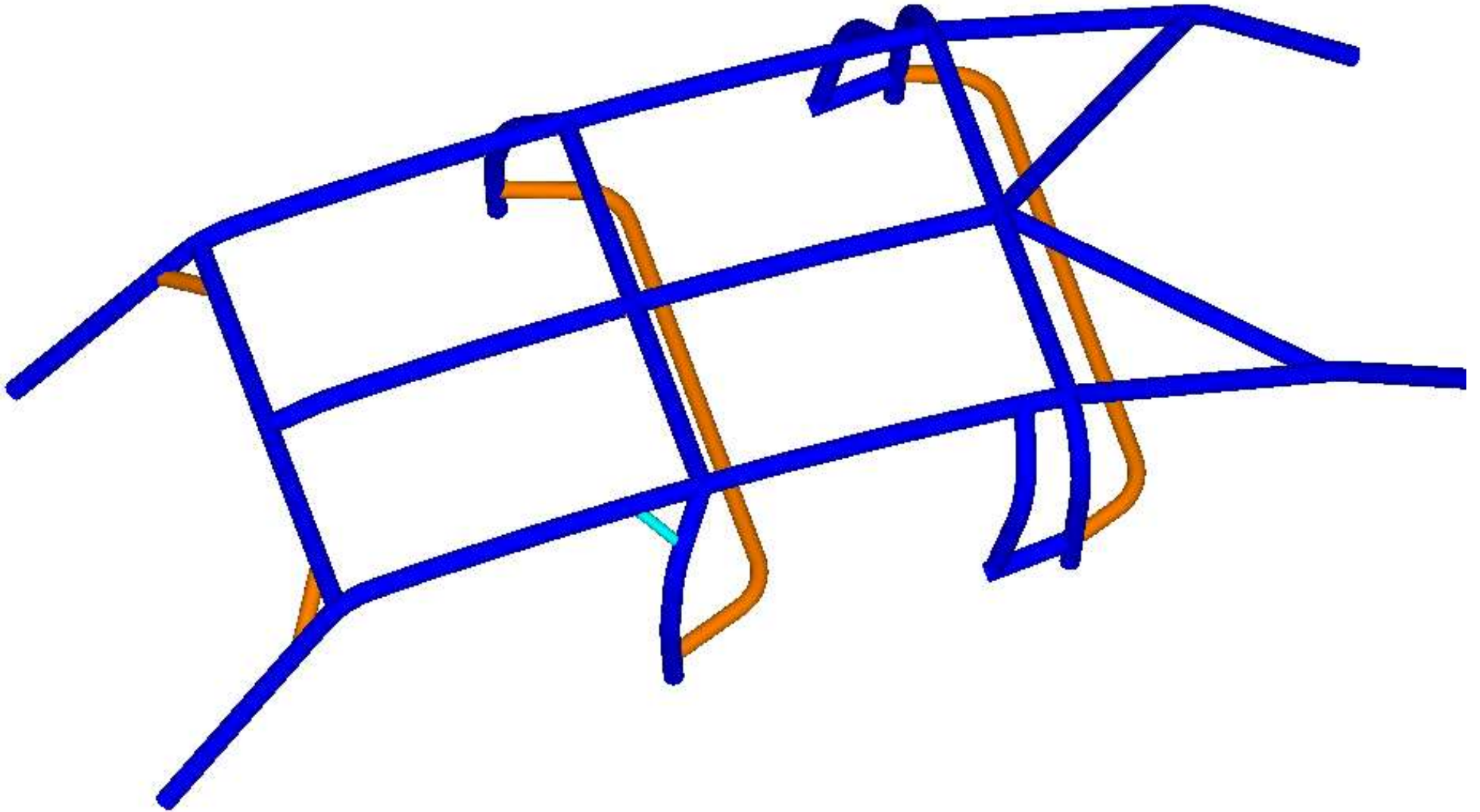


Overview



Overview

Fitment: This kit will fit KR4 models

Should fit all windshields

Works with tailgate

Roof is easily made to fit, eventually we will provide a dxf file for cnc plasma cutting.

Coolers still work and open

Clears 35's etc

KRX4 Height

The KRX4 has tons of room in the rear seats, however the rear seats are moved back and sit higher than the two seat versions. The rear head room is the only concern with a lowered cage as the arch design leaves plenty of room for the front seat occupants. Please see the photos with measurements from stock seats to determine proper head clearances before ordering. We can make height adjustments for an additional fee if we have time in our schedule, just ask.

Our current design is what I would run with my family. In the rear seats I have very little headroom but I don't plan on being back there or having tall adults in the back seats.

Cage Height

Given this information you must decide if this is proper cage kit for you and your passengers safety. We recommend a minimum of 4" clearance between helmet and the cage when properly seated and harnessed in. Good harnesses worn at **ALL TIMES** is a **REQUIREMENT**. We don't want to see anyone get hurt, no one wants to see anyone hurt, if the key is in the ignition the harness is on and tight!! Teach your passengers how to secure themselves and their hands prior to leaving in your ride. Ride responsibly and live to ride again!

A quick and easy test of clearance is a closed fist on top of your helmet and a friend to measure the height from the seat.

All people are shaped difference, Personally I'm 5'10" but tall torso and sit taller than my 6'1" friend by several inches. We can't account for all shapes and sizes so you have to do a bit of homework before ordering, but this kit should fit the majority of people with proper clearance.

KRX Specific NOTES

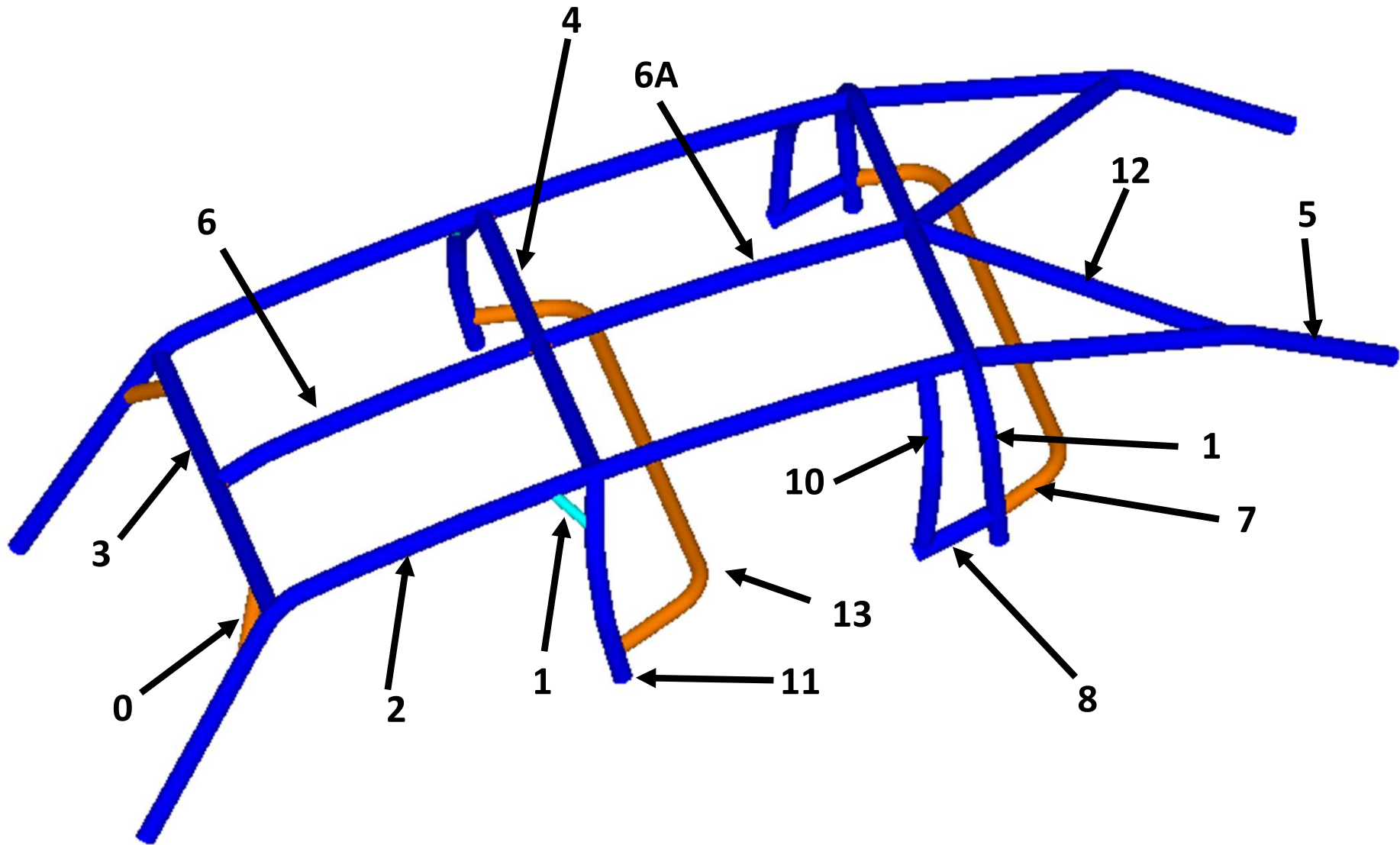
First of all the mounting points on the KRX are all threaded unlike other machines.

The factory bolts are M12 x 1.25

We HIGHLY suggest getting this tap before attempting a cage kit. We are trying to make them available on the site to add to your purchase.

The KRX A-pillar mounts are recessed into the dash and angled inward and twisted a bit. Also there are a number of different windshield options available. For these reasons we decided to not offer windshield/intrusion bars with this kit. Not only do these bars make many windshields not fit and the upper dash storage compartment unusable but installation and removal of the cage is extremely difficult with out some flex in the A-pillar tubes. Not to mention the electrical bus bar is located under these plastics and access will be very limited with them installed.

Part Numbers



Part numbers are engraved within 3" of the start of the part.

There is no Part 9

Passenger parts are followed with an M (for Mirror)

STOCK CAGE REMOVAL

Before removal of the stock cage have the machine on a flat level surface. The KRX4 is longer (obviously) and therefore the frame will flex more than two seat versions when removing the stock cage. The biggest concern with these is that the doors fit and function properly. Once the stock cage is removed ensure the doors are properly working and aligned. You may need to support the machine with weight off the suspension and even cycle the electronic suspension but this state must be achieved before attempting to install the cage kit. The cage will lock the frame in the state that it was installed. This can be difficult to achieve but is absolutely a must!

The kit is designed with extra length on the rear tubes (5) as well as the b-pillar tubes (11). This is necessary to allow for the frame variations and flex in the factory frame. These parts must be trimmed to fit.

The factory cage will spring out of alignment depending on the condition of the machine as well as factory tolerances.

Yes this is a RZR shown but the same principal applies to all machines and you will experience this.



Directions

1. We recommend running a tap in all the bolt holes after the factory cage is removed to ensure good clean threads to start with.
2. Clean all the bungs before bolting to the machine/jig. Bungs have oils and contaminants from the manufacturing process that will affect the welding process. Bolt bungs on to the machine/jig loosely but inline. Small washers are suggest in between the bungs at the A and B pillars. This will help with removal and reassembly after welding. We use a custom shim from 0.100" mild steel but a thin washer on each bolt will work. This is optional but may be beneficial in the following steps as all machines are different
3. Clean all tubes, inside and out around the areas to be welded. Again contaminates will be present from the manufacturing process. Now is a good time to check all the part numbers and lay them out for quick assembly.
4. Place #1 on the bungs. Part #1 has two 90 degree bends and there is some variation in the manufacturing process. The machines also vary (even new), we have noticed up to 3/8" variation on new showroom models. The washers/shims mentioned in step 1 can be adjusted or #1 can be strapped together to bring the ends together if necessary. This is your main structure, so take the time here to ensure a good solid fit for proper welding.

Directions

5. Before welding on any machine with electronics disconnect the negative battery terminal.
6. We also suggest the removal of the seats and use of good welding blankets to prevent damage to your machine.
7. Part #2 is slugged in the center for shipping purposes. Clean inside of part #2 with a file to ensure there are not burrs present. Lightly tap/rotate the provided slug into one side until it is centered. A small tack can be used to hold this in place while attaching the second piece. It is designed to have a 1/8"-3/16" gap for proper welding as well as plug weld holes on both sides. DO NOT WELD yet but place #2 and mirror on A pillar bungs. Start the notch in the middle of the main hoop and slide it outboard until a good fit. Leaving the bungs finger tight allows some adjustment to get good fitment at all locations. Center to center of #2 and mirror should be 39.25"
8. Place #3 between the #2 parts with the part number on the passenger side.
9. Place #4 centered on the slugged joint of part #2 and mirror. Once everything is places this part will have to be removed to fully weld the #2 weld joint. Part #4 should have the part number on the driver side and fwd.
10. Place 6 and 6A in place with part numbers fwd and tabs on the drivers side.
11. Pull/tap all these into alignment and hold with straps for the time being. Check square and step back to ensure the whole assembly isn't racked to one side or another.

Directions

12. Place #5 onto the C pillar bungs and align the notches with #2 rotating and adjusting until the notched end fits perfectly on #5. Trimming of the straight end of part 5 is necessary and should be done with care to ensure too much isn't removed, small steps. Once this tube is trimmed to fit it can be placed onto the bungs and tacked in place along with part #12.
13. #6 and mirror should meet in the center and align with the center of #4.
14. Once these main parts are fit well and aligned, double check square and true and start by tacking the main tubes (2 & 5) to the main hoop (1). Then mark or note the location of parts 3, 4, 6 and 6A and remove them to fully weld the joint in part 2. This joint can be smoothed or part 4 trimmed slightly to fit over the weld (preferred method).
15. #7 can be fit to the main hoop. Sometimes a tack on one side and a light ratchet strap is needed to get the other side in alignment. This is due to tolerances in the machines and our manufacturing process.
16. # 8 and 10 can also be fit to the main structure, we prefer to tig weld the cap onto #8 at the start of the project to make things easier and the part has time to cool before installation. It helps to fit both these pieces together to get good fitment.

B Pillar Notes

At this time (11/22/2022) no manufacturer makes a KRX4 specific b pillar bung but all sell the teryx4 style bung that does fit, just not well. We include these with the kit for the time being but they do require some trimming and work to make fit.

First they are only made for 0.095 tubing. We prefer to trim this portion down with a flap disc on a grinder to fit the provided 0.120 wall tubing. This isn't hard.

Next the bung is a touch too thick. We prefer to use a bandsaw to remove some material and then contour with a flap disc such that the plate sits flush.

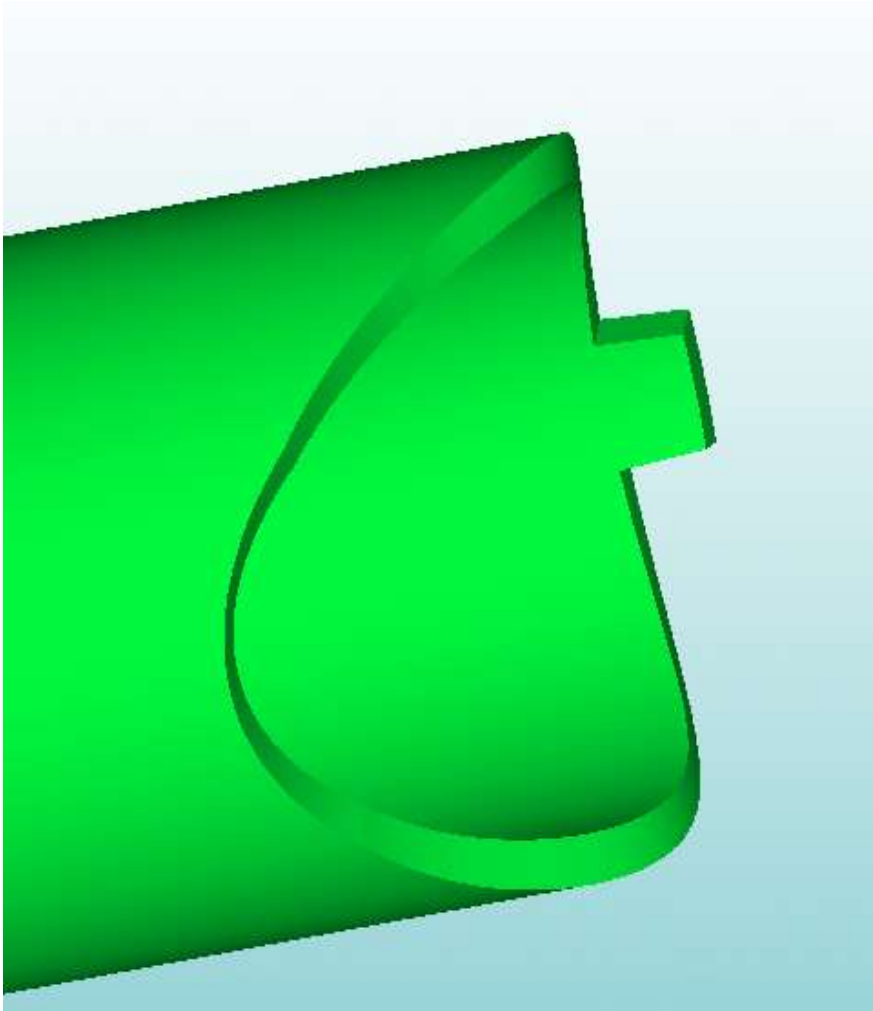
Lastly the hole pattern is too wide but it still fits. The plate will be welded to the provided bung also.

The KRX4 specific bungs will be provided once available. And this step can be ignored.

Part 11 is also provided with extra length and should be trimmed to fit on the straight cut end. Again this is to ensure that the kit fits all machines and your doors will work.

Part 13 should be installed at the proper height for the front seat occupants harnesses per harness manufacturer recommendations.

SLOT AND TABS



Slot and tab cuts will locate the parts with these features.

It is a good practice to assemble ALL parts to ensure they fit prior to tacking any of the pieces. Good clamps, magnets, ratchet straps and a few extra hands make this easier.

It is possible to flip a part backwards and still fit, but the mating parts will not fit and you'll know something isn't right. Please check this before contacting us.

If necessary these tabs can be ground down and the tubes slightly moved from where they were intended but the mating slot will also need to be properly welded closed.

Welding

Again this is a crucial part of your machine's safety and should only be assembled by a qualified welder, don't skimp here. And please pay your welder fairly! These kits can and have been fit and welded in an hour or 2 but that isn't typical. Expect 4-5 hrs of shop time minimum at a standard rate.

All tubes are mild steel and can be mig, tig or even stick welded.

Once the kit has been assembled/fit on the chassis with all the pieces you can start to tack pieces together. Having dry fit the kit once you should be able to figure out what pieces can be installed in what order. Some of our kits have tubes that can't fit back in after other pieces are installed – we try to avoid this though! It's recommended to fully weld every joint, even under joints that will be covered by another tube, slight grinding to clear the previous weld may be necessary.

There should be no excessive gaps or holes to fill, if there are STOP and check fitment of all the other tubes. If nothing is working please don't contact us! LOL. If you read this and tried hard we are here to help.

The KRX 4kits are CNC cut and therefore the edges can have some scale from the cutting process. Tubes also have mill scale, contaminates and oils on or inside of them. For best results a light sanding of the outside/inside and edges to be welded is recommended. With any welding process bright shiny clean metal produces the best results.

Welding Tips

The bungs provided in this kit are solid steel chunks and therefore will draw more heat from the welding process. Preferably these should be preheated before welding as well as wiped clean from contaminants.

Welding tubing is different than most welding contact us for some practice pieces, we would be happy to send you something to hone your skills. Preferably when the order is placed so we can throw some pieces in the box with your order.

Additional parts

We prefer the wrap around harnesses for ease of adjustment and a clean look but if you need tabs to bolt on your harnesses we will be offering them on our miscellaneous parts page or you can order them from our suppliers.

Simple tabs we typically use these
AA-028-C Trick Tab, 1/8" Steel, 1/2" Hole
From www.aa-mfg.com

Harness recommendations

Just some opinions here, ignore them if you want.

These are the preferred type of harness latch for what we do with these machines.



Harness recommendations

Just some opinions here, ignore them if you want.

This style will fill with sand/mud/dirt and either not unlatch for you when needed or not properly click in easily.



Harness recommendations

Just some opinions here, ignore them if you want.

This style will fill with sand/mud/dirt and either not unlatch for you when needed or not properly click in easily.



If you have either of these style already we recommend swapping them out or at the very least properly clean and lubricant them VERY often and ensure they are functioning properly BEFORE the time comes to test them.

RE-INSTALL

After the cage is fit to the vehicle and welded by a qualified professional, you may experience difficulty re-installing it onto the factory cage mounts. This is likely due to the factory chassis flexing and/or the cage moving from the welding process. The cage is now more rigid than the factory cage and the chassis will move some to accommodate this. It is a good idea to support the chassis (no weight on suspension) **PRIOR** to removing the factory cage and **DURING** assembly of the cage kit.

Since the cage is assembled and welded on the chassis it should fit back on nicely but may not fit a different vehicle of the same year/model. If there is excessive fitment issues please call us 636-271-5696 and we'll try to help but don't use anything more than a small ratchet strap and an alignment punch to locate the cage.

We find it best to re-install cages starting with the a-pillar mounts loosely then move rearward.

RE-INSTALL KRX Specific

Again the holes are threaded in the frame – **DON'T mess them up!!**

When removing the cage for final welding go ahead and run the tap back in through the holes and check all the bolts. We recommend getting factory bolts from the dealer as they have a specific strength and rating for the application. The bolts do seem soft compared to grade 8 hardware and it's likely the bolt will be harmed rather than the bolt hole in the frame which is easier to replace.

When reinstalling the cage typically the C-pillar will need to be pulled down to be in alignment. Be very careful using an alignment punch to not damage the threads. It's been our experience that you should loosely install one bolt in each A-pillar then focus on the B-pillar location. Start one bolt in the C-pillar and keep the other aligned then tighten that bolt. Try to start the other bolt and if it's not aligned start over! Loosen the first bolt and re-align until it goes in smoothly.

Once you get the C-pillar bolts in the rest should be easy but remember it will be a real shame to damage threaded holes in your frame so don't rush it.