



NP16501 FRONT SPRING HANGER D21/WD21 HARDBODY/PATHFINDER

KIT INCLUDES

Welded Front Hanger, Frame Mount Gusset Pack

NOTE: It is recommended that this part be installed by a certified welder. It is also recommended to fully ensure that the hanger itself is square and true to the frame of the truck BEFORE welding to the vehicle. Failure to do so is not our responsibility. Improper alignment of the hanger will affect the entire front suspension geometry.

At this point, the factory IFS suspension should be removed to allow for front springs and a solid front axle to be installed. These instructions will cover the fitment and welding of the hanger to the straight factory frame to allow for a leaf spring mounting point.

INSTRUCTIONS

1. Completely remove factory front bumper and any corresponding valence covers. This should leave you with bare frame ends and the factory lower cross-member that is welded between the frame-rails and just below the radiator.

The factory cross-member with the corrugated edge can be seen in the attached picture. This is your starting point.

It is recommended to wire wheel the surrounding areas and frame ends to promote better weld adhesion.



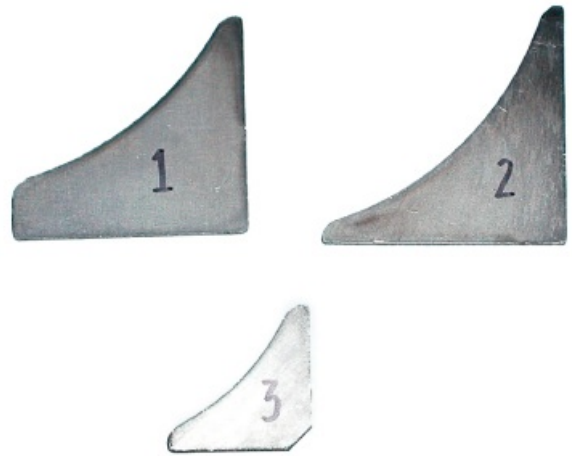
2. Locate and identify the 3 matched pairs of weld-on gussets.

#1 Rear Side Gusset

#2 Front Side Gusset

#3 Front Inside Hanger Gusset

Tip Always tack-weld everything in place. This will allow for minor adjustment or complete removal if necessary without having to grind at the part or the frame.

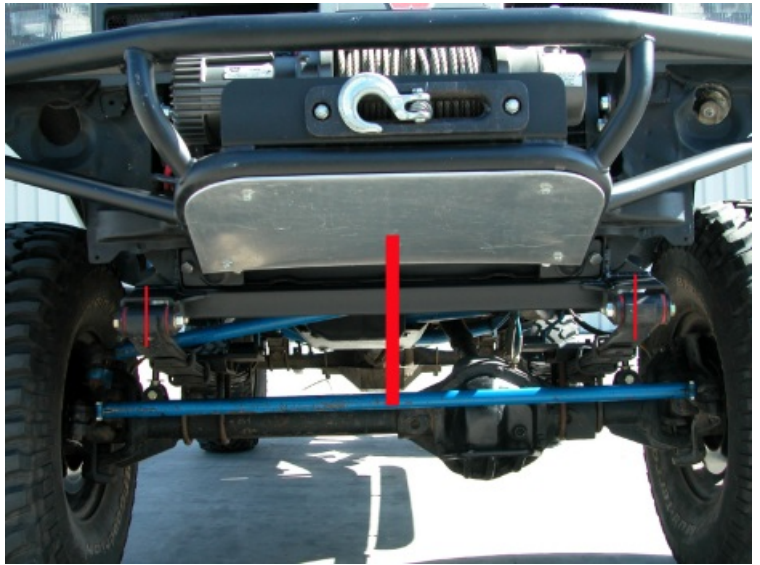


3. Using a tape measure locate and mark the center of the hanger as well as the factory cross-member. Aligning these two points is critical as it will affect the individual spring hanger location in relation to the frame ends. This can lead to issues with the side gusseting.

Approximate Measurements

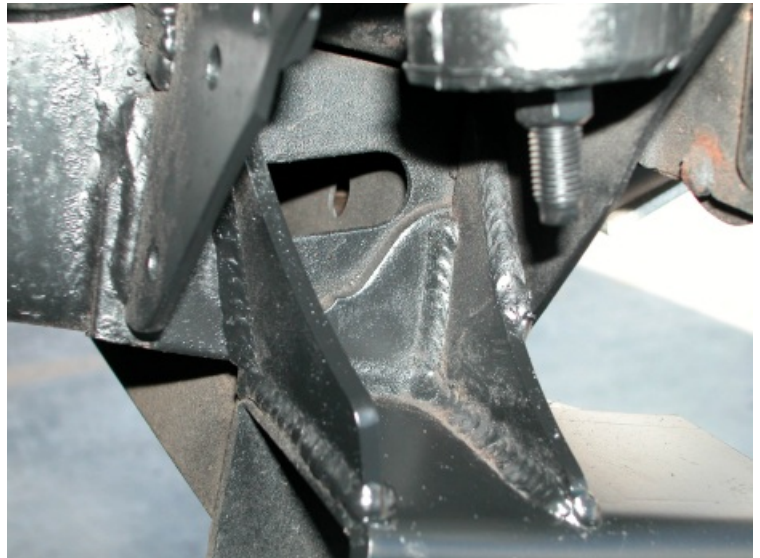
Hanger (inside to inside) = $28 \frac{9}{16}$ "

Frame Crossmember = $28 \frac{3}{8}$ "



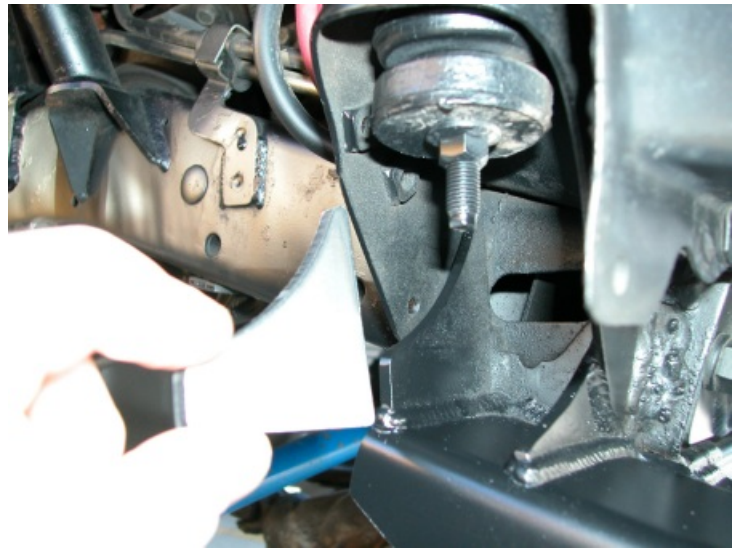
4. Once the centers have been aligned and secured in place with a clamp or Vise-grip, tack weld along the bottom of the factory cross-member as shown in Fig #1. Do not fully weld until all parts have been tacked into place.

With the hanger now attached to the frame, the gusset will be tacked into position



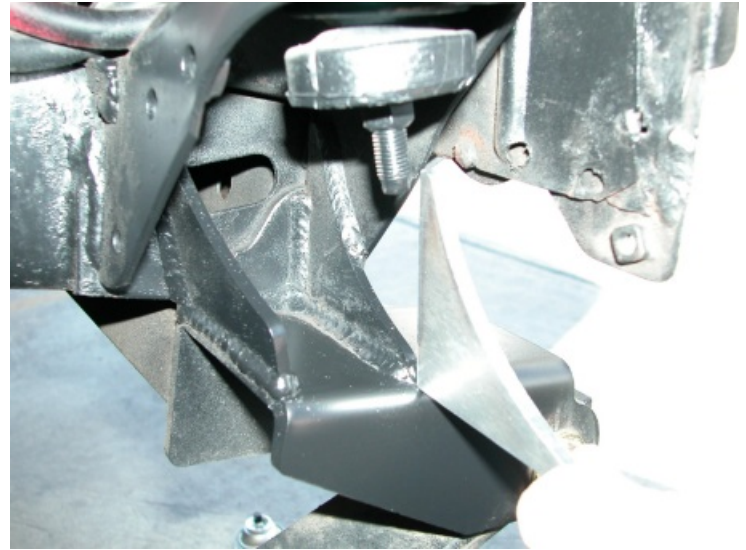
5. Passenger side gusset placement. Locate the gusset marked #1. This will secure the rearmost portion of the hanger to the side of the frame as shown in Fig #5. The gusset should rest along the inside edge of the factory body support. Tack in position.

Once all other gussets have been tacked into place, this gusset will need to be welded along the bottom side on both the front and rear as well as vertically along the backside (refer to Fig #4).



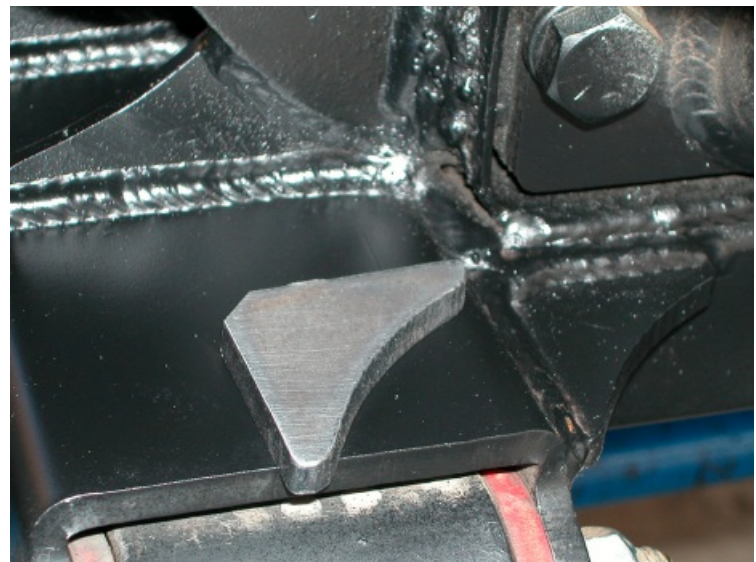
6. Locate the gusset marked #2. This gusset will secure the hanger to the forward body support mount and frame. The gusset will need to be tacked into place

To fully weld this gusset view the installed unit shown in both Fig #5 & 6.



7. Locate the gusset marked #3. This gusset is designed to strengthen the mount from the hanger to the cross-member itself. Tack into place and fully weld once every piece is correctly in position.

From here, you will repeat the installation for the driver's side mount as well. Throughout the tacking process, measure your guide lines and make sure that the part is not pulling in either direction.



8. After the final check has been made to ensure proper alignment of the hanger and all corresponding gussets, the piece can be fully welded to the vehicle. It is recommend to switch between the passenger and driver side to keep the factory pieces from overheating and warping. The center tube of the hanger should be welded in 5, 2" stitches evenly spaced from the center out.

Fully weld all connection point at each hanger with the stock frame rail and body supports.



9. View from the driver's side for reference.



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