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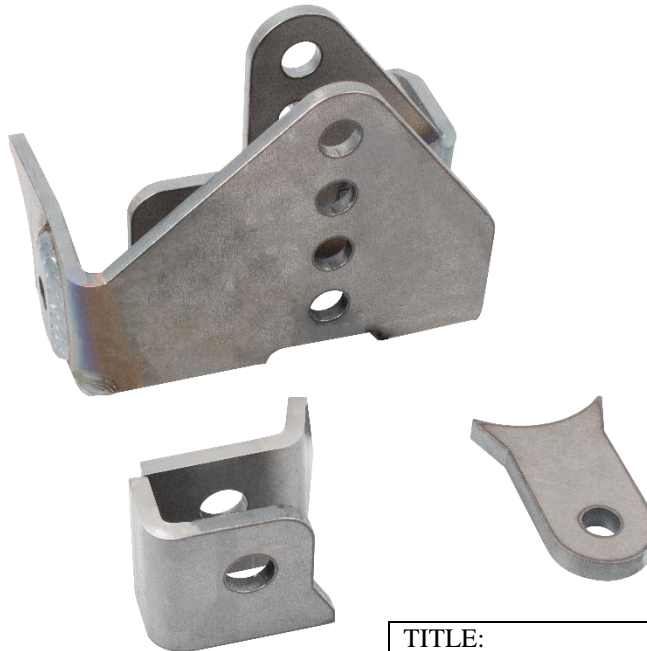
Revisions			
Rev.	Description	Date	Approved
A	Initial Release Per ECO 24-025	4/11/24	RG



## Weld On Front Track Bar Bracket

### Installation Instructions

Applications:  
 2018+ Jeep JL Wrangler  
 2020+Jeep JT Gladiator  
 2007-2018 Jeep JK Wrangler



TITLE:  
**WELD ON FRONT TRACK BAR  
 BRACKET INSTALLATION  
 INSTRUCTIONS**

SIZE	DWG NO:	REV
<b>A</b>	<b>8812-05-INST</b>	<b>A</b>
	SCALE: N/A	PAGE 1 OF 12



## WELD ON FRONT TRACK BAR BRACKET INSTALLATION INSTRUCTIONS

Thank you for purchasing the best aftermarket products available for your vehicle. We strongly feel that the parts you are about to install should meet or exceed your expectations for performance. Proper assembly is critical to the performance of these components and the vehicle as a whole. Please take the time to carefully read these instructions and familiarize yourself with the installation procedure before working on your vehicle. If you have any questions, PLEASE contact Synergy Manufacturing BEFORE beginning installation. Thanks again for supporting Synergy – enjoy the performance benefits of the best aftermarket products available for your vehicle!

**Synergy Manufacturing**  
**Phone: (805) 242-0397**  
**Email: support@synergymfg.com**

Modifying or otherwise altering vehicle components may cause the vehicle to handle differently than originally designed. It is the driver’s responsibility to familiarize themselves with the performance and handling characteristics of the modified vehicle. Vehicles with larger diameter than stock tires must be driven carefully and cannot be expected to perform as stock or meet OEM performance with regard to handling, braking, or crash performance. Ensure all replacement components are compatible with vehicle capacities so as not to overload components, especially tires. It is up to the individual to ensure that the vehicle and all components are compatible with the intended vehicle use, including load ratings, road conditions, and driver abilities. Thorough and frequent vehicle inspections are recommended to ensure a safe and reliable state of readiness, especially after off-highway use.

### PARTS LIST

#### 8812-05 Parts List

QTY	Part Number	Description
1	881205-WD	Jeep JL/JT Weld on Front Track Bar Bracket, Welded Assembly
1	881205-05	Jeep JL/JT Weld on Front Track Bar Bracket, Driver Side Sway Bar Tab
1	881205-06	Jeep JL/JT Weld on Front Track Bar Bracket, Hydro Assist Upper Tab
1	881205-07	Jeep JL/JT Weld on Front Track Bar Bracket, Hydro Assist Lower Tab

### GENERAL NOTES

- These instructions are also available on our website; [www.synergymfg.com](http://www.synergymfg.com). Check the website before you begin for any updated instructions and additional photos for your reference.
- You must use a minimum of 3” of front bump stop extension (PN:8057-10) to prevent the track bar and bracket from hitting the bottom of the frame at full compression travel.
- This track bar bracket will allow for the track bar to be mounted in the stock location or up to 3” taller than factory to correct the track bar geometry when utilizing a drag link flip at the steering knuckle.
- The installation of this bracket requires the complete removal of the stock track bar bracket with a sawzall and cut off wheel or plasma cutter or oxy-acetylene torch. The new bracket must be welded to the axle tube. An experienced fabricator/welder is recommended to properly install this bracket.

## TOOLS REQUIRED

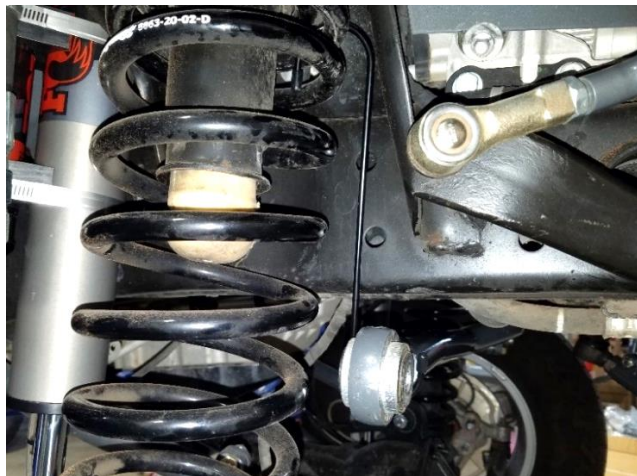
- 18mm, 21mm, 22mm Sockets and Wrenches
- Prybar
- Torque Wrench
- Grinder
- Welder
- Angle finder (digital or analog)

## ESTIMATED INSTALLATION TIME

**4 Hours**

## INSTALLATION

1. Installation can be done on the ground or in the air on a lift. Support the vehicle on jacks and remove the wheels and tires.
2. Remove the steering stabilizer followed by the front axle track bar bolt and pull the track bar up out of the bracket. Support the passenger side of the track bar by tying up the end so it does not fall down in your way while working on the axle. See **Figure 1**.



**Figure 1. Trackbar End Supported**

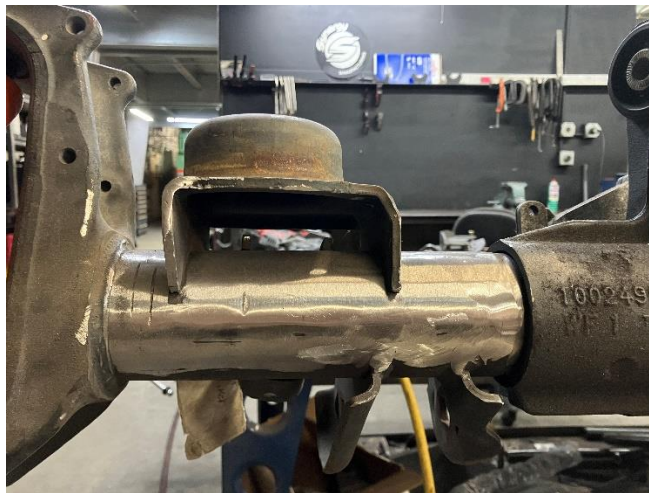
3. Remove the sway bar endlinks and tie rod from the front axle
4. Cover or remove the springs and shocks to protect them from damage while cutting the factory bracketry off, or welding the new bracketry on.

5. Cut off the factory track bar bracket and passenger side sway bar tab from the axle tube. Take care to not gouge or cut into the axle tube while removing the bracket. See **Figure 2**.



**Figure 2. Removed Factory Track Bar Bracket**

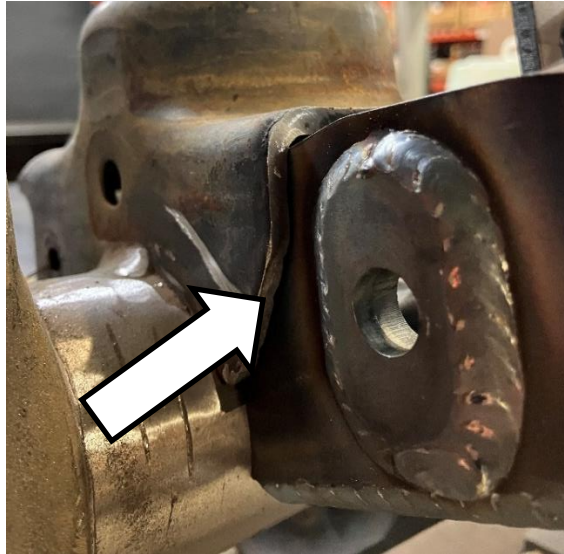
6. Grind down and remove any left over welds or bracket material. The axle tube should be smooth and free of paint. See **Figure 3**.



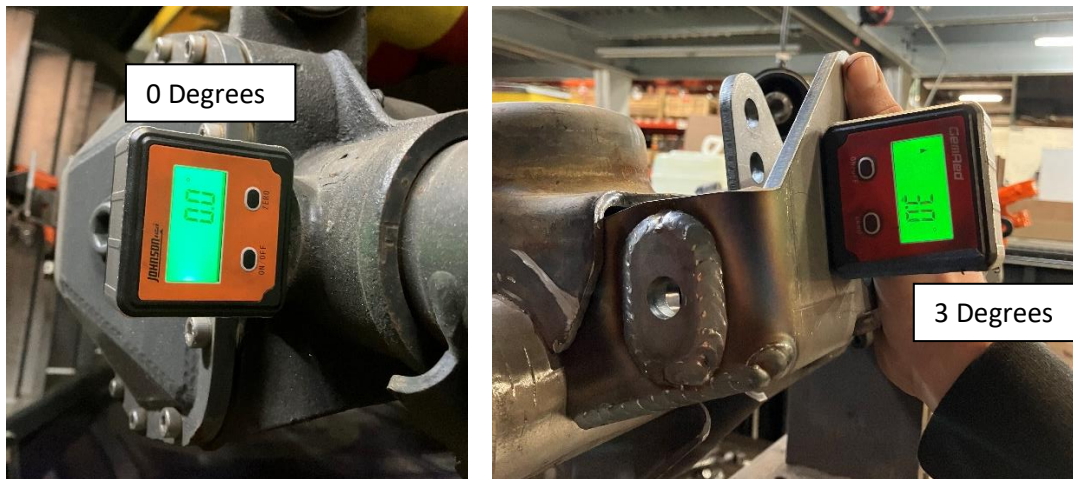
**Figure 3. Smoothed Out Axle Tube.**

7. **If installing the track bar bracket on a Jeep JK, skip ahead to step 13.**

8. **JL/JT Install:** Test fit the bracket. The track bar bracket should index on the outside flange of the spring perch and be angled up 3 degrees from the differential spreader holes, See **Figures 4, 5 and 6**.



**Figure 4. Track Bar Bracket Indexed on Outside Vertical Flange of Passenger Side Spring Perch**

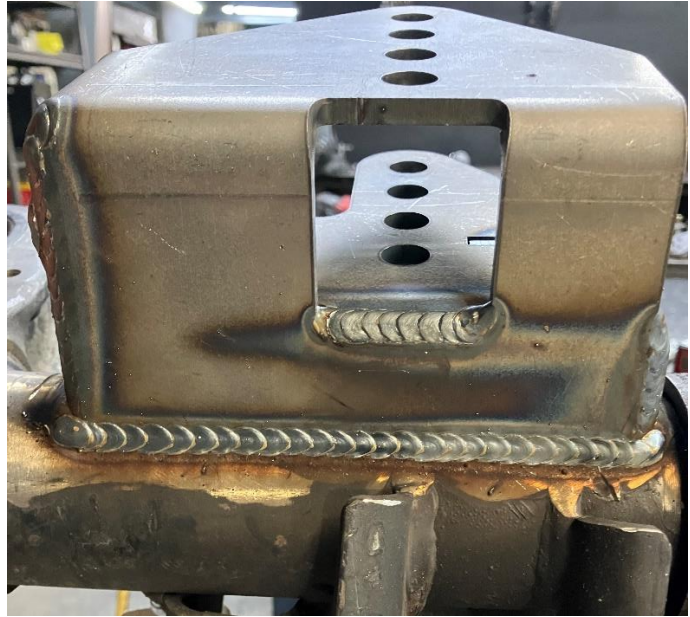


**Figures 5 and 6. Angle Finder Zeroed on Axle Spreader Hole and Displaying 3 Degrees Up on Track Bar Bracket.**

9. Make note of any control arm bracketry or paint that is under the new track bar bracket, any obstructions will have to be removed or clearanced before the new bracket can be welded on.
10. Once all obstructions have been clearanced or removed from the axle, tack the track bar bracket to the axle. Ensure the front face of the bracket is still rotated 3 degrees up from the face of the differential spreader holes.
11. With the new bracket tacked onto the axle tube and all weld areas prepped, fully weld the track bar bracket to the axle. We recommend welding in short sections and moving around to different parts of the bracket to reduce the possibility of warping the axle tube See **Figures 7-10**.



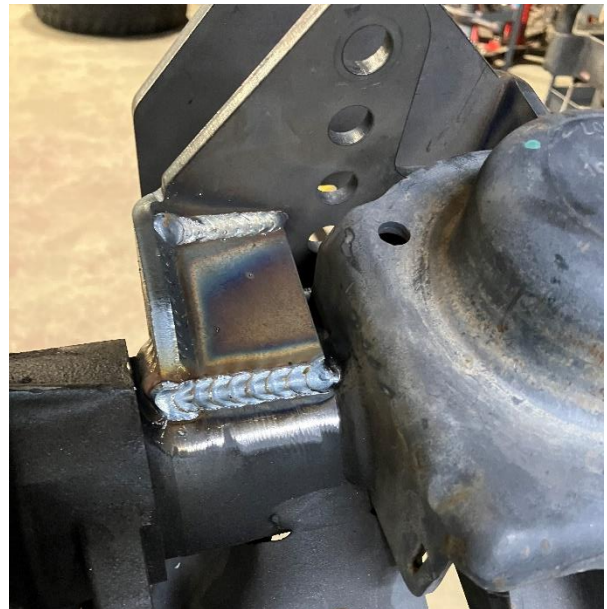
**Figure 7. Vertical Weld on the Spring Perch**



**Figure 8. Completed Bottom Weld**



**Figure 9. Vertical Weld Against FAD**



**Figure 10. Welded Top Tab of Track Bar Bracket**

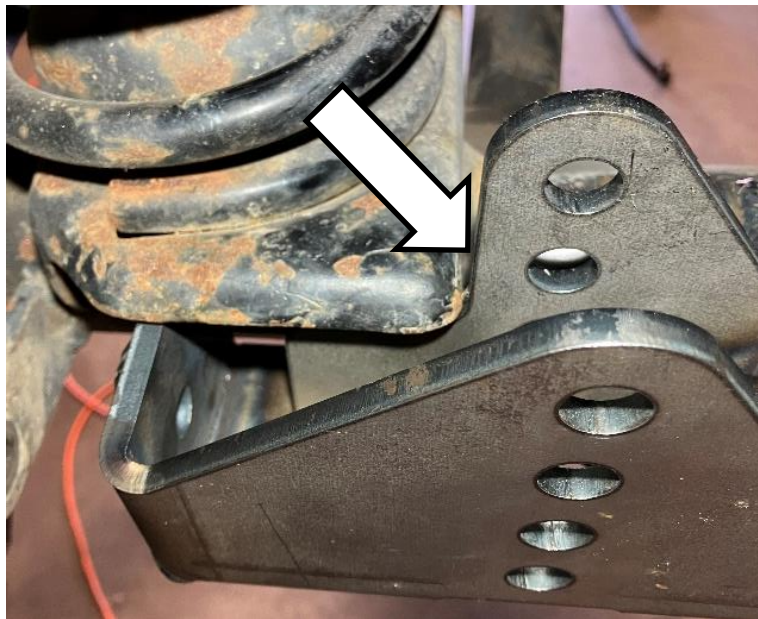
**12. If installing the Track Bar Bracket on a Jeep JL or JT, skip ahead to step 24.**

**13. Jeep JK Install:** The driver side sway bar mount on the axle must be removed and replaced with the provided tab. Take care when cutting the tab off the axle to not gouge or cut into the axle tube. See **Figure 11.**

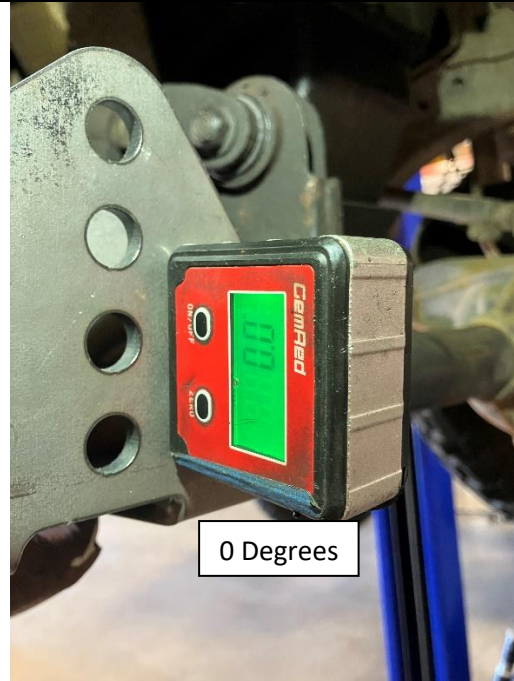


**Figure 11. Driver Side Sway Bar Tab Removed from the Axle Tube**

14. Test fit the bracket. The track bar bracket should index on the inside of the spring perch and have the front face of the bracket parallel to the differential spreader holes. See **Figures 12-14.**



**Figure 12. Track Bar Bracket Indexed on the Inside of the Spring Perch.**



**Figures 13 and 14. Front Face of Track Bar Bracket Parallel to the Spreader Holes on the Differential**

15. Make note of any control arm bracketry or paint that is under the new track bar bracket, any obstructions will have to be removed or cleared before the new bracket can be welded on.
16. Once all obstructions have been cleared or removed from the axle, tack the track bar bracket to the axle. Ensure the front face of the bracket is still parallel to the face of the differential spreader holes and the back side of the bracket is still indexed on the spring perch.
17. With the new bracket tacked onto the axle tube and all weld areas prepped, fully weld the track bar bracket to the axle. We recommend welding in short sections and moving around to different parts of the bracket to reduce the possibility of warping the axle tube See **Figures 15-18**.



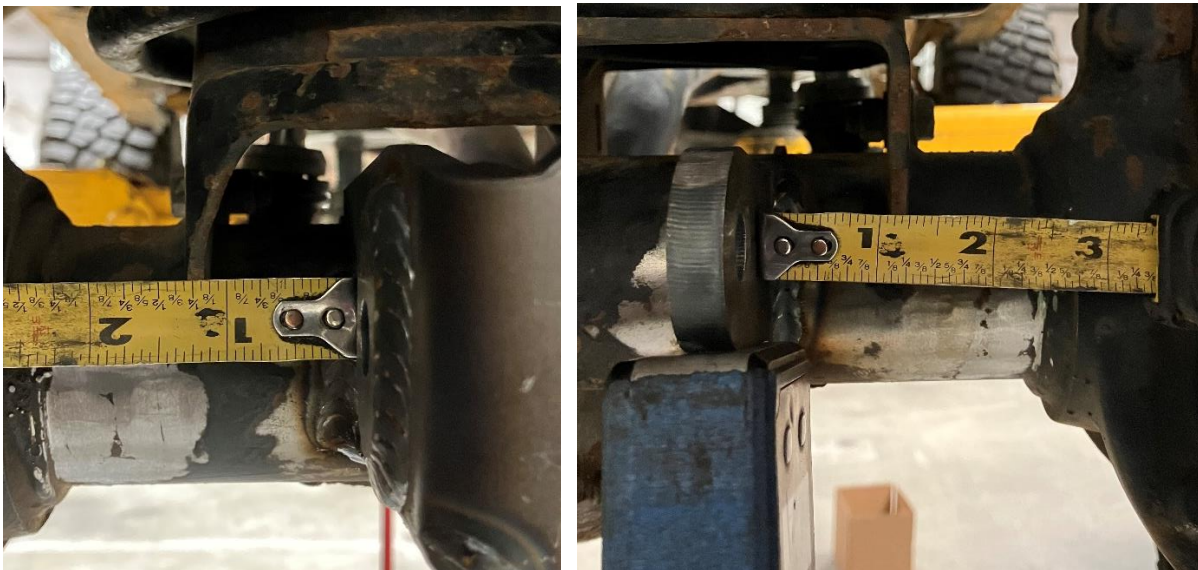
**Figures 15 and 16. Completed Vertical Welds on Either Side of the Track Bar Bracket.**





**Figures 17 and 18. Completed Welds on the Top and Bottom of the Track Bar Bracket**

18. Next, begin the installation of the driver side sway bar tab PN 881205-05.
19. Grind down any leftover weld material and paint from the axle tube to ensure a clean weld surface for the new sway bar tab.
20. Find a common reference point on the axle to locate the new sway bar tab, we recommend using the factory spring perches as the reference. Measure the distance from the spring perch to the sway bar end link mounting face on the track bar bracket. Mark on the driver side where the new sway bar tab will be placed with a marker or scribe. See **Figures 19 and 20.**



**Figures 19 and 20. Measuring the Distance from the Track Bar Bracket to the Outside of the Coil Bucket and Measuring the Same Distance on the Driver Side Sway Bar Mount.**

21. Next, ensure the sway bar mounting holes are level with each other. Holding the tab so that the bottom flange is 70 degrees from the front face of the track bar bracket will ensure the sway bar mounting holes are in line with each other. See **Figures 21 and 22.**



**Figures 21 and 22. Angle Finder Zeroed on the Front Face of the Track Bar Bracket and the New Sway Bar Tab Set at 70 Degrees on the Axle Tube.**

22. Tack the sway bar tab onto the axle tube on the location marked out in step 19.
23. Ensure the tab is vertical and perpendicular to the axle tube, then fully weld the tab to the axle tube. See **Figures 23 and 24.**



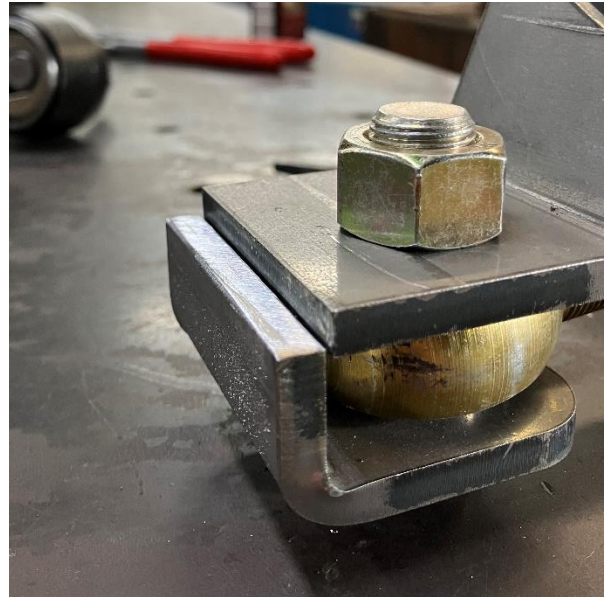
**Figures 23 and 24. Fully Welded Sway Bar Tab on the Driver Side Axle Tube**

24. If you are using the supplied tabs to mount a hydraulic assist steering ram, follow the instructions below.
25. Reinstall the tie rod and loosely bolt up the hydraulic ram to the tie rod.

26. Bolt the tabs marked 881205-06 (top tab) and 881205-07 (bottom tab) to the ram end. The tabs are designed to work with 5/8" and 3/4" ram rod ends. If using a 3/4" rod end, drill out the holes from 5/8" to 3/4". If using a 5/8" rod end, trim down the bottom tab part number 881205-07 to allow for a proper outside corner weld. See **Figures 25 and 26**.



**Figure 25. Hydro Tabs Bolted to 5/8" Rod End**



**Figure 26. Trimmed Hydro Tabs for Proper Weld**

27. Place the weld tabs on the front face of the track bar bracket so that the ram is parallel to the tie rod. See **Figure 27**.



**Figure 27. Hydro Assist Ram and Weld Tabs Placed on the Track Bar Bracket**

28. Tack the hydro assist ram tabs in the desired location and cycle the steering from steering lock to lock to ensure there is no contact made between the tie rod and hydraulic assist ram.
29. If there is any contact between the tie rod and ram, reposition the tabs on the track bar bracket to ensure the steering can cycle from lock to lock without contacting any other steering or axle components.

30. Once fitment has been finalized, remove the tie rod and hydraulic assist ram from the axle and fully weld the tabs. See **Figures 28 and 29**.



**Figures 28 and 29. Hydro Mount Fully Welded on the Track Bar Bracket**

31. With the track bar bracket fully welded to the axle and the hydraulic assist ram tabs fully welded to the bracket (if applicable), paint all exposed metal to prevent rust and corrosion.
32. Once the bracket has been painted, reinstall the track bar using the original hardware, torque to manufacturer specifications. There are 4 mounting heights on the track bar bracket: stock to +3". Installing the track bar in any position higher than stock will require modification to the drag link mounting locations to account for the change in suspension geometry. The most common mounting location other than stock is +3" when running the drag link in the flipped position on top of the steering knuckle.
33. Reinstall the tie rod and sway bar end links to manufacturer specifications. Reinstall front shocks and springs (if removed).
34. Install the hydro assist ram if applicable and torque mounting hardware to factory specifications. If a steering stabilizer is being installed rather than a hydro assist ram, we recommend using the Synergy Jeep Stabilizer Mounting Stud (part number 8806-01).
35. Check all bolt torques after 100 miles of driving and again after each off-road trip.