

7000 CONSERVATION 4-ROW AND 6-ROW NARROW MAX-EMERGE® DRAWN PLANTERS



JOHN DEERE

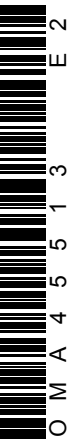
OPERATORS MANUAL

7000 CONSERVATION 4-ROW AND 6-ROW
NARROW MAX-EMERGE® DRAWN
PLANTERS

OMA45513 E2 English

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INTRODUCTION



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.

“Right-hand” and “left-hand” sides are determined by facing in the direction the planter will travel when being transported.

Record your planter serial number in the space provided on page 238. Your dealer needs this information to give you prompt, efficient service.

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



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Safety

2-3

Operate the Planter Safely

If the planter must be in a raised position while working on or near it, be certain service locks are installed.

Never ride or permit others to ride on the drawbar of the tractor or on the planter.

When using the auger fill attachment:

1. Keep all shields in place.
2. Disengage and shut off all engine and/or motor power before servicing or unclogging machine.
3. Keep hands, feet, and clothing away from power driven parts.

Transport Safely

While transporting the planter on a public road, follow safety instructions outlined under "Transporting."

Use care when transporting across rough ground.

Avoid High-Pressure Hydraulic Fluid

Escaping fluid under pressure can have sufficient force to penetrate the skin, causing serious injury. Before disconnecting lines, be sure to relieve pressure. Before applying pressure, be sure connections are tight and lines, pipes and hoses are not damaged. Use a piece of cardboard or wood, rather than hands, to search for 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.

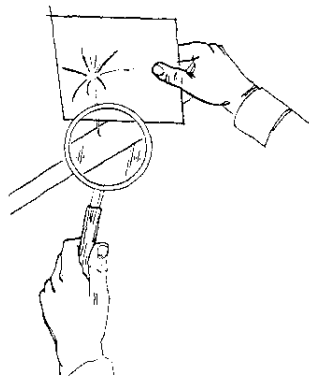
Always relieve pressure in the hydraulic system before working with hydraulic system components.

Lubricate the Planter Safely

Never clean, lubricate or adjust the planter while it is in motion.

Do Not Modify Planter

Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.



H35336

H35336

Handle Chemicals Properly

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

Free Dry Fertilizer Augers Safely

Do not use welding torch to free frozen dry fertilizer augers from auger shaft.

Fertilizer trapped inside augers could cause gas to form, which when heated, may cause augers to explode.

Mount Tires Safely

Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death. Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job. Have it done by your John Deere dealer or a qualified tire repair service.

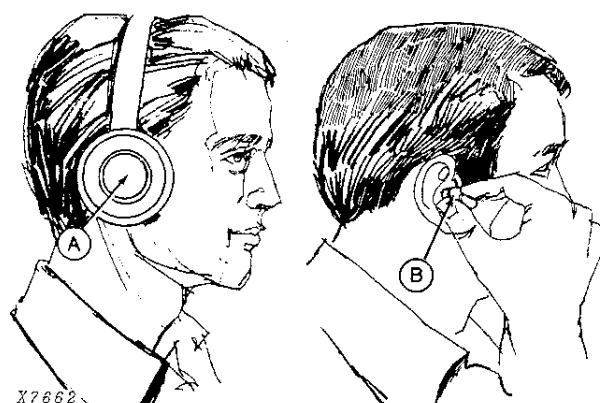
When sealing tire beads on rims, never exceed 35 psi or maximum inflation pressures specified by tire manufacturers for mounting tires. Inflation beyond this maximum pressure may break the bead, or even the rim, with dangerous explosive force. If both beads are not seated when the maximum recommended pressure is reached, deflate, reposition tire, relubricate bead and reinflate.

Detailed agricultural tire mounting instructions, including necessary safety precautions, are contained in John Deere Fundamentals of Service (FOS) Manual 55, Tires and Tracks, available through your John Deere dealer. Such information is also available from the Rubber Manufacturers Association and from tire manufacturers.

Protect Against Noise

Prolonged exposure to loud noise can cause impairment or loss of hearing.

Wear a suitable hearing protective device such as earmuffs (A) or earplugs (B) to protect against objectionable or uncomfortable loud noises.



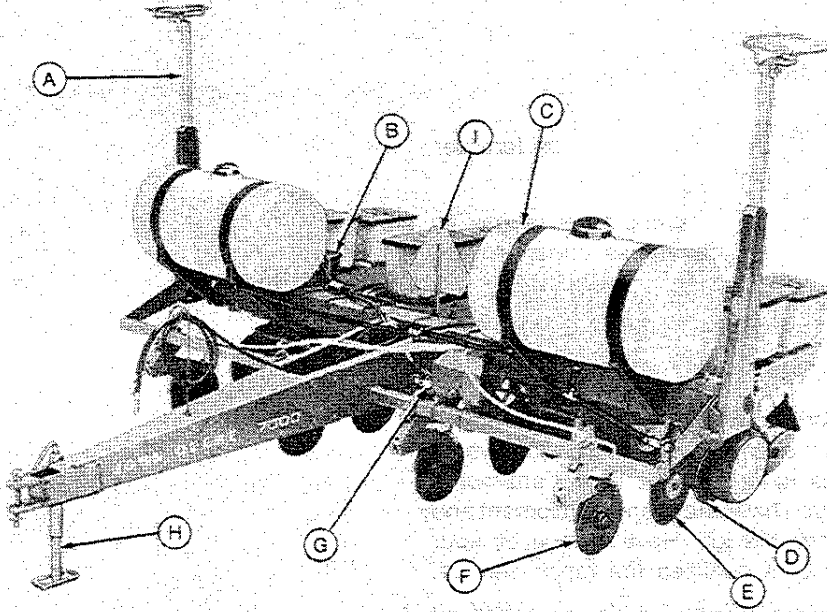
A—Earmuffs
B—Earplugs

X7662

X7662



Identification Views



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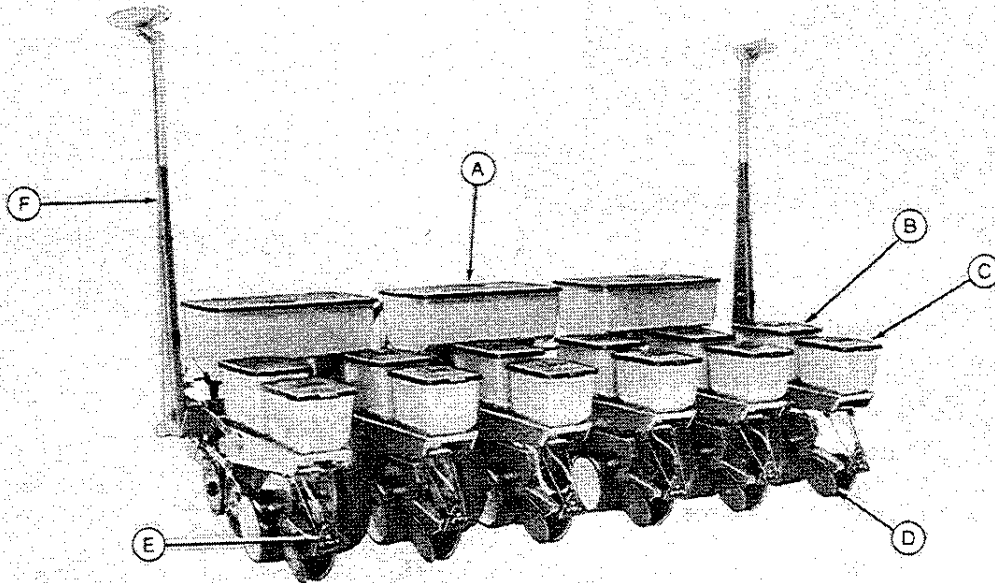
A—Marker
B—Wheel Module Hydraulic Cylinder

C—Liquid Fertilizer Tank and/or Ballast Tank
D—Tru-Vee™ Seed Opener Disks

E—Heavy-Duty Coulter
F—Double-Disk Fertilizer Openers

G—Metering Pump Valve for Quik-Fill™ Liquid Fertilizer Attachment
H—Jack Stand
I—SMV Emblem

7000 4-Row Conservation Planter With Liquid Fertilizer and/or Ballast Tanks



A20864

A20864

A—Dry Fertilizer Hopper
B—Seed Hopper

C—Insecticide and Herbicide Hopper
D—Closing Wheels

E—Herbicide Diffuser
F—Marker

7000 6-Row Narrow Conservation Planter With Dry Fertilizer Hoppers



Conservation Planting

Although the concept of conservation planting is not new, the rising costs of fuel and the need to preserve precious top soil has provided new impetus to further explore the advantages of conservation planting.

Besides lower fuel costs and soil conservation, other advantages incumbent to conservation planting include: reduced power requirements, superior moisture preservation, reduced soil compaction, expanded row crop acreage on marginal land, smaller machinery investments, more flexible planting schedules and, in some cases, improved yields.

The John Deere Conservation Tillage System has been designed to provide one essential function — precision planting.

Perhaps the pre-eminent feature in the conservation Max-Emerge planting unit is the heavy-duty coulter. By mounting the coulter directly to the planting unit, the coulter blade is positioned closer to the seed opener so the seed opener will follow in the opening made by the coulter. This increases in importance when working on hillsides.

Further, with the coulter mounted on the unit, the Max-Emerge seed depth gauging system regulates the depth of the coulter.

Weight (or ballast) is vital for adequate coulter penetration for your conservation planting system.

A heavy-duty down pressure spring system is an integral part of the new John Deere Conservation System.

The spring system performs two primary functions; it transfers the required frame weight for adequate coulter and seed opener penetration, and it strengthens the planting unit parallel arms to accommodate the toughest planting conditions.

Closing the seed furrow when conservation planting may require more closing force than is possible with regular closing wheels. An optional heavy-duty cast iron closing wheel is available to close the seed furrow.

By following the guidelines listed below, you will help to improve the performance of your Conservation Planter.

1. Operate the planter in a level position (side-to-side) with the bottom of the main frame tube approximately 20 to 22 in. (510 to 560 mm) above the ground. See page 21. The coulter blade should run approximately 3/8-in. (10 mm) above the seed opener blade. See page 28.
2. Tighten the down pressure springs until sufficient seed opener penetration is attained. See page 29.
3. Add only enough frame ballast to maintain the 20- to 22-in. (510 to 560 mm) dimension from the bottom of the main frame tube to the ground. See page 21.

Never add more ballast than would be available with available attachments (i.e. herbicide, insecticide, liquid or dry fertilizer).

4. Adjust closing wheels only tight enough to properly close the furrow. Too much pressure may cause inaccurate seed depth.
5. Select the type of coulter blade best suited to your soil conditions. See page 28.
6. Operate the planter at moderate speeds. Reduce speed when working in rough soil conditions.
7. For double crop applications, a straw chopper is recommended for use on the combine. This will minimize "residue build-up" on the coulter and help maintain the desired seed placement.
8. If equipped with dry or liquid fertilizer attachment, rough soil conditions may prevent adequate penetration by the double-disk fertilizer openers. If this is the case, a surface applicator is recommended. See page 118.
9. When planting in heavy residue, marker usage may be unadvisable as the mark left by the marker disk may not be visible from the tractor. In these circumstances, a tractor guide rod is recommended. See page 141.

IMPORTANT: The 7000 Conservation Planter is not recommended for rocky or extremely hard soil conditions.



Preparing the Tractor

HYDRAULIC PRESSURE

IMPORTANT: The operating pressure of your tractor must be a minimum of 13 790 kPa (137.9 bar) (2000 psi) for the planter hydraulic system to function properly.

The maximum operating pressure for the planter hydraulic system is 15 514 kPa (155.1 bar) (2250 psi). Exceeding this pressure is not recommended.

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

7-8

TIRE INFLATION

Inflate the tractor tires as recommended in the tractor operator's manual.

ROCKSHAFT HEIGHT STOP LOCK (4040, 4240, 4440, 4640, 4840, 8440, 8450, 8640 and 8650 Tractors)

If the tractor rockshaft is accidentally lowered with a Quik-Coupler hitch on the tractor, damage can occur to the planter hitch when turning the tractor.

To prevent accidentally lowering the rockshaft while operating the planter, install AR60331 rockshaft height stop. Installation instructions are provided with the stop.

Continued on next page

FRICTION PIN (2040, 2240, 2440, 2640 and 2940 Tractors)

If the tractor rockshaft is accidentally lowered with a Quik-Coupler hitch on the tractor, damage can occur to the planter hitch when turning the tractor.

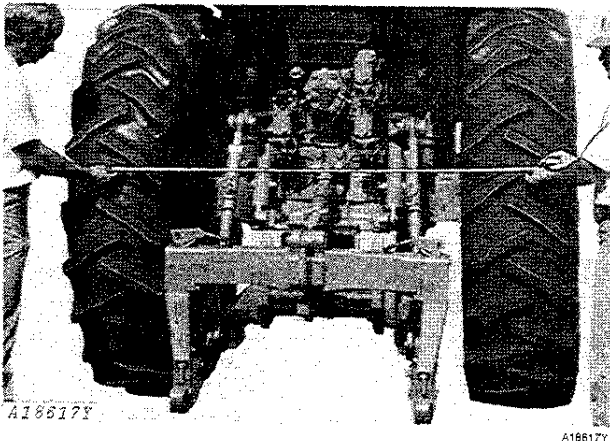
To prevent accidental lowering, be sure to install the friction pin in the control quadrant. See your tractor operator's manual.

TRACTOR DRAWBAR

7-8

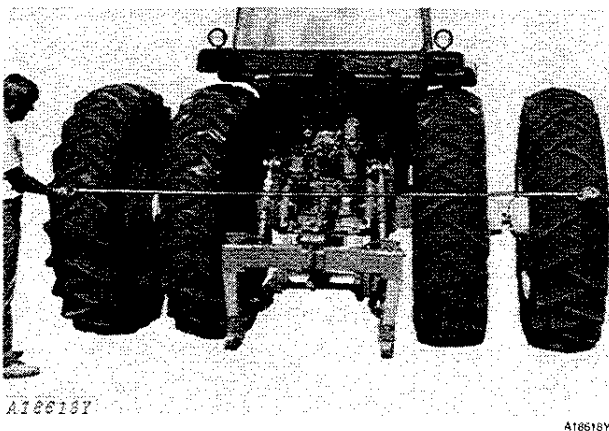
Place the drawbar approximately 17 in. (430 mm) from the ground and secure in the center of the tractor.

SETTING WHEEL TREAD



Set two-wheel drive tractor tires (center to center of tread) at twice the row spacing. For two-wheel drive tractors with dual wheels, set outer wheels as close as possible to four times the row spacing. Set four-wheel drive tractor tires (center to center of tread) as close as possible to twice the row spacing.

NOTE: Certain tire combinations may require Category 3N Quik-Coupler to obtain 60-in. (1 524 mm) wheel tread setting.

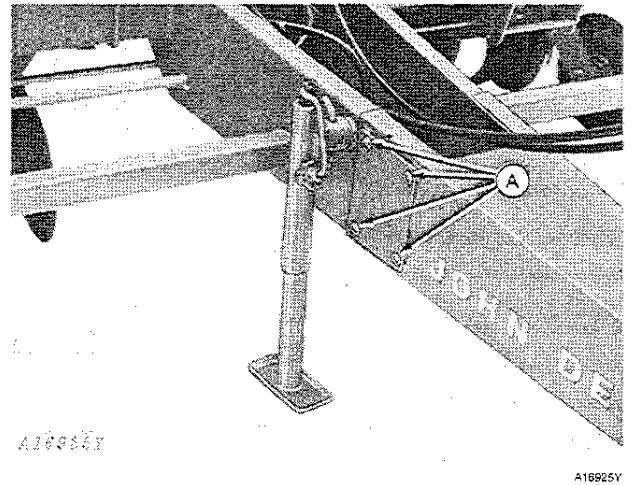




Preparing the Planter

HITCH

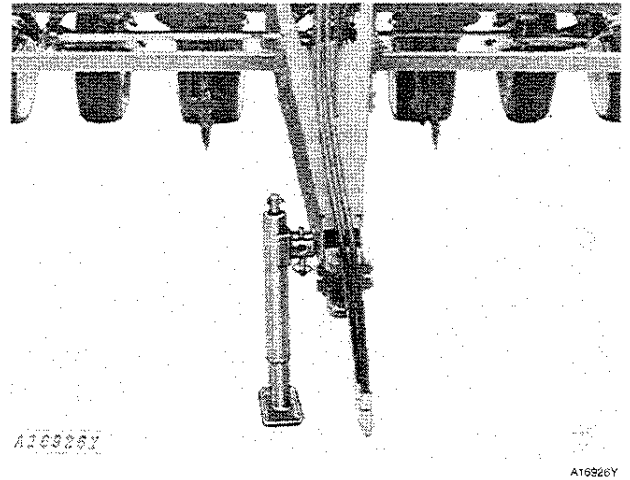
If planter has been stored with hitch removed, attach hitch to planter with 1/2 x 1-in. round head bolts at "A," and torque to 85 ft-lb (115 N·m).



9-15

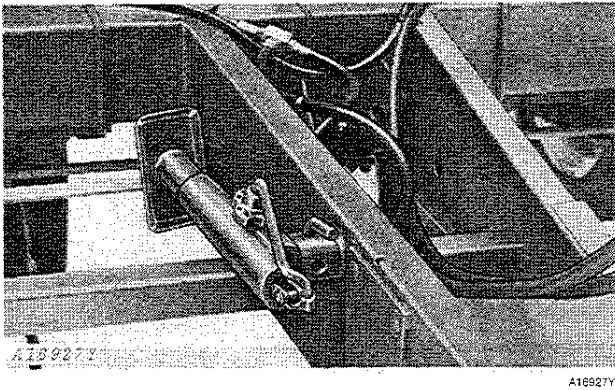
JACK

Position the jack on mount near planter hitch clevis for attaching, detaching, or storage (if hitch is not removed).



Continued on next page

10 *Preparing the Planter*



Mount in rear position during operation to provide clearance for turning. Rear mount is also used for storage with hitch removed. See "Storage" on page 113.

TIRE INFLATION

Be sure 7.60 x 15, 6 PR planter tires are inflated to 280 kPa (2.8 bar) (40 psi) of air pressure.

9-15

LUBRICATION

Be sure your planter has been properly lubricated. Consult the lubrication charts on pages 79-85 for lubricating instructions.

ROW WIDTHS

The 7000 Conservation Planter is available in the following row widths:

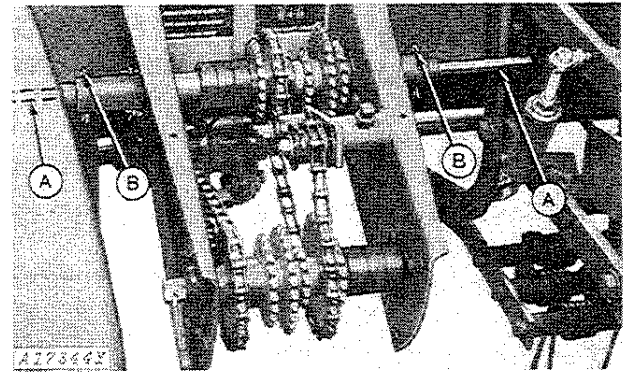
4-Row -30-, 32-, 34-, 36-, 38- and 40-in. (76, 81, 86, 91, 97 and 102 cm) row widths.

6-Row Narrow - 30-in. (76 cm) row widths.

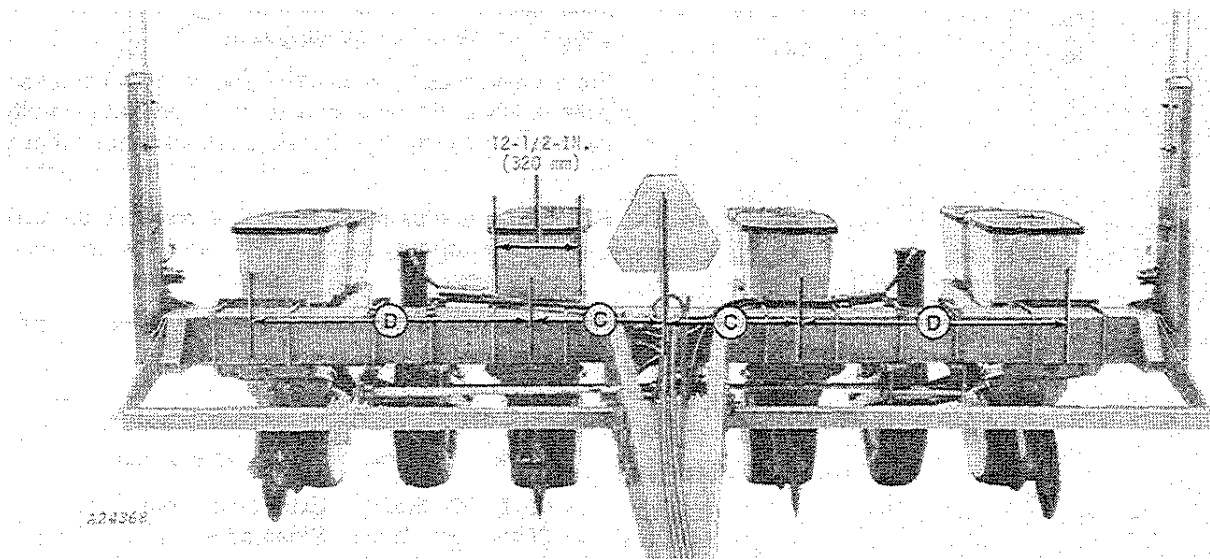
To change row widths on the 4-row planter, proceed as follows:

Empty hoppers and lower the planter until the double-disk seed openers rest on the ground.

Remove cotter pin (B) from driver and coupler and remove drill shaft (A).



A—Drill Shaft
B—Cotter Pin



C—1/2 Desired Row Spacing

D—Desired Row Spacing

Loosen U-bolts, then move all planting units, starting with inside rows. Place one inside unit one-half the desired row spacing (C) from the center of the planter frame to the center of the planting unit.

Place other unit at the desired row spacing (D) from this unit. Be certain unit mounting angles are vertical and spaced at approximately 12-1/2 in. (320 mm). Torque U-bolts uniformly, to 105 ft-lb (142 N·m).

Insert drill shaft (A) into driver and coupler and secure with cotter pin (B).

Check all drive components for interference. Check planting unit openers to insure seed tubes and openers are free of dirt or other foreign objects.

NOTE: If drill shaft does not align properly with transmission shaft, loosen planting unit drill shaft bearings, re-align shaft, and tighten bearings.

SELECTING SEED PLATES (Plate Seed Hoppers Only)

There are two ways to select seed plates. One is to follow the recommendation of the seed supplier 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 planter 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 seeds to determine the actual planting rate.

For a given spacing and travel speed, a 24-cell seed plate revolves slower than a 16-cell seed plate, resulting in better cell fill. It is therefore recommended that a 24-cell seed plate be used in all cases when available.

NOTE: See pages 56-58 for drilling distance conversion charts for 16-, 20- and 24-cell seed plates.

The following is a list of the most popular corn plates available with 16 and 24 cells.

PLATES FOR FLAT KERNELS OF CORN

16-Cell	24-Cell	Kind of Corn
H 697B	B 30070	Extra small corn
H 694B	H 1302B	Small corn
H 1572B	H 2711B	Small slender corn
H 695B	H 950B	Medium corn
H 2156B	H 2594B	Long thick corn
H 696B	H 2836B	Large corn
H 2504B	H 2848B	Medium flat slurry treated corn
H 2503B	H 2847B	Large flat slurry treated corn
*B 12498	Extra large flat slurry treated corn

*Turn H685B floor plate over (grooved side up.)

PLATES FOR ROUND KERNELS OF CORN

16-Cell	24-Cell	Kind of Corn
H 2295B	Extra small round corn
H 2043B	H 2824B	Small round corn
H 1933B	B 10853	Medium round corn
H 2044B	H 2712B	Large round corn
H 2820B	Extra large round corn

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

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