2377
2577
2588

Combines

SERVICE MANUAL

84125893

CASE IH AGRICULTURE

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2377/88 AND 2577/88 COMBINE REPAIR MANUAL
Publication Number 84125893
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GRAIN SCAN MONITOR

(Refer to Schematic RAC 6-10800, Page 7-9)

Each of the sensor pads have their own signal wire connected to the grain scan monitor as follows:

Left hand rotor sensor	Terminal 1, LG (205) wire
Right hand rotor sensor	Terminal 2, LGB (204) wire
Left hand chaffer sensor	Terminal 3, LG (203) wire
Right hand chaffer sensor	Terminal 4, LG (207) wire

Terminal 9 of the grain scan monitor is connected to braided shield wires that run in the wiring harness through connector # 1 (terminal 3), out to connector 47 for the chaffer sensors and through connector # 46, all the way to both rotor sensors. These wires are grounded and they keep other electrical interference from interrupting the signals being returned to the grain scan monitor from the grain loss sensors.

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TEST PROCEDURES

TEST #4

CHARGE PRESSURE

Install a 600 psi (41.3 bar) gauge into the charge test port on the hydrostatic pump as illustrated.

If the combine is equipped with a power guide axle, disconnect the charge line that goes to the power guide axle and remove the fitting, install the gauge in the fitting port. Plug the line that was removed.

CAUTION! Be sure no one is in the vicinity of the wheels or in front/rear of the combine.

TEST PROCEDURE:

1. Place the combine in a location that will allow it to be moved. Place the transmission in third gear.
2. Engage the parking brake.
3. Place the propulsion lever in the "NEUTRAL" position
4. Run the engine at **1100 RPM**. The pressures may be above specification (as high as 300 psi) at high idle.

   Results: Low pressure; Inspect the charge relief valve's O'rings, charge relief valve and charge pump.

   High pressure; replace the charge relief valve, check cooler filter and oil cooler for restrictions.

   NOTE: The pressure may be above the charge relief valve setting, because of the return oil flow through the hoses, oil cooler and back to the reservoir tank. This pressure is exposed to the backside of the relief valve and assist the relief valve spring. If the relief valve is checked in a test stand it will open at 220 PSI.
5. Charge pressure should be a minimum of 220 psi (15.1 bar), possibly as high as 330 psi (22.7 bar) with the engine at high idle.
6. Place the transmission into "THIRD" gear, **DO NOT DIS-ENGAGE THE PARKING BRAKE.**

   Results: Low pressure, inspect the shuttle relief valve O'rings or change the shuttle relief.

   High pressure, inspect for the freedom of the shuttle spool to move in it's bore and the shuttle relief valve.

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Section

8011

HYDRAULIC SCHEMATICS AND TROUBLESHOOTING

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What if the system does not operate correctly.
Lets look at a couple of "What If".

First we need to set a few specification that are only relevant to these "What Ifs", each machine will have it's own set of specification.

Charge Pressure	**220 psi**
Shuttle Pressure	**160 psi**
Foot-N-Inch Valve	**6400 psi**
Servo Pressure	**Same as charge circuit**

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2008 MODEL YEAR
ELECTRICAL SCHEMATIC
RAC 87474619

AXIAL FLOW® 2377 AND 2388 COMBINES
AXIAL FLOW® 2577 AND 2588 COMBINES

P.I.N. HAJ0303001 AND AFTER

LEGEND

- INDICATES CONSTANT POWER
- INDICATES POWER WHEN KEY SWITCH IS ON
- INDICATES POWER WHEN ENGINE OIL PRESSURE SENSED

Fan and Rotor Speed Control

Rotor Speed Control Relays

CONCAVE ADJUST

H.V.A.C.

H.V.A.C.

LIGHTER HORN DOME LIGHTS

BACKLIGHTING

PWR GUIDE AXLE VARIABLE PROPULSION

HEADER CONTROLLER

HEADER CONTROLLER

HEADER CONTROLLER

HEADER CONTROLLER

HEADER CONTROLLER

HEADER CONTROLLER

UNLOADER CONTROL/REAR LADDER SENSOR

LADDER SENSOR IS CONTROLLED BY A MAGNETIC TARGET MOUNTED TO THE REAR SERVICE LADDER.

LADDER SENSOR NORMALLY OPEN SENSOR SHOWN WITH REAR LADDER DOWN, NO MAGNET PRESENT.

LADDER SENSOR

LOW COOLANT INSTRUMENTATION

FEEDER & SEPARATOR CONTROLS

FEEDER & SEPARATOR CONTROLS

HEADER TILT

HEADER TILT

HEADER TILT

HEADER TILT

GRID HEATER

THROTTLE

ENGINE

ENGINE

DIAGNOSTIC CONN. & CAN BUS

REEL CONTROLS

REEL & UNLOADER CONTROLS

UNLOADER CONTROLS

UNLOADER CONTROLS

CAB INTERIOR

CAB EXTERIOR

YMIU J2 BLACK

YMIU J1 GREY

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