthetic and/or acoustic function.
- J. Any engine or transmission mount is allowed provided it attaches only to the original mounting points, does not relocate the engine/transmission (other than incidental to changes in compliance material), and weighs no less than the OE mount. All components between the engine/transmission and the mounting structure are considered to be part of the mount assembly.

## K. Limited Slip Differentials

STS, STF: No limited slip differentials are permitted except for factory standard viscous coupler type units.

STX, STU, STR: Only standard (as defined in Section 12.4) limited slip differentials (LSD) are allowed on AWD vehicles. For AWD vehicles that did not come with any type of limited slip differential (including center differential or transfer case), a single aftermarket mechanical LSD may be added. 2WD vehicles may use any mechanical LSD unit.

# 14.11 OUT OF PRODUCTION CARS

Where a car is out of production and the manufacturer is either out of business, stocks no parts or no longer has a required part, a part of any origin but as similar as possible to the original may be substituted. The entrant must be prepared to show documentary evidence that one of the three circumstances above applies and that the substituted part is as similar as possible under the circumstances. Substitute parts which provide improvements in performance (e.g., superior gearing, lighter weight, better camshaft profile, etc.) are not permitted under this allowance.