

THE PROVEN PERFORMERS

Owner's Operation and Maintenance Manual

320, 450, 530 and 700 Series Hose Reels



1300 242 504

sales@retragroup.com.au www.retragroup.com.au

Introduction

Congratulations on your purchase of a Real Ezy Hose Reel. These reels represent the highest grade of craftsmanship, durability and lightweight construction that have made Real Ezy Hose Reels the first choice amongst Australian fire departments for over 45 years and a leader for mining & civil applications across the country.

This manual explains operation, inspection, basic maintenance, and repair. If you have any questions about this manual or your Real Ezy Hose Reel, please contact Retra Fluid Handling Systems.

NOTE: Retra Fluid Handling Systems is always improving its range and developing its products continually improving on our reels' design and quality. Therefore, while this manual contains the most current product information at the time of printing, there may be minor discrepancies between your reel and this manual.

Table of Contents

Installation

Warranty	01
Pre-use inspection	02
Mounting the reel	04
Connection of the inlet and main hose	04
General operation	06

Maintenance

Lubrication	07
Fastener and fixing inspection	07
Checking for leaks	07
Cleaning	07
Storage	08

Repair

Rebuilding or replacing swivel	08
Replacing bearing blocks	10
Replacing electric motor	12
Replacing pinion	15
Adjusting or setting friction brake	16
Frequently Asked Questions	
Frequently asked questions	19

Installation

Warranty

Real Ezy Hose Reels manufactured by Retra Group Pty Ltd are warranted to be free of defects in material and workmanship for 10 years from the date of invoice or delivery (whichever is earlier).

Retra Group Pty Ltd's warranty does not cover damage caused by accident, misuse, use in applications other than that for which the Reel was designed, unauthorised modification, faulty installation, or fair wear and tear.

Retra Group Pty Ltd's Real Ezy Hose Reels must be installed and maintained in accordance with the instruction manual supplied with each reel, otherwise, the warranty may not be applicable.

Electric motors will be of merchantable quality and free from any defects in material and workmanship (fair wear and tear excluded) for a limited period of 12 months from the date of delivery.

The warranty for swivel O-rings is limited to 12 months.

Hoses and nozzles are not covered by our warranty as these are warranted by the respective hose and nozzle manufacturers.

To get replacement or repair parts under the warranty, email <u>sales@retragroup.com.au</u> and include any relevant information regarding the fault. Include images of the fault if possible and specify the serial number and model number of the reel. This information is found stamped into a plaque on the front right-hand side A-frame leg.

Please note shipping and handling fees may be applicable in some instances, these are assessed on a case-by-case basis.

Pre-use inspection

Before installation and use of your reel, ensure you:

- 1. Check the reel for any damage it may have sustained during shipping.
- 2. Confirm all parts are supplied as per your order.
- 3. Lubricate all moving parts to ensure reliable performance.

4. The swivel and bearings are greased when the reel is manufactured, but we recommend that you re-lubricate them.

Mounting the reel

Reels can be mounted in three different orientations. These include:

1. Truck-bed-mounted on a horizontal surface.



2. Wall-mounted on a vertical surface.



3. Roof-mounted upside down on a horizontal surface.



Depending on your application, modifications to the hose guide arms may need to be made as the reel will perform best when the guide allows the hose to pull straight off the spool at the angle you are situated, rather than making heavy contact with the hose guide. We can make changes to the arms whilst manufacturing the reel to suit your specific requirement.

Mounting

1. Make certain the mounting surface is flat and ridged to prevent the frame from twisting and causing the reel to bind during use.

2. Be sure the mounting surface is strong enough to support the reel and the weight of the hose & fluid.

3. The reel is secured to the mounting surface by four bolt holes on the A-frame legs. Measure the centres and drill mounting holes accordingly. We advise slightly slotting the mounting holes to allow for fractional width variations during the machining process. This allows for space to position the reel to spool freely.

4. The minimum fastener required is M10 with nyloc nuts. Keep in mind to use a large flat washer to give added support to the bolt head and nut. Always assess the working load and environment of your installation, making changes to the size and strength fastener where you feel necessary to guarantee safety.

5. Tighten the reel down and check that the drum rotates evenly without binding.

Connection of the inlet and main hose

Inlet hose

1. A flexible hose connection must be used between the swivel and the source of supply to prevent possible misalignment and binding.

2. Solid/non-flexible connections will immediately void the warranty.

3. The hose reel inlet/swivel are BSP fittings. Use the appropriate hose and fittings to connect the supply outlet to the inlet connection of the reel. Use thread sealant where applicable and permitted.

Main hose

4. First lay the hose out along the floor in a straight line, removing any twists or kinks.

5. Remove the clip cover from the drum rods and feed the end of the hose through the gap and then the semi-circle hose guide. A heavy-duty cable tie or similar is often used to secure the hose to the hose guide on the inside of the reel.



6. Reels as standard are supplied with a hose tail outlet on the reel. Slide a heavy-duty hose clamp over your hose then push the hose end over the hose tail. Secure the hose by tightening the hose clamp.



7. Fit your nozzle or valve to the other end of the hose.

8. Pressurise the reel & hose and vent the line of any air if need be. Pressurising the hose will stop it from collapsing as you load it onto the reel, this will be essential for most 32 mm, 38 mm and 50 mm ID hoses. It will also give you the chance to address any leaks while the hose is still laid out.

9. Install the clip cover to the drum rods and begin rewinding the reel whilst guiding the hose back and forth evenly.



General operation

Take a few minutes to familiarise yourself with the functionality of the hose reel by performing a trial run. Loosen the friction brake by about half a turn to disengage it from the axle and pull or power several meters of hose off the reel, then rewind the hose using the rewind handle or electric motor. Depending on your company requirements you may wish to develop a procedure for operation and use to safely train others on how to operate this equipment.

Maintenance

The frequency of maintenance is dependent on the application and environment you are using your hose reel.

For example, a fire truck has its reel fully checked and serviced about 2-3 times a year when the appliance undergoes a service at the manufacturer's workshop. Then depending on the frequency of use, fire crews will grease the reel when they grease other components on the truck. Water trucks used on mining and civil projects are exposed to the elements daily, so their maintenance frequency tends to be higher. Similarly to hose reels used for fire & emergency, they are often just greased when components of the truck or trailer are lubricated.

It is recommended that a service program and procedure is developed by your company so potential faults or failures can be addressed before they become a problem and render the equipment out of action, or cause injury to the operator.

If you require service information outside what is listed below, please feel free to contact Retra Fluid Handling Systems.

Lubrication

Lubricants are required where there is metal-to-metal contact. Periodically apply grease to the swivel, bearings & brake assembly and wipe away the old excess grease to prevent the build-up of dust and sand around these areas. We also recommend that you occasionally apply a small amount of lubricant to the roller guide corner blocks to ensure they spin freely. For electric-driven reels, the chain will require lubrication every so often to help clean dirt out of the links and protect from rust.

Fastener and fixing inspection

You must check to make sure the fasteners and fixings are tight and not working loose over time. Be mindful of the fact that a lot of the threads are aluminium and can be over-tightened.

Checking for leaks

Some maintenance checks are very simple and only require visual or audible inspection. Liquid leaks are easily found, and you will generally be able to hear the hiss of an air leak. However, a simple soapy water test will help reveal any air leaks by brushing soapy water around each joint and if bubbles appear then you know there is a leak.

Cleaning

Real Ezy Hose Reels are designed to require very low maintenance, and often the reel is only cleaned when the machine it is mounted to is cleaned. Cleaning will maintain performance and extend the life of parts. Soapy water and a dustpan brush do a great job at removing any build-up of dust or mud on the hose reel.

It is advised against the use of a pressure washer due to moisture and the entry of water causing a failure. Do not directly blast the bearings and brake assembly or motor. The electric motors are weatherproof but are not rated for pressure cleaning. Pressure cleaning or directly blasting the motor with water will void the warranty. Do not apply any degreaser to the drive chain, sprockets, or bearings. Lubrication after cleaning will help displace moisture from moving parts and prevent rust. You must lubricate the bearings, swivel & brake assembly after washing, also dry the chain with a rag or paper towel and lubricate.

Storage

There are preventative measures to consider if you are going to be storing your hose reel for extended periods. Specifically, cleaning the reel and lubricating it before storage. If stored in a place that is humid or exposed to the sea breeze you may want to apply a light coating of oil to the metal surfaces. Specifically guide arms, roller kit backing plate, handle & axle, and chain & sprocket.

Repair

Rebuilding or replacing swivel

Rebuild

If your swivel is leaking, there is a chance that the Viton seal has failed. If this is the case, the machined components are likely to be undamaged. To rebuild your swivel:

- 1. Depressurise the hose reel and drain the hose.
- 2. Remove the swivel from the hose reel with a pipe wrench.



3. Have a clean container ready to catch the ball bearings.

4. Remove the locking screw with a flat head screwdriver and the grease nipple with a 7 mm ring spanner.

5. Remove all the ball bearings by facing the hole down and rotating the swivel back and forth. You will not be able to slide the male and female components apart until all 42 of the balls are out.



6. Slide the male and female components apart and remove the seal.



7. Clean all surfaces and check for damage as any dents or scratches may cause the joint to leak again.

8. Smear some grease around the new seal and put it back in place.

9. Press the two components together. Insert 21 ball bearings in each hole and retrain with the locking screw and grease nipple.

10. Apply some grease to the swivel and rotate to ensure it operates smoothly.

11. Install using thread sealant where applicable and permitted.

12. Check for leaks.

Replace

- 1. Depressurise the hose reel and drain the hose.
- 2. Remove the swivel from the hose reel and inlet hose with a pipe wrench.
- 3. Clean the thread on the fluid axle.
- 4. Install using thread sealant where applicable and permitted.
- 5. Check for leaks.

Replacing bearing blocks

Each reel has a bearing block on the left and right-hand side. It may be necessary to remove and clean them if sand has ingressed or replace them if they have cracked (in an accident for example).

Fluid side

- 1. Depressurise the hose reel and drain the hose.
- 2. Remove the swivel with a pipe wrench.



Handle side

- 1. Remove the handle and locking collar with a 3 mm Allen key.
- 2. Undo the bolts holding the bearing block to the A-frame with a 9/16 ring spanner or socket.



3. Slide the bearing block off the axle. Installation follows the same procedure.



Replacing electric motor

Ensure the electricity supply to the reel is isolated and the hose depressurised.

1. Remove the hose roller guide from the guide arms with a 9/16 ring spanner or socket.



2. Remove the chain guard with a 3/16 Allen key and slide the guide up over the guide arm.



3. Remove the chain by disassembling the connecting link.



4. Remove the motor using a 9/16 ring spanner and socket.



5. Install the new motor using the same steps.

Replacing pinion

Ensure the electricity supply to the reel is isolated, depressurise the hose reel and drain the hose.

Motor pinion

Always replace pinion and chain at the same time.

1. Remove the electric motor (as per above).



2. Remove the grub screw and pry the pinion off the motor shaft using two levers or similar.



3. Install the new pinion and firmly tighten the grub screw. If you feel it necessary, a small amount of low-strength Loctite may be applied to the grub screw to ensure it does not work loose over time.



Adjusting or setting friction brake

The friction brake is used to lock the reel during transport and prevents the hose from over-spooling. It is adjustable so the operator can set the amount of friction on the drum.

To operate the brake simply tighten until you can not move the drum and to loosen, unscrew by half to one full turn. Do not unscrew the wing nut too far as it can cause the brake to malfunction.

If your friction brake is not working, it is most likely because the 5/16 threaded rod has come loose from the lower brake lock. To rectify:

- 1. Remove the rewind handle and locking collar with a 3 mm Allen key.
- 2. Undo the two bolts holding the bearing block to A-frame using a 9/16 ring spanner or socket.



3. Slide the bearing block off the axle and take the brake assembly out of the bearing block.



4. You will notice the lower brake lock is loose on the threaded rod, that should not be the case. The top cap nut should also be fixed with Loctite to the threaded rod.

5. Unscrew the lower lock and clean the threads. Apply Loctite and screw onto the threaded rod until the rod until the rod is halfway or flush to the bottom of the lock.



Before the Loctite dries you will need to:

- 6. Place the brake assembly back into the bearing block.
- 7. Ensure the cut-outs on the upper and lower locks are facing in towards the axle.



8. Hold the upper lock up and slide the bearing block with the brake onto the axle.

9. Tighten the cap nut (by hand or with a 1/2 ring end spanner) until there is a 1-2 mm gap between the cast wing and upper brake lock. Let the Loctite set.

10. Test to ensure the locks are tightening onto the axle.

11. Tighten the fixings to secure bearing block back to the A-Frames using 9/16 ring spanner or socket.

Frequently asked questions

Q. What can I do to stop my rewind handle from falling off the reel and getting lost?

A1. Fix a nut and bolt

A common solution is to simply drill a hole through the handle and axle and place a nut and bolt to fix the handle to the reel. This works well to eliminate the loss of handles.

A2. Fix a handle holder

In some cases, handles need to be easily removed due to the location of the reel. Some reels are placed on the very edge of trays etc. where the handle could cause an issue for crew walking past or potentially interfere with other objects around it. As a solution to this, we can fix a piece of RHS aluminium to the handle side back leg of the reel as a place for the handle to be securely kept.

A piece of steel wire can also be attached to the handle holder with a hook clasp clip that attaches to the handle. This ensures that if the handle was to dislodge from the holder while on rough terrain it has another line of protection to stop the handle from being lost.

Q. Can I buy service or repair parts?

A. Yes

Every part for our manual and electric hose reels is available for purchase separately. Please note some parts are only available as an assembly.

If you are not sure what part you need, simply email us some photos and if possible, the reel's model number (this is found stamped into a plaque on the A-frame legs).

We can provide a parts breakdown upon request to assist with diagnosing what part you require. Our clients have found this is especially helpful for servicing trucks with Real Ezy Hose Reels fitted to them.

Q. If I order a right-hand configuration reel but plans change and I end up needing the handle on the left, can I change this myself?

A. Yes (on manual rewind reels only)

The configuration can be changed on manual rewind reels. It will involve:

1. Removing bolts that secure the bearing blocks and guide arms to the A-frames, and rotating the drum assembly so the handle is on the side you prefer.

2. Swapping the hose guide on the inside of the reel to suit the correct orientation (there is a left and a right mould). You can contact us to swap your existing hose guide with the opposite variation.

3. There is also a gap left in the drum of the hose reel to allow the hose to pass through, this will need to be altered when you change the hose guide. The word 'REAL' cast into the side of the wheel can be used as a point of reference. When the handle is on the right-hand side, the rod on the 'R' of 'REAL' needs to be left open. For a handle on the left-hand side, the rod on the 'L' of 'REAL' is left open.

For visual reference, see the images on the next page.





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