FARMALL® 105U EP
FARMALL® 115U EP
With 16x16 Semi-Powershift Transmission

Tractor

FARMALL® 105U EP PIN ZxJKxxxxx and above
FARMALL® 115U EP PIN ZEJK14976 and above

SERVICE MANUAL

Part number 47387703
1st edition English
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9. Performance test the system.

NOTE: *Test procedure based upon ambient temperature of* ***35 °C (95 °F)****. For proper high side gauge reading for other ambient temperatures, refer to the pressure-temperature chart.*

Ambient Temperature* °C (°F)	High Pressure Gauge Reading kPa (psi)
21 °C (70 °F)	786 - 924 kPa (114 - 134 psi)
24 °C (75 °F)	869 - 1007 kPa (126 - 146 psi)
26 °C (80 °F)	972 - 1110 kPa (141 - 161 psi)
29.5 °C (85 °F)	1096 - 1234 kPa (159 - 179 psi)
32 °C (90 °F)	1158 - 1296 kPa (168 - 188 psi)
35 °C (95 °F)	1248 - 1386 kPa (181 - 201 psi)
38 °C (100 °F)	1386 - 1524 kPa (201 - 221 psi)
40.5 °C (105 °F)	1503 - 1641 kPa (218 - 238 psi)
43 °C (110 °F)	1696 - 1834 kPa (246 - 266 psi)
46 °C (115 °F)	1910 - 2048 kPa (277 - 297 psi)
49 °C (120 °F)	2117 - 2255 kPa (307 - 327 psi)

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6. Check the DPF pressure sensor. Clear all fault codes that may be stored. Check to see if any faults are present. Fault code 3798 should be present.

   A. If the fault code 3798 is present, the sensor has failed. Replace the sensor.

   B. If the fault code is not present continue with step **7**.

7. Check for short to ground condition. Place the ignition key switch OFF. Disconnect the engine control harness from the ECU at connector **X-937**. Use a multi-meter to check for continuity from the engine harness side of connector **X-947** pin 2, wire 330 (YE/BR) to chassis ground. There should be no continuity.

   A. If there is continuity, the short to ground condition is in the engine harness between connector **X-937** pin 2 and connector **X-947** pin 2, wire 330 (YE/BR). Locate and repair damaged wiring.

   B. If there is no continuity, continue with step **8**.

8. Check for a short circuit. Place the ignition key switch OFF. Use a multi-meter to check for continuity on the engine harness of connector **X-947** pin 2, wire 330 (YE/BR) to pin 3, wire 331 (YE). There should be no continuity.

   A. If there is continuity the wiring harness is shorted together. Locate and repair damaged wiring.

   B. If there is no continuity, continue with step **9**.

9. Check for an open circuit. Place the ignition key switch OFF. Use a multi-meter to check for continuity from the engine harness connector **X-947** pin 3, wire 331 (YE) to connector **X-937** pin 58, wire 331 (YE). There should be continuity.

   A. If there is no continuity, there is an open circuit in the engine harness between connector **X-947** pin 3, wire 331 (YE) and connector **X-937** pin 58, wire 331 (YE). Locate and repair damaged wiring.

   B. If there is continuity, continue with step **10**.

10. Locate the open circuit. Place the ignition key switch ON. Use a multi-meter to check for voltage on the ECU connector **X-937** pin 14, to chassis ground. There should be approximately **5.0 V**. Then check for continuity from the ECU connector **X-937** pin 36 ,to chassis ground. There should be continuity.

    A. If the readings are incorrect, use wiring schematics to check that the supply voltages and grounds are present.

    B. If the readings are correct, try reloading the software. Recheck that the fault has cleared. If the fault has not cleared, check all connections are clean, and secure. Check for any damaged wiring, and repair as necessary.

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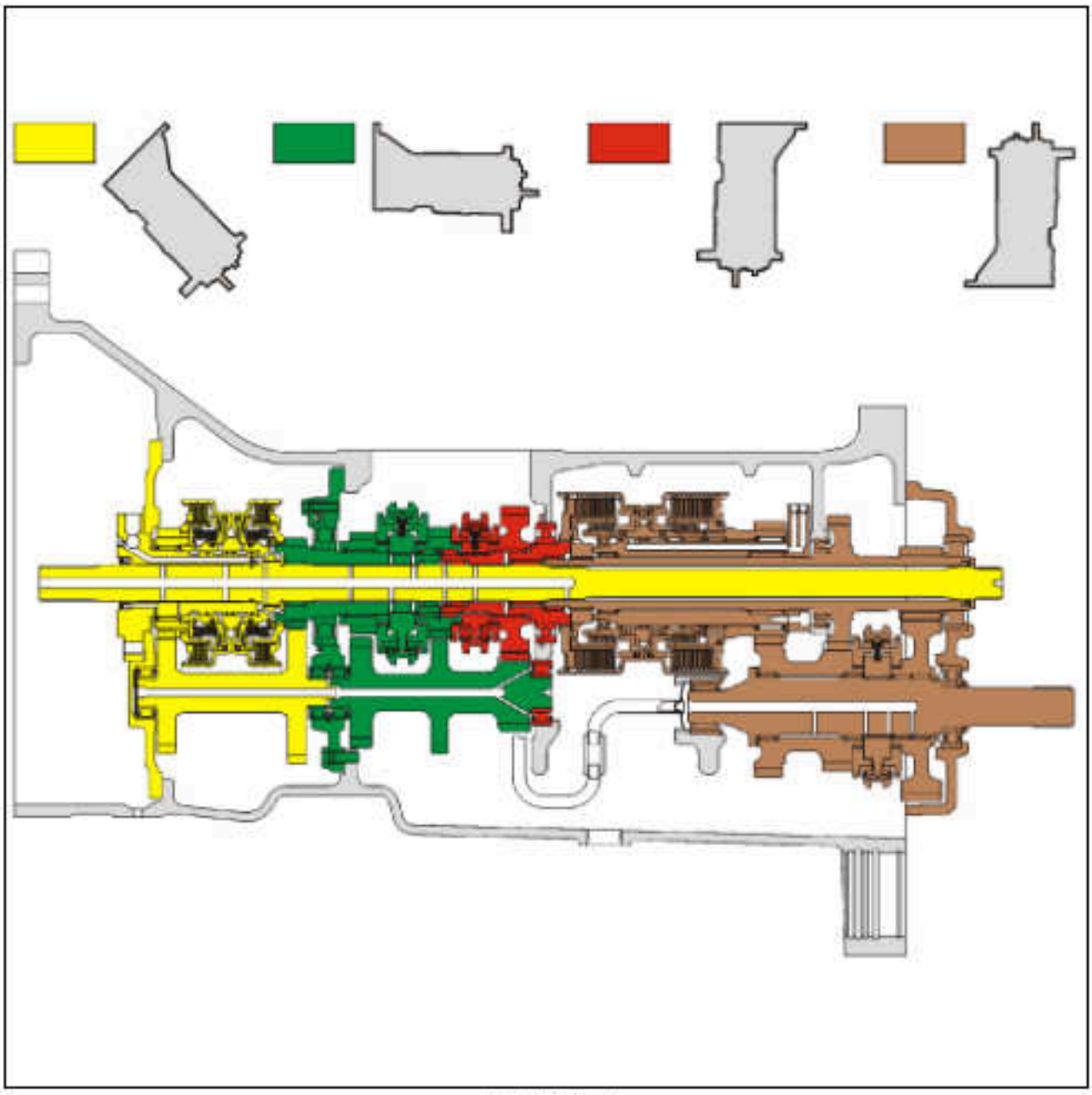
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Semi-Powershift transmission - Service instruction – Removal and installation sequence

Prior operation:
Semi-Powershift transmission - Remove (21.111).

1. The removal of components with the transmission oriented as shown in the color diagram below will facilitate operations.

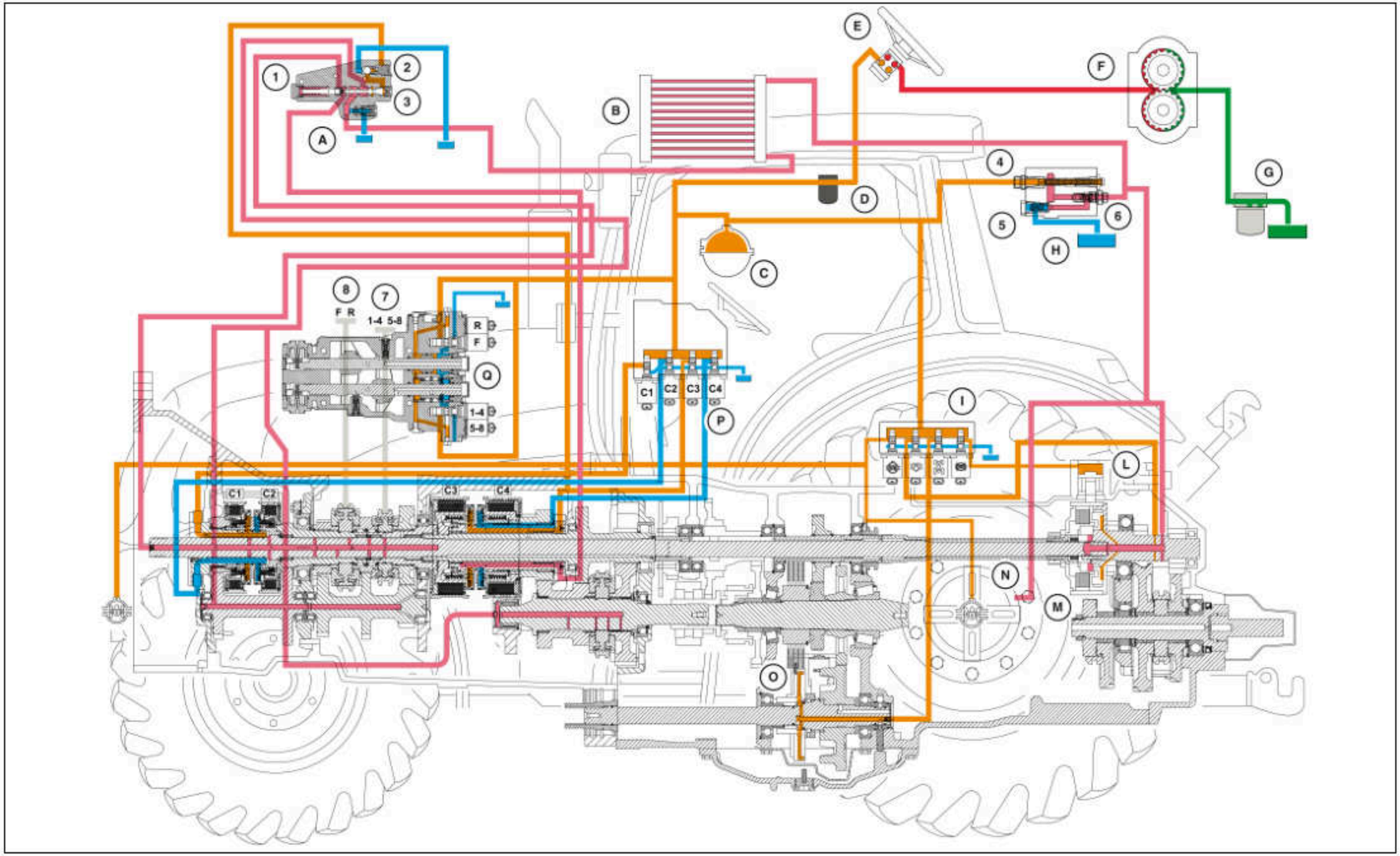


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Yellow- Front Section
Brown- Rear Section

Green/Red- Middle Section

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