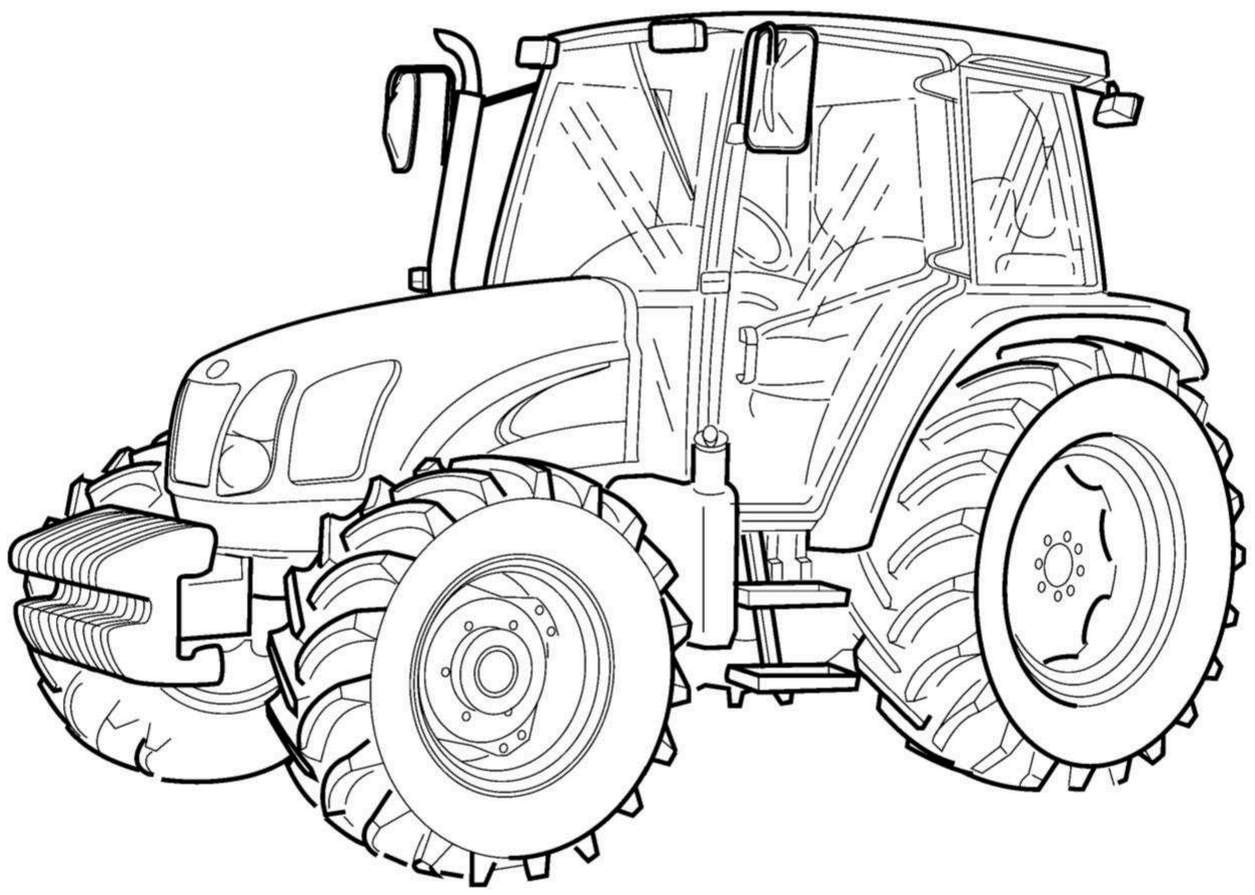
SERVICE MANUAL

T5030, T5040, T5050
T5060, T5070
Tractor



Print No. 87679925A

NEW HOLLAND
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CONTENTS VOLUME 1

	Page	Date
00 - GENERAL GUIDELINES		
General instructions	1-2	11-07
Safety regulations	3-4-5	11-07
Tractor refuelling	6	02-10
10 - ENGINE		
Summary	1	02-10
General specifications	2÷4	02-10
Fuel system data	5	02-10
Torque Specifications	6÷8	11-07
Special Tools	9	11-07
View of 4-cylinder engine	10	11-07
Fault diagnosis	11÷14	11-07
Engine removal-installation	15÷32	11-07
Replacing crankshaft front seal	33÷35	11-07
Replacing crankshaft rear seal	36÷38	11-07
Adjusting tappet, valve and rocker arm clearance	39÷41	11-07
Removal-Installation - injectors	42÷44	11-07
Removal - Installation - Bosch injection pump	45÷49	11-07
Injection pump, renewal and checking timing	50÷54	02-10
Bosch injection pump - air bleeding	54	11-07
Removal-Installation - coolant pump	55-56	11-07
Removal-Installation - thermostat valve	57-58	11-07
Removal-Installation - radiator	59÷65	11-07
Coolant pump drive belt adjustment	66÷67	11-07
18 - CLUTCH		
Summary	1	11-07
Main Data	2	11-07
Torque Specifications	3	11-07
Special Tools	3	11-07
Sections	4-5	02-10
Fault diagnosis	6	11-07
Checks and measurements - clutch	7-8	11-07
Adjustments - clutch pedal	9	02-08
Removal-Installation - clutch	10÷12	11-07
Clutch Overhaul	13÷16	11-07
Adjustments - clutch disengagement levers	17	11-07
21 - TRANSMISSIONS		
CHAPTER 1 - Reverser		
Summary	1	11-07
Main Data	2	11-07
Transmission diagrams	3	11-07
Torque Specifications	4	11-07
Special Tools	5	11-07
Sections	5-6	11-07
Description and operation	7	11-07
Fault diagnosis	7-8	11-07
Disassembly-Assembly - reverser-clutch casing	8÷12	11-07
Transmission longitudinal cutaway section view	13-14	11-07
CHAPTER 2 - Reverser and creeper unit		
Summary	1	11-07
Main Data	2	11-07
Transmission diagrams	3	11-07
Tightening torque	4	11-07
Special Tools	5÷6	11-07
Sections	7-8	11-07
Description and operation	9	11-07
Fault diagnosis	9	11-07
Replacing clutch casing-reverser and creeper unit	10÷15	11-07
End float adjustment between shaft and support	16÷17	11-07
Transmission longitudinal cutaway section view	18	11-07
CHAPTER 3 - Power Shuttle Transmission (12X12)		
Summary	1	11-07
Main Data	2-3	11-07

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	Page	Date
Transmission diagrams ...	4	11-07
Tightening torque	5-6	11-07
Special Tools	7-8	11-07
Sections	9+10	11-07
Description and operation .	11-12	11-07
Hydraulics	13+16	11-07
Range and gear lever position sensor adjustment	17-18	11-07
Disassembly-Assembly - clutch casing with Power Shuttle units	19+23	11-07
Disassembly-Assembly - driving shaft	24-25	11-07
Disassembly-Assembly - clutch (A) and (B)	25+32	11-07
Calibrations	33	11-07
HH MENU access	33-34	11-07
Clutch calibration H1 menu transmission	35+37	02-10
Transmission fault codes .	38+40	02-10
Transmission longitudinal cutaway section view	41	11-07

CHAPTER 4 - Power Shuttle transmission with dual command (2 speed power shift) function

Summary	1	11-07
Main Data	2-3	11-07
Transmission diagrams ...	4	11-07
Tightening torque	5-6	11-07
Special Tools	7-8	11-07
Sections	9+11	11-07
Description and operation .	12+18	11-07
Range and gear lever position sensor adjustment ...	19-20	11-07
Removal-Installation - clutch casing with Power Shuttle and Dual Command (2 Speed Power Shift) units	21+29	11-07
Disassembly-Assembly - clutch casing with Power Shuttle and Dual Command (2 Speed Power Shift) units	30+36	11-07
Disassembly-Assembly - driving shaft	37-38	11-07
Disassembly-Assembly - driven shaft	39+41	11-07
Disassembly-Assembly - clutch (A) and (B)	42+47	11-07
Calibrations	48	11-07
HH MENU access	48-49	11-07
Clutch calibration H1 menu transmission	50+52	02-10
Transmission fault codes .	53+55	02-10
Transmission longitudinal cutaway section view	56	11-07

CHAPTER 5 - Power Shuttle transmission with creeper unit - 20X20 version

Summary	1	02-10
Main Data	2-3	02-10
Transmission diagrams ...	4	02-10
Tightening torque	5-6	02-10
Special Tools	7-8	02-10
Sections	9+11	02-10
Description and operation .	12	02-10
Creeper unit troubleshooting	13	02-10
Disassembly-Assembly - clutch casing with Power Shuttle and creeper units .	14+17	02-10
Calibrations	18	02-10
HH MENU access	18-19	02-10
Clutch calibration H1 menu transmission	20+22	02-10
Transmission fault codes .	23+25	02-10

23 - DRIVE LINES

Summary	1	11-07
Main Data	2	11-07
Torque Specifications	3	11-07
Special Tools	3	11-07
Sections	4	11-07
Description and operation .	5	11-07
Fault diagnosis	6	11-07
Removal-Installation - services control valve	7+9	11-07
Disassembly-Assembly - services control valve	10+11	11-07
Removal-Installation - drive gear casing	12+16	11-07

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	Page	Date
Disassembly-Assembly - drive gear casing	17÷20	11-07

25 - FRONT AXLE MECHANICAL TRANSMISSION

Summary	1	11-07
Main Data	2÷4	11-07
Torque Specifications	5÷7	11-07
Special Tools	8-9	02-08
Sections	10÷14	11-07
Description and operation	15-16	11-07
Fault diagnosis	17	11-07
Rules for correctly fitting the axle support to the engine	18	11-07
Removal-Installation - front axle	19÷22	11-07
Disassembly-Assembly - front axle	23÷31	11-07
Overhaul - front differential	32	11-07
Overhaul - front axle differential with LIM-SLIP	33-34	11-07
Overhaul - differential lock unit	35-36	11-07
Disassembly-Assembly - front epicyclic final drive without brake	37÷40	11-07
Disassembly-Assembly - front epicyclic final drive with brake	41÷43	11-07
Replacing wheel hub seal with brake	44	11-07
Stub axle adjustments	45-46	11-07
Adjustments - bevel drive	47÷51	11-07

27 - REAR MECHANICAL TRANSMISSION

Summary	1	11-07
Main Data	2÷4	02-10
Torque Specifications	5-6	11-07
Special Tools	7÷11	11-07
Sections	12÷17	02-10
Description and operation	18	02-10
Fault diagnosis	19-20	11-07
Removal-Installation - transmission-gearbox casing	21÷34	11-07
Disassembly-Assembly - transmission-gearbox casing	35÷42	11-07
Gearbox driving shaft end float adjustment	43	11-07
Adjustments - differential lock engagement sleeve position	44	11-07
Determining the bevel pinion positioning adjustment ring	45-46	11-07
Tapered roller bearings adjustment for pinion shaft	47	11-07
Adjusting the bevel crown wheel bearings and checking the clearance between the sides of the bevel drive teeth	48÷50	02-10
Adjusting the preloading on the bevel drive bearings	51-52	02-10
Differential pinion and side gear backlash adjustment	53-54	02-10
Differential lock pedal travel adjustment	55	11-07
Removal-Installation - final drive	56÷59	11-07
Disassembly-Assembly - epicyclic final drive	59	11-07
Disassembly-Assembly - drive wheel shaft	60-61	11-07

31 - POWER TAKE-OFF

CHAPTER 1 - Mechanical power take-off

Summary	1	11-07
Main Data	2-3	11-07
Special Tools	3	11-07
Torque Specifications	4	11-07
Sections	5÷9	11-07
Description and operation	10-11	11-07
Fault diagnosis	11	11-07
Fitting cooler with mechanical transmission and power take-off	12-13	11-07
Cooling system description and operation	14	11-07
Removal-Installation - power take-off	15÷17	11-07

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Sectional views of 540 - 750 - 1000 rpm PTO
(see page 8)

1. Driven shaft locking ring nut.
2. 750 rpm PTO coupling sleeve.
3. 750 rpm rear driven gear (z 54).
4. Flywheel drive shaft.
5. Gearbox mid gear drive shaft (synchronized PTO, see sect. 31 Chap. 1, page 9); front driving gear 540 rpm (z 15), rear driving gear 1000 rpm (z 23).
6. 750 rpm driving gears (z 19).
7. Rear bearing support.
8. Oil delivery manifold on hydraulic cylinder (9).
9. Clutch engagement hydraulic cylinder (drive from flywheel).
10. Clutch disk disengagement spring (11 and 12).
11. Clutch driving disk.
12. Clutch driven disk.
13. Clutch rear bearing.
14. Shaft guards (15).
15. PTO grooved terminal.
16. PTO output shaft retaining circlip (1).
17. Seal.
18. Driven gear front and central bushings (19).
19. 1000 rpm front driven gear (z52) and 540 rpm central driven gear (z 61).
20. PTO unit retaining bolt.
21. Driven gear rear bushing (3).
22. Driven shaft.
23. Rod stop cap 25 (2).
24. 540/1000 rpm engagement fork.
25. Fork sliding rod.
26. Speed selection lever pin.
27. Fork guide pin (24).
28. Speed selection internal plate.
29. Plate status cap (28).
30. Fork guide pin (31).
31. 750 rpm engagement fork.
32. speed selection external lever.

(1) After installing the circlip in its seat, turn it half way round until it is opposite the flat surface of the PTO output shaft in order to lock it.

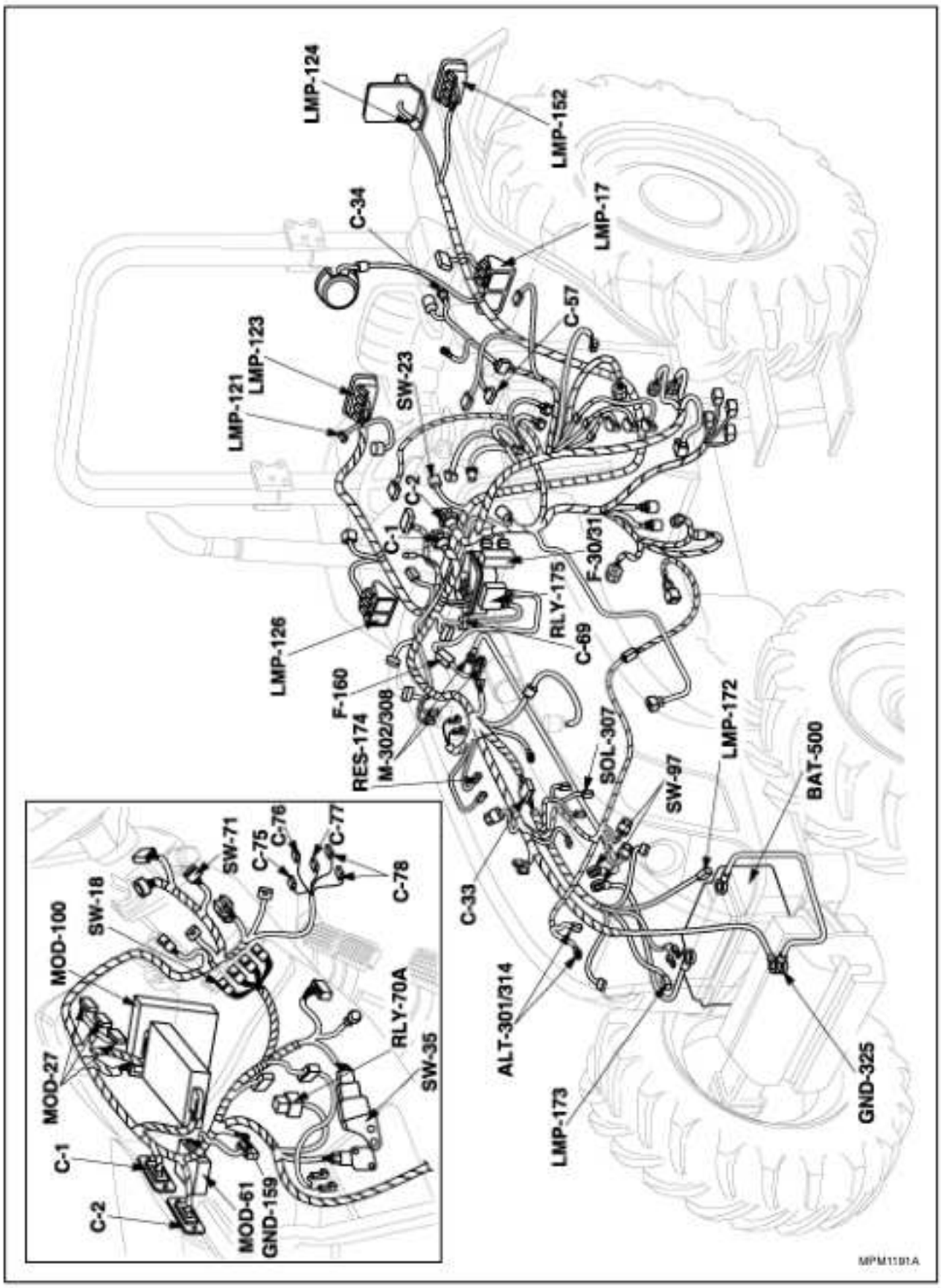
(2) Before screwing the cap onto the support, apply a few drops of Loctite 242 on its thread, then screw on fully but without tightening it.

Sectional views of PTO clutch unit
(see page 12)

A. Version with Power Shuttle.
B. Version without Power Shuttle.
1. Clutch.
2. Restrictor.
3. Oil drain valve.
4. Lubrication control valve.
5. Spring for valve (4).
6. Lubrication pressure control valve (version without power shuttle).
7. Lubrication oil inlet union.
8. Lubrication pressure control valve (version without power shuttle).
9. Spring for valve (8).
10. Plug (version with power shuttle).
11. Restrictor.
12. Spring and accumulator bottom).
13. Accumulator.
14. Power take-off clutch brake.
15. Pressurized oil inlet union.

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WIRING DIAGRAMS 5 - 6 - 7 - 8



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ERROR CODE 14093 - SEAT SWITCH SIGNAL SHORT TO + 12V OR OPEN CIRCUIT

Possible fault modes:

1. Faulty connectors
2. Operator present sensor faulty
3. Wiring fault
4. Faulty analog-digital instrument cluster (ADIC)

Remedies:

NOTE: *When the cause of the fault code has been rectified, clear the fault code and test the system for normal operation.*

1. Check the operator present switch **SW-59**, in **H9** channel **26**.

   A. With the driver seated the display must show a value of between 292 ÷ 450, with the driver standing, the display will show a value of between 450 ÷ 585. If the values displayed are not okay, continue to step 2.

   B. If the values displayed are okay, while still in H9, ch. 26 wiggle the harness and the connectors of the instrument cluster (ADIC) **MOD-27 (1)** and **MOD-27 (3)** and of the operator present switch **SW-59** to check for an intermittent circuit. Channel 26 values will change if an intermittent circuit is indicated; Repair or replace as necessary.

2. Check the operator present switch.

   A. Disconnect the connector **SW-59**. Check the resistance between:
   SW-59 pin **1** and pin **2**
   With the driver seated the resistance must be approximately 500 ohms, with the driver standing it must be approximately 2000 ohms. If the resistances indicated are not okay, replace the operator present switch.

   B. If the switch is okay, continue to step 3.

3. Check for an open circuit.

   A. Disconnect the connectors **MOD-27 (1)** and **MOD-27 (3)** Check between:
   SW-59 pin **1**, wire 1.0 **(VN)** and **MOD-27 (3)** pin **21** wire 1.0 **(VN).**
   SW-59 pin **2**, wire 1.0 **(NG)** and **MOD-27 (1)** pin **22**, wire 1.0 **(NG)**
   If an open circuit is indicated, repair or replace the harness as required.

   B. If an open circuit is not indicate, continue to step 4.

4. Check there is a short to positive.

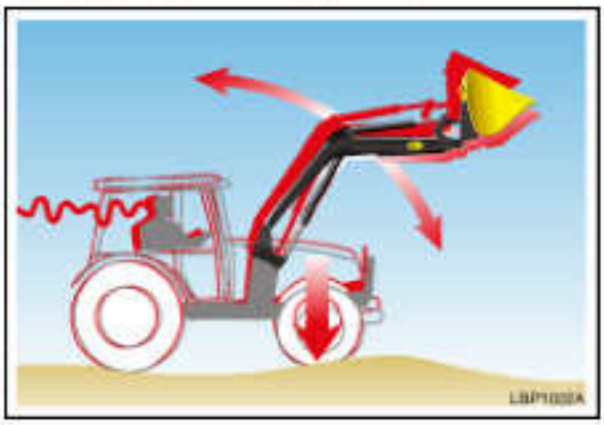
   A. Turn the ignition key switch 'ON'. Measure the voltage between the connector:
   SW-59 pin **1**, wire 1.0 **(VN)** and **ground**
   If a short to positive is indicated, repair or replace the harness as required.

   B. If the harness is okay, download the correct level software. If the fault occurs again, remove and replace the control panel (ADIC).

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SMOOTH RIDE CONTROL protects your tractor and increases the driving comfort.

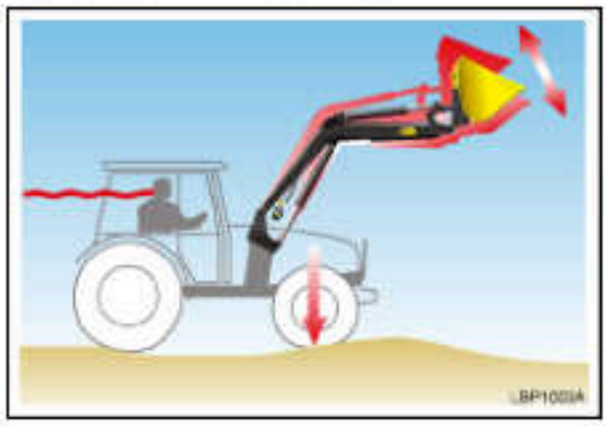
Without SMOOTH RIDE CONTROL



64

When a tractor is fitted with a conventional front loader, i.e. without SMOOTH RIDE CONTROL, the jolting that occurs when travelling at high speed over rough terrain is further accentuated by the front loader. This effect can only be reduced by the flexing action of the tires if the tractor is fitted with rigid axles. Both tractor and driver are heavily stressed as a result of the poor travelling characteristics.

With SMOOTH RIDE CONTROL



65

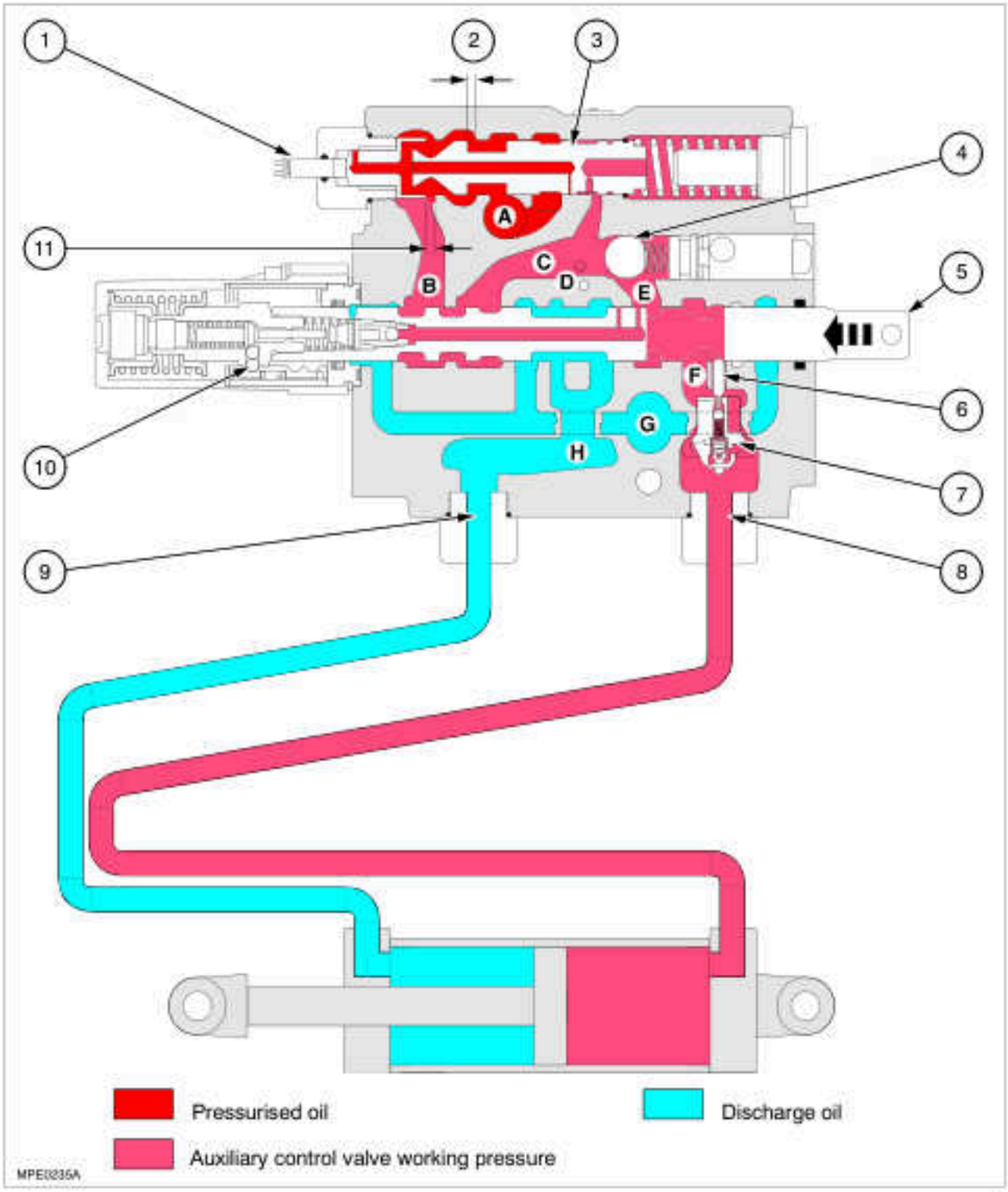
If fitted with the SMOOTH RIDE CONTROL system, the front loader effectively cushions the movement of the tractor under the same conditions. Sitting relaxed in his cab, the driver securely steers the tractor along the road. Shocks acting on the front loader are smoothly compensated by the two pneumatic pressure accumulators - the connection between tractor and front loader is no longer rigid but flexible.

General instructions

When the loader unit is fitted with SMOOTH RIDE CONTROL please notice the following instructions:

- It is preferable to use SMOOTH RIDE CONTROL when operating in long term road driving and bad road conditions (cock valve open). As shown in principal on the picture right the impact load of the liftarm will be damped through the accumulator.
- When loading with short distances to drive, such as earthwork, the SMOOTH RIDE CONTROL cock valve should be closed between the lift side of the liftarm ram and the accumulator. At maximum load of front loader the permanently changing use are disadvantages for the membrane of the accumulator. Further wise, a certain "swinging effect" can occur through the accumulator. The cock valve should be also closed when working with palette forks to refuse any "swinging effects" when lifting or lowering of palette.

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9

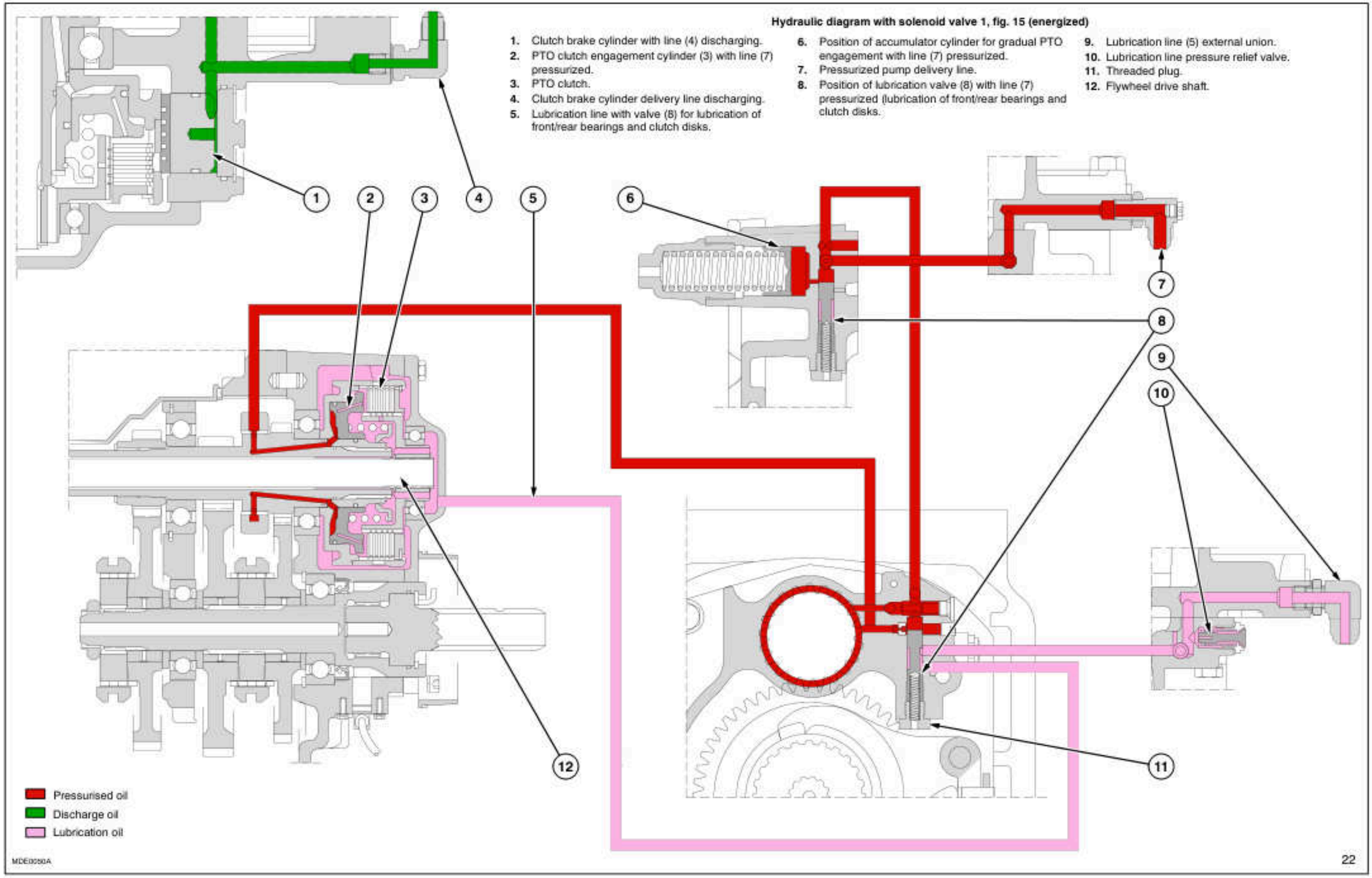
Auxiliary control valve operation - Lifting (cylinder extension)

1. Flow control valve adjuster
2. Metering Land
3. Flow regulator
4. Load check valve
5. Control pin
6. Roll Pin
7. Lock Valve
8. Lifting duct (cylinder extension)
9. Lowering duct (cylinder retraction)
10. Centering pin and release mechanism
11. Manually adjusted flow rate throttle

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Hydraulic diagram with solenoid valve 1, fig. 15 (energized)

1. Clutch brake cylinder with line (4) discharging.
2. PTO clutch engagement cylinder (3) with line (7) pressurized.
3. PTO clutch.
4. Clutch brake cylinder delivery line discharging.
5. Lubrication line with valve (8) for lubrication of front/rear bearings and clutch disks.
6. Position of accumulator cylinder for gradual PTO engagement with line (7) pressurized.
7. Pressurized pump delivery line.
8. Position of lubrication valve (8) with line (7) pressurized (lubrication of front/rear bearings and clutch disks.
9. Lubrication line (5) external union.
10. Lubrication line pressure relief valve.
11. Threaded plug.
12. Flywheel drive shaft.



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