

IAS-ANZ



Designed and manufactured in Australia

SINGLE ROPE TECHNIQUE EQUIPMENT [SRTE]

9 Nelson Avenue
Padstow NSW 2211 Australia

Phone: (61 2) 9796 3455
Email: sales@srte.com.au

Fax: (61 2) 9796 3488
Website: www.srte.com.au



SRTE Ascenders



Thankyou for selecting one of the SRTE **Ascenders** to complement your system. We at SRTE are confident that you will be happy with your acquisition. If you have any questions or product suggestions relating to this or any other product in our range, please do not hesitate to contact our Customer Service Centre at the above address.

SRTE Ascenders and **Specialised Ascenders** are especially designed for ultimate strength and durability. The bodies are machined from extruded aluminium and are anodised gold, black and red for corrosion protection. The cams are investment cast in stainless steel. The teeth and cam face curvature were specially designed to do the least damage to the rope while maintaining maximum strength. The tooth pattern channels away most of the build up from dirty rope; you can easily remove any remaining build up manually. Additional rigging holes on the top and bottom of most models prevent karabiners, lanyards, foot loops and other equipment from tangling, keeping your system in a state of high readiness.

SRTE Ascenders are available in 5 distinct styles: Standard, Explorer, Chest, Accessory and Specialised.

- **SRTE Standard Ascenders** are handed ascenders available in both left and right hand. Standard Ascenders have two rigging holes at the top and another two at the bottom. The catch is anodised green for easy identification on all models. Standard Ascenders require the Two Movement GREEN Method to insert or remove the rope.
- **SRTE Explorer Ascenders**, in addition to the features of the Standard Ascenders, have a stainless eyelet in the main bottom rigging hole. Explorer Ascenders are ergonomically shaped and have a comfort grip handle. Explorer Ascenders may have an oval karabiner inserted through the main top rigging hole on the rope closure side; attach that karabiner to your harness via a lanyard. A karabiner in this position enables the ascender to be used as a fall arrest ascender or as a self belay ascender. The ascender slides smoothly up the rope. On a fall the ascender is evenly loaded for maximum support. Explorer Ascenders use the One Movement SILVER Method to insert or remove the rope.
- **SRTE Chest Ascenders** are ergonomically shaped and have a permanent twist in their bodies, to ensure that the rope remains close to your body and to keep the catch accessible. By having the rope close to your body, ascending is easier. **SRTE Chest Ascenders** use the One Movement SILVER Method to insert or remove the rope. Chest Ascenders only have two rigging (karabiner) holes, one at the top and one at the bottom of the ascender and slot for chest belt on back.
- **SRTE Accessory Ascenders** are Mini Ascenders with no safety catch. They are designed to be used in places where they are seldom removed from the rope. Like Chest Ascenders, Accessory Ascenders have only two rigging (karabiner) holes.
- **SRTE Specialised Ascenders** combine ascender cams with pulley sheaves. All **SRTE Specialised Ascenders** can be used as a conventional pulley, a conventional ascender or a combined unit. On the **SRTE Rescue Mate**, the cam acts as a brake, supporting the load between hauling operations. On the **SRTE Riggers Mate**, the cam acts as a fall arrester and is activated on excessive speed. **SRTE Specialised Ascenders** use the One Movement SILVER Method to insert or remove the rope. Refer to individual instruction sheets for more information on Specialised Ascenders.

HOW TO USE YOUR SRTE ASCENDER

This sheet is not a fully comprehensive instruction manual.

Contact TRAC INTERNATIONAL (61) 0418 674 678 for information on SRTE approved Training Courses.

How to open the CAM/CATCH

There are three types of ascenders: the Two Movement GREEN cam+catch, the One Movement SILVER cam+catch and the No-Catch-on-Cam.

Two Movement GREEN Method

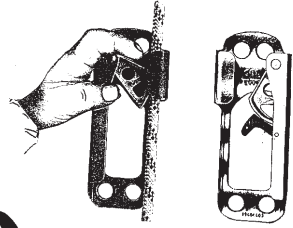
1. To open the cam, with your thumb on the thumb pin, pivot the green catch down; hold it there with your finger.
2. With your thumb, push the cam down as far as you can.
3. When the cam is completely down, release your grip on the thumb pin; the green catch will hold the cam in this open position.
4. Insert or remove the rope.
5. To close the cam, pivot the thumb pin on the green catch down; the cam will spring back to its normal position, locking the rope in place; release your grip on the thumb pin; the green catch will spring back to its normal position. Refer to the diagram.

One Movement SILVER Method

1. To open the cam, with your thumb on the thumb pin, pivot the silver catch down.
2. Pivot the catch back past the side of ascender, as far as you can.
3. Release your grip on the thumb pin; the silver catch will lock onto the side of the ascender, holding the cam in the open position.
4. Insert or remove the rope
5. To close the cam, pivot the pin on the silver catch down, away from the side of the ascender. Release your grip on the thumb pin; the cam and silver catch will return to their normal position, locking the rope in place.

No-Catch-on-Cam Method

1. To open the cam, ensure that there is no karabiner in the bottom hole.
2. Using your finger or thumb, push the cam down as far as you can.
3. When the cam is completely down, insert or remove the rope.
4. Do not release the cam until the rope has been threaded into the ascender correctly.
5. To close the cam, release your grip on the cam; the cam will return to its normal position, locking the rope in place.
6. For safety, insert a locking karabiner in the bottom hole to prevent accidental removal of the rope.



Correct Method of threading your SRTE Ascender

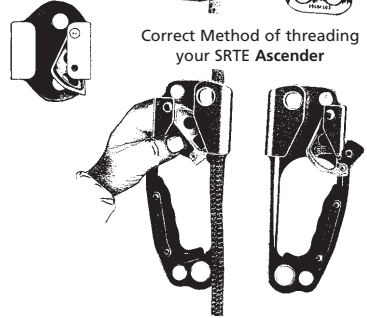
Prusiking – Ascending

A – BEFORE YOU START

1. Attach your SRTE **Chest Ascender** or Prusik knot to your Sit and Chest Harness using Karabiners.
2. Using Karabiners, attach an SRTE Foot Loop and Lanyard to your **Hand Ascender**; then attach the lanyard to your Sit Harness.
3. Attach your **Hand Ascender** above your **Chest Ascender** onto the rope. For each ascender, lock or hold the cam open, insert the rope and then let the cam close; the cam is now engaged.

Note: Your SRTE Ascenders will have a green, silver or no-catch cam – see above for operating instructions

1. Do not use an SRTE **Accessory Ascender** as either a **Chest** or **Hand Ascender** as there is no catch, making it dangerous if you have to perform a change-over.
2. Test your ascenders to make sure you have threaded them correctly and that they are working properly – an ascender should be able to support your weight without slipping.

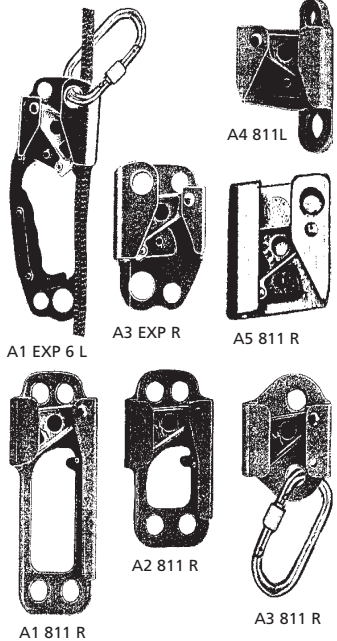


B – ASCENDING

1. Place your feet in your Foot Loops; keep your knees bent.
2. Shift your body weight from your **Hand Ascender** to your SRTE **Chest Ascender** or Prusik knot.
3. Straighten your legs; your **Chest Ascender** should move up automatically. If instead, you are using a Prusik knot, move the knot up the rope manually.
4. Your weight is now fully supported on your **Chest Ascender** or Prusik knot. You should now be sitting in your Sit Harness.
5. Move your **Hand Ascender** up the rope, at the same time moving your legs into a crouching position to allow the hand ascender to move.
6. Repeat steps 2 through 5 till you reach your destination.

C – DESCENDING

1. You can descend using SRTE Ascenders.
2. Always use two Ascenders when descending; move each Ascender down in short movements of approx 200mm each.
3. With ascenders already attached to you, your harness and the rope, using your finger, push the cam down as far as you can, first on one ascender and then the other.
4. **Do not touch the catch – touch the cam only.**
5. **Do not release both ascenders at the same time.**
6. The rope cannot come out of the ascender because the cam will not open completely – the catch prevents that from happening.
7. When you push the cam down, this allows the rope to run freely through the ascender – the cam is disengaged.
8. Slide your ascender down approx 200mm.
9. Release the cam; the cam will return to its normal position locking the rope in place – the cam is engaged.
10. Repeat steps 3 through 9 until you reach your desired position.
11. SRTE recommends that Descenders be used when descending; however, for short distances Ascenders may be used.



D – CHANGE-OVERS

Descending to Ascending

1. Lock-off the SRTE Descender
2. Attach the SRTE Ascenders
3. Remove the SRTE Descender
4. Ascend

Ascending to Descending

1. Attach the SRTE Descender and lock-off
2. Remove the SRTE Ascenders
3. Unlock the SRTE Descender
4. Descend

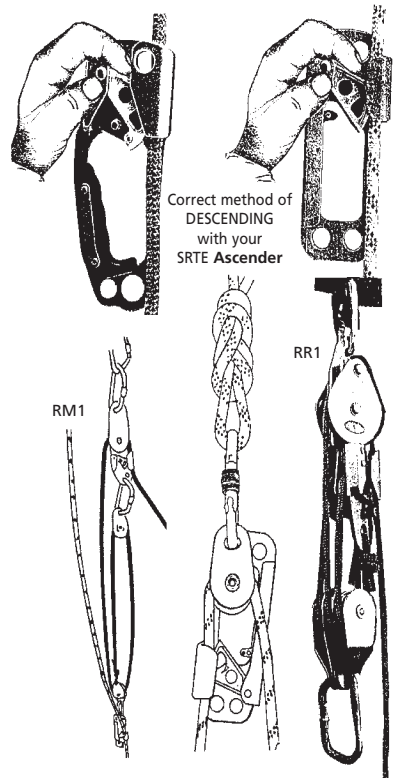
Hauling Systems

E – BEFORE YOU START

1. The mechanical advantage that you require will govern the type of pulleys you use in conjunction with your **SRTE Ascenders** or **SRTE Specialised Ascenders**, e.g., **SRTE Rescue Mates** or **SRTE Riggers Mates**.
2. Thread the rope through your **SRTE Pulleys** and **SRTE Ascender** or **SRTE Specialised Ascenders** ensuring that the tail end of the rope goes through the cam last.
3. Lock the cam open, insert the rope and then release the cam – the cam is now engaged.
4. **SRTE Ascenders** have green, silver or no-catch-on cams – see above for operating instructions.
5. Lock **SRTE Specialised Ascenders** and **SRTE Pulley** cheeks closed with an **SRTE Karabiner** (screwgate).
6. Securely attach the top pulley to your **Working Frame** (e.g., **Ozpod**, **Tripod** or **Beam**); adjust the frame height as required.
7. You should attach an **SRTE Hand Ascender** securely via an **Lanyard** and **Karabiners** to your **Harness**. For better control, use two ascenders to prevent rope burn to your hands. Thread the rope into your **SRTE Hand Ascender**.
8. Remove all slack between **SRTE Hand Ascender** and **SRTE Specialised Ascenders**.
9. Attach the load (worker) securely using an **SRTE Karabiner** (screwgate).
10. For specific instruction on **SRTE Specialised Ascenders**, refer to **SRTE Rescuemate** and **SRTE Riggersmate** individual instruction sheets.

F – MAINTENANCE

1. Wash ascenders in clean water only if they are gritty – the cam and catch will be stiff if gritty.
2. After washing, oil the cam spring, catch spring and sheave axle.
3. Worn teeth on the cam may interfere with fully functional operation of **SRTE Ascenders** and **SRTE Specialised Ascenders**. If cam teeth are flat, i.e., no longer pointed, your **Ascender** may slip under load. Discard or return the unit to **SRTE** to have the cam replaced.
4. If body or karabiner holes appear stressed, discard the unit.
5. If the axle appears stressed on **SRTE Specialised Ascenders**, discard the unit.
6. Your Quality System may require items to be returned to the manufacturer for periodic service – **SRTE** requires **Specialised Ascenders** to be returned annually for service – please contact our Customer Service staff before returning your **SRTE Ascender** or **SRTE Specialised Ascenders** for service.



Guarantee: All products manufactured by **SRTE** are guaranteed against defects in material and workmanship. Any warranty claims will be assessed and if appropriate **SRTE** will repair or replace at its discretion. **SRTE** will not repair merchandise which has been altered in any way.

Note: The warranty is void for non-factory approved adjustment or modification; in such cases, all freight charges are your responsibility.

Caution: All **SRTE Ascenders** and **SRTE Specialised Ascenders** are safe devices if used correctly. However, it is your obligation to determine whether each item is suited for its intended use. Climbing and Rescue, in caves or mountains, is inherently dangerous. Proper training and practice is a necessity.

SRTE Ascenders and **SRTE Specialised Ascenders** are intended for use on an overhead fixed rope. They are not intended for stopping leader falls. They are not for use on steel cable. Do not ever load your **SRTE Ascenders** and **SRTE Specialised Ascenders** with more than 300kg. Always have a backup. Don't ever hang your life on a single device. Climb smoothly; avoid rope bounce. There is always the possibility of a fall. You must have something in the system to limit the force, such as high stretch climbing rope or a stitch tear shock absorber.

In no event shall liability extend beyond the replacement cost of any item. However, no responsibility is implied or assumed for any accident or injury caused or related to product use, correct or otherwise.

Product Specifications and Test Data

Construction – Only the highest grades of extruded aluminium and stainless steel are used. **SRTE Ascenders** and **SRTE Specialised Ascenders** will not twist or damage the rope in any way under normal use, giving your rope a much longer life. **Test Data** – **Test 1 – Working use test – Cam Strength** 11mm static Kernmantle rope was threaded through each **SRTE Ascender**. The load on the ascender was gradually increased. **Results** – **Test 1 – Working use test – Cam Strength** The rope slipped through the cam at 900kg or greater.

Ascender Model	Description	Rope Range, mm	Rigging Points	Length, mm	Width, mm	Thickness, mm	Cam Strength, kg	Weight, grams
A1 816 L	Large Left Hand Standard Handled Ascender	9-16	4	197	75	28	900	339
A1 816 R	Large Right Hand Standard Handled Ascender	9-16	4	197	75	28	900	339
A1 EXP 6 L	Large Left Hand Explorer Handled Ascender	9-16	4	210	85	28	900	380
A1 EXP 6 R	Large Right Hand Explorer Handled Ascender	9-16	4	210	85	28	900	380
A1 811 L	Medium Left Hand Standard Handled Ascender	9-13	4	185	75	23	900	257
A1 811 R	Medium Right Hand Standard Handled Ascender	9-13	4	185	75	23	900	257
A1 EXP L	Medium Left Hand Explorer Handled Ascender	9-13	4	210	85	23	900	330
A1 EXP R	Medium Right Hand Explorer Handled Ascender	9-13	4	210	85	23	900	330
A2 811 L	Short Left Hand Standard Handled Ascender	9-13	4	135	75	23	900	221
A2 811 R	Short Right Hand Standard Handled Ascender	9-13	4	135	75	23	900	221
A3 811 L	Mini Left Accessory Ascender	9-13	2	95	75	23	900	180
A3 811 R	Mini Right Accessory Ascender	9-13	2	95	75	23	900	180
A3 EXP 6 L	Large Left Explorer Ascender	9-16	4	110	75	28	900	300
A3 EXP 6 R	Large Right Explorer Ascender	9-16	4	110	75	28	900	300
A3 EXP L	Small Left Explorer Ascender	9-13	4	110	75	23	900	225
A3 EXP R	Small Right Explorer Ascender	9-13	4	110	75	23	900	225
A4 816 L	Large Left Hand Chest Ascender	9-16	2	135	75	28	900	300
A4 811 L	Small Left Hand Chest Ascender	9-13	2	132	75	23	900	225

