7132

INSTRUCTIONS FOR 4-LINK LOW PROFILE REAR FRAME

ITEM	QTY	PART NO.	DESCRIPTION
1	1 pr.	4510	Frame 4-link low profile H/D 3x2
2	1	4512	Crossmember H/D 3 x2 x 60" 6 1/2 drop
3	1	1816	Tube 1 5/8 x .134 ERW 60"
4	1	1815	Tube 3 x 2 x .083 ERW 60"
5	4	2101	Shock bracket
6	2	4511	Bend 120 degree H/D 3 x 2
7	2	1817	Tube 1 1/4 x .134 ERW 60"
8	1	927132	Assembly drawing

Read and understand these instructions completely before starting.

NOTE: This kit is designed to provide a rear subframe for use with coil over shocks and a 4-link. It's low profile design makes it ideal for pickups as it will fit under the bed of most trucks. It can also be used in many passenger cars.

1. Remove the pickup's rear bed. Measure 24 inches forward from the rear axle centerline and mark this location on both sides of the stock rear frame. This is your primary reference. Also measure from the side of the frame to the center of the driveshaft to see if the driveshaft is centered or offset in the frame. Remove the stock rear suspension, gas tank and exhaust system. Set the vehicle up on jack stands placed approximately 36" forward of the rear axle centerline and just behind the front bumper. The vehicle must be level front to rear and right to left. The body must also be at the correct ride height you desire before continuing. Place a piece of string under the vehicle to form a centerline on the floor. Use a level to mark the floor at the outside of the frame. Do this front and rear. Measure between the marks to their mid point this is the center of the frame. Tape a piece of strong string just over the mid point marks. This will be a centerline reference point once the rear of the stock frame is cut off.

2. Measure from the 24 inches forward of the rear axle centerline reference mark to the end of the frame to determine the length of the new frame. Also measure 3 things for the rear bed mounts: 1. Distance behind the reference mark; 2. Height above the ground; 3. The width from the string centerline.

3. Cut off the stock frame 21 inches forward of the rear axle centerline. This will be 3 inches behind the 24 inch forward reference mark you placed on the outside of the frame in step 1. The stock frame is a U-shape. Cut the bottom of the frame out an additional 3 inches forward. The 120-degree bends weld inside the frame with their radius 7" above the ground. Cut the rear leg of the bend to fit just under the top of the frame. Cut the forward leg of the 120-degree bend on an angle to fit under the bottom of the frame.

4. The 3 x 2 dropped crossmember between the 120-degree bend. The drop points up over the driveshaft and must be centered over the driveshaft. Use the dimensions from step 1 to place the center of the driveshaft directly under the drop in the crossmember. The front side of the crossmember is 24 inches forward of the rear axle centerline even with your reference mark on the stock frame. The top of the straight portion of the crossmember is 6 1/2 inches above the bottom of 120-degree bend.

5. Next install the rear rails. Place a straight edge approximately 5 feet long on the bottom edge of the rear flat of the frame rail so it extends forward to the front of the rail. Measure down from the straight edge and mark the short front leg of the frame. Cut the frame to length to attach it to the dropped crossmember. Cut a 3 x 2 notch in the short leg of the frame to attach the frame to the top and back of the crossmember. The top of the 3 x 2 notch should be 4 inches below the bottom of the straight section at the rear of the new frame. Determine the width of the frame to clear the tires. Make the frame as wide as possible. You will

need a minimum of 1 to 1 1/2 inches tire clearance between the outside of frame and the inner sidewall of the tire. Place the new frame in position on the crossmember and measure back to the frame from the reference. Cut the frame to the correct length you determined in step 2 minus 2 inches for the width of the rear crossmember.

6. Cut the rear crossmember to length and fabricate mounts for the rear of the bed. Tack the crossmember and frame rails to the stock frame. Use all your dimensions from step 1 and 2 to make sure the new frame is at the correct width, centered on the string, the correct length to the rear; level and that the rear bed mounts are in the correct place.

7. Fabricate an upper shock crossmember from the 1 5/8 OD round tube and place the upper shock mount brackets at the correct width depending on the type of coilovers used. Install the shock crossmember per the assembly drawing.

8. Install the remaining suspension, 4-link, track locator, and lower shock mounts per their instructions. Also install the driveshaft and tires. Move the suspension throughout its travel and make sure nothing binds or hits the frame, especially the driveshaft. If the 4-link bars are too long it is okay to shorten them. Make sure you have a minimum of 1 1/8 inch thread engagement.

9. Cut one piece of 1 1/4 tube in half and use it to make the under frame support tubes (see the assembly drawing). Make sure the rear end of the tube clears the rear axle housing. Use the other 1 1/4 tube to make a frame triangulator. Make sure it clears the rear axle center section.

10. Use scrap material and parts from the old frame to attach the remaining bed mounts to the new frame.

11. Use Chassisworks truck tubs #6613 to make room for your new tires.

12. On many vehicles such as late model Chevy trucks the gas tank stock location will interfere with the new 4-link. If you shorten the gas tank by cutting it off just past the rear-mounting strap, you will have enough room for the new suspension. Do not modify the gas tank yourself. Find a competent professional welding shop to handle the modifications. Also make sure the tank is pressure tested to assure there are no leaks. Modifying the gas tank may not be legal in some states.

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