व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक COMMERCIAL TEST REPORT (Initial) रंग्रेख्या/No. : T- 1578/2106/2021 माह/Month : August, 2021

(यह परीक्षण रिपोर्ट 31/08/2024 तक मान्य है। / THIS TEST REPORT IS VALID UP TO 31/08/2024)



ESCORTS LIMITED, 22 (BRAND NAME : FARMTRAC) TRACTOR



भारत रारकार 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 AND FARMERS WELFARE) केन्द्रीय कृषि मशीनरी प्रशिक्षण एवं परीक्षण रारथान 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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Manufacturer

Test requested by (applicant) Selected for test by Place of running-in **Duration of said running-in (h):** - Engine - Transmission Method of Selection

: M/s. Escorts Limited

Plot No 2 & 3, Sector 13, Faridabad-121007 Haryana : The manufacturer

- : The applicant
- : At applicant's works
- : 20
- : 30
- : The test sample was selected randomly out of five tractors from the production line by the applicant for test.

Tractor chassis numbers, out of which, applicant has selected this tractor are:

- (i) T052503480CJ (ii) T052503499CJ
- (iii) T052503501CJ (iv) T052503521CJ
- (v) T052503504CJ.

1. SPECIFICATIONS

1.1	Tractor:		
	Make	:	Escorts Limited
	Model	:	22
	Brand name	:	Farmtrac
	Туре		Four wheeled, four wheel driven, unit
	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•	construction, Standard Agricultural Tractor.
	Month & Year of manufacture	:	06 / 20
	Chassis number	:	T052503501CJ
	Country of Origin	:	India
1.2	Engine:		
	Make	:	M/s Mitsubishi Heavy Industries-VST
			Diesel Engines Pvt. Ltd.
	Model	:	MVL3E-T3CC
	Туре	:	Four stroke, naturally aspirated, water
	Serial number		cooled, direct injection, diesel engine A70283
	Senai humber	•	A10203
	Engine speed (Manufacturer's recomn	nen	
	 Maximum speed at no load 	:	3220 to 3280
	- Low idle speed	:	900 to 1030
	 Speed at maximum torque 	:	1400 to 2000
	Rated speed, (rpm):		
	- For PTO use	:	3000
	- For drawbar use	:	3000
1.3	Cylinder & Cylinder Head:		
	Number	:	Three
	Disposition	:	Vertical, Inline
	Bore/stroke, (mm)	:	76/70
	Capacity as specified by the applicant, (cc)	:	
	Compression ratio, (apa)	:	23 : 1 (apa)

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14.4 Brakes:

Description	Initial specified thickness of brake lining,(mm)	Measured thickness of brake lining after test, (mm)	Height of brake lining over oil groove, (mm)	Minimum permissible height of brake lining above oil groove, (mm)
Left	4.02 to 4.16	4.11	0.45 to 0.54	0.10
Right	4.02 to 4.16	4.11	0.46 to 0.53	0.10

14.5	Front axle Condition of front axle seals & bearings Any visual damage, pitting & chipping of front axle transmission gear teeth	:	located at accommodated i separate portal. provided at bevel case. Normal None	ive reduction unit is wheel end, inside housing in Ball bearings are gears & front axle
	Bearing number of final drive bevel gear shaft (stub axle)	•	TX-6305 Texspin	
	Clearance between centre pin and bushes, (mm)	:	0.088 to 0.106	Against the discard limit of 0.60 mm.
14.6	Steering system: Visual condition of the components of complete steering assembly	:	Normal	
14.7	Starter motor & Alternator:			
	Presence of soil/oil in housing Condition of bearings and other	:	None	
	Components	:	Normal	

15. ADJUSTMENTS, DEFECTS, BREAKDOWNS AND REPAIRS

SI. No.	Adjustments/Defects/Breakdowns and Repairs	Tractor run hours
	-None-	

16. SUMMARY OF OBSERVATIONS, COMMENTS & RECOMMENDATIONS

16.1 On the basis of test conducted the performance results have been summarized as evaluative (mandatory) / Non-evaluation (Non-mandatory) parameter applicable for qualifying Minimum Performance criteria as per Clause-4 (Table-1) of Indian standard: 12207-2019 for acceptance of the tractor for the purpose of subsidies/NABARD financing are summarized as under:

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SI. 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
16.1.1	PTO Performa	nce :				
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	12.0 (D)	12.1	Yes
b)	Power at rated engine speed, (kW)	Non Evaluative	-do-	12.0 (D)	12.1	Yes
c)	Specific fuel consumption corresponding to maximum power, (g/kWh)	Evaluative	+ 10% maximum	350 (D)	337	Yes
d)	Maximum equivalent crankshaft torque, (Nm)	Non Evaluative	± 8%	50.0 (D)	48.5	Yes
e)	Back-up torque, percent	Evaluative	12 percent, min.	12 (R) percent, min.	25.6	Yes
f)	Maximum opera	ting tempera	ture, (^o 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)	115	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)	90	Yes
g)	Engine oil consumption, (g/kWh)	Evaluative	Not exceeding 1% of SFC at max. power under High ambient conditions	3.37 (R) 3.50 (D)	0.65	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.	3.25 per meter (R)	0.82	Yes

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1	2	3	4	5	6	7
16.1.2	Drawbar perfor	mance :				
a)	Max. drawbar pull with ballast corresponding to 15 percent wheel slip or 7 percent track slip, (kN)	Non Evaluative	Minimum 70% of static mass with ballast	recommended any ballast	manufact-	cable
b)	Max. drawbar pull without ballast or with standard ballast corresponding to 15 percent wheel slip or 7 percent track slip, (kN)	Evaluative	Minimum 70% of static mass of tractor without ballast or with standard ballast, as the case may be	5.55 (D) 5.87 (R) Minimum	7.75	Yes
c)	Maximum drawbar power without ballast, or with standard ballast as in case may be ,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.	9.0 (D) 9.7 (R) Minimum	10.8	Yes
d)	For the 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.	Not provided	Not applic- able	Not applicable
e)	Maximum transmission oil temperature, °C	Evaluative	To be declared by the manufacturer.	125 (D)	84	Yes
16.1.3	3 Power lift and hydraulic pump performance:					
a)	Maximum lifting capacity thro				0.10	
	1) At hitch points	Evaluative	Tolerance of ± 10%	7.45 (D)	8.10	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	4.90 (D) 2.85 (R) (Minimum)	5.68	Yes

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1		2	3	4	5	6	7
b)	Max	imum drop in the height of	Non	The observed	50 (D)	15	Yes
~,	the	point of application of the	Evaluative	value should	. ,		
		e after each 5 minutes		not exceed	50 (R) Maximum		
		val for a total duration of 30 utes, (mm)		50 mm	IVIAXIIIIUIII		
16.1.4		ke performance at 25 km	nh:				
a)		kimum stopping distance a		ual to or less th	nan 600 N on	brake pe	dal with
۳,		d ballast, (m):				brance pe	
	1)	Cold brake	Evaluative	10 m	10 (R)	4.40	Yes
	2)	Hot brake	Evaluative	10 m	10 (R)	4.70	Yes
b)		imum force exerted on the	Evaluative	600 N	600 (R)	250	Yes
	brak	te pedal to achieve a			Maximum	to	
		eleration of 2.5 m/s ² (N)				270	
c)		ether parking brake is	Evaluative	Yes / No	Yes	Yes	Yes
		ctive at a force of 600 N at pedal (s) or 400 N at hand					
	leve						
16.1.5		se measurement :	•				
a)	-	kimum ambient noise	Evaluative	88 dB (A) for	As per	82	Yes
	emi	tted by the tractor dB(A)		>1.5 tonne GVW and 85	CMVR		
				db (A) for <1.5			
				tonne GVW			
				(as per			
b)	Max	imum noise et enereter'e	Evoluctivo	CMVR) 96 (as per	A a a a a	00	Vaa
b)	Maximum noise at operator's ear level dB(A)		Evaluative	CMVR)	As per CMVR	92	Yes
16.1.6		plitude of mechanical vib	rations at:	,	CIMITY		
10.110	1)	Left foot rest			100 (R)	154	No
	2)	Right foot rest			100 (R)	101	No
	3)	Seat (with driver	Non	100 microns	100 (R)	77	Yes
	-,	seated)	Evaluative	(max)			
	4) Steering wheel				100 (R)	120	No
16.1.7	Air	cleaner oil pull over test	•				
		imum air cleaner pull over,	Evaluative	0.25%	Dry type air		Not
	(%)			(Max)	provide	ed	applicable
16.1.8		Ilage requirements:					
a)		ss mass of the trailers, (to	,		•		
	1)	Two wheel	Non	As specified	1.5 (D)	1.5	Yes
	2)	Four wheel	Evaluative	by the	Not	Not recom-	Not
				manufacturer	recommended	mended	applic-
b)	Die	tance travelled / litre of fue					able
b)					1	6 62 to	Na
	1)	Two wheel	Non Evaluative	As specified by the	4.0 to 5.0 (D)	6.62 to 6.89	No
	2)	Four wheel		manufacturer	Not	Not	
						applicable	
C)	Fue	I consumption (ml/km/ton	ne):				
	1)	Two wheel		As specified	85.0 to 90.0 (D)	96.71 to	No
	-		Non	by the		100.74	
	2)	Four wheel	Evaluative	manufacturar	Not recommended	Not applicable	
					recommended	applicable	

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1		2	3	4	5	6	7
16.1.9	We	tland cultivation (F	Puddling Ope	eration):			
	foll	aling for the owing semblies:	Evaluative	The identified assemblies should	There should be no	No ingress of mud and water was observed	Yes
	1)	Clutch assembly Brake housings	-do- -do-	essentially meet the requirement	ingres s of		
	3) 4)	Front axle hubs Engine oil	-do- -do-	of IS: 11082. No water ingress in the identified	water and / or mud		
10 1 10	5)	Transmission oil	-do-	assembly given in column-2.	(R)		
16.1.10 a)	Gua	fety features: ards against	Evaluative	Belt drives, pullies, silencer,		Meets the	Yes
	mo\	ving and hot parts		hydraulic pipes (As per IS: 12239 (Part-2)		requirements	
b)	arr	hting angement	Evaluative	As per CMVR		Meets the requirements	Yes
c)	rec (Tr mc mn		Non Eval uative	Should meet the requirements of IS: 12343 (As amended from time to time)		Does not meet the requirement	Not appli cable
d)	Te rec	chnical quirements for O shaft	Evaluative	Should meet the requirements of IS: 4931 (As amended from time to time)		Meets the requirements	Yes
e)		nensions of ee point linkage	Non Evaluative	Should meet the requirements of IS: 4468 (Part-I) (As amended from time to time)		Does not meet the requirement	Does not conform
f)		ecifications of kage drawbar	Evaluative	Should meet the requirements of IS 12953 (As amended from time to time)		Meets the requirements	Yes
(g)		ringing drawbar herever fitted)	Evaluative	Should meet the requirements of IS 12362 (Part 3) (As amended from time to time)		Not provided	Not apple- cable
(h)	1)	Maximum traveling speed at rated engine speed in reverse gear, kmph	Evaluative	Should not exceed 20.00 kmph		10.83 kmph (Meets the requirement)	Yes

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1		2	3	4	5	6	7
	2)	Audible	Evaluative	As soon as the		Not	Not
	_,	warning signal		travelling speed in		applicable	apple-
		on tractor		reverse gear reaches		applicable	cable
				to 20 kmph ,an audible warring signal on			
				warring signal on tractor 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.			
16.1.11				of labelling plate			X
	1)	Make	Evaluative	Should conform		ESCORTS	Yes
	<u> </u>			requirements of (with maximum PTC		LIMITED	
	2)	Model	Evaluative	and year of ma		22	Yes
	3)	Month & Year of	Evaluative	numerical form		06 & 20	Yes
		manufacture					
	4)	Engine number	Evaluative	MM YY Di	igit 01-12 in	A70283	Yes
	5)	Chassis number	Evaluative	box No.1 for MM		T052503501CJ	Yes
	6)	Declaration of	Evaluative	the months & nex		12.0	Yes
	,	PTO power,		box No.2 for YY			
		kW		the year of manufa	cturing.		
	7)		Evaluative			350	Yes
		Consumption g/kWh					
16.1.12	Dis	card limit for:					
(a)	Cyli	nder bore	Evaluative		76.2	76.012	Yes
	diar	neter, (mm)		To be specified by	y	to	
				Manufacturer		76.024	
(b)		arance between	Non		0.08	0.114 to 0.116	No
		on & cylinder	Evaluative				
	line	r at skirt, (mm)					
(C)	Pist	on diameter at	Non		76.406	75.908 to 75.910	No
(-)	skir	t, mm	Evaluative				
(d)							
(d)		g end gap (mm): Top comp. ring.		-do-	1.5	0.30 to 0.35	Yes
	-	2^{nd} comp. ring.	Evaluative	-do-	1.5	0.40	Yes
	-	Oil ring.		-do- -do-	1.5	0.40	Yes
(c)	- Dim	U U	oo (mm);	-40-	1.0	0.40	165
(e)	RIN	g groove clearar	ice (mm):	-do-	0.30	Tapered	Not
	-	Top comp. ring.	Evaluative	-00-	0.50	rapereu	appli-
							cable
	-	2 nd comp. ring.	-do-	-do-	0.30	0.090 to 0.094	Yes
	-	Oil ring.	-do-	-do-	0.20	0.040 to 0.041	Yes
(f)	Cle	arance of main er			1	1	
(.)	-	Diametrical	Evaluative	-do-	0.15	0.058 to 0.111	Yes
	-	Crank shaft			0.20	0.15	Yes
		end float	Evaluative	-do-	0.20	0.10	
		chu noat				L	

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1		2	3	4	5	6	7
(g)	Clea	arance of big end	d bearings, (n	nm):			
	-	Diametrical	Evaluative	-do-	0.20	0.045 to 0.120	Yes
	-	Axial	Evaluative	-do-	0.70	0.20	Yes
(h)	king	rance between pin and n,(mm)	Non Evaluative	-do-	Not applicable	Not applicable	
(i)	cent	rance between er pin and n,(mm)	Non Evaluative	-do-	0.60	0.088 to 0.106	Yes
16.1.13	Lite	rature (Submis	sion to test a	igency):			
(a)	Оре	erator manual	Evaluative	Provided / Not Provided	Provided	Provided	Yes
(b)	Part	s Catalogue	Evaluative	Provided / Not Provided	Provided	Provided	Yes
(c)		kshop/ vice manual	Evaluative	Provided / Not Provided	Provided	Provided	Yes
16.1.14	Prot (RO havi	ent of Roll Over ective Structure PS): for tractors ng more than 0 mm rear track h	Evaluative	ROPS should meet the requirement of IS:11821 or OECD code or equivalent International Standard	Not provided	Not fitted	Not appli- cable
16.1.15		ndard essories	Evaluative	Trailer hitch, front tow hook, linkage drawbar should be provided with tractor	Provided	Provided	Yes
16.1.16		essories tional)	Non Evaluative	Ballast weights if fitted should meet the requirement of CMVR.	Provided	Not applicable	

16.2	CATEGORY OF BREAKDOWNS / DEFECTS (As per Clause 5.0 of IS:12207-2019				
S. No.	Category of breakdowns	Category (Evaluative / Non Evaluative)	Requirements as per IS: 12207-2019	As observed	Whether meets the Requirement (Yes/No.)
1.	Critical	Evaluative	No critical breakdown	None	Yes
2.	Major	Evaluative	Not more than two major breakdowns and neither of them of repetitive 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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16.3 Salient Observations:

16.3.1 Laboratory tests:

16.3.1.1 PTO Performance:

- The maximum PTO power was observed as 12.1 kW against the declaration of 12.0 kW, which meets the requirement of IS: 12207-2019 with regard to tolerance limit.
- ii) The specific fuel consumption corresponding to maximum power was recorded as 337 g/kWh against the declaration of 350 g/kWh, which meets the requirement of IS: 12207-2019 with regard to tolerance limit.
- iii) The backup torque is **25.6** %, which meets the evaluative requirement of IS: 12207-2019.

16.3.1.2 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 to improve the operational comfort and service life of components.

16.3.1.3 Three point linkage:

- i) Distance from end of power take off to center of lower hitch point does not meet the requirement of relevant test code. It should be looked into.
- Some of the parameters conform to Cat. I and some of them conform to Cat. I N Keeping in view the spirit of standardization, necessary improvement may be incorporated.

16.3.1.4 Operator's Seat:

- i) Vertical distance from SIP to clutch & brake pedal does not meet the requirement of relevant test code. It should be looked into.
- **ii)** Longitudinal distance from SIP to differential lock pedal and vertical distance from SIP to center line of steering control wheel does not meet the requirement of relevant test code. It should be looked into.

16.3.1.5 Operator's work place:

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

- i) Vertical retainer at inner side of clutch pedal. It should be looked into.
- ii) Provision of spark arresting device in the exhaust system. It should be looked into.
- iii) Provision for drainage at LHS foot rest is not provided. It should be looked into.

16.3.1.6 Constructional requirement with regard to safety:

Meets the requirements of IS: 12239 (Part-II)-1996, except the following:

- i) PTO master shield has not been provided.
- ii) Working clearance in between position control and draft control lever is 25 mm which is less than the requirement of relevant test code.

16.3.1.7 Location of operator's controls with regard to safety:

Location of operator's controls with regard to safety meets the requirements of IS: 8133-1983(Reaffirmed 2014).

16.3.1.8 Components/Assembly Inspection:

- i) Clearance between piston to cylinder at skirt does not meet the non evaluative requirement of IS: 12207-2019. It should be looked into.
- ii) Discard limit of piston diameter at skirt does not meet the non evaluative requirement of IS: 12207-2019. It should be looked into.

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16.3.2 Field performance test:

16.3.2.1 Wet land cultivation (Puddling operation):

The manufacturer recommended "deep lug tyres" for wet land cultivation (puddling operation) and specifications of the deep lug tyre are given in **Annexure-II**.

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:

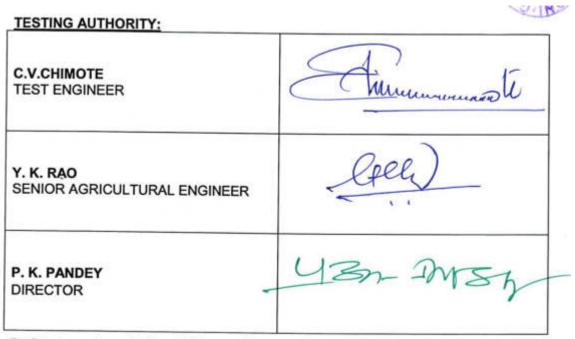
i) Provision for spark arresting device in exhaust system.

- **ii)** Vertical distance from seat index point to clutch, brake pedal and center of steering control wheel should be provided as per relevant Indian Standard.
- **iii)** Longitudinal distance from seat index point to differential lock pedal should be provided as per relevant Indian Standard.
- iv) Provision for drainage for LHS foot rest should be provided as per relevant Indian Standard.
- v) Vertical retainer at both sides of clutch pedals should be provided as per relevant Indian standard.
- vi) The working clearance between draft control lever and position control lever should be as per the minimum requirements of relevant Indian Standard for easy operating the lever.
- vii) PTO shaft master shield should be provided to avoid the accident.

16.6 Adequacy of Literature supplied with machine:

- **16.6.1** The following literature was supplied with the tractor for reference during the test:
 - Tractor Operator's Manual of ESCORTS LIMITED, 22,35 & 26 Models Tractor (Brand name- Farmtrac)
 - ii) Parts Catalogue of ESCORTS LIMITED, 22 Tractor (Brand name- Farmtrac)
 - iii) Service Manual of ESCORTS LIMITED, 22 & 35 Models Tractor (Brand name-Farmtrac)
 - iv) Service manual of Mitsubishi Diesel Engine L3E series, Engine Model No. MVL3E-T3CC.
- **16.6.2** i) The printed literature supplied with the test sample is in English. However, these literatures should be brought out in other vernacular languages of India for guidance of users.
- **16.7** Delay of three and half month in testing, was due to non-supply of "deep lug tyres" for wet land (puddling operation) cultivation by the manufacturer.

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Draft test report compiled by: Shivkumar Sharma, Senior Technical Assistant

17. APPLICANT'S COMMENTS

Para No.	Our Reference	Applicant's comments
17.1	16.3.1.2, 16.3.1.3, 16.3.1.4, 16.3.1.5, 16.3.1.6, 16.5 & 16.6	Your valuable comments & suggestions for improvement are well taken under our policy of continuous product improvement. These aspects are further being looked into and we will try to eliminate these deviations soon, wherever necessary.
17.2	16.3.1.8	Typographical mistake at our end and will be taken care of.
17.3	16.7	Due to Covid-19 we were not able to supply "deep lug tyres" on time.

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ANNEXURE- I

BRIEF SPECIFICATION OF IMPLEMENTS USED DURING FIELD TEST

S.No	Parameters	Rotavator	MB Plough
1.	Make	Mahindra	Mahindra & Mahindra
2.	Туре	Mounted	Mounted
3.	No. of Disc/blades	16	Two
4.	Type of Disc/blades	Hatchet	General purpose
5.	Size of bottoms/blades, (mm)	110 x 70 x 7	255
6.	Spacing of bottoms/flanges, (mm)	200	170
7.	Lower hitch point span, (mm)	490	480
8.	Mast height, (mm)	325	375
9.	Over all dimensions:		
	- Length	1010	1035
	- Width	1080	760
	- Height	745	840
10.	Gross mass, (kg)	185	75

ANNEXURE-II

BRIEF SPECIFICATION OF DEEP LUG TYRES USED DURING PUDDLING TEST

S.No	Parameters	Tyre		
		Front	Rear	
1.	Make	BKT	BKT	
2.	Model	TR -171	TR - 171	
3.	Туре	Pneumatic deep tread	Pneumatic deep tread	
4.	Size	5.00 - 12	8.00 - 18	
5.	Ply rating	6	8	
6.	Rim:			
	Make	CWPL	CWPL	
	Size	4 J x 12	W 7 x 18	

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ANNEXURE- III

TRACTOR RUN HOURS DURING TEST

Α.	LABORATORY AND TRACK TESTS:	HOURS			
1.	Running-in				
2.	PTO performance test	11.7			
3.	Power lift and hydraulic pump performance test	1.5			
4	Drawbar performance test	12.4			
5.	Turning ability	0.5			
6.	Location of centre of gravity	Nil			
7.	Operator's field of vision	0.1			
9.	Brake test	0.8			
10.	Noise measurement	1.0			
11.	Mechanical vibration test	1.0			
12.	Theoretical speed test	1.5			
В.	FIELD TEST:				
1.	MB ploughing	10.7			
2.	Rotavation	10.1			
3.	Puddling (including 5.0 hours of water proof test)	10.5			
C.	HAULAGE TEST:	7.2			
D.	Miscellaneous test and other run hours including idle run,	13.4			
	transportation, trials and preparation for test.				
	TOTAL:	82.4			

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