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Revisions				
Rev.	Description	Date	Approved	
A	Initial Release Per ECO 20-042	4/6/2020	KB	



# Jeep JL/JT Front Sway Bar Links and Quick Disconnect Brackets

**Installation Instructions** 

Applications: 2018+ Jeep Wrangler (JL/JLU/JT)

Covers Parts: 8859-10, 8859-11, 8859-12



	TITLE:			
	JEEP JL/JT FRONT SWAY BAR LINKS AND QUICK DISCONNECT BRACKET			
SIZE	DWG NO:		REV	
A	8859-10-INST		A	
	SCALE: N/A	PAGE 1 OF 13		



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**

8859-11 Jeep JL/JT Front Sway Bar Links				
QTY	Part Number	Description		
1	885901-L-PC	JL/JT FRONT SWAY BAR LINK, LEFT, POWDER COATED		
1	885901-R-PC	JL/JT FRONT SWAY BAR LINK, RIGHT, POWDER COATED		
2	4165-01	SWAY BAR END LINK TIE ROD END, 12MM STUD, GOLD ZINC		
1	4100-10	SPHERICAL SWAY BAR BUSHINGS (PAIR)		
2	410001-03	SWAY BAR LINK BUSHING INNER SLEEVE		

8859-12 Jeep JL/JT Front Sway Bar Disconnect Brackets				
QTY	Part Number	Description		
1	885902-L-PL	JL/JT FRONT SWAY BAR DISCONNECT BRACKET, LEFT, PLATED		
1	885902-R-PL	JL/JT FRONT SWAY BAR DISCONNECT BRACKET, RIGHT, PLATED		
4	807701	SWAY BAR DISCONNECT STUD WITH WRENCH FLATS		
2	N/A	LINCHPIN, 3/16" PIN, 1 9/16" LENGTH		
4	N/A	TOP LOCK NUT, 1/2-20 UNF, ZINC PLATE		
2	N/A	3/8-16 UNC X 3.5" LONG HEX HEAD BOLT, GRADE 8		
4	N/A	3/8" SAE FLAT WASHER, GRADE 8		
2	N/A	TOP LOCK NUT, 3/8-16 UNC, ZINC PLATE		
4	N/A	1/2" SAE FLAT WASHER, GRADE 8		
2	N/A	HEX HEAD THREAD CUTTING SCREW, 5/16" X .75" LONG		

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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.
- These instructions cover the installation of the extended sway bar links as well as the disconnect brackets.
- The extended sway bar links can be installed without the disconnect brackets. You will need to install the 410001-03 sleeves in the rubber spherical bushings in order to use the stock mounting bolts. The bushings are designed to slide over the disconnect studs and do not need the sleeves when using the disconnect studs.
- We recommend that even Rubicon owners with the factory electronic sway bar disconnect install the frame side disconnect brackets. On vehicles with long travel suspension, lots of droop travel may allow the sway bar links to over-center. Manually disconnecting them will prevent this from happening. And, in the rare occurrence the factory electronic sway bar disconnect system fails, the system can still be manually disconnected.
- If installing these on a stock height Wrangler or Gladiator with no bump stop spacing, it is necessary to cut off the outer sway bar end link tab on the passenger side of the front axle.
- Vehicles with 2-4" of lift will require either our 8855-01 Front Track Bar Relocation Bracket or the 8855-02 Front Sway Bar Link Relocation kit in order to prevent link over-centering at full droop. A minimum of 2" front bump stop spacing is required.
- Replacement bushings and tie rod ends are available from our web site; www.synergymfg.com.

#### **TOOLS REQUIRED**

- 14mm, 15mm, 18mm, 1/2", 9/16" and 3/4" sockets/wrenches
- 6mm Allen Key
- Torque Wrench
- Angle Grinder with Cutoff Wheel (If installing on stock height Wrangler)
- Spray Paint (If installing on stock height Wrangler)

#### ESTIMATED INSTALLATION TIME

#### 8859-11 EXTENDED SWAY BAR LINKS

1/2 Hour

#### 8859-12 SWAY BAR DISCONNECT BRACKETS

**1/2 Hour** 

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#### SWAY BAR ENDLINK INSTALLATION

- 1. Remove the factory front sway bar end links with a 18mm socket and wrench for the lower bolt and a 18mm wrench and 6mm allen key for the upper stud. The 6mm allen is to prevent the stud from spinning.
- 2. Install the grease fittings of your choice in the sway bar links. The kit comes with two standard zerk fittings and two needle zerk fittings. It is suggested to use either both standard or both needle fittings on the front threaded hole in the sway bar links, then use the remaining pair in the rear threaded holes to cap them off.
- 3. Make sure the sway bar links are the same length by adjusting (threading) the tie rod ends in or out. For most applications the links should be adjusted to the shortest possible length (fully collapsed). You can compare the two side by side as in **Figure 1**, or by measuring overall length.



Figure 1. Setting the End Links to the Same Length

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4. Install the sway bar link tie rod ends into the sway bar, with the nuts towards the frame. Use an open end 14mm wrench to hold the flats on the stud next to the dust boot in order to prevent the stud from spinning. The nut requires a 15mm socket. Tighten to 60lb-ft. See **Figure 2.** Verify the end links are oriented correctly at this time and make sure the zerk fittings of your choice are facing toward the front of the vehicle. See **Figure 3.** 



Figure 2. Installing the Driver's Side (Left) Sway Bar End Link



Figure 3. Correctly Oriented Driver's Side (Left) Sway Bar End Link

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5. Install the lower end of the sway bar link. Either use the stock hardware, see **Figure 4**., or install the sway bar end link onto a quick disconnect stud, see **Figure 5**. If using the stock hardware, you will need to make sure that the bushing has a sleeve installed in it to compensate for the smaller bolt size, see **Figure 6**.



Figure 4. Factory Mounting Hardware



Figure 5. Quick Disconnect Mounting Stud

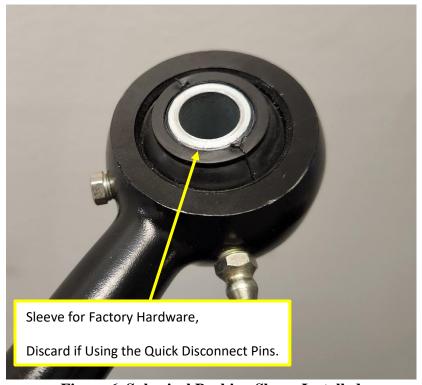


Figure 6. Spherical Bushing Sleeve Installed

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#### SWAY BAR DISCONNECT BRACKET INSTALLATION

1. If the links are being installed on a lifted vehicle proceed to **step 3**. If the sway bar disconnects are to be installed on a stock height Wrangler (no lift) then the passenger side outer axle side tab must be removed. Using an angle grinder with a cutoff wheel, cut off the tab along the axle. See **Figures 7 and 8**. Be careful not to damage the axle tube while cutting. After the tab has been cut off, paint any bare metal to prevent corrosion.



Figure 7. Tab to Remove



Figure 8. Tab Removed and Axle Cleaned Up.

2. Next, install a stud in the driver's side (left) axle tab, with the stud pointing in towards the center of the vehicle. Install a washer against the bracket under the nut. Use a 9/16" wrench to hold the stud from spinning and torque nut to 80 lb-ft with a 3/4" wrench or socket. Install another stud on the passenger side (right), with a washer under the nut, in the hole in the factory track bar bracket. The stud should be facing out, away from the center of the vehicle. See **Figure 9**. Torque to 80 lb-ft. After studs have been installed on the axle proceed to **step 5**.



Figure 9. Disconnect Stud Installed on Factory Track Bar Mount

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3. Lifted applications over 2in should use either the Synergy 8855-11 Front Track Bar Relocation Bracket or the 8855-02 Sway Bar Relocation Brackets in order to mount the disconnect pins to the front axle. The driver's side (Left) of the vehicle uses a relocation bracket to mount the disconnect pin. Use a 1/2" washer and 1/2" lock nut and securely tighten the sway bar disconnect stud in the top hole of the bracket with the stud facing in towards the center of the vehicle. Orient the hole in the stud that it is vertical and you can insert the pin from the top. Use a 9/16" wrench to hold the wrench flats on the end of the stud and use a 3/4" socket to torque hardware to 80 lb-ft. See **Figure 10.** 



Figure 10. Disconnect Stud Installed in Relocation Bracket

4. Install the passenger side (Right) disconnect stud on the axle. Use a 1/2" washer and 1/2" lock nut and securely tighten the sway bar disconnect stud in the top hole of the bracket. If using the 8855-02 Relocation Brackets, the stud should face in towards the center of the vehicle. If using the 8855-01 Front Track Bar Relocation Bracket the stud should face out towards the passenger side wheel. Once again orient the hole in the stud so that it is vertical and you can insert the pin from the top. Use a 9/16" wrench to hold the wrench flats on the end of the stud and use a 3/4" socket to torque hardware to 80 lb-ft. See **Figure 11.** 



Figure 11. Passenger Side (Right) Disconnect Stud Installed with 8855-01 Front Track Bar Relocation Bracket

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5. The remaining two disconnect studs get installed into the frame-side sway bar disconnect brackets. The brackets are etched 8859-L (Left side) and 8859-R (Right side), The left side of the vehicle is the driver's side, the right side is the passenger side. Left and right-side brackets are almost mirror images of each other, with the exception of the addition of one small hole on the right side bracket. See **Figure 12.** 



Figure 12. Left and Right Side Bracket Examples.

6. Before mounting the brackets to the frame, install the disconnect pins into the brackets. Use a 1/2" washer and 1/2-20 UNF top lock nut to secure the disconnect pins to the top hole in the brackets. Orient the hole in the stud approximately 40deg towards the rear of the bracket. See **Figures 18 and 19**. That way the retaining pin can be inserted from the upper rear and down into the stud. The top of the brackets bend out and up from the frame and the disconnect pins will protrude out from the frame.

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7. The plastic inner fender liner will need to be trimmed as shown in order to fit the disconnect brackets. See **Figure 13**. If you do not want to trim the plastic liner, you can remove the plastic push in fastener on the body mount and simply push the plastic fender liner in behind the new disconnect brackets.

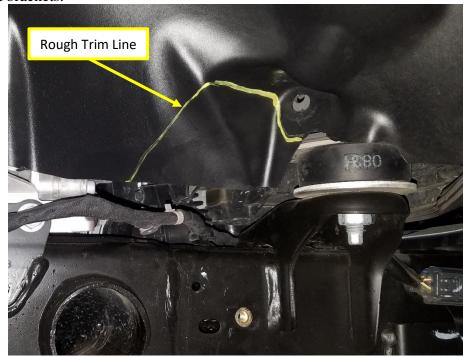


Figure 13. Inner Fender Trimming

8. On each side of the frame just behind the front grill mount there is a slotted hole with a small hole right above it. These holes will be used to mount the disconnect brackets. See **Figure 14.** 

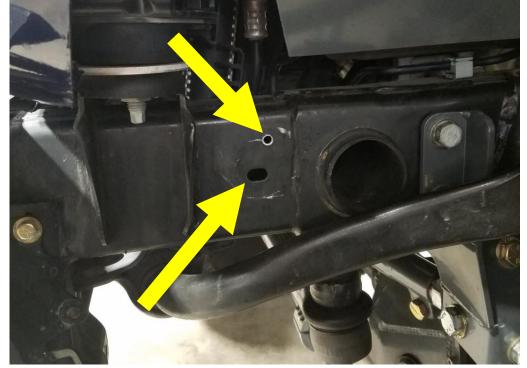


Figure 14. Disconnect Bracket Mounting Holes, Left Side.

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9. Insert the 3/8" x 3.5" long bolts and washers through the bottom hole in the brackets and through the slotted holes in the frame. Secure on the backside with the 3/8" top lock nuts. Snug the bolts up, but do not torque at this time. See **Figure 15**.



Figure 15. Installing the Lower 3/8" Bolt Through the Frame, Right Side.

10. The smaller upper round hole in the brackets lines up with the round holes in the frame above the slotted holes. The right side of JLs will use the little hole in the bracket directly above the larger hole, JTs will use the little hole offset to the rear. Use the 5/16" self-tapping screws in these holes and lightly tighten them. You should be able to rock the brackets back and forth a little bit. See **Figure 16 and 17.** 

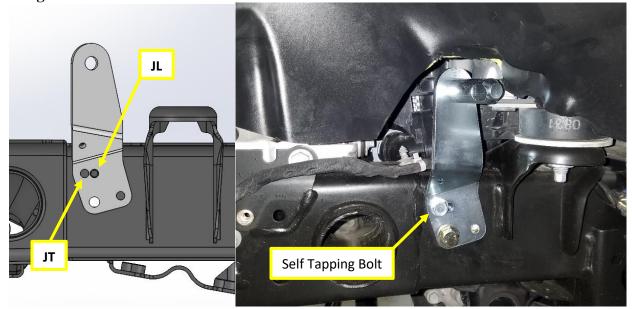


Figure 16. Upper Hole Location, Right Side.

Figure 17. Installing the Self-Tapping Bolt in the Upper Hole, Right Side.

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11. To adjust the brackets, install the already adjusted sway bar links onto the disconnect pins on the brackets. Make sure both sides are fully seated on the disconnect pins. Make sure the brackets are roughly parallel with the weld seam on the frame. Now, torque the 3/8" bolts and nuts to 40lb-ft, then torque the 5/16" self-tapping screws to 40 lb-ft. By getting both sway bar links installed onto the brackets before tightening, the brackets will be oriented to allow easy installation and removal of the sway bar links. **Figure 18** shows a correctly disconnected right side link.



Figure 18. Disconnected Link, Right Side.

12. Reinstall the bushing ends of the sway bar links onto the axle disconnect studs and secure with the included lynchpins. You may have to rock the vehicle to one side or the other in order to get both links on to the disconnect pins on the front axle. Once the sway bar bushings are greased, the bushings will be easier to move. **Figures 19 and 20,** show correctly disconnected and re-connected end links.



Figure 19. Correctly Installed and Disconnected Link, Left Side.

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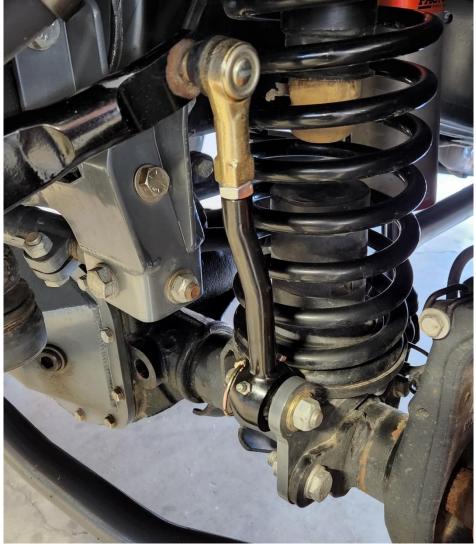


Figure 20. Correctly Installed and Connected Link, Left Side.

13. Use a grease gun and the zerk fitting on the sway bar links to lubricate the bushings. One or two pumps is all it should take. Wipe off any excess.

#### **Installation is Complete**

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