

SERVICE MANUAL

**ONE-STEP SHRINK WRAP MACHINE
MODEL: NEXGEN-2030**

CE

**DYNACLEAR PACKAGING
PRO PACK GROUP**

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1. INTRODUCTION

You have bought a machine with outstanding features and performance and we thank you very much for your confidence in choosing it. The NEXGEN-2030 system is a reliable, low priced and handy machine.

The technological concept underlying its design, as well as the components and materials used in the manufacturing and testing process are the best assurance of proper operation and long-lasting liability.

2. PERFORMANCES OF THE PACKAGING MACHINE

Thanks to its particular operating circuit, it can be used either as sealing and shrinking machine or as a sealing machine (sealing only). In this case it is possible to pack the object in a soft bag without shrink-wrapping. The film can be punched or not when running through the micro punch of machine itself. The film thickness in the range of 15-50 micron can be used.

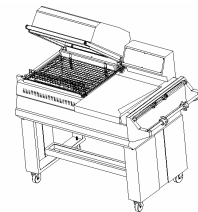
3. MACHINE DIMENSIONS

● UNPACKED MACHINE

See Fig.2

| Model | NEXGEN-2030 |
|--------|-------------|
| Length | 1760mm |
| Width | 1040mm |
| Height | 1450mm |

Fig.2



4. MACHINE SETUP AND INSTALLATION

● MACHINE ASSEMBLY

- ① Remove the packing of the machine and assemble the trolley. (See Fig.3)
 - ② Lift the machine and position it on the Trolley, paying attention that the 4 feet are Properly inserted in their housing as Fig.2.
 - ③ Slide the film holder into the film supporter rail on the proper guides. Fig.4
- The proper assembly machine as show in Fig.2.

Fig.3

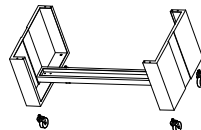
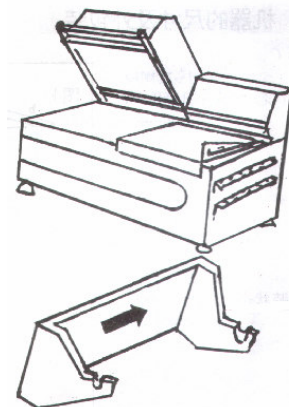


Fig.4



● ELECTRICAL CONNECTION

Before executing the electrical connections, make sure that the power supply is match to the following conditions:

| Model | NEXGEN-2030 |
|--------------|-------------|
| Power | 6.0KW |
| Voltage | 380V |
| Max. Current | 18A |

Where the wire with green-yellow color is the earthing wire, the wire with labeling “L” is the live wire; the wire with labeling “N” is the neutral wire.

Make sure all wires are connected properly, in case of doubts about the main voltage contact the local public supplies company.

ATTENTION: Earthing of the machine is obligatory.

5. PRINCIPLE OF OPERATION

● SEALING

Sealing and shrinking are done on impulse, set through an automatic control of sealing. The heat of the sealing blade melts film and then it is pressed between sealing blade and sealing tape.

● SHRINKING

Film shrinking is obtained contemporaneously to sealing and is produced by the forced circulation of hot air around the package.

Air heating is obtained by making the air pass through a group or thermostat heater.(heating chamber).

6. MACHINE ADJUSTMENT AND OPERATION

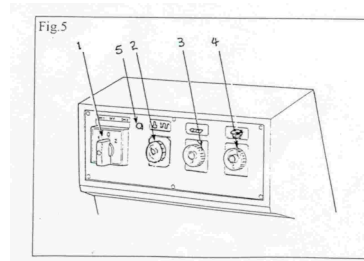
● ADJUSTMENT

- ①The NEXGEN-2030 can be used as a simple sealing machine or as a machine for sealing and shrinking at the same time.
- ②Turn the Main Switch (1) into pos.1 to carry out cutting and sealing only.
- ③Turn the Main Switch (1) into pos.2 to carry out sealing and shrinking in one operation. While in pos.2, before operating machine, wait till the adjusted temperature is reached (7-10 min) which is signaled through the switching off of the Temperature Controller (2).
- ④Adjust the Temperature Controller (2) into 150°C which corresponds to on average shrinking temperature, if shrinking is unsatisfactory or the time to obtain it is too long, increase the adjusted value also according to the kind of film used.
- ⑤Adjust the Sealing Timer (3) into 1 second (for PVC) corresponding to a medium sealing time. It may be necessary to increase or decrease the set value depend on the type and thickness of the film used. Attention: Increase the sealing time gradually, sealing blade overheat will shorten the life of the blade and blade holder; adjust the interval of the sealing temperature into 2-5mm

(according to the packing material).

⑥Adjust the Shrinking Timer (4) into 4 seconds, then increase or decrease the adjusted value according to the result obtained.

- (1) Main Switch
- (2) Temperature Controller
- (3) Sealing Timer
- (4) Shrink Timer.
- (5) Power Indicator
- (6) For Model 5540A, there is a Conveyor Timer for standard model to setup the transport time.



● INSERTING ROLL OF FILM

Insert the roll of film on the Roller (6) and block it through the Centering cones (7). See Fig6.

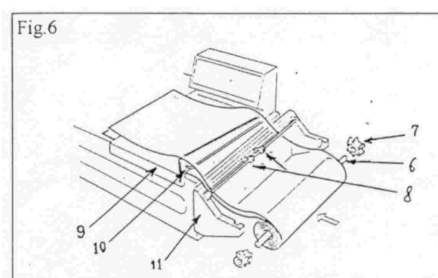
Run through the Micro punch (8).

Run the film lower layer under the Packaging Plate (9).

Run the film upper layer over the Packaging Plate (9) and Separator Rod (10).

See Fig.6:

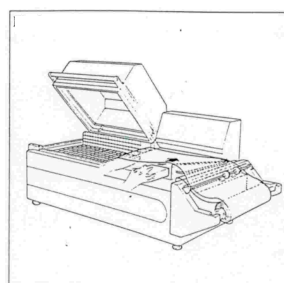
- (6).Roller
- (7).Centering Cone
- (8).Micro punch
- (9).Packing Plate
- (10).Separator Roll
- (11).Film Holder



● INSTALLATION OF THE SCREEN PLATE

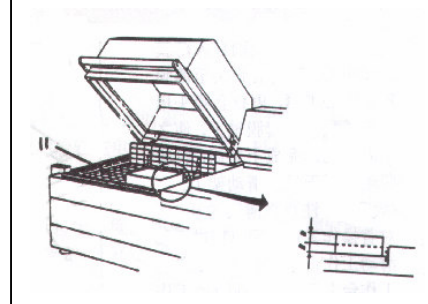
For a proper packing result, the screen plate (12) must be adjusted such that the film sealing is made at the half of the packaging height. See Fig.7

Fig.7



And the Film Holder (11) and the Packaging Plate (9) must be adjusted according to the width of the product to be packed, leaving a space of about 2 cm between the product and the sealing edge.

Fig.8



● INTRODUCE THE OBJECT TO BE WRAPPED

After carried out the first seal, the film is now ready to carry out wrapping. As Fig.8 shown, introduce the product Into the bag using the right hand (see Picture) and make it slide to the left until it is laid on the screen leaving a little space of about 1-2 cm to allow the passage of air for shrink-wrapping.

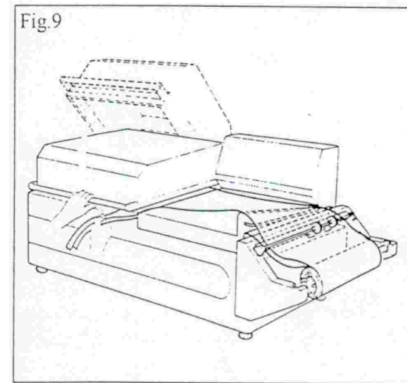
● OPERATION

By pushing the cover handle with a Pressure of 10-15 kg, the cover Rests on the sealing blade; by Pinching the film, it is automatically sealed on the open sides (right and front).

In case you have selected the function SEALING + SHRINK WRAPPING you will see the film shrink onto the product.

Slightly decrease the pressure on the cover handle to allow film detaches from the sealing area on the inside.

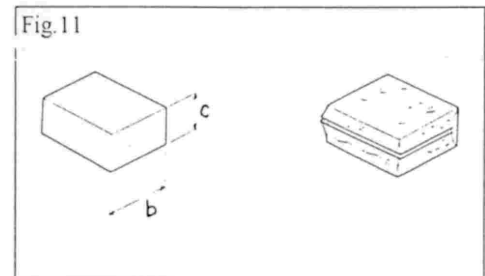
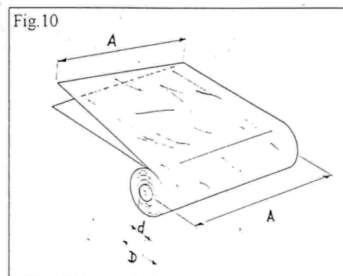
With the right hand detach the film the sealing blade to towards the outside (see Fig. 9)



7. MACHINE USING CONDITIONS

● FILMS TO USED

- ** Centerfold film
- ** Thickness 15-50my
- ** A=800mm Max for Nexgen-2030
- ** D=300mm Max
- ** d = 77mm



● CALCULATING BAND

Band A = b + c + (75mm), See Fig. 1

● MACHINE OPERATIONS LIMITS

Do not carry out packages whose surface is equal to the Screen plate (12). Leave at least 2 cm less than the perimeter of the Screen Plate (12).

Do not carry out packages weighing less than 100 gram.

Do not carry out packages weighing more than 15 kg.

Do not carry out packages whose height exceeds 250mm for Model: 5540.

Do not carry out package whose height exceeds 220mm for Model: 4030.

● ARTICLES NOT TO BE SHRINK – WRAPPED

To avoid permanent damage to the unit as well as possible risk of accidents to the operator, it is absolutely forbidden to pack the following products: Wet products, liquids of any kind and density in fragile containers, explosive materials, pressurized gas cylinder of any kind , bulk and volatile powders, bulk materials with grain size smaller than the holes of the reticulated plate; any material and products not listed nut which might harm operator and cause damages to the machine.

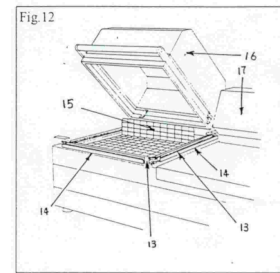
- **DANGER AND WARNING AREAS**

Do not touch the Sealing Blade (13) soon after sealing by reaching beyond the Safety guard (14). Danger of burns due to residual heat on the sealing blade.

Do not keep on sealing in case the Sealing Blade (13) breaks but replace it at once.

Do not touch the Chamber Closing Flap (15) during warm up and operating.

Always leave the Plastic cover (16) open (see Fig 12), when the machine is not in use.



8. MACHINE MAINTENANCE AND REPAIR

Before proceeding to maintenance, switch off the machine, see Fig.13

- **CLEANING OF THE SEALING WIRE**

Using a dry cloth or copper brush, wipe off the film residues clinging to the sealing wire: do this at once after sealing since the residues are easier to remove when still warm.

Lubricate the sealing wire periodically with the silicon spray supplied for the purpose.

- **CLEANING THE MACHINE**

If the machine works in a dust environment it is necessary to clean it more frequently inside as well as outside. It is especially recommended to vacuum-clean the dust that settles on the interior electrical components. To open the switch box (17) again remove the 4 fastening screws.

- **RUBBER AND TEFLON REPLACEMENT**

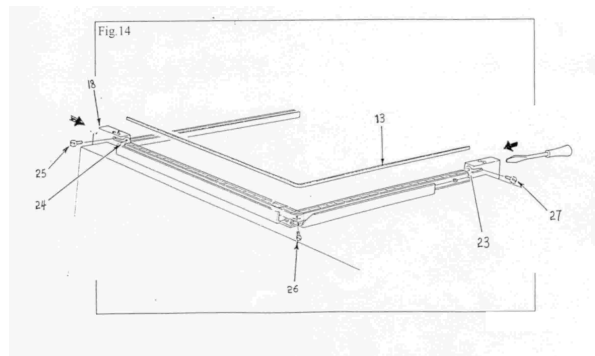
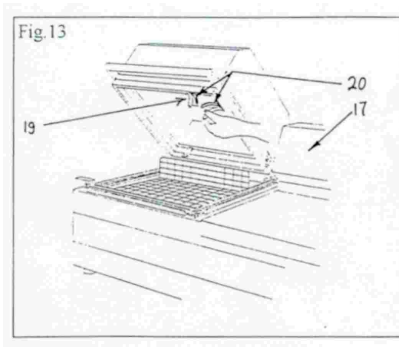
When the Teflon (19) is worn down, replace with the self-adhesive spare one. Be careful to apply it straight and flat . Clean the rubber with detergent before applying the self-adhesive Teflon tape.

If also the Rubber (20) is damaged, replace it as follows:

Remove the old rubber and clean the housing.

Use tow-sided adhesive tape to fixed the new rubber in linear way.

Apply the self-adhesive Teflon-strip.



- **CHANGING THE SEALING WIRE**

To replace the sealing Blade (13) follow this procedure (see Fig.14):

- A.Disconnect power to the machine
- B.Open the machine Switch Box (17) (See Fig.12)
- C.Open the Blade Protect Guide (18).
- D.Open the Protect Cover of the Compensation Equipment of the Sealing Blade.
- E.Unscrew the 3 screws (25)(26)(27).
- F.Take away the old Sealing Blade (13).
- G.Insert the new Sealing Blade (13) Starting from the center terminal and tighten the Screw (26).
- H.Sharpen the new Sealing Blade (13) in line with the hole of the Pistons (23) and (24).
- I.Complete the insertion of the Sealing Blade (13) in the whole housing.
- J.Push the Back Piston (23) completely against the Sealing Blade (13) so that it enters the blade hole and tighten the Screw (27).
- K.Push the Front Piston (24) completely against the Sealing Blade (13), and tighten the Screw (25).
- L.Make sure that the Sealing Blade (13) is positioned and tensioned properly.
- M.Close the Protect Cover of the compensation equipment of the Sealing Blade.
- N.Close the blade protect Guide (18).
- O.Close the machine switch Box (17).

9. GUIDE FOR TROUBLE SHOOTING

| Trouble | Cause of Problem | Possible Solution |
|--|--|--|
| Sealing is not carried out | Sealing Blade does not receive power | Check the power supply and blade connects, replace blade if necessary. |
| | This sealing time set value is too low | Increase the setting value gradually |
| | The compensation space is too little | Increase the space to a right value |
| Sealing blade produces smoke while sealing | The sealing time setting is too high | Decrease the setting value |
| | The compensation space is too big | Decrease the space to a right value |
| Sealing opens during shrinking | Sealing blade is dirt or break | Clean the sealing blade check if it is properly lodged and replace it if necessary |
| | The pressure on the cover handle is not sufficient | Slightly increase the pressure on the cover handle |

| | | |
|---|--|---|
| Machine is sealing but not shrinking | Shrink function is not selected | Check the main switch |
| | Temperature is too low or warm up time is not enough | Check the set value of temperature controller |
| | Heater is damaged | Change the new heater |
| | Fan is not working | Micro switch is damaged or a fault of the fan. |
| Some blister persists during shrink – wrapping | Film is not punched and air cannot exit | Pass film through the micro punch of the machine |
| Shrink-wrapping is carried out but is not uniform or complete | Film is not suitable or its quality is scanty | Use shrink film with the index of longitudinal and transversal shrink wrapping is about 40-70%. |

Beside the above possible reasons, voltage supply stability is another main reason, since voltage fluctuation will damage the circuit.

If after all checks the machine still does not run properly, please contact after sales service.

10. Spare parts

| NO. | ITEM | Specification | QTY |
|-----|------------------|---------------|---------|
| 1 | Tools 1 | 1.5, 5, 6mm | 3 pcs |
| 2 | Tools 2 | “+” | 1pcs |
| 3 | Silicon spray | MR-600 | 1Bottle |
| 4 | Sealing blade | | 1pcs |
| 5 | Teflon tape | | 1set |
| 6 | Operation manual | | 1set |

11. Easy damage parts

| NO. | ITEM |
|-----|----------------------|
| 1 | Teflon tape |
| 2 | Sealing blade |
| 3 | Black rubber |
| 4 | Sealing blade holder |