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Revisions			
Rev.	Description	Date	Approved
A	Initial Release Per ECO 24-066	9/12/24	RG



Ram Heavy Duty Front Track Bar

Installation Instructions

Applications:
 2014+ RAM 2500 4x4
 2013+ RAM 3500 4x4



TITLE:
**RAM HD FRONT TRACK BAR, 14+ 2500,
 13+ 3500 INSTALLATION
 INSTRUCTIONS**

SIZE	DWG NO:	REV
A	8704-11-INST	A
	SCALE: N/A	PAGE 1 OF 8



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!

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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

8704-11 Ram HD Front Track Bar		
QTY	Part Number	Description
1	870411-PC	Ram HD Front Track Bar, 14+ 2500, 13+ 3500
1	481011-L	Ram Track Bar Angled Housing DDB Joint
1	3622-10-14-PL	Threaded Adjuster Sleeve
1	432802	Track Bar Bushing, Ram 2013+
1	HF8-8-20	Hex Head Bolt, UNF 1/2-20 X 1.75
1	NSF-8	Top Lock Nut, UNF 1/2-20, Zinc Plate
2	NAS1149-FO863P	Flat Washer, 1/2 ID, 7/8 OD, Mil-Spec

GENERAL NOTES

- These instructions are also available on our website; www.synergymfg.com. Check the website before you begin for any updated instructions and additional photos for your reference.
- The installation of this adjustable track bar will allow you to correctly align the front axle after a suspension lift is installed.
- The track bar features a double adjuster assembly which allows you to adjust the length of the track bar without removing either end of the track bar from the vehicle.

- The maximum adjusted length for the Synergy Mfg. Ram HD Front Track Bar is 40 5/8 inches long. When adjusting the track bar, do not exceed 1-3/4 inches measured from the end of the track bar clamp to the end of the threads on the angled DDB forged housing!
- Replacement bushings are available from Synergy MFG, part number 4328-02.

TOOLS REQUIRED

- 27mm and 3/4 inch sockets and wrenches
- 1-1/2 inch wrench or adjustable (Crescent type) wrench
- Torque Wrench
- Tape measure and straight edge
- Basic hand tools

ESTIMATED INSTALLATION TIME

1 Hours

INSTALLATION

1. Make sure the vehicle is parked on a flat, level surface. Ensure the vehicle is in park or in gear with the parking brake set.
2. It is easiest to remove the track bar with the weight of the vehicle on the suspension, however, it can be difficult to remove the axle side bolt because the steering drag link gets in the way. Lifting the front of the truck on a lift as shown in **Figure 1**, or simply supporting the axle on jack stands so the wheels are off the ground and turning the wheels to the passenger side will help gain the necessary clearance to remove the bolt.



Figure 1. Supporting the Front of the Vehicle on a Lift

3. Use a 27mm socket and ratchet (or impact) to loosen and remove the axle side track bar bolt. Either lift the truck up or steer the truck to the pass side to get the drag link to clear the bolt as it comes out. Make sure not to lose the flag nut that secures the bolt on the back side of the bracket. Save the stock hardware as it will be re-used. See **Figure 2**.



Figure 2. Unbolting the Axle Side of the Front Track Bar

4. Use the same 27mm socket and ratchet to remove the frame side track bar bolt. Early trucks need a 27mm wrench for the nut on the back side, later trucks use another flag nut and consequently do not need a wrench. Make sure to support the track bar as you remove the bolt so it does not fall out of the mount. Completely remove the front track bar from the truck. Save the stock hardware as it will be re-used. See **Figure 3**.



Figure 3. Unbolting the Frame Side of the Front Track Bar

5. Install the new Synergy Ram HD Front Track Bar. Install the non-adjustable side of the track bar into the axle bracket with the bend on that side facing down (the pinch bolt on the frame side will be facing down). Partially install the track bar bolt. It is easiest to thread the track bar flag nut on if the track bar bolt is not fully seated. Hold the flag nut by the flag and rotate the track bar bolt into the mount and nut. Once the nut has started on the bolt continue to rotate the bolt in. See **Figures 4 and 5**.



Figure 4. Installing the Axle End Bolt



Figure 5. Holding the Flag Nut for Assembly

6. Push the frame side angled forging up into the frame side track bar mount making sure the angled forging is oriented correctly to easily slide into the frame side bracket. It may need to be spun 180 degrees to fit correctly but do not thread the angled forging out too far. Once in place, adjust the track bar length by spinning the adjuster sleeve until the track bar bushing bolt hole and the frame mount bolt holes line up. Make sure the length of the bar is adjusted by turning the adjuster sleeve and not just spinning the bushing end. There should be equal thread showing on the black forging and the silver adjuster sleeve. If the bar cannot be adjusted to make the bolt holes line up, a ratchet strap between the frame and opposing side on the axle can be used to pull the body over in order to get the bolts to line up. When the bolt holes are lined up, install the factory hardware through the frame side bracket and track bar. See **Figures 6 and 7**.



Figure 6. Installing the Frame Side Bolt



Figure 7. Installing the Frame Side Nut

7. Torque the track bar bolts to OEM specifications, see **Figures 8 and 9**:

- Axle Side bolt and nut – 285 lb-ft
- Frame side bolt and nut – 285 lb-ft



Figure 8. Torqueing Axle Side Bolt

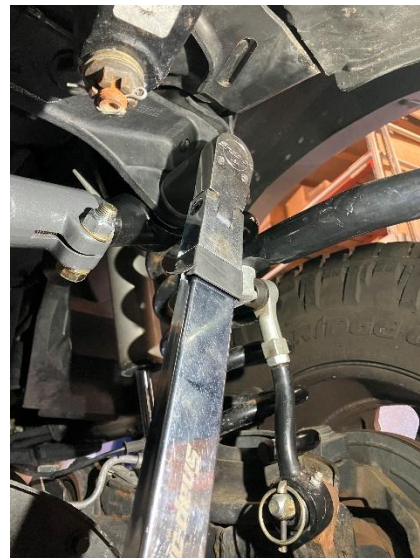


Figure 9. Torqueing Frame Side Bolt

8. With the vehicle on the ground at ride height, use a 1 1/2" wrench to rotate the double adjuster assembly to center the axle under the body of the vehicle. You can measure from the frame to the tire on each side, or use a straight edge on the outside of the tires to measure to the fenders on each side in order to get the axle centered. See **Figure 10**. Make sure the adjuster sleeve end is adjusted by turning the adjuster sleeve and not the bushing end or track bar itself. If the side to side measurement is off by a total of 1", then you would need to adjust the track bar 1/2" to center it. Turning the

adjuster clockwise shortens the bar, moving the axle towards the driver side of the vehicle. We recommend rotating the sleeve until one of the slots in the sleeve lines up with the slot in the track bar. Do not exceed 1.75" from the track bar end to the end of the threads on the shank of the angled DDB forging! See **Figure 11**.



Figure 10. Measuring Axle Side to Side



Figure 11. Max Angled DDB Forging Stick Out

9. Install the 1/2" pinch bolt through the hole in the forging of the track bar, with the bolt head towards the front of the vehicle, the nut towards the rear. With a 3/4" socket and wrench, tighten the pinch bolt to 90 lb-ft. Check to make sure the pinch bolt has adequately clamped the double adjuster assembly and there is no movement when putting a wrench on the adjuster sleeve. See **Figure 12**.



Figure 12. Tightening Pinch Bolt.

10. Re-check bolt torques after the first 100 miles and again after each off-road trip.



Figure 13. Completed Installation

Installation is Complete

Table 1. Ram HD Bolt Torques

Bolted Joint Location	Wrench Size	Torque
Axle Side Track Bar Bolt	27mm	285 lb-ft
Frame Side Track Bar Bolt	27mm	285 lb-ft
Adjuster Pinch Bolt	3/4"	90 lb-ft