



INSTALLATION MANUAL
TOYOTA 4" I.F.S SUSPENSION
1986-1996
PART # T411N
Part # T411B Rear Kit Box with
2 1/2" rear "U" Bolts
Part # T412B Rear Kit Box with
3 1/4" rear "U" Bolts

System Parts Check List	
Description	Qty
T41-01 - A-Arm Drop Brackets	4
T41-02 - Rear Crossmember	1
T41-03 - Center Differential Drop Bracket	1
T41-04 - Driver Side Differential Drop Bracket	1
T41-05 - Passenger Side Differential Drop Bracket	1
T41-06 - Bump Stop Spacer	4
T41-07 - Driver Side Sway Bar Drop Bracket	1
T41-08 - Passenger Side Sway Bar Drop Bracket	1
T41-09 - Tapered Spindle Sleeve	2
T41-10 - Driver Side Spindle Adapter	1
T41-11 - Passenger Side Spindle Adapter	1
T41-12 - Rear Brake Cable Extension	1
T41-NB123 - Hardware Bags	1
T4BL - Brakeline Extensions	1
14SL - 1/4" Spacer Sleeve	1
34SL - 3/4" Spacer Sleeve	1
118SL - 1 1/8" Spacer Sleeve	1
23SP - 2" x 3" Spacer Sleeve	8

REAR KIT

One of the following rear kits will be used with this base kit.

Part No. T411B

Rear End System Parts Check List

Description	Qty
BL3-01 - 3" Rear Lift Blocks	2
TCI-R15 - Rear add-a-leaf	2
CB38 - 3/8" Centering Bolt and Nuts	1
5U-243S - 9/16" x 2 1/2" x 10" Square "U" Bolt	4
916NW - 9/16" "U" Bolt Nuts and Washers	1

OR

Part No. T412B

Rear End System Parts Check List

Description	Qty
BL3-01 - 3" Rear Lift Blocks	2
TCI-R15 - Rear add-a-leaf	2
CB38 - 3/8" Centering Bolt and Nuts	1
5U-259S - 9/16" x 3 1/4" x 10" Square "U" Bolt	4
916NW - 9/16" "U" Bolt Nuts and Washers	1

Caution: Do not install a bodilift in combination with suspension system. Warranty will be void.

Congratulations on your selection to purchase a Tuff Country Suspension System. We at Tuff Country are proud to offer a high quality product at the industries most competitive pricing. Thank you for your confidence in us, and our product.

***Important Notes:** Please read before beginning installation. **Do Not Install a Bodilift in combination with a suspension system. If Bodilift is installed warranty will be void.**

Read and understand all sections of instruction manual. Check off parts list to be sure all parts are on hand. If any part is missing, you may call Tuff Country at: (800) 288-2190.

TUFF COUNTRY SUSPENSION highly recommends a qualified and or certified mechanic to perform this installation.

This is a mechanical lift of 4" front & 4" rear

Do not adjust torsion bars; leave at factory specs.

Front end alignment will be required.

FRONT END INSTALLATION

Please follow instructions carefully:

1. Safely lift vehicle with a hydraulic jack and placing jack stands under frame rails on front end. Set emergency brake and block rear wheels.
2. Remove wheels, tires and shocks.
3. Remove inner rubber fender splash guards and save for re-installation.
4. Remove clip from brakeline and bracket. Cut bracket to the center of hole to remove stock brakeline from stock bracket. Now install the new brakeline drop bracket to stock bracket by inserting a 3/8" x 1" bolt and washer (from bag #3) with washer on the top of stock bracket into new bracket. Tighten with a 3/8" lock nut (from bag #3) on the bottom. **Note: You may need to reform brakeline slightly, if so be sure not to kink brakeline.** Now re-install brakeline clip to hose.
(See Illustration # 1)

5. Remove sway bar. Remove (2) bump stops on passenger side and (2) bump stops on driver side.

6. Remove stock eccentric adjustable cam bolt nuts on both the front and rear of lower control arms **LEAVE THE BOLTS IN PLACE.** Remove front crossmember from mounting bracket. **ON THE PASSENGER SIDE ONLY** cut the crossmember mounting bracket tab off of the existing bracket between the bolt holes for the differential clearance. (See Illustration # 2)

7. Support lower control arms with a hydraulic jack and remove stock eccentric adjustable cam bolts from the front and rear of lower control arms. (Driver side and passenger side.)

8. Locate (4) part No. T4I-01 (A-Arm Drop Brackets), from bag # 2 locate (4) 5/8" x 4 1/2" Bolts and (4) 5/8" Lock Nuts. Also locate (8) 23SP (2" x 3" locating spacers). On passenger side of vehicle install (2) A-Arm drop brackets into stock lower control arm brackets. Secure using 5/8" x 4 1/2" bolts, nuts and locating spacers. Locating spacers go on the outside of each bracket. **NOTE: The locating spacers will go in one way only, all (8) spacers are the same.**

Repeat procedure on other side. Re-install stock front crossmember with stock bolts. **Hand tighten** all bolts associated with this step.

(See Illustration # 3)

9. Using a straight edge, line up the tabs on the new lower control arm drop brackets with tabs on the stock bracket. **Now torque bolts to 100 ft. lbs.**

Do not tighten crossmember bolts at this time. Install stock bolts and nuts into front crossmember and front differential. Now tighten bolts and the tighten crossmember bolts.

10. Locate part No. T4I-02 (Rear Crossmember), (8) 7/16" x 1" bolts, (16) 7/16" washers and (8) 1/2" lock nuts (from bag # 3). Install new crossmember rear lower control arm drop brackets. Secure with 7/16" hardware and torque to 45 ft. lbs. Using a straight edge line up the upper tabs with the lower tabs and the tighten 5/8" bolts to 100 ft. lbs.

(See Illustration # 4)

11. Install lower control arms into new lower control arms drop brackets. Re-install the stock eccentric adjustable cam bolts, washers and nuts on both the front and rear of the lower control arms. (Driver and passenger side). **Note: Be sure to tighten the nut, not the bolt the cam will not turn inside cam stops.** Torque to 103 ft. lbs. (See Illustration # 3)

12. Lower differential making sure **not to pull front drive shaft out.**

Locate part No. T4I-103 (Center Differential Drop Bracket), 14SL (1/4" Spacer sleeve), 34SL (3/4" Spacer sleeve), 118SL (1 1/8" Spacer sleeve), (2) 1/2" x 2 1/4" bolts, (2) 1/2" lock nuts, and (4) 1/2" flat washers (from bag # 1)

(See Illustration # 5 for steps 12a, 12b and 12c)

12a. Install the 1/4" spacer sleeve at the **rear lower mount** between the differential and new bracket. Use stock bolt through new bracket, new spacer sleeve and into the rear bottom hole. Front hole should be secured using stock bolt through new bracket and front bottom hole.

Torque to 70 ft. lbs

12b. Install 1 1/8" spacer sleeve at the **front** upper stock rubber mount with 1/2" x 2 1/4" bolt, 1/2" lock nut and 1/2" flat washers. **Torque to 70 ft. lbs**

12c. Install 3/4" spacer sleeve at the **rear** of upper stock rubber mount with 1/2" x 2 1/4" bolt, 1/2" lock nut and 1/2" washers. **Torque to 70 ft. lbs.**

13. Locate part No. T4I-05 (Passenger Side Differential Drop bracket), (1) 1/2" x 1 1/4" bolt, (1) 1/2" lock nut and (2) 1/2" flat washers from bag # 1. Install new passenger side differential drop bracket into upper hole in stock rubber mount. **Note: The widest portion of the bracket is positioned at the bottom with the hole towards the front.** Re-install the stock bolt through the bracket and into side of differential. Make sure to use loctite.

Torque to 70 ft. lbs. (See Illustration # 6)

14. Locate part No. T4I-04 (Driver Side Differential Drop Bracket), (2) 1/2" x 1 1/4" bolt, (2) 1/2" lock nuts and (4) 1/2" washers from bag # 1. Install driver side differential drop bracket using stock bolts in the two bottom holes. **Make sure to use loctite.** Use new 1/2" hardware to secure new driver side differential drop bracket into the two upper holes. **Torque to 70 ft. lbs.**

(See Illustration # 7)

15. Remove tie rods from steering knuckles. Remove the two bolts on the back side of spindle which holds the metal bracket to the brake hose.

16. Locate part No. T4I-10 (Driver Side Spindle Adapter), (1) part No. T4I-09 (Tapered Spindle Sleeve), (1) 5/8" x 2 1/2" bolt, (1) 5/8" Lock Nut and (2) 5/8" Flat Washers from bag # 2. On the driver side of vehicle support the lower control arms with a floor jack and separate the upper ball joint from spindle. Using a file, file corners off of the stock spindle to contour with bottom of the **new driver side spindle adapter** so that the **bottom** of the new spindle seat surface is the same contour as the **stock spindle bottom** surface. Now clean out the hole on the top of the steering knuckle spindle.

17. Insert the tapered spindle sleeve with the small end going downward into stock spindle. Install 5/8" x 2 1/2" bolt and 5/8" lock nut. (See Illustration # 8)

18. Refer again to **Illustration #8** and re-install brake hose bracket to the new spindle using the stock bolts. Make sure to use loctite. **Torque to 120 ft. lbs.** Now insert spindle into upper ball joint and tighten. **Torque to 105 ft. lbs.** Re-install tie rod and **Torque to 67 ft. lbs.**

19. File down lip on the front bump stops to allow shock clearance. Install new front shocks. (Not included in this kit.)

20. Repeat steps 15-19 on passenger side.

21. Locate part No. T4I-06 (Bump Stop Spacers), (4) 3/8" x 1" Bolts, (4) 3/8" Lock Nuts and (8) 3/8" Flat Washers from bag # 3. Remove stock bump stop from the stock bracket and attach the new bump stop extension to the stock bump stop. Install the other end of the bump stop extension to the stock bump stop bracket using 3/8" hardware. Repeat procedure on the other three bump stops. **Note: Keep front steel bump stop extensions at an angle so that the front shocks will clear. The rear bump stops do not require any angle.** (See Illustration # 9)

22. Locate part No. T4I-07 (Drivers Side Sway Bar Drop Bracket), T4I-08 (Passenger Side Sway Bar Drop Bracket), (4) 5/16" x 1" Bolts, (4) 5/16" Lock nuts and (8) 5/16" Flat washers from bag # 3. On driver side, re-install the sway bar with the new driver side sway bar drop bracket using stock bolts and nuts on the **top holes**. install the sway bar to the **bottom holes** of the drop bracket using 5/16" hardware. (See Illustration # 10) **Note: On the Driver side, use the first forward round hole and rear slotted hole with the slant of bracket going downward, open side inward. Now tighten sway bar bracket bolts and sway bar pins in control arms.**

23. Repeat step 22 on the passenger side. **Note: On the Passenger side use the first slotted hole and the rear round hole with the slant going downward and the open side inward. Now tighten sway bar bracket bolts and sway bar pins in control arms.**

24. Check and re-check that all installation steps are complete and done properly. Re-check torque specs on all new bolts **excluding any bolts where loctite used.**

25. Install the front wheels and carefully lower vehicle.

SPECIAL NOTES:

A. Measure from the center of hub to fender to ensure proper lift height.

B. Inform alignment shop that both the inner and outer tie rods may need to be pulled out of the adjusting sleeve and a 1/2" cut of tie rod ends so proper adjustment can be achieved.

C. When installing larger tires and wheels, check for clearance on the upper control arm. **Standard offset wheels must be used. 3 3/4" back spacing with no more than 5 1/4" from the side wall of the tire to the mounting surface of the wheel.**

FRONT END INSTALLATION COMPLETE.

REAR END INSTALLATION

1. Place floor jack under rear axle and safely raise vehicle. Set emergency brake and block front tires in both the front and back of front tires. Remove rear wheels and rear shocks.

2. Remove brakeline clip at the rear hose bracket. Now bolt rear brakeline extension bracket to existing bracket using 3/8" x 1" bolt, 3/8" washers and 3/8" lock nut from bag # 3. Install brake line into lower bracket hole and re-install stock brakeline slip. (See Illustration # 11)

3. Locate part No. T4I-12 (Rear Brake Cable Extension), (2) 5/16" x 1" bolt, (2) 5/16" Lock nuts from bag # 3. Un-bolt rear brake equalizer arm bracket from axle. Install rear brake cable extension to axle using the stock hardware and tighten. Mount equalizer cable bracket to the top of the extension using 5/16" hardware. (See Illustration # 12)

4. Loosen emergency brake cables by removing the cotter pin and pull the pin out from the back side of brake backing plate at the adjuster.

5. Raise floor jack until weight of springs are slightly RESTING on the axle. Remove "U" bolts from both springs and discard.

6. Lower down on jack until springs separate from axle pad enough to give room so axle blocks and add-a-leaves can be inserted. Secure spring assembly with C-clamps and remove stock center bolt. Now slowly remove C-clamps.

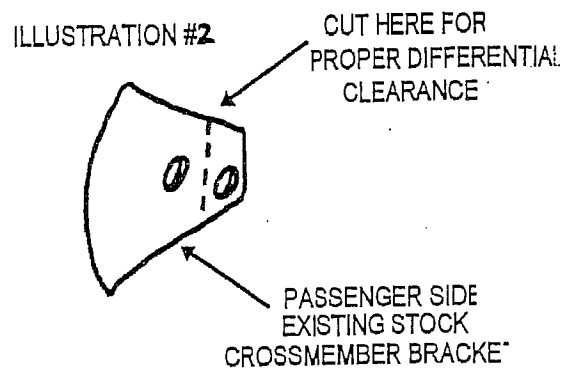
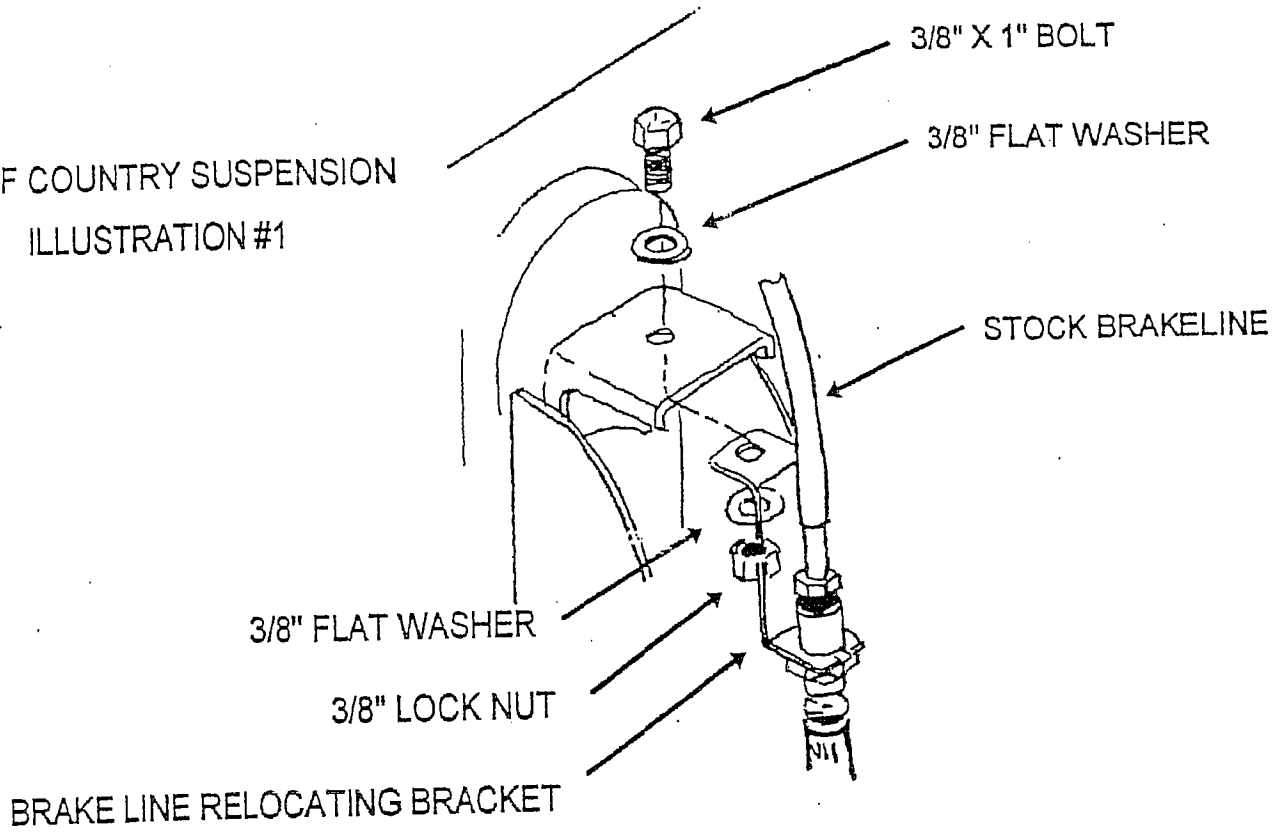
Note: For vehicles that have a 2 1/2" wide "U" bolts, kit box T4I1B should be used. If vehicle has 3 1/4" wide "U" bolts, kit box T4I2B should be used.

7. Located part No. TCI-R15 (Rear add-a-leafs), CB38 (3/8" Centering Bolts and Nuts). Place **add-a-leaf # TCI-R15** between existing spring assembly in progression of size order. **Note:** Do not install new leaf under to original factory overload springs. The overload spring is usually the large un-arched leaf at the bottom of the spring assembly. Use C-clamps to compress spring together and secure with new 3/8" centering bolt and nuts. Cut off extra thread. Repeat procedure for opposite side.
8. Locate part No. BL301 (3" lifted blocks). Position and center the 3" lifted block on the top of the axle pad. The bottom nubs must locate on the hole of the axle pad. The sort tapered end goes toward the front of vehicle. Raise the axle with a floor jack until spring center bolt is seated securely in lifted block centering hole. Continue to raise axle until the weight of vehicle is on the spring. **(See Illustration # 13)**
9. Locate part No. 5U-243S (9/16" x 2 1/2" x 10" Square "U" bolts) **use these "U" bolts when axle is 2 1/2" wide.** 5U-259S (9/16" x 3 1/4" x 10" Square "U" bolts) **use these "U" bolts when axle is 3 1/4" wide.** Locate 916NW (9/16" "U" High nuts and washers) Install new "U" bolts around spring pack, lifted block, axle and and secure with high nuts and washers. **Torque to 112 ft. lbs. (See Illustration # 13)**
10. Repeat steps 7-9 on opposite side.
11. Install new shock absorbers. Not included in kit.
12. Install wheels. Use floor jack to raise vehicle enough to remove both floor stands. lower vehicle to the ground and remove floor jack.
13. Check and double check that each procedure is complete and performed correctly. Double check to ensure that all bolts are tighten to proper specs, **Do not re-adjust any bolt where loctite was used.**
14. Check all hardware after the first 100 miles to make sure they are still at proper torque specs. Also check after every off road use.

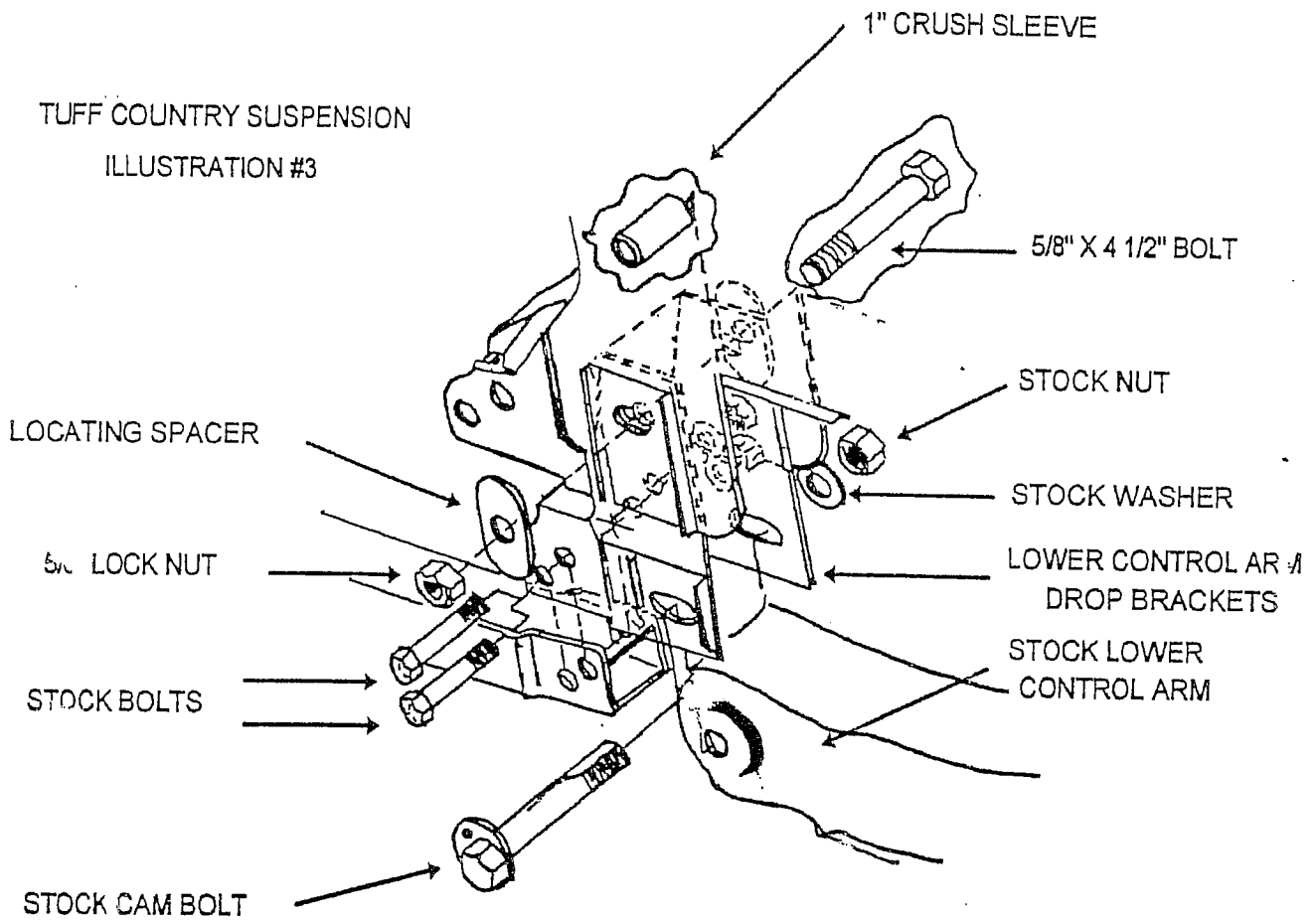
TORQUE SPECIFICATION LIST

5/16"	15-18 FT. LBS.
3/8"	28-32 FT. LBS.
7/16"	30-35 FT. LBS.
1/2"	65-85 FT. LBS.
9/16"	75-90 FT. LBS.
5/8"	85-110 FT. LBS.

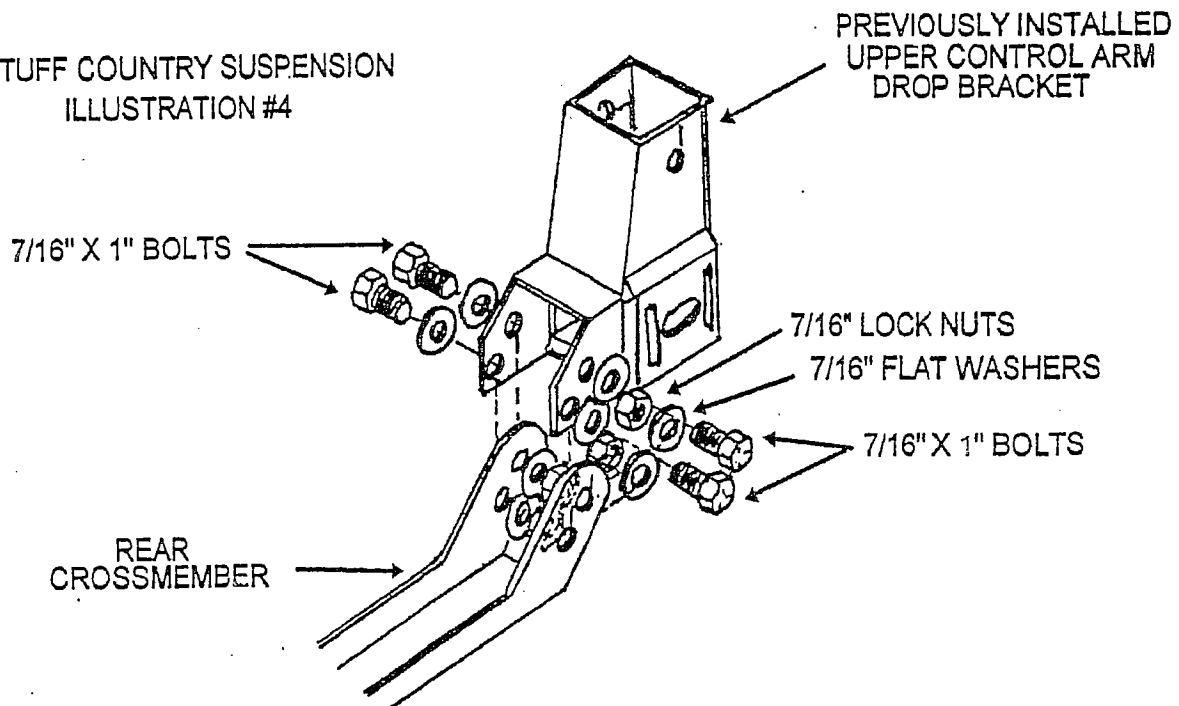
TUFF COUNTRY SUSPENSION
ILLUSTRATION #1



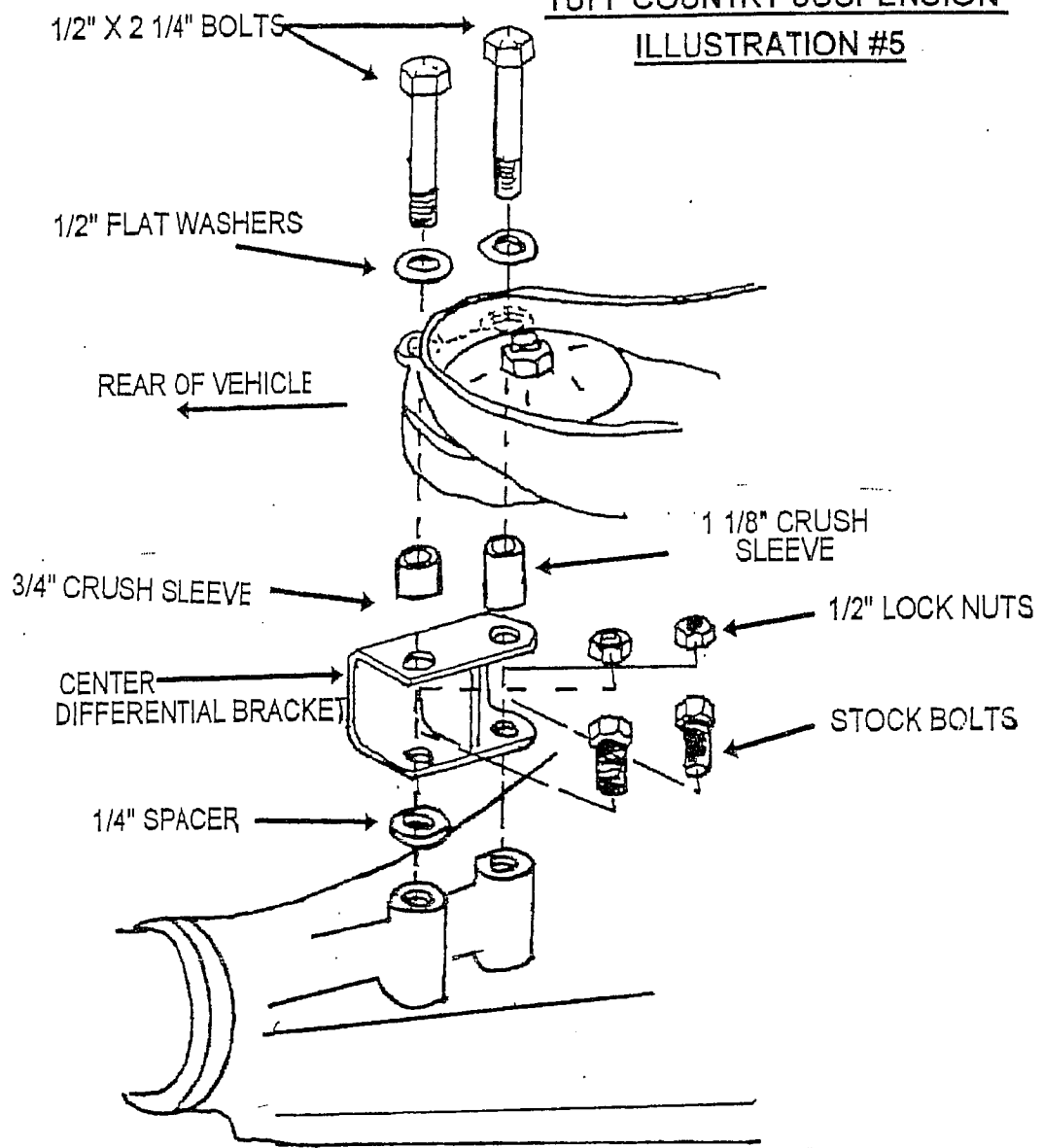
TUFF COUNTRY SUSPENSION
ILLUSTRATION #3



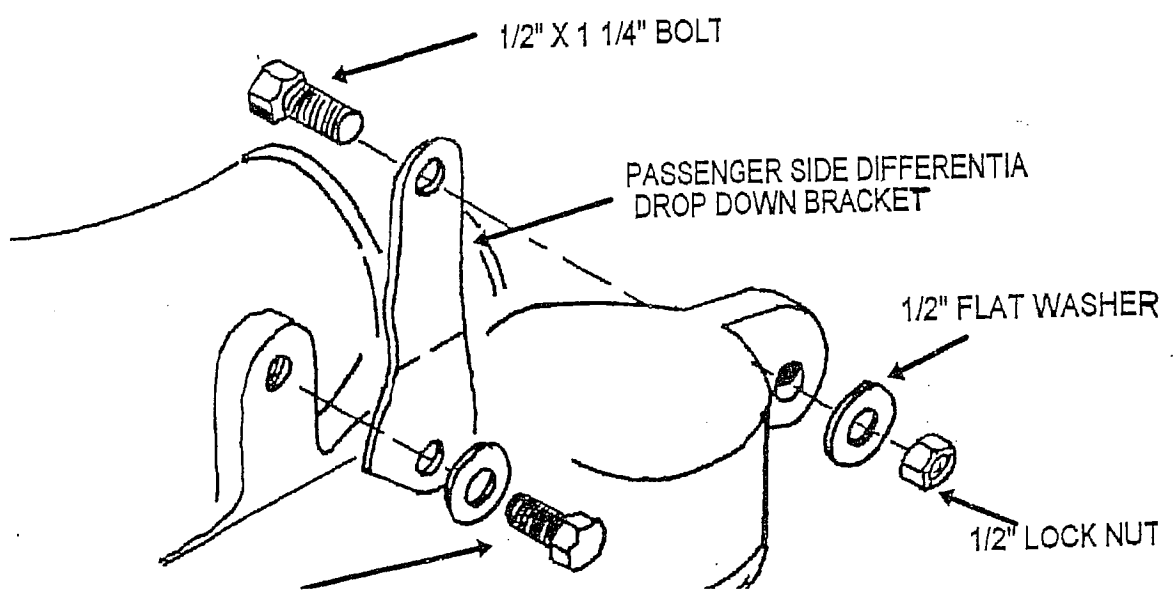
TUFF COUNTRY SUSPENSION
ILLUSTRATION #4



TUFF COUNTRY SUSPENSION
ILLUSTRATION #5



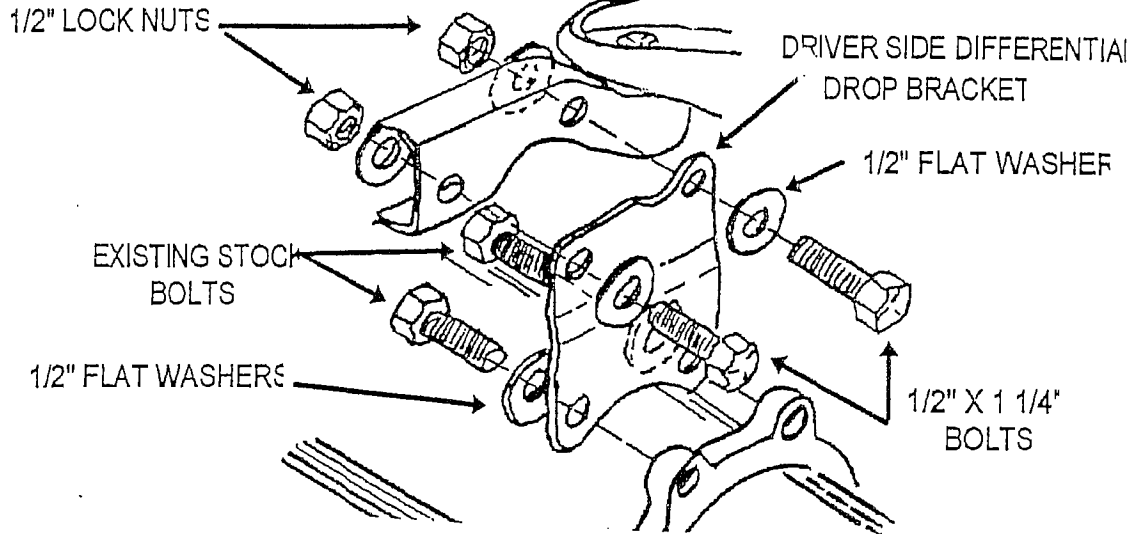
TUFF COUNTRY SUSPENSION
ILLUSTRATION #6



FRONT OF VEHICLE ←

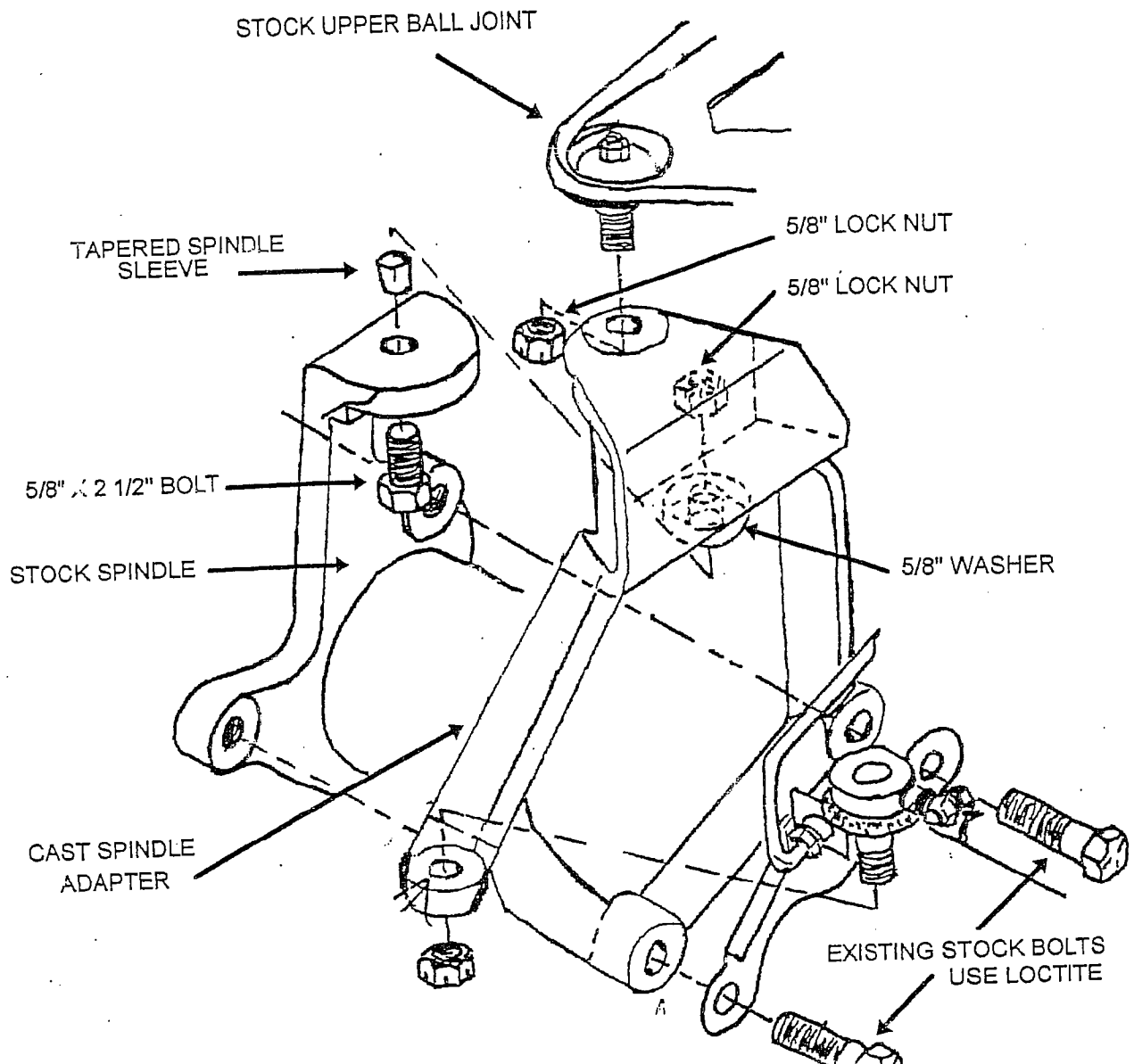
TUFF COUNTRY SUSPENSION

ILLUSTRATION #7

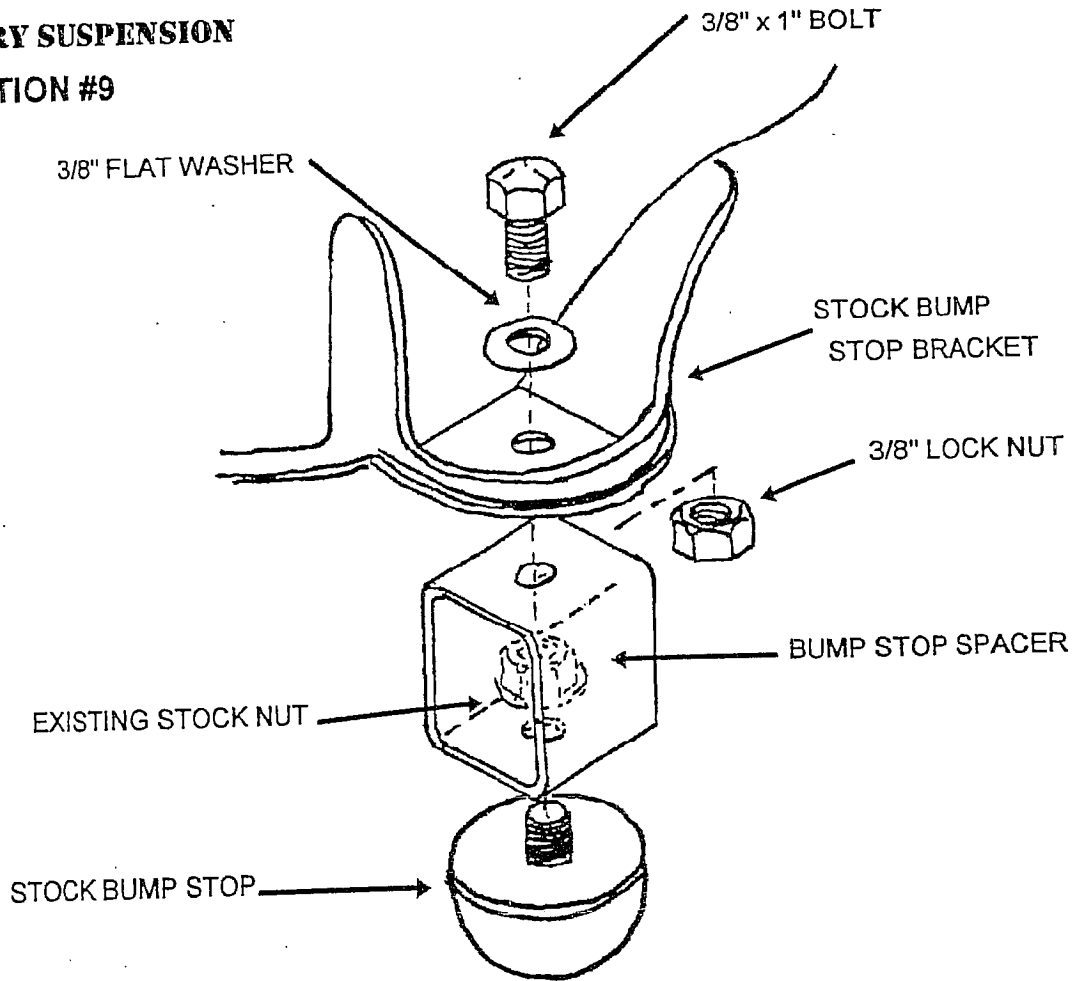


TUFF COUNTRY SUSPENSION

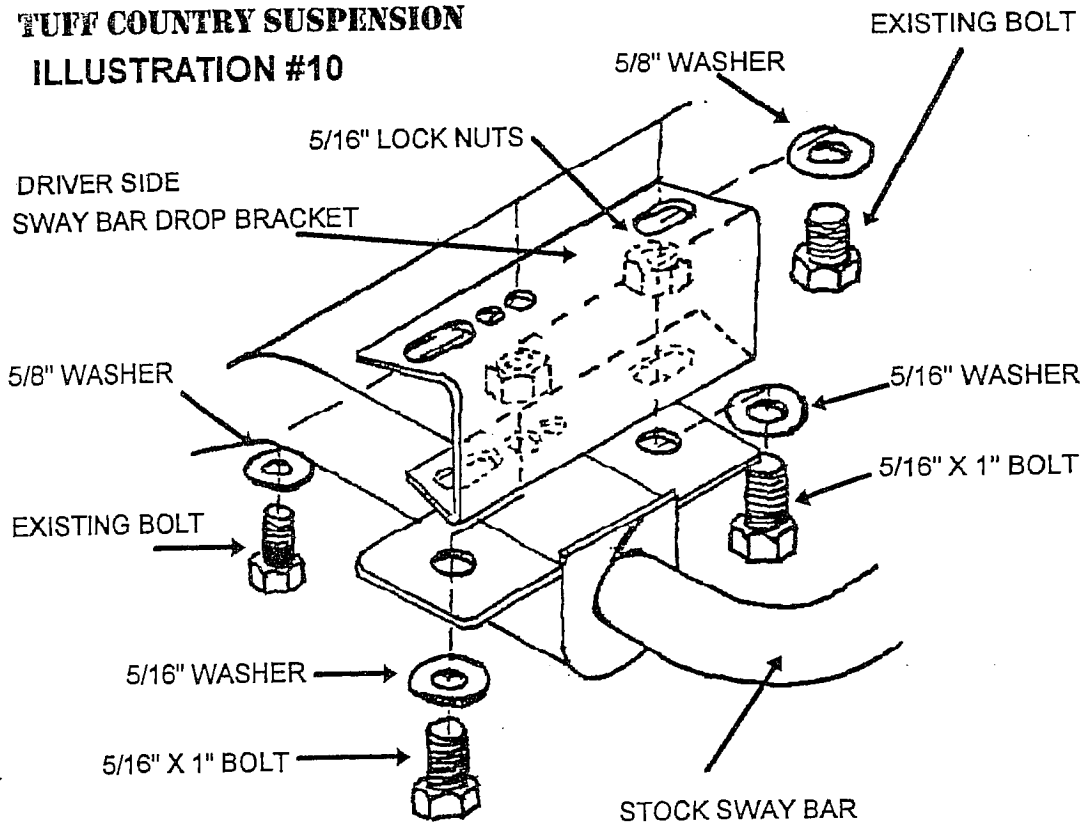
ILLUSTRATION #8



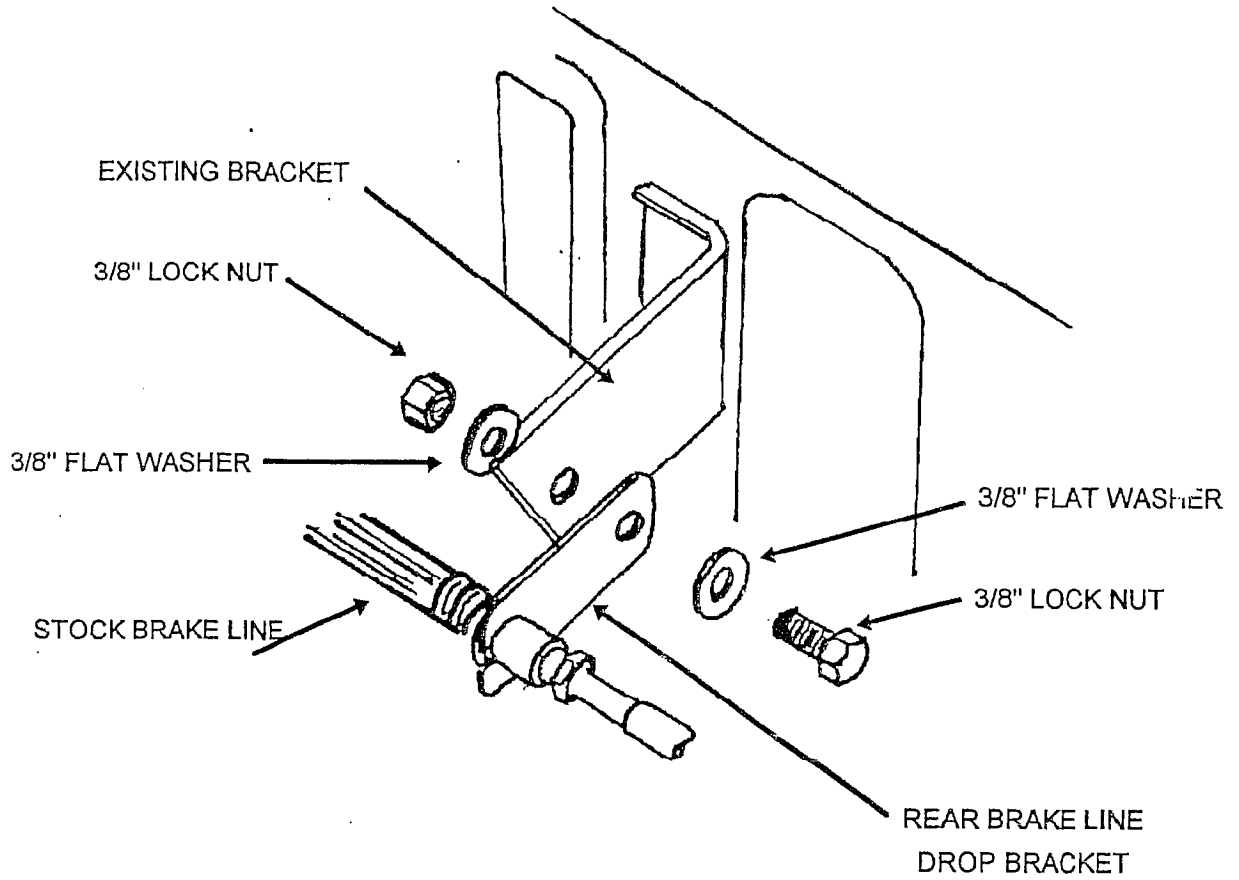
**TUFF COUNTRY SUSPENSION
ILLUSTRATION #9**



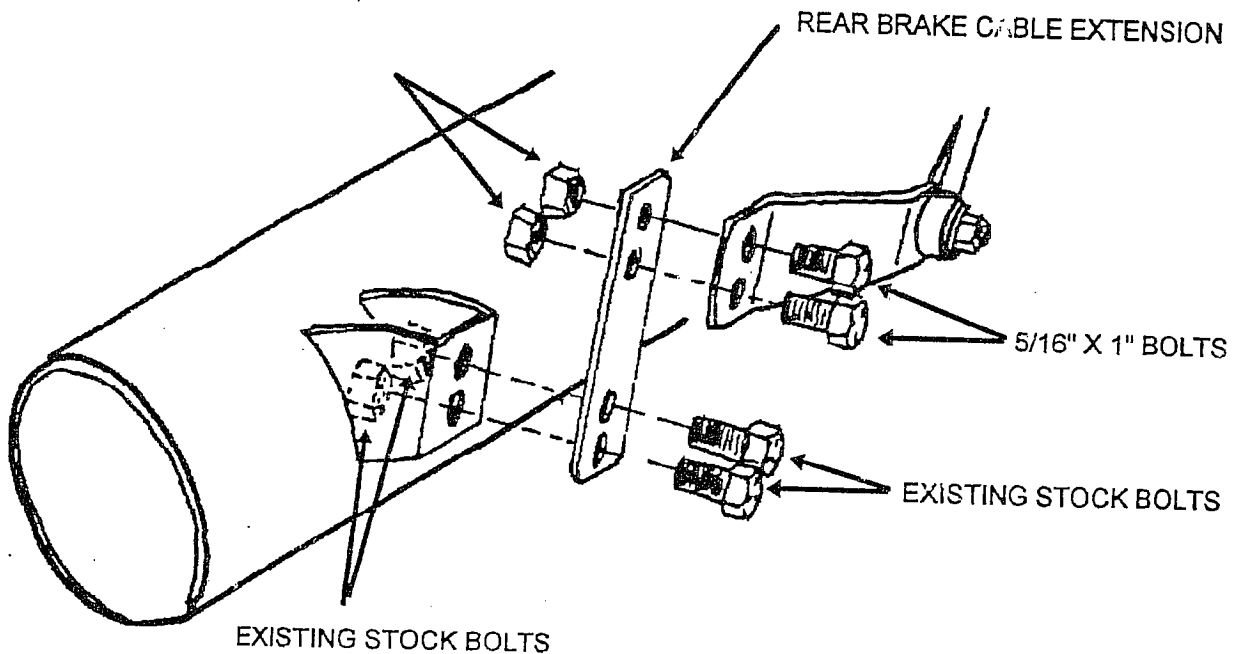
**TUFF COUNTRY SUSPENSION
ILLUSTRATION #10**



**TUFF COUNTRY SUSPENSION
ILLUSTRATION #11**



**TUFF COUNTRY SUSPENSION
ILLUSTRATION #12**



9/16" THREADED
U-BOLTS

**TUFF COUNTRY SUSPENSION
ILLUSTRATION #13**

