

## MG1532 & MG2032 MIXER-GRINDERS

#### **MODEL**

MG1532 ML-134099	7.5 HP Grind Motor + 1 HP Mix Motor
MG1532 ML-134103	5 HP Grind Motor + 1 HP Mix Motor
MG1532 ML-134100	7.5 HP Grind Motor + 1 HP Mix Motor w/ Side Feed
MG2032 ML-134104	7.5 HP Grind Motor + 1 HP Mix Motor
MG2032 ML-134105	7.5 HP Grind Motor + 1 HP Mix Motor w/ Side Feed

## Previous models covered by this manual:

MG1532 ML-104878	7.5 нр Grind Motor + 1 нр Mix Motor
MG1532 ML-104883	5 нР Grind Motor + 1 нР Mix Motor
MG1532 ML-104879	7.5 HP Grind Motor + 1 HP Mix Motor w/ Side Feed
MG2032 ML-104884	7.5 нр Grind Motor + 1 нр Mix Motor
MG2032 ML-104885	7.5 нр Grind Motor + 1 нр Mix Motor w/ Side Feed



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MODEL MG1532 MIXER-GRINDER



**MODEL MG2032 MIXER-GRINDER** 

# Installation, Operation, and Care of MG1532 & MG2032 MIXER-GRINDERS

### SAVE THESE INSTRUCTIONS

## **GENERAL**

The MG1532 & MG2032 Mixer-Grinders are designed to use a #32(42/46) size knife and plate (knives and plates are available at extra cost but not included with grinder). Do not use a plate with hole size smaller than 3/32".

The MG1532 Mixer-Grinder is equipped with either a 5 or  $7^{1/2}$  HP Grind Motor and a 1 HP Mix Motor. The MG2032 Mixer-Grinder is equipped with a  $7^{1/2}$  HP Grind Motor and a 1 HP Mix Motor. On all models, the worm rotates at 216 RPM and the mix arm rotates at 23 RPM. The MG1532 with 5 HP Grind Motor is for fresh meat only, not for frozen product.

The inclined hopper permits lower, easier loading while the tilted worm provides a convenient output height.

Releasing the latch handle allows the hopper guard (lid) to open easily — torsion springs counterbalance the lid's weight.

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

The MG1532 & MG2032 Mixer-Grinders may be ordered with any of the following options and/or accessories:

- Caster sets and / or adjustable leg sets. The MG1532 & MG2032 Mixer-Grinders are equipped with flexible power supply cord and plug. Either a receptacle or a pendant type connector is available. The receptacle requires a type FD electrical box (not supplied).
- 2) Pneumatic foot switch accessory (can be easily added at any time).

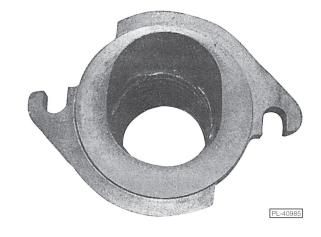


Fig. 1

3) The hopper side-feed inlet can be ordered (and factory installed) for the right side of the hopper to allow product from a companion first cut grinder to feed directly into the hopper. A plug assembly for the side feed inlet, a drip cup, and adapter ring for the first-cut grinder are available accessories.

The MG1532 hopper can hold up to 150 pounds of fresh meat. The MG2032 hopper can hold up to 200 pounds of fresh meat. The MG1532 & MG2032 Mixer-Grinders can grind at a rate of 55 to 60 pounds of fresh boneless beef per minute, first or second cut through a  $^{1}/_{8}$ " plate. Pork can be ground first cut through a  $^{3}/_{4}$ " breaker plate and second cut through a  $^{3}/_{16}$ " plate at 60 to 65 pounds per minute. Up to 60 pounds of frozen meat per batch (on units with  $7^{1}/_{2}$  HP Grind Motor only) can be ground from flake or stick form when tempered to  $26^{\circ}$ F or higher and first grind is through a  $^{3}/_{8}$ " or larger plate.

## INSTALLATION

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

Prior to installation, test the electrical service to make sure it agrees with the specifications on the machine data plate (Fig. 5).

#### CASTER SETS AND / OR ADJUSTABLE LEG SETS

With the mixer-grinder securely elevated using the base frame for support, bolt the caster assemblies through the corner holes using four hex-head 5/16-18 bolts, lockwashers, washers, and nuts for each caster, provided.

- When equippped with two Fixed and two Swivel casters, install Fixed Casterswithout-Brake on rear corners of the machine and Swivel Casters-with-Brake on front corners.
- On machines with four identical legs or casters, install one on each corner.

All casters and leg sets use washers under the flange and above the machine base frame. Insert bolt up through the flange from the bottom with the lockwasher next to the nut on top (Fig. 2).

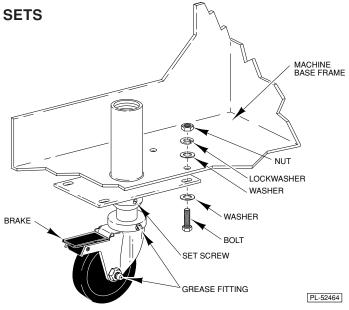


Fig. 2

#### **LEVELING**

Level the mixer-grinder, both front-to-back and side-to-side, by loosening the two set screws on the caster shaft (Fig. 2) and screwing the caster up or down. 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 Hobart Service.

#### PNEUMATIC FOOT SWITCH

To install the pneumatic foot switch, remove the lower front panel (6 screws). Remove the knockout from the bottom front floor panel inside the machine compartment (Fig. 3) and insert the tube from the foot switch through the knockout hole. Remove the cap from the barbed fitting at the bottom left side of the control box (Fig. 3) and connect the tube from the pneumatic foot switch onto the barbed fitting using the clamp provided. A pliers will be needed to squeeze the clamp open during installation. Avoid kinking the tube.

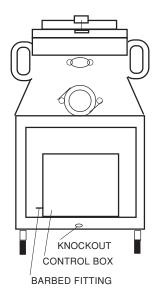


Fig. 3

#### **ELECTRICAL CONNECTION**

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

**WARNING**: DISCONNECT THE ELECTRICAL POWER SUPPLY AND PLACE A TAG AT THE DISCONNECT SWITCH INDICATING THAT YOU ARE WORKING ON THE CIRCUIT.

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 (Fig. 5) and Electrical Data, below.

#### **ELECTRICAL DATA**

Model	Horsepower	Volts / Hertz / Phase	Minimum Circuit Ampacity Maximum Protective Device AMPS	Receptacle	Plug
		208 / 60 / 3 built before October, 2000	30	w( O <sub>G</sub> 1) y z L21-30R	Plug: L21-30P
	7.5 HP Grind & 1 HP Mix	208 / 60 / 3 built after October, 2000 240 / 60 / 3	30	G ( ) Y ) Z ) L15-30R	Plug: L15-30P
		480 / 60 / 3	20	G(( ) Y ) L16-20R	Plug: L16-20P
MG1532	5 HP Grind & 1 HP Mix	208 - 240 / 60 / 1	30	L6-30R	Plug: L6-30P

Compiled in accordance with the National Electrical Code, NFPA-70, latest edition.

#### **CHECK MOTOR ROTATION** (Three-Phase Machines Only)

With the grinder cylinder in place and the hopper lid closed, check the rotation before making a permanent electrical connection by first pushing the MIX-GRIND START switch and then pushing the STOP switch (Fig. 4). The mixing arm and worm should both rotate counterclockwise, when viewed from the machine's front.

If the mixing arm and worm rotate clockwise, correct the rotation using the following procedure:

DISCONNECT THE ELECTRICAL POWER SUPPLY and interchange any two of the incoming power supply leads. Reconnect the power supply and push the MIX-GRIND START switch to verify that both the worm and the mixer arm rotate counterclockwise as viewed from the front of the machine.

#### **CONTROL BOX HEATERS**

The Mixer-Grinder has a heater in the control box and another heater in the front control panel to keep the controls dry. They are automatically ON when the machine is electrically connected. The Mixer-Grinder should always be connected EXCEPT when performing assembly, disassembly, cleaning, or maintenance of the machine. After cleaning, reconnect the electrical power supply.

## **OPERATION**

#### CONTROLS (Fig. 4)

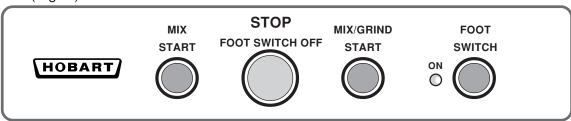


Fig. 4

MIX START Button— Starts rotating the mix arm. Use the Stop Button to stop mixing.

STOP Button — Turns the mixer-grinder off. Turns the Foot Switch off if it was on.

MIX/GRIND START Button — Starts rotating both mix arm and worm. Use the Stop Button to stop mixing and grinding.

FOOT SWITCH — When On, the Mix Start and Mix/Grind Start Buttons are inoperable and the accessory Foot Switch can be used to Mix/Grind ONLY. The indicator light shows when the Foot Switch is On. Push the STOP Button to turn the Foot Switch Off.

HOPPER LID INTERLOCK — An interlock switch requires the hopper lid to be closed before the machine can operate. Raising the hopper lid opens the electrical circuit and makes the machine inoperative.

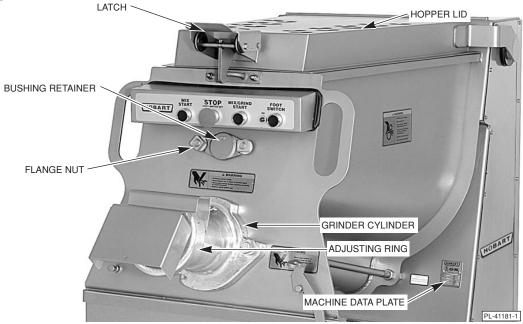


Fig. 5

#### **GRINDER ATTACHMENT**

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

The grinder attachment can easily be removed for cleaning (see Cleaning, page 8). Use the spanner wrench to loosen the adjusting ring and remove the adjusting ring, plate and knife. Next loosen, but do not remove the grinder attachment's two flange nuts, using the spanner wrench. Rotate the cylinder clockwise and remove the cylinder; then, remove the worm. At reassembly, install the worm and then the cylinder. Make sure TOP is visible on the cylinder and that the cylinder's flange nuts are tight before assembling the knife, plate, and adjusting ring. Use only the flange nuts provided. Two studs on the front of the machine allow storage of the spanner wrench and pneumatic foot switch.

The rubber seal at the drive end of the worm can be removed by hand for cleaning. Grasp the outer flange of the seal or use a dull screwdriver to pry the seal loose. Reinstall seal before installing worm.

Before using the grinder attachment, take it apart and thoroughly wash it. The knife and plate need some preliminary lubrication: Rub tallow or food grade mineral oil over the cutting faces of these parts. When assembling the knife, be sure to turn the cutting side towards the perforated plate. The notch on the circumference of the plate must fit over the pin in the cylinder. Knives and plates must be sharp and true for proper cutting action. Keep the grinder attachment in a clean and sanitary condition.

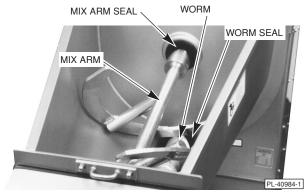


Fig. 6

#### **MIXING ARM**

Loosen the bushing retainer's two flange nuts and remove the bushing retainer (Fig. 5). Raise the hopper lid and pull the mixing arm from the square drive end, lifting the mixing arm from the hopper (Fig. 6). When reassembling, make sure TOP on the bushing retainer is "up" so the mixing arm runs straight between the round bushing and the square drive-end. Remove the mixing arm after disassembly of the grinder cylinder and worm. Reassemble the mixing arm before assembly of the grinder cylinder and worm.

#### **MIXING AND GRINDING**

The MG1532 has a hopper capacity of up to 150 pounds of fresh meat depending on the type of product. The MG2032 has a hopper capacity of up to 200 pounds of fresh meat depending on the type of product. Don't put frozen product in units with 5 HP Grind Motor.

Second cut meat may be mixed in the hopper for any desired length of time. During the MIX operation, the mixing arm rotates and the grinder worm does not. Continuous self-feeding occurs along with grinding in the MIX-GRIND operation. Mixing of uncut or unground meat is not recommended.

#### **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 Button to start grinding. Press STOP Button to stop grinding.

Second Grind . . .

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

#### **CLEANING**

**WARNING**: DISCONNECT THE ELECTRICAL POWER SUPPLY BEFORE CLEANING OR SERVICING THIS MACHINE.

In any cleaning operation after disconnecting the electrical power supply, seal the receptacle to prevent entrance of moisture. To make this seal on Hobart supplied receptacles and pendant connectors, place the cover cap into position and turn the screw type sealing ring clockwise.

Remove the following components when cleaning: Mixing arm, grinder adjusting ring, knife and plate. Remove the cylinder before removing the worm. (Also remove the side feed hopper plug, when used.) The method for removing these components has already been described (refer to Grinder Attachment, page 7). The mixing arm seal and the worm seal (Fig. 6) should be removed by hand for cleaning. Grasp the outer flange or use a dull screwdriver to pry the seal loose.

The machine can be washed down with hot water or steam as is customary in meat processing operations. When using detergents and sanitizers, follow manufacturer's instructions. Rinse with clear water. Allow to air dry.

After cleaning the machine, apply food grade mineral oil to lubricate the inside rim of the mixing arm seals and the worm seal where the mixing arm and worm will touch the seals. Reassemble the mixing arm seal, worm seal, mixing arm, and bushing retainer. To reassemble mix arm and worm seals . . . Align tab at bottom of each seal with notch at bottom of applicable seal hole in end wall of hopper. Arrow at top of seal points up. Squeeze sides of seal and push in. Push in top of seal. Make sure seals are properly seated.

After cleaning, a light coat of food grade mineral oil is recommended for the cylinder, adjusting ring, knife, plate, and worm — before reassembly.

## **MAINTENANCE**

**WARNING**: DISCONNECT THE ELECTRICAL POWER SUPPLY BEFORE CLEANING OR SERVICING THIS MACHINE.

#### LUBRICATION

Both motor bearings are pre-lubricated and sealed. No further lubrication is required.

#### **Gear Case for Mixing Arm**

Annually, or when needed, contact Hobart Service for lubrication maintenance.

#### **Gear Case for Worm**

Annually, or when needed, contact Hobart Service for lubrication maintenance.

#### **SERVICE**

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

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