GOAT BUILT IBEX REAR 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 1131-4 Ibex link mount bracket:

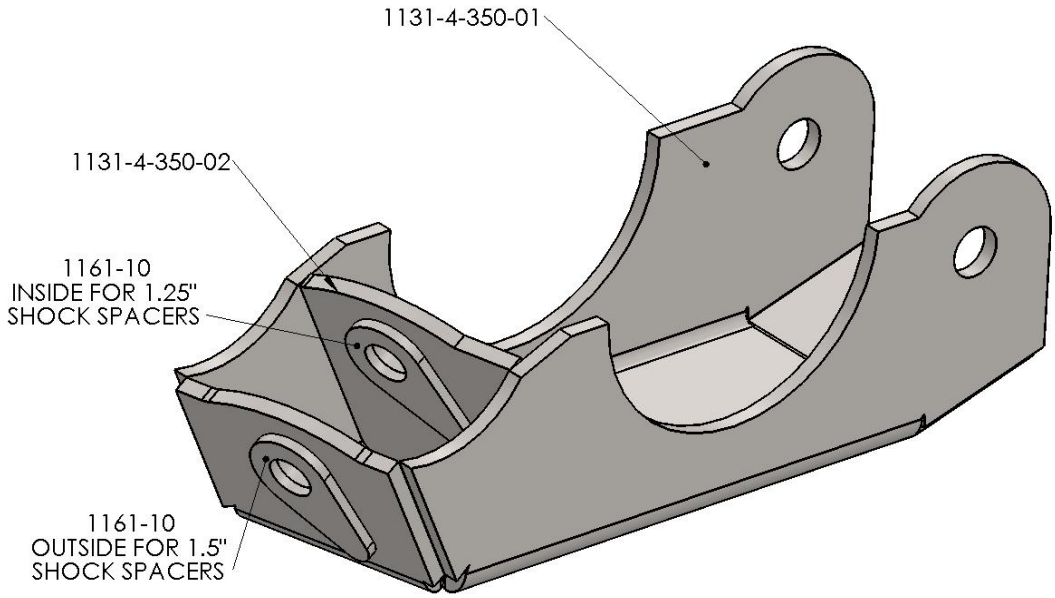
- These brackets are made to a specific axle tube diameter. If your axle tube diameter is different, you may need to modify the tube radius on the bracket slightly.
- These brackets are designed for a 4-seat Ibex with the shocks angled back behind the back seat. You may need to mount the brake calipers to the front of the axle for shock clearance.
- 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 torqed bolts..
- We recommend that brackets be welded by MIG or TIG. The person welding must me 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.

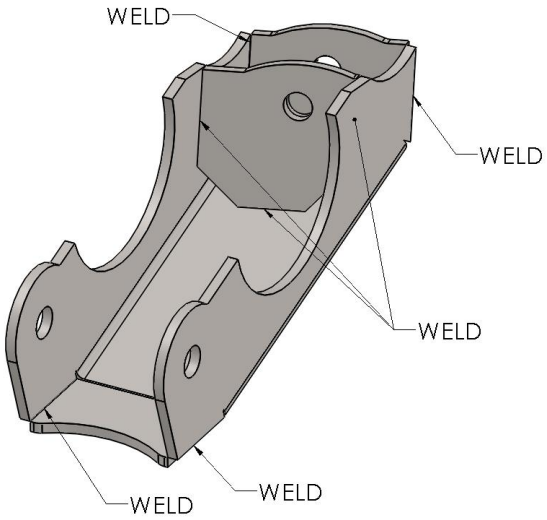
Remove any paint or rust from the tubes and diff housing where the bracket will be welded. If you are welding to the cast center section, I recommend to sand the cast surface smooth where it will be welded.

2. LCA Bracket Assembly.



2.1) The shock mounts are designed for 1.5" wide shock spacers. There are 4 teardrop shaped shock bolt weld washers included, 1161-10. 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. Weld the weld washers on the appropriate side of the -01 and -02 brackets for your application.

2.2) Use the 1.53 or 1.28 weld spacers and 1/2" bolts and bolt the -02 shock tab to the -01 LCA bracket. Weld the sides and bottom of the -02 shock tab and ripped edges of the -01 LCA bracket.

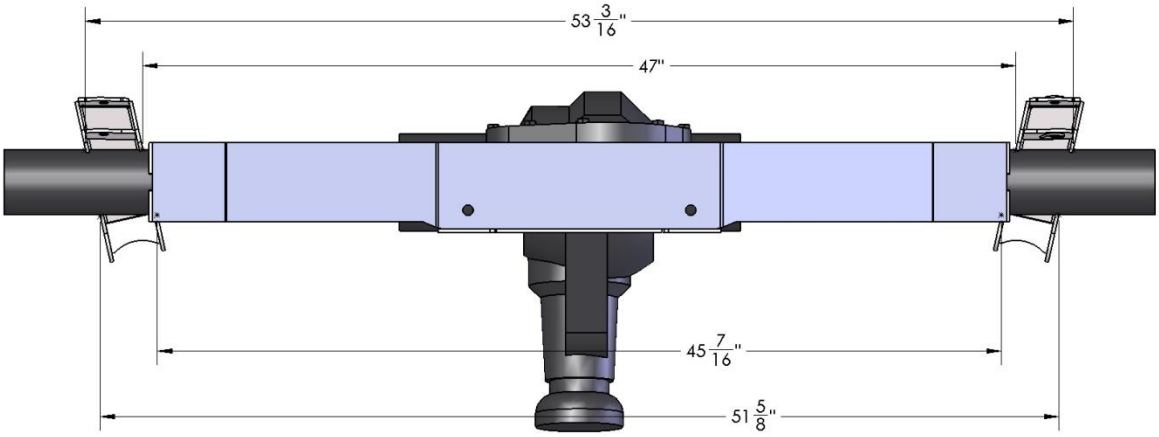


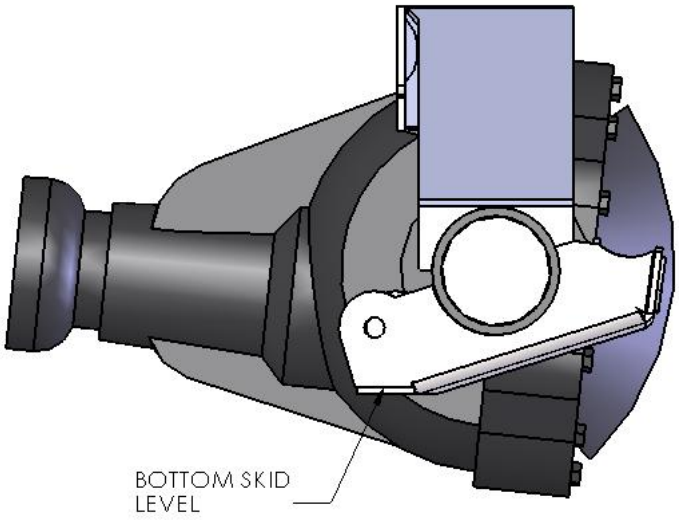
2.3) With the axle on jack stands or some sort of stand, set the pinion angle to your desired angle. I recommend 6 degrees of pinion angle

2.4) The LCA brackets may be sprung out slightly, install the 2.655 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.

2.5) There is a different left and right LCA bracket, they should angle inward towards the rear like the image below.

2.6) Position and tack weld the LCA bracket to the axle housing, a few different reference dimensions are shown below, depending on where you can measure easiest, the dimensions shown below are to the outside or inside of the LCA bracket. The bottom skid of the LCA bracket should be level to the ground at the desired pinion angle.





3. Final welding

3.1) Weld the outside edges of the LCA bracket where it contacts the axle tube, wrap the weld at least 1/2" around the front and back edges