



## D1403 Installation Instructions

2019-2025 Ram 2500

2019-2025 Ram 3500

4" Gas & 4.5" Diesel Replacement Radius Arm  
Suspension Lift

### Read and understand all instructions and warnings prior to installation of product and operation of vehicle.

Zone Offroad Products recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known. Minimum tool requirements include the following: Assorted metric and standard wrenches, hammer, hydraulic floor jack and a set of jack stands. See the "Special Tools Required" section for additional tools needed to complete this installation properly and safely.

#### »» PRODUCT SAFETY WARNING

Certain Zone Suspension Products are intended to improve off-road performance. Modifying your vehicle for off-road use may result in the vehicle handling differently than a factory equipped vehicle. Extreme care must be used to prevent loss of control or vehicle rollover. Failure to drive your modified vehicle safely may result in serious injury or death. Zone Offroad Products does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

You should never operate your modified vehicle under the influence of alcohol or drugs. Always drive your modified vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Always wear your seat belt.

#### »» TECHNICAL SUPPORT

[www.zoneoffroad.com](http://www.zoneoffroad.com) may have additional information about this product including the latest instructions, videos, photos, etc.

Send an e-mail to [tech-zone@ridefox.com](mailto:tech-zone@ridefox.com) detailing your issue for a quick response.

888.998.ZONE Call to speak directly with Zone tech support.

#### »» PRE-INSTALLATION NOTES

1. Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.
2. Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
3. Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.
4. Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced.
5. Secure and properly block vehicle prior to installation of Zone Offroad Products. Always wear safety glasses when using power tools.
6. If installation is to be performed without a hoist, Zone Offroad Products recommends rear alterations first.
7. Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle attitude. Always measure the attitude prior to beginning installation.

#### Difficulty Level

easy 1 2 3 **4** 5 difficult

Estimated installation: 7-8 hours

#### Special Tools Required

Pitman Arm Puller

Boot Clamp Pliers

#### Tire/Wheel Fitment

37x12.50 w/9" wide 5-1/2" Back-spacing

35x1250 w/ 9" wide 4-1/2" Back-spacing

## IMPORTANT

It is required that ride height measurements be taken before and after installation. Measure from the **WHEEL AXLE CENTER** up to the **FENDER LIP** of the wheel opening. Do this for all 4 wheels. Record measurements below.\*\*

### BEFORE:

*LF* \_\_\_\_\_ *RF* \_\_\_\_\_ *LR* \_\_\_\_\_ *RR* \_\_\_\_\_

### AFTER:

*LF* \_\_\_\_\_ *RF* \_\_\_\_\_ *LR* \_\_\_\_\_ *RR* \_\_\_\_\_



*\*\*These ride heights will be required if you have any ride height concerns after installation. Please be prepared to provide these to Technical Support.*

**\*Important\* Verify you have all of the kit components before beginning installation.**

<b>D1403 Kit Contents</b>			
		1/1	Brakeline Bracket (DRV/PASS)
<b>Qty</b>	<b>Part</b>	1	Loctite
2	Coil Spring (Diesel Only) <i>or</i>	2	Zip Tie
2	Coil Spring (Gas only)	1/1	Drive Shaft Boot Clamps
2	Radius Arm	1	Bolt Pack
4	Radius Arm Bushing	2	14mm-2.00 x 35mm bolt - 10.9 Clear Zinc
2	Radius Arm Sleeve	4	14mm Flat Washer - Clear Zinc
2	Bump Stop	2	14mm-2.00 Prevailing Torque Nut - Clear Zinc
1	Pitman Arm	1	Bolt Pack
1	4" Zone Track Bar Bracket	2	1/4" USS Washer - Clear Zinc
		2	5/16"-18 Prevailing Torque Nut - Clear Zinc

## » PRE-INSTALL NOTES

*Notes: Separate instructions are provided with the Index ring & Rear Box kits.*

## INSTALLATION INSTRUCTIONS

1. Park vehicle on clean, flat, and level surface. Block the rear wheels for safety.
2. Remove the front trackbar bolt from the frame rail. Retain all hardware. **Figure 1**

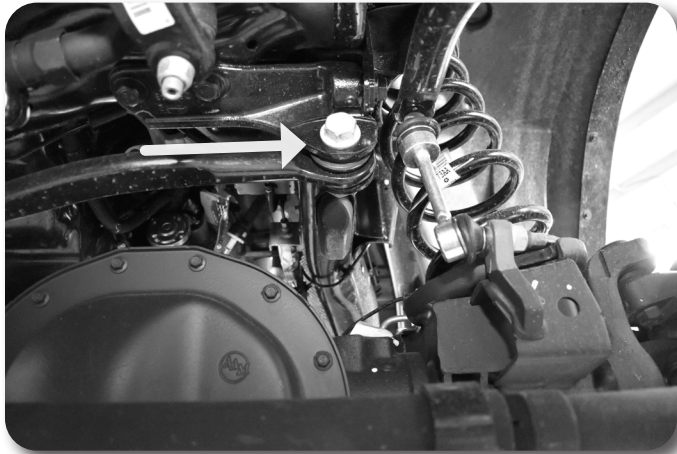


Figure 1

3. Raise the front of the vehicle and support the frame rails with jack stands. Do not support on the radius arms, they will be removed during the installation.
4. Support the front axle with a hydraulic jack.
5. Remove the factory wheels, remove the retaining clips that hold the rotor on and may interfere with aftermarket wheels.
6. Disconnect the front drive shaft from the front axle. Hang the drive shaft from the frame. Retain all hardware
7. Break the nut loose on the adjusting sleeve of the drag link. **Figure 2**



Figure 2

8. Disconnect the tie rod from the pitman arm, do not damage the tie rod boot. Mark the orientation of the pitman arm and remove the pitman arm from the sector shaft. Figure 3



Figure 3

9. Disconnect the sway bar links from the sway bar. Keep the nuts. Figure 4



Figure 4

10. Disconnect the brake line bracket from the top of the radius arm mount on the axle, retain bolt, discard bracket. Figure 5



Figure 5

11. Disconnect the factory shock from the lower shock mount. Figure 6 Lower the front axle and remove the coil springs.



Figure 6

12. Raise the front axle and reattach stock shocks with factory bolt. It is not necessary to put the nut tab back on. The shocks will be there to keep the axle secure. Keep a jack under the axle for extra support.
13. Grease bushings and sleeves, install into the new replacement radius arm. Thread grease fitting into eye with grease fitting facing down. Figure 7

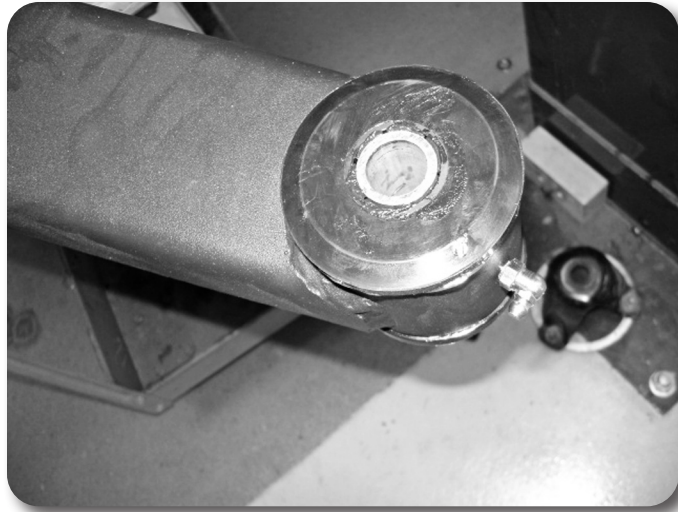


Figure 7

14. Remove the passenger's side radius arm. Retain all hardware. It will be necessary to remove the shock bolt and move the shock out of the way to get the upper hardware out.
15. Install the new radius arm. It may be difficult to hookup all of the hardware at this time. Hook up the upper radius arm bolt at the axle and the frame first. Reattach the front shock for safety. Figure 8 & 9

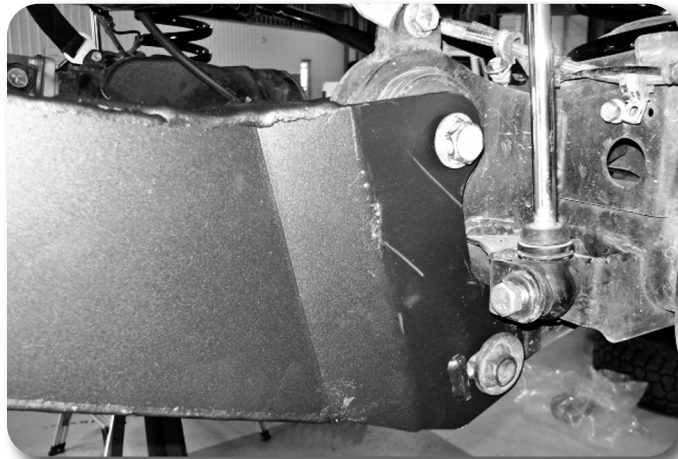


Figure 8

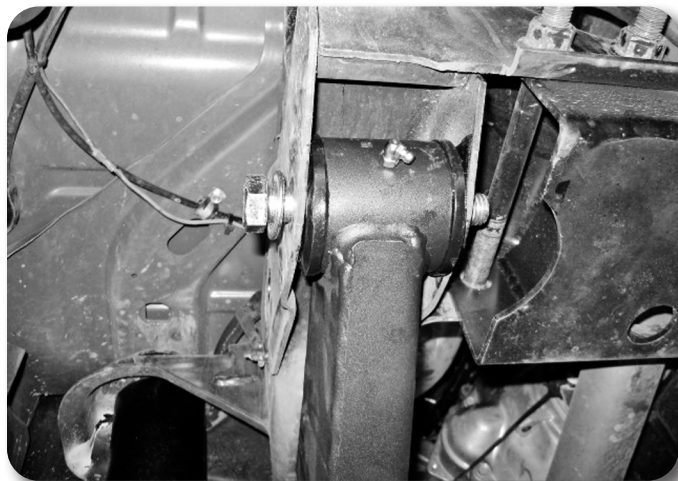


Figure 9

16. Support the pinion, disconnect the driver's side radius arm hardware and remove the stock arm.
17. Install the lower cam bolt on the passenger's side if it was unable to be installed in the previous step.
18. Install new driver's side arm with factory hardware. Reattach the factory shock for safety.
19. Adjust the cam so the bolt head is as far forward as possible (same as Pass side). Tighten radius arm hardware at the axle to 200 ft-lbs. Leave radius arm pivot hardware loose at the relocation brackets.
20. Remove the factory bump stops, it is easiest to hit them from side with a hammer to pop them out. Figure 10



Figure 10

21. Grease new replacement bump stops and raise axle with hydraulic jack to press the bump stops into position. These will be a tight fit. Figure 11



Figure 11

22. Remove the factory track bar bracket, retain the vertical hardware that goes into the cross member.
23. Install the provided trackbar bracket with factory bolts through the original vertical trackbar bracket holes in the crossmember, do not tighten.
24. Use the provided 14mm hardware, Bolt the new trackbar bracket to the Frame tab with the nut on the inside of the frame tab. Use OE hardware in the 3 remaining holes. Torque the OE bolts to 118 ft-lbs and provided 14mm hardware to 148.4 ft-lbs. Figure 12



Figure 12

25. Support front axle and remove the stock shocks. Retain the lower hardware, discard shocks and upper hardware.
26. **CAUTION:** Disconnect the transmission line bracket (Fig.13A) to move lines away from the top of coil bucket while drilling the indexing hole for the top spacer. For 2025 RAM 2500/3500 coil over conversion ONLY use the provided spacer and bolt. (Fig. 13B)



Figure 13A

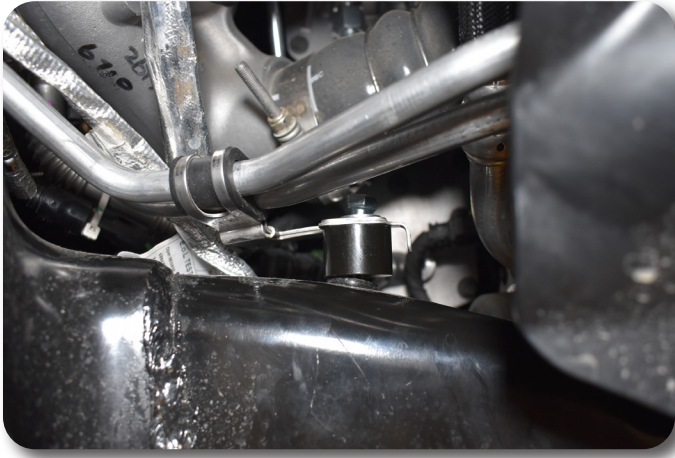


Figure 13B

27. Diesel Kits Only:

Lower the axle and install the new coils with factory isolator. The passenger's side upper mount will need to be reindexed. There is a template at the end of the instruction sheet. Cut this out and place over the passenger's side upper mount, mark hole center, and drill to 1/2". The hole should now be directly to the 'outside' of the vehicle. Install isolator with new coil spring. Ensure that coils are seated properly, have someone help if necessary. Figure 13c, 13d, 13e, 13f



Figure 13c

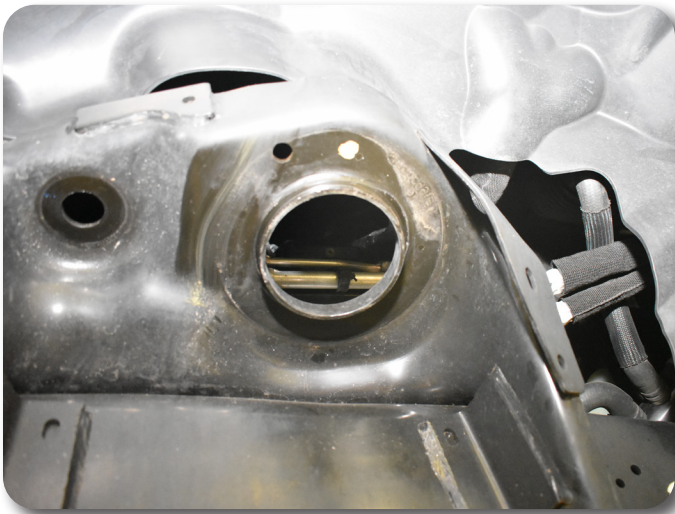


Figure 13d



Figure 13e



Figure 13f

**Fig 13a-13j Note:**

Index the Passenger's side coil only as shown.

28. Gas Kits Only:  
Lower the axle and install the new coils with factory isolator. The passenger's side upper mount will need to be reindexed. There is a template at the end of the instruction sheet. Cut this out and place over the passenger's side upper mount, mark hole center, and drill to 1/2". The hole should now be directly to the 'REAR' of the vehicle. Install isolator with new coil spring. Ensure that coils are seated properly, have someone help if necessary. Figure 13g, 13h, 13i, 13j



Figure 13g

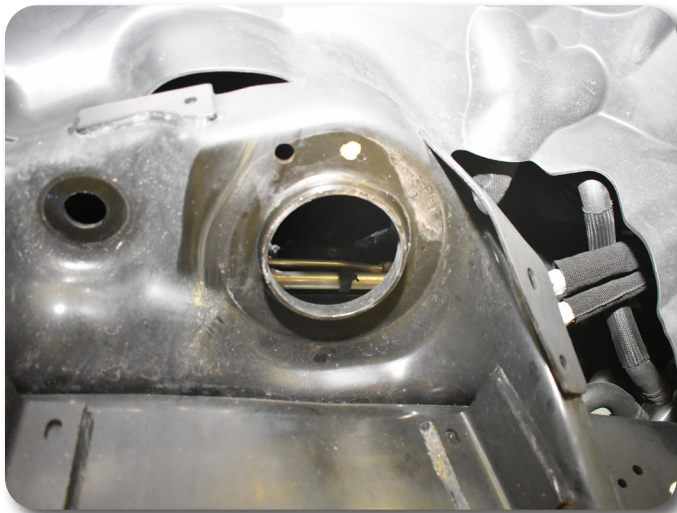


Figure 13h



Figure 13i

### Step #29 Note:

Due to radius arm design - hook up the lower shock mount first for easiest installation

### Step #31 Note:

Tie rod end should be facing up.



Figure 13j

29. Grease and install bushings and sleeves into the shocks. Attach the lower shock with factory hardware. Tighten hardware to 65 ft-lbs.
30. Attach shocks with new cup washers, bushings, and 1/2" nut at the top mount. Tighten the nut until the bushings begin to swell.
31. Mark or measure the amount of exposed threads on the drag link sleeve. Loosen the drag link sleeve until you can rotate the tie rod end 180deg. Rethread the drag link sleeve to the original location. This is a starting point and will need to be adjusted after the installation is complete. Figure 14 & 15



Figure 14



Figure 15

32. Install new pitman arm, use alignment mark made earlier. Loctite factory nut and install with lock washer tighten nut to 225 ft-lbs. Figure 16A



Figure 16A

33. Attach drag link to pitman arm with factory nut. Tighten to 27 ft-lbs plus 180deg. Figure 16B



Figure 16B

34. Disconnect brake line bracket from the frame location. Figure 17 (Driver Side shown). Mount the factory brake line bracket to the axle with OE hardware. Slightly bend the factory axle bracket to give the brake line more slack, torque to 10ft-lbs.
35. Mount the brake line relocation bracket to the factory brake line mount location at the frame with factory hardware, torque to 9ft-lbs. Mount the brake line to the relocation bracket using the provided 5/16" hardware, torque to 101in-lbs. Figure 17 (Driver Side)

### Step 34 Note

Use a small adjustable wrench or pliers to help bend the bracket slightly.

### Step 35 Note

The bracket will only rotate the brake line about 45deg. On the passenger side the bracket will end up resting against the motor mount frame bracket.



Figure 17

36. Reconnect the sway bar links with the factory hardware, torque to 81ft-lbs

**37. PLEASE SEE INDEX RING KIT INSTRUCTIONS AT THIS TIME.**

*NOTE: 2025 Diesels don't require an indexing ring to be installed. This step can be skipped.*

**38. PLEASE SEE REAR KIT INSTRUCTIONS AT THIS TIME.**

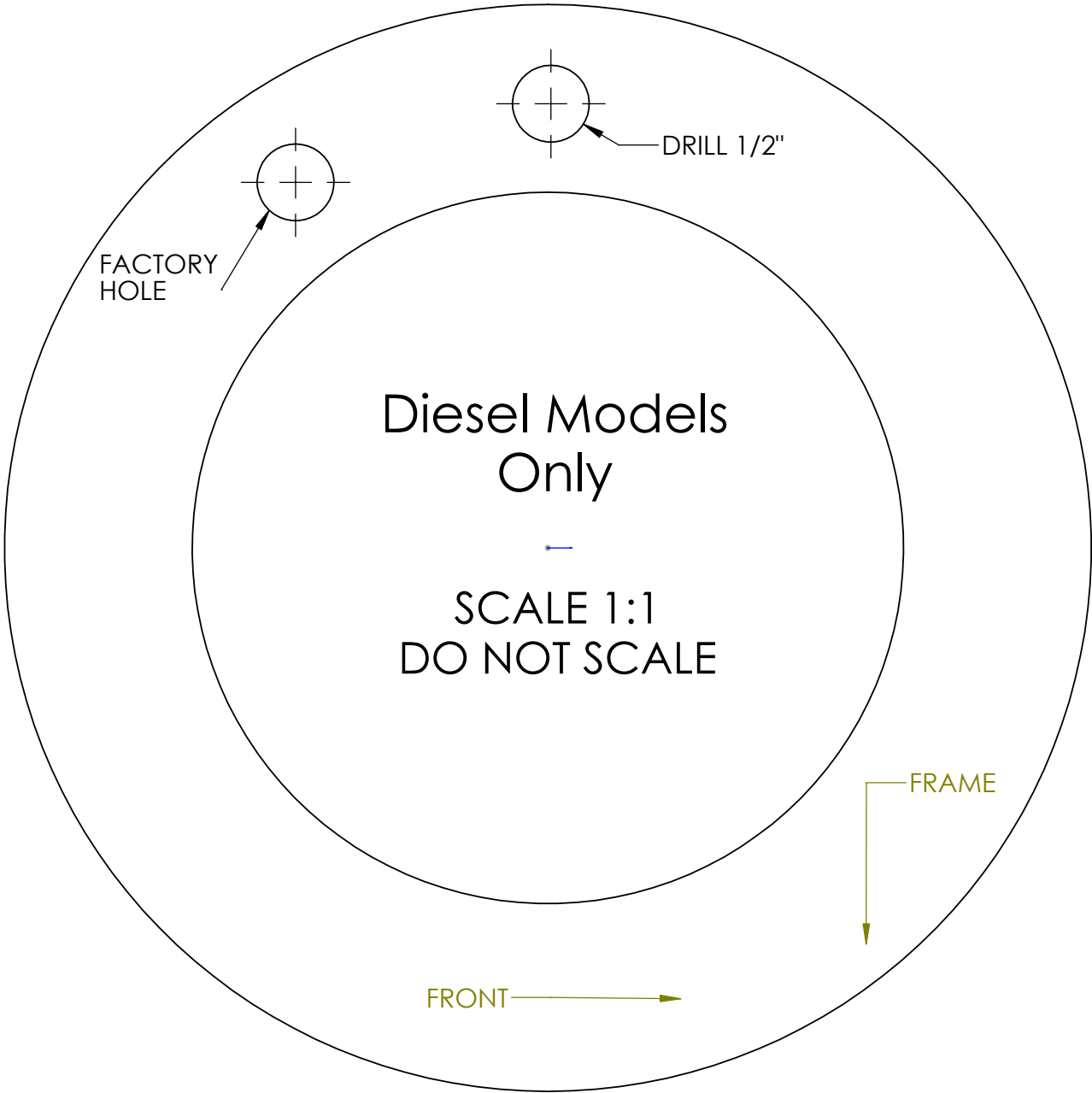
39. Install wheels and tighten lug nuts to factory specifications. Lower the vehicle to the ground.
40. Tighten radius arm hardware to 258 ft-lbs.
41. Turn the steering wheel to get the trackbar sleeve to align with the hole in the bracket. Tighten to 74 ft-lbs plus 160deg.
42. Recheck all hardware, check again at 500 miles, and again at regularly scheduled maintenance intervals.
43. Straighten the wheels, adjust the steering wheel to center. Torque the drag link clamp bolt to 55 ft-lbs. Do not drive the vehicle with the wheel off center or adverse traction control events may occur. An alignment is recommended at this time. The caster will be out of specification on the high side (6-7 degrees) with the cams all the way forward, this is acceptable to keep the caster from going negative during full droop incidences. If 4wd driveline or driving characteristics are not ideal, the caster can be lowered, however it is recommended to run as much as possible.

## Post-Installation Warnings

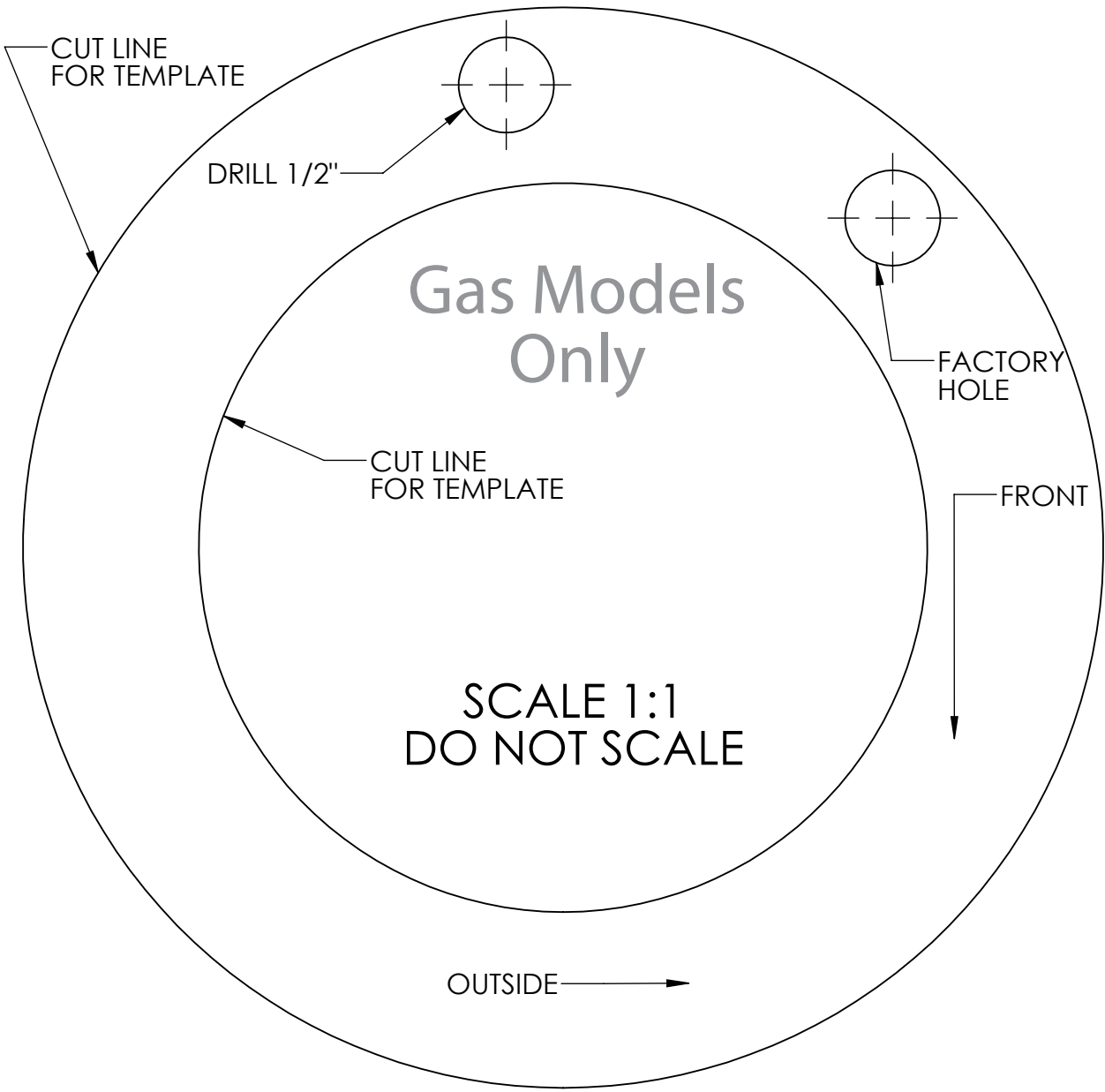
1. Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering gear for clearance. Test and inspect brake system.
2. Perform steering sweep to ensure front brake hoses have adequate slack and do not contact any rotating, mobile or heated members. Inspect rear brake hoses at full extension for adequate slack. Failure to perform hose check/replacement may result in component failure. Longer replacement hoses, if needed can be purchased from a local parts supplier.
3. Perform head light check and adjustment.
4. Re-torque all fasteners after 100 miles. Always inspect fasteners and components during routine servicing.

<b>Component</b>	<b>Torque (FT-LBS)</b>
<i>Front Track Bar OE Bolt</i>	<i>118</i>
<i>Front Track Bar Bracket 14mm Hardware</i>	<i>148.4</i>
<i>Front Lower Shock Bolt</i>	<i>65</i>
<i>Pitman Arm</i>	<i>177</i>
<i>Drag Link To Pitman Arm</i>	<i>27 + 180 degrees</i>
<i>Brake Line Bracket</i>	<i>10</i>
<i>Sway Bar Links</i>	<i>81</i>
<i>Radius Arm</i>	<i>258</i>
<i>Track Bar</i>	<i>74 + 160 degrees</i>
<i>Drag Link Clamp Bolt</i>	<i>55</i>











## D1258 Installation Instructions 2023 Ram 2500 2.5" Spacer Kits

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Zone Offroad Products recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known. Minimum tool requirements include the following: Assorted metric and standard wrenches, hammer, hydraulic floor jack and a set of jack stands. See the "Special Tools Required" section for additional tools needed to complete this installation properly and safely.

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**888.998.ZONE** Call to speak directly with Zone tech support.

#### Difficulty Level

easy 1 2 **3** 4 5 difficult

Estimated installation: 2 hours

#### Special Tools Required

1/2" Drill

#### Tire/Wheel Fitment

See front box kit

#### »» PRE-INSTALLATION NOTES

1. Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.
2. Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
3. Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.
4. Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced.
5. Secure and properly block vehicle prior to installation of Zone Offroad Products. Always wear safety glasses when using power tools.
6. If installation is to be performed without a hoist, Zone Offroad Products recommends rear alterations first.
7. Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle attitude. Always measure the attitude prior to beginning installation.

rev011725

**\*Important\* Verify you have all of the kit components before beginning installation.**

### D1258 Kit Contents

<i>Qty</i>	<i>Part</i>
2	Coil Spacers
1	Trackbar Bracket
1	2.125" Trackbar Spacer Sleeve
2	Bump Stop
2	15" Sway Bar Links
4	Hour Glass Bushing
4	Sway Bar Sleeves (5/8" OD x 1.375" Long)
1	Bolt Pack - Coil Spacer (#422)
1	Bolt Pack - Rear Box Kit (#497)

## INSTALLATION INSTRUCTIONS

1. Park vehicle on clean flat and level surface. Block front wheels for safety.
2. Disconnect the rear trackbar from the axle, retain all hardware. Fig 1

### Step 2 Note

*You may need to detach the vent hose clip from the track bar bracket to prevent the nut tab from puncturing the vent hose.*



Figure 1

3. Raise rear of vehicle and support frame rails with jack stands.
4. Remove the rear wheels.
5. Support the rear axle with a hydraulic jack.
6. Disconnect the rear sway bar links from the frame and sway bar. Fig 2



Figure 2

7. Disconnect the rear shocks and lower the axle, retain hardware. On the driver's side it is easiest to access the top hardware by cutting the inner fender well as shown. This trim procedure is not required but greatly aids in removal and installation of the shock. Fig 3a, 3b



Figure 3A



Figure 3B

8. Remove the rear coil springs and upper and lower coil spring retainers.
9. Install the rear coil spacers with 3/8" hardware (BP 422). Tighten 3/8" hardware to 35 ft-lbs.
10. Clearance the bottom two holes in the factory track bar bracket with a 1/2" drill bit to accept 7/16" hardware.
11. Install the track bar bracket to the axle. Hardware is located in bolt pack 497. First place the 2-1/8" long sleeve and place it inside the track bar bracket at the factory track bar bolt location using the provided 9/16" x 4" hardware. Using the 7/16" x 1-1/2" bolts, washers, and flange nuts attach the bracket through the bottom holes. Fig. 5A & 5B

### Step 11 Note

*Track bar hardware is in #497*

### Step 11 Note

*It may be necessary to grind the top of the OE track bar rear mount flange due to vehicle variances.*



Figure 5A

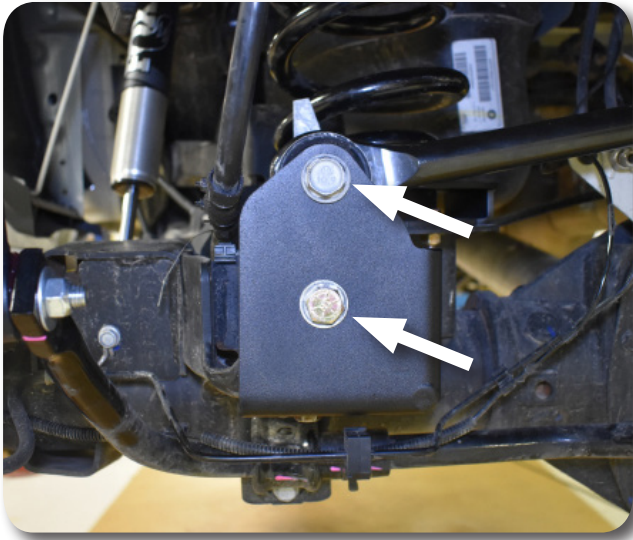


Figure 5B

12. Tighten trackbar bracket hardware as follows: 14mm factory hardware 140 ft-lbs, 7/16" hardware 70 ft-lbs.
13. Reinstall factory coils with OEM isolators on the spacers. Raise axle and ensure that the isolators are centered over the factory mounts. Orientate the coils so that the lower locating tab is at the rear of the vehicle. Fig 6

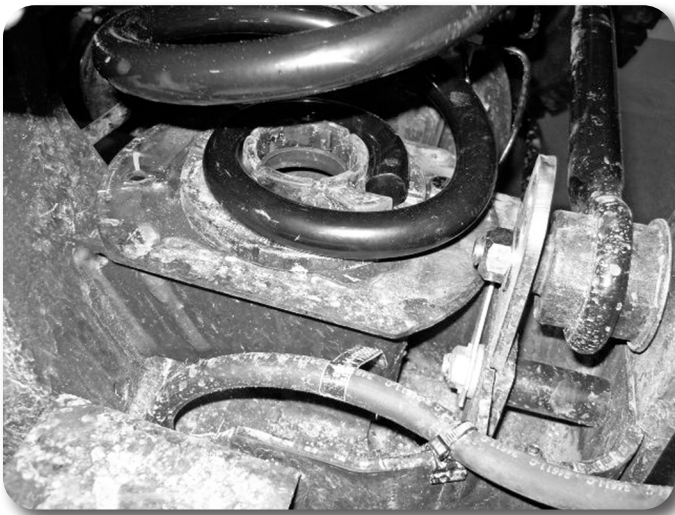


Figure 6

14. Open up the hole rearward of the OE shock hole inside the frame to 3/8" with a drill bit. Install the shock eliminator bracket onto the shock using hardware in bolt pack 946 included in the shock box. Tighten 1/2" eliminator hardware to 75ft-lbs. Install the shocks into the vehicle. Tighten 3/4" eliminator hardware to 120ft-lbs Fig. 7



Figure 7

### Step 15 Note

*Sway bar hardware (12mm x 65mm) is in #497*

15. Grease bushings and sleeves and install into sway bar links. Install sway bar links with new 12mm hardware. (BP 497). Tighten to 45 ft-lbs. Fig 8

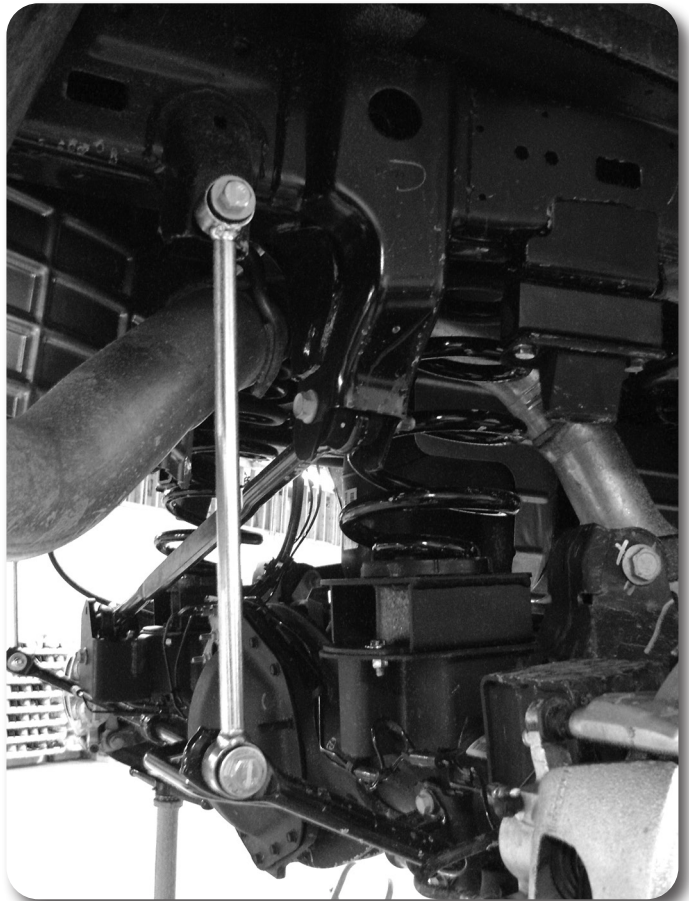


Figure 8

16. Remove the factory bump stops. Install bump stop drop brackets with new 10mm hardware (BP 497). Install so the small holes are to the inside of the vehicle. Tighten to 35 ft-lbs. Fig 9a, 9b

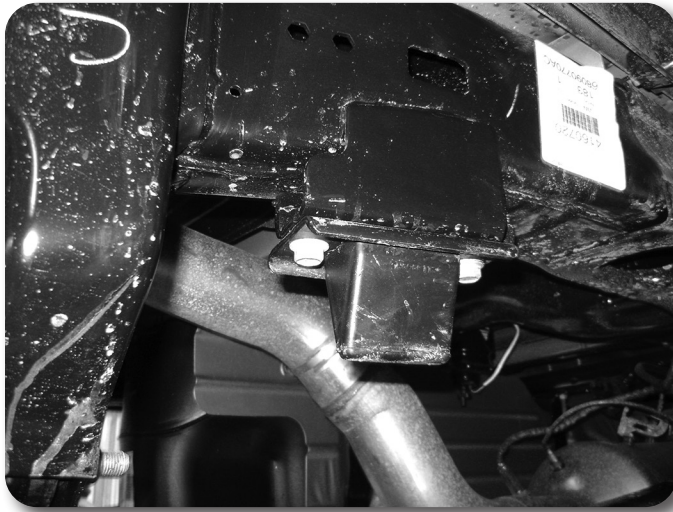


Figure 9A



Figure 9B

17. Reinstall wheels, if installing aftermarket wheels it is recommended to remove all of the rotor retaining clips to allow the wheel to sit flush against the rotor. Tighten to factory specifications.
18. Lower vehicle to the ground.
19. Attach trackbar to the new bracket with factory trackbar bolt and nut tab. It may be necessary to have an assistant push on one side of the truck slightly to get the holes aligned. Tighten to 154 ft-lbs.
20. Recheck all hardware for proper torque, check again after 500 miles.

### Post-Installation Warnings

1. Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering gear for clearance. Test and inspect brake system.
2. Perform steering sweep to ensure front brake hoses have adequate slack and do not contact any rotating, mobile or heated members. Inspect rear brake hoses at full extension for adequate slack. Failure to perform hose check/ replacement may result in component failure.
3. Perform head light check and adjustment.
4. Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.

<b>Component</b>	<b>Torque (FT-LBS)</b>
<i>14mm Trackbar Bracket Hardware</i>	<i>140</i>
<i>7/16" Trackbar Bracket Hardware</i>	<i>70</i>
<i>1/2" Shock Eliminator Hardware</i>	<i>75</i>
<i>3/4" Shock Eliminator Hardware</i>	<i>120</i>
<i>Sway Bar Link 12mm Hardware</i>	<i>45</i>
<i>Bump Stop 10mm Hardware</i>	<i>35</i>
<i>Trackbar to Bracket Bolt</i>	<i>154</i>



**D5612, D5624, D5823, D5620**  
**Installation Instructions**  
**2019-2025 Dodge 2500 Gas**  
**2019-2024 Dodge 2500 Diesel**  
**2019-2024 Dodge 3500 Gas & Diesel**  
**6-Bolt & 8-Bolt Transfer Case Indexing Ring Kit**

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**888.998.ZONE** Call to speak directly with Zone tech support.

**Difficulty Level**

easy 1 2 **3** 4 5 difficult

Estimated installation: 2 hours

**Special Tools Required**

short 9/16" wrench or

9/16" "S" shaped wrench

Seal Puller

Cut off wheel or Reciprocating saw

**» PRE-INSTALLATION NOTES**

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## Kit Contents

Qty	Description
1	Transmission Crossmember
1	Index Ring
1	Bolt Pack
1	Hose Clip
1	6mm-1 Prevailing Torque Nut - Clear Zinc
1	1/4" SAE Washer - Clear Zinc
4	Cable Ties
2	Cable Tie Tree
1	Loctite - 1ml
1/1	Stainless Steel Clamps
1	Exhaust Spacer - Drv (Used on 2019-2024 Gas models only)
1	Exhaust Spacer - Pass (Used on 2019-2024 Gas models only)
1	Seal Spacer (8-Bolt Only)
1	Output Seal (8-Bolt Only)
4	1/2" Spacer (Used on 6" Gas 2500 with Power Hop Damper Only)
1	Bolt Pack (8-Bolt Only)
8	10mm-1.50 x 30mm Flat Head Socket Cap Screw Class 10.9 - Black Oxide
8	3/8"-24 Hex Nut grade 8 - Yellow Zinc
8	3/8" Washer Cadmium Plate
1	Bolt Pack (6-Bolt Only)
6	10mm-1.50 x 30mm Flat Head Socket Cap Screw Class 10.9 - Black Oxide
6	3/8"-24 Hex Nut grade 8 - Yellow Zinc
6	3/8" Washer Cadmium Plate
1	Bolt Pack (Diesels Only)
1	5/8"-11 x 8" Grade 8 - Yellow Zinc
2	5/8" SAE Washer - Yellow Zinc
1	5/8"-11 Prevailing Torque Nut
1	Bolt Pack (Used on 2019-2024 Gas models only)
2	3/8"-16 x 4", Yellow Zinc
2	3/8"-16 x 3", Yellow Zinc
4	3/8 SAE Washer, Yellow Zinc
1	Bolt Pack (Used on 6" Gas 2500 with power hop Damper Only)
2	1/4"-20 x 3/4" Clear Zinc
2	1/4"-20 Prevailing Torque Nut, Clear Zinc
4	1/4" SAE Washer, Clear Zinc
4	10mm-1.50 x 50mm Bolt Clear Zinc
4	10mm-1.50 x 50mm Bolt, Clear Zinc

## IMPORTANT

*Zone Offroad recommends upgrading the transmission output shaft on vehicles with larger tires that will see heavy loads from other upgrades such as gearing, or performance tunes especially in high payload, heavy towing, or competition pulling applications.*

*2025 Models Only: Exhaust modification is required to clear front driveshaft. Vehicle can be driven w/o front driveshaft to an exhaust shop.”*

*2019-2024 Models only: Even with included exhaust spacers, some vehicles may require slight exhaust modification, see instructions for details.*

## INSTALLATION INSTRUCTIONS

1. Park vehicle on clean, flat, and level surface. Block the rear wheels for safety.
2. Remove the transfer case skid plate if equipped, it will not be reinstalled.
3. Remove the rear driveshaft, retain hardware. Disconnect the front driveshaft from the transfer case. It will be necessary to remove the forward most clamp on the front drive shaft boot to access the retaining clip to slide the front drive shaft off. Replacement clamps are provided (Figure 1a, 1b, 1c)

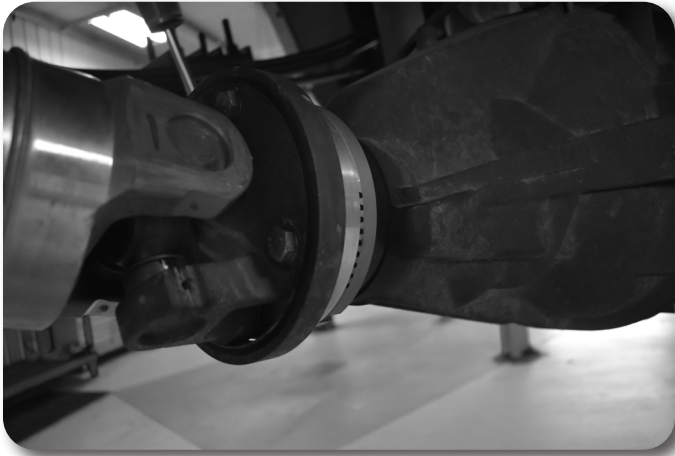


Figure 1a



Figure 1b



Figure 1c

4. Disconnect the wire harness that controls the transfer case. (Figure 2)
5. (Diesel Models only) To make removing the transfer case easier. Support the DEF Tank cross member with a jack. Remove the 2 exhaust mount bolts that are on the top of the DEF crossmember. Remove all 6 bolts supporting the cross member to the frame. Lower the crossmember where the top bolt holes lines up with the lower hole on the frame. Reinsert a bolt into each mount to support the crossmember.



Figure 2

6. Remove the 3 nuts that hold the transmission mount to the transmission cross-member. (Figure 3)

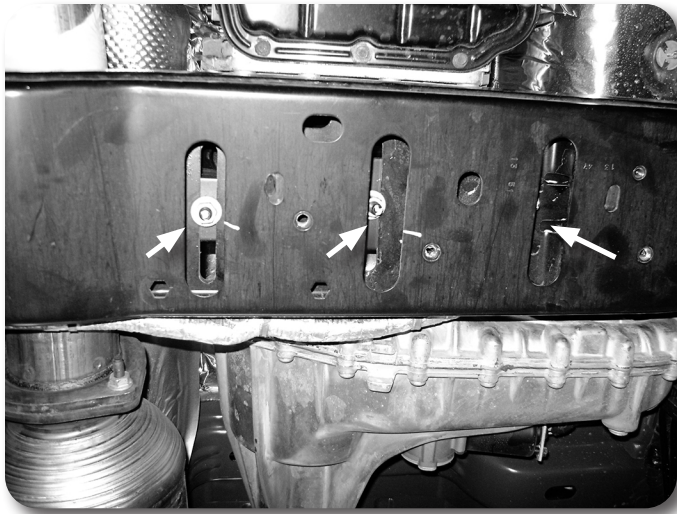


Figure 3

7. With the transmission well supported with a jack, remove the transmission crossmember and retain hardware.

*NOTE: 2019 Diesel Models Only Loosen the inner bolt on the passenger side for the transmission crossmember. Cut the Head off of the bolt so the bolt can be removed without removing the exhaust. Replacement hardware is provided. (Figure 4a)*



Figure 4A

8. If necessary to access the transfer case bolts, remove the transmission mount from the transmission. If equipped with a manual t-case & gas engine the transmission mount must be removed (Figure 4b)

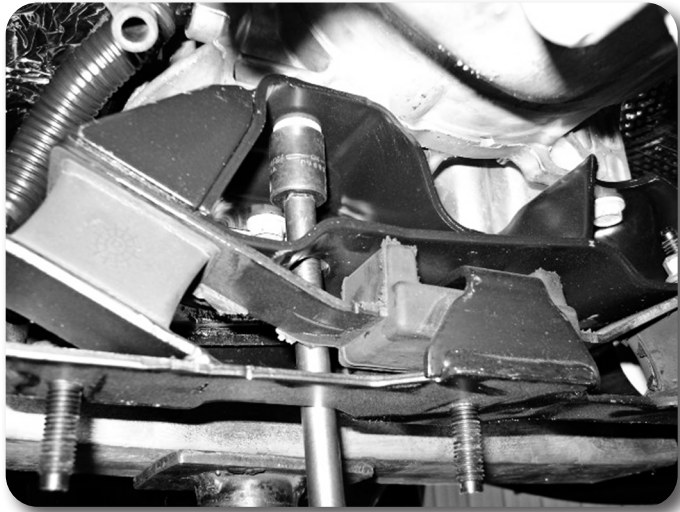


Figure 4B

9. Remove the 6 or 8 nuts that hold the transfer case to the transmission and remove the transfer case from the vehicle. Use extra caution as the transfer case is very heavy.

*NOTE: Do NOT remove the transmission output seal on a 6-Bolt!*

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» **ON 8-BOLT AISIN ONLY (STEP 10 & 11):**

10. Install supplied seal into the seal adapter. Apply provided grease (P/N: 45NA53) to between wipers on the T-Case shaft seal (P/N: UIS63X75X9) as shown on (Figure 5A)



Figure 5A

11. Install O-Ring (P/N: 9452K157) into groove on the seal adapter as shown in (Figure 5B). Lubricate o-ring and the surface above and below the o-ring as indicated by the arrows in (Figure 5B), before installing in transmission tail housing.

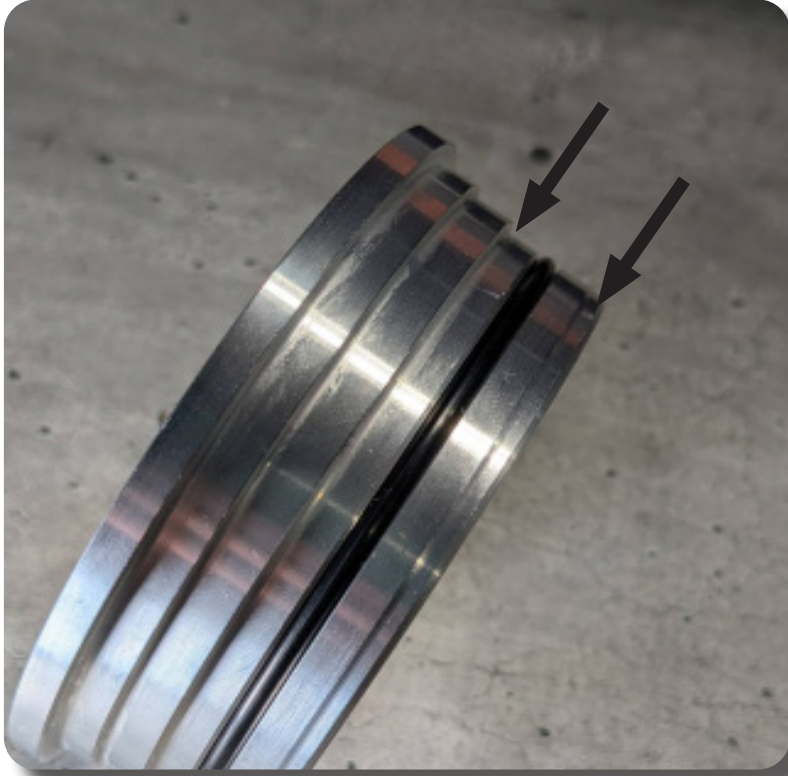


Figure 5B

12. Install the seal adapter into the transmission tail housing. Figure 5C



Figure 5C

13. Remove the studs on the transfer case by double nutting the studs. Place new indexing ring up to the transfer case. Attach with the provided 10mm flat head allen bolts. Note there is a specific orientation on the 6-Bolt and the indexing ring will need to be rotated to get the proper hole alignment. (Figure 6a, 6b) If installing an 8 bolt indexing ring skip to steps.15-17.

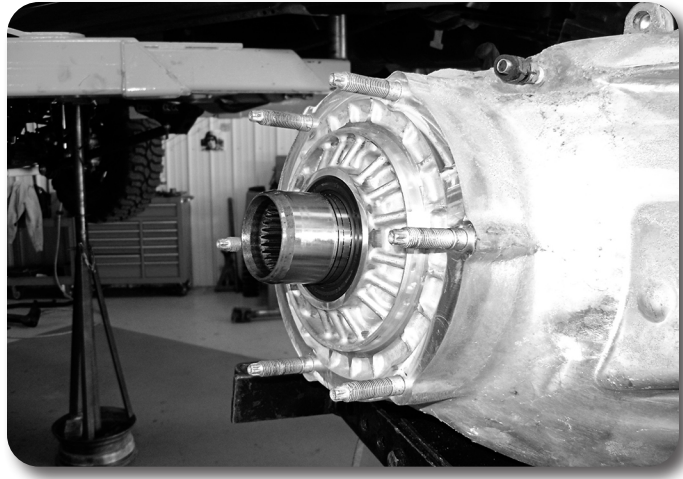


Figure 6a

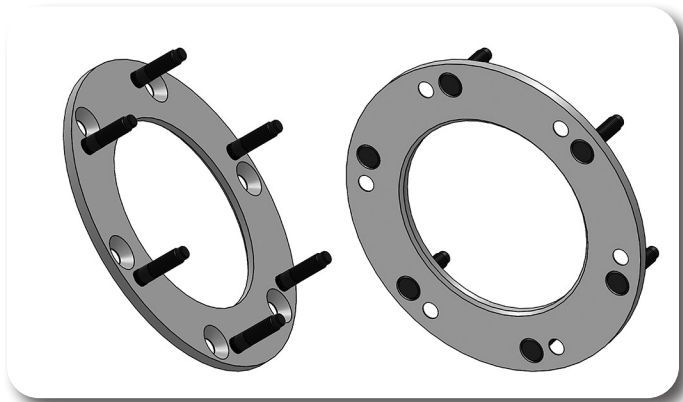


Figure 6b

14. Reinstall the transfer case and tighten with 3/8" fine thread nuts with washers. Thread locker and tighten to 45 ft-lbs.

*Note: This torque applies with the thread locker still slightly damp and acting as a lubricant. The max recommended torque is 55 ft-lbs when rechecking hardware.*

15. 2025 Gas Models only: Some vehicle may require you to grind a little off the t-case to clear the transmission lip. Fig. 6c



Figure 6c

**FOLLOW steps 16 through 18 for 8 bolt indexing ring installation**

16. Use the holes as indicated in (Figure 6d) to install the bolts as shown in Figure 6e.

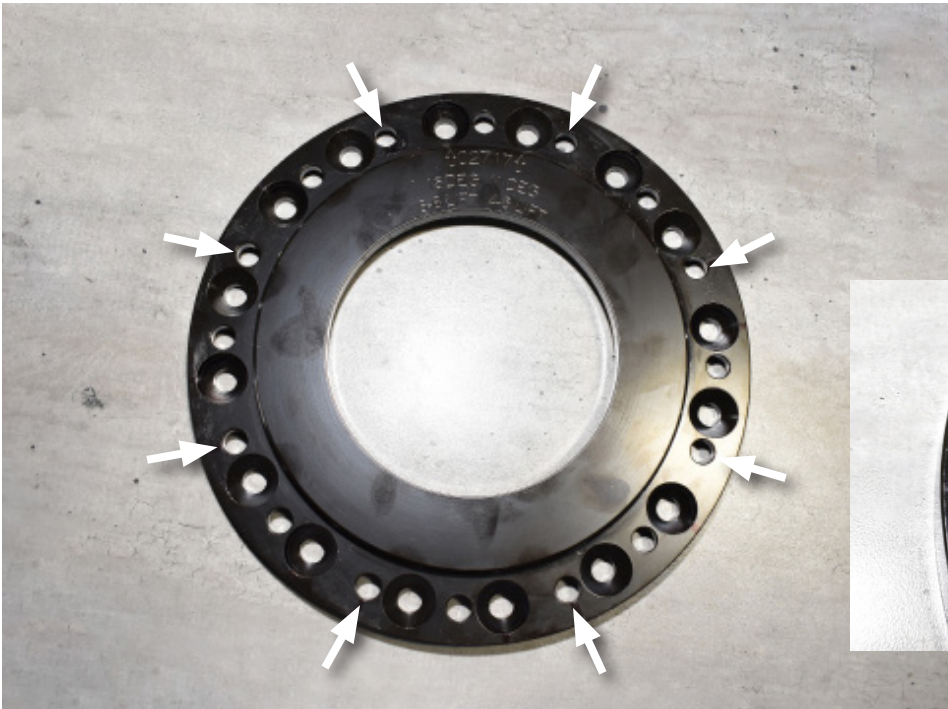


Figure 6d



Figure 6e

17. Using the 15 Degree holes, Follow the correct bolt hole usage as shown in (Figure 6f) to connect the indexing ring to the transfer case using the provided flat head Allen bolts. “DO NOT USE 11 DEGREE HOLES”

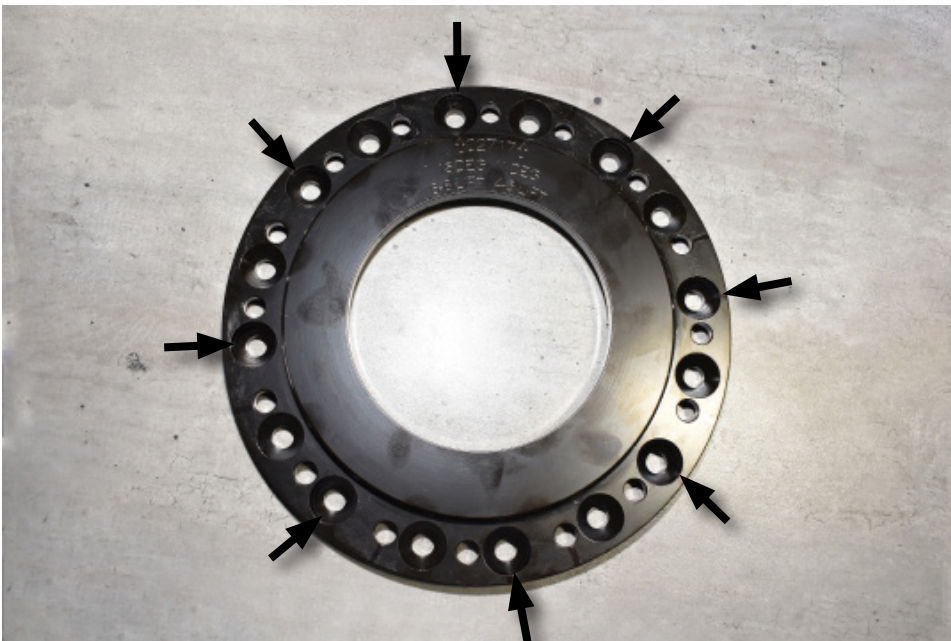


Figure 6f

18. Use the 8 nylock nuts and 8 washers as shown in (Figure 6g). to connect the t-case to the transmission.



Figure 6g

### Step 19 Note

Wire harness hardware is located in bolt pack 496.

19. Disconnect the wire harness on the frame rail, reroute the wires to the transmission / transfer case above the front driveshaft. Use the provided Zip Ties and 6mm nut, 1/4" washer, with hose clip and fasten the harness to one of the heat shield studs under the body. Ensure that the harness is secure and won't touch exhaust or drive shafts. (Figure 7)



Figure 7

*If Installing the manual t-case indexing mount do so at this time by following the provided instructions. Then finish these instructions afterwards.*

20. If the transmission mount was removed, reinstall with factory hardware.
21. Install the provided crossmember, the taller end will face towards the front of the vehicle. run all hardware front to back. Use the provided hardware to replace the cut bolt. Torque all hardware to 177ft-lbs (Figure 8)

### Step 21 Note

Replacement crossmember hardware is located in bolt pack 487.

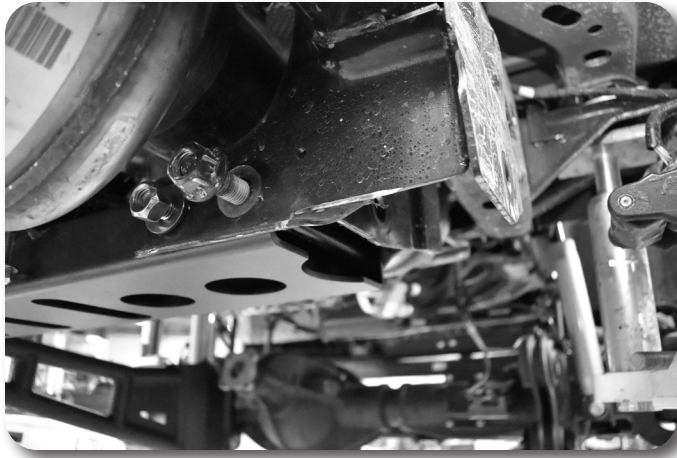


Figure 8

22. Lower the transmission and bolt the transmission to the new crossmember with factory hardware, Torque to 45 ft-lbs
23. 2019-2024 Gas 4" Models Only: Unbolt the drive side and passenger side exhaust at the end of the headers. Insert the larger exhaust spacer on the drivers side and the shorter one on the passenger side. Using the provided 3/8" hardware to re secure the exhaust with the spacers in them. Torque the 3/8" bolts to 37 ft-lbs (figure 9a, 9b)

*Hint: It easier to install the spacers if you slide the exhaust as far back in the hangers as possible.*

### **Step 23 Note**

Exhaust spacer hardware in Bolt Pack 499.

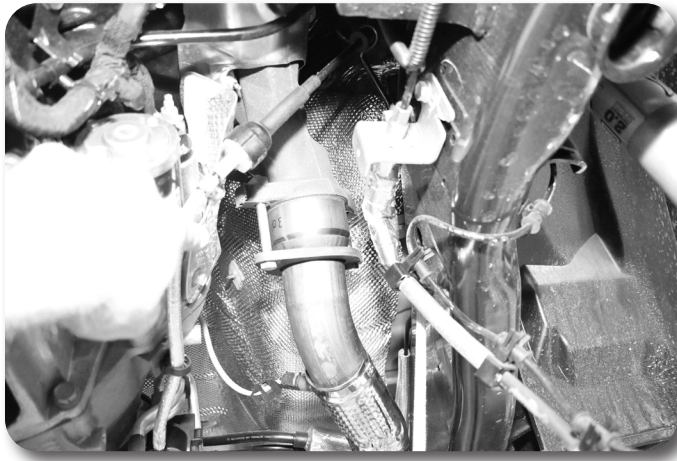


Figure 9a

### Step 24 Note

New boot clamps were provided with the front box kit. The large Clamp is for the drive shaft side of the boot.

### Step 24 Note

**4" Dsl, 6" Gas & Dsl, & 2025 4" Gas:** If you have not modified your exhaust yet you can leave the front drive shaft out of the vehicle to drive to an exhaust shop.

### Step 24 Note

**2019-2024 4" Gas Trucks Only:** If the drive shaft still slightly touches the exhaust use a Large C-clamp or ball joint press and flatten the exhaust pipe some.

### Post-Installation Warnings

1. Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering gear for clearance. Test and inspect brake system.

2. Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.

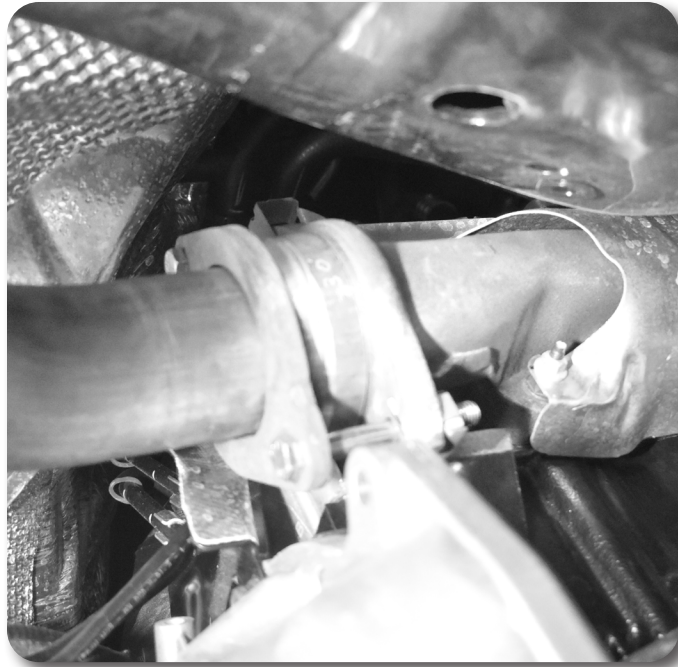


Figure 9b

24. Reattach the front driveshaft to the Transfer case, new clamps are provided for the boot. Reattach the front drive shaft to the axle with OE hardware and thread locker, torque to 85ft-lbs. rotate the front drive shaft to ensure it spins freely and clears exhaust and crossmember (Figure 10 gas model pictured)



Figure 10

25. Reinstall rear driveshaft with factory hardware with thread locker on threads. Tighten to 81 ft-lbs.
26. Resupport the DEF crossmember and remove the 3 bolts supporting it. Lift it back into the original position and bolt it into place with factory hardware, Torque to 35 ft-lbs. Bolt the exhaust mount back to the crossmember with factory hardware.
27. (6" Lift Gas 2500 Only) Power hop damper spacers and hardware (bolt pack 695) are only used with ZOND1258 and vehicles equipped with a power hop damper. These will be installed while installing the rear lift.
28. Recheck all hardware for proper torque. Check again after 500 miles and at regularly scheduled maintenance intervals.

<b>Component</b>	<b>Torque (FT-LBS)</b>
<i>Indexing Ring 3/8" Hardware</i>	<i>45</i>
<i>Crossmember Bolts</i>	<i>177</i>
<i>Transmission to Crossmember Hardware</i>	<i>45</i>
<i>Front Driveshaft to Axle</i>	<i>85</i>
<i>Rear Driveshaft to Axle</i>	<i>81</i>
<i>DEF Crossmember Bolts</i>	<i>35</i>

