1947-1954 Chevy Pick-up Custom IFS

Installation Instructions

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QTY	Part	QTY	Part
2	boxing plates	4	1/2-20x1/2" set screws
1	cross member	2	1/2-20x 2" Button Head Bolt
1	cross member tower top (right)	2	1/2-20 short nyloc nut
1	cross member tower top (left)	2	1/2 x 4.5" shoulder bolt x 3/8-16
2	upper control arm assemblies	2	3/8-16 nyloc nut
2	lower control arm assemblies	2	1/2 flat washer
1	rack & pinion with internal extensions and mounting hardware	4	/2-20x2.5" bolts
2	tie rod ends with jam nuts	4	1/4" lock washers
1	anti-roll bar	2	1/2-20 jam nuts
2	anti-roll bar pillow blocks	2	1/2-20 x 1.5" Button Head Bolts
2	sway bar locks with nub screws	2	1/2 lock washers
2	female heim joints	2	5/8-18 x 4.5" bolt
4	anti-roll bar nyliners	2	5/8-18 nyloc nut
2	coil-overs	2	5/8" stainless steel washers
1	left spindle assembly	2	5/8 id x 5/8" steel spacers
1	right spindle assembly	2	c-notch pieces
2	1/4" id x 2 1/8" spacer		

1. Remove the motor. While it may be possible to install this kit without removing the front-end, it is recommended that you do so, as it is much easier. Support the front and rear of the chassis on jack stands. Be safe! Avoid pulling and pushing on the vehicle while it is off the ground.

2. Mark the axle centerline on the chassis and remove the original front suspension and steering components. To remove the rivets holding the brackets, grind the rivet heads flush. Center punch the rivet and drill through using progressively larger drills up to a 5/16" drill. The rivet should be relatively easy to punch out. If not, then continue drilling with a 3/8" drill.

3. Before welding in the boxing plates, clean and prep the top and bottom inner edges of the rails. Tacks weld cross bars across the top and bottom of the rails to avoid the bars warping as you weld in the boxing plates. The cross bars can be removed once the plates are welded in.

4. The frame rails must be c-notched for the rack and pinion to not hit. Measure 5" in front of the axle centerline mark and draw a line perpendicular to the top of the frame rail as measured in front of the firewall. This line is the rack and pinion centerline. Use the c-notch semicircles as a pattern for cutting out the bottom of the rail to clear the rack. You will need a finished notch at least 1" high. Cut out the notch and weld in the semicircles after they have been trimmed to fit. If you like, and there is good weld penetration, grind the welds flush and blend the c-notch into the rail

5. Clean and prep the area on top and underneath in front of and behind the axle centerline mark you made earlier, as this is where the cross member will be welded. Slide the cross member in the chassis from underneath by lining up the center of the cross member with the axle centerline mark (the rack and pinion brackets identify the front of the cross member). From Bottom of the frame to floor at ride height 9 ¼ inchs In some cases you may need to grind the cross member for it to fit. Check that the center of the cross member leans back about 1.5-2.0° relative to the top of the frame rails measured at the center of the chassis, and tack weld in place. If you think you may be running more or less chassis rake than1.5°-2.0°, then adjust the cross member so that it will be level to the ground at ride height.

6**.** The cross member can be welded if the above checks out. Weld the cross member tower pieces to the top of the rails and the top of the cross member.

7. Assembly time! Bolt the lower control arms on with the coil-over brackets facing up. The stainless steel washers go on each side of the urethane bushings. Next, slide the anti-roll bar locks on to the center of the anti-roll bar followed by two white anti-roll bar nyliners on each side(flange goes on the inside). Slide the pillow blocks on and attach to the back of the cross member using the ¼-20 x 2.5" bolts and lock washers. Center the bar and slide the nyliners into the blocks and lock the anti-roll bar locks against them. Thread the female and male heims together with a ½" jam nut in between. Attach these to each side with the ½-20x1.5" bolts and lock washers.

8. Attach the coil-over to the cross member towers with the ½-20x2" button head bolts and short nyloc nuts. The shock adjuster should be at the bottom. From front to rear, use the ½ x 4.5" shouldered bolt through the heim joints, the ½" id x 2 1/8" spacers, the coil-over(and control arms) and followed by ½" flat washers and 3/8-16 nuts.

9. Install the upper control arm. The eccentric slides into the eccentric sleeve of the cross member and is locked down using the ½-20x ½" set screws. The stainless steel washers go on each side of the urethane bushings. Attach the spindles to the control arms. The steering arms go in front with the calipers on top.

10. Mount the rack and pinion to the cross member. The assembly order is: 5/8-18x4.0-4.5" bolt, 5/8" stainless steel washer, through the rack and pinion with the bushing flange on the underside, 5/8" spacer(if using a power rack), cross member bracket, and 5/8" nyloc nuts. Center the rack by turning all the way to the left and measuring from the end (when it is straight) to a fixed point like the bracket on the cross member. Turn the other direction and measure from the same points. Take the difference of these numbers, divide by two, and add this to the last measurement you took and this is where the tie-rod end will be when the rack is centered. Thread the tie-rod jam nuts on followed by the tie-rod ends and attach to the steering arms from underneath. Be careful not to bump the rack once you have centered it!

11. Tighten all suspension fasteners and return the vehicle to the ground with all components reinstalled (motor, body work, etc.) that will be on the vehicle when you drive it. Now that all the weight is on it, the lower control arms should be parallel to the ground. If they are not, you can adjust the ride height by jacking the front end off the ground to remove the weight on the suspension and adjust the spring preload by turning the lower rings on the coil-over.

12. The vehicle can be taken to an alignment shop to set the alignment properly to the specifications below.

Camber:	Caster:	Toe-in:
0°	2-3°	1/16” PER SIDE