SERVICE MANUAL

H8040

Self-Propelled Windrower

from PIN YCG667001 and above

Part number 47487694
1st edition English
January 2013

NEW HOLLAND AGRICULTURE

MidWestTech | New Holland H8040 Self-Propelled Windrower Service Manual | Publication 47487694

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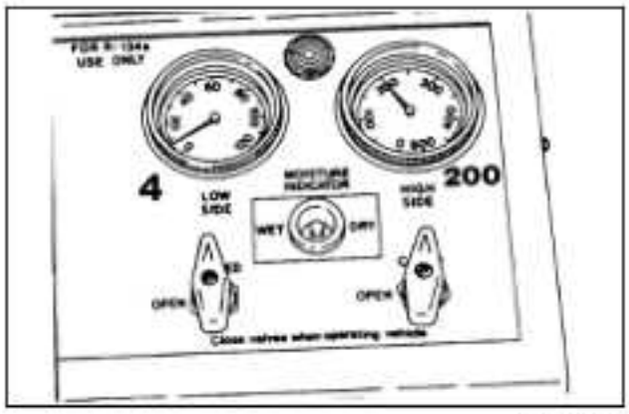
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Air-conditioning switch panel - Test Manifold Gauge Reading and Interpretations

EXAMPLE 3

Symptoms

1. Evaporator air is not being cooled.
2. Low side pressure reading does not change when compressor cycles on and off.
3. High side pressure slightly high or slightly low. See charts the pressure-temperature chart for correct gauge readings.



DIAGNOSIS: Non-condensables (air or moisture) are present. System not fully charged.

Corrective Procedures

1. Leak test the system. Give special attention to the compressor seal area..
2. Extract the refrigerant from the system.
3. Repair the leaks.
4. Replace the receiver/drier.
5. Check the compressor oil to ensure no loss.
6. Evacuate the system.
7. Charge the system.
8. Performance test the system.

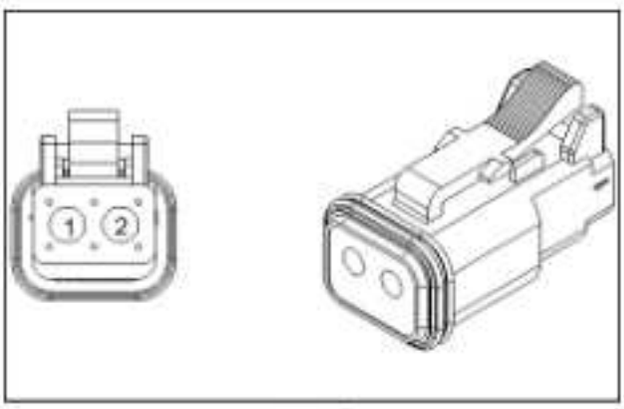
NOTE: *Test procedure based upon ambient temperature of* ***35 °C (95 °F)****. For proper high side gauge reading for other ambient temperatures, refer to the pressure-temperature chart.*

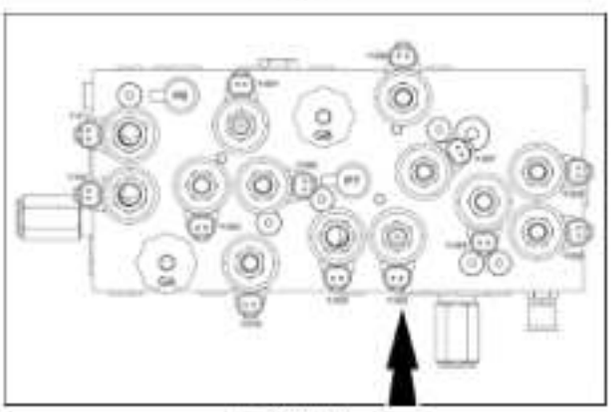
Ambient Temperature* °C (°F)	High-Pressure Gauge Reading kpa (psi)
21 °C (70 °F)	786 - 924 kPa (114 - 134 psi)
24 °C (75 °F)	869 - 1007 kPa (126 - 146 psi)
26 °C (80 °F)	972 - 1110 kPa (141 - 161 psi)
29.5 °C (85 °F)	1096 - 1234 kPa (159 - 179 psi)
32 °C (90 °F)	1158 - 1296 kPa (168 - 188 psi)
35 °C (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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CONNECTOR X-093 - Y-002 SOLENOID, HEADER FLOTATION, LEFT

CONNECTOR X-093 - Y-002 SOLENOID, HEADER FLOTATION, LEFT			
PIN NUMBER	**WIRE NUMBER**	**CIRCUIT REFERENCE**	**ELECTRICAL SCHEMATIC FRAME**
1	FM-416 (WH)	Input signal to UCM module **A-001** connector **X-005** pin 5 (6cyl standard only)	**Wire harnesses - Electrical schematic frame 51 - Header Flotation System (55.100)**
	FM.6-416 (WH)	Input signal to UCM module **A-001** connector **X-005** pin 5 (6cyl draper only)	**Wire harnesses - Electrical schematic frame 47 - Intake Air Pressurization System (55.100)**
	FM.4-416 (WH)	Input signal to UCM module **A-001** connector **X-005** pin 5 (4cyl draper only)	
2	FM-361D (BK)	Splice SP-361, right rear frame ground GND-008 (6cyl standard only)	**Wire harnesses - Electrical schematic frame 51 - Header Flotation System (55.100)**
	FM.6-361D (BK)	Splice SP-361, right rear frame ground GND-008 (6cyl draper only)	**Wire harnesses - Electrical schematic frame 47 - Intake Air Pressurization System (55.100)**
	FM.4-361D (BK)	Splice SP-361, right rear frame ground GND-008 (4cyl draper only)	





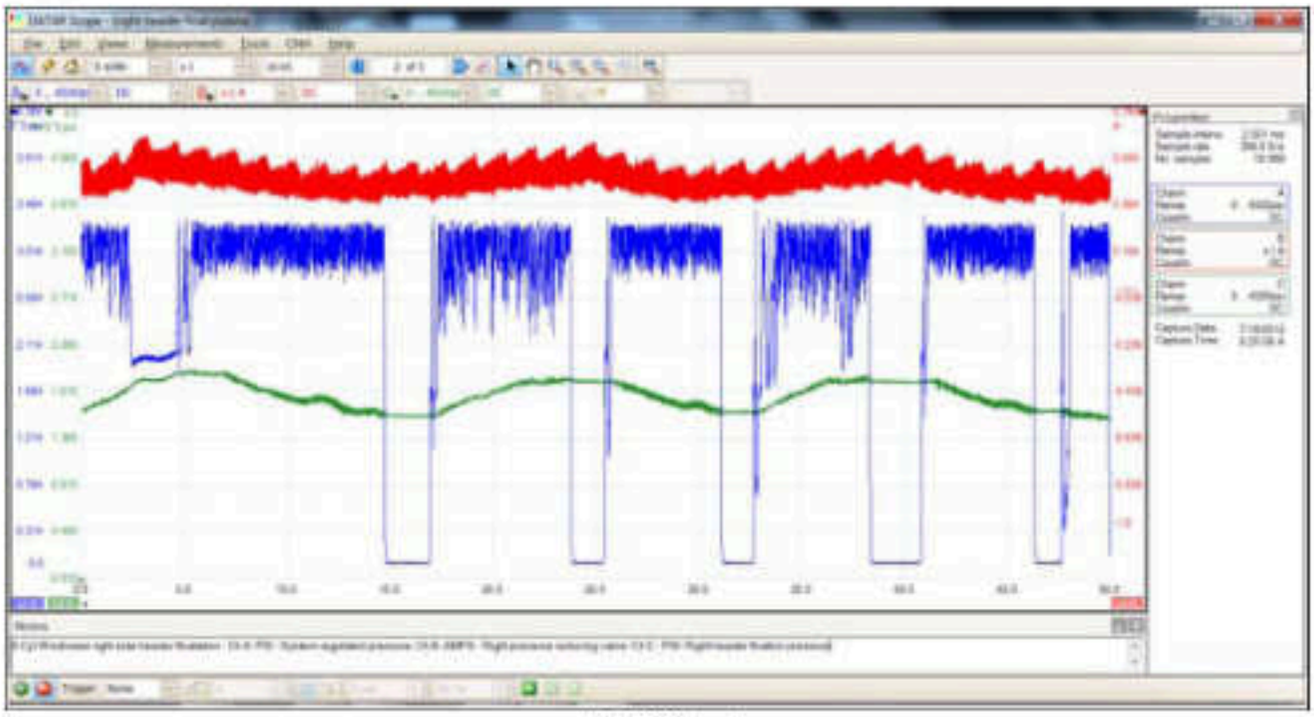
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Cab header controls - Troubleshooting Inoperative header function

Problem	Possible Cause	Correction
Counter-Balance (CB) Inoperative. Reel Lift Inoperative. Header Inoperative. Draper Cut Height Control Inoperative.	Blown fuse.	If fuse is blown, check harness for possible short to ground. Repair as needed.
Counter-Balance (CB) Inoperative. Reel Lift Inoperative. Header Inoperative. Draper Cut Height Control Inoperative.	Fuses Ok.	Make sure harness was installed correctly. Repair as needed.
Counter-Balance (CB) Inoperative. Reel Lift Inoperative. Header Inoperative. Draper Cut Height Control Inoperative.	Bad Relay.	Check relay's for power and ground per schematic charts. Repair as needed.
Counter-Balance (CB) Inoperative. Reel Lift Inoperative. Header Inoperative. Draper Cut Height Control Inoperative.	Relay Ok.	Check for a signal at valves with switch activation. Repair as needed.
Counter-Balance (CB) Inoperative.	One side is heavier than other.	Verify quick connectors at valve were in-stalled correctly per installation instructions.
Header Float	Accumulator pressure is low.	Refer Section 35 of windrower service manual.
Counter-Balance (CB) Inoperative.	Float setting is not correct when deck shifts.	Float must be reset to operate correctly.
Counter-Balance (CB) Inoperative. Reel Lift Inoperative. Header Inoperative. Draper Cut Height Control Inoperative.	Harness connector at valve was not populated correctly from installation.	Verify that the connectors are populated according to the diagrams following this chart.
Reel Lift Inoperative. Header Inoperative.	Failure on the unit side.	Verify whether problem is on header side or machine side.
Counter-Balance (CB) Inoperative. Reel Lift Inoperative. Header Inoperative. Draper Cut Height Control Inoperative.	Faulty Switch and/or Valve.	Check harness connectors for power and ground. Replace switch and valves as needed.

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Results:



NHL12WRC1054AA 4

Figure A

- The amp reading varies from **0.3 - 0.5 A** as the pressure on the right flotation circuit varies from approximately **1400 - 1900 psi**.

  NOTE: *These results will vary with the type of header and the width of the header being used.*

- The system pressure cycles to high pressure standby of **3200 psi** back to **0 psi** as the adjustments are made. This pressure is controlled by a master valve that must activate to provide oil to the right header flotation solenoid Y-001 (**L-01**).

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H8040 DRAPER EQUIPPED SELF-PROPELLED WINDROWERS
47484281
ELECTRICAL SCHEMATIC, NORTH AMERICA
MODEL YEAR 2013 PRODUCTION

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DRIVELINE - PROPULSION	Page 1, Sheet 7	LIGHTS AND HORN	Page 4, Sheet 37
DRIVELINE - PROPULSION	Page 1, Sheet 8	HYDRAULIC MONITORING AND MFH	Page 4, Sheet 38
DRIVELINE - PROPULSION	Page 1, Sheet 9	LIGHTING	Page 4, Sheet 40
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JUMP FROM ANOTHER SHEET · JUMP TO ANOTHER SHEET · ELECTRIC MOTOR · BATTERY · FUSE · CONNECTOR

RELAY · RESISTOR · VARIABLE RESISTOR · POSITION SENSOR · SOLENOID · SWITCH WITH MOMENTARY CONTACT

ALARM · GRID HEATER · SPEAKER · LAMP · POSITION SENSOR

SWITCH · PRESSURE SWITCH · ALTERNATOR · DIODE MODULE · KEY SWITCH

CM-053A OR 1.0
- WIRE GAUGE (SQUARE MM)
- WIRE COLOR
- CIRCUIT NUMBER
- HARNESS CODE

LEGEND

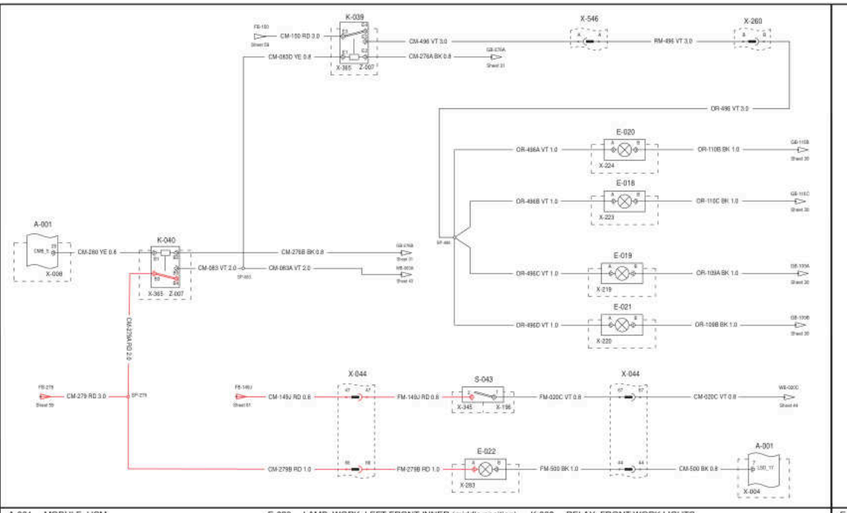
UNSWITCHED POWER
SWITCHED POWER
STARTING SEQUENCE

WIRING REFERENCES

Color	Color Code	Function
Black	BK	Ground, Chassis
Blue	BL	Printed Circuit Ground
White	WH	Increasing Actuation
Gray	GY	Decreasing Actuation
Orange	OR	Power After Ignition
Yellow	YE	Signal Wires
Red	RD	Battery Voltage
Violet	VT	Lighting
Pink	PK	Reference Voltage

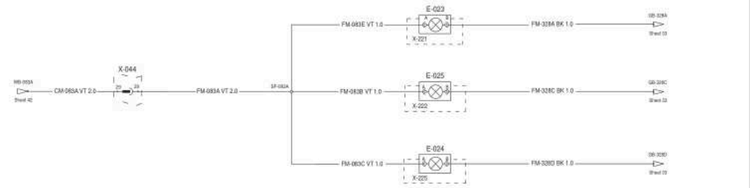
COMPONENT LEGEND

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



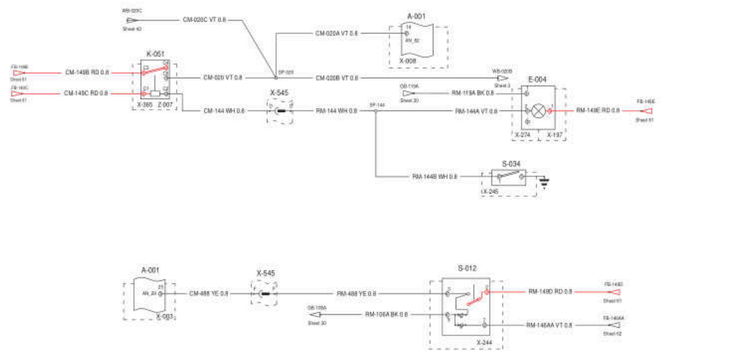
A-001 MODULE, UCM
E-018 LAMP, WORK, LEFT FRONT OUTER (outer position)
E-019 LAMP, WORK, RIGHT FRONT OUTER (outer position)
E-020 LAMP, WORK, LEFT FRONT INNER (middle position)
E-021 LAMP, WORK, RIGHT FRONT INNER (middle position)
E-022 LAMP, STUBBLE, LEFT
K-039 RELAY, FRONT WORK LIGHTS
K-040 RELAY, REAR WORK LIGHTS
S-043 SWITCH, FUEL DOOR LIGHT

SHEET 42 - LIGHTING



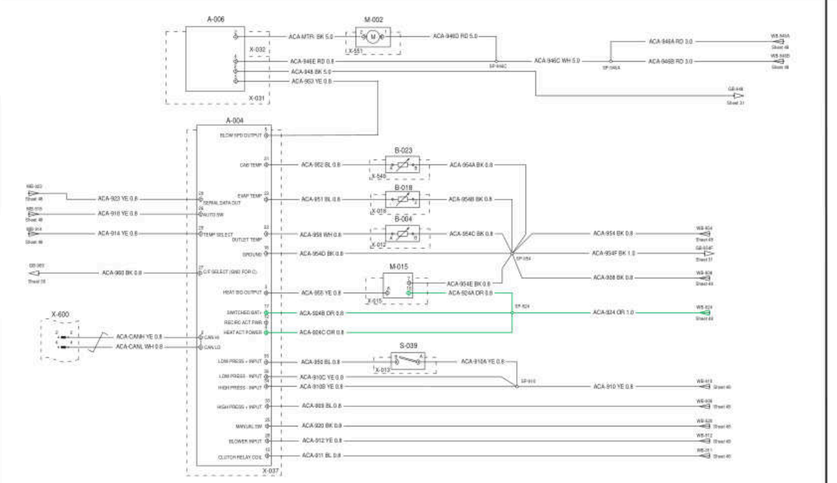
E-023 LAMP, STUBBLE, RIGHT
E-024 LAMP, WORK, LEFT REAR
E-025 LAMP, WORK, RIGHT REAR

SHEET 43 - LIGHTING



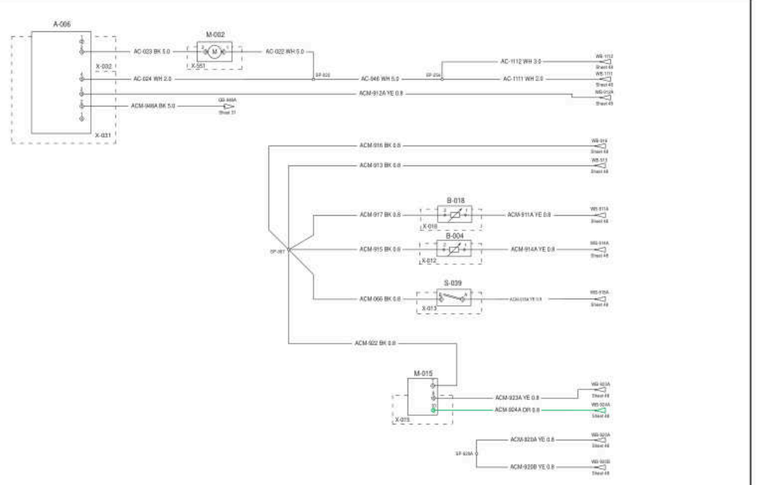
A-001 MODULE, UCM
E-004 LAMP, DOME
K-051 RELAY, DOOR SWITCH
S-012 SWITCH, WORK LIGHTS
S-034 SWITCH, CAB DOOR

SHEET 44 - LIGHTING & CAB DOOR



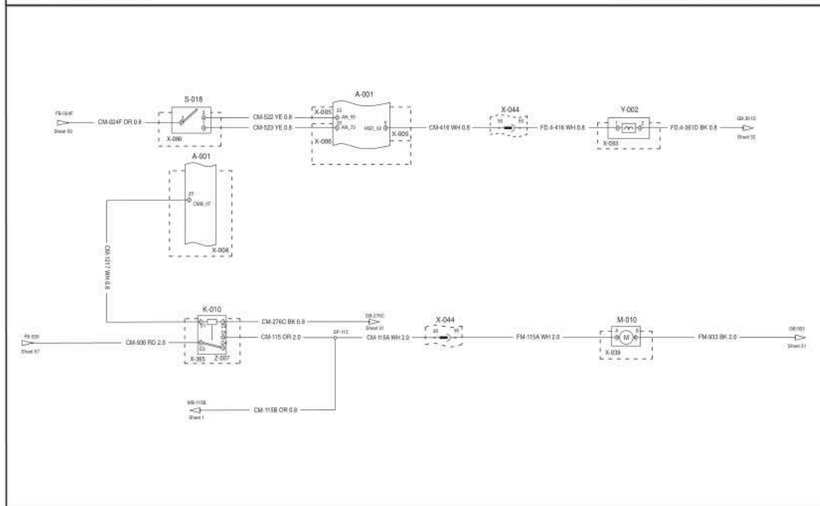
A-004 MODULE, ATC
A-006 MODULE, BLOWER SPEED
B-004 SENSOR, TEMPERATURE, OUTLET
B-018 SENSOR, TEMPERATURE, EVAPORATOR
B-023 SENSOR, TEMPERATURE, CAB
M-002 MOTOR, BLOWER
M-015 MOTOR, ATC WATER VALVE
S-039 SWITCH, LOW PRESSURE, ATC

SHEET 45 - ATC TEMPERATURE CONTROL



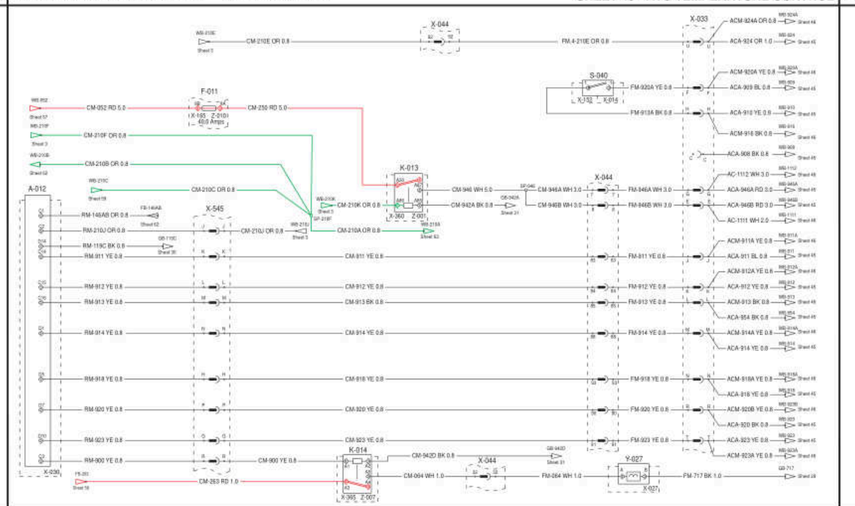
A-006 MODULE, BLOWER SPEED
B-004 SENSOR, TEMPERATURE, OUTLET
B-018 SENSOR, TEMPERATURE, EVAPORATOR
M-002 MOTOR, BLOWER
M-015 MOTOR, ATC WATER VALVE
S-039 SWITCH, LOW PRESSURE, ATC

SHEET 46 - MANUAL TEMPERATURE CONTROL



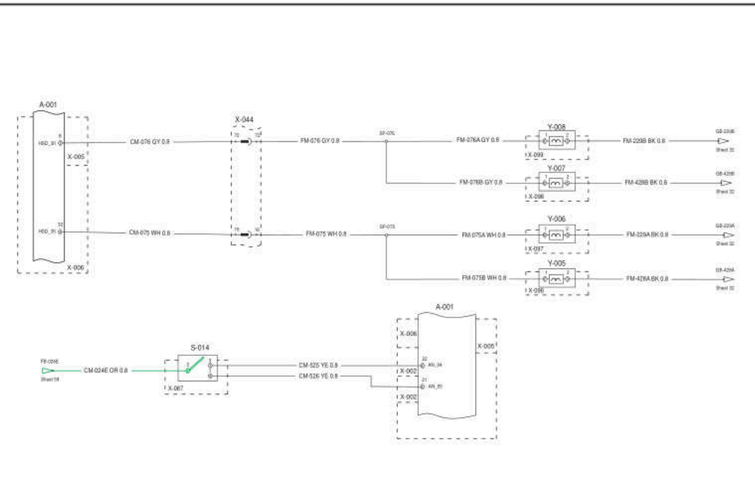
A-001 MODULE, UCM
K-010 RELAY, PRESSURIZATION FAN
M-010 MOTOR, INTAKE AIR PRESSURIZATION
S-018 SWITCH, HEADER TRIM, LEFT
Y-002 SOLENOID, HEADER FLOTATION, LEFT

SHEET 47 - INTAKE AIR PRESSURIZATION



A-012 MODULE, HVAC, AUTOMATIC & MANUAL
F-011 FUSE, HVAC
K-013 RELAY, HVAC
K-014 RELAY, A/C CLUTCH
S-040 SWITCH, PRESSURE, ATC HIGH
Y-027 SOLENOID, A/C CLUTCH

SHEET 48 - HVAC



A-001 MODULE, UCM
S-014 SWITCH, HEADER TRIM, RIGHT
Y-006 SOLENOID, HEADER RAISE VALVE, RIGHT
Y-008 SOLENOID, HEADER LOWER VALVE, RIGHT

SHEET 49 - HEADER

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