

SAFE Notice *2019* 1038

Telegram

SYDNEY

06 SEPTEMBER

1330 HOURS

TO:

SYDNEY TRAINS

Deputy Executive Director Network
Operations
Head of Service Delivery
Area Operations Managers Signal Box
Operations
ROC Sydney
Signal Box Operations
Deputy Executive Directors Train Crew
Crew Managers Train Crew
Shift Managers Train Crew

Waratah (A and B sets) fitted with Automatic Train Protection (ATP) equipment

Effective from 1330 hours, Tuesday, 10 September 2019, this SAFE Notice Telegram cancels and replaces SAFE Notice Telegram 2019 – 1013.

Changes since the previous SAFE Notice Telegram are that the ATP Driver machine interface (DMI) is now integrated with the Waratah electronic train information system (eTIS) in all fitted sets.

Waratah (A and B sets) fitted with Automatic Train Protection (ATP) equipment

Introduction

The Waratah A Set fleet is being progressively fitted with Automatic Train Protection (ATP) equipment, and B Set Waratahs have ATP equipment already installed.

In normal use, the trains are to be operated with the ATP system isolated. The ATP system may be taken out of isolation only for authorised testing.



NOTE

Operation of the train during testing, with ATP not isolated, will be under the supervision of a test captain.

Summary of changes

Installing ATP includes:

- integrating an ATP display and control touchscreen, called the Driver machine interface (DMI), with eTIS, which can be displayed on either screen
- installing two circuit-breakers for the ATP system (CB-ATP and CB-ATPCTRL) on the Locker 8 door
- installing ATP controls in a new panel in Locker 7A, as shown in Figure 1
- installing underframe components including a radar unit, an ATP antenna and speed sensors.
- installing connections to the vigilance control (VIG) and Driver Detection (DDV) penalty valves at each end of the set
- installing an ATP computer in each Driver trailer car, in locker 7B.

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NOTE

The ATP computer is not accessible to Train Crew.

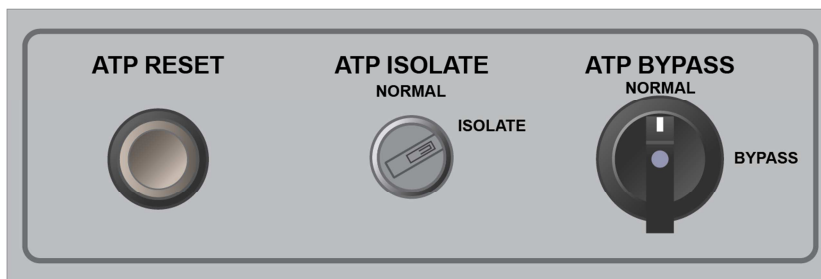


FIGURE 1: ATP control panel.

Trains fitted with ATP have warning signs (see Figure 2):

- below each bodyside crew door
- below the couplers.

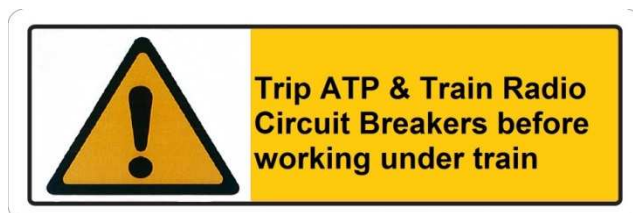


FIGURE 2: ATP warning sign.

Changes to the electronic Train Information System (eTIS)

On test trains with an integrated DMI, the eTIS:

- includes an ATP Status screen (D575)
- has a combined Low and High Tension status screen (D570)
- includes ATP in the Train Certificate
- displays the ATP mode in the Main Status screen (D101)

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ATP testing operating instructions

Before driving a train with ATP activated, Drivers must be briefed on how to operate ATP.

Guard's activities on trains fitted with ATP are not changed.

Except during testing, the ATP ISOLATE switch must be set to ISOLATE. If the switch is not in ISOLATE, tell Mechanical Control and follow their instructions.

Only test Engineers or maintenance personnel may un-isolate ATP.

Cutting in a cab during testing

Driver

1. Before cutting in a cab:
 - check that the CB-ATP & CB-ATPCTRL circuit breakers are ON,
 - check that the ATP ISOLATE switch is set to NORMAL. If it is not, tell the test captain
 - make sure that the ATP BYPASS switch is set to NORMAL.

When a cab is cut in, the system will show self-test and brake test messages.

Precautions for people under terminal cars



WARNING

If ATP is not isolated, its antennas generate electromagnetic radiation that can be harmful to people underneath the train.

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Train Crew

1. Before any person goes beneath a terminal car in which ATP is not isolated:
 - trip the car's ATP circuit-breaker (CB-ATP)
 - trip the car's train radio circuit-breaker (CB-TRADIO):
2. Do not reset the circuit-breakers until people are no longer beneath the train.



NOTE

The antennas are not hazardous to people in front of or beside the train.

Ending testing

When ATP testing is completed:

- the ATP system must be isolated in each driving cab by setting the ATP ISOLATE switch to ISOLATE
- the test captain must trip ATP-related circuit-breakers in the ATP computer lockers.

Fault management

While ATP is isolated, faults in the ATP equipment should not affect train operations.

During testing, possible ATP fault indications include:

- the DMI screen freezing, going blank or displaying a system failure symbol (⚠)
- the brake pipe venting
- the speedometer fluctuating rapidly or showing an obviously incorrect speed.

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If a fault other than one expected for a test case is indicated during testing, the Driver must tell the test captain and follow their instructions.

If the train needs assistance:

- the ATP system must be isolated in each driving cab by setting the ATP ISOLATE switch to ISOLATE
- the test captain must trip ATP-related circuit-breakers in the ATP computer lockers.

Effective date

1330 hours 10 September 2019

SYDNEY, 6 SEPTEMBER 2019

DIRECTOR SAFETY AND STANDARDS SYDNEY TRAINS

Returned to Controlling Manager: Date: Signed:



(Cut along this line and forward the detached receipt to your Controlling Manager)

To Controlling Manager:.....

Received SAFE Notice No. 1038 – 2019 Date:..... Signed:

Name (print): Location:

(Controlling Manager to retain this Acknowledgement of Receipt of the SAFE Notice for record purposes for 90 days)