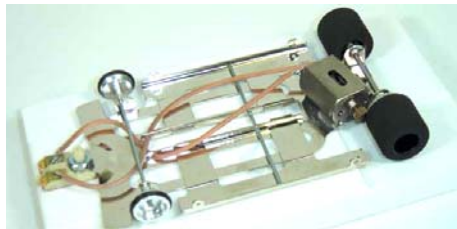




IRRA™

International Retro Racing Association

Retro Flexi GT Rules – Tier 2



A. Simplified Specification Reference

- Total Weight = 100 grams minimum
- Chassis Width = 3.250" maximum
- Body Width = 3.250" at the wheel arches
- Body Thickness = .010 with .007 minimum on sides
- F & R Track Width = 3.250"
- Chassis Clearance, F & R = .015" / .050" minimum
- Front Tire Diameter = .600" minimum
- Rear Tire Diameter = .750" minimum
- Rear Tire Width = .810" maximum
- Motor Type = F7, TSR D3, S7, PS 4002
- Body Height = 1.375" maximum
- Front Grill = / .063" (1/16th)
- Spoiler Size / Height = no wider than body; .500" maximum
- Rear Window: Painted, Tinted, or covered with interior.
- Driver Figure / Interior = Fully Molded, minimum two-color, presentably / realistically painted, no paper

B. General Specifications

1. **Maximum Overall Chassis Width:** 3.25" (82.55mm), measured across any part of the chassis, body, and the front and rear axles.
2. **Maximum Rear Tire Width:** 0.810" (20.57mm).
3. **Minimum Rear Tire Diameter:** 0.750" (19.05mm) across the full width of the tire.
4. **Minimum Front Tire Diameter:** 0.600" (15.88mm).
 - 4a. Wheels with O-ring "tires" are allowed.
 - 4b. Front tires must be black in color and may be coated.
5. **Minimum Rear Chassis Clearance:** 0.050" (1.27mm)
 - 5a. This will be measured under the chassis and gear.
 - 5b. Clearance will be measured with front and rear tires sitting flat on the test block without the guide.

6. **Minimum Front Chassis Clearance:** 0.015" (0.38mm)
 - 6a. This will be measured under the front axle.
 - 6b. Clearance will be measured with front and rear tires sitting flat on the test block without the guide.
7. **Rear Axles:** 3/32" (2.38mm) minimum diameter, solid steel.
 - 7a. Hollow axles are not legal.
 - 7b. Axles may only be flattened in the areas where the wheels and gear are secured.
8. **Front Axles:** 0.047" (1.19mm) minimum diameter and one-piece
9. **Bushings/Bearings:** Oilite/bronze bushings only in the rear.
 - 9a. May use eyelet bushings and solder or glue them into the chassis for the front axle.
10. **Minimum Weight:** 100 grams ready to race.
11. **Maximum Rear Body Height:** 1.375" (34.93mm) measured with the car on all four wheels on a tech block (unsupported by the guide flag), from the tech block surface to the top of the highest point of the rear of the body, excluding any add-on spoiler. Severe raking of the body for aerodynamic effect is not allowed.
12. All chassis parts, including the guide flag, must be covered by the unmodified body.
13. The wheels shall be located in relation to the wheel arches in the body.
14. **Minimum Weight:** 100 grams ready to race.
15. **Drive Type:** Anglwindler
16. **Drive Gears:** Any drive gear and ratio may be used.
17. **Maximum Front Axle Play:** 0.125" (3.18mm), as part of the maximum front track width.
 - 17a. At no time can tires extend out past the body.
18. **Tires – Rear:** Any commercially-available black natural rubber tire, chemically-treated or untreated, on any size hub.
 - 18a. Speed Rubber is prohibited.

18b. Tires may not be changed during a race. Should a racer encounter a damaged tire/wheel (stripped screw, bent hub or chunked tire), the racer will be afforded the opportunity to make the repair under the green and present the car to the tech inspector at the end of the heat for checking before the racer will be allowed to continue.

18c. For those races where there is a move-up from one main to another, tires can be changed and the car will go through a full tech inspection.

18d. Those racers making a move-up from one main to another and not choosing to change tires will still be subject to tech inspection for legal tire diameter and clearance.

18e. Tires may be cleaned during the race, in between heats, and during lane changes. Racers and their pit crews may only clean tires using the supplied cleaner (lighter fluid/naphtha) provided by the hosting raceway/race director/series director. The approved cleaner and supplied rag(s) that will be placed in a designated area prior to the race and tires must be cleaned in that designated area only.

Any racer transferring tire cleaner to the track surface will be disqualified.

Tire treatments such as Zip Grip, Sticky Fingers, or any other tire treatment may only be applied before the car is teched-in. No treatments will be allowed at any time after tech. The rear tires must be dry when the car is presented at tech.

Any racer or pit crew found applying tire treatments after tech, or cleaning tires with anything other than the supplied cleaner and rags, will result in racer disqualification.

C. Chassis

1. Chassis type: any commercially-available 4" (101.6mm) stamped steel 1/24 scale production "Flexi"-type chassis is allowed. May use lightweight replacement pans and center sections from the same manufacturer. No prototype chassis allowed!
2. May solder or glue motor in place.
3. May file motor opening/bracket area to fit motor properly but the bracket cannot be removed.
4. May reinforce rear uprights with a brace.
5. May use a motor brace and may connect to the rear brace.

6. Pin tubes (which may be floating pin tubes) located in the original body mount location and lead wire retainers are allowed.
7. May reinforce guide tongue but the guide hole may not be moved or modified.
8. Guide: single guide flag is allowed, centered on the longitudinal axis of the chassis (i.e. no sideways "free float" or offset) and with a blade no larger than .086" (2.20mm) wide x 1.060" (27.18mm) long.
9. Front axle must pass through the uprights.
10. The bottom surface of the whole chassis (including the motor, but excluding the motor seal and guide flag) must be flat and straight in all directions, with no bowing or drooping of any parts below the plane defined by the front and rear clearance specifications. This will be checked by applying a straight edge to the underside of the car both across the frame and along the length of the frame.
11. **Tape/Lead:** Lead weight may be added to a chassis but may only be affixed to the top side of the chassis. Strapping or other tape to control or restrict movements is allowed but may only be affixed to the top side of the chassis.

Taping a damaged body to a pan to finish a heat is now permitted. The body must be repaired, and the tape removed, before the start of the next heat of racing. Otherwise, the prohibition against the use of tape of any kind on the bottom of the chassis remains in place.

D. Motor

1. **Motor types:** May use any one of the following motors, which must remain unopened and unmodified.
 - **TSR Falcon 7**
 - **JK Retro Hawk**
 - **Slick 7 Mini Brute**

Note: No other motors will be allowed unless approved by the IRRA™ and added to the approved motor list. **Please refer to the Motor Rules page for more information on motors.**
2. At designated large IRRA™ scheduled races, the track owner may elect to utilize a hand-out motor system, using one of the approved motors. This will be announced well in advance and ample time will be allowed on the day of the race for the racer to obtain the motor and install it. If a race for this class is conducted using handout motors then the racer must use the motor(s) assigned to him/her.
3. **Exclusion Clause:** Clear violation of the motor-tampering rule will result in permanent exclusion from future IRRA™ events of any kind.

3a. Racers will be required to sign a tech sheet giving permission for the Race Director, at his discretion, to tear their motors down for inspection to prove legality.

3b. If a motor is deemed illegal due to unapproved modifications (including, but not limited to, incorrect armature, bushing alterations, magnet shimming, magnet change, timed brush hoods, etc.), the racer will be disqualified from the event and future events until reinstated by IRRA™ officials.

3c. Non-refurbishable motors found legal will be replaced at no cost to the racer.

4. A motor may not be changed after tech inspection or during a race except as follows:

4a. For those races where there is a move-up from one main to another, motors can be changed and the car will go through a full tech inspection.

4b. Should a racer's hand-out motor fail during the qualifying run or the warm-up, the racer will be given the opportunity to change to another hand-out motor without penalty, if a second hand-out motor purchased by the racer is available.

E. Body

1. All approved GT-Coupe bodies are listed in the "Approved Body Lists" section. All bodies must be representative of pre-1970 cars.

1a. Bodies may not be any less than .007" thick on the sides. Any body found to be flimsy or a detriment to marshaling will need to be corrected by the racer. Tape or body armor may be used to achieve the desired side thickness.

1b. Windows may not be cut out

2. **Body style:** Racers are encouraged to present cars with scale realism. Bodies must be those on the approved body list.

2a. No "flattened" or "aerodynamically-improved" bodies allowed (i.e. no molded-in spoilers, wings, etc., that were not on the original full-size car or original mold). Note: molded-in spoilers may not exceed the allowed specification governing the maximum width of the body.

2b. Front wheel arches must be cut out. Rear wheel arches may be left closed if the original full-size car ran with closed wheel arches.

2c. Bodies must be presentably-painted and carry at least three racing numbers, one on each side, and one on the front. To further clarify this regulation, all bodies must be fully opaque on all sides except for those areas deemed to be windows. Windows may be tinted. The term opaque means covered by paint, tape, or other

suitable material such that a finger is not visible through the paint or other covering under normal lighting.

2d. No part of the chassis may be seen when looking down on the car from above. Legal openings, such as air vents, etc., may be cut out.

2e. There should be a minimum 1/16" (1.59mm) vertical component and/or part of the grill along the front edge of the body unless this element was not on the original car (example: Ti22).

3. **Spoilers and Air Control:** A single, flat plastic spoiler set at any angle may be added to the rear of the body only.

3a. The spoiler's length is limited to a maximum of 1/2" (12.7mm) from the rear edge of the body and must be no wider than the outer edges of the body.

3b. No additional bends are allowed except for the one used to set the initial angle.

3c. No side dams of any type are allowed.

3d. Front diplanes are not allowed.

3e. High-mounted wings are allowed if they are used on the original full-size car. Such wings must be securely attached to the body and/or chassis.

3f. No notches can be cut in the spoiler above the bend line.

Here is an illustration. The .500" shown is the maximum allowed height of the spoiler from the edge of the body. This is where the bend line in the spoiler is positioned.

Straight - no holes - on the section above the bend line.



Cut outs above the bend line not allowed. No punched holes.



4. **Cockpit:** All bodies must carry a painted (at least two colors), fully-molded three-dimensional interior comprising a driver (helmet, shoulders, and arms), a steering wheel, and cockpit representation.

4a. Interiors must be presentably painted and realistically detailed

4b. No paper interiors.

4c. Rear windows must be painted, tinted, or covered or have the interior under them.