



FP4 Post Race Inspections - Appendix 3

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Introduction

FP4k is a UK based MSUK club that races using the Briggs & Stratton World Formula engine. The intention of this manual is to allow the race officials from the tracks that we visit to check the eligibility of our engines to ensure that regulations are being followed and fair racing is being undertaken.

Tools

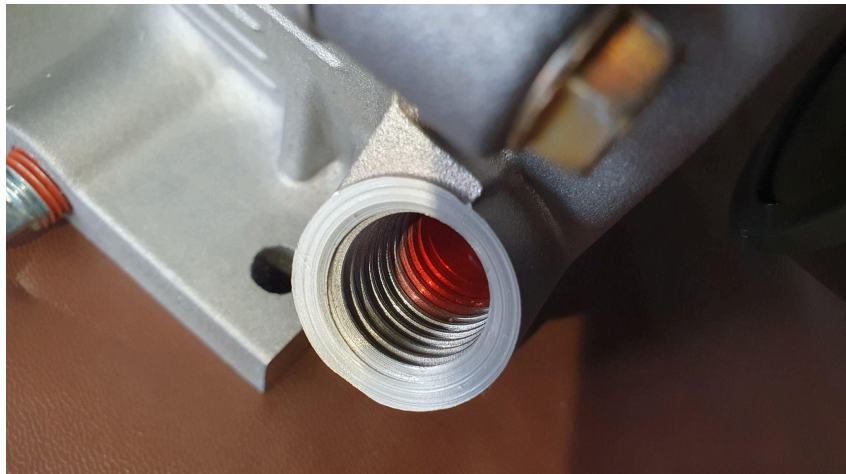
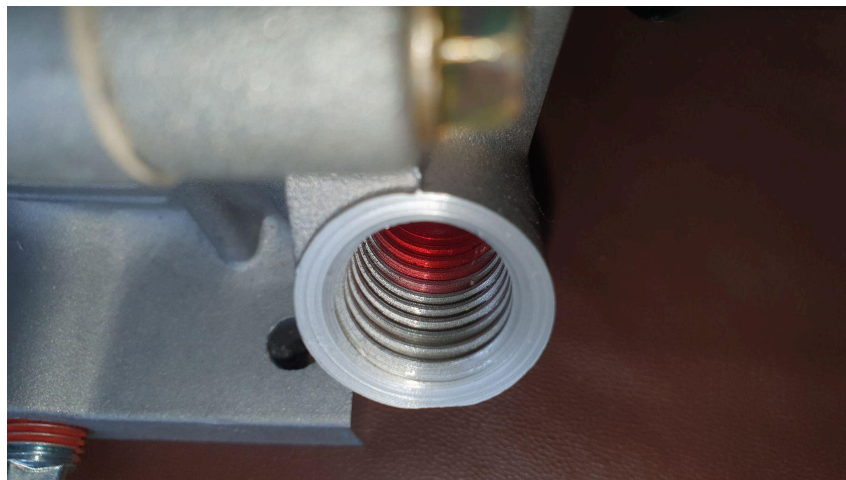
The below tools have been supplied in order to assist with checking the conformity of the World Formula engine.

Carburettor throat tool	0001	Tyre depth gauge	0004
Spirit Level	0002		
Oil funnel & jug	0003		

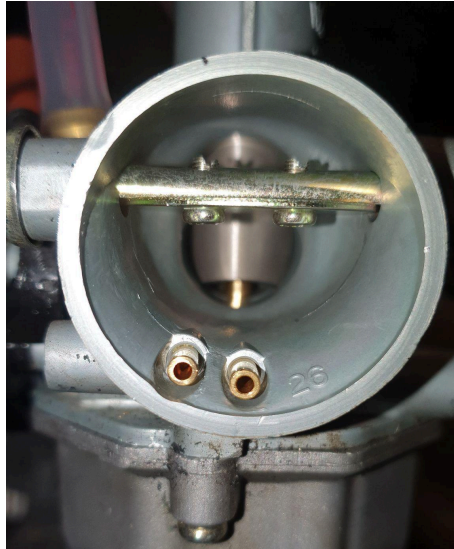
B&S World Formula engine

Oil

With the engine level in both the X & Y axis the oil should be just touching the sixth thread down from the top, the pictures below show the **minimum 400ml / 14oz** that must be present at the end of the race. If it is deemed that this level has not been met then it is suggested that the oil is drained and checked using the tools provided.



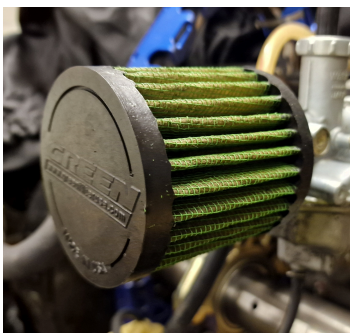
Carburettor



Air Filter & Rain Covers

Only the supplied (Green) air filter can be used, it needs to be fully intact and have no holes present.

A B&S or Non-B&S Rain Sock may be used as long as the original filter is in place.



Clutch

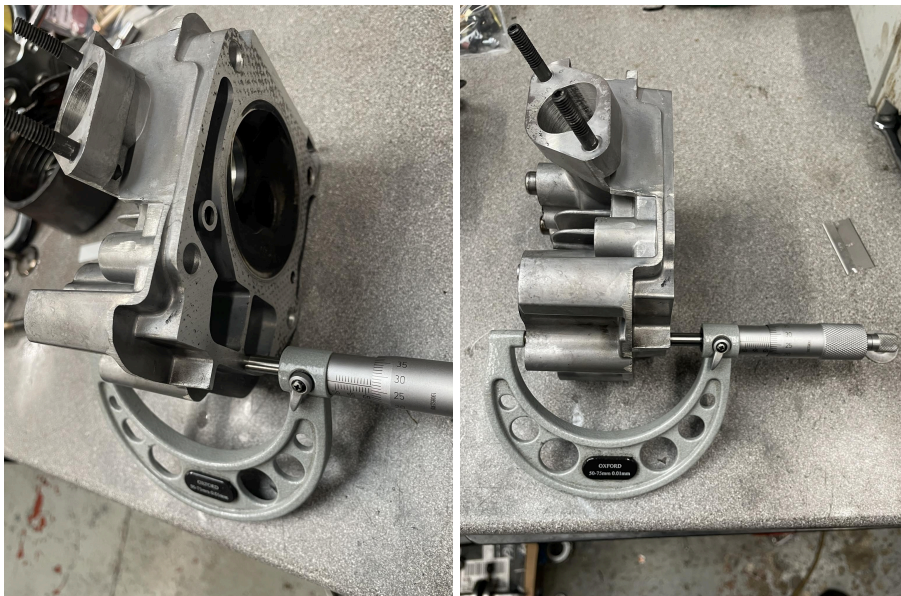
Only the Titan clutch is allowed as supplied and unmodified. Clutches may be run with any of the three different colour springs available from Briggs & Stratton

Either 16 & 17 tooth sprockets may be used.



Cylinder Head

May be skimmed to a minimum head thickness of 2.415". This allows for around 0.016" to be removed for truing of the head depending on the starting thickness at manufacturing. The head must be measured at the point shown in our Post Race Inspections sheet and with an appropriate micrometre.



Cylinder Head Gasket

A Cometic .045 gasket is the only permitted gasket other than the B&S stock gasket that may be used. This is to prevent the head from warping once the head has been machined flat.



Kart Exhaust Silencer

A standard TKM type silencer (single exhaust outlet), and the standard RVL exhaust with internal pipe (4110), or the RLV (4108) short bore exhaust, with internal pipe, are the only models permitted. These must be un-modified with all baffles in place.





Driver Weights

1 Tooth may be added per 7 kg over the minimum 165kg up to a maximum of three teeth

For the avoidance of doubt, in 165kg class:

172kg minimum weight = 1 extra tooth may be added

179kg minimum weight = 2 extra teeth may be added

186kg minimum weight = 3 extra tooth may be added

A maximum of three teeth from the advertised 165kg class gearing, may be added if the total weight allows.

For Drivers under 16, the minimum driver weight is 53kg in 165kg class, and 58kg in 179kg class.

 GEARING	Maximum Gearing *			
	165kg Class		179kg Class	
	16 Tooth	17 Tooth	16 Tooth	17 Tooth
Shenington	66	71	68	73
Clay Pigeon	66	71	68	73
Camberley	72	77	74	79
Lydd	65	70	67	72
Rissington	68	73	70	75
Forest Edge	69	74	71	76
Dunkeswell Raceway	69	74	71	76
Bayford Meadows	72	77	74	79
Kimbolton	TBC		TBC	
Buckmore Park	70	75	72	77

*One Tooth May be added per 7KG over Minimum 165kg
For the avoidance of Doubt:
172kg = 1 extra Tooth / 179kg = 2 extra Teeth / 186kg = 3 extra Teeth

A maximum of three teeth from the advertised 165kg class gearing, may be added if the driver weight allows.

Tyres

Dry:	Maxxis Sport	Front 10 x 4.5 x 5, Rear 11 x 7.1 x 5
Wet:	Maxxis SLW	Front 10 x 4.2 x 5, Rear 11 x 6.0 x 5

Tyres must be fitted to run in the correct direction of rotation, as indicated by the arrow on the tyres. Only the issued, documented tyres can be used for race day. They must also carry the FP4 laser etched logo.

