

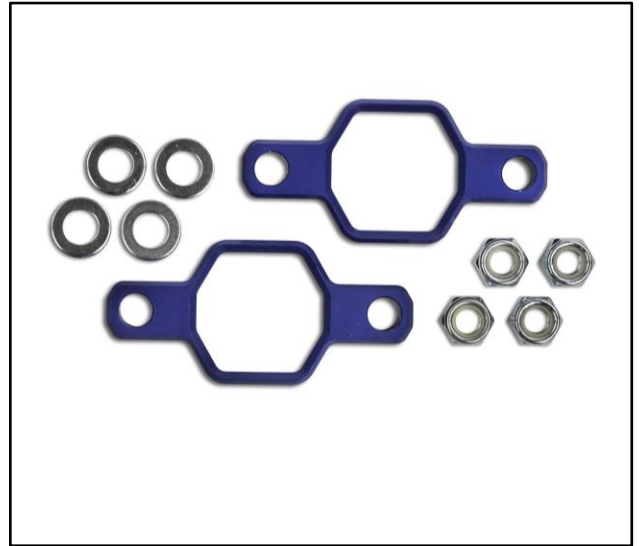
GM 2024+ 2500HD AT4X / ZR2 Front Shock Spacer Bundle

INSTALL INSTRUCTIONS:

GM 2024+ 2500HD AT4X / ZR2 Front Shock Spacer Bundle
SKU: 110-91256

PARTS LIST FOR SKU: 110-91256

| QTY | PART # | DESCRIPTION |
|-----|-------------------------|------------------------------------------|
| 2 | 3110 | 2024 AT4X / ZR2 HD Front Shock Spacer |
| 4 | HARDWARE-M12X1.75-LN | Class 10 M12 X 1.75 Lock Nut Zinc Plated |
| 4 | HARDWARE-M12-FLATWASHER | M12 Flat Washer Zinc Plated |


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.

Modification of vehicle suspension can interfere with ride-height sensors, active suspension, lane departure features, semi-autonomous, and autonomous driving features. It is the responsibility of the mechanic to determine feature compatibility prior to installation. Recalibration of sensors may be required in the event of any modification.

INTRODUCTION

The Cognito Shock Spacer Bundle is designed to work with the 2500HD AT4X / ZR2 compatible Cognito upper control arms **110-91252**, which allow for increased droop travel. This shock extender is added to make the Multimatic DSSV shock assembly longer, to increase droop travel for an improved ride. These spacers should not be used in conjunction with any other shock spacers.

TECH NOTES

- Read instructions carefully and study the pictures before attempting installation.
- If this product was purchased as part of a bundle/package. Familiarize yourself with each set of instructions included with the bundle/package before beginning.
- Check the parts and hardware packages against the parts list to assure that your kit is complete before starting.
- Stock droop travel is only 2-1/8", not adequate for the best ride possible. After adding this shock extender kit, the droop travel will be 3" or slightly more, do not attempt to raise the ride height from stock.
- Refer to the Cognito installation instructions #7446 for 110-91252 for step-by-step guidance on removal and installation of the upper control arms.

REQUIREMENTS

- Installation requires a qualified mechanic.
- Follow the OE specifications when replacing or re-installing OE fasteners, retainers, and hardware specified in the OEM manual.
- Always wear safety glasses when using power tools.
- When a lift is required to perform the installation of these products and always ensure the vehicle is properly supported before attempting installation or serious injury may occur.
- 2500HD AT4X is already lifted in the front from the factory via torsion bars and torsion keys, the height is maxed out from the factory, do not attempt to raise the ride height any further than stock.



INSTALLATION

1. Refer to the Cognito installation instructions #7446 for 110-91252 for step-by-step guidance on removal and installation of the upper control arms.
 - Follow those instructions until instructed to install the Cognito upper control arms.
2. Remove the Multimatic DSSV shocks and install one shock spacer above each front shock. Use the supplied hardware to replace the OEM flange nuts fastening the shock.
3. Continue with the installation instructions #7446.
 - After installing the front wheels return to this sheet.
4. Before lowering the vehicle, measure from the top of the wheel well directly above the center line of the wheel to the top of the tire, (see Figure 1). Record this measurement as (A) in Table 1. Subtract 3 inches from A and record this number.
 - **NOTE:**
It can be helpful to place a piece of painter's tape at the top of the wheel well directly above the centerline of the wheel and measure from there.

- Set the truck on the ground and drive forward and backward a few times to settle the suspension. Measure again from the top of the tire to the top of the wheel well as in the step above and record this measurement as (C) in Table 1.

- NOTE:**

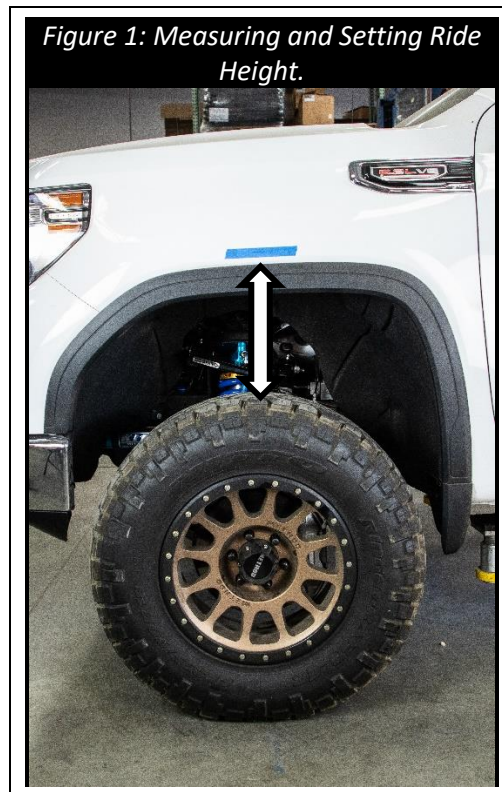
If (C) is larger than (B), the ride height is too tall. This can be caused by shocks or shock spacers that are too long, stacked shock spacers, spring preload devices, or any combination of the above.

Failure to use compatible shocks to limit the vehicles front suspension may cause over-extension, which as a result can cause damage to ball joints, uni-balls, tie rods, and/or CV axles, along with other related safety issues.

Warranty on Cognito products will be void if the vehicles front suspension is not properly limited to the above max ride height calculation.

| Suspension Travel | Record | Measurement (Inches) |
|-------------------|------------------------|----------------------|
| Full Droop | A | |
| Max Ride Height | $B = A - 3 \text{ in}$ | |
| Ride Height | C | |

Table 1. Suspension Travel Measurements



- Continue with the installation instructions #7446 and follow until completion.



WARRANTY / RETURN POLICY / SAFETY

Cognito Limited Lifetime Warranty

Cognito Motorsports, Inc. hereinafter “Cognito,” warrants to the original retail purchaser, that its suspension products are free from workmanship and material defects for as long as the purchaser owns the vehicle on which the product(s) were originally installed. This warranty will be void if any modifications are made to the components, including alterations to the surface finish, i.e.; painting, powder coating, plating, and/or welding, or if they are improperly installed. Cognito truck suspension products are not designed nor intended to be installed on “competition” vehicles used in race applications, stunt or for exhibition purposes that are outside of the intended operating conditions specified by the manufacturer. Racing and competition are defined as any contests between two or more vehicles; or vehicles competing individually on off road circuits in timed events (whether or not such contests are for an award or prize).

This warranty does not include coverage for police, taxi, government or commercial vehicles, and the warranty does not cover Cognito products sold outside of the USA. Cognito’s obligations under this warranty are specified and applied at its sole discretion, and warranty coverage is limited to repair or replacement of the defective product(s). Any and all costs of removal, installation or reinstallation; freight charges, incidental or consequential damages associated with the covered products are expressly excluded from this warranty.

The following items are exempt from Cognito limited warranty coverage: bushings, bump stops, tie-rod ends (Heim joints) and limiting straps. These parts are “consumables” and designed to wear as a normal part of their duty cycle, therefore they are not considered defective when worn. The aforementioned products are warrantied separately against defects in workmanship, for 60 days from the date of purchase. As a condition of warranty validation, respective Cognito suspension components must be installed as a complete system (not combined with non-Cognito hardware or ancillary parts). Any substitutions or omission of required components will void the warranty. Some minor cosmetic wear and imperfections may occur to parts during shipping, which is not covered under this warranty. This limited warranty does not apply to any components that have been subjected to collision damage, negligence, alteration, abuse, or misuse, and coverage does not extend to products manufactured by third-party companies. Cognito reserves the right to supersede, discontinue, or change the design, finish, part number and/or application of its parts when deemed necessary, without notice.

Return Policy

Product returns will not be accepted without prior written approval from an authorized Cognito representative. All products being returned must be shipped via trackable, prepaid freight. Returned products are subject to a 25% percent restocking fee. The eligible return period for products purchased directly from Cognito is 30 days from the verified date when the product(s) were originally received by the purchaser.

Product Safety Advisory

The installation of Cognito steering and suspension components will modify your vehicle’s original factory equipment and geometry, which may cause it to handle differently than a stock (unaltered) vehicle. Installation of these components is not intended to strengthen nor reinforce the vehicle’s frame, nor are they designed to increase rollover protection. It is necessary to periodically inspect all suspension and drive train components for proper attachment, torque specifications, operation, and for any potential unusual wear or damage. Installation of these parts will modify the height of the vehicle and may raise the center of gravity. Modifying vehicle height combined with off road operation may increase your vehicle’s susceptibility to rollover conditions, which may cause serious injury or death. Many states regulate allowable vehicle height modifications, and it is your responsibility to know and comply with the legal requirements specified by the laws where you reside. Modifications to your vehicle’s ride height may also affect the ride quality, driver input response, trackability and handling, and wear to your vehicle’s suspension components and tires.