



LIGHT VEHICLE FIRES

INCIDENT

During 1998, two Toyota Landcruiser vehicles at opencut mines caught fire. The fires were due to electrical faults in the engine compartment of the vehicles.

CIRCUMSTANCES

One of the vehicles had additional lighting fitted as an after-market upgrade. The wiring loom passed through an unbushed hole in the mudguard. Vibration caused insulation damage, resulting in a short circuit and fire.

The other vehicle had a cover missing from a slave relay enclosure. The enclosure filled with foreign material causing a short circuit and resultant fire.

INVESTIGATION

In both cases the electrical protection for the faulted circuits was provided by a "fusible link" rated at 65 amps. Testing showed that the "fusible link" would not isolate the faulted circuits at a current flow of 200 amps.

Efficient aftermarket wiring of auxiliary apparatus and better maintenance would have prevented the faults occurring.

RECOMMENDATIONS

All Toyota Landcruisers vehicles are to be fitted with a replacement electrical protective device, (Toyota Part No. 82620 60010) and to have the "Fusible Link".removed.

For further information contact Dennis Spruce, Inspector of Electrical Engineering, Hunter Region, on (02) 6572 1899, mobile 0418 618 337

A handwritten signature in black ink, appearing to read "N. Sneddon".

N. SNEDDON
ASSISTANT DIRECTOR SAFETY OPERATIONS