OPERATION

MODEL 4246
MIXER-GRINDER

4246S STANDARD (5 HP/1 HP)

ML-134216

4246HD HEAVY DUTY (7.5 HP/1 HP)

ML-134214

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Operation and Care of the MODEL 4246 MIXER-GRINDER

SAVE THESE INSTRUCTIONS

GENERAL

The Model 4246 Mixer-Grinder is designed to use #32-size knife and plate assemblies (not included with the unit).

The Model 4246 is equipped with two drive systems. A 1-HP motor drives the heavy-duty steel mixing arm. A 5-HP motor drives the grinder worm in the Standard 4246S unit. There is a 7 1/2-HP motor, specifically powered for grinding mixed fresh and frozen meat in the Heavy-Duty 4246HD. The data plate is marked 6 HP (total) for the 4246S and 8 1/2 HP (total) for the 4246HD.

The exclusive Hobart design #46 Wedge cylinder grinding end (Fig. 1) speeds product from hopper to grinding end by pulling pieces of meat through the large upper opening of the cylinder.

The 4246 Mixer-Grinder may be ordered with any of the following options and/or accessories:

- Pneumatic foot switch (can be added at any time)
- Nonadjustable legs with casters
- Adjustable legs with casters in two different height ranges

The hopper lid is designed to open either from the left or the right, depending on your needs. Contact your Hobart representative for further information.

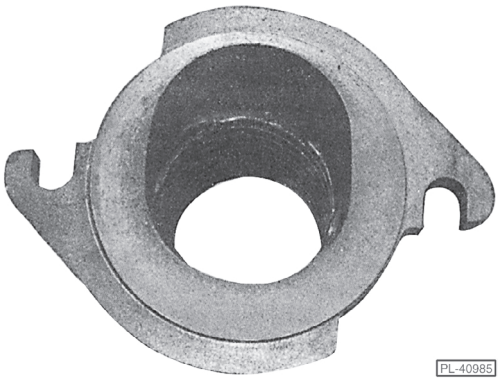

Fig. 1

The mixing arm rotates at 23 rpm and the grinder worm at 216 rpm. The 4246 Mixer-Grinder hopper has meat capacity up to 140 lb (64 kg), depending upon the type of product. It has a grinding rate of 55 to 60 lb (25 to 27 kg) of fresh boneless beef per minute, first or second cutting through a 1/8" plate, and a grinding rate of 60 to 65 lb (27 to 29 kg) of fresh boneless pork per minute, second cutting through a 3/16" plate. The 4246HD unit is powered for processing frozen meat tempered to 26°F (-3°C) or higher; the meat can be in flake or stick form.

INSTALLATION

UNPACKING

Immediately after unpacking the mixer-grinder, check for possible shipping damage, If the mixer-grinder is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

Remove the packing box by loosening and removing the four bolts through the wooden skid.

To set up the unit, follow the order of assembly below:

1. Legs, shipped in a separate box from the unit, require a $^{15}/_{16}$" socket with torque to 50 ft-lb.
2. Lower side panels are packed on top of unit.
3. Remove the spanner wrench and the meat deflector, located inside the hopper.
4. Pneumatic foot switch, if ordered, is shipped in a separate box.

Already assembled within the unit are the conveyor screw, mixing arm and cylinder. Remove the shipping plate and rubber spacer from the chopping end and replace with your #32 knife and plate assembly, not supplied.

LOCATION

Prior to installing the mixer-grinder, verify the electrical supply to make sure that it agrees with the specifications on the machine data plate, which is located under the hopper on the right.

LEVELING

Level the mixer-grinder, both front-to-back and side-to-side, by loosening the two set screws on the caster/leg shaft. Tighten both set screws when level.

LUBRICATION

The mixer-grinder is shipped with oil already installed. If oil loss is observed, the oil levels of both transmissions should be checked prior to operation. Contact a local Hobart Service Office.

PNEUMATIC FOOT SWITCH

To install the pneumatic foot switch:

1. Remove screws from the lower front panel.

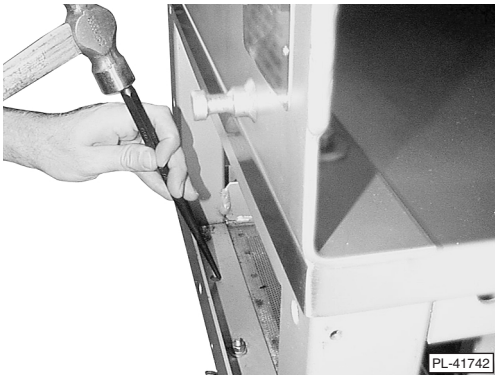

Fig. 2

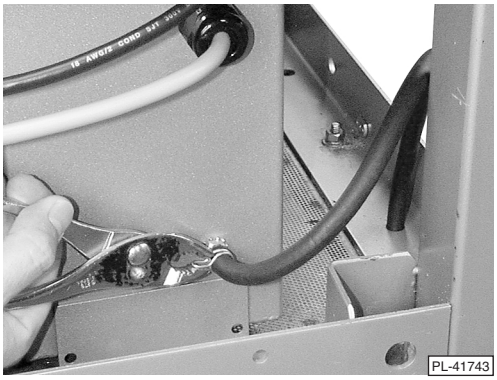

Fig. 3

2. On the front of the machine, locate the lower frame rail; approximately 4" (10.2 cm) from the left side, is a knockout hole for the foot switch control hose. Using a hammer and punch (Fig. 2), tap sharply to remove knockout piece in the sheet metal just beneath the frame rail.
3. Using pliers remove small pinch clamp from hose, save clamp.
4. Thread hose up through knockout hole (Fig. 3).
5. Slide pinch clamp onto hose approximately 2" (5.08 cm) from end of hose.
6. Route the hose around left corner of the control box. Avoid kinking the hose during installation.
7. A small metal nipple is located on the left side of the control box. Remove the protective cap and push hose tightly over the metal nipple.
8. Slide the clamp up the hose and place it within 1/4" (0.653 cm) of the hose end (Fig. 3) to ensure a proper seal.

NOTE: Be absolutely sure hose and clamp are firmly secured to nipple; a loose fit may cause foot controls to malfunction.

9. Reinstall lower front panel with six screws.

ELECTRICAL

WARNING: ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER LOCAL ELECTRICAL CODES.

The mixer-grinder is provided with a cord and plug and only requires that it be connected to an appropriately sized, grounding-type receptacle. Refer to the machine data plate.

CHECK MOTOR ROTATION

With the grinder cylinder in place and the hopper lid closed, check the rotation. Standing in front of machine, push the MIX/GRIND START button. Check that the mixing arm and worm rotate counterclockwise; press the STOP button to stop rotation.

If the mixing arm and worm do not rotate counterclockwise, correct the rotation using the following procedure:

1. Disconnect the electrical power supply and interchange any two power supply leads at the receptacle.
2. Reconnect the power supply and push the MIX/GRIND START button.
3. Verify that both the worm and the mixer arm rotate counterclockwise when viewed from the front of the machine.
4. Press the STOP button to stop rotation.

OPERATION IN TANDEM

When the 4246 is used in tandem as a first-cut machine, a special adjusting ring is required. When ordering side-feed adapters for non-Hobart grinders, specify plate size and type. When ordering adjusting rings for Hobart grinders, specify grinder size.

OPERATION

CONTROLS - FIG. 4

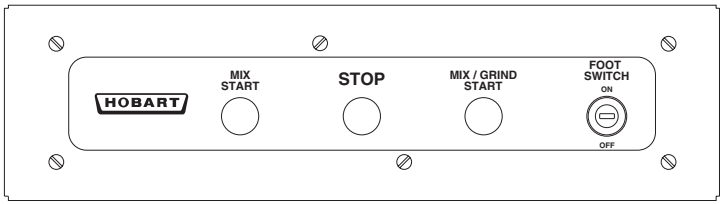

Fig. 4

MIX START	-	Starts the mixing arm.
STOP	-	All operations will be stopped.
MIX/GRIND START	-	Operates both the mixing arm and the conveyor screw.
FOOT SWITCH ON	-	The foot switch is used to operate the Mix/Grind mode only. The MIX START and GRIND START buttons are inoperable.
FOOT SWITCH OFF	-	All buttons are operable.

NOTE: If the foot switch is in the ON position, pressing the STOP button will stop the machine for as long as the button is held down.

WARNING: IF FOOT CONTROL IS DISASSEMBLED FOR CLEANING OR FOR REPAIR, THE UNIT MUST BE COMPLETELY REASSEMBLED AS MANUFACTURED PRIOR TO CUSTOMER USE.

ASSEMBLY AND USE

Do not use a plate with hole size smaller than $^{3}/_{32}$".

Before using the grinding cylinder, take it apart and wash it thoroughly. (See Cleaning instructions.)

Hand-tighten the end ring. Overtightening will damage unit.

The Wedge cylinder is marked TOP and BOTTOM. Before operating, be sure TOP is visible.

The knife and plate need some preliminary lubrication: rub tallow or mineral oil over the cutting surfaces of these parts. Knives and plates must be sharp and true for proper cutting action. The two studs on the front of the hopper allow storage of the spanner wrench and the foot control.

The Model 4246 hopper has a normal total capacity of 140 lb (63.5 kg), depending on the type of meat or product to be processed. Meat may be mixed in the hopper for any desired length of time. During the Mix-Only period, the mixing arm operates; and the hopper conveyor screw does not rotate. Continuous self-feeding occurs along with grinding in the Mix/Grind operation.

To shut hopper lid, lift the locking catch on the front hinge while holding the lid itself with your other hand.

GRINDING PROCEDURE

First Grind . . .

Fill hopper and close and latch the hopper lid. Overfilling will bend the hopper lid and may cause the interlock to open the electrical circuit.

Push MIX/GRIND START button to start grinding. Press STOP button to stop grinding.

Second Grind . . .

Fill hopper and close and latch the hopper lid. Press MIX START button. After desired mixing, press the STOP button. Then, press the MIX/GRIND START button to start grinding, press the STOP button to stop grinding, or activate and use the optional accessory Foot Switch.

MAINTENANCE

WARNING: DISCONNECT THE ELECTRICAL POWER TO THE MACHINE AND FOLLOW LOCKOUT / TAGOUT PROCEDURES.

CLEANING

The Model 4246 Mixer-Grinder is designed for easy cleaning. Stop the grinder and unplug electrical power source before cleaning or servicing. The following components must be removed when cleaning the mixer-grinder: mixing arm, end ring, knife, plate, cylinder and conveyor screw. The grinder attachment is easily cleaned.

1. Use spanner wrench to loosen the adjusting ring and to withdraw the plate, knife and conveyor screw.
2. Inside the hopper, remove the rubber seal at the drive end of the conveyor screw. Grasp the outer flange or use a dull screwdriver tip to pull the seal out.

3. Loosen the two retaining nuts, and remove the mixing arm pilot bushing assembly. Rotate and remove the bushing retainer. Disengage and pull mixing arm from the square drive and lift the arm from the hopper.
4. Wash machine with hot water or steam. When using detergents and sanitizers, follow manufacturer's instructions. Rinse with clear water. Allow to air-dry.
5. When mixer-grinder is clean and dry, apply a light coat of food-grade mineral oil to the cylinder, adjusting ring, knife, plate and worm.
6. Assemble mixing arm, cylinder, end ring, knife, plate and conveyor screw into mixer-grinder.
7. Reconnect electrical power supply.

HEATER

The mixer-grinder is equipped with heaters for the electric control box and operator panel to keep the controls dry. These are automatically on when the unit is electrically connected. The mixer-grinder should always be connected except when cleaning or disassembling unit.

LUBRICATION

Both motor bearings are prelubricated and sealed. No further lubrication is required.

SERVICE

Contact your local Hobart Service Office for any repairs or adjustments needed.

TROUBLESHOOTING

Problem	Possible Cause
Machine will not run.	1. Hopper lid not closed completely. 2. Plug disconnected from receptacle. 3. Circuit breaker tripped.
Poor grind result.	1. Adjusting ring loose. 2. Knife or plate dull. 3. Knife and plate not seated properly. 4. Plate stud broken. 5. Knife broken.

SERVICE

Contact your local Hobart Service Office for any repairs or adjustments needed on this equipment.