

PARKBRAKE FAULT: POLICE ACTION

Members will be aware that we have issued two previous circulars regarding park brake failures on *Sanwa Seiki* park brake control valves¹. These control valves are predominately fitted to Nissan trucks. In the time since the release of the latest circular there has been another serious incident involving one of these control valves. Having been informed of this incident our intention had been to provide a reminder to the industry. However, while drafting our circular we coincidentally received a request from the Police to circulate advice from them on this topic.

Rather than just rejig our draft we decided to transcribe the message we received from the Police verbatim. Hopefully this will reinforce the gravity of the situation at hand.

Members should also be aware of the increased attention that the Police are giving this matter. Although their position may not appear to fit Police objectives they do meet the Health and Safety aspects that Police are also responsible for.

The Police mention in their correspondence a warning sticker. A copy of that sticker is included at the end of this Circular. Although not mentioned in their message below the Police also made reference to the MBIE (originally DoL) Hazard Management Bulletin released earlier this year. The Bulletin is available on the following link. It is also attached to this Circular.

<http://www.business.govt.nz/healthandsafetygroup/information-guidance/all-guidance-items/hazard-management-bulletin-trucks-spring-brake-failure-kills-pedestrian>

Police message

There has been yet another crash involving an unintentional park brake release on a Nissan truck fitted with a Sanwa Seiki park brake control. This adds to the list of at least 8 incidents that have been documented in the lower South Island since the investigation of the 2010 fatal in Dunedin. In Southern there have also been several roadside inspections where this make of park brake have been in very poor working condition.

¹ Original circular issued 13 February 2013. Second circular issued 30 September 2013

The Coroner made a direction to UD Trucks (Nissan) to work with NZTA to notify the approximate 1500 owners of the models affected, some of the owners have not received the information for various reasons, most probably through change of ownership. In the recent crash the operator was not aware of the brake issue despite them operating several Nissans nationwide.

There is still currently ongoing dialogue between CVIU , NZTA and UD Trucks (Nissan) as to what more can be done regarding notifying operators of the issues with these park brakes.

In an effort to make sure CVIU have done everything we can I have directed my staff to follow a procedure when they deal with any Nissan CK300 through to the CK440 that were manufactured from 1993 to 2005.....

- If they come across any Nissans Models from the CK300 through to the CK440 that were manufactured from 1993 to 2005, give them a copy of the Hazard alert.*
- If they have not got the orange warning sticker affixed to the door or dash board, make a phone enq with the operator at the time to establish if they have had any contact from UD trucks and if they aware of the hazard.*
- Advise the operator that this is a Health and Safety issue and advise them to contact UD trucks.*

Note:

- the warning sticker with the orange band across the top is the one supplied by UD (Trucks) the one below was produced by a local service agent.*
- the Sanwa Seiki brake control although predominantly fitted to Nissans was apparently fitted to some Isuzu's of a similar vintage.*





Truck's Spring Brake Failure Kills Pedestrian



INCIDENT

A member of the public was killed when he walked between two unattended trucks parked on a hill road. The hand brake failed on the uppermost vehicle, causing it to run into the lower, crushing the victim.

CIRCUMSTANCES

Two trucks were parked on a hill, facing down.

The uppermost truck (truck 2) parked behind the first (truck 1) and the driver applied the park brake (a spring brake). Truck 2's driver exited the truck's cab and walked towards the rear of the vehicle, when the park brake released. The truck rolled down the hill into truck 1, crushing a member of the public who was walking between the rear of truck 1 and the front of truck 2.

INVESTIGATION

The investigation revealed that this was not an isolated incident; a number of other uncontrolled park brake releases have been recorded.

Truck 2 was fitted with a park brake control valve positioned at the base of the driver's seat. There are two known variants of brake valve – both operate the same way with the same locking system. They were manufactured up until approximately 2003.

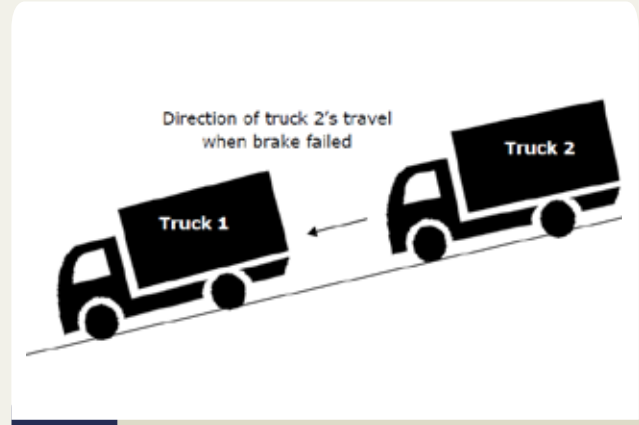
In the case of truck 2, the locking dowel in the park brake control valve had not fully engaged in the valve body, and the brake released.

There were two identified reasons for the brake not fully engaging:

1. the park brake operating lever (located in the handle head of the park brake control valve body) was sticking, and
2. the locking hole in the park brake control valve body was worn and elongated.

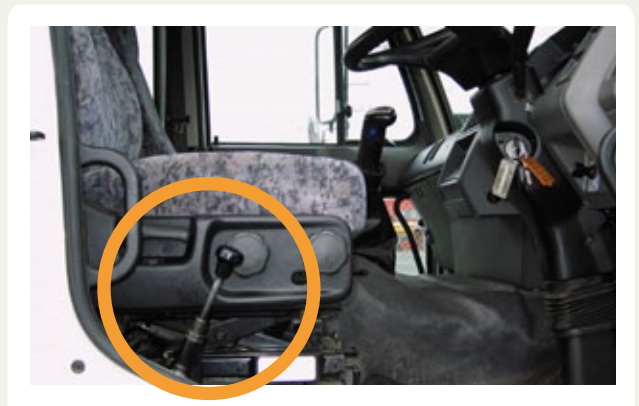
Either fault – on its own or together – will prevent full brake engagement.

The driver engaged the park brake control valve, but the operating lever failed to fully engage the locking dowel. The driver exited the truck with the park brake engaged but not correctly locked. Factors such as engine vibration, the bump of the closing door, and the return spring pressure on the operating lever would have been enough to release the brake, with fatal consequences.



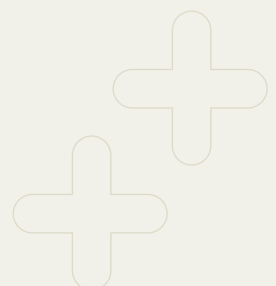
1

Figure 1: Diagram showing how the trucks were parked and the direction truck 2 travelled when the park brake failed.



2

Figure 2: shows the interior of a truck cab with a park brake control valve positioned at the base of the driver's seat. The park brake is in the "engaged" position.





GUIDANCE

The New Zealand Police's Commercial Vehicle Investigation Unit carried out an investigation, and made a number of recommendations.

Considering the age of some of the vehicles with this type of park brake control valve, control valve operation must be checked regularly. Operators and service personnel need to be made aware that:

When applying the park brake, the driver must ensure that the operating handle on the park brake control valve has fully dropped into its locking position. If this does not occur, the valve must be serviced immediately. The park brake control valve body wears down with use and, aided by the entry of dust and dirt, the smooth operation of the valve is affected – often to the degree that it will fail.

Dust boots on any such control valves must be in good condition.

Due to the position of the park brake control valve at the side of the seat base, the driver should make sure that he or she does not catch his or her clothing on the control lever when exiting the cab, because this, too, will often result in an uncontrolled park brake release.

WHICH INDUSTRIES/SECTORS OR MATTERS WILL THIS INFORMATION BE RELEVANT TO?

- All operators of heavy motor vehicles fitted with control valves and other vehicles fitted with similar type valves with spring brakes as a park brake;
- All drivers of these vehicles;
- All heavy motor vehicle service providers and repairers.

Note: This material has been prepared using the best information available to the Police/Department of Labour at the time of publication. Information may change over time and it may be necessary for you to obtain an update. This material is also only intended to provide general advice and does not constitute legal advice. You should make your own judgement about action you may need to take to ensure you have complied with your workplace health and safety obligations under the law.

