

Safe-Away[®] Product Catalogue



*For a safer way to access and egress from
earthmoving and mining equipment*

Table of Contents

Introduction	3
Electric Ladders	
Electric Ladder Features	4
Model EL-CF	5
Model EL-V	5
Model EL-RTV	5
Model EL-24H	5
Model EL-RT45	5
Model EL-FX	6
Manual Ladder	
Model ML2	7
Emergency Ladders	
Model EF (Emergency Folding)	8
Model EE (Emergency Escape)	9
Safe-Away® 2009 Series Power Pack	
Safe-Away® 2009 Series Power Pack	10
Incab Control - Data Logging	11
DK Series Access Systems	
Electric/Hydraulic	
RTV-SDK Stair	12
RTV-LDK Ladder	13
Stairs	
Electric/Hydraulic	
RTV Stairs (RTV-CF, RTV-B, RTV-S & RTV-XS)	14
RT-45	16
VHS	17
Ladders	
Electric/Hydraulic	
Model LX	18
SWING	19
RTV Ladders (RTV-LSSE & RTV-LNS)	20
RotorStep Ladders (MODEL G, GM, GK, L & S)	22
24H	24
Optional Extras	25
After Sales Support	26

Hedweld Group of Companies

Hedweld Group of Companies consists of Hedweld Engineering Pty Ltd, Hedweld USA Inc., Milbrotec Pty Ltd and Mecensol Pty Ltd. Hedweld has established itself as a world leader in the design and manufacture of mining equipment.

Hedweld is known for its Trilift® range of workshop component handling equipment and the Safe-Away® range of Ladder and Stair Access Systems. Hedweld markets and distributes a range of technologically advanced, innovative products designed for the mining and earthmoving industries. Both product ranges offer high quality products specifically designed to improve safety and efficiency within these industries.

Safe-Away® Product Range

Safe-Away® Ladder and Stair Access Systems provide innovative and technologically advanced access options specifically designed for the mining and earthmoving industries. These high quality products are designed to improve safety and efficiency within these industries. As well as supporting the Australian mining industry, Hedweld products are exported globally to regions including Africa, North and South America, Central Asia and the Asia Pacific.

The Safe-Away® designed and manufactured range of access systems offer improved safety for maintenance and operational personnel accessing and egressing from mining and heavy earthmoving vehicles. Access solutions are available for most makes and models of trucks, dozers, loaders, graders, scrapers, shovels, excavators and drill rigs.

To keep pace with the ever changing developments in heavy machinery design, Safe-Away® works closely with Original Equipment Manufacturers (OEMs) to custom design new and innovative products to make vehicle access safer and more time efficient. Safe-Away® has gained recognition as a supplier of reliable access equipment to OEMs globally.

Safety	Efficiency	Innovation
Hedweld's Safe-Away® range of Access Systems improve safety by reducing the hazards associated with accessing and egressing mining and earthmoving equipment.	By replacing traditional boarding methods with Safe-Away® Access Systems, personnel can access equipment easier while carrying objects, therefore reducing downtime.	Using the latest design techniques and technology we pride ourselves on being at the forefront of innovation.

Through innovation we provide improved safety and efficiency



Electric Ladders

Electric Ladders

The **Safe-Away® Electric Ladders** have been designed to suit various makes and models of mining and earthmoving equipment.

The **Safe-Away® Electric Ladders** provide:

- A 62° ladder offering safer access and egress while carrying objects (excluding the EL-FX).
- Each model raises safely out of the way while the vehicle is in motion.
- Handrails to give three points of contact
- Easy installation.
- Low maintenance.
- No hydraulics.
- Compact designs.
- Safe and user friendly.
- Cost effective.



Optional extras

- Additional Raise and Lower Control Panel Kit
- Emergency Stop
- External Audible Alarm
- Inhibit Kit

See page 25 for more details on extras.

Ladder Features



- **Boarding Light and Wiring Harness Kit.**
The LED boarding light will stay on for an adjustable/preset period.

- Incab **touch screen** controlling the up and down ladder functions with a battery charge display.
- The **DVC710** is the master control for the electric ladder input/out and is located with the **Electrical Control Module (ECM)**.
- The DVC710 is encapsulated in the ECM **stainless steel box** to withstand harsh operating environments.
- A **park brake interlock** provides additional protection by ensuring the ladder is raised automatically when the park brake is released.
- **Batteries** power the ladders. The host equipment's main power recharges these batteries when host is in use.



ECM Functions

- The **state of charge** is regulated by the DVC710.
- The **operational voltage** is 24VDC.
- The DVC710 has it's own Controller Area Network (CAN) which is used by the Incab Controller.
- The system is **compatible with all CAN-BUS** and J1939 components.
- Reverse polarity protection.
- Status LED indicator.



Electric Ladders

Designed to suit your fleet

The **Safe-Away® Electric Ladders** are designed to suit OEM vehicles and are able to be retrofitted if replacing existing systems. The Electric Ladders may be varied to accommodate your requirements for specific mount points, platform handrails, infills and site and/or OEM colours.

The Electric Ladder are designed for use on:

- Haul Trucks (up to 100 T payload)
- Civil Works Plant and Equipment
- Earthmoving Plant and Equipment
- Quarrying Plant and Equipment
- Mining Plant and Equipment



EL-V

The Electric Ladder - Vertical is designed for use on:

773B 773D 773E
 773F 775B 775D
 775E 775F 777B
 777C 777D L1100
 L1350 L1850
 ROC D65

Can be adapted for other equipment.



EL-CF

The Electric Ladder - Centre Folding is designed for use on:

988F 988G 988H
 WA600 WD600 WD900

Can be adapted for other equipment.



EL-RTV

The Electric Ladder - Raise To Vertical is designed for use on:

HD605 HD455
 HD785 HD985

Can be adapted for other equipment.



EL-24H

The Electric Ladder - 24H is designed for use on:
 24H graders

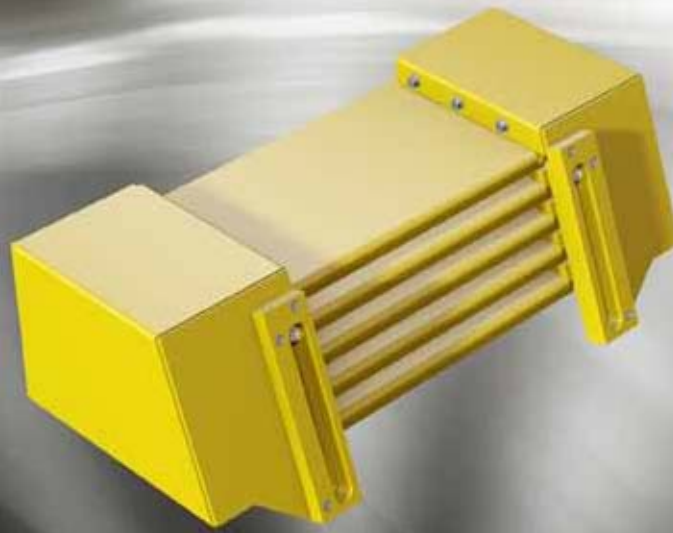


EL-RT45

The Electric Ladder - Raise to 45 degrees is designed for use on:

773B 773D 773E
 775B 775D 775E
 777B 777C 777D
 785B 785C 785D
 789B 789C 789D
 HD465 HD785 HD985
 140M 170E 630E
 730E MT3300
 MT3600 MT4000
 MT4400

Can be adapted for other equipment.



Electric Ladder

EL-FX Electric Ladder

The Safe-Away® EL-FX Electric Ladder has been designed to suit various makes and models of light commercial vehicles, flat bed trucks, articulated mining and earthmoving equipment.

The EL-FX Electric Ladder retracts to a safe stowed position when the equipment is in motion. The compact design and mounting arrangement makes the EL-FX suitable for a wide variety of vehicles with trays, and machines that articulate towards the access point. Easy to install and utilises a simple on board control system.

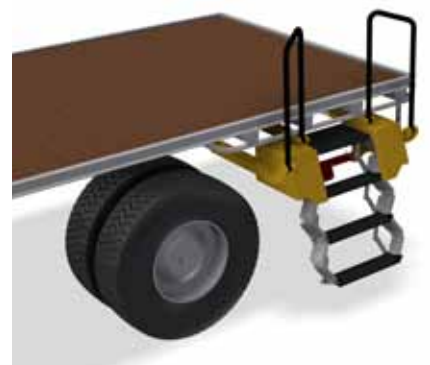
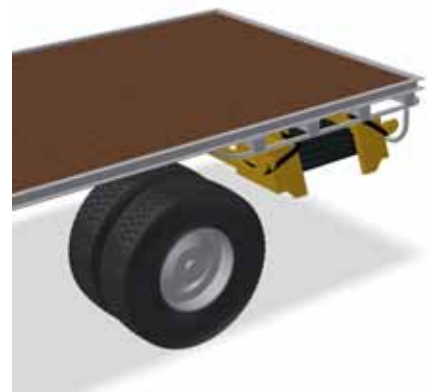
Designed for use on:

- Articulated Loaders
- Articulated Trucks
- On-highway Trucks/ Trailers (flat bed)

Ladder Features



- **Boarding Light and Wiring Harness Kit.** The LED boarding light will stay on for an adjustable/preset period.
- Incab **touch screen** controlling the up and down ladder functions with a battery charge display.
- The **DVC710** is the master control for the electric ladder input/out and is located with the **Electrical Control Module (ECM)**.
- The DVC710 is encapsulated in the ECM **stainless steel box** to withstand harsh operating environments.
- A **park brake interlock** provides additional protection by ensuring the ladder is raised automatically when the park brake is released.
- **Battery powered.** The host equipment's main power recharges these batteries when host is in use.





Manual Ladder

Model ML2

The Safe-Away® ML2 ladder is a manually operated ladder that has been designed as a secondary access option to improve safety for operators and maintenance personnel working with drill rigs or other equipment only requiring simple, manually operated access.

The ML2 ladder can be easily raised or lowered by one person from the deck area or from the ground. When not in use the ladder is retracted to a vertical position above the ground to reduce the possibility of physical damage.

A spring-loaded locking mechanism is provided to hold the ladder in the raised position, ensuring that the ladder will not accidentally lower while your equipment is in operation.

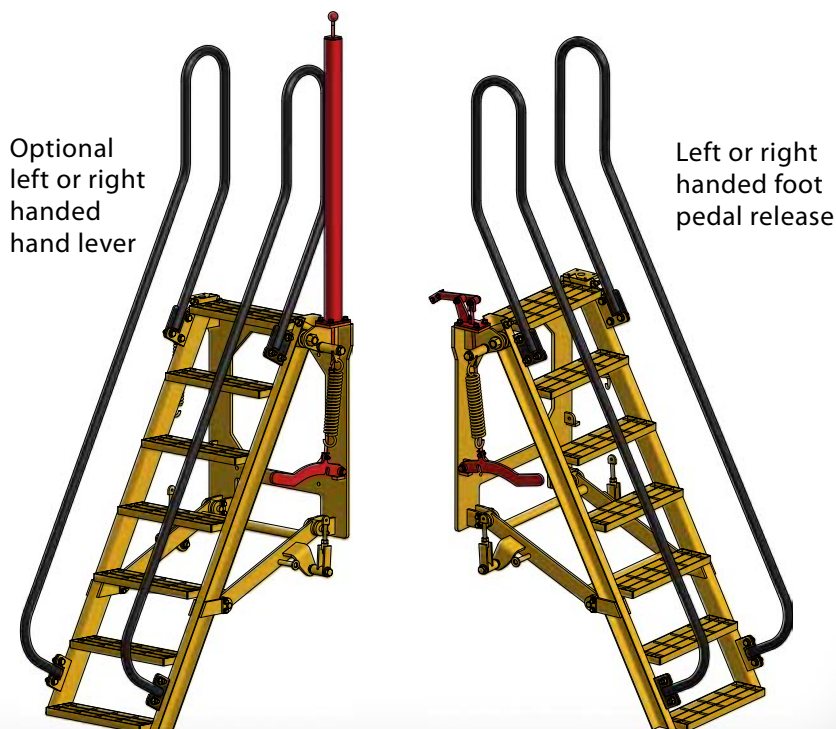
Designed for use on

- Drill Rigs
- Small Earthmoving Equipment
- Equipment up to 1760mm deck height

Ladder Features

- Manual operation.
- Comes pre-assembled and ready to fit.
- Easily operated from the ground or deck.
- Retracts to vertical position for storage.
- Low maintenance - no electrics or hydraulics.
- Suitable for emergency egress.

Please note this product does not require a Power Pack.



Optional left or right handed hand lever

Left or right handed foot pedal release

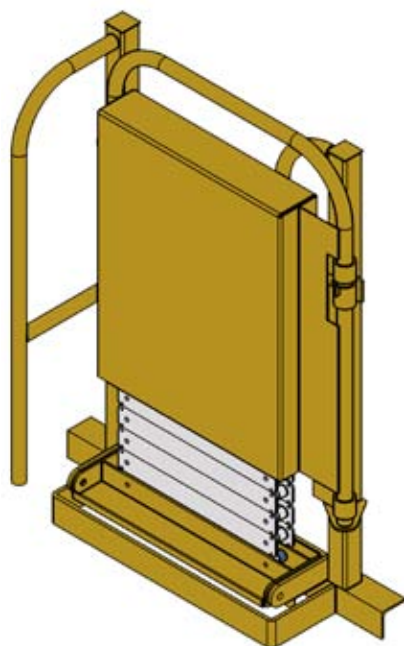


Emergency Ladder

Model EE (Emergency Escape)

The Safe-Away® Model Emergency Escape Ladder (EE) is designed as a complete module to be installed on existing walkways or platforms. It serves as part of the handrail section until the ladder is required.

The linked ladder sections concertina together to form a compact block inside the mount. In an emergency, the gate type mount cover is opened and the ladder is pushed out. As the ladder falls it expands to the open position, ready for descent to the ground.



Designed for use on

- Trucks
- Excavators
- Shovels
- Loaders
- Wheel Dozers

Ladder Features

- Simple to use in an emergency.
- Available in various lengths from 2400mm to 6600mm.
- Comes pre-assembled and ready to fit.

Please note this product does not require a Power Pack.



Step 1
Release lock

Step 2
Open gate

Step 3
Push ladder out

Step 4
Descend



Emergency Ladder

Model EF (Emergency Folding)

The Safe-Away® Model Emergency Folding Ladder (EF) is designed for quick evacuation from an excavator cab to the ground in the event of an emergency.

A foot-operated latch releases the pivoting section of the ladder. This ladder section will hinge over to the lowered position. The descent of the ladder is controlled by an accumulator and hydraulic cylinder.

Designed for use on

- Excavators
- Loaders

Ladder Features

- Simple to use in an emergency.
- Available in various lengths from 3000mm to 6600mm.
- Comes pre-assembled and ready to fit.
- Designed to come into contact with the ground.

Please note this product does not require a Power Pack.



Model EF Ladder shown fitted to excavator in the up and down positions



Safe-Away® Power Pack Series 2009

2009 Series Power Pack

The **Safe-Away® 2009 Series Access Control System** manages all hydraulic ladder and stair operations.

It provides:

- Activity logs downloadable to a USB.
- Sequential reports on all events with time and date stamps:
 - Raising and lowering,
 - Fault indications.
- Diagnostics and error reporting accessed directly from the incab control digital display.

The **Safe-Away® 2009 Series Power Pack** is driven by the Access Control System. The hydraulic Power Pack may be mounted vertically, or horizontally at a convenient location of your choosing, on the equipment.

It includes:

- Harnesses and Leads.
- Battery Circuit Breaker Kit.



Designed for use on

- All Safe-Away® electric/hydraulic operated Access Systems

Incab Control System Features

- Incab control panel with a digital touch pad display showing:
 - Access system status; UP, DOWN and IN MOTION.
 - Detailed fault indication with audible alarm and system event log.
 - 3,000 point event data log with download using a USB key.
- View downloaded log files as summary and/or full log data in Microsoft® Excel using the supplied SLA to XLS file converter.

Not required for:

- Electric ladders
- Manual ladders
- Emergency escape or folding ladders



Safe-Away® Power Pack Series 2009

Incab Control - Data Logging

The Incab Control includes an activity data logging capability which allows the simple download of logged data pertaining to the day to day operations of the access system. All events including raising and lowering of the ladder or stair and fault indications are time and date stamped to provide a sequential record of all access system operations.

The diagnostics and data logging capability is a standard feature with all Safe-Away® 2009 Series Access Systems. The Microsoft® Excel interface file is loaded on the USB key that is supplied with every access system. This file is required to generate reports and view the downloaded data log from the in cab controller. From this Microsoft® Excel interface file, users are able to view up to the last 3,000 events.

Features

- USB 2.0 connectivity for ease of download
- Data log is a small downloadable file for ease of transfer to laptop or PC for long term file management.
- Microsoft® Excel spreadsheet interface for easy analysing.
- Data presented in summary view and complete data log.
- Microsoft® Excel spreadsheet interface allows additional sorting of the complete log for personalised report development.

Easy 3 step process:

1. Download data log from incab control
2. Load to Microsoft® Excel interface file
3. View & diagnose log data



Log Index	Event Label	Event Code	Date
1	Ladder Down	254	01/09/2000 11:31:47 PM
2	System Voltage Below 18V	18	02/09/2000 12:15:21 AM
3	Ladder Up	255	02/09/2000 12:20:20 AM
4	Ladder Down	254	02/09/2000 01:38:05 AM
5	Ladder Up	255	02/09/2000 01:40:34 AM
6	Ladder Down	254	02/09/2000 04:38:29 AM
7	Ladder Up	255	02/09/2000 05:21:04 AM
8	Ladder Down	254	02/09/2000 06:37:10 AM
9	System Voltage Below 18V	18	02/09/2000 06:42:51 AM
10	Ladder Up	255	02/09/2000 07:19:39 AM
11	System Voltage < 18V During Movement	17	02/09/2000 07:19:46 AM
12	Ladder Down	254	02/09/2000 08:00:52 AM
13	System Voltage Below 18V	18	02/09/2000 08:01:40 AM
14	Ladder Up	255	02/09/2000 08:08:12 AM
15	Ladder Down	254	02/09/2000 08:22:30 AM
16	System Voltage Below 18V	18	02/09/2000 08:24:54 AM
17	System Voltage Below 18V	18	02/09/2000 12:24:06 PM



Electric/Hydraulic Stair

RTV-SDK Stair

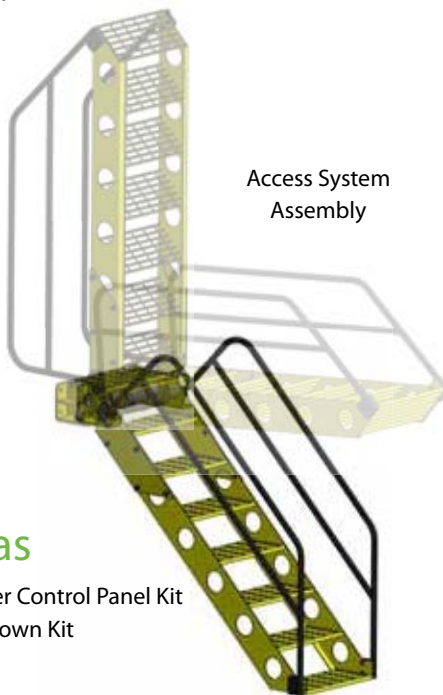
The Safe-Away® SDK Stair has been designed to improve safety for operator and maintenance staff when accessing large earthmoving equipment employed in the mining industry. The RTV-SDK is powered by the Safe-Away® 2009 Series Power Pack.

To reduce the possibility of physical damage, the RTV-SDK Stair is retracted to a vertical position above the ground when the machine is operational. The 45° stair offers easier access for maintenance and operational personnel when accessing the vehicle while carrying objects.

Mount infill box enclosing the horizontal Hydraulic Power Pack



Access System Assembly



Optional extras

- Additional Raise & Lower Control Panel Kit
- Hydraulic Emergency Down Kit
- Boarding Light
- Audible Alarm
- Inhibit Kit
- Reservoir Heater

See page 25 for more details on extras.

RTV-SDK

Designed for use on:

- Trucks
- Dozers
- Loaders
- Shovels
- Excavators

Compatible OEM models include:

773F	773G	775F	777F	777G
785C	785D	789C-D	793C-D	793C
793F	797F	988F-H	992C-D	992K
992C-G	993K	994G	844B-H	854B-K
730E	830E	930E	960E	WA600
WA900	WA1200	EH4500	EH5500	L1850
T262	T282			

Can also be adapted for other equipment.

Access System Features

- The RTV-SDK is driven by a double ended actuator driving both stringers with even power.
- The RTV-SDK is the outcome of an access system design review consolidating many of our previous stair models.

The RTV-SDK offers:

- lower cost,
- 10% fewer moving parts,
- a tread mesh top step for greater safety,
- simpler and more cost effective replacement as the actuator housing is separate to the infill box,
- easier installation, training and maintenance,
- less spare parts to be used or stocked.



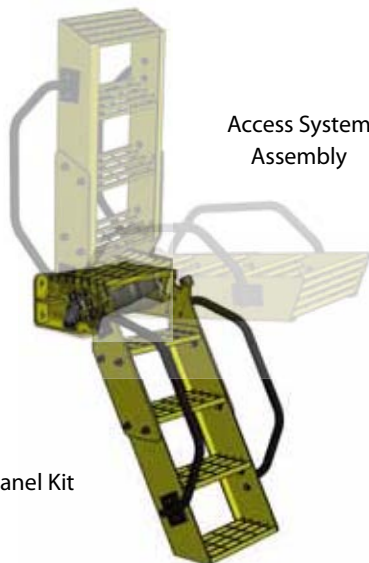
Electric/Hydraulic Ladder

RTV-LDK Ladder

The Safe-Away® Raise To Vertical LDK Ladders have been designed to provide a low maintenance, ergonomic and safe access for the operators and maintenance personnel of graders, scrapers or excavators in the heavy mining and earthmoving industries. The RTV-LDK is powered by the Safe-Away® 2009 Series Power Pack.

The RTV-LDK Ladders are electro-hydraulically controlled and rotate through an arc to the upright, 'parked' position to protect the ladders from physical damage when the equipment is in use. Included is a Park Brake Interlock Kit providing additional protection by ensuring the ladder is raised automatically when the park brake is released.

Mount infill box enclosing the horizontal Hydraulic Power Pack



Access System Assembly

Optional extras

- Additional Raise & Lower Control Panel Kit
- Hydraulic Emergency Down Kit
- Boarding Light
- Audible Alarm
- Inhibit Kit
- Reservoir Heater

See page 25 for more details on extras.

RTV-LDK

Designed for use on:

- Truck
- Dozers
- Loaders
- Shovels
- Excavators
- Graders

Compatible OEM models include:

773E	773F	775A-E	775F	777D
777F	777G	789A-C	789D	793B-F
797F	980H	988G	988H	992C-G
992K	993K	994D-F	994H	824H
834B-H	844H	854B-K	24M	385
HD1500	WA800	WA900	WD900	PC1000
PC1250	PC1600	EH4500	EH5500	EX1900
EX1200-5	MT4400			

Can also be adapted for other equipment.

Access System Features

- The RTV-LDK is driven by a double ended actuator driving both stringers with even power.
- The RTV-LDK is the outcome of an access system design review consolidating many of our previous stair models.

The RTV-LDK offers:

- lower cost,
- 10% fewer moving parts,
- a tread mesh top step for greater safety,
- simpler and more cost effective replacement as the actuator housing is separate to the infill box,
- easier installation, training and maintenance,
- less spare parts to be used or stocked.



Electric/Hydraulic Stair

RTV Stairs

The Safe-Away® Raise To Vertical (RTV) Stairs have been designed to improve safety for operator and maintenance staff when accessing large earthmoving equipment employed in the mining industry.

To reduce the possibility of physical damage to the stairs, the RTVs are retracted to a vertical position above the ground when the machine is operational. The 45° stair offers easier access for maintenance and operational personnel when accessing the vehicle while carrying objects.

The RTVs include a Park Brake Interlock Kit providing additional protection by ensuring the stair is raised automatically when the park brake is released.



Model RTV-S

Optional extras

- Additional Raise and Lower Control Panel Kit
- Hydraulic Emergency Down Kit
- Boarding Light
- Audible Alarm
- Inhibit Kit
- Reservoir Heater

See page 25 for more details on extras.

RTV-CF

Designed for use on:

- Shovels
- Loaders
- Excavators
- Equipment up to 4900mm deck height

Compatible OEM models include:

PC3000	PC4000	PC5500	PC8000
H285	EX1900	EX2500	EX3500
EX3600	EX5500	L1850	L2350
994	996	RH120	RH170
RH200	RH340	RH400	B295

Can be adapted for other equipment.





Electric/Hydraulic Stair

RTV-B

Designed for use on:

- Trucks
- Loaders
- Excavators
- Equipment up to 3000mm deck height

Compatible OEM models include:

994 WA1200

Can be adapted for other equipment.



RTV-S

Designed for use on:

- Trucks
- Loaders
- Equipment up to 2300mm deck height

Compatible OEM models include:

785B	785C	785D	793B	793C
793D	793F	992C	992D	992G
992K	993K	844H	854K	854G
730E	830E	930E	960E	
EH4500	EH5500	T262	T282	

May contain a horizontal Power Pack in the actuator box.



RTV-XS

Designed for use on:

- Trucks
- Loaders
- Equipment up to 3000mm deck height

Compatible OEM models include:

773F	775F	777F	777G	797F
988F	988G	988H	WA900	

Must have a special mount and vertically located Power Pack due to the short length of actuator box.



The Power Pack for this RTV-XS has been mounted vertically under the stair.



Electric/Hydraulic Stair

RT-45

The Safe-Away® Raise To 45° retractable stair consists of a pivoting bottom stair section which raises to an angle of 45 when the machine is operational. There are equipment specific designs to accommodate an upper landing and/or cabin access platform.

When fitted to a truck or water cart, the hydraulically controlled pivot stair section retracts above the bumper to reduce the possibility of physical damage.

The RT-45 includes a Park Brake Interlock Kit providing additional protection by ensuring the stair is raised automatically when the park brake is released.

The Safe-Away® RT-45 Stair is pictured on a Cat 785C truck (above) and on a Cat 777D water cart (below).



RT-45 for use on trucks & water carts

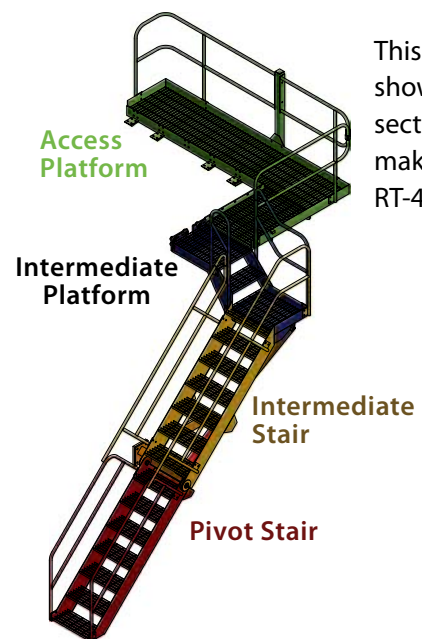
Compatible OEM models include:

773B	773D	773E	775B	775D
775E	777B	777C	777D	785B
785C	785D	789B	789C	789D
HD465	HD785	HD985	140M	170E
630E	730E	MT3300	MT3600	MT4000
MT4400				

Optional extras

- Additional Raise & Lower Control Panel Kit
- Hydraulic Emergency Down Kit
- Boarding Light
- Audible Alarm
- Inhibit Kit
- Reservoir Heater

See page 25 for more details on extras.



This drawing shows the sections that makes up the RT-45.



Electric/Hydraulic Stair

VHS

The Safe-Away® Variable Height Stair (VHS) has been designed to improve safety and access for operational and maintenance personnel working on drill rigs. Due to the height variations in drill rig positioning, the stair treads automatically compensate for stair angles between 29° & 45°.

The Safe-Away® VHS has been specifically designed to suit a wide range of drill rigs. The VHS Includes:

- Complete stair assembly, handrails, mounting bracket and installation kit.
- The fixed handrail system provides for three points of contact.
- Electric/hydraulic movements are controlled via the 24 volt Safe-Away Series 2009 VHS Power Pack.
- When the drill rig is operational or mobile the VHS is safely retracted to the horizontal position.
- A Maintenance Prop is provided for use on the Cylinder Rod, to enable work to occur under the stair with safety. The Maintenance Prop prevents the Hydraulic Cylinder from retracting, holding the stair in the raised position.
- Park Brake Interlock Kit provides additional protection by raising the stair automatically when the park brake is released.
- Hydraulic emergency down valve to manually release the stair lowering it to the down position.

The Safe-Away® 2009 Series VHS Power Pack comes in a stainless steel cabinet that houses the main hydraulic and electrical control components. The VHS Power Pack includes:

- Harnesses and leads.
- Battery Circuit Breaker Kit.



VHS Compatibility

DMM2	DMM3	DM25	DML	DML 60
D40KS	D45KS	D55SP	DR460	D60KS
D75KS	D90KS	D90K	1190E	
Pit Viper 235		Pit Viper 271		
Pit Viper 275		Pit Viper 351		



Model VHS shown fitted to a Drill Rig

Optional extras

- Additional Raise and Lower Control Panel Kit
- Boarding Light
- Audible Alarm
- Inhibit Kit

See page 25 for more details on extras.



Electric/Hydraulic Ladder

Model LX Ladder

The Safe-Away® Model LX Ladder has been designed to provide safe access for operation & maintenance personnel to large mining and earthmoving equipment. Two pairs of hydraulically powered parallel arms retract the ladder vertically for convenient stowage when the machine is operational.

To further protect the ladder from physical damage, the ladder's electrical system can be interconnected with the park brake and slewing mechanism to ensure the machine cannot be operated until the ladder is fully retracted. The Model LX includes a Park Brake Interlock Kit providing additional protection by ensuring the ladder is raised automatically when the park brake is released.



The Model LX pictured above is on the front of a Liebherr 996 Shovel in the down and up positions. The metallic cabinet containing the 2014 Series Power Pack can be seen mounted on the white wall on the front of the cabin.

Designed for use on:

- Shovels
- Excavators
- Equipment up to 3900mm deck height

Compatible OEM models include:

5130B	EX2500	EX3500	994	996
RH170	RH200	RH340		

Can be adapted for other equipment.

Optional extras

- Additional Raise and Lower Control Kit
- Hydraulic Emergency Down Kit
- Boarding Light
- Audible Alarm
- Inhibit Kit
- Reservoir Heater

See page 25 for more details on extras.



Model LX Ladder shown fitted to excavators



Electric/Hydraulic Ladder

SWING Ladder

The Safe-Away® SWING Access Ladder has been designed for heavy mining and excavation machinery to provide a low maintenance access system that will comply with step type ladder standards for 62° access and egress.

The ladder is electro-hydraulically controlled to provide an automatic three step process: swing up, retract in & lower to cradle. The ladder is protected from mechanical damage when raised to the fully retracted position when the vehicle is operational. The Swing Ladder includes:

- An LED boarding light that will stay on for an adjustable/preset period.
- Park Brake Interlock Kit providing additional protection by ensuring the ladder is raised automatically when the park brake is released.

Designed for use on:

- Dozers
- Shovels
- Excavators

Compatible OEM models include:

D9R	D9N	D9T	D10N
D10R	D10T	D11N	D11R
D11T	5130B	5230B	D275
D375	D475	PC1800	RH120

Can be adapted for other equipment.

Optional extras

- Additional Raise and Lower Control Panel Kit
- External Audible Alarm
- Inhibit Kit
- Reservoir Heater

See page 25 for more details on extras.





Electric/Hydraulic Ladders

RTV Ladders

The Safe-Away® Raise To Vertical (RTV) ladders have been designed to improve safety for operator and maintenance personnel when accessing large earthmoving equipment employed in the mining industry.

To reduce the possibility of physical damage to the ladders, the RTVs are retracted to a vertical position above the ground when the machine is operational. The 62° ladder offers easier access for maintenance and operational personnel when accessing the vehicle while carrying objects. The RTV Ladders include a Park Brake Interlock Kit providing additional protection by ensuring the ladder is raised automatically when the park brake is released.

Optional extras

- Additional Raise and Lower Control Panel Kit
- Hydraulic Emergency Down Kit
- Boarding Light
- Audible Alarm
- Inhibit Kit
- Reservoir Heater

See page 25 for more details on extras.



Model RTV-LNS Ladder shown fitted to truck



Electric/Hydraulic Ladders

RTV-LSSE

Designed for use on:

- Cat 24M Series Graders
- Trucks
- Loaders
- Small Excavators
- Equipment up to 2400mm deck height

Compatible OEM models include:

773E	773F	775B	775D	775E	775F	777B
777C	777D	777F	777G	785B	785C	785D
789B	789C	789D	793B	793C	793D	793F
980H	988F	988G	988H	992C	992D	992G
992K	993K	824H	834B	834G	834H	854K
854G	385C	994	WA800	WA900	WD900	
PC1250	EH4500	EH5500	EX1200	EX1900	MT4400	

Can be adapted for other equipment.



This RTV-LNS 7 step is specifically designed for the Cat 797. The vertical Power Pack is mounted on the truck at first platform.



This RTV-LSSE 8 step with mount and infill specifically designed for the Komatsu PC1250.

RTV-LNS

Designed for use on:

- Trucks

Compatible OEM models include:

797B 797F T282





Electric/Hydraulic Ladders

RotorStep Ladders

The Safe-Away® RotorSteps have been designed to provide a low maintenance, ergonomic and safe access for the operators and maintenance personnel of graders, scrapers or excavators in the mining and heavy earthmoving industries.

The RotorStep Ladders are electro-hydraulically controlled and rotate through an arc of 180° to the vertical 'parked' position to protect the ladders from physical damage when the equipment is in operation. The RotorStep Ladders include a Park Brake Interlock Kit providing additional protection by ensuring the ladder is raised automatically when the park brake is released.



RotorStep G Ladder shown fitted to a
Cat 16G Grader



RotorStep GM Ladder shown fitted to a
Cat 16M Grader



RotorStep S Ladder shown fitted to a
Cat 657 scraper

Optional extras

- Additional Raise and Lower Control Panel Kit
- Boarding Light
- Audible Alarm
- Inhibit Kit
- Reservoir Heater

See page 25 for more details on extras.



Electric/Hydraulic Ladders

RotorSteps

Model	Compatible with:	Features & Benefits
RotorStep G	Cat 16G Graders Cat 16H Graders	Operates with the cab door fully open or closed. Will not obstruct an operators vision when up.
RotorStep GM	Cat 16M Graders	The compact mount ensures visibility to the point of the blade. Operates with the cab door fully open or closed. Will not obstruct an operators vision when up.
RotorStep GK	Komatsu GD825 Graders	The compact mount ensures visibility to the point of the blade. Operates with the cab door fully open or closed. Will not obstruct an operators vision when up.
RotorStep L	Excavators and Trucks 320C 320D 320E 385B 385C PC300 PC1000 ZX350 934 974	Unique design keeps the ladder off the tracks. Compact mount plates to ensure visibility. Operates with the cab door fully open or close. Will not obstruct an operators vision when up.
RotorStep S	Cat Scrapers 631D 631E 631G 637D 637E 637G 651B 651E 657B 657E 657G	A rotating platform section provides a walkway between the cab and the ladder. It sits in an upright position when the scraper is operational. A robust mount minimises damage to ladder when positioned on the scraper front corners. Operates with the cab door fully open or closed. Will not obstruct an operators vision when up.



RotorStep L in the retracted position



RotorStep L in motion



RotorStep L in the extended position



Electric/Hydraulic Ladder

24H Ladder

The Safe-Away® Cat 24H Grader Access System has been specifically designed to provide safe and convenient access for operators and maintenance personnel accessing the 24H grader.

Hydraulically operated, the 24H Ladder folds neatly within the frame when the grader is in operation. Incorporated into the ladder design is a special mounting frame for fitting directly to the 24H. The 24H Ladder includes Park Brake Interlock Kit providing additional protection by ensuring the ladder is raised automatically when the park brake is released.

Designed for use on:

- Cat 24H Graders

Optional extras

- Additional Raise and Lower Control Panel Kit
- Hydraulic Emergency Down Kit
- Boarding Light
- Audible Alarm
- Inhibit Kit
- Reservoir Heater

See page 25 for more details on extras.



Cat 24H Access System shown lowered and retracted

Optional extras



Additional Raise and Lower Control Kit

Designed to enable the access system to raise and lower. This remotely mounted control is contained in a cast aluminium alloy box to provide protection against the elements and other damage.

It can be located outside the cabin, at the mid-platform or at ground level and operated with a simple toggle switch.

The Raise and Lower Control Kit can be supplied with an extension harness ranging from 1m-17m.



Hydraulic Emergency Down Kit

A lever operated three-way ball valve and mounting bracket provides a fail safe emergency down function.

This can be located on the host vehicle at a convenient location of your choosing.

The Hydraulic Emergency Down Kit is not suitable for the Electric Ladder, Swing, RotorStep or smaller RTV-LSSE Access Systems.

Note for the Electric Ladders an Emergency Stop can be fitted to stop the ladder at any point in the raise/lower cycle.



Boarding Light

The boarding light is activated by pressing the up or down directional switch. The light will stay on for an adjustable/preset period.

Audible Alarm

The external audible alarm is activated by pressing the up or down directional switch.



Inhibit Kit

The Inhibit Kit can be connected to the host vehicle to inhibit many functions for example slewing, while the access system is in motion.



Reservoir Heater

The Reservoir Heater ensures the viscosity of the oil is maintained to raise and lower the ladder in cold climates. The Reservoir Heater is suitable for temperatures down to -40 degrees Celsius.



Paint colours

All Safe-Away handrails and step treads can be painted to meet OEM or site paint colour specifications.



Training & Installation

The Safe-Away® designed and manufactured range of ladder and stair access systems offer improved safety for maintenance and operational personnel accessing and egressing mining and heavy earthmoving equipment.

Due to the many variations in mobile fleet designs, site specific configurations, deck heights and mount points we recommend you have the Hedweld Field Service Team provide Onsite Installation.

While performing an Onsite Installation our highly skilled team can train your maintenance personnel in the:

- ✓ diagnostics and data logging set up for the Incab Controllers
- ✓ pressure setting for hydraulic Power Packs, and
- ✓ provide tailored instructions for future installations.

Commissioning and training can be carried out by an authorised technician. Onsite training consists of both classroom theory and workshop practical training and assessment. Certificates of Competency are provided to participants upon successful completion.



Field Servicing & Repair

At Hedweld we want you to get the most out of your investment, so our Safe-Away® products are supplied with ongoing **preventative maintenance schedules**. These include daily, monthly, quarterly and annual checklists to make sure your equipment keeps running smoothly.

The Hedweld Field Servicing Team can provide your site with ongoing preventative maintenance support.

Hedweld have inducted Field Service Technicians with fully equipped vehicles who can provide;

- ✓ **preventative maintenance,**
- ✓ **breakdown repairs, and**
- ✓ **onsite installations**

on all Safe-Away® ladder & stair access systems.

Spare Parts & Manuals

Hedweld's Spare Parts Interpreter is able to assist you when ordering the parts you need on spareparts@hedweld.com.au It is our commitment to customers that spares will be dispatched the same or next day, on your transport.

If you require an electronic copy of an Operating Manual these can be ordered through Spare Parts.





Trilift® product range

Hedweld manufactures and distributes the Trilift® range of products specifically designed to assist with the removal, installation and handling of components on mining and heavy earthmoving vehicles. Components such as wheel motors, tyres, hoist cylinders, final drives, transmissions, differentials, hub and strut assemblies and more can be safely handled using our Trilift® component handling products.

As well as supporting the Australian mining industry, Hedweld products are exported worldwide to countries including Canada, Africa, South America, Central Asia, Asia Pacific and the USA.

To keep pace with the ever changing developments in heavy machinery design, Hedweld works closely with Original Equipment Manufacturers (OEMs) to custom design new and innovative products to make component lifting and handling safer, more time efficient and offering significant productivity gains. With the release of new, larger mining and earthmoving equipment, comes the need to safely lift and handle heavier components. Hedweld is constantly reviewing product designs in order to provide the market with timely solutions to the latest lifting and handling requirements.



Trilift® Variable Work Table with Multijig and Cylinder Handler



Trilift® TH15000 Workshop Tyre Handler removing Cat 789C tyre



Trilift® Cat 797 Transmission Hoist removing transmission

For more information on Hedweld products visit

www.hedweld.com.au

Search by **OEM vehicle type** to discover the right Trilift® and Safe-Away® products to suit your business.

Also manufacturers and suppliers of:

Trilift

Maintenance Support Equipment

Contact Information

Hedweld Engineering Pty Ltd
5 Thrift Close, Mt Thorley NSW 2330
Australia

Phone +61 2 6574 0000

Fax +61 2 6574 0099

enquiries@hedweld.com.au

www.hedweld.com.au

**SAFETY
EFFICIENCY
INNOVATION**



*Designed to provide improved safety & efficiency
when accessing earthmoving and mining equipment*