

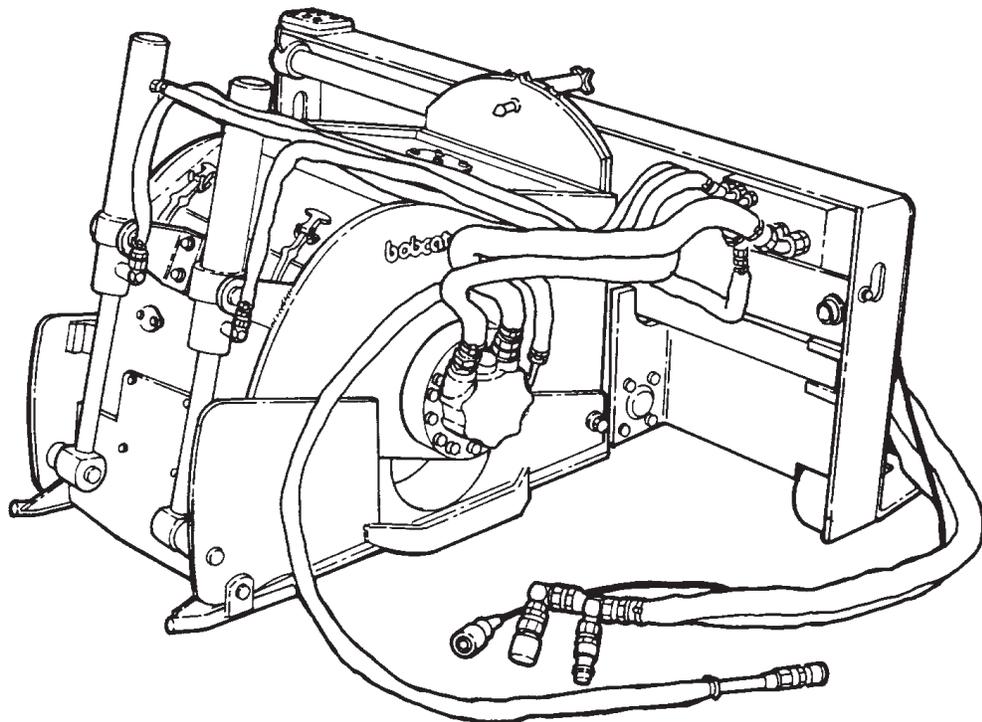
Product: Bobcat Planer Service Repair Workshop Manual
Full Download: <https://www.aresairmanual.com/downloads/bobcat-planer-service-repair-workshop-manual/>



PLANER

(S/N 178100101 & Above)
(S/N 887400101 & Above)
(S/N 052300101 & Above)
(S/N 303600101 & Above)
(S/N 400101001 & Above)
(S/N 400201001 & Above)
(S/N 910200101 & Above)
(S/N 910300101 & Above)
(S/N 341000101 & Above)
(S/N 721700101 & Above)

Service Manual



See
<https://www.aresairmanual.com/downloads/bobcat-planer-service-repair-workshop-manual/>

123 pages at:
[downloads/bobcat-planer-service-repair-workshop-manual/](https://www.aresairmanual.com/downloads/bobcat-planer-service-repair-workshop-manual/)

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MAINTENANCE SAFETY



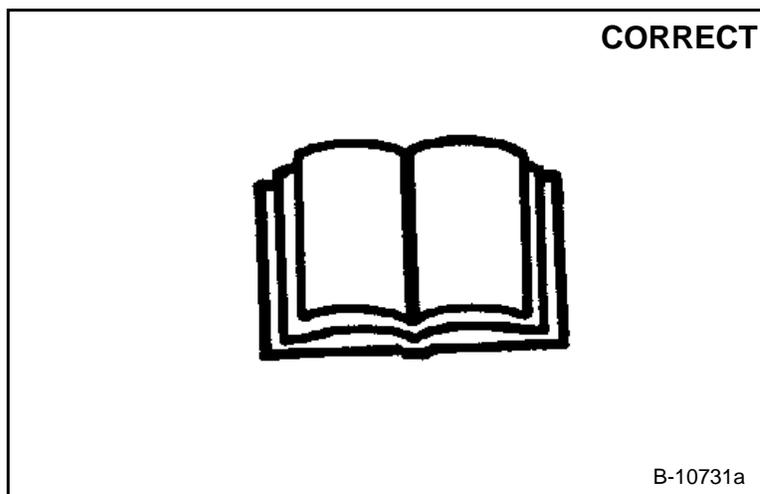
WARNING

Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Operator's Handbook and signs (decals) on machine. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.

W-2003-0903



Safety Alert Symbol: This symbol with a warning statement, means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.



-  Never service attachments without instructions. See Operation & Maintenance Manual and Attachment Service Manual.
-  Cleaning and maintenance are required daily.
-  Never service or adjust attachment with the engine running unless instructed to do so in manual.
-  Always lower the attachment to the ground before lubricating or servicing.
-  Avoid contact with leaking hydraulic fluid or diesel fuel under pressure. It can penetrate skin or eyes.
-  Stop, cool and clean engine of flammable materials before checking fluids.
-  Keep body, loose objects and clothing away from moving parts, electrical contacts, hot parts and exhaust.
-  Safety glasses are needed for eye protection from electrical arcs, battery acid, compressed springs, fluids under pressure and flying debris or when tools are used. Use eye protection approved for type of welding.



Bobcat®

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**STANDARD
FLOW PLANER**

**HIGH FLOW
PLANER**

**HIGH FLOW 18
AND 24 INCH
PLANER**

**HYDRAULIC
CYLINDER**

**CALIFORNIA
PROPOSITION 65 WARNING**

Diesel engine exhaust and some of its
constituents are known to the State of California
to cause cancer, birth defects and other
reproductive harm.

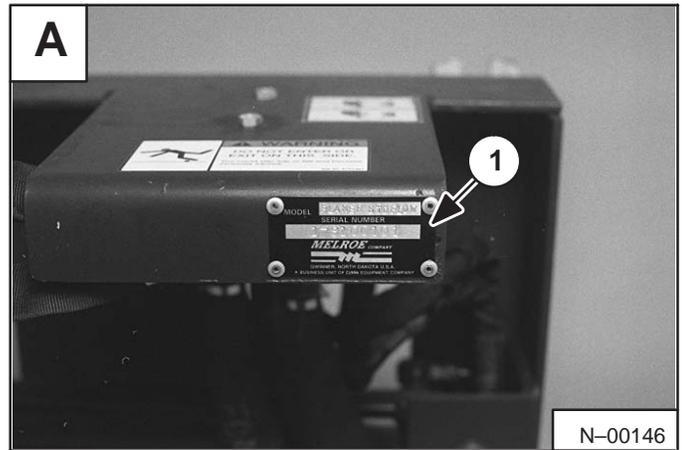


SERIAL NUMBER LOCATION

(S/N 178199191 & Above)

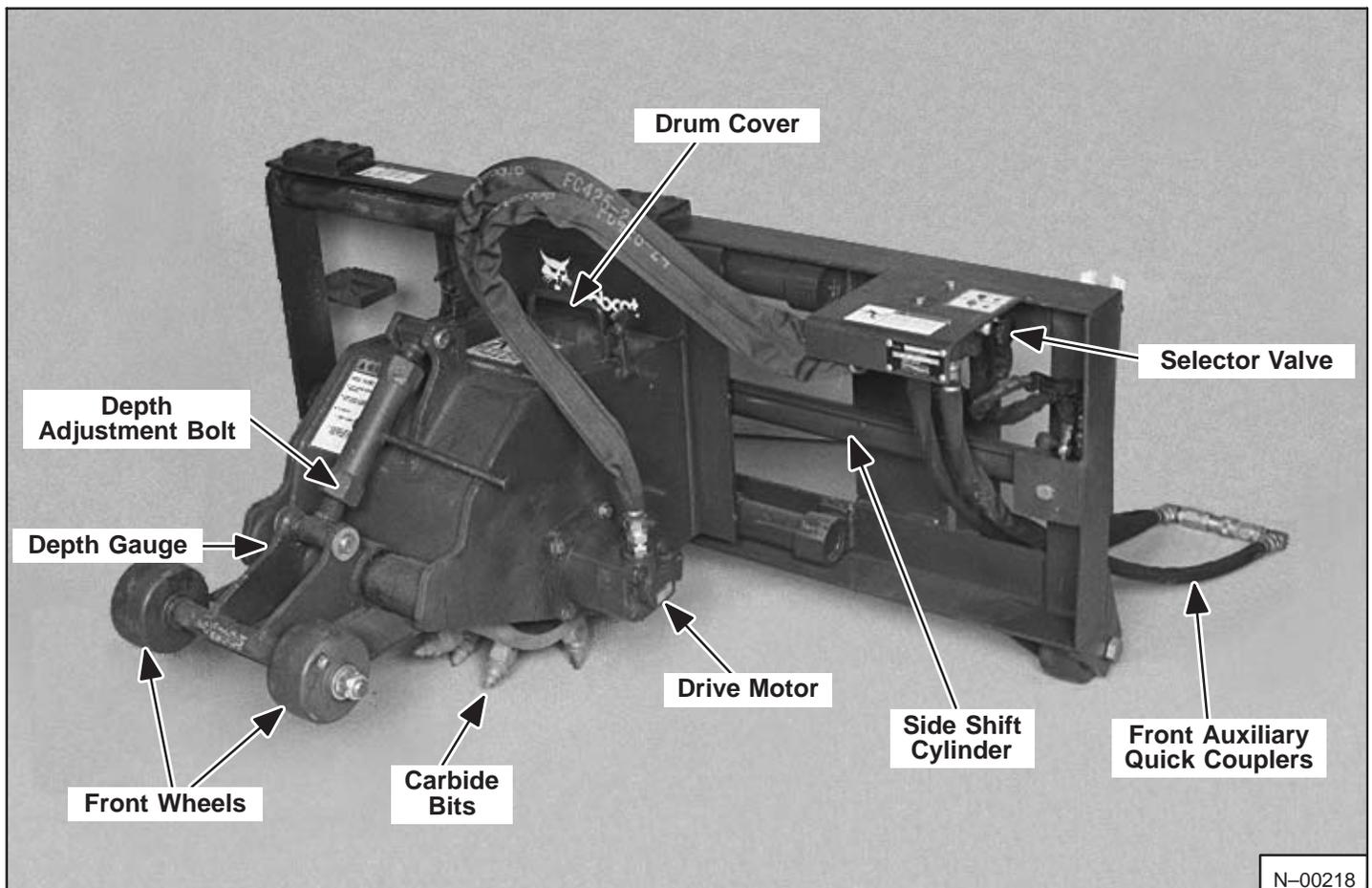
It is important to make the correct reference to the Serial Number of the Bobcat Standard Flow Planer when making repairs or ordering parts. Early or later models (identifications made by serial number) may use different parts, or it may be necessary to use a different procedure in doing a specific service operation [A].

The Standard Flow Planer serial number plate (Item 1) [A] is located on the front side of the frame by the selector valve.



PARTS IDENTIFICATION

(S/N 178100101 & Above)

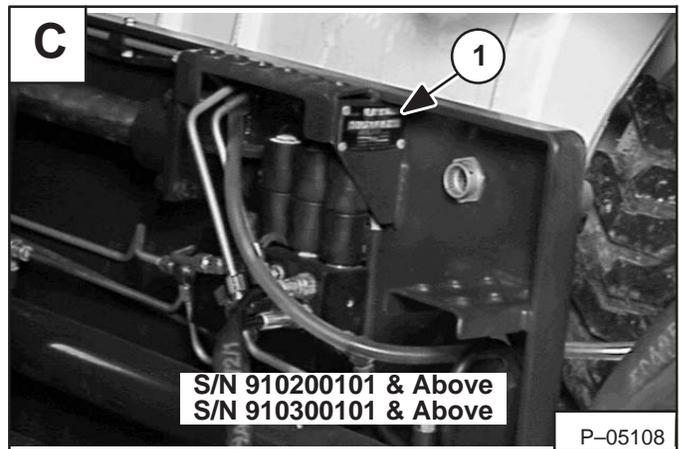
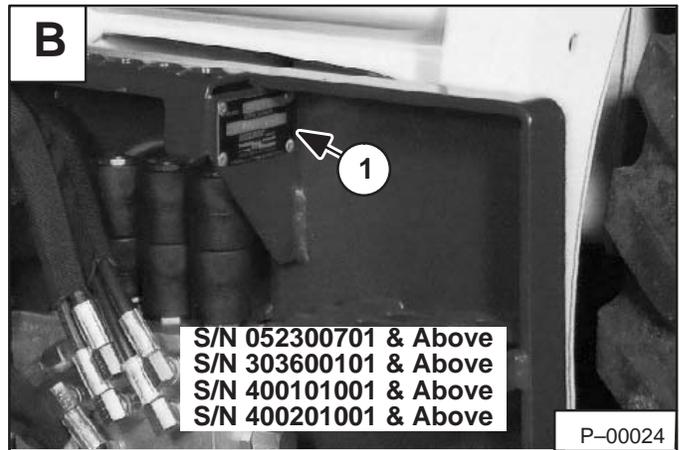
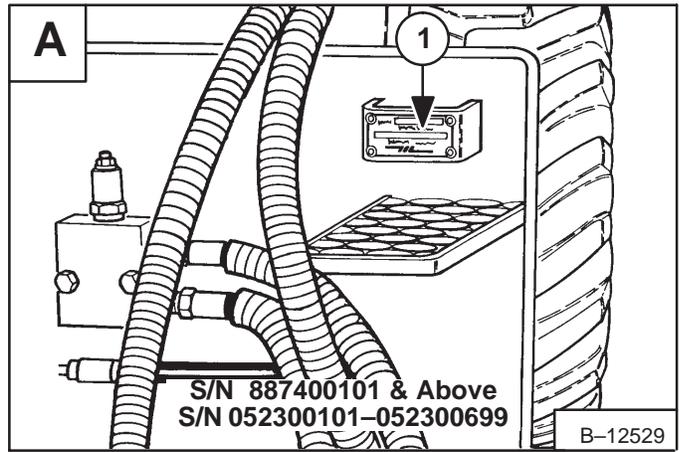


SERIAL NUMBER LOCATIONS

(S/N 8874001 & Above), (S/N 052300101 & Above), (S/N 303600101 & Above), (S/N 400101001 & Above), (S/N 400201001 & Above), (S/N 910200101 & Above) and (S/N 910300101 & Above)

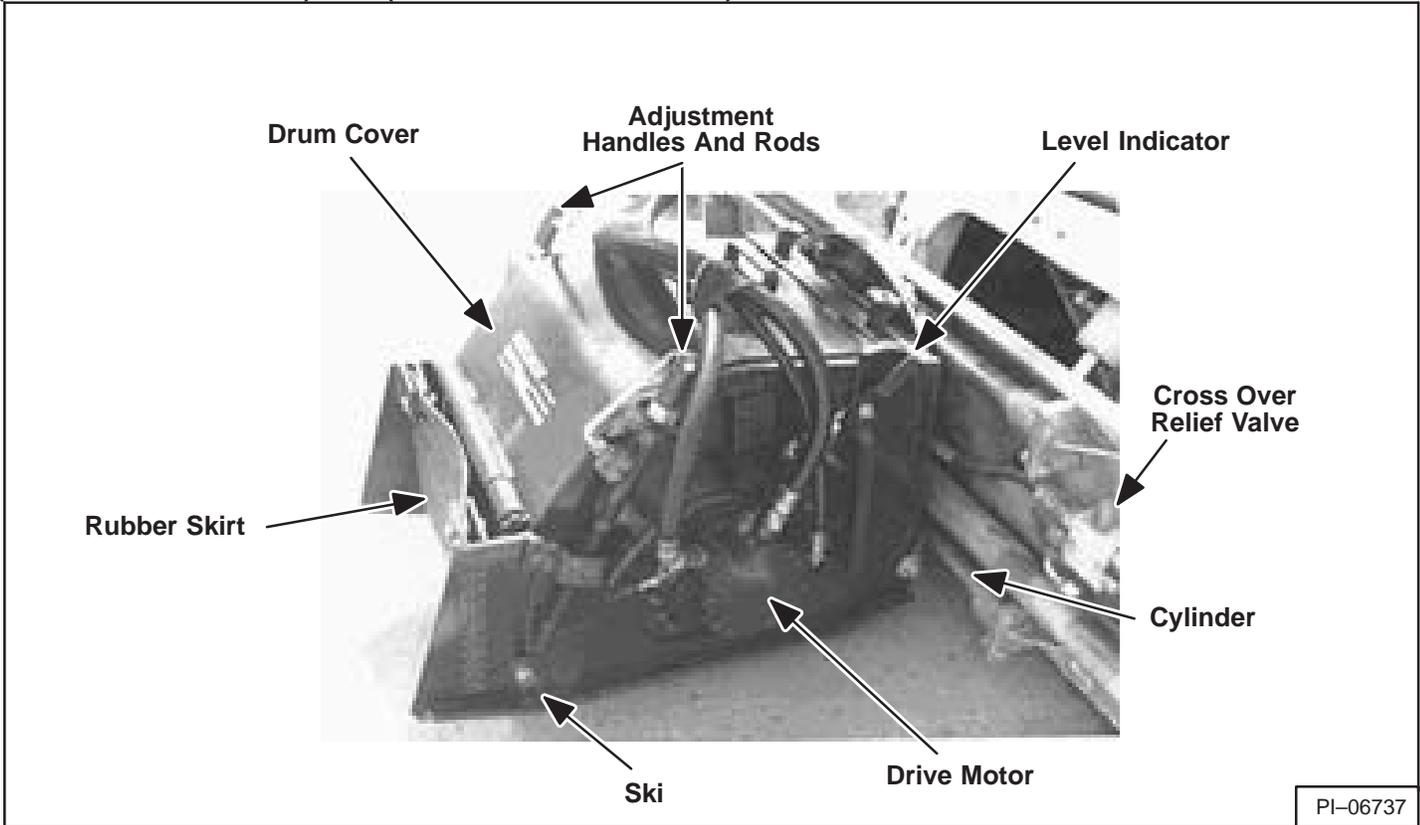
It is important to make the correct reference to the Serial Number of the Bobcat Planer when making repairs or ordering parts. Early or later models (identifications made by serial number) may use different parts, or it may be necessary to use a different procedure in doing a specific service operation [A], [B] & [C].

The Planer serial number plate (Item 1) [A], [B] & [C] is located on the front side of the Planer frame in the upper left corner.



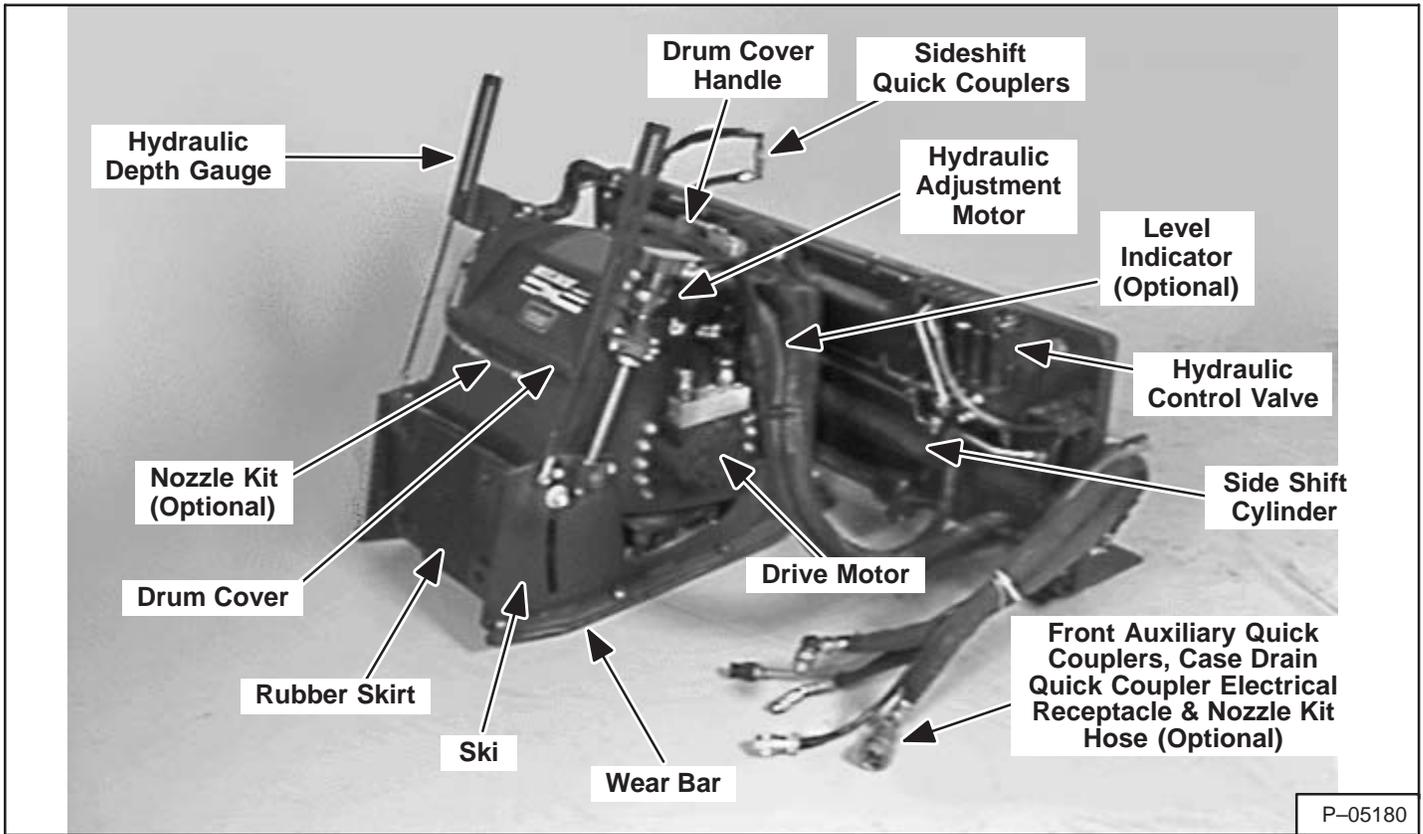
PARTS IDENTIFICATION

(S/N 887400101 & Above) AND (S/N 052300101–052300699)



PARTS IDENTIFICATION

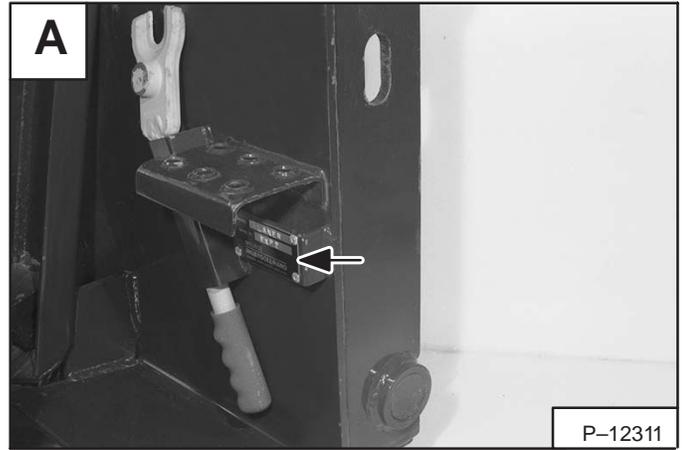
(S/N 052300701 & Above), (S/N 303600101 & Above), (S/N 400101001 & Above), (S/N 400201001 & Above), (S/N 910200101 & Above) And (S/N 910300101 & Above)



SERIAL NUMBER LOCATION

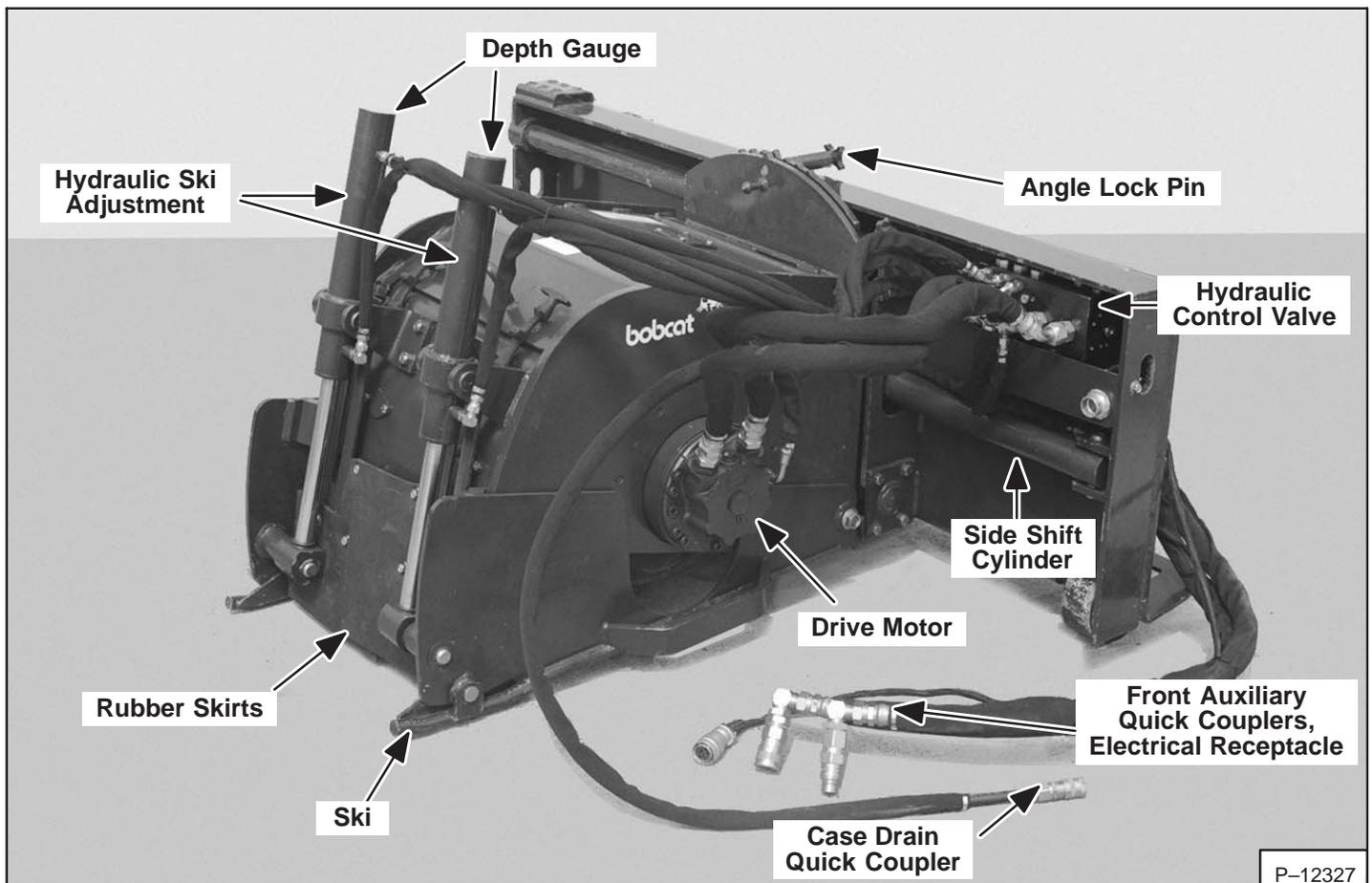
(S/N 341000101 & Above) And (S/N 721700101 & Above)

Always use the serial number of the Planer when requesting service information or when ordering parts. Early or later models (identification made by serial number) may use different parts, or it may be necessary to use a different procedure in doing a specific service operation [A].



PARTS IDENTIFICATION

(S/N 341000101 & Above) And (S/N 721700101 & Above)



PREVENTIVE MAINTENANCE

**STANDARD FLOW PLANER
(S/N 178100101 & Above)**

	Page Number
DRUM	
Replacing The Carbide Bits	10-10-5
LUBRICATING THE PLANER	10-10-4
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TROUBLESHOOTING



Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Handbook and signs (decals) on machine. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.

W-2003-0199

If the Planer is not working correctly, check the hydraulic system of the machine thoroughly before making any repairs on the Planer. Planer problems can be affected by a hydraulic system that is not operating to specifications. Connect a flow meter to the loader to check the hydraulic pump output, relief valve setting and tubelines to check flow and pressure. (See your Bobcat loader Dealer or the loader Service Manual for the correct procedure to connect the flow meter.)

Use the following troubleshooting chart to locate and correct problems which most often occur with the Planer.

PROBLEM	CAUSE	CORRECTION
Planer cut is inadequate.	Carbide bits worn or missing. Bits not free to rotate.	Replace the carbide bits. Clean bits shanks.
External oil leaks.	Defective assembly. Damaged O-rings.	Replace O-rings as needed. Check bolt torque.
Planer will not side shift.	Not enough hydraulic flow.	Test loader hydraulics for flow and pressure.
NOISY MOTOR Unloaded Loaded	Leaks.	Check motor
	Vibration; loose bolts.	Check torque.
	Humming; worn bearing.	Replace bearings.
Motor does not rotate.	No flow.	Check pump drive and pump inlet.
	No pressure.	Valves damaged or corroded.
	Excessive leakage.	Check condition of motor.
	Loader hydraulic pump not working.	Repair or Replace as needed.
Planer motor does not turn at normal speed.	Not enough flow.	Check pump flow and rotation speed. Check diverter valve.
Planer motor doesn't turn.	Internal leaks.	Check motor
	Pressure too low.	Check relief valve setting.
Motor turns irregularly.	Leaks	Check motor and selector valve.
	Irregular flow.	Check pump flow.
	Internal leaks.	Check motor.

LUBRICATING THE PLANER

Lubricate the Planer with a high quality lithium base grease every 8–10 hours of operation at the following locations:

Each front wheel (Item 1) **[A]**.

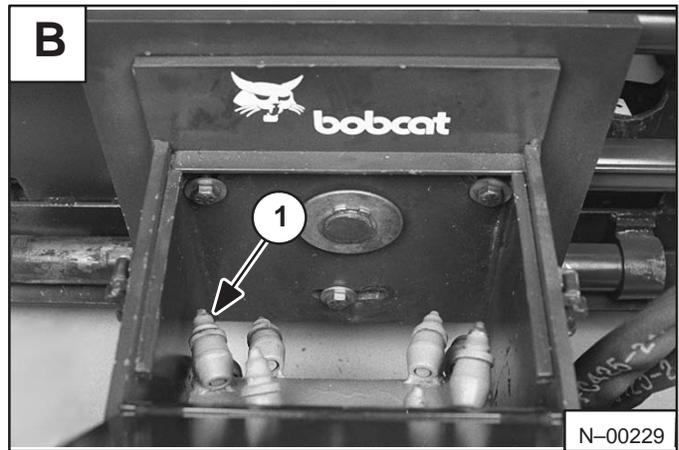
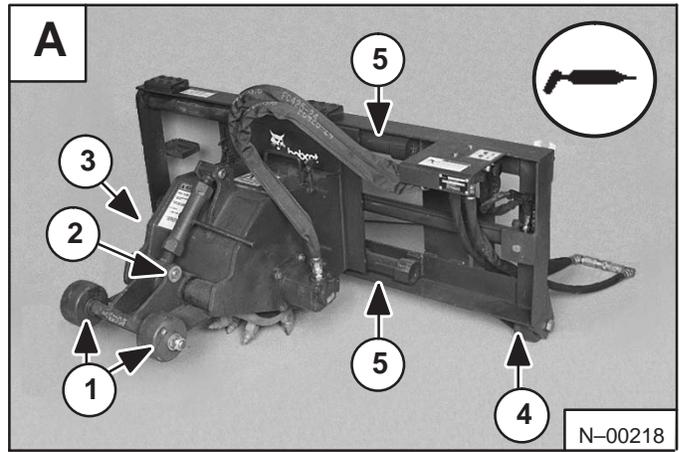
Lower bushing (Item 2) **[A]** on the wheel adjustment bolt.

Cutter wheel idle bearing (Item 3) **[A]**.

Each rear wheel (Item 4) **[A]**.

The side shift rods (Item 5) **[A]**.

Inspect the bits (Item 1) **[B]** every 8–10 hours of operation for wear. The bits must turn freely in the holders.



DRUM

Dozer Blade Mount Inspection

Lower the lift arms fully and tilt the Bob-Tach forward until the Planer rests on the work surface.

! **WARNING**

AVOID INJURY OR DEATH
DO NOT open cover while running. You could be drawn into the machine.

W-2181-0395

Stop the engine and exit the loader.

Lift the rubber latches (Item 1) [A] to open the cover.

! **WARNING**

Wear safety glasses to prevent eye injury when any of the following conditions exist:

- When fluids are under pressure.
- Flying debris or loose material is present.
- Engine is running.
- Tools are being used.

W-2019-1285

If any bit does not rotate freely, tap the holder to loosen dirt or foreign particles from the bit.

The tool listed (which is stored on the Planer frame), is used for the following procedure:

MEL1302 – Bit Removal and Installation Tool

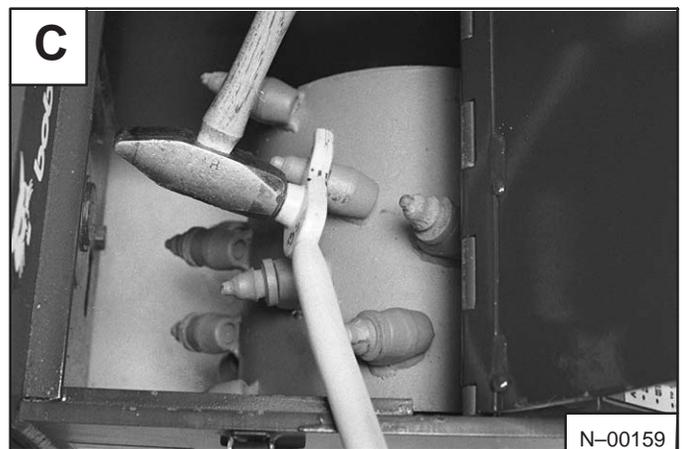
Install the tool on the flange as shown, and use a hammer to free the bit from the holder [B].

Put the tool on the bit as shown, and use a hammer to install the bit in the holder [C].

! **WARNING**

Do not strike the cutter bit with a hammer. The hard bit can shatter and cause serious injury. Use the correct bit installation tool.

W-2114-1191





MAIN FRAME
STANDARD FLOW PLANER
(S/N 178100101 & Above)

MAIN FRAME

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CUTTING DEPTH ADJUSTMENT BOLT	
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DRUM HOUSING	
Removal And Installation	10-20-3
WHEELS	
Front Wheels Removal And Installation	10-20-4
Rear Wheels Removal And Installation	10-20-5



DRUM HOUSING

Removal And Installation

Get in the operator seat, fasten the seat belt, and lower the seat bar.

Start the engine. Lower the Planer rear wheels to the work surface and tilt the Bob-Tach forward until the carbide tips contact the work surface.

Relieve the auxiliary hydraulic pressure. (See Loader Operation & Maintenance Manual.)

Stop the engine and exit the operator cab.

Remove the hoses from the drive motor. (See Page 10-30-1.)

Turn the adjustment bolt until the front wheels touch the work surface.

Release the rubber latches and open the drum cover.

Remove the large retaining ring (Item 1) [A] and the washer from the pivot pin.

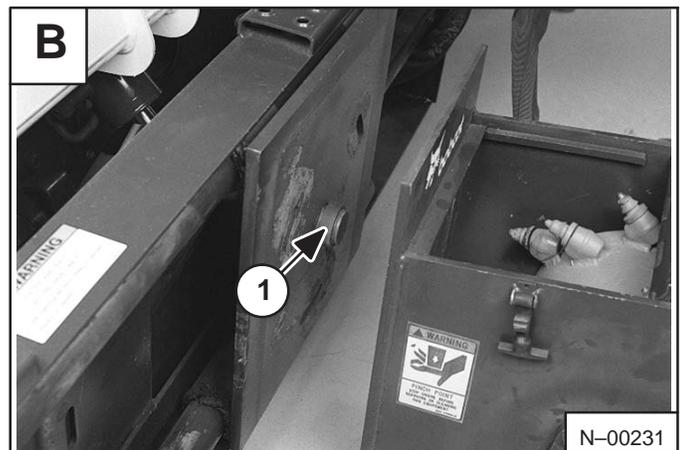
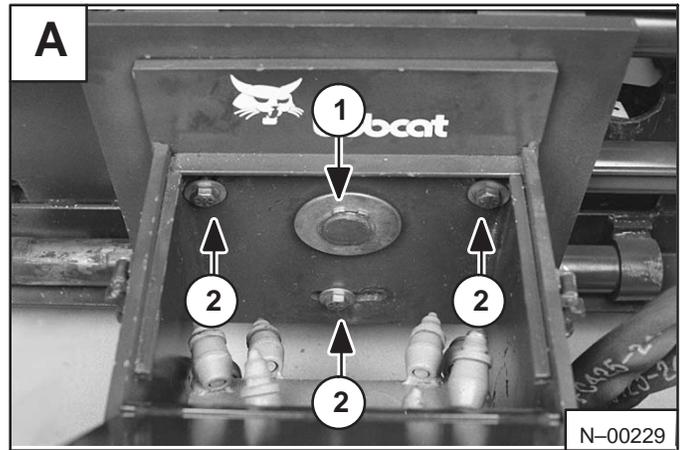
Remove the three nuts and bolts (Item 2) [A] from the back plate of the housing.

Installation: Tighten the bolts to 65–70 ft.-lbs. (88–90 Nm) torque.

Pull the drum housing away from the frame [B].

Remove the bushing (Item 1) [B] from the pivot pin.

NOTE: Apply anti-seize to the pivot pin and bushing during assembly.



WARNING

Before you leave the operator's seat:

- Lower the lift arms, put the attachment flat on the ground.
- Stop the engine.
- Engage the parking brake.
- Raise seat bar.
- (Foot Pedal Controls) Move pedals until both lock.
- (Mechanical Hand Controls) Move the hand controls until both lock.
The seat bar system must lock the lift and tilt controls in neutral when the seat bar is up. Service the system if hand controls do not lock correctly.
- (Advanced Hand Controls) Move the hand controls to the NEUTRAL POSITION to make sure that both lift and tilt functions are deactivated.
The seat bar system must deactivate the lift and tilt control functions when the seat bar is up. Service the system if hand controls do not deactivate.

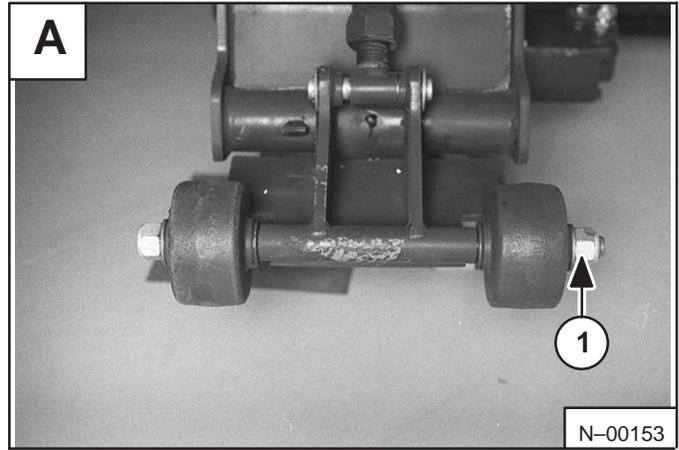
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WHEELS

Front Wheels Removal and Installation

Turn the adjustment bolt so the front wheels are off the work surface.

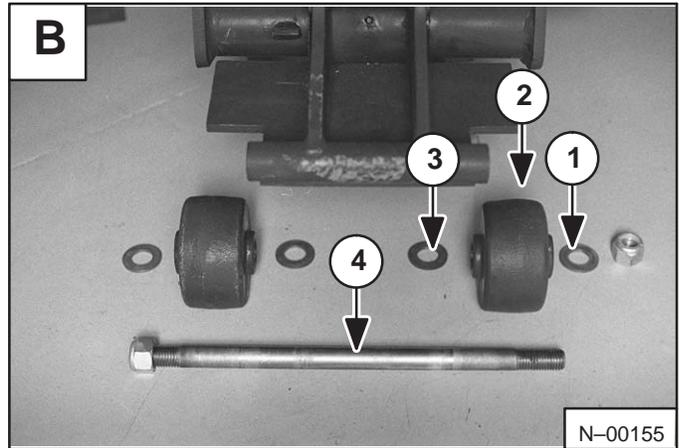
Remove the nut (Item 1) [A] from either end of the front axle.



Remove the outer washer (Item 1) [B], the wheel (Item 2) [B], and the inner washer (Item 3) [B].

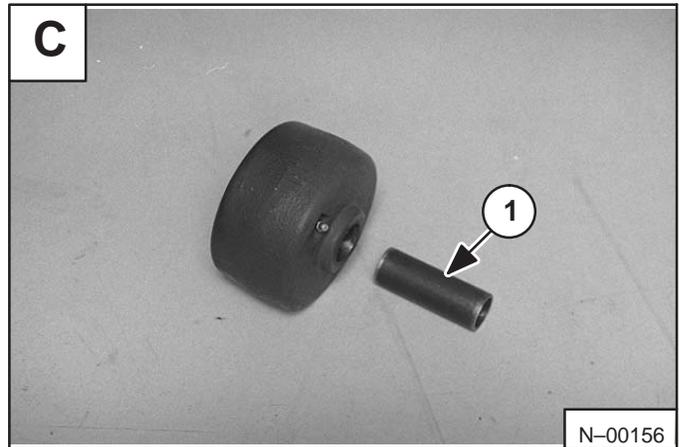
Remove the axle (Item 4) [B] from the housing.

Remove the other wheel from the axle [B].



The bushing (Item 1) [C] should slide freely from the wheel.

Installation: Apply a good quality lithium base grease to the inner and outer surface of the wheel bushing. Tighten the nuts to allow the wheels to rotate freely without binding.

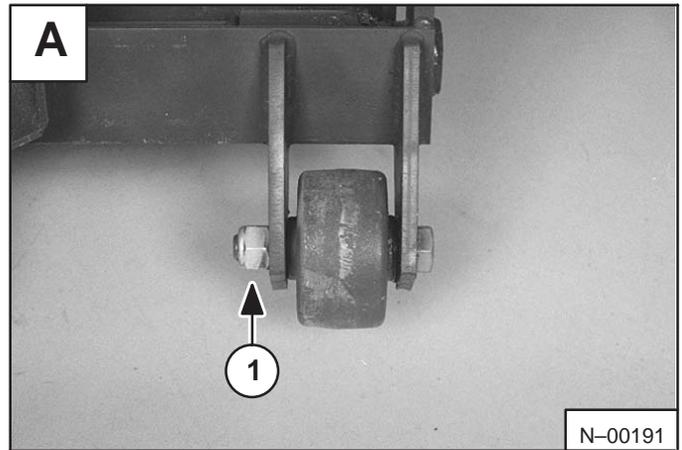


WHEELS (Cont'd)

Rear Wheel Removal and Installation

To remove the rear wheels from the Planer frame, raise the wheels off the work surface.

Remove the nut (Item 1) [A] from the axle.

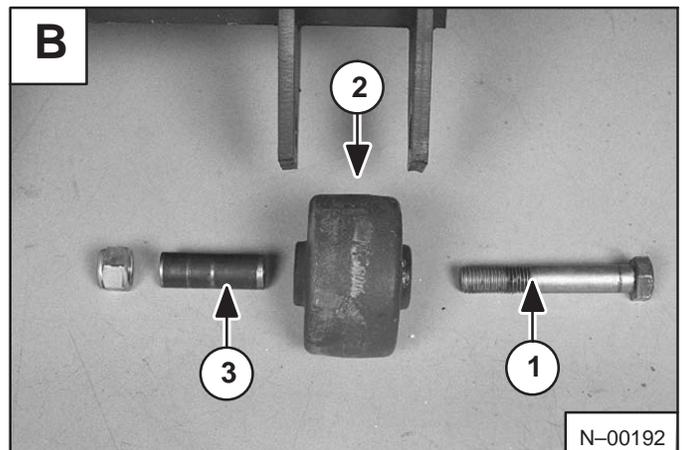


Remove the axle (Item 1) [B], and the wheel (Item 2) [B] from the frame.

Remove the bushing (Item 3) [B] from the wheel.

The bushing should slide freely from the wheel.

Installation: Apply a good quality lithium base grease to the inner and outer surface of the bushing.

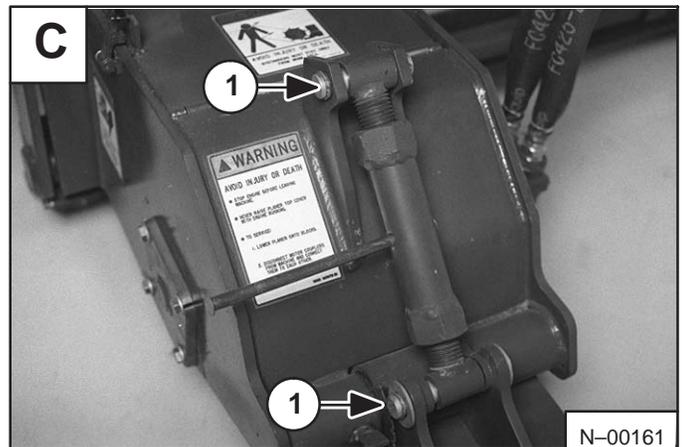


CUTTING DEPTH ADJUSTMENT BOLT

Removal and Installation

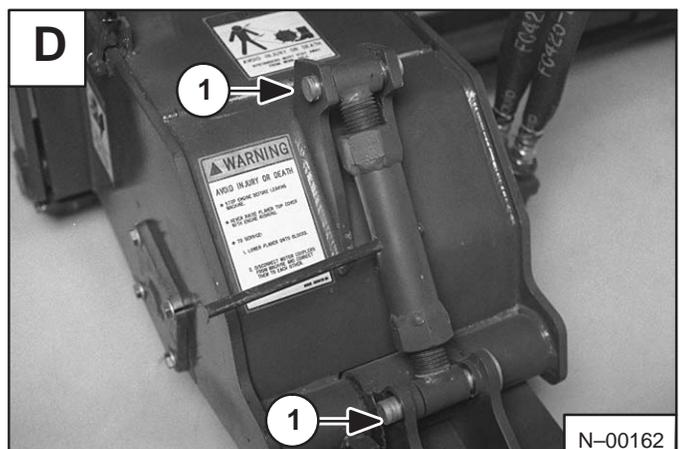
NOTE: When the adjustment bolt pins are removed, the front wheel assembly will be free to pivot. Support the front wheels when removing the pins.

Remove the retaining rings and washers (Item 1) [C] from the pins.



Remove the pins (Item 1) [D] from the brackets.

Installation: Apply anti-seize to the pins during installation.





HYDRAULIC SYSTEM
STANDARD FLOW PLANER
(S/N 178100101 & Above)

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Disassembly And Assembly	10-30-15
Parts Identification	10-30-14
Removal And Installation	10-30-14

**HYDRAULIC
SYSTEM**



HYDRAULIC MOTOR

Removal And Installation

Lower the lift arms fully and tilt the Bob-Tach forward to position the Planer on the work surface.

Stop the engine and engage the parking brake.

Open the cover on the Planer.

Remove the three bolts (Item 1) [A] from the idler shaft cover.

Installation: Tighten the bolts to 65–70 ft.-lbs. (88–95 Nm) torque.

Remove the hoses (Item 1) [B] from the motor. Install caps and plugs on the fittings and hoses.

Remove the three bolts (Item 2) [B] from the motor mounting flange.

Installation: Tighten the bolts to 65–70 ft.-lbs. (88–95 Nm) torque.

Get in the operator seat, fasten the seat belt and lower the seat bar.

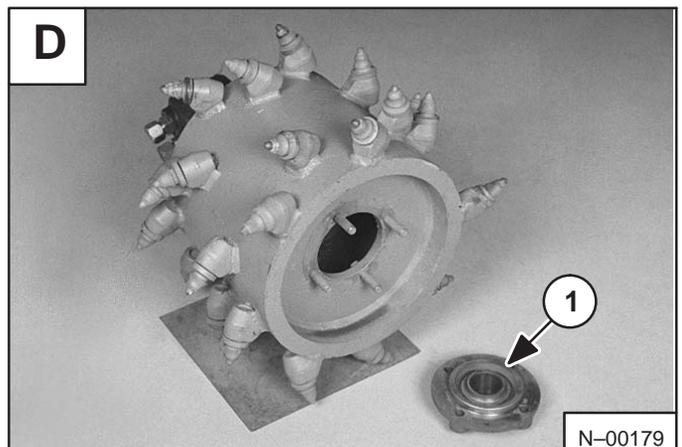
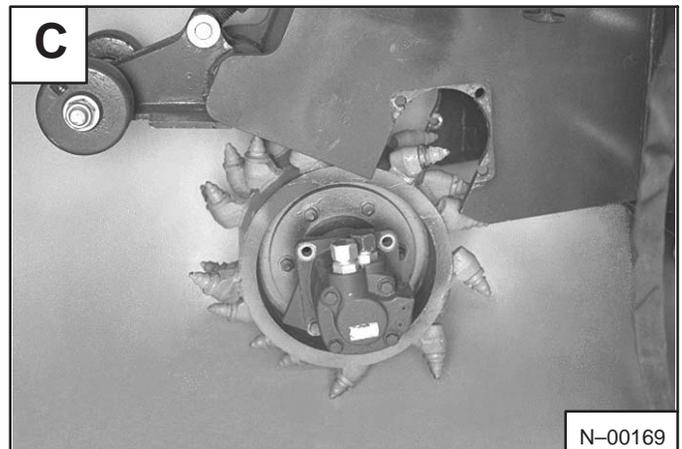
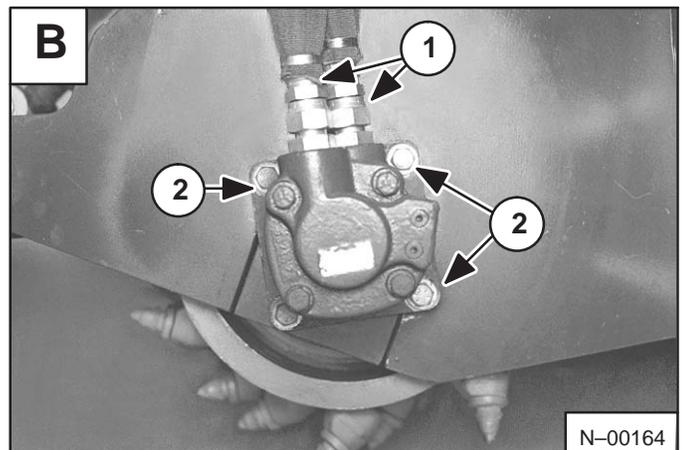
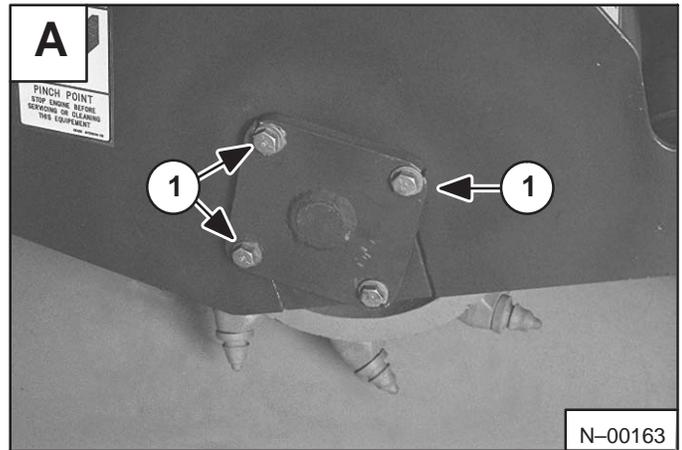
Start the engine and raise the Planer frame until it clears the drum [C].

Move the Planer frame away from the drum and lower it to the work surface. Stop the engine and exit the operator cab.

Installation: Reverse the procedure to install the drum in the Planer frame.

Slide the idler bearing shaft from the idler bearing.

Remove the four nuts to remove the idler bearing (Item 1) [D] from the drum.

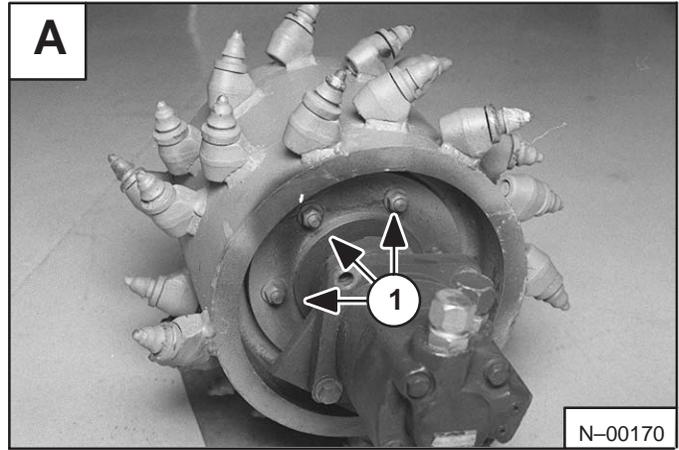


HYDRAULIC MOTOR (Cont'd)

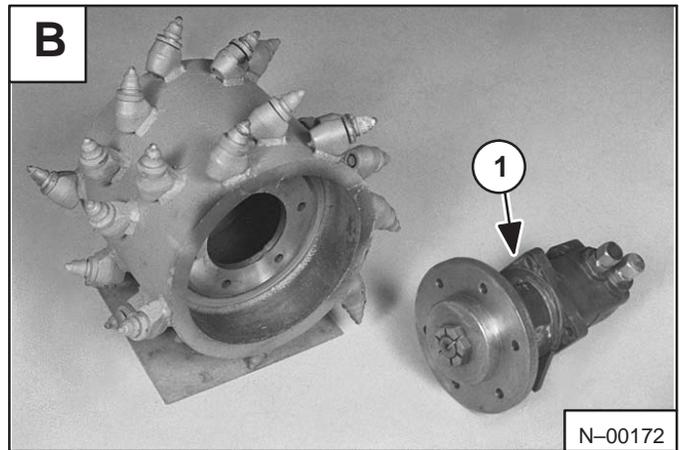
Removal and Installation (Cont'd)

Hold the bolts from inside the drum while removing the six nuts (Item 1) [A] from the motor mounting flange.

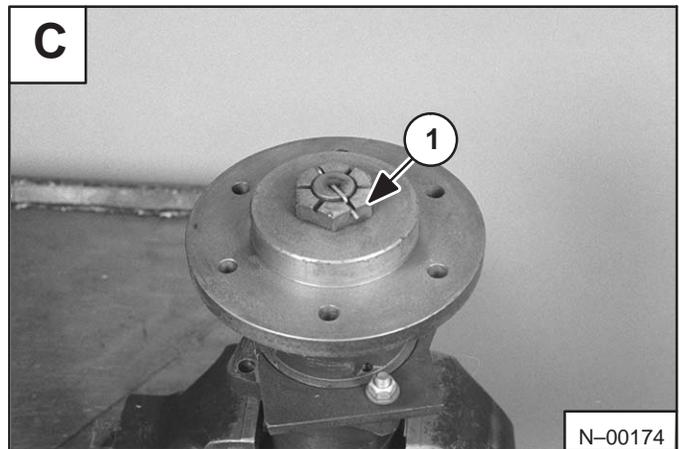
Installation: Tighten the nuts to 65–70 ft.-lbs. (88–95 Nm) torque.



Remove the motor and flange (Item 1) [B].



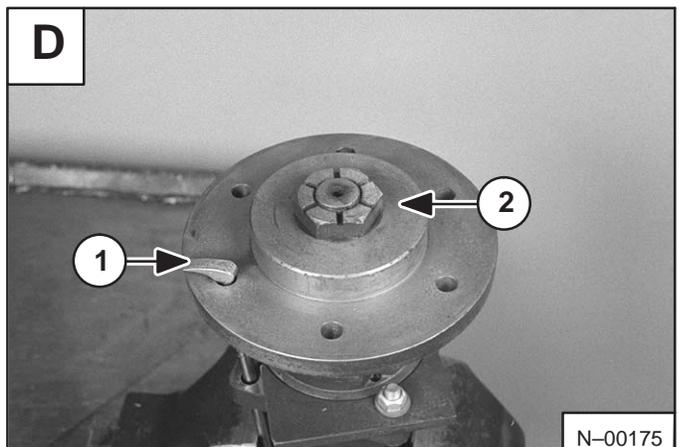
Put the motor in a vise and remove the cotter pin (Item 1) [C] from the slotted nut.



Install a pry bar (Item 1) [D] through the flange holes to hold the flange while removing the nut (Item 2) [D].

Remove the nut (Item 2) [D].

Installation: Tighten the nut to 300–400 ft.-lbs. (407–542 Nm) torque.



Use a three jaw puller to remove the flange from the motor [A].

⚠ WARNING

AVOID INJURY

Use care when pulling the flange, it fits tightly on the tapered shaft and may come off suddenly when force is applied with the puller.

W-2191-0595

Tighten the puller bolt (Item 1) [A]. Striking the end of the bolt with a hammer may be necessary to loosen the flange from the taper shaft.

NOTE: Use anti-seize on the tapered surface of the motor shaft during assembly.

Remove the square key (Item 1) [B] from the motor shaft.

