# Pallet Notcher PN100 Safety, Operation, Maintenance, & Parts Manual

PN100 rev. A1.00

Safety is our #1 concern!

Form #2581

### **MODELS EFFECTED:**

PN100EA10 PN100EB10 PN100EC10 PN100EB15 PN100EC15



WARNING! Read and understand this manual before using this machine.

#### California

### **Proposition 65 Warning**



**WARNING:** Breathing gas/diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Always start and operate the engine in a well-ventilated area. If in an enclosed area, vent the exhaust to the outside. Do not modify or tamper with the exhaust system. Do not idle the engine except as necessary.

For more information go to www.P65warnings.ca.gov.



**WARNING:** Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection.

For more information go to www.P65Warnings.ca.gov/wood.

### Active Patents assigned to Wood-Mizer, LLC

Wood-Mizer, LLC has received patents that protect our inventions which are a result of a dedication to research, innovation, development, and design. Learn more at: <a href="woodmizer.com/patents">woodmizer.com/patents</a>

#### ©November 4, 2024 Wood-Mizer LLC

Printed in the United States of America, all rights reserved. No part of this manual may be reproduced in any form by any photographic, electronic, mechanical or other means or used in any information storage and retrieval system without written permission from

Wood-Mizer, LLC 8180 West 10th Street Indianapolis, Indiana 46214

SECTIO	N 1 INTRODUCTION	
1.1	About This Manual	1-1
1.2	Getting Service	
1.3	Specifications	
1.4	Options and Accessories	
SECTIO	N 2 GENERAL SAFETY	
2.1	Safety Symbols	2-1
2.2	Safety Instructions	
2.3	Electrical Lockout Procedures	2-2
SECTIO	N 3 SETUP	
3.1	Site Preparation	3-1
3.2	Onsite Setup	3-1
3.3	Attach Board Stops	3-2
3.4	Check Drive Belt Tension	3-2
3.5	Dust Collection	3-2
3.6	Electrical	3-3
SECTIO	N 4 OPERATION	
4.1	Operation	4-1
SECTIO	N 5 MAINTENANCE	
5.1	General Maintenance	5-1
5.2	Sawdust Removal	
5.3	Lubrication	
5.4	Blade Inspection	
5.5	Blade Replacement	
SECTIO	N 6 REPLACEMENT PARTS	
6.1	PN100 Overview	6-1
6.2	Tabletop and Carriage Return	6-2
6.3	Notching Head Assembly	
6.4	Covers	6-5
6.5	Frame and Carriage Rails	6-6
6.6	Carriage Assembly	6-7
6.7	Stringer Clamp Assembly	
6.8	Motors	
6.9	Control Panel	6-11
6.10	Motor Controls Assembly	
6.11	Electrical	
6.12	Decals	6-14

# Wood-Mizer® LLC Limited Product Warranty



Wood-Mizer LLC ("Warrantor"), an Indiana corporation with its principal place of business at 8180 West Tenth Street, Indianapolis, IN 46214-2400 USA, warrants to the purchaser ("Purchaser") that for the time periods specifically stated herein and subject to the terms, conditions and limitations stated herein, the equipment manufactured by the Warrantor will be free from defects in material and workmanship attributable to Warrantor so long as, during the warranty periods stated herein, the equipment is installed, operated and maintained in accordance with the instructions provided by Warrantor.

PRODUCT	MODEL CLASS	LENGTH OF	WARRANTY	EFFECTIVE DATE	
PRODUCT	MODEL CLASS	USA & CANADA NON USA & CANADA		EFFECTIVE DATE	
Portable Sawmills, Resaws, Edgers	LT, LX, HR, EG	Two years	One year		
Portable Sawmills with Chassis	LT28, LT35, LT40, LT50, LT70, LX450	Two years, excluding the chassis, which chas- sis shall have a five year warranty	One year	Date of purchase	
Industrial Sawmills, Resaws, Edgers	WM, HR, EG, TVS, SVS	One year	One year	Date of purchase or date of	
TITAN Industrial	WB, TV, HR, EG, EA, MR	One year	One year	installation / training (if applicable), whichever occurs first, not to	
Material Handling	TWC, IC, TD, LD, GC, CR, CB, CC	One year	One year	exceed 6 months from date of purchase	
Blade Maintenance Equipment	BMS, BMT, BMST	One year	One year		
Options and Accessories	Various	One year*	One year*		
Moulders, Extractors	MP, MD	Two years	One year		
Kilns	KS, KD	One year	One year	Date of purchase	
Slab Flattener	MB	Two years	One year	Date of purchase	
Pallet Equipment	PD, PC	One year	One year		
Log Splitters	FS	One year	One year		
Replacement Parts	Various	90 days	90 days		

<sup>\*</sup> Warranty on Options will match the warranty on the primary equipment when purchased on same invoice.

#### Exclusions from 90 Day, Limited One Year and Two Year Warranty

Warrantor shall have **no** responsibility under this warranty for any wear components, including, but not limited to: belts, blade guides, blades, electric motor brushes, drum switches, filters, fuses, hoses, bearings (excluding cylindrical drive bearings), bushings, cable carriers, and spark plugs. All wear components are furnished "**as is**", without any warranty from Warrantor. This limited warranty does not cover any defects caused by misuse, negligence, alterations, damage due to overload, abnormal conditions, excessive operation, accident, or lack of performance of normal maintenance services.

Several components which are used in the manufacture of the equipment but not manufactured by Warrantor such as cant hooks, power plants, laser sights, batteries, tires, and trailer axles have warranties provided by the original equipment manufacturer (written copies available upon request). Warrantor does not separately warrant such items. Components or equipment manufactured by third parties are not covered by this warranty. Warrantor, however, will provide reasonable assistance to the Purchaser to make claims against any warranties applicable to such component parts as provided by such original equipment manufacturers. Components or equipment manufactured by third parties are not covered by this Warranty.

#### **Five Year Limited Chassis Warranty**

The limited five year chassis warranty described above, DOES NOT extend to (a) any damage stemming from accident, improper towing, overload, abuse, misuse, abnormal conditions, negligence, excessive operation, or lack of maintenance, (b) rust caused by exposure to corrosive atmospheric conditions, or (c) the sawmill head, carriage, axle, brakes, or any hydraulic or electrical components attached to the chassis.

#### Warrantor's Obligations as To Defects

In the event that the equipment fails to perform due to defective materials or workmanship attributable to Warrantor under normal use and service within the established warranty period, Purchaser's sole and exclusive remedy and Warrantor's sole liability shall be to replace or repair, in Warrantor's sole and subjective discretion, any defective part at Warrantor's principal place of business without cost to the Purchaser if such defect exists. The determination of whether a product is defective shall be made by Warrantor in Warrantor's sole and subjective discretion. The Purchaser must notify Warrantor prior to shipping any defective part. Warrantor, at its sole discretion, may cover expenses incurred in shipping the defective part to Warrantor for evaluation; provided, however, that Warrantor will not be responsible for labor, travel time, mileage, removal, installation or incidental or consequential damages. However, any part in excess of 140 pounds must be returned by the Purchaser, to the Warrantor's nearest authorized facility at the Purchaser's expense, if return is requested by Warrantor. Warrantor shall have a reasonable time within which to replace or repair the defective part. If Warrantor determines that the product is not defective under the terms of this warranty in Warrantor's sole and subjective discretion, then Purchaser shall be responsible for any expenses incurred by Warrantor in returning the equipment to the Purchaser.

#### **Limitations and Disclaimers of Other Warranties**

EXCEPT FOR THE EXPRESS WARRANTY PROVISIONS STATED ABOVE, WARRANTOR DISCLAIMS ALL WARRANTIES, EXPRESS AND/OR IMPLIED, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT AND TITLE. No representation or other affirmation of fact by representatives of Warrantor, whether verbal or in writing, including photographs, brochures, samples, models, or other sales aids, shall constitute a warranty or other basis for any legal action against Warrantor. There are no other representations, promises, agreements, covenants, warranties, guarantees, stipulations or conditions, express or implied, by Warrantor except as expressly set forth herein. THE ORIGINAL PURCHASER AND ANY INTENDED USER OR BENEFICIARY OF THIS EQUIPMENT, SHALL NOT BE ENTITLED TO RECOVER ANY INDIRECT, SPECIAL, PUNITIVE, EXEMPLARY, CONSEQUENTIAL, SPECIAL, OR INCIDENTIAL DAMAGES OR LOSES, INCLUDING BUT NOT LIMITED TO, DAMAGES OF LOST PRODUCTION, LOST REVENUE, LOST PRODUCT, LOST PROFITS, LOST BUSINESS, LOSS OF USE, LOSS OF GOODWILL, OR BUSINESS INTERRUPTION, FROM WARRANTOR FOR ANY REASON WHATSOEVER INCLUDING WITHOUT LIMITATION WARRANTY OR DEFECT IN THE PRODUCT REGARDLESS OF THE SOLE, JOINT AND/OR CONCURRENT NEGLIGENCE, BREACH OF CONTRACT, BREACH OF WARRANTY, STRICT LIABILITY IN TORT OR STATUTORY CLAIMS OR OTHER LEGAL FAULT OR RESPONSIBILITY OF EITHER WARRANTOR OR PURCHASER OR ITS EMPLOYEES OR AGENTS. Warrantor does not warrant that its equipment meets or complies with the requirements of any particular safety code or governmental requirements.

Defective items replaced under the terms of this warranty become the property of Warrantor.

#### **Design Changes**

Warrantor reserves the right to change the design of its products from time to time without notice and without obligation to make corresponding changes in or to its products previously manufactured.

#### **Rights of Purchasers**

The validity and effect of this limited warranty as well as its interpretation, operation and effect, shall be determined exclusively by the principles of law and equity of the State of Indiana, USA. This limited warranty gives Purchaser specific legal rights. Purchaser may also have other rights, which may vary from state to state. Some states may not allow limitations as to the duration of implied warranties or to the exclusion or limitation of incidental or consequential damages, so some of the limitations and exclusions detailed set forth above may not apply. In the event that any one or more of the provisions of this warranty shall be or become invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions of this warranty shall not be affected thereby.

#### Interpretations

This Warranty constitutes the entire warranty agreement between Warrantor and Purchaser and supersedes any prior understandings or agreements pertaining to the same subject matter. This warranty cannot be amended except in writing which refers to this warranty which is signed by both Warrantor and Purchaser.

### **SECTION 1 INTRODUCTION**

#### 1.1 About This Manual

This manual replaces any previous information received on your Wood-Mizer<sup>®</sup> equipment.

The information and instructions in this manual do not amend or extend the limited warranties for the equipment given at the time of purchase.

### 1.2 Getting Service

For contact information, sales, service, parts, and additional manuals, sign into your account on <a href="https://wood-mizer.com">https://wood-mizer.com</a>, or call inside the USA: 1-800-553-0182 or from outside the USA: 317-271-1542

### 1.3 Specifications

Equipment specification are included in the Online Manuals, which are found at <a href="https://apps.woodmizer.com/Manuals/Manuals.aspx?parent=0.">https://apps.woodmizer.com/Manuals/Manuals.aspx?parent=0.</a>

# 1.4 Options and Accessories

Your Wood-Mizer product may have options that can be added to the machine or accessories available to purchase.

**Option:** Your specific product can have accessories installed at the factory, or installed in the field.

**Accessory:** Your specific product may have accessories added to the machine that are not available to be installed at the factory.

**Power Options:** Your specific product power option is detailed based on the specific product number purchased.

This product has the following accessories available:

Part #	Name	Туре

TABLE 1-1

### SECTION 2 GENERAL SAFETY

## 2.1 Safety Symbols

The following symbols and signal words call your attention to instructions concerning your personal safety. Be sure to observe and follow these instructions.



**DANGER!** indicates an imminently hazardous situation which, if not avoided, will result in serious injury or death.



**WARNING!** suggests a potentially hazardous situation which, if not avoided, could result in serious injury or death.



**CAUTION!** refers to potentially hazardous situations which, if not avoided, may result in minor or moderate injury or damage to equipment.

**NOTICE** indicates vital information.

# 2.2 Safety Instructions

#### OWNER/OPERATOR'S RESPONSIBILITY

The procedures listed in this manual may not include all ANSI, OSHA, or locally required safety procedures. It is the owner/operator's responsibility and not Wood-Mizer LLC to ensure all operators are properly trained and informed of all safety protocols. Owner/Operators are responsible for following all safety procedures when operating and performing maintenance to the equipment.

### **OBSERVE ALL SAFETY INSTRUCTIONS**

**NOTICE** Read the entire Operator's Manual before operating this equipment.

Note all safety warnings throughout this manual and those posted on the machine.

Be able to access this manual at all times while operating this equipment.

Read additional manufacturer's manuals and observe their applicable safety instructions.

Only persons who have read and understood the entire operator's manual should operate this equipment.

This equipment is not intended for use by or around children.

It is the owner/operator's responsibility to comply with all applicable federal, state, and local laws, rules, and regulations regarding the ownership, operation, and transporting your equipment.

Operators should become thoroughly familiar with and comply with these applicable laws for operating and transporting equipment.



**WARNING!** Clean sawdust from all guards, vents, control boxes, or any area where sawdust may gather **after every shift**. Failure to

do so may result in fire, causing death or serious injury.

#### **WEAR SAFETY CLOTHING**



**WARNING!** Secure all loose clothing and jewelry before operating the equipment.

Always wear eye, ear, and foot protection when operating or servicing the equipment.

Wear hand protection while servicing the equipment blades.

Wear respiratory protection when sawing woods that require it. (It is up to the sawyer to know which woods require respiratory protection.)

#### **EQUIPMENT SETUP**



**DANGER!** Do not operate the equipment without **all** covers and guards in place.



**WARNING!** Set up the equipment on solid, level ground.

Keep all persons out of the area between the frame rails while loading and unloading the equipment.

#### CHECK EQUIPMENT BEFORE OPERATION



DANGER! Ensure all guards and covers are in place and secured before operating or towing the equipment.

#### **KEEP PERSONS AWAY**



**DANGER!** Keep all persons out of the path of moving equipment and boards when operating equipment or loading boards.

#### **KEEP HANDS AWAY**



**DANGER!** Remove power before clearing debris or any other maintenance activity.



**WARNING!** Avoid contact with any hot parts (motors).

Allow the system to cool sufficiently before beginning any service function, including debris removal.

Avoid contact with sharp edges of the cutting blades.

Stay a safe distance from rotating members (shafts, pulleys, etc.) and ensure loose clothing or long hair does not engage rotating members

Do not adjust the motor drive belt with the motor running.

Keep hands, feet, etc., clear of exiting sawdust chute when operating equipment.

#### **KEEP SAFETY LABELS IN GOOD CONDITION**

**NOTICE** Ensure that all safety decals are clean and readable. Replace all damaged safety decals to prevent personal injury or damage to the equipment. Contact your local distributor, or call your Customer Service Representative to order more decals.

**NOTICE** If replacing a component that has a safety decal affixed to it, ensure the new component also has the safety decal affixed in the same place.

# KEEP NOTCHER AND AREA AROUND NOTCHER CLEAN



WARNING! Maintain a clean and clear path for all necessary movement around the notcher and material stacking areas.

Do not allow children in the area of the notcher.

#### DISPOSE OF WOOD BY-PRODUCTS PROPERLY

**NOTICE** Properly dispose of all wood byproducts, including sawdust, chips, and other debris, including operation waste such as oil, filters, etc.

#### 2.3 Electrical Lockout Procedures

### **RULES FOR USING LOCKOUT PROCEDURE**

The equipment shall be locked out to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Do not attempt to operate any switch or valve bearing a lock.

# LOCKOUT PROCEDURES MUST BE USED DURING. BUT NOT LIMITED TO:

- Changing or adjusting blades
- Unjamming operations
- Cleaning
- Mechanical repair
- Electrical maintenance
- Retrieval of tools/parts from work area
- Activities where guards or electrical panel guard is open or removed

# MAINTENANCE HAZARDS INCLUDE, BUT NOT LIMITED TO:

- Blade contact
- Pinch points
- Kickbacks
- Missiles (thrown blades/wood chips)
- Electrical

# FAILURE TO LOCKOUT MAY RESULT IN, BUT NOT LIMITED TO:

■ Cut

- Crush
- Blindness
- Puncture
- Electrocution
- Serious injury and death
- Amputation
- Burn
- Shock

#### TO CONTROL MAINTENANCE DANGERS:

- Lockout procedures must be followed (see OSHA regulation 1910.147).
- Never rely on machine stop control for maintenance safety (emergency stops, on/ off buttons, interlocks).
- Do not reach into moving blades or feed systems. Allow all coasting parts to come to a complete stop.
- Electrical power supply and air supply must both be locked out.
- Where established lockout procedures cannot be used (electrical troubleshooting or mechanical dynamic troubleshooting), alternative effective protective techniques shall be employed which may require special skills and planning.
- Always follow safe operations practices in the workplace.

#### **EQUIPMENT LOCKOUT PROCEDURE**

Lockout procedures per OSHA regulation 1910.147, appendix A:

#### **GENERAL**

The following simple lockout procedure is provided to assist owner/operators in developing their procedures so they meet the requirements of **OSHA regulation 1910.147**. When the energy isolating devices are not lockable, tagout may be used, provided the owner/operator complies with the provisions of the standard which require additional training and more rigorous periodic inspections. When tagout is used and the energy isolating devices are lockable, the owner/operator must provide full operator protection (see OSHA regulation 1910.147, paragraph (c)(3)) and additional training and more rigorous periodic inspections are required. For more complex systems, more comprehensive procedures may need to be developed, documented, and utilized.

#### **PURPOSE**

This procedure establishes the minimum requirements for the lockout of energy isolating devices whenever maintenance or servicing is done on machines or equipment. It shall be used to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources and locked out before personnel perform any servicing or maintenance where the unexpected enervation or start-up of the machine or equipment or release of stored energy could cause injury.

#### **COMPLIANCE WITH THIS PROGRAM**

All personnel are required to comply with the restrictions and limitations imposed upon them during the use of lockout. The authorized personnel are required to perform the lockout in accordance with this procedure. All operators, upon observing a machine or piece of equipment which is locked out to perform servicing or maintenance shall not attempt to start, energize, or use that machine or equipment.

#### SEQUENCE OF LOCKOUT

- Notify all affected personnel that servicing or maintenance is required on a machine or equipment and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.
- 2. The authorized employee shall refer to the company procedure to identify the type and magnitude of the energy that the machine or equipment utilizes, shall understand the hazards of the energy, and shall know the methods to control the energy.
- 3. If the machine or equipment is operating, shut it down by the normal stopping procedure (depress the stop button, open switch, close valve, etc.).
- De-activate the energy isolating device(s) so that the machine or equipment is isolated from the energy source(s).
- Lock out the energy isolating device(s) with assigned individual lock(s).
- 6. Stored or residual energy (such as that in capacitors, springs, elevated machine members, rotating fly-wheels, hydraulic systems, and air, gas, steam, or water pressure, etc.) must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.
- 7. Ensure that the equipment is disconnected from the energy source(s) by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating control(s) or by testing to make certain the equipment will not operate.



**CAUTION!** Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.

**8.** The machine or equipment is now locked out.

### RESTORING EQUIPMENT TO SERVICE

When the servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the following steps shall be taken.

- Check the machine or equipment and the immediate area around the machine to ensure that nonessential items have been removed and that the machine or equipment components are operationally intact.
- 2. Check the work area to ensure that all personnel have been safely positioned or removed from the area.
- 3. Verify that the controls are in neutral.
- Remove the lockout devices and re-energize the machine or equipment.

**NOTE:** The removal of some forms of blocking may require re-enervation of the machine before safe removal.

Notify affected personnel that the servicing or maintenance is completed and the machine or equipment is ready for use.

# PROCEDURE INVOLVING MORE THAN ONE PERSON

In the preceding steps, if more than one individual is required to lock out the equipment, each shall place his own personal lock on the energy isolating devices.

### **SECTION 3 SETUP**

### 3.1 Site Preparation



**WARNING!** Have a certified electrician install the power to your machine. Failure to do so may result in death or serious injury.

Ensure the power supply cables are not a trip hazard.

Do not run system with panel door open.



**CAUTION!** Improper voltage will cause damage to the motor and electronic components. Have a qualified electrician install the power supply to begin using your equipment.

**NOTICE** The power supply must meet the motor specifications concerning wire size, fused disconnect, and voltage, which are provided in the motor's manual. The electrical installation must also meet local codes.

Ensure the blade spins in the proper direction. If not, have the electrician change the motor rotation.

# 3.2 Onsite Setup



**WARNING!** Maintain a clean and clear path for all necessary movement around the equipment and stacking areas.

Do not allow children in the area of the equipment.

Set up the equipment on level ground.

Do not use in low lighting.

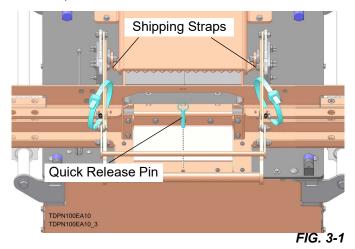
Do not use in a high moisture environment.

Do not use in extreme temperatures.

#### **UNCRATE AND PREPARE PARTS**

1. Check your PN100 as soon as it is received.

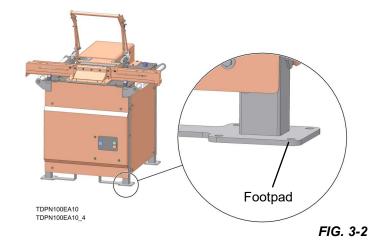
- Report any transport damage to Wood-Mizer and shipping agent immediately.
- 3. Set aside accessories, and other loose items.
- Remove shipping straps, quick release pin, and crating on flat, level surface.



Ensure machine includes all safety decals before installing <u>See Section 6.12</u>.

#### **POSITION PN100 FOR INSTALLATION**

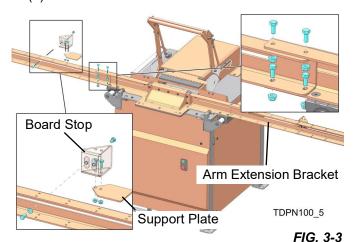
- **1.** Position machine in desired location, leaving ample surrounding space.
- 2. Shim four corners of machine until leveled front-to-rear and side-to-side.
- Anchor machine to flat level floor using 3/8" hardware (not included) in each of four footpads. See FIG. 3-2.



PN100 11/4/24 3-1

#### **Attach Board Stops** 3.3

- Install (2) arm extension brackets to carriage.
- Secure each arm extension with (4) 5/16" x 3/4" HH bolts and (4) 5/16" flanged hex nylock nuts.
- Attach (1) stringer support plate to each board stop using (2) 1/4" x 3/4" HH bolts and (2) 1/4" flanged hex nylock nuts.
- Install an assembled board stop onto each arm extension with (1) 5/16" x 3/4" HH bolt, (1) 5/16" washer, and (1) 5/16" x 1/2" HH bolt.



#### 3.4 **Check Drive Belt Tension**



WARNING! Lock out power supply before performing any maintenance. See Electrical Lockout Procedures. See Section 2.3

Do not inspect the drive belts or motor tension bracket with the motor running. Doing so may result in serious injury or death.

- Remove side panel.
- Use tension gauge to check tension of three drive belts in the center of the belt span.

**NOTE:** Tension requirements are printed on decal on outside of cabinet (3.6-5.1lbs@0.16in/16-23N @ 4mm)

- Use motor adjustment slots to adjust tension.
- Loosen four motor mounting bolts.
- Turn two adjustment bolts.

NOTE: Keep drive pulleys aligned.

- Recheck belt tension.
- Repeat adjustment steps if needed.
- Re-tighten mounting bolts.

#### Reinstall side panel.

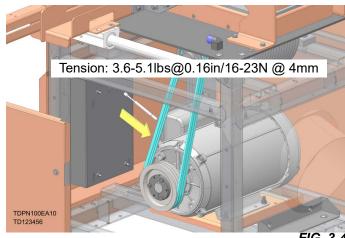


FIG. 3-4

#### **Dust Collection** 3.5



**WARNING!** Do not notch recycled material due to fire hazard.

The PN100 has a 10" rear-facing waste chute.

If using an extractor for this machine, a dust collection system rate of 2,500 CFM minimum is recommended.

A chip collection hopper or container can placed behind the waste chute.

The machine is designed to create passive air flow through the waste chute to keep cabinet clear of debris.

When collecting lumber waste, keep in mind:

- Check your local waste disposal codes before designing your dust collection sys-
- Design access to your dust collection bins so that they can be easily emptied.

If selling sawdust /chips for use with livestock, do not use harsh chemicals for cleaning or lubricating machinery.

3-2 PN100 11/4/24

# 3.6 Electrical



**WARNING!** Installation must be performed by a certified electrician in accordance with all applicable local laws, rules and regulations.

Model	hp Ratin g	Voltag e	FLC	FLA	OL Range	Recommended Power Wiring
PN100EA10	10	240, 1ph	50	40	32-50	6AWG
PN100EB10	10	240, 3ph	28	25	25-40	10AWG
PN100EC10	10	480, 3ph	14	12.5	10-15	14AWG
PN100EB15	15	240, 3ph	42	37.5	32-50	6AWG
PN100EC15	15	480, 3ph	21	18.8	15-23	10AWG

PN100 11/4/24 3-3



### **SECTION 4 OPERATION**



WARNING! Use on new lumber only. Failure to follow this may result in death or serious injury. Hot metal debris from nails, etc., in reused lumber may cause sawdust to ignite.

Do not operate this machine with safeguards bypassed.

## 4.1 Operation



**WARNING!** Keep hands 12" away from the blades at all times.

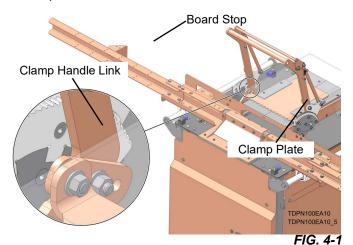
**NOTICE** Read and understand all information and warnings contained in the **General Safety** section of



this Operator's Manual before starting the PN100.

#### **MACHINE SETUP**

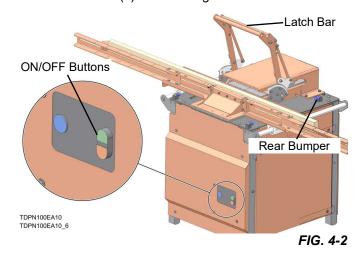
- Ensure the area is clear and free from unnecessary personnel.
- 2. Set the board stops at the desired distance.
- Adjust distance of serrated clamp plate from carriage fence to accommodate material thickness by moving clamp handle link.



#### **CUTTING OPERATION**

- 1. Press green ON button to engage notching head.
- **2.** Load board(s) into the carriage.
- **3.** Place board(s) firmly against the board stop.
- 4. Lower clamp handle to secure board in place.
- **5.** Push carriage forward to rear bumpers.
- **6.** Return carriage to home position.
- **7.** Squeeze latch bar to release board(s) from clamp.

8. Remove board(s) from carriage.



9. Press red OFF button to de-energize motor.

4-1 PN100 11/4/24

### **SECTION 5 MAINTENANCE**



**WARNING!** Lock out power supply before performing any maintenance. See Electrical Lockout Procedures. See Section 2.3

Ensure all electrical installation, service, and/or maintenance is performed by a qualified electrician.

Ensure your unit is on a level surface and secure from movement.

### 5.1 General Maintenance

Ensure power is removed.

Check for/remove debris in guards, clamps, motor compartment, sawdust exhaust, and around the work station after every use.

#### 5.2 Sawdust Removal



WARNING! Clean sawdust from all guards, vents, control boxes, or any area where sawdust may gather after every 8-hour shift. Failure to do so may result in fire, causing death or serious injury



- 1. Remove front and side access panels to clean.
- 2. Use compressed air to clean dust and debris from cabinet, blade compartment, and dust chute daily.
- **3.** Fully tighten all fasteners when reinstalling panels.

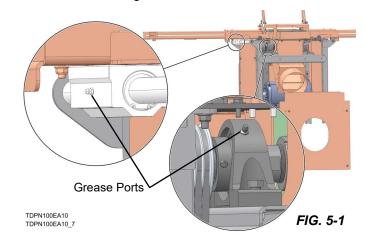
### 5.3 Lubrication

Grease ports are located on the blade shaft bearings (2) and on linear rail bearings (2).

- 1. Lubricate bearings every 90 days.
- 2. Remove (4) bolts from rear panel.

- 3. Remove rear panel.
- **4.** Apply Lithium-based NLGI #2 grease through 2 integrated grease ports on either side of the notching head as shown in FIG. 5-1.

**NOTE:** Bearings are factory prelubricated and **do not** require supplemental grease before service life begins. **Over-lubrication is a major cause of bearing failures.** Relubricate according to the recommended schedule.



## 5.4 Blade Inspection

- 1. Check blades weekly for sharpness.
- Check for cracks and missing carbides before each use.



**WARNING!** Using a broken or dull blade may cause injury or equipment damage.

3. Change or sharpen approximately every 90 days.

**NOTE:** Time will vary based on usage and wood species.

**NOTICE** Dull blade use places excessive strain on machine components, creates erratic, unpredictable cutting action, and generates excessive heat while cutting.

PN100 11/4/24 5-1

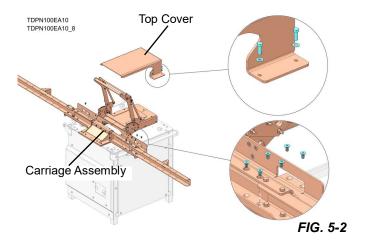
# 5.5 Blade Replacement



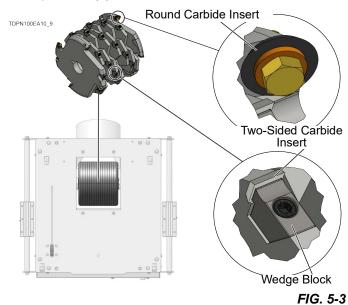
**WARNING!** Before changing the blade on this machine, lockout the electrical supply to the machine.

Wear gloves when working with the blade.

- 1. Remove (2) bolts from each side of top cover as shown in FIG. 5-2.
- 2. Remove top cover.
- **3.** Remove (6) Flat socket head cap screws (SHCS) from each (2) linear bearing as shown in FIG. 5-2.
- 4. Remove carriage assembly.



- 5. Loosen each (32) SHCS in wedge blocks.
- **6.** Remove all (32) two-sided carbide inserts.
- 7. If opposite side of carbide inserts have not yet been used, flip them over and reinstall.
- **8.** If both sides of carbide inserts have been used, install new inserts.
- **9.** Remove (4) hex bolts and (4) round carbide inserts from radius plate (2) on each side of cutter head.
- 10. Replace all (8) round carbide inserts.

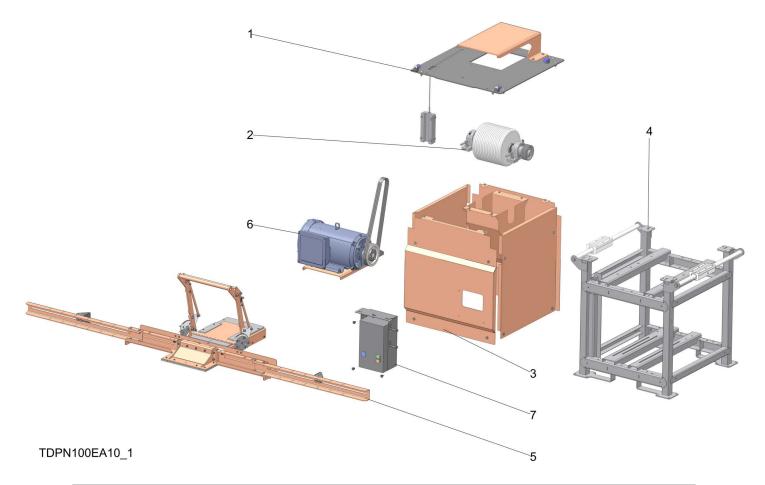


11. Reinstall carriage assembly and top cover.

5-2 PN100 11/4/24

# **SECTION 6 REPLACEMENT PARTS**

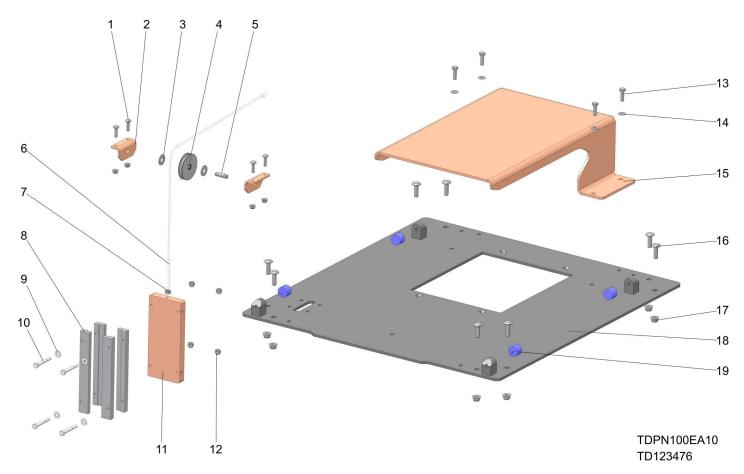
# 6.1 PN100 Overview



REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	123476	Assembly, Tabletop	(See Section 6.2)	1
2	123470	Assembly, 10" Notching Head	(See Section 6.3)	1
3		Covers	(See Section 6.4)	1
4		PN100 Frame and Rails	(See Section 6.5)	1
5	123500	Assy, Notcher Carriage	(See Section 6.6)	1
6	123559	Assy, Motor 10 HP 1 PH 1800 RPM	PN100EA10	1
	123519	Assy, Motor 10 HP 3 PH 1800 RPM	PN100EB10, PN100EC10	1
	123523	Assy, Motor 15 HP 3 PH 1800 RPM	PN100EB15, PN100EC15	1
7	133713	Assy, Control Panel PN100EA10	(See Section 6.9)	1
	133714	Assy, Control Panel PN100EB10		1
	133717	Assy, Control Panel PN100EB15		1
	133715	Assy, Control Panel PN100EC10		1
	133718	Assy, Control Panel PN100EC15		1

PN100 11/4/24 6-1

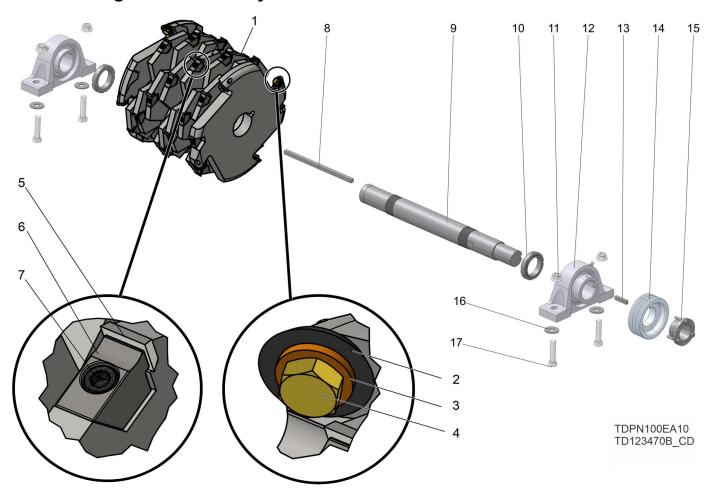
# 6.2 Tabletop and Carriage Return



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	123476	Assembly, Tabletop		1
	134194	Assembly, Carriage Return		1
1	F05005-34	Bolt, 1/4-20 X 1 Carr		4
2	134196	Plate, Pulley Mount		2
3	066114	Washer, .4 Idx1" Odx.06 Nylon		2
4	134193	Pulley, 2.5 Od, Sealed Brg, 3/8 Bore		1
5	134195	Shaft, Pulley Mount		1
6	134203	Cable, Plate Guide		1
7	F05010-17	Nut, 5/16-18 Hex		1
8	133656	Flat, Weight Guide		4
9	F05011-11	Washer, 1/4 Sae Flat		4
10	F05005-72	Bolt, 1/4-20x2 1/4 Hhc		4
11	134197	Plate, Return Weight		1
12	F05010-220	Nut, 1/4-20 Flanged Hex Nylock		8
13	F05006-27	Bolt, 5/16-18 X 1 Gr 5 Hh		4
14	F05011-17	Washer, 5/16 Sae Flat		4
15	123478	Weldment, Top Cover		1
16	F05007-11	Bolt, 3/8-16x1 1/4 Carriage		8
17	F05010-222	Nut, 3/8-16 Flanged Hex Nylock		8
18	134022	Weldment, Tabletop		1
19	065717	Bumper, 1x3/4 Rubber		4

6-2 PN100 11/4/24

# 6.3 Notching Head Assembly



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	123470	Assembly, 10" Notching Head		1
1	123471	Notching Head 10" Dia x 9" x 2" Bore		1
2	133911	Cutter, Round Carbide PT 301		8
3	133912	Carbide Shield, Notcher Cutter PT 310		8
4	133913	Screw, Hex Hd Carbide Insert PT311		8
5	133908	Cutter, Carbide 9/16", Notcher PT 501		32
6	133909	Block, Wedge Std Cutter PT 510		32
7	133910	Screw, Wedge Block PT511		32
8	123473	Key, 3/8 Sq x 8-15/16		1
9	123472	Shaft, Notching Head Arbor, 2" Dia		1
10	123475	Nut, Lock, KMK 10		2
11	F05010-223	Nut, 1/2-13 Flanged Hex Nylock		4
12	133678	Bearing, Pillow Block 1-7/8 Lock Collar		2
13	P294	Fitting, 1/4-28 45 Deg Grease		2
14	035657	Key, 1/4 x 3/8 x 1-1/2		1
15	134073	Sheave, 3 3V 412 SH		1
16	016546	Bushing, SHx1 5/8		1
17	F05008-27	Bolt, 1/2-13 X 2 1/4 Hhft Znc		4

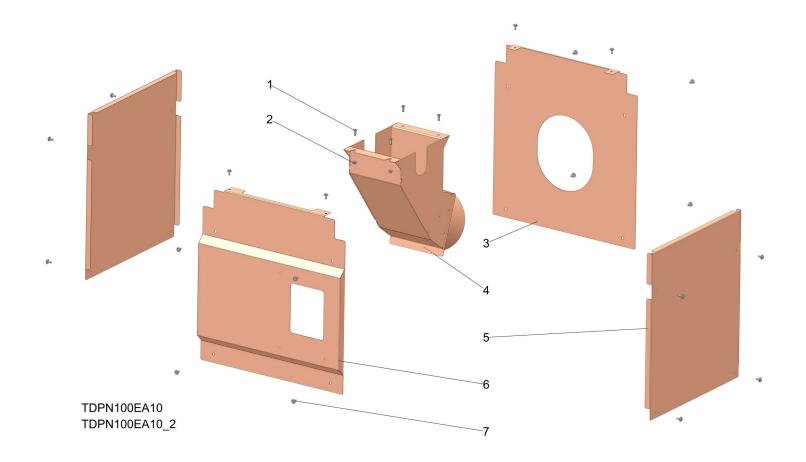
PN100 11/4/24 6-3

# Notching Head Assembly

REF	PART #	DESCRIPTION	COMMENTS	QTY.
18	F05011-68	Washer, 1/2 Standard Flat		4

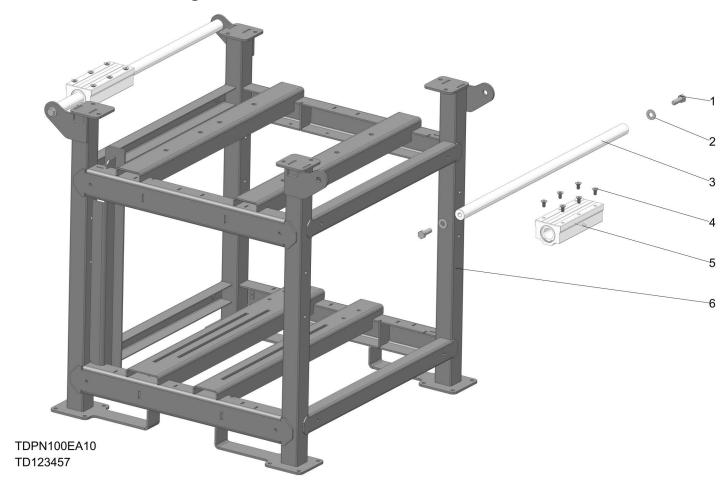
6-4 PN100 11/4/24

# 6.4 Covers



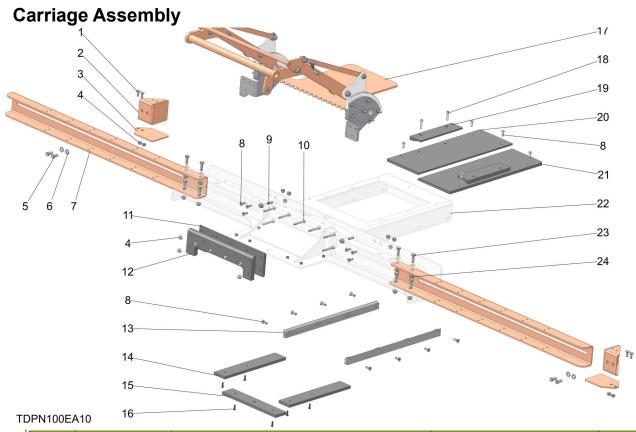
REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	F05006-124	Bolt, 5/16-18x1FHS Zinc		4
2	F05010-221	Nut, 5/16-18 Flanged Hex Nylock		4
3	123556	Weldment, Rear Cover		1
4	123525	Weldment, Dust Chute		1
5	123540	Plate, Side Cover		2
6	123555	Weldment, Front Cover		1
7	F05005-207	Bolt, 1/4-20x3/4 W/Conical Washer & Patch		20

# 6.5 Frame and Carriage Rails



REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	F05023-15	Bolt, M12x1.75x35mm 8.8 HH Znc		4
2	F05011-2	Washer, 1/2 SAE Flat		4
3	134001	Shaft, Linear 30mm Dia x 760mm		2
4	F05021-42	Bolt, M8-1.25x16 Flat SHC		12
5	134000	Bearing, Linear, 30mm Dia x 200 L		2
6	123457	Weldment, PN100 Frame		1

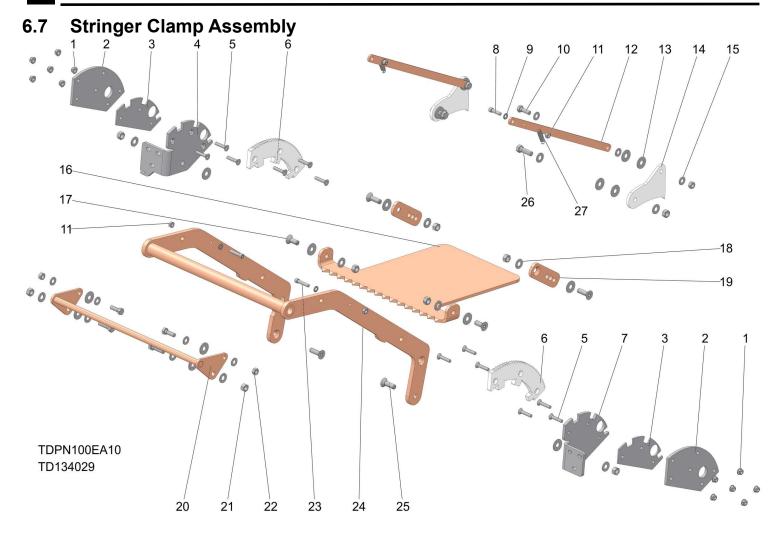
6-6 PN100 11/4/24



6.6

REF	PART #	DESCRIPTION	COMMENTS	QTY.
	123500	Assembly, Carriage		1
1	F05005-113	Bolt, 1/4-20x3/4 Carriage		4
2	123515	Weldment, End Stop		2
3	123517	Plate, Stringer Support		2
4	F05010-220	Nut, 1/4-20 Flanged Hex Nylock		29
5	F05006-102	Bolt, 5/16-18 x 3/4 HH Gr5		4
6	F05011-17	Washer, 5/16 SAE Flat		21
7	123512	Bracket, Arm Extension		2
8	F05005-117	Screw, 1/4-20x3/4 FHSH B/O		12
9	F05006-190	Screw, 5/16-18x1 BO SH Cone Pt Set		2
10	F05005-211	Screw, 1/4-20x2 FSH		7
11	133680	Backer, Stringer #1 UHMW		1
12	133681	Backer, Stringer #2 UHMW		1
13	133810	Assembly, Rear Carriage Slider		2
14	133692	Flat, Carriage Slide UHMW		2
15	133693	Flat, UHMW Carriage Slide Front UHMW		1
16	F05004-285	Screw, 10-24x5/8 SBHC SS		6
17	134029	Assembly, Stringer Clamp	(See Section 6.7)	1
18	F05005-48	Screw, 1/4-20x1 SHCS SS		4
19	134009	Retainer, Clamp Side UHMW		2
20	133683	Flat, Blade Guard Left UHMW		1
21	133682	Flat, Blade Guard Right UHMW		1
22	133766	Weldment, Carriage		1
23	F05006-27	Bolt, 5/16-18 x 1 Gr 5 HH		8
24	F05010-221	Nut, 5/16-18 Flanged Hex Nylock		10

PN100 11/4/24 6-7



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	134029	Assembly, Stringer Clamp		1
	133708	Assy, Ratchet Mount Left		1
	133709	Assy, Ratchet Mount Right		1
1	F05010-220	Nut, 1/4-20 Flanged Hex Nylock		6
2	134490	Plate, Ratchet Clamp		1
3	134489	Plate, Ratchet Spacer		1
4	133696	Bracket, Ratchet Mount, Left	Used with 133708	1
5	F05005-66	Screw, 1/4-20x1 1/4 FH		6
6	134483	Plate, Ratchet		1
7	134007	Bracket, Ratchet Mount, Right	Used with 133709	1
8	F05005-144	Screw, 1/4-20x1 SHCS SS		2
9	F05011-14	Washer, 1/4 Split Lock		4
10	F05006-1	Bolt, 5/16-18x1 HH Gr2		4
11	F05010-21	Nut, 1/4-20 Swaged		4
12	134012	Plate, Pivot To Pawl Strut		2
13	066114	Washer, .4 IDx1" ODx.06 Nylon		18
14	134010	PLATE, RATCHET PAWL		2
15	F05011-17	Washer, 5/16 SAE Flat		9
16	134005	Plate, Serrated Clamp		1
17	F05007-110	BOLT, 3/8-16 X 1 FHSH B/O		2
18	F05011-3	Washer, 3/8 Flat SAE		14

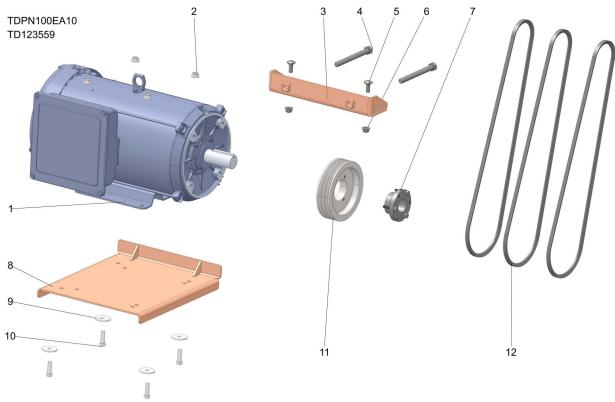
6-8 PN100 11/4/24

REF	PART #	DESCRIPTION	COMMENTS	QTY.
19	134006	Plate, Handle-Clamp Link		2
20	134070	Weldment, Latch Bar		1
21	F05010-25	Nut, 3/8-16 Swaged		10
22	F05010-6	Nut, 5/16-18 Swaged Hex		4
23	F05005-121	Screw, 1/4-20x1 1/4 SHC 18-8 SS		2
24	134069	Weldment, Handle		1
25	F05007-108	Bolt, 3/8-16x1 1/4 FHS		4
26	F05007-123	Bolt, 3/8-16x 1 1/4 HH Gr5		2
27	134021	Spring, Extension, 0.36 OD x 1.5L		2

PN100 11/4/24 6-9



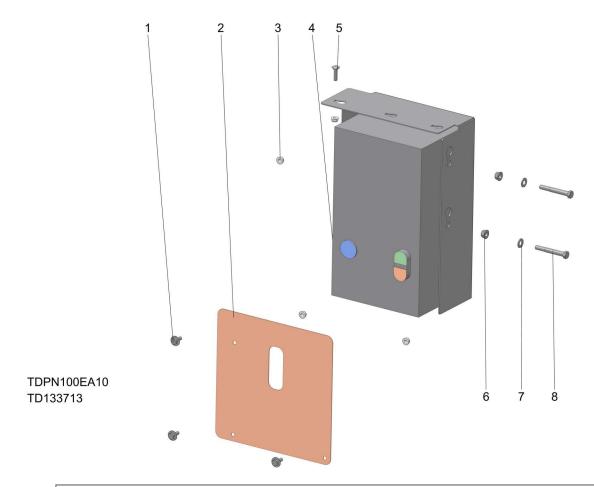
# 6.8 Motors



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	123559	Assembly, Motor 10HP, 1ph	Used with PN100EA10	1
	123519	Assembly, Motor, 10HP, 3ph	Used with PN100EB10 and PN100EC10	1
	123523	Assembly, Motor, 15HP	Used with PN100EB15 and PN100EC15	1
1	079949	Motor, 10hp 230v 1ph 60hz 1740rpm	Used with PN100EA10	1
	130076	Motor, Marathon 10HP 3P 230/460V1800RPM	Used with PN100EB10 and PN100EC10	1
	123454	Motor, 15 HP, 230/460V 1800 RPM	Used with PN100EB15 and PN100EC15	1
2	F05010-222	Nut, 3/8-16 Flanged Hex Nylock		4
	133679	Assy, Motor Tensioner		1
3	123554	Weldment, Motor Tensioner		1
4	F05008-29	Bolt, 1/2-13x5 1/2 FT HH		2
5	F05007-165	Bolt, 3/8-16x1 Carriage, Zinc Gr 5		2
6	F05010-222	Nut, 3/8-16 Flanged Hex Nylock		2
7	119076	Bushing, SDSx1-3/8	Used with PN100EA10, PN100EB10, and PN100EC10	1
	033249	Bushing, SDS x 1 5/8	Used with PN100EB15 and PN100EC15	1
8	123548	Weldment, Motor Mount		1
9	F05011-4	Washer, 3/8 Split Lock		4
10	F05007-123	Bolt, 3/8-16x1 1/4 FT HH Gr5	Used with PN100EA10, PN100EB10, and PN100EC10	4
	F05007-124	Bolt, 3/8-16X2 HH GR5	Used with PN100EB15 and PN100EC15	4
11	123521	Sheave, 3/3v6.00 Sds Qd		1
12	123456	Belt, 3vx530		3

6-10 PN100 11/4/24

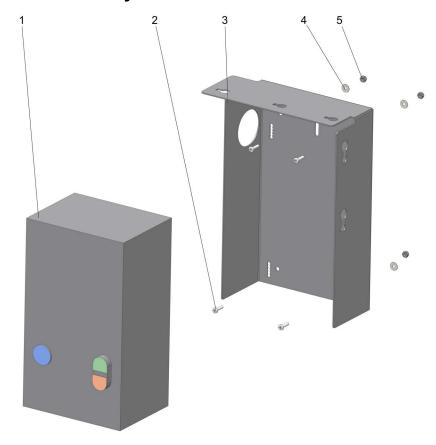
# 6.9 Control Panel



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	133713	Assembly, Control Panel PN100EA10		1
	133714	Assembly, Control Panel PN100EB10		1
	133715	Assembly, Control Panel PN100EC10		1
	133717	Assembly, Control Panel PN100EB15		1
	133718	Assembly, Control Panel PN100EC15		1
1	F05005-207	Bolt, 1/4-20x3/4 W/conical Washer & Patch		3
2	133701	Plate, Control Cover Small	Used with PN100EB10, PN100EC10, and PN100EC15	1
3	F05010-220	Nut, 1/4-20 Flanged Hex Nylock		4
4	134484	Assembly, Controls PN100EA10 230v 1ph	See Section 6.10 Motor Controls Assembly	1
	134485	Assembly, Controls PN100EB10		1
	134486	Assembly, Controls PN100EC10		1
	134487	Assembly, Controls PN100EB15 230v 3ph		1
	134488	Assembly, Controls PN100EC15 460V		1
5	F05005-34	Bolt, 1/4-20 X 1 Carr		1
6	F05010-221	Nut, 5/16-18 Flanged Hex Nylock		2
7	F05011-17	Washer, 5/16 Sae Flat		2
8	F05006-10	Bolt, 5/16-18x2 1/2 Hh Gr2		2

PN100 11/4/24 6-11

# **6.10 Motor Controls Assembly**



TDPN100EA10 TD134484

REF	PART #	DESCRIPTION	COMMENTS	QTY.
	134484	Assembly, Controls PN100EA10 230v 1ph		1
	134485	Assembly, Controls PN100EB10		1
	134486	Assembly, Controls PN100EC10		1
	134487	Assembly, Controls PN100EB15 230v 3ph		1
	134488	Assembly, Controls PN100EC15 460V		1
1		Starter, Motor	See Section 6.11 Electrical	1
2	F05004-126	Bolt, #10-24x3/4 CrSI PH		4
3	134480	Bracket, Control Box Mount Lrg	Used with PN100EA10 and PN100EB15	1
	123535	Bracket, PN100 Control Box Mount Sm	Used with PN100EB10, PN100EC10, and PN100EC15 (not shown)	1
4	F05011-18	Washer, #10 SAE Flat		4
5	F05010-160	Nut, #10-24 Hex Self-Locking		4
		Cable Assembly, Blade Motor	See Section 6.11 Electrical	1

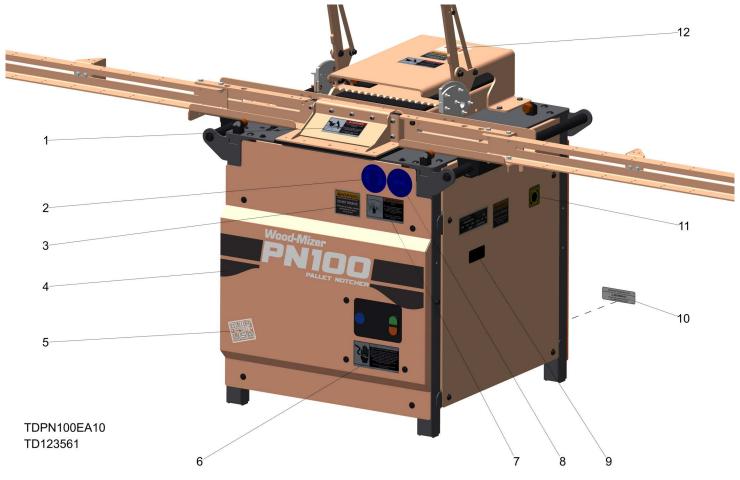
6-12 PN100 11/4/24

# 6.11 Electrical

REF	PART #	DESCRIPTION	COMMENTS	QTY.
	134478	Starter, Motor, 10hp, 230V 1-Ph	PN100EA10	1
	121221	Cable Assembly, PN100EA, Blade Motor		1
	121222	Starter, Enc., 240V 3Ph, EDOLP-010HP-240	PN100EB10	1
	121223	Cable Assembly, PN100EB, Blade Motor		1
	121224	Starter, Enc., 480V 3Ph, DOLP-010HP-480V	PN100EC10	1
	121225	Cable Assembly, PN100EC, Blade Motor		1
	121229	Starter, Enc., 240V 3Ph,15Hp, EDOLP-015H	PN100EB15	1
	121230	Cable Assembly, PN100EB15, Blade Motor		1
	121231	Starter, Enc., 15hp 480V 3Ph, EDOLP-015H	PN100EC15	1
	121232	Cable Assembly, PN100EC15, Blade Motor,15Hp		1



# 6.12 Decals



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	123561	Kit, PN100 Decals		1
1	033254	Decal, Moving Parts Danger		2
2	S12005G	Decal, Ear Warning		1
3	040911	Decal, Warning Operate With Guards		5
4	123562	Decal, PN100		1
5	074008	Decal, Built In The USA		1
6	S20061	Decal, Electrical Danger		1
7	016402	Decal, Read Manual Warning		1
8	S12004G	Decal, Eye Warning		1
9	122493	Decal, Belt Tension		1
10	111375	Decal, California Prop 65		1
11	122512	Decal, Blade Rotation, CCW		1
12	107171	Decal, White WM 3-1/2 x 3-1/2		1

6-14 PN100 11/4/24