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Tractor Test and Power Museum, The Lester F. Larsen

January 1925

Test 112: Oil Pull Model L 15-25

Nebraska Tractor Test Lab

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UNIVERSITY OF NEBRASKA AGRICULTURAL ENGINEERING DEPARTMENT

AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 112

Dates of test: March 29th to April 16th, 1925

Name, model and rating of tractor: Oil Pull L 15-25

Serial No. Engine: 96

Serial No. Chassis: 96

Manufacturer: Advance-Rumely Thresher Company Inc., La Porte, Indiana

Tractor Equipment used: American Bosch DU 1/2 Ed22 magneto. Secor-Higgins fuel valve

Style and dimensions of wheel lugs: Spade 3-1/4" high, 3" square at base.

BRAKE HORSE POWER TESTS

| H. P. | Dev. | Crank: Time: | Fuel Consumption | Water Consumption | Temp. | Average Humidity % | Height of Barometer In Inches |
|-------|------|-----------------|------------------|-------------------|-------------|--------------------|-------------------------------|
| | | Shaft: of | Kind: Gals | : H.P. | : Cool: In | : * | |
| | | Speed: Test: of | : per | : Hrs. @: | : ing: Fuel | : Total | : Cool--Air: |
| | | R.P.M: Min | : Fuel: Hour | : Gal.: | : : | : ing | : Average |
| | | : | : | : | : | : | : Humidity % |
| | | : | : | : | : | : | : Height of |
| | | : | : | : | : | : | : Barometer |
| | | : | : | : | : | : | : In Inches |

RATED LOAD TEST

| | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---|-----|---|-----|---|------|---|-------|---|-------|---|-------|---|-------|---|-----|---|----|---|----|---|-------|
| 25.19 | : | 75L | : | 120 | : | Kero | : | 2.31L | : | 10.88 | : | 3.765 | : | 3.765 | : | 220 | : | 60 | : | 86 | : | 28.75 |
| Belt Slippage 1.93% | | | | | | | | | | | | | | | | | | | | | | |

** VARYING LOAD TEST

| | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|-------|---|----|---|------|---|-------|---|------|---|------|---|------|---|-----|---|----|---|----|---|-------|
| 25.20 | : | 735.5 | : | 10 | : | Kero | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
| 25.29 | : | 750.5 | : | 10 | : | " | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
| 1.29 | : | 795.5 | : | 10 | : | " | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
| 6.61 | : | 787.5 | : | 10 | : | " | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
| 13.10 | : | 780.0 | : | 10 | : | " | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
| 19.24 | : | 771.0 | : | 10 | : | " | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
| 15.36 | : | 773.0 | : | 60 | : | Kero | : | 1.620 | : | 9.48 | : | 1.11 | : | 1.11 | : | 22L | : | 60 | : | 70 | : | 28.95 |
| Average Belt Slippage 1.58% | | | | | | | | | | | | | | | | | | | | | | |

MAXIMUM LOAD TEST

| | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---|-------|---|----|---|------|---|-------|---|------|---|------|---|------|---|-----|---|----|---|----|---|-------|
| 30.52 | : | 75L.0 | : | 60 | : | Kero | : | 3.625 | : | 8.42 | : | 4.90 | : | 4.90 | : | 16L | : | 66 | : | 39 | : | 28.95 |
| Belt Slippage 2.02% | | | | | | | | | | | | | | | | | | | | | | |

HALF LOAD TEST

| | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---|-------|---|----|---|------|---|-------|---|-------|---|------|---|------|---|-----|---|----|---|----|---|-------|
| 12.98 | : | 772.0 | : | 60 | : | Kero | : | 1.298 | : | 10.00 | : | 0.47 | : | 0.47 | : | 20L | : | 61 | : | 70 | : | 28.98 |
| Belt Slippage 1.43% | | | | | | | | | | | | | | | | | | | | | | |

* Taken in discharge line from engine

** The last line is an average for the hour

REMARKS: The kerosene used as fuel in this test weighed 6.78 pounds per gallon

COPY OF REPORT OF OFFICIAL TRACTOR TEST NO. 112.

DRAWBAR HORSE POWER TESTS

| H. P. : | Draw : | Speed : | Crank : | Slip : | Fuel Consumption : | Water : | Temp. Deg. F. : | | | | | | |
|---------|--------|---------|----------|----------|--------------------|---------|-----------------|--------|-----------|-------|------------|-----------|--|
| Dev. : | Bar : | Miles : | Shaft : | on : | Kind : | Amt. : | H.P. : | Used : | Cooling : | Air : | Average : | Height of | |
| : | Full : | Per : | Speed : | Drive : | Used : | Per : | Hrs. : | Per : | Fluid : | | Humidity : | Barometer | |
| : | Lbs. : | Hour : | R.P.M. : | Wheels : | | Hour : | Per : | Hour : | * | | % : | In Inches | |
| : | : | : | : | *** : | | Gals. : | Gal. : | Gals : | | | | | |

RATED LOAD TEST. TEN HOURS.

| | | | | | | | | | | | | | |
|---------|--------|--------|-------|---------|--------|---------|--------|---------|-------|------|------|---------|---|
| : | : | : | : | -0.55 : | : | : | : | : | : | : | : | : | : |
| 16.01 : | 2315 : | 2.59 : | 741 : | 11.43 : | Kero : | 2.584 : | 6.20 : | 2.696 : | 192 : | 71 : | 33 : | 28.64 : | |

MAXIMUM LOAD TEST

| | | | | | | | | | | | | | |
|---------|--------|--------|-------|---------|--------|----------------------|-----|---|-------|------|------|---------|---|
| : | : | : | : | 3.08 : | : | : | : | : | : | : | : | : | : |
| 18.48 : | 3327 : | 2.08 : | 776 : | 14.62 : | Kero : | -- NOT RECORDED -- : | | | 162 : | 52 : | 74 : | 28.95 : | |
| : | : | : | : | 1.09 : | : | : | : | : | : | : | : | : | : |
| 19.34 : | 2816 : | 2.58 : | 758 : | 12.87 : | " : | " : | " : | | 164 : | 50 : | 74 : | 28.95 : | |
| : | : | : | : | -1.50 : | : | : | : | : | : | : | : | : | : |
| 18.74 : | 2228 : | 3.15 : | 738 : | 10.59 : | " : | " : | " : | | 168 : | 50 : | 74 : | 28.95 : | |

* Taken in discharge line from engine.

** The first figure denotes slippage at the rim of the wheel. The second figure denotes slippage at the point of the lugs.

REMARKS: The second maximum and rated load tests were run in second gear. The first maximum test was run in low gear.
The third maximum test was run in high gear.

OIL CONSUMPTION: During the complete test consisting of about 40 hours running the following oil was used:
For the engine, 8-1/4 gallons of Mobiloil "B", 1 gallon to fill crankcase and 7-1/4 gallons were added to lubricator.
For the transmission, none.
Other lubrication - 2 lbs. cup grease.

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REPAIRS AND ADJUSTMENTS

During this test there were no adjustments or repairs necessary, except as noted below.

After the belt tests and before the drawbar tests were run, the first ring on the left cylinder was found to be stuck in its groove. This was corrected by cleaning.

At the end of the test the tractor was in good running order and there were no indications of undue wear nor of any weakness which might require early repair.

BRIEF SPECIFICATIONS

Oil Pull L 15-25

Motor: Own, 2 cylinder, horizontal, valve-in-head, removable cylinder sleeves, mounted crank shaft crosswise. Bore 5-13/16", stroke 7". Rated speed 755 rpm. Oil cooled.

Governor: own, fly-ball type.

Air Cleaner: Donaldson Simplex, oiled fiber type.

Lubricator: Manzel.

Chassis: Four wheel type, two drivers, enclosed gears, disc clutch. Rated speeds: 1st, 2 miles per hour; 2nd, 2.5 miles per hour; 3rd, 3 miles per hour.

Total weight as tested (with operator) 6,050 pounds.

REMARKS

In the advertising literature submitted with the specifications and application for test of this tractor, we find some claims and statements which cannot be directly compared with the results of this test as reported above. It is our opinion that none of these are excessive or unreasonable.

We, the undersigned, certify that above is a true and correct report of official tractor test No. 112.

E. E. Brackett
Engineer-in-Charge

Oscar W. Sjogren

C. W. Smith

Fred R. Nohavec

BOARD OF TRACTOR TEST ENGINEERS