

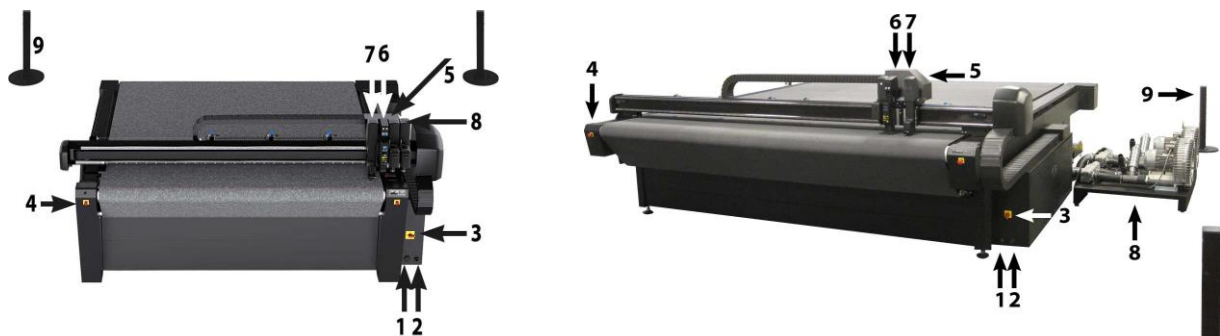
General Downtime Procedure F Series

In general, an F Series flatbed cutter doesn't have mandatory steps to shut down. However, this procedure provides some tips and tricks on how to prepare the flatbed cutter most optimally, in case it will be out of operation for a long period.

SHUTDOWN PROCEDURE:

Shutting down the flatbed cutter

Shutting down the machine can be done by turning the main switch **(3)** on the electrical box. It is also advised to disconnect the machine from the mains and pressured air/compressor. If the machine can not be disconnected physically then switch off the main breaker between the machine and the power grid.



Removing heavy tools/modules

Having heavy tools/modules installed can cause them to move downwards and hit the conveyor. Therefore, it is advised to remove the following tools/modules:

1. Pneumatic Oscillating Tool
2. Rotary Module
3. (HF) Router module

MAINTENANCE AND CLEANING:

In general, it is advised to completely inspect the machine visually once a week. With the machine out of operation, this is a good opportunity to inspect the machine thoroughly.

Cleaning the nose piece (kiss cutting knife only)

The nose piece may accumulate residue from the vinyl that will result in poor cut quality. The typical indication of a dirty nose piece is an interruption of the cut line every 12 mm (0.5”).

Cleaning the nose piece:

1. Remove the kiss cutting tool by turning it counterclockwise. Use the menu Change tool in Axis Control or switch off the cutter before doing this.
2. Observe the orientation of the nose piece in the tool and then push it out of its holder.
3. Remove any remaining vinyl residue using a brush or a pair of tweezers.
4. Put the nose piece back.
5. Install the kiss cutting knife again in the module.



Cleaning the gliding disk (Cutout and EOT)

The gliding disk may accumulate residue from the vinyl that will result in poor cut quality.

Cleaning the gliding disk:

1. Remove the single edge, double edge tool or EOT by turning it counterclockwise. Use the menu change tool in Axis Control or switch off the cutter.
2. Remove any remaining vinyl residue using a brush or a pair of tweezers or with compressed air. Remove the gliding disk from the tool if necessary.
3. Install the tool again in the module.



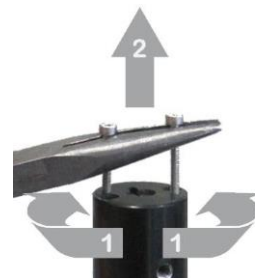
NOTE: The gliding surfaces may be lubricated with a dry Teflon spray before the gliding disk is set back on the tool.

Replacing knife guide of EOT

The very high frequency of the EOT implies that wear of moving parts inside the EOT is unavoidable. The level of wear is unpredictable since it depends on various parameters, such as thickness of the material that has been cut, its consistency, the used knife and other general operations parameters. The only part that the operator can replace is the knife guide. If other parts are worn, then the EOT will need to be serviced in a Summa service centre.

Replacing the knife guide:

1. Remove the EOT from the module. Use the menu change tool in Axis Control or switch off the cutter.
2. Remove the gliding disk (if it was mounted) and remove the knife.
3. Loosen the knife guide by removing the two setscrews.
4. Turn the setscrews for a turn of three in the two threaded holes next to the holes the screws came out of.
5. Gently remove the knife guide by pulling these setscrews.
6. Put the new knife guide in and proceed in the reverse order of removal.



Keeping the collet of the router clean

Each time a bit is removed or replaced, the collet needs to be cleaned. Clean the collet by tapping it gently on a flat service and/or blow the dust out of the grooves and thread (in the nut and on the miller).



ATTENTION: If the collet is not cleaned and the grooves become clogged with dust, then the bit can't be secured tightly enough. If the bit then comes loose during routing, it will damage the mat, miller and could even cause injury.

Cleaning the conveyor belt or protective mat

After a while, a lot of dust will gather in the conveyor belt. This will reduce the vacuum. The media will not stay in its place and the cutting quality will deteriorate.

Procedure: Cleaning the conveyor (protective matt)

Set the vacuum pump on 'blow' and clean the conveyor with a vacuum cleaner.

When a miller is mounted on the machine, this can be used to vacuum the conveyor belt or routing underlay. Click on the media button in Axis control. Two extra options are visible.

Clean table: Hit this button to vacuum the table (loaded area). The miller in the router will run, but it will not touch the surface)

Dust extraction: Click the radio button to set it on or off.

NOTE: Clean the conveyor/protective mat with a vacuum cleaner. Do not use compressed air as this will only blow the dust inside the gears or further inside the machine/conveyor – resulting in reduced vacuum power.

Cleaning the protection brushes at the sides

The brushes at the sides can accumulate dust. Use a vacuum cleaner to clean them. Do not use compressed air, since this will blow all the dust inside the machine.



Cleaning Guide rails

Generally, the guide rails don't need lubrication. The carriages have a built-in reservoir with lubrication. However, should the rails be very dirty, then they can be cleaned as follows.



Cleaning the rails:

1. Clean the lengths of the rails with a lint-free rag (start from the carriages and move away from it).
2. Soak another lint-free rag with lubricant for bearings/guiding rails and go over the lengths of the rails again.

Overall cleaning

The following points could also use some vacuum cleaning:

1. Cable chain X and Y
2. Cable gutter on the back of the top beam
3. Top of the electrical box
4. Top beam carriage and module slots

Emptying the vacuum cleaner

With the machine out of operation, it is the ideal time to empty the container of the vacuum cleaner.

1. Remove all attached hoses and open the clamps on top to remove the lid.
2. Lift the bag out of the container and empty

Emptying the compressed air filter (machines without auto drain only)

Check the filter regularly for compressed air and empty it if necessary. To do so, remove the front cover (two screws) and lift it out the front panel.



Filling up oil supply on machines with a POT

Check the oil level monthly. If the level is below half full, then add oil.



Protecting the machine

To prevent dust from covering the machine when out of operation, it is advised to cover it. For the F1612 you can use the slipcover the machine was packed in. For Large F Series, you can use a protective plastic sheet.

STARTUP PROCEDURE

Powering on the flatbed

WARNING: Make sure the power switch is turned off before connecting the power cord

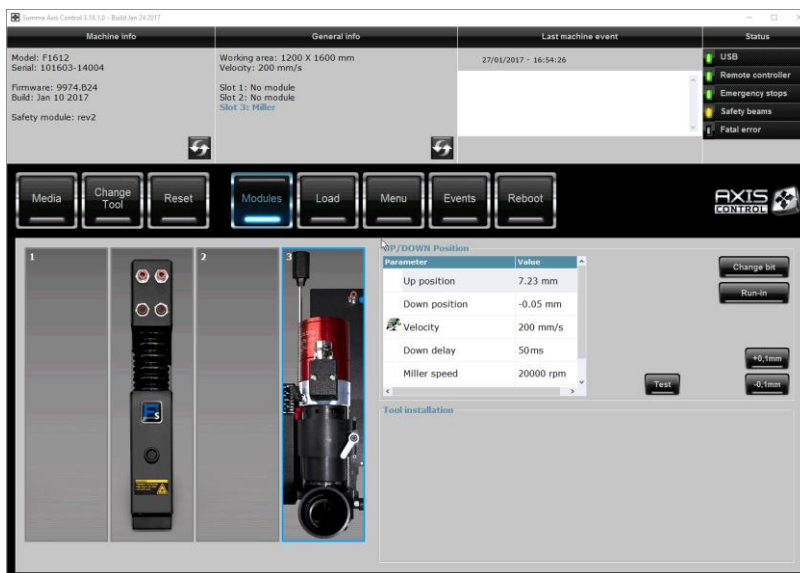
1. Reconnect the mains, air supply and/or arm the main and auxiliary circuit breakers
2. Move the conveyor 1 m forward by hand
3. Move the top beam and carriage around to overcome the extra friction
4. Remove all the excess grease to prevent it from accumulating on the rail and dropping the conveyor/media



5. Check and replace knives, if needed
6. Check if the safety system is still working properly

Maintenance HF miller

The miller has to go through a run-in procedure, each time the miller has run less than 20 minutes in 3 weeks. Run this procedure also at first installation. An internal parameter registers how long and when the miller has run. If a run-in procedure is necessary, Axis Control will give a message and an extra button will be visible in the modules menu.



Click the 'Run in' button and wait for the procedure to end. A window with the progress of the run-in cycle will be visible. After it is finished, the button in the menu will also disappear.

