



1979-1985 Extreme Lift Kit Instructions

Important notices:

These instructions are intended only as a general guide for installing All-Pro products. For some items, specialized mechanical skills, metal fabrication and/or welding skills may be needed for proper installation. If you have any doubts or questions about installing these or other parts please call us at the shop 951-658-7077 or contact a competent mechanic, fabricator, welder or other appropriate professional.

Aftermarket accessories are intended to modify and/or prepare a vehicle for uses that exceed conditions anticipated by the vehicle manufacturer. These uses may include high performance demands and negotiation of rough terrain. These conditions have extreme variance and cannot be controlled by the vehicle manufacturer or aftermarket accessory manufacturer. Therefore, the safe control of your vehicle is entirely your responsibility. Do not purchase parts from All-Pro Off-Road unless you are willing to accept this responsibility. Do not install any All-Pro part that you do not feel competent at installing without causing present or future injury to yourself or others; consult a professional installer.

All parts sold by All-Pro Off-Road are for off road racing use only and are not intended for use on the street. Modification of your vehicle to enhance performance with the parts sold by All-Pro Off-Road can result in dangerous situations that may result in bodily harm. The buyer hereby assumes all risks associated with any such modifications. All-Pro Off-Road will not accept responsibility for personal injury or property damage arising from the failure of any parts manufactured or sold by All-Pro Off-Road.

In an effort to provide both durability and safety, All Pro Off-Road recommends you carefully read the entire installation procedure before beginning, then rigidly follow these instructions during installation. Also, it is extremely important that you abide by proper safety procedures including the use of jack stands, setting the parking brake, wearing eye protection, etc.

Parts Check List:

Left and right steering arms
Pitman arm
Tie rod, Drag link
4 FJ-80 rod ends (2 left and 2 right thread) with locknuts, and cotter pins
IFS steering mount & reinforcement plate
Front spring hanger, bolts and bushings
Front 1.5" greasable shackles, bolts, bushings, and nuts
Rear 1.5" greasable shackles, bolts, bushings, and nuts
Front Leaf springs, bushings, spring pad
Rear leaf springs and bushings

Rear spring hangers, shackle hangers, and greasable bolts
Rear 3 hole perches
Front U bolt-flip kit (2 plates and 4 U bolts)
Rear U bolt-flip kit (2 plates and 4 U bolts)
Front and rear extended brake lines (set of three)
2 Shock hoops and 4 hoop braces
2 Front shocks
2 Rear shocks
Steering Stabilizer
Instructions

In addition to this kit you will need driveshaft work and an IFS power steering box from an 86 - 95 4WD Toyota PU or 4Runner.

AP-305513

Installation Procedure:

Begin by removing the stock suspension, axles, shocks, steering, and brake lines. Next cut off the Steering box mount and install the IFS steering box mount. Cut off the front spring hangers' flush with the bottom of the frame.

For 79-83 trucks, offset the hanger 1" forward as seen in the picture to the right >



Front Springs and Hanger

On 1984 & 1985 trucks the hanger positions onto the frame flush with the cross support. Center the hanger left to right using a tape measure and tack weld in place. The hanger main tube should be flush with the frame of the truck on 84-85 models.

1979 - 1983 ONLY: Place the front spring hanger on the frame so that the cross tube is 1" forward of the front of the frame as pictured above. 1979- 1983 frames are 1" shorter than 1984 - 1985 frames.

Next install the springs and 1.5" longer front shackles using bolts and bushings provided. The springs should be installed with the military style double wrap forward. The front spring shackles are the ones with 3/4" spacers. The rear spring shackles do not have spacers and are flat. Use the longer 150mm bolts on the front shackles. The shorter 120mm bolts are for the rear suspension shackles. Always mount springs with the military style double wrap eye to the front of the truck.

IFS Box Mounting



To mount the IFS steering box onto the frame it is first necessary to remove the original steering box, torque arm and bracket. The torque arm is not used with crossover steering and can be discarded. It will be necessary to use a torch and grinder to remove the original steering box bracket. Once the bracket has been removed from the frame you can begin the installation of the IFS box mount.

The 1979-1983 frames are one inch shorter at the firewall than are 1984 and 1985 trucks. This difference does not affect the placement of the steering box. There are three bolts that hold the IFS box onto the frame, two bolts go through the frame and the third goes through a bracket welded above the frame. Proper placement of the IFS box is important. Too high and

the pitman arm will hit the frame, too low and the leaf spring will hit the pitman arm, too far back and the tie rod will hit the drag link.

Install the pitman arm onto the steering box and snug down the sector shaft nut. Place the steering box on the frame rail and move it forward until it touches the body mount. Rotate the steering box back so that the steering shaft going to the steering wheel is nearly straight. Check the pitman arm to insure that there is no contact with the frame as it turns left and right.

Place the upper steering box mount onto the frame. Using the steering box as a template, mark the two lower mount holes. Drill a hole through the frame and insert the provided frame sleeve. The sleeves should be welded in place so that they are flush with the outside of the frame. When completed all three box mounting points should be on a flat plane for the box to mount to. Only a small weld will be possible on the outside of the sleeve. The remainder of the two sleeves will stick out on the inside of the frame. Here you can get a good weld, but don't turn the welder up too high as the back side of the frame is a little thinner than the rest of it. Next take the bracket that welds on top of the frame put in position for the top mount.

Some grinding may be necessary to this bracket to allow the bolt to slide through. With the box in place on the other two bolts position and modify the upper bracket as needed until all three box mount bolts can be easily installed. Once in place the upper bracket can be welded up. Bolt the IFS box onto the frame using the 3 provided 1/2" bolts and locking nuts. Weld the provided IFS frame plate on the inside of the frame rail to reinforce the frame. Connect the trucks steering shaft to the new box. Attach the factory power steering lines from the truck to the new IFS steering box.

Installing Hy-Steer™ Crossover Steering:

Remove both left and right steering arms from on top of the steering knuckles. As an option you can also remove the 4 studs from each of the knuckles. Each of these studs should be cleaned and inspected. Reuse studs only if in good condition. New studs can be purchased from your local Toyota Dealer. Reinstall the studs using Lock tight to prevent them from coming loose.

Reinstall the new steering arms using the same shims as the original arms. The arm with two holes goes on the right side and the arm with one hole goes on the left (driver) side. With the new arms attached there should be some resistance in the knuckle and should not have any play in it. Torque knuckle studs to 80 ft/lbs. If there is noticeable play the knuckle bearings need to be replaced and/or re-shimmed. Any play in the knuckle will result in steering vibrations when driven.

Take the tie rod and drag link and attach two-rod ends and jam nuts to them. Thread the ends into the tube until they bottom out, then back it out one two full turns. 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.

If the stock pitman arm is still attached to the IFS box use a pitman arm puller to remove it. Attach the left side of the drag link to the pitman arm. Now set the truck down on the ground and set the wheels so they point straight ahead. Turn the wheel all the way to the right until the steering box stops, and then turn it back to the left 2 1/4 turns. Both the box and tires are now "centered". Carefully lift the pitman arm up and slide it onto the sector shaft of the steering box and install the sector shaft nut. Torque Sector shaft nut to 130 ft/lbs. Tighten the 4 castle nuts on the links and install the cotter pins.



Install Front Flip kit

Using the front U-bolt flip kit install front axle under the springs. One of the front U bolts is longer than the other three, this one is used on the left side of the right leaf spring. The passenger side will be more of a challenge to get the u-bolt to slip into because of the pumpkin. Squeeze the top of the u-bolt until it slips into the plate. The U-bolt plate is installed on top of the leaf spring. Tighten the U-bolts to 80. Re-torque the U-bolts after 100 miles and periodically check the torque of these bolts. Cut off the excess U-bolt threads just above the nuts. Some type of bump stops will be needed front and rear. One method is to weld stock bump stops onto the top of the flip plate. If this is done it will also be necessary to weld an

extension or tube from the frame down to the bump stop. Bump stops must be setup so that there is a gap of 2" - 3" between the bump stop and pad of front springs. The bump stop need to be set so that it stops the spring at flat. Failure to install bump stops and allowing the spring to go into a negative arch ruins the spring and voids the warranty. On the rear spring the gap should be 4" to 5".

Hoops & Shocks

Position shock hoops onto frame so that the top of the shock mount is positioned with about 1/8" - 1/4" gap between the top of the fender well and the shock hoop. Tack weld the hoops into place and test fit the shocks (tube side up). About 6" of the shaft should be out of the shock tube. Reposition the hoops on the frame if necessary (It may be necessary to clearance the inner fender-well with a hammer to create enough space to move the hoop). Brace the hoops using the supplied 2 weld-on brace tubes per side. Finish welding the hoops into place. You must remove the shocks before welding. Welding spatter on the shaft will destroy the shock seals prematurely.



Front End Alignment

All Pro recommends using a High-Pinion front differential for better front driveshaft u-joint angle. Alignment of the solid front axle is very easy. With the adjuster nuts loose simply turn the tie rod to change the toe setting. The toe 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. It's recommended that 75% or more of the tie rod end threads be inside the tubing. Once the rods are set the nuts can be locked down. The two nuts on the passenger side can come very close to each other. It may be necessary to adjust the nuts so the flat sides come face to face. It may also be necessary to grind a little off one or both nuts to eliminate the nuts from rubbing each other when the steering is turned full left.

Rear Leaf Springs

All Pro rear 56" long 4, 5 and 6" lift springs are designed to be used on 1979 and later Toyota Pickup's and 4Runner's. When installing these springs it is possible to keep the axle location as it is, or to move the axle forward or backwards depending where you mount the spring hangers. For example it is very common to move the axle back one inch to allow for a better fit of the tire in the fender well. For someone with a long wheel base extra cab that wants to reduce wheel base it is possible to move the mounting points toward the front of the truck to reduce wheel base. Whatever your choice we recommend that the spring and shackle hangers be tack welded in place and the truck placed on the ground to verify shackle angle and axle position. If you are installing new springs we recommend you add 300 lbs of weight to the bed of the truck for this test to simulate the spring height that will result after the springs have had a chance to settle. The springs will settle in after your first hard trail run or about one month of regular driving. Shackle angle should be about 15 degrees.

When installing the 56" long rear springs on 1979 - 1988 trucks, the rear shackle hanger will need to be cut off with a die grinder and moved back 1.5-2.5" (depending on desired shackle angle) and reattached. The front spring hangers cannot be reused after cutting them off so we recommend our heavy-duty spring hangers. These will need to be installed approx 6" forward of the stock hangers, measured from center to center of the boltholes. When doing the finish welding on these mounts weld both sides of the hanger as well as filling the slots cut into the bottom of the hanger. It may be necessary to remove the fuel tank to fully weld the right side hanger. The tab on the rear hanger mounts to the outside of the frame



All springs need to be installed with the double military wrap towards the front of the vehicle (non-shackle side).

Actual lift provided will depend many variables. A heavy truck will be lifted less than a light truck. The spring's work well on truck weighing 3,500 to 5,000 lbs. Moving the axle forward will produce more lift, moving the axle back will add less lift. After the first 100 miles re-torque all bolts including wheel lugs, upper and lower knuckle bolts, U-bolts, shocks, pitman arm, shackles, and drive shaft bolts. It's also a good idea to re-torque knuckle bolts and U-bolts each time you change the engine oil. The steering wheel can be removed and reinstalled to align the wheel spokes.

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