

INSPECTION & MAINTENANCE LOG

INSPECTION

PRODUCT

To maintain the safety and serviceability of this product, the following inspections must be performed.

1. **Operator Inspection** The User/Operator should inspect the Ferno CSRK before and after each use. Check for excessive wear or damage of all components (refer to Inspection Guide in this manual). Refer any signs of deterioration to a competent person for a decision on the safety and serviceability of the product.

IDENTIFICATION #

 Periodic Inspection A full periodic inspection should be conducted every six months by a competent person or more often if your organisation's protocols dictate. If any part of the System is to be exposed to harsh chemicals or hazardous atmospheres, the User/Operator should consult with Ferno Australia to determine whether the part is suitable for continued use.

Periodic inspections should be recorded in the product's Inspection and Maintenance log.

FIRST INSPECTION DATE

ISSUE DATE

DATE	COMMENTS	ACTION YES/NO	SIGNAT	TURE	NEXT INSPECTION

DATE SUPPLIED

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USER INSTRUCTIONS
Australia (FWE-CSRK) CSRK CONFINED SPACE RESCUE KIT

The Ferno Confined Space Rescue Kit (CSRK) is a 4:1 ratio mechanical advantage lift system for ascent, with a manual override for descent. The 4:1 mechanical advantage lifting capability allows the operator to reduce the manual handling lift ratio to a quarter of the load weight. The total length of rope in the system is 50 m which allows for a 'working length' of approximately 12 m lowering or lifting.



Specifications

Specifications				
APPLICATIONS	The Ferno CSRK is designed for multi-purpose use including confined space entry and egress, rescue, working at height, work positioning, ascent, controlled descent and as a main or secondary system			
SYSTEM COMPONENTS	1 x VISC-RP703 Rescue Hauler 1 x VISC-RP061A1 Prusik Minding Pulley 2 x VCT A595TBBZO Large Triple-action Steel Karabiner with Captive Bar 1 x Brake Release Cord 50 m x 11 mm Kernmantle Rope 1 x Rope Bag Optional: Dust proof, plastic Stowage Drum with lid (FWE-CSRD DRUM)			
SYSTEM LENGTH	50 m of rope - approximately 12 m of Lift/Drop			
WORKING LOAD LIMIT (WLL)	250 kg maximum - 1 person working or 2 persons rescue			
ROPE BREAKING STRENGTH (MBS)	2997 kg minimum (29.4kN)			
RATINGS	Karabiners - 50 kN Pulleys - 40kN			
	Rope diameter range	10 - 13 mm		
	Working Load Limit (WLL)	800 kg		
RP703 RESCUE HAULER	Minimum Breaking Strength	40 kN		
NF/U3 NESCUE HAULEN	Wheel Material / Pulley Finish	Aluminium / Anodised		
	Weight	908 g		
	Certification	EN12278; EN567; NFPA 1983		
	Compatible with rope diameter	Max 13 mm		
	Minimum Breaking Strength	40 kN		
RP061 PRUSIK MINDING PULLEY	Wheel Material / Pulley Finish	Aluminium / Anodised		
	Weight	340 g		
	Certification	CE EN12278		

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SAFETY INFORMATION

Note: Each pulley has individual markings which may differ slightly with manufacture dates. It is important to record in writing the date the system is put into service as over the life of the system, the rope may be replaced and a new date will apply to the rope only. A sample of the System label is shown below.

WARNING EXPERT USE ONLY You must be trained by competent person and refer to instruction before the use of this product. Check the lanyard for damage before every use. Retire on any visible signs of damage. MANUFACTURED to the RELEVANT Sections of AS/NZS 1891.1 Made by Ferno Australia Pty Ltd Rating 21 kN Serial No Serial No Item No: FWE-CSRK FERNO CONFINED SPACE PULLEY KIT

Employer: It is your responsibility to ensure all users are instructed and trained in the correct use and maintenance of the equipment. Once equipment is issued, it is assumed this has been completed.

User: Only competent users should use this equipment. It is your responsibility to read and understand these instructions and be properly trained in the use of this equipment. Always use equipment safely and properly. Check equipment before and after each use.

General: This manual contains general instructions for the use, operation and care of this product. The instructions are not all inclusive. Safe and proper use of this product is solely at the discretion of the user. Safety information is included as a service to the user. All other safety measures taken by the user should be within and under consideration of applicable regulations and work protocols. It is recommended that training on the proper use of this product be provided before using this product in an actual situation.

Retain this manual for future reference. Include it with the product in the event of transfer to new users. Additional copies are available on request from Ferno Australia.



- » Working at height/rope access/technical rescue procedures require special skill and are potentially hazardous activities. No person should attempt such activities unless they have received professional instruction and training in these activities.
- » Before and after each use the device should be inspected by the Operator and if there is any doubt about the correct functioning, it should be immediately taken out of service and returned to the supplier or authorised service agent for inspection and rectification.
- » It is prohibited to alter, modify or tamper with the device in any way or form. The device is NOT to be rectified or serviced by any person unless they are trained and authorised by Ferno Australia.
- » If any part of the device assembly is exposed to chemicals, corrosive cleaning materials or hazardous atmospheres, the user must consult the manufacturer to determine if the part is suitable for ongoing use.

IMPORTANT

- » Ensure you have a rescue plan in place prior to working at height or confined space. A rescue plan is MANDATORY and the Operator must be aware of it prior to commencing work. Ensure the Operator is in good physical and mental health and is trained and competent in the use of the device. The Operator must have all relevant PPE for the job prior to commencement of working at height. Such PPE may include, but not be limited to the following: harness, lanyard, helmet, gloves, appropriate foot wear etc.
- » Consult with AS/NZS 4488.2:1997 for both requirements and guidance for the rigging and use of industrial rope access systems and guidance on the selection and maintenance of components.

BEFORE USE

Prior to each use of the Ferno CSRK, inspect the system to ensure it functions correctly and all components are damage free. A checklist is provided below as a guide that may be used in conjunction with your usual work place protocols.

INSPECTION GUIDE					
INSTRUCTION LABEL	Intact and securely in placeLegible				
COMPONENTS	Are all components present?				
HARDWARE	 Is the hardware true to their original forms and free of cracks, burrs, deep scratches and gouges? Do moving parts move freely and smoothly? Are devices free of grit and sand? Are karabiner hinge pins securely in place? Do the karabiner locking sleeves turn smoothly and latch the gates securely? 				
ROPE	 Is all rope in good condition with no cuts or frayed edges? Is rope stitching in good condition with no frayed or broken threads? 				

Rope Lifespan

Generally rope has a 10 year life span in ideal storage conditions however rope working life span will be affected by, but not limited to, the following conditions: frequency and type of operational usage, exposure to chemicals and natural environmental elements, your organisation's inspection criteria and protocols.

The working life of the rope is potentially deemed to be less than the actual shelf life. Refer to rope manufacturer's guidelines if additional information is required. Contact sales@ferno.com.au to request if necessary.

It is critical that the user conducts regular inspections on the rope to check its condition. If there is any doubt, the rope should be replaced.

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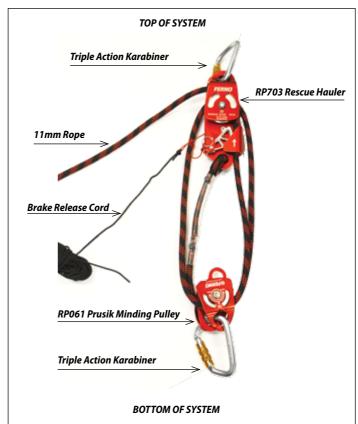
INSTRUCTIONS

INSTRUCTIONS FOR USE

Improper use and maintenance of the Ferno CSRK can result in injury. Use this system only for the purpose described in this manual.

NOTE: Ensure the brake cord is threaded and and the pin located as





The User is the person attached to the CSRK system and being lowered or raised on the system. **The Operator** is the standby person who remains at the operational end of the system to manually control the raising and lowering of the User.

pictured below.

- 1. Attach the karabiner at the top of system to the designated anchor point.
- Operator: Attach the User to the bottom pulley's karabiner via an appropriate fall arrest attachment point on the User's harness.

PRIOR TO LOADING THE SYSTEM WITH THE USER'S WEIGHT:

- 3. **Operator**: Place the rope bag to his left side, feeding the rope from the left hand, under the forearm, around his back and into his right hand. Note: Ferno recommends the use of rope gloves to maximise the Operator's grip on the rope in all conditions and to prevent rope burn.
- the rope to take up any slack in the System prior to the System assuming the weight of the User to enable a smooth transition.

 The System is now ready to assume the weight of the User.

DESCENDING:

- Operator: Pull the brake cord towards the Operator to release
 the cam brake. Note: Maintain tension on the brake cord to keep
 the brake cam open during lowering operations. Releasing the
 brake cord will activate the cam brake and arrest/stop the System.
- Operator: Control the rate of descent as described above, by feeding the rope into or pulling the rope out/away from the System as required.

ASCENDING:

- 7. Activate the cam brake by letting go of the Brake Release Cord. The cam brake will lock off the rope.
- 8. Pull on the tail end of the 11mm rope to raise the load/User. Each time the 11mm rope tail end is let go, the brake will activate and lock off the rope.

SAFETY TIPS:

- When the System is not in use raising or lowering, the end length of 11mm rope should be 'tied-off' to further secure the User's position.
- The Ferno Res-Q-Link Recovery Pole used in conjunction with the System allows you to hook on to a suspended victim during a rescue and cut them free of their primary connection to either lower or lift them to safety.

CLEANING AND STOWAGE

Hardware: Clean off surface dirt from hardware with a damp sponge. Clean with mild detergent/water mix if required. Always dry the device, preferably with compressed air, before storing.

Rope: Use Ferno Rope & Harness Wash to clean superficial dirt from rope and air dry in a well ventilated, shaded area away from direct heat to dry completely.

Store all equipment in a clean, dry area away from chemicals and corrosive elements. An optional dust proof, plastic Stowage Drum with lid (FWE-CSRD DRUM) is available from Ferno Australia.

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