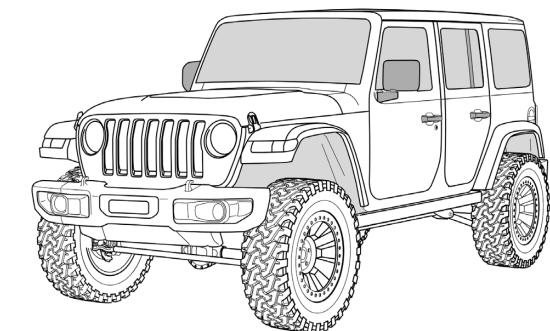


# Jeep JL 3.5" Spring Lift



### Important Notes:

Prior to beginning this install, or any installation, read the instructions thoroughly to familiarize yourself with the required steps. Evaluate if you are experienced and capable to personally perform these modifications. A factory service manual should be used in conjunction with these installation instructions.

This product will change the highway handling characteristics of your vehicle, exercise caution. After altering the suspension it is always advisable to have an alignment done by a competent 4 wheel drive shop or by an alignment shop that is experienced with lifted 4 wheel drive vehicles.

Refer to the parts list to ensure that all necessary components and hardware has been included. If any parts are missing please contact your local TeraFlex dealer for assistance.

NOTE: Some form of caster correction is required for the base spring lift kit

If a 37" tire is being installed on a Sport or Sahara additional up travel limit may be required using Bumpstop Spacer Kit #1959300.

### **Tools Needed:**

- Metric Sockets and Open End Wrenches
- Torque Wrench
- Drill and 1/2" Drill Bit

- Factory Service Manual
- General Mechanics Tools

## Maintenance Note:

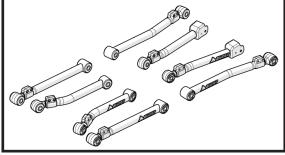
After the first 300 miles and every 3,000 miles after that, re-torque all the suspension components and bolts.

				Alpin	e CT3	Spor	Sport ST3		ise g Lift
		Description	ltem #	4DR	2DR	4DR	2DR	4DR	2DR
		1 Front	02-21-401-250-1	2	-	2	-	2	-
	and the second s		02-21-201-250-1	-	2	-	2	-	2
	B	2 Rear Left	02-22-411-250-1	1	-	1	-	1	-
	- M		02-22-211-250-1	-	1	-	1	-	1
	B	3 Rear Right	02-22-421-250-1	1	-	1	-	1	-
	B	• INear Night	02-22-221-250-1	-	1	-	1	-	1
		4 Front Bumpstops	12-01-109-200	2	2	2	2	2	2
	TURNATURES DE	s Rear Bumpstops	12-01-209-200	2	2	2	2	2	2
	00 00	6 Rear Bumpstop Bracket	12-02-209-002	2	2	2	2	2	2
	0 0	<ul> <li>Rear Bumpstop Mounting Strap</li> </ul>	12-02-209-001	2	2	2	2	2	2
ents		8 Front Bumpstop Spacers	12-02-109-050	4	4	4	4	4	4
Spring Box Components		Rear Bumpstop Spacers	12-02-209-050	4	4	4	4	4	4
ng Box	TITULARLAN	10 Brake Line Anchor Kit	1101255	1	1	1	1	1	1
Sprir		11 Front Swaybar link 10.75"	744500	2	2	2	2	2	2
		12 Rear Swaybar Link 11.50	21-01-001-115	2	2	2	2	2	2
		13 M10 x 1.5 Fuji Nut	23-07-03-001	6	6	6	6	6	6
	6	M10 x 1.5 x 100mm Flat Socket Cap Screw	45-04-003-001	2	2	2	2	2	2
		<sup>15</sup> M10 x 1.5 x 50mm Socket Cap Screw	45-03-003-001	4	4	4	4	4	4
		M10 x 1.5 x 25mm Button Socket Cap Screw	45-05-003-003	4	4	4	4	4	4
		M10 Lock Washer	45-12-002-001	4	4	4	4	4	4
	0	18 Nut Wrench Tool	600271	1	1	1	1	1	1
		M12 x 1.75 x 55mm Button Socket Cap Screw	45-05-003-001	2	2	2	2	2	2
		<sup>20</sup> M12 x 1.75mm Black Fuji Nut	23-07-02-002	2	2	2	2	2	2

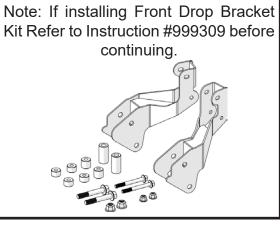
	_		Alpin	e CT3	Spor	t ST3	Ba Sprin	
_	Description	Item #	4DR	2DR	4DR	2DR	4DR	2DR
Spring Box Components	21 Front Track Bar Bracket	15-04-109-006	1	1	1	1	1	1
	M12 x 1.75 Flanged Serrated Nut	45-12-003-001	1	1	1	1	1	1
	<sup>23</sup> M14 x 2.0 x 80mm Hex Flange Bolt	45-02-003-011	1	1	1	1	1	1
	M12 x 1.75 x 25mm Hex Flange Bolt	45-02-003-013	2	2	2	2	2	2
	M12 X 1.75 Flange Top Lock Nut	45-08-003-001	1	1	1	1	1	1
	<sup>26</sup> M14 x 2.0 Flange Top Lock Nut	45-08-003-003	1	1	1	1	1	1

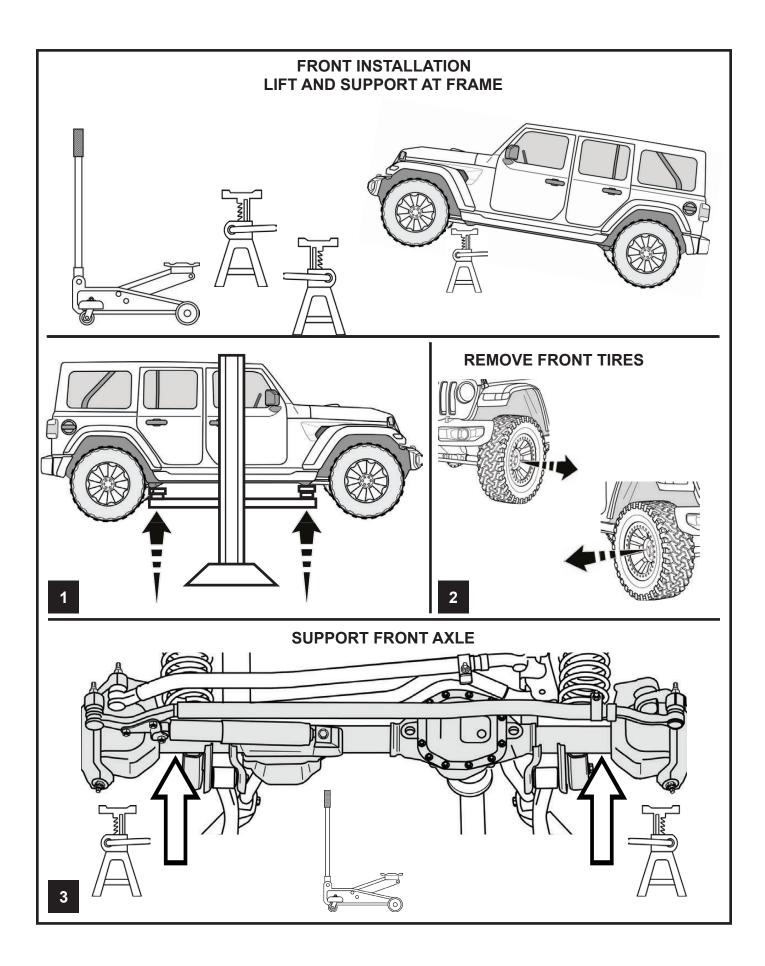
		Alpine CT3		Spor	Sport ST3		se g Lift
Description	ltem #	4DR	2DR	4DR	2DR	4DR	2DR
Jounce Bumpers Kit	1959200	1	1	1	1	-	-
Alpine Control Arm Kit	1416510	1	1	-	-	-	-
Front Arm Drop Bracket Kit	1938125	-	-	1	1	-	-
Rear Track Bar Kit	1953600	1	1	1	1	1	1

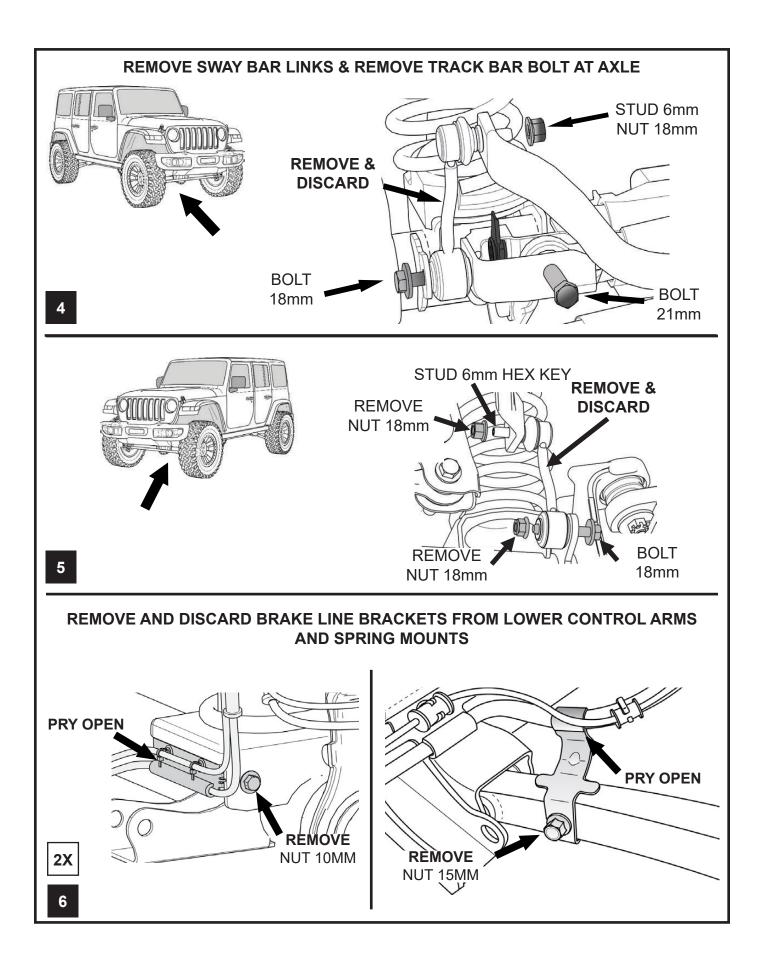
Note: If installing Alpine Control Arm Kit Refer to Instruction #999321 before continuing.

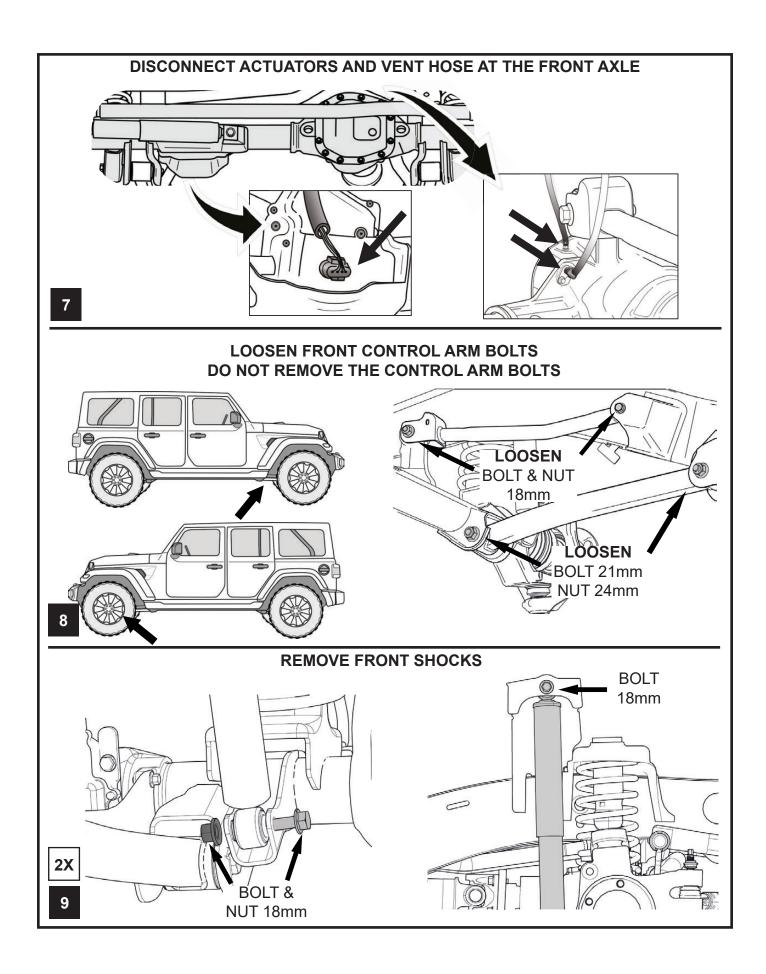


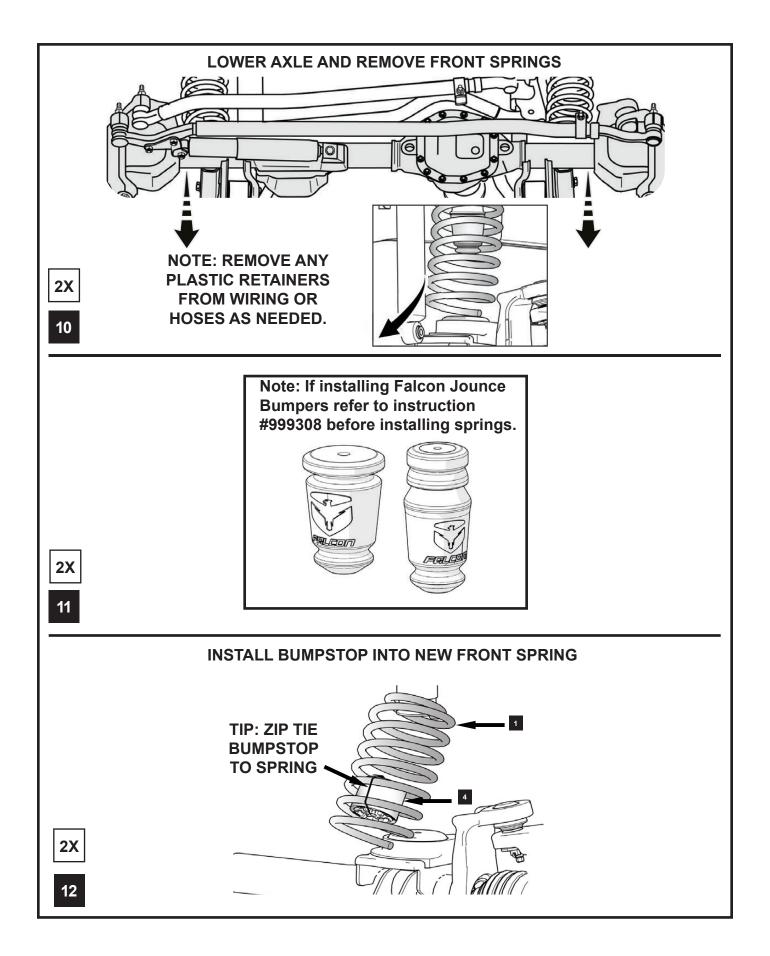
\*LEAVE CONTROL ARM BOLTS LOOSE UNTIL THE END OF THE LIFT INSTALLATION\*

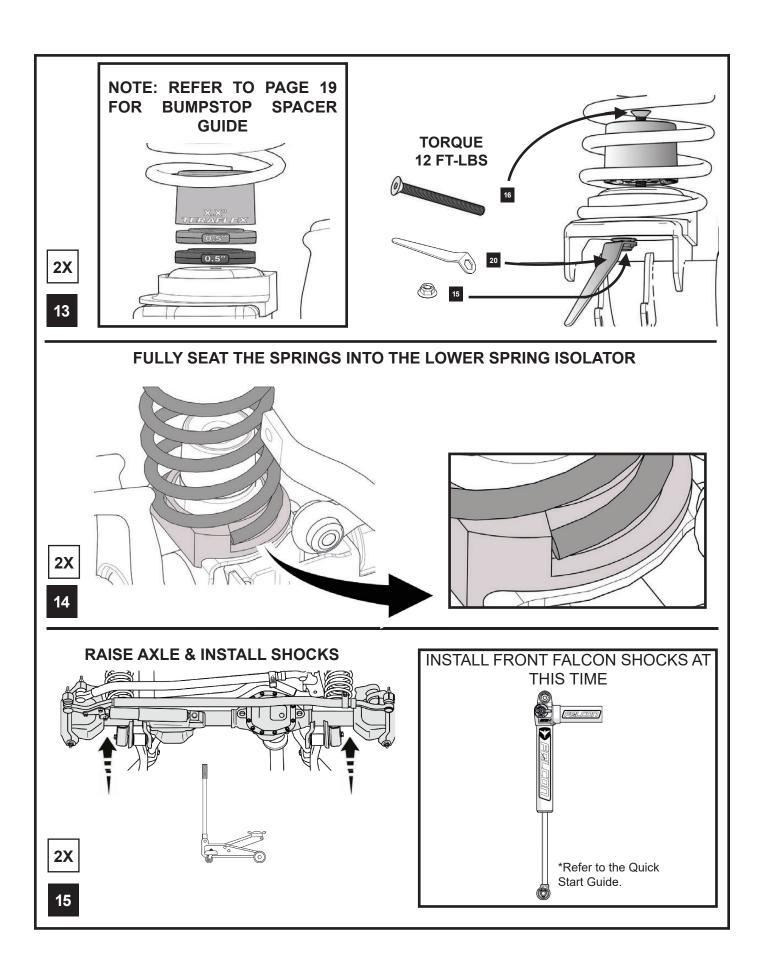


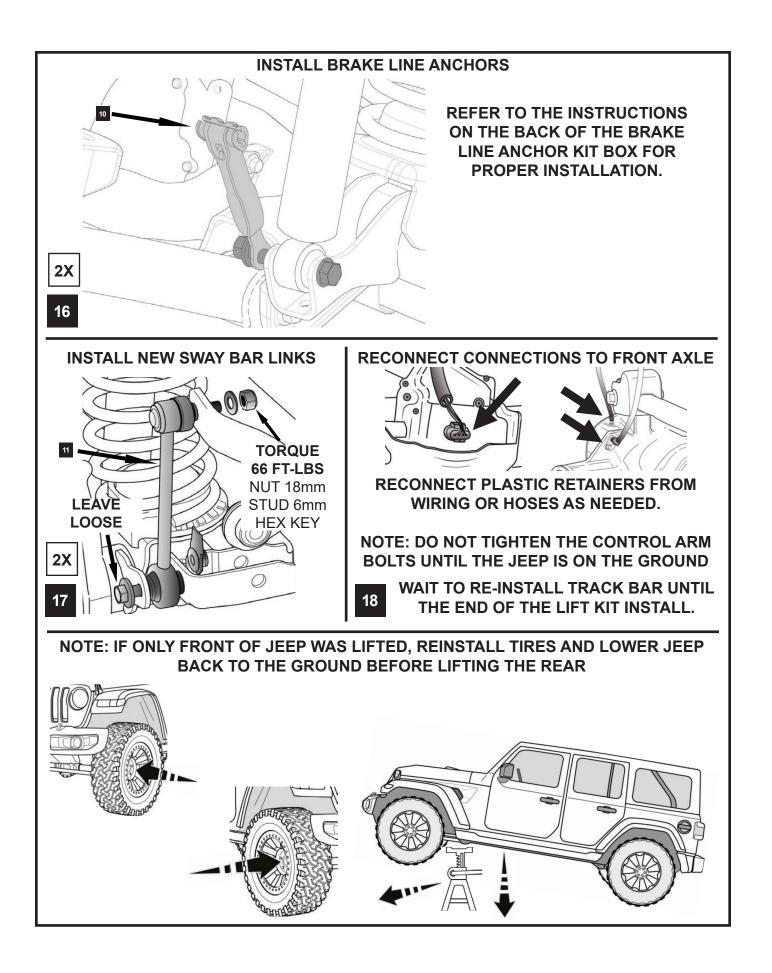


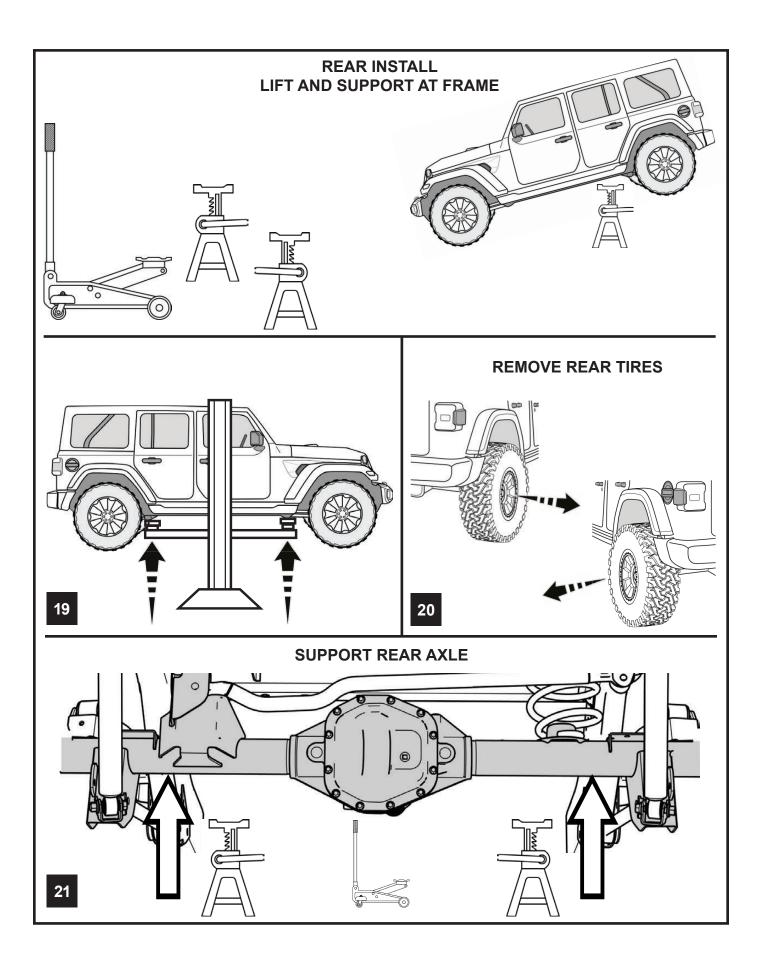


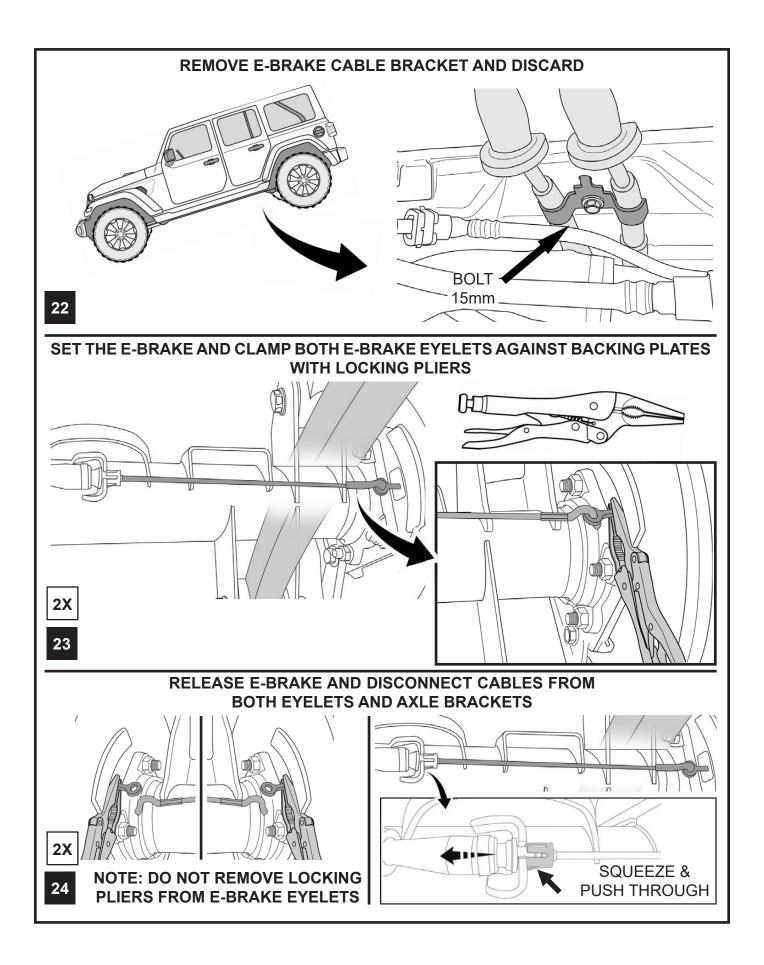


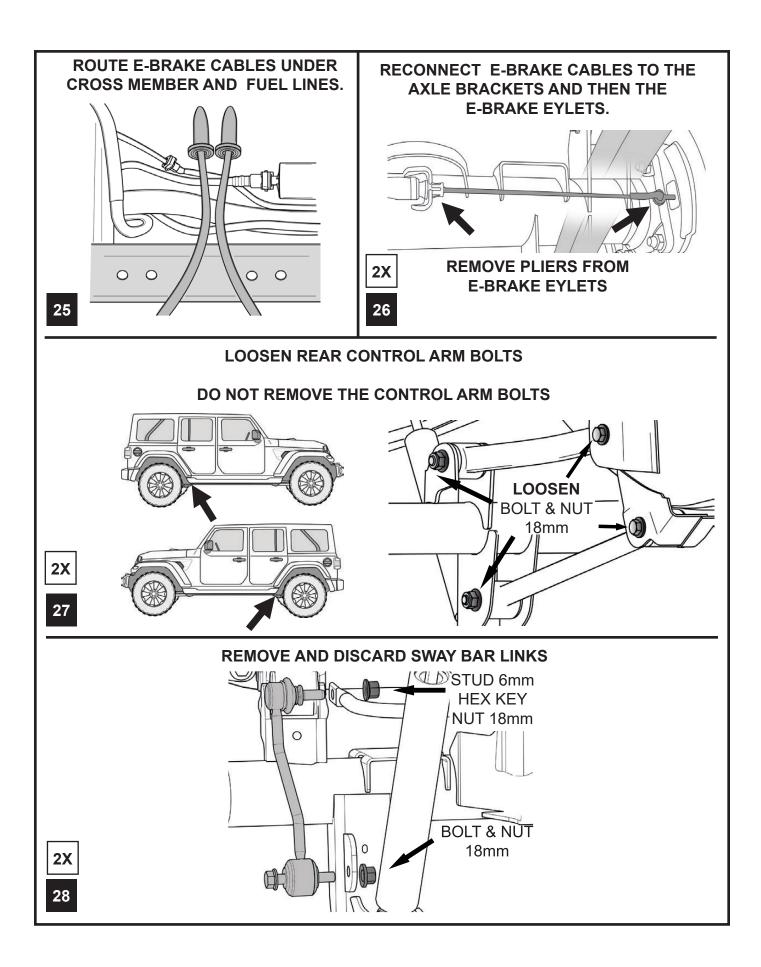


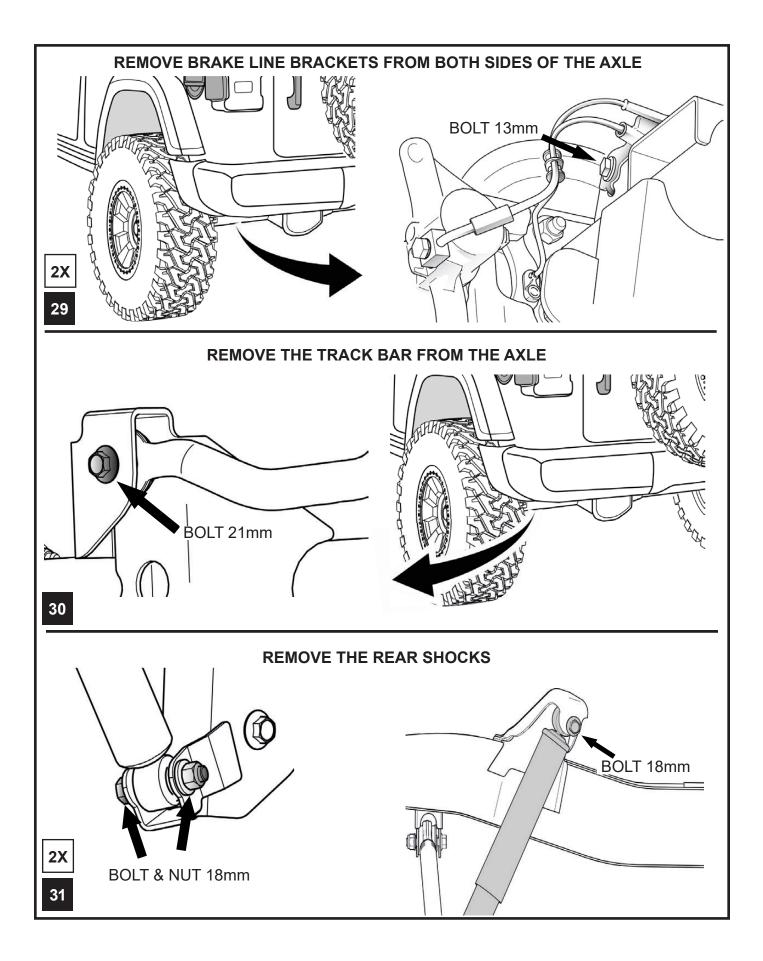


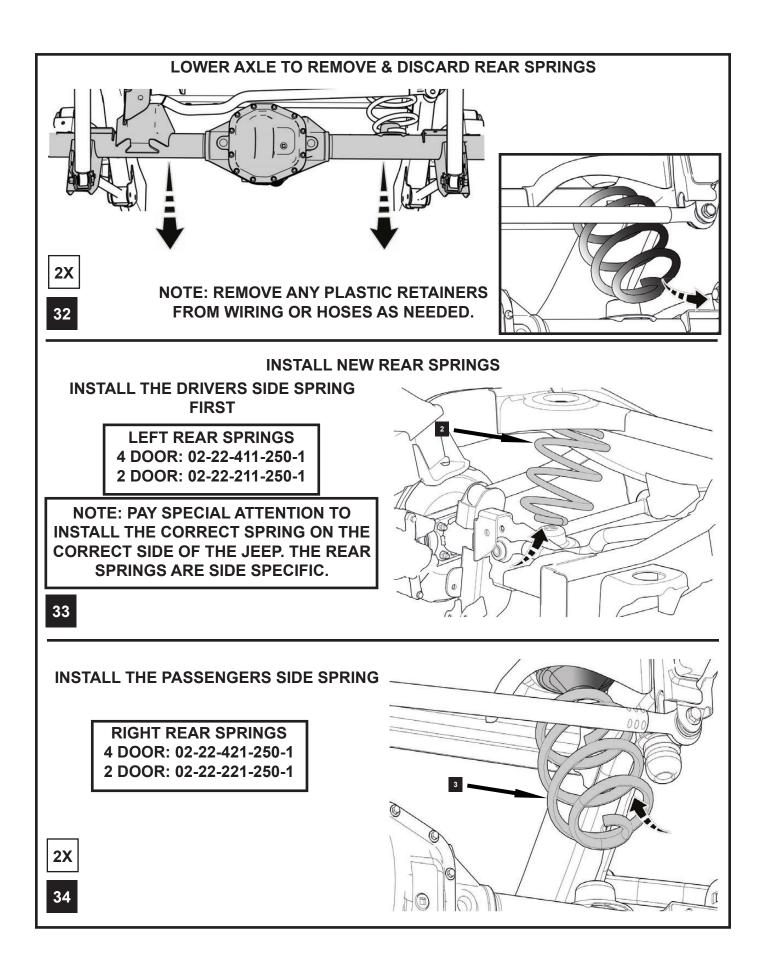


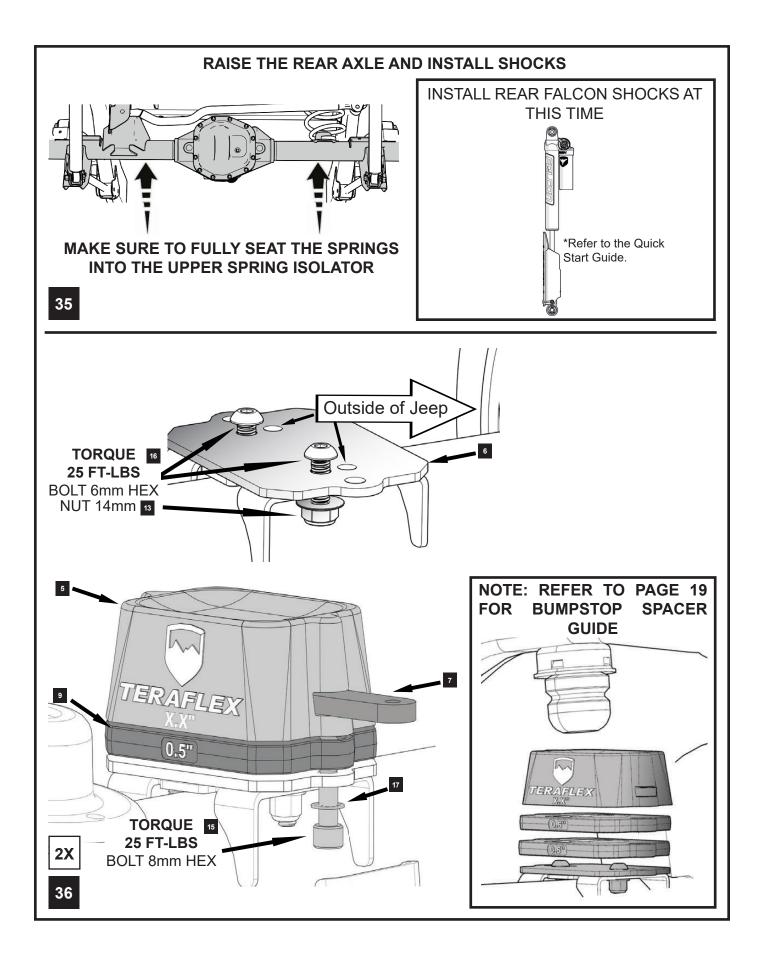


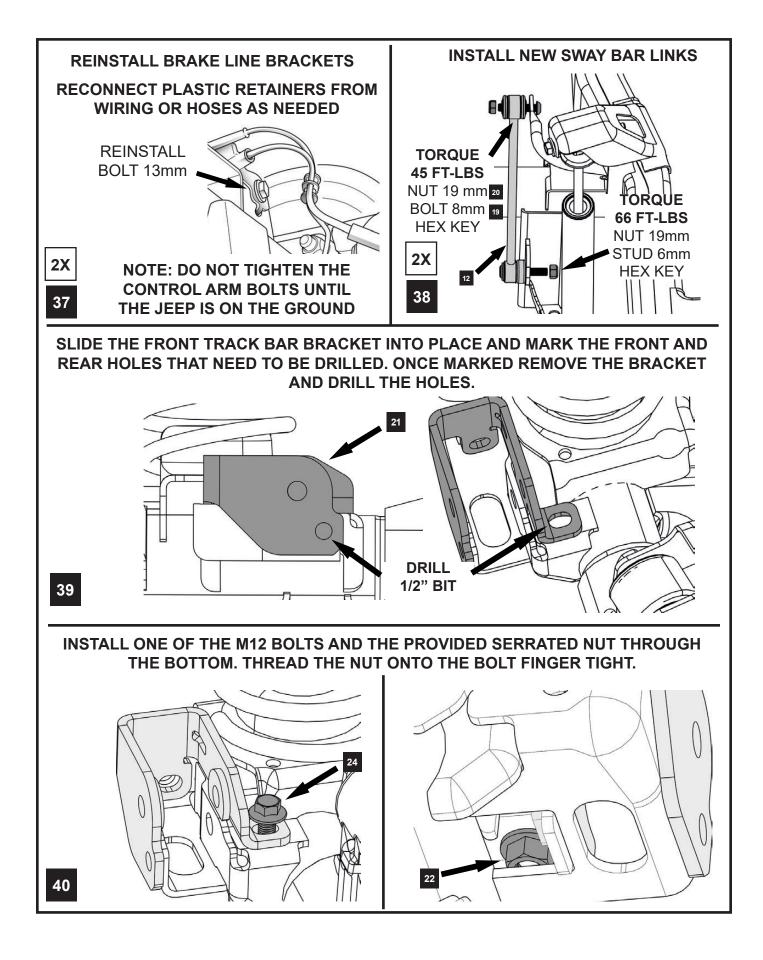


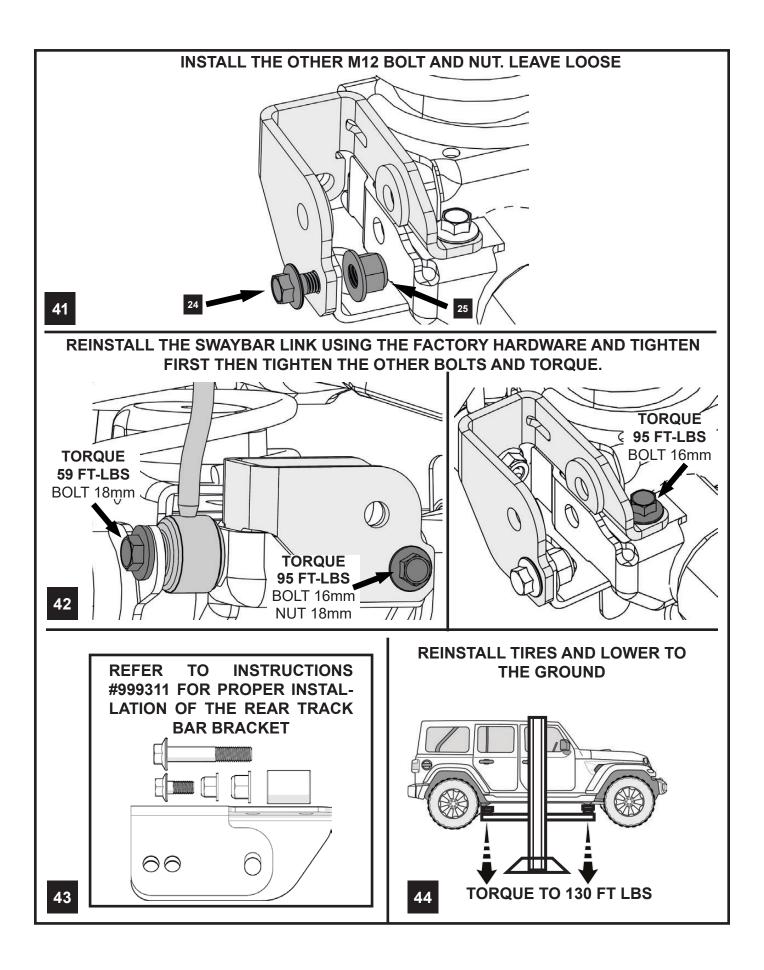


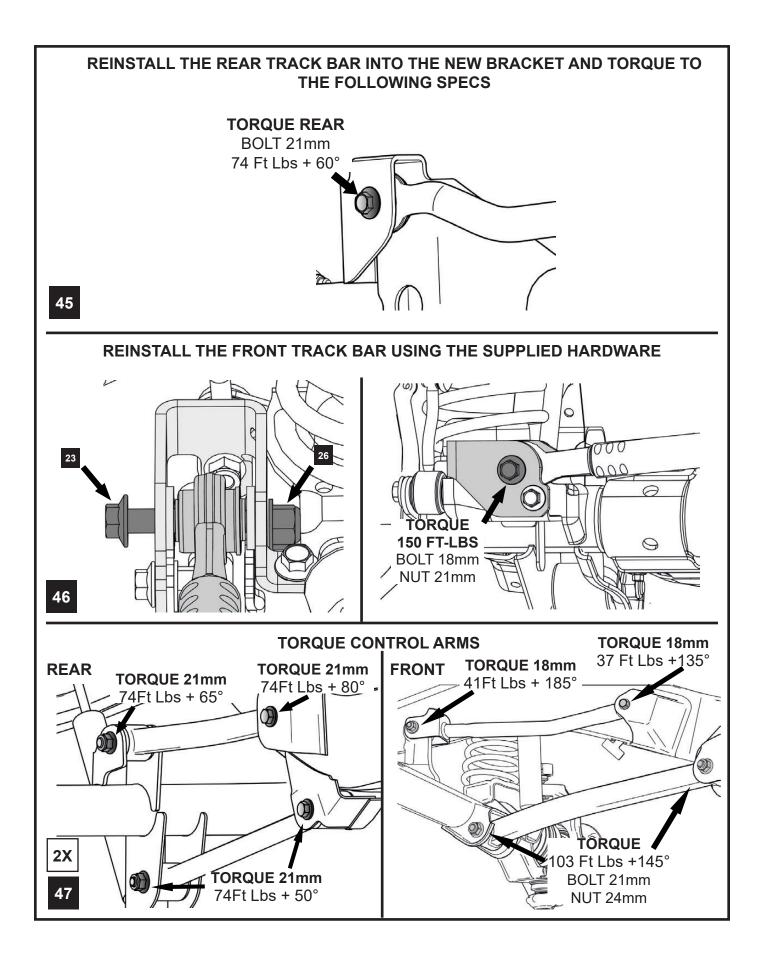








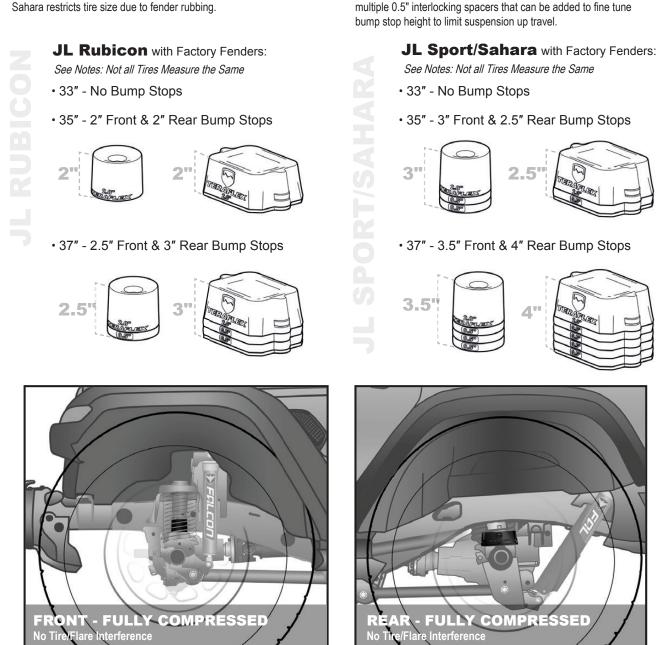




# JL Tire Clearance Guide (FACTORY FENDERS)

By limiting suspension up travel, TeraFlex Bump Stops allow the use of larger tires while keeping the factory fenders.

JL Rubicon models feature high-clearance fenders that allow for more up travel, while the lower-clearance fenders on JL Sport and Sahara restricts tire size due to fender rubbing.



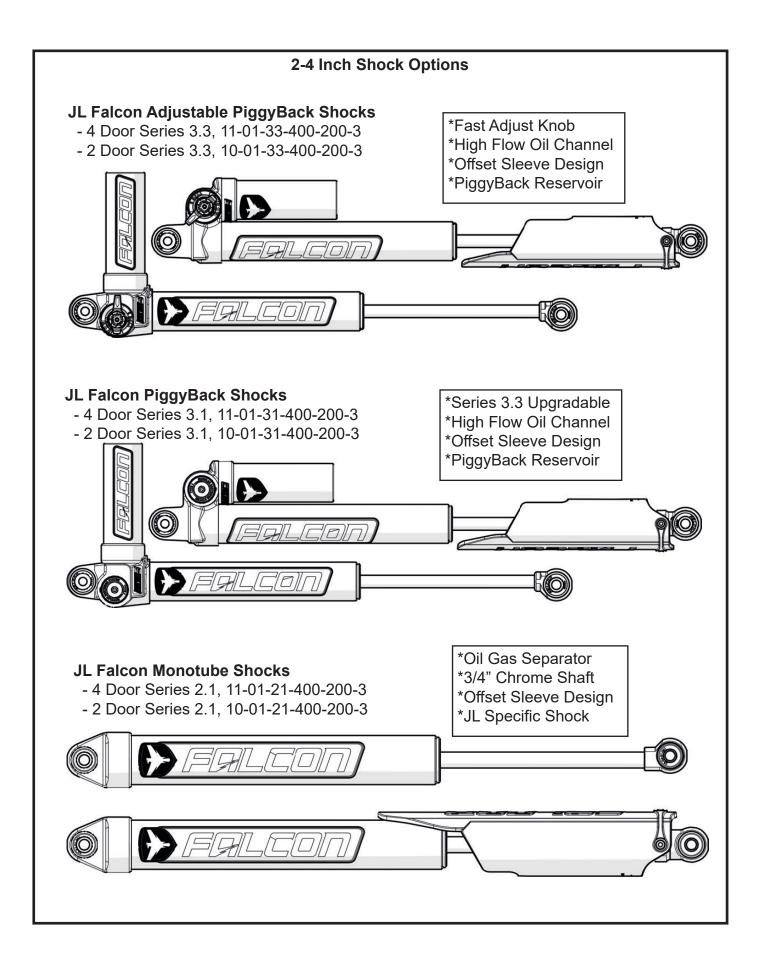
JL/JLU Strike Pad Shim (Front & Rear) 1959300

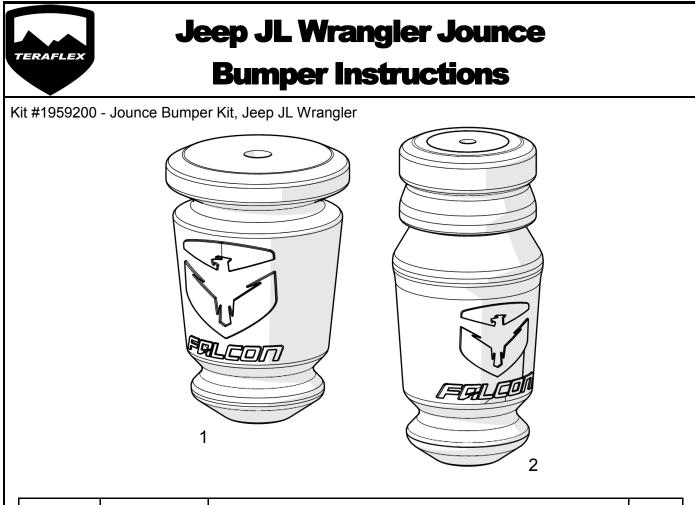
In order to address these fender differences, TeraFlex designed a

proprietary modular bump stop system, which can be adapted to fit

In addition to the main 2" bump stop spacers, this system includes

several different lift height and tire size configurations.





Item No.	Part Number	Description	Qty
1	45-02-02-002	Bumper (S), Foam, Snap-In, 3.90" Tall	2
2	45-02-03-001	Bumper (S), Foam, Snap-In / 1.97" Dia. 4.72" Tall	2

### **Important Notes:**

Prior to beginning this install, or any installation, *read the instructions thoroughly* to familiarize yourself with the required steps. Evaluate if you are experienced and capable to personally perform these modifications. A factory service manual should be used in conjunction with these installation instructions.

After altering the suspension it is always advisable to have an alignment done by a competent 4 wheel drive shop or by an alignment shop that is experienced with lifted 4 wheel drive vehicles.

Refer to the parts list to ensure that all necessary components and hardware has been included. If any parts are missing please contact your local TeraFlex dealer for assistance.

Refer to the factory service manual for the torque specs of the originally equipped hardware.

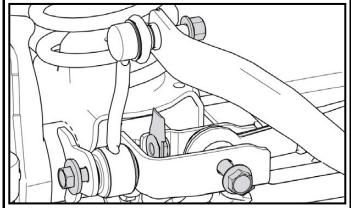
### Tools needed:

- This installation guide
- Basic mechanics tool set

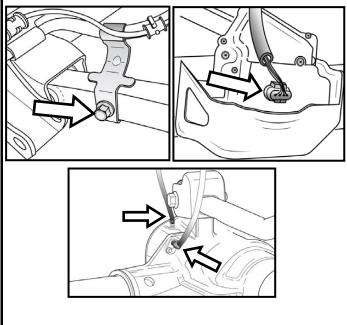
### FRONT AXLE

REFER TO THE FACTORY SERVICE MANUAL FOR LIFT LOCATIONS.

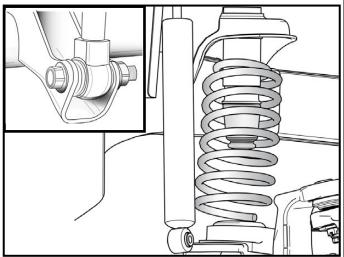
- 1. Raise and support the vehicle at the frame.
- 2. Remove the front tires and wheels.
- 3. Support the front axle with a jack or jack stands.
- 4. Remove the sway bar links at the axle.
- 5. Remove the track bar at the axle.



- 6. Remove the ABS/brake line anchor bracket from the frame (driver and passenger side).
- Remove the breather hose and axle actuator from the axle. NOTE: On Rubicon models the locker actuator will need to be removed as well.



- 8. Remove the shock at the axle.
- 10. Lower the axle until the springs are free and remove the springs. **NOTE:** Watch brake lines and wiring harnesses while lowering axle.



- 10. Remove the front bumpstops.
- 11. Install the new Front Extended Bumpstops into the factory jounce tubes. **Note:** If needed use a small amount of silicone lube spray, to help install the bumpstops.

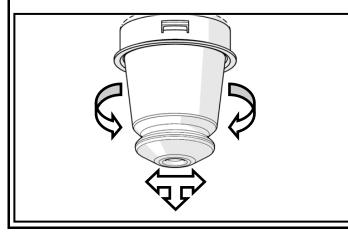


- 12. Reinstall the springs. **NOTE:** Check that the upper spring isolator is installed correctly with the locating pins aligned with holes in the upper spring mount.
- 13. Rotate the spring until pig tail end is fully seated into lower spring pads.
- 14. Raise the axle enough to reinstall the shocks. Torque shock bolts to 56 ft-lbs.
- 15. Reinstall sway bar links and torque bolts to 69 ft-lbs.

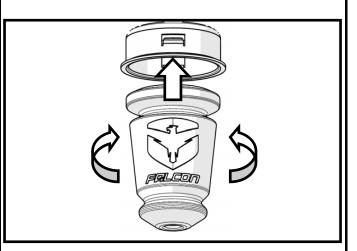
- Reinstall brake line brackets, axle actuator plug and breather hose and any plastic retainers from wiring or hoses that were removed. Rubicon models: Reinstall locker actuator plug.
- Reinstall the front wheels and tires and lower Jeep to the ground. Torque lug nuts to factory recommended specs.
- 18. Reinstall the front track bar and torque bolt to factory recommended specs.

### REAR AXLE

19. Remove the bumpstop from the frame mount by simply pulling downward with a twisting motion.

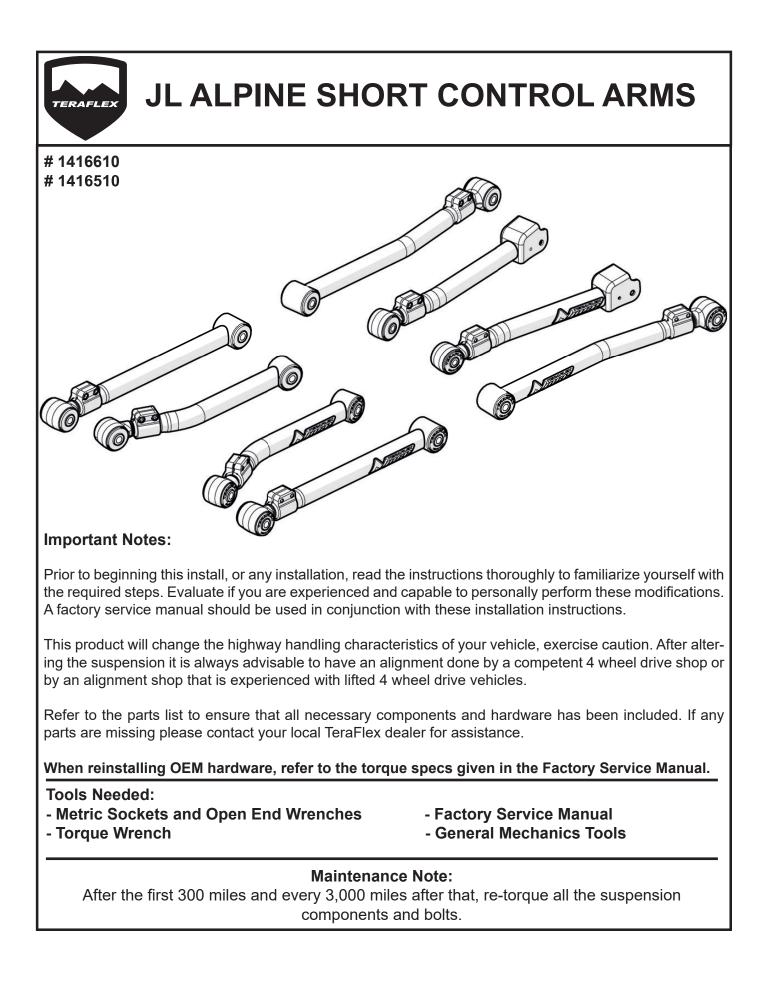


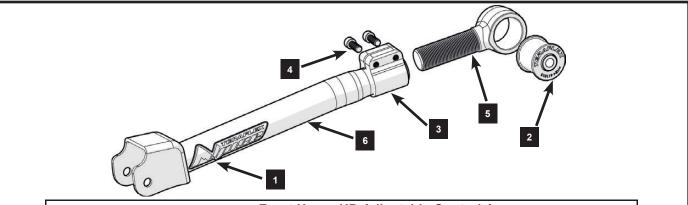
20. Install new bumpstop by twisting and pushing up. Note: If needed use a small amount of silicone lube spray, to help install the bumpstops.



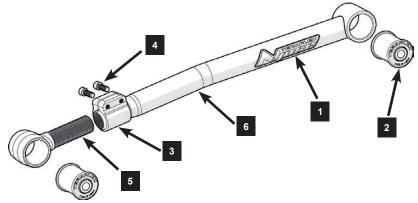
CONFIRM THAT ALL BRACKETS ARE REINSTALLED AND FASTENERS TORQUED CORRECTLY BEFORE OPERATING THE JEEP.

**INSTALLATION IS COMPLETE!** 

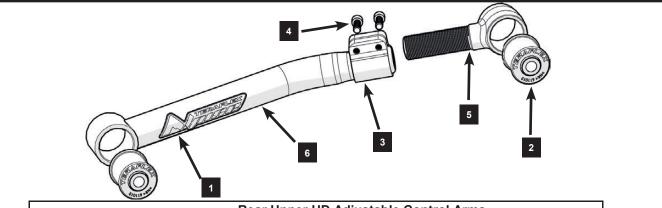




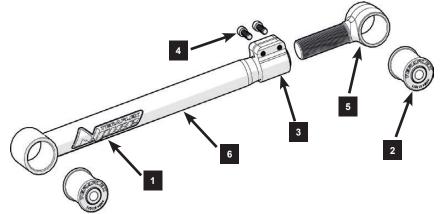
		Front Upper HD Adjustable Control Arms			
Item #	Part No.	Description	QTY		
1	95-01-003-001	Sticker, Teraflex, Alpine Arm, Polycarbonate	1		
2	611014	611014 Front Upper JL Control Arm Bushing Factory Replacement			
3	107105	Alpine Control Arm Aluminum Clamp	1		
4	414	3/8"-16x1" Socket Head Cap Screw	2		
5	116110	JL Front Upper Forged Bushing Eyelet	1		
6	07-01-001-005	Control Arm, Alpine / Jeep JL, Front / Upper / Left Assembly	1		
0	07-01-001-006	Control Arm, Alpine / Jeep JL, Front / Upper / Right Assembly			
		Alpine IR Bushings			
1	36-01-002-001	IR Badge, Teraflex	1		
I	95-01-004-001	Sticker, Teraflex, Alpine IR Arm, Polycarbonate	1		
2	611017	IR Revolver Rubber Bushing, Front Upper Arm	1		



	Front Lower HD Adjustable Control Arms								
Item #	Part No.	Description	QTY						
1	95-01-003-001 Sticker, Teraflex, Alpine Arm, Polycarbonate								
2	09-01-201-001	9-01-201-001 Front Lower JL Control Arm Bushing Factory Replacement							
3	107105 Alpine Control Arm Aluminum Clamp								
4	414	3/8"-16x1" Socket Head Cap Screw	2						
5	116110 JL Front Upper Forged Bushing Eyelet								
6	07-01-001-001	Control Arm, Alpine / Jeep JL, Front / Lower / Left Assembly	1						
0	07-01-001-002	Control Arm, Alpine / Jeep JL, Front / Lower / Right Assembly							
		Alpine IR Bushings							
1	36-01-002-001	IR Badge, Teraflex	1						
I	95-01-004-001	Sticker, Teraflex, Alpine IR Arm, Polycarbonate	1						
2	611020	IR Rubber Bushing, Lower Control Arm	2						



		Rear Upper HD Adjustable Control Arms	
Item #	Part No.	Description	QTY
1	95-01-003-001	Sticker, Teraflex, Alpine Arm, Polycarbonate	1
2	611012	Rear Upper JL Control Arm Bushing	2
3	107105	Alpine Control Arm Aluminum Clamp	1
4	414	3/8"-16x1" Socket Head Cap Screw	2
5	116130	JL Front Upper Forged Bushing Eyelet	1
6	07-01-001-011	Control Arm, Alpine / Jeep JL , Rear / Upper / Left Assembly	1
0	07-01-001-012	Control Arm, Alpine / Jeep JL, Rear / Upper / Right Assembly	
		Alpine IR Bushings	
1	36-01-002-001	IR Badge, Teraflex	1
	95-01-004-001	Sticker, Teraflex, Alpine IR Arm, Polycarbonate	1
2	611016	IR Revolver Rubber Bushing, Rear Upper Arm	2



	Rear Lower HD Adjustable Control Arms								
Item #	Part No.	Description	QTY						
1	95-01-003-001	01-003-001 Sticker, Teraflex, Alpine Arm, Polycarbonate							
2	611011	011 JL / JK Lower Control Arm Bushing							
3	3 107105 Alpine Control Arm Aluminum Clamp								
4	414	3/8"-16x1" Socket Head Cap Screw	2						
5	116110 JL / JK Rear Lower Forged Bushing Eyelet								
6	141542	Alpine JL / JK Rear Lower Driver HD Adjustable Control Arm	1						
0	141552	Alpine JL / JK Rear Lower Passenger HD Adjustable Control Arm							
		Alpine IR Bushings							
1	36-01-002-001	IR Badge, Teraflex	1						
	95-01-004-001	Sticker, Teraflex, Alpine IR Arm, Polycarbonate	1						
2	611015	IR Revolver Rubber Bushing, Rear Lower Arm	2						

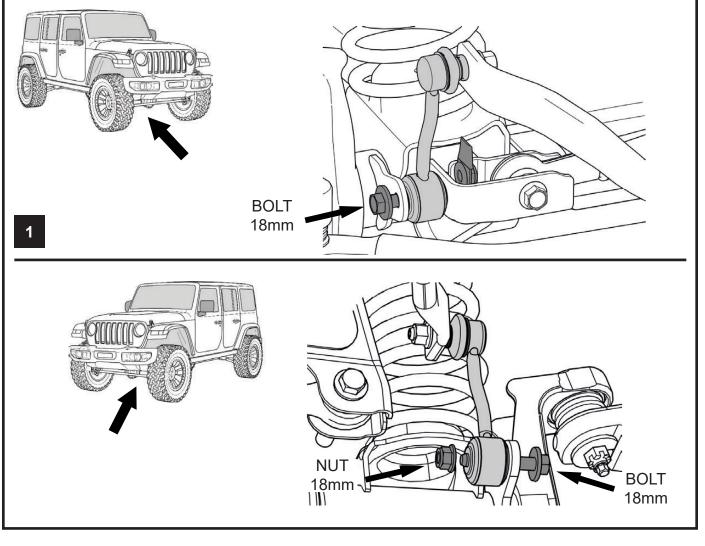
INSTALLATION OF THE CONTROL ARMS IS BEST DONE WITH ALL 4 TIRES OF THE JEEP ON THE GROUND. IF YOU PREFER TO RAISE THE JEEP FOR INSTALLATION REFER TO YOUR FACTORY SERVICE MANUAL FOR SAFE LIFTING LOCATIONS AND PROCEDURES.

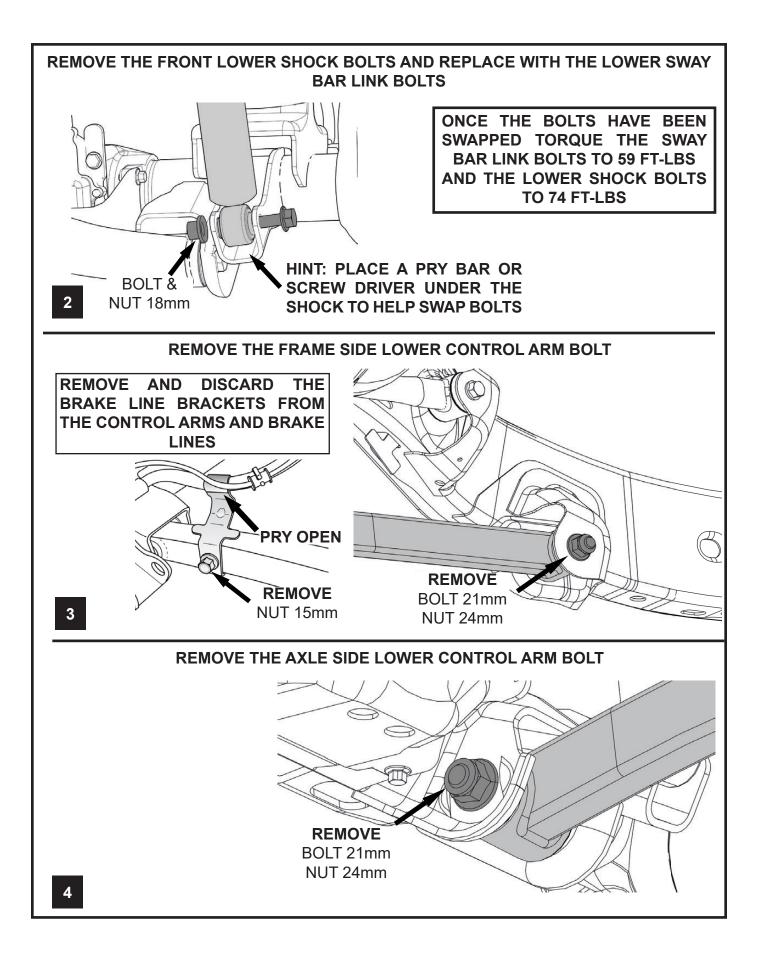
\*NOTE: DO NOT REMOVE MORE THAN TWO CONTROL ARMS AT A TIME\*

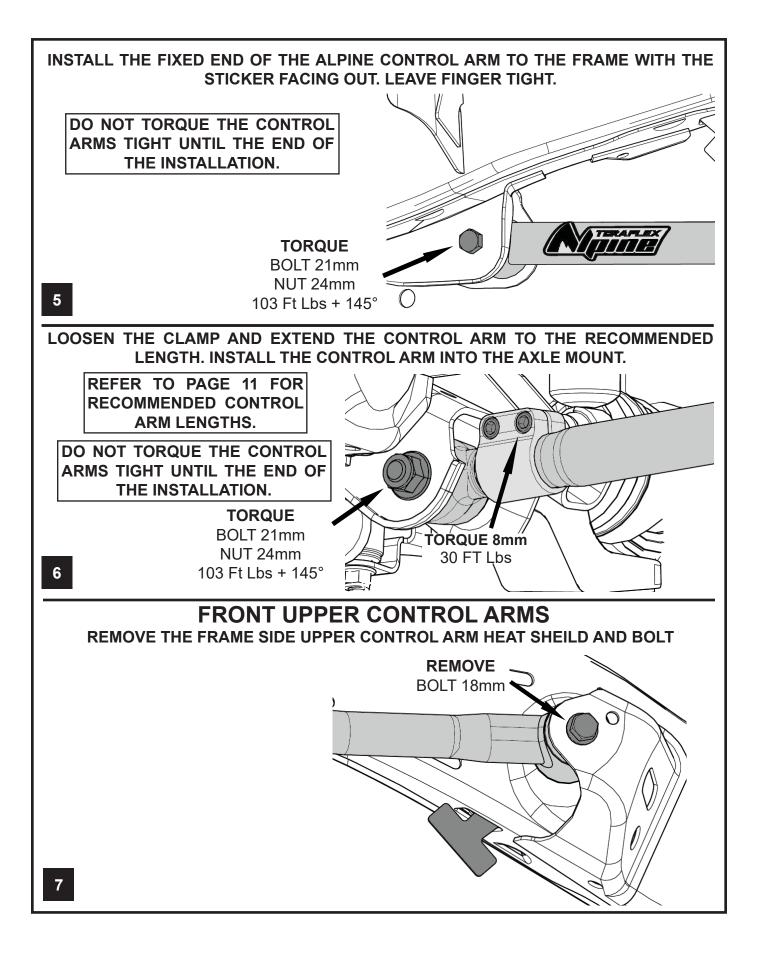
# FRONT LOWER CONTROL ARMS

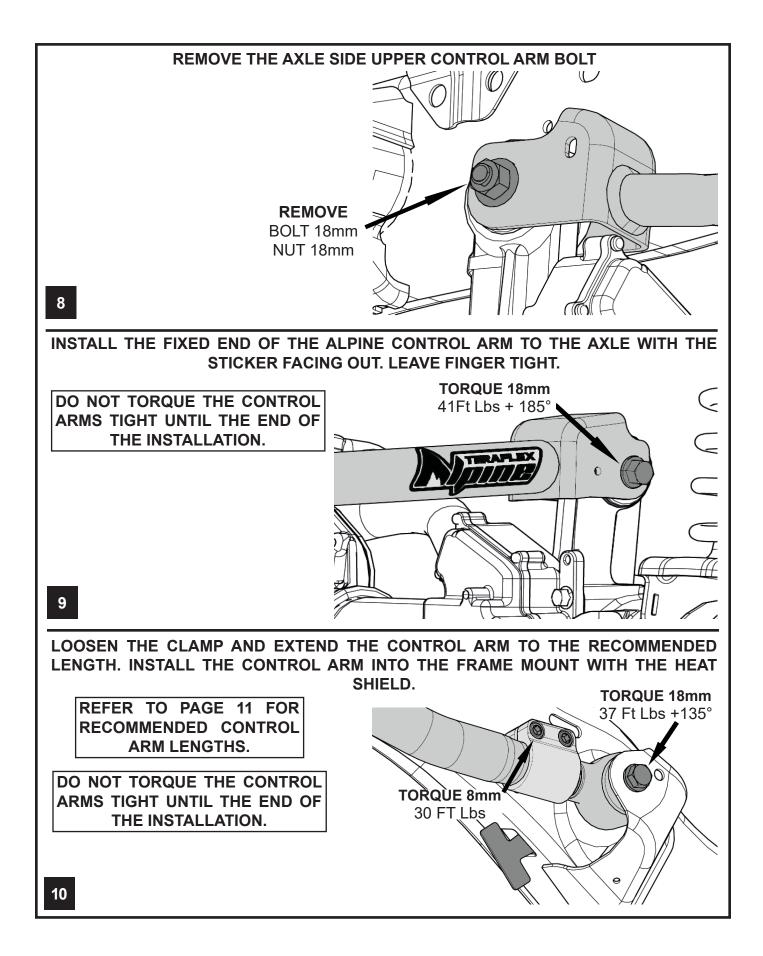
NOTE: THE FRONT LOWER SHOCK BOLTS ARE SLIGHTLY TOO LONG AND WILL MAKE CONTACT WITH THE ALPINE CONTROL ARMS. TO FIX THIS ISSUE SWAP THE LOWER SHOCK BOLTS WITH THE LOWER SWAY BAR LINK BOLTS.

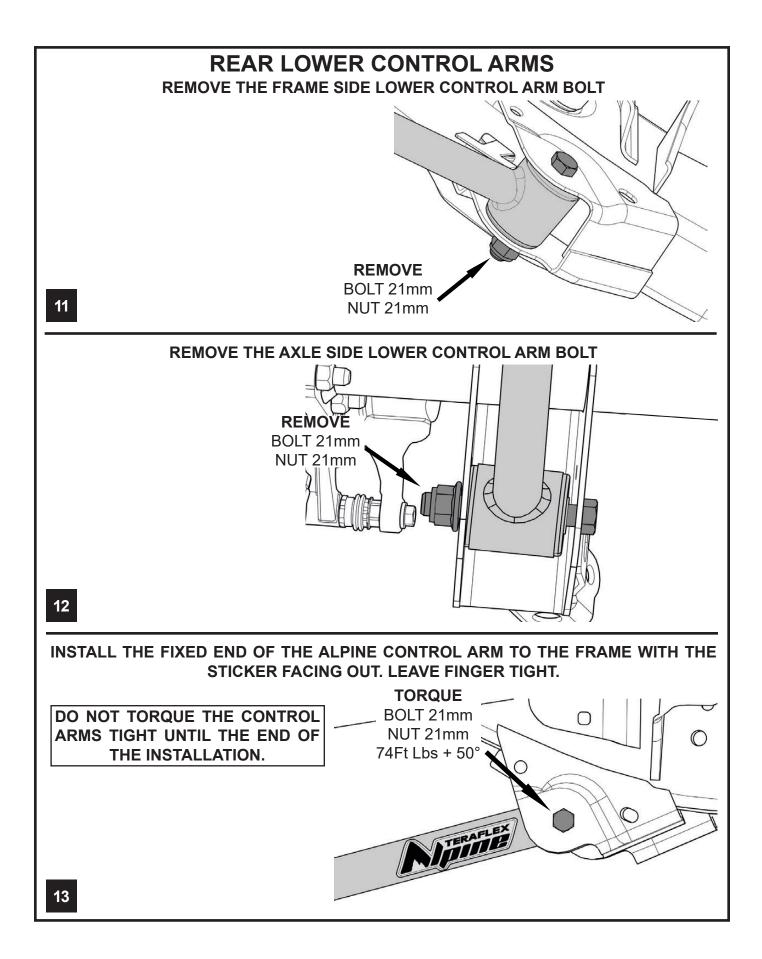
### REMOVE THE SWAY BAR LINK BOLTS AT THE AXLE

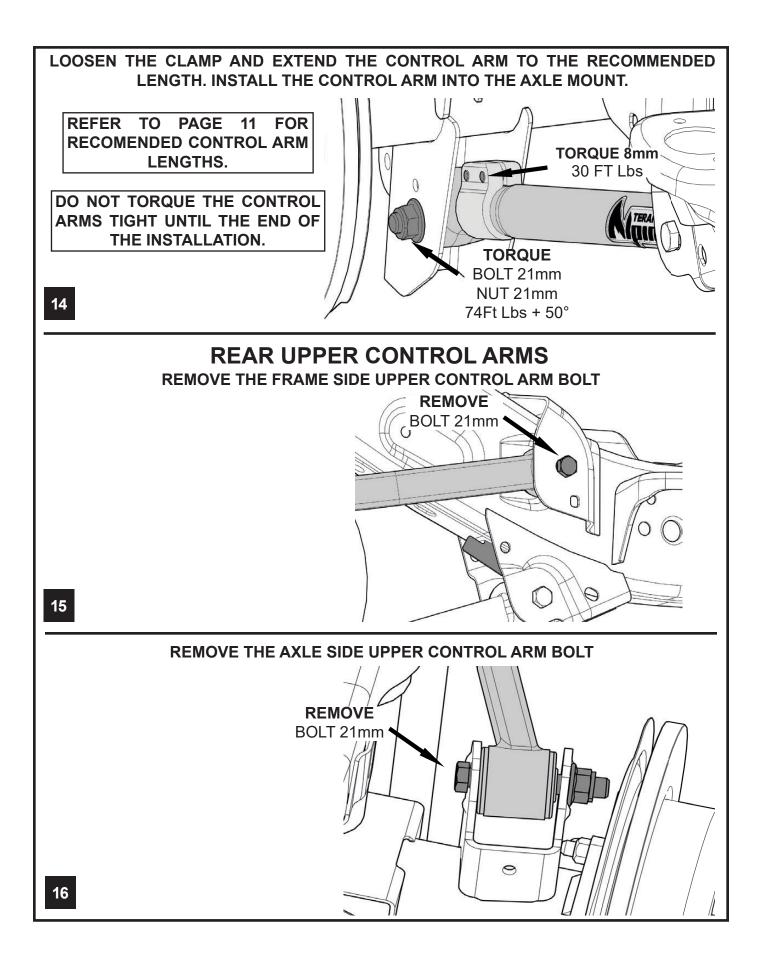


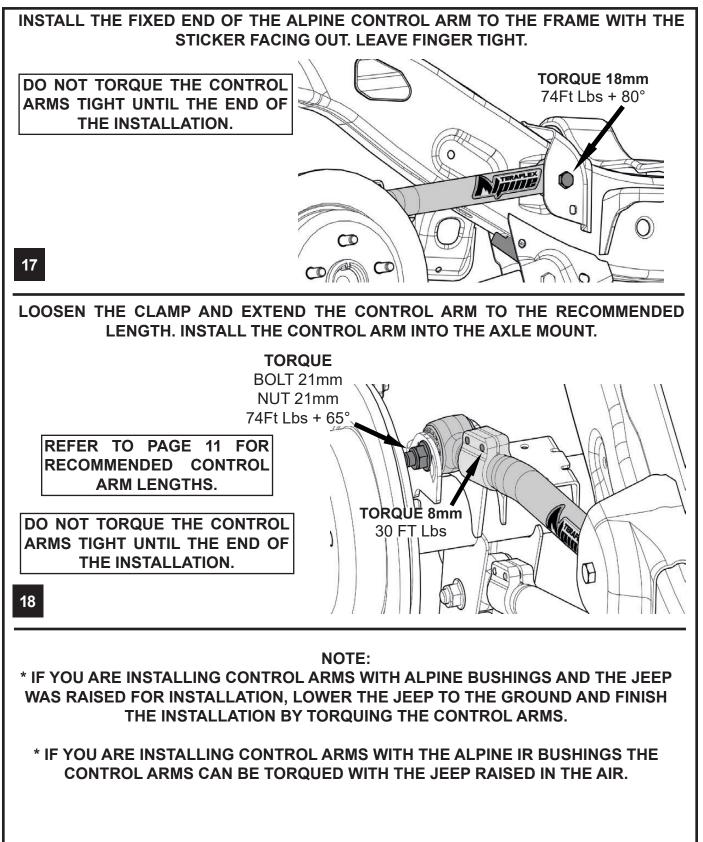












# **RECOMMENDED CONTROL ARM STARTING LENGTHS**

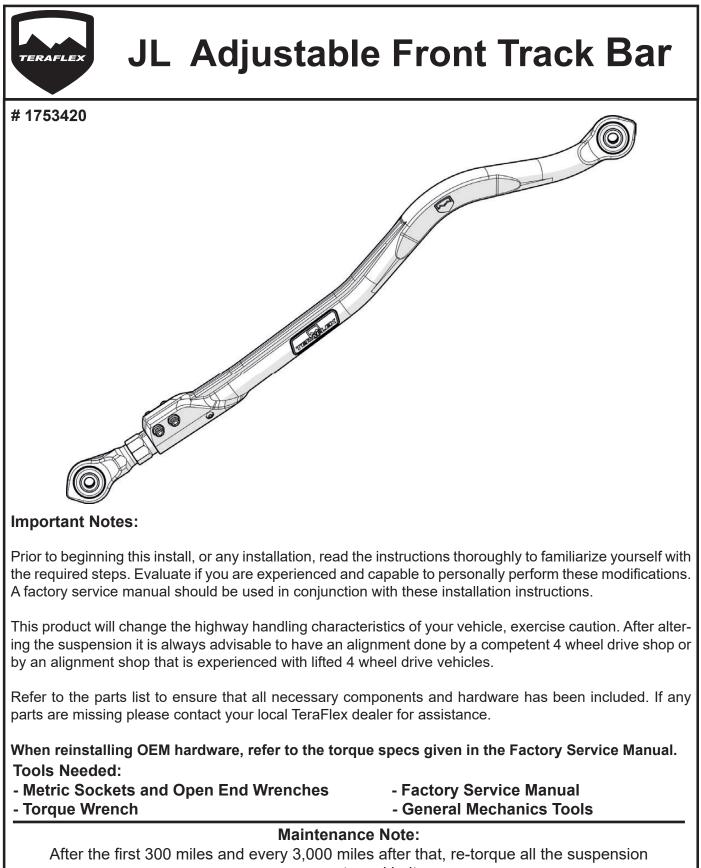
### NOTE: THESE ARE ONLY RECOMMENDED STARTING LENGTHS!! EACH JEEP IS DIFFERENT AND MAY NEED TO HAVE THE CONTROL ARM LENGTHS CHANGED FOR PROPER FUNCTION AND SAFE DRIVING.

		Lift Height								
		2.5"	2.5" Lift 3.5" Lift 4.5"							
		All 8	Single	All 8	Single	All 8	Single			
		Arms	Pair	Arms	Pair	Arms	Pair			
Control Arms	Front Lower	24 1/8"	24 1/4"	24 5/16"	24 7/16"	24 1/2"	24 5/8"			
	Front Upper	20"	20 1/8"	20 3/16"	20 1/8"	20 3/8"	20 1/8"			
Ar	Rear Lower	20 1/4"	19 5/8"	20 7/16"	19 13/16"	20 5/8"	20"			
_	Rear Upper	17 5/8"	17 3/8"	17 13/16"	17 3/8"	18"	17 3/8"			

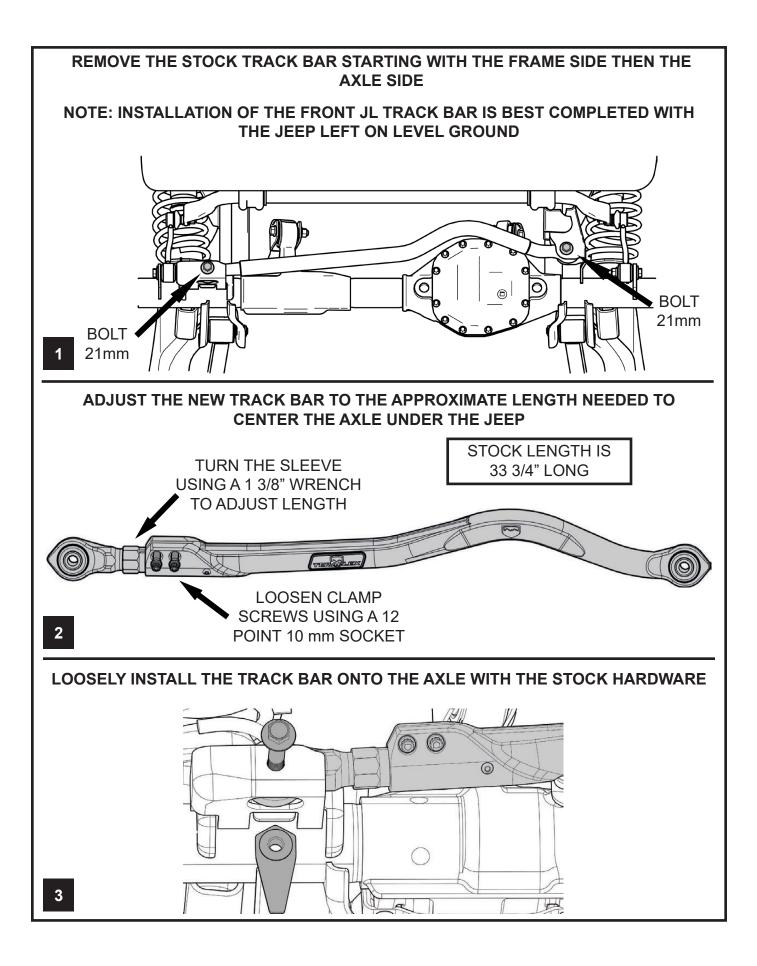
NOTE:

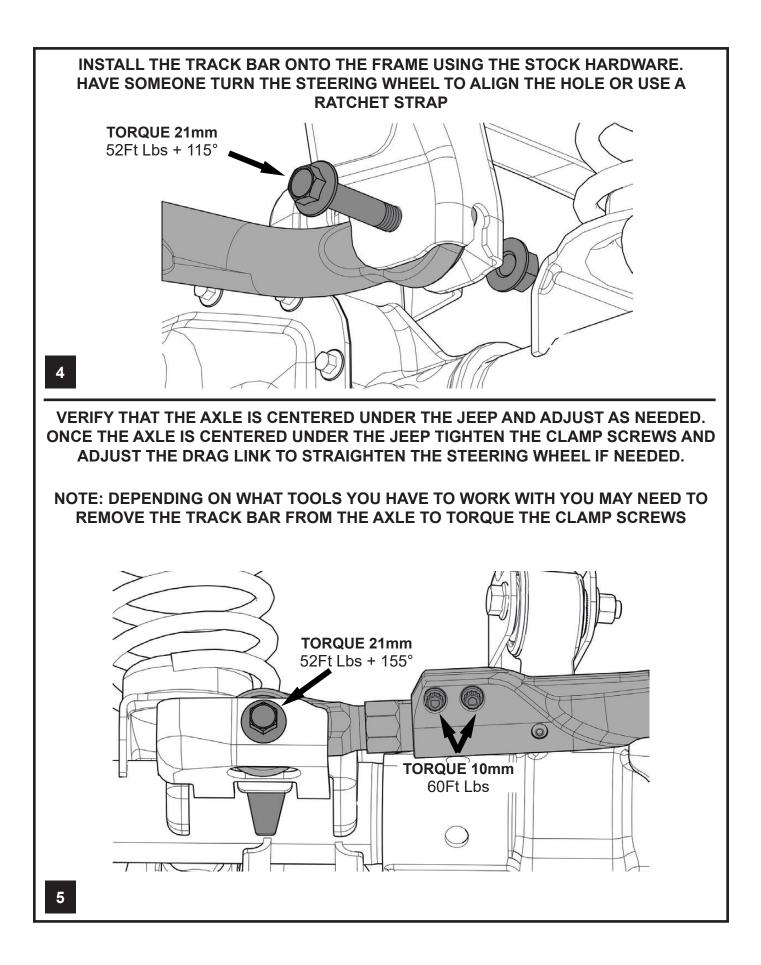
\* IF USING FRONT DROP BRACKETS (PN# 1938125), USE THE FACTORY ARM MEA-SURMENT AS A STARTING LEGNTH FOR THE FRONT LOWER ARMS.

\* IF INSTALLING A SINGLE PAIR OF ARMS TO CORRECT CASTER AND PINION AN-GLE, WE RECOMMEND REPLACING THE LOWER ARMS.



components and bolts.







### MAINTENANCE INFORMATION:

It is the buyer's responsibility to have all suspension, drivetrain, steering, and other components checked for proper tightness and torque after the first 100 miles and every 3000 miles after that.

#### NOTICE TO INSTALLER:

The enclosed "Warning to Driver" sticker must be installed in the vehicle in driver's view. This sticker is to act as a constant safety reminder when operating the vehicle. It is your responsibility as the equipment installer to install the provided sticker and to forward the product instructions to the vehicle's owner for review. If a "Warning to Driver" sticker or product installation guide were not included in the kit, FREE replacement stickers and instructions are available by request. It is the installer's duty to ensure a safe and controllable vehicle after the modifications have been performed.

#### WARNING:

Neither the seller nor the manufacturer will be liable for any loss, damage, or injury directly or indirectly arising from the use of or inability to determine the use of these products. Before using, the user shall determine the suitability of the products for its intended use, and the user shall assume all responsibility and risk in connection therewith.

#### WARNING TO DRIVER:

This vehicle has been modified to enhance off road performance and has unique handling characteristics. Use in harsh environments can cause extreme stress on the components. Vehicle should be inspected after being off road to make sure that all the components are in working order and safe to travel on the highway. All fasteners should be checked so that they are at the correct torque specifications as the vibration and stresses from off roading may cause critical fasteners to work loose. Extra care should be taken to inspect the critical components, steering, and brake systems. During each oil change components such as arms, tie rod ends, etc should be greased and checked for excessive wear. Any worn components should be replaced. When returning to the pavement always set or restore tire air pressure to the factory recommendation and connect or engage any disabled sway bar mechanisms. Because of the higher center of gravity and larger tires, this vehicle handles and reacts differently than many passenger cars, both on and off road. You must drive it safely! Extreme care should be taken to prevent vehicle rollover or loss of control, which can result in serious injury or death. Avoid sudden sharp turns or abrupt maneuvers. Generally, braking performance and capabilities are decreased when significantly larger/heavier tires are used, especially when used in combination with transfer case low-range reduction kits. Take this into consideration while driving. Do not add, alter or fabricate any factory or aftermarket parts to increase vehicle height over the intended height of the TeraFlex product purchased. Mixing component brand is not recommended. TeraFlex Inc. will not be responsible for any altered product or any improper installation or use of our products. We will be happy to answer any questions concerning the design, function, and correct use of our products. It is ultimately the buyer's responsibility to have all bolts/nuts checked for tightness after the first 100 miles and then every 3000 miles. Wheel a