PUMA 115
PUMA 125
PUMA 140
PUMA 155

Tractor with/without Multicontroller

SERVICE MANUAL

Part number 47924636
English
December 2010

CASE IH AGRICULTURE

MidWestTech | Case Puma 115, 125, 140, 155 Tractor Service Manual | Publication 87727132B

Order the manual at mid-west-tech.com >

Contents

HYDRAULIC - PNEUMATIC - ELECTRICAL - ELECTRONIC SYSTEMS - A

PRIMARY HYDRAULIC POWER SYSTEM - 10.A

TECHNICAL DATA
PRIMARY HYDRAULIC POWER SYSTEM
Torque 4
Special tools 4
Hydraulic pump
Variable displacement pump - Torque 6
Variable displacement pump - General specification 6
Charge pump
General specification 7

FUNCTIONAL DATA
PRIMARY HYDRAULIC POWER SYSTEM
Static description 8
Power beyond
Overview 19
Hydraulic pump
Static description 20
Dynamic description 23
Variable displacement pump - Sectional view 28
Variable displacement pump - Exploded view 29
Charge pump
Exploded view 30
Compensator
Exploded view 31

SERVICE
PRIMARY HYDRAULIC POWER SYSTEM
Pressure test 32
Signal valve
Pressure test 37
PUMA 115, PUMA 125 [Z7BL01001 - Z9BL40000], PUMA 125 [Z7BL50001 - Z9BL60000], PUMA 125 Multicontroller, PUMA 140 [Z7BL01001 - Z9BL40000], PUMA 140 [Z7BL50001 - Z9BL60000], PUMA 140 Multicontroller, PUMA 155 [Z7BL01001 - Z9BL40000], PUMA 155 [Z7BL50001 - Z9BL60000], PUMA 155 Multicontroller
Hydraulic pump
Variable displacement pump - Remove 39
Variable displacement pump - Overhaul 41
Variable displacement pump - Assemble 45

MidWestTech | Case Puma 115, 125, 140, 155 Tractor Service Manual | Publication 8... Order the manual at mid-west-tech.com >

Contents

HYDRAULIC - PNEUMATIC - ELECTRICAL - ELECTRONIC SYSTEMS - A

PRIMARY HYDRAULIC POWER SYSTEM Electro-hydraulic remote valve - 10.C

TECHNICAL DATA
PRIMARY HYDRAULIC POWER SYSTEM Electro-hydraulic remote valve
Torque 4
Special tools 4
Mid-mount remote control valve
Torque 5

FUNCTIONAL DATA
PRIMARY HYDRAULIC POWER SYSTEM Electro-hydraulic remote valve
Dynamic description 6
Static description Activity 23
Static description Activity 35
PUMA 125 Multicontroller, PUMA 140 Multicontroller, PUMA 155 Multicontroller
Static description Structure 46
Sectional view 51
Mid-mount remote control valve
Exploded view 52
Static description 53

SERVICE
PRIMARY HYDRAULIC POWER SYSTEM Electro-hydraulic remote valve
Remove 57
Calibrate 59
PUMA 115, PUMA 125 [Z7BL01001 - Z9BL40000], PUMA 125 [Z7BL50001 - Z9BL60000], PUMA 125 Multicontroller, PUMA 140 [Z7BL01001 - Z9BL40000], PUMA 140 [Z7BL50001 - Z9BL60000], PUMA 140 Multicontroller, PUMA 155 [Z7BL01001 - Z9BL40000], PUMA 155 [Z7BL50001 - Z9BL60000], PUMA 155 Multicontroller
Calibrate 62
PUMA 125 [Z9BL40001 -], PUMA 125 [Z9BL60001 -], PUMA 140 [Z9BL40001 -], PUMA 140 [Z9BL60001 -], PUMA 155 [Z9BL40001 -], PUMA 155 [Z9BL60001 -]
Coupler
Overhaul 65
Remote control valve
Remove 66
Install 68
Disassemble 69
Assemble 73
Mid-mount remote control valve

MidWestTech | Case Puma 115, 125, 140, 155 Tractor Service Manual | Publication 8... Order the manual at mid-west-tech.com >

Contents

HYDRAULIC - PNEUMATIC - ELECTRICAL - ELECTRONIC SYSTEMS - A

SECONDARY HYDRAULIC POWER SYSTEM - 12.A

FUNCTIONAL DATA
- Regulator and lubrication valve
  - Dynamic description 3
  - Exploded view 5

SERVICE
- Regulator and lubrication valve
  - Pressure test 6
- Priority valve
  - Pressure test 8
- Hydraulic pump
  - Pressure test 16

MidWestTech | Case Puma 115, 125, 140, 155 Tractor Service Manual | Publication 8... Order the manual at mid-west-tech.com >

Wiring harness - Electrical schematic frame 41 Auxiliary Control Unit

PUMA 115 Semi powershift with EHR"s, PUMA 125 [Z7BL01001 - Z9BL40000] Semi powershift with EHR"s, PUMA 125 [Z7BL50001 - Z9BL60000] Semi powershift with EHR"s, PUMA 140 [Z7BL01001 - Z9BL40000] Semi powershift with EHR"s, PUMA 140 [Z7BL50001 - Z9BL60000] Semi powershift with EHR"s, PUMA 155 [Z7BL01001 - Z9BL40000] Semi powershift with EHR"s, PUMA 155 [Z7BL50001 - Z9BL60000] Semi powershift with EHR"s

Component	Connector	Description
MOD-010	**C098/ C099/ C100/ C101/ C102**	XCM - Auxiliary Central Control Unit
SEN-005	**C234**	Front Axle Position Potentiometer
SOL-002	**C506**	Suspension Raise Solenoid
SOL-003	**C505**	Suspension Lower Solenoid
SOL-004	**C507**	Upper Lockout Solenoid
SOL-005	**C508**	Lower Lockout Solenoid
SOL-006	**C672**	Link Levelling Valve 2
SOL-007	**C673**	Link Levelling Valve 3
SOL-008	**C674**	Link Levelling Valve 4
SOL-009	**C675**	Link Levelling Valve 5
SOL-014	**C671**	Link Levelling Valve 1
SW-010	**C678**	Top Link Switch
SW-011	**C679**	Side Link Switch
	C020	Main Rear Cab Harness to Transmission Harness Connector
	C022	Main Rear Cab Harness to Transmission Harness Connector
	C024	Main Rear Cab Harness to Engine Harness Connector
	C026	Main Rear Cab Harness to Engine Harness Connector
	C064	Main Rear Cab Harness to EHR Harness Connector
	C227	Front Hitch / Front PTO Harness Connector
	C259	Front Suspension Harness Connector
	C659	Link Level Harness Connector

Wire Colour Codes

B	Black	R	Red	LTG	Light Green	K	Pink
N	Brown	O	Orange	U	Blue	W	White
TN	Light Brown	Y	Yellow	TQ	Turquoise		
S	Slate	G	Green	L	Lilac		

MidWestTech | Case Puma 115, 125, 140, 155 Tractor Service Manual | Publication 87727132B
Order the manual at mid-west-tech.com >

Fuse and relay box - General specification

PUMA 125 [Z9BL40001 -], PUMA 125 [Z9BL60001 -], PUMA 140 [Z9BL40001 -], PUMA 140 [Z9BL60001 -], PUMA 155 [Z9BL40001 -], PUMA 155 [Z9BL60001 -]

Description of the relays

Relay	Function
K001 / K002	Wiper Module Front & Rear
K003	Ignition Relay
K004	Lights Relay
K005	Starter Motor On
K006	Blower motor
K007	Dipped Beam Headlamps
K008	Stop Lamps Relay
K009	Main Beam Headlamps
K010	Hydraulic Trailer Brake
K011	Electronic Park Brake
K012	Pneumatic Trailer Brake
K013	Engine Shutdown
K014	Get U Home
K015	Front Worklamps Hood
K016	Rear Worklamps C Pillar Relay
K017	Power Supply ECU
K018	EL.Battery Isolator
K019	Air Condition Clutch Relay
K020	El.Hydraulic Remote Lock Relay
K021	Timer Relay Battery Isolator
K022	Heated Mirror Timer Relay

Fuses

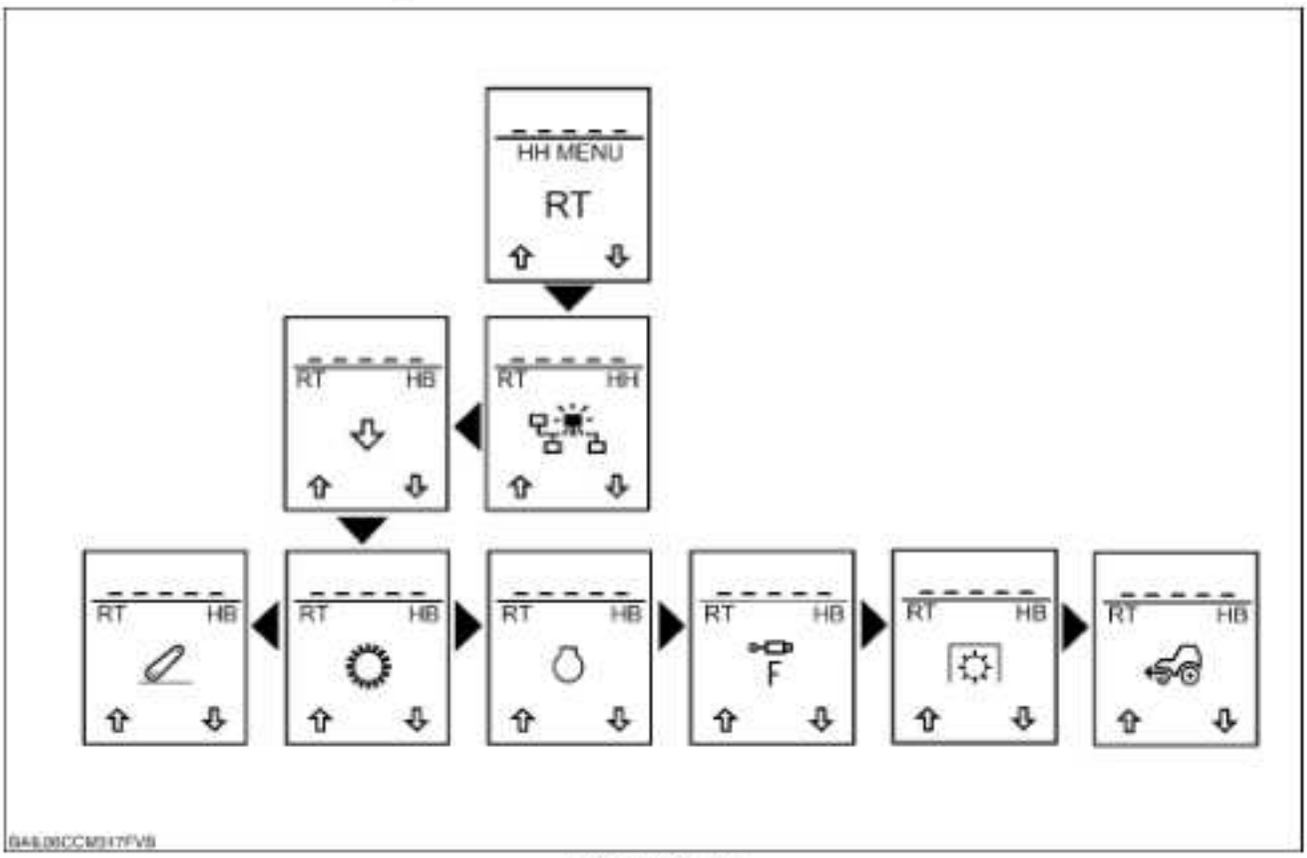
No.	Amps	Circuit
F001	10	Interior and step lighting and relay mirror heating
F002	25	Cigar lighter and power socket, cab (potential 30)
F003	10	Coupling of the A/C compressor
F004	10	Screw terminal red (potential 30)
F005	30	Blower motor
F006	10	Station memory and work lamp control unit
F007	20	Switch - Main headlights and hazard light switch
F008	20	Starter switch
F009	25	Front loader power
F010	30	Rear power socket (potential 15)
F011	15	Front windscreen wiper
F012	10	Rear windscreen wiper / switch, windscreen washing system, front/rear
F013	15	Relay, brake lights
F014	15	Headlight switch and flasher
F015	20	Brake light switch and pedal lock
F016	15	Trailer brake
F017	25	Power socket, cab (potential 15)
F018	15	Air blower motor relay and driver's seat / Armrest adjust
F019	15	Heated mirrors
F020	10	Radar sensor, normal signal socket / keypad
F021	15	Water sensor for the fuel filter, brake fluid level switch
F022	15	Side marker lights, right
F023	15	Side marker lights, left / licence plate lights
F024	10	Illumination - Lighting / cigar lighter - ICU - VT - heated mirror switch - EHR-lock switch

MidWestTech | Case Puma 115, 125, 140, 155 Tractor Service Manual | Publication 8... Order the manual at mid-west-tech.com >

HB - DISPLAY STORED FAULT CODES

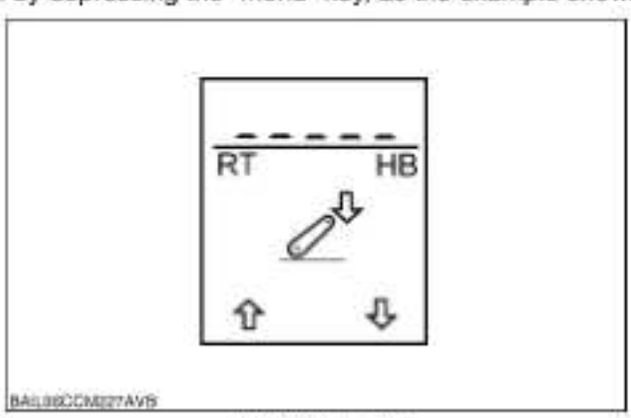
This menu is used to display fault codes which are stored in the EEPROM of the controller.
A maximum of ten fault codes for each sub-system can be stored.
Common to all sub-systems.

HB Menu Screen Select Diagram



BAIL09CCM017FVB 71

Select the required sub-system by depressing the "menu" key, as the example shown.



BAIL09CCM027AVB 72

The upper section of the display will display "- - - -", if no fault code is stored in the selected sub-system.

MidWestTech | Case Puma 115, 125, 140, 155 Tractor Service Manual | Publication 8... Order the manual at mid-west-tech.com >

AXLES, BRAKES AND STEERING - D

PUMA 115
PUMA 125
PUMA 140
PUMA 155

Tractor with/without Multicontroller

SERVICE MANUAL

Part number 84410750
English
December 2010
Replaces part numbers 87472685 - 87472686

CASE IH AGRICULTURE

MidWestTech | Case Puma 115, 125, 140, 155 Tractor Service Manual | Publication 87727... Order the manual at mid-west-tech.com >

HYDRAULIC - PNEUMATIC - ELECTRICAL - ELECTRONIC SYSTEMS - A

ELECTRICAL POWER SYSTEM - 30.A

[Z7BL01001 - Z9BL40000], [Z7BL50001 - Z9BL60000]

Connectors

PUMA 115
PUMA 125
PUMA 140
PUMA 155

Tractor with/without Multicontroller

SERVICE MANUAL

Part number 84410745

English

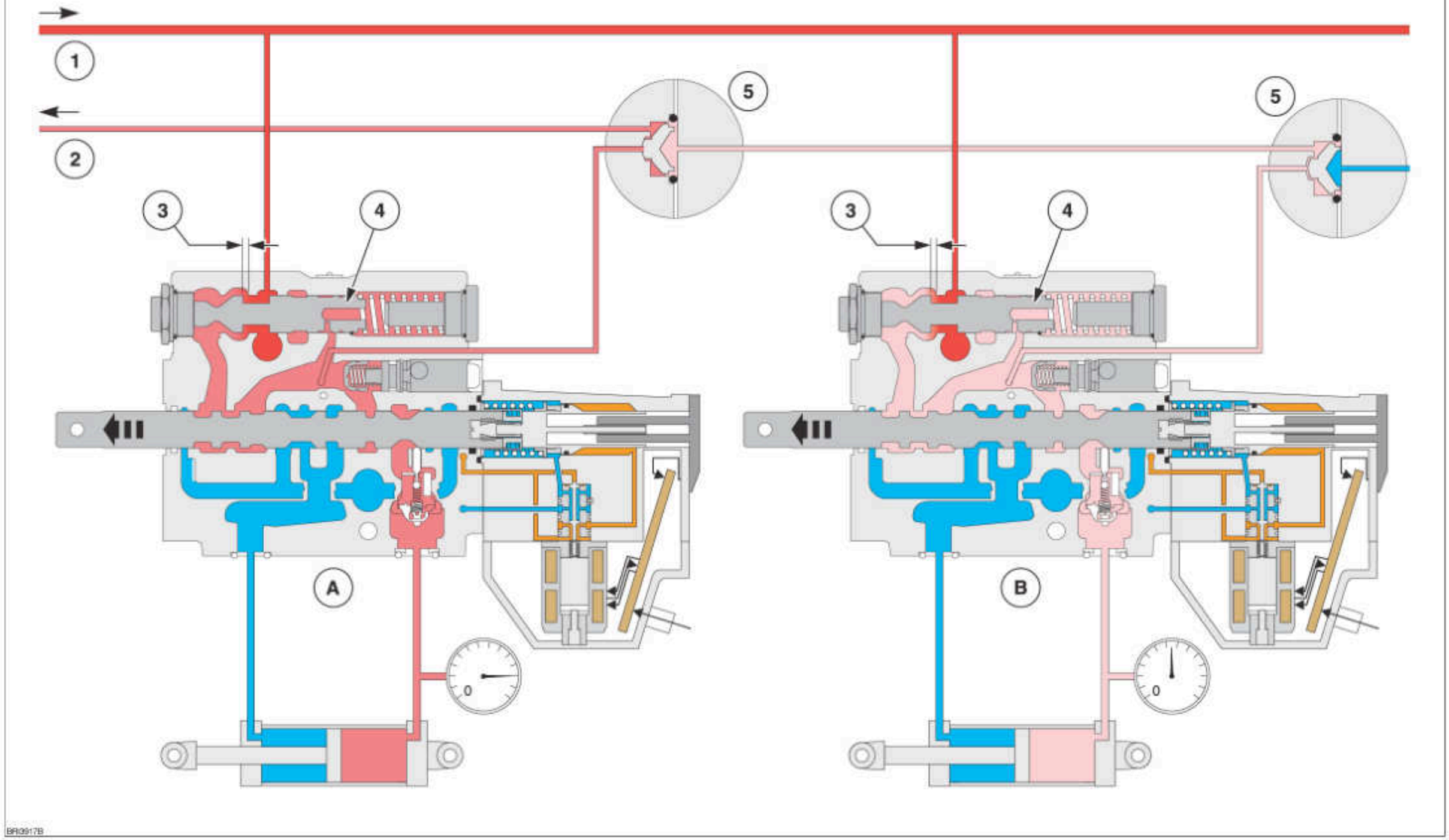
December 2010

Replaces part numbers 87472676 - 87472677

CASE IH AGRICULTURE

MidWestTech | Case Puma 115, 125, 140, 155 Tractor Service Manual | Publication 87727...

Order the manual at mid-west-tech.com >



MidWestTech | Case Puma 115, 125, 140, 155 Tractor Service Manual | Publication 87727132B
Order the manual at mid-west-tech.com >