

GRAVITY CLASS RULES

1. Cars must be brass weighted, inline motor chassis manufactured by BSRT, Slottech, or Wizzard High Performance. Eligible chassis include the Viper V1, BSRT G3, G3R or G3RS, Slottech Panther Jet and Thundercat T2-Jet, and the Wizzard Thunderstorm. Chassis may be flexible, medium or stiff.
2. Each car must have the rear traction magnets replaced by brass traction weights as manufactured by the chassis manufacturer for that chassis. Heavy or light weights may be used if offered by the chassis manufacturer for that chassis. If light weights require spacers, then spacers as provided by the chassis manufacturer must be used.
3. Each car must have a front brass weight(s) as made by the chassis manufacturer for that specific chassis.
4. Chassis may not be modified, except to add body mounts, and add axle retainers.
5. Glue may not be used except to add body mounts, retain the guide pin, or to act as "Loctite" for the BSRT G-Jet front weight screw.
6. Front/rear weights may not be modified.
7. Aftermarket weights and non-brass weights are not allowed.
8. Extended length guide pins are allowed.
9. The armature must be stock or a hot stock production red wire with crimp/folded/welded tabs. The commutator may be trued, epoxied, and advanced timed. Small cuts or drill marks may be made for balancing only. No machining/cutting along the entire length or circumference of the lams/stacks. Excessive removal of material to reduce weight is not allowed. Minimum 5.8 ohms. No dewinding, rewinding, or soldered tabs.
10. Motor magnets must be level 4 grade (see chart for Spec-Stock). Magnets may not be cut or restricted by any artificial means. No additional magnets may be used.
11. Armature bushings may be metal or plastic, and must be generally available. Bushings may be reamed and chamfered. Ball bearings are not allowed.
12. Front rims must be plastic or aluminum. Front tire height is open. Chassis front axle holes may be reamed to 0.052"
13. Independently rotating front rims are allowed.
14. Rear tire material, coating and height is open.
15. The maximum allowable lateral movement of the front axle is 1/32 inch. Axle spacers may be used.
16. The maximum width of the car is 1-5/16" (1.3125").
17. Rear rims and the crown gear may be lightened. Spacers may be added to the rear axle to adjust gear mesh. Gear boss is permitted.
18. Any electrical system must be as provided by the chassis manufacturer. Bigfoot brush systems are allowed. Pickup travel may be limited. Helper springs are allowed. Plating is allowed. Shunts are not allowed.
19. Body may be lexan or injection molded.
13. Track voltage will be 12.0 volts.

SPEC STOCK CAR CLASS RULES

Legal chassis are: BSRT G3/G3R/G3RS, Slottech T1/T2/T3, Wizzard Storm, Viper V1

1. Chassis must be stock and cannot be modified in any way except to cut off molded in body posts and drill holes for axle retainers.
2. All magnets must be "HOPRA Approved" stock ceramic or "compression molded ceramic grade polymer" and cannot be cut.
3. The gauss reading taken in the center of the traction or motor magnet shall not exceed the following criteria. This is taken after 5 min cool down period and at the lowest point on each magnet as it runs parallel to the rail. Any reading above these figures will be cause for disqualification or rejection at tech.
3. The armature must be stock or a hot stock production red wire with crimp/folded/welded tabs. The commutator may be trued, epoxied, and advanced timed. Small cuts or drill marks may be made for balancing only. No machining/cutting along the entire length or circumference of the lams/stacks. Excessive removal of material to reduce weight is not allowed. Minimum 5.8 ohms. No dewinding, rewinding, or soldered tabs.
4. The electrical system must be stock or stock replacement for the car. Plated parts are not allowed unless they are stock for the car. The use of big foot brushes or twisted endbells is not allowed.
5. The rear axle and guide pin must be stock. 7/23 gear ratio only is allowed. The front wheels, tires and axle may be any readily available parts. Rear may be readily available solid silicon/rubber replacement tires. Rear wheels may be readily available, double flanged replacement wheels.

Allowed magnets for Spec-Stock (level 4 motor and traction)

Manufacturer	Part#	Description	Chassis Type
Viper	100-mtr 100-trc	Pro 4 motor Magnets Pro 4 Traction Magnets	Viper V1
Wizzard	WS60 WS61	Storm Motor Magnets Storm Traction Magnets	Wizzard Storm
Slottech	81C 86C	G6 Motor Magnets G6 Traction Magnets	Thundercat T3
BSRT	277 290 284	G-Force C4 H-D Motor G-Force C4 Motor G-Force C4 Traction	G3/G3r/G3rs
Viper	103-mtr 103-trc	Pro 4 Motor Magnets Pro 4 Traction Magnets	G3/G3r

MODIFIED CLASS RULES

[Legal chassis are: BSRT T2/G3/G3R/G3RS, Mattel/Tyco 440x2, Slottech Panther/Panther 02, Thundercat T3, Tomy AFX Super G+, Wizzard Storm, Viper Scale Racing V1].

1. The chassis shall be stock, readily available, and cannot be machined, sanded, or cut except to provide the following:

- a. Add body mounts
- b. Reinforce and/or replace pickup tabs
- c. Add adjustable brush tension
- d. Add axle retainer

2. Only compression molded polymer magnets may be used.

a. The definition of a polymer magnet can be found in Section O. Definitions.

b. The expected gauss reading taken in the center of the traction or motor magnet shall not exceed the following criteria. The is taken after a 5-minute cool down period and at the lowest point on each magnet as it runs parallel to the rail. Any reading above these figures will be cause for disqualification or rejection at tech.

i. Traction: 2300 gauss maximum

ii. Motor: 2000 gauss maximum

c. See the chart in this section for specific approved manufacturer part numbers.

3. The use of glue shall not be allowed on the chassis, magnets, or bulkheads except for the body mounts, guide pin and armature bushings.

4. Other nonmagnetic material may be employed to restrict the movement of the magnets.

5. The use of flux collectors shall not be allowed

6. The armature must be a production armature. The commutator and laminations may be trued, epoxied, and advance timed. Small cut or drill marks may be made for balancing only. Minimum 2.5 ohms (measured pole to pole with armature removed from car and checked after a 5-minute cool down period). No dewinding, rewinding, or soldered tabs.

7. Electrical systems shall be stock replacement. Adjustable brush tension is allowed. Plated parts are allowed. Shunt wires and soldering of parts is not allowed. Electrical parts may be lightly sanded for cleaning purposes only.

8. Rear tires may be readily available solid silicon/rubber replacement tires. Rear wheels must be readily available, double flanged replacement wheels.

9. The front wheels, tires and axle may be any readily available parts.

10. There are no restrictions on armature bushings (may be glued in). Ball bearings are not allowed.

11. There are no restrictions on guide pin, gears, axles.

Allowed magnets for Modified (level 4 motor, level 10 traction)

Manufacturer	Part#	Description	Chassis Type
Viper	100-mtr 100-trc 200-trc	Pro 4 motor Magnets Pro 4 Traction Magnets Pro 10 Trac Magnets	Viper V1
Wizzard	WS60 WS61 MHP061 MHP67	Storm Motor Magnets Storm Traction Magnets High Level Trc Magnets Level 10 Trc Magnets	Wizzard Storm
Slottech	81C 86C 86	G6 Motor Magnets G6 Traction Magnets G13 Traction Magnets	Thundercat T3
BSRT	277 290 284 286	G-Force C4 H-D Motor G-Force C4 Motor G-Force C4 Traction G-Force P10 Trc Mags	G3/G3r/G3rs
Viper	103-mtr 103-trc 203-trc	Pro 4 Motor Magnets Pro 4 Traction Magnets Pro 10 Trc Magnets	G3/G3r

2017 Summer HO POINTS SERIES

Tuesday nights

	Gravity	Spec-Stock	Modified
30-May	1	2	
6-Jun		1	2
13-Jun	1		2
20-Jun	1	2	
27-Jun		1	2
4-Jul	no races		
11-Jul	1		2
18-Jul	1	2	
25-Jul		1	2
1-Aug	1		2
8-Aug	1	2	

Two drops per each class

Plaques for overall points, and class championships

Note: one drop in class championships

1=first race 2=second race

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