

FORMAX®

FD 87Casino EX
Industrial Conveyor Shredder

MACHINE SPECIFICATIONS	
Model Type	FD 87Casino EXCC
Serial #:	
Shred Size:	.5" x 3.51" (Average Playing Card)
Shred Capacity:	Up to 650 lbs/hr (Playing Cards)
Speed:	Up to 43 fpm
Throat Width:	16"
Waste Bin Capacity:	28 gallons
Motor:	3HP
Power:	3-Phase, 220V, 50/60Hz NEMA L15-20P plug included NEMA L15-20R Receptacle Required
Weight:	1015 lbs.

The serial number is specified on the nameplate of the shredder. Guarantee claims and inquiries cannot be processed if you do not quote the serial number.

Enter this number into the nameplate shown here immediately after receipt of the shredder.

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Safety Precautions

“Work safety” symbol



This symbol marks all work safety notes in this manual which can endanger the health or life of operators. Please pay attention to this symbol and exercise particular care in such cases. Please also forward all work safety notes to other users. Apart from the instructions in this manual, you should also follow generally applicable safety and accident prevention regulation.

“Attention” notes



This icon marks information in this manual which requires particular attention including guidelines, regulations, instructions and correct working procedures intended to prevent damage to the machine and/or other equipment.

Notes on work safety

The FD 87Casino EX shredder has been inspected for safety. However, improper operation and misuse risk the following:

- the health or life of the operator
- the machine and other valuable equipment
- the efficient operation of the shredder.

The FD 87Casino EX employs state-of-the-art technology and is safe to operate. However, this machine can become hazardous if used incorrectly, by untrained staff or for purposes other than those for which it is designed.

- Material with a tendency to curl, e.g. tapes, cords, etc. should not be processed.
- Keep long hair, loose clothes, ties, scarves, etc. away from feed opening.
- Only one person should operate the shredder at a time.
- Always follow local safety and accident prevention regulations when operating the shredder.
- No pedestals or other raised surfaces may be placed in the vicinity of the machine if they alter the safety clearances.
- All connecting cables must be laid in such a way that they cannot be tripped over.
- Mechanical wearing parts must be inspected once a year.

The FD 87Casino EX shredder is intended **only** for shredding playing cards, casino chips, dice, and other similar casino gaming pieces. It is designed for shredding large volumes of casino gaming pieces. The hardened, solid-steel cutting rollers are unaffected by these materials.

Any other use beyond the scope described here is regarded as not being in accordance with the instructions. The manufacturer will not be held liable for damage resulting from incorrect use; the user alone is responsible.

Users must also follow the assembly, dismantling, re-assembly, operation and maintenance procedures specified by the manufacturer. The operation, maintenance and repair of the machine must be performed only by trained personnel who are aware of the potential dangers.

The relevant accident prevention regulations as well as other generally recognized rules concerning safety engineering and occupational safety must be observed.

- Each person responsible for assembling, dismantling and reassembling and maintenance (inspection, servicing, repair) of the shredder must have read and fully understood the entire operating manual, in particular the "Safety" section.
- The shredder may only be operated, serviced and repaired by authorized, trained personnel.
- The shut-down procedures specified in this manual must be followed during all assembly, dismantling and re-assembling, cleaning, and maintenance work. This type of work must be performed only when the machine is idle.
- The drive of the FD 87Casino EX must be secured against unintentional switching-on before performing work on the machine. Set the main switch to "Off" and unplug machine from wall outlet.
- After repair, check all protective devices to be sure they have been re-installed before operation.
- Do not perform any work which may impair your safety while operating the machine.
- Immediately report any changes which impair your safety to the person responsible. Shut the machine down until such damage has been resolved.
- Before operating the shredder, ensure that it is in perfect working condition.
- Ensure that the workplace around the FD 87Casino EX is always clean and safe.
- The user must not make any conversions or changes on his own initiative which impair the safety of the FD 87Casino EX. Protective devices must not be removed or rendered inoperative.
- All work which is not directly connected to the normal operation of the machine must always be performed when the machine is idle.
- Doors and flaps must not be opened until the machine is motionless. Observe safety labels!
- Test the safety features after installing or repairing electrical components.

Checking the safety devices

Check the safety devices:

- at the start of each work shift (when operation is sporadic)
- at least once a week in continuous operation
- after each maintenance or repair

Check the safety devices for:

- specified condition
- specified location
- safe attachment
- specified function

Correct defects before you operate the shredder.

1. Immediately shut down the shredder if defects occur during operation and make sure the defects are corrected.
2. Do not modify or remove protective devices. Do not switch off protective devices. For safety reasons, modifications of the machine are not allowed.



Danger: Defective safety devices can cause serious accidents. If safety devices are not working properly, the shredder should immediately be put out of operation.

Never reach into the cutting system while it is operating; you risk serious injury!

Only when all safety devices are operating correctly can the shredder be used again.

Operate the shredder only when the device has been checked and is in order.

1. Check the **Stop** button (A) on the left of the control panel:

The shredder must switch off immediately when the button is pushed.



Overview



Cutting Data, Speed, Dimensions, Weight

Shred Size:	.5" x 3.5" (13 x 18mm) Standard Playing Card
Sheet Capacity:	Up to 650 lbs/hr (Standard Playing Cards)
Speed:	Up to 16 feet per minute (5m/min)
Feed Opening:	11.5" (292mm)
Dimensions:	29" W x 53" D x 53" H / 68" H w/ Display Open
Feed Table Dimensions:	28.5" W x 17.5" D x 22" H
Space Requirements:	40" W x 63" L x 76" H
Waste Bin Capacity:	28gal.
Weight:	1015 lbs. (460kg)

Motor Specifications, Power Requirements

Motor Type	Horizontal Geared
Rated Power	3HP
Operating Voltage	220V
Phase	3-Phase
Frequency	50/60Hz
Rated Current	8.5A
Output RPM	25 RPM
Number of Poles	4 (3 hot & 1 ground)
Total Rated Power Pn	2.25 KW
Total Rated Current In	8.5 A
Total EOCR Protection	15 A

Installation

1. Appropriate power outlet must be available at installation site.
2. The FD 87Casino EX is delivered completely assembled (although it can be delivered in parts, if necessary.) During transport, be aware of the shredder's high center of gravity.
3. The shredder can be moved on its casters. If a fork-lift is used, be sure to use the designated pick-up points.
4. Install the shredder on a flat and even floor without carpeting.
5. Once the shredder is in place, lock the caster brakes, and plug in power to appropriate power source.



Power Plug

Power: 3-Phase, 220V, 50/60Hz

Plug Type: NEMA L15-20P

Start-up and Operation

Main Switch

1. On the left side of the machine, open the door leading to the electrical control panel. Push on the lever (Fig. 1) and the handle will pop out. Pull to open (Fig. 2).
2. Flip the main power switch to the UP position (Fig. 3). Close electrical control panel door.
3. Insert key into On-Off switch to right of control panel (Fig. 4). Turn key right, to the On position.



Fig. 1



Fig. 2

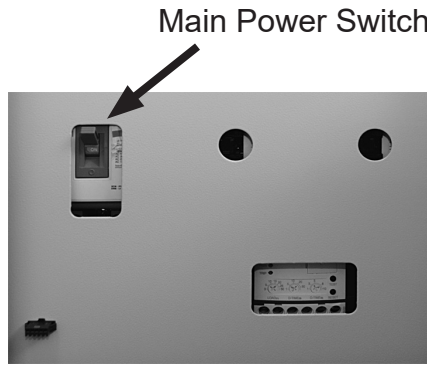
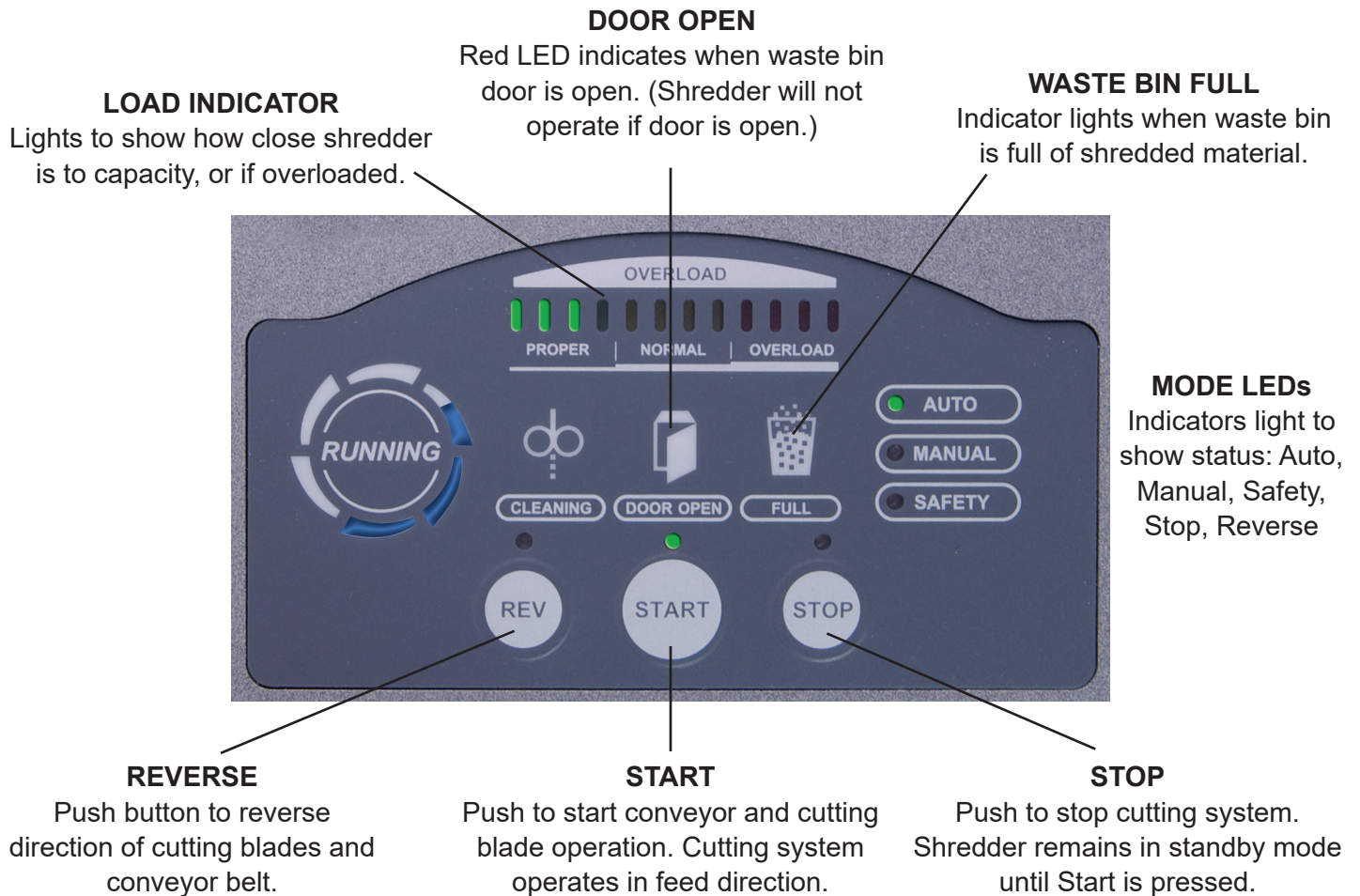


Fig. 3



Fig. 4

Control Panel



Operation

1. Set main switch to ON (Fig. 3). Turn the OFF/ON key switch on the control panel to the ON position.
2. Lift open the video display. Video recording will begin automatically. The red dots indicate when the recording has begun. See the Video Recording System Manual for more details.

NOTE: The video display must be lifted open for the shredder to power on.

3. Touch the START pad on the control panel. The conveyor will begin to move in the forward direction.
4. Place the material to be shredded on the feed table, then slide onto the inlet conveyor belt, in appropriate amounts, (shred capacity may vary due to variables in material and power supply.)



Video Display

NOTE: If material is accidentally placed onto the conveyor belt, DO NOT REACH FOR IT. Instead, press the red STOP button on the control panel. When the shredder stops, press and hold the REVERSE pad. The conveyor will operate in reverse, allowing safer access to the materials. The shredder will stop when the REVERSE pad is released. To resume shredding, press the START pad.

Turning off the shredder

1. To shut down the shredder, press the STOP pad on the control panel.
2. Turn OFF/ON key switch on the control panel to the OFF position.
3. Open the electrical control panel door, and flip the main power switch DOWN to the off position.
4. Close the video display.

Overloading the motor

If the shred capacity is exceeded (too many items to shred at once), the shredder will stop automatically. To resume shredding:

1. Push and hold the reverse pad until the materials back completely out of the shredder.
2. Press the red STOP pad, then divide the materials into smaller stacks.
3. Press the START pad. The conveyor and internal shredding mechanisms will begin to move.
4. Continue shredding, feeding fewer materials at a time.

Frequent Overloading

If the shredder is repeatedly overloaded, the motor can overheat, which will cause the shredder to switch off automatically. To resume shredding:

1. Allow the motor to cool down for approximately 20 - 30 minutes before using.
2. Once the motor has cooled sufficiently, resume shredding by following standard operating procedure (see Operation).



NOTE:

To maintain optimum performance and allow constant operation, avoid repeatedly overloading the shredder. This will prevent time-consuming reversing cycles, and will provide the highest possible throughput.

Emptying the Waste Bin

Shredded particles accumulate in the shredder waste bin during normal operation. When the red “Waste Bin Full” lamp lights, empty the waste bin.

1. Switch the shredder off by pressing the STOP pad on the control panel, turn the OFF/ON key switch to the OFF position and flip the main power switch to the OFF position.
2. Open the waste bin access door. Pull out and empty the waste bin.
3. Push the waste bin back in, close the door, turn power switches back on and resume shredding.

Exterior cleaning

- Turn shredder off and unplug from wall outlet.
- Wipe the exterior surfaces with a soft cloth. If the surfaces are very dirty, use a neutral detergent, then wipe again with a soft cloth.

CAUTION:

- Never put water directly on the surface of the shredder.
- Never clean the case with benzene or thinner, since it will cause discoloration.