

SKYJACKER

SUSPENSIONS

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1980-1996 Ford F150 4WD
1980-1996 Ford Bronco 4WD
Class II Radius Arms
For 4"- 6" Suspension Lift
Installation Instructions

Required Tools List:

- SAE Sockets \ Wrenches
- Metric Sockets \ Wrenches
- Angle Drill
- Drill
- Drill Bits (1/8", 1/4", & 7/16)
- Punch
- Center Punch
- Hammer
- Cut-Off Tool
- Power Grinder
- Air Chisel
- Safety Glasses
- Jack Stands
- Wheel Chock
- Floor Jack
- Paint Marker
- Measuring Tape
- Torque Wrench



Before beginning installation, read these instructions & enclosed driver's WARNING NOTICE thoroughly & completely. Also affix WARNING decal in passenger compartment in clear view of all occupants. Please refer to Parts List to insure that all parts & hardware are received prior to disassembly of vehicle. If any parts are found to be missing, contact SKYJACKER® Customer Service at 318-388-0816 to obtain needed items. If you have any questions or reservations about installing this product, contact SKYJACKER® Technical Assistance at 318-388-0816.

Important Notes:

- Skyjacker® Offers Optional Radius Arm Frame Support Bar (Part # FSB80).
- After Installation, a Qualified Alignment Facility Is Required to Align Vehicle to OEM Specifications. If vehicle cannot be brought to within +/- 1/2° of OEM Specifications, Adjustable Camber \ Caster Alignment Shims May Be Required. (Part # 1032H. Requires 1 Per Side).
- This Radius Arm Kit Is a Bolt-On Assembly. Do Not Weld Components to Vehicle & Do Not Weld Anything to Components.
- Check OEM Vehicle Frame for Any Damage or Severe Corrosion. If There Is Any Doubt as to Condition of Chassis, Have a State Approved Alignment \ Frame Specialist Check Vehicle. If There Is Any Structural Damage, Do Not Install this Kit.

Component Box Breakdown:		
Part # RA150		
Item #	Description	Qty
RA150-L	RADIUS ARM, LEFT	1
RA150-R	RADIUS ARM, RIGHT	1
34STVCTN	3/4 COARSE THRD STOVER NUT	2
SAB85	RADIUS ARM BUSHING KIT	1
HB-RA150	HARDWARE BAG FOR RA150	1

Hardware Bag Breakdown:		
Part # SAB85		
Item #	Description	Qty
SAB8-5	STRUT ARM BUSHING, LARGE	2
SAB8-BACK	STRUT ARM BUSHING, SMALL	2

Hardware Bag Breakdown:		
Part # HB-RA150		
Item #	Description	Qty
12X3FTB	1/2 X 3 FINE THREAD BOLT	2
12FTN	1/2-20 FINE THRD N/I LOCK NUT	2
12SAEW	1/2 SAE WASHER	4
716X112FTB	7/16 X 1-1/2 FINE THREAD BOLT	8
716FTN	7/16-20 FINE THRD N/I LOCK NUT	8
716SAEW	7/16 SAE WASHER	16
2X34SW	2 X 3/4 SPECIAL WASHER	2
LT100	THREAD LOCKING COMPOUND	1

NOTE: If Installing Skyjacker Replacement Radius Arms as an Optional Up-Grade (Lift Kit Has Already Been Installed), Proceed to Step 1.

NOTE: If Installing Skyjacker Replacement Radius Arms as Part of New Lift Kit Installation, Proceed to Step 6.

Front Installation: Note: Save all factory components & hardware for reuse, unless noted.

1. Chock rear tires \wheels. Ensure that vehicle transmission is in PARK and engage emergency brake. **Note:** Be sure steering wheel \wheels are pointing straight forward.
2. Raise front of vehicle. Place a floor jack under each outer ends of both axle halves & evenly raise vehicle. Support frame rails using jack stands at indicated lift points in OEM service manual. **Tech Note:** OEM radius arms will need to move freely during this installation. Ease vehicle down onto jack stands. Continue down with jacks until there is only a slight load on each coil spring.
3. Remove front tires \wheels using a socket.
4. If vehicle is equipped with OEM sway bar, remove driver & passenger OEM frame mount brackets. **Note:** On some models, sway bar is mounted to OEM crossmember (instead of frame rail). Disconnect sway bar links from OEM axle mount bracket. Remove sway bar assembly.
5. Remove two (2) brake caliper mounting bolts & remove brake caliper from OEM knuckle. **Note:** Hang brake caliper on frame out of way using a hook or bungee. **Do Not** hang by rubber brake line. **Tech Note:** Install an OEM lug nut to hold OEM disc brake rotor safely in place.

Note: Perform Steps 6-22 on One Side at a Time.

6. Support OEM axle beam near spindle with a floor jack. Support OEM axle beam at several points to prevent it from tipping or falling over. **Tech Note:** OEM axle beam assemblies are very heavy, so exercise caution when removing them to avoid any possibility of injury.
7. Remove OEM axle pivot bolt from axle beam bushing mount using an 18mm & 21mm socket \wrench. **Note:** Drive side axle pivot bushing mounts to passenger side. Passenger mounts to driver side.
8. **Tech Note:** Spray a good penetrating oil onto all driver & passenger side OEM coil spring bolts, OEM radius arm bolts & OEM frame mount hardware to help loosen.

9. Disconnect OEM shock at upper shock at coil spring tower using a 14mm socket \ wrench.
(Illustration # 1)

Disconnect OEM shock at lower axle mount on radius arm using a 18mm socket \ wrench.
(Illustration # 1)

Remove front shock absorber.

10. Remove upper OEM J-clip bolt that holds coil spring to upper spring tower using a 13mm socket \ wrench.
Remove J-clip.
(Illustration # 1)

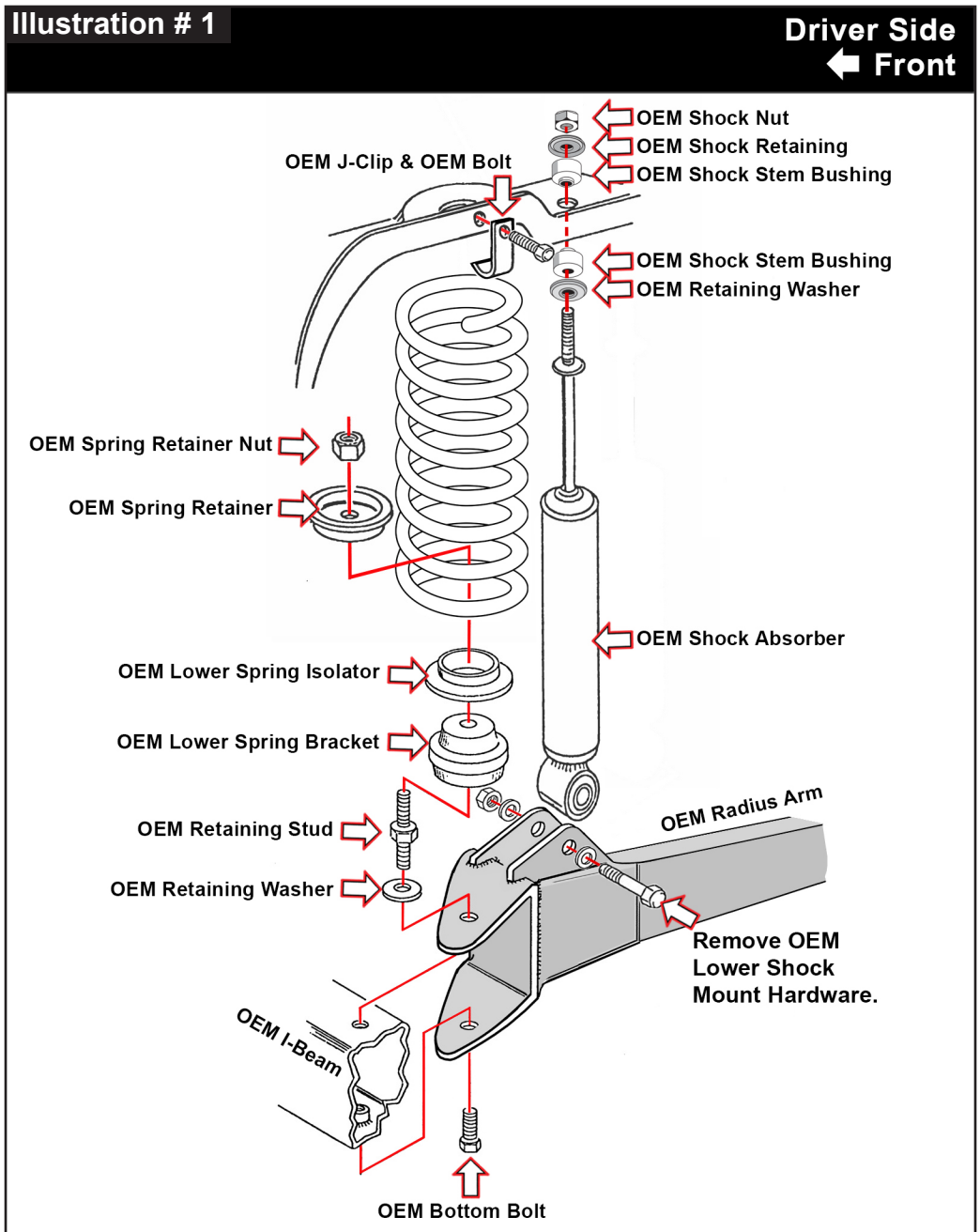
Remove lower OEM coil spring retainer nut using a 1-1/8" socket \ wrench. Remove spring retainer.
(Illustration # 1)

Carefully lower floor jack & remove OEM coil spring.

Remove OEM lower spring isolator & lower OEM spring bracket \ sway bar bracket.

11. First, remove OEM bottom bolt from OEM radius arm from OEM front axle beam.
(Illustration # 1)

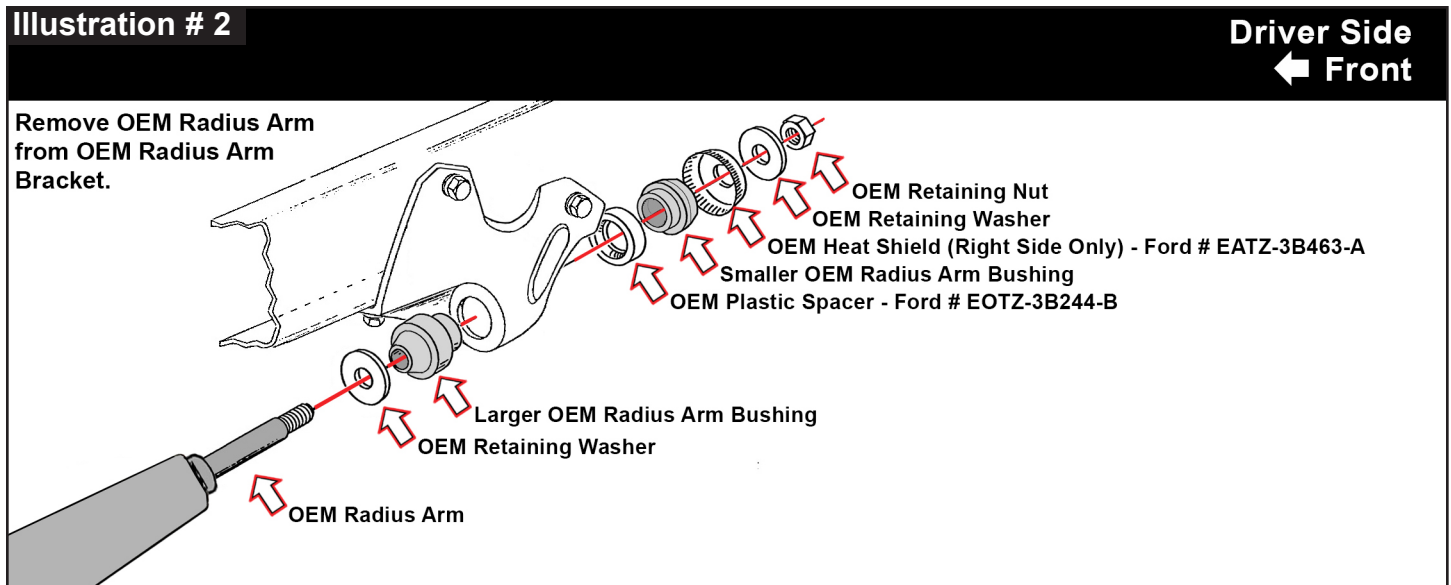
Next, remove OEM retaining stud & retaining washer.
Retain OEM hardware.



12. Remove OEM radius arm retaining nut using a 1-1/8" socket \ wrench. (Illustration # 2)

Remove OEM radius arm rear hardware (bushings, washers, OEM plastic spacer & OEM heat shield (right side only)). Retain OEM plastic spacer & OEM heat shield to be reinstalled.

Tech Note: Adjustable channel lock pliers or a small pry bar may be needed to remove bushing from radius arm.



13. Remove OEM radius arm from OEM front axle beam & rear frame mount.

14. Remove OEM radius arm frame mount bracket. (Illustration # 3)

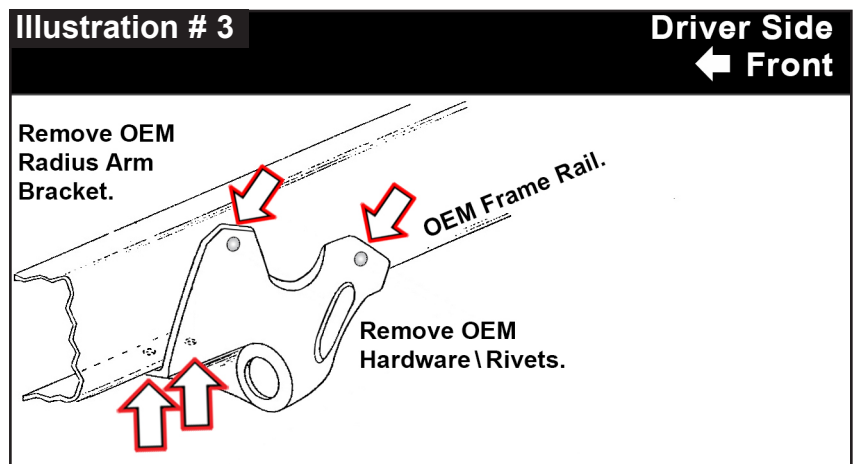
Note: Some OEM frame mount brackets are bolted to frame: some are riveted. Others have a combination of bolts & rivets.

Remove by unbolting or remove rivet heads using an air chisel, power grinder, or drill. A right angle drill may be necessary to drill some rivets.

Remove OEM Rivets Steps:

- Center Punch Rivet Head.
- Drill 1/4" Pilot Hole in Center of Rivet Approximately 1/4" Deep.
- Drill Rivet Head Off Using a 7/16" Bit. Be Careful Not to Drill into Crossmember.
- Drive Rivet Out with a Hammer & Punch.

Tech Note: Grind smooth any burrs or sharp edges on OEM frame. Be sure bottom & outside of frame is smooth & clean with nothing protruding between frame & bracket mounting points. OEM frame mount bracket must be flush against frame prior to drilling.



15. Reposition OEM radius arm frame mount bracket rearward on OEM frame **EXACTLY 15"**. (Illustration # 4)

Align OEM radius arm frame mount bracket with bottom & outside of frame rail at OEM radius arm bracket position.

16. Use OEM bracket as a guide for four (4) mounting holes on OEM frame. Mark \ scribe, center punch & drill 1/8" pilot holes. (Illustration # 5)

CAUTION: Prior to drilling, check inside frame rail for any obstructions, wires, brake lines, fuel lines, hoses, etc that could be damaged.

It may be necessary to reroute lines on certain model vehicles if they interfere with relocated mounting brackets.

Drill out pilot holes with a 7/16" drill bit.

17. Use a wire brush, grinder brush or similar tool to remove any undercoating. OEM bracket must be installed on a smooth & clean surface. Then paint all exposed metal.

First, insert two (2) supplied 7/16" x 1-1/2" Fine Thread Bolt & 7/16" SAE Washer up through bracket & frame rail. (Illustration # 5) Attach on top of frame with supplied 7/16" SAE Washer & 7/16" Nylon Insert Lock Nut using a 5/8" socket \ wrench.

Next, install & attach two (2) outer frame rail bolts. Insert supplied 7/16" x 1-1/2" Fine Thread Bolt & SAE Washer through bracket & outside of frame rail at each mounting hole. Attach each bolt on inside of frame rail with supplied 7/16" SAE Washer & 7/16" Nylon Insert Lock Nut using a 5/8" socket \ wrench.

Fully tighten & torque all hardware. Torque 60 ft-lbs

18. **Note:** Skyjacker Radius Arms Are Side Specific:
RA150-L Driver Side \ Left & # RA150-R Passenger Side \ Right.

First, install OEM retaining washer & supplied Large 'Cone Shaped' Radius Arm Bushing onto appropriate Skyjacker Radius Arm retaining stud. (Illustration # 6)

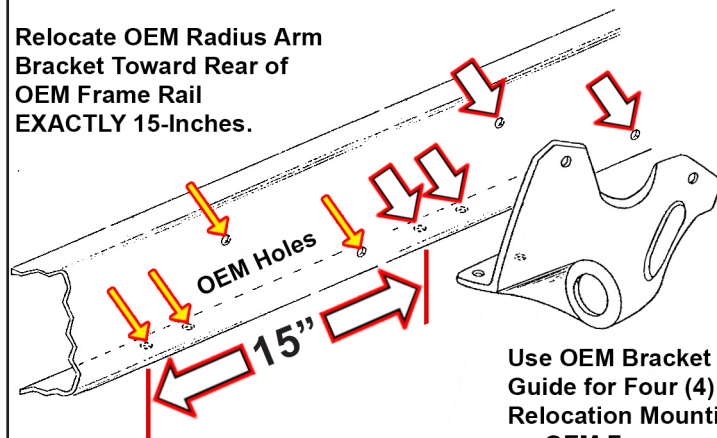
Next, position Skyjacker Radius Arm retaining stud into relocated OEM radius arm bracket.

Illustration # 4

Driver Side

← **Front**

Relocate OEM Radius Arm Bracket Toward Rear of OEM Frame Rail EXACTLY 15-Inches.



Use OEM Bracket as a Guide for Four (4) Relocation Mounting Holes on OEM Frame.

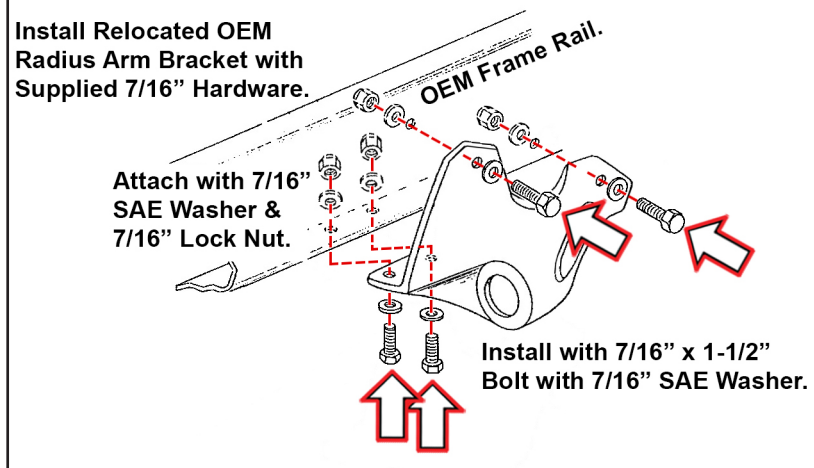
Illustration # 5

Driver Side

← **Front**

Install Relocated OEM Radius Arm Bracket with Supplied 7/16" Hardware.

Attach with 7/16" SAE Washer & 7/16" Lock Nut.

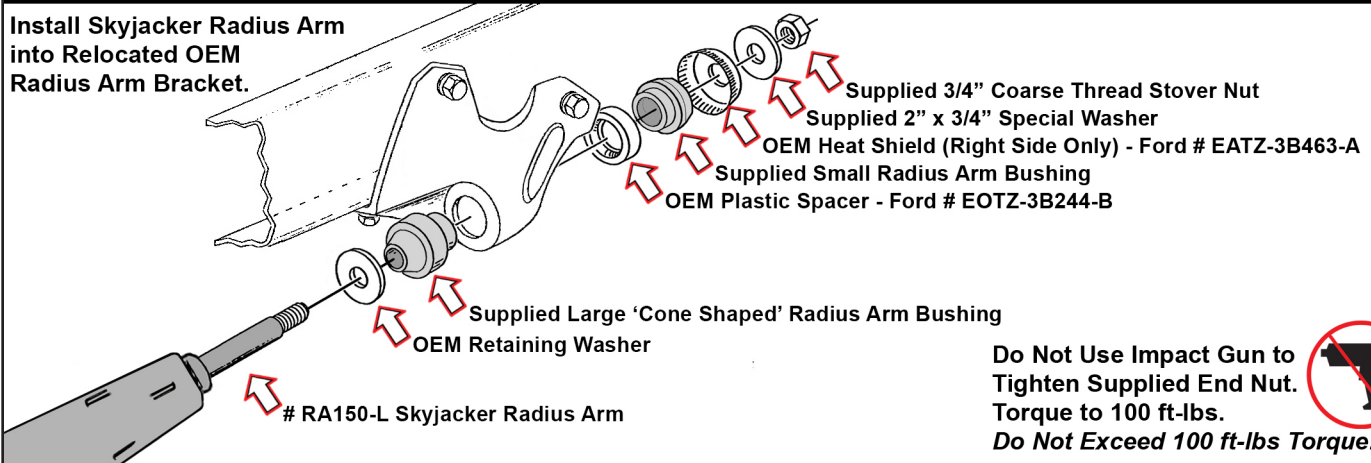


Install with 7/16" x 1-1/2" Bolt with 7/16" SAE Washer.

Illustration # 6

Driver Side
← Front

Install Skyjacker Radius Arm into Relocated OEM Radius Arm Bracket.



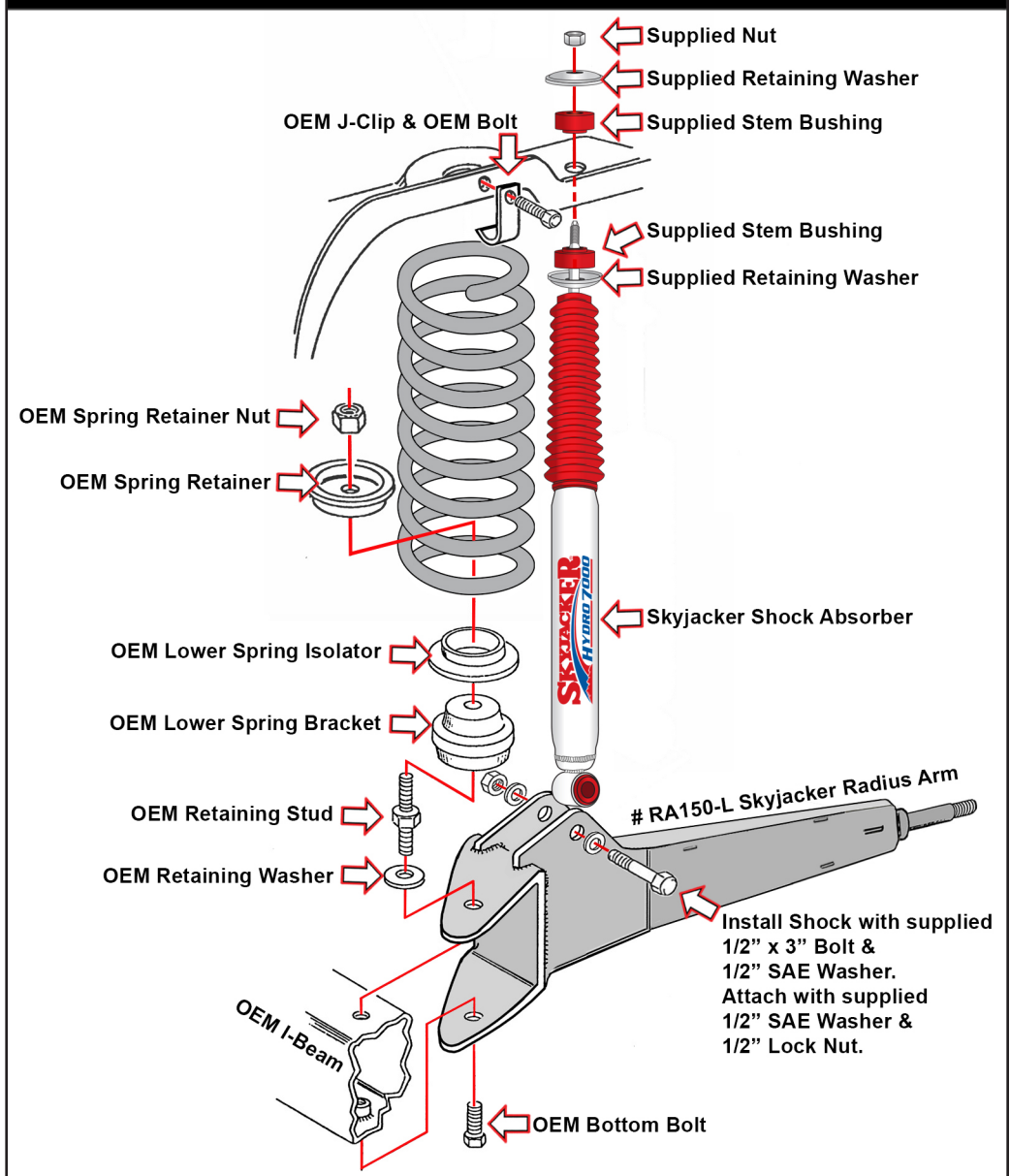
19. Position front end mount of Skyjacker Radius Arm into front OEM axle mount. (Illustration # 7)
First, apply supplied Thread Locking Compound to OEM bottom bolt. Install bolt up through Skyjacker Radius Arm into OEM axle mount.

Next, apply supplied Thread Locking Compound to OEM retaining stud. Install OEM retaining stud & retaining washer down through Skyjacker Radius Arm into OEM axle mount.

Position lower OEM spring bracket \ sway bar bracket & lower spring isolator on top of retaining stud.

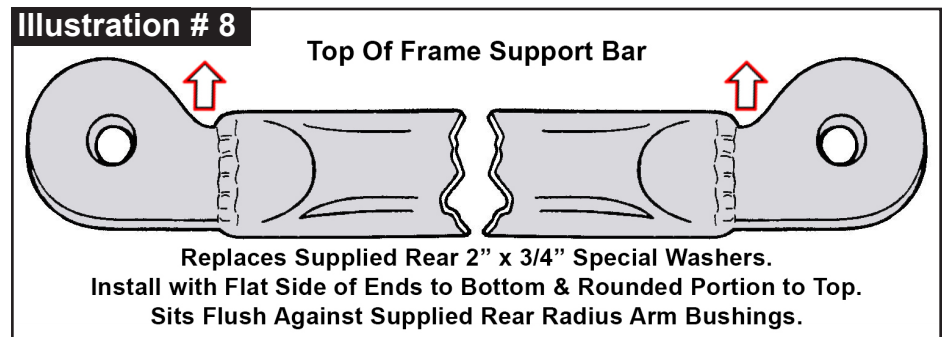
Illustration # 7

Driver Side
← Front



20. At Skyjacker Radius Arm retaining stud, install OEM plastic spacer, supplied Small Radius Arm Bushing, OEM heat shield (right only), & supplied 2" x 3/4" Special Washer. (Illustration # 6)

NOTE: If you purchased Skyjacker OPTIONAL Part # FSB80 Frame Support Bar, install Frame Support Bar with flat side of ends to bottom & rounded portion to top (instead of using supplied 2" x 3/4" Special Washer). (Illustration # 8)



Apply supplied Thread Locking Compound to Skyjacker Radius Arm retaining stud threads.

Install supplied 3/4" Course Thread Nut onto Skyjacker Radius Arm retaining stud using a 1-1/8" socket \ wrench. **Note:** Do Not Use Impact Gun to Tighten Supplied End Nut. Torque to 100 ft-lbs. **Do Not Exceed 100 ft-lbs.**

21. With a floor jack still supporting OEM axle beam, lower axle beam down enough install Skyjacker Coil Spring. Place Skyjacker Coil Spring first into upper OEM spring tower, then onto lower OEM spring isolator & spring bracket \ sway bar bracket. (Illustration # 7)

Attach upper OEM J-clip bolt that holds coil spring to upper spring tower with OEM hardware.

22. Install Skyjacker front shock. (Illustration # 7) Attach lower shock eye mount to Skyjacker Radius Arm \ shock mount with supplied 1/2" x 3" Fine Thread bolt & 1/2" SAE Washer from outside-to-inside of vehicle.

Attach with supplied 1/2" SAE Washer & 1/2" Nylon Insert Lock Nut using a 3/4" socket \ wrench. Secure, but **Do Not Completely Tighten**. To set bushings properly for ride height, these will be tightened once vehicle is on ground with full vehicle weight on tires \ wheels.

Install a supplied Shock Washer & Polyurethane Stem Bushing onto Skyjacker shock stem. Attach to upper OEM shock tower mount with supplied Bushing, Washer & Nut. Secure, but **Do Not Completely Tighten**.

Note: Perform Steps 6-22 on Opposite Side Now. Then Proceed to Next Steps.

NOTE: If Installing Skyjacker Replacement Radius Arms as Part of New Lift Kit Installation, Proceed to Back to Lift Kit Installation Instructions.

23. Reinstall OEM brake caliper to OEM knuckle with OEM brake caliper mounting bolts. Torque 22-27 ft-lbs. **Note:** If OEM brake lines are reinstalled, they must be in good condition; check for chafed spots, cracks & dry rot.

24. Using a floor jack, raise & position one of OEM axle beam into appropriate OEM axle pivot bracket. Insert OEM axle pivot bolt with washer through OEM bracket & axle beam bushing mount. Attach with OEM washer & nut using an 18mm & 21mm socket \ wrench. (See Illustration # 2 & # 3) Secure, but **Do Not Completely Tighten** at this time.

Repeat this procedure on opposite side.

25. If vehicle is equipped with OEM sway bar, reconnect driver & passenger OEM frame mount brackets. Torque 19-25 ft-lbs.

Reconnect sway bar to OEM axle mount brackets. Secure, but **Do Not Completely Tighten**.

26. Install front tires \ wheels. Lower vehicle to ground. Torque lugs to OEM service manual specifications.

Final Clearance Check & Torque Steps:

Note: Drag Link Must Be Adjusted to Center Steering Wheel Before Vehicle Is Driven. Failure to Do So Will Cause Odd Handling Characteristics, & Poor Performance.

1. Start vehicle. Make sure there are no dash lights pertaining to suspension.
2. Jounce vehicle a couple of times. This will help suspension settle to new ride height. Cycle steering left-to-right lock-to-lock. Check all components for proper operation & clearances. Check for any binding or interference.

There should be a Minimum of 1" of Clearance Between Tires & Radius Arms at Full Lock.

Note: If Less than 1", check to make sure you have proper tire \ wheel size & offset.

If necessary, OEM steering stop bolts may be adjusted out to a Maximum of 1-1/4".

3. Front Tighten & Torque Sequence.

Front shock absorber upper mount using a 14mm socket \ wrench. Torque 15-25 ft-lbs.

Front shock absorber lower mount using a 3/4" socket \ wrench. Torque 65 ft-lbs.

Tighten sway bar links at OEM coil spring \ sway bar bracket. Torque 16-21 ft-lbs.

NOTE: Remove Skyjacker Radius Arm supplied 3/4" End Nut at relocated OEM frame bracket.

Apply supplied Thread Locking Compound to Skyjacker Radius Arm nut mount.

Reinstall supplied 3/4" End Nut using a 1-1/8" socket \ wrench. Torque 100 ft-lbs.

Final Notes:

- After installation is complete, double check that all nuts & bolts are tight. Refer to following chart for proper torque specifications. (**Note:** Do not re-tighten nuts & bolts where thread lock compound was used.)
- With vehicle placed on ground, cycle steering lock to lock & inspect steering, suspension, brake lines, front & rear drivelines, fuel lines & wiring harnesses for proper operation, tightness & adequate clearance.
- Have headlights readjusted to proper settings.
- Have a qualified alignment center align vehicle to OEM specifications.
- After first 100 miles, check all hardware for proper torque & periodically thereafter.

TORQUE SPECIFICATIONS					
INCH SYSTEM			METRIC SYSTEM		
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 8.8	Class 10.9
5/16	180 in-lbs	240 in-lbs	6MM	60 in-lbs	108 in-lbs
3/8	30 ft-lbs	35 ft-lbs	8MM	216 in-lbs	23 ft-lbs
7/16	45 ft-lbs	60 ft-lbs	10MM	32 ft-lbs	45 ft-lbs
1/2	65 ft-lbs	90 ft-lbs	12MM	55 ft-lbs	75 ft-lbs
9/16	95 ft-lbs	130 ft-lbs	14MM	85 ft-lbs	120 ft-lbs
5/8	135 ft-lbs	175 ft-lbs	16MM	130 ft-lbs	165 ft-lbs
3/4	185 ft-lbs	280 ft-lbs	18MM	170 ft-lbs	240 ft-lbs
Above Specifications Are Not to Be Used When the Bolt Is Being Installed With a Bushing.					

Seat Belts Save Lives. Please Wear Your Seat Belt.