FARMALL® 30C
FARMALL® 35C
Tier 4B (final)
Compact Tractor

SERVICE MANUAL

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CASE IH AGRICULTURE

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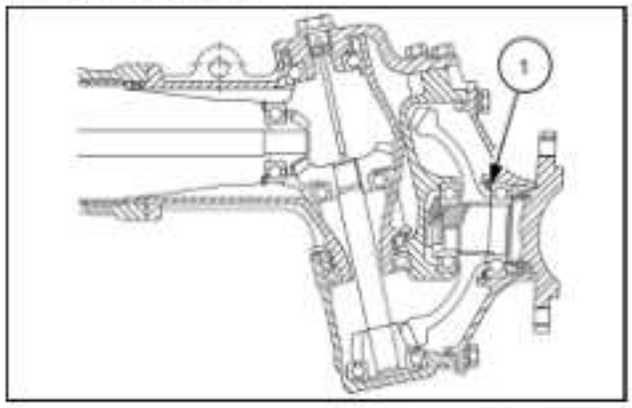
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Final drives - Adjust backlash

Farmall® 30C	NA
Farmall® 35C	NA

NOTE: *If the backlash measurement is not within the specifications do the following:*

1. Adjust the back lash by adding or subtracting shims at **(1)**.



NOTE: *The tolerance for backlash is* ***0.2 - 0.4 mm*** *(****0.008 - 0.016 in****).*

NOTE: *Available shims are* ***0.2 mm****, and* ***0.5 mm*** *in thickness.*

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Wire connectors - Component diagram 16 – Connectors X-160 to X-169 (Hydrostatic Transmission (HST) cab models)

Farmall® 35C TIER 4B (FINAL), Cab	NA

X-162 - [E-022] (Male)

Pin	From	Wire	Description	Color-Size	Frame
1	SP-J68-P-X	69B	69B	GN - 0.85	SHEET 09
2	SP-J20-P-X	201A	201A	BK - 0.85	

X-163 - [E-023] (Male)

Pin	From	Wire	Description	Color-Size	Frame
1	SP-J68-P-X	69C	69C	GN - 0.85	SHEET 09
2	SP-J20-P-X	201B	201B	BK - 0.85	

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3484-0-Aftertreatment 1 ignition: data valid but above normal operational range

Farmall® 30C	NA
Farmall® 35C	NA

Control Module : ECU

Context:
The Engine Control Unit (ECU). monitors the burner glow voltage at ECU connector X-9000 pin 66.

Cause:
The ECU is sensing the burner glow voltage is over **12.0 V**.

Possible failure modes:

1. The burner glow plug resistor has failed.
2. The burner glow relay has failed.
3. The wiring harness has failed.
4. The ECU has an internal failure.

Solution:

1. Use the Service Tool I to verify the fault is active.

   Select the "Active Diagnostic Codes" icon.

   A. If the fault code is present, continue with Step **2**.

   B. If the fault is not present, the fault may be intermittent and not currently active. Continue with Step **8**.
2. Use the Service Tool I to verify if fault code 168-3 is active.

   A. If fault code 168-3 is not active, continue with Step **3**.

   B. If fault code 168-3 is active, continue with that troubleshooting procedure. Then verify if this fault code has been corrected.
3. Verify that the wiring and connectors are free of damage.

   Inspect the harness from the ECU to glow plug resistor connector.

   Inspect the harness from the glow plug resistor to the burner glow relay connector.

   Verify that the harness is free of damage, corrosion, abrasion and incorrect attachment.

   A. The connectors are secure and the harness is free of damage. Continue with Step **4**.

   B. The connectors or the harness has damage. Repair or replace the harness or connectors as required.
4. Check the burner glow plug resistor .

   Place the key switch OFF.

   Disconnect the wiring harness from the glow plug resistor at connector X-9086.

   Use a multimeter to measure the resistance of the glow plug resistor between pin 1 to pin 2.

   There should be approximately **0.65 - 0.71 Ω**.

   A. If the resistance is correct, continue with Step **5**.

   B. If the resistance is incorrect, the glow plug has failed. Replace the glow plug resistor.

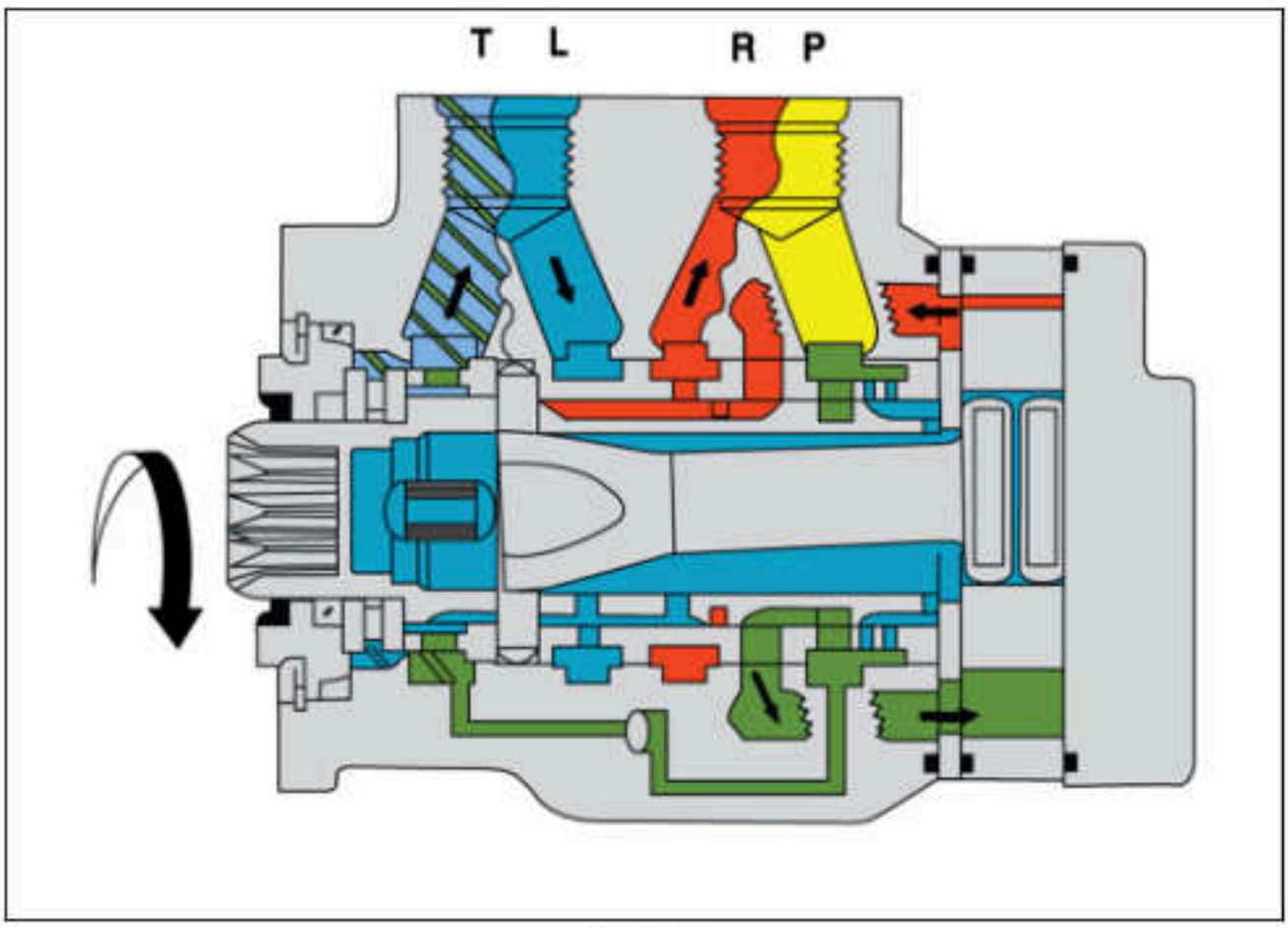
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Emergency operation

⚠ WARNING

Loss of control hazard!
Because of the slow responsiveness of the steering in this condition, you should not travel at high speeds or on downhill roads.
Failure to comply could result in death or serious injury.

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Emergency mode steering manually

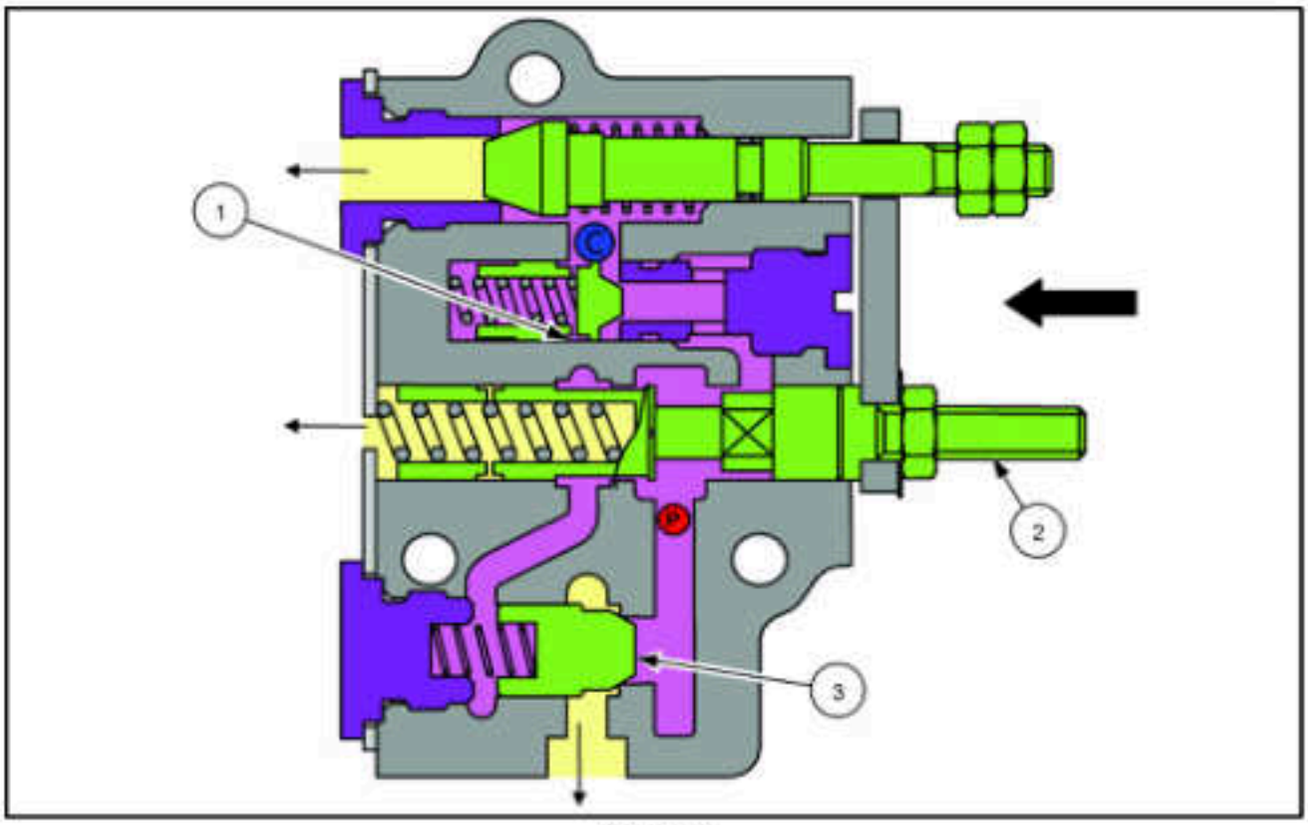
(T) - Tank
(L) - Left steer port
(R) - Right steer port
(P) - Pump discharge

- Pressurized oil from pump
- Oil from rotor
- Discharge
- Suction
- Suction or discharge
- Neutral

NOTICE: *In the EMERGENCY manual steering mode, if steering becomes difficult to do, STOP and transport the tractor by trailer.*

If hydraulic pressure is not generated by the hydraulic pump, the "Rocker" inside the valve serves as a hand pump, and allows the steering cylinder to operate.
The oil returning to the port **(T)** is sent to the rotor **(1)** through the check valve and the rotor sends oil to the cylinder. At this time, the oil in the opposite side returns to the port **(T)** again and repeats the procedure previously described.

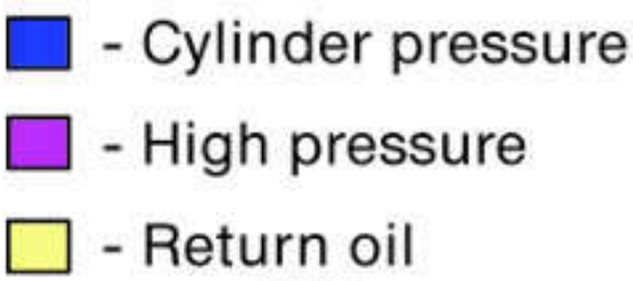
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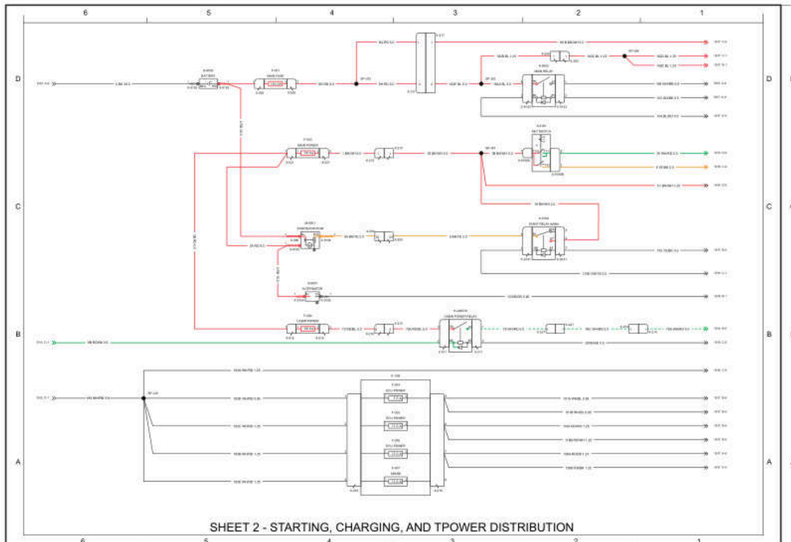
Raise position

When the valve spool **(2)** moves inward in the "RAISE" position, oil flow being supplied by the pump is route around the valve spool to the backside of the unload valve **(3)** allowing the unload valve to remain seated. When the unload valve remains seated, pressure increases in the valve passage until the pressure on the front side of the check valve **(1)** is greater than the pressure on the backside of the valve, allowing the check valve to open. When the check valve opens, the oil supplied by the pump is routed to the Hydraulic Power Lift (HPL) lift cylinder and the three-point hitch raises.

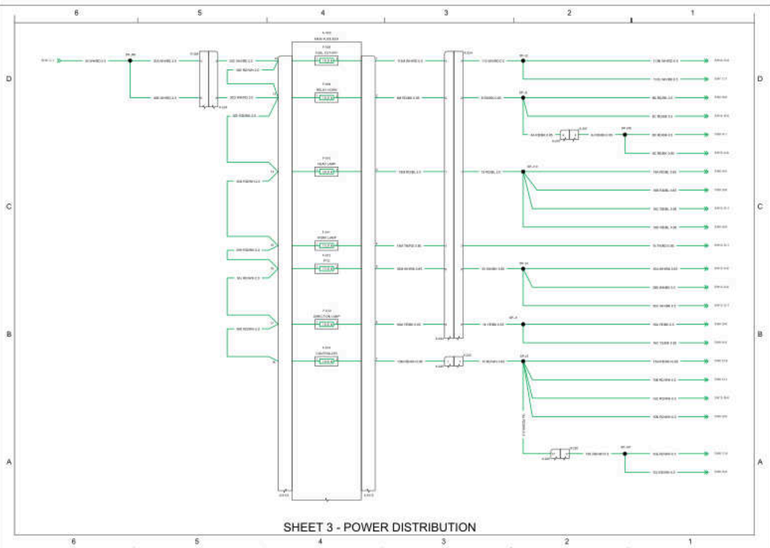


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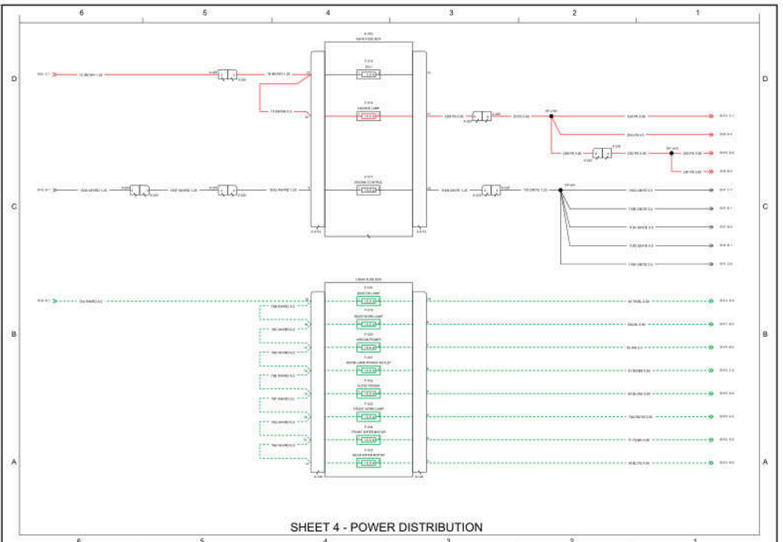
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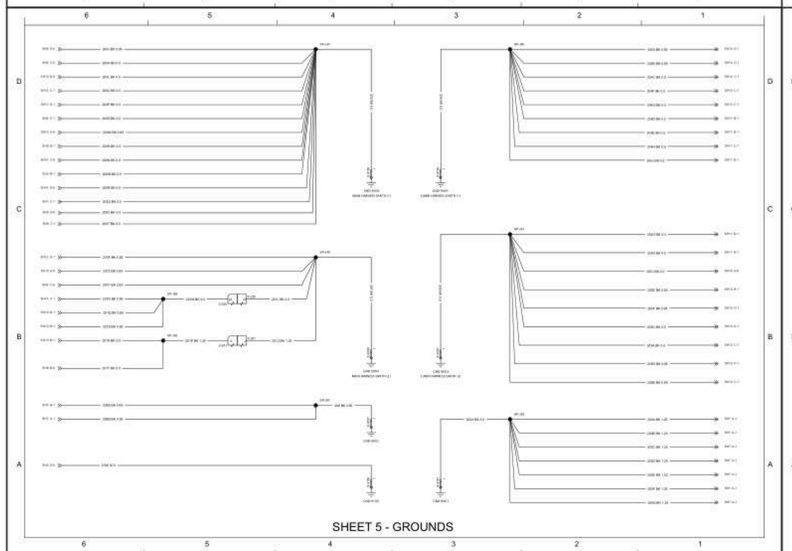
SHEET 2 - STARTING, CHARGING, AND TPOWER DISTRIBUTION



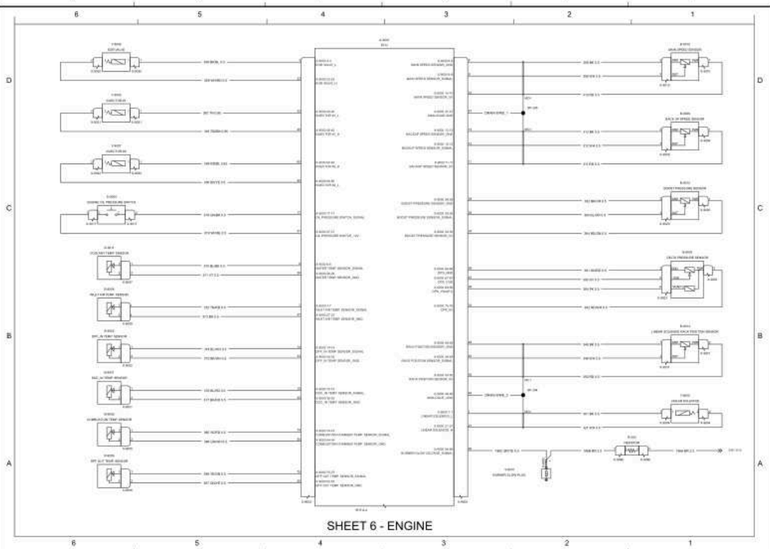
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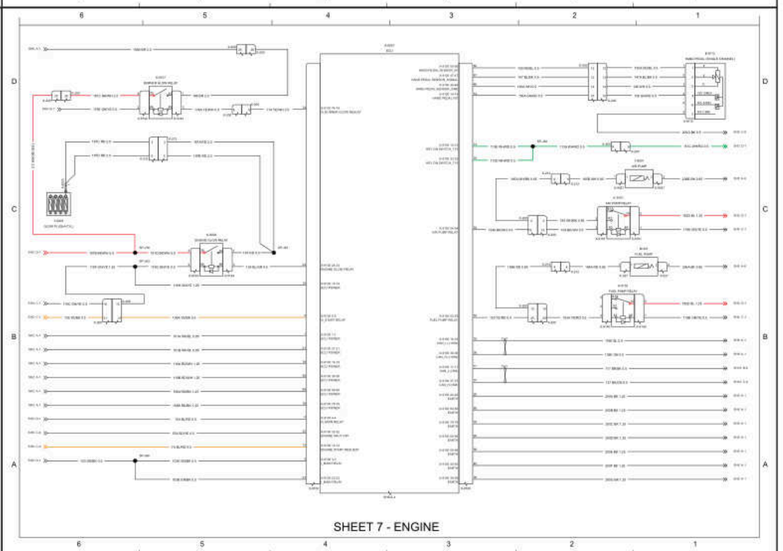
SHEET 4 - POWER DISTRIBUTION



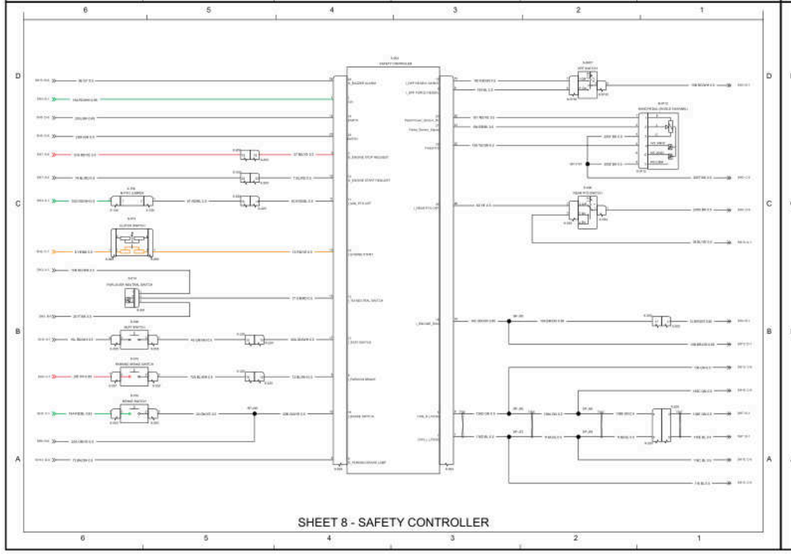
SHEET 5 - GROUNDS



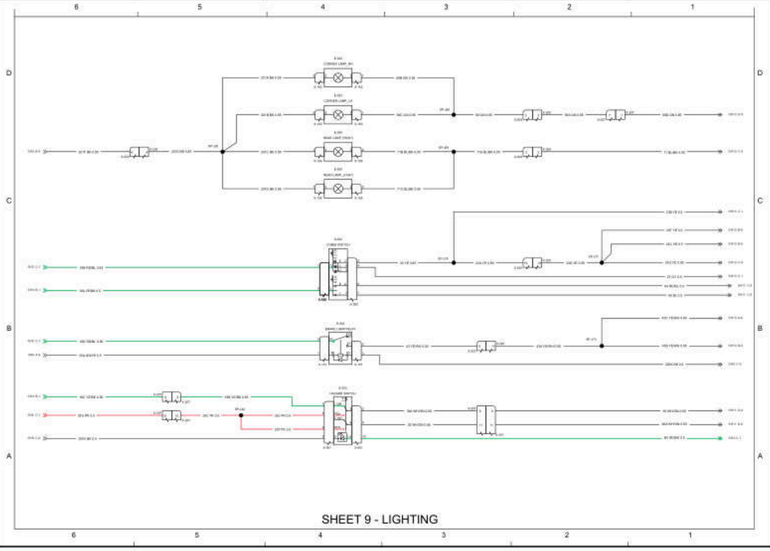
SHEET 6 - ENGINE



SHEET 7 - ENGINE



SHEET 8 - SAFETY CONTROLLER



SHEET 9 - LIGHTING

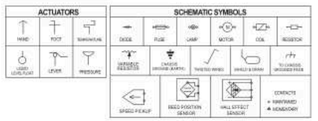
FARMALL® 35C / FARMALL® 40C / FARMALL® 50C COMPACT TRACTOR 47951357

ELECTRICAL SCHEMATIC
CAB - MECHANICAL TRANSMISSION
1ST EDITION

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SYMBOL LEGEND



CIRCUIT COLOR INDEX

- 12V UNSWITCHED POWER
- IGNITION KEY ON
- IGNITION KEY ON - AFTER CAB POWER RELAY
- CRANKING

COMPONENT LEGEND

Label Prefix	Component Type	Label Prefix	Component Type
A	Electronics	K	Relays
B	Sensors	M	Motors
D	Diodes	Q	Circuit Breakers
E	Lights	R	Resistive
F	Fuses	S	Switches
G	Generators	W	Splice Blocks
H	Audio	Y	Solenoids
J	Outlets		

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