Traxda 903040 installation

⚠️ Safety First

- **Weight:** This is a heavy vehicle. Ensure your jack and stands are rated for at least 3 tons.
- **Spring Tension:** Never attempt to disassemble the strut assembly (separating the spring from the shock) without a professional-grade spring compressor.
- **Alignment:** Any time you touch the struts, you **must** get a professional alignment afterward to prevent tire wear.

Tools You'll Need

- Floor jack and jack stands
- Metric socket set (10mm, 12mm, 14mm, 17mm, 19mm, 22mm, 24mm)
- Breaker bar and torque wrench
- Pry bar
- Ball joint separator (optional but helpful)
- Penetrating oil (WD-40 Specialist or PB Blaster)

Part 1: Removal

1. **Preparation:** * Park on a level surface.
    - Loosen the lug nuts while the wheels are on the ground.
    - Jack up the front of the vehicle and secure it on jack stands. Remove the wheels.
2. **Disconnect Links & Brackets:**
    - Remove the **sway bar end link** from the steering knuckle or the sway bar itself to allow the lower control arm (LCA) to drop.
    - Unbolt the **brake line brackets** and **ABS wire brackets** from the spindle and frame to ensure they don't stretch when the suspension drops.
3. **The Lower Mount:**
    - Remove the large bolt passing through the bottom of the strut (the "clevis" bolt) where it attaches to the LCA. This will likely be very tight (22mm or 24mm).
4. **Upper Control Arm (UCA) Separation:**
    - To get enough clearance to pull the strut out, you usually need to disconnect the upper ball joint.
    - Remove the cotter pin and loosen the castle nut. Use a ball joint separator or a hammer (hitting the side of the knuckle, not the stud) to break the taper fit.

    - **Pro Tip:** Support the LCA with a jack so the spindle doesn't flop outward and pull on the CV axle.
5. **Upper Strut Nuts:**
    - Under the hood, locate the three or four nuts on the top of the strut tower.
    - **Do not** touch the center nut (the one holding the spring tension).
    - Remove the outer nuts. Hold the strut with one hand as you remove the last nut so it doesn't fall.
6. **Extraction:**
    - Push down on the LCA and maneuver the strut assembly out of the wheel well.

Place Traxda plates on top of strut mount. They are indexed to only fit one way. Then re-install strut into vehicle.

Part 2: Reinstallation

1. **Seat the New Strut:**
    - Slide the new strut into the upper tower. Align the studs with the holes.
    - Hand-tighten the upper nuts to hold it in place.
2. **Lower Bolt Alignment:**
    - Align the bottom of the strut with the LCA mount. Use a pry bar or a jack under the LCA to line up the holes.
    - Slide the large lower bolt through. **Do not torque this yet.**
3. **Reconnect Upper Ball Joint:**
    - Jack up the LCA to bring the spindle up to the UCA.
    - Tighten the castle nut and install a **new** cotter pin.
4. **Final Connections:**
    - Reattach the sway bar links and all brake/ABS line brackets.
    - Put the wheels back on and lower the vehicle to the ground.
5. **The "Laden" Torque:**
    - **Crucial:** Only perform the final tightening of the upper and lower strut bolts once the vehicle's full weight is on its own tires. This prevents the rubber bushings from binding and tearing.

Torque Specifications (General Estimates)

Always verify with your specific service manual, as specs can vary slightly by trim: | Component | Torque (Approximate) | | :--- | :--- | | **Upper Strut Nuts** | 45–55 ft-lbs | | **Lower Strut Bolt** | 100+ ft-lbs (Check manual) | | **Upper Ball Joint Nut** | 80 ft-lbs | | **Sway Bar Links** | 50 ft-lbs | | **Wheel Lug Nuts** | 95 ft-lbs |