

1/24th FK FLEXI PHOENIX CLASS (GTP & WING fixed gear ratio racing)

Motor - MAR602 Phoenix Motor

End bell retaining tabs must be intact and show no signs of tamper. i.e. motors must not have been opened. Excessive damage to end bell retaining tabs may fail to give confidence of motor having remained unopened and can be rejected by a scrutineer, steward or race controller. Armature shafts may be shortened (both ends) and can may be notched to allow for axle clearance.

Gear Ratio Fixed - 11/35 64 pitch gears allowed. Spur gear may not protrude below chassis.

Chassis - Any two or three piece stamped and pressed steel 4" chassis commercially manufactured prior to October 2016 (the release date of the JK C43) is allowed. *i.e. JK C43 or newer chassis are excluded.* No wire cut EDM or laser cut chassis are allowed. Lightweight pans are allowed. Must use all parts as supplied in full chassis kit. Any replacement parts must be manufacturer original parts, no alternative or home made parts. Bite bar style, straight wire elements are free.

Body Type & Height – Any commercially available body may be used. *Minimum thickness 0.005"*.

***Applies to GTP** - 44mm is the maximum height when measured on a recessed level board whilst fully fitted to the car. Side plates of the rear wing area may not exceed 30mm in length. This is measured from in front of the uppermost front facing edge of the rear spoiler, in a forward direction along the top edge - but does not include any radius or blend from that edge downward to the rest of the body. When viewed from the side the body must retain significant, recognisable profile of the body shape i.e. flat sides of the body may not extend upward to form an additional side dam/plate along the length of the body.

***Applies to WING** - Any commercially available wing body may be used.

Maximum Width - 83mm, measured across any part of the chassis, body and the front and rear axles. Excludes the heads of the body pins.

Clearance - Minimum clearance is 0.6mm under the rear axle uprights at the beginning of each race (this does not apply to club racing). The spur or crown gear may not protrude below the chassis.

Chassis Ballast - Tape and Lead may be applied only to the upper faces of chassis in all classes.

Front Wheels - Physical or stick on of 12.7mm diameter minimum, must be run. They do not have to touch the track. Wheels are to be an accurate representation of a wheel and tyre and they must represent the scale of the car with a clear archway around them. Wheels must appear to be predominately aligned with a vertical face and in the correct position for front wheels on the body.

Front Axle - If used, front axle must be fitted to the front wheel tower uprights through the original manufactured holes for the front axle.

Rear Wheels – The maximum allowed width of the rear tyres is 20.5mm.

Axle Bushings (no ball races) - Oilite or brass only may be soldered or glued into place in the original manufactured position. The original holes may be adjusted to facilitate gear mesh, alignment of axle and ride height.

Bracing Rear Axle - May be added to support only the rear axle uprights. This bracing of uprights may not incorporate a connection to the motor or any of the motor's allowable bracing (i.e. is to be a separate brace for bracing the rear axle uprights only).

Guide Flag - No projections capable of guiding the car are allowed beneath it, other than the actual guide and two typical braid. Only one guide flag allowed, with a blade not more than 30mm long.

Guide Tongue Brace - Any guide tongue brace allowed.

Miscellaneous Parts - Guide nut, washers, spacers, clips, lead-wire, solder, and earring backs (that retain and route lead wire) are free.

Blueprinting - Pressed steel chassis may be flattened and straightened, wheel towers straightened to ninety degrees, guide tongue levelled and doubled, rear bearing holes enlarged to enable rear axle to be set level and at ninety degrees to direction of movement, sharp edges rounded to avoid track damage, and chassis assembled to allow pans to move freely. Chassis may not be altered by removing chassis material except as specified above. The articulation of the chassis may not be altered by removing material. The original manufacturer's method of joining the chassis pieces together and articulating their movement must be retained. Tape, packing etc. is allowable to restrict movement but may not be applied to the underside of the chassis.

Motor Mounting - Motor must be mounted in the original as manufactured position, fixed to the chassis by screws or soldering, or a combination of both and must use original parts supplied by the chassis manufacturer for this purpose and in the position intended. It may not protrude below the chassis underside. One additional piece of tube of 1/8" maximum outside diameter and of 10mm maximum length may be added to bridge the solder joint on either the forward or rear of motor can to act as a removable joint aiding in release of motor from chassis. *Note – if the chassis includes a lower rear motor bracket, such as with the JK X25, then this may still be incorporated in the intended position on the chassis. No other home-made brackets may be used.*

Motor Upright Bracket - The existing motor can bearing slot may be enlarged to allow for a proper motor fit and gear mesh. But the full bracket outline must remain.

Pin Tubes - Floating pin tubes may be used but pins must be affixed in tubes so as to remain with their head flush with face of body. This is a matter of safety and loose pins will be rejected when scrutinized or if found to be so during any race may be requested to be removed from the track and must be corrected and checked by race controller before returning to the track.

Body - Body must be a reasonable representation of a full size car and must be available commercially and be available to all club members. Body shape is to remain as manufactured apart from necessary alterations needed to clear the wheels. The front of the body may not be cut so high as to lose the shape and detail of the front. Cutting out the rear of the body is allowed. Body must be fully painted and the paint sufficiently opaque so that no chassis or components can be seen through the body. Windscreens and windows must be left clear. A clear strip may separate the wing from the main body.

Body Mounting - Bodies may be fixed to the chassis by any combination of tape, clips or pin tubes. Where pin tubes are used they must be located in the existing body fixing chassis holes. Body must be cut and mounted high enough to allow for the minimum front wheel diameter to be visible as an upright wheel mounted to a predominately vertical face or, if used, high enough to allow for the free rotation of physical front wheels under the body.

Trimming & Cut Outs - Cars are to have only portions cut out from the body which are normally cut out on the full sized cars i.e. air intakes, engine grilles etc. The windows may not be cut out unless proof is provided that the car raced in such a form. No mechanical components may protrude through the bodywork (with exception of guide flag).

Wheel Arches - Front wheel arches must be clear, or cut to at least the horizontal centre line of the front wheels. Trimming for front or rear wheel clearance may not extend into the top surface of the body.

Cover Chassis - The chassis and guide must be completely covered by the body when viewed from above.

Driver - A non-transparent three (3) dimensional driver, consisting of at least head / shoulders / arms and steering wheel, with at least two (2) colours is to be securely fixed in the driving position of the car at the commencement of every race.

Numbers - All cars must have at least two (2) readable numbers, of the same numeral. Cars shall have those numerals visible in two (2) different locations.