INSTALLATION INSTRUCTIONS

2020-2024 GM 2500/3500HD 4WD/2WD
6” RTS SUSPENSION KIT
FTS21277

Fabtech Motorsports | 4331 Eucalyptus Ave. Chino, CA 91710
Tech Line: 909-597-7800 | **Fax:** 909-597-7185 | **Web:** www.fabtechmotorsports.com

	K1159	6” RTS SYSTEM W/ PERF SHOCKS
1	FTS21277	COMPONENT BOX 1
1	FTS21278	COMPONENT BOX 2
1	FTS21279	COMPONENT BOX 3 - 2500HD
2	FTS7358	FRONT PERFORMANCE SHOCK
2	FTS7240	REAR PERFORMANCE SHOCK

	K1159DL	6” RTS SYSTEM W/ DLSS SHOCKS
1	FTS21277	COMPONENT BOX 1
1	FTS21278	COMPONENT BOX 2
1	FTS21279	COMPONENT BOX 3 - 2500HD
2	FTS811552	FRONT 2.25” DIRT LOGIC N/R SHOCK
2	FTS811562	REAR 2.25” DIRT LOGIC N/R SHOCK

	K1159M	6” RTS SYSTEM W/ STEALTH SHOCKS
1	FTS21277	COMPONENT BOX 1
1	FTS21278	COMPONENT BOX 2
1	FTS21279	COMPONENT BOX 3 - 2500HD
2	FTS6358	FRONT STEALTH SHOCK
2	FTS6240	REAR STEALTH SHOCK

	K1160DL	6” RTS SYSTEM W/ DLSS RESI SHOCKS
1	FTS21277	COMPONENT BOX 1
1	FTS21278	COMPONENT BOX 2
1	FTS21279	COMPONENT BOX 3 - 2500HD
1	FTS801552D	FRONT 2.25” DIRT LOGIC W/RESI SHOCK (DRIVER)
1	FTS801552P	FRONT 2.25” DIRT LOGIC W/RESI SHOCK (PASS)
2	FTS811562	REAR 2.25” DIRT LOGIC N/R SHOCK

	K1161	6” RTS SYSTEM W/ PERF SHOCKS
1	FTS21277	COMPONENT BOX 1
1	FTS21278	COMPONENT BOX 2
1	FTS21280	COMPONENT BOX 3 - 3500HD
2	FTS7358	FRONT PERFORMANCE SHOCK
2	FTS7240	REAR PERFORMANCE SHOCK

	K1161DL	6” RTS SYSTEM W/ DLSS SHOCKS
1	FTS21277	COMPONENT BOX 1
1	FTS21278	COMPONENT BOX 2
1	FTS21280	COMPONENT BOX 3 - 3500HD
2	FTS811552	FRONT 2.25” DIRT LOGIC N/R SHOCK
2	FTS811562	REAR 2.25” DIRT LOGIC N/R SHOCK

	K1161M	6” RTS SYSTEM W/ STEALTH SHOCKS
1	FTS21277	COMPONENT BOX 1
1	FTS21278	COMPONENT BOX 2
1	FTS21280	COMPONENT BOX 3 - 3500HD
2	FTS6358	FRONT STEALTH SHOCK
2	FTS6240	REAR STEALTH SHOCK

	K1162DL	6” RTS SYSTEM W/ DLSS RESI SHOCKS
1	FTS21277	COMPONENT BOX 1
1	FTS21278	COMPONENT BOX 2
1	FTS21280	COMPONENT BOX 3 - 3500HD
1	FTS801552D	FRONT 2.25” DIRT LOGIC W/RESI SHOCK (DRIVER)
1	FTS801552P	FRONT 2.25” DIRT LOGIC W/RESI SHOCK (PASS)
2	FTS811562	REAR 2.25” DIRT LOGIC N/R SHOCK

	FTS21277	COMPONENT BOX 1
2	FT20277	OUTER TIE ROD
1	FT20777	DIFF BRACKET (REAR)
1	FT20913D	6” HD SPINDLE (DRIVER)
1	FT20913P	6” HD SPINDLE (PASS)
2	FT20922	CV AXLE SPACER
1	FT20925	DIFF BRACKET (DRIVER)
1	FT20926	DIFF BRACKET (PASSENGER)

	FTS21278	COMPONENT BOX 2
1	FT20911	FRONT CROSSMEMBER
1	FT20912	REAR CROSSMEMBER
1	FT20914	HARDWARE SUBASSEMBLY
1	FT20928	DIFF SKID PLATE
1	FT20522	8 X 180 1/4” WHEEL SPACER

	FTS21279	COMPONENT BOX 3 - 2500HD
1	FT20916	RTS BRACKET (DRIVER)
1	FT20917	RTS BRACKET (PASS)
2	FT20920	RTS BUSHING (FRONT)
2	FT20921	RTS BUSHING (REAR)
1	FT20923	BUMP STOP W/ SWAY BAR MOUNT (DRIVER)
1	FT20924	BUMP STOP W/ SWAY BAR MOUNT (PASSENGER)
1	FT20938	HARDWARE KIT
2	FT20941	REAR BUMPSTOP BRACKET
2	FT20955	RTS BUSHING SMALL
4	FT755U	U-BOLT SQ 3/4-16 X 14 X 3.100
2	FTBK3	3” BLOCK

	FTS21280	COMPONENT BOX 3 - 3500HD
1	FT20916	RTS BRACKET (DRIVER)
1	FT20917	RTS BRACKET (PASS)
2	FT20920	RTS BUSHING (FRONT)
2	FT20921	RTS BUSHING (REAR)
1	FT20923	BUMP STOP W/ SWAY BAR MOUNT (DRIVER)
1	FT20924	BUMP STOP W/ SWAY BAR MOUNT (PASSENGER)
1	FT20938	HARDWARE KIT
2	FT20941	REAR BUMPSTOP BRACKET
2	FT20955	RTS BUSHING SMALL
4	FT753U	U-BOLT SQ 3/4-16 X 17 X 3.100
2	FTBK4	4” BLOCK

NOTE: TO ORDER WEARABLE REPLACEMENT COMPONENTS DO NOT USE PART NUMBERS SHOWN ON THIS INSTRUCTION SHEET. GO TO FABTECH WEBSITE AND LOOK UP WEARABLE REPLACEMENT PARTS TO FIND THE PROPER PART NUMBER TO ORDER.

	FT20938 - HARDWARE KIT	LOCATION
	BAG 1	
2	M12-1.75 X 40 MM HEX BOLT	DRIVER DIFF
2	M12 SPLIT LOCK WASHER	
2	M12 WASHER	
3	1/2-13 X 1-1/4" HEX BOLT	
2	1/2-13 X 1-1/2 HEX BOLT	
1	1/2-13 X 2" HEX BOLT	
2	1/2-13 X 3-1/2 HEX BOLT	DIFF MOUNT
1	1/2-13 X 3-3/4" HEX BOLT	
19	1/2 SAE WASHER	
8	1/2-13 C-LOCK NUT	
2	M18-2.5 X 120 MM HEX BOLT	CONTROL ARM (FRT)
2	M18-2.5 X 150 MM HEX BOLT	CONTROL ARM (REAR)
8	M18 FLAT WASHER	
4	M18-2.5 C-LOCK NUT	
1	THREAD LOCKING COMPOUND 1 MIL	
	BAG 2	
2	1/2-13 X 2-3/4 BUTTONHEAD BOLT	LWR SHOCK
2	1/2-13 C-LOCK NUT	
4	1/2" SAE WASHER	
8	7/16-14 X 1-1/2" HEX BOLT	
16	7/16 SAE WASHER	
8	7/16-14 C-LOCK NUT	
2	M12-1.75 X 60MM HEX BOLT	
4	12MM FLAT WASHER	
2	M12-1.75 C-LOCK NUT	
2	9/16-12 X 7-3/4" HEX BOLT	
4	9/16 SAE WASHER	
2	9/16-12 C-LOCK NUT	
2	5/8-11 X 6-3/4" HEX BOLT	
4	5/8" SAE WASHER	
2	5/8-11 C-LOCK NUT	
2	5/16-18 X 3/4" HEX BOLT	
4	5/16 WASHER	
2	5/16-18 C-LOCK NUT	
6	1/4-20 X 1/2" HEX BOLT	BRAKE LINE (FRONT)
6	1/4 SAE WASHER	
6	1/4 SPLIT LOCK WASHER	
4	NEOPRENE CLAMP	
10	PLASTIC CABLE TIE	

	FT20938 - HARDWARE KIT	LOCATION
	BAG 3	
2	5/16-18 X 1" HEX BOLT	
4	5/16 SAE WASHER	
2	5/16-18 C-LOCK NUT	
8	3/4-16 NYLOCK NUT	UBOLTS
8	3/4" SAE WASHER	UBOLTS
2	M6-1.0 X 40MM HEX BOLT	
2	M6 FLAT WASHER	
2	1/2-13 X 1-1/2" HEX BOLT	
2	1/2" SAE WASHER	
2	1/2" LOCK WASHER	

	FT20914	HARDWARE SUBASSEMBLY
2	FT1020	BUSHING
2	FT120	LOWER SHOCK WASHER 1.000 X .563 X .310
1	FT181	SLEEVE .625 X .500 X 2.375
1	FT20520	FRONT BRAKELINE BRACKET (DRIVER)
1	FT20521	FRONT BRAKELINE BRACKET (PASS)
1	FT20918	BRAKELINE BRACKET
1	FT20919	REAR DIFF SPACER
2	FT20942	NUT TAB
2	FT20956	REAR BUMPSTOP WASHER
1	FT21277i	INSTRUCTIONS
1	FT30182	NUT TAB
2	FT629	SLEEVE
1	FTAS12	STICKER FT BLUE 10X4 DIE CUT
1	FTAS16	DRIVER WARNING DECAL
1	FTREGCARD	REGISTRATION CARD

Prior to installing this kit, with the vehicle on level ground. Measure the height of your vehicle. This measurement can be recorded from the center of the wheel, straight up to the top of the inner fender lip. Record the measurements below.

LF:_____ **RF:**_____

LR:_____ **RR:**_____

- TOOL LIST -

Required Tools (Not Included)

- Basic Hand Tools
- Floor Jack
- Jack Stands
- Torsion Key Removal Tool
- Drill w/ Assorted Drill Bits.
- Assorted Metric and S.A.E sockets, and Allen wrenches
- Torque Wrench
- Die Grinder w/ Cutoff Wheel or Sawzall

- PRE-INSTALLATION NOTES -

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

READ THIS BEFORE YOU BEGIN INSTALLATION -

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.

This suspension must be installed with Fabtech shock absorbers.

Use the provided thread locking compound on all hardware.

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 wheel and tire.
- Does not fit standard cab models.
- Diesel models only.
- Vehicles equipped with 2 piece rear driveshaft require FTS21292

Recommend Tires and Wheels:

- Use 37/12.50R18 tire w/ 18x9 wheels w/ 5-3/4” BS w/ minor trimming
- Use 37/12.50R20 tire w/ 20x9 wheels w/ 5-3/4” BS w/ minor trimming
- Use 37/12.50R22 tire w/ 22x9 wheels w/ 5-3/4” BS w/ minor trimming

- INSTRUCTIONS -

FRONT SUSPENSION

- Measure the vehicles height at each corner and record on page 4.

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. Locate the torsion bar adjusting cams and threaded bolts. Measure exposed threads of torsion bar adjusting bolts and record for reinstallation. Mark torsion bars indicating driver and passenger. Using a torsion bar removal tool unload the torsion bars and remove the cross member and bars. Retain the hardware for reinstallation. NOTE- Do not attempt to unload or remove torsion bars without the proper torsion bar tool. Torsion Bars are under extreme spring load.

3. Remove the sway bar link ends from the sway bar and lower control arm.

4. Remove and discard front factory differential skid plate and splash shield.

5. Disconnect the tie rod ends from the steering knuckle by striking the knuckle to dislodge the tie rod end. **SEE FIGURE 1**

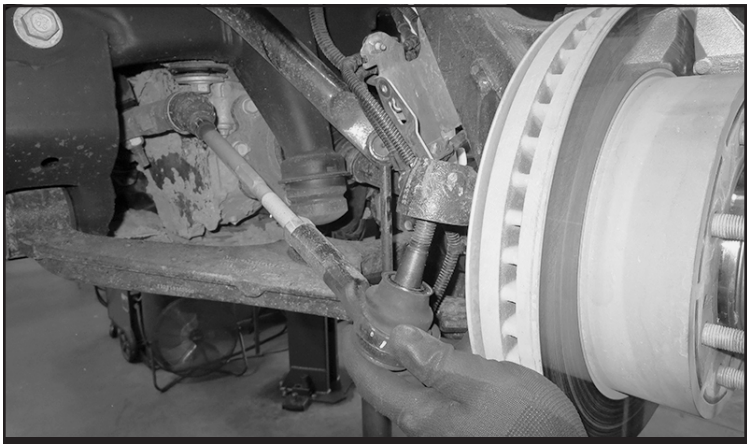


FIGURE 1 - STEP 5

6. Disconnect the brake hose bracket from the back of the steering knuckle. Remove the bracket from the hoses and discard. Disconnect the brakeline bracket from the upper control arm bumpstop pad. Unbolt the wheel speed sensor from the hub/control arm. Save all hardware. **SEE FIGURES 2-3**

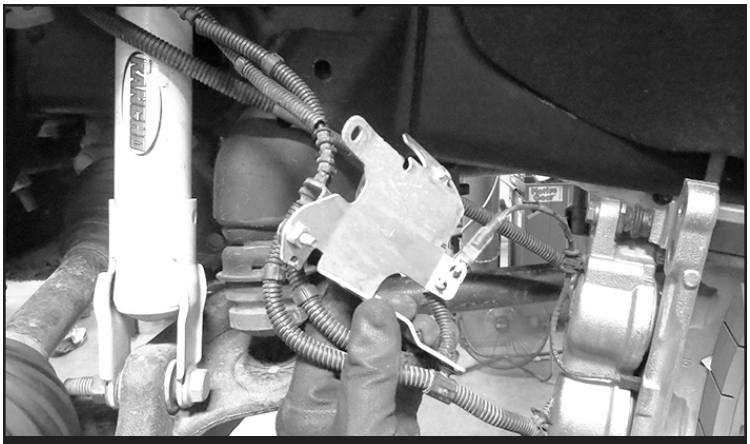


FIGURE 2 - STEP 6



FIGURE 3 - STEP 6

7. Remove the caliper from the rotor and place above the upper control arm during this portion of the installation. Remove rotor set screw then remove the brake rotor from the knuckle. **SEE FIGURES 4-5**



FIGURE 4 - STEP 7

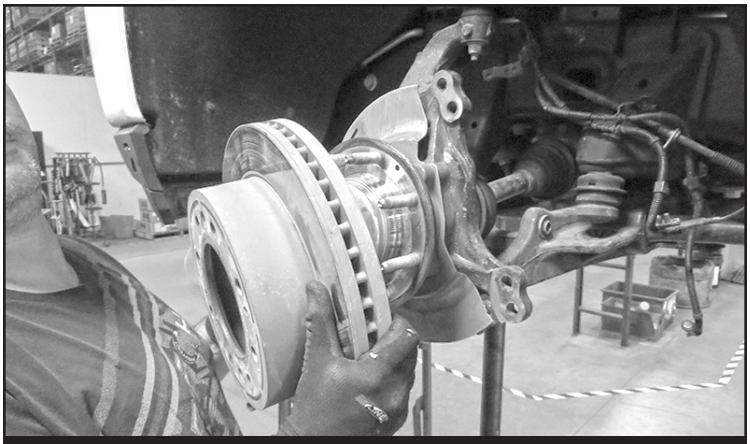


FIGURE 5 - STEP 7

8. Remove axle bearing cover. Then remove the axle nut. Save all parts and hardware for reinstallation. **SEE FIGURE 6**



FIGURE 6 - STEP 8

9. Loosen the upper and lower control arm ball joint nuts. Disconnect the upper and lower ball joints from the steering knuckle by striking the knuckle with a large hammer next to each ball joint on the knuckle to dislodge the ball joints. Use care not to hit the ball joints. Remove the factory knuckle. Save all hardware. **SEE FIGURE 7-8**

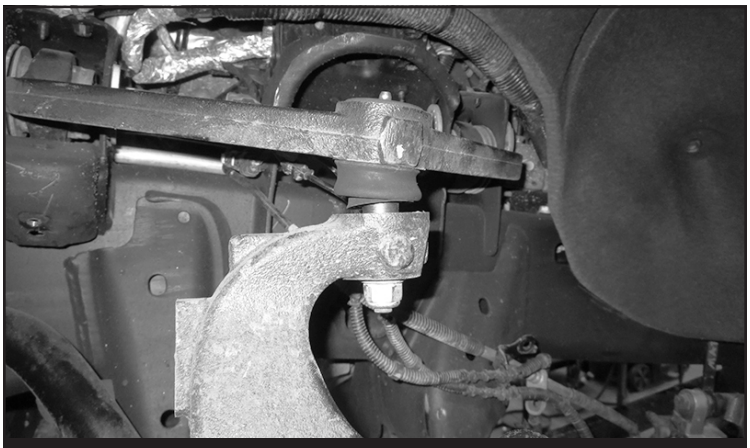


FIGURE 7 - STEP 9



FIGURE 8 - STEP 9

10. Remove and discard the front factory shocks. Save hardware. **SEE FIGURES 9-10**

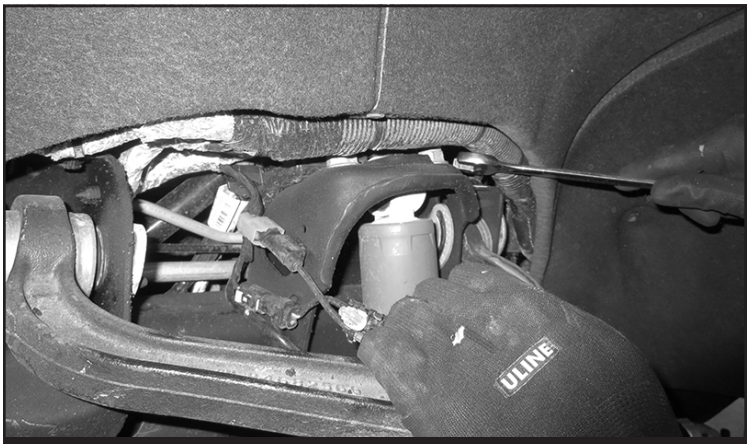


FIGURE 9 - STEP 10

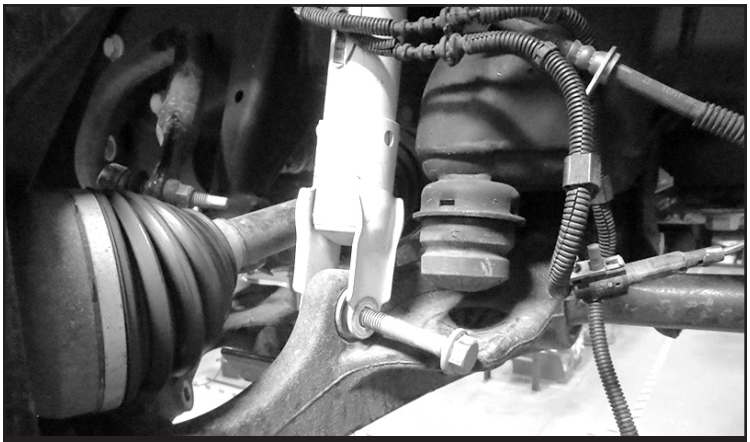


FIGURE 10 - STEP 10

11. Remove the lower control arm from the frame and torsion bar by sliding the control arm forward. Retain the arms and hardware for reinstallation. Then, remove the torsion key & torsion bar from the vehicle. **SEE FIGURES 11-13**



FIGURE 11 - STEP 11

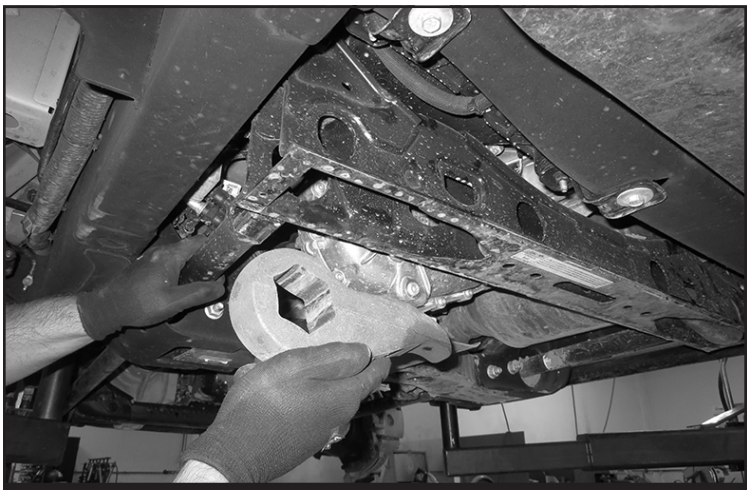


FIGURE 12 - STEP 11

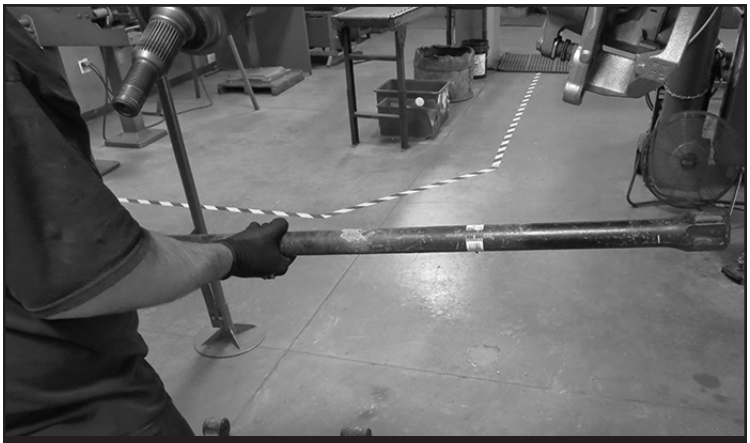


FIGURE 13 - STEP 11

12. Disconnect CV axles from differential housing and remove axle assembly. Save hardware. **SEE FIGURE 14**

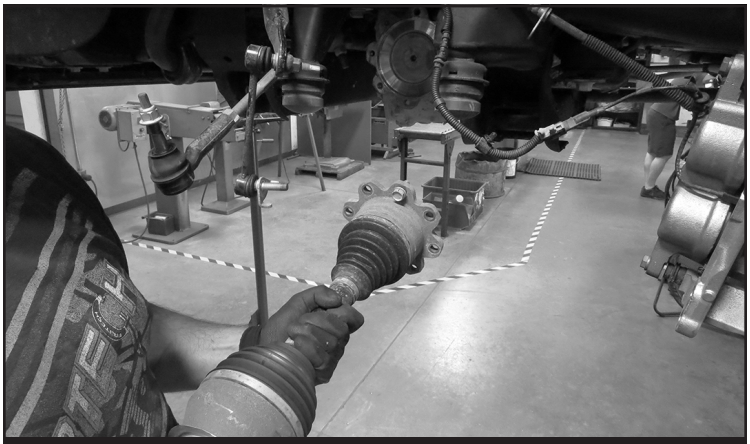


FIGURE 14 - STEP 12

13. Repeat steps on the opposite side.

14. Remove the stock differential rear cross member and discard. **SEE FIGURE 15**



FIGURE 15 - STEP 14

15. Disconnect front drive shaft from differential housing. Retain bolts and u-joint clamps for reinstallation. **SEE FIGURE 16**



FIGURE 16 - STEP 15

16. Disconnect the differential housing electrical connection and vacuum line from differential housing.

17. Remove the differential housing assembly from vehicle. **SEE FIGURE 17**



FIGURE 17 - STEP 17

18. Locate the driver side rear mount on the differential. Using a die grinder, modify the diff like shown in **FIGURES 18-19** grind off 9/16” from the edge of the hole. Next, grind a 5/16” radius in the flat spot just in front of the diff mount. Then, drill out the same diff mount hole using a 1/2” drill bit.

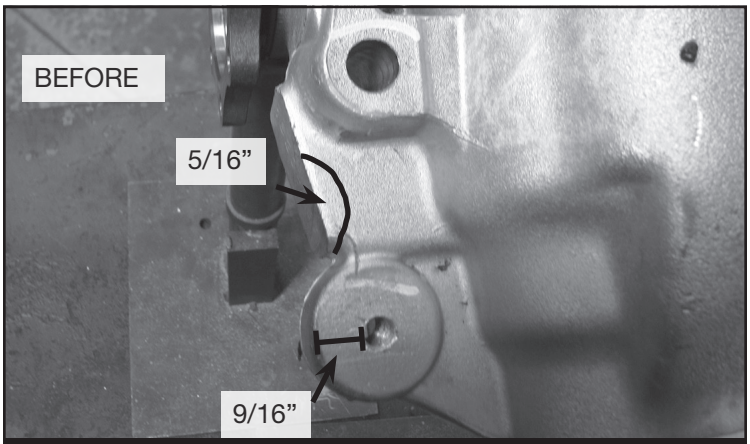


FIGURE 18 - STEP 18

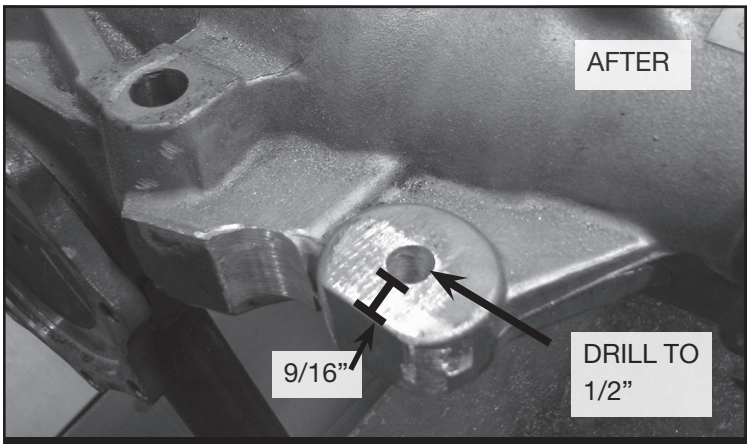


FIGURE 19 - STEP 18

19. Locate the driver side rear lower control arm pocket, measure 1-3/8” from the center of the pivot hole of the pocket and mark a vertical and horizontal line on the pocket. Using a reciprocating saw or cut off wheel cut the pocket on both the front and back side. **SEE FIGURES 20-21**

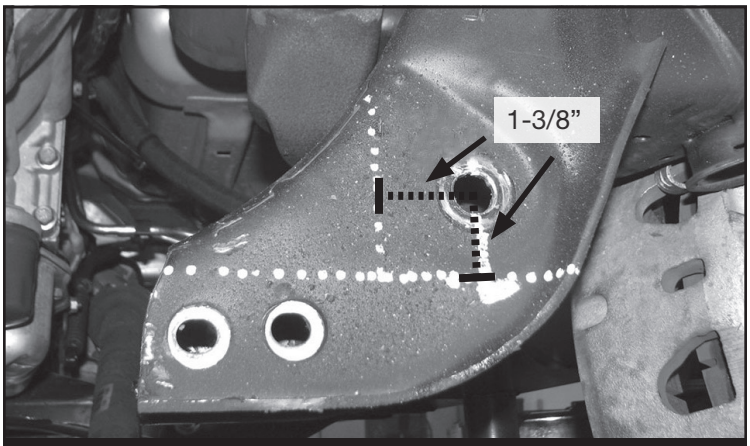


FIGURE 20 - STEP 19

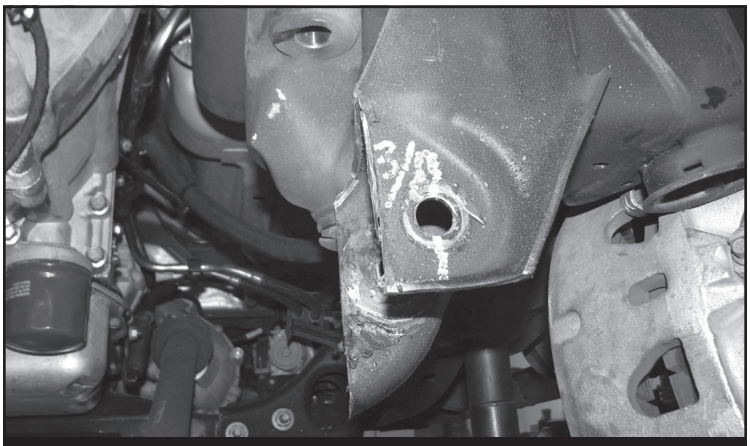


FIGURE 21 - STEP 19

20. Locate the passenger side lower control arm pocket. From the center or the control arm pivot hole, measure 1-3/8” down and make a straight line across on the front side only. Using a sawzall, cut the front portion of the pocket only. **SEE FIGURES 22-23**

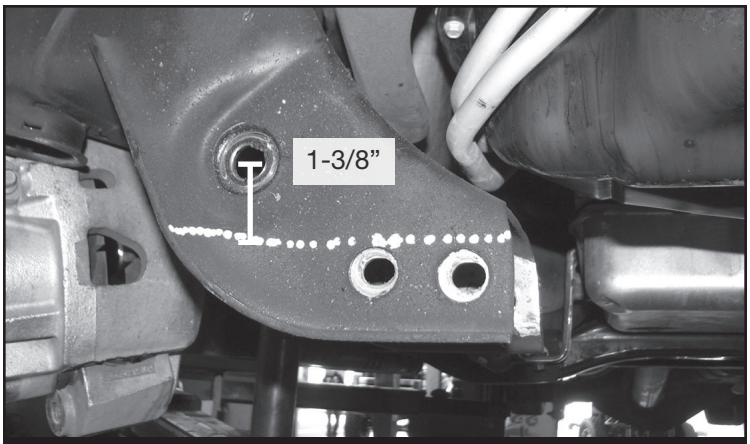


FIGURE 22 - STEP 20

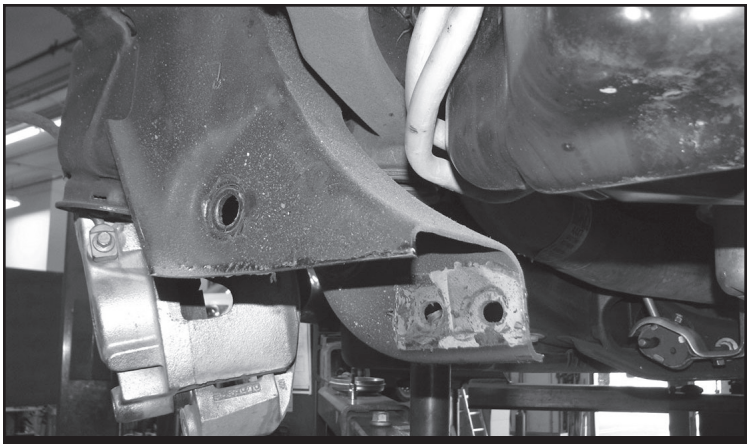


FIGURE 23 - STEP 20

21. Install the new Driver side Diff bracket (FT20925) to the Driver side of the vehicles bottom factory frame mount using two M12-1.75x40mm bolts, lock washers and flat washers. The smaller taper should face the front of the vehicle. Torque to 100 ft-lbs. **SEE FIGURE 24**

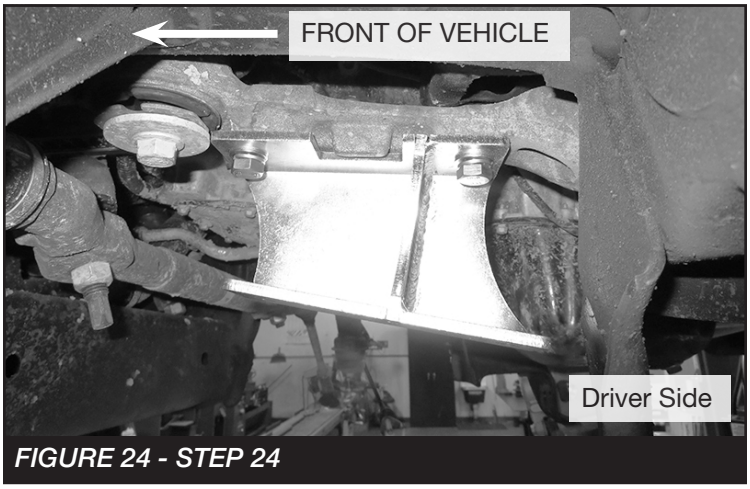


FIGURE 24 - STEP 24

22. Install the Fabtech Pass side Diff bracket (FT20926) to the Passenger side of the vehicles bottom factory frame mount using the factory hardware. Torque to 120 ft-lbs **SEE FIGURE 25**

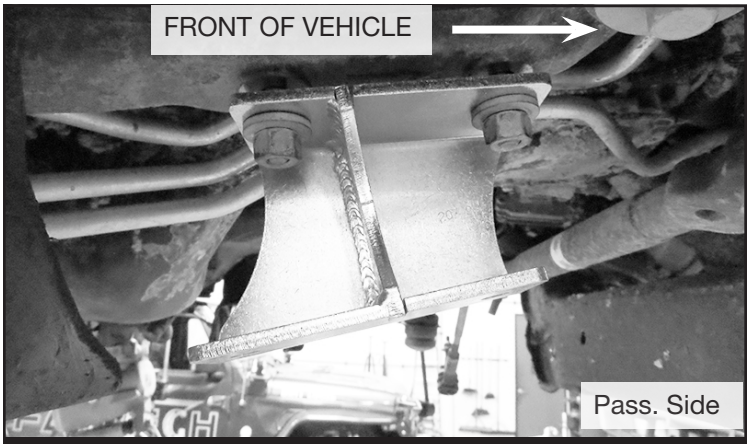


FIGURE 25 - STEP 22

23. Re-install the factory differential using the supplied 1/2" X 3-1/2" bolts, nuts and washers on the driver side and the 1/2" X 1-1/2" bolts, nuts and washers on the passenger side. Torque all 1/2" hardware to 106 ft-lbs. **SEE FIGURES 26-27**

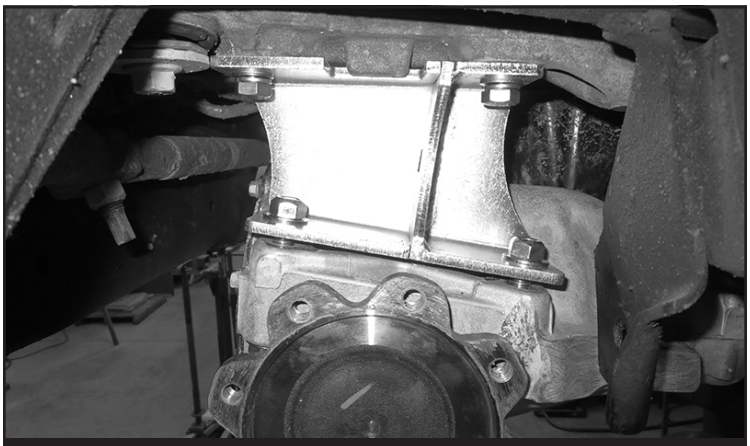


FIGURE 26 - STEP 23



FIGURE 27 - STEP 23

24. Install the new Fabtech rear crossmember (FT20912) using the factory bolts. Leave loose. Next, Insert (2) FT1020 (Bushings) and a FT181 (Sleeve) into FT20777 (Rear diff bracket). Install the FT20777 onto the rear crossmember using the supplied 1/2" X 3-3/4" bolt, nut and washers. Then, install 1/2" X 2" bolt and washer through the FT20777 bracket and the differential using FT30182 (Nut Tab). Leave loose. **NOTE: Trimming of the driver rear pocket made be required to properly install the rear diff bracket. SEE FIGURES 28-29**

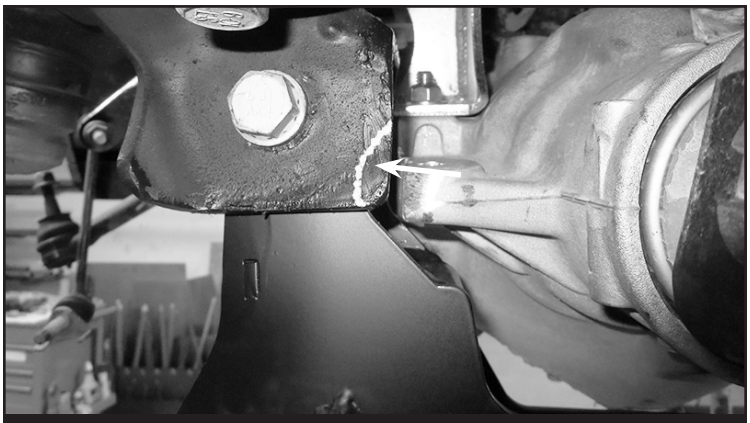


FIGURE 28 - STEP 24

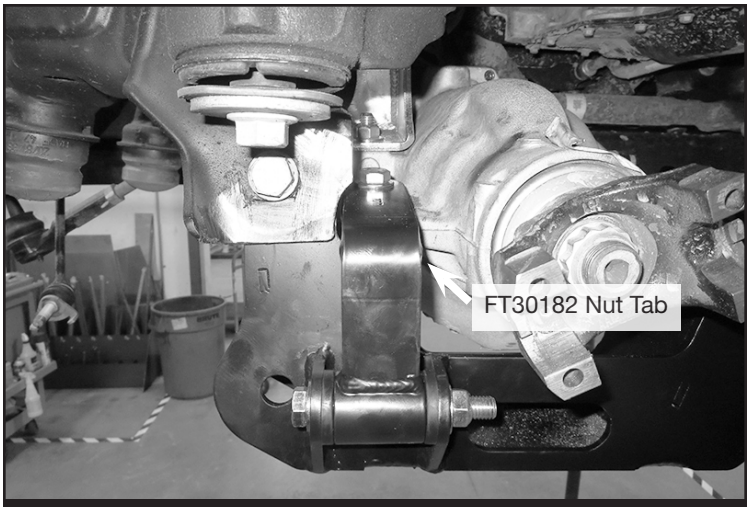


FIGURE 29 - STEP 24

25. Re-connect the front driveshaft to the differential using the factory hardware. Torque to 60 ft-lbs.

26. Install the new Fabtech front crossmember (FT20911) using the factory hardware. Leave loose. **SEE FIGURE 30**



FIGURE 30 - STEP 26

27. Locate the opening on the frame that the torsion bars run through. The front side on both driver and pass sides will need to be ground out 1/2” to avoid contact with the new torsion bar angle. **SEE FIGURES 31-32**

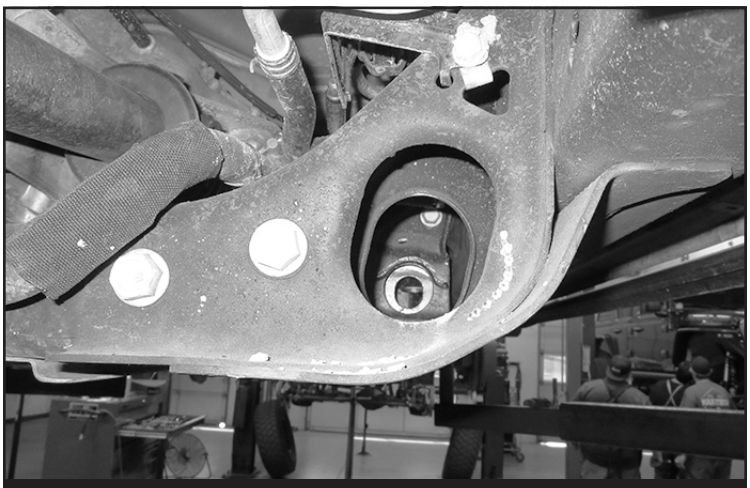


FIGURE 31 - STEP 27



FIGURE 32 - STEP 27

28. Using a ball joint clamp or press. Remove the factory bushings from the lower control arm. **SEE FIGURES 33-34**

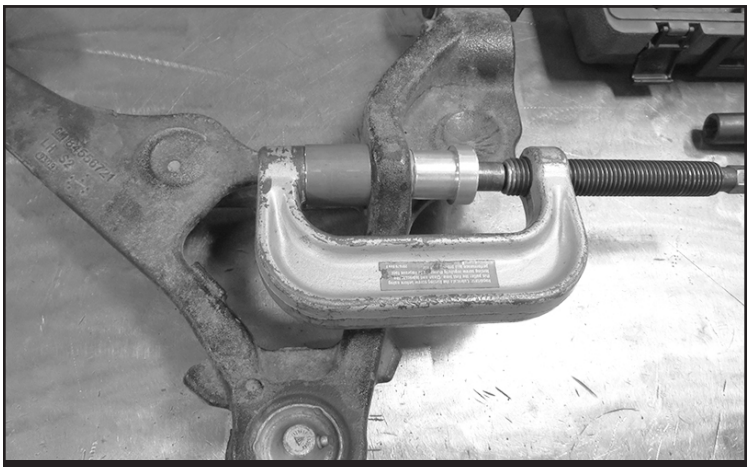


FIGURE 33 - STEP 28



FIGURE 34 - STEP 28

29. Install both lower control arms into the Fabtech crossmember pockets using the supplied M18 X 120mm hardware for the front pivot and M18 X 150mm hardware for the rear pivot. Leave loose. **SEE FIGURE 35**



FIGURE 35 - STEP 29

30. Locate FT20923 (Driver bump stop bracket).Place the FT20923 onto the arm. Lightly install using the supplied M12 x 60mm bolt and FT120 (Spacer) to the existing factory hole on the lower control arm. Line up the bracket with the edge of the factory arm then mark the two holes to drill on the control arm. Remove and drill to 7/16" **SEE FIGURES 36-40**



FIGURE 36 - STEP 30

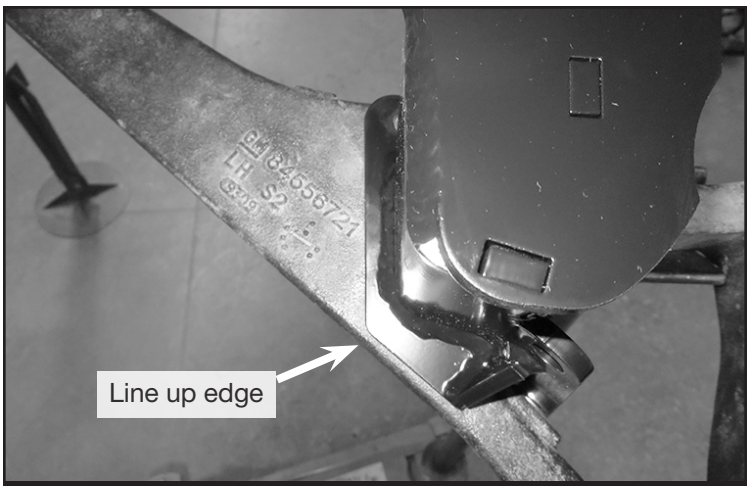


FIGURE 37 - STEP 30

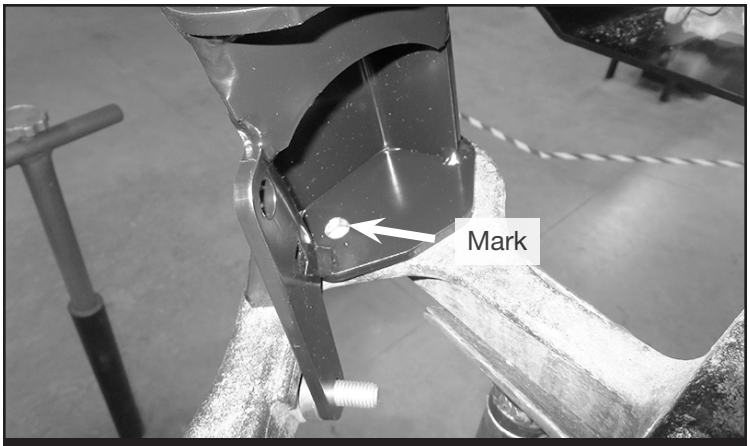


FIGURE 38 - STEP 30

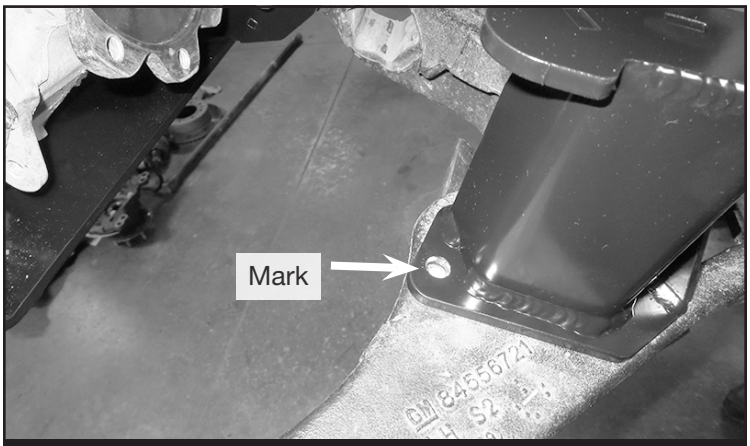


FIGURE 39 - STEP 30



FIGURE 40 - STEP 30

31. Reinstall the bracket to the lower control arm using the 12mm hardware and spacer as well as the supplied 7/16” x 1-1/2” bolts, nuts and washers for the two locations that were drilled. Torque to 54 ft-lbs. **SEE FIGURE 41**



FIGURE 41 - STEP 31

32. Install the large aluminum bushing (FT20920) into the front side of the torsion bar hex on the lower control arm. Then, install the medium size aluminum bushing (FT20921) in the rear side of the hex on the lower control arm. **SEE FIGURE 42**



FIGURE 42 - STEP 32

33. Install the small aluminum bushing (FT20955) into the front side of the control arm where the bushing was removed earlier. **SEE FIGURE 46**



FIGURE 45 - STEP 33

34. Install the new RTS driver side bracket (FT20916) onto the lower control arm using the supplied 9/16” x 7-3/4” bolt, nut and washers and 5/8” x 6-3/4” bolt, nut and washers. Leave Loose. **SEE FIGURES 43-44**

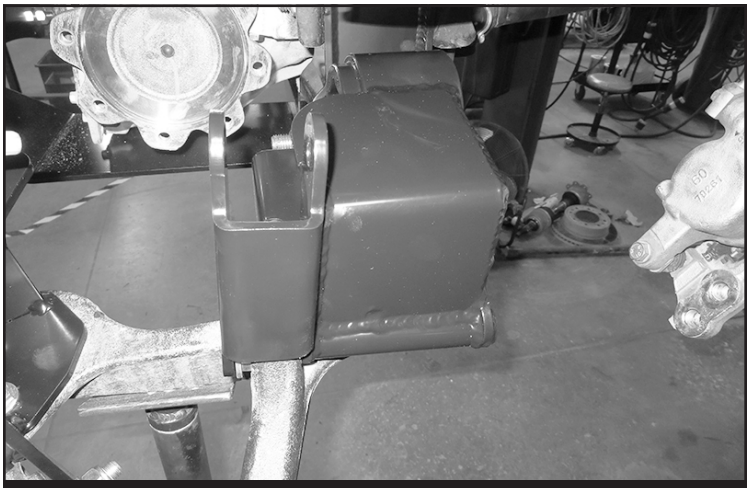


FIGURE 43 - STEP 34

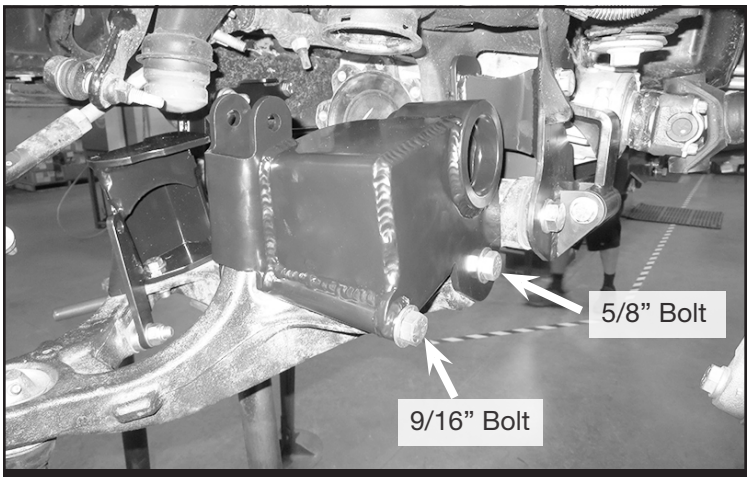


FIGURE 44 - STEP 34

35. Repeat steps on the opposite side.

36. Reinstall the factory torsion bars then slide forward into the new RTS bracket. Torque the 9/16” hardware for the RTS bracket to 129 ft-lbs and the 5/8” hardware 180 ft-lbs.

37. Locate the factory knuckle. Remove the four mounting bolts attaching the hub assembly to the knuckle. **SEE FIGURE 46**



FIGURE 46 - STEP 37

38. Remove the o-ring from the factory knuckle then install it in the new Fabtech driver knuckle (FT20913D). **SEE FIGURE 47**



FIGURE 47 - STEP 38

39. Install the dust shield/hub assembly onto the new knuckle using the four bolts previously removed. Torque to 165 ft-lbs. **SEE FIGURE 48** Repeat steps for the passenger side knuckle.



FIGURE 48 - STEP 39

40. Reinstall the factory CV axles to the diff using the factory hardware. Torque to 58 ft-lbs .

41. Install the factory sway bar end links to the sway bar and the new Fabtech bumpstop brackets using the factory hardware. Torque to 46 ft-lbs. **SEE FIGURE 49**

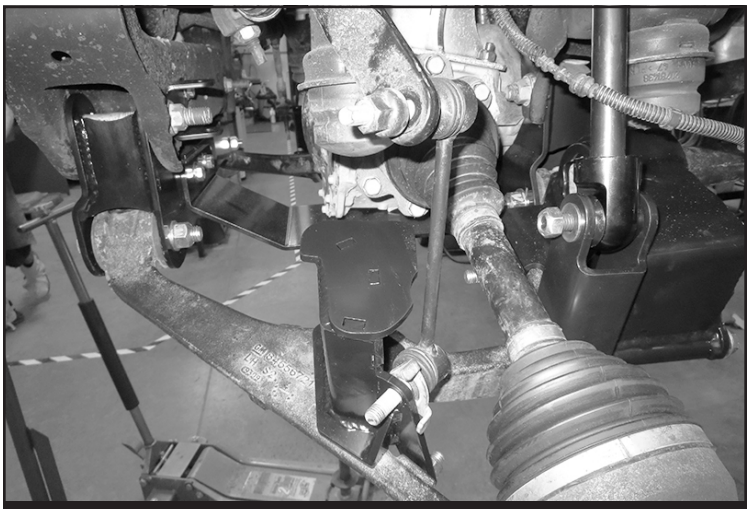


FIGURE 49 - STEP 41

42. Install the new front shocks with the supplied shock hardware and 1/2” x 2-3/4” Buttonhead bolt, nut and washers. **NOTE: Install the buttonhead bolt so the head is facing towards the rear of the vehicle.** If installing Dirt Logic shocks refer to the instructions provided with the shocks. **SEE FIGURE 50** Repeat steps on the opposite side.

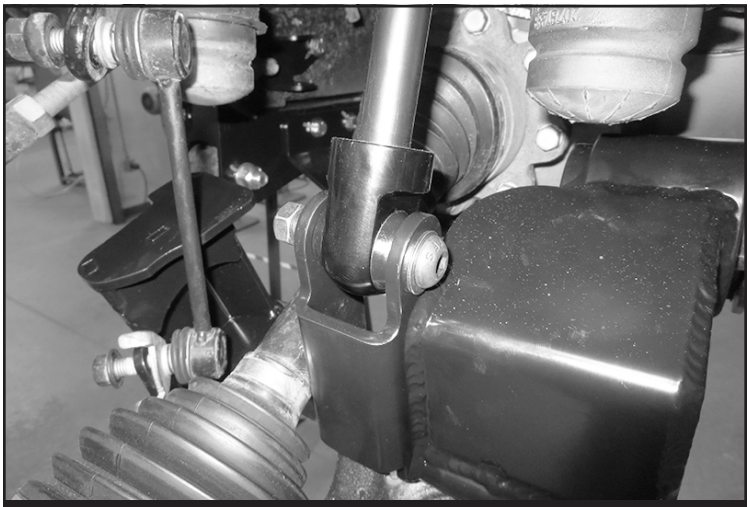


FIGURE 50 - STEP 42

43. Locate the FT20922 (Axle spacer). Install the axle spacer onto the axle shaft while Installing the new Fabtech spindles FT20913D & FT20913P. Torque to upper ball joint to 45 ft-lbs and the lower to 70 ft-lbs. **SEE FIGURES 51-52**

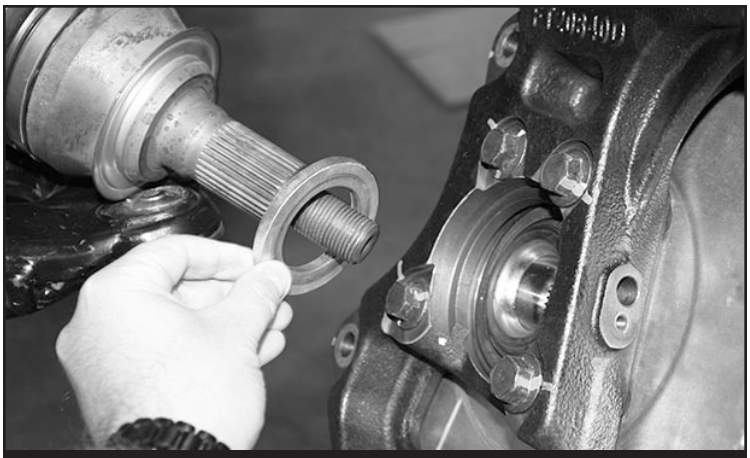


FIGURE 51 - STEP 43



FIGURE 52 - STEP 43

44. Install the axle nut and dust cover. Torque to 165 ft-lbs. Then, install the brake rotor with the factory locating screw. Torque to 17 ft-lbs. **SEE FIGURES 53-54**

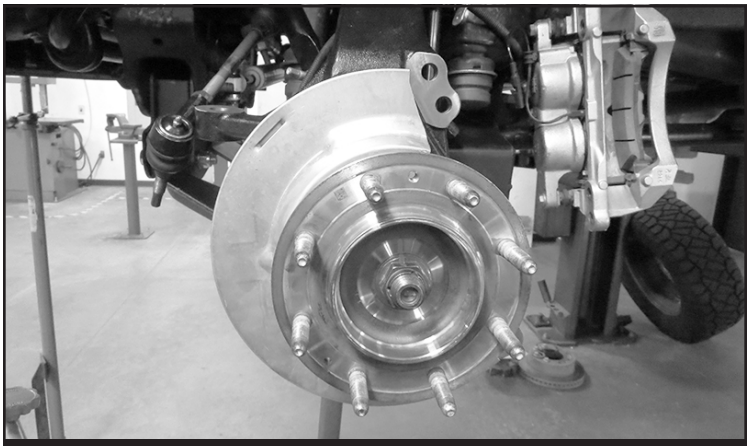


FIGURE 53 - STEP 44



FIGURE 54 - STEP 44

45. Install the brake caliper to the new knuckle using the factory bolts. Torque to 180 ft-lbs.

46. Install FT20928 (Skid Plate) to the front and rear crossmembers using the supplied 1/2” x 1-1/4” bolts, nuts and washers. Torque to 106 ft-lbs. **SEE FIGURES 55-56**

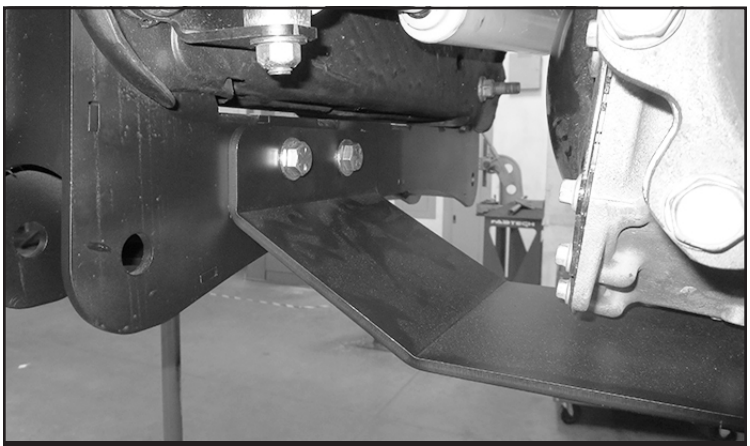


FIGURE 55 - STEP 46



FIGURE 56 - STEP 46

47. Install FT20520 (Driver brake line bracket) onto the factory brakeline bracket using the supplied 5/16" x 3/4" bolt, nut and washers. Then, attach the new bracket to the upper control arm bumpstop pad using the factory bolt removed earlier. **SEE FIGURE 57** Repeat on passenger side.

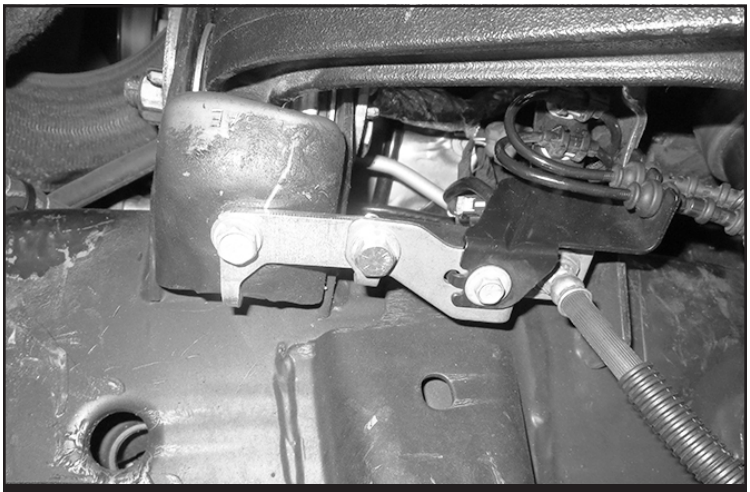


FIGURE 57 - STEP 47

48. Remove the factory outer tie rod ends and install the new Fabtech FT20277 tie rods. Install onto the new spindle Torque to 60 ft-lbs. **SEE FIGURE 58** Repeat on passenger side.



FIGURE 58 - STEP 48

49. Using the supplied clamps, 1/4" hardware and zip ties. Secure the brake/ABS lines to the new Fabtech knuckle. Install the ABS sensor into the knuckle using the factory hardware. Torque to 8 ft-lbs. **SEE FIGURES 59-61**



FIGURE 59 - STEP 49

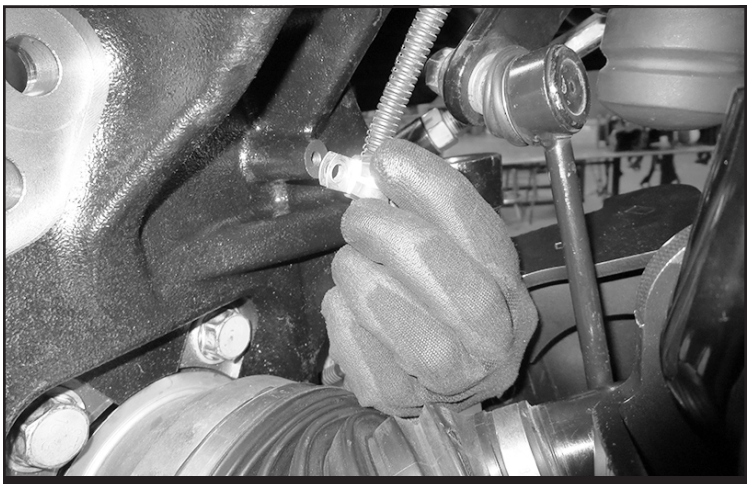


FIGURE 60 - STEP 49

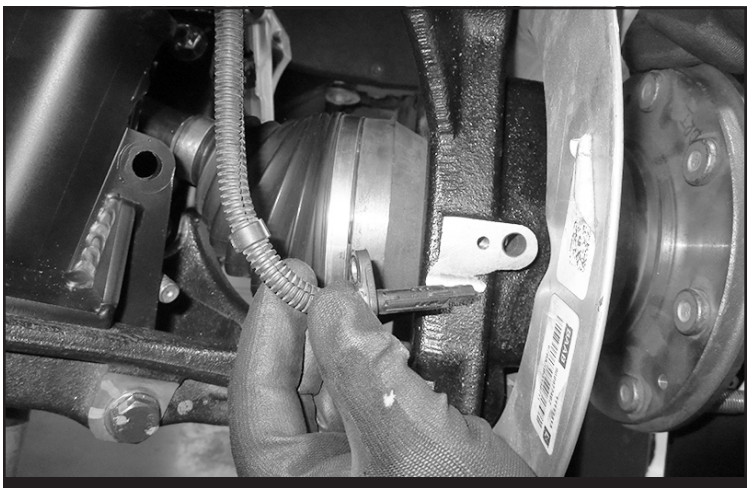


FIGURE 61 - STEP 49

50. Proceed to torque all the differential and crossmember hardware except the lower control arm pivot bolts. These will be torqued once its on the ground.

- 9/16” - 153 ft-lbs
- M18 - 285 ft-lbs
- 1/2” - 106 ft-lbs

51. Set the torsion key bolts to the measurements recorded from step 2. This is a starting point. Adjustments will be made once vehicle is on the ground.

- REAR SUSPENSION -

52. 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 and u-bolts. Lower axle down slowly. Use care not to over extend the brake hose.

53. On the front side of the axle bumpstop pad. The center existing hole will need to be drilled out to 1” **SEE FIGURE 62**



FIGURE 62 - STEP 53

54. On the same bumpstop pad open up the hole on the top to 1/2” **SEE FIGURE 63**

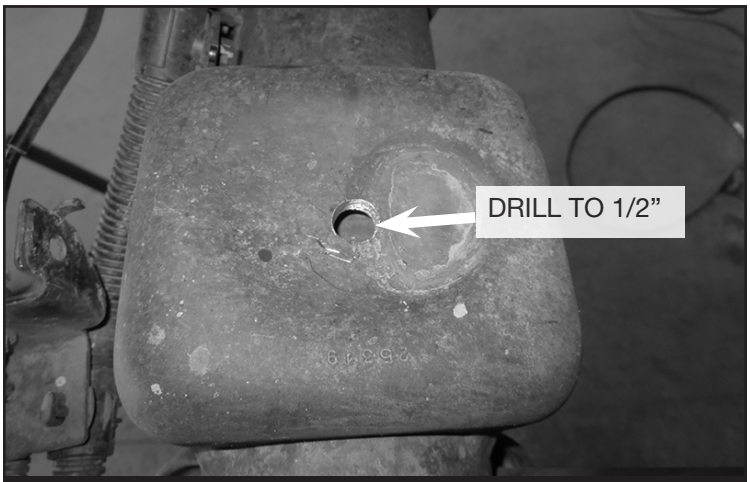


FIGURE 63 - STEP 54

55. Install FT20956 (Spacer) onto the top of the bumpstop pad. **SEE FIGURE 64.** Next, installing FT20941 (Bumpstop Bracket) onto the bumpstop pad using the supplied 1/2” x 1-1/2” bolt, washers and FT20942 (Nut Tab). **NOTE: The nut tab will be inserted through the front side where the hole was opened to 1”.** Torque to 106 ft-lbs. **SEE FIGURE 65**

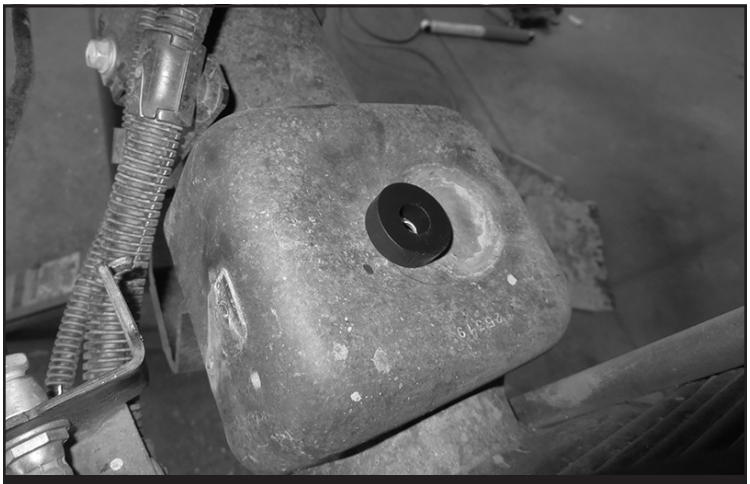


FIGURE 64 - STEP 55



FIGURE 65 - STEP 55

56. Using 23/32” drill bit. Drill out the centering pin hole on both new blocks. **SEE FIGURE 66**.

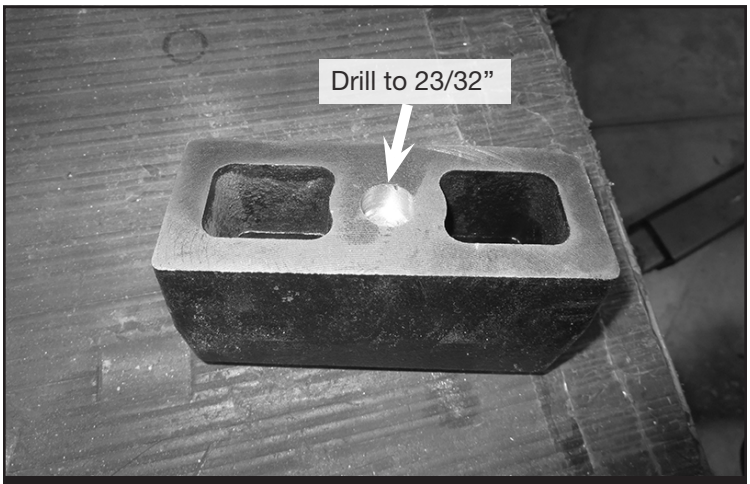


FIGURE 66 - STEP 56

57. Locate the vehicles axle block pad. Using a 3/4” drill bit open up the existing holes on both driver and passenger sides. **SEE FIGURE 67.** Then, insert FT629 (Block sleeve into the holes. **SEE FIGURE 68**



FIGURE 67 - STEP 57



FIGURE 68 - STEP 57

58. Install the new blocks and u-bolts. Install the block with the small taper towards the front of the vehicle. Torque the ubolts to 215 ft-lbs. **SEE FIGURE 69**



FIGURE 69 - STEP 58

59. Disconnect the brakeline bracket from the rear axle differential. Install FT20918 (Brake Line bracket) using the factory hardware. Then, install the factory brakeline bracket to the new bracket using the supplied 5/16” hardware. Torque to 17 ft-lbs. **SEE FIGURE 70**

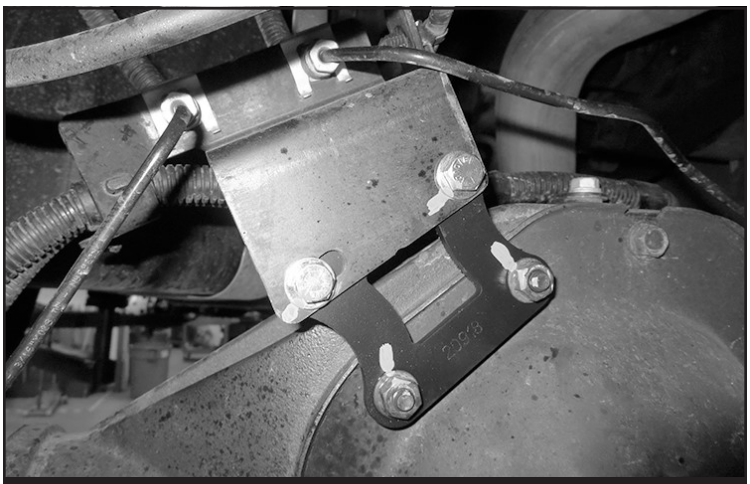


FIGURE 70 - STEP 59

60. Disconnect the electrical harness from the top of the rear axle differential by removing the two factory bolts. Install FT20919 (Differential spacer) between the differential and connector using the supplied M6 bolts and washers. Torque 8 ft-lbs. **SEE FIGURE 71**



FIGURE 71 - STEP 60

61. Install the new Fabtech shocks with the factory hardware. Torque to 127 ft-lbs.

62. 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.**

63. Check front end alignment and set to factory specifications. Re-adjust headlights.

64. Recheck all bolts for proper torque.

65. Recheck brake hoses, ABS wires and suspension parts for proper tire clearance while turning tires fully left to right.

66. 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.**

67. Install Driver Warning Decal. Complete product registration card and mail to Fabtech in order to receive future safety and technical bulletins on this suspension.

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.

RE-TORQUE 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 inconstancies 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