XJ LONG TRAVEL SUSPENSION KIT

PART #: RK-605LT-XJ/RK-800LT-XJ APPLICATION: '84-'01 Jeep Cherokees

QTY.	PART #	DESCRIPTION
1	BFA-22	Left Lower Long Arm
1	BFA-24	Right Lower Long Arm
2	AA-1600	Adjustable Upper Arm
1	CM-500	Crossmember
1	LA-101	Left Outside Frame Plate
1	LA-102	Right Outside Frame Plate
2	LA-112	Inside Frame Backing Plate
HARDWARE		
4	10X1.5"-50 bolt	
4	3/8" flat washer	
2	1/2"x5" bolt	
2	1/2"x6" bolt	
4	1/2" Nyloc nut	
8	1/2" flat washer	
2	7/16"x3.5" bolt	
4	7/16" nyloc nut	
8	7/16" flat washer	
2	7/16" side tab bolt	

*** ADJUSTABLE UPPER ARMS NOT SHOWN

THIS INSTALLATION CAN BE PERFORMED BY ANYONE WITH MECHANICAL EXPERIENCE AS LONG AS THEY FOLLOW THE INSTRUCTIONS LISTED. PRIOR TO INSTALLATION INSPECT ALL DRIVELINE, BRAKE LINES, AND BUSHINGS TO BE IN GOOD CONDITION. FRONT-END ALIGNMENT WILL BE NECESSARY. BE SURE TO PROPERLY TORQUE ALL BOLTS AND NUTS TO THE TORQUE SPECS LISTED. THE KIT SHOULD TAKE ABOUT 7-8 HOURS TO INSTALL AND REQUIRES AN ASSORTMENT OF SOCKETS AND WRENCHES, JACK STANDS, FLOOR JACK, AND A SPRING COMPRESSOR IS NICE. THEY CAN BE RENTED AT YOUR LOCAL PARTS STORE. THIS INSTALLATION IS FOR THE BASIC KIT, OPTIONAL PARTS, SUCH AS THE TRAC-BAR AND CONTROL ARMS, THIS MAY ADD INSTALLATION TIME AND MAY CHANGE THE INSTALLATION STEPS.

1) Raise vehicle and place jack stands under frame. Remove tires and wheel.

2) Place jack under the transmission, remove the 4 nuts that bolt the transmission mount, these nuts will be reused.
With the trans supported by the jack remove the 2 bolts that hold the crossmember into place, 2 of these may be threaded studs coming out of the frame, they too are threaded into the frame and come out with a stud extractor or vise grips. Discard these bolts and studs, they will be replaced.

3) With the crossmember removed, hold the left outside frame plate (part # LA101) up into place. Temporarily start the two lower 10 x 1.5 bolts and snug them up into place, this allows you use the outer plates as a template to drill into the uni-frame. Once the outer frame plates are snug against the uni-frame, center punch where the two holes are to be drilled.
Before drilling, on the inside of the frame it is necessary to pull the fuel lines away from the frame.

4) Remove outside frame plates. Start with a 1/8 starter bit then use the long 3/8 to 1/2 drill bit to drill through both sides of the frame. Once these are drilled through the frame, use a 1 inch hole saw or a plasma cutter to make a 1 inch hole on the inside of the uni-frame. This is where the inside backing plate will side into place. Repeat on the right side

5) Once the holes are drilled, hold the crossmember into place, make notice the pre drilled skid plate holes in the crossmember are to be located to the rear of the vehicle. Install the 4 transmission nuts, torque to 25 ft. lbs.

6) Just in front of the crossmember frame mounting holes, locate the oval hole in the side of the frame, you will need to fish one of the two 7/16 stud bolts through the bottom of the uni -frame. (This bolt is “T” on the diagram.)

7) The outside frame plate is ready to install, start the two 10 x 1.5 bolts with flat washer (These are bolts “ L “ in the diagram) through the side plate and through the crossmember. Install a 7/16 flat washer and Nyloc nut onto the 7/16 stud bolt
(Bolt “ T ‘ in diagram)

8) Place one of the 6 inch 1/2 inch bolts with flat washer through the front of the outside frame plate. (This is bolt “ E “ in the diagram). Place the inside backing plate inside the uni-body, The longer tube on the plate will go into the front hole. Put the 6-inch bolt into the tube sleeve and use a 1/2 flat washer and Nyloc nut on it. Install the 5-inch 1/2 bolt into the back bolt hole into the tube sleeve and install flat washer and Nyloc nut. Leave loose at this time. Repeat on the right side.

9) Once all bolts are in place and started, Torque bolts “ L “ to 35 ft. lbs. Torque bolts “ T “ to 45 ft. lbs..
Torque bolts “ E “ to 75 ft. lbs. Lower jack and locate it to the front axle.

10) Remove the shocks at the axle, the hardware at the axle will be reused. Remove the shock completely if replacing with Rusty's long travel shocks.

11) Unbolt sway bar on both sides, save hardware.

12) Remove the bolt at the axle end of the trac bar.

13) On each side, remove the bolt that holds the spring keeper clip, it's located on the lower coil spring mount.

14) Take special care with the coil spring compressor and remove the coils.

15) With the front axle supported with jack, remove the upper control arms. Save the hardware, the upper control arm bolt at the axle will be reused. Remove the lower control arms, again the hardware will be reused.

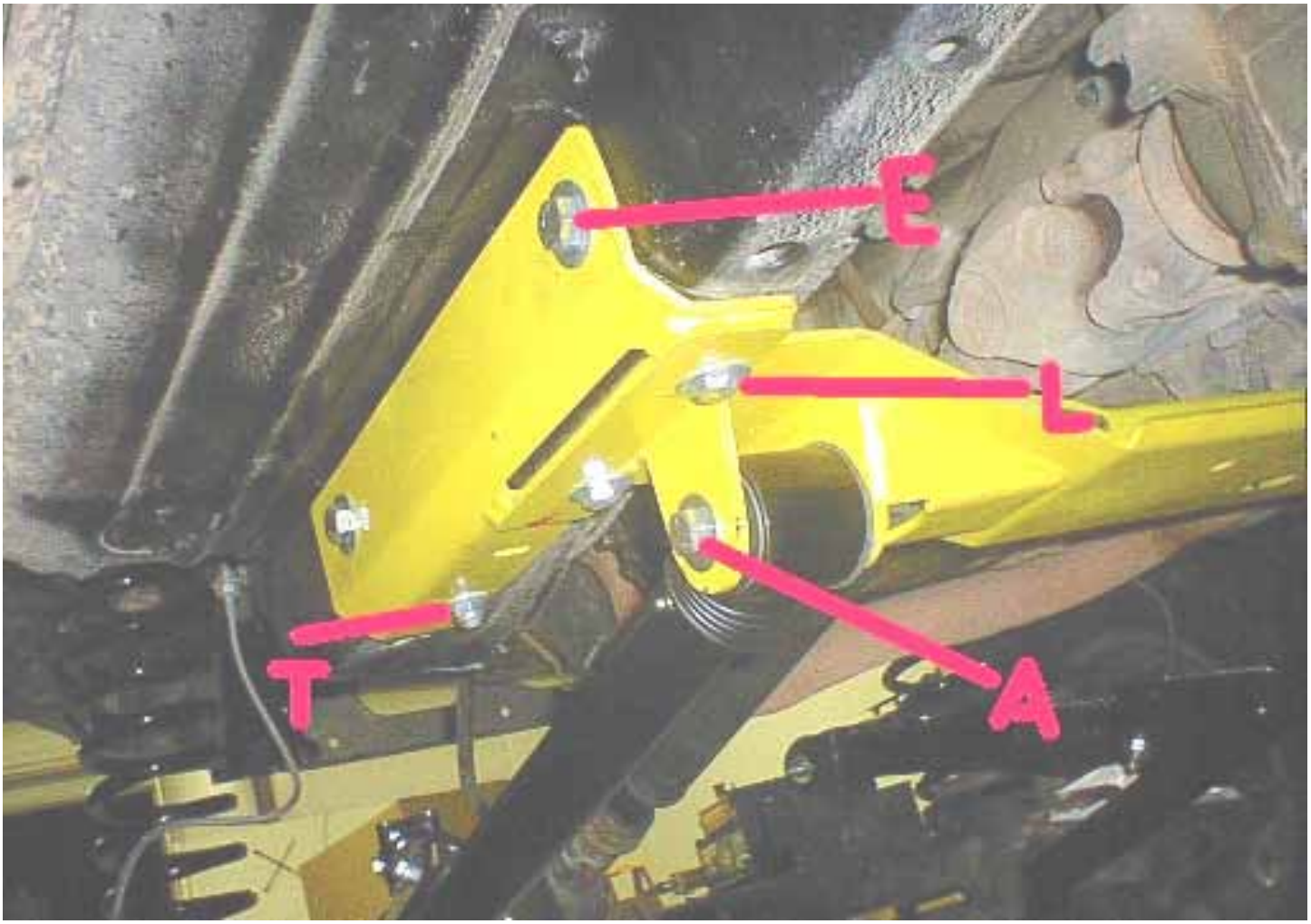
16) With the arms out of the way, use a grinder, saws all, or plasma cutter to remove the original lower control arm mount at the frame. Be very careful not to cut into the uni-frame. Once removed paint all exposed metal surfaces.
Depending on the lift of your vehicle, the arms need to be made to the right length.

17) With 6.5 inches of lift the lower long arms should be adjusted to a length of 35.75, center of hole to center of hole.
The upper control arms should be 15.75. With 8.5 inches of lift the lower long arms should be adjusted to a length of 36.00 to 36.25, center of hole to center of hole. The upper control arms should be 15.75.
These are rough measurements, your vehicle may differ. Castor should be set at 7 degrees positive.
The lower arm adjusts the wheelbase and there should be a slight tilt in the front coil spring. If you get any rubbing on the bump stop, it may be necessary to bump it back a 1/2 inch or so.

18) Once the arms are adjusted to an approximate length, bolt them into the lower axle mount, install factory bolt. Install the adjustable end to the new Rusty's crossmember.
19) Install the new adjustable upper control arms to the lower long arm, them bolt to the upper axle mount. Take a moment to inspect the upper axle bushing, these must be in good shape.
20) Once all the arms are installed, torque the lower control arm bolts (bolt "A" in diagram) too 100 ft.lbs..
Torque the upper control arm bolts to 45 ft. lbs..
At this time cycle the suspension up and down to make sure all brake lines, steering and any other components don't make contact with anything or may be too short.

21) With special care reinstall the coil spring and bolt keepers into place, torque to 20 ft. lb. Reinstall shocks. Reinstall sway bar. Install tires and torque to factory specs.
22) Jack up vehicle and remove jack stands and lower vehicle to ground.

23) Unlock steering wheel and get someone to turn steering wheel while lining up the trac bar to it is mounting point. Install trac-bar bolt and torque to 35 ft. lbs



WARNING

IT IS THE OWNERS' RESPONSIBILITY TO INSPECT ALL RUSTY'S PRODUCTS FOR PROPER TORQUE SPECS TO PREVENT LOOSENING OF COMPONENTS. BRAKING AND HANDLING CAPABILITIES ARE DECREASED WHEN LARGER TIRES AND WHEELS ARE USED. SEAT BELTS AND SHOULDER HARNESSES SHOULD BE WORN AT ALL TIMES. RE-CHECK ALL BOLTS AND NUTS AFTER THE FIRST 300 MILES AND AFTER ANY OFF-ROAD USAGE DURING THE FIRST 300 MILES. ALTHOUGH ALL OF OUR PRODUCTS ARE MADE FROM THE HIGHEST QUALITY MATERIALS POSSIBLE, THEY ARE NOT A SUBSTITUTE FOR SAFE AND CAREFUL DRIVING. IN OTHER WORDS, HAVE GOOD SAFE ON-ROAD / OFF-ROAD SENSE. KNOW THE TERRAIN, THE SPEED LIMITATIONS, AND ANY OBSTACLES THAT MAY LIE AHEAD. PLEASE REMEMBER TO PRESERVE OUR RIGHT TO ENJOY PUBLIC LAND THROUGH THE PROPER USE OF OFF-ROAD VEHICLES. THANK YOU FOR CHOOSING RUSTY'S OFF ROAD PRODUCTS.

FOR QUESTIONS OR SUGGESTIONS, CONTACT OUR TECH DEPARTMENT 256-442-0607