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Nebraska Tractor Tests

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Larsen

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January 1922

## Test 086: Holt T-35 15-25

Nebraska Tractor Test Lab

University of Nebraska-Lincoln, [tractortestlab@unl.edu](mailto:tractortestlab@unl.edu)

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UNIVERSITY OF NEBRASKA AGRICULTURAL ENGINEERING DEPARTMENT  
AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 86

Dates of test: July 19 to 26, 1922.

Name, model and rating of tractor: Holt T-35 15-25

Serial No. Engine: 30150 Serial No. Chassis: S 25218

Manufacturer: The Holt Mfg. Co., Stockton, Calif.

Tractor equipment used: Eisemann G4 Magneto; Kingston L Carburetor.

Style and dimensions of wheel lugs: Track Layer 3/4" grousers.

BRAKE HORSE POWER TESTS

H.P. Dev.	Crank Shaft Speed R.P.M.	Time of Test Min.	Fuel Consump.			Water Consump. Gals. Per Hour			Temp. Deg. F.		Humid- ity	Height of Barom- eter
			Kind of Fuel	Gals. @ Hour	H.P. Hrs. Gal.	Cool- ing	In Fuel	Total	Cool- ing Fluid	Air		

RATED LOAD TEST

25.38	1007	120	Gasol	2.685	9.45				204	87	57	28.84
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Belt slippage 1.04%

\*\*VARYING LOAD TEST

25.36	998.5	10										
25.32	996.5	10										
1.33	1143.5	10										
7.18	1123.5	10										
13.97	1095.5	10										
20.42	1070.0	10										
16.13	1071.0	60	Gasol	2.231	7.23				189	93	57	28.84

Belt Slippage.80%

MAXIMUM LOAD TEST

25.48	1003.0	60	Gasol	2.699	9.44	0.485		0.485	208	90	57	28.84
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Belt Slippage 1.18%

HALF LOAD TEST

13.45	1055.0	60	Gasol	2.007	6.70				183.5	92	57	28.84
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Belt Slippage 0.75%

\*Taken in discharge line from engine.

Remarks: The gasoline used as fuel in these tests weighed 6.15 pounds per gallon.

\*\* The last line is an average for the hour.

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## DRAWBAR HORSE POWER TESTS

H.P. Dev.	Draw Bar Pull Lbs.	Speed Miles per Hour	Crank Shaft Speed R.P.M.	Slip on Drive Wheels %***	Fuel Consumption			Water used per hour gals.	Temp. Deg. F.		Average Humid- ity	Height of Barom- eter
					Kind Used	Amt per hour gals	H.P. hrs per gal.		Cool- ing Fluid	Air		

## RATED LOAD TEST, TEN HOURS

15.13	1896	3.00	1036	5.55	Gasol	2.525	5.99		186	92	60	28.80
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## MAXIMUM LOAD TEST

18.17	2397	2.84	1007	7.39	Gasol	---Not Recorded---		196	87	73	28.80
15.44	3275	1.77	1015	20.65	"	"	"	187	88	73	28.80
17.07	1325	4.83	957	2.15	"	"	"	200	88	73	28.80

\*Taken in discharge line from engine.

Remarks: The rated load test and first maximum test were made in second gear.  
The second maximum test was made in low gear.  
The third maximum test was made in high gear.

Oil Consumption: During the complete test consisting of about 38 hours running the following oil was used:  
For the engine, 2 gallons of Mobiloil B to fill crank case; added during test 2 gallons.  
For the transmission, 1/2 gallons of Mobiloil B.2 Gal - 600 W for tracks.

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Repairs and Adjustments:

During the test and before any data were taken the magneto points were dressed. One spark plug was replaced and the tension on the left track was loosened.

At the end of the test the tractor was in good working condition and there was no evidence of undue wear nor of any weakness which might require early repair.

Brief Specifications:

Motor: Own, 4 cylinder, vertical, valve-in-head, overhead cam shaft; bore, 4"; stroke, 5 1/2"; rated speed, 1000 r.p.m.; own governor built in.

Chassis: Track layer; Disc clutch; 3 speeds forward; low, 2.18 miles per hour; second, 3.04 miles per hour; high, 5.23 miles per hour.

Total weight: 4040 pounds

Remarks in General:

In the advertising literature submitted with the applications 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. 86.

E. E. Brackett  
Engineer-in-Charge

Oscar W. Sjogren

C. W. Smith

Fred R. Nohavec  
Board of Tractor Test Engineers