

Akula Racing Speartooth 22 Conversion Kit for TLR22 1/10th Off Road Chassis

Instructions

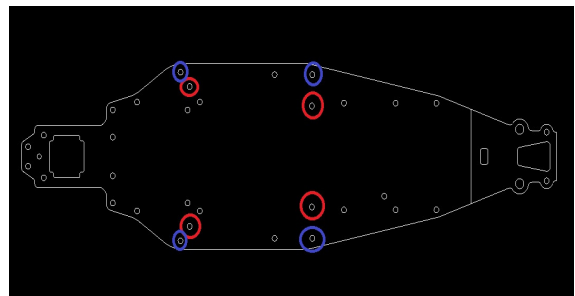
Stage 1 - Preparation

We strongly recommend taking the time to prepare and seal the edges of all carbon fibre parts using cyanoacrylate (CA) glue, this will help prevent the carbon delaminating. The best guide to this process we've found is on the CRC website at; <http://www.teamcrc.com/crc/modules.php?name=News&file=article&sid=16&mode=&order=0&thold=0>

A simpler method is to take some wet and dry sandpaper and cut out a small strip of around 75mm x 25mm. Hold an end in each hand, place the strip across the carbon part (so one end is either side of the part) and use it like a band to sand the edge of the part. Once the whole part has been prepared, so all sharp edges have been smoothed out, then use a Q-Tip (cotton bud) to run CA glue around the edges of the part until they are fully sealed.

Stage 2 – Main Chassis

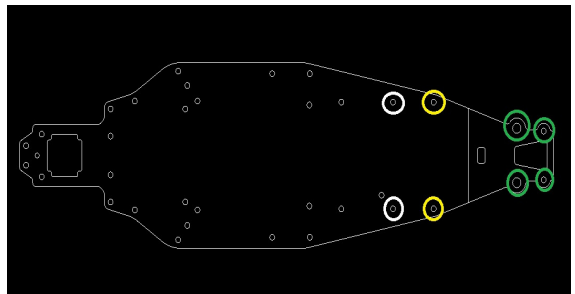
The first stage is to take the main chassis and fit the posts for the battery strap and the side plates. The picture on the right shows the relevant mounting locations for the posts. Use 6mm countersunk screws provided to secure the 25mm posts using the holes marked with the red circles and the 12mm posts using the holes marked with the blue circles.



Once these posts are mounted then the two side plates can be fixed to the top of the 12mm posts using the 8mm button head screws provided.

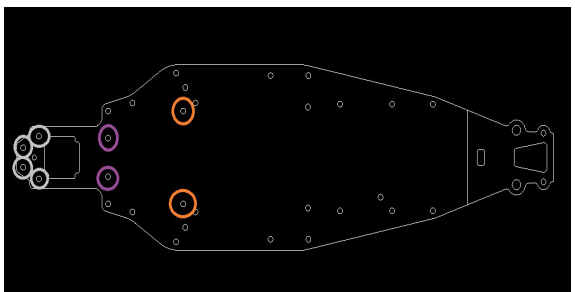
Stage 3 - Front End

To fit the front end to the new chassis plate you will need the six 2.0mm washers, the two 20mm countersunk screws, the two M3 nyloc nuts (all provided) and two 12mm screws from the original kit. Remove the entire front end from the original chassis – leaving the servo installed and fixed to the front bulkhead. This is secured to the new chassis using the four holes on the kickup (marked with green circles in the picture on the right) and the original screws for the front end. Once attached use two of the 2.0mm washers between the front mounting holes (marked with yellow circles) for the servo pillars with the two original 12mm screws. For the rear of the servo pillar (marked with white circles) use two of the 2.0mm washers under the pillar and two on top. Use the two 20mm countersunk screws to thread all the way through the post and through the side plate and secure with the M3 nyloc nut on top of the side plate.



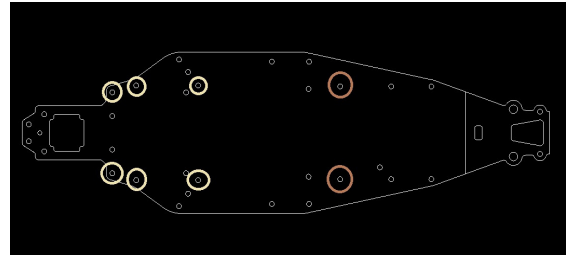
Stage 4 - Rear End (Mid Motor)

To fit the rear end you will need the four 1.0mm washers (provided) and the standard screws provided in the original kit. The carbon chassis does not have the rear kick up that the original aluminium chassis does, so one 1.0mm washer is needed between the chassis and the rear pivot block at each screw marked by the grey circles in the picture to the right to give the same geometry – IT IS CRUCIAL THESE SPACERS ARE USED, LEAVING THEM OUT WILL NOT GIVE MORE ANTI-SQUAT BUT WILL PUT TENSION INTO THE CHASSIS AND MAY WEAKEN THE CHASSIS ACROSS THE GEARBOX CUT OUT. It is easiest to turn the rear bumper and pivot block over and place the washers on each hole, then use the small screw to tighten the pivot block to the chassis and hold the washers in place. Then move the gearbox into position and use the standard screws to fix it, the forward pivot block and shim (purple circles) and the motor brace (orange circles) into position.



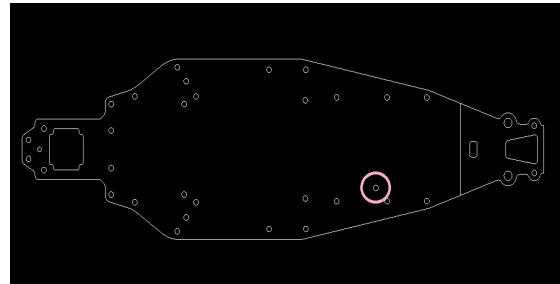
Stage 5 - Rear End (Rear Motor)

To configure the car in rear motor format you will still need to use the eight 0.5mm shims between the chassis and the rear pivot block. The six mounting holes for the main battery holder are circled in white, and the two holes for the location of the front retaining block are circled in brown. If you are using a stick pack running rear to front then it will fit with no problems – using saddles running the same way end-to-end may require some modification of the battery retaining strap to access the connectors.



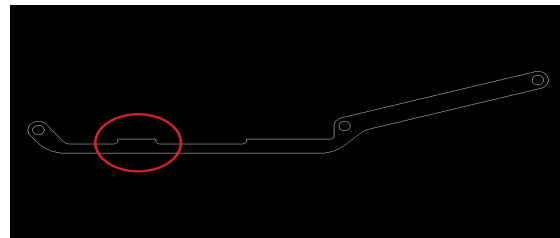
Stage 6 – Finishing Touches

The aerial mount should be fixed using a 6mm countersunk screw (supplied) in the hole shown circled in pink in the picture to the right. Cut the undertray along the cut lines front and rear and trim along the top. This can now be mounted either under the chassis using double sided tape or cut along the sides and fitted as two individual sidepods between the top side plate mounting posts and the chassis. The undertray will enable the kit shell to be used when running saddle packs across the chassis – although this will result in the shell sitting quite high on the car due to the shallow depth of the sidepods.



Saddle Packs VS 'Stubby' Packs

The Speartooth has been designed to accept both standard sized saddle packs and 'stubby' packs running across the chassis. The kit side plates as supplied are sized for the saddle packs. As the 'stubby' packs are around 3mm longer than the width of two saddles the small tab on the side plates needs to be removed for them to fit – this is shown circled in red in the picture to the right. Once this has been removed the pack will be held securely in place side to side and also front to rear.



For support and setup information please keep an eye on www.akularacing.co.uk/support - we will be updating this constantly with new setups and information regarding the Speartooth 22.

We would love to hear your experiences with the Speartooth 22 – please e-mail us at info@akularacing.co.uk with any news, setups or suggestions you may have.

Parts List

Part Number	Description	Supplied
AKR-ST22-CF0125	Speartooth 22 Main Chassis	1
AKR-ST22-CF0220	Speartooth 22 battery strap	1
AKR-ST22-CF0530	Speartooth 22 3.0mm Chassis Side Plate	2
AKR-FE-SP12050	12mm threaded spacer bar	4
AKR-FE-SP25050	25mm threaded spacer bar	4
AKR-SS-CS060M3	6mm countersunk screws	9
AKR-SS-BH060M3	6mm button head screws	4
AKR-SS-BH080M3	8mm button head screws	4
AKR-SS-CS200M3	20mm countersunk screws	2
AKR-AL-SP02070DB	2mm M3 ultra wide washers	6
AKR-SS-NN055M3S	M3 nyloc nuts	2
AKR-AL-SP01050DB	1.0mm M3 washers	4
AKR-AL-AM01DB	Aluminium aerial mount	1
AKR-LX-001	Speartooth 22 Undertray	1