



ARROW
SUSPENSION

OWL INSTALL GUIDE

1994-UP MERCEDES SPRINTER REAR SPRING PACK

UPDATED FALL 2025

NOTES

For the most up-to-date and current installation instructions, please visit our website at **www.owlvans.com**

- Please read all instructions carefully before installing Owl products on your vehicle.
- This is a bolt-on leaf pack lift kit designed for easy installation using basic hand tools.
- For vehicles not receiving the full 2.0" rear lift kit, remove the three smallest leafs from the 6-leaf rear spring pack. This prevents over-extension of critical suspension components and ensures proper ride height and articulation balance.
- The leaf spring pack can be configured with different numbers of leafs from left to right to correct any side-to-side lean—a common issue on camper vans with fully built interiors. Adjust leaf count as needed to achieve a level ride height.
- This kit is fully removable, allowing the vehicle to be returned to its original stock configuration if desired.

PARTS LIST

2007-Up, Mercedes Sprinter Rear 3 Leaf Pack

PART	P/N	QTY.	✓
LEAF SPRINGS: 3 PACK (ADD ON)	SP-LF2500-3PK	1	
U-BOLT 3-6 PACK	SP-UBLT-36	4	

OR

2007-Up, Mercedes Sprinter Rear 6 Leaf Pack

PART	P/N	QTY.	✓
LEAF SPRINGS: 6-PACK (ADD-ON) (2" LIFT)	SP-LF2500-6PK	1	
U-BOLT 3-6 PACK	SP-UBLT-36	4	

TOOLS NEEDED

1. Quality jack and two jack stands
2. Basic hand tools:
 - Wrench and socket set, including:
 - Metric sizes: 10mm, 13mm, 17-19mm, 21mm
 - SAE sizes: 9/16"

INSTALLATION

These instructions show installation on the driver's (left-hand) side. Passenger side installation is similar; any differences will be noted in the steps.

1.

Before placing the vehicle on jack stands or a lift, measure and record the ride height on both sides to establish a baseline and determine if any side-to-side lean requires correction. Then loosen lug bolts.

Note: Most vans naturally sit slightly lower on the driver (left-hand) side due to the fuel tank location on that side of the vehicle.

2.

Safely support the vehicle so the rear suspension can hang freely. This can be accomplished using an **automotive lift or a floor jack with quality jack stands** positioned under the frame rails. Ensure the vehicle is stable and secure before working underneath.

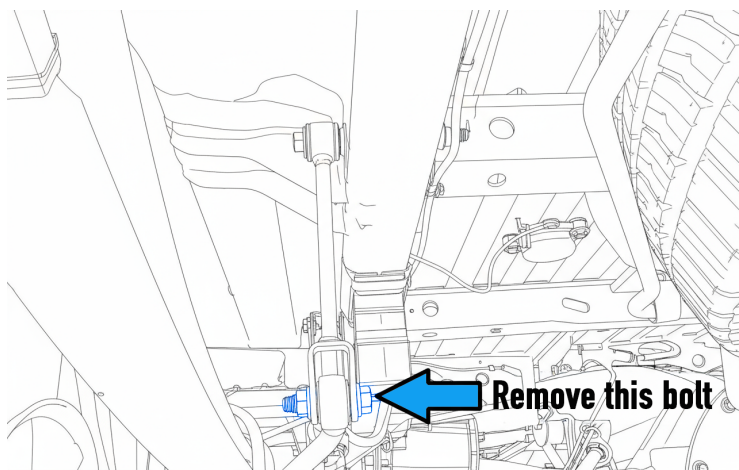
3.

With the rear suspension hanging freely, remove both rear wheels and tires to provide access to the leaf spring and shock components.

4.

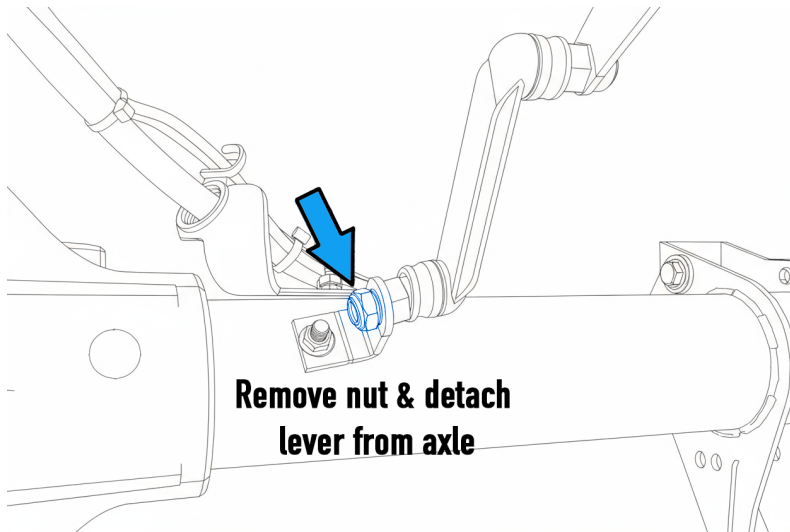
Using an **18mm socket and wrench**, remove the **lower sway bar end link bolt** on both sides of the vehicle.

Note: Retain all hardware, as it will be **reinstalled during assembly**.



5.

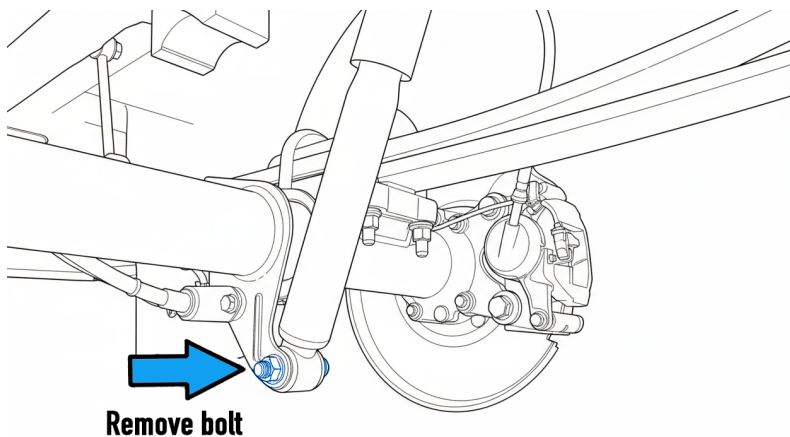
If equipped, disconnect the brake proportioning or wind assist sensor lever. Use a **16mm socket or wrench** to remove the retaining nut and **keep the hardware for reinstallation**.

**6.**

Proceed by working on one side of the vehicle at a time, beginning with the driver's (left-hand) side. This helps maintain axle stability and makes reassembly easier.

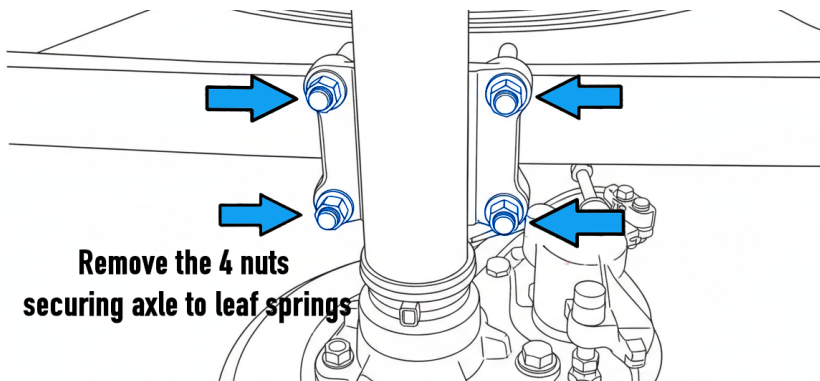
7.

Support the **rear axle** with a jack or stand, then **remove the lower shock bolt** using an **18mm socket and wrench**. This allows the axle to droop freely for leaf spring removal.



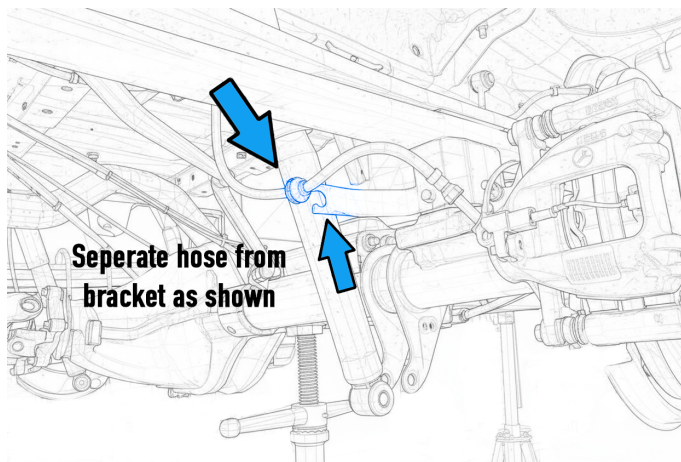
8.

Using a **19mm socket or wrench**, remove the **U-bolt nuts** securing the axle to the leaf spring, then **remove the U-bolts** completely. *See image below for reference.*



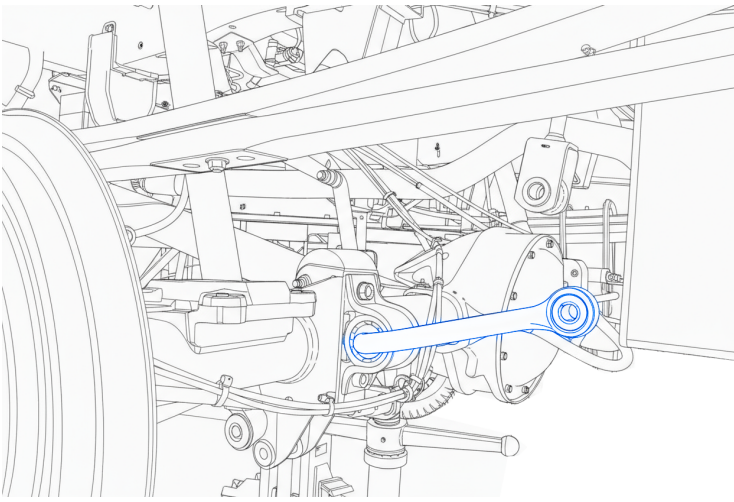
9.

Remove the **brake hose** from the **factory lift block** to free the line before removing the block assembly. *See image below for reference.*

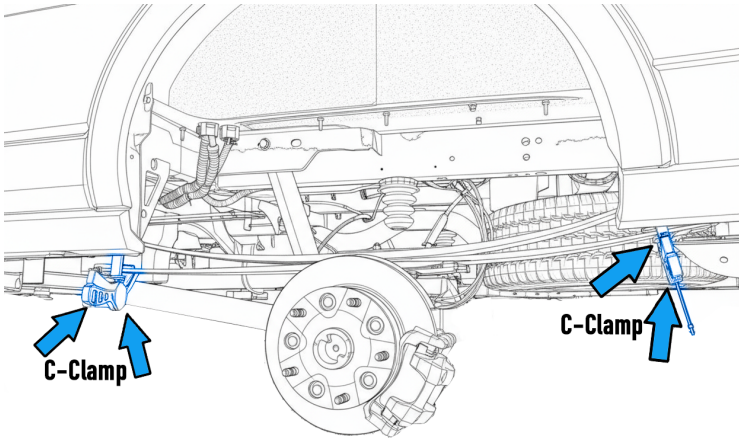


10.

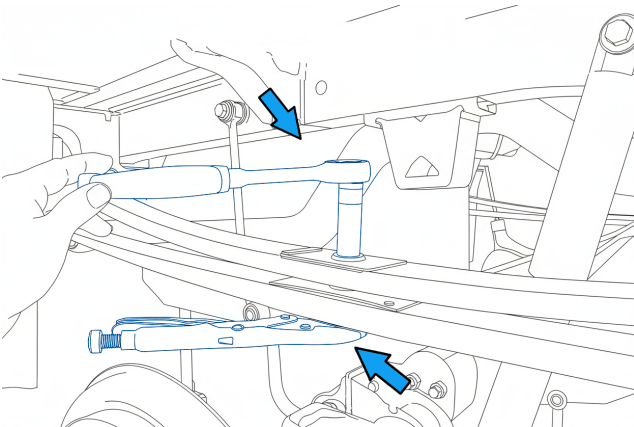
Slowly **lower the rear axle** until the **factory lift block** can be removed. Carefully **remove the block** and **set it aside** for reinstallation later in the process.

**11.**

Use a pair of **quick clamps or C-clamps** to securely hold the main and lower leaf springs together before removing the center pin. *See image below for reference.*

**12.**

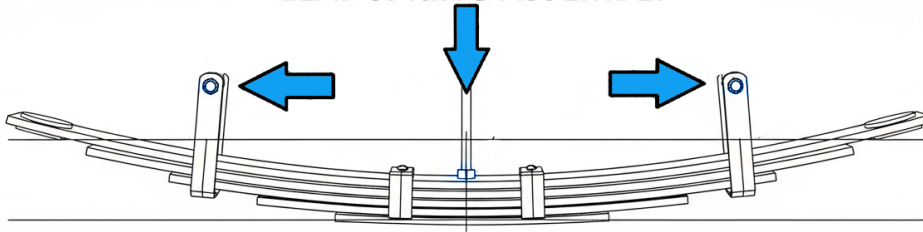
Using a **16mm socket or wrench**, remove the nut securing the leaf spring center pin. In some cases, the center pin may need to be held with a pair of **vise-grips** to prevent it from spinning during removal. *See image below for reference.*



13.

Use a **9/16" socket or wrench** to remove the leaf spring center pin nut and the bolt and nut securing the spring clamps. Carefully separate the mini pack and **retain all hardware for reassembly.**

9/16" Wrench/Socket for All hardware

LEAF SPRING ASSEMBLY**14.**

CRITICAL: A maximum of three (3) leafs may be installed per side unless a full rear lift kit is being used.

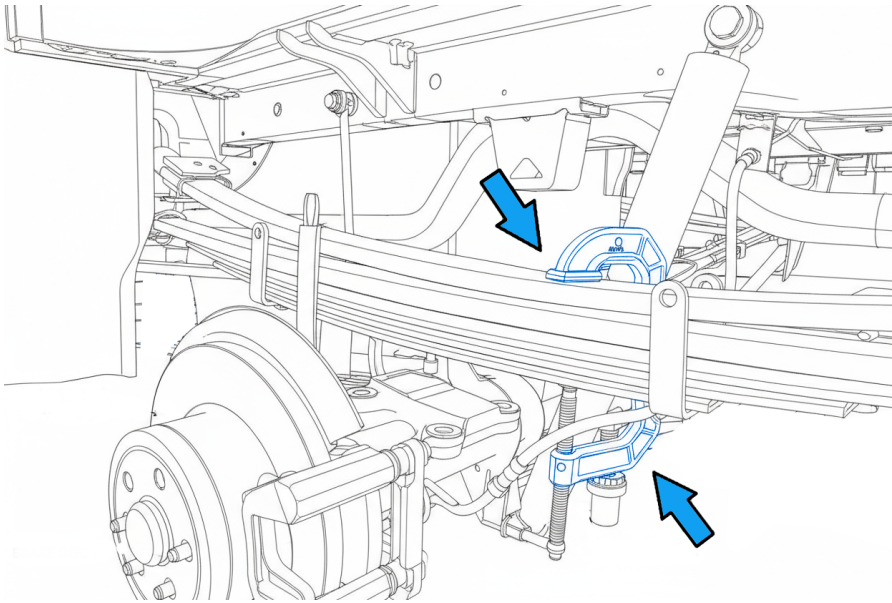
The **full kit** must include **bump stop drop brackets**, **extended sway bar links**, and **extended rear shock mounts** to maintain safe suspension geometry and prevent component damage.

15.

Assemble the **leaf spring pack** as shown below. A **three-leaf configuration** provides approximately **1.0"-1.3125" (25-33mm)** of rear lift. Ensure each leaf is properly aligned and seated before securing the pack.

16.

Install the **mini-pack** onto the **factory leaf springs**, aligning the **center pin** with the existing spring pack. Use **C-clamps** to **preload the springs into position—do not use the center pin nut** to draw the springs together, as this can **strip the threads** and damage the hardware.

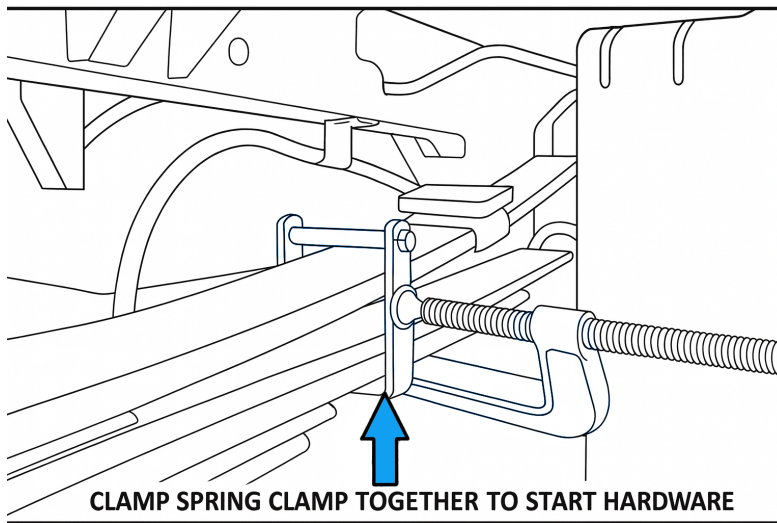
**17.**

Once the springs are aligned and clamped all the way into position, install the 3/8" center pin nut removed in step 13 and tighten with a **9/16" socket / wrench**. Torque to **22 ft-lbs (30 N.m)**

18.

Reinstall the 3/8" spring clamp hardware and spacers removed earlier (Step 14). Use a **9/16" socket or wrench** and torque to **22 ft-lbs (30 N.m)**.

In some cases, the **spring clamps may need to be compressed slightly** to start the hardware—use a **C-clamp or quick clamp** to bring the brackets together enough to thread the nut. See *image below for reference*.

**19.**

Reinstall the **factory lift block**, then position the **new U-bolts** over the axle and secure them with the **provided nuts**.

Torque all **U-bolt nuts to 125 ft-lbs (169 N·m)** in a crisscross pattern to ensure even clamping across the spring pack.

20.

Secure the **brake hose** back into the **factory bracket** on the **lift block**, ensuring it's properly seated and free from twists or tension through the full range of suspension travel.

21.

Reinstall the **rear lower shock bolt** and **torque to 52 ft-lbs (70 N·m)** using an **18mm socket or wrench**. Ensure the shock bushing is seated properly before tightening.

22.

Repeat **Steps 6-22** on the **passenger (right-hand) side** of the vehicle, following the same installation sequence and torque specifications to ensure uniform suspension setup.

23.

Reinstall the **lower sway bar end link bolt** and **torque to 52 ft-lbs (70 N·m)**. Verify the sway bar and link bushings are properly seated before tightening.

24.

Re-secure the **brake proportioning or wind assist sensor lever** (from Step 5) using a **16mm socket or wrench**, and **torque to 15 ft-lbs (20 N·m)**. Confirm the linkage moves freely through the full range of suspension travel.

25.

After 100 miles, recheck bolt torques.

CONGRATS! YOUR INSTALLATION IS COMPLETE.

RELEASE OF LIABILITY

I, the customer, do hereby release and forever discharge Owl Vans LLC, their agents, employees, successors and assigns, and their respective heirs, personal representatives, affiliates, successors and assigns, and any and all persons, firms or corporations liable or who might be claimed to be liable, whether or not herein named, from any and all claims, demands, damages, actions, causes of action or suits of any kind or nature whatsoever, whether known or unknown, fixed or contingent, which I now have or may hereafter have or claim to have, as a result of or in any way relating to the following: Parts sold & installed by Owl Vans LLC or parts sold & installed by end-user; any parts sold online, any parts sold online or installed by a re-seller, any parts installed by an installation shop.

It is understood and agreed that this payment is made and received in full and complete settlement and satisfaction of the aforesaid actions, causes of action, claims and demands; that this Release contains the entire agreement between the parties; and that the terms of this Agreement are contractual and not merely a recital.

Furthermore, this Release shall be binding upon the undersigned, and his respective heirs, executors, administrators, personal representatives, successors and assigns. This Release shall be subject to and governed by the laws of the State of Idaho.

PRODUCT SAFETY WARNING:

Owl Vans LLC strongly recommends the installation of products be done by a certified mechanic. If this does not occur, be certain the person(s) installing the product read, understand and follow all instructions and warnings pertaining to the application before installation. Do not add, alter, or

fabricate any factory or aftermarket parts to increase vehicle height over the intended height of the Owl Vans LLC product purchased. Mixing component brands is not recommended.

Installation of suspension lift kits or any other lifting kits or devices will raise the center of gravity. For this reason, Owl Vans LLC urges that extreme caution be used when encountering driving conditions which may cause vehicle imbalance. Furthermore, the driver's field of vision and judgment will not be as good due to the height of the vehicle. Due to the installation of larger tires, the speedometer will read slower than the actual speed being traveled and more distance will be required to stop the vehicle. It is the owner's responsibility to caution and warn any potential driver of the vehicle about these driving and handling conditions. Owl Vans LLC will not be held liable or responsible for damages or personal injuries resulting from the use of lifting devices and or related products. The tires and rims should be changed to sufficiently increase the vehicle's total overall width and stability to help accommodate lifting devices.

Owl Vans LLC aftermarket suspension products and accessories modify a vehicle for uses which exceed conditions anticipated by the vehicle manufacturer. The uses include the high performance demands required during off-road. These conditions vary in the degree of extremity and cannot be controlled by the vehicle or product manufacturer. If the components within the suspension system or accessories become worn due to frequent and/or extreme use, the safety and reliability of the vehicle is at risk. The maintenance of aftermarket equipment to ensure the vehicle occupants safety is entirely your responsibility. Do not purchase Owl Vans LLC products unless you are willing to accept this responsibility. Do not install any Owl Vans LLC suspension products or accessories unless you feel competent at installing the product without causing present or future injury to yourself or other vehicle occupants; seek an authorized installation center.

Most states have some type of law limiting vehicle height. The amount of lift allowed, and how the lift can be achieved, varies greatly. Several states offer exemptions for farm and commercial registered vehicles. It is the vehicle owner's responsibility to check state and local laws to ensure that their vehicle will be in compliance.

Owl Vans LLC reserves the right to make changes in design, materials and specifications as deemed necessary without prior notice and without assuming obligation to modify any product previously manufactured. Obligation or liabilities will not be assumed with respect to similar products previously advertised.

This Release of Liability and Product Safety Warning has been read and fully understood by the undersigned and has been explained to me.