FARMALL® 70
FARMALL® 80
FARMALL® 90
FARMALL® 95

Tractors

SERVICE MANUAL

84253591

CASE IH AGRICULTURE

MidWestTech | Case Farmall 70, 80, 90, 95 Tractor Service Manual | Publication 84253591

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

FARMALL 70, FARMALL 80, FARMALL 90, FARMALL 95 SERVICE MANUAL COMPLETE CONTENTS

SECTION 00 - GENERAL 2
SECTION 10 - ENGINE 3
SECTION 18 - CLUTCH 6
SECTION 21 - TRANSMISSIONS 7
SECTION 23 - DRIVE LINES 9
SECTION 25 - FRONT AXLE MECHANICAL TRANSMISSION 9
SECTION 27 - REAR AXLE AND TRANSMISSION 11
SECTION 31 - POWER TAKE-OFF 12
SECTION 33 - BRAKING SYSTEM 13
SECTION 35 - HYDRAULIC SYSTEM 14
SECTION 41 - STEERING 17
SECTION 44 - FRONT AXLE AND WHEELS (2WD) 18
SECTION 50 - CAB AIR CONDITIONING SYSTEM 19
SECTION 55 - ELECTRICAL SYSTEM 21
SECTION 90 - PLATFORM, CAB, BODYWORK 25

The following pages are the collation of the contents pages from each section and chapter of the Farmall 70, Farmall 80, Farmall 90, Farmall 95 Service manual. Complete Service part # 84253591.

The sections used through out all Case IH product Service manuals may not be used for each product. Each Service manual will be made up of one or several books. Each book will be labeled as to which sections are in the overall Service manual and which sections are in each book.

The sections listed above are the sections utilized for the Farmall 70, Farmall 80, Farmall 90, Farmall 95 Tractors.

© 2009 CNH America LLC. All Rights Reserved.
Case IH is a registered trademark of CNH America LLC.

84253595 7/09
Replaces 87758589

MidWestTech | Case Farmall 70, 80, 90, 95 Tractor Service Manual | Publication 84253591 Order the manual at mid-west-tech.com >

SECTION 00 - GENERAL

BOOK 1 - 84253592

Chapter 1 - General

CONTENTS

Section	Description	Page
	General Instructions	3
	Important Notice	3
	Shimming	3
	Rotating Shaft Seals	3
	O Rings	3
	Sealers	3
	Bearings	3
	Spring Pins	3
	Precautionary Notice	4
	Equipment Notice	4
	Spare Parts Notice	4
	General Notices	4
	Health and Safety	5
	Health and Safety Precautions	5
	General Workshop Tools and Equipment	11
	Legal Aspects	11
	Lubricants and Greases	11
	Precautionary Statements	15
	Personal Safety	15
	Machine Safety	15
	Information	15
	Safety	16
	The Tractor	16
	Driving the Tractor	16
	Operating the Tractor	16
	Operating the PTO	17
	Servicing the Tractor	17
	Diesel Fuel	18
	ROPS	18
	Ecology and the Environment	19
	Precautions	19
	Minimum Hardware Tightening Torques	20
	Consumables	23

MidWestTech | Case Farmall 70, 80, 90, 95 Tractor Service Manual | Publication 84253591 Order the manual at mid-west-tech.com >

SECTION 10 - ENGINE

BOOK 1 - 84253592

Chapter 1 - Engine (F5C)

CONTENTS

Section	Description	Page
	Special Tools	2
	Troubleshooting	3
	Overhaul	7
10 001 10	Removal	7
	Installation	25

SECTION 10 - ENGINE

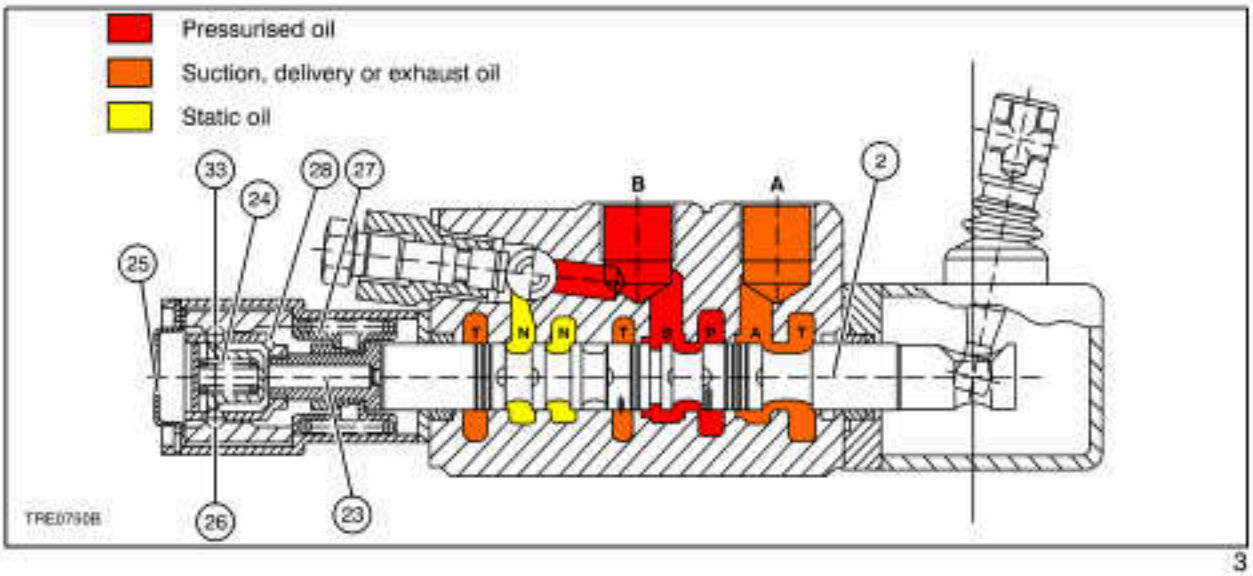
BOOK 1 - 84253592

Chapter 2 - Engine (NEF)

CONTENTS

Section	Description	Page
	Specifications	4
	Torques	12
	Special Tools	14
	Sectional Views	15
	Troubleshooting	20
	Overhaul	24
10 001 10	Engine	24
	Removal	24
	Installation	40
10 001 53	Disassembly	42
	Engine Assembly on the Bench	56
	Fitting the Bushings	56
	Fitting the Tappets	57
	Fitting the Camshaft	57
	Fitting the Oil Nozzles	58

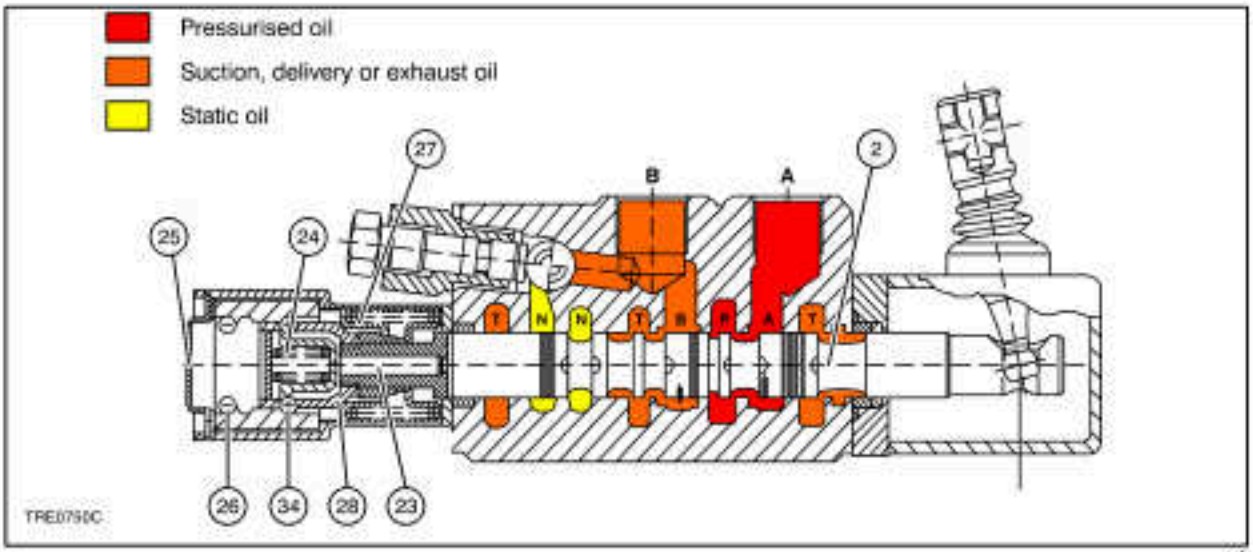
MidWestTech | Case Farmall 70, 80, 90, 95 Tractor Service Manual | Publication 84253591 Order the manual at mid-west-tech.com >



3

Lifting

When the spool (2) moves to left, the detent balls (26) engage the groove (33), where they are held in place by the support (28) and spring (24). The movement of the spool (2) connects: the pressure line (P) with the line (B), and also the upper cylinder chamber with the exhaust line (T) by way of line (A), intercepting the supply of oil to the hydraulic lift control valve. Automatic detent release working principle is explained at page 7.



4

Lowering

When the spool (2) moves to right, the detent balls engage in the groove (34) where they are held in position by the support (28) and the spring (24). In this condition the oil contained in the lower chamber of the cylinder can flow to the exhaust (T) by way of line (B), while the upper chamber is connected with the pressure line (P) by way of line (A). On completion of the lowering operation, the detent will be automatically released as explained at Page 7.

MidWestTech | Case Farmall 70, 80, 90, 95 Tractor Service Manual | Publication 84253591 Order the manual at mid-west-tech.com >

STEERING TO THE RIGHT

When you turn the steering wheel clockwise, the springs (11) fig. 2 deform, allowing the valve (12) fig. 4 to rotate in relation to the sleeve (11).

In this state, the following takes place:

- De-synchronization of the internal ducts with parts (11) and (12) fig. 4, which were aligned in the neutral phase, resulting in interruption of the flow of oil to the outlet.
- Alignment with the same number of internal ducts connected moment by moment with the rotor compartments at intake from the pump (7) fig. 4 and in the delivery line to the steering cylinders (2), thus allowing the wheels to be steered to the right.

STEERING TO THE LEFT

When you turn the steering wheel counter-clockwise, the grooves inside parts (11) and (12) fig. 4 and the delivery lines to the steering cylinders are reversed, thus allowing the wheels to be steered to the left.

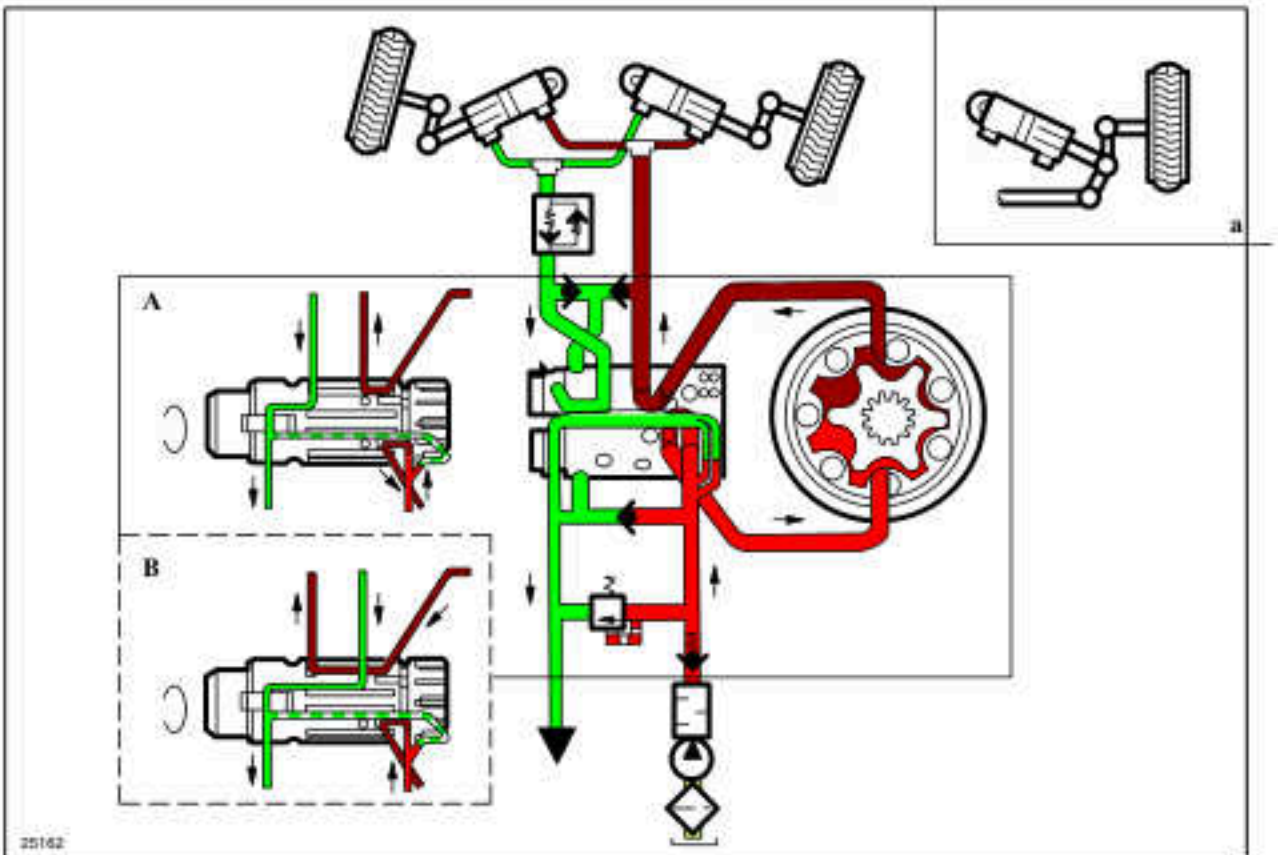
STEERING TO THE RIGHT MANUALLY

If there is a fault or loss of oil pressure at the hydrostatic steering pump, steering can also be performed manually.

When you turn the steering wheel clockwise, the rotor inside the hydrostatic steering control valve (3) fig. 4 performs the function of a hand pump, sending oil to the control cylinder rod side (2), thus allowing the wheels to be steered to the right manually.

STEERING TO THE LEFT MANUALLY

When you turn the steering wheel anticlockwise, you act upon the rotor inside the hydrostatic steering control valve which, by operating as a hand pump as previously described, sends oil to the control cylinder piston side, thus allowing the wheels to be steered to the left manually.



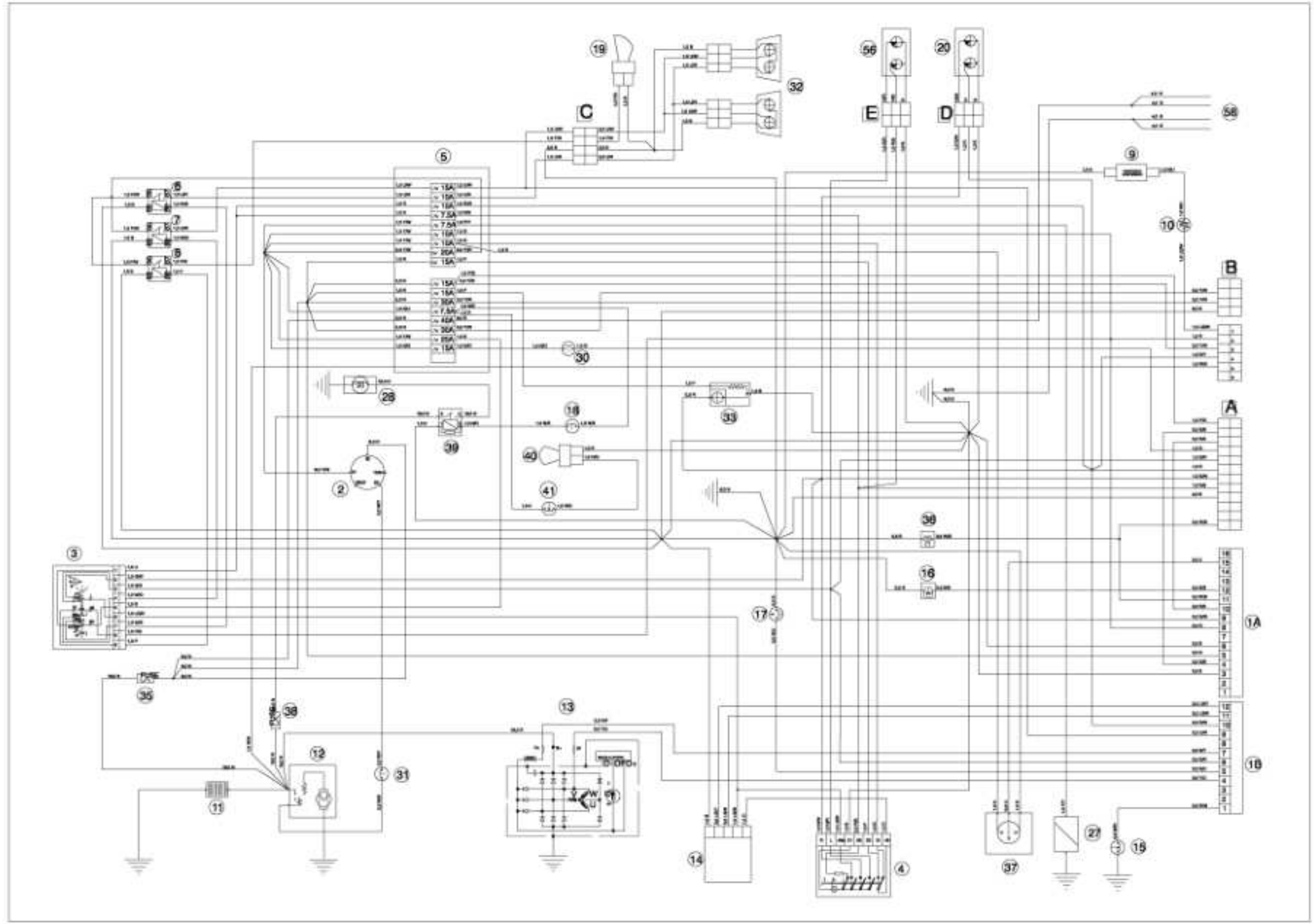
5

a 2WD models
A Steering to the right
B Steering to the left

Oil in intake line
Oil in delivery line from pump
Oil in delivery line to hydraulic cylinder
Oil returning to reservoir

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

GENERAL DIAGRAM - CENTER (WITH CAB)



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