

SECTION 55 – ELECTRICAL SYSTEM

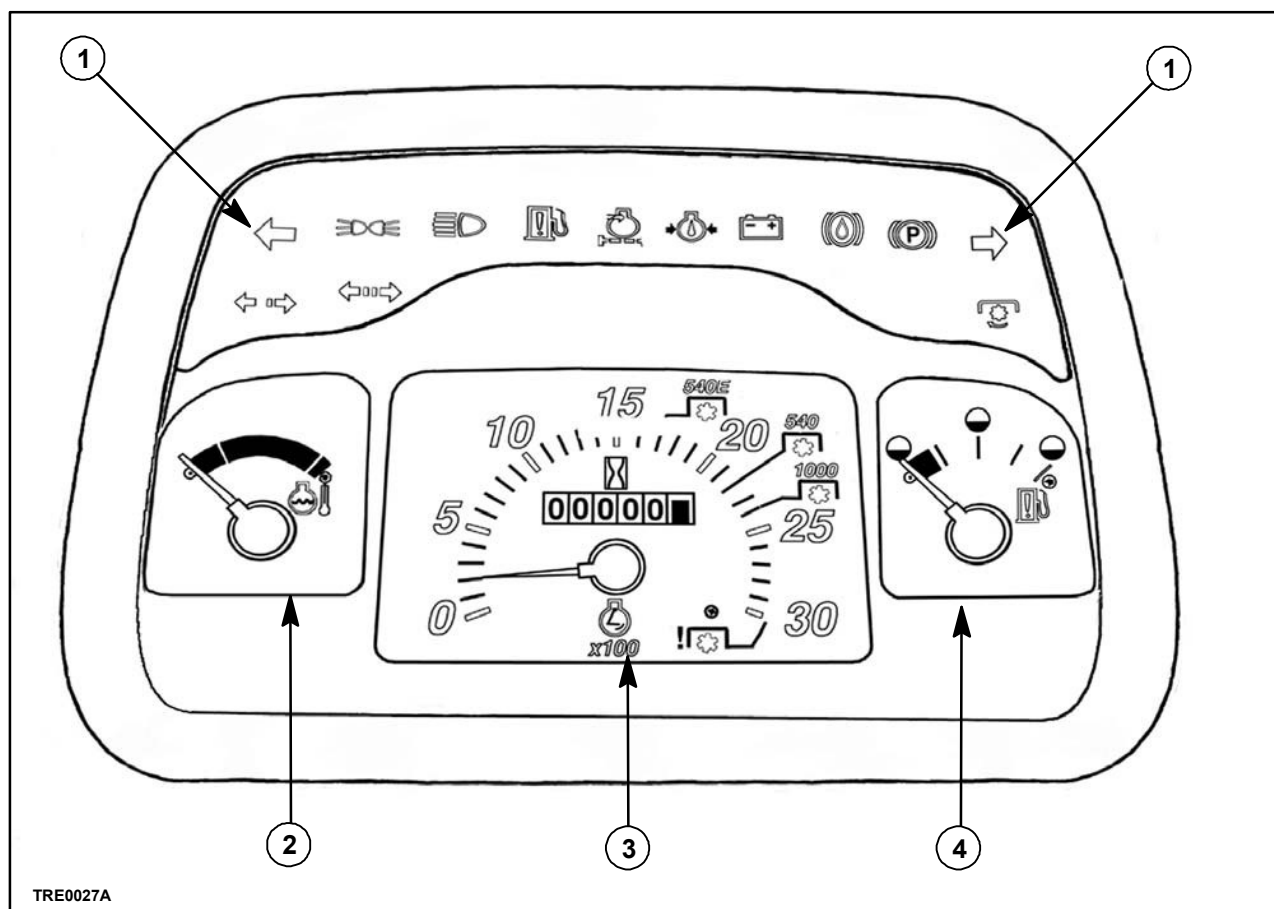
Chapter 1 – INSTRUMENTS

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ANALOGUE INSTRUMENTS

INTRODUCTION



The analogue instrument panel consists of four display sections:

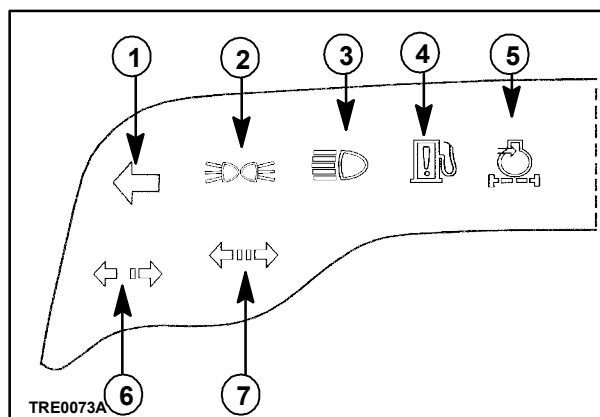
- 1) Warning and indicator lights;
- 2) Fuel level gauge;
- 3) Proofmeter;
- 4) Engine coolant temperature gauge.

Condition

- 1 – Left direction indicator
- 2 – Side lights
- 3 – Main beam headlights
- 4 – Water in fuel
- 5 – Air filter blocked
- 6 – First trailer direction indicator
- 7 – Second trailer direction indicator

Indicator

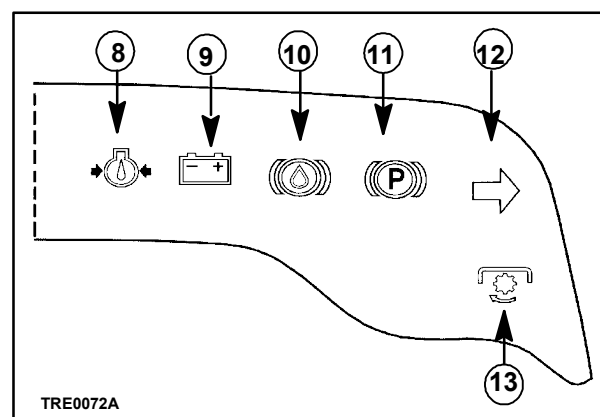
- Flashing (green)
- Fixed (green)
- Fixed (blue)
- Fixed (red)
- Fixed (amber)
- Flashing (green)
- Flashing (green)



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- 8 – Engine oil pressure low
- 9 – Battery charge low
- 10 – Brake fluid level low
- 11 – Hand brake on
- 12 – Right direction indicator
- 13 – Power take-off on

- Fixed (amber)
- Fixed (red)
- Fixed (red)
- Fixed (red)
- Flashing (green)
- Fixed (amber)



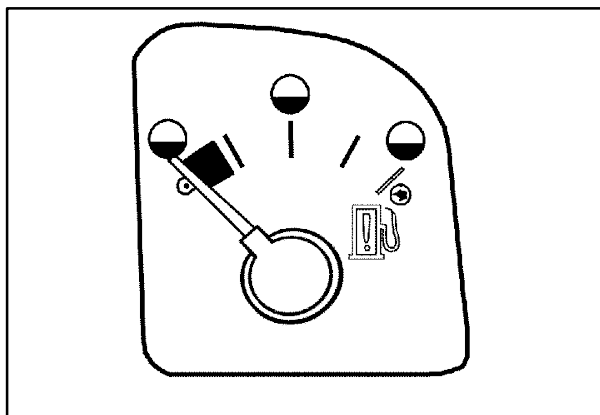
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Fuel level gauge (Fig. 3).

This instrument shows the level of fuel in the tank.

When the tank is full, the hand moves completely to the right.

When the tank is less than 1/4 full, the hand moves into the red area.



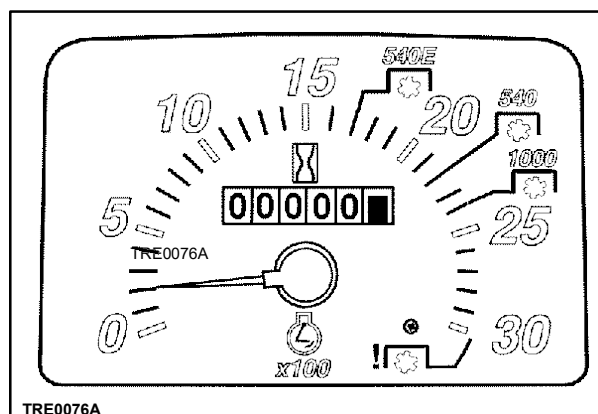
4

Proofmeter (Fig. 4).

Engine speed indicator and chronograph with a six figure hourmeter. The figures on black background count hours of work done and the figure on red background (far right) shows tenths of an hour.

The green, blue and yellow sectors show the engine speed at which optimum power take-off performance is achieved (respectively 540, 540E and 1000 rev/min).

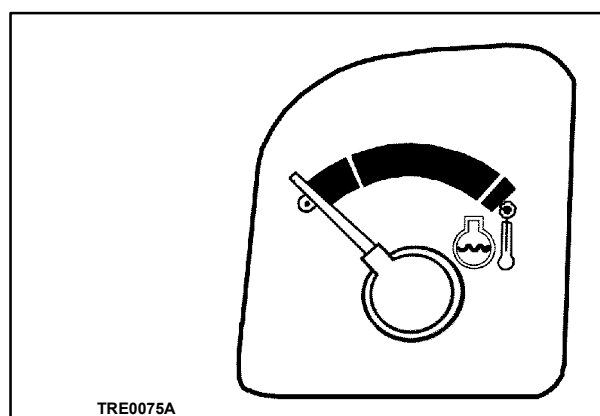
- Green symbol = power take-off at 540 rev/min
- Blue symbol = power take-off at 540E rev/min.
- Yellow symbol = power take-off at 1000 rev/min.



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Engine coolant temperature gauge (Fig. 5).

- Green area = normal temperature.
- White area = temperature too low.
- Red area = engine overheating.



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TRANSMITTERS, SENSORS AND SWITCHES

A. MAIN FUSE BOX

The tractors fuses relays are housed under a plastic cover.

B. BATTERY

The tractors are fitted with maintenance-free batteries. Keep the top part clean and dry. Check that the level of electrolyte reaches the top mark and never falls below the lower mark.

C. ALTERNATOR

This provides a square wave signal and recharges the battery. It also provides power required by electric devices.

D. TRANSMISSION CLUTCH PEDAL SWITCH

This switch is activated when the clutch pedal is pressed and it prevents starting if the clutch pedal is not lowered.

E. AIR CLEANER CLOGGED SENSOR

This is activated when the vacuum in the air operating system exceeds a pre-set value. It lights up the warning light.

F. FUEL SEDIMENTER

Activated when water gets into the fuel filter and the relevant warning light comes on.

G. ENGINE OIL PRESSURE SWITCH

This is activated as soon as oil pressure in the engine drops less than 0.68 bar (9.86psi). It lights up the warning light. This switch is usually closed.

H. FUEL TANK LEVEL TRANSMITTER

A signal from the transmitter potentiometer defines the level of fuel in the tank. The level is shown by the gauge.

I. ENGINE COOLANT TEMPERATURE

The temperature transmitter resistance varies in proportion to the coolant temperature, generating a modulated voltage signal picked up by the gauge.

J. BRAKE LIGHT SWITCHES

These are activated when the brakes are on.

K. BRAKE OIL LEVEL SWITCH

This switch is activated when the fluid level drops below the minimum value and lights up the warning light.

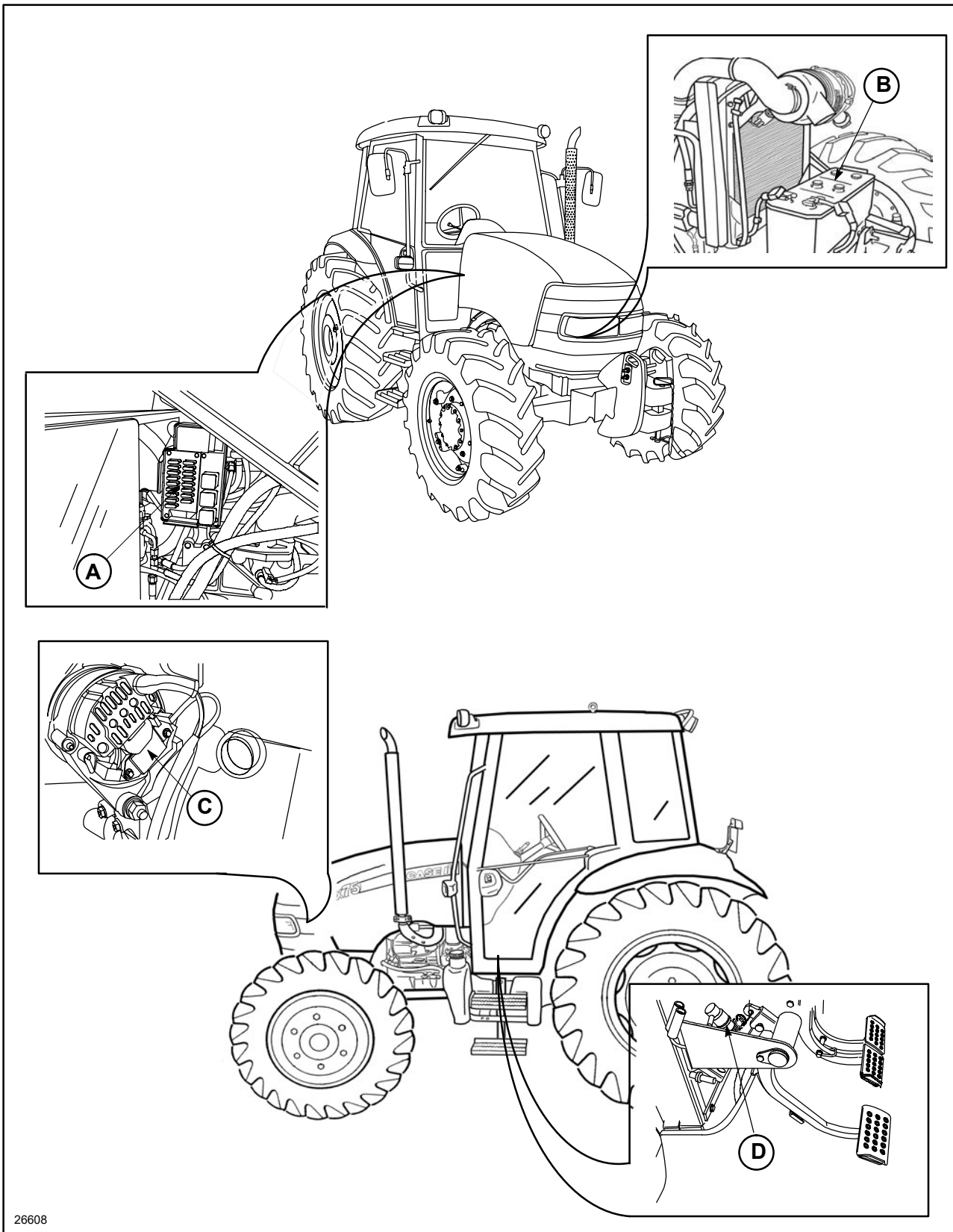
L. PARKING BRAKE SWITCH

Activated when the parking brakes are applied, switching on the indicator light on the dashboard.

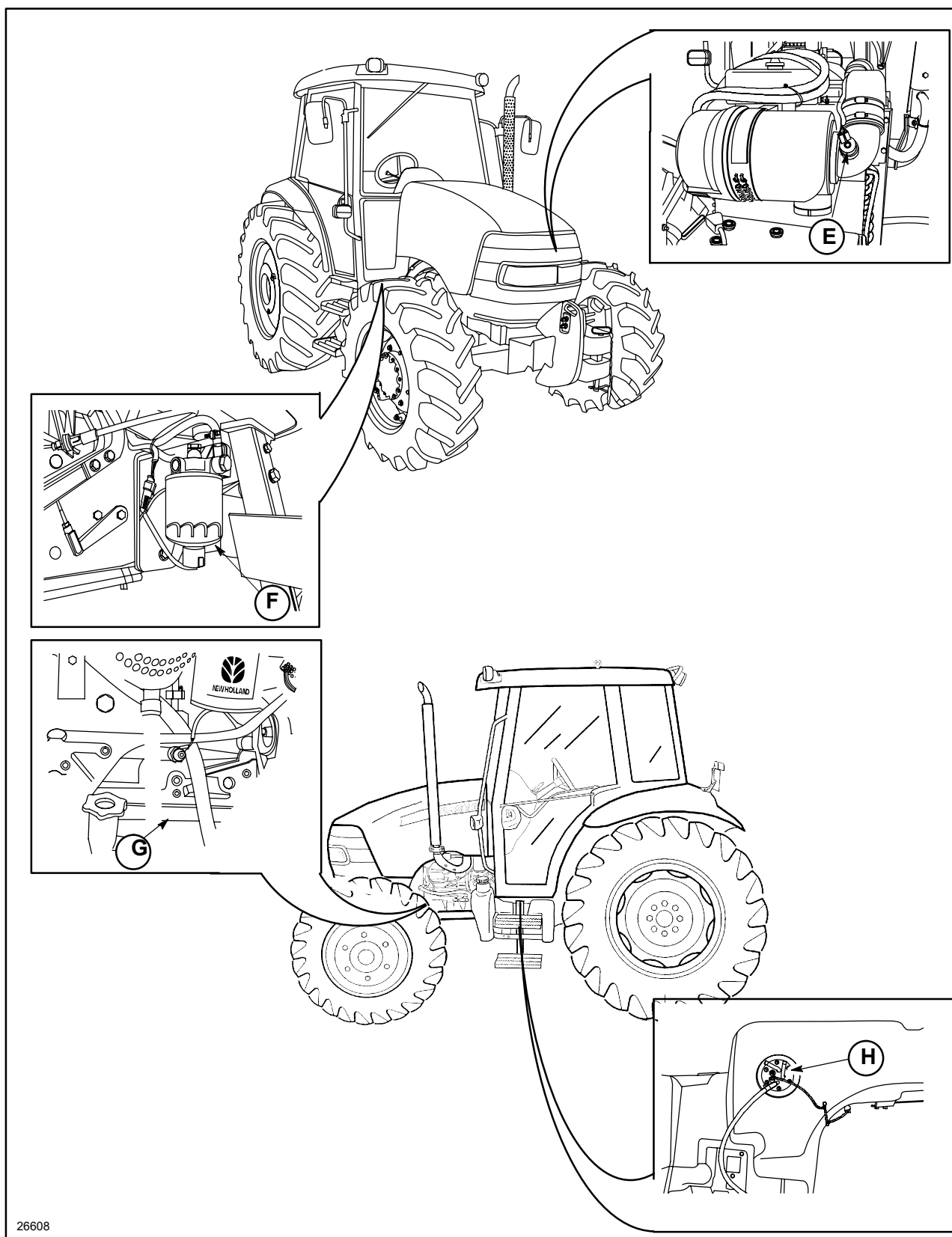
M. OPERATOR SEAT TRANSMITTER (NAR MARKET ONLY)

A transmitter in the seat detects when an operator is seated.

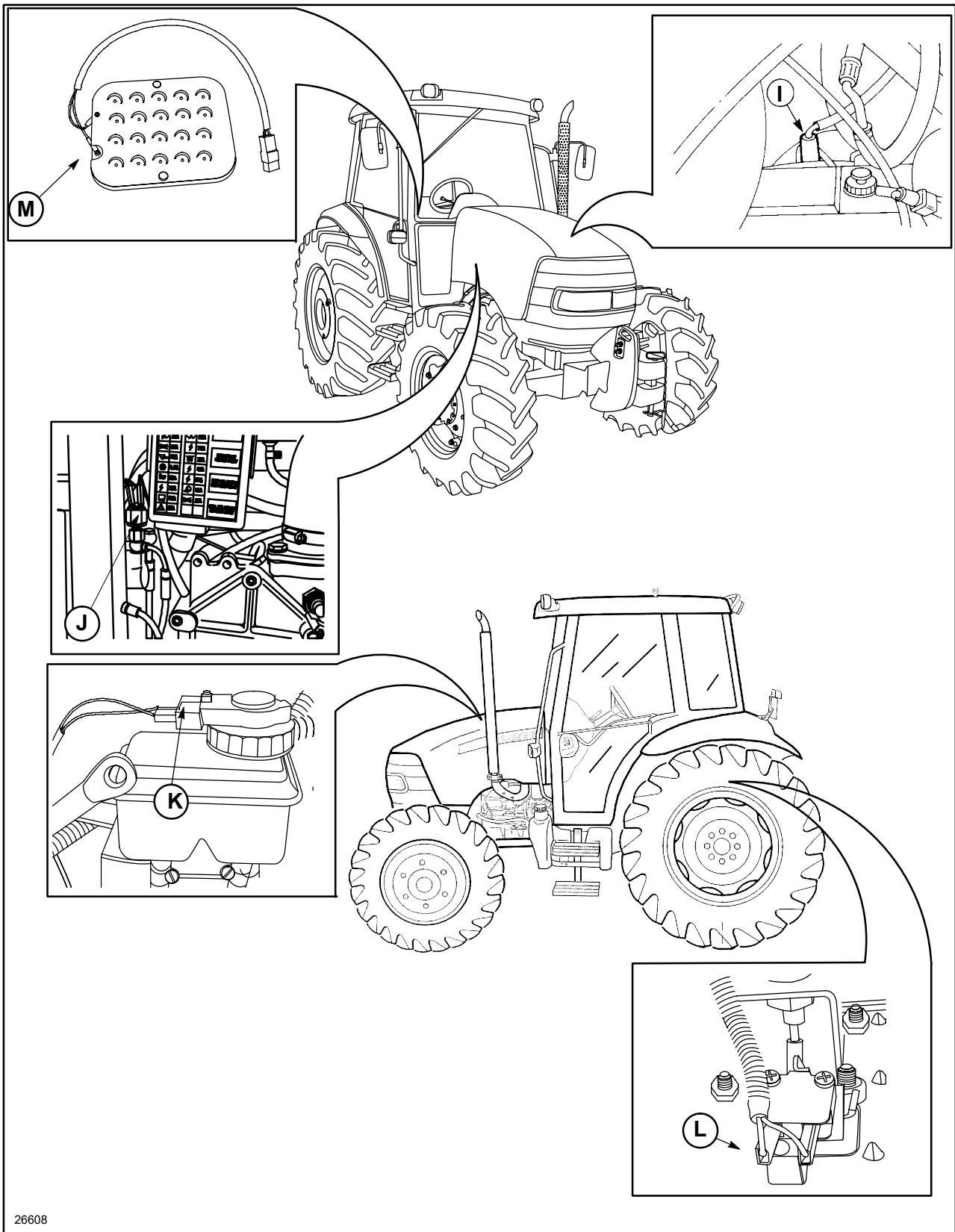
TRANSMITTERS AND SWITCHES



TRANSMITTERS AND SWITCHES



TRANSMITTERS AND SWITCHES



SECTION 55 – ELECTRICAL SYSTEM**Chapter 2 – COMPONENTS****CONTENTS**

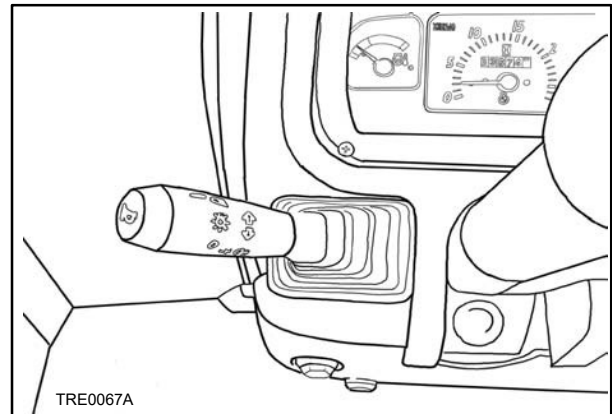
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55 500 INTRODUCTION

The components described in this section are located on the instrument console (rear hood), in the cab roof and on the right-hand fender, inside the cab.

COMPONENT DESCRIPTION**INSTRUMENT CONSOLE CONTROLS****1. Lights control lever.**

The lever operates external lights, horn and the direction indicators.



1

REAR HOOD CONTROLS**Starter switch**

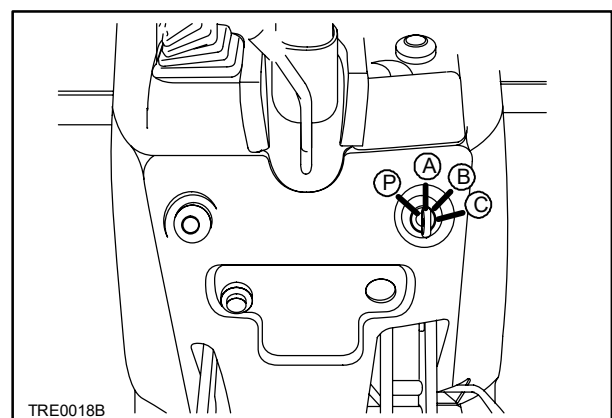
To operate the four switch functions, turn the key (1) through the following positions:

A. No power to circuits (key can be removed).
Engine stopped: automatic activation of fuel injection cut-off.

B. Control instrument and indicator power supply.
Power supplied to various circuits.

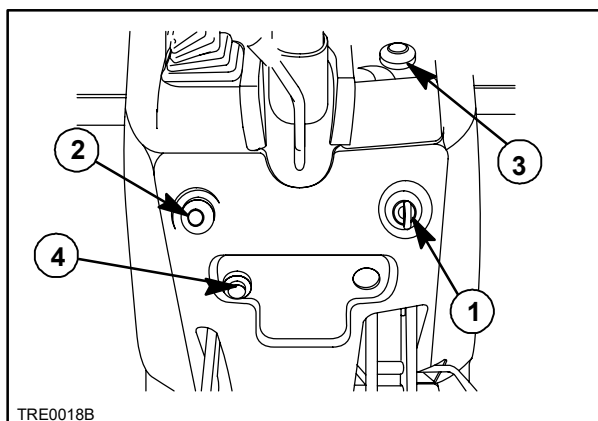
C. Starting the engine: when released, the key returns automatically to position (B).

P. Parking lights on, instrument panel lighted (key removable).



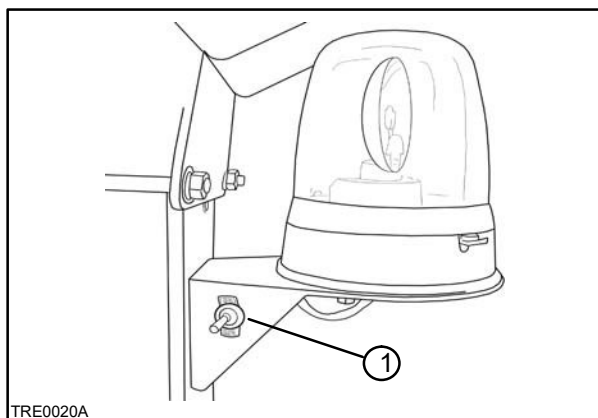
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1. Starter switch.
2. Thermostarter.
3. Hazard warning lights switch.
4. Cigar lighter



3

1. Beacon on/off switch (tractors without cab)

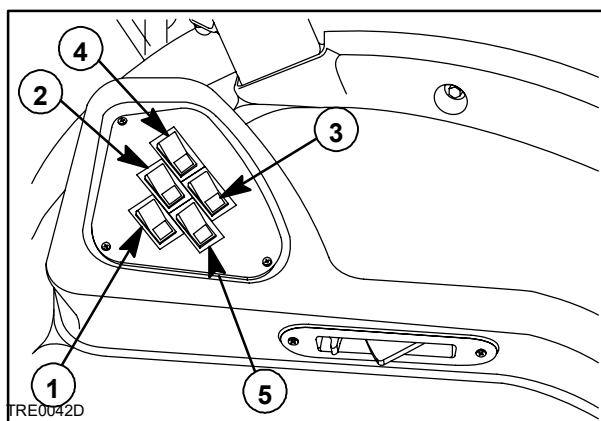


4

IN-CAB CONTROLS

1. Fender-mounted controls

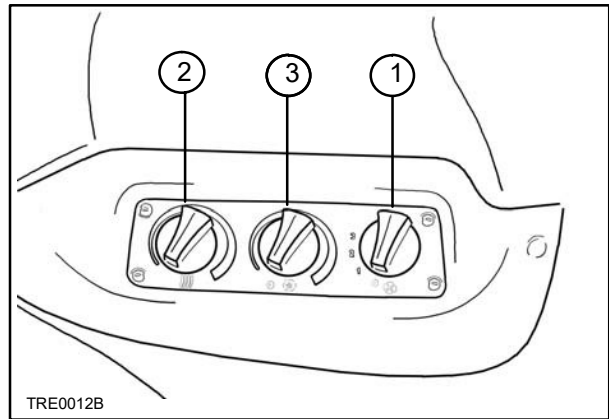
1. Windscreen washer,
2. Windscreen wiper,
3. Rear working lights,
4. Front working lights and
5. Beacon controls (with cab)



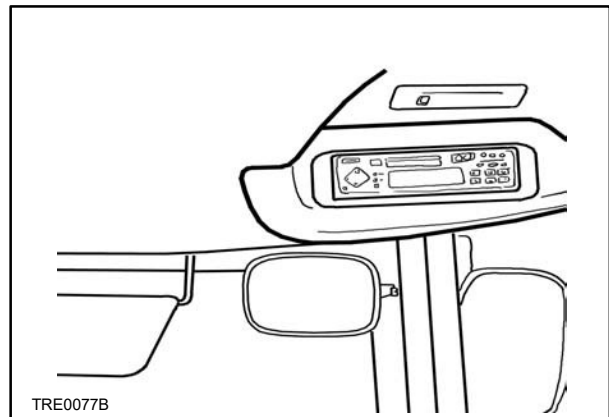
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2. Heating and air-conditioning controls

1. Electric fan speed control
2. Heating control
3. Air-conditioning control



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3. Radio

7

