

व्यावसायिक परीक्षण रिपोर्ट (द्वितीय बैच परीक्षण)  
COMMERCIAL TEST REPORT (Second Batch Test)

संख्या/No. : T- 1730/2261/2023  
माह/Month : May, 2023

Application Reference No.28/2022-23/30

(यह परीक्षण रिपोर्ट 31/05/2030 तक वैध है / THIS TEST REPORT IS VALID UPTO 31/05/2030)



## KUBOTA, A211N TRACTOR



भारत सरकार

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

GOVERNMENT OF INDIA

MINISTRY OF AGRICULTURE AND FARMERS WELFARE  
(DEPARTMENT OF AGRICULTURE & FARMERS WELFARE)

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## 2. FUEL AND LUBRICANTS

**2.1 Fuel** : The High-speed diesel oil supplied by M/s Indian Oil Corporation Limited having density of 0.826 g/cc at 15°C was used.

### 2.2 Lubricants:

S. No.	Particulars	As recommended by the manufacturer	As used during the test
1.	Engine oil	Kubota Genuine or SAE 10W30	As recommended
2.	Transmission, rear differential, rear axle & hydraulic system	Kubota Super UDT fluid or SAE75W80	Oil originally filled in the systems was not changed
3.	Steering housing	SAE90	
4.	Front axle & front final drive	Kubota Super UDT fluid or SAE75W80	
5.	Grease	NLGI-2 or NLGI-1	As recommended

## 3. SPECIFICATIONS

### 3.1 Tractor:

Make : KUBOTA  
 Model : A211N  
 Type : Four wheel drive, standard agricultural tractor.  
 Month & Year of manufacture : 05/22  
 Chassis number : KBTB1NTNLNTE37435  
 Country of Origin : Thailand

### 3.2 Engine:

Manufacturer's address : KUBOTA Corporation, 1-2-47, Shikitsu-Higashi, Naniwa-ku, Osaka – 556-8601, Japan  
 Make : Kubota, Japan  
 Model : D1005  
 Type : Four stroke, liquid cooled, naturally aspirated, indirect injection, diesel engine.  
 Serial number : 1NA7952  
**Engine speed (Manufacturer's recommended production setting), (rpm):**  
 - Maximum speed at no load : 2820  
 - Low idle speed : 1050 to 1150  
 - Speed at maximum torque : 1800 to 2000  
**Rated speed, (rpm):**  
 - For PTO use : 2600  
 - For drawbar use : 2600  
 Country of Origin : Japan

### 3.3 Cylinder & Cylinder Head:

Number : Three  
 Disposition : Inline, vertical  
 Bore/stroke, (mm) : 76.0/73.6  
 Capacity as specified by the applicant, (cc) : 1001  
 Compression ratio, (apa) : 24 :1  
 Type of cylinder head : Monoblock  
 Type of cylinder liners : Wet, Non-replaceable

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	Type of combustion chamber	: Indirect injection, swirl chamber on piston crown
	Arrangement of valves	: Overhead, Inline
	<b>Valve clearance (cold / Hot) :</b>	
	- Inlet valve, (mm)	: 0.145 – 0.185
	- Exhaust valve, (mm)	: 0.145 – 0.185
<b>3.4</b>	<b>Fuel System:</b>	
	Type of fuel feed system	: Gravity & force feed
<b>3.4.1</b>	<b>Fuel tank:</b>	
	Capacity, (l)	: 23.0
	Location	: Above clutch housing
	Provision for draining of sediments/ water	: <b>Not provided</b>
	Material of fuel tank	: Plastic
<b>3.4.2</b>	<b>Water separator :</b>	
	Make	: TAIYO GIKEN, Thailand
	Type	: Gravity separation with fuel filter element
	Location	: Between the fuel tank and fuel feed pump
<b>3.4.3</b>	<b>Fuel feed pump:</b>	
	Make	: KYOSAN DENKI, Japan (apa)
	Type	: Diaphragm operated, cam drive
	Model/Group combination No.	: Not available
	Provision of sediment bowl	: Not provided
	Method of drive	: Through cam shaft of fuel injection pump.
<b>3.4.4</b>	<b>Fuel filters:</b>	
	Make	: TAIYO GIKEN, Thailand
	Model/Group combination No.	: Not available
	Number	: One
	Type of elements	: Paper
	Capacity of final stage filter, (l)	: 0.10
<b>3.4.5</b>	<b>Fuel Injection pump:</b>	
	Make	: BOSCH Corp, Japan
	Model/Group combination No.	: Zexel, NP-PER 3M-D55 (apa)
	Type	: Inline, Plunger
	Serial number	: Not available
	Method of drive	: Through timing gears
<b>3.4.6</b>	<b>Fuel injectors:</b>	
	Make	: BOSCH Corp, Japan
	<b>Model/Group combination no. :</b>	
	Holder No.	: Not available
	Nozzle Number	: 237-Z-NP-DN4PDN165
	Type	: Pintle
	Manufacturer's production pressure setting, (MPa)	: 13.7 to 14.7
	Injection timing	: 18 degree before TDC
	Firing order	: 1-2-3
<b>3.4.7</b>	<b>Governor:</b>	
	Make	: NIHON IET, Japan (apa)
	Model/Group combination No.	: Not available
	Type	: Mechanical, centrifugal, variable speed

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### 16. SUMMARY OF OBSERVATIONS, COMMENTS & RECOMMENDATIONS

**16.1** On the basis of tests conducted the performance results have been summarized as evaluative (mandatory) and non-evaluative (not-mandatory) parameter applicable for qualifying Minimum Performance Criteria as per Clause-4 (Table-1) of **IS: 12207-2019** for acceptance of the tractor for the purpose of subsidies/NABARD financing are summarized as under:

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
<b>16.1.1</b>	<b>PTO Performance:</b>					
<b>a)</b>	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 or engine power $>26$ kW, $\pm 10\%$ for PTO power or Engine power $\leq 26$ kW.	11.5 (D)	11.2	Yes
<b>b)</b>	Power at rated engine speed, (kW)	Non-Evaluative	-do-	11.5 (D)	10.2	<b>No</b>
<b>c)</b>	Specific fuel consumption corresponding to maximum power, (g/kWh)	Evaluative	+ 10% maximum	318 (D)	309	Yes
<b>d)</b>	Maximum equivalent crankshaft torque, (Nm)	Non-Evaluative	$\pm 8\%$	49.5 (D)	49.6	Yes
<b>e)</b>	Back-up torque, percent	Evaluative	12 %, minimum	17.3	32.6	Yes
<b>f)</b>	<b>Maximum operating temperature, (<math>^{\circ}</math>C)</b>					
	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.	130 (D)	113	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.	130 (D)	105	Yes
<b>g)</b>	Engine oil consumption, (g/kWh)	Evaluative	Not exceeding 1% of SFC at max. power under High ambient conditions	0.95 (D) 3.08 (R)	0.29	Yes
<b>h)</b>	Smoke level, ( $m^{-1}$ )	Evaluative	Maximum light absorption coefficient of 3.25 per meter or equivalent BOSCH No. 5.2 or 75 Hatridge value ( <b>As per CMVR</b> )	3.25 per meter maximum	0.55	Yes

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1	2	3	4	5	6	7	
<b>16.1.2</b>	<b>Drawbar performance:</b>						
<b>a)</b>	Max. drawbar pull with ballast corresponding to 15 percent wheel slip, (kN)	Non-Evaluative	Minimum 70% of static mass with ballast	5.00 (D) 5.62 (R) minimum	7.23	Yes	
<b>b)</b>	Maximum drawbar pull without ballast corresponding to 15 percent wheel slip, (kN)	Evaluative	Minimum 70% of static mass of tractor without ballast	4.70 (D) 4.12 (R) minimum	5.59	Yes	
<b>c)</b>	Maximum drawbar power without 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.	9.2 (D) 8.4 (R) minimum	8.9	Yes	
<b>d)</b>	Max. transmission oil temperature, (°C)	Evaluative	The declared value should not exceed the maximum value specified by oil company	120 (D)	89	Yes	
<b>16.1.3</b>	<b>Power lift and hydraulic pump performance:</b>						
<b>a)</b>	Maximum lifting capacity throughout the range of lift, (kN):						
	1)	At hitch points	Evaluative	±10%	6.00 (D)	5.49	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	3.20 (D) 2.64 (R) minimum	4.09	Yes
<b>b)</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 minute, (mm)		Non Evaluative	Observed value should not exceed 50 mm.	11 (D) 50 maximum	0	Yes

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1	2	3	4	5	6	7
<b>16.1.4</b>	<b>Brake performance at 25 kmph:</b>					
<b>a)</b>	Maximum stopping distance at a force, equal to or less than 600 N on brake pedal without ballast, (m):					
	1) Cold brake	Evaluative	10	10	4.21	Yes
	2) Hot brake	Evaluative	10	10	4.73	Yes
<b>b)</b>	Maximum force exerted on the brake pedal to achieve a deceleration of 2.5 m/s <sup>2</sup> (N)	Evaluative	600	600 maximum	293 to 311	Yes
<b>c)</b>	Whether parking brake is effective at a force of 600 N at foot pedal(s) or 400 N at hand lever, N	Evaluative	Yes / No	Yes (R)	Yes	Yes
<b>16.1.5</b>	<b>Noise measurement:</b>					
<b>a)</b>	Maximum ambient noise emitted by the tractor, dB(A)	Evaluative	88 dB (A) for >1.5 tonne GVW and 85 db (A) for <1.5 tonne GVW (as per CMVR)	85 (R) maximum	78	Yes
<b>b)</b>	Maximum noise at operator's ear level, dB(A)	Evaluative	96 (as per CMVR)	96 (R) maximum	90	Yes
<b>16.1.6</b>	<b>Amplitude of mechanical vibrations at:</b>					
	1) Left foot rest	Non-Evaluative	100 microns (max.)	100 (max.)	60	Yes
	2) Right foot rest				97	Yes
	3) Seat (with driver seated)				94	Yes
	4) Steering Wheel				251	<b>No</b>
<b>16.1.7</b>	<b>Air Cleaner:</b>					
	Max. oil pull over, (%)	Evaluative	0.25% (max.)	Dry type air cleaner is fitted		Not applicable
<b>16.1.8</b>	<b>Haulage requirements:</b>					
<b>a)</b>	Gross mass of the trailers, (tones):					
	Two wheel	Non-Evaluative	As specified by the manufacturer	1.5 (D)	1.5	Yes
<b>b)</b>	<b>Distance travelled / litre of fuel consumption, (km/l):</b>					
	Two wheel	Non-Evaluative	As specified by the manufacturer	6.80 to 8.80 (D)	8.44 to 8.71	Yes
<b>c)</b>	<b>Fuel consumption (cc/km/tonne):</b>					
	Two wheel	Non-Evaluative	As specified by the manufacturer	79.00 to 89.00 (D)	76.56 to 78.98	<b>No</b>
<b>16.1.9</b>	<b>Safety features:</b>					
<b>a)</b>	Guards against moving and hot parts	Evaluative	Belt drives, pulleys, silencer, hydraulic pipes (As per IS 12239 (Part2))	Meets the requirement		Yes
<b>b)</b>	Lighting arrangement	Evaluative	As per CMVR	Meets the requirement		Yes

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1	2	3	4	5	6	7
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)	<b>Does not meet the requirement</b>		<b>No</b>
d)	Technical requirements for PTO shaft	Evaluative	Should meet the requirements of IS: 4931 (As amended from time to time)	Meets the requirement		Yes
e)	Dimensions of three-point linkage	Non-Evaluative	Should meet the requirements of IS: 4468 (Part-2) (As amended from time to time)	<b>Does not meet the requirement</b>		<b>No</b>
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	8.83 kmph (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		Not applicable

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1	2	3	4	5	6	7	
<b>16.1.11</b>	<b>Labelling of tractors (Provision of labelling plate):</b>						
	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-left: 20px;"> <tr> <td>MM</td> <td>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	KUBOTA	Yes
MM	YY						
	2) Model	Evaluative		A211N	Yes		
	3) Month & Year of manufacture	Evaluative		05/22	Yes		
	4) Engine number	Evaluative		INA7952	Yes		
	5) Chassis number	Evaluative		KBTBINTNLNTE374 35	Yes		
	6) Maximum PTO power, (kW)	Evaluative		11.5	Yes		
	7) Specific fuel consumption, g/kWh	Evaluative	318	Yes			
<b>16.1.12</b>	<b>Discard limit for:</b>						
<b>(a)</b>	Cylinder bore diameter, (mm)	Evaluative	To be specified by the manufacturer and supported by the printed literature	76.15	76.000 to 76.010	Yes	
<b>(b)</b>	Clearance between piston & cylinder liner at skirt, (mm)	Non-Evaluative		0.30	0.044 to 0.055	Yes	
<b>(c)</b>	Piston diameter at skirt, (mm)	Non-Evaluative		75.86	75.965	Yes	
<b>d)</b>	<b>Ring end gap, (mm):</b>						
	- Top comp. ring.	Evaluative	To be specified by the manufacturer and supported by the printed literature	1.25	0.40 to 0.45	Yes	
	- 2 <sup>nd</sup> comp. ring.			1.25	0.45 to 0.50	Yes	
	- Oil ring.			1.25	0.35 to 0.40	Yes	
<b>(e)</b>	<b>Ring groove clearance, (mm):</b>						
	- Top comp. ring.	Evaluative	To be specified by the manufacturer and supported by the printed literature	--	Taper rings	--	
	- 2 <sup>nd</sup> comp. ring.			0.15	0.103 to 0.110	Yes	
	- Oil ring.			0.15	0.043 to 0.045	Yes	
<b>(f)</b>	<b>Clearance of main bearings, (mm):</b>						
	- Diametrical clearance	Evaluative	To be specified by the manufacturer and supported by the printed literature	0.40	0.077 to 0.088	Yes	
	- Crankshaft end float	Evaluative		0.50	0.20	Yes	
<b>(g)</b>	<b>Clearance of big end bearings, (mm):</b>						
	- Diametrical	Evaluative	-do-	0.40	0.081 to 0.090	Yes	
	- Axial	Evaluative	-do-	0.50	0.25	Yes	
<b>(h)</b>	Clearance between king pin and bush, (mm)	Non-Evaluative	-do-	--	Not provided	--	



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1	2	3	4	5	6	7
(i)	Clearance between centre pin and bush, (mm)	Non-Evaluative	-do-	0.45	0.110 to 0.116	Yes
<b>16.1.13</b>	<b>Literature (Submission to test agency)</b>					
(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
<b>16.1.14</b>	<b>Fitment of Roll Over Protective Structures (ROPS):</b>					
	For tractor having more than 1150 mm rear track width	Evaluative	ROPS should meet the requirement of IS:1182 or OECD code or equivalent International Standard		Not fitted	Not applicable
<b>16.1.15</b>	Standard Accessories	Evaluative	Trailer hitch, front tow hook, linkage drawbar should be provided with tractor		Provided	Yes
<b>16.1.16</b>	Accessories (optional)	Non Evaluative	Ballast weight, if fitted, should meet the requirement of CMVR		Provided	Yes

<b>16.2 CATEGORY OF BREAKDOWNS / DEFECTS (As per clause 5.0 of IS:12207-2019):</b>					
S. No.	Category of breakdowns	Category (Evaluative / Non-Evaluative)	Requirements as per IS: 12207-2019	As observed	Whether meets the Requirements (Yes/No)
1.	Critical	Evaluative	There is no 'critical breakdown' during the course of testing	None	Yes
2.	Major	Evaluative	There are not more than 1 major breakdowns and neither of them is of repetitive nature	None	Yes
3.	Minor	Evaluative	There are not more than 3 minor defects during the test and the frequency of each is not be more than two	None	Yes
4.	Total breakdowns	Evaluative	In no case, the total number of breakdowns should exceed four, that is, (1 major + 3 minor) or 4 minor breakdowns.	None	Yes

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**16.3 Salient Observations:**

**16.3.1 Laboratory tests:**

**16.3.1.1 PTO Performance Test:**

The term “Rated Power” is derived from the expression “Availability of power at rated rpm”. Further the rated rpm is defined as “the engine speed specified by the tractor manufacturer for continuous operation at full load”. The existing vast difference between declared rated power & observed rated power, therefore, needs to be reduced to the reasonable limit.

**16.3.1.2 Drawbar Performance Test:**

- i) Maximum drawbar pull with ballast has been recorded as 7.23 kN, whereas the same was observed as 6.11kN during the first batch testing. The observed value is 18.3% higher than the previous model value. Hence, the second batch model does not meet the qualifying performance criteria in comparison to first batch model as per the requirement laid down in clause 7.6 of IS: 12207 – 2019. This should be looked into for necessary corrective action.
- ii) Maximum drawbar pull without ballast has been recorded as 5.59 kN, whereas the same was observed as 5.19 kN during the first batch testing. The observed value is 7.7% higher than the previous model value. Hence, the second batch model does not meet the qualifying performance criteria in comparison to first batch model as per the requirement laid down in clause 7.6 of IS: 12207 – 2019. This should be looked into for necessary corrective action.
- iii) Maximum transmission oil temperature has been recorded as 89°C, whereas the same was observed as 80°C during the first batch testing. The observed value is 11.3% higher than the previous model value. Hence, the second batch model does not meet the qualifying performance criteria in comparison to first batch model as per the requirement laid down in clause 7.6 of IS: 12207 – 2019. This should be looked into for necessary corrective action.

**16.3.1.3 Power Lift and Hydraulic Performance Test:**

- i) Maximum lifting capacity throughout the range of lift at hitch point has been recorded as 5.49 kN, whereas the same was observed as 6.27 kN during the first batch testing. The observed value is 12.4 % lower than the previous model value. Hence, the second batch model does not meet the qualifying performance criteria in comparison to first batch model as per the requirement laid down in clause 7.6 of IS: 12207 – 2019. This should be looked into for necessary corrective action.
- ii) Maximum lifting capacity throughout the range of lift with the standard frame has been recorded as 4.09 kN, whereas the same was observed as 4.64 kN during the first batch testing. The observed value is 11.9 % lower than the previous model value. Hence, the second batch model does not meet the qualifying performance criteria in comparison to first batch model as per the requirement laid down in clause 7.6 of IS: 12207 – 2019. This should be looked into for necessary corrective action.

**16.3.1.4 Mechanical Vibration:**

The amplitude of mechanical vibration on various assemblies marked as (\*) in Chapter – 10 of this test report is on higher side. This calls for dampening down of vibrations especially on steering wheel to improve the operational comfort and service life of components.

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**16.3.1.5 Drive wheel rims:**

- i) The sizes of drive wheel rims were found to be “W6 x 18”.
- ii) As per Rule 95 A (2) of CMVR, 1989 read in conjunction with IS: 13154- 2015 provides for “The Agricultural Tractor manufacturer shall select ONLY THAT RIM SIZE AS RECOMMENDED BY THE TYRE MANUFACTURER.” In this case, the rim size RECOMMENDED by IS: 13154-2015, by ITTAC manual is “W7”. An immediate corrective action is required to be taken even in stand point of view with compliance to CMVR, 1989.

**16.3.1.6 Operator controls- Symbols / Colour Codes:**

- i) Symbol of rockshaft (basic, up and down) has not been provided as per IS: 6283 (Part-1) – 2006 (Reaffirmed 2019).
- ii) Colour codes for engine revolution gauge, fuel level gauge and water temperature gauge are not provided as per IS: 6283 (Part-2) – 2007 (Reaffirmed 2019).

All of the above should be looked into for necessary corrective action.

**16.4 Maintenance / Service Problems:**

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

**16.5 Recommendation with regard to safety on tractor:**

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

- i) The hand accelerator lever, when moved away from the operator (i.e., forward) decreases the engine speed, which does not meet the requirement as laid down in Table – 1 of IS: 8133-2021.
- ii) Identification of hand control by colour coding of engine speed control, transmission control, parking brake and differential lock has not been provided as per the requirement as laid down in Table – 5 of IS: 8133-2021.
- iii) Hand holds for easy mounting and dismounting has not been provided as per requirement of IS: 12239 (Part -1) 2018.
- iv) Vertical retainer has not been provided at clutch pedal as per requirement of IS: 12239 (Part -1) 2018.
- v) Spark arrester has not been provided in the exhaust system as per IS: 12239 (Part -1) 2018.
- vi) Shield for PTO has not been provided as per IS:12239(Part-2)-1999.
- vii) Working clearance around the PTO engaging lever & range selection gear lever was measured 40 mm against the minimum requirement of 70 mm as per IS:12239(Part-2)-1999.

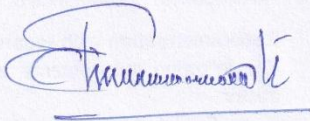
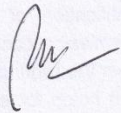
The observations at S. No. (iii), (v) & (vi) were also made in the previous test report No. T-1138/1664/2018 (March, 2018) and no improvement have been made as regards to its conformity so far. All of the above should be looked into for necessary corrective action.

T- 1730/2261/2023	<b>KUBOTA, A211N TRACTOR</b> <b>- Commercial (Second Batch Test)</b>
	<b>THIS TEST REPORT IS VALID UPTO 31/05/2030</b>

**16.6 Adequacy of Literature supplied with machine:**

- 16.6.1** The following literature was supplied with test sample for reference during the test.
- a) Operator's Manual for Kubota, A211N, A211N-Optional, B2441, B2741 and B2741S tractor models.
  - b) Workshop Manual for Kubota, A211N, A211N-Optional, B2441, B2741 and B2741S tractor models.
  - c) Illustrated Parts List for Kubota, A211N tractor model.
- 16.6.2** 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) Service schedule and grade of steering oil.
  - ii) Safe hitch height while using trailer.
  - iii) Recommended tyre inflation pressure for road & field work not mentioned clearly.

**TESTING AUTHORITY:**

<p><b>C.V. CHIMOTE</b> TEST ENGINEER</p>	
<p><b>A. K. UPADHYAY</b> DIRECTOR (I/c)</p>	

Test report is compiled by: **C. K. Tijare**, Agricultural Engineer

**17. APPLICANT'S COMMENTS**

Para no.	Our reference	Comments
		Nil

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	<b>THIS TEST REPORT IS VALID UPTO 31/05/2030</b>

**ANNEXURE-I**

**BRIEF SPECIFICATION OF TRAILER DECLARED AS MATCHING TRAILER BY APPLICANT**

S. No.	Item	Single axle trailer
1.	Make	SAI FABS, Bangalore
2.	Model	Not available
3.	Type of trailer	Semi - Trailer
4.	Number of axle(s)	Single
5.	Un laden Weight of Trailer, kg	550
7.	<b>Overall dimensions of Trailer, (mm):</b>	
	Overall Length	3165
	Overall Width	1690
	Overall Height	1100
	Wheel Base	Not applicable
	Wheel Track	1520
8.	<b>Dimension of fitted Platform, (mm):</b>	
	Length	2305
	Width	1630
	Height from ground	530
9.	Brakes of Trailer	Not Provided

**ANNEXURE - II**

**TRACTOR RUN HOURS DURING TEST**

A.	LABORATORY AND TRACK TESTS:	HOURS
1.	Running-in	50.0
2.	PTO performance test	13.5
3.	Power lift and hydraulic pump performance test	1.3
4.	Drawbar performance test	16.1
5.	Brake test	1.3
6.	Noise measurement	2.5
7.	Mechanical vibration test	0.8
8.	Nominal speed test	1.6
<b>B.</b>	<b>HAULAGE TEST:</b>	9.2
<b>C.</b>	Miscellaneous test and other run hours including idle run, transportation, trials and preparation for test	7.4
<b>TOTAL:</b>		103.7