



INSTALLATION INSTRUCTIONS

FTS22205		2015 FORD F-150 4WD
1	FT30640	DIFF SUPPORT BRACKET (FRONT)
1	FT30637BK	DIFF SUPPORT BRACKET (REAR)
1	FT30608	DRIVESHAFT SPACER
1	FT30641	HARDWARE SUBASSEMBLY

FT30641		HARDWARE SUBASSEMBLY
1	FT30639	NUT TAB
2	FT1020	BUSHING
1	FT181	SLEEVE .625 X .500 X 2.375
1	FT30642	HARDWARE KIT

FT30642 - HARDWARE KIT		LOCATION
1	M18-2.5 NYLOCK NUT	
3	1/2-13 C-LOCK NUT ZINC	
1	3/8" LOCK WASHER	
1	THREAD LOCKING COMPOUND	

2015 FORD F-150 4WD DIFFERENTIAL SUPPORT REVISION FT22205i

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Tech Line: 909-597-7800 | **Fax:** 909-597-7185 | **Web:** www.fabtechmotorsports.com



- 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 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.

- INSTRUCTIONS -

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. Support the differential and rear crossmember with a jack. Remove sway bar first. Then, remove FT30589BK (rear diff plate) and FT30594 (spacer plate) and discard. Remove and discard the existing center differential bracket. Save hardware. **SEE FIGURE 1-2**

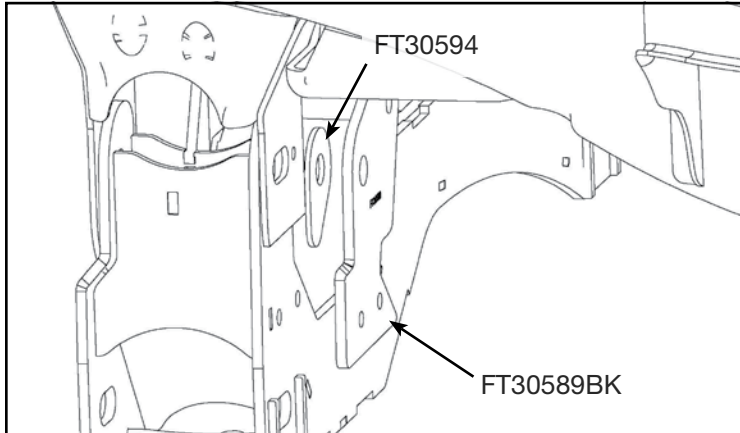


FIGURE 1 - STEP 2

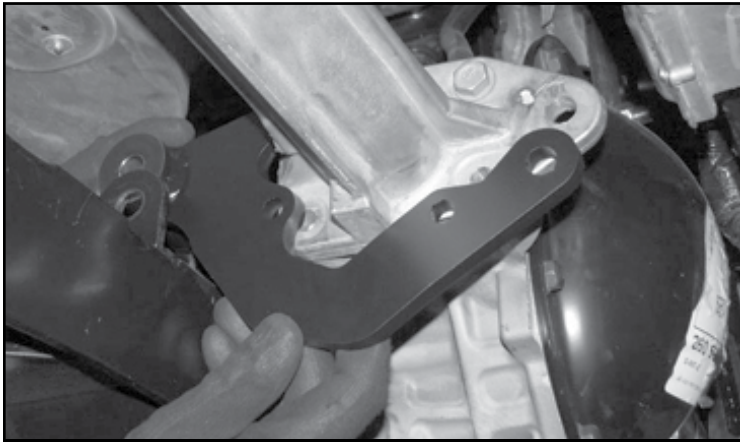


FIGURE 2 - STEP 2

3. Using a reciprocating saw, carefully cut 1-3/4" from the end of the tab on the crossmember. **SEE FIGURE 3 FOR ILLUSTRATION.** Paint raw metal. **SEE FIGURES 4-5.**

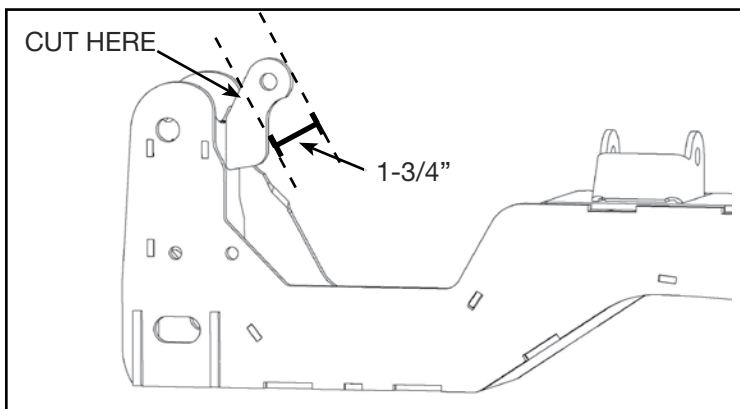


FIGURE 3 - STEP 3



FIGURE 4 - STEP 3



FIGURE 5 - STEP 3

4. Locate the new center differential bracket (FT30640). Install two of the Fabtech (FT1020) bushings and one sleeve (FT181) into the barrel on the differential bracket. Mount the new differential bracket to the center of the differential. Mount the front tab on the diff to the center bracket using the 1/2"-13 x 2" bolt, washers and new c-lock nut. Install the 1/2-13 X 4" bolt, washers and new c-lock nut on the bracket that mounts to the front crossmember. Leave loose at this time. **SEE FIGURE 6**

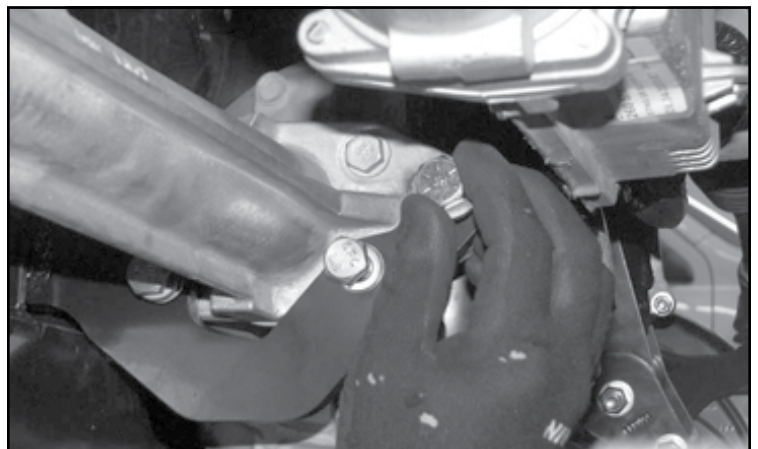


FIGURE 6 - STEP 4

5. Install the FT30637BK (Diff support bracket) by routing it up and over the driveshaft using the bolts, washers and new supplied nuts. **NOTE: Adjusting the pinion angle with a jack will be necessary to install the bracket. SEE FIGURES 7-8**

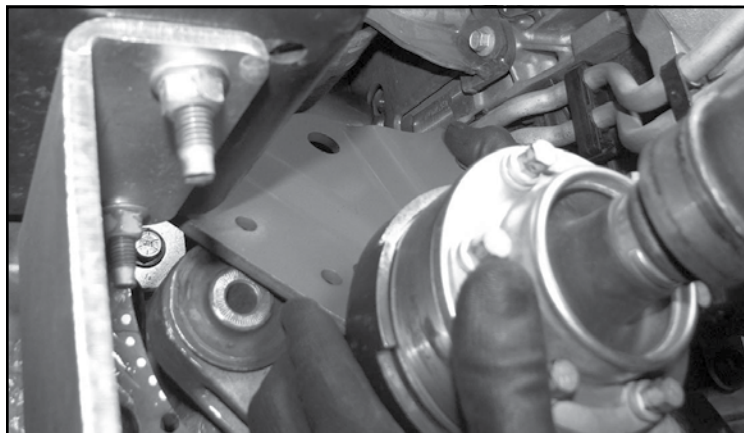


FIGURE 7 - STEP 5

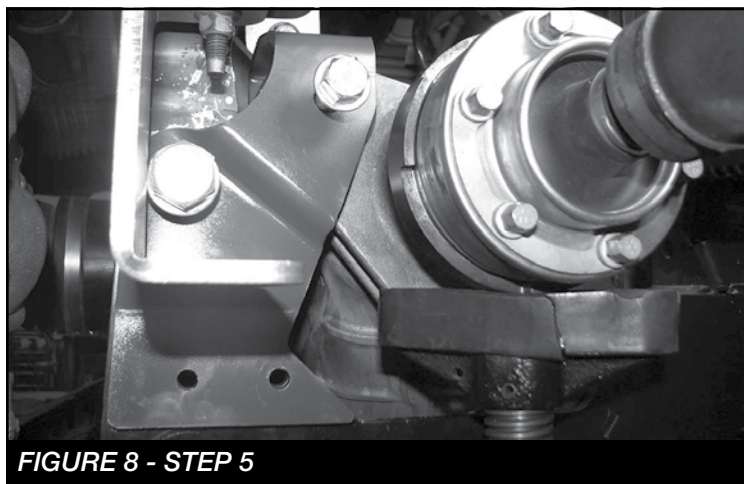


FIGURE 8 - STEP 5

6. Locate and install FT30639 (Nut Tab) with the 3/8" bolt, washer and supplied lock washer for the outside location. Insert the nut tab down through the opening of the crossmember. Install the second 3/8" bolt and hardware. Torque to 52 ft-lbs. **SEE FIGURES 9-10**

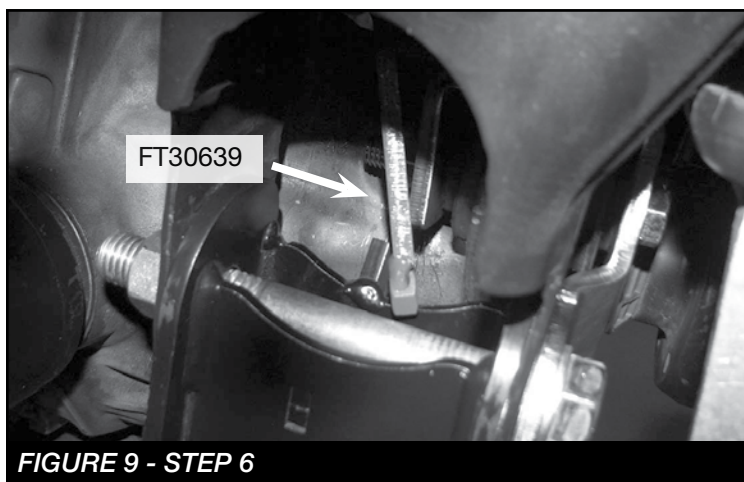


FIGURE 9 - STEP 6

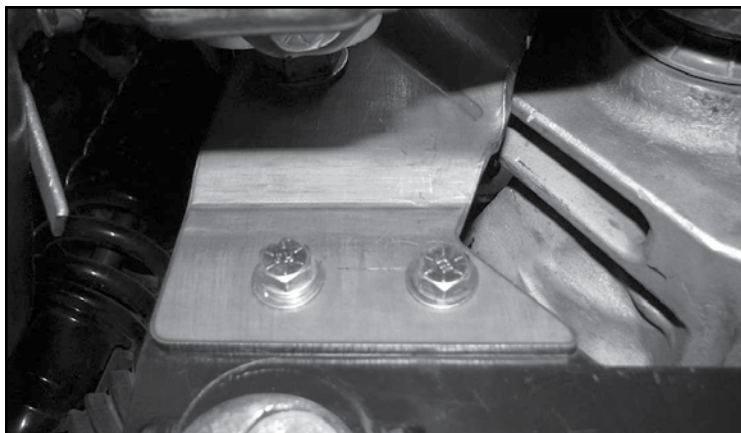


FIGURE 10 - STEP 6

7. Torque the 18mm bolt to 220 ft-lbs and 1/2" bolt to 127 ft-lbs on the rear bracket. Torque the M10-1.5 x 45mm bolts to 35 ft-lbs. Torque the 1/2"-13 x 2" bolt to 90 ft-lbs on the front mount. Reconnect sway bar. Torque hardware to 83 ft-lbs.
8. Disconnect the front driveshaft from the differential and install FT30608 (Driveshaft spacer) with the factory bolts. Torque to 58 ft-lbs. **SEE FIGURE 11**

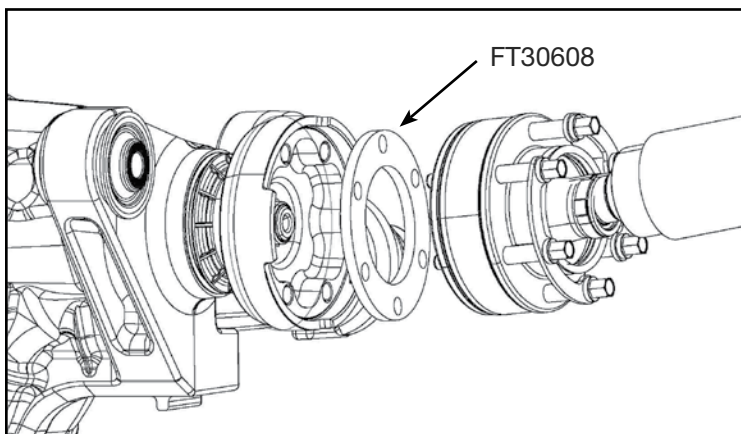


FIGURE 11 - STEP 8

9. Install tires and wheels and torque lug nuts to wheel manufacturer's specifications.

- **HUB actuator function must be tested with the steps on the next page.**

Procedure for checking proper installation of HUB actuator.

- The IWE system uses vacuum hubs that engage the front wheel hubs to the front halfshafts or disengage the front wheel hubs from the front halfshafts.
 - The IWE solenoid receives engine vacuum from the vacuum reservoir.
 - When the 4-wheel drive system is in 2WD mode, the 4x4 module (PCM) supplies a ground path to the IWE solenoid to apply vacuum to the wheel ends (disengaging the front hubs from the front halfshafts). In 4WD mode, the 4x4 module (PCM) does not supply the ground path to the IWE solenoid, vacuum is not applied to the integrated wheel ends and an internal spring keeps the front hubs engaged to the front halfshafts.
10. With the vehicle on level ground. Engage the emergency brake and chalk the rear wheels.
 11. Jack up the front driver side enough so the wheel/tire spins freely.
 12. With the vehicle in PARK, start the engine. **NOTE: MAKE SURE THE VEHICLE IS PLACED IN 2WD.** Rotate the wheel/tire and check to see if the CV halfshaft rotates. If the CV halfshaft rotates, either a vacuum leak is present or the IWE (Intergrated Wheel End) was installed improperly. **NOTE: DO NOT OPERATE THE VEHICLE OR DAMAGE WILL OCCUR. SEE FIGURE 12**

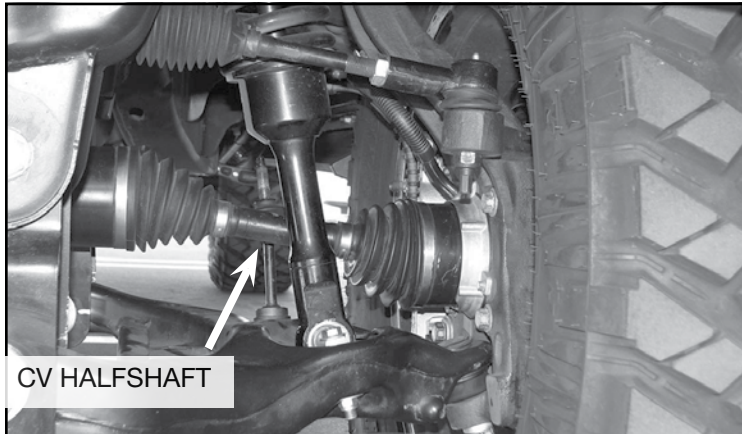


FIGURE 12 - STEP 12

13. If the CV halfshaft remains stationary when the wheel/tire is rotated repeat steps 10-12 on the front passenger wheel/tire.

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

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

- Product Warranty and Warnings -

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

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

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

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

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

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

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

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

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

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

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

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

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