

व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)
COMMERCIAL TEST REPORT (Initial)

संख्या/No. : T-1645/2176/2022
माह/Month : May, 2022

[ONLINE TESTING]

(यहपरीक्षण रिपोर्ट 31/05/2025 तक वैध है / THIS TEST REPORT IS VALID UPTO 31/05/2025)



JOHN DEERE, 5075E 4WD GEAR PRO LIFT PRO TRACTOR



भारत सरकार

कृषि एवं किसान कल्याण मंत्रालय
(कृषि, सहकारिता एवं किसान कल्याण विभाग)

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
(DEPARTMENT OF AGRICULTURE, CO-OPERATION & FARMERS WELFARE)

केन्द्रीय कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान
ट्रैक्टर नगर, बुदनी (म.प्र.) 466 445
CENTRAL FARM MACHINERY TRAINING & TESTING INSTITUTE
(An ISO 9001 : 2015 Certified Institute)
TRACTOR NAGAR, BUDNI (M.P.) 466 445

E-mail: fmti-mp@nic.in

Web site: <http://www.fmttibudni.gov.in>

Telephone: 07564-299003

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1. SPECIFICATIONS

1.1 Tractor:

Make : John Deere
 Model : 5075E 4WD Gear Pro Lift Pro
 Variants, if any:

S. No.	Variant model (*)	Variant features
1.	5075E Gear Pro Lift Pro	With rear wheel driven (2WD).

***The variant models have not been tested at this Institute yet.**

Type : Four-Wheel Driven (4WD), Standard Agricultural Tractor.
 Month & year of manufacture : 07/21
 Chassis number : 1PY5075EKMA607221
 Country of origin : India

1.2 Engine:

Manufacturer's address : **M/s. John Deere India Pvt. Ltd.**
 Gat No.166 - 167 & 271 - 291,
 Off. Pune-Nagar Road, Sanaswadi,
 Pune - 412 208
 Make : John Deere
 Model : 3029HPY106
 Type : Four stroke, common rail direct injection,
 turbo charged, liquid cooled, diesel engine.
 Serial number : PY3029U052747
 Country of origin : India

1.2.1 Engine speed (rpm), (Manufacturer's recommended production settings):

- Maximum speed at no load : 2190 to 2210
 - Low idle speed : 840 to 860
 - Speed at maximum torque : 1200

Rated speed, (rpm):

- For PTO use : 2100
 - For drawbar use : 2100

1.3 Cylinder & Cylinder Head:

Number : Three
 Disposition : Vertical, inline
 Bore/stroke, (mm) : 106.5 / 110
 Capacity as specified by the applicant, (cc) : 2940
 Compression ratio : 16.9 : 1 (± 0.4)
 Type of cylinder head : Monoblock
 Type of cylinder liners : Wet, replaceable
 Type of combustion chamber : Re-entrant cavity on piston head
 Arrangement of valves : Overhead, inline

Valve clearance (cold/hot):

	<u>Cold</u>	<u>Hot</u>
- Inlet valve, (mm)	0.35 ± 0.25	NA
- Exhaust valve, (mm)	0.50 ± 0.15	NA

1.4 Fuel System:

Type of fuel feed system : Gravity and force feed

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17. SUMMARY OF OBSERVATIONS, COMMENTS & RECOMMENDATIONS

17.1	On the basis of test results, this tractor viz. JOHN DEERE, 5075E 4WD GEAR PRO LIFT PRO TRACTOR does not satisfy the Evaluative Requirement of Technical Requirement for PTO Shaft, the summary of the test results are given in the ensuing table.					
S. No.	Characteristic	Category (Evaluative / Non- Evaluative)	Requirements as per IS: 12207-2019	Values declared by the applicant/ (D) Requirement (R)	As observed	Whether meets the requirements (Yes/No)
1	2	3	4	5	6	7
17.1.1	PTO Performance:					
a)	Maximum power under 2 h test, (kW) (Natural ambient condition)	Evaluative	Declared value to be achieved with a tolerance of: $\pm 5\%$ for PTO power and or engine power >26 kW. $\pm 10\%$ for PTO power and or engine ≤ 26 kW.	47.6 (Standard Mode) (D)	46.9	Yes
b)	Power at rated engine speed, (kW)	Non-Evaluative	-do-	47.6 (Standard Mode) (D)	46.3	Yes
c)	Specific fuel consumption corresponding to maximum power, (g/kWh)	Evaluative	+ 10% max.	255 (Standard Mode) (D)	266	Yes
d)	Maximum equivalent crankshaft torque, (Nm)	Non-Evaluative	$\pm 8\%$	290 (Standard Mode) (D)	286.1	Yes
e)	Back-up torque, percent	Evaluative	12 percent	12 (D) 12 (R)	36.0	Yes
f)	Maximum operating temperature, ($^{\circ}\text{C}$):					
	1) Engine oil	Evaluative	The declared value should not exceed the max. value specified by the oil company and the observed value under high ambient condition should not exceed the declaration.	135 (D)	119	Yes
	2) Coolant	Evaluative	The declared value should not exceed the boiling temperature of coolant under the pressurized or otherwise and the observed value under high ambient condition should not exceed the declaration.	118 (D)	103	Yes
g)	Engine oil consumption, (g/kWh)	Evaluative	Not exceeding 1% of SFC at max. Power under High ambient conditions.	2.67 Maximum (R)	0.109	Yes
h)	Smoke level, m^{-1}	Evaluative	Maximum light absorption coefficient of 3.25 per meter or equivalent BOSCH No. 5.2 or 75 Hatridge value (As per CMVR).	3.25 per meter Maximum (R)	0.25	Yes

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1	2	3	4	5	6	7	
17.1.2	Drawbar performance:						
a)	Max. drawbar pull with ballasted corresponding to 15 percent wheel slip, (kN)	Non-Evaluative	Minimum 70% of static mass of tractor with ballast.	24.71 (D) 24.92 Minimum (R)	33.36	Yes	
b)	Max. drawbar pull without ballast corresponding to 15 percent wheel slip, (kN)	Evaluative	Minimum 70% of static mass of tractor without ballast or with standard ballast, as the case may be.	18.81 (D) 18.89 (R) Minimum	26.72	Yes	
c)	Maximum drawbar power with standard ballast, (kW).	Evaluative	Minimum 80 % of PTO power as referred in SI No. i) a) of PTO performance in case of tractors having total static mass > 1500 kg Minimum 75 % of PTO power as referred in SI No. i) a) of PTO performance in case of light weight tractors having ≤1500 kg total static mass of tractor Minimum 75 % of the engine power as referred in SI No. i) a) of engine performance in case of tractors which do not have a PTO shaft.	38.1 (D) 37.5 (R) Minimum	41.0	Yes	
d)	For tractors fitted with air conditioned /heated cabin: Maximum drawbar power without ballast, or with standard ballast as the case may be, kW	Evaluative	Minimum 70 % of PTO power as referred in SI No. i) a) of PTO performance in case of tractors having total static mass > 1500 kg	Nil	Not applicable	Not applicable	
e)	Maximum transmission oil temperature, (°C)	Evaluative	The declared value should not exceed the maximum value specified by oil company	120 (D)	105	Yes	
17.1.3	Power lift and hydraulic pump performance:						
a)	Maximum lifting capacity throughout the range of lift, (kN):						
	1)	At hitch points	Evaluative	Tolerance of ± 10%	25.0 (D)	25.11	Yes
	2)	With the standard frame	Evaluative	The lift capacity should at least be 24 kg/PTO kW and it should be 21.5 kg/engine kW where the tractor is not provided with a PTO shaft.	21.0 (D) 11.04 (R) Minimum	20.22	Yes
b)	Maximum drop in the height of the point of application of the force after each 5 minutes interval for a total duration of 30 Minutes, (mm)	Non-Evaluative	The observed value should not exceed 50 mm	50 (D) Maximum	00	Yes	

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1	2	3	4	5	6	7	
17.1.4	Brake performance at 25 kmph:						
a)	Maximum stopping distance at a force, equal to or less than 600 N on brake pedal with road ballast, (m):						
	1)	Cold brake	Evaluative	10	10 (R)	8.23	Yes
	2)	Hot brake	Evaluative	10	10 (R)	7.40	Yes
b)	Maximum force exerted on the brake pedal to achieve a deceleration of 2.5 m/s ² , (N)		Evaluative	600	600 (R) Maximum	262 to 285	Yes
c)	Whether parking brake is effective at a force of 600 N at foot pedal (s) or 400 N at hand lever		Evaluative	Yes / No	Yes	Yes	Yes
17.1.5	Noise measurement:						
a)	Maximum ambient noise emitted by the tractor, dB(A)		Evaluative	As per CMVR	88 (R)	80	Yes
b)	Maximum noise at operator's ear level, dB(A)		Evaluative	As per CMVR	96 (R)	93	Yes
17.1.6	Amplitude of mechanical vibrations at:						
	1)	Left foot rest	Non-Evaluative	100 microns (max.)	100 (R)	115	No
	2)	Right foot rest				120	No
	3)	Seat (with driver seated)				82	Yes
	4)	Steering wheel				142	No
17.1.7	Air cleaner:						
	Maximum air cleaner oil pull over, (%)		Evaluative	0.25 (Max.)	Dry type air cleaner fitted		Not applicable
17.1.8	Haulage requirements:						
a)	Gross mass of the trailers, (tonne):						
	Two wheel		Non-Evaluative	As specified by the manufacturer	6.0 (D)	6.0	Yes
Four wheel		Non-Evaluative	8.0 (D)		8.0	Yes	
b)	Distance travelled / liter of fuel consumption, (km/l):						
	Two wheel		Non-Evaluative	As specified by the manufacturer	4 to 6 (D)	3.22 to 3.35	Yes
Four wheel		Non-Evaluative	4 to 6 (D)		2.96 to 3.03	Yes	
c)	Fuel consumption, (ml/km/tonne):						
	Two wheel		Non-Evaluative	As specified by the manufacturer	30 to 50 (D)	49.76 to 51.78	No
Four wheel		Non-Evaluative	30 to 50 (D)		41.25 to 42.16	Yes	

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1	2	3	4	5	6	7	
17.1.9	Wetland cultivation:						
	Sealing for the following assemblies:		Evaluative	The identified assemblies should essentially meet the requirement of IS: 11082. No water ingress in the identified assembly given in column-2. If tractor does not meet the requirements of wetland cultivation, it may be recommended for dry land operation only.	There should be no ingress of water and/or mud (R)	The manufacturer has recommended that the tractor is not suitable for wetland cultivation (puddling operation) and therefore, the wetland cultivation (puddling operation) test was not conducted.	--
	1)	Clutch assembly	-do-				
	2)	Brake housings	-do-				
	3)	Front axle hubs	-do-				
	4)	Engine Oil	-do-				
5)	Transmission Oil	-do-					
17.1.10	Safety features:						
a)	Guards against moving and hot parts	Evaluative	Belt drives, pulleys, silencer, hydraulic pipes (As per IS 12239 (Part2))	Meets the requirement	Yes		
b)	Lighting arrangement	Evaluative	As per CMVR	Meets the requirement	Yes		
c)	Seating requirements (Tractors having more than 1150 mm rear track width)	Non-Evaluative	Should meet the requirements of IS: 12343 (As amended from time to time)	Does not meet the requirement	No		
d)	Technical requirements for PTO shaft	Evaluative	Should meet the requirements of IS: 4931 (As amended from time to time)	Does not meet the requirement	No		
e)	Dimensions of three-point linkage	Non-Evaluative	Should meet the requirements of IS: 4468 (Part-I) (As amended from time to time)	Meets the requirement	Yes		
f)	Specifications of linkage drawbar	Evaluative	Should meet the requirements of IS: 12953 (As amended from time to time)	Meets the requirement	Yes		
g)	Swinging drawbar (wherever fitted)	Evaluative	Should meet the requirement of IS: 12362 (Part 3) (As amended from time to time)	Not provided	Not applicable		
h)	1)	Maximum travelling speed at rated engine speed in reverse gears, Kmph	Evaluative	Should not exceed 20 Kmph	15.83 @ 1390 engine rpm (Meets the requirement)	Yes	
	2)	Audible warning signal on tractor	Evaluative	As soon as the travelling speed in reverse gear reaches to 20 kmph, an audible warning signal on tractor shall be activated. The safety aspects about the operation of shuttle technology shall be brought in operation and manufacturer /dealer shall ensure the training on this aspect to operator before the delivery of tractor.	Not fitted, however reverse speed will be controlled by controller (ECU) & ground wheel speed sensor.	Not applicable	

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1	2	3	4	5	6	7	
17.1.11	Labelling of tractors (Provision of labelling plate):						
1)	Make	Evaluative	Should conform to the requirements of CMVR along with maximum PTO Power in kW and year of manufacture in numerical form. <table border="1" style="margin: 5px auto; width: 60px; height: 20px;"> <tr> <td style="width: 30px;">MM</td> <td style="width: 30px;">YY</td> </tr> </table> Digit 01 – 12 in box No.1 for MM will represent the months and next two digits in box No.2 for YY will represent the year of Manufacturing.	MM	YY	John Deere	Yes
MM	YY						
2)	Model	Evaluative		5075E 4WD Gear Pro Lift Pro	Yes		
3)	Month & Year of manufacture	Evaluative		07 & 21	Yes		
4)	Engine number	Evaluative		PY3029U052747	Yes		
5)	Chassis number	Evaluative		1PY50755EKMA607221	Yes		
6)	Maximum PTO power, (kW)	Evaluative		47.6	Yes		
7)	Specific fuel consumption , g/kWh	Evaluative	255	Yes			
17.1.12	Discard limit for:						
(a)	Cylinder bore diameter, (mm)	Evaluative	To be specified by the manufacturer and supported by the printed literature	106.77	106.492 to 106.528	Yes	
(b)	Clearance between piston & cylinder liner at skirt, (mm)	Non-Evaluative		0.32	0.124 to 0.131	Yes	
(c)	Piston diameter at skirt, (mm)	Non-Evaluative		106.28	106.385 to 106.397	Yes	
d)	Ring end gap (mm):						
-	Top comp. ring.	Evaluative	To be specified by the manufacturer and supported by the printed literature	0.50	0.30 to 0.35	Yes	
-	2 nd comp. ring.			1.00	0.50 to 0.70	Yes	
-	Oil ring.			0.70	0.30 to 0.40	Yes	
(e)	Ring groove clearance (mm):						
-	Top comp. ring.	Evaluative	To be specified by the manufacturer and supported by the printed literature	0.200	--Tapped--	--	
-	2 nd comp. ring.			0.100	0.049 to 0.062	Yes	
-	Oil ring.			0.092	0.040 to 0.047	Yes	
(f)	Clearance of main bearings (mm):						
-	Diametrical clearance	Evaluative	To be specified by the manufacturer and supported by the printed literature	0.65	0.066 to 0.098	Yes	
-	Crankshaft end float	Evaluative		0.85	0.23	Yes	
(g)	Clearance of big end bearings, (mm):						
-	Diametrical	Evaluative	-do-	0.65	0.094 to 0.113	Yes	
-	Axial	Evaluative	-do-	0.85	0.30	Yes	

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1	2	3	4	5	6	7
(h)	Clearance between king pin and bush, (mm)	Non-Evaluative	-do-	Tapper roller bearings are provided		Not applicable
(i)	Clearance between centre pin and bush, (mm)	Non-Evaluative	-do-	0.80	0.121 to 0.123	Yes
17.1.13	Literature (Submission to test agency)					
(a)	Operator manual	Evaluative	Provided / Not Provided	Provided	Provided	Yes
(b)	Parts Catalogue	Evaluative	Provided / Not Provided	Provided	Provided	Yes
(c)	Workshop/ Service manual	Evaluative	Provided / Not Provided	Provided	Provided	Yes
17.1.14	Fitment of Roll Over Protective Structures (ROPS):					
	For tractor having more than 1150 mm rear track width	Evaluative	ROPS should meet the requirement of IS:11821 or OECD code or equivalent International Standard	ROPS fitted in tractor meets the requirement of IS:11821 vide certificate No. ED/19-20/2099996460/U3229, dated 13.05.2020		Yes
17.1.15	Standard Accessories	Evaluative	Trailer hitch, front tow hook, linkage drawbar should be provided with tractor	Provided		Yes
17.1.16	Accessories (optional)	Non Evaluative	Ballast weight, if fitted, should meet the requirement of CMVR	Provided		Yes

17.2 CATEGORY OF BREAKDOWNS / DEFECTS (As per clause 5.0 of IS:12207-2019):					
S. No.	Category of break-downs	Category (Evaluative / Non-Evaluative)	Requirements as per IS: 12207-2019	As observed	Whether meets the Requirements (Yes/No)
1.	Critical	Evaluative	No critical breakdown	None	Yes
2.	Major	Evaluative	Not more than two and neither of them should be repetitive in nature	None	Yes
3.	Minor	Evaluative	Not more than five and frequency of each should not be more than two.	None	Yes
4.	Total breakdowns	Evaluative	In no case, the total number of breakdowns should exceed five, that is, (2 major + 3 minor) or (1 major + 4 minor) or 5 minor breakdowns.	None	Yes

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17.2.1 Conformity with following IS:

- | | | | |
|-------|--|---|-------------------------|
| i) | Guide lines for declaration of power and specific fuel consumption and labelling of agricultural tractors (First revision) [IS10273: 1987 (Reaffirmed in January, 2019)] | : | Conforms |
| ii) | Agricultural tractors - Rear mounted power take-off - Types 1, 2 and 3 (third revision) [IS:4931-1995 (Reaffirmed in January, 2019)] | : | Conforms |
| iii) | Agricultural wheeled tractors - Rear mounted three-point linkage: Part 1 Categories 1, 2, 3 & 4 (fourth revision) [IS 4468(Part-I):1997/ISO 730-1:1994 (Reaffirmed in 2017)] | : | Conforms |
| iv) | Drawbar for agricultural tractors – Link type [IS 12953:1990 (Reaffirmed October, 2017)] | : | Conforms |
| v) | Agricultural tractors - Operator's seat technical requirement [IS 12343 –1998 (First revision) (Reaffirmed in January, 2019)] | : | Does not conform |
| vi) | Guide for safety & comfort of operator of agricultural tractors: Part 1 General requirements (first revision): [IS 12239 (PT-1)-2018 /ISO 4254-1:2018] | : | Does not conform |
| vii) | Tractors and machinery for agriculture and forestry – Technical means for ensuring safety Part 2: Tractors (first revision) (IS 12239 (PT-2) 1999) (Reaffirmed in January, 2019)] | : | Does not conform |
| viii) | Guide lines for location and operation of operator controls on agricultural tractors and machinery (first revision) IS: 8133- 1983 (Reaffirmed in January, 2019)] | : | Conforms |
| ix) | Tractors and machinery for agriculture and forestry, powered lawn and garden equipment - Symbols for operator controls and other displays Part 2 Symbols for agricultural tractors and machinery [IS:6283 (Part-1)-2006 and IS: 6283 (Part-2)- 2007 (Reaffirmed in January, 2019)] | : | Conforms |
| x) | Agricultural Tractors and Machinery - Lighting device for travel on public roads (IS: 14683-1999) (Reaffirmed in January, 2019)] | : | Conforms |

17.3 Salient Observations:

17.3.1 Laboratory tests:

17.3.1.1 Specifications of Power Take-off Shaft:

With standard fitment rear tyre of size 18.4-30 & optional rear tyre of size 16.9-30, the dimension “h” of PTO shaft has been measured 715 & 695 mm respectively against the requirement of 450 to 675 mm, which does not meet the evaluative requirement of IS:4931-1995 (Type-I).

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17.3.1.2 Hydraulic Performance:

The moment about rear axle with standard frame was calculated as **32.35 kN-m**. Whereas, the moment about front axle was calculated as **21.91 kN-m** under unballasted condition. The moment about rear axle with coupled frame is on higher side as compared to moment about front axle under unballasted condition. This should be looked into for necessary corrective action.

17.3.1.3 Mechanical Vibration:

The amplitude of mechanical vibration on various assemblies marked as (*) in Chapter-8 of this test report is on higher side. This calls for dampening down of vibrations especially on foot rest & steering wheel to improve the operational comfort and service life of components.

17.3.1.4 Operator's Seat:

- i) Longitudinal distance from seat index point to the centre of differential lock pedal has been measured as 250 mm against the requirement of 355 to 770 mm.
- ii) Vertical distance from seat index point to the centre of clutch & brake pedal has been measured as 345 & 345 mm respectively, against the requirement of 380 to 620 mm.

Above parameters does not meet the requirement of IS: 12343-1998, (Re-affirmed in January, 2019). This should be looked into for necessary corrective action.

17.3.1.5 Operator's work place:

Operator's work place meets the requirements of IS: 12239 (Part-I) 1996 (Reaffirmed Oct., 2017), **except the following:**

- i) Vertical retainer on inner side of clutch pedal has not been provided.
- ii) Spark arrester in the exhaust system has not been provided.

Above parameters does not meet the requirement of IS: 12239 (Part-I) 1996 (Reaffirmed Oct., 2017). This should be looked into for necessary corrective action.

17.3.1.6 Constructional requirement with regard to safety:

Meets the requirements of IS: 12239 (Part-II)-1996 (Re-affirmed in January, 2019), except the following:

The working clearance around position and draft control lever has been measured as 40 mm against the minimum requirement of 70 mm.

Above parameters does not meet the requirement of IS: 12239 (Part-II)-1996 (Re-affirmed in January, 2019). This should be looked into for necessary corrective action.

17.3.1.7 Three Point Linkage:

- i) Diameter of hole for upper and lower hitch point meets the requirements of Cat-II whereas the width of ball has been provided as per Cat-I. This should be looked into for necessary corrective action.
- ii) Some of the parameters conform to Cat. I and some of them conform to Cat. II. Keeping in view the spirit of standardization, necessary improvement may be incorporated.

17.3.1.8 Haulage Test:

The specific fuel consumption with four-wheel trailer was recorded as 49.76 to 51.78 **ml/km/tonne**, respectively against the declaration of 30 to 50 ml/km/tonne respectively. This should to be looked into for necessary corrective action.

17.3.1.9 Rear view mirror:

The exterior rear- view mirror (Class-II) has been provided on RHS. However, the fitted mirror does not having clear view of that part of the road i.e. **FIELD OF VISION** defined as Para no. 5.0 of AIS – 114. This should to be looked into for necessary corrective action as related to safety of operator in both road & field works.

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17.4 Field test (Dry land operation)

1. During the field test (ploughing operation) ‘service alert indicator’ was glowing & soon after ‘engine stop’ indicator also displayed along with continuous long beep sound. Thereafter ‘Roll mode switch’ on the cluster was pressed for approximately 5 seconds to check the error codes.
The following codes were shown:
 - (a) 94.17(which means fuel pressure low) &
 - (b) 94.18 (which means fuel pressure moderately low).
 - i) During inspection it was found that the air vent on fuel tank cap was chocked & same has been cleaned.
 - ii) For clearing the past active error codes, ‘Service advisor EDL3’ unit was connected with the tractor’s ‘OBD’ port and codes were cleared by clicking ‘clear codes’ option in the service advisor software.
2. ‘Service alert indicator’ again glowed on the cluster during further ploughing operation with the same error codes 94.17/94.18 on dashboard.
 - i) On inspection, fuel pickup strainer filled on the supply line from fuel tank was found choked with sediments. Upon the request of applicant, cleaning /flushing of fuel tank and fuel supply system was carried out.
 - ii) Past active error codes 94.17(which means fuel pressure low) /94.18 (which means fuel pressure moderately low) were cleared by following the method as mentions in S. No. 1. (ii).

17.5 Wet land cultivation (Puddling Operation):

The manufacturer has recommended that the tractor is not suitable for wetland cultivation (puddling operation) and therefore, the wetland cultivation (puddling operation) was not conducted. It is recommended that this fact that the tractor is not suitable for wetland (puddling) operation should be mentioned clearly & boldly in all the relevant literature of the tractor & also a cautionary notice regarding non-suitability of tractor for puddling operation may be displayed on the bonnet of the tractor.

17.6 Maintenance / Service Problems:

No noticeable maintenance or service problem was observed during the test.

17.7 Recommendation with regard to safety on tractor:

The following requirements, inter alia, may be considered for incorporation on the tractor:

- i) Longitudinal distance from seat index point to the centre of differential lock pedal has been measured as 250 mm against the requirement of 355 to 770 mm.
- ii) Vertical distance from seat index point to the centre of clutch & brake pedal has been measured as 345 & 345 mm respectively, against the requirement of 380 to 620 mm.
- iii) Vertical retainers at both sides of clutch pedal should be provided.
- iv) Spark arrester should be provided in the exhaust system as per the requirement of IS: 12239 (Part-2)-1999 (Re-affirmed in January, 2019).
- v) The working clearance between position and draft control lever of hydraulic system was measured as 40 mm against the minimum requirement 70 mm as per IS: 12239 (Part-2)-1999 (Re-affirmed in January, 2019).

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17.8 Adequacy of Literature supplied with machine:


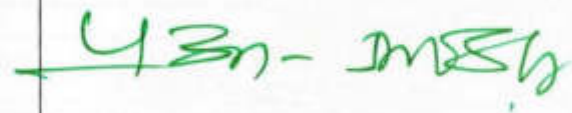
17.8.1 The following literatures were supplied with the test tractor for reference during the test: -

- a) Operator's Manual of John Deere 5310 Gear Pro (2WD&4WD), 5405 Gear Pro (2WD & 4WD), 5075E Gear Pro (2WD & 4WD) and 5075E Gear Pro Lift Pro (2WD & 4WD) tractor models
- b) Parts Catalogue of John Deere 5075E and its variant tractor models.
- c) Workshop Service / Technical Manual Part-1 & Part-2 of John Deere 5310 Gear Pro (2WD&4WD), 5405 Gear Pro (2WD&4WD), 5075E Gear Pro (2WD & 4WD) and 5075E Gear Pro Lift Pro (2WD&4WD) tractor models

17.8.2 The operator manual may be brought out for the guidance of users and service personnel as per IS:8132-1999 incorporating, inter alia, the following:

- i) Safe hitch height while using trailer.
- ii) Information and operation on the components / assemblies such as charge air cooler, turbo charger, fuel injection pump (HPP), common rail, diesel oxidation catalyst (DOC), exhaust gas recirculation (EGR), electronic control unit (ECU), details of sensors / actuators etc.
- iii) Information related to PTO & Drawbar of the tractor such as, maximum engine power, maximum torque, backup torque, specific fuel consumption, maximum drawbar power etc should be included in the technical specification of the tractor for the guidance of the user's.
- iv) "CARE Button" for convenience of the farmers.

TESTING AUTHORITY:

C.V. CHIMOTE TEST ENGINEER	
P. K. PANDEY DIRECTOR	

Draft test report is compiled by: Chanchlesh Singh Raghuwanshi, Agricultural Engineer.

T-1645/2176/2022	JOHN DEERE, 5075E 4WD GEARPRO LIFTPRO TRACTOR - COMMERCIAL (Initial)
	THIS TEST REPORT IS VALID UPTO: 31/05/2025

18. APPLICANT'S COMMENTS

Para No.	Our Reference	Applicant's comments
18.1	17.3.1.2	We will certainly look into your recommendation
18.2	17.3.1.3,17.3.1.4, 17.3.1.5 & 17.3.1.9	Your valuable comments and suggestions for improvements are well taken. Under our policy of continuous product improvement these aspects are further being looked into and will try to eliminate these deviations soon wherever necessary.

ANNEXURE- I

BRIEF SPECIFICATION OF MATCHING IMPLEMENTS AS DECLARED BY APPLICANT

S. No.	Parameters	Disc Plough	Rotavator
1	Make	Himco	Kubota
2	Type	Mounted	Mounted
3	No. of Discs / Blades	Three	42 in 7 flanges (6.5 feet)
4	Type of Discs / Blades	Concave	Hatchet
5	Size of Discs / Blades, (mm)	670	230 x 75 x 7
6	Spacing of Discs /Flanges, (mm)	600	255
7	Lower hitch point span, (mm)	800	825
8	Mast height, (mm)	580	625
9	Overall Dimensions, (mm):		
	Length	2230	1050
	Width	1140	2065
	Height	1480	1070
10	Gross Mass, (kg)	380	510

ANNEXURE- II

BRIEF SPECIFICATION OF MATCHING TRAILERS AS DECLARED BY APPLICANT

S.No.	Item	Trailer	Trailer
1.	Type of trailer	Semi - Trailer	Semi – Trailer
2.	Number of axles	Single	Double
3.	Un laden weight of Trailer, kg	1670	2800
4.	Fully laden weight of Trailer, (kg)	4000	5500
5.	Overall dimensions of Trailer, (mm):		
	Overall Width	1870	2140
	Overall Length	4180	5785
	Overall Height	2175	2110
	Wheel Base	Not applicable	2835
	Wheel Track	1600	1740(Front) & 1765(Rear)
6.	Dimension of fitted Platform, (mm):		
	Length	3040	4225
	Width	1830	2135
	Height from ground	1190	1305
7.	Brakes of Trailer (If provided)	Not Provided	Not Provided
	Make		Brakes India Limited, Chennai (T.N)
	Type		Hydraulic drum brakes system
	Control system		Single action control system

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ANNEXURE-III

TRACTOR RUN HOURS DURING TEST

A.	LABORATORY AND TRACK TESTS:	HOURS
1.	Running-in	24.0
2.	PTO performance test	26.7
3.	Power lift and hydraulic pump performance test	4.0
4.	Drawbar performance test	25.3
5.	Turning ability	0.2
6.	Location of centre of gravity	0.2
7.	Operator's field of vision	0.2
8.	Brake test	2.3
9.	Noise measurement	2.3
10.	Mechanical vibration test	1.3
11.	Nominal speed test	3.8
B.	FIELD TEST:	
1.	Disc ploughing	21.1
2.	Rotavation	15.2
C.	HAULAGE TEST:	6.0
D.	Miscellaneous test and other run hours including idle run, transportation, trials and preparation for test	12.4
TOTAL:		145.0