



GOAT BUILT IBEX FRONT AXLE LINK MOUNTS

Thank you for purchasing Ibex chassis kit components, before starting your build, we recommend that you read through these instructions to familiarize yourself with the steps and parts so you can plan and prepare for your built accordingly.

A few notes about the 1138 Ibex link mount bracket:

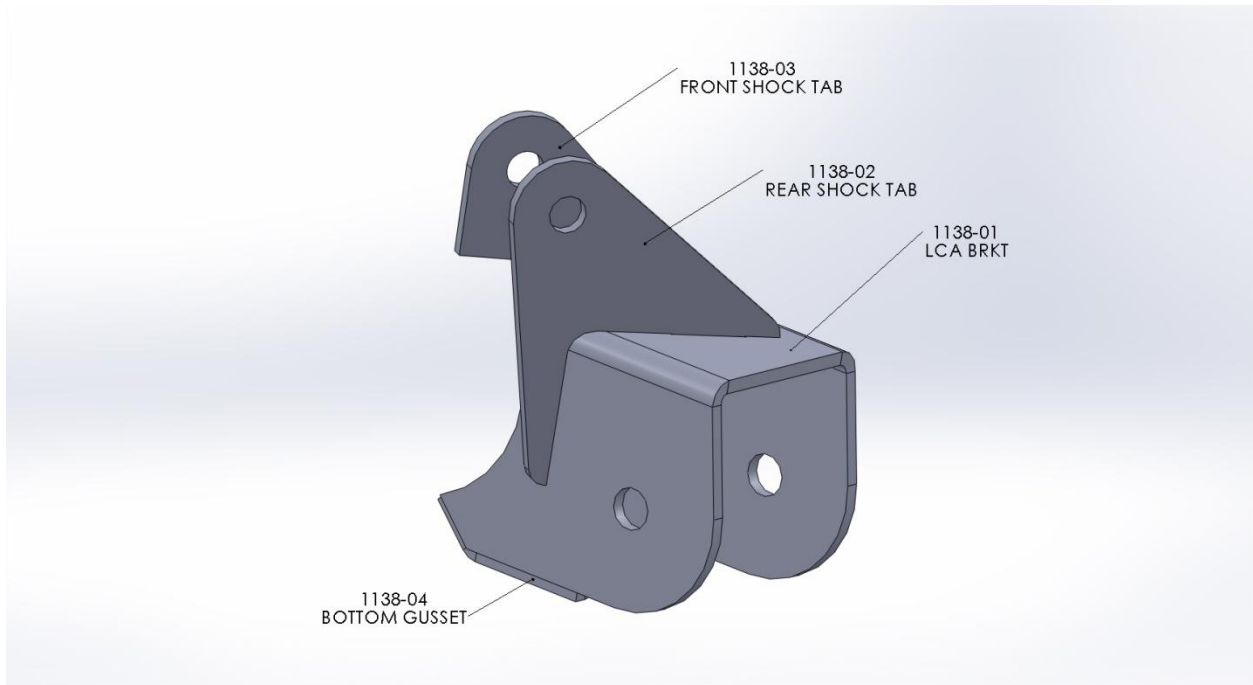
- These brackets are made to a specific axle tube diameter. If your axle tube diameter is different, you may need to modify the tube radius on the bracket slightly.
- Take your time to make sure all the parts fit correctly before tack welding. Use a level, digital protractor and tape measure to double check according to the instructions.
- Bolts and lock nuts for the upper control arms and shocks are included, plain nuts are included for mock up, wait to install the lock nuts until final assembly. Torque the 9/16 bolts/nuts to 150 ft-lbs and 1/2" bolts/nuts to 110 ft-lbs during final assembly. Proper bolt torque will insure maximum bolt/bracket strength. Many link bolt and bracket failures can be attributed to improperly torqued bolts..
- We recommend that brackets be welded by MIG or TIG. The person welding must be a competent welder capable sufficient weld penetration and weld quality
- For MIG welding, we recommend 75/25 AR/CO2 shielding gas; we have found that .035 Lincoln Super-Arc L-56 wire works best.
- For TIG welding, use 100% Argon with ER70S-2 filler rod, we like to use 1/16 diameter filler rod with this thickness of material. When welding to a cast differential center section, stainless 312 filler rod works best. Preheat the weld and lay a root pass, then immediately lay second weave pass over the root pass.
- Additional assembly pictures are posted on the website, www.goatbuilt.com/

1. Prep Axle Housing

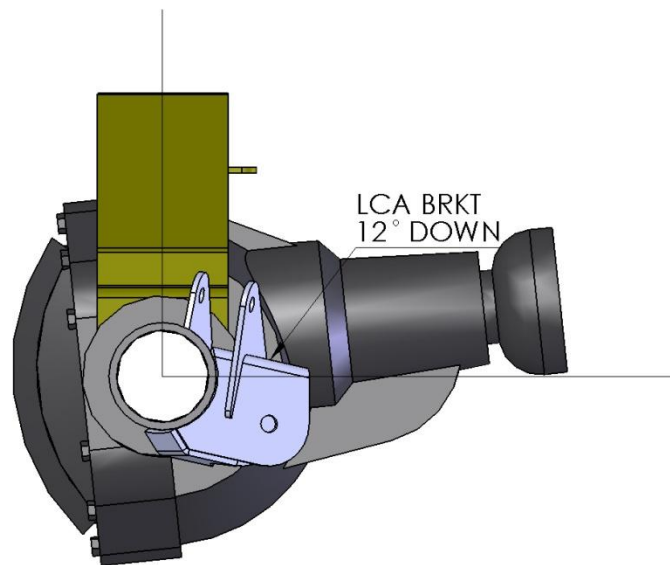
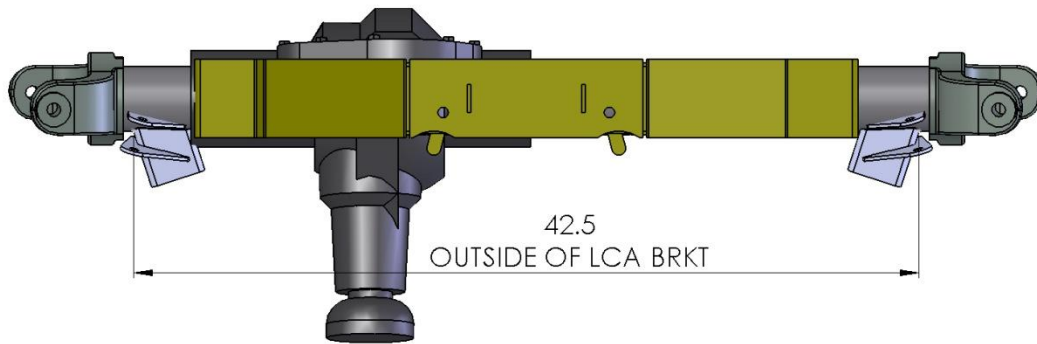
If you are using a used axle housing, cut all the brackets from the tubes, there should be no brackets and only bare tubes. A cutting torch or plasma cutter works best, be careful to not cut into the tubes. A cut off wheel on a grinder also works. Grind the tubes clean. I recommend a 4-1/2 angle grinder with a 60 grit flat sanding disc. Once all the welds are ground down, sanding the tube with an 80 grit DA (dual action) sander will give you a clean look.

Remove any paint or rust from the tubes and diff housing where the bracket will be welded. If you are welding to the cast center section, I recommend to sand the cast surface smooth where it will be welded.

2. LCA Bracket Assembly.



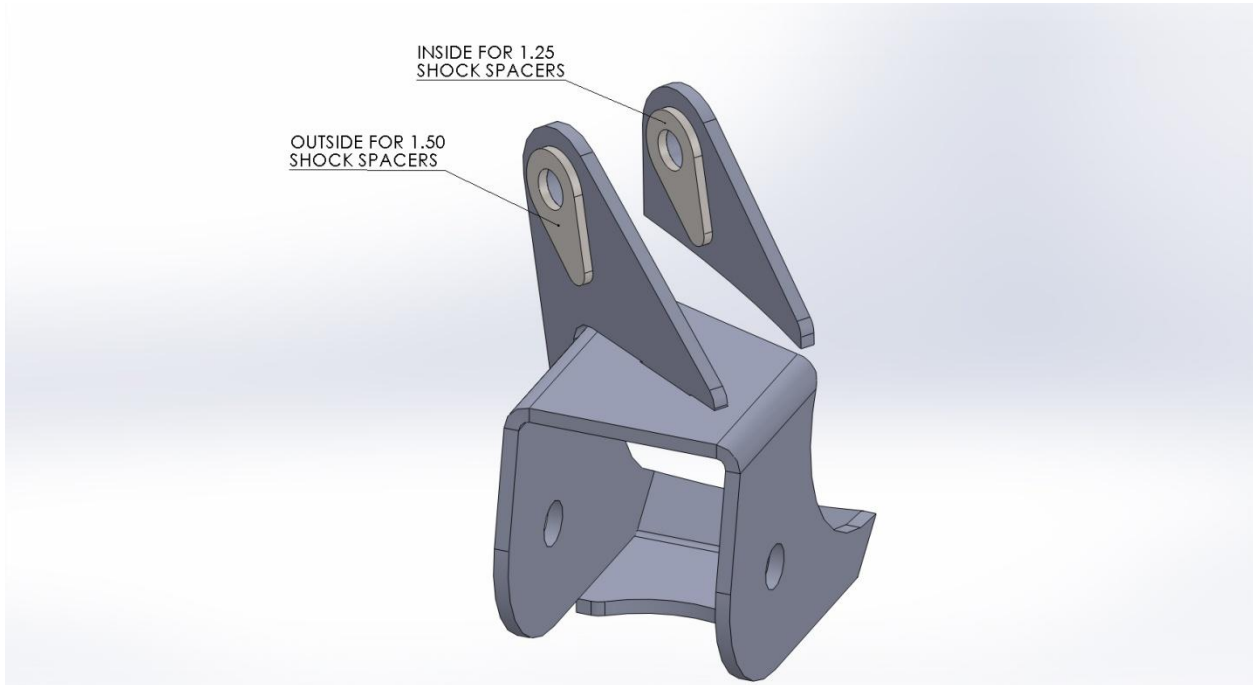
- 2.1) With the axle on jack stands or some sort of stand, set the castor or pinion angle to your desired angle. I recommend 6 degrees of castor
- 2.2) The LCA brackets may be sprung out slightly, install the 2-5/8 weld spacers in the LCA bracket with the included 9/16 bolts, washers and plain nut. This will clamp the LCA bracket to the correct spacing, leave the weld spacers installed until after final welding.
- 2.3) There is a different left and right LCA bracket, they should angle inward towards the rear like the image below.
- 2.4) Position and tack weld the LCA brackets, -01 to the axle housing, the outside of the brackets should be about 42.5" apart, this dimension can vary, put the LCA brackets as far outward as possible without contacting the tire when turning lock to lock. Generally put the outside edge against the weld on the inner C. You may have to notch in inside of the short side LCA bracket to fit the differential housing. The top should angle down 12 degrees so that the LCA bolt hole is 1.5" below the centerline of the axle tube. I suggest that you tack weld all the brackets and assemble the rest of the suspension in the chassis, cycle the suspension with shocks and steering to make sure the shock and tires have enough clearance.



2.5) Position and tack weld the bottom gusset. There is a left and right side so make sure they fit correctly.

3. Shock Mounts

- 3.1) The shock mounts are designed for 1.5" wide shock spacers. There are 4 teardrop shaped shock bolt weld washers included. If you are using 1.5" wide shock spacers, weld the weld washers to the outside of the shock tabs. If you are using 1.25" wide shock spacers, weld the weld washers to the inside of the shock tabs.



- 3.2) Use the 1.53 or 1.28 weld spacers and 1/2" bolts and bolt the front and rear shock tabs together
- 3.3) Position and tack weld the shock tabs to the LCA brackets. The rear shock tab has a tab that fits into the slot on the top of the LCA bracket. The front shock tab should rest on the axle tube. This will set the front to back angle of the shock mounts. If you desire a different angle, you can shorten either shock tab.

4. Final welding

- 4.1) Weld the top and side of the LCA bracket to the axle tube.
- 4.2) Weld the bottom gusset to the LCA bracket and axle tube.
- 4.3) Weld the shock tabs to the LCA bracket and axle tube.