

`48-`56 Ford Pickup Rear leaf Spring Kit **Installation Instructions**

Tech Line: 1-855-693-1259 www.totalcostinvolved.com

CHECK ALL PARTS INCLUDED IN THIS KIT TO THE PARTS LIST BEFORE INSTALLING THE KIT. IF ANY PIECES ARE MISSING, PLEASE CONTACT: TOTAL COST INVOLVED 1-855-693-1259



Parts

- 48 inch leaf springs
- (4) U-bolts
- (16) 3/8-24 x 1 1/4bolts & nuts
- (2) 1/2-20 x 4 bolts

- (2) Leaf spring brackets
- (2) 5-hole plates
- (4) $\frac{7/16-20 \times 1\frac{1}{4}}{\text{bolts}}$
- (14) 1/2-20 nuts

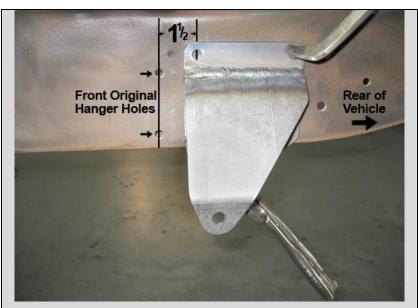
- (2) Shackle brackets
- (2) Spring pads
- (32) 3/8 flat washers
- (8) 1/2 flat washers

- (4) Shackle plates
- (2) Shock absorbers
- (16) 7/16-20 nuts
- (2) $1/2 \times 5$ bolts

- (4) Shackle pins
- (1) Shock cross member
- 7/16-20 x 5½

- (8) Shackle bushings
- (2) Shock studs
- (12) 7/16 flat washers

While it may be possible to install this kit without removing the bed, 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. Remove the rear axle assembly, stock springs, shocks and brackets.



<u>1.</u>

Start by removing the front stock spring hangers. To remove the rivets, grind the heads flush. Center punch and drill using progressively larger drills up to a 5/16" drill. The rivet should be easy to punch out. If not, then drill with a 3/8 bit. Take care not to drill the original rivet holes larger or off center, the new parts with use these holes.

The brackets will bolt directly to the existing holes on the 1948-1952 Ford pick up and only the 7/16 underside hole will have to be drilled using the tab hole as a guide as shown in instruction #2.

On 1953-1956 Ford pick up draw a line down through the front set of original hanger holes. Draw a second line $1\frac{1}{2}$ inch rearward of the original holes. Position the new hanger bracket straight edge forward as pictured so that the front two holes line up with the new line and the bottom tab is flush with the bottom of the frame. Square the bracket to the top of the frame and clamp securely to frame.



<u>2.</u>

Using a 7/16 transfer punch, center punch the bottom frame rail through the bracket tab hole. Use a center drill or 1/8 inch drill bit to pilot drill starter hole through the frame rail and the lower cross-member flange. It is easier to drill the hole out to 7/16 inch using progressively larger drill bits starting with ½ inch. It is also better to use a drill motor with a side handle to steady the drilling process to prevent the bit from catching and twisting out of your hands.

On 1948-1952 Ford pick up proceed to instruction #5.

On 1953-1956 pick ups next, using the 7/16 by $1\frac{1}{4}$ inch bolt, temporarily bolt bracket to frame as pictured in upper right.

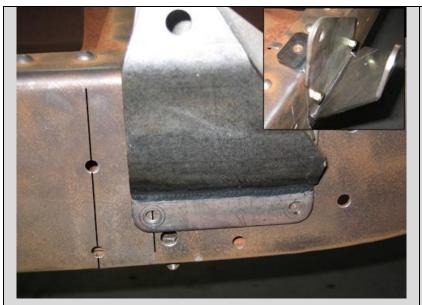


<u>3.</u>

1953-1956 Ford pick up only

Check the bracket again to be sure it is square with the top of the rail and using a 3/8 inch transfer punch, center punch the top two holes through the bracket onto the side of the frame. Center drill front hole as before and then drill hole to 3/8 inch. Temporarily install a 3/8 by 1 inch bolt in the drilled hold and tighten. This will keep the bracket from moving as you drill the remaining hole.

After the top two holes are drilled, remove the bracket from the frame rail. You are going to use the hanger bracket from the opposite side as a pattern to drill the bottom holes.



<u>4.</u>

1953-1956 Ford pick up only

You have to use the bracket from the opposite side as a pattern because the cross-member rivet will interfere with the lower inner tab on the bracket you were originally using.

Bolt the opposite side bracket <u>upside down</u> on the frame rail as pictured and use the same drilling procedure as before.

When drilling is finished remove the bracket and replace with the correct side.



<u>5.</u>

1948-1956 Ford pick up

Align the correct bracket over the drilled holes and using the furnished 3/8 by 1 inch bolts, washers and nuts fasten the hanger to the side of the frame. The top bolts go through the bracket from the outside of the frame, the bottom bolts go from inside the frame with the nuts on the bracket side and the 7/16 by 1½ inch bolt with washer goes through the bottom tab and through the frame and cross-member lower flange with the nut and washer on the inside of the frame rail as pictured in lower left picture.

Note: Driver's side bracket shown.



6.

Remove the stock rear shackle hangers. Use the same procedure to remove the rivets as the front bracket.

The brackets will bolt directly to the existing holes on the 1948-1952 Ford pick up and only the 7/16 underside hole will have to be drilled using the tab hole as a guide as shown in instruction #7.

On 1953-1956 pick ups draw a line through the front original shackle hanger hole. Draw another line $1\frac{1}{2}$ inch forward and position the new hanger bracket straight edge and shackle bushing hole to the rear as pictured and line the rear two holes with the new line and the bottom tab is flush with the bottom of the frame. Square the bracket to the top of the frame and clamp securely to frame.



<u>7.</u>

Using the same procedure for drilling the underside 7/16 inch hole as you did on the front bracket. After the hole is drilled, temporarily bolt the bracket to the frame using the 7/16 by 1½ inch bolt.

1948-1952 Ford pick up proceed to instruction #10



<u>8.</u>

1953-1956 Ford pick up only

Check the bracket again to be sure it is square with the top of the rail and using a 3/8 inch transfer punch, center punch the top two holes through the bracket onto the side of the frame. Center drill front hole as before and then drill hole to 3/8 inch. Temporarily install a 3/8 by 1 inch bolt in the drilled hold and tighten. This will keep the bracket from moving as you drill the remaining hole.

After the top two holes are drilled, remove the bracket from the frame rail. You are going to flip the bracket upside down and use the hanger bracket as a pattern to drill the bottom holes.

Note: Driver's side bracket shown.



<u>9.</u>

1953-1956 Ford pick up only

Bolt the bracket <u>upside down</u> on the frame rail as pictured and use the same drilling procedure as before.

When drilling is finished remove the bracket and flip right side up and proceed with bolting hanger bracket to the frame.



<u>10.</u>

1948-1956 Ford pick up

Align the bracket over the drilled holes and using the furnished 3/8 by 1 inch bolts, washers and nuts fasten the hanger to the side of the frame. The top bolts go through the bracket from the outside of the frame, the bottom bolts go from inside the frame with the nuts on the bracket side and the 7/16 by inch bolt with washer goes through the bottom tab and through the frame and cross-member lower flange with the nut and washer on the inside of the frame rail as pictured in lower left picture.

Note: Driver's side bracket shown.



11.

Installing rear shock cross member

Measured from the rear bed hole forward along the top of the frame rail and draw a line across the top of the frame rail to drill the hole for the cross member. There are two different measurements because of frame length.

1948- 1952 Ford pick up-----27½ inches 1953-1956 Ford pick up-----29¼ inches



<u>12.</u>

Set the cross member on top of the rail. Make sure the shock sleeves are parallel with the top of the rails. Centered the cross member for and aft on the line. Center the cross member from side to side as pictured. Center punch one side with a ½ inch transfer punch as pictured in lower left corner. Center drill the hole and finish drilling to ½ inch. Set the cross member back up on top of the frame rails and insert a ½ inch bolt through the cross member and through the hole in the frame as pictured in upper right. On the opposite side line up the tube on the line and center punch the frame and drill the hole out to ½ inch.



<u>13.</u>

Install the cross member between the rails with the shock tubes parallel to the top of the frame. If the cross member is installed upside down the shock tubes will be pointing up. Install a ½ inch bolt through the frame into the cross member on one side to register it properly. Using a ½ inch transfer punch go through the frame hole and the cross member and punch center hole. Use a long small drill bit and drill through the ½ inch top hole to the center hole in the bottom rail. The final ½ inch hole can be drilled from the bottom to keep the bit from 'walking". Slide the cross member back up to the hole and install the ½ inch bolt all the way through. On the other side now that the cross member is positioned correctly you can drill through the top hole and using the cross member as a guide, drill the ½ inch hole all the way through the rail.



14.

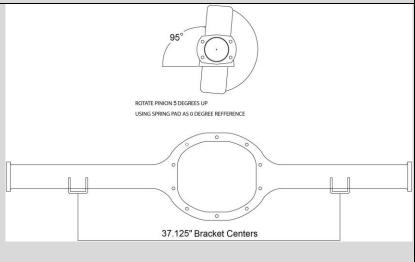
Spring Installation

Install the spring end with the pressed steel lined bushing in the front hanger using the 4 inch x ½ inch bolt. Install nut and lightly tighten.

Install the shackle urethane bushings into the rear of the spring and the rear shackle hanger. Use a soft hammer to tap them in. The bushings will stick out just a little but will seat fully when the shackle plates are fully tightened.

Lightly tap the shackle pins through the bushings in the spring and the rear shackle hanger. Install the shackle plates over the ends of the pins, install the nuts and tighten.

Finish tightening the front spring hanger bolts.



<u>15.</u>

Installing spring pads.

Measure the center to center measurement of the spring center bolts on the springs that were just installed. This will be the spring pad centers measurement. Center the pads on your housing.

The pinion angle is 5 degrees up from the spring pads with the spring pads being level. Clamp or lightly tack weld the brackets and double check brackets for equal side to side centering and the correct pinion angle. Finish welding the brackets.



<u>16.</u>

Installing the housing

Set the housing on the rear leaf spring center bolts. Drop the u-bolts over the housing. Install the 5-hole plates under the spring with the shock tab facing down on the inboard side and behind the axle. Install the $\frac{1}{2}$ x 20 nuts on the u-bolts and tighten evenly.

Installing the shocks

Install the $\frac{1}{2}$ x 20 threaded end of the shock stud through the shock tab. Install nut and tighten. Install the rubber bushing end of the shock onto the stud, install 7/16 washer and nut. Using a 7/16 washer on each side of the steel sleeve end of the shock install the 7/16 x 5 inch bolt through the shock and thought the tube on the cross member, install nut and tighten.



<u>17.</u>

Finished installation of the leaf spring kit.

Replacement Parts:

Shocks = Monroe Part# 33121 Shackle Bushings = Energy Suspension Part# 2866.01

No returns or exchanges without a RMA#.

Packages must be inspected upon receipt & be reported within 10 days.

If you are missing parts from your kit, TCI Engineering will send the missing parts via FedEx or U.S. mail ground.

Returned packages are subject to inspection before replacement/refund is given.(Some items will be subject to a 15% restocking fee)

Thank you for your business!



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