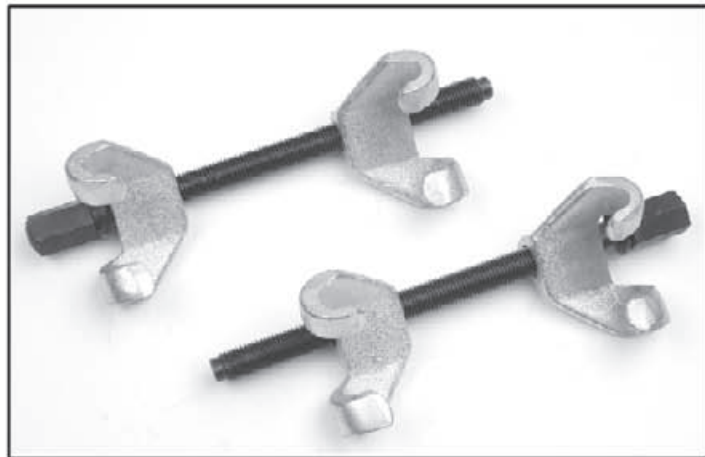




# Assembly & Instruction Manual

## COIL SPRING COMPRESSOR

Model **5131**



Distributed Exclusively By

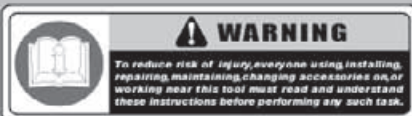


THANK YOU FOR BUYING CUMMINS INDUSTRIAL TOOLS  
Your new Coil Spring Compressor been engineered and  
manufactured to Cummins tools high standards for  
dependability,ease of operation,and operator safety.properly  
cared for,it will give you years of rugged,trouble-free performance

**CAUTION:** Carefully read through this entire operator's manual before using your new machine

Pay close attention to the Rules for Safe Operation,Warnings,and Cautions.If you use your  
machine properly and only for what it is intended,you will enjoy years of safe,reliable service.

**SAVE THIS MANUAL FOR FUTURE REFERENCE**



### WARNING

To reduce risk of injury,everyone using installing,  
repairing,maintaining,changing accessories on,or  
working near this tool must read and understand  
these instructions before performing any such task.

Customer Service Postal Address:  
1290 35 Road  
Minden, NE 68959  
voice: 1-(308) 832-2070  
fax: 1-(308) 832-2069

*You can purchase additional  
items at [www.cumminstools.com](http://www.cumminstools.com)*

## **SPECIFICATIONS**

Length	12"
Maximum Spring Diameter	3/4"
Maximum Compressible Spring Length	10"

## **SAVE THIS MANUAL**

You will need this manual for the safety instructions , operating instructions, and parts list. Put it in a safe, dry place for future reference. **Keep your invoice with this manual. Write the invoice number on the inside front cover.**

**READ ALL INSTRUCTIONS  
BEFORE ASSEMBLING OR  
OPERATING THE COIL  
SPRING COMPRESSOR.**

## **SAFETY WARNINGS & CAUTIONS**

**WARNING:** When using electric tools, machines or equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury.

### **READ ALL INSTRUCTIONS BEFORE USING THIS TOOL**

1. **KEEP WORK AREA CLEAN.** Cluttered areas invite injuries.
2. **CONSIDER WORK AREA CONDITIONS.** Don't use in damp, wet, or poorly lit locations. Don't expose to rain. Keep work area well lit.
3. **KEEP CHILDREN AWAY.** All children should be kept away from the work area. Don't let them handle machine.
4. **STORE IDLE EQUIPMENT.** When not in use, tools should be locked up in a dry location to inhibit rust. If possible, store in an area out of reach of children.
5. **DON'T FORCE THE MACHINE OR TOOL.** It will do the job better and more safely at the rate for which it was intended.
6. **USE THE RIGHT TOOL.** Don't force a small tool or attachment to do the work of a larger industrial tool. Don't use a tool for a purpose for which it was not intended.
7. **DRESS PROPERLY.** Don't wear loose clothing or jewelry. They can be caught in moving parts. Protective gloves and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair, preventing it from getting caught in machinery.
8. **USE EYE AND EAR PROTECTION.** Use a full face mask if the work you're doing produces metal filings, dust or wood chips. Goggles are acceptable in other situations. Wear a clean dust mask if the work creates a lot of fine or coarse dust. When operating for extended periods of time, use approved ear protection. Safety goggles and ear protectors are available from Cummins Industrial Tools.
9. **SECURE WORK.** Use clamps or a vise to hold the work if possible. It's safer than

using your hands and it frees both hands to operate the tool.

10. **DON'T OVERREACH.** Keep proper footing and balance at all times.
11. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Keep handles dry, clean, and free from oil and grease.
12. **STAY ALERT.** Watch what you are doing, use common sense. Don't operate any tool when you are tired.
13. **CHECK DAMAGED PARTS.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and other conditions that may affect its operation. Any part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in the instruction manual.
14. **REPLACEMENT PARTS AND ACCESSORIES.** When servicing, use only identical replacement parts. Only use accessories intended for use with this tool. Approved accessories are available from Cummins Industrial Tools.
15. **DO NOT OPERATE TOOL IF UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate machine.

### **UNPACKING**

If any parts are missing or broken, please call Cummins Industrial Tools at the number on the cover of this manual.

<b>Ref</b>	<b>Item Description</b>	<b>Quantity</b>
N/A	Coil Spring Compressor Assembly	2
6	Safety Hook	4
5	Square Washer	2

## **ASSEMBLY**

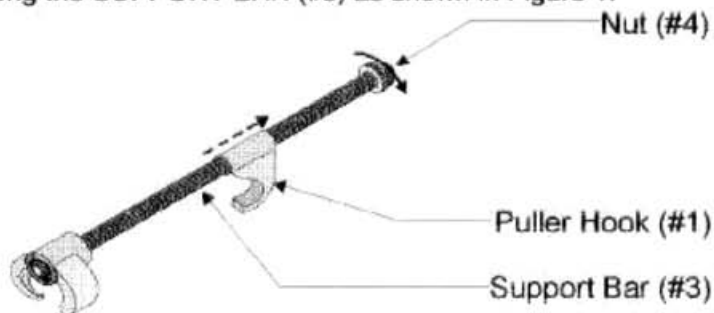
Assembly Steps are included under **OPERATION** because you assemble the Coil Spring Compressor as you use the tool.

## **OPERATION**

### ***Installing the Coil Spring Compressors***

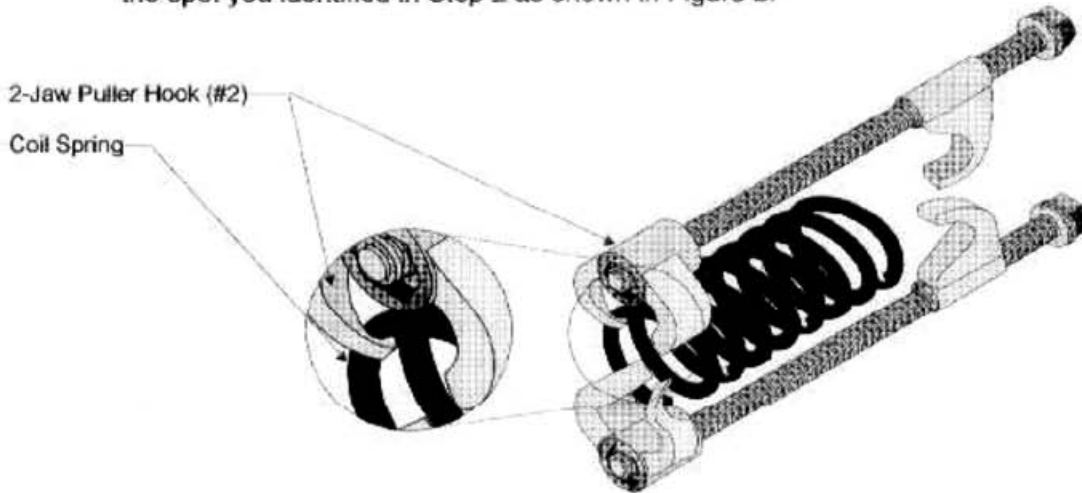
For the purposes of this manual, it is assumed you will be removing a coil spring from a MacPherson Strut Assembly which has been removed from the vehicle. The Coil Spring Compressor can be used on any large coil spring following the Steps below.

- Step 1: Place the Strut Assembly down on a workbench or other solid work surface.
- Step 2: Examine the coil spring inside the Strut Assembly. You will need to identify areas at each end of the coil spring to attach the PULLER HOOKS of the Coil Spring Compressor. There needs to be enough space between the coils for the PULLER HOOKS to fit between and still allow you enough compression to collapse the spring enough for safe removal. Ideally you will place the PULLER HOOKS towards the outer ends of the coil spring.
- Step 3: Adjust the NUT (#4) to give you the ability to move the PULLER HOOK (#1) along the SUPPORT BAR (#3) as shown in Figure 1.



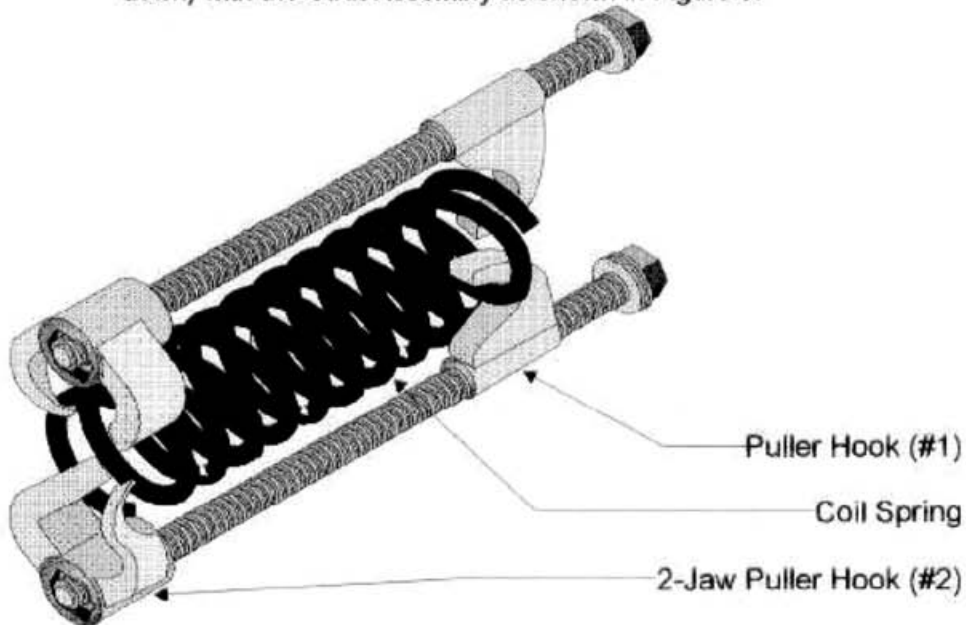
***Figure 1 – Adjusting the Puller Hook***

Step 4: Place the Hooks of the 2-JAW PULLER HOOK (#2) around the coil spring at the spot you identified in Step 2 as shown in Figure 2.



**Figure 2 -- Proper Hook Placement**

Step 5: Adjust the PULLER HOOK to fit around the coil spring at the end opposite from Step 4. Make sure the Coil Spring Compressor is parallel (straight up and down) with the Strut Assembly as shown in Figure 3.

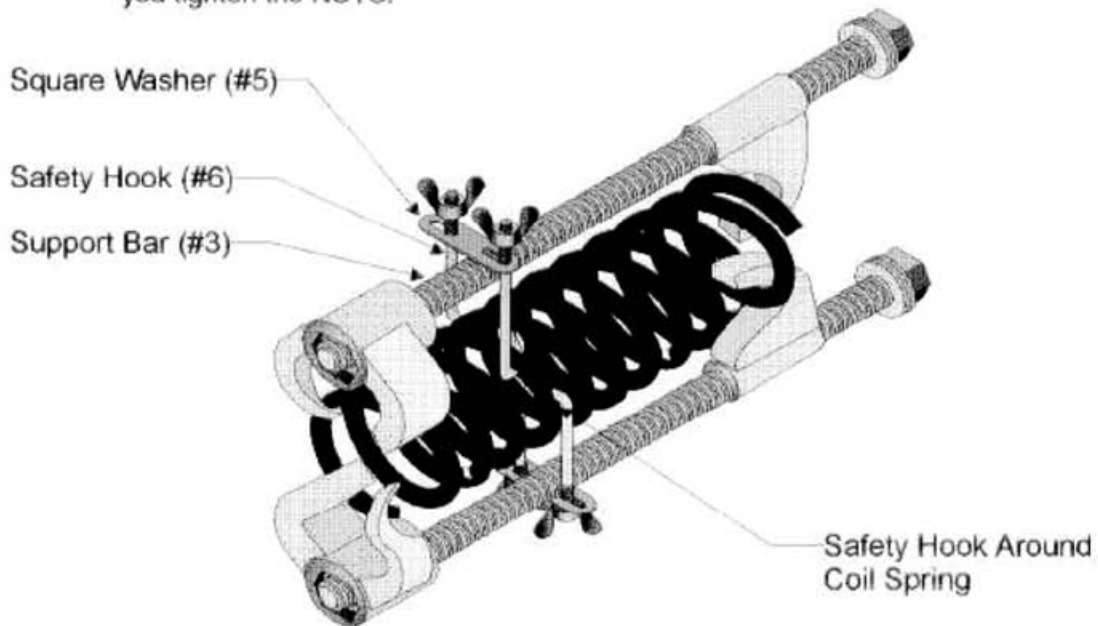


**Figure 3 -- Proper Hook Placement**

Step 6: Tighten the NUT until it contacts the PULLER HOOK.

Step 7: Remove the Wing Nuts from two of the SAFETY HOOK (#6).

- Step 8: Take one SAFETY HOOK and place it next to the SUPPORT BAR around one coil of the coil spring.
- Step 9: Repeat Step 8 with the second SAFETY HOOK, placing it on the opposite side of the SUPPORT BAR.
- Step 10: Place the SQUARE WASHER (#5) over the two threaded ends of the SAFETY HOOKS. The SQUARE WASHER should hold the two SAFETY HOOKS together and should rest on the SUPPORT BAR.
- Step 11: Thread on the Wing Nut for each SAFETY HOOK and tighten the SQUARE WASHER against the SUPPORT BAR as shown in Figure 4. This will hold the coil spring against the SUPPORT BAR and prevent it from bending outward as you tighten the NUTS.



**Figure 4 -- Safety Hook Positioning**

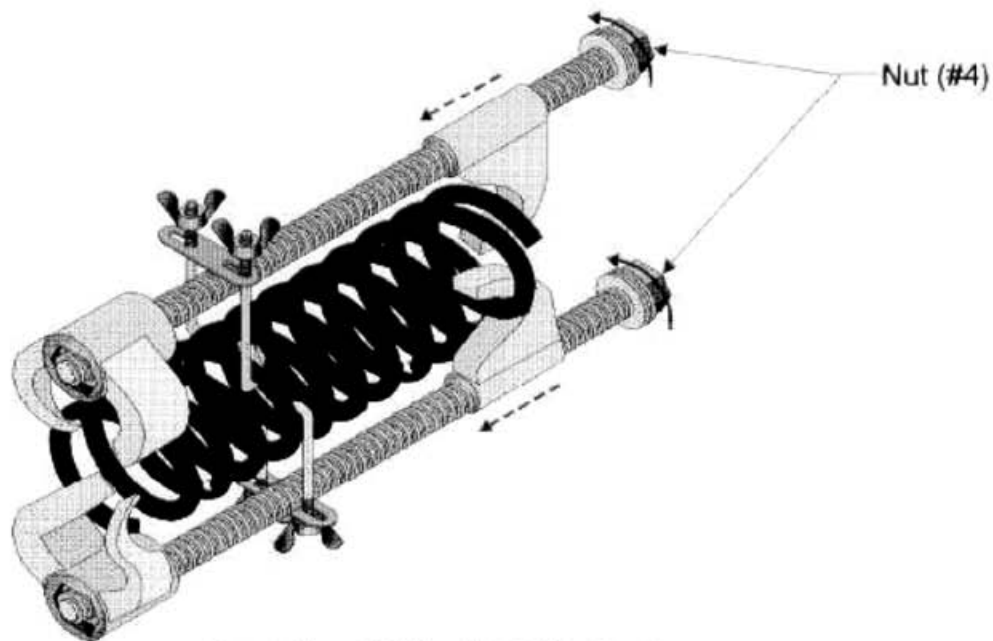
- Step 12: Repeat Steps 2 through 11 with the second Coil Spring Compressor Assembly.

**WARNING**  
Make sure you ALWAYS use  
BOTH Coil Spring Compressors.

### **Removing Coil Springs**

- Step 1: You can use a 15/16" socket, end wrench, or appropriate impact wrench and socket to tighten the NUTS (#4) to compress the coil spring.
- Step 2: Check the SAFETY HOOKS (#6) to ensure they are installed correctly.
- Step 3: Rotate the Strut Assembly so you can easily access the NUT on each Coil Spring Compressor.
- Step 4: Begin to tighten the NUT on one Coil Spring Compressor as shown in Figure 5. Tighten the NUT about one inch, then tighten the NUT of the other Coil Spring Compressor an equal amount.

**WARNING**  
You MUST tighten the NUTS EVENLY. Do not tighten one Coil Spring Compressor all at once.



**Figure 5 -- Tighten the Nuts Evenly**

- Step 5: If you are using an impact wrench to compress the coil spring, use caution and only tighten the NUT a small amount each time. Switch to the opposite NUT often to compress the coil spring evenly.
- Step 6: As you tighten the NUT on each Coil Spring Compressor, you will be compressing the coil spring. When you compress the coil spring enough to allow free play of the coil spring on the Strut Assembly, you may remove the Strut Bearing Nut at the top of the Strut Assembly and remove the Strut Bearing and Top Hat. You can now remove the compressed coil spring.

- Step 7: If you have tightened the Coil Spring Compressors as far as possible and there is no free play of the coil spring on the Strut Assembly, **DO NOT REMOVE** the Strut Bearing Nut. Remove the Coil Spring Compressors evenly and place the PULLER HOOKS further apart on the coil spring in order to compress more of the coil spring. Repeat Steps 2 through 6.
- Step 8: Do not store a compressed coil spring for ANY length of time, even if you are immediately replacing the Strut. Loosen the NUTS on the Coil Spring Compressors **EVENLY** to reduce pressure.

### ***Installing Coil Springs***

- Step 1: Check the SAFETY HOOKS to make sure they are installed correctly.
- Step 2: Slide the compressed coil spring onto the Strut Assembly. Install the Top Hat, Strut Bearing, and Strut Bearing Nut. Tighten.
- Step 3: Adjust the coil spring so that the blunt ends of the coils fit into the formed areas in the Spring Perch and Top Hat.
- Step 4: Proceed to release the NUTS on both Coil Spring Compressors. Loosen the NUTS **evenly**.
- Step 5: When the Coil Spring Compressors are loose, remove the PULLER HOOKS from the coil spring.

### **MAINTENANCE**

Before each use, inspect the SAFETY HOOKS, SQUARE WASHERS, and the PULLER HOOKS on the Coil Spring Compressors. **Do not use if you find any cracks or other damage.**

### PARTS LIST

Item#	Description	Qty
1	Puller Hook	2
2	2-Jaw Puller Hook	2
3	Support Bar	2

Item#	Description	Qty
4	Nut	2
5	Square Washer	2
6	Safety Hook	4

### ASSEMBLY DIAGRAM

