

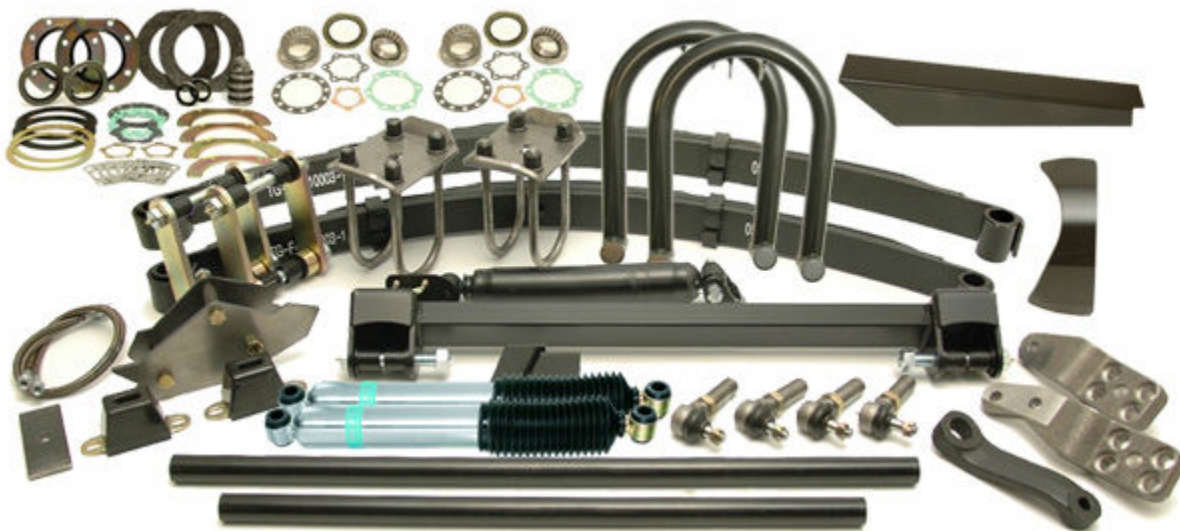


Classic Front Lift Kit

Install Instructions For Kit 110039-1-Kit, 110040-1-Kit, 110041-1-Kit

Kit Includes:

- Front Spring Hanger w/bolts & bushings
- Front Leaf Springs w/bushings
- Greasable Shackles
- 2 Bilstein Shocks
- 2 Shock Hoops w/Gussets
- U Bolt Flip Kit
- 2 Extended Front Brake Lines
- High Steer Crossover Steering
- Steering Stabilizer Kit
- Heavy Duty IFS Mount Kit
- Small Diff Armor
- Gusset, Upper Axle
- Knuckle Rebuild Kit
- 2 Wheel Bearing Kits
- 2 Bumpstops
- Spring Pad
- Instructions



Installation

In addition to the items in the kit you will also need an IFS style steering box. Any Toyota 4WD IFS box from 1986-1996 can be used. 2WD boxes can not be used due to the smaller sector shaft. Custom length drive

shafts will also be needed. It is not possible to accurately measure the needed drive shaft length until after the installation of the lift is complete. Heavy wall drive shaft tubing with a minimum thickness of .095 wall should be used. We recommend a front drive shaft with a minimum slip joint of 10" to prevent driveshaft from coming apart under extreme articulation.

1) Start by removing the leaf springs, axle, shackles, front shocks, brake lines, steering and push pull steering box.

Installing Steering Box

(2) Remove steering box mount from frame using a torch or plasma cutter. Remove all parts of the bracket until you are left with a bare frame rail. Use a grinder for a smooth finish.

3) Install provided pitman arm onto IFS box and install washer and nut. Install one tire rod end into the pitman arm for positioning of IFS Box. Center the steering box (left to right) before installing the pitman arm. With the steering box on the frame, the pitman arm should point toward the rear of the truck when the box is centered.

4) Position IFS steering box on outside of the frame rail. Slide the box as far forward as possible. Rotate the box so that the pitman arm will clear the frame by 1/2". Turn IFS box input from lock to lock and verify clearance under the frame as the Pitman arm moves left and right. Once proper position has been established, mark the position of the two lower holes of the steering box on the frame.

5) Drill steering box holes (3/4") through frame. Insert IFS box mount tubes through frame. Place outer IFS plate over tubes. Weld outer plate to the three frame tubes using a high heat setting on welder for good penetration. Use grinder to grind the outside plate weld so that it is completely flush. Slide inner plate onto tubes and fully weld around tubes on the inside. Weld up both inner and outer plate directly to frame. Some minor reshaping of outer plates may be necessary with grinder if plates hang below frame.

6) Bolt on steering box and connect hydraulic hoses to power steering system. Toyota uses the same hydraulic hose fitting on all steering boxes from 1979-1995.

Installing Leaf Springs

7) Cut off and remove front leaf spring hangers with torch or plasma cutter.

8) The front spring hanger should be mounted so that it is 3/4" - 1" forward of the center of the front frame crossmember. Using jack-stands or c-clamps, hold crossmember in position and weld hanger in place. Hanger should be centered left to right and square with the frame.

9) Weld the spring pad onto the left front axle spring perch. Weld across the front and back. Do not weld the sides so that the pad can be removed if need be in the future. This pad raises up the spring perch to match the taller on the passenger side.

10) Install leaf springs with military wrap (full double wrapped) end forward into the front hanger. Use shackle kit provided with kit to attach the rear end of the springs to the frame. Apply a small dab of axle grease to the threads of the shackle bolts before installing locknut. Grease shackles with standard grease gun. Shackles can be installed with grease fittings facing inside or out.

Install High Steer

11) Remove nuts and cone washers from both stock steering arms. Remove stock steering arms from knuckles. It may be necessary to use a hammer to tap arms out of position. Retain stock knuckle shims for each



side. Remove stock knuckle studs. Clean knuckle studs and threads. Apply locktight and reinstall knuckle studs into axle. Install new steering arms using original shims. Knuckle preload with tie rod removed should be approximately 15 lbs. If it is over or under you may wish to reshim the knuckle. See factory service manual for procedure. Additional shims are provided with knuckle rebuild kit. Install the steering arm with two holes on the right side of the truck. Install the steering arm with one hole on the left side of the truck. Torque knuckle studs to 80 ft/lbs.

Install Front Flip kit

12) Using the front front U bolt flip kit install front axle under the springs. Weld the bumpstops to the top center of u-bolt plates. The U-bolt plate is installed on top of the leaf spring. Tighten the U-bolts to 100lbs. Cut off the excess U-bolt threads just above the nuts so that 3-5 threads are exposed.

Install Tie Rod and Drag Link

(13) Each rod has one left handed thread and one right handed thread. When installed on the truck, the right hand threaded ends of each link should be on the right side of the truck, and the left threaded ends should be used on the left side of the truck. The longer rod is the tie rod and the shorter rod is the drag link. Take the tie rod and install it in the one hole of the left steering arm. Then take the other end and install it in the rear hole of the arm on the right side of the truck. Install the right side of the drag link in the forward hole of the right side steering arm. The left end of the drag link should be installed in the pitman arm. Tighten castle nuts to 65 lbs and install 4 cotter pins.

Shocks and Shock Hoops

14) To install shock hoops it may be necessary to cut open the inner fender. If 14" shocks are used you will most likely need to bring the shock hoop up through the fenders. This may require relocation some items directly above the shocks. If your using 12" shocks and short style hoops, there is no need to cut open the fenders.

15) Install shocks and hoops so that approximately 60% of the shock is in the tube and 40% is out or as close to this as you can. Exact positioning will depend on spring height, vehicle weight, and shock choice. Shocks should be mounted vertically with the "Can" or body of the shock in the up position.

16) Test fit shocks before making any permanent welds. Do not weld near shocks unless the chrome plating of the shock rod is covered. If weld splatter attaches to shock rod, it will damage the shock seal and destroy the shock. This type of shock failure is not covered by warrantee.

17) After hoops are installed, install two gussets on each shock hoop. The gussets (1" round tubing) will need to be finish trimmed to fit before welding in position. Shock sleeves should be installed in the top and bottom of each shock before installation.

Steering Stabilizer

18) The steering stabilizer included in the kit is designed to help reduce steering wheel vibrations at higher speeds. To install, weld the notched end to the passenger side frame rail. Pull the shock out 1/2 half of it's length. Using provided U-Bolts attach the stabilizer to the upper steering rod (draglink).

Front End Alignment

19) Alignment of the solid front axle is very easy. With the adjuster nuts loose simply turn the tie rod to change the tow setting. The tow should be set so that it's 1/16" to 1/8" tow in. The drag link can also be adjusted in the



same way. Most the tie rod end should be threaded into the tie rods. Once the rods are set the nuts can be locked down.

Notes:

After driving truck 100 miles retorque U-bolts to 100 ft/lbs.
Recheck U-bolts and knuckle stud nuts at each oil change or 5,000 miles.



These instructions are designed as a general installation guide. Installation of Trail-Gear Products requires specialized skills such as metal fabrication, welding and mechanical trouble shooting. If you have any questions or are unsure about how to proceed, please contact our shop at 559-252-4950 or seek help from a competent fabricator. Using fabrication tools such as welders, torches and grinders can cause serious bodily harm and death. Please operate equipment carefully and observe proper safety procedures.

Rock crawling and off-road driving are inherently dangerous activities. Some modifications will adversely affect the on-road handling characteristics of your vehicle. All products sold by Trail-Gear Inc are sold for off road use only. Any other use or application is the responsibility of the purchaser and/or user. Some modifications and installation of certain aftermarket parts may under certain circumstances void your original dealer warrantee. Modification of your vehicle may create dangerous conditions which could cause roll-overs resulting in serious bodily injury or death. Buyers and users of these products hereby expressly assume all risks associated with any such modifications and use.

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