AFX8010
Combine

SERVICE MANUAL

87543035

CASE IH AGRICULTURE

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Chapters

Each Chapter is identified by a letter and number combination e.g. Engine B.10.A The first letter is identical to the Section letter i.e. Chapter B.10 is inside Section B, Power Production.

CONTENTS

The Chapter Contents lists all the technical data (specifications), functional data (how it works), service data (remove, install adjust, etc..) and diagnostic data (fault codes and troubleshooting) that have been written in that Chapter for that function or system on the machine.

Contents

POWER PRODUCTION
ENGINE _ 10.A
TECHNICAL DATA
ENGINE - General specification (B.10.A - D.40.A.10) 3
AFX8010
FUNCTIONAL DATA
ENGINE - Dynamic description (B.10.A - C.30.A.10) 4
AFX8010
SERVICE
ENGINE - Remove (B.10.A - F.10.A.10) 5
AFX8010
DIAGNOSTIC
ENGINE - Troubleshooting (B.10.A - G.40.A.10) 6
AFX8010

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DISTRIBUTION SYSTEMS - A

PRIMARY HYDRAULIC POWER SYSTEM - 10.A

CONTENTS

FUNCTIONAL

Description	Page
Basic Principles Of The System	5
General Information	7
Specifications	8
Hydraulic System	9
Hydraulic Component Locations	10
Oil Supply	11
Filtration	12
Cooling	12
Gear Pumps	13
Hydraulic Schematic	14
PFC Pump Hydraulic System	18
PFC Pump Schematic	18
PFC Component Locations	19
Signal Circuits	29
Steering Priority Valve	30
Electrical Monitoring Circuits	36
Regulated Pressure	37
Park Brake / Regulated Pressure Valve	37
Component Location	38
Regulated Pressure Schematic	38
Regulated Pressure Valve Operation	39
Electrical Monitoring Circuits	40
Control Pressure	41
Control Pressure Pump	45
Filtration	46
Control / Lubrication Pressure Valve	47
Control Pressure Schematic	48
Electrical Monitoring Circuits	50

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Contents

DISTRIBUTION SYSTEMS - A

SECONDARY HYDRAULIC POWER SYSTEM - 12.A

DIAGNOSTIC

Sensing system

Sensing system Differential pressure switch - Short circuit to B+ (A.12.A.95.81 - G.30.B.54) 3
AFX8010

Sensing system Pressure sensor - Under limit value (A.12.A.95.91 - G.30.C.20) 6
AFX8010

Sensing system Pressure sensor - Short circuit to B+ (A.12.A.95.91 - G.30.B.54) 7
AFX8010

Sensing system Pressure sensor - Open circuit (A.12.A.95.91 - G.30.B.50) 12
AFX8010

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Valve guide oversizes

0.2 - 0.4 mm	**0.0079 - 0.0157 in**

Valve stem diameter

8.960 - 8.975 mm	**0.3528 - 0.3533 in**

Valve seat angle

Intake	60 deg - 30'	7'30"
Exhaust	45 deg - 30'	7'30"

Valve stem and relative guide assembly clearance

0.040 - 0.070 mm	**0.0016 - 0.0028 in**

Internal diameter of bore on head for valve seat

Intake	**44.185 - 44.220 mm**	**1.7396 - 1.7409 in**
Exhaust	**42.985 - 43.020 mm**	**1.6923 - 1.6937 in**

Valve seat external diameter

Intake	**44.260 - 44.275 mm**	**1.7425 - 1.7431 in**
Exhaust	**43.060 - 43.075 mm**	**1.6953 - 1.695 in**

Valve seat angle in cylinder head

Intake	60 deg	30 min
Exhaust	45 deg	30 min

Valve depth in relation to cylinder head surface

Intake	**0.65 - 0.95 mm**	**0.0256 - 0.0374 in**
Exhaust	**1.8 - 2.1 mm**	**0.0709 - 0.0827 in**

Valve seat and bore fit on cylinder head (interference)

0.040 - 0.090 mm	**0.0016 - 0.0035 in**

Valve mushroom-head diameter:

Intake	**42.985 - 43.015 mm**	**1.6923 - 1.6935 in**
Exhaust	**41.985 - 42.015 mm**	**1.6530 - 1.6541 in**

Maximum off-centering of the valve with the indicator resting in the center of the contact surface

0.03 mm	**0.0012 in**

Camshaft bushing seat diameter in cylinder head

88.000 - 88.030 mm	**3.4646 - 3.4657 in**

Camshaft support journal diameter

82.950 - 82.968 mm	**3.2657 - 3.2665 in**

Camshaft bushing external diameter

88.153 - 88.183 mm	**3.4706 - 3.4718 in**

Internal diameter of finished bushings in seats

83.018 - 83.085 mm	**3.2684 - 3.2711 in**

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D. If the concave motor does not operate in either direction, and the fault code **E0078-11 - Concave Motor** is displayed, continue with step **9**.

E. If the concave motor does not operate in either direction, and both fault codes **E0044-06 - Concave Current Sense** and **E0078-11 - Concave Motor** are displayed, continue with step **14**.

F. If the grain tank covers motor operates in one direction only, and the fault code **E0045-06 - Covers Current Sense** is displayed, continue with step **15**.

G. If the grain tank covers motor operates in one direction only, and both fault codes **E0045-06 - Covers Current Sense** and **E0079-11 - Grain Tank Covers Motor** are displayed, continue with step **16**.

H. If the grain tank covers motor does not operate in either direction, and the fault code **E0045-06 - Covers Current Sense** is displayed, continue with step **20**.

I. If the grain tank covers motor does not operate in either direction, and both fault codes **E0045-06 - Covers Current Sense** and **E0079-11 - Grain Tank Covers Motor** are displayed, continue with step **31**.

J. If both the concave motor and grain tank covers motor do not operate in either direction, and the fault codes **E0078-11 - Concave Motor** and **E0079-11 - Grain Tank Covers Motor** are displayed, continue with step **32**.

K. If both the concave motor and grain tank covers motor do not operate in either direction, and there are no fault codes displayed, continue with step **34**.

2. Manually operate the concave motor using the "DIAG" screen controls, while having an observer inspect the concave linkage movement for binding.

   A. The concave clearance adjustment motor is bound up. See the appropriate repair manual chapter for repair.

3. The concave clearance motor operates in one direction only. Fault codes indicate a short to ground. Disconnect the concave clearance motor connector **X190**. Measure the resistance on concave motor connector **X190** between pin 1 and pin 2. The proper resistance range for the motor is **1.0 - 5.0 ohms**.

   A. If out of specification, replace concave motor.

   B. If the motor coil resistance is within specification, continue with Step **4**.

4. Use a multimeter to check for continuity on the harness end of connector **X190** pin 2 and chassis ground. Flex the concave extension (CC) harness while making this check. There should not be any continuity to ground.

   A. If there is no continuity to ground, erase the fault code and continue operation.

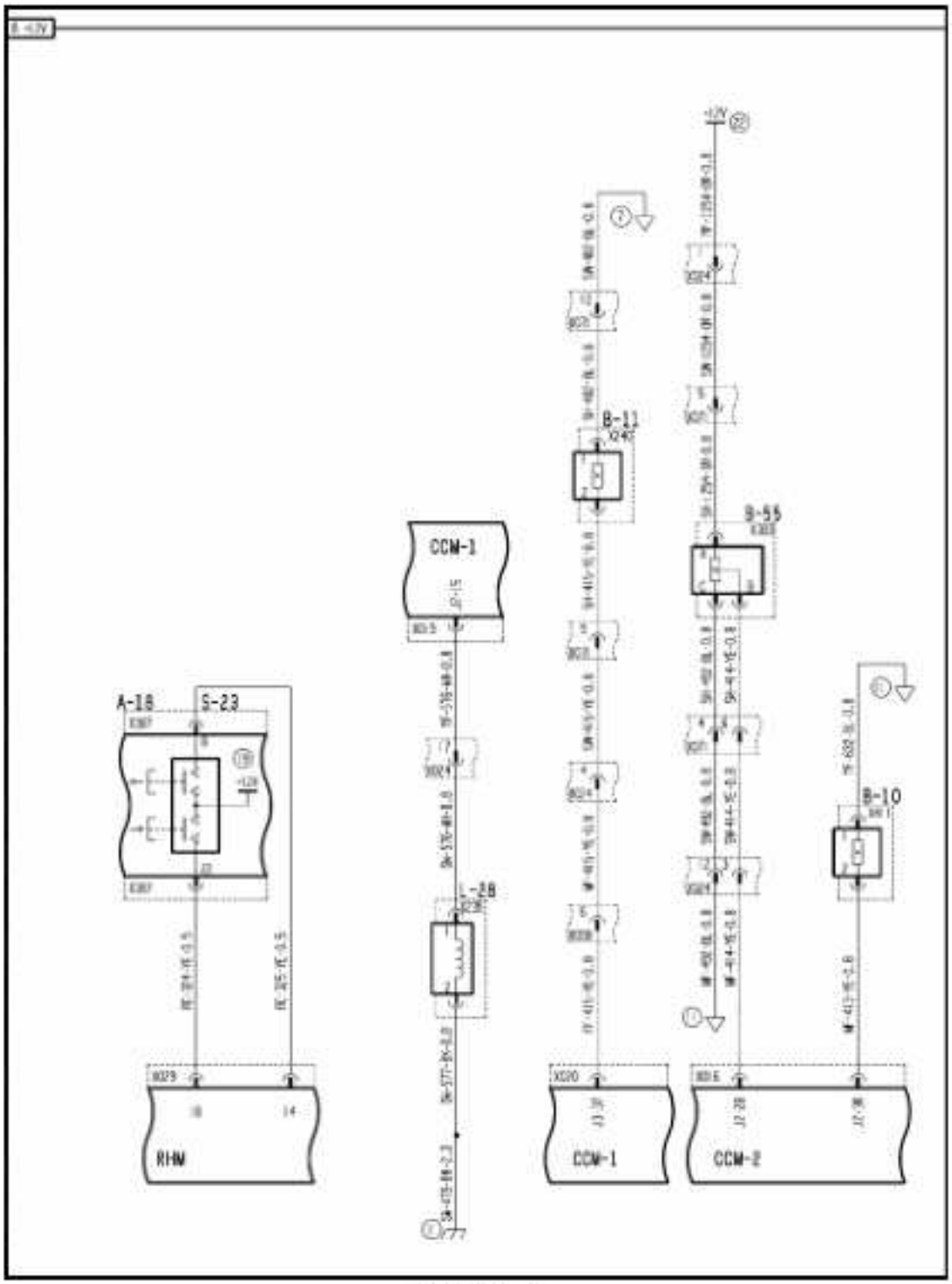
   B. If there is continuity to ground, continue with Step **6**.

5. Disconnect connector **X456**. Use a multimeter to check for continuity between the main frame (MF) harness end of connector **X456** pin 2 and chassis ground. There should not be any continuity.

   A. If there is no continuity to ground, there is a short to ground in the concave extension (CC) harness between connector **X456** and connector **X190** wire 695 white. Locate the short and repair.

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Wiring harness - Electrical schematic frame 23 (A.30.A.88 - C.20.E.23)



AFX8CHEM23-04 1

FRAME 23 - TRASH

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