

Tillage Parts Guide



Tillage Parts Guide

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TILLAGE METHODS

Tillage tool requirements are based on the tillage method being used — primary, secondary, seeding, or crop care.

Primary Tillage



Primary tillage is aggressive, deep tillage. It usually penetrates six inches deep or deeper, and uses implements such as a chisel plow, ripper, heavy disk, or mulch tiller. Its aim is to fracture or loosen soil and mix residue and fertilizer into the tilled layer.

- Chisel Plow: 2410, 240 and 610
- Disk: 2625
- Moldboard Plow: 3710, 975, and 995
- Mulch Tiller: 714
- Rippers: 512, 2100, 2700, 2720, 913 and 915

Secondary Tillage



Secondary tillage is shallow tillage — usually less than six inches. Its goal is to kill weeds, level soil, break clods, or incorporate herbicides and nutrients. Secondary tillage uses light disks, field cultivators, mulch finishers, crumblers, or similar tools. Secondary tillage is not necessarily preceded by primary tillage.

- Disks: 425, 637, 650, 670, 2620, and 2623
- Field Cultivators: 2210
- Mulch Finisher: 2310

Vertical Tillage



Vertical tillage is any type of deep tillage that doesn't create a horizontal layer to break up surface soil compaction, or smooth out areas in a field with shallow rills from water erosion or ruts and tire tracks from agricultural equipment.

- Vertical tillage: 2623VT

Nutrient Application



Nutrient application is to obtain maximum crop yield by managing nutrients in the soil. This is accomplished by utilizing tools that allow for efficient and precise delivery of dry and liquid fertilizers.

- Nutrient Applicators: 2510C, 2510H and 2510S

Seeding Tillage



Seeding tillage is shallow — usually three to four inches. Its major goals are to dislodge weed seeds, fracture soil, and provide a temporary cavity for seed placement. It is performed by air seeders and metered drills.

- Air Hoe Drill: 1830 and 1835

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Crop-Care Tillage



Crop-care tillage begins when seeds begin to germinate. Tilling the soil kills weeds, increases aeration, and improves water infiltration — all important for optimum plant growth. If crusting occurs before emergence, a rotary hoe is used to break up the crust and uproot small weeds. Row-crop cultivators are used not only to till and shape the soil, but also to fertilize and apply pesticides.

Benefits of tillage

- A **Tillage helps soil dry sooner and more uniformly**, especially high-residue or poorly drained fields. Tillage warms the soil earlier in the spring, so you may be able to plant sooner, use longer-season seed varieties, and harvest later. Crop dries in the field, not the bin.
- B **Tillage can help reduce insect and plant disease problems.** The risk of insect damage increases as tillage decreases and more crop residue remains. The mixing action of tillage helps reduce the population of pests such as cutworms, slugs, and stalk borers.
- C **Tillage makes it easier to control soil fertility.** By applying fertilizer, lime, and manure directly into the soil, you get more even distribution to the crop and lose less beneficial material. Incorporation also reduces volatilization and runoff of surface-applied commercial nitrogen and manure.
- D **Tillage is the low-cost way to manage weeds.** Pre-plant incorporation of herbicides with a tillage pass lets you use less chemicals and, with consistent distribution, use them more effectively. Plus, tillage kills weeds and volunteer plants before the crop goes in.
- E **Tillage is the most economical solution for soil compaction in the top 8 to 12 inches of soil.** Even by eliminating all pre-plant tillage, compaction can still develop from trips over the field by combines, grain carts, fertilizer and manure applicators, trucks, and livestock.
- F **Tillage can benefit the environment.** A rough, residue-covered soil surface from fall tillage increases water absorption and reduces runoff and wind erosion. Mixing fertilizer, manure, lime, and herbicides into a residue-covered surface on your seedbed pass further reduces runoff into surface waters.

John Deere Soil-Management Solutions

There is no one-size-fits-all weed-control system. Every year is different. Crops, weeds, and weather conditions vary. Your weed-management plan needs the flexibility to handle change — and cost effectively.

Some years you may be able to accomplish your weed-management goal by spraying. Other years, tillage alone may be the best choice. Much of the time, however, combining managed tillage with a site-specific chemical application will give you the most complete and cost-effective weed kill. And it optimizes your seed and chemical investment.

Because conditions are ever changing, you may need to mix and match various ground-engaging tools from year to year on your implement. John Deere offers a full product line of premium-quality tools with a variety of product features to provide flexibility to meet these changing needs.

SWEEPS, SHOVELS & ATTACHING HARDWARE

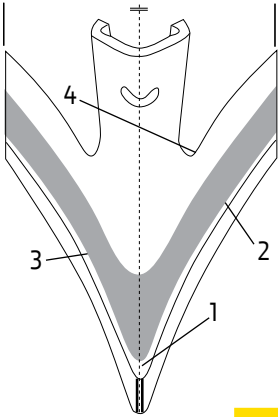


Xtra-Life sweeps

For those who demand even more from their tillage tools, John Deere offers Xtra-Life coating, a special alloy coating applied to the high-wear areas of the tillage parts (shank, point, and blade). The coating is then melted in via a high-heat process that allows the coating to blend into the base metal. The end result is tillage parts with extended life and reduced wear on parts that are key to tillage tool performance.

Wear Characteristics and Results (When should a sweep be replaced?)

Tillage tools wear during their performance. Too much wear affects weed-management results. When tools show on the following wear characteristics, the tool should be replaced.



WEAR CHARACTERISTIC	RESULT
1. Rounded point.	<ul style="list-style-type: none">Reduces penetration performance.Up force begins to occur, reducing tillage effectiveness and increasing equipment stress.
2. Cutting blade of wing reduced to 50-percent width of original wing	<ul style="list-style-type: none">Soil-mixing action is reduced and risk of wing breakage occurs.
3. Blunt edge on wing blade.	<ul style="list-style-type: none">Compacts soil at tillage surface and reduces seed germination and water infiltration activity.
4. Shank worn through (caused by shallow tillage where extremely crusty abrasive soils exist).	<ul style="list-style-type: none">The sweep breaks off the shank and is lost in the field.

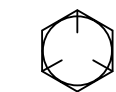
Hardware

John Deere specifies certified Grade 5 or Grade 8 hardware for use with our tillage products. These certified products provide:

- 1. High hardness ratings for long wear life and durability.
- 2. High yield-strength ratings for maximum strain resistance.
- 3. High tensile-strength ratings for excellent fracture resistance.

These characteristics are designed to provide long-wearing and reliable hardware performance.

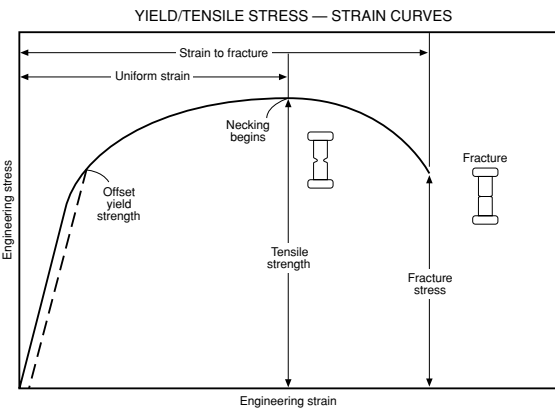
Hardware recommendations are matched to the sweep work requirements to ensure excellent sweep retention and rigidity. To ensure that proper hardware is being used, refer to the following markings to verify hardware grade rating:



Grade 5 markings
52 ft.lbs



Grade 8 markings
74 ft. lbs



Counterfeit hardware is common in the market. Use of inferior hardware can result in frequent hardware adjustments, replacement, and tillage tool-performance problems (related to loose or lost sweeps). To learn more on the torque for John Deere machines, reference DTAC solution:92123.

Product features

Product features include wing type, crown height, material thickness, and shank angle. The features and benefits of each product option follow:

Wing Type Options



- High Productivity Wing:**
- The High Productivity curved wing design allows for longer wear life and shape retention.
 - Thanks to its low wing profile, it performs at top speeds of 7-10 mph while creating less draft and soil disturbance.



- Conventional Wing**
- The conventional-wing design provides an excellent option for the lowest cost investment and minimum soil throw.



- Tru-Width™ Wing**
- The Tru-Width design provides up to 30 percent more wear life compared to the conventional wing design.
 - It reduces the potential of field striping throughout the life of the sweep, providing more consistent chemical incorporation and weed kill.

Crown Height

Choose the crown height of your sweep based on the desired results.



Low-Crown Design

- Shallow crown and flat wings
- Excellent residue flow
- Minimal ridging
- Good soil conservation



Medium-Crown Design

- Higher profile with steeper angled wings
- More soil lifting and moving action
- Excellent down force for good penetration
- Positive scouring performance

Material Thickness

Select the material thickness depending upon tillage and performance requirements.

Sweeps are typically made of 3/16-in.- or 1/4-in. material:

- 3/16-in. material is typically used where sharp edges are required for aggressive slicing and soil penetration (particularly in hard, crusty soils).
- 1/4-in. material is typically used where tough and highly abrasive soils are encountered and longer wear life is desired.

Shovels/chisels vary in thickness — 1/4-in., 5/16-in., 3/8-in., 1/2-in., 5/8-in., 3/4-in., and 7/8-in.

FIELD CULTIVATOR SWEEPS

Perma-Loc™ Part Detail

Features and Benefits

- John Deere Perma-Loc Quick Change system makes changing sweeps and spoons faster than ever before.
- Specifically designed sweep, spoon, adapter, and spring work together to ensure that the sweep locks on and stays on throughout the tillage operation.
- Heavy-duty cast adapter with locking spring ensure for a tight fit and easy installation-no tools required to install sweep.
- Quick and easy removal of the sweep with part number N237623.
- See hardware AN234540 or AN234961 on page 21

High Productivity Perma-Loc™ Field Cultivator Sweeps

Size	Thickness	Part Number	Angle	Crown	Wing	Hole Spacing	Bolthole Size
7-in.	1/4-in.	N331099	47-deg.	Low	Medium	NA	NA
9-in.	1/4-in.	N331100	47-deg.	Low	Medium	NA	NA
10-in.	1/4-in.	N331101	47-deg.	Low	Medium	NA	NA
12-in.	1/4-in.	N331102	47-deg.	Low	Medium	NA	NA

Perma-Loc Tru-Width™ Field Cultivator Sweeps

Size	Thickness	Part Number	Angle	Crown	Wing	Hole Spacing	Bolthole Size
7-in.	1/4-in.	N238333	47-deg.	Medium	Medium	NA	NA
7-in.	1/4-in.	N238333XLT*	47-deg.	Medium	Medium	NA	NA
9-in.	1/4-in.	N238334	47-deg.	Medium	Medium	NA	NA
9-in.	1/4-in.	N238334XLT*	47-deg.	Medium	Medium	NA	NA
10-in.	1/4-in.	N238335	47-deg.	Medium	Medium	NA	NA
10-in.	1/4-in.	N238335XLT*	47-deg.	Medium	Medium	NA	NA
12-in.	1/4-in.	N238336	47-deg.	Medium	Medium	NA	NA
12-in.	1/4-in.	N238336XLT*	47-deg.	Medium	Medium	NA	NA

*XLT= Xtra-Life coating on wings, points, and stem.

Perma-Loc Tru-Width Spoons

Size	Thickness	Part Number	Angle	Crown	Wing	Hole Spacing	Bolthole Size
2-in.	1/4-in.	N403769	47-deg.	Medium	Medium	NA	NA
3-in.	1/4-in.	N238756	51-deg.	Medium	Medium	NA	NA
4-in.	1/4-in.	N238757	51-deg.	Medium	Medium	NA	NA

Perma-Loc Adapters

Part Description	Where Used	Part Number
47-deg., Curved	Field Cultivators and Mulch Finishers with Curved Standards (Deere Applications)	N237614
47-deg., Flat	Field Cultivators and Mulch Finishers with Flat Standards (Competitive-DMI, CNH, Bourgault)	N330001
51-deg., Curved	Air Hoe Drills/Spoons	N237616

Perma-Loc Springs

47-deg. Adapter Locking Spring	NA	N237620
51-deg. Adapter Locking Spring	NA	N237621

Perma-Loc Removal Tool

Optional Tool Helps Make Perma-Loc Sweep Removal Quick and Easy	NA	N237623
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High Productivity and Tru-Width™ Sweeps



Examples of Tru-Width sweeps for secondary and crop care tillage. 47-deg. shank angle.



N331103 (7-in.)



N182043 (12-in.)

Features and Benefits

- Unique, proven, Tru-Width design maintains cutting width throughout sweep life, which can extend 30 percent beyond that of conventional sweeps.
- Available in low and medium crown.
- Ridged medium crown ensures long point life for ongoing consistent tillage action. It parts soil and improves mixing action, chemical incorporation, and weed eradication.
- Wing angle is set on each type to optimize performance related to respective tillage/seeding practices.
- Tru-Width wing design provides even seed distribution throughout the life of the sweep.
- Excellent fit on other makes of tillage equipment for improved performance.
- Because of their unique wraparound design, Tru-Width sweeps provide even draft and maximum holding power.
- Sweeps will fit most competitive equipment.
- See hardware AN234100 or AN234101 on page 21

High Productivity Field Cultivator Sweeps

Size	Thickness	Part Number	Angle	Crown	Wing	Hole Spacing	Bolthole Size
7-in.	1/4-in.	N331103	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
9-in.	1/4-in.	N331104	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
10-in.	1/4-in.	N331105	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
12-in.	1/4-in.	N331106	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.

Tru-Width Field Cultivator Sweeps

Size	Thickness	Part Number	Angle	Crown	Wing	Hole Spacing	Bolthole Size
7-in.	1/4-in.	N182039	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
7-in.	1/4-in.	N182039XLT*	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
9-in.	1/4-in.	N182113	47-deg.	Low	Medium	1 3/4-in.	7/16-in.
9-in.	1/4-in.	N182040	47-deg.	Medium	Medium	1 3/4-in.	7/16-in..
9-in.	1/4-in.	N182040XLT*	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
10-in.	1/4-in.	N182114	47-deg.	Low	Medium	1 3/4-in.	7/16-in.
10-in.	1/4-in.	N182041	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
10-in.	1/4-in.	N182041XLT*	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
11-in.	1/4-in.	N182042	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
11-in.	1/4-in.	N182042XLT*	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
12-in.	1/4-in.	N182043	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
12-in.	1/4-in.	N182043XLT*	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
16-in.	1/4-in.	N182117	47-deg.	Low	Medium	1 3/4-in.	7/16-in.

*XLT = Xtra-Life coating on wings, point, and stem.

Conventional Sweeps



Examples of 47-deg.-shank-angle conventional-wing sweeps for primary and seeding tillage.



N188991 (4 1/2-in.)



N188995 (12-in.)

Features and benefits

- Nose angle is precisely set for excellent soil penetration.
- Both low and medium-crown wing designs provide excellent soil mixing and residue retention.
- Wing ends are clipped for minimum soil side throw.
- 3/16-in. and 1/4-in. thickness options are dependent upon soil conditions and sweep applications.
- Provide an economical tillage value.
- Sweeps will fit most competitive equipment.

Conventional Field Cultivator Sweeps

Size	Thickness	Part Number	Angle	Crown	Wing	Hole Spacing	Bolthole Size
4 1/2-in.	3/16-in.	N130165	43-deg.	Medium	Medium	1 3/4-in.	3/8-in.
7-in.	3/16-in.	N130166	43-deg.	Medium	Medium	1 3/4-in.	3/8-in.
7-in.	3/16-in.	N130166XLT*	43-deg.	Medium	Medium	1 3/4-in.	3/8-in.
9-in.	3/16-in.	N130167	43-deg.	Medium	Medium	1 3/4-in.	3/8-in.
9-in.	3/16-in.	N130167XLT*	43-deg.	Medium	Medium	1 3/4-in.	3/8-in.
10-in.	3/16-in.	N130168	43-deg.	Medium	Medium	1 3/4-in.	3/8-in.
10-in.	3/16-in.	N130168XLT*	43-deg.	Medium	Medium	1 3/4-in.	3/8-in.
12-in.	1/4-in.	N973MN	43-deg.	Medium	Medium	1 3/4-in.	3/8-in.
4 1/2-in.	1/4-in.	N188991	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
4 1/2-in.	1/4-in.	N188991XLT*	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
7-in.	1/4-in.	N188992	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
7-in.	1/4-in.	N188992XLT*	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
9-in.	1/4-in.	N188993	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
9-in.	1/4-in.	N188993XLT*	47-deg.	Medium	Medium	1 3/4-in.	7/16-in..
10-in.	1/4-in.	N188994	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
10-in.	1/4-in.	N188994XLT*	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.
12-in.	1/4-in.	N188995	47-deg.	Medium	Medium	1 3/4-in.	7/16-in.

*XLT = Xtra-Life coating on wings, point, and stem.

Hardware

Kit	Part Number	Quantity	Part Number	Part Description
AN234100	50		10H1073	7/16-in. x 1 1/2-in. Bolt
			24M7043	.060-in. x 1 5/32-in. Washer
			14H813	7/16-in. Hex Nut
AN234101	50		N189527	No. 3 Repair Head Special Plow Bolt
			24H1305	.060-in. x 1 3/32-in. Washer
			14H812	3/8-in. Hex Nut

Tru-Width™ Sweeps



Examples of Tru-Width sweeps for primary and seeding tillage. Medium crown, 51-deg. shank angle.



N182045 (10-in.)



N182038 (18-in.)

- Features and Benefits
- Unique, proven, Tru-Width design maintains cutting width throughout sweep life, which can extend 30 percent beyond that of conventional sweeps.
 - Available in low and medium crown.
 - Ridged medium crown ensures long point life for ongoing consistent tillage action. It parts soil and improves mixing action, chemical incorporation, and weed eradication.
 - Wing angle is set on each type to optimize performance related to respective tillage/seeding practices.
 - Tru-Width wing design provides even seed distribution throughout the life of the sweep.
 - Excellent fit on other makes of tillage equipment for improved performance.
 - Because of their unique wraparound design, Tru-Width sweeps provide even draft and maximum holding power.
 - Sweeps will fit most competitive equipment.

Tru-Width Chisel Plow Sweeps

Size	Thickness	Part Number	Angle	Crown	Wing	Hole Spacing	Bolthole Size
8-in.	1/4-in.	N182044	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
10-in.	1/4-in.	N182045	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
12-in.	1/4-in.	N182046	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
12-in.	1/4-in.	N182035	51-deg.	Medium	Wide	2 1/4-in.	1/2-in.
12-in.	1/4-in.	N182035XLT*	51-deg.	Medium	Wide	2 1/4-in.	1/2-in.
14-in.	1/4-in.	43CP14TW	43-deg.	Medium	Wide	2 1/4-in.	1/2-in.
14-in.	1/4-in.	N182036	51-deg.	Medium	Wide	2 1/4-in.	1/2-in.
14-in.	1/4-in.	N182036XLT*	51-deg.	Medium	Wide	2 1/4-in.	1/2-in.
16-in.	1/4-in.	43CP16TW	43-deg.	Medium	Wide	2 1/4-in.	1/2-in.
16-in.	1/4-in.	N182037	51-deg.	Medium	Wide	2 1/4-in.	1/2-in.
16-in.	1/4-in.	N182037XLT*	51-deg.	Medium	Wide	2 1/4-in.	1/2-in.
18-in.	1/4-in.	43CP18TW	43-deg.	Medium	Wide	2 1/4-in.	1/2-in.
18-in.	1/4-in.	N182038	51-deg.	Medium	Wide	2 1/4-in.	1/2-in.
18-in.	1/4-in.	N182038XLT*	51-deg.	Medium	Wide	2 1/4-in.	1/2-in.
20-in.	1/4-in.	N182111	51-deg.	Low	Wide	2 1/4-in.	1/2-in.
24-in.	1/4-in.	N232829	51-deg.	Medium	Wide	2 1/4-in.	1/2-in.
24-in.	1/4-in.	N233903*	51-deg.	Medium	Wide	2 1/4-in.	1/2-in.

*XLT=Xtra-Life coating on wings, point, and stem

Hardware

Kit	Part Number	Quantity	Part Number	Part Description
AN234104		50	10H1236	1/2-in. x 2 1/4-in. Bolt
		50	12H301	1/2-in. Washer
		50	14H960	1/2-in. Heavy Hex
AN234105		50	10H1237	1/2-in. x 2 1/2-in. Bolt
		50	12H301	1/2-in. Washer
		50	14H960	1/2-in. Heavy Hex

Conventional Sweeps



Examples of medium crown, 51-deg.-shank-angle conventional-wing sweeps for primary and seeding tillage.



N130179 (8-in.)



N130185 (20-in.)

- Features and Benefits
- Nose angle is precisely set for excellent soil penetration.
 - Both low and medium-crown wing designs provide excellent soil mixing and residue retention.
 - Wing ends are clipped for minimum soil side throw.
 - 3/16-in.- and 1/4-in. thickness options are dependent upon soil conditions and sweep applications.
 - Provide an economical tillage value.
 - Sweeps will fit most competitive equipment utilizing the characteristics in the charts.

Conventional Chisel Plow Sweeps

Size	Thickness	Part Number	Angle	Crown	Wing	Hole Spacing	Bolthole Size
6 1/2-in.	1/4-in.	N130188	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
6 1/2-in.	1/4-in.	N130188XLT*	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
8-in.	1/4-in.	N130179	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
8-in.	1/4-in.	N130179XLT*	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
10-in.	1/4-in.	N130180	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
10-in.	1/4-in.	N130180XLT*	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
12-in.	1/4-in.	N130181	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
12-in.	1/4-in.	N130181XLT*	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
14-in.	1/4-in.	47CP014	47-deg.	Medium	Medium	2 1/4-in.	1/2-in.
14-in.	1/4-in.	N130182	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
14-in.	1/4-in.	N130182XLT*	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
16-in.	1/4-in.	47CP016	47-deg.	Medium	Medium	2 1/4-in.	1/2-in.
16-in.	1/4-in.	N130177	51-deg.	Low	Narrow	2 1/4-in.	1/2-in.
16-in.	1/4-in.	N130183	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
16-in.	1/4-in.	N130183XLT*	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
18-in.	1/4-in.	47CP018	47-deg.	Medium	Medium	2 1/4-in.	1/2-in.
18-in.	1/4-in.	N130178	51-deg.	Low	Narrow	2 1/4-in.	1/2-in.
18-in.	1/4-in.	N130178XLT*	51-deg.	Low	Narrow	2 1/4-in.	1/2-in.
18-in.	1/4-in.	N130184	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
18-in.	1/4-in.	N130184XLT*	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
20-in.	1/4-in.	N130185	51-deg.	Medium	Medium	2 1/4-in.	1/2-in.
24-in.	1/4-in.	N188290	51-deg.	Low	Medium	2 1/4-in.	1/2-in.

*XLT=Xtra-Life coating on wings, point, and stem

Hardware

Kit	Part Number	Quantity	Part Number	Part Description
AN234104		50	10H1236	1/2-in. x 2 1/4-in. Bolt
		50	12H301	1/2-in. Washer
		50	14H960	1/2-in. Heavy Hex
AN234105		50	10H1237	1/2-in. x 2 1/2-in. Bolt
		50	12H301	1/2-in. Washer
		50	14H960	1/2-in. Heavy Hex

Heel Sweeps



- Features and Benefits
- Heat-treated for extra strength and durability.
 - By using with chisel points, operators are able to chisel and cultivate at the same time, optimizing soil conditions for their crops.

Heel Sweeps

Size	Thickness	Part Number	Stem Angle	Crown	Hole Spacing	Bolthole Size
16-in.	1/4-in.	N237718	NA	NA	2 1/4-in.	1/2-in.
18-in.	1/4-in.	N237719	NA	NA	2 1/4-in.	1/2-in.

Chisel Points for Heel Sweeps, Double Point

Size	Thickness	Part Number
2-in. x 14-in.	5/8-in.	N130189
2-in. x 16-in.	5/8-in.	N130190
4-in. x 14 1/2-in.	3/8-in.	N130193

Single-Point Chrome Cap

Size	Thickness	Part Number
2-in. x 12-in.	7/8-in.	N237890
2-in. x 12-in.	7/8-in.	AN231796

Heavy-Duty Double Point

Size	Thickness	Part Number
2-in. x 16-in.	7/8-in.	N237910

Hardware

Kit Part Number	Quantity	Part Number	Part Description
For-N130189, N130190, and N130193			
AN234106	50	10H1238	1/2-in. x2 3/4-in. Bolt
	50	14H960	1/2-in. Heavy Hex
	50	12H301	1/2-in. Washer
For-AN231796 with heel sweep			
No kit order	50	N234753	3/8-in. x 1 3/4-in. Grade 8 Bolt
individual parts	50	10H1239	1/2-in. x 3-in. Hex
	50	24H1305	13/32-in. x 13/16-in. x 1/16-in. Washer
For-AN231796 without heel sweep			
AN234106	50	10H1238	1/2-in. x2 3/4-in. Bolt
	50	14H960	1/2-in. Heavy Hex
	50	12H301	1/2-in. Washer
For-N237890 and N237910			
No kit order	50	N234753	3/8-in. x 1 3/4-in. Grade 8 Bolt
individual parts	50	19H3057	1/2-in. x 2 3/4-in. Hex
	50	24H1305	13/32-in. x 13/16-in. x 1/16-in. Washer

Chisel Parts



A—Single-piece twisted slash point (N237720)



B—Points for moldboard assembly (N237724)



C—Moldboards for moldboard assembly (N237729)

Fits Brillion, Brinkley, Bush Hog, Case, Glencoe, Hiniker, John Deere, KMC, Krause, Landoll, Noble, Taylor, and Wil-Rich (three-piece assembly parts).

Chisel Parts

Part Number	Description	OEM Number
A — Single-piece twisted slash point		
N237720	1/2- x 4- x 26-in. Twisted Slash Point (RH)	
N237721	1/2- x 4- x 26-in. Twisted Slash Pointtt (LH)	
N237722	1/2- x 4- x 26-in. Twisted Slash Point, Hard Faced (RH)	
N237723	1/2- x 4- x 26-in. Twisted Slash Point, Hard Faced (LH)	
B — Points for moldboard twist assembly		
N237724	1/2- x 4-in. Soil-Saver Point (RH)	6135
N237725	1/2- x 4-in. Soil-Saver Point (LH)	6167
N237726	1/2- x 4-in. Soil-Saver Point, Hard Faced (RH)	6136
N237727	1/2- x 4-in. Soil-Saver Point, Hard Faced (LH)	6168
C — Moldboards for moldboard assembly		
N237728	1/2- x 4- x 18-in. Soil-Saver Moldboard (RH)	6137
N237729	1/2- x 4- x 18-in. Soil-Saver Moldboard (LH)	6138

Hardware for Points, Moldboards, and Twist Assemblies

Part Number	Description	OEM Number
PMCH1500	1/2-in. Clipped Head Bolt	
12H301	1/2-in. Hex Nut	

Twisted Shovels



- Features and Benefits
- Offer versatility for your primary tillage operation.
 - 24-in. concaves shovel generates “soil ribbons” that tack down residue and reduce erosion damage.
 - 22-in. flat shovel provide excellent soil/trash mixing and compaction control.

Concave Twisted Shovels

Size	Part Number	Material Thickness	Weight (lb.)
3-in. x 24-in. LH	N181913	1/2-in.	9.00
3-in. x 24-in. RH	N181912	1/2-in.	9.00
4-in. x 24-in. LH	N181907	1/2-in.	11.00
4-in. x 24-in. RH	N181906	1/2-in.	11.00

Flat Twisted Shovels

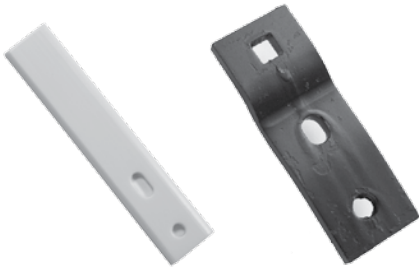
Size	Part Number	Material Thickness	Weight (lb.)
3-in. x 22-in. LH	N130195	3/8-in.	6.00
3-in. x 22-in. RH	N130194	3/8-in.	6.00
3-in. x 22-in. LH	N182107	1/2-in.	8.00
3-in. x 22-in. RH	N182108	1/2-in.	8.00
4-in. x 22-in. LH	N182109	1/2-in.	10.40
4-in. x 22-in. RH	N182110	1/2-in.	10.40

Seeding Shovels and Weeding Knives



Seeding Shovels			
Size/Description	Part Number	Material Thickness	Weight (lb.)
1 3/16-in. Double-Point Shovel	B910M	3/16-in.	0.70
1 3/4-in. Double-Point Shovel	K144M	3/16-in.	0.95
1 5/8-in. x 8-in. Double-Point Shovel	N182058	1/4-in.	1.00
1 3/4-in. x 10-in. Double-Point Shovel (43-deg.)	N506M	5/16-in.	1.13
1 3/4-in. x 10-in. Double-Point Shovel (47-deg.)	N188990	5/16-in.	1.13
2-in. x 10-in. Double-Point Shovel (55-deg.)	N182029	5/16-in.	1.59
2 1/4-in. Single-Point Wraparound Shovel	M15012	1/4-in.	1.57
4-in. Single-Point Wraparound Shovel	M17050	1/4-in.	2.25
Weeding Knives			
Size	Part Number	Weight (lb.)	
26-in. LH	A38642	6.90	
26-in. RH	A38641	6.90	

Miscellaneous products



Size/Description	Part Number
Sweep Extender (3 holes, for field cultivators)	N189542
1 3/4-in. x 9-in. Shank Protectors (poly)	TY15990
2-in. x 10-in. Shank Protectors (poly, for chisel plows)	TY15991

ROW-CROP CULTIVATOR SWEEPS

Tru-Width™ Sweeps



- Features and Benefits
- Unique, proven, Tru-Width design maintains cutting width throughout sweep life, which can extend 30 percent beyond that of conventional sweeps.
 - Available in low and medium crown.
 - Ridged medium crown ensures long point life for ongoing consistent tillage action. It parts soil and improves mixing action, chemical incorporation, and weed eradication.
 - Wing angle is set on each type to optimize performance related to respective tillage/seeding practices.
 - Tru-Width wing design provides even seed distribution throughout the life of the sweep.
 - Excellent fit on other makes of tillage equipment for improved performance.
 - Because of their unique wraparound design, Tru-Width sweeps provide even draft and maximum holding power.

Tru-Width Row-Crop Cultivator Sweeps						
Size	Thickness	Part Number	Stem Angle	Crown	Hole Spacing	Bolthole Size
24-in.	1/4-in.	N232829	51-deg.	Medium	2 1/4-in.	7/16-in.
24-in. XLT	1/4-in.	N233903*	51-deg.	Medium	2 1/4-in.	7/16-in.

*XLT=Xtra-Life coating on wings, point, and stem

Hardware			
Kit	Part Number	Quantity	Part Description
AN234095	N181782	50	7/16-in. x 1 3/4-in. Bolt
	12H293	50	7/16-in. Lock Washer
	14H813	50	7/16-in. Hex Nut
AN234104	10H1236	50	1/2-in. x 2 1/4-in. Bolt
	12H301	50	1/2-in. Washer
	14H960	50	1/2-in. Heavy Hex Nut

Conventional Row-Crop Cultivator Sweeps



Features and Benefits

- Nose angle is precisely set for excellent soil penetration.
- Both low and medium-crown wing designs provide excellent soil mixing and residue retention.
- Wing ends are clipped for minimum soil side throw.
- 3/16-in. and 1/4-in. thickness options are dependent upon soil conditions and sweep applications.
- Provide an economical tillage value.
- Available for many all-makes applications.

Conventional Row-Crop Cultivator Sweeps

Size	Thickness	Part Number	Angle	Crown	Wing	Hole Spacing	Bolthole Size
4-in.	3/16-in.	N239040	55-deg.	Medium	Narrow	2-in.	7/16-in.
4-in.	3/16-in.	N239040XLT*	55-deg.	Medium	Narrow	2-in.	7/16-in.
6-in.	3/16-in.	N239041	55-deg.	Medium	Narrow	2-in.	7/16-in.
6-in.	3/16-in.	N239041XLT*	55-deg.	Medium	Narrow	2-in.	7/16-in.
8-in.	3/16-in.	N239042	55-deg.	Medium	Narrow	2-in.	7/16-in.
8-in.	3/16-in.	N239042XLT*	55-deg.	Medium	Narrow	2-in.	7/16-in.
10-in.	3/16-in.	N239043	55-deg.	Medium	Narrow	2-in.	7/16-in.
10-in.	3/16-in.	N239043XLT*	55-deg.	Medium	Narrow	2-in.	7/16-in.
12-in.	1/4-in.	N239033	55-deg.	Medium	Medium	2-in.	7/16-in.
12-in.	1/4-in.	N239033XLT*	55-deg.	Medium	Medium	2-in.	7/16-in.
14-in.	1/4-in.	N239034	55-deg.	Medium	Medium	2-in.	7/16-in.
14-in.	1/4-in.	N239034XLT*	55-deg.	Medium	Medium	2-in.	7/16-in.
16-in.	1/4-in.	N239035	55-deg.	Medium	Medium	2-in.	7/16-in.
16-in.	1/4-in.	N239035XLT*	55-deg.	Medium	Medium	2-in.	7/16-in.

*XLT=Xtra-Life coating on wings, point, and stem

3/4 Conventional Row-Crop Cultivator Sweeps

Description	Size	Thickness	Part Number	Angle	Crown	Wing	Hole Spacing	Bolthole Size
3/4 Wing — RH	5-in.	3/16-in.	N239036	55-deg.	Medium	Narrow	2-in.	7/16-in.
3/4 Wing — LH	5-in.	3/16-in.	N239037	55-deg.	Medium	Narrow	2-in.	7/16-in.
3/4 Wing — RH	6 1/2-in.	3/16-in.	N239038	55-deg.	Medium	Narrow	2-in.	7/16-in.
3/4 Wing — LH	6 1/2-in.	3/16-in.	N239039	55-deg.	Medium	Narrow	2-in.	7/16-in.
3/4 Wing — RH	7 3/4-in.	3/16-in.	N187688	55-deg.	Medium	Narrow	2-in.	7/16-in.
3/4 Wing — LH	7 3/4-in.	3/16-in.	N187689	55-deg.	Medium	Narrow	2-in.	7/16-in.

Hardware

Kit Part Number	Quantity	Part Number	Part Description
AN181518	50	09H1761	7/16-in. x 2 1/2-in. Bolt
	50	24M7180	.105-in. x 1/2-in. Washer
	50	14H813	7/16-in. Hex Nut
AN181520	50	09H1765	7/16-in. x 1 1/2-in. Bolt
	50	24H1327	.105-in. x 15/32-in. Washer
	50	14H813	7/16-in. Hex Nut
AN181521	50	03H1528	5/8-in. x 1 1/2-in. Bolt
	50	24H1139	.105-in. x 1 1/16-in. Washer
	50	14H760	5/8-in. Hex Nut

S-Tine Sweeps and Shovels for Row-Crop Cultivators



Features and Benefits

- Built with unique wraparound design, leading to a tight square shank-to-standard fit.
- Produces even draft and maximum holding power.

S-Tine Sweeps and Shovels for Row-Crop Cultivators

Size	Thickness	Part Number	Angle	Crown	Hole Spacing	Bolthole Size
1 5/8-in. x 8-in.	1/4-in.	N182058	43-deg.	Medium	NA	3/8-in.
1 5/8-in. x 8-in. Kit	1/4-in.	AN232008	43-deg.	Medium	NA	3/8-in.
2 3/4-in.	1/4-in.	N182059	43-deg.	Medium	NA	3/8-in.
2 3/4-in. Kit	1/4-in.	AN232009	43-deg.	Medium	NA	3/8-in.
2 3/4-in.	1/4-in.	N182059XLT*	43-deg.	Medium	NA	3/8-in.
4-in.	1/4-in.	N182060	43-deg.	Medium	NA	3/8-in.
4-in. Kit	1/4-in.	AN232010	43-deg.	Medium	NA	3/8-in.
4-in.	1/4-in.	N182060XLT*	43-deg.	Medium	NA	3/8-in.
4-in. V-Pattern	1/4-in.	N182076	43-deg.	Medium	NA	3/8-in.
4-in. V-Pattern Kit	1/4-in.	AN232011	43-deg.	Medium	NA	3/8-in.
4-in. V-Pattern	1/4-in.	N182076XLT*	43-deg.	Medium	NA	3/8-in.
7-in.	1/4-in.	N182061	43-deg.	Medium	NA	3/8-in.
7-in.	1/4-in.	N182061XLT*	43-deg.	Medium	NA	3/8-in.
9-in.	1/4-in.	N182081	43-deg.	Medium	NA	3/8-in.

*XLT=Xtra-Life coating on wings, point, and stem

Hardware

Kit Part Number	Quantity	Part Number	Part Description
AN232013	50	N234753	3/8-in. x 1 3/4-in. Bolt
	50	24H1139	.060-in. x 13/32-in. Washer
	50	14H931	3/8-in. Hex Nut

Rotary Hoe Wheel



Sixteen curved tines on each wheel explode soil crust and uproot weeds. These wheels can also fit Yetter, M&W, and Hiniker rotary hoes.

- Triple-sealed bearing for long life.
- Spoon-formed tine for excellent aeration and weed eradication.
- Accurately peened rivets strengthen wheel construction for long life.

Rotary Hoe Wheel

Description	Part Number	Weight (lb.)	Diameter (in.)
Rotary Hoe Wheel	AN142663	9.35	18
Rotary Hoe Wheel	AN142664	12.80	21

Precision Plus Fin and Precision Plus Narrow-Wing S-Tine Sweeps



- Features and Benefits
- Greatly reduces the likelihood of shoe breakage, because the shoe slotted, tang-inserted, and double welded (top and bottom).
 - The sweeps reduce twisting and have an extended product life.

Precision Plus Fin and Precision Plus Narrow-Wing S-Tine Sweeps

Size	Thickness	Part Number
8-in.	3/16-in.	AN231772
10-in.	3/16-in.	AN231773
12-in.	3/16-in.	AN231774
14-in.	3/16-in.	AN231775

Hardware

Part	Part Number	Part Description
Bolt	03H1746	1/2-in. x 1 1/4-in. Bolt
Nut	14H1040	1/2-in. Hex Nut

Precision Plus Narrow-Wing Sweeps

Size	Thickness	Part Number
8-in.	3/16-in.	N182082
10-in.	3/16-in.	N182083
12-in.	1/4-in.	N182084
14-in.	1/4-in.	N182085

Hardware

Kit Part Number	Quantity	Part Number	Part Description
AN232013	50	N234753	3/8-in. x 1 3/4-in. Grade 8 Bolt
	50	24H1305	.060-in. x 1 3/32-in. Washer
	50	14H931	3/8-in. Hex Nut

Attaching Hardware Information

Part Number	Hardware Kit Description	Bolt	Description	Kit Breakdown		
				Nut	Description	Washer
AN181518	Sweep Bolts (50 – 7/16 x 2 1/2)	09H1761	7/16-in. x 2 1/2-in.	14H813	7/16-in. Hex	24M7180
AN181519	Part no longer a kit — order individual pieces	03H1857	5/8-in. x 2 3/4-in.	14H1039	5/8-in. Hex	24H1192
AN181520	Sweep Bolts (50 – 7/16 x 1 1/2)	09H1765	7/16-in. x 1 1/2-in.	14H813	7/16-in. Hex	24H1327
AN181521	Sweep Bolts (50 – 5/8 x 1 1/2)	03H1528	5/8-in. x 1 1/2-in.	14H760	5/8-in. Hex	24H1139
AN232013	Sweep Bolts (50 – 3/8 x 1 3/4)	N234753	3/8-in. x 1 3/4-in.	14H931	3/8-in. Hex	24H1305
AN234095	Sweep Bolts (50 – 7/16 x 1 3/4)	N181782	7/16-in. x 1 3/4-in.	14H813	7/16-in. Hex	24H1327
AN234096	Sweep Bolts (50 – 7/16 x 2 1/4)	10H1160	7/16-in. x 2 1/4-in.	14H813	7/16-in. Hex	24H1327
AN234097	Sweep Bolts — Special Head	N181784	7/16-in. x 2 1/4-in.	14H813	7/16-in. Hex	24H1327
AN234098	Sweep Bolts — Special Head	N181783	7/16-in. x 2-in.	14H813	7/16-in. Hex	24H1327
AN234099	Sweep Bolts (50 – 3/8 x 1 1/4)	10H1027	3/8-in. x 1 1/4-in.	14H812	3/8-in. Hex	24H1305
AN234100	Sweep Bolts (50 – 7/16 x 1 1/2)	10H1073	7/16-in. x 1 1/2-in.	14H813	7/16-in. Hex	24M7043
AN234101	Sweep Bolts (50 – Special Head)	N189527	No. 3 Head	14H812	3/8-in. Hex	24H1305
AN234102	Sweep Bolts (50 – 7/16 x 1 3/4)	10H1158	7/16-in. x 1 3/4-in.	14H813	7/16-in. Hex	24M7043
AN234103	Sweep Bolts (50 – 1/2 x 2) R.O.	10H1246	1/2-in. x 2-in.	14H960	1/2-in. Heavy Hex	12H301
AN234104	Sweep Bolts (50 – 1/2 x 2 1/4)	10H1236	1/2-in. x 2 1/4-in.	14H960	1/2-in. Heavy Hex	12H301
AN234105	Sweep Bolts (50 – 1/2 x 2 1/2) R.O.	10H1237	1/2-in. x 2 1/2-in.	14H960	1/2-in. Heavy Hex	12H301
AN234106	Sweep Bolts (50 – 1/2 x 2 3/4) R.O.	10H1238	1/2-in. x 2 3/4-in.	14H960	1/2-in. Heavy Hex	12H301
AN234168	Sweep Bolts (50 – 7/16 x 2)	10H1159	7/16-in. x 2-in.	14H813	7/16-in. Hex	24H1327
AN234540	Perma-Loc™ Hardware Bundle (50 PCS) (FC)	10H1159	7/16-in. x 2-in.	14H813	7/16-in. Hex	24H1327
AN234961	Perma-Loc™ Hardware Bundle (50 PCS) (200# Standard FC)	10H1160	7/16-in. x 2 1/4-in.	14H813	7/16-in. Hex	24H1327

Part Number	Hardware Kit Description	Tru-Width™ FC	Conventional Wing FC	Perma-Loc™ FC	Tru-Width™ CP	Conventional Wing CP	Conventional Row-Crop FC	Tru-Width™ Row-Crop FC	S-Tine	Precision Plus
Sweep Bolts										
AN181518	50 – 7/16 x 2 1/2						x			
AN181520	50 – 7/16 x 1 1/2						x			
AN181521	50 – 5/8 x 1 1/2									
AN232013	50 – 3/8 x 1 3/4								x	x
AN234095	50 – 7/16 x 1 3/4							x		
AN234096	50 – 7/16 x 2 1/4									
AN234097	Special Head									
AN234098	Special Head									
AN234099	50 – 3/8 x 1 1/4									
AN234100	50 – 7/16 x 1 1/2	x	x							
AN234101	50 – Special Head	x	x							
AN234102	50 – 7/16 x 1 3/4									
AN234103	50 – 1/2 x 2 R.O.									
AN234104	50 – 1/2 x 2 1/4				x	x				
AN234105	50 – 1/2 x 2 1/2 R.O.				x	x				
AN234106	50 – 1/2 x 2 3/4 R.O.									
AN234168	50 – 7/16 x 2									
Perma-Loc™ Hardware Bundle										
AN234540	50 PCS — FC			x						
AN234961	50 PCS 200# Standard FC			x						



RIPPER POINTS

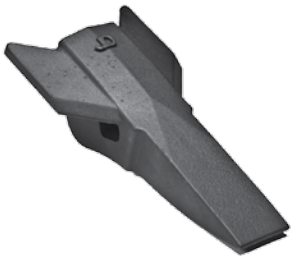


Ripper Points

RIPPER POINTS

John Deere ripper points, available in regular and heavy-duty, are highly rock resistant for longer wear. They fluff the soil for improved root penetration and water percolation, and the patented wing profile creates less draft for easier pulling and lower horsepower requirements.

LaserRip™ II Ripper Points



- Features and Benefits
- High-Performance for those operating in difficult conditions.
 - Critical wear areas are thicker for increased wear life.
 - Exclusive cast material ensures resistance to rock chipping.
 - Patented enlarged mounting holes for bolt head protection and retention.
 - Fits John Deere and many competitive machines with 1 1/4-in parabolic standards.

LaseRip II Ripper Points

LaserRip II Points to fit 1¼-in. Standard for John Deere (Front mounting hole)

Size	Applications	Part Number	Standard
Wingless	Deere	N400763	1 ¼-in. Parabolic
5-in.	Deere	N400764	1 ¼-in. Parabolic
7-in.	Deere	N400765	1 ¼-in. Parabolic
10-in.	Deere	N400766	1 ¼-in. Parabolic

LaserRip II Points to fit 1¼-in. Standard for CNH/DMI/Brillion (Rear mounting hole)

Size	Application	Part Number	Standard
Wingless	CNH/DMI/Brillion	N401043	1 ¼-in. Parabolic
7-in.	CNH/DMI/Brillion	N401044	1 ¼ -in. Parabolic

LaserRip Ripper Points for All-Makes Applications



- Features and Benefits
- Exclusive cast material ensures high resistance to rock chipping.
 - Critical wear areas thicker for increased wear life.

Regular-Duty LaserRip Ripper Points

Size	Applications	Part Number	Standard
2 ¾-in.	Sunflower	N237223	1 ¼-in. Parabolic
7-in.	Sunflower	N237224	1 ¼-in. Parabolic
2 ¾-in.	DMI	N236412	1 ½-in. Parabolic
7-in.	DMI	N400739	1 ½-in. Parabolic
10-in.	DMI	N400740	1 ½-in. Parabolic

Min-Till LaserRip Points

- Features and Benefits
- Designed to create minimum soil disturbance

Min-Till LaserRip Point



Size	Part Number	Standard	Soil Surface Profile	Fracturing	Penetration	Speed Sensitivity	Residue Retention
Wingless	N262903	¾-in.	Ultra Low Disturbance	Good	Best	Best	Best
7-in.	N262740	¾-in.	Moderate Disturbance	Best	Best	Good	Good
10-in.	N262902	¾-in.	Low Disturbance	Best	Better	Better	Better

Ripper Points



Steel Ripper Points

- Features and Benefits
- Designed for highly abrasive soils.
 - Economical way to meet standard tillage needs.



Regular-Duty Steel Ripper Points — 3/4-in. thickness

Size	Part Number	Material Thickness	Type
2 1/4-in. x 3/4-in.	AA21507	3/4-in.	Standard
3-in. x 3/4-in.	AN260481	3/4-in.	Single Capped (3 3/4-in.)
3-in. x 3/4-in.	AN260482	3/4-in.	Double Capped (7 1/2-in.)

Heavy-Duty Steel Ripper Points — 1 1/4-in. thickness

Size	Part Number	Material Thickness	Type
2 1/2-in. x 1 1/4-in.	AP39487	1 1/4-in.	Standard
3-in. x 1 1/4-in.	AP39496	1 1/4-in.	Single Chrome Capped (3 3/4-in.)
3-in. x 1 1/4-in.	AP39491	1 1/4-in.	Full-Cover Chrome Capped (10-in.)



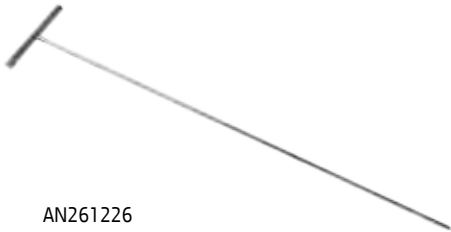
Coverboards

- For use with LaserRip points on 1 1/4-in. and 1 1/2-in. parabolic standards: John Deere, Case, and DMI.
- Move more soil and bury residue.
- Fit John Deere 2700 Mulch Ripper.
- Not for use with wear shins.

Sizes available: 4-in. to 8-in. N262718 (4-in.), N262719 (6-in.), N262720 (8-in.)

Soil Probe

- To detect soil compaction, use of the soil probe is recommended.
1. Press probe into ground slowly with consistent down pressure.
 2. Note the depth at which it takes added force to penetrate (typically the top of the compacted layer).
 3. Continue to force the probe through this layer and note the depth where less force is needed (typically the bottom edge).
 4. Continue in different areas of the field to diagnose compacted areas.
 5. Set opening depth one inch below the bottom edge of the compacted layer.



AN261226

NUTRIENT APPLICATION



Nutrient Application

Nutrient Application Parts

Conventional Applicator Knives

- Features and Benefits
- Chrome carbide point for excellent wear
 - Available as a standard knife or with vapor tube
 - Universal mounting hole for All-Makes applications
 - Shank is high strength steel

Anhydrous Knife

Part Number	Description	Thickness
AN231685	Conventional Applicator knife	1/2in
AN401419	Conventional Anhydrous knife	1/2in
AN401420	Conventional Anhydrous knife with Vapor	1/2in
AN401421	Mole Anhydrous knife	1/2in
AN401422	Mole Anhydrous knife with Vapor	1/2in

Heavy-Duty Strip-Till Knives

- Features and Benefits
- Provides consistent nutrient placement along with superior compaction shattering.
 - Cast-chrome pin-on point provides excellent lifting and fracturing without soil inversion or blowout.
 - Points can easily be switched out in season between the mole style and wingless style, depending on soil and field conditions
 - Reference page 27 for Heavy Duty part detail

Replaceable Pin-on Points

- Features and Benefits
- New wingless point provides a low disturbance option for customers who want to run shallow and fast
 - Mole-style option for customers requiring more aggressive tillage and compaction shattering
 - Chrome-carbide for excellent wear performance
 - Points easily switched between mole and wingless style, depending on soil and field conditions
 - Wingless point available as a service part only

Replaceable Pin-On Points

Part number	Description
AN236320	Mole-Style Replaceable Pin-On Point Kit
AN237013	Wingless Replaceable Pin-On Point Kit

Nutrient Application Part Detail

Application	Part Number	Quantity	Part Descriptions
Anhydrous	AN236291	1	Knife Configuration (3/8-in. stainless steel anhydrous ammonia tube) Poly liquid and vapor tube not included with knife. The poly tubes (liquid and vapor) come with the anhydrous flow system for the toolbar.
Anhydrous, Dry, and Vapor	AN236292	1	Knife Configuration (3/8-in. stainless steel anhydrous ammonia, 1 3/4-in. dry, and 3/4-in. vapor tube) Poly liquid and vapor tube not included with knife. The poly tubes (liquid and vapor) come with the anhydrous flow system for the toolbar.
Anhydrous and Dry	AN236292	1	Knife Configuration (3/8-in. stainless steel anhydrous ammonia and 1 3/4-in. dry tube) Poly liquid and vapor tube not included with knife. The poly tubes (liquid and vapor) come with the anhydrous flow system for the toolbar.
Anhydrous and Liquid	AN236293	1	Knife Configuration (3/8-in. stainless steel anhydrous ammonia and 1/2-in. liquid tube) Poly liquid and vapor tube not included with knife. The poly tubes (liquid and vapor) come with the anhydrous flow system for the toolbar.
Anhydrous and Vapor	AN236293	1	Knife Configuration (3/8-in. stainless steel anhydrous ammonia and 3/4-in. vapor tube) Poly liquid and vapor tube not included with knife. The poly tubes (liquid and vapor) come with the anhydrous flow system for the toolbar.
Anhydrous, Liquid, and Vapor	AN236293	1	Knife Configuration (3/8-in. stainless steel anhydrous ammonia, 1/2-in. liquid, and 3/4-in. vapor tube) Poly liquid and vapor tube not included with knife. The poly tubes (liquid and vapor) come with the anhydrous flow system for the toolbar.
Mole-Style Replaceable	AN236320	1	Cast-Chrome Pin-On Point with A35642 Roll Pin
Wingless Replaceable Pin-On Point Kit	AN237013	1	Cast-Chrome Reduced Disturbance Pin-On Point with A35462 Roll Pin
Mounting Hardware	19M7481	2	M16 x 80 Cap Screw
	14M7589	2	M16 Locknut

DISK BLADES AND BEARINGS

Disk Blades



Farms and farm equipment manufacturers are requiring a lot more of their disk blades these days. These blades are expected to operate at high speeds as part of heavier implements pulled by higher horse-power tractors.

Even at moderate tractor speed, a disk blade will grind itself against the soil 4,000 times an hour. Each rotation means another flexing of the metal. The impact of its edge against a granite boulder tops 500,000 psi.

At John Deere, we talk about disk blades using two different names: John Deere O.E.M. disk blades and All-Makes blades.

John Deere Diamond Series Blades are made specifically for John Deere equipment and meet a high set of standards. These standards, JDS 100, ensure that John Deere blades are made from the finest steel, heat-treated properly, and dimensionally correct.

The Diamond Series Blades for All-Makes line of disk blades uses these same high standards for blades that fit competitive equipment.

Value

Value — that is the goal of each and every disk blade, whether it is John Deere or All Makes. Each is designed to meet a specific need of the customer and give excellent value for the dollar spent. Only you, the John Deere dealer, can offer the farmer such a variety of products, whether it's for a John Deere machine or a competitive brand.

Disk Blade Material

Rockwell Hardness



In addition to micro-alloy content, the hardness of the steel is important. A properly hardened blade will resist wear, but too much hardness can cause a blade to be brittle. Because a disk blade is constantly flexing, it must have the ability to bend without breaking.

The heat-treat process must be closely monitored to control hardness within a small range. This maximizes wear resistance, but ensures the blade will be flexible and absorb impacts without failure.

All lines of disk blades offered by John Deere are within this range. In addition, great care is taken to make sure the hardness is consistent throughout the blade. This consistency is one of the hallmarks of all the blades sold by John Deere.

Performance Features

Improved Wear Rates reduce part-replacement costs. On average, customers are covering more acres than they have in the past. As a result, wear rates are a larger issue. The window of opportunity is not getting any larger, so it is imperative that the implement and its parts perform.

- John Deere Diamond Series disk blades are up to 17 percent harder than the old high-carbon John Deere disk blades they replace.
- Micro-alloy steel can be hardened to higher levels (roughly 7 to 10 percent higher than traditional materials) while maintaining excellent durability.
- The new micro-alloy steel yields extended life and durability.
- Manufacturing processes are simpler, providing for better consistency.

Improved Flex Capability when striking anchored objects. This is an important feature, as customers are using higher-horsepower tractors to pull disks, thus pulling them at higher rates of speed to increase productivity. The improved flexibility of the blade will help keep the customer up and running instead of replacing broken blades.

- Micro-alloy steel is more ductile, increasing its ability to flex more readily when severe side loads occur.
- The improved ductility also reduces the potential for edge deformation.

Sharper Edges provide for more aggressive penetration and improved cutting action. With today's genetically modified seed, the residue (such as that from BT corn stalks) is much more challenging to deal with. Also as yields continue to increase, customers have to deal with more residue than ever before. All of these are reasons why sharper and longer-lasting blades provide our customers with more uptime.

- The micro-alloy material tends to wear more on the sidewall in proportion to the diameter. This provides a sharper, more aggressive edge compared to high-carbon disk blades that tend to reduce in diameter as they wear.

Ball Test

The "Ball Test" involves drilling a 1/2-in. hole in the blade and then trying to force a 1-in. ball through that hole. The resulting cracks then indicate the effectiveness of the method of inclusion control. A dominant crack in one direction is a failure. Random cracks that do not exceed a 3-in. diameter circle indicate that inclusion control was good and the blade passes inspection.

Wear Test

Wear tests can indicate which blades have the proper micro-alloy levels and hardness to resist wear, but the tests give no indication of the ability to absorb shock and impacts, or the dimensional accuracy of the blade. Wear tests are done under laboratory conditions by running sand between a coupon cut from a blade and a rubber wheel.

Toughness Test



To measure toughness, the steel industry has developed the Tensile and Yield test and the Charpy Impact test.

In the Tensile and Yield test, a coupon is literally pulled apart. The measurement of the amount of force applied before the material begins to stretch is its yield point. The point at which it finally breaks is its tensile strength.

In the Charpy Impact test, coupons are subjected to increasingly stronger blows until breakage occurs.

These two tests give a real indication of the toughness of a disk blade and its ability to flex without breaking and to withstand impacting such materials as rocks and stumps.

Basic Shapes of Disk Blades



The *spherical*, the most common shape, is so called because it represents a slice from a sphere. Because there are no flat areas on this blade, its curvature must be consistent and exact if the mating parts are to fit correctly against the blade. Consistent diameter and depth (concavity) are good indications that the curvature is correct. Many John Deere blades are spaced out to two decimal places as a way of maintaining control over this characteristic.



A variation of the spherical blade is the *raised flat center*. This style is commonly found on Case-IH-brand disks. With this style of blade, it is very important that the flat area in the center be in the same plane as the edge of the blade and that the diameter of this area be correct. If these two characteristics are not controlled, there can be problems with wobble and eccentricity.



The *conical* represents a section cut from a cone. This is a John Deere design still popular in some soils and tillage conditions. With this blade, diameter, concavity, and the center area must be controlled as well as the degree of the angle of the cone itself. Because of the aggressive action of this blade, dimensional accuracy must be maintained for the entire disk to work properly.

Vertical Tillage



The front plain blade has a shallow concavity to enable operation at narrower blade spacing's which helps in the sizing of residue and also assists in operating at higher speeds.



The rear 13-wave blade delivers maximum vertical residue soil mixing, soil aeration and residue anchoring. The waves help reduce drag and consequently wear and allow the blade to operate more efficiently at higher speeds.

Blade Spacing Versus Diameter

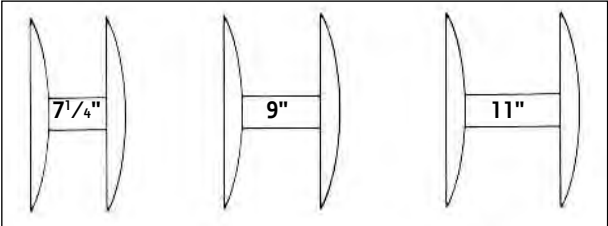
Spacing is the most limiting factor when selecting the proper blade diameter. In general, the larger the space between the blades, the greater the volume of trash and soil that can pass through. This permits the use of larger-diameter blades that cut and throw more trash and soil.

(a) For 7 1/4-in. blade spacing, 18-in., 20-in., or 22-in. blades are recommended. This 7 1/4-in. blade spacing is the best choice for thorough chemical incorporation and seedbed preparation. This spacing is suited for disking through cover crops and penetrating the soil easily.

(b) For 9-in. spacing, 22-in. or 24-in. blades are optimum. This 9-in. spacing provides more disking versatility. It's narrow enough to prepare seedbeds and incorporate chemicals. It's also wide enough to offer ample blade weight and clearance for disking crop residue.

(c) For 11-in. spacing, 24-in., 26-in., or 28-in. blades work best for deep tillage, hard-to-penetrate soils, or heavy residue.

Performance

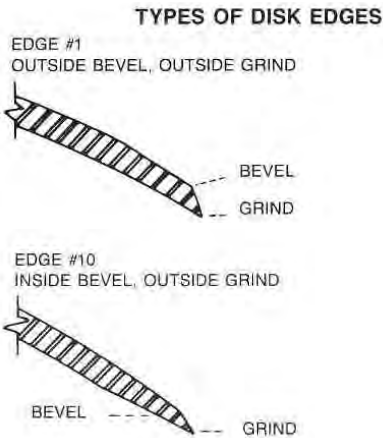


It is important that replacement blades are compatible with the specific operation. Characteristics such as correct blade diameter, shape, thickness, and edge will affect overall disk performance and must be considered. Choosing the best blade for a specific operation will give the type of penetration, mixing, and residue flow you want without ridging.

Thickness

A thinner, smaller blade will penetrate better, but will break more easily. A thicker, larger blade is heavier to stand up better in rocky conditions, but will not penetrate as easily.

Edge



Edging and notches play an important role in the high-residue conditions common today. John Deere blades have edge designs that provide trash-cutting ability with enough toughness to hold up in the field. The blade being too sharp will result in feathered edges that peen over and break off, resulting in uneven wear patterns. A blade that is too dull will not penetrate the ground or cut the trash. The notched blades have notches cut at angles to provide a sharp edge inside the notch. They are beneficial in cutting trash.

Select the blade edge to best match customer needs. The No. 1 edge has a beefier profile and is best for rocky conditions. The No. 10 edge has a narrower profile and should work well in most non-rock conditions.

Edge-Rolling

John Deere offers several disk blades that will support the edge-rolling practices that are commonly used in some areas of the country. These blades can be rolled to restore the edge sharpness for customers needing a better penetrating blade. The special boron-composite material is capable of enduring the edge-rolling techniques without jeopardizing blade edge durability and longevity. John Deere does not recommend rolling disk blades that do not have this “rollable” designation.

John Deere Disk Blade-Replacement Recommendations

Generally a blade will begin to lose its effectiveness for leveling and penetration when it has worn down past 15 to 20 percent of its original size. For example, the following blade sizes would be worn down as follows when applying that rule of thumb:

- 26-in. original diameter — replace when worn to 20 1/2–21-in.
- 24-in. original diameter — replace when worn to 19 1/2–20-in.
- 22-in. original diameter — replace when worn to 18 1/2–19-in.

Additional information:
Blades will wear differently depending on conditions and operation, and these guidelines do not fall within the John Deere warranty policy for these blades.

Type of Disk Blades

Code	Description	Shape
C	Cutout	
PF	Plain Flat Center	
P	Plain Edge	

Common Thicknesses (Gauge)

Metric	Birmingham	or	Fraction
3.0 mm (.118)	11 ga. (.125)		1/8 in. (.125)
3.5 mm (.138)	10 ga. (.134)		
4.0 mm (.157)	9 ga. (.148)		
	8 ga. (.169)		
4.5 mm (.177)	7 ga. (.180)		3/16 in. (.187)
5.0 mm (.197)	6 ga. (.203)		
6.5 mm (.256)			1/4 in. (.250)
8.0 mm (.315)			5/16 in. (.312)
10.0 mm (.394)			3/8 in. (.375)
12.0 mm (.472)			1/2 in. (.500)

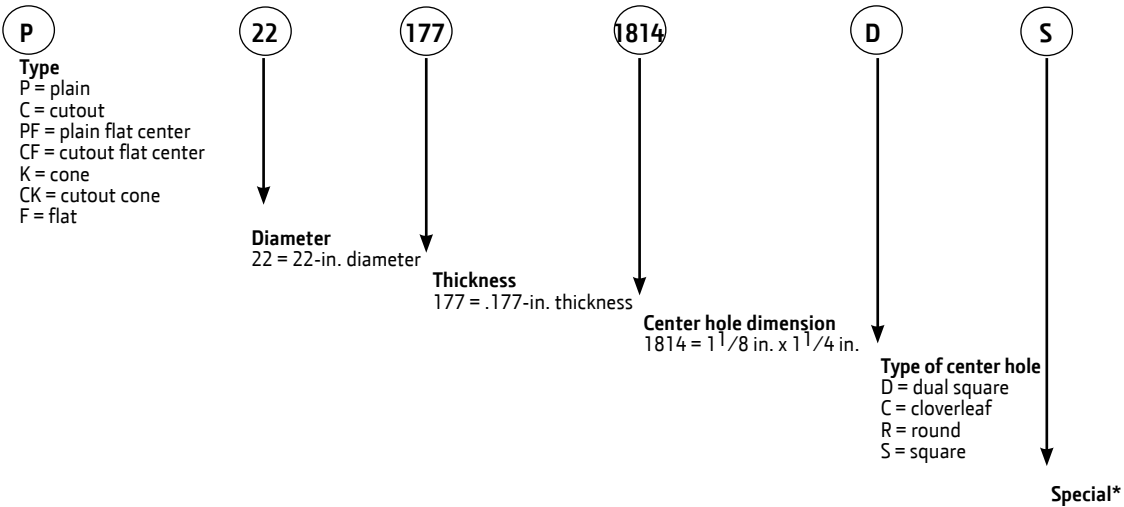
Decimal equivalents are in parentheses for comparison.

Center holes					
Code	Description	Shape	Code	Description	Shape
R	Round		D	Dual Square	
RS	Round Square		S	Square	
CNH/IH Blades					

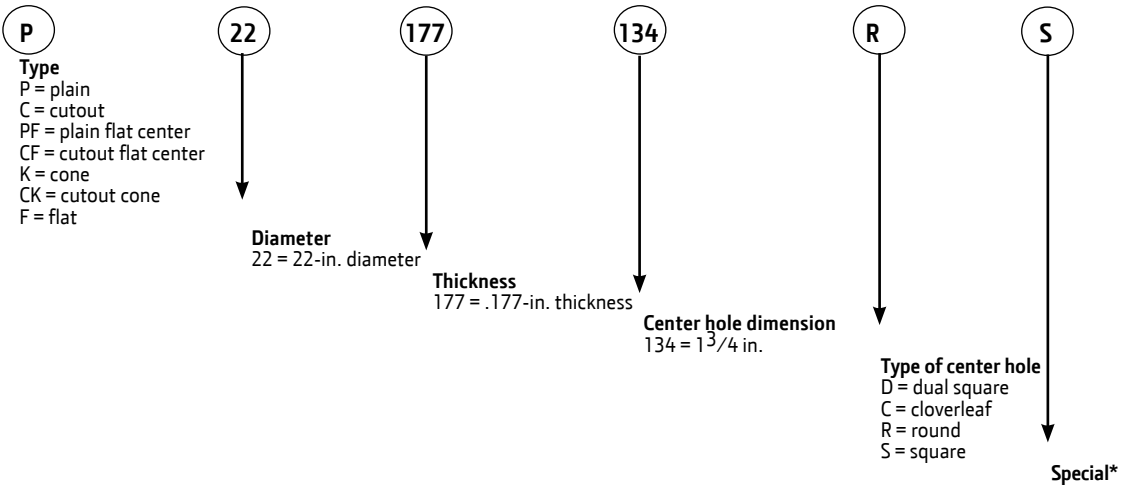
All-Makes Disk Blades — Smart Part Instructions

See the examples below to understand the smart part numbers established for all brands of disk blades.

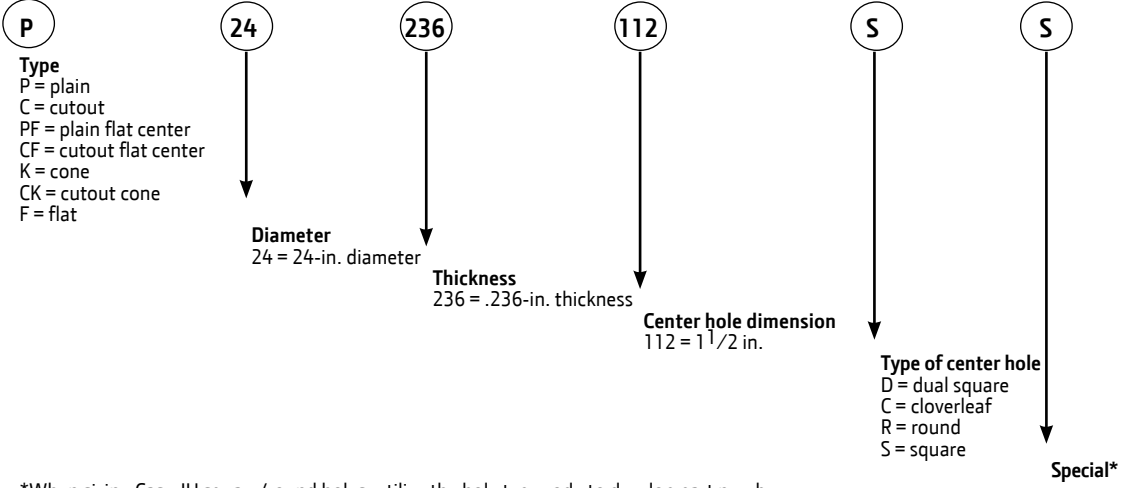
Example #1: P221771814D



Example #2: P22177134R



Example #3: P24236112S



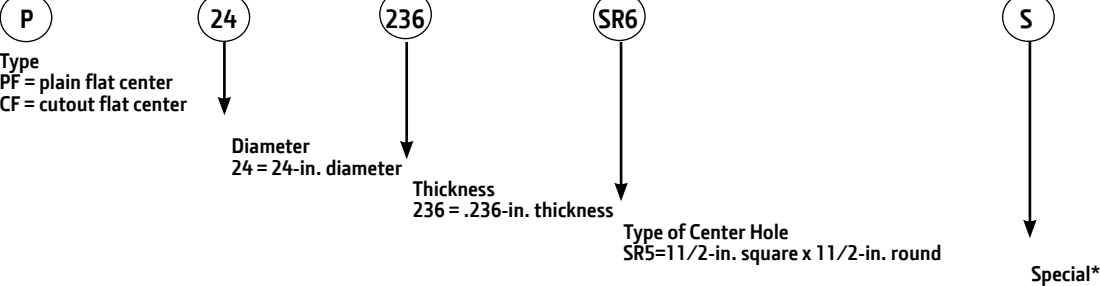
*When sizing Case-IH square/round holes, utilize the hole type code to develop part number.

All-Makes Disk Blades — Smart Part Instructions (continued)

Square Round Center Hole Codes for CNH/IHC Blades

Code	Arbor Square Dimension	Arbor Round Dimension	Blade Square Dimension	Blade Round Dimension
SR-1	7/8-in.	1-in.		
SR-2	1-in.	1 1/8-in.	59/64-in.	13/64-in.
SR-3	1 1/8-in.	1 1/4-in.	13/64-in.	111/64-in.
SR-4	1 1/4-in.	1 1/2-in.	111/64-in.	119/64-in.
SR-4.5	1 1/2-in.	1 5/8-in.	119/64-in.	135/64-in.
SR-5	1 1/2-in.	1 3/4-in.	135/64-in.	143/64-in.
SR-6	1 3/4-in.	2-in.	151/64-in.	151/64-in.
SR-7	2 1/4-in.	1 1/2-in.	219/64-in.	235/64-in.

Example #4: PF24236SR6



*Blades are typically sized with a concavity directly related to the diameter.

For special disk applications, deviations in concavities may occur. When a blade has a special concavity, the part number will be noted with "S". Special concavities are used on plain blades only. The print must be reviewed to identify unique concavity.

Diameter	Typical concavity
16 in.	1.5 in.
18 in.	1.75 in.
20 in.	2.0 in.
22 in.	2.50 in.
24 in.	3.0 in.
26 in.	3.5 in.

Disk Blades — Plain Edge

Part Number	Diameter		Thickness		Blade	Center Hole		Center	Concavity		App. Type
	inch	mm	inch	mm	Edge	inch	mm	HoleShape	inch	mm	
22877	14	356	0.098	2.5	1	0.53	13.49	R	1.19	30.23	John Deere
B27492	14	356	0.118	3	1	1.17	29.72	S	1.19	30.23	John Deere
N216471	14	356	0.118	3	1	2	50.8	R	1.19	30.23	John Deere
A38558	16	406	0.118	3	1	1.06	26.92	R	1.5	38.1	John Deere
B31343	16	406	0.118	3	1	1.05x1.17	26.59x29.77	D	1.45	36.83	John Deere
N186718	16	406	0.177	4.5	1	1.05x1.17	26.59x29.77	D	1.5	38.1	John Deere
A36156	18	457	0.157	4	10	1.17x1.30	29.72x33.02	D	2.8	71.12	John Deere
A39551	18	457	0.118	3	1	1.06	26.92	R	1.75	44.45	John Deere
A47239	18	457	0.177	4.5	1	1.17x1.30	29.77x32.94	D	1.75	44.45	John Deere
B31313	18	457	0.118	3	1	1.05x1.17	26.59x29.77	D	1.75	44.45	John Deere
B31315	18	457	0.138	3.5	1	1.17x1.30	29.77x32.94	D	1.75	44.45	John Deere
N262113	18	457	0.157	4	1	1.16	29.36	R	1.72	43.69	John Deere
N242994	18	457	0.177	4.5	1	2	50.8	R	1.75	44.5	John Deere
A38658	20	508	0.157	4	1	1.06	26.92	R	2	50.8	John Deere
A47237	20	508	0.256	6.5	1	1.17x1.30	29.77x32.94	D	2	50.8	John Deere
B31316	20	508	0.157	4	1	1.17x1.30	29.77x32.94	D	2	50.8	John Deere
B31318	20	508	0.177	4.5	1	1.17x1.30	29.77x32.94	D	2.03	51.56	John Deere
B31321	20	508	0.177	4.5	10	1.17x1.30	29.77x32.94	D	3.32	84.33	John Deere
B32709	20	508	0.177	4.5	1	1.17x1.30	29.77x32.94	D	3.2	81.28	John Deere
N231991	20	508	0.177	4.5	1	1.17x1.30	29.77x32.94	D	1.63	41.4	John Deere
N330738	20	508	0.197	5	1	1.17x1.30	29.77x32.94	D	1.65	41.91	John Deere
P20177118S	20	508	0.177	4.5	1	1.17	29.17	S	1.9	48.26	John Deere
N402465	20	508	0.177	4.5	1	2	50.8	R	1.64	41.9	John Deere
N242912	20	508	0.177	4.5	1	2	50.8	R	1.9	48.3	John Deere
A27767	22	559	0.256	6.5	1	1.55x1.67	32.29x42.49	D	2.5	63.5	John Deere
A27768	22	559	0.256	6.5	10	1.55x1.67	39.29x42.52	D	3.74	94.99	John Deere
A28610	22	559	0.256	6.5	10	1.17x1.30	29.77x32.94	D	3.6	91.77	John Deere
A35487	22	559	0.256	6.5	1	1.17x1.30	29.72x33.02	D	2.56	65.02	John Deere
A42170	22	559	0.256	6.5	1	1.57	39.88	R	2.5	63.5	John Deere
A49254	22	559	0.177	4.5	10	1.17x1.30	29.77x32.94	D	2.5	63.5	John Deere
B32711	22	559	0.177	4.5	10	1.17x1.30	29.77x32.94	D	3.65	92.71	John Deere
N241277	22	559	0.197	5	10	1.17x1.30	29.77x32.94	D	2.07	52.58	John Deere
N242216	22	559	0.256	6.5	1	1.17x1.30	29.77x32.94	D	2.1	53.34	John Deere
P22177118S	22	559	0.177	4.5	1	1.17	29.17	S	2.45	63.5	John Deere
N242915	22	559	0.177	4.5	10	2	50.8	R	2.44	62.2	John Deere
N242917	22	559	0.256	6.5	1	2	50.8	R	2.5	63.5	John Deere
N242996	22	559	0.256	6.5	1	2	50.8	R	2.5	59.8	John Deere
B28211	24	610	0.256	6.5	10	1.55	39.29	S	4.18	106.17	John Deere
B32715	24	610	0.256	6.5	10	1.3	32.94	S	3.87	98.3	John Deere
B32721	24	610	0.256	6.5	10	1.55x1.67	32.29x42.49	D	3.87	98.3	John Deere
B35606	24	610	0.256	6.5	10	1.3	32.94	D	2.84	72.14	John Deere
B35610	24	610	0.256	6.5	10	1.55x1.67	32.29x42.49	D	2.84	72.14	John Deere
K33524	24	610	0.187	4.7	1	1.58	40.08	R	3.6	91	John Deere
N240064	24	610	0.177	4.5	10	1.17x1.30	29.77x32.94	D	2.88	73.15	John Deere
N241278	24	610	0.197	5	10	1.17x1.30	29.77x32.94	D	2.3	58.42	John Deere
N242322	24	610	0.256	6.5	1	1.17x1.30	29.77x32.94	D	2.3	58.42	John Deere
P24256118S	24	610	0.177	4.5	1	1.17	29.17	S	2.9	74.68	John Deere
N242920	24	610	0.197	5	10	2	50.8	R	2.29	58.4	John Deere
N242921	24	610	0.256	6.5	1	2	50.8	R	2.83	72.1	John Deere
N242998	24	610	0.256	6.5	1	2	50.8	R	2.29	57.2	John Deere
A31998	26	660	0.256	6.5	10	1.55x1.67	32.29x42.49	D	4	101.6	John Deere
B29353	26	660	0.256	6.5	10	1.55	39.29	S	4.69	119.13	John Deere
B32717	26	660	0.256	6.5	10	1.3	33.02	S	4.51	114.55	John Deere
B35608	26	660	0.256	6.5	10	1.3	33.02	S	4	101.6	John Deere
N242039	26	660	0.256	6.5	10	1.3	33.02	S	3.45	87.63	John Deere
N242923	26	660	0.256	6.5	1	2	50.8	R	3.4	86.4	John Deere
P22256118S	22	559	0.256	6.5	1	1.17	29.72	S	2.48	62.99	All-Makes
P24256112S	24	610	0.256	6.5	1	1.5	38.1	S	3.04	77.22	All-Makes
PM33551445	14	356	0.098	2.4	1	2.5	64	R	0.91	23	DMI
PM33551850	18	457	0.138	3.5	1	1.8	46	R	1.6	41	DMI
PM33552050	20	508	0.197	5	1	5.5	135	R	1.8	44	DMI
PM33552055	20	508	0.256	6.5	1	5.5	135	R	1.8	44	DMI
PM33552255	22	559	0.256	6.5	1	5.5	135	R	1.8	44	DMI
P18138112R	18	457	0.138	3.5	1	1.56	39.62	R	1.74	44.19	Krause
P20177112R	20	508	0.177	4.5	1	1.56	39.7	R	1.89	48.01	Krause
P20197112R	20	508	0.197	5	1	1.55	39.29	R	1.85	46.99	Krause
P22177112R	22	559	0.177	4.5	1	1.55	39.29	R	2.57	65.28	Krause
P22197112R	22	559	0.197	5	1	1.56	39.7	R	2.53	64.26	Krause
P22256112R	22	559	0.256	6.5	1	1.55	39.29	R	2.48	62.99	Krause
P24197112R	24	610	0.197	5	1	1.55	39.29	R	2.8	71.12	Krause
P24256112R	24	610	0.256	6.5	1	1.55	39.29	R	3.04	77.22	Krause
P24256112R	24	610	0.256	6.5	1	1.55	39.29	R	3.04	77.22	Krause
P20197134RS	20	508	0.197	5	1	1.8	45.72	R	1.47	37.34	Landoll/Sunflower
P20256134RS	20	508	0.256	6.5	1	1.8	45.72	R	1.45	36.83	Landoll/Sunflower
P22177134R	22	559	0.177	4.5	1	1.82	46.2	R	2.5	63.5	Landoll/Sunflower
P22197134R	22	559	0.197	5	1	1.8	45.72	R	2.56	65.02	Landoll/Sunflower
P22256134R	22	559	0.256	6.5	1	1.8	45.72	R	2.47	62.74	Landoll/Sunflower
P24177134R	24	610	0.177	4.5	1	1.8	45.72	R	2.81	71.37	Landoll/Sunflower
P24197134R	24	610	0.197	5	1	1.8	45.72	R	2.78	70.61	Landoll/Sunflower
P24256134R	24	610	0.256	6.5	1	1.8	45.72	R	3	76.2	Landoll/Sunflower
P24256134RS	24	610	0.256	6.5	1	1.8	45.72	RS	2.19	55.63	Landoll/Sunflower



Vertical Tillage Disk Blades

Part Number	Diameter		Thickness		Blade	Center Hole		Center	Concavity	
	inch	mm	inch	mm	Edge	inch	mm	Hole Shape	inch	mm
N242916	22	559	0.197	5	10	2	50.8	R	2.07	52.6
N403847	22	559	0.197	5	1	2	50.8	R	2.07	52.6

John Deere Rollable-Edge Disk Blades

Part Number	Diameter		Thickness		Blade	Disk	Center Hole		Center	Concavity	
	inch	mm	inch	mm	Edge	Edge	inch	mm	Hole Shape	inch	mm
John Deere Applications											
N404744	20	508	0.197	5	Plain	1	2	50.8	S	1.65	41.91
PS222561814D	22	559	0.256	6.5	Plain	special	1.17 x 1.30	29.77 x 32.94	C	2.25	57.15
N402348	22	559	0.256	6.5	Plain	1	2	50.8	R	2.25	57.2
N404600	22	559	0.197	5	Plain	1	2	50.8	S	2.07	52.58
PS242561814D	24	610	0.256	6.5	Plain	special	1.17 x 1.30	29.77 x 32.94	C	2.3	58.42
N402349	24	610	0.256	6.5	Plain	1	2	50.8	R	2.29	58.4
N404601	24	610	0.197	5	Plain	1	2	50.8	S	2.3	58.42
Krause Applications											
PS22256112R	22	559	0.256	6.5	Plain	special	1.55	39.29	R	2.25	57.15
PS24256112R	24	610	0.256	6.5	Plain	special	1.55	39.29	R	2.3	58.42
Landoll/Sunflower Applications											
PS22256134R	22	559	0.256	6.5	Plain	special	1.8	45.72	R	2.25	57.15
PS24256134R	24	610	0.256	6.5	Plain	special	1.8	45.72	R	2.3	58.42

Disk Blades — Cutout Edge

Part Number	Diameter		Thickness		Edge	Blade	Center Hole		Center	Concavity	
	inch	mm	inch	mm	Type		inch	mm	Hole Shape	inch	mm
A39177	18	457	0.118	3	Cutout, 9	1	1.06	26.92	R	1.75	44.45
B31342	18	457	0.138	3.5	Cutout, 9	1	1.17 x 1.30	29.77 x 32.94	C	1.75	44.45
A39548	18	457	0.177	4.5	Cutout, 3		1.17	29.72	S	1.67	42.42
A39178	20	508	0.157	4	Cutout, 10	1	1.06	26.92	R	2	50.8
B31319	20	508	0.177	4.5	Cutout, 10	1	1.17 x 1.30	29.77 x 32.94	C	2.03	51.56
B32710	20	508	0.177	4.5	Cutout, 6	1	1.17 x 1.30	29.77 x 32.94	C	3.27	83.06
A47238	20	508	0.256	6.5	Cutout, 10	1	1.17 x 1.30	29.77 x 32.94	C	2	50.8
B31323	22	559	0.177	4.5	Cutout, 10	1	1.17 x 1.30	29.77 x 32.94	C	2.5	63.5
B32712	22	559	0.177	4.5	Cutout	10	1.17 x 1.30	29.77 x 32.94	C	3.74	94.99
Q31446	22	559	0.177	4.5	Cutout, 10	1	1.58	40.08	R	2.5	63.5
A36292	22	559	0.256	6.5	Cutout, 10	1	1.17 x 1.30	29.72 x 33.02	C	2.5	63.5
A36293	22	559	0.256	6.5	Cutout, 7	10	1.17 x 1.30	29.72 x 33.02	C	3.62	91.95
N242918	22	559	0.256	6.5	Cutout, 10	1	2	50.8	R	2.57	65.5
B28061	24	610	0.256	6.5	Cutout, 8	10	1.55	39.29	S	4.18	106.17
B32716	24	610	0.256	6.5	Cutout, 8	10	1.30	32.94	S	3.87	98.3
N242047	24	610	0.256	6.5	Cutout, 10	10	1.17 x 1.30	29.77 x 32.94	C	2.3	58.42
B35607	24	610	0.256	6.5	Cutout, 10	10	1.30	32.94	S	2.84	72.14
N242922	24	610	0.256	6.5	Cutout, 10	10	2	50.8	R	2.83	72.1
N242997	24	610	0.256	6.5	Cutout, 10	10	2	50.8	R	2.42	61.7
B29354	26	660	0.256	6.5	Cutout, 9	10	1.55	39.29	S	4.69	119.13
B32092	26	660	0.256	6.5	Cutout, 10	1	1.55	39.29	S	3.75	95.25
A34797	26	660	0.256	6.5	Cutout, 10	10	1.3	33.02	S	4	101.6
B32718	26	660	0.256	6.5	Cutout, 9	10	1.3	33.02	S	4.35	110.49
N242344	26	660	0.256	6.5	Cutout, 10	10	1.3	33.02	S	3.45	87.63
B32720	26	660	0.315	8	Cutout, 9	10	1.55 x 1.67	32.29 x 42.49	C	4.51	114.55
N242924	26	660	0.256	6.5	Cutout, 10	10	2	50.8	R	3.29	83.8



All-Makes Disk Blades Plain Flat Center (Crimped) — Plain Edge — CNH/IHC New Holland

Part Number	Diameter		Thickness		Edge Type	Blade Edge	Center Hole		Center Hole Shape	Concavity	
	inch	mm	inch	mm			inch	mm		inch	mm
PF20177118C	20	508	0.177	4.5	Plain	1	1.17	29.77	C	2	50.8
PF20177SR3	20	508	0.177	4.5	Plain	1	1.23 x 1.36	32.24 x 34.42	SR3	1.93	49.02
PF22177118C	22	559	0.177	4.5	Plain	1	1.17	29.77	C	2.5	63.5
PF22197SR3	22	559	0.197	5	Plain	1	1.23 x 1.36	32.24 x 34.42	SR3	2.43	61.72
PF22197SR4	22	559	0.197	5	Plain	1	1.34 x 1.59	34.04 x 40.39	SR4	2.48	62.99
PF22197118C	22	559	0.197	5	Plain	1	1.17	29.77	C	2.46	62.48
PF22256SR4	22	559	0.256	6.5	Plain	1	1.34 x 1.59	34.04 x 40.39	SR4	2.47	62.74

Abbreviations: C-Cloverleaf SR3-1 1/8-in sq. x 1 1/4-in. rd. SR4-1 1/4-in. sq. x 1 1/2-in. rd.

O.E.M. Disk Blades — Center Hole

O.E.M. Disk Model Number	Axle Size	O.E.M. Disk Model Number	Axle Size	O.E.M. Disk Model Number	Axle Size
Allis Chalmers		Dunham-Lehr		John Deere (continued)	
2100	1 1/2-in. square	GC	1 1/8-in. square	1630	1 1/2-in. square
2300	1 1/2-in. square	34	1 1/2-in. round	100	1 1/8-in. square
Amco		Ford		110	1 1/8-in. square
WOD, WTD	1 1/8-in. square	201	1-in. round	200 Series	1 1/8-in. square
WOE	1 3/8-in. round	202	1-in. round	210 Series	1 1/8-in. square
WOF, WOJ	1 1/2-in. square	204	1-in. round	220	1 1/8-in. square
WTF, WTJ	1 1/2-in. square	219	1 1/2-in. square	230 (Cone Disc)	1 1/8-in. square
F-15	1 1/2-in. square	220	1 1/8-in. square	310	1 1/8-in. square
Athens		221	1 5/16-in. round	525	1 1/4-in. square
48	1-in. square	222	1 1/8-in. square	637	1 1/8-in. square
62	1 1/8-in. square	223	1 1/8-in. square	1630	1 1/2-in. round
126	1 1/2-in. square	236	1 1/2-in. square	1635	1 1/2-in. square
131	1 1/2-in. square	240	1 1/8-in. square	1640	1 1/2-in. square
Blanton		241	1 1/8-in. square	2620 (Cone Disc)	1 1/2-in. square
4500	1 1/2-in. square	243	1 1/2-in. round	2621	1 1/2-in. square
B900	1 1/8-in. square	Hesston		2650	1 3/4-in. square
B1000	1 1/8-in. square	2440	1 1/8-in. square	2651	1 3/4-in. square
3000H	1 1/2-in. square	2420	1 1/8-in. square	2700	2 1/4-in. square
Burch		International Harvester		BWA	1 1/4-in. square
Kwick-Set	1 1/8-in. square	122	1 1/8-in. square	BWF	1 1/4-in. square
209	1 1/8-in. square	132	1 1/8-in. square	Kent	
208 BW	1 1/2-in. round	350	1 1/8-in. square	6112D	1 1/2-in. round
Tru-Cut	7/8-in. square	370	1 1/8-in. square	6118D	1 1/2-in. round
Bush-Hog		470	1 1/8-in. square	6323D	1 1/2-in. round
245	1 1/4 or 1 1/2-in. square	475	1 1/8-in. square	6327D	1 1/2-in. round
346	2 1/4-in. round	480	1 1/8-in. square	7333D	1 1/2-in. round
1440	1 1/8-in. square	485	1 1/8-in. square	6540D	1 1/2-in. round
1445	1 1/8 or 1 1/4-in. square	490	1 1/8-in. square	7550D	1 1/2-in. round
1450	1 1/8 or 1 1/4-in. square	500	1 1/2-in. square	Kewanee	
145	1 1/4-in. square	501	1 1/2-in. square	800	1 1/8-in. square
146 Reg.	1 1/4-in. square	596	1 1/2-in. square	1000	1 1/8-in. square
146 HD	1 1/2-in. square	610	1 1/2-in. square	Krause	
1422	1-in. or 1 1/8-in. square	630	1 1/2-in. round	1952–1956–1960–1970	1 1/2-in. round
1424	1 1/8-in. square	770	1 1/2-in. square	1968–1969–1979	1 1/2-in. round
1432	1 1/8-in. square	780	1 3/4-in. square	1965–1966–1976	1 1/2-in. round
1436	1 1/8-in. square	John Deere		1480 Series	1 1/2-in. round
1437	1 1/8-in. or 1 1/2-in. square	105	1-in. round	1480 Series	1 3/4-in. round
1438	1 1/8-in. square	115	1 1/8-in. round	1900 Series	1 1/2-in. round
1444	1 1/8-in. square	215	1 1/2-in. round	1950 Series	1 1/2-in. round
Rolling Bedder	1 1/8-in. square	225	1 1/2-in. round	2100 Series	1 1/2-in. round
		235	1 1/2-in. round	2200 Series	1 1/2-in. round
		425	1 1/2-in. round	2400 Series	1 1/2-in. round

Continued on next page

O.E.M. Disk Blades — Center Hole (continued)

O.E.M. Disk Model Number	Axle Size	O.E.M. Disk Model Number	Axle Size	O.E.M. Disk Model Number	Axle Size
Krause (continued)		Schafer		White	
2400 Series	1 3/4-in. round	355	1 3/4-in. round	250	1 1/8-in. square
2700 Series	2 1/2-in. round	555	2-in. round	251	1 1/8-in. square
3100 Series	1 1/2-in. round	Sunflower		252	1 1/8-in. square
3200 Series	1 3/4-in. round			253	1 1/8-in. square
4995 Series	1 1/2-in. round	1210	1 1/2-in. round	254	1 1/8-in. square
5800 Series	1 1/2-in. round	1211	1 3/4-in. round	255	1 1/8-in. square
7300 Series	1 1/2-in. round	1230	1 1/2-in. round	256	1 1/8-in. square
7400 Series	1 1/2-in. round	1231	1 3/4-in. round	263	1 1/8-in. square
8200 Series	1 1/2-in. round	1233	1 3/4-in. round	264	1 1/8-in. square
8300 Series	1 1/2-in. round	1300	1 3/4-in. round	265	1 1/2-in. square
1498 and 1499	1 1/2-in. round	1320 and 1330	1 3/4-in. round	271	1 1/8-in. square
1465–1470	1 3/4-in. round	1321	1 3/4-in. round	272	1 1/8-in. square
1580	1 1/2-in. round	1331	1 3/4-in. round	273/274	1 1/2-in. round
1740–1769	1 3/4-in. round	1430 and 1440	1 3/4-in. round	281	1 1/2-in. square
1912–1915–1918	1 1/2-in. round	1431	1 3/4-in. round		
1901–1904–1907	1 1/2-in. round	1434	1 3/4-in. round		
1922–1925–1928	1 1/2-in. round	1435	1 3/4-in. round		
1921–1924–1927	1 1/2-in. round	1441	1 3/4-in. round		
1959–1963–1973	1 1/2-in. round	1444	1 3/4-in. round		
Massey Ferguson		1541	1 3/4-in. round		
MF820	1 1/4-in. square	1544	1 3/4-in. round		
MF620	1 1/4-in. square	4211	1 3/4-in. round		
MF520	1 1/4-in. square	6010	1 3/4-in. round		
MF270	1 1/2-in. square	6030	1 3/4-in. round		
MF21	1-in. square	Taylor Way			
MF25	1-in. round				
MF30	1 1/2-in. square	200251-200268	1 1/2-in. square		
MF39	1-in. round	200108-200118	1 1/8-in. square		
MF40	1 1/2-in. square	200023	1 1/8-in. square		
MF52	1 1/8-in. round	200024	1 1/8-in. square		
MF72	1 1/8-in. round	200196-200199	1 1/8-in. square		
MF120	1 1/8-in. square	2000051-2000068	1 1/8-in. square		
MF220	1 1/8-in. square	200284-200291	1 1/2-in. square		
MF233	1 1/8-in. square	200310-200315	1 1/2-in. square		
MF213	1 1/8-in. square	2001 Series	1 1/8-in. square		
Miller		200011	7/8-in. square		
Series I	1 3/4-in. round	200013	7/8-in. square		
Series II	1 3/4-in. round	200035	1 1/8-in. square		
New Holland		200036	1 1/8-in. square		
OD100	1 3/4-in. round	200037	1 1/8-in. square		
OD200	1 3/4-in. round	200048	1 1/8-in. square		
OD300	2-in. round	200049	1 1/8-in. square		
TD100	1 3/4-in. round	2000165	7/8-in. square		
TD200	1 3/4-in. round	2000166	7/8-in. square		
Rhino		2000167	7/8-in. square		
127/167	1 1/2-in. square				
131	1 1/2-in. square				
137/187	1 1/2-in. square				
177	1 1/2-in. square				
Flex 90	1 1/8-in. square				

Coulter Blades

Customize your equipment to match any trash-cutting or row-tillage requirements. Special micro-alloy material and advanced manufacturing technology make these blades tougher than anything in the field. Each blade is made to the same stringent John Deere specifications. The end result is a blade that maintains its diameter and edge longer, resulting in extended life and performance.



BUBBLE

Results

- Aggressively tills as the point bubbles enter the soil.
- Cuts through tough residue.
- Works well in wet conditions.



8 WAVE

Results

- Performs well at high planting speeds.
- Less soil disruption, but gives a versatile seedbed for good seed-to-soil contact.



13 FLUTE

Results

- Designed for slower planting speeds.
- Aggressively tills a wider area for a good seedbed.



25 WAVE

Results

- Slower-speed blade for a fine-tilled seedbed.
- Works well in wet conditions.

Tillage Coulter Blades

Part Number	Description	Blade Type	Diameter		Thickness		Bolts
			inch	mm	inch	mm	
N283805	Blade, Double-Disk Opener	Flat	13.5	343	0.098	2.5	1
33124	Blade, Coulter, Flat	Flat	15	381	0.138	3.5	5
A17093	Blade, Coulter, 50 Ripples	Ripple	17	432	0.138	3.5	6
33131	Blade, Coulter, Flat	Flat	17	432	0.157	4.0	6
N130051	Blade, Coulter, Flat	Flat	18	456	0.177	4.5	4
A17842	Blade, Coulter, 54 Ripples	Ripple	18	457	0.157	4.0	6
A33005	Blade, Coulter, 54 Ripples	Ripple	18	457	0.157	4.0	5
A17843	Blade, Coulter, 14 Notches	Notched	18	457	0.177	4.5	6
N283804	Blade, Single-Disk Opener	Flat	18	459	0.197	5.0	4
A17094	Blade, Coulter, 60 Ripples	Ripple	20	508	0.177	4.5	6
A33066	Blade, Coulter, 60 Ripples	Ripple	20	508	0.177	4.5	5
A36114	Blade, Coulter, Flat	Flat	20	508	0.177	4.5	5
N233826	Blade, Coulter, 60 Ripples	Ripple	20	514	0.177	4.5	4
PM33502042	Blade, Coulter, Flat	Flat	20	518	0.177	4.5	4
N216270	Blade, Coulter, Flat	Flat	20	518	0.177	4.5	4
N187522	Blade, Coulter, Flat	Flat	20	518	0.197	5.0	1
F20256134R	Blade, Coulter, Flat	Flat	20	518	0.256	6.5	1
A34776	Blade, Coulter, 60 Ripples	Ripple	22	559	0.177	4.5	5
N262329	Blade, Coulter, Flat	Flat	22	559	0.177	4.5	4
N183542	Blade, Coulter, Flat	Flat	22	564	0.177	4.5	1
PM33502240	Blade, Coulter, Flat	Flat	22	577	0.177	4.5	4
PM33502442	Blade, Coulter, Flat	Flat	25	632	0.197	5.0	4

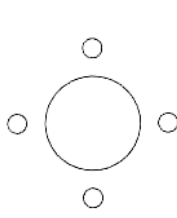
Seeding Coulter Blades

Part Number	Description	Blade Type	Diameter		Thickness		Bolts
			inch	mm	inch	mm	
B287M	Blade, Double-Disk Opener	Concave	13.50	342.9	0.098	2.5	8
K202M	Blade, Double-Disk Opener	Flat	13.50	342.9	0.098	2.5	6
K204M	Blade, Semi-Deep	Concave	14.00	355.6	0.083	2.1	6
M18600	Blade, Single Disk	Concave	13.00	330.2	0.083	2.1	6
A36114	Coulter Blade	Flat	20.38	517.5	0.177	4.5	5
A72361	Disk, Concave Notched	8 Notched	16.25	412.8	0.118	3.0	4
A72358	Fertilizer Opener Disk	Flat	15.94	405.0	0.197	5.0	5
A72677	Fluted Coulter Blade	13 Flute	15.87	403.0	0.177	4.5	6
A72678	Fluted Coulter Blade	13 Flute	15.87	403.0	0.177	4.5	5
A72679	Fluted Coulter Blade	25 Flute	15.87	403.0	0.177	4.5	6
A72680	Fluted Coulter Blade	25 Flute	15.87	403.0	0.177	4.5	5
A72685	Fluted Coulter Blade	36 Rippled	15.87	403.0	0.157	4.0	4
A72686	Fluted Coulter Blade	8 Flute	15.87	403.0	0.157	4.0	4
A72687	Fluted Coulter Blade	13 Flute	15.87	403.0	0.157	4.0	4
A72688	Fluted Coulter Blade	25 Flute	15.87	403.0	0.157	4.0	4
A72690	Fluted Coulter Blade	8 Flute	14.65	372.0	0.157	4.0	4
A72691	Fluted Coulter Blade	8 Flute	17.56	446.0	0.157	4.0	4
A72692	Fluted Coulter Blade	8 Flute	17.56	446.0	0.157	4.0	4
A72693	Fluted Coulter Blade	13 Flute	17.64	448.0	0.157	4.0	4
A72694	Fluted Coulter Blade	13 Flute	17.64	448.0	0.157	4.0	4
A72698	Fluted Coulter Blade	25 Flute	17.64	448.0	0.157	4.0	4
A72699	Fluted Coulter Blade	25 Flute	17.64	448.0	0.157	4.0	4
A73612	Fluted Coulter Blade	25 Flute	14.65	372.0	0.157	4.0	4
A73615	Fluted Coulter Blade	8 Flute	15.87	403.0	0.177	4.5	5
A73911	Fluted Coulter Blade	8 Flute	15.63	397.0	0.177	4.5	6
A73916	Fluted Coulter Blade	8 Flute	15.00	381.0	0.177	4.5	6
N140342	Fluted Coulter Blade	25 Flute	14.13	358.8	0.157	4.0	4
A34776	Rippled Coulter Blade	60 Rippled	22.36	567.9	0.177	4.5	5
A72360	Rippled Coulter Blade	36 Rippled	15.87	403.0	0.157	4.0	5
A73910	Rippled Coulter Blade	36 Rippled	15.87	403.0	0.157	4.0	6
N262330	Rippled Coulter Blade	60 Rippled	22.19	563.6	0.177	4.5	4
A72357	Seed Opener Disk	Flat	15.00	381.0	0.118	3.0	6
A72359	Seed Opener Disk	Flat	13.50	343.0	0.118	3.0	6
A73831	Seed Opener Disk	Flat	12.00	304.8	0.098	2.5	6
A74203	Seed Opener Disk	Flat	13.50	342.9	0.098	2.5	6

Disk Assemblies

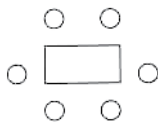
Part Number	Description	Blade Type	Diameter		Bolts	Blade
			inch	mm		
AN161226	Blade, Assembly with Bearing Case Riveted	Concave	13	305	6	Uses Blade M18600
AA57466	Blade, Assembly, Fertilizer Opener, 13.5-in.	Flat	13.5	343	6	Uses Blade A72359
AA57467	Blade, Assembly, Fertilizer Opener, 13.5-in.	Flat	13.5	343	6	Uses Blade A72359
AA58324	Blade, Assembly	Flat	13.5	343	6	Uses Blade A74199
BB83M	Blade, Assembly with Bearing Double-Disk Opener RH Side	Flat	13.5	343	1	Uses Blade B287M
BB84M	Blade, Assembly with Bearing Double-Disk Opener LH Side	Flat	13.5	343	1	Uses Blade B287M
KK254M	Blade, Assembly for Double-Disk Openers RH	Flat	13.5	343	6	Uses Blade K202M
KK255M	Blade, Assembly for Double-Disk Openers LH	Flat	13.5	343	6	Uses Blade K202M
AM12419	Blade, Assembly with Bearing Case	Concave	14	356	6	Uses Blade K204M
AN161227	Blade, Assembly with Bearing Case Semi-Deep	Concave	14	356	6	Uses Blade K204M
AA55927	Blade, Assembly Tru-Vee Opener, 15-in., 3.0-mm	Flat	15	381	6	Uses Blade A72357
AA53860	Blade, Assembly Tru-Vee Opener, 15-in, 3.5-mm	Flat	15	381	6	Uses Blade A71827

Bolthole Pattern



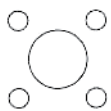
H
Center Hole: 2 1/2 in.
Bolt Circle: 4 in.
Bolt Holes: (4) 1 7/32 in.
Farm Tools, and Wil-Rich/Noble

To Fit:
Hiniker and others including Black Machine Brillion, DMI, Glencoe/Farmland, Haybuster, Landoll, Sukup United



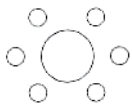
IH
Center Hole: 3 1/32 x 1 11/32 in.
Bolt Circle: 3 1/4 in.
Bolt Holes: (6) 1 1/32 in.

To Fit:
IH older style and others



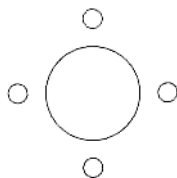
IHN
Center Hole: 1 1/2 in.
Bolt Circle: 4 1/2 in.
Bolt Holes: (4) 1 7/32 in.

To Fit:
IH newer style and others



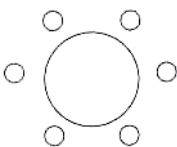
JD
Center Hole: 2 in.
Bolt Circle: 3 1/2 in.
Bolt Holes: (6)

To Fit:
John Deere HS and NU bottoms (non-metric) and others including Yetter



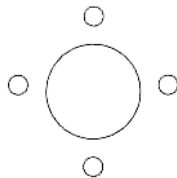
JDD
Center Hole: 3 in.
Bolt Circle: 4 3/8 in.
Yetter
Bolt Holes: (4)

To Fit:
John Deere NU450 Metric bottoms and others including



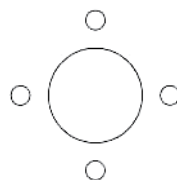
JDM
Center Hole: 2 in.
Bolt Circle: 3 3/8 in.
Bolt Holes: (6)

To Fit:
Kinze and others including Black Machine



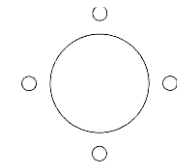
MLWR
Center Hole: 3 11/16 in.
Bolt Circle: 5 in.
Bolt Holes: (4) 1 7/32 in.

To Fit:
Melroe/Wil-Rich. This is a very common agricultural hub used by Acra Plant, Ag Systems, Bingham Bros., Caldwell-Hamby, DMI, Flex-Coil, Harrell, Landoll, Marliss, Monroe/Tuflin, Noble, Sunflower, Thurston/Blu Jet, Tye, United Farm Tools, Wiese, Wetherall, York Agri Products, and others



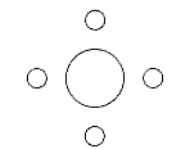
MF
Center Hole: 3.172 in.
Bolt Circle: 4 3/4 in.
Bolt Holes: (4) 1 5/32 in.

To Fit:
Massey Ferguson and others



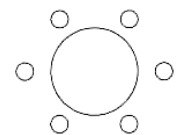
OL
Center Hole: 4 in.
Bolt Circle: 5 1/4 in.
Bolt Holes: (4) 1 7/32 in.

To Fit:
Oliver/White and others including Great Plains, KBH, Marliss, Unverferth, and Yetter



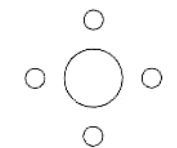
ORT
Center Hole: 2 in.
Bolt Circle: 2 11/16 in.
Bolt Circle: 4 1/4 in.
Bolt Holes: (4) 1 3/32 in.

To Fit:
Orthman and others



R
Center Hole: 3 3/4 in.
Bolt Circle: 5 in.
Bolt Holes: (6) 7/16 in.

To Fit:
Rawson and others



W
Center Hole: 2 1/2 in.
Bolt Circle: 4 in.
Bolt Holes: (4) 1 3/32 in.

To Fit:
Wetherall and others including Alloway, Kongskilde, Lorenz, Noble, P&H, and Tebben

Combination Scrapers



- Self-adjusting for sticky soil.
- Can be locked tight for light, sandy, or dry soil to prevent wear on the blade.
- Positioned to direct soil back, rather than up on gangs.
- High-strength steel.
- Heat-treated.

Rigid Scrapers

- Clean blades in most conditions.
- Easy to adjust for long life and good performance.
- Mounting bar positioned to allow good residue flow.
- Heat-treated.

Heavy-Duty Disk Spools



- Designed to handle the constant hammering to the gang and to prevent the gang bolt from flexing when an obstacle is struck.
- The larger surface diameter also provides extra blade support to help reduce blade breakage.

Heavy-Duty Reinforced Sleeve



- The John Deere disk uses a heavy-duty sleeve in the gang assembly.
- The sleeves are made out of high-carbon seamless tubing with thicker walls for longer wear life and strength. It is placed between spools carrying the bearing.
- The sleeve reinforces the spool and axle, and distributes the bearing load as the sleeve fits into the end of the spool.

The John Deere reinforced sleeves offer:

Features

- Thick wall.
- Drawn I.D. and O.D.
- Accurate flow.
- High-carbon steel.

Benefits

- Withstand operating stress in the standard area.
- Fits tightly to I.D. control dimensions of bearing.
- Consistent strength throughout.
- Long wear life.

Gang Bolts for John Deere Disks



John Deere gang bolts contain high-carbon steel while some of our competitors use medium-carbon steel. This means the John Deere gang bolt is less likely to bend or box, which would impact the performance of the total gang assembly.

*Gang-bolt lengths are measured from below the head of the bolt.

Square Body	Round Head
Part number	*Nuts and washers dimensions
A15143	1 1/8-in. sq. x 10.12-in.
A20132	1 1/8-in. sq. x 38.12 in.
A20133	1 1/8-in.sq. x 50.70 in.
A20134	1 1/8-in. sq. x 59.70
A20615	1 1/8-in. sq. x 65.00 in.
N241664	1 1/8-in. sq. x 67.25 in.
N241665	1 1/8-in. sq. x 74.50 in.
N241666	1 1/8-in. sq. x 81.75 in.
A20617	1 1/8-in. sq. x 83.00 in.
A40826	1 1/8-in. sq. x 92.19 in.
A40827	1 1/8-in. sq. x 101.19 in.

Square Body	Round Head
Part number	*Dimension
B34225	1 1/4-in. sq. x 65.80 in.
B34219	1 1/4-in. sq. x 68.74 in.
B34226	1 1/4-in. sq. x 74.89 in.
B13681	1 1/4-in. sq. x 78.38 in.
B34220	1 1/4-in. sq. x 79.35 in.
B34227	1 1/4-in. sq. x 84.00 in.
B34221	1 1/4-in. sq. x 90.36 in.

Square Body	Square Head
Part number	* Dimesnion
30750	1-in. sq. x 22.50 in.
K1718B	1-in. sq. x 58.38 in.
N189983	1-in. sq. x 74.90 in.
N261792	1 1/8-in. sq. x 6.12 in.
N241638	1 1/8-in. sq. x 7.00 in.
A15143	1 1/8-in. sq. x 10.12 in.
N260928	1 1/8-in. sq. x 10.40 in.
Q437K	1 1/8-in. sq. x 20.19 in.
A20131	1 1/8-in. sq. x 29.00 in.
A20132	1 1/8-in. sq. x 38.12 in.
N241660	1 1/8-in. sq. x 38.23 in.
P55127	1 1/8-in. sq. x 38.27 in.
N281316	1 1/8-in. sq. x 38.75 in.
N281318	1 1/8-in. sq. x 42.75 in.
B10482	1 1/8-in. sq. x 44.38 in.
N240684	1 1/8-in. sq. x 45.35 in.
N241661	1 1/8-in. sq. x 45.48 in.
N281317	1 1/8-in. sq. x 45.48 in.
A20133	1 1/8-in. sq. x 47.00 in.
P55862	1 1/8-in. sq. x 47.40 in.
N281319	1 1/8-in. sq. x 47.75 in.
N281320	1 1/8-in. sq. x 50.75 in.
B10483	1 1/8-in. sq. x 51.50 in.
N240685	1 1/8-in. sq. x 52.60 in.
N241662	1 1/8-in. sq. x 52.73 in.
B12170	1 1/8-in. sq. x 52.75 in.
N281321	1 1/8-in. sq. x 52.75 in.
N281322	1 1/8-in. sq. x 55.25 in.
A20134	1 1/8-in. sq. x 56.00 in.
B10484	1 1/8-in. sq. x 58.75 in.
N240686	1 1/8-in. sq. x 59.85 in.

Square Body	Square Head
Part number	* Dimesnion
N241663	1 1/8-in. sq. x 60.08 in.
A10862	1 1/8-in. sq. x 61.00 in.
N184523	1 1/8-in. sq. x 62.50 in.
N281323	1 1/8-in. sq. x 62.75 in.
A20615	1 1/8-in. sq. x 65.00 in.
N240687	1 1/8-in. sq. x 67.10 in.
N241664	1 1/8-in. sq. x 67.38 in.
B12172	1 1/8-in. sq. x 69.75 in.
A20616	1 1/8-in. sq. x 74.00 in.
P70772	1 1/8-in. sq. x 74.33 in.
N240688	1 1/8-in. sq. x 74.35 in.
N241665	1 1/8-in. sq. x 74.73 in.
B12173	1 1/8-in. sq. x 78.06 in.
N240689	1 1/8-in. sq. x 81.60 in.
N241666	1 1/8-in. sq. x 82.03 in.
A20617	1 1/8-in. sq. x 83.00 in.
AP40416	1 1/8-in. sq. x 83.86 in.
B12576	1 1/8-in. sq. x 86.75 in.
N240690	1 1/8-in. sq. x 88.85 in.
N241667	1 1/8-in. sq. x 89.38 in.
A40826	1 1/8-in. sq. x 92.19 in.
N241668	1 1/8-in. sq. x 96.68 in.
A40827	1 1/8-in. sq. x 101.19 in.
P58273	1 1/8-in. sq. x 102.93 in.
A16841	1 1/8-in. sq. x 187.75 in.
B34222	1 1/4-in. sq. x 38.50 in.
B34217	1 1/4-in. sq. x 46.30 in.
P58274	1 1/4-in. sq. x 46.94 in.
B34223	1 1/4-in. sq. x 47.60 in.
N217154	1 1/4-in. sq. x 51.44 in.

Square Body	Square Head
Part number	* Dimesnion
N217157	1 1/4-in. sq. x 52.76 in.
N217153	1 1/4-in. sq. x 53.44 in.
N217155	1 1/4-in. sq. x 54.05 in.
N217152	1 1/4-in. sq. x 55.44 in.
B34224	1 1/4-in. sq. x 56.70 in.
N217156	1 1/4-in. sq. x 58.25 in.
N217156	1 1/4-in. sq. x 60.25 in.
B13159	1 1/4-in. sq. x 62.00 in.
B34225	1 1/4-in. sq. x 65.80 in.
B34219	1 1/4-in. sq. x 68.36 in.
B13161	1 1/4-in. sq. x 69.80 in.
N262064	1 1/4-in. sq. x 70.24 in.
B34226	1 1/4-in. sq. x 74.90 in.
B13681	1 1/4-in. sq. x 78.38 in.
B34220	1 1/4-in. sq. x 79.36 in.
B34227	1 1/4-in. sq. x 84.00 in.
B34221	1 1/4-in. sq. x 90.36 in.
A26367	1 1/4-in. sq. x 93.10 in.
A26368	1 1/4-in. sq. x 101.36 in.
A33123	1 1/4-in. sq. x 102.48 in.
N262065	1 1/4-in. sq. x 103.24 in.
A37822	1 1/4-in. sq. x 112.36 in.
N241153	1 1/4-in. sq. x 123.36 in.
B32003	1 1/2-in. sq. x 56.90 in.
B15415	1 1/2-in. sq. x 57.38 in.
B34218	1 1/2-in. sq. x 57.38 in.
B32002	1 1/2-in. sq. x 67.90 in.
B32001	1 1/2-in. sq. x 90.40 in.
A31658	1 5/8-in. sq. x 80.90 in.
N402318	2-in. sq. x 48.27 in.
N242978	2-in. sq. x 49.45 in.

Gang Bolts for John Deere Disks (continued)

*Gang-bolt lengths are measured from below the head of the bolt.

Square Body	Square Head
Part number	*Dimensions
N242975	2-in. sq. x 55.28 in.
N242979	2-in. sq. x 58.43 in.
N401856	2-in. sq. x 59.29 in.
N242985	2-in.sq. x 62.56 in.
N242980	2-in. sq. x 67.44 in.
N242990	2-in. sq. x 69.84 in.
N242991	2-in. sq. x 70.31 in.
N242976	2-in. sq. x 75.91 in.
N242981	2-in. sq. x 76.46 in.
N243005	2-in. sq. x 77.13 in.
N243007	2-in. sq. x 81.26 in.

Part number	*Dimensions
N243008	2-in. sq. x 84.68 in.
N242982	2-in. sq.x 85.47 in.
N243155	2-in. sq. x 91.65 in.
N402168	2-in. sq. x 92.44 in.
N242917	2-in. sq. x 93.82 in.
N242983	2-in. sq. x 94.49 in.
N243006	2-in. sq. x 98.94 in.
N242972	2-in. sq. x 102.79 in.
N242984	2-in. sq. x 103.50 in.
N243152	2-in. sq. x 114.33 in.
N400393	2-in. sq. x 125.35

Square Body	Hex Head
Part number	*Dimension
A41971	1-in. sq. x 31.57 in.
A41969	1-in. sq. x 38.70 in.
A41970	1-in. sq. x 47.48 in.
A45919	1-in. sq. x 56.50 in.
N240397	1-in. sq. x 65.50 in.
N240406	1-in. sq. x 67.75 in.

Square Body	Hex Head
Part number	*Dimension
B11044	1 1/8-in. sq. x 125.13 in.
B11045	1 1/8-in. sq. x 148.37 in.
A16841	1 1/8-in. sq. x 187.75 in.
AP29932	1 1/2-in. sq. x 50.00 in.
AP29702	1 1/2-in. sq. x 59.13 in.
AP29703	1 1/2-in. sq. x 105.28 in.

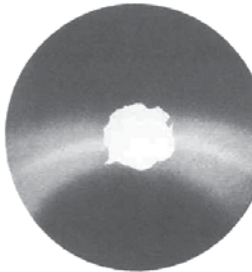
Our Adjustment Policy on Disk Blade Failure

Our adjustment policy is designed to be fair to both the user and the manufacturer. In these drawings of impaired disks, we have indicated typical disk failures and the most common reasons for these failures. John Deere disk blades with warrantable breaks as shown have worn less than 10 percent of the original diameter (center breakage excluded) up to one year from date of purchase.

Example of Disk Blade Field Failure



Straight directional break due to defective material. Full credit is granted at original purchase price.



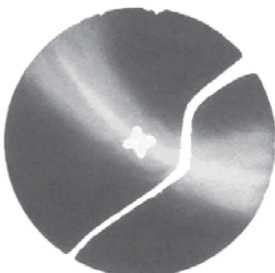
Breakout of center of disk. Generally caused by tilling over rocks or stumps, loose gang bolts, and excessive disk flexing. Credit is not offered.



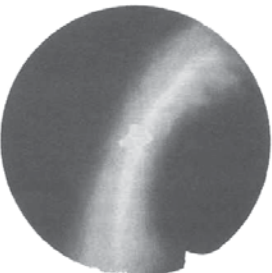
Disk fracture resulting from contact with rocks, stumps, or other solid objects. Credit is not offered.



Disk fracture resulting from contact with rocks, stumps, or other solid objects. Credit is not offered.

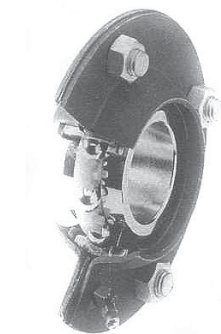


Disk fracture resulting from contact with rocks, stumps, or other solid objects. Credit is not offered.

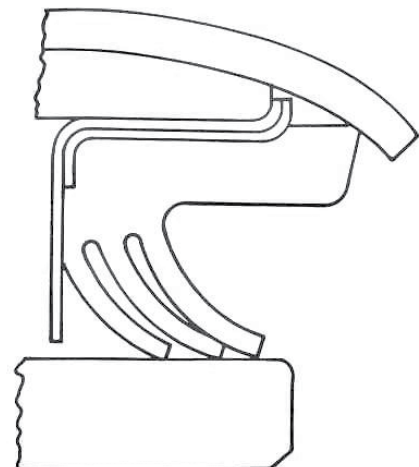


Chipped and dented edges resulting from contact with rocks, stumps, or other solid objects. Credit is not offered.

John Deere Dura-Flex™ Bearings



Bearing with Flange Housing



3 + 1 Seal

Gang Bearings

Dura-Flex gang bearings with 3 + 1 seals are one of the finest examples of John Deere engineering. This exclusive patented design has greatly increased bearing life when used with either flange or cast housing.

The 3 + 1 seal design posed a unique challenge in the seal material itself. The three long flexible seals require contradicting qualities — toughness for long wear, yet resiliency for constant spring-like action to seal against the inner race. The three lips shield the bearings, thereby keeping dirt out while allowing old grease to be purged from the heart of the bearing by fresh grease. Bearing failure is caused by contamination and/or misalignment. With three seals to protect the bearing against contamination, the engineers set out to design a true self-aligning bearing. The housing extends beyond the outer race of the bearing, contacting the fourth or outer seal when the two housing halves are clinched together. This fourth seal serves three functions:

- 1) Frees the outer race to realign inside the housing.
- 2) Prevents the bearing from turning inside the housing.
- 3) Provides a positive seal to keep dirt from getting in between the outer race and bearing.

Housings

For repair, John Deere offers two types of housings: cast or flange. Both offer the same protection, allowing the bearing to realign.

The flange housing is designed for most conditions. The flange housing with bearing wear guards can also preserve bearing life and provides an economical alternative if some protection is desired.

The cast housing is designed to preserve bearing life in very abrasive soils and is used with a heavier standard and a large-diameter spool for better blade backup.

The cast or extended flange housing also adds protection against wrapping of twine, wire, or grass.

Part number	Inside Dimensions		Outside Dimensions		Outer Race Width in.	Outer Race Width mm
	inch	mm	inch	mm		
AA28184	1.777	45.16	3.346	85	1.187	30.163
AA28186	2.194	55.75	3.937	100	1.312	33.338

John Deere Maintenance Free Bearing

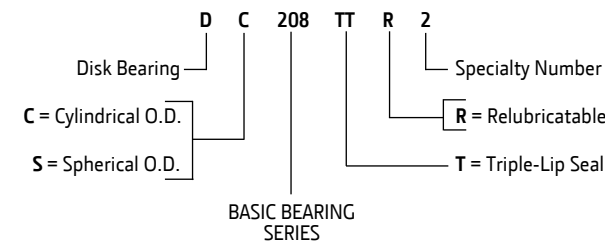


Maintenance free bearings are features of the new John Deere 2600 Series Disks. A high-density polymer liner allows the bearing to dynamically align the shaft in rough field conditions.

These new bearings increase productivity by reducing the amount of time needed to service the disk before operation and allow the customer to spend more time in the field.

Part number	Inside Dimensions		Outside Dimensions		Outer Race Width inch	Outer Race Width mm
	inch	mm	inch	mm		
AN241911	2.194	55.75	3.937	100	1.562	39.688

Disk-Bearing Identification Code



Disk bearings

Choosing The Right Bearing

Load, speed, shaft diameter, and projected fatigue life are important considerations affecting the selection of a suitable disk-blade bearing. Bearing type and bearing fatigue life can be substantially influenced by environmental conditions such as operating speed, alignment, lubrication type, and contamination.

When selecting a John Deere or All-Makes bearing for a disk-blade application, you can be sure that the life-load relationship has been met in regard to:

- 1) Fatigue life — hours that a bearing will attain or exceed.
- 2) Radial load — the load applied to a bearing with a rotating inner ring and stationary outer ring that would be attained under the actual conditions of a load and rotation.
- 3) Speed in rpm — rotation.

John Deere bearings, regardless of supplier, are manufactured and tested to rigid quality standards to ensure they stand up to tough use:

- 1) Laboratory Tests — under accelerated conditions, various bearing types and sources are tested to ensure the correct bearing is selected.
- 2) Field Tests — in actual working conditions.

By using John Deere replacement bearings, the customer can be assured of getting a bearing with the correct sealing, lubrication, internal tolerance finish, load, and speed characteristics. This means longer bearing life and reduced downtime.

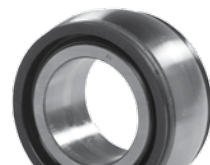
Feature/Benefit Summary

Designed and manufactured to John Deere tolerance requirements:

- Ensures long bearing life.
- Reduces costly machine downtime.

Application tested:

- Ensures correct bearing for specific application.



John Deere Dura-Flex™ Bearings



All-Makes Bearings

Disk Bearings — Cross-Reference Specifications

Square Bore Size

Part Number	Supplier	Inside Dimension (in.)	Inside Dimension (mm)	Outside Dimension (in.)	Outside Dimension (mm)	Outer Race Width (in.)	Outer Race Width (mm)
PMDC208TT8	W208PP8	1.125	28.5750	3.150	80.00000	1.188	30.16250
PMDC208TTR17	GW208PP17	1.125	28.5750	3.376	85.73770	1.188	30.17520
PMDC209TTR8	GW209PPB8	1.250	31.7500	3.347	85.00110	0.886	22.50694
PMDC210TT4	W210PP4	1.125	28.5750	3.543	89.99982	1.188	30.16250
PMDC211TT3	W211PP3	1.500	38.1000	3.937	100.00000	1.313	33.33750
PMDC211TT5	W211PP5	1.500	38.1000	4.000	101.60000	1.438	36.52520
PMDC211TTR3	GW211PP3	1.500	38.1000	3.937	100.00000	1.313	33.33750
PMDC211TTR4	DC211TTR4	1.500	38.1000	3.937	100.00000	1.313	33.33750
PMDC214TTR3	GW214PP3	2.688	68.2625	4.921	125.00102	1.563	39.68750
PMDS208TT12	DS208TT12	1.125	28.5750	3.443	87.45220	1.188	30.16250
PMDS208TT6	W208PPB6	1.000	25.4000	3.150	80.00000	0.709	18.00098
PMDS208TT8	DS208TT8	1.125	28.5750	3.150	79.99984	1.188	30.16250
PMDS208TTR8	DS208TTR8	1.125	28.5750	3.150	79.99984	1.188	30.16250
PMDS209TT5	W209PPB5	1.250	31.7500	3.347	85.00110	1.188	30.16250
PMDS209TTR5	GW209PPB5	1.250	31.7500	3.347	85.00110	1.188	30.16250
PMDS210TTR4	GW210PPB4	1.125	28.5750	3.543	89.99982	1.188	30.16250
PMDS211TT3	W211PPB3	1.500	38.1000	3.937	99.99980	1.313	33.33750
PMDS211TT6	W211PPB6	1.500	38.1000	4.130	104.90200	1.438	36.51250
PMDS211TTR3	GW211PPB3	1.500	38.1000	3.937	99.99980	1.313	33.33750
PMFD209RK	FD209 – 1¼ SQ	1.250	31.7500	5.000	127.00000	1.687	42.84980
PMFD209RM	FD209 – 1⅞ SQ	1.125	28.5750	5.000	127.00000	1.687	42.84980
PMFD211RM	FD211 – 1½ SQ	1.500	38.1000	5.500	139.70000	2.000	50.80000

Round Bore Size

Part Number	Supplier	Inside Dimension (in.)	Inside Dimension (mm)	Outside Dimension (in.)	Outside Dimension (mm)	Outer Race Width (in.)	Outer Race Width (mm)
PMDC208TT10	W208PP10	1.500	38.10000	3.150	79.99984	0.827	21.00072
PMDC211TTR21	GW211PP25	1.775	45.08500	3.937	99.99980	1.313	33.33750
PMDS208TT7	W208PPB7	1.188	30.16250	3.150	79.99984	0.709	18.00098
PMDS209TT2	W209PPB2	1.771	44.98848	3.347	85.00110	1.188	30.16250
PMDS209TT4	W209PPB4	1.525	38.73500	3.347	85.00110	1.188	30.16250
PMDS209TT6	DS209TT6	1.525	38.73500	3.443	87.45220	1.188	30.16250
PMDS209TTR2	GW209PPB2	1.771	44.98848	3.347	85.00110	1.188	30.16250
PMDS210TT2	W210PPB2	1.938	49.21250	3.543	89.99982	1.188	30.16250
PMDS210TT5	W210PPB5	1.775	45.08500	3.543	89.99982	1.188	30.16250
PMDS210TTR2	GW210PPB2	1.938	49.21250	3.543	89.99982	1.188	30.16250
PMDS210TTR5R	GW210PPB5	1.775	45.08500	3.543	89.99982	1.188	30.16250
PMDS211TT2	W211PPB2	2.188	55.57520	3.937	99.99980	1.313	33.33750
PMDS211TT4	W211PPB4	2.187	55.55996	3.937	99.99980	1.312	33.32480
PMDS211TTR14	GW211PPB14	2.005	50.92700	3.937	99.99980	0.984	25.00122
PMDS211TTR2	GW211PPB2	2.187	55.55996	3.937	99.99980	1.313	33.33750
PMDS211TTR23	DS211TTR23	1.775	45.08500	3.980	101.09200	1.335	33.90900
PMFD209RA	ST491A	1.750	44.45000	5.000	127.00000	1.687	42.84980
PMFD209RB	ST491B	1.500	38.10000	5.000	127.00000	1.687	42.84980
PMFD211RE	FD211-1-3/4RD	1.750	44.45000	5.500	139.70000	2.187	55.54980

Abbreviations: SQ – Square
RD – Round

Disk-Bearing Applications

OEM Machine	Replaces	All-Makes Part Number	Bore Size (in.)	Outside Diameter (in.)	Inside Race Width (in.)	Outside Race Width (in.)	Flange Used	Reference	Applications
Amco	10272	JD9248	1⅛ sq.	3.150	1.438	0.709	E62484	W208PPB5	WTD5, WTD6, LFD2, LFDB2, Disk
Amco	10333	PMDS208TT8	1⅛ sq.	3.150	1.438	1.188	E62484	W208PPB8	WTD10, WTD3, WTD4 Disk
Amco	11071	PMDC211TT3	1½ sq.	3.937	1.313	1.313	—	W211 PP3	516, 517, 518 Disk Harrow
Amco	11079	PMDS208TT6	1 sq.	3.150	1.438	0.709	E62484	W208PPB6	LFBD2, LFB2, LTB2
Amco	11503	PMDC211TTR4	1½ sq.	3.937	1.750	1.313	—	GW21 1 PP4	—
Amco	610333	PMDS208TTR8	1⅛ sq.	3.150	1.438	1.188	AE30794/E50822	GW208PPB8	13½ Pulverizing Disk
Amco	610771	PMDS210TTR2	1⅓/16 sq.	3.543	1.188	1.188	PMG90MSA-ZP/ PMG90MSB-ZP	GW210PPB2R	Disk Harrow
Amco	611071	PMDC211TTR3	1½ sq.	3.937	1.313	1.312	—	GW21 1 PP3	WOF3, WOF5, WOF6, WOJ3, WOJ4, Offset Disk
Athens	—	JD9248	1⅛ sq.	3.150	1.438	0.709	E62484	W208PPB5	Ridger
Athens	—	JD9350	1⅛ sq.	3.150	1.438	0.709	—	W208PP5	Ridger
Athens		PMDC211TT3	1½ sq.	3.937	1.313	1.313		W211PP3	Levee Plow, 1st Series
Athens	—	PMDS208TT6	1 sq.	3.150	1.438	0.709	E62484	W208PPB6	—
Athens	—	PMDS211TT6	1½ sq.	4.125	1.750	1.438	—	W211 PPB6	Levee Plow, 2nd Series
Athens	—	PMDS211TTR3	1½ sq.	3.937	1.313	1.313	AA21005/A22445	GW21 1 PPB3	Disk Harrow, New Ground Disk
Badger	85481014	PMDC211TT5	1½ sq.	4.00	1.750	1.438	—	W211 PP5	—
BCA	DC208TT5	JD9350	1⅛ sq.	3.150	1.438	0.709		W208PP5	F871, F901, F984 F981,F982 Bedder
BCA	DS208TT5	JD9248	1⅛ sq.	3.150	1.438	0.709	E62484	W208PPB5	8500, F810H, F850H
BCA	DS209TT5	JD8664	1¼ sq.	3.347	1.438	1.188	N166516	W209PPB5	9000Drill, 4400 Combine
BCA	DS209TTR4	AN240220	1.535 rd.	3.347	1.188	1.188	AE29907/E39751	GW209PPB4	—
BCA	DS211TTR13	AN240221	1¾ rd.	3.968	1.313	0.984	AA21005/A22445	GW211PPB13	—
Blanton		PMDS208TT12	1⅛ sq.	3.438	1.438	1.188	PM87MS-S-ZP	W208PPB12	Square Axle Disk
Brillion	9C16	PMDC208TT8	1⅛ sq.	3.150	1.438	1.185	—	W208PP8	—
Brillion	2.1516	JD9248	1⅛ sq.	3.150	1.438	0.709	E62484	W208PPB5	—
Brillion	3.1131	PMDS211TT3	1½ sq.	3.937	1.313	1.313	EH714360	W211 PPB3	—
Burch	—	PMDS210TT2	1⅓/16 rd.	3.543	1.188	1.188	H75385	W210PPB2	EZ, EZ-A, EZ-B, 145 Disk, Kwik Set, Hippen Ridge
Burch	—	PMDS211TT6	1½ sq.	4.125	1.750	1.438	—	W211 PPB6	Super Tandem 1973-Up
Burch	203214	PMDS211TT3	1½ sq.	3.937	1.313	1.313	EH714360	W211 PPB3	Offset Disk
Burch	78672A	PMDS211TTR3	1½ sq.	3.937	1.313	1.313	AA21005/A22445	GW21 1 PPB3	Offset Disk, Super Tandem
Burch	9554A	JD9350	1⅛ sq.	3.150	1.438	0.709	—	W208PP5	Ridger, 8 Row
Burch	J9373	JD9248	1⅛ sq.	3.150	1.438	0.709	E62484	W208PPB5	Ridger, E-Z Set, E-2G0, Early
Bush Hog	14-24-16 14-36-183	PMDC208TTR17	1⅛ sq.	3.376	1.438	1.188	—	GW208PP17	1424, 1426, 1432, 1435, 1438, 1439, 1444 w/1⅛-in.
Bush Hog	14-24-63	PMDC208TTR17	1⅛ sq.	3.376	1.438	1.888	—	GW208PP17	1422, 1423, Disk w/ 1-in. Gang Bolt
Bush Hog	14-24-26	PMDS208TT12	1⅛ sq.	3.438	1.438	1.188	PM87MS-S-ZP	W208PPB12	Disk Harrow
Bush Hog	14-4-5	PMDS209TT2	1.7717rd.	3.347	1.188	1.188	N166516	W209PPB2	—

Abbreviations: SQ – Square
RD – Round

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Disk-Bearing Applications

OEM Machine	Replaces	All-Makes Part Number	Bore Size (in.)	Outside Diameter (in.)	Inside Race Width (in.)	Outside Race Width (in.)	Flange Used	Reference	Applications
Bush Hog	14-5-109	PMDS210TT2	115/16 rd.	3.543	1.188	1.188	H75385	W210PPB2	145
Bush Hog	14-6-430	PMDC211TTR3	11/2 sq.	3.937	1.313	1.313	—	GW21 1PP3	145, 146, 246, 1435, 1437
Bush Hog	16-11-176	JD9350	11/8 sq.	3.150	1.438	0.709	—	W208PP5	W/11/2-in. Gang Bolt Bedder and Rigger
Bush Hog	7950006	JD9350	11/8 sq.	3.150	1.438	0.709	—	W208PP5	—
Caldwell	—	JD9248	11/8 sq.	3.150	1.438	0.709	E62484	W208PPB5	11/8 Axle Models
Case	H7474139	JD9350	11/8 sq.	3.150	1.438	0.709	—	W208PP5	Ridger
Case	H747170	PMDS211TT2	23/16 rd.	3.968	1.313	1.313	EH714360	W211 PPB2	Trencher
Case	H747444	PMDC211TT3	11/2 sq.	3.937	1.313	1.313	—	W211 PP3	Trencher
Case	T15820	PMDS208TT6	1 sq.	3.150	1.438	0.709	E62484	W208PPB6	Smaller Ridger
Case	T25486	PMDS208TT8	11/8 sq.	3.150	1.438	1.188	E62484	K208PPB8	—
Case	T28503	PMDS208TT12	11/8 sq.	3.438	1.438	1.188	PM87MS-S-ZP	W208PPB12	Disk Harrow
Case	T51610	PMDS211TTR3	11/2 sq.	3.937	1.313	1.313	AA21005/A22445	GW21 1 PPB3	K23, K23A, G59, Disk (Spherical O.D.)
Case	T51653	PMDC211TTR3	11/2 sq.	3.937	1.313	1.313	—	GW21 1 PP3	E30, 6109, 6110, 6119, K23, K23A Disk Harrow
Case	T53781	PMDS210TTR2	115/16 rd.	3.543	1.188	1.188	PMG90MSA-ZP/PM90MSB-ZP	GW210PPB2	Disk Harrow
Case	T56688	PMDC211TTR4	11/2 sq.	3.937	1.750	1.313	—	GW21 1 PP4	K23B Disk Harrow
Case	T57559	PMDS211TTR2	23/16 rd.	3.968	1.313	1.313	AA21005/A22445	GW21 1 PPB2	—
Charles Mach.	—	JD9350	11/8 sq.	3.150	1.438	0.709	—	W208PP5	Trencher
Chattanooga	—	JD9248	11/8 sq.	3.15	1.438	0.709	E62484	W208PPB5	—
Chattanooga	—	PMDS211TT6	11/2 sq.	4.125	1.750	1.438	—	W211 PPB6 ~Levi,	Levi-Dyke Plow
Deutz-Allis	—	PMDC211TT3	11/2 sq.	3.937	1.313	1.313	—	W211 PP3	K7 Disk
Deutz-Allis	406677	PMDC211TT5	11/2 sq.	4.00	1.750	1.438	—	W211 PPB5	3100, K, KT, WKT Disk
Deutz-Allis	430478	PMDS209TT2	1.7717 rd.	3.347	1.188	1.188	N166516	W209PPB	Disk Harrow
Deutz-Allis	430480	PMDS211TT2	23/16 rd.	3.968	1.313	1.313	EH714360	W211 PPB2	—
Deutz-Allis	70583939	PMDS211TTR3	11/2 sq.	3.937	1.313	1.313	AA21005/A22445	GW21 1 PPB3	2600 Disk
DMI	21842400	AN240220	1.535 rd.	3.347	1.188	1.188	AE29907/E39751	GW209PPB4	—
Dunham	GK260	JD9248	11/8 sq.	3.150	1.438	0.709	E622484	W208PPB5	Disk Harrow
Dunham	—	PMDS208TT12	11/8 sq.	3.438	1.438	1.188	PM87MS-S-ZP	W208PPB12	Disk Harrow (Wide O.R.)
Eversman	261750	JD9248	11/8 sq.	3.150	1.438	0.709	E62484	W208PPB5	—
Eversman	266740	PMDS208TT12	11/8 sq.	3.438	1.438	1.188	PM87MS-S-ZP	W208PPB12	—
Farmhand	EP5403	PMDC211TTR4	11/2 sq.	3.937	1.750	1.313	—	GW21 1 PP4	—
Farmhand	610771	PMDS210TTR2	115/16 rd.	3.937	1.750	1.313	PMG90MSA-ZP/PM90MSB-ZP	GW21 0PPB2	Disk Harrow
Farmhand	10771	PMDS210TT2	115/16 rd.	0.543	1.188	1.188	H75385	W210PP132	—
Farmhand	IA64318	PMFD209RB	11/2 rd.	—	—	—	—	DHU1-1/28209	Disk Harrow
Farmhand	IR41009	JD9248	11/8 sq.	3.150	1.438	0.709	E62484	W208PP135	—
Farmhand	310072	PMDS209TT2	1.7717 rd.	3.347	1.188	1.188	N166516	W209PPB2	Disk Harrow
Farmhand	340103	PMDS209TT4	1.535 rd.	3.347	1.188	1.188	N166516	W209PPB4	Disk Harrow
Farmhand	7377-1	PMDS211TT3	11/2 sq.	3.937	1.313	1.313	EH71436	W211 PPB3	—
Farmhand	EP6576	AN240220	1.535 rd.	3.347	1.188	1.188	AE29907/E39751	GW209PPB4	—
Ford	113903	PMDS209TT2	1.7717 rd.	3.347	1.188	1.188	N166516	W209PPB2	204, 210, 224, 230 Disk
Ford	MULCH112SG	PMDS211TT3	11/2 sq.	3.937	1.313	1.313	EH714360	W211 PPB3	236 Cutting Disk
Ford	MULCBB112	PMDC211TT3	11/2 sq.	3.937	1.313	1.313	—	W211 PP3	219, 223 Cutting Disk

Abbreviations: SQ – Square
RD – Round

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Disk-Bearing Applications

OEM Machine	Replaces	All-Makes Part Number	Bore Size (in.)	Outside Diameter (in.)	Inside Race Width (in.)	Outside Race Width (in.)	Flange Used	Reference	Applications
Ford	SBP238481B	PMDS208TTR8	11/8 sq.	3.150	1.438	1.188	AE30794/E50822	GW208PPB8	241, 242, 243 246 Disk Harrow
Forest City Greenline	—	JD9350	11/8 sq.	3.150	1.438	0.709	—	W208PP5	Ridger
	—	PMDC211TTR3	11/2 sq.	3.937	1.313	1.313	—	GW21 1 PP3	Disk Harrow
Hardee Mfg.	—	PMDS208TT12	11/8 sq.	3.438	1.438	1.188	PM87MS-S-ZP	W208PPB12	Disk Harrow
Hester Plow	—	JD9350	11/8 sq.	3.150	1.438	0.709	—	W208PP5	Disk Harrow
IH/Case	1251062091	PMDS209TT2	1.7717 rd.	3.347	1.188	1.188	N166516	W209PP132	—
IH/Case	630210891	JD9448	11/8 sq.	3.150	1.438	0.709	E62484	W208PPB5	Ridger
H/Case	958334891	PMDS211TTR2	23/16 rd.	3.968	1.313	1.313	EH714360	W211 PPB2	—
IH/Case	ST491A	PMFD209RA	13/4 rd.	—	—	—	—	DHU1-3/45209	315 Pack-Mulch, 330, 350, 370, 470, 475, 480
IMCO	—	PMDS208TT12	11/8 sq.	3.438	1.438	1.188	PM87MS-S-ZP	W208PPB12	Wheel Disk
Kelly	5051001	AN240220	1.535 rd.	3.347	1.188	1.188	AE29907/E39751	GW209PPB4	—
Kelly	605100	JD9248	11/8 rd.	3.150	1.438	0.709	E62484	W208PPB5	—
Kelly	06A51-001	JD9350	11/8 sq.	3.150	1.438	0.709	—	W208PPB	Coulter
Kent	FC0481	PMFD209RB	11/2 rd.	—	—	—	—	DHU1-1/28209	Disk Harrow
Kewanee	6143683	PMDC208TTR17	11/8 sq.	3.376	1.438	1.188	—	—	GW208PP17
Kewanee	82055	PMDC211TT3	11/2 sq.	3.937	1.313	1.313	—	W211 PP3	Disk Harrow
Kewanee	82151	PMDS208TTR8	11/8 sq.	3.150	1.438	1.188	AE30794/E50822	GW208PPB8	500, 600 Disk
Kewanee	82246	PMDS210TTR4	11/8 sq.	3.543	1.188	1.188	PMG90MSA-ZP/PM90MSB-ZP	W210PPB4	1000 Series Disk thru 1977
Kewanee	B7980/G0052604	JD9248	11/8 sq.	3.150	1.438	0.709	E62484	W208PPB5	206, 400 Disk
Kewanee	88018	JD9350	11/8 sq.	3.150	1.438	0.709	—	W208PP5	—
Kewanee	61046430	PMDC211TTR3	11/2 sq.	3.937	1.313	1.313	PM87MS-S-ZP	GW21 1 PP3 W208PPB12	KCB, WGH, EZB, MFB, Disk Harrow
King Plow	BB-2N	PMDS208TT12	11/8 sq.	3.438	1.438	1.188	—	None	1900-1928, 2135–2166, 2200, 4900 Series Rock F1
Krause	1927-11-0	PMCD5209TTR6	1.530 rd	—	—	—	—	None	2400 Series Rock Flex Gang
Krause	2410-11-1	PMCD5211TTR2	13/4 rd.	3.979	2.125	1.335	H75385	W210PPB5	Disk Harrow
Krause	40103	PMDS210TT5	13/4 rd.	3.543	1.188	1.188	PMG90MSA-ZP/PM90MSB-ZP	GW210PPB5	—
Krause	40-106	PMDS210TTR5R	1.785 rd.	3.543	1.188	1.188	—	DHU1-1/45209	Disk Harrow
Krause	40-128	PMFD209RK	11/4 sq.	—	—	—	E62484	W208PPB7	Disk Harrow
Krause	40102/P-212-10-2	PMDS208TT7	13/16 rd	3.150	1.188	0.709	N166516	W209PPB4	—
Krause	40-104/412-10-2	PMDS209TT4	1.535 rd.	3.347	1.188	1.188	—	—	—
Krause	40-105	AN240220	1.535 rd.	3.347	1.188	1.188	AE29907/E39751	GW209PPB4	—
Krause	40-109	PMFD209RB	11/2 rd.	—	—	—	—	DHU1-128209	Disk Harrow
Krause	612-10-2	AN240220	1.535 rd.	3.347	1.188	1.188	AE29907/E39751	GW209PPB4	Disk Harrow
Landoll	1065010003	AN240220	1.535 rd.	—	—	—	—	AE29907/E39751	GW209PPB4
Landoll	1065010011	PMFD209RB	11/2 rd.	—	—	—	—	DHU1-1/28209	Disk Harrow
Long	9-90092	PMDS208TT12	11/8 sq.	3.438	1.438	1.188	PM87MS-S-ZP	W208PPB12	Disk Harrow
Long	9-90241	PMDS211TT6	11/2 sq.	4.125	1.750	1.438	—	W211 PPB6	958, 959, 960, 1090, Disk Harrow
Long	9-92088	PMDS211TTR3	11/2 sq.	3.937	1.313	1.313	AA21005/A22445	GW21 1 PPB3	—

Abbreviations: SQ – Square
RD – Round

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Disk-Bearing Applications

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OEM Machine	Replaces	All-Makes Part Number	Bore Size (in.)	Outside Diameter (in.)	Inside Race Width (in.)	Outside Race Width (in.)	Flange Used	Reference	Applications
Massey Ferguson	843638M1/1905666	JD9248	1⅛ sq.	3.150	1.438	0.709	E62484	W208PPB5	—
Massey Ferguson	1905678M1	PMDC211TT3	1⅛ sq.	3.937	1.313	1.313	—	W211 PP3	Disk Harow
Massey Ferguson	447899M1	PMDS208TT12	1⅛ sq.	3.438	1.438	1.188	PM87MS-S-ZP	W208PPB12	34MTD and 33 Rev. Disk
Massey Ferguson	4494321V11	PMDS211TTR3	1⅛ sq.	3.937	1.313	1.313	AA21005/A22445	GG21 1 PPB3	30, 40, 520, 620, 720, Disk Harrow
Massey Ferguson	831960M1	PMDS211TT2	2⅜/16 rd.	3.968	1.313	1.313	EH714360	W211 PPB2	27 Flex Disk
Massey Ferguson	831960M3	PMDS210TT2	1⅝/16 rd.	3.543	1.188	1.188	H75385	W210PPB2	Disk Harrow
Massey Ferguson	832540M1	PMDS211TT3	1⅛ sq.	3.937	1.313	1.313	EH714360	W211PP133	38, 41, 42 Disk Harrow
Massey Ferguson	834367M1/1025130	PMDS208TT6	1 sq.	3.150	1.438	0.709	E62484	W208PPB6	21 Disk Harrow ‘
Massey Ferguson	835050M1	PMDS209TT2	1.772 rd.	3.347	1.188	1.188	N166516	W209PPB2	34, 39, 68, Disk Harrow
Massey Ferguson	842303M1	JD8664	1¼ sq.	3.347	1.438	1.188	N166516	W209PPB5	520, 620, Disk Harrow
McClesky		PMDS208TT12	1⅛ sq.	3.438	1.438	1.188	PM87MS-S-ZP	W208PPB12	F228, L150 Harrow
Melroe	6517957	PMDS211TT2	2⅜/16 rd.	3.968	1.313	1.313	EH714360	W211 PP132	—
Moline		JD9350	1⅛ sq.	3.150	1.438	0.709	—	W208PP5	Hipper
Moline	20H2152	PMDS209TT2	1.772 rd.	3.347	1.188	1.188	N166516	W209PPB2	Disk Harrow
Multi Purpose	—	JD9350	1⅛ sq.	3.150	1.438	0.709	—	W208PP5	Ridger
New Holland	NDAS4508BJ	JD9248	1⅛ sq.	3.150	1.438	0.709	E62484	W208PPB5	—
New Holland	SPB238481B	PMDS208TTR8	1⅛ sq.	3.150	1.438	1.188	AE30794/E50822	GW208PPB8	—
Oliver	2370928	PMDS208TT7	1⅜/16 rd.	3.150	1.188	0.709	E62484	W208PPB7	241, 352, 250 Series Wheel Disk Harrow
Oliver	2384818	PMDS208TTR8	1⅛ sq.	3.150	1.438	1.188	AE30794/E50822	GW208PPB8	263 Disk
Oliver	30-1005197	PMDS208TT7	1⅜/16 rd.	3.150	1.188	0.709	E62484	W208PPB7	—
Pico	4404-P	PMDS211TT3	1⅛ sq.	3.937	1.313	1.313	EH714360	W211 PPB3	HD Levee Plow, WO Series Disk Harrow
Pico	744-P	JD9248	1⅛ sq.	3.150	1.438	0.709	E62484	W208PPB5	L0, 175, 185, 200, 206, 250, 300 LT400, 720,
Piper	—	JD8664	1¼ sq.	3.347	1.438	1.188	N166516	W209PPB5	Do-All
Piper	—	JD9350	1⅛ sq.	3.150	1.438	0.709	—	W208PP5	Disk Harrow and Ridger
Rome	—	PMDS208TT12	1⅛ sq.	3.438	1.438	1.188	PM87MS-S-ZP	208PPB12	7⅛ Disk Harrow
Shaffer	—	PMDS209TT2	1.772 rd.	3.347	1.188	1.188	N166516	W209PPB2	Disk Harrow
Shaffer	—	PMDS210TT2	1⅝/16 rd.	3.543	1.188	1.188	H75385	W210PPB2	Disk Harrow
Southern	—	PMDS208TT12	1⅛ sq.	3.438	1.438	1.188	PM87MS-S-ZP	W208PPB12	Disk Harrow, 13 Pulverizing Disk
Sunflower	3091	PMDC211TTR21	1⅜ rd.	3.937	1.750	1.313	—	None	Gimbal Mount Unit Insert
Sunflower	FK311007	PMFD209RK	1¼ sq.	—	—	—	—	DHU1-1/45209	Disk Harrow
Sunflower	YYB3471	PMFD209RM	1⅛ sq.	—	—	—	—	DHU1-1/85209	Disk Harrow
Sunflower	1186	PMDS208TT7	1⅜/16 rd.	3.150	1.188	0.709	E62484	W208PPB7	—
Sunflower	1829	AN240220	1.535 rd.	3.347	1.188	1.188	AE29907/E39751	GW209PPB4	—
Sunflower	242	AN240221	1⅜ rd.	3.968	1.313	0.984	AA21005/A22445	GW211PPB13	Disk Harrow
Sunflower	24A5301	JD9248	1⅛ sq.	3.150	1.438	0.709	E62484	W208PPB5	—
Talbot	T151	PMDS208TT8	1⅛ sq.	3.150	1.438	1.188	E62484	W208PPB8	—

Abbreviations: SQ – Square RD – Round

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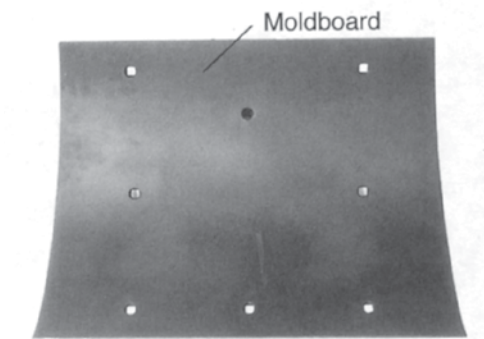
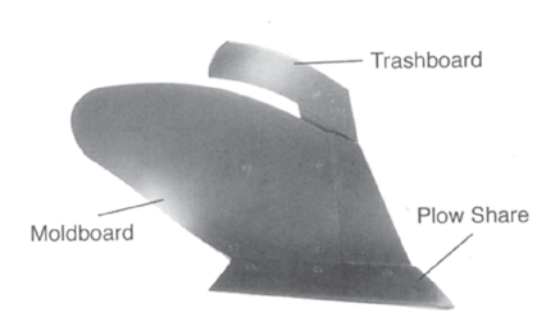
Disk-Bearing Applications

OEM Machine	Replaces	All-Makes Part Number	Bore Size (in.)	Outside Diameter (in.)	Inside Race Width (in.)	Outside Race Width (in.)	Flange Used	Reference	Applications
Taylor	204147	PMDS208TT12	1⅛ sq.	3.438	1.438	1.188	PM87MS-S-ZP	W208PPB12	Disk Harrow, Light Duty, 12⅛, 19, 21
Taylor	204679	PMDS211TT6	1⅛ sq.	4.125	1.750	1.438	—	W211 PPB6	Disk Harrow, Extra Heavy Duty
Taylor	207022	PMDS211TTR3	1⅛ sq.	3.937	1.313	1.313	AA21005/A22445	GW21 1 PP133	Disk Harrow, Heavy Duty
Taylor	207359	PMDS208TTR8	1⅛ sq.	3.150	1.438	1.188	AE30794/E50822	GW208PPB8	20000, Series Disk,
Taylor	606973	JD9350	1⅛ sq.	3.150	1.438	0.709	—	W208PP5	—
Towner		PMDS211TT6	1⅛ sq.	4.125	1.750	1.438	—	W211 PPB6	510, 515 Harrow
Towner	15013	PMDS208TT12	1⅛ sq.	3.438	1.438	1.188	PM87MS-S-ZP	W208PPB12	15013 Rep 1
Tufline	T60	JD9248	1⅛ sq.	3.150	1.438	0.709	E62484	W208PPB5	Disk Harrow, 1⅛-in. Gang Bolt
Tufline	T602	PMDS208TT12	1⅛ sq.	3.438	1.438	1.188	PM87MS-S-ZP	W208PPB12	Disk Harrow, 1⅛-in.
Unverferth	7044	PMDS209TT2	1.7717rd.	3.347	1.188	1.188	N166516	W209PPB2	Disk Harrow
Unverferth	91134	PMFD209RB	1⅛ rd.	—	—	—	—	DHU1-1/28209	Disk Harrow
W & A Mfg.	481217A	PMDC208TTR17	1⅛ sq.	3.376	1.438	1.188	—	GW208PP17	—
W & A Mfg.	481202	JD9350	1⅛ sq.	3.150	1.438	0.709	—	W208PP5	Ridger and Does More
W & A Mfg.	481213	PMDC211TTR3	1⅛ sq.	3.937	1.313	1.313	—	GW21 1 PP3	—
White	2730928	PMDS208TT7	1⅜/16 rd	3.150	1.188	0.709	E62484	W208PPB7	—
White	W238481B	PMDS208TTR8	1⅛ sq.	3.150	1.438	1.188	AE30794/E50822	W209PPB8	—
White	W238813	PMFD209RM	1⅛ sq.	—	—	—	—	DHU1-1/88209	Disk Harrow
Wil-Rich	24677	PMDC208TTR17	1⅛ sq.	3.376	1.438	1.188	—	GW208PP17	—
Wil-Rich	24022	PMDS211TTR2	2⅜/16 rd.	3.968	1.313	1.313	AA21005/A22445	GW21 1PPB2	Disk Harrow

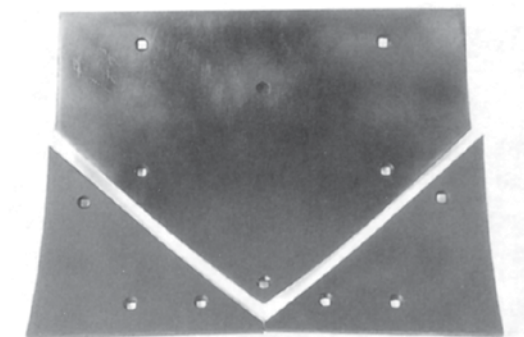
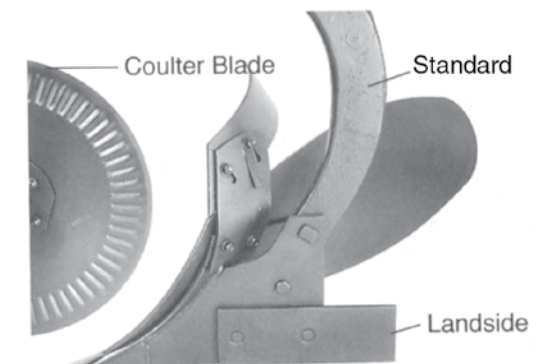
Abbreviations: SQ – Square RD – Round

This moldboard plow parts section provides listings of high-wear plow components. These components reflect John Deere's commitment to quality that provides maximum product life and performance. John Deere design and manufacturing processes, competitive prices, and field-to-parts-counter service deliver added value for our customers.

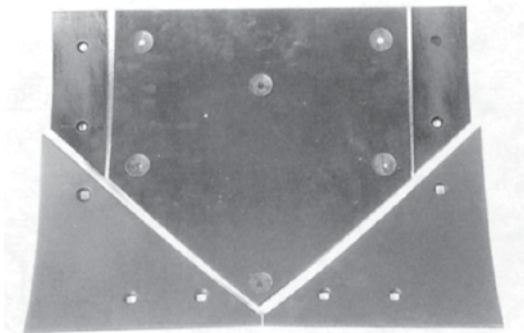
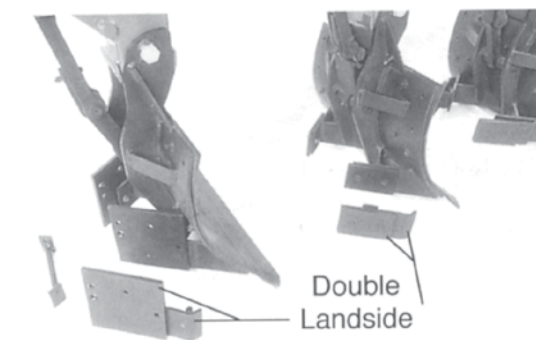
Moldboard Plow Components and Assembly



Front Two-Way Bottom (One-Piece Moldboard)



Front Two-Way Bottom (Three-Piece Moldboard)



Front Two-Way Bottom (Five-Piece Moldboard)



Plowshare Features And Benefits

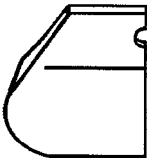
Material

- Fine-grain, high-carbon steel meets rigid metallurgical and dimensional specifications.
- Parts have consistent quality.

Process

- Modern, well-maintained equipment heat-treats, quenches, and tempers these products.
- Hardness levels that maximize wear and minimize breakage are maintained.

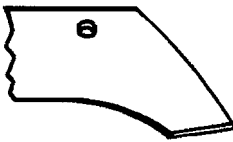
Design



Upset Point

(Standard Feature on Heavy-Duty Plowshares — One-Way Bottoms Only)

- Extra material is forged into the point.
- This increases product life by reducing replacement intervals.



Extended Point

(Optional Feature)

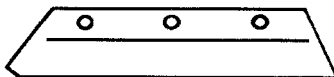
- The extended point is desirable for use in heavy soils.
- Soil penetration is improved and product life is increased.



Concave and Beveled Back Side

(Standard Feature)

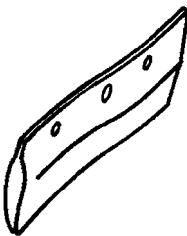
- The back side of the plowshare is concave and beveled.
- This design promotes a continuous self-sharpening edge that minimizes draft and provides excellent soil penetration.



Exclusive Top Ground Edge

(Standard Feature)

- John Deere plowshares have an exclusive top ground edge.
- A precise fit with the moldboard and shin eliminates gaps and uneven soil flow that reduces scouring and can cause uneven wear patterns.



Lengthwise Twist

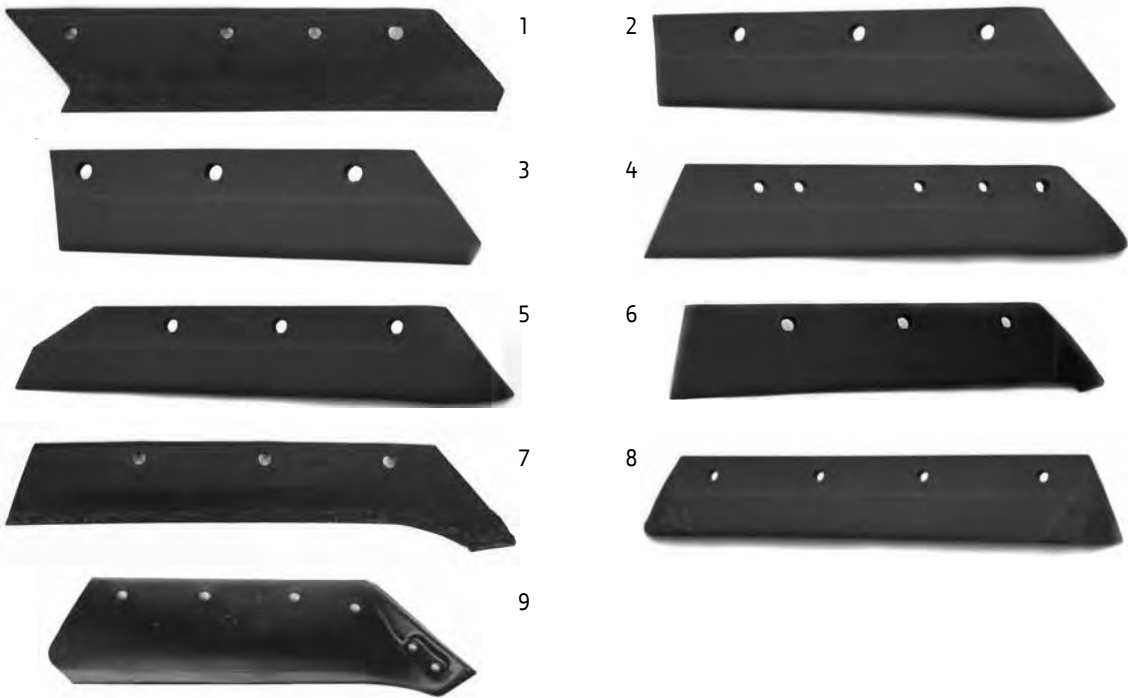
(Standard Feature — One-Way Bottoms Only)

- The exclusive lengthwise twist conforms to the shape of the moldboard and lowers the position of the point.
- The twist minimizes draft for smooth soil flow.
- The lower point maximizes soil penetration.

Plowshare Options

Shape Options	Performance Characteristics
Full Cut	Use when a standard width of cut is required.
Narrow Cut	Use when a narrow width of cut is required.
Overcut	Use when a wide width of cut or complete slicing is required.
Extended Point (Gumbo)	Use in heavy soil conditions when penetration in tight, heavy soil is a problem.
Reversible Point (400-mm Long Bottom)	Has a reversible and replaceable share point.
Two-Way (Two Points)	Used on reversible (two-way) plows.

Shape Options	Performance Characteristics
Regular	Use where there are few rocks and low-wear soil conditions.
Heavy Duty (Upset Point)	Use in hard-to-penetrate, high-wear conditions.
Hard Faced	Use in areas where abrasive soil causes rapid wear of heavy-duty plowshares. Do not use in rocky soil.



- 1 – Narrow cut, regular
- 3 – Full cut, regular
- 5 – Overcut, heavy duty
- 7 – Full cut, heavy duty, long point, hard faced
- 9 – Reversible point share

- 2 – Narrow cut, heavy duty
- 4 – Full cut, heavy duty
- 6 – Full cut, heavy duty, hard faced
- 8 – Plowshare

Hardware For Plowshares



Use hardware with the right fit and the designed strength to work with John Deere plowshares.

- Plow bolts with nuts, 7/16-in. x 1 3/16-in., AA15890 (box of 50)
- Plow bolts with nuts, 1/2-in. x 1 1/4-in., AA15892(box of 50)
- Plow bolts only, 1/2-in. x 1 3/8-in., A14551 (package of 4)
- Plow bolts with nuts, M16 x 34, AA28651 (box of 25)*

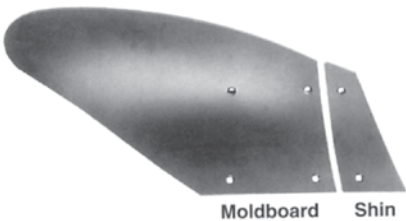
*Use with 14H1040 1/2-in. heavy-duty nut.

Warranty Information

The John Deere warranty policy covers plowshares for up to 12 months following the date of purchase. A replacement part will be furnished without charge if the part breaks, subject to the established wear guidelines. To determine if the product fits within these warranty guidelines, follow the steps below:

- 1) Measure the perpendicular distance from the center of the first bolthole to the share’s edge of ground contact.
- 2) Determine if the share is a metric-dimension share or inch-dimension share:
 - **Metric-Dimension Shares:** If there are 100 mm of product remaining, then the share is warrantable. In other words, there has been only 15 mm of wear.
 - **Inch-Dimension Shares:** If there are 3.5 inches of product remaining, then the share is warrantable. In other words, there has been only a half-inch of wear.

One-Way Moldboard and Shin Features and Benefits



Materials

- Shins use 5/16-in.-thick high-carbon steel that meets rigid metallurgical and dimensional specifications.
- Parts exhibit consistent quality.
- NU moldboards feature three-ply construction — hard outer layers with a soft center (available on select models).
- The hard outer layer provides long life with maximum polish. The soft center increases flex capability, reducing the potential for breakage.

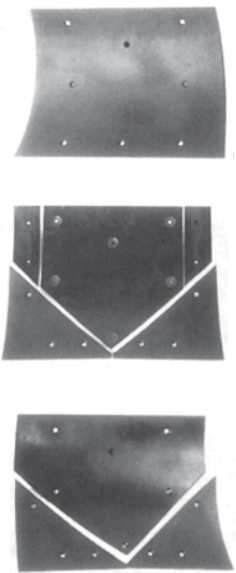
Design

- Moldboard, shin, and other components are computer designed.
- Parts fit perfectly, for longer wear.

Process

- Moldboards and shins are die cut, formed, and quenched in a continuous process.
- Each component has a consistent shape and fits precisely with mating components to maintain proper soil flow.

Two-Way Moldboard and Shins



Two-way integral moldboard plows utilize a single set of bottoms that can be positioned right or left. The standard is located directly behind the moldboard, minimizes moldboard flexing, and eliminates the need for three-ply construction.

The one-piece moldboard is made from 1/4-in.-thick, heat-treated, high-carbon steel.

A five-piece moldboard is available as a field-installed option. Two additional steel shins are added above the current shins. For use with a smaller plastic moldboard, holes are predrilled in the frog to accept the factory option.

The three-piece moldboard has two options:

Option 1: 5/16-in. high-carbon steel for use in abrasive or rocky soil.

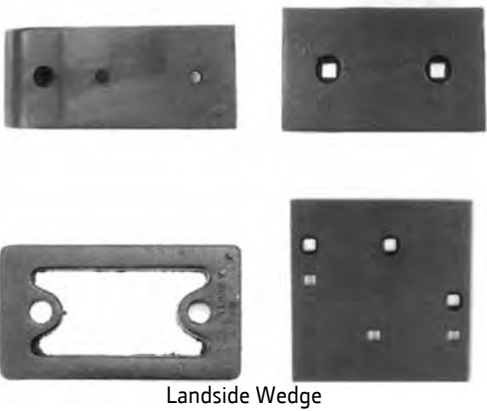
Option 2: 1/4-in. plastic to shed sticky soil.

Steel shins are used with both the steel and plastic moldboard.

Landsides and Wedges

One-Way Plows

Landsides and wedges help keep the plow on the “line of draft” and minimize overcutting or undercutting in adverse conditions.

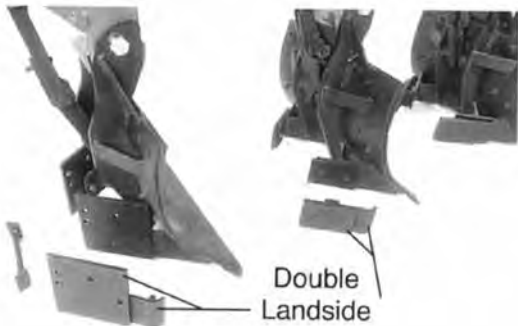


Option	Function
Long Landside	Use to minimize overcutting in light soil and/or shallow plowing.
Short Landside	Use as required to minimize overcutting.
Landside Wedge	Recommended in severe conditions when landside is not enough to prevent overcutting or undercutting.

Large Square Landside

Two-Way Plows

Landsides and wedges are used in average-to-soft soil conditions to provide sufficient furrow-wall pressure.



Option	Function
Landsides and Wedges	Use in average-to-soft soil conditions to provide sufficient furrow-wall pressure.
Double Landsides	Use in hard soil conditions where furrow-wall pressure is not a problem.
Square Landside	Use on the rear bottom.

Trash Boards

Trash boards improve coverage in heavy or tall residue. They are mounted just above and at the leading edge of the plow moldboard to help deflect trash toward the furrow bottom. Slots in the trash-board support bracket provide adjustment for various levels of coverage.

For maximum coverage, set the trash board at the highest setting in the slot on the trash-board support bracket. For less coverage, use the lowest slot in the trash-board support bracket.



Option	Function
Steel	Use in abrasive and nonsticky soils.
Plastic	Use in sticky, nonabrasive soil.

35 and 45 Series Integral Plows



- NU1034 Bottom – 14 in.
- NU1036 Bottom – 16 in.
- NU1044 Bottom – 14 in.
- NU1046 Bottom – 16 in.
- SDT446 Slat Bottom – 16 in.

Plowshares

Description	Usage	Part Number	Attaching Hardware
14-in. Full Cut, Heavy Duty	NU1034 and NU1044	A51498	(1) 12H292, (3) 12H325, and (3) AA15890
16-in. Full Cut, Heavy Duty	NU1046 and SDT	A51500	Same as above
16-in. Full Cut, Heavy Duty, Hard Faced	NU1036, NU1046, and SDT	A51508	Same as above
16-in. Narrow Cut, Regular	NU1036	A10224	Same as above
16-in. Narrow Cut, Heavy Duty	NU1046 and SDT	A51501	Same as above

Frogs

Description	Part Number	Attaching Hardware
Frog (NU1036 and NU1046)	AA15835	—
Moldboard Brace (NU1036 and NU1046)	A15600	(4) 24H1334, (1) 10H1241, and (1) 14H1047
Moldboard Brace (NU1036 and NU1046)	A15598	(1) A12414 and (1) 14H1047

Landside — No. 12

Description	Part Number	Attaching Hardware
Heel	A13853	—
Landside, Rear	A17550	(3) 14H1047, (1) 24H1346, (1) 15645, (1) 10H1015, (2) 10H1158, (1) 10H1080, (1) 10H1238, (2) 14H1040, (1) 10H1237, and (1) 14H1039
Strap	A17552	(1) 14H1040, (1) 19H2726, and (1) 12H294
Wedge	A13851	—

Landside — No. 13*

Description	Part Number	Attaching Hardware
Landside	A16493	(1) 10H1237, (1) 10H1238, and (2) 14H1040
Wear Plate	A16495	(1) A16497, (1) A16498, and (2) 14H1047

*Use No. 13 Landside and hardware for replacement of the No. 9 Landside.

Coulter Blades

Description	Blade Only Part Number	Serial Number
17-in. Plain	33131**	(–1976)
17-in. Notched	—	(–1966)
17-in. Rippled	A17093*	—
Rivet	16H1370*	—

*Cone bearing (–1976). / *Anti-friction bearing.

Landside — No. 14		
Description	Part Number	Attaching Hardware
Landside	A18001	(2) 14H1040, (1) 14H1047, (1) 10H1238, (1) 10H1239, and (1) 10H1158
Adjuster	A15635	(1) 19H2699, (1) 12H293, and (1) 14H1047

Landside — No. 15		
Description	Part Number	Attaching Hardware
Landside (RH), Front	A22032	(2) 10H1242, (1) 10H1238, (1) 10H1239, (2) 14H1047, and (2) 14H1040
Wedge	A22031	—

Landside — No. 16		
Description	Part Number	Attaching Hardware
Landside (RH), Front	A34336	(2) 10H1242, (1) 10H1238, (1) 10H1239, (2) 14H1047, and (2) 14H1040
Wedge	A22031	—

Moldboards and Shins — NU Bottoms		
Description	Part Number	Attaching Hardware
Moldboard (NU1034 and NU1044)	A15595	(7) A12414 and (7) 14H1047
Moldboard (NU1036 and NU1046)	A15596	Same as above
Moldboard Extension (NU1036 and NU1046)	7750A	(AR) 24H1346
Shin (NU1034 and NU1044)	A15593	(2) A12414 and (2) 14H1047
Shin (NU1036 and NU1046)	A51081	Same as above

Shins and Slat — SDT446 Bottom		
Description	Part Number	Attaching Hardware
Shin	A14702	(2) A12414 and (2) 14H1047
Slat — 1st	A12402	(4) A12414 and (4) 14H1047
Slat — 2nd	A12404	(2) A12414, (1) 24H1341, and (2) 14H1047
Slat — 3rd	A12406	Same as above
Slat — 4th	A12408	Same as above

Trash Boards		
Description	Part Number	Attaching Hardware
Trash Board, Plastic	A36451	(2) A12414 and (2) 14H1047
Trash Board, Steel	A45379	Same as above

965, 975, and 995 Reversible On-Land Plows 835, 3945, and 3955 Reversible Integral Plows

Plowshares			
Description	Usage	Part Number	Attaching Hardware
26-in. Two Way, Hard Faced	3835	P59131	(4) 10H1245, (4) 12H293, and (4) 14H813
28-in. Two Way, Regular	965, 975, 995, 3945, and 3955	P59129	(4) AA15890, (4) 12H325, and (4) 14H1047
28-in. Two Way, Hard Faced	965, 975, 995, 3945, and 3955	P59130	Same as above

Frogs			
Description	Usage	Part Number	Attaching Hardware
Frog (Except Rear)	965, 3945, and 3955	AP31247	(3) 19H2228, (3) 12H304, (3) 14H812, (1) P57273, (1) 12H245, and (1) 14H1077
Frog (Rear)	965, 3945, and 3955	AP31246	Same as above
Bushing	965, 3945, and 3955	P57252	(1) 19H1922 and (1) K40014
Frog	975 and 995	AP39473	(2) P66664, (2) 12H234, and (2) 14H1048

Landsides and Wedges			
Description	Usage	Part Number	Attaching Hardware
Landside (Except Rear) (6 Bottom)	965	P57046	(2) 10H1073, (2) 12H293, and (2) 14H813
Landside (Rear) (6 Bottom)	965	P57522	(4) 10H1073, (4) 12H293, and (4) 14H813
Landside (Except Rear) (7 Bottom)	965	P57046	(2) 10H1011, (2) 12H293, and (2) 14H813
Landside (Rear) (7 Bottom)	965	P57052	(4) 10H1011, (4) 12H293, and (4) 14H813
Landside (Except Rear)	3835	P57219	(2) 10H1073, (2) 12H293, and (2) 14H813
Landside (Rear)	3835	P57223	(4) 10H1073, (4) 12H293, and (4) 14H813
Landside (Except Rear)	3945	P57046	(2) 10H1011, (2) 12H293, and (2) 14H813
Landside (Rear)	3945	P57052	(4) 10H1011, (4) 12H293, and (4) 14H813
Landside (Except Rear)	975, 995, and 3955	P57046	(2) 10H1073, (2) 12H293, and (2) 14H813
Landside (Rear)	3955	P57052	(4) 10H1011, (4) 12H293, and (4) 14H813
Landside (Rear)	975 and 995	P60071	(2) 10H1159, (1) 14H1047, and (2) 12H293
Wedge (Except Rear)	965	AP31248	(1) 19H2731, (1) 10H1015, (2) 12H293, and (2) 14H813
Wedge (Rear)	965	AP31249	(1) 19H2731, (1) 10H1015, (2) 12H293, and (2) 14H813
Wedge (All Bottoms)	975 and 995	AP31248	(1) 19H2731, (1) 10H1015, (2) 12H293, and (2) 14H813

Moldboards and Shins			
Description	Usage	Part Number	Attaching Hardware
Moldboard, Steel	965, 975, 995, 3945, and 3955	P57264	(6) 10H1027, (6) 24H1682, (6) 12H304, and (6) 14H1076
Moldboard, Plastic	965, 975, 995, 3945, and 3955	P60102	(6) P57541, (6) 24H1292, (6) 12H303, and (6) 14H785
Shin (RH)	965, 3945, and 3955	P57266	(3) 10H1027, (3) 24H1682, (3) 12H304, and (3) 14H1076
Shin (LH)	965, 3945, and 3955	P57265	Same as above
Shin (RH), Steel	975 and 995	P59408	Same as above
Shin (LH), Steel	975 and 995	P59409	Same as above
Share Point (RH), Steel	975 and 995	P57266	—
Share Point (LH), Steel	975 and 995	P57265	—
Sheet	8395, 3945, and 3955	P57062	—

1000 Integral Plow



NU350 Bottom – 14 in. (350 mm)

Plowshares

Description	Part Number	Attaching Hardware
14-in. (350 mm) Full Cut, Regular	A32217	(3) AA28651
14-in. (350 mm) Narrow Cut, Heavy Duty	A42805	Same as above
16-in. (400 mm) Full Cut, Heavy Duty	A42806	Same as above
16-in. (400 mm) Full Cut, Heavy Duty, Hard Faced	A42946	Same as above

Coulter Blade

Description	Part Number	Attaching Hardware
17-in. (430 mm) Rippled	A17093	(3) 19M3145 and (3) 14M7274

Frog

Description	Part Number	Attaching Hardware
Bolt	A45048	(1) A31869

Landside and Wedges

Description	Part Number	Attaching Hardware
Landside, Short	A45226	(1) A45223, (1) A45224, and (1) A31869,
Landside, Long	N250286	(1) 14M7276
Landside, Long Rear	A39114	(1) A44246, (1) A31869, and (1) 14M7276
Heel for Long Rear Landside	A13853	(2) A44271, (2) 24M7038, (2) 14M7275, and (1) 15645
Wedge	A36611	(1) A45489, (1) A45488, (1) A31869, and (1) 14M7276

Moldboard and Shin

Description	Part Number	Attaching Hardware
Shin	A42943	(1) A32044, (2) 14M7275, (1) A32225, and (1) 24M7038

Trash Boards

Description	Part Number	Attaching Hardware
Bracket (For Plastic Trash Board)	A32216	—
Bracket (For Steel Trash Board)	A32214	—
Trash Board, Plastic	A36451	(2) A32225, (2) 14M7275, and (2) 24M7038
Trash Board, Steel	A45381	(2) A32044, (2) 14M7275, and (2) 24M7038

1150 and 1250 Series Integral Plows
1350 and 1450 Series Semi-Integral Plows



NU1036 Bottom – 16 in. NU1056 Bottom – 16 in.
NU1046 Bottom – 16 in. SDT446 Slat Bottom – 16 in.
NU1048 Bottom – 18 in.

Plowshares

Description	Usage	Part Number	Attaching Hardware
16-in. Full Cut, Regular	NU1036	A10223	(1) 12H292, (1) AA15892, (3) 12H325, and (3) AA15890
16-in. Full Cut, Heavy Duty	NU1046, NU1056, and SDT	A51500	Same as above
16-in. Full Cut, Heavy-Duty, Hard Faced	NU1036, NU1046, and SDT	A51508	Same as above
16-in. Narrow Cut, Regular	NU1036	A10224	Same as above
16-in. Narrow Cut, Heavy Duty	SDT	A51501	Same as above
18-in. Full Cut, Heavy Duty	NU1048	A51504	Same as above
18-in. Full Cut, Heavy Duty, Hard Faced	NU1048	A51510	Same as above
18-in. Narrow Cut, Heavy Duty	NU1048	A51505	Same as above

Frogs

Description	Part Number	Attaching Hardware
Frog (NU1036, NU1046, and NU1056)	AA15835	—
Frog (NU1048) (–1974)	AA15835	—
Frog (NU1048) (1974–)	AA23791	—
Moldboard Brace (NU1036, NU1046, and NU1056)	A15600	(4) 24H1334, (1) 10H1241, and (1) 14H1047
Moldboard Brace (NU1036, NU1046, and NU1056)	A15598	(1) A12414 and (1) 14H1047
Moldboard Brace (NU1048) (–1974)	A17435**	(1) A17787 and (1) 14H1047
Moldboard Plate (NU1048) (1982–)	A17437	(2) A12414, (4) 14H1047, and (2) A16497

*Use with AA15835 Frog. / **Use with AA23791 Frog.

Landside — No. 12

Description	Part Number	Attaching Hardware
Heel	A13853	—
Landside, Rear	A17550	(3) 14H1047, (1) 24H1346, (1) 15645, (1) 10H1015, (2) 10H1158, (1) 10H1080, (1) 10H1238, (2) 14H1040, (1) 10H1237, and (1) 14H1039
Strap	A17552	(1) 14H1040, (1) 19H2726, and (1) 12H294
Wedge	A13851	—

Coulter Blades (1150 and 1250) (See Parts Catalog for 1350 and 1450)

Description	Blade and Hub Part Number	Blade Only Part Number	Serial Number
17-in. Rippled	—	A17093*	—
18-in. Notched	—	A17843†	(–1976)
20-in. Rippled	—	A17094†*	(–1976)
Rivet	—	16H1370**	—

*Cone bearing (–1973). / †Cone bearing, cushion clamp and round shank (–1976). / †Anti-friction bearing clamp and round shank. / **Cone-bearing clamp and round shank.

Landside — No. 13*

Description	Part Number	Attaching Hardware
Landside	A16493	(1) 10H1237, (1) 10H1238, and (2) 14H1040
Wear Plate	A16495	(1) A16497, (1) A16498, and (2) 14H1047

* Use No. 13 Landsides and hardware for replacement of No. 9 Landside.

Landside — No. 14

Description	Part Number	Attaching Hardware
Landside	A18001	(2) 14H1040, (1) 14H1047, (1) 10H1238, (1) 10H1239, and (1) 10H1158
Adjuster	A15635	(1) 19H2699, (1) 12H293, and (1) 14H1047

Landside — No. 15

Description	Part Number	Attaching Hardware
Landside (RH), Front	A22032	(2) 14H1040, (2) 10H1242, (1) 10H1238, (1) 10H1239, and (2) 14H1047
Wedge	A22031	—

Landside — No. 16

Description	Part Number	Attaching Hardware
Landside (RH), Front	A34336	(2) 14H1040, (2) 10H1242, (1) 10H1238, (1) 10H1239, and (2) 14H1047
Wedge	A22031	—

Moldboards and Shins — NU

Description	Part Number	Attaching Hardware
Moldboard (NU1036 and NU1046)	A15596	(7) A12414 and (7) 14H1047
Moldboard (NU1048)	A17431	(8) A12414 and (8) 14H1047
Moldboard (NU1056)	A20895	(5) A12414 and (5) 14H1047
Moldboard Extension (NU1036, NU1046, and NU1048)	7750A	(1) 24H1346
Shin (NU1036, NU1046, NU1048, and NU1056)	A51081	(2) A12414 and (2) 14H1047

Shins and Slats — SDT446

Description	Part Number	Attaching Hardware
Shin, RH	A14702	(2) A12414 and (2) 14H1047
Slat — 1st	A12402	(4) A12414 and (4) 14H1047
Slat — 2nd	A12404	(2) A12414, (1) 24H1341, and (2) 14H1047
Slat — 3rd	A12406	Same as above
Slat — 4th	A12408	Same as above

Trash Boards

Description	Part Number	Attaching Hardware
Trash Board, Steel	A45379	(2) A12414 and (2) 14H1047
Trash Board, Plastic	A36451	Same as above

1600 Integral Plow
2000 Semi-Integral Plow



NU350 Bottom – 14 in. (350 mm)
NU400 Bottom – 16 in. (400 mm)
16 in. (400 mm) Long Bottom

Plowshares

Description	Usage	Part Number	Attaching Hardware
14-in. (350 mm) Full Cut, Regular	NU350	A32217	(3) AA28651
14-in. (350 mm) Narrow Cut, Heavy Duty	NU350	A42805	Same as above
16-in. (400 mm) Full Cut, Heavy Duty	NU400	A42806	Same as above
16-in. (400 mm) Full Cut, Heavy Duty, Hard Faced	NU400	A42946	Same as above
16-in. (400 mm) Long-Bottom Reversible Point Share	16-in. (400 mm) Long	A45243	Same as above
16-in. (400 mm) Long-Bottom Reversible Point	16-in. (400 mm) Long	A45244	(2) AA33098

Coulter Blades

Description	Part Number	Attaching Hardware
18-in. (450 mm) Rippled	A33005	(5) A31867 and (5) 19M7744
20-in. (500 mm) Rippled	A33066	Same as above

Frogs

Description	Part Number	Attaching Hardware
Frog (NU400 Bottom)	AA33156	—
Bolt	A45048	(1) A31869

Landsides and Wedges

Description	Part Number	Attaching Hardware
Landside, Short	A45226	(1) A45223, (1) A45224, (1) A31869, and (1) 14M7276
Landside, Long	N250286	Same as above
Landside, Long (RH), Rear (NU350)	A39114	(1) A44246, (1) A31869, and (1) 14M7276
Heel for Rear Long Landside	A13853	(2) A44271, (1) 15645, (2) 24M7038, and (2) 14M7275
Landside (16-in. [400 mm] Long Bottom)	A45251	A46551, (1) A46552, and (1) AA33098
Landside Plate (16-in. [400 mm] Long Bottom)	A45249	(2) 19M7720 and (2) A31869
Wedge	A36611	(1) A45489, (1) A31869, (1) A45488, and (1) 14M7276

Moldboards and Shins

Description	Part Number	Attaching Hardware
Moldboard (NU400 Bottom)	A32210	(3) A32044, (4) 14M7275, (2) 24M7038, and (1) A32225
Moldboard (16-in. [400 mm] Long Bottom)	A45245	(10) AA35634
Moldboard Extension (16-in. [400 mm] Long Bottom)	A46321	—
Eyebolt (16-in. [400 mm] Long Bottom)	A45256	—
Eyebolt Bracket (16-in. [400 mm] Long Bottom)	A45254	—
Shin (NU350 Bottom)	A42943	(1) A32044, (2) 14M7275, (1) A32225, and (1) 24M7038
Shin (NU400 Bottom)	A51080	Same as above
Shin (16-in. [400 mm] Long Bottom)	A45246	(1) AA35634

Trash Boards

Description	Part Number	Attaching Hardware
Trash Boards, Plastic	A36451	(2) A32225, (2) 24M7038, and (2) 14M7275
Trash Boards, Steel	A45381	(2) A32044, (2) 24M7038, and (2) 14M7275
Trash Board (16-in. [400 mm] Long Bottom)	N250313	(2) AA35634 and (2) 24M7038
Bracket for Plastic Trash Board	A32216	—
Bracket for Steel Trash Board	A32214	—
Bracket (16-in. [400 mm] Long Bottom)	N250314	—

2600, 2700, 2800, and 2810 Semi-Integral Plows
3600, 3700 (Flex), and 3710 Drawn Plows



NU400 Bottom – 16 in. (400 mm)
NU450 Bottom – 18 in. (450 mm)
16-in. (400 mm) Long Bottom

Plowshares

Description	Usage	Part Number	Attaching Hardware
14-in. (350 mm) Full Cut, Regular	NU400	A32217	(3) AA28651
14-in. (350 mm) Narrow Cut, Heavy Duty	NU400	A42805	Same as above
16-in. (400 mm) Full Cut, Heavy Duty	NU400	A42806 and A42946	Same as above
18-in. (450 mm) Full Cut, Heavy Duty	NU450	A42808	Same as above
18-in. (450 mm) Full Cut, Heavy Duty, Hard Faced	NU450	A42947	Same as above
18-in. (450 mm) Full Cut, Heavy Duty, Long Point, Hard Faced	NU450	A44851	Same as above
18-in. (450 mm) Narrow Cut, Heavy Duty	NU450	A42807	Same as above
18-in. (450 mm) Overcut, Heavy Duty	NU450	A42809	Same as above
16-in. (400 mm) Reversible Point Share	400 mm Long	A45243	(4) AA33098
16-in. (400 mm) Reversible Point	400 mm Long	A45244	(2) AA33098

Coulter Blades

Description	Part Number	Attaching Hardware
18-in. Rippled (Except 2810 and 3710)	A33005*	(5) A31867 and (5) 19M7744
20-in. Plain	A36114*	Same as above
20-in. Rippled	A33066*	Same as above
22-in. Rippled (Except 2600 and 3600)	A34776#	Same as above

*Cushion and rigid./ #Rigid only.

Frogs

Description	Part Number	Attaching Hardware
Frog (NU400)	AA33156	—
Frog (NU450)	AA33157	—
Bolt (1982–)	A45048	(1) A31869

Landsides and Wedges

Description	Part Number	Attaching Hardware
Landside, Long	N250286	(1) A45223 and (1) A45224
Landside, Short	A45226	(1) A31869 and (1) 14M7276
Landside (16-in. [400 mm] Long)	A45251	(1) AA33098, (1) A46551, and (1) A46552
Landside Plate (16-in. [400 mm] Long)	A45249	(2) 19M7720 and (2) A31869
Wedge	A36611	(1) A45488, (1) 14M7276, (1) A45489, and (1) A31869

Moldboards and Shins

Description	Part Number	Attaching Hardware
Moldboard (NU400)	A32210	(3) A32044, (4) 14M7275, (2) 24M7038, and (1) A32225
Moldboard (NU450)	A32209	Same as above
Moldboard (16-in. [400 mm] Long)	A45245	(10) AA35634
Moldboard Extension (16-in. [400 mm] Long)	A46321	—
Eyebolt (16-in. [400 mm] Long)	A45256	—
Eyebolt (16-in. [400 mm] Long)	A45254	—
Shin (NU400 and NU450)	A51080	(1) A32044, (2) 14M7275, (1) A32225, and (1) 24M7038
Shin (16-in. [400 mm] Long)	A45246	(1) AA35634

Trash Boards

Description	Part Number	Attaching Hardware
Bracket (For Plastic Trash Board)	A32216	—
Bracket (For Steel Trash Board)	A32214	—
Bracket (16-in. [400 mm] Long)	N250314	—
Trash Board, Plastic	A36451	(2) A32225, (2) 14M7275, and (2) 24M7038
Trash Board, Steel (Except 2810 and 3710)	A45379	(2) A32044, (2) 14M7275, and (2) 24M7038
Trash Board, Steel (2810 and 3710)	A45381	Same as above
Trash Board (16-in. [400 mm] Long)	N250313	(2) AA35634 and (1) 24M7038

4200, 4600, 8350, and 8450 Series Integral Two-Way Plows



NU1046 Bottom – 16 in.

Plowshares

Description	Usage	Part Number	Attaching Hardware
16-in. Full Cut, Heavy Duty (RH)	NU1046	A51500	(1) 12H292, (1) AA15892, (3) 12H325, and (3) AA15890
16-in. Full Cut, Heavy Duty (RH), Hard Faced	NU1046	A51508	Same as above
16-in. Narrow Cut, Heavy Duty (RH)	NU1046	A51501	Same as above
16-in. Full Cut, Heavy Duty (LH)	NU1046	A51503	Same as above
16-in. Full Cut, Heavy Duty (LH), Hard Faced	NU1046	A51509	Same as above
18-in. Full Cut, Heavy Duty (RH)	NU1048	A51504	(1) 12H292, (1) AA15892, (4) 12H325, and (4) AA15890
18-in. Full Cut, Heavy Duty (RH), Hard Faced	NU1048	A51510	Same as above
18-in. Narrow Cut, Heavy Duty (RH)	NU1048	A51505	Same as above
18-in. Full Cut, Heavy Duty (LH)	NU1048	A51506	Same as above
18-in. Full Cut, Heavy Duty,(LH), Hard Faced	NU1048	A51511	Same as above

Frogs

Description	Usage	Part Number	Attaching Hardware
Frog (RH)	NU1046	AA15835	—
Frog (LH)	NU1046	AA15836	—
Frog (RH) (–1974)	NU1048	AA15835	—
Frog (RH) (1974–)	NU1048	AA23791	—
Frog (LH) (–1974)	NU1048	AA15836	—
Frog (LH) (1974–)	NU1048	AA23792	—
Moldboard Brace (RH)	NU1046	A15600	(4) 24H1334, (1) 10H1241, and (1) 14H1047
Moldboard Brace (RH)	NU1046	A15598	(1) A12414 and (1) 14H1047
Moldboard Brace (LH)	NU1046	A10517	Same as above
Moldboard Brace (RH) (–1974)	NU1048	A17435**	(1) A17787 and (1) 14H1047
Moldboard Brace (LH) (1974–)	NU1048	A27457*	(1) 10H1241, (AR) 24H1346, and (1) 14H1047
Moldboard Brace (RH)	NU1048	A17437	(2) A12414, (4) 14H1047, and (2) A16497
Moldboard Brace (LH)	NU1048	A17438	Same as above

Coulter Blades

Description	Blade and Hub Part Number	Blade Only Part Number	Serial Number
17-in. Rippled	—	A17093*	(–1971)
18-in. Rippled	—	A17842**	(–1976)
18-in. Notched	—	A17843#	(–1976)
20-in. Rippled	—	A17094**	(–1976)
Rivet	—	16H1370*	

*Cone bearing. / #Antifriction bearing.

Landside — No. 12			
Description	Usage	Part Number	Attaching Hardware
Heel (RH)	—	A13853	—
Heel (LH)	—	A13855	—
		(3) 14H1047, (1) 24H1346, (1) 15645, (1) 10H1015, (1) 10H1237, (2) 10H1158,	
Landside (LH), Rear	—	A17550	(1) 10H1080, (1) 10H1238, (2) 14H1040, and (1) 14H1039
Landside (RH), Rear		A17551	Same as above
Strap		A17552	(1) 14H1040, (1) 19H2726, and (1) 12H294
Wedge		A13851	—

Landside — No. 13*			
Description	Part Number	Attaching Hardware	
Landside (LH)	A16494	(1) 10H1237, (1) 10H1238, and (2) 14H1040	
Landside (RH)	A16493	Same as above	
Wear Plate (LH)	A16496	(1) A16497, (1) A16498, and (2) 14H1047	
Wear Plate (RH)	A16495	Same as above	

*Use No. 13 Landside and hardware for replacement on the No. 9 Landside.

Landside — No. 14			
Description	Part Number	Attaching Hardware	
Landside (RH)	A18001	(2) 14H1040, (1) 14H1047, (1) 10H1238, (1) 10H1239, and (1) 10H1158	
Adjuster	A15635	(1) 19H2699, (1) 12H293, and (1) 14H1047	

Landside — No. 15			
Description	Part Number	Attaching Hardware	
Landside (LH), Front	A22033	(1) 10H1242, (1) 10H1238, (1) 10H1239, (2) 14H1047, (2) 14H1040, and (1) A17787	
Landside (RH), Front	A22032	Same as above	
Wedge	A22031	—	

Landside — No. 16			
Description	Part Number	Attaching Hardware	
Landside, (LH) Front	A34337	(1) 10H1242, (1) 10H1238, (1) 10H1239, (2) 14H1047, (2) 14H1040, and (1) A17787	
Landside, (RH) Front	A34336	Same as above	
Wedge	A22031	—	

Moldboards and Shins			
Description	Usage	Part Number	Attaching Hardware
Moldboard (RH)	NU1046	A15596	(7) A12414 and (7) 14H1047
Moldboard (LH)	NU1046	A51082	Same as above
Moldboard (RH)	NU1048	A17431	(8) A12414 and (8) 14H1047
Moldboard (LH)	NU1048	A17432	Same as above
Shin (RH)	—	A51081	(2) A12414 and (2) 14H1047
Shin (LH)	—	A51082	Same as above
Moldboard Extension (RH)	—	7750A	(–1969) (1) 24H1341 and (1) 24H1346
Moldboard Extension (LH)	—	7749A	(1) 24H1341

Trash Boards			
Description	Part Number	Attaching Hardware	
Trash Boards (RH), Steel	A45379	(2) A12414 and (2) 14H1047	
Trash Boards (LH), Steel	A45380	Same as above	

4200, 4600, 8350, and 8450 Series Integral Two-Way Plows (continued)



SDT446 Slat Bottom – 16 in.

Plowshares			
Description	Part Number	Attaching Hardware	
16-in. Full Cut, Heavy Duty (RH)	A51500	(1) 12H292, (1) AA15892, (3) 12H325, and (3) AA15890	
16-in. Full Cut, Heavy Duty (RH), Hard Faced	A51508	Same as above	
16-in. Narrow Cut, Heavy Duty (RH)	A51501	Same as above	
16-in. Full Cut, Heavy Duty (LH)	A51503	(1) 12H292, (1) AA15892, (3) 12H325, and (3) AA15890	
16-in. Full Cut, Heavy Duty (LH), Hard Faced	A51509	Same as above	

Landside — No. 12			
Description	Part Number	Attaching Hardware	
Heel (LH)	A13855	—	
Heel (RH)	A13853	—	
Landside (LH), Rear	A17551	(3) 14H1047, (1) 24H1346, (1) 15645, (1) 10H1015, (2) 10H1158, (1) 10H1080, (1) 10H1238, (2) 14H1040, (1) 10H1237, (1) 14H1039, and (1) 24H1226	
Landside (RH), Rear	A17550	Same as above	
Strap	A17552	(1) 14H1040, (1) 19H2726, and (1) 12H294	
Wedge	A13851	—	

Landside — No. 13*			
Description	Part Number	Attaching Hardware	
Landside (LH)	A16494	(1) 10H1237, (1) 10H1238, and (2) 14H1040	
Landside (RH)	A16493	Same as above	
Wear Plate (LH)	A16496	(1) A16497, (1) A16498, and (2) 14H1047	
Wear Plate (RH)	A16495	Same as above	

*Use No. 13 Landsides and hardware for replacement of the No. 9 Landside.

Coulter Blades			
Description	Blade and Hub Part Number	Blade Only Part Number	Serial Number
17-in. Plain	33131*	—	(–1971)
17-in. Rippled	A17093*	—	(–1971)
18-in. Rippled	A17842*#	—	(–1976)
18-in. Notched	A17843#	—	(–1976)
20-in. Rippled	A17094*#	—	(–1976)
Rivet	16H1370*	—	—

*Cone bearing (–1976). / #Antifriction bearing.

Landside — No. 14

Description	Part Number	Attaching Hardware
Landside	A18001	(2) 14H1040, (1) 14H1047, (1) 10H1238, (1) 10H1239, and (1) 10H1158
Adjuster	A15635	(1) 19H2699, (1) 12H293, and (1) 14H1047

Landside — No. 15

Description	Part Number	Attaching Hardware
Landside (LH), Front	A22033	(1) 10H1242, (1) 10H1238, (1) 10H1239, (2) 14H1047, (2) 14H1040, and (1) A17787
Landside (RH), Front	A22032	Same as above
Wedge	A22031	—

Landside — No. 16

Description	Part Number	Attaching Hardware
Landside (LH), Front	A34337	(1) 10H1242, (1) 10H1238, (1) 10H1239, (2) 14H1047, (2) 14H1040, and (1) A17787
Landside (RH), Front	A34336	Same as above
Wedge	A22031	—

Shins and Slat

Description	Part Number	Attaching Hardware
Shin (RH)	A14702	(2) A12414 and (2) 14H1047
Shin (LH)	A14703	Same as above
Slat — 1st (RH)	A12402	(4) A12414 and (4) 14H1047
Slat — 2nd (RH)	A12404	(2) A12414, (1) 24H1341, and (2) 14H1047
Slat — 3rd (RH)	A12406	Same as above
Slat — 4th (RH)	A12408	Same as above
Slat — 1st (LH)	A12403	(4) A12414 and (4) 14H1047
Slat — 2nd (LH)	A12405	(2) A12414, (1) 24H1341, and (2) 14H1047
Slat — 3rd (LH)	A12407	Same as above
Slat — 4th (LH)	A12409	Same as above

Trash Boards

Description	Part Number	Attaching Hardware
Trash Board (LH), Steel	A45379	(2) A12414 and (2) 14H1047
Trash Board (RH), Plastic	A45380	Same as above

4200, 4600, 8350, and 8450 Series Integral Two-Way Plows
(continued)



SDT546 Bottom – 16 in.

Plowshares

Description	Part Number	Attaching Hardware
16-in. Full Cut, Heavy Duty (RH)	A51500	(1) 12H292, (1) AA15892, (3) 12H325, and (3) AA15890
16-in. Full Cut, Heavy Duty (RH), Hard Faced	A51508	Same as above
16-in. Full Cut, Heavy Duty (LH)	A51503	Same as above
16-in. Full Cut, Heavy Duty (LH), Hard Faced	A51509	Same as above

Frogs

Description	Part Number	Attaching Hardware
Frog (RH)	BA1055A	—
Brace (RH)	8275A	(1) A12414 and (1) 14H1047
Brace (LH)	A10517	(1) 10H1055, (1) 14H1047, and (AR) 24H1334

Landside — No. 12

Description	Part Number	Attaching Hardware
Heel (LH)	A13855	—
Heel (RH)	A13853	—
Landside (LH), Rear	A17551	(3) 14H1047, (1) 24H1346, (1) 15645, (1) 10H1015, (2) 10H1158, (1) 10H1080, (1) 10H1238, (2) 14H1040, (1) 10H1237, (1) 10H1039, and (1) 24H1226
Landside (RH), Rear	A17550	Same as above
Strap	A17552	(1) 14H1040, (1) 19H2726, and (1) 12H294
Wedge	A13851	—

Coulter Blades

Description	Blade and Hub Part Number	Blade Only Part Number	Serial Number
17-in. Plain	—	33131**	(–1971)
17-in. Rippled	—	A17093*	(–1971)
18-in. Rippled	—	A17842**	(–1976)
18-in. Notched	—	A17843#	(–1976)
20-in. Rippled	—	A17094**	(–1976)
Rivet	—	16H1370*	—

*Cone bearing (–1976). / **Antifriction bearing.

Landside — No. 13*

Description	Part Number	Attaching Hardware
Landside (LH)	A16494	(1) 10H1237, (1) 10H1238, and (2) 14H1040
Landside (RH)	A16493	Same as above
Wear Plate (LH)	A16496	(1) A16497, (1) A16498, and (2) 14H1047
Wear Plate (RH)	A16495	Same as above

*Use No. 13 Landsides and hardware for replacement of the No. 9 Landside.

Landside — No. 14

Description	Part Number	Attaching Hardware
Landside	A18001	(2) 14H1040, (1) 14H1047, (1) 10H1238, (1) 10H1239, and (1) 10H1158
Adjuster	A15635	(1) 19H2699, (1) 12H293, and (1) 14H1047

Landside — No. 15

Description	Part Number	Attaching Hardware
Landside (LH), Front	A22033	(1) 10H1242, (1)10H1238, (1) 10H1239, (2) 14H1047, (2) 14H1040, and (1) A17787
Landside (RH), Front	A22031	Same as above
Wedge	A22031	—

Landside — No. 16

Description	Part Number	Attaching Hardware
Landside (LH), Front	A34337	(1) 10H1242, (1) 10H1238, (1) 10H1239, (2) 14H1047, (2) 14H1040, and (1) A17787
Landside (RH), Front	A34336	Same as above
Wedge	A22031	—

Moldboards and Shins

Description	Part Number	Attaching Hardware
Shin (RH)	A14702	(2) A12414 and (2) 14H1047
Shin (LH)	A14703	Same as above

Trash Boards

Description	Part Number	Attaching Hardware
Trash Board (LH), Steel	A45380	(2) A12414, (2) 14H1047, and (2) 24H1226
Trash Board (RH), Steel	A45379	Same as above

Reference Guide for Identifying Genuine John Deere Parts

This reference guide is intended to help dealers and customers more easily identify the parts they need for their John Deere plow. Below you will find tables of useful data and/or hints/tips that will help to significantly narrow down the possibilities.

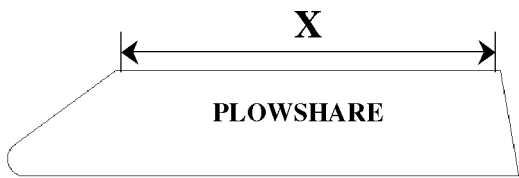
Part Numbers Indicate Number of Boltholes and Shape

Set of Part Numbers*	Number of Boltholes and Shape
A10000 Series	4 Boltholes, Regular
A32000 Series	3 Boltholes, Regular
A42000 Series	3 Boltholes, Heavy Duty
A44000 Series	3 Boltholes, Gumbo
A45000 Series	Number of Boltholes Varies, Long Bottom
P57000 and P59000 Series	4 Boltholes, Two Way
A51000 Series	4 Boltholes, Heavy Duty

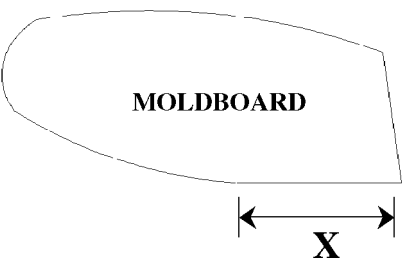
*Note: Older plow models will normally require a 4-bolt share, while the newer models typically require a 3-bolt share.

Bottoms Separated by Number of Boltholes and Length of Top Edge on Share

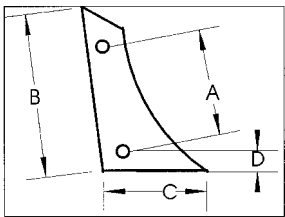
Boltholes	Plowshare Part Number	Bottom Type	Dimension X on Share
3	A42808, A44851, A42807, A42809, and A42947	NU450	20.08 in. (510 mm)
	A32217, A42805, A42806, and A42946	NU350	17.13 in. (435 mm)
4	A51501	NU1046 and SDT446	14.72 in. (374 mm)
	A51498	NU1034 and NU1044	
	A10223	NU1036	16.75 in. (425.5 mm)
	A51503 and A51509	SDT446, NU1046, and SDT546	16.61 in. (422 mm)
	A51500	NU1046, NU1056, SDT446, and SDT546	
	A51508	NU1036, NU1046, SDT446, and STD546	
	A51506	NU1048	
	A51511, A51510, and A51504	NU1048	19.76 in. (502 mm)
6	A10224	NU1036	17.25 in. (438 mm)
	A45243	16 in. (400 mm) Long	14.96 in. (380 mm)



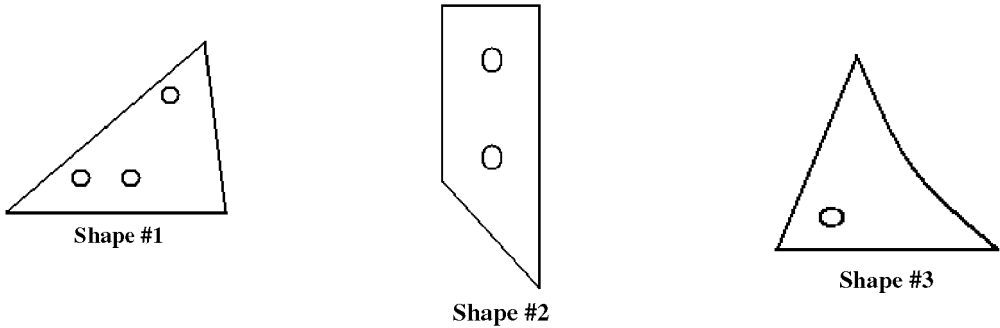
Bottoms Separated by Dimension X on Moldboard			
Type of Bottom	Possible Compatibility with Moldboard Part Number*		Dimension X on Moldboard
NU1034 – 14 in.	A15595		7.80 in. (198 mm)
NU1044 – 14 in.	A15595		
NU1036 – 16 in.	A15596		10.20 in. (259 mm)
NU1046 – 16 in.	A15596 and A15607		
NU1056 – 16 in.	A20895		
NU1048 – 18 in.	A17431 and A17432		13.11 in. (333 mm)
NU400 – 16 in. (400 mm)	A32210		10.08 in. (256 mm)
NU450 – 18 in. (450 mm)	A32209		13.15 in. (334 mm)
400 mm Long	A45245		Varies
*Note: These are merely moldboards that could be compatible with your plow. If more than one possibility is listed, it is advised that you reference the page for your specific plow series.			



Shin Identification Guide — Part 1						
Part Number	Plow Bottom Series/Usage	Hardware Needed	Drawing Dimensions (inches)			
			A	B	C	D
A15593	NU1034 and NU1044	(2) A12414 and (2) 14H1047	8.25	12.04	5.81	1.38
A14702	SDT446 and SDT546	(2) A12414 and (2) 14H1047	9.06	12.94	6.22	1.25
A14703	SDT446 and SDT546	(2) A12414 and (2) 14H1047	9.06	12.94	6.22	1.25
A42943	NU350	(1) A32044 and (2) 14M7275 (1) A32225 and (1) 24M7038	8.83	13.47	6.57	1.38
A51081	NU1036, NU1046, NU1048, and NU1056	(2) A12414 and (2) 14H1047	8.77	13.30	6.37	1.25
A51082	NU1046 and NU1048	(2) A12414 and (2) 14H1047	8.77	13.30	6.37	1.25
A51080	NU400	(1) A32044 and (2) 14M7275 (1) A32225 and (1) 24M7038	8.77	13.30	6.37	1.37

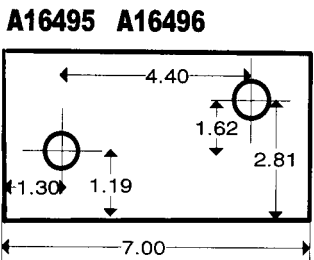
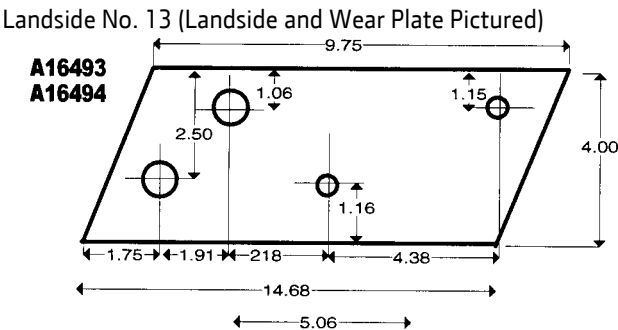
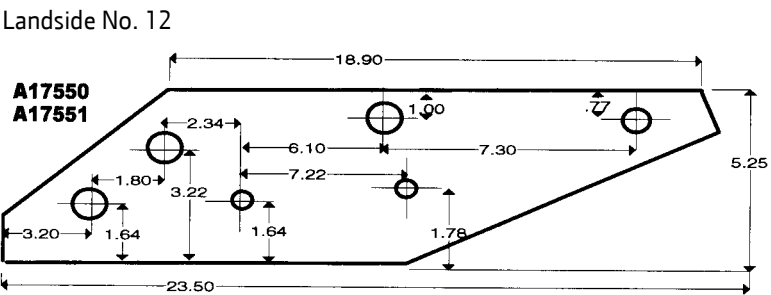


Shin Identification Guide — Part 2				
Part Number*	Right-/Left-Handed Part	Plow Bottom Series/Usage	Hardware Needed	Shape Number
P57266	RH	965, 3945, and 3955	(3) 10H1027, (3) 24H1682, (3) 12H304, and (3) 14H812	1
P57265	LH	965, 3945, and 3955	Same as above	1
P59408	RH	975 and 995	Same as above	2
P59409	LH	975 and 995	Same as above	2
A45246	RH	400 mm Long	(1) AA35634	3

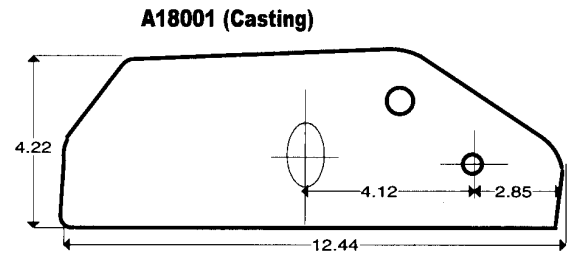


Landside Identification Guide

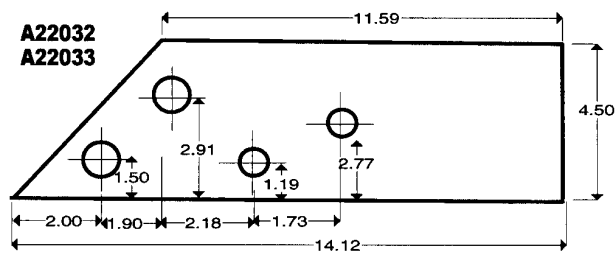
The following landsides are compatible with one or more of the following bottoms: NU1034, NU1036, NU1044, NU1046, NU1048, SDT446, or SDT546. Please note some part numbers may be for left-handed parts and not compatible with all plows. Reference the page matching the customer’s model number to confirm that the proper landside is selected.



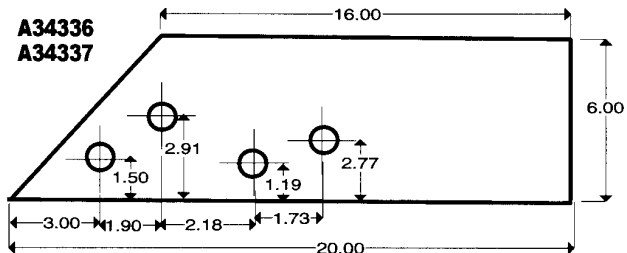
Landside No. 14



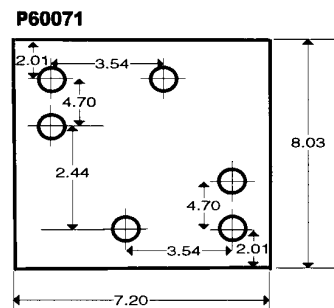
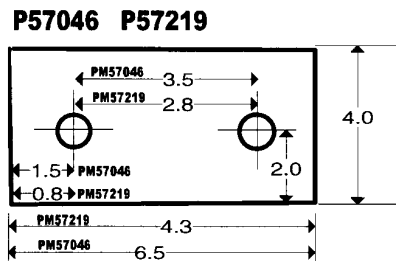
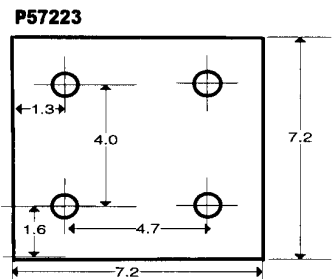
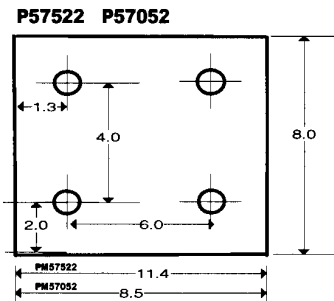
Landside No. 15



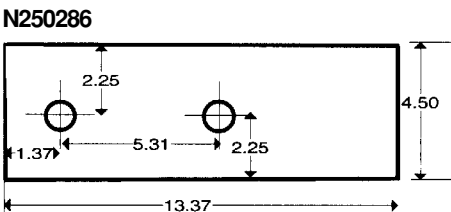
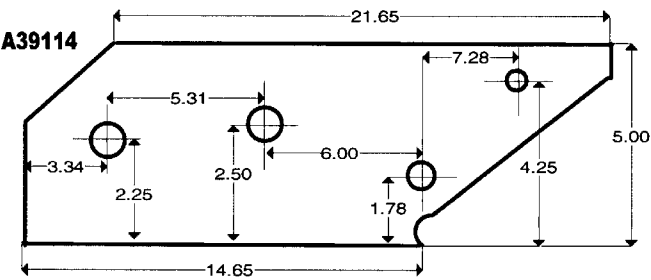
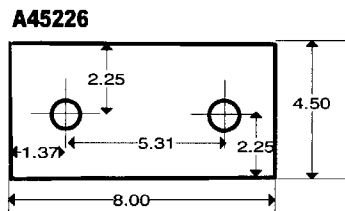
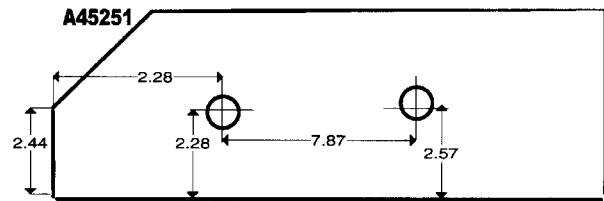
Landside No. 16



The following landsides are compatible with two-way bottoms for one or more of following plow models: 965, 975, 995, 3835, 3945, and 3955. Reference the page matching the customer's model number to confirm that the proper landside is selected.



The following landsides are compatible with one or more of the following bottoms: NU350, NU400, NU450, or 400-mm long. Reference the page matching the customer's model number to confirm that the proper landside is selected.

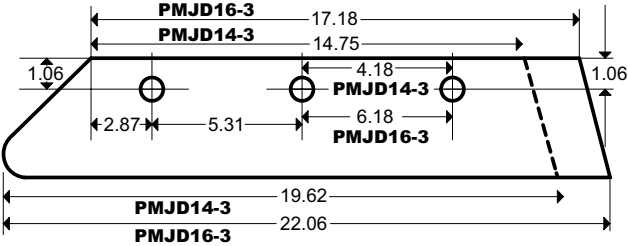


All-makes plow parts and chisel points

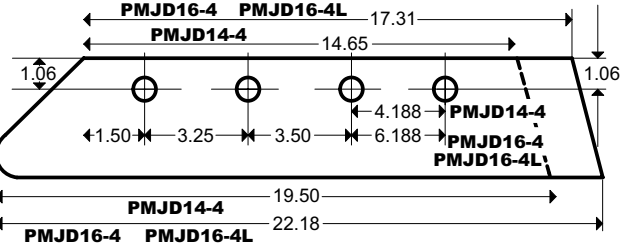
John Deere

Part No.	Description	Plow Bottom Series	Plow Bolt Requirements	Will Replace OEM Number
PMJD14-3	14-in. Ribbed, 3 Hole (RH)	HS	(3) AA15890	A10005
PMJD14-4	14-in. Ribbed, 4 Hole (RH)	HS and NU	(1) PMCH1483 and (3) AA15890	A10221 and A51498
PMJD16-3	16-in. Ribbed, 3 Hole (RH)	HS	(3) AA15890	A10003 and A10007
PMJD16-4	16-in. Ribbed, 4 Hole (RH)	HS and NU	(1) PMCH1483 and (3) AA15890	A10223, A51500, A51500, and A51509
PMJD16-4HF	16-in. Ribbed, Hard Faced, 4 Hole (RH)			
PMJD16-4L	16-in. Ribbed, 4 Hole (LH)	HS and NU	(1) PMCH1483 and (3) AA15890	A51503
PMJD16-4LHF	16-in. Ribbed, Hard Faced, 4 Hole (LH)			
PMJD18-5	18-in. Ribbed, 5 Hole (RH)	NU	(1) PMCH1483 and (4) AA15890	A51504, and A51510
PMJD18-5HF	18-in. Ribbed, Hard Faced, 5 Hole (RH)			
PMJD18-3M	18-in. Metric Ribbed, 3 Hole (RH)	Metric NU450	(4) 03M7198	A42808
PMJD18-5L	18-in. Ribbed, 5 Hole (LH)	NU	(1) PMCH1483 and (4) AA15890	A51511, and A51506
PMJD18-5LHF	18-in. Ribbed, Hard Faced, 5 Hole (LH)			

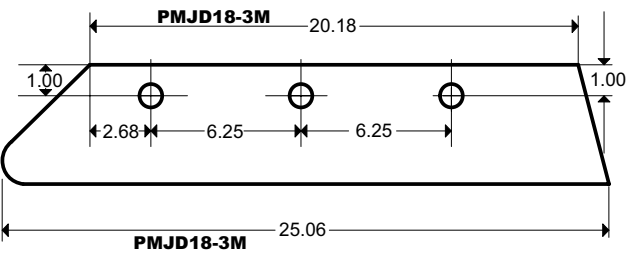
Deere 3-Hole Shares



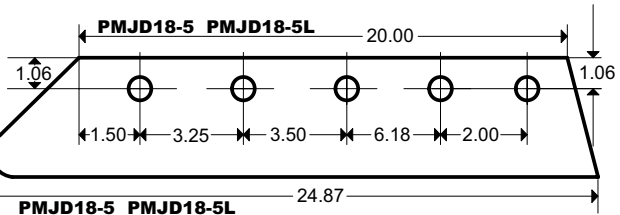
Deere 4-Hole Shares



Deere Metric 3-Hole Shares



Deere 5-Hole Shares

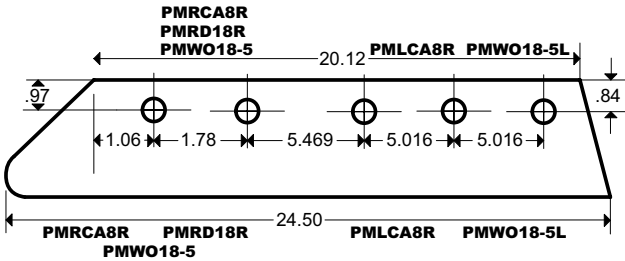


	Part No.	Description	Plow Bottom Series	Plow Bolt Requirements			Will Replace OEM Number
				Qty.	Size	Bolt No.	
Moldboards	PMHS14R	Moldboard, 14-in. (RH)	HS	6	7/16 x 1 1/4	10H1072	A20700
	PMHS16R	Moldboard, 16-in. (RH)	HS	6	7/16 x 1 1/4	10H1072	A20702
	PMNU16R	Moldboard, 16-in. (RH)	NU	7	7/16 x 1 1/4	10H1072	A15596
	PMNU16L	Moldboard, 16-in. (LH)	NU	7	7/16 x 1 1/4	10H1072	A15607
	PMNU18R	Moldboard, 18-in. (RH)	NU	7	7/16 x 1 1/4	10H1072	A17431
	PMNU18L	Moldboard, 18-in. (LH)	NU	7	7/16 x 1 1/4	10H1072	A17432
	PMMET16R	Moldboard, 400 mm (RH)	Metric NU400	4	12 mm x 30	03M7198	A32210
	PMMET18R	Moldboard, 450 mm (RH)	Metric NU450	4	12 mm x 30	03M7198	A32209

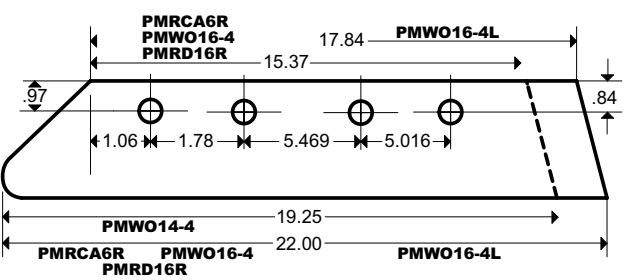
JI Case

Part No.	Description	Plow Bottom Series	Plow Bolt Requirements	Will Replace OEM Number
PMRCA6S	16-in. Narrow Cut (RH)	White R619	(3) AA15890 and (1) PMCH1483	T63195, and T57749
PMRCA6R	16-in. Full (RH)	White R619	(3) AA15890 and (1) PMCH1483	T63194, T58108, and 133068C1
PMWO16-4	16-in. Full, Ribbed (RH)			
PMRD16R	16-in. Full (RH)	White R619	(4) PMCH1483	T58111 and T63197
PMRCA8S	18-in. Narrow Cut (RH)	White R619	(4) AA15890 and (1) PMCH1483	T63097 and T57750
PMRCA8R	18-in. Full (RH)	White R619	(4) AA15890 and (1) PMCH1483	T58109 and 1337609C1
PMWO18-5	18-in. Full, Ribbed (RH)			
PMRD18R	18-in. Full (RH)	White R619	(5) PMCH1483	T58112 and T63133

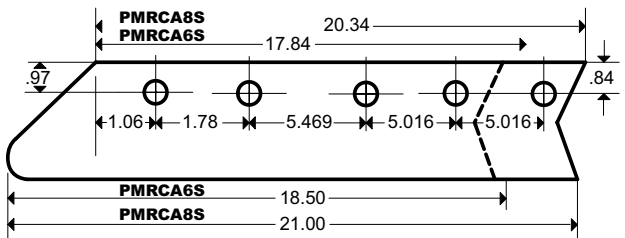
White 5-Hole Shares



White 4-Hole Shares



White Narrow Cut Shares

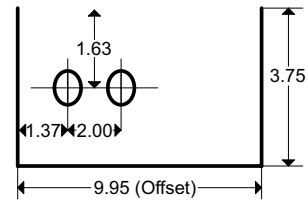


Other			Plow Bottom	Plow Bolt Requirements			
	Part No.	Description	Series	Qty.	Size	Bolt No.	Will Replace OEM Number
	PMEP7490	Shin, 12–18-in. (RH)	White R619	2	7/16 x 1 1/4	10H1072	T63099 and T57747
	PMR619-16	Moldboard, 16-in. (RH)	White R619	4	7/16 x 1 1/4	10H1072	T57757, T57827, and T63183
				1	7/16 x 1 1/2	10H1073	
	PMR619-18	Moldboard, 18-in. (RH)	White R619	5	7/16 x 1 1/4	10H1072	T63183 and T57757
				1	7/16 x 1 1/2	10H1073	
	PM220787	Landside, Offset (RH)	White R619	1	7/16 x 1 3/4	10H1158	T54235
				1	5/8 x 1 3/4	10H1039	
				1	5/8 x 3	10H1043	
PM220379	Landside, Flat (RH)	White R619	1	5/8 x 1 1/2	10H1059	T54272	
			1	1/2 x 2	10H1246		
PM220380	Landside, Pad (RH)	White R619	2	5/8 x 1 1/2	10H1080	T56680	
PMHS151X	Trash Board (RH)	All Series	2	3/8 x 1 1/2	10H1028	T54227	

Allis-Chalmers

Part No.	Description	Plow Bottom Series	Plow Bolt Requirements			Will Replace OEM Number
			Qty.	Size	Bolt No.	
PM586758	Landside, Offset (RH)	386 and 387	2	7/16 x 2 1/4	10H1015	568758, 586924, and 70568758

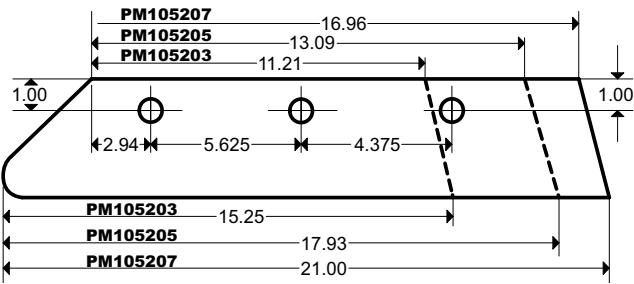
PM586758



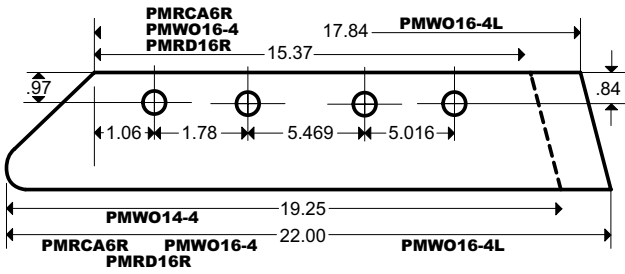
Ford

Part No.	Description	Plow Bottom Series	Plow Bolt Requirements	Will Replace OEM Number
PM105203	12-in. Full (RH)	General Purpose	(2) AA15890	105203, 104405, and 251419
PM105205	14-in. Full (RH)	General Purpose	(3) AA15890	105205, 104410, and 251421
PMFD14-4	14-in. Full, Ribbed (RH)	Heavy Duty or General Purpose	(4) AA15890	7100369, 201579, and 7102454
PM105207	16-in. Full (RH)	General Purpose	(3) AA15890	105207, 251424, and 104413
PMFD16-4	16-in. Full, Ribbed	Heavy Duty or General Purpose	(4) AA15890	7100269, 201579, 7102454, 251428, and 7100370
PMRCA6S	16-in. Narrow (RH)	White R619 and R625	(3) AA15890 and (1) PMCH1483	219623BS and RCA6S
PMRCA6R	16-in. Full (RH)	White R619 and R625	(3) AA15890 and (1) PMCH1483	219617BS and RCA6R
PMWO16-4	16-in. Full, Ribbed (RH)	White R619 and R625	(3) AA15890 and (1) PMCH1483	219625BS and RCA8S
PMRCA8S	18-in. Narrow	White R619 and R625	(4) AA15890 and (1) PMCH1483	219625BS and RCA8S
PMRCA8R	18-in. Full (RH)	White R619 and R625	(4) AA15890 and (1) PMCH1483	219619BS and RCA8R
PMWO18-5	18-in. Full, Ribbed (RH)	White R619 and R625	(4) AA15890 and (1) PMCH1483	SBP219207BS and 251565
PMWO16-4L	16-in. Full, Ribbed (LH)	White R619 and R625	(3) AA15890 and (1) PMCH1483	SBP219210BS and 251566
PMWO18-5L	18-in. Full, Ribbed (LH)	White R619 and R625	(4) AA15890 and (1) PMCH1483	

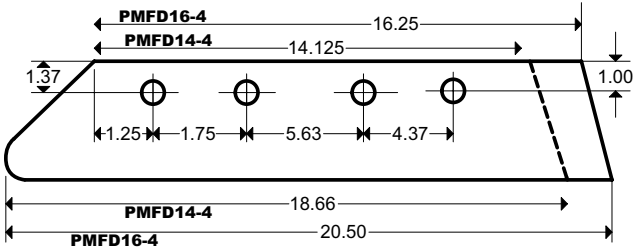
Ford 2- and 3-Hole Shares



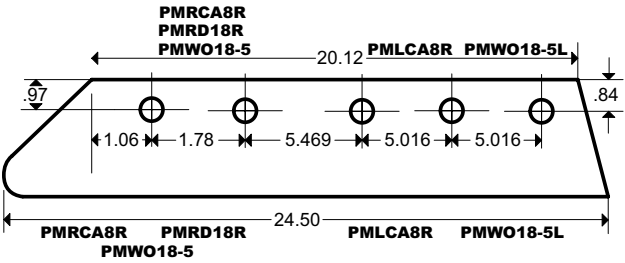
White 4-Hole Shares



Ford 4-Hole Shares

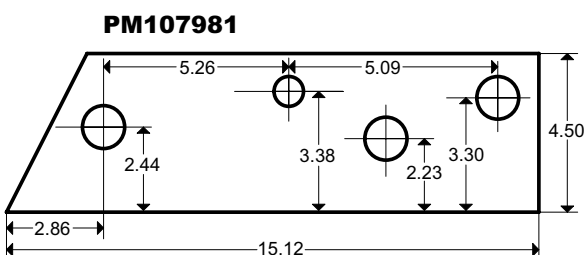
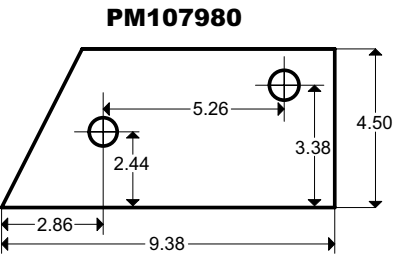
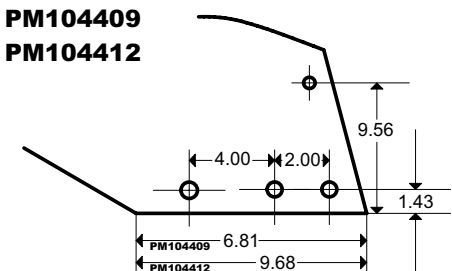
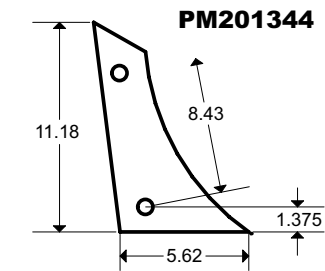


White 5-Hole Shares



Ford (continued)

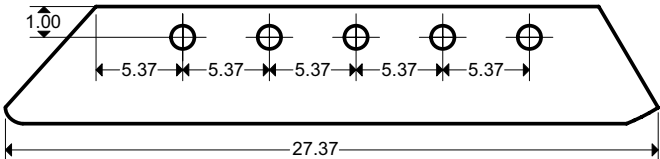
Part No.	Description	Plow Bottom Series	Plow Bolt Requirements			Will Replace OEM Number
			Qty.	Size	Bolt No.	
PM201344	Shin, 12-, 14-, 16-, and 18-in. (RH)	General Purpose	2	7/16 x 1 1/4	10H1072	251435, 201344, 112136, and 104403
PMEP7490	Shin, 12-, 14-, and 16-in. (RH)	R619 and R419	2	7/16 x 1 1/4	10H1072	251437, SBP-EP7490S, and HR22615A
PM220381	Shin, 18-in. HS and 20-in. (RH)	R619 Deep Till	2	7/16 x 1 1/4	10H1072	251439 and SBP2203818S
PM217404	Shin, 16- and 18-in. (LH)	White R619	2	7/16 x 1 1/4	10H1072	SBP-217404BS and 251571
PM104409	Moldboard, 14-in. (RH)	General Purpose	5	7/16 x 1 1/4	10H1072	201277, 104409, 251440, and 104425
PM104412	Moldboard, 16-in. (RH)	General Purpose	5	7/16 x 1 1/4	10H1072	201278, 104412, 251442, and 104426
PMR619-16	Moldboard, 16-in. (RH)	White R619	4	7/16 x 1 1/4	10H1072	SPB-HR21800B and 251441
			1	7/16 x 1 1/2	10H1073	
PMR619-16L	Moldboard, 16-in. (LH)	White R619	4	7/16 x 1 1/4	10H1072	SBP-217776BS and 251575
			1	7/16 x 1 1/2	10H1073	
PMR619-18	Moldboard, 18-in. (RH)	White R619	5	7/16 x 1 1/4	10H1072	SBP-30-1012991 and 251444
			1	7/16 x 1 1/2	10H1073	
PMR619-18H	Moldboard, 18-in. (RH)	R619 Deep Till	5	7/16 x 1 1/4	10H1072	SBP220746B and 251443
			1	7/16 x 1 1/2	10H1073	
PM107980	Landside, Short (RH)	General Purpose	4	7/16 x 1 3/4	10H1158	107980 and 251448
			1	5/8 x 3 1/2	10H1059	
PM107981	Landside, Medium (RH)	General Purpose	1	7/16 x 1 1/2	10H1073	107981 and 251449
			1	5/8 x 3 1/2	10H1059	
PM220787	Landside, Offset (RH)	White R619	1	7/16 x 1 3/4	10H1158	SBP-220787BS and 251454
			1	5/8 x 1 3/4	10H1039	
			1	5/8 x 3	10H1043	
PM220379	Landside, Flat (RH)	White R619	1	5/8 x 3 1/2	10H1059	SBP-220379B and 251578
			1	1/2 x 2	10H1246	
PM220380	Landside, Pad (RH)	White R619	2	5/8 x 1 1/2	10H1080	SBP-220380BS and 251580
PMHS151X	Trash Board (RH)	General Purpose	2	3/8 x 1 1/2	10H1028	W219290B and 109241



Harrell

Part No.	Description	Plow Bottom Series	Plow Bolt Requirements			Will Replace OEM Number
			Qty.	Size	Bolt No.	
PMH30674	Share, Double Ended	2-Way	5	7/16 x 1 1/4	A16498	H7900636, 79006, and H79006

Harrell Shares

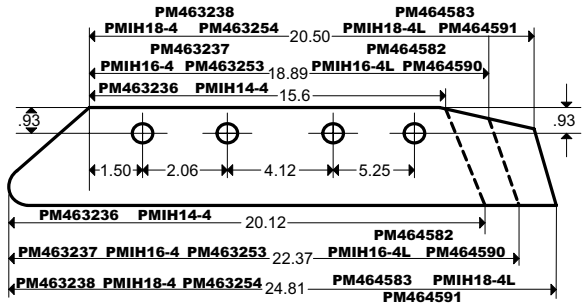


IHC

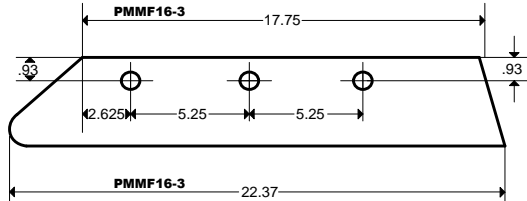
Part No.	Description	Plow Bottom Series	Plow Bolt Requirements	Will Replace OEM Number
PM463236	14-in. Full (RH)	Super Chief	(3) AA15890 and (1) PMCH1483	463236R1, 463236R2, 463240R1, and 1980953C1
PMIH14-4	14-in. Full, Ribbed			
PM463237	16-in. Full (RH)	Super Chief	(3) AA15890 and (1) PMCH1483	463237R1, 463237R2, 463241R1, and 1980954C1
PMIH16-4	16-in. Full, Ribbed (RH)			
PMIH16-4HF	16-in. Full, Ribbed, Hard Faced (RH)			
PMMF16-3	16-in. Full, Ribbed (RH)	Super Chief	(3) PMCH1483	463245R1 and 463229R1
PM463253	16-in. Deep Suck (RH)	Super Chief	(3) AA15890 and (1) PMCH1483	463253R1 and 463253R2
PM464582	16-in. Full (LH)	Super Chief	(3) AA15890 and (1) PMCH1483	464582R1 and 464582R2
PMIH16-4L	16-in. Full, Ribbed (LH)			
PMIH16-4LHF	16-in. Full, Ribbed, Hard Surface (LH)			
PM464590	16-in. Deep Suck (LH)	Super Chief	(3) AA15890 and (1) PMCH1483	464590R1 and 464590R2
PM463238	18-in. Full (RH)	Super Chief	(3) AA15890 and (1) PMCH1483	463238R1, 463238R2, and 1980948C1
PMIH18-4	18-in. Full, Ribbed (RH)			
PMIH18-4HF	18-in. Full, Ribbed, Hard Faced (RH)			
PM463254	18-in. Deep Suck (RH)	Super Chief	(3) AA15890 and (1) PMCH1483	463254R1 and 463254R2
PM464583	18-in. Full (RH)	Super Chief	(3) AA15890 and (1) PMCH1483	464583R1 and 464583R2
PMIH18-4L	18-in. Full, Ribbed (RH)			
PMIH18-4LHF	18-in. Full, Ribbed, Hard Faced (RH)			
PM464591	18-in. Deep Suck (LH)	Super Chief	(3) AA15890 and (1) PMCH1483	464591R1 and 464591R2

Plow Parts

IHC Super Chief 4-Hole Shares



IHC or Massey 3-Hole Shares



Part No.	Description	Plow Bottom Series	Plow Bolt Requirements	Will Replace OEM Number
PM522325	Shin, 14-, 16-, and 18-in. (RH)	Super Chief	Qty. 2 Size 7/16 x 1 1/4 Bolt No. 10H1072	132001C11, 522325R1, and 488266R1
PM464595	Shin, 16- and 18-in. (LH)	Super Chief	Qty. 2 Size 7/16 x 1 1/4 Bolt No. 10H1072	464595R1, 128410C11, and 55075C
PM462314	Moldboard, 16- and 18-in. (RH)	Super Chief	Qty. 4 Size 7/16 x 1 1/4 Bolt No. 10H1072 Qty. 1 Size 7/16 x 1 1/2 Bolt No. 10H1073	462314R1, 1284101C1, 179314A1, 58996C11, and 132000C11
PM464603	Moldboard, 16- and 18-in. (LH)	Super Chief	Qty. 4 Size 7/16 x 1 1/4 Bolt No. 10H1072 Qty. 1 Size 7/16 x 1 1/2 Bolt No. 10H1073	464603R1 and 112779C1
PM59057C1	Landside, Medium (RH)	Super Chief	Qty. 3 Size 7/16 x 1 1/2 Bolt No. 10H1073	59057C1, 1980672C1, 522342R1, 522343R1, and 489465R1
PM1980671	Landside, Medium (LH)	Super Chief	Qty. 3 Size 7/16 x 1 1/2 Bolt No. 10H1073	1980671C1, 522342L, and 522343L
PM59058C1	Landside, Pad (RH)	Super Chief	Qty. 1 Size 7/16 x 2 1/2 Bolt No. 10H1237 Qty. 1 Size 7/16 x 1 3/4 Bolt No. 10H1158	59058C1 and 59058C2
PM1980947	Landside, Pad (LH)	Super Chief	Qty. 1 Size 7/16 x 2 1/2 Bolt No. 10H1237 Qty. 1 Size 7/16 x 1 3/4 Bolt No. 10H1158	1980947C1
PM464719	Trash Board (RH)	Super Chief	Qty. 2 Size 3/8 x 1 1/2 Bolt No. 10H1028	464719R1
PM467817	Trash Board (LH)	Super Chief	Qty. 2 Size 3/8 x 1 1/2 Bolt No. 10H1028	467817R1

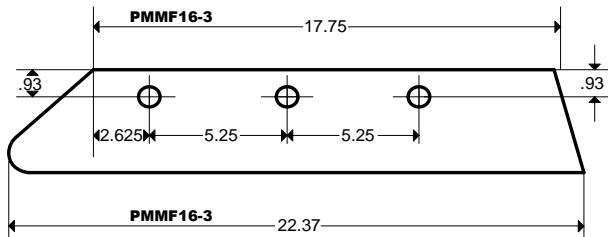
Other

Massey Ferguson

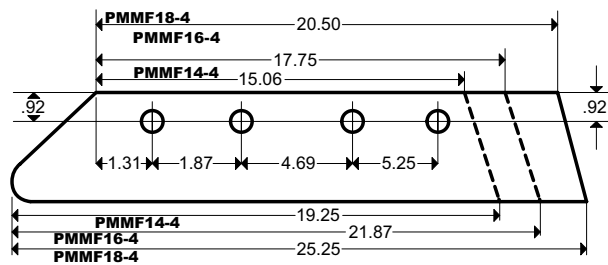
Part No.	Description	Plow Bottom Series	Plow Bolt Requirements	Will Replace OEM Number
PMMF14-4	14-in. Full, Ribbed (RH)	N Heavy Duty	(4) PMCH1483	475161M1 and 475713M1
PMMF16-3	16-in. Full, Ribbed (RH)	N	(3) PMCH1483	475135M1 and 660208M1
PMMF16-4	16-in. Full, Ribbed (RH)	N Heavy Duty	(4) PMCH1483	475167M1 and 475716M1
PMMF18-4	18-in. Full, Ribbed (RH)	N Heavy Duty	(4) PMCH1483	475823M1

Shares

IHC or Massey 3-Hole Shares



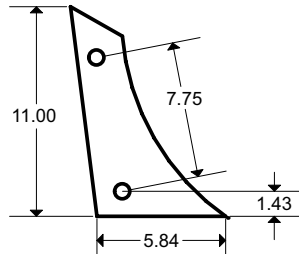
Massey 4-Hole Shares



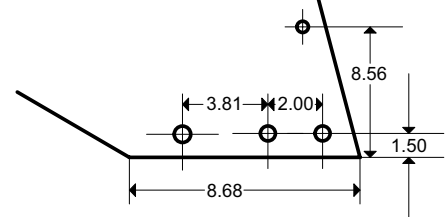
Part No.	Description	Plow Bottom Series	Plow Bolt Requirements	Will Replace OEM Number
PM660008	Shin, 14-, 16-, and 18-in. (RH)	N & N Heavy Duty	Qty. 2 Size 7/16 x 1 1/4 Bolt No. 10H1072	660020M1, 1073604M1, and 660008M1
PM660010	Moldboard, 14-in. (RH)	N & N Heavy Duty	Qty. 5 Size 7/16 x 1 1/4 Bolt No. 10H1072	660022M91, 1073609M1, and 660010M1
PM660204	Moldboard, 16- and 18-in. (RH)	N & N Heavy Duty	Qty. 5 Size 7/16 x 1 1/4 Bolt No. 10H1072	660206M91, 1073616M1, and 660204M1
PM475937	Landside, Short (RH)	N & N Heavy Duty	Qty. 1 Size 5/8 x 3 1/2 Bolt No. 10H1059 Qty. 2 Size 7/16 x 1 1/2 Bolt No. 10H1073	475937M1

Other

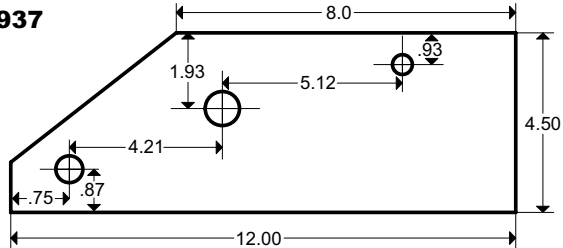
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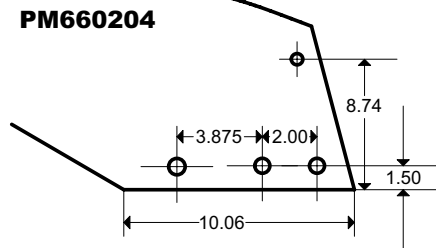
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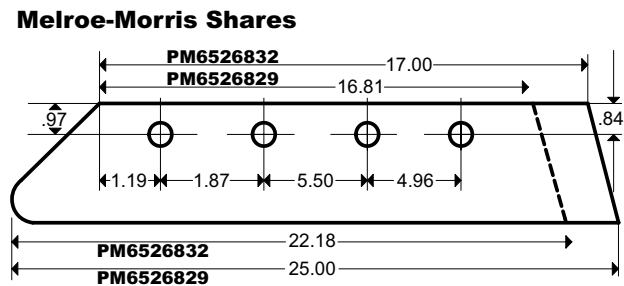
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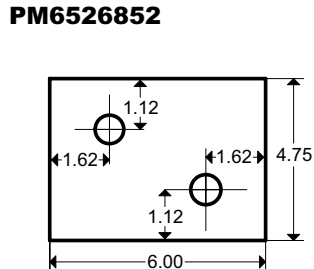
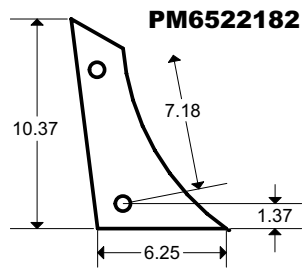
PM660204



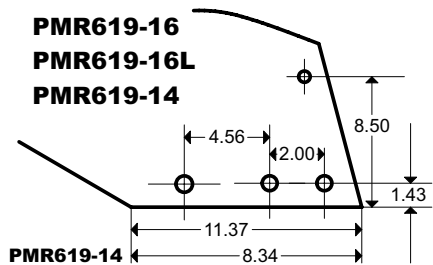
Melrose Morris					
	Part No.	Description	Plow Bottom Series	Plow Bolt Requirements	Will Replace OEM Number
Shares	PM6526832	16-in. Full (RH)	GP 806-RR	(4) AA15890	P6526832 and P24988
	PM6526829	18-in. Full (RH)	GP 806-RR	(4) AA15890	P6526829 and P24987



	Part No.	Description	Plow Bottom Series	Plow Bolt Requirements	Will Replace OEM Number
Other	PM6522182	Shin, 14-, 16-, and 18-in. (RH)	GP 806-RR	Qty. 1 Size 7/16 x 1 1/4 Bolt No. 10H1072	P6522182 and P14617
	PM6526852	Landside, Pad (RH)	GP 806-RR	Qty. 1 Size 7/16 x 2 1/2 Bolt No. 10H1015	P6526852 and P6522847
	PM6526852	Landside, Pad (RH)	GP 806-RR	Qty. 1 Size 7/16 x 1 3/4 Bolt No. 10H1158	P6522847
	PMHS151X	Trash Board (RH)	GP 806-RR	Qty. 2 Size 3/8 x 1 1/2 Bolt No. 10H1028	P6522177
	PMHS151X	Trash Board (RH)	GP 806-RR	Qty. 2 Size 3/8 x 1 1/2 Bolt No. 10H1028	P6522177



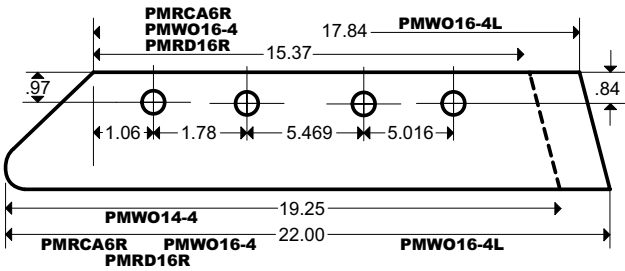
Pittsburgh / National / David Brown							
Other	Part No.	Description	Plow Bottom Series	Plow Bolt Requirements			Will Replace OEM Number
				Qty.	Size	Bolt No.	
	PMR619-14	Moldboard, 14-in. (RH)	HS, GP, HD, and DV	4	7/16 x 1 1/4	10H1072	28978, HS117, and HS138
				1	7/16 x 1 1/2	10H1073	
	PMR619-16	Moldboard, 16-in. (RH)	HS, GP, HD, and DV	4	7/16 x 1 1/4	10H1072	28979, HS119, and HS139
				1	7/16 x 1 1/2	10H1073	
	PMEP1300	Landside, Heel, Ref. HS136	HS, GP, HD, and DV	2	1/2 x 2	10H1246	EP1300 and HS115
	PMHS151X	Trash Board (RH)	HS, GP, HD, and DV	2	3/8 x 1 1/2	10H1028	HS151



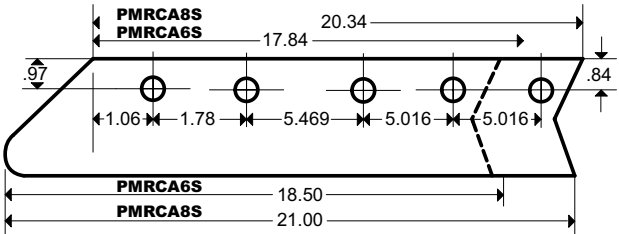
White/Oliver

Shares	Part No.	Description	Plow Bottom Series	Plow Bolt Requirements	Will Replace OEM Number
	PMWO14-4	14-in. Full, Ribbed (RH)	R619, R625, and R919	(3) AA15890 and (1) PMCH1483	219615BS and RCA4R
	PMRCA6S	16-in. Narrow (RH)	R619, R625, and R919	(3) AA15890 and (1) PMCH1483	219623BS and RCA6S
	PMRCA6R	16-in. Full (RH)	R619, R625, and R919	(3) AA15890 and (1) PMCH1483	219617BS and RCA6R
	PMWO16-4	16-in. Full, Ribbed (RH)			
	PMRD16R	16-in. Upset (RH)	R619, R625, and R919	(4) PMCH1483	220016B and RD16R
	PMRCA8S	18-in. Narrow (RH)	R619 and R625	(4) AA15890 and (1) PMCH1483	219625BS and RCA8S
	PMRCA8R	18-in. Full (RH)	R619 and R625	(4) AA15890 and (1) PMCH1483	219619BS and RCA8R
	PMWO18-5	18-in. Full, Ribbed (RH)			
	PMRD18R	18-in. Upset (RH)	R619 and R625	(5) PMCH1483	220024BS and RD18R
	PMWO16-4L	16-in. Full, Ribbed	R619 and R625	(3) AA15890 and (1) PMCH1483	219207BS and LCA6R
	PMWO18-5L	18-in. Full, Ribbed (LH)	R619 and R625	(4) AA15890 and (1) PMCH1483	219210BS and LCA8R

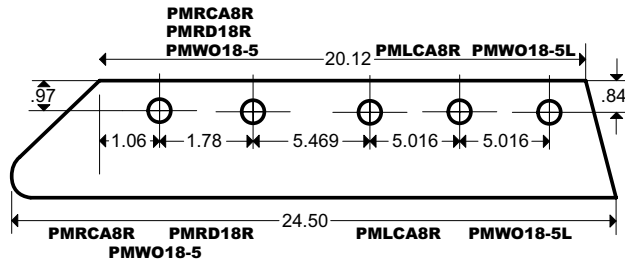
White 4-Hole Shares



White Narrow Cut Shares



White 5-Hole Shares

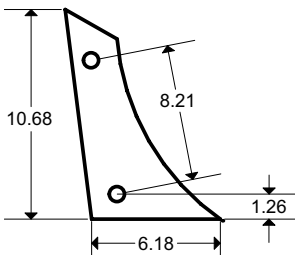


White/Oliver (continued)

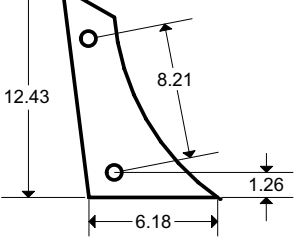
Part No.	Description	Plow Bottom Series	Plow Bolt Requirements			Will Replace OEM Number
			Qty.	Size	Bolt No.	
PMEP7490	Shin, 12-, 14-, and 16-in. (RH)	R619, R719, and 419	2	7/16 x 1 1/4	10H1072	WEP7490C and HR22615A
PM220381	Shin, 18-in. HS and 20-in. (RH)	R619 Deep Till	2	7/16 x 1 1/4	10H1072	W220381BS
PM217404	Shin, 12-, 14-, 16-, and 18 in. (LH)	R619, R719, and R419	2	7/16 x 1 1/4	10H1072	W217404BS
PMR619-14	Moldboard, 14-in. (RH)	R619	4	7/16 x 1 1/4	10H1072	WHR21799B
			1	7/16 x 1 1/2	10H1073	
PMR619-16	Moldboard, 16-in. (RH)	R619	4	7/16 x 1 1/4	10H1072	WHR21800B
			1	7/16 x 1 1/2	10H1073	
PMR619-16L	Moldboard, 16-in. (LH)	R619	4	7/16 x 1 1/4	10H1072	W217776BS
			1	7/16 x 1 1/2	10H1073	
PMR619-18	Moldboard, 18-in. (RH)	R619	5	7/16 x 1 1/4	10H1072	30-1012991
			1	7/16 x 1 1/2	10H1073	
PMR619-18H	Moldboard, 18-in., High Speed (RH)	R619 Deep Till	5	7/16 x 1 1/4	10H1072	W220746BS
			1	7/16 x 1 1/2	10H1073	
PM220787	Landside, Offset (RH)	R619 and R719	1	7/16 x 1 3/4	10H1158	W220787B
			1	5/8 x 1 3/4	10H1039	
			1	5/8 x 3	10H1043	
PM220379	Landside, Flat (RH)	R619 and R719	1	5/8 x 3 1/2	10H1059	W220379B and 22-379B
			1	1/2 x 2	10H1246	
PM220380	Landside, Pad (RH)	R619 and R719	2	5/8 x 1 1/2	10H1080	W220380B
PMEP1300	Landside, Heel, Ref. HS136	R619 and R419	2	1/2 x 2	10H1246	WEP1300B
PMHS151X	Trash Board (RH)	All Series	2	3/8 x 1 1/2	10H1028	W219290B

Other

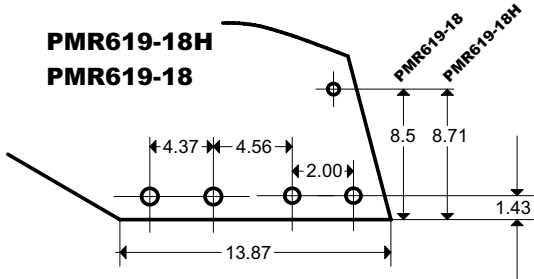
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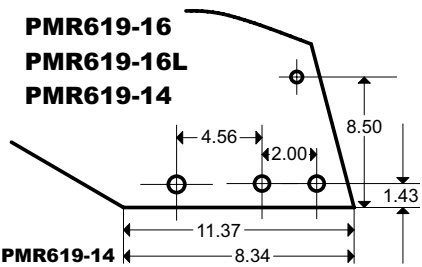
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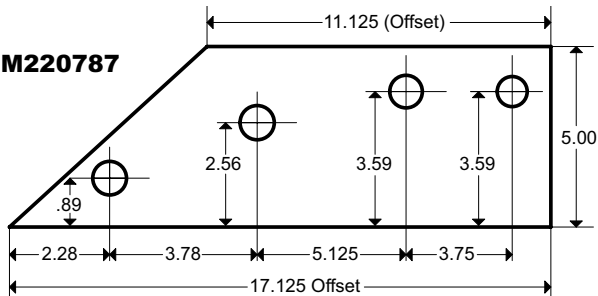
PMR619-18H
PMR619-18



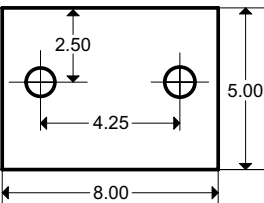
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PMR619-16L
PMR619-14



PM220787



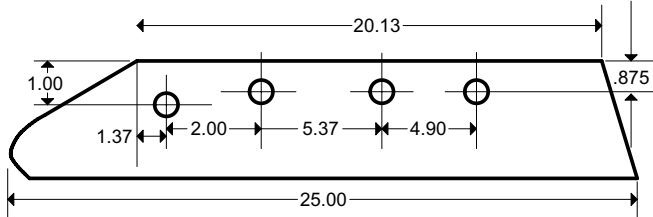
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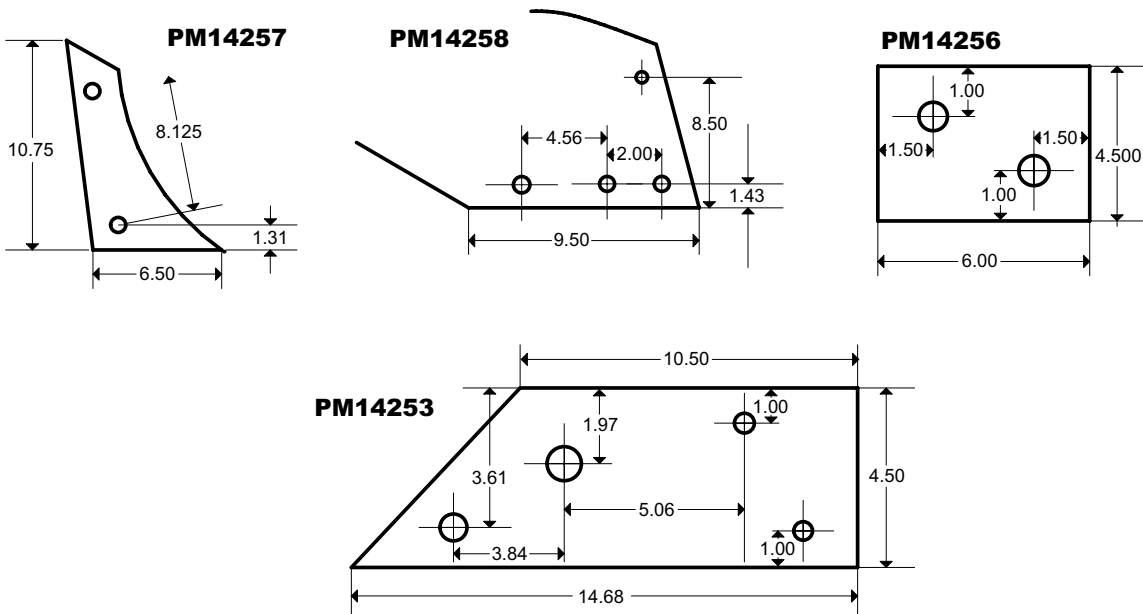
Wil-Rich

Part No.	Description	Plow Bottom Series	Plow Bolt Requirements	Will Replace OEM Number
PM14255	18-in. Full (RH)			
PMWR18-4	18-in. Full, Ribbed (RH)	General Purpose	(4) PMCH1483	14255 and 215806
PMWR18-4HF	18-in. Full, Ribbed, Hard Faced (RH)			

Wil-Rich 4 Hole



	Part No.	Description	Plow Bottom Series	Plow Bolt Requirements			Will Replace OEM Number
				Qty.	Size	Bolt No.	
Other	PM14257	Shin, 16- and 18-in. (RH)	General Purpose	2	7/16 x 1 1/4	10H1072	14257 and 213022
	PM14258	Moldboard, 16- and 18-in. (RH)	General Purpose	5	7/16 x 1 1/4	10H1072	14258, 21589, and 215177
	PM14253	Landside (RH)	General Purpose	1	5/8 x 3 1/2	10H1059	14253 and 215111
				1	7/16 x 1 1/2	10H1073	
	PM14256	Landside, Pad (RH)	General Purpose	1	7/16 x 2 1/2	10H1015	14256 and 215225
				1	7/16 x 1 3/4	10H1158	
	PMHS151X	Trash Board (RH)	General Purpose	2	3/8 x 1 1/2	10H1028	14649



Clipped Head (packaged 50 per box with nut)

Description	Part Number
7/16- x 1 1/4-in. (RH)	AA15890
1/2- x 1 1/4-in. (RH)	PMCH1483
1/2- x 1 1/2-in. (RH)	PMCH1500

PART NUMBER	PAGE	PART NUMBER	PAGE	PART NUMBER	PAGE	PART NUMBER	PAGE	PART NUMBER	PAGE
15645	61, 64, 65, 67, 72, 73, 75	10H1237	12, 13, 61, 65, 66, 72, 73, 75, 76, 88	14H785	63	43CP16TW	12	A15600	61, 65, 71
22877	36	10H1238	14, 61, 62, 65, 66, 72, 73, 74, 75, 76	14H812	11, 63, 79	43CP18TW	12	A15607	78
30750	44			14H813	11, 17, 18, 63	47CP014	13	A15635	62, 66, 72, 74, 76
33124	40			14H931	19, 20	47CP018	13	A16493	61, 66, 72, 73, 76, 79
33131	40, 61, 73, 75			14H960	12, 13, 14, 17	7749A	72	A16494	72, 73, 76, 79
03H1528	18			14M7274	64	7750A	62, 66, 72		
03H1746	20	10H1239	14, 62, 66, 72, 74, 76	14M7275	64, 67, 68, 70, 78	8275A	75	A16495	61, 66, 72, 73, 76, 79
03M7198	82	10H1241	61, 65, 71	14M7276	64, 67, 69	A10223	65, 77	A16496	72, 73, 76, 79
09H1761	18	10H1242	62, 66, 72, 74, 76	A10224	61, 65, 77	A10517	71, 75		
09H1765	18			A10862	44	A16497	61, 65, 66, 71, 72, 73, 76	A16498	61, 66, 72, 73, 76, 87
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10H1015	61, 63, 65, 72, 73, 75, 84, 90, 94	10H1246	83, 86, 91, 93	A12402	74	A12403	74		
10H1027	63, 79, 90	12H234	63	A12403	74	A12404	62, 66, 74	A16841	44, 45
10H1028	83, 86, 88, 90, 91, 93, 94	12H245	63	A12404	62, 66, 74	A12405	74		
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