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Precision Mixers

BUILT TO LAST BUILT TO LAST BUILT TO LAST BUILT TO LAST BUILT TO LAST BUILT TO LAST

Instruction Manual



V- Series Mixers

V-60 HD-60 V-80 V-80EL

Rev.4/24/24

Precision North America Food Machinery LLC.
60 Commerce Avenue, Albany, NY 12206

INDEX

Mixer Overview ---------- 04

Safety Guidelines ---------- 05

Quick Start Guide ---------- 06

Operating Instructions ---------- 07-15

Capacity Chart ---------- 11

Timer Instructions ---------- 15

Troubleshooting ---------- 16

Cleaning Instructions ---------- 17

Preventative Maintenance ---------- 18-21

Maintenance Log ---------- 22

Warranty Information ---------- 23-24

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Operating Instructions



V-80 EL CONTROL PANEL



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Operating Instructions

Safety Guidelines

WARNING

Read the OPERATION MANUAL before operating the mixer.
Disconnect power either through plug or breaker before cleaning or servicing the machine.
Always keep all hands, hair, clothing, and any loose articles away from moving parts.

Owners must ensure that anyone handling this equipment is at least 18 years old, properly trained, and have read and comprehended this handbook completely before allowing them to do so. This Manual alone does not replace proper training. Owners are responsible for ensuring that no unauthorized personal touch, clean, operate, or otherwise handle this equipment.
Do not operate this equipment if it, or the enviroment it is in, is not in good operating condition. Do not operate this equipment if there are parts missing.
Please see proper owners, operators, or trainers with any questions on how to operate or maintain this machine.

Precision North America Food Machinery, LLC is not responsible for any damages or harm done due to the negligence of the owners and operators of this machine. It is very important to follow safety guidlines and only use this machine for its intended use.

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Operating Instructions

Quick Start Guide

1. Place & Lock Bowl on Mixer While Bowl Arms are In the Down Position(pg. 3)
2. While Bowl is Still in the Down Position, Place Agitator onto Agitator Shaft
3. Put Ingrediants in Bowl
4. Raise Bowl All the Way Up with the Crank Handle & Wheel OR Electic Up Button
5. Gently Close Safety Cage
6. Set Desired Mix Speed
7. Set Timer To Desired time
8. Press the Green Start Button To Start Mixing.

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Operating Instructions
Safety Cage

Bowl Guard in the open position



To open the safety cage, hold the handle and gently move cage to the left.

Bowl Guard in the closed position



To close the safety cage, hold the handle and gently move cage to the right

Do not force cage to open or close farther than it naturally would stop. Doing so can damage the safety switch mechanism and can prevent the mxier from starting.

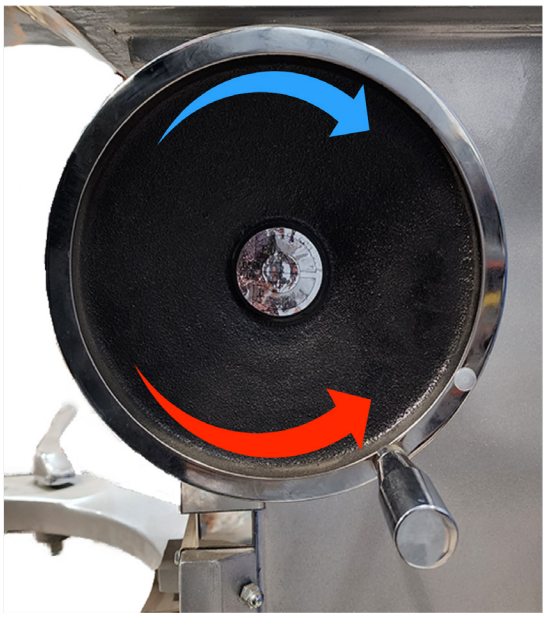
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Operating Instructions

Bowl Lift

MANUAL LIFT

Raise Bowl



Lower Bowl

Raising the Bowl

Turn wheel counter-clockwise to lower the bowl. It is necessary to lower the bowl to change agitators, this also makes the bowl more accessible for filling.
Please be sure to carefully lower bowl and to always have the bowl dolly sit under the bowl when lowering it. This will ensure bowl will not be lowered too far.,

Raising the Bowl

When raising the bowl turn wheel clockwise until it easily stops.



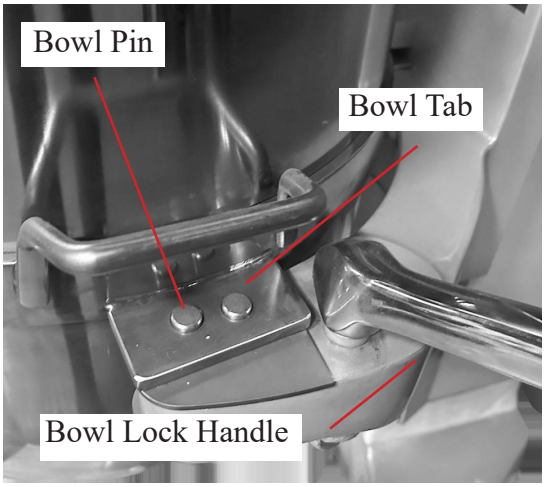
Push and Hold the Gray Up Button. Before lowering the bowl, be sure the locking bowl handles are not locked. Push and Hold the Gray Down Button to lower bowl.

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Operating Instructions

Bowl & Bowl Arm

To place bowl on mixer, lower the bowl arms down. place the bowl on the bowl arms by lining up the bowl pin holes to the pins



Pictured above: Bowl is NOT locked in

To lock bowl into mixer, pull bowl locks forward until they go over the bowl tabs.

Make sure bowl is locked before mixing


Pictured above: Bowl IS locked in

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Operating Instructions

Agitators



The **Beater** is commonly used for thin batters, cakes, and mashing potatoes

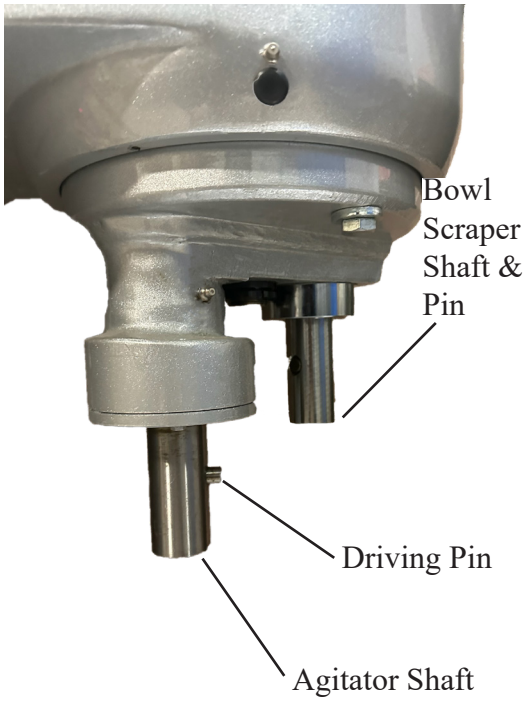


The **WireWhip** is best for whipping cream and beating eggs.



The **Dough Hook** is best used for heavy bread dough.

When placing the agitator onto the agitator shaft, the bowl must be in the **down** position and the safety cage **open**. Slip the agitator up the shaft and turn it until the driving pin in the shaft reaches the L-shaped slot in the attachment



Agitator Should be Removed after each batch is completed. Failure to do so can cause agitator to get stuck.

Operating Instructions

Adding Ingredients

WARNING

- Not Following the capacity chart and overloading may result in damages to the mixer. Any damage done due to overloading and not following the capacity chart will void the warranty.
- Make sure practice personal PPE and avoid inhaling any Flour and ingredient particles.
- Only add ingredients to bowl once it is on the mixer.

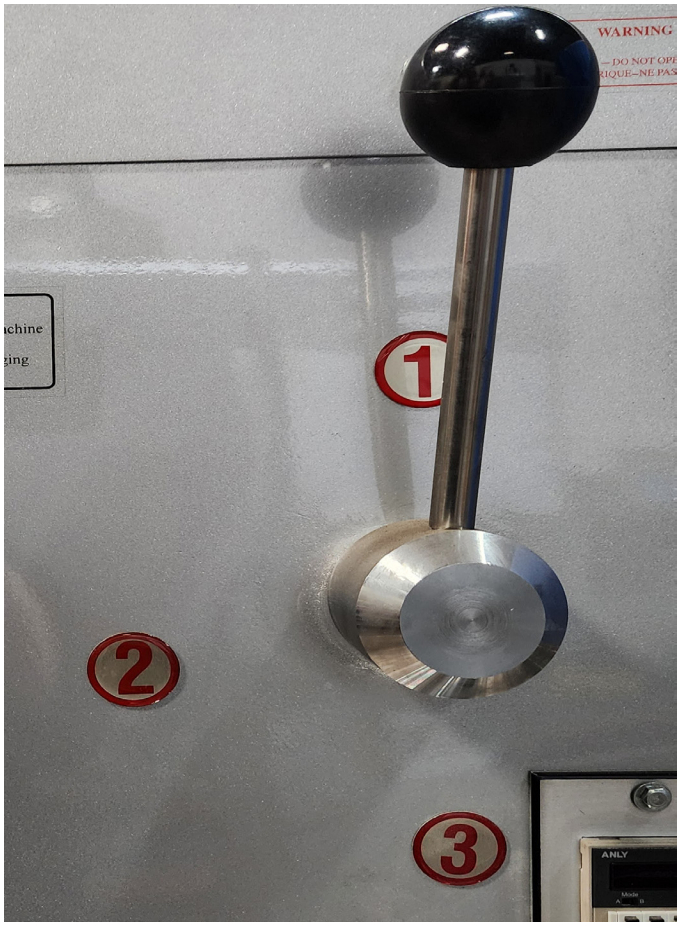
Capacity Chart

	Speed	Attachment	V-60	HD-60	V-80/(EL)
Cake (Sponge)		**Paddle**	45 lbs	-	90 lbs
Cake(Short)		**Paddle**	45 lbs	-	90 lbs
Cake(Pound)		**Paddle**	45 lbs	80 lbs	80 lbs
Cake(Cup)		**Paddle**	60 lbs	90 lbs	90 lbs
Cake(Layer)		**Paddle**	65 lbs	80 lbs	80 lbs
Cookies,Sugar		**Paddle**	40 lbs	-	60 lbs
Waffle Batter		**Paddle**	1/2 Bowl	1/2 Bowl	1/2 Bowl
Dough(pie)		**Paddle**	45 lbs	80 lbs	75 lbs
Dough(Bread or roll) 60% AR	**1**	**Hook**	50 lbs	90 lbs	80 lbs
Dough(Bread) < 60% AR	**1**	**Hook**	55 lbs	90 lbs	75 lbs
Dough(Pizza) 50% AR	**1**	**Hook**	70 lbs	80 lbs	75 lbs
Dough(pizza) < 50% AR	**1**	**Hook**	40 lbs	50 lbs	45 lbs
Dough(Donut) 65% AR	**1**	**Hook**	35 lbs	75 lbs	60 lbs
Icing(Fondant)		**Paddle**	26 lbs	-	66 lbs
Icing, shortening and sugar creamed		**Paddle**	45 lbs	60 lbs	60 lbs
Pasta		**Hook**	30 lbs	45 lbs	40 lbs
Mashed Poatoes		**Paddle**	40 lbs	50 lbs	45 lbs

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Operating Instructions

Mixer Speeds



To change speeds, first turn off the motor, and then move the shifter handle to the desired speed.
Use **3rd speed** for fast, light work as whipping cream, beating eggs, and mixing thin batters.
Use **1st speed**, or slow speed, for heavy mixtures, like bread dough etc.
Also use this speed for the food chopper Hub attachment.
In many mixing operations, it is customary to begin in 1st speed, then change to a higher speed as the work progresses.

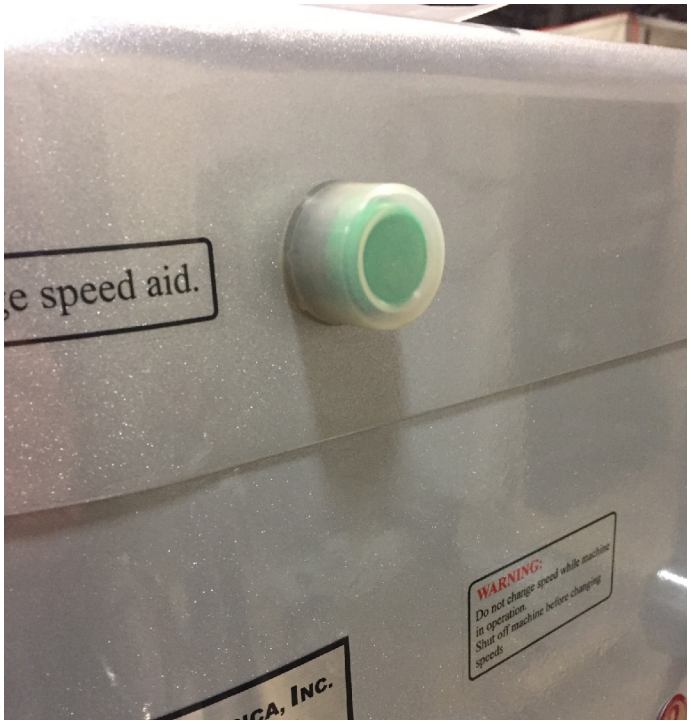
Never mix dough in 3rd speed. Pizza Dough should only be mixed in 1st speed.

Always turn off motor before changing speeds to avoid damaging gears

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Change Speed aid

Never change speeds while mixer is in operation!



NEW STYLE



OLD STYLE

Change speed aid is not used for every Shift! See Below..

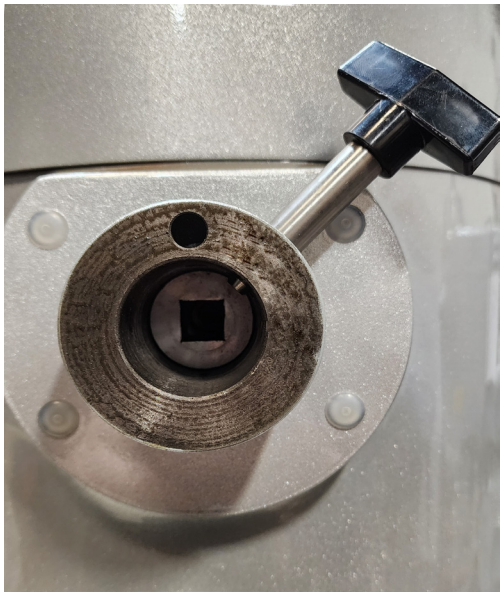
The change speed aid is there in case the mixer will not shift into desired position. Our mixers are gear to gear drive and have no clutches or shims or spacers. Because of this the transmission will stop with the gears teeth lined up over or under each other. This condition will not allow the mixer to change speed. In the event this occurs the change speed aid will roll the gear box slightly and allow you to shift.

Old style Change speed aid has a big black knob. Depress this inward as you shift and it will allow shifting. This may take a few pumps.
New style has a green button and it electrically assists the gearbox. Push the button once and release it.

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Operating Instructions

Hub Attachments



NEVER mix product in bowl while using hub.

To use attachment

- First make sure that mixer is off and not running.
- Remove the hub cover and thumb screw.
- Line up the attachment shaft to the Hub hole to insert.
- Twist thumb screw in and tighten until Attachment is secure.
- Be sure to lubricate attachment hub periodically with mineral oil.

Depending on attachment, use only the recommended speed.

Meat Grinder	Speed 1
Vegetable Slicer	Speed 1 or 2
Cheese Grater	Speed 1 or 2

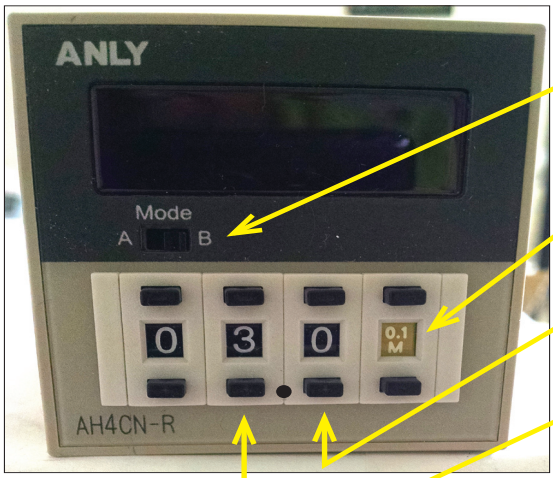
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Operating Instructions

Timer Instructions

Instructions for the Operation of the Digital Timer for the Model HD-60 Precision Mixer

The Timer example below is set for 3 minutes



Always run the timer in the B Mode setting on your dial

Always leave the .1 M setting on your dial.

Set your Fractional Timer Minutes here.
(.5) = 30 seconds

Set your Timer Minutes here.
(Pictured is 3 Minutes)

The Timer example below is set for 3 minutes and 30 Seconds



The Timer example below is set for 12 minutes



Troubleshooting

Mixer wont turn on:	Action
Check breaker, flip breaker off then on.	Try to start mixer
If mixer has a removable plug, unplug then plug back in.	Try to start mixer
Open then close cage.	Try to start mixer
Lower the bowl 4-5 inches and roll it back up.	Try to start mixer
Change the timer setting from seconds to minutes or hours.	Try to start mixer

Other Troubleshooting	Action
Squeaky Noise and mixer mixing slow or not at all	Belts are loose or have slipped. Adjust belts or call technician
Mixer wont change speed	Mixer may be inbetween gears. Use shift assist and try to move speed handle again. Call technican if not resolved.
Bowl lift hard to roll up or down	Bowl cup and/or slides need to be lubricated with mineral oil and/or cleaned. Refer to PM instructions.
Grinding noise while mixing	Planetary may need to be greased. Refer to PM instructions.
Agitator falls off shaft	Mixer may have been installed incorrectly. Contact electrician.

Call your service provider or Precision North America if you need further technical assistance.

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Preventative Maintenance

CLEANING

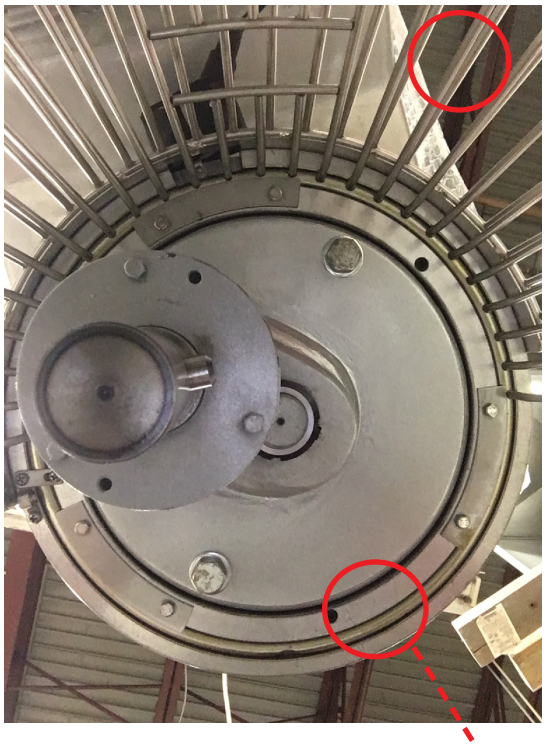
Machine should be kept clean- **Use mild soap and water (do not hose down)**

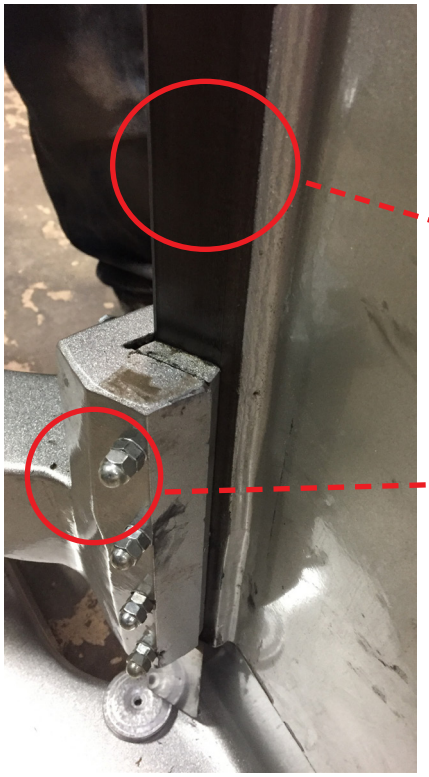
Use of any factory unauthorized cleaning solution may result in mixer paint and finish to be compromised.

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

Any areas of the mixer that could come in contact with product during mixing should be cleaned at least daily. These areas include but are not limited to:

Safety Guard: Clean debris inbetween metal spokes of the cage as well as area where cage is attached. Ensure there is no product left in planetary area underneath where safety cage is connected. Doing so will ensure proper Safety Cage operation and sanitation.





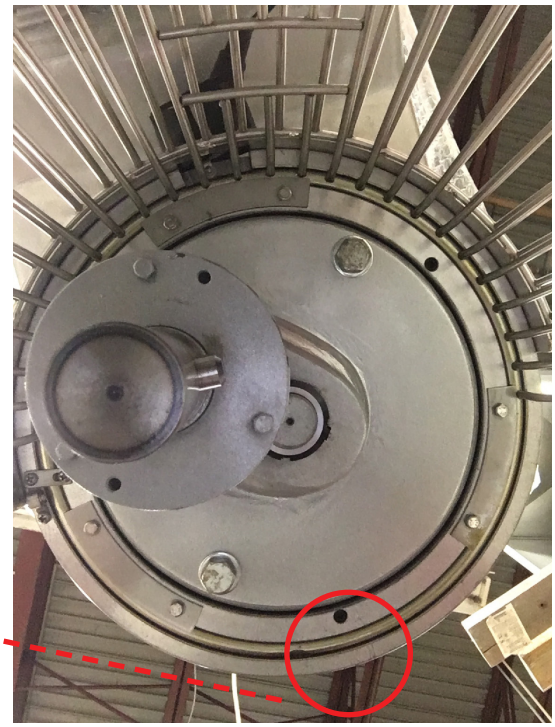
Bowl Slides: In the event product gets onto area where Bowl Arms either raise or lower the bowl, it could inhibit smooth operation. Clear debris and re apply Mineral oil if needed. (see Lubrication page for more detail)

Preventative Maintenance

LUBRICATION



•A grease fitting is provided for the planetary and should be lubricated after approximately 40 hours of use. (Food grade Lithium grease)

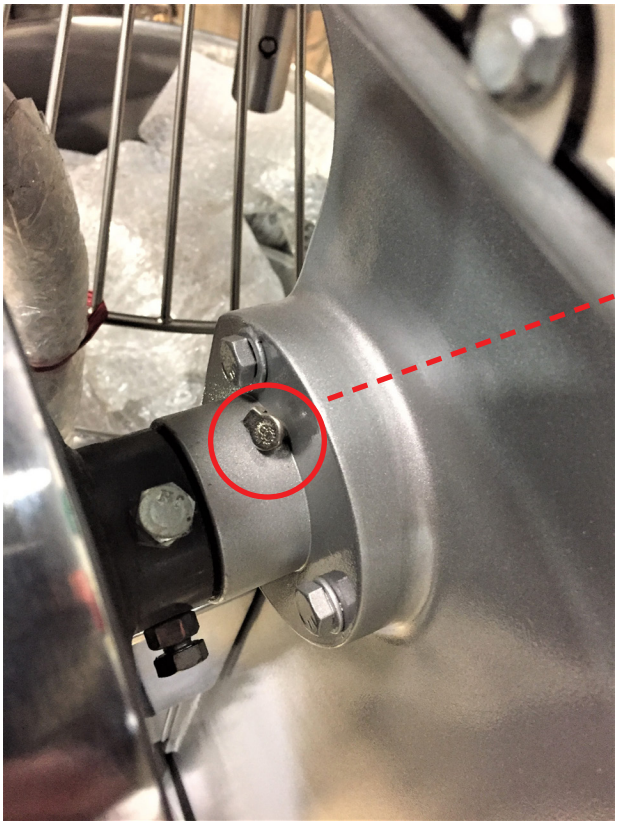


•Lubricate the rotating cage as needed with petroleum jelly or mineral oil only.

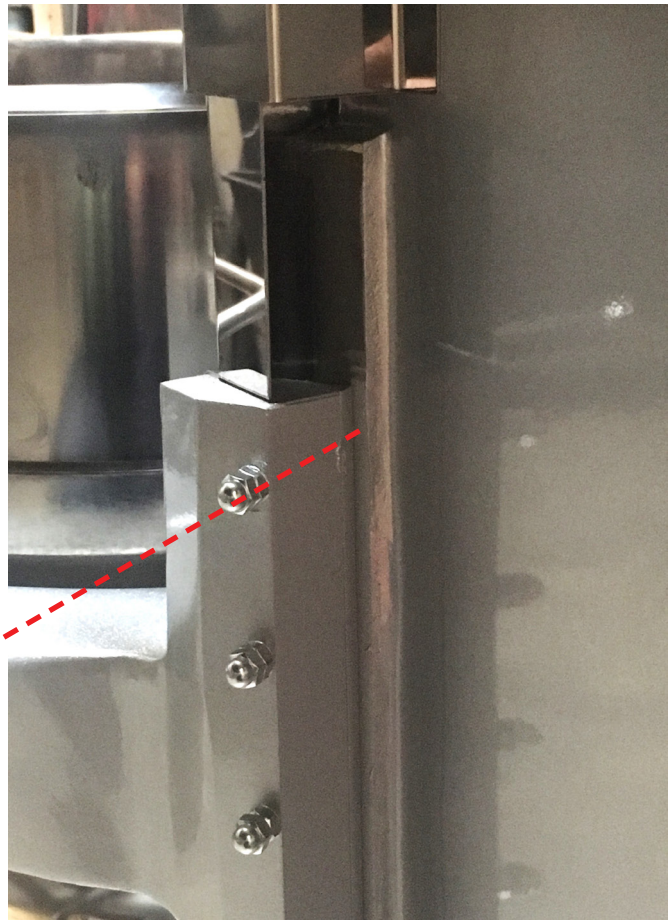
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LUBRICATION CONTINUED

Lubricate as needed NOT every time it's used.



Fitting for lubricating the hand crank (**Mineral Oil**).



Before applying mineral oil, make sure bowl slides are clear of debris. Apply two small drops of mineral oil to each slide weekly or as needed.

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Top cover removal

REMINDER!

Power must be disconnected or breaker turned off and properly locked and tagged out!

Old Style Black Knob



- Remove the change speed handle
- Use a 9/16” wrench to hold the lock nut
- And unscrew the black depression handle.
- Remove the lock nut
- Remove the (2) top cover screws (10 mm)
- Lift the cover from the shifting side and remove.
- Set cover aside

New Style Green Button



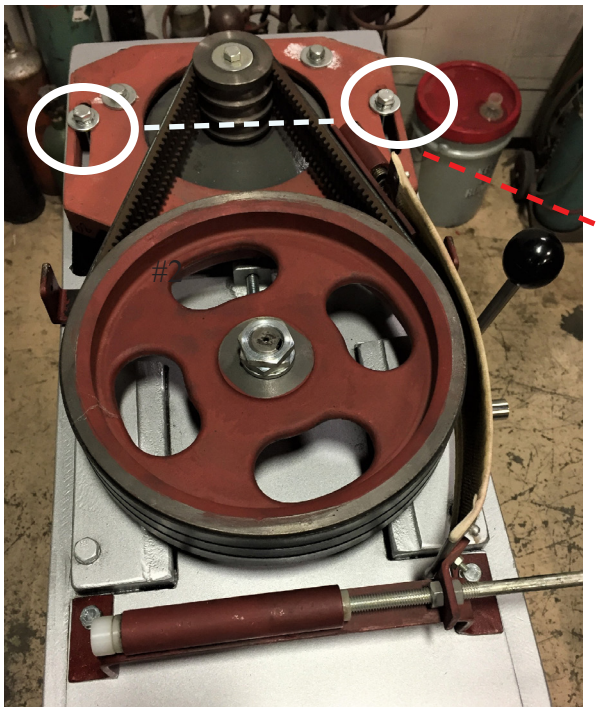
- Remove the (2) top cover screws (10 mm)
- Lift the cover
- Turn the cover sideways and balance on the front of the mixer

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Preventative Maintenance

Belt Replacement/ Tensioning

Belt replacement



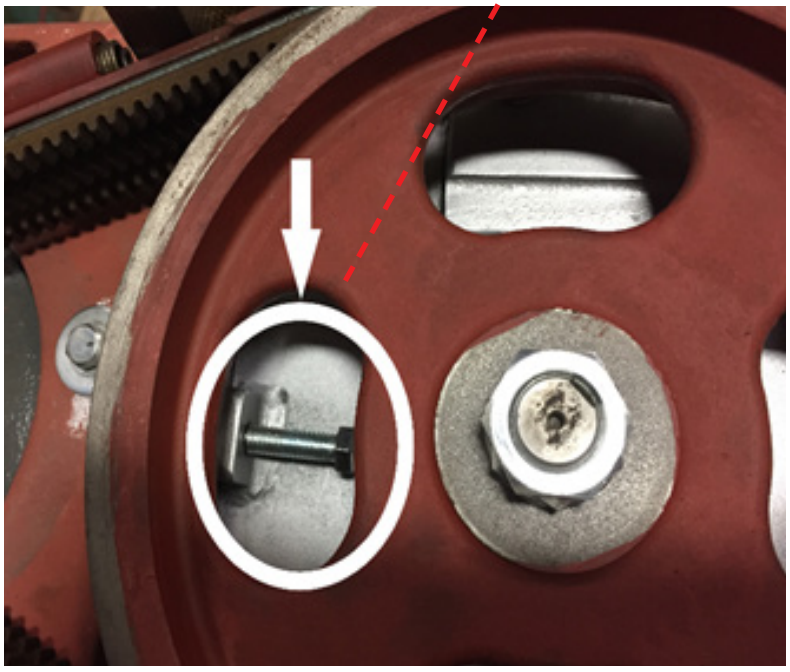
Belt tensioning is part of the preventive maintenance of the machines as this is a wear part. This can be done easily by almost anyone.

1. Remove the top cover (see above)

2. Loosen the (2) 9/16” bolts on the motor bracket.

3. Loosen the adjustment screw (9/16”) located on the casting underneath the main drive sheave/pulley.

4. Pull belts off and replace.



Belt tensioning

1.Remove the top cover

2. Loosen the (2) 9/16” bolts on the motor Bracket

3. Turn the adjustment screw (9/16”) located on the casting underneath the main drive sheave/pulley.

Note: Belts should have minimal deflection ½” to ¾” deflection. A good rule of thumb is- you should be able to force your finger between the top (2) belts from the top down, but not be able to weave it through all (3).

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Maintenance Log

Model #:_____ Serial #: _____ Location: _____

Date	Maintenance Preformed	Completed By	Notes

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60 Commerce Avenue, Albany, NY 12206

WARRANTY

ONE-YEAR PARTS & LABOR WARRANTY
Precision North America, LLC. warrants to the original purchaser of every new Precision Mixer and all parts thereof, to be free from defects in material and workmanship, under normal and proper use and maintenance service as specified by Precision N. America, LLC. and upon proper installation and start-up in accordance with the instruction packet supplied by each Precision mixer. Precision's obligation under this warranty is limited to a period of (1) year from the date of original installation, or 15 months after shipment date from Precision, whichever occurs first. Any parts covered under this warranty that are determined by Precision N. America to have been defective within (1) one year of original installation or fifteen (15) months after shipment date from Precision N. America, whichever occurs first, is limited to the repair or replacement, including labor charges, of defective parts or assemblies. The labor warranty shall include standard straight time labor charges only, as determined by Precision N. America.

ADDITIONAL 2 YEARS PART WARRANTY
In addition to the (1) one year warranty stated above, Precision N. America, LLC. includes an additional (2) two years warranty on the motor and complete drive train. Terms and conditions on the additional (2) two year parts warranty are the same as stated above, excluding labor.

EXTENDED WARRANTY ON PRECISION MODEL #HD-60
Precision North America, LLC. warrants to the original purchaser of every new Precision HD-60 an extended 6-year warranty on all gears and shafts in the planetary and transmission, parts only. Warranty applies to said parts if breakage is due to manufacturer's defect or customer error. Shipping and labor charges are not covered under this extended warranty. Customers Obligation Completed warranty card, along with original purchase receipt, must be on file with Precision N. America, LLC. To file your registration, simply complete warranty card and mail together with your invoice to Precision N. America, LLC., 60 Commerce Ave., Albany, NY 12206 Strong Recommendation.To avoid labor costs and down time for your mixer, we recommend that the customer perform scheduled maintenance on the HD-60. Maintenance includes planetary being greased a minimum of once every 12-months, and transmission oil changed a minimum of once every 5-years.

PERFORMANCE GUARANTEE
From the date of delivery, for 30-days, if your Precision HD-60 does not perform to your satisfaction, Precision will replace it with a new mixer brand of customer's choice. Customer is responsible for the difference in average retail cost between the mixers. Customer is responsible for all freight charges. Precision must be notified of any lack of performance and be able to view it at the customer's location.

WARRANTY CLAIMS
All claims for labor or parts must be authorized through Precision North America, LLC. All claims should include: model number, serial number, proof of purchase, date of installation, and all pertinent information supporting the existence of the alleged defect.

WARRANTY INFORMATION CONTINUED ON NEXT PAGE

Precision North America Food Machinery LLC.
60 Commerce Avenue, Albany, NY 12206

WARRANTY

WHAT IS NOT COVERED BY THIS WARRANTY

Precision N. America's sole obligation under this warranty is limited to either repair or replacement of parts, subject to the ad-ditional limitations below. This warranty neither assumes nor authorizes any person to assume obligations other than those expressly covered by this warranty.

NO CONSEQUENTION DAMAGES.

PRECISON N. AMERICA, LLC. IS NOT RESPONSIBLE FOR ECONOMIC LOSS; OR SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOSSES OR DAMAGES ARISING FROM FOOD OR PRODUCT SPOILAGE CLAIMS WHETHER OR NOT ON ACCOUNT OF MACHINE MALFUNCTION.

WARRANTY IS NOT TRANSFERABLE.

This warranty is not assignable and applies only in favor of the original pur-chaser/user to whom delivered. ANY SUCH ASSIGNMENT OR TRANSFER SHALL VOID THE WARRANTIES HEREIN MADE AND SHALL VOID ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

IMPROPER USAGE.

PRECISION N. AMERICA, LLC. ASSUMES NO LIABILITY FOR THE PARTS OR LABOR COVERAGE FOR COMPONANT FAILURE OR OTHER DAMAGES RESULTING FROM IMPROPER USAGE OR INSTALLATION OR FAILURE TO CLEAN AND/OR MAINTAIN PRODUCT AS SET FORTH IN THE WARRANTY PACKET PROVIDED WITH THE MACHINE.

ALTERATION, NEGLECT, ABUSE, MISUSE, ACCIDENT, DAMAGE DURING TRANSIT, FIRE, FLOOD, ACTS OF GOD.

Precision N. America, LLC. is not responsible for the repair or replacement of any parts that Precision determines have been subjected after the date of manufacture to alteration, neglect, abuse, misuse, accident, damage during transit, fire, flood, or act of God.

I**MPROPER ELECTRICAL CONNECTIONS**.

Precision N. America is Not RESPONSIBLE FOR THE REPAIR OR RE-PLACEMENT OF FAILED OR DAMAGED COMPONENTS RESULTING FROM ELECTRICAL POWER FAILURE, THE USE OF EXTENSION CORDS, LOW VOLTAGE, OR VOLTAGE DROPS TO THE MACHINE.

NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

THERE ARE NO OTHER WARRANTIES, EXPRESSED, IMPLIED OR STATUTORY, EXCEPT THE (1) YEAR LABOR & (3) THREE YEAR PARTS WARRANTY AS DESCRIBED ABOVE. THESE WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, INCLUDING IMPLIED WARRANTY AND MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. OUTSIDE U.S. This warranty does not apply to, and Precision N. America, LLC. is not responsible for, any warranty claims made on products sold or used outside the

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WARRANTY
Registration Card

Precision N. America, LLC.
Mail Card Immediately

This Card must be mailed immediately after installation date for warranty to be in effect.

Please Mail to:
Precision North America, LLC.
60 Commerce Ave.
Albany, NY 12206

Name_____ Mixer Model #_____ M/C # Machine Code_____

Type of Business_____ Business phone #_____

Address_____ City_____ State_____ Zip_____

Name of Power Company_____

This is to inform Precision N. America, Inc. that I, (owners name)_____

have had the above mixer installed in my place of business on (date)_____

The above warranties are in effect from this installation date, or 90 days after shipment from Precision, whichever comes first.

Customer Signature_____

Precision North America, LLC. phone: 518-462-3387 fax: 518-462-3389 www.precisionmixers.com

IMPORTANT: Copy of sales receipt must accompany this warranty card for warranty to be valid