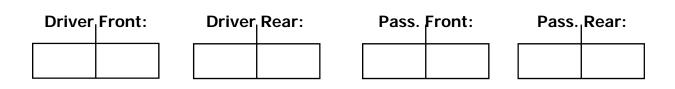


#### Please read Instructions thoroughly and completely before beginning installation. Installation by a certified mechanic is recommended. ReadyLIFT® Suspension is <u>NOT</u> responsible for any damage or failure resulting from improper installation.

Safety Warning: Suspension systems or components that enhance the on and off-road performance of your vehicle may cause it to handle differently than it did from the factory. Extreme care must be used to prevent loss of control or vehicle rollover during abrupt maneuvers. Always operate your vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Failure to drive safely may result in serious injury or death to driver and passengers. Driver and passengers must ALWAYS wear your seat belts, avoid quick sharp turns and other sudden maneuvers. ReadyLIFT® Suspension does not recommend the combined use of suspension lifts, body lifts, or other lifting devices. You should never operate your vehicle under the influence of alcohol or drugs. Constant maintenance is required to keep your vehicle safe. Thor-oughly inspect your vehicle before and after every off-road use. It is the responsibility of the retailer and/ or the installer to review all state and local laws, with the end user of this product, related to bumper height laws and the lifting of their vehicle before the purchase and installation of any ReadyLIFT® products. It is the responsibility of the driver/s to check their surrounding area for obstructions, people, and animals before moving the ve-hicle. All raised vehicles have increased blind spots and damage, injury and/or death can occur if these instructions are not followed.

This suspension system was developed using a 37" x 13.5" tire with 20" x 9" wheel and a 5" backspacing. If wider tires are used, offset wheels may be necessary and trimming may be required. Factory wheels can be used but are not recommended with tires over 11" wide. The stock spare rim can be run in an emergency. Please note that if running the spare factory tire, it is done for short distances and a speed not to exceed 45mph or damage to differentials may occur.

## VEHICLE HEIGHT MEASURMENTS





This Bill of Materials represents the component contents of this kit. All hardware is of the highest grade and the components are manufactured to exacting specifications for a trouble free installation. Use the attached torque specifications chart when final tightening of the nuts and bolts are done.

PART #	DESCRIPTION	QTY
	FRONT SWAY BAR DROP BRACKETS	2
48-1690	FRONT SWAY BAR DROP BRACKET HARDWARE	1
	BOLT, 7/16" X 1.25", HHB, G8, CZ	4
	NUT, 7/16", STOVER, G8, CZ	4
	WASHER, 7/16, FLAT, G8, CZ	8
	RADIUS ARM DROP BRACKETS	2
48-1691	RADIUS ARM DROP BRACKET HARDWARE	1
	FLAG NUTS	4
	BOLT, 1/2" X 1 1/4", HHB, G8, CZ	4
	WASHER, 1/2, G8, CZ	4
	BOLT, M18 X 130MM, HHB, 10.9, CZ	2
	NUT, M18, STOVER, 10.9, CZ	2
	WASHER, M18, 10.9, CZ	4
	FRONT TRACK BAR BRACKET	1
48-1692	FRONT TRACK BAR BRACKET HARDWARE	1
	FLAG NUTS	1
	BOLT, M18 X 80MM, HHB, 10.9, BO	1
	NUT, M18, STOVER, 10.9, CZ	1
	WASHER, M18, 10.9, CZ	2
	BOLT, 3/8" X 1", HHB, G8, CZ	3
	WASHER, 3/8", FLAT, G8, CZ	3
	FRONT BUMP STOPS	2
	DROP PITMAN ARM	1
	FRONT BRAKE LINE EXTENSION BRACKETS	2
48-1697	FRONT BRAKE LINE EXTENSION BRACKET HARDWARE	1
	BOLT, 5/16" X 1.00", HHB, G8, CZ	2
	NUT, 5/16", STOVER, G8, CZ	2
	WASHER, 5/16", FLAT, G8, CZ	4
	FRONT COIL SPRINGS	2

PART #	DESCRIPTION	QTY
	REAR SWAY BAR END LINKS 14.25"	2
48-1693	REAR SWAY BAR END LINK HARDWARE	1
	BOLT, M12 X 70MM, HHB, 10.9, CZ	4
	NUT, M12, STOVER, 10.9, CZ	4
	WASHER, 12MM, FLAT, 10.9, CZ	4
	WASHER, 12MM, FENDER, CZ	4
	REAR COIL SPACERS	2
48-1694	REAR COIL SPACER HARDWARE	1
	BOLT, 3/8" X 1", HHB, G8, CZ	4
	NUT, 3/8", STOVER, G8, CZ	4
	WASHER, 3/8", FLAT, G8, CZ	8
	REAR BUMPSTOP DROP BRACKETS	2
48-1695	REAR BUMPSTOP DROP BRACKET HARDWARE	1
	BOLT, 3/8" X 1", HHB, G8, CZ	4
	NUT, 3/8", STOVER, G8, CZ	4
	WASHER, 3/8", FLAT, G8, CZ	8
	REAR TRACK BAR BRACKET	1
48-1696	REAR TRACK BAR BRACKET HARDWARE	1
	REAR TRACK BAR BRACKET CRUSH SLEEVE	1
	BOLT, 3/8" X 1", HHB, G8, CZ	2
	NUT, 3/8", STOVER, G8, CZ	1
	WASHER, 3/8", FLAT, G8, CZ	3
	BOLT, M14 X 110MM, HHB, 10.9, CZ	1
	NUT, M14, STOVER, 10.9, CZ	1
	WASHER, M14, FLAT, 10.9, CZ	2

# Extended length shocks are required for this application and must be purchased before starting installation.

#### Before you start installation:

ReadyLIFT<sup>®</sup> Off Road Suspension highly recommends that the installation of this product be performed by a professional mechanic with experience working on and installing suspension products. Professional knowledge and skill will typically yield the best installation results. If you need an installer in your area, please contact ReadyLIFT<sup>®</sup> Suspension customer service to find one of our "Pro-Grade" Dealers. Notes:

Safety Warning

- Installation by a professional mechanic is highly recommended.
- A Factory Service Manual for your specific Year / Make / Model is highly recommended for reference during installation.
- Installation requires cutting and welding of the vehicle frame.
- Vehicles with a two piece rear driveline may require a carrier bearing drop support bracket, call technical assistance for details.
- Vehicles achieving more than 5" of rear lift may require rear driveline modifications, call technical assistance for details.
- All lifted vehicles may require additional driveline modifications and or balancing.
- A four wheel vehicle alignment will need to be performed after installation of this product.
- Speedometer / Computer recalibration is required if changing +/- 10% from factory tire diameter.
- Use of a Vehicle Hoist will greatly reduce installation time.
- Vehicle must be in excellent operating condition. Repair or replace any and all worn or damaged components prior to installation.

Place the vehicle on level ground. Engage the parking brake and block the rear wheels for safety.

Record stock vehicle ride height measurements on both the front and the rear, this will provide and guideline on vehicle rake and lift height. Measure from the center of the wheel up to the bottom edge of the fender well opening and record on chart provided on page 2.

#### **Front Install** Repeat for both driver and passenger side

1. Raise the front of the vehicle and support with jack stands at each frame rail behind the lower radius arms. Remove the front wheels. (Fig 1)

2. Locate the brake line/ABS brackets attached to the axle and remove brackets. (Fig 2, 3)

3. Locate the brake line/ABS bracket on the inside of the frame rails and remove. (Fig 4)

4. Loosen but do not remove the lower shock mounting bolts. (Fig 5)











5. Place a jack under the axle for support. Remove the radius arm bolts. (Fig 6)

6. Rotate the axle to release radius arms from the mounting location. (Fig 7)

7. Locate and install the driver and passenger side radius arm drop brackets using the factory hardware at the main mounting location. Do not tighten at this time.(Fig 8)

8. Locate the 4 wire flag nuts and the holes on the outside of the frame. Bend the wires to align the tab nut with the lower mounting holes in the bracket and frame. Once lined up with the lower mounting holes, install the 1/2" x 1 1/4" bolts and washers from bag 48-1691. Torque to 150 ft-lbs. Torque the factory hardware to 300 ft-lbs. (Fig 9, 10, 11)

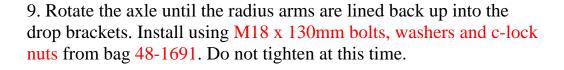


Fig 10











Fig 9

10. Mark the drive shaft location to the axle mounting surface and remove the front axle. (Fig 12)

11. Supporting the axle with a suitable jack, remove the front shock. Discard shock.

12. Remove the sway bar from the frame. Let hang out of the way. (Fig 13)

13. Remove the tie rod end at the pitman arm. Strike the pitman arm tie rod boss with a dead blow hammer to dislodge the taper. Remove the pitman arm nut. Using a pitman arm puller, remove the pitman arm from steering box. (Fig 14)

14. Remove tie rod end from the adjuster sleeve by loosening up both jam nuts and rotating adjuster until the tie rod end is free. Using a suitable cutting tool, remove the flat portion of the tie rod end so that it can be reinstalled 180 degrees from original position. Reinstall the tie rod end onto the adjuster at the same length as removed. (Fig 15)

15. Locate and install the drop pitman arm in the factory orientation using factory hardware with a drop of Loctite. Attach tie rod end to pitman arm using factory hardware. Rotate the steering all the way to the right until hubs are resting on the turn stops. Torque pitman arm nut to 177 ft-lbs. Torque tie rod end to 100 ft-lbs. Rotate the steering back to center.

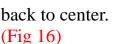












16. Remove the track bar from the frame and loosen at the axle.

17. Lower the axle enough to remove the coil springs from their mounts and discard.

18. Locate the 3 holes in the front cross member under the engine. Drill out the 2 holes closest to the middle to 1/2" and the hole leading into the cross member to 3/4". The 3/4" hole is to pass the wire nut through. Paint all exposed metal with a high quality rust preventative paint. Do not drill past the first layer of cross member. (Fig 17, 18)

19. Install front track bar drop bracket using factory hardware in the original location. Do not tighten at this time.

20. Locate the wired flag nut and bend wire until flag nut lines up with 2 holes on the cross member. Install using 3/8" x 1" bolts and washers from bag 48-1692. Install 3/8" x 1" bolt and washer from the outside of the frame into the track bar bracket. Torque all 3 bolts to 45 ft-lbs. Install track bar into drop bracket using M18 x 85mm bolt, washers and c-nut from bag 48-1692. Do not tighten at this time. (Fig 19, 20)

21. Remove the factory bump stops. Install 5" bump stops. To aid in install, lube the mounting end with a soap and water mix. (Fig 21, 22)













22. It is necessary to trim the tab off the coil spring isolator for reinstall. Use a cutting tool and remove the tab. (Fig 23)

23. Locate and install the coil springs with factory isolators on top. Make sure the isolator is positioned on the flat end of the coil spring. Lower the axle low enough to set both springs in place. Make sure that the lower portion of the spring is sitting as shown in the pictures. Driver side spring lines up with the end of the weld on the lower cup to axle. Passenger side ends up with end of the weld on the lower cup to axle/track bar mount. This is necessary to keep the springs matched to the angle of the mounting cups on the axle. Failure to do so will cause the springs to bow out in inappropriate angles. (Fig 24, 25)

24. Install front shocks using factory lower hardware and provided upper hardware. Torque factory hardware to 90 ft-lbs. Torque the upper mounting hardware to 30 ft-lbs.

25. Install sway bar drop brackets to the frame using the factory hardware. Install the sway bar to the drop brackets using 7/16" x 1 1/4" bolts, washers, and c-lock nuts from bag 48-1690. Torque factory hardware to 50 ft-lbs. Torque the 7/16" hardware to 60 ft-lbs. (Fig 26)

26. Install brake line drops to the brake line bracket using 5/16" x 1" bolts, washers and c-lock nuts from bag 48-1697. Do no tighten at this time. Attach brake line and drop to the inside frame rail using the factory hardware. It will be necessary to gently pull down on and

bend the metal brake line on the driver side to gain the slack needed. The passenger side bracket will angle around the frame gusset. Reinstall the brake line to axle brackets using factory hardware. Torque

all hardware to 10 ft-lbs. (Fig 27, 28)













27. Install the front wheels and lower vehicle to the ground. Torque to the lug nuts to the wheel manufacture specs.

28. Torque the radius arm and track bar bolts to 200 ft-lbs.

# <u>Rear Install</u>

Block the front wheels for safety and raise the rear of the vehicle. Place jack stand under the frame rails in front of the rear lower control arm links.

1. Place a jack under the axle for support.

- 2. Remove the sway bar end links. (Fig 1)
- 3. Remove the rear shock.

4. Loosen the lower track bar mounting bolt and remove the upper track bar mounting bolt.

5. Remove the parking brake bracket from the lower arm on the driver side.  $(\mathbf{T}_{i}, \mathbf{Q})$ 

## (Fig 2)

6. Loosen the upper and lower control arm bolts. (Fig 3)

7. Lower the axle enough to remove the springs.

8. Install track bar bracket using the factory hardware and crush sleeve in the original location and the 3/8" x 1" bolts, washers and c-lock nuts from bag 48-1696 on the side holes. Torque the factory hardware to 100 ft-lbs, the 3/8" hardware to 45 ft-lbs. Install the track bar using 14mm x 105mm, washers, and c-lock nut from bag 48-1696. Do not tighten at this time. (Fig 4, 5)











9. Install rear coil spring spacers using 3/8" x 1" bolts, washers, and c-lock nuts from bag 48-1694. Torque to 45 ft-lbs. (Fig 6)

10. Install the rear coil springs with factory isolators onto the spacers. Raise axle to hold coil springs in place.

11. Remove the factory bump stops.

12. Install the rear bump stop extensions using factory hardware at the frame. Install the bump stops using  $3/8" - 16 \times 1"$  bolts, washers and c-lock nuts from bag 48-1695. Torque hardware to 30 ft-lbs. (Fig 7)

13. Install the rear shocks using the factory hardware on the bottom and the provided hardware on the top of the shock. Do not tighten at this time.

14. Install the sway bar end links using M12 x 70mm bolts, washers, and c-lock nuts from bag 48-1693. Do not tighten at this time. (Fig 8)

15. Reinstall the parking brake cable bracket using the factory hardware. Torque to 10 ft-lbs. (Fig 9)

16. If you have removed the rear wheels, install at this time. Lower the vehicle to the ground. Torque the lug nuts to the wheel manufactures specs.

17. Torque the lower shock bolts to 90 ft-lbs, upper shock hardware to 30 ft-lbs, sway bar end links to 65 ft-lbs, upper and lower control arm bolts to 200 ft-lbs , and track bar mounting bolts to 100 ft-lbs.

\*\*\*Note: Some models have a torque shock located on top of the differential. This will need to be removed for this application.\*\*\* (Fig 10)













#### Final Checks & Adjustments

**Post Installation Warnings:** Once the vehicle is lowered to the ground, check all parts which have rubber or urethane components to insure proper torque. Torque wheels to factory specs. Move vehicle backwards and forwards a short distance to allow suspension components to adjust. Turn the front wheels completely left then right and verify adequate tire, wheel, brake line, and ABS wire clearance. Test and inspect steering, brake and suspension components for tightness and proper operation. Inspect brakes hoses and ABS lines for adequate slack at full extension.

## \*\*\*FAILURE TO PERFORM THE POST INSPECTION CHECKS MAY RESULT IN VEHICLE COMPONENT DAMAGE AND/OR PERSONAL INJURY OR DEATH TO THE DRIVER AND/OR OTHERS\*\*\*

**Vehicle Handling Warning:** Vehicles with larger tires and wheels will handle differently than stock vehicles. Take time to familiarize yourself with the handling of your vehicle.

## Wheel Alignment/Headlamp Adjustment:

It is necessary to have a proper and professional wheel alignment performed by a certified alignment technician. It is recommended that your vehicle alignment be checked after any off-road driving. In addition to your vehicle alignment, for your safety and others, it is necessary to check and adjust your vehicle headlamps for proper aim and alignment

## Vehicle Re-Torque and Safety Inspection:

Upon completion of all services and adjustments performed on your vehicle, and within 50 miles of driving, check to ensure all fasteners and hardware are properly torqued to specification as noted in the vehicles factory service manual or the torque specs included.

#### \*\*\*RECHECK ALL HARDWARE FOR PROPER TORQUE VALUES AFTER 500 MILES, AND THEN PERIODICALLY AT THE EACH SERVICE INTERVAL THERAFTER.\*\*\*