

PUBLIC TRANSPORT AUTHORITY
SAFEWORKING RULES AND PROCEDURES

5003
HALF PILOT
KEYS AND
PILOT KEY
WORKING

CONTENTS

1.	Purpose	3
2.	General.....	3
	2.1. Half Pilot Keys.....	3
	2.2. Lost or Damaged Half Pilot Keys	3
3.	Pilot Key Working	4
	3.1. Pilot Key	4
	3.2. Competent Worker Available	5
	3.3. Advising Rail Traffic Crews.	5
4.	Introducing Pilot Key Working	5
	4.1. Departure Signal Has Failed	5
	4.2. Departure Signal Will Show a Proceed Indication.....	5
	4.3. Rail Traffic Arrives at the Other End of the Section	5
	4.4. Introduction by Road Vehicle	6
	4.5. Transfer of Pilot Key.....	6
5.	Working of Rail Traffic	6
	5.1. Assurances	6
	5.2. Following Rail Traffic.....	6
6.	Pilot Key Lost	7
7.	Reporting.....	7
8.	Resumption of Normal Working.....	8
9.	Keeping Records.....	8
10.	Reference	8
11.	Effective Date	8

1. PURPOSE

The purpose of this rule is to detail the protocols for the use of *Half Pilot Keys* which are provided at each end of a single line *Section* and work in conjunction with the *Departure Signals* at the end of the *Section* where they are located in the Public Transport Authority (PTA) *Network*.

Half Pilot Keys are used to assist in providing safe separation of *Rail Traffic* during *Signalling* failures, *Rail Traffic* failures and some *Work on Track* activities.

2. GENERAL

At each end of a single line automatic signalling section, a *Half Pilot Key* is located adjacent to the *Departure Signals*.

Half Pilot Keys are engraved with the names of the stations at each end of the *Section*; the first station shown is the station at which the key belongs.

A *Half Pilot Key* must not be removed without permission of the *Train Controller*.

2.1. HALF PILOT KEYS

A *Half Pilot Key* is housed in a switch. To remove a *Half Pilot Key* it is turned to "out", then withdrawn.

The *Half Pilot Key* works in conjunction with the *Departure Signals* at the end of the *Section* where it is located. When the *Half Pilot Key* is withdrawn or not turned to "in" the *Departure Signals* at that end will remain at Stop.

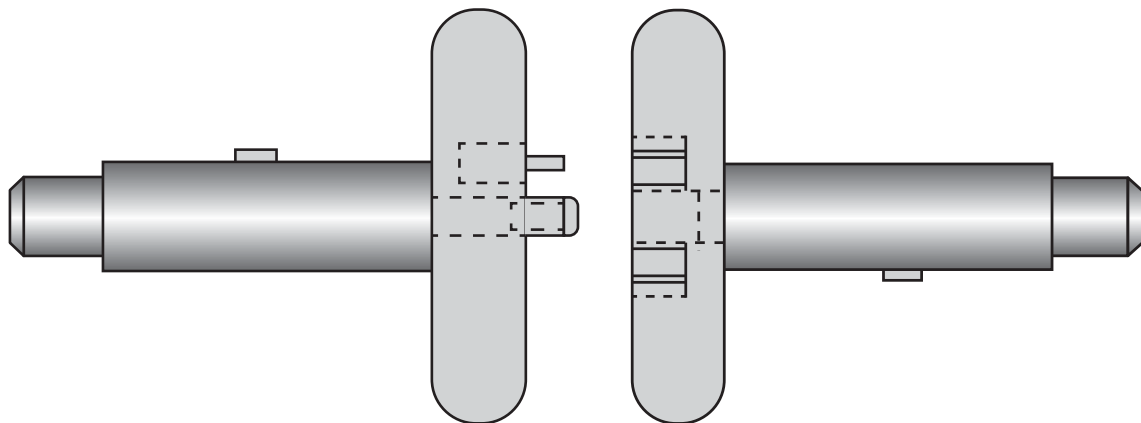


FIGURE 2.1. Male key

FIGURE 2.2. Female key

2.2. LOST OR DAMAGED HALF PILOT KEYS

In the event of a *Half Pilot Key* becoming lost or damaged in such a way that it cannot be inserted in the *Pilot Key* switch:

- the *Worker* discovering the loss or damage must advise the *Train Controller*, who will advise the Transperth Train Operations Manager;
- the Transperth Train Operations Manager must make *Altered Working* arrangements for *Rail Traffic* until such time as a new *Half Pilot Key* is obtained, in accordance with **Rule 1001 Scope of the Network Rules, Section 2.4**; and
- if a lengthy delay is likely to occur before a replacement is obtained, the Transperth Train Operations Manager may *Authorise* the *Maintenance Representative* to cut the *Half Pilot Key* contact out of circuit, to enable working under proper *Signal* indication.

3. PILOT KEY WORKING

In the event of failure of the *Departure Signal* controlling the entrance to a single line automatic signalling section, *Pilot Key Working* is introduced as required.

3.1. PILOT KEY

A *Pilot Key* consists of two *Half Pilot Keys* taken from the *Pilot Key* switches located *Adjacent* to the *Departure Signals* at each end of the *Section* concerned. It is assembled by screwing the two *Half Pilot Keys* together.

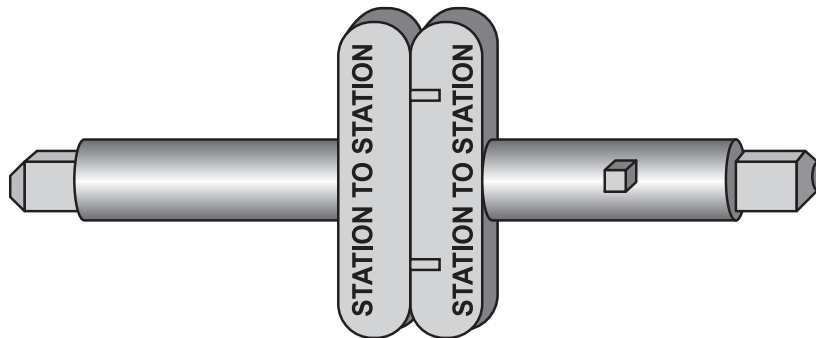


FIGURE 3.1. Full Pilot Key assembled

Half Pilot Keys are arranged in such a manner that it is not possible to screw them together unless they are from each end of the affected *Section*.

After screwing the two *Half Pilot Keys* together, the *Competent Worker* must:

- examine the *Pilot Key* to ensure it correctly shows the names of the stations at each end of the affected *Section*; and
- advise the *Train Controller* when *Pilot Key Working* is instituted.

Rail Traffic Crew must not accept a *Pilot Key* that is not properly screwed together or does not display the *Location* names applicable to the affected *Section*.

3.2. COMPETENT WORKER AVAILABLE

The *Competent Worker*, if available, may attend the *Location* and work as directed by the *Train Controller* to assist with *Pilot Key Working*.

3.3. ADVISING RAIL TRAFFIC CREW

Rail Traffic Crew approaching a *Section* where *Pilot Key Working* has been instituted must be given prior notification by:

- the issue of a *Special Notice*; or
- verbal advice from the *Train Controller*.

4. INTRODUCING PILOT KEY WORKING

4.1. DEPARTURE SIGNAL FAILURE

Where the *Departure Signal* fails, the *Train Controller* must arrange issue of an *Alternative Proceed Authority (APA)* for the first *Rail Traffic* to pass the *Departure Signal* at Stop, in accordance with **Rule 5019 Alternative Proceed Authority**.

The *Rail Traffic Crew* must remove the *Half Pilot Key* and take it to the other end of the *Section*.

4.2. DEPARTURE SIGNAL SHOWING A PROCEED INDICATION

Where the *Departure Signal* shows a *Proceed* indication, the *Rail Traffic* must pass the *Departure Signal* at *Proceed*, and when passed, the *Rail Traffic Crew* must remove the *Half Pilot Key* and take it to the other end of the *Section*.

4.3. RAIL TRAFFIC ARRIVAL AT THE OTHER END OF THE SECTION

On arrival at the other end of the section the *Rail Traffic Crew* must:

- remove the *Half Pilot Key* from that end;
- screw the *Half Pilot Keys* together;
- advise the *Train Controller* that *Pilot Key Working* has been instituted; and
- leave the *Pilot Key* where instructed by the *Train Controller*.



NOTE

Where the *Pilot Key* would be at the wrong end of the *Section* after *Pilot Key Working* has been introduced, the *Train Controller* may delay the introduction of *Pilot Key Working* by continuing to issue APAs.

4.4. INTRODUCTION BY ROAD VEHICLE

Where approved by the Transperth Train Operations Manager, *Pilot Key Working* may be introduced by a road vehicle, provided:

- the state of the *Section* is known;
- no *Rail Traffic* is in the affected *Section*; and
- *Rail Traffic* at or *Closely Approaching* the *Location* has been issued a *Restraint Authority*.

4.5. TRANSFER OF PILOT KEY

After *Pilot Key Working* has been introduced the *Pilot Key* can be transferred from one end of the *Section* to the other by whatever means available.

The *Train Controller* will direct the *Competent Worker* where to take the *Pilot Key* and where it is to be left.

5. WORKING OF RAIL TRAFFIC

When *Pilot Key Working* has been introduced and *Rail Traffic* is *Authorised* to pass a *Departure Signal* at Stop by the *Train Controller*, this *Authority* applies to the *Departure Signal* only and if any *Intermediate Signals* are at Stop they can only be passed as provided in **Rule 6013 Passing Fixed Signals at Stop**.

5.1. ASSURANCES

Before being *Authorised* to enter the *Section* and where *Pilot Key Working* has been introduced, *Rail Traffic Crew* must be in possession of the *Pilot Key*, or *Pilot Key Caution Authority* form after seeing the *Pilot Key*.

5.2. FOLLOWING RAIL TRAFFIC

When it is necessary to start two or more *Rail Traffic* movements from one end of the *Section*, before *Rail Traffic* has to be started from the opposite end, the *Train Controller* must issue the *Rail Traffic Crew* a *Pilot Key Caution Authority* form.

Rail Traffic must not be permitted to enter a *Section* under *Pilot Key Working* unless the preceding *Rail Traffic* has passed completely out of:

- the *Section*; or
- where *Permissive Working* is permitted, the first *Block*.

The *Rail Traffic Crew* must not accept a Pilot Key Caution Authority form unless they first sight the *Pilot Key*.



NOTE

A Pilot Key Caution Authority form applies to a single journey only, to the other end of the *Section*.

The Pilot Key Caution Authority form must be cancelled when the *Rail Traffic* has arrived *Complete* at the end of the *Section*.

The last *Rail Traffic Crew* which is to pass over the *Section* before a *Rail Traffic* movement has to be started from the other end, must carry the *Pilot Key*.

6. PILOT KEY LOST

Where a *Pilot Key* is lost, the *Train Controller* must advise the Transperth Train Operations Manager, who must make special arrangements for working of *Rail Traffic*.

If the lost *Pilot Key* is found, the *Train Controller* must be advised, and the *Train Controller* will advise the Transperth Train Operations Manager.

7. REPORTING

The *Rail Traffic Crew* must advise the *Train Controller* when the *Rail Traffic*:

- enters the affected *Section*; and
 - arrives *Complete* at the *Location* at the end of the affected *Section*.
-

8. RESUMPTION OF NORMAL WORKING



WARNING

Where normal working is to be resumed, *Rail Traffic* must not be permitted to depart until the *Departure Signal* is displaying a *Proceed* indication.

When normal working is to be resumed, the *Train Controller* must instruct the *Rail Traffic Crew* or *Competent Worker* at the *Location* where *Pilot Key Working* is to be cancelled, to:

- unscrew the *Pilot Key*;
- replace the appropriate *Half Pilot Key* in the *Pilot Key* switch; and
- then take the other *Half Pilot Key* to the opposite end of the *Section*.

After replacing each *Half Pilot Key* and turning them to "in", the *Rail Traffic Crew* or *Competent Worker* must advise the *Train Controller*.

The *Train Controller* must test affected *Departure Signals* when each *Half Pilot Key* is replaced.

9. KEEPING RECORDS

Train Controllers must keep a *Permanent Record* of the details of *Pilot Key Working*.

10. REFERENCE

Rule 1001 Scope of the Network Rules
Rule 5019 Alternative Proceed Authority
Rule 6013 Passing Signals at Stop

11. EFFECTIVE DATE

1 November 2015