

C. Sidecar chassis



Take the sidecar swingarm..



And mount with a M14x50 bolt with spring-washer and washer the M14 ball joint to the end of the square tube. The nut should be in the tube.



Use a big screw driver as a wedge. This will keep the nut from turning when fastening the bolt. Tighten the bolt with 80Nm.



Insert a dust cap in the tube. It could be necessary to cut away some material at the side of the ball joint.



Use a "low" M14 nut on the ball joint.



Take the other ball joint with a “low” nut and screw this in the round tube of the swing arm. **Do not completely tighten for now!**



Take an M14x50 bolt with spring spacer and spacer and insert in the ball joint.



Use a M14 nut to tighten the bolt. Tighten with 80Nm.



Assemble the swing arm to the frame. Insert the end of the ball joint(square tube) and the bolt(round tube) in the correct holes. Adjust the swing arm by screwing in and out the ball joint(round tube) and screwing in and out the “low” nut (square tube). The swing arm should be assembled without tension. The round tube should be parallel with the sidecar frame.



Take 2 M14 nuts and provide these with Loctite. Then fasten the nuts in the tubes to the bolt and the ball joint but do not tighten them completely. Check if the swing arm is assembled without tension and make sure that it can make the whole spring travel distance without touching the frame. Then first tighten the nut with the round tube (80Nm) using the big screwdriver to block the nut.

Tighten the “low” nut on the ball joint at the square tube. **Note: the ball joint can turn a bit whilst tightening, make sure that you block this and that the ball joint is in a completely upright position so it can not disturb the movement of the swing arm.**



Tighten the “low’ nut on the round tube. **Again make sure that the ball joint is in an upright position can not disturb the movement of the swing arm.**

When the optional brake is used, please first start with the ‘brake construction manual’ before you go on with this manual.



Take the 4 M10x1.25x60 Allen bolts, **these bolts have fine thread and higher strength and should not be replaced by “normal” bolts** , and apply Loctite to these bolts.



Assemble the wheel bearing with the M10x1.25x60 bolts and tighten with 40Nm. On the picture you see the optional brake but you will do the same with the model without brake.



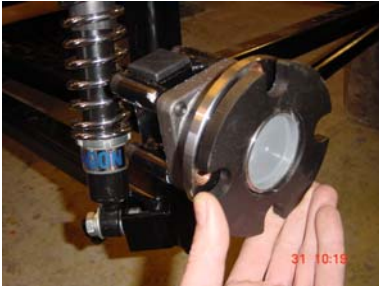
Assemble the shock absorber. Note how the shock absorber is mounted to the plate in the picture. Take a M12x50 bolt with washer and insert in the plate from the inside(motorcycle side), then place the shock absorber, a big washer and a spring washer followed by the nut. Tighten with 60 Nm.



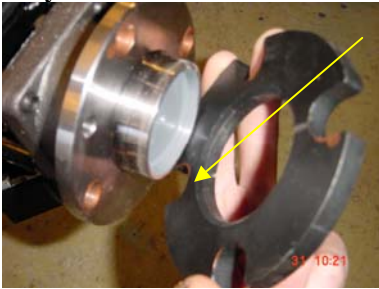
Take a M12x40 bolt with a spring washer, a big washer and the shock absorber and insert this in the mounting point of the swing arm. Place a nut in the inside of the mounting point and tighten the bolt with 60nm.



If necessary use an extra washer to make sure the bolt does not touch the swing arm.



Only if the sidecar brake is not mounted use the big spacer.



The side with the cut of edge should be facing towards the bearing



Mount the sidecar wheel. Tighten in 2 steps, first 50Nm and then 100Nm.



Take the 2 M20 ball joints and screw on a "low" nut on both ball joints to the end of the thread.



Insert the 2 other "low" nuts in the frame and screw in the ball joints. Do not tighten them because you will use these to line out the sidecar.



Assemble the upper tube with the 2 M14 ball joints and 'low' nuts. Screw in the ball joints a few rotations.

Note: the ball joints should be screwed in at least 14mm in the tube!

Mount one side of the tube to the frame with a M14x50 bolt with spring washer and washer and apply Loctite to the bolt. Then fasten the bolt with a nut on the inside of the frame with 80Nm.