



## **Kit Contents**

- x4 Three way tubing blocks
- x4 Chassis hooks
- x4 String tube mount
- x16 Thumb knobs
- X8 Bolt and Nut sets

## **Other needed Components**

Roughly 20ft of  $\frac{3}{4}$ " (19mm) aluminium square tubing.  $\frac{1}{16}$ " wall is sufficient but can go thicker based on preference.

Roughly 20ft of  $\frac{3}{4}$ " (19mm) aluminum round tubing.  $\frac{1}{16}$ " wall is sufficient but can go thicker based on preference.

String - Kite string works well along with fishing line. For convenient reels, chalk snap lines work nicely as well

## **Recommended tools**

- 5mm hex key/socket
- 13mm or  $\frac{1}{2}$ " wrench
- Propane torch or similar
- Drill with a  $\frac{5}{16}$ " bit
- Tape measure
- Saw (hacksaw, bandsaw, cutoff wheel, whatever)
- Marker

## **Assembly**

Start with measuring your car. Determine how long you want the round string holder rod to be. Determine your track width and add 10-20cm per side to allow room for adjustment. For reference, the AMG GTS has a string spacing of 200cm so the rods can be about 220cm to allow for adjustment.

Next measure the spacing for where you would like the chassis hooks to sit. This will determine the crossbar width. Usually 100cm is sufficient for the top crossbar. Be sure to leave room for adjustment.



Measure how long the bars for the chassis hooks should be to clear the bumper. Usually 40-60cm is sufficient.

Now measure how far down the round rod needs to sit to reach the center of the wheel hub. Usually this is around 60-80cm.



Make a list of cuts and proceed to cut and deburr your tubing to suit your measurements. Be sure to double check that your measurements fit on the front and back of the vehicle.

Now it is time to assemble the bar holders and chassis hooks. These pieces are designed to be a really tight fit and will require heating up the aluminium tubing before inserting. This will melt the plastic slightly and provide a very snug fit. Using your propane torch, heat up the end of the tubing and once it's reached sufficient temperature to melt the plastic, quickly insert the square tubing into the mount. Next take your 5/16" drill and drill through the aluminium square tube from

either side and install the M8 bolt and nut. Repeat this process for all of the chassis hooks and rod holders.



Assemble your rods onto the 3-way blocks and test fit on the vehicle and you can mount the strings to your alignment kit to see how it all fits. Use the thumb screws to lock the string holder rod and 3-way blocks in place. Once you've set up the string and decided where all your bars should go, it's nice to mark the tubing with a marker so you can quickly dial it back in if the kit gets disassembled for transport or other cars.

## Optional Things

String holders. These make it easier to hold the string in an exact position. Using the pinch bolt (4mm hex key) lock the string holder down once you've determined the optimal position. These also make it easier to ensure your strings won't be trapezoid shaped. Ensuring the string width is the same front and back is critical. Alternatively to the Ansix string holders, you can use a simple sharpie mark, cut a notch into the tube using a hacksaw or tubing cutter, a hose clamp, tape, etc. There are lots of options for this.

Slip plates. These make it easier to settle the suspension. For instance if you're doing an alignment on a lift, it isn't convenient to roll the car back and forth. Our slip plates are made from  $\frac{1}{8}$ " thick Polypropylene which is naturally fairly slippery. But to make them suitable slip plates, we recommend putting a dollop of a heavy grease in the middle of the plate. If you don't go too crazy with the grease these can stay relatively clean. You will see our slip plates have a rough and a shiny side. Put the two shiny sides together with grease in between. Alternatively we have had success with simple things like garbage bags with silicone spray inside, freezer bags with grease inside, etc. Or nothing at all and just roll the car back and forth.

For directions on how to properly do a string alignment, I recommend taking the racecraftHQ course. <https://www.racecrafthq.com/>