Test 1113: John Deere 4630 Power Shift Diesel

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NEBRASKA TRACTOR TEST 1113 – JOHN DEERE 4630 POWER SHIFT DIESEL

Department of Agricultural Engineering
Dates of Test: October 13th to October 24th, 1972
Manufacturer: John Deere Waterloo Tractor Works, Waterloo, Iowa

FUEL, OIL AND TIME
Fuel No. 2 Diesel
Cetane No. 54.5 (rating taken from oil company's typical inspection data) Specific gravity converted to 60°/60° 0.8542 Weight per gallon 6.946 lb Oil SAE 30 API service classification
John Deere Torq-Gard or CD-SD To motor 3.881 gal Drained from motor 3.547 gal Transmission and final drive lubricant John Deere Special 305 oil Total time engine was operated 47 hours

ENGINE
Make John Deere Diesel Type 6 cylinder with turbo-charger and intercooler
Serial No. 6041AR-TI - 5414HR

Crankshaft lengthwise Rated rpm 2200 Bore and stroke 4.25" x 4.75" Compression ratio 16.0 to 1 Displacement 404 cu. in. Cranking system electrical (two 6 volt batteries) Lubrication pressure Air cleaner pre cleaner and two dry type in series with replaceable treated paper elements Oil filter full flow with replaceable paper cartridge Oil Cooler engine coolant heat exchanger for crankcase and engine Coolant for transmission and hydraulic system Fuel filter sediment bowl with screen and replaceable paper primary and secondary filter elements Muffler was used Cooling medium temperature control thermostat

CHASSIS
Type standard Serial No. 4630P 001850R Tread width rear 63.0" to 105.6" front 56.0" to 80.0" Wheel base 112.7" Center of gravity (without operator or ballast, with minimum tread, with fuel tank filled and tractor serviced for operation) Horizontal distance forward from center-line of rear wheels 31.7" Vertical distance above roadway 43.8" Horizontal distance from center of rear wheel tread 0.7" to the left Hydraulic control system direct engine drive Transmission selective gear fixed ratio with operator controlled full range power shifting Advertised speeds mph first 1.7 second 2.4 third 3.7 fourth 4.8 fifth 6.2 sixth 8.1 seventh 10.5 eighth 11.7 reverse 2.0, 2.9, 4.5 and 5.9 Clutch and wet multiple discs operated hydraulically Brakes wet disc hydraulically power actuated by two foot pedals that can be locked together Steering hydraulic Type in series with replaceable treated paper elements Cool- Air Air Barometer inches of Mercury

Engineer-in-Charge
L. F. LARSEN
Board of Tractor Test Engineers

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