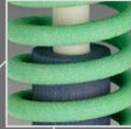


Z450 Maintenance



Z CORPORATION



Any service engineer will tell you that “A clean machine is a happy machine”. It is a fact that well maintained machines require less service calls.

Routine Maintenance



- Cleaning the Service Station
- Cleaning Parking Caps
- Cleaning the Debris Filter
- Lubrication (Fast Axis, Slow Axis, and Piston Screw)
- Cleaning Pulleys
- Emptying the Solid Waste

Service Station

- Remove any large chunks



Remove any large deposits of powder. Trying to flush away large deposits may clog the drain line.

Service Station



- Push down the lever to expose the rubber flaps and wash with distilled water



Rinse off the rubber flaps (squeegee) and wipe with a q-tip or paper towel. While applying distilled water, use the brush provided in the tools to loosen any particles that have adhered to the squeegee.

Service Station



- Wash with distilled water



Make sure you wipe away any water after spraying the squeegee.

Service Station

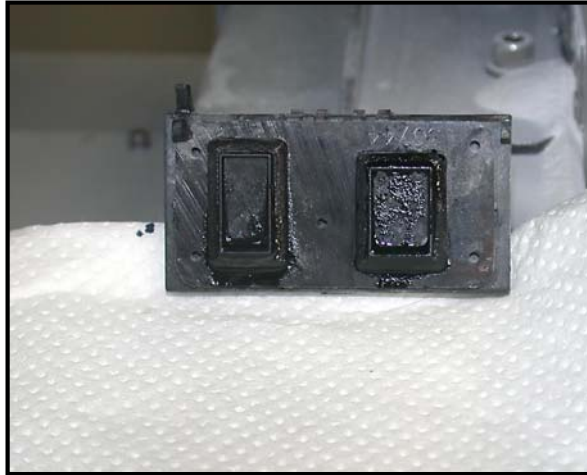
- Pull the red cap and make sure you have cleaning fluid



Make sure that the reservoir has fluid. If fluid level is low add ZC10 fluid until the level is from $\frac{1}{2}$ to $\frac{3}{4}$ full. Do not fill all the way as must leave room to replace the cap.

Cleaning Parking Caps

- Place a folded paper towel under the parking caps



Cleaning Parking Caps

- Wash the pads and clean with paper towel



If there are areas of collected powder, it may help to use the small brush provided with the system. Spray on some water and then brush the areas that have residue. After brushing, spray a little more water and clean off any dirt and water that remains. Make sure the pads are dry before returning the machine to operation.

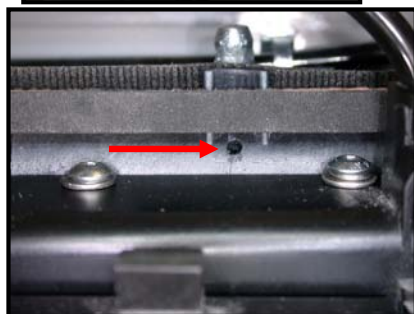
Cleaning Debris Filter

- Clean Debris Filter, and Screen



Visually inspect the debris filter. If you see chunks of material, make sure you dump them into the trash before starting a new job. Make sure that powder is not building up on the smaller screen behind the debris filter.

Grease Fast and Slow Axis



Grease Fast Axis:

The carriage has a relief hole that is just below the drive belt connection. When greasing the carriage, squeeze in grease until it just starts to exit the relief hole. Clean off this area with a paper towel, and make sure you don't get grease on the belt. Move the fast axis back and forth by hand to distribute the grease. Wipe off any grease that accumulates on the rail and end plates.

Grease Slow Axis

When greasing the slow axis, you will notice a slight resistance when the bearing becomes full of grease.

Bearings that are new and completely dry might take 5 to 7 squeezes of the handle; regular maintenance might require just 1 or 2 squeezes to get to this point of resistance. Gently move the slow axis back and forth to distribute the grease.

Make sure you zero out the maintenance functions in the Service menu.



Use a sharp pointed tool or stiff brush to remove the powder and rubber from the motor and idler pulleys.

Piston Screw



Wipe off the piston screw and squeeze out an inch of grease toward the top of the screw. Manually move the build bed all the way up and then all the way down. This will spread the grease over the length of the screw.

Solid Waste Disposal



The life of the solid waste filter depends on the amount of system use. The system will be equipped with a timer that will advise changing the filter after a given period of system use. The instructions will be to change it when the systems indicates it is time, or during yearly maintenance. Whatever comes first.

Cleaning The Alignment Sensor



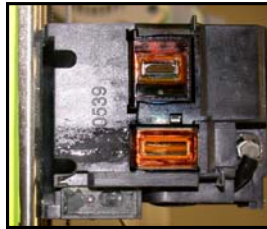
Clean before running an alignment!

Select "LOWER BUILD BED" from the menu and lower the build bed 4 or 5 inches.

Open the top cover and gently pull the fast axis toward you until it is about centered above the build bed.

The alignment sensor is underneath the carriage just below the brown cable that comes out on the left side. The sensor should be wiped off before running an alignment pattern. You may use a slightly damp paper towel, followed by a wipe with a dry paper towel to remove the dust and moisture. When complete, close the top cover. The Fast Axis will return to the Parking Caps.

Cleaning Under The Carriage



- Install magnetic mirror as shown
- Residue that needs to be cleaned
- Distilled water and folded paper towel
- Use mirror to clean under carriage

Clean when changing print head.

Over time a mixture of ZC10 head cleaner and powder may collect. Instruct the customer to clean under the carriage before installing a new print head. It is typical that the area behind the HP11 Print Head will require the most cleaning.