Operation and Service Manual for FS724, FS728 Self-Retracting hose, cord & cable Reels

For Models after 1 June 2004

SAFETY FIRST!

ReCoila highly recommends that any operator familiarise themselves with the following points and other information contained in this manual before operating the reel.

Remember - safety first, become familiar with the operation and function of your new hose or cable reel to avoid injury and damage to the reel.

THE DO'S AND DON'TS OF REEL OPERATION:

DON'T let the hose, cord or cable fly back into the reel uncontrolled.

DO walk back to the reel with the hose or cable end, place it safely down and with one hand, release the locking system allowing the hose / cable to rewind back into the reel in a controlled fashion.

DON'T let the hose / cable end, gun, socket or nozzle impact into the reel.

DO Control the wind allowing the gun, nozzle or socket to rest up against the opening of the reel then pull it out and allow it to lock with a short section of hose or cable hanging from the reel. This allows the locking system to hold the hose, not the end fittings.

DON'T pull the hose from the reel by the gun, socket or nozzle end.

DO hold the hose or cable when pulling or dragging the hose or cable around.

DON'T walk away from the reel pulling the hose or cable by the gun, socket or nozzle.

DO stand at the reel and pull out the required length of hose or cable and lock in position, letting the hose or cable fall to the ground. Then, holding the hose or cable near the end fitting, walk to the work area.

DON'T use the hose or cable reel if you notice and cracked, fractured, split, damaged, frayed or swelling hose or cable.

DO have your plant supervisor made aware immediately and isolate the reel.

Overview

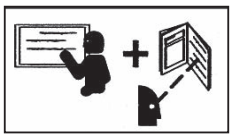
The following operation, service and repair manual has been designed to give the operator/user a full understanding of the operational aspects of the hose and cable reels as well as being a supplement to our factory service and maintenance training course.

The basic principle of each reel is the same and the repair or service is carried out in the same manner from one model to the next, however certain models require higher levels of technical knowledge. These reels are listed separately and so are their respective parts breakdown.

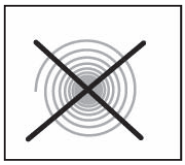
List of precaution symbols

Means Warning. Watch out! There are possible hazards with this procedure! Possible hazards are shown by this warning symbol.

Means Warning. Moving parts, keep away from moving parts and pinch points.



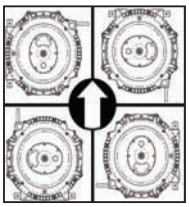
Means consult the service centre or become trained and read the service manual.



Means Warning. Item under tension, this area contains a tensioned spring.

Means Warning. Do not remove fasteners or attempt to service without contacting a service centre or becoming fully trained on the service and repair of hose reels.

Means Warning. Never let the hose or cable rewind uncontrolled.



Means all positional locking system.

Means ensure you have full knowledge of the service or repair task being carried out. Possible hazards.

Note: Please refer to your local authority for rules and regulations on the safe use of compressed liquids, gases and fuel gases.

Pre-inspection

- Check the reel for shipping damages.
- Insure all parts are supplied as ordered.
- Record the Model Number and Serial Number for future reference.
- Complete the warranty registration form contained within this manual and return to ReCoila® affirming your year warranty period.
- We recommend that you check and re-lubricate bearing and moving parts as described in the maintenance section to ensure smooth reliable operation.

Installation instructions

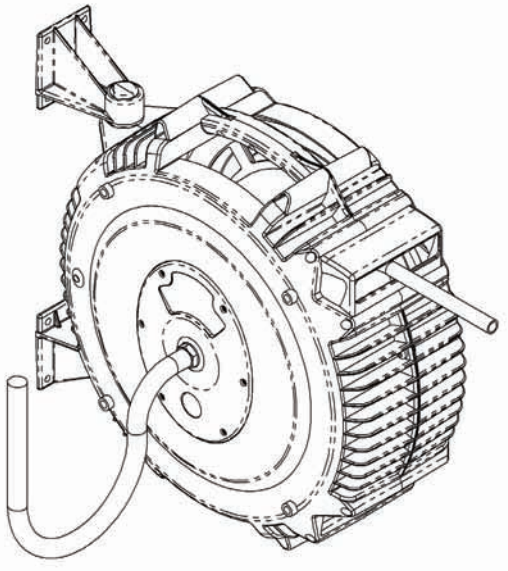
Connection of the inlet (supply) hose/s

A flexible connection between the reel and the source of supply is required to prevent possible misalignment and binding. **Non flexible connections will void the warranty.** The pressure rating of the inlet hose must be equal to or greater than the rating of the reel.

Always check with your local authorities for appropriate rules and regulations for safe use and handling of compressed gases, liquids and fuel gases.

Do not use lubricants or thread sealants on Oxygen connections unless such lubricants or sealants are approved by your local authorities for use with Oxygen.

- Using the appropriate approved hose and fittings connect the supply line to the inlet connection of the reel.
- Ensure you use thread sealants where applicable and permitted.
- Never over-tighten or under-tighten fittings.
- Once connection has been made to the inlet of the reel, ensure you make or fit a connection to the outlet of the reel (the main hose) then turn the supply valve on slowly and check for leaks.



Note: Please refer to your local authority for rules and regulations on the safe use of compressed liquids, gases and fuel gases.

Mounting the reel

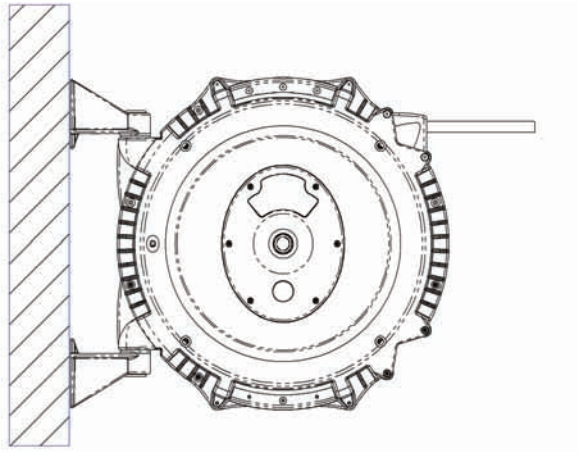
All ReCoila® spring rewind hose reels are fitted with an all position locking system which allows the reel to operate in all positions (360 by 360 degrees). The reel is supplied as standard with a mounting system and brackets that allow ceiling mounting or wall mounting - an optional floor or under bench mount can be purchased for other mounting positions - see the following page for examples.

The optimum height for wall mounting is such that it allows the hose or cable to be pulled at an upward or downward angle of no more than approx. 15 degrees - angles exceeding this can create undue drag in operation and potentially cause premature wear to the mouth opening of the reel.

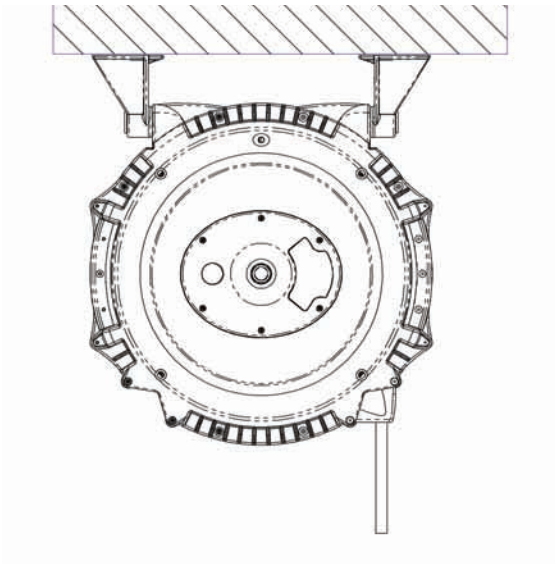
For wall mounting where heights above three metres are required, we suggest the use of the swivel mounting optional floor bracket. Bolt the bracket to the wall and fix the reel in position as you would for ceiling mounting – see example on the following page.

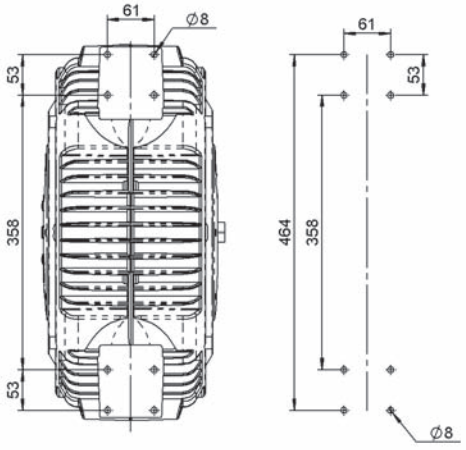
Note: When putting reel into bracket do not allow reel to hang freely from bottom bracket. Hold in place.

Typical mounting



Ceiling mounting



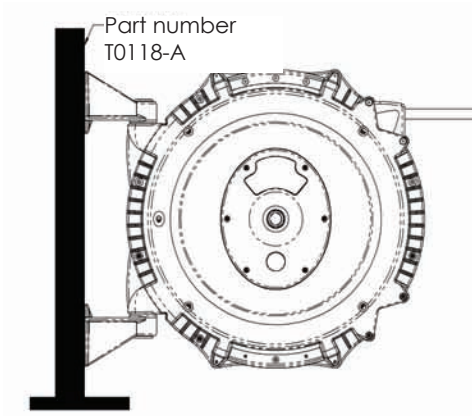


Note: The orientation of the wall brackets are important, please follow drawings

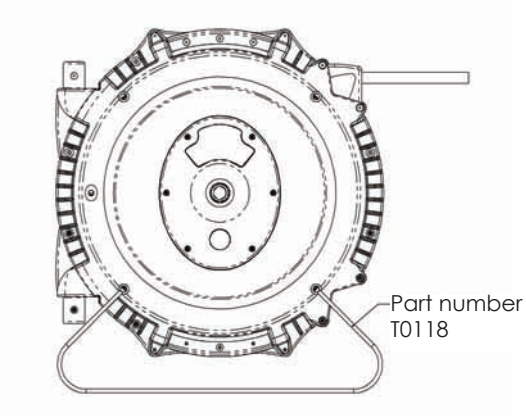
Fitting optional mounting brackets

Optional extra mounting brackets are available such as, fixed floor mounting where you do not require the reel to swivel, or extra high wall mounting where you require the reel to be mounted high up on a wall, or swivel floor mounted and under bench mounting.

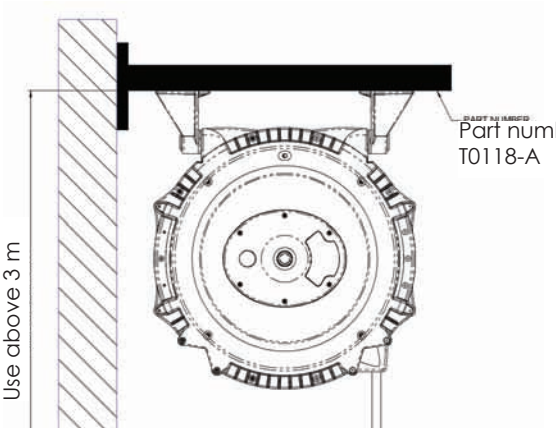
Swivel floor mount



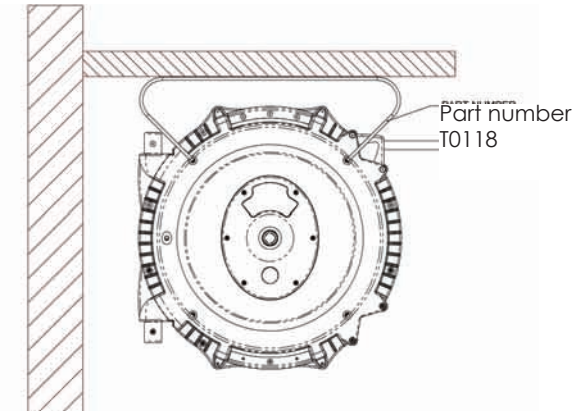
Fixed floor mount



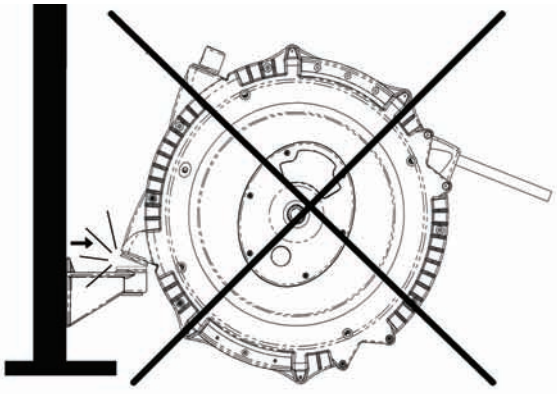
Typical extra high wall mount using the Swivel floor mounting bracket

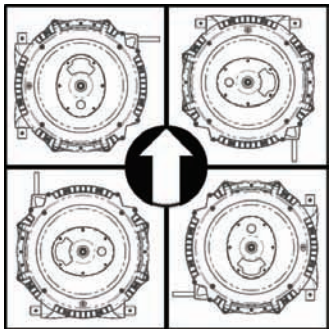


Under bench mounting using the fixed floor mounting bracket



Important: When mounting the reel, do not leave the reel hanging unspported in one mounting bracket whilst reaching for fasteners or tools. Leaving the reel hanging from one bracket places unncessary stress on the bottom boss, and may cause the boss to fail immediately. If it does not break immediately, the boss can be severely weakened and fail some weeks later during normal operation.





How to use the reel

Once you have mounted your reel and made the inlet connection you are ready for operation. In order to familiarise yourself with the function of the reel, stand as close as possible to the reel, pulling the hose slowly - out, you will note a clicking noise. This is the locking pawl running over the locking teeth or ratchet teeth.

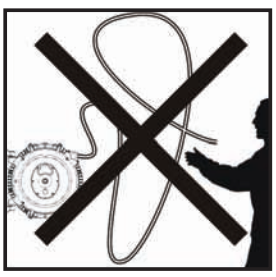
As soon as you hear this noise, stop pulling and allow the hose to retract a little and it will lock in position. If it won't lock allow the hose to retract back further then pull it again slowly, until you hear the first one or two clicks. Stop pulling and allow the hose to retract a small amount and it will lock.

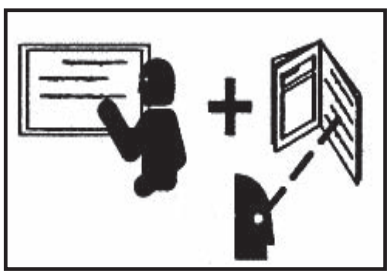
Now pull it out some more until you hear the next set of clicks and repeat the locking process. The hose will lock at approx. every three feet (one metre) increments but only after you have been pulling it with an outward movement. The locking system is designed so the hose will never lock when rewinding it.

Once you are familiar with the system you won't need to listen for the locking clicks as you will automatically know when and where it will lock.

Never let the hose fly back uncontrolled. This can cause damage to property or person. Always keep a firm hold of the hose as it is retracting back into the reel.

To rewind the hose pull it out about 1ft or 300 mm and then allow it to retract back whilst holding the hose. If you want to stop the rewinding and lock it in position again, pull some hose out until you hear the clicking and allow it to retract a little, locking the hose in position.





Maintenance section

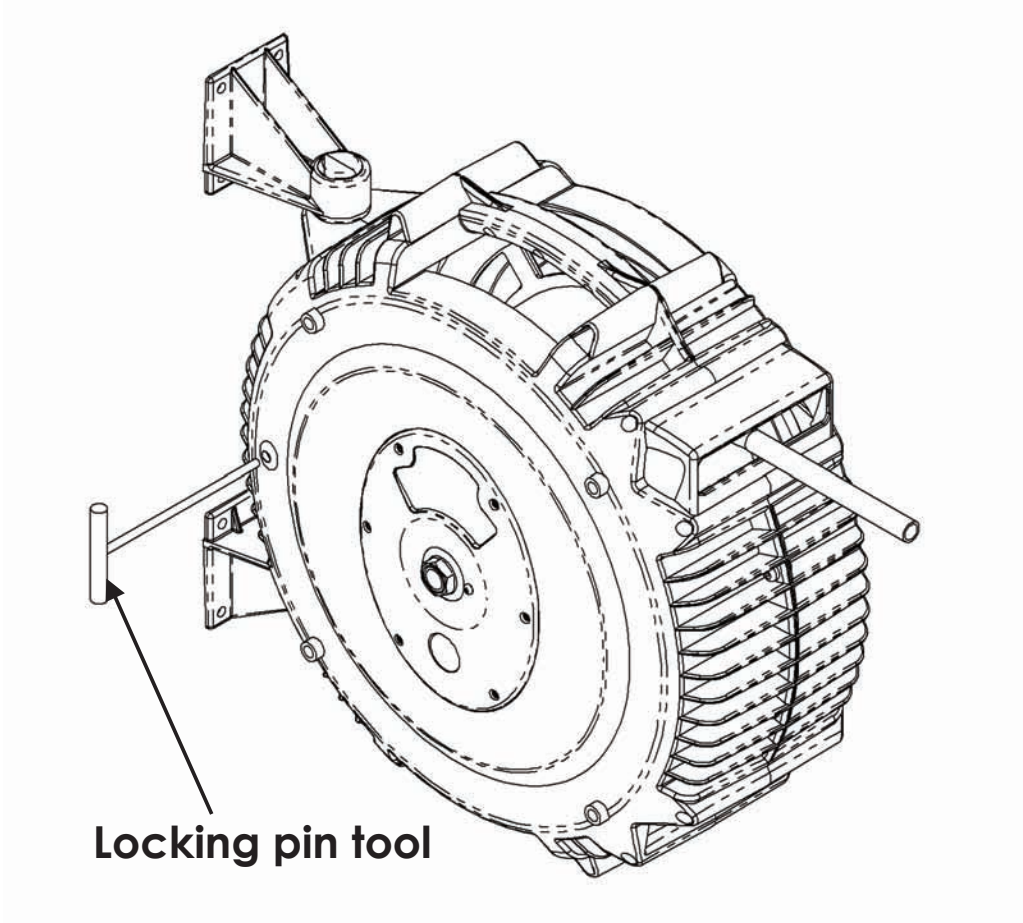
Inserting the locking pin service tool

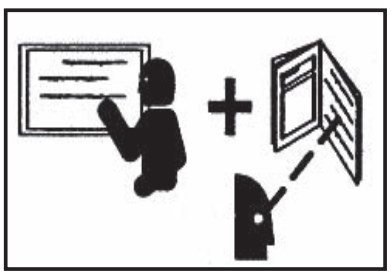
In the interest of safety we have designed and constructed a special service tool, a locking pin that when inserted through the outer cases, locks the drum from being able to rotate when carrying out service work.

These tools can be purchased from your nearest distributor (part number - SGTOOL).

We recommend that this tool be used to prevent damage to the reel or to the service person.

By simply rotating the drum, pulling the hose slowly and looking into the service pin hole shown below you will see the line up holes, insert the pin right through the reel so that it protrudes out the opposite side.





Checking for leaks

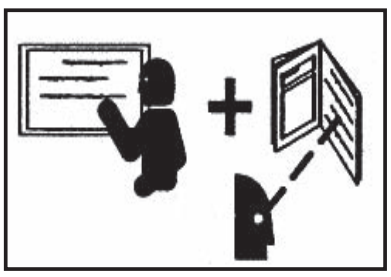
Like all moving and rotating components there is a need to make regular maintenance checks. Some of these checks are very simple and only require a visual inspection. Other checks require service work to be carried out on items such as seals and O-rings. For O-ring and seal servicing, refer to "servicing O-rings and seals" on the following page of this manual.

From time to time we recommend that the user check for leaks. Liquid leaks are easily found, however, gas leaks require some form of leak test. A soapy water test is the most simple. Soapy water brushed around each joint will soon indicate a leak when bubbles appear.

Oxygen and Fuel gas reels should be checked regularly to prevent the possibility of fire due to leaking of flammable gases. The soapy water test also applies here, however, a quick test to determine a leak or not is to pressurise the lines, ensure the blow torch or appliance is turned off. Without touching the regulators, turn the main bottle valve off. If you watch the pressure gauge on the regulator and it begins to drop this indicates there is a leak somewhere between the regulator and the blow torch or appliance. If this occurs, pressurise the system again and apply the soapy water test to find the leak.

Checking for hose defects

High pressure systems will require a regular test procedure where the system is pressurised to a test pressure and maintained. Most of ReCoila®'s PVC hose reels do not require this test and a simple visual inspection will identify potential hose failures. Pull all of the hose from the reel and lock it in the final position, sliding the hose through your hands look for cuts, bruises, cracks, blistering or hardening of the hose's skin. Should you find any of these conditions, point these out to your workshop foreman or manager so that the appropriate action can be taken.



Servicing or Replacing O-rings, seals and swivels

As with normal and scheduled maintenance checks, O-rings and seals will need to be serviced or replaced from time to time. The task of replacing the O-rings and seals is quite simple and should only take a few minutes following the procedure below.

Pull the hose all the way out of the reel, using the service locking tool described in "use of service locking tool", fix the service tool in position. This locks the reel and makes it safe to carry out repairs.

Note: Never open the tension side plate or adjust tension with the hose fully or partially extended. All of the hose must be fully wound onto the reel.

Disconnect the inlet supply from the inlet fitting on the reel. Remove the six self-tapping screws in the inlet side plate. Remove the side plate and the swivel.

At the axle end of the swivel, remove the circlip and slide the swivel sleeve off the swivel shaft.

This will expose the O-rings and seals - remove these with an appropriate tool.

Note: Do not score or scratch the O-ring or seal, sealing surfaces.

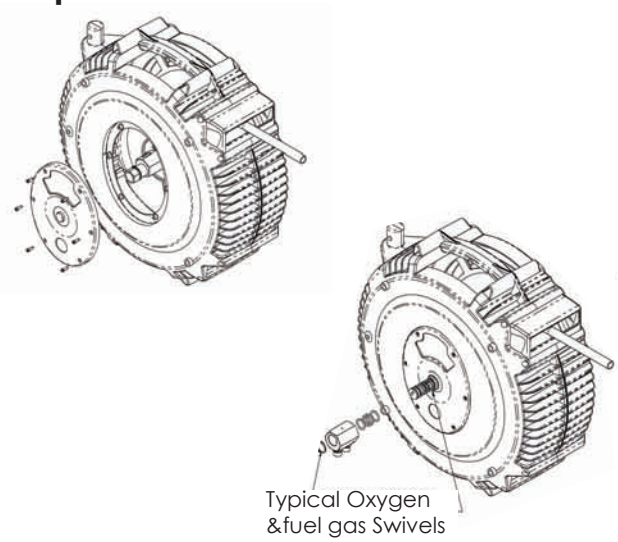
Replace the O-rings and seals and apply an appropriate lubricant.

Note: Use only ReCoila® original seals and O-rings, failure to do so will void warranty.

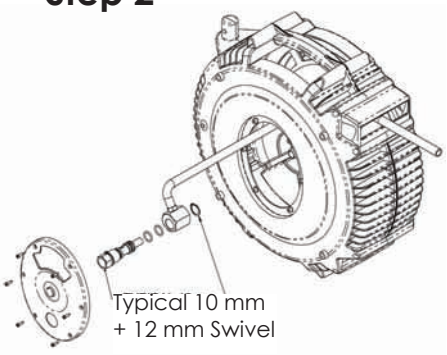
Note: For Oxygen swivels and connections use only approved lubricants. Refer to your authorities.

Re-assemble the swivel and re-fit in position, replace the self-tapping screws. Reconnect the inlet supply and check for leaks refer to "checking for leaks" on previous page of this manual.

Step 1



Step 2



Adding / removing tension

Note: Never add or remove tension when the hose is extended from the reel. The hose must always be fully wound on the hose reel.

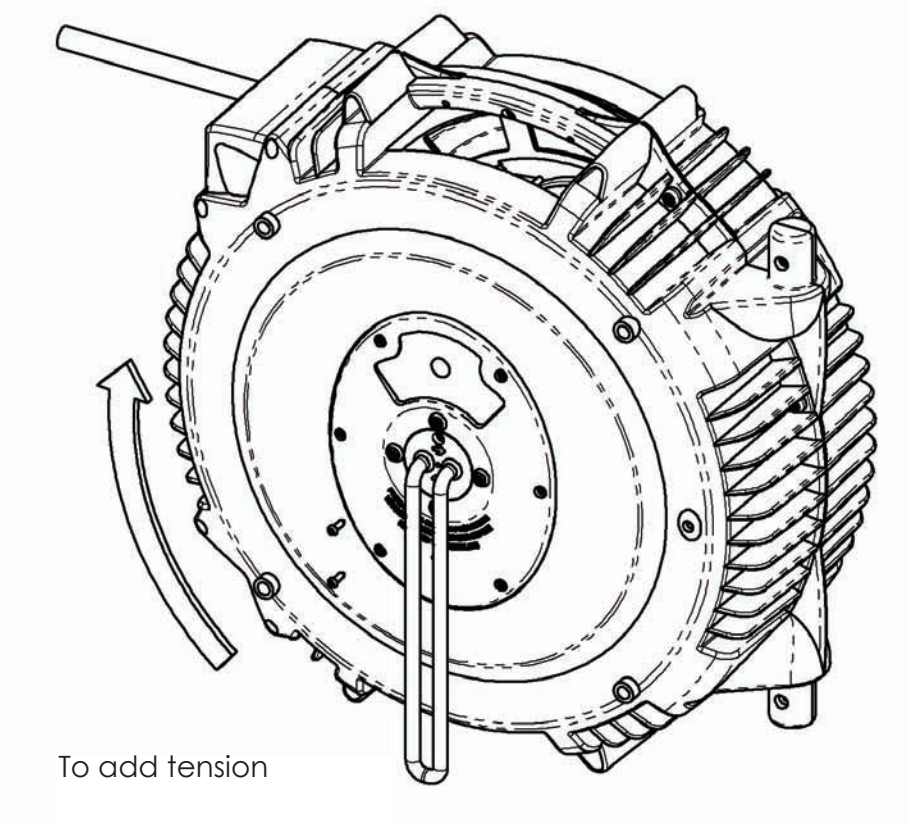
Adding tension

With the hose fully recoiled in the reel, remove the two most inner self-tapping screws locked on the tension ring. With a "C" spanner or the tensioning service tool rotate the cap clockwise one full turn, the tensioning cap is a ratchet system so you will note the clicking as you rotate the cap. Always have the screws vertical when finished, this way you will always know you have a full turn.

Whenever adding tension only ever add one full turn at a time.

Before replacing the screws pull the hose out - check to ensure that all of the hose comes out. **If you cannot pull the hose all the way out** and there are remaining coils left on the reel, this indicates that you have **over-tensioned** the spring or that the spring has run out of power and we suggest you contact your service center.

If all is OK, replace the two self-tapping screws to lock the cap in position.



To add tension

Note: Never add or remove tension when the hose is extended from the reel. The hose must always be fully wound on the hose reel.

Removing tension

Removing tension is done for one of two reasons:

1. that you over tensioned your hose reel and cannot pull all the hose out.
2. is that you are replacing the spring drum. There should be no other reason to remove tension from the reel.

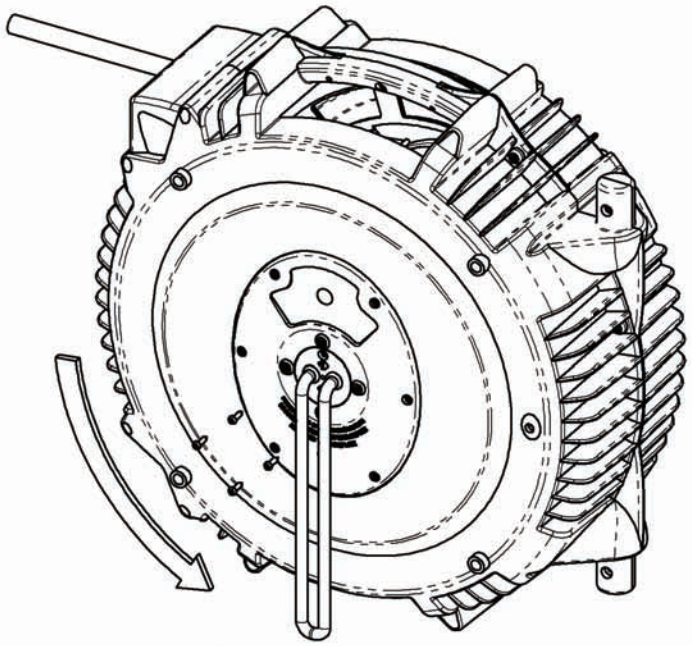
Using a "C" spanner or the service tool, hold the centre locking cap and remove the four outer screws.

Note: There is tension on this cap and it will want to spin anti-clockwise so hold tightly.

Once the screws are removed, allow the cap to unwind in a controlled manner - when the tension is released the cap will sit stationary. This has now released all the tension. Replace the four self-tapping screws ensuring you locate the correct position between the inner rotating cap and the side plate.

To add tension follow the steps on previous page "Adding tension". If you have removed all the tension and are re-tensioning, add five full turns to start with and then one at a time if necessary.

Repeat the steps as described in "Adding tension".



To remove tension