



**AUSTRALIAN RAIL TRACK CORPORATION LTD**

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**Discipline**

**Engineering Standard – NSW**

**Category**

**Signalling**

**Title**

**Damage to Signalling Equipment Including Cables**

**Reference Number**

**SMP 05 – (RIC Standard: SC 00 52 00 05 SI)**

Superseded

**Document Control**

<b>Status</b>	<b>Date</b>	<b>Prepared</b>	<b>Reviewed</b>	<b>Endorsed</b>	<b>Approved</b>
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		Refer to Reference Number	H Olsen	M Owens	Refer to minutes of meeting 12/08/04

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## **Document Approval**

The technical content of this document has been approved by the relevant ARTC engineering authority and has also been endorsed by the ARTC Safety Committee.

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## About This Standard

This Standard defines the procedures and actions to be taken when operational signalling infrastructure has been damaged.

Superseded

## Document History

**Primary Source** – RIC Standard SC 00 52 00 05 SI Version 2.0

### List of Amendments –

ISSUE	DATE	CLAUSE	DESCRIPTION
1.1	14/03/2005	Disclaimer	Minor editorial change
	13/08/2010		Superseded by ESM-00-05 and ESM-00-06

Superseded

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Superseded

## 1 GENERAL

It is essential that repair of damage to vital signalling equipment including cables is completed to be safe and secure.

Details of incidents of damage involving the replacement, reconnection or readjustment of vital signalling equipment including cables shall be reported to the Maintenance Signal Engineer who shall satisfy him/herself that the matter has received appropriate attention and shall instigate corrective action to prevent a recurrence, as required.

The Maintenance Signal Engineer shall maintain a record or database of damage to vital signalling equipment including cables, recording full details of the incident and personnel involved, and the repairs required and effected.

Repairs shall be carried out by suitably accredited personnel to proper standards and to the satisfaction of the Signal Engineer responsible for the maintenance of the equipment.

Repairs shall be carried out in accordance with the respective safeworking procedures for working on signalling equipment.

The repaired equipment shall be tested by a suitable accredited person to ensure that the function operates correctly and reliably by a suitably accredited person. Signalling cable repairs shall be insulation tested.

When repairs to damaged signalling equipment have been effected, a Detailed Report and/or “Damage to Signalling and Safeworking Equipment by Other Parties” forms (SF J104/A and SF J104/B) as applicable, shall be submitted to the Maintenance Signal Engineer by the senior signalling employee attending.

Full details of the cause of the damage shall be given. Units of plant owned or operated by either ARTC or other parties shall be included in the report as well as the name of the operator.

Whenever temporary repairs are made to vital items of signalling equipment including cables then a report of the nature of the repairs is to be made to the Signal Engineer for inclusion on the records or in the database.

If a temporary repair has been made, the Signal Maintainer shall ensure that permanent repairs are carried out at the earliest opportunity and advise the Maintenance Signal Engineer for the records or database to be updated.

Where accredited persons other than the local Signal Maintainer attend a failure or damage incident and carry out temporary repairs, a copy of the Detailed Report is to be forwarded to the local Signal Engineer describing the defect/damage and the temporary repairs.

A record of temporary repairs required to be made permanent shall be kept by the Signal Engineers.

## 2 Signalling Forms

**Australian Rail Track Corporation**

**Signalling Form**

**SF J104/A Rev.2**

### DAMAGE TO SIGNALLING AND SAFEWORKING EQUIPMENT BY OTHER PARTIES

LOCATION:

EQUIPMENT:

Date of accident: \_\_\_\_\_ / \_\_\_\_\_ / 19

Time \_\_\_\_\_ am/pm

Time of call \_\_\_\_\_ am/pm

Time attended at scene: \_\_\_\_\_ am/pm

Date remedied: \_\_\_\_\_ / \_\_\_\_\_ / 19

Time remedied \_\_\_\_\_ am/pm

OTHER PARTIES INVOLVED: \_\_\_\_\_

(Full name and address, including Vehicle Registration where applicable, name both owner and driver)

LICENCE No. OF DRIVER \_\_\_\_\_ POLICE OFFICER I/C INVESTIGATIONS \_\_\_\_\_

FULL DESCRIPTION OF HOW ACCIDENT OCCURRED:

NAME AND CLASSIFICATION OF OFFICER I/C REPAIRS:

DESCRIPTION OF EQUIPMENT DAMAGE & REPAIRS REQUIRED (Refer SF J104/B)

WORK ORDER No.: \_\_\_\_\_

Signature: \_\_\_\_\_

Date \_\_\_\_\_

CERTIFIED CORRECT: \_\_\_\_\_

(Controlling Officer)

(Covering Report Attached)

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**Signalling Form SF J104/B Sh 1 of 2 Rev.2**

### DAMAGE TO SIGNALLING AND SAFEWORKING EQUIPMENT BY OTHER PARTIES

(Check list for use in case of derailment or major incident)

**INCIDENT DETAILS**

Incident:			
Location:			
Date:		Time:	
Report Compiled By (Name):			
Position:		Location:	

**THROUGH SERVICES**

Air Lines	
Cable Troughing (GST)	
GLT	
Cable Pits	
Cable – Multicore	
Cable – Power	
Cable – Communications	
Aerial Line Wires / Cable	
Line Poles	

**POINTS EQUIPMENT**

Channel Iron	
Cranks, Compensators etc.	
Lever, Frames	
Point Machines	
Derails	
EP Valve Units	
Detectors, Indication Boxes	
Locks (Facing Point, Plunger, Bracket)	
Releasing Switches	
Point Blades	
Extension Irons	
Spreaders, Rods etc.	
Clamp Lock Pumps	
Clamp Lock Piston Unit	
Clamp / Claw Lock Mechanism	
ESML	



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**Signalling Form SF J104/B Sh 2 of 2 Rev.2**

**EQUIPMENT HOUSINGS**

Termination Boxes / DB's	
Equipment / Level Crossing Hut	
Location Cases	
Earthing Rods, Mats	

**SIGNAL EQUIPMENT**

Signal Gantries	
Running Signals	
Shunt Signals	
Signal Lights	
Point Indicators	
Train Stops	
Employee Warning Lights	
Buffer Stop Lights	
Notice Boards	
Telephones	
Trackside Monitoring Equipment	

**LEVEL CROSSING EQUIPMENT**

Lights Stand	
Lights	
Boom Lights	
Boom Mechanism	
Booms	
Pedestrian Barriers/Lights	
ARMCO Guardrails	

**TRACK CIRCUITS**

Insulated Joints	
Bootleg Risers	
Matching/Tuning Units	
Track Connection Cables	
Series Bonds, Parallel Bonds	
Feed/Relay Fuses	
Impedance Bonds	
Impedance Bond Sideleads	
Electrolysis Bonds/Cables	
OHWS Spark Gap Connections	
Solar Feed Units	