



# JL Alpine Long Arms and Brackets

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# 1316010  
 # 1310510  
 # 1316012  
 # 1310512  
 # 1316005  
 # 1310505  
 # 1958002  
 # 1958000



## Important Notes:

The gas tank will need to be removed. Installation of this kit is best done with as little fuel in the gas tank as possible.

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.

**When reinstalling OEM hardware, refer to the torque specs given in the Factory Service Manual.**

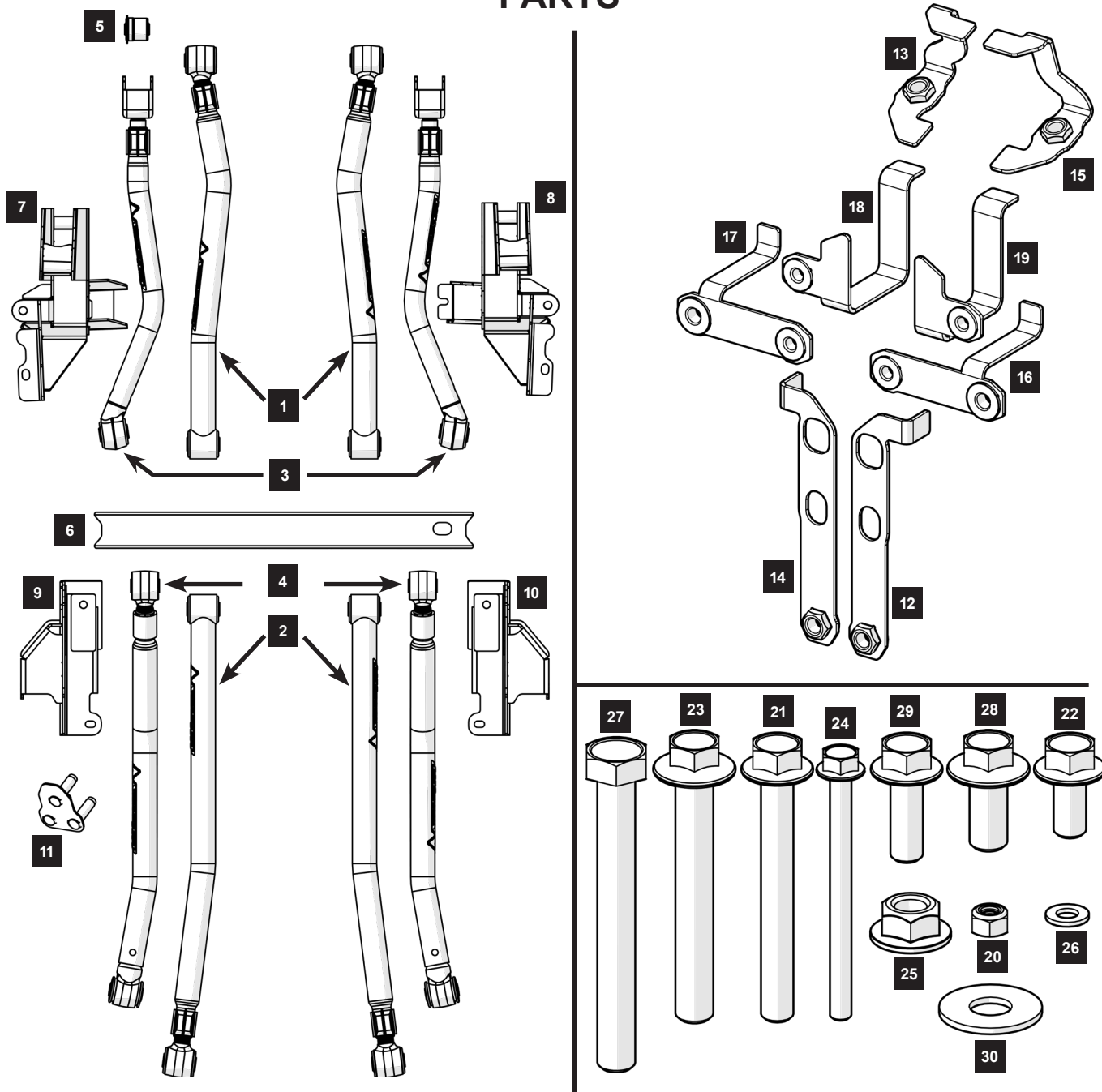
### Tools Needed:

- |  |                                   |
|--|-----------------------------------|
| - Metric Sockets and Open End Wrenches | - Factory Service Manual          |
| - Torque Wrench                        | - General Mechanics Tools         |
| - Drill and 11/16" Drill Bit           | - Cut Off Wheel / Grinder / Torch |

### Maintenance Note:

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

## PARTS



## NOTE:

\* IF YOU ARE INSTALLING CONTROL ARMS WITH ALPINE BUSHINGS, LOWER THE JEEP TO THE GROUND AND FINISH THE INSTALLATION BY TORQUING THE CONTROL ARM BOLTS. THE CONTROL ARM BOLTS MUST BE TORQUED WITH THE JEEP AT RIDE HEIGHT, SITTING ON ITS OWN WEIGHT.

\* IF YOU ARE INSTALLING CONTROL ARMS WITH THE ALPINE IR BUSHINGS THE CONTROL ARM BOLTS CAN BE TORQUED WITH THE JEEP RAISED IN THE AIR.

# 4 DOOR ALPINE IR

1310510 Alpine IR JL All 8 Long Arm Kit W/Long FlexArm Brackets (4 Door IR)			
Item #	Part No.	Description	QTY
	<b>1317001</b>	<b>JL Alpine IR Lower Long Arm Kit</b>	
1	1310500	Alpine IR JL Front Lower Long Arm Kit	1
2	1310540	Alpine IR JL Rear Lower Long Arm Kit	1
	<b>1317002</b>	<b>JL Alpine IR Upper Long Arm Kit</b>	
3	1310520	Alpine IR JL Front Upper Long Arm Kit	1
4	1310560	Alpine IR JL Rear Upper Long Arm Kit	1
5	611018	Front Upper Axle Revolver Rubber Bushing, Small	2
	<b>1958000</b>	<b>4 Door JL Long FlexArm Bracket Kit</b>	
6	15-11-001-031	Long Arm, JL Wrangler, Reinforcement Crossmember	1
7	15-11-001-100	Long Arm, JL Wrangler, Front / Driver / Assembly	1
8	15-11-001-200	Long Arm, JL Wrangler, Front / Passenger / Assembly	1
9	15-11-001-300	Long Arm, JL Wrangler, Rear / Driver / Assembly	1
10	15-11-001-400	Long Arm, JL Wrangler, Rear / Passenger / Assembly	1
11	15-11-001-500	Long Arm, JL Wrangler, Crush Plate Assembly	2
		<b>Hardware</b>	
12	47-03-002-001	Flag Nut Assy, Steel/Zinc, M14 x 2.0 / Top Lock / Long Flag/ Right Rear	1
13	47-03-002-002	Flag Nut Assy, Steel/ Zinc, M14 x 2.0/ Top Lock/ Short Flag/ Right Rear	1
14	47-03-002-003	Flag Nut Assy, Steel / Zinc, M14 x 2.0/ Top Lock/ Long Flag/ Left Rear	1
15	47-03-002-004	Flag Nut Assy, Steel / Zinc, M14 x 2.0 / Top Lock / Short Flag / Left Rear	1
16	47-03-002-005	Flag Nut Assy, Steel / Zinc, M14 x 2.0 / Top Lock / Long Flag / Left Front	1
17	47-03-002-006	Flag Nut Assy, Steel / Zinc, M14 x 2.0 / Top Lock / Long Flag / Right Front	1
18	47-03-002-007	Flag Nut Assy, Steel / Zinc, M12 x 1.75 / Top Lock / Short Flag / Left Front	1
19	47-03-002-008	Flag Nut Assy, Steel / Zinc, M12 x 1.75 / Top Lock / Short Flag / Right Front	1
	<b>5103</b>	<b>Hardware Pack, Long Arm Front Brackets, Jeep JL Wrangler, 4 Door</b>	
20	169	Nut M8 x 1.25 pitch Nylock Hex zinc	4
21	221	Bolt M12 x 1.75 x 100mm Long Grade 10.9 Flanged Hex Head	2
22	45-02-003-013	Hex Flange Bolt, Alloy Steel / Yellow Zinc, M12 x 1.75 x 25mm	2
23	45-02-003-019	Hex Flange Bolt, Alloy Steel/ Yellow Zinc, M14 x 2.0 x 100mm	4
24	45-02-003-024	Hex Flange Bolt, Alloy Steel / Yellow Zinc, M8 x 1.25 x 100mm	4
25	45-08-003-003	Flange Top Lock Nut, Alloy Steel/Yellow Zinc, M14 x 2.0mm	2
26	11403	Washer, M8 x 16mm OD, Zinc Coating	4
	<b>5102</b>	<b>Hardware Pack, Long Arm Rear Brackets, Jeep JL Wrangler</b>	
23	45-02-003-019	Hex Flange Bolt, Alloy Steel/ Yellow Zinc, M14 x 2.0 x 100mm	2
27	45-02-003-021	Hex Head Bolt, Alloy Steel/ Yellow Zinc, M14 x 2.0 x 120mm	2
28	45-02-003-022	Hex Flange Bolt, Alloy Steel/ Yellow Zinc, M14 x 2.0 x 30mm	2
29	45-02-003-023	Hex Flange Bolt, Alloy Steel/ Yellow Zinc, M12 x 1.75 x 35mm	6
25	45-08-003-003	Flange Top Lock Nut, Alloy Steel/Yellow Zinc, M14 x 2.0mm	2
30	45-10-003-004	Washer 9/16" Flat Zinc Plated	2

# 4 DOOR ALPINE

<b>1316010 Alpine JL All 8 Long Arm Kit W/Long FlexArm Brackets (4 Door Alpine)</b>			
Item #	Part No.	Description	QTY
	<b>1316001</b>	<b>JL Alpine Lower Long Arm Kit</b>	
1	1316500	Alpine JL Front Lower Long Arm Kit	1
2	1316540	Alpine JL Rear Lower Long Arm Kit	1
	<b>1316002</b>	<b>JL Alpine Upper Long Arm Kit</b>	
3	1316520	Alpine JL Front Upper Long Arm Kit	1
4	1316560	Alpine JL Rear Upper Long Arm Kit	1
	<b>1958000</b>	<b>4 Door JL Long FlexArm Bracket Kit</b>	
6	15-11-001-031	Long Arm, JL Wrangler, Reinforcement Crossmember	1
7	15-11-001-100	Long Arm, JL Wrangler, Front / Driver / Assembly	1
8	15-11-001-200	Long Arm, JL Wrangler, Front / Passenger / Assembly	1
9	15-11-001-300	Long Arm, JL Wrangler, Rear / Driver / Assembly	1
10	15-11-001-400	Long Arm, JL Wrangler, Rear / Passenger / Assembly	1
11	15-11-001-500	Long Arm, JL Wrangler, Crush Plate Assembly	2
		<b>Hardware</b>	
12	47-03-002-001	Flag Nut Assy, Steel/Zinc, M14 x 2.0 / Top Lock / Long Flag/ Right Rear	1
13	47-03-002-002	Flag Nut Assy, Steel/ Zinc, M14 x 2.0/ Top Lock/ Short Flag/ Right Rear	1
14	47-03-002-003	Flag Nut Assy, Steel / Zinc, M14 x 2.0/ Top Lock/ Long Flag/ Left Rear	1
15	47-03-002-004	Flag Nut Assy, Steel / Zinc, M14 x 2.0 / Top Lock / Short Flag / Left Rear	1
16	47-03-002-005	Flag Nut Assy, Steel / Zinc, M14 x 2.0 / Top Lock / Long Flag / Left Front	1
17	47-03-002-006	Flag Nut Assy, Steel / Zinc, M14 x 2.0 / Top Lock / Long Flag / Right Front	1
18	47-03-002-007	Flag Nut Assy, Steel / Zinc, M12 x 1.75 / Top Lock / Short Flag / Left Front	1
19	47-03-002-008	Flag Nut Assy, Steel / Zinc, M12 x 1.75 / Top Lock / Short Flag / Right Front	1
	<b>5103</b>	<b>Hardware Pack, Long Arm Front Brackets, Jeep JL Wrangler, 4 Door</b>	
20	169	Nut M8 x 1.25 pitch Nylock Hex zinc	4
21	221	Bolt M12 x 1.75 x 100mm Long Grade 10.9 Flanged Hex Head	2
22	45-02-003-013	Hex Flange Bolt, Alloy Steel / Yellow Zinc, M12 x 1.75 x 25mm	2
23	45-02-003-019	Hex Flange Bolt, Alloy Steel/ Yellow Zinc, M14 x 2.0 x 100mm	4
24	45-02-003-024	Hex Flange Bolt, Alloy Steel / Yellow Zinc, M8 x 1.25 x 100mm	4
25	45-08-003-003	Flange Top Lock Nut, Alloy Steel/Yellow Zinc, M14 x 2.0mm	2
26	11403	Washer, M8 x 16mm OD, Zinc Coating	4
	<b>5102</b>	<b>Hardware Pack, Long Arm Rear Brackets, Jeep JL Wrangler</b>	
23	45-02-003-019	Hex Flange Bolt, Alloy Steel/ Yellow Zinc, M14 x 2.0 x 100mm	2
27	45-02-003-021	Hex Head Bolt, Alloy Steel/ Yellow Zinc, M14 x 2.0 x 120mm	2
28	45-02-003-022	Hex Flange Bolt, Alloy Steel/ Yellow Zinc, M14 x 2.0 x 30mm	2
29	45-02-003-023	Hex Flange Bolt, Alloy Steel/ Yellow Zinc, M12 x 1.75 x 35mm	6
25	45-08-003-003	Flange Top Lock Nut, Alloy Steel/Yellow Zinc, M14 x 2.0mm	2
30	45-10-003-004	Washer 9/16" Flat Zinc Plated	2



## 2 DOOR ALPINE IR

1310512 Alpine IR JL 2Dr All 8 Long Arm Kit W/long FlexArm Brackets (2 Door IR)			
Item #	Part No.	Description	QTY
	<b>1317001</b>	<b>JL Alpine IR Lower Long Arm Kit</b>	
1	1310500	Alpine IR JL Front Lower Long Arm Kit	1
2	1310540	Alpine IR JL Rear Lower Long Arm Kit	1
	<b>1317002</b>	<b>JL Alpine IR Upper Long Arm Kit</b>	
3	1310520	Alpine IR JL Front Upper Long Arm Kit	1
4	1310560	Alpine IR JL Rear Upper Long Arm Kit	1
5	611018	Front Upper Axle Revolver Rubber Bushing, Small	2
	<b>1958002</b>	<b>2 Door JL Long FlexArm Bracket Kit</b>	
6	15-11-001-031	Long Arm, JL Wrangler, Reinforcement Crossmember	1
7	15-11-001-100	Long Arm, JL Wrangler, Front / Driver / Assembly	1
8	15-11-002-200	Long Arm, JL Wrangler, 2 Door/ Front / Passenger / Assembly	1
9	15-11-001-300	Long Arm, Jeep JL Wrangler, Rear / Driver / Assembly	1
10	15-11-001-400	Long Arm, Jeep JL Wrangler, Rear / Passenger / Assembly	1
11	15-11-001-500	Long Arm, Jeep JL Wrangler, Crush Plate Assembly	2
		<b>Hardware</b>	
12	47-03-002-001	Flag Nut Assy, Steel/Zinc, M14 x 2.0 / Top Lock / Long Flag/ Right Rear	1
13	47-03-002-002	Flag Nut Assy, Steel/ Zinc, M14 x 2.0/ Top Lock/ Short Flag/ Right Rear	1
14	47-03-002-003	Flag Nut Assy, Steel / Zinc, M14 x 2.0/ Top Lock/ Long Flag/ Left Rear	1
15	47-03-002-004	Flag Nut Assy, Steel / Zinc, M14 x 2.0 / Top Lock / Short Flag / Left Rear	1
16	47-03-002-005	Flag Nut Assy, Steel / Zinc, M14 x 2.0 / Top Lock / Long Flag / Left Front	1
17	47-03-002-006	Flag Nut Assy, Steel / Zinc, M14 x 2.0 / Top Lock / Long Flag / Right Front	1
18	47-03-002-007	Flag Nut Assy, Steel / Zinc, M12 x 1.75 / Top Lock / Short Flag / Left Front	1
19	47-03-002-008	Flag Nut Assy, Steel / Zinc, M12 x 1.75 / Top Lock / Short Flag / Right Front	1
	<b>5101</b>	<b>Hardware Pack, Long Arm Front Brackets, Jeep JL Wrangler, 2 Door</b>	
20	169	Nut M8 x 1.25 pitch Nylock Hex zinc	4
21	221	Bolt M12 x 1.75 x 100mm Long Grade 10.9 Flanged Hex Head	2
22	45-02-003-013	Hex Flange Bolt, Alloy Steel / Yellow Zinc, M12 x 1.75 x 25mm	1
23	45-02-003-019	Hex Flange Bolt, Alloy Steel/ Yellow Zinc, M14 x 2.0 x 100mm	4
24	45-02-003-024	Hex Flange Bolt, Alloy Steel / Yellow Zinc, M8 x 1.25 x 100mm	4
25	45-08-003-003	Flange Top Lock Nut, Alloy Steel/Yellow Zinc, M14 x 2.0mm	2
26	11403	Washer, M8 x 16mm OD, Zinc Coating	4
	<b>5102</b>	<b>Hardware Pack, Long Arm Rear Brackets, Jeep JL Wrangler</b>	
23	45-02-003-019	Hex Flange Bolt, Alloy Steel/ Yellow Zinc, M14 x 2.0 x 100mm	2
27	45-02-003-021	Hex Head Bolt, Alloy Steel/ Yellow Zinc, M14 x 2.0 x 120mm	2
28	45-02-003-022	Hex Flange Bolt, Alloy Steel/ Yellow Zinc, M14 x 2.0 x 30mm	2
29	45-02-003-023	Hex Flange Bolt, Alloy Steel/ Yellow Zinc, M12 x 1.75 x 35mm	6
25	45-08-003-003	Flange Top Lock Nut, Alloy Steel/Yellow Zinc, M14 x 2.0mm	2
30	45-10-003-004	Washer 9/16" Flat Zinc Plated	2

## 2 DOOR ALPINE

1316012 Alpine JL 2Dr All 8 Long Arm Kit W/long FlexArm Brackets (2 Door Alpine)			
Item #	Part No.	Description	QTY
	<b>1316001</b>	<b>JL Alpine Lower Long Arm Kit</b>	
1	1316500	Alpine JL Front Lower Long Arm Kit	1
2	1316540	Alpine JL Rear Lower Long Arm Kit	1
	<b>1316002</b>	<b>JL Alpine Upper Long Arm Kit</b>	
3	1316520	Alpine JL Front Upper Long Arm Kit	1
4	1316560	Alpine JL Rear Upper Long Arm Kit	1
	<b>1958002</b>	<b>2 Door JL Long FlexArm Bracket Kit</b>	
6	15-11-001-031	Long Arm, JL Wrangler, Reinforcement Crossmember	1
7	15-11-001-100	Long Arm, JL Wrangler, Front / Driver / Assembly	1
8	15-11-002-200	Long Arm, JL Wrangler, 2 Door/ Front / Passenger / Assembly	1
9	15-11-001-300	Long Arm, Jeep JL Wrangler, Rear / Driver / Assembly	1
10	15-11-001-400	Long Arm, Jeep JL Wrangler, Rear / Passenger / Assembly	1
11	15-11-001-500	Long Arm, Jeep JL Wrangler, Crush Plate Assembly	2
		<b>Hardware</b>	
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13	47-03-002-002	Flag Nut Assy, Steel/ Zinc, M14 x 2.0/ Top Lock/ Short Flag/ Right Rear	1
14	47-03-002-003	Flag Nut Assy, Steel / Zinc, M14 x 2.0/ Top Lock/ Long Flag/ Left Rear	1
15	47-03-002-004	Flag Nut Assy, Steel / Zinc, M14 x 2.0 / Top Lock / Short Flag / Left Rear	1
16	47-03-002-005	Flag Nut Assy, Steel / Zinc, M14 x 2.0 / Top Lock / Long Flag / Left Front	1
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23	45-02-003-019	Hex Flange Bolt, Alloy Steel/ Yellow Zinc, M14 x 2.0 x 100mm	4
24	45-02-003-024	Hex Flange Bolt, Alloy Steel / Yellow Zinc, M8 x 1.25 x 100mm	4
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29	45-02-003-023	Hex Flange Bolt, Alloy Steel/ Yellow Zinc, M12 x 1.75 x 35mm	6
25	45-08-003-003	Flange Top Lock Nut, Alloy Steel/Yellow Zinc, M14 x 2.0mm	2
30	45-10-003-004	Washer 9/16" Flat Zinc Plated	2

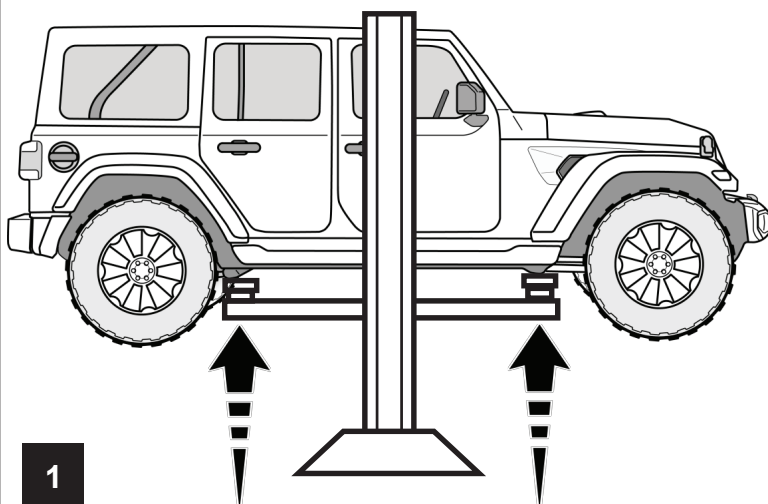
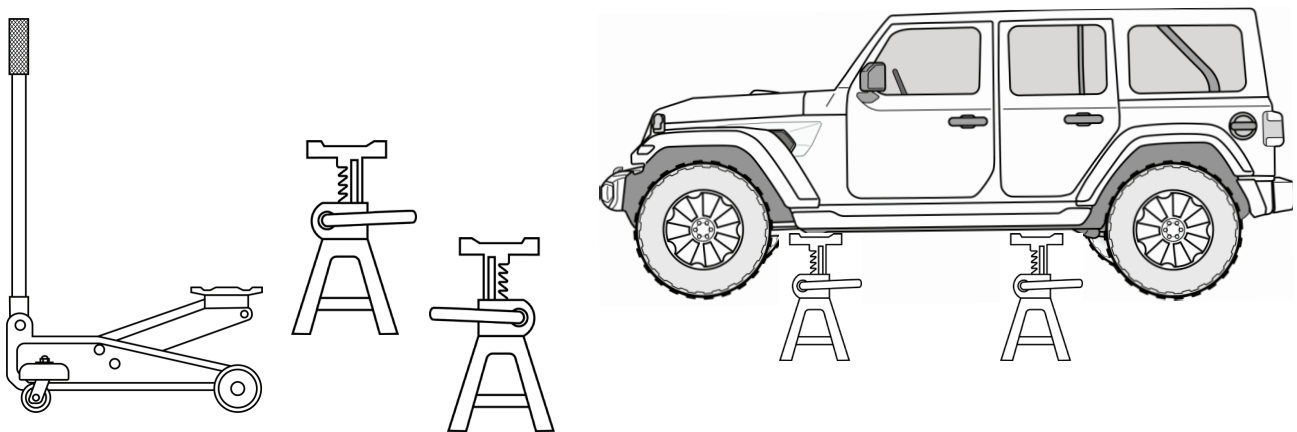
## FRONT DISASSEMBLY

**DISCONNECT THE BATTERY ACCORDING TO THE FACTORY SERVICE MANUAL**

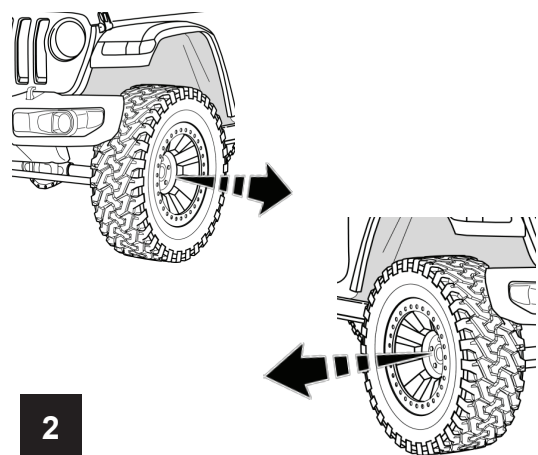
**THE GAS TANK WILL NEED TO BE REMOVED IN ORDER TO INSTALL THE LONG ARM BRACKETS. REMOVAL OF THE GAS TANK IS BEST DONE WITH AS LITTLE FUEL IN THE TANK AS POSSIBLE.**

**YOU WILL NEED TO BE ABLE TO ACCESS SEVERAL POINTS OF THE FRAME DURING INSTALL. IF YOUR JEEP IS EQUIPPED WITH OEM ROCK SLIDERS YOU CAN SUPPORT THE JEEP AT THE SLIDERS FOR EASY ACCESS TO THE FRAME. IF YOUR JEEP IS NOT EQUIPPED WITH OEM ROCK SLIDERS YOU MAY NEED TO LIFT AND ADJUST YOUR SUPPORTS AT DIFFERENT TIMES DURING THE INSTALLATION.**

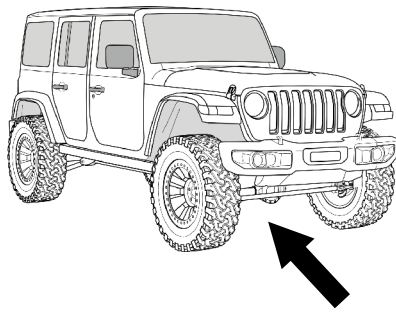
### LIFT AND SUPPORT AT FRAME



### REMOVE FRONT TIRES



## REMOVE SWAY BAR LINKS & REMOVE TRACK BAR BOLT AT AXLE

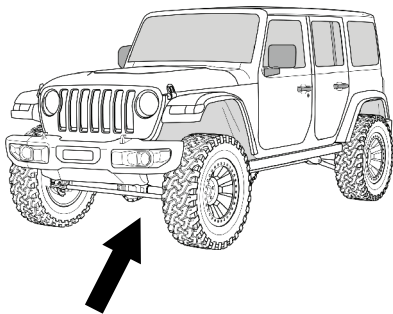


**REMOVE &  
DISCARD**

**BOLT  
18mm**

**STUD 6mm  
NUT 18mm**

**BOLT  
21mm**



**STUD 6mm HEX KEY**

**REMOVE  
NUT 18mm**

**REMOVE &  
DISCARD**

**REMOVE  
NUT 18mm**

**BOLT  
18mm**

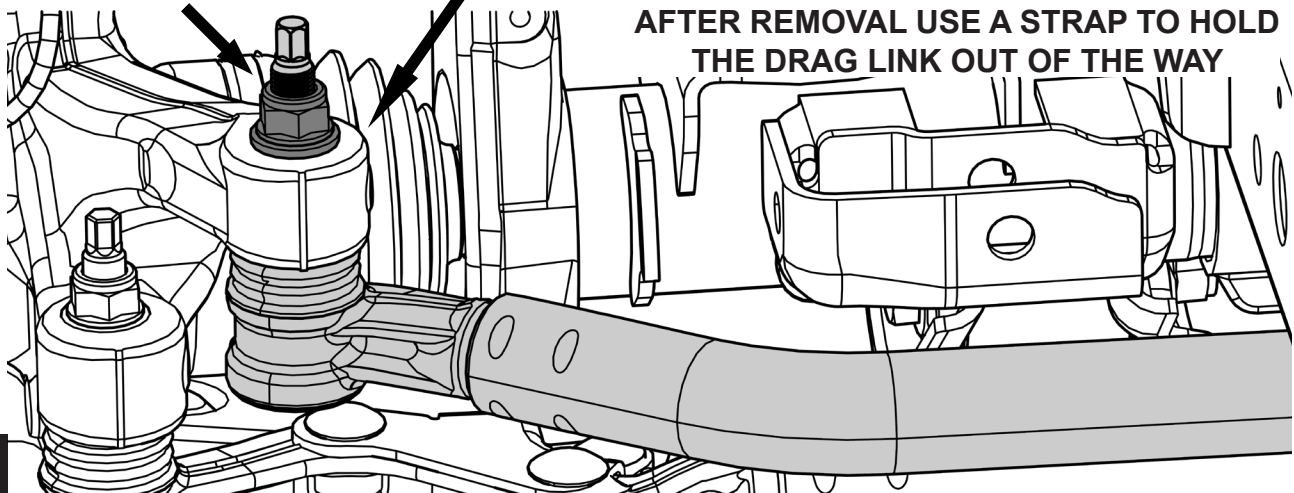
**3**

## REMOVE THE DRAG LINK AT THE KNUCKLE

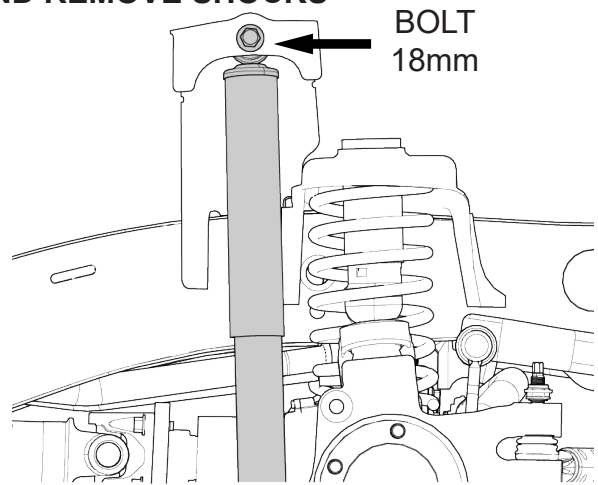
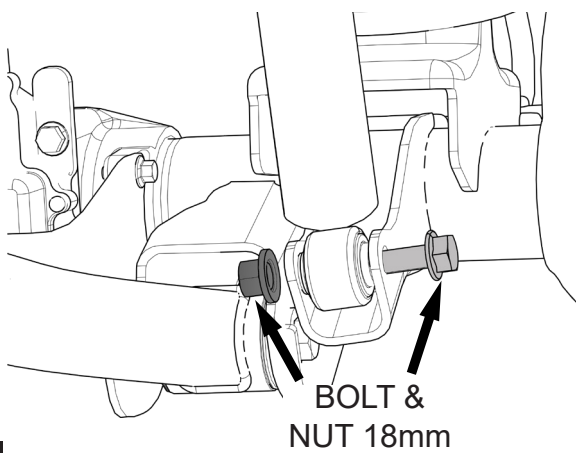
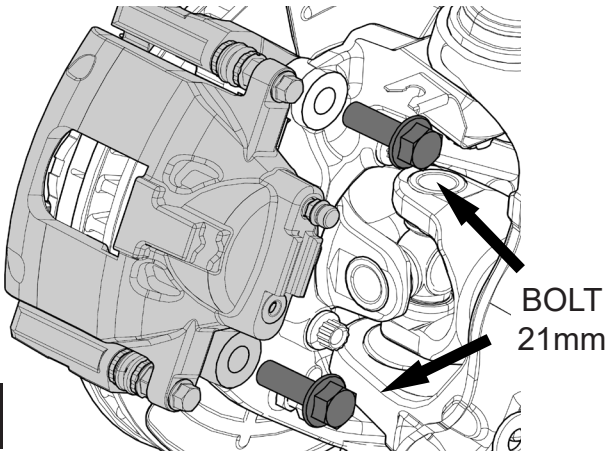
**REMOVE  
NUT 21mm**

**HIT WITH HAMMER TO RELEASE**

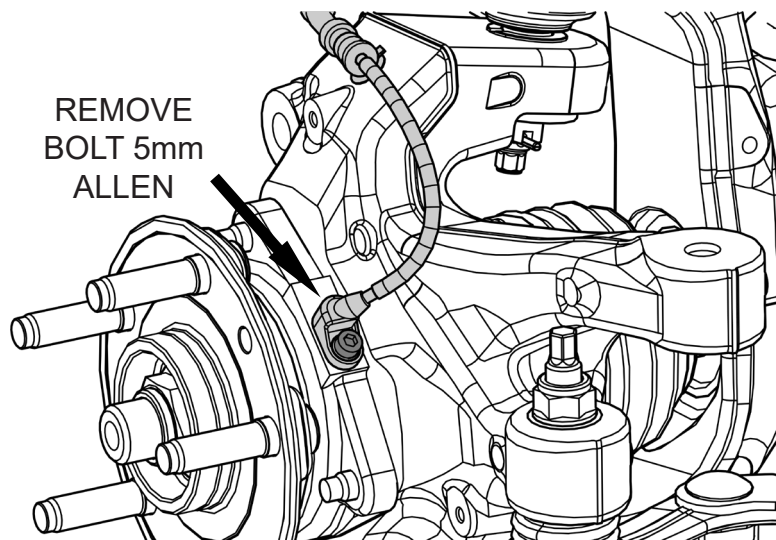
**AFTER REMOVAL USE A STRAP TO HOLD  
THE DRAG LINK OUT OF THE WAY**



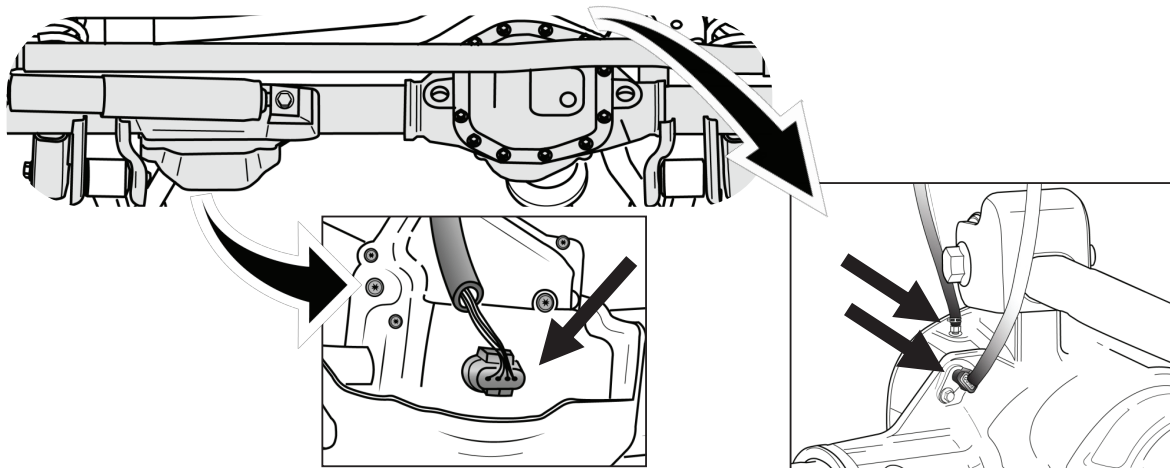
**4**

**SUPPORT THE FRONT AXLE AND REMOVE SHOCKS****5****REMOVE THE FRONT CALIPERS FROM THE AXLE**

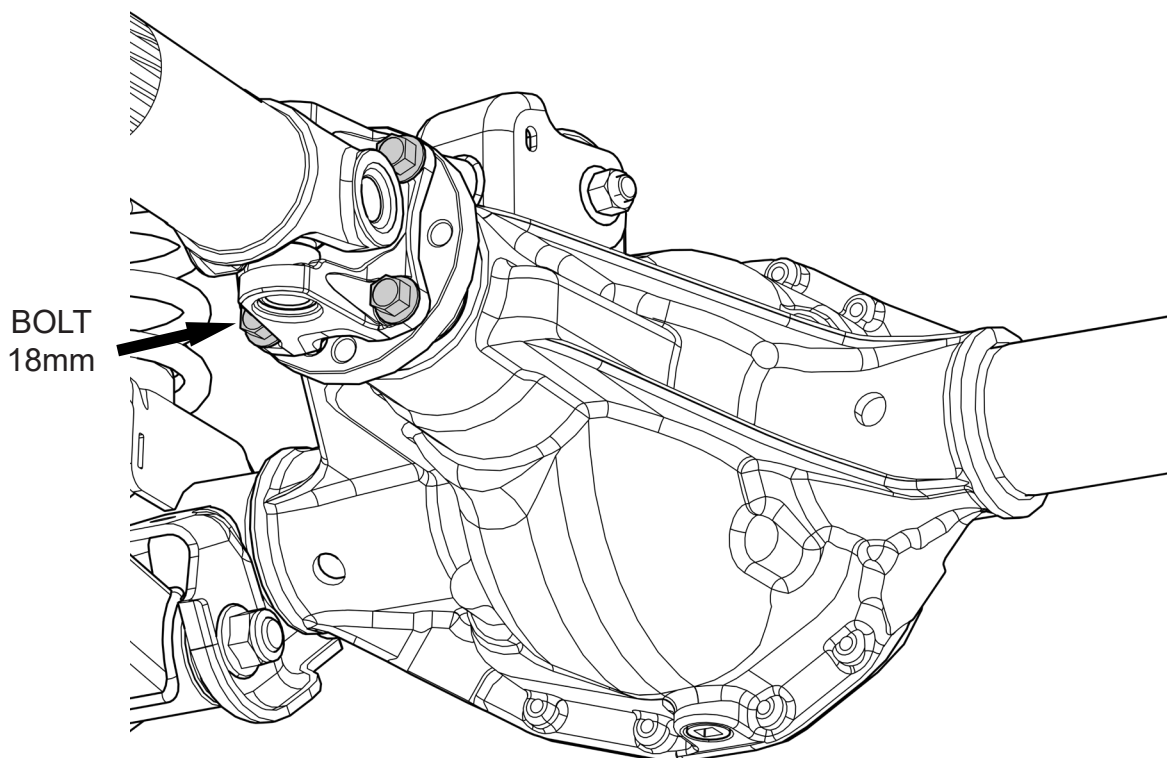
**DO NOT HANG THE CALIPERS BY  
THE BRAKE LINES**

**6****DISCONNECT THE ABS LINES FROM THE AXLE****7**



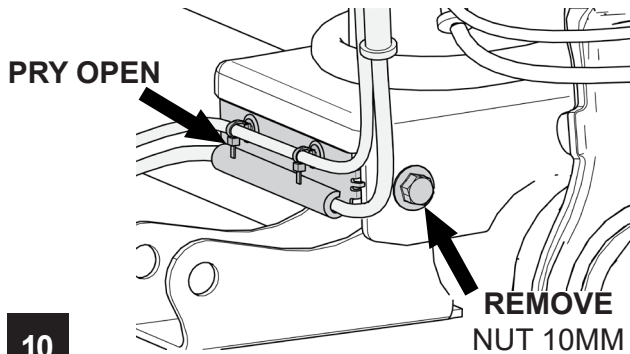
**DISCONNECT ACTUATORS AND VENT HOSE AT THE FRONT AXLE****8****REMOVE THE FRONT DRIVE SHAFT**

**REMOVE THE DRIVE SHAFT AT THE AXLE AND SUPPORT  
THE DRIVE SHAFT OUT OF THE WAY USING A STRAP**

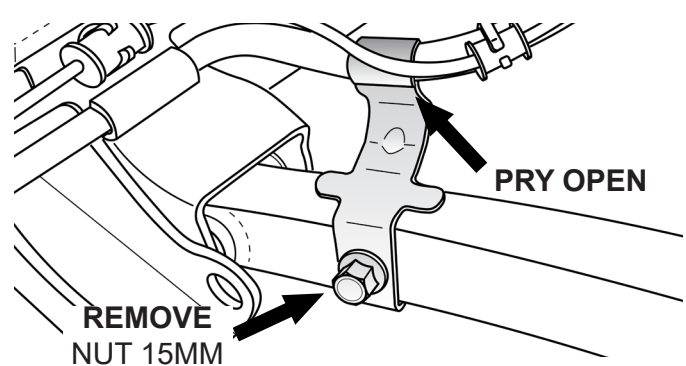
**9**



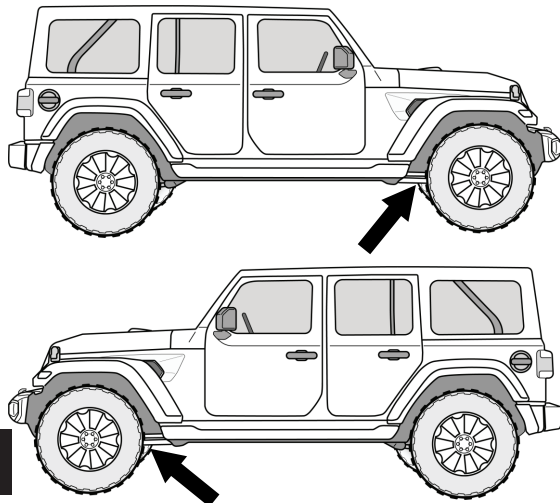
## REMOVE AND DISCARD BRAKE LINE BRACKETS FROM LOWER CONTROL ARMS AND SPRING MOUNTS



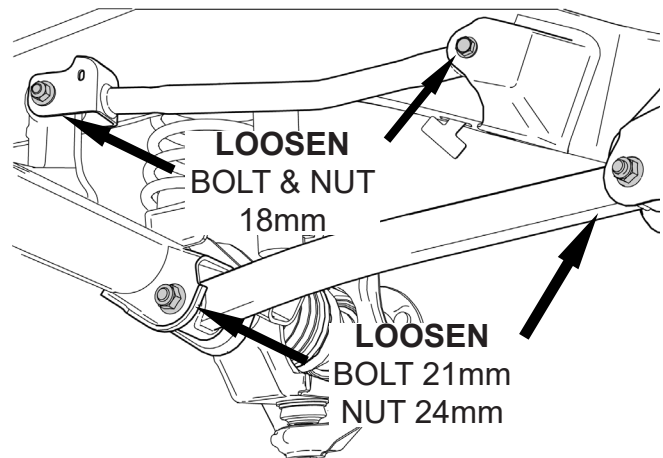
10



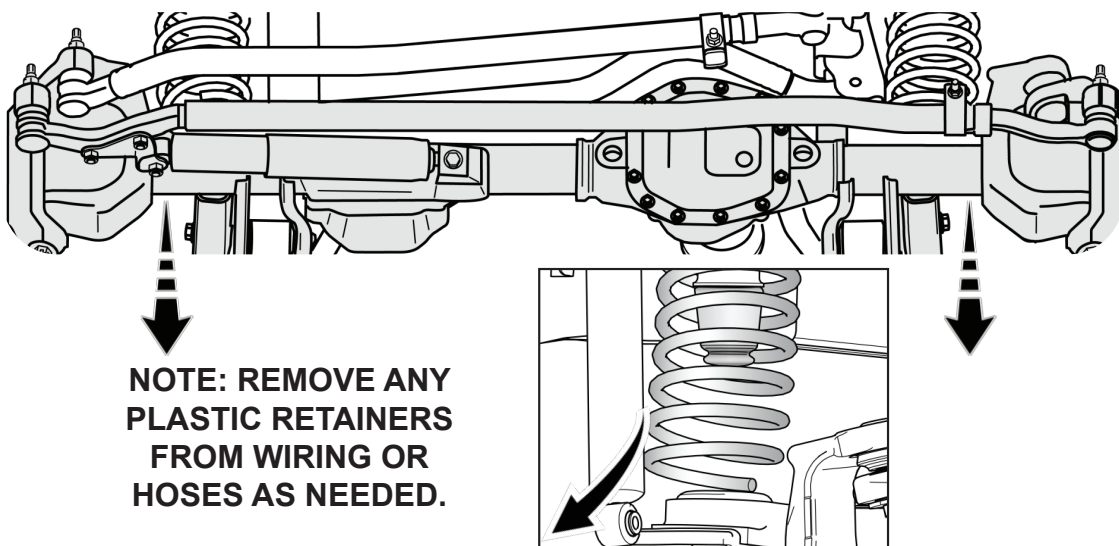
## LOOSEN FRONT CONTROL ARM BOLTS DO NOT REMOVE THE CONTROL ARM BOLTS



11

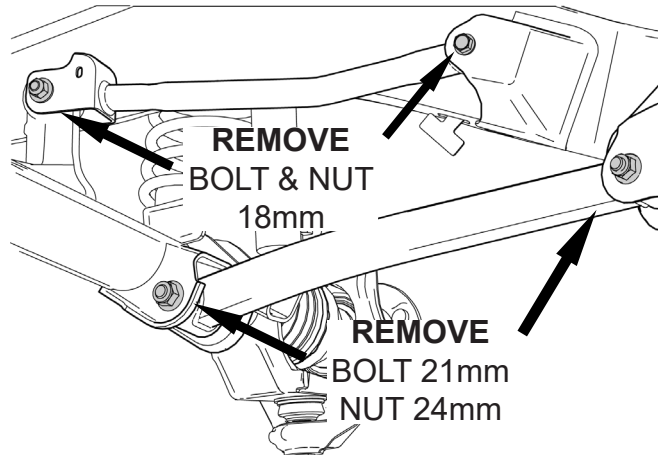
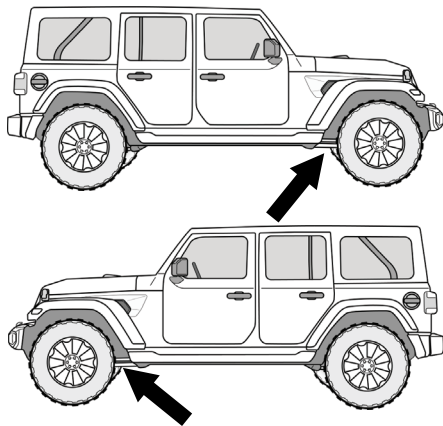


## LOWER AXLE AND REMOVE FRONT SPRINGS



12

**SUPPORT THE FRONT AXLE AND COMPLETELY  
REMOVING THE FRONT CONTROL ARM BOLTS**



**13**

**REMOVE AND LOWER THE AXLE OUT OF THE WAY**

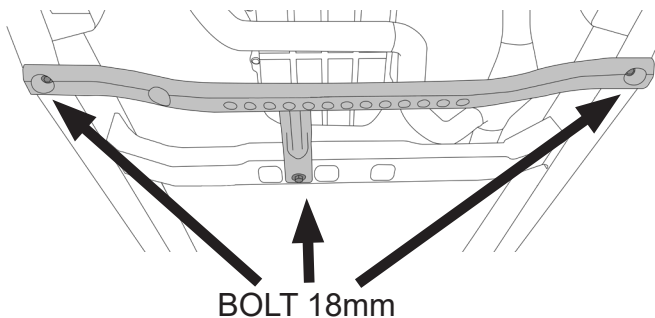
**NOTE: ON DIESEL MODELS THE EXHAUST BLOCKS THE PASSENGER SIDE UPPER CONTROL ARM BOLT FROM COMING OUT. THE FOLLOWING STEPS ARE FOR GETTING THE BOLT FREE.**

- 1. REMOVE UPPER CONTROL ARM FROM AXLE.**
- 2. REMOVE REAR NUT FROM THE FRAME AND PULL BOLT OUT TILL IT IS JUST ABOUT TO TOUCH THE EXHAUST.**
- 3. CRANK CONTROL ARM HARD TOWARDS THE ENGINE BLOCK UNTIL BOLT CAN CLEAR THE TOP OF THE EXHAUST. BOLT SHOULD BE ABLE TO SLIDE OUT AND THE CONTROL ARM CAN BE REMOVED.**

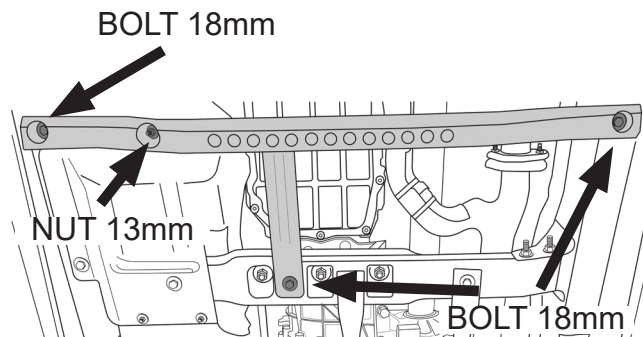
**OPTIONAL METHOD WOULD BE TO CUT THE BOLT. BOLT WILL NOT BE REUSED.**

**REMOVE AND DISCARD THE EXHAUST SKID PLATE  
DO NOT DISCARD THE FACTORY BOLTS OR NUT. BOLTS WILL BE  
REUSED IN STEPS 54 AND 61**

**4 DOOR MODEL**



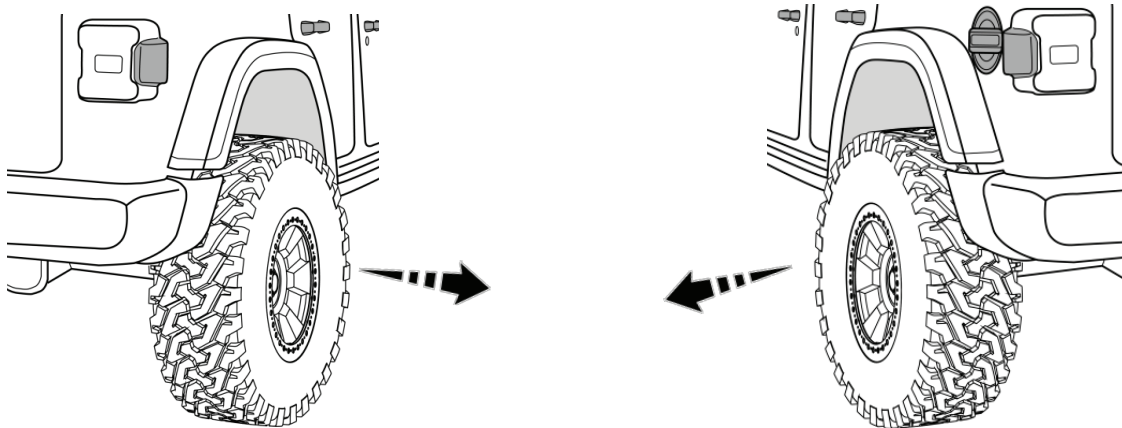
**2 DOOR MODEL**



**14**

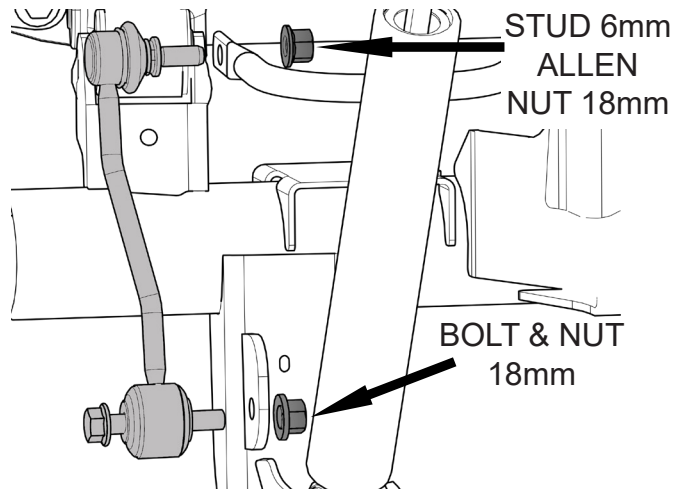
## REAR DISASSEMBLY

### REMOVE REAR TIRES



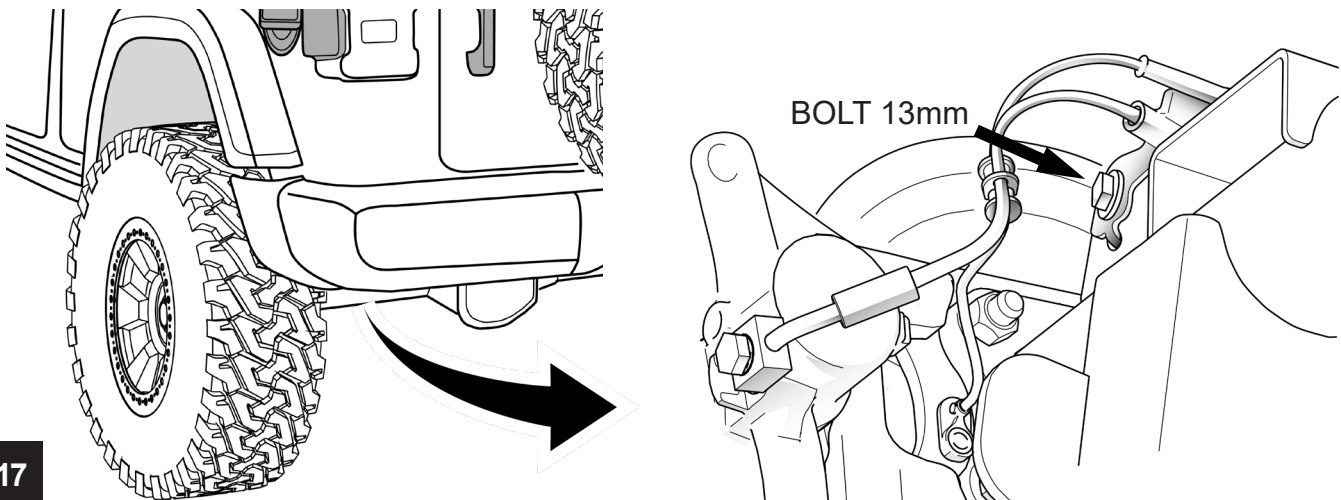
15

### REMOVE AND DISCARD REAR SWAY BAR LINKS



16

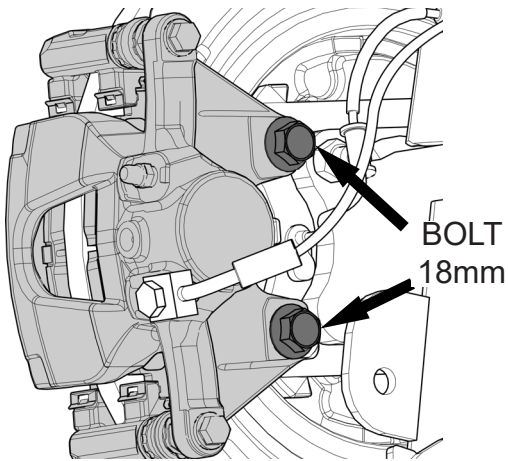
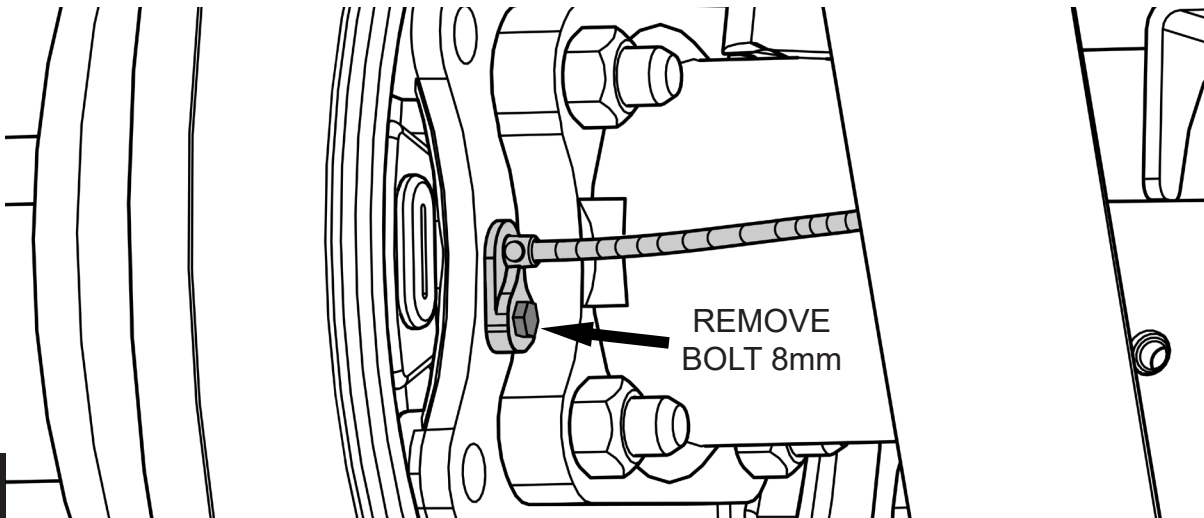
### REMOVE BRAKE LINE BRACKETS FROM BOTH SIDES OF THE AXLE



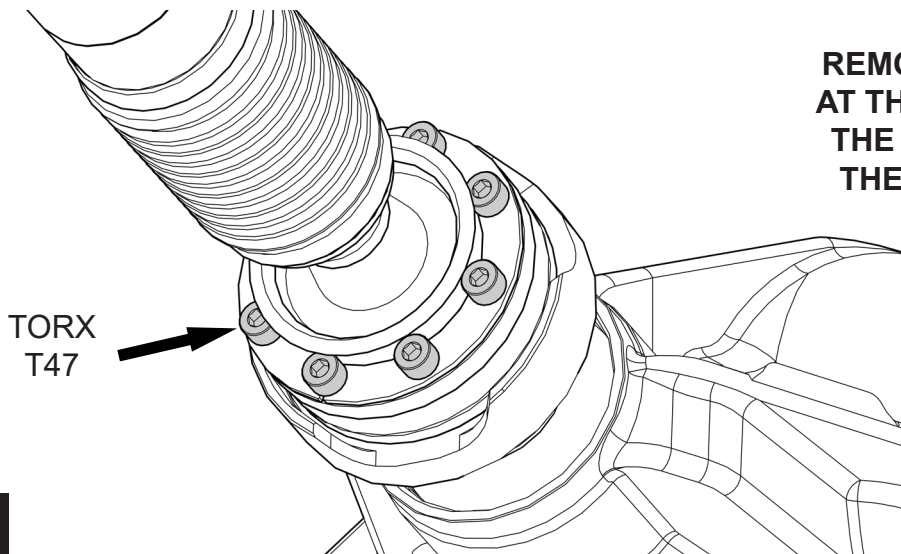
17

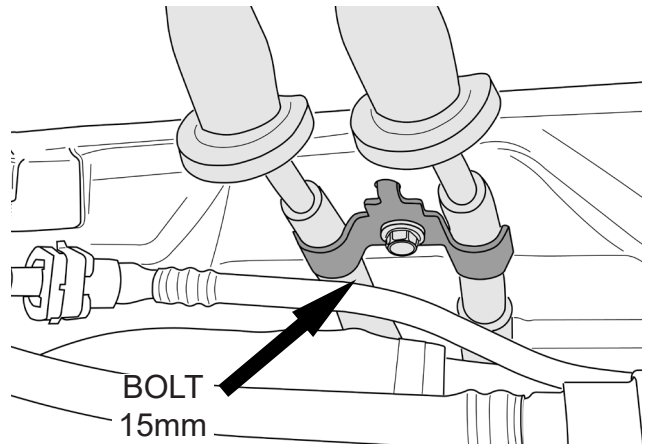
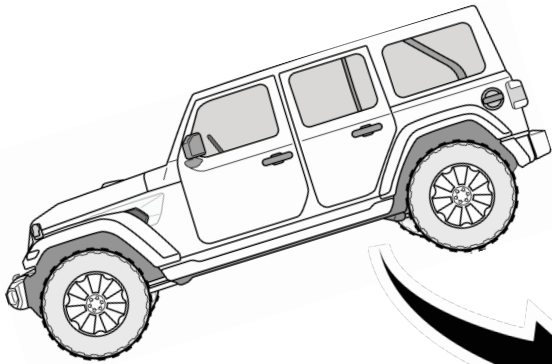
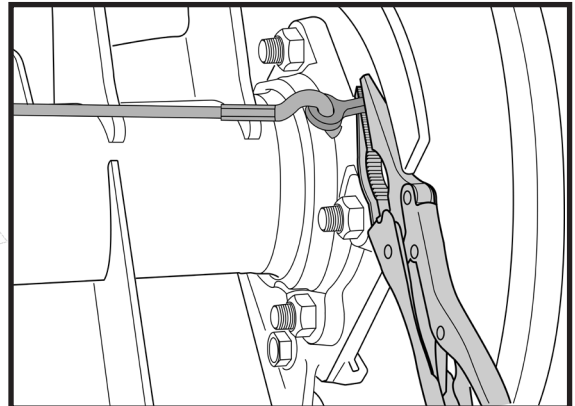
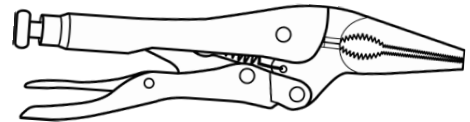
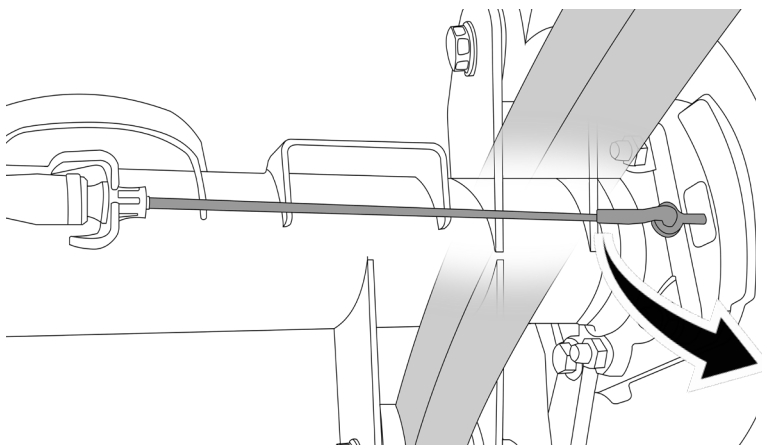
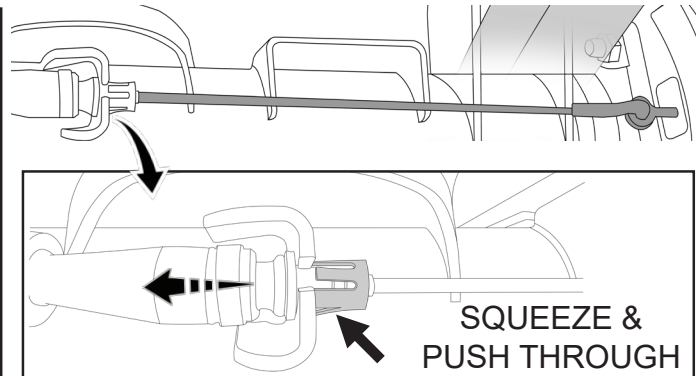
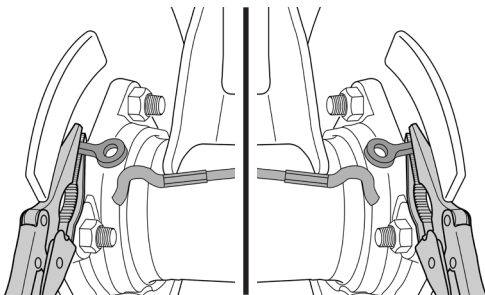
**REMOVE THE REAR CALIPERS FROM THE AXLE**

**DO NOT HANG THE CALIPERS BY  
THE BRAKE LINES**

**18****DISCONNECT THE ABS LINES FROM THE AXLE****19****REMOVE THE REAR DRIVE SHAFT**

**REMOVE THE DRIVE SHAFT  
AT THE AXLE AND SUPPORT  
THE DRIVE SHAFT OUT OF  
THE WAY USING A STRAP**

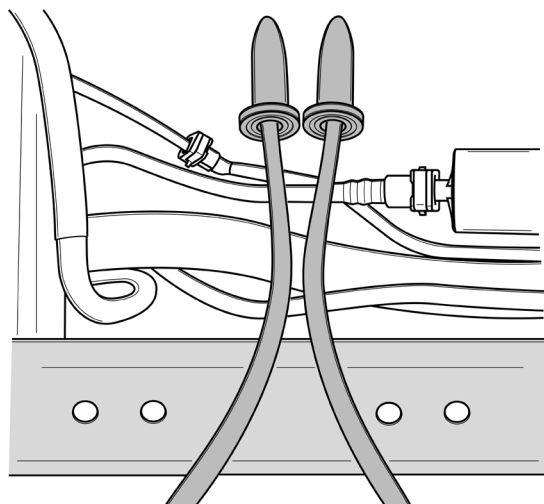
**20**

**REMOVE E-BRAKE CABLE BRACKET AND DISCARD****21****SET THE E-BRAKE AND CLAMP BOTH E-BRAKE EYELETS AGAINST BACKING PLATES WITH LOCKING PLIERS****22****RELEASE E-BRAKE AND DISCONNECT CABLES FROM BOTH EYELETS AND AXLE BRACKETS****23****NOTE: DO NOT REMOVE LOCKING PLIERS FROM E-BRAKE EYELETS**



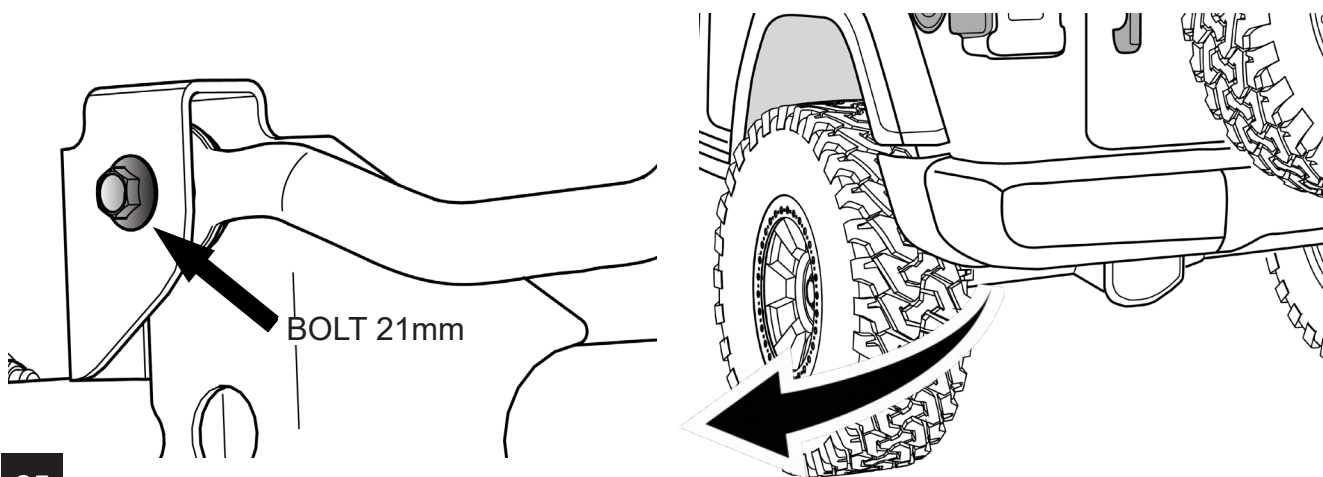
**ROUTE E-BRAKE CABLES UNDER CROSS MEMBER AND FUEL LINES.**

24



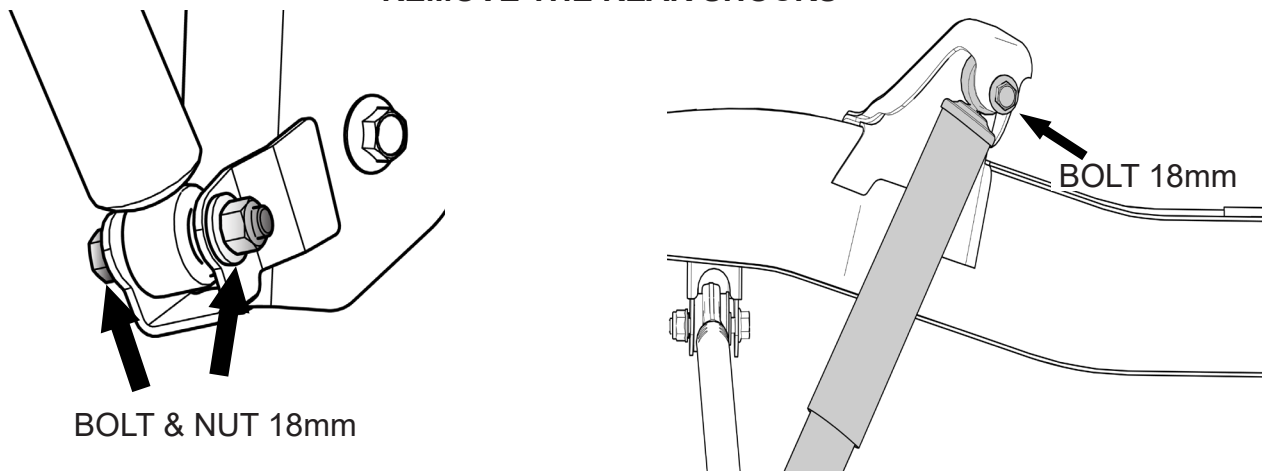
**REMOVE THE TRACK BAR FROM THE AXLE**

25



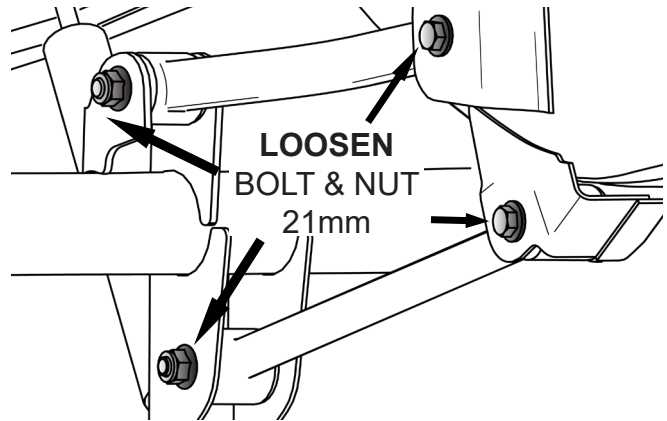
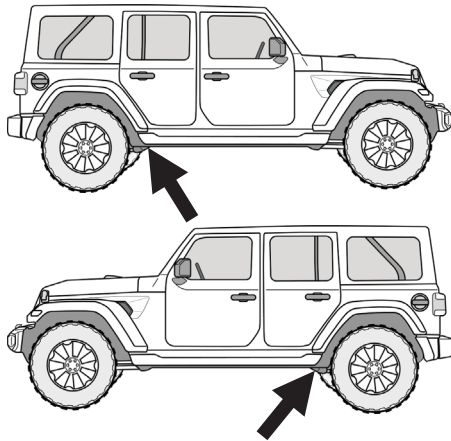
**REMOVE THE REAR SHOCKS**

26

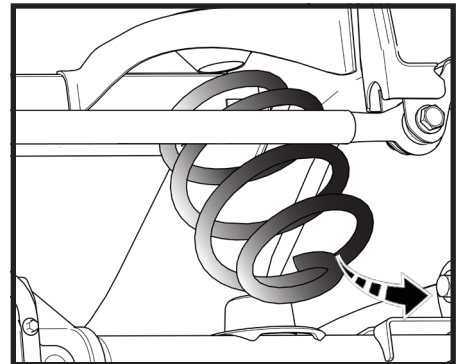
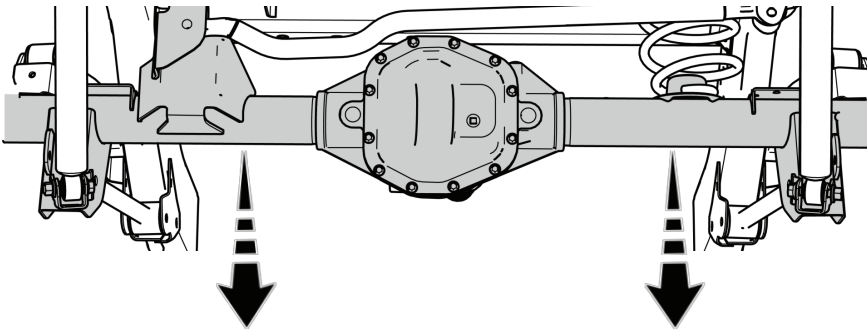




**LOOSEN REAR CONTROL ARM BOLTS  
DO NOT REMOVE THE CONTROL ARM BOLTS**

**27**

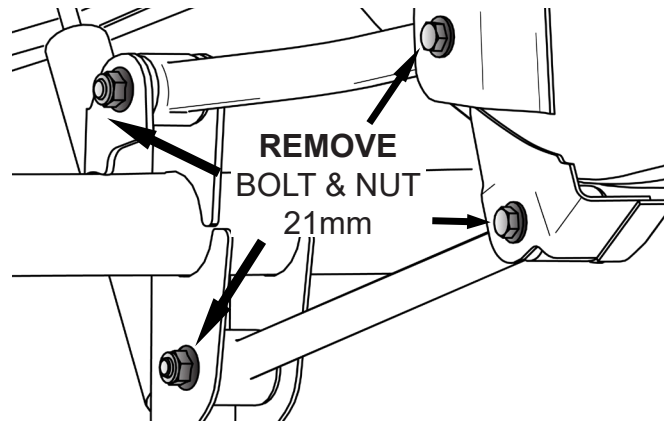
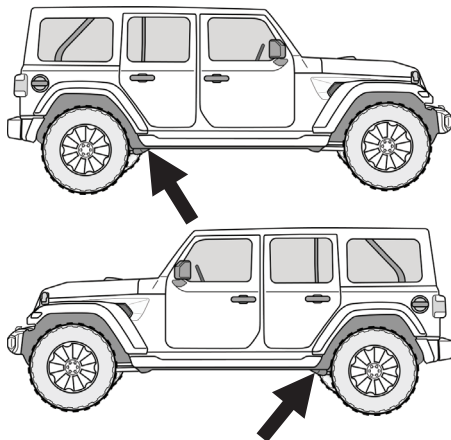
**LOWER AXLE TO REMOVE REAR SPRINGS**



**NOTE: REMOVE ANY PLASTIC RETAINERS OR CONNECTORS FROM WIRING OR HOSES AS NEEDED.**

**28**

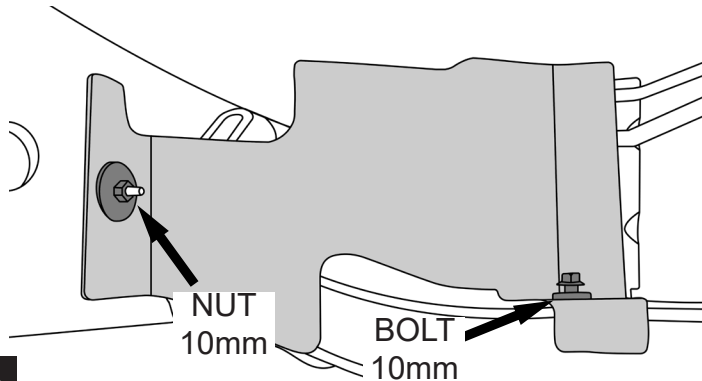
**SUPPORT THE REAR AXLE AND CONTINUE BY COMPLETELY REMOVING THE REAR CONTROL ARM BOLTS**

**29**

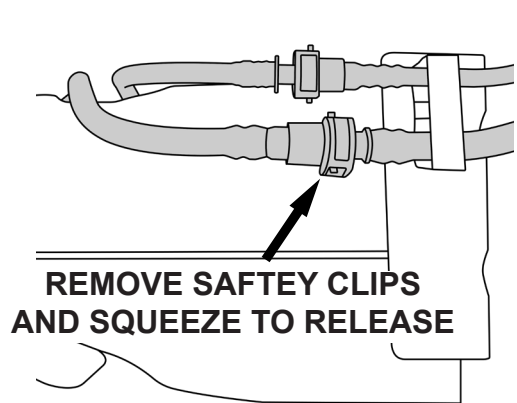
**REMOVE AND LOWER THE AXLE OUT OF THE WAY**

## GAS TANK REMOVAL (4 DOOR)

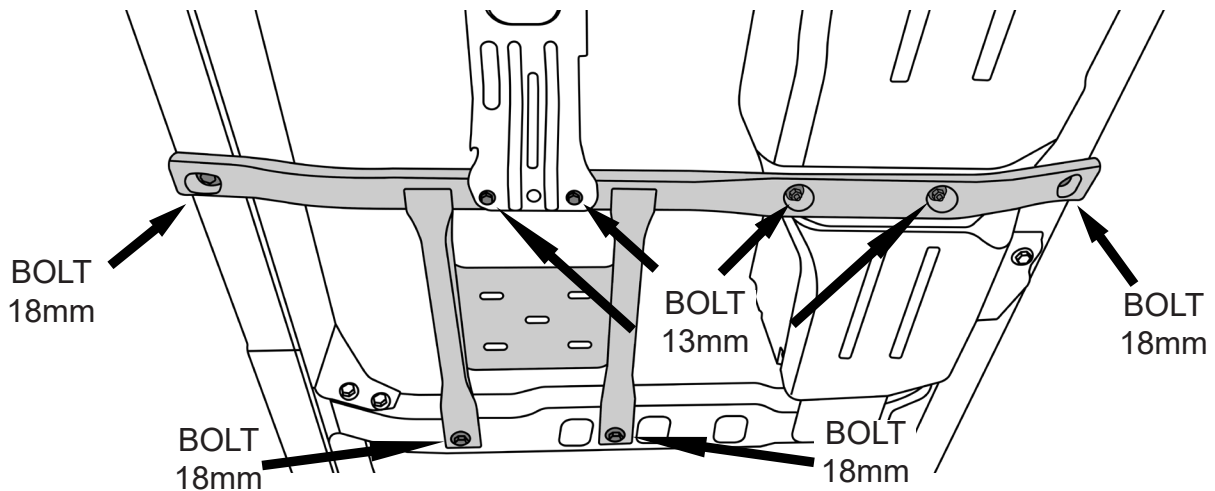
REMOVE THE FUEL LINE SHIELD AND DISCONNECT FUEL LINES



30

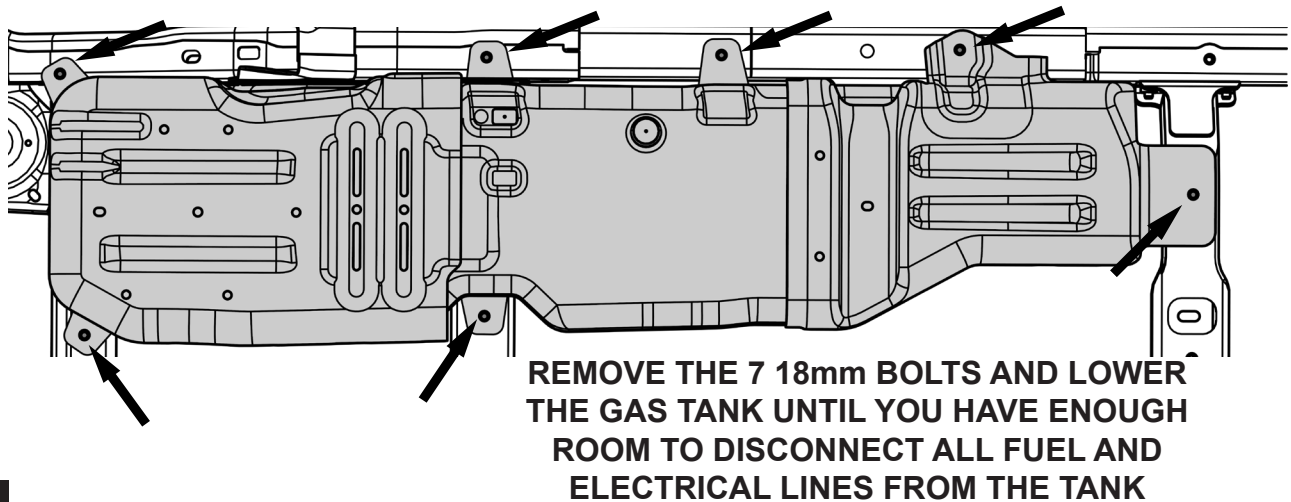


REMOVE THE TRANSMISSION SKID PLATE AND SET ASIDE



31

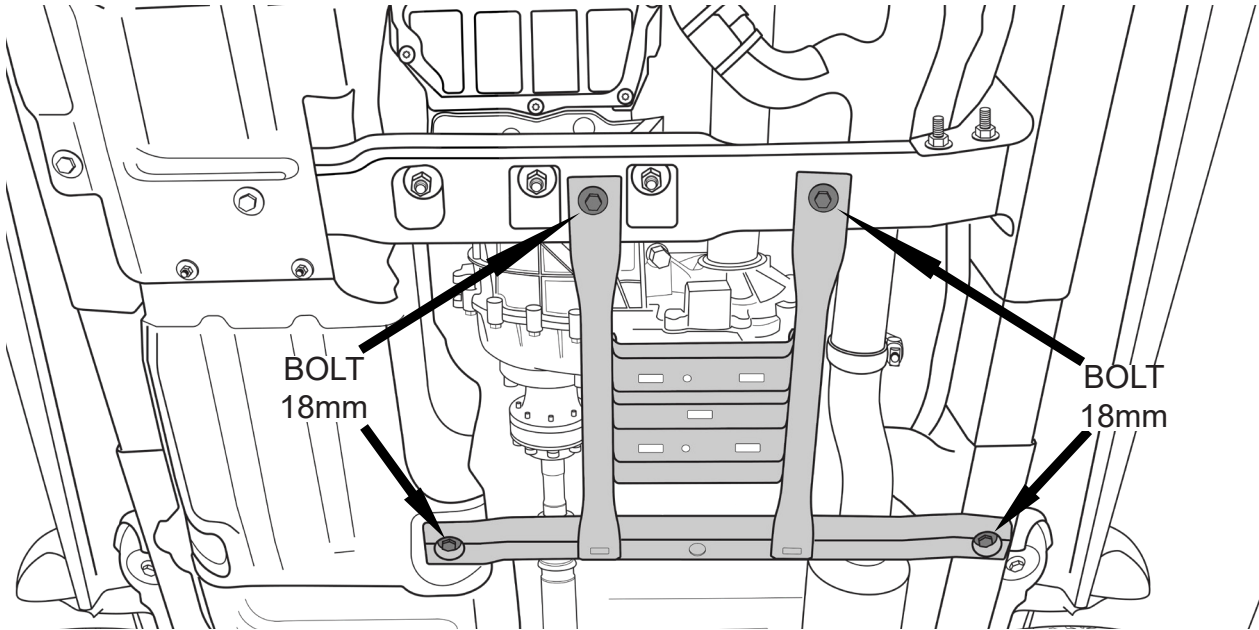
REMOVE THE GAS TANK



32

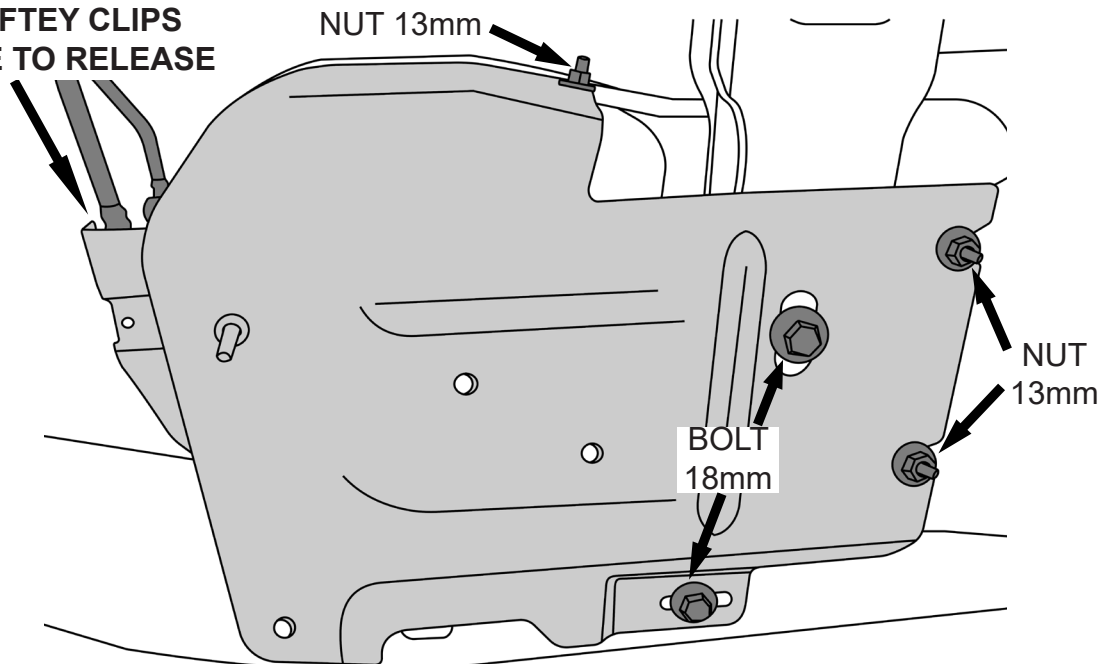
## **GAS TANK REMOVAL (2 DOOR)**

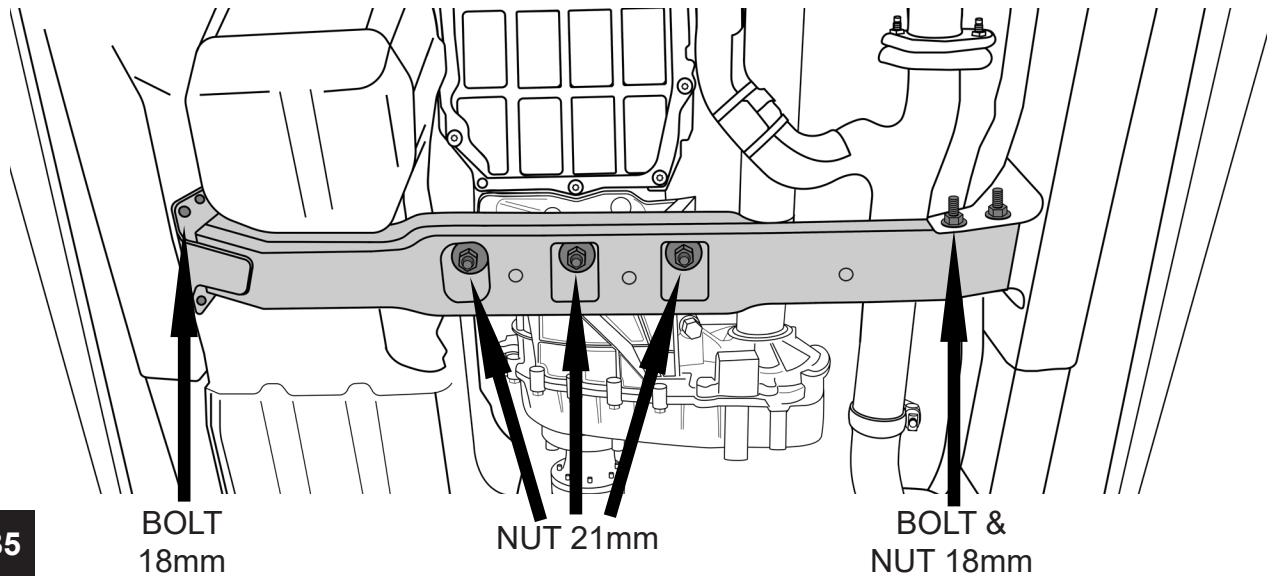
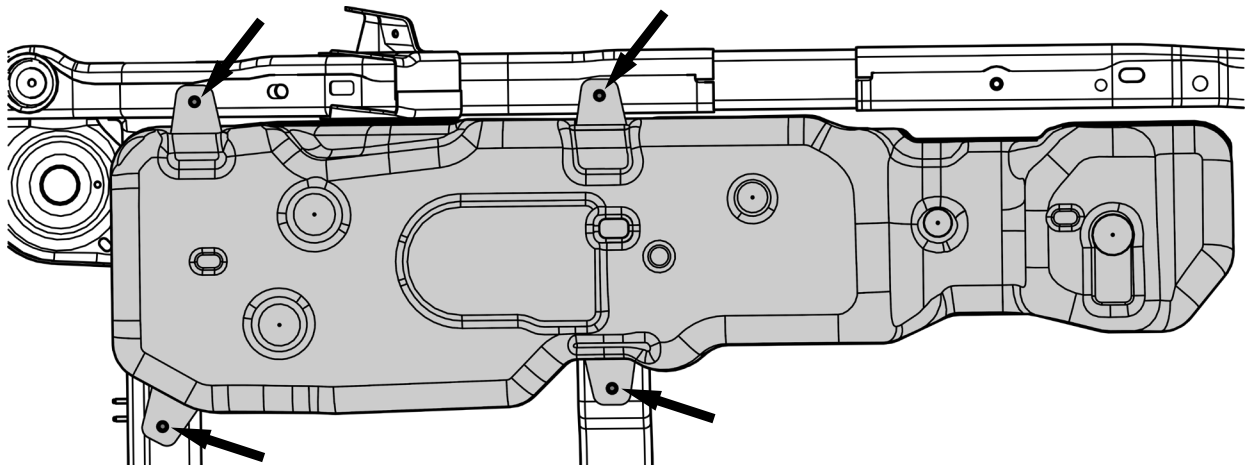
**REMOVE THE TRANSMISSION SKID PLATE AND SET ASIDE**

**33**

### **DISCONNECT THE FUEL LINES AND REMOVE THE FRONT SECTION OF THE GAS TANK SKID PLATE**

**REMOVE SAFTEY CLIPS  
AND SQUEEZE TO RELEASE**

**34**

**SUPPORT THE TRANSMISSION AND REMOVE THE TRANSMISSION CROSSMEMBER****35****REMOVE THE GAS TANK**

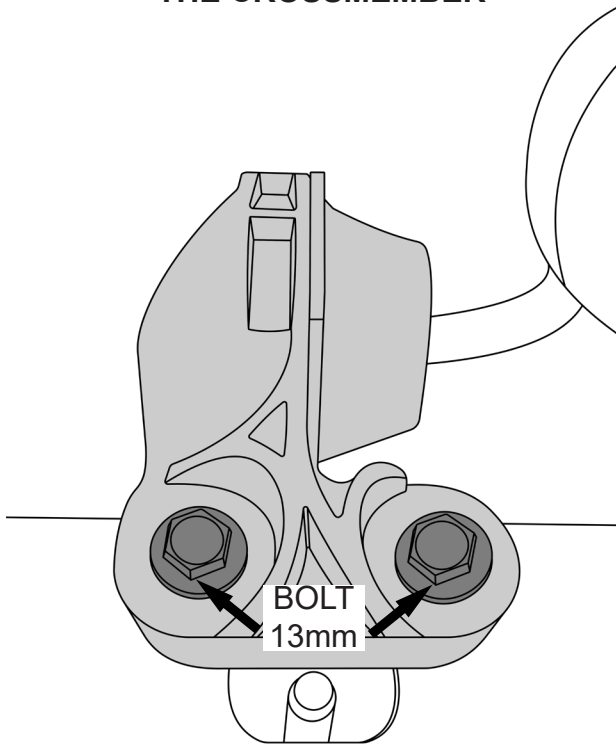
**REMOVE THE 4 18mm BOLTS AND LOWER THE GAS TANK UNTIL YOU HAVE ENOUGH ROOM TO DISCONNECT ALL FUEL AND ELECTRICAL LINES FROM THE TANK**

**ONCE THE GAS TANK HAS BEEN REMOVED YOU CAN TEMPORARILY REINSTALL THE TRANSMISSION CROSSMEMBER TO SUPPORT THE TRANSMISSION**

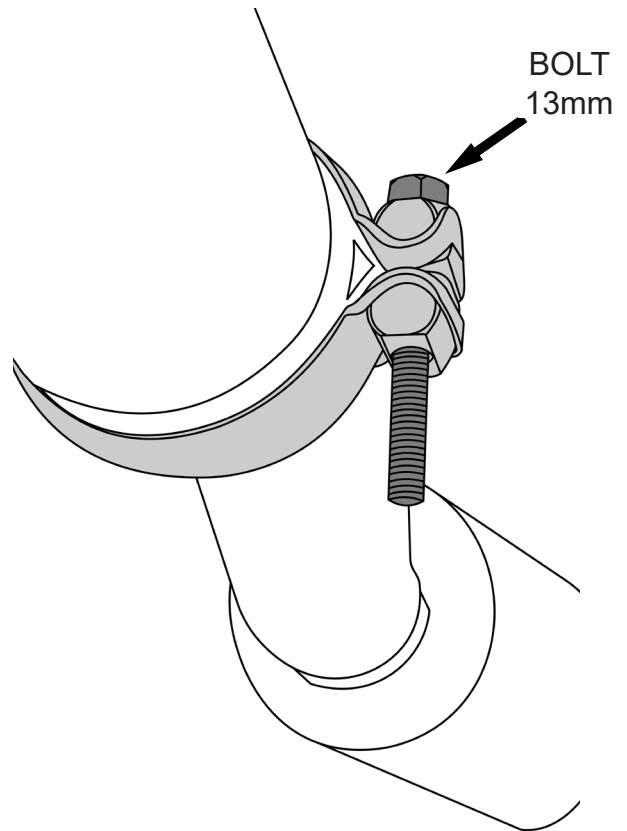
**36**

## EXHAUST REMOVAL (TURBO)

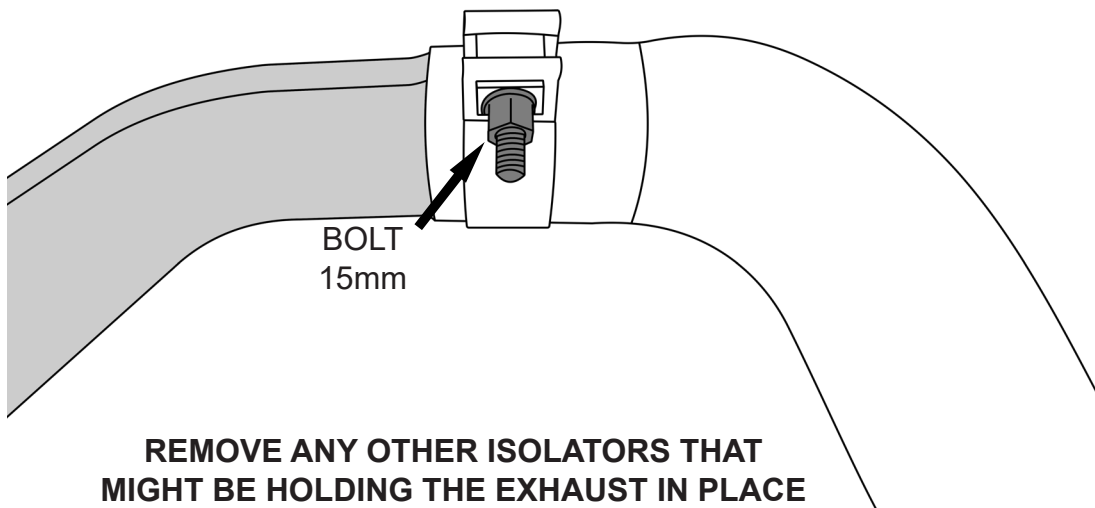
REMOVE THE EXHAUST MOUNT FROM  
THE CROSSMEMBER

**37**

LOOSEN THE FRONT EXHAUST CLAMP

**38**

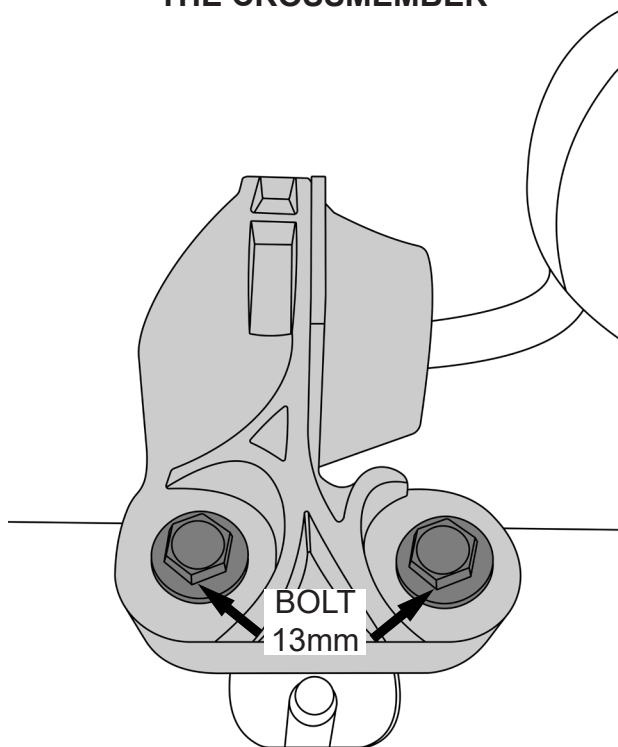
LOOSEN THE REAR EXHAUST CLAMP AND REMOVE THE CENTER SECTION  
OF EXHAUST

**39**

REMOVE ANY OTHER ISOLATORS THAT  
MIGHT BE HOLDING THE EXHAUST IN PLACE

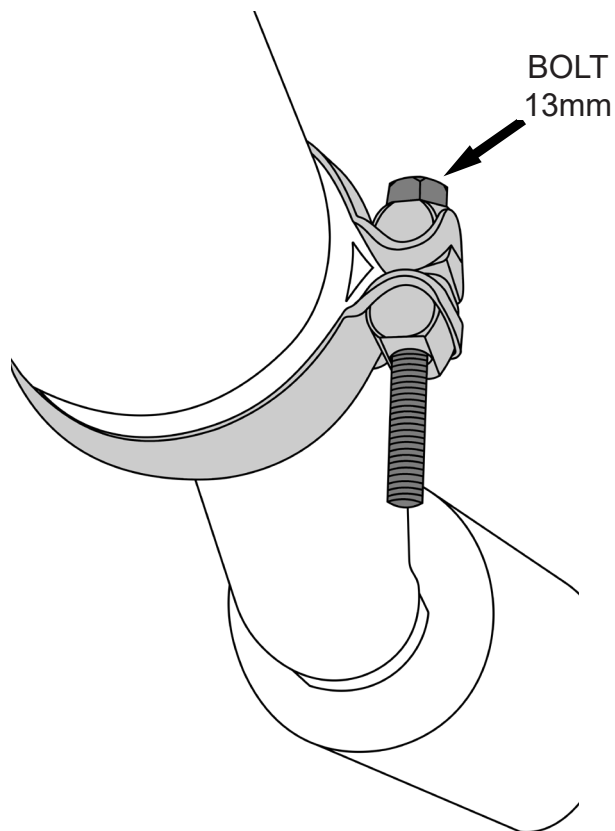
## EXHAUST REMOVAL (NON TURBO)

REMOVE THE EXHAUST MOUNT FROM THE CROSSMEMBER



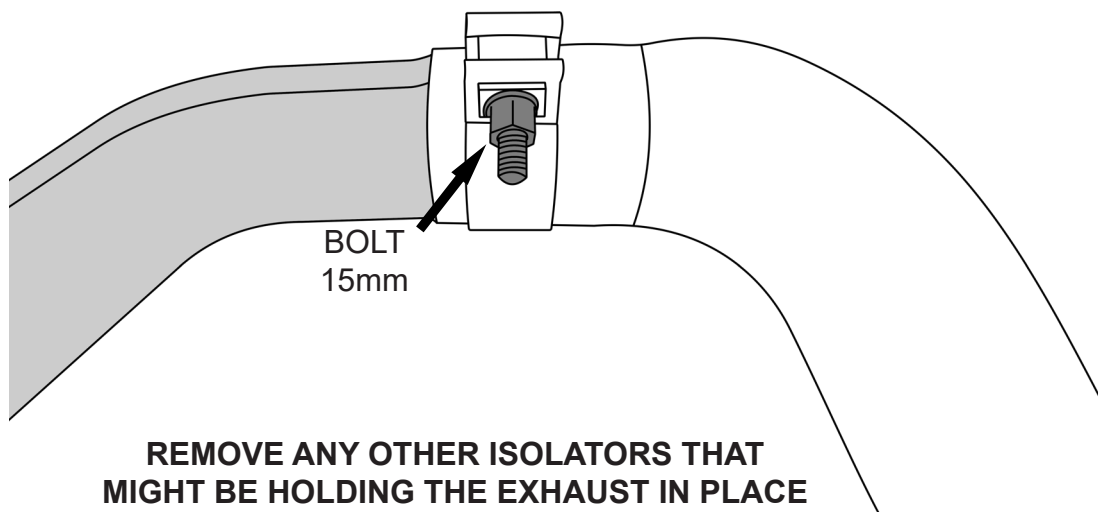
40

LOOSEN THE FRONT EXHAUST CLAMP



41

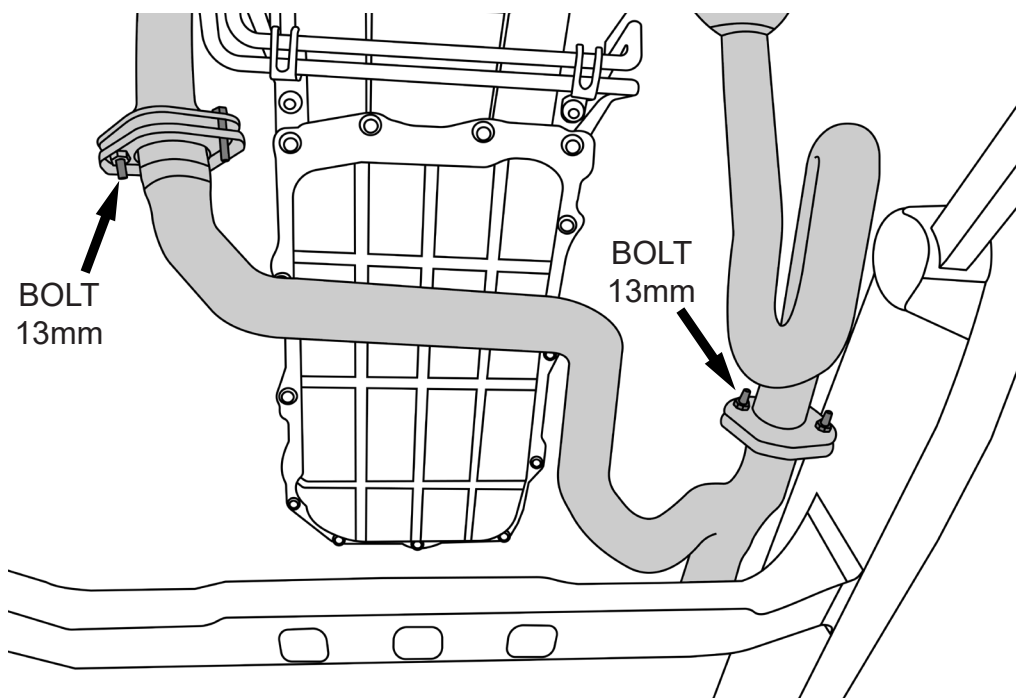
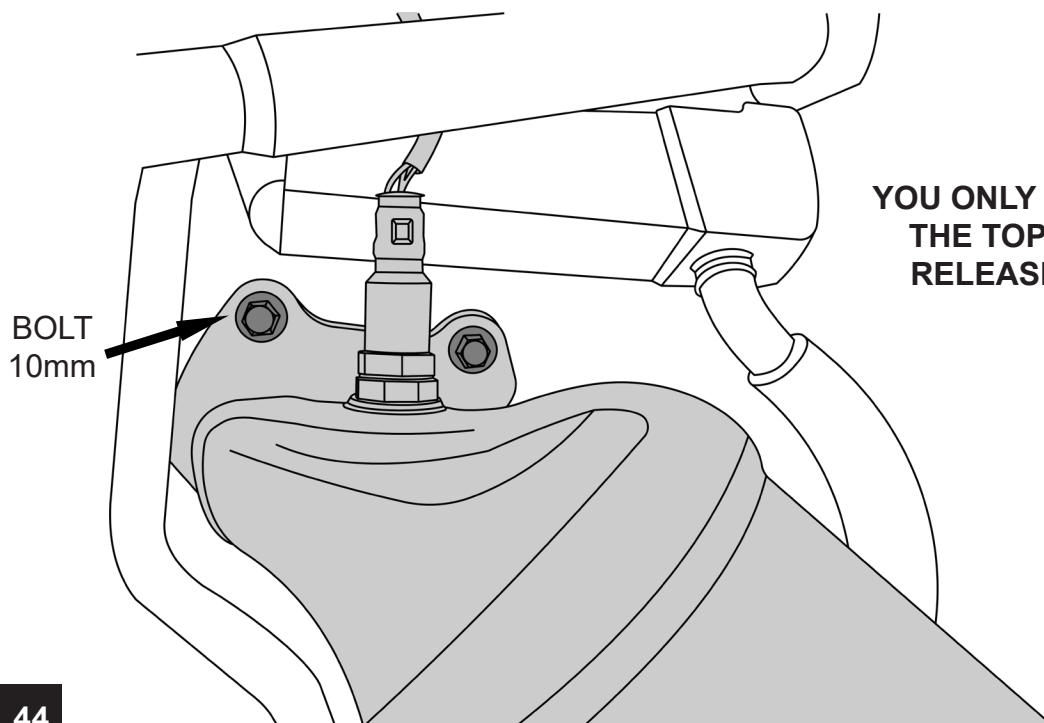
LOOSEN THE REAR EXHAUST CLAMP AND REMOVE THE CENTER SECTION OF EXHAUST



42

REMOVE ANY OTHER ISOLATORS THAT MIGHT BE HOLDING THE EXHAUST IN PLACE



**REMOVE THE "Y" SECTION OF EXHAUST****43****DISCONNECT THE OXYGEN SENSORS AND REMOVE THE EXHAUST AT THE HEADERS FROM BOTH SIDES OF THE ENGINE**

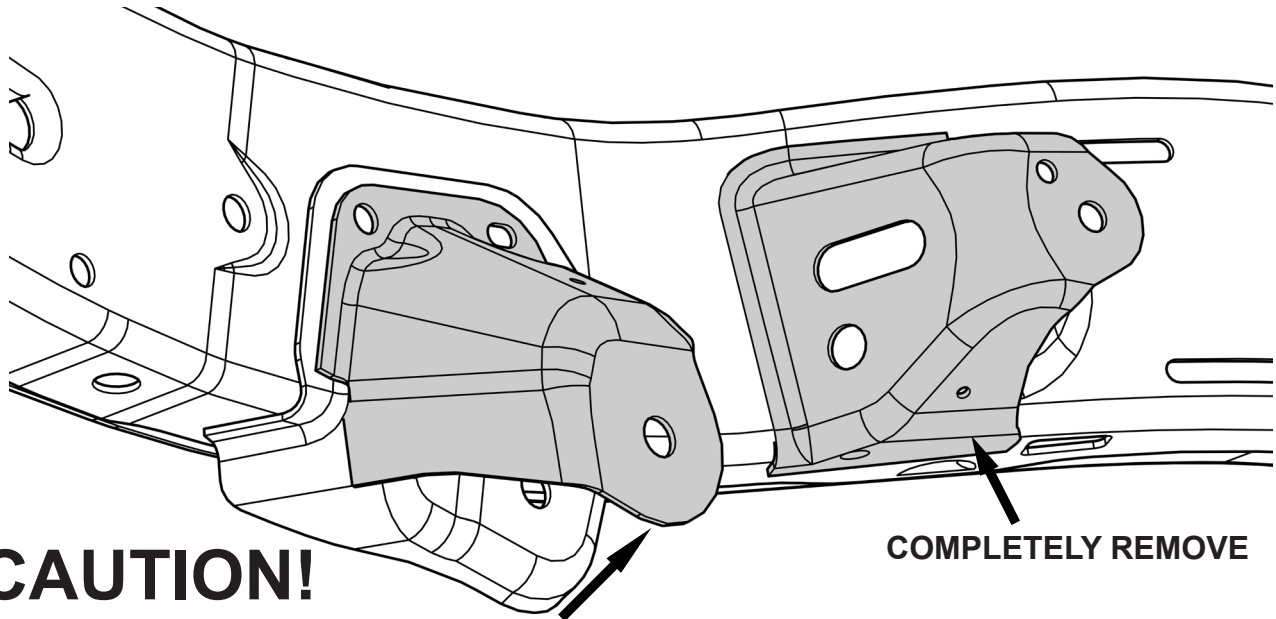
**YOU ONLY NEED TO REMOVE  
THE TOP TWO BOLTS TO  
RELEASE THE EXHAUST**

**44**

# STOCK CONTROL ARM BRACKET REMOVAL

## FRONT BRACKET REMOVAL

USE A CUTOFF WHEEL OR TORCH TO REMOVE THE FRONT STOCK BRACKETS



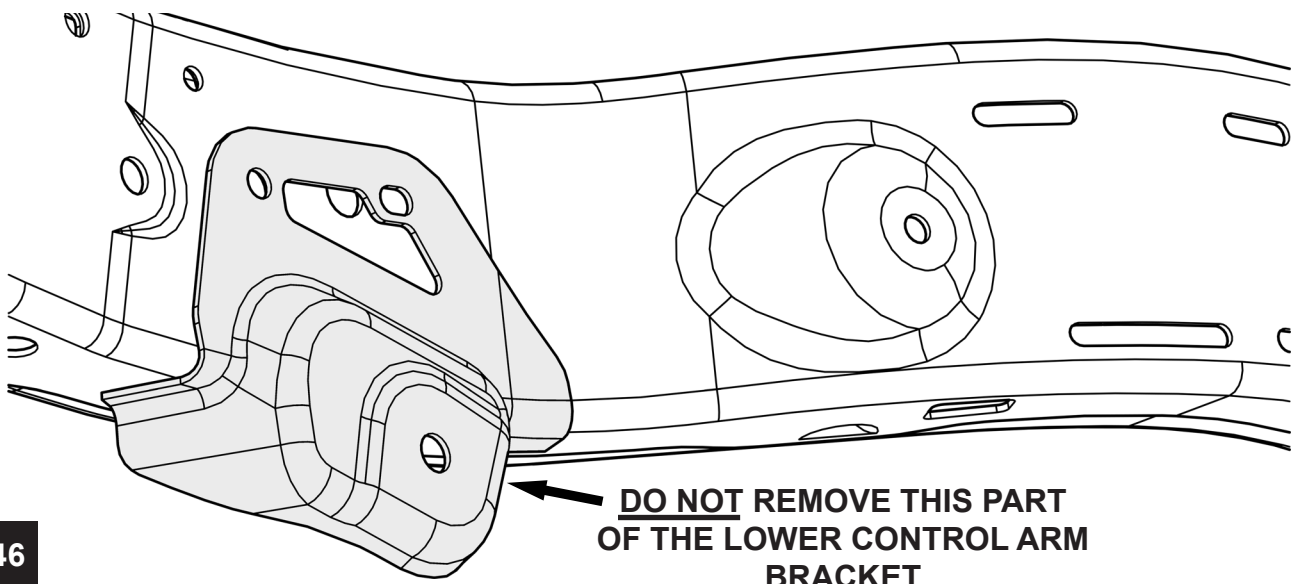
**CAUTION!**

ONLY REMOVE THE INSIDE  
PORTION OF THE STOCK LOWER  
CONTROL ARM BRACKET

COVER ANY FUEL LINES WITH WET RAGS  
AND MOVE ANY WIRES OR LINES BEFORE  
CUTTING THE BRACKETS OFF

45

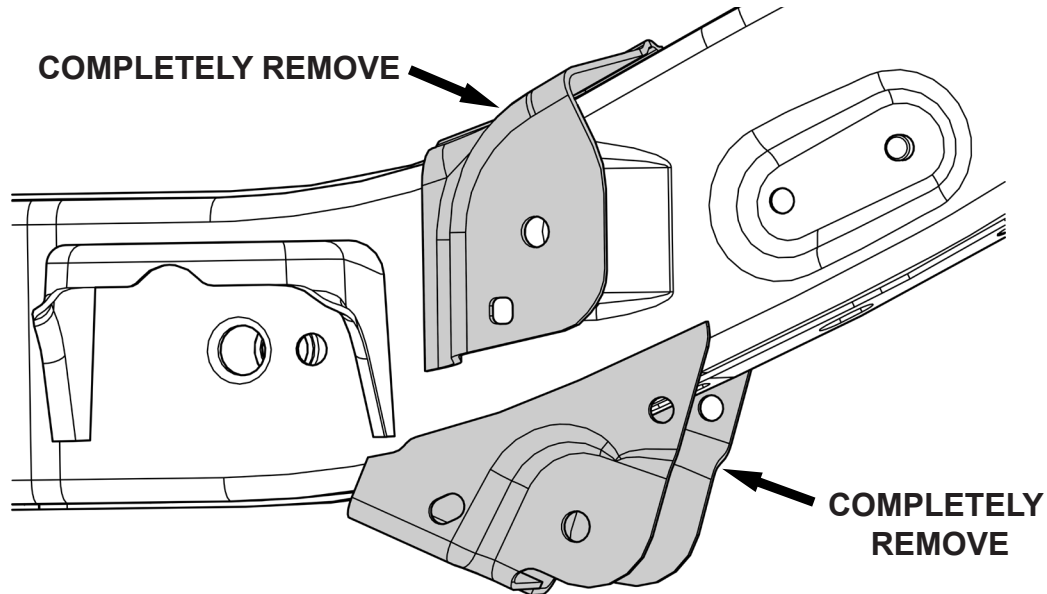
AFTER CUTTING GRIND THE FRAME SMOOTH AND PAINT ANY RAW METAL



46

## REAR BRACKET REMOVAL

USE A CUTOFF WHEEL OR TORCH TO REMOVE THE REAR STOCK BRACKETS

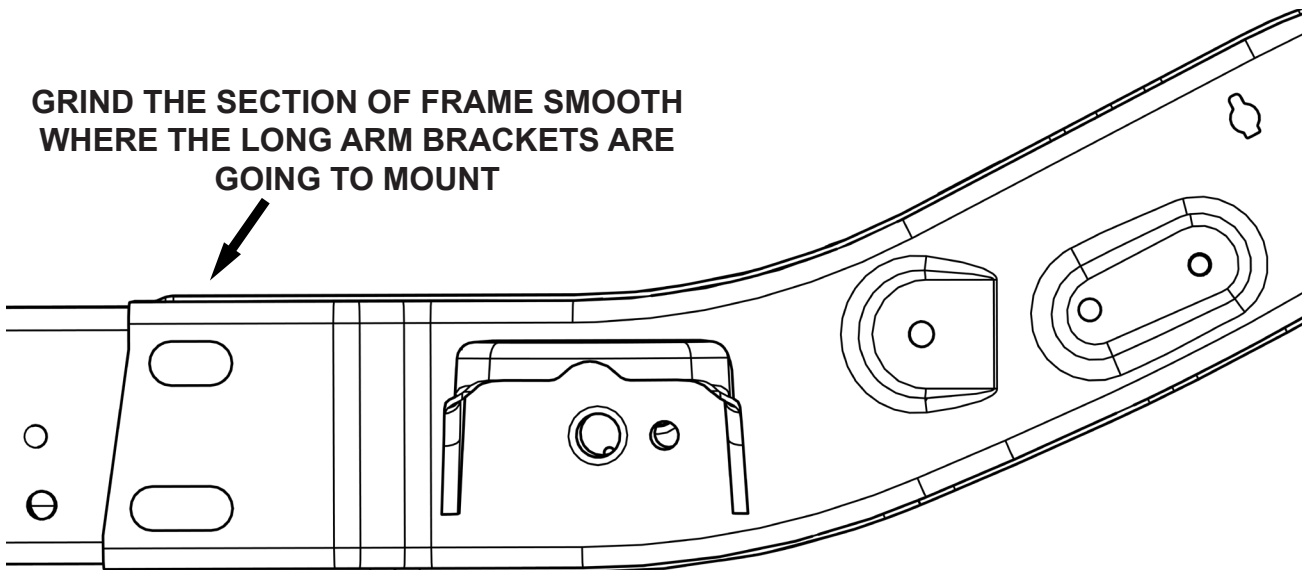


COVER ANY FUEL LINES WITH WET RAGS  
AND MOVE ANY WIRES OR LINES BEFORE  
CUTTING THE BRACKETS OFF

47

AFTER CUTTING GRIND THE FRAME SMOOTH AND PAINT ANY RAW METAL

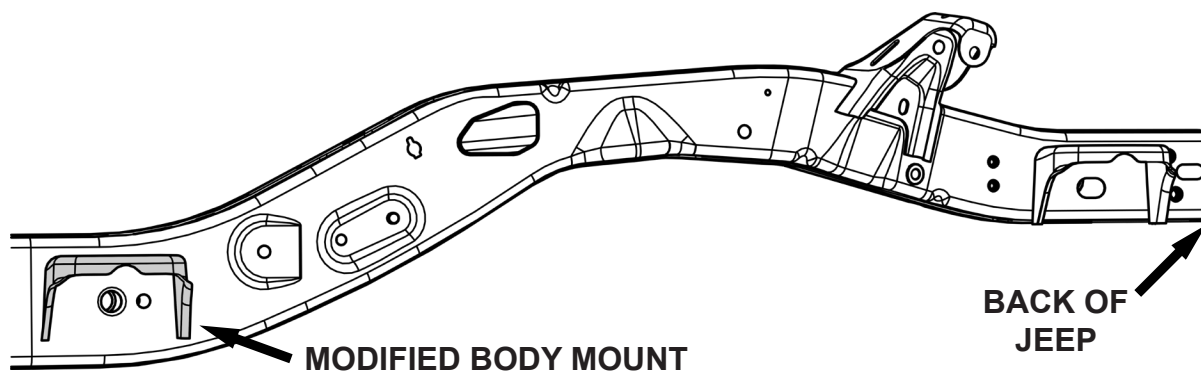
GRIND THE SECTION OF FRAME SMOOTH  
WHERE THE LONG ARM BRACKETS ARE  
GOING TO MOUNT



48

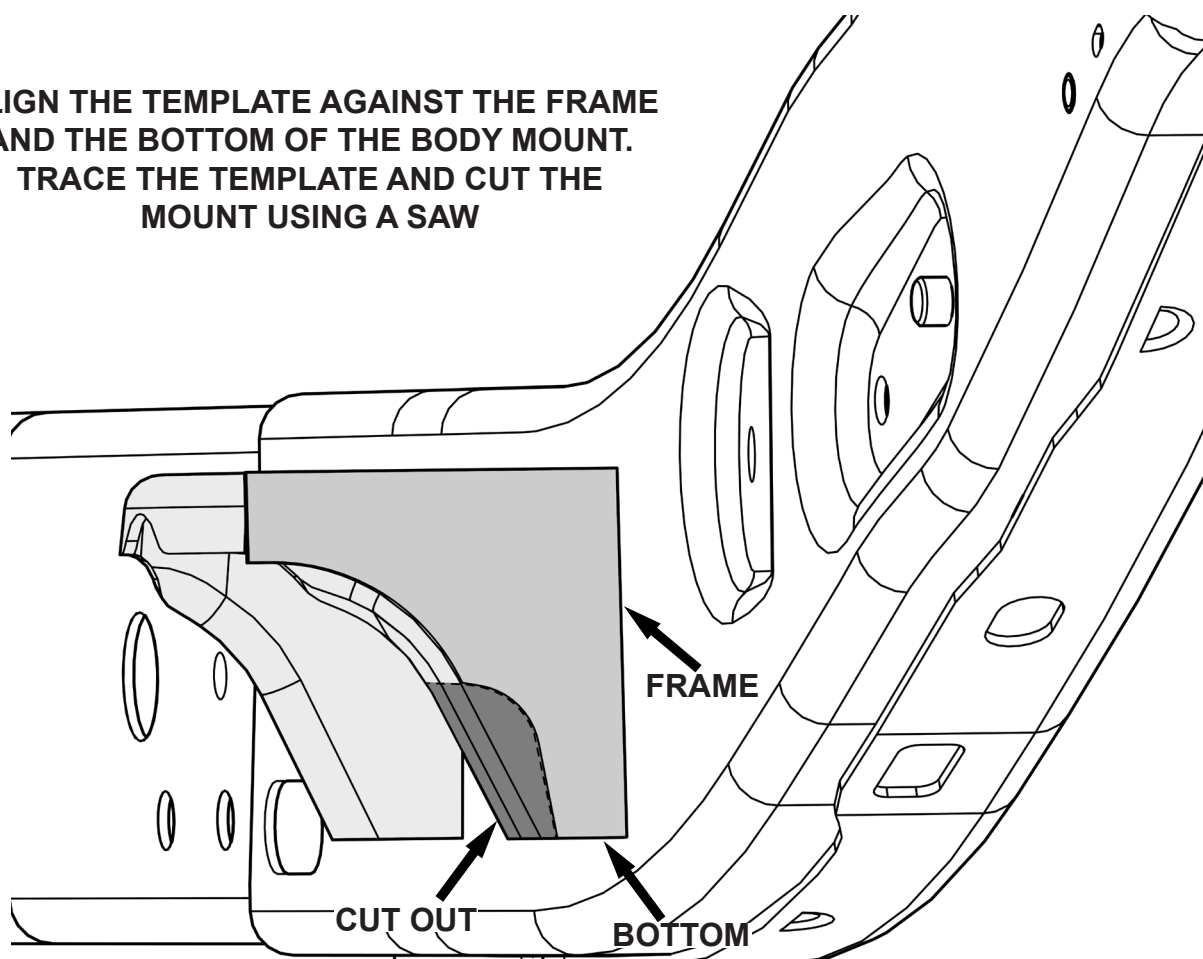
## BODY MOUNT MODIFICATION

THE BODY MOUNTS NEXT TO THE REAR CONTROL ARM MOUNTS WILL NEED TO BE MODIFIED FOR CONTROL ARM CLEARANCE

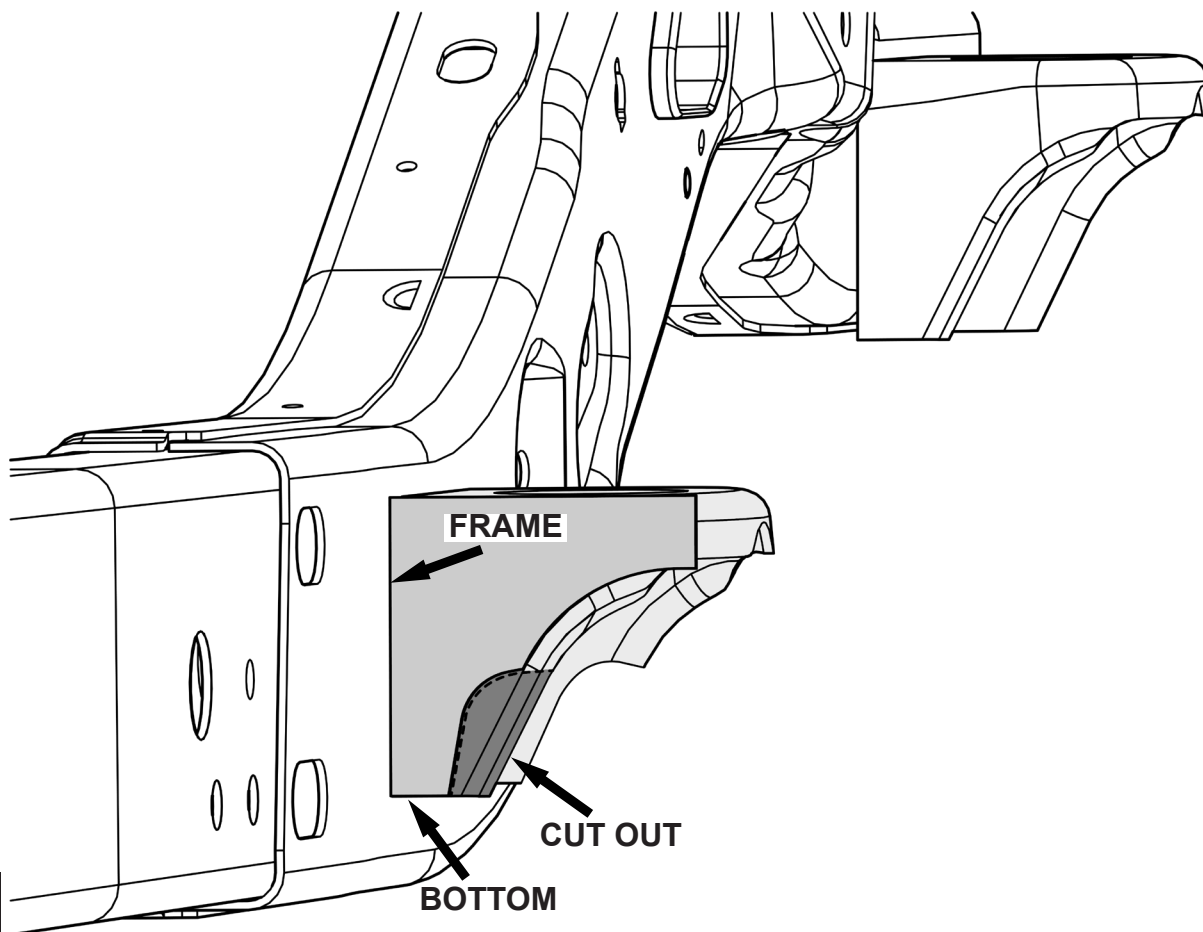


CUT OUT THE TEMPLATE AND PLACE IT ONTO THE REAR BODY MOUNT

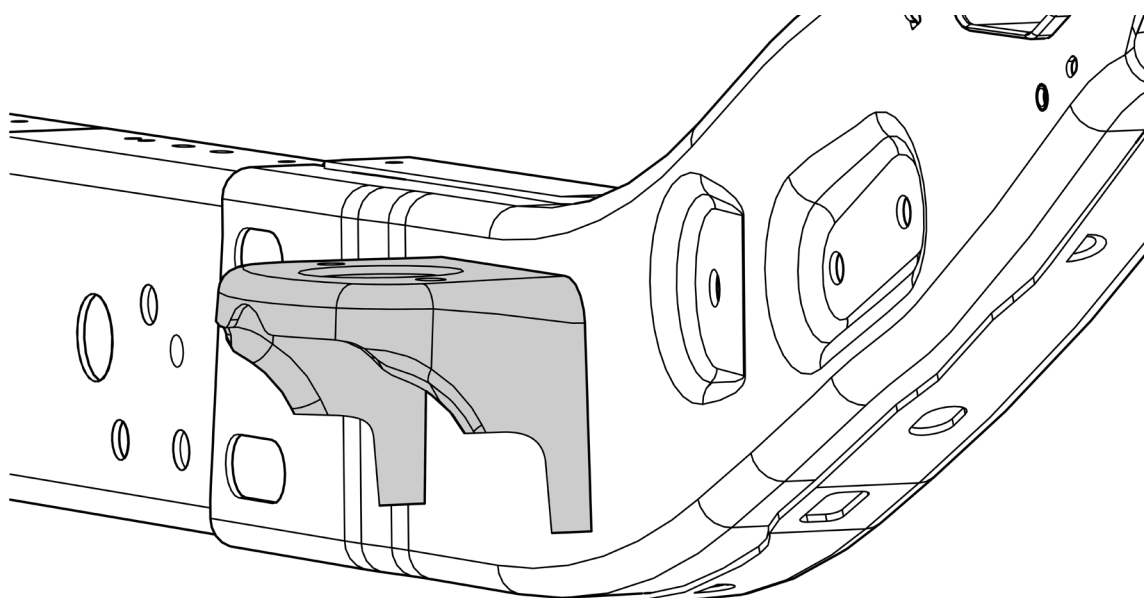
ALIGN THE TEMPLATE AGAINST THE FRAME AND THE BOTTOM OF THE BODY MOUNT.  
TRACE THE TEMPLATE AND CUT THE MOUNT USING A SAW



**PLACE THE TEMPLATE ON THE OTHER SIDE OF THE BODY MOUNT AND REPEAT  
STEP 49**



**AFTER CUTTING GRIND THE BRACKET SMOOTH AND PAINT ANY RAW METAL**

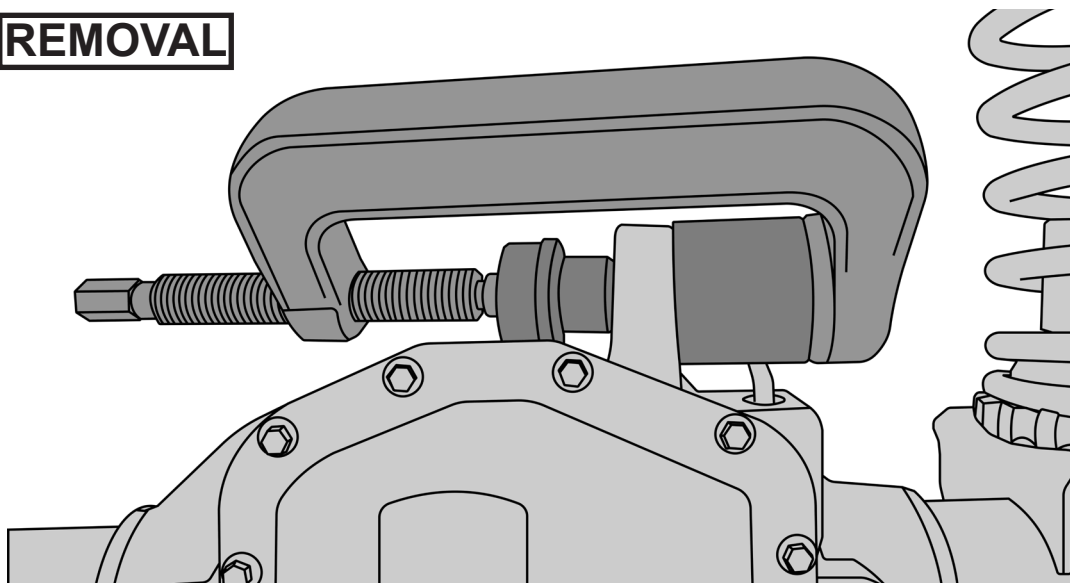


## AXLE BUSHING REMOVAL / INSTALL (OPTIONAL)

USE A BALL JOINT PRESS TOOL TO REMOVE OLD BUSHING AND INSTALL THE NEW IR BUSHING

DISCONNECT THE AXLE BREATHER HOSE AND ANY ELECTRICAL WIRES THAT ARE IN THE WAY

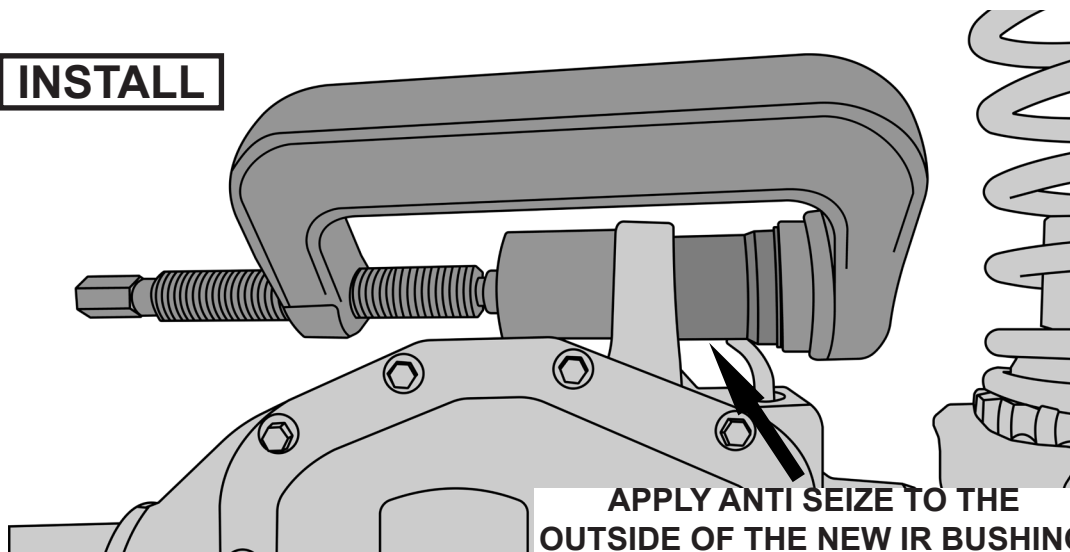
### REMOVAL



52

PRESS THE BUSHING INTO THE AXLE UNTIL FULLY SEATED

### INSTALL



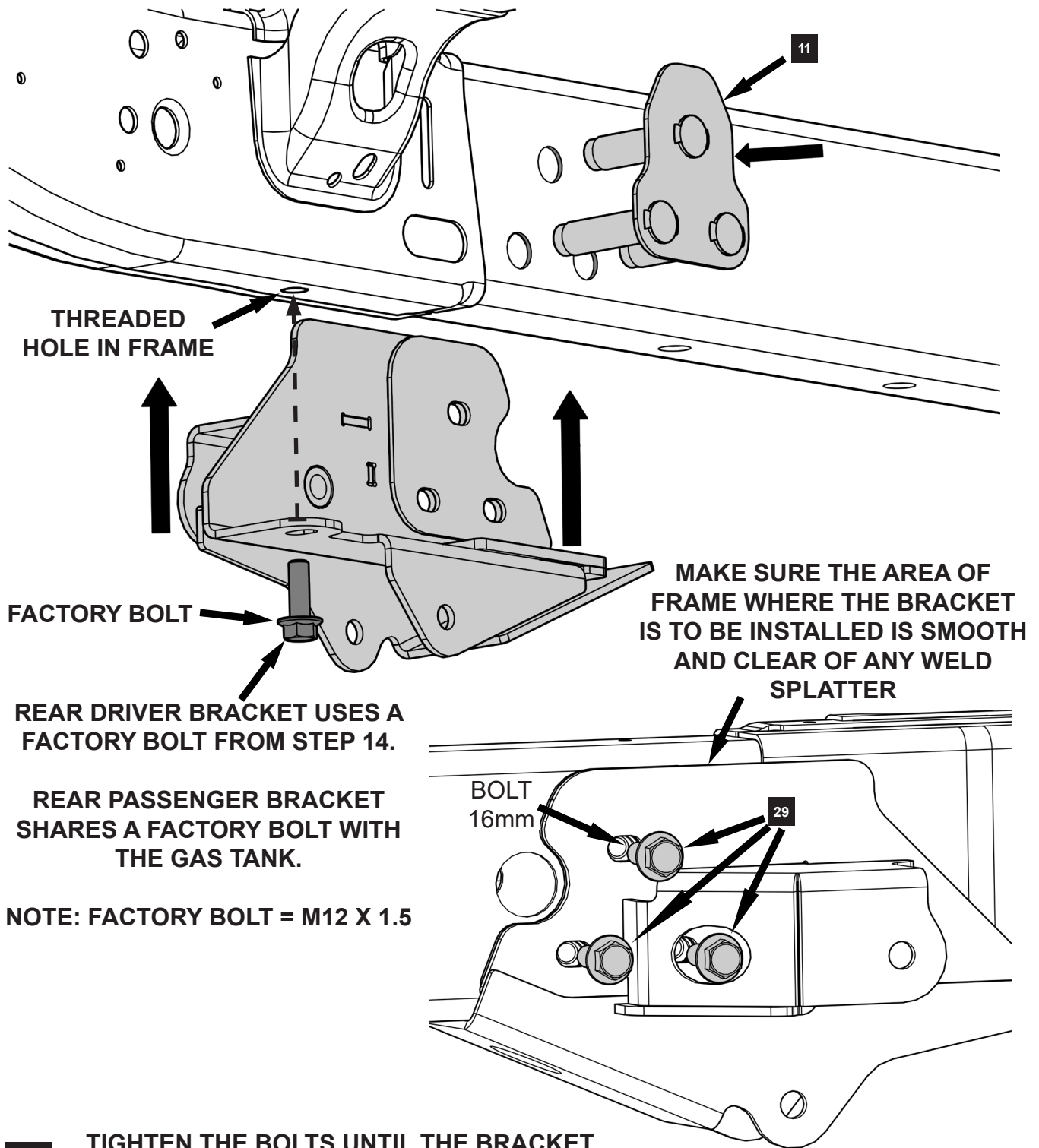
APPLY ANTI SEIZE TO THE  
OUTSIDE OF THE NEW IR BUSHING

53



## REAR LONG ARM BRACKET INSTALL

TEMPORARILY INSTALL THE REAR BRACKET USING THE BACKING PLATE WITH PROVIDED HARDWARE AND A FACTORY BOLT

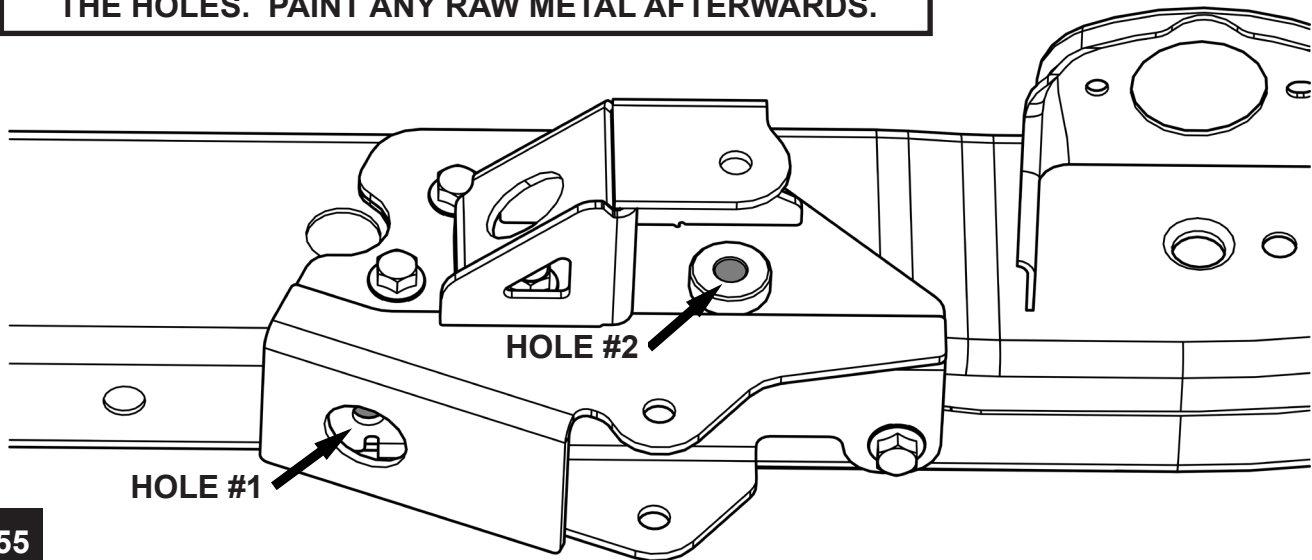
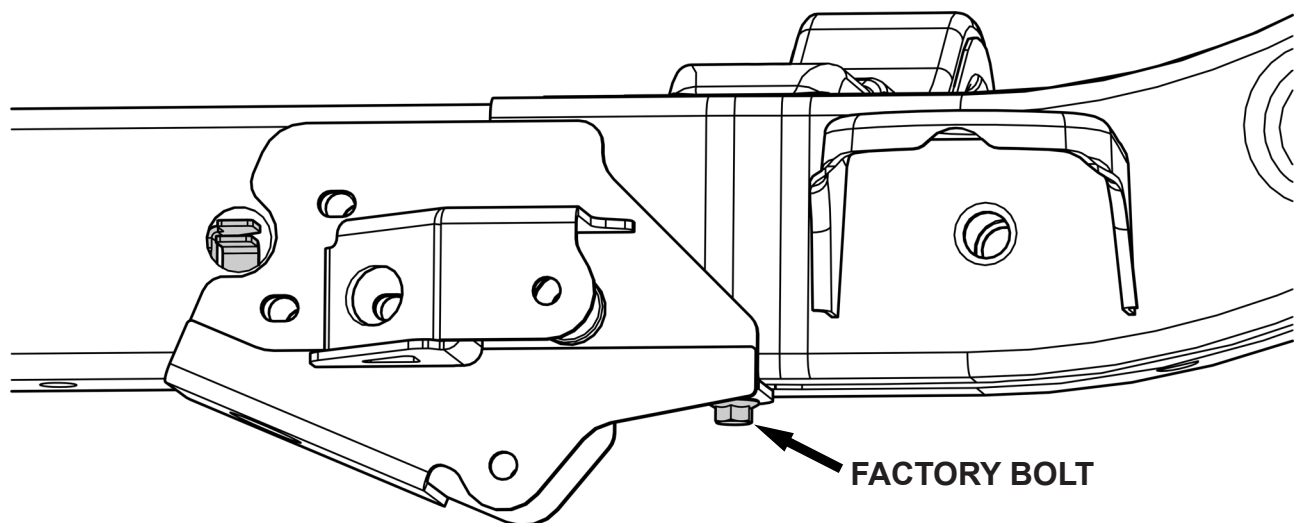


54

**TIGHTEN THE BOLTS UNTIL THE BRACKET IS FIRMLY IN PLACE**

**MARK AND DRILL 2 HOLES INTO THE FRAME USING A 11/16" DRILL BIT**

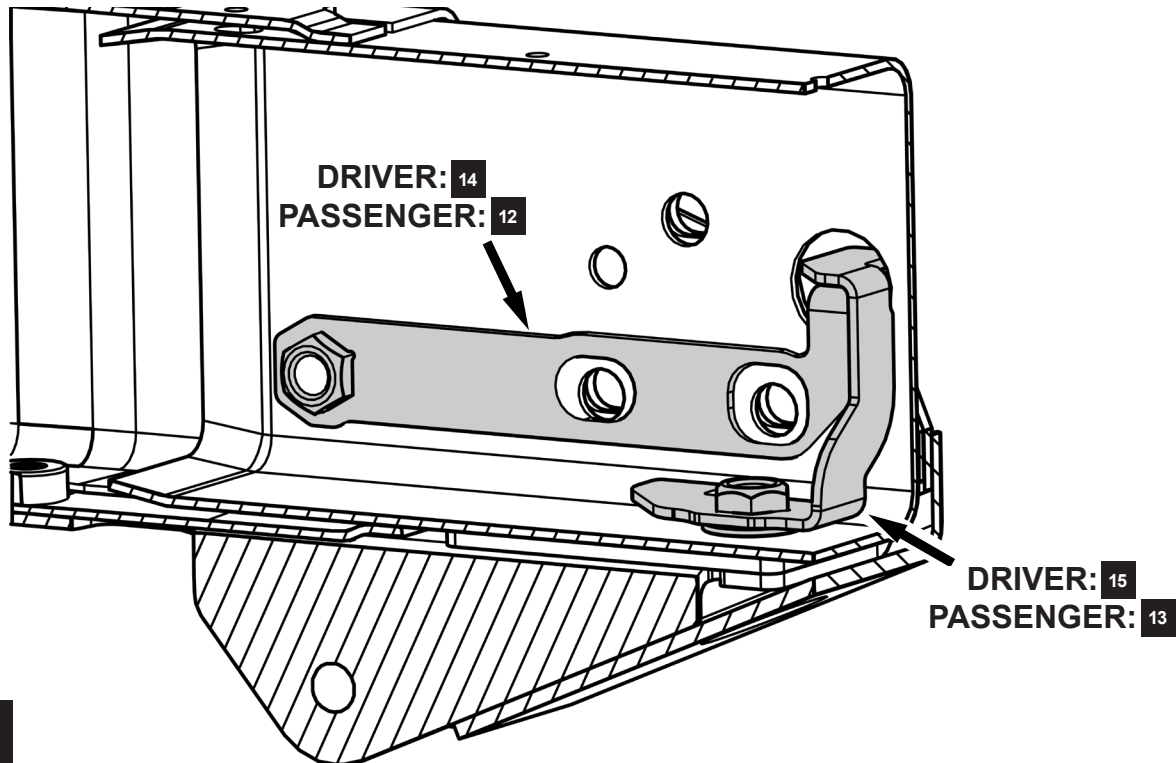
**WE RECOMMEND USING A TRANSFER TYPE CENTER PUNCH TO DRILL AN ACCURATE HOLE. ONCE THE HOLES HAVE BEEN MARKED, REMOVE THE BRACKET AND DRILL THE HOLES. PAINT ANY RAW METAL AFTERWARDS.**

**REINSTALL THE REAR BRACKET**

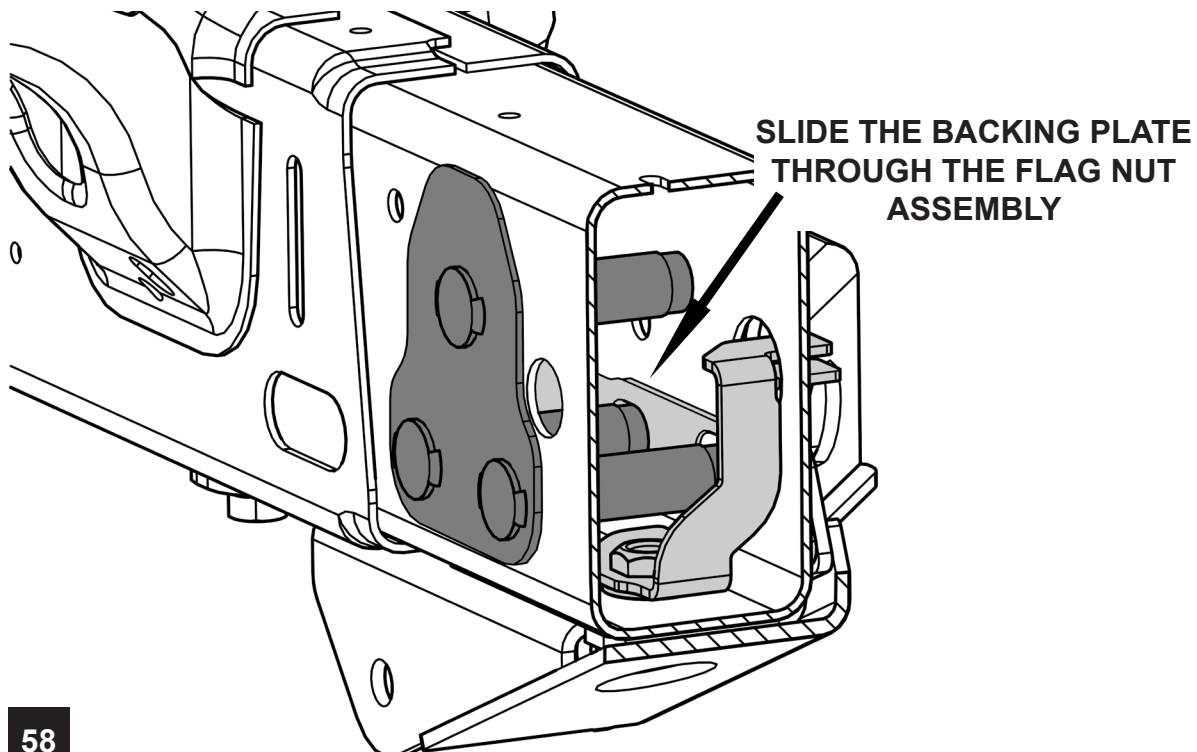
**USING THE FACTORY BOLT TO HOLD THE BRACKET TO THE FRAME, SLIDE THE TWO FLAG NUT ASSEMBLIES INTO THE FRAME AS SHOWN IN STEPS 57-58**

**56**

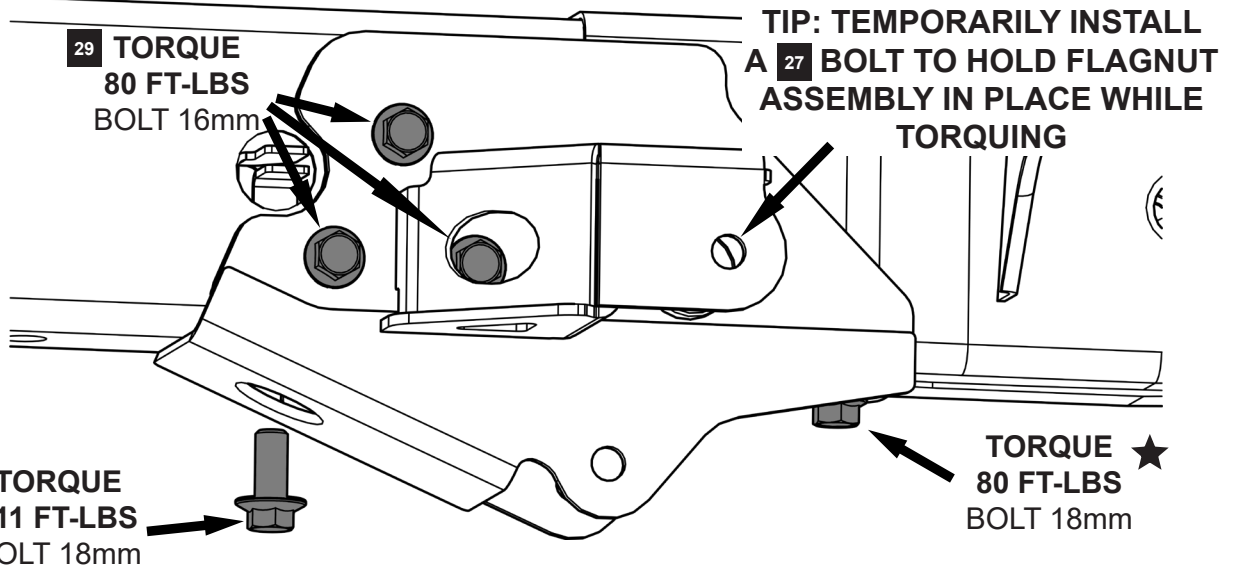
**SLIDE THE LONGER FLAG NUT ASSEMBLY INTO THE FRAME FOLLOWED BY THE SHORTER FLAG NUT ASSEMBLY**



**LOCK THE FLAG NUT ASSEMBLIES INTO PLACE WITH THE BACKING PLATE**



**APPLY RED THREAD LOCK TO ALL BOLTS  
REINSTALL AND TORQUE THE REAR BRACKET TO THE FRAME**



## NOTES:

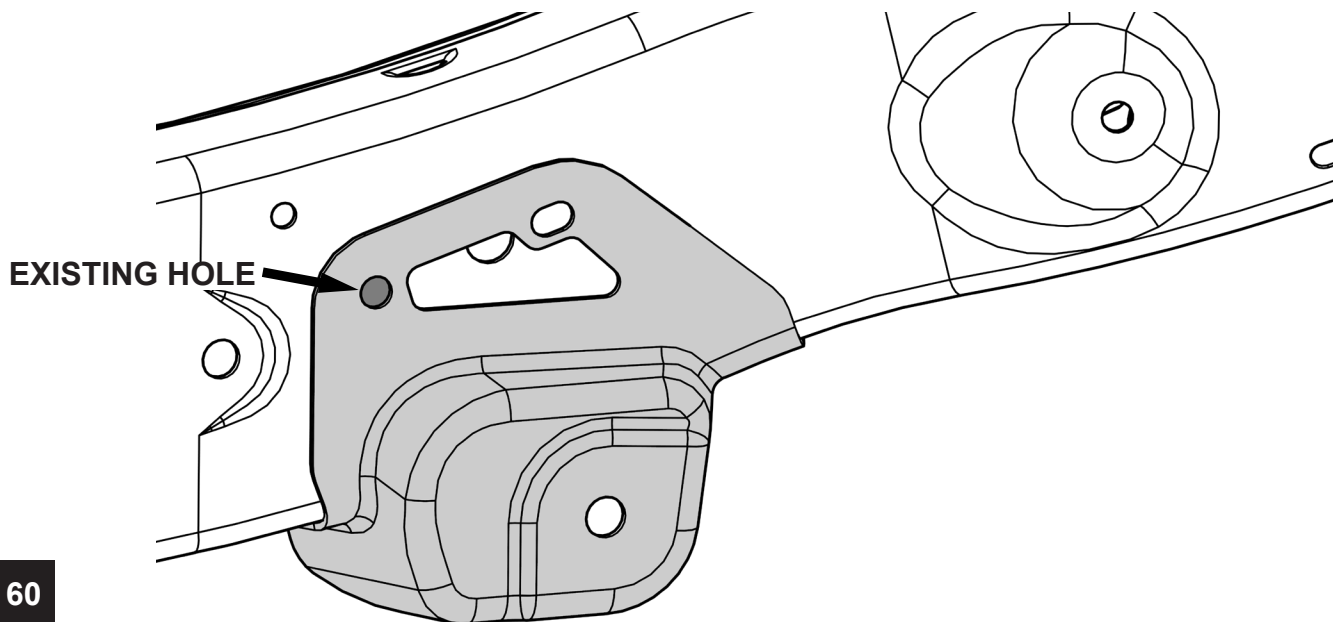
**TORQUE THE BOLTS EVENLY TO ENSURE THERE ARE NO GAPS AND THE BRACKET IS FLUSH WITH THE FRAME**



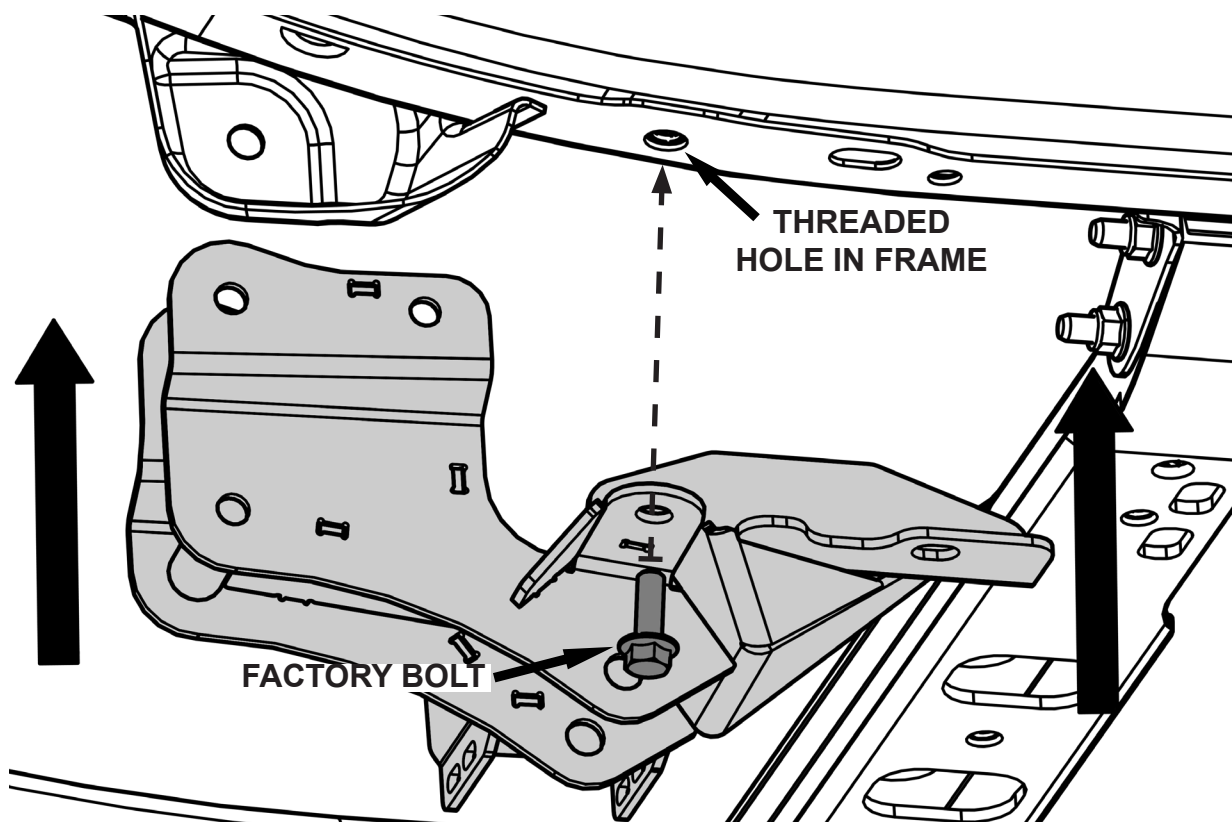
**ON THE PASSENGER SIDE, THIS BOLT WILL NEED TO COME OUT TO REINSTALL THE GAS TANK**

## FRONT LONG ARM BRACKET INSTALL

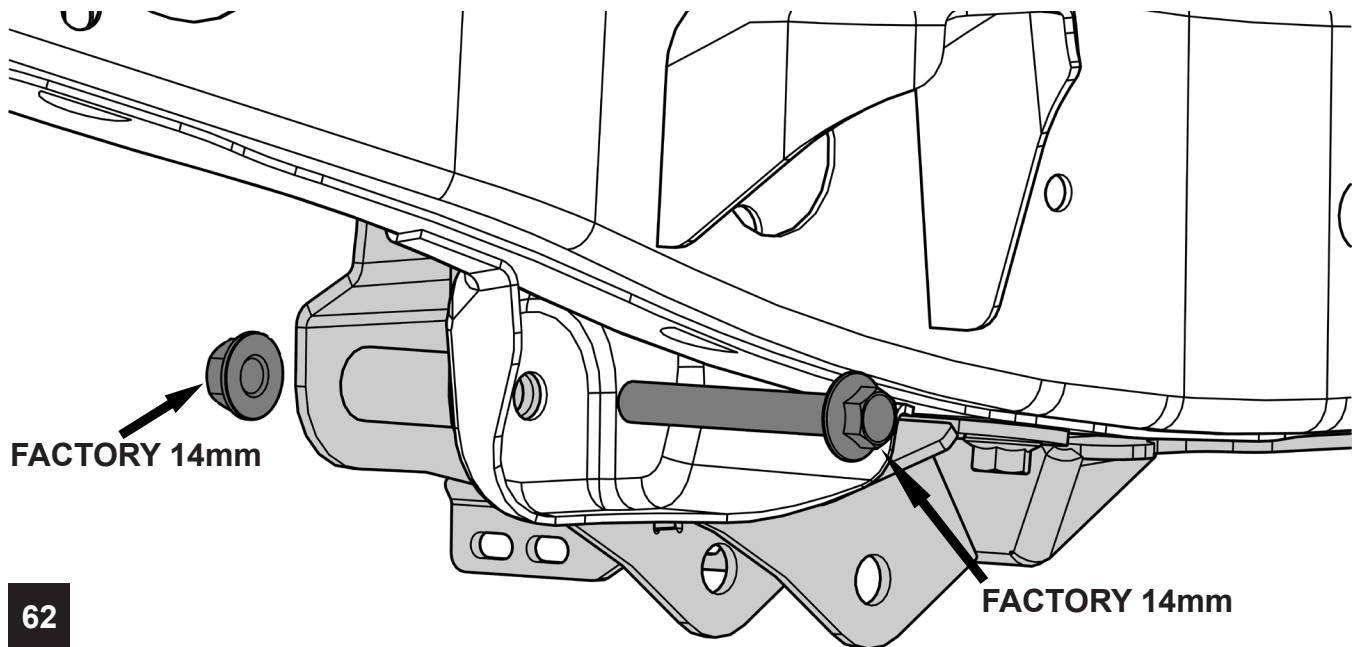
DRILL THE EXISTING HOLE BIGGER USING A 11/16" DRILL BIT



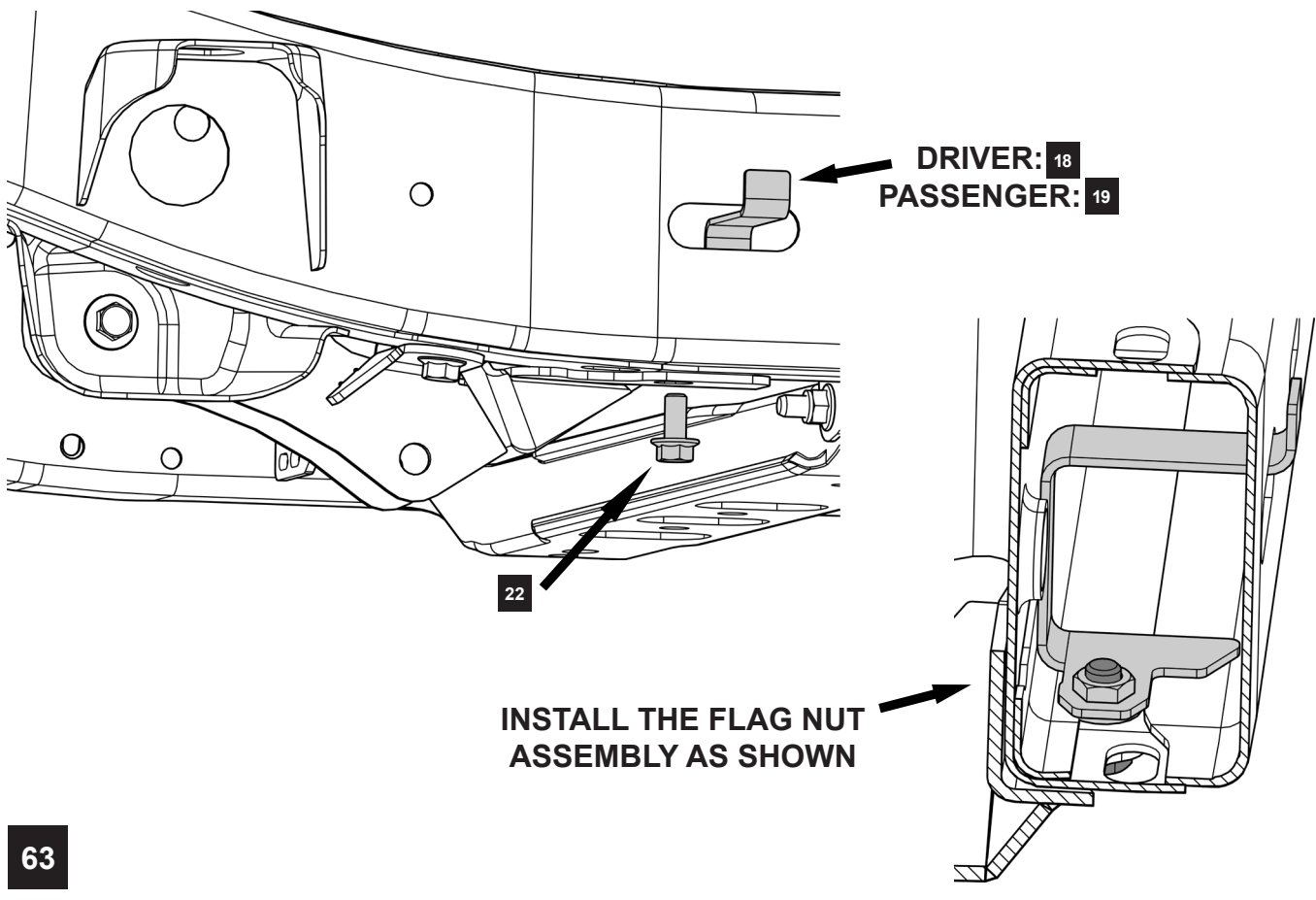
TEMPORARILY INSTALL THE FRONT BRACKET USING A FACTORY BOLT



**TEMPORARILY REUSE A FACTORY 14mm BOLT FROM THE FRONT CONTROL ARM**

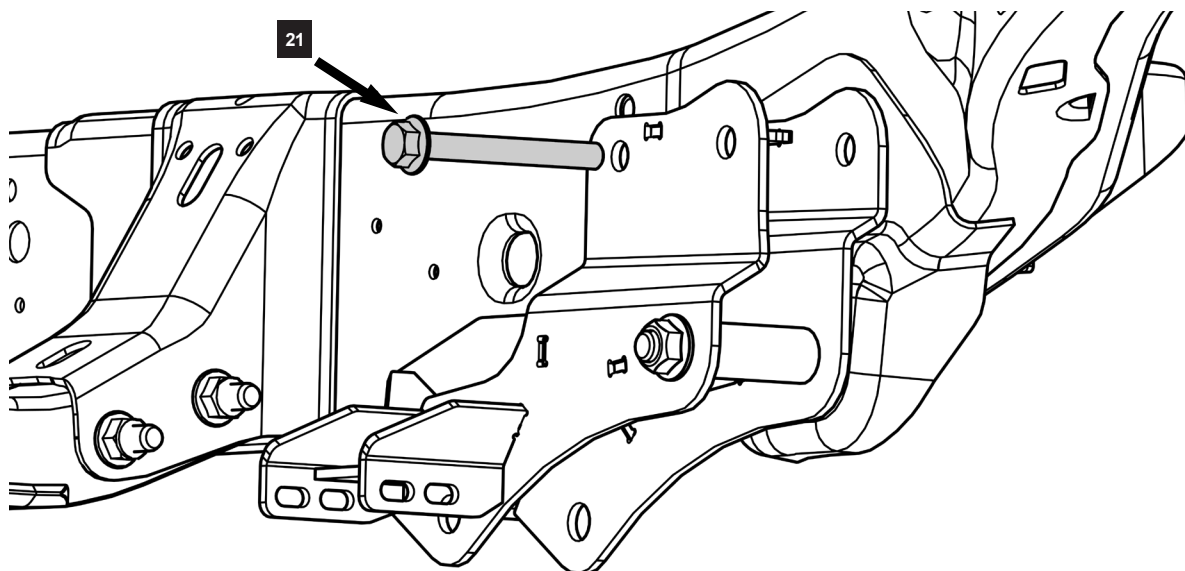
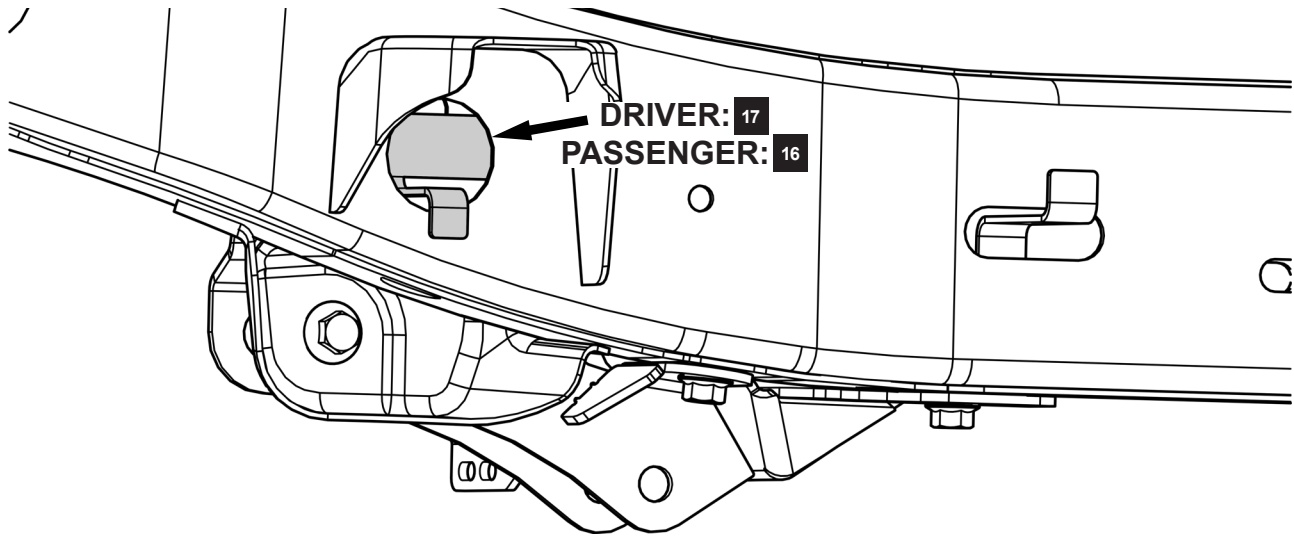


**SLIDE THE FIRST FLAG NUT ASSEMBLY INTO THE FRAME AND INSTALL THE PROVIDED HARDWARE**



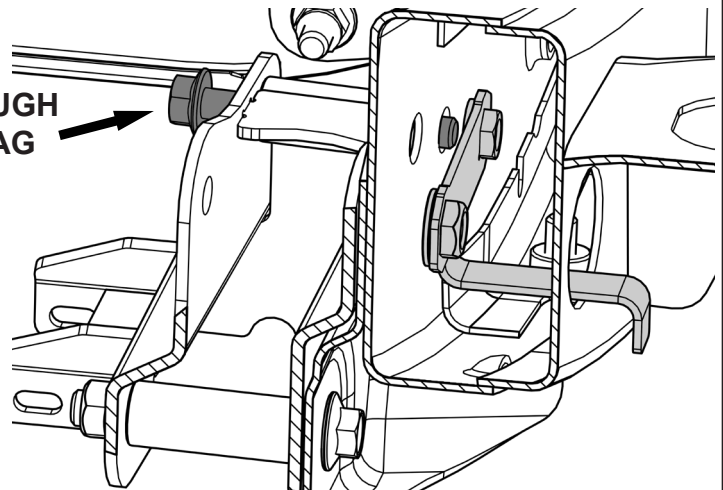


**SLIDE THE SECOND FLAG NUT ASSEMBLY INTO THE FRAME AND INSTALL THE PROVIDED HARDWARE**



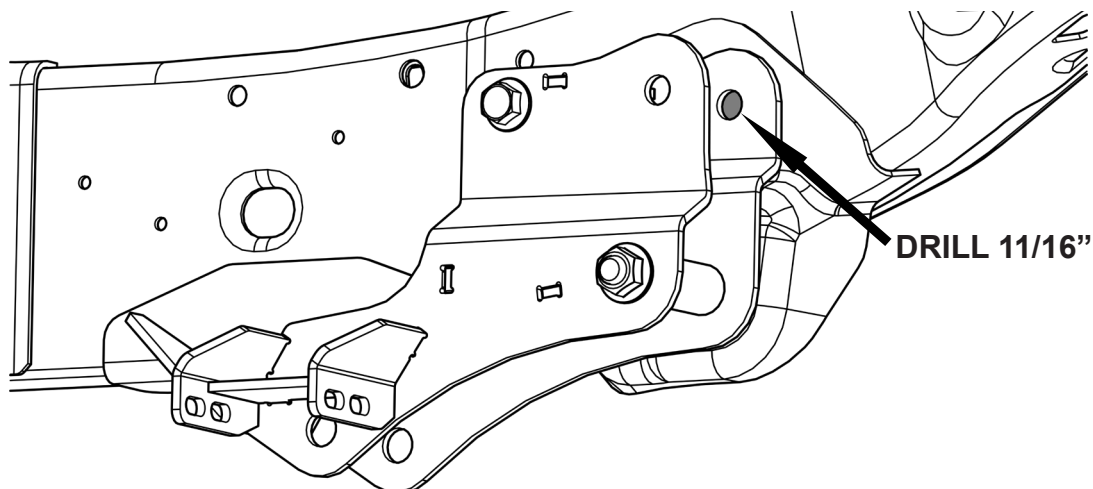
**SLIDE THE PROVIDED BOLT THROUGH THE BRACKET AND INTO THE FLAG NUT ASSEMBLY**

**TIGHTEN ALL THE BOLTS UNTIL THE BRACKET IS FIRMLY IN PLACE**



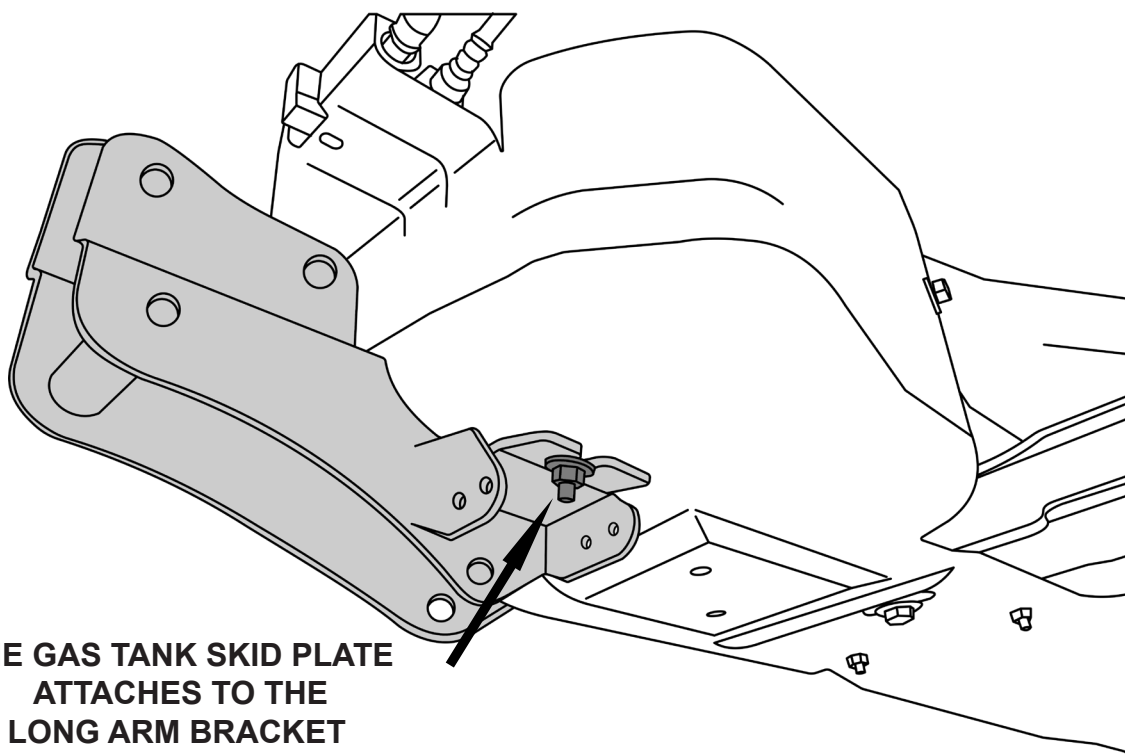
**MARK AND DRILL THE REMAINING HOLE INTO THE FRAME USING A 11/16" DRILL BIT**

**WE RECOMMEND USING A TRANSFER TYPE CENTER PUNCH TO DRILL AN ACCURATE HOLE. ONCE THE HOLES HAVE BEEN MARKED, REMOVE THE BRACKET AND DRILL THE HOLES. PAINT ANY RAW METAL AFTERWARDS.**



**65**

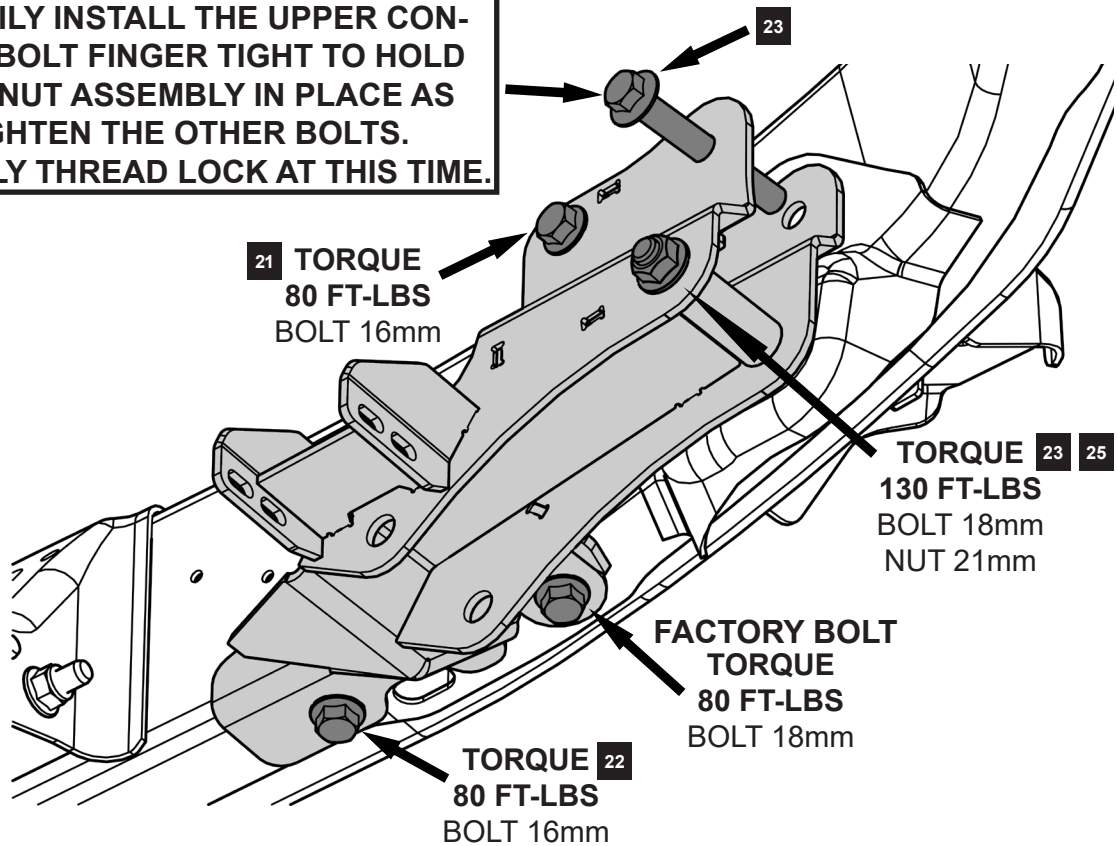
**NOTE: (2 DOOR MODELS ONLY) YOU WILL NEED TO REINSTALL THE GAS TANK BEFORE INSTALLING THE FRONT LONG ARM BRACKETS**



**66**

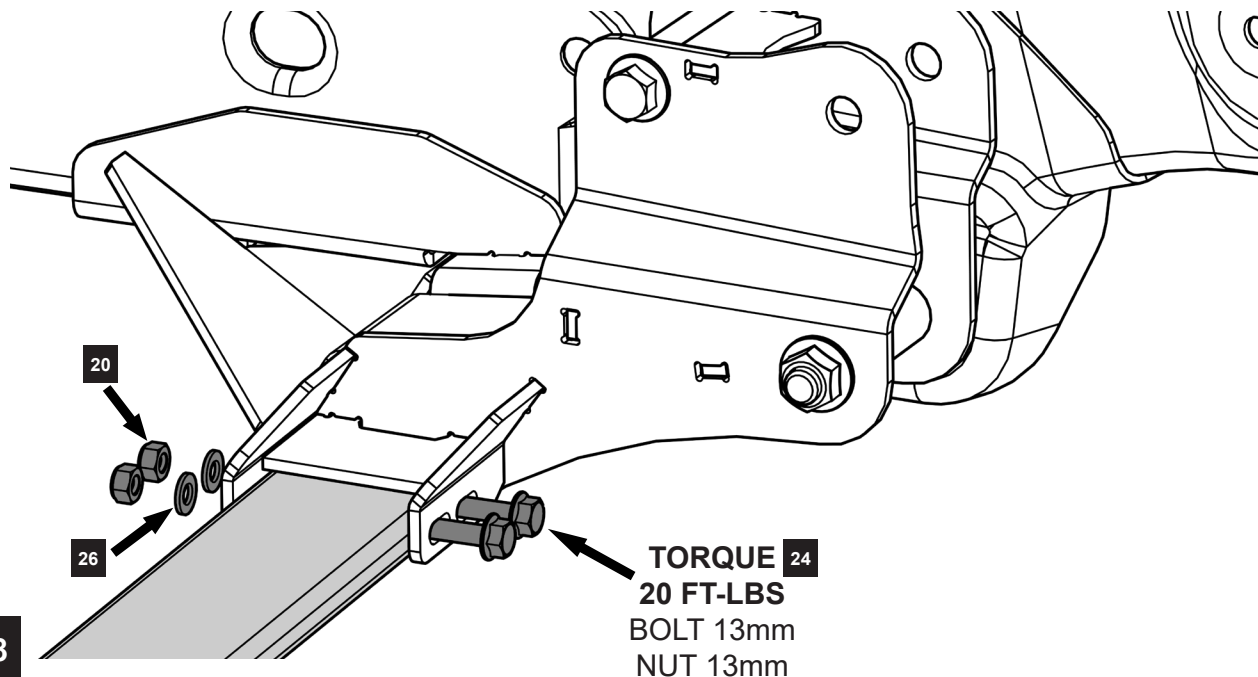
**REINSTALL AND TORQUE THE FRONT BRACKET TO THE FRAME  
APPLY RED THREAD LOCK TO ALL BOLTS**

**TEMPORARILY INSTALL THE UPPER CONTROL ARM BOLT FINGER TIGHT TO HOLD THE FLAG NUT ASSEMBLY IN PLACE AS YOU TIGHTEN THE OTHER BOLTS. DO NOT APPLY THREAD LOCK AT THIS TIME.**

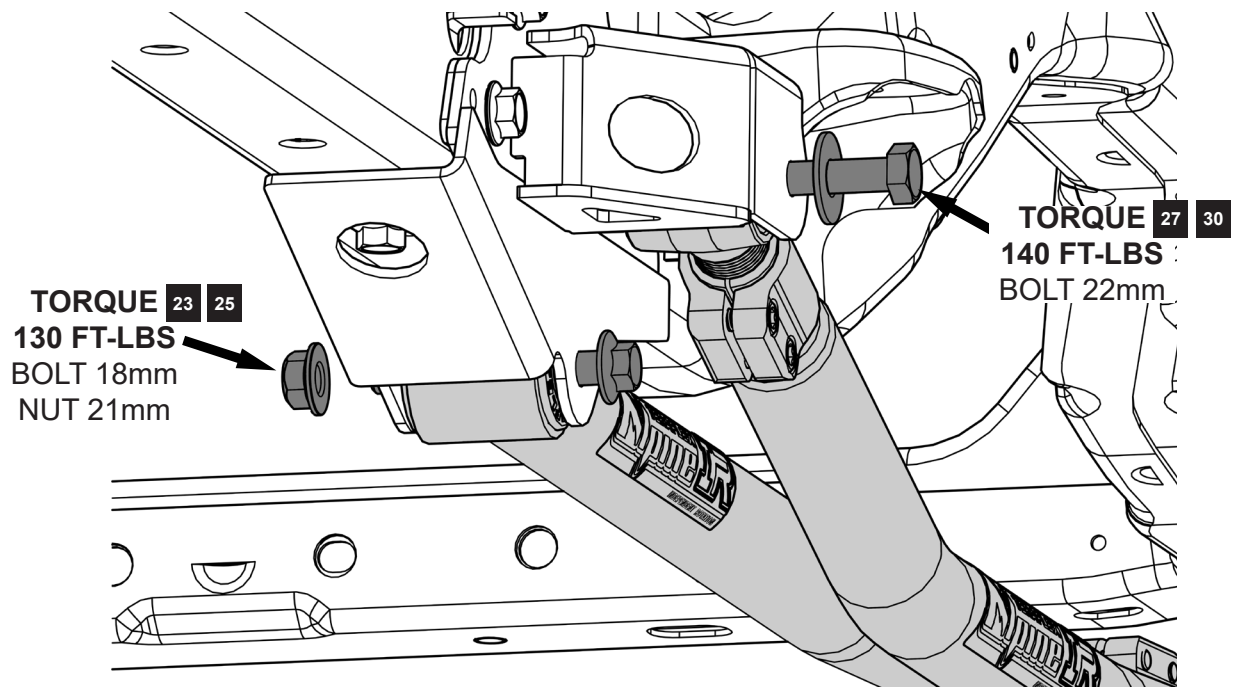


67

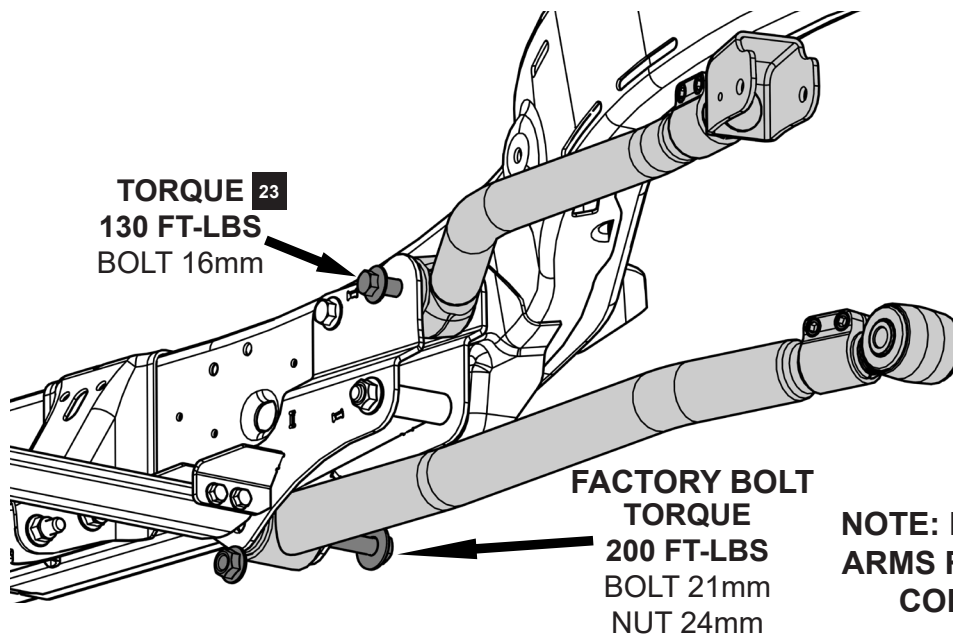
**INSTALL THE CROSSMEMBER WITH THE PROVIDED HARDWARE**



68

**INSTALL THE LONG ARMS**

**ADJUST THE LONG ARMS TO THE RECOMMENDED STARTING LENGTHS  
AND INSTALL THE HARDWARE WITH RED THREAD LOCK**



**NOTE: FRONT LOWER LONG  
ARMS REUSE THE FACTORY  
CONTROL ARM BOLT**

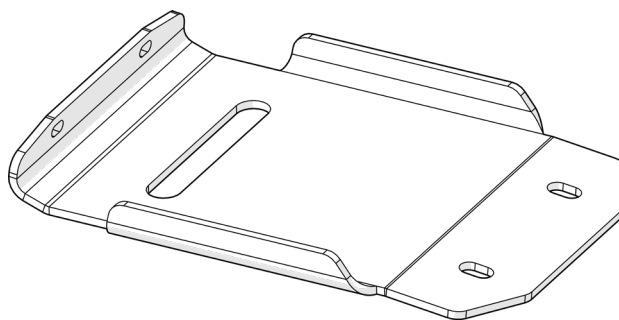
**IF INSTALLING LONG ARMS WITH IR  
BUSHINGS YOU CAN TORQUE THE  
ARM BOLTS NOW, OTHERWISE WAIT  
UNTIL THE JEEP IS ON THE GROUND**

**69**

Recommended Starting Lengths	
Front Upper Control Arms	28 1/8"
Front Lower Control Arms	31 5/8"
Rear Upper Control Arms	33 1/8"
Rear Lower Control Arms	37 3/8"

**INSTALL THE CROSSMEMBER SKID PLATE AT THIS TIME (SOLD SEPARATELY)**

**REFER TO INSTRUCTIONS #999359 FOR  
PROPER INSTALLATION OF THE  
CROSSMEMBER SKID PLATE**



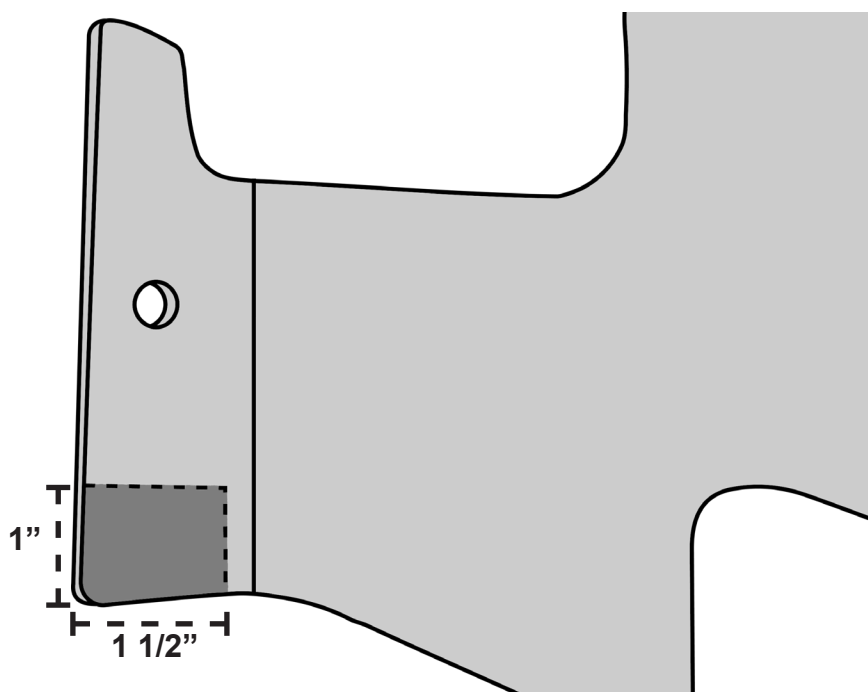
**70**

**REINSTALL THE EXHAUST, GAS TANK AND CROSSMEMBERS IN REVERSE ORDER  
OF REMOVAL.**

**REINSTALL THE AXLES AND DRIVE LINES  
REFER TO PAGE 40 FOR TORQUE SPECS**

**REFER TO THE SPRING BOX INSTRUCTIONS FOR COMPLETION OF YOUR LIFT KIT.**

**NOTE: WHEN REINSTALLING GAS TANK ON 4 DOOR MODELS YOU MAY NEED TO  
MODIFY THE FUEL LINE SHIELD.**



TORQUE SPECS		
Step Number	Description	Torque Specs
<b>Exhaust</b>		
44	Catalytic Converter to Cylinder Head Bolts	18 Ft. Lbs.
43	Exhaust Y-Pipe-to-Catalytic Converter Flange Bolts	18 Ft. Lbs.
39/42 38/41	Exhaust Resonator Clamp Bolt	30 Ft. Lbs.
37/40	Front Exhaust Isolator Bolts	22 Ft. Lbs.
<b>Gas Tank</b>		
32/36	Fuel Tank Skid Plate Bolts	70 Ft. Lbs.
34	Fuel tank Front Skid Plate Bolts	70 Ft. Lbs.
34	Fuel tank Front Skid Plate Nuts	20 Ft. Lbs.
30	Fuel line shield	9 Ft. Lbs.
<b>Skid Plates / Crossmembers</b>		
35	Transmission crossmember to frame bolts (righthand side)	52 Ft. Lbs.
35	Transmission crossmember to bracket bolts/nuts	129 Ft. Lbs.
35	3 nuts, transmission to cross member	21 Ft. Lbs.
31/33	Transfer case skid plate bolts	70 Ft. Lbs.
34	Skid plate fuel tank to trans crossmember	48 Ft. Lbs.
<b>Drive Line</b>		
20	Rear Driveshaft to Rear Axle Flange Bolts	29 Ft. Lbs.
9	Front Driveshaft to Front Axle Flange Bolts	89 Ft. Lbs.
<b>Other</b>		
19	Rear wheel speed sensor bolt	8 Ft. Lbs.
7	Front wheel speed sensor bolt	5 Ft. Lbs.
4	Drag Link Outer Nut (At Steering Knuckle)	47 Ft. Lbs.



# TERAFLEX

## PRODUCT INFORMATION

### 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 alignment, steering system, suspension and drive line systems must be inspected by a qualified professional mechanic at least every 3000 miles.

### TERAFLEX PRODUCT WARRANTY:

TeraFlex Inc. warrants TeraFlex Suspension products to the original retail purchaser to be free of defects in material and workmanship for as long as the original purchaser owns the vehicle on which products were originally installed.

Failure to complete regular maintenance (grease every 3000 miles) on TeraFlex FlexArms will void this warranty. All other conditions of the standard TeraFlex product warranty apply.

All TeraLow products are covered by the TeraFlex two (2) year warranty to be free of defects in material and workmanship for two years from date purchased.

TeraFlex axles are covered by a 12-month warranty to be free of defects in materials and workmanship.

This warranty does not cover or include product finish, improperly installed or applied products, improperly maintained products, products or components used for racing or competition or damage due to abuse or neglect, products that fail due to the use of larger tire and wheel combinations.

All returns must be accompanied by an original invoice. It is the customer's responsibility to remove the product from the vehicle. Shipping charges are the responsibility of the customer. TeraFlex Inc. will pay the return freight if the product meets the terms of warranty.

This warranty is for the replacement or repair of defective TeraFlex products only and does not include freight charges, labor charges for removal of or installation of TeraFlex or related products or components, costs incurred due to down time of the vehicle, or lost profits due to vehicle down time.

A returned goods authorization number (RGA#) must accompany any returned products. For more information please contact a TeraFlex customer service representative.

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