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2015

Test 2127: Cabela's LM55H

Nebraska Tractor Test Laboratory

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NEBRASKA TRACTOR TEST 2127

CABELA'S LM55H DIESEL

HYDROSTATIC

POWER TAKE-OFF PERFORMANCE

Power HP (kW)	Crank shaft speed rpm	Gal/ltr (l/h)	lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Mean Atmospheric Conditions
MAXIMUM POWER AND FUEL CONSUMPTION					
Rated Engine Speed—(PTO speed—580 rpm)					
44.43 (33.13)	2803	3.12 (11.83)	0.493 (0.300)	14.22 (2.80)	Fuel used during active exhaust regeneration -na (see Note 1 p.2)
Standard Power Take-off Speed (540 rpm)					
43.72 (32.60)	2610	2.94 (11.15)	0.472 (0.287)	14.85 (2.92)	

VARYING POWER AND FUEL CONSUMPTION

44.43 (33.13)	2803	3.12 (11.83)	0.493 (0.300)	14.22 (2.80)	Air temperature
38.32 (28.57)	2849	2.93 (11.10)	0.536 (0.326)	13.07 (2.57)	78°F (26°C)
29.04 (21.66)	2880	2.34 (8.87)	0.565 (0.344)	12.40 (2.44)	Relative humidity
19.63 (14.64)	2911	1.87 (7.10)	0.669 (0.407)	10.47 (2.06)	62%
9.87 (7.36)	2942	1.51 (5.70)	1.069 (0.650)	6.55 (1.29)	Barometer
1.71 (1.28)	2950	1.16 (4.38)	4.736 (2.881)	1.48 (0.29)	28.73"Hg (97.29 kPa)

Maximum Torque 105 lb.-ft. (143 Nm) at 1803 rpm
 Maximum Torque Rise -26.6%
 Torque rise at 2242 rpm - 18%

TRACTOR SOUND LEVEL WITH CAB

	Front Wheel Drive Engaged dB(A)	Disengaged dB(A)
At no load in Mid range -5.1 mph (8.2 km/h) engine speed 2950 rpm	84.3	84.1
At no load in Mid range -4.9 mph (7.9 km/h) engine speed 1825 rpm	76.1	76.4
Bystander in High range		80.0

TIRES AND WEIGHT

Rear Tires—No., size, ply & psi (kPa)
Front Tires—No., size, ply & psi (kPa)
Height of Drawbar
Static Weight with operator—Rear
 — Front
 — Total

Tested Without Ballast

Two 16.9-24;8;16 (110)
 Two 12-16.5;6;20 (140)
 16.5 in (420 mm)
 2635 lb (1195 kg)
 1955 lb (887 kg)
 4590 lb (2082 kg)

Location of tests: Nebraska Tractor Test Laboratory, University of Nebraska, Lincoln Nebraska 68583-0832

Dates of tests: August 20 to September 3, 2015

Manufacturer: Tong Yang Moolsan Co. Ltd 2,3F, Daeyong B/D, 7, Eonju-ro 133-gil Kangnam-gu Seoul, Republic of Korea

FUEL, OIL and TIME: Fuel No. 2 Diesel Specific gravity converted to 60°/60°F (15°/15°C) 0.8415 Fuel weight 7.007 lbs/gal (0.840 kg/l) Oil SAE 10W30 API service classification CJ-4 Transmission and hydraulic lubricant Cabela Super tractor fluid Front axle lubricant SAE90 Gear oil Total time engine was operated 14.5 hours

ENGINE: Make Yanmar Diesel Type four cylinder vertical with turbocharger Serial No. *92748* Crankshaft lengthwise Rated engine speed 2800 Bore and stroke 3.386" x 3.543" (86.0 mm x 90.0 mm) Compression ratio 19.2 to 1 Displacement 128 cu in (2091 ml) Starting system 12 volt Lubrication pressure Air cleaner two paper elements Oil filter one full flow cartridge Oil cooler radiator for transmission and hydraulic oil Fuel filter one paper element and sediment bowl Exhaust DOC (diesel oxidation catalyst), and regenerative DPF (diesel particulate filter) integrated within an underhood muffler with a horizontal outlet Cooling medium temperature control one thermostat

ENGINE OPERATING PARAMETERS: Fuel rate: 21.2 - 22.3 lb/h (9.6 - 10.1 kg/h) High idle: 2940 - 2960 rpm Turbo boost: nominal 7.3 - 8.7 psi (50 - 60 kPa) as measured 7.7 psi (53 kPa)

CHASSIS: Type front wheel assist Serial No. *55CJJ00060* Tread width rear 46.1" (1172 mm) to 58.3" (1481 mm) front 52.4" (1330 mm) to 56.8" (1442 mm) Wheelbase 76.2" (1935 mm) Hydraulic control system direct engine drive Transmission Hydrostatic. Infinitely variable within the ranges shown. The transmission has 3 mechanical ranges Nominal travel speeds mph (km/h) A-0-4.4 (7.0), B-0-7.1 (11.4), C-0-20.8 (33.4) reverse A-0-4.4 (7.0), B-0-7.1 (11.4), C-0-20.9 (33.4) Clutch none - the travel speed is electronically controlled by a foot pedal Brakes multiple wet disc hydraulically operated by two foot pedals which can be locked together Steering hydrostatic Power take-off 540 rpm at 2610 engine rpm Unladen tractor mass 4415 lb (2003kg)

HYDRAULIC PERFORMANCE

CATEGORY: I

Quick Attach: None

OECD Static test

Maximum force exerted through whole range: 2472 lbs (11.0 kN) (at 24" (610 mm) behind hitch points)
2633 lbs (11.7 kN) (at hitch points)

- i) Sustained pressure of the open relief valve: 2203 psi (152 bar)
- ii) Pump delivery rate at minimum pressure and rated engine speed: 9.2 GPM (34.8 l/min)
- iii) Pump delivery rate at maximum hydraulic power: 8.9 GPM (33.7 l/min)
- Delivery pressure: 1795 psi (124 bar)
- Power: 9.3 HP (7.0 kW)

REPAIRS AND ADJUSTMENTS: No repairs or adjustments.

NOTE 1: The engine in this tractor has a manual control for the regeneration process that could not be overridden. This test sequence was not done.

REMARKS: This tractor did not meet the manufacturer's implement pump capacity claim of 9.5 GPM (36.1 l/min) nor 3 point lift claims of 2945 lbs (1336 kg) at 24" (610 mm) behind link ends nor 3314 lbs (1503 kg) at the link ends. All test results were determined from observed data obtained in accordance with official OECD, SAE and Nebraska test procedures.

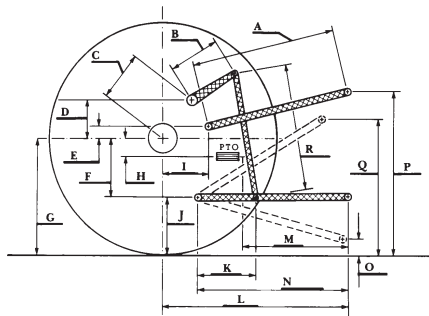
We, the undersigned, certify that this is a true and correct report of official Tractor Test No. **2127**, October 26, 2015.

Roger M. Hoy
Director

M.F. Kocher
P.J. Jasa
J.D. Luck
Board of Tractor Test Engineers

HITCH DIMENSIONS AS TESTED—NO LOAD

	inch	mm
A	24.8	630
B	9.8	250
C	10.5	266
D	10.2	260
E	11.2	285
F	6.2	158
G	24.4	620
H	0.6	15
I	11.4	289
J	18.2	462
K	16.0	406
L	35.4	900
M	25.0	635
N	29.9	759
O	7.9	200
P	36.2	919
Q	30.8	783
R	21.1	535



Cabela's LM55H Diesel

Institute of Agriculture and Natural Resources
University of Nebraska–Lincoln