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# 19-23 GM 1500 2WD CSS-C1-14 3" LIFT SPINDLE LIFT

## **READ THE FOLLOWING NOTES PRIOR TO INSTALLATION**

DO NOT ALTER THE FINISH OF ANY COMPONENTS. CHANGING THE FINISH SUCH AS CHROMING, ZINC-PLATING, OR ANY TYPE OF PAINTING, CAN CAUSE STRUCTURAL FATIGUE OF COMPONENTS.

PRIOR TO INSTALLATION, COMPARE THE PARTS LIST WITH THE COMPONENTS RECEIVED IN THE KIT. IF ANY PIECES ARE MISSING, PLEASE CONTACT YOUR LOCAL RETAILER OR CST PERFORMANCE SUSPENSION AT 951-571-0212, AND YOU WILL BE TAKEN CARE OF IN A TIMELY MANNER.

READ ALL INSTRUCTION FROM START TO FINISH BEFORE BEGINNING INSTALLATION. IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED, SEVERE FRAME, TIRE, OR SUSPENSION DAMAGE MAY RESULT TO THE VEHICLE. IF YOU INCUR A PROBLEM DURING THE INSTALLATION OF THIS KIT, FIRST BE SURE YOU HAVE FOLLOWED THE INSTRUCTION FROM START TO FINISH ACCURATELY AND IF SO PLEASE CALL 951-571-0212, WE WILL DO OUR BEST OVER THE PHONE TO ASSIST YOU WITH YOUR PROBLEM, OR DIRECT YOU ACCORDINGLY.

VEHICLES THAT RECEIVE OVER SIZED TIRES SHOULD CHECK BALL JOINTS, TIE ROD ENDS AND PIVOT POINTS, AS WELL AS GENERALLY INSPECT THE ENTIRE SUSPENSION FRONT TO REAR EVERY 2500 – 5000 MILES FOR WEAR AND REPLACE PARTS AS NEEDED.

ALSO, WE WOULD LOVE TO SEE YOUR TRUCK COMPLETED. IF YOU WOULD LIKE TO HAVE YOUR VEHICLE FEATURED ON OUR SOCIAL MEDIA PAGES, PLEASE E-MAIL US AT <a href="mailto:sales@cstsuspension.com">sales@cstsuspension.com</a> WITH PICTURES OF YOUR VEHICLE, LIST OF MODS, YOUR ACCOUNT NAME AND WE WILL GET THEM POSTED. THANK YOU FOR SUPPORTING CST!!!





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### Before and after measurements

We suggest you measure from the center of wheel hub to bottom of fender

BEFORE:	DF	PF	DR	PR
AFTER:	DF	PF	DR	PR

#### **INSTRUCTIONS:**

- 1. JACK UP THE TRUCK AND SUPPORT IT UNDER THE FRAME WITH JACK STANDS: NEVER WORK UNDER AN UNSUPPORTED VEHICLE.
- 2. REMOVE THE FRONT TIRES. (2 22MM SOCKET)
- 3. UNBOLT THE ANTILOCK WIRE BRACKETS FROM THE SPINDLE. (2000) 10MM SOCKET)
- 4. REMOVE THE ANTILOCK WIRE BRACKET FROM THE PASSENGER SIDE UPPER CONTROL ARM. THIS WILL NOT BE REUSED. (2000 10MM SOCKET)
- 5. REMOVE THE ANTILOCK SENSORS FROM THE SPINDLE. (2000) 10MM SOCKET)
- 6. REMOVE THE NUT FOR THE TIE ROD AND SEPARATE THE TIE ROD FROM THE SPINDLE. USE A REMOVAL TOOL OR STRIKE THE SPINDLE WITH A HAMMER TO JAR THE TAPER LOOSE, DO NOT HIT THE TIE ROD OR THE THREADS. (2) 21MM SOCKET)
- 7. REMOVE THE TWO BOLTS THAT HOLD THE BRAKE CALIPERS TO THE SPINDLES AND HANG THEM ASIDE USING BRAKE HANGERS. (2000) 18MM SOCKET)
- 8. LOOSEN THE NUT FOR THE UPPER BALL JOINT AND LOWER BALL JOINT BUT LEAVE THEM ON ABOUT 1/2". BREAK THE TAPER LOOSE BY USING A REMOVAL TOOL OR STRIKING THE SPINDLE WITH A HAMMER; DO NOT HIT THE BALL JOINT. (2)—21MM SOCKET, 24MM SOCKET)
- 9. REMOVE THE NUTS FOR THE UPPER AND LOWER BALL JOINTS AND REMOVE THE SPINDLES / HUBS FROM THE TRUCK.
- 10. PLACE THE SPINDLES / HUBS ON THE BENCH WITH THE WHEEL STUDS FACING DOWN. REMOVE THE BOLTS THAT HOLD THE HUB TO THE SPINDLE AND THE SMALL DUST SHIELD THAT IS COVERING THE BACK OF THE HUB. PULL THE STOCK SPINDLE OFF OF THE HUB. THE SMALL DUST SHIELD THAT IS COVERING THE BACK OF THE HUB WILL NOT BE REUSED. THE LARGE FACTORY DUST SHIELD FOR THE ROTOR AND O-RING AT THE BASE OF THE HUB BEARING WILL BE REUSED. (2)—18MM SOCKET)
- 11. PLACE THE NEW SPINDLE ONTO THE HUB AND INSTALL THE BOLTS USING A SMALL AMOUNT OF RED LOCKTITE. THE O-RING AT THE BASE OF THE HUB WILL FIT INTO THE GROOVE MACHINED INTO THE HUB SURFACE ON YOUR NEW CST SPINDLES (2)—18MM SOCKET)
- 12. IF YOU ARE INSTALLING CST UPPER CONTROL ARMS AND/ OR COIL OVERS REFER TO THOSE INSTRUCTIONS NOW.
- 13. ATTACH THE SPINDLE TO THE UPPER AND LOWER BALL JOINTS USING THE STOCK NUTS. (2000) 24MM SOCKET/21MM SOCKET)

14. USING PLIERS AND A SCREWDRIVER/ SMALL PRYBAR, PRY OPEN THE OEM BRAKE LINE BRACKET AND REMOVE IT FROM THE BRAKE LINE. (SEE PICTURE BELOW)



- 15. ATTACH THE BRAKE CALIPERS USING THE OEM BOLTS AND A SMALL AMOUNT OF RED LOCKTITE. (2)—0 18MM SOCKET)
- 16. USING A DIE GRINDER CAREFULLY CUT OFF THE SMALL TABS FROM THE LOWER OEM ABS SENSOR WIRE BRACKETS. (SEE PICTURE BELOW)



- 17. REINSTALL THE ABS SENSORS INTO THE SPINDLES ON BOTH SIDES OF THE TRUCK USING THE OEM BOLTS. (2) 10MM SOCKET)
- 18. OPEN HARDWARE BAG #1 (DRIVER)
- 19. ATTACH THE LOWER OEM ABS WIRE BRACKET TO THE THREADED HOLE ON THE FRONT SIDE OF THE SPINDLE ON THE DRIVER SIDE USING THE SUPPLIED 1/4-20 X 1/2" BOLT AND WASHER. (2) 7/16" WRENCH, 7/16" SOCKET)
- 20. ON THE DRIVER SIDE REAR OF THE SPINDLE ATTACH THE OEM BRAKE SENSOR BRACKET TO THE LOWER 1/4" HOLE LASER CUT IN THE SPINDLE USING A SUPPLIED 1/4-20 X 1" BOLT, NUT, AND WASHERS. (2)—7/16" WRENCH, 7/16" SOCKET)
- 21. ATTACH THE DRIVER SIDE BRAKE LINE AND THE NEW BRAKE SENSOR BRACKET (PART NUMBER 12-117) TO THE REAR OF THE SPINDLE USING THE MIDDLE ¼" HOLE LASER CUT IN THE SPINDLE WITH THE SUPPLIED ADEL CLAMP, ¼-20 X 1" BOLT, NUT, AND WASHERS. (SEE PICTURE BELOW) ( 7/16" WRENCH, 7/16" SOCKET)



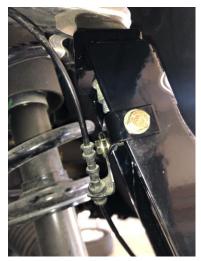


22. ATTACH THE UPPER ABS RELOCATION BRACKET (PART NUMBER 12-116) TO THE REAR OF THE DRIVER SIDE SPINDLE USING THE TOP ¼" HOLE LASER CUT IN THE SPINDLE WITH THE SUPPLIED ¼-20 X 1" BOLT, NUT, AND WASHERS. (SEE PICTURE BELOW) (2000) 7/16" WRENCH, 7/16" SOCKET)





- 23. OPEN HARDWARE BAG #2 (PASSENGER)
- 24. ATTACH THE LOWER OEM ABS WIRE BRACKET TO THE THREADED HOLE ON THE FRONT SIDE OF THE SPINDLE ON THE PASSENGER SIDE USING THE SUPPLIED 1/4-20 X 1/2" BOLT AND WASHER. (2) 7/16" WRENCH, 7/16" SOCKET)
- 25. ON THE PASSENGER SIDE ATTACH THE SPINDLE ABS WIRE RELOCATION BRACKET (PART NUMBER 12-118) TO THE TOP ¼" LASER CUT HOLE IN THE SPINDLE USING THE SUPPLIED ¼-20 X 1" BOLT, NUT AND WASHERS. THEN ATTACH THE OEM ABS WIRE BRACKET TO THE NEW RELOCATION BRACKET USING THE SUPPLIED ¼-20 X ¾" BOLT, NUT, AND WASHERS. (SEE PICTURE BELOW) (2) 7/16" WRENCH, 7/16" SOCKET)





26. ATTACH THE NEW PASSENGER UPPER CONTROL ARM ABS BRACKET (PART NUMBER 12-119) TO THE UPPER CONTROL ARM USING THE OEM BOLT AND THEN CLIP THE ABS WIRE INTO PLACE. BE SURE THE BRACKET IS IN A GOOD POSITION BEFORE TIGHTENING TO ENSURE THAT THE WIRE DOES NOT GET TOO TIGHT WHEN STEERING LEFT TO RIGHT. (SEE PICTURE BELOW) (2)—10MM SOCKET)





- 27. CYCLE BOTH SPINDLES, STEERING FULLY TO THE LEFT AND RIGHT TO BE SURE THAT NONE OF THE WIRES OR BRAKE LINES WILL GET PINCHED OR HUNG UP ON ANYTHING.
- 28. ATTACH THE TIE ROD END TO THE SPINDLE USING THE OEM NUT. (2000) 21MM SOCKET)
- 29. INSTALL THE FRONT TIRES. TURN THE STEERING WHEEL BOTH WAYS AND MAKE SURE THE BRAKE LINES AND THE ANTILOCK WIRES DO NOT COME IN CONTACT WITH THE WHEELS. (2) 22MM SOCKET)
- 30. SET THE TRUCK BACK ON THE GROUND AND TORQUE THE LUGS TO 100 FT.LBS.
- 31. SET THE TOE IF NECESSARY AND HAVE THE TRUCK PROFESSIONALLY ALIGNED.

#### PARTS BAG #1

- 3) 1/4 x 1 BOLTS
- 1) 1/4 x 1/2 BOLT
- 7) 1/4 WASHERS
- 3) 1/4 LOCK NUTS
- 1) 1/2 ADEL CLAMP
- 1) 12-116 DRIVER UPPER ABS WIRE BRACKET
- 1) 12-117 DRIVER LOWER BRAKE SENSOR BRACKET

#### PARTS BAG #2

- 1) 1/4 x 1 BOLT
- 1) 1/4 x 3/4 BOLT
- 1) 1/4 x 1/2 BOLT
- 5) 1/4 WASHERS
- 2) 1/4 LOCK NUTS
- 1) 12-118 PASSENGER SPINDLE ABS WIRE BRACKET
- 1) 12-119 PASSENGER UPPER ARM ABS WIRE BRACKET









For technical assistance call CST at 951-571-0212
Or e-mail us at <a href="mailto:sales@cstsuspension.com">sales@cstsuspension.com</a>

Thank you for buying CST Performance Suspension!