35 Inch Tire Clearance Kit

2023+ Chevrolet Silverado 1500 ZR2 Bison and 2023+ GMC Sierra 1500 AT4X AEV Edition

INSTALLATION GUIDE

NEW PRODUCT

Please visit www.aev-conversions.com to view the most current installation guide for this product.

This is a new product and we want to make sure that you receive the latest and most accurate information based on customer feedback, product revisions, and/or model year updates. We value customer feedback, so we encourage you to contact our Technical Support department if you have any suggestions on how to make the installation of this product easier or if you have any questions regarding the installation of this product. AEV's Technical Support can be reached by email at tech@aev-conversions.com or by giving us a call at (248)-926-0256.

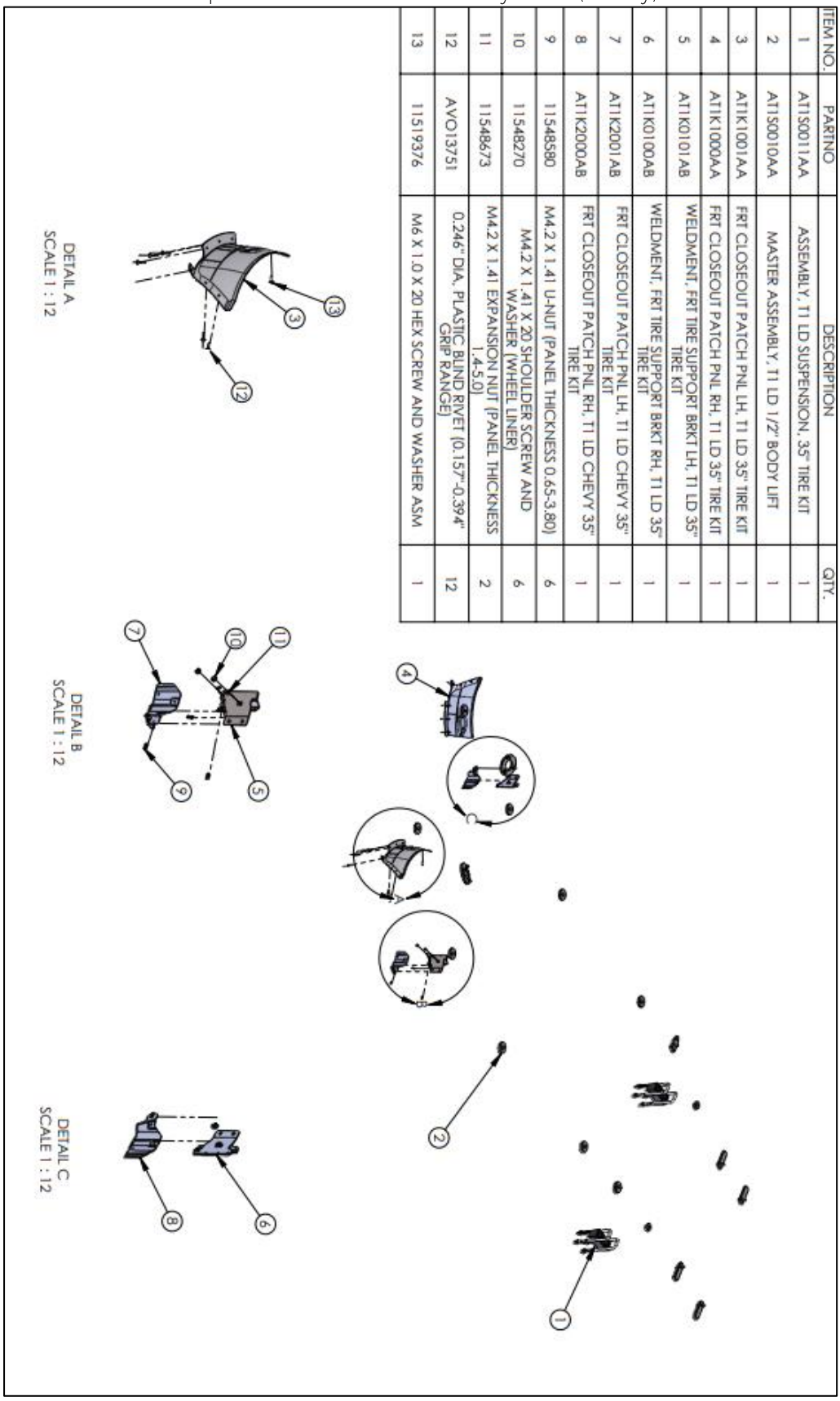
PLEASE READ BEFORE YOU START

To guarantee a quality installation, we recommend reading these instructions thoroughly before beginning any work. These instructions assume a certain amount of mechanical ability and are not written nor intended for someone not familiar with auto repair.

AEV30506AA Written By: Cole Fleming Approved By: Sean Williams
Last Updated: 1/23/2025

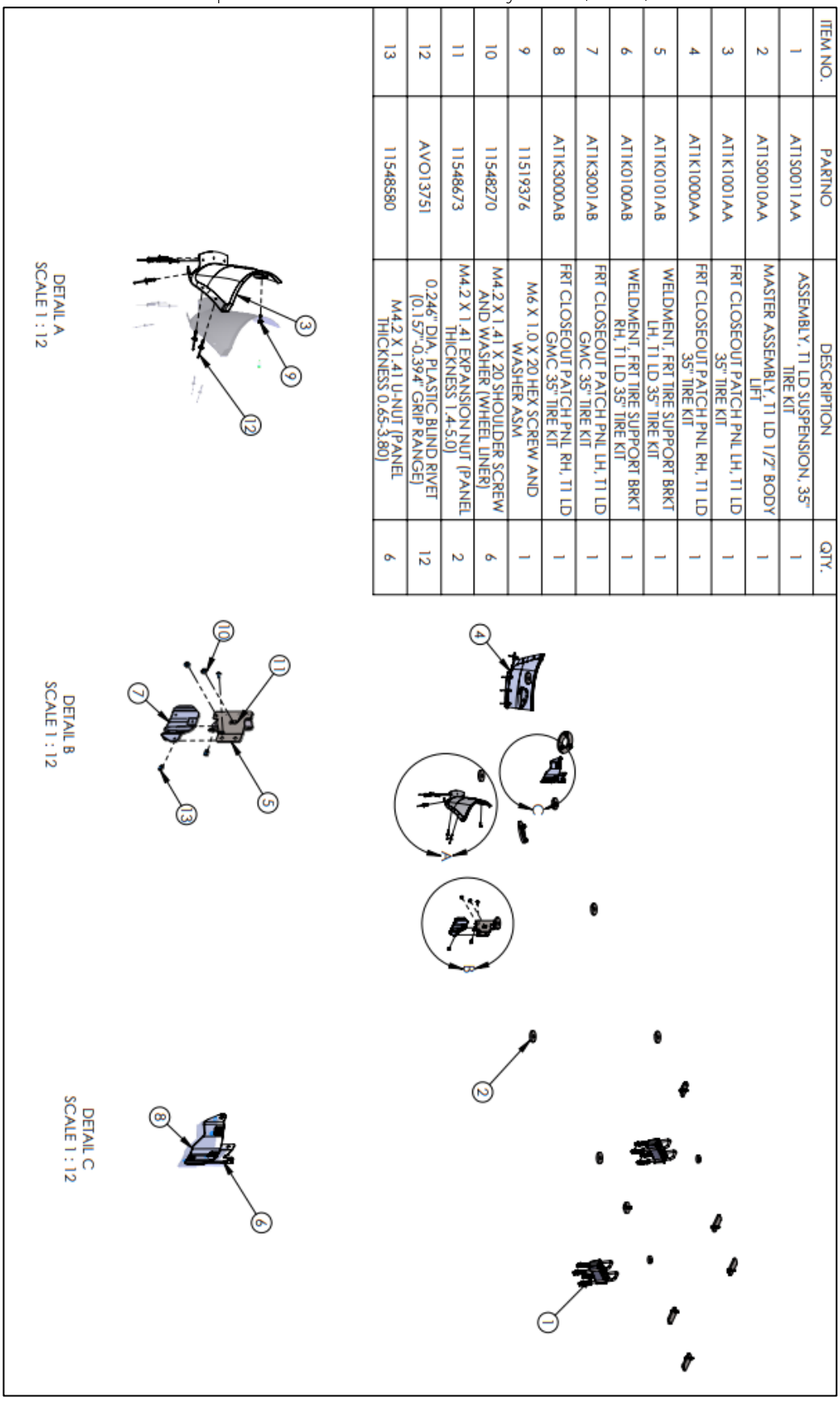
Exploded 35" Tire Kit Assembly View (Chevy)

ITEM NO.	PARTNO	DESCRIPTION	QTY.
1	AT150011AA	ASSEMBLY, T1 LD SUSPENSION, 35" TIRE KIT	1
2	AT150010AA	MASTER ASSEMBLY, T1 LD 1/2" BODY LIFT	1
3	ATIK1001AA	FRT CLOSEOUT PATCH PNL LH, T1 LD 35" TIRE KIT	1
4	ATIK1000AA	FRT CLOSEOUT PATCH PNL RH, T1 LD 35" TIRE KIT	1
5	ATIK0101AB	WELDMENT, FRT TIRE SUPPORT BRKT LH, T1 LD 35" TIRE KIT	1
6	ATIK0100AB	WELDMENT, FRT TIRE SUPPORT BRKT RH, T1 LD 35" TIRE KIT	1
7	ATIK2001AB	FRT CLOSEOUT PATCH PNL LH, T1 LD CHEVY 35" TIRE KIT	1
8	ATIK2000AB	FRT CLOSEOUT PATCH PNL RH, T1 LD CHEVY 35" TIRE KIT	1
9	11548580	M4.2 X 1.41 U-NUT (PANEL THICKNESS 0.65-3.80)	6
10	11548270	M4.2 X 1.41 X 20 SHOULDER SCREW AND WASHER (WHEEL LINER)	6
11	11548673	M4.2 X 1.41 EXPANSION NUT (PANEL THICKNESS 1.4-5.0)	2
12	AVO13751	0.246" DIA. PLASTIC BLIND RIVET (0.157"-0.394" GRIP RANGE)	12
13	11519376	M6 X 1.0 X 20 HEX SCREW AND WASHER ASM	1



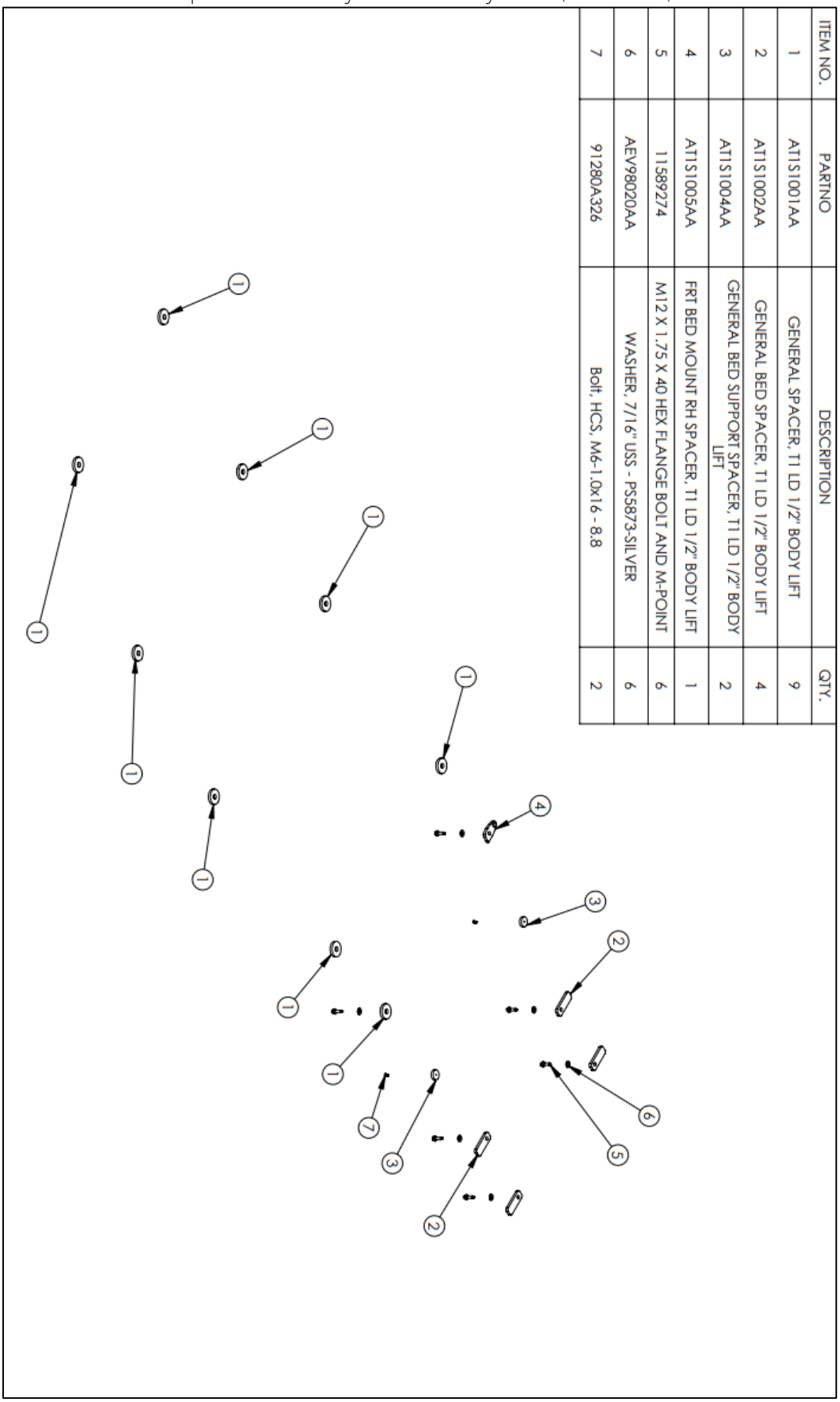
Exploded 35" Tire Kit Assembly View (GMC)

ITEM NO.	PARTNO	DESCRIPTION	QTY.
1	AT1S0011AA	ASSEMBLY, T1 LD SUSPENSION, 35" TIRE KIT	1
2	AT1S0010AA	MASTER ASSEMBLY, T1 LD 1/2" BODY LIFT	1
3	AT1K1001AA	FRT CLOSEOUT PATCH PNL LH, T1 LD 35" TIRE KIT	1
4	AT1K1000AA	FRT CLOSEOUT PATCH PNL RH, T1 LD 35" TIRE KIT	1
5	AT1K0101AB	WELDMENT, FRT TIRE SUPPORT BRKT LH, T1 LD 35" TIRE KIT	1
6	AT1K0100AB	WELDMENT, FRT TIRE SUPPORT BRKT RH, T1 LD 35" TIRE KIT	1
7	AT1K3001AB	FRT CLOSEOUT PATCH PNL LH, T1 LD GMC 35" TIRE KIT	1
8	AT1K3000AB	FRT CLOSEOUT PATCH PNL RH, T1 LD GMC 35" TIRE KIT	1
9	11519376	M6 X 1.0 X 20 HEX SCREW AND WASHER ASM	1
10	11548270	M4.2 X 1.41 X 20 SHOULDER SCREW AND WASHER (WHEEL LINER)	6
11	11548673	M4.2 X 1.41 EXPANSION NUT (PANEL THICKNESS 1.4-5.0)	2
12	AVO13751	0.246" DIA, PLASTIC BLIND RIVET (0.157"-0.394" GRIP RANGE)	12
13	11548580	M4.2 X 1.41 U-NUT (PANEL THICKNESS 0.65-3.80)	6



Exploded ½" Body Lift Assembly View (Common)

ITEM NO.	PARTNO	DESCRIPTION	QTY.
1	ATIS1001AA	GENERAL SPACER, T1 LD 1/2" BODY LIFT	9
2	ATIS1002AA	GENERAL BED SPACER, T1 LD 1/2" BODY LIFT	4
3	ATIS1004AA	GENERAL BED SUPPORT SPACER, T1 LD 1/2" BODY LIFT	2
4	ATIS1005AA	FRT BED MOUNT RH SPACER, T1 LD 1/2" BODY LIFT	1
5	1158927 4	M12 X 1.75 X 40 HEX FLANGE BOLT AND M-POINT	6
6	AEV98020AA	WASHER, 7/16" USS - PS5873-SILVER	6
7	91280A326	Bolt, HCS, M6-1.0x16 - 8.8	2



INCLUDED PARTS	QTY
Body Lift and Suspension	
UPPER STRUT SPACERS	2
LIFT BLOCKS	2
BODY SPACERS	10
BED SPACERS	6
FASTENER PACK	1
Closeout Kit	
FRONT CLOSEOUTS	2
FLARE EXTENSIONS	2
FRONT REAR WHEEL LINER BRACKETS	2
FASTENER PACK	1

REQUIRED TOOLS
General Hand Tools (Metric)
Jack or hoist
Jack Stands
Torque Wrench
Breaker Bar
Rubber Mallet
T15 Torx
Cutoff tool (die grinder, body saw, etc.)
Plastic Riveter Tool
Shears or Knife
Drill
¼ Inch Drill Bit (optional Step Bit)
Silver Sharpie
Tape

I. VEHICLE PREPARATION FOR UPPER STRUT SPACERS

1. Use a 2-post hoist or jack and jack stands to raise and secure vehicle by the frame. Fully drooped tires should be at least 1.5" from the ground.
2. Remove both front wheels.
3. It is recommended to use a support underneath the rotor while installing your AEV Upper Strut Spacers. (Figure 1)

Figure 1

4. Disconnect your sway bar from the end link on both sides of the vehicle.
    a. Remove the nut and pull the stud outboard of the vehicle to release the sway bar. (Figure 2)

Figure 2

5. Remove the 3 nuts from the bolts connected to the top of your strut. These nuts will not be reused. (Figure 3)

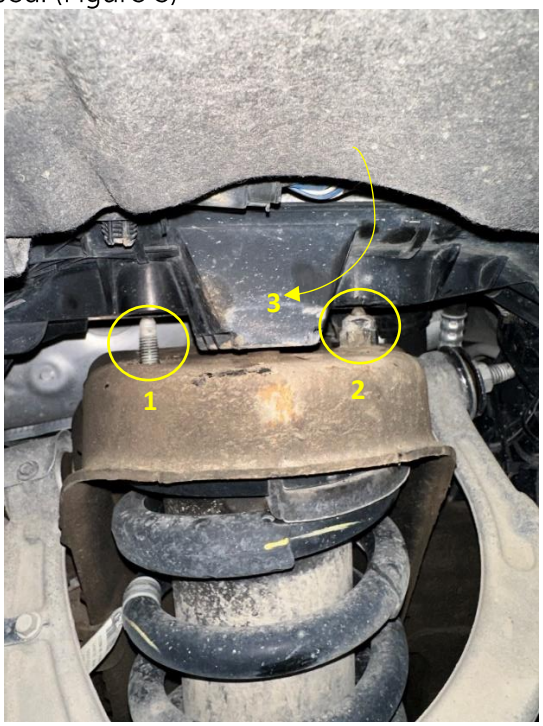


Figure 3

6. Loosen your ABS line.
    a. This will consist of 4 bolts.
    b. It is important to pay close attention to the routing of this line to be sure you are reconnecting it the correct way. (Figure 4)

Figure 4

7. It is recommended to loosen your brake line from the strut to prevent any damage to the brake line.

8. Remove the upper ball joint nut.
    a. First loosen the upper ball joint nut to allow the knuckle to be able to rest on it without falling. (Figure 5)
    b. Then, hit the knuckle surrounding the joint with a hammer. The stud will slip out of the knuckle and catch on the nut.
    c. From there remove the nut all the way to release the knuckle and allow the suspension to be drooped further. (Figure 5)

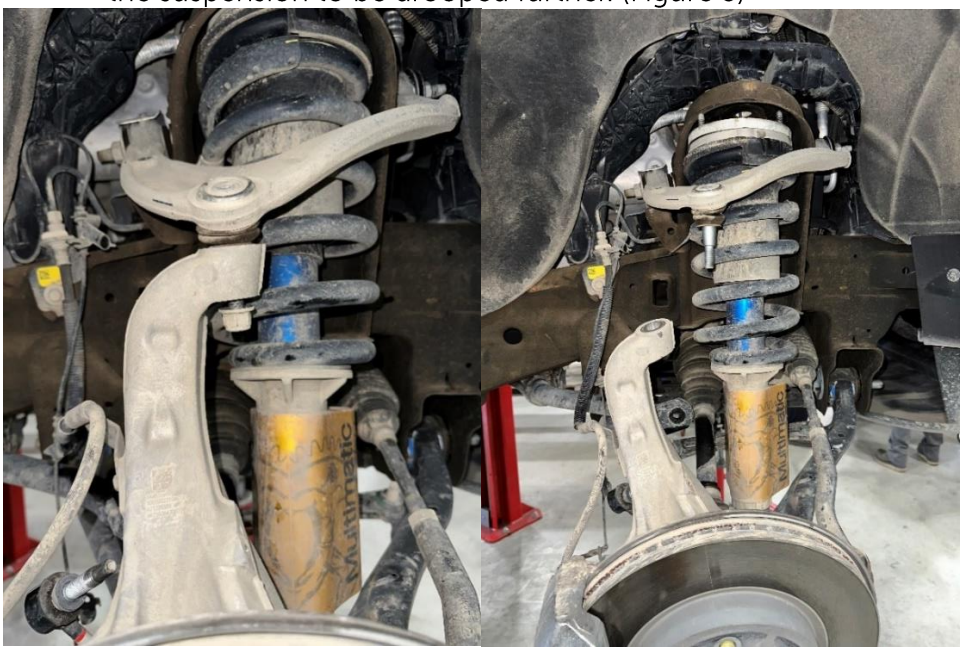


Figure 5

9. Remove the 2 bolts connecting the bottom of the strut to the lower control arm. (Figure 6)

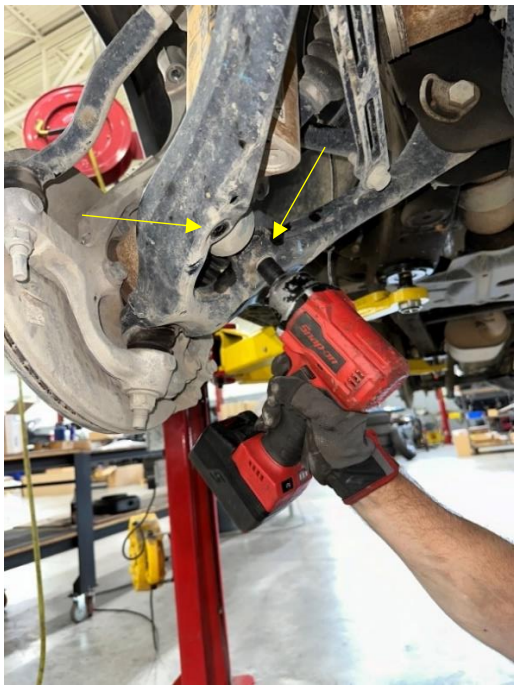


Figure 6

10. You are now ready to install your AEV Upper Strut Spacer.

II. INSTALLATION FOR UPPER STRUT SPACERS

1. Install your AEV Upper Strut Spacers. (Figure 7)
    a. Before installing, measure the distance between holes. These can only be installed one way. The widest space between holes faces outboard on vehicle and goes through bolts 1 and 2 in Figure 3.
        i. The strut does not need to be removed from the vehicle. With the lower control arm connection undone, the strut can be rotated slightly to lower it and install the spacer over the studs.
    b. 3 washers, provided in the hardware kit, will be added to the top of the struct spacer.

Figure 7

III. REINSTALLATION FOR UPPER STRUT SPACERS

1. To reinstall your new AEV Upper Strut Spacers, work backwards from the "Vehicle Preparation" guideline above.
    a. It is recommended that you loosely tighten all bolts to get everything in place before tightening everything down to torque specs.
2. Replace top 3 nuts on strut with AEV provided M10 Flange nuts.
3. Use the following torque spec guide when reinstalling hardware.

2 lower strut bolts	50Nm (37lb-ft)
Upper ball joint nut	First Pass: 35Nm(26lb-ft) Final Pass: 85-95 degrees
3 nuts on strut	58Nm (43lb-ft)
Sway Bar	100Nm (74lb-ft)

4. Repeat all processes for the other side of the vehicle.
5. Reinstall wheels/tires and torque lug nuts to 190Nm(140lb-ft). Raise vehicle, remove jack stands, and lower vehicle to the ground.

Note: If installing front trim/closeout kit at the same time as suspension, jump ahead to that section before reinstalling the wheels/tires.

NOTE: AEV recommends a front-end alignment any time ride height is modified.

IV. VEHICLE PREPARATION FOR LIFT BLOCKS

1. Use a 2-post hoist or jack and jack stands to raise and secure vehicle by the frame. Fully drooped tires should be at least 1.5" from the ground.
2. Remove both rear wheels.
3. It is important to support your rear axle while installing your AEV Lift Blocks. (Figure 8)

Figure 8

4. Remove the 4 nuts that connect to the U-Bolt. (Figure 9)
    a. These bolts may be very tight; it is recommended that you spray them with lubricant.
5. Remove the U-Bolts; these will not be reused. Save lower U-Bolt plate, this will be reused.

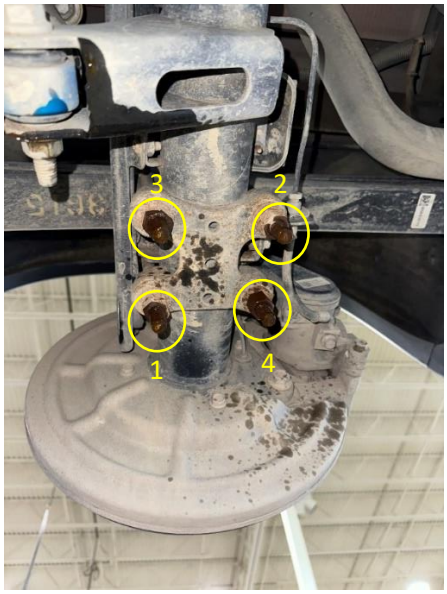


Figure 9

6. Remove the bolt connecting the shock to the axle. (Figure 10)

Figure 10

V. INSTALLATION FOR LIFT BLOCKS

1. Using your jack or support system, cautiously lower your axle on the side you are working on to allow room for the AEV lift block to be installed.
2. Remove the factory lift block, then install your AEV lift block underneath the leaf springs. These blocks are not tapered, so it is not critical which end is forward.
3. The lift blocks might need some force to set them into place. It is recommended to use a rubber mallet if needed.
4. Install AEV U-Bolts, factory lower U-Bolt plate, and M14 lock nuts from AEV kit. (Figure 11)

Figure 11

VI. REINSTALLATION FOR LIFT BLOCKS

1. Using the included M14 Top Lock Flange Nuts from the AEV fastener pack, loosely snug the U-Bolts. They must be tight enough to keep the center pins engaged to align the axle, while still allowing play when installing the lift blocks on both sides.
2. Reinstall rear shocks to a torque of 160Nm (118lb-ft).
3. Tighten the provided U-Bolt nuts using the numbered pattern in Figure 9 and the torque specs below to ensure all are aligned and tightened evenly.
    a. First Pass: 80Nm (59lb-ft)
    b. Second Pass: Loosen 180 degrees
    c. Third Pass: 80Nm (59lb-ft)
    d. Final Pass: 120 - 140 degrees
4. Repeat all processes on the other side of the vehicle.

VII. VEHICLE PREPARATION FOR BODY LIFT SPACERS

1. Loosen radiator skid to remove closeout panels.
2. Loosen bolts from body mounts at the marked locations. Remove only the bolts from the side of the cab you're starting with for spacer installation. Save these bolts for reinstallation later. (Figure 17)
3. Using a jack or multiple jacks, find a spot on your truck's cab to be able to lift one side at a time in order to install body lift spacers. It is suggested to use crossmembers or other reinforced areas to prevent bending or damaging thin body panels; lift the body enough to slide the AEV spacers in between the mounts and the body (roughly 5/8"). (Figure 12)

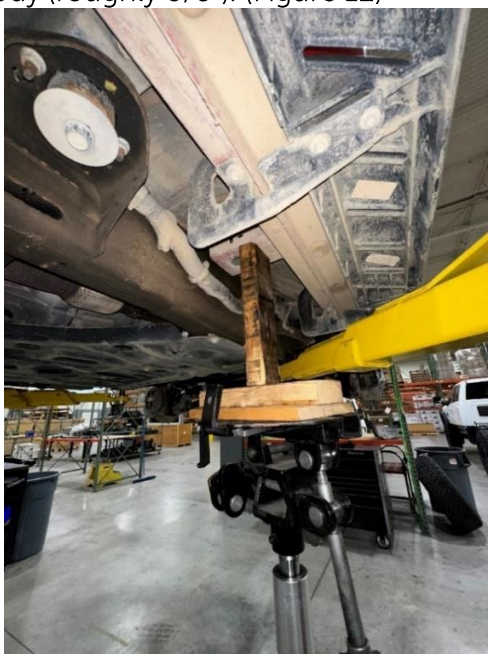


Figure 12

VIII. INSTALLATION FOR BODY LIFT SPACERS

1. Install AEV General Body Spacers in between body and mount. (Figure 13)

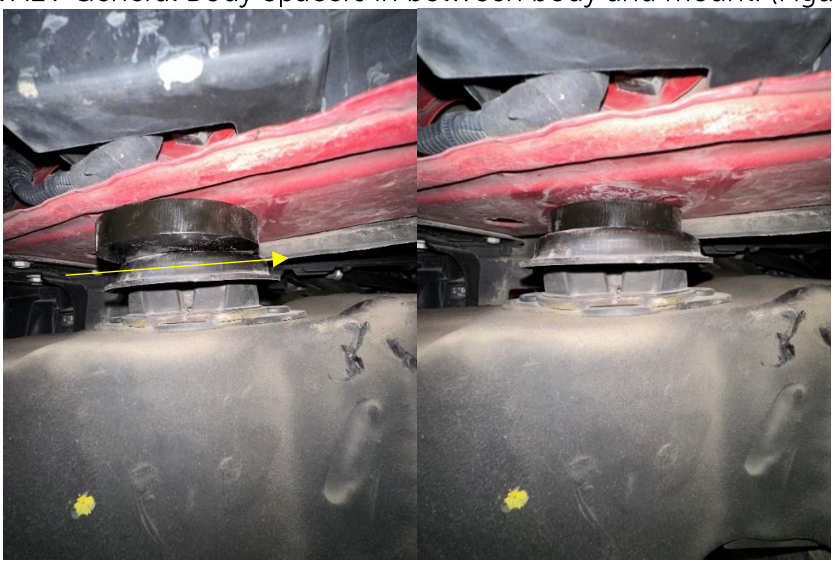


Figure 13

2. Repeat this process 4 times on one side. Refer to Figure 17

IX. REINSTALLATION FOR BODY LIFT SPACERS

1. Loosely reinstall factory bolts.
2. Move to the other side of the vehicle and repeat the “Installation for Body Lift Spacers” steps.
3. Once all spacers and bolts are installed, torque bolts to 165Nm (122lb-ft).

X. VEHICLE PREPARATION FOR BED LIFT SPACERS

1. Loosen bolts from body mounts at the marked locations. Remove only the bolts from the side of the bed you’re starting with for spacer installation. (Figure 17)
2. Screw the Flanged Button Socket Bolt into the small General Support Spacers. These bolts are used as alignment pins when installing. (Figure 14)

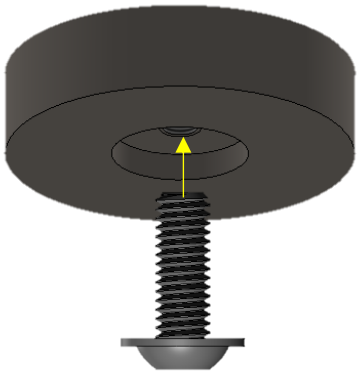


Figure 14

3. Use a jack to lift the bed of the vehicle about 5/8”; enough to slide the AEV spacers in between the mounts and the body. It will need to be raised slightly further for the spacers with the alignment pins. (Figure 15)

Figure 15

XI. INSTALLATION FOR BED LIFT SPACERS

1. Slide the spacers in between the bed and the mounts. Refer to Figure 17 to understand where the spacers go.
    a. The general support spacers will be installed in the wheel well. The plastic shim that is already on the vehicle will remain there. You will need to place these and slowly lower the bed to use the screw as a location pin. The studs should stick up into the bed of the vehicle. (Figure 16)

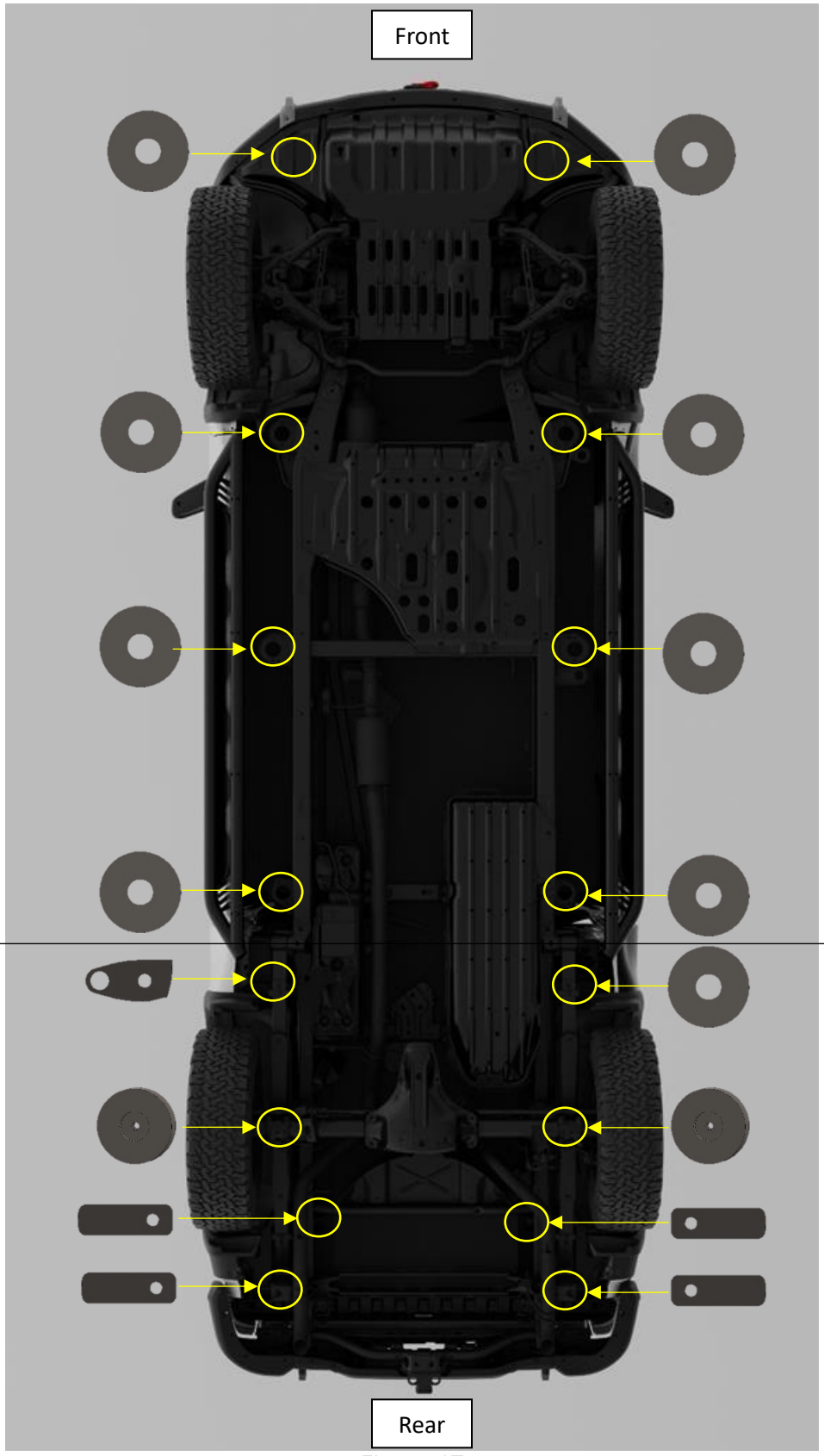
Figure 16

XII. REINSTALLATION FOR BED LIFT SPACERS

1. Slowly lower the bed while making sure the General Support Spacers are correctly aligned.
2. Replace bolts for the rectangular spacers with the supplied M12x40 bolts from hardware pack and install loosely. Round front spacers can reuse factory bolts.
3. Move to the other side of the vehicle and repeat the above steps.
4. Once all spacers and bolts are installed, torque bolts to 85Nm (63lb-ft).

Underside of vehicle shown.

Body

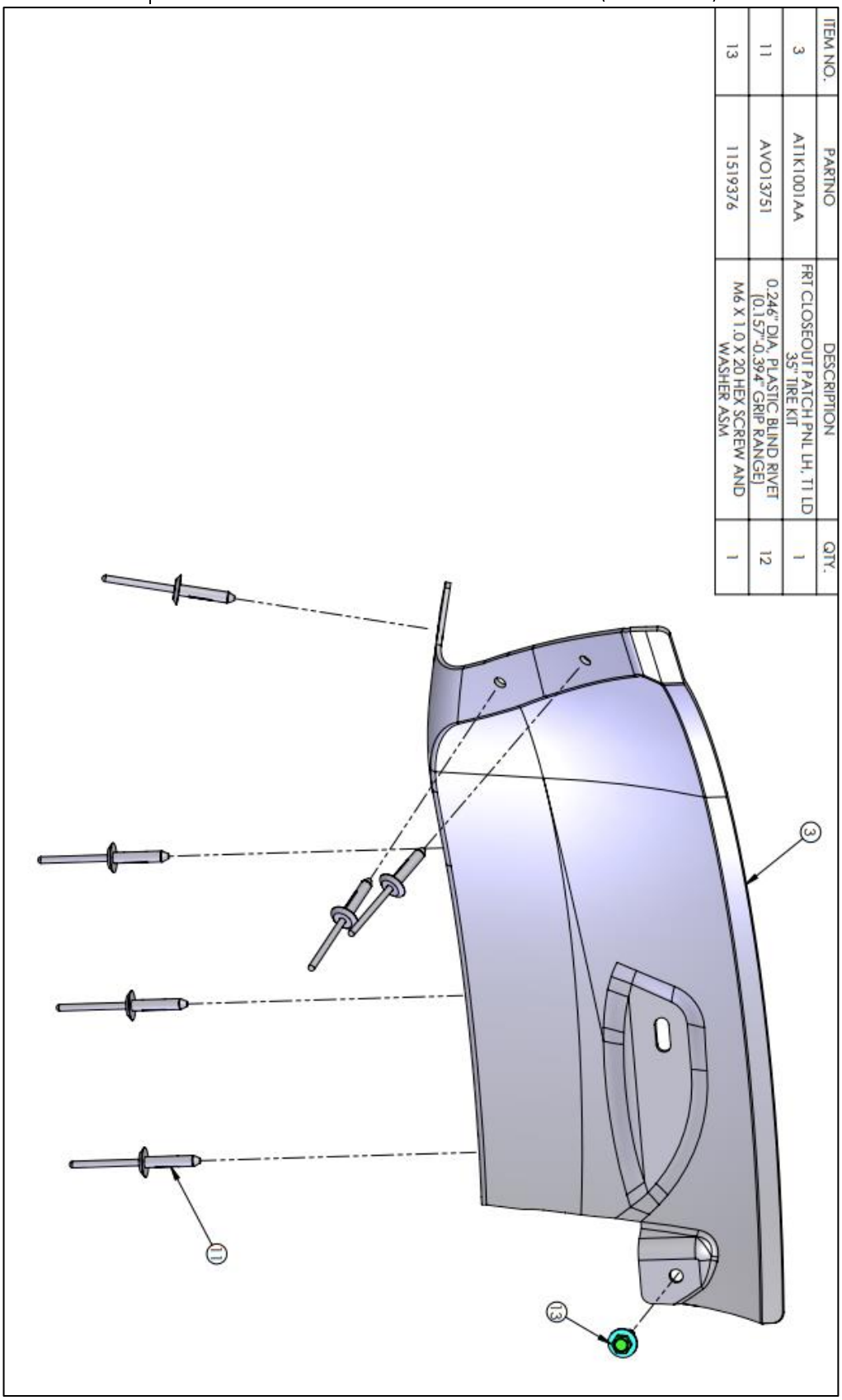


Bed Spacers

Figure 17

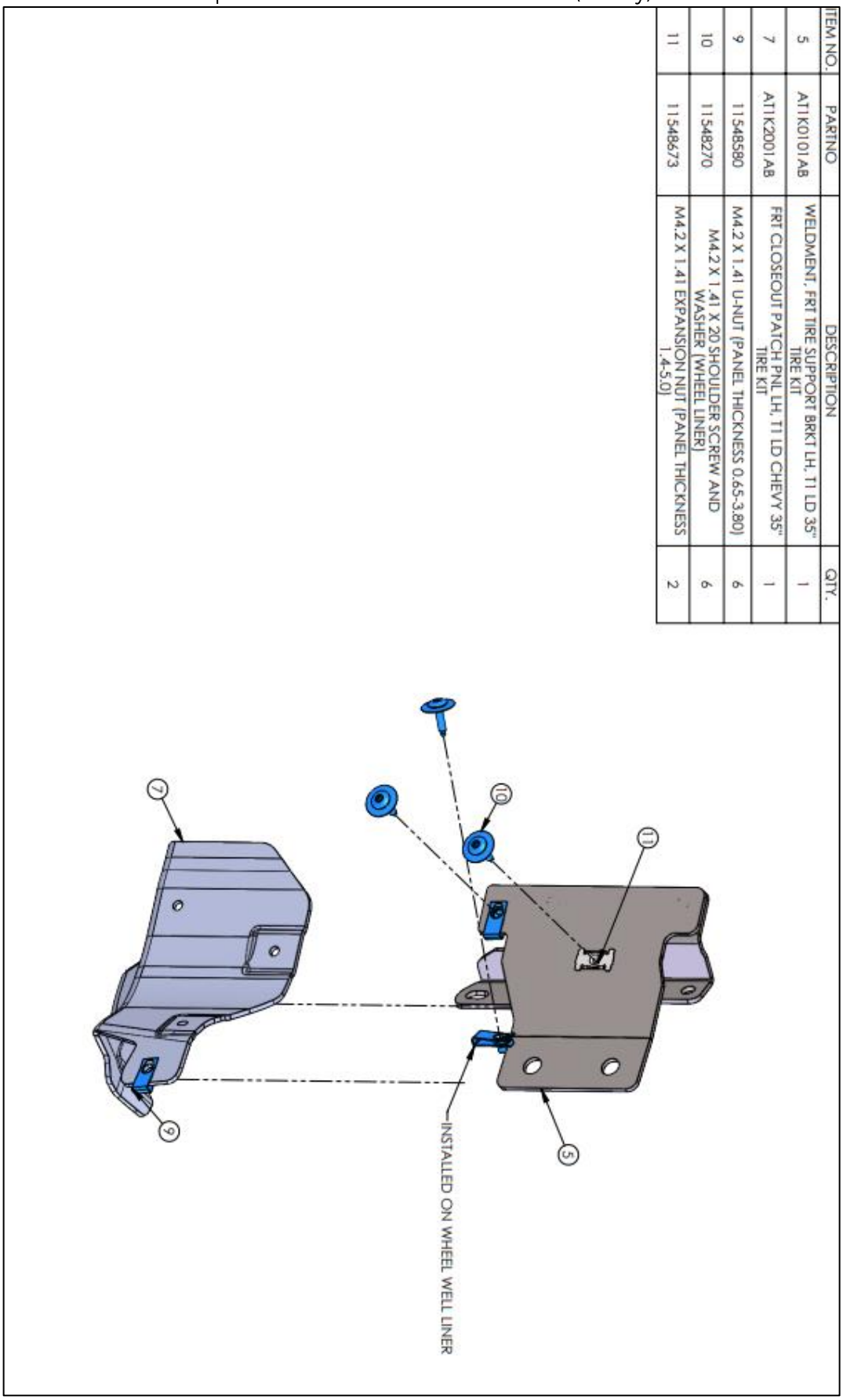
Exploded Front Closeout Patch Panel View (Common)

ITEM NO.	PARTNO	DESCRIPTION	QTY.
3	ATIK1001AA	FRT CLOSEOUT PATCH PNL LH, TI LD 35" TIRE KIT	1
11	AVO13751	0.246" DIA. PLASTIC BLIND RIVET (0.157"-0.394" GRIP RANGE)	12
13	11519376	M6 X 1.0 X 20 HEX SCREW AND WASHER ASM	1



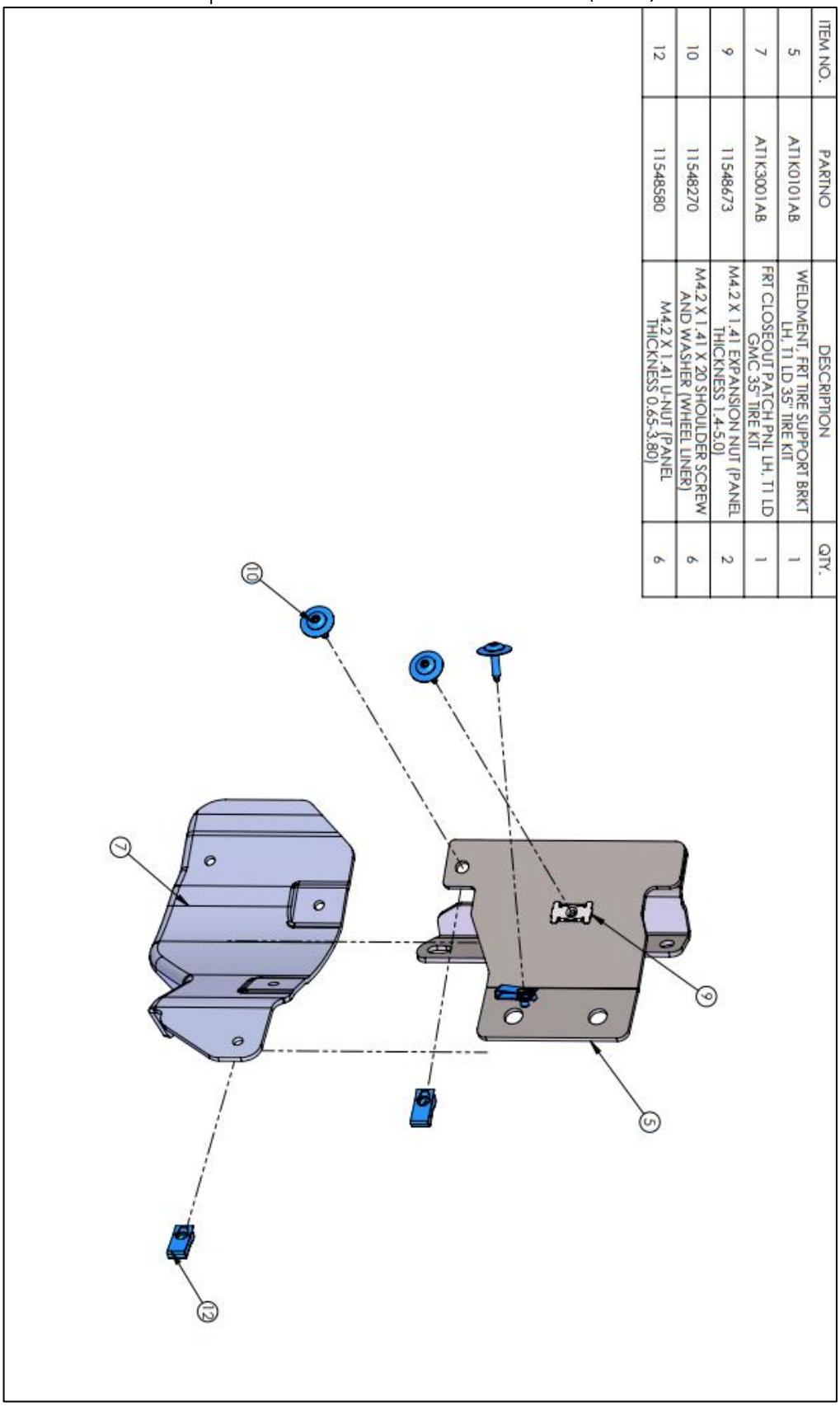
Exploded Front Rear Flare Extension (Chevy)

ITEM NO.	PARTNO	DESCRIPTION	QTY.
5	A1K0101AB	WELDMENT, FRT TIRE SUPPORT BRKT LH, T1 LD 35" TIRE KIT	1
7	A1K2001AB	FRT CLOSEOUT PATCH PNL LH, T1 LD CHEVY 35" TIRE KIT	1
9	11548580	M4.2 X 1.41 U-NUT (PANEL THICKNESS 0.65-3.80)	6
10	11548270	M4.2 X 1.41 X 20 SHOULDER SCREW AND WASHER (WHEEL LINER)	6
11	11548673	M4.2 X 1.41 EXPANSION NUT (PANEL THICKNESS 1.4-5.0)	2



Exploded Front Rear Flare Extension (GMC)

ITEM NO.	PARTNO	DESCRIPTION	QTY.
5	ATIK0101AB	WELDMENT, FRT TIRE SUPPORT BRKT LH, T1 LD 35" TIRE KIT	1
7	ATIK3001AB	FRT CLOSEOUT PATCH PNL LH, T1 LD GMC 35" TIRE KIT	1
9	11548673	M4.2 X 1.41 EXPANSION NUT (PANEL THICKNESS 1.4-5.0)	2
10	11548270	M4.2 X 1.41 X 20 SHOULDER SCREW AND WASHER (WHEEL LINER)	6
12	11548580	M4.2 X 1.41 U-NUT (PANEL THICKNESS 0.65-3.80)	6



XIII. PREP AND INSTALLATION FOR FRONT CLOSEOUTS

1. Use a 2-post hoist or jack and jack stands to raise and secure your vehicle by the frame until the tires are off the ground.
2. Remove both front wheels. All modifications are at the front of the vehicle, no clearance modifications are required at the rear axle.
3. Remove your vehicle's OEM bumper Closeouts. To do so, remove the 3 bolts highlighted below, and the 2 bolts in the wheel well. Save these bolts for reinstallation later. (Figure 18)

Figure 18

4. Trim and remove the below section, including the bolt, on the LH side of your vehicle. By removing this section, it will help your AEV closeout sit more flush to your wheel liner and provide extra clearance for your tires. Be sure to remove the 6mm bolt on the inboard side. A replacement bolt is provided in your fastener pack to use when reinstalling. (Figure 19; Chevy Picture)

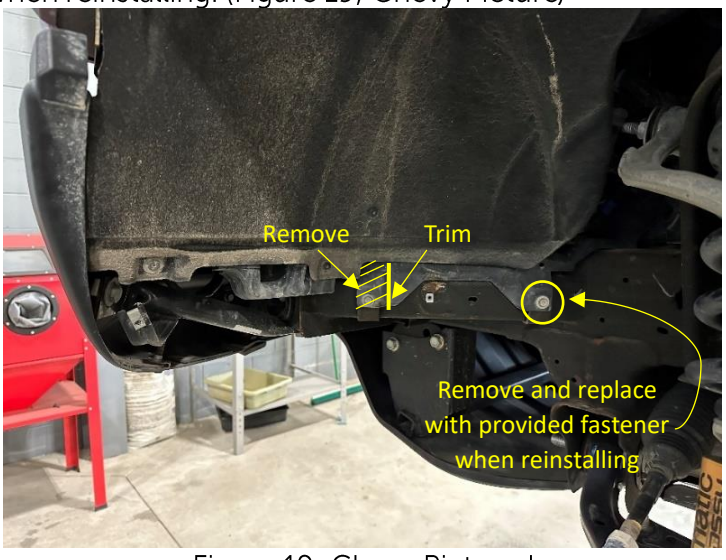


Figure 19; Chevy Pictured

5. Line up the AEV front closeout trim template to your OEM closeout. Trace the outside of the template with a silver marker. (Flip the template over to use on the other side of the vehicle.) (Figure 20)

Figure 20

6. Trim your OEM closeout using the silver traced line from the trim template. This can be done with a die grinder, body saw, or even carefully with a jig or band saw. Clean up the trimmed edges so the new closeout panel can sit flush against the OEM closeout.
7. Line up your new AEV front closeout to your now trimmed OEM closeout. To attach, it is recommended to drill a ¼" hole and rivet each individual hole as you go, working from the outboard side in. (Figure 21)

Figure 21

8. Reuse the bolts from OEM Closeout to reinstall your new AEV closeout. (Figure 22)

Figure 22

9. Be sure to install the provided bolt on the LH inboard side of the vehicle when reinstalling your AEV closeout.

XIV. PREP AND INSTALLATION FOR FRONT REAR CLOSEOUTS

1. When working in this area, it is recommended to remove the rear half of your flare to make it easier to work.
2. Remove your vehicle's lower flare extensions. To do so, remove the 4 bolts highlighted below (Figure 23; Chevy pictured). Be sure to save the bolts. These will be used for the reinstallation process. These will also be held in by separate clips on the inside the flare extension. Depending on the GM brand, your clips will be different. Refer to Figure 24 below to determine your clip shape. It is recommended to pinch these to remove them from the vehicle to prevent damage. Spare clips are included in the hardware package in case these are damaged.

Figure 23; Chevy Pictured

Chevy GMC

Figure 24

3. Using the AEV trim template, line up your flare extension and trace the outline with a sliver marker. (Flip the template over to use on the other side of the vehicle. A relief cut has been added to the GMC template to prevent it from splitting.) (Figure 25)

Chevy GMC

Figure 25

Chevy GMC

Figure 25

4. Remove the trim template and use your silver marked trim line as a guide to trim your OEM flare extension. (Figure 26)

Chevy GMC

Figure 26

5. To access the OEM rear wheel liner bracket, it is recommended to remove the adjacent bolt from the wheel liner. (Figure 27)

Figure 27

6. Remove your OEM rear wheel liner brackets. Be sure to save the bolts. (Figure 28)

Figure 28

7. When installing your new AEV rear wheel liner bracket, be sure to reuse the OEM bolts. Once all four mounting bolts have been hand started, torque them to 17Nm (12.5 lb-ft)
8. Install the u-nut on the bottom of the bracket for a bolt to be threaded in from inside the wheel well. Installing it so the closed end is facing outboard on the vehicle, not toward the nearby frame bracket. Install the green expansion nut in the center of the AEV front rear wheel liner bracket. (Figure 29)

Figure 29

9. Using the wheel liner trim template, outline your cut line and drill a ¼" hole. (Flip the template over to use on the other side of the vehicle.) (Figure 30; Chevy Pictured)

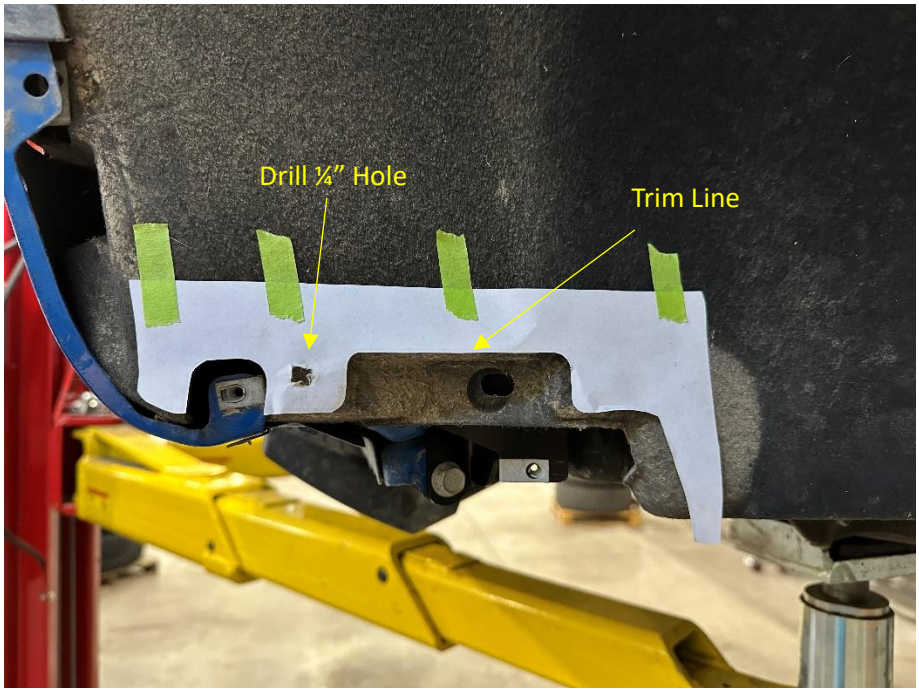


Figure 30; Chevy Pictured

10. Remove the template. Using your outlined trim line, cut along the line to remove unwanted material, and drill a ¼" hole, being careful not to drill through anything else behind the liner. This can be cut using sharp shears or knife. Once this is cut, add the provided u-nut to the newly drilled template hole. A ¼" hole will also need to be drilled in your wheel liner for the AEV rear wheel liner top screw. It is recommended to drill this hole large to help insert the bolt. (Figure 31; Chevy Pictured)

Figure 31; Chevy Pictured

11. Your new AEV flare extension will be positioned behind your OEM flare extension. (Figure 32; Chevy Pictured)

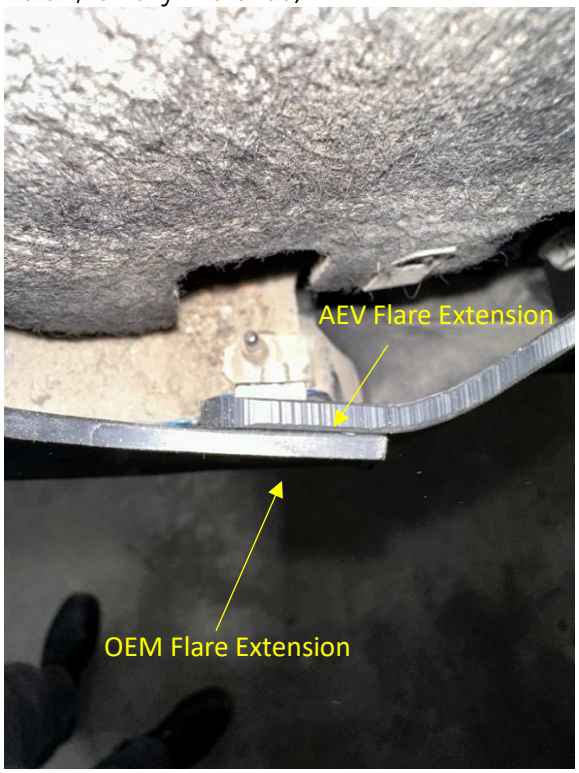


Figure 32; Chevy Pictured

12. Attach your new AEV flare extension using the hardware provided. To make it easier to bolt the wheel liner to the AEV flare extension, it is recommended to use a tool behind the wheel liner to push it forward in vehicle. (Figure 33; Chevy Pictured)

Figure 33; Chevy Pictured

13. Once the closeout is loosely fastened in all locations, torque all hardware to spec. Small M4.2 screws: 3 Nm (25 lb-ft). Larger M6 bolts: 17Nm (12.5 lb-ft)
14. Install wheels and tires and torque lug nuts to 190Nm(140lb-ft).
15. Enjoy your new AEV 35" Tire Clearance Kit!

NOTE: Be sure to check clearances to other accessories and add-on such as electric folding steps.