Under Cover Fabworks, LLC
undercoverfab.com
sales@undercoverfab.com · (334) 797-7113

Front Truss System Install Instructions

High-pinion Dana 30 front (XJ, MJ & swapped TJ/LJ) and JK Rubicon Dana 44 front trusses



These trusses are for factory front axles, where stiffness matters. They reinforce the axle from one end to the other, strengthening the tubes and helping keep them from spinning in the center section. They aren't meant as a platform for link tabs.

Included: a main truss body made from 1/2" plate and a 1/4" formed channel for the long (passenger) side. The JK kit adds a 1/4" short-side piece for the driver's side. The high-pinion Dana 30 kit adds a new passenger-side upper control arm mount. Every kit ships unassembled and bare.

You'll need: a welder, a grinder with a flap disc, a reciprocating saw or cutoff wheel (high-pinion Dana 30), a torch for preheating, and paint.

Off-road use only. You're responsible for confirming the truss fits your vehicle. Tack everything together and check the fit before you do any final welding. Welded parts can't be returned.

Control arm clearance: some aftermarket control arms can hit the truss. Leave at least 1/4" of clearance; if needed, trim the control arm's bracket slightly so it doesn't rub.

Heat: preheat the casting where you weld in the middle, especially around the upper control arm mounts, for good penetration. Skip around as you weld so no one area gets too hot and warps, and keep the heat away from the inner axle seals. Skipping around protects the inner axle seals, but it's a good idea to pull the axle shafts and replace the inner seals.

Axle in or out: it's easiest with the axle out of the vehicle. You can also do it with the axle installed if the chassis is on jack stands and the axle hangs down with plenty of clearance.

Before you begin

Park on level ground, set the parking brake, and put an automatic transmission in Park or a manual transmission in gear. Support the vehicle safely on jack stands. Read these instructions all the way through before you start, and call us with any questions. Under Cover Fabworks assumes no liability for accidents from the use (proper or improper) of these instructions.

Installation

1. **Fit the main truss body.** Line it up over the center section, mark where it touches, then grind off the paint down to bare metal in those areas. Set it back in place.
2. **Check control arm clearance.** Make sure the driver's upper control arm and its bracket clear the truss body by at least 1/4". Trim the control arm's bracket now if it doesn't.
3. **Weld the main body.** Tack it and check the fit, then preheat the casting. Weld the front and back of the body to the top of the center section, just forward and rearward of the control arm mount. Then weld all the way around everywhere the body touches the axle tubes and the driver-side lower coil spring bucket.
4. **High-pinion Dana 30 truss only: remove the factory passenger-side upper control arm mount.** Cut it off with a reciprocating saw or a grinder. There's no need to grind it flush, because the truss covers it.
5. **Fit the long-side channel.** Set it in place on the passenger-side tube, mark where it touches, and grind off the paint. On the JK, the channel slips around the factory upper control arm mount, which stays in place.
6. **Weld the long-side channel.** Tack it and check the fit, then weld it to the tube. Its edges have low and raised sections all along the length: weld only the low sections where they touch the tube, and leave the gaps between them open so water can drain out. On the JK, also weld all the way around the factory upper control arm mount.
7. **JK only: install the short-side piece** on the driver's side the same way: fit, mark, grind off the paint, tack, then stitch-weld it.
8. **High-pinion Dana 30 truss only: weld on the new passenger-side upper control arm mount.** It locates with tabs and slots. Tack it, check the fit, then weld it solid.
9. **Finish up.** Let everything cool slowly, then paint all bare metal.

That's it. Thanks for choosing Under Cover Fabworks. Call or email us with any questions.