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

संख्या/No. : T-1703/2234/2023 माह/Month : January, 2023

(यह परीक्षण रिपोर्ट 31/01/2028 तक वैध है / THIS TEST REPORT IS VALID UPTO 31/01/2028) [Application Reference No. 28/2021-22/119]



## ESCORTS KUBOTA LIMITED, 50 F5 (BRAND NAME – FARMTRAC) 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) 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

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T-1703/2234/2023			ITED, 50 F5 (BRAND NAME – FARMTRAC) DR - COMMERCIAL (Initial)
	THIS TES	T RE	PORT IS VALID UPTO: 31/01/2028
<b>Manufacturer</b> Location of mar (apa)	nufacturing plants	:	<ul> <li>M/s. Escorts Kubota Limited, Plot No. 2 &amp; 3, Sector - 13,</li> <li>FARIDABAD - 121 007 (Haryana), India</li> <li>i) M/s. Escorts Kubota Limited, Plot No. 2 &amp; 3, Sector - 13, FARIDABAD - 121 007 (Haryana)</li> <li>ii) M/s. Escorts Kubota India Private Limited, Plot No. 18/4, Mathura Road, FARIDABAD - 121 007 (Haryana)</li> </ul>
Test requested	by	:	M/s Escorts Kubota Limited, Knowledge Management Center, 15/5, Mathura Road, FARIDABAD – 121 003 (Haryana)
Selected for tes Place of running Duration of said - Engine - Transmission <b>Method of Sele</b>	g-in Trunning-in, (h):	: : : : : : : : : : : : : : : : : : : :	Testing Authority At testing institute 10 15 The test sample was selected randomly out of five tractors from the production line by the representative of testing authority through online mode. Tractors chassis serial number made available for random selection i) T054000353AL ii) T054000355AL iii) T054000355AL iii) T054000356AL
	1. SPEC	IFIC	v) T054000357AL
1.1 Tractor: Make Model Brand name Variant, if any Type Year of manufac Chassis number Country of origin		: Es : 50 : FA : No : Fo Ag : 04 : TO	corts Kubota Limited F5 RMTRAC one ur wheeled, Rear wheel driven, Standard pricultural Tractor. /22 54000354AL dia
1.2 Engine: Manufacturer add Make Model Type Serial number Year of manufact		Pla FA Es : FN : Fo dir : E2	s. Escorts Kubota Limited, ot No. 2 & 3, Sector - 13, RIDABAD – 121 007 (Haryana) corts Kubota Limited I3.351A-3A ur stroke, naturally aspirated, liquid cooled, ect injection, diesel engine. 580875 ot available
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#### ESCORTS KUBOTA LIMITED, 50 F5 (BRAND NAME – FARMTRAC) TRACTOR - COMMERCIAL (Initial) THIS TEST REPORT IS VALID UPTO: 31/01/2028

#### 17. ADJUSTMENTS, DEFECTS, BREAKDOWNS AND REPAIRS

SI. No.	Adjustments/Defects/Breakdowns and Repairs	Tractor run hours
1	2	3
	None	

#### **18. SUMMARY OF OBSERVATIONS, COMMENTS & RECOMMENDATIONS**

**18.1** 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: 12207-2019** 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 require- ments (Yes/No)
1	2	3	4	5	6	7
18.1.1	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 $\leq 26$ kW.	32.3 (D)	31.7	Yes
b)	Power at rated engine speed, (kW)	Non- Evaluative	-do-	32.3 (D)	31.7	Yes
c)	Specific fuel consumption corresponding to maximum power, (g/kWh)	Evaluative	+ 10% max.	263 (D)	253	Yes
d)	Maximum equivalent crankshaft torque, (Nm)	Non- Evaluative	± 8%	228 (D)	225.8	Yes
e)	Back-up torque, percent	Evaluative	12 percent	12% (D) 12 % (R) Minimum	38.1	Yes
f)	Maximum operating	temperature	, ( <sup>o</sup> 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.	130 (D)	109	Yes

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1	2	3	4	5	6	7
	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)	101	Yes
g)	Engine oil consumption, (g/kWh)	Evaluative	Not exceeding 1% of SFC at max. power under High ambient conditions.	2.53 Maximum (R)	0.43	Yes
h)	Smoke level, m <sup>-1</sup>	Evaluative	Maximum light absorption coefficient of 3.25 per meter or equivalent BOSCH No. 5.2 or 75 Hatridge value ( <b>As per</b> <b>CMVR</b> ).	3.25 Maximum (R)	0.10	Yes
18.1.2	Drawbar performa	ance:				
a)	Max. drawbar pull with ballasted corresponding to 15 percent wheel slip, (kN)	Non- Evaluative	Minimum 70% of static mass of tractor with ballast.	20.20 (D) 19.63 (R) Minimum	23.76	Yes
b)	Max. drawbar pull without ballasted 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.	15.58 (D) 14.96 (R) Minimum	18.07	Yes
c)	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.	25.84 (D) 25.4 (R) Minimum	28.1	Yes
d)	For tractors fitted with air conditioned /heated cabin: Maximum drawba power withou ballast, or with standard ballast as the case may be, kW	r t S	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 applic- able	Not appl- icable
e)	Maximum transmission oil temperature (°C)	Evaluative	The declared value should not exceed the maximum value specified by oil company	130 (D)	88	Yes

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4		2	2	4	E	<b>^</b>	-
1	De	2	3	4	5	6	7
18.1.3		wer lift and hyd					
a)	ivia	At hitch	Evaluative	nout the range of lift, (kN): Tolerance of ± 10%	13.80	13.69	Yes
	1)	points	Evaluative	Tolerance of $\pm 10\%$		13.69	165
		With the	Evaluative	The lift capacity should at	(D) 7.60	11.56	Yes
		standard		least be 24 kg/PTO kW. and	(D)	11.50	163
	2)	frame		it should be 21.5 kg/engine	7.46		
	2)	Itallie		kW where the tractor is not	(R)		
				provided with a PTO shaft.	Minimum		
b)	Ma	ximum drop in	Non-	The observed value should	50 (D)	8	Yes
5)		height of the	Evaluative	not exceed 50 mm	Maximum	0	100
		nt of application			Maximan		
		the force after					
	eac	h 5 minutes					
	inte	erval for a total					
		ation of 30					
		utes, (mm)					
18.1.4		ake performanc					
a)				a force, equal to or less that	an 600 N o	n brake	pedal
		nout ballast, (m):		10			
	1)	Cold brake	Evaluative	10	10 (R)	7.71	Yes
	2)	Hot brake	Evaluative	10	10 (R)	7.85	Yes
b)		kimum force	Evaluative	600	600 (R)	228	Yes
	exe bra	rted on the ke pedal to			Maximum	to	
		ieve pedal to				270	
		eleration of 2.5					
	m/s	<sup>2</sup> (N)					
c)		ether parking	Evaluative	Yes / No	Yes	Yes	Yes
		ke is effective at					
		prce of 600 N at					
	foot pedal (s) or 400 N at hand						
		er, N					
18.1.5	No	ise measureme	nt:				
a)	Ма	ximum	Evaluative	As per CMVR	88 (R)	83	Yes
	am	bient noise					
	em	itted by the					
		ctor dB(A)	-				
b)		ximum noise	Evaluative	As per CMVR	96 (R)	94	Yes
		operator's ear					
40.4.0		el dB(A)					
18.1.6	<b>Am</b> 1)	plitude of mech			100/D)	100	N-
	1) 2)	Left foot rest	Non- Evaluative	100 microns (max)	100(R)	120	No Yes
	2) 3)	Right foot rest				89	
	3)	Seat (with				103	No
	4)	driver seated)				204	N-
	4)	Steering				281	No
18.1.7	-: ۸	wheel cleaner Oil Pul					I
10.1./		ximum air	Evaluative	0.25% (Maximum)	0.25	0.16	Yes
		aner oil pull		0.20% (waximum)	0.25 (D)	0.10	100
		arier oli puli er, (%)			(D) Maximum		
	UVE	51, (70)					

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1		2	3	4	5	6	7
18.1.8	Ha	ulage requirem	-		-	-	-
a)		oss mass of the					
,		o wheels	Non-	As specified by the	5.0 (D)	5.0	Yes
	Γ οι	ur wheels	Evaluative Non-	Manufacturer As specified by the	6 0 (D)	6.0	Yes
	FUL		Evaluative	manufacturer	6.0 (D)	0.0	163
b)	Dis	tance travelled /		onsumption, (km/l):			
2)		o wheels	Non-	As specified by the	8.00 to	5.17	No
			Evaluative	manufacturer	9.00 (D)		
	Fou	ır wheels	Non- Evaluative	As specified by the manufacturer	8.00 to 9.00 (D)	5.37 to 5.59	No
c)	Fue	el consumption (	ml/km/tonne)				
		o wheels	Non- Evaluative	As specified by the manufacturer	30.00 to 35.00 (D)	38.68	Νο
		ır wheels	Non- Evaluative	As specified by the manufacturer	30.00 to 35.00 (D)	29.82 to 31.03	Νο
18.1.9	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	There should be no ingress	No ingress of mud and / or	Yes
	1)	Clutch assembly	-do-	assembly given in column-2. If tractor does not meet the	of water and/or	water was	
	2)	Brake housings	-do-	requirements of wetland cultivation, it may be	mud (R)	observe d	
	3)	Front axle hubs	-do-	recommended for dry land operation only.			
	4)	Engine oil	-do-				
	5)	Transmission oil	-do-				
18.1.10	Saf	ety features:					
a)	Gu	ards against ving and hot	Evaluative	Belt drives, pulleys, silencer pipes (As per IS 12239 (Part2)		Meets the require- ment	Yes
b)		hting angement	Evaluative	As per CMVR		Meets the require- ment	Yes
c)	requ	rear track	Non- Evaluative	Should meet the requirement 12343 (As amended from time	Does not meet the require- ment	No	
d)	Teo req	chnical uirements for O shaft	Evaluative	Should meet the requirement 4931 (As amended from time to		Meets the require- ment	Yes
e)	Din thre	nensions of	Non- Evaluative	Should meet the requirement 4468 (Part-I) (As amended from time)		Does not meet the require- ment	No

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4		2	2	4		5	6	7
1	0	2	<b>3</b> Evaluative			•	6	7
f)		ecifications of age drawbar	Evaluative	Should meet the should meet the should meet the should be should b			Meets the require- ment	Yes
g)		inging drawbar herever fitted)	Evaluative	Should meet the requirement of IS: 12362 (Part 3) (As amended from time to time)			Not Provided	
h)	1)	Maximum travelling speed at rated engine speed in reverse gears, kmph	Evaluative	Should not exce			(10.84 kmph) Meets the require- ment	
	2)	Audible warning signal on tractor	Evaluative	As soon as the t gear reaches to warning signal or The safety aspect shuttle technolo- operation and m ensure the trai operator before th	o 20 kmph, n tractor shall cts about the gy shall be nanufacturer ning on this	an audible be activated. operation of brought in /dealer shall aspect to		Not appli c- able
18.1.11	Lal	celling of tracto	rs (Provisio	n of labelling pl	late):			
	1)	Make	Evaluative	Should conforr		ESCORT	S LIMITED	Yes
	2)	Model	Evaluative		of CMVR	50	F5	Yes
	3)	Month & Year of manufacture	Evaluative	along with max Power in kW a	nd year of	04	22	Yes
	4)	Engine number	Evaluative	manufacture in form.		E258	0875	Yes
	5)	Chassis number	Evaluative	MM Digit 01 – 12 in		T05400	0354AL	Yes
	6)	Maximum PTO power, kW	Evaluative	for MM will rep months and nex in box No.2 for	t two digits or YY will	32	3	Yes
	7)	Specific fuel consumption g/kWh	Evaluative	represent the manufacturing.	year of	26	3	Yes
18.1.12	Dis	card limit for:						
a)		inder bore meter, (mm)	Evaluative	To be	108 (D		106.656 to 106.680	Yes
b)	bet cyli	arance ween piston & nder liner at rt, (mm)	Non- Evaluative	specified by the manufacturer and	0.450 (D		0.070 to 0.078	Yes
c)	Pis	ton diameter at skirt, (mm)	Non- Evaluative	supported by the printed literature		he ring clearance discard	106.596 to 106.608	Yes
	Rir	ig end gap (mm	):		•			
d)	-	Top comp. ring		-do-	4.0	(D)	0.30 to 0.35	Yes
	-	2 <sup>nd</sup> comp. ring		-do-	4.0	(D)	0.70 to 0.75	Yes
	-	Oil ring		-do-	4.0	(D)	0.50 to 0.60	Yes

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		2	2		F	<b>^</b>	
1	D:-	_	3	4	5	6	7
	RII	g groove cleara Top comp. ring		-do-	2.0 (D)	0.136 to	Yes
e)	-		Evaluative	-00-		0.13810	
	-	2 <sup>nd</sup> comp. ring		-do-	2.0 (D)	0.083 to 0.101	Yes
	-	Oil ring		-do-	2.0 (D)	0.058 to 0.061	Yes
f)	Cle	arance of main	bearings (m	nm):		0.001	
-,	-	Diametrical	Evaluative	-do-	1.00 (D)	0.015 to	Yes
		clearance				0.047	
	-	Crankshaft end float	Evaluative		1.20 (D)	0.07	Yes
g)	Cle	arance of big e	nd bearings	, (mm):			
	-	Diametrical	Evaluative	-do-	1.00 (D)	0.021 to 0.035	Yes
	-	Axial	Evaluative	-do-	1.20 (D)	0.25	Yes
h)	Cle	arance	Non	-do-	0.40 (D)	0.122 to	Yes
		ween king pin bush, (mm)	Evaluative			0.258	
i)		arance	Non	-do-	0.50 (D)	0.212 to	Yes
-		ween centre	Evaluative			0.303	
	pin						
	(mi						
18.1.13		erature (Submis			Dreviele el/	<b>B</b>	
a)		erator manual	Evaluative	Literature should meet	Provided/ Not Provided	Provided	Yes
b)	Pai	rts Catalogue	Evaluative	the requirement of Indian	Provided/ Not Provided	Provided	Yes
c)		orkshop/ rvice manual	Evaluative	Standard: 8132	Provided/ Not Provided	Provided	Yes
18.1.14		ment of Roll Ov	er Protective	e Structures (R(	OPS):		
		tractor having		ROPS should	Not provided	Not fitted	Not
		re than 1150 n rear track		meet the requirement of IS:1182 or OECD code or equivalent International Standard	(D)		appli- cable
18.1.15	Sta	indard	Evaluative	Trailer hitch,	Provided	Provided	Yes
	Aco	cessories		front tow	(D)		
				hook, linkage			
				drawbar			
				should be			
				provided with			
				tractor			
18.1.16	Aco	cessories	Non	Ballast	Not applicable	Not fitted	Not
		tional)	Evaluative	weight, if	(D)		appli-
	<b>х г</b>	,	_	fitted, should			cable
				meet the			
				requirement			
				of CMVR			
							1

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18.2	CATEGORY OF B	REAKDOWN	S / DEFECTS (As per claus	se 5.0 of IS:12	2207-2019):
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 2 major breakdowns and neither of them is of repetitive nature	None	Yes
3.	Minor	Evaluative	Not more than 5 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 four, that is, (2 major + 3 minor) or 5 minor breakdowns.	None	Yes

#### 18.3 Salient Observations:

#### 18.3.1 Laboratory tests:

#### 18.3.1.1 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies marked as (\*) in Chapter-9 of this test report are on higher side, especially at LHS foot rest, steering control wheel and operators seat and does not meet the non-evaluative requirements of IS: 12207 - 2019. This calls for dampening down of vibrations to improve operational comfort and service life of components.

#### 18.3.1.2 Drive wheel rims:

- i) The sizes of Drive Wheel Rims were found to be "W12 x 16".
- 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 "W13". An immediate corrective action is required to be taken even in stand point of view with compliance to CMVR, 1989.

#### 18.3.1.3 Operator seat: Meet the requirements of IS: 12343- 2021, except the following:-

- i) Length of seat is 355 mm against the requirement of 260±50 mm.
- ii) Width of seat is 420 mm against the requirement of 450 mm minimum.
- iii) The provision for adjustment of driver's mass is 50 to 120 kg against the requirement of 40 to 100 kg.
- iv) Vertical distance of centre of steering control wheel from seat index point (SIP) is 200 mm, against the requirement of 265 to 385 mm.
- v) Vertical distance of centre of foot rest from seat index point (SIP) is 620 mm, against the requirement of 450 to 520 mm.

This should be looked into for necessary corrective action.

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#### 18.3.1.4 Specifications of three point linkage:

The dimensions viz. diameter of hitch pin hole & width of ball of upper hitch points, diameter of hitch pin hole & width of ball of lower hitch points, lateral distance from lower hitch point to centre line of tractor and transport height does not meet the requirements of IS:4468 (Part-I) – 1997. This should be looked into for necessary corrective action.

#### 18.3.2 Haulage Test:

- i) The distance covered per litre of fuel consumption in two wheel & four wheel trailer has been observed as 5.17 & 5.37 to 5.59 km/l, respectively against the declaration of 8.00 to 9.00 km/l. It may be looked into for necessary corrective action
- ii) The fuel consumption (ml/km/tonne) in two wheel & four wheel trailer has been observed as 38.68 & 29.82 to 31.03 ml/km/tonne, respectively against the declaration of 30.00 to 35.00 ml/km/tonne. It may be looked into for necessary corrective action

#### **18.4** Specification of Tractor:

Discrepancies in the specification between the Specification sheet and Operator's manual are as under:

S. No.	Description	As per Specification Sheet	As per Operator's manual
· · · · · · · · · · · · · · · · · · ·			0.00 40
a)	Front tyre size	7.50 – 16, 8 PR	6.00 – 16
			(Refer P. No. 10 – 16)
b)	Rear tyre size	14.9 – 28, 12 PR	13.6 – 28 & 14.9 – 28
			(Refer P. No. 10 – 16)
c)	Rear tyre size (optional)	16.9 - 28	Not available

#### 18.5 Maintenance / Service Problems:

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

#### 18.6 Recommendation with regard to safety on tractor:

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

- i) Spark arrester should be provided in the exhaust system as per the requirement of IS: 12239 (Part-1)-2018.
- ii) Vertical retainer should be provided on inner side of clutch pedal and inner brake pedal as per IS-12239 (Part-1) 2018.
- iii) Master shield on Power Take-Off shaft should be provided as per IS-12239 (Part-2) 1999 (Reaffirmed in January 2019)
- iv) Working clearance between position control lever & RHS fender is 45 mm, between position control lever & draft control lever is 35 mm, between range selection lever & LHS fender is 40mm and between PTO engaging lever & hydraulic top cover is 30 mm, as against the minimum requirement of 70 mm as per IS-12239 (Part-2) 1999 (Reaffirmed in January 2019).
- v) The hand control of PTO engaging lever, engine speed control, transmission control and parking brake should have colour codes as per IS: 8133 2021.
- vi) The hand accelerator lever when moved away from the operator (i.e. forward) should increase the engine speed, as par IS: 8133-2021.

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#### 18.7 Adequacy of Literature supplied with machine:

- **18.7.1** The following literature was supplied with the test sample for reference during the test.
  - a) Operator's manual of tractor models 50 F5 (BRAND NAME FARMTRAC) and FARMTRAC 6055
  - b) Parts catalogue of tractor model 50 F5 (BRAND NAME FARMTRAC)
  - c) Service Manual of tractor model 50 F5 (BRAND NAME FARMTRAC)
- **18.7.2** The operator's manual may be brought out for the guidance of users and service personnel as per IS: 8132-1999 (Reaffirmed in 2019) incorporating, inter alia, the following:
  - i) Safe hitch height of the trailer.

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ii) Preparation and maintenance of tractor for wet land operation.

#### TESTING AUTHORITY:

C.V. CHIMOTE TEST ENGINEER	Thuman
P.K. PANDEY DIRECTOR	43n-mosy

Draft test report compiled by: C. K. Tijare, Agricultural Engineer.

#### **19. APPLICANT'S COMMENTS**

Para no.	Our reference	Comments	
19.1	18.3.1.2	Your comment for fitment of recommended rim	
		size according to IS: 13154 - 2015/ITTAC	
		manual is well taken. We will try to take	
		necessary action in our design to eliminate this	
		gap.	
19.2	18.4 & 18.7.2	Observations will be studied and necessary	
		corrective action will be initiated.	

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T-1703/2234/2023	ESCORTS KUBOTA LIMITED, 50 F5 (BRAND NAME – FARMTRAC) TRACTOR - COMMERCIAL (Initial)
	THIS TEST REPORT IS VALID UPTO: 31/01/2028

#### **ANNEXURE-I**

#### BRIEF SPECIFICATION OF MATCHING IMPLEMENTS AS DECLARED BY APPLICANT

S. No.	Parameters	Disc Plough	Rotavator (Dryland)
1	Make	Fieldking	Maschio
2	Туре	Mounted	Mounted
3	No. of Bottom/ Blades	Three	42 in 8 flanges
4	Type of Bottom / Blades	Plain concave	Hatchet
5	Size of Bottom / Blades, (mm)	615	275 x 75 x 8.0
6	Spacing of Bottoms /Flanges, (mm)	550	200
7	Lower hitch point span, (mm)	805	800
8	Mast height, (mm)	510	600
9	Overall Dimensions, (mm):		
	Length	2360	910
	Width	1080	1630
	Height	1180	1070
10	Gross Mass, (kg)	345	380

#### ANNEXURE-II

#### BRIEF SPECIFICATION OF MATCHING CAGE WHEEL AS DECLARED BY APPLICANT

S. No.	Items	Specifications
1	Туре	Full cage wheel
2	Diameter, (mm)	1220
3	Width, (mm)	900
4	No. and types of lugs	24, straight lugs made up of MS-angle
		section welded to angle iron frame.
5	Size of angle section, (mm)	45 x 45 x 5.0
6	Length of lugs, (mm)	445
7	Spacing of lugs, (mm)	310
8	Weight of each cage wheels (kg)	120

#### **ANNEXURE- III**

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

S. No.	Item	Trailer-1	Trailer-2
1	Make	Kisan Engineering Works, MIDC,	
		Awadhan D	Dhule (M.S.)
2	Model	Kisan 1062	Not available
3	Type of trailer	Semi - Trailer	Semi – Trailer
4	Number of axles	Single	Double
5	Unladen Weight of Trailer, kg	1670	2800
6	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)
7	Dimension of fitted Platform, (mm):		
	Length	3040	4225
	Width	1830	2135
	Height from ground	1190	1305
8	Brakes of Trailer	Not provided	Not provided

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T 4700/000 4/0000	ESCORTS KUBOTA LIMITED, 50 F5 (BRAND NAME – FARMTRAC)		
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#### ANNEXURE- IV

### TRACTOR RUN HOURS DURING TEST

Α.	LABORATORY AND TRACK TESTS	HOURS
1.	Running-in	25.0
2.	PTO performance test	11.9
3.	Drawbar performance test	16.7
4.	Power lift and hydraulic pump performance test	4.9
5.	Brake test	1.3
6.	Noise measurement	1.5
7.	Mechanical vibration test	1.0
8.	Air cleaner oil pull over test	3.5
9.	Turning ability test	0.5
10	Location of centre of gravity	0.2
11.	Operators field of vision	0.0
12.	Nominal speed test	0.5
В.	FIELD TEST	
1.	M. B. Plough	11.4
2.	Rotavation	10.9
3.	Puddling (including 5.0 hours water proof test)	15.5
C.	HAULAGE TEST	5.1
D.	Miscellaneous test and other run hours including idle run, transportation,	
	trials and preparation for test	
	TOTAL:	117.7