



JG Design and Fabrication

1949-1951 Mercury rear 2 link suspension install instructions

1. Jack vehicle up, level front to back and side to side
*We recommend supporting the rear of the vehicle in front of the axle to allow for the removal of the axle easier.
2. Remove tires
3. Tear down rear suspension, remove driveline, brake hose, brake line, parking brake cables, shocks, and leaf springs.
4. With the axle out of the chassis, measure the degree of the leaf spring perches to the pinion for reference when re installing axle and setting pinion angle.
5. Cut the stock brackets off the axle housing and grind clean / prep axle housing.
6. Prep / clean chassis for mount and bracket installation. Front link mounts mount towards front of x frame and bag mount / notch assembly mounts over axle centerline. You can loosely locate components to layout correct area to clean.
7. Once chassis cleaned, position front link mounts. Link mounts position on each side of X frame. From the center of the X Frame moving rearward, there are 2 – 1.375” holes. From the rear edge of the further rear hole, measure 6.125” and mark on both sides.
8. Place the front edge of angled link mount brackets. There will be a stamping in the stock chassis that you must cut out. Re position angled link mount bracket.
9. Once positioned, mark through the pivot mount holes on the bracket on the stock chassis. You will drill a hole or hole saw on this mark to allow access to the inside of the link mount hardware.
10. Now the link mounts can be clamped in place. The front edge of the angled link mount bracket will land at your previously made mark 6.125” from the rear of the 1.375” hole in the chassis. *See attached photo for reference.
11. Tack front link mounts in place once positioned correctly side to side.
12. Position bag mount / notch assembly on inside of chassis. Use hole in supplied mount to locate assembly off existing hole in chassis. Rear edge of supplied mount should be parallel to rear crossmember.
13. Once mount positioned, clamp in place and mark your notch cut. Transfer from inside of chassis to outside of chassis, side to side.
14. Remove bag mount / notch assembly, cut chassis for notch.
*We recommend supporting the rear of the chassis with a jack lightly while the chassis is on jackstands in front of the axle to minimize chassis flex.

15. Clean up notch cut work, re position bag mount / notch assembly to inside of chassis, clamp in place, then tack.
16. Position notch frame cap in place and tack.
17. Inspect fitment to ensure material is clean and prepped, and fitment is good. Weld notch assembly and bag mounts out.
18. On the drivers side of the chassis behind the notch assembly, locate the rivots holding the rear shock crossmember in place. Remove rivots.
19. Install the chassis panhard bar mount, locating off the rivot holes with hardware provided. Tighten hardware. *We recommend welding this mount in place in addition to bolting.*
20. Prior to re positioning the axle under the chassis, find center on axle housing, then measure 19.250" out off center. It may be easier to work off the backing plates inwards. Desired outcome is to have marks 38.500" centered on the axle housing.
21. Install link arms into front link mounts with socket head bolt facing upward on axle side.
*If link arms do not have bushings installed in them, apply a small amount of wheel bearing grease to bushing halves and inner sleeves prior to installation. Install provided 3/8 – 16 x 3/4" socket head bolt.
**Panhard bar bracket to rear of link arm / axle goes on passenger side.
22. Position axle back under chassis and support with jack or on jackstands.
23. Position axle pads onto link arms and cycle up to axle. Take provided 3/4" U Bolt and drop over axle tube, through axle pads, through link arm, and tighten nuts. Leave loose enough to move around slightly.
24. Move axle around until inside of axle pads land on previously made marks 38.500" apart. Link arms / axle pad spread is 38.500 inside of link arm to inside of link arm.
25. Tighten U Bolts up, set pinion angle based off previously taken measurement, and final tighten U Bolts, then tack axle pads in place.
26. Cycle suspension to determine cut work needed to trunk and driveline tunnel.
27. Perform any sheetmetal work needed at this point. Once fabrication completed, disassemble, final weld, and finish product as desired. (Paint, powdercoat, chrome, ect.)
28. Re assemble suspension with link arms first.
29. Install upper bag mounts with upper hardware first. Cycle suspension up and install 3/8-16 x 2 1/2" socket head bolt provided for lower mount. We only use the center hole on the lower bag mount.
30. Install the shocks once the bags are in place. We use the stock upper location. Then swing the shock down into the lower mount using the provided shock bolt. The shock will fit to the rear of the tab on the link arm.
31. Prior to installing the panhard bar, ensure both heim joints are threaded in evenly side to side to ensure correct adjustment. Install the passenger side first on the link arm.
32. Cycle up to drivers side mount and adjust heims if needed to allow for an easier install. Be sure to thread evenly by holding the loose heim while adjusting the bar. Install with the hardware front to rear.

33. Cycle entire suspension up to your desired ride height. Measure from backing plate to the outside of the chassis side to side. Adjust panhard bar side to side to center rear axle in chassis.
34. Re route fuel lines, brake lines, and emergency brake cables as needed to clear all suspension components.



