

# FLY/FLYSLOT/SLOTWINGS 2019 “Classics” NORTH AMERICA FINALS RULES

## DATE/TIME:

North America Finals Event: June 1, 2019

## ELIGIBLE DRIVERS:

Racers must confirm interest in participating by contacting Robert Holt phone (908-397-7886) or e-mail (holtr371@yahoo.com) prior to May 30, 2019. All drivers should take note that the following rules will be utilized and enforced.

## ELIGIBLE CARS:

Only the following Fly (including GB Track), Flyslot, and Slotwings “Classics” brand cars as raced in the World Championship of Manufactures and at Le Mans from 1969 – 1971 are permitted – Chevron B19, Chevron B21, Ferrari 250LM, Ferrari 512S (Spyder, Berlinetta, Coda Lunga), Ford GT40, Ford GT40 Mk II, Lola T70 Mk. 3B, Porsche Carrera 6 (906), Porsche 908, Porsche 908/2, Porsche 908/2 Flunder, Porsche 908/2 Flunder LH, Porsche 908/3, Porsche 917K, and Porsche 917LH. As new cars are introduced they will be reviewed and added. Kits must be complete with all the parts that come in the kit, excepting those changes allowed below. See picture below for eligible car examples:

## Fly/Flyslot/Slotwings LeMans Classic



## GENERAL:

Any modifications or parts not specifically addressed in the series rules or are not listed in the approved parts list are not legal and will not be permitted. If the rules stated on this page do not indicate a part or tuning method IS allowed, it is NOT allowed. Any variations to these rules must be approved in advance by GTSLOTS. All rules are subject to change.

## THE BODY:

Bodies may not be modified, lightened, or cut in any way – including wheel wells, body posts, interiors, etc.

EXCEPTIONS: Sharp edges and burrs may be trimmed or sanded slightly to permit clearance for the proper seating of the body onto the chassis and to allow for body float. All cars must start each race with all parts intact except for exhaust pipes, mirrors, wipers, and antennas. All cars must start with all rear wings and/or spoiler(s) in place as applicable if it came on the original model. Bodies and interiors can be custom painted, but all cars must have proper numbers and markings as is prototypical and look like race cars. Bodies must be attached by any and all screws locations provided by the factory, using any manufacturer's screws, and shims are permitted to adjust chassis/body/spur gear/tire tweak and clearance. If body screws are run loose, tape must be placed over the screw holes in the bottom of the chassis. All cars must use the complete and unmodified interior w/driver figure as supplied with the car. The front edge of the interior, front interior mounting posts, and detail mounting posts may be modified sufficiently only to allow clearance of a full front axle or do-it-yourself stub axles in replacement of the stock stub axles. An "in-line" body may only be used with an "in-line" chassis unless all missing detail/interior parts are replaced with those used on a sidewinder body of the same type car. All windows must remain transparent as is prototypical.

## CHASSIS/PODS:

Only Fly, Flyslot, and Slotwings in-line and sidewinder (with and w/o pod) type chassis. NO TRACTION MAGNETS. Sanding edges of chassis for float is legal. No more than .010" of material should be removed. If a standard credit card can be passed in the gap between the body and chassis, the sanding has exceeded tolerance and the car may fail inspection. NO modifications to axle mounts front or rear are permitted. Front axle ride height adjusting blocks must be in place if included in original model. (Note: chassis may not be modified in any manner to fit gears.)

## AXLES\BUSHINGS\WHEELS\TIRES:

Fly, Flyslot, Slotwings, or any other manufacture's 3/32" axles, axle stoppers, and bushings (no ball bearings or offset bushings except as noted) are allowed. Bushings may be glued in place. Front stub axles may be replaced with a single axle of the correct length, stub axles fabricated from a shortened axle and axle stopper, or equivalent. (Note: on the Chevron the front body post mount prevents the use of a single axle.) Axle shims are permitted. Stock front and rear wheels and/or any style (or color) C. B. Design wheels (front – 15mm x 8mm only/rear – 15mm x 11mm only) are allowed. Stock plastic wheels may be lightly sanded for the purposes of truing. Wheels may be painted. CA (Super) glue may be used to repair loose or attach plastic wheels. Fly/Flyslot/Slotwings stock or Slot.it tires may be used on the front. Front tires may be both glued and trued. All rear tires to be supplied by GTSLOTS on race day unless otherwise noted. Note: some rear bushings may require the removal (or notching) of the bearing flange where it comes into contact with the motor can and will be permitted only in the sidewinder chassis cars for the proper seating and alignment of the motor in the rear motor pod assembly. See picture below:



Approved rear tires are:

"Quick Slicks" tire(s) #CB46 (.780"x.435"), #CB47 (.797"x.433"), #CB48 (.813"x.441), or #CB49 (.828"x.441"). Rear tires may extend past body by no more than .5mm. (.020"). No chemicals may be used on the tires. Tires are subject to change at the Finals and due to availability some tire sizes may not be available.

## GEARING:

ONLY the Slot.it 12 tooth 6.5 mm pinion and the 34/36/38 tooth (ratios – 2.83/3.00/3.17) 19 mm sidewinder spur gears for sidewinder configured cars and the Slot.it 8 tooth 5.5 mm pinion and the 23/24/25/26 tooth (ratios –

2.88/3.00/3.13/3.25) in-line spur (standard or offset) gears for in-line configured cars are permitted. Driver may apply grease to the gears.

### **GUIDE BLADES/BRAID/ELECTRICAL:**

Only the Fly/Flyslot/Slotwings stock guide blade is allowed and shimming is permitted. Any manufactures' braid and lead wire may be used and must be attached to the guide blade through the use of any manufactures' eyelets or the M2 grub screw method. (Note: the lead wires may be soldered directly to the eyelets only and may not be glued or soldered to the braid). Wires may be held in place and supported on the chassis using tape, heat shrink tubing, and/or silicone adhesive.

### **ALLOWED MODIFICATIONS TO THE CHASSIS/BODY:**

In order to foster competition and create parity between the different models and drive configurations of Fly/Flyslot/Slotwing cars, the following approved modifications are being permitted on a car by car basis (Note: all modifications should be made in a clean and professional manner and not deter from the proper "look" of the car):

#### General (all cars):

- It has been found that the motor wires should be routed over the pinion side of the motor and not over the motor can so as not to cause interference (pinching) with the underside of the car body. (Note: no material may be removed from the interior or detail parts for clearance of the motor wires except at the point of contact where the wires are soldered to the motor tabs and only sufficient to permit the proper seating of the body to the chassis.)
- If using fabricated stub axles, some cars may require material removed from mounting posts for interiors and other body details for clearance of stub axle parts.

#### Chevron B19/B21 (sidewinder):

- The engine air intake trumpet detail that resides between the inside of the body and top surface of the electric motor may be trimmed to allow clearance to the motor for pod and body float.

#### Ferrari 250LM (sidewinder):

- The pinion gear may be narrowed to a thickness of .110" or tapered at the end to allow clearance for removal of the pinion and to clear the gear side rear tire inner edge.

Ferrari 512S (sidewinder): none required at this time

#### Ferrari 512S Coda Lunga (in-line):

- The area on the bottom of the interior tray assembly between the driver and the bottom of the air intake detail of the engine may be shaved to allow clearance for the top of the electric motor can (including tape to secure the motor in place) to allow the chassis to fully seat in place within the body and to allow for proper body float.

#### Ferrari 512S Coda Lunga (sidewinder):

- Rear body "trim tabs" are optional.

Ferrari 512S Berlinetta (sidewinder): none required at this time

Ford GT40 (sidewinder): none required at this time

#### Ford GT40 Mk II (in-line):

- Avant Slot 0.5mm offset axle bushings may be used to adjust issue with alignment of motor shaft and rear axle.
- The area on the bottom of the interior tray assembly beneath the driver and the bottom of the air intake detail of the engine may be shaved to allow clearance for the top of the electric motor can (including tape to secure the motor in place) to allow the chassis to seat in place within the body and to allow for proper body float. (Note: sufficient material must remain to support the driver portion of the interior.)

Ford GT40 Mk II (sidewinder): none required at this time

#### Lola T70 Mk. 3B (in-line):

- The exhaust pipe openings on the rear of the body may be extended to the bottom of the body so as to allow for the chassis to properly seat in the body.

- Avant Slot 1.0mm offset axle bushings may be used to adjust issue with alignment of motor shaft and rear axle.

Lola T70 Mk. 3B (sidewinder): none required at this time

#### Porsche Carrera 6 [906] (sidewinder):

- The pinion gear may be narrowed to a thickness of .110" or tapered at the end to allow clearance for removal of the pinion and to clear the gear side rear tire inner edge.

Porsche 908 (sidewinder): none required at this time

Porsche 908 Flunder (sidewinder): none required at this time

Porsche 908 Flunder LH (sidewinder): none required at this time

Porsche 908/2 (sidewinder): none required at this time

Porsche 908/3 (sidewinder): none required at this time

Porsche 917K (in-line):

The area on the bottom of the interior tray assembly between the driver and the bottom of the cooling fan detail of the engine may be shaved and/or removed to allow clearance for the top of the electric motor can (including tape to secure the motor in place) to allow the chassis to fully seat in place within the body and to allow for proper body float.

Porsche 917K (sidewinder): none required at this time

Porsche 917LH (in-line):

The area on the bottom of the interior tray assembly between the driver and the bottom of the cooling fan detail of the engine may be shaved and/or removed to allow clearance for the top of the electric motor can (including tape to secure the motor in place) to allow the chassis to fully seat in place within the body and to allow for proper body float. In addition the surface of the spare tire and/or the under body tail section where the two parts come into contact may be shaved to allow for body float.

Porsche 917LH (sidewinder): none required at this time

### **MOTOR:**

Motors provided by the racers themselves (GTSLOTS black and/or white endbell short can also known as the Piranha 21.5k – rated 21.5k @ 12volts) using the appropriate Slot.it 12 tooth or 8 tooth pinion. All motors will be tested for RPM as part of the tech inspection process with a maximum not to exceed \_\_\_\_\_ RPM. (Note: spec will be provided and adjusted accordingly as motors are tested at the event.) No chemicals (example: Voo Doo drops, etc.) shall be added to the motors. For the sole purpose to hold the motor in place, motors may ONLY be attached in place in the motor pod or chassis by using a single piece of tape and/or removable glue supplied by the racer. Holes may be cut out of the tape to allow for cooling over the motor vent holes.

### **WEIGHT:**

Weight may be added to the inside of the chassis. Added weight may not be utilized to alter the function or movement of the front or rear axles. NO weight may be attached to the underside of the chassis.

**LIGHTING (Optional):** May not be added.

### **TRACK VOLTAGE:**

Track power will be set at 12 volts for the N. America finals.

### **RACE PROCEDURES:**

- All participating race cars will be inspected to ensure rule compliance. A few test laps (the number to be determined by the race organizer) will be allowed prior to the final inspection.
- It is the responsibility of each participant to make sure that the front spoiler, chassis, and spur gear of their car has sufficient clearance to the track and pickup rail surface so as not to rub under race conditions and will be inspected for such clearance.
- Loose parts, wheel inserts, etc. may be attached and/or repaired using any type of available glue.
- Cars will be impounded after the inspection process and drivers cannot touch their cars unless done under “green flag” race conditions under the observation of a race official.
- Any controller is permitted, provided that the controller does not store an electrical charge.
- The race director for the event (the race organizer holding the event) will have the final determination if any questions or conflicts arise.
- Drivers and/or their authorized representatives may repair broken or damaged cars (IE: damaged braids, broken wires, loose gears and/or wheels, lose or missing screws, etc.) during “green flag” conditions, only under the view of a race official assigned by the race director, repairs must be properly performed to meet all posted rules, and parts may not be torn or broken off the car where screws are used to retain the parts (IE: the front spoiler, etc.) to perform the repair.
- For any clarification of the race procedures being used at the National Championship please contact:  
Robert Holt by phone (908-397-7886) or e-mail (holtr371@yahoo.com)  
Bob Kuss by phone (610-996-0595) or e-mail (lotus74s6@verizon.net)

# FLY/FLYSLOT/SLOTWINGS 2019 “Classics” Approved Parts List:

## Fly/Flyslot/Slotwings Parts Lists:

### Approved Cars:

Chevron B19 (sidewinder)  
Chevron B21 (sidewinder)  
Ferrari 250LM  
Ferrari 512S (in-line) – Coda Lunga  
Ferrari 512S (sidewinder) – Spyder, Berlinetta, Coda Lunga  
Ford GT40 (sidewinder)  
Ford GT40 Mk. II (in-line)  
Ford GT40 Mk. II (sidewinder)  
Lola T70 Mk. 3B (in-line)  
Lola T70 Mk. 3B (sidewinder)  
Porsche Carrera 6 [906] (sidewinder)  
Porsche 908 (sidewinder)  
Porsche 908/2 (sidewinder)  
Porsche 908/2 Flunder (sidewinder)  
Porsche 908/2 Flunder LH (sidewinder)  
Porsche 908/3 (sidewinder)  
Porsche 917K (in-line)  
Porsche 917K (sidewinder)  
Porsche 917LH (in-line)  
Porsche 917LH (sidewinder)

### Chassis:

#### Fly:

#05301 – Ferrari 250LM Sidewinder Chassis  
#79055 – Porsche 908 Sidewinder Chassis (Ref #B55)  
#79077 – Lola T70 Sidewinder Chassis (Ref #B77)  
#?????? – Porsche Carrera 6 [906] Chassis  
#79080 – Porsche 917K Sidewinder Chassis (Ref #B80)  
#79105 – Chevron B19/B21 Sidewinder Chassis (Ref #B105)

#### Flyslot:

#00501 – Porsche 917K Sidewinder Chassis w/pod  
#70501 – Lola T70 Inline Chassis  
#70601 – Porsche 917 Inline Chassis  
#70701 – Ferrari 512S Inline Chassis  
#70801 – Ford MkII Inline Chassis

### Front/Rear Axle Assemblies w/ Wheels:

#### Fly:

#79052 – Porsche 908/917K (sidewinder type) Front Axle Kit (Ref #B52)  
#79053 – Porsche 908/917K (sidewinder type) Rear Axle Kit (Ref #B53)  
#79078 – Lola T70 (sidewinder type) Front Axle Kit (Ref #B78)  
#79079 – Lola T70 (sidewinder type) Rear Axle Kit (Ref #B79)  
#79106 – Chevron B19/B21 Front Axle Kit (Ref #B106) #79107 – Chevron B19/B21 Rear Axle Kit (Ref #B107)

#### Flyslot:

#00202 – Porsche 908 Front Axle Kit (Black)  
#00203 – Porsche 908 Rear Axle Kit (Black)  
#00502 – Porsche 917K (sidewinder) Front Axle Kit (Gold)  
#00503 – Porsche 917K (sidewinder) Rear Axle Kit (Gold)

### Guide Blades, braid, and wire:

#80001 – Standard Guide Blade w/braid, eyelets, & wire

### Other manufacture’s approved parts:

#### Axles & Axle Spacers:

Any manufactures axles are permitted.

Any manufacturer's spacers are permitted (for both axles and body).

Any manufactures axle stoppers are permitted.

#### Bearings:

Any manufacturer's bearings are permitted.

#SWB/01 – Racer Sideways Bushings motorholder Group 5 (racing) – recommended

#CB050 – 0132 .05mm offset bronze bushings (for Ford GT40 Mk. II in-line cars)

#CB100 – 0132 1.0mm offset bronze bushings (for Lola T70 Mk. 3B in-line cars)

#### Gears:

#GI23-BZ – Slot.it 23 tooth Bronze In-Line Crown

#GI23-AL – Slot.it 23 tooth Aluminum In-Line Crown

#GO23-BZ – Slot.it 23 tooth Bronze Offset In-Line Crown

#GO23-AL – Slot.it 23 tooth Aluminum Offset In-Line Crown

#GI24-BZ – Slot.it 24 tooth Bronze In-Line Crown

#GI24-AL – Slot.it 24 tooth Aluminum In-Line Crown

#GO24-BZ – Slot.it 24 tooth Bronze Offset In-Line Crown

#GO24-AL – Slot.it 24 tooth Aluminum Offset In-Line Crown

#GI25-BZ – Slot.it 25 tooth Bronze In-Line Crown

#GI25-AL – Slot.it 25 tooth Aluminum In-Line Crown

#GO25-BZ – Slot.it 25 tooth Bronze Offset In-Line Crown

#GO25-AL – Slot.it 25 tooth Aluminum Offset In-Line Crown

#GI26-BZ – Slot.it 26 tooth Bronze In-Line Crown

#GI26-AL – Slot.it 26 tooth Aluminum In-Line Crown

#GO26-BZ – Slot.it 26 tooth Bronze Offset In-Line Crown

#GO26-AL – Slot.it 26 tooth Aluminum Offset In-Line Crown

#GS1934 – Slot.it 34 tooth, 19mm, Ergal sidewinder lightened Spur

#GS1936 – Slot.it 36 tooth, 19mm, Ergal sidewinder lightened Spur

#GS1938 – Slot.it 38 tooth, 19mm, Ergal sidewinder lightened Spur

#PI08 – Slot.it 8 tooth, 5.5mm, Brass In-line pinion

#PS12 – Slot.it 12 tooth, 6.5mm, Brass Sidewinder pinion

#PI6512E – Slot.it 12 tooth, 6.5mm, Ergal Sidewinder Pinion

#### Guide Blades, braid, wire, and eyelets:

Any manufacturer's braid, wire, and eyelets are permitted.

Any manufacturer's guide spacers are permitted.

#### Screws and set screws:

Any manufacturer's screws and set screws are permitted.

#### Tires:

##### Front:

#PT07 – Slot.it 10x18mm Z0 Rubber Tires

#PT15 – Slot.it 10x16.5mm Z0 Rubber Tire

#PT19 – Slot.it 8x14.2mm Z1 Rubber Tire

#PT1088C1 – Slot.it 8x16.1mm C1 Rubber Tire (replacement for #PT20)

#PT1159C1 – Slot.it 9.5x17.2mm C1 Rubber Tire

#PT1214S2 – Slot.it 8.4x14.6mm S2 Silicone Tire

##### Rear:

#CB46 – Quick Slicks Silicone Tires

#CB47 – Quick Slicks Silicone Tires

#CB48 – Quick Slicks Silicone Tires

#CB49 – Quick Slicks Silicone Tires

#### Wheels:

#CBD0010 – C.B. Design 15x8mm 5-Spoke Racing Wheels (silver)

#CBD0020 – C.B. Design 15x11mm 5-Spoke Racing Wheels (silver)

#CBD0150 – C.B. Design 15x8mm 5-Spoke Classic Wheels (black)

#CBD0165 – C.B. Design 15x8mm 5-Spoke Classic Wheels (silver)

#CBD0250 – C.B. Design 15x11mm 5-Spoke Classic Wheels (black)  
#CBD0265 – C.B. Design 15x11mm 5-Spoke Classic Wheels (silver)  
#CBD0435 – C.B. Design 15x8mm Classic Steel Wheels (black)  
#CBD0450 – C.B. Design 15x8mm Classic Steel Wheels (silver)  
#CBD0535 – C.B. Design 15x11mm Classic Steel Wheels (black)  
#CBD0550 – C.B. Design 15x11mm Classic Steel Wheels (silver)  
#CBD0755 – C.B. Design 15x8mm F1/Modified Style Wheels (silver)  
#CBD0775 – C.B. Design 15x11mm F1/Modified Style Wheels (silver)  
#CBD0800 – C.B. Design 15x8mm LMP Wheels (black)  
#CBD0810 – C.B. Design 15x8mm LMP Wheels (silver)  
#CBD1050 – C.B. Design 15x8mm Insert Wheels (silver)  
#CBD1150 – C.B. Design 15x11mm Insert Wheels (silver)  
#CBD1400 – C.B. Design 15x8mm Stock Car Wheels (black)  
#CBD1410 – C.B. Design 15x8mm Stock Car Wheels (silver)  
#CBD1500 – C.B. Design 15x11mm Stock Car Wheels (black)  
#CBD1510 – C.B. Design 15x11mm Stock Car Wheels (silver)

(Note: the above part numbers for wheels have been confirmed as being currently available. There are additional wheels that may and/or may have been available at one time, in the correct sizes, types, and additional colors, that are also permitted.)