

व्यावसायिक - प्रशासनिक विस्तार परीक्षण रिपोर्ट
COMMERCIAL – ADMINISTRATIVE
EXTENSION TEST REPORT

संख्या/No. : T-1897/2428/2024

माह/Month : October, 2024

Application Reference No. 28/2023-24/106



Make of Agricultural Tractor : Escorts Kubota Limited
Model : 6060 F3 (BRAND NAME – FARMTRAC)
Manufactured by : M/s. Escorts Kubota Limited,
15/5, Corporate Centre,
Mathura Road, Faridabad- 121003, Haryana, India



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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T-1897/2428/2024	Escorts Kubota Limited, 6060 F3 (BRAND NAME - FARMTRAC) – Commercial (Administrative Extension)
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IMPORTANT INFORMATION

This Test Report is an Administrative Extension of its Base Model “Escorts Kubota Limited, 6055 F32 (BRAND NAME - FARMTRAC)” which had undergone Initial Commercial Test at this Institute, bearing test report No T-1800/2331/2023 released in November, 2023.

The firm has made changes in the model name of the said tractor as “Escorts Kubota Limited, 6060 F3 (BRAND NAME - FARMTRAC)” and requested vide online application No. 28/2023-24/106 dated 05.02.2024 for Administrative Extension test, which was allowed vide clause no. 3.2.4 of IS: 12207 - 2022.

The firm has submitted an undertaking dated 10.08.2024 stating that they will discontinue availing subsidy or any other financial benefits sponsored by Central/ State Government on the base model i.e. “Escorts Kubota Limited, 6055 F32 (BRAND NAME - FARMTRAC)” with effect from 31.08.2024 as the model name is subject to change.

Month: October	Test Report No.: T-1897/2428/2024	Year: 2024
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CENTRAL FARM MACHINERY TRAINING AND TESTING INSTITUTE – BUDNI	Page 2 of 13
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T-1897/2428/2024	Escorts Kubota Limited, 6060 F3 (BRAND NAME - FARMTRAC) – Commercial (Administrative Extension)
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1. SCOPE OF TEST

The “**Escorts Kubota Limited, 6055 F32 (BRAND NAME – FARMTRAC)**” tractor model had undergone Initial Commercial Test at this Institute, bearing test report No. **T-1800/2331/2023** released in **November, 2023**. Now, the firm has made the following changes in the model name of the said tractor and requested vide application No. 28/2023-24/106 dated 05.02.2024 for **Administrative Extension**, which was allowed vide clause no. 3.2.4 of IS: 12207 – 2022.

Parameters	Previous Sample	Present Sample
Make, Model of tractor	Escorts Kubota Limited, 6055 F32 (BRAND NAME – FARMTRAC)	Escorts Kubota Limited, 6060 F3 (BRAND NAME – FARMTRAC)

In view of the above mentioned change which does not affect the performance of the tractor, checking of specification was only conducted and no performance test on the test sample was conducted thereby.

The applicant vide letter number EKL/Hom/R-243 dated 11.10.2024 has informed that the last cut-off chassis number and engine serial number of the base model tractor i.e. “Escorts Kubota Limited, 6055 F32 (BRAND NAME – FARMTRAC)” generated on production line are as under:

Chassis Number	Engine Serial Number
T052662469JM	E2643918

- | | | | |
|-----|---|-----|---|
| [C] | Tractor manufacturer’s name and address | : | M/s. Escorts Kubota Limited,
15/5, Corporate Centre, Mathura Road,
Faridabad- 121003, Haryana, India |
| [D] | Location of tractor assembly | i) | Escorts Kubota Limited,
Plot No. 2 & 3, Sector – 13
Faridabad – 121 007, Haryana |
| | | ii) | Escorts Kubota Limited,
18/4, Mathura Road,
Faridabad-121007, Haryana, India |
| [C] | Submitted for test by (Applicant) | : | M/s. Escorts Kubota Limited,
Knowledge Management Centre, 15/5, Mathura
Road, Faridabad- 121003, Haryana, India |
| [C] | Selected for test by | : | The Ministry vide OM No. 13-17/2021 - M&T (I&P)
dated 28.07.2022, has allowed the applicant to
submit the test sample directly to the Institute
without requiring any random selection for Initial
Commercial Testing. Thus, the applicant directly
submitted the test sample to the Institute for test. |

2. ESSENTIAL TESTS

2.1 BRIEF SPECIFICATIONS OF TRACTOR

The following are the brief specifications of the tractor. However, for detail specifications, the test report No. **T-1800/2331/2023** released in **November, 2023** should be referred.

2.1.1 Identification:

2.1.1.1 Denomination

- | | | | |
|-----|-----------------------------|---|---|
| [C] | Make of tractor | : | Escorts Kubota Limited |
| [C] | Model (trade name) | : | 6060 F3 (BRAND NAME - FARMTRAC) |
| [C] | Type | : | Rear Wheel Drive, Standard Agricultural Tractor |
| [C] | Month & year of manufacture | : | 11/22 |
| [D] | Country of origin | : | India |

2.1.1.2 Numbers:

- | | | | |
|-----|---|---|--------------|
| [D] | 1 st Serial No. of prototype | : | T052618046HL |
| [C] | Serial No. | : | T052618046HL |

T-1897/2428/2024	Escorts Kubota Limited, 6060 F3 (BRAND NAME - FARMTRAC) – Commercial (Administrative Extension)
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2.1.6 Tyres and track width specifications*:

Tyres		Front	Rear
-Make		MRF	MRF
- Dimensions		7.50-16	16.9-28
- Ply rating		8	12
- Type		Pneumatic, ribbed	Pneumatic, traction
- Maximum load (tyre manufacturer's)	kN	8.58	Not available
- Maximum load (tractor manufacturer's)	kN	6.47	18.14
- Inflation pressure (tyre manufacturer's)	kPa	370	Not available
- Dynamic radius index	mm	---	670
- Chosen track width	mm	1390	1460

*Data reported from the Initial Commercial Test Report vide No. T-1800/2331/2023 (November, 2023).

2.1.7 Labelling of tractor [Refer IS: 10273-1987 (Reaffirmed 2019)]:

Labelling plate is riveted on LHS fender and provides the following information:

Name of Manufacturer	Escorts Kubota Limited, Agri Machinery, Faridabad
Make	ESCORTS KUBOTA LIMITED (FORMERLY ESCORTS LIMITED)
Model	6060 F3
Month & Year of manufacture	11/22
Engine Serial Number	E2607331
Chassis Serial Number	T052618046HL
Maximum PTO Power, kW(hp)	40.0
Specific fuel consumption, g/kWh (g/hph)	250

3. SUMMARY OF OBSERVATIONS, COMMENTS & RECOMMENDATIONS

3.1 The performance results have been reproduced from ICT Test Report of “Escorts Kubota Limited, 6055 F32 (BRAND NAME – FARMTRAC)” tractor model bearing test report No. T-1800/2331/2023 released in November, 2023. On the basis of test conducted the performance results have been summarized as evaluative (mandatory) / Non-evaluative (Non-mandatory) parameters applicable for Qualifying Minimum Performance criteria as per Clause-4 (Table-1) of IS: 12207-2022 for acceptance of the tractor for the purpose of subsidies/NABARD financing are summarized as under:

Sl. No.	Characteristic	Category (Evaluative / Non Evaluative)	Requirements as per IS: 12207-2022	Values declared by the applicant/ (D) Requirement (R)	As observed	Whether meets the requirements (Yes/No)
1	2	3	4	5	6	7
	MANDATORY TESTS: (As per Ministry's Office Memorandum No. 13-17/2021-M&T (I&P) dated 28th of July, 2022). (In the ensuing table, 'D' stands for applicant's declaration, whereas 'R' stands for requirement as per BIS test code)					
3.1.1	PTO Performance:					
a)	Maximum power under 2 h test, (kW) (Natural ambient condition)	Evaluative	Declared value to be achieved with a tolerance of: ±5% for PTO power and or engine power >26 kW. ±10% for PTO power and or engine ≤ 26 kW.	40.0 (D)	42.0	Yes
b)	Power at rated engine speed, (kW)	Non Evaluative	-do-	40.0 (D)	42.0	Yes

T-1897/2428/2024	Escorts Kubota Limited, 6060 F3 (BRAND NAME - FARMTRAC) – Commercial (Administrative Extension)
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1	2	3	4	5	6	7
c)	Specific fuel consumption corresponding to maximum power, (g/kWh)	Evaluative	Should not be more than 10% of declared value.	250 (D)	249	Yes
d)	Maximum equivalent crankshaft torque, (Nm)	Non Evaluative	± 8%	235 (D)	243.0	Yes
e)	Back-up torque, percent	Evaluative	Should be min. 12%	12 (D) 12	21.3	Yes
f)	Maximum operating temperature, (°C):					
	1) Engine oil	Evaluative	The declared value should not exceed the Max value specified by the oil company and the observed value under natural ambient/high ambient condition should not exceed the declaration.	130 (D)	117	Yes
	2) Coolant	Evaluative	Observed value should not exceed the declared value or boiling point of coolant at radiator cap pressure whichever is lower. The boiling point of the coolant at radiator pressure shall be provided by the applicant.	118 (D)	101	Yes
g)	Engine oil consumption, (g/kWh)	Evaluative	Not exceeding 1% of SFC at Max power under natural ambient condition. The value would be based on the test conducted under natural ambient condition	2.49 (R) Maximum	0.46	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). Max Smoke level shall be reported out of 6 readings tested as per IS 12062 and observed value should be well within the required limits.	3.25 per meter (R) Maximum	0.05	Yes
3.1.2	Drawbar performance:					
a)	Max. drawbar pull with ballast corresponding to 15 percent wheel slip, (kN)	Non Evaluative	Minimum 70% of static mass of tractor with ballast.	**	**	**
b)	Max. drawbar pull with standard ballast corresponding to 15 percent wheel slip, (kN)	Evaluative	In case of tractors having total static mass ≥ 1500 kg, Min 70% of static mass of tractor without ballast or with standard ballast, as the case may be. In case of light weight tractors having ≤ 1500 kg total static mass of tractor, Min. 65% of static mass of tractor without ballast or with standard ballast, as the case may be.	17.30 (D) 17.44 (R) Minimum	20.84	Yes

T-1897/2428/2024	Escorts Kubota Limited, 6060 F3 (BRAND NAME - FARMTRAC) – Commercial (Administrative Extension)
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1	2	3	4	5	6	7
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.	32.0 (D) 33.6 (R) Minimum	37.5	Yes
d)	Maximum transmission oil temperature, (°C)	Evaluative	The declared value should not exceed the recommendation by the oil manufacturer. The observed value should not exceed the declared value throughout the drawbar test.	130 (D)	111	Yes
<p>**Applicant vide letter no. EKL/Hom/P-041 dated 30th Sept,2023 has requested not to conduct the ballasted drawbar performance test & ten-hour drawbar test during Initial Commercial testing, which was allowed as per the additional guidelines for testing of tractors as per new regime of testing of tractors vide an OM No. 13-32/2023-M&T(I&P) (FTS-125476) dated 16.05.2023. Accordingly, drawbar performance test under standard ballast condition was conducted only.</p>						
3.1.3 Power lift and hydraulic pump performance:						
a)	Maximum lifting capacity throughout the range of lift, (kN):					
	1) At hitch points	Evaluative	Should not be less than 90% of declared value.	18.20 (D) 16.38 (R) Minimum	21.61	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.	11.80 (D) 9.89 (R) Minimum	18.01	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	25	Yes
3.1.4 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	6.63	Yes
	2) Hot brake	Evaluative	10	10	6.86	Yes
b)	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
3.1.5	OPTIONAL TESTS: As the applicant has not applied for any optional tests, therefore no optional tests was conducted.					

T-1897/2428/2024	Escorts Kubota Limited, 6060 F3 (BRAND NAME - FARMTRAC) – Commercial (Administrative Extension)
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1	2	3	4	5	6	7		
3.1.6	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	Conforms		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	Non 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 17231: 2019 (As amended from time to time)	Does not meet the requirement		No		
f)	Specifications of linkage drawbar	Non Evaluative	Should meet the requirements of IS: 12953 (As amended from time to time)	Conforms		Yes		
g)	Swinging drawbar (wherever fitted)	Non Evaluative	Should meet the requirement of IS: 12362 (Part 3) (As amended from time to time)	Not provided		Not applicable		
h)	Audible warning signal on tractor	Evaluative	If tractor travel speed in reverse gear exceeds 20 kmph, an audible warning signal on tractor shall get activated. A sticker to the effect that "operating the tractor beyond 20 kmph speed in reverse gear is not safe" should be prominently displayed.	Not fitted		Not applicable		
3.1.7	Labelling of tractors (Provision of labeling plate):							
	1) Make	Evaluative	Should conform to the requirements of CMVR along-with declared value of PTO in kW, Specific fuel consumption (SFC) corresponding to maximum power in g/kWh and year of manufacture in numerical form <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>MM</td><td>YY</td></tr></table> Digit 01-12 in box No. 1 for MM will represent the month and next two digit in the box No. 2 for YY will represent the year of manufacturing.	MM	YY	ESCORTS KUBOTA LIMITED (FORMERLY ESCORTS LIMITED)		Yes
MM	YY							
	2) Model	Evaluative		6060 F3		Yes		
	3) Month & Year of manufacture	Evaluative		11/22		Yes		
	4) Engine number	Evaluative		E2607331		Yes		
	5) Chassis number	Evaluative		T052618046HL		Yes		
	6) Maximum PTO power, (kW)	Evaluative		40.0		Yes		
	7) Specific fuel consumption, (g/kWh)	Evaluative	250		Yes			
3.1.8	Literature (Submission to test agency):							
(a)	Operator manual	Evaluative	The printed literature in booklet form should be provided as per IS 8132 and should submit along with the test sample.	Provided		Yes		
(b)	Parts Catalogue	Evaluative		Provided		Yes		
(c)	Workshop/ Service manual	Evaluative		Provided		Yes		

1	2	3	4	5	6
3.1.9	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.	Not fitted	Not applicable
3.1.10	Standard Accessories	Evaluative	Trailer hitch, front tow hook, linkage drawbar should be provided with tractor	Provided	Yes
3.1.11	Accessories (optional)	Non Evaluative	Ballast weight, if fitted, should meet the requirement of CMVR	Provided	Yes
3.2	CATEGORY OF BREAKDOWNS / DEFECTS (As per clause 5.0 of IS:12207-2022):				
S. No.	Category of break-downs	Category (Evaluative / Non Evaluative)	Requirements as per IS: 12207-2022	As observed	Whether meets the Requirement (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 2 major breakdowns and neither of them should be of repetitive nature.	None	Yes
3.	Minor	Evaluative	There are not more than 5 minor defects during the test and neither of them should of repetitive nature.	One (Mn-17)	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.	One	Yes



Remark:

- All performance results as mentioned in Clause No. 3 (except Clause No. 3.1.7) are taken from base model tractor i.e. Escorts Kubota Limited, 6055 F32 (BRAND NAME – FARMTRAC) bearing test report no. T-1800/2331/2023, November 2023.
- All the parameter of the labeling plate highlighted in bold in Clause No. 3.1.7 belong to the tractor under administrative extension.

3.3 Salient Observations:

This tractor model meets the evaluative requirement of IS: 12207-2022.

**TEST CARRIED OUT AT C.F.M.T. & T.I., BUDNI (M.P.), INDIA
TESTING AUTHORITY**

P. LODH SENIOR AGRICULTURAL ENGINEER	
Dr. P. P. RAO DIRECTOR	 30/10/2024

Draft Test Report compiled by P. Lodh, Senior Agricultural Engineer

4. APPLICANT'S COMMENTS

Para No.	Our reference	Applicant's comments
		None