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Larsen

January 1948

Test 401: Masey-Harris Pony

Tractor Museum

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Copy of Report of Official Tractor Test No. 401

Dates of test: September 14 to September 22, 1948
 Name and model of tractor: MASSEY-HARRIS PONY
 Manufacturer: MASSEY-HARRIS COMPANY, LTD., Toronto, Ontario, Canada
 Manufacturer's rating: No rating

HORSEPOWER SUMMARY

| | DRAWBAR | BELT |
|--|---------|-------|
| 1. Sea level (calculated) maximum horsepower (based on 60° F. and 29.92" Hg.) | 11.08 | 12.16 |
| 2. Observed maximum horsepower (tests F & B) | 10.43 | 11.62 |
| 3. Seventy-five per cent of calculated maximum drawbar horsepower and eighty-five per cent of calculated maximum belt horsepower (formerly ASAE and SAE ratings) | 8.31 | 10.34 |

REMARKS

No repairs or adjustments.

FUEL, OIL, and TIME

Fuel Gasoline Octane 74* Weight per gallon 6.208 pounds
Oil SAE 20-20W To Motor 1.061 gal. Drained from motor 0.976 gal.
Total time motor was operated 46.5 hours

* Octane rating taken from oil company's typical inspection data.

We, the undersigned, certify that this is a true and correct report of official tractor test no. 401.

L. F. Larsen
 Engineer in Charge

C. W. Smith

F. D. Yung

L. W. Hurlbut
 BOARD OF TRACTOR TEST ENGINEERS

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All results shown on pages 2 and 3 were determined from observed data and without allowances, additions or deductions. Tests B and F were made with carburetor set for 100% maximum belt horsepower and data from these tests were used in determining the horsepower to be developed in tests D and H, respectively. Tests C, D, E, G, H, and J were made with an operating setting of the carburetor (selected by the manufacturer) of 2.3% of maximum belt horsepower.

B E L T H O R S E P O W E R T E S T S

| Horse- power | Crank shaft speed rpm | Fuel Consumption | | | Water used gal per hr | Temperature | | Barometer Inches of Mercury |
|-----------------|--------------------------------|------------------|------------------|-----------------|--------------------------------|---------------------------|-----------|-----------------------------------|
| | | gal per hr | hp-hr per gal | lb per hp-hr | | Cool- ing mod °F | Air °F | |

TEST B - 100% MAXIMUM LOAD - TWO HOURS

| | | | | | | | | |
|-------|------|-------|------|-------|------|-----|----|--------|
| 11.62 | 1801 | 1.164 | 9.98 | 0.622 | 0.00 | 201 | 74 | 28.972 |
|-------|------|-------|------|-------|------|-----|----|--------|

TEST C - OPERATING MAXIMUM LOAD - ONE HOUR

| | | | | | | | | |
|-------|------|-------|-------|-------|------|-----|----|--------|
| 10.71 | 1798 | 1.037 | 10.33 | 0.601 | 0.00 | 199 | 76 | 28.995 |
|-------|------|-------|-------|-------|------|-----|----|--------|

*TEST D - ONE HOUR

| | | | | | | | | |
|-------|------|-------|-------|-------|------|-----|----|--------|
| 10.38 | 1799 | 1.031 | 10.07 | 0.617 | 0.00 | 201 | 83 | 29.035 |
|-------|------|-------|-------|-------|------|-----|----|--------|

TEST E - VARYING LOAD - TWO HOURS (20 minute runs; lastline average)

| | | | | | | | | |
|-------|------|-------|-------|-------|-------|-----|----|---------|
| 10.36 | 1796 | 1.029 | 10.07 | 0.617 | - - - | 201 | 83 | - - - - |
| 1.57 | 1986 | 0.604 | 2.60 | 2.389 | - - - | 195 | 85 | - - - - |
| 5.51 | 1895 | 0.749 | 7.36 | 0.844 | - - - | 198 | 86 | - - - - |
| 10.49 | 1774 | 1.024 | 10.24 | 0.606 | - - - | 205 | 86 | - - - - |
| 2.78 | 1910 | 0.633 | 4.39 | 1.414 | - - - | 199 | 86 | - - - - |
| 8.22 | 1904 | 0.995 | 8.26 | 0.752 | - - - | 199 | 86 | - - - - |
| 6.49 | 1877 | 0.839 | 7.74 | 0.803 | 0.00 | 199 | 85 | 29.050 |

* Formerly called RATED LOAD, see HORSEPOWER SUMMARY 3, page 1

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D R A W B A R H O R S E P O W E R T E S T S

| Horse- power | Draw bar pull lb | Speed mph | Crank shaft speed rpm | Slip on drive wheels % | Fuel Consumption | | | Water used gal per hr | Temperature Cool- ing mod °F | Air °F | Barometer Inches of Mercury |
|-----------------|---------------------------|--------------|--------------------------------|------------------------------------|------------------|------------------|-----------------|--------------------------------|--|-----------|-----------------------------------|
| | | | | | gal per hr | hp-hr per gal | lb per hp-hr | | | | |

Rear wheels, tires and added weight used in Tests F, G, and H: Pressed steel wheels; 8-24, 4 ply tires and 316 lb added weight per wheel.

TEST F - 100% MAXIMUM LOAD - 2nd GEAR

| | | | | | | | | | | |
|-------|------|------|------|------|----------------------|--|--|-----|----|--------|
| 10.43 | 1124 | 3.48 | 1804 | 6.30 | ----Not Recorded---- | | | 202 | 88 | 28.905 |
|-------|------|------|------|------|----------------------|--|--|-----|----|--------|

TEST G - OPERATING MAXIMUM LOAD

| | | | | | | | | | | |
|------|------|------|------|------|----------------------|--|--|-----|----|--------|
| 9.80 | 1132 | 2.57 | 1802 | 8.88 | ----Not Recorded---- | | | 202 | 92 | 28.895 |
| 9.86 | 1057 | 3.50 | 1807 | 5.99 | ----" " ---- | | | 200 | 88 | 28.905 |
| 9.23 | 494 | 7.00 | 1797 | 2.69 | ----" " ---- | | | 199 | 89 | 28.905 |

*TEST H - TEN HOURS - 2nd GEAR

| | | | | | | | | | | | |
|------|-----|------|------|------|-------|------|--------|------|-----|----|--------|
| 8.36 | 891 | 3.52 | 1799 | 4.96 | 0.927 | 9.02 | 10.689 | 0.00 | 193 | 79 | 28.831 |
|------|-----|------|------|------|-------|------|--------|------|-----|----|--------|

TEST J - OPERATING MAXIMUM LOAD - 2nd GEAR

| | | | | | | | | | | |
|------|------|------|------|------|----------------------|--|--|-----|----|--------|
| 9.26 | 1002 | 3.46 | 1804 | 7.46 | ----Not Recorded---- | | | 191 | 67 | 28.820 |
|------|------|------|------|------|----------------------|--|--|-----|----|--------|

~~Formerly~~ called RATED LOAD; see HORSEPOWER SUMMARY 3, page 1.

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TIRES, WHEELS, AND WEIGHT

| | Tests F, G, & H. | Test J |
|---|----------------------|----------------------|
| Rear Wheel; Type (each) | Pressed Steel | Pressed Steel |
| Liquid Ballast | 116 lb | None |
| Added Cast Iron | 200 lb | None |
| Rear Tires: No. Size & Ply | 2 8-24 4 ply | 2 8-24 4 ply |
| Type of Tread | Champion Ground Grip | Champion Ground Grip |
| Make | Firestone | Firestone |
| Air Pressure | 12 lb | 12 lb |
| Front Wheel; Type (each) | Pressed Steel | Pressed Steel |
| Liquid Ballast | None | None |
| Added Cast Iron | None | None |
| Front Tires: No. Size & Ply | 2 4.00-15 4 ply | 2 4.00-15 4 ply |
| Type of Tread | Triple rib | Triple rib |
| Make | Goodyear | Goodyear |
| Air Pressure | 28 lb | 28 lb |
| Height of Drawbar | 20 1/2 inches | 21 1/2 inches |
| Static Weight: Rear End | 1708 lb | 1076 Lb |
| Front End | 644 lb | 644 lb |
| Total Weight as Tested (With Operator) | 2547 lb | 1890 lb |

