व्यावसायिक परीक्षण रिपोर्ट COMMERCIAL TEST REPORT (Initial) संख्या / No. : T-968/1487/2015

माह / Month: March, 2015



NEW HOLLAND 7510 - TRACTOR



भारत सरकार GOVERNMENT OF INDIA

कृषि मंत्रालय (कृषि एवं सहकारिता विभाग, मशीनीकरण एवं प्रोद्योगिकी प्रभाग)
Ministry of Agriculture (Deptt. of Agri. & Co-op, Mechanization & Technology Division)

CENTRAL FARM MACHINERY TRAINING & TESTING INSTITUTE (An ISO: 9001 - 2008 Certified Institute)

ट्रैक्टर नगर, बुदनी (म.प्र.) ४६६ ४४५ Tractor Nagar, Budni (M.P.) 466 445

Phone: 07564-234729 Fax: 07564 - 234743 E-mail fmti-mp@nic.in Website: http://cfmtti.dacnet.nic.in

NEW HOLLAND 7510- TRACTOR Commercial (Initial)

Manufacturer

: M/s. New Holland Fiat (India) Pvt. Ltd.,

Plot No.-3, Udyog Kendra, Greater Noida - 201 306, Distt. Gautam Budh Nagar,

(Uttar Pradesh)

Test requested by

: The manufacturer

Selected for test by

: The manufacturer

Place of running-in

: At manufacturer's works

Duration of said running-in, (h):

- Engine

: 50

- Transmission

50

Method of Selection

: The tractor was submitted directly by the applicant for test. Hence, method of

selection is not known.

1. SPECIFICATIONS

1.1 Tractor:

Make

: New Holland

Model Brand name

: 7510 : NA

*Variants. If any:

| S.No. | Variants Model | Variant Feature |
|-------|------------------------|------------------------|
| 1 | New Holland 7510 2WD | 24+24 Transmission,2WD |
| 2 | New Holland 7510 8+8 | 8+8 Transmission,2WD |
| 3 | New Holland 7510 4WD | 24+24 Transmission,4WD |
| 4 | New Holland 7510 12+12 | 12+12 Transmission,4WD |

*The variant models have not been tested at this Institute yet.

Type

: Four wheeled.

Rear-wheel driven. Standard Agricultural Tractor.

Year of manufacture

: March, 2014 (L403)

Chassis number

: NH1279779

Country of origin

: India

1.2 Engine:

Make

: IVECO (apa)

Model

: 8035.45*720

Type

: Four stroke, water cooled, turbocharged, intercooled, direct injection, diesel engine.

: 125615D

Serial number Country of origin

: India

1.2.1 Engine speed (rpm), (Manufacturer's recommended production settings):

- Maximum speed at no load

: 2450 to 2600

- Low idle speed

: 600 to 700

Speed at maximum torque

: 1100 to 1500

Rated speed, (rpm):

- For PTO use

: 2300

- For drawbar use

: 2300

NEW HOLLAND 7510- TRACTOR Commercial (Initial)



| | Replace new hydraulic pump Make –Rexroth ,Bosch group (Made In India) Model/group combination no:-AZPW10019LH030PBS0593 E 061 100 600 Sr no :-301206475 This breakdown/defect has been categorized in major (Mj-15) | |
|----|--|------|
| | | 4.8 |
| 2. | was leaked & oil slashed. So damaged hydraulic pump outlet mounting adopter "O" ring was replaced breakdown/defect has been | |
| 0 | with new one (part to broakdown as per 15.1225 to eat puncture) | 43.3 |
| 3. | After completion of two over the rim. So, the rim. | 43.3 |
| 4. | repaired and refitted. During ten hours drawbar test, creeping of LHS & RHS rear tyre over the During ten hours drawbar test, creeping of LHS & RHS rear tyre over the Normal State of the | |

16. SUMMARY OF OBSERVATIONS, COMMENTS & RECOMMENDATIONS Evaluative (mandatory) / Non-evaluative (Non-mandatory) parameters applicable for evaluative (mandatory) / Non-evaluative (Non-mandatory) parameters applicable for qualifying Minimum Performance criteria as per Clause-4 (Table-1) of IS: 12207-2014 qualifying Minimum Performance criteria as per Glause-4 (Table-1) of is: 12207-2014 for acceptance of the tractor for the purpose of subsidies/NABARD financing are 16.1 Whether

| | for acceptance of summarized as un | der: | | declared by the | As | meets the |
|------------------------|--|--|---|--------------------|-------------------|--------------|
| SI. No. Characteristic | Category (Evaluative / Non Evaluative) | Requirements as per IS: 12207-2014 | applicant / (D) Requirement (R) | ed | ments (Yes/No) | |
| | | | | 5 | 6 | 7 |
| | | | 4 | | | 1 |
| | | 3 | Declared value to be achieved | | | |
| 1 | 2 | | Declared value to be achieved with a tolerance of: -5 / +10% for with a tolerance of: -5 / +10% | | | |
| 16.1.1 | PTO Performance | Evaluative | with a tolerance of: -5 / +10 / 8 tolerance of: | 50 (D) | 50.2 | Yes |
| a) | Maximum power under 2 h test, (kW) (Natural ambient condition) | pto power ≤ 26 for pto power ≤ 26 for pto power ±10% for Engine power | | | | |
| | | | -7.5/+10% to. 26 kW | 50 (D) | 50.2 | Yes |
| | | Non | -do- | | | |
| b) | Power at rated | Luative. | | 260 (D) | 263 | Yes |
| | engine speed, (kW) | LVC | + 5% | | | 100 |
| c) | Specific fuel | | | | | |
| 16 | concumption | Non Evaluative | | | | |
| | corresponding to | Evaluativ | | 285 (D) | 306.7 | Yes |
| | maximum power. | | ± 8% | 285 (0) | | |
| | (g/kWh) | | 101 | | - | — |
| a) | d) Maximum | Non Evaluative | | 30.0 (D) | 47.1 | Yes |
| | equivalent crankshaft torque, | Evaluation | 10 percent, min. | | | |
| | (Nm) | Non | 10 pers | | | |
| e) | (Nm) Back-up torque, | Evaluative | | | | |
| -, | Dack-up torq | Evalua | | | - | |

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percent

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| 1 | | | 3 | 4 | 5 | 6 | 7 |
|---------------|--------------|--|-------------------|--|-------------------------------------|----------|-------|
| _ | Mar | 2 ximum operati | ng temperatu | re, (°C) The declared value should | | | |
| , | 1) | Engine oil | Non Evaluative | not exceed the max. value specified by the oil company and the observed value under high ambient condition should not | 132(D) | 120 | 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 | 119 (D) | 103 | Yes |
| | Eng | jine oil | | Not exceeding 170 on High | Maximum (R) | 0.438 | Yes |
| g) | con | sumption, Wh) | Evaluative | ambient continues Maximum light absorption coefficient of 3.25 per meter or equivalent meter or 5.2 or 75 | 3.25 per meter Maximum (R) | 0.54 | Yes |
| h) | , | Smoke level | Evaluative | BOSCH No. 5.2 of Hatridge value (As per CMVR) | | l | |
| 16.1.2 | _ | wbar perform | ance : | | 26.0 (D) | ⊣ | Yes |
| a) | Max Dull | kimum drawbar with ballast | Non | Minimum 65% of static mass with ballast | 23.4 (R) Minimum | 27.93 | |
| _ | 15 | responding to percent wheel , (kN) | | Minimum 65% of static mass of tractor without mass of tractor without | 20 (D) 16.6 | 20.93 | Yes |
| b) | Max with | k. drawbar pull standard | Evaluative | ballast of white case may ballast, as the case may | (R) Minimum | | |
| | 15 slin | respond-ing to percent wheel , (kN) | | Minimum 80 % of PTO Minimum 80 % of PTO power as referred in SI No. power as referred in SI No. | 40 (D) | 41 | Ye |
| c) | Mar | kimum drawpai ver with stan- rd ballast, | Evaluative | i) a) of tractors having case of tractors having total static mass > 1500 kg total static mass > 1500 kg Minimum 75 % of PTO performance in i) a) of tractor having 1500 kg tractors having 1500 kg tractors having 1500 kg tractor total static mass of the Minimum 75 % of the minimum 75 % of the engine power as referred in SI No. | 40.2(R) Minimum | | |
| | | _ | Non | tractors which do not tractors which do not a PTO shaft. | | 106 | Ye |
| d) | Ma: trar | ximum nsmission oil | 1+11/6 | The deciment maximum exceed the maximum specified by oil company specif | | Page 41 | of 49 |
| | | 4 | | INDELLE | | | |

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| 1 | | 2 | 3 | 4 | 5 | 6 | 7 |
|----------|-----------------------|---|--------------------------|--|----------------------|-----------|--|
| 1 16.1.3 | Pou | use and bud | raulic nump | performance : | | | |
| | Pov | ver int and nya | -it-, throughout | | | | 5/00/5/5 |
| a) | Max | imum lifting capa | Non | Tolerance of minus | 24.52 (D) | 23.05 | Yes |
| | 2) | At hitch points With the standard | Evaluative Evaluative | The lift capacity should at least be 24 kg/PTO kW. and | 18.50 (D) | 21.92 | Yes |
| | | frame | | kW where the tractor is not provided with a PTO shaft | 11.82 (R) Minimum | | |
| b) | the | imum drop in height of the | Non Evaluative | The observed value should not exceed 50 mm | 50 (D) Maximum | 45 | Yes |
| | appl force minu | ication of the e after each 5 utes interval | | ce, equal to or less than 60 | | - del u | |
| | (mm | 1) | o at 25 kmph | : agual to or less than 60 | 0 N on brake | e pedal w | illi roat |
| 16.1.4 | Bra | ke performand | istance at a for | ce, equal to | 10 (P) | 6.51 | Yes |
| a) | Max | imum stopping o | iloto. | 10 | 10 (R) | 6.66 | Yes |
| | balla | 351, (111). | Evaluative | 10 | 10 (14) | | |
| | 1) | 1) Cold brake | Evaluative | | 600 (R) | 217 | |
| | 2) | Hot brake | | | Maximum | to | Yes |
| b) | | imum force | 11.10 | 600 | Maximon | 251 | |
| | exer | teu on | Evaluative | | | | |
| | brak | e peda | | | | | |
| | achi | eve eleration of 2.5 | | | | | |
| | dece | //// | | | Yes | Yes | Yes |
| c) | | u narkilly | Evaluative | Yes / No | | | |
| ٠, | | i- offective at | | | | | |
| | | | | | | | |
| | foot nedal(S) | | | 1 | | 87 | Yes |
| | Na | hand lever | ont: | T CMVR | 88(R) | 87 | 165 |
| 16.1.5 | Noi | no moasulein | T | As per CMVR | | | |
| a) | Max | imum anio | | | (5) | 98 | Yes |
| - C | nois | emitted by | | As per CMVR | 98(R) | 98 | 100 |
| | 145183017 | dR(A) | tive | AS por | | | |
| b) | Max | dimum noise | Evaluative | | | 30 | Yes |
| -0.076 | ope | rator's ear level | thra | tions at: | | 30 | Yes |
| | dB(| rator's ear level A) plitude of med | hanical vibra | | (2.3) | | No |
| 16.1.6 | Am | plitude of med | I | 100 microns (max) | 100(R) | 170 | |
| | 1) | Left foot rest | 1 | 100 1111 | | 210 | No |
| | 2) | LI FOOT ICO | Non Evaluative | | | | |
| | 3) | Coat (with unit | Evaluation | | | | |
| | 10 | sealeur | | | | | 1 |
| | 4) | Steering wheel | 12: | | 7.0 (D) | 7.0 | Ye |
| 40 | | wheel ulage requirem uss mass of the tr | ents . | | 8.0 (D) | 8.0 | Ye |
| 16.1.7 | Ha | ulage require | ailers, to | | 0.0 (0) | | |
| a) | Gro | | Evaluative | | | | |
| 12011 | 1) | I VVO · · · | Evaluation | | | | 2232 |
| | 2) | Four wheel | 1 | | 114011 | Page 42 | of 49 |
| | 1-/ | | | TESTING INSTITUTE- E | BUDNI | 1 490 12 | and the state of t |
| | | | | TESTING INSTITUTE | | | |
| | | | TRAINING & | | | | |
| | | WAIERY | IN | | | | |
| JTDA | | AMACHINE | | | | | |

NEW HOLLAND 7510- TRACTOR Commercial (Initial)

| | | | 2 | 4 | 5 | 6 | 7 | |
|---|--|--|--|--|---|--|-------------------------------------|--|
| 1 | | 2 | 3 | | | | 1 1/ | |
| b) | Dist | 2 ance travelled / li | ter of fuel cons | | 5.0 to | 3.94 to 4.05 | Yes | |
| | 1) | Two wheel | 1 | | 6.0(D) | | Yes | |
| | ., | 5/20/20/20/00/00/00/00/00/00/00/00/00/00/ | Non | | 4.0 to | 3.76to 3.87 | res | |
| | 2) | Four | Evaluative | | 6.0(D) | | | |
| | 1 | wheel | V. | | | 05.00 45 | Yes | |
| c) | Fue | l consumption (m | I/km/tonne): | T | 25 to | 35.23 to 36.27 | 165 | |
| | 1) | Two wheel | | | 50(D) | 32.34 to | Yes | |
| | 1,7 | 1 100 111100 | Non | | 25 to | 33.24 | , 05 | |
| | 2) | Four wheel | Evaluative | | 50(D) | 35.24 | | |
| 16.1.8 | 101- | tland cultivation | n: | The identified | | | | |
| 10.1.8 | | | Evaluative | -mblies should | | Manufacture | | |
| | | illing io. | D W The Control of th | - atially meet the | There | has not | | |
| | | owing | | autroment of to. | There | recommende | 2000.000 | |
| | - | emblies: | -do- | 11082. No water | be no | d the tractor | Not | |
| | 1) | Clutch | | ingress in the identified assembly given in | ingress | for puddling operation. | applie | |
| | 01 | assembly | -do- | assembly giver in column-2.If tractor does | of water | Hence the | able | |
| | 2) | Brake | | not meet the | and/or | puddling test | 1 | |
| | 21 | housings Front axle | -do- | | mud | was not | | |
| | 3) | hubs | | requirements of the cultivation, it may be cultivation and for dry | 8250 | conducted | | |
| | 43 | Engine Oil | -do- | recommended for dry land operation only. | | LI ALTINIC ATAMAS COST III | | |
| | 4) | | -do- | land operation | | | | |
| | 5) | Transmission | -40 | | | Conforms | Yes* | |
| | | Oil | | Belt drives, pullies, | | Contornis | 165 | |
| 16.1.9 | Caf | ety features : | - Uno | Belt drives, paulic | | | | |
| | Sai | CLY ICUS | luative | | | | | |
| | Gu | ards against | Evaluative | -iloncer, liyuru | | | | |
| a) | Gua | ards against | | silencer, Hydros | . Filly O | uarded. The v | ear of | |
| a) | Gua | ards against ving and hot | | pipes (As per IS 12239 (Part 2)) | ot fully g | uarded. The y | ear of | |
| a) | Gua | ards against ving and hot | | pipes (As per IS 12239 (Part 2)) | ot fully g | uarded. The yof relevant IS | ear of | |
| a) | Gua | ards against ving and hot | | pipes (As per IS 12239 (Part 2)) | ot fully g nentation on dian stan | uarded. The yof relevant IS dard this confo | ear of 12207- rms to | |
| a) Remari | Gua mo par k: Th | ards against ving and hot ts ne guards agai | nst moving | pipes (As per IS 12239 (Part 2)) and hot parts are n e the date of implementation of In | ot fully g nentation on dian stan | uarded. The yof relevant IS dard this confo | rear of 12207- orms to | |
| a) Remari | Gua mo par k: Th | ards against ving and hot ts ne guards agai | nst moving | pipes (As per IS 12239 (Part 2)) and hot parts are n e the date of implementation of In | ot fully g nentation on dian stan | uarded. The yof relevant IS dard this confo | ear of 12207- rms to Yes | |
| a) Remari | Gua mo par k: Th | ards against ving and hot ts ne guards agai | nst moving | silencer, ryding pipes (As per IS 12239 (Part 2)) and hot parts are not the date of implementation of Information (Parch, 2009). | ot fully g nentation on dian stan | uarded. The yof relevant IS dard this confo | rear of 12207- orms to Yes | |
| Remark Manufac 2014. TI S 1223 | k: The cturer herefo | ards against ving and hot ts ne guards against against of the test sare ore, for prospect (2) – 1999 (Re | nst moving | silencer, ryding pipes (As per IS 12239 (Part 2)) and hot parts are not the date of implementation of Information (Parch, 2009). As per CMVR | ot fully g nentation on dian stan | requirements | ear of 12207- rms to Yes | |
| a) Remari | Gua mo par k: The cturer herefo 9 (Pa | ards against ving and hot ts ne guards against agains | nst moving | silencer, ryding pipes (As per IS 12239 (Part 2)) and hot parts are not the date of implementation of Information (Parch, 2009). As per CMVR | ot fully g nentation on dian stan | requirements Does not | ear of 12207- rms to Yes | |
| Remark manufac 2014. Ti S 12239 b) | Gua mo par k: Th cturer herefo 9 (Pa Ligh arra | ards against ving and hot ts ne guards against of the test salore, for prospecting ngement | nst moving | silencer, riversity pipes (As per IS 12239 (Part 2)) and hot parts are not per the date of implementation of light pipes (As per CMVR) Should meet the requirements of IS: | ot fully g nentation on dian stan | Does not meet the | 168 | |
| Remark Manufac 2014. TI S 1223 | k: The cturer herefore (Pa Ligh arranses) | ards against ving and hot ts ne guards against of the test salore, for prospecting ngement ting | nst moving mple is before tive effects of affirmed in M Evaluative | silencer, riversity pipes (As per IS 12239 (Part 2)) and hot parts are not per the date of implementation of light pipes (As per CMVR) Should meet the requirements of IS: | ot fully g nentation on dian stan | requirements Does not | 168 | |
| Remark manufac 2014. Ti S 12239 b) | k: The turer herefore (Pa Ligh arran Sear requirement) | ards against ving and hot ts ne guards against of the test sain ore, for prospecting ngement ting irrements arters having | nst moving mple is before tive effects of affirmed in M Evaluative | silencer, riversity pipes (As per IS 12239 (Part 2)) and hot parts are not rethe date of implementation of light parts, 2009). As per CMVR Should meet the requirements of IS: 12343 (As amended from time | ot fully g nentation on dian stan | Does not meet the | 168 | |
| Remark manufac 2014. Ti S 12239 b) | k: The turer herefore (Pa Ligh arran Seat requirement) | ards against ving and hot ts ne guards against of the test same ore, for prospecting ngement ting irrements cotors having than 1150 | nst moving mple is before tive effects of affirmed in M Evaluative | silencer, riversity pipes (As per IS 12239 (Part 2)) and hot parts are not re the date of implementation of light arch, 2009). As per CMVR Should meet the requirements of IS: (As amended from time to time) | ot fully g nentation on dian stan | Does not meet the requirements | No | |
| Remark manufac 2014. Ti S 12239 b) | Gui mo par k: Th cturer herefo 9 (Pa Ligh arra Sea requ (Tra more | ards against ving and hot ts ne guards against of the test sar ore, for prospecting or the test sar or the tes | nst moving mple is before tive effects of affirmed in M Evaluative | silencer, riversity pipes (As per IS 12239 (Part 2)) and hot parts are not the date of implementation of light arch, 2009). As per CMVR Should meet the requirements of IS: (As amended from time to time) | | Does not meet the requirements Meets the | 168 | |
| Remark manufac 2014. Ti S 12239 b) | k: The turer herefore (Pa Ligh arran Sear requirement) | ards against ving and hot ts ne guards against of the test sar ore, for prospecting agament ting airements ctors having than 1150 rear track | nst moving mple is before stive effects of affirmed in M Evaluative Non Evaluative | silencer, riversity pipes (As per IS 12239 (Part 2)) and hot parts are not the date of implementation of light arch, 2009). As per CMVR Should meet the requirements of IS: (As amended from time to time) | | Does not meet the requirements | No | |
| Remark manufact 2014. Ti S 12239 b) | k: The turer herefore (Pa Ligh arran Sear requirement width | ards against ving and hot ts ne guards against of the test said ore, for prospecting ngement ting nirements ctors having than 1150 rear track h) | nst moving mple is before stive effects of affirmed in M Evaluative Non Evaluative | silencer, rividing pipes (As per IS 12239 (Part 2)) and hot parts are in the date of implementation of larch, 2009). As per CMVR Should meet the requirements of IS: 12343 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended days) | | Does not meet the requirements Meets the | No | |
| Remark manufac 2014. Ti S 12239 b) | Gui mo par k: Th cturer herefo 9 (Pa Ligh arra Sea requ (Tra more mm widtl Tech | ards against ving and hot ts ne guards against of the test sar ore, for prospectors, for prospecting agament ting airements ctors having the than 1150 rear track homes. | nst moving mple is before stive effects of affirmed in M Evaluative Non Evaluative | silencer, riversity pipes (As per IS 12239 (Part 2)) and hot parts are note the date of implementation of larch, 2009). As per CMVR Should meet the requirements of IS: 12343 (As amended from time) Should meet the requirements of IS: 12343 (As amended from time) | | Does not meet the requirements Meets the requirements | No | |
| Remark manufact 2014. Ti S 12239 b) | Gui mo par k: Th cturer herefo 9 (Pa Ligh arra Seai requ (Tra more mm widtl Tech | ards against ving and hot ts ne guards against for the test sar ore, for prospecting ngement ting nirements ctors having that the thing or track thing nirements for track thing nirements for track thing nirements for the track that | nst moving mple is before tive effects of affirmed in M Evaluative Non Evaluative Non Evaluative | silencer, rividing pipes (As per IS 12239 (Part 2)) and hot parts are in the date of implementation of larger (As per CMVR) Should meet the requirements of IS: 12343 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended from time to time) | - | Does not meet the requirements Meets the requirements Meet the | No | |
| Remark manufact 2014. Ti S 12239 b) | Gui mo par k: Th cturer herefo 9 (Pa Ligh arra Seai requ (Tra more mm widtl Tech | ards against ving and hot ts ving and hot ts ne guards against of the test sar ore, for prospecting of the test sar ore, for ore, for prospecting of the test sar ore, for | nst moving mple is before stive effects of affirmed in M Evaluative Non Evaluative Non Evaluative | silencer, rividing pipes (As per IS 12239 (Part 2)) and hot parts are in the date of implementation of larch, 2009). As per CMVR Should meet the requirements of IS: 12343 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended from time to time) Should meet the | - | Does not meet the requirements Meets the requirements | No | |
| Remark manufact 2014. Ti S 12239 b) c) | Gui mo par k: Th cturer herefo 9 (Pa Ligh arrai Sea requ (Tra more mm widtl Tech requ PTC | ards against ving and hot ts ving and hot ts ne guards against of the test sar ore, for prospecting of treat ting direments ctors having the entire track holds in the entirements of th | nst moving mple is before stive effects of affirmed in M Evaluative Non Evaluative Non Evaluative | silencer, rividing pipes (As per IS 12239 (Part 2)) and hot parts are in the date of implementation of larch, 2009). As per CMVR Should meet the requirements of IS: 12343 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended from time to time) Should meet the | - | Does not meet the requirements Meets the requirements Meet the | No | |
| Remark manufact 2014. Ti S 12239 b) | Gui mo par k: Th cturer herefo 9 (Pa Ligh arrai Sea requ (Tra more mm widtl Tech requ PTC | ards against ving and hot ts ving and hot ts ne guards against of the test sar ore, for prospecting of treat ting direments ctors having the entire track holds in the entirements of th | nst moving mple is before tive effects of affirmed in M Evaluative Non Evaluative Non Evaluative | silencer, rividing pipes (As per IS 12239 (Part 2)) and hot parts are in the date of implementation of larch, 2009). As per CMVR Should meet the requirements of IS: 12343 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended from time) Should meet the requirements of IS: 4931 (As amended from time) Should meet the requirements of IS: 4468 (Part-I) (As amended from time | - | Does not meet the requirements Meets the requirements Meet the requirements | No Yes | |
| Remark manufact 2014. Ti S 12239 b) c) | Gui mo par k: Th cturer herefo 9 (Pa Ligh arrai Sea requ (Tra more mm widtl Tech requ PTC | ards against ving and hot ts ving and hot ts ne guards against of the test sail ore, for prospecting ngement ting ngement ting irements ctors having than 1150 rear track holinical property of the test sail or t | nst moving mple is before stive effects of affirmed in M Evaluative Non Evaluative Non Evaluative | silencer, rividing pipes (As per IS 12239 (Part 2)) and hot parts are in the date of implementation of larger (As per CMVR) Should meet the requirements of IS: 12343 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended from time to time) Should meet the requirements of IS: 4468 (Part-I) (As amended from time to time) | - | Does not meet the requirements Meets the requirements Meet the requirements Meet the requirements | No | |
| Remark manufact 2014. Ti S 12239 b) c) | Gui mo par k: Th cturer herefo 9 (Pa Ligh arrai Sea requ (Tra more mm widtl Tech requ PTC | ards against ving and hot ts ving and hot ts ne guards against of the test sar ore, for prospecting of treat ting direments ctors having the entire track holds in the entirements of th | nst moving mple is before stive effects of affirmed in M Evaluative Non Evaluative Non Evaluative Non Evaluative | silencer, rivided pipes (As per IS 12239 (Part 2)) and hot parts are note the date of implementation of limplementation of limplementation of limplements of IS: As per CMVR Should meet the requirements of IS: 12343 (As amended from time) Should meet the requirements of IS: 4931 (As amended from time to time) Should meet the requirements of IS: 4468 (Part-I) (As amended from time to time) Should meet the samended from time to time) Should meet the Should meet the Should meet the samended from time to time) | - | Does not meet the requirements Meets the requirements Meet the requirements | No Yes | |
| Remark manufact 2014. Ti S 12239 b) c) | Gu: more par k: The cturer herefe 9 (Pa Ligh arrai Seal requi (Trai more mm widtl Tech requi PTO | ards against ving and hot ts ne guards against of the test sain ore, for prospecting or 1999 (Reting or 1999) (Reting or 199 | nst moving mple is before stive effects of affirmed in M Evaluative Non Evaluative Non Evaluative Non Evaluative | silencer, riversity pipes (As per IS 12239 (Part 2)) and hot parts are note the date of implementation of larger (As per CMVR) Should meet the requirements of IS: 12343 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended from time to time) Should meet the requirements of IS: 4468 (Part-I) (As amended from time to time) Should meet the solutions. | - | Does not meet the requirements Meets the requirements Meet the requirements Meet the requirements | No Yes Yes Not | |
| a) Remark manufact 2014. Ti S 12239 b) c) | Gu: more par k: The cturer herefe 9 (Pa Ligh arrai Seal requi (Trai more mm widtl Tech requi PTO | ards against ving and hot ts ne guards against of the test sain ore, for prospecting or 1999 (Reting or 1999) (Reting or 199 | nst moving mple is before stive effects of affirmed in M Evaluative Non Evaluative Non Evaluative Non Evaluative | silencer, rividing pipes (As per IS 12239 (Part 2)) and hot parts are in the date of implementation of larger (As per CMVR) Should meet the requirements of IS: 12343 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended from time to time) Should meet the requirements of IS: 4468 (Part-I) (As amended from time to time) Should meet the requirements of IS: 4953 and IS 12953 and IS | - | Does not meet the requirements Meets the requirements Meet the requirements Meet the requirements | No Yes Yes Not appli | |
| Remark manufact 2014. Ti S 12239 b) c) | Gui mo par k: The turer herefo (Pa Ligh arrai requi (Trai more min width Tech requi PTC Dimithre | ards against ving and hot ts The guards against of the test sare ore, for prospecting ore or track ting or track | nst moving mple is before stive effects of affirmed in M Evaluative Non Evaluative Non Evaluative Non Evaluative | silencer, riversity pipes (As per IS 12239 (Part 2)) and hot parts are note the date of implementation of light implementation of light implementation of light implements of IS: 12343 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended from time to time) Should meet the requirements of IS: 4468 (Part-I) (As amended from time to time) Should meet the requirements of IS: 4468 (Part-I) (As amended from time to time) Should meet the requirements of IS: 12953 and IS 12362 (Part 3) (As aded from time to time) | - | Does not meet the requirements Meets the requirements Meet the requirements Meet the requirements | No Yes Yes Not | |
| a) Remark manufact 2014. Ti S 12239 b) c) | Gu: more par k: The cturer herefe (Pa Ligh arra Seat requ (Tra more min widtl Tech requ PTC Dim three | ards against ving and hot ts The guards against of the test sare ore, for prospecting ore or track ting or track | nst moving mple is before stive effects of affirmed in M Evaluative Non Evaluative Non Evaluative Non Evaluative | silencer, riversity pipes (As per IS 12239 (Part 2)) and hot parts are note the date of implementation of larger (As per CMVR) Should meet the requirements of IS: 12343 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended from time to time) Should meet the requirements of IS: 4931 (As amended from time to time) Should meet the requirements of IS: 4468 (Part-I) (As amended from time to time) Should meet the solutions. | - | Does not meet the requirements Meets the requirements Meet the requirements Meet the requirements | No Yes Yes Not appli | |

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| | | | | 3 | | 4 | | 5 | 6 | 7 |
|---------|---------------------------------------|------------------------------------|------------------|-----------------|--------|-------------------------------------|----------------|---------------------|------------------------|--------|
| 1 | | 2 | _ | J (Dues) | icio | n of labellin | g plate |): | | 1.4.4 |
| 16.1.10 | Lab | elling of t | racto | ors (Prov | 1510 | n of labellin | | | New Holland | Yes |
| | 1) | Make | | Evaluati | •• | | | | 7510 | Yes |
| | 2) | Model | | Evaluati | | | | | L403 | Yes |
| | 3) | Year of m | ıfa | Evaluati | | | | 125615D | Yes | |
| | - | Engine | | Evaluative | | Should con | form to | | | |
| | 4) | number | | Evaluati | | the requirements of | | | NH1279779 | Yes |
| | 5) | Chassis number | | | | 0 | | | 50 (67) | Yes |
| | 6) | Declaration PTO pow (kW) (P | n of ver, | Evaluati | ve | | | | x === | 1 |
| 16.1.11 | Disc | ard limit fo | or: | | _ | 1 | fied by | 104.204 | 104.04 | Yes |
| (a) | | der bore | | Evaluati | ve | To be spec | acturer | (D) | | |
| (b) | Clea | eter, (mm) rance een piston | | Non Evaluati | ve | and support the prin literatu | ted by | 0.50 (D) | 0.180 to 0.187 | Yes |
| | cylin | der liner | at | | | Illerato | | | | M |
| | ekirt | (mm) | | | _ | | | 1.50(D) | 0.45 | Yes |
| (c) | Ring | end gap (| mm): | | | -do- | | 1.50(D) | 0.60 to 0.65 | Yes |
| (-) | Ring end gap (mm): - Top comp. ring. | | - Junt | ive | -do- | | 1.80(D) | 0.45 to 0.55 | Yes | |
| | - 2º | comp. rir | ng. | g. Evaluat | | -do- | | | | _ |
| | | | | (mm) | | 10 | | | Taper rings | |
| (d) | - Oil ring. Ring groove clearar | | nce (min). | | -do- | | 0.40 (D) | 0.070 to 0.059 | Yes | |
| () | - Top comp. ring. | | Evaluat | ive | -do- | | 0.40 (D) | 0.056 to 0.069 | Yes | |
| | - 2 | comp. rin | np. ring. Evalua | | -00- | | | | | 1 |
| | - 0 | | | | mm |): | | 0.50 (D) | 0.119 to 0.148 | Yes |
| (0) | Class | il ring. | ain b | earings | 111111 | | | 0.50 (D) | 0.11019 | Yes |
| (e) | - D | ametrical | | LVC | | | | 0.50 (D) | 0.15 | res |
| | _ | earance | nd | Evaluat | ve | | | | | T 1/- |
| | - C | rankshaft e | | LVG | e (n | nm): | | 0.50 (D) | 0.089 to 0.102 0.40 | Yes |
| 10 | tic | oat of hi | ia en | d bearing | ive | -do- | | 0.75 (D) | 0.40 | 1 1 63 |
| (f) | Clea | rance of b | 9 | Evaluat | ive | -00- | | 10 (D) | 0.079 to 0.103 | Yes |
| | - D | amound | | Evalus | | -do- | | 0.40 (D) | 0.075 to 0.100 | 1,175 |
| (g) | Class | xial rance betwo pin and bus | een sh, | Non Evaluati | ve | -do- | | 0.50 (D) | 0.074 to 0.083 | Yes |
| | | | | Non | | -40- | | | | |
| (h) | Clea | rance between | 60. | treati | ve | | | - Luant | | |
| | centr | e pin and | | 10 10 | st a | gency) | As per | relevant | Provided | Yes |
| 16.1.12 | bush | e pin and , (mm) ature (Sub | mis | sion to te | D | ovided/Not | IS C | ode (15 | | |
| 0.1.12 | Liter | ature (ou | | tive | Pi | Provided | 8132) | relevant | | |
| (a) | 0 | perator nanual | Ev | aluative | _ | wided/Not | IS C | ode (io | Provided | Yes |
| (b) | 9828 | Parts | Ev | aluative | 6 | Provided | As per IS C | relevant ode (IS | Provided | Yes |
| ,-, | | italogue | | 971889 | Pr | ovided/Not Provided | 8132) | | | |
| (c) | S | orkshop/ Service nanual | Ev | aluative | | Plovica | | | | |

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| | | | 4 | | 5 | 6 |
|---------|------------------------------|---|--|---------|-----------------------|----------------------------------|
| 1 | 2 | 3 | | | | |
| 16.1.13 | CATEGORY O | F BREAKDO | WNS / DEFECTS : | | | Whether |
| SI. No. | SI. No. Category of (E | | Requirements as per IS: 12207-2014 | | As obser v-ed | meets the requirements (Yes/No.) |
| | Dicamo | Evaluative) | No critical breakdown | | None | Yes |
| 1. | Critical | Evaluative | No critical breakdown | ner of | | |
| 2. | Ontious | | Not more than two and neither of them should be repetitive in | | One | Yes |
| ۷. | Major | Evaluative | nature five | _ | | |
| | Wiajo. | 110000000000000000000000000000000000000 | | and | One | Yes |
| 3. | Carro | frequency of each should no | | ot be | One | |
| Minor | Minor | Evaluative | than two. | | | |
| | In no case, the total number | | five. | Two | Yes | |
| 4. | Total | Evaluative | breakdowns should exert that is, (2 major + 3 minor) | or 5 | | |
| | breakdowns | | minor breakdowns. | 7-2014: | | |
| | | - ntc 35 | per Clause-4 (Table-2) of the | As oh | served | Remarks |
| 16.2 | Optional requ | irements as | minor breakdowns. per Clause-4 (Table-2) of IS Requirements | A3 01 | | |
| S.No. | Characteristic | | | | | Not applicable |
| 1. | 1. Fitment of W | | provision for fitment of ROPS. Solution for fitment of ROPS. Positive fit should meet the provision of IS: 11821 (As amended provision for fitment of ROPS.) | | ROPS not provided app | |
| ' | KOIS | requirement to time) or equivalent | | | | |
| | | from time Internationa | from time to time, from time to time, from time to time, from tow hook, may be Proposition of the front town hook, may be Proposition of the front town hook, may be Proposition of the front town hook, may be Proposition of the front time to time, and the front time, and t | | vided | Yes |
| 2. | Accessories | Trailer hitch provided. | 1, | | forms | |

16.3

Guidelines for declaration of power and specific fuel : Conforms consumption and labeling of agricultural tractors (First revision) [IS: 10273-1987 (Reaffirmed in March, 2009)]

Agricultural tractors - Rear mounted power take-off - : Conforms

Types 1, 2 and 3(third revision)[IS: 4931-1995

: Conforms

iii) Agricultural wheeled tractors - Rear mounted threepoint linkage: Part 1 Categories 1, 2, 3 & 4 (fourth revision) [IS 4468 (Part-I):1997 (Reaffirmed in March, iv) Drawbar for agricultural tractors – Link type [IS : Conforms 12052-1002 [Description of the March 2007)].

12953:1990 (Reaffirmed in March, 2007)].

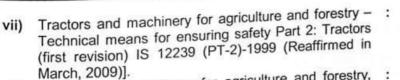
Does not conform

v) Agricultural tractors Operator's seat technical revision) (Reaffirmed in March, 2009)].

vi) Guide for safety & comfort of operator of agricultural : Does not conform treature of safety & comfort of operator (first revision) :

tractors: Part 1 General requirements (first revision): 12239 (PT-1)-1996 (Reaffirmed in March, 2009)/ISO 4254-1:1989].

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Does not conform

Tractors and machinery for agriculture and forestry, powered lawn and garden equipment - Symbols for viii) operator controls and other displays [IS: 6283 (Part-1 & Part-2) -2006 & 2007(Reaffirmed in March, 2009)/

Conforms

Guide lines for location and operation of operator : controls on agricultural tractors and machinery (first revision) (IS: 8133 - 1983) (Reaffirmed in March,

Conforms

Agricultural Tractor & Machinery Lighting device for : Conforms travel on public roads (IS: 14683-1999) (Reaffirmed in March, 2009)]

Salient Observations: 16.4

Laboratory tests: 16.4.1

16.4.1.3

PTO Performance: 16.4.1.1

- The power at rated engine speed as 50.2 kW against the declaration of 50.0 kW, which is within the tolerance limit of IS: 12207-2014. i) ii)
- The specific fuel consumption corresponding to maximum power was The specific fuel collading size the declaration of 260 g/kWh, which is measured as 263 g/kWh against the declaration of 260 g/kWh, which is within the tolerance limit of IS: 12207-2014. iii)

16.4.1.2

After completion of 10 hour drawbar test, the RHS rear tyre got puncture due After completion of 10 floar draws as 100 floar tyre got puncture due to creeping of tyre over the rim. So, the RHS rear wheel tube was repaired Drawbar performance test: and refitted.

During ten hours drawbar test, creeping of LHS & RHS rear tyre over the i)

During ten hours drawbar test, crosping of Erio & Rio rear tyre over the rims was observed as 35 mm & 90 mm respectively. This should be looked into for necessary corrective action. ii)

- During the hydraulic performance test, pump relief valve test, the flow of During the hydraulic performance test, party tollow valve test the flow of hydraulic in inline tester was fluctuating so the manufacture following Hydraulic performance: A) Hydraulic pump filter replaced with new one.

 - The suction line & strainer was closed.

 The hydraulic pump assembly cover was remove & it was observed that (
 The hydraulic pump assembly cover was remove & it was observed that (The suction line & strainer was cleaned.
 - The hydraulic pump assembly cover (01 no's) of hydraulic pump driven shaft Part no. 8273918) key gear drive (01 no. 5118570) (01 nos) having interest the hub. (Part no. 5118570) Part no. 8273918) key gear difference from the hub (Part no. 5118570) (01 nos.) having internal found broken, also the hub (Part no. 5118570) (11 nos.) having internal b) found broken, also the hub it was seen that the hydraulic pump scratch. After closed condition

After above condition the applicant was replaced the hydraulic pump with

same specification as:-

Make -Rexroth ,Bosch group (Made In India) Make -Rexroun, Bussell group (Mass III IIIIII)

Model/group combination no:-AZPW10019LH030PBS0593

This breakdown/defect has been categorized in major (Mj-15) breakdown as

per IS:12207-2014

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- After above repairing/replacing hydraulic pump, during hydraulic pump performance test, the "O" ring situated at pump outlet & outlet pipe elbow was ii) leaked & oil slashed.
 - So damaged hydraulic pump outlet mounting adopter "O" ring was replaced with new one (part no. 14457580). This breakdown/defect has been categorized in minor (Mn-18) breakdown as per IS:12207-2014
- The moment about rear axle with standard frame was calculated as 36.17 kN-m whereas, the moment about front axle was calculated as 20.06 iii) kN-m under standard ballasted condition and 26.54 kN-m under ballasted condition. The moment about rear axle is on higher side as compared to the moment about front axle even under ballasted condition. It is, therefore, recommended that the lifting capacity of the hydraulic system may be reduced suitably.

16.4.1.4

The amplitude of mechanical vibration on various assemblies marked as (*) in The amplitude of mechanical violation of the amplitude of the control of the cont vibrations to improve the operational comfort and service life of components.

- Location and operation of operator's control: Working clearance between draft & position lever does not meet the requirement of the IS: 12279 (Part-2)-1999. This should be looked into for necessary corrective 16.4.1.5
- Wetland cultivation (Puddling operation):
- The manufacturer has recommended that the tractor is not suitable for The manufacturer has recommon operation) and therefore, the wetland wetland cultivation (puddling operation) 16.4.2.1 wetland cultivation (puddling operation) was not conducted. It is recommended that cultivation (puddling operation) that the tractor is not cultivation. cultivation (pudding operation) had the tractor is not suitable for wetland in all the literature this fact that the tractor is not suitable for wetland in all the literature this fact that the relevant (puddling) operation should be mentioned clearly & boldly in all the relevant (puddling) operation should be included a solid of the tractor & also a cautionary notice regarding non-suitability of literature of the tractor was be displayed on the bonnet of the literature of the tractor & also a databased on the bonnet of the tractor. tractor for puddling operation may be displayed on the bonnet of the tractor.
 - The text provided with year code is unit no. instead of year of manufacture on the The text provided with year code is drift to mote on year of manufacture on the label plate of the tractor. This does not fulfill Labelling of tractors (Provision of label plate of the tractor applicant provided corrected labelling at this respect applicant provided corrected labelling at the respect at the respect applicant provided corrected labelling at the respect at the respect applicant provided corrected labelling at the respect at the label plate of the tractor. This does not family case in tractors (Provision of labelling plate). In this respect applicant provided corrected labelling plate with labelling plate). In this resputacturing clearly and given undertaking to account labelling plate). In this respect applicant provide and given undertaking to provide the indication of year of manufacturing clearly and given undertaking to provide the 16.5 same on the production line.
 - Maintenance / Service Florica.

 No noticeable maintenance or service problem was observed during the test 16.6
 - Recommendation with regard to safety on tractor: Recommendation with regard to said, may be considered for incorporation on the The following requirements, inter alia, may be considered for incorporation on the Provision for spark arresting device in exhaust system. 16.7
 - tractor:
 - Provision of PTO shart master shield.

 Provision of PTO shart master shield.

 Guard for insulation to avoid inadvertent contact during normal operation with Guard for insulation to avoid inadvertent cause harm/discomfort to operate. i)
 - Guard for insulation to avoid madvertent contact during normal operation with an exposed hot element that may cause harm/discomfort to operator in the relaxation for evaluative parameters. an exposed hot element that may based hermonestor to operator in the normal operating position. The relaxation for evaluative parameter for normal operating is given as per para 16.1.9(a) ii) conforming the same is given as per para 16.1.9(a) iii) Adequacy of Literature:
 The following literatures were supplied with the test tractor for reference during the
- 16.8
- Operator's manual (For 7510,6510 & 6010 excel series model tractors) Operator's manual (For 7510,6510 & 6010 excel series tractor models)
 Service Parts catalogue (For 7510,6510 & 6010 excel series tractor models) Service Parts catalogue (For 7510,6510 & 6010 excel series tractor models)
 Service Manual (For 7510,6510 & 6010 excel series tractor models) 16.8.1 test:-

 - a)
- CENTRAL FARM MACHINERY TRAINING & TESTING INSTITUTE- BUDNI b)

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- 16.8.2 Information on variant models & their feature at a glance shall also be included in the operator's manual
- 16.8.3 The literature should be brought out in national as well as other regional languages of India for guidance of users.

17.0 Citizen charter

| Duration of Test | Test duration under citizen charter | Whether the report released within time frame given in the citizen charter | Remark |
|--------------------------------------|-------------------------------------|--|--------|
| 8 Months uly,2014 to March, 2015) | 10 Months | Yes | Yes |

TESTING AUTHORITY:-

P. C MESHRAM AGRICULTURAL A.K.SINGH SENIOR AGRICULTURAL ENGINEER C.R.LOHI DIRECTOR

Test Report compiled by Shri. Chanchlesh Singh Raghuwanshi, Senior Technical Assistant.

18. APPLICANT'S COMMENTS

| | 10 APPLIO | |
|----------|-------------------------------------|---|
| | 18. APPLIO7. | Applicant's comments |
| | Our Reference | Your valuable comments & suggestions for |
| Para No. | | Your valuable comments a suggestion of improvements are well taken. Under our policy of continuous product improvement these aspects continuous product improvement these aspects continuous points looked into & will take |
| 40 4 | 16.3 (v),(vi),(vii),16.4.1.5,16.5 & | continuous product improvement as a continuous product improvement as a will take are further being looked into & will take appropriate actions to eliminate these deviations soon wherever necessary. |
| | Ton () | |