

INFOSHEET 1.78

Date: December 1999
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No. of Pages: 3

Early Version Holland Fleetmaster Fifth Wheels

Situation:

Potential disconnection problems have been identified with an early version Holland Fleetmaster FW8 fifth wheel. Investigation has shown that repeated attempts to engage the kingpin with the fifth wheel jaw, without ensuring the tractor and semitrailer are at compatible heights and that the jaw is open, may lead to damage. This damage leaves the trailer liable to disconnection in spite of the release handle being in the fully home position.

Clarification:

The cause is shown in the attached photograph, looking at the underside of a fifth wheel (see page 3). High and fast lock-ups on a partially closed jaw can cause the locking plunger to be driven laterally away from the throat of the fifth wheel. The locking plunger is located on the hinged arm, which is attached to the release handle at its outer end. During high and fast lock-ups, the force on the jaw is sufficient to bend the hinged arm once the release handle stop has reached the fully home position.

Once bent, the hinged arm no longer allows the locking plunger to move forward sufficiently to engage the jaw in the closed position. The amount of locking capability will vary according to the degree that the arm is bent and the locking plunger withdrawn. The jaw may lock sufficiently to enable the tractor to appear adequately coupled to the trailer, reach highway speed, and then disconnect.

The position of the release handle alone IS NOT a sufficient indication that a safe lock-up has occurred. Nor is it sufficient to jerk the trailer with the tractor after lock-up. If the nose of the locking plunger cannot be seen, the mechanism has been damaged, and the fifth wheel is **DANGEROUS AND MUST NOT BE USED UNTIL REPAIRED.**

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The potential hazard does not affect other models of Holland fifth wheels, and only affects Fleetmaster units that have been badly treated during the coupling operation. In future, Holland Fleetmaster fifth wheel jaw kits will be supplied with a new hinged arm, as well as jaws and other replacement parts, and will come complete with fitting and operating instructions that have until now accompanied overhaul kits and new fifth wheels.

Action:

It may be possible to see the arm from beneath the vehicle and detect the damage, but the best diagnostic aid is the position of the locking plunger nose.

Visual inspection of the hinged arm is misleading. A mechanism in an unsafe condition can best be detected by looking from the rear into the throat of the fifth wheel once the jaw has locked around the kingpin. The fifth wheel is safe if, with the release handle fully home, the nose of the locking plunger is clearly visible. This is fully described in the Holland Operating and Repair instructions.

Maintenance personnel servicing tractor units cannot use a standard kingpin to adjust the jaws of this model of fifth wheel. The correct Holland TLN1000 or TLN5000 lock tester must be used to prevent over-adjustment and subsequent disconnection. Correct adjustment of the jaw using the Holland gauge leaves the jaw with a small clearance around the kingpin when the kingpin is in the locked position.

Maintenance personnel servicing or operating vehicles equipped with fifth wheels should be familiar with the maintenance and operating instructions for all brands on which they work. For Holland fifth wheels, appropriate instructions can be obtained from any Holland distributor or from Transpecs (PO Box 98-971, Auckland, or telephone 09 980 7300, fax 09 980 7341).

Transport Services Delivery agents have been instructed to inspect tractors equipped with Holland Fleetmaster FW8 fifth wheels for this condition during Certificate of Fitness (CoF) inspections.

Note for holders of the Heavy Motor Vehicle Safety Inspection Guide

This Infosheet supplements the guidance provided by Infosheets 1.30 and 1.50, and page 12.4 of the *Heavy Motor Vehicle Safety Inspection Guide*.

HOLLAND FLEETMASTER FW 8 FIFTH WHEEL

VIEW OF UNSAFE LOCKING BAR LEVER

