



TITAN TRAILERS

How to Adjust Mechanical Cable Brakes on a Trailer

A Step-by-Step Guide to Safer Towing and Effective Braking

Mechanical cable brakes are a common and reliable braking system for trailers, particularly for smaller and medium-sized models. Proper adjustment of these brakes is essential for safety, for both the trailer and the towing vehicle, and for the longevity of your brake components. This guide will walk you through why regular adjustment is important, what tools you'll need, and a detailed, step-by-step process to adjust your trailer's mechanical cable brakes.

Why Adjusting Mechanical Cable Brakes Matters

Effective braking is critical whenever you're towing a trailer. Mechanical cable brakes rely on the correct tension in their cables to transmit force from the tow vehicle's brake pedal to the brake shoes or pads inside the trailer's drum or disc assemblies. Over time, cables can stretch, brake linings wear down, and adjusters can drift out of their proper position. When this happens, you may experience:

- Longer stopping distances
- Unbalanced braking between trailer wheels
- Unstable or uneven trailer movement during braking
- Excessive wear on brake components and cables
- Potential legal or regulatory issues if your trailer brakes are found inadequate during safety checks

Tools and Materials Needed

Before you begin, assemble the following tools and materials:

- Wheel chocks
- Jack and jack stands or sturdy ramps (for lifting the trailer)
- Lug wrench (for wheel removal)
- Adjustable wrenches and/or socket set
- Pliers (needle-nose and regular)
- Flathead screwdriver

- Brake adjustment tool (often called a “spoon” or brake adjusting lever)
- Wire brush (for cleaning)
- Penetrating oil (if parts are seized or corroded)
- Shop rags and gloves
- Replacement cotter pins or locking nuts (if needed)
- Service manual for your trailer (if available)

Safety First

- Always Park the trailer on a flat, stable surface.
- Chock the trailer wheels not being adjusted to prevent movement.
- Wear gloves and eye protection.
- Never crawl under a trailer supported only by a jack; always use jack stands.

Understanding the System

Mechanical cable brakes work by transferring the motion of the tow vehicle’s brake pedal to the trailer wheels via a system of cables and levers. Pulling the handbrake (in the case of a parking brake) or pressing the brake pedal (for service brakes) pulls a main cable that, through a series of equaliser bars and secondary cables, activates the brake mechanisms at each wheel.

Typical cable brake systems have several key adjustment points:

- Main cable length adjustment (often at the drawbar or near the handbrake lever)
- Equaliser or balance bar (to ensure both sides receive even braking force)
- Individual cable adjusters at each wheel brake
- Brake shoe adjustment within the drum (if applicable)

Step-by-Step Adjustment Procedure

1. Inspect the Brake System

Before adjusting, do a visual inspection:

- Check cables for fraying, kinks, or corrosion. Replace any damaged cables.
- Look for seized or bent levers and linkages.
- Ensure all mounting hardware is secure.
- If needed, lubricate moving parts sparingly.

2. Lift and Secure the Trailer

- Chock the trailer wheels not being serviced.
- Loosen the wheel nuts slightly while the trailer is still on the ground.
- Jack up the trailer according to manufacturer instructions and secure with jack stands.
- Remove the wheels to access the brake assemblies, if necessary.

3. Adjust the Brake Shoes (Drum Brakes Only)

- Locate the brake adjuster on the backing plate of each brake drum (sometimes under a rubber plug).

- Using the brake adjusting tool or flathead screwdriver, turn the adjuster to expand the brake shoes outward until they just lightly contact the drum.
- Spin the drum; you should feel a slight drag.
- Back off the adjuster slightly (typically a few clicks) until the drag is minimal but present.
- Repeat for each wheel.

4. Adjust the Cable Length and Tension

With the shoes correctly set, now adjust the cables:

- Locate the main cable adjuster, typically a threaded rod with locking nuts near the handbrake lever or drawbar.
- Pull the handbrake slightly (not fully engaged) and check how much slack is in the main cable and the secondary cables running to each wheel.
- Adjust the main cable until there is very little slack, but the brakes do not engage when the handbrake is in the off position.
- Check that all secondary cables are tensioned equally. This is often done at the equaliser bar or at inline cable adjusters near each wheel.
- Tighten or loosen individual cable adjusters so that all brakes begin to engage at the same time when the brake is applied.

5. Test the System

- With the wheels still off the ground, spin each wheel by hand and apply the handbrake or have an assistant press the brake pedal (if the system is connected to the tow vehicle).
- Each wheel should stop at approximately the same point of brake lever movement.
- If one wheel engages too early or too late, fine-tune the secondary cable adjuster for that wheel.
- Release the brakes and ensure all wheels spin freely without excessive drag.

6. Finalise and Reassemble

- Double-check all lock nuts, cotter pins, and adjusting nuts to ensure security.
- Replace the wheels and tighten the lug nuts in a star pattern to manufacturer specifications.
- Lower the trailer to the ground and remove the chocks.
- Test the brakes at low speed in a safe area before returning to normal use.

Troubleshooting Common Issues

- Brakes too loose: Increase tension on the main or secondary cables and verify brake shoes are properly adjusted.
- Brakes dragging or sticking: Loosen the cable tension and check return springs inside the brake drums.
- Uneven braking: Adjust individual cable tensions until wheels engage simultaneously; inspect equaliser bar for wear or damage.
- Handbrake lever travel excessive: Adjust cable tension and inspect for stretched or worn cables.

- Cables won't adjust: Soak with penetrating oil, work the adjusters back and forth, or replace seized components.

Maintenance Tips for Mechanical Cable

Brakes

- Inspect cables, levers, and brake assemblies at least twice a year, or more frequently if the trailer is used regularly or in harsh conditions.
- Keep all moving parts lightly lubricated but avoid getting oil or grease on brake linings or drums.
- Replace frayed, rusted, or stretched cables promptly.
- Check for proper operation after driving through water or mud; moisture can cause corrosion or sticking.
- Refer to your trailer's service manual for model-specific guidance and torque values.

Key Message

Adjusting mechanical cable brakes on a trailer is a straightforward but critical maintenance task. By following these steps, you'll ensure your trailer brakes operate safely, reducing stopping distances and improving road safety for you and others. Regular checks and timely adjustments not only protect your investment but also keep you in compliance with the law. If you ever feel uncertain during the process, don't hesitate to us for further information and advice

Safe travels! TITAN TRAILERS



Parts and Components