KLM15757



AIR SUSPENSION SYSTEMS

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2006 and up Ford F-53 Chassis Motorhome Front Installation Instructions



Installation

- 1. Place the coach on a level concrete surface.
- 2. Place a jack under each side of the frame just behind the leaf spring shackles. Jack the coach up high enough so that the tires are just off the ground. Place a jack stand next to the jacks to prevent the coach from falling off the jacks.
- 3. It works best to install one side at a time. Remove the lower shock bolt. Remove the factory sway bar, panhard bar, panhard bar axle mount (located on driver's side keep these bolts as they will be reused). Remove upper panhard bar mount (located on passenger's side inner frame rail). Remove the bump stop and leaf spring. Keep track of the U-bolts that hold the front of the leaf in place as well as the bolt that connects the rear of the leaf spring to the shackle.



The picture below shows the kit installed

4. Two holes (anything between 1/2" - 5/8" will work) need to be drilled in the bottom of the frame. These holes will not be centered. They need to be towards the inside of the frame. If the frame is has an inner bracket, that bracket will need to be trimmed to allow for the air fitting. These holes are what the air bag studs fit into. Locate the bolt (may be a huck bolt, middle on passenger side and rear on the drivers side) in the bottom of the frame that is about 4 1/2" forward of the double wall frame. Measure and center punch 5 1/2"" back and 1/2" back, centering the location in the center of the frame. See the picture on the following page as well as the pictures below.





If your chassis has this bracket on the passenger side, it needs to be cut to allow space for the air bag.

Cut here

remove this bolt



Inner wall of the frame needs to be trimmed so the air fitting doesn't interfere

5. Once the old leaf spring is removed, locate the new leaf spring and connect the front end into the factory location and connect rear end to the shackle. Locate the air bag and insert the brass air line fitting in the top of the bag. Next, locate the lower air bag mount and fasten the air bag to the bracket using the 3/8" x 1" bolts. Center up the bolt in the slot. Make sure the air inlet of the air bag goes towards the inside of the vehicle and the shock mount goes towards the rear of the vehicle.





6. Place the lower air bag mount on the top of the leaf spring (the shock mount goes towards the rear of the coach). Slide the U-bolts under the lower air bag plate and fasten assembly back in place. Go ahead and torque the nuts on the U-bolts to 150 lb / ft. Reattach the bottom shock bolt.



7. Repeat Steps 3-6 on the opposite side.

NOTE: There are two additional parts included that are used if the coach has a Banks aftermarket header system. The curved shield included for the kit is a heat shield only used on banks headers on the passenger side. It will keep the heat off the air bag.



The factory exhaust is far enough away and does not need a shield.

The other flat plate (circle with a hole in it) is used for an upper air bag mount on the passenger side for a banks header equipped unit. This rotates the air bag out away from the exhaust header.



8. Locate the driver's side trac bar mount that fastens to the axle. Attach this bracket to the axle with the factory bolts that held the original bracket in place .



9. Locate the upper passenger's side pan hard bar mount and fasten to the frame.



10. Locate the track bar. Use the 5/8 x 4" bolts and fasten both end to the pan hard bar mounts. NOTE: Newer models will have a straight adjustable pan hard bar



11. Reattach factory sway bar. Using the factory bolts, the sway bar will be fastened to the front side of the panhard bar mount (driver's side). On the passenger's side, the sway bar will be fastened to the factory mount



12. If the optional height control valves were purchased, locate the mounting brackets. If not purchased, go on to step 13. They will be welded to the jack mounting pads coming off the frame. Locate the height control valve and rotate the arm clockwise and counter clockwise 6 times each way. This will get the lubrication in the internal parts ready for use. Now attach the height control valve with the 1/4x1" bolts. Next you will



need to weld the tab to the shock mount so that it is straight in line with the end of the height control valve. Now the endlinks will need to be trimmed so the height control arm is straight out when the bags are at 7.5" The height control pictured below is shown with no air in the bags. The height control valve arm will be straight out at ride height (air bags at 7.5").





Once the install is done, locate the 2"x1.5" flat steel. It gets welded here. Failure to install this gusset may cause your shock mount to fatigue over time and crack. 13. Whether you do mechanical height control valves or the manual fill kit, the best ride on the vehicle will be with the air bags at the 7.5" range. You measure the air bags from the bottom of the frame to the top of the mounting bracket. Do not be alarmed if the air pressure is 10-20 psi different on the gauges. These motor coaches do not weigh the same on each side.

