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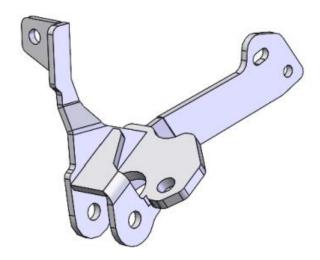
Revisions						
Rev.	Description	Date	Approved			
-	Initial Release Per ECO 22-002	1/7/22	RG			



# Ram 3<sup>RD</sup> Generation Track Bar Conversion Bracket

**Installation Instructions** 

Applications: 94-01 RAM 1500 4x4 94-02 RAM 2500/3500 4x4



SIZE

A

TITLE:							
RAM 4x4 1500 (94-01), 2500/3500 (94-02) FRONT TRACK BAR CONVERSION BRACKET.							
DWG NO:		REV					
8554	-						
SCALE: N/A	PAGE 1 OF 11						



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**

8554 RAM 3 <sup>RD</sup> GEN TRACK BAR CONVERSION BRACKET					
QTY	Part Number	Description			
1	855402-PC	Track Bar Conversion Bracket			
1	855402-05	Frame Rail Nut Tab			
1	850702-01	Taper Eliminator			
2	N/A	3/8-16 UNC x 2.5" Hex Head Bolt, Grade 8			
1	N/A	9/16-18 UNF x 3.0" Hex Head Bolt, Grade 8			
1	N/A	5/8-18 UNF x 2.5" Hex Head Bolt, Grade 8			
1	N/A	1/2-13 UNC x 1.25" Hex Head Bolt, Grade 8			
2	N/A	3/8-16 UNC Top Lock Nut			
1	N/A	9/16-18 UNF Top Lock Nut			
1	N/A	5/8-18 UNF Top Lock Nut			
4	N/A	3/8 Flat Washer, Grade 8, SAE			
1_	N/A	1/2 Flat Washer, Grade 8, SAE			
2	N/A	9/16 Flat Washer, Grade 8, SAE			
1	N/A	5/8 Flat Washer, Grade 8, SAE			

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### **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 track bar conversion bracket will allow you to install a Dodge third generation track bar PN 8550-11 on your second generation truck and correctly align the front axle after a suspension lift is installed.
- This kit requires some drilling and possibly grinding, depending on the configuration of the truck's frame.
- The 8554-02 Track Bar Conversion Bracket is a direct replacement of the original 8554 bracket and is compatible with the older 8550-XX track bars.

## **TOOLS REQUIRED**

- 9/16", 18 mm, 3/4", 13/16", 7/8", 15/16" sockets and wrenches
- Torque Wrench
- Tape measure and straight edge
- Grinder and abrasives (Application Dependent)
- Basic hand tools
- Jack and jack stands
- Drill and drill bits (3/8" and 1/2" bits)

#### ESTIMATED INSTALLATION TIME

4-6 Hours

(Including track bar install)

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## **INSTALLATION**

1. Begin by removing the axle side track bar bolt (18mm). This is easiest to do when the truck is on the ground and the weight of the vehicle is on the suspension. **See Figure 1.** 

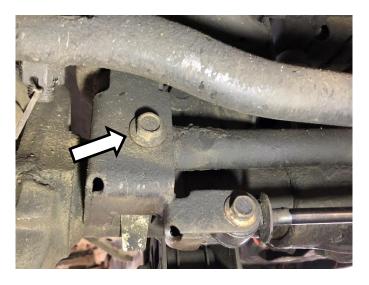


Figure 1. Axle Side Track Bar Bolt

- 2. Next, lift the vehicle up so the suspension can hang free, support it securely using Jack stands.
- 3. Once the vehicle is in the air and safely supported, remove the frame side stud on the factory track bar (7/8"). See Figure 2. In order to loosen the taper fit and completely remove the factory track bar, a hammer may be used to hit the frame side mount and the factory joint.



Figure 2. Frame Side Track Bar Bolt to be Removed

**4.** Next, inspect the underside of the frame side factory track bar tab. Some truck models have a weld that will inhibit the new track bar bracket from sitting flat on the surface. **See Figures 3 and 4.** 

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Figure 3. Track Bar Tab that Will Not Require Modification.

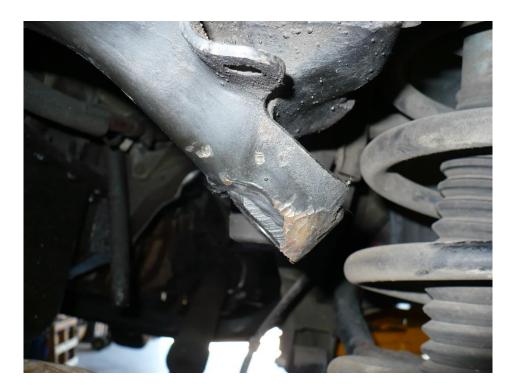


Figure 4. Track Bar Tab that WILL Require Modification

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- **5.** Some grinding will be needed to fit the Synergy MFG 8554-02 Track Bar Conversion Bracket if the track bar tab resembles the one pictured in Figure 4.
  - Use a 4-1/2" angle grinder with a flap wheel, grinding disk, or sanding disc and clean up weld / weld area until the underside of the factory track bar tab looks as pictured in **Figure 5.**



Figure 5. Correctly Modified Underside of Track Bar Mount

**6.** More grinding is necessary on the leading edge of the factory tab to clear the new spherical joints on the third generation track bar. **See Figure 6.** 



Figure 6. Correctly Clearanced Front Edge of Track Bar Tab

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7. Next, remove the bolt securing the brake line tab to the cross member (10mm). Gently push the brake line up towards the engine. **See Figure 7.** 



Figure 7. Brake Line Hold Down to be Removed.

**8.** Carefully grind the last 2-3 inches of the factory track bar brace until it is flush with the crossmember as pictured in **Figure 8**.



Figure 8. Clearanced Factory Track Bar Brace.

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- 9. Now fitment of the new 8554-02 Track Bar Conversion Bracket can begin,
  - O Start by installing the tapered sleeve into the factory track bar tab. Note the sleeve is installed from the bottom with the smaller taper going towards the top.
  - o Next, bolt up the 8554-02 bracket as pictured below, align the 5/8" bolt in the bracket and start the nut on the top of the factory track bar tab. Use a washer under the nut, **See Figure 9.**



Figure 9. Correctly Installed 5/8" Bolt with Washer on Top Side of Factory Tab

10. Mark and center punch the two cross member holes. The slotted hole on the crossmember mount should line up or be very close to lining up with the factory brake line hold down hole. Holes can be drilled with the bracket on the vehicle but it's suggested to remove the bracket to avoid damaging the powder coat. See Figures 10 through 13.





Figures 10 and 11. Center punched and Drilled Crossmember (3/8" Drill Bit)

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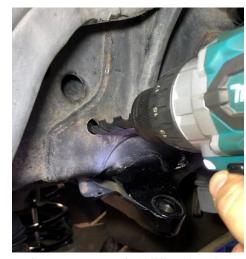


Figure 12 and 13. Center Punched and Drilled Frame Rail (1/2" Drill Bit)

- 11. Once holes are drilled, now is a good time to paint any exposed bare metal surfaces left over from grinding / drilling.
- 12. Next reinstall bracket, do not tighten any bolts until all bolts have been started.
  - Be sure to utilize a washer under both the nut and head of each fastener with the exception of the 5/8" going through the factory track bar tab. This only gets a washer under the nut on the top of the track bar tab. See Figures 14 and 15 for reference.
  - $\circ$  Use one of the 3/8" bolt to resecure the brake line hold down tab.



Figure 14. Installed Track Bar Conversion Bracket (Underside View)

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Figure 15. Installed Track Bar Conversion Bracket (Drivers Side View).

- 13. Once all bolts have been started, snug them all down and torque in the following order.
  - 5/8-18 UNF 200 ft-lbs.
  - o ½"-13 UNC − 75 ft-lbs
  - $\circ$  3/8-16 UNC 24 ft-lbs
- **14.** This kit is designed to use Synergy 8550-11 Dodge TB. Refer to the instructions included with the 8550-11 track bar for installation.
  - $\circ$  Install the TB at the frame side using the 9/16-12 x 3" long bolt provided in the kit. Use a washer under both the bolt head and under the stover nut. (Do not tighten)
  - Wait to install the axle side bolt once the vehicle is sitting on the ground under its own weight. Re-use the stock track bar mounting bolt and torque to 125 ft-lbs. It helps to have someone turn the steering wheel to help align the bushing to the bracket hole when inserting the bolt.
  - o Torque the frame side TB bolt to 145 ft-lbs.
  - o Recheck torques after 100 miles of driving.

Table 1. Dodge Ram Bolt Torques

Bolted Joint Location	Wrench Size	Torque
3/8" Cross Member Bolt	9/16"	24 ft-lb
1/2" Frame Tab Bolt	3/4"	75 ft-lb
5/8" Factory Track Bar Mount	15/16"	200 ft-lb
9/16" Frame Side Track Bar Bolt	13/16"	145 ft-lb
Stock Axle Side Track Bar Bolt	18 mm	125 ft-lb

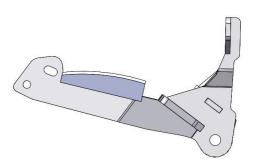
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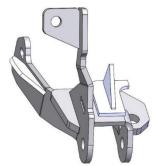


#### Appendix A

This Appendix describes the additional steps required to install the optional weld on gussets included with the 8554-02 Track Bar Conversion Bracket.

1. There are three extra uncoated tabs included in the 8554-02 Track Bar Conversion Bracket, they will be installed in the manner shown in **Figures 16 and 17.** 





Figures 16 and 17. Mocked Weld on Tabs for 8554-02 Track Bar Conversion Bracket.

2. Remove powder coat from the 8554-02 bracket in the areas shown in Figures 18 and 19.





Figure 18 and 19. Areas to Remove Powder Coat from Bracket

- 3. Clean any paint off of the crossmember where the tab will be welded.
- 4. Remove paint from the factory track bar mount where the tabs will be welded.
- 5. Install the bracket as in the same manner as the non-welded orientation.
- 6. Trim tabs as needed for desired fit and weld tabs to both the frame and 8554-02 bracket.
- 7. Paint all exposed metal and welded surfaces.

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