Preparation

Elevate vehicle and support with jack stands. Remove wheels and tires, shocks, brake calipers (Do Not Disconnect Brake Lines), hubs, bearing carriers, axles, front a-arms, rear radius rods, and rear trailing arms. Remove bushings and ball joint from front a-arms as they will be used in the new a-arms.

Shock Bracket Installation

<u>Front (</u>Refer to Photo A)

- 1. The long bent plate of the lift will be installed on the backside of the shock mount/frame brace.
- 2. The long straight plate will be installed on the front side of the shock mount/frame brace. From the backside of the assembly, install a M10x70mm bolt with washer through the back plate, stock shock mount with medium length spacer between.
- 3. Continue bolt through front plate and secure with washer and nut; repeat on opposite side.
- 4. Insert M10x70 bolt with washer through center holes of lift brackets with long spacer between.

<u>Rear</u> (Refer to Photo B & C)

- 1. Overlap inner and outer brackets so the holes in the bracket line up with the stock shock mount and the two holes in the frame above the stock shock mount.
- 2. Insert M8x30mm bolt with lock washer and flat washer up through the holes in the brackets and the holes in the frame; secure brackets in place by screwing the bolt into the provided nut plate. Repeat with second bolt.
- 3. Insert M12x70mm bolt through the stock shock mount and lift brackets with a short spacer between lift brackets. Secure with washer and nut.
- 4. Repeat on opposite side.

Front Suspension Installation

- 1. Install stock bushings and ball joints into new a-arms.
- 2. Install new a-arms into frame using stock hardware; leave 3/8" of threads showing on heim joint. Two misalignment spacers (D) are needed to install each upper a-arm. Refer to Photos (D) & (L).
- 3. Insert new axles into front diff and reinstall bearing carrier and hub using stock hardware except axle nut and lower ball joint pinch bolt. Use new axle nut and M10x50mm bolt as pinch bolt on lower a-arm. Refer to Photo (E).
- 4. Reinstall front brake calipers and shocks (Adjust front shocks to measure 7.5" from upper bolt hole to top of spring). Tighten all front hardware.

<u>Tie Rod Installation</u>

Connect new tie rod to bearing carrier using two misalignment spacers (C) and supplied $\frac{1}{2}$ " x 3" bolt and nut. (On 2015+ models, use one spacer (C) and one spacer (E)) The corresponding hole in the bearing carrier will have to be drilled out to $\frac{1}{2}$ " to accept the $\frac{1}{2}$ " bolt. Insert the bolt from the bottom to allow for clearance. Refer to Photo (F).

Connect the other end of the tie rod to rack using the supplied hardware. Refer to Photos (G) & (H).

- 1. With the tie rods and boots removed from the steering rack, turn the steering wheel clockwise until it stops.
- 2. Insert Steering Rack Clevis (A) into the steering rack tube on the driver side of the rack.(Apply red thread locker to threads)(On Ranger models, a ³/₄" flat washer must be installed on the threaded end of the Steering Rack Clevis (A) to remove step for proper steering of vehicle.)
- 3. The Steering Rack Clevis will need to be aligned so that it doesn't bind against the inner heim joint when misaligning. Call if you have questions on this.(Tighten as tight as possible)
- 4. Insert Rod End (C) into the clevis and secure with supplied Allen head bolt (D) and Nylock-nut (E). (Tighten nut)
- 5. Install the rack boot back into place so that the threaded end of the rod end is exposed out of the small hole of the boot.
- 6. Place jam nut (F) onto the rod end and install the new tie rod onto the rod end.
- 7. Turn the steering wheel counter-clockwise until it stops and install a zip tie on inner lip of boot.
- 8. Repeat process on passenger side.

Front-end alignment will need to be adjusted once installation of lift is complete.

Rear Suspension Installation

- 1. Attach trailing arm bracket to the frame using the provided hardware. Refer to Photos (I) & (J).
- 2. Insert new axles into the transmission and reinstall bearing carrier and hub using stock hardware except axle nut. Use new axle nut.
- 3. Connect radius rods to frame using four misalignment spacers (A), four misalignment spacers (B), new pull plate and stock hardware.
- 4. Connect the radius rods to the trailing arms using eight misalignment spacers (A) and stock hardware (Adjust length of radius rods measuring from center hole to center hole of heims; Upper 28-1/8", Lower 29-1/8").
- 5. Rear-end alignment will need to be adjusted once installation of lift is complete.
- 6. Using a shock spring compressor, remove rear springs from shock. Slide provided spring spacer onto rear shock and reinstall springs. Refer to Photo (K).
- 7. Reinstall rear brake calipers and shocks (Adjust rear shocks to measure 10.5" from upper bolt hole to top of top spring). Tighten all rear hardware and test drive.
- 8. If you have a 4 seater High Lifter Edition, You will NOT use the rear shock spring spacer.



Photo A



Photo B



Photo C





Photo E





Photo G



Photo H





Photo K

MISALIGNMENT SPACERS



Photo L

The bottom rear portion of the stock trailing arm (3/8" of an inch) must be cut off to allow for Lower Radius Rod Installation. (See Image Below)

