

**Gathering of the Green
2004 Winter Convention**

**March 10 – 13
Moline, IL**

Wheels Used on John Deere Tractors

History

Descriptions

Part and Casting Numbers

Applications

**Duane Larson
Knoxville, TN**

Introduction

- Compiled a table of 221 wheels
 - Covers Waterloo Lettered Series
 - No numbered series (yet)
 - No Dubuque series (yet)
 - Wheel Properties
 - Part number
 - Casting number
 - Description
 - Size
 - Type
 - Application
 - Model, year

Introduction

- Too many wheels to cover today
- Tire and wheel history
- General wheel information
- Discuss wheel properties
- Selected wheels in detail
 - Illustrate information available
- Last 20-30 minutes for questions
- Drop-in opportunity tomorrow

Acknowledgements and References

- **Many, many people have provided information, wheels to study, photos, references, and encouragement**
- **Parts dealers**
 - Dave Cook
 - Rob Detwiler
 - Phil Miller
 - Herb Nielsen
 - Marlin Smith
 - Greg Stephen
 - Harlan Wilson
- **Restoration Experts**
 - Cork Groth
 - Phil Maria
 - Paul and Michael Ostrander
 - Melanie and Donnie Sharp
 - John Boehm

Acknowledgements and References

- Individuals
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 - Dave Kuhl (Titan Wheel)
 - Eric LaCruze
 - Bill Lee (Curator, Beckman Archive, SDSU)
 - Wes Malcolm
 - Kent Pribil
 - David Smallman
 - Dick Sundberg
 - Paul Winter
 - Len Wagner (Firestone)
 - Joe Pacuit (Tire and Rim Association)
- All those folks who have restored tractors and displayed at EXPOs so I could study the wheels!

Acknowledgements and References

- Technical References
 - John Deere Parts Books
 - The earlier the better!
 - Tractor Digest Magazine
 - “The Unstyled Model A”
 - **Wes Malcolm – in depth look at the A**
 - “John Deere Unstyled Letter Series” and
 - “John Deere Styled Letter Series” books
 - **J. R. Hobbs – GREAT references**
 - “Original John Deere Model A”
 - **Rukes and Kraushaar – decision records**

Acknowledgements and References

- John Deere Field Service Bulletins
- Deere Branch House Bulletins
 - Deere & Webber 1936 – 1946
- Branch House Price Lists
- Instruction and Parts Lists
 - Owner's manuals to 1945
- Tire company catalogs
- Advertising literature
- Green Magazine
- Two-Cylinder Magazine
- Two-Cylinder EXPOs

Outline of Talk

- Steel Wheel usage
- Rubber Tire history
- Conventional and wide-base rims and tires
- Part and Casting numbers
- Comments on wheel types
- Front wheels
 - Reversible and non-reversible
 - Heavy duty
 - Examples of front wheel information

Outline of Talk

- Rear wheels
 - Breakage/improvement programs
 - Hub clamp summary
 - Wheel simplification program
 - Examples of rear wheel information
- Questions
- **NOTE: Use of “Rubber Tires” implies pneumatic (not hard rubber) tires unless otherwise specified.**

Steel Wheels

- Steel wheels had long history
 - Steam traction engines
 - Early large farm tractors
- Types used by John Deere
 - Flat steel
 - Skeleton
 - Hard rubber tires attached to steel wheels
- Bolt-on lugs for traction
 - Huge variety of designs
 - Whole separate topic
- Available from the spoker D to the 830

Why Did Rubber Replace Steel?

- Operator comfort
- Traction
- Higher speeds
 - A, B 5th and 6th gears locked out with steel
- Use public roads
- Fuel economy
- More available horsepower

Horsepower to Move Tractor in Loose Soil

- Allis Chalmers engineers determined hp necessary to move in loose soil:

<u>Speed</u>	<u>Rubber</u>	<u>Steel</u>
2 mph	5 hp	10 hp
5 mph	9 hp	18.5 hp

- Unstyled A
 - 3rd gear → 4.75 mph
 - Max drawbar hp in 1st gear → 18.72
- No wonder D&W branch didn't price B on skeleton steel in '35 and '36 price lists!

Wheel and Rim Development for Rubber Tires

- Tractor tires needed a new wheel and rim
 - French & Hecht worked with tire and tractor manufacturer's to develop wheel
 - Chose the round-spoke design
 - Drop center rim approved 10/14/32 by the Tire and Rim Association (TRA)
 - TRA nomenclature
 - Example: 4.00E x 16 rim for 5.50 x 16 tire
 - 4.00" is inside distance from bead to bead
 - E defines the rim profile
 - 16" is the diameter bead to bead distance

Wheel and Rim Development

- F&H made wheels for many brands
 - Some wheels for other tractors will fit on JD
 - Example: GP spoke rear for rubber

Spoke Wheels for Rubber AC1070

- GP late '32 – end
- F&H wheel
- 12 – 4" x 3/4" spokes
- Casting # HC3
- Rim 8.00T-24
- Tire 11.25 x 24
- Similar wheels
 - HC26A IHC
 - HC46A AC

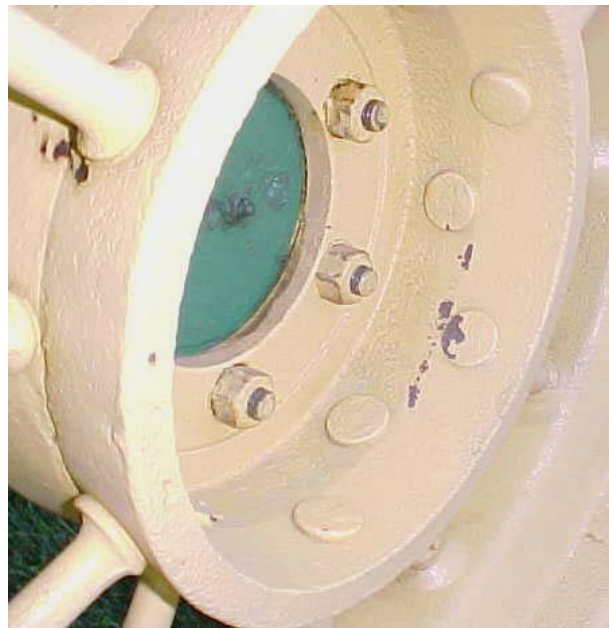


Comparison of HC3, HC26A, and HC46A

- Front side of hubs



HC 3 JD-GP



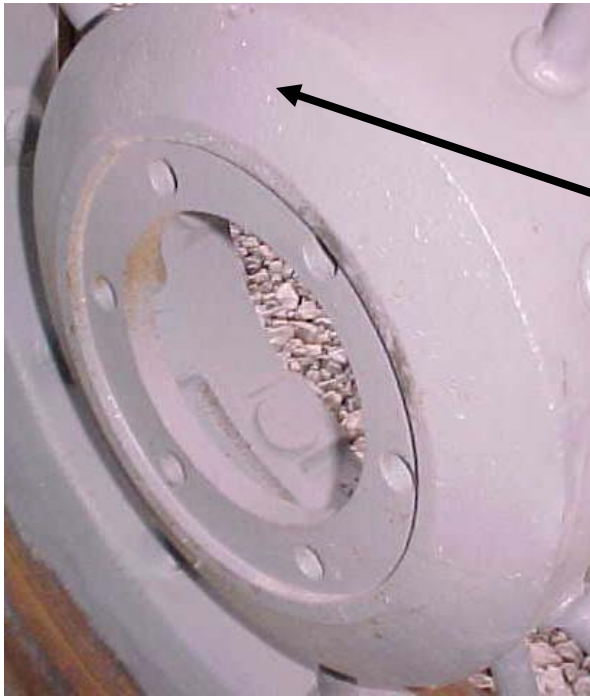
HC 26A F-20



HC 46A WC-AC

Comparison of HC3, HC26A, and HC46A

- Rear of Wheels



HC 3 JD-GP

Note difference in slope

HC 26A F-20



HC 46A AC-WC

Wheel and Rim Development

- F&H made wheels for many brands
 - Hub casting # defines the center hub only!!!
 - Unstyled B round spoke wheel for rubber and flat spoke skeleton wheel both use HC177 hub

Skeleton Wheel

AB363

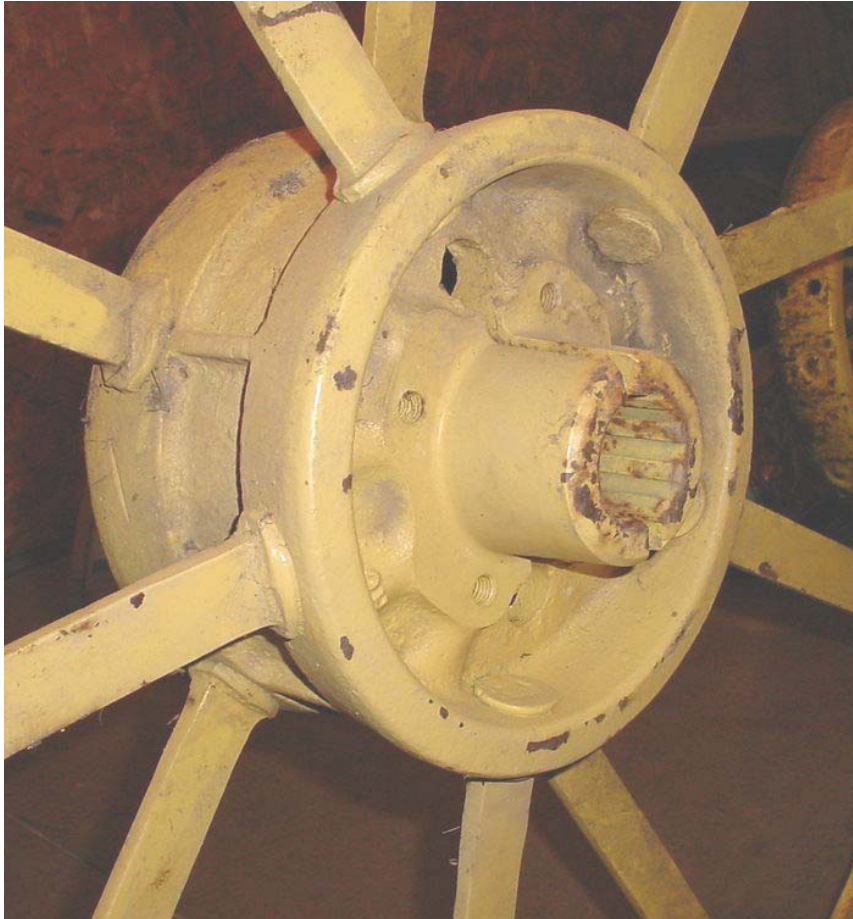
- B, BN, BW 1000 – 12011(?)
- F&H wheel, casting # HC177
- 10 – 1 1/2" x 7/16" spokes
- 48" x 1 15/16" wheel
- Lugs are evenly spaced
- Cast-in hub
- Clamp B25R
- c/n also RS rubber wheel



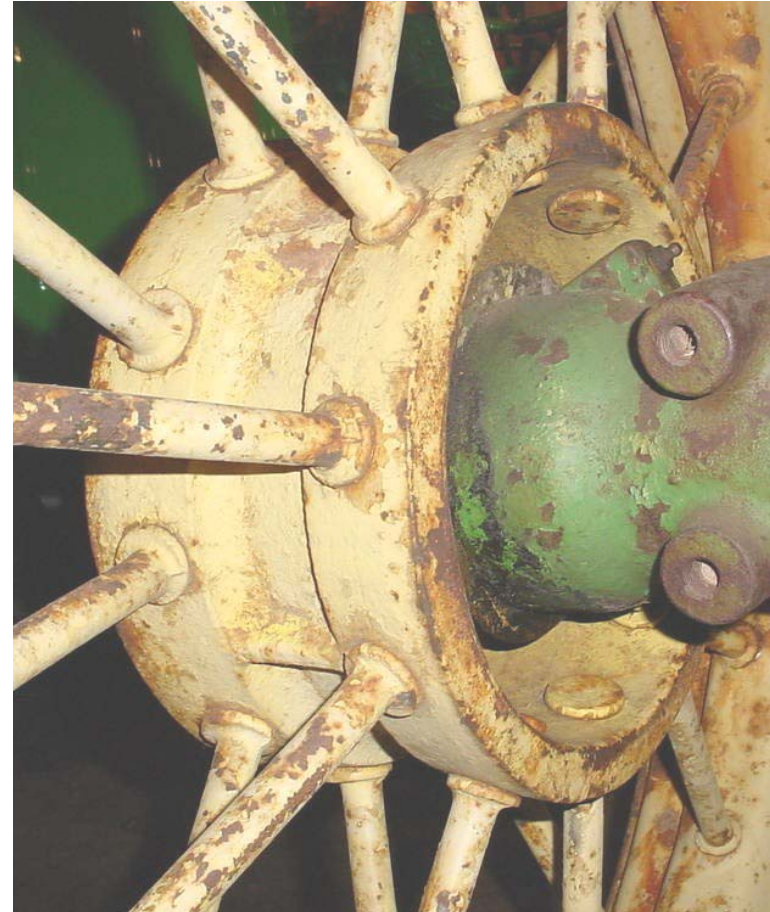
- B, BN, BW 1000 – 59999
- F&H round spoke wheel
- 10-spline cast-in hub
- Clamp B25R
- Casting # HC177
 - Same as for skeleton
- 20 – 10" x 3/4" spokes
- Hub differences
 - Smooth inside hub
 - Added strength ribs



Compare Round Spoke and Skeleton Hubs



**HC177 Skeleton Wheel
Hub**



**HC177 Round Spoke
Rubber Hub**

Wheel and Rim Development

- F&H made wheels for many brands
 - “Holy Grail” → list showing what hub casting numbers fit what brand tractor probably doesn't exist
 - What would you get if you ordered a HC177?
 - List of F&H part numbers and applications does exist

F&H p/n for Model A Round Spoke Wheels

Make & Model of Tractor	Steel or Rubber Tires	Size of Steel Wheel or 6 Rubber Tires		Center Rear Axle to Gr'd	Tread Width of Rear Wheels *	Changeover Wheel Data		
		Front	Rear			Serial No. of Tractor	Wheel No. Front Rear	
JOHN DEERE								
A, AW	Steel Rub.	24" 5.50-16	50"	25.0	56-84AA	All All	147 †363-H	
			9.00-36	26.5	56-84AA	{ Up to 460,000 }		136
			10.00-36	27.4	56-84AA			170
			11.25-36	28.2	56-84AA			170
			9.00-36	26.5	56-84AA	{ 460,000 to 488,000 }		°356
			10.00-36	27.4	56-84AA			°358
			11.25-36	28.2	56-84AA			°358
			9.00-36	26.5	56-84AA	{ 488,000 and up }		°570
			10.00-36	27.4	56-84AA			°572
			11.25-36	28.2	56-84AA			°572

Tractor Rubber Tire History

- Initial development
 - Goodyear
 - **1931 – working with Florida citrus farmers**
 - Adopting airplane tires
 - **FIN 10/13/32 carried first tire announcement**
 - All Weather tread
 - **1937 – Sure Grip Tire**
 - Announced in FIN 8/12/37
 - **1938 – Announcement of Wide Base rim/tire**
 - **1948 – Super Sure Grip – used until '60's**

Early Goodyear Tractor Tires

Announcing the New GOODYEAR FARM TRACTOR TIRE

GOODYEAR now offers the first perfected low-pressure pneumatic tire for farm tractor service.

It is a specially designed Goodyear All-Weather Tread Tire with the following valuable characteristics:

It increases the effective power of the tractor.

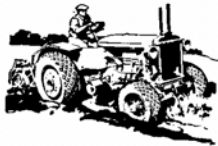
Its low pressure (only 12 lbs.) brings extra speed, more cushioning, greater operating range, and lower tractor operating and maintenance costs.

Its All-Weather Tread design has tractive edges in all directions—high enough for traction in any going but not so high as to "dig in"—and this tractive design is carried far down the sidewalls for greater pulling power in soft going.

Its body is extra-resilient, extra-durable Goodyear Supertwist Cord.

This new tire has been developed by Goodyear out of experience gained with the Goodyear Tractor Airwheel Tire, introduced two seasons ago into citrus grove operations in Florida.

Plans are being made for its use as original equipment next season on the leading makes of farm tractors.



GOODYEAR RIM FOR FARM TRACTOR WHEELS

Goodyear also makes the rims used by the wheel manufacturers in the farm tractor changeover wheels. Of drop center type, with tapered bead seat, this rim provides simplicity of design, easy tire changing and perfect bead seating with absolute freedom from slipping.

For complete information about the new Goodyear Farm Tractor Tire, see your Goodyear Service Station Dealer or write to Goodyear, Akron, Ohio, or Los Angeles, Cal.

THE GREATEST NAME IN RUBBER
GOODYEAR
EQUIP YOUR TRACTOR WITH THE NEW GOODYEAR FARM TRACTOR TIRE

More "DRAW-BAR PULL" for NEW-TRACTOR Sales



NOWADAYS when a farmer buys a new tractor, the reason's apt to be not so much because his old one is worn out—but because a new one will save him money, time and labor.

That's due, as you know, to the big tractor improvements that have been made in recent years—improvements not only in the tractor itself but also in its wheel equipment.

In other words, he not only wants a new tractor—he wants that tractor to be on rubber.

Knowing that, your best bet is to order your tractors and implements to come factory-equipped with Goodyears.

The farmer knows that name stands for better performance, better value, more satisfaction. He's had plenty of good experience with many different Goodyear products for the farm. He knows it's the greatest name in rubber.

So, when a farmer comes into your store to look over a new tractor and to talk over the idea of buying one—you start off with one big point in your favor if that tractor stands on Goodyear tires.

To give your sales this added "draw-bar pull"—on all your factory orders,

Specify

**MORE FARM TRACTORS
ARE EQUIPPED WITH
GOODYEAR TIRES THAN
ANY OTHER KIND**



Only the Goodyear Sure-Grip Provides All These Advantages

OPEN-CENTER TREAD—no pockets to pack up and cause slip; full self-cleaning; better penetration

WIDER TREAD—greater traction; more pull

BETTER GRIP—lugs are deeper cut and wider spaced to dig in without shearing off soil

SMOOTH RIDING—lug bars overlap evenly at center, giving continuous support on hard roads

GREATER FLEXIBILITY—conforms better to rough ground

REINFORCED LUGS—battressed at both sides to prevent undercutting

WEATHERPROOF RUBBER—resists effects of sun, weather and barnyard acids

SUPERTWIST CORD in every ply.

*Trademark of The Goodyear Tire & Rubber Company

GOODYEAR
TRACTOR AND IMPLEMENT TIRES

FIN 10/13-32 ad

Sure Grip 8/12/37

25

Tractor Tire History

- Initial development
 - Firestone
 - **1931 – testing airplane tires on tractors**
 - **FIN 10/13/32 carried first tire announcement**
 - Chevron tread
 - **1933 – racing AC tractors to sell tires**
 - **1935 – Ground Grip tread**
 - **1937 – deeper Ground Grip tread**
 - **1938 – Wide Base Ground Grip**
 - **1946 – Champion Ground Grip**
 - **1949 – Open Center Grip – till '60's**

Firestone Tractor Tire Evolution

Chevron 1932

1937 Ground Grip

1946 Champion Ground Grip



1935 Ground Grip

1938 wide base Ground Grip

Followed by the 45 degree Champion Ground Grip in 12/49

John Deere first used Rubber Tires in 1932

FIRESTONE TIRES, RIMS and WHEELS NOW AVAILABLE for:

MAKE	FOUR WHEEL	ROW CROP OR WIDE TREAD
Allis Chalmers	Model U	Model UC
J. I. Case	Model C	Doall CC
John Deere	Model GP	GP Wide Tread
McCormick Deering	Model 10-20	Farmall F-20
Twin City	Model KT	Universal
Oliver	Model 18-28	
Fordson	All Types	

Wheels and tires are available for other makes and models of tractors on special order.

HIGHER SPEEDS SAVE TIME

Firestone Brochure dated November 1932

“Conventional” and “Wide-Base” rims and tires

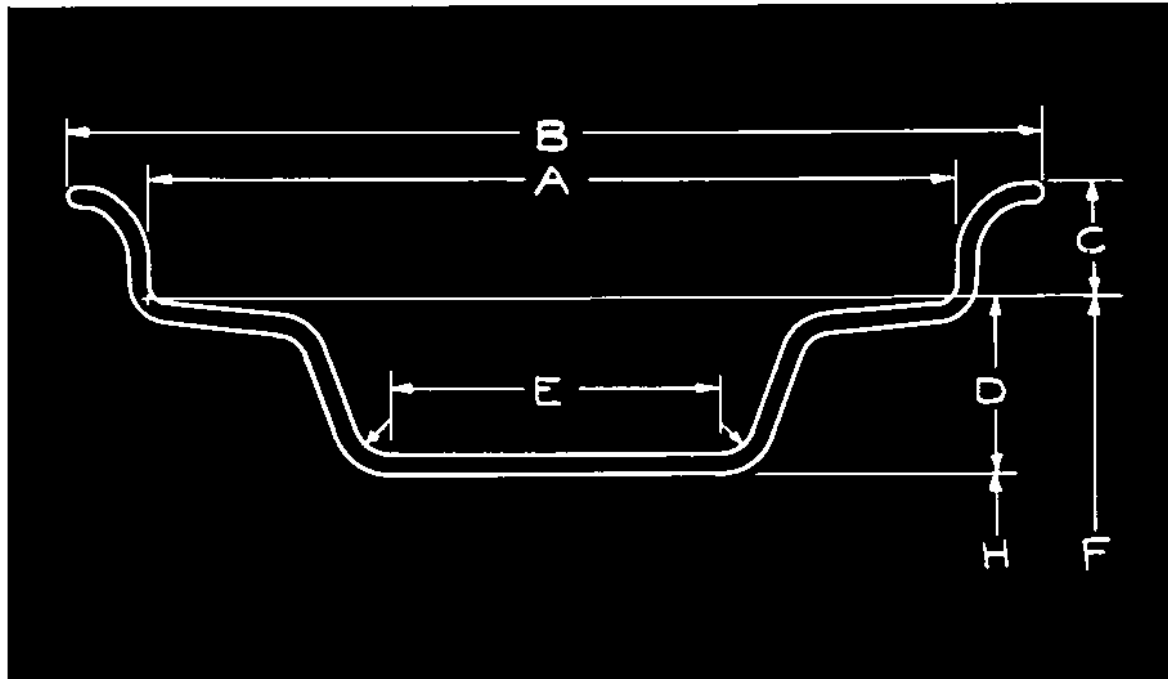
- Rims until late 1938 had a profile designed for a tire shape which was rounded across the tread.
- In late 1938 Goodyear takes credit for introduction of the wide base rim and tire
 - Due to the rim and tire design, more of the tread was in contact with the ground
- Original tires and rims then became known as “conventional” tires and rims

“Conventional” and “Wide-Base” rims and tires

- WB tires had a flatter profile, so to maintain the axle-ground clearance, a larger diameter WB tire was used
 - 36” conventional tire replaced by a 38” WB
 - 38” conventional tires did not exist
- Comparisons:
 - Handout contains information on conversion between conventional and WB tires and rims
 - Rim profiles show why WB tires do not fit conventional rims

Handouts from the Gathering of the Green workshops are among the information included on the CD available through this web site.

Wide Base and Conventional Rim Profiles



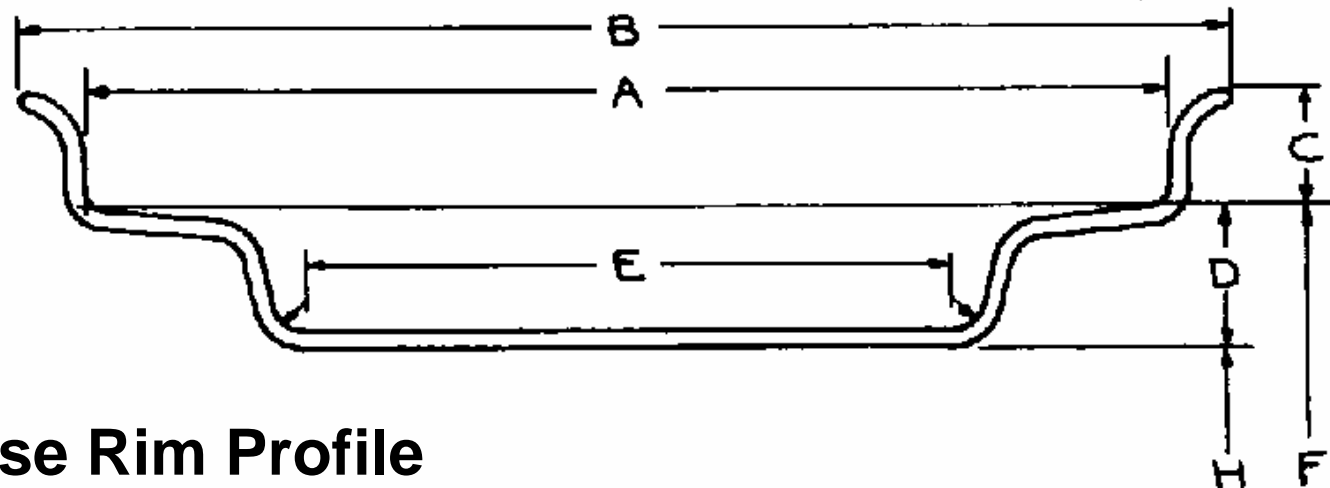
Conventional
Rim Profile

A: 9.00-36 tire -6.00S-36 rim

A = 6.00", C = 1.218"

Replace with new 9.5-36
designed for W8-36 rim

A = 8.00", C = 0.875"



Wide-Base Rim Profile

Rear Wheel Casting and Stamping Information

- General rule is all F&H wheels built for JD had hub casting numbers (exceptions exist)
- Field Service Bulletin 118 (2/15/41) announced that JD drive wheels would have identification numbers
 - Flat and skeleton steel
 - Assembly # of rim, spokes, and hub was cast in hub
 - Cast wheels identified by casting #
 - Demountable rims identified by rim size
 - Pressed steel had assembly # stamped

Front Wheel Casting and Stamping Information

- F&H wheels generally had a hub casting #
- JD wheels usually did not
- Pressed steel wheels did not until late '43 with introduction of reversible wheels, after that they did, with 1-2 exceptions
 - Identification is by diameter, (non)/presence of slots, width, number of rivets attaching rim to center, and (non)/reversible
 - Can be tricky
 - Examples follow, but first discuss “reversible”

Reversible and Non-Reversible Front Wheels

- Non-reversible
 - Early wheels designed to fit one way on hub
 - Bolt plate nearly in center of wheel
 - AA2106R spacers introduced 8/1/39
 - Address problem with listed crops

AA2106R Spacers

- Hard to keep front wheels on listed row
- Casting # A2275R
- Set front wheel out 2"
 - A: 7 1/2" spacing to 11 1/2"
 - B: 7" spacing to 11"
 - G: 8 1/2" to 12 1/2"
- Real solution
 - Modify wheels



Reversible and Non-Reversible Front Wheels

- Reversible wheels introduced 11/12/43 for the B, and 4/7/44 for A
 - Bolt plate ~ 1" off rim center
 - Shifts wheel ~2" when reversed on hub
 - New hubs needed

Reversible – Non-Reversible Identification

- By inspection
 - If the bolt plate dishes out, away from the rivets/spot welding used to attach the center to the rim, it is reversible.
 - If the bolt plate dishes toward the rivets.... It is non-reversible.
- By measurement
 - Measure the distance from the edge of the rim (or tire, if mounted) to a common location from both the inside and outside (VS side), and subtract the distances. If the difference is ≤ 1 ", it is non reversible, ≥ 2 " is reversible

Heavy Duty Front Wheels

- JD1274R was first HD front wheel
- “Heavy Duty” wheels introduced for use with manure loaders and 4-row cultivators
 - “regular” wheel uses 0.130” steel
 - HD wheel uses 0.160” steel
 - Use with 6 and 8 ply tires

Pressed Steel Wheel Descriptions

- Wheel center riveted to rim initially
 - Center riveted using 10 rivets
 - Later, center had metal removed to form 4 flutes, and 2 or 3 rivets attached each flute to rim
 - One way to identify non-stamped wheels
- ~ 1951 center flutes spot welded to rim
- p/n stamping began w/reversible wheel
- Some wheels have 4 slots between the center plate and rim
- Examples of “A” pressed wheels follow

Pressed Steel Wheel – JD1232R (1)

- **Stamped:** No
- **First use:** A445325 (12/36)
 - 12/36 - ~mid '38 (estimated)
- **Rim size:** 4.00E x 16
- **Tire size:** 5.50-16
- **Mounting holes:** 6+3
- **Slots:** none
- **Rivet #/Welded:** 10R
- **Weight holes:** none
- **Offset:** non-rev
 - Center-out: 2 1/2"
 - Center-in: 1 1/2"



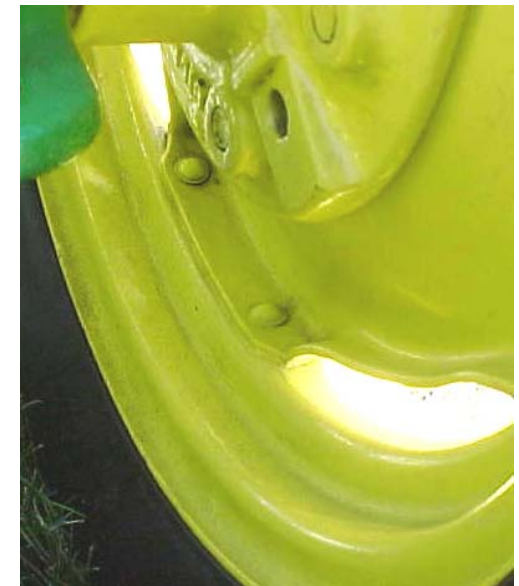
Pressed Steel Wheel – JD1232R (2)

- **Stamped:** No
- **First use:** ~mid '38 – early '40
- **Rim size:** 4.00E x 16
- **Tire size:** 5.50-16
- **Mtg holes:** 6+3
- **Slots:** none
- **Rivet #/Welded:** 4 x 2R
- **Weight holes:** none
- **Offset:** non-rev
 - **Center-out:** 2 1/2"
 - **Center-in:** 1 1/2"



Pressed Steel Wheel – JD1232R (3)

- **Stamped:** No
- **First use:**
 - early '40 – (5-12)/'41
- **Rim size:** 4.00E x 16
- **Tire size:** 5.50-16
- **Mounting holes:** 6+3
- **Slots:** 4
- **Rivet #/Welded:** 4 x 2R
- **Weight holes:** none
- **Offset:** non-rev
 - Center-out: 2 1/2"
 - Center-in: 1 1/2"



Pressed Steel Wheel JD1261R

- **Stamped:** No
- **Used:** (5–12)/41 – 4/7/44
- **Rim size:** 4.00E x 16
- **Tire size:** 5.50-16
- **Mounting holes:** 6+3
- **Slots:** 4
- **Rivet #/Welded:** 4 x 3R
- **Weight holes:** none
- **Offset:** non-rev
 - **Center-out:** 2 1/2"
 - **Center-in:** 1 1/2"



Pressed Steel Wheel JD1268R

- **Stamped:** Yes
- **Used** 538660 - end
- **Rim size:** 4.00E x 16
- **Tire size:** 5.50 x 16
- **Mounting holes:** 6 + 3
- **Slots:** none
- **Rivet #/Welded:** 3R, W
- **Weight holes** none
- **Offset:** reversible
 - **Center-out:** 2 1/4"
 - **Center-in:** 4 1/4"



Pressed Steel Wheel JD1274R

- **Stamped:** Yes
- **Used** A584000 - end
- **Rim size:** 4.25K x 16
 - Heavy duty version of JD1268R
- **Tire size:** 5.50 x 16
- **Mounting holes:** 6 + 3
- **Slots:** none
- **Rivet #/Welded:** 3R, W
- **Weight holes** none
- **Offset:** reversible
 - Center-out: 2 1/4"
 - Center-in: 4 1/4"



Pressed Steel Wheel JD1290R

- **Stamped:** Yes
- **Used** 4/1/58 –
 - Replacement for JD1274R
- **Rim size:** 4.25K x 16
- **Tire size:** 6.00" x 16"
- **Mounting holes:** 6 + 3
- **Slots:** 0
- **Rivet #/Welded:** 3R/W
- **Weight holes** 0
- **Offset:** reversible
 - Center-out: 1 1/2"
 - Center-in: 3 5/8"



Pressed Steel Wheels

- Most wheels have 6 mtg holes + 3 weight holes to mount front weights to hub
- Some wheels have 4 holes midway between bolt center and rim for attaching weights to the rim

Pressed Steel Wheel JD1281R

- **Stamped:** Yes
- **Used** Hi Crop 665000- end
- **Rim size:** 5.5F x 20
- **Tire size:** 7.50 x 20
- **Mounting holes:** 6 + 6
- **Slots:** 4
- **Rivet #/Welded:** 3R/flute
- **Weight holes** 4
- **Offset:** reversible
 - Center-out:
 - Center-in:



Rear Wheel Types

- Flat steel
- Skeleton steel
- Spoke rubber
- Cast
- Pressed steel
- Primary suppliers
 - French & Hecht
 - John Deere
- Lots of specialty wheels
 - Topic for next time

Comparing F&H and JD wheel Hubs

- F&H hubs used several shapes
 - Flat hub
 - Shallow “V” hub
 - Hubs with scallops on edge(s)
 - Spokes often visible inside the hub
- John Deere hubs
 - Characteristic “zig-zag” hub pattern
 - Spokes end inside casting
 - Manufacturing methods shown in “Sheppard” series tapes from Two-Cylinder

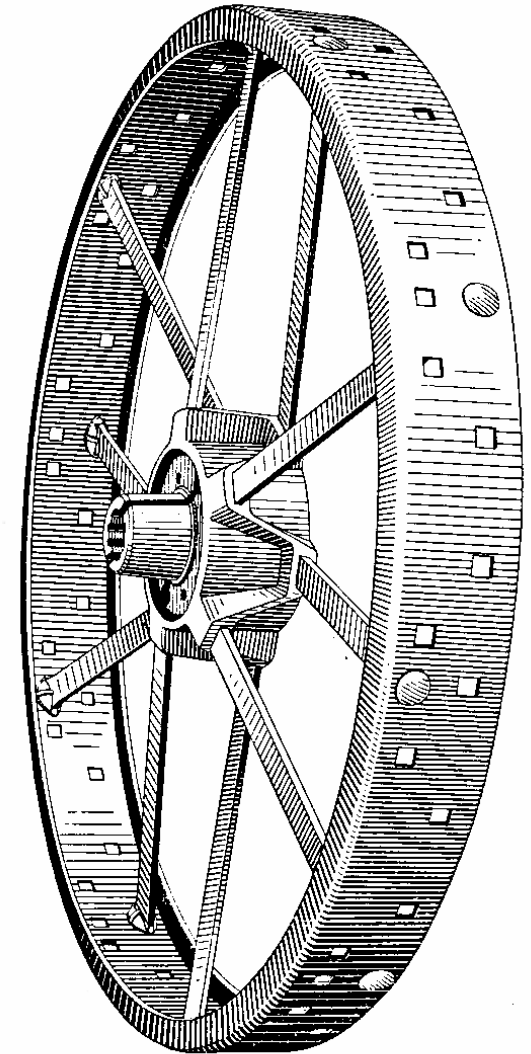
Flat Steel Information Illustrated by Model B

- Illustrates development
- Breakage problems and solutions
- Hub styles
 - Cast-in
 - Bolt-in
 - Two types
 - Pressed steel hubs
 - All others
- Hub clamps
 - B used 5 different clamps (4 on steel wheels)

Flat Steel

JD1215R

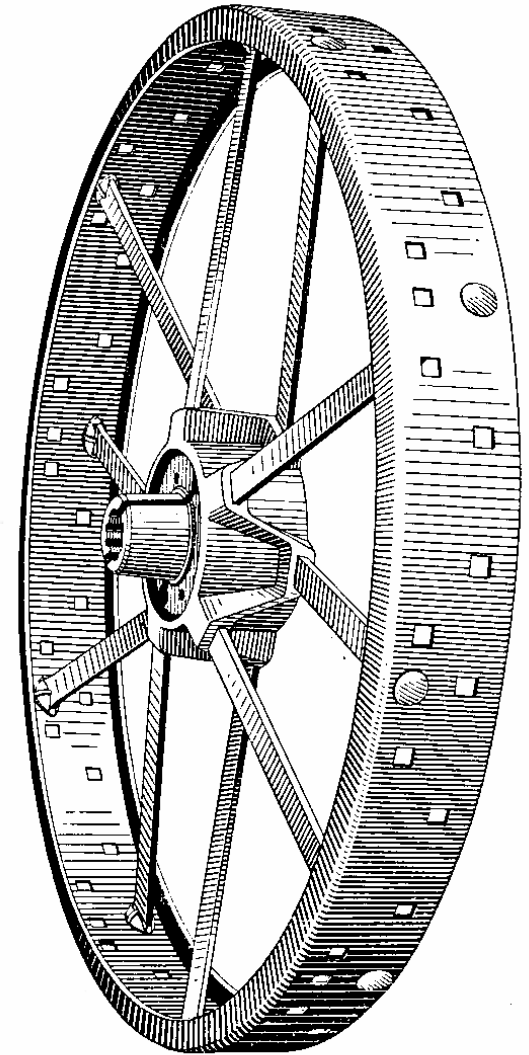
- B, BN, BW 1000 – 59999
- JD wheel
- No casting #
- 10 spline cast-in hub
- Hub clamp B25R
- 10 flat spokes
- 48" x 5 1/4" x 1/4" wheel



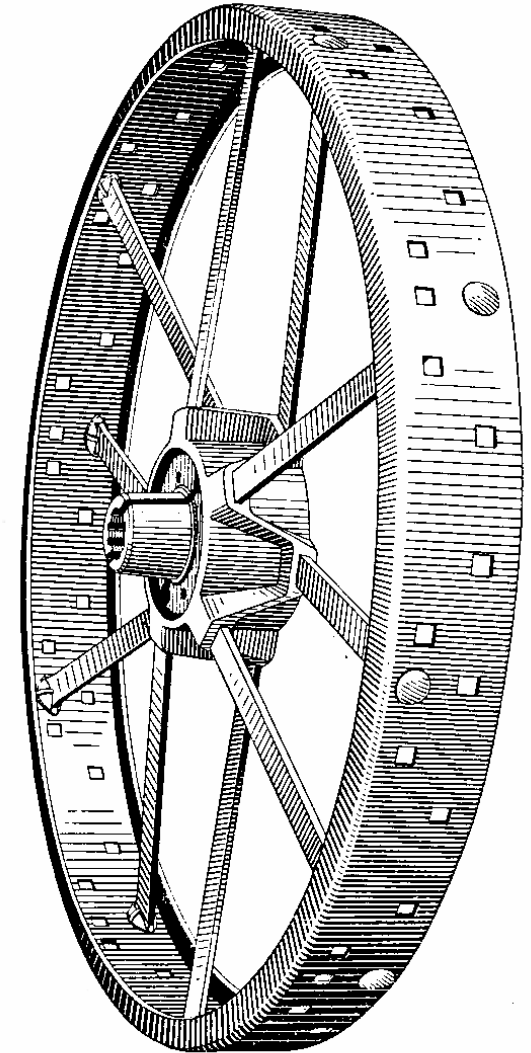
Flat Steel

JD1236R

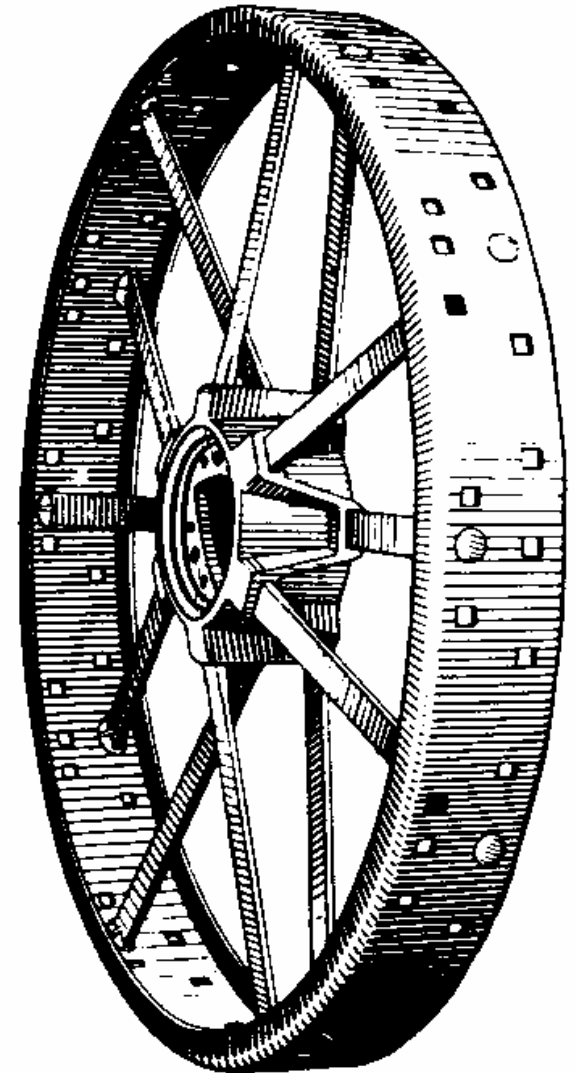
- B, BN, BW 60000 – 102682
- JD wheel
- 10 – 3/8" x 1 1/2" spokes
- No casting #
- 12 spline cast-in hub
- B1189R clamp
- 48" x 5 1/4" x 1/4" wheel
- Hub breakage problem



- B, BN, BW 102683 – 165400
- JD wheel, casting # B1959R
- 10 – 1 1/2" x 3/8" spokes
- Beefed up JD1236R hub
- New clamp B1961R
- 48" x 5 1/4"
- 12 spline cast-in hub
- Parts books are confusing on this wheel
 - AB2958R = JD1257R + B1961R



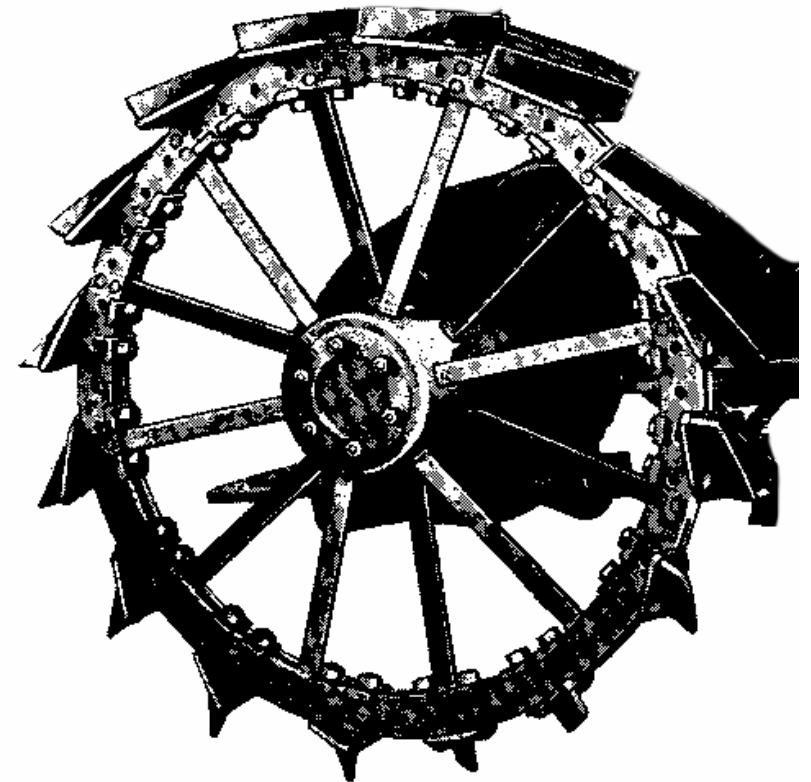
- B, BN, BW 165401 – 200999
- JD “Heavy Duty” wheel
- Casting # JD1265R
- 12-spline B2096R bolt-in hub
- B2097R clamp
- 12 – 3/8” x 1 3/4” spokes
- 48” x 5 1/4”
- Replacement for 60000 –
- 10-spline B2186R bolt-in hub
– Replacement for 1000-59999



Skeleton Steel Information Illustrated by GPWT

- Hub casting numbers
 - All seem to be HA503A
 - Flat and skeleton

- GPWT 400000 – 401237
- F&H 12 spoke wheel
 - Dual bands
- 46” diameter
- C1515 (2 pc) overtire
 - To make “flat steel” wheel
- Casting # HA503A(?)



- GPWT 401238 – 402688
 - Option 402689 - end
- F&H 12 spoke wheel
 - Dual band
- 43 1/2" diameter
- Casting # HA503A
- No flat steel wheel
- Overtires → flat steel
 - C1548 10" (2 pc)
 - C1840 6" (2 pc)



- GPWT early wheel
- Not used in production
 - Paul Ostrander
- Tractor Digest Vol. 3 No. 1 pp 37-38
illustrates early skeleton wheels on GP
Tricycles
 - Might be these wheels?

Spoke Wheels for Rubber

AR/AO (1)

- Did the AO/AR ever come with round spoke rear wheels for rubber?

"AR"	6.00x16	4	28	11.25x24	6	}	Spoke	Wheels	Not	Furnished.
"AO"				12.75x24	6					
"BR"	5.50x16	4	28	9.00x28	4					
"BO"				11.25x24	6	12	12	12	12	12

Field Service Bulletins 70 (2/15/37) and 89 (9/15/38) give tire inflation charts and recommended maximum weights for tires mounted on spoke wheels. For the AR and AO, and the 9.00x 28 tire on the BR, the notation is "Spoke Wheels Not Furnished"

Spoke Wheels for Rubber

AR/AO (2)

11.25"x24" 4-PLY TIRES FOR "AR", "AO", "BR" AND "BO" TRACTORS

We are now in position to ship 11.25"x24" 4-Ply tires on Models "AR", "AO", "BR" and "BO" tractors. These tires effect a saving of \$20.00 retail and \$15.50 dealers net per tractor over 11.25"x24" 6-Ply tires furnished heretofore.

The inflation pressure for 11.25"x24" 4-Ply tires is as follows:

JOHN DEERE MODELS "AR"—"AO"

REAR TIRES										
Tire Size	Ply	Spoke Wheels with added weight of Cast Iron or Liquid in Tires.					Cast Wheels with added weight of Cast-Iron or Liquid in Tires.			
		0	150 Lbs.	300 Lbs.	450 Lbs.	600 Lbs.	0	150 Lbs.	300 Lbs.	
11.25-24	4	Spoke Wheels Not Furnished					12	12	12	
JOHN DEERE MODELS "BR"—"BO"										
11.25-24	4	12	12	12	12	12	12	12	12	

John Deere Tractor Co. Letter (8/1/39) announcing that 11.25x24 4 Ply tires are now available for the AR, AO, BR, BO tractors. Under AR-AO, "Spoke Wheels Not Furnished"

- October 1939 Tractor Co. Letter lists weights for spoke and cast wheels, AR-AO listed only under cast wheels
- April 1940 Tractor Co. Letter lists wheels available, AR-AO not under spoke wheels
- June 1941 Tractor Co. Letter lists wheels available, AR-AO not under spoke wheels
- Brochure A199-40-12 states that the AR and AO use cast rear wheels; the BR and BO use cast or spoke wheels.

- No parts book shows a spoke wheel
- About convinced the AR and AO came on rubber with cast rear wheels only? Well...
- If it is in the Price List, then it's for sale, right?
- 1937 Revised Wholesale PL 3/8/37 Moline
 - AR AB-662 11.25x24 spoke \$967.50

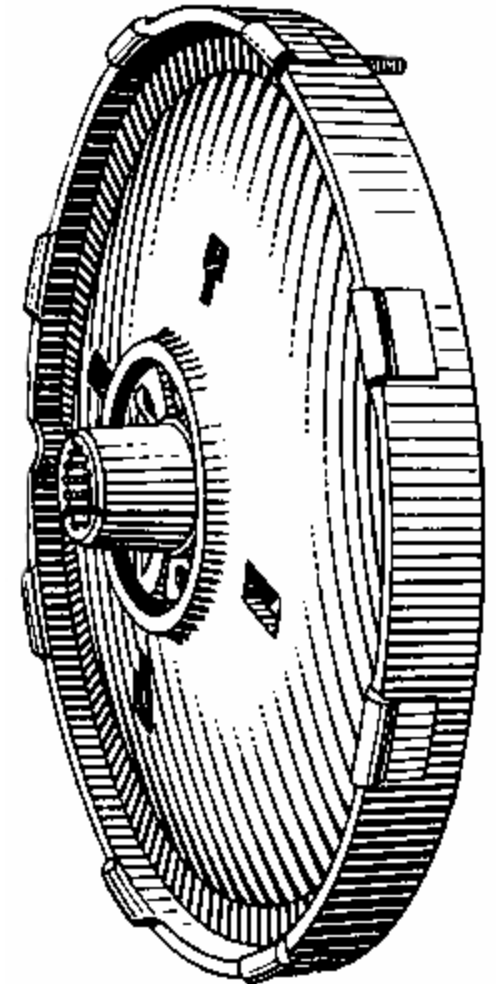
but

- 1937 PL #2 3/8/37 Deere & Webber
 - “Spoke type rear wheels not available for rubber tired “AR” and “AO” tractors”.

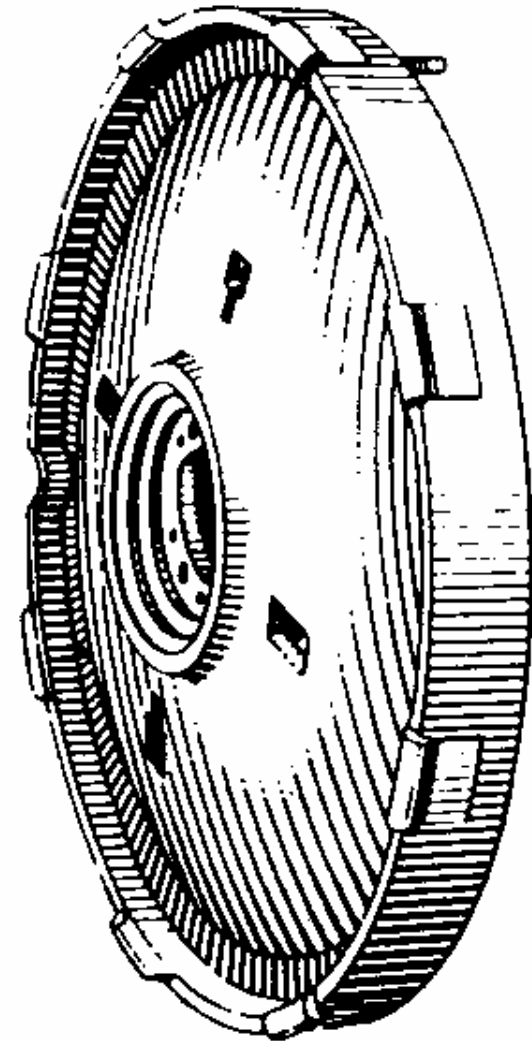
- Revised Retail PL 11/1/37 Moline
 - AR AB-662 11.25x24 spoke \$1160.00
- Price list 11/1/37 Omaha
 - AR, AO w/AC1070 (F&H HC3) spoke wheel
- 1938 PL No. 1, **12/1/37 Deere & Webber**
 - AR, AO 11.25x24 spoke wheels
- 1940 PL 2/26/40 St. Louis
 - AR, AO on AC1070 spoke wheels
- After 1940, cast rears (increased hp)

- Illustrates wide variety of rims used

- G G1000 – G20759
- Casting # F337R
- 12 spline cast-in hub
 - Stop crack holes missing early
- Clamp F22R
- Conventional rim
 - AA1002R demountable rim
 - 10.00, 11.25x36" tire
 - G1000 - G11953
- Wide base rims
 - AA3033R 10-38 G11954 – 13747
 - AA2478R 11-38 G10706 – 13747
 - AA3043R 12-38 G10706 - end



- G, GN, GW G20760 – end
- Casting # F857R
- 12 spline F858R bolt-in hub
- Clamp A1812R
- AA3043R rim for 12-38 tire
 - AA2478R 11-38 optional
- Wheel had 4 additional holes
 - Added ~late 1950
 - Same casting #

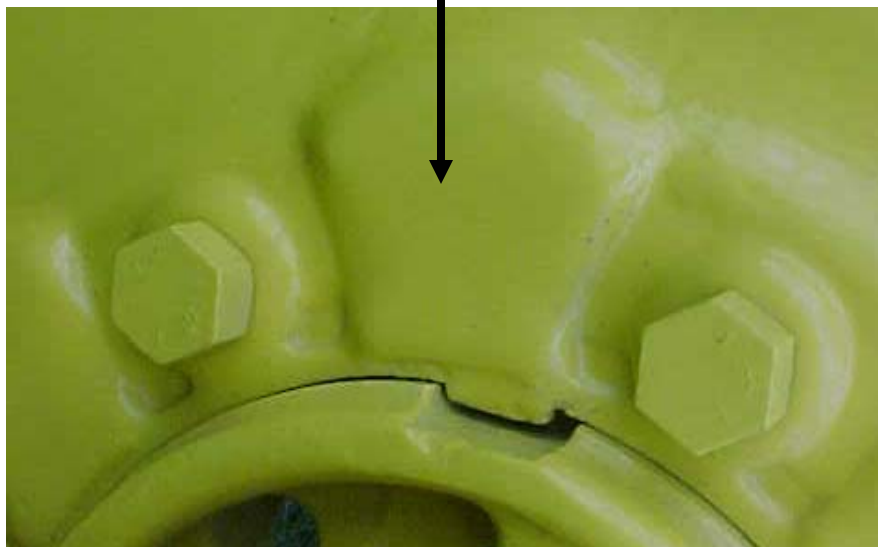


Pressed Steel Information Illustrated by H wheels

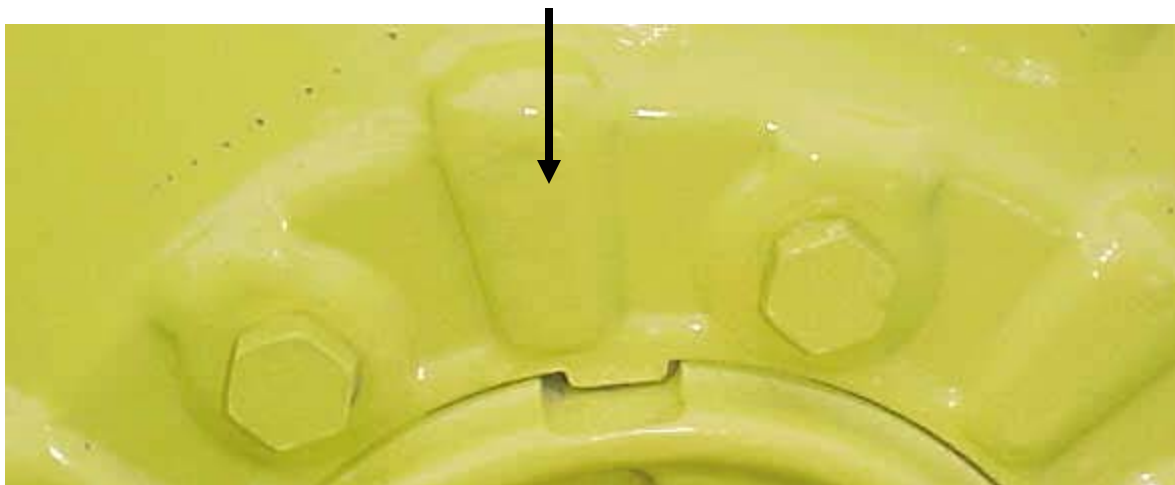
- Four sizes of pressed steel rims
- Two types
 - Narrow raised bosses around hub
 - Larger raised bosses
 - Assume manufacturer difference
- 4 slots present
 - Non-JD wheel seen, has no slots

- H, HN H1000 –
- Wheel stamped w/part number
- 32x6W rim
 - Used for 6.50, 7.50x32 tires
 - Until 3/39 then 7.50 only
 - By 8/39 7,8x32 wide base
 - Used for wide base, conventional
 - After 3/12/40, 7x32 only
- H220R 12 spline hub
- H221R clamp

- H, HN 3/12/40 – end
- Wheel stamped w/part number
- 32 x 7W rim for 8-32 tire
- H220R hub, H221R clamp
- 4 slots
- Example of wide boss



- H, HN ~early '40 – end
- Wheel stamped with p/n
- 32 x 8W rim for 9x32 tire
- H220 hub, H221R clamp
- 4 slots
- Example of narrow boss



- HNH, HWH 2/41 – 1/42
- Wheel stamped with p/n
- 38x7W rim for 8x38 tire
- Same wheel as Model B
- H991 hub
- B1189R clamp



Summary

- Early farm tire usage
- Conventional and wide-base rims and tires
- Reversible and non-reversible front wheels
- Rear wheel development/improvement
- Taken examples from wheel database to illustrate points
- Question time
- Drop in session Friday, 3-5 pm