







### THE JOHN DEERE GENERAL PURPOSE ORCHARD TRACTOR

The initial design work to provide an orchard tractor in the "GP" line can be credited to Lindeman Power Equipment Company of Yakima, Washington. To John Deere tractor collectors the Lindeman name is best known through the "Lindeman Crawlers" that the Yakima firm built from Model "BO" tractors.

Work on the "GPO" began in 1929 with the modification of a "GP" standard-tread tractor to provide lower overall height for clearance in orchards. John Deere representatives from Waterloo, Iowa, and Moline, Illinois, traveled to Yakima to examine and photograph the tractor. Favorable response led to an agreement that several additional tractors would be built using their basic theme but incorporating some engineering changes from Deere.

Six experimental "GP" Orchard tractors were built and tested prior to the decision to go into regular production. They were not built from the ground up or converted from standard-tread models. Rather, these six tractors were built from 1930 General Purpose Wide-Tread tractors with the six-inch bore and crossover manifold. The tractors were pulled from inventory for conversion to the experimental Orchard units. Even more interesting is that each of them was finally given a "GPO" serial number that *precedes* the generally known starting point of the series at 15000.

The decision to build the "GPO" as a regular production tractor followed the six experimental units by about seven months.

# Decision No. 3700 February 10, 1931

To provide a tractor for orchard work, we will adopt a General Purpose Orchard Tractor built along the general design of the "GP" tractor with height reduced by lowering main frame front and rear by using lower type front axle and turning the rear axle housing backward.

The first tractors will include improvements contemplated for "GP" tractors as follows:

EXPERIMENTAL "GPO" TRACTORS				
Original	Experimental	Final		
<u>"GPWT" Tractor</u>	<u>"CX" Number</u>	<u>Serial #</u>	<u>Ship Date</u>	Destination
402147	CX17	14994	07/18/30	Yakima, WA
402138	CX18	14995	07/24/30	Fullerton, CA
402128	CX19	14996	07/24/30	Gilroy, CA
402115	CX20	14997	07/24/30	Hollister, CA
402245	CX21	14998	09/06/30	Ukiah, CA
402250	CX22	14999	09/06/30	Porterville, CA

Six "GPO" Tractors were built prior to the previously known start of production at serial number 15000. Numbers 14994 through 14999 were built into orchard tractors from General Purpose Wide-Tread tractors with the unusual crossover manifold. The extraordinary photographs on page 64 show one of these tractors.



The first "GPO" was a General Purpose standard tread that was revised by the Lindeman Brothers of Yakima, Washington. In 1929, the Lindemans, who were John Deere dealers as well as industrial manufacturers, fitted a special front axle and quill castings which dropped the tractor 7 inches. They invited Deere officials to look it over, and that's what is happening in the first three photos on page 66.

The bottom right photo was taken directly from a 1932 "GPO" sales literature. Note that Deere not only adopted much of the Lindeman design, but also used one of the original file photos after having it retouched with citrus fenders. *Fuel tank insulation as adopted by Decision No. 3666.* 

Fan shaft bearings as adopted by Decision No. 3667.

Radiator guard and curtain as adopted by Decision No. 3665.

Manifold as adopted by Decision No. 3664. Larger rear axle bearings as adopted by Decision No. 3670.

Connecting rod and piston assemblies as adopted by Decision No. 3669.

Estimated production: 1931 — 300 1932 — 600.

Effective March 25, 1931.

Production level of the "GPO" fell short of the quantities forecasted, but at this point no one could accurately predict the effect the Great Depression would have on agriculture. Even though 1931 was a relatively respectable year, sales plunged in 1932, 1933 and 1934. By 1935 the standard-tread models "AO" and "BO" were positioned to take over the duties of the "GPO".

Exact total production of the "GPO" cannot be determined. There were 733 listed as built, including the six experimentals; but 15 of them, numbers 15601 through 15615, were shown as scrapped without ever being warehoused or delivered. It's unlikely that so many would have been scrapped, but more probable that these serial numbers were simply not used. If so, the total count is 718. Serial numbers of production tractors span 15000 through 15732. Numbers 15220 through 15225 are shown as not used.

Some of the more interesting production tractors are listed below:

### FIRST 25 "GPO" SERIAL NUMBERS

<u>Serial #</u>	<u>Ship Date</u>	Destination
15000	04/02/31	Medford, OR
15001	03/31/31	Welland, Ontario, Canada
15002	03/31/31	Welland, Ontario, Canada
15003	04/02/31	San Francisco, CA
15004	03/31/31	Welland, Ontario, Canada
15005	03/31/31	Welland, Ontario, Canada
15006	04/02/31	Roseburg, OR
15007	04/02/31	Medford, OR
15008	04/02/31	San Francisco, CA
15009	04/02/31	San Francisco, CA
15010	04/02/31	Salem, OR
15011	04/09/31	Hart, MI
15012	03/31/31	Welland, Ontario, Canada
15013	03/31/31	Welland, Ontario, Canada
15014	04/02/31	San Francisco, CA
15015	04/09/31	Benton Harbor, MI
15016	04/02/31	San Francisco, CA
15017	04/02/31	San Francisco, CA
15018	04/08/31	Custer, MI
15019	04/02/31	San Francisco, CA
15020	04/02/31	Monmouth, OR
15021	04/02/31	San Francisco, CA
15022	04/02/31	San Francisco, CA
15023	04/11/31	Traverse City, MI
15024	04/07/31	Halsey, OR

#### FIRST WITH RUBBER TIRES

<u>Serial #</u>	<u>Ship Date</u>	Destination
15257	05/31/32	Palatka, FL
15279	05/31/32	Palatka, FL
15287	05/31/32	Palatka, FL
15297	05/31/32	Palatka, FL
15300	05/31/32	Palatka, FL
15313	05/31/32	Palatka, FL



## OTHERS WITH UNUSUAL HISTORIES

<u>Serial #</u>	<u>Ship Date</u>	Destination		
15367	03/11/32	Minneapolis, MN		
—Scrapped, rebuilt into 15578 on 07/24/34.				
15389	10/19/33	Syracuse, NY		
—First listed with low-pressure balloon tires.				
15404	12/27/33	San Francisco, CA		
—Used in Show.	the Firestone	Display at Century of Progress		
15407	05/01/35	Urbana, IL		
-1933 tractor fitted with balloon-type tires. Recorded as "Golf Course Special" in records. Used at Century				
of Prog	ress Show. Re	built and sold as used in 1935		
to Urba	na, Illinois.			
]	LAST TEN S	ERIAL NUMBERS		
<u>Serial #</u>	<u>Ship Date</u>	Destination		
15723	04/16/35	Milwaukee, WI		
15724	04/12/35	San Francisco, CA		
15725	04/22/35	Baltimore, MD		
15726	04/02/35	Lockport, NY		
15797	04/03/35	Indianapolis IN		

Serial #	Ship Date	Destination
15723	04/16/35	Milwaukee, WI
15724	04/12/35	San Francisco, CA
15725	04/22/35	Baltimore, MD
15726	04/02/35	Lockport, NY
15727	04/03/35	Indianapolis, IN
15728	04/05/35	Auburn, NY
15729	04/09/35	Roseburg, OR
15730	04/09/35	St. Louis, MO
15731	04/09/35	Woodburn, OR
15732	04/09/35	Roseburg, OR

Take note once again of serial number 15407. The notation "Golf Course Special" might also be applied to other "GPO" tractors fitted with the balloon tire equipment. However, none of the other 48 tractors with balloon tires show this notation. If that doesn't make this one special enough, consider the fact that it was the last to be shipped, even though it is a 1933 tractor.

Regular "GPO" equipment included JD1202 42-3/4 x 10-inch rear wheels,

AC651 24 x 6-inch front wheels (spoke type), and standard style "GP" fenders. Available options that were frequently ordered included cast front wheels and citrus fenders (see page 68). The cast wheels retailed for \$15, and the citrus fenders for \$20, which all seems appropriate on a tractor priced at \$855. The single and dual rear rubber tire options specified for Florida bumped the price up past the thousand dollar mark.

About 25 "GPO" tractors shipped to the Lindeman Power & Equipment Company in Yakima, Washington, were fitted with a Lindeman-designed crawler unit. About half that number are known to exist today. The "GPO" Lindeman Crawlers will be the subject of a future feature article.

The Models "GP" and "GPO" officially came to an end on March 28, 1935, with Decision No. 5399:

Due to the introduction of the General Purpose Model "AR" tractor, production of the General Purpose ("GP") and General Purpose Orchard tractors will be discontinued.

*Effective:* When approximately 30 Orchard tractors now in progress are completed. Use parts not required for production for repairs.

The "GPO" is much more common in collections than the Series "P" and some other models in the "GP" line, but it is quite scarce and seems to evoke pleasant visions in the minds of its owners of early orchards in a not-so-populated, slower-paced world. Consequently, they tend not to part with these tractors very readily. For sure, in the fascinating history of John Deere Tractors, the "GPO" ranks very high. ■

The "GPO" in the foreground of this factory photograph can be compared to the "GP" Standard. The difference in height is apparent at the relationship of the radiator to the top of the front wheels. The reason for the laid-back air intake of the Orchard tractor is obvious.



### JOHN DEERE GENERAL PURPOSE ORCHARD TRACTOR SPECIFICATIONS

The photograph at the left provides another view of the tractor shown on page 50. For additional description, see page 112. POWER: Suitable for two 14-inch plows, 22-inch thresher, or 24-inch thresher SPEEDS (mph): Low, 2-1/4; Intermediate, 3; High, 4; Reverse, 1-3/4 BELT PULLEY: 13-inch diameter x 6-1/2 inch face, 950 rpm; belt speed, 3200 fpm POWER TAKE-OFF: For front or rear connections rotates clockwise, 520 rpm, separate gear shift ENGINE: Horizontal 2-cylinder "L" head type Revolutions per minute: 950 Bore and Stroke: 6 inches x 6 inches Crankshaft: 3-inch diameter drop-forged, long bearings Connecting Rod: Drop-forged, two-bolt type Governor: Enclosed, fly-ball type Carburetor: Double-nozzle type with air choker Ignition: High-tension magneto, with enclosed impulse starter Air Cleaner: Oil-filter type with auxiliary Lubrication: Force-feed, geared pump Cooling: Tubular radiator, thermo-siphon Air Fan: Gear-driven, no belts BEARINGS: Main: 3-1/2-inch long removable, bronze back, babbitt-lined Connecting Rod: 2-3/4-inch long removable, bronze back, babbitt-lined Front Wheels & Rear Axles: Tapered roller (8) Transmission and Belt Pulley: Roller (1), ball (4), tapered roller (2) Fan and Governor Shaft: Tapered roller (4), ball thrust (1) TRANSMISSION: Spur gear, selective type, 3 speeds forward, 1 speed reverse GEARS: Forged steel cut teeth and heat-treated and hardened

CLUTCH: 10-inch dry disks, locking in and out FINAL DRIVE: Enclosed roller chains DRIVE AXLE: 2-1/2 inch diameter, high-carbon steel DRIVE WHEELS: 42-3/4 inches x 10 inches forged steel rims FRONT WHEELS: 24-inch diameter x 6-inch face; forged steel rims with dust-proof bearings FUEL TANK CAPACITY: Distillate or Kerosene, 16 gallons; Gasoline, 2 gallons WATER CAPACITY: 9 gallons LENGTH WITH FENDERS AND PLATFORM: 121 inches WIDTH: Overall with orchard-type fenders, 64 inches HEIGHT: 49 inches at radiator cap; 51 inches to top of fenders; 54 inches to top of steering wheel **TURING RADIUS:** 8 feet DRAWBAR: Adjustable up and down 8-1/2 inches; sideways, 34-1/2 inches DRAWBAR CLEARANCE IN HIGH POSITION: 10 inches PLATFORM CLEARANCE: 16 inches FRONT AXLE CLEARANCE: Center 15-3/4 inches; lowest point 8-3/4 inches WHEEL BASE: 78-1/4 inches REAR WHEEL TREAD: 49-1/2 inches WEIGHT: 4250 pounds with 4-inch lugs, 2-1/2 inch guide bands, no fuel or water