



DON'T FORGET
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INSTALLATION INSTRUCTIONS

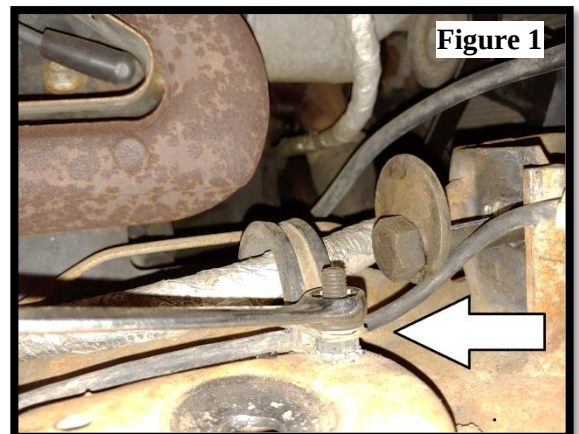
*C1500 UPPER CONTROL ARMS WITH MOUNTS
P/N 52608*

TOOLS AND SUPPLIES REQUIRED

- Floor Jack
- Two (2) Jack Stands
- Drill with 3/8" & 7/16" drill bit
- SAE Wrench Set
- Anti-seize
- Ratchet & SAE Socket Set
- Metric wrenches & socket set
- Torque Wrench
- Reciprocating Saw
- Angle Grinder

INSTALLATION PREPARATION-

1. Disconnect and remove the battery and battery tray.
2. Raise the vehicle and support with jack stands on a stable surface.
3. Remove the wheels and brake calipers. Do not allow the brake caliper to hang by the brake hose as this can damage the brake hose.
4. Unbolt the sway bar from the lower control arms if equipped with a sway bar.
5. Disconnect the lower shock mount from the lower control arm.
6. Remove the cotter pins from the ball joints and loosen the castle nuts. Do not remove the castle nuts at this time.
7. Strike the flat surface on the spindle near the ball joint with a hammer to separate the ball joints from the spindle. A ball joint separating tool (pickle fork) may be required.
8. Using a spring compressor, compress the front springs to take pressure off the lower control arm.
9. Place a floor jack under the lower control arm and remove the ball joint castle nuts. Lower the control arm out of the way. The spindle and spring can now be removed from the vehicle.
10. Remove the inner fender liners. The passenger side fender liner supports the battery and battery tray so be sure you have removed both during Step 1.
11. Remove the battery cable bracket attached to the spring cap of the frame. **(Figure 1)**



NOTE:

This suspension system includes three templates for mounting the new control arm bracket. Two templates fit into the stock control arm mounts. The templates are mirrored when flipped and will be used for both sides of the truck.

12. Place the front and rear templates into the factory control arm mounts. (**Figure 2**) The outer edge of the templates will follow the contour of the frame. The contour of the template should be at the edge of the frame contour for correct placement.

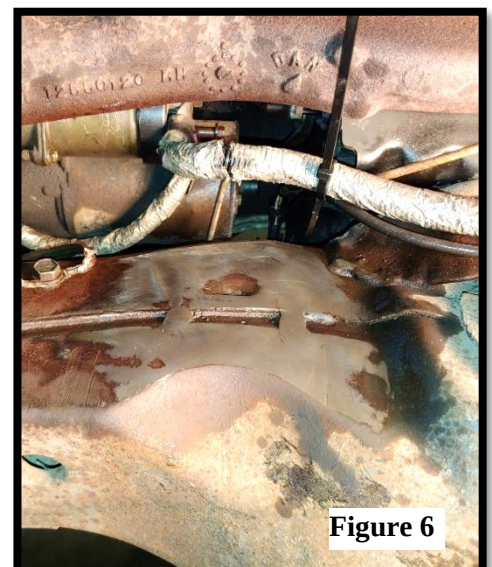
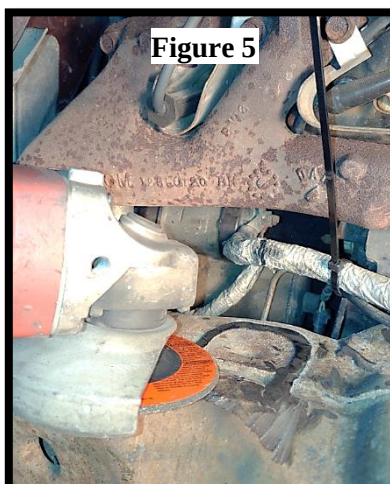
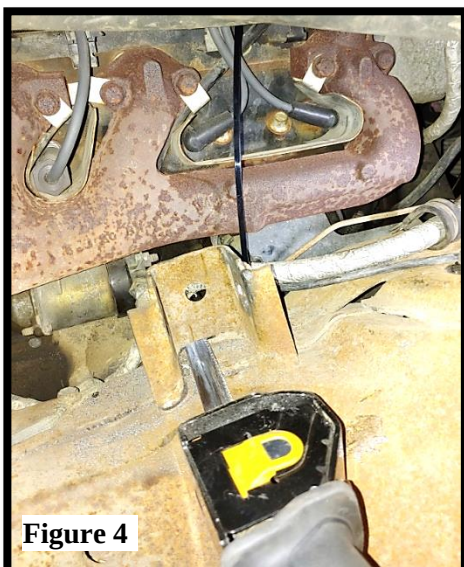
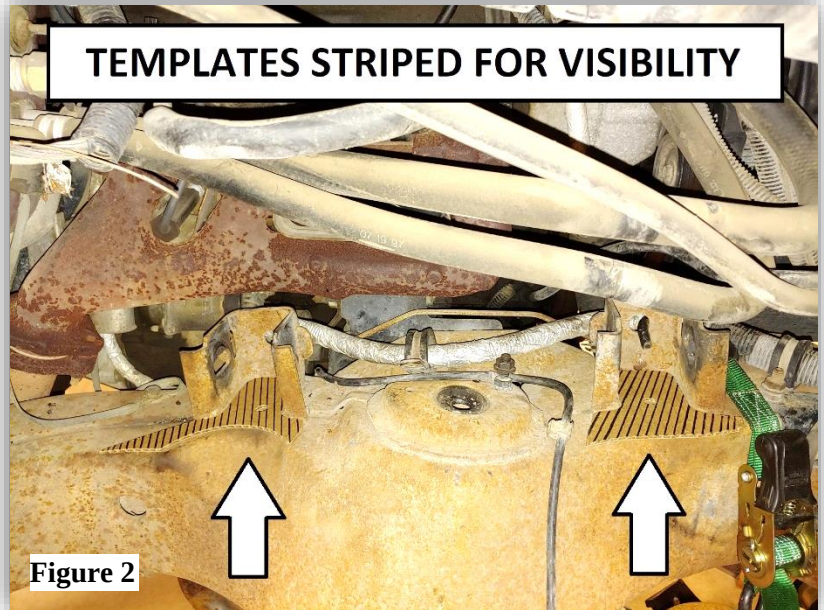
13. Mark the two holes in the template. These holes will end up positioning the new control arm bracket. (**Figure 3**)

14. Use a punch on the center of your marks, then drill the two holes using a 7/16" drill bit.

NOTE: The hardware to mount to the bracket is 3/8", but drilling the two initial holes to 7/16" will give the bracket a little bit of play when positioning before marking/drilling the remaining holes. With variances and differences in frames, the first two slightly larger holes will allow the bracket edge to match the frames edge.

15. Ensure there are not any wires/brackets behind the factory control arm mounts before cutting them off flush with a reciprocating saw. (**Figure 4**)

16. Grind any remaining portion of the arm mounts flush with the frame (**Figures 5 & 6**)



17. Using a cutoff wheel, cut the circular spring perch off flush with the frame. The spring perch is easier to cut off when sectioned. **(Figures 7 & 8)**

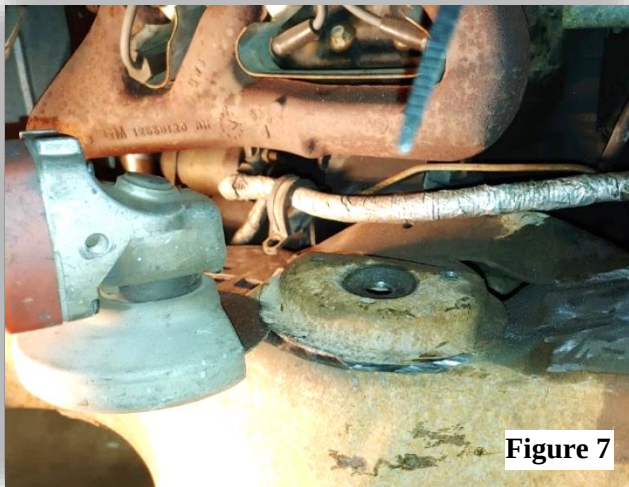


Figure 7

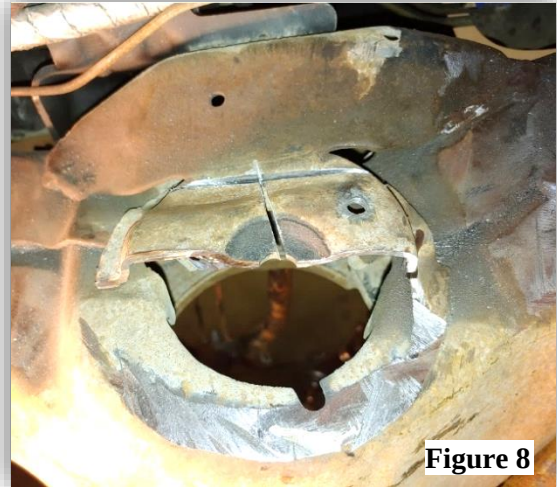


Figure 8

18. Grind any remaining portion of the spring perch flat with the frame.

19. Position the new control arm bracket onto the frame using 3/8" hardware in the two holes drilled with the templates. Position the bracket so the outboard edge of the bracket matches the edge of the frame rail. Tighten the two bolts once in place. **(Figure 9)**

20. With the bracket bolted down, drill the remaining mounting holes using a 3/8" drill bit. **(Figure 10)**



Figure 9



Figure 10

21. Remove the new control arm mounting bracket from the frame.

22. Place the circular template on top of the spring perch lining up the two drilled holes. **(Figure 11)** This template will be used to remove the inner "fingers" of the factory spring perch and a small portion of frame above the spring perch.

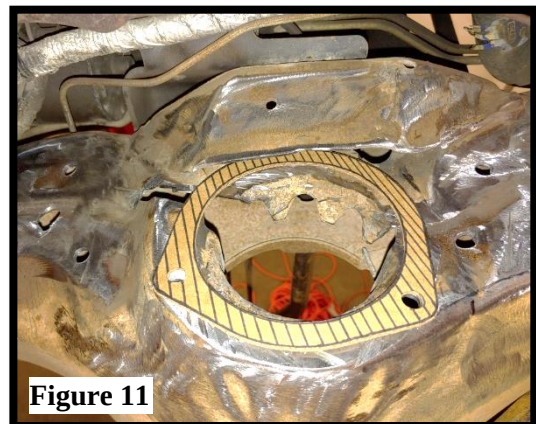


Figure 11

23. Mark the inner circle of the template and visually mark the template outer circle on the frame just above the template.
(Figure 12)

24. Cut the marked portions from the frame. (Figure 13)

25. Temporarily place the new control arm bracket on the frame. Ensure the bracket sits flat on the frame with nothing obstructing the final install.

26. Prep and paint the frame surface as desired to prevent future corrosion.



Figure 12

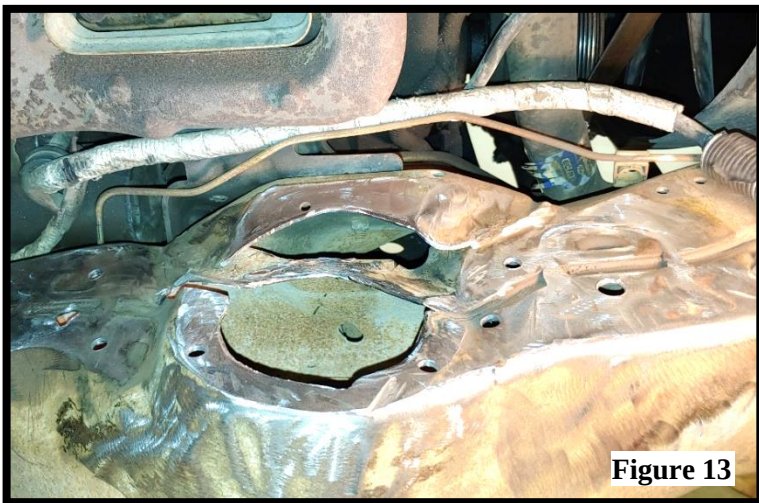
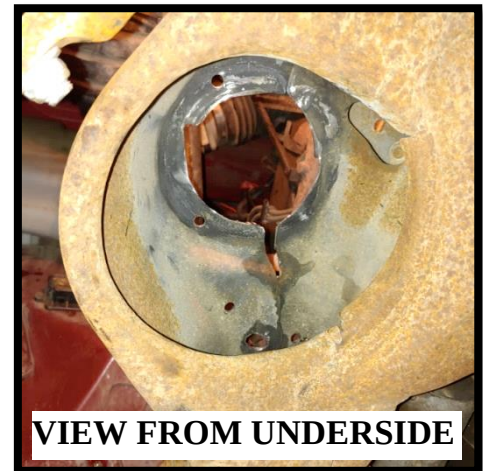


Figure 13



VIEW FROM UNDERSIDE

INSTALLATION-

27. Bolt the control arm bracket to the frame using 3/8" x 1.25" hardware with two washers per connection. Torque to 31 lb. ft.

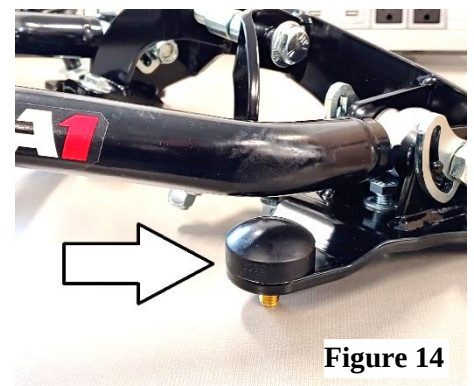
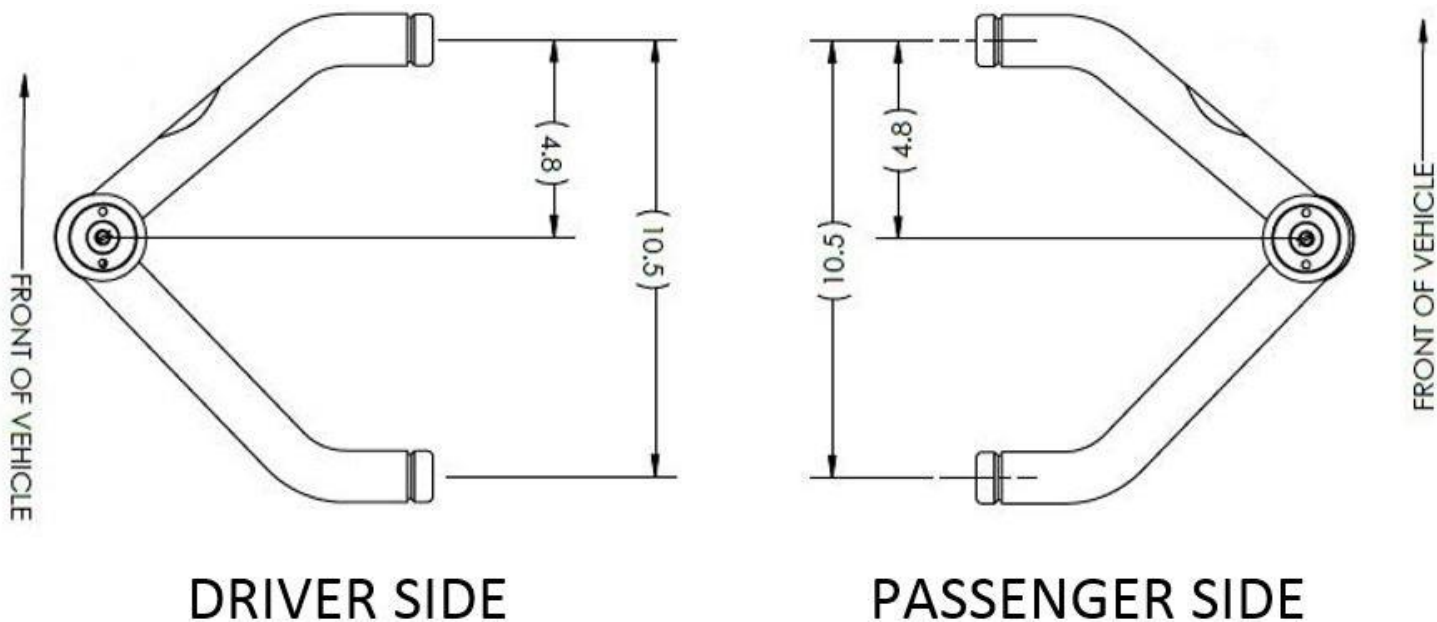


Figure 14

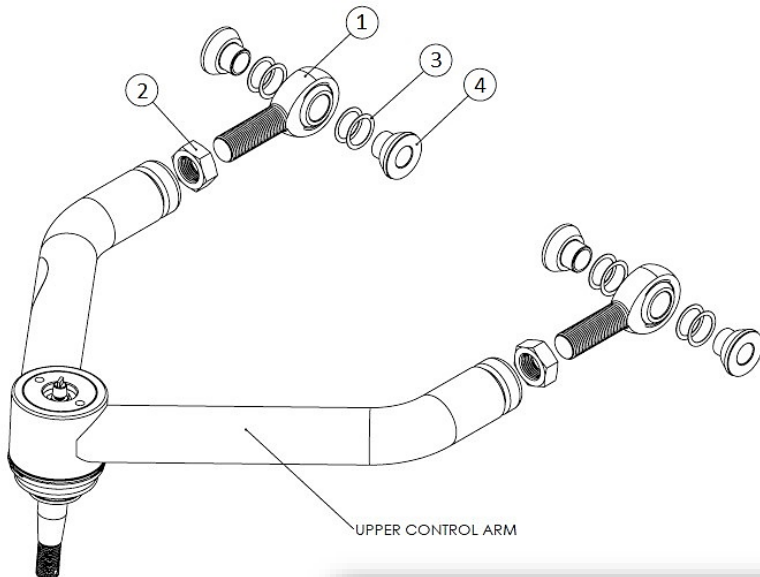
28. Install the droop stop onto the front flange of the control arm bracket. (Figure 14)

29. Identify the right and left upper control arms using the diagram below, noting that the ball joint is biased towards the front of the truck.

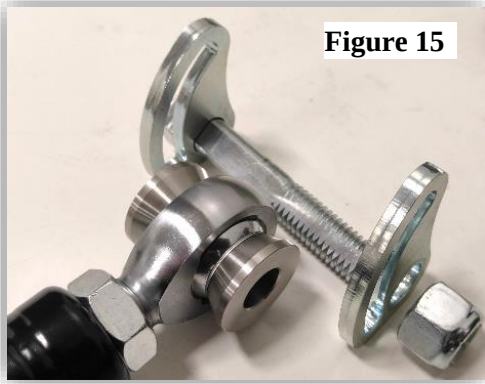


30. Prep the upper control arms for installation by threading the 5/8" jam nuts onto the 5/8" male rod ends. Thread the jam nuts all the way to the base of the rod end. Thread the rod ends into upper control arms until 2-3 threads are seen between jam nut and control arm assembly. Leave jam nuts loose until arms are installed to allow alignment with mounting bolts. The rod ends can be adjusted during alignment for caster/camber adjustment.

BALLOON #	PART #	DESCRIPTION	QTY PER ARM
1	XMR10	5/8" MALE ROD END	2
2	JNR10S	JAM NUT, 5/8" -18 RH	2
3	9005-293	SHIM FLAT, .015" THICK	8
4	9004-177	STEPPED SPACER, .345" WIDTH	4



31. Install two stepped spacers (#4) into the bore of each rod end starting with two shims (#3) per side. One spacer and two shims per side of the rod end bore. Add/adjust shims for even fit front to rear in the bracket.
32. Using four eccentric spacers per arm, install the upper control arms with 1/2" x 3" cam adjust bolts and nylock nuts. Turn the bolt head to adjust the eccentric near the center of the eccentrics range and tighten the nut to 55 lb. ft. Final camber adjustment should be performed during the professional alignment. **(Figures 15 & 16)**



33. Refer to the assembly instructions with the Dx501 shocks for coil-over assembly.

34. Install the upper coil-over connection of the Dx501 shocks to the mounting bracket using 1/2" x 4.25" bolt with .6" long stepped spacer. The internal step of the spacer should be installed over the bearing of the shock connection. **(Figure 17)**

35. Install the spindle onto the upper and lower ball joint with washer, castle nut. Torque to 60 lb. ft. then tighten until cotter pin hole is visible. Install cotter pin to complete.

36. Compress the coil-over shock and connect it to the lower control arm using 1/2" hardware. Torque to 50 lb. ft.

37. Secure the brake line and ABS sensor wire to the control arms with enough slack for the spindle to turn lock to lock without tension.

38. Re-install wheels and sway bar end links (if equipped).

39. Adjust ride height as desired using the included T114W spanner wrench set.

Note: A front wheel alignment should be performed by a qualified alignment shop after any changes to the suspension system.



Figure 16

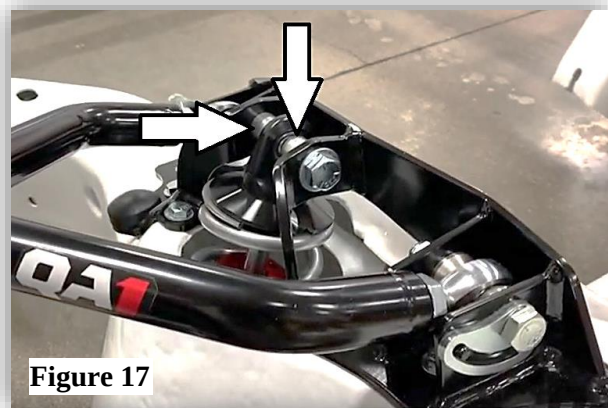


Figure 17

Recommended Alignment Specs

Camber:	-.5 (+/- .5) degree
Caster:	4 to 7 degrees
Cross Caster:	.5 degrees
Toe	.20 degrees toe in (+/- .100 degrees)
Toe:	1/16" to 1/8" toe in



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