

DK Series

The Safe-Away® DK Series Raise to Vertical Access Systems have been designed to improve safety for operator and maintenance staff when accessing large earthmoving equipment employed in the mining industry.

Designed to reduce the possibility of physical damage to the access systems on heavy mining and excavation machinery, the DK Series stairs and ladders are raised to a vertical position above the ground when the machine is operational. They offer easier access for maintenance personnel when accessing the vehicle while carrying tools.

INNOVATION
efficiently
designed to
minimise
costs



Stair
RTV-SDK

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



Ladder
RTV-LDK

Safety & Efficiency

The **Safe-Away® DK Series Raise to Vertical (RTV) Access Systems** have been specifically designed to suit a wide range of equipment and provide:

- A 45° stair (RTV-SDK) and 62° ladder (RTV-LDK) offering safer access and egress while carrying tools.
- Two sections: the Mount Infill box enclosing the horizontal Hydraulic Power Pack and the Access System Assembly (steelwork) making it easier and more cost effective to replace a section than other Safe-Away models available.
- A tread mesh top step for stability.
- Minimal parts which means reduced spares on hand.
- Minimal moving wear parts.
- Fixed handrails (to give three points of contact) that are easy to remove and/or replace.
- A Park Brake Interlock Kit offering additional protection by raising the system automatically when the park brake is released (Note: not applicable with Momentary operation configuration).

Innovation

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

It provides:

- Simple downloading of day to day logged data to a USB.
- Sequential reports on all events with time and date stamps:
 - Raising and lowering,
 - Fault indications.
- Operational history data logs
- Diagnostics and error reporting accessed directly from the Incab control digital display.

Access 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 connection to the side of the in cab control panel.
- View downloaded log files as summary and/or full log data in Microsoft® Excel using the supplied SLA to XLS file converter.



The **Safe-Away® 2009 Series Power Pack** is driven by the Access Control System. Conveniently, the top step/platform is the Power Pack box designed to safely store the hydraulic Safe-Away® Series 2009 Power Pack in a horizontal position. Or the Power Pack may be mounted vertically at another location of your choosing.

It includes:

- Harnesses and Leads.
- Battery Circuit Breaker Kit.

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 08:42:51 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 12:24:01 PM

Designed to suit your fleet

The **Safe-Away® DK Series RTV Access Systems** are designed to suit OEM vehicles. Each Access System may be varied to accommodate your requirements for specific mount points, platform handrails, infills and site and/or OEM colours.



RTV-SDK (45° stair)

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			

The stair can also be adapted for other equipment.

RTV-LDK (62° ladder)

Designed for use on:

- Trucks
- 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			

The ladder can also be adapted for other equipment.

Optional extras

1. Additional Raise and Lower Control Panel Kit



A remotely mounted control panel designed to enable the raise and lower operation from outside of the vehicle's cab, or at a position accessible from ground level. Encased in a protective aluminium case.



2. Hydraulic Emergency Down Kit

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

3. Boarding Light and Audible Alarm Kits



The boarding light (left) and audible alarm (below) are activated by pressing the up or down directional switch. The light will stay on for an adjustable/preset period.



4. Inhibit Kit

A relay with connecting harness for customer only installation of machine inhibit functions independent of the standard Safe-Away® in-built ladder safety functions.



5. Reservoir Heater & Circuit Breaker

The Reservoir Heater ensures the viscosity of the oil is maintained to raise and lower the ladder in cold climates.



6. Momentary Operation

Safe-Away® Access Systems can be supplied with momentary operation.

Continuous improvement

One of the key objectives when designing the **Safe-Away® DK Series Access Systems** was to minimise the number of parts, moving or static. By re-engineering and standardising our previous Safe-Away® models we were able to reduce the number of parts. This will reduce your costs for the Access System and of stock on hand and a lowers the number of wear parts.

Specifications

These Safe-Away® Access System have been designed and manufactured to comply where practicably possible with the relevant sections of the following standards:-

SAE J185_200305 ISO 2867:2011 ANSI Z535.4-2007 ANSI A14.2-2007 AS 3868-1991 AS1657-2013

RTV-SDK Range Dimensions

Steps	Deck Height		Raised height	
4	1045mm	41.1in	1044mm	41.1in
5	1260mm	49.6in	1348mm	53.1in
6	1475mm	58.1in	1652mm	60in
7	1690mm	66.5in	1956mm	77in
8	1905mm	75in	2260mm	89in
9	2120mm	83.5in	2564mm	101in
10	2335mm	91.9in	2868mm	113in

Stair Dimensions (approx)

A	Stair Width	574mm	22.6in
B	Actuator Height	204mm	8in
C	Actuator Depth	311mm	12.2in
D	Mount Box Height	204mm	8in
E	Mount Box Depth	668mm	26.3in
F	Handrail Height	1230mm	48.4in

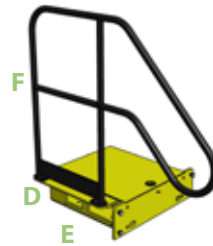
RTV-LDK Range Dimensions

Steps	Deck Height		Raised height	
5	1400mm	55.1in	1220mm	48in
6	1560mm	61.4in	1514mm	59.6in
7	1900mm	74.8in	1797mm	70.7in
8	2150mm	84.6in	2080mm	81.8in
9	2400mm	94.5in	2363mm	93in
10	2650mm	104.3in	2647mm	104.2in
11	2900mm	114.2in	2930mm	115.3in
12	3150mm	124in	3213mm	91.1in

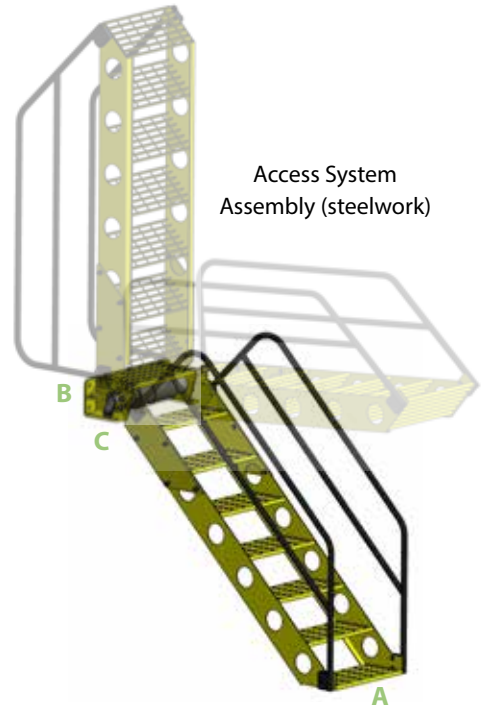
Ladder Dimensions (approx)

A	Ladder Width	457mm	17.5in
B	Actuator Height	204mm	8in
C	Actuator Depth	311mm	12.2in
D	Mount Box Height	204mm	8in
E	Mount Box Depth	668mm	26.3in
F	Handrail Height	1230mm	48.4in

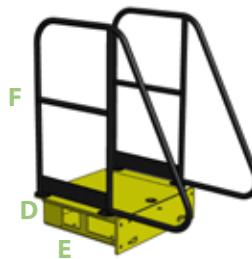
Mount infill box enclosing the horizontal Hydraulic Power Pack



Access System Assembly (steelwork)



Mount infill box enclosing the horizontal Hydraulic Power Pack



Access System Assembly (steelwork)

