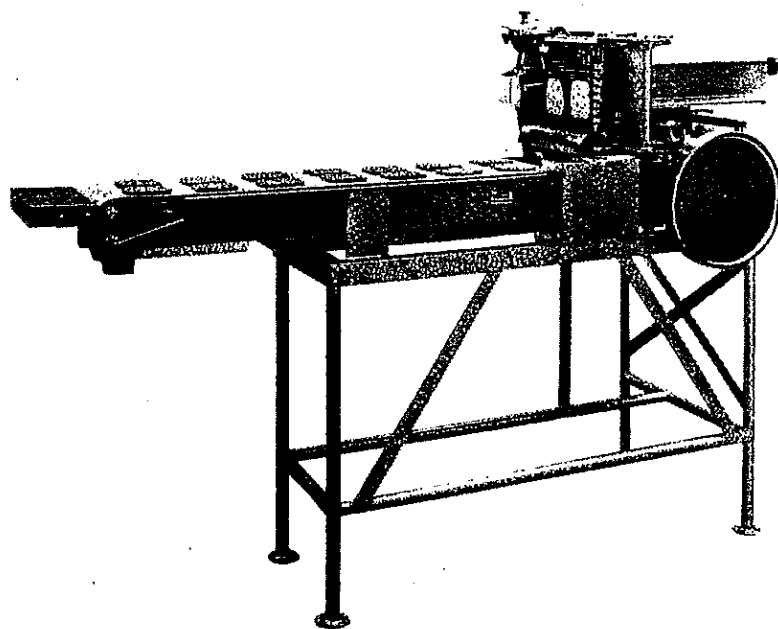
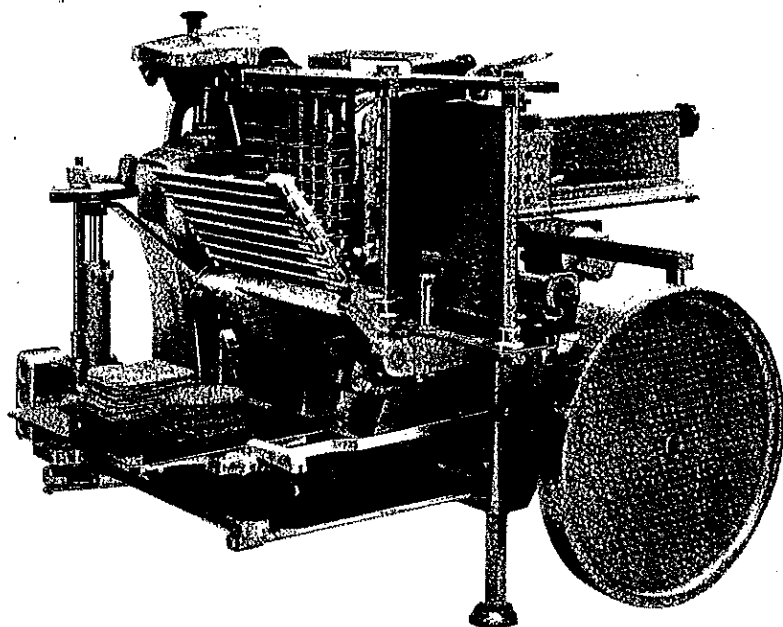


**Berkel**

## **OWNERS MANUAL**



**MODELS 180D & 180GS**

# **SLICERS**



# **CAUTION**

- 1. Disconnect this equipment from its electric power source before cleaning or lubricating.**
- 2. Operation of this equipment by untrained personnel may result in injury. Read instructions before operating.**
- 3. Keep metal objects away from machine while in operation.**
- 4. Mount machine securely on a stable surface before operating.**
- 5. Keep hands away from moving parts while machine is operating.**
- 6. Be sure the machine is connected to a power source of proper voltage and frequency before operating.**

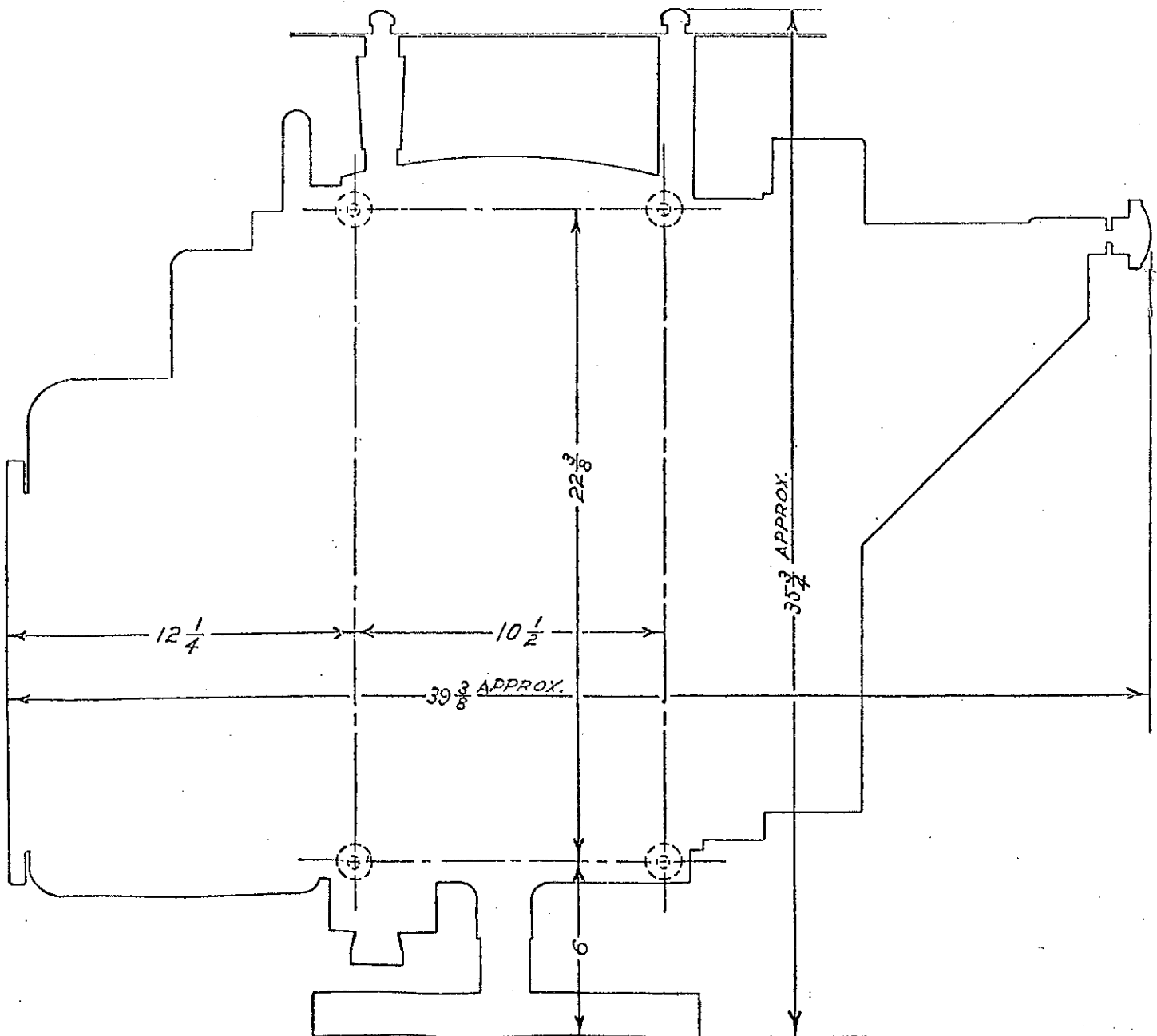
## INSTALLING THE MODEL 180D

The Model 180D can be installed on a Model #10 stand or on a solid table. The #10 stand is drilled for fastening the machine with bolts.

If the Model 180D is to be installed on a table, drill four (4) holes thru the table top according to the dimensions shown in the layout below. The two (2) holes nearest the flywheel should not be drilled any further than two inches from the edge of the table top; this will allow a clearance of approximately two inches between table and flywheel for safety reasons.

Use four (4) bolts of sufficient length to pass thru the table top and rubber feet and into the extension legs. Tighten the bolts enough to hold the machine without compressing the rubber feet excessively.

Be sure the motor specifications are correct, before connecting to power line. Turn the flywheel slowly in a clockwise direction to make sure all parts are clearing properly before turning on the electrical switch. Make sure the machine is oiled and greased.



# **INSTRUCTIONS FOR INSTALLING THE MODEL 180GS MACHINE AND SHINGLING AND GROUPING CONVEYOR ON STAND**

After the machine and stand are unpacked, set the machine stand in the position of operation. The stand should be made level by adjusting the adjustable feet on the stand as required.

Remove, from the bag in the accessory box, the Adjustable Machine Foot (No. 8558) with two nuts (No. 9126), also the three solid Frame Feet (No. 6000-1) with three long Bolts (No. 978) and washers.

Place the Adjustable Machine Foot in the back hole to the right of the machine stand, with a nut on top of the stand angle and one under this angle. The head of this Adjustable foot **MUST** be on top and screwed down as close to the angle as possible.

Next, place the three solid Frame Feet on the stand top, over the remaining three holes.

Place the machine upon the four feet and bolt the three feet to the machine frame, up through the stand, using the three long bolts with washers.

Adjust the Adjustable Foot, with the fingers, until it comes in contact with the machine frame. Tighten the nuts on this foot, bottom nut first.

To install the flywheel, remove the taper pin and shaft cover from the flywheel shaft. Place the flywheel on the shaft so the taper pin holes are aligned. The taper pin should slip in easily to within one-quarter of an inch of the top of the taper pin. Drive in taper pin securely and screw the flywheel shaft cover back in place.

Next, turn the flywheel clockwise until the flyfingers are in the horizontal position. Remove both locating pins (A-6003-7), and the upper stud and block assembly (A-6004-5M).

Place the Conveyor Frame and Chain Assembly upon the Base Plate and fasten down with the two locating pins. Be sure that the Conveyor Shield is as close to the knife as possible but **NOT** touching.

Connect the Chain Driving Rod to the Driving Lever with the Upper Stud and Block Assembly, making sure the solid side of the Fiber Block is down.

Turn the machine by hand in a clockwise direction, and check to see that the Flyfingers pass the Conveyor Chain Needles without hitting.

To install the Sharpener, first remove the screws as instructed, by the tag on the Sharpener Base. Next, insert the Sharpener Post into the largest hole in the Sharpener Base, turn counterclockwise, resting the other shaft in the countersunk hole on the shelf. Replace the screw.

You are now ready to connect the Shingling and Grouping Conveyor to the machine and stand.

First, lay the Switch and Conduit for the Conveyor off to the side, to the back and to the left of the machine.

Next, place the Shingling and Grouping Conveyor on the stand. If the Conveyor does not set solid, find the Fastening Bracket (No. 6120-2A) that is not touching the stand. Loosen the bolts holding this bracket to the side frame, allowing the Fastening Bracket to drop to the stand or raise one of the Brackets if necessary. (NOTICE: NEVER MOVE THE BRACKET NEAREST THE FLYWHEEL). Then tighten the bolts.

Place the Switch and Conduit between the two back side Fastening Brackets and run it across and under the conveyor, to the front side. The Switch Box Assembly is fastened on the Conveyor Front Frame and on the left-hand end. There are two bolts and nuts in the Conveyor Frame for this.

Next, place the Conduit Clamp over one of the holes in the rear, right-hand Fastening Bracket. Bolt this clamp down with the Bracket. Use the eight bolts (No. 9887), washers (No. 9249) and nuts (No. 9164) which will be found in the accessory bag, to bolt the Fastening Brackets to the stand.

Connect the Pivot Lever on conveyor to the crank on the slicer with the snap rings and washers.

Turn the flywheel by hand in a clockwise direction to be sure the machine operates freely and is connected properly.

Oil and grease. The machine is ready to operate. When under power, the flywheel should turn in a clockwise direction.

# OPERATING INSTRUCTIONS – MODEL 180D & 180GS

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**CAUTION, before operating your new machine ensure that it is connected to a power source of the correct voltage and frequency.**

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## MODEL 180D

Rotate flywheel by hand in a clockwise direction to bring the table to its full travel toward the operator see illustration #1. Release the feed roller latch and move gripper assembly to the right away from the knife as far as it will go. Raise gripper control knob to retract gripper needles. Place product against back of meat table and against the front of the gripper assembly. Move gripper control knob down to engage gripper needles in the product. Slide the gripper and product to the left so that the product has raised the hold down fingers and is approximately to the edge of the table. Adjust the hold down finger tension by moving the hold down finger adjusting lever upward until a reasonable pressure is applied to the product. The tension required varies with the product being sliced but a little experience will show the correct setting for each product. Do not apply too much tension since this will compress the product and cause uneven slicing. Raise the slice receiving tray to its most upward position. Set the receiving tray index to the desired number of slices. Adjust the slice thickness knob under the meat table for the desired slice thickness. Turn on the on/off power switch. The machine will run until the desired number of slices have been cut and then shut off automatically.

Remove slice stack from the receiving tray. Raise the receiving tray to its highest position and turn the automatic shut off switch to the on position. The machine will continue in this manner until the entire loaf of product has been sliced.

Slide the gripper assembly all the way to the right. Raise the gripper control knob to release the end piece of the product and repeat the above.

## MODEL 180GS

Rotate the flywheel by hand in a clockwise direction to bring the table to the full extent of its travel toward the operator (see illustration #3) release the feed roller latch and move the gripper assembly to the right away from the knife as far as it will go. Raise the gripper control knob to retract the gripper

needles. Place the product against the back of the meat table and against the front of the gripper assembly. Move the gripper control knob down to engage the gripper needles in the product; re-engage feed roller latch. Slide the gripper and product to the left by turning feed screw knob counter-clockwise so that the product has raised the hold down fingers and is approximately to the edge of the table. Adjust the hold down finger tension by moving the hold down finger adjusting lever upward until a reasonable pressure is applied to the product. The tension required varies with the product being sliced, but a little experience will show the correct setting for each product. Do not apply too much tension since this will compress the product and cause uneven slicing.

The conveyor attached to the model 180GS is designed to provide a shingling function and a grouping function.

The amount of overlap in the shingling operation is controlled by the handle protruding through the bottom of the conveyor control box. The shingling indicating plate moves past a pointer in the window in the top of the conveyor control box. The numbers on this indicating plate are for reference only.

The conveyor can be controlled to provide groups or stacks of product with a predetermined number of slices. The grouping control is the round knob that protrudes through the front of the conveyor control box. The group indicating plate moves past a pointer in the window in the top of the conveyor control box and the numbers on this indicating plate correspond to the number of slices in the group or stack. In order to stack slices it is necessary to adjust the shingle control to the off position. However, counted groups of shingled slices may be obtained by utilizing both shingling and grouping controls at same time.

The slice thickness control located under the meat table should be adjusted to provide the proper slice thickness. The numbers on the knob of this control are for reference only.

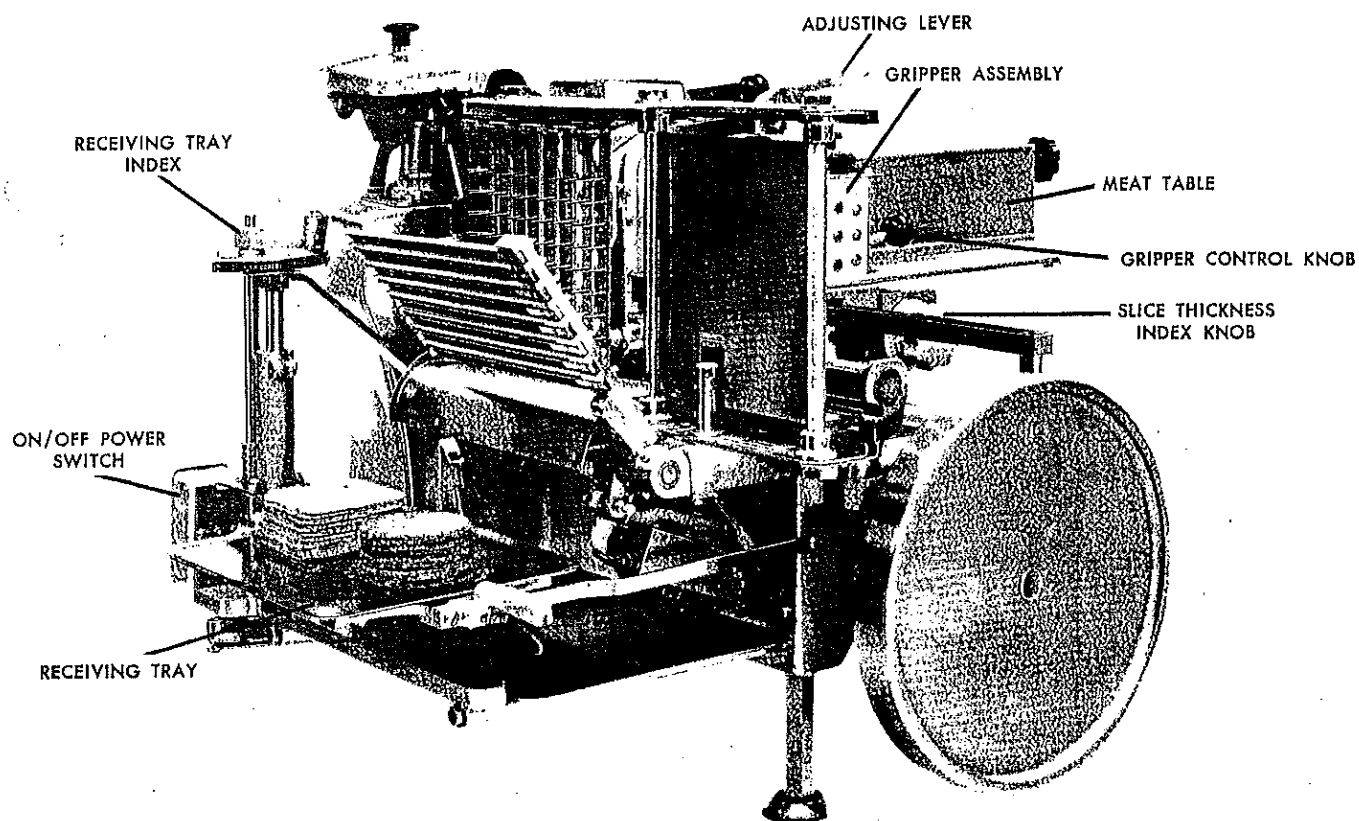


Illustration #1

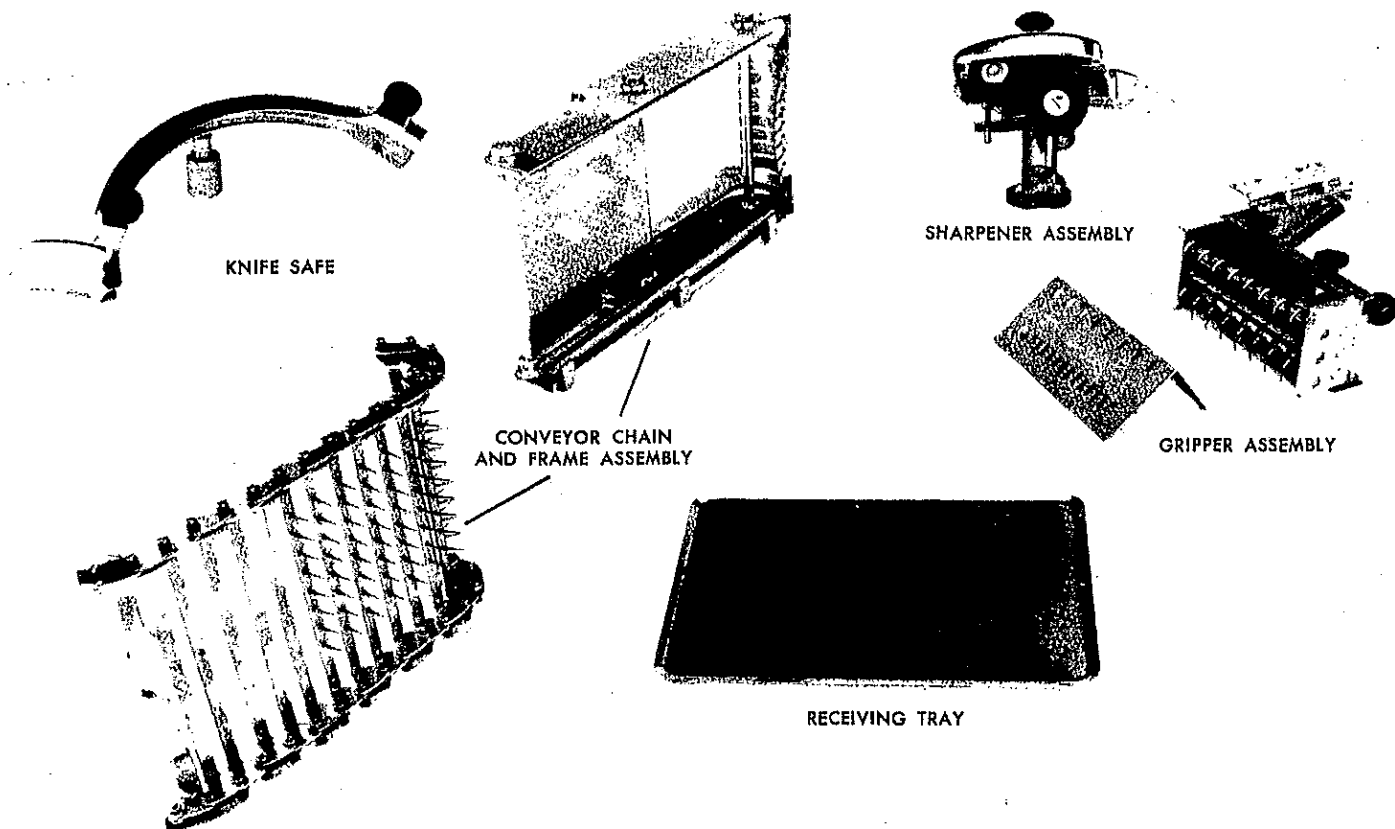


Illustration #2



## CLEANING INSTRUCTIONS MODELS 180D AND 180GS

**CAUTION:** BEFORE CLEANING, be sure to disconnect the machine from the electric power source.

### MODEL 180-D

To facilitate cleaning, the following assemblies should be removed from the machine: (See illus. #2).

#### 1. Conveyor Chain & Frame Assembly

To remove this assembly, loosen the clamp screw in the top of the conveyor driving lever and remove upper stud and block assembly. Slide the conveyor out of the conveyor frame. Remove the two retaining studs using a pin punch or small diameter rod for leverage. The conveyor frame will now lift off of the machine.

#### 2. Sharpener Assembly

To remove the sharpener assembly, simply lift up on the sharpener knob and rotate the sharpener assembly to align the notch in the retaining collar to clear the retainer. The assembly will lift clear of the machine.

#### 3. Gripper Assembly

To remove the gripper assembly, loosen the two black plastic thumbscrews located on the feed roller assembly and lift out the gripper assembly. The two black plastic thumbscrews on top of the gripper assembly should be loosened and the front cover of the gripper removed.

#### 4. Knife Safe

To remove the knife safe, loosen the two black plastic thumbscrews and lift off the knife safe. **CAUTION:** With the knife safe removed, the cutting edge of the knife at the rear of the machine is exposed and represents a cutting hazard. Replace the knife safe immediately after cleaning.

#### 5. Receiving Tray

To remove the receiving tray, remove the three black thumbscrews from the underside and lift the receiving tray off.

The parts which have been removed can be washed in a sink with hot water and detergent. After washing and rinsing thoroughly, the parts should be sanitized according to the local health regulations.

The machine should be washed down with a solution of hot water and detergent. Use a detergent that will not adversely affect stainless steel, aluminum, nickel, chromium, or tinned finish. The use of a commercial spray cleaning apparatus is also permissible.

To clean the knife, fold a towel in several thicknesses to form a pad. This pad should be moistened with the detergent solution. Keeping the fingers well away from the knife edge, rub the surface of the knife from the center out to the edge.

Follow up the cleaning with a spray of Berkel U.S.D.A. Accepted Food Machine Oil. This will protect and lubricate the moving parts.

To reassemble the machine, follow the disassemble instructions in reverse order.

When reassembling the conveyor, be sure to oil all links and rollers liberally top and bottom.

Before tightening conveyor frame mounting studs, position the knife shield close to the knife—but not touching it.

The sharpening stones must be kept clean in order to do a good job of sharpening the knife. Stones clogged with fats and grease will not cut. To clean the sharpener stones, rub briskly with a small, stiff, bristled brush dipped in a strong ammonia solution.

### MODEL 180-GS

The method for cleaning the Model 180-GS is identical with the Model 180-D, with the exception of the receiving tray. The receiving tray is replaced by a conveyor system.

### CONVEYOR

To clean the conveyor, first release the belt tension by lifting up on the conveyor tension lever. (See illus. #3) The belt can be lifted clear of the rollers to facilitate cleaning of the rollers and the underside of the conveyor belt.

## LUBRICATING INSTRUCTIONS 180D AND 180GS

Use only Berkel U.S.D.A. Accepted Food Machine Grease and Berkel U.S.D.A. Accepted Food Machine Oil to lubricate this machine.

Using the grease gun and grease provided, grease each fitting (as indicated in illus. #4 and #6) daily. Using oil provided, oil oilers as indicated in this illustration daily.

It is most important that the machine be given a good lubrication after wash down. The Berkel Food Machine Oil is odorless and tasteless, so it can be used liberally on any part of the machine. A spray down with Berkel Oil, after cleaning, makes the machine much easier to clean the next time.



## SHARPENING INSTRUCTIONS

A sharp knife is necessary to produce a good slice of product. To keep your knife sharp, it should be sharpened at least once a day and more often if you have heavy production going through your machine. To sharpen your knife, follow these simple instructions.

1. Clean any grease or fats from the knife. (See cleaning instructions).
2. Switch off the machine. Lift sharpener assembly (See illust. #6) by grasping the sharpener knob and lifting straight up until the sharpener assembly engages a limit stop. Rotate the sharpener assembly counterclockwise until a rotation stop is engaged. Lower the sharpener assembly into the sharpening position.
3. Switch on the machine.  
**CAUTION:** The cutting edge of the knife is exposed and does present a cutting hazard. Move the sharpening lever to the left away from the knife. This will engage the sharpening stones with the knife. Hold in this position for approximately (5) forward and backward movements of the meat table. This should put a good edge on the knife edge, for a longer period of time, will simply wear the knife and will not produce a sharper edge. Switch off the machine.
4. Clean any sharpening residue from the knife and meat table area.
5. Return the sharpener assembly to its stored position. (Follow Step #2 in reverse order).

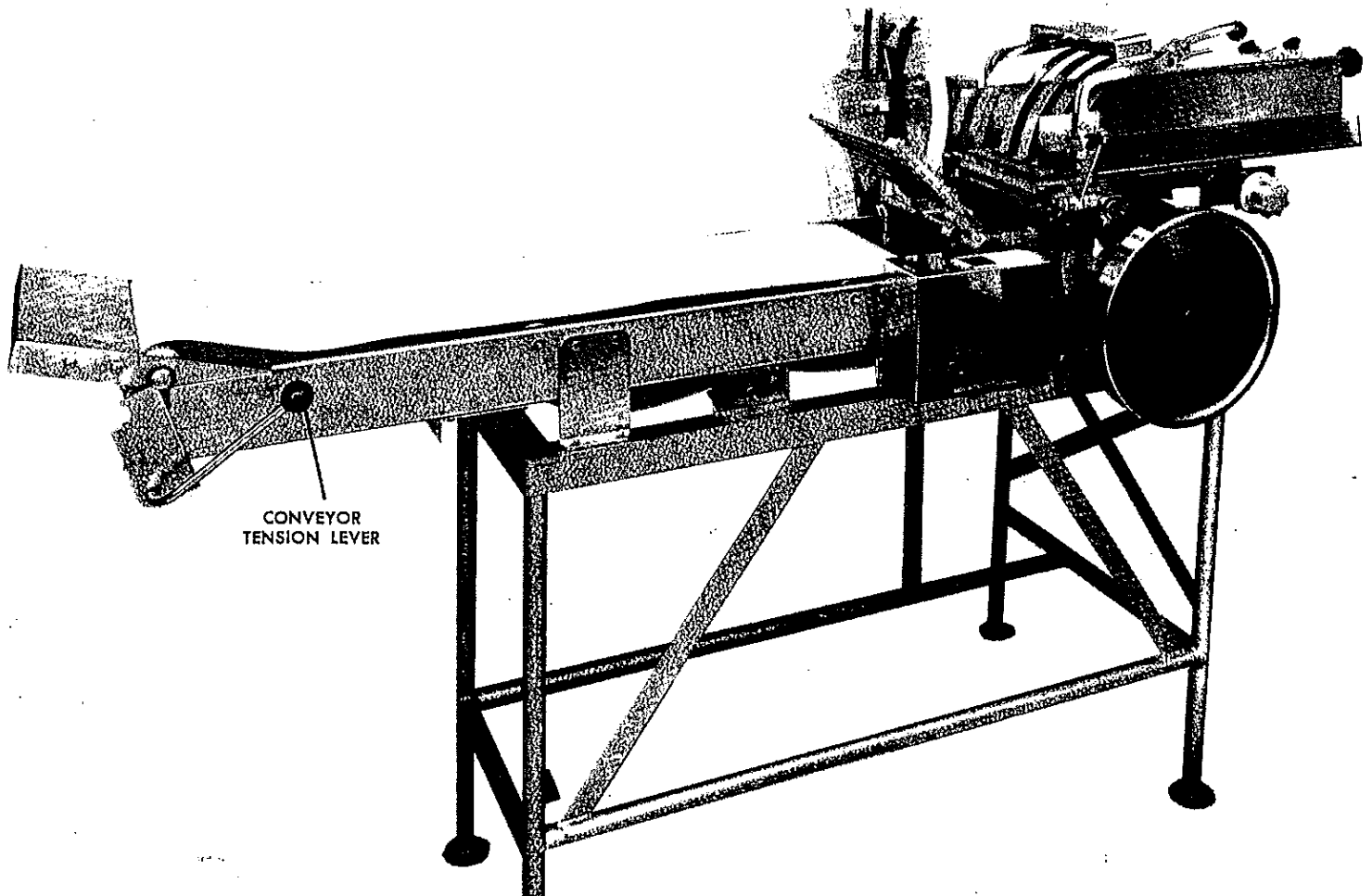


Illustration #3

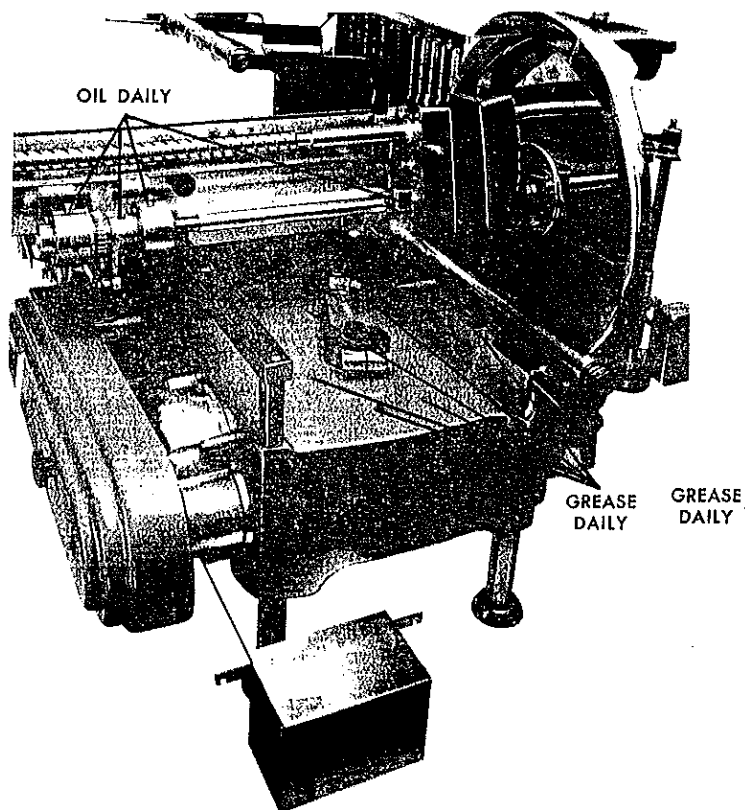


Illustration #4

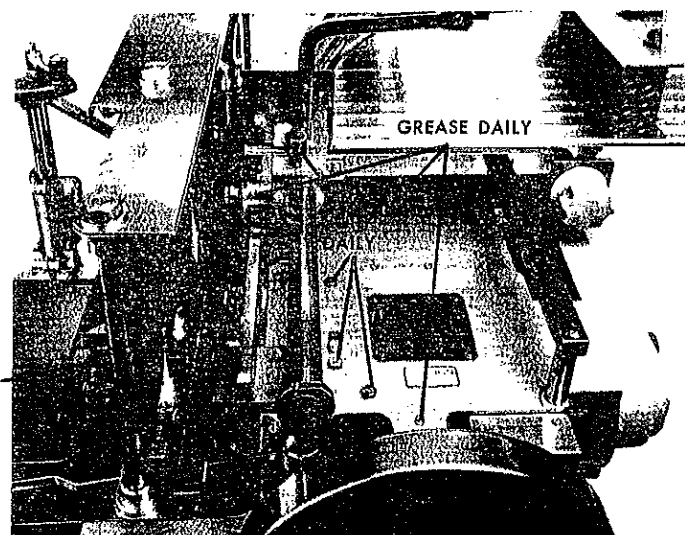


Illustration #5

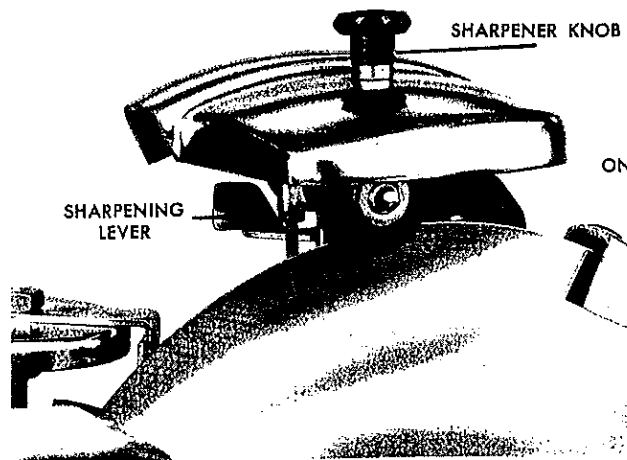


Illustration #6

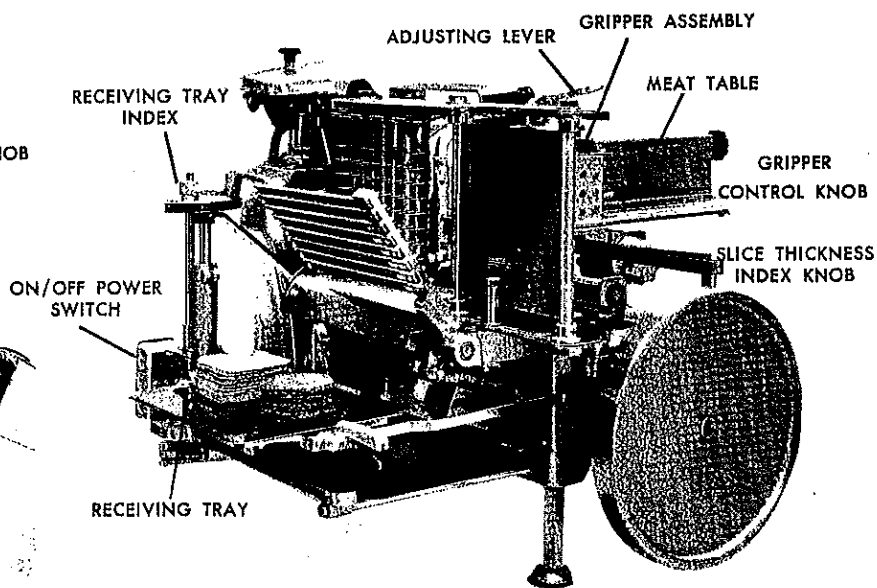


Illustration #7