

OPERATOR & SERVICE MANUAL OF 1026e



Dear Customer
Heartiest Welcome to Indo Farm Family

Congratulations and thank you
for having chosen **INDO FARM** Tractor
for your business.

We hope and wish you a very satisfying
value for money experience using this brand.
We wish you great success in all your endeavors.

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FOR 1026e TRACTORS
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To ensure the best performance and longest possible service life for your tractor, and to safeguard your guarantee, use only recommended lubricants and fuels, and genuine Indo Farm engine and tractor parts.

Every effort has been made to ensure that the Information and Instructions contained in this Manual are correct at the time of its publication, but for continuous R&D efforts, the manufacturer reserves right to alter any of the specifications or instructions without issuing any prior notice.

PERSONAL DESCRIPTION

(To be Filled up by the Dealer)

NAME : _____
ADDRESS : _____
TRACTOR MODEL : _____ CHASSIS NO. _____
ENGINE SERIAL NO. : _____
NAME AND ADDRESS : _____
OF DEALER : _____
PHONE NO. _____
NEAREST AUTHORISED : _____
DEALER : _____
PHONE NO. _____
INSTALLATION DATE : _____ EXPIRY OF WARRANTY _____

EQUIPMENT

SPECIFICATION/SIZE

MANUFACTURER

TYRE: FRONT

REAR

STARTER

ALTERNATOR

DIESEL PUMP

BATTERY

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

"PLEASE KEEP THIS MANUAL SAFELY FOR REGULAR REFERENCES"

UNIVERSAL SIGNS



HEAD LIGHT DIPPED BEAM



HEAD LIGHT MAIN BEAM



MASTER LIGHTING SWITCH



TURN SIGNAL



HAZARD WARNING LAMP



ENGINE OIL PRESSURE



ALTERNATOR CHARGE



HORN



STARTER SWITCH KEY



NOTE AND WARNING



ENGINE SPEED (rpm x 100)



SLOW / LOW



FAST / HIGH



PARKING BRAKE



PTO DRIVE (OFF)



PTO DRIVE (ON)



FUEL LEVEL



COOLANT TEMPERATURE

N

TRANSMISSION NEUTRAL

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PREFACE

Congratulations on your selection and purchase of 1026e tractor fitted with Mitsubishi EU Stage-V engine. The purpose of this manual is to enable you (the owner and/ or operator) to handle and maintain the tractor efficiently in a safe manner. If the instructions included herein are followed carefully the tractor will continue to contribute towards prosperous farming in the Indo Farm tradition. Therefore, it is necessary to ensure that the installation procedures and instructions conveyed herewith are adequately understood and sincerely followed. In order to observe our recommendations towards owner and user's benefit, make daily maintenance a routine and keep a record of hours of service.

Unfortunately wide variations in operating conditions make it impossible for the Company to make comprehensive or definite statements in the manuals regarding performance and method of use of its tractors and implements or to accept any liability for a loss or damage, which may result from these statements or from any errors or omissions. Users are therefore strongly advised to make use of the Indo Farm dealers in connection with any service or maintenance problem. Indo Farm dealers are specially trained and equipped for the purpose of advising the users on any special problem arising as a result of local conditions and are able to call on the technical staff of Indo Farm's service department for advice. If the tractor is to be used in abnormal or odd conditions, which could prove injurious to it, please consult your nearest Indo Farm dealer for special instructions before going with the tractor for such use, otherwise the warranty may be invalidated.

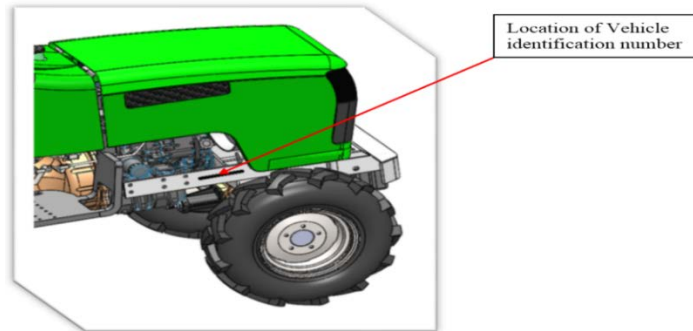
When replacement of parts is required, it is important that only genuine Indo farm service parts or spare parts recommended by Indo Farm should be used. Extensive damage may occur as a result of the fitment of parts of inferior quality. Indo Farm customers are advised to buy service parts only from an authorized Indo Farm dealer or from a dealer of recommended spare parts other than the Indo Farm genuine parts.

Chapter 2 : Tractor Identification

2.1 Chassis Serial No. (Vehicle identification no.)

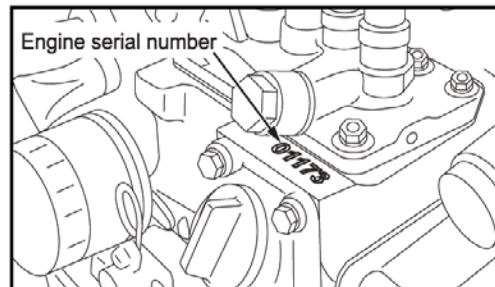
The chassis no. or vehicle identification no. is used to register the vehicles. Whenever you to consult your dealer, do remember to quote dealer chassis no. of your tractor.

It is located at right side of front axle bracket. For reference the pictorial view of chassis no. location is given. If you find bit difficult to read the chassis no. Then alternately same is provided on statutory plate.



2.2 Engine serial number

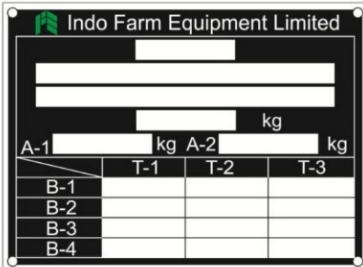
It's engraving is available on Fuel injection pump housing.



2.3 Statutory data plate

It is riveted near left fender as shown in figure.

It has approval number, VIN number of vehicle, maximum permissible technical mass and it's front , rear reaction data and allowable trailer mass data.



The diagram shows a rectangular data plate with the following layout:

Indo Farm Equipment Limited			
[Approval Number]			
[VIN]			
[Mass]		kg	
A-1	[Mass]	kg	A-2
	T-1	T-2	T-3
B-1			
B-2			
B-3			
B-4			

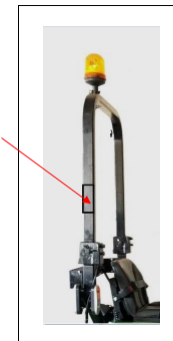
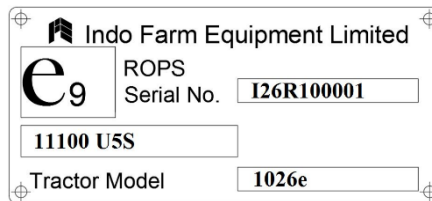


2.4 ROPS data plate

It is riveted vertically on R.H.S of ROPS arms.

It contains below information.

- i) ROPS sr. no.
- ii) Approval no.
- iii) Tractor model.



CHAPTER 3 : Safety Information

3.1 Pre-requisites and safety rules

- Before starting operating the tractor or its attachment (s), the operator must familiarize himself with the functions and means of operation of all the gauges and controls, especially those for transmission, clutch, brake, steering, governor, PTO, and hydraulic lift system.
- The operator should be familiarized with the provisions of road traffic and off-road vehicles related Do's and Don'ts as provided at the end of this manual.
- Inspect and tighten all external nuts, bolts, and plugs, particularly the front wheel bolts and rear wheel nuts, which should be tightened to the recommended torque.
- Before starting and during operating the tractor, watch out for children, old men, insane people and animals around. Always look behind before going to reverse.
- While driving, never shift the gear lever unless the drive to the wheels is disconnected (the clutch pedal is fully depressed).
- When working with heavy tractor-mounted implements or trailers, front ballast weight should be used.
- Don't let anyone operate the tractor without instruction / unless he is trained / authorized driver.
- Never start the engine or operate the controls unless you are in the driver's seat.
- Always drive the tractor at a safe speed relative to the local conditions and ensure that your speed is low enough for an emergency stop to be safe and secure.

- Always put the tractor in gear when going downhill. Under no circumstances should the maximum engine speed be exceeded.
- Check the brakes periodically and adjust if necessary. Check them more frequently if heavy work is involved. Reliable braking is of importance for safety.
- Keep the brake pedals latched together, except when independent braking is required. Don't use independent brakes to turn sharply. They are used only to assist turning or steerability when traveling under difficult field conditions or when going very slowly or on headlands.
- Always engage the parking brakes when stopping to bring the tractor to a secure halt.
- Disengage the PTO driveline when not in use and fit the PTO removable cap.
- Before attaching, detaching, cleaning or adjusting PTO driven implements, always disengage the PTO drive; stop the engine and remove the key.
- When towing the implements or trailer attach them directly to the tractor or by means of a rigid draw bar. Never use a rope for this purpose.
- Don't ride on or get down from the moving tractor. Always use proper footrest.
- Keep the pedals, control levers, footrest as well as steps clean and free from mud and grease.
- Never work under a raised implement. If required, support the implement mechanically.
- While operating the tractor on hillsides ensure that fuel tank contains not less fuel than ¼-th of its capacity, otherwise air is likely to enter the fuel system.
- Whenever possible avoid driving the tractor across slopes. Preferably drive up and down sloping fields.

- If it is necessary to work across slopes, then proceed as follows:
- Always turn uphill at the end of each run. Speed must be reduced to a minimum on headlands.
- Ensure that the rear tyre pressures are equal.
- Keep the tractor in the same gear when climbing up the hill or coming down the hill.

Other important safety notes :

Avoid hot Surfaces

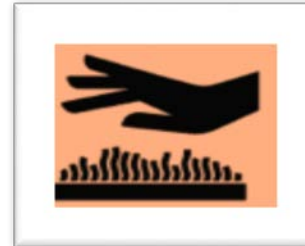
Hot areas are generally as under.

Exhaust muffler –

While working on any application, don't ever try to touch the exhaust silencer, it remains very hot.

Although it is protected by heat guard, but still to be safer side even minor touch should be avoided.

It can be fatal for clothing and skin.



Avoid High-Pressure Fluids

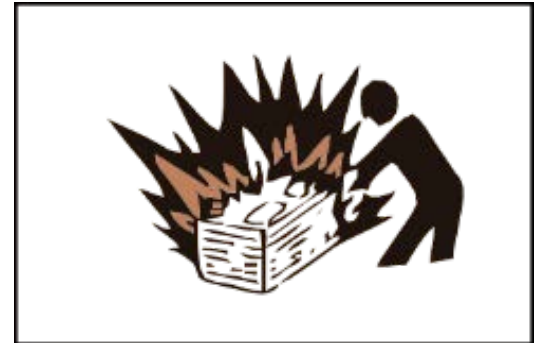
High pressure fuel can penetrate the skin causing serious injury. Keep hands and body away from pinholes and nozzles, which inject fluids under high pressure. If any fluid is injected into the skin, consult your doctor immediately.



Avoid battery explosions

Keep sparks , lighted match sticks , and flames away from the top of battery. Battery can explode.

Never check battery charge by placing a metal object across the poles.

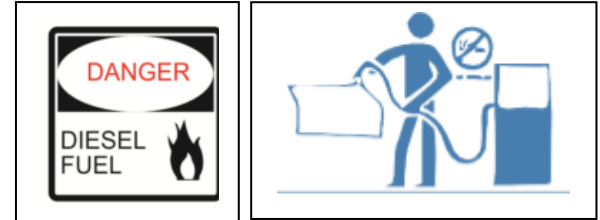


Always use safety lights

Use hazard warning lights and turn signals are recommended when towing equipment on public roads unless prohibited by state or local regulations.

Fuel safety

- Handle fuel with care; as it is highly flammable.
- Don't refuel the tractor while smoking or near open flame or sparks.
- Always stop engine before refueling.
- Always keep your tractor clean of accumulated grease and debris.
- Always clean up spilled fuel.



Stay away from rotating shafts

- Entanglement in rotating shaft can cause serious injury or death. Keep PTO shield in place at all times.
- Wear close fitting clothing. Stop the engine and make sure PTO drive is stopped before making adjustments, connections, or cleaning out PTO driven equipment.



General Operating Hazards

- When implement / trailer is attached to tractor while turning on the road make sufficient clearance for turning.
- Pull only from the approved drawbar/ trailer hook. Towing or attaching to other locations may cause the tractor to overturn.
- Improper use of the trailer hook, even if correctly positioned, may cause the tractor to overturn to the back.

Don't overload an attachment or towed equipment. Use ballast mass to maintain tractor stability.

Prohibited use of tractor where overturning hazard exists

Risk of Over turning:

For operator/ driver safety, tractor is having Roll over protection system and seat with safety belt.

If somehow overturning happen hold the steering wheel properly and don't try to leave your seat till tractor come to rest.

Precaution should be taken:

- For road / transport applications lock the brake pedals first.
- Don't try to run the tractor on over speed. Always choose the safe driving speed.

- While turning, reduce the speed to minimum, if somehow your tractor bounce, you may loose control on steering, that may throw operator out.
- Don't drive in overloading condition. It will pull the tractor downward in sloppy condition.
- Don't brake suddenly. Apply brakes slowly. Otherwise chances of trailing vehicle collision will increase.
- When going downward in a hilly / sloppy area use lesser pedal force to slow the tractor speed and use the same gear you would like to use while going up the slope. Try shafting gear below start of sloppy area.

Chapter 4 : Tractor Installation

The tractor installation must be carried out when the tractor is first delivered to the buyer. When supplying a new Indo Farm tractor, the dealer is required to carry out certain activities, which include full pre-delivery inspection (PDI) to ensure that the tractor supplied is ready for immediate use. The following checklist details the points that should be covered in demonstration by the dealer during the tractor installation:

- Use of all instruments and controls.
- Running-in procedure.
- All the safety points and covers on the tractor.
- Location of tractor and engine serial number.
- Procedure for starting and stopping the engine,
- Starting, driving and stopping the tractor.
- Gear Selection for the particular operation to be performed.
- How to use and adjust the clutch.

- ❑ Brake latching, unlatching and method of adjustment.
- ❑ Proper use of PTO.
- ❑ How to use the hydraulic lift system; attach / detach implements,
- ❑ Use of correct tyre pressure and method of making the wheel track adjustments, front wheel alignment.
- ❑ Fan belt adjustment, cooling system
- ❑ How to remove the air in fuel system.
- ❑ Maintenance of Electrical system.
- ❑ Fastening of bolts and nuts.
- ❑ Grease Points.
- ❑ Replacement of fuel and lubrication filters.
- ❑ Transport and storage of the fuel.
- ❑ Warranty entitlement and the services due during the warranty period.

4.1 Running-in

Experience has shown that the first 50 h of tractor operation can be a major factor in determining the performance and life of the tractor-engine and the tractor. Therefore, the following precautions should be taken during the running-in period.

- After reaching operating temperatures, the tractor should be operated at normal loads but excessive load should be avoided.
- Change Engine oil after first 50 h of operation.

- Use low gear when pulling heavy load.
- During running in period, check frequently the tightness of all screws, bolts, nuts etc.
- Be especially observant of clutch pedal free-play and brake adjustments and readjust them as required. Material used on clutch discs and brake shoes tend to `bed in' in the first few hours of operation and may necessitate early and frequent readjustment.
- Change transmission oil after recommended hours of operation and clean the hydraulic oil strainer.

4.2 Starting Instructions

Prior to starting the tractor, a few basic procedures should be followed to ensure that the tractor keeps in operating order and optimum life, dependability and operator's safety.

- Make sure all safety shields are in place and secured properly.
- Check coolant, engine oil and transmission oil levels and re-fill as recommended if necessary.
- Check operation of clutch, brake and throttle controls, all controls must operate freely.
- Ensure general inspection of tyres, tyre pressure and wheel nuts / bolts tightness. Observe for external signs of leakage and correct before operating the tractor.
- Ensure that there is sufficient fuel in the tank and the fuel cock is open.

Don't attempt to start the tractor unless operator seated on driver seat and parking brake is applied.

To start the engine, proceed as follows :

- Red colour battery-cut-off switch (located front left of tractor) should be rotated in horizontal position.
- Clutch is fully pressed.
- High-low lever is neutral position.
- Gear shifter lever is neutral position.
- Make sure the brake pedals are latched together.
- Now turn starting key, wait till glow plug light is on, start once light is switched off

NOTES :

If the engine does not start even after following standard starting procedure, bleed air that may be present in the fuel system and re-crank. It will start now.

4.3 Stopping Instructions

To stop the engine, use push-to-stop button given LHS side of instrument cluster. After engine has stopped, turn the key to 'off' position,

4.4 Operating / Driving Instructions

Before Starting :

Important Note ! Don't rest on or ride the clutch pedal, as this may cause premature wear of the clutch. Don't change the gear lever when the tractor is in motion. Never coast down steep slopes with the tractor in gear and the clutch pedal depressed. In low-range transmission this would result in the free clutch disc being driven at a speed sufficient to cause the clutch facing to be cracked and be damaged by centrifugal force. If the tractor is to be towed, levers position should be neutral, and a maximum speed should not be exceed.

After Starting the Engine :

1. Depress the clutch pedal fully and select the required gear by using gearshift levers in desired positions.
2. Release the parking brake lever.
3. Increase the engine speed slowly and release the clutch pedal simultaneously.
4. Remove foot from the clutch pedal and slowly increase the throttle opening until the required engine speed is reached. Now proceed on driving, following pertinent rules.

4.5 Special Maintenance

1. Before washing the tractor, cover the starter and the alternator with polythene sheets so that water may not enter into these parts.
2. Don't wash the tractor while the engine is running. First stop the engine and allow it some time to cool down and then go for washing.
3. Don't exert much pressure straight on radiator fins; this may damage the fins.

Chapter 5.0 : Troubles & trouble-shooting

Table 5.1 Possible causes of and suggested solutions to troubles in engine

Trouble	Possible Cause	Solution
The engine does not start or is difficult to start	Incorrect starting procedure	See starting procedure
	Fuel level lower / empty	Correct fuel level
	Air in fuel system	Bleed fuel system
	Fuel system choked	Contact your dealer
	Fuel filter clogged	Replace fuel filter
	Fuel pump injector faulty	Contact your dealer
	Fuel tap strainer clogged	Clean Strainer
	Feed pump wire connection loose or open	Correct the connection
Engine does not reach maximum power	Engine overload	Change to lower gear or reduce load
	Air cleaner dirty	Carry out maintenance on air cleaner
	Fuel filter clogged	Replace filter
	Engine overheating	Check engine overheating
	Fuel injector fault	Contact dealer to check the injectors
	Low engine operating temperature	Check thermostat
	Implement incorrectly set	Use correct implement setting

Trouble	Possible Cause	Solution
Abnormal engine knocking	Oil level low	Top up oil level
	Tappet setting incorrect	Contact your dealer
Excessive oil consumption	Oil level too high	Reduce oil level
	Oil viscosity wrong	Use recommended oil only (15W40 grade)
	Oil leaking	Correct leakage, see if oil sump tightened properly
Engine overheating	Radiator core / fins clogged	Clean
	Engine overload	Change to lower gear or reduce load
	Engine oil level low	Top up oil level with recommended oil
	Coolant level low	Top up coolant level in radiator tank, check system for leaks
	Incorrect coolant used	Use recommended coolant
	Radiator cap defective	Replace cap with new one
	Fan / Alternator belt slipping or worn	Check belt tension, replace belt if worn
	Cooling system clogged	Flush cooling system

Trouble	Possible Cause	Solution
	Thermostat not proper functioning	Check thermostat
	Hoses leaking	Tighten hose connections
	Temperature indicator not working properly	Get electrical connection checked

5.2 Possible causes of and suggested solutions to troubles in electrical system

Trouble	Possible Cause	Solution
The electrical system does not work	Battery terminals loose or corroded Sulphated batteries	Clean and tighten terminals Check electrolyte levels; if the system still does not work, contact the dealer
Starting motor does not work	Connection loose or corroded High / low selector gear and gear shift levers engaged Battery totally discharged	Clean and tighten loose connections Shift gear lever to neutral position Charge or replace battery
Battery not charging	Belt loose or worn Electrolyte Level low	Check belt tension if necessary, replace belt Check Electrolyte level
Low starter motor speed and difficulty in starting engine	Connection loose or corroded Battery discharged	Clean them and tighten loose connection Check electrolyte level

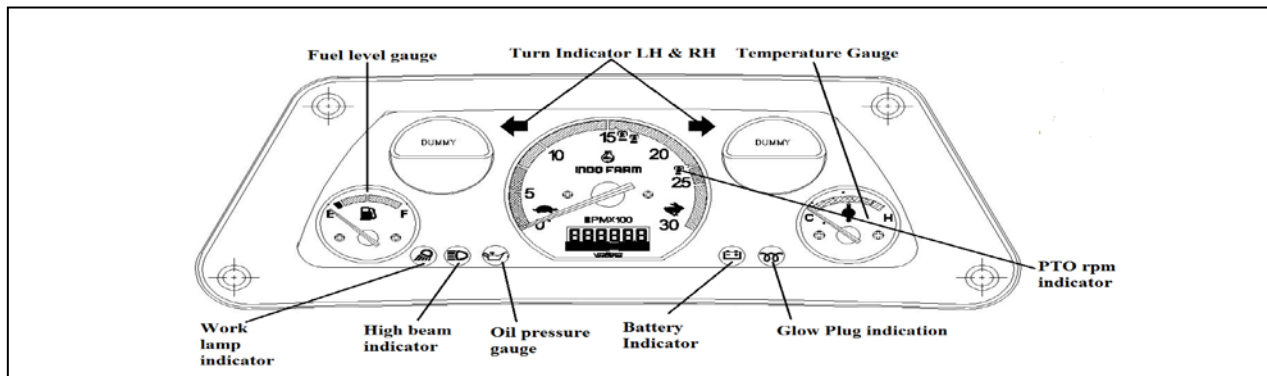
5.3 Possible causes of and suggested solutions to troubles in hydraulic lift and three-point linkage

Trouble	Possible Cause	Solution
Linkage does not lift fully	Incorrect setting of hydraulic lift arm	Contact your dealer
Hydraulic lift operates slowly in draft control	Position control incorrectly set Implement not working properly Lowering speed too slow	Adjust combined position control Adjust implement settings Contact your dealer
Hydraulic lift operates too fast in draft control	Combined position control incorrectly set	Have valves checked by your dealer

Chapter 6 : Instruments & Controls

6.1 Measuring Gauges

Instrument Cluster



Fuel Gauge :

Indicates the fuel level in the fuel tank. The reading in the red zone indicates that fuel refilling is required.

RPM cum Hour Meter

This instrument's needle tells us the rpm of the engine, whereas digital indication tells us number of hours of run by Engine. Operator should keep the rpm in green zone which is safe for operation.

Battery Charge Indicator

It indicates the status of battery charging. Refer below table for knowing battery charging status properly.

Conditions			Battery Status
Ignition switch	Engine	Indicator	
On	Off	Glowing	Ok
On	Off	Off	Battery / Charging system (i.e alternator) is defective
On	Start / Running	Off	Battery charging ok
On	Start / Running	Glowing	Charging system is defective,

Temperature Gauge

Indicates the temperature of engine coolant (water). If the pointer stays in the green zone, the operating temperature is normal. If the pointer enters the red zone, the engine is overheated and should be stopped to determine the cause.

If overheating observed - Check fan belt, it should not be loose, coolant level should be ok, also check engine oil level.

Use only Mitsubishi (1026e engine manufacturer) recommended coolant that is all season, non-amine type LLC (long life coolant).

Oil Pressure Indicator

It indicates the lubrication oil pressure in the engine. If at any stage of operation on the tractor indicator start glowing, immediately stop the engine and follow below instructions.

- Tractor should be stand on straight surface.
- After stopping the engine weight for some time to let the oil get down in oil sump from upper parts.
- Check engine oil, it should be above minimum mark. If it is found low then add recommended oil (**grade 15W40**) up to max level of dipstick.
- Check the oil sump and other parts for any kind of oil leakage. Correct if found anywhere.

- Now start the engine, weight for some time, if red light does not glow, it is ok, if it glows contact nearest dealer.

High Beam Indicator

It glows when combination switch is turned to high beam mode.

Left turn indicator

It glows when left side indicator is applied from combination switch.

Right turn indicator

It glows when right side indicator is applied from combination switch.

6.2 Electrical Controls

Hazard Switch

It gives indication of following.

- Some major mechanical issue in the tractor.
- All lights blinking indicate that the operator has no control on the vehicle.

This switch is pressed to blink all indicators to alert others about hazard situation



Combination Switch

It is basically a multifunctional electrical switch. Each position details is explained below.

Off position- All lights will remain off on this condition.

1st position (Clockwise) = On this position of combination switch mainly parking lights,

Instrument panel lights and tail lights will work.

2nd position (Clockwise) :- On this position of combination switch head light (low beam),

Instrument panel lights, parking lights and tail light will work.

3rd position (Clockwise) :- On this position of combination switch head light (high beam),

Instrument panel lights, parking lights and tail light will work.

Horn : - Press the combination switch's centrally located horn sign button to blow the horn.



Push to stop button

Push the button to stop the engine whenever required by pressing this button.



Starter Switch

Starter switch with different operational position symbols.

The starter switch has three operational positions. These three positions, which may be obtained by turning the key clockwise as shown symbolically in photo.

- Off
- Auxiliary: This position permits the electrical service to be switched on without the engine start.
- II Auxiliary plus Start: At this position, the switch supplies power to the starter motor.



Fuse Box

The fuse box is situated near fuel tank frame engine side portion.

Beacon Light Switch

It is used to on / off the beacon light which is available on front plate of dashboard.



Registration plate lamp

A vehicle registration lamp / license plate lamp / number plate lamp is mounted on registration plate. Registration plate is identified in photo by red line.



Lights

The tractor is equipped with lights (front fender lamp, rear fender lamp, head lamp, registration plate lamp etc.) approved as per ECE norms.

Reflectors

These are fitted on rear of fenders.
Reflector highlighted by red line in photo.



Chapter 7 : Operations

7.1 Tractor boarding Instructions for operator

Board the tractor from LHS side, because foot step is provided in LHS so that operator body may not touch various control levers. It is also recommended to ease boarding operation for operator.

7.2 Tractor leaving Instructions for operator

Wait the tractor to stop after pressing the push to stop the button, apply parking brake and leave the tractor.

7.3 Starting instructions

There are three key position of starting key.

Off Position (1st position) - At this position the power supply is off for all electrical circuits. Key can only be inserted or removed in this position. For tractor safety it is always recommended to remove key when leaving the tractor.

- **On and Heat (2nd Position):** When key is turned to 2nd position, engine cylinder head glow plugs heating starts. Glow plug heating indication is available on instrument cluster. Heating of glow plug occurs for few seconds. As soon as the glow signal is off on instrument cluster. Turn key to 3rd position.
- **Starting position (3rd Position)** – Once the key is turned to this position. Engine gets started.

Before starting do as under.

- Battery cut of switch (located front left of tractor) is in horizontal position.
- Clutch is fully pressed.
- High-low lever is neutral position.
- Gear shifter lever is neutral position.
- PTO lever is in neutral position.
- Now turn starting key to IInd position, wait till glow plug light is on, start as soon as light is switched off.
- Release the parking brake if already engaged.

7.4 Running-in instructions

Experience has shown that the first 50 h of tractor operation can be a major factor in determining the performance and life of the tractor-engine and the tractor. Therefore, the following precautions should be taken during the running-in period.

- After reaching operating temperatures, the tractor should be operated at normal loads but excessive load should be avoided.
- Change Engine oil after first 50 h of operation.
- Use low gear when pulling heavy load.
- During running in period, check frequently the tightness of all screws, bolts, nuts etc.
- Be especially observant of clutch pedal free-play and brake adjustments and readjust them as required. Material used on
 - clutch discs and brake shoes tend to `bed in' in the first few hours of operation and may necessitate early and frequent
 - readjustment.
- Change transmission oil after recommended hours of operation and clean the hydraulic oil strainer.

7.5 Stopping the engine :

Bring the accelerator to idle position.

Now press push to stop button (located near instrument cluster to stop the engine).

7.6 Bonnet opening instruction

Push the knob given on bonnet towards steering side and lift the bonnet from another hand.

7.7 Bonnet Closing instruction

Slowly lower the bonnet to its last position.



7.8 Foot Throttle

Operation of the foot throttle over-rides the hand throttle setting when increasing engine speed. When the foot throttle is released, the engine will return to the speed set by the hand throttle.

When operating the foot throttle, the hand throttle must be fully closed.



7.9 Hand throttle lever

This lever is used to increase or decrease the engine rpm as per requirement of field work.

For increase the rpm lever is pushed down and to reduce the engine rpm lever is pushed up.

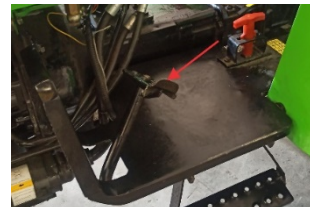


7.10. Clutch pedal

The clutch is used to disengage or engage the drive as per requirement.

Pedal Pressed = Drive disengaged.

Pedal released = Drive engaged.



Clutch instructions-

- Never keep riding the clutch while tractor in motion.
- Never coast down slopes when gear lever in neutral / clutch pressed when in gear.
- Always press the clutch before shifting the gear.

7.11 Brake Pedal operation

The two brake pedals can be used independently, or can be latched together for normal braking.

For independent brakes, disengage the latch; the inner pedal acts on the left hand rear wheel and the outer pedal acts on the right hand rear wheel.

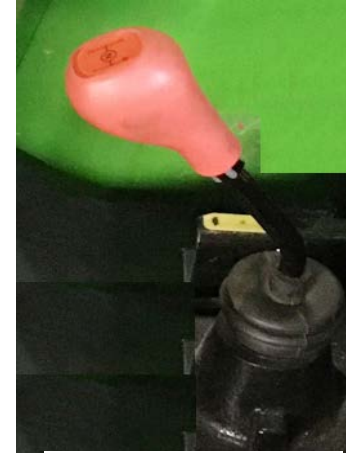


7.12 Main Gear Lever

The main function of this levers to select desired gear speed. There are 6 nos. forward speeds (3 high+3 low speeds) and 2 reverse speeds (one high reverse and one low reverse) achieved by combination of high–low gear lever. From top side photo of gear shifter lever the gear shifting pattern is made cleared.

Note:-

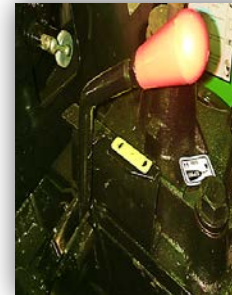
- While changing the motion from reverse to forward or vice versa, the wait should be done by the time tractor stop.
- While selecting the required gear the clutch should be released slowly and start increasing the speed by pressing the accelerator slowly.



7.13 High-Low lever

This lever enables us to change the high speed into low speeds and low speeds into higher one. As per the requirement the selection may be done in combination with main gear shifter lever.

It has basically three selections.



Slow speed selection- If the lever is taken out of the neutral position cut and moved forward. Slow speed mode will be selected.

Neutral Position: - When lever remains in middle cut , it is the neutral mode. When the tractor is stopped after work, it is usually recommended to keep in neutral mode.

High speed selection- If the lever is taken out of the neutral position cut and moved backward. High speed mode will be selected.

7.14 4WD / 2WD Selection lever

This lever decides whether tractor to be run in 4WD or 2WD mode.

4WD Mode - When this lever is moved in forward direction, the 4WD mode is actuated. With this position power is transmitted to all 4 wheels (front as well as rear) of tractor.

2WD Mode - When this lever is moved in backward direction, the 2WD mode is actuated. With this position power is transmitted to rear wheels only.

Suitability- 2WD- For road, 4WD- For field.



7.15 PTO LEVER

In this tractor there are three positions of PTO lever. Refer given photo.

Position 1, 2 & 3 are for selecting different PTO rated rpm and **N** refer to Neutral position.

PTO Lever position	PTO RPM	Engine rpm
1	540	2300
2	540E	1558
3	1000	1673



7.16 PTO Shield

For the operator safety PTO shield is provided above the PTO shaft.

7.17 PTO related instructions:

- When PTO is not operational protect it by PTO cover for safety purpose
- Before starting working on implements operated by the PTO, disengage the PTO, stop the engine, remove key and engage parking brake. Don't work when under raised implements.
- Never remove PTO shield, it is given for safety purpose.
- Before operating any implement by using PTO, Always make sure that all bystanders are at good distance from the tractor.
- Stay clear from the area of the TPL while adjusting it.
- The mounted implement should be lowered on the ground before leaving the tractor idle.
- Stay clear from the area between tractor and trailer.
- Before cleaning, adjusting or lubricating a PTO-driven implement, the TPL, always make sure the PTO is motion is off and the tractor engine is off and key is out.
- Loosen PTO shield mounting bolts and rotate upward for ease in connecting. Engine should be off rotate shaft slightly by hand if required to match connecting shaft splines. Connect both shafts. Ensure connecting shaft is properly locked to PTO shaft. Now restore PTO shield in it's original position by rotating it downwards.



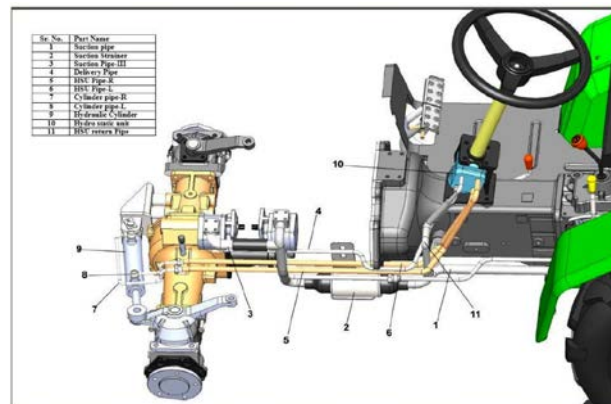
7.18 Hydraulic Coupling

Take off coupler cover. While connecting the hose, make sure that the connectors are perfectly clean.

Note : Connect the trailer's pipe with the QRC, operate the hydraulic lever respectively to lift trailer.

Information about inspection about hydraulic hoses

- Check hoses regularly – during service / before cranking tractor after long time storage – for leaks, kinks, cuts, tears, rubbing, bulges, corrosion, exposed fabric and other signs of wear and damage.
- If during any inspection any defect found in hoses, contact dealer to arrange the required hose.



7.19 Power Steering

This tractor is equipped with hydrostatic power steering for ease in all operations.

Note: Power steering works only when engine is start. Because steering pump works when engine is running.

7.20 Differential lock pedal

When this pedal is pressed, differential lock will work and both the wheels will rotate at same speed.

Key points :-

- It should be used only when the tractor is in straight position and should be disengaged at turns to avoid damage of differential assy.
- Do not operate this differential lock when tractor speed ≥ 5 kmph on turning.



7.21 Wheels and Tyres

These are key components of any vehicle. The major load of the vehicle is divided onto 4-wheels 1026e tyres specs.

Type / Model	Tyre type	Applications	Tyre size-Front	Tyre size-Rear	Make	Tyre size-Front	Tyre size-Rear
1026e	Agricultural	Field	6.0-12	8.3-20	Apollo / MRF	30	22
	Turf	Lawn/ Garden	23*8.5-12	33*15.5-16.5	BKT	30	25
	Industrial	Industrial	23*8.5-12	33*15.5-16.5	Speedways	30	25

In general tractor is utilized for two types of activities. Which are mentioned as under.

Working on soft soil condition where maximum adhesion is needed. In this case there will be use of lowest pressure compatible with the load carried.

Work on hard ground and roads, towing etc. In this case there will be use of maximum pressure.

Other important instruction related to tyres.

- ❑ Always use the recommended tyres.
- ❑ Keep oil, grease and strong alkaline or acid fertilizers away from the tyres to prevent deterioration of the rubber.
- ❑ When tyres worn out with time and usage always replace the tyres with matching specs as recommended by manufacturer.
- ❑ Ensure tyres pressure is correct.

Tyre risks, including those associated with handling, repair and over inflation and installation of tyre.

Negligence and improper handling shorten tyre life. Here such information will be provided about the tractor that account for proper handling and more life of tyres. Factors are mentioned as under.

Problems	Possible cause	Corrective action
Alternate wear tread	<ul style="list-style-type: none"> ▪ Improper pressure ▪ Continuous overloading application ▪ In correct matching of tractor with trailer 	<ul style="list-style-type: none"> ▪ Keep pressure ok ▪ Don't use tractor in overloading condition ▪ Match proper trailer with tractor, keep care of recommended trailer mass.

Problems	Possible cause	Corrective action
Side wall damage	<ul style="list-style-type: none"> ▪ Damage caused by sharp items like stones, glass pcs. etc. ▪ Tyres damage with linkages while turning. 	<ul style="list-style-type: none"> ▪ Keep care to avoid running on sharp items. ▪ Never take sudden turning
Wear from high centre head	<ul style="list-style-type: none"> ▪ Excessive pressure will lead to fast wear of tyres. ▪ Use of tractor for road application for longer period. 	<ul style="list-style-type: none"> ▪ Keep proper tyre inflation and use blast mass when needed.
Puncture of tyre again and again	<ul style="list-style-type: none"> ▪ Damage due to shap metallic of glass objects. ▪ Excess tyre pressure 	<ul style="list-style-type: none"> ▪ Keep care to avoid running on sharp objects. ▪ Maintain proper pressure

Suggestion to longer life of tyres.

- Always maintain proper inflation of tyres.
- Tyre should be ballast to overcome slippage issues when needed.
- Tractor storage area should have shed to avoid the direct effect of sun rays on it's tyres.
- Ensure in tractor storage area there is no spillage of oil and grease.

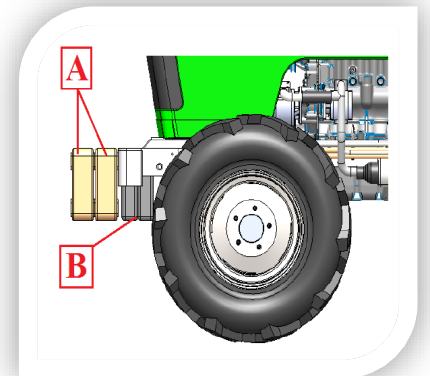
Tighting torque information

Check the tightness of both and front and rear wheels. Recommended torque for front wheels is 115 Nm and that for rear wheels is 280 Nm.

Tractor blast mass information:

The blasting is important factor in tractor performance. The weight of the tractor can be increased as per requirement. Maximum benefit can be achieved if tractor weight is suitable for application.

Blast mass are usually fitted to increase traction and stability



Below factor affect the amount of blast masses.

1. Soil type
2. Type of implement
3. Tractor speed and load output (whether partial or full)

By default 1026e tractor is fitted with one ~19 kg single weight.
Front tow hook is provided as std. fitment.

Maximum blast weight details are as under :

1. 2 nos. 39 kg blast weight each will be mounted on front side of bumper as shown in below picture.
2. 2 nos. 19 kg blast weight each will be mounted behind front bumper as shown in below picture.

Note - On both front and rear wheel no blasting is provided.

Tractor Speed Chart

Speed chart of 1026e tractor with agricultural rear tyre size 8.3-20@2500 rated engine rpm

Gear	Speed data (kmph)
Forward	
L1	1.23
L2	1.85
L3	3.10
H1	5.39
H2	8.12
H3	13.65
Reverse	
LR	1.57
HR	6.89

Speed chart of 1026e tractor with rear tyre size 33x15.5-16.5 (Industrial / Turf Tyre) @2500 rated engine rpm

Gear	Ratios (engine speed/vehicle speed for manual transmission only)
Forward	
L1	1.09
L2	1.64
L3	2.75
H1	4.78
H2	7.19
H3	12.09
Reverse	
LR	1.39
HR	6.10

To convert Kmph into mph, multiply kmph speed data with 0.625.

Note: Above speed values may vary within $\pm 5\%$ according to tyre pressure & loading conditions.

7.22 Parking Brake

The parking brake lever, located on left side of main gear shifter lever, serves to lock the tractor rear wheels.

To engage (lock) the brakes, pull the orange knob of parking brake lever and rotate it's T to horizontal position w.r.t driver position and rest the knob on it's bracket.

If the operator leaves the tractor without applying parking brake, it will give alarm to alert the operator.

Provision of alarm is for safety purpose.

7.23 Hydraulic Control levers

Position Control Lever

It is black colour handle located towards fender side which enables raising or lowering the implement / lift. It is used when implement operation demands stable / fixed position

Draft Control Lever

It is red colour handle locate towards driver side which is used to control the draft of soil on implement. By controlling the draft, the implement and tractor can be prevented from overloading.



7.24 Transport Lock

It is provided for safety during transportation of implement machinery. It is located on front side of hydraulic cover below operator seat as shown in photo.

Note:

- For safety lock fully tighten the response valve by rotating it in clockwise direction.
- Response valve should be closed during transportation of implements.



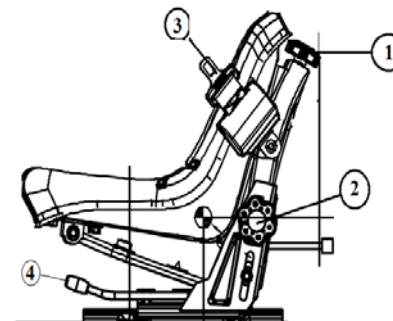
7.25 DRIVER'S SEAT

This tractor is equipped with E-marked driver seat with seat belt assy.

While seating it is recommended to adjust the seat in vertical and horizontal direction.

- i) for better ergonomics.
- ii) To reduce vibrations
- iii) To have comfortable position towards all levers.

For horizontal adjustment: In Seat assy., a lever (4) is provided to adjust the seat in front and rear directions. Lever is to be lifted for seat adjustment.



For vertical adjustment:

- knob (1) to be used to adjust weight (range 50 kg to 120 kg)
- Knob (2) to be used to adjust height of the seat (± 30 mm)
- Seat belt (3) is to be fastened for safety.

Precautions related to driver seat assy.

- i) No adjustment to be done when tractor is in motion.
- ii) Ensure seat is properly secured / tightened.
- iii) Only operator should be allowed to ride the tractor.
- iv) Always use seat belt when the ROPS is equipped with tractor.



7.26 Seven Pin socket

It is mounted on rear side of driver seat to join the trailer connections as per following connectors.

- i) Earthing
- ii) Working Light
- iii) Left indicator
- iv) Parking light
- v) Right indicator
- vi) Brake Light
- vii) For spare connection

7.27 Roll Over Protection

The benefit of the frame is to protect the driver / operator.
The objective of the frame is to protect the operator in the event of a roll over.

ROPS is so designed to take complete weight of tractor in the event of overturning.
ROP frame is designed and tested to meet relevant ECE Norms.

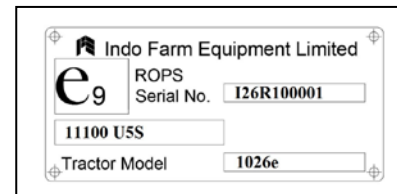
This ROPS has rearward foldable option by removing locking pins from both sides of reverse U shape frame.

Folding ROPS can be used to enter where there are height constraints - like low height entry gate in tractor storage building.

Take proper care while lowering the upper reverse U-shaped frame.

When ROPS is folded. Take care, because negligence could lead to striking of lowered ROPS frame with anything.

Every ROPS assy. has ROPS sr. and ECE approval number data plate which is affixed on RHS of ROPS frame arm.



7.28 Rear trailer hook / drawbar

The tractor is equipped with fixed rear trailer hook conforming to ECE regulation.

A TA mark decal is also affixed on it which provide necessary information about this part like type, approval and other relevant data.

While connecting the trailer with hook make sure both hook and trailer coupling part are properly aligned. Always use less than or equal recommended trailer mass.

Chapter 8.0 : MAINTENANCE

8.1 Maintenance Schedule

SERVICE	ITEM	CHECK	CLEAN	LUBE	CHANGE	ADJUST	TOP UP
DAILY OR 10 HRS.	Tractor		X				
	Engine oil level	X					X
	Radiator coolant level	X					X
	Battery electrolyte level	X					X
	Tyre pressure	X				X	
WEEKLY OR 50 HRS.	Front & rear wheel fasteners	X				X	
	Transmission oil level	X					X
	Fan belt tension	X				X	
	Front axle spindle housing			X			
	Drag link ball ends			X			
	Brake pedal			X			
	Leveling box			X			
	Fork leveling			X			
250 HRS.	Tightness of fasteners	X				X	
	Radiator fins	X	X				
	Lubrication oil				X		
	Oil filter element				X		

Service interval	item	Check	Clean	Lube	Change	Adjust	Top up
	Brakes	X				X	
	Steering Oil	X					X
	Fuel Filter Element	X			X		
500 hrs.	Radiator Coolant	X	X		X		
	Oil filter	X			X		
	Diesel filter element	X			X		
	Rear Axle Shaft brg. end float	X				X	
	Valve Play	X				X	
	Steering Arm Cap	X				X	
750 hrs.	Radiator water	X	X		X		
	Oil filter	X			X		
	Diesel filter element	X			X		
	Rear axle shaft brg. end float	X				X	
	Valve Play	X				X	
	Hydraulic suction strainer				X		
1000 hrs.	Steering Arm Cap	X				X	
	Oil Pump Suction Strainer	X	X				

Service interval	item	Check	Clean	Lube	Change	Adjust	Top up
	Oil filter	X			X		
	Diesel filter element	X			X		
	Alternator	X					

8.2 Recommended lubricants for 1026e tractor

Particulars	Recommended grade	Capacity
Bare engine sump	15W40	3.7 ltrs.
Total lub. oil of engine		4.2 ltrs.
Steering housing oil	EP80	0.330-0.350 ltr
4WD front axle (with differential case)		2.0-2.5 ltrs.
Transmission housing		~17 ltrs.
Hydraulic oil		In common with transmission oil
Grease	Multipurpose grease	-

8.3 Air cleaner cleaning, checking and replacing air cleaner element

Caution!

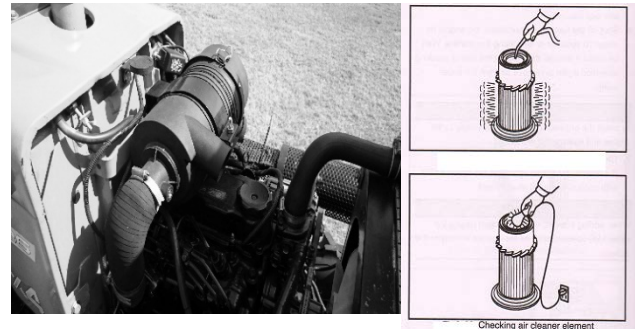
Never service the air cleaner while the engine is running. Servicing the air cleaner while the engine is in operation can cause foreign particles to enter the engine and result in rapid wear of parts that leads to a shorter life of engine. Never knock or hit the element.

When using compressed air, wear protective gear such as safety glasses, hard hat and gloves. Working without protective gear can result in severe personal injury.

To air cleaner is very easy. Just lift bonnet and air cleaner is located above engine top cover. It is mounted on fuel tank frame. Front side opening of the bonnet has make operator work easier.

Cleaning, checking, replacing steps:-

- Remove the air cleaner cover.
- Remove the air cleaner element from the body.
- Blow compressed on to the inside surface of the element to remove the dust or other contaminants.
- To remove dust stuck on the element, blow dry compressed air onto the outside surface from a distance. Blow compressed air on the inside



surface towards outside along the pleats. Then, blow compressed air on the outside and inside surface again.

- After cleaning, place a light bulb to illuminate inside the element to check for defects such as cut, pin holes or local wear.
- If defects are found, replace the air cleaner with new one.
- After cleaning, checking and or replacing the air cleaner element, re-install the air cleaner element to the body.

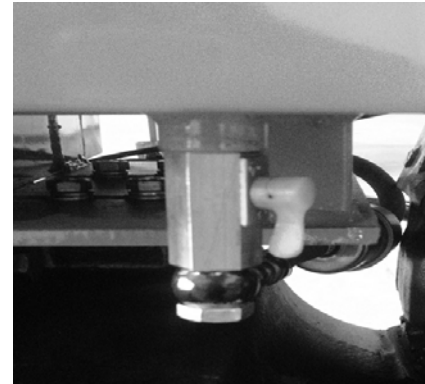
8.4 Fuel Tap

Fuel tap is located at bottom of the fuel tank as shown in photo. After stopping the tractor does not turn the fuel tap off, as this may result in air locks in the fuel system. Turn the fuel tap off in case of need only.

8.5 Fuel Filler Cap

To remove fuel filler or fuel tank cap, press the cap downward and turn counter clockwise.

As a precaution, do not fill the tank with diesel when the engine is running.

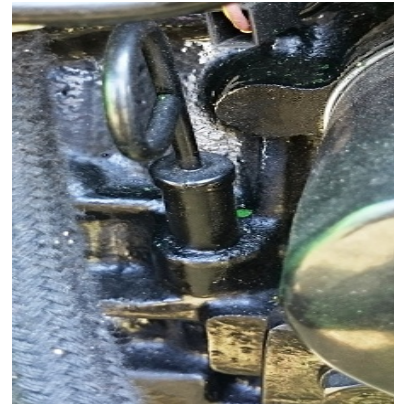


8.6 Engine Oil Filler Cap and Dipstick

To remove the oil filler cap, press the cap downwards and turn it counter clockwise. Engine oil dipstick helps to maintain the oil level between the MIN and MAX marks. To raise oil level from MIN to MAX marks on dipstick, it takes approximately 1.5 litre oil.



Engine Oil Filler Cap



Engine oil Dipstick

8.7 Transmission and Hydraulic oil dipstick

Dipstick is located on R.H.S of gear shifter lever.

The oil level must be maintained in between MIN. & MAX marks on dipstick.
Min. is

the lowest level at which the hydraulic will operate satisfactory on level ground. MAX

oil level should only be used if working in slopes. Operation at the MAX level will

increase oil churning losses, raise the oil temperature and reduce PTO horsepower.

NOTE : The tractor must be on level ground when checking oil level.



8.8 Engine lubrication system

Check the engine oil level after every 10 engine operation hours, or daily. Note that during oil level check the tractor must be on level ground. Change the engine oil and oil filter after every 250-operation hours.

WARNING : Extreme caution should be taken when draining the engine oil. If the tractor is running, the oil will be very hot. Severe burn can result if skin comes into contact with hot oil.

Oil should be changed after work, when the engine is still warm, following this procedure:

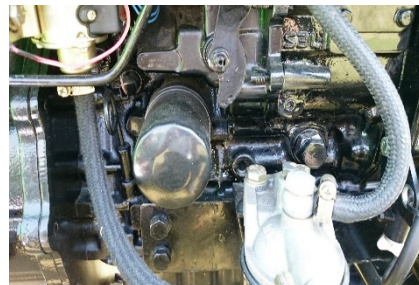
- Park the tractor on level ground.
- Carefully remove the engine sump drain plug as shown Fig. 7.1.
- Allow the oil to completely drain out.
- Refit the drain plug and tighten securely.
- Refill the sump with approved oil (15W40), up to in between Min and Max marks
- on dipstick.

- Unscrew and discard the oil filter.
- Smear a few drops of clean engine oil on the new sealing ring then locate the sealing ring in the recess on the top of the new filter.

Screw the new filter into the filter body until the sealing ring just contacts the filter body, then tighten a further half run by hand only. Don't over tighten.

NOTE : When unscrewing the old filter never use hammer, cold chisel etc. as this may damage the filter body, or the cylinder block.

After changing the oil and filter, run the engine and check for leaks, then recheck oil level.

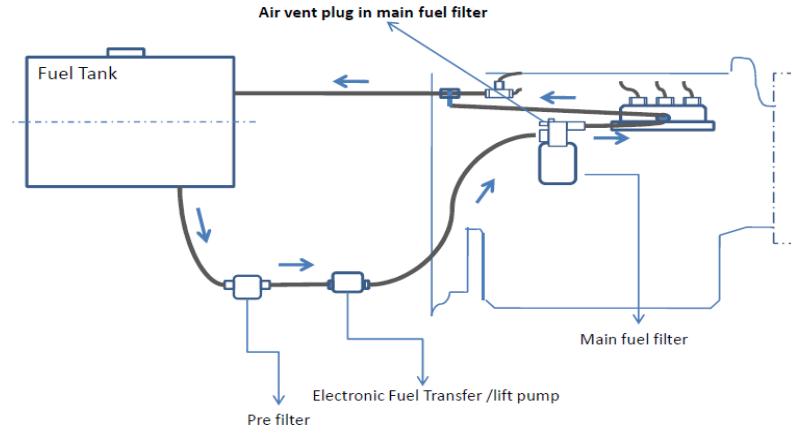


Engine oil sump drain plug



8.9 Fuel System Maintenance

Major parts are FIP, Injectors, fuel filter, electronic fuel transfer pump, pre-filter and fuel tank. How they are connected that is shown in figure. Utmost care must be taken to keep the fuel and fuel system clean and to service the fuel system components at the recommended intervals.



Procedure to change fuel filter element :

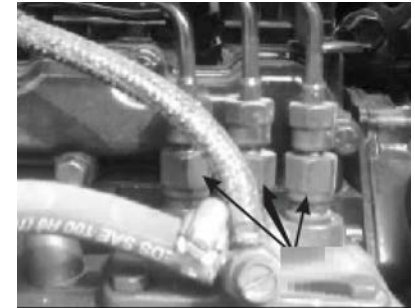
- Stop the fuel supply by closing fuel cock.
- Remove the filter by rotating it in anti-clockwise direction by hand or special wrench.
- Take new filter and check it for proper seating of gasket.
- Apply clean engine oil to gasket on the new fuel filter.
- Install fuel filter, when the filter gasket contacts the mounting surface of filter, tighten the filter and ensure that there is no leakage

Cautions :

- Do not fill-up filter bowl with diesel before assembling on the cover; otherwise some diesel will enter fuel injection pump without filtration. Fit the filter elements in the empty bowls and fill the bowl by operating the hand primer.
- Do not reuse the filter element after cleaning them / blowing with air, as this will harm the fuel injection equipment.

Air Bleeding of Fuel System

- After changing the fuel filter the system must be air - bleed in following manner :



- Switch on the ignition key to start the electric pump till completion of air bleeding process.
- Loosen the banjo / air vent screw of fuel filter assy.
- Tighten the banjo / air vent screw bubble free fuel flows.
- Loosen the fuel return banjo of FIP and allow the air to flow out from the system.
 - Tighten the return banjo until the bubble free fuel flows from the return valve.
 - Loosen the injector pipes connector and crank the engine till the bubble free fuel flow is ensured. Tighten all the injector's pipes.

Warning- Make sure that any fire hazard is not around the work area when handling fuel. Wipe off spilled fuel thoroughly. It can cause fire. After cleaning or replacing the fuel system components, bleed the components.

Note: - Air trapped in the fuel injection pipe and nozzle is automatically exhausted when cranking the engine.

8.10 COOLING SYSTEM

Refilling coolant

The coolant level must be maintained by checking the same regularly

- ❑ Make sure drain cocks and are closed tightly.
- ❑ Remove radiator cap, and pour-in recommended coolant (Ethylene glycol, non-amene premix type).



- ❑ Check radiator and other parts for coolant leakage
- ❑ When coolant reaches the full level, close the radiator cap securely.
- ❑ Run the engine with radiator cap open and accelerate 2-3 times and Top up coolant if required.

Note : - When adding coolant, pour the recommended coolant only .

Draining coolant

- ❑ When draining coolant immediately after engine operation, let the engine idle at low idling speed for 5-6 minutes to lower the coolant temperature.
- ❑ Shut off the engine. Let the engine cooled for safety.
- ❑ Now open the radiator cap safely.
- ❑ Place the can under the drain cock and open it to drain the coolant.

Note :- In this tractor radiator coolant drain plug is not below the radiator, for ease in draining it is fixed on RHS arm of front axle

Support bracket.

Cleaning cooling system

- ❑ Close the drain cocks and plugs.
- ❑ Pour in a cleaning solution (non-corrosive solution to rubber and metals) in the cooling system, and operate the engine at 1300 to 1500 rpm for about 15 minutes, then drain the cleaning solution.
- ❑ Close the drain cocks and plugs.
- ❑ Pour in fresh water, and operate the engine at 1300 to 1500 rpm for 10 minutes. Repeat rinsing until the draining water becomes clear and clean.

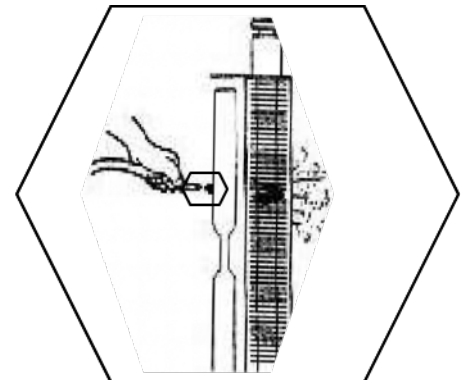
Radiator Fins Cleaning

1. Check radiator fins for holes or cracks for chocking.
2. To clean the radiator blow compressed air from engine side to outside.

Radiator Cap

Cooling system is closed pressurized system so don't operate the tractor without radiator cap or cap with damaged rubber seals/defective release valve to avoid water loss and engine overheating.

Use original radiator cap only.



8.11 CLUTCH Pedal

Cautions:

1. When the tractor is moving, do not change the gear and or engage / disengage the PTO drive unless the transmission is disengaged.
2. At all-time avoid riding the clutch pedal, which can cause overheating and will lead to the clutch failure.
3. Never drive down the slopes with the tractor is in gear and the clutch pedal depressed.
4. Don't neglect clutch adjustments, as rapid wear and / or severe clutch damage will result.



When the tractor enters service, clutch pedal free travel should periodically be checked during the first 50 h of operation and necessary adjustments made immediately. Subsequent checks must be made at 250 operation hours' intervals. The clutch pedal free travel should be 20 to 25 mm.

NOTE : With the time of use the clutch pedal free travel gradually decreases due to the clutch plate lining wear. If the dimension decreases to less than 6 mm the clutch tends to slip which causes rapid wear and / or severe clutch damage.

8.12 Brake Pedals

How to check the brake :

Release the parking brake. Uncouple the two brake pedals. Press down the right hand pedal and measure the free play of pedal as shown in the figure. The distance should be between ~35-40 mm.

If the free play is less than 35 mm or higher than 40 mm then adjust the both hex nut on actuator tie rod until free play comes to 35 to 40 mm. Now, press down the left hand pedal. If the values are not equal with the right hand pedal then repeat the same procedure until values come equal.

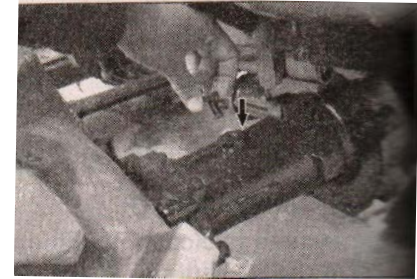
Use independent brake in the field operations. In field you will turn more sharply by pressing brake pedal for the side wheel on the turn. The pedals must be locked for road use.

8.13 TRANSMISSION

FRONT AXLE OIL LEVEL

Check oil level by opening plug available on front axle housing. Just open the plug and see level.

Note : - Capacity- 2-2.5 ltrs, Grade- EP80.



8.14 STEERING GEAR BOX OIL LEVEL

Whenever it is required to change the steering gear box oil. Below are the steps.

- Firstly Oil is drained by opening side plate.
- After draining oil completely fresh oil is poured through oil plug.

Note: - Capacity- 0.330-0.350 Itrs, Grade- EP80.

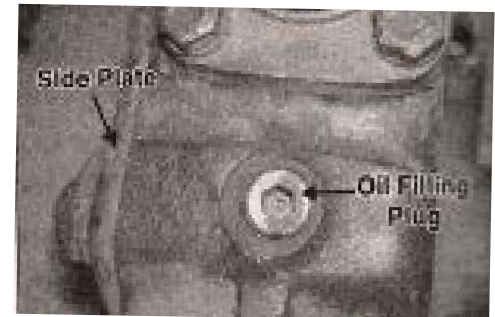
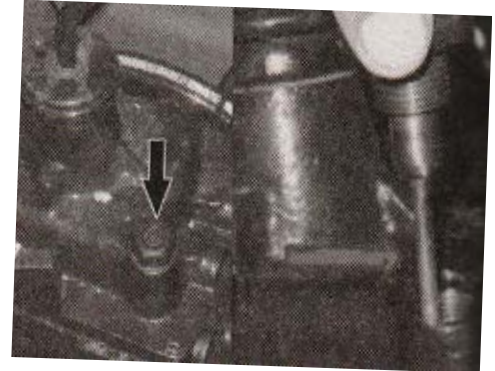
8.15 Transmission/ Hydraulic oil level check and change

Check oil level by opening dipstick which is available near gear shifter lever. Just unscrew it and see the level.

If require pour more oil to achieve desired level.

After recommended hours when it is required to change the transmission/hydraulic oil. Run the tractor for some time to heat up the oil. Make tractor to stand on straight track, turn of the engine and drain the transmission oil by opening drain plug available at bottom of transmission housing. Close drain plug and top up now with fresh oil.

Note: - Capacity- 17 Itrs, Grade- EP80.



Cleaning of Suction Strainer (A)

At each oil change, thoroughly clean suction strainer by washing with light oil or kerosene.

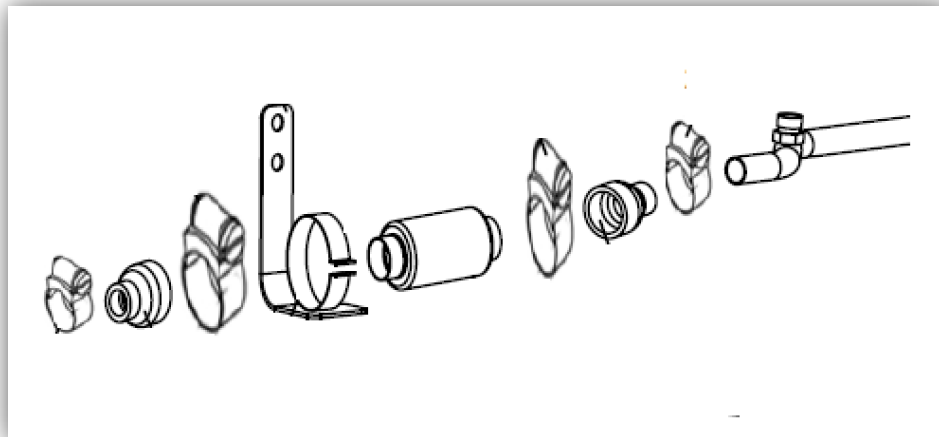
Failure to observe this will result in extensive shortening life of hydraulic system.

Procedure to Clean Suction Strainer :

Remove all hose clamps.

Remove hoses from suction strainer assy.

1. Hold the strainer assembly in left hand & remove the wire clip & magnetic strainer from the housing with the help of right hand fingers.
2. Unscrew the nut & remove supporting cup . After dis-assembling supporting cup remove the sheath (8) having ferrous dust by sliding it with the help of plastic support.
3. Clean the sheath from ferrous dust with the help of soft cloth and refit the same.
4. Assemble the supporting cup & tighten the nut.
5. Assemble magnetic strainer in strainer housing and lock it with the wire clip.
6. Fix the hose pipes and tighten the hose warm clamps.



Replacement: If required, replace the magnetic strainer at every 750 Hours.

8.16 THREE-POINT LINKAGE SYSTEM

WARNING

Don't in any circumstances attempt to pull or tow from the top link connection. The tractor is fitted with ball joints at the top link and ball ends at the lower links. When attaching or detaching three-point hitch implements, always use the position control lever. This will ensure precise control over the implement. Before attaching an implement to the three-point linkage system, the trailer hook should be adjusted for vertical position or dismantled to prevent the implement knocking against it. Attach the top link to top or lower bracket hole depending on the implement frame height.



Top Link

The top link is fitted with a barrel turnbuckle enabling its length to be adjusted.

Lower Links

When fitting implements to the lower links, follow the procedure as given below:

1. Back the tractor up to the implement, aligning the lower link ball ends with the implement hitch pins.
2. Using position control to raise or lower the lower links until the left hand ball end aligns with implement hitch pin. Push the hitch pin through the ball and secure it with the linch pin.
3. Attach the right lower link to the implement, using the leveling lever to adjust the height of the link if necessary.
4. Attach the top link one end to the implement frame and the other end to the top link attachment point on the tractor.

8.17 HITCHING OF IMPLEMENTS WITH TRACTOR

If the implement is placed on level ground, it will be convenient for hitching. Place the tractor in front of the implement and hitch the implement with the tractor three-point linkage in the following procedure:

- a. Hitch the implement with left side lower link and insert implement cotter pin.

- b. By adjusting the leveling box, hitch the implement with right side lower link and insert implement cotter pin.
- c. By adjusting the turnbuckle, hitch the implement with upper link and insert implement cotter pin.
- d. With the help of stay bar, control the swaying of the hitched implement. The amount of allowable swaying can be controlled adjusting the stay bar.

8.18 HITCHING OF TRAILER WITH TRACTOR

- Ensure the trailer capacity is as recommended by manufacturer.
- Hitching of the trolley with the drawbar connecting the lower links of three-point hitch system is easier.
- Trolley should be made in such a way that its toe-bar is always perfectly across the longitudinal axis.

8.19 Battery and it's maintenance

Specifications : 12V, 65 Ah

How to remove battery if required.

Battery is positioned at front side of the tractor,



For battery removal do as mentioned below.

1. Lift the bonnet.
2. First detach positive and negative cables first.
3. Unscrew nuts of battery mounting cover plate.
4. Now take out the battery safely.

How to check electrolyte level

It should be as per the battery manufacturer recommendations. If required top up with distilled water. Never add acid.

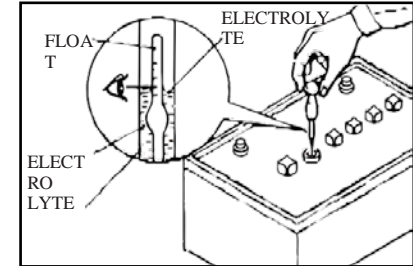
Check Carefully Battery Charging

Protect against freezing. Insure both terminals are clean and properly tightened. Check specific gravity of battery using a battery hydrometer.

Specific gravity of a charged battery is 1.265 ± 0.005 at Standard conditions.

Hazards Related to Battery

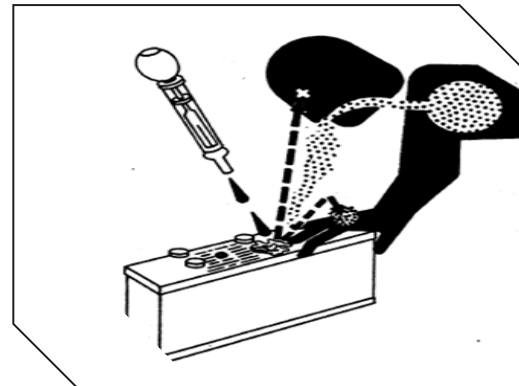
1. Never disturb electrical connections / circuits.
2. Never replace a damaged fuse by a more capacity fuse. It can cause fire.



3. Never work on electric components like starter motor and alternator when engine is running.
4. While washing tractor by pressurized spray take ample care not to damage the electrical connections. Ensure engine is in off.
5. Battery gas can explode. Keep sparks and flames away from batteries.
6. Use a voltmeter or hydrometer to check battery charging not by placing metallic object
7. Always remove grounded (-) battery clamp first and replace clamp after this..
8. Acid in battery electrolyte is poisonous and can burn skin and can create holes in clothes, and cause blindness if splashed into eyes.

Avoid hazards by:

1. Filling batteries in a well ventilated area.
2. Wearing proper eye protection and rubber gloves.
3. Avoiding use of air pressure to clean batteries.
4. Avoiding breathing fumes when electrolyte is added.
5. Avoiding spilling or dropping electrolyte.
6. Using correct battery charger procedure.



If acid is spilled on skin or in eyes:

7. Flush with water.
8. Apply baking soda or lime to help neutralize the acid.
9. Flush eyes with water for 15-30 minutes. Get medical attention immediately.

If acid is swallowed:

- Do not induce vomiting.
- Drink large amounts of water or milk, but do not exceed 2 L.
- Get medical attention immediately.



WARNING

Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals cause cancer and reproductive harm. Wash hands after handling.

Checking V-Belt and adjusting belt tension

If defects such as cuts or surface separation are found on V-belt during inspection, replace V-belt. Keep and grease away from the belt, since they may cause the belt to slip and shorten the service life.

Excessive V-belt tension can cause rapid wear of the alternator bearing and shorten the service life of the belt. Adjust belt tension accurately by following the procedures below.

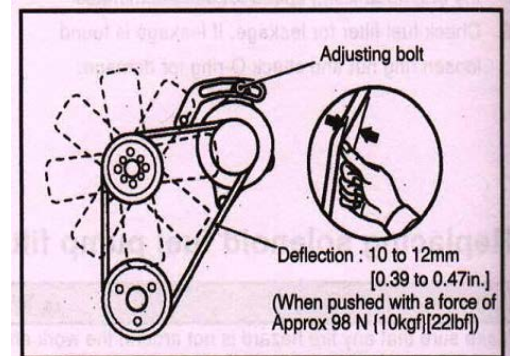
Checking V-belt

1. Inspect V-belt for defects such as wear, cuts or surface separations. If defects are found, replace V-belt with a new belt.
2. Inspect belt tension as instructed below :
3. Push the belt downward with 10 kgf force midway between pulleys. If the deflection is 10 to 12 mm, the tension is correct.

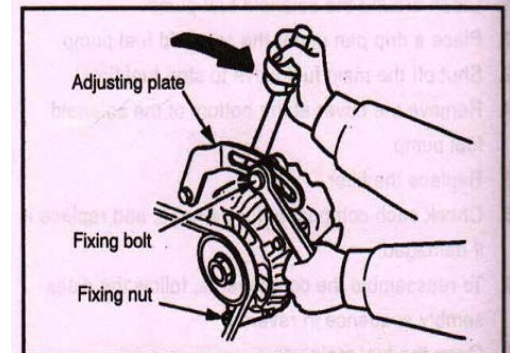
If the tension is out of specified value, adjust belt tension.

Procedure to adjust V-belt tension

1. Loosen all retaining bolts of the alternator and adjusting plate.



Tension adjusting V-belt (1)



Tension adjusting V-belt (2)

2. Insert a bar between the alternator and cylinder block and use leverage to move the alternator to have proper V-belt tension.
3. While V-belt tension is appropriate, retighten all the retaining bolts of the alternator and adjusting plate.

8.21 Checking Starter

Visually check the starter for damage.

If the starter are dusty , blow off dust using compressed air.

Note :- If defects are found in the starter. Then contact your dealer.

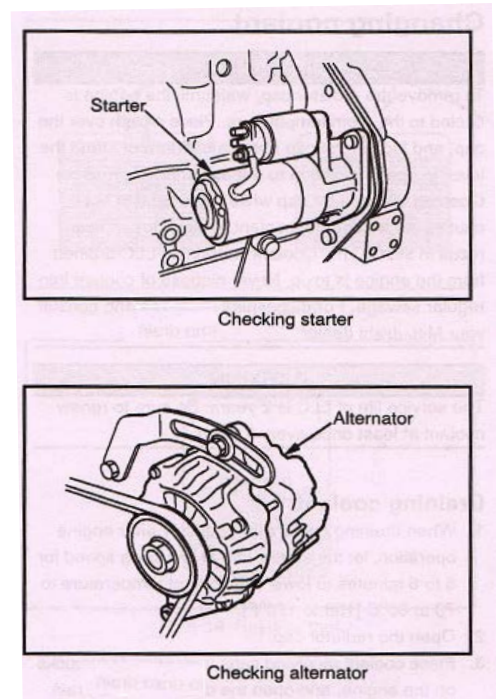
8.22 Checking Alternator

Visually check the alternator for damage.

If the alternator is dusty, blow off dust using compressed air.

Remove V-belt , and turn the pulley with hands to make sure it rotates smoothly.

Note :- If defects are found in the alternator. Then contact your dealer.



8.23 Grease Points:

Lubrication of grease points is recommended at regular intervals. Clean the grease gun and grease points before and after lubrication. Key greasing point are given as under.

(1) Front axle Pivot pin - 1 Point		Lift Rods (2 Points)	
		LH-1 Point 	RH-1 Point 
Tie rod assy. (2 Points)		Brake pedal shaft (LH-1 Point and RH-1 Point)	
LHS 	RHS 		
Clutch actuator shaft (2 points)			
			

8.24 Jack Points for lifting

Front side jack point

In the photo front jack point is shown. It can be used to lift front side to open left / right front wheel.



Rear side jack point

In 2nd photo rear jack point is shown, this jack point can be used to lift rear portion to open rear wheels.

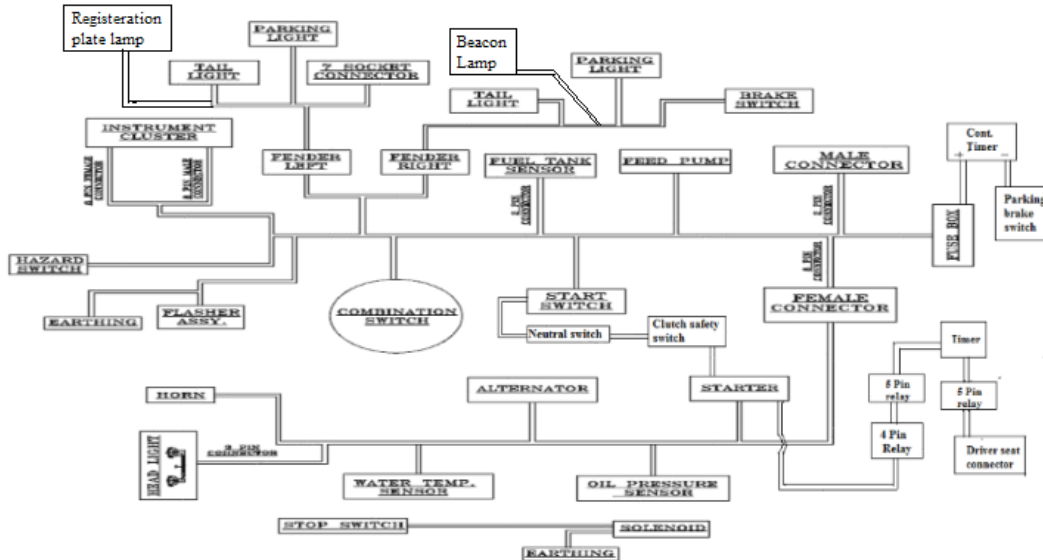
Key notes in jack

- Make sure the jack is properly working before putting in use.
- Jack up tractor on firm, level ground only.
- During jacking work use suitable support stand as per need.



8.25 Electrical diagram

ELECTRIC CIRCUIT BLOCK DIAGRAM



9.0 Technical Specifications

	Model /Type	1026e
ENGINE	Make	Mitsubishi Heavy Industries-VST Diesel Engines Private Ltd. Mitsubishi Heavy Industries Engine & Turbocharger , Ltd.
	Combustion Cycle	Compression Ignition, Four Stroke, Indirect fuel injection.
	Model Name / Type	MVS3L2-Z564JCIF / S3L2-18.2 / 2500
	Bore x Stroke	78 mm x 92 mm
	Firing order	1-3-2
	Displacement (Ltr.)	1.319
	Compression ratio	22 :1±0.5
	Fuel Injection system	
	Make and type	Denso-Japan, Inline, 8440
	Injection timing	15°±1.5 BTDC
	Engine Rated speed	2500 rpm
	Low Idling	1000±1000
	High Idling	2700±50
	Valve Clearance Intake (mm) / Exhaust (mm)	0.25 / 0.25
LUBRICATION	Total Engine Lub. Oil capacity (l)	4.2

	Model /Type		1026e		
TRANSMISSION	Clutch Type		Single Clutch, Mechanical		
	Gearbox Type		Sliding Mesh , 6 Forward + 2 Reverse speeds		
	Oil capacity , Ltr.		~17.0		
BRAKES	Type		Oil Immersed Brakes		
STEERING	Type		Power Steering		
P.T.O.	Power take off	Type	Type-I		
		PTO Speeds	540@2300 Engine rpm , 540E@1558 Engine rpm, 1000@1673 Engine rpm		
Hydraulic lift capacity,	kg		500		
Electrical Equipment					
Voltage of battery	V		12		
Rating	Ah		65		
Starter motor type	-		Solenoid engaged flange-mounted		
TYRES	Front Tyre Size		With Agricultural Tyres	With Industrial Tyres	With Turf Tyres
			6.00 x 12	23x8.5-12	23x8.5-12
	Rear Tyre Size		8.30 x 20	33x15.5-16.5	33x15.5-16.5

	Model /Type	1026e		
Overall dimensions (mm)	Parameters	With Agricultural tyres	With Industrial Tyres	With Turf Tyres
	Length	2740	2740	2740
	Width	1070	1400	1400
	Height	2520	2500	2500
	Wheel base	1520	1520	1520
	Front Track	910	980	970
	Rear Track	810	1020	1010
	Total mass	930	990	990
	With Blast Mass	1030	1090	1090

Implement Specifications		
Sr. No.	Implement Name	Specification if any
1	Rotavator	Blades – 20 , 28 Type of blade – L / J Maximum weight – 150 kg 540 rpm@2300 engine rpm Gear L1/L2/L3
2	Trailer	Maximum gross weight = 0.7 Tonne Gear H3.
3	Sprayer	Maximum tank capacity – 600 ltrs. Gear – H1/H2 ERPM- 2000-2100 540 rpm@2300 engine rpm

10. THE WARRANTY POLICY

M/s Indo Farm Equipment Limited, Export Promotion Industrial Park, Phase: II, Baddi-173205, Solan, Himachal Pradesh (India). warrants, subject to hereinafter, that all new goods supplied by it are free from defects in material and workmanship. Its liability under such warranty being limited to making good, any parts or parts within one year or one thousand working hours as per the meter reading, whichever appears earlier from the date when the tractor was delivered to the original retail purchaser, be returned to Indo Farm Equipment Limited (whose decision is final and conclusive) to have been defective in material or workmanship. All claims against manufacturing defects will be settled by Indo Farm Equipment Limited as per their published service policy of which some of the main features are:

10.1 MAIN FEATURES OF THE WARRANTY POLICY

1. The tractor is maintained and serviced as per our recommendations.
2. The tractor belongs to the first owner.
3. The tractor warranty becomes in-operative if the tractor and other components have been repaired in an un-authorized workshop.
4. The components/parts have not been repaired/tampered/ altered/ modified or used in any way that if it affects adversely its stability of performance and in all such cases the judgment of company's experts will be final.
5. Warranty on proprietary articles and electrical equipment shall be undertaken by the dealer directly upon the response from manufacturer as per their warranty terms.

6. Warranty on parts fitted on tractor, as a free replacement/repair during the warranty period, shall expire with the warranty of the vehicle.
7. Warranty does not cover normal wear and tear and also the damage due to negligence, improper storage or operation.
8. No warranty claim will be entertained unless our authorized dealer has performed all the services up to the time of raising the warranty claim on the vehicle.

10.2 COMPONENTS NOT COVERED UNDER THE WARRANTY

- Electrical goods like bulbs, harness, switches and all glass items are not claimable. At the time of the delivery of the tractor, the customer is expected to check all the above said items to his level of satisfaction and afterwards company will not be responsible for any damage to such items.
- All rubber components like oil seals, rubber rings, gaskets, hose pipes, belts, springs, nuts, bolts, clutch linings, plastic components does not come under warranty.
- Wheel bearings if spoiled due to presence of dust, are not covered under warranty.
- Tractor once sold, will not be returned. If any component is found having any defect, then it will be replaced or repaired. The decision to be repaired or replaced will be the sole discretionary of the company.
- In case of leakage of oil seals, the customer has to pay for the oil spilled. The dealer is only expected to top up the oil.

- ❑ The repair of the components failed is the responsibility of the dealer, the labour cost of tractor under warranty to be borne by the dealer and thus the customer is provided labour free warranty. However the parts to be replaced will be provided to the customer if covered under warranty.
- ❑ The dealer as well as the company also reserves the right to refuse the warranty claim of part, which is not manufactured or supplied with original equipment.

11. DO'S AND DONT'S

11.1 DO'S

REGARDING ENGINE

a. General

1. Release the starter key once the engine has started.
2. Ensure oil pressure sensor is working, it's indication is given in instrument cluster.

b. Air Induction System

1. Clean air cleaner element as per recommended schedule.

c. Fuel System

1. Drain sediments from the fuel tank periodically.
2. Clean fuel tank thoroughly once after every 1200 working hours.
3. Change filters regularly as recommended, i.e., after every 250 h of operation.
4. Fill in diesel in the tank at the end of the day's work so as to avoid condensation.

d. Water Cooling System

1. Ensure that the radiator is always filled / top up with the recommended coolant only.
2. Clean the radiator front grill to ensure free flow of air when the engine is operating.

3. Clean radiator fins periodically to prevent accumulation of dust.
4. Ensure proper tension of fan belt. Deflection should not be more than (10 mm) when pressure is applied on belt midway between the fan pulley and the crankshaft pulley.

e. Lubrication System

1. Replace engine oil after first 50 h of operation in case of new tractor. Thereafter, engine oil should be refilled after every 250 working hours.
2. Check oil level daily with the tractor parked on a level ground.
3. Replace lube oil filter element after every 250 working hours. If the filter element gets clogged, unfiltered oil is supplied to the engine through the by-pass valve and this can reduce the life of piston and bearing assembly in the long run.

(f) Breather and Exhaust System

1. Ensure that the breather pipe is cleaned after every 500 h of operation.
2. Ensure that the exhaust passage is not blocked.

REGARDING CLUTCH

1. It should not be used to rest the foot.
2. It should be pressed fully to change the gear. Partial pressing may be harmful for gears.
3. Ensure that the clutch pedal is released slowly while moving the tractor.

REGARDING TRANSMISSION

1. Change the transmission oil as per recommended schedule.
2. Check the condition of rubber protection bellow gear levers periodically as they are provided to prevent infiltration of water and dust into gearbox.
3. Remove the plate from transmission case bottom and check for oil leakage through main drive oil seal.

REGARDING HYDRAULIC SYSTEM AND LINKAGE

1. Ensure that both the hydraulic control levers are below sector marks while draining the arm cylinder for refilling of oil.
2. Ensure that the hydraulic strainer cleaned during oil replacements as per maintenance schedule.
3. Adjust the top link for proper length.
4. Ensure that the lift cover bolts are always tight.
5. Keep the lower links in lifted position when the tractor is moving without an implement mounted on it.
6. Keep the ball joints on top and lower links clean and dry. Don't lubricate them.
7. Ensure that the implements are raised and lowered using the position control lever only and not the draft control lever.

REGARDING BRAKING SYSTEM

1. Keep the brake pedals locked with interlocking latch when the tractor is not being used in field.
2. Use parking brakes when the vehicle is stationary.

3. Check loose connection in linkage mechanism.
4. Grease brake pedal bush bearing assembly periodically.

REGARDING FRONT AXLE & STEERING MECHANISM

1. Lubricate the steering drag links and bushes periodically.
2. Get the front hub bearings adjusted as prescribed in the operator's Instruction after every 300 h.
3. Get the toe-in adjusted by authorized service center. It should be kept about 3-6 mm.
4. Check the tightness of both and front and rear wheels. Recommended torque for front wheels is 115 Nm and that for rear wheels is 280 Nm.
5. Check oil level of steering gear box and maintain the specified level. Drain and refill fresh oil once a year.

REGARDING TYRES

1. Ensure that correct tyre pressures as recommended in the tyres. This will lead to better traction and longer tyre life.

REGARDING ELECTRICALS

1. Ensure that the battery terminals are kept clean and lubricated with petroleum jelly.
2. Check electrical wiring periodically to prevent it from chaffing.
3. Earth the tractor by wrapping a chain around the front axle, dropping one end of the chain on the ground while working with stationary PTO driving implement. This saves the electric equipment from damage due to static electricity.

REGARDING SAVING OF OIL

1. Switch off the engine when tractor is not in operation. Avoid unnecessary idling.
2. Operate the tractor at 2/3rd throttle for maximum fuel efficiency.
3. Select the correct gear, depending upon the nature of work, implement used and soil condition.
4. Maintain the recommended tyre pressures for fuel-efficient operation and long life of tyres. Check daily.
5. Use matching trailer for transportation. Ensure proper hitching. Never overload the trailer.
6. Maintain the tractor in good working condition.

11.2 DONT'S

REGARDING ENGINE

a. General

1. Don't keep on continuously cranking the engine with starter key. It will shorten the life of the battery.
2. Don't race the engine in neutral.

b. Air Induction System

- i. Don't run the tractor if the air cleaner assembly is defective, as this will lead to impure air being taken in and consequently excessive wear of liners and piston rings.

(c) Fuel System

1. Don't keep the fuel tank without a proper sealing cap.
2. Don't use contaminated fuel as it may affect the operation of fuel injection pump and the injectors.
3. Don't use bad quality spurious filters as replacements.
4. Don't use bad quality high-pressure pipes. Clean and flush the pipes before use.
5. Don't allow leakage through fuel pipe joints.

a. Water Cooling System

1. Don't run the tractor with the radiator cap removed.
2. Don't run the tractor when the radiator hoses are leaking, as this will lead to overheating of the engine.

3. Don't remove thermostat, as it will affect engine performance.
4. Don't run the belt too tight, as it will lead to premature failure of water pump and dynamo bearing.
5. Don't run the belt loose, as it will lead to inefficient cooling and improper charging of the battery.

b. Lubrication System

1. Don't use wrong grade of lubrication oil.
2. Don't mix different brands of engine oil.

c. Exhaust System

1. Don't allow the exhaust passage to be blocked partially or fully by any means.

REGARDING CLUTCH

1. Don't rest your foot on or ride the clutch pedal.
2. Don't work on tractor by slipping and reengaging the clutch.
3. Don't coast down steep slopes with the tractor in gear and clutch pedal depressed.

REGARDING TRANSMISSION

1. Don't change gears while tractor is in motion. Tractor should be brought to a halt and only then gears should be changed so as to ensure that gear teeth do not get damaged.

REGARDING HYDRAULIC SYSTEM AND LINKAGE

1. Don't move the operational control lever from position control range to fast response when the tractor is on a hard surface like concrete, as the implement will crash down and get damaged.
2. Don't lift more than 500 kgf load on the lower links.
3. Don't attempt to pull or tow anything from the top link connection. It is dangerous.
4. Don't use bolts in place of lynch pins.
5. Don't reverse the tractor with PTO driven implement attached and PTO lever in ground PTO position. Implement may get damaged if driven in reverse.

REGARDING BRAKING SYSTEM

- 1 Don't attempt to turn sharply using independent brakes when traveling at high speed. This may cause the tractor to overturn.
- 2 Don't rest foot on or ride the brake pedal.

REGARDING FRONT AXLE & STEERING MECHANISM

1. Don't grease steering gear column top bearing excessively. Use only one or two shots of recommended grease.
2. Don't use wrong grade of oil for lubrication of steering gear box.

REGARDING TYRES

1. Don't allow oil, grease and some crop sprays containing considerable amounts of acid and alkalis to contaminate the tire. These can cause considerable damage to the tyre, if they penetrate into plies through small holes or splits.

REGARDING ELECTRICALS

1. Don't change leads of battery terminals as it leads to failure of electrical components.
2. Don't leave the battery leads in the connected position if the tractor is not going to be used for a long period of time.
3. Don't overfill battery with distilled water. The level should be just enough to submerge the battery plates.

REGARDING SAVING OF OIL

1. Don't allow fuel or oil to leak. Ensure the joints are adequately tight.
2. Don't spill fuel or oil while filling or topping up. Use a funnel.
3. Don't overfill engine oil as this can cause excessive oil consumption and oil leaks.
4. Don't ride the clutch or brake pedal.
5. Don't allow the rear wheel to slip. Use ballast, if necessary.
6. Don't use worn-out tyres.
7. Don't use unclean worn-out filters.
8. Don't use inferior quality lubricants, use only recommended grade.

REGARDING FIRE SAFETY PRECAUTIONS

- ❑ Don't refuel the tractor with the engine running.
- ❑ Don't store fuel and other inflammable materials in the tractor parking area and building.
- ❑ Don't drive the tractor over or close to inflammable materials so that the exhaust pipe outlet gets very near to these materials.
- ❑ Don't keep rags and other inflammable materials soaked in oil, petrol inside parking area.
- ❑ Don't use steel tools for hammering out the plugs of fuel barrels or other vessels containing fuel.
- ❑ Don't use naked flame near batteries.
- ❑ Don't use water to extinguish burning fuel or lubricants as this makes the fire to spread even faster.

VALID FOR EITHER 50 HRS. OR ONE MONTH FROM DATE OF SALE WHICHEVER IS EARLIER**Jobs to be carried**

1. Grease All Points
2. Tighten Cylinder Head Nuts
3. Change Engine Oil
4. Change Oil Filter
5. Clean Air Cleaner Filter
6. Check Fan Belt tension
7. Check and Adjust Valve play
8. Check and Adjust Clutch
9. Check and Adjust Brakes
10. Check Front Wheel Toe-In
11. Check all Oil Levels
12. Check all bolts and nuts
13. Check Electrical Systems
14. Check Hydraulic System
15. Check and Adjust Steering play
16. Check Tyre Inflation Pressure
17. Check Injectors
18. Inspect Engine lubrication
19. Check Hydraulic system and its adjustment
20. Check Electrolyte Level of Battery

TRACTOR PARTICULARS

Serial No. :

Engine No. :

Gear Box No. :

Date of Sale :

Invoice No. :

Date of Service :

Hours worked :

Note: This free service does not include cost of lubricants, diesel, material and spare parts.

This is to certify that above mentioned jobs have been carried out free of cost on my tractor satisfactorily and now my tractor is running perfectly alright.

Dealer's Name & Address**Owner's Signature & Address****PLEASE SEND THIS COUPON TO THE COMPANY WITHIN ONE WEEK AFTER SERVICING**

VALID FOR EITHER 200 HRS. OR THREE MONTHS FROM DATE OF SALE WHICHEVER IS EARLIER**Jobs to be carried**

1. Grease All Points
2. Clean Oil Pump Strainer
3. Change Engine Oil
4. Change Oil Filter
5. Check and Adjust Valve Play
6. Check Fan Belt tension
7. Clean Air Cleaner
8. Check and Adjust Brakes
9. Change Fuel Filter
10. Flush Cooling System
11. Check Front Wheel Toe-in
12. Check Clutch Adjustment
13. Check Front Wheel Toe-In
14. Check Electrical Systems
15. Check Hydraulic System
16. Check Electrolyte Level in Battery

TRACTOR PARTICULARS

Serial No. :

Engine No. :

Gear Box No. :

Date of Sale :

Invoice No. :

Date of Service :

Hours worked :

Note: This free service does not include cost of lubricants, diesel, material and spare parts.

This is to certify that above mentioned jobs have been carried out free of cost on my tractor satisfactorily and now my tractor is running perfectly alright.

Dealer's Name & Address**Owner's Signature & Address****PLEASE SEND THIS COUPON TO THE COMPANY WITHIN ONE WEEK AFTER SERVICING**

VALID FOR EITHER 400 HRS. OR SIX MONTHS FROM DATE OF SALE WHICHEVER IS EARLIER**Jobs to be carried**

1. Grease all points
2. Change Engine Oil
3. Change Oil Filter
4. Check Tappet Clearances
5. Clean Air Cleaner
6. Remove Injectors and Check their spray
7. Replace Fuel Filter
8. Check Cooling System
9. Check and Adjust Clutch
10. Check and Adjust Hand and Foot Brakes
11. Check Front Wheel Toe-in
12. Check Clutch Adjustment
13. Check Front Wheel Toe-In
14. Check Electrical Systems
15. Check Hydraulic System
16. Check Electrolyte Level in Battery

TRACTOR PARTICULARS

Serial No. :

Engine No. :

Gear Box No. :

Date of Sale :

Invoice No. :

Date of Service :

Hours worked :

Note: This free service does not include cost of lubricants, diesel, material and spare parts.

This is to certify that above mentioned jobs have been carried out free of cost on my tractor satisfactorily and now my tractor is running perfectly alright.

Dealer's Name & Address**Owner's Signature & Address****PLEASE SEND THIS COUPON TO THE COMPANY WITHIN ONE WEEK AFTER SERVICING**

VALID FOR EITHER 600 HRS. OR EIGHT MONTHS FROM DATE OF SALE WHICHEVER IS EARLIER**Jobs to be carried**

1. Check Steering system, Grease front bearing & Top up steering oil
2. Check and Adjust Front Wheel Toe-In
3. Clean Air Cleaner
4. Check and Adjust Tappet play
5. Check and Adjust Injector Pressure
6. Check and Adjust Fan Belt Tension
7. Check and Tighten Cyl. Head Bolts
8. Change Fuel Filter and Lube Oil Filter
9. Change Engine Oil
10. Change Gear Box Oil
11. Check and Adjust Clutch
12. Check and Adjust Hyd. Control in all positions
13. Check Electrical System
14. Grease all Points
15. Tighten all Bolts and Nuts
16. Check Cooling System
17. Check Tyre Inflation Pressure
18. Check Electrolyte Level in Battery

TRACTOR PARTICULARS

Serial No. :

Engine No. :

Gear Box No. :

Date of Sale :

Invoice No. :

Date of Service :

Hours worked :

Note: This free service does not include cost of lubricants, diesel, material and spare parts.

This is to certify that above mentioned jobs have been carried out free of cost on my tractor satisfactorily and now my tractor is running perfectly alright.

Dealer's Name & Address**Owner's Signature & Address****PLEASE SEND THIS COUPON TO THE COMPANY WITHIN ONE WEEK AFTER SERVICING**



FREE SERVICE COUPON

5

VALID FOR EITHER 800 HRS. OR TEN MONTHS FROM DATE OF SALE WHICHEVER IS EARLIER

Jobs to be carried

- 1. Grease All Points
- 2. Change Engine Oil
- 3. Clean Oil Filter
- 4. Clean Air Cleaner Oil
- 5. Check Fan Belt Tension
- 6. Check and Adjust Valve play
- 7. Check and Adjust Clutch
- 8. Check and Adjust Brakes
- 9. Check Front Wheel Toe-In
- 10. Check all Oil Levels
- 11. Check all Bolts and Nuts
- 12. Check Electrical Systems
- 13. Check Hydraulic System
- 14. Check and Adjust Steering Play
- 15. Check Tyre Inflation Pressure
- 16. Check Injectors
- 17. Inspect Engine lubrication
- 18. Check Hydraulic System and Its Adjustment

TRACTOR PARTICULARS

Serial No. :

Engine No. :

Gear Box No. :

Date of Sale :

Invoice No. :

Date of Service :

Hours worked :

Note: This free service does not include cost of lubricants, diesel, material and spare parts.

This is to certify that above mentioned jobs have been carried out free of cost on my tractor satisfactorily and now my tractor is running perfectly alright.

Dealer's Name & Address

Owner's Signature & Address

PLEASE SEND THIS COUPON TO THE COMPANY WITHIN ONE WEEK AFTER SERVICING

VALID FOR EITHER 1000 HRS. OR ONE YEAR FROM DATE OF SALE WHICHEVER IS EARLIER**Jobs to be carried**

1. Grease all points
2. Tighten cylinder head nuts
3. Change Engine Oil
4. Clean Oil Filter
5. Change Air Cleaner Cartridge
6. Check Fan Belt tension
7. Check and Adjust Valve Play
8. Check and Adjust Clutch
9. Check and Adjust Brakes
10. Check Front Wheel Toe-In
11. Check All Oil Levels
12. Check All Bolts and Nuts
13. Check Electrical Systems
14. Check Hydraulic System
15. Check and Adjust Steering Play, Fill up Steering Oil
16. Check Tyre Inflation Pressure
17. Check Injectors
18. Inspection of Engine lubrication
19. Check Hydraulic system and its adjustment
20. Check Electrolyte Level in Battery

TRACTOR PARTICULARS

Serial No. :

Engine No. :

Gear Box No. :

Date of Sale :

Invoice No. :

Date of Service :

Hours worked :

Note: This free service does not include cost of lubricants, diesel, material and spare parts.

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Dealer's Name & Address**Owner's Signature & Address****PLEASE SEND THIS COUPON TO THE COMPANY WITHIN ONE WEEK AFTER SERVICING**



WARRANTY REGISTRATION CARD

I hereby state that I have taken delivery of the tractor described hereunder from M/s I have appreciated the statements given below by the dealer's representative. I will abide by all instructions, otherwise my warranty period should be deemed to be over.

TRACTOR

Engine No. :
 Chassis No. :
 Model :
 Pump No.:
 Date of Selling :
 Hour Reading :
 Alternator Make and No. :
 Battery Make and No. :
 Tyre Make, Size :
 Front : Left No.
 Right No.
 Rear : Left No.
 Right No.

INFORMATION ABOUT OWNER

Name :
 Father's Name :
 Address :

 Mobile :
 Phone :
 Main Crop(s) :
 Business :
 Other Tractor :

S.No.	Checklist for Installation	✓/x	S.No.	Checklist for Installation	✓/x
1	Use of Various Controls and Gauges		16	Do's and Don'ts	
2	Starting and Stopping the Engine		17	Battery Maintenance	
3	Significance Warning Lamps		18	Engaging PTO and to Use It	
4	Selection of Gears		19	Procedure for Checking Oil Levels	
5	Periodic Maintenance		20	Use of Hydraulic System	
6	Procedure for Changing Engine Oil		21	Validity of Free Services	
7	Procedure for Cleaning Air Cleaner		22	Use of Special Attachments	
8	Locations of Greasing Points		23	Storing of Tractor	
9	Procedure Bleeding Fuel System		24	Starting Tractor After Storage	
10	Correct Inflation Pressure of Tyre		25	Hitching of Implements and Trailers	
11	Use of Independent Wheel Braking		26	Use of Weight Ballast and Water Ballast	
12	Wheel Track Adjustment		27	Proper Tightening of Nuts & Bolts	
13	Use of Hand Brake		28	Use of Operator's Manual	
14	Trouble Shooting		29	INDO FARM Warranty Policy	
15	Selection of Suitable Implements				



WARRANTY REGISTRATION CARD

Free Service Activity

	1	2	3	4	5
Due Date					
Date of Service Render					

Months and Hours for Due Servicing

January	February	March	April	May	June	July	August	September	October	November	December

Received Materials:

- Draw bar Bumper Front Hook Rear Hook
 Tool Kit Operator's Manual Front & Rear Weight (Optional) Fender Guard
 Fender Sheet Fender Support

.....
 Installer Signature
 Date :

.....
 Customer's Signature
 Date :

.....
 Dealer's Signature duly Seal
 and & Address



WARRANTY REGISTRATION CARD

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 Chassis No. :
 Model :
 Pump No.:
 Date of Selling :
 Hour Reading :
 Alternator Make and No. :
 Battery Make and No. :
 Tyre Make, Size :
 Front : Left No.
 Right No.
 Rear : Left No.
 Right No.

INFORMATION ABOUT OWNER

Name :
 Father's Name :
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WARRANTY REGISTRATION CARD

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 Tool Kit Operator's Manual Front & Rear Weight (Optional) Fender Guard
 Fender Sheet Fender Support

.....
 Installer Signature
 Date :

.....
 Customer's Signature
 Date :

.....
 Dealer's Signature duly Seal
 and & Address

During the warranty period the six time services given by M/s
..... was as per below standard:

Excellent

Good

Satisfactory

Poor

Customer Name and Address :

Mobile _____ Phone _____

Tractor Model : _____

Chassis No. : _____

Engine No. : _____

Date of Sale : _____

Working Hour : _____

.....
Customer's Signature
Date :

.....
Dealer's Signature duly Seal
and & Address
.....

Our Product Range



 **INDO FARM
EQUIPMENT LIMITED**
An ISO 9001:2015 Certified Company



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Tel. : +91-1795-274241 (8 Lines), **Fax** : +91-1795-274308-309, **Email** : mail@indofarm.in, **Website** : www.indofarm.in

Customer Service Helpline : 78340-00007

www.indofarm.in