PA700 Series Planting Attachments

JOHN DEERE

OPERATORS MANUAL

PA700 Series Planting Attachments

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ENGLISH

TO THE PURCHASER

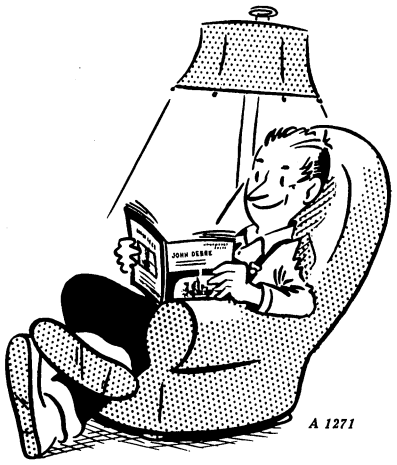
Behind your new planting attachment is an organization that has designed and built farm implements for over 125 years. This planting attachment was built in a John Deere factory by experienced men, many who have worked in this large plant for from 10 to 45 years, thus assuring the utmost in good design, high-grade workmanship, and thorough inspection, so essential to the production of good implements.

High-quality materials, precision production methods, and accurately-controlled heat-treating assure maximum strength and long life for every part.

This manual has been carefully prepared and illustrated so you may make the necessary adjustments for adapting your planting attachment to work properly in practically all types of soil and field conditions. These adjustments, such as row spacings, proper penetration, etc., are fully covered in this manual.

Occasionally your planting attachment may need new parts to replace worn parts, or require emergency service not covered in this manual. If so, we suggest that you take advantage of the facilities offered by your John Deere dealer, which assure you of genuine John Deere Parts and prompt "know-how" service in the field or in the shop.

If you will furnish your dealer with the information which should be recorded at the bottom of this page, when the planting attachment is delivered, he can give you prompt and efficient service.



Study this manual carefully. Keep it handy, in a safe place, for future reference.

JOHN DEERE PA700 SERIES PLANTING ATTACHMENTS

Planting Attachment No. . . . . .

Date Purchased . . . . . 19 . .

(To be filled in by Purchaser)

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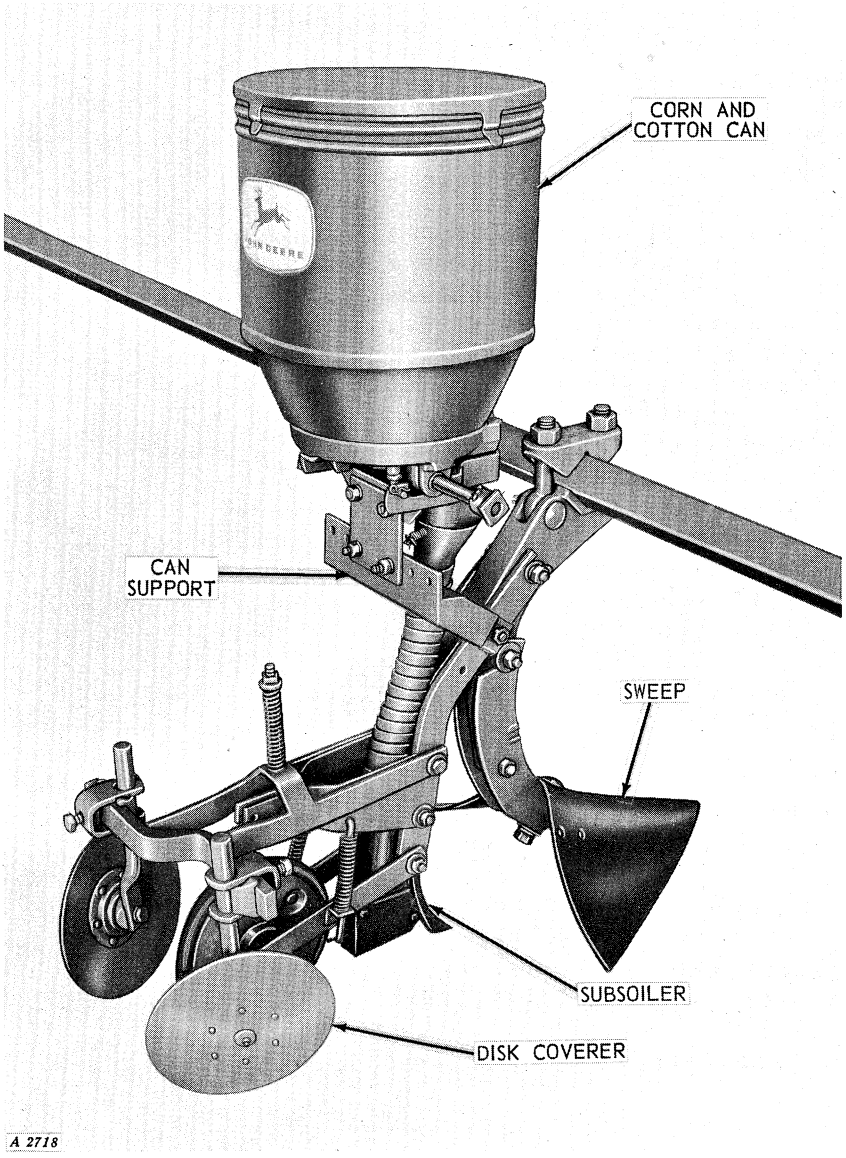
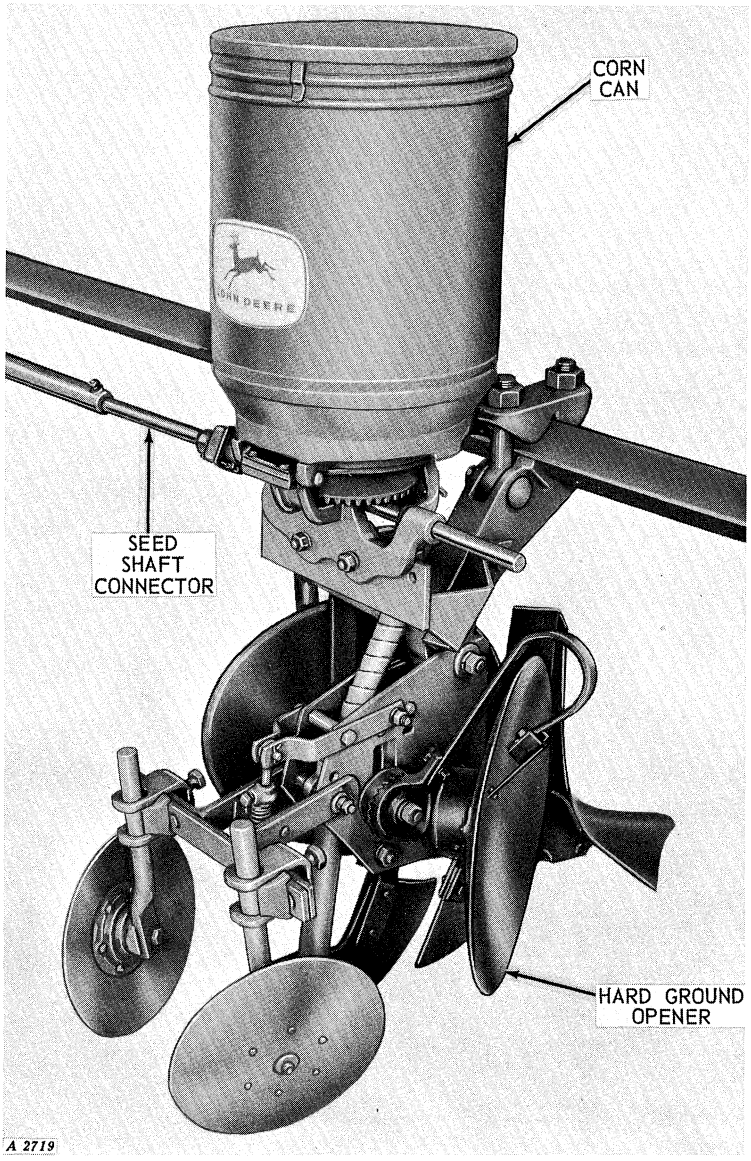
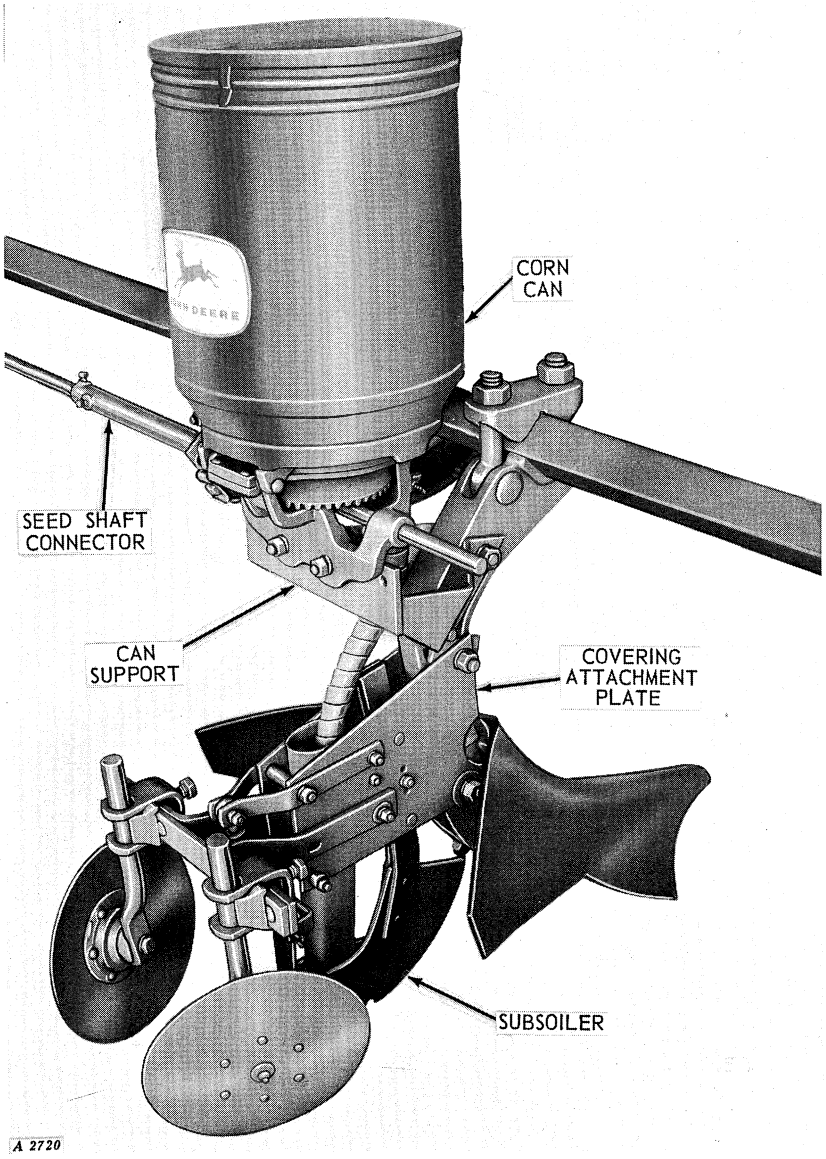


John Deere PA704 Gauge-Wheel-Drive Planting Attachment with Press Wheel (Special Equipment)



John Deere PA732 Gauge-Wheel-Drive Planting Attachment



John Deere PA733 Gauge-Wheel-Drive Planting Attachment

SPECIFICATIONS

TYPES	The PA700 Series consist of the following: PA704 - 2-Row; Corn and Cotton Cans PA732 - 4-Row; Corn Cans; Hard Ground Openers PA733 - 4-Row; Corn Cans PA734 - 4-Row; Corn and Cotton Cans PA752 - 6-Row; Corn Cans; Hard Ground Openers PA753 - 6-Row; Corn Cans PA754 - 6-Row; Corn and Cotton Cans
ROW SPACING	2-Row and 4-Row Planting Attachments: 36- to 42-inch rows. 6-Row Planting Attachments: 36- to 40-inch rows.
TYPE OF DRIVE	Gauge-Wheel Drive, Regular; Tractor-Axle Drive available on PA704, PA734, and PA754, special.
DEPTH CONTROL	Gauge Wheel Controlled.
LIFT	Controlled by Tractor Rockshaft Control Lever.
SHOVEL COVERERS	Available on order in lieu of Disk Coverers.
KNIFE COVERERS	Available on order in lieu of Disk Coverers.
RUNNER OPENER WITH BOOT	Available on order for PA732 and PA752 Planting Attachments.
NO. 6 PRESS WHEEL ATTACHMENT	Available on order for PA732 and PA733 Planting Attachments.
SPECIAL EQUIPMENT AND ATTACHMENTS	The following attachments are available for PA704, PA734, and PA754 Planting Attachments: Rubber press wheel, cell drop cotton attachment, unshelled peanut attachment, pea or bean attachment, rubber cut-off and baffle plate, brush cut-off and baffle plate, vegetable and grass seed cut-off, cotton picker wheel, and "Scat" planter.

(Specifications and design subject to change without notice.)

NOTE: When the term "right" or "left" is used, it means from a position behind the planting attachment and facing the front.

OPERATION

GENERAL

The John Deere PA700 Series Planting Attachments are designed for the F311 or F871 Series Bedders.

These planting attachments have short straight-line tubes to prevent bunching of seed, and disk coverers 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 gauge-wheel drive assures uniform rate of planting even though soil conditions may cause tractor wheel slippage.

The planting attachment and bedder bar are fully tractor-carried when lifted but ride on gauge wheels when working, giving ample flexibility to follow ground contours.

PREPARING THE BEDDER

Refer to the bedder operator's manual for proper use of lift springs, centering bar, and gauge wheels.

PREPARING AND ADJUSTING TRACTOR

For complete tractor operating instructions refer to your tractor operator's manual. Also refer to bedder operator's manual for tractor adjustments.

DRIVE SPROCKETS AND CHAIN TIGHTENERS

When the planting attachments are tractor-axle-driven, attach the drive sprockets and chain tighteners to the tractor rear axle as shown on page 26.

ADJUSTING SPEED OF ROCKSHAFT DROP

Set the speed of the rockshaft drop on tractors on which the rockshaft and implement drop can be regulated. Adjust the valve to give a smooth slow drop of the planting attachments.

NOTE: The planting attachments should be lowered to working position slow enough so the seed tubes do not become plugged with dirt.

REAR WHEEL SETTING

Set the rear wheels of the tractor to conform to the row spacing of the planting attachment. For 4- and 6-row operation set rear wheels double the row spacing desired, measuring from center-to-center of tires.

FRONT WHEEL SETTING

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

FRONT END WEIGHTING

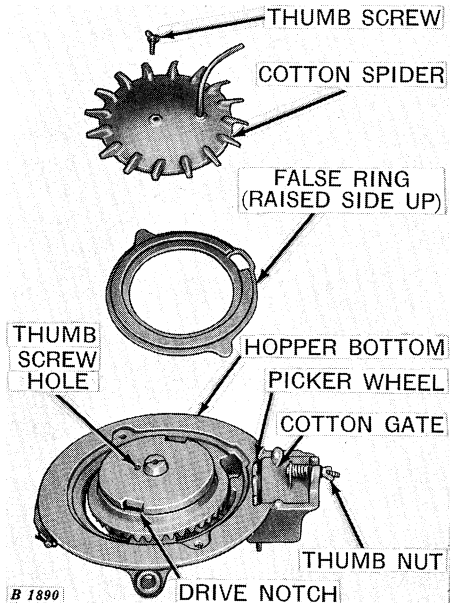
Front end stability is necessary for efficient operation and safety. Therefore, it is important that weight be added to the front end of the tractor. The following table gives recommended front end weighting when PA700 Series Planting Attachments are used on F311 or F871 Series Bedders.

	F311 Bedders		F871 Bedders		
	2-Row	4-Row	2-Row	4-Row	6-Row
2010 Row-Crop Tractors	0	300	0	N.R.*	N.R.*
2010 Row-Crop Utility Tractors	0	400	0	N.R.*	N.R.*
3010 Row-Crop Tractors					
Single Front Wheel	0	700	0	500	N.R.*
Dual Front Wheel with Roll-O-Matic	0	600	0	400	N.R.*
Adjustable Front Axle	0	300	0	50	N.R.*
3010 Row-Crop Utility Tractors:					
Adjustable Front Axle-Long Wheel Base	0	200	0	0	N.R.*
Adjustable Front Axle-Short Wheel Base	0	300	0	0	N.R.*
Fixed Front Axle-Long Wheel Base	0	100	0	0	N.R.*
Fixed Front Axle-Short Wheel Base	0	200	0	0	N.R.*
3010 Standard Tractors:					
Adjustable Front Axle	0	400	0	200	N.R.*
Fixed Front Axle	0	300	0	150	N.R.*
4010 Row-Crop Tractors:					
Single Front Wheel	N.R.*	N.R.*	0	0	850
Dual Front Wheel with Roll-O-Matic	N.R.*	N.R.*	0	0	800
Adjustable Front Axle	N.R.*	N.R.*	0	0	450

**N.R. — Not Recommended*

PREPARING THE PLANTING ATTACHMENT

PLANTING COTTON WITH PICKER WHEEL



When using the PA704, PA734, or PA754 Planting Attachments to plant cotton, remove the corn cut-off from the hopper by unscrewing the thumb screw which holds it in place.

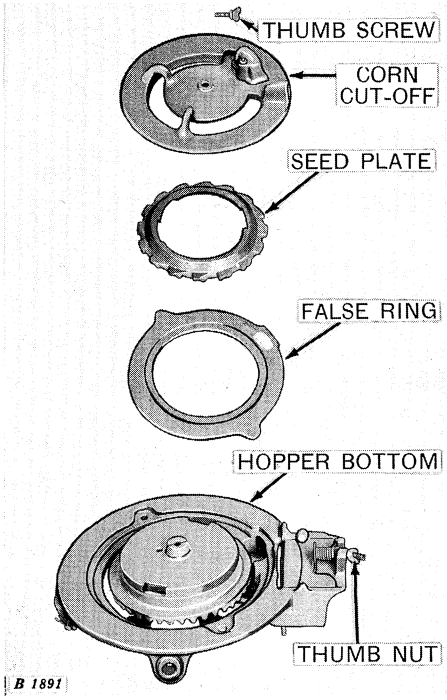
Place the false ring in hopper with the **raised side up.**

Install the cotton spider 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 in the hopper bottom. The drive lugs on the cotton spider must engage the drive notches on the hopper bottom.

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

For best results use the large sprocket on the press wheel shaft and the small sprocket on the hopper drill shaft. This will drive the picker wheel at its fastest speed.

PLANTING CORN, ACID-DELINTED COTTON, AND ALL OTHER SEEDS



Remove the cotton spider.

Install false ring with **raised side up** when planting small seed such as: feterita, sorghum, etc. If corn, acid delinted cotton, 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 chart on page 10.

Install seed plate.

Install corn cut-off and fasten in place with the thumb screw. The cut-off must fit tightly against the false ring.

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 great 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, if available, 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.

The following is a list of the most popular plates available:

Plates for Flat Kernels of Corn

12-Cell	16-Cell	24-Cell	Kind of Corn
. . . . .	H697B	H2571B	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
. . . . .	B12498B	. . . . .	Extra Large Flat Slurry Treated Corn

Plates for Round Kernels of Corn

12-Cell	16-Cell	24-Cell	Kind of Corn
. . . . .	H2295B	. . . . .	Extra Small Round Corn
. . . . .	H2043B	H2824B	Small Round Corn
H2560B	H1933B	B10853B	Medium Round Corn
. . . . .	H2044B	H2712B	Large Round Corn
. . . . .	H2820B	. . . . .	Extra Large Round Corn

Plates for Soybeans

20-Cell	
H1255B	
H2527B	Use with H1279B Floor Plate in PA732, PA733, PA752, and PA753 Planting Attachments and P1583B Floor Plate in PA704, PA734, and PA754 Planting Attachments.

Plates for Edible Beans

16-Cell	20-Cell	24-Cell
H1324B	H1300B	H1301B
H1071B	H954B	H983B
H956B	H1315B	. . . . .
. . . . .	H1258B	. . . . .
. . . . .	H1254B	. . . . .
. . . . .	H1255B	. . . . .
. . . . .	H1084B	. . . . .

Plates for Acid-Delinted Cotton Seed

24-Cell	48-Cell
H1301B	H3160B

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
nH2825B	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)
nH3102B	32	Maize and Grain Sorghum
uH 776B	..	Blank Plate 5/32" Thick (Holes can be drilled up to 1/4")
kH1211B	..	Blank Plate 5/32" Thick (Cells can be filed in edge)
nH1259B	..	Blank Plate 5/32" 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 P1582B False Ring Raised Side Up

BOTTOMS

The polished surfaces of the bottoms 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 gasoline, kerosene, or diesel fuel.

Be careful when using any of these fuels so they do not ignite. 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 pages 32 and 33.

PLANTING DISTANCES AND QUANTITIES

The sprockets, length of chains, and seed plates determine the planting distances in the field. The number of points or teeth on the sprockets govern the speed that the seed plate travels in relation to the ground travel. The length of the chain is determined by the size of the sprockets used.

ACID-DELINTED COTTON SEED - Gauge-Wheel Drive; 40-Inch Rows 5.90-15 Tires, 8-Tooth Sprocket on Gauge Wheel Drive

Changeable gears		Inches ground travel	Plate revolutions	Pounds per acre planted		
Driving	Driven	per plate revolution	per acre	24-cell H1301B or 48-cell H3160B	16-cell H695B	24-cell H950B
12-tooth	6-tooth	96	1630	17.8	20.4	28
12-tooth	*7-tooth	112	1426	15.6	17.8	24.7
12-tooth	8-tooth	128	1223	13.4	15.3	21.4
12-tooth	*9-tooth	144	1090	11.9	14.9	19.4
8-tooth	6-tooth	144	1090	11.9	14.9	19.4
12-tooth	10-tooth	160	980	10.7	12.2	17.5
8-tooth	8-tooth	192	815	8.9	10.2	14.1
8-tooth	10-tooth	240	653	7.1	8.2	11.6
6-tooth	8-tooth	256	613	6.7	7.7	10.9
8-tooth	12-tooth	288	545	6	6.8	9.7
*9-tooth	12-tooth	256	613	6.7	7.7	10.9
6-tooth	10-tooth	320	490	5.4	6.1	8.8
6-tooth	12-tooth	384	408	4.5	5.1	7.3
*7-tooth	12-tooth	336	476	5.3	6.0	8.5

NOTES: When gauge wheels with 6.70-15 tires are used, reduce planting amounts by 5 per cent.
When gauge wheels with 7.60-15 tires are used, reduce planting amounts by 11 per cent.
Add 5 per cent for 38-inch rows.
Add 11 per cent for 36-inch rows.
**7- and 9-tooth sprockets are available as special equipment.*

ACID-DELINTED COTTON SEED - Tractor-Axle Drive; 40-Inch Rows 3010 or 4010 Tractor; 13.6-38, 15.5-38, or 18.4-30 Tires

Changeable gears		Inches ground travel	Plate revolutions	Pounds per acre planted		
Driving	Driven	per plate revolution	per acre	24-cell H1301B or 48-cell H3160B	16-cell H695B	24-cell H950B
12-tooth	6-tooth	82	1910	20.8	24	34
12-tooth	*7-tooth	96	1668	18.2	20.6	30
12-tooth	8-tooth	110	1425	15.6	17.8	25
12-tooth	*9-tooth	123	1275	14	16	22.7
8-tooth	6-tooth	123	1275	14	16	22.7
12-tooth	10-tooth	137	1145	12.5	14.3	20.5
8-tooth	8-tooth	165	950	10.4	11.9	17
8-tooth	10-tooth	206	760	8.3	9.5	13.5
6-tooth	8-tooth	220	712	7.8	8.9	12.7
8-tooth	12-tooth	248	632	6.9	7.9	11.2
*9-tooth	12-tooth	220	712	7.8	8.9	12.7
6-tooth	10-tooth	274	552	6	6.9	9.8
8-tooth	12-tooth	329	476	5.2	6	8.5
*7-tooth	12-tooth	288	554	6	7	9.8

NOTE: Above figures will increase by 6 per cent on 2010 Series Tractors regardless of tire size except as above.
**7- and 9-tooth sprockets are available as special equipment.*

MECHANICALLY-DELINTED COTTON SEED - Gauge-Wheel Drive; 40-Inch Rows; 5.90-15 Tires; 8-Tooth Sprocket on Gauge-Wheel Drive

Driving sprocket	Driven sprocket	Inches ground travel per plate revolution	Plate revolutions per acre	Pounds per acre planted 32-cell AB12535B	Pounds per acre planted 48-cell AB12536B
12-tooth	6-tooth	96	1630	34	27
12-tooth	*7-tooth	112	1426	31	24.5
12-tooth	8-tooth	128	1223	28	22
12-tooth	*9-tooth	144	1090	26	20.5
8-tooth	6-tooth	144	1090	26	20.5
12-tooth	10-tooth	160	980	24.5	19.5
8-tooth	8-tooth	192	815	20	16.5
8-tooth	10-tooth	240	653	16	13
6-tooth	8-tooth	256	613	15	12
8-tooth	12-tooth	288	545	13.5	11
*9-tooth	12-tooth	256	613	15	12
6-tooth	10-tooth	320	490	12	10
6-tooth	12-tooth	384	408	10	8
*7-tooth	12-tooth	336	476	11.8	9.5

NOTES: When gauge wheels with 6.70-15 tires are used, reduce planting amounts by 5 per cent.
When gauge wheels with 7.60-15 tires are used, reduce planting amounts by 11 per cent.
Add 5 per cent for 38-inch rows.
Add 11 per cent for 36-inch rows.
**7- and 9-tooth sprockets are available as special equipment.*

MECHANICALLY-DELINTED COTTON SEED - Tractor-Axle Drive; 40-Inch Rows; 13.6-38, 15.5-38, or 18.4-30 Tires; 28-Tooth Axle Sprocket

Driving sprocket	Driven sprocket	Inches ground travel per plate revolution	Plate revolutions per acre	Pounds per acre planted 32-cell AB12535B	Pounds per acre planted 48-cell AB12536B
12-tooth	6-tooth	82	1910	40	32
12-tooth	*7-tooth	96	1668	36	27.8
12-tooth	8-tooth	110	1425	32	25.5
12-tooth	*9-tooth	123	1275	29	23
8-tooth	6-tooth	123	1275	29	23
12-tooth	10-tooth	137	1145	27.5	22
8-tooth	8-tooth	165	950	24	19
8-tooth	10-tooth	206	760	19	15
6-tooth	8-tooth	220	712	18	14
8-tooth	12-tooth	248	632	16	13
*9-tooth	12-tooth	220	712	18	14
6-tooth	10-tooth	274	552	14	11
6-tooth	12-tooth	329	476	12	9.5
*7-tooth	12-tooth	288	554	14	11.2

NOTES: Add 5 per cent for 38-inch rows.
Add 11 per cent for 36-inch rows.
Add 6 per cent for 2010 Series Tractors with 12.4-36 or 13.9-36 tires.
**7- and 9-tooth sprockets are available as special equipment.*

MAIZE - Gauge-Wheel Drive; 5.90-15 Tires; H3102B 32-Cell Plate

Driving sprocket	Driven sprocket	Inches ground travel per plate revolution	Plate revolutions per acre	Pounds per acre planted 36-inch rows	38-inch rows	40-inch rows	42-inch rows
12-tooth	6-tooth	96	1630	12	11.4	10.8	10.3
12-tooth	*7-tooth	112	1426	10.5	10	9.5	9
12-tooth	8-tooth	128	1223	9.1	8.6	8.2	7.8
12-tooth	*9-tooth	144	1090	8	7.5	7.2	6.9
8-tooth	6-tooth	144	1090	8	7.5	7.2	6.9
12-tooth	10-tooth	160	980	7.2	6.8	6.5	6.2
8-tooth	8-tooth	192	815	6	5.7	5.4	5.1
8-tooth	10-tooth	240	653	4.8	4.5	4.3	4.1
6-tooth	8-tooth	256	613	4.5	4.3	4.1	3.9
8-tooth	12-tooth	288	545	4	3.8	3.6	3.4
*9-tooth	12-tooth	256	613	4.5	4.3	4.1	3.9
6-tooth	10-tooth	320	490	3.6	3.4	3.2	3
6-tooth	12-tooth	384	408	3	2.8	2.7	2.5
*7-tooth	12-tooth	336	476	3.5	3.3	3.1	2.9

NOTES: Quantities decrease by 5 per cent with 6.70-15 tires, by 11 per cent with 7.60-15.
Quantities increase by 50 per cent with H2672B 24-cell plate, decrease 50 per cent with H2825B 16-cell plate.
H3102B and H2825B require Y5055B bottom plate in corn hoppers.
H2672B requires H3123B bottom plate in corn hoppers.
H3102B and H2825B require P671B bottom plate for combination corn and cotton hoppers.
H2672B requires P2498B bottom plate for combination corn and cotton hoppers.
**7- and 9-tooth sprockets are available as special equipment.*

MAIZE - Tractor-Axle Drive; 3010 or 4010 Tractor with 38-Inch Wheels; H3102B 32-Cell Plate

Driving sprocket	Driven sprocket	Inches ground travel per plate revolution	Plate revolutions per acre	Pounds per acre planted 36-inch rows	38-inch rows	40-inch rows	42-inch rows
12-tooth	6-tooth	82	1910	14	13.3	12.6	12
12-tooth	*7-tooth	96	1668	12.2	12.1	11	10.5
12-tooth	8-tooth	110	1425	10.4	9.9	9.4	9
12-tooth	*9-tooth	123	1275	9.4	8.9	8.4	8
8-tooth	6-tooth	123	1275	9.4	8.9	8.4	8
12-tooth	10-tooth	137	1145	8.4	8	7.5	7.2
8-tooth	8-tooth	165	950	7	6.6	6.3	6
8-tooth	10-tooth	206	760	5.5	5.3	5	4.8
6-tooth	8-tooth	220	712	5.2	5	4.7	4.5
8-tooth	12-tooth	248	632	4.7	4.4	4.2	4
*9-tooth	12-tooth	220	712	5.2	5	4.7	4.5
6-tooth	10-tooth	274	552	4.2	4	3.8	3.6
6-tooth	12-tooth	329	476	3.5	3.3	3.1	3
*7-tooth	12-tooth	288	554	4.1	3.9	3.6	3.5

NOTES: Pounds per acre increase 6 per cent on 2010 Tractor with above exception.
Quantities increase 50 per cent with H2672B 24-cell plate, decrease 50 per cent with H2825B 16-cell plate.
H3102B and H2825B require Y5055B bottom plate in corn hoppers.
H2672B requires H3123B bottom plate in corn hoppers.
H3102B and H2825B require P671B bottom plate in combination corn and cotton hoppers.
H2672B requires P2498B bottom plate in combination corn and cotton hoppers.
**7- and 9-tooth sprockets are available as special equipment.*

SOYBEANS - Gauge-Wheel Drive; 5.90-15 Tires; H1255B 20-Cell Plate with Standard Bottom Plate

Driving sprocket	Driven sprocket	Inches ground travel per plate revolution	Plate revolutions per acre	Pounds per acre planted 36-inch rows	38-inch rows	40-inch rows	42-inch rows
12-tooth	6-tooth	96	1630	112	107	102	97
12-tooth	*7-tooth	112	1426	98	94	89	85
12-tooth	8-tooth	128	1223	84	80	76	72
12-tooth	*9-tooth	144	1090	75	71	68	64
8-tooth	6-tooth	144	1090	75	71	68	64
12-tooth	10-tooth	160	980	68	64	61	58
8-tooth	8-tooth	192	815	57	54	51	48
8-tooth	10-tooth	240	653	46	43	41	39
6-tooth	8-tooth	256	613	43	40.5	38	36
8-tooth	12-tooth	288	545	38	36	34	32
*9-tooth	12-tooth	256	613	43	40.5	38	36
6-tooth	10-tooth	320	490	34	32	30.5	29
6-tooth	12-tooth	384	408	28	27	25.5	24
*7-tooth	12-tooth	336	476	33	31.5	30	28

NOTES: Quantities decrease by 5 per cent with 6.70-15 tires, by 11 per cent with 7.60-15.
Quantities increase by 50 per cent with H2527B 20-cell plate.
H2527B requires H1279B bottom plate with groove side up in corn cans.
H2527B requires P1583B bottom plate with groove side up in corn and cotton cans.
7- and 9-tooth sprockets are available as special equipment.

SOYBEANS - Tractor-Axle Drive; 3010 or 4010 Tractor with 38-Inch Wheels; H1255B 20-Cell Plate with Standard Bottom Plate

Driving sprocket	Driven sprocket	Inches ground travel per plate revolution	Plate revolutions per acre	Pounds per acre planted 36-inch rows	38-inch rows	40-inch rows	42-inch rows
12-tooth	6-tooth	82	1910	131	124	118	112
12-tooth	*7-tooth	96	1668	115	108	103	98
12-tooth	8-tooth	110	1425	98	93	88	84
12-tooth	*9-tooth	123	1275	87	83	79	75
8-tooth	6-tooth	123	1275	87	83	79	75
12-tooth	10-tooth	137	1145	76	74	71	67
8-tooth	8-tooth	165	950	65	62	59	56
8-tooth	10-tooth	206	760	52	50	47	45
6-tooth	8-tooth	220	712	49	46	44	42
8-tooth	12-tooth	248	632	43	41	39	37
*9-tooth	12-tooth	220	712	49	46	44	42
6-tooth	10-tooth	274	552	39	37	35	34
6-tooth	12-tooth	329	476	33	31	29	28
*7-tooth	12-tooth	288	554	39	37	35	34

NOTES: Quantities increase by 50 per cent with H2527B 20-cell plate.
H2527B requires H1279B bottom plate with groove side up in corn cans.
H2527B requires P1583B bottom plate with groove side up in corn and cotton cans.
7- and 9-tooth sprockets are available as special equipment.

DRILLING DISTANCES WHEN USING CELL PLATES
Gauge-Wheel Drive; 5.90-15 Tires

Driving sprocket	Driven sprocket	Inches ground travel per plate revolution	Plate revolutions per acre	Drilling distances in inches 8-cell	16-cell	24-cell
12-tooth	6-tooth	96	1630	12	6	4
12-tooth	*7-tooth	112	1426	14	7	4.7
**12-tooth	**8-tooth	128	1223	16	8	5.3
12-tooth	*9-tooth	144	1090	18	9	6
8-tooth	6-tooth	144	1090	18	9	6
8-tooth	*7-tooth	168	952	21	10.5	7
12-tooth	10-tooth	160	980	20	10	6.7
8-tooth	8-tooth	192	815	24	12	8
8-tooth	10-tooth	240	653	30	15	10
6-tooth	8-tooth	256	613	32	16	10.7
*7-tooth	8-tooth	224	714	28	14	9
8-tooth	12-tooth	288	545	36	18	12
*9-tooth	12-tooth	256	613	32	16	10.7
6-tooth	10-tooth	320	490	40	20	13.3
6-tooth	12-tooth	384	408	48	24	16
*7-tooth	12-tooth	336	476	42	21	14

NOTES: Distances increase by 5 per cent with 6.70-15 tires, by 11 per cent with 7.60-15.
***Recommended for cotton cans with picker wheel.*
Always use 8-tooth driven sprocket on drive from gauge wheel.
**7- and 9-tooth sprockets are available as special equipment.*

DRILLING DISTANCES WHEN USING CELL PLATES
Tractor-Axle Drive; 3010 or 4010 Tractor with 38-Inch Wheels; 28-tooth axle sprocket

Driving sprocket	Driven sprocket	Inches ground travel per plate revolution	Plate revolutions per acre	Drilling distances in inches 8-cell	16-cell	24-cell
12-tooth	6-tooth	82	1910	10.2	5.1	3.4
12-tooth	*7-tooth	96	1668	12	6	4
**12-tooth	**8-tooth	110	1425	13.8	6.9	4.6
12-tooth	*9-tooth	123	1275	15.4	7.7	5.1
8-tooth	6-tooth	123	1275	15.4	7.7	5.1
8-tooth	*7-tooth	144	1112	18	9	6
12-tooth	10-tooth	137	1145	17.2	8.6	5.7
8-tooth	8-tooth	165	950	20.6	10.3	6.9
8-tooth	10-tooth	206	760	25.8	12.9	8.6
6-tooth	8-tooth	220	712	27.4	13.7	9.1
*7-tooth	8-tooth	192	831	24	12	8
8-tooth	12-tooth	247	632	30.8	15.4	10.3
*9-tooth	12-tooth	220	712	27.4	13.7	9.1
6-tooth	10-tooth	274	552	34	17	11.4
6-tooth	12-tooth	329	476	41	20.5	13.6
*7-tooth	12-tooth	288	554	36	18	12

NOTES: Distances are reduced by approximately 6 per cent on 2010 Tractors with above exception.
***Recommended for cotton cans with picker wheel.*
**7- and 9-tooth sprockets are available as special equipment.*

FORMULA TO BE USED FOR COMPUTING CORN POPULATION PER ACRE WHEN PLANTING

2504.52 inches (length of one row in square acre) divided by drilling distance equals seeds per row.

Divide 2504.52 by row spacing to obtain rows per acre.

Multiply seeds per row times rows per acre to obtain seed population per acre.

ADJUSTING ROW WIDTH

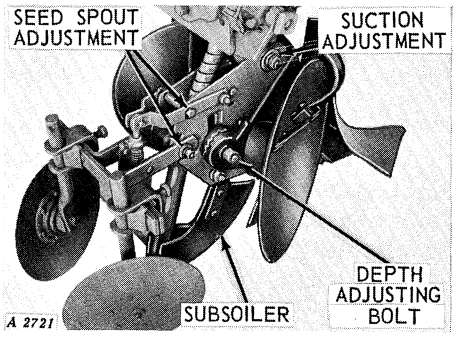
The 2- and 4-row PA700 Series planting attachments are adjustable for row spacings of 36 to 42 inches. The 6-row Attachments are adjustable for row spacings of 36 to 40 inches.

Set tractor wheels to conform to the row spacing.

DEPTH OF PLANTING

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

HARD GROUND OPENER



The hard ground opener is used on the PA732 and PA752 Planting Attachments.

The hard ground opener has a corrugated disk bracket which permits changing the disk angle.

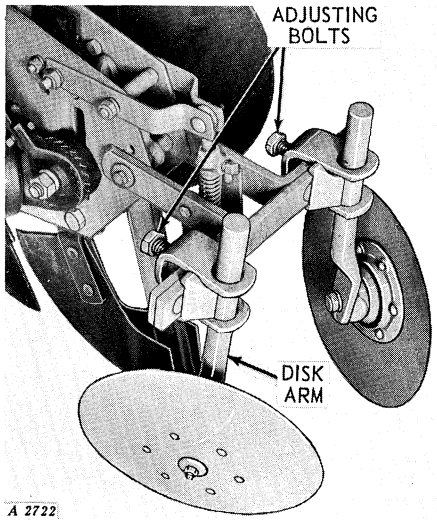
The disks can be raised or lowered for working depth by loosening the depth adjusting bolt and allowing entire unit to be either raised or lowered in the disk frame.

The suction of the bottom may be varied slightly by setting bolt which attaches the frame to the bedder beam either to the rear or front of the adjusting slot in the disk frame.

Several holes in the subsoiler shank allow for working depth adjustment. The seed spout also must be adjusted for depth when the subsoiler working depth has been changed. This is done by attaching seed spout to either of the two bolts as indicated in the illustration.

Hard ground openers on these planting attachments may be changed to loose ground openers by replacing the lister bottoms and subsoilers with runner openers which are available as special equipment. See page **23.**

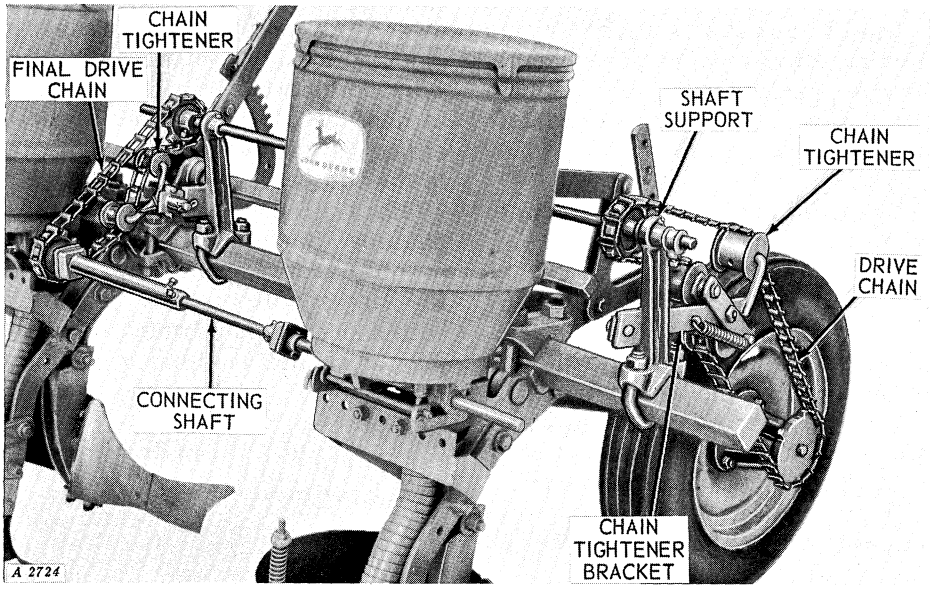
DISK COVERER



Disk Coverers are supplied as regular equipment on all PA700 Series Planting Attachments. The disk coverer throws a blanket of loose soil over the seed after it has been deposited in the soil.

Working depth of the coverers may be adjusted by loosening the adjusting bolt in the yoke and positioning the disk arm.

GAUGE WHEEL DRIVE ON F311 SERIES BEDDERS



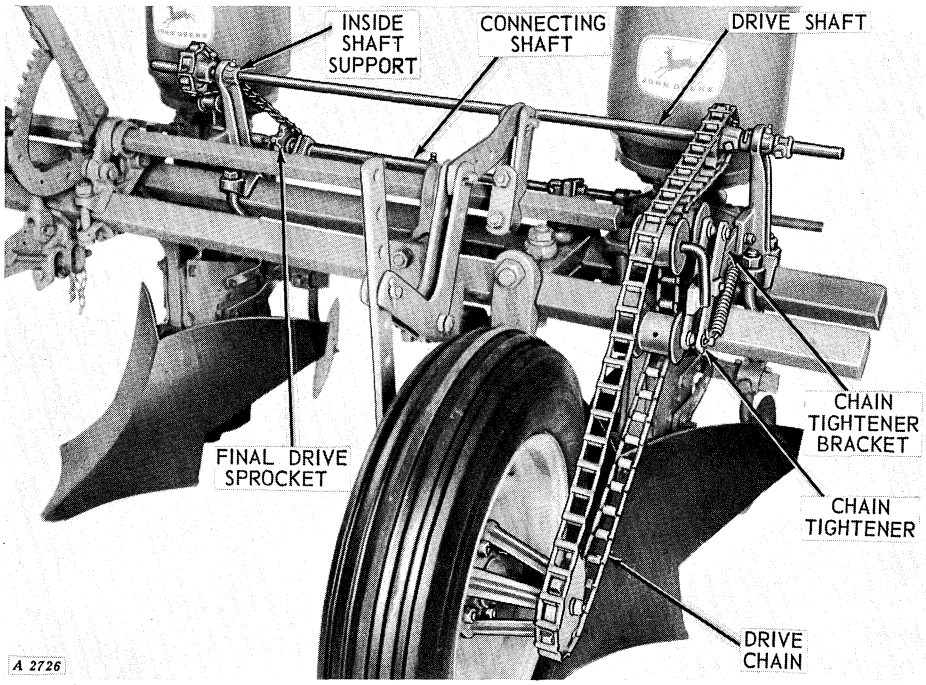
Drive Parts – PA734 Planting Attachment on F311 Bedder (Right-Side Illustrated)

When gauge wheels are used to drive the planting attachments on an F311 Bedder, shaft supports must be attached with the offset towards the rear of bedder bar.

For 2-row applications, the same drive parts are provided for the F311 Bedder and the F871 Bedder. An extra shaft support is provided so offsetting the drive shaft may be accomplished.

GAUGE WHEEL DRIVE ON F871 SERIES BEDDERS

GAUGE WHEELS IN FRONT OF BEDDER BARS



Drive Parts – PA733 Planting Attachment on F871 Bedder (Left-Side Illustrated)

When gauge wheels are used to drive the planting attachments on the F871 Bedders, shaft supports must be attached with the offset toward the front.

On the 2-row attachment, the final drive sprocket and chain drives the right-hand seed can. A connecting shaft is used to transmit the drive to the left-hand can.

On the 4-row attachments the final drive sprocket and chain drives the outside seed cans. A connecting shaft is used for both the right- and left-hand sides to drive the inside cans.

On 4-row bedders, gauge wheels may be run directly in front of the outside bottoms as illustrated above, or to the outside of the lister bottoms.

Running gauge wheels to the outside of the lister bottoms is limited to bedders with a 12-1/2-foot front bar and a 14-foot or longer rear bar. It is also limited to 36-, 38-, or 40-inch rows.

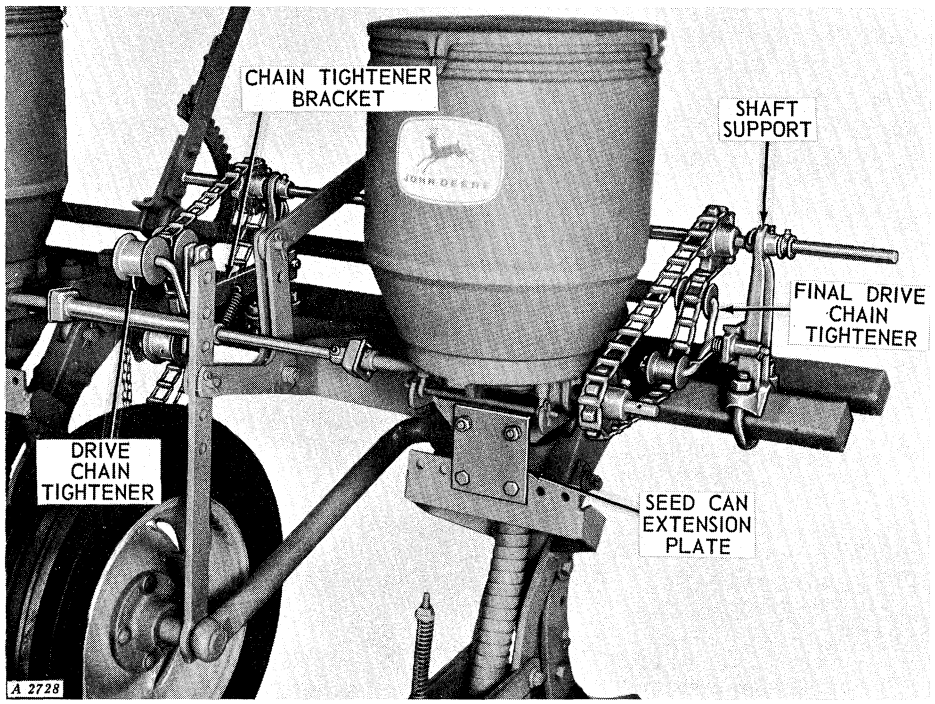
To run the gauge wheels to the outside of the lister bottoms, move all drive parts toward the ends of the bedder bar. Change the chain tightener brackets so the right-hand bracket is used on the left-hand outside shaft support and the left-hand bracket is used on the right-hand outside shaft support. Install final drive gears and sprockets to the inside of the outside seed cans.

On 6-row planting attachments run the gauge wheels in front of the outside bottoms. Two connecting shafts are used to operate the two outside cans on right- and left-hand sides.

NOTE: Check all drive parts to be sure parts do not bind.

GAUGE WHEEL DRIVE ON F871 SERIES BEDDERS - Continued

GAUGE WHEELS TO REAR OF BEDDER BARS



Drive Parts – PA734 Planting Attachment on F871 Bedder (Right-Side Illustrated)

For instructions on placing the gauge wheels behind the bedder bars, see your bedder operator's manual. A seed can extension plate must be used to attach the gear nest to the support.

The chain tightener brackets should be reversed so the right-hand bracket is used on the left-hand side and the left-hand bracket is used on the right-hand side, with the chain tightener rollers to the rear of bedder bars.

The final drive chain tighteners should be placed on the shaft supports to the outer ends of the bedder bar.

TRANSPORTING

CAUTION: 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.

SAFETY RULES

Be careful when operating the planting attachment to avoid injury to yourself and your helpers.

Only one person—the operator—should be permitted on the tractor platform while tractor and planting attachments are in operation.

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

If spray can paint is used for protecting the bottoms to be put in storage, be careful when discarding empty can. Do **not** incinerate or puncture can.

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

CAUSES FOR COMMON PLANTING DIFFICULTIES

INACCURATE DROP:

A—Poorly graded corn.

B—Wrong seed plates.

C—Floor plate turned wrong side up or wrong false ring used.

D—Cut-off or knocker worn or not working freely.

E—Seed interfering with proper action of cut-off and roller knocker. (Seed may drop into cut-off and knocker housing if hopper is inverted when changing seed plates.)

PLANTING MORE CORN IN SOME ROWS THAN IN OTHERS

A—Seed interfering with proper action of cut-off and roller knocker. (Seed may drop into cut-off and knocker housing if hopper is inverted when changing seed plates.)

B—Cut-off tongue worn or out of position.

C—Weak or broken cut-off spring.

D—Floor plate turned wrong side up.

E—Wrong seed plate or false ring in one hopper.

F—Warped false ring.

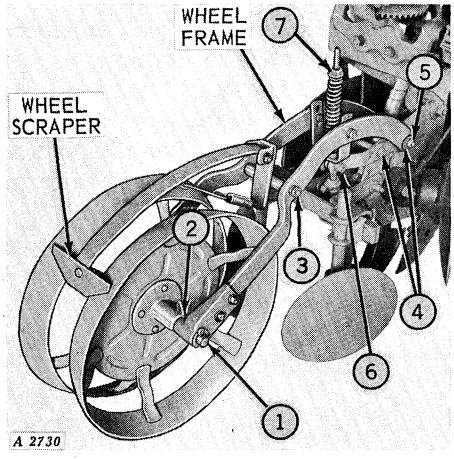
G—Hopper not clamped down tight.

SPECIAL EQUIPMENT AND ATTACHMENTS

Special equipment for these planting attachments is available from your John Deere dealer. The special equipment will adapt the planting attachments to your requirements.

Assembly and operation instructions are illustrated and described below and on the following pages.

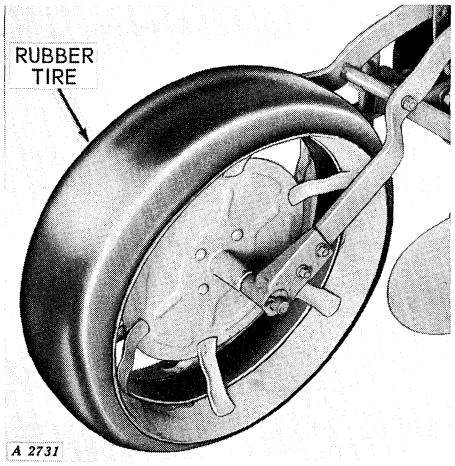
NO. 6 PRESS WHEEL ATTACHMENT
(For PA732 and PA733 Planting Attachments)



This attachment is used to press the soil after the seed is planted and covered.

Pressure is adjusted by the spring at the top of the attachment. To install:

1. Remove axle, insert press wheel in frame and replace axle.
2. Tighten set screw in press wheel.
3. Remove frame spacer and attach wheel scraper in its place.
4. Replace plunger support with plunger supports provided with press wheel frame.
5. Attach assembled wheel frame to disk frame.

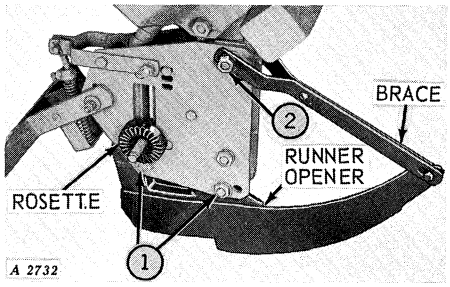


6. Insert threaded end of plunger eyebolt through yoke and then attach plunger eyebolt to plunger supports.
7. Attach plunger spring and nut.

A rubber tire may be used in place of the wheel scraper in wet sticky conditions where the scrapers do not clean the steel wheel properly.

To attach the rubber tire, remove the wheel scraper and replace with bushing supplied with wheel frame. Loosen the set screw in the press wheel and remove the axle. Attach rubber tire over press wheel. Replace axle and tighten the set screw in press wheel.

LOOSE GROUND OPENER
(For PA732 and PA752 Planting Attachments)

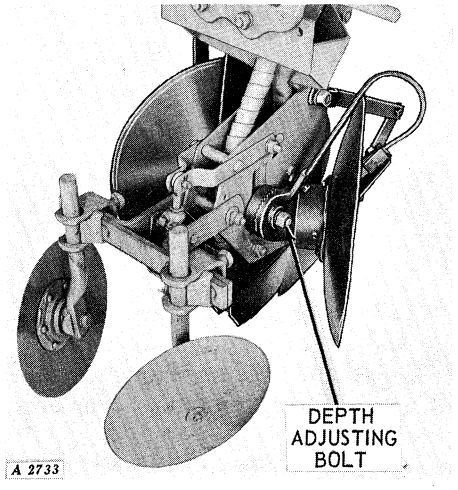


Converting Hard Ground Opener to Loose Ground Opener

A runner opener with boot is available to convert a hard ground opener into a loose ground opener. When converting to a loose ground opener, remove lister bottom and subsoiler and replace with runner opener, boot, and brace. To install:

1. Attach seed boot and runner to plates.
2. Attach runner brace to plates and beam.

NOTE: Rosette must be turned so raised mark is to the front. See illustration above.



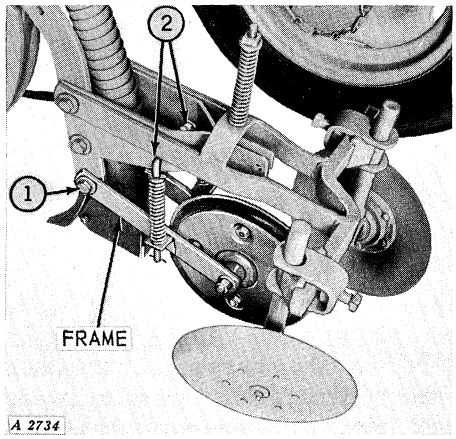
Loose Ground Opener

The loose ground opener has a corrugated disk bracket which permits changing the disk angle for various types of furrows.

Attach disk and scraper bracket to the rosette with the notch in the bracket matched to notch on top of the rosette.

The openers are also adjustable for depth by loosening the depth adjusting bolts and moving the entire unit up or down on the covering frame plates.

RUBBER-TIRED PRESS WHEEL
(For PA704, PA734, and PA754 Planting Attachments)

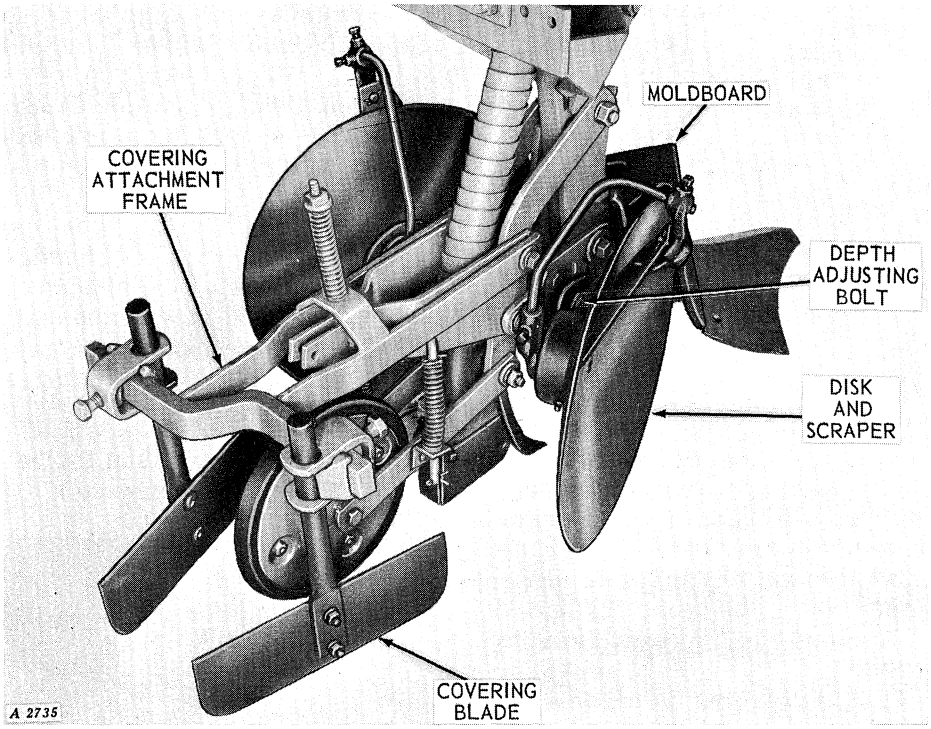


A 10 x 1-inch rubber-tired press wheel is available to firmly press the seed ahead of the coverers. To install:

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

2. Attach spring plungers to plunger supports.

"SCAT" PLANTER
(For PA704, PA734, and PA754 Planting Attachments)



The "Scat" Planter has a short cast moldboard and disk openers to open a water furrow along the seedbed sides, a subsoiler for dropping seed into the furrow, a 10 x 1-inch rubber-tired press wheel to press seed into ground, and covering blades to cover the seed.

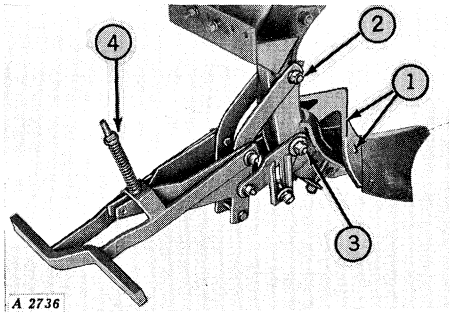
Working depths of the covering blades may be adjusted by raising or lowering covering blade shank in yokes.

Slots in the subsoiler allow for working depth adjustment.

The depth adjusting bolt permits changing disk angle and also depth adjustment.

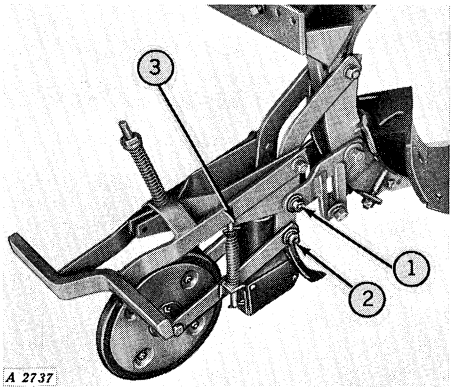
To install the "Scat" planter proceed as follows:

Moldboard and Covering Frame



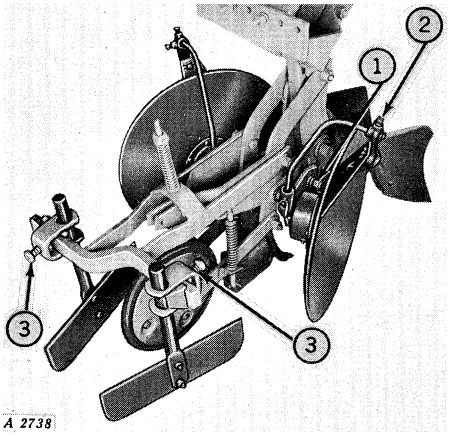
1. Remove moldboard from bottom and attach cast moldboard.
2. Attach covering frame to beam and standard, removing washers from bolt.
3. Using washers removed from bolt in key 2, attach disk opener brackets to beam and standard.
4. Attach spring plunger rod and spring to covering blade frame.

Subsoiler and press wheel



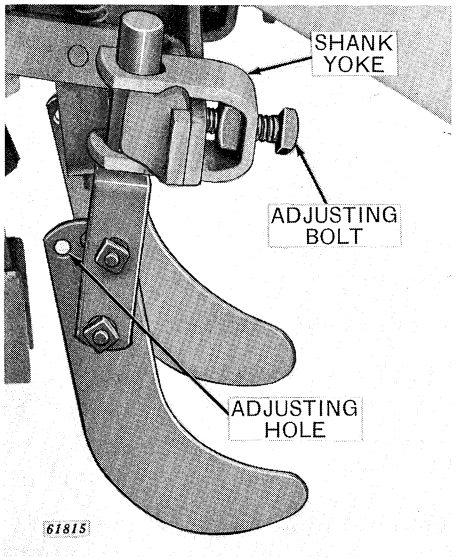
1. Attach subsoiler to covering frame and disk opener brackets.
2. Attach press wheel frame and subsoiler to covering frame.
3. Attach press wheel frame springs to covering frame with cotter pins.

Disk Openers and Covering Blades



1. Attach disk openers to disk opener brackets.
2. Set disk scraper as desired.
3. Attach covering blades to frame.

KNIFE COVERER



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

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

To attach, insert shank into yoke and tighten securely with adjusting bolt.

Keeping your equipment in proper adjustment will help to keep it operating efficiently and economically.

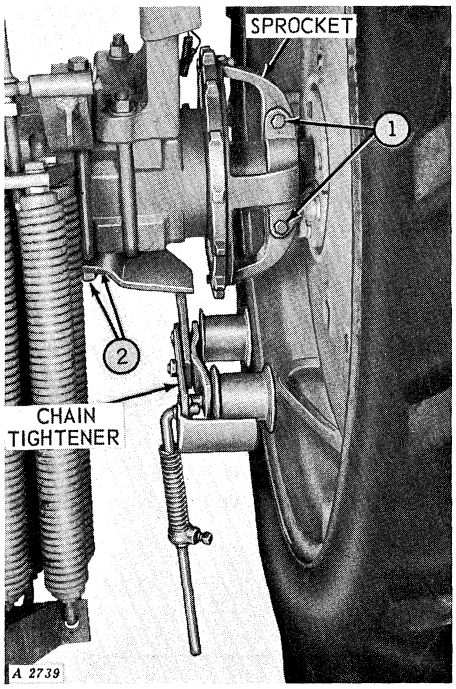
TRACTOR-AXLE DRIVE
(For PA704, PA734, and PA754 Planting Attachments)

When preparing tractor for use with a 2-row planting attachment, the sprocket and chain tightener should be attached to the right-hand side of the rear axle.

When a 4- or a 6-row planting attachment is used, attach sprockets and chain tightener to both sides of rear axle.

F311 and F871 Bedders

Attaching Sprocket and chain tightener



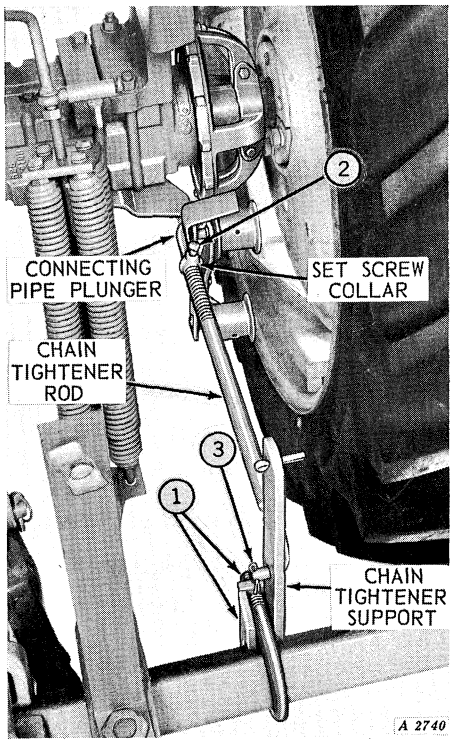
1. Attach drive sprocket to right-hand tractor axle for 2-row operation and to right- and left-hand axles for 4- and 6-row operation.

NOTE: Be sure lock strap fits into keyed axle, preventing the sprocket from rotating on the axle.

2. Attach chain tightener to tractor axle housing with same two bolts that fasten lift spring support.

F871 Bedders

Attaching Chain Tightener Support and Rod



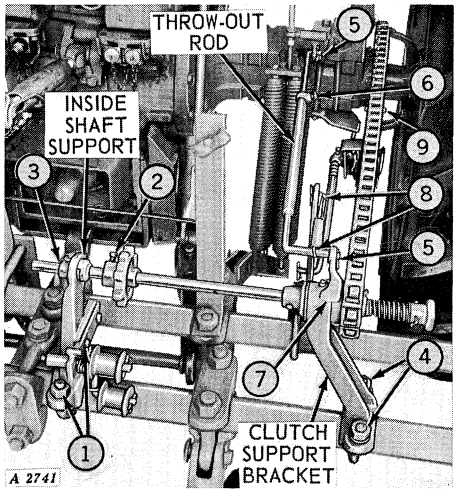
1. Attach chain tightener support to front bedder bar.

2. Remove set screw collar and spring. Place collar on connecting pipe plunger and then the spring. Slide chain tightener rod over connecting pipe plunger.

3. Attach chain tightener rod to support.

NOTE: Chain tightener support is used only when lever-controlled gauge wheels are not used. If bedder is equipped with lever-controlled gauge wheels, see related section of assembly for F311 Bedders.

Attaching Drive Shaft Supports and Sprockets



1. Attach inside shaft support with drive shaft bearing to rear bar of bedder with U-bolt and nuts. *NOTE: Shaft support will be offset toward the front. Nuts on U-bolt should not be drawn up too tight until exact location has been determined.*

2. Slide desired sprocket on drive shaft.

3. Slide drive shaft through drive shaft bearing.

4. Attach clutch support bracket with clutch and drive shaft, to rear, frame bar with U-bolt and nuts. *NOTE: Clutch support will be offset toward the front.*

5. Attach throw-out rod to lift spring bracket and throw-out cam and secure with cotter pins.

6. Adjust set screw collar on throw-out rod. Adjust set screw collar on connecting pipe plunger for proper spring tension.

NOTE: Bedder should be in lifted position.

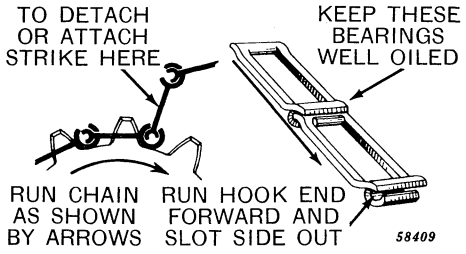
7. Make sure clutch is disengaged when bedder is in full lifted position.

8. Attach throw-out cam return spring to throw-out rod and chain tightener support.

9. Attach drive chain to drive sprocket and throw-out sprocket. The number of links will vary for different tractors and different working depths.

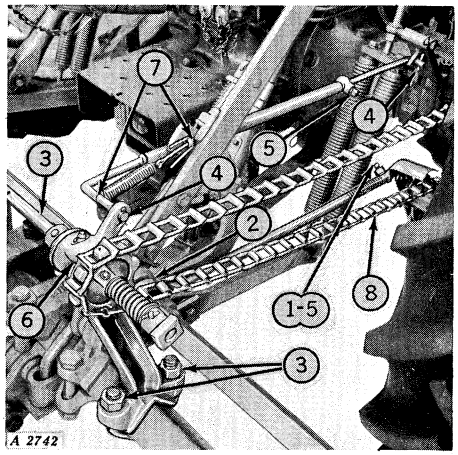
NOTE: The chain should be long enough so it will not be too tight when planting attachments are at working depth. Rivet head of Quik-Tatch link in drive chain should be toward pivot bolt of chain idler to eliminate any possibility of interference when operating. Assemble chains on sprockets so that strain is borne by heavy side of the links.

Illustration below shows proper installation of chains.



TRACTOR-AXLE DRIVE— CONTINUED

(For PA704, PA734, and PA754 Planting Attachments)



1. Remove set screw collar and spring. Place collar on connecting pipe plunger and then the spring. Slide chain tightener rod over connecting pipe plunger.

2. Attach chain tightener rod to ratchet.

3. Attach inside shaft support and drive shaft bearing, clutch support bracket, and drive shaft to bedder bar.

NOTE: Shaft support and clutch support bracket will have offset to rear. Nuts on U-bolts should not be drawn up too tight until exact location has been determined.

4. Attach throw-out rod to lift spring bracket and throw-out cam and secure with cotter pins.

5. Adjust set screw collar on throw-out rod. Adjust set screw collar on connecting pipe plunger for proper spring tension.

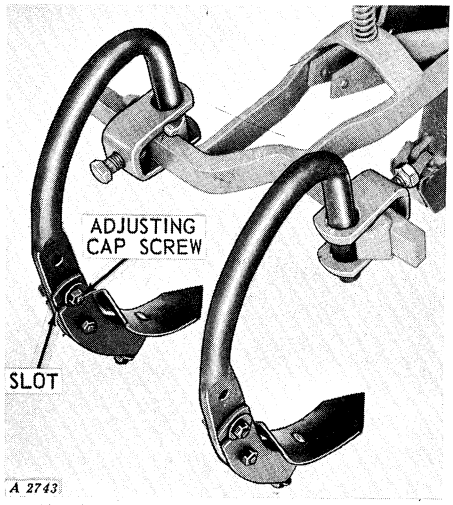
NOTE: Bedder should be in lifted position.

6. Make sure clutch is disengaged when bedder is in full lifted position.

7. Attach throw-out cam return spring to throw-out rod and ratchet.

8. Attach drive chain to drive sprocket and throw-out sprocket. The number of links will vary for different tractors and working depths.

SHOVEL COVERER



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

The shovel sleeve is slotted 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. Be careful not to draw up nut too tight.

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.

Three holes in the shovel shank allow the shovel to be moved up or down for different depths.

To reset a shovel after it has tripped; loosen adjusting bolt and nut, push shovel back in proper position, and tighten nut for proper tripping resistance.

To attach, insert shank into yoke and tighten securely.

PEA OR BEAN ATTACHMENT (For PA704, PA734, and PA754 Planting Attachments)

This attachment (Nos. 2421B and BB10522B) consists of combination corn and bean cut-off, bean hopper, and regular bean plates.

To install, remove the corn cut-off or cotton spider from the hopper, whichever may be installed at the time. Remove the false ring P2386B.

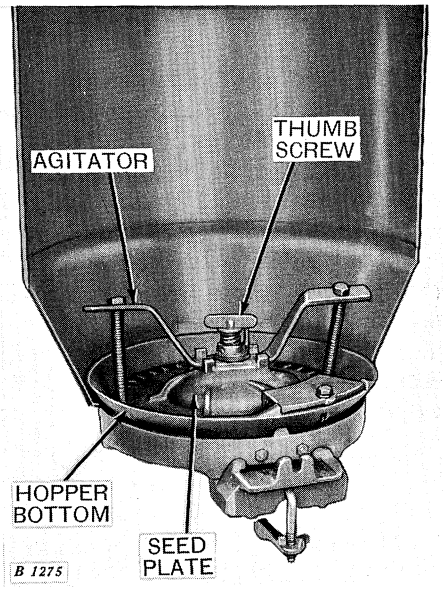
Unscrew the stud bolt which holds the combination gear ring and blank plate in place. Remove these two parts.

Select the desired combination gear ring and bean plate and secure it in place with the stud bolt. Install the false ring P2386B. Place the desired corn plate in position. Install the combination corn and bean cut-off with bean hopper attached, fitting it down over the cut-off stop near the bottom and flush against the false plate. Secure it in place with the thumbscrew.

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 and corn 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 plate, turn it one-half turn and reinstall.

CELL-DROP COTTON PLANTING ATTACHMENT (For PA704, PA734, and PA754 Planting Attachments)

The cell-drop cotton planting attachment (BB10947B) is designed primarily for planting mechanically delinted cotton seed.



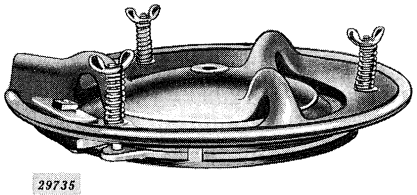
Three seed plates are available:

48-cell plate AB12536B
32-cell plate AB12535B
24-cell plate AB13010B

These plates are not shipped with the attachment and must be ordered separately.

Installation instructions are shipped with the attachment.

FINE SEED ATTACHMENT
(For PA704, PA734, and PA754 Planting Attachments)



The fine seed attachment (No. BB10532B) is available for planting small vegetable and grass seed. It has a machined false ring and seed plate that are held tightly together with three springs and thumb nuts. A rubber gasket fits around the edge of the cut-off plate between the plate and the hopper. The attachment is held in the hopper with the same thumb screw as that used with the regular cut-off.

SHELLED PEANUT ATTACHMENT
(For PA704, PA734, and PA754 Planting Attachments)

This attachment (No. BB10525B) is used for planting shelled peanuts. A baffle plate supports most of the weight of the seed, and a lighter spring is used in the cut-off plate.

UNSHELLED PEANUT ATTACHMENT
(For PA704, PA734, and PA754 Planting Attachments)

The unshelled peanut attachment (No. BB10518B) is used for planting peanuts in the shell. Directions for installing are furnished with the attachment.

BRUSH CUT-OFF AND BAFFLE PLATE
(For PA704, PA734, and PA754 Planting Attachments)

The attachment (No. BB10531B) is used for planting fragile seeds such as castor beans. The baffle plate supports most of the weight of the seed and reduces seed damage.

MAINTENANCE

MIDDLEBREAKER BOTTOMS

RUST PREVENTION

Protect the face of the lister bottoms and shares 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 spray can (PT65).

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 orignals and have more and better material in points and wearing surfaces to stay sharp longer.

SERVICE AT THE BEGINNING OF THE SEASON

Clean off any dirt or grease that may have accumulated on moving parts. This will prevent abrasive action that could cause excessive wear.

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

Lubricate as shown on pages 32 and 33.

SERVICE AT THE END OF THE SEASON

The planting attachment's chief enemies, rust and corrosion, are busy the year-around. A little time and effort spent protecting the attachment from destructive moisture will repay you in longer service, easier operation, and higher resale value.

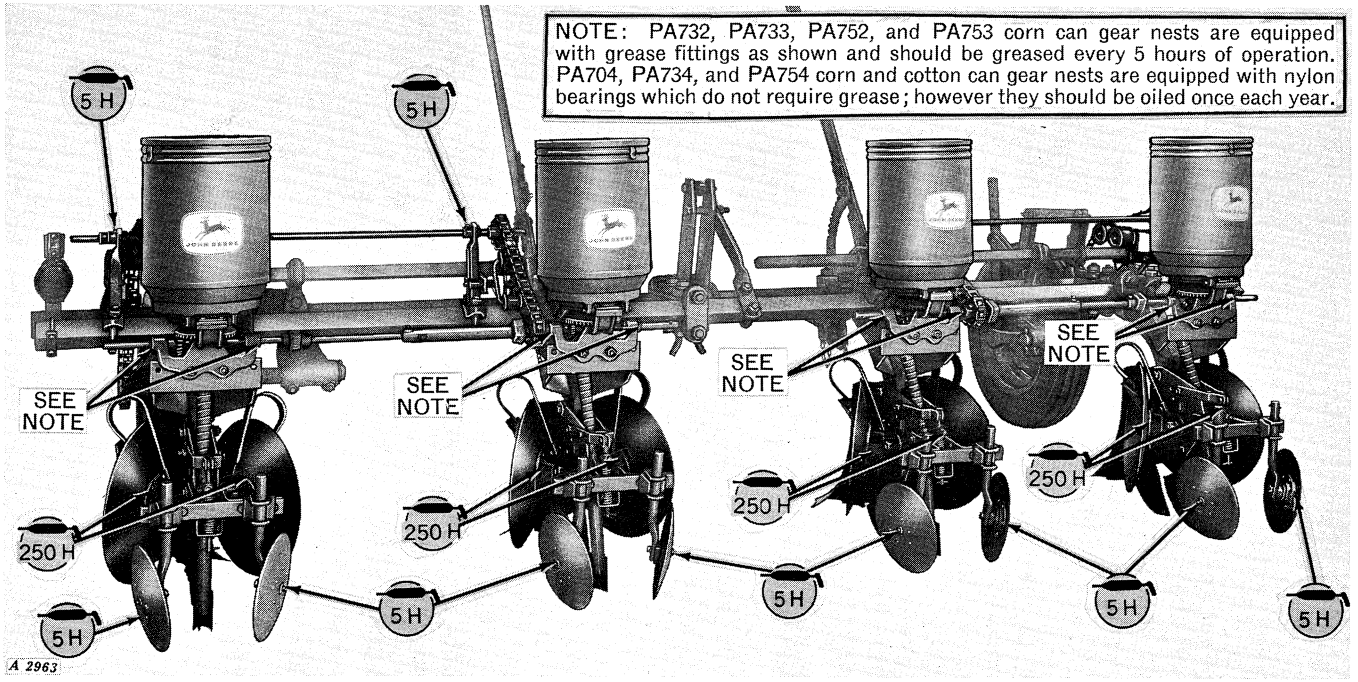
Clean planting attachment thoroughly to remove dirt and trash which would hold moisture and cause rusting.

LUBRICATION

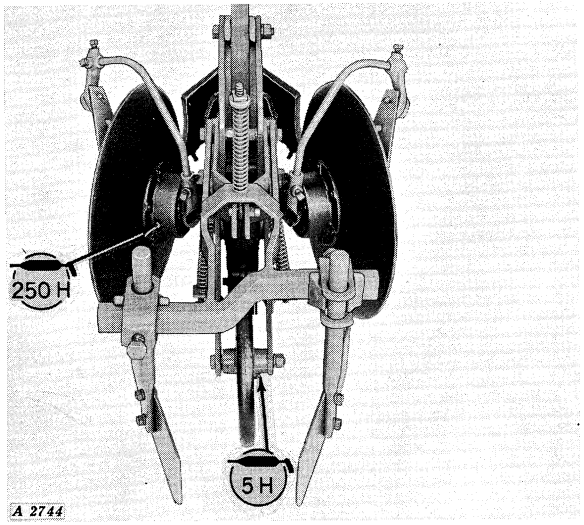
Grease fittings are provided at all points indicated in the lubrication chart. All parts provided with grease fittings should be lubricated as indicated with SAE multipurpose-type grease. If any grease fittings are missing, replace them immediately. **Clean the fittings thoroughly before using grease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

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

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

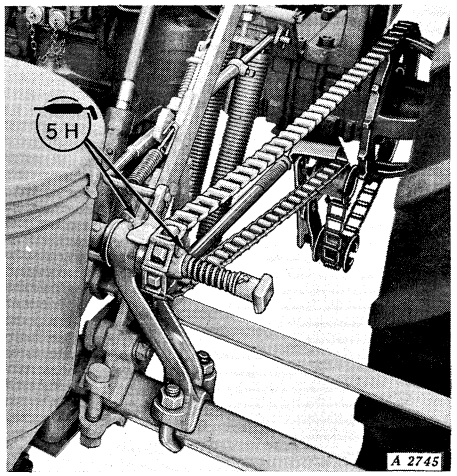


Lubrication Chart

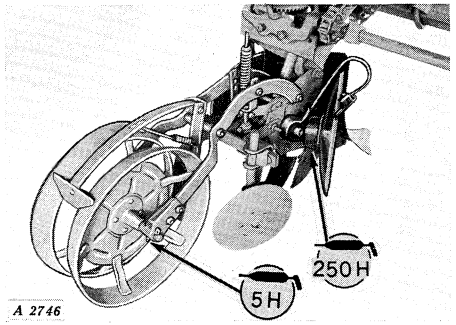


"Scat" Planter

Symbols	
5 H	Grease every 5 hours of operation.
250 H	Grease every 250 hours of operation



Clutch Support Bracket and Throw-Out Cam



No. 6 Press Wheel Attachment

ASSEMBLY

1. Read all assembly instructions and carefully observe illustrations.
2. Cut bundling wires and conveniently arrange parts.
3. Lubricate all bearings and moving parts as you proceed so they move freely.

REGULAR SHIPPING BUNDLES

Bundle No.	Description	PA704	PA732	PA733	PA734	PA752	PA753	PA754
SD 104 A	Subsoiler)	2	..	..	4	..	..	6
SD 105 A	Subsoiler)	2	..	..	4	..	..	6
SD 1824 A	Subsoiler) Optional	2	..	..	4	..	..	6
BA 10994 A	Subsoiler)	2	..	..	4	..	..	6
SD 2198 A	Subsoiler)	..	4	4	..	6	6	..
SD 2231 A	Subsoiler)	..	4	4	..	6	6	..
SD 2232 A	Subsoiler)	..	4	4	..	6	6	..
SD 118 A	Disk Coverers	2	4	4	4	6	6	6
BA 11008 A	Disk Frame	..	4	..	..	6	..	..
SD 1178 A	Frame Spacer	..	4	..	..	6	..	..
SD 1180 A	Seed Tube	..	4	4	..	6	6	..
SD 1181 A	Seed Boot	..	..	4	..	..	6	..
SD 1820 A	Covering Attachment Frame	..	..	4	..	..	6	..
SD 2020 A	Disk and Scraper	..	4	..	..	6	..	..
SD 2084 A	Standard with SB252 Bottom	..	4	..	..	6	..	..
SD 2150 A	Root Cutter	..	..	4	..	..	6	..
BA 10301 A	Corn Cans (Pair)	..	2	2	..	3	3	..
SD 2610 A	Final Drive Sprocket	1	2	2	2	3	3	3
SD 2612 A	Seed Spout	1	..	..	2	..	..	3
SD 2625 A	Drive Shaft	1	2	2	2	2	2	2
BA 10219 A	Covering Attachment Plates	..	..	4	..	..	6	..
SD 2685 A	Seed Boot	..	4	..	..	6	..	..
BA 10640 A	Drive Parts	..	1	1	1	1	1	1
BA 10072 A	Seed Shaft Connector	..	..	..	..	1	1	1
BA 10935 A	Corn and Cotton Cans (Pair)	1	..	..	2	..	..	3
BA 10936 A	Can Support	1	..	..	2	..	..	3
BA 10937 A	Covering Frame	1	..	..	2	..	..	3
BA 10941 A	Drive	1	..	..	..	..	..	..
BA 10939 A	Can Support	..	2	2	..	3	3	..
BA 10940 A	Gear Nest	..	2	2	..	3	3	..

SPECIAL SHIPPING BUNDLES

SD 119 A	Knife Coverers in lieu of SD118A.	2	4	4	4	6	6	6
SD 121 A	Shovel Coverers in lieu of SD118A	2	4	4	4	6	6	6
BB 10532 B	Vegetable and Grass Seed Cut-Off	1	..	..	2	..	..	3
A 11366 A	Sprocket - 9-Tooth	1	2	..	..	2	2	2
A 13422 A	Sprocket - 7-Tooth	1	2	..	..	2	2	2

SPECIAL SHIPPING BUNDLES—CONTINUED

Bundle No.	Description	PA704	PA732	PA733	PA734	PA752	PA753	PA754
BA 10938 A	Cotton Picker Wheel	1	..	..	2	..	..	3
BA 10939 A	Can Support	1	..	..	2	..	..	3
BA 10731 A	10 x 1-Inch Rubber Press Wheel	2	..	..	4	..	..	6
SD 2810 A	Runner Opener with Boot for Converting Hard Ground Opener into Loose Ground Opener with Long Runner	..	4	..	..	6	..	..
BA 10452 A	Drive Sprocket and Throw-Out Rod, R.H.	1	..	..	..	..	..	..
BA 10638 A	Drive Shaft and Throw-Out, R.H.	1	..	..	..	..	..	..
	Above two bundles furnished in lieu of BA10941A Drive, R.H. and SD2625A Drive Shaft when Tractor-Axle Drive is required on F871 Bedder.							
BA 10452 A	Drive Sprocket and Throw-Out Rod, R.H.	1	..	..	..	..	..	..
BA 10463 A	Drive Shaft and Throw-Out, R.H.	1	..	..	..	..	..	..
	Above two bundles furnished in lieu of BA10941A Drive, R.H. and SD2625A Drive Shaft when Tractor-Axle drive is required on F311 Bedder.							
BA 10161 A	Chain Tightener Support (For use with Tractor-Axle Drive on F871 Series Bedders less Gauge Wheels or with Hydraulic Gauge Wheels)	1	..	..	2	..	..	2
BA 10452 A	Drive Sprocket and Throw-Out Rod, R.H.	..	..	..	1	..	..	..
BA 10453 A	Drive Sprocket and Throw-Out Rod, L.H.	..	..	..	1	..	..	..
BA 10463 A	Drive Shaft and Throw-Out, R.H.	..	..	..	1	..	..	..
BA 10464 A	Drive Shaft and Throw-Out, L.H.	..	..	..	1	..	..	..
	Above four bundles furnished in lieu of one BA10640A or one BA10465A Drive and two SD2625A Drive Shafts when Tractor-Axle Drive is required on F311 Series Bedders.							
BA 10452 A	Drive Sprocket and Throw-Out Rod, R.H.	..	..	..	1	..	..	1
BA 10453 A	Drive Sprocket and Throw-Out Rod, L.H.	..	..	..	1	..	..	1
BA 10638 A	Drive Shaft and Throw-Out, R.H.	..	..	..	1	..	..	1
BA 10639 A	Drive Shaft and Throw-Out, L.H.	..	..	..	1	..	..	1
	Above four bundles furnished in lieu of one BA10640A Drive and two SD2625A Drive Shafts when Tractor-Axle Drive is required on F871 Series Bedders.							

SPECIAL SHIPPING BUNDLES—CONTINUED

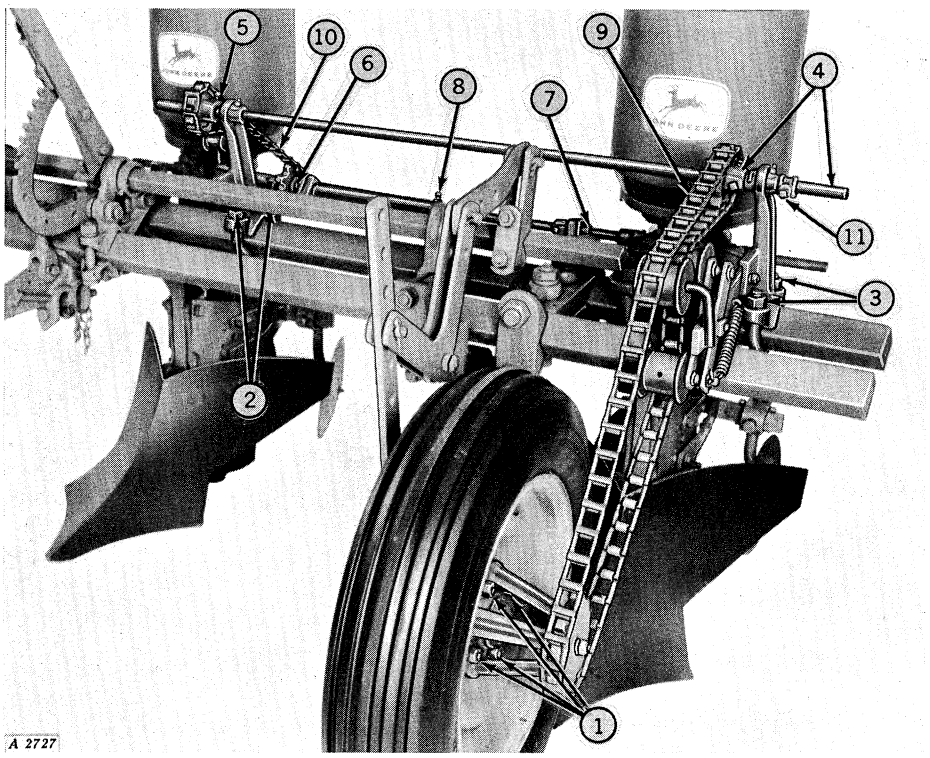
Bundle No.	Description	PA704	PA732	PA733	PA734	PA752	PA753	PA754
BA 10465 A	Drive - In lieu of BA10640A Drive when Planting Attachment is ordered for use with F311 Series Bedders	..	1	1	1	..	..	..
BB 10947 B	Cell Drop Cotton Attachment	1	..	..	2	..	..	3
AB 12535 B	Cotton Seed Plate—32 Cell } Optional for Cotton Cell Drop	2	..	..	4	..	..	6
AB 12536 B	Cotton Seed Plate—48 Cell } Optional for Cotton Cell Drop	2	..	..	4	..	..	6
BB 10518 B	No. 10 Unshelled Peanut Attachment	2	..	..	4	..	..	6
BB 10525 B	Rubber Cut-off and Baffle Plate for Shelled Peanuts	1	..	..	2	..	..	3
BB 10531 B	Brush Cut-Off and Baffle Plate for Castor Beans	1	..	..	2	..	..	3
No. 6 Press Wheel Attachment								
BA 10225 A	Press Wheel Frame	..	4	4	..	..	..	..
SD 2174 A	Wheel Scraper	..	4	4	..	..	..	..
SD 2188 A	Press Wheel	..	4	4	..	..	..	..
SD 2189 A	Rubber Tire (In lieu of 2—SD2174A)	..	2	2	..	..	..	..
Pea or Bean Attachment								
2421 B	Hopper and Lid	2	..	..	4	..	..	6
BB 10522 B	Carton of Plates	2	..	..	4	..	..	6
Scat Planter Attachment								
BA 10727 A	Disk Scraper	2	..	..	4	..	..	6
BA 10728 A	Covering Attachment Frame	2	..	..	4	..	..	6
BA 10729 A	Moldboard	2	..	..	4	..	..	6
BA 10730 A	Covering Blade	2	..	..	4	..	..	6
BA 10731 A	10 x 1 Press Wheel	2	..	..	4	..	..	6
SD 2150 A	Root Cutter	2	..	..	4	..	..	6
SD 118 A	Disk Coverers) In lieu of	2	..	..	4	..	..	6
SD 119 A	Knife Coverers) BA10730A	2	..	..	4	..	..	6

Above Scat Planter Attachment and BA10939A furnished in lieu of SD118A, BA10936A, and BA10937A.

NOTE

When planting attachments are equipped for Tractor-Axle Drive, see page 26 for assembly instructions.

GAUGE WHEEL DRIVE ON F871 SERIES BEDDERS
(When Gauge Wheels are in Front of Bedder Bars)



1. Attach drive sprocket support and sprocket to gauge wheel. Leave tapered nuts on wheel bolts and attach support and sprocket with additional lock washers and nuts provided.

2. Attach inside shaft support with chain tightener to rear bedder bar.

3. Attach outside shaft support with chain tightener to rear bedder bar.

4. Slide drive shaft through outside shaft support bearing and place gauge wheel drive sprocket on the drive shaft. Slide drive shaft through inside shaft support bearing.

5. Attach final drive sprocket to drive shaft.

6. Attach driven sprocket to gear nest drive shaft.

7. Attach male knuckles to gear nest drive shafts with drilled pin and cotter pin.

8. Extend connecting shaft and drive shaft sleeve to their maximum permissible length (depending on row spacing) and insert socket of drive shaft sleeve over male knuckle of adjoining gear nest drive shaft.

Tighten set screws in connecting shaft sleeve.

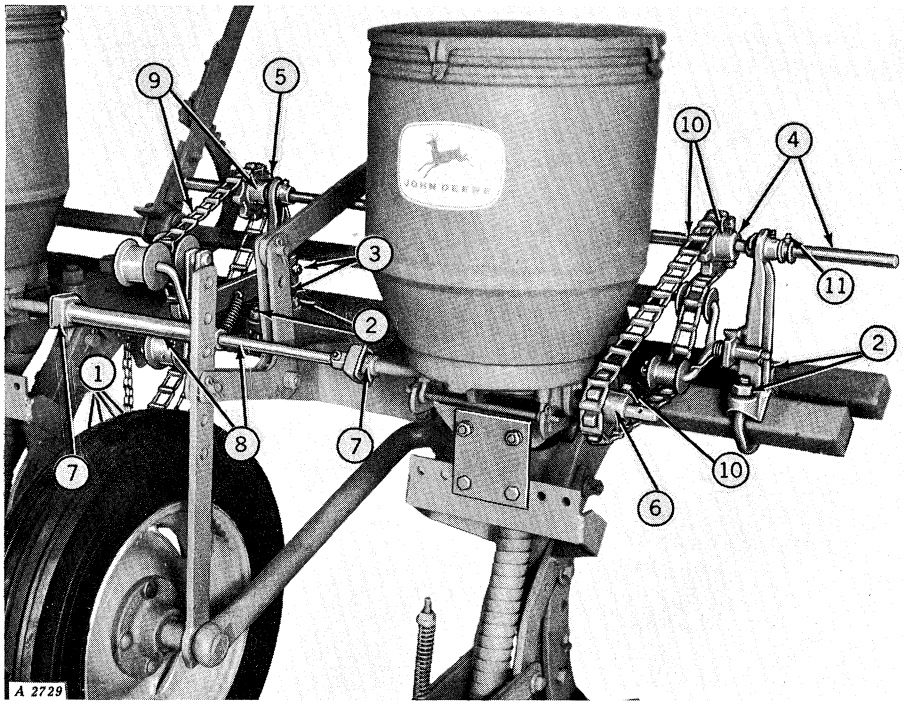
9. Align sprockets and tighten set screw on sprocket. Attach gauge wheel drive chain as shown above.

10. Align sprockets and tighten set screws on final drive and driven sprockets. Attach final drive chain as shown above.

Tighten all nuts securely.

11. Attach set screw collar on drive shaft next to shaft support bearing.

GAUGE WHEEL DRIVE ON F871 SERIES BEDDERS
(When Gauge Wheels are to the Rear of Bedder Bars)



1. Attach drive sprocket support and sprocket to gauge wheel. Leave tapered nuts on bolts and place sprocket support on gauge wheel bolts. Secure with lock washers and nuts provided.

2. Attach shaft supports to the rear bedder bar with the offset to the rear. Leave nuts loose until exact location is determined.

3. The gauge wheel drive chain tightener brackets must be assembled so the left-hand bracket is used on the right-hand inside shaft support, and the right-hand bracket is used on the left-hand inside shaft support.

4. Slide drive shaft through outside shaft support bearing and place final drive sprocket on the drive shaft. Slide drive shaft through inside shaft support bearing.

5. Attach gauge wheel drive sprocket to drive shaft.

6. Attach driven sprocket to gear nest drive shaft.

7. Attach male knuckles to gear nest drive shafts with drilled pin and cotter pin.

8. Extend connecting shaft and drive shaft sleeve to their maximum permissible length (depending on row spacing) and insert socket of drive shaft sleeve over male knuckle of adjoining gear nest drive shaft.

Tighten set screws in connecting shaft sleeve.

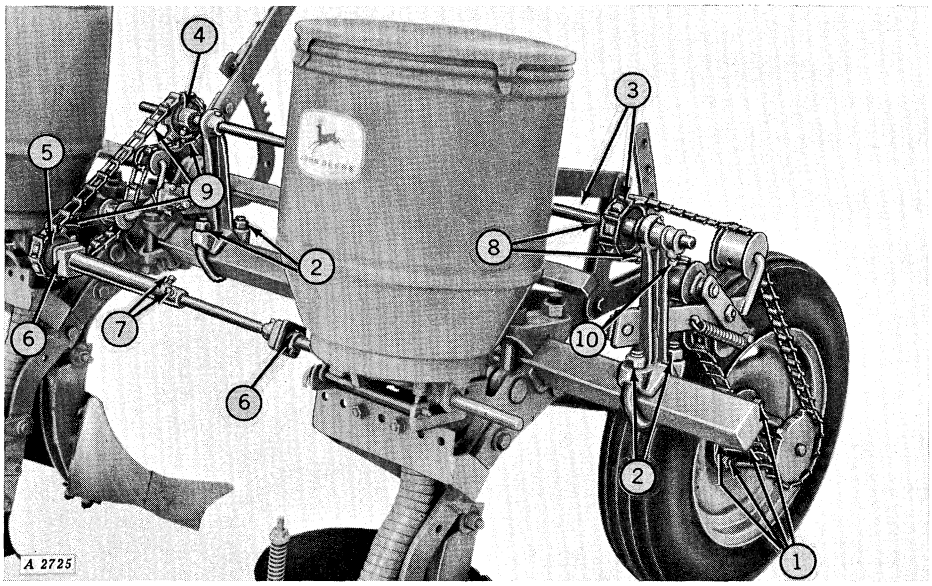
9. Align sprockets and tighten set screw on sprocket. Attach gauge wheel drive chain as shown above.

10. Align sprockets and tighten set screws on final drive and driven sprockets. Attach final drive chain as shown above.

Tighten all nuts securely.

11. Attach set screw on drive shaft next to shaft support bearing.

GAUGE WHEEL DRIVE ON F311 SERIES BEDDERS



1. Attach drive sprocket support and sprocket to gauge wheel. Leave tapered nuts on bolts and place sprocket support on gauge wheel bolts. Secure with lock washers and nuts provided.

2. Attach shaft supports with chain tighteners to bedder bar.

NOTE: Be sure offset of shaft supports are to the rear.

3. Slide drive shaft through outside shaft support bearing and place final drive sprocket on the drive shaft. Slide drive shaft through inside shaft support bearing.

4. Attach final drive sprocket to drive shaft.

5. Attach driven sprocket to gear nest drive shaft.

6. Attach male knuckles to gear nest drive shafts with drilled pin and cotter pin.

7. Extend connecting shaft and drive shaft sleeve to their maximum permissible length (depending on row spacing) and insert socket of drive shaft sleeve over male knuckle of adjoining gear nest drive shaft.

Tighten set screws in connecting shaft sleeve.

8. Align sprockets and tighten set screw on sprocket. Attach gauge wheel drive chain as shown above.

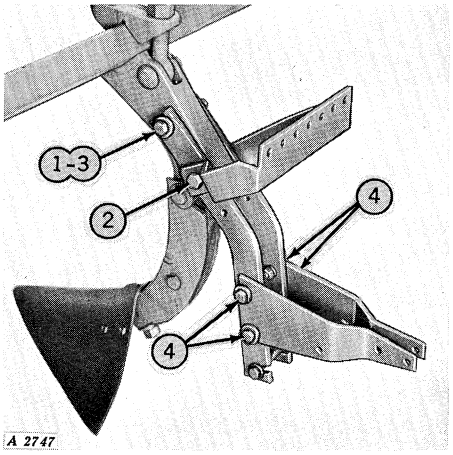
9. Align sprockets and tighten set screws on final drive and driven sprockets. Attach final drive chain as shown above.

Tighten all nuts securely.

10. Attach set screw collar on drive shaft next to shaft support bearing.

PA704, PA734, AND PA754 PLANTING ATTACHMENTS

GEAR NEST SUPPORT



1. Insert bolt with bushing through top hole in beam. Leave nut loose. Slide slotted upper end of support onto bushings.

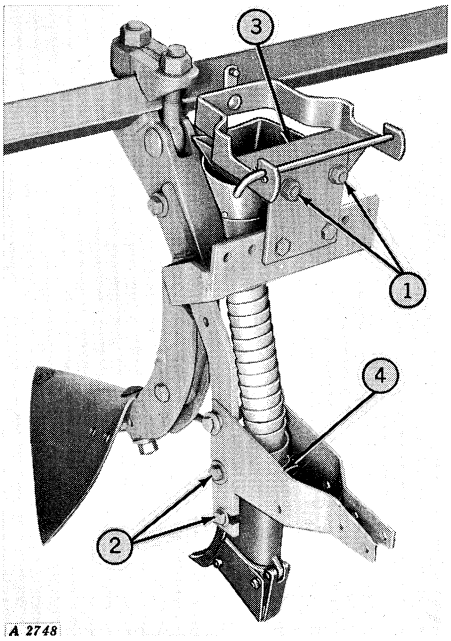
2. Attach can support to beam.

3. Tighten nut on bolt in top hole.

4. Attach plunger supports to gear nest support with bolts provided.

NOTE: Bolts with bushings are for top holes in plunger supports and bolts with washers are for bottom holes in plunger supports.

CAN SUPPORT, SUBSOILER, AND SEED TUBE



1. If gauge wheels are run behind bedder bar, secure can support to extension plate as shown above. If gauge wheels are run to front of bedder bar, secure can support to gear nest support. See illustration on page 18.

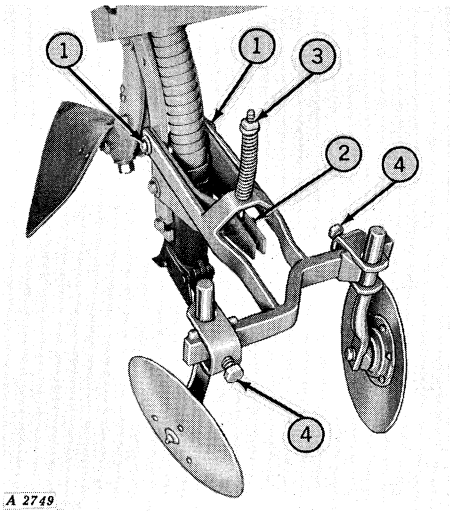
2. Attach subsoiler to gear nest support frame.

3. Attach seed tube to can support.

4. Secure lower end of seed tube to subsoiler by inserting lugs on tube into slots of subsoiler.

PA704, PA734, AND PA754 PLANTING ATTACHMENTS — Continued

COVERING FRAME AND DISK COVERERS



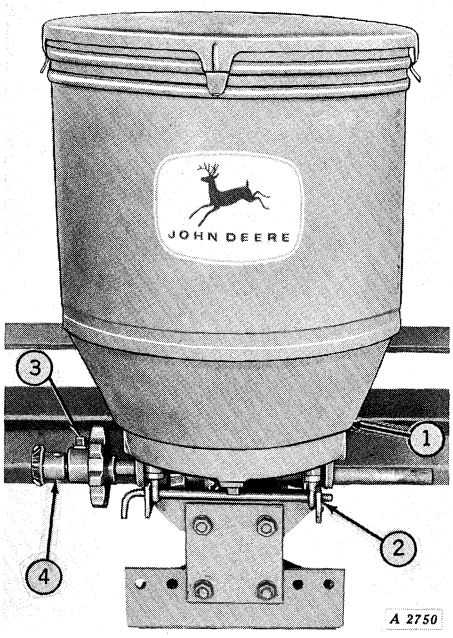
1. Attach covering frame to plunger support.

2. Secure plunger eyebolt to plunger supports with bolt provided.

3. Lower frame over plunger eyebolt and attach spring and plunger nut.

4. Attach disk coverers and tighten bolts securely.

CORN AND COTTON CAN



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 support with bottom locking pin and spring locking pin.

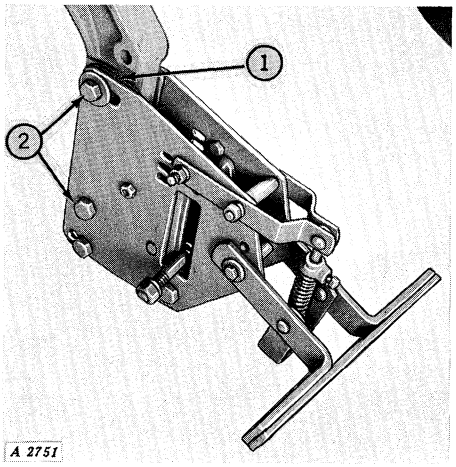
The following steps apply only to units driven directly from the drive shaft on the bedder.

3. Attach final drive sprocket to gear nest drive shaft.

4. Attach male knuckle to gear nest drive shaft with drilled pin and cotter pin.

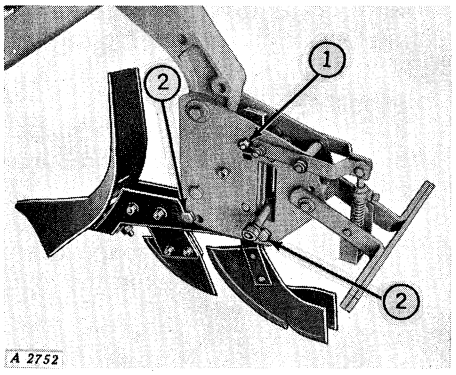
PA732 AND PA752 PLANTING ATTACHMENTS

DISK FRAME



1. Insert frame spacers between disk frame plates.
2. Attach disk frame and spacers to beam. Leave nuts loose.

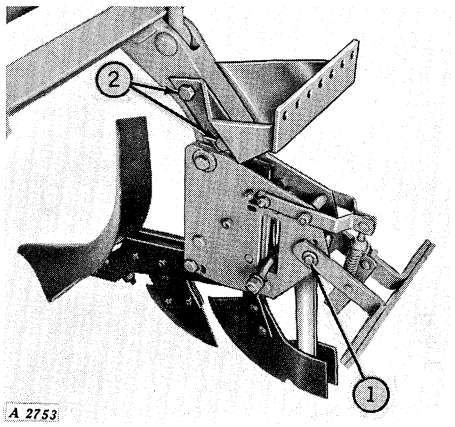
SUBSOILER AND STANDARD WITH BOTTOM AND ROOT CUTTER



1. Raise bedder and insert subsoiler through disk frame. Secure with bolt provided.
2. Attach standard with bottom and root cutter to lower holes in disk frame.

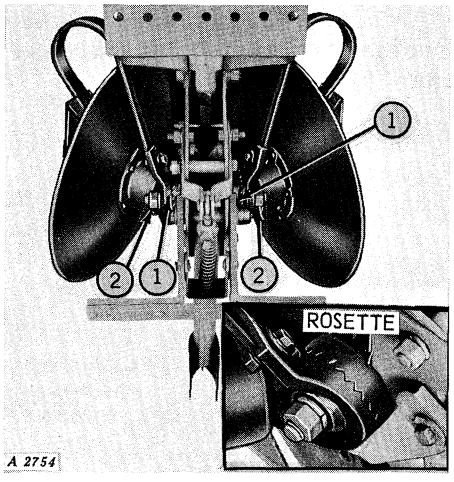
NOTE: Forward bolt must be in front hole of disk frame. Leave nuts loose.

SEED BOOT AND CAN SUPPORT



1. Remove bolt, bushings, and spacer. Slip spacer through hinge on back side of seed boot. Insert seed boot and spacer between disk frame plates and replace bolt and bushings. Tighten all bolts.
2. Attach can support to beam.

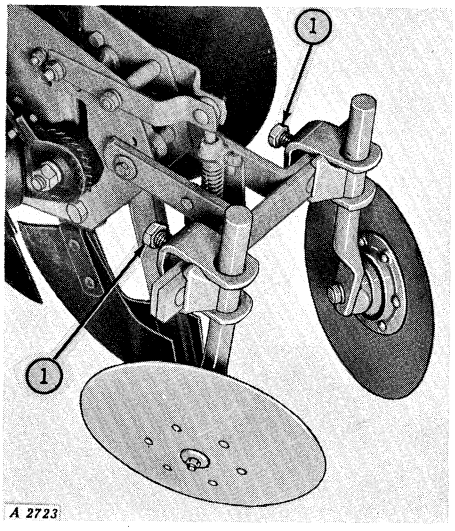
HARD GROUND OPENER



1. Attach hard ground openers by placing rosette on bolt with raised mark to the rear. See inset in illustration above.

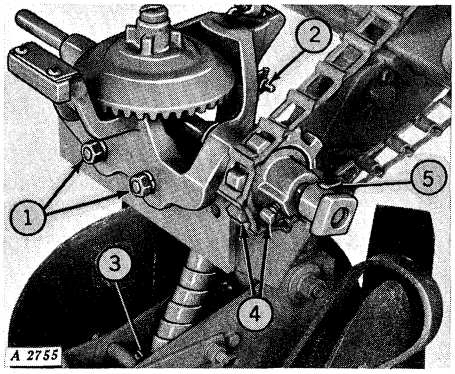
2. Attach disk and scraper bracket to the rosette with the notch in the bracket matched to notch on top of the rosette. Tighten bolt.

DISK COVERERS



1. Attach disk coverers and tighten bolts securely.

GEAR NEST AND SEED TUBE



1. Attach gear nest to can support.

2. Attach seed tube to gear nest.

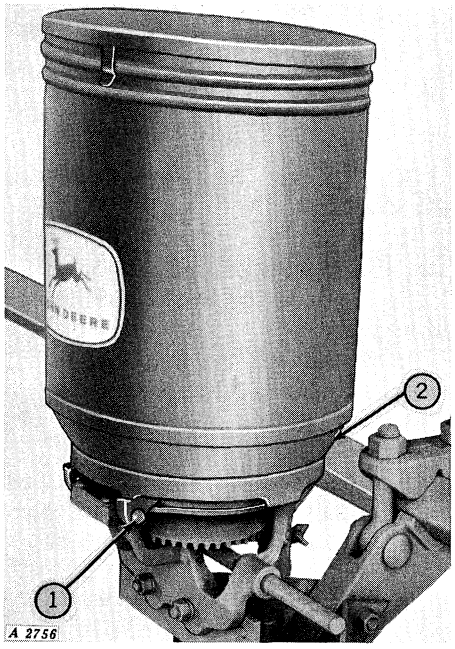
3. Insert seed tube in seed boot.

The following steps apply only to units driven directly from the drive shaft on the bedder.

4. Attach final drive sprocket to gear nest drive shaft. Attach drive chain.

5. Attach male knuckle to gear nest drive shaft with drilled pin and cotter pin.

CORN CAN

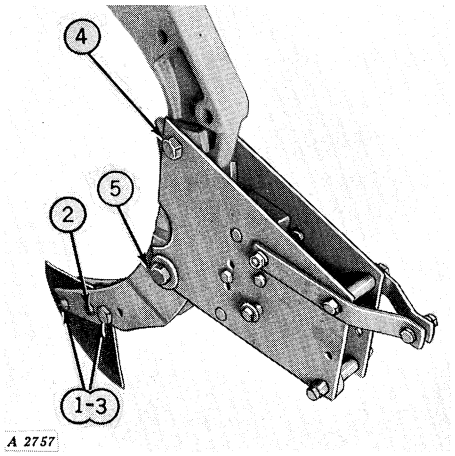


1. Insert can in gear nest hinge.

2. Secure can to gear nest with wing nut and bolt.

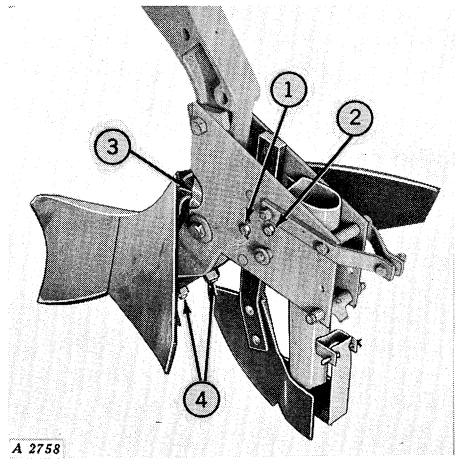
PA733 AND PA753 PLANTING ATTACHMENTS

ROOT CUTTER AND COVERING ATTACHMENT PLATES



1. Remove two spacers from standard.
2. Insert blocks and root cutter and attach with bolt supplied.
3. Replace the two bolts removed in step 1.
4. Remove 5/8 x 3-1/4-inch bolt from standard. Attach covering attachment plates to standard with 5/8 x 3-1/2-inch bolt supplied.
5. Remove lower bolt in standard, and replace with bolt and washers removed in step 4. Leave nuts loose.

SUBSOILER AND SEED BOOT



Raise bedder.

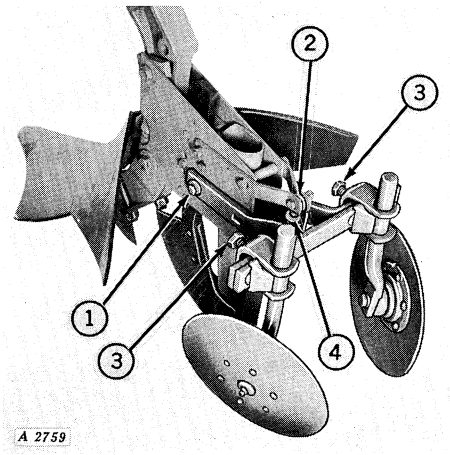
1. Insert subsoiler and attach to plates.

2. Attach seed boot.

3. Place bottom on standard, making sure that the top of frog fits into notches on standard.

4. Replace strap and nuts on bolts and tighten securely.

COVERING FRAME AND DISK COVERERS



1. Attach covering frame to plates with bolt and bushing provided.

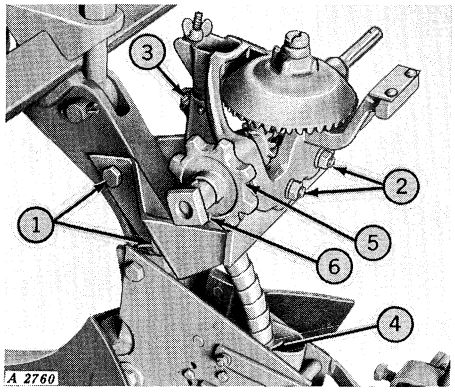
2. Attach spring plunger to spring plunger support.

3. Attach disk coverers and tighten bolts securely.

4. Adjust and tighten collar for proper spring tension.

PA733 AND PA753 PLANTING ATTACHMENTS — Continued

CAN SUPPORT, GEAR NEST, AND SEED TUBE



1. Attach can support to beam.

2. Attach gear nest to can support.

3. Attach seed tube to gear nest.

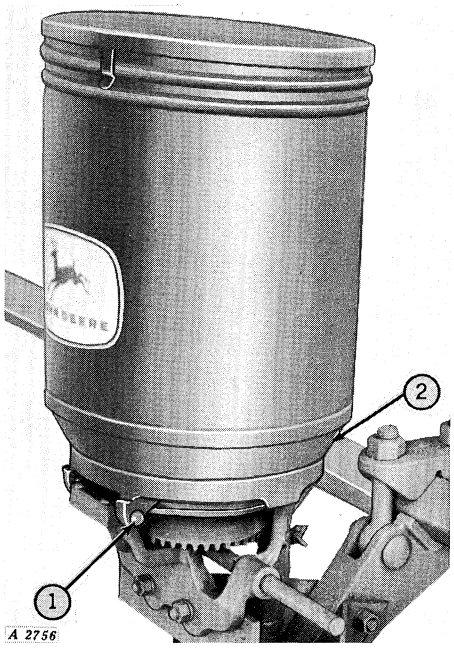
4. Insert seed tube in seed boot.

The following steps apply only to units driven directly from the drive shaft on the bedder.

5. Attach final drive sprocket to gear nest drive shaft.

6. Attach male knuckle to gear nest drive shaft with drilled pin and cotter pin.

CORN CAN



1. Insert can in gear nest hinge.

2. Secure can to gear nest with wing nut and bolt.

GREASE FITTINGS

Insert grease fittings in all locations shown in the Lubrication Chart on pages 32 and 33. Apply grease and oil to all points as indicated in the chart.

MEMORANDA

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nobody can fill them like you can!

That's what the owner of this pair of work shoes is finding out—the hard way. Through a careless action, he has become the victim of an accident. It's a mighty tough way to find out that nobody else can wear your shoes or practice safety for you. And a needless, costly lesson to learn that safety is an everyday need.

Put safety into each of your workdays; read the operator's manual thoroughly; know how to operate each machine properly and safely; take the safety precautions specified; think before you act.

Make sure you wear your "shoes" everyday. Outfit yourself with a safety program now.

As a member of the National Safety Council, we are privileged to use the Green Cross for Safety to designate not only our interest in Safety, but to emphasize and call attention to the safety precautions in this manual.

GREEN CROSS FOR SAFETY®