

# 2019 - South Sound Speedway Rules

## Heavy Iron Rules

### **RULES:**

All cars will be inspected before the derby by track officials. All cars hood and trunk area will be opened for inspection. All winning cars may be re-inspected prior to leaving the arena area and before payout. No pit crew members will be allowed in the arena during the re-inspection of winning cars. Drivers can be disqualified, if they have not complied with the derby rules and /or the official's decision in tech inspections. No additional welding will be allowed on any vehicle following tech. Approved safety helmets are required, and must stay on during the entire length of time of the derby. Safety belts and or lap harness belts are required. If you do not hit within 90 SECONDS or less you may be disqualified. If the derby is stopped twice for a fire or rollover on the same car, your time will be ended there. Must have an 18" sign board or 18" numbers on both the driver and passenger door. Safety gloves/glasses MUST be worn by all drivers. **Tech has final call on any decision!**

The Derby is open to any American made hardtop model stock car or station wagon. NO 1973 or older Imperials or Imperial sub frames. No Trucks, Commercial Vehicles or Convertibles allowed.

1. All glass, all chrome, exterior mirrors, headlights, taillights, chrome rings, emblems, grills and flammable materials must be removed. Glass must be removed. Rear seats must be removed. All car preparations must be done prior to coming to the event. No trailer hitches.

2. **Doors:** Must be chained or welded shut, 3"x 1/8" thick strap or 1/2" round rod MAX. Chains must be MIN 5/16" and 1/2" MAX and may only be wrapped through/around the body, not the cage. Window openings may be hammered together and welded, may use same filler as door strap material.

3. **Fenders:** You are allowed 5 bolts per wheel opening to bolt inner and outer skin together, 3/8" bolt with 1.5" fender washers MAX.

4. **Cage:** All cage material must be a MIN 1/4" thick, and 3" in diameter but not exceed 6" in diameter, with the exception of the door bars. ALL CAGE and GAS TANK PROTECTOR material may not come within 4" of the floor, 6" of the firewall, and 1" from package tray/speaker deck and inner fender wells.

- A. Rear cross brace from door post to door post, within 6" behind the driver's seat. Must be welded or bolted with MIN 2 each 3/4" bolts to the door bars on each side.
- B. Front cross brace from A pillar to A pillar, bolted or welded. May be connected to door bars
- C. Door bars are required on both driver and passenger sides, may be ran on the inside or outside of the door, and no longer than 6' 6". Must be MIN 5" tall and MAX 12" tall.
- D. Halo bar or MIN 2 roll bars must be in line with rear cross bar. Must be bolted to the roof with a MIN 4 each 3/8" bolts and 2" washers.
- E. Gas tank protector must follow cage criteria from above. MUST have some sort of protection around gas tank or you will not run. May not protrude out rear window at all.
- F. Down bars from rear cross bar to floor may be installed for safety, may be bolted or welded to floor skin ONLY. May not touch or connect to frame. MAX 2 each (this is the only bar that may be closer than 4" to the floor)

5. **Engine/Transmission:** Engine swaps allowed. Full engine protectors/cradles, pulley protectors, aftermarket bellhousings, steel tail shafts, transmission braces, and skid plates are aloud. Engine may only be mounted to the engine cross member (may in no way be welded to the frame rail). If solid welding, you may weld it in 3 locations, MAX 6" weld each. If using a bolt on engine mount you may weld the mount solid, but no bigger than an 8" x 8" mount. Transmission may be bolted in with 2ea MAX 5/8" bolts or welded in with no more than 6" of weld. Header protectors may be used. Absolutely no metal fan shrouds, must be plastic and not attached to the engine. Pulley protectors may not contact sway bar.

6. **Hood/Trunk:** Hoods may be chained and/or bolted in MAX 8 spots in any combination. Trunks may be tucked, wedged, or canoed as long as deck lid stays on factory hinges. Speaker deck may not be removed. Hood skins may be bolted back together with a MAX of 12ea 3/8" bolts and 2" fender washers  
HOODS MAY NOT BE WELDED SHUT!

- A. (Trunk only) Welds not to exceed 5" on 5" off, with 3" x 1/8" filler.
- B. 2 each, 1" all thread may go from the frame through the trunk lid/hood, MAX 6" x 1/4" washers may go through factory body hole or welded to the side of the frame with a 4" weld.
- C. 1 wrap of chain MIN 5/16" and MAX 1/2", bolted together in 1 spot.
- D. If bolting, use 6" of 2" x 2" angle welded to the fender and hood/trunk lid separately, and bolted together with 2 each 3/8" bolts. This is 1 spot

8. **Window Bars:** MAX 3" x 3/8" flat bar or 2" x 2" x 1/4" tubing, 2 each front and 2 each rear window bars may be used. Can be bolted with MAX 1/2" bolts and 6" x 1/4" washers or welded but not both. All bars may not extend farther than 6" past any window seam (get a 6" x 6" contact area on sheet metal) or come in contact with any cage material. Window mars may be connected to each other in the window opening only, not where bars connect to sheet metal. Window screens are recommended.

9. **Bumpers:** Any OEM car bumper or MAX 5" x 5" x 3/16" box tube may be used. Inner and outer skins of bumper may be fully welded. Bumpers may be reinforced on the inside only of the bumper only (Homemade bumper in the stock shape with a skin welded on does not count). Bumpers can be welded to brackets and/or frame, nothing else! Bumper height may not exceed 20" measured to the bottom of the bumper. If square tube is used, may not be stuffed, ends may not be welded, and be no wider than the body.

10. **Bumper Brackets:** Any OEM CAR bracket may be used on any car in any formation. If bracket and shock are separated only 1 may be used, NOT BOTH. All bumper brackets may not extend past the front edge of the factory A-Arm tower/mounting bracket factory weld. An alternative to an OEM bracket is 2" x 1/8" pipe or 4" x 1/4" plate, may not be overlapped/doubled in anyway, and must be a single piece. Plate may conform to the frame, but pipe must be straight (no bends). All brackets must only contact 1 side of the frame (top, bottom, side) and must stay on the outside, unless using the factory bracket in the factory location.

11. **Suspension/Steering:** Front suspension may be bolted with 1 each MAX 1" bolt and 3" washers and welded down with 2 each pieces of 2" x 4" 1/8" straps, no other welding of suspension aloud. Spindles and A-arms may be swapped but must be CAR OEM and bolt on without modification, no aftermarket or truck. Aftermarket weld-in or bolt-in ball joints may be used. No coil to leaf conversions. Coil springs may be doubled or swapped for height. Trailing arms must be stock to the car you are running, but may be strengthened, and shortened to change pinion angle. No welding on springs or shackles. OEM shackles only. MAX 9 leafs and must have a 1" stagger. 4 each leaf spring clamps per leaf pack, 3 1/2" x 1 1/2" wide with 3/8" bolts. May use U-joints in steering and aftermarket tie rods, no heim joints. Max 1" All thread shocks allowed in stock location "not thru frame rail", if the shock goes thru the body it will count as a body mount.

12. **Frame/Body Mount:** You may replace body bolts with up to 3/4" bolts and 3" washers. 2 each 3/4" extra body bolts may be used from your choice of location from firewall to speaker deck. Any bolt that passes through the frame will be considered a frame/body bolt, and may only go through the factory body sheet metal. Frame seams may be welded from transmission cross member forward, 1 pass no wider than a 1/2" weld. Transmission cross member may be replaced with a 2" x 3" x 1/4" square or 2" round tube and 2 each 5" pieces of 2" x 2" x 1/4" angle to help support cross member. NO ADDED METAL other than what was stated above. No welding body to frame. NO SEAM WELDING BODY PANELS! Body spacers/pucks may be removed.

13. **Gas tanks:** Must be relocated to directly behind the rear cross bar. Must be a metal boat tank or a fuel cell, 10 gallons MAX. NO PLASTIC TANKS. If you use an electric fuel pump, a KILL SWITCH must be visible and pointed out to tech. All fuel lines must be sleeved for protection.

14. **Batteries:** Must be relocated to inside the vehicle, within the caged area. MUST be in a metal enclosure, secured to the floor or cage. NO RATCHET STRAPS! 2 Batteries MAX

15. **Radiator/Core Support:** Must be OEM style radiator, no homemade tanks. No antifreeze. No additional radiator supports or mounts. Radiator and core support may not be moved from OEM location. Only wire, straps or plastic ties may secure radiator.

16. **Rear End:** Any rear end may be used (full floaters may be used but only use 5 lug nuts). Axle savers and back braces aloud, but no bracing in any way, may strengthen the frame or body. You also may chain your rear end with 1 wrap of chain around each frame rail, MAX 3/8" chain, must be bolted together and in no way be attached to the frame with bolts or welds. Pinion brakes allowed.

17. **Tires/Wheels:** Any pneumatic tire may be used. No cement, hoops, liners, foam, or fluids in tires. AIR ONLY! Full wheel centers and 1" bead savers aloud. Beadlocks allowed inside rear only. Tubes allowed and recommended.

18. **Pre-Ran Cars:** Max 4 each 4" x 6" 3/16" plates per frame rail. Plates may not be within 1" of each other and only 3 on each frame rail may be used in front of the transmission cross member. Call with questions. 1/4" hump plates 6" x 22" long ok pre ran only.

#### 19. **80's and Newer:**

- You may pitch, tilt or tip 80's and newer style cars in one location, using any of the following ways only
  1. You may cold pitch, no added metal.
  2. You may cut all three flaps and pull the front end down moving the flap 1/2 inch and re-weld. Do not re-weld any other crush box seams, no added metal or plate.
  3. You may pitch at the transmission cross member, since you are already allowed to weld a 5-inch piece of angle there to mount your cross member.

#### **98 and newer**

- Watts-link conversion for Fords. You may convert a Watts-Link to a standard 4 link system in the following way: Use the upper and lower trailing arm brackets off an older Ford. After market trailing arm mounting brackets are allowed, but no thicker than 1/4 inch and may be attached with max of 4 - 1/2" bolts each side. No positioning of brackets to strengthen the front down legs of the rear hump, must be mounted in the stock location.

#### **03s and newer**

- May run the original aluminum cradle and stock lower A-arm, Johnson bolt in steel cradle or similar BOLT IN CRADLE is allowed, no weld in cradles.
- Upper A-arm, motor mounts and spring bucket must mount off the 2 existing cradle bolts. No frame welding allowed for these components.
- No mounting plate or component may extend more than 2 inch in front of or behind the cradle bolts, measured from middle of the bolt, this rule will be strictly enforced.
- You may use any automotive or fabricated spring bucket but it must not strengthen the frame in any way, cannot not be any larger than necessary to hold coil spring. Again, must be mounted off 2 existing cradle bolts. DO NOT weld to frame in any way.
- To mount steering box, you may weld a tube to the top and bottom of frame. Do not weld excessively, do not pin frame to mount the steering box.
- If you choose to pitch, this must be done in only 1 location and a single pass weld only to re-attach.
- You may cut the excess frame off the front rails but you may not move the front body mount. All body mounts must remain in stock location.

## 20. **VEHICLE OPTIONS/OTHER:**

1. CALL FOR RUST REPAIR
2. Aftermarket gas and brake pedals allowed.
3. Floor Shift or aftermarket shifter allowed.
4. Hand throttle allowed.
5. NO fuel or engine oil coolers.
6. Transmission coolers aloud. Must be inside car. **DOUBLE CLAMPED AND HOSES SLEEVED!**
7. Air condenser may protect radiator. Only to be attached to core support.
8. Electric or mechanical radiator fans may be used. **MUST BE PLASTIC!**
9. Slider driveshafts allowed.
10. Body creasing or shaping allowed.
11. **ABSOLUTELY NO SHEET METAL WELDING** other than stated above.
12. Must have working brakes.
13. If holes are cut in firewall larger than 5" X 5", must cover the hole with a tin or rubber.
14. A hose may be attached to the transmission filler tube (Burp Tube) for fire safety.
15. Pre-bending trunks allowed but may not exceed MAX bumper height of 20".
16. Firewall may be hammered back, but still must maintain 6" away from the cage. If firewall is removed, that 6" is now measured from the DP/Mid plate.