



## **INSTALLATION INSTRUCTIONS**



**2007-2020 TOYOTA TUNDRA 2WD/4WD**

**6" BASIC & PERFORMANCE SYSTEMS**

**Fabtech Motorsports** | 4331 Eucalyptus Ave. Chino, CA 91710

**Tech Line:** 909-597-7800 | **Fax:** 909-597-7185 | **Web:** [www.fabtechmotorsports.com](http://www.fabtechmotorsports.com)

# - PARTS LIST -

## 2007-2015 MODELS

<b>FTS26020BK COMPONENT BOX 1</b>		
1	FT70056BK	Bumpstop Mount (Driver)
1	FT70057BK	Bumpstop Mount (Passenger)
2	FT70075	Carrier Bearing Spacer
1	FT70119BK	Skid Plate
1	FT70129	Hardware Kit
1	FT70144	Hardware Subassembly
1	FTS70109D	Spindle (Driver)
1	FTS70109P	Spindle (Passenger)

<b>FT70144 HARDWARE SUBASSEMBLY</b>		
1	FT26020i	Instructions
1	FT30075	Differential Vent Hose (Large)
1	FT70033	Rear ABS Bracket Extension
3	FT70072	Rear Brake Line Bracket Ext.
2	FT70110	Tie Rod End
1	FT70111	Brake Hose Mount Bracket (Driver)
1	FT70112	Brake Hose Mount Bracket (Passenger)
1	FT70142	Differential Vent Hose (Small)
2	FT70196	Body Mount Weld-in Gusset
1	FTREGCARD	Registration Card

<b>FTS26021BK COMPONENT BOX 2</b>		
4	FT1500U	U-Bolt
2	FT20599BK	Impact Strut
1	FT70107BK	Front Crossmember
1	FT70108BK	Rear Crossmember
1	FT70117	Diff Drop Bracket (Driver)
1	FT70118	Diff Drop Bracket (Passenger)
2	FT70120	Sway Bar Drop Bracket
2	FT70121	Impact Strut Mount
1	FT70139	Weld In Plate (Passenger)
1	FT70140	Weld In Plate (Driver)
1	FT70145	Hardware Subassembly
2	FTBK3	3" Block

<b>FT70145 HARDWARE SUBASSEMBLY</b>		
2	FT1027	Bushing
1	FT1044	Bushings
4	FT1599-2-5	Spacer
2	FT404739	Sleeve
2	FT70116	Brake Line Bracket
1	FT90087	Bushing Kit
1	FT916H	Hardware

<b>FTS26022BK COMPONENT BOX 3</b>		
8	37000005052	3/8" SAE Washer G5 Zinc
8	37160003052	3/8"-16 Nylock Nut Zinc
1	FT70169BK	Shock Spacer (Passenger)
1	FT70197BK	Shock Spacer (Driver)

**- PARTS LIST -**

**2016-2020 MODELS**

<b>FTS26071 COMPONENT BOX 1</b>		
1	FT70056BK	Bumpstop Mount (Driver)
1	FT70057BK	Bumpstop Mount (Passenger)
2	FT70075	Carrier Bearing Spacer
1	FT70119BK	Skid Plate
1	FT70129	Hardware Kit
1	FT70144	Hardware Subassembly
1	FTS70227D	Spindle (Driver)
1	FTS70227P	Spindle (Passenger)

<b>FT70144 HARDWARE SUBASSEMBLY</b>		
1	FT26020i	Instructions
1	FT30075	Differential Vent Hose (Large)
1	FT70033	Rear ABS Bracket Extension
3	FT70072	Rear Brake Line Bracket Ext.
2	FT70110	Tie Rod End
1	FT70111	Brake Hose Mount Bracket (Driver)
1	FT70112	Brake Hose Mount Bracket (Passenger)
1	FT70142	Differential Vent Hose (Small)
2	FT70196	Body Mount Weld-in Gusset
1	FTREGCARD	Registration Card

<b>FTS26072 COMPONENT BOX 2</b>		
4	FT1500U	U-Bolt
1	FT70107BK	Front Crossmember
1	FT70117	Diff Drop Bracket (Driver)
1	FT70118	Diff Drop Bracket (Passenger)
2	FT70120	Sway Bar Drop Bracket
1	FT70139	Weld In Plate (Passenger)
1	FT70140	Weld In Plate (Driver)
1	FT70231BK	Rear Crossmember
1	FT70232	Hardware Subassembly
2	FTBK3	3" Block

<b>FT70232 HARDWARE SUBASSEMBLY</b>		
2	FT1027	Bushing
4	FT1599-2-5	Spacer
2	FT404739	Sleeve
2	FT70116	Brake Line Bracket
1	FT90087	Bushing Kit
1	FT916H	Hardware

<b>FTS26022BK COMPONENT BOX 3</b>		
8	37000005052	3/8" SAE Washer G5 Zinc
8	37160003052	3/8"-16 Nylock Nut Zinc
1	FT70169BK	Shock Spacer (Passenger)
1	FT70197BK	Shock Spacer (Driver)

## - PARTS LIST CONTINUED -

FT70129 - HARDWARE		LOCATION
4	7/16"-14 X 1 1/4" Bolt	Sway Bar Drop Bracket
4	7/16"-14 C-lock Nut	
8	7/16" SAE Flat Washer	
4	7/16" USS Flat Washer	
6	1/4"-20 X 1/2" Bolt	Brake Line Bracket.
6	1/4" SAE Flat Washer	
4	1/4"-20 X 3/4" Bolt	ABS Ln w/ Adel Clamp
4	1/4" SAE Flat Washer	
2	5/16"-18 x 1 1/4" Bolt	Brake Line Drop Bracket
2	5/16"-18 C-Lock Nut	
4	5/16" SAE Flat Washer	
2	24mm-3.0 X 140mm Bolt	Front Cross Member
2	24mm-3.0 C-lock Nut	
4	24mm Flat Washer	
2	18mm-2.50 X 150mm Bolt	Rear Cross Member
2	18mm-2.50 C-lock Nut	
4	18mm Flat Washer	
3	14mm x 1.50 x 70mm Bolt	Front Diff Mount (Driver)
6	14mm Flat Washer	
1	1/2"-13 X 4 1/2" Bolt	FrontT Diff Skid Plate
2	1/2"-13 x 1 1/4" Bolt	(2wd only)
1	1/2"-13 X 1 3/4" Bolt	
1	1/2"-13 C-lock Nut	
3	1/2" SAE flat Washer	
1	1/2" Split Lock Washer	
1	3/4"-10 X 3" Bolt	Front Diff To Rear Crossmember (Driver)
1	3/4"-10 C-lock Nut	
2	3/4" SAE Flat Washer	
2	9/16"-12 X 2 1/4" Bolt	Front Diff Mount (Passenger)
2	9/16"-12 C-Lock Nut	
4	9/16" SAE Flat Washer	

1	1/2"-13 x 3 3/4" Bolt	Diff To Front Crossmember (Passenger)
1	1/2"-13 C-Lock Nut	
2	1/2" SAE Flat Washer	
4	3/8"-16 X 1 1/4" Bolt	Bumpstop Mount
4	3/8"-16 C-lock Nut	
8	3/8" SAE Flat Washer	
2	10mm-1.25 X 25mm Bolt	
2	10mm-1.25 Hex Nut	
4	10mm Split Lock Washer	
4	10mm Flat Washer	
2	7/16"-14 X 3 1/2" Bolt	Impact Strut Mount
2	7/16"-14 C-lock Nut	
4	7/16" SAE Flat Washer	
4	1/2"-13 X 5 1/4" Bolt	
4	1/2"-13 C-lock Nut	
8	1/2" SAE Flat Washer	
4	7/16"-14 X 3 1/2" Bolt	Impact Strut Tube
4	7/16"-14 C-lock Nut	
8	7/16" SAE Flat Washer	
4	5/16"-18 X 1 1/4" Bolt	Rear ABS & Brake link Bracket
4	5/16"-18 C-lock Nut	
8	5/16" SAE Flat Washer	
4	Cotter Pins 5/32" X 2"	Lower Ball Joint & CV Axle
6	FT Clamp Adel Clamp	ABS Lines
2	Thread Lock Compound	

## - TOOL LIST -

### Required Tools (Not Included)

Basic Hand Tools

Floor Jack

Jack Stands

Assorted Metric and S.A.E sockets, and Allen wrenches

Torque Wrench

**Large C-clamp or C-clamp Vise Grips**

**Die Grinder with Cutoff Wheel**

**Mig Welder**

**Ball Joint Press Kit**

## - PRE-INSTALLATION NOTES -

For technical assistance call: **909-597-7800** or e-mail: **info@fabtechmotorsports.com**

### **Read this before you begin installation-**

### ***NOTE: THE INSTALLATION OF THIS KIT REQUIRES WELDING, AND SHOULD BE PERFORMED BY A CERTIFIED WELDER***

Check all parts to the parts list above before beginning installation. If any parts are missing contact Fabtech at 909-597-7800 and a replacement part will be sent to you immediately.

Read all instructions thoroughly from start to finish before beginning the installation. If these instructions are not properly followed severe frame, driveline and / or suspension damage may occur.

Check your local city and state laws prior to the installation of this system for legality. Do not install if not legal in your area.

Prior to the installation of this suspension system perform a front end alignment and record. Do not install this system if the vehicle alignment is not within factory specifications. Check for frame and suspension damage prior to installation.

The installation of this suspension system should be performed by two professional mechanics.

Installation of all fasteners requires the use of provided thread locking compound with proper torque values as indicated throughout the installation. Apply thread locking compound upon the final torque of the fastener.

**WARNING-** Installation of this system will alter the center of gravity of the vehicle and may increase roll over as compared to stock.

Vehicles that receive oversized tires should check ball joints, uniballs, tie rods ends, pitman arm and idler arm every 2500-5000 miles for wear and replace as needed.

Verify differential fluid is at manufactures recommended level prior to kit installation. Installation of the kit will reposition the differential and the fill plug hole may be in a different position. (For example, if the manufacture recommends 3 quarts of fluid, make sure the diff has 3 quarts of fluid). Check your specific manual for correct amount of fluid.

### **FOOTNOTES-**

- Can not Use OEM wheels and tire.
- Fits Double cab & CrewMax 5.7L w/auto trans only.
- Will not work with 17" wheels.
- Basic kits will not work on TRD PRO Models

# - INSTRUCTIONS -

## FRONT SUSPENSION

1. Disconnect the negative terminal on the battery. Jack up the front end of the truck and support the frame rails with jack stands. **NEVER WORK UNDER AN UNSUPPORTED VEHICLE!** Remove the front tires.
2. Working from both sides of the truck, locate and remove the factory skid plate. Discard skid plate and hardware, these will not be reinstalled on the truck. **SEE FIGURES 1-2**



FIGURE 1 - STEP 2



FIGURE 2 - STEP 2

3. Remove factory mud flaps off front of the vehicle and discard. **SEE FIGURES 3-4**



FIGURE 3 - STEP 3



FIGURE 4 - STEP 3

4. Remove the sway bar end link from the lower control arm and leave connected to the bar. Then remove the bar from the truck. Save the bar and end links with all hardware. **SEE FIGURES 5-7**

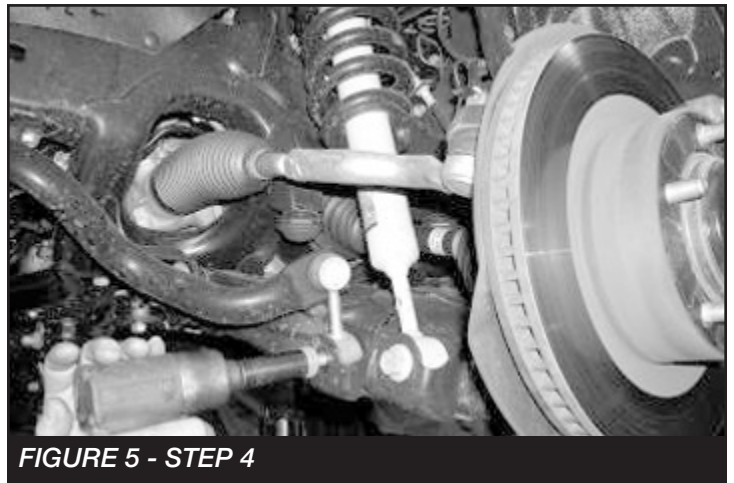


FIGURE 5 - STEP 4

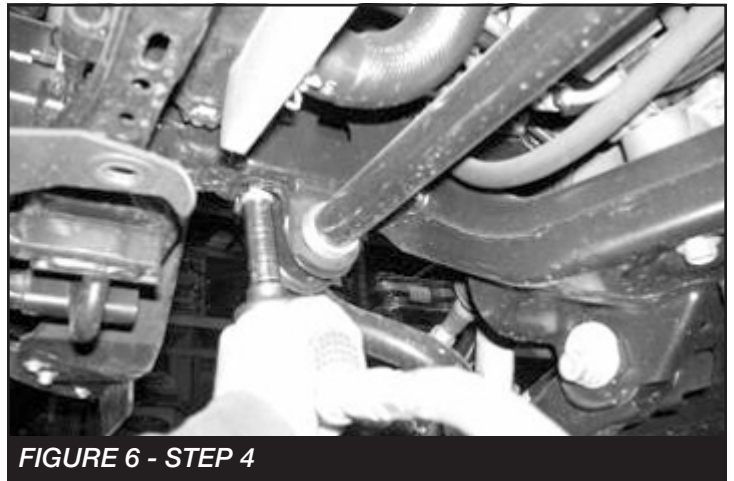


FIGURE 6 - STEP 4



FIGURE 7 - STEP 4

5. Working from the driver side, loosen the jam nut on the inner tie rod end. Remove the nut from the tie rod ends. Disconnect the tie rod ends from the steering knuckle by striking the knuckle with a large hammer to dislodge the tie rod end. Use care as to not hit the threads on the tie rod end with the hammer as you will damage them. Remove & Discard the tie rod & save all hardware. **SEE FIGURES 8-10**



FIGURE 8 - STEP 5



FIGURE 9 - STEP 5



FIGURE 10 - STEP 5

6. Remove the brake caliper from the steering knuckle and hang out of the way. Do not allow the brake caliper to hang from brake line. Remove the brake line brackets from the knuckle. Trucks equipped with ABS brakes, unbolt the ABS line and disconnect from steering knuckle. Save all the brackets & hardware. **SEE FIGURES 11-14**

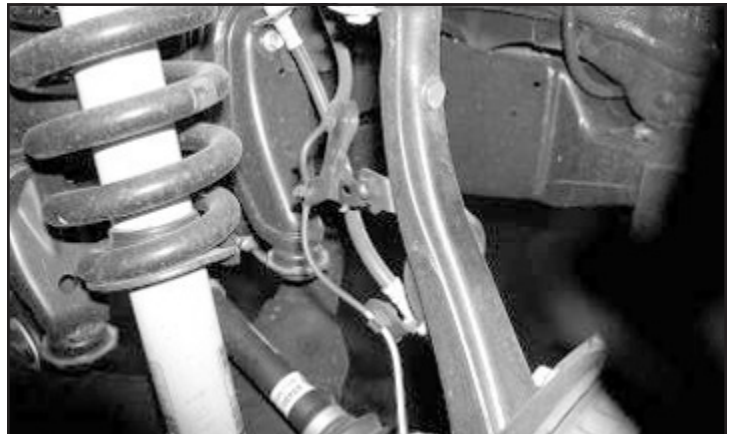


FIGURE 11 - STEP 6

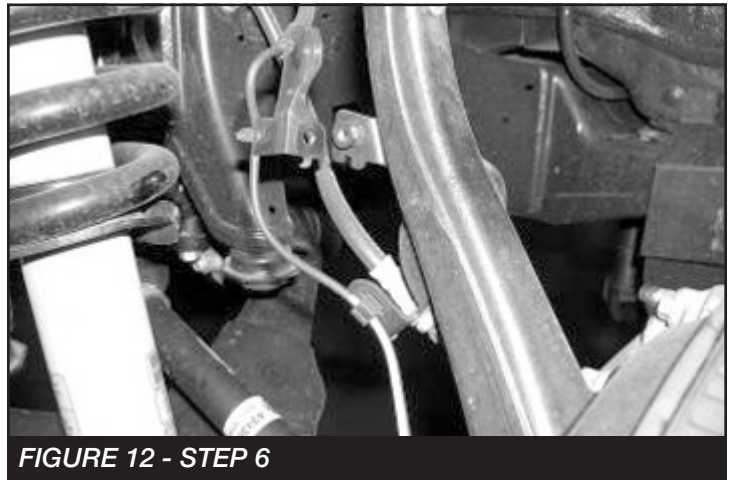


FIGURE 12 - STEP 6

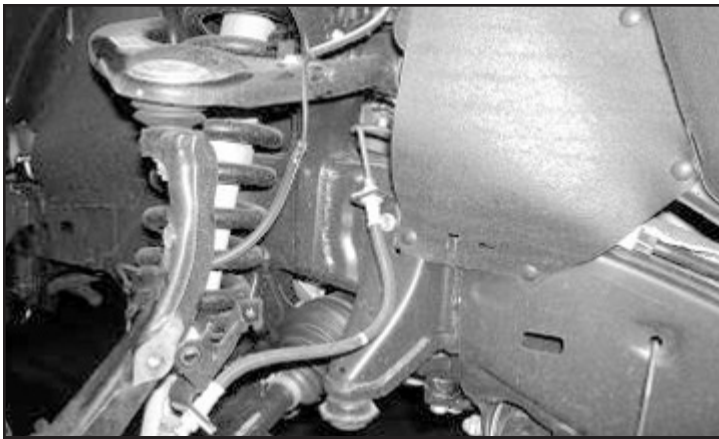


FIGURE 13 - STEP 6



FIGURE 14 - STEP 6

7. Remove the brake rotor, save all hardware. Remove the hub cover, the cotter pin, and axle nut. Remove the four hub bolts (Do Not Remove the bolts from the hub) and remove the hub with the backing plate from the knuckle and CV shaft (use an air hammer with a blunt point punch bit to remove CV axle shaft from the hub, do not damage the axle). Save all components and hardware. **Do not remove the CV axles from the front differential.** SEE FIGURES 15-20



FIGURE 15 - STEP 7



FIGURE 16 - STEP 7



FIGURE 17 - STEP 7



FIGURE 18 - STEP 7



FIGURE 19 - STEP 7



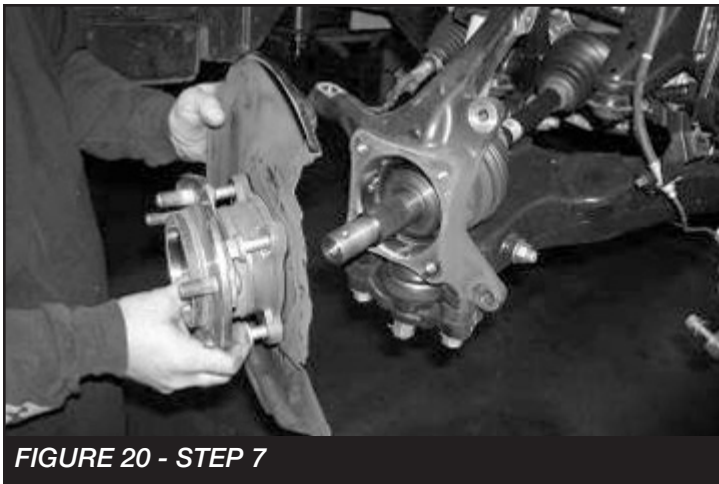


FIGURE 20 - STEP 7

8. Support the lower A-Arm with a floor jack. Loosen the upper ball joint nut. Disconnect the upper ball joint from the upper control arm by striking the knuckle with a large hammer next to the ball joint to dislodge the ball joint. **Use care not to hit the ball joint when removing.** Remove and save factory castle nut. **SEE FIGURES 21-22**



FIGURE 21 - STEP 8



FIGURE 22 - STEP 8

9. Loosen the castle nut on the lower ball joint and strike the lower ball joint boss assembly with a large hammer next to the ball joint to dislodge (**use care not to hit the ball joint when removing**). Remove the two bolts on each side connecting the lower ball joint assembly to the knuckle and remove the knuckle. Remove the castle nut from the lower ball joint and remove the boss from the ball joint. Save the castle nut and discard the rest.

**SEE FIGURES 23-26**

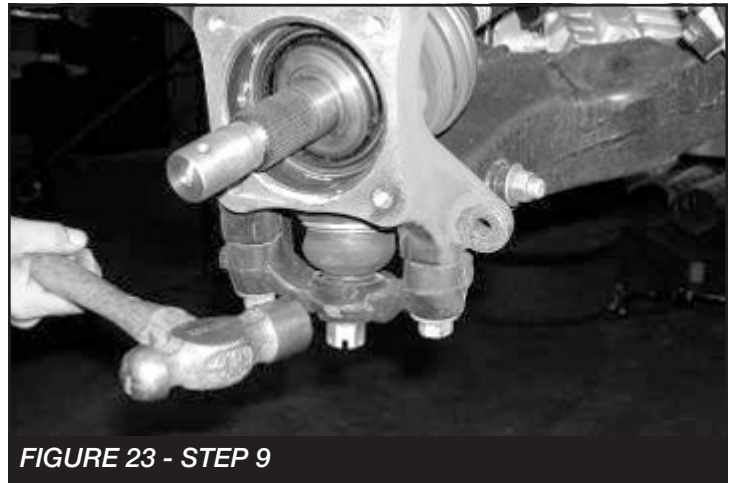


FIGURE 23 - STEP 9



FIGURE 24 - STEP 9

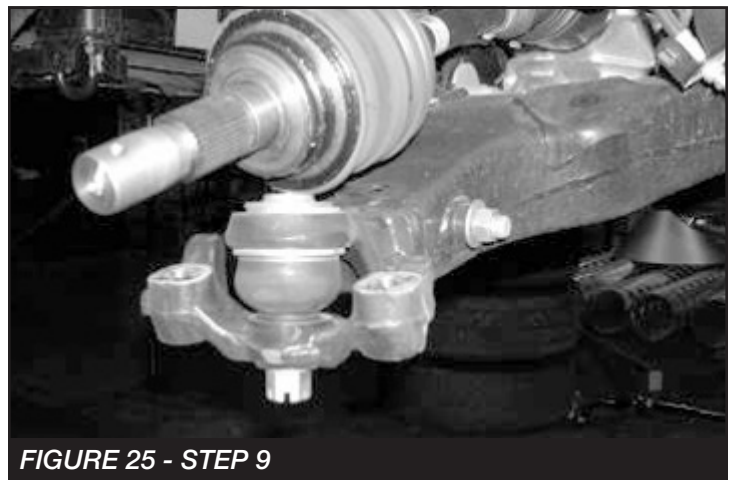


FIGURE 25 - STEP 9



FIGURE 26 - STEP 9

10. Remove the four upper nuts then the lower bolt from the shock assembly. Remove the shock assembly as one complete unit and save with the hardware if installing the spacer, discard if installing Dirt Logic coilovers. **SEE FIGURES 27-30**



FIGURE 27 - STEP 10



FIGURE 28 - STEP 10

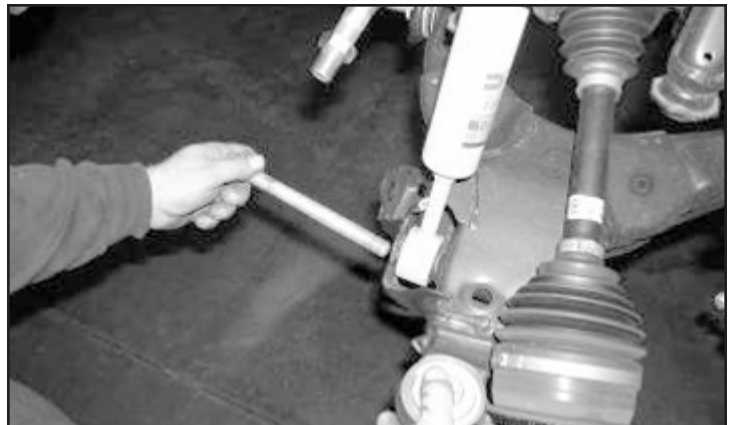


FIGURE 29 - STEP 10



FIGURE 30 - STEP 10

11. Remove the brake line bracket from the frame and save the hardware. Remove the bumpstops from the factory mounts and save. Remove and save the factory lower control arms with the hardware. Loosen the factory Upper Control Arm nuts on the front & rear of the arm, (**do not remove them**). **SEE FIGURES 31-35**



FIGURE 31 - STEP 11



FIGURE 32 - STEP 11



FIGURE 33 - STEP 11



FIGURE 34 - STEP 11

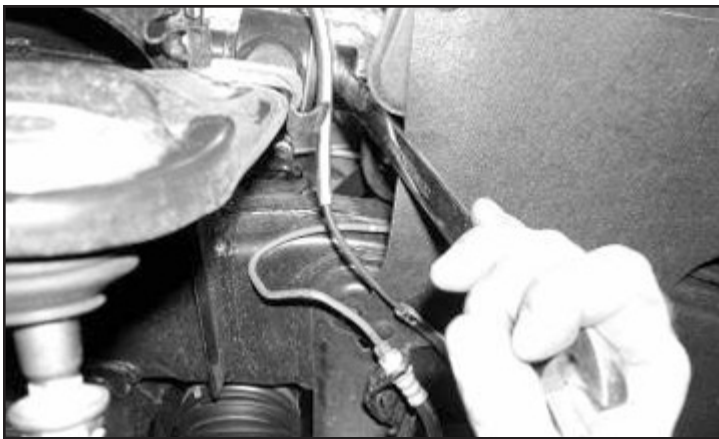


FIGURE 35 - STEP 11

12. Repeat steps five through eleven on the passenger side.

**IF INSTALLING ON A 2WD MODEL -  
SKIP STEPS 13-24**

13. Disconnect the front drive shaft from the differential and from the transfer case. Save with all the hardware, they will be re-installed.

14. Support the front differential with a transmission or floor jack. Disconnect all electrical, vacuum lines, and breather lines from the differential. Remove the bolts from the rear driver side differential and differential bracket and save as you will reuse it during assembly. Remove the passenger and driver front differential bracket bolts from the frame. Discard the bolts, as you will not reuse them. **DO NOT SEPARATE THE C.V. AXLES FROM THE DIFFERENTIAL.** Remove the differential from the truck and set aside. **USE CARE WHEN REMOVING DIFFERENTIAL AS TO NOT DAMAGE THE C.V. Axles and 4WD VACUUM ACTUATOR ASSEMBLY.** SEE FIGURES 36-41



FIGURE 36 - STEP 14

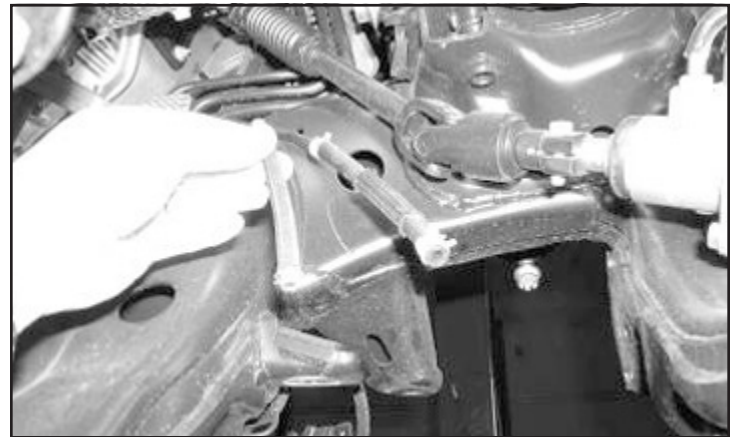


FIGURE 37 - STEP 14



FIGURE 38 - STEP 14

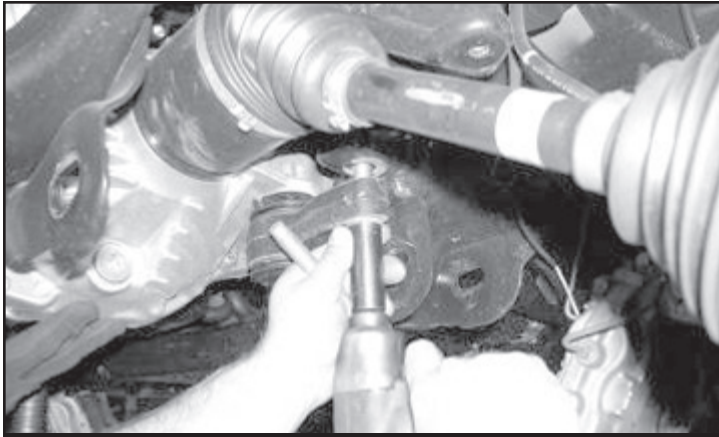


FIGURE 39 - STEP 14

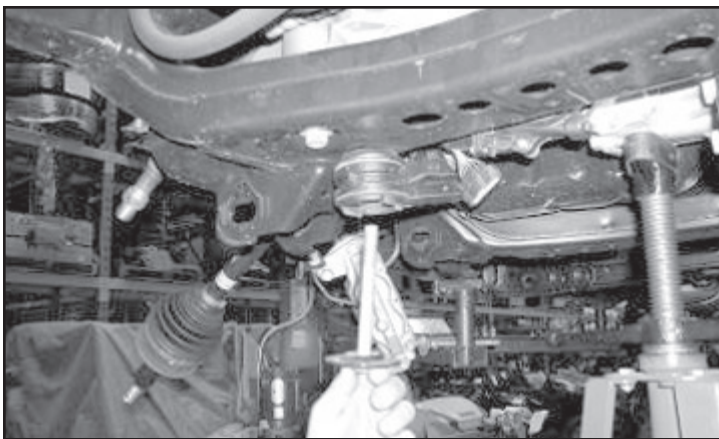


FIGURE 40 - STEP 14

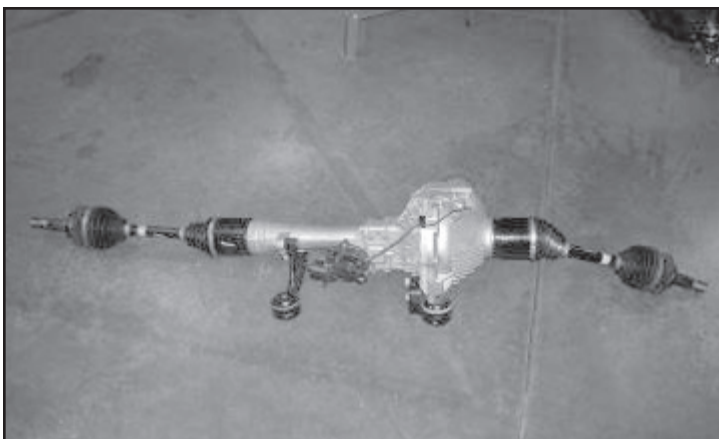


FIGURE 41 - STEP 14

15. Locate the factory rear crossmember. From the driver's side, mark the crossmember 2-1/2" from center the cam pocket adjustment hole inward and mark the frame. Draw a line straight across the top of the crossmember and connect to the first line that is on the back of the crossmember. On the bottom of the crossmember, draw another line forward from the first line just beside the weld for the control arm pocket. From the passenger side, mark the crossmember 4 1/2" from center of the cam pocket adjustment hole inward and mark the frame the same as the driver side. Use a Sawzall or Die Grinder with a cutoff wheel to make these cuts. Take care to cut the crossmember straight up and down and to not cut into the control arm pocket. Remove the rear crossmember section and discard. **SEE FIGURES 42-49**

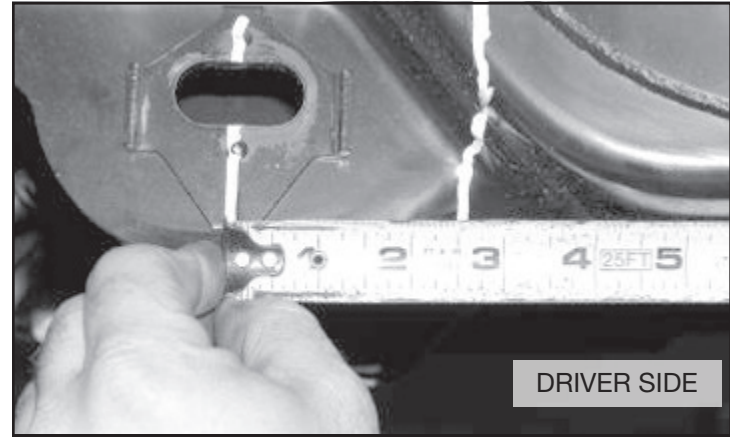


FIGURE 42 - STEP 15

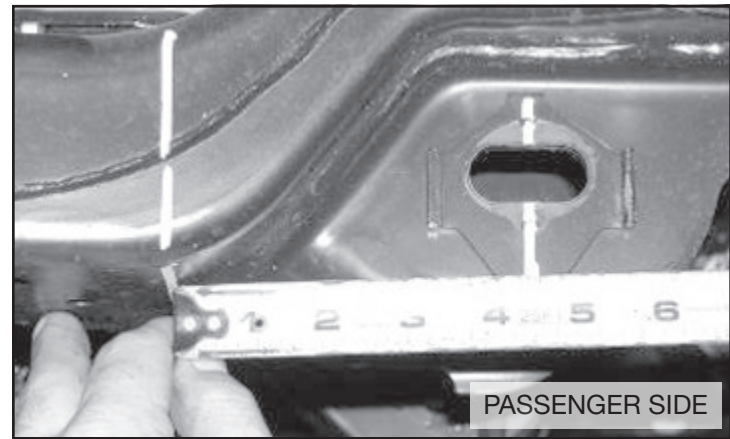


FIGURE 43 - STEP 15

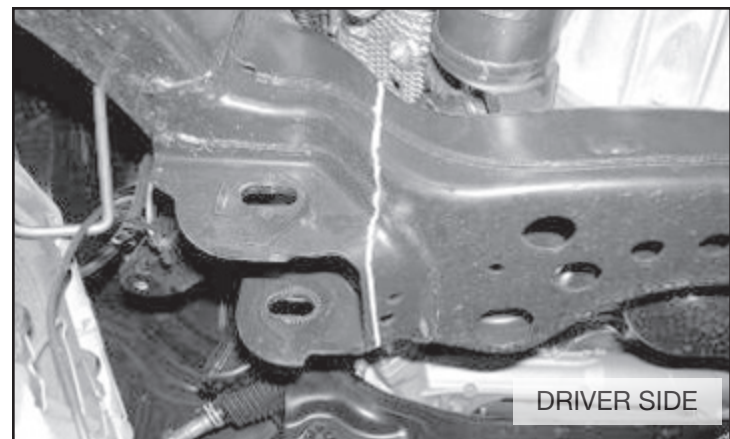


FIGURE 44 - STEP 15

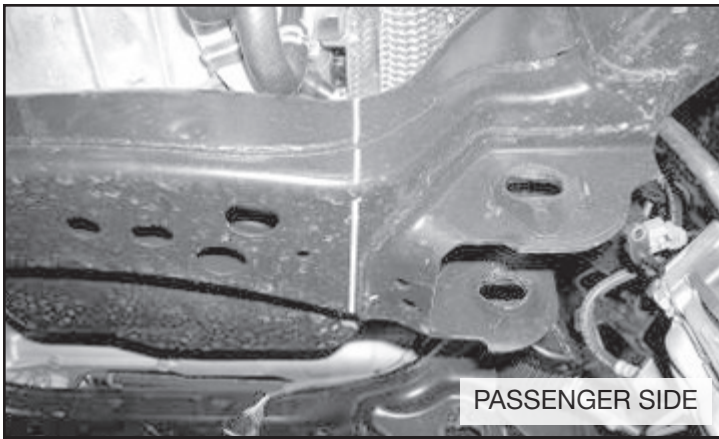


FIGURE 45 - STEP 15

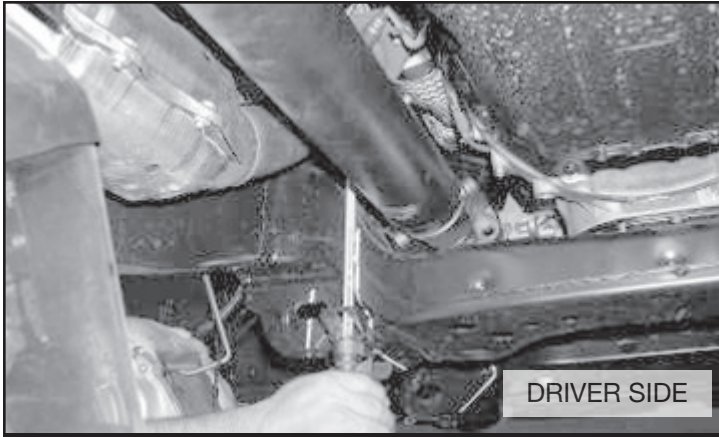


FIGURE 46 - STEP 15

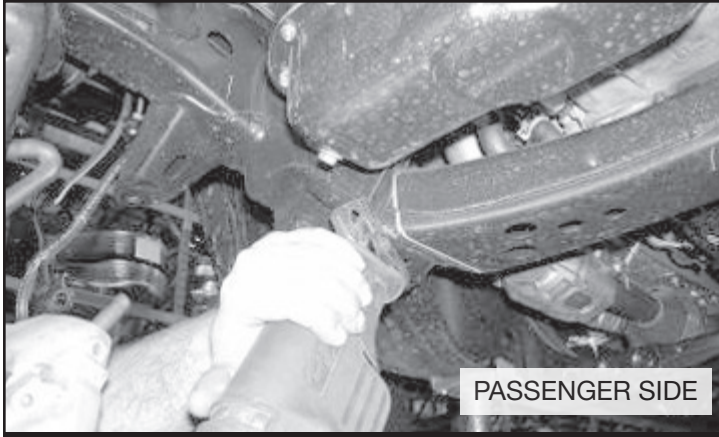


FIGURE 47 - STEP 15

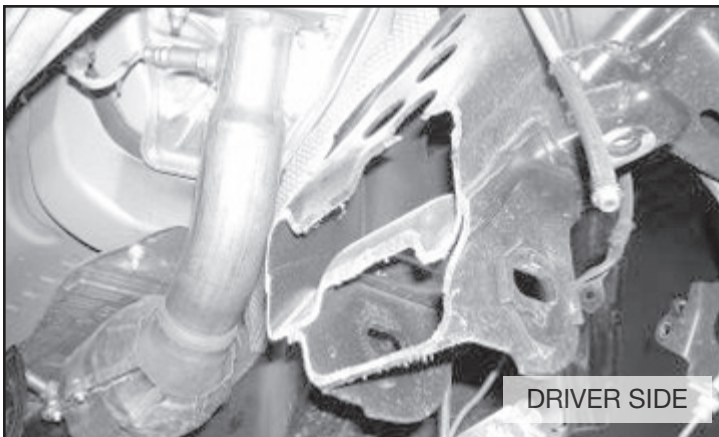


FIGURE 48 - STEP 15

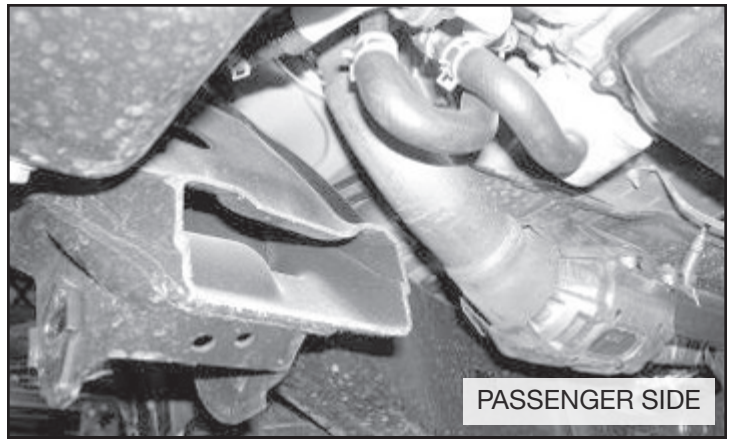


FIGURE 49 - STEP 15

16. Locate FT70140 (Drv Side) & FT70139 (Pass. Side) weld in plates. You will need to weld in these plates to cover the holes made by cutting out the original cross member. Clean area to bare metal weld in new plates. Let plate cool and paint with a corrosive resistant paint or under coating. **SEE FIGURES 50-54**

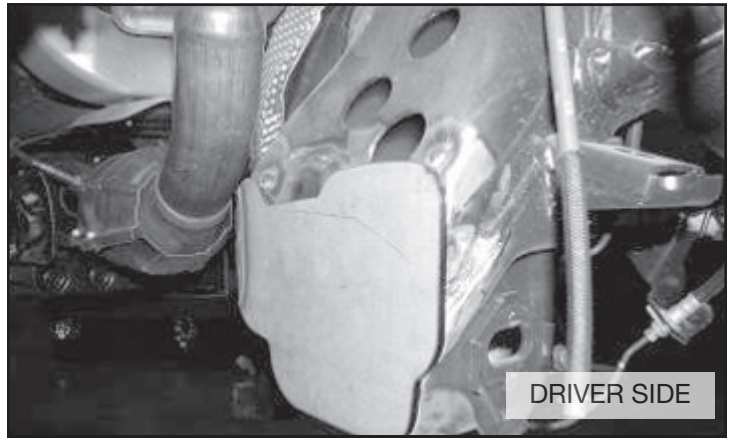


FIGURE 50 - STEP 16

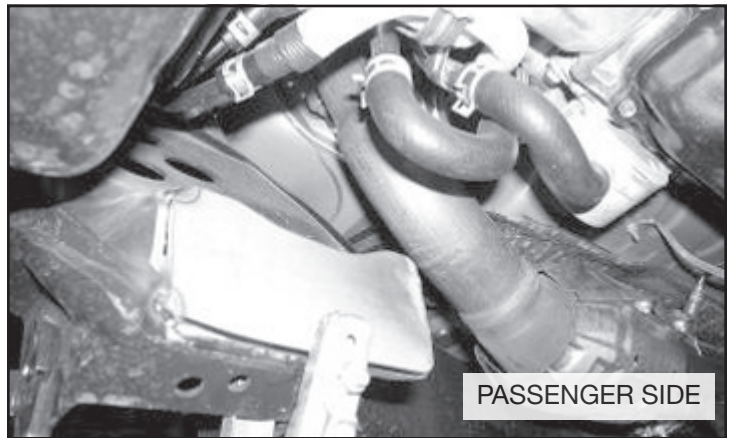
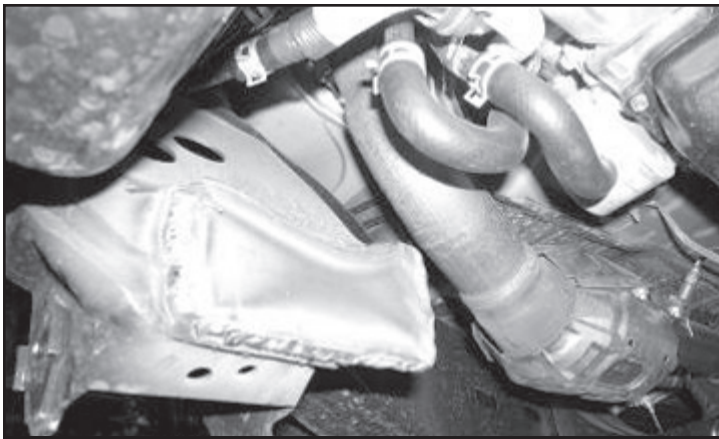


FIGURE 52 - STEP 16

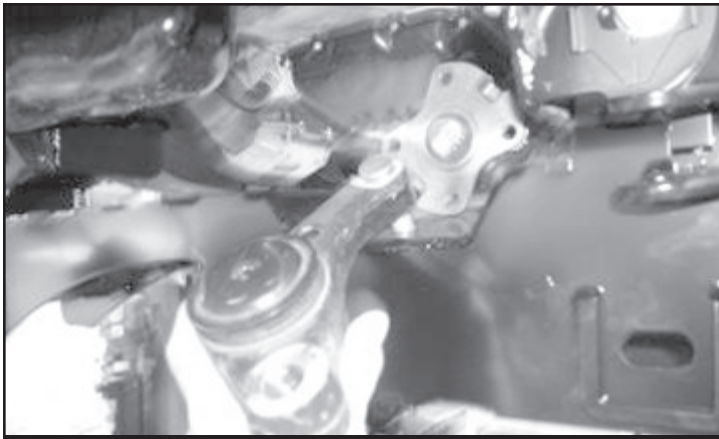


**FIGURE 53 - STEP 16**

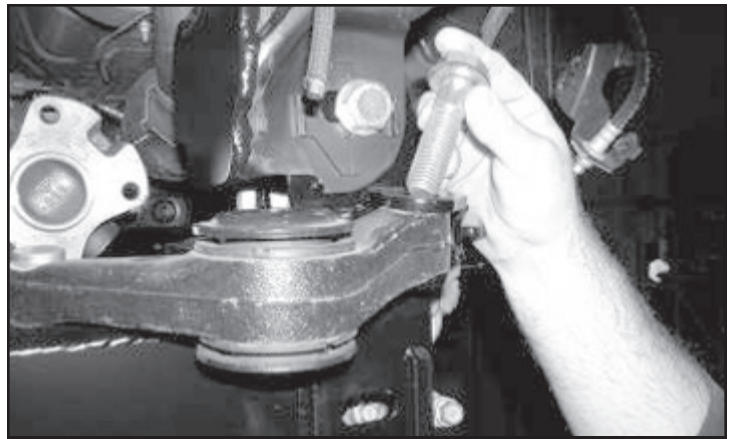


**FIGURE 54 - STEP 16**

17. Locate FT70108BK Rear Crossmember and supplied 18mm hardware & install into the rear frame pockets (install the bolts from the front to the rear). Leave loose. Locate the factory rear diff bracket and hardware and the supplied  $\frac{3}{4}$ " hardware. Attach the bracket to the crossmember with the factory bolt first, then the  $\frac{3}{4}$ " hardware. Leave loose. **SEE FIGURES 55-56**

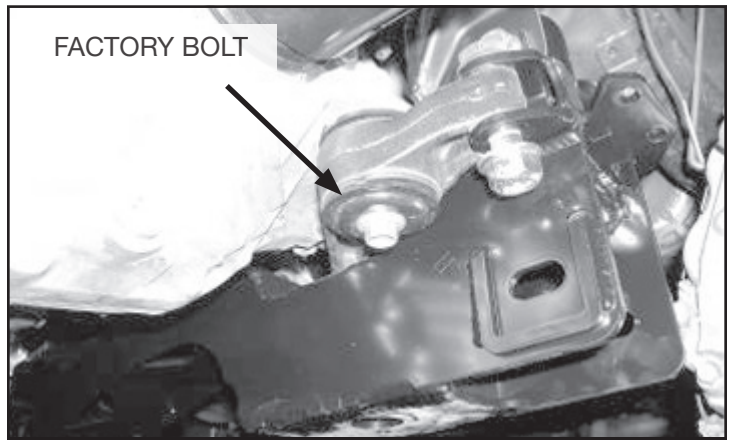


**FIGURE 55 - STEP 17**

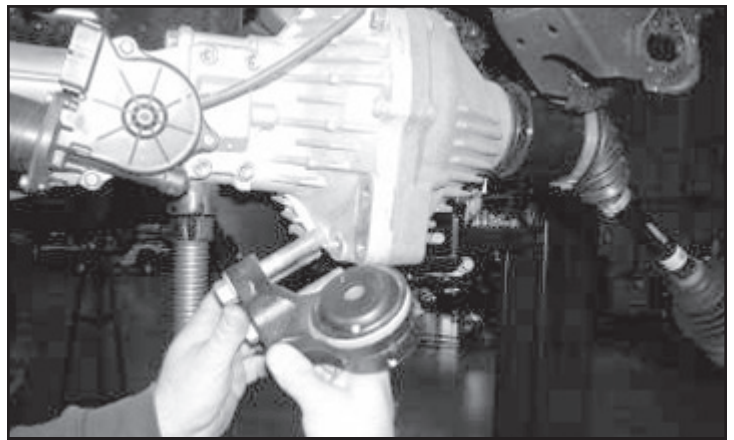


**FIGURE 56 - STEP 17**

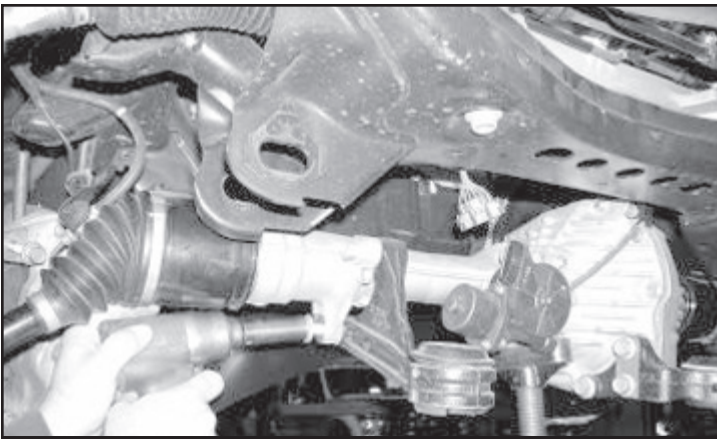
18. Install the differential up into the truck and attach to the rear crossmember bracket. Keep the diff supported by a floor or post jack. **DO NOT LET THE DIFF HANG FROM JUST THE REAR MOUNT.** Remove the factory front differential mounts & discard with the hardware. **SEE FIGURES 57-59**



**FIGURE 57 - STEP 18**



**FIGURE 58 - STEP 18**



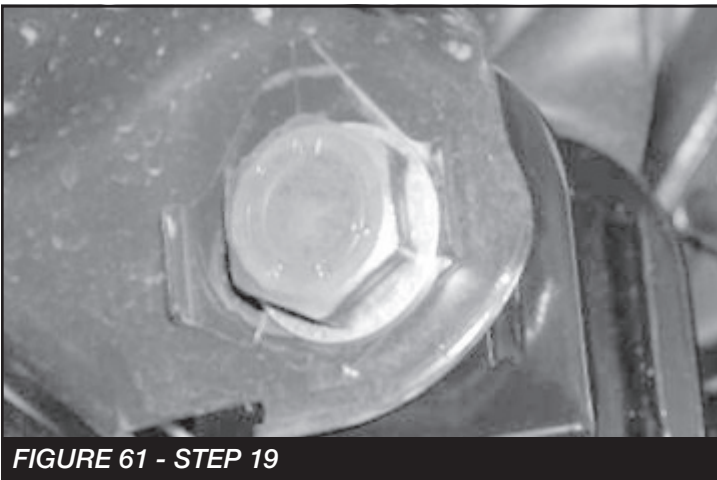
**FIGURE 59 - STEP 18**

19. Locate the Fabtech front crossmember FT70107, with the supplied 24mm bolts, nuts, and washers, attach the crossmember to the factory control arm pockets & leave loose at this time (install the bolts from the front to the rear and so the washer sits flat in the pocket).

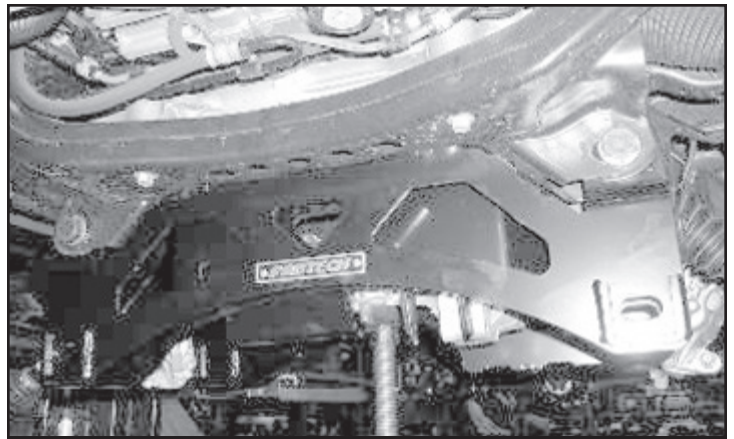
**SEE FIGURES 60-62**



**FIGURE 60 - STEP 19**



**FIGURE 61 - STEP 19**



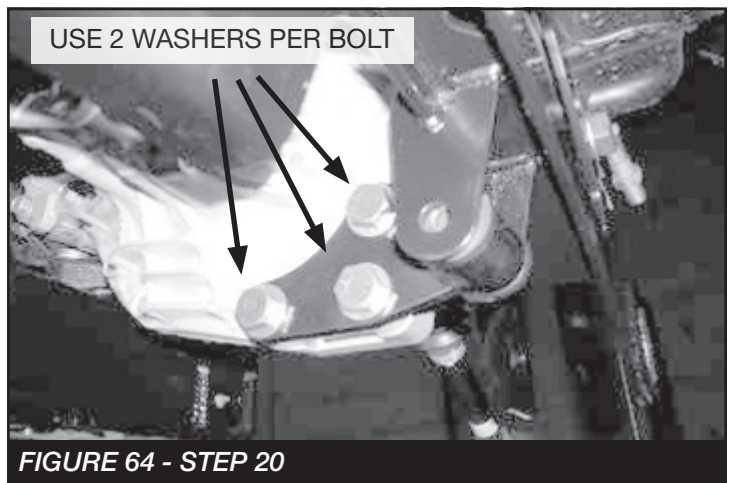
**FIGURE 62 - STEP 19**

20. Locate FT70117 Driver Diff mount, FT70118 Pass Diff mount, and FT90087 Bushing and Sleeve Kit. Install the four bushings and the two sleeves into the new mounts. Using the supplied 14mm x 70mm (drv. side) & 9/16" x 2 1/4" (pass side) hardware and some of the supplied thread-locking compound, mount the new diff mounts to the front differential. Torque the hardware to 75 ft-lbs.

**SEE FIGURES 63-65**



**FIGURE 63 - STEP 20**



**FIGURE 64 - STEP 20**



**FIGURE 65 - STEP 20**

21. Use the supplied  $\frac{1}{2}$ " x  $3\frac{3}{4}$ " bolt and hardware and attach the passenger front diff mount to the front crossmember & leave loose. Locate FT70119BK Skid Plate & the supplied  $\frac{1}{2}$ " x  $4\frac{1}{2}$ " bolt & hardware. Position the skid plate around the mounting tabs on the front crossmember where the new diff mount is and install the  $4\frac{1}{2}$ " bolt, leave loose. **SEE FIGURES 66-67**



**FIGURE 66 - STEP 21**



**FIGURE 67 - STEP 21**

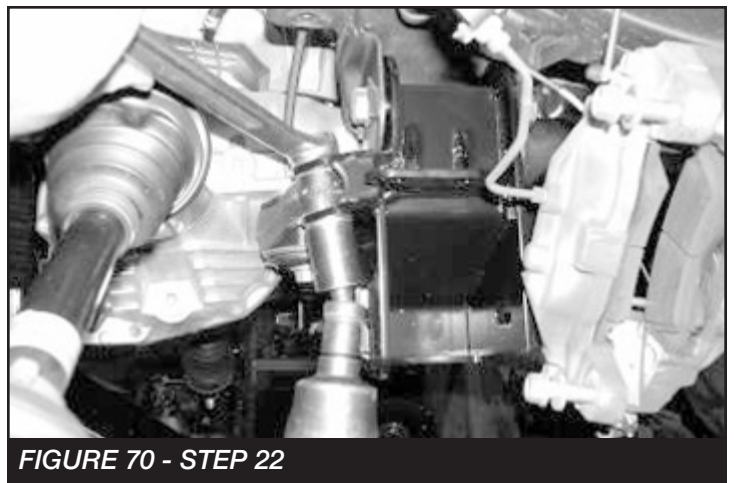
22. Torque the two rear differential bracket bolts (\*\* 85 ft. lbs) the factory mount that was bolted to the new rear crossmember. Torque the  $\frac{3}{4}$ " bolt on the bracket & crossmember to 175 ft-lbs. Locate the supplied  $\frac{1}{2}$ " x  $1\frac{3}{4}$ " bolt, flat & split washers and attach the rear of the skid plate to the rear crossmember. Torque to 75 ft-lbs. **SEE FIGURES 68-71**



**FIGURE 68 - STEP 22**



**FIGURE 69 - STEP 22**



**FIGURE 70 - STEP 22**



**FIGURE 71 - STEP 22**



23. Locate the supplied differential vent hoses. Remove the two hoses from the factory hard lines and discard (use care NOT to bend / damage the hard lines). Install the new hoses to the hard lines and then to the differential. Remove the electrical wiring harness loom from the cable tie connector on the frame. This will allow enough slack in the line to reconnect the plug to the differential. Reconnect the plug at this time. **SEE FIGURES**

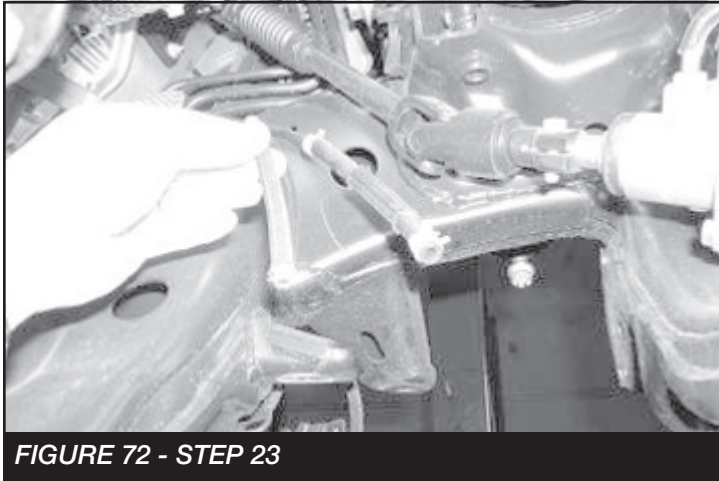


FIGURE 72 - STEP 23



FIGURE 73 - STEP 23

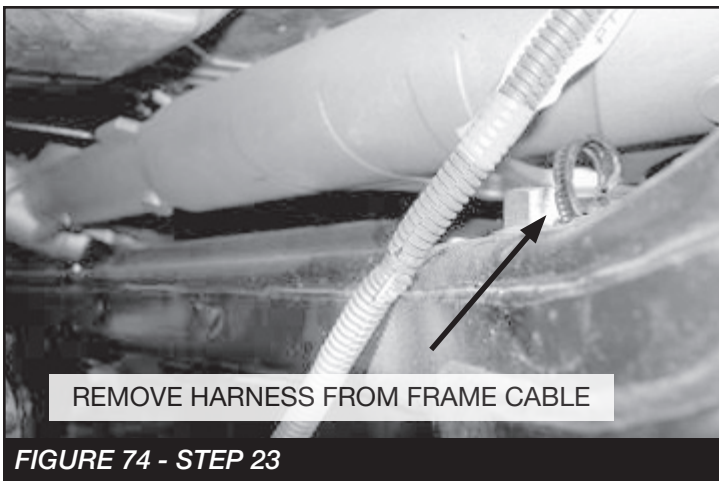


FIGURE 74 - STEP 23

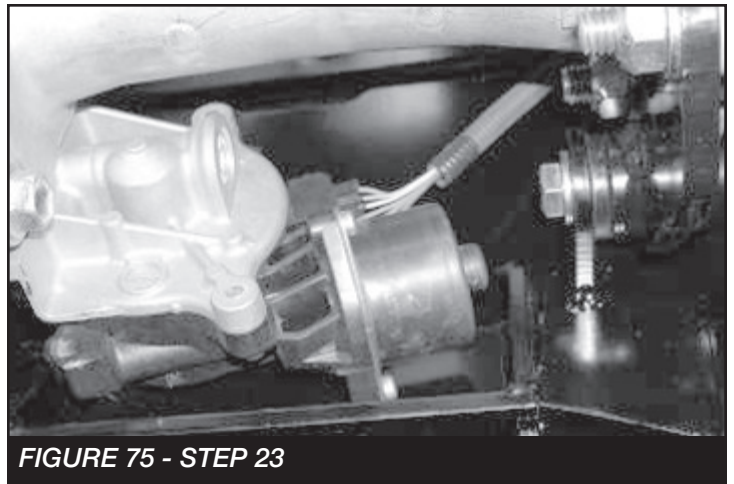


FIGURE 75 - STEP 23

24. Locate the previously removed factory hardware for the front driveshaft and install with some of the supplied thread-locking compound on the bolts and torque to 50 ft-lbs. Re-connect all electrical, vacuum lines, and breather lines back to the differential. **SEE FIGURES 76**

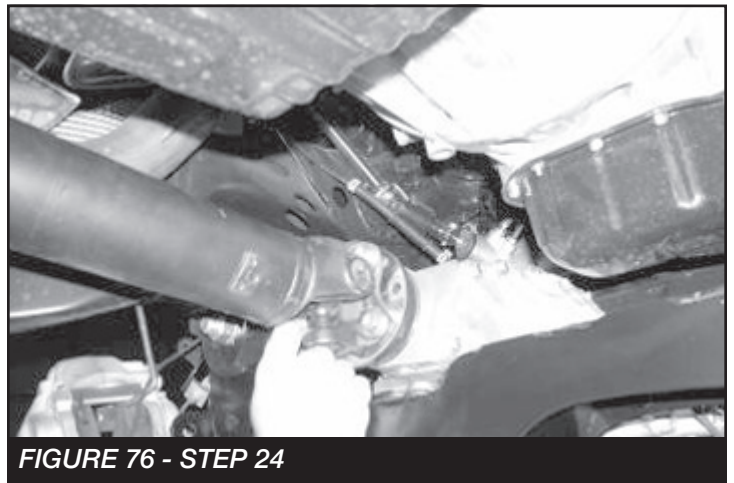


FIGURE 76 - STEP 24

**CONTINUE INSTALLATION FOR 2WD AND 4WD**

25. For 2wd model trucks, install the front and rear crossmembers as instructed in steps 17 & 19, disregard the diff and diff bracket installation.

26. Install the factory lower control arms, using stock alignment bolts and hardware, leave loose (make sure the bolts are installed from front to back & that the washers are flat against the crossmember in the alignment pockets). **SEE FIGURES 77-78**

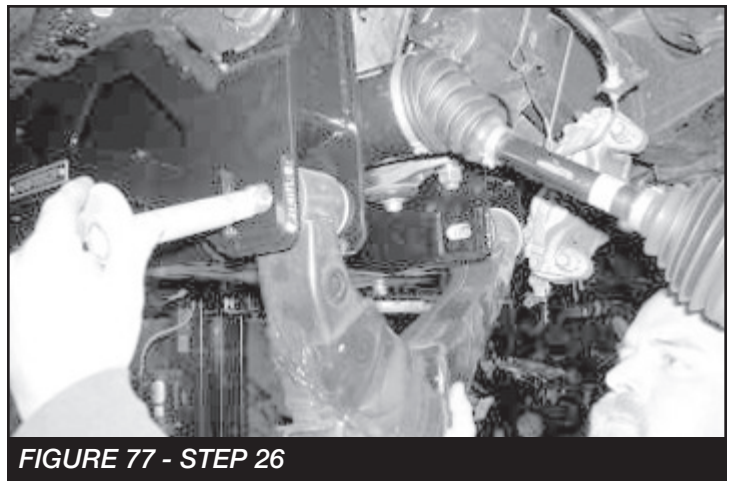
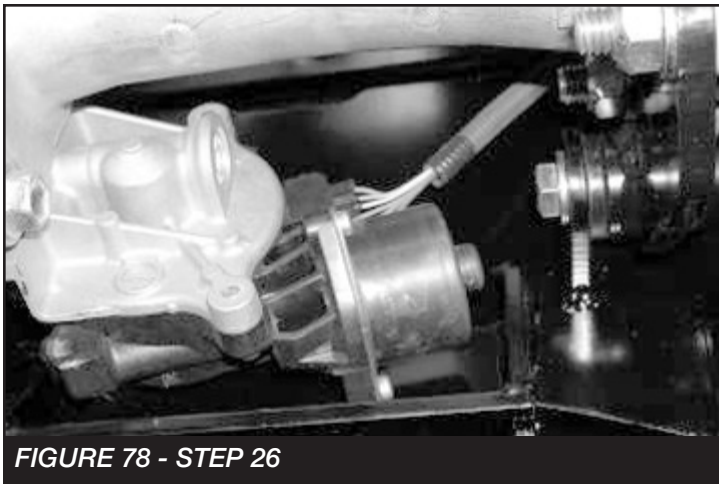
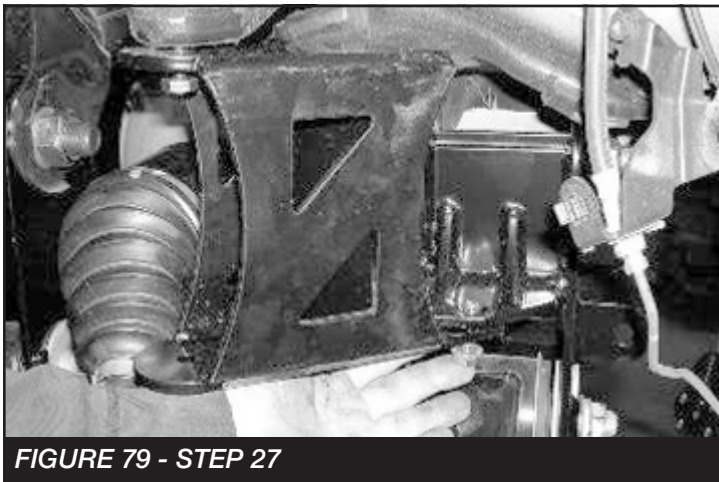


FIGURE 77 - STEP 26

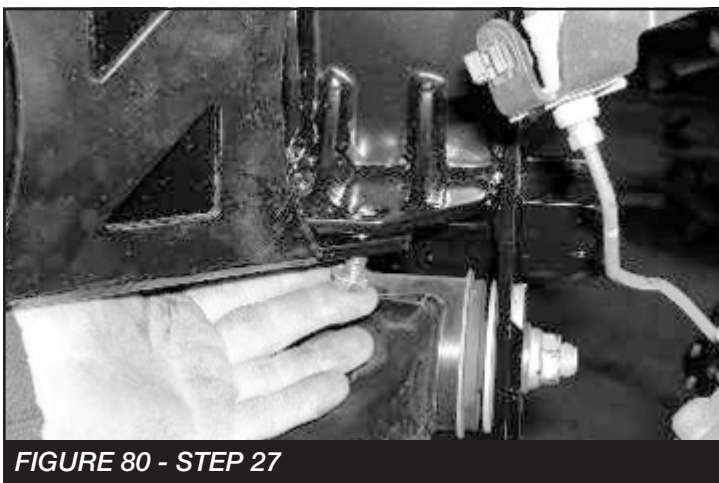


**FIGURE 78 - STEP 26**

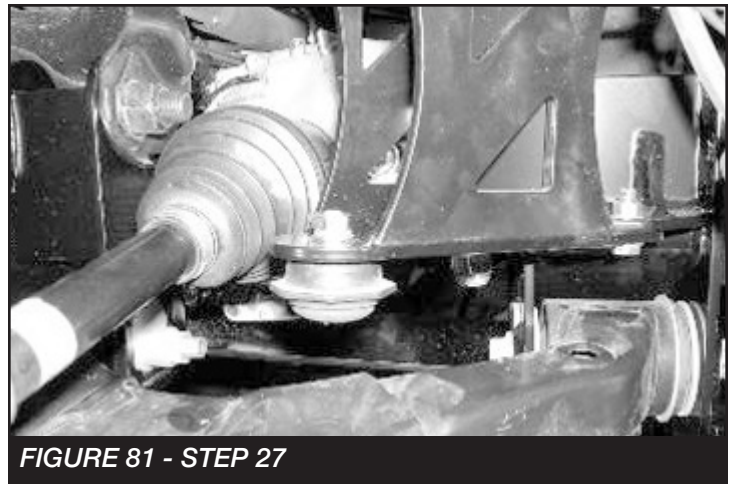
27. Locate FT70056 (drv.) & 70057 (pass.) bumpstop drop bracket. Attach the top of the bracket to the factory bump stop position using the supplied 10mm x 25mm bolt and flat & split washers\*\*. Attach the two bottom holes of the bracket to the rear Fabtech crossmember, using the supplied 3/8" x 1 1/4" bolts, nuts, & washers. Now locate the previously removed bumpstop & attach to the new bump stop bracket using the supplied 10mm nut, & washer. **SEE FIGURES 79-81**



**FIGURE 79 - STEP 27**



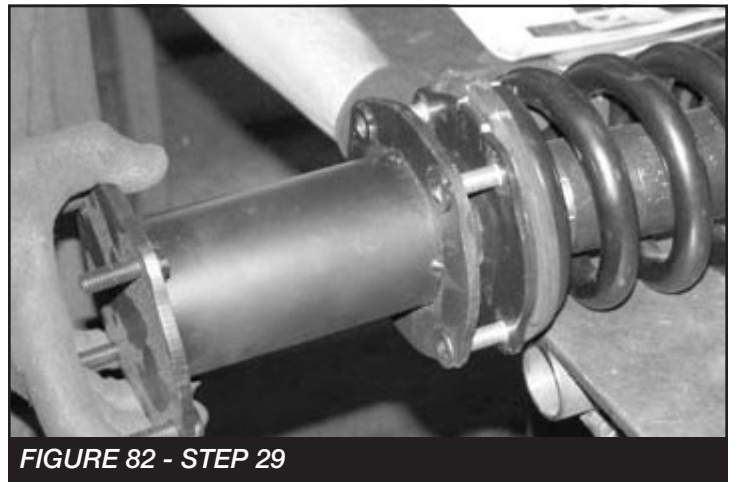
**FIGURE 80 - STEP 27**



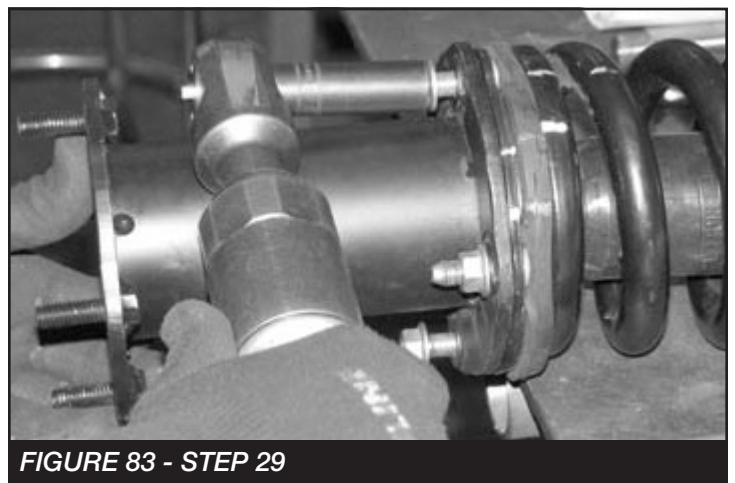
**FIGURE 81 - STEP 27**

**FOR BASIC SYSTEM INSTALLATION FOLLOW STEPS 28-31**

- 28. Locate the new FT70169BK (Passenger) & FT70197BK (Driver) shock spacers.
- 29. Install the spacers onto the factory shocks using the factory hardware. Torque to 35 ft-lbs. **SEE FIGURES 82-83**



**FIGURE 82 - STEP 29**



**FIGURE 83 - STEP 29**

30. Mount the shocks with the spacer up into the bucket with the supplied 3/8 hardware. Leave loose until the bottom shock eye is mounted. **SEE FIGURES 84-85**



**FIGURE 84 - STEP 30**



**FIGURE 85 - STEP 30**

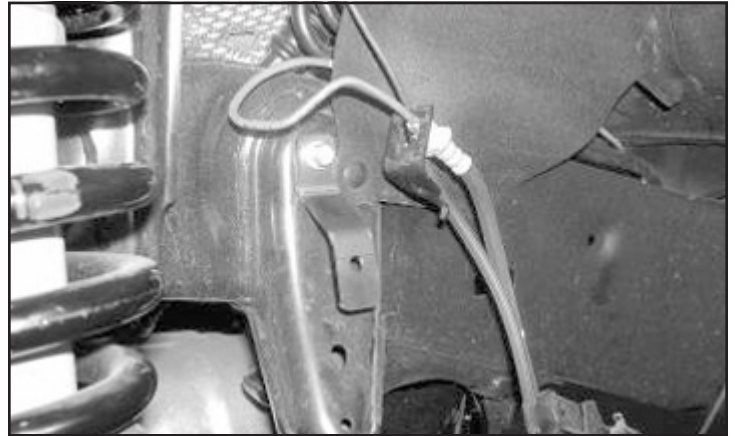
31. Install the lower factory rod end into the lower control mount using factory hardware. Torque the upper bolts to 37 ft-lbs and the lower 160 ft-lbs.

**FOR PERFORMANCE SYSTEM INSTALLATION FOLLOW STEP 32**

32. Locate and install the Dirt Logic Coil Over shocks as described in the instructions enclosed with the coilovers.
33. Locate FT70116 Brake Line Bracket. Mount the new bracket to the frame in the stock location with the factory hardware. Mount the factory bracket to the new Fabtech bracket with the supplied 5/16" hardware. Re-attach the line to the original bracket with the factory C-Clip. **SEE FIGURES 86-89**



**FIGURE 86 - STEP 33**



**FIGURE 87 - STEP 33**

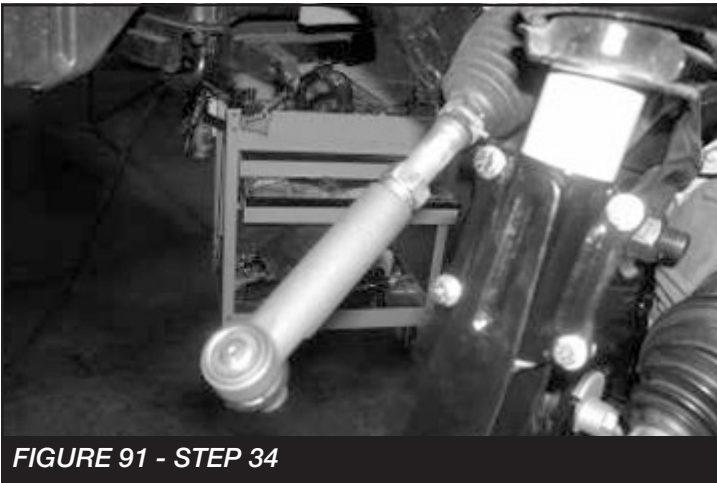
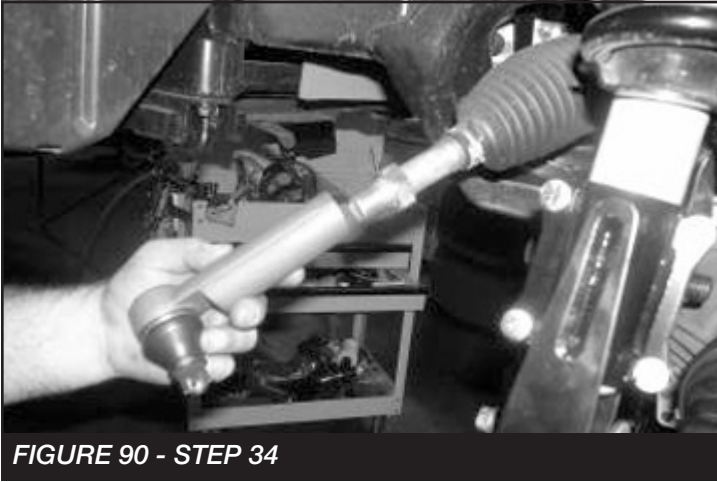


**FIGURE 88 - STEP 33**



**FIGURE 89 - STEP 33**

34. Locate the FT70110 Tie Rod Ends and install onto the inner tie rods and leave loose. **SEE FIGURES 90-91**



35. Locate the factory steering knuckles and remove the hubs, backing plates, inner seal, and the dust covers. Locate the new Fabtech FTS70109D and FTS70109P steering knuckles. Install the factory inner seal. **NOTE:** 2wd models have a dust shield that must be taken out of the stock knuckle and installed in the new Fabtech knuckle. **SEE FIGURES 92-97**



**FIGURE 93 - STEP 35**



**FIGURE 94 - STEP 35**



**FIGURE 95 - STEP 35**



**FIGURE 96 - STEP 35**



**FIGURE 97 - STEP 35**

36. Locate the factory upper and lower ball joint nuts. Position the knuckle onto the lower ball joint and CV Axle (4wd only) at the same time and install the lower ball joint nut. Leave loose (make sure not to damage the CV & CV Boot or the seal in the knuckle). Then attach top of the knuckle to the upper ball joint with the factory nut. Leave Loose. **SEE FIGURES 98-101**



**FIGURE 98 - STEP 36**



**FIGURE 99 - STEP 36**



**FIGURE 100 - STEP 36**



**FIGURE 101 - STEP 36**

37. Torque the crossmember bolts to 125 ft-lbs, the alignment cam bolts to 85 ft-lbs, the upper ball joint nut to 81 ft-lbs and the lower ball joint nut to 123 ft-lbs, the 1/2" diff bolts to 75 ft-lbs, 9/16" diff bolts to \*\*85 ft-lbs, & the 10mm diff bolts to 75 ft-lbs.

38. Install the factory hubs, backing plates, and the dust covers with the factory hardware and supplied thread-locking compound. Torque the hub bolts to 73 ft-lbs. Torque the CV Axle nut to 249 ft-lbs. & install axle nut retainer with new supplied cotter pin.  
**SEE FIGURES 102-104**



**FIGURE 102 - STEP 38**

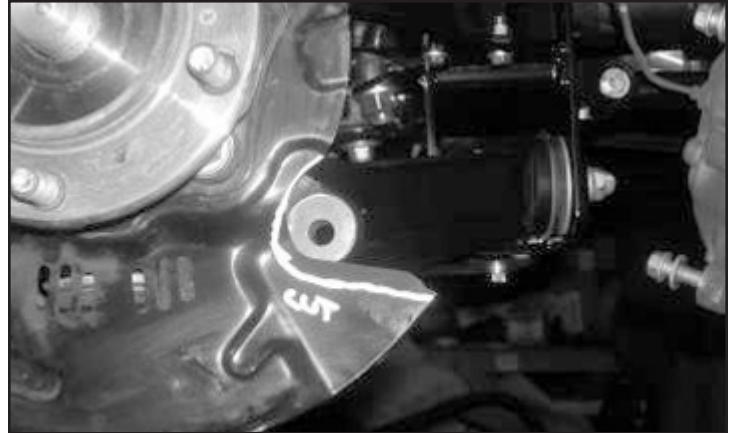


**FIGURE 103 - STEP 38**



**FIGURE 104 - STEP 38**

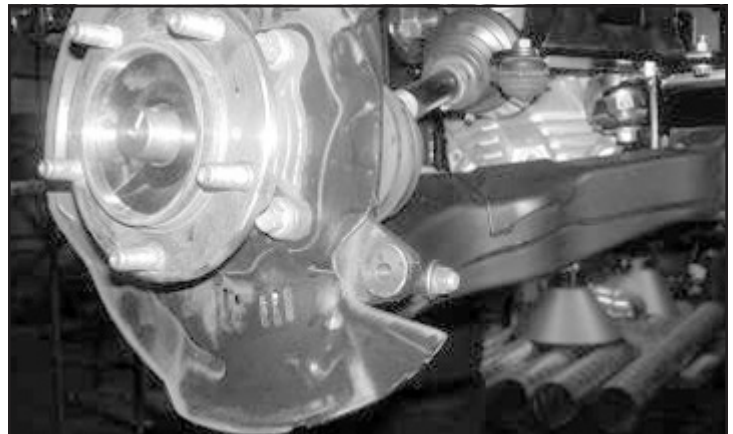
39. The factory dust shield will need to be trimmed where the lower brake caliper bolt is. Mark the shield as shown in the photo and cut / grind. Use the caliper as a check fit tool to ensure that you do not remove more material than needed. **SEE FIGURES 105-107**



**FIGURE 105 - STEP 39**

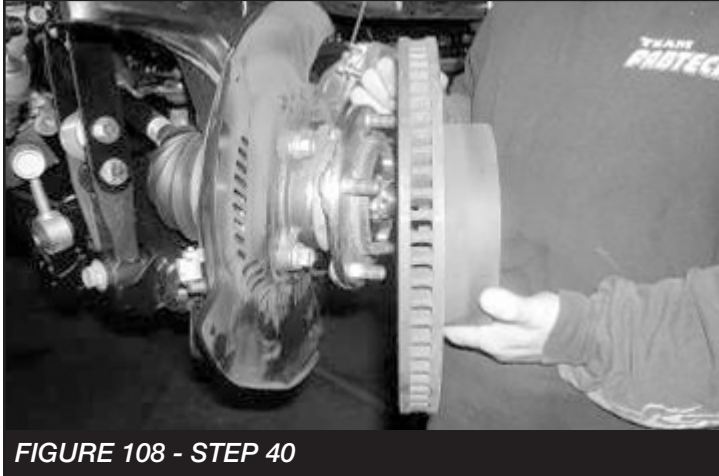


**FIGURE 106 - STEP 39**



**FIGURE 107 - STEP 39**

40. Install brake rotors & brake calipers with the factory hardware and thread locking compound. Torque the caliper bolts to 73 ft-lbs. Locate FT70111 (drv) & FT70112 (pas) Brake Hose Mount Bracket and the supplied  $\frac{1}{4}$ " x  $\frac{3}{4}$ " hardware. Mount the bracket to the knuckle. Mount the factory brake hose to the new bracket with the  $\frac{1}{4}$ " x  $\frac{1}{2}$ " hardware. Torque to 10 ft-lbs. Mark the factory bracket as shown in photo and cut / remove this inside section of the bracket (use care NOT to damage the brake hose). Sand and paint the raw end of the bracket. (This is done to prevent the brake hose from hitting the bracket). Install the brake line into the original bracket and install the factory C-Clip. **SEE FIGURES 108-112**



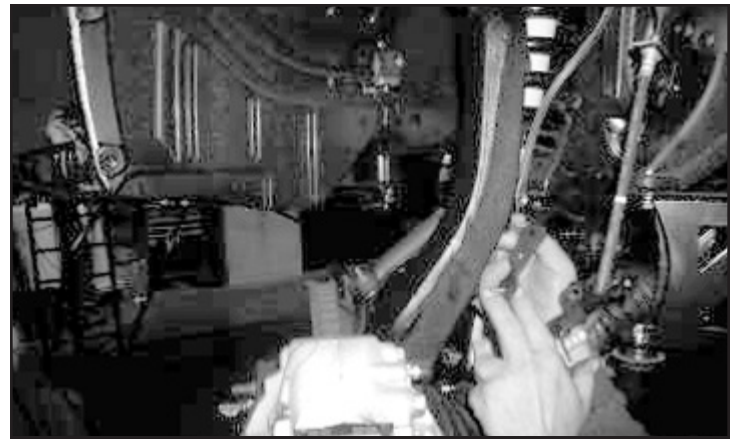
**FIGURE 108 - STEP 40**



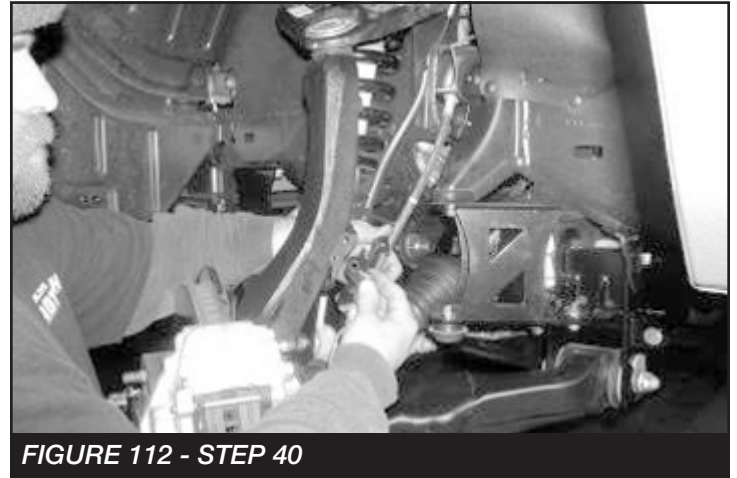
**FIGURE 109 - STEP 40**



**FIGURE 110 - STEP 40**

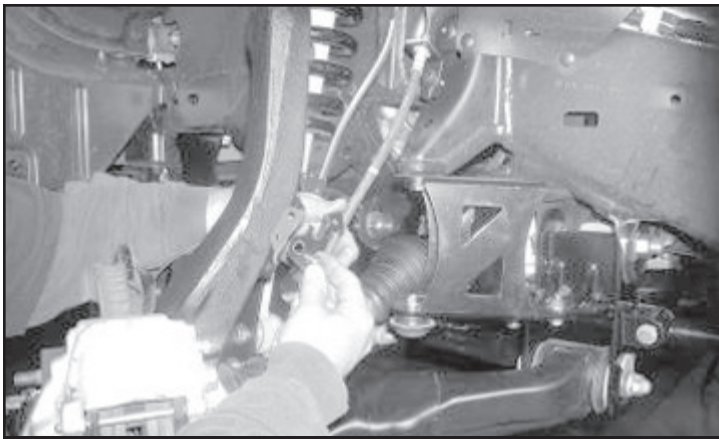


**FIGURE 111 - STEP 40**

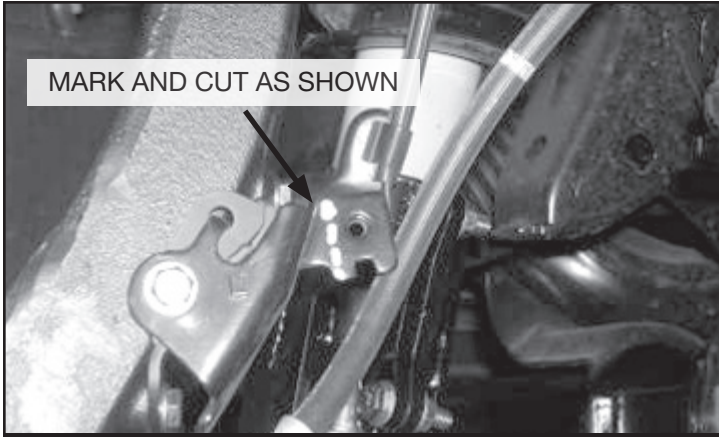


**FIGURE 112 - STEP 40**

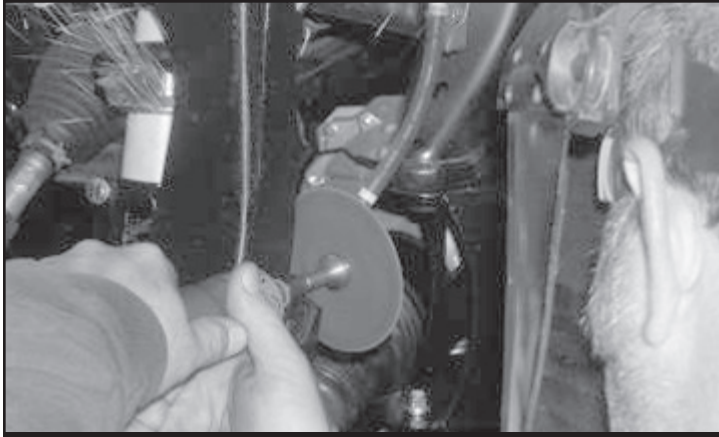
41. Route the ABS onto backside of the steering knuckle. To do this you must loosen the clips that hold the ABS line in place and the factory bracket on the upper control arm. There should be enough slack just inside the wheel well to pull the line down for the factory sensor to bolt into the new Fabtech steering Knuckle. Using the supplied Adel clamps and the  $\frac{1}{4}$ " x  $\frac{3}{4}$ " bolts, washers, & split washers, reinstall the factory ABS Sensor into the Fabtech Knuckle. Now attach the tie rod ends with the factory castle nut and supplied cotter pin. (Torque the tie rod ends to 70 ft-lbs). Grease tie rod ends with a grease gun. **SEE FIGURES 113-125**



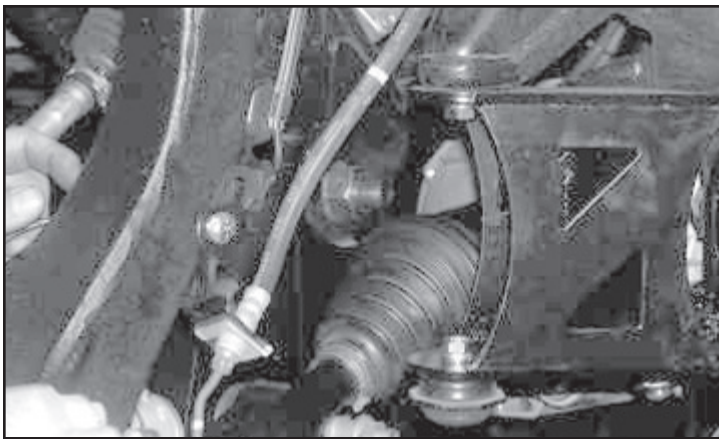
**FIGURE 113 - STEP 41**



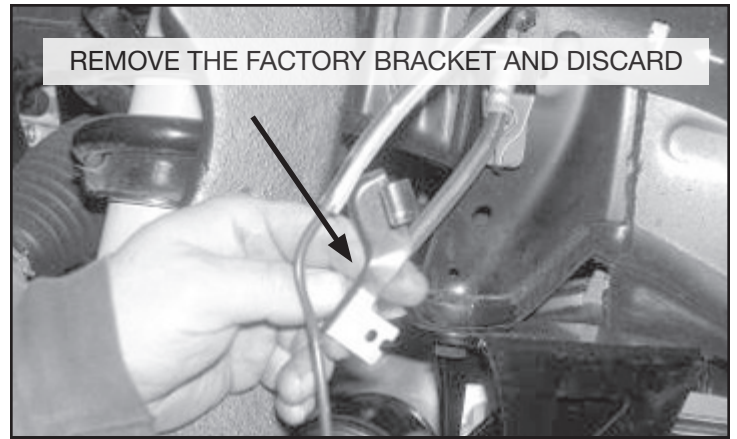
**FIGURE 114 - STEP 41**



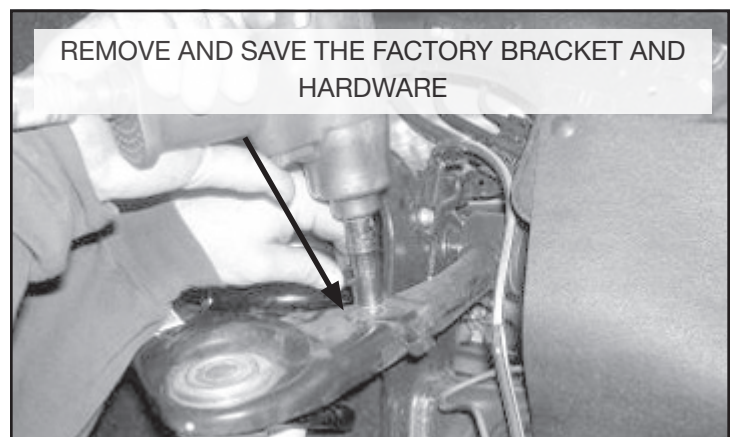
**FIGURE 115 - STEP 41**



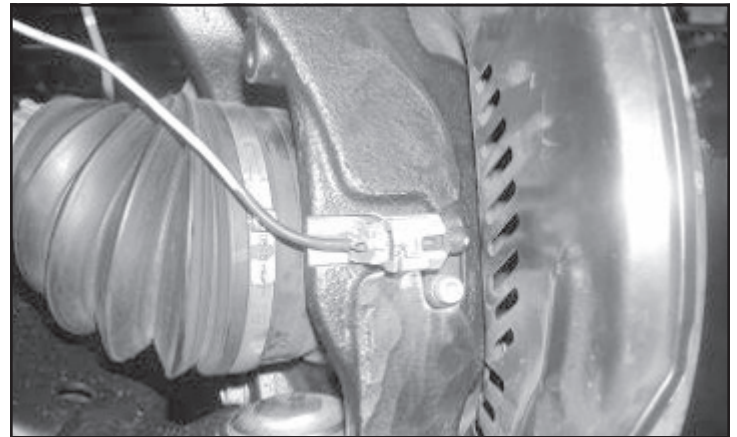
**FIGURE 116 - STEP 41**



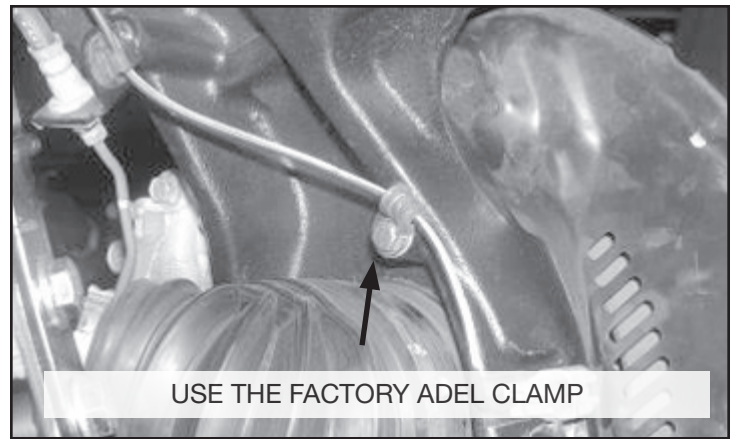
**FIGURE 117 - STEP 41**



**FIGURE 118 - STEP 41**



**FIGURE 119 - STEP 41**



**FIGURE 120 - STEP 41**



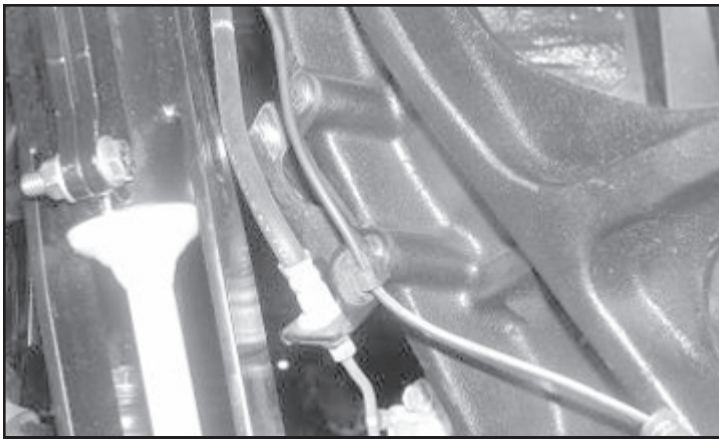


FIGURE 121 - STEP 41

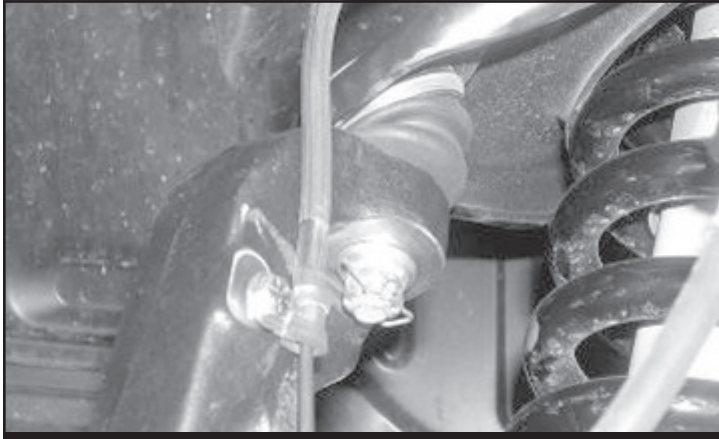
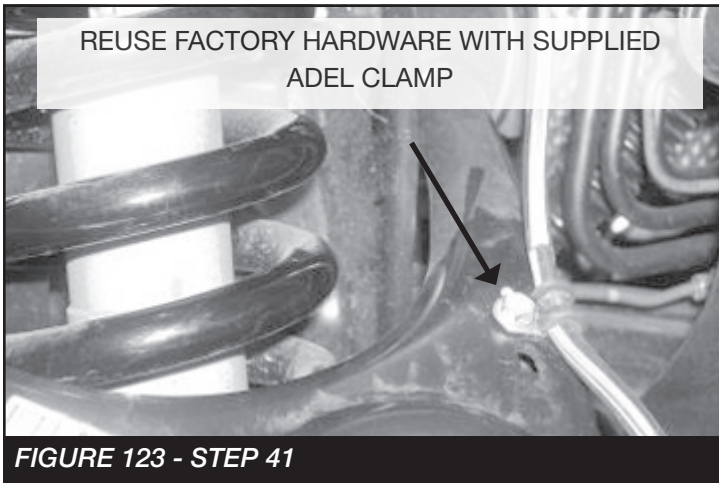


FIGURE 122 - STEP 41



REUSE FACTORY HARDWARE WITH SUPPLIED  
ADEL CLAMP

FIGURE 123 - STEP 41

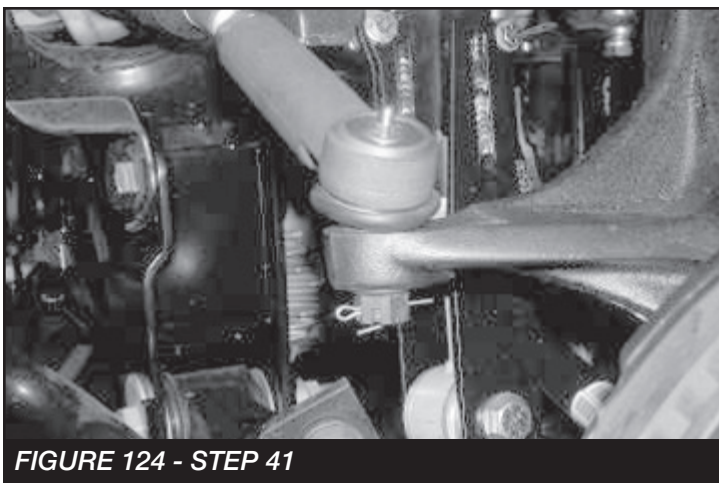


FIGURE 124 - STEP 41

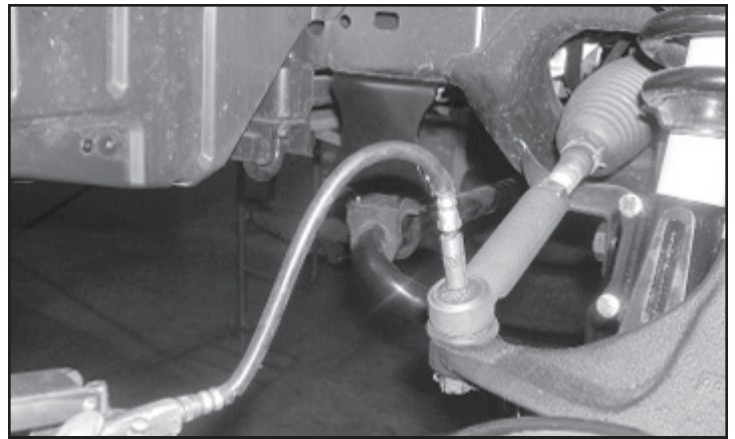


FIGURE 125 - STEP 41

42. Locate FT70120 Sway Bar Drop Brackets & the factory sway bar, with hardware and end links attached. Also locate the supplied 7/16" x 1-1/4" hardware. Position the new drop bracket on the frame and attach with the factory hardware. Install the sway bar to the new drop brackets with the supplied 3/8" hardware (make sure to use the SAE & USS Flat washers). Torque the 7/16" hardware to 50 ft-lbs, and the factory sway bar bracket bolts to 50 ft-lbs. **SEE FIGURES 126-129**

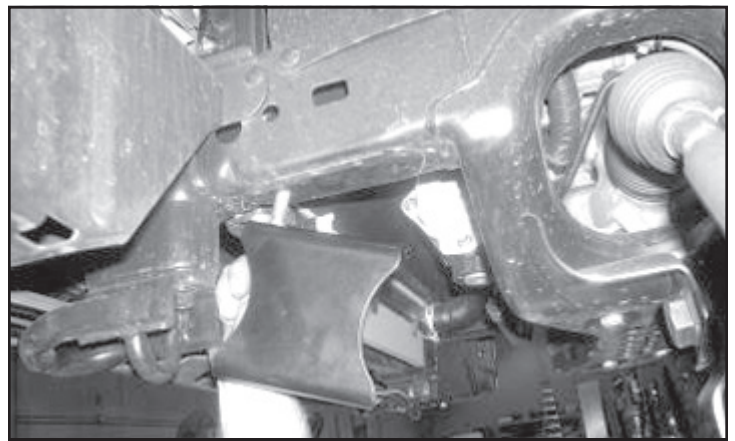


FIGURE 126 - STEP 42

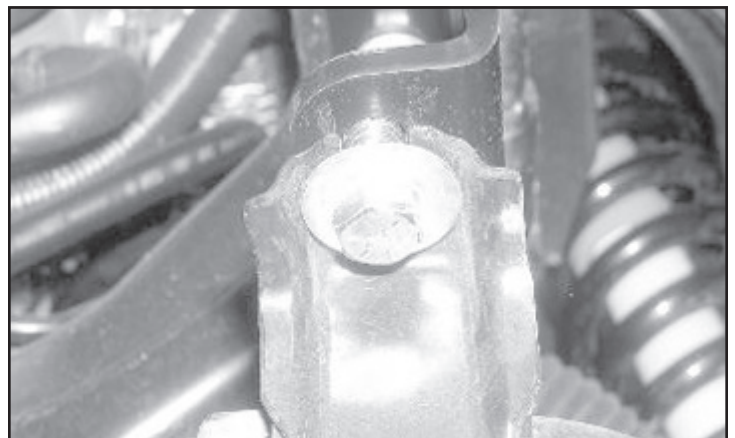


FIGURE 127 - STEP 42



FIGURE 128 - STEP 42



FIGURE 129 - STEP 42

43. Locate the FT70121 Impact Strut mounts **(07-15 MODELS ONLY)** and the supplied  $\frac{1}{2}$ " x  $5\frac{1}{4}$ " &  $\frac{7}{16}$ " x  $3\frac{1}{2}$ ". Support the crossmember and remove the two bolts from one side at a time. Once the factory bolts are removed, drill the holes out to  $\frac{1}{2}$ ". Locate the FT1599-2-5 spacers and install with the new bracket on the back of the crossmember with the  $\frac{1}{2}$ " hardware as shown in the photo. Leave loose. Locate the  $\frac{7}{16}$ " x  $3\frac{1}{2}$ " from the bottom of the bracket up through the crossmember. Torque to  $\frac{7}{16}$ " hardware to \*\* 55 ft-lbs & the  $\frac{1}{2}$ " to 75 ft-lbs. **SEE FIGURES 130-137**

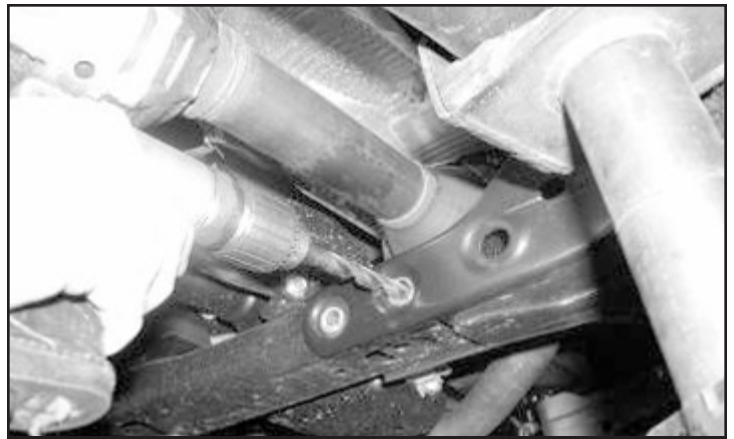


FIGURE 130 - STEP 43



FIGURE 131 - STEP 43



FIGURE 132 - STEP 43



FIGURE 133 - STEP 43



FIGURE 134 - STEP 43



FIGURE 135 - STEP 43



FIGURE 136 - STEP 43

44. Locate FT20599BK Impact strut tubes and FT1044 Bushings. Install the bushings into the strut tubes. Attach the strut tubes to the rear Fabtech crossmember then to the strut brackets on the transmission crossmember with the supplied 7/16" x 3 1/2" bolts and hardware. Torque to 50 ft-lbs. **SEE FIGURE 137**



FIGURE 137 - STEP 44

45. Locate the factory body mount in the back of the wheel well. Mark and cut as shown in photos. Weld in the new FT70196 gussets allow to cool then paint all areas. **SEE FIGURES 138-142**



FIGURE 138 - STEP 45



FIGURE 139 - STEP 45

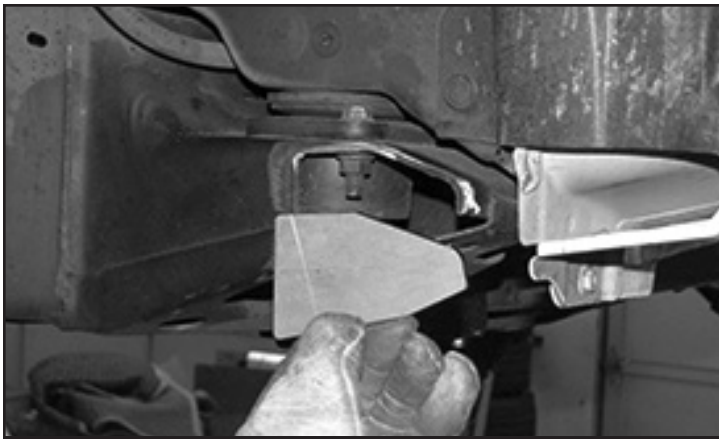


FIGURE 140 - STEP 45



FIGURE 141 - STEP 45



FIGURE 142 - STEP 45

46. Reinstall the front wheels and tires and torque to the wheel manufactures specs. Turn wheels left to right to check for proper clearance between brake lines / ABS Lines to tires and wheels with vehicle hanging and on the ground. Reroute lines as required for clearance.

### ***Rear Suspension Instructions:***

47. Jack up the rear end of the vehicle and support the frame rails with jack stands. Supporting the rear differential remove and discard the rear shocks, save hardware.
48. Disconnect the ABS lines, Brake lines, & E-Brake Cables from the differential. Save ALL the hardware.  
**SEE FIGURES 143-146**

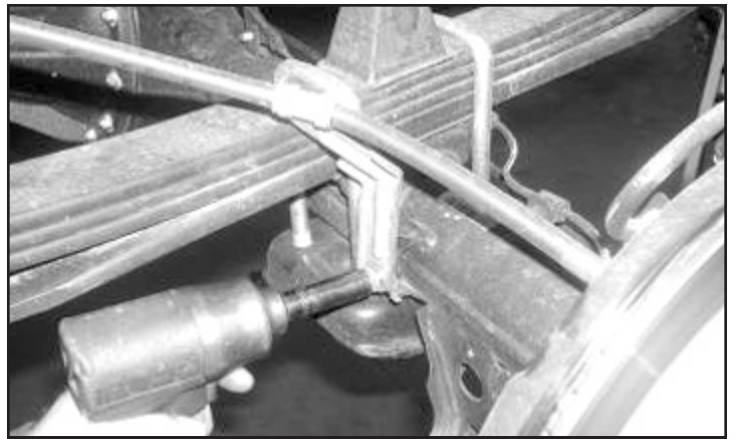


FIGURE 143 - STEP 48



FIGURE 144 - STEP 48

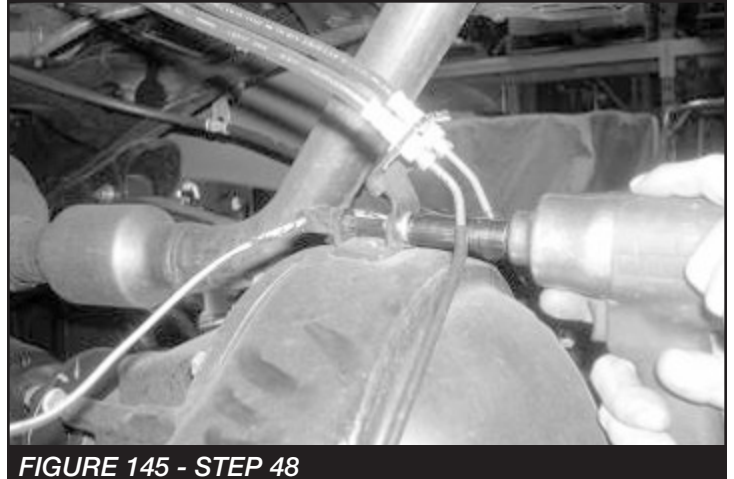


FIGURE 145 - STEP 48



FIGURE 146 - STEP 48

49. Supporting the rear differential remove and discard the factory u- bolts and blocks. Lower the axle down slowly. Use care not to over extend the brake hose.
50. Locate and install the rear lift blocks with the provided short center pin on the bottom of the block, to the axle. The short end of the block should face to the front of the vehicle. (The Block Is Marked Front.) Using the provided U bolts, nuts, and washers align axle, lift blocks, stock bump stop, and springs and torque to U Bolts to 90 ft-lbs. **SEE FIGURES 147-149**



**FIGURE 147 - STEP 50**

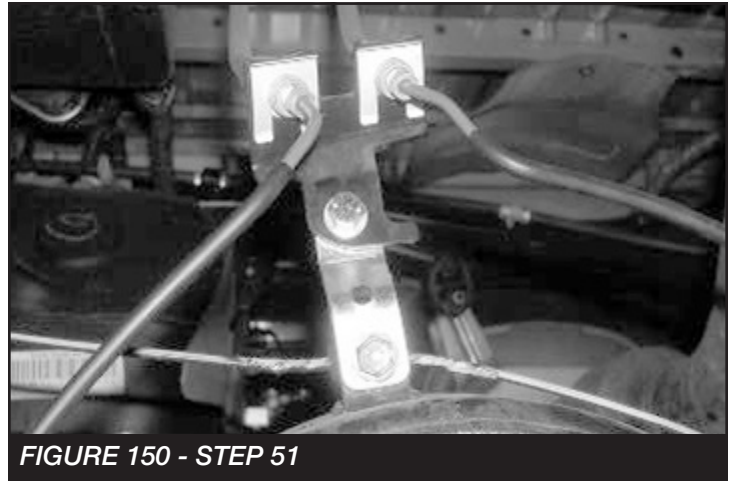


**FIGURE 148 - STEP 50**



**FIGURE 149 - STEP 50**

51. Locate FT70072 brake line bracket & attach to the factory perch using the factory hardware. Attach the factory bracket to the new drop bracket using the supplied 5/16" x 1 1/4" bolt, nut, & washer. Re-attach the brake lines to the axle with the original hardware with the factory clips / brackets turned upside down so the brake line is raised from its original position. **SEE FIGURES 150-153**



**FIGURE 150 - STEP 51**

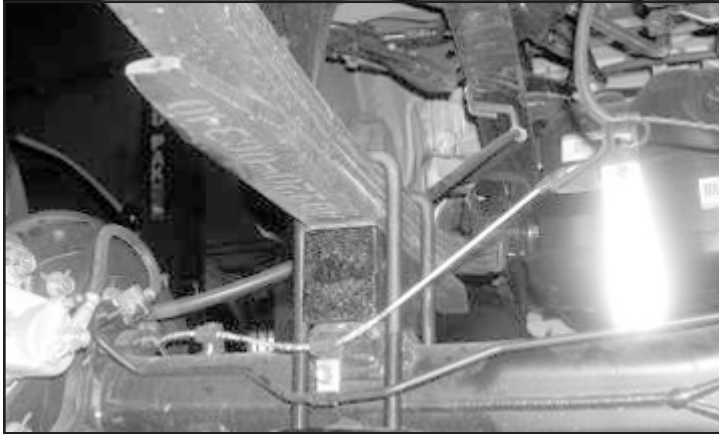


**FIGURE 151 - STEP 51**



**FIGURE 152 - STEP 51**

52. Locate FT70033 ABS line bracket. Attach it to the factory ABS Perch using the factory hardware. Attach the factory ABS bracket to the new bracket using the supplied 5/16" x 1 1/4" bolt, nut, & washers. Remove some of the slack in the ABS line on the outside of the leaf spring by moving the ABS line on the mounts so the line has slack on the inside of the spring. **SEE FIGURES 153-154**



**FIGURE 153 - STEP 52**



**FIGURE 154 - STEP 52**

53. Locate the two remaining FT70072 brackets and attach to the axle with the factory hardware where the factory E-Brake Cable Bracket was attached. Use the supplied 5/16" hardware to attach the factory bracket to the new bracket. **SEE FIGURES 155-156**



**FIGURE 155 - STEP 53**



**FIGURE 156 - STEP 53**

54. Locate FT70075 Carrier Bearing Drop Spacer. Remove the factory hardware from the carrier bearing mount and save. Insert the drop spacer between the carrier bearing and the factory mount & attach with the factory hardware. Use the supplied thread locking compound and torque to 40 ft-lbs. **SEE FIGURES 157-160**



**FIGURE 157 - STEP 54**



**FIGURE 158 - STEP 54**



FIGURE 159 - STEP 54



FIGURE 160 - STEP 54

55. Install the new Fabtech shocks FTS7189 (not included with the kit) with the hardware and supplied shock sleeves & bushings that were provided in the FTS26021BK kit (Do not use the bushings & sleeves provided with the shocks). Torque upper and lower bolts to 53 ft-lbs.
56. Install tires and wheels and torque lug nuts to wheel manufacturer's specifications. Turn front tires left to right and check for appropriate tire clearance. **Note - Some oversized tires may require trimming of the front bumper & valance.**
57. Check front end alignment and set to factory specifications. Readjust headlights.
58. Recheck all bolts for proper torque.
59. Recheck brake hoses, ABS wires and suspension parts for proper tire clearance while turning tires fully left to right.
60. Check the fluid in the front and rear differential and fill if needed with factory specification differential oil. **Note - some differentials may expel fluid after filling and driving. This can be normal in resetting the fluid level with the new position of the differential/s.**
61. Install Driver Warning Decal. Complete product registration card and mail to Fabtech in order to receive future safety and technical bulletins on this suspension.
62. Have vehicle properly aligned to factory specs.

Vehicles that will receive oversized tires should check ball joints, uniballs and all steering components every 2500-5000 miles for wear and replace as required.

**RETORQUE ALL NUTS, BOLTS AND LUGS AFTER 50 MILES AND PERIODICALLY THEREAFTER.**

For technical assistance call: **909-597-7800**

## - Product Warranty and Warnings -

Fabtech provides a Limited Lifetime Warranty to the original retail purchaser who owns the vehicle, on which the product was originally installed, for defects in workmanship and materials.

The Limited Lifetime Warranty excludes the following Fabtech items; bushings, bump stops, ball joints, tie rod ends, limiting straps, cross shafts, heim joints and driveshafts. These parts are subject to wear and are not considered defective when worn. They are warranted for 60 days from the date of purchase for defects in workmanship.

Dirt Logic and Performance Coilover take apart shocks are considered a serviceable shock with a one year warranty on leakage only. Service seal kits are available separately for future maintenance. All other shocks are covered under our Limited Lifetime Warranty.

Fabtech does not warrant any product for finish, alterations, modifications and/or installation contrary to Fabtech's instructions. Alterations to the finish of the parts including but not limited to painting, powder coating, plating and/or welding will void all warranties. Some finish damage may occur to parts during shipping, which is considered normal and is not covered under warranty.

Fabtech products are not designed nor intended to be installed on vehicles used in race applications or for racing purposes or for similar activities. (A "RACE" is defined as any contest between two or more vehicles, or any contest of one or more vehicle against the clock, whether or not such contest is for a prize). This warranty does not include coverage for police or taxi vehicles, race vehicles, or vehicles used for government or commercial purposes. Also excluded from this warranty are sales outside of the United States of America.

Installation of most suspension products will raise the center of gravity of the vehicle and will cause the vehicle to handle differently than stock. It may increase the vehicle's susceptibility to a rollover, on road and off road, at all speeds. Extreme care should be taken to operate the vehicle safely at all times to prevent rollover or loss of control resulting in serious injury or death. Fabtech front end Desert Guards may impair the deployment or operation of vehicles equipped with supplemental restraining systems/air bag systems and should not be installed if the vehicle is equipped as so.

Fabtech makes every effort to ensure suspension product compatibility with all vehicles listed on the website, but due to unknown auto manufacturer's production changes and/or inconsistencies by the auto manufacturer, Fabtech cannot be responsible for 100% compatibility, including the fitment of tire and wheel sizes listed. The Tire and Wheel sizes listed in Fabtech's website are only a guideline for street driving with noted fender trimming. Fabtech is not responsible for damages to the vehicle's body or tires. Fabtech is not responsible for premature wear of factory components due to the installation of oversized tires and wheels.

Fabtech's obligation under this warranty is limited to the repair or replacement, at Fabtech option, of the defective product only. All costs of removal, installation or re-installation, freight charges, incidental or consequential damages are expressly excluded from this warranty. Fabtech is not responsible for damages and/or warranty of other vehicle parts related or non related to the installed Fabtech product. This warranty is expressly in lieu of all other warranties expressed or implied. This warranty shall not apply to any product that has been subject to accident, negligence, alteration, abuse or misuse as determined by Fabtech.

Fabtech suspension components must be installed as a complete system including shocks as shown on our website. All warranties will become void if Fabtech parts are combined and/or substituted with other aftermarket suspension products. Combination and/or substitution of other aftermarket suspension parts may cause premature wear and/or product failure resulting in an accident causing injury or death. Fabtech does not warrant products not manufactured by Fabtech.

Depending on the condition of the factory suspension components retained after the installation of a Fabtech suspension not all vehicles may have the same ride stance front to rear as described in the website. The blue color of suspension components shown in all Fabtech photographs are for display purposes only. Majority of all Fabtech components will be black specifically where noted with part numbers ending in BK.

Installation of Fabtech product may void the vehicles factory warranty; it is the consumer's responsibility to check with their local vehicle's dealer for warranty disposition before the installation of the product. Some state laws may prohibit modification of suspension to a vehicle in whole or in part. It is the responsibility of the installer and consumer to consult local laws prior to the installation of any Fabtech suspension product to comply with such written laws.

It is the responsibility of the distributor and/or the retailer to review all warranties and warnings of Fabtech products with the consumer prior to purchase.

Fabtech reserves the right to super cede, discontinue, change the design, finish, part number and/or application of parts when deemed necessary without written notice. Fabtech is not responsible for misprints or typographical errors within the website or price sheet. For the most recent Product Warranty and Warnings visit our website [www.fabtechmotorsports.com](http://www.fabtechmotorsports.com)