Industry alert: Risk of trailers disconnecting from incorrect coupling and damaged couplings

NZ Transport Agency Waka Kotahi (NZTA) is issuing an industry alert to warn the heavy vehicle industry about the risk of trailers becoming disconnected.

Industry alert: Risk of trailers disconnecting from incorrect coupling and damaged couplings [PDF, 625 KB]

Incidents where drawbar trailers have failed to couple correctly have caused them to disconnect or damage the coupling.

This type of failure can happen when coupling dropping pins are blocked by dirt or something else preventing the pin from dropping to the fully locked position.

Regular inspection, maintenance, lubrication and keeping couplings clean will prevent this happening.

Truck tow couplings with a dropping pin must be checked and inspected regularly. Drivers must check the trailer coupling at every connection at least once a day (before driving).

Key points

- Do not use modified or damaged couplings. Look out for release handles which have been bent or shifted from their original position (sometimes referred to as "clocked" on the spline).
- Keep coupling bottom bushes clean and free of debris. Do not drive with the dropping pin in the raised position, it allows dirt and debris to enter the lower pin bush.

For operators

If you operate vehicles with a drawbar:

- Inspect your fleet and check the condition of towing connections.
- Stop using vehicles with a damaged coupling or towing connection.
- Clean dirt or debris from the towing connection before inspection and use.
- Test the coupling and confirm it is working correctly, and the locking indicator is accurate.
- Complete repairs and maintenance before returning the vehicle to service.
- Keep couplings closed (pin down) when not towing, to reduce dirt in the lower pin receiver.
- Drivers must always physically check correct trailer coupling before driving.

For vehicle inspectors

When inspecting a drawbar coupling:

- Check the locking indicator shows the correct pin position (open or locked).
- Make sure the coupling is reasonably clean and the lower bush (where the pin drops) is clean and free of debris.
- Check the release handle isn’t obstructed, damaged, or hitting other components. It must freely travel to the locked pin position.

For certifiers

When inspecting a draw beam and coupling:

- Check the coupling is installed according to the manufacturer’s instructions.
- Check the coupling and locking indicator work correctly.
- Check the release handle isn’t obstructed or hitting other components in all positions. It must move freely to the locked pin position.

For repairers

- Dropping pins must move freely and lock properly—don’t allow anything to block or restrict them.
- Repairs must follow the manufacturer’s instructions and specifications.
- All components must meet the coupling manufacturer’s wear specification/tolerances.
- Make sure release handles aren’t obstructed or hitting components in all positions (locked and open).
- Ensure couplings are clean, especially in the lower bush which locates the dropping pin.
- Lubricate couplings correctly.
- Never allow a vehicle to be operated with an excessively worn or damaged coupling.
- After any repair, test the coupling to confirm:
    - it works correctly
    - the release handle isn’t obstructed in any position
    - the dropping pin correctly locates in its locked position
    - the locking indicator correctly indicates pin position and the couplings locked and unlocked status.