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2009-2012 DODGE RAM 2500/3500 (4WD) Part #54900 & 54950

FRONT DISASSEMBLY:

Before you do anything it makes the installation easier if you loosen your front stock shocks before the truck is in the air. Once it is in the air, it is really hard to get to the upper nut and there is a lot of tension on it. Loosen the top nut with a 15mm socket but **DO NOT** take it all the way off since it holds up all the front suspension.

- 1. Always use the proper tools. Place wheel chalks behind the rear tires. With the parking brake set, use a jack and lift the front of the vehicle and place jack stands under the frame on each side. Remove the front tires/wheels.
- 2. Remove the driver side tie-rod from the pitman arm using a 21mm socket. Use a tie-rod removal tool to remove the tie-rod and be very careful to not damage your stock tie-rods.
- 3. Remove the pitman arm nut, use a pitman arm puller, and remove the pitman arm.
- 4. Use a 21mm socket to remove the driver side bolt on the stock track bar. ONLY REMOVE THE DRIVER SIDE BOLT.
- 5. Use a jack/brace to support the front differential.
- 6. Remove the front part of the front drive-line using a T40 socket to remove the four torque head bolts. To remove the rear of the drive-line use a 16mm hex socket (shallow) with an extension. Carefully remove the entire drive-line and set it to the side.
- 7. Use a 13mm socket and remove the stock brake line bracket from the driver side front axle and let the brake hose hang freely.
- 8. With a support still under the front differential, remove the front shocks.
- 9. Lower down the support to take some pressure off of the coils. Once the coils are free, remove the front coils.
- 10. Unbolt the front radius rods using 21mm & 24mm sockets.
- 11. Use a die-grinder to completely cut-off the factory radius arm brackets from the factory frame. You are only cutting the weld, not the frame! DO NOT cut the factory frame. Do this for the driver & passenger side. If there is any excess weld left on the frame, grind it off so that the frame is smooth.

- 12. We provided a 5/8" hole saw in the kit to make this step waaaaay easier and faster (you're welcome!!). There is a stock oval hole in the frame that lines up with the oval cut in the new radius arm drops. Once the bracket is located & the hole is lined up, mark & drill (with provided 5/8" hole saw) the three holes on each side of the frame. There are six holes on the driver side & six holes on the passenger side that you will drill/cut. There is no difference in our new brackets for the driver or passenger side. DO NOT try to drill from one side of the frame all the way through to the other side. Make sure you drill three holes on the one side and then go to the other side to drill the three other holes. The brackets will install with the 5/8" bolts towards the front of the truck and the angle & triangles towards the rear of the truck. On the passenger side you will need to loosen the exhaust to have some room but DO NOT remove it.
- 13. Now that the holes are drilled, remove the new bracket. The three holes, on the INSIDE only need to be drilled out (opened up) to 7/8". It is easiest to use a uni-bit (since it is shorter and easier to work around the stock exhaust) to drill the three holes. Do this on the driver and the passenger side inside three holes ONLY. 14. Insert the three provided sleeves into the new 7/8" holes. The sleeves are for extra frame support. There are three sleeves for the driver side and three for the passenger side.
- 15. Slide the radius arm drop brackets back over the frame and use the provided 5/8" x 4.5" bolt. Put the head of the bolt on the outside with the nylock nuts to the inside of the frame. Use the provided flat wahers (one on the head side & one on the nut side) for each bolt. Make sure all three bolts for each bracket go through the sleeves in the frame & then out the other side. Make sure the sleeves are flush with the frame and not sticking out or else the bracket will not go on/fit right. Fully tighten all the hardware.
- 16. Re-tighten the passenger side factory exhaust back how it was stock.
- 17. Install new long arm brackets. The upper arm doesn't matter which side, driver or passenger, they are the same and are the straight ones. The lower long arm has a specific driver and passenger side. The driver side lower long arm is pictured. The arm has a bend to clear the tire. The arms go straight out of the new brackets (rear of the arms) and then angle outwards at the front towards the Johnny Joint. First, you bolt the rear of the long arm to the bracket. using 5/8" x 4 1/2" bolts with two washers & a nylock nut per bolt. Leave the rear bolts loose & then install the front of the long arms with the Johnny Joints. The upper long arm has a 14mm Johnny Joint so you use the factory 14mm bolt. The lower long arm has an 18mm Johnny Joint so you use the factory 18mm hardware. Leave the front loose for now. Repeat above for passenger side. The upper long arm should have the grease fitting up and the lower long arm should have the grease fitting down so that you can easilly get to the fittings to add grease.
- 18. Use a die-grinder to cut-off the factory sway bar mounts (there is one on each side pointed towards the front of the truck) at the weld so that you don't cut /damage the frame. Grind off all the excess, left-over weld so that the frame is smooth. The first picture is a close-up of the driver side bracket. The 2nd picture is zoomed out showing the entire front-end with both the brackets.
- 19. On the brackets, the round bung should be at the top and towards the inside of the truck (that is how you determine the driver and passenger side). The driver side sway bar end-link bracket installs where you just cut-off the factory bracket. Line up the cut-out in the bracket with the cut-out in the frame. For the hole that is already there, use the provided $9/16" \times 1 1/4"$ bolt with two washers & a nylock nut. The other hole (towards the outside of the vehicle) has to be drilled for a $9/16" \times 1 1/4"$ bolt. The picture shows drilling the passenger side.
- 20. Install the new McGaughy's shocks using the factory hardware. Use a 9/16" x 3" bolt with two washers & a top lock nut to bolt the provided "clevis" bracket (black "U" bracket with 5/8" bolt welded on) around the new shock. The clevis goes on the end of the shock with the shaft, NOT the main body end. Install the upper end

of the shock (the end with the clevis) to the factory shock mount hole. Use the provided 5/8" nut & tighten onto the welded on bolt on the clevis.

- 21. Install the new coil springs. The stock coil spring is colator goes on top of the coil & it may be helpful to use a piece of tape to attach the is colator to the coil so it stays while you are lifting the coil in. The progressive wound part of the coil goes towards the ground (the end where the windings are closer together).
- 22. Install the bottom of the shock into the factory mount using the factory hardware. Tighten both ends of the shock hardware.
- 23. Install the new track bar bracket. The upper hole goes into the factory hole (where the stock track bar originally bolted in) and you use the factory hardware. For the inside hole in the track bar bracket (inside the triangular area) use the provided 1/2" x 3" bolt to bolt the new bracket to the frame through the oval hole and then on top of the frame. Slide on the extra thick steel washer on bolt threads & then the provided 1/2" top lock nut.
- 24. The bottom hole of the new track bar bracket is where the stock track bar bolts back up to the new 5/8"x 3 1/4" olt with two washers & nylock nut that are all provided. Tighten all hardware.
- 25. Install the new provided pitman arm onto the bottom of the steering box (where the stock one mounted) using the factory lock washer & nut.
- 26. Install the factory tie-rod into the pitman arm using the factory flange nut. Tighten.
- 27. Take off the factory front sway brackets.
- 28. Install the new sway bar drops. The open side of the bracket goes toward the inside of the truck. Use the factory bolts to install the new drop bracket to the same holes the stock bracket came out of. Make sure the new brackets are mounting the sway bar forward. Re-mount the factory sway bar using the factory mounts to the bottom of our new drop brackets using 9/16" x 1 1/4" provided bolts with two washers & a nylock nut.
- 29. Use the stock sway bar end links & mount them on the outside of the sway bar factory bracket (next to the coil spring). The short end of the endlink goes through the bracket with the long shaft going upwards and through the sway bar hole. Tighten with all the original factory hardware. (The flange nut goes on the bottom & the rubber bushing goes on top with the stock curved washer & nut.)
- 30. Put three U-clamps back on the stock drag link, using the stock hardware, & tighten.
- 31. On the driver's side, line up the factory brake hose bracket with the rear edge of the factory frame, facing outward. Mark the hole & drill so you can mount the bracket with the provided $1/4" \times 3/4"$ bolt, 2 washers, & nylock nut. Repeat for passenger side. Tighten everything.
- 32. Use provided billet drive-line adapter & provided 7/16" x 2 1/2" socket head allen bolts to bolt the rear of the drive-line to the transfer case. The four bolts thread into the transfer case so you only use one washer.

REAR INSTALLATION:

- 33. Use the provided $3/8" \times 1 \frac{1}{2"}$ bolt to install the brake line bracket onto the factory brass brake line "T". The bracket bolts to the rear-end in the factory hole where the brass block originally bolted with the original bolt.
- 34. Make sure you support the rear-end and remove the driver's side factory U-bolts and plate. Use a rotary file and take-off a 1/16" off the outer edge of each U-bolt hole in the upper U-bolt plate. The factory U-bolts are 9/16" & we give you 5/8" U-bolts. Only do one side at a time, DON'T remove both at the same time.
- 35. Lower down the driver's side of the rear-end so that you can install the new lift block between the leaf spring & the axle. The lift blocks are angled so the taller end of the block goes towards the rear of the truck.
- 36. Install the provided U-bolts into the factory U-bolt plate with the provided hardware. Screw on the nuts until they are snug but don't tighten them yet.
- 37. Repeat steps 35-37 for the passenger side.
- 38. Now that both lift blocks are in place and the taller end of the blocks are towards the rear, tighten all four U-bolts equally.
- 39. Remove the factory bump stop with a 15mm socket. Install the new bump stop drop onto the same factory holes as where the stock bump stop came out of. Use the factory bolt on the upper hole & the provided 3/8" x 1 1/4" bolts with 2 washers & nylock nuts to bolt the factory rubber bump stop to the new bump stop bracket.
- 40. Install both of the rear McGaughy's shocks #3250. The shock shaft goes toward the top, upper mount and the main body goes towards the axle. Use the factory hardware from the stock shocks.
- 41. Use $3/8" \times 1 \frac{1}{4"}$ bolt with 2 washers & nylock nut to install the new provided brake line bracket on the driver's side (outside of the frame). The bracket goes through the hole in the frame where the stock brake cable originally went through. The hole is underneath the rear driver's side door on the outside of the frame.
- 42. Install brake line bracket.
- 43. Tighten everything completely.
- 44. Re-install the wheels to the manufacturers specifications. Grease the Johnny Joints & repeat at every oil change.