Section 11

Train Signals - Rules 1 to 5

Applicability

VIC

Publication Requirement

External Only

Document Status

Issue/Revision #	Effective from
1.2	26 October 2014
2.0	04 October 2015

Table of Contents

1. Train Lights

a. Head and Marker Lights

For the information of Stationmasters, Signallers and others, each locomotive, railcar or leading motor carriage of a train must display head and marker lights., and if available, destination signs.

Locomotives have a head light and two marker lights at each end. Motor carriages are provided with head and marker lights on the leading end.

b. White Lights

Two white marker lights are to be displayed, one on either side of the leading end of the train, except where otherwise directed in this Code of Practice.

When a train is hauled by more than one locomotive, only the headlight on the leading locomotive is to be switched on.

c. Lights Used During Darkness and Shunting Operations

Locomotives engaged in shunting duties must display a ‘white’ marker light on the Driver’s side at each end of the locomotive, and a ‘red’ marker light on the opposite side at each end. The headlight must remain switched off.

d. Destination Signs at Night

In addition to the 'white' marker lights, electric trains have destination signs at the front and rear, and these must be illuminated at night.

2. Tail Signals

a. Train Discs and Lights

Every train on a running line must display at the rear of the last vehicle either:

1. A white disc
2. A red light(s) both day and night
3. An end of train marker both day and night, or
4. An End of Train Monitoring Unit both day and night

An End of Train Marker may consist of standard ETM, a modified ETM for use where electronic end of train monitoring is provided (TAILS), an ETAS unit, or a unit consisting of a white reflectorized disc by day, or flashing red light displayed at night-time or during inclement weather.

If 'D' vans are attached to the rear of passenger trains, two flashing lights are affixed to the trailing end of the van. These flashing lights show 'red' towards the rear of the train and 'white' towards the front.

b. Multiple Locomotives Coupled Together

When multiple locomotives run coupled together without a train, the last locomotive only must carry the end of train marker, white disc or red light in the rear of the locomotive.

c. Locomotive Assisting in Rear of a Train

When a locomotive assists in the rear of a train by night the following marker lights must be displayed:

1. white marker lights on the front, and
2. an end of train marker, white disc or red light on the rear of the assisting locomotive.

d. Removal of Tail Signals

Where a train is assisted by another locomotive or train in the rear, the Driver of the assisting locomotive must remove any markers at the rear of the first train.

Immediately upon detaching the assisting locomotive or train at a location station or crossing loop, the tail light, the end of train marker or disc must be replaced by the Driver of the assisting locomotive.

3. Headlight and ETM

a. Headlight Full On

The headlight must normally be `full on' during darkness, and by daylight and darkness when travelling on the ARTC Network. beyond Newport., Sunshine, Dandenong, Broadmeadows, Frankston & Eltham when passing through the Heidelberg-Rosanna tunnel, and on the goods line between Newport and Sunshine.

b. Headlight Dimmed

The headlight must be dimmed if full on when:

1. Passing through the Suburban area, between Melbourne and the following stations:

Newport	Eltham
Sunshine	Epping
Dandenong	Upfield
Belgrave	Sandringham
Lilydale	Williamstown
Broadmeadows	Glen Waverley, and
Frankston	Alamein

2. approaching stations where the train is scheduled to stop,
3. standing within location limits,
4. exchanging staffs by hand,
5. in yards where shunting locomotives are employed,
6. trains approaching in opposite directions, until the locomotives or leading cabs have passed each other. The headlight must then be returned to `full on'.

The headlight must be dimmed at all times passing through the underground loop and West Richmond tunnel.

c. Headlight Off

The headlights must be turned off when the train has stopped clear at a crossing loop / location, waiting to cross an opposing train.

Once the lead ends of the locomotives (motive power units) or leading cabs of the opposing train has gone past each other, the headlights must be returned to `full on'.

d. Tail Signals Displayed

At the start of a journey, unless instructions are issued to the contrary, the Officer in Charge must confirm to the Driver that the correct tail signal is displayed.

For electric suburban type trains, the Driver is responsible for the proper head and tail signals being displayed.

e. Intermediate Tail Signals

Locomotives hauling trains must not display an end of train marker, a white disc or a red light on the rear of the locomotive.

Passenger trains must not display an end of train marker, a white disc or a red light on an intermediate passenger car.

After sunset and at all time when stopped or working in tunnels, every locomotive or leading carriage of an electric train must carry the proper head and marker lights.

f. Testing End of Train Marker

The employee fitting the end of train marker to the rear of the train must:

1. ensure the manual switch is on,
2. place both hands across the face of the lens and check that the light begins to flash,
3. check the low battery light; if low, the light will shine through the base of the lens.

g. Tail Signals Not Showing Properly

On lines where there is automatic signalling, Signallers and employees at stations between signalboxes must observe each train when passing and check it is complete.

If a Signaller observes any irregularity with the tail signals, the Stationmaster, or Train Network Controller and Signaller at the next station must be informed. The Stationmaster or Signaller at that location station will instruct the Driver to attend to the tail signals.

The Signaller, after informing the Train Network Controller and Signaller at the next station, must record this action in the Train Register Book and must give a written report.

The Signaller or Stationmaster receiving the information from the Signaller in the rear, must also give a written report.

h. Trains Hauled by Multiple Locomotives

When a train with two locomotives in front, or two light locomotives coupled together, arrive at a crossing location station, the Driver of the leading locomotive must see that the locomotive is not uncoupled until the correct head and marker lights are correctly displayed on the second locomotive.

Where it is necessary for a vehicle to be attached or detached from the rear of the train at an intermediate location station or siding, the competent employee in charge of the movement must:

1. (1) ensure the proper tail signals are in position on the rear vehicle, and
2. advise the Driver the correct tail signals are displayed before the train is permitted to depart the intermediate location station or siding.

i. Track Maintenance Machines

Track Maintenance machines when travelling on a running line, must carry a white disc by day on the rear of the machine, or a red light by night.

When authority is granted by the Manager Safeworking for track maintenance machines are to travel in convoy, the last machine only is to carry the tail signal on the rear of the machine.

Track machines must display the following headlights when travelling or working on running lines.

During daylight:

- Headlights illuminated, and a white disc on the rear of the machine. The roof-mounted ‘yellow’ flashing light operating.

During darkness:

- Headlights illuminated, and a ‘red’ tail light on the rear of the vehicle. The roof-mounted ‘yellow’ flashing light operating.

4. Double Lines

When a train is shunted into a siding for another train to pass, in darkness or if a clear view cannot be obtained, the tail and side lights or end of train marker must be removed so that ‘red’ lights are not displayed to the passing train.

a. Red Light for Shunted Trains

Before a train is shunted from one running line to another in darkness, the Driver must display a ‘red’ head signal on the front of the train to face oncoming trains.

All other head signals must be obscured. Once the train has been shunted from one running line to another, the tail and side lights or end of train marker must be removed or obscured.

The ‘red’ light must remain displayed until the whole of the shunted train has been returned to the appropriate running line, when the side and tail lights or end of train marker must be replaced.

b. Detaching Engine from Train

If the locomotive, motor carriage or portion of the train has to be detached, leaving vehicles standing on the wrong line, the Driver must place a ‘red’ light or ‘red’ reflective disc on the leading end of the front vehicle. This must be done before making any changes to the configuration of the train.

c. Vehicles Left Standing on a Running Line

If a train or vehicles are shunted from a siding to a running line and have to stand there, the competent worker in charge of the shunting movement must, if a clear view cannot be obtained, place a ‘red’ light or ‘red’ reflective disc on the end of the train which faces the approaching train on the same line.

5. Single Lines

a. Signal Lights for Trains Crossing at Single Line Stations

When a train is standing clear at a location or crossing loop and if a clear view cannot be obtained and a cross is to be effected, the Driver must:

1. display a `white’ marker light nearest the clear running line,
2. display a `red’ light furthest from the clear line, and
3. obscure all other lights on the front of the locomotive.

b. Electrified Metropolitan Area

It will not be necessary for Electric Suburban trains to display marker lights as described in Clause (a) above, when crossing another train at a Single Line Crossing Station in the Electrified Metropolitan area.