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INSTALL INSTRUCTIONS:
Cognito SM Series Compression Struts for 2011-2019 GM 2500HD/3500HD 2WD/4WD trucks
SKU: 110-90457



PARTS LIST FOR SKU: 110-90457

QTY	PART #	DESCRIPTION
1	8527	Driver Boxed Compression Strut
1	8528	Passenger Boxed Compression Strut
1	HP9040	Compression Strut Hardware

PARTS LIST FOR SKU: HP9040

QTY	PART #	DESCRIPTION
8	HARDWARE-33086	1/2 Flat Washer
4	HARDWARE-37268	1/2-13 Lock Nut
4	HARDWARE-15221	Head Cap Screw 1/2-13X4.5
4	5012	Crush Sleeve
8	POLY-BUSHING-2130G	Polyurethane Bushing

WARNING

Please read this entire instruction sheet before beginning installation. Proper installation of these components requires a qualified mechanic. Always wear safety glasses when using power tools, and take appropriate precautions when working under a vehicle. If these instructions are not properly followed you may jeopardize your, and your passenger's safety, and severe frame, suspension or tire damage may also result from improper installation.

TECH NOTES

- It is necessary to raise the vehicle to perform installation of these products. A hoist or installation bay is recommended. Always ensure the truck is properly supported before attempting installation as serious injury could occur.

REQUIREMENTS

- Installation requires a qualified mechanic.
- Read instructions carefully and sy the pictures before attempting installation.
- Check the parts and any hardware packages against the parts list to assure that your kit is complete.

INSTALLATION

1. Gather the compression struts, 8 pivot bushings and 4 crush sleeves for assembly (Figure 1).

Figure 1: Bushings and Crush Sleeves.



2. Insert the pivot bushings into each end of the compression strut pivot tubes and apply grease to the crush sleeves (Figure 2). Install the crush sleeves through the pivot bushings (a rubber mallet may be required for this step).

Figure 2: Preparation for Crush Sleeve Install.



3. Note the heavy end of the compression strut. This end will align to the front of the vehicle and has a pivot tube welded at 2 degrees which is critical for the alignment of the compression struts to the Cognito bracket and cross member (Figure 3). **The driver side compression strut is stamped with number 8527 and the passenger side is stamped with number 8528.**

Figure 3: Compression Strut Orientation.



4. If this is a new install of a Cognito front lift system, you can now refer to the lift system install of the compression strut at this time. If this is an upgrade to previously installed Cognito compression struts, this Cognito boxed compression strut kit is a direct replacement (Figure 4).ss

Figure 4: Tubular Compression Strut and Bracket.



5. Remove the tubed compression struts by removing the ½” hardware.

6. Install and fasten the Cognito boxed compression strut to the bracket and the Cognito rear cross member, (Be mindful of the driver and passenger side compression struts and the forward orientation of the compression strut during installation. Failure to do so will cause alignment issues.)

7. Tighten all 1/2" diameter hardware to 60 ft-lbs

WARRANTY / RETURN POLICY / SAFETY

Cognito Limited Lifetime Warranty

Cognito Motorsports warrants, to the original retail purchaser, that its suspension products are free from defects in workmanship and material for as long as the purchaser owns the vehicle on which the product was originally installed. Cognito Motorsports does not warrant the product for finish, alterations, modifications, and/or original installation contrary to specifications of Cognito Motorsports. Cognito Motorsports suspension products are not designed nor intended to be installed on vehicles used in race applications or for racing purposes or for similar activities involving abnormal abuse other than the vehicle was originally designed to handle or endure. (A "RACE" is defined as any contest between two or more vehicles, and/or contest of one or more vehicle against the clock, whether or not such contest is for a prize.)

This warranty does not include coverage for police or taxi vehicles, race vehicles, or vehicles used for government or commercial purposes. Also excluded from this warrant are sales outside of the United States of America. Alterations to the finish of the parts including but not limited to painting, powder coating, plating, and/or welding will void all warranties. Cognito Motorsports obligation under this warranty is limited to the repair or replacement, at Cognito Motorsports option of the defective product. Any and all costs of removal, installation or re-installation, freight charges, incidental or consequential damages are expressly excluded from this warranty.

This warranty excludes the following items: bushings, bumpstops, tie-rod ends, limiting straps, and hiem joints. These parts are subject to wear and are not considered defective when worn. They are warranted for 60 days of purchase for defects in workmanship. Cognito Motorsports suspension components must be installed as a complete system. Any substitutions or exemptions of required components will immediately void the warranty. Some finish damage may happen to parts during shipping and is not covered under warranty. This warranty shall not apply to any product that had been subject to accident, negligence, alteration, abuse, or misuse. Cognito Motorsports does not warrant products not manufactured by Cognito Motorsports. Cognito Motorsports reserves the right to supercede, discontinue, or change the design, finish, part number and/or application of parts when deemed necessary by Cognito Motorsports without written notice.

Return Policy

Cognito Motorsports has a no refund return policy. Under special circumstances, returns might be accepted with prior written approval. All returned product will be shipped freight prepaid. Product returned is subject to a 25% restocking fee. No returns will be accepted after 30 days upon receipt of product.

Product Consumer Safety and Warning

The installation of this kit will modify the suspension of your vehicle and may cause it to handle significantly different than a factory equipped vehicle. Installing larger tires with modified suspension and increased ground clearance will significantly alter the handling characteristics of the vehicle, and may result in increased braking distances as well as changes in vehicle maneuverability and handling compared to the factory equipped vehicle. As with any vehicle, extreme caution and care must be used to prevent loss of control or roll-over during sharp turns or abrupt maneuvers. Always wear seat belts and drive safely, recognizing the reduced speeds and specialized driving techniques is required.

This suspension system will not strengthen nor reinforce the stock frame of the vehicle, nor will it increase rollover protection. It is necessary to periodically inspect all suspension and drive train components for tightness of fit or any damage. Installation of these parts will modify the height of the vehicle and will raise the center of gravity. Altered height modifications and off-road operation may increase your vehicle's susceptibility to roll over conditions and may cause serious injury or death. Many states regulate the height modification to each vehicle. Check the laws in your state for exact specifications. Height modifications may effect the reaction, ride, handling, and wear factor of your vehicle's components.

Failure to drive this vehicle safely may result in injury or death! Do not drive this vehicle unless you are familiar with its unique handling characteristics and are confident of your ability to maintain control under all driving conditions. Some modifications and combinations of modifications are not recommended, unsafe, and may not be permitted in your state. Consult your vehicle owner's manual, the instructions accompanying this product, and your state laws before undertaking these modifications. The owner of the modified vehicle and the qualified mechanic required to install this product are responsible for the legality and safety of the vehicle being modified.