



## 2023-2024 NORA Carpet Racing Rules

#### Revision History

Name	Rev	Date	Change
Briscoe/Robinson	01	9-15-2023	Initial Release, import old formatting, updated 2023/24 rules
Robinson	02	10/31/2023	Novice motor rules update. 21.5T motor removed.

### Introduction

Welcome to the 2023/24 indoor onroad carpet racing season! The rules and guidelines detailed in this document are meant not only to provide structure to the NORA carpet racing program, but also include helpful tips for racers to make the most of any particular class.

#### **NORA Executives and Contact List**

Onroad Director	Peter Robinson	(425) 309-5790	peter.abhs@gmail.com
Race Announcer	Jim Glasgow	(425) 359-2180	jimglasgow33@yahoo.com
Practice Director	Wes Briscoe	(425) 418-4957	wes462@gmail.com

#### **General Rules**

#### • Code of Conduct:

 NORA is a family friendly venue, and all are welcome and encouraged to enjoy RC racing together.

• All members and attendees are to retrain from all forms of unacceptable behavior not limited to:

- Harassment
- Bullying
- Discrimination
- Swearing or vulgar language
- Threats
- Violence
- Unsafe or Illegal activity

If you observe anything in violation of the above code of conduct, please immediately bring it to the attention of the Race Director or any other NORA executive or board member. Violation of this code of conduct can and/or will result in corrective action not limited to: warning, suspension, denied event entry, disqualification, and/or revocation of NORA membership.

#### • COVID-19 Policy:

o NORA asks that you use good judgment regarding COVID-19 or any contagious illness. This is an indoor venue where we will all be in close proximity to each other. If you are sick, we ask that you please stay home even if you are asymptomatic or only show mild symptoms. Please do not attend if you've tested positive for, or come in close contact with someone who has COVID-19. Please follow current CDC guidelines for quarantine if you have or have been exposed to COVID-19. Also please use good hygiene at the track. Wash and sanitize your hands often.

### **Track Rules**

#### Race Days:

- Doors open by 7:00am for practice
- Class specific practice sessions can be called by the race director as needed (example: Novice only, Mod 1/12 only, etc)
- Last call for race registration at 10:15am
- o Drivers meeting at 10:20am
- o Racing begins at 10:30am
- Race format:
  - Two rounds of IFMAR start qualifying
  - Resort after Round 1 by rocket round (i.e. a driver's individual fastest run)
  - Single main events from lowest to highest
    - Single bump-up for lower main winners
    - Maximum number of cars per main will be at the race director's discretion (based on class, track layout, driver skill, etc)

#### Practice Days:

- Practice day schedule will be the Saturday opposite of race days
- o Doors open by 9:00am for practice
- Class specific practice sessions may be ran depending on number of people attending sessions
- Doors close by 6:00pm

#### Race entry and practice fees:

- o Member:
  - Race Fee: \$20 first class, \$10 each additional class
  - Practice Fee: \$5 flat fee for practice days

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- o Seniors (ou+):
  - Race Fee: \$15 first class, \$10 each additional class
  - Practice Fee: \$5 flat fee for practice days
- Novice Class:
  - Race Fee: \$10 for the Novice Class
    - Practice Fee: \$5 flat fee for practice days

#### Corner Marshaling:

- o All racers are required to corner marshal for the race immediately following their own. (racers in the last race of a round, will be expected to corner marshal the first race of the round).
- o If you are unable to fulfill this requirement, you must find a suitable and physically capable replacement.
- o If you have a physical disability or injury that prevents you from fulfilling this requirement, please speak with the Race Director prior to the start of the event or during registration.
- o Please help the program to run efficiently by observing these requirements.

#### • Transponders and Timing System:

- NORA provide a MyLaps RC4 lap counting and timing system, using LiveRC
- o Personal transponders are highly recommended.
- Compatible Transponders include:
  - MyLaps 2-Wire Hybrid
  - MyLaps RC4 3-Wire
  - AMB Personal Transponders
- Limited quantity of house transponders are available with a collateral deposit (such as drivers license, car keys, etc)
- LiveRC: skagitriverraceway.liverc.com

#### Technical inspection:

- NORA incorporates an honor system for technical inspection/scrutineering.
- o The club and class specific rules set forth in this document are required
- o A self-tech inspection area will be provided trackside and it is encouraged that before each run, drivers will self-check their own vehicles for the following:
  - Chassis weight (see class rules for specific requirements)
  - Ride height (see class rules for specific requirements)
  - Battery Voltage (see rules for voltage limits)
- Spot checks may be required at any time by the Race Director and at their discretion to ensure conformity with the club rules and any applicable class specific rules.
- o Failure of tech inspection by the Race Director will result in disqualification of a racers results for that class for that round, and all rounds leading up to the failed inspection.

#### Batteries:

- ROAR Approved hard case lipo batteries only (see class specific rules for detail on cellcount).
- Lipo capable chargers must be used.
- o <u>Racers must charge batteries in Lipo safe cases, bags, or sleeves</u>. Charging with a battery in a vehicle is **not** allowed, and extremely dangerous.
- o Lipo batteries are not allowed to remain in the building between events.
- o LiPo battery maximum charge voltage (measured with all electronics turned OFF):
  - 1s LiPo batteries may be charged to a maximum of 4.20v
  - 2s LiPo batteries may be charged to a maximum of 8.40v.
- Racers found with batteries charged to a voltage higher than these maximum values may be subject to disqualification by the Race Director.
- These battery voltage maximums are a zero-tolerance policy, designed to promote a safe racing environment.

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- Allowable traction additives/sauce (in original bottles only) for all tires are:
  - SXT 3.0 (original feel, no cap label)
  - SXT 3.0 Lite (less-aggressive feel, White cap label)
  - SXT 3.0 Max (very aggressive feel, Red cap label)
- Tire cleaning is allowed, limited to:

- The traction additives/sauce listed above
- Simple Green
- Motor spray and/or low VOC brake cleaner
- Specific RC industry tire cleaners
- Water

#### • Pitting (i.e. Tables, Chairs, and other peripherals):

- o NORA has on-site power, and many club members provide tables on site, however everyone is encouraged to bring their own pitting peripherals not limited to:
  - Chairs
  - 4 to 6 foot folding tables
  - Power strips
  - Extension Cords
  - Pit mats (especially is using a table which is not your own)

### • Parking and Fairgrounds Etiquette

- o Racers must park in the gravel parking lot away from the building, or near building F where we race.
- Do not park near or around any other buildings.
- o Do not park or drive in grass. Drive slow and respect the neighbors.
- Please pack out as much of your garbage as possible and keep the area cleaner than you found it.
- o Smoking and vaping is not permitted within the building or within 25 feet of a building entrance.

## 2023 - 2024 Race Day and Practice Schedule

Below is the 2023-2024 racing and practice schedule. Much care and consideration is taken to forecast a schedule of events prior to the start of the season, these dates are subject to change (with as much advance notice as possible) as needed and as determined by the onroad director.

#### • Track Setup:

- 10/7/23 to 10/8/23 Exact schedule TBD. Subfloor, carpet, and drivers stand setup.
- o 10/14/23 to 10/15/23 Exact schedule TBD. Pit setup and free practice for helpers.
- 2023-2024 Points Series Racing Schedule Best 7 of 10 results to count for the 23/24 points series championship.
  - o Race 1 10/21/23
  - o Race 2 11/4/23

- Kace o 1/0/24
- o Race 7 1/20/24
- o Race 8 2/3/24
- o Race 9 2/24/24
- Race 10 3/9/24 (Points Series Finale Awards to follow)
- 2023-2024 Practice/Test & Tune Day Schedule Unless otherwise communicated in advance, doors open at 9am and close at 6pm.
  - o Practice 1 10/28/23
  - o Practice 2 11/11/23
  - o Practice 3 11/25/23
  - o Practice 4 12/23/23
  - o Practice 5 12/30/23
  - o Practice 6 1/27/24
  - o Practice 7 2/10/24
  - o Practice 8 3/2/24

### **Class Specific Rules**

These class rules are designed to create a fun and fair racing environment, with steps in progression for racers of all skill levels to compete and grow (i.e. Novice, Sportsman, Intermediate, and Expert). Each chassis type with more than one class is designed to provide an avenue for a new racer to progress and move up to more advanced classes, with the previous class building a foundation for the next.

#### Novice:

• **Novice** - This is the class to enter for all first-time and inexperienced racers who are just starting out. A pseudo "run-whatcha-brung" format, intended to get new drivers on the track with minimal investment and just have some fun learning to get around the track with their peers. (Skill level restriction: Novice Only)

Class rules for that chassis type.  Motor:  Any 25.5T motor for 1/10 scale cars (17.5T motors allowed if using a 1/12 scale chassis). First time racers may "run whatcha brung" but throttle end points may be limited to control top speed at the race director's discretion. Novice's are encouraged to use a 25.5T motor.  Gearing:  Open. See a NORA club member for help with starting gearing.  ESC:  Any ESC in "Blinky" or non-timing mode.			
throttle end points may be limited to control top speed at the race director's discretion. Novice's are encouraged to use a 25.5T motor.  Gearing:  Open. See a NORA club member for help with starting gearing.  ESC:  Any ESC in "Blinky" or non-timing mode.  ROAR Approved Hardcase 2s Lipo (1/10 scale cars), or 1S Lipo (1/10)	Chassis:	Any 1/10 or 1/12 chassis, consistent with the equivalent NORA stock class rules for that chassis type.	
ESC: Any ESC in "Blinky" or non-timing mode.  Battery: ROAR Approved Hardcase 2s Lipo (1/10 scale cars), or 1S Lipo (1/10 scale cars)	Motor:	Any 25.5T motor for 1/10 scale cars (17.5T motors allowed if using a 1/12 scale chassis). First time racers may "run whatcha brung" but throttle end points may be limited to control top speed at the race director's discretion. Novice's are encouraged to use a 25.5T motor.	
Battery: ROAR Approved Hardcase 2s Lipo (1/10 scale cars), or 1S Lipo (1/1	Gearing:	Open. See a NORA club member for help with starting gearing.	
	ESC:	Any ESC in "Blinky" or non-timing mode.	
	Battery:	ROAR Approved Hardcase 2s Lipo (1/10 scale cars), or 1S Lipo (1/12 scale cars)	
Weight: N/A	Weight:	N/A	
Ride Height: 5mm min (1/10 scale cars), or 3.5mm min (1/12 scale cars)	Ride Height:	5mm min (1/10 scale cars), or 3.5mm min (1/12 scale cars)	
Bodies: See class rules for closest related chassis type for suggestion.	Bodies:	See class rules for closest related chassis type for suggestion.	

Race Length:	5 min
Main Event Capacity	8 drivers
Other Notes:	The Race Director may implement a minimum break-out lap time, or racers may be asked to turn down the throttle end point of their radio, in order to limit the top speed of their car and in order to limit speed to a lower pace manageable by new racers.
Suggested traction application:	Apply fully to front/rear tires 15 minutes prior to running, wipe off until mostly dry. Clean with traction compound, approved cleaner, or simple green after running.

### **Eurotruck:**

• Eurotruck (TCS Spec) - This is a box stock Tamiya TCS compliant class, and is a great way to introduce someone new to the hobby. The racing is fun, competitive, and inexpensive. The close racing and low cost make this class appealing to racers of all skill levels. If not outlined here, Tamiya TCS rules apply. (Skill level restriction: Novice to Expert)

Chassis:	Item 58632 Team Hahn Racing MAN TGS, 58642 Team Reinert Racing MAN TGS, 58661 Buggyra Racing Fat Fox, and 58683 Tankpool24 Mercedes Actros
Motor:	Kit supplied 54358 RS-540 motor only.
Gearing:	Kit provided pinion and spur only

Battery:	Reedy Wolfpack or Peak Racing Powermax round-case Tamiya compliant hard case Lipo allowed. ROAR Approved hardcase 2S 6200 Lipo allowed. Connector may be changed to DEANS type or XT60.
Weight:	No minimum. No ballast weights may be added.
Ride Height:	Chassis and body must not drag on the carpet.
Bodies:	Item 58632 Team Hahn Racing MAN TGS, 58642 Team Reinert Racing MAN TGS, 58661 Buggyra Racing Fat Fox, and 58683 Tankpool24 Mercedes Actros bodies only.
Tires:	Kit tires and wheels ust be used Tires may be glued to the wheels.
Traction Compound:	Allowed
Other Notes:	TCS rules apply. Only hop-up allowed is ball bearings. Tamiya battery plugs can be changed. Motor bullets must remain. All body parts must be used.
Suggested traction application:	Apply traction compound for 5-15 minutes, wipe dry before running. Clean tires after running with an approved cleaner.

### Pan Cars:

• GT12 - This is a limited/spec controlled class where the cars run the same tire, gear ratio, and motor. This is the easiest pan car class in terms of power system setup, allowing the driver to focus on chassis preparation and driving. While this class is meant as an introduction to 1/12 pan car racing, the scale appearance of the bodies and close racing on track make it appealing to racers of all skill levels. (Skill level restriction: Sportsman to Expert)

Chassis:	Any 1/12 pan car style chassis.
Motor:	Hobbywing Justock FTM 17.5 (PN 30408011, 2450kv) Discount code: NORAHOBBYWING
Gearing:	1.80:1 final ratio (72/40 or 81/45)
ESC:	ROAR Approved 'blinky' non-timing
Battery:	ROAR Approved Hardcase 1s Lipo
Weight:	750g min
Ride Height:	3.5mm min
Bodies:	GT-style 1/12 bodies only. 50g minimum weight. Scale realism is encouraged.
Tires:	SJT Pre-mounted rubber tires only. No modification, sanding, or retruing is permitted. Discount Code: NORA2324
Traction Compound:	Allowed

Other Notes:	Regular ROAR chassis rules apply for width/height.	
Suggested traction application:	Apply fully to front/rear tires 10 minutes prior to run, wipe off until mostly dry. Clean with traction compound, approved cleaner, or simple green after running.	

• 1/12 17.5T Stock - This is the next progression in 1/12 pan car racing. Faster speed, better grip, and ability to change roll out and tune motors will give racers the ability to tune more and learn in a faster environment. (Skill level restriction: Sportsman to Expert)

Chassis:	Any 1/12 pan car style chassis.	
Motor:	ROAR Approved 17.5 stock motor.  Suggested motors:  • R1Wurks V21-S 17.5 (P/N 020077-3)  • Trinity Slot Machine 17.5 (P/N TRITEP2022)  • Hobbywing V10 G4 17.5 (P/N HWA30401141)	
Gearing:	Open (80-90mm suggested starting rollout.)	
ESC:	ROAR Approved 'blinky' non-timing.	
Battery:	ROAR Approved Hardcase 1s Lipo	
Weight:	730g min	
Ride Height:	3mm min	
Bodies:	Any ROAR/IFMAR approved 1/12 LMP style body.	
Tires:	Purple/blue stripe 1/12 "spec" tires, any manufacturer. No limit on size.  Recommended starting size: 42mm rear / 41mm front	
Traction Compound:	Allowed	
Race Length:	8 min	
Main Event Capacity	8 drivers	
Other Notes:	Regular ROAR chassis rules apply for width/height.	
Suggested traction application:	Apply fully to rear tires 20-45 minutes prior to run, apply to fronts 8-15 minutes prior to run. Clean tires after your run with traction compound, approved cleaner, or simple green.	

Chassis:	Any 1/12 pan car style chassis.
Motor:	6.5T limit. Any ROAR approved modified or spec brushless motor up to the 6.5T limit. Suggested motors:  • Hobbywing V10 Motor G3 6.5T On-Road Spec (P/N 30401123)
Gearing:	Open (55mm suggested starting rollout.)
ESC:	ROAR approved 'blinky' non-timing.
Battery:	ROAR Approved Hardcase 1s Lipo
Weight:	730g min
Ride Height:	3.5mm min
Bodies:	Any ROAR/IFMAR approved 1/12 LMP style body.
Tires:	Open
	Recommended starting size: 42mm rear / 41mm front
Traction Compound:	Allowed
Race Length	8 min
Main Event Capacity	8 Drivers
Other Notes:	Regular ROAR chassis rules apply for width/height.
Suggested traction application:	Apply fully to rear tires 20-45 minutes prior to run, apply to fronts 8-15 minutes prior to run. Clean tires after your run with traction compound, approved cleaner, or simple green.

• WGT-10R (NORA Spec) - This is a pan car class utilizing rubber tires for cost-effective and fun racing, and scale prototype and LeMans style bodyshells for scale realism. This is an intermediate class, with appeal for all skill levels. (Skill level restriction: Sportsman to Expert)

Chassis:	Any 1/10 pan car style chassis (WGT)	
Motor:	ROAR Approved 21.5T motors. No endbell timing restrictions.	
	Suggested motors:  • R1Wurks V21-S 21.5 (P/N: 020078-3) • Trinity Slot Machine 21.5 (P/N: TEP2023E) • Hobbywing V10 G4 21.5 (P/N: 30401142) • Motiv MC4 21.5 (P/N: MOV40215)	
Gearing:	Open	

Woight:	1025a min
Weight:	1025g min
Ride Height:	5mm min
Bodies:	ROAR Approved GT style, USVTA, USGT, Street Spec, or Scale bodies only (LMP wedge style bodies not allowed).
Tires:	CRC RT-1 Tires, CRC GTR Rims, CRC stock/factory inserts (P/N: 2311 Front, 2312 Rear, and 2314 Pre-mounted set) only.
Traction Compound:	Allowed
Race Length	5 min
Main Event Capacity	8 Drivers
Other Notes:	Regular ROAR chassis rules apply for width/height.
Suggested traction application:	Apply fully to rear tires 15-20 minutes prior to run, apply to fronts 8-15 minutes prior to run. Clean tires after your run with traction compound, approved cleaner, or simple green.

• Formula 1 - This is a pan car class featuring open-wheel Formula 1 inspired racing chassis and scale realism. This is an intermediate class, with appeal for all skill levels. (Skill level restriction: Sportsman to Expert)

Chassis:	Any 190mm 1/10 rear-wheel drive formula 1 pan car chassis
Motor:	ROAR Approved 21.5T motors. No endbell timing restrictions. Tamiya silver can 540 motors are allowed.
	Suggested motors:  • R1Wurks V21-S 21.5 (P/N: 020078-3) • Trinity Slot Machine 21.5 (P/N: TEP2023E) • Hobbywing V10 G4 21.5 (P/N: 30401142) • Motiv MC4 21.5 (P/N: MOV40215)
Gearing:	Open
ESC:	ROAR approved 'blinky' non-timing.
Battery:	ROAR Approved Hardcase 2s "Shorty" Lipo
Weight:	1050g min
Ride Height:	4mm min
Bodies:	Any Formula 1 style body intended for 1/10 scale Formula 1 pan car chassis.
Wings:	Front and Rear wings to scale, and intended for 1/10 scale F1 cars
Tires:	F1 scale rubber tires only.
Traction Compound:	Allowed

Other Notes:	Regular ROAR chassis rules apply for width/height where applicable
Suggested traction application:	Apply fully to rear tires 15-20 minutes prior to run, apply to fronts 8-15 minutes prior to run. Clean tires after your run with traction compound, approved cleaner, or simple green.

## **Touring Cars:**

• **USGT (NORA Spec)** - This is a limited/spec controlled class where the cars implement bodies that bring a scale realism not seen in other TC classes. This is an excellent progression class from novice in terms of power system setup, allowing the driver to focus on chassis preparation and driving. The scale appearance of the bodies and close racing on track make it appealing to racers of all skill levels. (Skill level restriction: Sportsman to Expert)

Chassis:	Any 1/10 190mm 4WD or FWD touring car chassis.
Motor:	ROAR Approved 25.5T motors or Tamiya Silvercan 540.
Rotor:	12.3mm rotors only
Gearing:	Open
ESC:	ROAR Approved 'blinky' non-timing
Battery:	ROAR Approved Hardcase 2s Lipo
Weight:	1350g min (FWD no minimum weight)
Ride Height:	5mm min
Bodies:	USGT style bodies required, with realistic racing livery encouraged. Bodies that include a rear deck spoiler may use it. USGT may run included rear wings, or optional wing sets that emphasize scale realism. FWD cars must use FWD bodies. No GT2 or "Mazda" style bodies
Tires:	Gravity USGT (gray rim) pre-mounts only (P/N GRC123). Legacy tires from 2022 rules will be allowed during change over.
Traction Compound:	Allowed
Race Length:	5 min
Main Event Capacity	8 drivers
Other Notes:	USGT chassis rules apply where not otherwise noted.
Suggested traction application:	Apply fully to front/rear tires 15 minutes prior to your run. Wipe off until mostly dry. Clean with traction compound, approved cleaner, or simple green after running.

• Vintage Trans-Am (NORA Spec) - This is a limited/spec controlled class where the cars run the same tire, motor, and implement bodies that bring a scale vintage realism not seen in other TC classes.

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Chassis:	Any 1/10 190mm 4WD touring car chassis.
Motor:	ROAR Approved 25.5T motors or Tamiya Silvercan 540.
Rotor:	12.3mm rotors only
Gearing:	Open.
	Suggested starting FDR: 3.6
ESC:	ROAR Approved 'blinky' non-timing
Battery:	ROAR Approved Hardcase 2s Lipo
Weight:	1380g min
Ride Height:	5mm min
Bodies:	Late '60s to early '70s American pony car Vintage Trans-Am Trans-Am style bodies are required, with scale realism encouraged. No USGT or other style TC bodies allowed. If a body includes a rear deck spoiler, it may be used.
Tires:	ProtoForm (P/N: 10139-00 Rear and P/N:10140-00 Front) or HPI Vintage tires required.
Traction Compound:	Allowed
Race Length:	5 min
Main Event Capacity	8 drivers
Other Notes:	USVTA chassis rules apply where not otherwise noted.
Suggested traction application:	Apply fully to front/rear tires 15 minutes prior to your run. Wipe off until mostly dry. Clean with traction compound, approved cleaner, or simple green after running.

• Stock 21.5T TC - This is a competitive spec controlled class where the cars run the same tire and motor. Stock TC is a progression in power level and competition from the USGT and VTA classes. (Skill level restriction: Intermediate to Expert)

Chassis:	Any 1/10 190mm 4WD touring car chassis.
Motor:	ROAR Approved 21.5T motors. No endbell timing restrictions.  Suggested motors:  • R1Wurks V21-S 21.5 (P/N: 020078-3)  • Trinity Slot Machine 21.5 (P/N: TEP2023E)  • Hobbywing V10 G4 21.5 (P/N: 30401142)  • Motiv MC4 21.5 (P/N: MOV40215)
Rotor:	ROAR Approved turning rotors allowed (specific to the motor in use)
Gearing:	Open (Suggested starting ratio 2.1, or 4.0 FDR. Example: 42/90)

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Weight:	1320g min
Ride Height:	5mm min
Bodies:	Any ROAR approved 190mm Touring Car bodyshell.
Tires:	Gravity G-SPEC Type C Rubber touring car tires, Gravity RC Edge wheel (P/N: GRC132. Available from the club for a discounted price)
Traction Compound:	Allowed
Race Length:	5 min
Main Event Capacity	8 drivers
Other Notes:	ROAR chassis rules apply where not otherwise noted.
Suggested traction application:	Apply fully to front/rear tires 15 minutes prior to your run. Wipe off until mostly dry. Clean with traction compound, approved cleaner, or simple green after running.

# • Modified TC - This is the fastest touring class that NORA offers, and the only spec controlled components are the tires. (Skill level restriction: Expert Only)

Chassis:	Any 1/10 190mm 4WD touring car chassis.
Motor:	Open. No endbell timing restrictions.
	Suggested motor wind - 5.0T
Rotor:	ROAR Approved turning rotors allowed (specific to the motor in use)
Gearing:	Open gearing.
	Suggested gearing: <b>4.5T</b> : 27/110   <b>5.0T</b> : 28/110   <b>5.5T</b> : 29/110 (7.6 FDR)
ESC:	No restrictions. Turbo and Boost allowed.
Battery:	ROAR Approved Hardcase 2s Lipo
Weight:	1320g min
Ride Height:	5mm min
Bodies:	Any ROAR approved 190mm Touring Car bodyshell.
Tires:	Gravity G-SPEC Type C Rubber touring car tires, Gravity RC Edge wheel (P/N: GRC132. Available from the club for a discounted price)
Traction Compound:	Allowed
Race Length:	5 min

Suggested traction application:	Apply fully to front/rear tires 15 minutes prior to your run. Wipe off until mostly dry. Clean with traction compound, approved cleaner, or simple green after running.
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