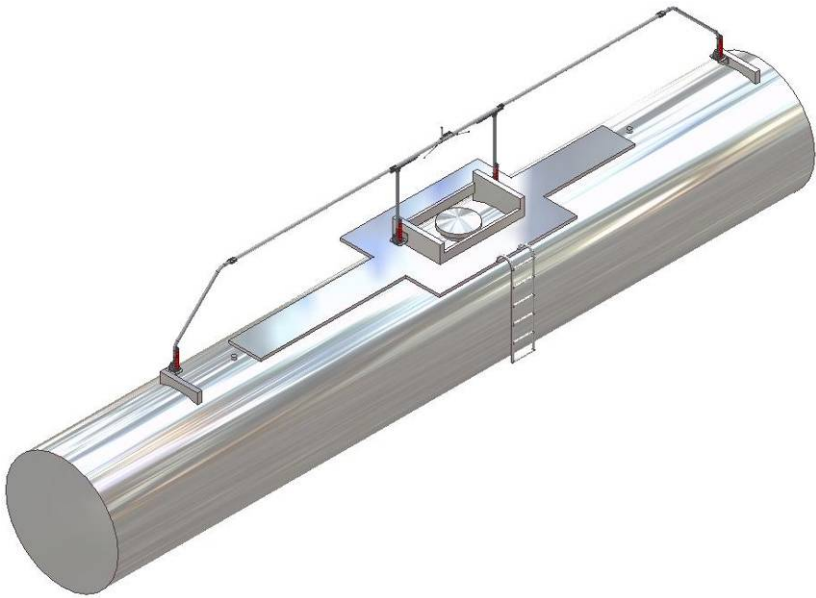




# RAILTRAM™

## Height Safety System

### Operator's Manual



**STANDFAST**  
CORPORATION 

GET HOME  
**SAFELY**

**Doc No: TR-20-0-M-001**  
**Effective: 15 January 2006**

**CONTENTS**

Introduction	3
Customer Service	3
Important Safety Information	4
Description of Equipment	6
Fall Restraint and Fall Arrest	8
Pre-Use Check	9
Operating Instructions	11
Cleaning and Preventative Maintenance	15
Periodic Examination	16
Overhaul and Repair	16
Equipment Records	17
Inspection and Maintenance Intervals	18
Equipment Record Form	19

## **INTRODUCTION**

This Manual contains safety information and instructions for operating the RAILTRAM system.

This Manual should be stored in an area where it is accessible to operators of the RAILTRAM system.

Continued improvement and advancement of product design may have caused changes to your RAILTRAM system, which are not included in this Manual.

Some photographs or illustrations in this Manual may show details or attachments that are different from your RAILTRAM system. Whenever a question arises regarding your RAILTRAM, or this Manual, please consult the Standfast website at [www.standfastcorp.com](http://www.standfastcorp.com) for the latest available information.

Further information on operating the RAILTRAM system is available in training material and courses. Further enquiry regarding these materials and courses should be directed to: [hq@standfastcorp.com](mailto:hq@standfastcorp.com)

The Equipment Record and an Operators Manual must be supplied to the end user when the RAILTRAM or TRAM belt are sold, resold, rented, or otherwise made available for use. This is to ensure that the end user gets the necessary information for the safe use of the RAILTRAM system.

## **CUSTOMER SERVICE**

Please contact the authorised RAILTRAM distributor in your area for enquiries regarding the operation, Periodic Examination, Overhaul and Repair of your RAILTRAM system. The distributor nearest you can be found by consulting [www.standfastcorp.com](http://www.standfastcorp.com)

# Important Safety Information

---



## General

Do not operate or work on the RAILTRAM system unless you have read and understand the instructions and warnings in this Manual. Failure to follow the instructions or heed the warnings could result in injury or death. Improper operation, maintenance or repair of this product can be dangerous and could result in injury or death.

No one should make any alterations or additions to the equipment. Any repair shall only be carried out in accordance with authorized procedures.

The RAILTRAM shall not be used outside its limitations as described in this Manual, or for any purpose other than that for which it is intended.



## Safe Working at Heights

The operation and maintenance of the RAILTRAM system must comply with the safety Legislation and Regulations of the jurisdiction in which it is used.

Operators of the RAILTRAM system must be properly trained and competent.

Further enquiry regarding training materials and courses should be directed to: [hq@standfastcorp.com](mailto:hq@standfastcorp.com)

The TRAM restraint belt must only be used when the RAILTRAM system is used as a total restraint system. The TRAM restraint belt must not be used if there is a risk of free fall.

Total restraint means that there is no risk of fall as the user is prevented from reaching a fall edge. This is achieved through combination of anchor point and lanyard length.



## Pre-Use Check

Operators must carry out a Pre-Use check of the equipment, as per the instructions in this Manual, to ensure that it is in a serviceable condition and operates correctly before it is used.

It is essential for safety that equipment is withdrawn from use immediately should any doubt arise about its condition for safe use.



## Periodic Examination

Periodic Examination should be carried out at intervals of six months or less.

Periodic Examinations are only to be conducted by a Competent Person for Periodic Examination and strictly in accordance with Periodic Examination procedures.

Equipment Records of Periodic Examination must be maintained and available to the operator.



## Installation

Anyone installing or maintaining the RAILTRAM system must read, understand and strictly adhere to the instructions and safety information in this manual and the RAILTRAM System Installation Manual.

The installer must verify the adequacy of the mounting points (the points to which RAILTRAM is attached to the parent equipment) either by calculation or by carrying out a test in a sample of the mounting point material in compliance with the specifications of the appropriate Standards, as per the instructions in the RAILTRAM System Installation Manual.



## Safety Signs and Labels

The RAILTRAM system is permanently marked or labelled to indicate its purpose, correct use, limitations and other relevant safety information aimed at reducing the incidence or misuse or misfitting of the equipment. The labels also contain a unique serial number and the date of manufacture.

- A TRAM belt label is usually affixed to the front of the belt.
- A RAILTRAM Installation label is affixed at or close to the RAILTRAM Installation.

The RAILTRAM Installation label should be clearly visible to the user before the user is in a position where there is a risk of fall.

Make sure that you can read all safety signs. Clean or replace these if you cannot read the words or see the illustrations. When cleaning the labels use a cloth, water and soap. Do not use solvents, gasoline, etc., to clean safety signs. The use of solvents, gasoline, etc., could loosen the adhesive and cause the sign to fall off.

You must replace a safety sign or label if it is damaged, missing or cannot be read. If a label is attached to a part, and that part is replaced, make sure a new label is installed on the replaced part.

# Description of Equipment

## The RAILTRAM System

RAILTRAM System - The RAILTRAM System includes a RAILTRAM slider unit that moves along a rail (the RAILTRAM Installation), and a restraint harness attached by two lanyards. The RAILTRAM provides the operator an ideal system of mobility and restraint. The user is firmly attached to the unit at all times and cannot fall.

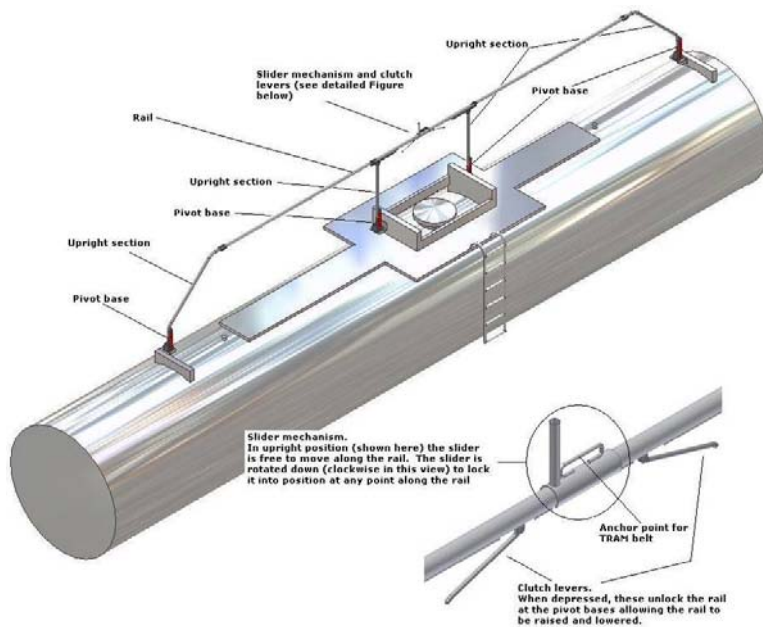
The system consists of the RAILTRAM Installation and the TRAM belt.

## RAILTRAM Installation

The RAILTRAM Installation is comprised of a rail and a slider mechanism.

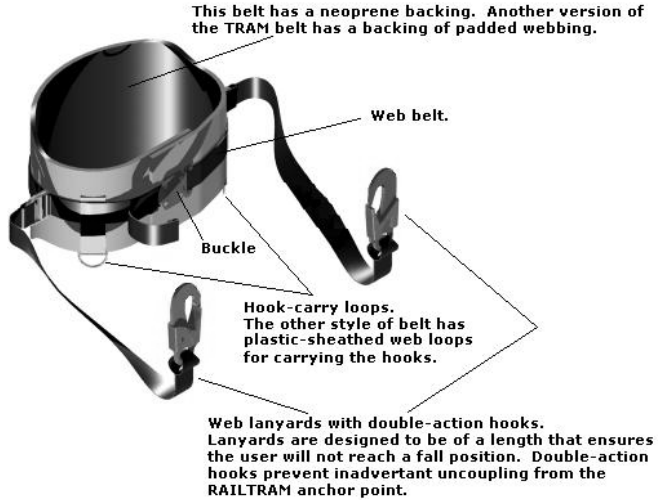
The rail is mounted to the parent equipment by four upright sections on pivot bases. The rail pivots towards the ladder at these points. The upright sections lock into the pivot bases to hold the rail securely in the lowered position when not in use, and in the raised position when the user needs a secure anchor point.

The user connects to a slider mechanism that provides an anchor point for fall prevention, and rotates to a locked position to ensure that the user is secure in their position at any point along the rail when working.



## TRAM Belt

The TRAM restraint body belt is an approved fall protection device that is designed for work positioning and restraint.



The belt shown in this image is the style with a padded webbing back. The double action hooks are attached to the anchor point on the slider of the lowered rail. The user is demonstrating how the belt holds the user on the ladder if hand grip is lost.

# Fall Restraint and Fall Arrest

---

The RAILTRAM safety system is personal fall protection system. It is not suitable for fall arrest.



## Fall Restraint

RAILTRAM is a restraint system. It is essential for safety that when RAILTRAM is used, a fall to a lower level is not possible. Note that:

- The TRAM belt has two lanyards
- The RAILTRAM slider has a single anchor points

The operator should normally attach both lanyards to the anchor points, however the belt is rated to protect an operator if only one lanyard is attached. Operators should not anchor themselves with only one lanyard if doing so allows them to reach a position where a fall to a lower level is possible.

The operator should ensure that all work tasks can be performed without restriction.



## Fall Arrest

The RAILTRAM system is not a fall arrest device.



# Pre-use Check

---

Pre-Use checks are essential and should be carried out by the operator each time, before the RAILTRAM system is used. They consist of tactile and visual inspections to ensure the RAILTRAM system will be ready for immediate use. A visual check should be undertaken in good light.

If during pre-use checks any of the following conditions are found, immediately withdraw the TRAM belt from service and pass it to a Competent Person (see definition the next page) who will determine what action to take:

- The belt has been inspected by a Competent Person within the last 6 months
- The TRAM belt label is not present or legible
- There is any doubt about the condition of the system for safe use

## TRAM belt

Ensure that:

- There is an up-to-date Equipment Record for the TRAM belt
- There is a label on the belt, it is undamaged and can be read
- The serial number on the Equipment Record corresponds to the serial number on the belt label
- Before each use, the belt and lanyards should be checked for defects and damage have the potential to result in the failure of the belt, as follows:
  - Cuts of 1 mm or more at the edges of webbing lanyards
  - Surface abrasion across the face of the webbing, particularly if localised
  - Abrasion at the edges, particularly if localised
  - Damage to stitching (eg cuts or abrasion)
  - A knot in the lanyard
  - Chemical attack which can result in local weakening and softening – often indicated by flaking of the surface. There may also be a change to the colour of the fibres
  - Heat or friction damage indicated by fibres with a glazed appearance which may feel harder than surrounding fibres
  - UV-degradation which is difficult to identify, particularly visually, but there may be some loss of colour (if dyed) and a powdery surface
  - Contamination (eg with dirt, grit, sand etc) which may result in internal or external abrasion
  - Damaged or deformed fittings (eg connectors)

## RAILTRAM Installation

The Operator may need to attach to the RAILTRAM safety system before completing all Pre-Use Checks as the RAILTRAM Installation are located where there is a risk of fall.

- Check the Equipment Record for the RAILTRAM Installation.
- Only check the RAILTRAM Installation labels when it is safe to do so, i.e. the operator may need to attach to the RAILTRAM safety system before checking the labels if there is a risk of fall.

The Pre-Use Check of the RAILTRAM Installation consists of visual checks and checks of operation.

- Visually inspect the anchor point for signs of corrosion or deformation
- Attach to the lanyard hooks to the anchor point
- Depress the clutch levers and check that the RAILTRAM assembly is released and moves up freely
- After climbing from the ladder to the elevated work area, check that the locking pins seat correctly in the pivot bases.
- Check that the slider moves freely along the rail.
- Check the rail for damage, corrosion or deposits of foreign material that may affect the smooth operation of the RAILTRAM slider

A Competent Person is defined as a person:

- who is knowledgeable of recommendations and instructions on the RAILTRAM System issued by Standfast (including information contained in this manual)
- who is authorised\* by Standfast to carry out inspection, maintenance, servicing and repair work,
- who has the necessary training, skills and tools to perform the work properly,
- who is capable of identifying existing and predictable defects and hazards in any component of the RAILTRAM safety system and related equipment used in the work environment,
- who is authorised to take prompt corrective action to eliminate or control hazards, and has the skills and resources to do so,
- who is familiar with relevant guidelines and national and international safety regulations.

\*Your Standfast RAILTRAM Dealer is authorised to carry out all inspection, maintenance, servicing and repair work on the RAILTRAM System. Your Standfast RAILTRAM Dealer may also be contacted to authorise a Competent Person.

# Operating Instructions

---

## STEP 1

**PRE USE CHECK** - Always check the system before use. See previous page.

## STEP 2

Place the TRAM restraint belt on.

With the neoprene style belt (shown here) ensure that the Velcro strips are aligned and secured.



## STEP 3

Fasten the buckle.



## STEP 4

Pull the belt strap tight.

Ensure that the double-action hooks are connected onto the belt in the "carry position" (as shown here) before climbing the ladder.



## STEP 5

The double-action hooks are operated by first depressing the latch on the back spine of the hook and then opening the hook gate.



## STEP 6

Maintaining three points of contact...

Climb the ladder and stop at the lowest point on the ladder where the RAILTRAM rail can be reached and held.

Unclip one hook from the 'carry position' on the belt and attach it to the anchor point on the RAILTRAM slider. Repeat this for the other hook.

Note: Do not cross the lanyards over when connecting them - connect the right-hand hook to right side of the anchor point, and the left-hand hook to left side of the anchor point.



## STEP 7

Hold the RAILTRAM rail with both hands, depress the clutch levers to allow the RAILTRAM to rise, then push up on the rail to raise it.

Continue holding the rail with both hands whilst climbing the ladder onto the platform.



## STEP 8

When reaching the platform, look to see that the locking pins in the upright sections have seated themselves in the pivot bases.

If they are not properly seated, push or pull slightly on the top rail to align the locking pin with the slot in the pivot base.



## STEP 9

To move along the rail, hold the rail slider handle in the upright position whilst walking.

When the desired work position is reached, rotate the slider towards you to lock it into position on the rail.

To return along the platform towards the ladder, turn and hold the slider upright with the other hand.



## STEP 10

To descend from the walkway, turn to face the rail, depress the clutch levers and pull back on the rail.



## STEP 11

Maintaining three points of contact...

Move from the walkway back on to the ladder, grasping the rail with both hands.

One at a time, disconnect the lanyard hooks from the anchor point on the slider and reattach to the belt in the 'carry position'

Proceed back down the ladder.



# **Cleaning and Preventative Maintenance**

---

## **TRAM belt Cleaning Procedure**

1. Wipe off surface dirt with a damp cloth
2. Clean webbing and hardware with warm water and mild detergent
3. Rinse in warm water
4. Drip-dry in the shade

Do not place Belt near direct heat or in direct sun to dry

Do not store a wet or damp belt

## **RAILTRAM Installation Cleaning Procedure**

The RAILTRAM is constructed predominately of Stainless Steel components and is very durable in normal operating conditions.

Care should be taken not to contaminate parts of the RAILTRAM device by allowing it to come into contact with mild or carbon steel cleaning implements.

NEVER use steel wool (wire wool) or steel wire brushes to clean stainless steel. They are usually made of carbon steel and any fragments left behind will rust onto the stainless steel surface. Using any kind of scourer that has previously been used on mild or carbon steel should be avoided for the same reason.

1. Remove covers from the RAILTRAM pivot bases (if fitted) and visually inspect the RAILTRAM system for evidence of contaminants eg dust, stones, mud, cement, grain dust etc that will foul the working parts of the RAILTRAM.
2. Hose down the RAILTRAM Installation to remove any excess contaminants.
3. Visually inspect the Installation again and remove any further contaminates with the aid of brushes and cleaning tools. For best results, use mild detergent and warm water followed by rinsing with clean cold water.
4. If any stains or surface rust remains after the cleaning steps above scrubbing may be required. Use a clean nylon scourer or a cloth with chalk-based cream cleaner. Alternatively it may be necessary to use a proprietary stainless steel cleaner. These are usually based on dangerous chemicals (such as phosphoric, oxalic or sulphamic acids) and must be handled with care according to the manufacturer's directions. After cleaning it is important to neutralize any acids with a 1% ammonia or baking powder solution followed by rinsing with clean water.

Cement and mortar splashes should be washed off before they set. Mild acids such as vinegar may be used, however avoid those using chloride rich chemicals. Do not use brick cleaning liquids that contain hydrochloric acid.

# Periodic Examination

---

The continued efficiency and durability of the RAILTRAM system and the safety of the user depends on regular Periodic Examination.

Periodic Examination is a more formal, in-depth inspection and should be carried out on all elements of the RAILTRAM system periodically at intervals of six months or less.

Periodic Examination is only to be conducted by a Competent Person and strictly in accordance with Periodic Examination procedures.

It is essential that the person carrying out any inspection is sufficiently independent and impartial to allow them to make objective decisions, and has appropriate and genuine authority to discard defective equipment.

Periodic Examination should be recorded in the Equipment Record.

A Competent Person for Periodic Examination is a person who is knowledgeable of the current Periodic Examination requirements, recommendations and instructions issued by Standfast applicable to the relevant component, subsystem or system.

This person should be capable of identifying and assessing the significance of defects, should initiate the corrective action to be taken and should have the necessary skills and resources to do so.

# Overhaul and Repair

---

Overhaul is when the major wear items on the RAILTRAM are replaced. Note that no overhaul or repair is performed on the TRAM belt. If the belt needs more than cleaning or preventative maintenance, it should be replaced.

The intervals represent maintenance of a non-failed RAILTRAM. In other words, the RAILTRAM is being rebuilt with certain new parts replacing worn parts such as main bearings.

The Equipment Record lists the components inspected, rebuilt, exchanged or replaced at overhaul.

Incidental to the replacement of these relatively few parts is the complete inspection of all other parts that are visible during the Overhaul of the RAILTRAM.

The Overhaul interval assumes that regular Periodic Examinations have been carefully followed.

Some users may obtain significantly longer or shorter life than the chart recommends between Overhauls, but if the recommended intervals are followed, Overhauls will occur before actual failure, and the total cost of operation will be minimized.

If you experience a structural failure, which necessitates a repair, or consider that your RAILTRAM system may have been overloaded, contact Standfast for information regarding Repair.

Standfast may authorize some repairs to be conducted by a Competent Person. The repair procedure shall be strictly in accordance with the instructions provided by Standfast.

## **Equipment Records**

---

Documentation is a key element of a well-managed personal protective equipment program.

Equipment Records should be maintained as proof of Inspection and Maintenance of the RAILTRAM system.

All Orders, Invoices and Receipts should be kept with the Equipment Records.

It is the responsibility of the user organization to enter onto the Equipment Record the details required. An example template is shown at the end of this manual.

# Inspection and Maintenance Intervals

---

Inspection and maintenance should always be performed at the designated intervals.

## Type of Inspection / Maintenance

---

PRE USE CHECK	Should be carried out by the operator each time, before the RAILTRAM system is used
CLEANING AND PREVENTATIVE MAINTENANCE	May be carried out at any time as required and should be carried out at regular frequent intervals as determined by operating conditions
PERIODIC EXAMINATION AND MAINTENANCE	Should be carried out by a Competent Person on all elements of the RAILTRAM system periodically at intervals of six months or less, or more frequently if the RAILTRAM system is operating in extreme conditions
OVERHAUL AND RECERTIFICATION	Should be carried out on all elements of the RAILTRAM system periodically at intervals of 5 years or less, or more frequently if the RAILTRAM is operating in extreme conditions
REPAIR	May be carried out at any time as required

---

The operating environment of the RAILTRAM also governs the Inspection and Maintenance schedule.

Under extremely severe corrosive liquid or abrasive dust exposures or for operation under extremes of temperature, more frequent Inspection and Maintenance may be necessary.

Perform Inspections and Maintenance on items at multiples of the original Inspection and Maintenance Interval.

Standfast or your RAILTRAM distributor can assist you in tailoring your Inspection and Maintenance Intervals to meet the needs of your operating environment.





**STANDFAST**  
CORPORATION 

Unit 2, 8 Camford Street, PO Box 1224  
Milton Queensland 4064 Australia

**Telephone +61 7 3369 9800**

Facsimile +61 7 3369 9844

hq@standfastcorp.com

[www.standfastcorp.com](http://www.standfastcorp.com)

**STANDFAST**  
INTERNATIONAL 

Bruxelles 15 BP 20  
1150 Woluwe Saint Pierre Belgium

**Telephone UK +44 (0)20 8123 1180**

**Telephone Europe +32 (0)2 779 9500**

hq@standfastcorp.com

[www.standfastcorp.com](http://www.standfastcorp.com)

**STANDFAST**  
USA 

2502 North Clark Street, Suite # 207  
Chicago, IL 60614

**Telephone 877 850 TRAM (8726)**

Facsimile 219 972 7654

tbingham@standfastusa.com

[www.standfastusa.com](http://www.standfastusa.com)



GET HOME  
**SAFELY**