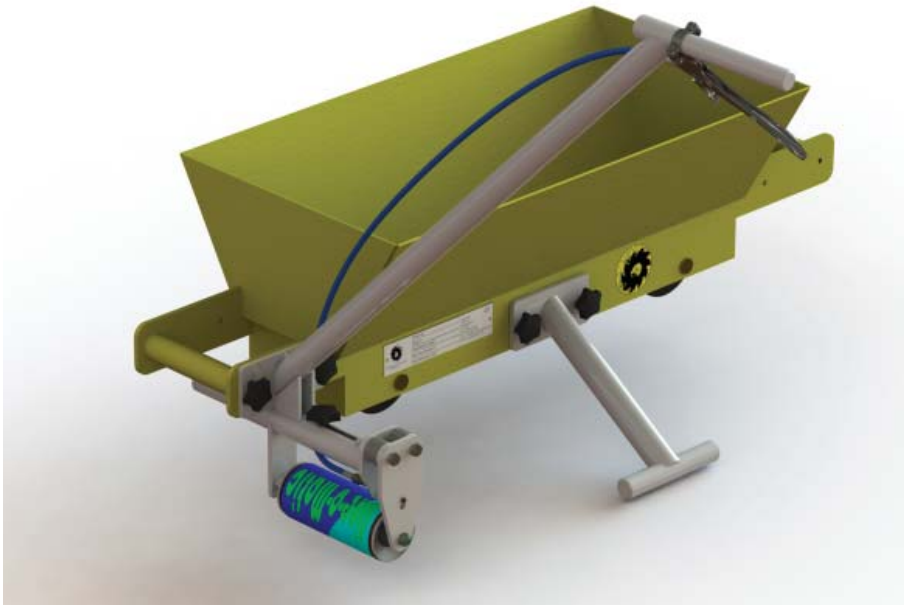


Thomson Engineering Design Ltd  
**Rail Marking Skate**



**Operator's Instructions**

**Original Document in English Language**

**Issue 1  
December 2013**



# Introduction

*The Thomson Engineering Design Rail Marking Skate has been designed for spray paint marking of the rail head for demarcation of maintenance areas, application of heat reflective coatings and similar purposes.*

The device is a light, portable Skate and requires no hydraulic, electrical or pneumatic feed. It is suitable for all types of running rail.

This document is designed to give operators and maintainers the information necessary to use the Rail Marking Skate in a safe and efficient manner. It includes routine daily maintenance operations which would normally be carried out by operators but attention is drawn to the maintenance plan for this attachment which gives more details of these operations as well as including check sheets.

The Rail Marking Skate Maintenance Plan is a separate document number RMT-Maint-01.

## **Warning**

**The Thomson Engineering Design Rail Marking Skate must not be used for any purpose or in any way not described within this document. Using the Thomson Engineering Design Rail Marking Skate for any purpose not described in this document may be dangerous and may invalidate the manufacturer's warranty.**

## **Warning**

**The maximum load which may be carried by the Rail Marking Skate is marked on the manufacturer's plate.**

**Damage may occur if the device is overloaded.**

**Device must not be used on lines open to traffic.**

**Device must not be used on third or fourth rail electrified lines unless the power is turned off.**

**Do not use this device unless and until you have read and understood the contents of this manual and the associated maintenance**



The Thomson Engineering Design Rail Marking Skate is proudly designed and made in the United Kingdom.

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## Specifications

Overall Dimensions (assembled)	Height	800 mm
	Width	1015 mm
	Length	1000 mm
Tare Weight		13 kg
Maximum load capacity		25 kg
Heaviest part (main body)		9.5 kg
Working temperature range		-20 to +50 celsius
HAVS level		< 2.5 m/s <sup>2</sup>
Noise level		approx. 62 dB(A)

## Issue Record

Issue 1

December 2013

# Description of the Rail Marking Skate

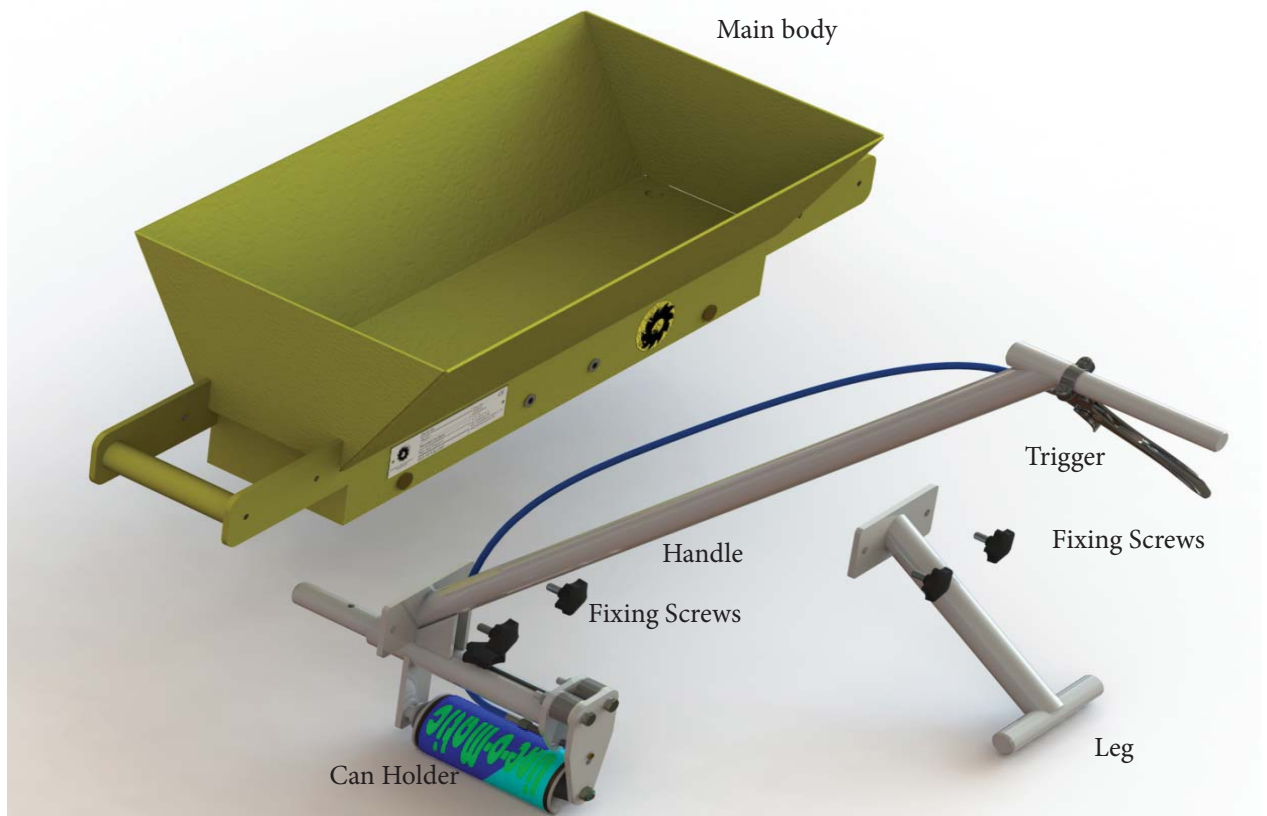
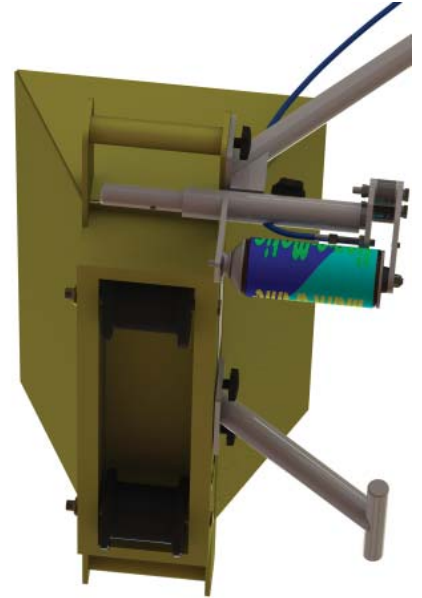
The main parts of the Thomson Engineering Design Rail Marking Skate are illustrated below.

The main body of the device consists of a deep tray for carrying spare paint cans mounted on a chassis with two grooved wheels and two carrying handles.

Threaded holes in the middle of the chassis sides allow the fitment of a support leg which is attached to the chassis using fixing screws.

On each side of the handles there are similar threaded holes for attaching the handle assembly - again using the fixing screws supplied.

The handle assembly includes the paint can holder. This is designed to support and operate special aerosol paint cans and is adjustable to take all sizes of can.



# Daily Checks and Maintenance

*Daily checks of the Rail Marking Skate are designed to ensure that it is fit for use. Daily maintenance is limited to visual inspection of the device and checking that the wheels move freely.*

The following is a list of the relevant daily checks. These should be carried out at the start of the shift before putting the Rail Marking Skate into service. If the Rail Marking Skate is used for an extended period then these checks and maintenance operations should be repeated every eight to twelve hours of use.

Each of these operations is described in detail in the Rail Marking Skate Maintenance Plan.

Before use check that:

- Both wheels spin freely
- Wheels do not have more than 5mm end float
- All bolts and nuts are tight
- All parts are free of cracks, wear and distortion
- Handles are free of burrs and distortion
- Manufacturer's plate is fitted and legible

# Personal Protective Equipment

*All work operations should be risk assessed and appropriate Personal Protective Equipment (PPE) worn. Please note that the risks to the operator may also come from the work environment itself.*

The risk assessment should also take into account the recommendations included in the COSHH data sheet for the paint being used.

For the Rail Marking Skate the appropriate PPE may include:

- Eye Protection
- Gloves
- Breathing Filter Mask

In addition to other site-specific PPE such as high visibility clothing, safety boots, hard hat, etc.

# Assembling the Rail Marking Skate

*The Thomson Engineering Design Rail Marking Skate requires no tools to assemble.*

The leg may be fitted to either side of the body but must always be fitted on the same side as the handle.

The handle may be fitted on either side of the body and at either end of the body. To prevent paint contaminating the wheels of the Skate consider which way the Skate will be pushed along the rail and fit the handle at the 'rear' end of the Skate.

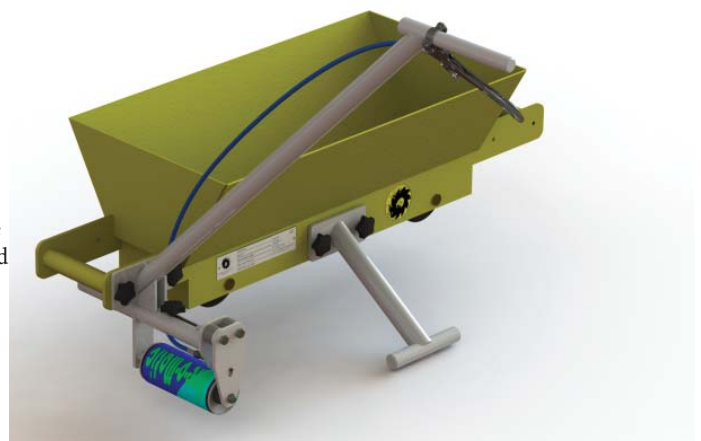
Firmly tighten the fixing screws - by hand only.



Fit the leg to the centre of the chassis and secure it using two fixing screws.



Fit the handle assembly to the side plate at one end of the chassis. The handle and leg must be on the same side.



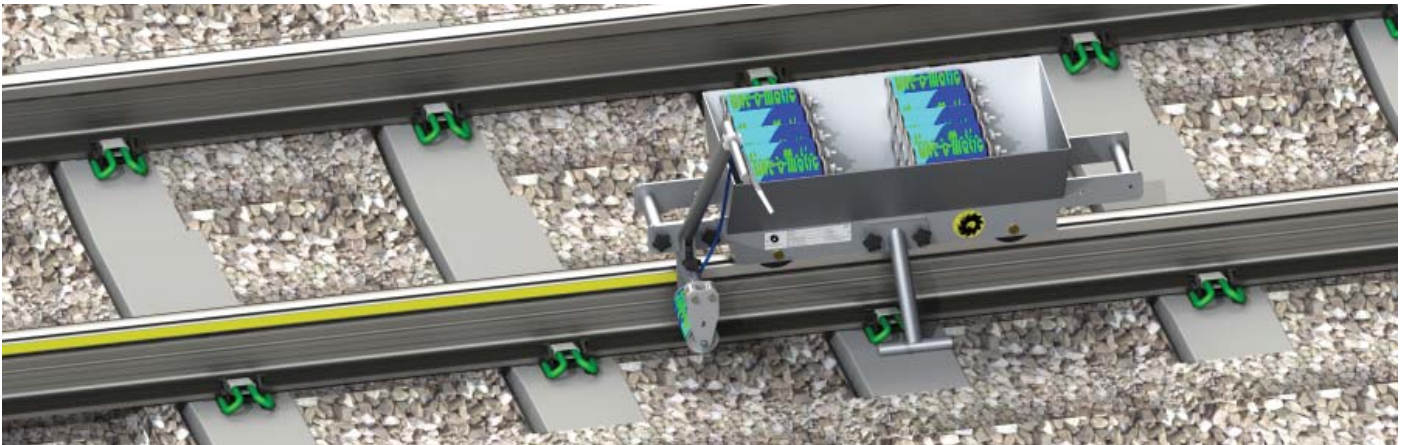
# Using the Rail Marking Skate

Once the Rail Marking Skate is assembled the wheels are placed on the head of the rail to be marked.

Fit a paint can into the holder (see below) and load the body with extra cans as required.

To apply paint to the rail lift the handle slightly to level the body of the device then squeeze the trigger whilst propelling the Skate.

Walk at a steady pace - the width of the line and the opacity of the paint can be reduced if the Skate is moving too fast.

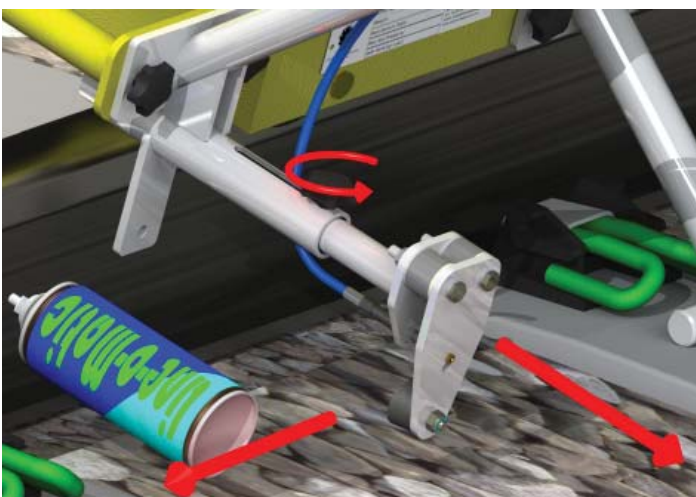


## Changing the Paint Can

When the paint can is exhausted it can quickly be changed by loosening the fixing screw and sliding the rod assembly away from the base of the can.

When fitting the new can, make sure that the rubber pad fits snugly in the centre of the can base before tightening the fixing screw.

When fitting longer cans, remove the fixing screw and move it to another threaded hole in the inner rod.



# Dismantling and Transporting the Rail Marking Skate

*Once the marking work is complete the Rail Marking Skate should be dismantled, cleaned and stowed for transport.*

First remove the spray can and wipe any paint spray from the can holder and other parts of the device.

Unscrew and remove the handle assembly.

Unscrew and remove the leg assembly.

Clean the device with a solution of soap and warm water to remove dirt if necessary.



# Warnings

## WARNING

PAINT FUMES CAN BE HAZARDOUS TO HEALTH.

READ AND UNDERSTAND THE COSHH SHEET BEFORE USING ANY CHEMICAL

## WARNING

NEVER GO ON OR NEAR THE LINE UNTIL YOU ARE SURE THAT TRAIN AND MACHINE MOVEMENTS ARE SUSPENDED

## WARNING

ONLY TRAINED AND COMPETENT OPERATORS SHOULD USE THE Rail Marking Skate.

DO NOT ATTEMPT TO USE THE Rail Marking Skate UNTIL YOU HAVE READ AND UNDERSTOOD THIS OPERATORS' MANUAL.

ALWAYS COMPLETE THE DAILY CHECKS AND MAINTENANCE BEFORE USING THE Rail Marking Skate.

## WARNING

DO NOT USE THIS DEVICE UNLESS YOU HAVE READ AND UNDERSTOOD THIS MANUAL AND RECEIVED APPROPRIATE TRAINING IN THE HAZARDS ASSOCIATED WITH WORKING IN THE RAIL ENVIRONMENT.

## WARNING

THE Rail Marking Skate IS DESIGNED FOR THE PAINTING OF RAIL SECITONS. IT MUST NOT BE USED FOR ANY OTHER PURPOSE.

THE USE OF THE Rail Marking Skate FOR ANY OTHER PURPOSE MAY LEAD TO SEVERE INJURY TO PERSONS AND DAMAGE TO THE DEVICE.

## WARNING

THE Rail Marking Skate MUST NOT BE MODIFIED IN ANY WAY WITHOUT THE PRIOR CONSENT OF THE MANUFACTURER.

*If any part of this Operators' Instruction document is unclear or for any technical advice please contact the manufacturer.*

Manufacturer's contact details can be found on Page 10.

# Contacting the Manufacturer

*The Thomson Engineering Design Rail Marking Skate is manufactured in the United Kingdom by:*

**Thomson Engineering Design Ltd**  
**Valley Road**  
**Cinderford**  
**Gloucestershire**  
**England**  
**GL14 2NZ**

**Tel: +44 (0) 1594 82 66 11**

**Fax: +44 (0) 1594 82 55 60**

**Email: [sales@thomsondesignuk.com](mailto:sales@thomsondesignuk.com)**

All spare parts, technical, training and sales enquiries should be directed to the manufacturer.

Please note that outside normal business hours all calls are diverted to an on-call technical advisor.





THOMSON ENGINEERING DESIGN LTD

RAIL PRODUCTS

## Certificate of Conformity

WE:

THOMSON ENGINEERING DESIGN LTD

Valley Road

Cinderford

Gloucestershire

GL14 2NZ

Declare under our sole responsibility that the product known as:

RAIL MARKING SKATE

To which this declaration relates is in conformity with the following standards:

2006/42/EC

Authorised signatory:

David Thomson BSc CEng MIMechE

December 2013

