

### **PRO COMP SUSPENSION**

**Suspension Systems that Work!** 

PN# PLC09100 2002-2008 Dodge Ram 1500 Mega Cab, 1994-2001 Ram 1500, 1994-2008 Ram 2500-3500 2WD Coil Spacer Kit

This document contains very important information that includes warranty information and instructions for resolving problems you may encounter. Please keep it in the vehicle as a permanent record.

Part #	Description	
M03210-BK-01	<b>COIL SPACER</b>	

Qty. 2

### **TOOLS REQUIRED:**

Jack, Jack Stands, Wrench & Socket set, Coil Spring Compressor (some vehicles)

RECOMMENDED PRO COMP SHOCKS				
	<u>Front:</u>	Rear:		
94-08 Ram 2500/3500 4WD:	927592	927543		
94-01 RAM 1500 2WD:	914553	924543		

#### For 1500:

Optional Equipment Available from your Pro Comp Distributor!

**Hoop Style Light Bar** 

PN 26100 (Black), 26100G (Grey)

Also, check out our outstanding selection of Pro Comp tires

compliment your new installation!

For 2500/3500:

Optional Equipment Available from your Pro Comp Distributor!219838Dual Steering Stabilizer Kit50328U-bolt kit for vehicles w/ Dana 80 rear axle.

Check out our outstanding selection of Pro Comp tires to

compliment your new installation!

### **Before You Begin:**

- $\Rightarrow$  Read the instructions and study the illustrations before attempting the installation.
- $\Rightarrow$  Separating the parts according to the areas where they will be used and placing the hardware with the brackets before you begin will save installation time.
- $\Rightarrow$  Check the parts and hardware against the parts list to assure that your kit is complete.
- $\Rightarrow$  ALWAYS wear safety glasses when using power tools or working beneath your vehicle.
- $\Rightarrow$  A pitman arm removal tool and tie rod separating tool are required to perform the installation. See the special tools at the top of this page.
- $\Rightarrow$  Always use NEW cotter pins on re-assembly! (These items are NOT supplied)

# Introduction:

- This installation requires a professional mechanic!
- We recommend that you have access to a factory service manual to assist in the disassembly and reassembly of your vehicle. It contains a wealth of detailed information.
- Prior to installation, carefully inspect the vehicle's steering and driveline systems paying close attention to the tie rod ends, ball joints, wheel bearing preload, pitman and idler arms. Additionally, check steering-to-frame and suspension-to-frame attaching points for stress cracks. The overall vehicle must be in excellent working condition. Repair or replace all worn or damaged parts!
- Read the instructions carefully and study the illustrations before attempting installation! You may save yourself a lot of extra work.
- Check the parts and hardware against the parts list to assure that your kit is complete. Separating parts according to the areas where they will be used and placing the hardware with the brackets before you begin will save installation time.
- Check the special equipment list and ensure the availability of these tools.
- Secure and properly block vehicle prior to beginning installation.
- <u>ALWAYS</u> wear safety glasses when using power tools or working under the vehicle!
- Use caution when cutting is required under the vehicle. The factory undercoating is flammable. Take appropriate precautions. Have a fire extinguisher close at hand.
- Foot pound torque readings are listed on the Torque Specifications chart at the end of the instructions. These are to be used unless specifically directed otherwise. Apply thread lock retaining compound where specified.
- Please note that while every effort is made to ensure that the installation of your Pro Comp lift kit is a positive experience, variations in construction and assembly in the vehicle manufacturing process will virtually ensure that some parts may seem difficult to install. Additionally, the current trend in manufacturing of vehicles results in a frame that is highly flexible and may shift slightly on disassembly prior to installation. The use of pry bars and tapered punches for alignment is considered normal and usually does not indicate a faulty product. However, if you are uncertain about some aspect of the installation process, please feel free to call our tech support department at the number listed on the cover page. We do not recommend that you modify the Pro Comp parts in any way as this will void any warranty expressed or implied by the Pro Comp Suspension company.

# **Please Note:**

- $\Rightarrow$  Front suspension and head light realignment is <u>necessary</u>!
- $\Rightarrow$  Speedometer and ABS recalibration will be necessary if larger tires (10% more than stock diameter) are installed.
- ⇒ IT IS ADVISABLE THAT YOU HAVE HELP AVAILABLE WHEN INSTALLING THIS KIT. SOME COMPONENTS ARE HEAVY AND AWKWARD. AN ADDITIONAL SET OF HANDS IS GOOD INSURANCE AGAINST INJURY!

## Installation:

- 1. Check to see that the spacer kit you purchased matches the year and model of your vehicle. Spacer kits two inches or taller may require a spring compressor to install. Ball joint and tie rod forks may also be useful.
- 2. A good portion of your front suspension will be disassembled so this would be a good time to replace any worn parts (i.e. tie rod ends, ball joints, idler arm and any bushings) Replace bushings with polyurethane replacement parts.
- 3. Jack up vehicle as high as possible using jack stands for support at all times.
- 4. With vehicle safely off the ground remove front tires. It is advisable to disassemble on side at a time so that you can use the other side as a reference for reassembly in the event you get side tracked.
- 5. Remove the brake caliper from the rotor (attached with 2 bolts inside the caliper or with press-in clips depending on the vehicle). Do not remove the brake line from the caliper unless you intend to bleed the brakes at this time. Set the caliper aside or tie it up to the frame rail. Avoid pinching the brake line.
- 6. Remove the tie rod from the spindle using the proper tools. Do not hit the tie rod itself or the nut on the threaded portion of the tie rod or it may cause damaged and need replacing.
- 7. Remove the anti-sway bar from the lower control arm. This would be a good time to replace the end link bushings with poly-urethane replacement bushings.
- 8. If your vehicle is equipped with anti-lock brakes you must now disconnect the front rotor sensor from the dust shield or spindle and set it aside.
- 9. Disconnect your shock absorber com-

pletely from the vehicle whether it is mounted inside the coil spring or not.

- 10. Support the lower control arm with jack just touching the arm. This will prevent it from dropping when the ball joint is disconnected.
- 11. The use of a coil spring compressor is recommended before the following steps are taken.
- 12. Disconnect the upper ball joint from the top of the spindle using the proper tools. Do not hit the ball joint or the threaded end of the ball joint. Once the ball joint is free the spindle should move easily.
- 13. Be careful when lowering the lower control arm. The coil spring is under high compression and may shoot out when released. Do not stand near the side of the truck during this step. Lower the jack so that the lower control arm swings down. If the coil spring has not fallen out on it's own you may need to use a pry bar from the front of the vehicle to remove it.
- 14. Note which end of the coil spring is "bottom" for installation. Also note the depression in the lower control arm. It is important that the last winding of the coil spring fit into the indentation completely so that the vehicle will sit level. Do not switch coil springs from side to side as some vehicles have a specific "right" and "left" coil spring.
- 15. Check the coil spacer for proper fitment into the coil spring mount in the frame. The flat part of the spacer should face up and touch the top of the spring mount. Some vehicles have guiding tabs to center the coil spring in its top mount. These tabs may have become bent and need to be bent back to allow the spacer to properly fit in the mount.
- 16. Install the coil spring with the spacer on top of it. If used the coil spring compres-

sor should still be on the spring in a compressed state. If it is not you may need to compress the spring before re-installing. Make sure the spacer is centered in the upper mount and the bottom of the spring is properly nested in the receptor groove on the lower control arm. If you are installing a two-inch or taller spacer you may need a spring compressor. Follow all safety rules when installing the coil spring as it will be under extreme compression.

- 17. Raise the lower control arm with a jack once the coil spring and spacer are properly lined up. Raise until the spindle is high enough to bolt on the upper ball joint. Before bolting on the upper ball joint make sure the brake caliper and brake line are where they need to be since some brake lines run inside the spindle and outside the coil spring.
- 18. With the upper ball joint tight and a cotter pin re-installed you may now remove the jack from under the lower control arm.

- 19. Assemble all of the components previously removed (sway bar with new polyurethane bushings, tie rod ends with polyurethane grease boot, brake caliper and anti-lock sensor). Don't forget the shock with a new colored boot while it is off.
- 20. Repeat instructions for other side.
- 21. After properly installing both spacers you can install your front tires and lower vehicle back to the ground.
- 22. Your vehicle may sit too high at first because the suspension needs to settle. Carefully back the vehicle up and drive forward a few times using the brakes frequently. Park on level ground and check out your lift.
- 23. The vehicle will now require a front wheel alignment. Failure to do so may result in severe wear on your tires and may pull to one direction.

Bolt Torque and ID									
Decimal System			Metric System						
All Torques in Ft. Lbs. Maximums									
Bolt Size	Grade 5	Grade8	Bolt Size	Class 9.8	Class 10.9	Class 12.9			
5/16	15	20	M6	5	9	12			
3/8	30	45	M8	18	23	27			
7/16	45	60	M10	32	45	50			
1/2	65	90	M12	55	75	90			
9/16	95	130	M14	85	120	145			
5/8	135	175	M16	130	165	210			
3/4	185	280	M18	170	240	290			
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G = Grade (Bolt Strength) D = Nominal Diameter (Inches) T = Thread Count (Threads per Inch) L = Length (Inches) X = Description (Hex Head Cap Screw)			P = Prop erty Class (Bolt Strength) D = Nominal Diameter (Millimeters) T = Thread Pitch (Thread Width, mm) L = Length (Millimeters) X = Description (Hex Head Cap Screw)						

Use this only as a guide for hardware without a called out torque specification in the instruction manual.