

TRAXDA

2" Suspension Lift Kit

2021–2025 Toyota Sienna (4th Generation)

Part No. 906040 | Fits All Trim Levels Including Woodland Edition

■ WOODLAND EDITION COMPATIBILITY

This kit is fully compatible with the Woodland Edition, which comes equipped with taller factory springs. All kit components fit without modification.

CONTENTS

1. Parts Included
2. Tools Required
3. Important Notes Before You Begin
4. Front Installation — Strut Spacers & Sway Bar Links
5. Rear Installation — Shocks, Spring Mount Spacers, Radius Arm Drops & Brake Line Brackets
6. Torque Specifications
7. Post-Installation Checklist

1. PARTS INCLUDED

Part Description	Qty
Front strut spacers with 1.5° offset (no left/right designation)	2
Front sway bar drop links (shorter replacement)	2
Rear shock extension brackets	2
Rear spring mount spacers	2
Rear radius arm drop brackets	2
Rear brake line extension brackets	2
Hardware kit (all mounting hardware included)	1

2. TOOLS REQUIRED

- Standard hand tool set (metric sockets and wrenches)
- Impact gun
- Torque wrench (capable of 30–160 ft-lbs)
- 2-post lift (strongly recommended — floor jack and jack stands can be used but a lift makes this job significantly easier)
- Breaker bar

- Penetrating oil (recommended for fasteners on higher-mileage vehicles)

3. IMPORTANT NOTES BEFORE YOU BEGIN

■ READ BEFORE STARTING

Professional installation is recommended. Improper installation of suspension components can cause loss of vehicle control resulting in serious injury or death. An alignment is REQUIRED after installation.

- All kit parts are non-handed — no left/right designation. Each component fits either side.
- The front strut spacers include a 1.5° built-in offset that corrects alignment camber. Correct spacer orientation is critical — see Step 4 for detail.
- Tighten all suspension bolts with the vehicle at ride height (weight on wheels), unless noted otherwise. This prevents bushing preload in the wrong position.
- An alignment is mandatory after installation. The front offset spacers are designed to bring camber within factory spec, but alignment must still be verified and adjusted as needed.
- Depending on your vehicle's prior alignment history and wear, additional camber correction cams may be required at the lower strut bolt locations.
- Retain all OEM hardware removed during installation unless the kit hardware is a direct replacement.

4. FRONT INSTALLATION — STRUT SPACERS & SWAY BAR LINKS

■ SPACER ORIENTATION — CRITICAL

The front strut spacer has a 1.5° offset to correct camber. The spacer **MUST** be installed with the offset directed **INWARD** (toward the engine). Incorrect orientation will increase negative camber rather than correcting it and will require alignment cams to fix.

1. Raise the vehicle and support it safely on a 2-post lift or jack stands. Block the rear tires if using jack stands.
2. Remove the front wheels.
3. Remove the front sway bar end links on both sides. Set aside — the OEM links will not be reused.
4. Unbolt the front ABS/brake hose bracket from the front strut body on each side and position it safely out of the way.
5. Unbolt the ABS sensor from the front steering knuckle and position it safely clear of the work area.
6. Support the lower control arm and steering knuckle with a floor jack to prevent the assembly from dropping. Remove the two lower strut pinch bolts at the knuckle. Keep the assembly supported — the CV axle shaft can be damaged if the assembly is allowed to hang.
7. **WIPER/COWL REMOVAL** — this exposes the strut tower nuts: Remove the wiper arms (pop the caps at the base of each arm and unbolt). Carefully remove both fender-to-cowl side seals — release the top clip first, then pivot off the lower clip.
8. Remove the upper windshield cowl plastic by undoing the push pins and carefully releasing the snap rail from the windshield. Take your time — the snap rail is fragile.
9. Unclip the wire loom from the windshield cowl panel and position it out of the way.
10. Remove the wiper motor linkage assembly.
11. Remove the lower windshield cowl panel. Note the two support bracket locations on the firewall, and the support brackets underneath the cowl panel that are held in position by the strut mount nuts.
12. **WARNING: Do NOT loosen the nut in the center of the strut mount. That nut holds the strut assembly together — the spring is under extreme pressure. Strut disassembly is not required.**
13. Remove the three strut tower nuts. Remove the front strut assembly completely from the vehicle.
14. Install the Traxda offset spacer onto the top of the strut. **CRITICAL ORIENTATION: The offset must point INWARD — toward the engine. Incorrect orientation will worsen camber rather than correct it.** Confirm all three spacer studs align with the strut tower holes before installing.
15. Reinstall the strut assembly into the strut tower, feeding the spacer studs through the tower holes. Start all three tower nuts by hand, then torque to 59 ft-lbs.
16. Reinstall the lower strut pinch bolts finger-tight. Install the Traxda shorter sway bar end links — torque both end nuts to 29 ft-lbs.
17. Reinstall the ABS sensor and brake hose bracket to their original locations.
18. Reinstall the lower cowl panel, wiper motor linkage, wire loom, upper cowl plastic, fender-to-cowl side seals, and wiper arms. When reinstalling the upper cowl snap rail, work evenly across its length to avoid cracking it.
19. Lower the vehicle to ride height. Final-torque the lower strut pinch bolts to 156 ft-lbs with the suspension loaded.
These bolts must be torqued at ride height to prevent bushing preload in the wrong position.
20. Reinstall wheels. Torque lug nuts to 76 ft-lbs in a star pattern.
21. Repeat for the opposite side.

5. REAR INSTALLATION — SHOCKS, SPRING MOUNTS & RADIUS ARM DROPS

1. Raise and support the rear of the vehicle. Place a floor jack under the rear trailing arm/axle carrier on the side you are working. You will need to control the arm through its range of motion.
2. Remove the rear wheel.
3. Remove the sway bar end link bolt at the trailing arm. This allows the arm to swing freely.
4. Remove the lower shock mounting bolt. Then remove the upper shock mounting bolt. Remove the complete shock assembly (shock body plus top and bottom mounting brackets attached). Set aside — the extension bracket will be installed off-vehicle.
5. SHOCK EXTENSION BRACKET (off-vehicle): With the shock assembly on the bench, install the Traxda extension bracket at the top mount. Reinstall the top mount bolt through the extension bracket. Torque to 45 ft-lbs.

Assembling the extension off-vehicle is significantly easier than working in the wheel well.

6. Slowly lower the floor jack, allowing the trailing arm to drop. **Control the descent — the coil spring is under tension and will eject violently if the arm drops uncontrolled.** Lower until spring tension is relieved and the spring can be safely removed by hand.
7. Remove the coil spring. Note the spring orientation and seating for reinstallation.
8. PASSENGER SIDE NOTE: On the passenger side, the trailing arm will contact the exhaust assembly as it swings down. Lower the muffler assembly by removing or loosening its hangers enough to let it droop clear. You may also want to trim the edge of the heat shield for easier clearance. In development testing the exhaust was not fully removed — just let it droop.
9. UPPER SPRING MOUNT SPACER (spring tension now off): Locate the three bolts holding the upper spring plate to the body. Remove all three bolts. Install the Traxda spacer above the upper spring plate using the supplied 10mm 8.8 bolts. Torque to 30 ft-lbs.
10. RADIUS ARM DROP BRACKETS (spring tension still off): Remove the forward radius arm mounting bolts at the frame. Install the Traxda drop bracket between the radius arm bushing and the frame mount using the supplied 14mm 8.8 bolts. Torque to 85 ft-lbs.

Installing the radius arm drop while spring tension is off makes this significantly easier — the arm is fully unloaded and has maximum movement freedom.

11. REINSTALL SPRING: Raise the trailing arm with the floor jack. A tall jack stand is very useful here to hold the arm at the correct height while you position the spring. Seat the spring correctly in both the upper and lower perches.
12. Continue raising the arm until the shock lower mount aligns. Reinstall the shock assembly (with extension bracket already attached). Install the lower shock bolt and the upper shock bolt through the extension bracket into the body mount. Torque both to 45 ft-lbs.

Torque with the suspension at ride height — lower the vehicle onto its wheels before final torque on the shock bolts.

13. Reinstall the sway bar end link bolt. Torque to OEM spec (29 ft-lbs).
14. BRAKE LINE EXTENSION BRACKET: Remove the OEM brake line retaining bolt. Install the Traxda extension bracket using the supplied 8mm 8.8 bolt. Torque to 20 ft-lbs. Reroute the brake flex line through the extension bracket. Bounce the suspension by hand to confirm adequate flex line slack through full travel.

A stretched or kinked brake flex line is a critical safety hazard. Verify routing carefully.

15. Reinstall the rear wheel. Torque lug nuts to 76 ft-lbs in a star pattern.
16. Repeat all rear steps for the opposite side. Passenger side: address exhaust clearance before dropping the arm (see Step 8).

6. TORQUE SPECIFICATIONS

FRONT

Fastener	Torque
Front strut tower nuts (3 per side, at strut tower)	59 ft-lbs
Front strut lower pinch bolts (2 per side, at knuckle) — torque at ride height	156 ft-lbs
Front sway bar end link nuts (upper and lower)	29 ft-lbs
Lug nuts — front	76 ft-lbs

REAR

Fastener	Torque
Rear shock extension bracket bolts (12mm 8.8) — torque at ride height	45 ft-lbs
Rear upper spring mount spacer bolts (10mm 8.8, Traxda hardware)	30 ft-lbs
Rear radius arm drop bracket bolts (14mm 8.8, Traxda hardware)	85 ft-lbs
Rear brake line extension bracket bolt (8mm 8.8, Traxda hardware)	20 ft-lbs
Rear sway bar end link bolt (OEM hardware reused)	29 ft-lbs
Lug nuts — rear	76 ft-lbs

* Front strut lower pinch bolts and rear shock extension bolts must be torqued with the vehicle at ride height (weight on wheels) to prevent bushing preload in the wrong position.

7. POST-INSTALLATION CHECKLIST

- All fasteners torqued to specification.
- Front spacers confirmed installed with offset pointing INWARD (toward engine) on both sides.
- Front sway bar end links replaced with Traxda shorter links on both sides.
- Rear shock extension brackets assembled off-vehicle and reinstalled correctly.
- Rear spring mount spacers and radius arm drops installed on both sides.
- Rear brake flex lines checked for adequate slack through full suspension travel.
- ABS and brake line routing inspected — no kinking, chafing, or tension.
- Passenger side exhaust hangers and heat shield reinstalled/trimmed as needed.
- All removed OEM hardware accounted for.
- Vehicle lowered to ground — bounced several times to settle suspension.
- Front strut lower pinch bolts and rear shock bolts final-torqued at ride height.
- Re-check torque on all fasteners after first 50–100 miles.
- **ALIGNMENT COMPLETED** — do not drive extended distances before alignment.
- Alignment cam positions recorded if cams were required.

Questions? Contact us at support@traxda.com