University of Nebraska - Lincoln
DigitalCommons@University of Nebraska - Lincoln

Nebraska Tractor Tests

Tractor Test and Power Museum, The Lester F. Larsen

2022

Tractor Test 2252: John Deere 9RX 540

Nebraska Tractor Test Lab

Follow this and additional works at: https://digitalcommons.unl.edu/tractormuseumlit

 Part of the Energy Systems Commons, History of Science, Technology, and Medicine Commons, Other Mechanical Engineering Commons, Physical Sciences and Mathematics Commons, Science and Mathematics Education Commons, and the United States History Commons

This Article is brought to you for free and open access by the Tractor Test and Power Museum, The Lester F. Larsen at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Nebraska Tractor Tests by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

NEBRASKA OECD TRACTOR TEST 2252–SUMMARY 1212
JOHN DEERE 9RX 540 DIESEL
18 SPEED

POWER TAKE-OFF PERFORMANCE

Power HP *(kW)*	Crank shaft speed rpm	Diesel Consumption Gal/hr *(l/h)*	lb/hp.hr *(kg/kW.h)*	D.E.F. Consumption Hp.hr/gal *(kW.h/l)*	D.E.F. Consumption Gal/hr *(l/h)*	Mean Atmospheric Conditions
MAXIMUM POWER AND FUEL CONSUMPTION SEE NOTE 1 - PAGE 2						
Rated Engine Speed—(PTO speed—1109 rpm)						
319.64 *(238.56)*	2099	18.63 *(70.51)*	0.411 *(0.250)*	17.16 *(3.38)*	0.86 *(3.25)*	Fuel used during active exhaust regeneration-1.03 gal *(3.89 l)* (see note 2, p.2)
Standard Power Take-off Speed(1000 rpm)						
365.34 *(272.43)*	1895	20.16 *(76.30)*	0.389 *(0.236)*	18.13 *(3.57)*	0.67 *(2.55)*	
Maximum Power (1 hour)						
368.18 *(274.55)*	1749	19.71 *(74.62)*	0.377 *(0.230)*	18.68 *(3.68)*	0.68 *(2.56)*	
VARYING POWER AND FUEL CONSUMPTION						
319.64 *(238.56)*	2099	18.63 *(70.51)*	0.411 *(0.250)*	17.16 *(3.38)*	0.86 *(3.25)*	Air temperature
277.80 *(207.16)*	2150	17.00 *(64.33)*	0.431 *(0.262)*	16.35 *(3.22)*	0.82 *(3.10)*	73°F *(23°C)*
208.79 *(155.69)*	2150	13.81 *(52.27)*	0.466 *(0.283)*	15.12 *(2.98)*	0.58 *(2.20)*	Relative humidity
139.22 *(103.82)*	2150	11.27 *(42.68)*	0.571 *(0.347)*	12.35 *(2.43)*	0.56 *(2.12)*	30%
69.58 *(51.88)*	2150	8.38 *(31.73)*	0.849 *(0.516)*	8.30 *(1.64)*	0.35 *(1.33)*	Barometer
1.54 *(1.15)*	2150	5.62 *(21.27)*	25.690 *(15.627)*	0.27 *(0.05)*	0.46 *(1.74)*	28.37" Hg *(96.08 kPa)*

Maximum Torque - 1183 lb-ft *(1604 Nm)* at 1550 rpm
Maximum Torque Rise -48.0%
Torque rise at 1678 engine rpm - 43%
Power increase at 1749 engine rpm - 15.2%

DRAWBAR PERFORMANCE (Unballasted)
FUEL CONSUMPTION CHARACTERISTICS

Power Hp *(kW)*	Drawbar pull lbs *(kN)*	Speed mph *(km/h)*	Crank-shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr *(kg/kW.h)*	Fuel Consumption Hp.hr/gal *(kW.h/l)*	D.E.F. Consumption lb/hp.hr *(kg/kW.h)*	Temp.°F cool-ing med	*(°C)* Air dry bulb	Barom. inch Hg *(kPa)*
Power at Rated Engine Speed—7th Gear- Manual mode										
409.34 *(305.24)*	30394 *(135.20)*	5.05 *(8.13)*	2099	3.0	0.443 *(0.270)*	15.90 *(3.13)*	0.020 *(0.012)*	207 *(97)*	69 *(21)*	28.37 *(96.07)*
75% of Pull at Rated Engine Speed—7th Gear - Manual mode										
318.43 *(237.45)*	22660 *(100.80)*	5.27 *(8.48)*	2167	1.8	0.457 *(0.278)*	15.44 *(3.04)*	0.024 *(0.015)*	207 *(97)*	77 *(25)*	28.32 *(95.90)*
50% of Pull at Rated Engine Speed—7th Gear- Manual mode										
216.56 *(161.49)*	15138 *(67.34)*	5.36 *(8.63)*	2188	1.0	0.509 *(0.310)*	13.83 *(2.73)*	0.034 *(0.021)*	206 *(96)*	78 *(25)*	28.32 *(95.89)*
75% of Pull at Reduced Engine Speed— 5.3 mph *(8.6 km/h)*-Auto mode										
318.16 *(237.25)*	22642 *(100.71)*	5.27 *(8.48)*	1433	1.9	0.398 *(0.242)*	17.71 *(3.49)*	0.029 *(0.017)*	206 *(96)*	77 *(25)*	28.32 *(95.90)*
50% of Pull at Reduced Engine Speed— 5.3 mph *(8.6 km/h)*-Auto mode										
216.42 *(161.38)*	15280 *(67.97)*	5.31 *(8.55)*	1433	1.1	0.436 *(0.265)*	16.18 *(3.19)*	0.024 *(0.014)*	202 *(94)*	79 *(26)*	28.30 *(95.83)*

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

Dates of tests: May 17 - 23, 2022

Manufacturer: John Deere Tractor Works, 3500 East Donald St., P.O. Box 270, Waterloo Ia, 50704-0270

CONSUMABLE Fluids, OIL and TIME: Fuel No. 2 Diesel **Specific gravity converted to 60°/60°F *(15°/15°C)*** 0.8463 **Fuel weight** 7.047 lbs/gal *(0.845 kg/l)* **Diesel Exhaust Fluid (DEF)** 32% aqueous urea solution **DEF weight** 9.071 lbs/gal *(1.087 kg/l)* **Oil SAE** 10W-30 **API service classification** CK-4 **Transmission, hydraulic and final drive lubricant** John Deere Hy-Gard fluid **Total time engine was operated:** 25.0 hours

ENGINE: Make John Deere Diesel **Type** six cylinder vertical with two turbochargers, air to air aftercooler and D.E.F.(diesel exhaust fluid) exhaust treatment **Serial No.** *RG6136U000749* **Crankshaft** lengthwise **Rated engine speed** 2100 **Bore and stroke** 5.197" x 6.496" *(132.0 mm x 165.0 mm)* **Compression ratio** 15.9 to 1 **Displacement** 826 cu in *(13548 ml)* **Starting system** 12 volt **Lubrication** pressure **Air cleaner** two paper elements and aspirator **Oil filter** one full flow cartridge **Oil cooler** radiator for crankcase oil, radiator for transmission/hydraulic oil also feeding front and rear axles **Fuel filter** two paper cartridges **Fuel cooler** radiator for returned fuel **Exhaust** DOC (diesel oxidation catalyst) and SCR (selective catalyst reduction) integrated within a vertical muffler **Cooling medium temperature control** 1 thermostat and variable speed fan

ENGINE OPERATING PARAMETERS: Fuel rate: Stationary PTO operation (390 engine hp) 124.7 - 135.1 lb/h *(56.5 - 61.3 kg/h)*, Drawbar operations (540 engine hp) 174.8 - 189.4 lb/h *(79.3 - 85.9 kg/h)* **High idle:** 2150 - 2250 rpm (2125 - 2175 rpm with PTO engaged) **Turbo boost:** (540 engine hp) nominal 31.9 - 36.3 psi *(220 - 250 kPa)* as measured 34.5 psi *(238 kPa)*

CHASSIS: Type 4WD with rubber tracks **Serial No.** *1RW9590DENJ820127* **Track width** rear 88.0" *(2235 mm)* front 88.0" *(2235 mm)* **Wheelbase** 163.5" *(4154 mm)* **Length of track on ground** 72.4" *(1839 mm)* **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio with full range operator controlled power shift **Nominal travel speeds mph *(km/h)*** first 2.52 *(4.06)* second 3.12 *(5.02)* third 3.44 *(5.53)* fourth 3.85 *(6.20)* fifth 4.24 *(6.82)* sixth 4.75 (7.65) seventh 5.24 *(8.43)* eighth 5.82 *(9.37)* ninth 6.46 *(10.40)* tenth 7.19 *(11.57)* eleventh 7.92 *(12.74)* twelfth 8.71 *(14.02)* thirteenth 9.77 *(15.73)* fourteenth 10.75 *(17.30)*

DRAWBAR PERFORMANCE

(Unballasted at 2100 engine rpm, Manual mode)

MAXIMUM POWER IN SELECTED GEARS

Power Hp *(kW)*	Drawbar pull lbs *(kN)*	Speed mph *(km/h)*	Crank-shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr *(kg/kW.h)*	Hp.hr/gal *(kW.h/l)*	D.E.F. Consumption lb/hp.hr *(kg/kW.h)*	Temp.°F*(°C)* cool-ing med	Air dry bulb	Barom. inch Hg *(kPa)*
					1st Gear					
324.07	54946	2.22	2155	14.1	0.519	13.57	0.023	206	65	28.63
(241.66)	*(244.41)*	*(3.56)*			*(0.316)*	*(2.67)*	*(0.014)*	*(96)*	*(18)*	*(96.95)*
					2nd Gear					
362.90	49869	2.73	2099	11.8	0.501	14.06	0.023	206	69	28.63
(270.61)	*(221.83)*	*(4.39)*			*(0.305)*	*(2.77)*	*(0.014)*	*(97)*	*(20)*	*(96.95)*
					3rd Gear					
378.12	46153	3.07	2097	9.9	0.481	14.65	0.022	206	70	28.64
(281.96)	*(205.30)*	*(4.94)*			*(0.293)*	*(2.89)*	*(0.013)*	*(97)*	*(21)*	*(96.97)*
					4th Gear					
386.64	40817	3.56	2103	7.3	0.470	14.99	0.022	206	71	28.64
(288.32)	*(181.56)*	*(5.72)*			*(0.286)*	*(2.95)*	*(0.014)*	*(97)*	*(22)*	*(96.99)*
					5th Gear					
399.78	37586	3.99	2099	5.3	0.457	15.42	0.023	207	78	28.62
(298.12)	*(167.19)*	*(6.41)*			*(0.278)*	*(3.04)*	*(0.014)*	*(97)*	*(25)*	*(96.92)*
					6th Gear					
400.55	33210	4.53	2097	4.2	0.453	15.55	0.024	208	78	28.62
(298.69)	*(147.72)*	*(7.28)*			*(0.276)*	*(3.06)*	*(0.015)*	*(98)*	*(26)*	*(96.92)*
					7th Gear					
409.34	30394	5.05	2099	3.0	0.443	15.90	0.020	207	69	28.37
(305.24)	*(135.20)*	*(8.13)*			*(0.270)*	*(3.13)*	*(0.012)*	*(97)*	*(21)*	*(96.07)*
					8th Gear					
407.91	27107	5.65	2098	2.4	0.446	15.81	0.020	207	70	28.35
(304.18)	*(120.58)*	*(9.08)*			*(0.271)*	*(3.11)*	*(0.012)*	*(97)*	*(21)*	*(96.00)*
					9th Gear					
409.58	24399	6.30	2099	1.9	0.444	15.88	0.020	207	74	28.62
(305.42)	*(108.53)*	*(10.13)*			*(0.270)*	*(3.13)*	*(0.012)*	*(97)*	*(23)*	*(96.92)*
					10th Gear					
408.04	21781	7.03	2099	1.6	0.447	15.76	0.020	207	74	28.62
(304.27)	*(96.89)*	*(11.31)*			*(0.272)*	*(3.10)*	*(0.012)*	*(97)*	*(23)*	*(96.92)*
					11th Gear					
408.59	19756	7.76	2099	1.4	0.447	15.77	0.019	207	76	28.63
(304.69)	*(87.88)*	*(12.48)*			*(0.272)*	*(3.11)*	*(0.012)*	*(97)*	*(24)*	*(96.95)*
					12th Gear					
407.47	17865	8.56	2099	1.1	0.448	15.73	0.020	207	77	28.63
(303.85)	*(79.47)*	*(13.77)*			*(0.273)*	*(3.10)*	*(0.012)*	*(97)*	*(25)*	*(96.95)*

TRACTOR SOUND LEVEL WITH CAB	dB(A)
At no load in 6th gear	72.3
Transport speed - no load - 18th gear	76.4
Bystander in 18th gear	91.8

Horizontal distance of drawbar hitch point behind rear wheel axis - 54.2"*(1377 mm),* 60.1"*(1527 mm)*

TRACKS AND WEIGHT	Tested Without Ballast
Rear tracks - no & size	2 x 30.0 in *(760 mm)*
Front tracks - no & size	2 x 30.0 in *(760 mm)*
Height of drawbar	21.0 in *(545 mm)*
Static weight with operator- Rear	25905 lb *(11750 kg)*
- Front	32825 lb *(14889 kg)*
- Total	58730 lb *(26639 kg)*

fifteenth 13.29 *(21.38)* sixteenth 16.40 *(26.39)* seventeenth 20.10 *(32.34)* eighteenth 24.78 *(39.90)* reverse 2.52 *(4.06)*, 3.44 *(5.53)*, 3.85 *(6.20)*, 5.24 *(8.43)*, 5.82 *(9.37)*, 7.92 *(12.74)* **Clutch** wet multiple disc hydraulically actuated by foot pedal **Brakes** wet multiple disc hydraulically actuated by foot pedal **Steering** hydrostatic and articulated **Power take-off** 1000 rpm at 1895 engine rpm **Unladen tractor mass** 58555 lb *(26560 kg)*

REPAIRS AND ADJUSTMENTS: No repairs or adjustments.

NOTE 1. In stationary PTO operation, this model operates in a derated power mode. With stationary PTO operation, using FieldCruise™, an isochronous governor is utilized. All PTO tests were conducted with FieldCruise™ engaged.

NOTE 2. The manufacturer declares that the average time between active regenerations is over 50 hours. A 1% power increase was observed during the active regeneration.

NOTE 3: The performance figures on this report are the result of replacing the electronic control module of the John Deere 9RX 590 with the John Deere 9RX 540 module.

NOTE 4: The John Deere 9RX 540 T.E.C.U. (Tractor Electronic Control Unit) is compliant with ISOBUS 11783.

REMARKS: All test results were determined from observed data obtained in accordance with official OECD, SAE and Nebraska test procedures. This tractor fell 0.9% short meeting the manufacturer's remote hydraulic flow claim of 58.0 GPM *(219 l/min)*. The manufacturer's remote hydraulic flow claim of 115.0 GPM *(435 l/min)* with dual pumps was not verified. The manufacturer's remote hydraulic flow claim of 42.0 GPM *(159 l/min)* with the optional 3/4" coupler set was not verified. The performance figures on this summary were taken from a test conducted under the OECD Code 2 test procedure.

We, the undersigned, certify that this is a true and correct report of official Tractor Test No. **2252**, Nebraska Summary 1212, December 2, 2022.

Roger M. Hoy
Director

P.J. Jasa
J.D. Luck
S. Pitla
Board of Tractor Test Engineers

DRAWBAR PERFORMANCE
UNBALLASTED - AUTO MODE
(Loads based on 2100 engine rpm manual mode performance runs)
DRAWBAR POWER AT SELECTED TRAVEL SPEEDS

Power Hp *(kW)*	Drawbar pull lbs *(kN)*	Speed mph *(km/h)*	Crank-shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr *(kg/kW.h)*	Hp.hr/gal *(kW.h/l)*	D.E.F. Consumption lb/hp.hr *(kg/kW.h)*	Temp.°F *(°C)* cool-ing med	Air dry bulb	Barom. inch Hg *(kPa)*
				3.9 mph *(6.2 km/h)*						
386.03	40289	3.59	1561	7.3	0.412	17.12	0.024	205	75	28.64
(287.86)	*(179.21)*	*(5.78)*			*(0.250)*	*(3.37)*	*(0.014)*	*(96)*	*(23)*	*(96.99)*
				4.2 mph *(6.8 km/h)*						
399.74	37299	4.02	1542	5.6	0.401	17.58	0.025	206	78	28.62
(298.09)	*(165.91)*	*(6.47)*			*(0.244)*	*(3.46)*	*(0.015)*	*(97)*	*(26)*	*(96.92)*
				4.7 mph *(7.6 km/h)*						
400.73	32961	4.56	1555	4.3	0.401	17.57	0.025	206	80	28.61
(298.82)	*(146.62)*	*(7.34)*			*(0.244)*	*(3.46)*	*(0.015)*	*(96)*	*(27)*	*(96.88)*
				5.2 mph *(8.4 km/h)*						
409.04	30009	5.11	1547	3.0	0.397	17.77	0.021	206	70	28.36
(305.02)	*(133.49)*	*(8.22)*			*(0.241)*	*(3.50)*	*(0.013)*	*(96)*	*(21)*	*(96.04)*
				5.7 mph *(9.2 km/h)*						
407.42	27172	5.62	1694	2.4	0.406	17.38	0.020	206	72	28.35
(303.81)	*(120.87)*	*(9.04)*			*(0.247)*	*(3.42)*	*(0.012)*	*(97)*	*(22)*	*(96.00)*
				6.3 mph *(10.2 km/h)*						
408.94	24588	6.24	1699	2.0	0.406	17.38	0.021	206	74	28.62
(304.95)	*(109.37)*	*(10.04)*			*(0.247)*	*(3.42)*	*(0.013)*	*(97)*	*(23)*	*(96.92)*
				7.1 mph *(11.4 km/h)*						
407.23	21816	7.00	1899	1.6	0.416	16.95	0.017	207	75	28.63
(303.67)	*(97.04)*	*(11.27)*			*(0.253)*	*(3.34)*	*(0.010)*	*(97)*	*(24)*	*(96.95)*
				8.0 mph *(12.8 km/h)*						
407.41	19577	7.80	1918	1.3	0.418	16.87	0.017	207	76	28.63
(303.81)	*(87.08)*	*(12.55)*			*(0.254)*	*(3.32)*	*(0.010)*	*(97)*	*(24)*	*(96.95)*
				8.6 mph *(13.8 km/h)*						
407.43	17898	8.54	1868	1.2	0.422	16.68	0.019	207	77	28.62
(303.82)	*(79.61)*	*(13.74)*			*(0.257)*	*(3.29)*	*(0.011)*	*(97)*	*(25)*	*(96.92)*

DRAWBAR PERFORMANCE
(Unballasted at 1800 ENGINE RPM, Manual mode)
MAXIMUM POWER IN SELECTED GEARS

Power Hp *(kW)*	Drawbar pull lbs *(kN)*	Speed mph *(km/h)*	Crank-shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr *(kg/kW.h)*	Hp.hr/gal *(kW.h/l)*	D.E.F. Consumption lb/hp.hr *(kg/kW.h)*	Temp.°F*(°C)* cool-ing med	Air dry bulb	Barom. inch Hg *(kPa)*
					1st Gear					
323.58	54737	2.22	2155	13.9	0.518	13.60	0.023	206	65	28.63
(241.29)	*(243.48)*	*(3.57)*			*(0.315)*	*(2.68)*	*(0.014)*	*(96)*	*(18)*	*(96.94)*
					2nd Gear					
368.80	51360	2.70	2082	12.3	0.499	14.13	0.022	206	67	28.63
(275.01)	*(228.46)*	*(4.34)*			*(0.303)*	*(2.78)*	*(0.013)*	*(97)*	*(19)*	*(96.94)*
					3rd Gear					
382.55	48593	2.96	2063	11.9	0.484	14.55	0.022	206	70	28.64
(285.27)	*(216.15)*	*(4.76)*			*(0.295)*	*(2.87)*	*(0.013)*	*(97)*	*(21)*	*(96.99)*
					4th Gear					
407.06	46718	3.27	2012	10.9	0.468	15.06	0.020	206	72	28.64
(303.54)	*(207.81)*	*(5.26)*			*(0.285)*	*(2.97)*	*(0.012)*	*(97)*	*(22)*	*(96.99)*
					5th Gear					
438.59	44990	3.66	1962	7.1	0.438	16.09	0.020	207	68	28.38
(327.06)	*(200.13)*	*(5.88)*			*(0.266)*	*(3.17)*	*(0.012)*	*(97)*	*(20)*	*(96.11)*
					6th Gear					
447.19	42120	3.99	1886	6.2	0.429	16.42	0.021	207	68	28.38
(333.47)	*(187.36)*	*(6.41)*			*(0.261)*	*(3.23)*	*(0.013)*	*(97)*	*(20)*	*(96.11)*
					7th Gear					
456.82	40686	4.22	1800	5.7	0.417	16.90	0.022	207	69	28.37
(340.65)	*(180.98)*	*(6.78)*			*(0.254)*	*(3.33)*	*(0.013)*	*(97)*	*(21)*	*(96.07)*
					8th Gear					
460.37	36416	4.74	1800	4.5	0.414	17.04	0.021	207	71	28.35
(343.29)	*(161.98)*	*(7.63)*			*(0.252)*	*(3.36)*	*(0.013)*	*(97)*	*(22)*	*(96.00)*
					9th Gear					
461.37	32602	5.31	1800	3.6	0.413	17.08	0.022	207	74	28.33
(344.04)	*(145.02)*	*(8.55)*			*(0.251)*	*(3.37)*	*(0.014)*	*(97)*	*(23)*	*(95.94)*
					10th Gear					
462.36	29174	5.94	1799	2.9	0.411	17.13	0.022	207	75	28.33
(344.78)	*(129.77)*	*(9.56)*			*(0.250)*	*(3.37)*	*(0.014)*	*(97)*	*(24)*	*(95.94)*
					11th Gear					
467.17	26600	6.59	1800	2.3	0.408	17.27	0.022	206	72	28.35
(348.36)	*(118.32)*	*(10.60)*			*(0.248)*	*(3.40)*	*(0.013)*	*(97)*	*(22)*	*(96.00)*
					12th Gear					
467.82	24125	7.27	1799	1.9	0.406	17.35	0.022	207	72	28.35
(348.85)	*(107.31)*	*(11.70)*			*(0.247)*	*(3.42)*	*(0.013)*	*(97)*	*(22)*	*(96.00)*
					13th Gear					
459.28	21071	8.18	1798	1.7	0.413	17.06	0.023	207	76	28.33
(342.48)	*(93.73)*	*(13.16)*			*(0.251)*	*(3.36)*	*(0.014)*	*(97)*	*(24)*	*(95.94)*

Lugging ability in 11th gear

Crankshaft speed rpm	2098	1999	1901	1800	1701	1500	1300	1105
Pull-lbs	19442	22752	24758	26444	27803	28636	27852	26400
(kN)	*(86.48)*	*(101.21)*	*(110.13)*	*(117.63)*	*(123.68)*	*(127.38)*	*(123.89)*	*(117.43)*
Increase in pull %	0	17	27	36	43	47	43	36
Power-Hp	401.31	445.55	459.33	463.13	458.77	415.52	350.83	283.25
(kW)	*(299.25)*	*(332.25)*	*(342.52)*	*(345.35)*	*(342.10)*	*(309.85)*	*(261.61)*	*(211.22)*
Speed-mph	7.74	7.34	6.96	6.57	6.19	5.44	4.73	4.02
(km/h)	*(12.46)*	*(11.81)*	*(11.20)*	*(10.57)*	*(9.96)*	*(8.75)*	*(7.60)*	*(6.47)*
Slip %	1.5	2.0	2.3	2.6	2.9	3.2	3.1	2.8

HYDRAULIC PERFORMANCE

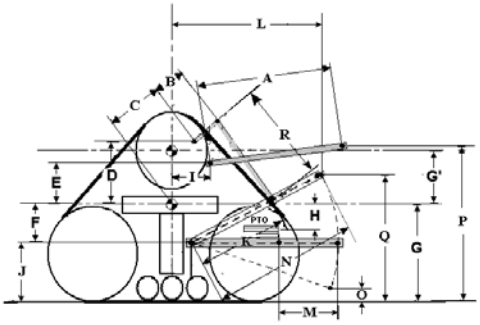
CATEGORY: 4N/4
Quick Attach: Yes
OECD Static test

	Category 4N lift cylinders
Maximum force exerted through whole range:	15648 lbs *(69.6 kN)* (1 x 90 mm and 1x100 mm)
	20965 lbs *(93.3 kN)* (2 x 110 mm)
	Category 4
	15501 lbs *(69.0 kN)* (1 x 90 mm and 1x100 mm)
	20527 lbs *(91.3 kN)* (2 x 110 mm)
	three outlet sets combined
i) Sustained pressure at compensator cutoff:	2869 psi *(198 bar)*
ii) Pump delivery rate at minimum pressure and rated engine speed:	57.5 GPM *(217.6 l/min)*
iii) Pump delivery rate at maximum hydraulic power:	58.4 GPM *(221.1 l/min)*
Delivery pressure:	2439 psi *(168 bar)*
Power:	83.1 HP *(62.0 kW)*
	single outlet set - 1/2" couplers
i) Sustained pressure at compensator cutoff:	2869 psi *(198 bar)*
ii) Pump delivery rate at minimum pressure and rated engine speed:	36.5 GPM *(138.0 l/min)*
iii) Pump delivery rate at maximum hydraulic power:	34.3 GPM *(130.0 l/min)*
Delivery pressure:	2289 psi *(158 bar)*
Power:	45.9 HP *(34.2 kW)*

	Category 4N		Category 4	
	inch	*mm*	inch	*mm*
A	30.7	*780*	29.9	*760*
B	19.7	*500*	19.7	*500*
C	34.8	*885*	34.8	*885*
D	28.7	*730*	28.7	*730*
E	18.7	*475*	18.7	*475*
F	12.5	*318*	12.5	*318*
G	33.1	*842*	33.1	*842*
*G'	19.5	*495*	19.5	*495*
H	2.2	*57*	2.2	*57*
I	28.8	*733*	28.8	*733*
J	20.6	*524*	20.6	*524*
K	30.9	*785*	30.9	*785*
L	52.8	*1342*	52.8	*1342*
*L'	58.7	*1491*	59.6	*1515*
M	14.7	*374*	14.7	*374*
N	45.6	*1159*	45.6	*1159*
O	9.0	*230*	9.0	*230*
P	47.6	*1210*	47.6	*1210*
Q	40.6	*1032*	40.4	*1027*
R	49.6	*1260*	48.6	*1260*

*G' to undercarriage pivot point
*L' to Quick Attach ends

HITCH DIMENSIONS AS TESTED—NO LOAD



RECOMMENDED CITATION FORMAT:

NTTL.(2022).Nebraska OECD Tractor test 2252 for John Deere 9RX 540 Diesel. Lincoln, NE:Nebraska Tractor Test Laboratory. Retrieved from http://tractortestlab.unl.edu



JOHN DEERE 9RX 540 DIESEL

Institute of Agriculture and Natural Resources
University of Nebraska–Lincoln