INSTALLATION INSTRUCTIONS





2014-2018 GM C/K1500 2WD/4WD

2017-2020 GM C/K 1500 SUV

6” BASIC & PERFORMANCE SYSTEMS (GEN 2)

FT21170i

Fabtech Motorsports | 2213 Industrial Park Rd. Lancaster, SC 29720

Tech Line: 909-597-7800 | **Web:** www.fabtechmotorsports.com

- PARTS LIST -
6” SYSTEM - FACTORY FORGED STEEL SUSPENSION (GEN 2)
(refer to page 5 for hardware list)

	K1083	6” BASIC SYSTEM GEN 2 W/PERFORMANCE SHOCKS W/STEEL SUSPENSION
1	FTS21170	COMPONENT BOX 1
1	FTS21171	COILOVER SPACER KIT
1	FTS21173	COMPONENT BOX 2 (GEN2) - STEEL
2	FTS7240	REAR PERFORMANCE SHOCK

	K1083M	6” BASIC SYSTEM GEN 2 W/STEALTH SHOCKS W/STEEL SUSPENSION
1	FTS21170	COMPONENT BOX 1
1	FTS21171	COILOVER SPACER KIT
1	FTS21173	COMPONENT BOX 2 (GEN2) - STEEL
2	FTS6240	REAR STEALTH SHOCK

	K1083DL	6” PERFORMANCE SYSTEM GEN 2 W/DIRT LOGIC SHOCKS W/STEEL SUSPENSION
1	FTS21170	COMPONENT BOX 1
1	FTS21173	COMPONENT BOX 2 (GEN2) - STEEL
1	FTS21207	FRONT DIRT LOGIC 2.5 COILOVER
2	FTS810562	DIRT LOGIC 2.25 NON RESI BLACK

	K1085DB	6” PERFORMANCE SYSTEM GEN 2 W/DIRT LOGIC 4.0 NON-RESI SHOCKS W/STEEL SUSPENSION
1	FTS21170	COMPONENT BOX 1
1	FTS21173	COMPONENT BOX 2 (GEN2) - STEEL
2	FTS835082	FRONT DIRT LOGIC 4.0 COILOVER
2	FTS810562	DIRT LOGIC 2.25 NON RESI BLACK

	FTS21170	COMPONENT BOX 1 (GEN2)
1	FT20657BK	FRONT SKID PLATE
2	FT20658	SWAY BAR DROP BRACKET
1	FT20647	DIFF BRACKET DRIVER
1	FT20637BK	FRONT CROSSMEMBER
1	FT20638BK	REAR CROSSMEMBER
1	FT20648	DIFF BRACKET PASSENGER
1	FT20655	REAR DIFF SUPPORT
1	FT20678	HARDWARE SUBASSEMBLY
1	FT20685	HARDWARE KIT

	FT20678	HARDWARE SUBASSEMBLY
1	FT20313	FRONT BRAKELINE BRACKET (DRIVER)
1	FT20314	FRONT BRAKELINE BRACKET (PASSENGER)
1	FT90085	BUSHING KIT (REAR DIFF SUPPORT)
1	FTAS12	STICKER FT BLUE 10X4 DIE CUT
1	FTAS16	DRIVER WARNING DECAL
1	FTREGCARD	REGISTRATION CARD
1	FT21170i	INSTRUCTIONS

	FTS21173	COMPONENT BOX 2 (GEN2) STEEL
4	FT1500U-3	UBOLT SQ 9/16-18X12.50X2.63
1	FT20679	HARDWARE SUBASSEMBLY
2	FTBK5	BLOCK 5.0”
1	FTS20641D or FT20736D	SPINDLE (DRIVER)
1	FTS20641P or FT20736P	SPINDLE (PASSENGER)

	FT20679	HARDWARE SUBASSEMBLY
2	FT20025	REAR BUMPSTOP SPACERS
2	FT20277	OUTER TIE ROD
1	FT20300	6 LUG 1/4” SPARE WHEEL SPACER
1	FT20349	REAR BRAKE LINE BRACKET
2	FT20664	AXLE SHAFT SPACER
1	FT757U	U-BOLT

	FTS21171	GM 1500 6” SPACER KIT
1	FT20667BK	UPPER SHOCK EXTENSION (DRIVER)
1	FT20668BK	UPPER SHOCK EXTENSION (PASSENGER)

- PARTS LIST -
6” SYSTEM - FACTORY ALUMINUM OR STAMPED STEEL SUSPENSION (GEN 2)
(refer to page 5 for hardware list)

	K1084	6” BASIC SYSTEM GEN 2 W/PERFORMANCE SHOCKS W/ALUMINUM & STAMPED STEEL SUSPENSION
1	FTS21170	COMPONENT BOX 1
1	FTS21171	COILOVER SPACER KIT
1	FTS21172	COMPONENT BOX 2 (GEN2) - ALUMINUM
2	FTS7240	REAR PERFORMANCE SHOCK

	K1084M	6” BASIC SYSTEM GEN 2 W/STEALTH SHOCKS W/ALUMINUM & STAMPED STEEL SUSPENSION
1	FTS21170	COMPONENT BOX 1
1	FTS21171	COILOVER SPACER KIT
1	FTS21172	COMPONENT BOX 2 (GEN2) - ALUMINUM
2	FTS6240	REAR STEALTH SHOCK

	K1084DL	6” PERFORMANCE SYSTEM GEN 2 W/DIRT LOGIC SHOCKS W/ALUMINUM & STAMPED STEEL SUSPENSION
1	FTS21170	COMPONENT BOX 1
1	FTS21172	COMPONENT BOX 2 (GEN2) - ALUMINUM
1	FTS21207	FRONT DIRT LOGIC 2.5 COILOVER
2	FTS810562	DIRT LOGIC 2.25 NON RESI BLACK

	K1086DB	6” PERFORMANCE SYSTEM GEN 2 W/DIRT LOGIC SHOCKS W/ALUMINUM & STAMPED STEEL SUSPENSION
1	FTS21170	COMPONENT BOX 1
1	FTS21172	COMPONENT BOX 2 (GEN2) - ALUMINUM
2	FTS835082	FRONT DIRT LOGIC 4.0 COILOVER
2	FTS810562	DIRT LOGIC 2.25 NON RESI BLACK

	FTS21170	COMPONENT BOX 1 (GEN2)
1	FT20657BK	FRONT SKID PLATE
2	FT20658	SWAY BAR DROP BRACKET
1	FT20647	DIFF BRACKET DRIVER
1	FT20637BK	FRONT CROSSMEMBER
1	FT20638BK	REAR CROSSMEMBER
1	FT20648	DIFF BRACKET PASSENGER
1	FT20655	REAR DIFF SUPPORT
1	FT20678	HARDWARE SUBASSEMBLY
1	FT20685	HARDWARE KIT

	FTS21172	COMPONENT BOX 2 (GEN2) - ALUM
4	FT1500U-3	UBOLT SQ 9/16-18X12.50X2.63
1	FT20679	HARDWARE SUBASSEMBLY
2	FTBK5	BLOCK 5.0”
1	FTS20640D or FTS20642D	SPINDLE (DRIVER)
1	FTS20640P or FTS20642P	SPINDLE (PASSENGER)

	FT20679	HARDWARE SUBASSEMBLY
2	FT20025	REAR BUMPSTOP SPACERS
2	FT20277	OUTER TIE ROD
1	FT20300	6 LUG 1/4” SPARE WHEEL SPACER
1	FT20349	REAR BRAKE LINE BRACKET
2	FT20664	AXLE SHAFT SPACER
1	FT757U	U-BOLT

	FT20678	HARDWARE SUBASSEMBLY
1	FT20313	FRONT BRAKELINE BRACKET (DRIVER)
1	FT20314	FRONT BRAKELINE BRACKET (PASSENGER)
1	FT90085	BUSHING KIT (REAR DIFF SUPPORT)
1	FTAS12	STICKER FT BLUE 10X4 DIE CUT
1	FTAS16	DRIVER WARNING DECAL
1	FTREGCARD	REGISTRATION CARD
1	FT21170i	INSTRUCTIONS

	FTS21171	2014 GM 1500 6” SPACER KIT
1	FT20667BK	UPPER SHOCK EXTENSION (DRIVER)
1	FT20668BK	UPPER SHOCK EXTENSION (PASSENGER)

- PARTS LIST -
6” SYSTEM - GM 1500 SUV - (GEN 2)
(refer to page 5 for hardware list)

	K1125	6” BASIC SYSTEM GEN 2 CHEVY 1500 SUV
1	FTS21170	COMPONENT BOX 1
1	FTS21171	COILOVER SPACER KIT
1	FTS21246	COMPONENT BOX 2 (GEN2) - SUV
1	FTS21247	REAR BOX KIT

	FTS21170	COMPONENT BOX 1 (GEN2)
1	FT20657BK	FRONT SKID PLATE
2	FT20658	SWAY BAR DROP BRACKET
1	FT20647	DIFF BRACKET DRIVER
1	FT20637BK	FRONT CROSSMEMBER
1	FT20638BK	REAR CROSSMEMBER
1	FT20648	DIFF BRACKET PASSENGER
1	FT20655	REAR DIFF SUPPORT
1	FT20678	HARDWARE SUBASSEMBLY
1	FT20685	HARDWARE KIT

	FT20678	HARDWARE SUBASSEMBLY
1	FT20313	FRONT BRAKELINE BRACKET (DRIVER)
1	FT20314	FRONT BRAKELINE BRACKET (PASSENGER)
1	FT90085	BUSHING KIT (REAR DIFF SUPPORT)
1	FTAS12	STICKER FT BLUE 10X4 DIE CUT
1	FTAS16	DRIVER WARNING DECAL
1	FTREGCARD	REGISTRATION CARD
1	FT21170i	INSTRUCTIONS

	FTS21171	2014 GM 1500 6” SPACER KIT
1	FT20667BK	UPPER SHOCK EXTENSION (DRIVER)
1	FT20668BK	UPPER SHOCK EXTENSION (PASSENGER)

	FTS21246	COMPONENT BOX 2 (GEN2) - SUV
1	FT20826	HARDWARE SUBASSEMBLY
1	FTS20640D or FTS20642D	SPINDLE (DRIVER)
1	FTS20640P or FTS20642P	SPINDLE (PASSENGER)

	FT20826	HARDWARE SUBASSEMBLY
2	FT20277	OUTER TIE ROD
1	FT20300	6 LUG 1/4” SPARE WHEEL SPACER
2	FT20664	AXLE SHAFT SPACER
1	FT757U	AXLE U-BOLT

	FTS21247	SUV REAR BOX KIT
1	FT1599-2-2DBK	5” SHOCK DROP BRACKET (DRIVER)
1	FT1599-2-2PBK	5” SHOCK DROP BRACKET (PASS)
2	FT1599-2-4	5” SWAY BAR LINK
1	FT20292BK	REAR TRACK BAR BRACKET
1	FT20299	BUSHING AND SLEEVE KIT
1	FT20307BK	TRACK BAR BRACKET SUPPORT
1	FT20309	HARDWARE KIT
1	FT20319BK	REAR BUMP STOP BRACKET DRIVER)
1	FT20320BK	REAR BUMP STOP BRACKET (PASS)
1	FT20823	REAR UPPER LINK (DRIVER)
1	FT20824	REAR UPPER LINK (PASS)
2	FT20825	LOWER LINK
2	FT1599-2BK	REAR COIL SPRING
1	FT20827	HARDWARE SUBASSEMBLY

	FT20827	HARDWARE SUBASSEMBLY
4	12001407100	ZIP TIE 14”
4	12008007100	ZIP TIE 8”
8	FT1004	SWAY BAR LINK BUSHING HALF
1	FT21247i	INSTRUCTIONS
4	FT404739	SLEEVE OD 0.62 ID 12MM L 1.48

- PARTS LIST -
HARDWARE LIST

	FT20685 - HARDWARE KIT SUB BAG 1	LOCATION
8	9/16 SAE WASHER G5 ZINC	U-BOLT HARDWARE
8	9/16-18 NYLOCK NUT G5 ZINC	
2	5/16 SAE WASHER G5 ZINC	REAR BRAKELINE BRKT
1	5/16-18 X 1 HEX BOLT G5 ZINC	
1	NUT 5/16-18 STOVER G5 Z1	
2	M10 FLAT WASHER ZINC	REAR BUMP STOP
2	M10-1.5 X 25MM HEX HD C/S CL10.9	

	FT20685 - HARDWARE KIT SUB BAG 2	LOCATION
2	BOLT 5/8"-11 X 4.5" G8 Z2	FRT CROSSMEMBER
4	5/8 SAE WASHER G8 ZINC	
2	LOCK NUT STOVER 5/8"- 11 G8	
4	5/8- 11 X 5-1/2 HEX BOLT G5 ZINC	REAR CROSSMEMBER
8	5/8 SAE WASHER G8 ZINC	REAR BUMP STOP
4	LOCK NUT STOVER 5/8"-11 G8	
2	7/16- 14 X 1-1/2 HEX BOLT G8 ZC	SKID PLATE
4	7/16 SAE WASHER G8 ZINC	
2	7/16-14 C-LOCK NUT ZINC	
1	1/2-13 X 1-1/2 HEX BOLT G8 ZINC	SKID PLATE
2	1/2 SAE WASHER G8 ZINC	
1	1/2-13 C-LOCK NUT ZINC	

	FT20685 - HARDWARE KIT SUB BAG 3	LOCATION
1	9/16-18 X 4-1/2 HEX BOLT G8 ZC	REAR DIFF SUPPORT
2	9/16 SAE WASHER G8 ZINC	
1	9/16-18 NYLOCK NUT G5 ZINC	
3	M10-1.5 X 60MM HEX BOLT G10.9	
3	M10 FLAT WASHER ZINC	
2	1/2-13 X 1-3/4 HEX BOLT G8 ZINC	DRIVER DIFF BRACKET
4	1/2 SAE WASHER G8 ZINC	
2	1/2-13 C-LOCK NUT ZINC	
2	1/2 SAE WASHER G8 ZINC	PASS DIFF UBOLT
2	1/2-13 C-LOCK NUT ZINC	
1	9/16-12 X 1-3/4 HEX BOLT G8 ZINC	PASS DIFF BRACKET
2	9/16 SAE WASHER G8 ZINC	
1	C-LOCK NUT 9/16"-12 CLEAR ZINC	

	FT20685 - HARDWARE KIT SUB BAG 4	LOCATION
6	7/16 SAE WASHER G8 ZINC	UPPER SHOCK EXT
6	7/16-14 C-LOCK NUT ZINC	
4	3/8-16 X 1-1/2 HEX BOLT G8 ZINC	SWAY BAR
8	3/8 SAE WASHER G8 ZINC	
4	3/8-16 C-LOCK NUT ZINC	
4	M10-1.5 X 30 HEX BOLT G10.9 ZINC	SWAY BAR
4	10MM SPLIT WASHER	
2	1/4-20 X 3/4 HEX BOLT G5 ZINC	SPINDLE ABS
2	1/4 LOCK WASHER G5 ZINC	
4	1/4-20 X 1 HEX BOLT G5 ZINC	BRAKE LINE BRACKET
8	1/4 SAE WASHER G5 ZINC	
4	1/4-20 C-LOCK NUT ZINC	
2	CLAMP 3/8 X 1/2W .26 RUBBER CLAMP	FRONT BRAKE LINES
12	8" CABLE TIE BLACK	FRT/REAR BRAKE LINE
2	THREAD LOCKING COMPOUND 2 MIL	

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.

- 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
Die Grinder w/ Cutoff Wheel or Reciprocating Saw

- 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 -

- Will not fit all wheel drive models.
- Cannot use OEM wheel and tire. Use wheels with 5” Backspacing.
- Does not fit standard cab.
- Will not fit vehicles equipped with super cruise

- 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 the front of the truck, remove factory skid plate. 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 2

3. Remove the brake hose bracket from the steering knuckle and coil bucket, save hardware. Remove the caliper from the rotor and secure the brake caliper to the frame out of the way. **DO NOT ALLOW THE BRAKE CALIPER TO HANG FROM THE HOSE. SEE FIGURES 2-3**



FIGURE 2 - STEP 3



FIGURE 3 - STEP 3

4. Remove the wheel stud clips and discard. Remove the rotor positioning screw, and remove the rotor. Put in safe place not allowing it to get damaged. Retain hardware for reinstallation. **SEE FIGURES 4-5**



FIGURE 4 - STEP 4

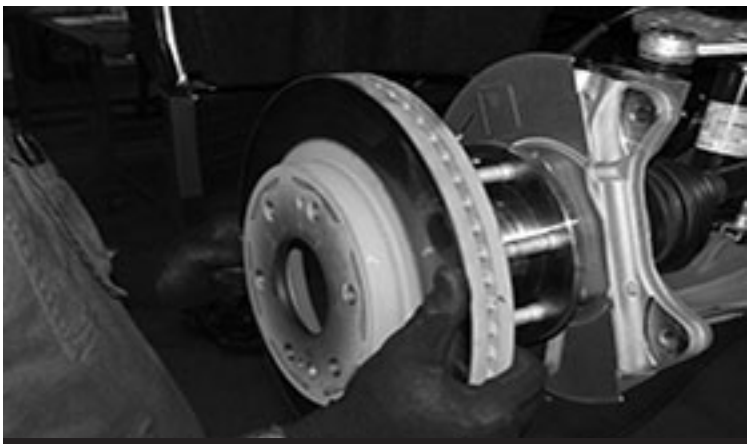


FIGURE 5 - STEP 4

5. Remove the wheel sensor screw and carefully remove the sensor and reroute it away from the spindle. Save hardware. **SEE FIGURE 6**



FIGURE 6 - STEP 5

6. Remove the axle nut and washer, save for re-installation. **SEE FIGURE 7**

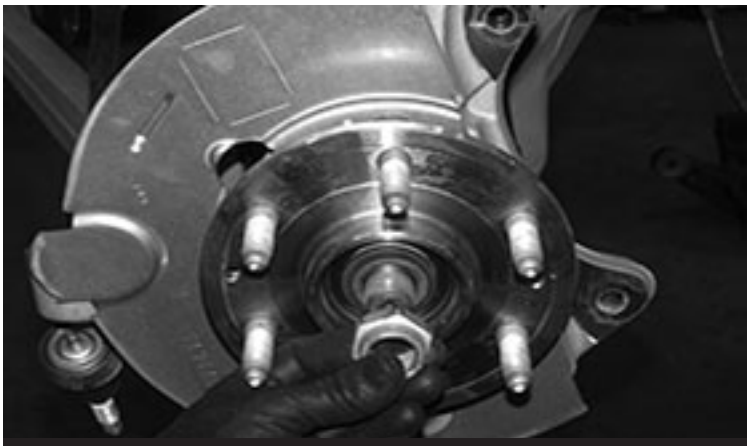


FIGURE 7 - STEP 6

7. Loosen the upper and lower ball joint nuts. Using a large hammer, carefully strike the spindle at the ball joint to dislodge the ball joint. Use care not to hit the ball joints when removing. **SEE FIGURES 8-10.** Remove and save the nuts. Discard the factory spindle.



FIGURE 8 - STEP 7

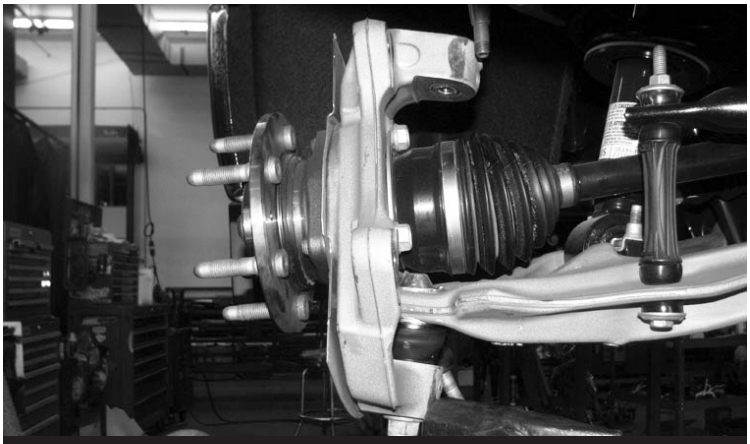


FIGURE 9 - STEP 7



FIGURE 10 - STEP 7

8. Remove the sway bar end link bolt and the end link save the bolt for reinstallation. **SEE FIGURE 11**



FIGURE 11 - STEP 8

9. Remove and save the upper coilover assembly nuts, and lower bar pin bolts. Remove the coilover. **NOTE: For Magna-Ride models disconnect the wire at the top of the coilover. SEE FIGURES 12-14.**



FIGURE 12 - STEP 9



FIGURE 13 - STEP 9



FIGURE 14 - STEP 9

10. Remove and save the bolts attaching the axle shaft to the differential. Remove the axle shaft. **SEE FIGURE 15**

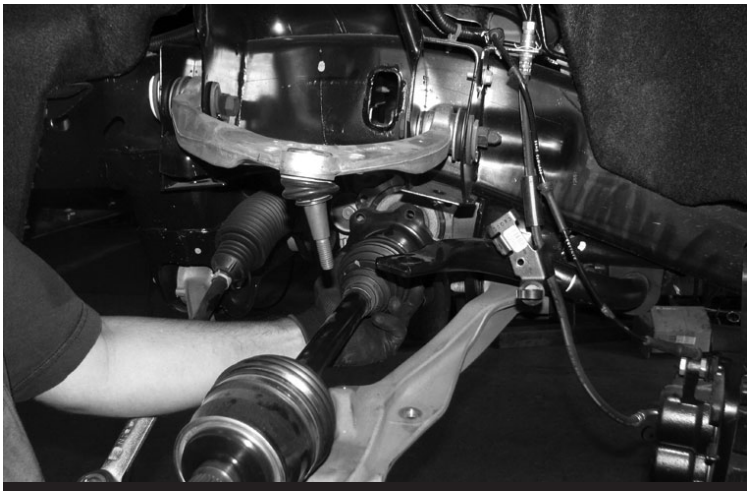


FIGURE 15 - STEP 10

11. Loosen and remove the lower control arm bolts. Remove control arms and set aside with hardware. **SEE FIGURES 16-17**



FIGURE 16 - STEP 11



FIGURE 17 - STEP 11

12. Remove sway bar from vehicle, discard hardware. **SEE FIGURE 18**



FIGURE 18 - STEP 12

13. Remove the factory brake line bracket from the brake line. Be careful not to damage the hose. **NOTE: May require cutting, be careful not to damage the hose. SEE FIGURE 19**

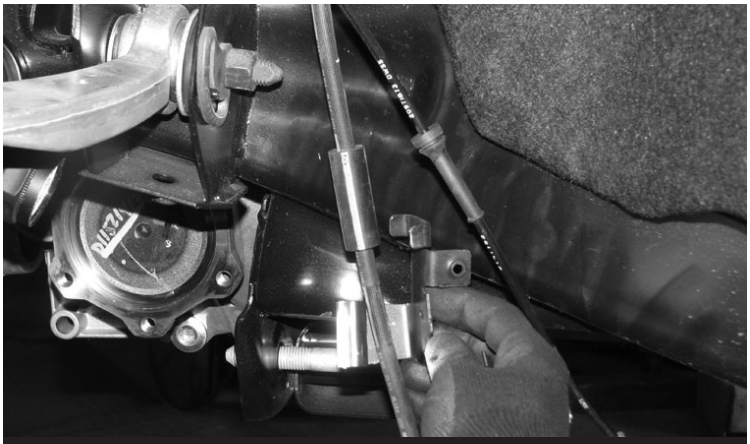


FIGURE 19 - STEP 13

14. Locate and remove the rear factory cross member and discard. **SEE FIGURE 20**

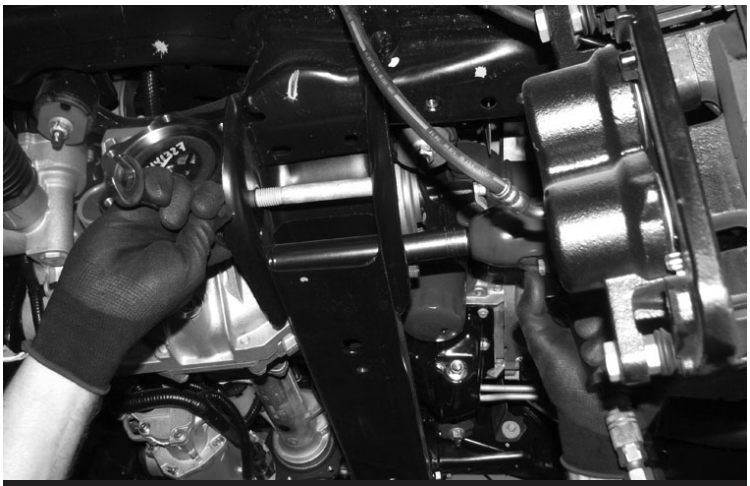


FIGURE 20 - STEP 14

15. Locate the rear driver lower control arm mount on the frame. Measure 3” from the inside edge of the mount and mark with a paint pen. Use a reciprocating saw and cut both sides of the mount from the frame. **SEE FIGURES 21-22**

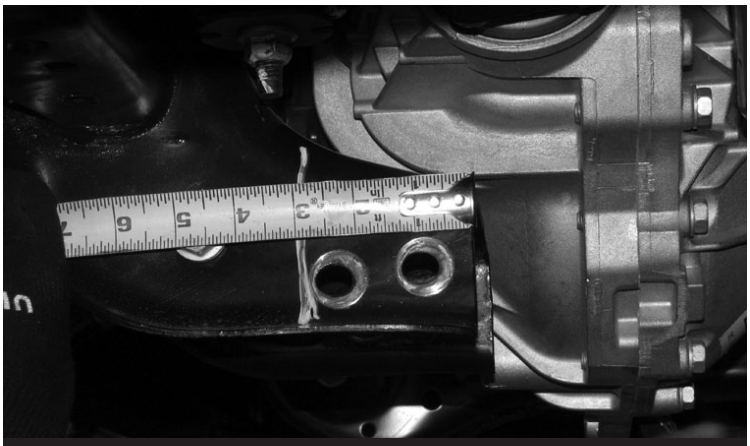


FIGURE 21 - STEP 15



FIGURE 22 - STEP 15

16. Locate the rear passenger lower control arm mount on the frame. Measure 3-1/2” from the inside edge of the mount and mark with a paint pen. Use a reciprocating saw and cut both sides of the mount from the frame. **SEE FIGURES 23-24**



FIGURE 23 - STEP 16



FIGURE 24 - STEP 16

17. Locate the factory front lower control arm pockets. Grind about 1/4” from both corners on both pockets. **SEE FIGURES 25-26**



FIGURE 25 - STEP 17



FIGURE 26 - STEP 17

18. DUE TO VARIANCES IN EACH TRUCK, ADDITIONAL GRINDING MAY BE REQUIRED FOR PROPER FITMENT OF THE CROSS MEMBERS. USE THESE MEASUREMENTS AS A STARTING POINT AND CLEARANCE THE FRAME POCKETS AS NEEDED FOR PROPER FITMENT OF THE CROSS MEMBERS.

19. Locate the driver and passenger rear lower control arm pockets. On the front side of the pockets, measure and mark 1” down from the mounting hole. Cut the brackets like shown in **FIGURES 27-28**



FIGURE 27 - STEP 19



FIGURE 28 - STEP 19

20. Disconnect the front driveshaft from the differential housing and retain bolts and u joint clamps for reinstallation. **SEE FIGURE 29**



FIGURE 29 - STEP 20

21. Unplug the steering rack harness and remove the steering rack. Due to manufacturer variances, some steering racks will need to be trimmed on the passenger side where the wiring harnesses are located. If the rack has an extended lip over the harness carefully trim a radius like shown in **FIGURE 30**

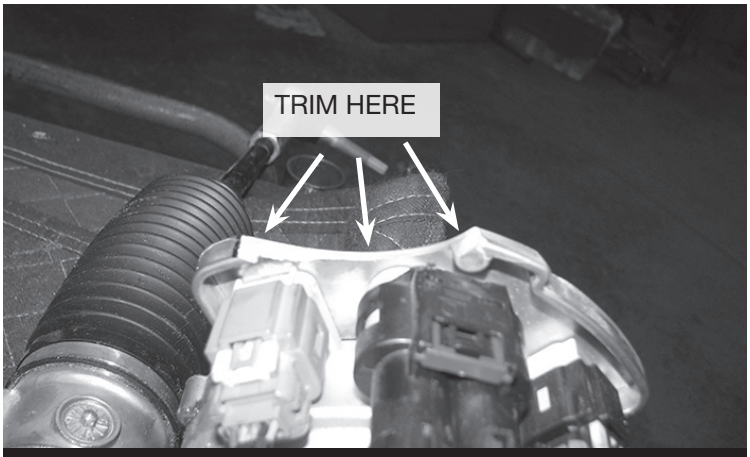


FIGURE 30 - STEP 21

22. Disconnect the electrical connection (pass side) and the vacuum line (driver side) from the differential housing. Make sure the wire harness is completely detached from the housing. Carefully remove the differential and set aside. Retain hardware for reinstallation.

23. Locate the drivers side differential mount. The locating pin on the mount needs to be cut off. Using a die grinder with a cut off wheel, cut the pin flush with the bracket. **SEE FIGURE 31**



FIGURE 31 - STEP 23

24. Locate the passenger side front mounting tab on the differential. Cut the front tab straight off and sand to a smooth finish. The end should be flush with the axle housing. **NOTE: More sanding may be required due to manufacturer variances. SEE FIGURES 32-34**

Note: Grind a flat spot on the axle (approx. 1/8” deep) just to the side of the mounting tab. SEE FIGURE 33. This is to prevent the steering rack and differential from making contact.



FIGURE 32 - STEP 24

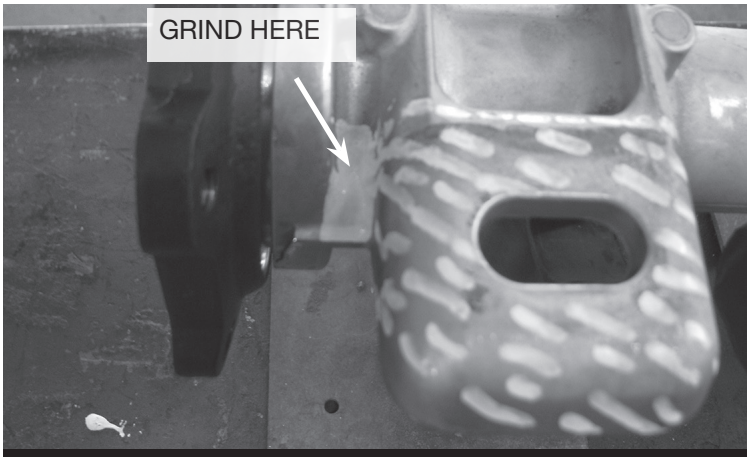


FIGURE 33 - STEP 24



FIGURE 34 - STEP 24

25. Locate FT20647 (driver) and FT20648 (pass) differential drop brackets and factory hardware. Install the brackets to the factory mounts with the taller part of the bracket towards the front of the vehicle. **SEE FIGURES 35-37** Torque to 100 ft-lbs.

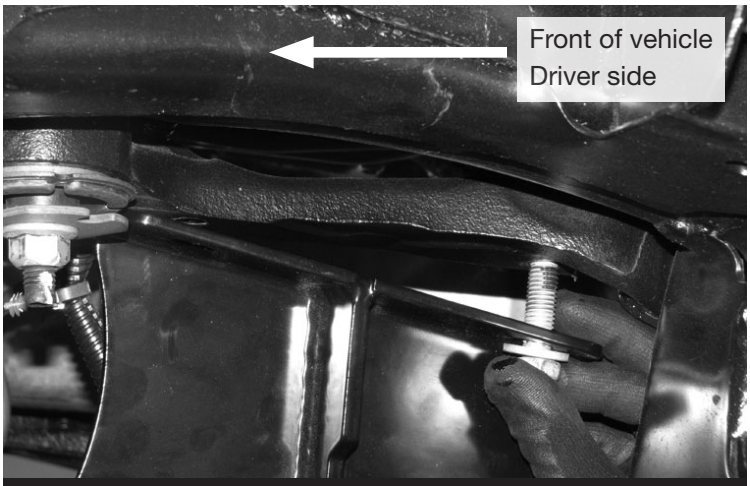


FIGURE 35 - STEP 25

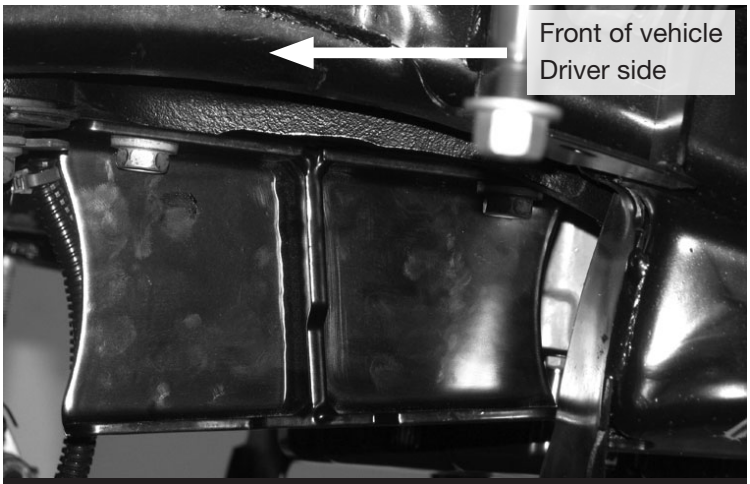


FIGURE 36 - STEP 25

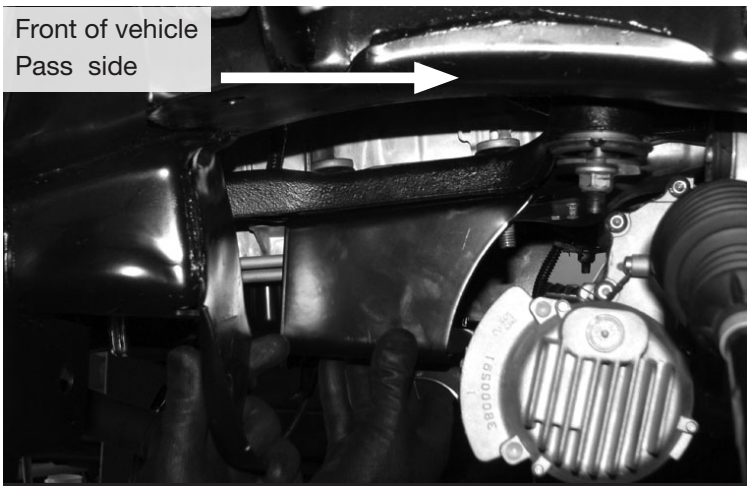


FIGURE 37 - STEP 25

26. Locate the Differential drop bracket hardware. (driver) 1/2”-13 x 1-3/4” bolt, washers, and nuts. (Pass) 9/16”-12 x 1-3/4” bolt, washer, and nut, FT757U (ubolt) and 1/2” washers and nuts. Using a transmission jack, install the differential into the vehicle with the provided hardware, leave loose at this time. **SEE FIGURES 38-41**



FIGURE 38 - STEP 26



FIGURE 39 - STEP 26

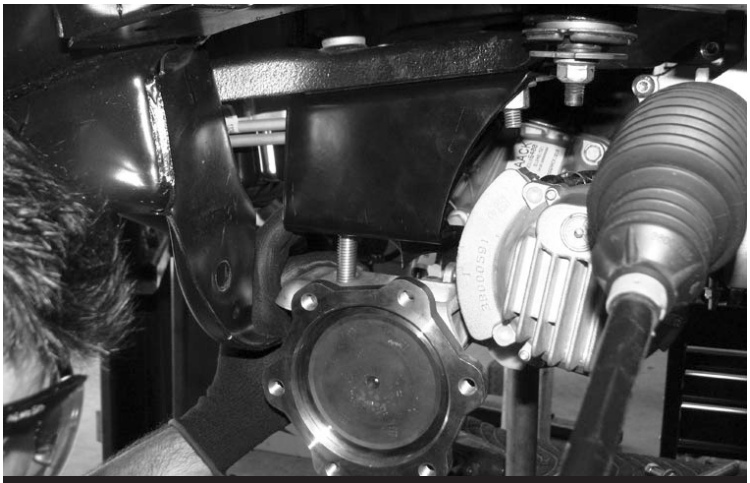


FIGURE 40 - STEP 26



FIGURE 41 - STEP 25

27. Reinstall the steering rack and plug all harnesses back in. Locate and install FT20637BK (front crossmember) into the factory lower control arm pockets using the stock hardware. Leave loose at this time. **SEE FIGURE 42**



FIGURE 42 - STEP 27

28. Install FT90085 (bushing kit) into FT20655 (rear diff support) **SEE FIGURES 43-44**



FIGURE 43 - STEP 28



FIGURE 44 - STEP 28

29. Remove the 3 factory differential housing bolts and discard. **SEE FIGURE 45**

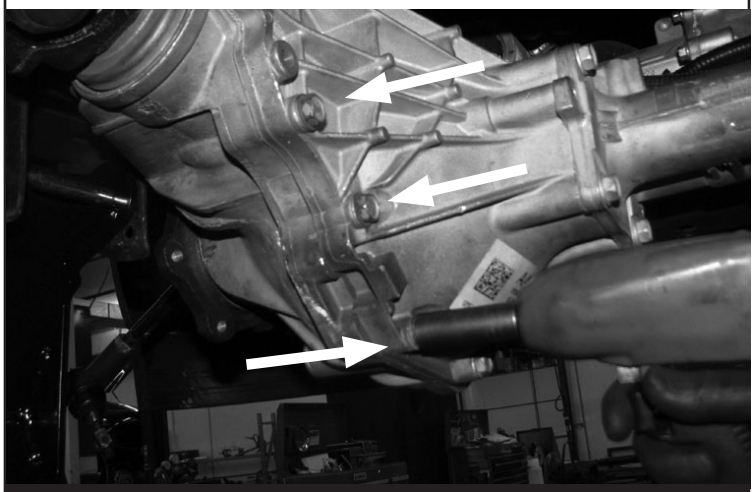


FIGURE 45 - STEP 29

30. Install the FT20365 (rear diff support bracket) on the differential using the provided M10-1.5 X 60mm bolts, washers and thread lock. Torque to 58 ft-lbs. **SEE FIGURE 46**



FIGURE 46 - STEP 30

31. Locate and install FT20638BK (rear crossmember) using the provided 5/8”-11 X 5-1/2” bolts, washers, and nuts, leave loose at this time. Locate the rear diff support hardware 9/16”-18 X 4-1/2” bolt, washers and nut. Install the hardware and leave loose at this time. **SEE FIGURE 47-48**

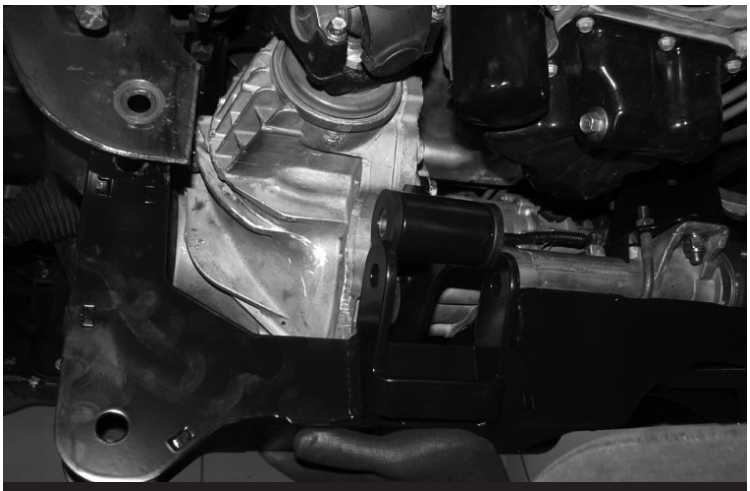


FIGURE 47 - STEP 31

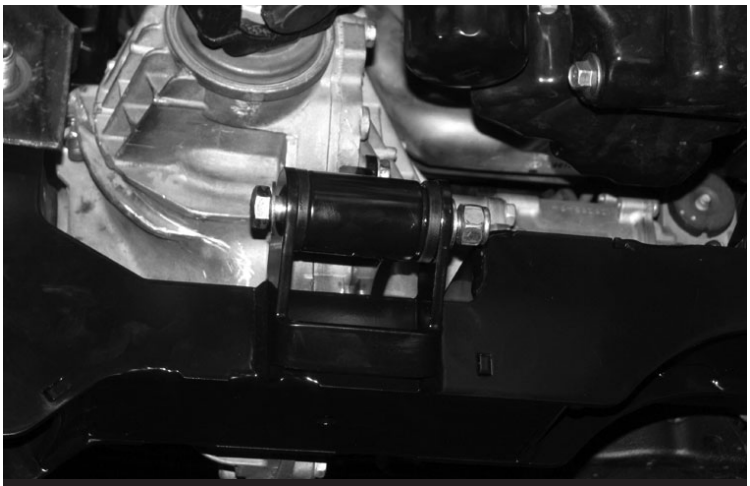


FIGURE 48 - STEP 31

32. Locate FT20657BK (front skid plate) using the provided hardware, install the skid plate by using the 7/16”-14 x1-1/2” bolts, washers and nuts to the front crossmember. **Torque to 83 ft-lbs.** Use the 1/2”-13 x 1-1/2” bolt, washer and nut on the rear crossmember. Torque to 127 ft-lbs. **SEE FIGURE 49**



FIGURE 49 - STEP 32

33. Reinstall the lower control arms using the provided 5/8”-11 X 4-1/2” bolt, washers and nut for the front pocket. Use the 5/8”-11 X 5-1/2” bolt, washers, and nut for the rear pocket. Leave loose at this time. **SEE FIGURE 50**



FIGURE 50 - STEP 33

34. Locate the factory spindle. Disassemble the factory knuckle from the hub assembly by removing the 3 bolts. Discard knuckle washer. **SEE FIGURES 51-52**

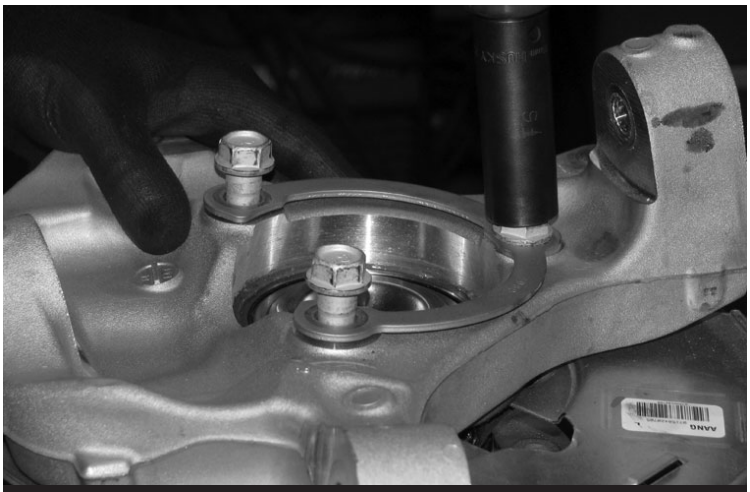


FIGURE 51 - STEP 34



FIGURE 52 - STEP 34

35. The dust shield on the hub assembly needs to be trimmed to clear the new Fabtech spindle. Refer to **FIGURE 53. Repeat for passenger side.**

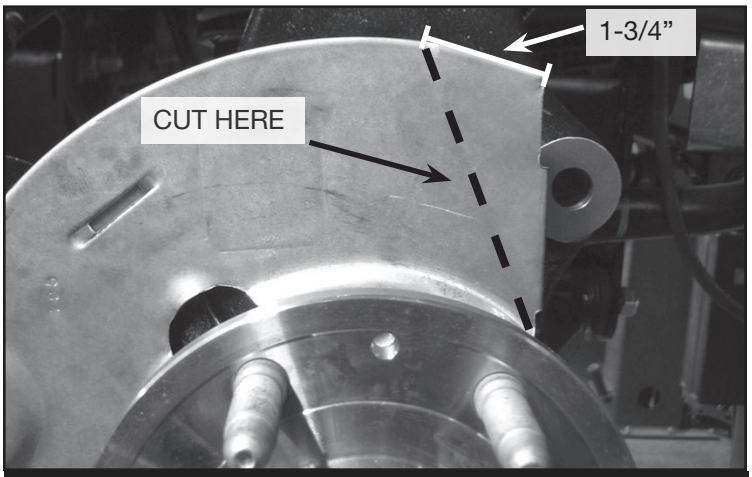


FIGURE 53 - STEP 35

36. Locate FTS20641D, FTS20640D, FTS20642D or FT20736D (Driver Knuckle), assemble the new spindle on the hub assembly. Use thread lock on the factory hardware and torque to 125 ft-lbs. Repeat on passenger side using the corresponding knuckle. **SEE FIGURE 54**

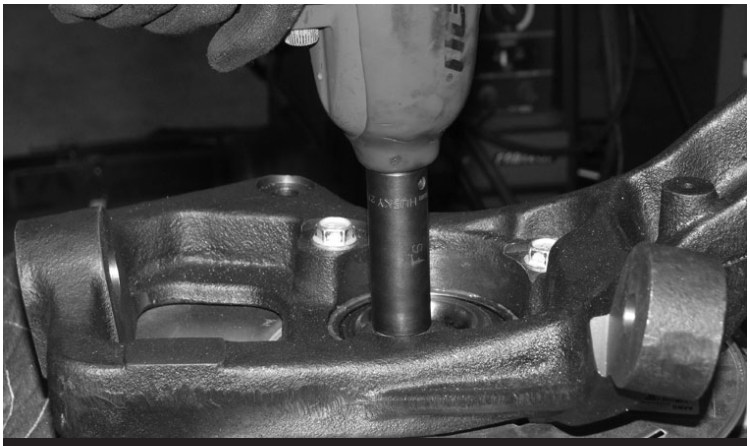


FIGURE 54 - STEP 36

37. Locate the drivers side axle shaft, factory hardware and FT20664 (Axle Shaft Spacer).Using thread lock install the Axle shaft to the differential **SEE FIGURE 55,** Torque to 55 ft-lbs**.** Install FT20664 (Axle Shaft Spacer) onto the axle **SEE FIGURE 56**.

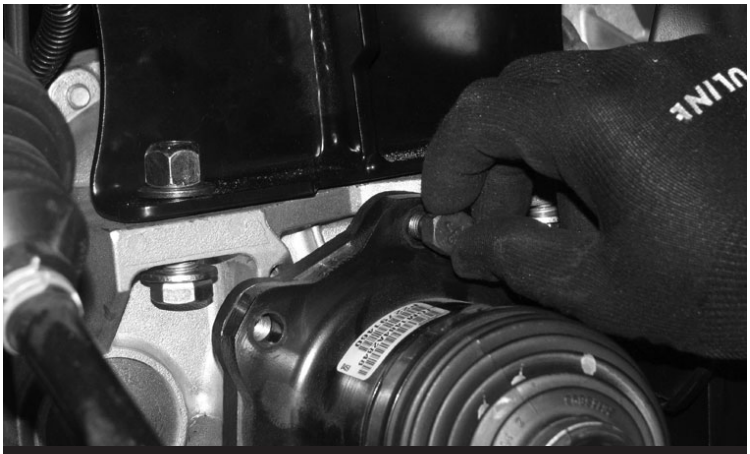


FIGURE 55 - STEP 37



FIGURE 56 - STEP 37

38. **NOTE: For Dirt Logic Coilovers skip to step 40.** Locate the factory drivers side coilover assembly and FT20667BK (Driver side shock extension). **NOTE: When installing on vehicle equpped with Magna-Ride. Route the wire up through the inside of the new Fabtech spacer before installing the factory nuts.** Using the thread lock assemble the two with the factory hardware. Torque to 58 ft-lbs. **SEE FIGURE 57-58 Repeat for Passenger side.**



FIGURE 57 - STEP 38



FIGURE 58 - STEP 38

39. Install the coilover assembly into the top mount using the provided 7/16" hardware. Torque to 83 ft-lbs. Then, use the factory hardware to assemble the lower control arm to the coilover. Torque to 100 ft-lbs **SEE FIGURES 59-61**

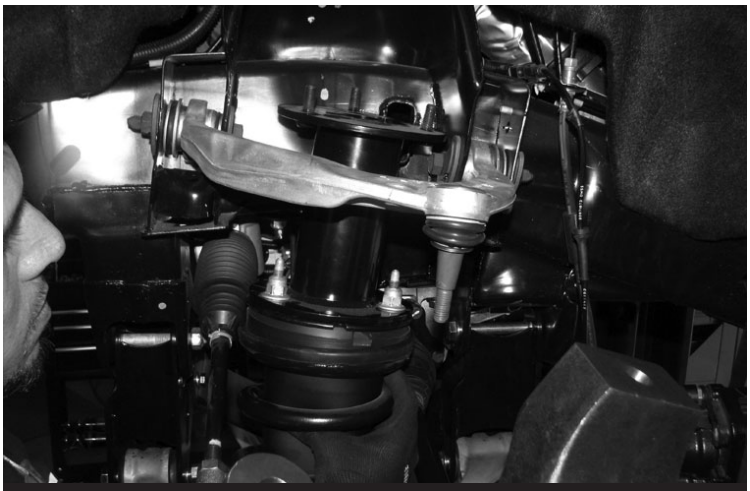


FIGURE 59 - STEP 39



FIGURE 60 - STEP 39



FIGURE 61 - STEP 39

40. For Dirt Logic Coilovers use the supplied 3/8” hardware for the top mount, and 7/16” hardware for the lower mount. When installing the coilover, it will offset towards the rear of the vehicle**. SEE FIGURES 62-64.**



FIGURE 62 - STEP 40



FIGURE 63 - STEP 40



FIGURE 64 - STEP 40

41. If installing the Dirt Logic 4.0 Coilover. It will install the same as in **Step 39. SEE FIGURE 65**



FIGURE 65 - STEP 41

42. Install the new spindle onto the lower control arm ball joint while inserting the axle end through the hub assembly **SEE FIGURE 66** Torque to 83 ft-lbs**.** Finally, connect the upper control arm to the spindle. **SEE FIGURE 67.** Torque the upper ball joint to 58 ft-lbs, and the lower ball joint to 70 ft-lbs. **NOTE: If installing on a vehicle with factory stamped steel control arms the rubber stop on the control arm pocket will need to be removed.**



FIGURE 66 - STEP 42



FIGURE 67 - STEP 42

43. Locate the FT20277 (Outer Tie Rod), install the zerk fitting that is provided. **SEE FIGURE 68.** Loosen the jam nut and remove factory tie rod end, leaving the factory jam nut in place, install the FT20277 until it makes contact with the jam nut. Attach the new tie rod end to the spindle with the supplied nut and torque to 40 ft-lbs. Then, tighten the jam nut. **SEE FIGURE 68-71. NOTE: IF USING 17"/18" WHEELS, THE EXCESS THREAD ON THE BOTTOM OF THE LOWER BALL JOINT WILL NEED TO BE CUT OFF.**

NOTE: Make sure to grease the new tie rod end ball joints.



FIGURE 68 - STEP 43



FIGURE 69 - STEP 43



FIGURE 70 - STEP 43



FIGURE 71 - STEP 43

44. Locate and install the factory hub assembly washer and nut using the provided thread lock. Torque to 150 ft-lbs **SEE FIGURE 72**



FIGURE 72 - STEP 44

45. Locate FT20313 (Driver), FT20314 (Pass) brake line bracket and the provided 1/4”-20 x 1” bolts, washers and nuts. Position the new bracket into the factory brake line bracket location and attach with the factory hardware and the 1/4” hardware. Attach the factory bracket to the new Fabtech bracket. Carefully bend the hard brake line and attach with the supplied 1/4” hardware. Torque to 10 ft-lbs. **SEE FIGURES 73-74**



FIGURE 73 - STEP 45



FIGURE 74 - STEP 45

46. Re-route the brake hose and the ABS line to the steering knuckle. Secure the ABS line to the back of the knuckle using the provided clamp and 1/4” bolt and washer. Torque to 10 ft-lbs. Re-connect the ABS line into the hub assembly and torque to 10 ft-lbs. Use the provided black zip ties to mount the brake line in a safe location. **SEE FIGURES 75-76**

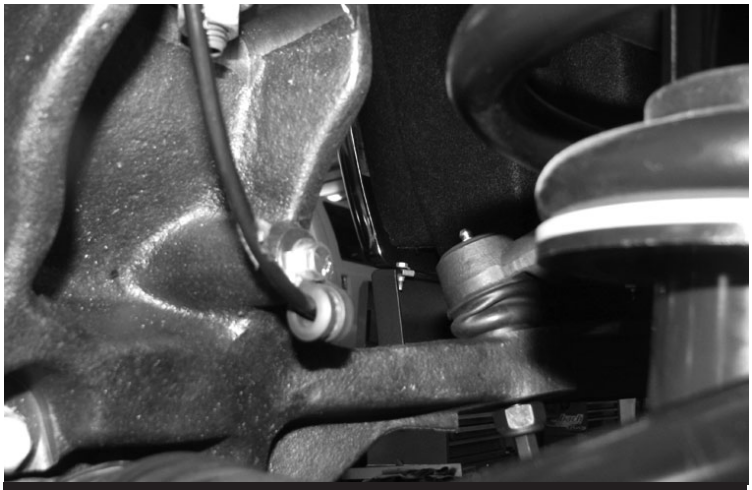


FIGURE 75 - STEP 46



FIGURE 76 - STEP 46

47. Proceed with torquing all bolts and nuts. Differential bracket bolts torque to 106 ft-lbs. Cross member bolts torque to 212 ft-lbs, rear differential bracket torque to 100 ft-lbs.

48. Re-install the front driveshaft to the differential with the factory hardware and torque to 50 ft-lbs.

49. Locate FT20658BK (sway bar drop brackets), and M10-1.5 x 30 bolts and washers. Install the new brackets with the flat side towards the outside of the vehicle. Torque to 58 ft-lbs. **SEE FIGURE 77**

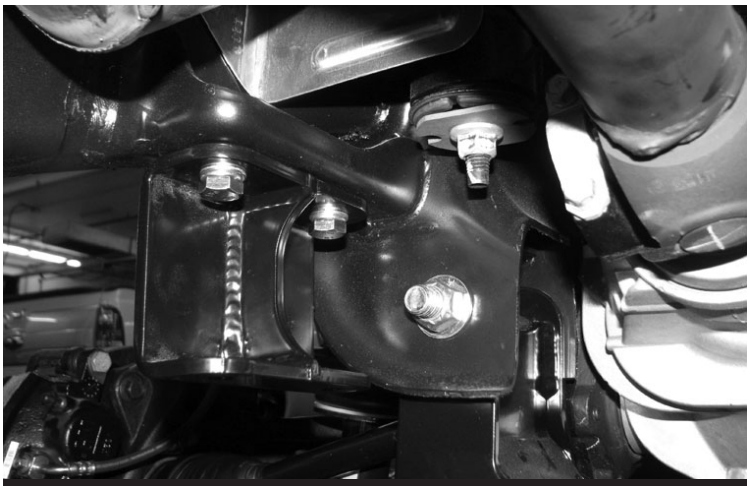


FIGURE 77 - STEP 49

50. Install the factory sway bar using the provided 3/8”-16 x 1-1/2” bolts, washers and nuts. Torque to 52 ft-lbs. Install the factory sway bar links with the factory hardware and torque to 58 ft-lbs. **SEE FIGURES 78**



FIGURE 78 - STEP 50

REAR SUSPENSION

NOTE: IF INSTALLING ON A SUV REFER TO THE INSTRUCTIONS IN THE REAR BOX KIT.

NOTE: Be sure not to over extend any electrical harnesses attached to the rear axle.

51. 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, u-bolts and blocks. Disconnect the brake line bracket at the differential and save the hardware. Remove the ABS line clip from the top of the frame and at the axle. Remove the e-brake cable bracket on the drivers side of the frame and save the hardware. Lower axle down slowly. Use care not to over extend the brake hose. **SEE FIGURES 79-81**



FIGURE 79 - STEP 51

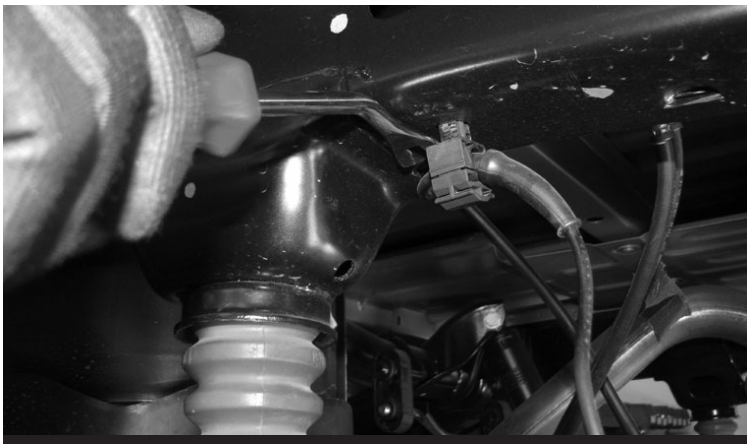


FIGURE 80 - STEP 51

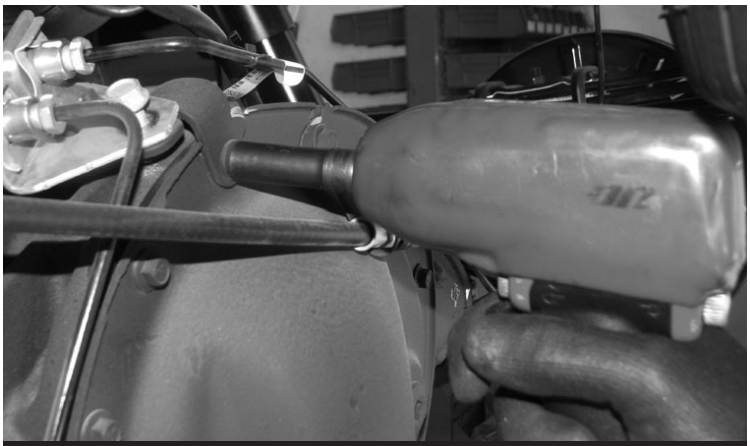


FIGURE 81 - STEP 51

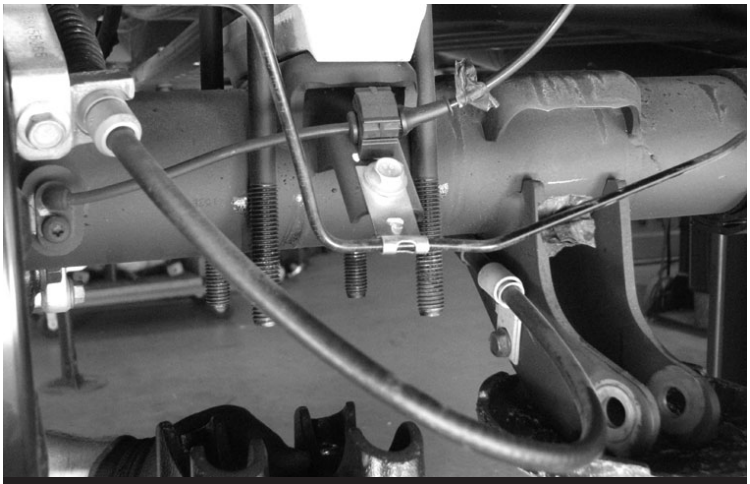


FIGURE 82 - STEP 51

52. Locate FTBK5 (5” Block), FT1500U-3 (Ubolts) and 9/16” Hardware. Install the blocks with the new hardware, the short end of the block should be facing the front of the vehicle. Torque to 184 ft-lbs. **SEE FIGURE 83**

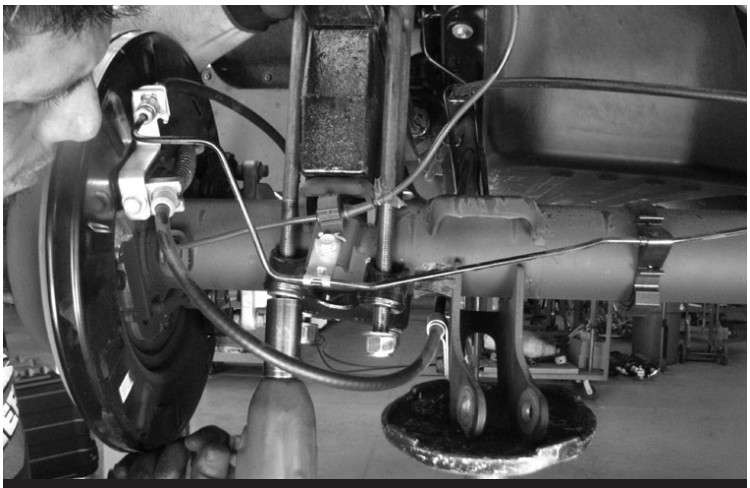


FIGURE 83 - STEP 52

53. Remove the rear bump stops from the frame. Take the factory bolts and use a die grinder with a cut off wheel to cut 1/2” from the end. Locate FT20025 bump stop spacers and install to the factory bumpstops using the trimmed factory bolt. Use a drill with a 7/16” bit and drill out the weld nut in the frame that originally held the bumpstops in place. Install the 10mm x 25mm bolt and washer from the inside of the frame and attach the new bumpstop spacer. Torque the bolts to 58 ft-lbs. **SEE FIGURE 84-88**



FIGURE 84 - STEP 53

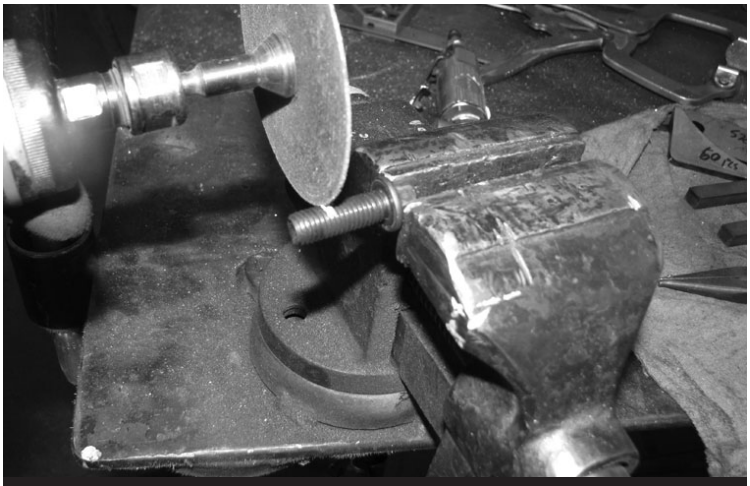


FIGURE 85 - STEP 53



FIGURE 86 - STEP 53



FIGURE 87 - STEP 53



FIGURE 88 - STEP 53

54. Locate FTS7240 (Performance), FTS6240 (Stealth) or FTS810562 (Dirt Logic 2.25 Black Shock). Insert the bushings and sleeves into the ends, and install. Torque to 65 ft-lbs. **SEE FIGURES 89-90**



FIGURE 89 - STEP 54



FIGURE 90 - STEP 54

55. Locate FT20349 (Brake Line Bracket) and the supplied 5/16”-18 x 1” bolt, washers and nut. Attach the new bracket to the differential using the factory bolt. Then, attach the brake line assembly to the new fabtech bracket using the supplied 5/16” hardware. Torque to 29 ft-lbs. **SEE FIGURE 91**

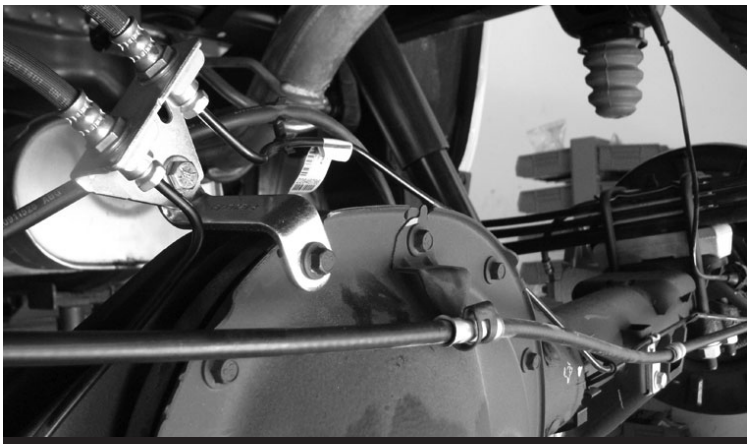


FIGURE 91 - STEP 55

56. Remove the drivers side E-brake cable from the previously removed bracket. Position the passenger side cable into the bottom position of the bracket where the drivers side was originally. Re-install the bracket into the factory location with the factory hardware. **SEE FIGURE 92**



FIGURE 92 - STEP 56

57. Using the supplied black zip ties, secure both ABS lines to the inside part of the u bolt. Allow some slack when securing them all the way. **SEE FIGURE 93-94**

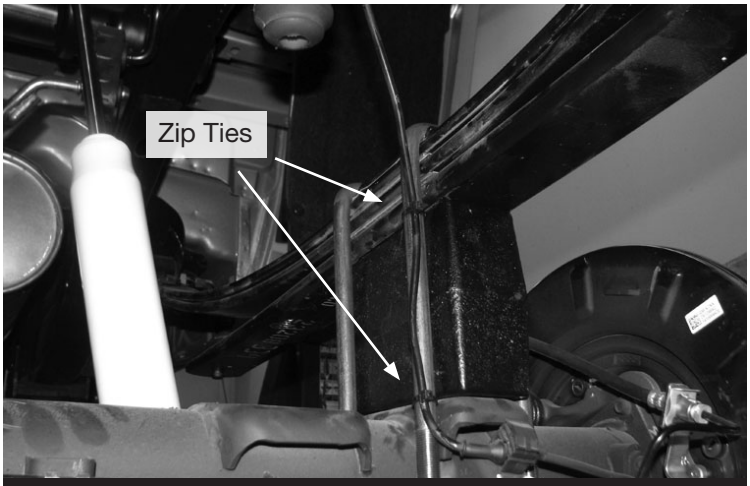


FIGURE 93 - STEP 57



FIGURE 94 - STEP 57

58. 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.**

59. Check front end alignment and set to factory specifications. Readjust headlights.

60. Recheck all bolts for proper torque.

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

62. 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.**

63. 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