

FCL ZERO RD CLEANING & MAINTENANCE

The Film Industry often requires film equipment to work in difficult, harsh conditions. The Zero RD Rain Deflector is very effective in rainy, snowy and also muddy environments. However it is important to give it a good cleaning after such a job. Moreover it is absolutely crucial to properly clean the Zero if it comes into contact with salt water.

It is ideal to have a spray bottle of distilled water in your set kit. If you are working in exceptionally muddy conditions it is a good idea to spray off the dirt through out the day. If you are working with salt water then it is absolutely important to rinse the Rain Deflector with distilled water once you are finished the day. If you do not clean the device right away, then the salt will corrode the rain deflector parts (Bearings, Motor Shafts etc). The only sure way of rinsing away the salt is with distilled water.

Before disassembling the Rain Deflector wash off the dirt from it and wipe it with a soft micro fibre cloth.

To do the service you will require the following cleaning supplies:

- Distilled water
- Isopropyl Alcohol
- compressed air
- paper towel
- micro fibre towel

You will also require the following tools:

- a set of metric Allan Keys
- small, flathead screwdriver
- roller adjustment tool (provided with Zero RD kit)

Step 1 – REMOVING THE SPINNING DISK

Remove the Filters from the Filter Tray.

Loosen the three bolts that secure the tension roller. Give each bolt half a turn, do not unscrew the bolts completely.

Use the special adjustment tool provided with the Zero RD kit and turn the tensioning mechanism clockwise until the keyway is facing down.

Give a slight push on the glass from the inside with one hand and use the other hand to lift the Spinning Disk up and out of the rain deflector.

Step 2 – REMOVING THE FRONT COVER

Unscrew the four bolts holding the front cover.

Carefully lift the front cover off.

Step 3 - WASHING THE ROLLERS

Use distilled water and spray directly onto the rollers to wash off any dirt and debris.

Use compressed air to blow off any water and debris.

Take a paper towel and wipe off the water.

It is important to completely dry any moisture on the rollers.

You can use a heat gun to speed up the process. Make sure that you do not heat the rollers too much. Roller Covers should not be hot to the touch.

Repeat the process for every roller.

Step 4 - CLEANING THE CONTACT SURFACE OF THE ROLLER

The Rollers do tend to accumulate dirt on the contact surface over time and it is very important to keep them clean, otherwise the glass will not spin uniformly.

Use a paper towel and spray isopropyl alcohol onto it.

Wipe the entire surface of the roller until it is completely clean of any dirt.

Repeat the process for every roller.

Step 5 - REMOVING THE ROLLER ASSEMBLY

It is possible that you may have to remove the roller assembly completely to have better access for cleaning.

Loosen the three bolts holding the roller assembly.

Lift up by the cover.

Clean the area around the axle using distilled water, compressed air and paper towels.

Spray isopropyl alcohol onto the paper towel and wipe the axle.

Do not use any grease or lubricants.

Use the method describe in step 3 to clean off any dirt off the rollers.

Step 6 - INSTALLING THE ROLLER ASSEMBLY BACK ONTO ZERO RD

Notice the flat spot on the roller assembly and on the axle.

Hold the assembly with one finger on the roller and keep it oriented with the flat spot parallel to the flat side of the cover.

Use a small flat screw driver to hold the axel in place.

Push the assembly onto the axle.

Use your fingers to press it down. Do not use a hammer or any other heavy tool.

Insert the three bolts, and carefully hand tighten them. Then start tightening half a turn each until the roller assembly is fully pressed in and bolts are tightened.

Do not use power tools.

Step 7 - INSTALLING THE COVER

Put the cover back on.

Insert the four bolts.

Hand tighten the bolts. Do not use power tools.

Step 8 - REMOVING AND CLEANING THE GLASS

Clean the filter trays if needed

In order to clean the dirt that gets in behind the glass you will need to take the glass out of the disk

Take the Spinning Disk.

Find the split in the seal.

Use a small flat screw driver to get one end out.

Pull the end and remove the seal from around the glass.

Wipe the seal with the isopropyl alcohol. Do not use any other cleaning solution!

Push the glass up with your fingers and take it out.

Use alcohol or lens cleaning solution to clean the glass.

Use only a micro fibre towel to wipe the glass, as not to scratch the surface.

Step 9 - CLEANING THE DISK

You will need to clean the metal frame of the disk once you removed the seal and the glass.

Use distilled water and isopropyl alcohol to clean it

It's very important to thoroughly clean the contact surface of the disk and the rollers.

Use Isopropyl alcohol to clean it. If needed you can use a soft brush.

Never use a brush that can scratch the contact surface.

Use the compressed air and a heat gun to dry the disk.

Step 10 - ASSEMBLING THE SPINNING DISK

Take the metal ring and lay it flat on a table facing up.

Insert the glass inside the ring.

Lay the seal around the edge of the frame.

Connect the ends and starting from the ends of the seal start pushing the seal in.

Do not stretch the seal, just push it in all around the frame.

Once the seal is roughly in use the tip of your fingers to stretch and even out the seal.

Step 11 - CLEANING THE OFFSET BRACKET

Flip the rain deflector over and remove the offset bracket.

Unscrew the three bolts holding it on.

Use distilled water and isopropyl alcohol to wash off the dirt.

Use paper towels and compressed air to dry it.

Clean the area under the bracket.

Put the bracket back and tighten the three bolts.

Step 12 - CLEANING THE CONNECTOR AND SWITCH

If needed use electric contact cleaner to clean the connector and the switch.

Do not in any circumstances disassemble the motor covers as it will void the warranty.

The covers are well sealed and it is impossible for the dirt and water to get inside unless there is physical damage, in which case you should send the Rain Deflector in for repairs. Or request a new motor cover.

Step 13 - INSTALLING THE SPINNING GLASS

Once you have assembled the Glass Ring you can install it back into the rain deflector.

Ideally you should have the rain deflector on the mounting rods.

Make sure the tensioning roller is all the way up and the keyway is all the way down.

Insert the bottom of the glass disk onto the rollers and then push it in from the top. Roll it side to side to help seat itself.

Do not force the disk in.

Once the disk is in, lower the tensioning roller. The keyway should be between the top and bottom screw on the right.

Use your fingers to roll the disk and with the other hand feel the tension between the tensioning roller axle and the glass ring. If you apply pressure to the axle you should be able to make the glass ring slip.

The ring should spin freely with out much tension.

Once you have made the tensioning adjustment, tighten the three screws.

Step 14 - CHECK THE RAIN DEFLECTOR

Turn the rain deflector on and let it run for five minutes.

After that perform the tensioning adjustment one more time.

If you have any other maintenance questions or concerns please send us an email (oleksiy@filmotechnic-canada.ca) and we will help you.