Cold Planer
AP-CP30 Series
Low Flow Models: CP3012LF and CP3016LF,
High Flow Models: CP3018, CP3024, CP3030, CP3040, and CP3048

CP30 Series of Low-Flow Cold Planers
CP30 Series of High-Flow Cold Planers

350-376MK
Operator’s Manual

Read the Operator’s Manual entirely. When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

Cover photo may show optional equipment not supplied with standard unit.
For an Operator’s Manual and Decal Kit in French Language, please see your Kubota dealer.

Printed 8/6/20
Machine Identification
Record your machine details in the log below. If you replace this manual, be sure to transfer this information to the new manual.

If you, or the dealer, have added Options not originally ordered with the machine, or removed Options that were originally ordered, the weights and measurements are no longer accurate for your machine. Update the record by adding the machine weight and measurements provided in the Specifications & Capacities Section of this manual with the Option(s) weight and measurements.

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Accessories

Dealer Contact Information

Name: ______________________
Street: ____________________
City/State: ______________________
Telephone: ____________________
Email: ____________________

California Proposition 65

⚠️ WARNING: Cancer and reproductive harm - www.P65Warnings.ca.gov
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Printed in the United States of America.
See previous page for Table of Contents.
Important Safety Information

Listed below are common practices that may or may not be applicable to the products described in this manual.

Safety at All Times

Careful operation is your best assurance against an accident.

All operators, no matter how much experience they may have, should carefully read this manual and other related manuals, or have the manuals read to them, before operating the power machine and this attachment.

▲ Thoroughly read and understand the “Safety Label” section. Read all instructions noted on them.
▲ Do not operate the equipment while under the influence of drugs or alcohol as they impair the ability to safely and properly operate the equipment.
▲ Operator should be familiar with all functions of the skid steer and attachment and be able to handle emergencies quickly.
▲ Make sure all guards and shields appropriate for the operation are in place and secured before operating the attachment.
▲ Keep all bystanders away from equipment and work area.
▲ Start skid steer from the driver’s seat with steering levers and hydraulic controls in neutral.
▲ Operate skid steer and controls from the driver’s seat only.
▲ Never dismount from a moving skid steer or leave skid steer unattended with engine running.
▲ Do not allow anyone to stand between attachment and skid steer while hooking-up.
▲ Keep hands, feet, and clothing away from power-driven parts.
▲ While transporting and operating equipment, watch out for objects overhead and along side such as fences, trees, buildings, wires, etc.
▲ Store attachment in an area where children normally do not play. When needed, secure attachment against falling with support blocks.

Look for the Safety Alert Symbol

The SAFETY ALERT SYMBOL indicates there is a potential hazard to personal safety and extra precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. Hazard control, and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of equipment.

Be Aware of Signal Words

A signal word designates a degree or level of hazard seriousness. The signal words are:

▲ WARNING Indicates a hazardous situation that, if not avoided, could result in death or serious injury.
▲ CAUTION Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury.

Safety Precautions for Children

Tragedy can occur if the operator is not alert to the presence of children. Children generally are attracted to attachments and their work.

▲ Never assume children will remain where you last saw them.
▲ Keep children out of the work area and under the watchful eye of a responsible adult.
▲ Be alert and shut the attachment and skid steer/track loader down if children enter the work area.
▲ Never carry children on the power machine or attachment. There is not a safe place for them to ride. They may fall off and be run over or interfere with the control of the power machine.
▲ Never allow children to operate the power machine, even under adult supervision.
▲ Never allow children to play on the power machine or attachment.
▲ Use extra caution when backing up. Before the power machine starts to move, look down and behind to make sure the area is clear.

Skid Steer Shutdown and Storage

▲ Reduce engine speed and shut-off all power to the attachment.
▲ Park on solid, level ground and lower attachment until it is flat on the ground or support blocks.
▲ Turn off engine, and remove ignition key to prevent unauthorized starting.
▲ Relieve all hydraulic pressures.
▲ If included, raise seat bar and move controls until both lock.
▲ Wait for all components to stop before leaving operator’s seat.
▲ Use steps, grab-handles and anti-slip surfaces when stepping on and off the skid steer.
▲ Detach and store attachment in an area where children normally do not play. Secure attachment by using blocks and supports.
Listed below are common practices that may or may not be applicable to the products described in this manual.

### Dig Safe - Avoid Underground Utilities
- **USA:** Call 811
- **CAN:** digsafecanada.ca

Always contact your local utility companies (electrical, telephone, gas, water, sewer, and others) before digging so that they may mark the location of any underground services in the area.

Be sure to ask how close you can work to the marks they positioned.

### Transport Safely
- Comply with federal, state, and local laws.
- Use towing vehicle and trailer of adequate size and capacity. Secure equipment towed on a trailer with chocks, tie downs, and chains.
- Sudden braking can cause a towed trailer to swerve and upset. Reduce speed if towed trailer is not equipped with brakes.
- Avoid contact with any overhead utility lines or electrically charged conductors.
- Always drive with load on end of loader arms low to the ground.
- Always drive straight up and down steep inclines with heavy end of skid steer on the “uphill” side.

Engage park brake when stopped on an incline.

Maximum transport speed for an attached equipment is 20 mph. DO NOT EXCEED. Never travel at a speed which does not allow adequate control of steering and stopping. Some rough terrains require a slower speed.

As a guideline, use the following maximum speed weight ratios for attached equipment:
- **20 mph** when weight of attached equipment is less than or equal to the weight of machine towing the equipment.
- **10 mph** when weight of attached equipment exceeds weight of machine towing equipment but not more than double the weight.

IMPORTANT: Do not tow a load that is more than double the weight of the vehicle towing the load.

### Practice Safe Maintenance
- Understand procedure before doing work. Refer to the Operator's Manual for additional information.
- Work on a level surface in a clean dry area that is well-lit.
- Lower attachment to the ground and follow all shutdown procedures before leaving the operator's seat to perform maintenance.
- Do not work under any hydraulically supported equipment. It can settle, suddenly leak down, or be lowered accidentally. If it is necessary to work under the equipment, securely support it with stands or suitable blocking beforehand.
- Use properly grounded electrical outlets and tools.
- Use correct tools and equipment for the job that are in good condition.
- Allow equipment to cool before working on it.
- Disconnect battery ground cable (-) before servicing or adjusting electrical systems or before welding on equipment.
- Inspect all parts. Make certain that parts are in good condition & installed properly.
- Replace parts on this attachment with genuine Kubota parts only. Do not alter this attachment in a way which will adversely affect its performance.
- Do not grease or oil attachment while it is in operation.
- Remove buildup of grease, oil, or debris.
- Always make sure any material and waste products from the repair and maintenance of the attachment are properly collected and disposed.
- Remove all tools and unused parts from the equipment before operation.

### Tire Safety
- Tire changing can be dangerous and must be performed by trained personnel using the correct tools and equipment.
- Always properly match the wheel size to the properly sized tire.
- Always maintain correct tire pressure. Do not inflate tires above recommended pressures shown in the Operator's Manual.
- When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.
- Securely support the implement when changing a wheel.
- When removing and installing wheels, use wheel handling equipment adequate for the weight involved.
- Make sure wheel bolts have been tightened to the specified torque.
Important Safety Information

These are common practices that may or may not be applicable to the products described in this manual.

Prepare for Emergencies

▲ Be prepared if a fire starts.
▲ Keep a first aid kit and fire extinguisher handy.
▲ Keep emergency numbers for doctor, ambulance, hospital, and fire department near phone.

Wear Personal Protective Equipment (PPE)

▲ Wear protective clothing and equipment appropriate for the job such as safety shoes, safety glasses, hard hat, dust mask, and ear plugs.
▲ Clothing should fit snug without fringes and pull strings to avoid entanglement with moving parts.
▲ Prolonged exposure to loud noise can cause hearing impairment or hearing loss. Wear suitable hearing protection such as earmuffs or earplugs.
▲ Operating a machine safely requires the operator’s full attention. Avoid wearing headphones while operating equipment.

Avoid High Pressure Fluids

▲ Escaping fluid under pressure can penetrate the skin causing serious injury.
▲ Relieve all residual pressure before disconnecting hydraulic lines or performing work on the hydraulic system.
▲ Make sure all hydraulic fluid connections are properly tightened/torqued and all hydraulic hoses and lines are in good condition before applying pressure to the system.
▲ Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks.
▲ Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
▲ DO NOT DELAY. If an accident occurs, see a doctor familiar with this type of injury immediately. Any fluid injected into the skin or eyes must be treated within a few hours or gangrene may result.

Use Safety Lights and Devices

▲ Slow moving tractors, skid steers, and self-propelled machines can create a hazard when driven on public roads. They are difficult to see, especially at night. Use the Slow Moving Vehicle (SMV) sign when on public roads.
▲ Flashing warning lights and turn signals are recommended whenever driving on public roads.

Use Seat Belt and ROPS

▲ Kubota recommends the use of a CAB or roll-over-protective-structures (ROPS) and seat belt in almost all power machines. Combination of a CAB or ROPS and seat belt will reduce the risk of serious injury or death if the power machine should be upset.
▲ If ROPS is in the locked-up position, fasten seat belt snugly and securely to help protect against serious injury or death from falling and machine overturn.

Keep Riders Off Machinery

▲ Never carry riders on skid steer or attachment.
▲ Riders obstruct operator’s view and interfere with the control of the power machine.
▲ Riders can be struck by objects or thrown from the equipment.
▲ Never use skid steer or attachment to lift or transport riders.
Avoid crystalline Silica (quartz) Dust

Because crystalline silica is a basic component of sand and granite, many activities at construction sites produce dust containing crystalline silica. Trenching, sawing, and boring of material containing crystalline silica can produce dust containing crystalline silica particles. This dust can cause serious injury to the lungs (silicosis).

There are guidelines which should be followed if crystalline silica (quartz) is present in the dust.

- Be aware of and follow OSHA (or other local, State, or Federal) guidelines for exposure to airborne crystalline silica.
- Know the work operations where exposure to crystalline silica may occur.
- Participate in air monitoring or training programs offered by the employer.
- Be aware of and use optional equipment controls such as water sprays, local exhaust ventilation, and enclosed cabs with positive pressure air conditioning if the machine has such equipment. Otherwise respirators shall be worn.
- Where respirators are required, wear a respirator approved for protection against crystalline silica containing dust. Do not alter respirator in any way. Workers who use tight-fitting respirators can not have beards/mustaches which interfere with the respirator seal to the face.
- If possible, change into disposable or washable work clothes at the work site; shower and change into clean clothing before leaving the work site.
- Do not eat, drink, use tobacco products, or apply cosmetics in areas where there is dust containing crystalline silica.
- Store food, drink, and personal belongings away from the work area.
- Wash hands and face before eating, drinking, smoking, or applying cosmetics after leaving the exposure area.

Handle Chemicals Properly

- Protective clothing should be worn.
- Handle all chemicals with care.
- Follow instructions on container label.
- Chemicals can be dangerous. Improper use can seriously injure persons, animals, plants, soil, and property.
- Inhaling smoke from any type of chemical fire can be a serious health hazard.
- Store or dispose of unused chemicals as specified by the chemical manufacturer.
This page left blank intentionally.
Safety Labels

Your Cold Planer comes equipped with all safety labels in place. They are designed to help you safely operate your attachment. Read and follow their directions.

1. Keep all safety labels clean and legible.
2. Refer to this section for proper label placement. Replace all damaged or missing labels. Order new labels from your nearest Kubota dealer. To find your nearest dealer, visit our dealer locator at www.landpride.com.

3. Some new equipment installed during repair requires safety labels to be affixed to the replaced component as specified by Kubota. When ordering new components make sure the correct safety labels are included in the request.

4. Refer to this section for proper label placement.
   To install new labels:
   a. Clean surface area where label is to be placed.
   b. Spray soapy water onto the cleaned area.
   c. Peel backing from label and press label firmly onto the surface.
   d. Squeeze out air bubbles with edge of a credit card or with a similar type of straight edge.

818-798C
Warning: Pinch Point Hazard (3 places)
Models CP3012LF & CP3016LF

818-798C
Warning: Pinch Point Hazard (3 - places)
Models CP3018, CP3024, CP3030, CP3040, & CP3048
Important Safety Information

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Danger: Rotating Parts Hazard (2 places)
Models CP3012LF & CP3016LF

Danger: Rotating Parts Hazard (2 places)
Models CP3018, CP3024, CP3030, CP3040, & CP3048
Important Safety Information

838-094C
Warning: High Pressure Fluid Hazard (1 place)
Models CP3012LF & CP3016LF

838-094C
Warning: High Pressure Fluid Hazard (2 places)
Models CP3018, CP3024, CP3030, CP3040, & CP3048
Important Safety Information

844-046C
Warning: Thrown Object Hazard (3 places)
Models CP3012LF & CP3016LF

844-046C
Warning: Thrown Object Hazard (3 places)
Models CP3018, CP3024, CP3030, CP3040, & CP3048
## Important Safety Information

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#### WARNING

**Flying objects and Dust hazard.**

To prevent serious injury or death:
- Wear approved eye protection when operating this equipment.
- Wear approved dust mask when operating this equipment.

**848-392C**

Warning: Flying Objects and Dust Hazard (1 place)

#### WARNING

**To Prevent Serious Injury or Death**
- Avoid unsafe operation or maintenance.
- Do not operate or work on this machine without reading and understanding the Operator’s Manual.
- If manual is lost, contact your nearest dealer for a new manual.

**838-293C**

Warning: Read Operator’s Manual (1 place)

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**Important Safety Information**

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Models CP3012LF & CP3016LF

Models CP3018, CP3024, CP3030, CP3040, & CP3048

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**WARNING**

**SILICA DUST HAZARD**

Silica dust can cause serious injury to the lungs. To avoid exposure to silica dust particles:

- Be aware of and follow the OSHA (or other regulatory body) guidelines for exposure to airborne crystalline silica.
- To meet OSHA silica guidelines, use appropriate Personal Protective Equipment and dust abatement systems, such as waterspray systems.

**844-124C**

Warning: Silica Dust Hazard (1 Place)
Kubota welcomes you to the growing family of new product owners. This Cold Planer has been designed with care and built by skilled workers using quality materials. Proper assembly, maintenance, and safe operating practices will help you get years of satisfactory use from this product.

Application
Kubota’s CP30 Series Cold Planers are hydraulically powered attachments intended for milling asphalt or light grinding of concrete surfaces with uses and applications around streets, parking lots, driveways, construction sites, municipalities, parks, and universities.

The Low-Flow Cold Planer Models are offered in 12” (31 cm) and 16” (41 cm) widths and are powered by a hydraulic motor capable of handling up to 25 gpm (94.6 Lpm). They can cut up to 5” (13 cm) deep, tilt ± 15 degrees, and sideshift 26” (66 cm). Depth and tilt control are manually operated, while sideshift is hydraulically controlled.

The High-Flow Cold Planer Models are available in widths of 18”, 24”, 30”, 40”, and 48” (46, 61, 76, 102, and 122 cm) with a hydraulic-driven planetary gearbox drive that provides maximum cutting torque while under load. The High-Flow Cold Planers can cut up to 6” deep and sideshift 26” (66 cm) and can handle up to 42 gpm (159 Lpm). Tilt varies from planer to planer (see page 34 for amount of tilt your model is capable of producing). Included with the high-flow models is an electro-hydraulic control harness for controlling depth of cut. Tilt and sideshift are also electro-hydraulic controlled. However, the operator will need to dismount to switch the function between tilt and sideshift at the solenoid valve.

See “Specifications & Capacities” on page 34 and “Features & Benefits” on page 35 for additional information and performance enhancing options.

Using This Manual
• This Operator’s Manual is designed to help familiarize you with safety, assembly, operation, adjustments, troubleshooting, and maintenance. Read this manual and follow the recommendations to help ensure safe and efficient operation.
• The information contained within this manual was current at the time of printing. Some parts may change slightly to assure you of the best performance.
• To order a new Operator’s or Parts Manual, contact your authorized dealer. Manuals can also be downloaded, free-of-charge, from our website at www.landpride.com

Definitions

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<tr>
<td>NOTE:</td>
<td>A special point of information that the operator should be aware of before continuing.</td>
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Terminology
“Right” or “Left” as used in this manual is determined by facing the direction the machine will operate while in use unless otherwise stated.

Owner Assistance
The Online Warranty Registration should be completed by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

The parts on your Cold Planer have been specially designed by Kubota/Land Pride and should only be replaced with genuine Kubota parts. Contact a Kubota dealer if customer service or repair parts are required. Your Kubota dealer has trained personnel, repair parts, and equipment needed to service this implement.

Serial Number
For quick reference and prompt service, record model and serial number on the inside cover page and again on the warranty page. Always provide model number and serial number when ordering parts and in all correspondences with your Kubota dealer. For location of your serial number plate, see Figure 1.

Further Assistance
Your dealer wants you to be satisfied with your new attachment. If for any reason you do not understand any part of this manual or are not satisfied with the service received, the following actions are suggested:

1. Discuss any problems you have with your attachment with your dealership service personnel so they can address the problem.
2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the question/problem, and request assistance.
3. For further assistance write to:

Kubota by Land Pride
Service Department
1525 East North Street
P.O. Box 5060
Salina, Ks. 67402-5060
E-mail address
lpservicedept@landpride.com
Skid Steer Requirements
The Cold Planer is designed to attach to Kubota skid steers and track loaders within the following requirements:

Hitch type. . . . . . . Skid steer quick attach, ISO 24410
Horsepower requirements . . . . . . . . . Max 100 hp
Hydraulic flow rates
3012LF & 3016LF . . . . . . . . 15-25 gpm (57-95 Lpm)
3018 . . . . . . . . . . . . . . . . . 24-42 gpm (91-159 Lpm)
3024 . . . . . . . . . . . . . . . . . 27-42 gpm (102-159 Lpm)
3030, 3040, & 3048 . . . . . . . . 30-42 gpm (114-159 Lpm)
Min. hydraulic pressure
3012LF, 3016LF, 3018, & 3024 . . . . . . . . . 2000 psi (13.8 MPa)
3040 . . . . . . . . . . . . . . . . . . . . 3000 psi (20.7 MPa)
3048 . . . . . . . . . . . . . . . . . . . . 3500 psi (24.1 MPa)
Max. hydraulic pressure
3012LF & 3016LF . . . . . . . . . . 3500 psi (24.1 MPa)
3018/24/30/40/48 . . . . . . . . . . 5000 psi (34.5 MPa)
Case Drain
3012LF & 3016LF . . . . . . . . . . . . . . . . Not Required
3018/24/30/40/48 . . . . . . . . . . . . . . . . Required
Skid steer weight . . . . . . . . . . . . . . . See Warning below

⚠️ WARNING
To avoid serious injury or death:
• Consult your power machine Operator’s Manual for operating capacity, lifting capacity, and operating specifications. Exceeding rated capacities and specifications can result in a rollover or other serious hazard.
• Power machines outside the listed horsepower range must not be used. Higher horsepower machines can damage the attachment. Under horsepower machines make the job more difficult.
• Lightweight power machines may need weight added to the rear to maintain steering control and prevent forward tipping or side tipping caused by a heavy front load. Consult your power machine Operator’s Manual to determine proper weight requirements and maximum weight limitations.

Torque Requirements
Refer to “Torque Values Chart” on page 37 to determine correct torque values when tightening hardware.

Before You Start

⚠️ WARNING
To avoid serious injury or death:
• Allow only persons to operate this attachment who have fully read and comprehended this manual, who are properly trained to operate the attachment safely, and who are age 16 or older. Serious injury or death can result from the failure to read, understand, and follow instructions provided in this manual.

Skid Steer Shutdown Procedure
The following are basic skid steer shutdown procedures. Follow these procedures and any additional shutdown procedures provided in your skid steer Operator’s Manual before leaving the operator’s seat.

1. Reduce engine speed and shut-off all power to the attachment.
2. Park on solid, level ground and lower attachment until it is flat on the ground or on non-concrete support blocks.
3. Turn off engine, and remove switch key to prevent unauthorized starting.
4. Relieve all hydraulic pressure to auxiliary hydraulic lines.
5. If included, raise seat bar and move controls until both lock.
6. Wait for all components to come to a complete stop before leaving the operator’s seat.
7. Use steps, grab-handles and anti-slip surfaces when stepping on and off the skid steer or attachment.
Dealer Set-up

Refer to Figure 1-1 & Figure 1-2:

The Cold Planer is shipped from the factory fully assembled. Use a hoist or other suitable lift device to lift the unit off the pallet and set it on the ground. Make sure the Cold Planer is secured before lifting it.

Use lift holes on both sides of the planer shown in Figure 1-1 to pick up the Low Flow Cold Planers (Models CP3012LF or CP3016LF).

Use lift lugs on both sides of the planer shown in Figure 1-2 to pick up the High-Flow Cold Planers (Models CP3018, CP3024, CP3030, CP3040, or CP3048).

Preform the following simple checks before operation begins.

Safety Decals

Refer to pages 6-11:

The safety decals should be clearly readable and always followed. Replace any decal that is missing or not readable. Refer to “Safety Labels” on page 6.

Low-Flow Cold Planer Set-up

The following checks are for Models CP3012LF and CP3016LF. If the Cold Planer is not one of these two models, skip to “High-Flow Cold Planer Set-up” on page 15.

Hydraulic Couplers

The hydraulic hoses on the Low-Flow Cold Planer are shipped with couplers. If the couplers do not fit the skid steer couplers, the customer will need to obtain the correct style and size to match the skid steer couplers and planer hydraulic hoses.

The planers operate on the skid steer auxiliary hydraulic flow. Since the auxiliary flow is reversible, be sure to operate the unit so the drum is spinning in the direction the teeth are pointing.

Hydraulic Hoses and Fittings

All fittings should be tight and free of hydraulic leaks. Hoses must be free of abrasion or cuts that might result in leakage. Check your attachment before operation to make sure all hose routings are kink-free and allow for maximum movement of loader arms and tilt motion required during normal operation.

Drum Assembly

For proper drum operation, picks must be installed in every pick holder on the drum.
Section 1: Assembly & Set-up

High-Flow Cold Planer Set-up
The following checks are for Models CP3018, CP3024, CP3030, CP3040, and CP3048. If the Cold Planer is not one of these five models, Refer to “Low-Flow Cold Planer Set-up” on page 14.

Hydraulic Couplers
The hydraulic hoses on the High-Flow Cold Planer are shipped with couplers. If the couplers do not fit the skid steer couplers, the customer will need to obtain the correct style and size to match the skid steer couplers and planer hydraulic hoses.

The pressure “in” port on the diverter valve is marked LP for motor pressure. Return flow to the loader is marked LR for motor return. The small hose is for the drive motor case drain and is connected directly to the skid steer case drain coupler.

The case drain hose should be connected directly to the case drain coupler on the skid steer.

Hoses and Fittings
All fittings should be tight and free of hydraulic leaks. Hoses must be free of abrasion or cuts that might result in leakage. Check your attachment before operation to make sure all hose routings are kink-free and allow for maximum movement of loader arm and tilt motion required during normal operation.

Wire Harness
The wiring harness to the electro-hydraulic valve block should be routed to prevent catching or pinching when sideshifting, tilting, or lowering the drum fully into the cut.

Drum Assembly
For proper drum operation, picks must be installed in every pick holder on the drum.

Motor Case Drain

IMPORTANT: Do not operate the Cold Planer without connecting the case drain hose to the skid steer’s case drain coupler. Not connecting case drain coupler may cause severe damage to the hydraulic motor.

IMPORTANT: Unobstructed case drain flow is critical to proper motor operation. Blocked case drain flow will damage the hydraulic motor.

NOTE: Unless a defect in the motor is found, damage to the motor shaft seal and end cap gasket are not covered under the warranty.

The High-Flow Cold Planers have a planetary gearbox mounted with the drum which is driven by a hydraulic piston motor.

During motor operation, some oil bypasses the motor and must be allowed an unobstructed path back to the skid steer hydraulic tank. If this flow is restricted, pressure will build up inside the motor and will damage the motor shaft seals and/or end cap gasket.

Several cases can lead to this damage:
• Pinched or crushed case drain hose can restrict flow.
• Disconnected case drain quick coupler will stop flow.
• Picks on the cutting drum can come in contact with the pavement or trailer ramps while the skid steer is in motion, forcing the drum to rotate with the high-flow hydraulic circuit “off”. This drum rotation forces the motor to turn, which pressurizes the motor’s case because the pressure and return oil’s path have been blocked.

If the above issues are not addressed, severe motor damage may result. All of these issues can be attributed to the operator and are preventable with proper operation. Never operate Cold Planer without ensuring the case drain hose is in good working order and properly connected.
Section 2: Operating Procedures

Hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training involved in the operation, transport, storage, and maintenance of the Cold Planer. Therefore, it is absolutely essential that no one operates the Cold Planer unless they are age 16 or older and have read, fully understood, and are totally familiar with the Operator’s Manual and equipment work site.

Perform the following inspections before using your Cold Planer.

Operating Checklist

<table>
<thead>
<tr>
<th>Check</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read &amp; follow all safety rules &amp; safety decals. Refer to this manual and the attachment’s decals.</td>
<td></td>
</tr>
<tr>
<td>Make sure all guards and shields are in place.</td>
<td></td>
</tr>
<tr>
<td>Read &amp; follow preparation &amp; setup instructions. Refer to “Section 1: Assembly &amp; Set-up”.</td>
<td>13</td>
</tr>
<tr>
<td>Read and follow all operating procedures. Refer to “Section 2: Operating Procedures”.</td>
<td>16</td>
</tr>
<tr>
<td>Read &amp; follow all maintenance Instructions. Refer to “Section 4: Maintenance &amp; Lubrication”.</td>
<td>27</td>
</tr>
<tr>
<td>Read &amp; follow all lubrication instructions. Refer to “Lubrication Points”.</td>
<td>30</td>
</tr>
<tr>
<td>Check initially and periodically for loose bolts and pins. Refer to “Torque Values Chart”.</td>
<td>37</td>
</tr>
</tbody>
</table>

General Safety Information

Exposed moving parts are guarded whenever possible for safety. However, not all moving parts can be shielded in order to ensure proper operation. This Operator’s Manual and safety decals on the machine provide important safety information. Read and follow their directions. If a safety decal becomes difficult to read, replace it immediately.

DANGER

To avoid serious injury or death:

- Never crawl under raised loader arms unless properly secured. Fully lower loader arms or have the loader arms secured in the raised position with an approved lift-arm support before leaving the skid steer seat. Crawling under unsupported loader arms can cause a crushing hazard.
- Always secure equipment with solid, non-concrete supports before working under it. Never place equipment supported by concrete blocks or hydraulics. Concrete can break, hydraulic lines can burst, and/or hydraulic controls can be actuated even when power to hydraulics is off.
- Keep body, body extremities, clothing, pull strings, etc. away from rotating/moving parts. Always shut off hydraulics to the attachment and shut down the power machine before adjusting or servicing the equipment.
- All guards and shields must be installed and in good working condition while operating the attachment. Never operate planer with drum door open.
- Do not let children play on or around the attachment including when stored. Children and/or attachment can fall.
- Do not allow bystanders or animals to be near the attachment, loader arms, or power machine during operation. Stop operation if bystanders are too close. They can be hit by thrown or falling objects, entangled, crushed, run over, etc.
- Do not drive close to ditches, retaining walls, drop-offs, water, etc. Rollover due to a cave-in or mishap could result.
- Know weight limitations of operating surfaces and clearances.

WARNING

To avoid serious injury or death:

- Make sure safety labels are installed in their proper location and are in good condition before operating the attachment. Read and obey all instructions on the labels.
- Refer to the safety section of your skid steer Operator’s Manual and observe all safety recommendations set forth in the manual.
- Allow only persons to operate this attachment who have fully read and comprehended this manual, who are properly trained to operate the attachment safely, and who are age 16 or older. Serious injury or death can result from the failure to read, understand, and follow instructions provided in this manual.
- Operate only power machines equipped with a certified Roll-Over Protective Structure (ROPS) and seat belt. Fasten seat belt snugly and securely to help protect against serious injury or death from machine overturn.
- Backup alarm must be in good working order to warn others. Use a backup camera or rear-view mirror that is in good condition to ensure the area behind the unit is clear. Drive at a slower speed to compensate for blind spots.
- Operate attachment from inside an enclosed cab or wear a dust mask and eye protection. Flying dust and debris can enter the lungs causing respiratory problems, enter the eyes causing eye injury and/or cause bodily injury to the body of people or animals.
- Avoid exposure to dust containing crystalline silica particles. This dust can cause serious injury to the lungs (silicosis). Because crystalline silica is a basic component of sand and granite, many activities at construction sites produce dust containing crystalline silica. Trenching, sawing, and boring of material containing crystalline silica can produce dust containing crystalline silica.
- Make sure controls are all in neutral position or park before starting the power machine.
- Always operate attachment while seated with seat belt properly fastened around the operator. When equipped, always lower seat/lap bar(s). This will help protect the operator against rollovers and sudden stops.
• Never carry riders on the attachment or power machine. Riders can obstruct the operator’s view, interfere with controls, be pinched by moving components, become entangled in rotating components, struck by objects, thrown about, fall off and be run over, etc.

• Always shut power machine down using the “Shutdown Procedure” provided in this manual before servicing, adjusting, cleaning, or maintaining the attachment.

• Never allow hands or feet near any working part of the attachment unless the mandatory power machine shutdown procedure has been completed.

• Check hitch fit-up frequently. An improper fit-up can cause the attachment to come loose from the loader hitch plate and fall.

• Do not grind anything other than asphalt or light concrete. Doing so can cause a thrown object hazard or damage the Cold Planer.

• Never make contact with underground utilities such as electrical power lines, gas lines, phone lines, etc. They can cause serious injury or death from electrocution, explosion, or fire. If in doubt, call 811 (USA) before digging so that they can mark the location of underground services in the area. For contact information, see Dig Safe in the “Important Safety Information” starting on page 1.

• Always exercise safety, courtesy, and common sense. Be aware of pedestrian and vehicle traffic. Check blind spots before moving. Use Cold Planer during low-traffic hours.

• Do not use this attachment to lift, carry, push or tow other equipment or objects. It is not properly designed or guarded for this use. The operator could lose control resulting in equipment damage and/or tipping hazard.

• Keep body, body extremities, loose clothing, pull strings, etc. away from pinch points such as rotating, extending, and/or retracting components. Secure pinch point areas to ensure they will not move before working on or near them.

• Perform scheduled maintenance. Check for loose hardware, missing parts, broken parts, structural cracks, and excessive wear. Make repairs before putting the attachment back into service. Serious breakdowns can result in injury or death.

• Hydraulic fluid under high pressure can penetrate the skin and/or eyes causing a serious injury. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Use a piece of cardboard or wood rather than hands when searching for leaks. A doctor familiar with this type of injury must treat the injury within a few hours or gangrene may result. DO NOT DELAY.
2. If lock mechanism is mechanical, raise lock handles on the loader hitch plate fully up to raise lock pins.
4. If lock mechanism is hydraulic, use auxiliary hydraulic controls to raise lock pins fully up.
5. Drive slowly to the planer hitch plate while making sure the loader hitch is parallel with the top angle bar on the cold Planer hitch plate.
6. Tilt top of loader hitch plate slightly forward.
7. Place top of loader hitch plate under the Cold Planer top angled bar and slowly raise loader arms up until loader hitch plate is seated under the top angle bar.
8. Tilt top of loader hitch plate back until planer hitch plate makes full contact with loader hitch plate and the Cold Planer is slightly off the ground.
9. Engage lock mechanism:
   **Hydraulic Lock Mechanism:**
   a. Engage quick hitch locking mechanism hydraulically.
   **Mechanical Lock Mechanism:**
   b. Push lock handles down to drive lock pins through bottom slots in the planer hitch plate. Make sure handles are locked down.
   c. Return to skid steer and start.
10. Raise loader arms enough to visually ensure lock pins are through the bottom slots on the Cold Planer.

### Hydraulic Hose Hook-up

**WARNING**

To avoid serious injury or death:
- Hydraulic fluid under high pressure can penetrate the skin and/or eyes causing a serious injury. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Use a piece of cardboard or wood rather than hands when searching for leaks. A doctor familiar with this type of injury must treat the injury within a few hours or gangrene may result. **DO NOT DELAY.**
- Shut power machine down and release all hydraulic pressure to the equipment before connecting or disconnecting hydraulic hoses to or from the power machine.
- Make sure hydraulic flow to the Cold Planer does not exceed maximum rated flow listed in the specifications on page 34. Exceeding maximum flow will increase rotor speed and result in a thrown object hazard.

- **IMPORTANT:** Make sure coupler fittings are clean before making connections. Dirt can quickly damage the hydraulic system. Inspect couplers for corrosion, cracks and excessive wear. Replace couplers if any of these conditions exist.
- **IMPORTANT:** All hoses should be free of kinks, cuts, or abrasions for safe operation. Do not operate if hoses are worn or damaged.

1. Clean quick connect couplers of dirt and then connect female and male coupler to the skid steer’s auxiliary outlets. Make sure quick connect couplers have fully engaged. If they have not, check the following to make sure:
   a. Couplers are same size and type.
   b. Auxiliary hydraulic pressure to the loader couplers has been released.

- **NOTE:** A case drain line with coupler is included only for High-Flow Cold Planers with a planetary gearbox.

2. If hooking-up a High-Flow Cold Planer, hook-up case drain hydraulic hose coupler to the skid steer’s case drain coupler.
3. Refer to Figure 2-2 on page 19 for the low-flow hydraulic schematic and Figure 2-3 on page 19 for the high-flow hydraulic schematic.
4. For additional help, refer to Hydraulic Hook-up in your skid steer Operator’s Manual.
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Section 2: Operating Procedures

72154

SIDESHIFT CYLINDER

DRUM MOTOR

SKID STEER AUXILIARY HYDRAULICS

Low-Flow Hydraulic Schematic
Figure 2-2

72153

LEFT DEPTH CYLINDER
SIDE SHIFT CYLINDER
RIGHT DEPTH CYLINDER
TILT CYLINDER

SKID STEER HIGH FLOW HYDRAULICS

LOADER PRESSURE

LOAD RETURN

CASE DRAIN

DRUM MOTOR

High-Flow Hydraulic Schematic
Figure 2-3
Electrical Hook-up

Refer to Figure 2-4 & Figure 2-5:

1. Attach Main wire harness #106-6498 to the high flow diverter valve #106-6540. Make sure wire colors are matched with the stated color for each connector on the valve.

2. Attach relay connectors to sealed relays #S0-0230 shown in Figure 2-6 on page 21.

3. Rout main wire harness #106-6498 through the spring hose loop and connect it to the skid steer auxiliary switch.

4. Make sure main wire harness #106-6498 is routed to prevent it from catching or pinching while sideshifting, tilting the drum, tilting the hitch plate, or lowering the drum fully into the cut.
Section 2: Operating Procedures

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High Flow Electrical Schematic For Main Wire Harness #106-6498
Figure 2-6
Pre-Operation Inspection


2. Complete “Operating Checklist” on page 16.

3. Inspect attachment’s safety equipment to make sure it is in good working condition and that all safety alert decals are visible and legible. Replace all missing and/or illegible safety alert decals. See “Safety Labels” on page 6.

4. Check skid steer and Cold Planer hitch plates. Make sure all hitch components are in good working condition:
   a. Check for and remove any debris in the loader and Cold Planer hitch plates.
   b. Check hitch plates for structural cracks that can weaken the hitch plates and result in dropping the attachment. Check for bent plates that will prevent full and complete hook-up. Repair or replace damaged hitch plates before putting the Cold Planer into service.
   c. Check operation of lock pins in the loader hitch plate. Lock pins must move freely and extend fully into the bottom slots in the Cold Planer hitch plate.
   d. Check hydraulic hoses for pinch points and clearances. Make sure hydraulic hoses will not interfere with hitch hook-up.

5. If attachment is to be operated in reverse, make sure visibility to the rear of the power unit is appropriate for the attachment. Backup camera or mirror is recommended. Maintain cleanliness of lens or mirror.

6. Consult your skid steer Operator’s Manual to determine if rear ballast is required. Add ballast if necessary.

7. Visually check for excessive wear, worn, damaged, cracked, or loose parts. Replace parts with genuine Kubota parts.

8. Inspect condition of hydraulic hoses, fittings, and valves before starting the skid steer. Make sure hoses are not twisted or frayed and will not get pinched, kinked, or stretched.

9. Start skid steer and check hydraulic oil leaks with a piece of paper or cardboard. Do not use your hands as invisible thin streams of high pressure oil can be injected into your skin. See “Avoid High Pressure Fluids Hazard” on page 3.

10. Check all controls and operating functions of the skid steer.

11. Operate the Cold Planer through its full range of movements to check for clearances. Refer to “Check Equipment Clearances” on this page.

Check Equipment Clearances

It is important to check equipment clearances and hydraulic hose routing before putting the Cold Planer into operation. Carefully go through the planer’s full range of motions to make sure the planer does not make contact with the skid steer frame, tires, and hydraulic hoses. Check hydraulic hoses to make sure they do not stretch, kink, or pinch.

⚠️ WARNING ⚠️

To avoid serious injury or death:

- Use steps, grab-handles, and anti-slip surfaces on the power machine and attachment to get on and off the power machine. Using unapproved stepping surfaces and/or handholds can result in a falling hazard.

- Check hitch fit-up frequently. An improper fit-up can cause the attachment to come loose from the loader hitch plate and fall.

1. Before starting the skid steer, check hitch hook-up. The attachment can fall from the loader hitch plate if not properly connected.
   a. Make sure loader hitch is fully seated under the Cold Planer’s top angle bar.
   b. Make sure loader hitch plate is against the Cold Planer hitch plate.
   c. Make sure lock handles or hydraulic locks are locked with lock pins fully seated in the bottom slots.

2. If necessary, have someone stand nearby but at a safe distance that can motion for the operator to stop if a problem develops.

3. With the Cold Planer on the ground, start skid steer and carefully rotate the top of the loader hitch plate fully back while watching hydraulic hoses to make sure they do not become pinched or kinked.

4. Carefully raise loader arms up while tilting the top of the hitch fully forward to rotate the front of the Cold Planer down. Watch hydraulic hoses to make sure they do not stretch, pinch, or kink.

5. Continue to raise loader arms fully up and tilt the loader hitch fully forward while watching to make sure the attachment does not make contact with the skid steer or skid tires. Watch hydraulic hoses to make sure they do not stretch, pinch, or kink.

6. Rotate top of hitch plate back and lower loader arms until Cold Planer is resting on the ground.


8. Recheck hydraulic hoses. If needed, add zip ties to the hoses to protect them from possible damage.
Section 2: Operating Procedures

Basic Operation

**IMPORTANT:** Insufficient hydraulic power will result in poor performance. Check pressure and flow per factory skid steer specifications.

**NOTE:** Milling speed will depend on pick condition, age and density of the material, aggregate size, and ambient temperature.

Before operating the attachment, read this entire manual. Follow all safety guidelines in this manual and safety decals on the unit. Make sure that all guards, shields, and decals are in place and in good condition prior to operation.

See specifications in this manual for minimum and maximum pressures and flow requirements for your machine. Make sure the skid steer hydraulic pressure ratings fall within the specified range.

The Cold Planer is a hydraulically powered attachment intended for milling asphalt or light concrete surfaces. The performance of the attachment can vary greatly depending upon how it is used and operated. The recommended operation procedures in this manual should be followed at all times for maximum productivity.

Productivity can vary greatly depending on milling depth, type of aggregate in the mix, ambient temperature, and condition of the picks.

Picks should be inspected every 30 minutes for wear and to make sure they are rotating freely in their holders. Replace worn picks immediately. To promote pick rotation, spray picks daily with a water based asphalt emulsifier to break down asphalt emulsion. (Example: Zep’s part #AR6690) See the maintenance section for more information.

Optional picks for milling concrete and Water Spray Kits are available. Water Spray Kits increase productivity by suppression dust and help picks rotate properly.

If attachment is to be operated in reverse, make sure visibility to the rear of the power unit is appropriate for the attachment. Backup camera or mirror is recommended. Maintain cleanliness of lens or mirror.

Do not turn while milling. Cut straight lines only. Cutting curves will quickly wear the picks located along the edge of the drum and decrease productivity. Milling a radius or curve can also damage the drum.

Operating Low-Flow Cold Planer

Refer to Figure 2-8:

1. Enter skid steer and fasten seat belt.
2. Make sure the area is clear of all bystanders, start skid steer, and set engine at an idle.
4. Dismount skid steer to make the following adjustments:
   a. Loosen wing screw (#1) and manually adjust tilt jack (#2) to the preferred angle using angle gauge (#3) as a guide. Tighten wing screw (#1).
   b. Loosen wing screw (#4) and manually adjust depth jack (#5) to the preferred depth using depth gauge (#6) as a guide. Tighten wing screw (#4).
   c. Refer to Figure 2-7: If sideshifting the planer, move toggle lever (#8) to sideshift position.
5. Repeat steps 1-2 above.
6. Raise Cold Planer fully off the ground and then engage hydraulic cylinder (#7) to start sideshifting.
8. Refer to Figure 2-7: Return toggle lever (#8) to drum operating position and repeat steps 1-2 above.
9. Raise loader arms until planer drum is off the surface. Engage hydraulics to the planer and move throttle to full rpm. Keep throttle at full rpm during milling operations.
10. Lower drum into the cut.
11. Move forward at a speed that will allow the drum to cut efficiently without stalling.
Operating High-Flow Cold Planer

Refer to Figure 2-9:

1. Enter skid steer and fasten the seat belt.
2. Make sure the area is clear of bystanders, start skid steer, and set engine at an idle.
3. Raise planer off the ground just high enough to allow for adjustments.
4. With skid steer operating at an idle, make the following adjustments using the electrical and hydraulic controls.

   a. Adjust planer depth on the left with cylinder (#1) while using depth gauge (#2) as a guide.
   b. Adjust planer depth on the right with cylinder (#3) while using depth gauge (#4) as a guide.
   c. Engage hydraulic cylinder (#5) to sideshift the planer.
   d. Engage hydraulics to tilt cylinder (#7). Adjust planer tilt to the preferred angle using angle gauge (#6) as a guide.

   NOTE: It is best to begin operation by setting the depth cylinders to zero depth.

5. Raise loader arms until the Cold Planer is off the road surface.
7. Fully lower the loader arms and then roll out the bucket function until the planer is level with the pavement.
8. Move throttle to the full rpm position and keep it there during milling operations. Begin operation with the depth cylinders set to zero and then lower the drum into the cut to the desired depth.
9. Keep throttle at full rpm and move forward at a speed that will allow the drum to cut efficiently without stalling.
Transporting

**WARNING**
To avoid serious injury or death:

When traveling on roadways, transport in such a way that other vehicles may pass you safely. Use accessory lights, clean reflectors, and a slow moving vehicle sign that is visible from the back to warn operators in other vehicles of your presence. Always comply with all federal, state, and local laws.

1. Be sure to reduce ground speed when turning. Leave enough clearance to keep the attachment from making contact with obstacles such as buildings, trees or fences.
2. Select a safe ground speed when transporting from one area to another.
3. When traveling on public roadways, transport in such a way that faster moving vehicles may pass you safely. A slow moving vehicle sign should always be properly displayed when traveling on public roads or right-of-ways.
4. Decrease transport speed when traveling over rough or hilly terrain.
5. When transporting skid steer on a trailer:
   - Use towing vehicle and trailer of adequate capacity.
   - Always drive up a ramp with heavy end uphill.
   - Secure skid steer loader and attachment using tie downs and chains.

Unhook Cold Planer

Refer to “Figure 2-1” on page 17:

1. Park skid steer with Cold Planer on a flat, level surface. Lower loader arms until Cold Planer is resting on the ground.
3. Disconnect hydraulic hoses. It will be necessary to release hydraulic pressure in the lines before hoses will disconnect from the skid steer. Coil hydraulic hoses and store them on the planer with hose ends out of the dirt.
4. Disconnect wire harness from the skid steer. Coil wire harness up and store on the planer with the plug end hanging down to keep moisture and dirt out.
5. If lock handles are mechanical, pull lock handles up on the loader hitch plate to remove lock pins from the bottom slots in the attachment’s hitch plate.
6. Return to the skid steer seat and fasten seat belt.
7. Start skid steer.
8. If lock handles are hydraulic, raise lock pins hydraulically to remove them from the hitch plate slots.
9. Tilt loader hitch plate slightly forward until the bottom of the loader hitch plate has separated away from the bottom of the Cold Planer hitch plate.
10. Slowly lower loader arms until the loader hitch plate has separated from the attachment’s top angle bars.
11. Back skid steer slowly away from the planer making sure the skid steer does not interfere with the attachment’s hitch plate, hydraulic hoses, or wire harness.
Section 3: Options & Accessories

Picks (Accessory)
The factory installed carbide picks are a general purpose pick and are designed for milling both asphalt and concrete. Picks designed for extended periods of concrete milling are available from your dealer.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>106-0831</td>
<td>Pick, CP30, Asphalt (See Notes 1 &amp; 2)</td>
<td></td>
</tr>
<tr>
<td>106-0832</td>
<td>Pick, Concrete (Accessory) See Note 1</td>
<td></td>
</tr>
</tbody>
</table>

Note 1: Factory Installed.
Note 2: Total quantity of picks required per drum varies from model to model. See Model number and quantities listed below.

- CP3012LF . . 30 ea.
- CP3016LF . . 38 ea.
- CP3018 . . . . 40 ea.
- CP3024 . . . . 50 ea.
- CP3030 . . . . 60 ea.
- CP3040 . . . . 76 ea.
- CP3048 . . . . 96 ea.

Water Spray Kit (Accessory)
Use Water Spray Kit provided by Kubota to increase pick life by 20% to 40% and to suppress milling dust. Water Spray Kits are available from your dealer. Order 1 Cold Planer Control Box, 1 Water Tank Kit, and 1 Spray Bar Kit that matches the Cold Planer model.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>350-438A</td>
<td>Cold Planer Control Box</td>
</tr>
<tr>
<td>350-378A</td>
<td>Water Tank Kit, CP30</td>
</tr>
<tr>
<td>350-379A</td>
<td>Spray Bar Kit, CP3012LF</td>
</tr>
<tr>
<td>350-380A</td>
<td>Spray Bar Kit, CP3016LF</td>
</tr>
<tr>
<td>350-381A</td>
<td>Spray Bar Kit, CP3018</td>
</tr>
<tr>
<td>350-382A</td>
<td>Spray Bar Kit, CP3024</td>
</tr>
<tr>
<td>350-383A</td>
<td>Spray Bar Kit, CP3030</td>
</tr>
<tr>
<td>350-384A</td>
<td>Spray Bar Kit, CP3040</td>
</tr>
<tr>
<td>350-385A</td>
<td>Spray Bar Kit, CP3048</td>
</tr>
</tbody>
</table>
Maintenance

Proper servicing and adjustment are key to the long life of any attachment. With careful and systematic inspection, you can avoid costly maintenance, time, and repair.

Check all bolts after using the unit for several hours to be sure they are tight. Replace any worn, damaged, or illegible safety labels by obtaining new labels from your Kubota dealer.

**DANGER**

To avoid serious injury or death:

- Do not go near or under raised loader arms without first securing loader arms in the raised position with an approved lift-arm support.
- Keep body, body extremities, clothing, pull strings, etc. away from rotating/moving parts. Always shut off hydraulics to the attachment and shutdown the power machine before adjusting or servicing the equipment.
- Always secure equipment with solid, non-concrete supports before working under it. Never go under equipment supported by concrete blocks or hydraulics. Concrete can break, hydraulic lines can burst, and/or hydraulic controls can be actuated even when power to hydraulics is off.

**WARNING**

To avoid serious injury or death:

- Always shut power machine down using the “Shutdown Procedure” provided in this manual before servicing, adjusting, cleaning, or maintaining the attachment.
- Allow only persons to perform maintenance on this attachment who have been properly trained in its safe operation.
- Perform scheduled maintenance. Check for loose hardware, missing parts, broken parts, structural cracks, and excessive wear. Make repairs before putting the implement back into service.
- Backup alarm must be in good working order to warn others. Use a backup camera or rear-view mirror that is in good condition to ensure the area behind the unit is clear. Drive at a slower speed to compensate for blind spots.
- Do not alter attachment or replace parts on the attachment with other brands. Other brands may not fit properly or meet OEM specifications. They can weaken the integrity and impair the safety, function, performance, and life of the attachment. Replace parts only with genuine OEM parts.
- Check hydraulic hoses and fittings frequently for leaks or damage. Fluid escaping under pressure can penetrate skin. Large leaks can drop the attachment.
- Lubricate, make adjustments and repairs in a safe area away from traffic and other hazards.
- Check hitch fit-up frequently. An improper fit-up can cause the attachment to come loose from the loader hitch plate and fall.

**Hydraulic fluid heats up when the skid steer is operating. This can cause hydraulic hoses, fittings, and couplers to become hot. Wear gloves when working with hydraulic components and when connecting and disconnecting hydraulic couplers.**

Servicing Drivetrain Components

Detailed repair of the drivetrain components such as the hydraulic motor and gearbox are not covered in this manual. Contact your Kubota dealer for information about repairing these components during the warranty period.

Any unauthorized work performed on these components during the warranty period may void your warranty.

Cutting Drum Maintenance

Cutting drum maintenance is critical to extending the life of the pick, pick holder, and overall productivity of the planer.

**IMPORTANT: Inspect cutting drum picks and pick holders every 30 minutes of operation.**

The factory installed carbide picks are a general purpose pick and are designed for milling both asphalt and light concrete. Picks designed for extended periods of concrete cutting are available from your dealer. Refer to “Picks (Accessory)” on page 26.

Pick life varies with depth, density, material, aggregate, and maintenance. To maximize pick life, the picks must be free to rotate in the holder.

The pick has two functions:

- Serve as a consumable cutting tool.
- Protect the holder.

If the pick is not free to rotate in the holder or if the pick locks up in the holder, pick and pick holder wear is greatly accelerated.

Edge picks wear faster than center picks due to side loading of the drum during the power unit’s steering corrections.

To promote pick rotation in the holder, spray picks daily with a water based asphalt emulsifier to break down asphalt emulsion. (Example: Zep’s part #AR6690)

If the pick remains in the holder beyond the intended replacement point, it reduces the cutting performance and will not protect the holder. If the picks are worn enough to indicate slight holder wear, replace pick immediately.

Use Water Spray Kit provided by Kubota to increase pick life by 20% to 40% and to suppress milling dust. Refer to “Water Spray Kit (Accessory)” on page 26.

Figure 4-1 and Figure 4-3 on page 28 show examples of excessively worn picks.
Varying Degrees of Pick Wear

Examples of remaining pick life (%)

<table>
<thead>
<tr>
<th>100</th>
<th>95</th>
<th>90</th>
<th>75</th>
<th>40</th>
<th>20</th>
<th>0</th>
<th>-5</th>
</tr>
</thead>
</table>

Rotating Picks

Non-Rotating Picks

Picks may last twice as long if they are free to rotate in their holder

Remove & Install Picks

Refer to Figure 4-2:

**WARNING**

To avoid serious injury or death:

- Never strike a pick on the carbide tip. The carbide can break or chip and cause injury.
- Always wear eye protection when removing and installing picks. Carbide picks can shatter causing injury.

A fork type pick tool (#1) is included with the Cold Planer and should be used to remove picks from the holders. Insert the fork into the groove on the pick and strike the tool with a hammer. In the event the pick tool is not available, a punch can be inserted into the bottom of the pick holders and tapped on the underside of the pick to dislodge it.

For installation, the fork type tool should be inserted into the groove on the pick and struck with a hammer. If the tool is not available, a length of pipe with a 3/4 to 1 inch inside diameter can be placed over the pick to protect the carbide pick from a direct hit. Striking a small piece of wood placed on top the pipe to absorb the shock will also help prevent damage to the pick and pick holder.

Pick Holder Repair

Refer to Figure 4-3:

**IMPORTANT:** To avoid bearing damage, always ground directly to the drum before welding.

**IMPORTANT:** Kubota does not warrant any ground engaging parts (drum, picks, holders, or bases) against wear, unless the wear is determined by Kubota to have been caused by a manufacturing defect.

If a pick holder becomes worn, note the position and angle of the holder. Cut the pick holder from the drum using a torch or air-arc. Weld the new holder to the drum in the noted position.
Change Oil In Planetary Gearbox

Planetary Gearbox Oil Change
Refer to Figure 4-4:

The planetary gearbox oil should be drained and refilled at 100 hours of operation and every 250 hours or yearly, whichever comes first, after initial oil change.

The planetary gearbox contains synthetic EP90 gear oil and should be half full during operation.

Oil drain and fill procedure:
1. Clean area around plug holes on gearbox.
2. Remove the two drain plugs on the gearbox. Rotate drum so that a plug hole is on the bottom to drain the gearbox of oil.
3. Drain oil into an approved container.
4. Rotate planer drum and gearbox until one plug hole is horizontal and the other plug hole is on top.
5. Slowly fill gearbox though the top fill hole until oil reaches the horizontal oil level hole.
6. The gearbox should be half full of AGMA EP90 synthetic gear lubricant or SAE 75W90 synthetic gear lubricant. (Chevron RPM Synthetic 75W90 for example). The approximate volume of the gearbox is 30 oz.
7. Replace the two gearbox plugs and tighten.

Long-Term Storage
Clean, inspect, service, and make necessary repairs to the Cold Planer when parking it for long periods and when parking it at the end of a working season. This will help ensure that the planer is ready for field use the next time you hook-up to it.
Lubrication Points
Low-Flow Cold Planer Lubrication

**Sideshift Bars, Low-Flow**
2 - Sideshift Bars (Upper and Lower)
Type of Lubrication:
Graphite lube spray such as CRC 30094
Quantity: Clean and spray sideshift bars once a week.

**IMPORTANT**: Do not apply grease to the sideshift bars. Grease catches milling dust and causes the sideshift mechanism to bind and wear quickly.

**Dead Shaft Bearing, Low-Flow**
1 - Zerk
Type of Lubrication:
EP Lithium NLGL No. 2 grade Grease
Quantity: Add grease until grease begins to emerge.
**Depth Jack, Low-Flow**

3- Zerks

Type of Lubrication:
EP Lithium NLGL No. 2 grade Grease

Quantity: Add grease until grease begins to emerge.

---

**Tilt Jack, Low-Flow**

3- Zerks

Type of Lubrication:
EP Lithium NLGL No. 2 grade Grease

Quantity: Add grease until grease begins to emerge.
High-Flow Cold Planer Lubrication

**Sideshift Bars, High-Flow**

2 - Sideshift Bars (Upper and Lower)

Type of Lubrication:
Graphite lube spray such as CRC 30094

Quantity: Clean and spray sideshift bars once a week.

**IMPORTANT:** Do not apply grease to the sideshift bars. Grease catches milling dust and causes the sideshift mechanism to bind and wear quickly.

**Left & Right Depth Skids, High-Flow**

4 - Retained Skid Locations

Type of Lubrication:
Graphite lube spray such as CRC 30094

Quantity: Spray deft skid bars once a week.

**IMPORTANT:** Do not apply grease to the depth skids. Grease catches milling dust and causes the deft skid mechanism to bind and wear quickly.
Section 4: Maintenance & Lubrication

Dead Shaft Bearing, High-Flow
1 - Zerk
Type of Lubrication:
EP Lithium NLGL No. 2 Grade Grease
Quantity: Add grease until grease begins to emerge.

Depth Cylinder Pivot Pins, High-Flow
4 - Zerk
Lubricate every 40 hours of use or weekly, whichever comes first.
Type of Lubrication:
EP Lithium NLGL No. 2 Grade Grease
Quantity: Add grease until grease begins to emerge.

Planetary Gearbox, High-Flow
Type of Lubrication: Synthetic EP90 Gear Oil
Change oil at the first 100 hours of use. Thereafter, change every 250 hours or yearly, whichever comes first.
Quantity: Fill until oil reaches oil level plug hole which is rotated to be horizontal, approximately 30 oz.
Refer to “Planetary Gearbox Oil Change” on page 29.
### CP30 Series Cold Planers

#### Specifications & Capacities

<table>
<thead>
<tr>
<th>Model Numbers</th>
<th>CP3012LF</th>
<th>CP3016LF</th>
<th>CP3018</th>
<th>CP3024</th>
<th>CP3030</th>
<th>CP3040</th>
<th>CP3048</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cutting width (inches (cm))</td>
<td>12 (31)</td>
<td>16 (41)</td>
<td>18 (46)</td>
<td>24 (61)</td>
<td>30 (76)</td>
<td>40 (102)</td>
<td>48 (122)</td>
</tr>
<tr>
<td>Cutting depth (inches (cm))</td>
<td>0 to 5 (0 to 13)</td>
<td>0 to 6 (0 to 15)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of picks</td>
<td>30</td>
<td>38</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>76</td>
<td>90</td>
</tr>
<tr>
<td>Min. hydraulic flow gpm (Lpm)</td>
<td>15 (56.8)</td>
<td>24 (91)</td>
<td>27 (102)</td>
<td>30 (114)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max. hydraulic flow gpm (Lpm)</td>
<td>25 (94.6)</td>
<td>42 (159)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum pressure psi (MPa)</td>
<td>2,000 (13.8)</td>
<td>2,000 (13.8)</td>
<td>2,000 (13.8)</td>
<td>2,500 (17.2)</td>
<td>3,000 (20.7)</td>
<td>3,500 (24.1)</td>
<td></td>
</tr>
<tr>
<td>Maximum pressure psi (MPa)</td>
<td>3,500 (24.1)</td>
<td>5,000 (34.4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tilt capability degrees</td>
<td>±15</td>
<td>±15</td>
<td>±13</td>
<td>±10</td>
<td>±8</td>
<td>±6</td>
<td></td>
</tr>
<tr>
<td>Sideshift travel inches (cm)</td>
<td>26 (66)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wall clearance inches (cm)</td>
<td>Not available</td>
<td>4 (10 cm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planetary gearbox oil type</td>
<td>Not applicable</td>
<td>EP90 or SAE75W90 Synthetic Gear lubricant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planetary gearbox oil capacity</td>
<td>Not applicable</td>
<td>Approximately 30 oz (1 L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approximate weight lbs (kg)</td>
<td>1284 (582)</td>
<td>1455 (660)</td>
<td>1730 (785)</td>
<td>1901 (862)</td>
<td>1991 (903)</td>
<td>2308 (1047)</td>
<td>2504 (1136)</td>
</tr>
</tbody>
</table>

**CP3012LF & CP3016LF**

- 49 1/2" (1.26 m)
- 67 1/2" (1.71 m)

**CP3018, CP3024, CP3030, CP3040, & CP3048**

- 49" (1.24 m)
- 67" (1.7 m)
- 37 1/2" (0.95 m)
## CP3012LF & CP3016LF Low-Flow Cold Planers

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removable carbide picks</td>
<td>Uses rocket fin technology that is built into the picks for longer life. Easy to replace.</td>
</tr>
<tr>
<td>Hydraulic sideshift</td>
<td>Drum engagement and sideshift are integrated into the multi-function grips of the SSV/SVL.</td>
</tr>
<tr>
<td>Manual tilt and depth adjustment</td>
<td>Economical and easy to adjust.</td>
</tr>
</tbody>
</table>

## CP3018, CP3024, CP3030, CP3040, & CP3048 High-Flow Cold Planers

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removable carbide picks</td>
<td>Uses rocket fin technology that is built into the picks for longer life. Easy to replace.</td>
</tr>
<tr>
<td>Skid shoes adjust independently with hydraulic cylinders</td>
<td>Allows the planer to follow curb and gutter as well as the contour of the road or street.</td>
</tr>
<tr>
<td>Tilt, depth, and sideshift adjust hydraulically</td>
<td>All functions are integrated into the multi-function grips of the SSV/SVL.</td>
</tr>
<tr>
<td>Case drain</td>
<td>Protects hydraulic motor and seals.</td>
</tr>
</tbody>
</table>
### Troubleshooting Chart

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drum does not rotate.</td>
<td>Auxiliary hydraulics switch for continuous operation is not engaged.</td>
<td>Engage auxiliary hydraulics switch for continuous operation.</td>
</tr>
<tr>
<td></td>
<td>One or both of the hydraulic couplers are not fully connected.</td>
<td>Reconnect couplers to skid steer auxiliary hydraulic outlets.</td>
</tr>
<tr>
<td>Drum rotates backward.</td>
<td>Male and female hydraulic couplers are connected in reverse order.</td>
<td>Switch male and female couplers on hydraulic hoses and then reconnect hoses to the auxiliary hydraulic outlets.</td>
</tr>
<tr>
<td>Motor oil seal is leaking.</td>
<td>Return line from motor has been pinched or is collapsed.</td>
<td>Replace motor seal. Check motor return hose for kinks.</td>
</tr>
<tr>
<td></td>
<td>Case drain line is not properly connected.</td>
<td>Connect case drain line to the hydraulic motor and skid steer reservoir.</td>
</tr>
<tr>
<td>Pick is wearing unevenly.</td>
<td>Pick is not rotating in the holder.</td>
<td>Spray picks daily with a water based asphalt emulsifier to break down asphalt emulsion. Example: Zep’s part # AR6690</td>
</tr>
<tr>
<td>Picks do not last long.</td>
<td>Not inspecting picks frequently.</td>
<td>Inspect picks every 30 minutes of operation for sign of pick rotation and wear. Replace picks as needed. Refer to “Remove &amp; Install Picks” on page 28.</td>
</tr>
<tr>
<td></td>
<td>Picks are not kept clean.</td>
<td>Recommend adding a Water Spray Kit. This kit can increase tooth life by 20 to 40% and suppress milling dust.</td>
</tr>
<tr>
<td></td>
<td>Picks are cutting concrete most of the time.</td>
<td>Replace standard asphalt picks with concrete picks.</td>
</tr>
<tr>
<td>Edge picks are wearing faster than the center picks.</td>
<td>Side loading on the drum during steering corrections.</td>
<td>Make straight cuts. Keep steering corrections to a minimum.</td>
</tr>
<tr>
<td>Pick holders are wearing.</td>
<td>Not inspecting pick holders frequently.</td>
<td>Inspect pick holders every 30 minutes of operation for wear. Replace pick holders as needed. Refer to “Pick Holder Repair” on page 28.</td>
</tr>
<tr>
<td></td>
<td>Pick is not rotating in the holder.</td>
<td>Spray picks daily with a water based asphalt emulsifier to break down asphalt emulsion. Example: Zep’s part # AR6690</td>
</tr>
<tr>
<td></td>
<td>Pick is worn beyond its intended replacement point.</td>
<td>Replace pick if pick is worn enough to indicate slight holder wear.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Replace pick holder if worn excessively.</td>
</tr>
</tbody>
</table>
# Torque Values Chart for Common Bolt Sizes

<table>
<thead>
<tr>
<th>Bolt Size (inches)</th>
<th>Bolt Head Identification</th>
<th>Grade 2</th>
<th>Grade 5</th>
<th>Grade 8</th>
<th>Bolt Size (Metric)</th>
<th>Class 5.8</th>
<th>Class 8.8</th>
<th>Class 10.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>in-tpi 1</td>
<td>N·m 2</td>
<td>ft-lb 3</td>
<td>N·m</td>
<td>ft-lb</td>
<td>N·m</td>
<td>ft-lb</td>
<td>mm x pitch 4</td>
<td>N·m</td>
</tr>
<tr>
<td>1/4&quot; - 20</td>
<td>7.4</td>
<td>5.6</td>
<td>11</td>
<td>8</td>
<td>16</td>
<td>12</td>
<td>M 5 X 0.8</td>
<td>4</td>
</tr>
<tr>
<td>1/4&quot; - 28</td>
<td>8.5</td>
<td>6</td>
<td>13</td>
<td>10</td>
<td>18</td>
<td>14</td>
<td>M 6 X 1</td>
<td>7</td>
</tr>
<tr>
<td>5/16&quot; - 18</td>
<td>15</td>
<td>11</td>
<td>24</td>
<td>17</td>
<td>33</td>
<td>25</td>
<td>M 8 X 1.25</td>
<td>17</td>
</tr>
<tr>
<td>5/16&quot; - 24</td>
<td>17</td>
<td>13</td>
<td>26</td>
<td>19</td>
<td>37</td>
<td>27</td>
<td>M 8 X 1</td>
<td>18</td>
</tr>
<tr>
<td>3/8&quot; - 16</td>
<td>27</td>
<td>20</td>
<td>42</td>
<td>31</td>
<td>59</td>
<td>44</td>
<td>M10 X 1.5</td>
<td>33</td>
</tr>
<tr>
<td>3/8&quot; - 24</td>
<td>31</td>
<td>22</td>
<td>47</td>
<td>35</td>
<td>67</td>
<td>49</td>
<td>M10 X 0.75</td>
<td>39</td>
</tr>
<tr>
<td>7/16&quot; - 14</td>
<td>43</td>
<td>32</td>
<td>67</td>
<td>49</td>
<td>95</td>
<td>70</td>
<td>M12 X 1.75</td>
<td>58</td>
</tr>
<tr>
<td>7/16&quot; - 20</td>
<td>49</td>
<td>36</td>
<td>75</td>
<td>55</td>
<td>105</td>
<td>78</td>
<td>M12 X 1.5</td>
<td>60</td>
</tr>
<tr>
<td>1/2&quot; - 13</td>
<td>66</td>
<td>49</td>
<td>105</td>
<td>76</td>
<td>145</td>
<td>105</td>
<td>M12 X 1</td>
<td>90</td>
</tr>
<tr>
<td>1/2&quot; - 20</td>
<td>75</td>
<td>55</td>
<td>115</td>
<td>85</td>
<td>165</td>
<td>120</td>
<td>M14 X 2</td>
<td>92</td>
</tr>
<tr>
<td>9/16&quot; - 12</td>
<td>95</td>
<td>70</td>
<td>150</td>
<td>110</td>
<td>210</td>
<td>155</td>
<td>M14 X 1.5</td>
<td>99</td>
</tr>
<tr>
<td>9/16&quot; - 18</td>
<td>105</td>
<td>79</td>
<td>165</td>
<td>120</td>
<td>235</td>
<td>170</td>
<td>M16 X 2</td>
<td>145</td>
</tr>
<tr>
<td>5/8&quot; - 11</td>
<td>130</td>
<td>97</td>
<td>205</td>
<td>150</td>
<td>285</td>
<td>210</td>
<td>M16 X 1.5</td>
<td>155</td>
</tr>
<tr>
<td>5/8&quot; - 18</td>
<td>150</td>
<td>110</td>
<td>230</td>
<td>170</td>
<td>325</td>
<td>240</td>
<td>M18 X 2.5</td>
<td>195</td>
</tr>
<tr>
<td>3/4&quot; - 10</td>
<td>235</td>
<td>170</td>
<td>360</td>
<td>265</td>
<td>510</td>
<td>375</td>
<td>M18 X 1.5</td>
<td>220</td>
</tr>
<tr>
<td>3/4&quot; - 16</td>
<td>260</td>
<td>190</td>
<td>405</td>
<td>295</td>
<td>570</td>
<td>420</td>
<td>M20 X 2.5</td>
<td>280</td>
</tr>
<tr>
<td>7/8&quot; - 9</td>
<td>225</td>
<td>165</td>
<td>585</td>
<td>430</td>
<td>820</td>
<td>605</td>
<td>M20 X 1.5</td>
<td>310</td>
</tr>
<tr>
<td>7/8&quot; - 14</td>
<td>250</td>
<td>185</td>
<td>640</td>
<td>475</td>
<td>905</td>
<td>670</td>
<td>M24 X 3</td>
<td>480</td>
</tr>
<tr>
<td>1&quot; - 8</td>
<td>340</td>
<td>250</td>
<td>875</td>
<td>645</td>
<td>1230</td>
<td>910</td>
<td>M24 X 2</td>
<td>525</td>
</tr>
<tr>
<td>1&quot; - 12</td>
<td>370</td>
<td>275</td>
<td>955</td>
<td>705</td>
<td>1350</td>
<td>995</td>
<td>M30 X 3.5</td>
<td>960</td>
</tr>
<tr>
<td>1-1/8&quot; - 7</td>
<td>480</td>
<td>355</td>
<td>1080</td>
<td>795</td>
<td>1750</td>
<td>1290</td>
<td>M30 X 2</td>
<td>1060</td>
</tr>
<tr>
<td>1-1/8&quot; - 12</td>
<td>540</td>
<td>395</td>
<td>1210</td>
<td>890</td>
<td>1960</td>
<td>1440</td>
<td>M36 X 3.5</td>
<td>1730</td>
</tr>
<tr>
<td>1-1/4&quot; - 7</td>
<td>680</td>
<td>500</td>
<td>1520</td>
<td>1120</td>
<td>2460</td>
<td>1820</td>
<td>M36 X 2</td>
<td>1880</td>
</tr>
</tbody>
</table>

| 1-1/4" - 12 | 750 | 555 | 1680 | 1240 | 2730 | 2010 | 5.8 |
| 1-3/8" - 6 | 890 | 655 | 1990 | 1470 | 3230 | 2380 | 8.8 |
| 1-3/8" - 12 | 1010 | 745 | 2270 | 1670 | 3680 | 2710 | 10.9 |
| 1-1/2" - 6 | 1180 | 870 | 2640 | 1950 | 4290 | 3160 |
| 1-1/2" - 12 | 1330 | 980 | 2970 | 2190 | 4820 | 3560 |

1 in-tpi = nominal thread diameter in inches-threads per inch
2 N·m = newton-meters
3 ft-lb= foot pounds
4 mm x pitch = nominal thread diameter in millimeters x thread pitch

Torque tolerance + 0%, -15% of torquing values. Unless otherwise specified use torque values listed above.
Warranty

Land Pride warrants to the original purchaser that this Land Pride product will be free from defects in material and workmanship beginning on the date of purchase by the end user according to the following schedule when used as intended and under normal service and conditions for personal use.

**Overall Unit:** One year Parts and Labor

**Hydraulic Motor:** Two years Parts and Labor

**Hydraulic Cylinder:** One year Parts and Labor; Hoses and seals are considered wear items.

**Drums, Picks, Pick Holders, and Bases:** Considered wear items

This Warranty is limited to the repair or replacement of any defective part by Land Pride and the installation by the dealer of any such replacement part, and does not cover common wear items such as blades, belts, tines, etc. Land Pride reserves the right to inspect any equipment or parts which are claimed to have been defective in material or workmanship.

This Warranty does not apply to any part or product which in Land Pride’s judgment shall have been misused or damaged by accident or lack of normal maintenance or care, or which has been repaired or altered in a way which adversely affects its performance or reliability, or which has been used for a purpose for which the product is not designed. Misuse also specifically includes failure to properly maintain oil levels, grease points and driveline shafts.

Claims under this Warranty should be made to the dealer which originally sold the product and all warranty adjustments must be made through an authorized Kubota dealer. Kubota reserves the right to make changes in materials or design of the product at any time without notice.

This Warranty shall not be interpreted to render Land Pride liable for damages of any kind, direct, consequential, or contingent to property. Furthermore, Land Pride shall not be liable for damages resulting from any cause beyond its reasonable control. This Warranty does not extend to loss of crops, any expense or loss for labor, supplies, rental machinery or for any other reason.

No other warranty of any kind whatsoever, express or implied, is made with respect to this sale; and all implied warranties of merchantability and fitness for a particular purpose which exceed the obligations set forth in this written warranty are hereby disclaimed and excluded from this sale.

This Warranty is not valid unless registered with Land Pride within 30 days from the date of original purchase.

**IMPORTANT:** The Online Warranty Registration should be completed by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

Model Number ____________________ Serial Number ____________________
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