

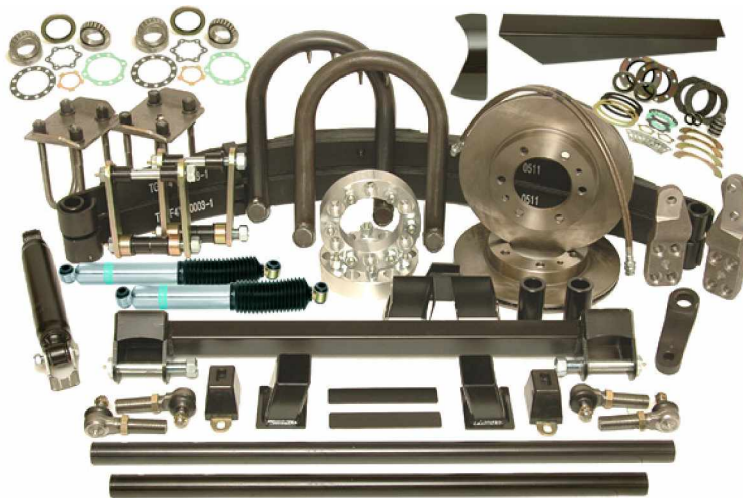


## IFS Eliminator Kit - Install Instructions

Part Numbers:110001-1-Kit, 110002-1-Kit, 110003-1-Kit

### Kit Contents:

- Front Leaf Springs (your choice 3" 4" or 5")
- High Steer Crossover Steering Kit
- Front Drop Hanger with Greasable Bolts
- Greasable 5" Shackles
- Frame Tubes & Jigs
- Steering Stabilizer Kit
- U bolt Flip Kit
- Shock Hoops (2)
- Bilstein Shocks (2) (12" or 14")
- Front Brake Lines (2)
- Vented Rotors (2)
- Bumpstop Extensions (2)
- Wheel Spacers (2)
- Bumpstops (2)
- Front Axle Gusset
- Axle Diff Armor
- Knuckle Service Kit
- Wheel Bearing Kit (2)
- Motor Mount Cover Plates
- Spring Pad



If you have any questions during the installation of your kit, please call us for assistance.

This kit is designed to replace the IFS suspension on 1986-1995 Toyota Pickup's and 4Runners. Installation time is typically 2 to 3 days. In addition to common hand tool you will also need a plasma cutter or torch, grinder and 230V welder. In addition to this kit you will need to have a custom drive shaft made. We recommend measuring for the drive shaft after the installation of the kit. Using a drive shaft with a minimum of 10" of drive shaft slip spline will prevent the drive shaft from separating due to the extreme flexibility of this kit. Drive shaft tubing should be a minimum of .095" thickness.

Our kit includes a knuckle rebuild kit and wheel bearing kits, use these when rebuilding and preparing the front axle.

## **IFS Removal**

Unbolt and remove the front axle half shafts, differential, idler arm, tie rod, A-arms, sway bars and torsion bars. Using a torch or plasma cutter, cut off the A-arm mounting brackets. Once removed, use a grinder to remove the remnants of the brackets. Grind until frame is completely smooth and flat. When removing the the A-arms, part of the engine motor mounts will be removed. This is normal and later plates will be installed to fill the void created by removing the IFS suspension.

## **Front Spring Hanger**

With the front suspension removed and the frame cleaned we are start the installation of the new suspension. The front springs hanger has a front and back side to it. If you look close the springs hangers are offset from the tubing. These hangers should be offset forward for installation. Center the hanger left to right on the frame and flush with the front of the frame. Weld the hanger in place with small welds between the frame and hanger. Be sure to fully weld around the spring hangers as this is where most of the stress will be transfer to the frame. It is normal for there to be a small gap between the bottom of frame and the top of hanger.

## **Frame Tubes and Jigs**

To mount the front shackles, tubes are installed into the frame. Jigs are provide to properly position the tubes in the frame. Each jig is labeled with an arrow and "R" or "L" label. The jig labeled R is for the Right side (passenger) and the jig labeled L is for the left side (driver). The arrow points toward the front of the truck.

Place the frame jig onto the frame and center the jig in the body mount under the firewall. Mark or scribe both the inside and outside of the frame rails. Using a plasma cutter or torch, cut the holes through the frame. Slide each frame tube into the frame. Center the frame tube in it's hole. After centering the tube, push it toward the outside of the frame 1/4". Now weld the frame tube in place. Now do the other frame tube, centering it up and then pushing it out 1/4" before welding in place. Weld both the inside of the frame and the outside.

## **Assemble Springs Onto Axle**

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.

Weld the provided bumpstops on to the top of the U-Bolt flip plates. Place the leaf springs onto the axle housing and install U-Bolt Flip kit. Spring should be installed onto the axle with the full military wrap end forward.

Roll Axle with leaf springs under truck. Bolt springs in place with greasable bolts and shackles. Center steering wheel inside cab (turn lock to lock and split the difference). Bolt on pitman arm to stock IFS steering box.

## **Shocks and Shock Hoops**

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.

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.

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.

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.

Weld on the provided Bumpstop extensions to the frame. Note the axle moves back as it travels up. The bumpstops should contact as close as possible to the center of the extension. We recommend that you tack weld the extension in place first, then using a large rock, ramp or forklift, verify that the bumpstop and extension contact correctly.

## **Steering Stabilizer**

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).

## **Notes:**

Torque pitman arm nut to 130 ft/lbs.

Torque U-bolts to 90 ft/lbs. U-bolt tops may be cut off flush with nuts.

Retorque U-bolts after 100 miles and at every oil change (or each 5,000 miles).



These instructions are designed as a general installation guide. Installation of many 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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