



2025 Rules

Revision Prelease-0.1

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Contents

General Rules	1
GT Radial Stock Class	3
GT Radial Street Class	5
Touring Class	5
Unlimited Class	5
Modificaiton Points	6

Introduction

Welcome to 86 Challenge. Drivers of all skill levels are welcome and there is no charge to participate.

See 86challenge.us for more information, including schedule, historical results, and forms for registering for GT Radial's Championship Cash Prize and tire contingency program.

Questions, corrections, or clarifications can be raised on our [Facebook Group](#) or [Discord server](#).

1. General Rules

1.1. Chassis must be one of the following (hereafter referred to by their Designation):

Chassis	Designation
2012–2016 Scion FR-S	Gen. 1
2012–2020 Subaru BRZ	Gen. 1
2017–2020 Toyota 86	Gen. 1
2022+ Subaru BRZ	Gen. 2
2022+ Toyota GR86	Gen. 2

1.2. GT Radial Sponsorship

- 1.2.1. Participation in GT Radial Championship Cash Prize and tire contingency are optional and require registration by submitting a form directly to GT Radial
- 1.2.2. Participants in the Championship Cash Prize and tire contingency must display 1 large GT Radial decal on the windshield and display 2 smaller GT Radial decals, one on each side of their car

1.3. Timing

- 1.3.1. The following timing methods are accepted, but transponder time will take priority if more than one time is available for a given lap:

Timing Method	Time Penalty (s)
Official timing transponder	N/A
Data logger with at least 10Hz GPS (e.g. Aim Solo 2)	0.2
Data logger with at least 1Hz GPS (e.g. iPhone)	0.5

- 1.3.2. If a driver participates in multiple run groups, they must declare in advance which run group will be used for official timing. Please declare which run group will be used for timing on your event registration form if you sign up for multiple run groups.
- 1.3.3. If a driver participates in a dedicated 86 Challenge run group, their timing will be taken exclusively from that run group.

1.4. Classes

- 1.4.1. Cars will be classed according to rules and modification points listed in the following sections.
- 1.4.2. A car may be used in multiple classes if driven by different drivers. Please comment on your event registration form if you are co-driving a car and what group you are driving in.
- 1.4.3. Prior to a driver's first event of the season, they may declare to run in a higher class than their modification points would normally dictate.
- 1.4.4. A driver shall not compete in more than one class during an event.
- 1.4.5. If a driver modifies their car mid-season and moves up or down a class, the points earned in the previous class will NOT be carried over to the new class. Drivers may choose to not earn points in the new class and keep the points in the previous class. Drivers participating in the GT Radial Championship Prize challenge cannot change classes.

1.5. Scoring

- 1.5.1. Championship points are awarded at the end of each event according to the chart below:

Finish Position	Points
1st	10
2nd	7
3rd	5
4th	4
5th	3
6th	2
7th+	1

- 1.5.2. At the end of the season, the driver with the most points from 7 of the best scores out of 10 events wins the championship.
- 1.5.3. Ties will go to the competitor with the lowest time at the same configuration Thunderhill East regular event during the season. If there is still a tie, the participant with the fastest time at Laguna Seca regular event during the season will be awarded the win.

2. GT Radial Stock Class

- 2.1. Vehicles in this class are only allowed performance modifications included in this section.
- 2.2. In order to balance performance between Gen. 1 and Gen. 2 cars, a time handicap will be added to Gen. 2 lap times, according to the table below. For any tracks/configurations not listed below, the closest comparable track configuration will be used.

Track	Handicap Time (s)
Buttonwillow Raceway #1	+2.5
Buttonwillow Raceway #13CW	+2.0
Buttonwillow Raceway New Track	+1.5
Laguna Seca	+2.5
Sonoma Raceway	+2.5
Thunderhill 5-mile Bypass	+4.0
Thunderhill East	+2.5
Thunderhill West	+1.5

2.3. Engine

- 2.3.1. Engine tuning must be unmodified
- 2.3.2. Oil coolers, accumulators, and/or sump changes are allowed
- 2.3.3. Gen. 2 intake charcoal filters shall be present and unaltered

2.4. Alignment

- 2.4.1. Front camber shall not exceed (be more negative than) -2.5 degrees
- 2.4.2. Front camber may be adjusted using only using the following parts:

Description	Allowed Parts
Crash bolt (i.e. 14mm lower bolt used in upper position)	Toyota SU003-02818 Subaru 901000394
Camber bolts (in either/both positions)	SPC 81280 SPC 81305 Whiteline KCA416 Whiteline KCA414 Eibach 5.81305K
Front Strut Mounts	Pedders PED-580096 Whiteline KCA335
Camber plates	Any

- 2.4.3. Rear camber with stock, unmodified, and undamaged components is not restricted
- 2.4.4. Rear camber with adjustable components shall not exceed -2.0 degrees
- 2.4.5. Rear camber may be adjusted only using the following parts:

Description	Parts
OEM-style, adjustable, steel rear lower control arm	SPC 67660

Camber bolts	H&R TC112
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2.4.6. Toe angle may be adjusted without limitation

2.4.7. Cutting or bending of any vehicle sheet metal or suspension components to change alignment or ride height is not allowed

2.5. Wheels

2.5.1. Wheels must have a maximum width of 8.0 inches

2.5.2. Wheel spacers are allowed

2.6. Tires

2.6.1. Tires must be one of the following:

Description	Sizes
GT Radial Champiro SX2 or GT Radial HPY	215/45R17 225/45R17
Michelin Primacy HP (Gen. 2 OEM)*	215/45R17
Michelin Pilot Sport 4 (Gen. 2 OEM)*	215/40R18

2.6.2. OEM tires marked with (*) are allowed for a competitor's first 2 events

2.6.3. Points earned with OEM Michelin tires will not be eligible toward GT Radial tire contingency nor toward GT Radial Championship Cash Prize

2.7. Aero

2.7.1. STI and TRD lips are not allowed

2.7.2. Gen. 1 BRZ tS wing is not allowed

2.7.3. Gen. 2 ducktails (OEM or equivalently-sized) are allowed

2.8. Safety

2.8.1. Any safety device may be used

2.8.2. Cars equipped with a full aftermarket safety system (bucket seats, racing harnesses, neck restraint system, full or half roll cage, etc.) are allowed, as long as total curb weight of the car with full tank of fuel remains above 2800 lbs without driver. The car will need to be weighed at a location approved by the Rules Board before it is allowed to enter Stock Class.

2.9. Misc

2.9.1. OEM-style, off-the-shelf, non-adjustable, and non-rebuildable dampers with unaltered valving are allowed

2.9.2. Braking upgrades are allowed

2.9.3. Replacing OEM parts with newer/older OEM parts is allowed (e.g. dampers, sway bars, etc).

2.9.4. No lightweight replacement parts are allowed (e.g. battery, lighter than OEM trunk) or removal of parts allowed.

2.9.5. Removal of spare tire, floor mats, and tools is allowed.

2.9.6. Non-OEM cat-back exhaust with a weight greater than 32 lbs is allowed (no removal of any catalyst)

3. GT Radial Street Class

3.1. Drivers are allotted 3 modification points according to **Modification Points**

3.2. Minimum weight is 2800 lbs without driver and with a full tank of gas

3.3. Wheels

3.3.1. Wheels must have a maximum width of 9.0 inches

3.4. Tires

3.4.1. Tires must be one of the following:

Description	Sizes
GT Radial Champiro SX2 or GT Radial HPY	215/45R17
	225/45R17
	235/45R17
	245/40R17
Michelin Primacy HP (Gen. 2 OEM)*	215/45R17
Michelin Pilot Sport 4 (Gen. 2 OEM)*	215/40R18

3.4.2. OEM tires marked with (*) are allowed for a competitor's first 2 events

3.4.3. Points earned with OEM Michelin tires will not be eligible toward GT Radial tire contingency nor toward GT Radial Championship Cash Prize

4. Touring Class

4.1. Drivers are allotted 10 modification points according to **Modification Points**

4.2. Maximum tire width: 255 mm

4.3. Minimum weight is 2750 lbs without driver and with a full tank of gas

4.4. Event standings will be determined by *Adjusted Track Time*, as defined below:

$$Adjustment\ Factor = \frac{\text{Gen. 1 Stock record at event track}}{\text{Gen. 1 Stock record at Thunderhill East Bypass}} \quad (1)$$

$$Adjusted\ Track\ Time = \text{Raw Time} + \text{Modification Points} \times \text{Adjustment Factor} \quad (2)$$

4.5. You can use the following table to find the Touring handicap. (Top row is Modification Points. Use track to find handicapped time to be added to lap time):

[Table Placeholder]

5. Unlimited Class

5.1. Anything goes!

6. Modificaiton Points

Applicable to GT Radial Street and Touring classes only.

Chassis

Points	Modifications
0	Gen. 1 (2013–2020 model years)
2	Gen. 2 (2022+ model years)

Tires

Any tire not on this list will automatically be 6pts

Points	Modifications
-1	17" GT Radial SX2 17" GT Radial HPY 17" Michelin Primacy HP
0	215/40R18 Michelin Pilot Sport 4 (OEM only) Yokohama Advan Apex V601
1	18" GT Radial SX2 GT Radial SX2 RS
2	Continental ExtremeContact Sport (ECS) Dunlop Direzza ZII Star Spec Dunlop Direzza ZIII Falken Azenis RT615K Federal 595 RS-RR Goodyear Eagle F1 Supercar 3 Hankook Ventus RS-4 Kumho Ecsta V730 Maxxis VR-1 Michelin Pilot Sport 4S Michelin Pilot Sport Cup 2 (180TW) Michelin Pilot Sport Cup 2 Connect Nankang NS-2R Nexen Nfera SUR4 Nitto NT01 Nitto NT05 Toyo Proxes R888 Yokohama Advan AD08R
3	BFGoodrich g-Force Rival S Bridgestone Potenza RE71R Bridgestone Potenza RE71RS Continental ExtremeContact Force (ECF) Falken Azenis RT660 Goodyear Eagle F1 Supercar 3R

Maxxis Victra RC-1
 Maxxis Victra VR2
 Nankang AR-1
 Nankang CR-1
 Nexen N'Fera SUR4G
 Yokohama Advan A052

5	Treadwear 40–99
6	Racing slicks or any other unlisted tire

Engine & Drivetrain

Points	Modifications
0.5	Gen. 1 Aftermarket intake, header, front-pipe, overpipe, and/or any removal of OEM catalytic converter
0.5	Gen. 1 NA tune for less than or equal to 93 (R+M)/2 octane rating (non-OEM)
1.5	Gen. 1 NA tune for greater than 15% ethanol content or gasoline greater than 93 (R+M)/2 octane rating
0.5	Gen. 2 Aftermarket intake, header, front-pipe, overpipe, and/or any removal of OEM catalytic converter
1	Gen. 2 NA tune for less than or equal to 93 (R+M)/2 octane rating (non-OEM)
1.5	Gen. 2 NA tune for greater than 15% ethanol or gasoline greater than 93 (R+M)/2 octane rating
5	Forced induction and tune for less than or equal to 93 (R+M)/2 octane rating
2	Forced induction tuned for greater than 15% ethanol content or gasoline greater than 93 (R+M)/2 octane rating
0.5	Lighter than OEM rotational inertia flywheel, clutch and/or driveshaft
0.5	Non-OEM limited slip differential
1	Non-OEM Transmission
2	FA20 to FA24 engine swap
X	Any other engine swap or hybrid system (contact Rules Board for individual engine swap classing)

Front Aero

Points	Modifications
0	Small Front Aero: STI lip, TRD lip, or Any device that extends less than 50mm outward or rearwards from the bottom leading edge of the bumper
1	Medium Front Aero: Any device that extends 50 to 74mm outward or rearwards from the bottom leading edge of the bumper
1.5	Large Front Aero: Any device that extends 75 to 124mm outward or rearwards from the bottom leading edge of the bumper
3	Unlimited Front Aero: Any device that extends greater than 125mm outward, and any distance rearward from the bottom leading edge of the bumper

0.5 Canards/dive planes hood vents, fender vents, or any vertical deviation on splitter

Rear Aero

Points	Modifications
0	Really Small Rear Aero: OEM rear spoilers, OEM wings (excluding Gen. 1 tS wing), or Any aftermarket spoilers, wings and gurney flaps less than 60 mm in height
0.5	Small Rear Aero: Any aftermarket rear spoiler greater than 60 mm in height
1	Medium Rear Aero: Gen. 1 BRZ tS wing, SARD LSR, or Any wing with max width of 1400mm, max stand height of 200mm, max chord length of 200mm, and no added gurney flap
1.5	Large Rear Aero: APR GTC-200, Voltex Type 12, Voltex Type 1S, or Any wing with max width of 1460mm, max stand height of 245mm, and max chord length of 250mm
2	Unlimited Rear Aero: Wings with width greater than 1460mm, stand height greater than 245mm, or chord length greater than 250mm
0.5	Any rear diffuser that extends in front of the rear axle or behind rearmost point of the rear bumper

Suspension

Points	Modifications
0	OEM-style, off-the-shelf, non-adjustable dampers
0.5	Non-OEM springs
0.5	Adjustable dampers or modification to damper valving
0.5	Remote reservoirs

Weight Reduction

Points	Modifications
1	Removal of any interior trim pieces or seating not required for installation of a roll cage

Free Modifications

Points	Modifications
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- 0 Any in-cabin safety equipment
 - Any interior removal as needed to accommodate safety equipment
 - Any replacement drop-in air filter for OEM intake
 - Gen. 2 charcoal airbox filter removal
 - Intake resonator removal
 - Aftermarket radiator or oil-cooler
 - Aftermarket calipers, rotors, pads or brake ducting
 - Any interior removal as needed to accommodate safety equipment
 - Any alignment bolt/kit, bump steer kit, tie rod end, roll center adjuster
 - Any spherical bushings including strut top mounts
 - Any bolt-on chassis bracing
 - Any oil-catch can, oil baffle pan
 - Any transmission or diff cooling system
 - Any lightweight battery
 - Any cat-back (no removal of any catalyst) exhaust
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Prohibited Modifications

Points	Modifications
1,000	<ul style="list-style-type: none"> Active aero devices Active dampers Advanced driver-assistance systems (ADAS) system Aftermarket ABS or TCS, or modified driver assist firmware Air suspension Any non-aluminum or steel wheels (e.g. carbon fiber, magnesium, titanium) Any non-pump-gasoline or ethanol-gasoline fuel Changing to a different type of suspension (e.g. double A-arm, inboard shocks/springs) Cutting, removing, or reshaping exterior parts not required for pointed modifications
