

# **INSTALLATION INSTRUCTIONS**

NOTE: MUST CHECK AND FILL FRONT DIFFERENTIAL BEFORE INSTALL

# 2021-2024 FORD BRONCO 4WD 5"- 6" BASIC & PERFORMANCE SYSTEMS

FTS22357

NOTE: Prior to installation of this suspension kit. Please add 1.5 quarts of differential fuild to the front diff.

	FTS22357	COMPONENT BOX 1	
1	FT31027	FRONT CROSSMEMBER	
1	FT31028	REAR CROSSMEMBER	
1	FT31048	SWAY BAR BRACKET (DRIVER)	
1	FT31049	SWAY BAR BRACKET (PASS)	
1	FT31050	UPPER DIFF MOUNT (DRIVER)	
1	FT31051	DIFF SKID PLATE	
1	FT31054	DIFF TORQUE MOUNT (REAR)	
1	FT31058	DIFF MOUNT (PASS)	
1	FT31060	HARDWARE SUBASSEMBLY	

	FT31060 HARDWARE SUBASSEMBLY		
2	FT1020	BUSHING	
1	FT181	SLEEVE .625 X .500 X 2.375	
1	FT1599-1-5	BRAKELINE TAB (REAR)	
1	FT20349	REAR BRAKELINE BRACKET	
1	FT22357i	INSTRUCTIONS	
1	FT31059	NUT TAB	
2	FT30290	SLEEVE 1.000 X .500 X .520	
2	FT31057	BRAKE LINE TAB FRONT	
1	FT31061	HARDWARE KIT	
1	FTAS12	STICKER 10X4	
1	FTAS16	DRIVER WARNING DECAL	
1	FTREGCARD	REGISTRATION CARD	

	FTS22358 COMPONENT BOX 2		
1	FT30900	DRIVESHAFT SPACER (PINION)	
1	FT30990D	KNUCKLE (DRIVER)	
1	FT30990P	KNUCKLE (PASSENGER)	
1	FT30991	TRACK BAR BRACKET (REAR)	
1	FT31055	DRIVESHAFT SPACER (TRANSMISSION)	
1	FT31062	HARDWARE SUBASSEMBLY	
1	FT31063	SWAY BAR SKID PLATE	

FT31062		HARDWARE SUBASSEMBLY	
2	FT31056	TIE ROD END	
2	FT31064	CV SPACER	
1	FT31065	DRIVESHAFT VENT	
1	FTAS12	STCIKER 10X4	
1	FTAS16	DRIVER WARNING DECAL	
1	FTREGCARD	REGISTRATION CARD	

	FT31061 - HARDWARE KIT	LOCATION
	BAG 1	
4	5/8-11 X 4-1/4" HEX BOLT	CROSSMEMBER
10	5/8" SAE WASHER	
5	5/8-11 C-LOCK NUT	
4	M12-1.75 X 45MM HEX BOLT	DIFF TORQUE MOUNT
4	M12 FLAT WASHER	
4	M12 SPLIT LOCK WASHER	
1	1/2-13 X 4" HEX BOLT	
2	1/2-13 X 2" HEX BOLT	
1	M10-1.5 X 90MM HEX BOLT	PASS DIFF MOUNT
2	M10 FLAT WASHER	
1	M10-1.5 NUT	
2	3/8-16 X 1" HEX BOLT	DIFF NUT TAB
2	3/8" SAE WASHER	
2	3/8" LOCK WASHER	
4	7/16-14 X 1" HEX BOLT	SWAY BAR BRACKET
8	7/16" SAE WASHER	
4	7/16-14 C-LOCK NUT	
4	1/2-13 X 1-1/4" HEX BOLT	SWAY BAR/SKID PLATE
3	1/2" LOCK WASHER	
12	1/2" SAE WASHER	
4	1/2-13 C-LOCK NUT	
1	5/8-11 X 4.5" HEX BOLT	SKID PLATE
2	5/16-18 X 1" HEX BOLT	FRONT BRAKE LINE
4	5/16" SAE WASHER	
2	5/16-18 C-LOCK NUT	
	BAG 2	
6	M10-1.50 X 90MM SOCKET BOLT	DRIVESHAFT
6	M10-1.50 X 70MM SOCKET BOLT	DRIVESHAFT
2	7/16-14 X 1-1/4" HEX BOLT	REAR TRACK BAR
4	7/16" SAE WASHER	
2	7/16-14 C-LOCK NUT	
1	5/8-11 X 3-3/4" HEX BOLT	REAR TRACK BAR
2	5/8" SAE WASHER	
1	5/8-11 C-LOCK NUT	
2	5/16-18 X 3/4" HEX BOLT	REAR BRAKE LINE
4	5/16" SAE WASHER	
2	5/16-18 C-LOCK NUT	

THREAD LOCKING COMPOUND

## - TOOL LIST -

## **Required Tools (Not Included)**

Die Grinder w/ Cutoff Wheel or Sawzall

Basic Hand Tools
Floor Jack
Jack Stands
Assorted Metric and S.A.E sockets, and Allen wrenches
Torque Wrench

# - 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.

This suspension and shocks have been designed to be installed on a stock vehicle.

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.

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. 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.

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.

Read all warnings and warranties on the last page of these instructions before starting installation.

**NOTE:** Prior to installation of this suspension kit. Please add 1.5 quarts of differential fuild to the front diff.

#### FOOTNOTES -

- Does not fit vehicles equipped with HOSS 3.0 package.
- FTS22349 and FTS22350 (Tie Rod Kits) will not work with this lift kit

### - INSTRUCTIONS -

#### - FRONT SUSPENSION -

- 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. Remove both skid plates from the front bumper to the front crossmember and the one attached to both front and rear crossmember.
- Disconnect the factory brake lines from the factory knuckle. Remove the ABS sensor from the knuckle. Save hardware. SEE FIGURE 1



 Loosen the tie rod nut and carefully strike the knuckle with a hammer until it comes loose. Save hardware. SEE FIGURE 2



FIGURE 2 - STEP 4

 Disconnect the factory sway bar link from the lower control arm. Save Hardware. NOTE: Disconnect from the opposite side as well so the sway bar can move freely. SEE FIGURE 3



- 6. Remove the entire factory sway bar from the frame mounts and set aside. Save all hardware.
- Remove the bolts attaching the brake caliper to the knuckle. Then secure the caliper to the frame. Do not allow it to hang freely. Remove the brake rotor and set aside. SEE FIGURES 4-5

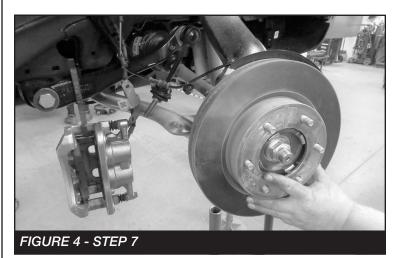


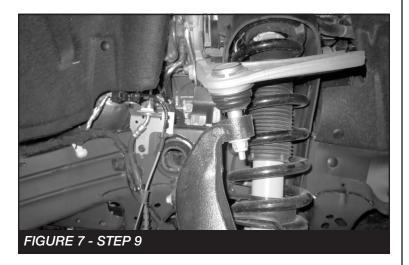


FIGURE 5 - STEP 7

#### 8. Remove the CV axle nut and save. SEE FIGURE 6

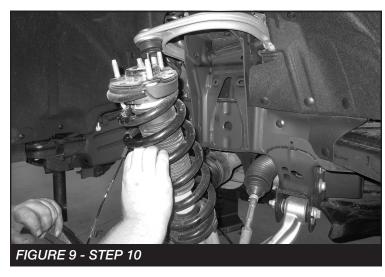


 Loosen the upper & lower ball joint nuts and carefully strike the knuckle at the ball joints with a hammer until it comes loose from the control arm. Remove the factory knuckle and save the hardware. SEE FIGURES 7-8





10. Remove the upper and lower strut hardware. Then, remove the factory strut from the vehicle. Save hardware. **SEE FIGURE 9** 

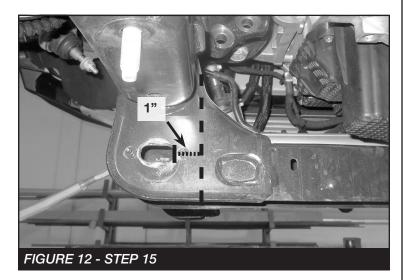


- 11. Remove the factory lower control arms. Save hardware.
- 12. Remove the factory front driveshaft from the vehicle.
- 13. Disconnect the electrical plug from the front differential. Then, with assistance remove the front differential from the vehicle.
- 14. Remove the front differential mounting bracket from the front crossmember. **SEE FIGURE 10.** Cut the ears off that attached the diff to the bracket. **SEE FIGURE 11** Then, reinstall the bracket to crossmember.

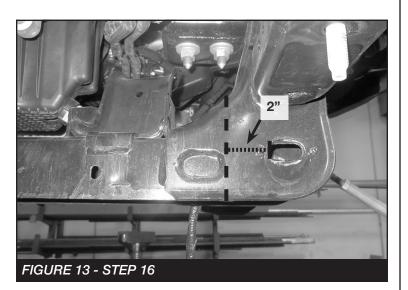




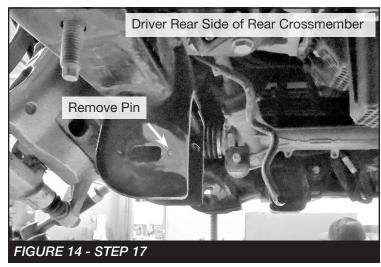
 Locate the rear factory crossmember. Starting on the driver rear side. From the control arm mounting hole, measure 1" inward and mark a vertical line. SEE FIGURE 12



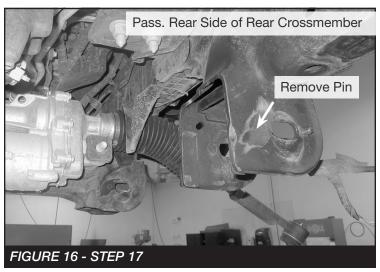
16. On the passenger rear side. From the control arm mounting hole, measure 2" inward and mark a vertical line. **SEE FIGURE 13** 



17. Using a reciprocating saw, cut the center section of the crossmember from the vehicle. Locate the inside alignment cam pins on both the front and back side of both control arm pockets. These will need to be removed and sanded down. **SEE FIGURES 14-16** 







18. Locate the driver side rear lower control arm pocket. On the front side where you made the vertical cut. Mark a 1" radius on the top corner. Then, using a grinder notch out the corner to allow clearance of the differential. SEE FIGURES 17-18





19. Locate the front differential. The corner of the rear mount will need to be ground of 1/2". **SEE FIGURES 19-20** 





20. Remove the locating pin on the upper rear differential mount. **SEE FIGURES 21-22** 

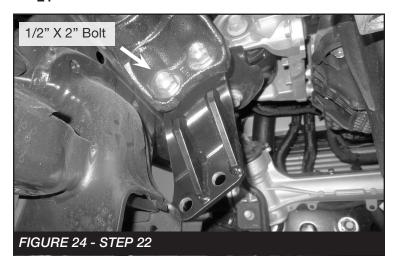




21. Install FT31027 (Front Crossmember) using the supplied 5/8" x 4-1/4" bolts, nuts and washers. Leave loose. **SEE FIGURE 23** 



22. Install FT31050 (Driver upper diff bracket) using the supplied 1/2" x 2" bolts, nuts and washers. **SEE FIGURE 24** 



23. Reinstall the differential using the supplied M12 x 45mm bolts, split washers, and flat washers for to attach to the FT31050 (Driver upper bracket). Also, insert the supplied 5/8" x 4-1/2" bolt to temporarily hold the differential in place to the front crossmember. **SEE FIGURES 25-26** 



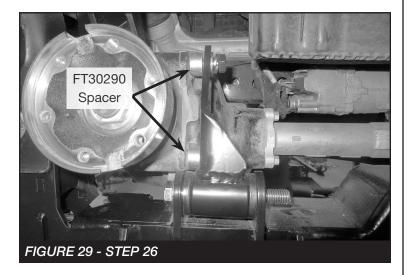


24. Install FT31028 (Rear Crossmember) using the supplied 5/8" x 4-1/4" bolts, nuts and washers. NOTE: When installing the crossmember the passenger side diff mount will be positioned above the differential. SEE FIGURES 27-28



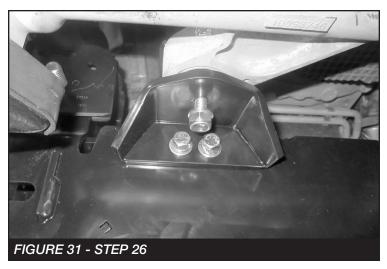


- 25. Locate FT3154 (Rear diff mount) and install (2) FT1020 (Bushings) & FT181 (Sleeve) into the barrel. Use the supplied urethane grease.
- 26. Install FT31054 (Rear diff mount) to the differential using the supplied M12 x 45mm bolts, split washers and flat washers along with the FT30290 (Spacer) between the diff and bracket. Then, install the 1/2"x 4" bolt, nut and washers to attach the bracket to the new crossmember. **SEE FIGURES 29-30**





27. Install FT31058 (Passenger diff mount) to the new crossmember using the supplied 3/8" x 1" bolts, nuts, washers and FT31059 (Nut tab). The nut tab will insert up through the crossmember opening on the bottom. Then, insert the supplied M10 x 90mm Bolt, nut and washers. Leave loose. **SEE FIGURES 31-32** 

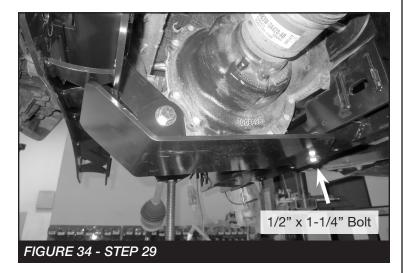




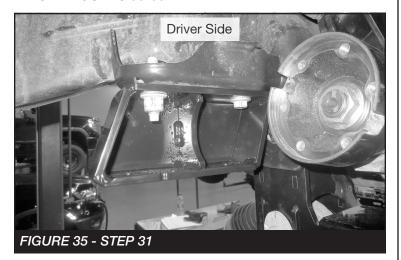
28. Install the factory lower control arms to the new crossmembers using the factory hardware. Leave loose. **SEE FIGURE 33** 



29. Installing FT31051 (Diff skid plate). Carefully remove the 5/8" x 4-1/2" bolt from the front diff mount then reinstall it with the skid plate. Install the supplied 1/2" x 1-1/2" bolt, nut and washers at the rear of the skid plate to attach to the rear crossmember. **SEE FIGURE 34** 



- 30. Torque the differential mounts and crossmembers. Start at the top and work down. Leave the lower control arm hardware loose.
- Torque to the following:
  - 1/2" & M12 hardware to 106 ft-lbs.
  - M10 & 3/8" hardware to 49 ft-lbs.
  - 5/8" & Factory hardware to 185 ft-lbs.
- 31. Install FT31048 & FT31049 (Driver and Pass sway bar brackets) using the factory hardware. Torque to 85 ft-lbs. **SEE FIGURES 35-36**



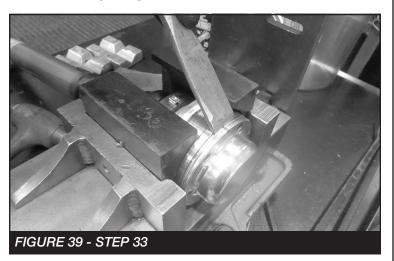


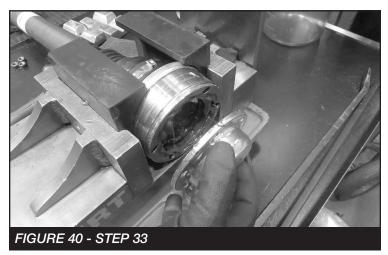
32. Reinstall the factory sway bar to the new drop brackets using the supplied 7/16" x 1" bolts, nuts and washers. Torque to 65 ft-lbs. If equipped, reconnect the plug for the electronic sway bar disconnect. **SEE FIGURES 37-38** 





33. Locate the factory front driveshaft. The end caps will need to be swapped and the driveshaft will be reinstalled the opposite way. Remove the end caps by slightly tapping it with a straight edge tool. **SEE FIGURES 39-42** 









34. Notice the one end cap has a breather vent. The one that does not will need to be drilled to install the supplied vent. Mark the center of the end cap then drill a hole using a 1/2" bit. Install FT31065 (Driveshaft vent). **SEE FIGURES** 43-45







35. Install the end cap with the smaller bulge on the end with the driveshaft boot. Then, install the other end cap with the new vent on the opposite end. **NOTE: Make sure the through bolt holes are lined up. SEE FIGURES 46-47** 





36. When reinstalling the front driveshaft. Install the front (Pinion side) with FT30900 (Spacer Pinion Side (1" Spacer)) and M10 x 90mm bolts. Torque to 37 ft-lbs. **SEE FIGURE 48** 



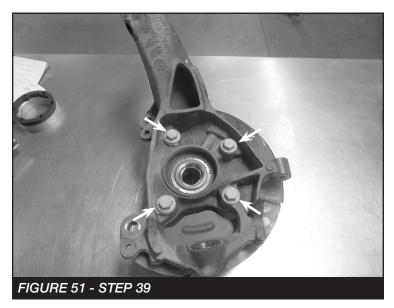
37. Install the rear (transmission side) with FT31055 (Spacer Trans. side (1/2" Spacer)) and M10 x 70mm bolts. Torque to 37 ft-lbs. **SEE FIGURE 49** 



38. Install FT31063 (Sway bar skid plate) to the rear crossmember using the supplied (3) 1/2" x 1-1/4" bolts, split washers and flat washers. **SEE FIGURE 50** 



39. Locate both factory knuckles. Disassemble the hubs from the knuckle by removing the (4) bolts on each knuckle assembly. **SEE FIGURE 51** 



40. Remove the (3) small screws attaching the dust shield onto the knuckles. **SEE FIGURE 52** 



41. Install the dust shields and hub assemblies on the new Fabtech knuckles FT30990D & FT30990P (Driver & Pass Knuckles). Torque the small screws to 9 ft-lbs and the hub bolts to 129 ft-lbs. **SEE FIGURES 53-54** 

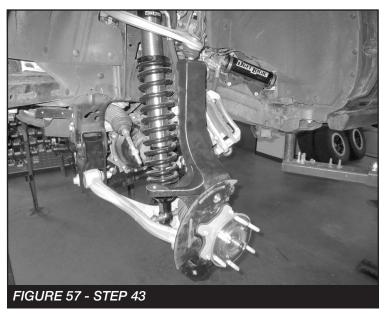




- 42. At this time refer to the instructions supplied with either the spacer box kit or Dirt Logic coilover box. Once completed, continue with the following steps.
- 43. Install the new Fabtech knuckle assemblies to the lower and upper ball joints. NOTE: Install FT31064 (CV spacer) between the CV shaft and the hub bearing. Torque the upper and lower ball joint nuts to 85 ft-lbs. SEE FIGURES 55-57.







44. Install the CV axle nut. Torque to 220 ft-lbs. **SEE FIGURE 58** 

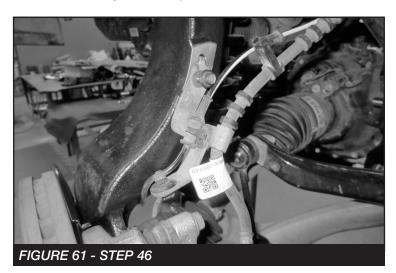


45. Install the brake rotor and brake caliper Torque the brake caliper housing bolts to 184 ft-lbs. Then, install the ABS sensor into the knuckle. Torque to 6 ft-lbs **SEE FIGURES 59-60** 





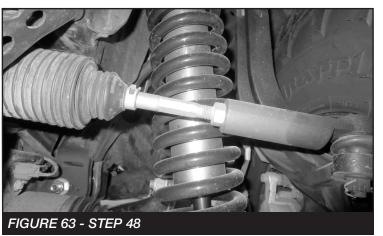
46. Reinstall the Brake hose/ ABS line bracket to the new knuckle using the factory hardware. **SEE FIGURE 61** 



47. Install FT31057 (Brake line bracket) to the frame using the factory bolt. Then, install the factory brake line bracket to the new Fabtech bracket using the supplied 5/16" bolt, nut and washers. **SEE FIGURE 62** 



48. Remove the factory outer tie rod ends. Install FT31056 (Outer Tie rod) to the inner tie rod. Leave 1/2" of visible thread. NOTE: This is a starting point final adjustments will be made when alignment is performed. Install the new tie rod end to the knuckle. Torque to 56 ft-lbs. SEE FIGURE 63.



49.

50.

51.

52.

# **REAR SUSPENSION**



- 53. Jack up the rear end of the truck and support the frame rails with jack stands. **NEVER WORK UNDER AN UNSUPPORTED VEHICLE!** Remove the rear tires.
- 54. Supporting the rear axle. Disconnect the rear track bar from the axle side bracket. Save hardware. **SEE FIGURE 64**
- 55. Remove the rear inner fender liners to access the upper strut hardware.
- 56. Disconnect both Driver and Pass. strut assemblies. Lower the rear end and remove the struts from the vehicle.
- 57. At this time refer to the instructions supplied with



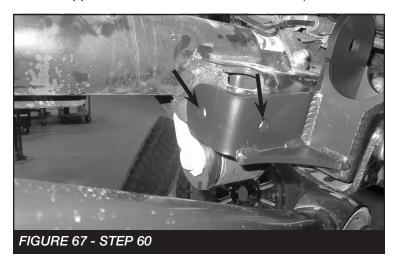
either the spacer box kit or Dirt Logic coilovers box. Once completed, continue with the following steps.

58. Disconnect the brake line bracket from behind the factory track bar mount. Install FT1599-1-5 (Brakeline Tab) to the mount using the factory hardware then install the



brakeline bracket to the new tab using the supplied 5/16" hardware. Torque to 10 ft-lbs. **SEE FIGURE 65** 

59. Disconnect the rear brakeline bracket at the passenger side upper link arm bracket. Install FT20349 (Rear



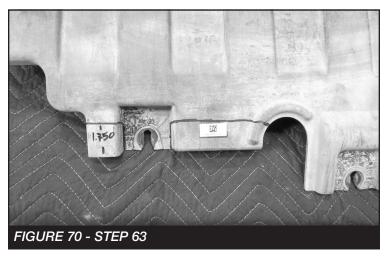
brakeline bracket) tot he factory mount using the factory bolt. Then, install the brakeline bracket to the new Fabtech bracket using the supplied 5/16" hardware. **SEE FIGURE 66** 



60. Install FT30991 (Track bar bracket) onto the factory axle mount using the factory bolt. Then, using the new bracket mark the two holes on the factory mount. Remove the



bracket and drill the holes using a 1/2" drill bit. **SEE FIGURE 67** 







- 61. Reinstall the new Fabtech bracket using the factory bolt and the supplied 7/16"x 1-1/4" hardware. Torque the factory bolt to 160 ft-lbs and the 7/16" hardware to 65 ft-lbs. **SEE FIGURE 68**
- 62. Install the track bar to the new Fabtech bracket using the supplied 5/8"x 3-3/4" hardware. Torque to 170 ft-lbs. **SEE FIGURE 69**
- 63. Locate the factory skid plate. **SEE FIGURES 70-71** for trimming locations. Then, install using the factory hardware. **SEE FIGURE 72**
- 64. 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.
- 65. Check front end alignment and set to factory specifications. Readjust headlights.
- 66. Recheck all bolts for proper torque. RE-TORQUE ALL NUTS, BOLTS AND LUGS AFTER 50 MILES AND PERIODICALLY THEREAFTER UNTIL TORQUE VALUES ARE RETAINED.
- 67. Recheck brake hoses, ABS wires and suspension parts for proper tire clearance while turning tires fully left to right.

- 68. 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.
- 69. Check ball joints, uniballs bearings, bushings and all steering components every 2500-5000 miles for wear and replace as required.
- 70. Install Driver Warning Decal. Complete product registration card and mail to Fabtech in order to receive future safety and technical bulletins on this suspension.
- 71. Review all included warnings and warranties with consumer

For technical assistance call: 909-597-7800

# - Product Warranty & 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, Uniball bearings, 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 take apart shocks are considered a serviceable shock with a 1-year warranty against any manufacturer's defects. If a shock fails within the initial year of ownership, the owner must ship the shock to Fabtech for inspection and service. If after examination the shock is determined to have failed due to neglect, damage caused by improper installation, or any reason other than "normal wear and tear," the owner of the shock will be responsible for all service costs. Costs include labor, parts, and shipping. 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. This warranty does not include coverage for police, taxi, first responder vehicles, race vehicles, or vehicles used for government, commercial or fleet 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.

Oversized tires and wheels may decrease the vehicle's braking capacity. Drivers should always brake early and be aware of the increased the stopping distance of the vehicle. Drivers should adjust their driving habits to the effectiveness of the braking. Adjust your driving habits to these changes.

Failure to drive safely may result in serious injury or death to driver and passengers. Driver and passengers must ALWAYS wear your seat belts, avoid quick sharp turns and other sudden maneuvers