## Step 1 DIY Tire Carrier Install Instructions





Step by step on how to install the DIY Tire Carrier. Please read all steps carefully before starting the install.

Questions or Support:
Phone: 269-353-1184
Email: info@jcroffroad.com

## Step 2 Included Parts



Check that you have all of the parts shown before starting.

## Step 3 Included Hardware

**046-0180 BOLT PACK**

DIY-TC BP • Bill of materials (per 1 bag)

PIECES / BAG 24

| BIN | QTY | PART # | DESCRIPTION |
|---|---|---|---|
| 1 | 6 | 040-0020 | 5/16-18 SERR FLANGE NUT HARD ZNC |
| 2 | 6 | 040-0005 | 5/16-18 x 3/4 BUTTON HD SOC CAP 18-8 SS |
| 3 | 4 | 070-0014 | 1/2 RUBBER PUSH-IN BUMPER |
| 4 | 1 | 040-0266 | 1/2 x 4-1/2 QUICK-RELEASE PIN |
| 5 | 1 | 070-0082 | DE-STA-CO U-HOOK LATCH CLAMP 344 |
| 6 | 6 | 040-0138 | 5/16 (M8) MIL-SPEC FLAT WASHER 316 SS |

Set bins out in this order • One bag at a time • Gold = zinc • Black = black finish Odoo BOM link in description

**046-0247 BOLT PACK**

TM-BP • Bill of materials (per 1 bag)

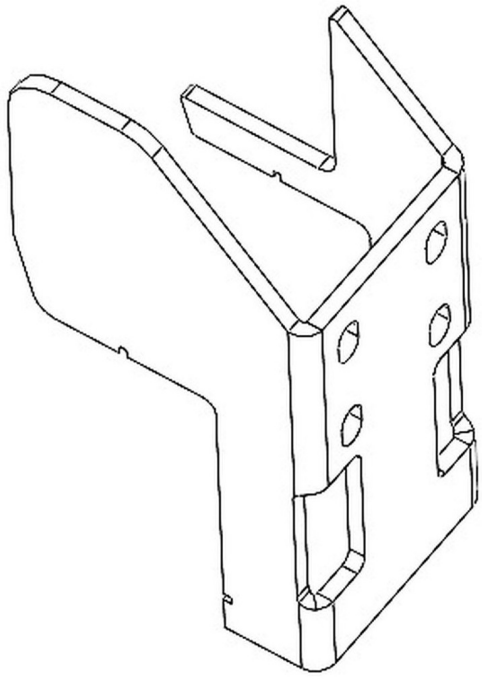
PIECES / BAG 9

| BIN | QTY | PART # | DESCRIPTION |
|---|---|---|---|
| 1 | 4 | 040-0066 | 1/2-20 x 5/8 OPEN WHEEL NUT ZNC |
| 2 | 3 | 040-0075 | 1/2-20 WHEEL BOLT |
| 3 | 2 | 040-0003 | 9/16 USS FLAT WASHER ZNC |

Set bins out in this order • One bag at a time • Gold = zinc • Black = black finish Odoo BOM link in description

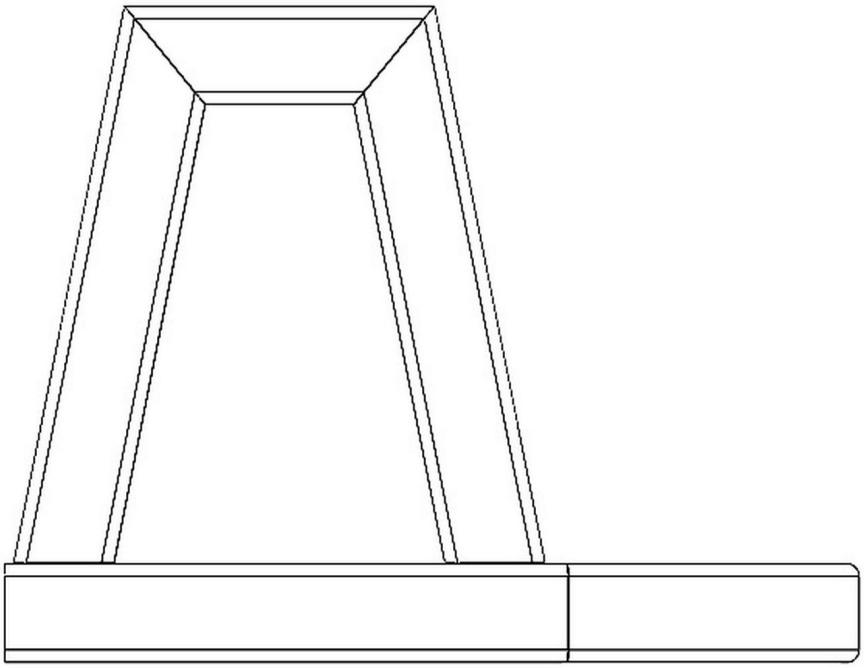
Check that you have all of the hardware shown before starting.

## Step 4 Bend Parts



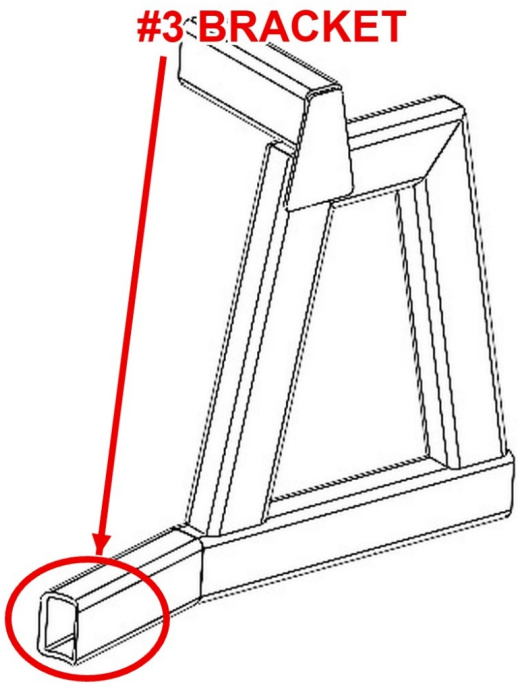
Bend all parts on their slit lines before welding: 4 parts bend to 90 degrees and the 2 tube braces bend to 165 degrees. Test fit each against the reference views.

## Step 5 Tack Carrier



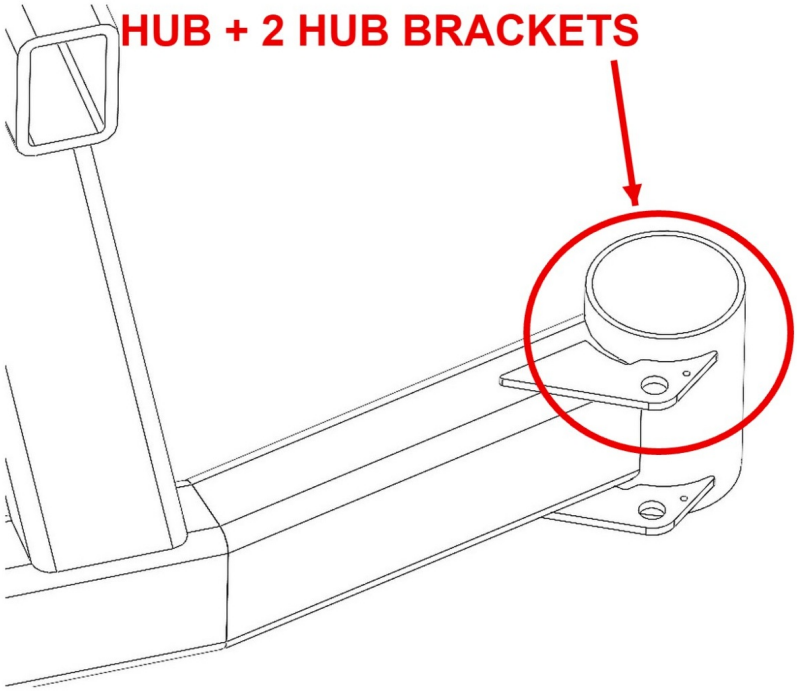
Solidly tack the carrier together first so you can adjust. Weld 5 of the 6 tube pieces into the base formation, seams welded, level and square. One tube piece stays left over for the top.

## Step 6 Weld Base



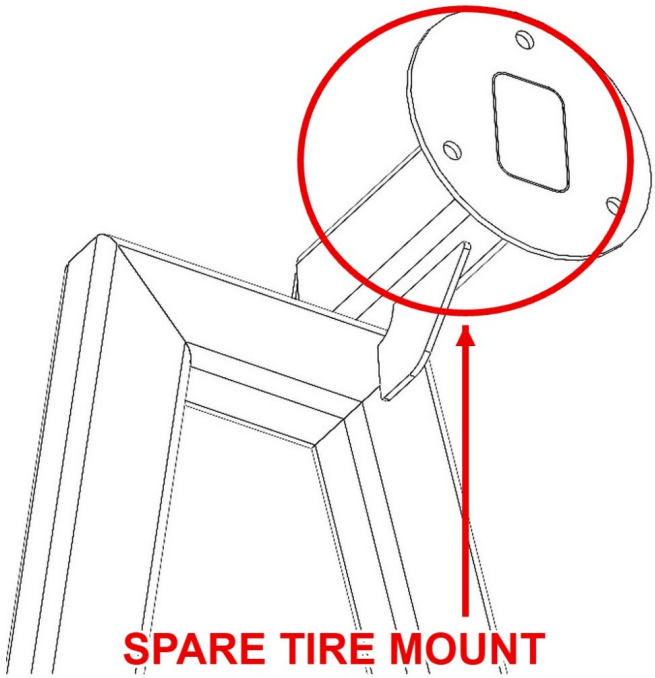

Weld the last tube piece and the #3 bracket to the base (viewed from the back). Match the bracket profile to the tube first. It can slide side to side to suit your tire size.

## Step 7 Weld Hub



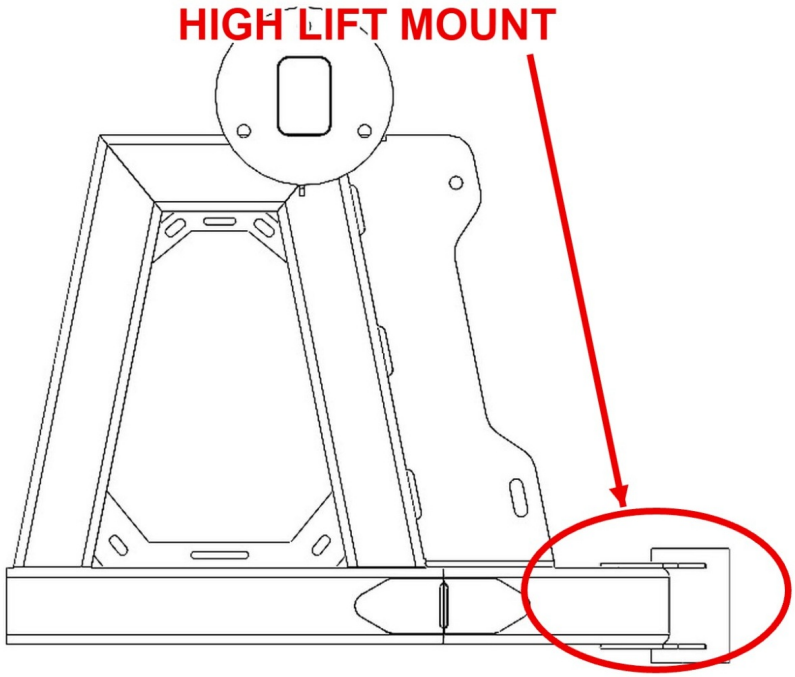

Weld the 2 hub brackets and the hub onto the curved end of the tube, one bracket on top and one on the bottom. Center the hub on the tube height-wise. Use heavy tacks only so you can verify carrier-to-bumper alignment.

## Step 8 Weld Spare Tire Mount



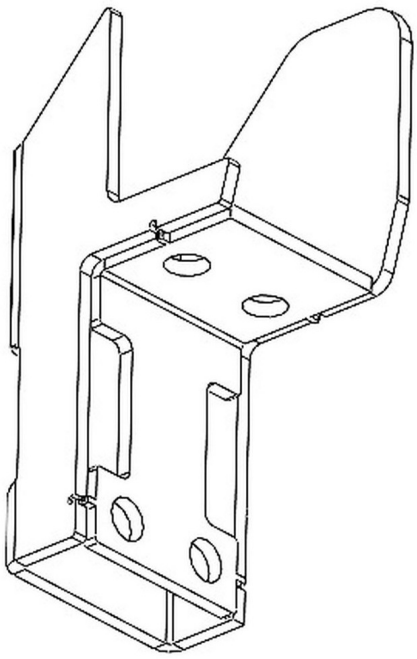

Weld the top tube support bracket and the spare tire mount to the top tube. Line up the etched profile on the tire mount and weld the faces flush. Center the support bracket on the top tube, flush on the base of the A-shaped tube.

## Step 9 Optional High Lift Mount



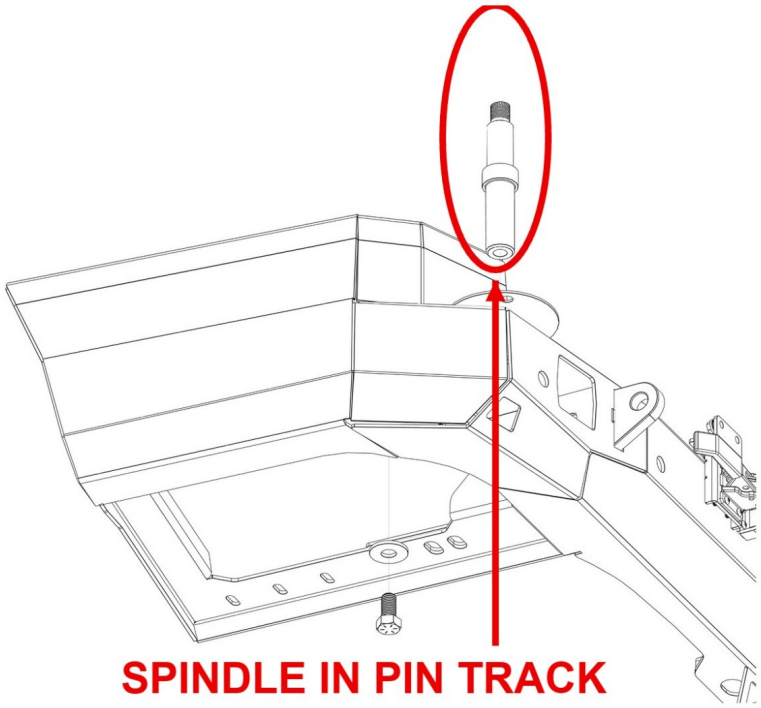

Optional high lift mount: set the small top flange flush with the top tube and the larger bottom flange flush with the bottom tube, then weld. Then weld the 3 tie-in brackets: the oval over the lower angled tubes, the other two flush at the top and bottom corners.

## Step 10 Build Latch Bracket



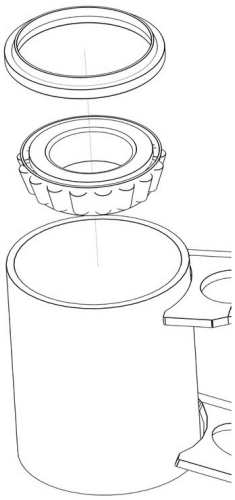
Bend the latch bracket pieces 90 degrees on their bend lines and weld them together, lining the tabs up. Weld the assembly to the end of the bottom tube. Shown for a right side carrier, so mirror it for a left side.

## Step 11 Install Spindle



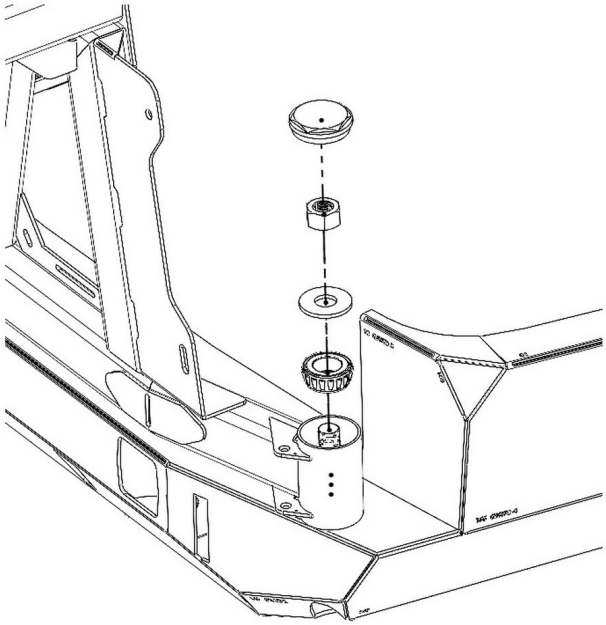

Install the spindle into the bumper: put the large end into the pin track hole. Secure it with the 3/4 x 1-1/2 bolt and 3/4 washer, threaded into the bottom of the spindle from behind the bumper.

## Step 12 Grease Bearings



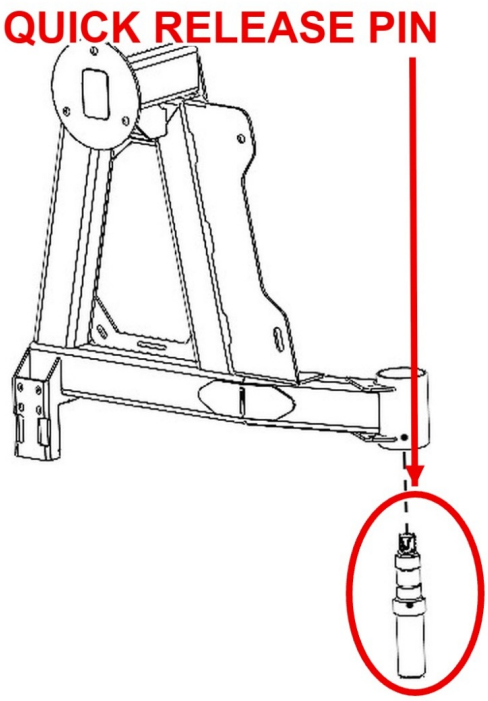
Grease both bearings and the rubber seal. Flip the carrier upside down and insert one bearing and the seal into the hub: smaller end of the bearing down, soft lip of the seal up. Tap the seal in with a hammer and screwdriver.

## Step 13 Mount Latch



Mount the latch and check that it works and that the carrier sits parallel to the bumper top. Drop the carrier onto the spindle, add the second bearing (small end down), the 1 inch washer, and the 1 inch nut. Tighten until there is no wiggle without straining the bearings, then thread on the spindle cap with the wrench.

## Step 14 Install Quick Release Pin




Grease the quick release pin and drop it into the small hub brackets beside the hub. It locks the carrier open and is not a brake. Swing the carrier open as far as the tire allows, then drill a 1/2 hole in the bumper top for the drop pin stop.

## Step 15 Final Weld



Happy with the look and alignment? Fully weld the carrier to finish the build. Customize and set up the carrier to your liking, as in the photo.

## Step 16 Installation Complete



Confirm all hardware is tightened. Congrats! Your installation of the DIY Tire Carrier is now complete. Enjoy!