Magnum 250
Magnum 280
Magnum 310
Magnum 340
Powershift Transmission (PST)
Tractor

PIN ZERF04500 and above

SERVICE MANUAL

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CASE IH AGRICULTURE

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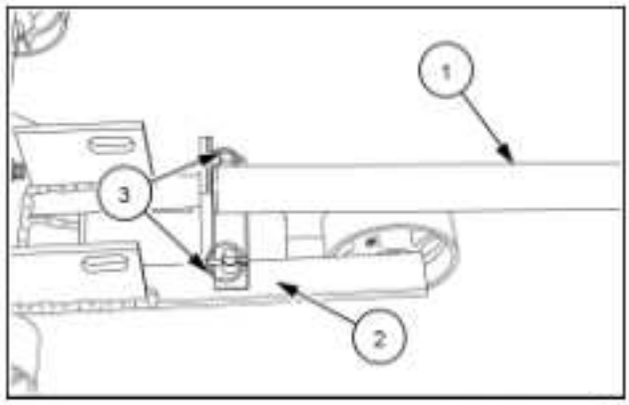
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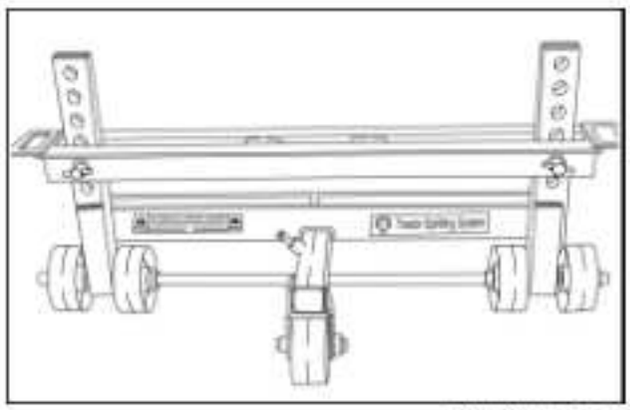
Tractors with front weights

31. Attach the connecting tube from kit **380040228 (1)** to the fold down splitting stand **(2)**. Install the lynch pins **(3)** to secure the tube.



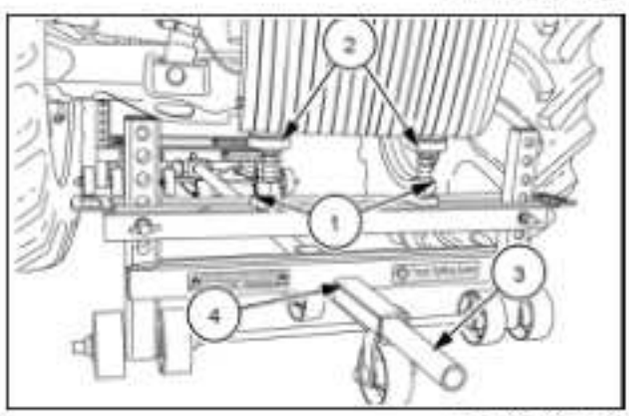
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32. Place the balance attachment stand from kit **380040228 (1)** in front of the front weight package.



25

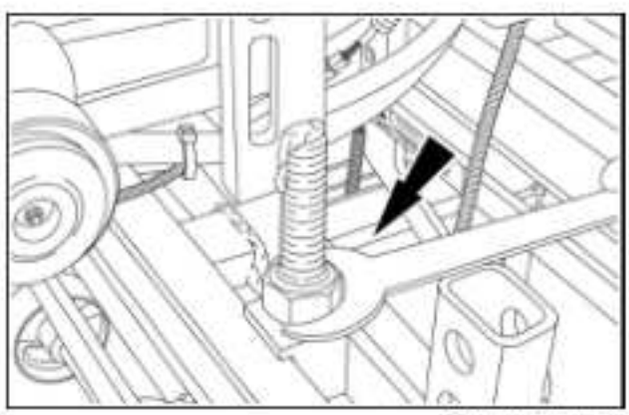
33. Install jack blocks with flat washers **(1)** and single jack plate attachments **(2)**. Align the stand with the connecting tube **(3)** and position the stand under the weight package. Tighten the tube locking bolt **(4)**.



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All models

34. Starting on one corner, evenly raise the supports until the weight of the transmission and the front frame is evenly distributed on the splitting stands.



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Wire harnesses - Electrical schematic sheet 11 - Engine control unit

Type	Component	Connector / Link	Description
ECU	A-001		ENGINE CONTROLLER
ECU	A-190		DEF SUPPLY MODULE
Sensor	B-189		DOC UPSTREAM TEMP SENSOR
Sensor	B-191		SCR UPSTREAM TEMP SENSOR
Sensor	B-193		SCR DOWNSTREAM TEMP SENSOR
Sensor	B-194		DEF TANK LEVEL/TEMP SENSOR SENDER UNIT
Connector	X-003	**X-003**	TO SCR CANISTER HARNESS
Connector	X-1000	**X-1000**	TO LH PLATFORM HARNESS
Connector	X-180	**X-180**	ECU CONTROLLER
Connector	X-190	**X-190**	
Connector	X-191	**X-191**	SCR UPSTREAM TEMP SENSOR
Connector	X-194	**X-194**	
Connector	X-199	**X-199**	DEF DOSING MODULE
Connector	X-202	**X-202**	
Connector	X-203	**X-203**	DOC UPSTREAM TEMP SENSOR
Connector	X-204	**X-204**	SCR DOWNSTREAM TEMP SENSOR
Solenoid	Y-196		DEF DOSING MODULE
Solenoid	Y-197		DEF TANK/WAPCO HEATER VALVE

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Clear all fault codes and test clutch operation.

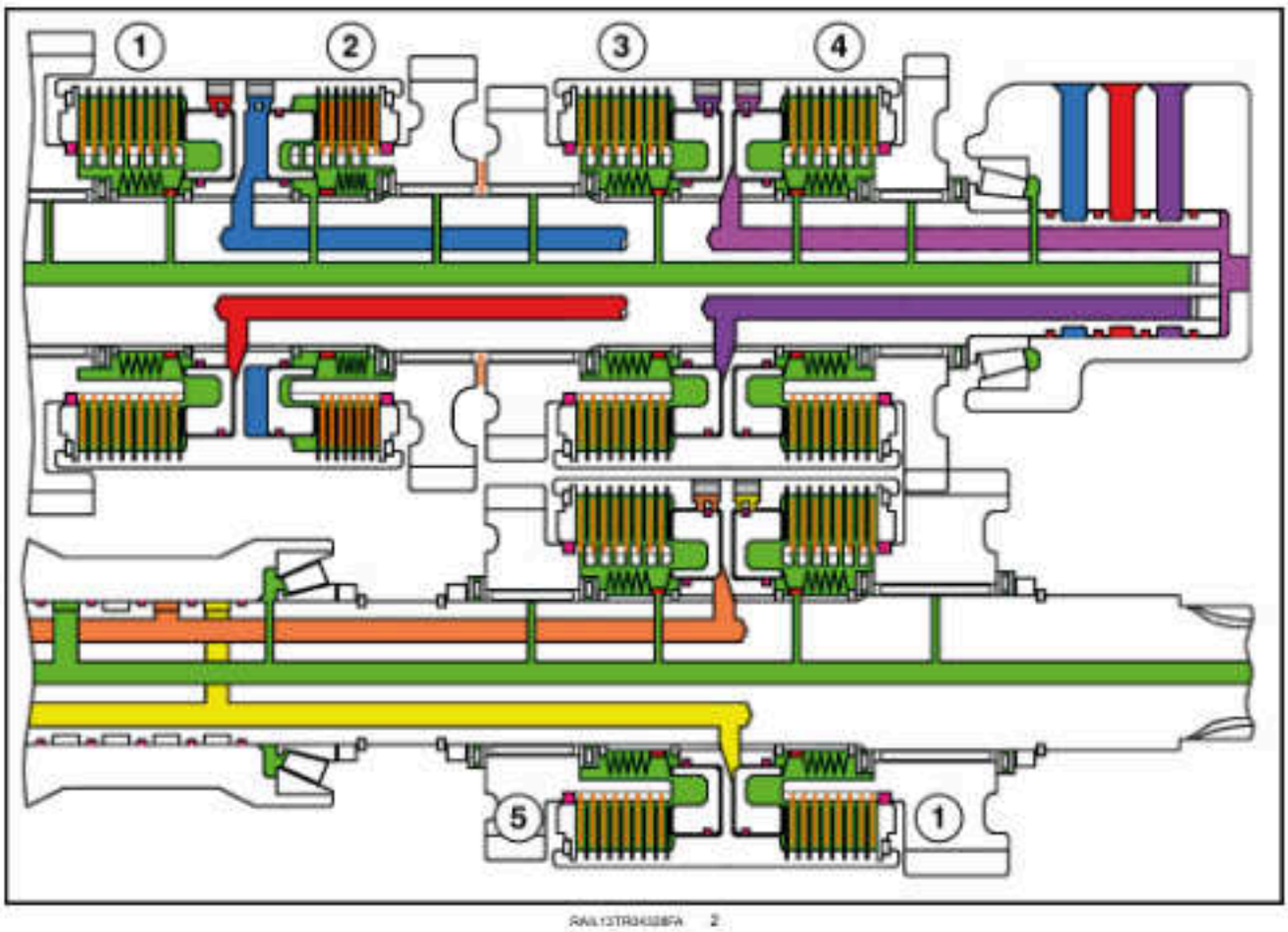
A. Fault codes redisplays. Remove and replace the tractor control unit (TCU). Return unit to field operation.

B. Fault code does not redisplay. Return unit to field operation.

Wire harnesses - Electrical schematic sheet 13 (55.100.DP-C.20.E.13)

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Speed housing clutch oil supply



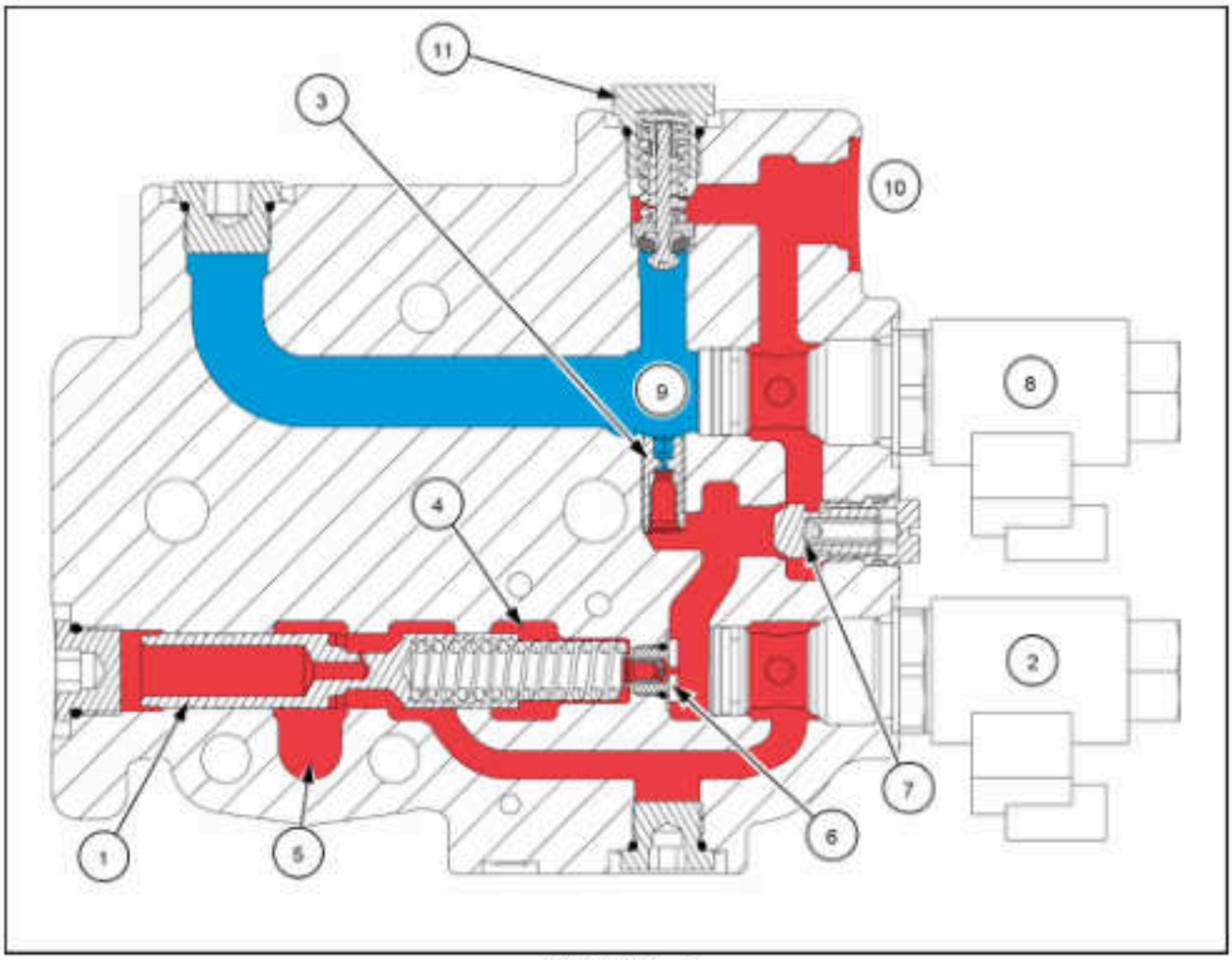
RAIL12TR04328FA 2

Lubrication oil
Odd clutch supply
Even clutch supply
1-2 clutch supply
3-4 clutch supply
5-6 clutch supply
Reverse clutch supply

1. 1-2 clutch	4. Reverse clutch
2. 3-4 clutch	5. Odd clutch
3. 5-6 clutch	6. Even clutch

As oil is supplied to a clutch, the clutch locks and its gear is locked to the shaft. Torque is transmitted from the shaft through the clutch to the gear, or from the gear through the clutch to the shaft. Gears are in constant mesh, and the even gear is in mesh with the reverse gear/clutch and a countershaft gear. The even gear is used as an idler in some reverse gears and as direct drive to the reverse clutch in others. The master clutch is located between the speed output shaft and the range input shaft. All clutches are constantly supplied pressurized lubricating oil to keep them clean and cool.

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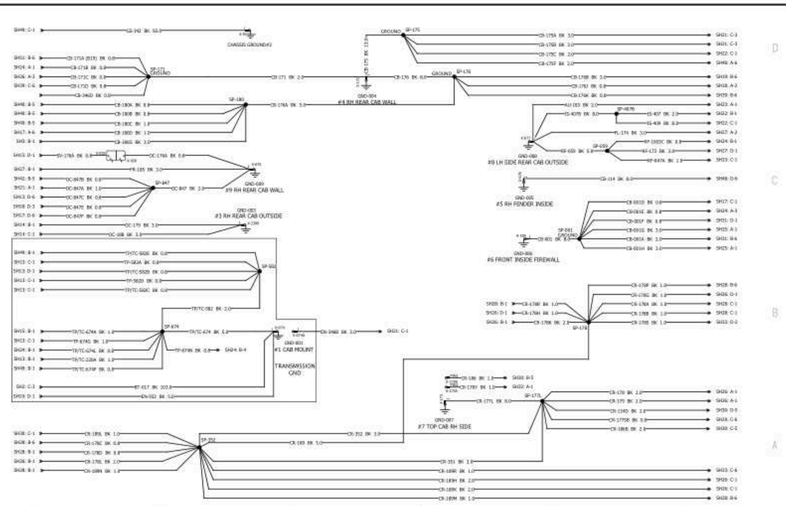
Raise position

PFC pump pressure	Return to tank pressure
Trapped oil	
1. Flow control spool	7. Load check
2. Raise solenoid	8. Lower solenoid
3. Screened orifice plug	9. Return to tank
4. Pilot signal to compensator	10. Hitch cylinders
5. PFC pump supply	11. Relief valve
6. Check/orifice plug	

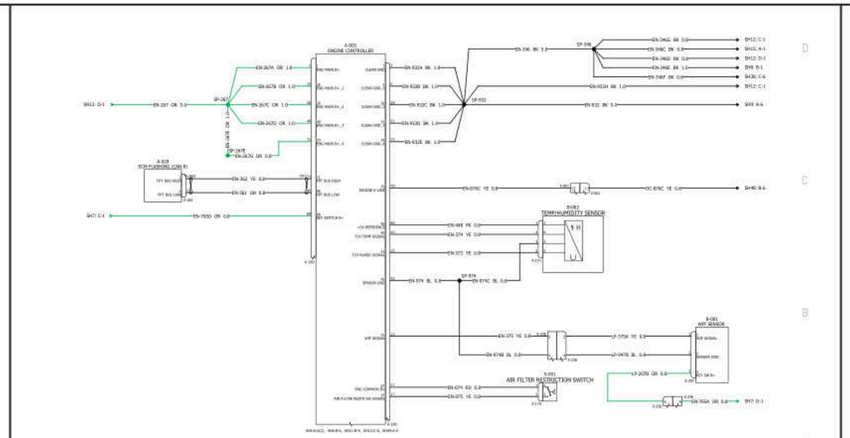
Lowering function

To lower the hitch, the lower proportional solenoid valve must be energized by the tractor control unit (TCU). The amount of spool movement depends on the amount of current supplied by the controller to the proportional solenoid. Once the lower solenoid is energized, the solenoid valve shifts, opening a flow path directly back to tank.

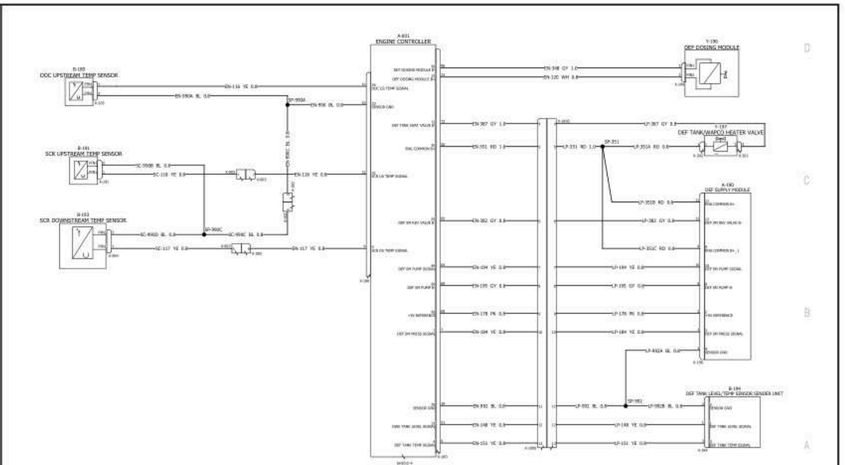
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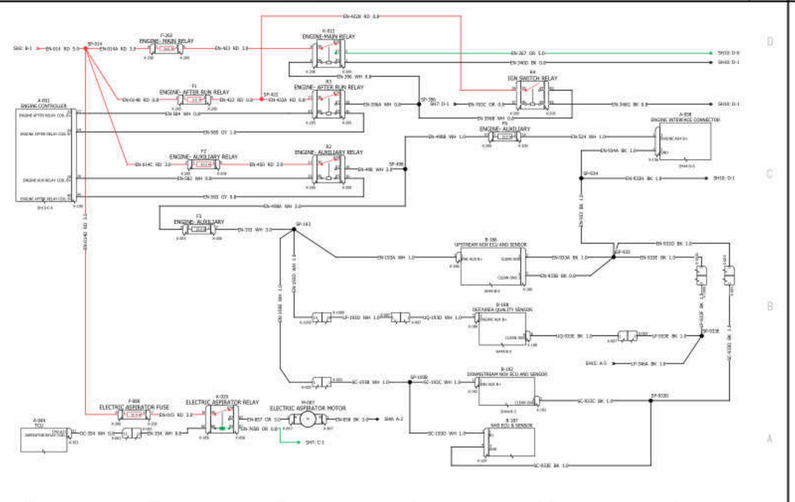
GROUNDING SYSTEM 9



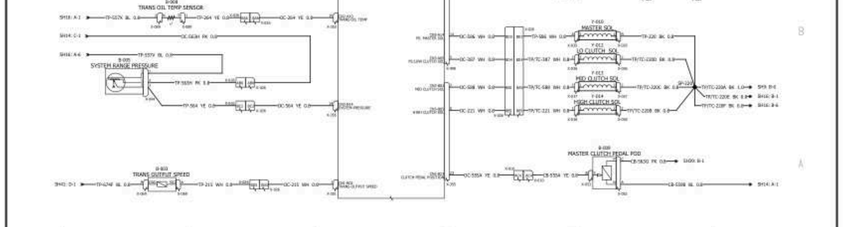
ENGINE CONTROL UNIT 10



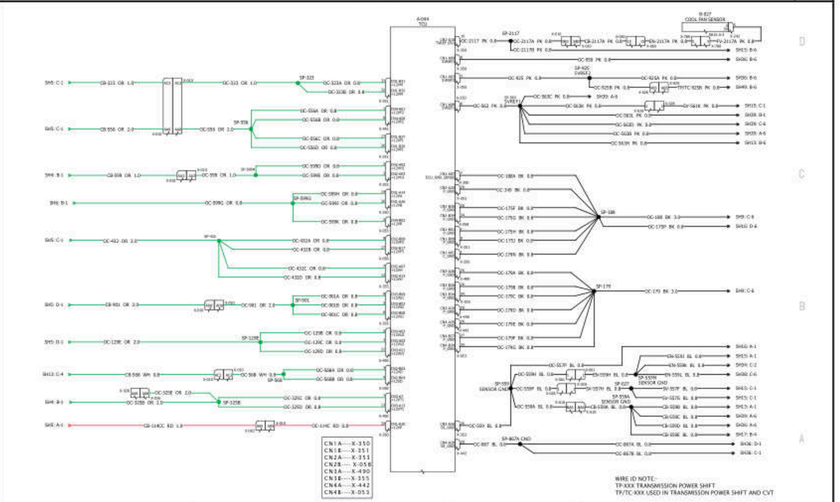
ENGINE CONTROL UNIT 11



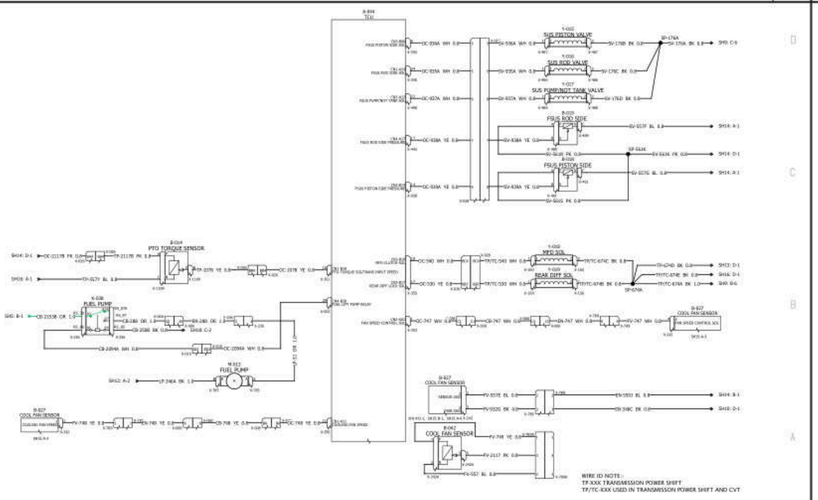
POWER DISTRIBUTION ENGINE / SENSORS 12



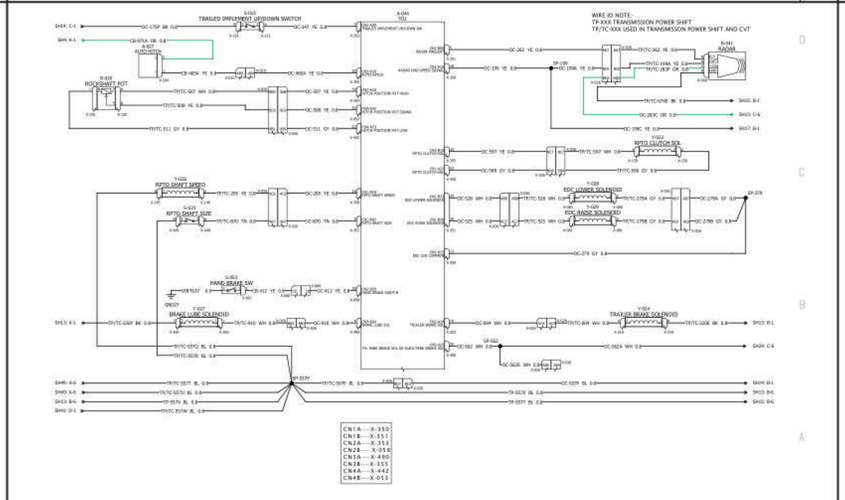
TRANSMISSION - SOLENOIDS AND SENSORS 13



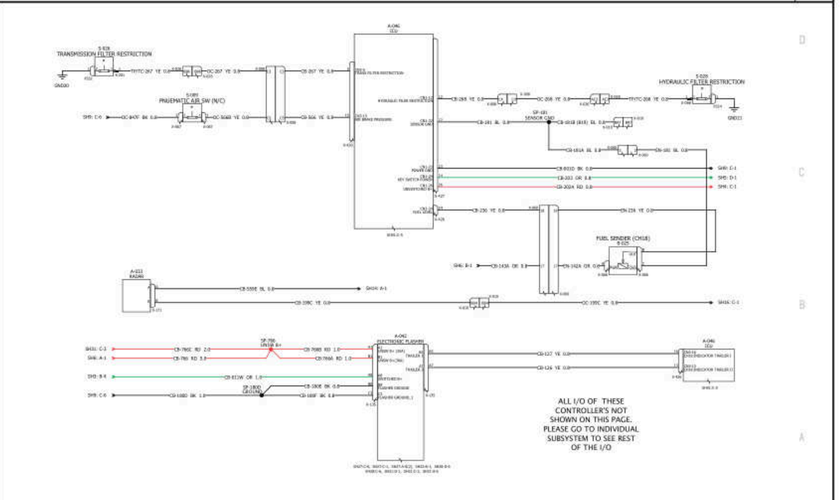
TRANSMISSION - POWER DISTRIBUTION 14



TRANSMISSION - SENSORS, FRONT SUSPENSION 15



TRANSMISSION - BRAKES, HITCH, RADAR 16



INSTRUMENT CLUSTER, ELECTRONIC FLASHER 17

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