

John Deere PA800 Series Planting Attachments



JOHN DEERE

OPERATORS MANUAL

**John Deere PA800 Series Planting
Attachments**

OMA29579 Issue C5 English

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To the Purchaser

This new planting attachment was carefully designed and manufactured to give years of dependable service. To keep it running efficiently, read the instructions in this operator's manual. Each section is clearly identified so you can easily find the information you need - whether it is operation, lubrication, or adjustments and service. Read the Table of Contents to learn where each section is located. Use the alphabetical index for fast reference.

In addition to the equipment furnished with your planting attachment, attachments are available to help you do a better job in special crop conditions. These are described in the special equipment section of this manual and can be purchased from your John Deere dealer.

"Right-hand" and "left-hand" sides are determined by facing in the direction the planting attachment will travel when in use.

Record the model of your planting attachment in the space provided on page 60. Your dealer needs this information to give you prompt, efficient service when you order parts or attachments. If your planting attachment requires replacement parts, go to your John Deere dealer where you can obtain genuine John Deere parts - accept no substitutes.

The warranty on this planting attachment appears on your copy of the purchase order which you should have received from your dealer when you purchased the planting attachment.



This safety alert symbol identifies important safety messages in this manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

Your operator's manual contains SI Metric equivalents which follow immediately after the U.S. customary units of measure.



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Safety Suggestions

 The safety of the operator was one of the prime considerations in the minds of John Deere engineers when these planting attachments were designed. Shielding, simple adjustments, and other safety features were built into the planting attachment wherever possible.

However, investigation of thousands of farm accidents show that careless use of farm machinery causes nearly one-third of all farm accidents. You can make your farm a safer place to live and work if you observe the safety suggestions given. Study these suggestions carefully and insist that they be followed by those working with you and for you.

Be careful when operating the planting attachment to avoid injury to the operator and his assistants.

Always lower the planting attachment to the ground when not in use. Whenever possible, perform service work and adjustments with the planting attachment on the ground.

If the planting attachment must be in a raised position while working on or near it, support it securely with blocks or with parking stands.

Permit only one person—the operator—on the tractor platform while tractor, bedder and planting attachment are in operation.

Never ride or permit others to ride on the drawbar of the tractor or on the bedder or planting attachment.

Be careful when using diesel fuel so it does not ignite. The planting attachment should be in a well-ventilated area and away from any sparks or flames.

Ballast recommendations provide for adequate transport stability. Additional front ballast may be re-

quired for satisfactory field operation. See tractor operator's manual.

Never clean, lubricate, or adjust a machine that is in motion.

Escaping fluid under pressure can have sufficient force to penetrate the skin, causing serious personal injury. Before disconnecting lines, be sure to relieve all pressure. Before applying pressure to the system, be sure all connections are tight and that lines, pipes and hoses are not damaged. Fluid escaping from a very small hole can be almost invisible. Use a piece of cardboard or wood, rather than hands, to search for suspected leaks.

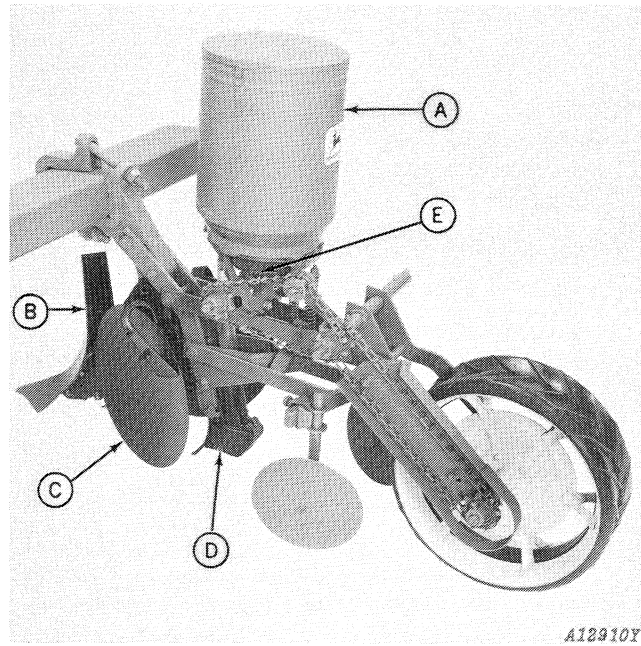
If injured by escaping fluid, see a doctor at once. Serious infection or reaction can develop if proper medical treatment is not administered immediately.

When transporting the bedder and planting attachment on a road or highway at night or during the day, use accessory lights and devices for adequate warning to operators of other vehicles. In this regard, check local governmental regulations. Various safety lights and devices are available from your John Deere dealer.

Be careful when operating on hillsides because the tractor may tip sideways if it strikes a hole, ditch, or other irregularity.

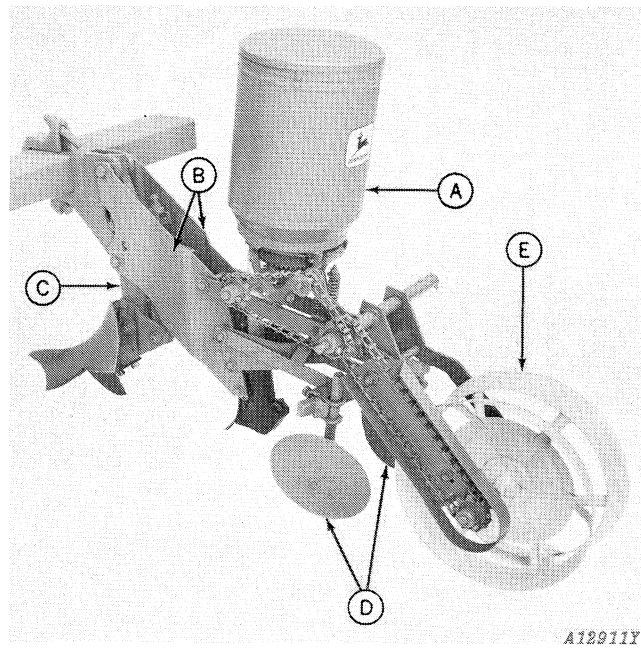
Agricultural chemicals can be dangerous. Improper selection or use can injure persons, animals, plants, soils, or other property. BE SAFE: handle and apply it with care. Follow instructions of the chemical manufacturer.

Finally, remember this: An accident is usually caused by someone's carelessness, neglect, or oversight.



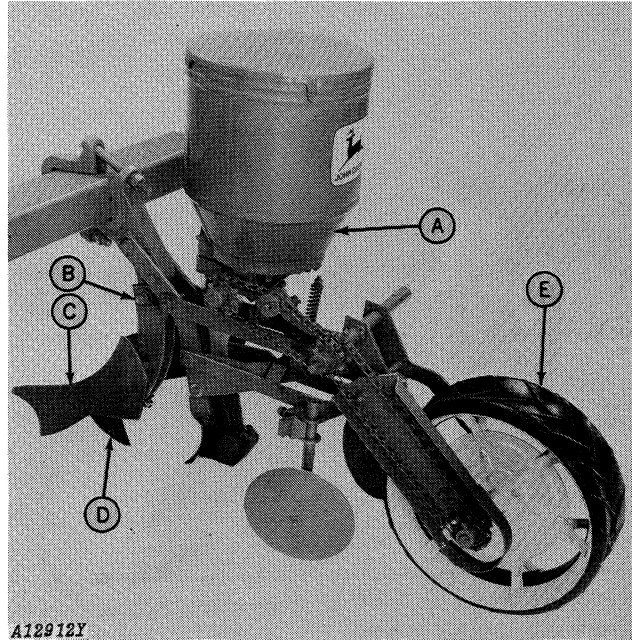
A—Corn Can
B—Lister Bottom
C—Hard Ground Disk Opener
D—Subsoiler
E—Gear Nest

PA802 Press Wheel Drive Planting Attachment with Rubber-Tire Press Wheel



A—Corn Can
B—Extension Plates
C—Safety Trip Standards
D—Disk Coverers
E—Steel Press Wheel

PA803 Press Wheel Drive Planting Attachment with Steel Press Wheel



A12912Y

A—Corn and Cotton Can
B—Friction-Trip Standard

D—Root Cutter
E—Rubber Tire Press Wheel
C—Lister Bottom

PA804 Press Wheel Drive Planting Attachment with Rubber-Tired Press Wheel



Operation

PREPARING THE BEDDER

Refer to the bedder operator's manual for instructions on preparing the bedder.

PREPARING THE PLANTING ATTACHMENT

General

The John Deere PA800 Series Planting Attachment is a self-contained planting unit adaptable for use with either the 2-1/4-inch (57 mm) square bedder or toolbar or the 4- x 7- or 5- x 7-inch (102 mm x 178 mm or 127 mm x 178 mm) bedder bars.

PA802 Planting Attachments require John Deere beams for either the 2-1/4-inch (57 mm) square bedder or toolbars or the 4- x 7- or 5- x 7-inch (102 mm x 178 mm or 127 mm x 178 mm) bedder bars.

PA803 Planting Attachments require John Deere beams equipped with safety-trip standards and lister bottoms or sweeps for either the 2-1/4-inch (57 mm) bedder or toolbars or the 4- x 7- or 5- x 7-inch (102 mm x 178 mm or 127 x 178 mm) bedder bars.

PA804 Planting Attachments require John Deere beams equipped with friction-trip standards for either 2-1/4-inch (57 mm) bedder or toolbars or the 4- x 7- or 5- x 7-inch (102 mm x 178 mm or 127 mm x 178 mm) bedder bars.

If the bedder or toolbar is not equipped with beams and bottoms, it will be necessary to order them as special equipment.

Each planting unit is driven by its own press wheel, assuring accurate planting regardless of tractor wheel slippage.

These planting attachments have short straight-drop seed tubes to prevent bunching of seed. Various types of covering equipment are available to assure uniform depth of soil over the seed.

These planting attachments may be used for surface planting, bed planting, and furrow planting, depending on the type of planting units used.

The planting attachments and bedder or tool bar are fully tractor-carried when lifted, but have ample flexibility to follow the contour of the ground when working.

Adjusting Row Width

These planting attachments are adjustable for 36-, 38- or 40-inch (914, 965, or 1016 mm) row spacings. To determine row width locations, see page 48.

Set tractor wheels to conform to the row spacing.

Depth of Planting

Depth of planting is controlled by raising and lowering the subsoiler on planter shank.

The position of the bedder bar is regulated by the tractor hydraulic system or by the gauge wheels on the bedder.

Raising and Lowering

Use the tractor rockshaft control lever to raise or lower the planting attachments.

When the bedder is equipped with gauge wheels, position the rockshaft control lever when planting to release hydraulic pressure from the rockshaft. This will allow the rockshaft to vary its up and down position automatically as the planting attachment follows ground contours.

NOTE: When operating in the field, lower the planting attachment only when the tractor is moving forward. This will prevent the seed tubes from clogging in most soil conditions.

PREPARING THE PLANTING ATTACHMENT—Continued

Leveling the Bedder or Toolbar

Adjust the 3-point hitch both laterally and vertically according to the tractor operator's manual. The toolbar must be parallel to the ground, and the seed hoppers on the planting units must be perpendicular to the ground when the toolbar is lowered to the operating position.

Disk Furrow Openers

The polished surfaces of the disks have been painted with protective black paint.

In most cases it is not necessary to remove the black paint because it will wear off quickly upon contact with the soil. In those soils where the black paint will not wear off, remove with diesel fuel.

 **CAUTION: If diesel fuel is used, the planting attachment should be in a well-ventilated area and away from any sparks or flames.**

If the planting attachment is not to be used immediately, protect the polished surfaces by applying a coat of John Deere Plow Bottom Black Paint or cup or gun grease.

Bolts and Set Screws

Before starting to work with a new planting attachment or one which has been stored, check to see that all bolts and set screws are tight and all cotter pins are spread to keep them from falling out.

Lubrication

Be sure planting attachment has been properly lubricated. See lubrication chart on page 32.

PREPARING THE TRACTOR

For complete operating instructions concerning the tractor, refer to the tractor operator's manual.

Rear Wheel Tread

Set tractor wheel tread (center to center of tires) as nearly as possible twice the distance of the row width. For example: for 40-inch (102 cm) row widths, set the tractor wheel tread at 80 inches (203 cm).

Tire Pressure

Consult your tractor operator's manual for front and rear tire pressure.

Adjusting Speed of Rockshaft Drop

Set the speed of the rockshaft drop on tractor on which the rockshaft and implement drop can be regulated.

Adjust the throttle valve to give a smooth, slow drop of the planter.

Front Wheel Tread

On wide front-end tractors, set front wheels to conform to rear wheel setting.

Front End Weighting

Tractor front end stability is necessary for safe and efficient operation. Therefore, it is important that the proper amount of weight be installed on the front of the tractor as recommended in your tractor operator's manual.

 **CAUTION: Ballast recommendations provide for adequate transport stability. Additional front ballast may be required for satisfactory field operation. See tractor operator's manual.**

Instructions:

Step 1 - Find your bedder model in the "Implement Code Table" and enter its code on line 1, page 7.

Step 2 - Enter an implement code for the planting attachment on line 2.

Step 3 - Add these codes to obtain total implement code.

Step 4 - Select additions and subtractions from bedder, planting attachments, and tractor codes.

Step 5 - Refer to tractor operator's manual to determine required tractor front ballast.

IMPLEMENT CODE TABLE

Bedder

	884	885	886	888
Basic Bedder	40	46	68	95
Add for Dual Gauge Wheels in Front of Bedder Bar (886 only)	-	-	5	-
Add for 38 or 39A Disk Marker Attachment	7	-	-	-
Add for 40A Disk Marker Attachment	-	8	10	12
Add for 41 Disk Marker Attachment	-	-	-	15
Add for 15-Footer (4.6 m) Bedder Bar (884 only)	3	-	-	-
Add for 22-Footer (6.7 m) Bedder Bar (886 only)	-	-	6	-
Add for 30-Footer 6-Inch (9.3 m) Bedder Bar (888 only)	-	-	-	7
Add for Transport Attachment	-	-	18	18

PLANTING ATTACHMENTS

	4-Row	6-Row	8-Row
Add for Basic Planting Attachment	68	102	136
Add for 10- x 1-Inch (254 x 25 mm) Press Wheel	3	5	6
Add for Herbicide Attachments	12	18	24
Add for Insecticide Attachments	11	17	22
Add for Insecticide and Herbicide Attachments	17	26	34
Add for 30 Pound (14 kg) Insecticide Attachments	17	26	34

Example

Your Code

Step 1 68

Step 1 _____

Step 2 102

Step 2 _____

Step 3 170 (sub)

Step 3 _____ (sub)

Step 4 6

Step 4 _____

5526Step 5 212 (Total)

Step 5 _____ (Total)

Our example is an 886 Bedder with the optional 22-foot (6.7 m) bedder bar, dual gauge wheels, 6-row planting attachment with 10- x 1-inch (254 x 25 mm) press wheels, and insecticide and herbicide attachments on a 4430 Tractor with Quik-Coupler.

IMPORTANT: Refer to tractor operator's manual:

1. If the total implement code exceeds the maximum implement code listed for a particular tractor model, the implement-attachment combination is not recommended for that tractor.
2. The total load on any tractor wheel due to the weight of the implement-attachment combination and tractor equipment should not exceed the carrying capacity of the tractor tires.



CAUTION: When operating the tractor in third or lower gears, regardless of size and equipment used, front-end weights up to the maximum permissible are recommended to avoid possible front end tip-up.

For maximum permissible ballast, see your tractor operator's manual.

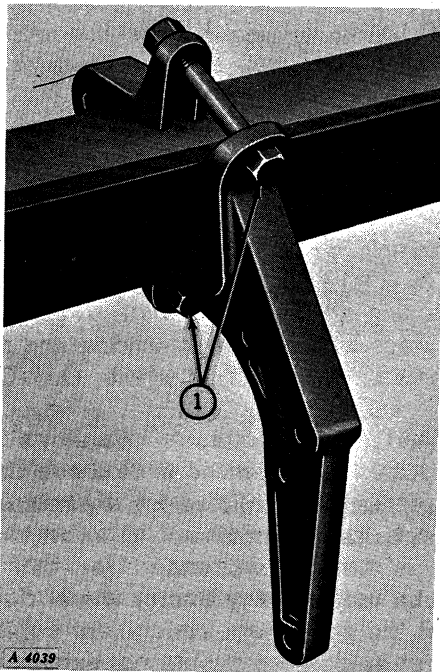
LISTER OPENERS

The PA803 Planting Attachments are designed for use with beams equipped with safety-trip standards and lister bottoms or sweeps.

The PA804 Planting Attachments are designed for use with beams equipped with friction-trip standards. The beams, standards and bottoms or sweeps are not furnished.

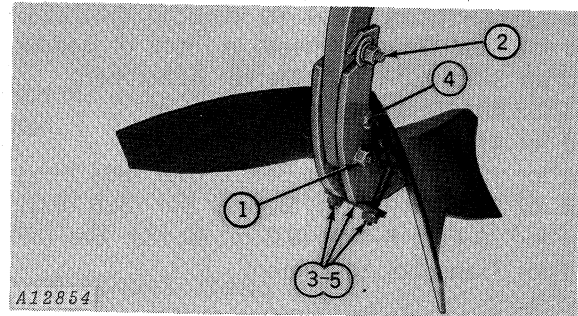
If the bedder or toolbar is not equipped with beams and bottoms, it will be necessary to order them as special equipment.

Regular Beams



1. Attach beams to toolbar equidistant using dimension determined by desired row spacing. **Be sure inside flat surfaces of cap and beam are flush with bedder bar.**

Curved Beam with Friction-Trip Standard



The friction-trip standards are slotted at the top end, allowing the bottom to trip when an obstruction is encountered, preventing damage to the bedder or bottom.

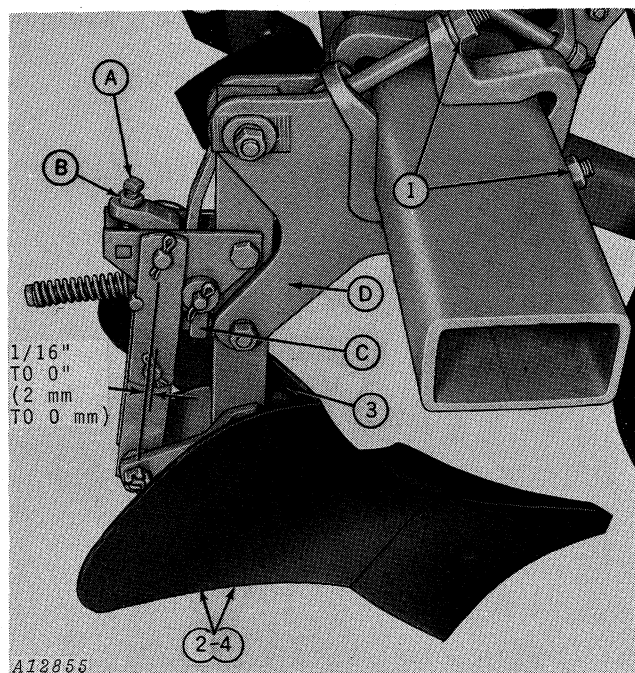
To reset the bottom, loosen the bolts, push the standards back in position, and retighten bolts.

The slots at the upper end of the standards also allow standards to be set for proper suction. They should be set so the bottoms or sweeps work uniformly.

Use the following procedure to assemble:

1. Attach standard to beam.
2. Bolt upper end of standard to beam. *Bolt should not be drawn up so tight that it will prevent bottom from tripping when an obstruction is encountered.*
3. Remove nuts and straps from bolts in bottom.
4. Place bottoms on standards, making sure that the top of frog fits into notches on standard.
5. Replace strap and nuts on bolts and tighten securely.

Safety-Trip Standards and Bottoms



A—Tension Set Screw
B—Lock Nut

C—Over-Center Adjustment
D—Beam

The safety-trip standard prevents damage by allowing the standard and bottom to trip back when a solid obstruction is encountered. Slots at the top of the beam allow the standard to be set for proper suction. They should be set so the bottoms or sweeps work uniformly. Should additional adjustments be required for penetration in different types of soil, adjust the center link of the tractor hitch.

To reset after a bottom has been tripped, back the tractor, without raising the toolbar, until the safety-trip snaps back into the locked position.

If properly adjusted and lubricated regularly, the trip will protect the implement from unnecessary damage.

To attach safety-trip standard:

1. Attach beams (D) to bedder bar.
2. Remove nuts and straps from bolts in bottom.
3. Place bottoms on standards making sure that the top of frog fits into notches on standard.
4. Replace strap and nuts on bolts and tighten securely.

Tension Adjustment

The release mechanism of the safety-trip is factory set for proper tension. It may become necessary, because of wear or for other reasons, to change this adjustment.

The set screw (A) in the upper linkage is for adjusting the tension only. Loosen the lock nut (B) and turn the set screw only one-quarter turn at a time.

Over-Center Adjustment

The set screw in the lower linkage of the safety-trip regulates the over-center adjustment (C) of the links. Recommended setting for the links is from 1/16 inch to 0 inch (1.59 mm to 0.00 mm) over center toward the front. When the links are set toward the rear, the bottom will trip too easily.

Loosen the lock nut on the set screw and turn the set screw until the links are in the proper position. Retighten the lock nut.

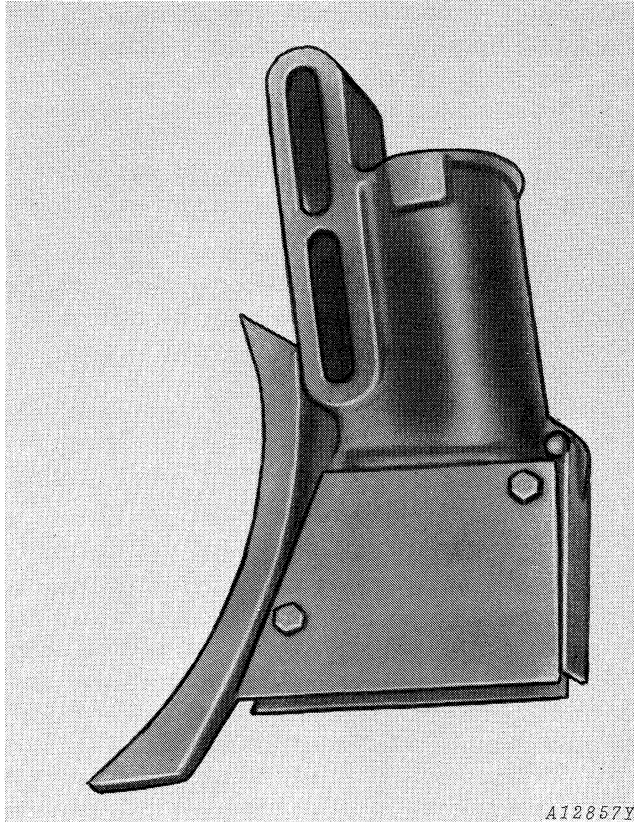
Continue adjustments until trip will hold in ordinary working conditions where no obstructions are encountered.

IMPORTANT: Do not draw up the hexagon slotted nuts too tight on the standards and beam as this will cause trip to function improperly and will result in damage to implement.

SUBSOILERS

The subsoiler is used to drop seed into the furrow. Slots in the subsoiler allow for working depth adjustment.

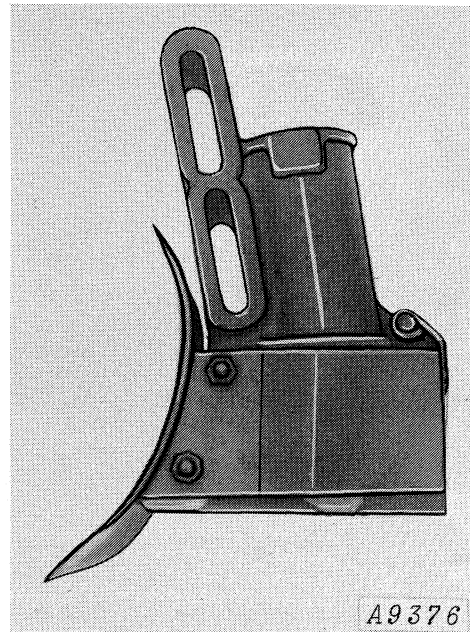
Subsoiler with Reversible Point



This subsoiler is equipped with a narrow tip reversible chisel. The seed boot is long and permits adjustment for deeper operation. The side plates are tapered and equipped with an integral baffle to resist plugging.

This subsoiler will open a trench and deposit seed in a narrow band. It is suited for use with the 10 x 1-inch (254 mm x 25 mm) seed packer wheel.

Subsoiler with Reversible Shovel

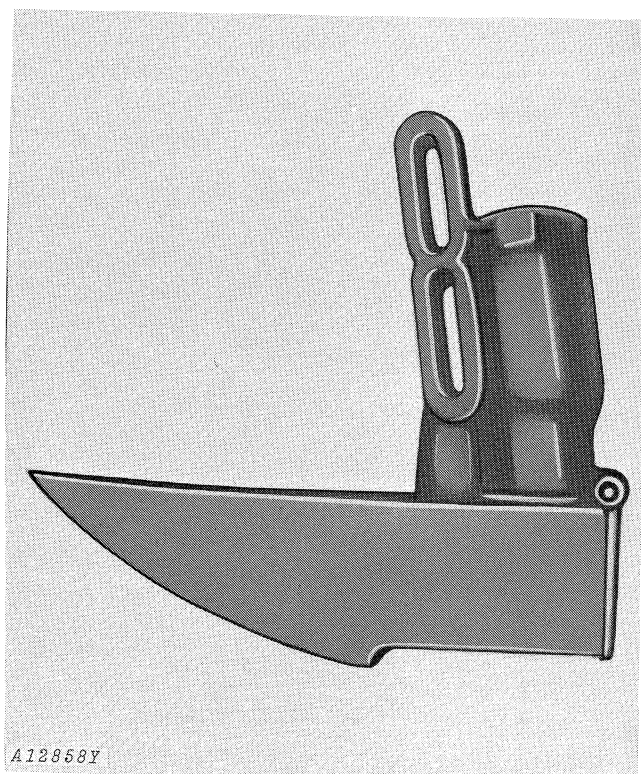


The subsoiler is used to drop seed into the furrow. Slots in the subsoiler allow for working depth adjustment.

The 2-inch (51 mm) wide shovel is reversible. The seed boot is equipped with an integral baffle to resist plugging.

This subsoiler will open a seed trench under adverse conditions in sticky soils.

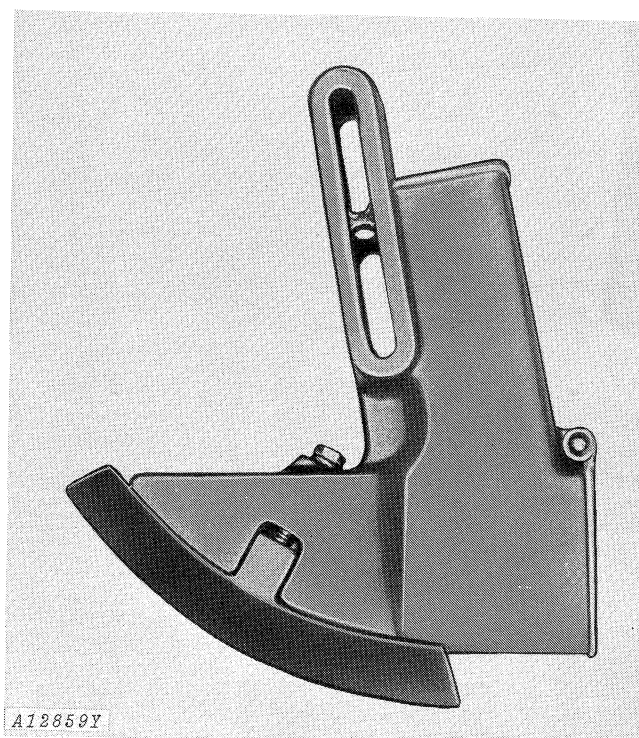
Subsoiler with Runner



This subsoiler is equipped with a runner for use in rocky soils. The seed boot is long and permits adjustment for deep operation. The runner is narrow, has tapered sides and is equipped with an integral baffle to resist plugging.

This subsoiler will open a seed trench in rocky soils and deposit seed in a narrow band. This subsoiler is suited for use with the 10 x 1-inch (254 mm x 25 mm) seed packer wheel.

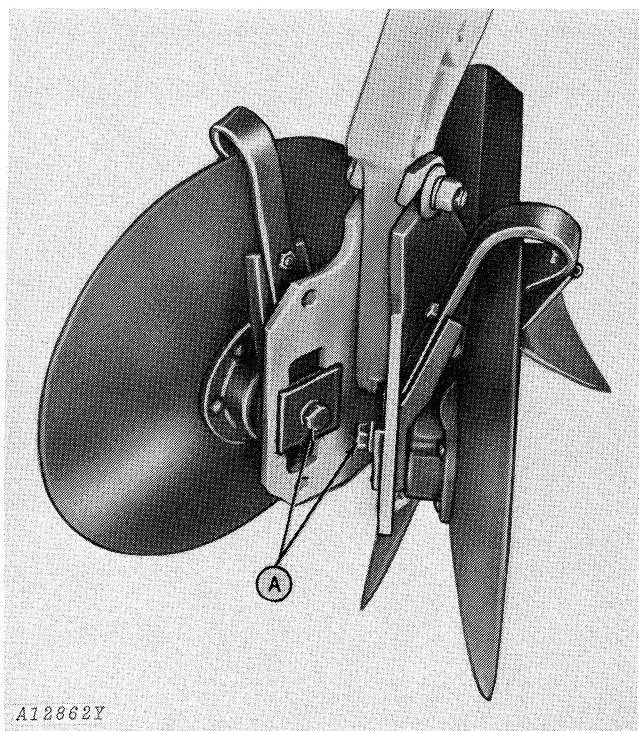
Subsoiler with Compaction Insert



This subsoiler is equipped with a reversible cast runner.

The streamlined seed boot will reduce the build-up of trash. Due to the "V" shaped trench, the seeds are placed in a straight line at a uniform depth and in firm soil for better contact with soil moisture.

HARD GROUND DISK OPENERS



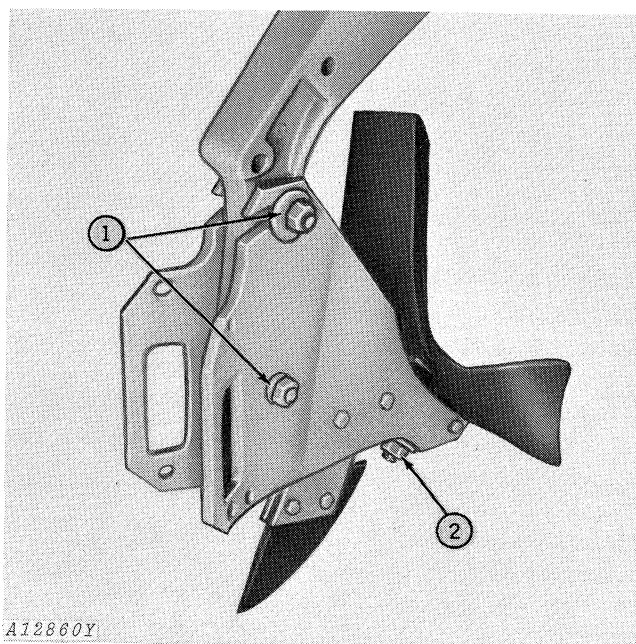
A—Depth Adjusting Bolts

The hard ground disk opener and standard is regular equipment. The angle of the disks is fixed. No adjustment is necessary.

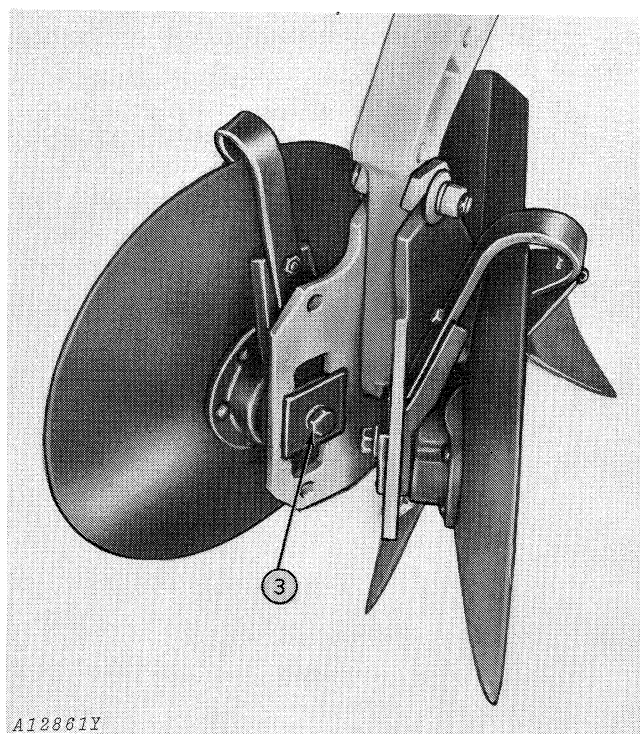
The disks can be raised or lowered by loosening the depth adjusting bolts (A) and allowing the entire unit to be raised or lowered in the slots in the standards.

The suction of the bottom can be varied slightly by loosening the suction adjustment bolt in the standards and moving standards forward or back in the slots of the standards. Be sure to tighten bolt securely after making suction adjustment.

Assembly



1. Attach frame plates to beam with bolts supplied.
2. Bolt lister bottom to standard.

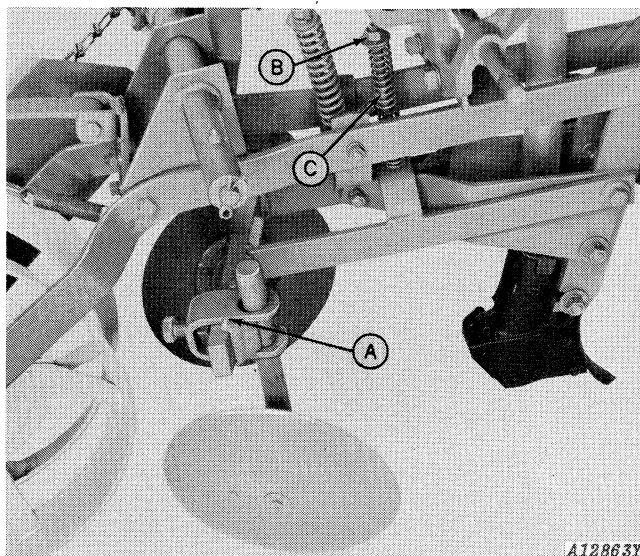


3. Attach the disk openers and scrapers to frame plates with carriage bolts supplied in frame plates.

SEED COVERERS

The planting attachment is regularly equipped with disk coverers, but shovel or knife coverers may be ordered as special equipment.

Disk Coverers



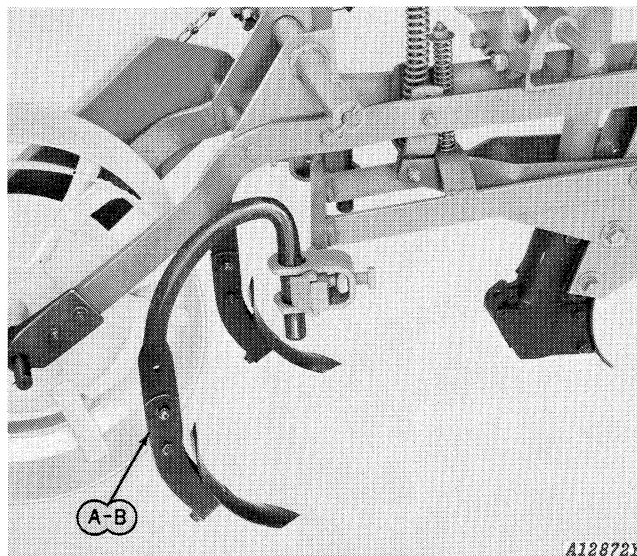
A—Clamp
B—Nut

C—Plunger Spring

The disk coverers throw loose soil over the seed after it has been deposited in the soil.

Loosen clamp (A) to adjust coverers to desired depth and angle. Tension on the covering frame plunger spring (C) regulates the amount of penetration of the coverers. This tension can be varied by adjusting the nut (B) on the spring plunger. Medium tension is generally sufficient. If pressure is too great, coverers will dig too deep and throw up too much soil.

Shovel Coverers



A—Shovel Sleeve Slot

B—Adjusting Bolt and Nut

Shovel coverers are particularly effective in areas where scouring of the disk coverer is a problem.

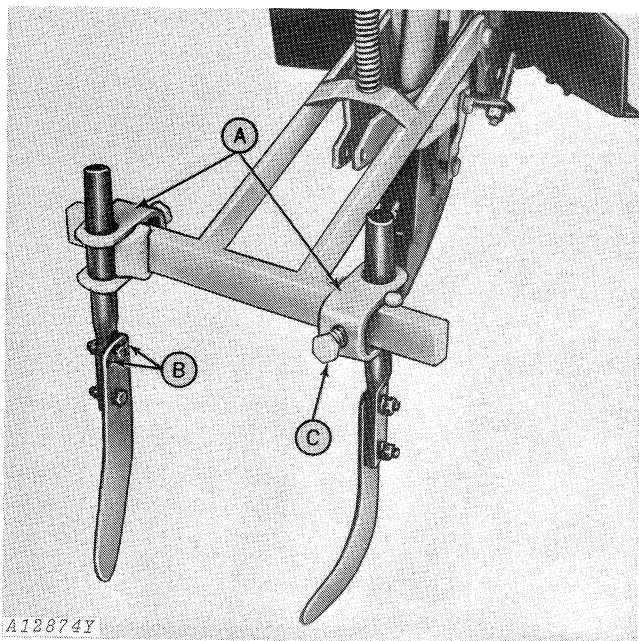
The shovel sleeve is slotted (A) at the upper end to allow shovel to trip when an obstruction is encountered, preventing damage to the shovel and planting attachment. The slot in the sleeve also provides suction adjustment for the shovel.

Tripping resistance is controlled by the degree of tightness of the adjusting bolt and nut (B). Be careful not to overtighten nut.

Suction of the shovel can be adjusted by first loosening adjusting bolt and nut and then moving shovel to desired position. Be sure to tighten nut for proper tripping resistance.

SEED COVERERS—Continued

Knife Coverers



A—Shank Yoke
B—Adjusting Hole

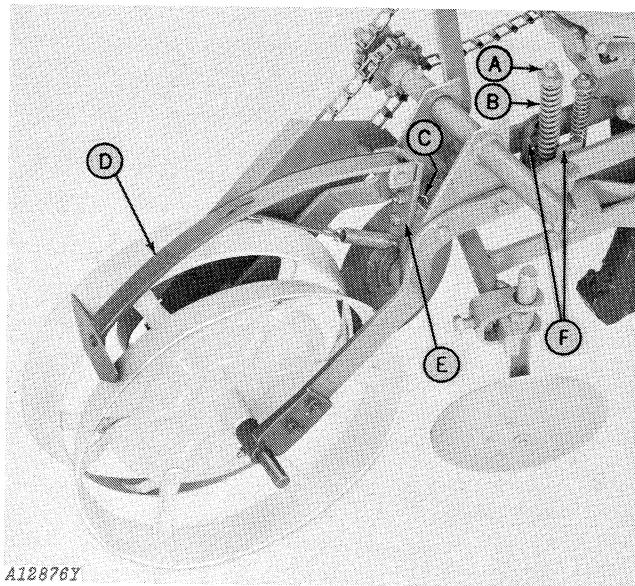
C—Adjusting Bolt

The knife coverer is primarily used in well-conditioned soil.

There are three adjusting holes (B) in the blade of the coverer so blade may be tilted at different angles. The knife may also be adjusted for depth by loosening the adjusting bolt (C) and nut and moving the coverer shank up or down in the shank yoke (A).

PRESS WHEELS

The press wheel firms the soil over the seed and provides a positive drive for the seed plates and the fertilizer, herbicide, and insecticide unit.



A—Adjusting Nut
B—Plunger Spring
C—U-bolt

D—Scraper
E—Scraper Support
F—Plunger Yoke

Adjusting Down Pressure

Down pressure on the press wheel is controlled by the plunger spring (B) and nut (A) shown above. Tighten the nut to increase the down pressure.

Adjusting Height of Wheel

Three holes are provided on each side of the plunger yoke (F) to allow adjustment of the height of the press wheel in relationship to the runner opener or subsoiler.

Scrapers (Special Equipment)

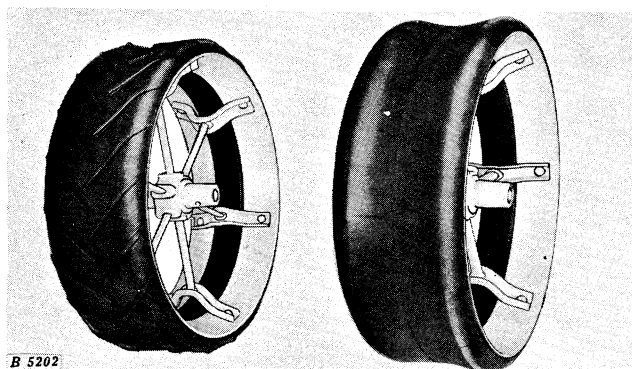
Press wheel scrapers (D) will keep the wheels clean if the soil has a tendency to stick to the steel press wheels. The scrapers cannot be used with a rubber press wheel tire or when the Insecticide Attachment is used.

Set the scraper blade close enough to keep the wheel clean. However, never set the blade so close that it causes friction or keeps the wheels from turning.

To adjust the scraper, loosen nuts on U-bolt (C) and pivot scraper support (E) until desired setting is obtained. Then tighten nuts.

Press Wheel With Rubber Tire

A rubber-tired press wheel with smooth face or traction tread tire is available in lieu of the steel wheel.



Smooth or cleated type rubber tires are available for use in wet, sticky soil conditions, where the scrapers do not clean the steel wheels properly. The flexing action of the rubber tires sheds the soil and keeps the wheels cleaner. Scrapers cannot be used with rubber press wheel tires.

The tires are attached to the wheels by stretching them over the steel rims much the same as an automobile tire; they require no cement and no air pressure. Attaching the tires is much easier if a tire soap is used on the tires as well as on the steel rims.

SELECTING SEED PLATES

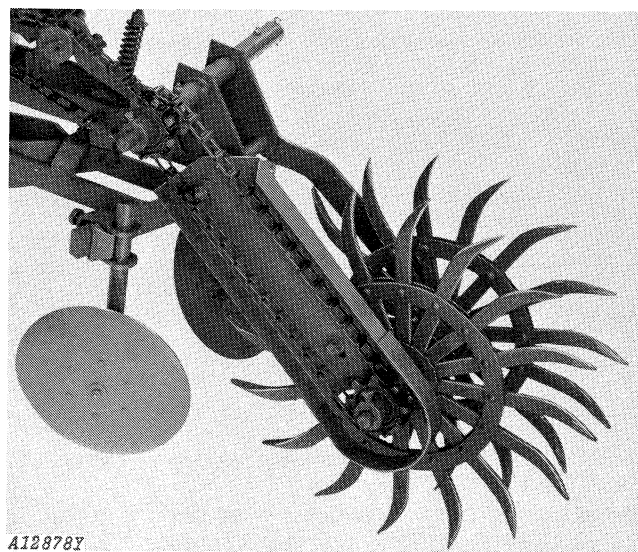
The selection of the seed plates is one of the most important steps in preparing the planting attachments for the field.

There is a large variety of John Deere seed plates available in various cell sizes and number of cells.

Growing conditions change from year to year, and the size of the seed will also vary. Therefore, it is quite likely that different seed plates are required to plant the same variety of seed from year to year.

There are two ways to select seed plates. One is to follow the recommendation of the seed supplier

Open Drive Wheels



Open drive wheels for use in gumbo or sticky soil are available as optional equipment in place of regular press wheels.

Attach the open drive wheel to the wheel frame as outlined under "Press Wheel with Rubber Tire".

and the other is to take a sample of the seed to be planted to a John Deere dealer and let him recommend the seed plates.

In either case the accuracy of the seed plate selected should be checked when installed in your planting attachment and operated at the planting speed you intend to travel. The best check is to plant a short distance, at the desired planting speed, and then stop and dig up the hills of seed to determine the actual planting rate.

The following is a list of the most popular seed plates.

SELECTING SEED PLATES—Continued**PLATES FOR FLAT KERNELS OF CORN**

12-Cell	16-Cell	24-Cell	Kind of Corn
.....	H697B	B30070	Extra Small Corn
H966B	H694B	H1302B	Small Corn
.....	H1572B	H2711B	Small Slender Corn
H948B	H695B	H950B	Medium Corn
.....	H2156B	H2594B	Long Thick Corn
.....	H696B	H2836B	Large Corn
.....	H2504B	H2848B	Medium Flat Slurry Treated Corn
.....	H2503B	H2847B	Large Flat Slurry Treated Corn
.....	B12498	.....	Extra Large Flat Slurry Treated Corn

PLATES FOR EDIBLE BEANS**PLATES FOR SOYBEANS**

16-Cell	20-Cell	24-Cell	30-Cell	40-Cell	20-Cell
H1324B	H1300B	H1301B	H2480B	H2441B	H1255B
H1071B	H954B	H983B	.....	.....	H2527B (Use with H1279B Floor Plate)
H956B	H1315B	.....	.....	.....	.....
.....	H1258B	.....	.....	.....	.....
.....	H1254B	.....	.....	.....	.....
.....	H1255B	.....	.....	.....	.....
.....	H1084B	.....	.....	.....	.....

PLATES FOR ROUND KERNELS OF CORN**PLATES FOR ACID-DELINTED COTTON SEED**

12-Cell	16-Cell	24-Cell	Kind of Corn	24-Cell	48-Cell
.....	H2295B	.....	Extra Small Round Corn	H1301B	H3160B
.....	H2043B	H2824B	Small Round Corn		
H2560B	H1933B	B10853	Medium Round Corn		
.....	H2044B	H2712B	Large Round Corn		
.....	H2820B	.....	Extra Large Round Corn		

NOTE: A stepped false ring (B27054) is available for providing additional hole depth when planting the above sizes of seed.

The following is a partial list of seed plates which require a special false ring or floor plate, or the regular floor plate turned over:

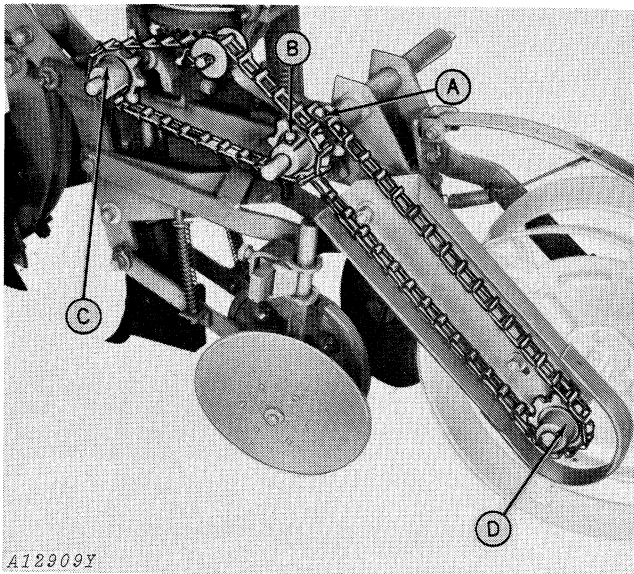
Seed Plate No.	No. of Cells	Kind of Seed
uH 779B	16	Popcorn
uH 780B	16	Medium Country Gentleman Sweet Corn
uH 961B	16	Spanish Corn and Small Popcorn
uH 963B	16	Large Country Gentleman Sweet Corn
uH 964B	16	Small Sweet Corn, Small Sunflower Seed
uH1238B	16	Medium Shoe Peg Corn
uH1239B	16	Medium Sweet Corn, Large Sunflower Seed
uH1240B	16	Extra Small Country Gentleman Tapered Sweet Corn
kH1262B	16	Cantaloupes and Cucumbers
oH1263B	16	Beet Seed (Thin Plate)
oH1316B	16	Extra Small Round Corn
sH1322B	16	Extra, Extra Small Corn
sH1345B	16	Small Round Corn
sH1352B	16	Extra Small Narrow Corn
nH1353B	16	Tomato Seed (Machined Plate)
uH2505B	16	Popcorn
uH2671B	16	Popcorn
uH2709B	16	Popcorn
nB27768	16	Maize and Grain Sorghum
uH 781B	20	Popcorn
pH2527B	20	Soybeans - Heavy Planting
sH2672B	24	Maize and Grain Sorghum
nH1256B	25	Onion Seed (Machined)
nB27769	32	Maize and Grain Sorghum
uH 776B	..	Blank Plate 5/32" (4 mm) Thick (Holes can be drilled up to 1/4") (6 mm)
kH1211B	..	Blank Plate 5/32" (4 mm) Thick (Cells can be filed in edge)
nH1259B	..	Blank Plate 5/32" (4 mm) Thick (Machined)

Legend

- (k) Corn Can - Use with Y3313B False Ring
- (k) Cotton and Corn Can - Use with P509B False Ring
- (n) Corn Can - Use with AH306B Floor Plate and Y5055B False Ring
- (n) Cotton and Corn Can - Use with P671B False Ring
- (o) Corn Can - Use with H1264B Floor Plate
- (p) Corn Can - Use with H1279B Floor Plate
- (p) Cotton and Corn Can - Use with P1583B False Ring
- (s) Corn Can - Use with H1323B Floor Plate
- (s) Cotton and Corn Can - Use with P2498B False Ring Raised Side Up
- (u) Corn Can - Use with Y2630B False Ring or H1346B Floor Plate
- (u) Cotton and Corn Can - Turn P2386B False Ring Raised Side Up



PLANTING RATES



**A—8-Tooth Press Wheel
Driven Sprocket**
B—Final Drive Sprocket

C—Final Driven Sprocket
**D—8-Tooth Press Wheel
Drive Sprocket**

The sprockets, length of drive chains, seed cans, and seed plates must be changed to plant or drill the various kinds of seeds at different row spacings.

The size of the final drive sprocket (B) and the final driven sprocket (C) determines the speed that the seed plate travels in relation to the ground travel. Twelve different drilling distances can be obtained with each seed plate. The size of the final drive and final driven sprockets also determines the length of the final drive chain.

Seven sprockets are furnished with the planting attachment. Two 8-tooth sprockets are always used as the press wheel drive (D) and driven sprockets (A) (see illustration at left) unless the maize can attachment is used. See charts on pages 29-30 for sprocket requirements of maize can attachment.

The other five sprockets are used in various combinations as the final drive and driven sprockets. These combinations give the drilling distances shown in the charts on pages 20 and 21.

The 7- and 9-tooth sprockets in the charts are special equipment.

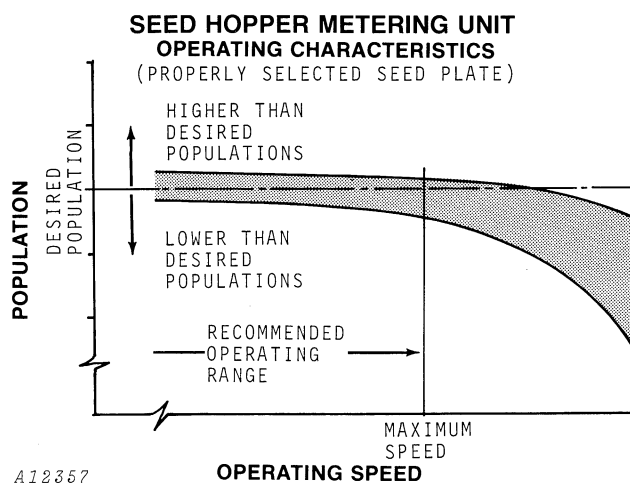
The number of cells in the seed plate determines the drilling distance with a particular combination of sprockets. The size and shape of the cells in the seed plate is determined by the size and shape of the seed to be planted. See "Seed Plates" on pages 16 and 17.

IMPORTANT: The graph below shows the operating characteristics of the hopper seed metering unit.

The operating band illustrates how the hopper seed metering unit performs with regard to the desired population (indicated by the horizontal line). The width of the band is due to various sizes and shapes of seeds. The band width increases at speeds above the maximum speeds shown in the following rate charts. The preferred cell fill of the seed plate decreases when the planter is operated above the maximum speed.

Best results are obtained when the planter is operated below the full maximum speed.

The rate charts on pages 19 through 31 give the approximate planting rates for various seed plates. The sprocket combinations in the charts refer to the sprockets on the planting units. Set the sprockets for the desired planting rate. The charts may not give exact planting rates for a given sprocket setting because of variations in seed size or shape. They provide only a starting point for obtaining the desired rate. The use of inoculants or other materials with the seed may tend to lower the planting rates. Refer to page 18 for setting sprocket combinations.



PLANT POPULATION AND APPROXIMATE DRILLING DISTANCE FOR 16-CELL* SEED PLATE
(Metric equivalents are given in parentheses)

Maximum Speed in		Average Drilling Distance		Sprocket Combinations		Plant Population per Acre (hectare)							
						Row Width							
mph	(km/h)	in	inches (mm)	Driver	Driven	30"	(76 cm)	36"	(91 cm)	38"	(97 cm)	40"	(102 cm)
3	(4.8)	6-1/4	(160)	12	6	33,100	(81 800)	27,600	(68 200)	26,200	(64 700)	24,900	(61 500)
3	(4.8)	7-1/4	(185)	12	7	28,600	(70 700)	23,900	(59 000)	22,600	(55 800)	21,500	(53 100)
3-1/2	(5.6)	8-1/4	(211)	12	8	25,100	(62 000)	21,000	(51 900)	19,900	(49 200)	18,900	(46 700)
4	(6.4)	9-1/4	(235)	8	6	22,400	(55 300)	18,700	(46 200)	17,700	(43 800)	16,900	(41 800)
4-1/2	(7.2)	10-1/4	(260)	12	10	20,300	(50 200)	16,900	(41 800)	16,000	(39 500)	15,200	(37 600)
5	(8.0)	11	(279)	8	7	19,200	(47 400)	16,000	(39 500)	15,100	(37 300)	14,400	(35 600)
5-1/2	(8.8)	12-1/2	(318)	8	8	16,700	(41 300)	13,900	(34 300)	13,200	(32 600)	12,200	(30 100)
6	(9.6)	14	(356)	8	9	14,800	(36 600)	12,400	(30 600)	11,700	(28 900)	11,100	(27 400)
6	(9.6)	15-3/4	(400)	8	10	13,300	(32 900)	11,100	(27 400)	10,500	(25 900)	9,900	(24 500)
6	(9.6)	18-3/4	(476)	8	12	11,100	(27 400)	9,300	(23 000)	8,800	(21 700)	8,300	(20 500)
6	(9.6)	21-1/2	(546)	7	12	9,700	(24 000)	8,100	(20 000)	7,700	(19 000)	7,300	(18 000)
6	(9.6)	25	(635)	6	12	8,400	(20 800)	6,700	(16 600)	6,600	(16 300)	6,200	(15 000)

*For 8-cell seed plate, divide population by 2; multiply drilling distance by 2.

For 32-cell seed plate, multiply population by 2; divide drilling distance by 3.

For 48-cell seed plate, multiply population by 3; divide drilling distance by 3.

For 64-cell seed plate, multiply population by 4; divide drilling distance by 4.

PLANT POPULATION AND APPROXIMATE DRILLING DISTANCE FOR 20-CELL* SEED PLATE
(Metric equivalents are given in parentheses)

Maximum Speed in		Average Drilling Distance		Sprocket Combinations		Plant Population per Acre (hectare)							
		Drilling Distance				Row Width							
mph	(km/h)	in	inches (mm)	Driver	Driven	30"	(76 cm)	36"	(91 cm)	38"	(97 cm)	40"	(102 cm)
3	(4.8)	5	(127)	12	6	41,800	(103 300)	34,800	(86 100)	33,000	(81 600)	31,400	(77 500)
3	(4.8)	6	(152)	12	7	36,000	(89 000)	30,000	(74 200)	28,500	(70 300)	27,000	(66 800)
3-1/2	(5.6)	6-1/2	(165)	12	8	31,700	(78 300)	26,400	(65 200)	25,000	(61 800)	23,800	(58 700)
4	(6.4)	7-1/2	(191)	8	6	28,300	(69 800)	23,500	(58 200)	22,300	(55 100)	21,200	(52 400)
4-1/2	(7.2)	8-1/4	(210)	12	10	25,500	(63 000)	21,200	(52 500)	20,100	(49 700)	19,100	(47 300)
5	(8.0)	8-3/4	(222)	8	7	24,000	(59 400)	20,000	(49 500)	19,000	(46 900)	18,000	(44 500)
5-1/2	(8.8)	10	(254)	8	8	20,900	(51 700)	17,400	(43 100)	16,500	(40 800)	15,700	(39 200)
6	(9.6)	11-1/4	(286)	8	9	18,500	(45 700)	15,400	(38 100)	14,600	(36 000)	13,900	(34 300)
6	(9.6)	12-1/2	(318)	8	10	16,600	(41 000)	13,800	(34 200)	13,100	(32 400)	12,400	(30 800)
6	(9.6)	15	(381)	8	12	13,900	(34 500)	11,600	(28 700)	11,000	(27 200)	10,500	(25 900)
6	(9.6)	17-1/4	(438)	7	12	12,200	(30 200)	10,200	(25 200)	9,700	(23 800)	9,200	(22 700)
6	(9.6)	20	(508)	6	12	10,500	(25 800)	8,700	(21 500)	8,300	(20 400)	7,800	(19 400)

*For 10-cell seed plate, divide population by 2; multiply drilling distance by 2.

For 40-cell seed plate, multiply population by 2; divide drilling distance by 2.

PLANT POPULATION AND APPROXIMATE DRILLING DISTANCE FOR 24-CELL* SEED PLATE
(Metric equivalents are given in parentheses)

Maximum Speed in mph (km/h)	Average Drilling Distance in inches (mm)	Sprocket Combinations Driver Driven	Plant Population per Acre (hectare) Row Width			
			30" (76 cm)	36" (91 cm)	38" (97 cm)	40" (102 cm)
3 (4.8)	4 (102)	12 6	52,300 (129 200)	43,600 (107 600)	41,300 (102 000)	39,200 (96 900)
3 (4.8)	4-1/2 (114)	12 7	44,500 (109 900)	37,000 (91 600)	35,100 (86 800)	33,400 (82 400)
3-1/2 (5.6)	5-1/2 (140)	12 8	38,000 (93 900)	31,700 (78 300)	30,000 (74 200)	28,500 (70 500)
4 (6.4)	6-1/4 (159)	8 6	33,200 (82 000)	27,700 (68 300)	26,200 (64 700)	24,900 (61 500)
4-1/2 (7.2)	7 (178)	12 10	29,900 (73 800)	24,900 (61 500)	23,600 (58 300)	22,400 (55 400)
5 (8.0)	7-1/4 (184)	8 7	28,700 (70 800)	23,900 (59 000)	22,600 (55 900)	21,500 (53 100)
5-1/2 (8.8)	8-1/4 (210)	8 8	25,200 (62 200)	21,000 (51 900)	19,900 (49 100)	18,900 (46 700)
6 (9.6)	9-1/2 (241)	8 9	22,200 (55 000)	18,500 (45 800)	17,600 (43 400)	16,700 (41 200)
6 (9.6)	10-1/2 (267)	8 10	19,900 (49 200)	16,600 (41 000)	15,700 (38 800)	14,900 (36 900)
6 (9.6)	12-1/2 (318)	8 12	16,700 (41 300)	14,000 (34 400)	13,200 (32 600)	12,500 (31 000)
6 (9.6)	14-1/4 (362)	7 12	14,600 (36 100)	12,200 (30 100)	11,500 (28 500)	11,000 (27 100)
6 (9.6)	16-3/4 (425)	6 12	12,500 (30 900)	10,400 (25 800)	9,900 (24 400)	9,400 (23 200)

**For 12-cell seed plate, divide population by 2; multiply drilling distance by 2.*

For 36-cell seed plate, multiply population by 1.5; divide drilling distance by 1.5.

For 48-cell seed plate, multiply population by 2; divide drilling distance by 2.

**A Careful Operator
IS THE BEST INSURANCE
AGAINST AN ACCIDENT**

X1285N

Seed Hoppers

Planting Mechanically Delinted* Or Gin-Run Cotton Seed With Regular Metal Hopper

When planting gin-run cotton, remove the cutoff from the hopper by unscrewing the thumb screw (A) which holds it in place.

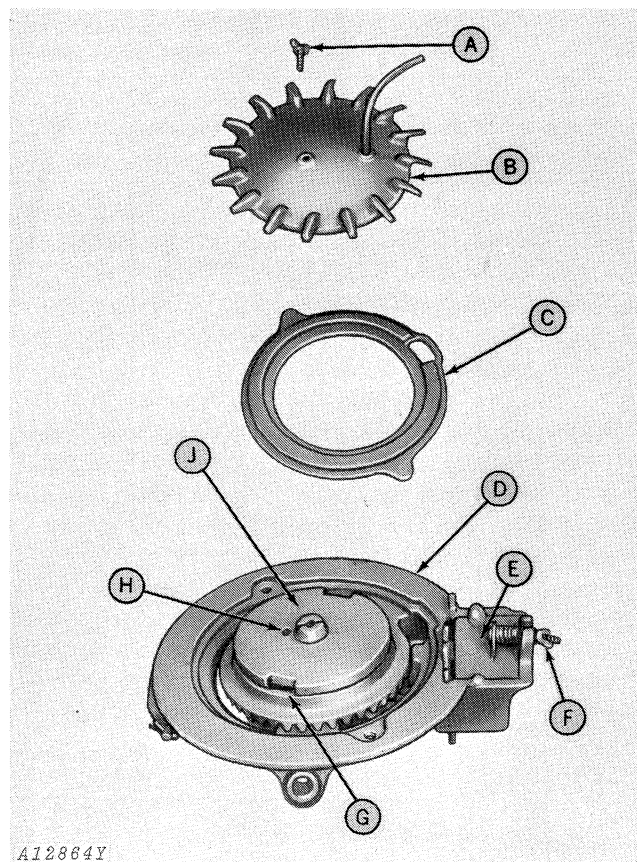
Place the false ring (C) in hopper with RAISED SIDE UP.

Install the cotton spider (B) and hold it in place with the thumb screw. The hole in the cotton spider is off to one side of center and lines up with the thumb screw hole (H) in the ring gear. The drive lugs on the cotton spider must engage the drive notches (G) on the ring gear (J).

NOTE: Be sure cotton spider is seated on the ring gear when thumb screw is tightened. Rotate shaft in hopper bottom (D) to be sure it turns freely.

The quantity of cotton planted is regulated by the cotton gate (E). To increase the quantity of seed planted, turn the thumb nut (F) to the right which will open the cotton gate. To decrease the quantity of seed planted, turn the thumb nut to the left.

*Mechanically delinted cotton includes flame or zip delinted cotton.



A—Thumb Screw
B—Cotton Spider
C—False Ring
(Raised side up)
D—Hopper Bottom

E—Cotton Gate
F—Thumb Nut
G—Drive Notch
H—Thumb Screw Hole
J—Ring Gear

**Planting Acid Delinted Cotton Seed,
Soybeans, and All Other Seed Except
Mechanically Delinted Or Gin Run
Cotton Seed**

Remove the cotton spider. Install false ring (D) with RAISED SIDE UP when planting such small seeds as: feterita, sorghum, etc. If soybeans, acid delinted cotton, corn, or other large seeds are to be planted, install the false ring with FLAT SIDE UP.

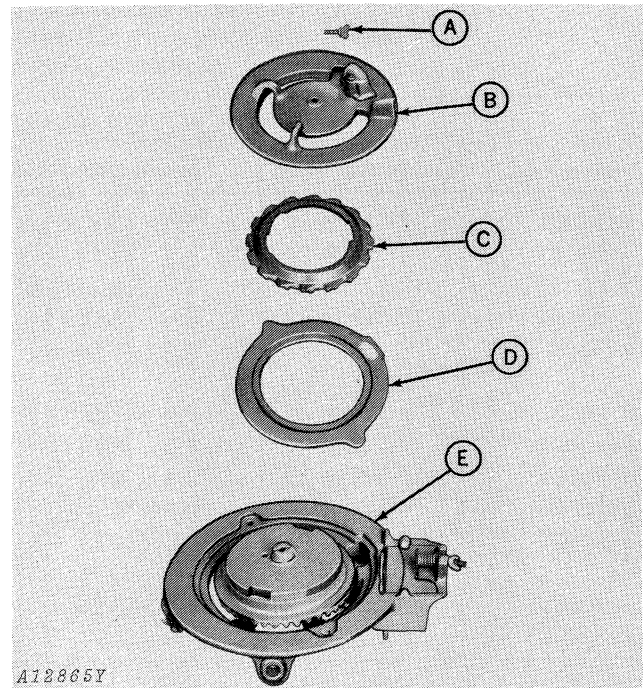
NOTE: Some seed plates require special false rings. See seed plate charts on pages 16 and 17.

Install seed plate (C).

Install cutoff (B) and fasten in place with the thumb screw (A). The cutoff must fit tightly against the false ring.

NOTE: Be sure cutoff is seated on the ring gear when thumb screw (A) is tightened. Rotate shaft in hopper bottom (E) to be sure it turns freely.

The following rate charts are for this hopper bottom.



A—Thumb Screw
B—Cutoff
C—Seed Plate

D—False Ring
E—Hopper Bottom

**APPROXIMATE POUNDS (kg) OF SORGHUM/MAIZE
PLANTED PER ACRE (hectare) USING 32-CELL PLATE B27769 Shown on page 23
(Metric Equivalents are given in parentheses)**

Final (Driver) Sprocket	Final (Driven) Sprocket	Pounds Per Acre (kg/ha) in Row Width of:			
		30-In. (762)	36-In. (914)	38-In. (965)	40-In. (1016)
6-Tooth	12-Tooth	3.4 (3.8)	2.9 (3.3)	2.8 (3.1)	2.6 (2.9)
7-Tooth	12-Tooth	4.1 (4.6)	3.4 (3.8)	3.2 (3.6)	3.1 (3.5)
8-Tooth	12-Tooth	4.6 (5.2)	3.9 (4.4)	3.7 (4.1)	3.5 (3.9)
8-Tooth	10-Tooth	5.6 (6.3)	4.6 (5.2)	4.4 (4.9)	4.2 (4.7)
8-Tooth	9-Tooth	6.2 (7.0)	5.2 (5.8)	4.9 (5.5)	4.6 (5.2)
8-Tooth	8-Tooth	7.0 (7.8)	5.8 (6.5)	5.5 (6.2)	5.2 (5.8)
8-Tooth	7-Tooth	8.0 (9.0)	6.7 (7.5)	6.3 (7.1)	6.0 (6.7)
12-Tooth	10-Tooth	8.4 (9.4)	7.0 (7.8)	6.6 (7.4)	6.3 (7.0)
8-Tooth	6-Tooth	9.3 (10.4)	7.7 (8.6)	7.3 (8.2)	7.0 (7.8)
12-Tooth	8-Tooth	10.5 (11.8)	8.7 (9.8)	8.2 (9.2)	7.9 (8.9)
12-Tooth	7-Tooth	11.9 (13.3)	10.0 (11.2)	9.4 (10.5)	8.9 (10.0)
12-Tooth	6-Tooth	14.0 (15.7)	11.6 (13.0)	11.0 (12.3)	10.4 (11.7)

**APPROXIMATE POUNDS (kg) OF SOYBEANS
PLANTED PER ACRE (hectare) USING 20-CELL PLATE H1255B Shown on page 23
(Metric Equivalents are given in parentheses)**

Final (Driver) Sprocket	Final (Driven) Sprocket	Pounds Per Acre (kg/ha) in Row Width of:			
		30-In. (762)	36-In. (914)	38-In. (965)	40-In. (1016)
6-Tooth	12-Tooth	35 (39)	29 (33)	27 (30)	26 (29)
7-Tooth	12-Tooth	41 (46)	34 (38)	32 (36)	31 (34)
8-Tooth	12-Tooth	47 (53)	39 (44)	37 (42)	35 (39)
8-Tooth	10-Tooth	55 (62)	45 (50)	43 (48)	41 (46)
8-Tooth	9-Tooth	61 (68)	52 (58)	49 (55)	46 (52)
8-Tooth	8-Tooth	69 (77)	58 (65)	55 (62)	52 (58)
8-Tooth	7-Tooth	79 (89)	66 (74)	62 (70)	59 (66)
12-Tooth	10-Tooth	83 (93)	69 (77)	65 (73)	62 (70)
8-Tooth	6-Tooth	92 (103)	77 (86)	73 (82)	69 (77)
12-Tooth	8-Tooth	104 (117)	87 (98)	82 (92)	78 (87)
12-Tooth	7-Tooth	119 (133)	100 (112)	94 (105)	89 (100)
12-Tooth	6-Tooth	139 (156)	116 (130)	110 (123)	104 (117)

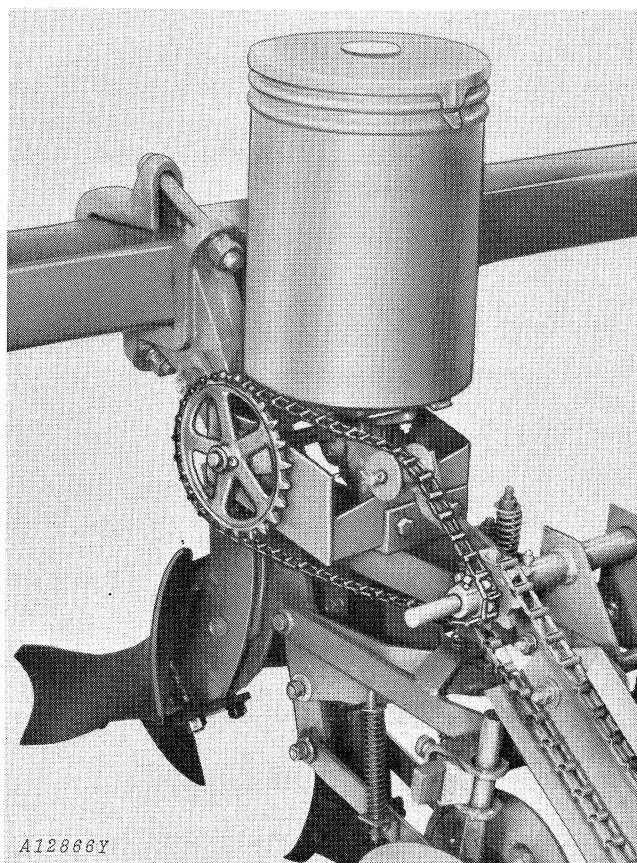
NOTE: The above amounts can be increased 50 per cent by using H2527B 20-Cell Plate. H1255B is used with standard bottom plate. H2557B is used with special bottom plate H1279B, groove side up, in corn cans, or with P1583B, groove side up in combination corn and cotton cans.

APPROXIMATE POUNDS (kg) OF ACID-DELINTED COTTON SEED PLANTED PER ACRE (hectare) Shown on page 23
(Metric Equivalents are given in parentheses)

Press Wheel (Driver) Sprocket	Shaft (Driven) Sprocket	Pounds Per Acre (kg/ha) Planted				
		24-Cell	48-Cell	16-Cell	20-Cell	24-Cell
		H1301B	H3160B	H695B	H1315B	H950B
12-Tooth	6-Tooth	13.8 (15.5)	17.3 (19.4)	23.2 (26.0)	26.2 (29.3)	34.8 (39.0)
12-Tooth	*7-Tooth	11.8 (13.2)	14.8 (16.6)	19.8 (22.2)	22.4 (25.1)	29.7 (33.3)
12-Tooth	8-Tooth	10.6 (11.9)	13.0 (14.6)	17.4 (19.5)	19.5 (21.8)	26.0 (29.1)
12-Tooth	*9-Tooth	9.1 (10.2)	11.5 (12.9)	15.4 (17.3)	17.4 (19.5)	23.0 (25.8)
8-Tooth	6-Tooth	8.3 (9.3)	11.5 (12.9)	15.4 (17.3)	17.4 (19.5)	23.0 (25.8)
12-Tooth	10-Tooth	6.9 (7.7)	10.4 (11.7)	13.8 (15.5)	15.7 (17.6)	20.7 (22.4)
8-Tooth	8-Tooth		8.6 (9.6)	11.6 (13.0)	13.0 (14.6)	17.4 (19.5)
8-Tooth	10-Tooth		6.9 (7.7)	9.3 (10.4)	11.5 (12.9)	14.0 (15.7)
6-Tooth	8-Tooth			8.7 (9.7)	9.8 (11.0)	13.0 (14.6)
8-Tooth	12-Tooth			7.7 (8.6)	8.7 (9.7)	11.5 (12.9)
*9-Tooth	12-Tooth			8.7 (9.7)	9.8 (11.0)	13.0 (14.6)
6-Tooth	10-Tooth			7.0 (7.8)	7.8 (8.7)	10.5 (11.8)
6-Tooth	12-Tooth			5.8 (6.5)	6.5 (7.3)	8.7 (9.7)
*7-Tooth	12-Tooth			6.6 (7.4)	7.5 (8.4)	9.9 (11.1)
		Approximate Number of Seeds per Plate Revolution				
		48	60	80	90	120

*7- and 9-tooth sprockets are available as special equipment.

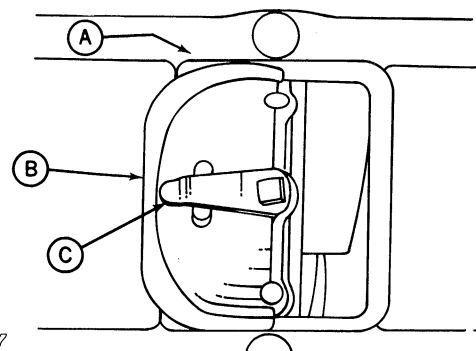
SORGHUM/MAIZE SEED CAN



Sorghum/maize seed cans have large capacity and are equipped with double-run feeds, permitting the planting of maize, soybeans, acid-delinted cotton seed, and other seeds that normally may be planted with a grain drill.

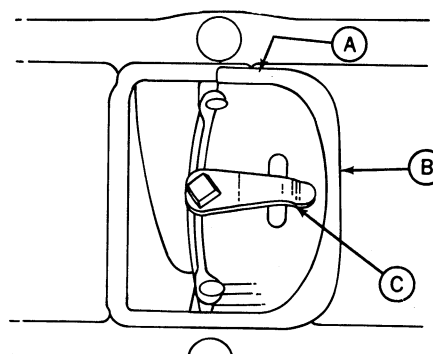
Feed Covers

The feed covers are used to cover either the small or large side of the feed wheel.



A12867
A—Small Side
B—Feed Cover

C—Latch



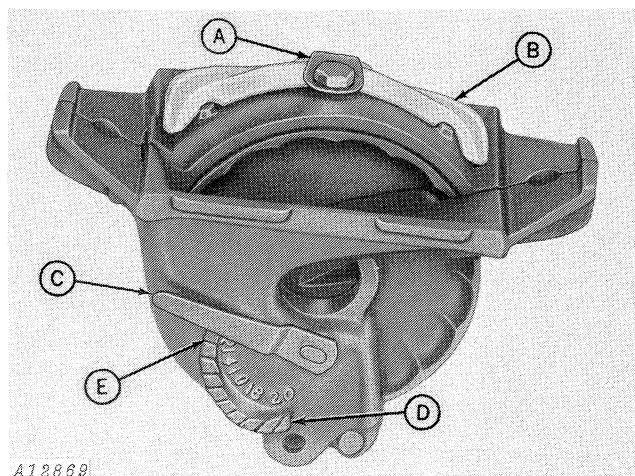
A12868
A—Large Side
B—Feed Cover

C—Latch

To change the cover from one side of the feed wheel to the other side, loosen latch nut and pivot latch away from cover. Lift off feed covers and reassemble on opposite side of feed wheel opening. Tighten latch nut.

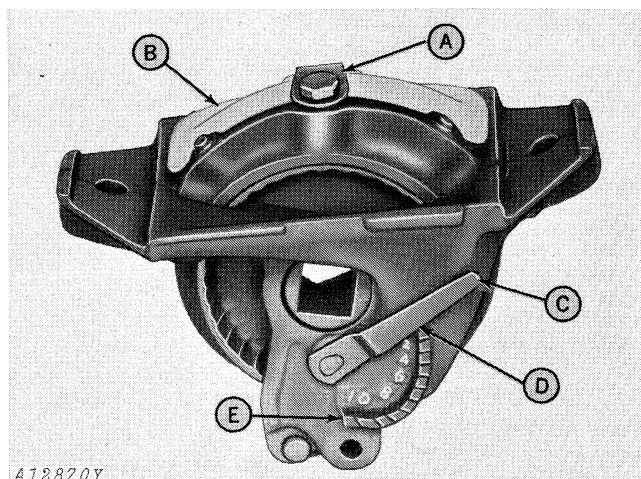
SORGHUM/MAIZE CAN—Continued

Feed Gates



A—Latch
B—Feed Cover
C—Lock Lever
D—Smallest Quantity
E—Largest Quantity

Small Side of Feed Wheel



A—Latch
B—Feed Cover
C—Lock Lever
D—Smallest Quantity
E—Largest Quantity

Large Side of Feed Wheel

A lock lever on each side of the feed wheel regulates a gate inside the feed. Each gate can be adjusted for 10 different rates of seeding. Set all gates for the same rate of seeding.

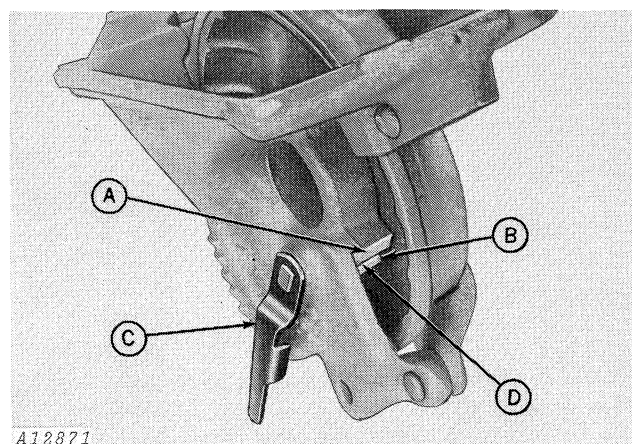
IMPORTANT: The lock levers must be in the same position on all feed cups to insure uniform metering of grain from each feed.

Cleaning Grain Feeds

To clean feeds, adjust feed gates to the No. 10 position on the small side and No. 20 position on the large side of feed wheel; then disengage drive clutch and revolve feed shafts with wrench. If feed shafts are tight, saturate feeds with diesel fuel.

Be sure all diesel fuel is removed before planting next crop.

Checking Seed Gate Opening



A—Gauging Ledge
B—Seed Gate
C—Gate Latch in Wide Open Position
D—From "TOUCHING" to 1/32-inch (0.79 mm) Gap

To check the accuracy of the seed gate (B) opening with the notches on the feed cup, move the latch to the wide-open setting. The seed gate should touch the gauging ledge (A) or be within 1/32-inch (0.79 mm) of the ledge.

To adjust the seed gate opening, insert screw driver or other tool under seed gate to hold it tight against the gauging ledge and bend gate latch to the wide-open notch or position (C).

Pounds of Seed Per Acre (ha)

The following charts give pounds of seed that may be sowed per acre (ha) for 30-, 36-, or 40-inch (762 mm, 914 mm or 1016 mm) rows by using different lock lever positions and sprocket combinations.

PLANTING MAIZE USING 7-TOOTH TO 24-TOOTH FINAL DRIVE SPROCKETS
(Metric equivalents are given in parentheses)

Press Wheel		Inches (m) Ground Travel Per Feed Revolution	Feed Revolutions Per Acre (hectare)	Pounds Per Acre (kg/ha)									
(Driver) Sprocket	(Driven) Sprocket			Position of Lock Lever									
				6	7	8	9	10					
30-INCH (762 mm) ROWS													
6-Tooth	12-Tooth	387 (9.83)	540 (1334)	4.1 (4.6)	5.5 (6.1)	6.7 (7.5)	8.1 (9.1)	9.3 (10.4)					
6-Tooth	10-Tooth	322 (8.18)	670 (1656)	5.1 (5.7)	6.8 (7.6)	8.4 (9.4)	10.0 (11.2)	11.5 (12.9)					
10-Tooth	12-Tooth	232 (5.89)	905 (2236)	7.0 (7.8)	9.2 (10.3)	11.3 (12.7)	13.6 (15.2)	15.5 (17.4)					
12-Tooth	10-Tooth	161 (4.09)	1305 (3225)	10.0 (11.2)	13.3 (14.9)	16.3 (18.3)	19.5 (21.8)	22.5 (25.2)					
36-INCH (914 mm) ROWS													
6-Tooth	12-Tooth	387 (9.83)	450 (1112)	3.5 (3.9)	4.6 (5.2)	5.6 (6.3)	6.8 (7.6)	7.7 (8.6)					
6-Tooth	10-Tooth	322 (8.18)	540 (1334)	4.1 (4.6)	5.5 (6.1)	6.7 (7.5)	8.1 (9.1)	9.3 (10.4)					
10-Tooth	12-Tooth	232 (5.89)	750 (1853)	5.7 (6.4)	7.6 (8.5)	9.4 (10.5)	11.0 (12.3)	13.0 (14.6)					
12-Tooth	10-Tooth	161 (4.09)	1080 (2669)	8.3 (9.3)	11.0 (12.3)	13.5 (15.1)	16.0 (17.9)	18.5 (20.7)					
38-INCH (965 mm) ROWS													
6-Tooth	12-Tooth	387 (9.83)	428 (1056)	3.3 (3.7)	4.4 (4.9)	5.4 (6.1)	6.5 (7.3)	7.4 (8.3)					
6-Tooth	10-Tooth	322 (8.18)	514 (1270)	4.0 (4.5)	5.3 (5.9)	6.4 (7.2)	7.7 (8.6)	8.9 (10.0)					
10-Tooth	12-Tooth	232 (5.89)	713 (1762)	5.5 (6.2)	7.3 (8.2)	9.0 (10.1)	10.5 (11.8)	12.5 (14.0)					
12-Tooth	10-Tooth	161 (4.09)	1026 (2535)	7.9 (8.9)	10.5 (11.8)	12.8 (14.3)	15.3 (17.1)	17.8 (19.9)					
40-INCH (1016 mm) ROWS													
6-Tooth	12-Tooth	387 (9.83)	405 (1001)	3.1 (3.5)	4.1 (4.5)	5.1 (5.7)	6.1 (6.8)	7.0 (7.8)					
6-Tooth	10-Tooth	322 (8.18)	487 (1203)	3.8 (4.3)	5.0 (5.6)	6.1 (6.8)	7.3 (8.2)	8.4 (9.4)					
10-Tooth	12-Tooth	232 (5.89)	675 (1668)	5.2 (5.8)	6.9 (7.7)	8.5 (9.5)	10.0 (11.2)	12.0 (13.4)					
12-Tooth	10-Tooth	161 (4.09)	972 (2402)	7.5 (8.4)	9.9 (11.1)	12.0 (13.4)	14.5 (16.2)	17.0 (19.0)					

PLANTING MAIZE USING 7-TOOTH TO 30-TOOTH FINAL DRIVE SPROCKETS*
(Metric equivalents are given in parentheses)

Press Wheel		Inches (m) Ground Travel Per Feed Revolution	Feed Revolutions Per Acre (hectare)	Pounds Per Acre (kg/ha)					
(Driver) Sprocket	(Driven) Sprocket			Position of Lock Lever					
				6	7	8	9	10	
30-INCH (762 mm) ROWS									
6-Tooth	12-Tooth	483 (12.27)	432 (1067)	3.3 (3.7)	4.4 (4.9)	5.4 (6.1)	6.5 (7.3)	7.5 (8.4)	
6-Tooth	10-Tooth	402 (10.21)	536 (1325)	4.1 (4.6)	5.4 (6.1)	6.7 (7.5)	8.0 (9.0)	9.2 (10.3)	
10-Tooth	12-Tooth	290 (7.37)	724 (1789)	5.6 (6.3)	7.4 (8.3)	9.0 (10.1)	10.8 (12.1)	12.4 (13.9)	
12-Tooth	10-Tooth	201 (5.11)	1042 (2575)	8.0 (9.0)	10.6 (11.9)	13.0 (14.6)	15.5 (17.4)	18.0 (20.2)	
36-INCH (914 mm) ROWS									
6-Tooth	12-Tooth	483 (12.27)	360 (889)	2.8 (3.1)	3.7 (4.1)	4.5 (5.0)	5.4 (6.1)	6.2 (6.9)	
6-Tooth	10-Tooth	402 (10.21)	432 (1067)	3.3 (3.7)	4.4 (4.9)	5.4 (6.1)	6.4 (7.2)	7.4 (8.3)	
10-Tooth	12-Tooth	290 (7.37)	600 (1483)	4.5 (5.0)	6.1 (6.8)	7.5 (8.4)	8.8 (9.9)	10.4 (11.7)	
12-Tooth	10-Tooth	201 (5.11)	862 (2130)	6.7 (7.5)	8.8 (9.9)	10.8 (12.1)	12.8 (14.3)	14.8 (16.6)	
38-INCH (965 mm) ROWS									
6-Tooth	12-Tooth	483 (12.27)	341 (843)	2.7 (3.0)	3.5 (3.9)	4.3 (4.8)	5.2 (5.8)	5.9 (6.6)	
6-Tooth	10-Tooth	402 (10.21)	411 (1016)	3.2 (3.6)	4.2 (4.7)	5.2 (5.8)	6.1 (6.8)	7.1 (8.0)	
10-Tooth	12-Tooth	290 (7.37)	570 (1409)	4.3 (4.8)	5.8 (6.5)	7.2 (8.1)	8.4 (9.4)	10.0 (11.2)	
12-Tooth	10-Tooth	201 (5.11)	821 (2029)	6.4 (7.1)	8.4 (9.4)	10.3 (11.5)	12.3 (13.8)	14.2 (15.9)	
40-INCH (1016 mm) ROWS									
6-Tooth	12-Tooth	483 (12.27)	323 (798)	2.5 (2.8)	3.3 (3.7)	4.1 (4.6)	4.9 (5.5)	5.6 (6.3)	
6-Tooth	10-Tooth	402 (10.21)	390 (964)	3.0 (3.4)	4.0 (4.5)	4.9 (5.5)	5.8 (6.5)	6.7 (7.5)	
10-Tooth	12-Tooth	290 (7.37)	540 (1334)	4.1 (4.6)	5.5 (6.2)	6.8 (7.6)	8.0 (9.0)	9.6 (10.8)	
12-Tooth	10-Tooth	201 (5.11)	780 (1927)	6.0 (6.7)	7.9 (8.9)	9.6 (10.8)	11.6 (13.0)	13.5 (15.1)	

*30-tooth sprocket, B28700, available as repair item.

PLANTING ACID-DELINTED COTTON USING 7-TOOTH TO 24-TOOTH FINAL DRIVE SPROCKETS
(Metric equivalents are given in parentheses)

Press Wheel		Inches (m) Ground Travel Per Feed Revolution	Feed Revolutions Per Acre (hectare)	Pounds Per Acre (kg/ha) Position of Lock Lever									
(Driver) Sprocket	(Driven) Sprocket			11	12	13	14	15	16	17	18	19	20
38-INCH (965 mm) ROWS													
6-Tooth	12-Tooth	387 (9.83)	426 (1053)	8.5 (9.5)	9.2 (10.3)	9.6 (10.8)	10.5 (11.8)	11.1 (12.4)	12.2 (13.7)	14.2 (15.9)	16.2 (18.1)	18.0 (20.2)	19.5 (21.8)
6-Tooth	10-Tooth	322 (8.18)	513 (1268)	10.3 (11.5)	11.1 (12.4)	11.6 (13.0)	12.3 (13.8)	13.3 (14.9)	14.7 (16.5)	17.2 (19.3)	19.5 (21.8)	21.5 (24.1)	23.5 (26.3)
10-Tooth	12-Tooth	232 (5.89)	710 (1754)	14.2 (15.9)	15.3 (17.1)	16.0 (17.9)	17.0 (19.0)	18.5 (20.7)	20.4 (22.8)	24.0 (26.9)	27.0 (30.2)	30.0 (33.6)	34.0 (38.0)
12-Tooth	10-Tooth	161 (4.09)	1022 (2525)	20.4 (22.9)	21.8 (24.4)	22.8 (25.5)	24.3 (27.2)	26.3 (29.5)	29.0 (32.5)	34.0 (38.1)	39.0 (43.7)	43.0 (48.2)	46.0 (51.5)
40-INCH (1016 mm) ROWS													
6-Tooth	12-Tooth	387 (9.83)	405 (1001)	8.1 (9.1)	8.7 (9.7)	9.1 (10.2)	9.7 (10.7)	10.5 (11.8)	11.6 (13.0)	13.6 (15.2)	15.4 (17.3)	17.0 (19.0)	18.5 (20.7)
6-Tooth	10-Tooth	322 (8.18)	487 (1203)	9.8 (11.0)	10.5 (11.8)	11.0 (12.3)	11.7 (13.1)	12.7 (14.2)	14.0 (15.7)	16.3 (18.3)	18.5 (20.7)	20.5 (23.0)	22.0 (24.6)
10-Tooth	12-Tooth	232 (5.89)	675 (1668)	13.5 (15.1)	14.5 (16.2)	15.2 (17.0)	16.2 (18.1)	17.5 (19.6)	19.4 (21.7)	22.6 (25.3)	25.6 (28.7)	28.0 (31.4)	31.0 (34.7)
12-Tooth	10-Tooth	161 (4.09)	972 (2402)	19.4 (21.7)	21.0 (23.5)	22.0 (24.6)	23.3 (26.1)	25.2 (28.2)	28.0 (31.4)	32.6 (36.5)	37.0 (41.4)	40.4 (44.8)	44.0 (49.3)

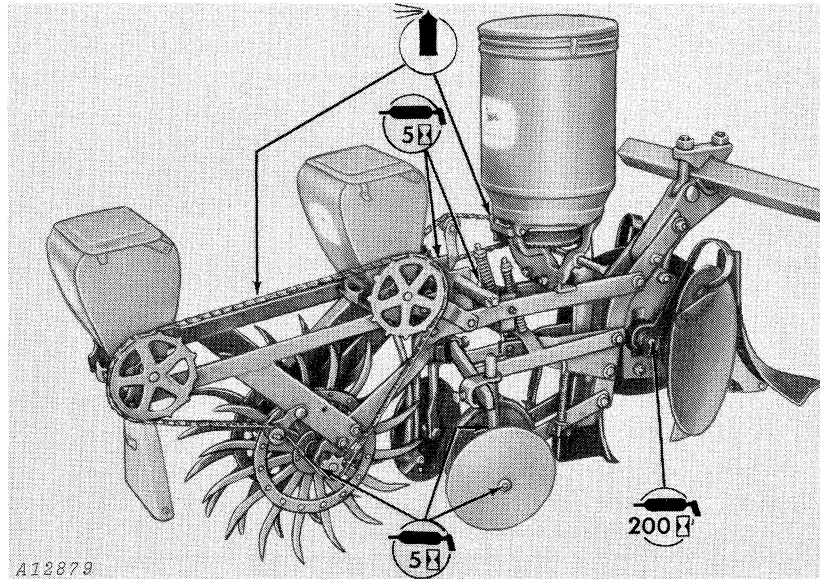
PLANTING ACID-DELINTED COTTON USING 7-TOOTH TO 30-TOOTH FINAL DRIVE SPROCKETS*
(Metric equivalents are given in parentheses)

Press Wheel		Inches (m) Ground Travel Per Feed Revolution	Feed Revolutions Per Acre (hectare)	Pounds Per Acre (kg/ha) Position of Lock Lever									
(Driver) Sprocket	(Driven) Sprocket			11	12	13	14	15	16	17	18	19	20
38-INCH (965 mm) ROWS													
6-Tooth	12-Tooth	387 (9.83)	340 (840)	6.8 (7.6)	7.3 (8.2)	7.6 (8.5)	8.2 (9.2)	8.8 (9.9)	10.2 (11.4)	11.4 (12.8)	13.0 (14.6)	14.3 (16.0)	15.5 (17.4)
6-Tooth	10-Tooth	322 (8.18)	410 (1013)	8.2 (9.2)	8.8 (9.9)	9.2 (10.3)	9.8 (11.0)	10.6 (11.9)	12.2 (13.7)	13.8 (15.5)	15.5 (17.4)	17.2 (19.3)	18.7 (20.9)
10-Tooth	12-Tooth	232 (5.89)	568 (1404)	11.4 (12.8)	12.2 (13.7)	12.8 (14.3)	13.6 (15.2)	14.7 (16.5)	16.8 (18.8)	19.0 (21.3)	22.0 (24.6)	24.0 (26.9)	26.0 (29.1)
12-Tooth	10-Tooth	161 (4.09)	817 (2019)	16.3 (18.3)	17.6 (19.7)	18.4 (20.6)	19.6 (22.0)	21.0 (23.5)	24.0 (26.9)	27.0 (30.2)	31.0 (34.7)	33.8 (37.9)	37.0 (41.4)
40-INCH (1016 mm) ROWS													
6-Tooth	12-Tooth	387 (9.83)	324 (801)	6.5 (7.3)	7.0 (7.8)	7.3 (8.2)	7.8 (8.7)	8.4 (9.4)	9.6 (10.8)	11.0 (12.3)	12.3 (13.8)	13.6 (15.2)	14.8 (16.6)
6-Tooth	10-Tooth	322 (8.18)	390 (964)	7.8 (8.7)	8.4 (9.4)	8.8 (9.9)	9.4 (10.5)	11.2 (12.5)	11.6 (13.0)	13.0 (14.6)	14.8 (16.6)	16.4 (18.3)	17.8 (19.9)
10-Tooth	12-Tooth	232 (5.89)	540 (1334)	10.8 (12.1)	11.6 (13.0)	12.2 (13.7)	13.0 (14.6)	14.0 (15.7)	16.0 (17.9)	18.0 (20.2)	20.0 (22.4)	23.0 (25.8)	25.0 (28.0)
12-Tooth	10-Tooth	161 (4.09)	777 (1920)	15.5 (17.4)	16.8 (18.8)	17.5 (19.6)	18.6 (20.8)	20.0 (22.4)	23.0 (25.8)	26.0 (29.1)	29.0 (32.5)	33.0 (37.0)	35.0 (39.2)

*30-tooth sprocket, B28700, available as repair item.



Lubrication



Planting Attachment

Grease fittings are provided at all points indicated in the lubrication chart. All parts provided with grease fittings should be lubricated as indicated with SAE Multipurpose-type grease. If any grease fittings are missing, replace them immediately. *Clean the fittings thoroughly before using grease gun.*

All other moving parts on the planting attachment should be oiled periodically with SAE 30 lubricating oil.

The period recommended is based on normal conditions; severe or unusual conditions may require more frequent lubrication.

SYMBOLS



Lubricate with John Deere Multi-Purpose Lubricant or an equivalent SAE multipurpose-type grease at hourly intervals indicated on the symbols.



Lubricate all roller chains periodically with John Deere PT508 chain lube or equivalent.



Service

SHARES

Be sure to maintain a uniform shape of the cutting edge when worn shares are being sharpened. When replacing shares, insist on genuine John Deere Shares with the word "Deere" stamped on the back near the share number. "Deere" replacement shares fit like the originals and have more and better material in points and wearing surfaces to stay sharp longer.

RUST PREVENTION

Protect the face of the bottoms, sweeps, or disk openers from rust whenever the planting attachment is not in use (even overnight) by applying a light coating of oil or grease. When storing the planting attachment for the season, apply a good rust preventive such as John Deere Plow Bottom Black Paint or a heavy coating of cup or gun grease. The paint is available from your John Deere dealer in brush-type (PT64) or a 12-ounce (.35 l) spray can (PT65).

SERVICE AT THE BEGINNING OF THE SEASON

Before using the planting attachment after it has been stored, turn the press wheel by hand, to be sure the drive and seed plates are free to turn. Rotate forward only, as assemblies are not designed to rotate in reverse.

Inspect the seed hoppers for cleanliness to be certain that the seed will drop freely.

Clean any dirt or grease that may have accumulated on moving parts, gears, and chains, before

operating the planter. This will prevent abrasive action that could cause excessive wear.

Thoroughly inspect the planting attachment for loose parts, and adjust as necessary.

Be certain all adjustments are made for the planting conditions to be encountered.

Lubricate the unit as outlined on page 32.

SERVICE AT THE END OF THE SEASON

When planting is completed for the season, store the Planting Attachment under cover with all parts in operating condition.

Clean the planting attachment thoroughly to remove dirt and trash which would hold moisture and cause rusting.

Lubricate the planting attachment as outlined on page 32.

Paint all parts which have chipped and require repainting.

Store the planting attachment in a clean, dry place, with the wheels out of the sun and off of the floor. Do not let the planter rest on the wheels in storage, as this will reduce their life.

Inspect the planting attachment for worn or broken parts. See your John Deere dealer during the off-season, so that parts or service can be acquired when the planting attachment is not needed in the field.



Trouble Shooting

The majority of planting attachment operating problems can be traced to improper adjustment. The service chart which follows is designed to help you when such a problem develops, by suggesting a probable cause and the recommended solution.

These suggested remedies should be applied with caution. Make a sincere effort to understand your planting attachment and know why you are making an adjustment.

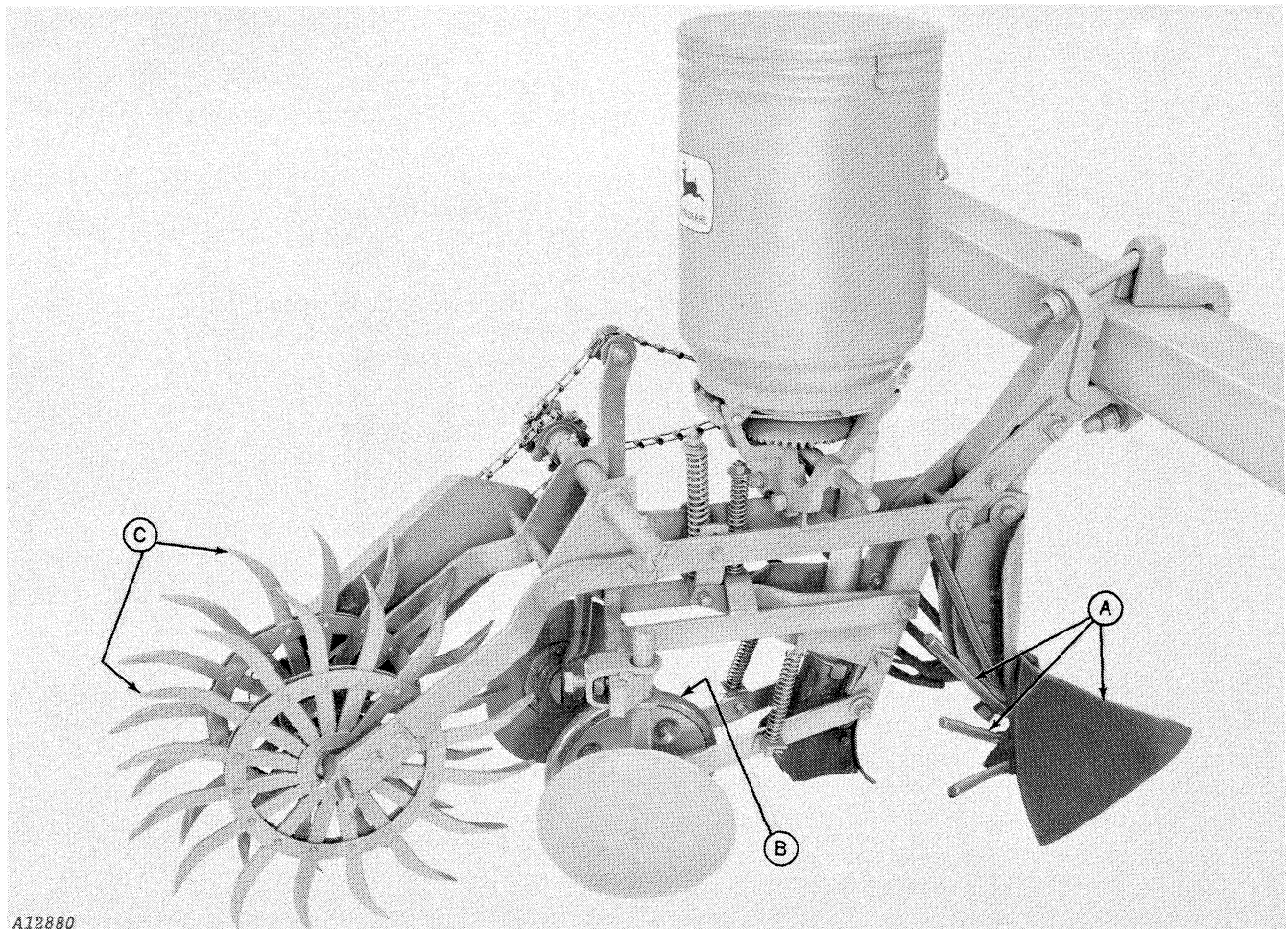
Problem	Probable Cause	Possible Remedy	Page
Unit plants at uneven depths	Planting attachment running nose down.	Adjust tractor center link.	5
	Disk or knife coverers improperly adjusted.	Adjust knives or disks.	13,14
	Excessive ground speed or uneven ground speed.	Reduce speed and/or run at more uniform speed.	—
Unit scatters seed.	Planting attachment running on nose.	Adjust tractor center link.	5
	Running planting attachment too fast.	Reduce speed.	—
Seed tube plugs.	Soil too moist.	Let soil dry.	—
	Tractor rockshaft dropping too fast.	Adjust rockshaft speed of drop.	6
	Allowing planting units to roll backward when planting attachment is being lowered to planting position.	Lower planting units only when tractor is moving forward.	5

Problem	Probable Cause	Possible Remedy	Page
Inaccurate drop or planting more seed in one row than another.	Poorly sized seed.	Have seed properly sized and matched with plate.	15-17
	Wrong seed plates.	Have dealer check plates.	—
	Floor plate turned wrong side up or wrong false ring used.	Check table for instructions. If using seed plates not listed in tables, check with dealer.	15-18
	Cutoff tongue or knocker worn or not working freely.	Adjust or replace cutoff tongue or knocker.	—
	Weak or worn cutoff spring.	Replace spring.	—
	Hopper not clamped down tightly.	Tighten hopper.	—
	Planting too fast.	Reduce ground speed.	—
	Chain on wrong sprockets.	Refer to chart.	18
	Worn openers.	Replace openers.	—



Special Equipment

MINIMUM TILLAGE PLANTING



A12880

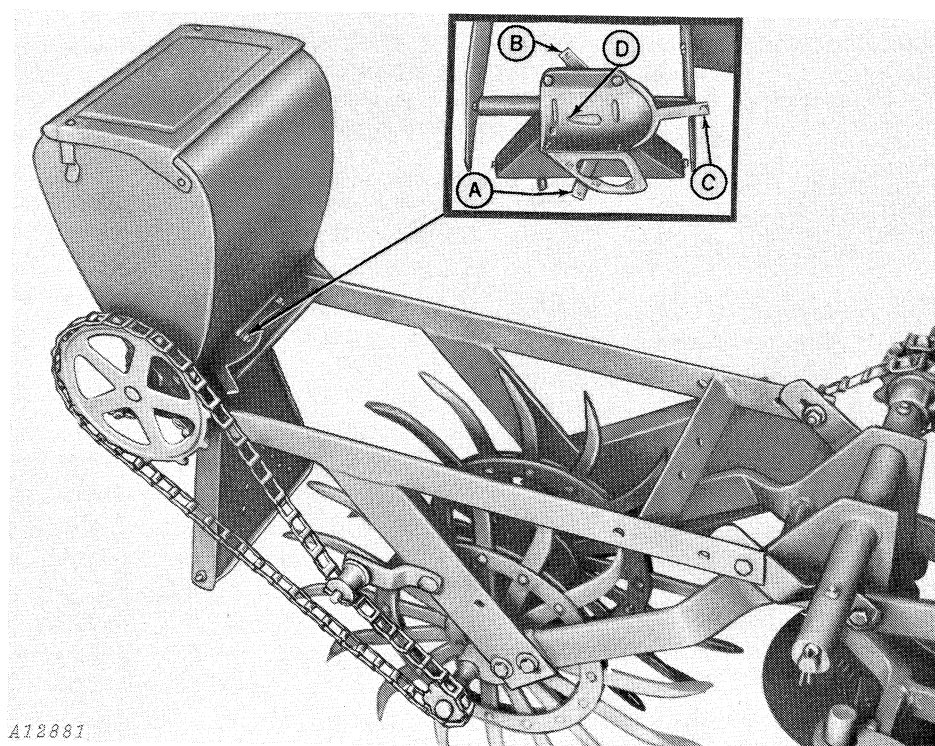
- A—Trash Rod and Sweeps
- B—10 x 1 Inch (254 mm x 25 mm)
Press Wheel
- C—Open Drive Wheels

PA803 Planting Attachment Equipped for Minimum Tillage Planting

The PA803 and PA804 Planting Attachments may be used for minimum tillage planting by using trash rods and sweeps in lieu of lister bottoms or sweeps, open drive wheels in

lieu of steel press wheels with or without rubber tires, and a 10- x 1-inch (254 mm x 25 mm) press wheel. Also available are the Insecticide and/or Herbicide Attachments.

HERBICIDE ATTACHMENT



A—Range No. 1

B—Range No. 2

C—Range No. 3

D—Metering Gate

Each granular herbicide hopper has a capacity of approximately 15 pounds (7 kg). The unit will apply 2 to 30 pounds per acre (0.9 kg to 14 kg per ha) in bands 14 inches (356 mm) wide, depending on type of herbicide.

Rate of Application

The chemical manufacturer may recommend the rate of application in the following ways:

1. Pounds per acre (kg/ha) for a given band width and row spacing.
2. Pounds per acre (kg/ha) for complete (broadcast) coverage.

When the chemical manufacturer recommends pounds per acre (kg/ha) for your band width and row spacing, see "Metering Gate," page 38.

When the chemical manufacturer recommends pounds per acre (kg/ha) for complete (broadcast) coverage only, it is necessary to find the pounds per acre (kg/ha) for your band width and row spacing: This will give you the approximate pounds (kg) to apply to get the same chemical concentration per square inch (mm²) as the chemical manufacturer recommends for complete (broadcast) coverage.

Use the following formula to find the pounds per acre (kg/ha) for your band width and row spacing:

$$A \times \frac{B}{C} = \text{Delivery rate in pounds per acre (kg/ha) for a given band width and row spacing}$$

Legend:

A — Chemical manufacturer's recommended rate in pounds per acre (kg/ha) for complete (broadcast) coverage.

B — Band width.

C — Row spacing.

EXAMPLE: If the chemical manufacturer recommends 20 pounds per acre (9 kg/ha) for complete (broadcast) coverage, and the band width is 14 inches (356 mm) and row spacing is 40 inches (1016 mm) apply the formula as follows:

$$20 \times \frac{14}{40} = 7 \text{ pounds per acre} \quad 9 \times \frac{356}{1016} = 3 \text{ kilograms per hectare}$$

Metering Gate

The metering gate (D) on the hopper can be adjusted for range 1 (A), 2(B), or 3 (C). The delivery rate will increase from range 1 through range 3. To change from one range to another push down slightly on the metering gate and rotate it to the desired range.

There are 33 intermediate notches for each range. The delivery rate will increase from notch 1 through notch 33.

38 Special Equipment

Use the following metering gate settings as a starting point for distributing 14-inch (36 cm) bands,

the desired row spacing at 5 miles per hour (8 km/h).

METERING GATE SETTING (STARTING POINT ONLY) Approximate Rate of Band Application in Pounds (kg) Per Acre (hectare) (Metric Equivalents are given in parentheses)

Range	Notch	Row Spacing in Inches (cm)									
		20" (51 cm)	22" (56 cm)	24" (61 cm)	28" (71 cm)	30" (76 cm)	32" (81 cm)	34" (86 cm)	36" (91 cm)	38" (97 cm)	40" (102 cm)
1	23	7 (7.8)	6-1/4 (7)	5-3/4 (6.4)	5 (5.6)	4-5/8 (5.2)	4-1/2 (4.8)	4 (4.5)	4 (4.5)	3-5/8 (4.1)	3-1/2 (3.9)
1	29	10 (11.2)	9 (10.1)	8-1/4 (9.2)	7 (7.8)	6-5/8 (7.4)	6-1/4 (7)	6 (6.7)	5-1/2 (6.2)	5-1/4 (5.9)	5 (5.6)
1	33	12 (13.4)	10-7/8 (12.2)	10 (11.2)	8-1/2 (9.5)	8 (9)	7-1/2 (8.4)	7 (7.8)	6-3/4 (7.6)	6-1/4 (7)	6 (6.7)
2	4	14 (15.7)	12-1/2 (14)	11-1/2 (12.9)	10 (11.2)	9-1/4 (10.4)	8-3/4 (9.8)	8-1/4 (9.2)	7-7/8 (8.8)	7-1/4 (8.1)	7 (7.8)
2	7	16 (17.9)	14-1/2 (16.2)	13-1/2 (15.1)	11-1/2 (12.9)	10-1/2 (11.8)	10 (11.2)	9-1/2 (10.6)	9 (10.1)	8-1/2 (9.5)	8 (9)
2	10	18 (20.2)	16-1/4 (18.2)	14-7/8 (16.7)	12-7/8 (14.4)	12 (13.4)	11-1/4 (12.6)	10-1/2 (11.8)	10 (11.2)	9-1/2 (10.6)	9 (10.1)
2	13	20 (22.4)	18 (20.2)	16-1/2 (18.5)	14-1/4 (16)	13-1/4 (14.8)	12-1/2 (14)	11-7/8 (13.3)	11 (12.3)	10-1/2 (11.8)	10 (11.2)
2	21	24 (26.9)	21-1/2 (24.1)	19-7/8 (22.3)	17 (19)	16 (17.9)	15 (16.8)	14 (15.7)	13-1/4 (14.8)	12-1/2 (14)	12 (13.4)
2	32	30 (33.6)	27 (30.2)	24-3/4 (27.7)	21-1/2 (24.1)	20 (22.4)	18-3/4 (21)	17-3/4 (19.9)	16-5/8 (18.6)	15-3/4 (17.6)	15 (16.8)

NOTE: For speeds faster than 5 miles per hour (8 km/h), use a higher notch setting. For speeds slower than 5 miles per hour (8 km/h), use a lower notch setting.

A special 18-tooth sprocket (B30093) is recommended to be used on the herbicide hopper for herbicide rates of 12 pounds or over per acre (13.4 kg/ha). It can be obtained from your John Deere Dealer.

Checking Rate of Application

The rate of delivery may be affected by change in temperature, humidity, speed, ground conditions or by any obstruction in the metering gate. Also, large variations may exist in the "flowability" of different herbicide or sometimes even within the same herbicides.

Check the herbicide in the field at planting speed that can be maintained uniformly even when traveling up hill or down hill.

NOTE: Do not turn the press wheel by hand to check the rate of application.

Fill the herbicide hoppers. Empty all other hoppers on the planter.

To check the exact number of pounds per acre (kg/ha) of herbicide that will be delivered, attach a cloth bag to each granular herbicide diffuser, lower the planter, and proceed as follows:

U.S. Measurement

Drive 80 rods at planting speed. Weigh the herbicide in ounces that was caught in one bag. Multiply that amount by the factor shown to determine pounds per acre.

Check the herbicide caught in each bag in the same manner.

Pounds Per Acre Factor for Given Row Width

Row Width	Factor	Row Width	Factor
40-In.	0.62	30-In.	0.83
38-In.	0.65	28-In.	0.89
36-In.	0.69	24-In.	1.03
34-In.	0.73	22-In.	1.13
32-In.	0.78	20-In.	1.24

Example: Assume you are planting 40-inch rows, 80 rods long, and you caught 11.2 ounces in one bag (one row). 11.2 ounces times 0.62 (factor for 40-inch rows) equals 6.9 pounds per acre.

If the desired amount is not obtained for each unit with the first setting, adjust the metering gate and repeat the check until desired amount is delivered.

Metric

Drive 200 metres at planting speed. Weigh, in grams, the herbicide that was caught in one bag. Multiply that amount by the factor to determine kilograms per hectare.

Check the herbicide caught in each bag in the same manner.

Kilograms Per Hectare Factor for Given Row Width

Row Width	Factor	Row Width	Factor
102 cm	0.049	76 cm	0.066
97 cm	0.052	71 cm	0.070
91 cm	0.055	61 cm	0.082
86 cm	0.058	56 cm	0.090
81 cm	0.062	51 cm	0.096

Example: Assume you are planting 102 cm rows, 200 metres long, and you caught 200 grams in one bag (one row). 200 grams times 0.049 (factor for 102 cm rows) equals 9.8 kilograms per hectare.

If the desired kilograms per hectare is not obtained for each unit with the first setting, adjust the metering gate and repeat the check until desired amount is delivered.

Field Operation

While planting, protect against improper application by frequent checks and necessary adjustment of the metering gates on the hoppers.

A slight amount of herbicide may be discharged through the hopper opening when the bedder is stopped or when turning at the end of the field. When transporting, it may be desirable to close the outlet opening by setting each metering gate in range 1 and notch 1 to prevent leakage.

Handling Granular Herbicide

Granular herbicide absorbs moisture readily. Keep granular herbicide dry. Do not store in a damp place. The granular herbicide attachment must be covered with canvas, plastic, or other suitable waterproof material at night, or during wet weather. If the herbicide is allowed to absorb moisture, the rate of application is greatly affected and it will be necessary to clean the hopper and fluted roller before using.



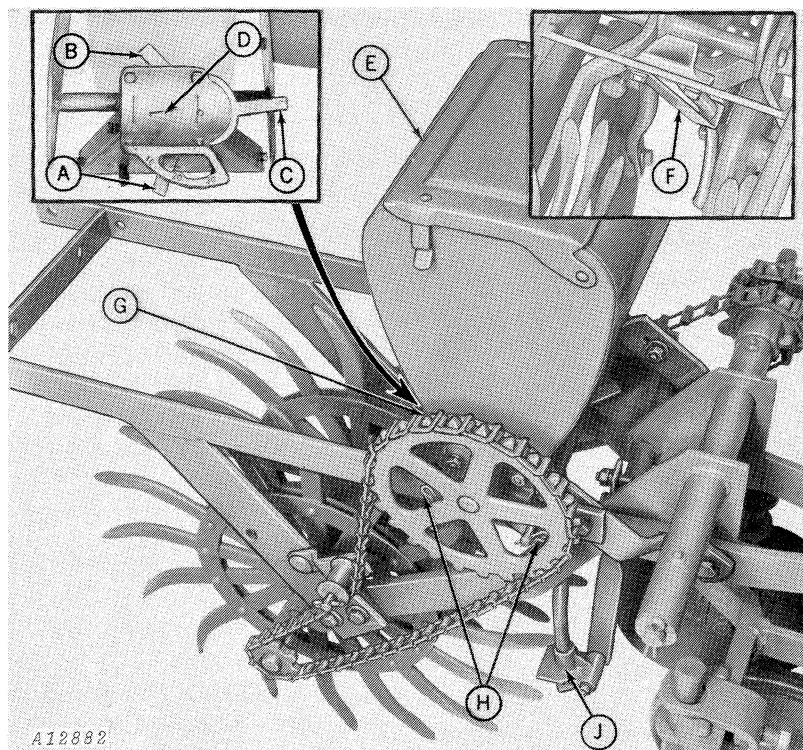
CAUTION: Agricultural chemicals can be dangerous! Improper selection or use can injure persons, animals, plants, soils, or other property. BE SAFE: Select the right chemical for the job. Handle and apply it with care. Follow the instructions of the chemical manufacturer.

Clean Hoppers

At the end of each day's use, the hoppers should be thoroughly cleaned. Remove the hoppers by removing the pins and spring locking pins.

Remove the fluted roller from the hopper by first removing the snap lock pin at the left end of the hopper drive shaft. Remove the spring-loaded pin from the fluted roller. Pull the shaft from the right-hand side of the hopper and remove fluted roller from the hopper. Wash and dry the hopper, outlet opening, and the fluted roller thoroughly.

INSECTICIDE ATTACHMENT



A—Range No. 1
B—Range No. 2
C—Range No. 3
D—Outlet Opening
E—Hopper

F—Tube Holder
G—Metering Gate
H—Spring Locking Pin
J—Spreader

Each insecticide hopper (E) has a capacity of approximately 15 pounds (7 kg). The unit will apply insecticide in the row with the seed at the time of planting either by use of the band spreader (J) as shown in above illustration or, if desired, the insecticide may be deposited closer to seed drop by use of the tube and bracket (F) as shown in inset.

Rate of Application

The chemical manufacturer will recommend the rate of application.

Metering Gate

The metering gate (G) on the hopper (E) can be adjusted for range 1A, 2B, or 3C. The delivery rate will increase from range 1 through range 3. To change from one range to another push down slightly on the metering gate and rotate it to the desired range.

There are 33 intermediate notches for each range. The delivery rate will increase from notch 1 through notch 33.

Set each unit at the desired starting point. Use the following metering gate setting as a starting point for distributing with 40-inch (102 cm) row spacing, at 5 miles per hour (8.0 km/h).

METERING GATE SETTING (STARTING POINT ONLY)
Approximate Rate of Band Application in Pounds (kg) Per Acre (hectare)
 (Metric Equivalents are given in parentheses)

Range	Notch	20" (51 cm)	22" (56 cm)	24" (61 cm)	28" (71 cm)	30" (76 cm)	32" (81 cm)	34" (86 cm)	36" (91 cm)	38" (97 cm)	40" (102 cm)
1	27	6 (6.7)	5-1/2 (6.2)	5 (5.6)	4-1/4 (4.8)	4 (4.5)	3-3/4 (4.2)	3-1/2 (3.9)	3-1/4 (3.6)	3-1/4 (3.6)	3 (3.4)
1	31	8 (9.0)	7-1/4 (8.1)	6-5/8 (7.4)	5-3/4 (6.4)	5-1/4 (5.9)	5 (5.6)	4-3/4 (5.3)	4-1/2 (4.8)	4-1/4 (4.8)	4 (4.5)
2	1	10 (11.2)	9 (10.1)	8-1/4 (9.2)	7-1/4 (8.1)	6-5/8 (7.4)	6-1/4 (7.0)	6 (6.7)	5-1/2 (6.2)	5-1/4 (5.9)	5 (5.6)
2	6	12 (13.4)	10-7/8 (12.2)	10 (11.2)	8-5/8 (9.7)	8 (9.0)	7-1/2 (8.4)	7 (7.8)	6-3/4 (7.6)	6-1/4 (7.0)	6 (6.7)
2	11	14 (15.7)	12-5/8 (14.1)	11-1/2 (12.9)	10 (11.2)	9-1/4 (10.4)	8-3/4 (9.8)	8-1/4 (9.2)	7-7/8 (8.8)	7-1/4 (8.1)	7 (7.8)
2	16	16 (17.9)	14-1/2 (16.2)	13-1/4 (14.8)	11-1/2 (12.9)	10-1/2 (11.8)	10 (11.2)	9-1/2 (10.6)	9 (10.1)	8-1/4 (9.2)	8 (9)
2	20	18 (20.2)	16-1/4 (18.2)	14-7/8 (16.7)	12-7/8 (14.4)	12 (13.4)	11-1/4 (12.6)	10-1/2 (11.8)	10 (11.2)	9-1/2 (10.6)	9 (10.1)
2	24	20 (22.4)	18 (20.2)	16-1/2 (18.5)	14-1/4 (16)	13-1/4 (14.8)	12-1/2 (14)	11-7/8 (13.3)	11 (12.3)	10-1/2 (11.8)	10 (11.2)

NOTE: For speeds faster than 5 miles per hour (8 km/h) use a higher notch setting. For speeds slower than 5 miles per hour (8 km/h) use a lower notch setting.

A special 18-tooth sprocket (B30093) is recommended to be used on the insecticide hopper for insecticide rates of 12 pounds or over per acre (13.4 kg/hectare). It can be obtained from your John Deere dealer.

Checking Rate of Application

The rate of application of insecticide is affected by travel speed of the planter. Select a speed that can be maintained uniformly even when traveling up hill or down hill.

Check the insecticide attachment in the field at planting speed.

NOTE: Do not turn the press wheel by hand to check rate of application.

The rate of delivery may be affected by change in temperature, humidity, speed, ground condition, or by any obstruction in the metering device. Also, large variations may exist in the "flowability" of different insecticides or sometimes within the same insecticides.

Fill the insecticide hoppers. Empty all other hoppers on the planter.

To check the exact number of pounds (kg) of your insecticide that will actually be delivered, attach one of the cloth bags furnished under the outlet of each insecticide hopper and proceed as follows:

U.S. Measurement

Drive 80 rods at planting speed. Weigh the insecticide in ounces that was caught in one bag. Multiply that amount by the factor shown to determine pounds per acre.

Check the insecticide caught in each bag in the same manner.

Pounds Per Acre Factor for Given Row Width

Row Width	Factor	Row Width	Factor
40-In.	0.62	30-In.	0.83
38-In.	0.65	28-In.	0.89
36-In.	0.69	24-In.	1.03
34-In.	0.73	22-In.	1.13
32-In.	0.78	20-In.	1.24

Example: Assume you are planting 40-inch rows, 80 rods long, and you caught 11.2 ounces in one bag (one row). 11.2 ounces times 0.62 (factor for 40-inch rows) equals 6.9 pounds per acre.

If the desired amount is not obtained for each unit with the first setting, adjust the metering gate and repeat the check until desired amount is delivered.

INSECTICIDE ATTACHMENT—Continued

Metric

Drive 200 metres at planting speed. Weigh, in grams, the insecticide that was caught in one bag. Multiply that amount by the factor to determine kilograms per hectare.

Check the insecticide caught in each bag in the same manner.

Kilograms Per Hectare Factor for Given Row Width

Row Width	Factor	Row Width	Factor
102 cm	0.049	76 cm	0.066
97 cm	0.052	71 cm	0.070
91 cm	0.055	61 cm	0.082
86 cm	0.058	56 cm	0.090
81 cm	0.062	51 cm	0.096

Example: Assume you are planting 102 cm rows, 200 metres long, and you caught 200 grams in one bag (one row). 200 grams times 0.049 (factor for 102 cm rows) equals 9.8 kilograms per hectare.

If the desired kilograms per hectare is not obtained for each unit with the first setting, adjust the metering gate and repeat the check until desired amount is delivered.

Field Operation

While planting, protect against improper application by frequent checks and necessary adjustment of metering gates and hoppers.

NOTE: A slight amount of insecticide will be discharged through the hopper outlet opening when turning at the end of the field or when the planter is stopped. When transporting, close the outlet opening by setting range No. 1 in notch No. 1 to prevent leakage.

Handling Insecticides

CAUTION: Agricultural chemicals can be dangerous! Improper selection or use can injure persons, animals, plants, soils or other property. **BE SAFE:** Select the right chemical for the job. Handle and apply it with care. Follow the instructions of the chemical manufacturer.

Most insecticides readily accumulate moisture and cause metal to corrode. This corrosion not only shortens metal life but leads to unnecessary expense for parts broken because of binding or "freezing." Deposits of insecticide will build up in the hopper and interfere with working parts. Therefore, the hoppers should be cleaned every day of use.

Cleaning Hoppers

At the end of each day's use the hoppers should be thoroughly cleaned. Remove the hoppers by removing the pins and spring locking pins.

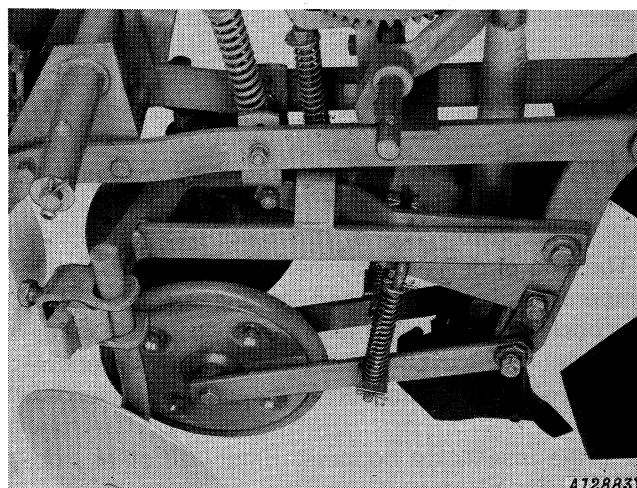
Remove the fluted roller from the hopper by first removing the cotter pin at the right-hand end of the hopper drive shaft. Remove the spring loaded pin from the fluted roller. Pull the shaft from the left-hand side of the hopper and remove fluted roller from hopper. Clean the hopper, outlet opening and fluted roller thoroughly.

INSECTICIDE AND HERBICIDE ATTACHMENT

For complete operating instructions on the herbicide attachment, see pages 37-39.

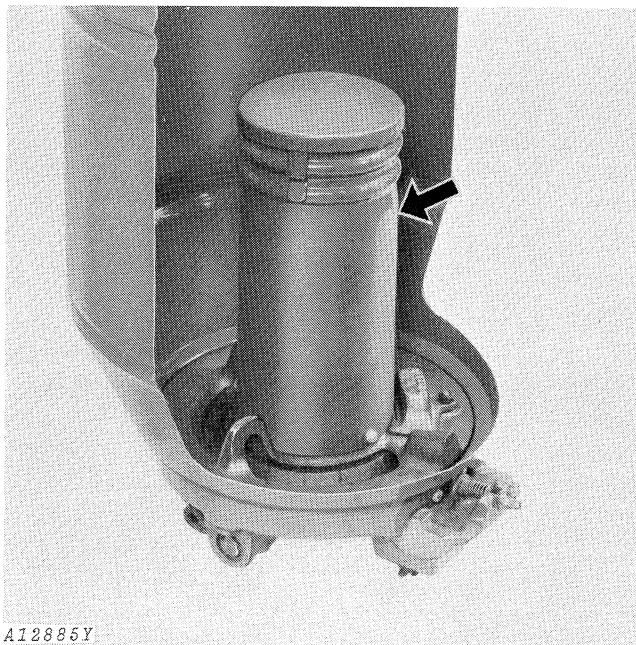
For complete operating instructions on the insecticide attachment, see pages 40-42.

10- X 1-INCH (254 mm x 25 mm) SEED PACKER WHEEL



The 10- x 1-inch (254 mm x 25 mm) rubber-tired seed packer wheel firmly presses the seed ahead of the coverers.

CORN AND BEAN ATTACHMENT FOR CORN AND COTTON HOPPER



Bean Hopper

The corn and bean attachment consists of combination corn and bean cutoff, bean hopper, and regular bean plates.

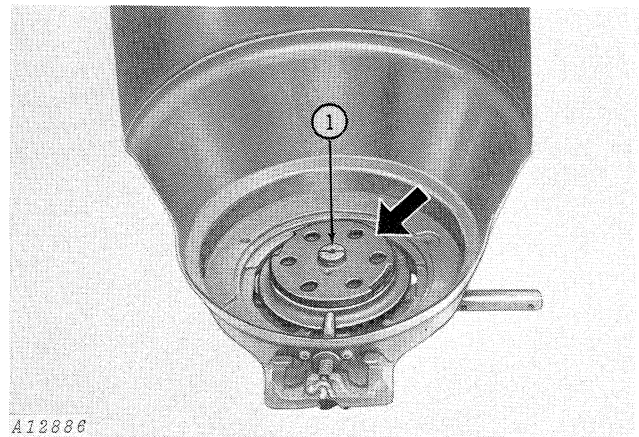
The cells in the bean and corn plates have been spaced to give as close as possible an alternating drop. If the planter is to plant beans and corn alternately in the rows, it is necessary that the bean plate have the same number of cells.

If plates with an odd number of cells, such as three or five, are being used, and the planter does not alternate properly, remove the corn plates, turn it one-half turn and reinstall.

Assembly

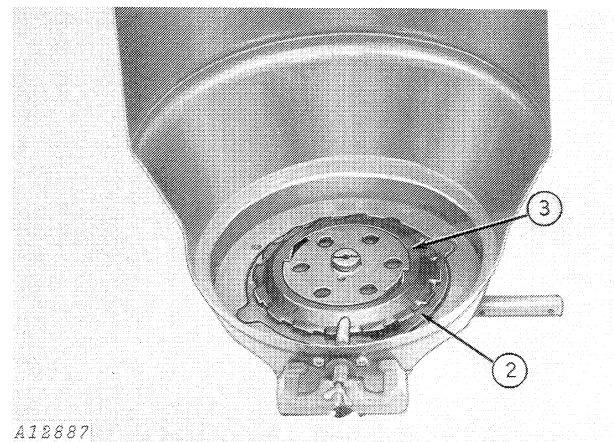
Remove the corn cutoff or cotton spider from the seed hopper. Remove the false ring.

Unscrew the stud bolt which holds the combination ring gear and blank plate in place. Remove these two parts.



Combination Ring Gear and Bean Plate

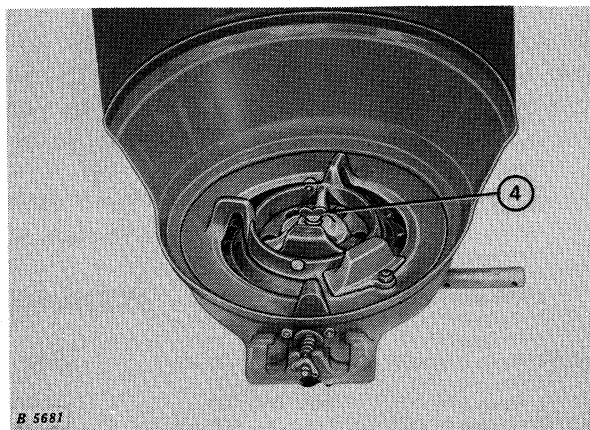
1. Select the desired combination ring gear and bean plate and secure it in place with stud bolt.



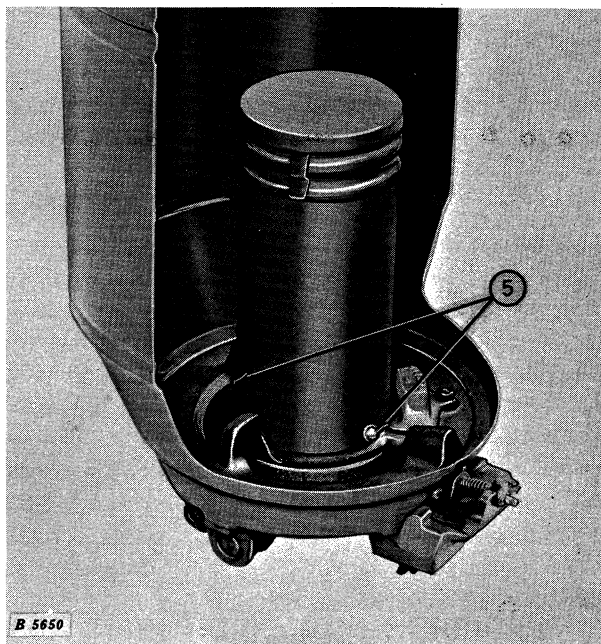
2. Install false ring.

3. Place desired corn seed plate in position.

CORN AND BEAN ATTACHMENT FOR CORN AND COTTON HOPPER—Continued



4. Install combination corn and bean cutoff stop near bottom and flush against false plate. Secure in place with thumb screw.



5. Install bean can as shown above.



Assembly

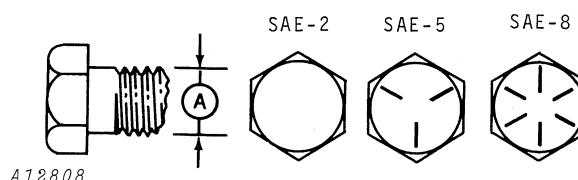
GENERAL

Bolts furnished with the planter are identified by radial lines on the head.

Bolts should be used in the holes in which they are found or in the parts to which they are attached unless otherwise shown.

Leave bolts loose until parts or attachments are completely assembled. Then tighten bolts to torques shown in chart at right unless otherwise specified. It is important that bolts are tight. Loose bolts can cause breakage of parts.

If bolts must be replaced, be certain to replace them with bolts of equal strength. SAE 2 strength bolts have a plain head. SAE 5 bolts have three radial lines on the head. SAE 8 bolts have six radial lines on the head. The radial lines may or may not be equally spaced.



Bolt Diameter "A"	Bolt Torque in Ft.-Pounds (Nm)		
	SAE 2	SAE 5	SAE 8
1/4"	6 (8)	10 (14)	14 (19)
5/16"	13 (18)	20 (27)	30 (41)
3/8"	23 (31)	35 (47)	50 (68)
7/16"	35 (47)	55 (75)	80 (108)
1/2"	55 (75)	85 (115)	120 (163)
9/16"	75 (102)	130 (176)	175 (237)
5/8"	105 (142)	170 (231)	240 (325)
3/4	185 (251)	300 (407)	425 (576)
7/8"	160 (217)	445 (603)	685 (929)

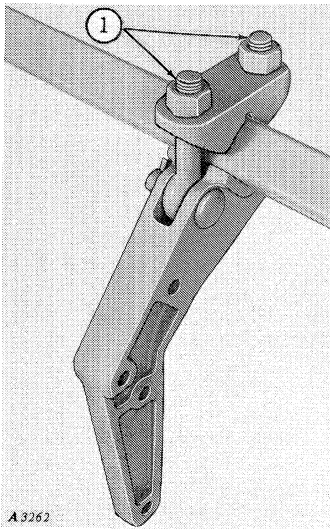
NOTE: Bolts having lock nuts should be tightened to approximately 50% of amounts shown in above chart.

PA802 AND PA804 PLANTING ATTACHMENTS

The PA802 and PA804 Planting Attachments are designed for use with John Deere beams for 2-1/4-inch (57 mm) bedder or tool bars or 4 x 7- or 5 x 7-inch (102 mm x 178 mm or 127 mm x 178 mm) bedder bars.

If the bedder or tool bar is not equipped with John Deere beams and bottoms, it will be necessary to order them as special equipment.

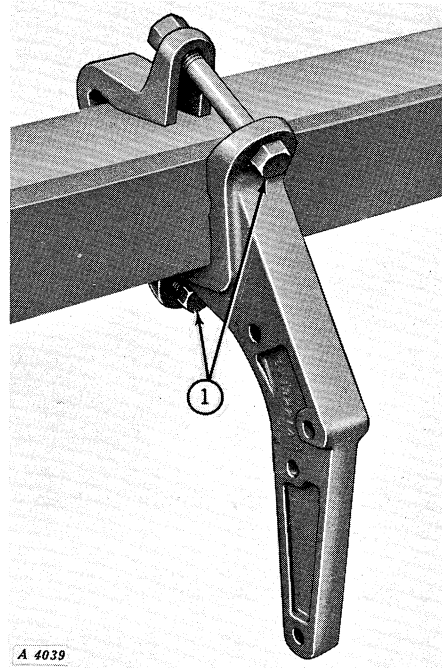
Beam For 2-1/4-Inch (57 mm) Bar



1. Attach beams to bar.

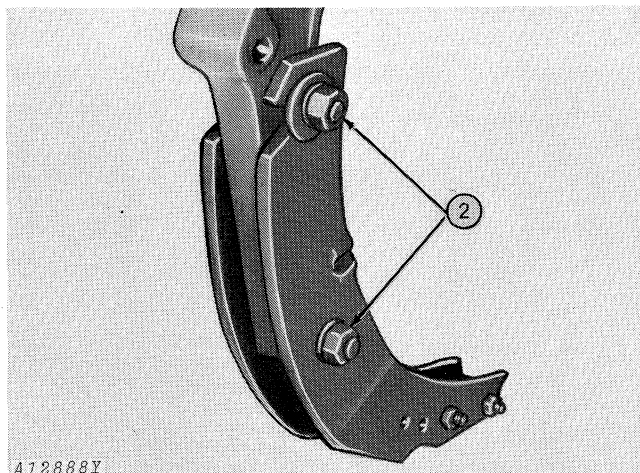
Space beams for row spacing desired. For example, for 40-inch (1016 mm) rows on a 4-row bedder, place the center beams 20 inches (508 mm) from the exact center of bar and the outside beams 40 inches (1016 mm) from the inside beams, center-to-center.

Beam For 4 x 7- or 5 x 7-Inch (102 mm x 178 mm or 127 mm x 178 mm) Bar



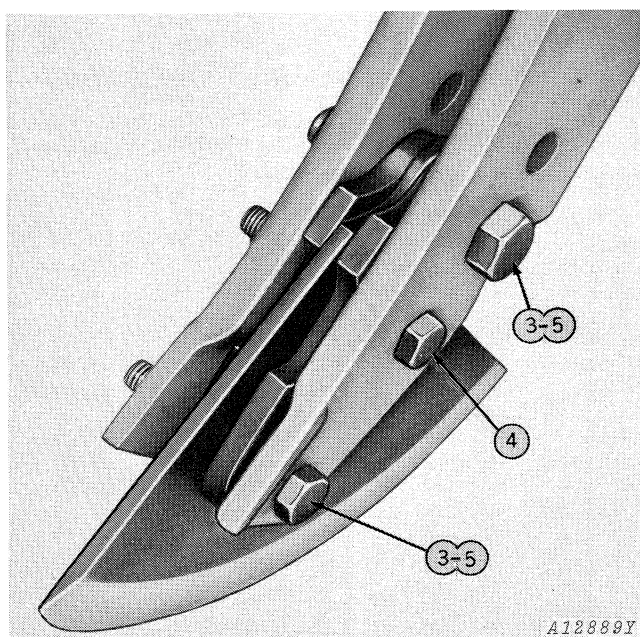
1. Attach beams to bar.

Space beams for row spacing desired. For example, for 40-inch (1016 mm) rows on a 4-row bedder, place the center beams 20 inches (508 mm) from the exact center of bar and the outside beams 40 inches (1016 mm) from the inside beams, center-to-center.



Friction-Trip Standard

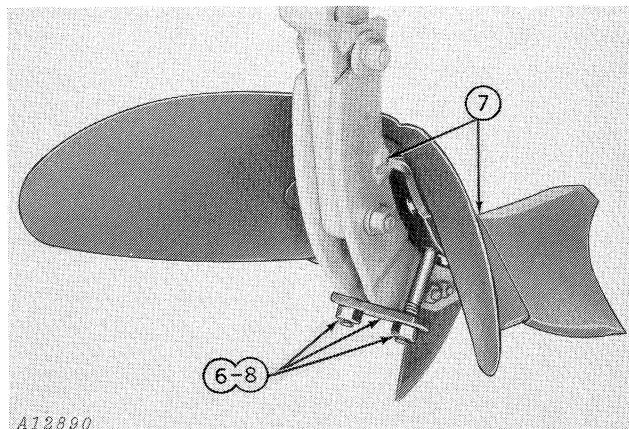
2. Attach standards to beams using flat washers on upper bolt. Do not tighten upper bolt at this time.



3. Remove two spacers from standard.

4. Insert blocks and root cutter and attach with 3/8 x 2-1/4-inch machine bolt.

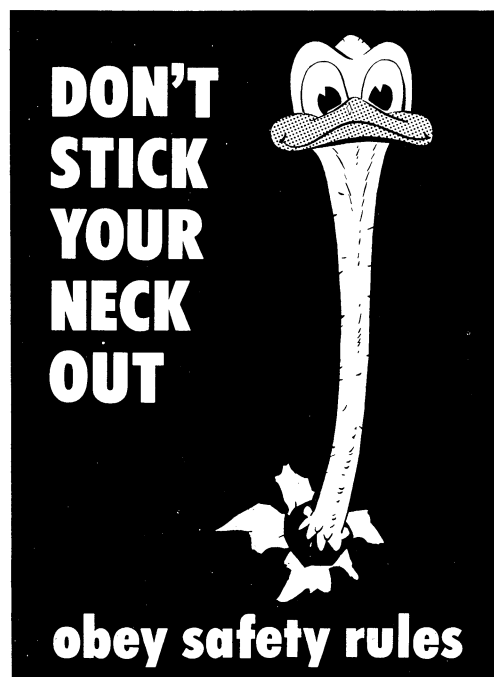
5. Replace the two machine bolts removed in Step 3.



6. Remove nuts and strap from lister bottom.

7. Place bottom on standards making sure top of frog fits into notches in standards.

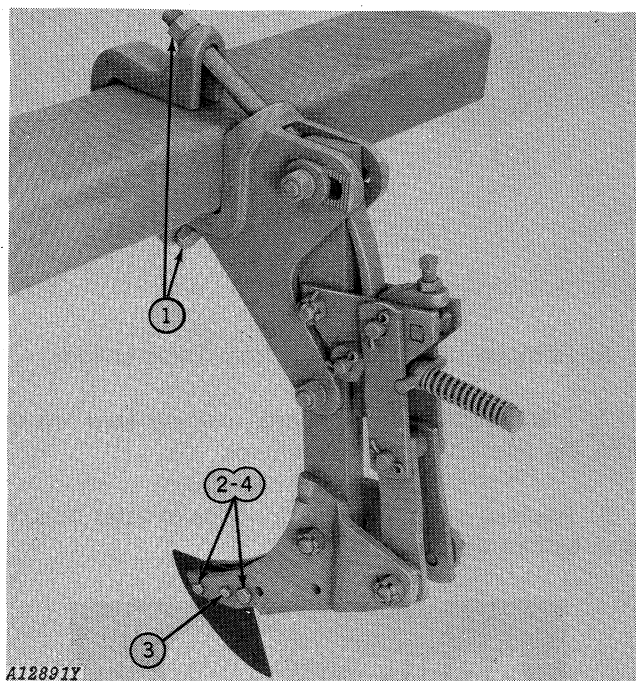
8. Replace strap and nuts on bolts of lister bottom and tighten securely.



R 2250

PA803 PLANTING ATTACHMENTS

Beam, Safety-Trip Standard and Bottom

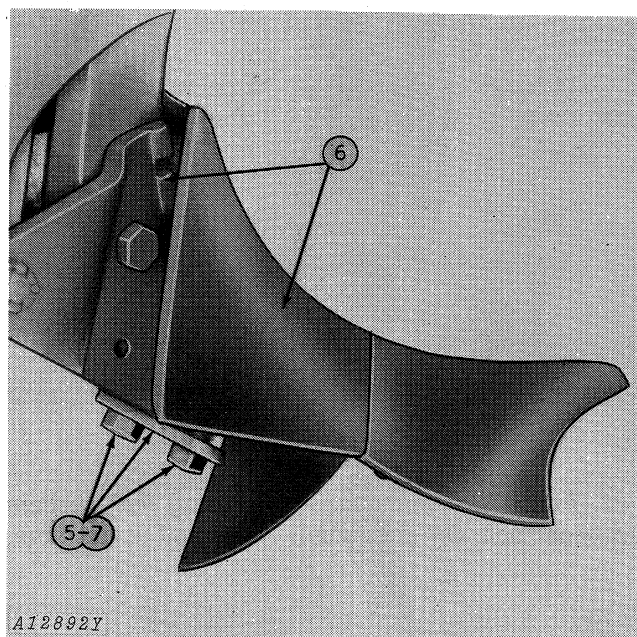


1. Attach beams to bar. Space beams for row spacing desired. For example, for 40-inch (1016 mm) rows on a 4-row bedder, place the center beams 20 inches (508 mm) from the exact center of bar and the outside beams 40 inches (1016 mm) from the inside beams, center-to-center.

2. Remove two spacers from standard.

3. Insert blocks and root cutter and attach with 3/8 x 2-1/4-inch machine bolt.

4. Replace the two machine bolts removed in Step 2.



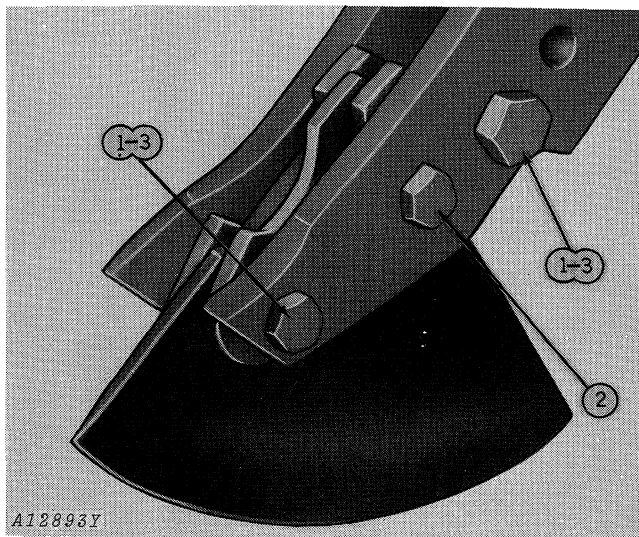
5. Remove nuts and strap from lister bottom.

6. Place bottom on standards making sure top of frog fits into notches in standards.

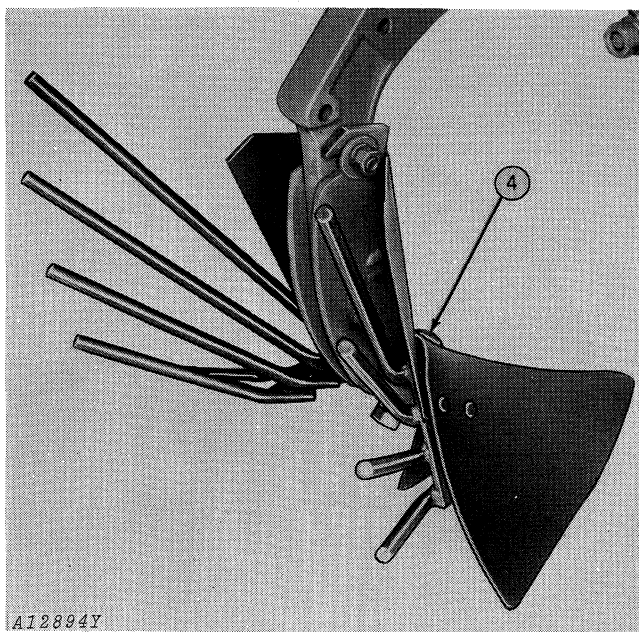
7. Replace strap and nuts on bolts of lister bottom and tighten securely.

NOTE: See page 51 for assembly of the wheel frame.

Trash Rods and Sweep



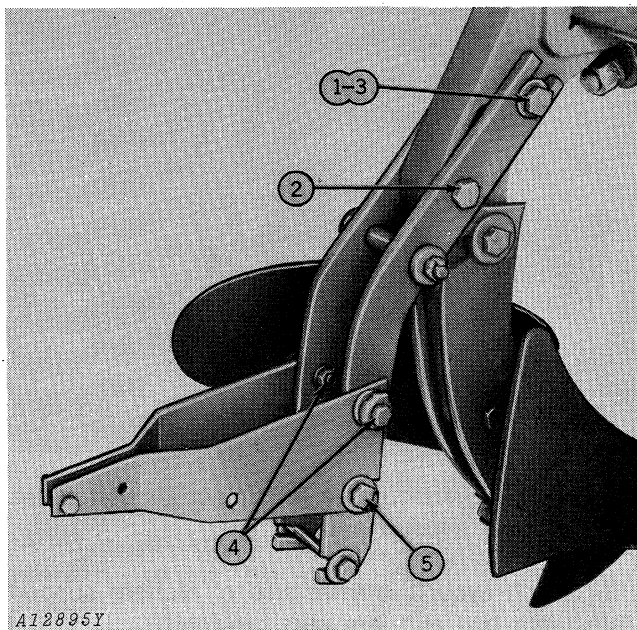
1. Remove two spacers from standard.
2. Insert blocks and root cutter and attach with bolts supplied.
3. Replace bolts removed in Step 1.



4. Attach sweep to standard.

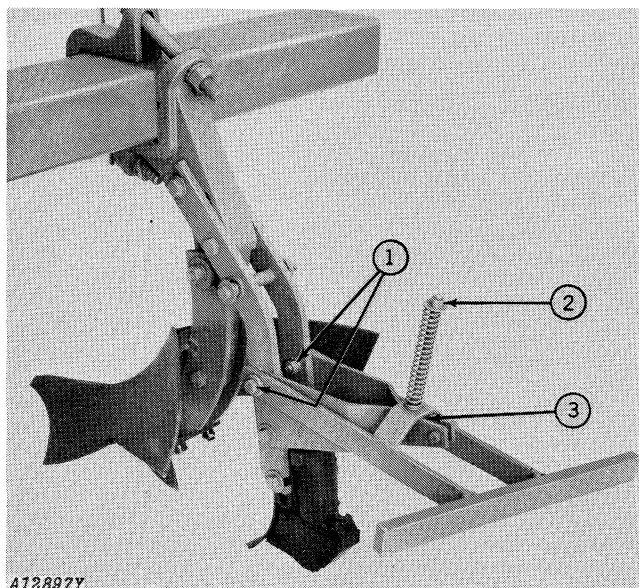
PA802 AND PA804 PLANTING ATTACHMENTS

Subsoiler and Spring Plunger Supports for Friction-Trip Standard



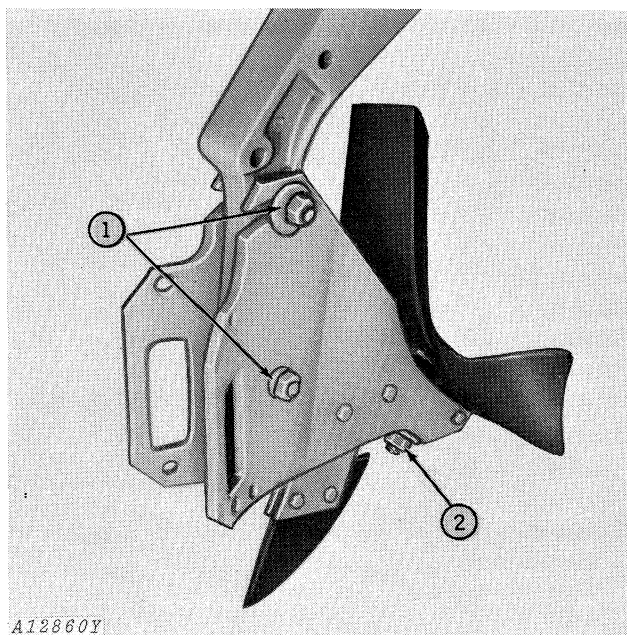
1. Attach bolt with bushing through top hole in curved beam. Leave nut loose. Slide slotted end of support arms onto bushings.
2. Bolt support arms to beams.
3. Tighten nut on bolt in top hole.
4. Attach plunger support plates to subsoiler support arm using cap screws with bushings.
5. Attach plunger support plates to subsoiler support arms.

Covering Frame For Friction-Trip Standard

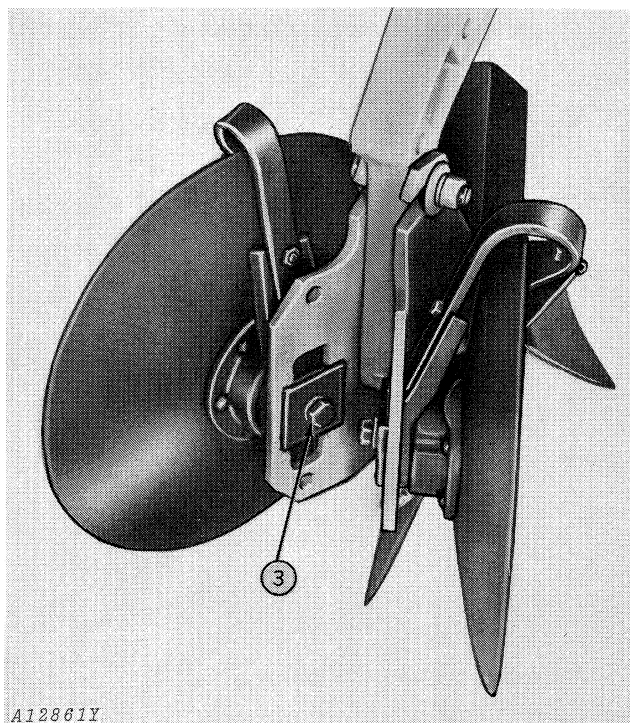


1. Attach covering frame to plunger support plates and subsoiler support arms.
2. Attach eyebolt in front hole of plunger support plates with bolt and jam nuts provided.
3. Lower covering frame over plunger eyebolt, place spring and washer on eyebolt, and secure nut.

Hard Ground Disk Opener

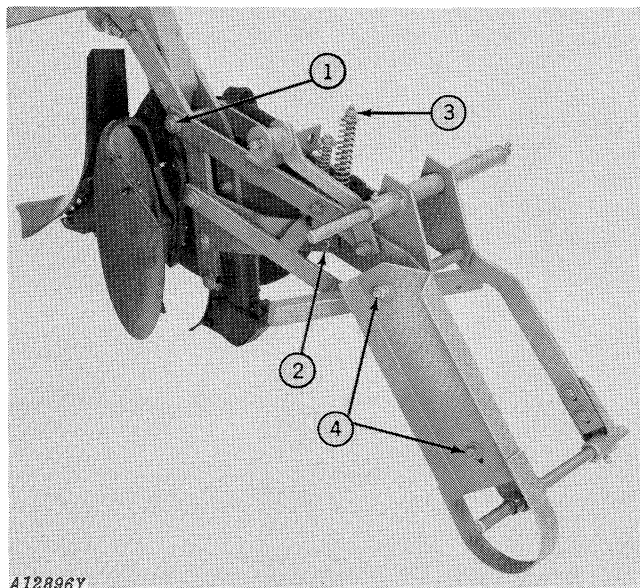


1. Attach frame plates to beam with bolts supplied.
2. Bolt lister bottom to standard.



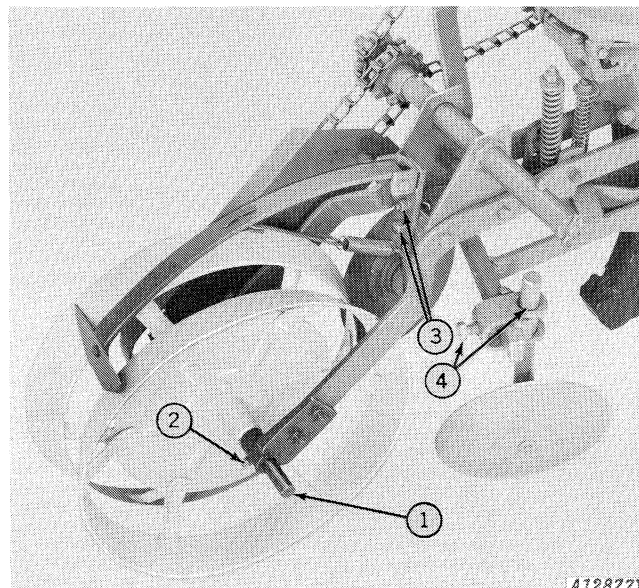
3. Attach the disk openers and scrapers to frame plates with carriage bolts supplied in frame plates.

Wheel Frame for Friction-Trip Standard



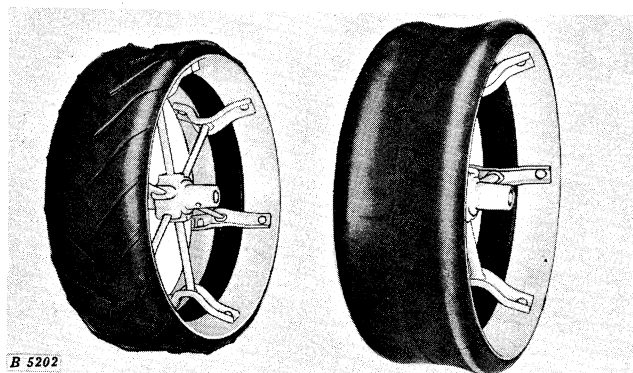
1. Attach wheel frame to subsoiler support plates with spacer, bushings, washers, and bolt provided. Secure with slotted nut and cotter pin.
2. Attach plunger eyebolt to plunger support plates with jam nuts.
3. Lower wheel frame over plunger rod. Place spring and flat washer on plunger rod and secure with nut.
4. Bolt chain guard to wheel frame.

Press Wheel, Scraper, and Disk Covers



1. Slide axle out of frame. *NOTE: If insecticide or herbicide attachments are used, use the press wheel axle provided with the attachment.*
 2. Insert press wheel in frame and push axle through wheel frame and wheel hub. Tighten set screw in press wheel.
 3. Attach wheel scraper (special equipment) to frame with U-bolt supplied.
- NOTE: Wheel scraper cannot be used when rubber press wheel tires or insecticide attachment is used.*
4. Insert shank into yoke and tighten bolt securely.

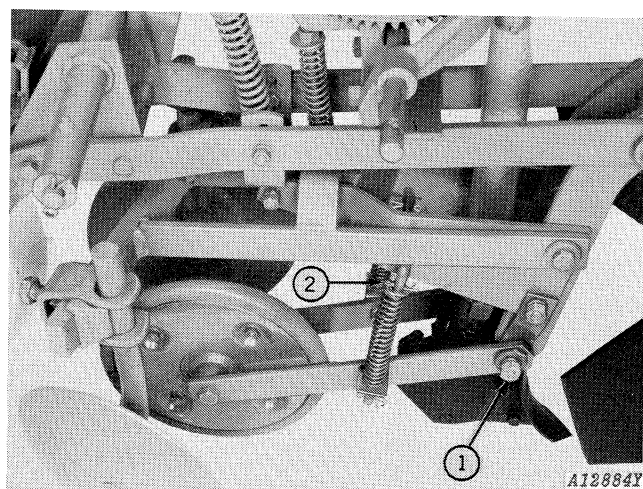
Press Wheel With Rubber Tire



1. Slide axle out of frame. *Note: If insecticide or herbicide attachments are used, use the press wheel axle provided with the attachment.*

2. Insert press wheel in frame and push axle through wheel frame and wheel hub. Tighten set screw in press wheel.

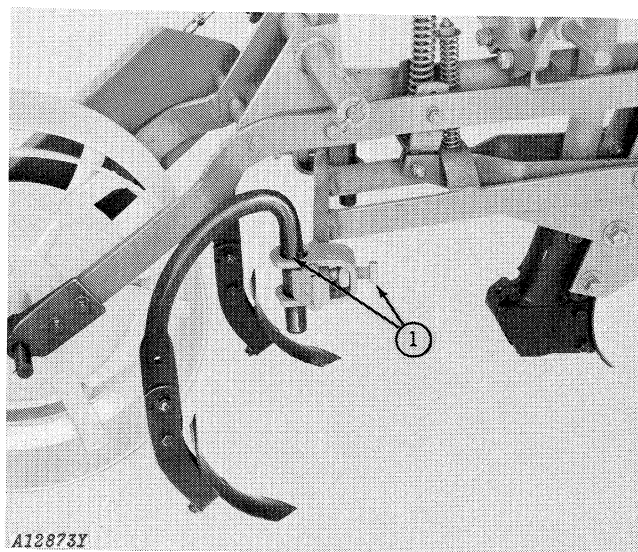
10- x 1-Inch (254 mm x 25 mm) Press Wheel



1. Remove 1/2- x 4-inch machine bolt and washers from support frame. Attach press wheel frame to support frame with 1/2- x 5-inch machine bolt provided.

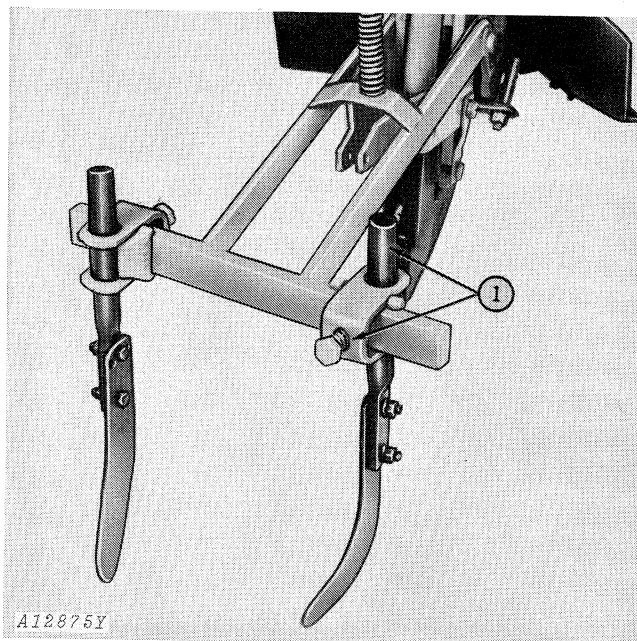
2. Attach spring plungers to plunger supports.

SHOVEL COVERERS



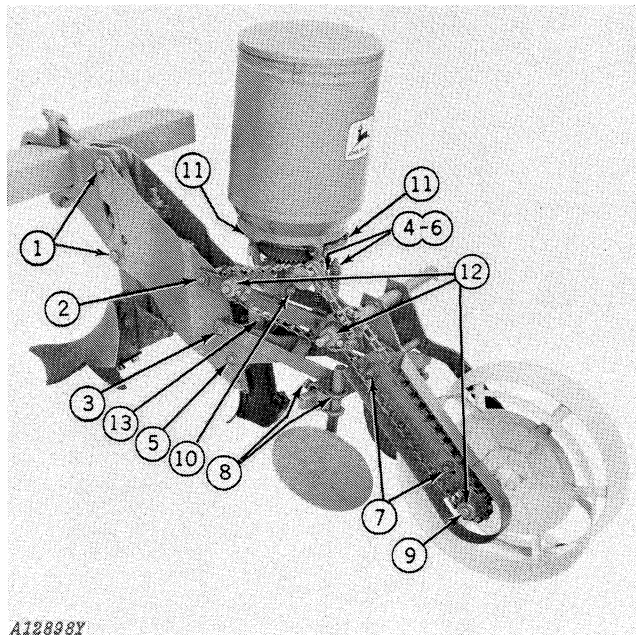
1. Insert shank into yoke and tighten bolt securely.

KNIFE COVERER



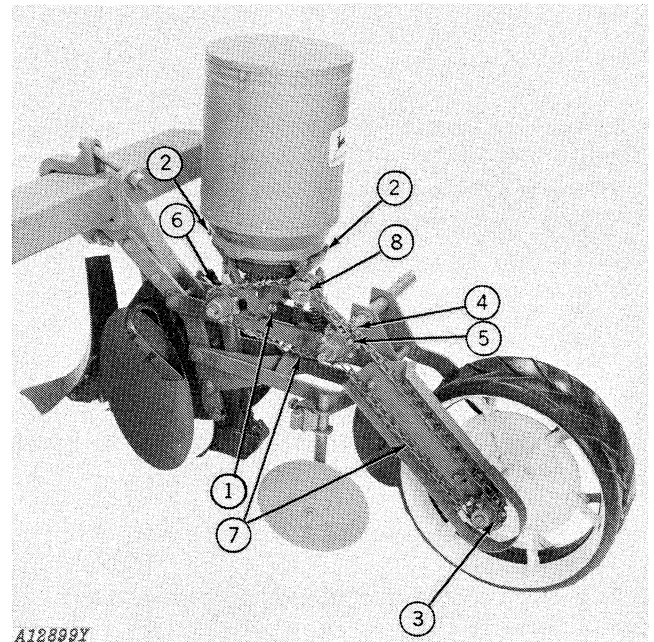
1. Insert shank into yoke and tighten bolt securely.

PA803 PLANTING ATTACHMENTS



1. Attach plates to beam with bolts supplied.
2. Attach wheel frame.
3. Attach covering frame and plunger support plates.
4. Attach plunger eyebolts to plunger support plates. *NOTE: The shortest eyebolt attaches to the front hole.*
5. Attach subsoiler and plunger support plates to wheel frame plates.
6. Lower covering frame and wheel frame over plunger eyebolts and attach springs, washers, and plunger nuts. Tighten plunger nuts.
7. Bolt chain guard to wheel frame.
8. Attach disk coverers and tighten bolts securely.
9. Attach the press wheel to the frame as outlined on page 51.
10. Bolt gear nest to wheel frame.
11. Hook corn can to gear nest and fasten can with bolt and wing nut.
12. Attach the sprockets as outlined on pages 53-54.
13. Insert tube into subsoiler and fasten tube to gear nest.

GEAR NEST, CORN CAN, DRIVE SPROCKETS AND CHAIN FOR PA802 and PA803

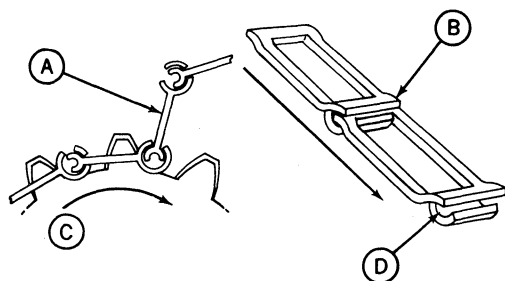


1. Bolt gear nest to wheel frame.
2. Hook corn can to gear nest and fasten can with pin and wing nut.

Before attaching sprockets, see charts on pages 20, 21 for selection and location of sprockets to be used on axle and gear nest drive shaft.

3. Attach drive sprocket to axle.
4. Attach driven sprocket to countershaft.
5. Attach drive sprocket to countershaft.
6. Attach driven sprocket to gear nest drive shaft.
7. Attach upper and lower drive chains. The number of links will vary with the sprockets used. Attach chain with hook end toward the line of travel and the slotted side out.

GEAR NEST, CORN CAN, DRIVE SPROCKETS AND CHAIN FOR PA802 AND PA803—Continued



A12900

A—Link

B—Bearing

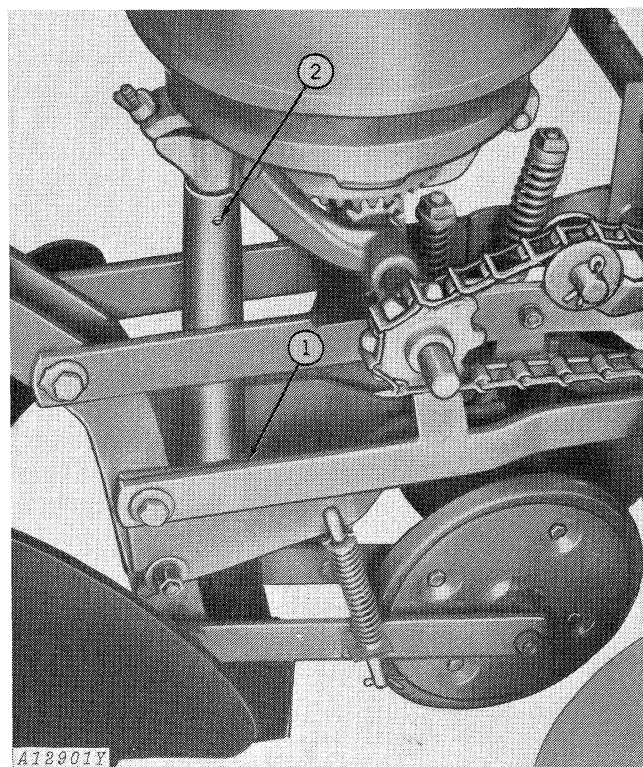
To attach or detach chain, position link (A) as shown above and strike.

Keep the chain bearings (B) well oiled.

Run chain in the direction of the arrow (C).

Run hook end forward with slot side (D), as illustrated above.

SEED TUBE FOR PA802 AND PA803

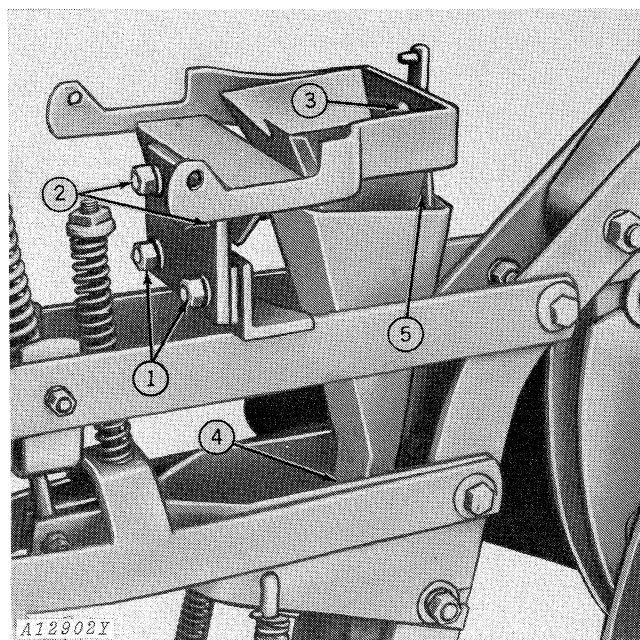


A12901Y

1. Insert tube into subsoiler.

2. Fasten tube to gear nest.

CAN SUPPORT, BRACKET, AND SEED TUBE FOR PA804



A12902Y

1. Bolt can support and strap to wheel frame.

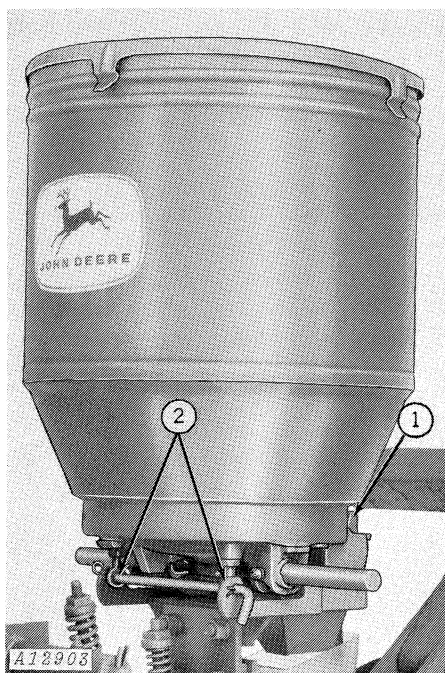
2. Bolt can support to bracket.

3. Bolt seed tube strap to dowel strap.

4. Insert tube into subsoiler.

5. Fasten tube to strap. *NOTE: The plain washer should be placed between the nut and the tube to protect the seed tube.*

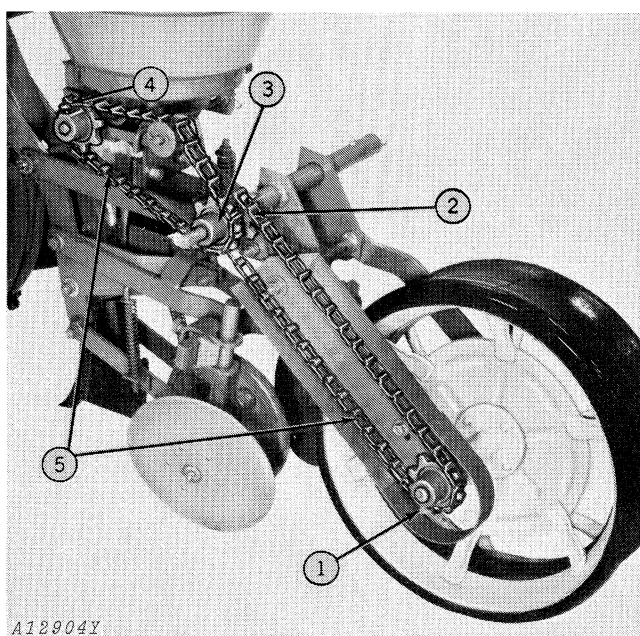
CORN AND COTTON CAN FOR PA804



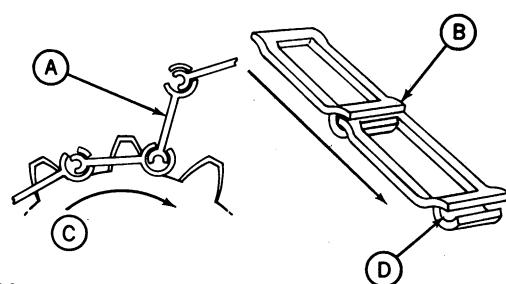
1. Align hole in front of seed can bottom plate with support holding strap dowel, and attach front of can to support.

2. Attach rear of can to bracket with attaching pin. Secure with spring locking pin.

DRIVE SPROCKETS AND CHAIN FOR PA804



1. Attach drive sprocket to axle.
2. Attach driven sprocket to countershaft.
3. Attach drive sprocket to countershaft.
4. Attach driven sprocket to gear nest drive shaft.
5. Attach upper and lower drive chains. The number of links will vary with the sprockets used. Attach chain with hook end toward the line of travel and the slotted side out.



A12900

A—Link

B—Bearing

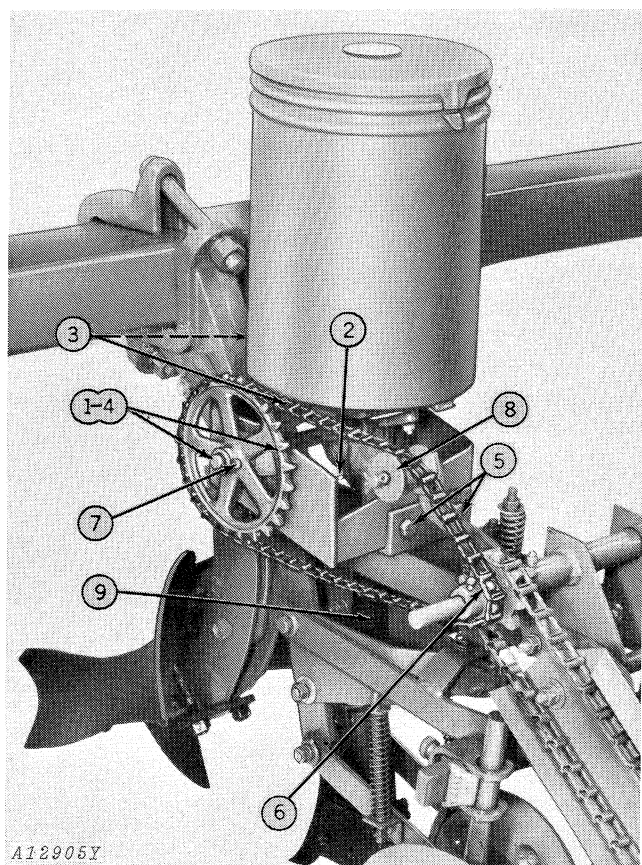
To attach or detach chain, position link (A) as shown above and strike.

Keep the chain bearings (B) well oiled.

Run chain in the direction of the arrow (C).

Run hook end forward with slot side (D), as illustrated above.

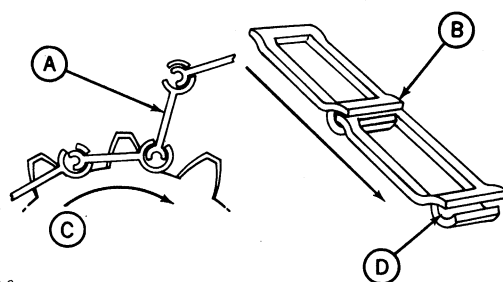
MAIZE CAN



1. Detach bearing bracket and remove shaft from seed can support.
2. Attach seed tube top and seed tube to seed can.
3. Attach seed can to seed can support.
4. Insert shaft and bolt bearing bracket to seed can support.

5. Attach seed can support to wheel frame.
6. Attach drive sprocket to countershaft.
7. Attach driven sprocket to seed shaft.
8. Attach drive chain as shown at left.

The number of links will vary with the sprockets used. Attach chain with hook end toward the line of travel and the slotted side out.



A—Link

B—Bearing

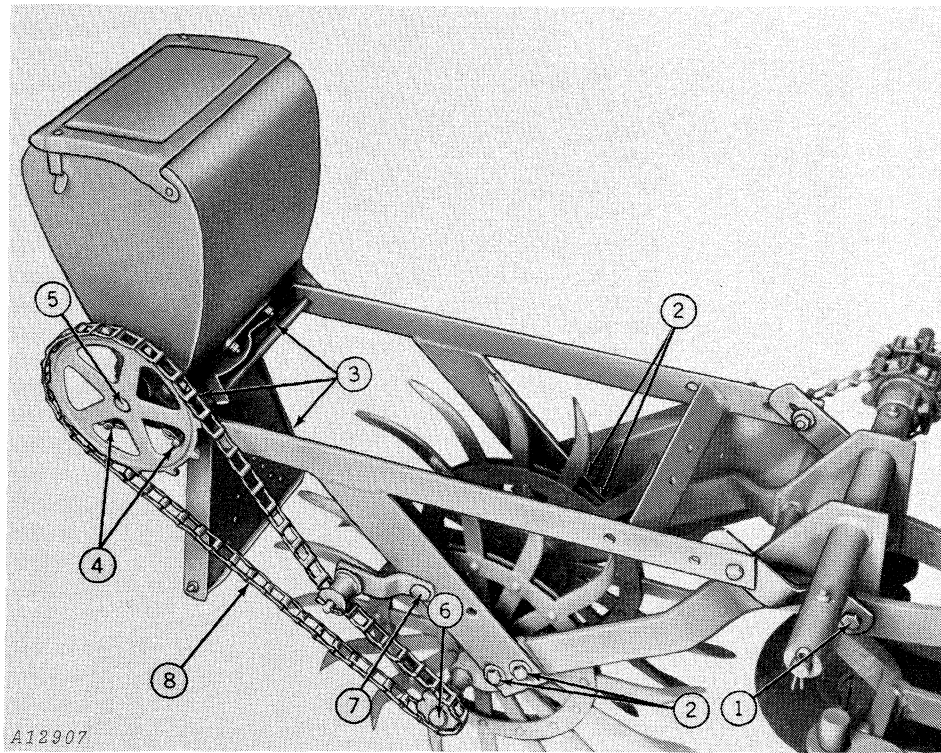
To attach or detach chain, position link (A) as shown above and strike.

Keep the chain bearings (B) well oiled.

Run chain in the direction of the arrow (C).

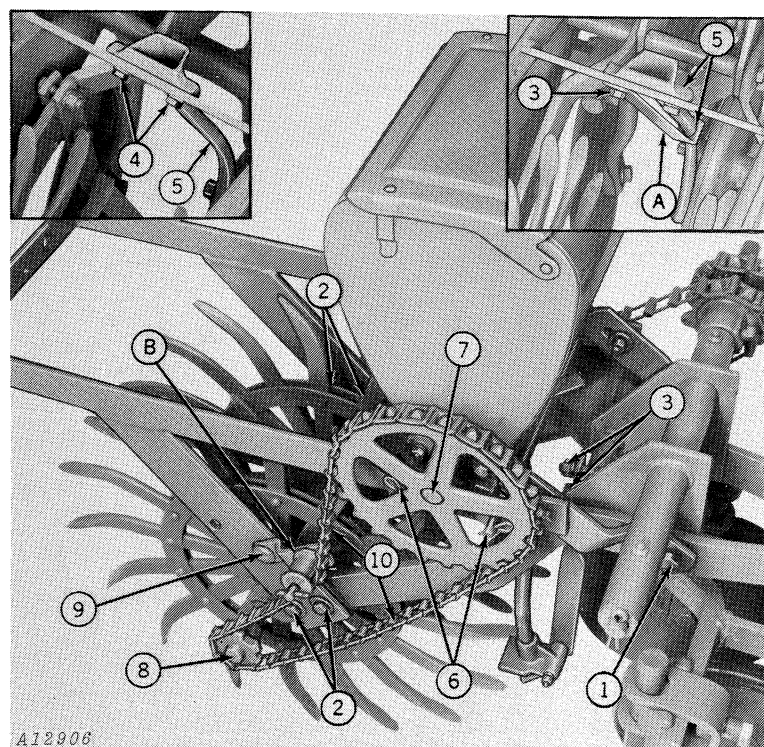
Run hook end forward with slot side (D), as illustrated above.

HERBICIDE ATTACHMENT



1. Attach frame to wheel frame and countershaft.
2. Attach frame support to wheel frame.
3. Bolt herbicide diffuser to frame.
4. Attach the herbicide hopper to the frame with the pins and spring locking pins.
5. Install the driven sprocket.
6. If not already done, remove press wheel axle and use axle supplied with Herbicide Attachment. Install the drive sprocket on drive wheel axle.
7. Bolt chain idler to rear hole in frame support.
8. Attach drive chain over the sprockets. Be sure the open end of the chain links run in the direction of travel. Tighten chain idler.

INSECTICIDE ATTACHMENT

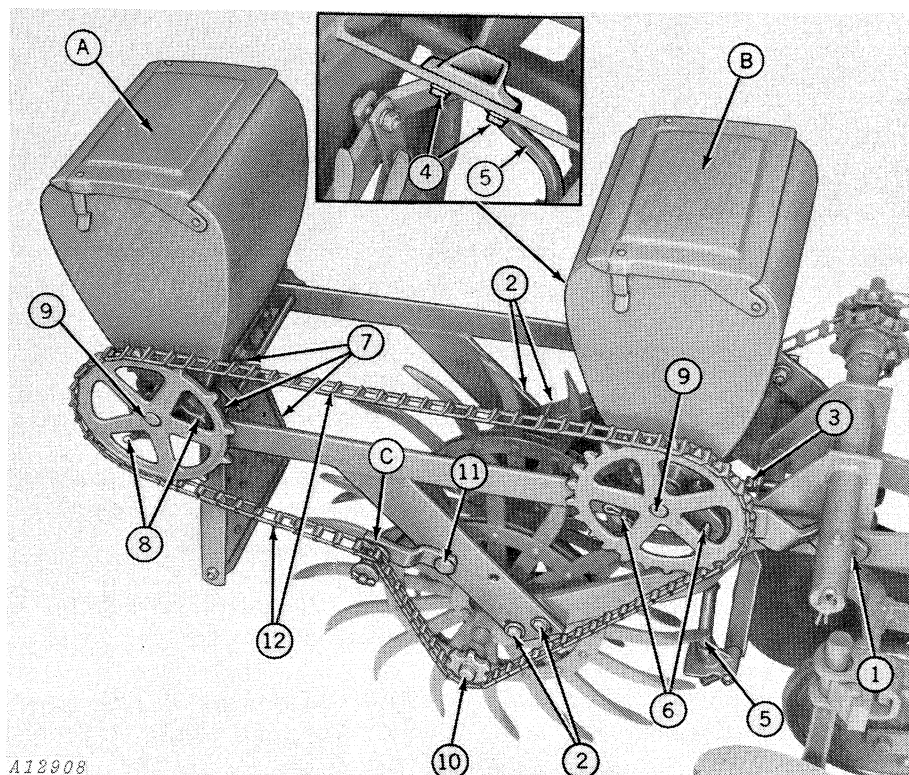


A—Tube Holder

B—Chain Idler

1. Attach frame to wheel frame and countershaft.
2. Attach frame support to wheel frame.
3. Attach spreader support to wheel frame with U-bolt. *NOTE: If tube holder (A) is used in place of spreader support, attach the tube holder to frame as shown in inset.*
4. Bolt insecticide spout to frame.
5. Attach insecticide tube to spout and insert tube in tube holder or spreader.
6. Attach the insecticide hopper to the frame with the pins and spring locking pins.
7. Install the driven sprocket.
8. If not already done, remove press wheel axle and use axle supplied with Insecticide Attachment. Install drive sprocket on drive wheel axle.
9. Bolt chain idler to front hole in frame support.
10. Attach drive chain over the sprockets. Be sure the open end of the chain links run in the direction of travel. Tighten chain idler (B).

INSECTICIDE AND HERBICIDE ATTACHMENT



A—Herbicide Attachment
B—Insecticide Attachment

C—Chain Idler

1. Attach frame to wheel frame and countershaft.
2. Attach frame support to wheel frame.
3. Attach spreader support to wheel frame with U-bolt. *NOTE: If tube holder is used in place of spreader support, attach the tube holder to frame as shown in inset in illustration on page 40.*
4. Bolt insecticide spout to frame.
5. Attach insecticide tube to spout and insert tube in tube holder or spreader.
6. Attach the insecticide hopper to the frame with the pins and spring locking pins.
7. Bolt herbicide diffuser to frame.
8. Attach the herbicide hopper to the frame with the pins and spring locking pins.
9. Install the driven sprockets.
10. If not already done, remove press wheel axle and use axle supplied with Insecticide and Herbicide Attachment. Install the drive wheel axle.
11. Bolt chain idler (C) to rear hole in frame support.
12. Attach drive chain over the sprockets. Be sure the open end of the chain links run in the direction of travel. Tighten chain idler.



Specifications

TYPES - PA800 Series Press Wheel Drive Planting Attachments:

PA802 - With corn cans, disk coverers, and hard ground disk openers.

PA803 - With corn cans, disk coverers, and lister bottoms or sweeps.

PA804 - With corn and cotton cans, disk coverers, and lister bottoms or sweeps.

NOTE: One PA800 Series Planting Attachment provides for 2-row planting, two PA800 Attachments for 4-row planting, and three PA800 Attachments for 6-row planting.

ROW SPACING - Row spacing and number of rows depends on length and type of toolbar.

TYPE OF DRIVE - Press Wheel Drive.

Steel press wheel less tire, regular. Steel press wheel with smooth face or traction tread tire available on order.

Hoe-type (open-drive), optional equipment.

DEPTH CONTROL - Toolbar gauge wheel or tractor hydraulic system.

INSECTICIDE ATTACHMENT - Available on order.

HERBICIDE ATTACHMENT - Available on order.

INSECTICIDE AND HERBICIDE ATTACHMENT

Available on order.

SEED FIRING WHEEL - 10- x 1-inch (254 mm x 25 mm) press wheel available on order.

SHOVEL COVERERS - Available on order in lieu of disk coverers.

KNIFE COVERERS - Available on order in lieu of disk coverers.

RUNNER OPENER AND SUPPORT - Available on order for converting hard ground opener into loose ground opener.

MAIZE CAN AND SUPPORT - Available on order in lieu of corn can or corn and cotton can.

TRASH ROD AND SWEEP - Minimum tillage rods and sweeps available on order for PA803.

ROOT CUTTER - Available on order for PA804.

PEA AND BEAN ATTACHMENT - Available on order for corn and cotton cans.

SUBSOILERS - Subsoiler with reversible point, regular equipment; reversible shovel, runner opener and compaction runner are special equipment.

JOHN DEERE PA800 SERIES PLANTING ATTACHMENTS

Planting Attachment No.

Date Purchased 19.....

(To be filled in by Purchaser)

(Specifications and design subject to change without notice.)



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MEMORANDA

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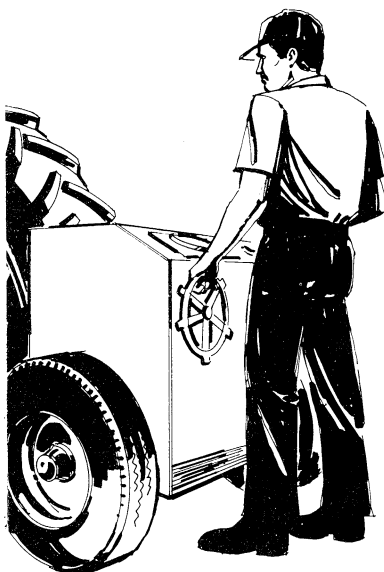
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