

Installation Manual

3 Series – 5 Series – Z Series

Typical Installation

Place truck on lift or suitable jack stands with rear wheels off the surface. Remove rear wheels, hitch & rear bumper. Remove spare tire & mounting bracket. Place mainframe on suitable platform (trans jack with a piece of plywood works fine) slide mainframe assembly in from rear. Jack mainframe up til it comes in contact with the frame. Keep about 1-1/2" from differential as to not rub when the wheels are on the surface when lowered. From each side pick the mounting pads that work best. (pads are welded off center as to work in front or rear). At this point you want to also look to see if you will need to notch out a piece of the cross member where the up/down cylinder will be installed. (some Fords and Dodges and the 2011 and up Chev also will need this) Slide pads into the mainframe & use a "C" clamp to hold in place.

Note: On the 3 Series only...measure the mainframe from the furthest part front to the furthest part rear to make sure it's not more then 32". This is a must.

Use a tape measure and check from each side of the mainframe to the rear of the frame. These measurements must be within 1/4" of each other. (this is one of the most important steps! After the measurements are the same, straighten the pads up and drill four 1/2" holes into the frame. It's best to start with a 1/4" bit and go up from there. Drill one hole, stick a bolt (supplied) through the hole. Drill a second hole, slide in another bolt. Put on the nuts and tighten down. Now, go to the other side. Check the measurement again, be sure it didn't move. Drill all four holes and the two on the first side and tighten down.

Go to the back. On the 5 and Z Series only. **Make sure the Hyd block is mounted on the rail.** (Just like it came shipped) Pull the mainframe apart and slide in the pads. "C" clamp the pads in place at the edge of the frame. Mark the two holes where the bumper bolts were. Mark a third hole either below or above where the bumper brackets go. Remove pads and drill holes. Place pads back and mark frame, drill third hole. Lift bumper in place. Use bolts supplied, bolt bumper and pads in place.

Shocks

Sometimes the shocks get in the way of the mainframe. In the box there will be a 2"x 2" square tube with ears on, depending on the truck...the shock extension can be placed at the top or the bottom of the shock. Decide where the shock will miss

the mainframe, cut the tube off at the best length, drill a hole in the tube and slide it in the original bracket and bolt in place. (it's best to weld along the sides if you have a welder handy).

'03 and up Dodge tube frame

The difference here is: You need to use a saws all and cut the hitch off about 4" from each side. (you will be using the hitch bolts later) The front part of the mainframe will have "U" bolts that wrap around the frame. Same thing with the measurements..be sure it's square. The rear pads will need to be cut in an "L" shape and drilled to use the hitch bolts. (I'll have pictures on the last page) You will also need to trim off the part that hangs down, see pics.

Chev HD (wide frame)

Short bed and long bed will be a little different, but mostly the same. This truck has a wide frame and you can (if desired) place the mounting pads sideways and tilt the mainframe to slide it up into the frame. However, you will take a saws all and cut the spare tire mount completely out, see pics. Clamp the pads inside and drill through the frame and through the pads. At the rear, cut off the pad so it measures 5 1/2" high and stand up in frame. Use a torch or cutoff wheel to cut the factory rivet flush with the inside of the frame. Again, use two bumper bolt holes and drill a third.

2011 (up) GM Trucks

On the front mounting pads...there will be 4 "U" bolts that will slide over the frame from the inside. Slide these through the pads and install washers and nuts. Again, measure the mainframe to the rear of the frame. This is important! No more than 1/4" difference here. The rear pads will be marked and drilled to match the three bumper bolts. Install the bumper and thread the bolts back in.

UP/Down Cylinder

At this time lift red up/down cylinder in place with threaded yoke down. Swing it up and down to make sure it clears everything. While hanging, start hoses, noht tight. Pick up cylinder and hold with a strap. Route two hoses and turn to screw onto block. Tighten both ends.

Boom

Jack the boom up into place, (if a power boom, start two hoses on fittings first. Do not tighten) Grease main pin and slide it in place, install clip. If power, route hoses to block, twist to screw on fittings. Tighten both ends.

Before we go further, decide where you want the pump. Mount it in the bed or make a bracket to mount on the frame. (so many types of trucks, this is on you) The pump is marked, be very careful how you run the hoses and the power cable that they don't get against the exhaust or rub anything. Run two hoses to the block. One is marked "P" the other "T", don't cross them. Run the power cable to the engine compartment, zip tie fuse to something close to the battery. Attach the wire to one side, then run the other one to the positive post on battery. At the aluminum block there will be a 15' wire attached, run it along side the two hoses to the pump. Fill pump with regular ATF fluid. In colder areas it's better to use lightweight hyd fluid. The functions of the unit will be clearly marked where the hoses go. When you hook up the Z Series head hoses (open/closed) it doesn't matter which one goes where, you can change these at the Z bar. The best configuration on the remote is to have the "down, out, & open" all down the right side. This helps when doing a "Repo" to not look at the remote while performing the job.

T Bar

This is very simple. Slide on T bar and two 1/2" X 5" bolts. Tighten as needed.

"Z" Bar

On this step we have to back up a second. While installing the boom, you will need to install the track tray with the two 3/8" bolts supplied. Also, the two hoses to the block and the track assembly. The track has two hoses, one end has 90 degree couplers. This end attaches to the track tray fittings. Slide the complete Z bar assembly on the boom end. (it may be necessary to power up the pump to slide out the boom a small amount, if you do this...place the track hoses in a container as fluid will shoot out) Install the pin and the *two tapered bolts, lock tight here*. Install the two 1/2" X 5" bolts. Tighten the three bolts as needed. Slide the track hoses through the end of the boom and install track end bolt. Run this bolt almost tight...not tight. Run or (3 Series) pull boom all the way out. Use a putty knife or similar to smear a good water resistant grease to the bottom of the boom. Use a grease gun to grease the fittings on top of the boom. There will be a grease fitting included with this package to install on the underside of the boom at the main pin. Also there are grease fittings located under the uprights on the mainframe. Make sure to grease all these areas. Don't forget the T bar pin. Run the boom back in. Check fluid lever. Run out and in to get all the air out of the system.

We hope these instructions help with your installation. However, if you have any questions...feel free to call & ask our tech 1 866-494-6500



'03 up Dodge Rear Pads



Pump Mounted on Frame



'03 up Dodge Ft Pads



Chev HD cut out



Typical 4 Bolt install



C clamp pad



'03 up Dodge cut hitch



Chev HD install inside frame



Cut cross member 2011^
(Chev & GMC)



Shock relocating 2011^
(Chev & GMC)



Lower Shock Mount



"U" bolts over frame 2011^
(Chev & GMC)