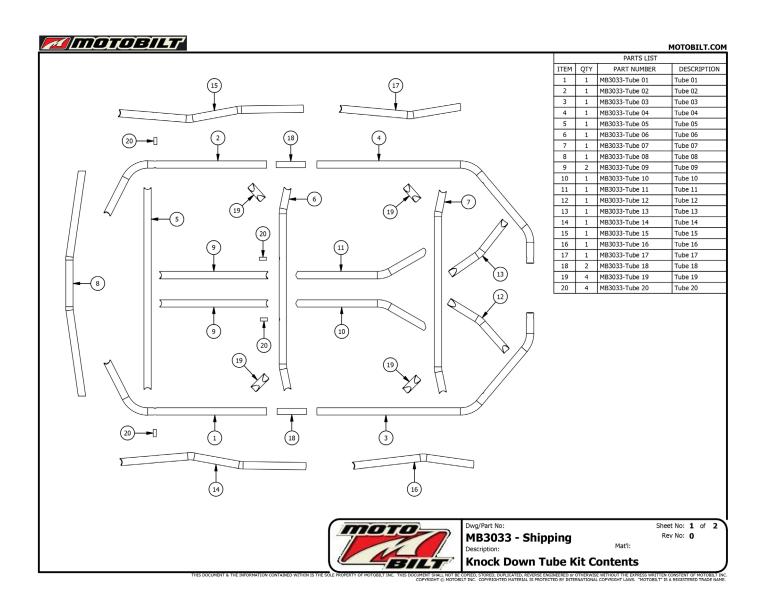
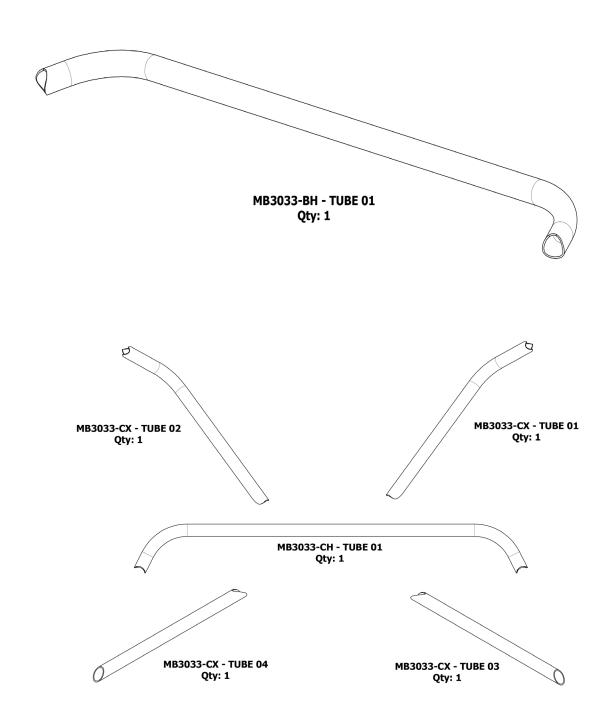


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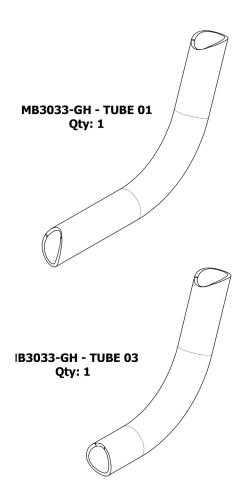


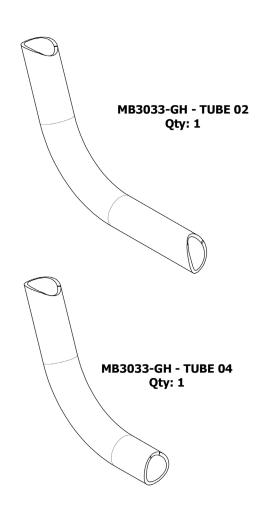














The factory interior must first be removed.

NOTE:

Note: The dash and center console can remain in the vehicle, but will need to be protected from sparks during welding

- Confirm that Jeep tub is level to the ground.
 This may require setting the Jeep on jack stands
- Remove the negative battery terminal from the battery.
- **3** Remove the top from the Jeep.
- 4 Remove all doors
- Starting from the front remove the driver seat by first unplugging the seat from the factory harness and then removing the four bolts mounting the seat bracket to the Jeep tub. (13mm socket)

- Remove the front passenger seat by first unplugging the seat from the factory harness and then removing the four bolts mounting the seat bracket to the Jeep tub. (13mm socket)
- Remove the rear seat by removing the eight bolts and two nuts fastening it to the Jeep tub. See picture below for marked bolt locations. (13mm and 18mm socket)





- Remove the plastic trim surrounding the windshield. (Philips Screws)
- Remove the driver and passenger sun visors. (T-20) (Hardware will be re-used)
- Remove the plastic trim surrounding the B-Pillar
- Remove the rear sub-woofer if equipped and rear plastic trim. (10mm socket)
- Remove the stock seat belt retractors and seat belts (Torx T-50 and T45) front and rear. The bolts retaining the seat belt retractors can be difficult to remove. This is normal due to the factory thread locker but be careful not to strip them. The front seat belt retractors reuse the OEM hardware. New hardware is included for the rear seat belt retractors
- **13**) Remove all the interior carpeting
- Unplug then remove the rear soundbar and dome light.

- Unplug and remove the trunk over head dome light by unclipping it from the factory cage.
- Remove the rear soft top brackets if equipped. (10mm) (Will be re-used)
- Remove the factory roll bar padding and foam.
- Unplug then remove the factory GPS antenna if equipped. (10mm) (hardware is re-used)
- Detach the wiring harness from the passenger side B-pillar that connects to the GPS antenna and sound bar.
- Unplug the wiring harness from the windshield frame and move aside.

Removing the stock cage

- Unbolt the front cage tubes that attach the B-Pillar to the windshield frame. (13mm)
- **22** Remove the windshield wipers
- Remove the windshield brackets (T-40)

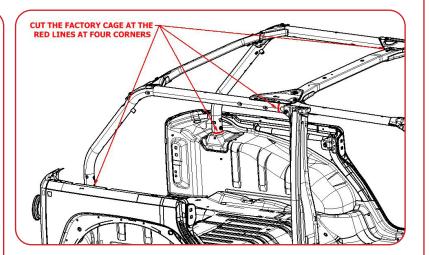




Fold the windshield down. Cover and protect the windshield glass from welding sparks to avoid damage.

When cutting the factory cage protect all exposed metal from corrosion

- Starting at the D-pillar, cut the factory cage off the tub on both sides of the vehicle. Cut the cage as close to the factory base as possible.
- After cutting the D-pillar, cut the factory cage from the B-pillar. This is a rough cut to remove the cage and will be trimmed later for fitment.





27) Remove the factory cage and set aside.

Cut off the stud that is in front of D-pillar on the driver and passenger side.

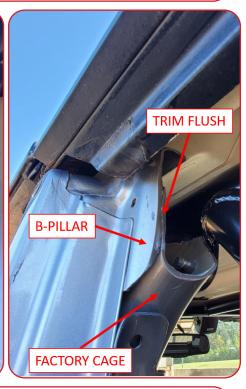
Grind or cut the factory D-pillar so that it is flush with the base. This will be covered over with a plate provided in the kit.



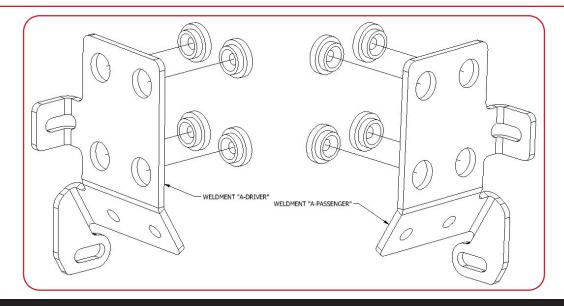
Trim what is left of the factory cage to the b-pillar. Make sure not to cut past the factory interior threaded hole. There is a tab in the cage that will be utilizing the threaded hole tie in the factory b-pillar to the Motobilt cage.







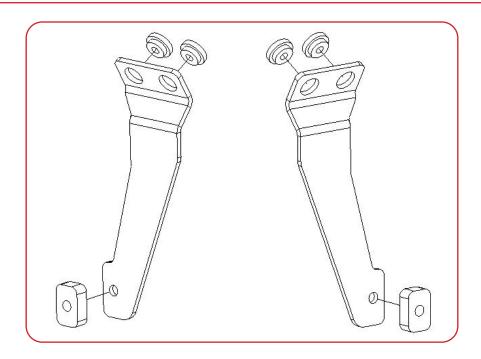
Weld the provided 0.375UNC Countersunk weld nuts to MB3032-01 and MB3032-01_MIR. Four weld nuts per plate.



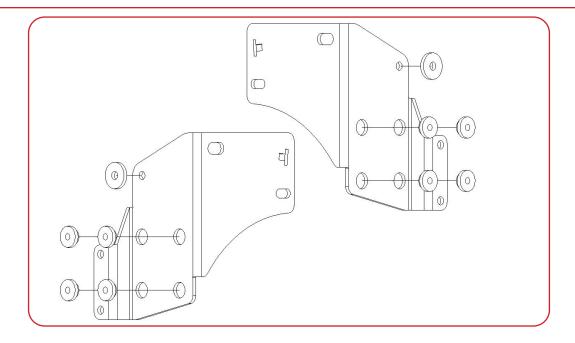


32

Weld the spacer plate and weld nuts to MB3032-02 and MB3032-02_MIR. Two weld nuts and one spacer per plate.



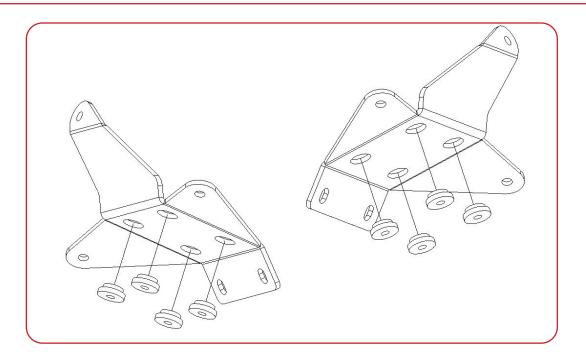
Weld the weld nuts and MB3032-07 spacer plate to MB3032-06 and MB3032-06_MIR. Four weld nuts and one spacer per plate.





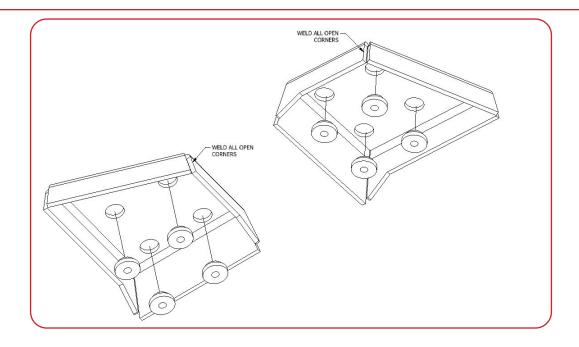
34

Weld the weld nuts to MB3032-09 and MB3032-09_MIR. Four weld nuts and one spacer per plate.



35

Weld the weld nuts to MB3032-08 and MB3032-08_MIR. Four weld nuts and one spacer per plate. Then weld the four corner seams.





Setting the A-Pillar [Reference Assembly Drawing: MB3032 – A-Pillar]

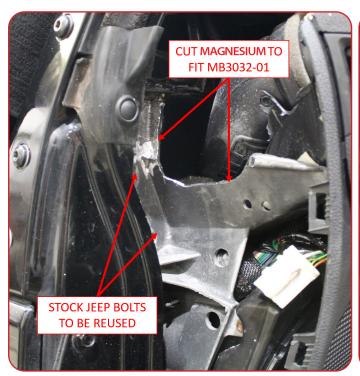


When grinding the dash, please note that Magnesium is EXTREMELY FLAMMABLE.

Use CAUTION with any sparks while grinding, and when finished with this step

ENSURE ALL MAGNESIUM DUST FROM DASH IS PROPERLY CLEANED BEFORE WELDING.

Remove the plastic trim on each side of the dash. Starting on the drivers side remove the two 6mm bolts (10mm socket) that are securing the magnesium dash structure to the tub. These bolts will be reused. Take plate MB3032-01 and test for fitment. The magnesium (please see above warning) dash will need to be trimmed to allow MB3032-01 to fit properly. Once the magnesium dash structure has be properly trimmed back, fasten MB3032-01 to the magnesium dash structure using the two factory bolts that were previously removed. Do not fully tighten.





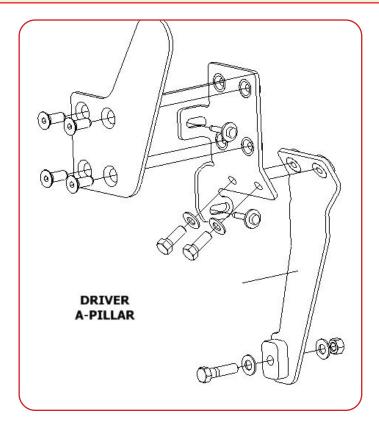
37

Install MB3032-02 by sliding the top of the plate with the two weld nuts installed behind plate MB3032-01. The spacer plate welded to MB3032-02 should be behind the pinch weld. Fasten MB3032-02 to MB3032-01 by hand tightening two 3/8"-16 x 1" hex bolts and two 3/8" washer into the weld nuts on plate MB3032-02.



Setting the A-Pillar [Reference Assembly Drawing: MB3032 – A-Pillar]

Fasten plate MB3032-04 to MB3032-01 using four 3/8"-16 X 1" hex countersunk bolts.



- Measure an confirm there is a space between face of plate MB3032-04 and the factory seam weld of 1-1/8". This allows the dash side trim panel to be remounted
- **40** Repeat steps 36-38 for the passenger side.

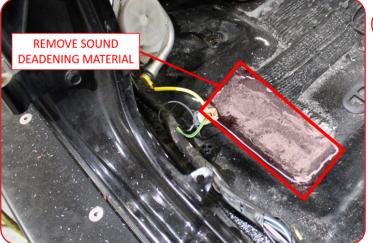




Setting the B-Pillar [Reference Assembly Drawing: MB3032 – B-Pillar]

- Unclip the wiring harness that is routed on the floor the Jeep by the B-pillar and move it out of the way.
- Grind off the stud on the floor near the B-pillar that is used to attach the harness.





Scrape away the factory sound deadening material to allow MB3032-06 to sit flat to the body

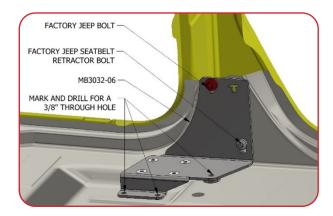


Setting the B-Pillar [Reference Assembly Drawing: MB3032 – B-Pillar]

Bolt plate MB3032-06 to the Jeep tub using the factory Jeep bolt and factory Jeep seatbelt retractor bolt



Mark the three holes that need to be drilled. Drill the three holes that bolt MB3032-06 to the tub floor to allow a 3/8" bolt to pass through.





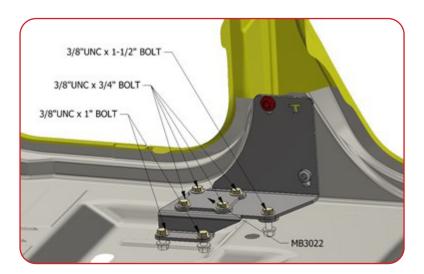
After drilling bolt MB3032-06 back to the place and fasten using the two factory bolts that attach to the B-pillar and the three 3/8" bolts that bolt through the tub. The factory wiring harness should be above the plate and not pinched between the B-pillar mount and the body.

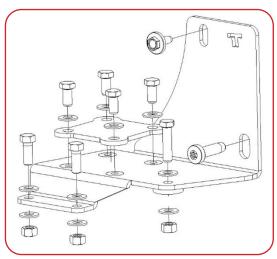


Setting the B-Pillar [Reference Assembly Drawing: MB3032 – B-Pillar]

47) Now bolt MB3022 to MB3032-06 two the four weld nuts using 3/8"UNC x $\frac{3}{4}$ " hardware provided.

(48) Tighten hardware and repeat steps 40-46 on the passenger side





Setting the C-Pillar [Reference Assembly Drawing: MB3032 – C-Pillar]

Bolt MB3032-09 to MB3032-10 using the provided 3/8" hardware.

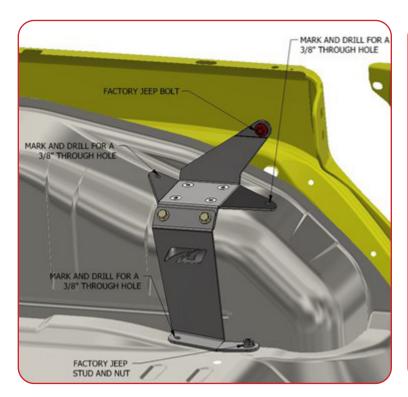
Mount the bolted assembly to the tub using the factory bolt and stud.





Setting the C-Pillar [Reference Assembly Drawing: MB3032 – C-Pillar]

Mark the three holes that need to be drilled. Drill the three holes that bolt the assembly to the tub floor to allow a 3/8" bolt to pass through





Fasten the assembly MB3032-09 and MB3032-10 to the Jeep tub using the provided 3/8" hardware for the holes that were drilled and the factory hardware.

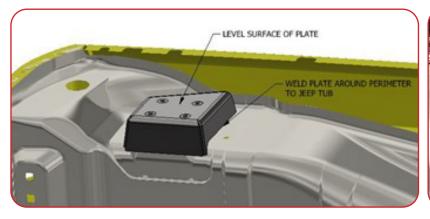


Setting the D-Pillar [Reference Assembly Drawing: MB3032 – D-Pillar]

- Set plate MB3032-08 on top of where the stock Jeep cage was cut off. MB3032-08 should seat itself, if not the stock cage may need to be trimmed down further. The long edge should face towards the front of the Jeep and the short edge should be rear facing
- With the Jeep level, level the top surface of plate MB3032-08



- Mark the area at the bottom of MB3032-08 where it meets the tub. Remove the plate and grind the tub down to the bare metal ½" above and below the line to prepare for welding.
- Tack MB3032-08 to the tub and confirm the plate top surface is still level. Then weld the bottom edges of MB3032-08 directly to the Jeep tub around the perimeter.

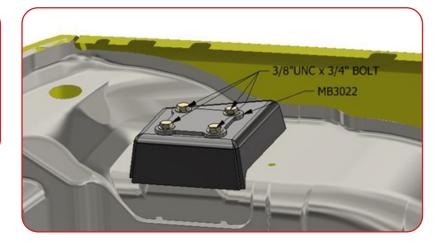






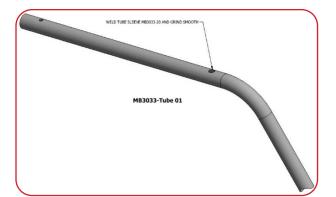
Setting the D-Pillar [Reference Assembly Drawing: MB3032 – D-Pillar]

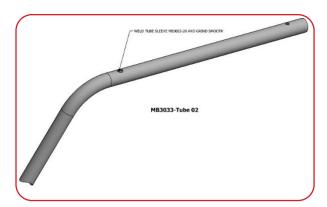
- Bolt MB3022 to MB3032-08 using the provided 3/8" hardware.
- Tighten hardware and repeat steps 54-58 on passenger side



Tube Preparation

Insert the one tube sleeve MB3033-20 into MB3033-Tube 01. Grind the weld down smooth to the surface of the tube. Repeat on MB3033-Tube 02.



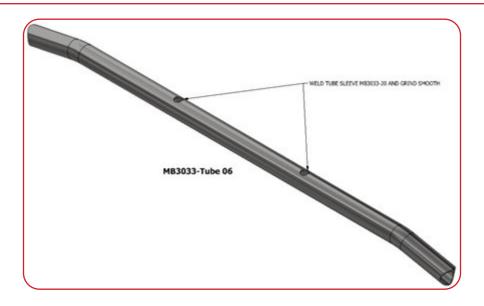




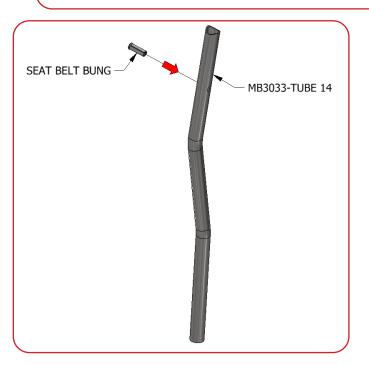


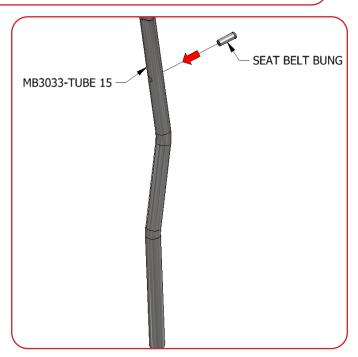
62

Insert two tube sleeves into MB3033-20 into MB3033-06. Grind the welds down smooth to the surface of the tube.



Weld one seat belt bung MB5514 into tube MB3033-Tube 14 and another seat belt bung MB5514 into tube MB3033-Tube 15.

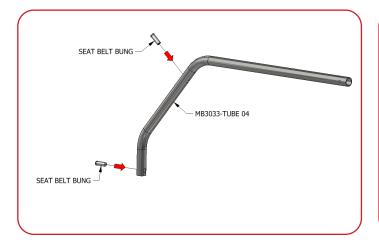


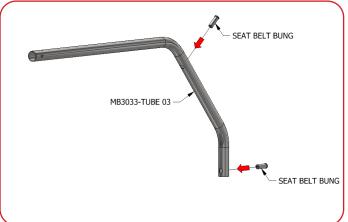






Weld two seat belt bungs MB5514 into tube MB3033-Tube 03 and another two seat belt bungs MB5514 into tube MB3033-Tube 04.

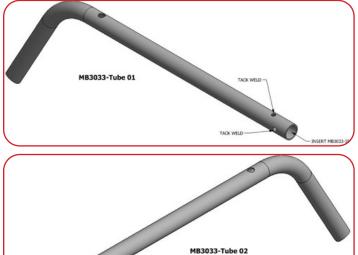




65

Insert the inner tube sleeve MB3033-Tube 18 into the end of MB3033-Tube 01 3-1/2" inches into the tube. Tack weld the tube at the plug weld holes to tube MB3033-Tube 18. Repeat on tube MB3033-Tube 02.

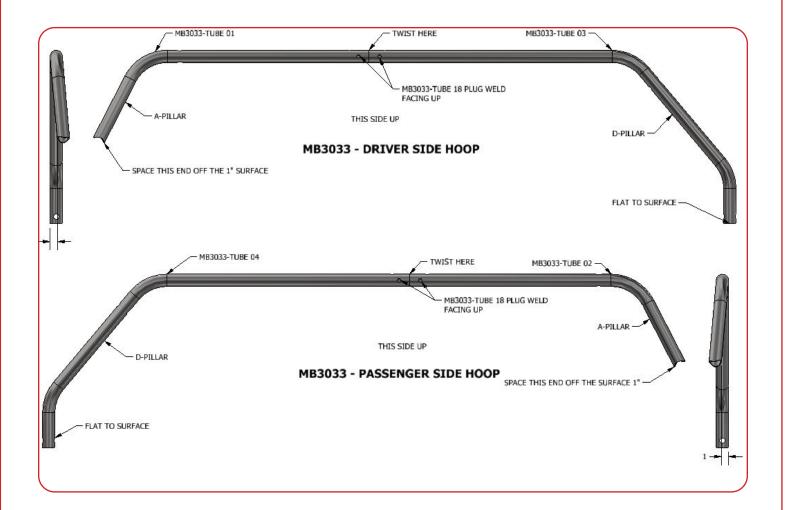






66

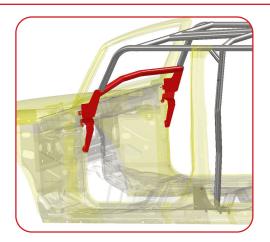
Assembling the side hoops. Lay MB3033-Tube 01 on a flat surface with the tack weld for MB3033-Tube 18 facing up. Insert MB3033-Tube 03 into the other end of MB3033-Tube 18. MB3033-Tube 03 should now be sleeved onto MB3033-Tube 18 and touching MB3033-Tube 01. Raise the notched end of MB3033-Tube 01 one inch off the ground creating a twist in the tube assembly. Tack weld the tube at the plug weld holes to tube MB3033-Tube 18. Repeat on tube MB3033-Tube 02 and MB3033-Tube 04 on the passenger side.





67

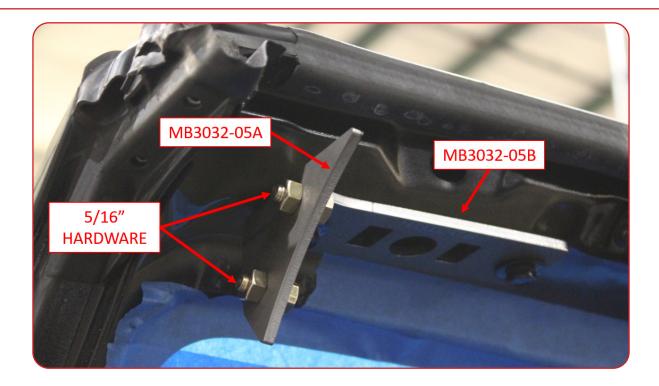
Install the dash cross MB3033-Tube 08 with the bend facing out towards the front of the jeep. The ends of the tube should be flush with MB3032-04 and MB3032-04_MIR and centered on the radius on the top of the plate leaving an 1/8" reveal for welding. Use a spacer to space the center of the tube ½" from the top dash. Once the tube is in place tack weld MB3033-Tube 08 to MB3032-04 and MB3032-04_MIR.





68

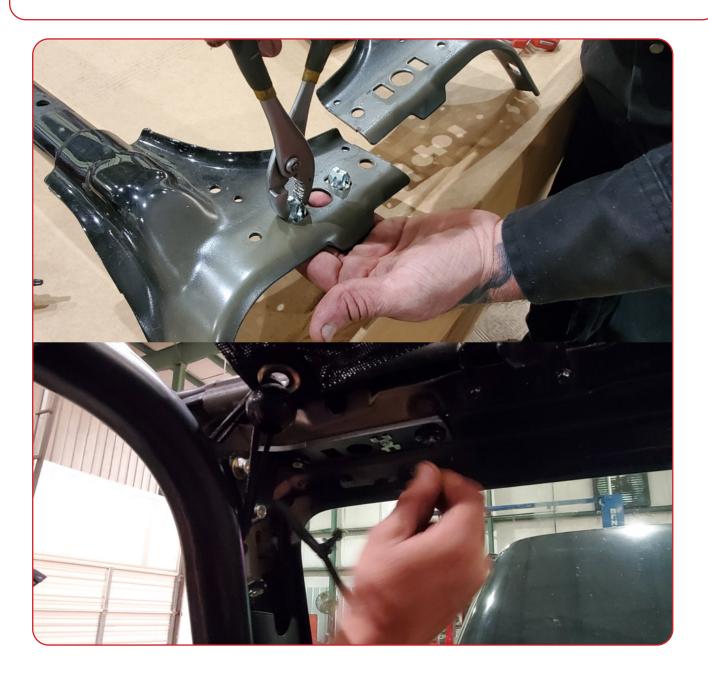
Attach MB3032-05B to the windshield using the factory hardware. Bolt MB5032-05A to MB3032-05B using the supplied 5/16" hardware.





69

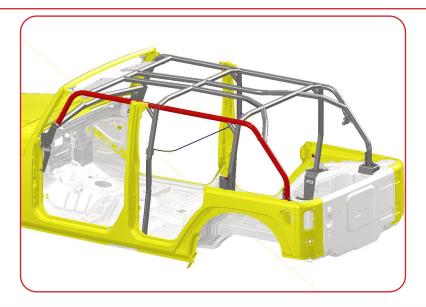
Remove the visor clips from the stock roll bar and insert into the square hole on MB3032-05B.





70

Place the Driver Side Hoop on MB3033-Tube 08 and the D-pillar roll cage foot and hold in place.



71) Place the passenger Side Hoop on MB3033-Tube 08 and the D-pillar roll cage foot and hold in place.





72

Place tube MB3033-Tube 06 at the splice joint between the driver side hoop and passenger side



73

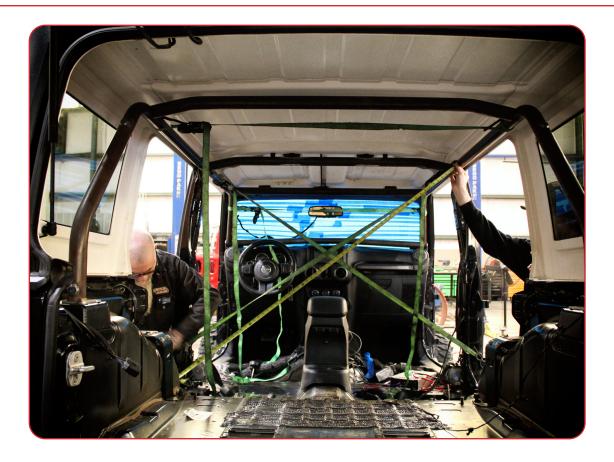
Using a strap, hold the tube assembly and check for fitment with the freedom panels. The tube sleeves need to line up with the holes used to secure the freedom panels to the jeep.





74

Install the top and confirm that there are no conflicts and check that the cage is square.



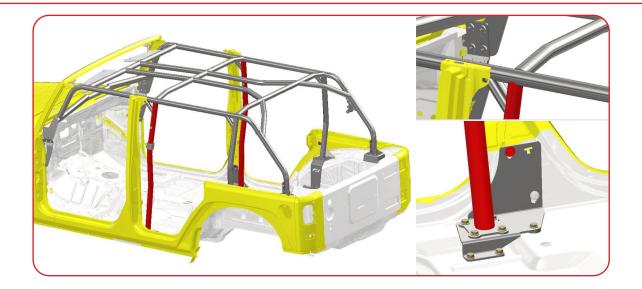
75

Tack the driver side hoop and passenger side hoop to MB3033-Tube 08, MB3033-Tube 06, MB3032-05A, and the D-Pillar cage foot (MB3022).



76

Install the driver side and passenger side B-Pillar tubes. Install MB3033-Tube 14 on the driver side. The top of MB3033-Tube 14 should straddle the driver side hoop splice joint and be inline with MB3033-Tube 06. The bottom of MB3033-Tube 14 should land centered on MB3022 B-Pillar cage foot. Tack MB3033-Tube 14 in place. Repeat on passenger side with MB3033-Tube 15.



77

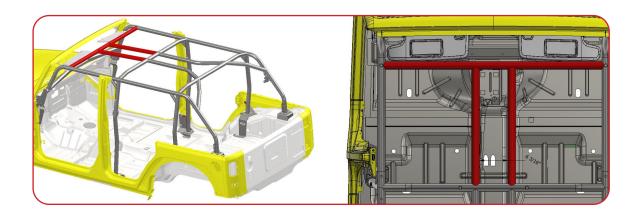
Place MB3033-Tube 05 between the driver side hoop and passenger side hoop.





78

Install both MB3033-Tube 09 tubes between MB3033-Tube 06 and MB3033-Tube 05. These tubes will set the place of tube MB3033-Tube 05. The inside dimensions of between the two MB3033-Tube 09 tubes should be 6-3/16". Tack tubes in place.





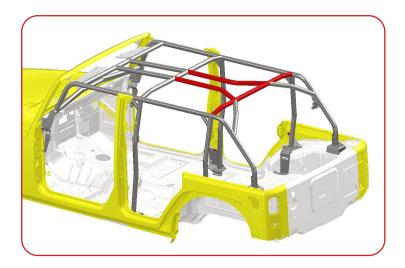
Install the rear most cross bar MB3033-Tube 07 between the driver side hoop and passenger side hoop.





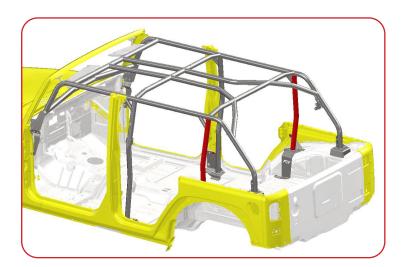
80

Install MB3033-Tube 10 and MB3033-Tube 11 in-between MB3033-Tube 06 and MB3033-Tube 07. The inside distance between MB3033-Tube 10 and MB3033-Tube 11 should be set to 6-3/16". Tack all three tubes in place.



81

Install the two C-Pillar bars MB3033-Tube 16 and MB3033-Tube 17. The top of the C-Pillar tubes should be inline with MB3033-Tube 07 and should land on the C-pillar MB3022 cage foot. Tack both tubes in place.





82

Install tube MB3033-Tube 12 and MB3033-Tube 13. Align MB3033-Tube 12 to MB3033-Tube 10 and tack in place to MB3033-Tube 07 and the driver side hoop. Align MB3033-Tube 13 to MB3033-Tube 11 and tack in place to MB3033-Tube 07 and the passenger side hoop.



83

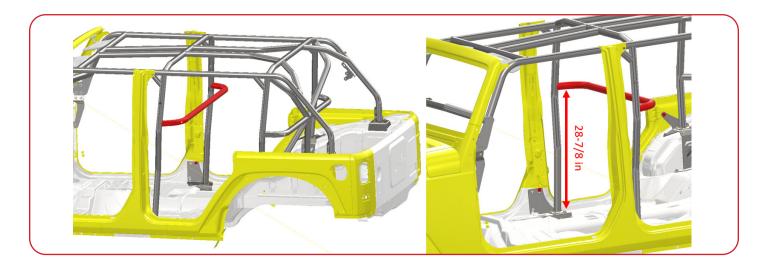
Tack in place the four gusset tubes MB3033-Tube 19 between the B-Pillar and driver side hoop and passenger side hoop and then the C-Pillar and driver side hoop and passenger side hoop.





84

Install the B-Pillar Harness bar MB3033-Tube18. The bottom of tube MB3033-Tube18 should measure 27-7/8" from the top of plate MB3022. Tack MB3033-Tube 18 to MB3033-Tube 14 and MB3033-Tube 15 B-pillar bars.



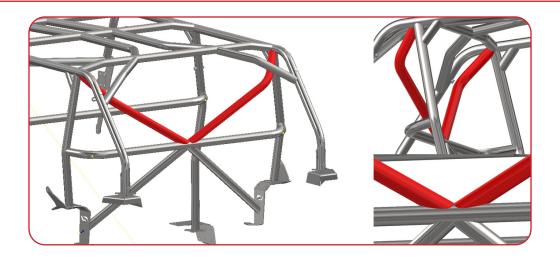
Install the (optional) MB3033-CH Tube 01 C-Pillar Harness bar on the two c-pillar tubes. Mount the MB3033-CH Tube 01 at the center of the bend in tube MB3033 – Tube 16 and MB3033 – Tube 17. The space between the top of the MB3022 foot pad and bottom of MB3033-CH Tube 01 should be 11in on each side. If being used with the optional C-Pillar X-Bar, we recommend test fitting the top X-Bar tubes before tacking the harness bar in place to confirm fitment.



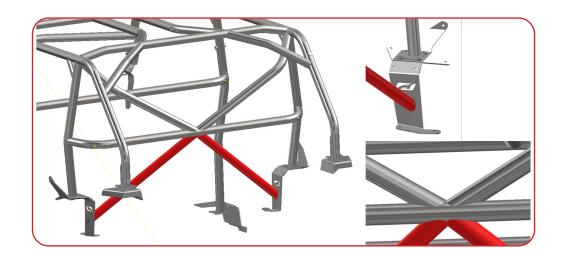


86

Install the (optional) C-Pillar X-bars starting with the top two bars MB3033-CX - Tube 01 and MB3033-CX - Tube 02. Test fit and tack the tubes in place at the center of MB3033-CH - Tube 01 and the top of MB3033 - Tube 16 and MB3033 - Tube 17 C-pillar tubes. The height of the harness bar MB3033-CH - Tube 01 may need to be adjusted to allow for the proper fit.



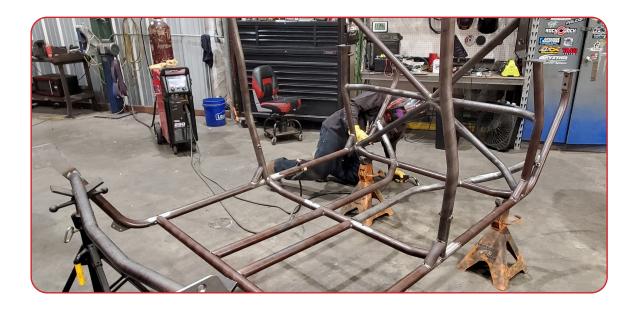
Mount at the bottom two (optional) X-Bar tubes in place MB3033-CX - Tube 03 and MB3033-CX - Tube 04. The top of the tubes are welded at the center of MB3033-CH – Tube 01 and the bottoms are welded to MB3032-10 and MB3032-10_MIR.





88

Unbolt the cage from the six mounting locations and finish weld the cage. Move around the cage welding opposite corners to prevent the cage from twisting do to uneven heat.



89

Install the rear seat belt retractor brackets MB3036. Bolt in place and weld the plate to the tube and D-Pillar cage foot MB3022.







Weld two freedom panel foot pads MB3032-12 to tubes MB3033-Tube 09 and MB3033-Tube 06. One on the driver side and one on the passenger side. The top surface of MB3032-12 needs to be 1/4" below the top surface of the tubes. It helps to sandwich a 1/4" spacer to a straight edge and tack in place. Finish weld after confirming fitment.



91

If equipped weld on the satellite antenna MB3032-13 on the passenger side.



92

Weld on grab handles



Installing the A-Pillar Dash Plate

93 C

Cut off the top retainer clip







Trim the dash side panel to remove the center inset.





Sand down the internal plastic ribbing so it does not interfere

with the A-pillar plate



96

Lay the MB3032-15 cover plate over the panel and mark and drill the holes for the rivets. Test fit all the holes line up on the MB3032-14, MB3032-15, and dash trim plate. This may require slightly bending the cover plates by hand to conform to the trim plate. Then remove for paint or powder coating.





- After paint, rivet the MB3032-14 and MB3032-15 cover plates onto the plastic trim panel. Use eight 1/8" rivets on each side with a washer on the plastic side in the back.
- Reinstall the cover plate onto the dashboard.
- Paint roll cage and any unpainted plates.
- 100 Reinstall roll cage.
- 101 Reinstall interior.