

STOP-- READ THIS FIRST

INSTRUCTIONS FOR McGAUGHY'S **PART# 2000C** SPINDLES PATENT PENDING

Winner of the 2003

Winner of the 2003 SEMA Design Award from GENERAL MOTORS

Congratulations on your purchase of McGaughy's spindles! You made the right choice in choosing our patented (US patent#6,860,498), GM award winning, world's first drop spindles! We won the GM Award for "THE MOST INNOVATIVE PRODUCT OF THE YEAR" at the 2003 SEMA Show for the spindles you purchased. **EXCELLENT CHOICE!!**

ALWAYS USE PROPER TOOLS AND SAFETY PRECAUTIONS AFTER FOLLOWING REPAIR MANUAL INSTRUCTIONS TO REMOVE CALIPER AND ROTOR FOLLOW THESE STEPS:

- 1. DISCONNECT ABS SENSOR PLUG FOR HUB ASSEMBLY.
- 2. REMOVE HUB ASSEMBLY FROM SPINDLE.
- 3. COMPRESS COIL SPRING USING PROPER SPRING COMPRESSOR.
- 4. DISCONNECT UPPER BALL JOINT, LOWER BALL JOINT & TIE ROD END.
- 5. REMOVE SPINDLE FROM VEHICLE.
- 6. DRILL OUT 4 RIVETS THAT HOLD LOWER BALL JOINT IN LOWER CONTROL ARM. (FIG #1)
- 7. REMOVE LOWER BALL JOINT FROM LOWER CONTROL ARM.
- 7A. IT WILL BE NECESSARY TO GRIND TOP EDGE OF A-FRAME FOR BALL JOINT CLEARANCE & NOTCH FOR BALL JOINT RIDGE. (FIG #2)
- 8. INSTALL SPACER SUPPLIED WITH SPINDLES INTO LOWER CONTROL ARM POCKET WHERE BALL JOINT USED TO BE WITH ROUND CUT OUT POINTING OUTWARDS. THERE IS ALSO A CUT OUT IN SPACER
- WHICH POINTS UP. THIS IS FOR BALL JOINT WEB ON BOTTOM OF BALL JOINT
- 9. PLACE BALL JOINT ON TOP OF LOWER CONTROL ARM AND INSERT 4 BOLTS SUPPLIED UPWARD THROUGH LOWER CONTROL ARM/SPACER & BALL JOINT SO THAT SUPPLIED NUTS ARE ON TOP OF BALL JOINT. (FIG #3)
- 10. INSTALL M12 STUD SUPPLIED WITH SPINDLES INTO THE TOP THREADED MOUNTING HOLE OF SPINDLE.

THIS STUD IS TO BE INSTALLED WITH LOCKTITE AND TIGHTENED SECURELY. (TIGHTEN TO 75 LBS)

- 11. INSTALL HUB ASSEMBLY USING M12 NUT ON STUD.
- (TIGHTEN TO 75LBS) USE TWO OF YOUR ORIGINAL HUB BOLTS ON LOWER TWO HOLES, LOCKTITE AND TIGHTEN THESE TWO BOLTS SECURELY (TIGHTEN TO MANUFACTURERS SPECIFICATIONS)
- 12. INSTALL COIL SPRING INTO SPRING POCKET OF CONTROL ARM AND CROSS MEMBER. INSTALL SPINDLE INTO UPPER AND LOWER BALL JOINTS.
- 13. TIGHTEN BOTH BALL JOINTS TO MANUFACTURERS SPECIFICATIONS.
- 14. INSTALL TIE ROD TO SPINDLE ARM AND TIGHTEN TO MANUFACTURERS SPECIFICATIONS.
- 15. USING A DIE GRINDER OR SOME TYPE OF CUTTING DEVICE CUT OFF THE EXCESS THREADED STUD OF LOWER BALL JOINT WHICH EXTENDS THROUGH LOWER BALL JOINT NUT. THIS WILL NEED TO BE DONE IF YOU PLAN ON USING 16" RIMS. IF YOU ARE NOT USING 16" RIMS THEN THIS MAY NOT NEED TO BE DONE. CHECK FOR CLEARANCE BEFORE INSTALLING YOUR RIM.
- 16. INSTALL ROTOR ASSEMBLY.
- 17. INSTALL CALIPER USING LOCKTITE ON MOUNTING BOLTS AND TIGHTEN TO MANUFACTURES SPECIFICATIONS.
- 18. SLIDE RUBBER BRAKE HOSE THROUGH FACTORY MOUNTING BRACKETS SO THAT WHEN BRACKETS ARE BOLTED TO TOP OF SPINDLE THERE IS NO STRETCHING OR BINDING OF RUBBER BRAKE HOSE AGAINST SPINDLE, CALIPER OR UPPER CONTROL ARM. AFTER ADJUSTING BRAKE HOSE TURN SPINDLE FROM LOCK TO LOCK MAKING SURE THAT BRAKE HOSE DOES NOT STRETCH, RUB, OR BIND. THIS IS VERY IMPORTANT BECAUSE BRAKE HOSE MAY BECOME DAMAGED AND CAUSE BRAKE FAILURE.
- 19. BOLT BRAKE HOSE BRACKET MAKING SURE TO USE LOCKTITE ON MOUNTING BOLT AND TIGHTEN SECURELY.
- 20. INSTALL WHEEL AND TIGHTEN RIM TO FACTORY SPECIFICATIONS. INSPECT RIM CLEARANCE TO ALL PARTS OF SPINDLE MAKING SURE THERE IS NO RUBBING.
- 21. REPEAT THIS PROCEDURE FOR OTHER SIDE.
- 22. VEHICLE WILL NOW NEED TO HAVE FRONT END ALIGNMENT CHECKED AND ADJUSTED.
- 23. AFTER 10 MILES RECHECK TIGHTNESS OF WHEEL LUG NUTS.