



SUPPLEMENT PACKET v.1

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1. Seat Installation General (Cadet 950mm Rookie) (Note for Tested Dimensions download Seat Setup PDF)

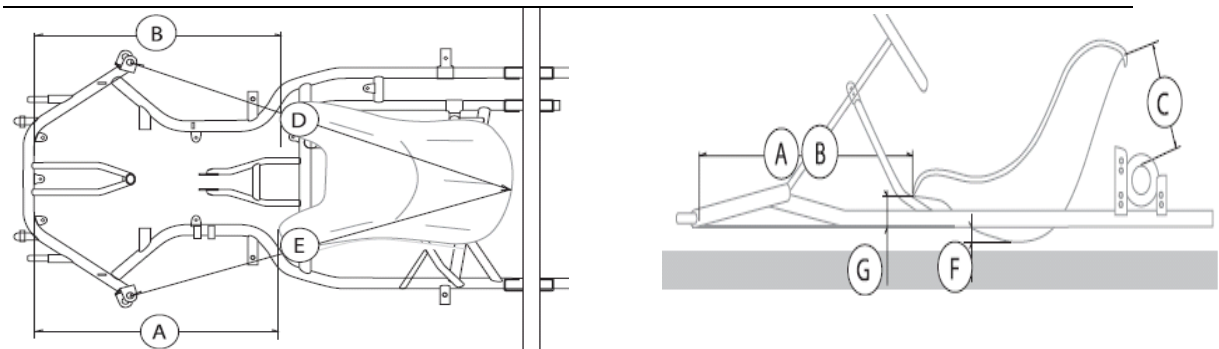
- A (mm) Dimension.....550mm
- B (mm) Dimension.....550mm
- C (mm) Dimension.....220mm
- G (mm) Dimension.....8-10cm

1a. Seat Installation General (KF3 / TaG Jr.) (Note for Tested Dimensions download Seat Setup PDF)

- A (mm) Dimension.....620mm
- B (mm) Dimension.....620mm
- C (mm) Dimension.....220mm
- G (mm) Dimension.....8-9cm

1b. Seat Installation General (KF2) (Note for Tested Dimensions download Seat Setup PDF) (*These are setting used frequently with Bridgestone YJB and MG FZ)

- A (mm) Dimension.....630mm *635mm
- B (mm) Dimension.....630mm *640mm
- C (mm) Dimension.....210mm *195mm
- G (mm) Dimension.....8cm *9cm



It is through endless testing with our Race Department that we have been able to secure these new seat placements. Of course these seat placements are with respect to the new Mercury and Lynx chassis. We would recommend keeping the older seat placements consistent with the T-11 version. These placements have been successful in all weather conditions and using the different tire combinations has also given us great results.



Part Number	Product Description
0037.FP(1-2-3-4)	FLAT BOTTOM SEAT - FIBERGLASS
0037.00	STANDARD SEAT – FIBERGLASS (NO Longer Available)

1B. New Rear Seat Struts

New for 2010 is a new OTK adjustable seat strut designed for the engine side. This seat strut is highly recommended for KZ/ICC as well as all KF applications. Our Race Department still recommends using two standard OTK seat struts on the engine side for all other applications.

Fully adjustable with a rigid 90 degree angle to make close clearances easy to manage!



Part Number	Product Description
0006.BODXKIT	Complete Right Supplementary Adjustable Seat's Support



2. Caster / Camber adjustments

Caster and Camber can be adjusted at the front-end of the chassis. New for 2010, J3 Competition is offering Non-OTK eccentrics. The different model eccentric still incorporate the 10mm uni-ball, however the different eccentrics offer more or less adjustment depending on your needs. These new items allow for tuners to find the ‘Sweet-Spot’ much easier. Of course you may or may not need these, but the option is definitely a nice feature

Type	Size	Model	Less	Caster	More
1 Dot	10mm Uni-Ball	0211.D1KIT			
2 Dot	10mm Uni-Ball	0211.D2KIT			
OTK	10mm Uni-Ball	Standard Model			
4 DOT	10mm Uni-Ball	0211.D4KIT			

3. Tire Pressures

With the introduction of some categories and the new Kosmic Mercury chassis, we have altered our recommended tire pressures slightly. These pressures can be found below. One thing that has affected the tire conditions in 2009 and thus far in 2010 is the track surfaces and the lack of rubber build up. We have seen less and less grip building up during the race weekends and this has changed our ‘Hot’ pressures. Therefore, we have been unable to manage the ‘Hot’ temperatures as precisely as years past.

<i>Category</i>	<i>Compound/Make</i>	<i>Cold</i>	<i>Hot</i>
KF2	Bridgestone YJB	.58Bar	12.5psi / .85 Bar
KF3	Bridgestone YKC	.7 Bar	12.5psi / .85 Bar
Rotax Sr. / Jr.	MOJO D2	.68 - .82 Bar	12.5psi / .85 Bar



4. Axle Chart and the effectiveness

Newly introduced is the standard OTK Type ‘N’ axle in a 1000mm length. 30mm shorter than the standard 1030mm axle, the 1000mm axle is offered to increase the chassis effectiveness. The shorter axle allows more demand on the chassis as opposed to the tire working so hard. This new length axle has been proven in lower grip conditions as well as with drivers who are small and thus require the sidewall of the tire to work in a different way from a taller or even average sized driver.

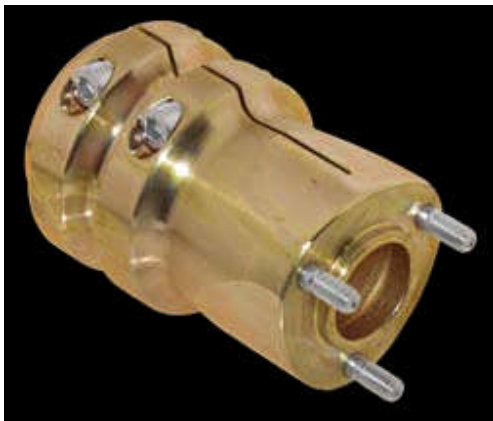


Axle Chart

Type	Size	Model	HARDNESS		Code
			SOFT	HARD	
N	50x1000	DD			0054.G0N1000
N	50x1030	DD			0054.G0N
H	50x1030	DD			0054.G0H

5. Rear Hubs

For 2010 OTK is the new 115mm rear hub available for 50mm axles. Produced of the standard OTK magnesium, the 115mm is a much needed size which fills the gap between the standard 92mm and 148mm long hub. This hub will definitely allow the rear tires to work harder and increase the exit grip and is recommended for higher horsepower applications including Stock Moto, KF2 and KZ.



OTK – Part Number	Description	Material Type
0053.EA	WHEEL'S BOSS MG D. 50 X 148	Magnesium

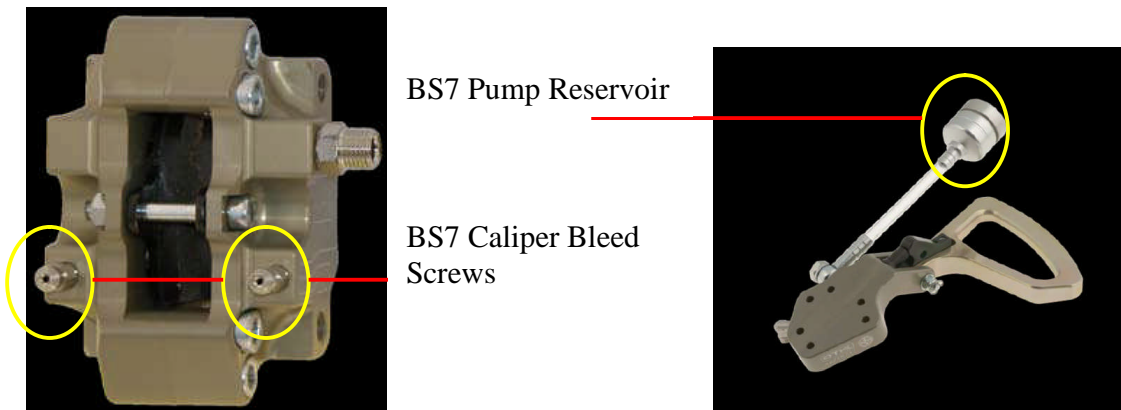
“The perfect fit when 148mm rear hubs are too abrasive on the rear tire.”



6. Braking Systems (Front BS7)

The BS7 braking system or “Hand Brake” is an amazing and effective tool if used properly in the KF2 category. The biggest question people ask is – “How do I bleed this system?”. It's fairly easy, yet a little time consuming, so here are some basic steps:

1. Make sure the extra BS7 reservoir is filled with Dot 5 Brake fluid.
2. Open all four bleed screws on the front calipers as to let the fluid drain through.
You will need a 6mm wrench for the bleed screws
3. Once you see that fluid is exiting the bleed screws with little air, tighten all four screws
4. With all four bleed screws tightened, fill the reservoir to the bottom of the cap threads.
5. Now zip tie the reservoir to the steering wheel so it is in a vertical position and secure
6. It's the fun part now! Pump the handle/pump 7-8 times at once and then hold closed and watch the air bubbles escape to the reservoir. Once they have escaped, repeat the steps until the handle has little to no air and the feel is strong!



**Brake Fluid requirements are as follows, which can be purchased at J3 Competition Inc.*

Fluid	Brake System
Dot 5	BS 5/6/7

6a. Brake Pad Identification

A new improvement in packaging and ease of ordering for 2010 is that BS6 brake pad kits are now available packaged in pairs and BS7 brake pad kits are now available in packages of four. This clean and sensible package makes point-of-sale easier for kart shops as well as inventory tracking.



Part Number	Product Description	System Type
0100.F2KIT	Front Brake Pad Kit (4 Brake Pads Total)	BS 7
0082.D4KIT	Brake Pad Kit (2 Brake Pads Total)	BS 6 / 5

7. Basic Wet Weather Tips *Advanced*

Several Changes can take place before a wet weather session and the best thing to remember is to start with the front of the chassis and move backward. It's very important

to make sure whatever changes you are able to make in a rushed condition that they are completed **100%** before moving to the next change.

****Notice** - Remember to check your rear track width in wet conditions as to insure the rear tires are OUTSIDE of the OTK homologated rear bumper. If the rear bumper protrudes outside the tires you will be disqualified!**

Additional Wet Condition recommendations

- Widen the front hubs as far as possible (Install Longer Front Hubs if Possible with a 5mm stub axle spacer on the inside of the hub)
- Keep the extra seat struts bolted solid



- Loosen the two center floor tray bolts
- Adjust the front-end geometry to 6mm open toe-in if experiencing understeer
- Install Type 'N' axle in center position
- Remember if the track has sweeping corners, **USE** the rear bar. It will lose efficiency in the slower corners, but the gains in the long sweeping corners will definitely assist in overall performance
- Use the standard flat torsion bar in the vertical position
- Set the tire pressure at 1.4 – 1.6 bar cold when using Vega, Bridgestone, and MG rain tires

8. Conclusion

J3 Competition is committed to making all Kosmic Racing Kart owner's champions and race winners. We hope this informative 'Knowledge Packet' supplement v.1 will further assist in our efforts to continually improve our work toward bringing unparalleled knowledge and technical advancements.

The information in this packet is 'general knowledge' developed by our Race Department, which has been correlated with several victories and track successes. However, we understand that this supplemental information may not apply to all owners or track conditions encountered. Keep in mind that trial and error is still a greatest means of understanding the Kosmic Racing Kart material.

THANKS AGAIN

J3 Competition Race Department