



## FJ40 Roll Bar / Cage Installation Instructions

### Factory Roll Bar Replacement Kit includes:

- 1 Main hoop (AKA B- Pillar)
- 2 Rear factory down bars
- 2 Molded Rib Floor Plates (for Main Hoop)
- 2 Flat Floor Plates

### Intermediate Roll Cage Kit includes

- 1 Main hoop (AKA B- Pillar)
- 2 Rear factory down bars
- 2 Molded Rib Floor Plates (for Main Hoop)
- 2 Flat Floor Plates
- 2 Front Floor Plates
- 2 Knee bars (AKA A-Pillar Bars), one **left** and one **right**!
- 2 Upper front spreaders, 45\* and 90\* notches with a 45 \* bend
- 1 Upper front spreader connector...11" long x 1.75 DOM tubing notched one end
- 1 Upper Windshield Bar
- 1 Dash Bar 1.5"
- 2 Gussets (Main Hoop-Knee Bar) 1.5" Notched on one side

### Family Roll Cage Kit includes

- 1 Main hoop (AKA B- Pillar)
- 2 Molded Rib Floor Plates (for Main Hoop)
- 2 Flat Floor Plates
- 2 Front Floor Plates

- 2 Knee bars (AKA A-Pillar Bars), one **left** and one **right**!
- 2 Front roof spreaders, 45\* and 90\* notches with a 45 \* bend
- 1 Upper front spreader connector...11" long x 1.75 DOM tubing notched one end
- 1 Upper Windshield Bar, slightly bent in the middle
- 1 Dash Bar 1.5inch tubing, straight with notches
- 2 Gussets (Main Hoop-Knee Bar) 1.5" Notched on one side
- 1 Rear halo(FAMILY CAGE)
- 2 Rear halo down bars(FAMILY CAGE)
- 2 Rear halo Gussets (1.5")
- 2 Rear roof Spreaders

### **TOOLS RECOMMENDED FOR THIS ROLL CAGE KIT**

- 220v Mig/Tig Welder , No stick welders
- 1-2 squares
- 1-2 welding magnets
- 1-2 tape measures
- (1-2) 4-4.5 in grinders
- (1) 60 grit flap disc
- (1) 4-4.5" grinding disc
- (1) wire wheel for grinder
- (1) 1/2 drill with drill bits up to the size of ½
- 2-3 BUDDIES FOR EXTRA EYES AND HANDS!!
- Small hand tools for installation of cage!
- Welding blanket to cover seats, interior and glass
- (1-2) ratchet straps

### **Additional Parts Required**

- (24) ½ in grade 8 bolts, 1" long, with nuts, lock washers, and flat washers

### **Skills Required**

- Competent mechanical knowledge
- Certified Welder capable of strong structurally sound welds
- Use of a Grinder, to help finish & perfect the notches

**Note: This is Simply a Guide, Each Fj40 is unique in its own way, and this cage can be installed multiple ways to fit each users needs. Remember to always wear safety protection.**

1. Precautions for installation of this product, would be removal of seats, fuel tank, and any other interior that is flammable or damageable!
2. Locate Main Hoop Floor plate. Floor Plates install on the top of the front Tub Rib. Use the Supplied Ribbed Plates on the main Hoop! The placement of this is critical
3. The main hoop needs to be placed equally side to side, behind the front seats, in the location of the factory bar. CENTER THE CAGE OVER THE CENTER OF THE FRONT RIB ON THE TUB, (NOTE: If you want your cage removable, place the outer edge of the 4 rear floor plates inside the inner dimensions of the upper tub hard top mounting rib.)
4. Tack the main hoop square onto the floor plates.
5. Locate Front Knee Bar Plates. Tape temporarily in place. Drilling Mounting



Holes through the plates into the floor is recommended before you install the Tubes.

6. Install each Knee bar. The Top of these should intersect the Main hoop at the top of the Apex of the main hoop Bend. Installing the upper windshield bar and wrapping it with a ratchet strap will help keep everything in place, but movable, while you tack everything in place. The Dash Bar (1.5") can be put in place and ratchet strapped (1/2" Above the Dash, or 30 3/4" between the Windshield Bar depending upon year)



7. Knee bars should be square to the floor and equal distance between the doors while closed. Take your time on this step and ensure that each bar is square and the intersections are tight. Minor grinding may be required on the notches to get a better fit. (1/2) gap should be kept in order to prevent contact while flexing or ruff roads.
8. Install Both Overhead Spreaders, and Connecting Section, you may need to shift the upper windshield bar to best fit the Spreaders. – Spreaders are designed to be taller in the center than the rest of the cage, this helps spread any forces in a roll, and Shed Water collecting on your Bikini.
9. Once everything is double checked you should use Healthy tacks to keep it all together.

10. Locate Rear Floor Plates. Tape them temporarily in place. Plates install in the center of the 2 rear most Tub Ribs.



11. Install Rear Upper Halo, Intersections should match the Front Knee Bar Locations at the top apex of the Main hoop. (Ratchet strap may be required to pull the Halo together to match front. This hoop is slightly angled down, front to rear)



12. Install the rear Down Bars. Bottom of bar locates in the center of the floor plate, (must be slightly cut or angled to match angle of tube). The top of these tubes intersect the Top Halo at the outermost Apex of the Halo Bends. (The location of this intersection can be changed to your taste)
13. Ensure the Halo is level and even, and the Down Bars are even when viewed from the side. Tack into Place.



14. Add Rear Halo Spreaders, and Tack into place
15. Add Gussets Between the Down Bars and the Inner Apex on the halo. 1.5" tube
16. Add Gussets Between the Main Bar and Knee Bars 1.5" tube
17. Once you are happy with the location of all the bars double check fitment of Hard Top, Doors, and any other Accessories that may interfere for the new tube work.
18. Now its time to fully weld each Intersection and paint the cage.

## Cage Options

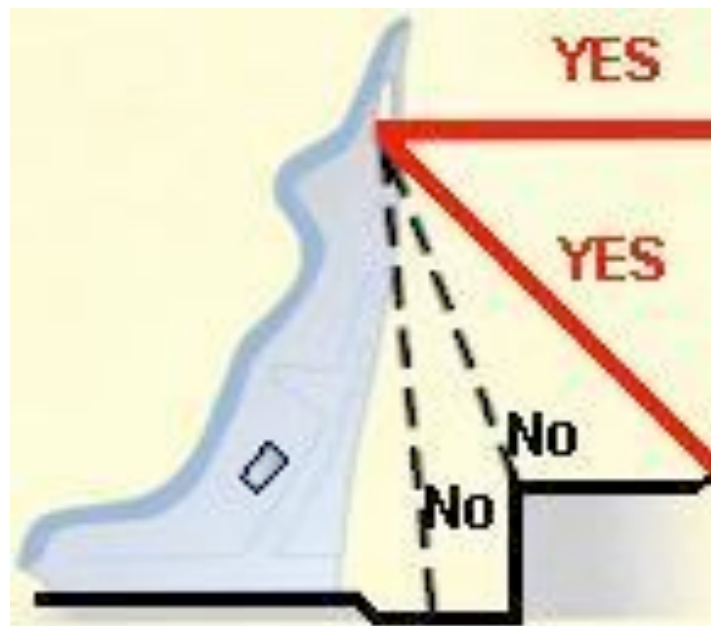
Door Bars – Door Bars should be installed and fitted at the same time as the knee Bars. (installs Approx 4" Above floor intersection on the knee bar)

Seat Cradle – Uses the Door Bars to complete the seat Mount Setup. Each Seat is different.

Grab Handles – These install in the front top Corners of the knee bars (we recommend you angle the bars toward the inside of the cage so in the event of a roll your hands are more protected).

76+ Factory Seat Belts – Install to your liking based on how tall you would like the shoulder belt.

Harness Bar – Locate between the Main Hoop, behind rear seats Directly



behind the Upper Slots in your Racing Seats.

Frame Mount Kit – This Kit comes un notched due to the differences in each rig, Some with body lifts, different sized tiers, wheelbase, ect. – Tie the mount plates on the top of the tub into plates on the bottom, and weld the tubes between bottom plates and frame as best as possible while keeping optimal tire clearance.