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

- Toooo 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
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    – 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
  – Kelly Brosseth
  – Brandon Knapp
  – 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:

<table>
<thead>
<tr>
<th>Speed</th>
<th>Rubber</th>
<th>Steel</th>
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<tr>
<td>2 mph</td>
<td>5 hp</td>
<td>10 hp</td>
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<tr>
<td>5 mph</td>
<td>9 hp</td>
<td>18.5 hp</td>
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</table>

• 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

Note difference in slope

HC 3  JD-GP

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
Spoke Wheels for Rubber AB375

- 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
<table>
<thead>
<tr>
<th>Make &amp; Model of Tractor</th>
<th>Steel or Rubber Tires</th>
<th>Size of Steel Wheel or 6 Rubber Tires</th>
<th>Center Rear Axle to Gr'd</th>
<th>Tread Width of Rear Wheels *</th>
<th>Changeover Wheel Data</th>
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<td>Front: 24&quot; 5.50-16 / Rear: 50&quot;</td>
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<td>All</td>
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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:

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

Its body is extra-reinforced, extra-durable Goodyear Superontext Card.

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.

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

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

NOWAYS 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 true, 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 Goodyear.

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 to 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 Sure Grip Tires—

GOODYEAR TRACTOR AND IMPLEMENT TIRES

FIN 10/13-32 ad

Sure Grip 8/12/37
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
- 1935 Ground Grip
- 1937 Ground Grip
- 1938 wide base Ground Grip
- 1946 Champion 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:**

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

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 $\leq 1''$, it is non reversible, $\geq 2''$ 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
Flat Steel   JD1257R

- 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
Flat Steel JD1265R

- 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
• Hub casting numbers
  – All seem to be HA503A
  • Flat and skeleton
Skeleton Steel C1510

- GPWT 400000 – 401237
- F&H 12 spoke wheel
  - Dual bands
- 46” diameter
- C1515 (2 pc) overtire
  - To make “flat steel” wheel
- Casting # HA503A(?)
Skeleton Steel C1547

- 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?

<table>
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<th>“AR”</th>
<th>“AO”</th>
<th>“BR”</th>
<th>“BO”</th>
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<tr>
<td></td>
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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”
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.
Spoke Wheels for Rubber AR/AO (4)

• 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”.

63
- 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)
Cast Wheels for Rubber Model G

• Illustrates wide variety of rims used
Cast Wheel AF375R

- 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
Cast Wheel AF919R

- 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
Pressed Steel JD1241R

- 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
Pressed Steel JD1252R

- 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
Pressed Steel JD1251R

- 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
Pressed Steel JD1250R

- 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