

BRITISH RAILWAYS



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DRIVER'S MANUAL

DRIVER'S SAFETY DEVICE

BR 33056/4

DRIVERS' SAFETY DEVICE

1.1 Foot Pedals

The driver's safety device in diesel electric locomotives consists of a foot pedal situated beneath the driving desk. This must be depressed when the reversing handle is in either FOR or REV if it is required to release the brakes. The brakes will be applied 5-7 seconds after the pedal is released. Traction power will also be suspended when running.

If a brake application occurs as a result of the D.S.D., the power controller must be moved to OFF. When the brakes have been fully released, power may be reapplied. Extreme care must be taken if loose coupled vehicles are being hauled and the train must come to a stand before reapplying power.

A holdover button is provided on the righthand side of the driving compartment in order to keep the brakes released if it is necessary to cross the cab.

1.2 Foot pedals with vigilance control

Some locomotives are being fitted with a 'vigilance' system added to the driver's safety device. When this system is used, the foot pedal must be depressed in the normal way, in order to keep the brakes released when the reversing handle is at FOR or REV. At the end of a period of approximately one minute a buzzer will sound. The pedal must then be released to its fully raised position and re-depressed within 5 seconds. This will silence the buzzer and the brakes will remain released for a further minute, provided the pedal remains depressed. If the pedal is not released and re-depressed when the buzzer sounds, the brakes will commence to apply after a period of 5-7 seconds. Similarly, if the pedal is released to its raised position at any time when the reversing handle is at FOR or REV, the brakes will commence to apply after a period of 5-7 seconds.

A hand plunger is provided on both sides of the driving compartment. These plungers may be used as an alternative to the pedal and they also allow the driver to keep the brakes released if it is necessary to cross the driving compartment.

1.3 IMPORTANT

The reversing handle must never be moved from the FOR or REV position unless the locomotive is stationary and the brake is applied.

1.4 Diesel mechanical multiple units

The driver's safety device in Diesel mechanical multiple units is incorporated in the power controller, which must be depressed when in the IDLING position in order to release the brakes. If the handle is raised from any position the brakes will commence to apply after a period of 5-7 seconds. If the handle is raised when in a power position, it must be returned to IDLING and then be re-depressed, in order to prevent a brake application.

1.5. Isolation

In dual braked locomotives a D.S.D. isolating cock is provided. If the brake equipment is of Davies & Metcalfe manufacture, the D.S.D. pedal must be depressed, even though the equipment is isolated. This is necessary in order to keep the feed cut-off valves energised and failure to do so will result in a slow fall of the brake pipe pressure.

In vacuum braked locomotives a single D.S.D. isolating cock may be provided or alternatively it may be necessary to close an air and a vacuum isolating cock.

In D.M.U. trains an isolating cock is provided on each individual D.S.D. apparatus, which is situated behind a transparent cover. The cock only isolates the apparatus in the power car in which it is situated and the D.S.D. does not become inoperative on the train unless all such cocks are moved to ISOLATED. If more than one power car is used on a train, a D.S.D. apparatus may be isolated, but protection is still available from the remainder.

If the D.S.D. apparatus is isolated or inoperative on any train, the driver must, if possible work the train to the first telephone, signal box or station and await further instructions from the Traffic Control unless he is accompanied by a second man who is competent to operate the brake.