

INSTALLATION INSTRUCTIONS

14 Bolt Rear Truss System

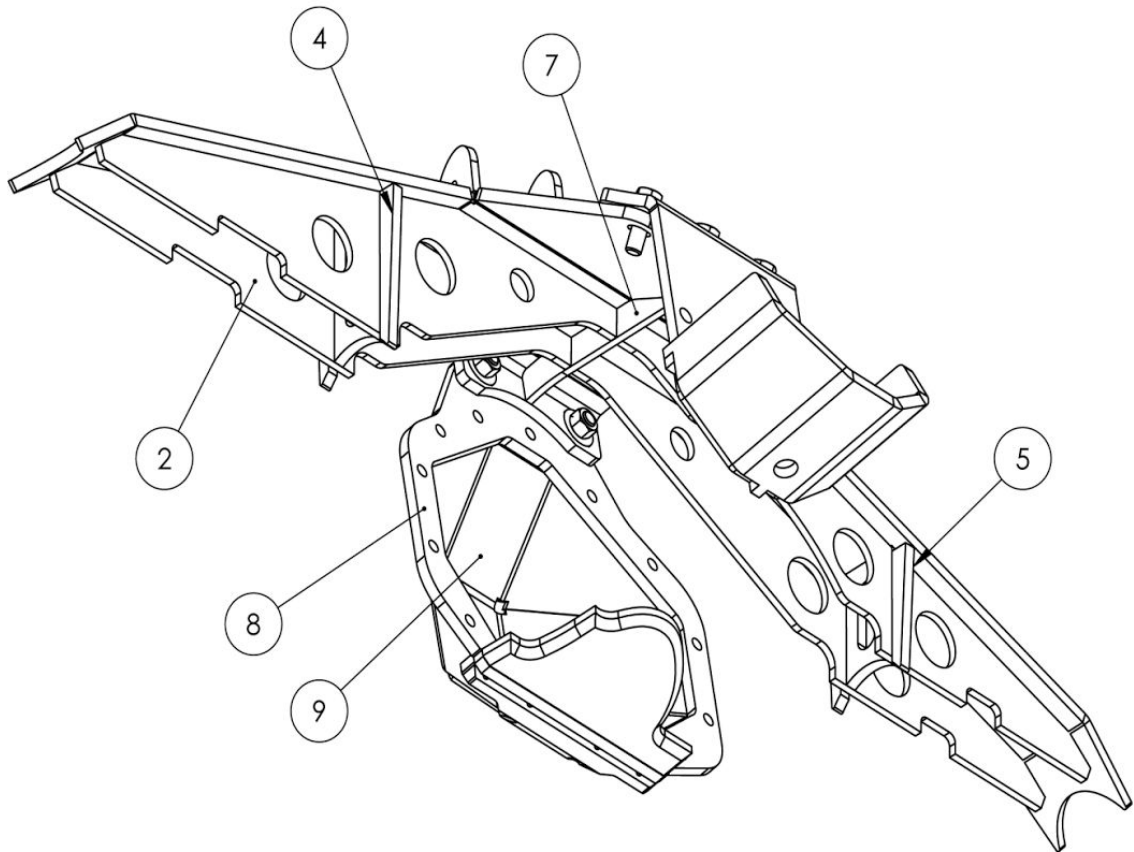
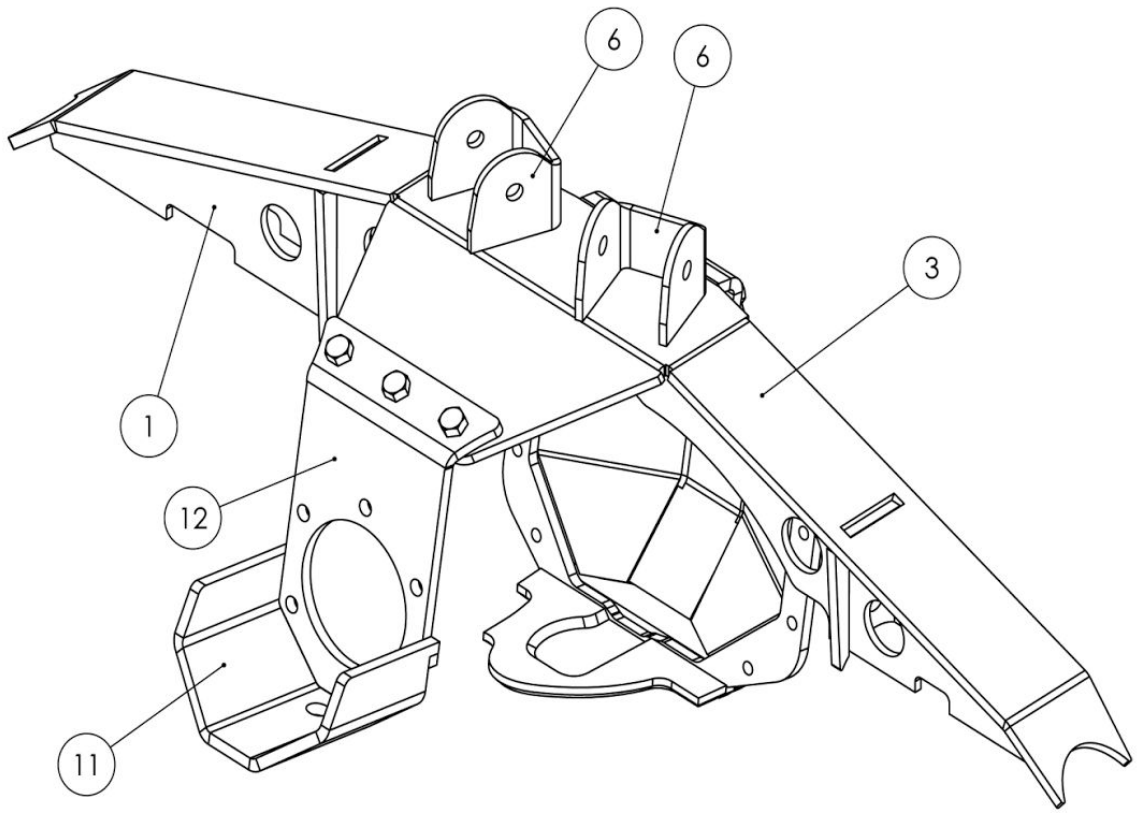
Ballistic Fabrication produces products for custom vehicles. Many products require general welding and fabrication skills. Welding should only be done by a competent welder. Ballistic Fabrication is not liable for improper installation. Check with local laws if your vehicle is driven on the street as some Ballistic Products may not be street legal in all states.

Whats Included

Instruction Manual Part Number - TRUP-1207-INST

ASSEMBLY BILL OF MATERIALS			
#	DESCRIPTION	ASSEMBLY #	QTY
1	Front Plate	TRUP-1207-1B	1
2	Rear Plate	TRUP-1207-1C	1
3	Top Plate	TRUP-1207-1A	1
4	Tall Gusset	TRUP-1207-1D	1
5	Short Gusset	TRUP-1207-1E	1
6	Upper Link Mount	TRUP-1207-1F	2
7	Center Gusset	TRUP-1207-1H	1
8	Diff Cover Flange	DIFP-2001-06	1
9	Diff Cover	DIFP-2001-06	1
10	Diff Cover Gusset (Not Shown)	TRUP-1207-1I	1
11	Pinion Guard	TRUP-1203-L	1
12	Pinion Guard Tie-in	TRUP-1203-6	1

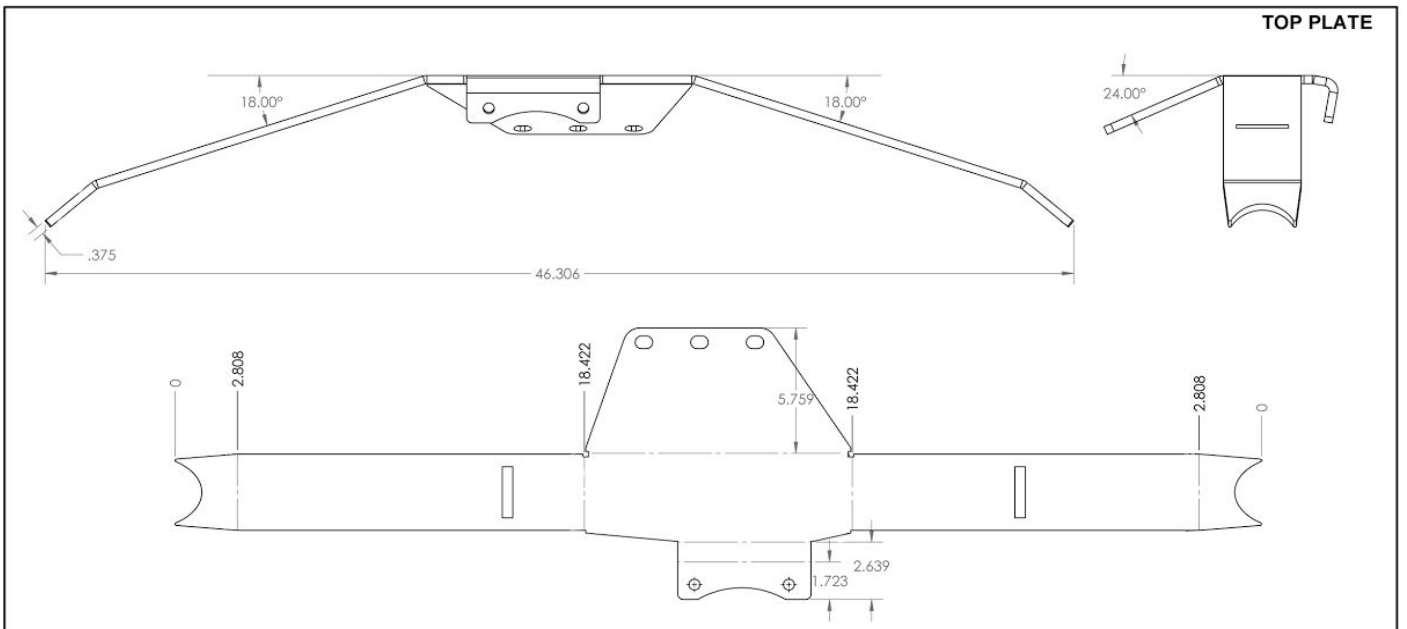
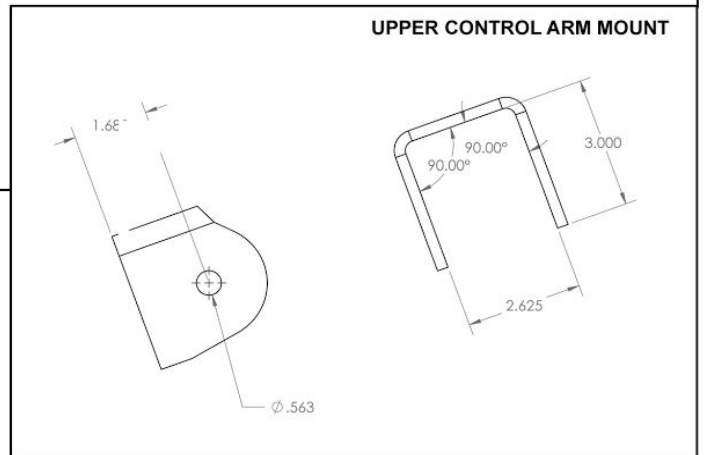
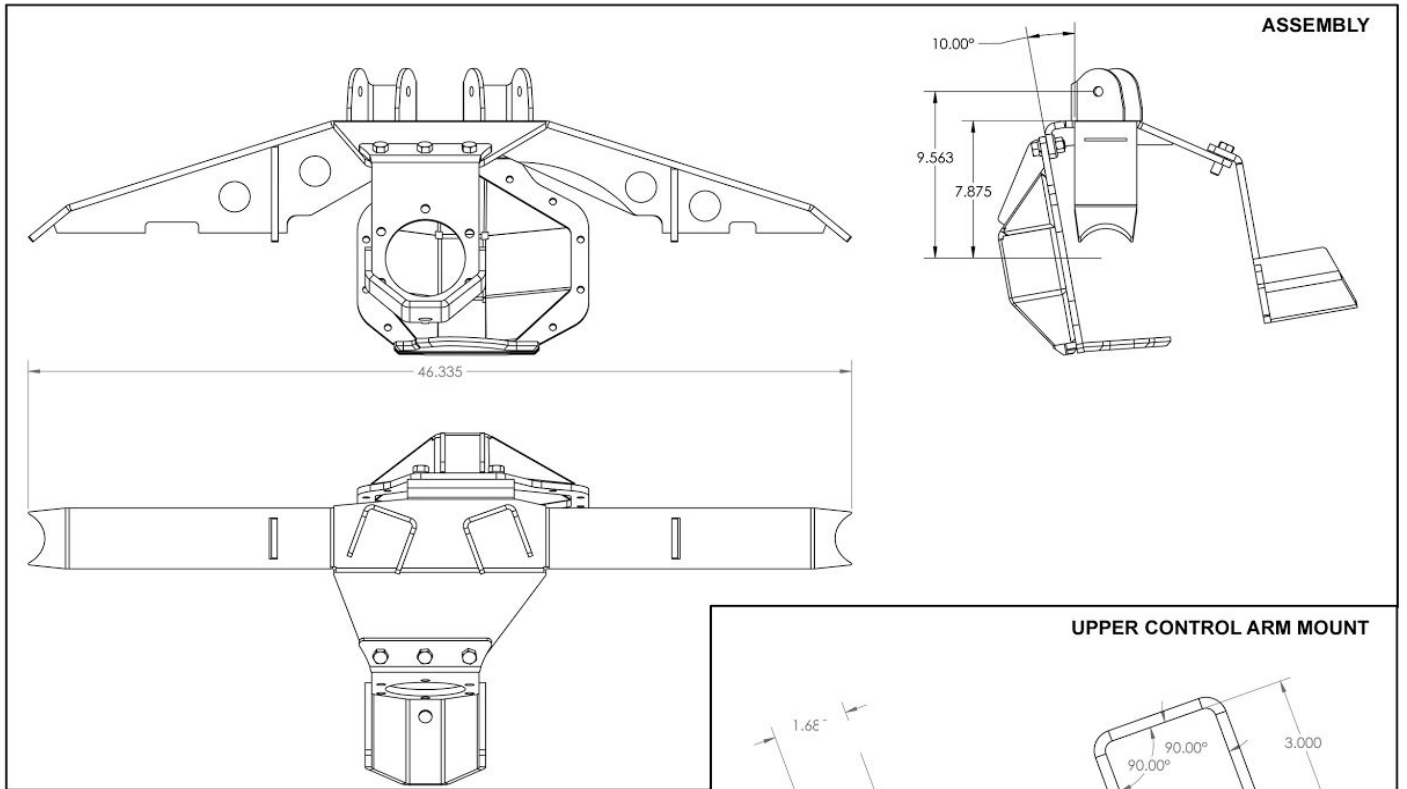
ASSEMBLY HARDWARE	
DESCRIPTION	QTY
Gr8 Hex Bolt: 1/2"-13 x 1.75"	5
SAE Flat Washer: 1/2"	10
Split Lock Washer: 1/2"	5
Gr8 Hex Nut: 1/2"-13	5
Gr8 Hex Bolt: 3/8"-16 x 1.50"	6
SAE Flat Washer: 3/8"	6
Split Lock Washer: 3/8"	17
SHCS: 3/8"-16 x 1.0 (Axle Yr - 1998.5)	11
SHCS: M8-1.25 x 25mm (Axle Yr 1998.5+)	11
SHCS: 5/16"- 18 x 1.00"	4



Additional Options

- Two (2) BRK-1040 - Inner Frame Mount: .250" Plate 22.5 degree offset
- One (1) pair BRK-1009-4 - Lower Axle Link Bracket. 3.25" Axle, 22.5 degree offset, 2.63" mounting width, 9/16" bolt hole
- One (1) BRK-1031-2 - 4-link Adjustable Mounting System: 2.63" Mounting Width 2.0" round tube
- Four (4) BJ-675-15 - Forged Chromoly 2.63" Ballistic Joint, 1.25" Shank RH, 9/16" bore, Fully assembled
- Four (4) BJ-675-16 - Forged Chromoly 2.63" Ballistic Joint, 1.25" Shank LH, 9/16" bore, Fully assembled
- Four (4) JAM-719 - 1.25" - 12tpi Jam Nut RH
- Four (4) JAM-720 - 1.25" - 12tpi Jam Nut LH
- Four (4) TA-247 - Tube adapter 1.25" -12tpi 1.5" ID - 2.0" OD RH
- Four (4) TA-248 - Tube adapter 1.25" -12tpi 1.5" ID - 2.0" OD LH
- Four (4) DOM-406-5 - DOM 1.5" ID - 2.0" OD .250" wall 5 feet each
- Eight (8) KIT-2305-02 - Gr 8 Bolt Kit: 9/16-18 x 3.75"
- Pre-Turned Ring & Pinion Sets - 4.88, 5.13, 5.38 - \$419.99 - Call for Availability and to order
- Turning Your Ring Gear - \$105.00 - Call to Order

Specifications



Dis-assembly

- Completely Dis-assemble axle. The brake assembly may be left on axle, but it is recommended to completely tear the axle down to a bare housing.
- Cut off existing leaf spring mounts and grind axle tubes clean (It is possible to use leaf springs with this Truss kit, some trimming of the Truss will necessary).
- Cut off the shock mounts if the original mounting locations are not being reused and grind the axle tubes clean. Ballistic offers many shock mounting tabs and brackets to fit your needs.

Pre-assembly

- Clean axle housing to prepare for welding. Sand Blasting is recommended, but the axle can be prepped with a grinder if necessary.
- Follow instructions for the 14 Bolt Shave Kit except for Final Assembly.

14 Bolt Shave Kit Instructions

- Temporarily bolt the Differential Cover to the axle with the supplied 3/8-16 x 1" bolts (Axle Year -1998.5) or M8-1.25 x 25MM bolts (Axle Year 1985.5+) as it will bolt to the Truss Top Plate(3) to position it to the axle.
- Assemble the Front Plate(1), Rear Plate(2), Tall Gusset(4), Short Gusset(5), and Center Gusset(7) on the axle.

- Bolt the Top Plate to the Differential Cover with the supplied 1/2-13 x 1.75" bolts.
- Temporarily Bolt the Pinion Support to the axle with the supplied 3/8-16 x 1.5" bolts and to the Top Plate with the supplied 1/2-13 x 1.75" bolts.
- Once everything is aligned correctly and the gaps are consistent all the way around the pieces can be tack welded together.
- Remove the truss from the axle and fully weld all of the seams. To prevent warping, Do not weld continuously in one area. Weld a bead no more than is 2 inches long in an area and move to another area. Allow time between welds for the assembly to cool.

NOTE: this is not a job for a 110 volt welder or for an inexperienced welder. If you are not 100% confident in your welding abilities take your axle to a professional welder for final welding.



- Once the truss is fully welded and cooled it can be placed back on the axle and bolted to the Differential Cover and Pinion Support again. It may be necessary to clamp the Truss to the axle at this point as some warping may have occurred during welding.
- Weld the Truss to the Axle. Again, do not weld continuously in one area. Weld no more than a 2 inch bead in one area before welding in another area and allow time to cool between welds.
- Now that the truss is fully welded to the axle and cooled the Upper Link Mounts can be positioned and welded.
- The axle will need to be positioned under the vehicle and the suspension links temporarily attached.
- Once the angle and position of the Upper Link Mounts have been verified and rechecked they can be tacked into place.
- Remove the axle from under the vehicle and finish welding the Upper Link Mounts.

Final Assembly

- Remove the Pinion Support and Differential Cover.
- Install the Pinion Bearings per manufacturer's specifications.
- Install the carrier and set pinion preload, backlash, and gear pattern per manufacturers specifications
- Install the Pinion Support with the supplied 3/8-16 x 1.5" bolts and torque to 65 ft/lbs per manufacturers specifications. Bolt the Pinion Support to the Top Plate with the supplied 1/2-13 x 1.75" bolts.
- Clean the mating surface of the differential cover and housing using acetone or other solvent that does not leave a residue.

- Using a quality form in place gasket such as "Right Stuff®" or other equivalent RTV sealant, place a 1/8" to 3/16" bead on the mating surface of the housing and around all bolt holes.
- Install the Differential Cover with the supplied 3/8-16 x 1" bolts (Axle Year -1998.5) or M8-1.25 x 25MM bolts (Axle Year 1985.5+) and torque to 35 ft/lbs per manufacturers specifications. (If using some other sealant, follow the provided instructions on the back of the package about torque sequence as some may require a secondary tightening after a setting period)
- Install any other components on the axle assembly such as Ballistic Lower Link Mounts or Shock Tabs prior to Painting or Powder Coating the axle.
- Fill with appropriate gear oil.