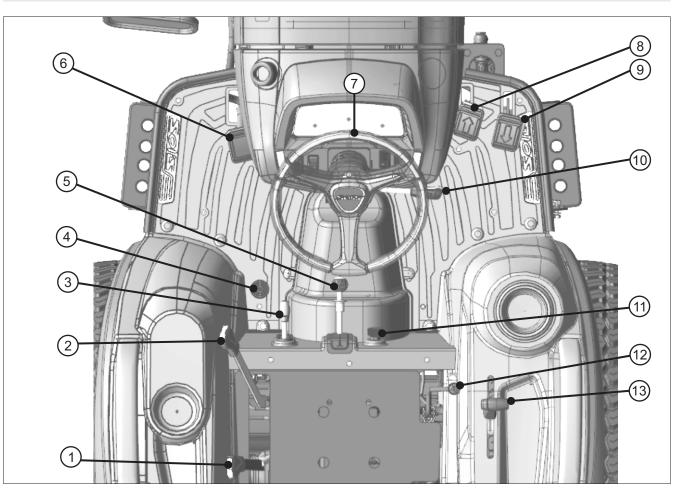
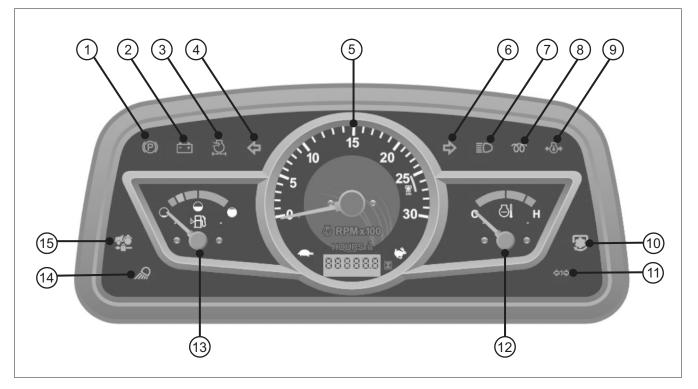
# **3.1 Tractor Controls**



- 1 PTO Shifter Lever
- 2 Hi-Low Lever
- 3 2WD/4WD Lever
- 4 Differential Lock
- 5 Parking Brake Lever
- 6 Brake Pedal
- 7 Steering Wheel

- 8 Forward Speed Control Pedal
- 9 Reverse Speed Control Pedal
- 10 Hand Throttle Lever
- 11 Response Valve / Transport Lock
- 12 DCV Lever
- 13 Hydraulic Control Lever

# 3.2. Instrument Panel



1	(P)	Parking Brake Indicator
2	<u>- +</u>	Battery Charging Indicator
3	<u>B</u>	Air Cleaner Clogging Indicator
4	$\diamond$	Left Turn Indicator
5	Ø	RPM & Hour Meter
6	⇔	Right Turn Indicator
7	≣D	High Beam Indicator
8	M	Glow Plug Indicator
9	₽	Oil Pressure Indicator
10	٢	PTO Monitor Lamp
11	<b>4</b> 1	Turn Trailer Indicator
12	۵.	Temperature Gauge
13		Fuel Gauge
14	<i>]</i> ]]];	Working Lamp Indicator
15		Cruise On-Off Indicator

# 3.2.1 Park Brake Indicator

It glows when parking brake is engaged.

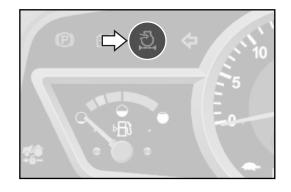
# 3.2.2 Battery Charge Indicator

This indicator indicates that either battery is being charged or not. Refer the below given observations with respect to different conditions:

	Conditions			
Ignition Switch	Engine	Indicator	Battery Charging System Functioning	
ON	OFF	GLOW	OK	
ON	OFF	OFF	Charging System/Battery is defective, Get both thing checked from electrician	
ON	Start/Running	OFF	Battery being Charged	
ON	Start/Running	GLOW	Charging System is defective / Battery is draining out, get the charging system checked from electrician.	

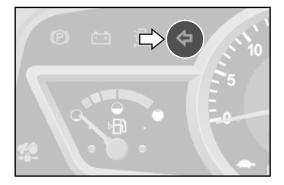
#### 3.2.3 Air Cleaner Clogging Indicator

This light will glow when the air filter get choked. Clean the air cleaner element immediately with air pressure if this light is glowing.



# 3.2.4 Left Turn Indicator

It glows when the left side indicator is switched ON.



#### 3.2.5 Engine RPM cum Hour Meter

Needle of this meter indicates speed of engine in revolution per minute and the hour meter indicates the number of hours worked by the engine.

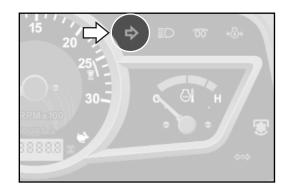
Green Zone is safe for operation.

**NOTE:** Hour meter may differ from actual hour (As per Clock) as this is dependent on engine RPM.

### 3.2.6 Right Turn Indicator

It glows when the right side indicator is switched ON.



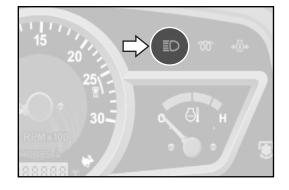


# 3.2.7 High Beam Indicator

This light glows when Head Lights are in high beam mode.

#### 3.2.8 Cold Start Indication

It glows when ignition heater is ON at second position of the starting key.





## 3.2.9 Oil Pressure Indicator

This light glows when engine oil pressure is low.



#### 3.2.10 PTO Monitor Lamp

This light glows when PTO is engaged.

#### 3.2.11 Turn Trailer Lamp

This light glows when Trailer lamp load is attached & Turn indicator Switch is ON. It also glows all the time when Hazard switch is ON.

#### 3.2.12 Temperature Gauge:

This gauge indicates temperature of engine coolant, GREEN zone indicates normal temperature and RED zone indicates engine overheating. If the needle moves beyond normal range, towards RED zone, follow the below procedure:

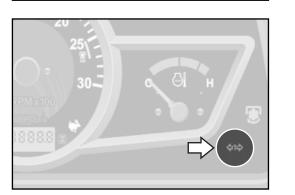
- 1. Drive safely to the side of road and park your tractor.
- 2. Allow the engine to run idle.
- 3. If the temperature does not go down, shut-off the engine and allow sufficient time for it to cool.
- 4. Visually inspect the fan belt for looseness, breakage and all water hose connections for leakage.
- 5. If the fan belt is OK and no coolant leak is noticed check the coolant level.
- 6. Add coolant if required, otherwise contact your nearest dealer.





Do not remove the radiator cap when the engine and radiator are hot. Hot coolant and steam may blow out under pressure, which could cause serious injury. The cap should only be taken off when the coolant temperature has lowered.

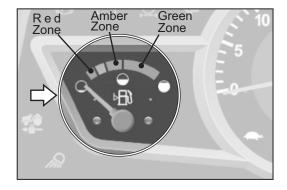
**WARNING** Necessary precaution to be taken while opening the radiator cap.



# 3.2.13 Fuel Gauge

Fuel gauge gives an approximate indication of the quantity of fuel in fuel tank. If the needle enters in RED zone, refill the fuel tank.

Ensure Min. 6 Litre [1.32 U.S. Gallon] of Fuel in Fuel Tank to avoid air locking.



# 3.2.14 Work Lamp Indicator

This light glows when work lamp or plough lamp is ON.

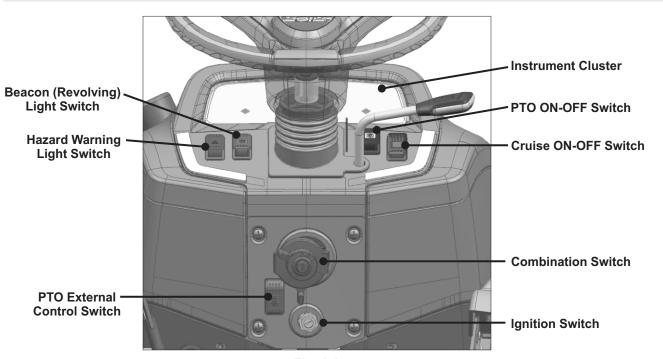


# 3.2.15 Cruise Control Indicator

This light glows when cruise magnet is ON.



# 3.3 Dashboard Controls





# 3.3.1 Hazard Warning Light Switch (Fig. 3.3.1):

Purpose of the hazard switch is as follows:

- 1. All the four lights blinking, indicates that driver has no control on tractor.
- 2. Mechanical defects in the tractor.

Push this switch to blink all indicators in HAZARD situation to alert others.

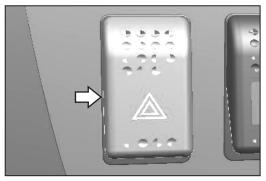


Fig. 3.3.1

#### 3.3.2 Combination Switch (Fig. 3.3.2):

#### Side Indicator Switch (A):

This switch is used for indicating the vehicle turn. Move turn signal lever left to indicate left (L) hand turn or right (R) for right hand turn. Indicator lights will flash according.

#### Horn Switch (B):

Press this switch to blow the Horn.

# Head Light and Parking Light Switch (C):

This switch illuminates all lights (Parking Light, Head Light, High Beam, Low Beam) with the clockwise rotation.

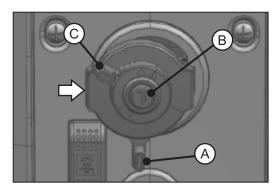
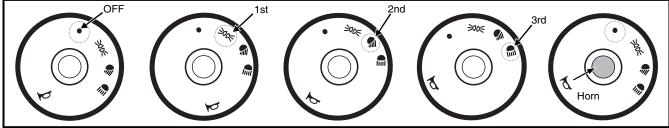


Fig. 3.3.2

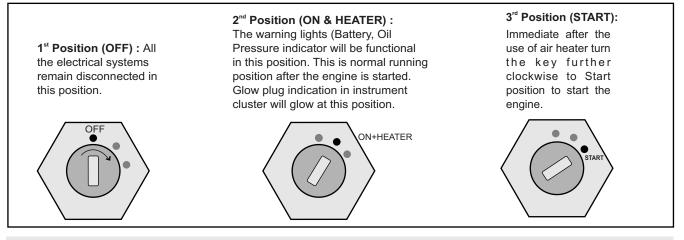
# **INSTRUMENTS & CONTROLS** 45

All lights are off. (Clockwise) (Clockwise): (Clockwise): (Clockwise):   With 1 <sup>st</sup> click Stop With 2 <sup>nd</sup> click Stop With 3 <sup>nd</sup> click Stop With 3 <sup>nd</sup> click Stop	Horn : Press the combination switch to blow the Horn.
--	--



# 3.3.3 Starting Key (Ignition) Switch:

Functioning of starting key switch is as below:



**NOTE : •** Do not keep the starter engaged more than 5-8 seconds. If engine stalls/fails to start then wait for 5-10 seconds before re-engaging the starter, otherwise you may damage it.

• Keep the switch in OFF condition when engine is also in OFF condition.

### 3.3.4 Revolving Light Switch:

This switch is used to ON/OFF the revolving Light mounted on Rops.

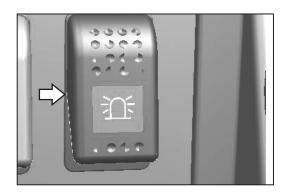


Fig. 3.3.4

#### 3.3.5 PTO ON-OFF Switch

This Switch is used to ON/OFF the PTO & provide Signal to PTO Solenoid valve through Safety Controller. When we press this switch for 3 Second then PTO Solenoid will be ON & We press Switch again it will Stop the PTO Solenoid immendiatly.

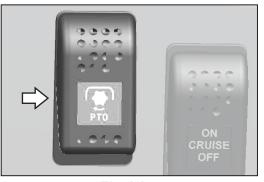


Fig. 3.3.5

# 3.3.6 Cruise ON-OFF Switch

This Switch on-off the cruise Magnet, When this switch type : press in upper side cruise magnet will be ON & when it press in lower side then magnet will be OFF.

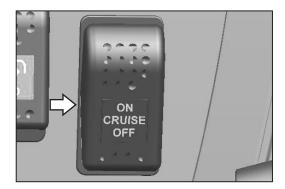


Fig. 3.3.6

# 3.3.7 PTO External Control Switch

When this switch ON, Operator can get up the driver seat after park brake applied to use the stationary PTO application.

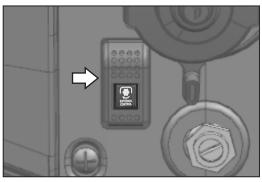


Fig. 3.3.7

#### 3.4 Fuse Box

Fuse Box is mounted on Radiator Bracket (See figure). If any electrical failure occurs, check and rectify the problem & replace the blown up fuse with genuine fuse of specified rating.



Never install a wire instead for proper fuse.

Refer "Page No. 79" for details of Fuses.



Fig. 3.4

# 3.5 Battery

Battery is located at front side of tractor on front axle bracket. Open the bonnet to access the battery (see fig. 3.5a).

# Battery Cut-off Switch (Fig. 3.5b):

Battery cut-off switch is provided to connect or disconnect power supply from the battery. When the tractor is not in use for longer period, rotate the switch to anti-clockwise to switch off the power supply.

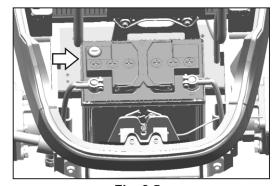


Fig. 3.5a

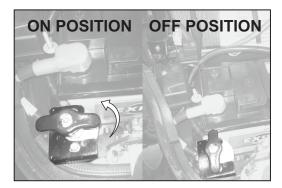


Fig. 3.5b

# 3.6 Seven Pin Socket:

Seven pin socket mounted on licence plate to attach the trailer connections (see fig. 3.6).

Details of connectors is given under:

Pin No	Used for	Wire Color
PIN 1	Left Turn Single	Yellow
PIN 2	Rear Fog light / Aux +ve	Blue
PIN 3	Earth	White
PIN 4	Right Turn Signal	Green
PIN 5	Right Parking Light	Brown
PIN 6	Brake Light	Red
PIN 7	-	-

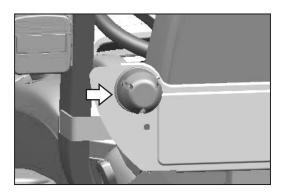


Fig. 3.6

# 3.7 Tractor Lights

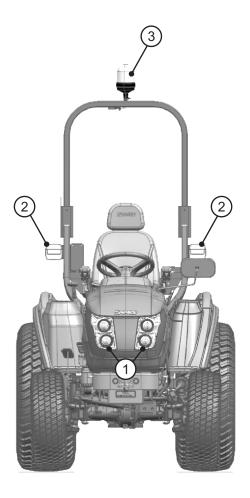
Head Lights (1): Projector lamps are provided for better focus & lighting and improved aesthetics.

**Tail Lights (2):** Tail Lights are having various indications i.e. light indication for brakes, side indicators and hazard warning light.

**Beacon Light (3):** To be used according to your country's regulation. This light is detachable type and can be removed based on requirements.

Plough Lamp (4): Adjustable plough lamp is provided at rear side as shown in figure.

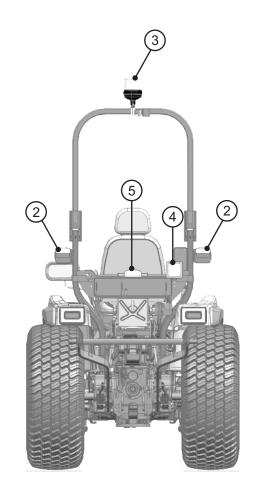
Registration Plate Light (5): Registration plate light is provided on registration plate at rear side as shown in figure.



# 3.8 Registration Plate

A vehicle registration plate or number plate is mounted at rear end of the tractor as shown in figure 3.8.

The same is to be used as per country's rule.



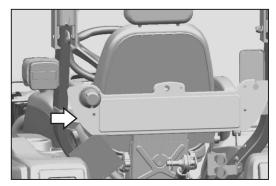


Fig. 3.8

# 3.9 Driver's Seat

While seating, adjust the weight of operator with weight adjustment knob provided at back side of seat so as to be comfortable driving & to minimize vibrations.

With the to & fro adjusting knob, slide the seat so as to have a comfortable approach towards all levers. The range of effort that can be adjusted while sitting on seat is 50-120 kgf [110.2 - 264.5 lbf]

#### **Horizontal Adjustment**

• Lift the lever (1, fig. 3.9a) to move the seat forward and backward.

#### **Vertical Adjustment**

- Use knob (2, fig. 3.9b) to adjust the suspension.
- Use knob (3, fig. 3.9b) to adjust the height of the seat vertically.
- Seat belt (4, fig. 3.9c) for safety.

## Adjustment of Arm rest inclination:

- Raise the arm rest in upward position.
- Rotate knob (5, fig. 3.9d) in clockwise direction to increase the arm rest inclination.
- Rotate knob (5, fig. 3.9d) in anti-clockwise direction to decrease the arm rest inclination.



#### To avoid personal injury

- Make adjustments to the seat only while the tractor is stopped.
- Make sure that the seat is completely secured after each adjustment.
- Do not allow any person other than the operator to ride on the tractor.
- Always use the seat belt when the ROPS is installed.
- Do not use the seat belt if the tractor is not equipped with ROPS.



3.9a

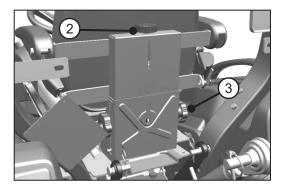


Fig 3.9b

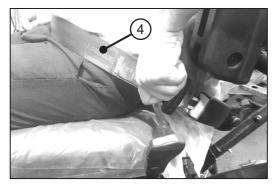


Fig. 3.9c

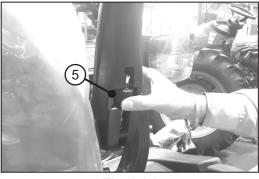


Fig. 3.9d