

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

संख्या/No. : T- 1592/2123/2021
माह/Month : October, 2021

[ONLINE TESTING]

(यह परीक्षण रिपोर्ट 31/10/2024 तक वैध है। / THIS TEST REPORT IS VALID UPTO:31/10/2024)



TAFE, MF 241 DI AT TRACTOR



सत्यमेव जयते

दृष्टं, कृषि विभाग, कृषि विभाग ;

दृष्टं, कृषि विभाग, कृषि विभाग ;

GOVERNMENT OF INDIA

MINISTRY OF AGRICULTURE AND FARMERS WELFARE

(Department of Agriculture, Co-operation & Farmers Welfare)

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T- 1592/2123/2021	TAFE, MF 241 DI AT TRACTOR – Commercial (ICT)
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Manufacturer : M/s Tractors and Farm Equipment Limited, Post Box No. 3302, Old 35 (New 77), Mahatma Gandhi Road, Nungambakkam, Chennai – 600 034

Location of manufacturing plant : i) M/s Tractors and Farm Equipment Limited
Kalladipatti Plant, 10/205, Kalladipatti (PO), Pincode – 624 201, Dindigul Dist., Tamil Nadu
ii) M/s Tractors and Farm Equipment Limited,
Doddaballapur Plant Plot No. – 1, KIADB Industrial Estate, Doddaballapur, Bangalore- 561 203

Test requested by (applicant) : The manufacturer
Selected for test by : The manufacturer
Place of running-in : At manufacturer's work place
Duration of said running-in, (h):
- Engine : 12
- Transmission : 24

Method of Selection : Due to Covid-19 pandemic, it was not possible to conduct the random selection. Nor it was possible for applicant to facilitate the random selection. As a last resort, applicant requested to allow the direct submission of test sample which was allowed.

1. SPECIFICATIONS

- 1.1 Tractor:**
- Make : TAFE
Model : MF 241 DI AT
Variants, if any : None
Type : Four wheeled, Rear wheel driven, Unit Construction, General purpose, Agricultural tractor
Month & Year of manufacture : 11 / 20
Chassis number : MEA83315LL2326426
Country of origin : India
- 1.2 Engine:**
- Make : Simpson & Co. Ltd.
Model : TIIIA S325.1-F2
Type : Four stroke, Liquid cooled, Naturally aspirated, Direct injection, Diesel engine.
Serial number : S325.1L23536
- 1.2.1 Engine speed(Manufacturer's recommended production setting), (rpm):**
- Maximum speed at no load : 2100 to 2200
- Low idle speed : 700 to 800
- Speed at maximum torque : 1100 to 1400
- Rated speed, (rpm):**
- For PTO use : 2000
- For drawbar use : 2000

17. SUMMARY OF OBSERVATIONS, COMMENTS & RECOMMENDATIONS

17.1 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
17.1.1	PTO Performance :					
a)	Max. 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 ≤ 26 kW.	27.2 (D)	26.7	Yes
b)	Power at rated engine speed, (kW)	Non Evaluative	-do-	27.2 (D)	26.7	Yes
c)	Specific fuel consumption corresponding to maximum power, (g/kWh)	Evaluative	+ 10% Max.	265 (D)	241	Yes
d)	Maximum equivalent crankshaft torque, (Nm)	Non Evaluative	$\pm 8\%$	165.8 (D)	146.8	No
e)	Back-up torque, percent	Evaluative	12 percent, min.	12 % (D) 12 % (R)	15.2	Yes
f)	Maximum operating temperature($^{\circ}$ 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.	132 (D)	125	Yes
	2) Coolant (liquid)	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.	112 (D)	104	Yes
g)	Engine oil consumption, (g/kWh)	Evaluative	Not exceeding 1% of SFC at max. power under High ambient conditions	2.44 (Maximum) (R)	0.33	Yes
h)	Smoke level, (m^{-1})	Evaluative	Maximum light absorption coefficient of 3.25 per metre or equivalent BOSCH No. 5.2 or 75 Hatridge value (As per CMVR)	3.25 (Maximum) (R)	0.09	Yes

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1	2	3	4	5	6	7
17.1.2	Drawbar performance:					
a)	Maximum drawbar pull with ballast corresponding to 15 percent wheel slip, (kN)	Non Evaluative	Minimum 70% of static mass with ballast	19.0 (D) 19.19 (Minimum) (R)	20.75	Yes
b)	Maximum drawbar pull with standard ballast corresponding to 15 percent wheel slip, (kN)	Evaluative	Minimum 70% of static mass of tractor without / standard ballast	13.0 (D) 13.22 (Minimum) (R)	14.41	Yes
c)	Maximum drawbar power without ballast, or with standard ballast as the 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.	22.0 (D) 21.4 Minimum (R)	22.5	Yes
d)	Maximum transmission oil temperature (°C)	Evaluative	The declared value should not exceed the maximum value specified by oil company	132 (D)	75	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	±10 percent	16.50 (D)	16.73	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	7.00 (D) 6.29 Minimum (R)	12.52	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 minute, (mm)	Non Evaluative	The observed value should not exceed 50 mm	50 (D) 50 Maximum (R)	80	No
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 ballast, (m):					
	1) Cold brake	Evaluative	10	10 (R)	7.19	Yes
	2) Hot brake	Evaluative	10	10 (R)	7.30	Yes

1	2	3	4	5	6	7
b)	Maximum force exerted on the brake pedal to achieve a deceleration of 2.5 m/s ² (N)	Evaluative	600	600 (R)	190 to 198	Yes
c)	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	434	Yes
17.1.5 Noise measurement :						
a)	Maximum ambient noise emitted by the tractor dB(A)	Evaluative	As per CMVR	88 (R)	80.0	Yes
b)	Maximum noise at operator's ear level dB(A)	Evaluative	As per CMVR	96 (R)	95.0	Yes
17.1.6 Amplitude of mechanical vibrations at :						
1)	Left foot rest	Non Evaluative	100 microns (max)	100(R)	185	No
2)	Right foot rest		-do-		127	No
3)	Seat (with driver seated)		-do-		40	Yes
4)	Steering wheel		do-		223	No
17.1.7 Air cleaner oil pull over:						
	Maximum air cleaner oil pull over	Evaluative	0.25 % (max.)	0.25 % (max.)	0.16	Yes
17.1.8 Haulage requirements:						
a) Gross mass of the trailers, (tonnes):						
1)	Two wheel	Non	--	5.0 (D)	5.0	Yes
2)	Four wheel	Evaluative		5.0 (D)	5.0	Yes
b) Distance travelled / litre of fuel consumption, (km/l):						
1)	Two wheel	Non Evaluative	--	4.8 to 6.5 (D)	5.44 to 5.48	Yes
2)	Four wheel		4.8 to 6.5 (D)	5.59 to 5.74	Yes	
c) Fuel consumption (ml/km/tonne):						
1)	Two wheel	Non	--	25 to 30 (D)	36.51 to 36.75	No
2)	Four wheel	Evaluative		25 to 30 (D)	35.78 to 35.82	No
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)	No ingress of water and / or mud was observed	Yes
1)	Clutch assembly	-do-				
2)	Brake housings	-do-				
3)	Front axle hubs	-do-				
4)	Engine Oil	-do-				
5)	Transmission Oil	-do-				

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1	2	3	4	5	6	7
17.1.10	Safety features :					
a)	Guards against moving and hot parts	Evaluative	Belt drives, pulleys, silencer, hydraulics pipes(as per IS-12239 Part 2)		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 conform	No
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-I) (As amended from time to time)		Does not conform	No
f)	Specifications of linkage drawbar	Evaluative	Should meet the requirements of IS 12953 (As amended from time to time)		Meets the requirement	Yes
g)	Specifications of Swinging drawbar (wherever fitted)	Evaluative	Should meet the requirements 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		34.65 kmph (Meet the requirements)	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.		Audible warning signal is activated when reverse gear speed reaches to 20 kmph in HR3 & HR4 gears	Yes
17.1.11	Labelling of tractors (Provision of labelling plate):					
	1) Make	Evaluative	Should conform to the requirements of CMVR along with maximum declared value of PTO power in kW and for month & year of manufacture in numerical MM YY 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		TAFE	Yes
	2) Model	Evaluative			MF 241 DI AT	Yes
	3) Month & Year of manufacture	Evaluative			11 / 20	Yes
	4) Engine number	Evaluative			S325.1L23536	Yes
	5) Chassis number	Evaluative			MEA83315LL 2326426	Yes
	6) Declaration of PTO power, kW	Evaluative			27.2	Yes

1	2	3	4	5	6	7
17.1.12	Discard limit for:					
(a)	Cylinder bore diameter, (mm)	Evaluative	To be specified by Manufacturer	91.86 (D)	91.465 to 91.481	Yes
(b)	Clearance between piston & cylinder liner at skirt, (mm)	Non Evaluative		0.25 (D) (With new rings)	0.122 to 0.131	Yes
(c)	Piston diameter at skirt, (mm)	Non Evaluative		Piston is discarded when ring groove clearance exceeds 0.25 mm with new rings	91.347 to 91.358	Yes
(d)	Ring end gap, (mm):					
	- Top comp. ring.	Evaluative	-do-	1.50 (D)	0.45	Yes
	- 2 nd comp. ring.		-do-	1.50 (D)	0.100 to 0.105	Yes
	- Oil ring.		-do-	1.50 (D)	0.45 to 0.50	Yes
(e)	Ring groove clearance, (mm):					
	- Top comp. ring.	Evaluative	-do-	--Tapered rings--		Not applicable
	- 2 nd comp. ring.		-do-	0.20 (D)	0.057 to 0.067	Yes
	- Oil ring.		-do-	0.25 (D)	0.051 to 0.061	Yes
(f)	Diametrical clearance of main bearings, (mm):	Evaluative	-do-	0.25 (D)	0.103 to 0.136	Yes
(g)	Clearance of big end bearings, (mm):					
	- Diametrical	Evaluative	-do-	0.25 (D)	0.092 to 0.171	Yes
	- Axial	Evaluative	-do-	0.75 (D)	0.30	Yes
(h)	Crankshaft end float, (mm)	Evaluative	-do-	0.5 (D)	0.25	Yes
(i)	Clearance between king pin and bush,(mm)	Non Evaluative	-do-	Not Specified	0.087 to 0.143	--
(j)	Clearance between center pin and bush,(mm)	Non Evaluative	-do-	1.25 (D)	0.075 to 0.106	--
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

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1	2	3	4	5	6	7
17.1.14	Fitment of Roll Over Protective Structure (ROPS): for tractors 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 Provided (D)	Not fitted	Not Applicable
17.1.15	Standard accessories	Evaluative	Trailer hitch, front tow hook, linkage drawbar should be provided with tractor	Provided	Provided	Yes
17.1.16	Accessories (Optional)	Non Evaluative	Ballast weights if fitted should meet the requirement of CMVR.	Not Provided	Not Fitted	Not Applicable

17.2 CATEGORY OF BREAKDOWNS / DEFECTS (As per clause 5.0 of IS:12207-2019):					
S. No.	Category of Breakdown	Category (Evaluative / Non Evaluative)	Requirements as per IS: 12207-2019	As observed	Whether meets the requirement (Yes/No.)
1.	Critical breakdown	Evaluative	There is no 'critical breakdown' during the course of testing	None	Yes
2.	Major breakdowns	Evaluative	There are not more than 1 major breakdowns and neither of them is of repetitive nature	None	Yes
3.	Minor breakdowns	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

17.3 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)] : **Does not conform**
- iv) Drawbar for agricultural tractors – Link type [IS 12953:1990 (Reaffirmed in 2017)] : **Conforms**
- v) Agricultural tractors - Operator's seat technical requirement [IS 12343 –1998 (First revision) (Reaffirmed in January, 2019)] : **Does not conform**

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- vi) Guide for safety & comfort of operator of agricultural tractors: Part 1 General requirements (first revision): [IS 12239 (PT-1) 1996/ISO 4254-1:2018] : Conforms
- 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

17.4 Salient Observations:

17.4.1 Laboratory tests:

17.4.1.1 PTO Performance Test:

- i) The maximum PTO power is recorded as **26.7 kW** against the declaration of **27.2 kW**, which meets the requirement of IS: 12207-2019 with regard to tolerance limit.
- ii) The specific fuel consumption corresponding to maximum power is recorded as **241 g/kWh** against the declaration of **265 g/kWh**, which is within the tolerance limit of IS: 12207-2019.
- iii) The maximum equivalent crankshaft torque is recorded as **146.8 N-m** against the declaration of **165.8 N-m**, which does not meet the requirement of IS: 12207-2019 with regard to tolerance limit.
- iv) The backup torque is recorded as **15.2 %** and meets the evaluative requirement of IS: 12207-2019.

17.4.1.2 Drawbar Performance Test:

During ten hours drawbar performance test, creeping of LHS & RHS rear tyres over the rims are recorded as **35 & 30 mm** respectively. This should be looked into for necessary corrective action.

17.4.1.3 Hydraulic performance test:

Maximum cumulative drop in height of hydraulic lift during lift maintenance load test for a total duration of 30 minute has been recorded as **80mm** against the maximum requirement of **50 mm**. This indicates internal leakage of hydraulic fluid. This should be looked into for necessary corrective action.

17.4.1.4 Mechanical Vibration:

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

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17.4.1.5 Three-point linkage:

- i) The dimensions of width of ball of lower hitch point and Lateral distance from lower hitch point to centre line of tractor does not meet the requirement of IS:4468- 1997 (Part-I) (Reaffirmed in October, 2017). This should be looked into for necessary corrective action at production level.
- ii) Some of the parameters of three point linkage conform to Cat. I and some of them conform to Cat.II. Keeping in view the spirit of standardization, necessary improvement may be incorporated.

17.4.1.6 Haulage test:

Specific fuel consumption with two & four wheel trailer was recorded as **36.51 to 36.75 & 35.78 to 35.82 ml/km/tonne** respectively against the declaration of 25.0 to **30.0 ml/km/tonne** & which does not meet the requirement IS:12207-2019. This should be looked into for necessary corrective action.

17.4.1.7 Components/Assembly Inspection:

- i) Clearance between king pin and bush,(mm)
- ii) Minimum permissible depth of oil groove of brake lining, (mm)
- iii) Height of lining over rivet head of clutch plate, (mm)

The discard limit of above said parameters were not given in the technical specification & literature submitted by the applicant. This should be looked into for necessary corrective action.

17.5 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 centre of steering control wheel has been measured as 540 mm. It should be within 425 to 525 mm as per IS: 12343-1998 (Re-affirmed in January, 2019).
- ii) There shall be provision of spark arrester in the exhaust system of tractor's engine as per IS: 12239 (Part-2)-1999 (Re-affirmed in January, 2019).
- iii) Working clearance between hydraulic position control and draft control lever is measured as 40 mm against the minimum requirement 70 mm, It should be as per IS: 12239 (Part-2) – 1999 (Reaffirmed in January, 2019).
- iv) There shall be provision of master shield around the PTO shaft as per IS: 4931-1995 (Reaffirmed in January, 2019).



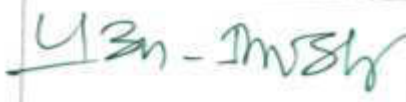
17.6 Adequacy of Literature:

17.6.1 Following literature of following tractor models were supplied with the test sample for reference during the test.

- i) Operator's Instruction book / Manual of MF 241 DI AT 2WD & MF 241 DI AT 4WD tractor models
- ii) Parts Catalogue Book / Manual of MF 241 DI AT 2WD tractor model
- iii) Workshop Service Manual (Part-1 and Part-2) MF 241 DI AT 2WD & MF 241 DI AT 4WD tractor models

- 17.6.2 Literatures submitted by applicant are found sufficient, **except the following:**
- i) Recommended oil / lubricant grade given in Operator's Instruction book / Manual does not match with specifications submitted by applicant.
 - ii) Oil change period of transmission, hydraulic, brake and steering system given in Operator's Instruction book / Manual does not match with specifications submitted by applicant.
 - iii) Brand name of coolant recommended for cooling system of tractor is not available in Operator's and Service manual.
- 17.6.3 The literature should be brought out in national as well as other regional languages of India for guidance of users

TESTING AUTHORITY:

C.V. CHIMOTE TEST ENGINEER	
Y. K. RAO SENIOR AGRICULTURAL ENGINEER	
P. K. PANDEY DIRECTOR	

Draft Test Report is compiled by: **Poonam Khurasia**, Senior Technical Assistant

18. APPLICANT'S COMMENTS

Para No.	Our Reference	Applicant's comments
18.1	17.4.1.2, 17.4.1.3, 17.4.1.4, 17.4.1.5 [(i) & (ii)], 17.4.1.6, 17.4.1.7 [(i), (ii) & (iii)], 17.5 [(i), (ii) & (iv)] 17.6.2 [(i), (ii) & (iii)] & 17.6.3	We will study and take appropriate corrective actions.

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ANNEXURE – I

BRIEF SPECIFICATION OF IMPLEMENTS USED DURING FIELD TEST

S.No.	Item	Disc Plough	Rotavator
1.	Make	Massey Ferguson	Sonalika
2.	Type	Mounted	Mounted
3.	No. of bottom/blades	Two	36 (in 6 flanges)
4.	Type of bottom/blades	Plain concave	Hatchet shape
5.	Size of bottom/blades, (mm)	650	255 x 60 x 6
6.	Spacing of bottom/flanges, (mm)	510	250
7.	Lower hitch point span, (mm)	735	715
8.	Mast height, (mm)	540	610
9.	Overall dimensions, (mm):		
	- Length	1550	970
	- Width	990	1780
	- Height	1110	1080
10.	Gross mass, (kg)	250	440

ANNEXURE- II

BRIEF SPECIFICATION OF FULL CAGE WHEEL

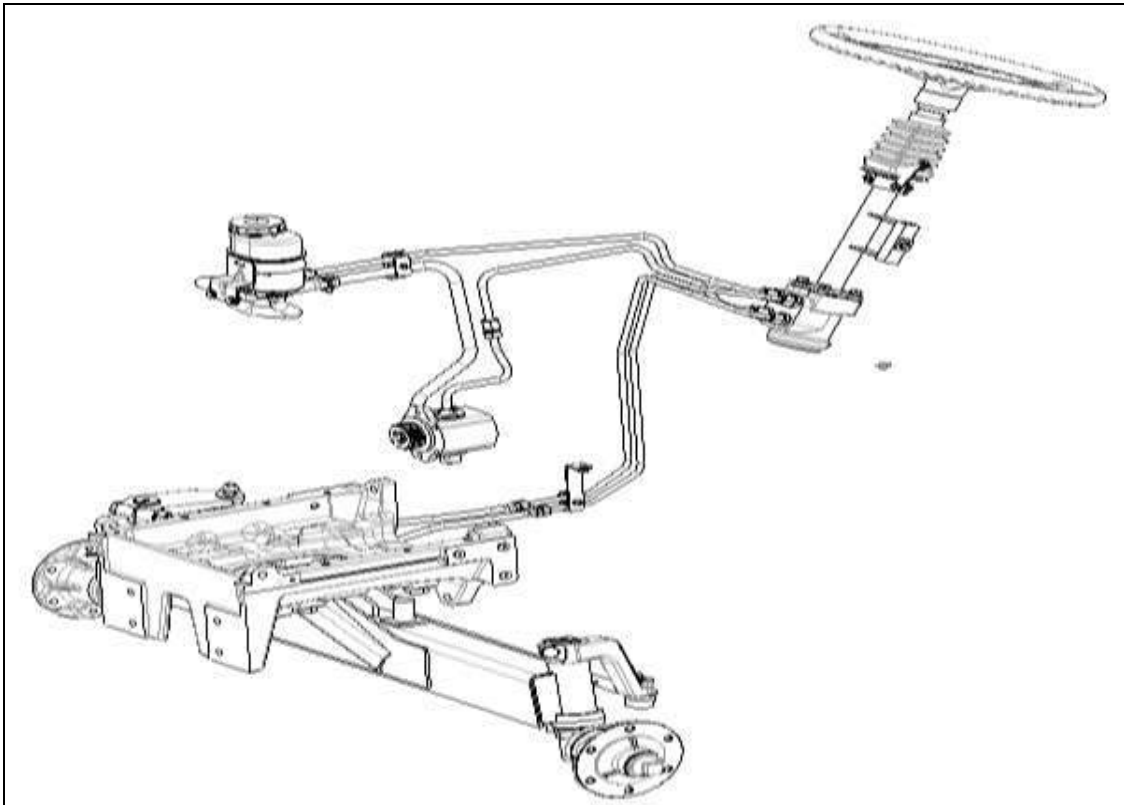
S. No.	Items	Specifications
1.	Type	Full cage wheel
2.	Diameter, (mm)	1240
3.	Width, (mm)	895
4.	No. and types of lugs	24, straight lugs made up of MS-angle section welded to angle iron frame.
5.	Size of angle section, (mm)	50 x 50 x 5
6.	Length of lugs, (mm)	445
7.	Spacing of lugs, (mm)	315
8.	Weight of each cage wheels (kg)	145

ANNEXURE –III

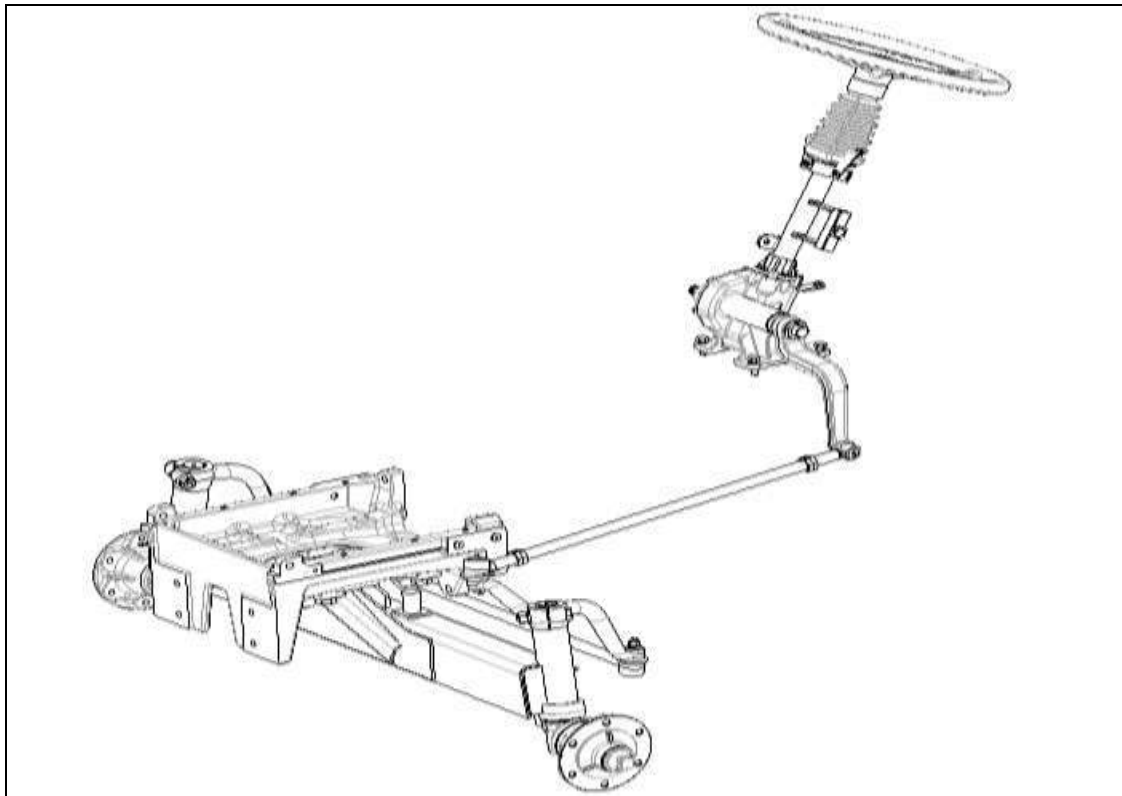
TRACTOR RUN HOURS DURING TEST

A.	LABORATORY AND TRACK TESTS:	HOURS
1.	Running-in	36.00
2.	PTO performance test	9.86
3.	Drawbar performance test	15.27
4.	Power lift and hydraulic pump performance test	1.5
5.	Turning ability	0.33
6.	Location of centre of gravity	0.25
7.	Operator's field of vision	Nil
8.	Brake test	1.75
9.	Noise measurement	1.91
10.	Mechanical vibration test	1.00
11.	Air cleaner oil pull over	2.50
12.	Theoretical speed test	2.45
B.	FIELD TEST:	
1.	Disc Plough	10.50
2.	Rotavation	10.25
3.	Wet land cultivation (puddling and water proof test)	15.63
C.	HAULAGE TEST:	
D.	Miscellaneous test and other run hours including idle run, transportation, trials and preparation for test	16.58
TOTAL:		131.91

ANNEXURE-IV



STANDARD FITMENT –STRAIGHT FIXED AXLE WITH POWER STEERING



OPTIONAL FITMENT- STRAIGHT FIXED AXLE WITH MANUAL STEERING