SERVICE MANUAL

TS100A / TS110A / TS115A / TS125A
TS130A / TS135A

Print No. 6045515107

NEW HOLLAND
AGRICULTURE

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Repair Manual – TS-A Plus and TS-A Delta Series Tractors

604.55.151.07 (Includes 604.55.151.04 + Supps .05 & .06)

CONTENTS - VOLUME 1

GENERAL — **SECTION 00**

General Information — **Chapter 1**

Section	Description	Page
00 000	General Instructions	2
	Health and Safety	5
	Ecology and the Environment	13
	Product Identification	14
	International Symbols	17
	General Dimensions	18
	Vehicle Weights	22
	Capacities	24
	General Hardware Tightening Torques	25

SEPARATING THE TRACTOR — **SECTION 01**

Separating front axle and front support from the engine — **Chapter 1**

Section	Description	Page
	Torque Values	2
	Special Tools	2
10 001	Separating Front Axle and Front Support from the Engine	3
10 001	Installing Front Axle and Front Support to the Engine	9
	Front Axle to Front Support Shim Calculation	14

Separating Engine and Front Support from the Transmission — **Chapter 2**

Section	Description	Page
	Torque Values	2
	Special Tools	2
	Separating Engine and Front Support from the Transmission	4
	Installing Engine and Front Support to the Transmission	11

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Contents Continued:

Separating Transmission, Engine and Front Support from the Rear Axle — Chapter 3

Section	Description	Page
	Torque Values	2
	Special Tools	2
	Separating Transmission, Engine and Front Support from the Rear Axle	3
	Installing Transmission, Engine and Front Support to the Rear Axle	8

Engine Removal — Chapter 4

Section	Description	Page
	Torque Values	2
	Special Tools	2
	Engine Removal	3
	Engine Installation	12

Transmission Removal — Chapter 5

Section	Description	Page
	Torque Values	2
	Special Tools	2
	Transmission Removal	3
	Transmission Installation	6

Cab Removal — Chapter 6

Section	Description	Page
	Torque Values (Tractors with Cab Suspension)	2
	Torque Values (Tractors with Standard Cab)	3
	Special Tools	3
90 150	Cab Removal	4
90 150	Cab Installation	13

ENGINE — SECTION 10

Engine - 4 Cylinder Electronic — Chapter 1

Section	Description	Page
10 000	General specifications	2
	Assembly Clearances - Data	4
	Torque wrench settings	7
	Tools	13
	Cooling system	14
	Lubrication system	15
	Lubrication system components	16
	Engine overhaul	17

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Contents Continued:

Bushings 29
Assembly on the workbench 30
Fitting engine components 35
Checks, dimensions and repairs (cylinder liner block) 52
Checks, dimensions and repairs – crankshaft, bearings 54
Timing system 59
Bushings 60
Checks, dimensions and repairs – pistons 61
Connecting rod – piston assembly 70
Valves 72
Valve guides 73
Valve seats 73
Valve springs 75
Fitting the cylinder head 76
Fuel supply gear pump 79
CP3 high-pressure pump 80
Rail (pressure accumulator) 85
Pressure relief valve 86
Electro-injector 87
Pressure limiter for fuel return 88

Engine - 6 Cylinder Electronic — Chapter 2

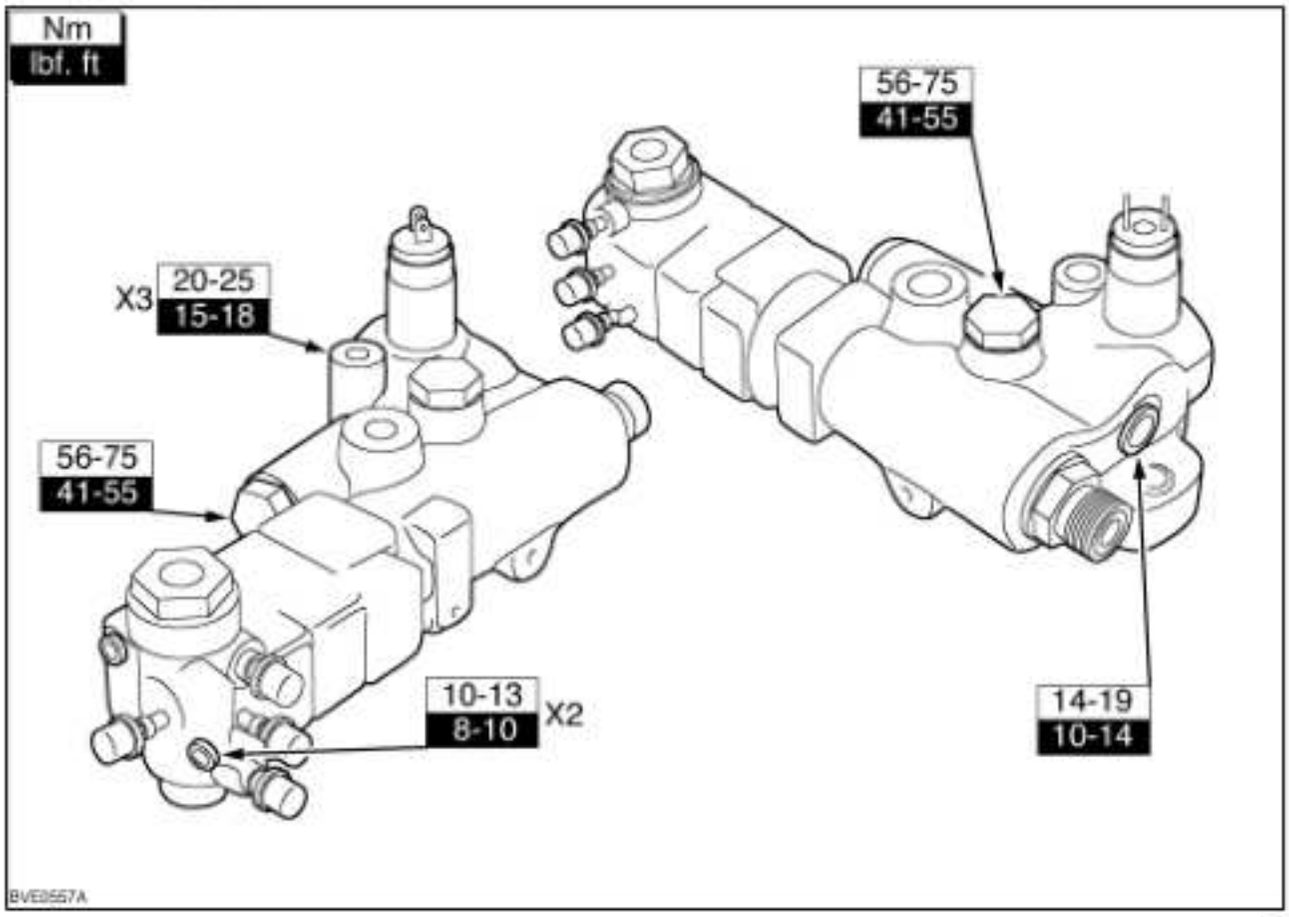
Section	Description	Page
10 000	General specifications	2
	Assembly Clearances – Data	4
	Torque wrench settings	8
	Tools	13
	Cooling system	14
	Lubrication system	15
	Camshaft timing operations	16
	Fitting the cylinder head	17
	Cylinder block repairs	19
	Crankshaft	21
	Timing system	24
	Bushings	25
	Checks, dimensions – connecting rod-piston assembly	26
	Valves	28
	Valve guides	28
	Valve seats	28
	Spindle – Rocker arms	30
	Rail (pressure accumulator)	31

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SPECIFICATIONS

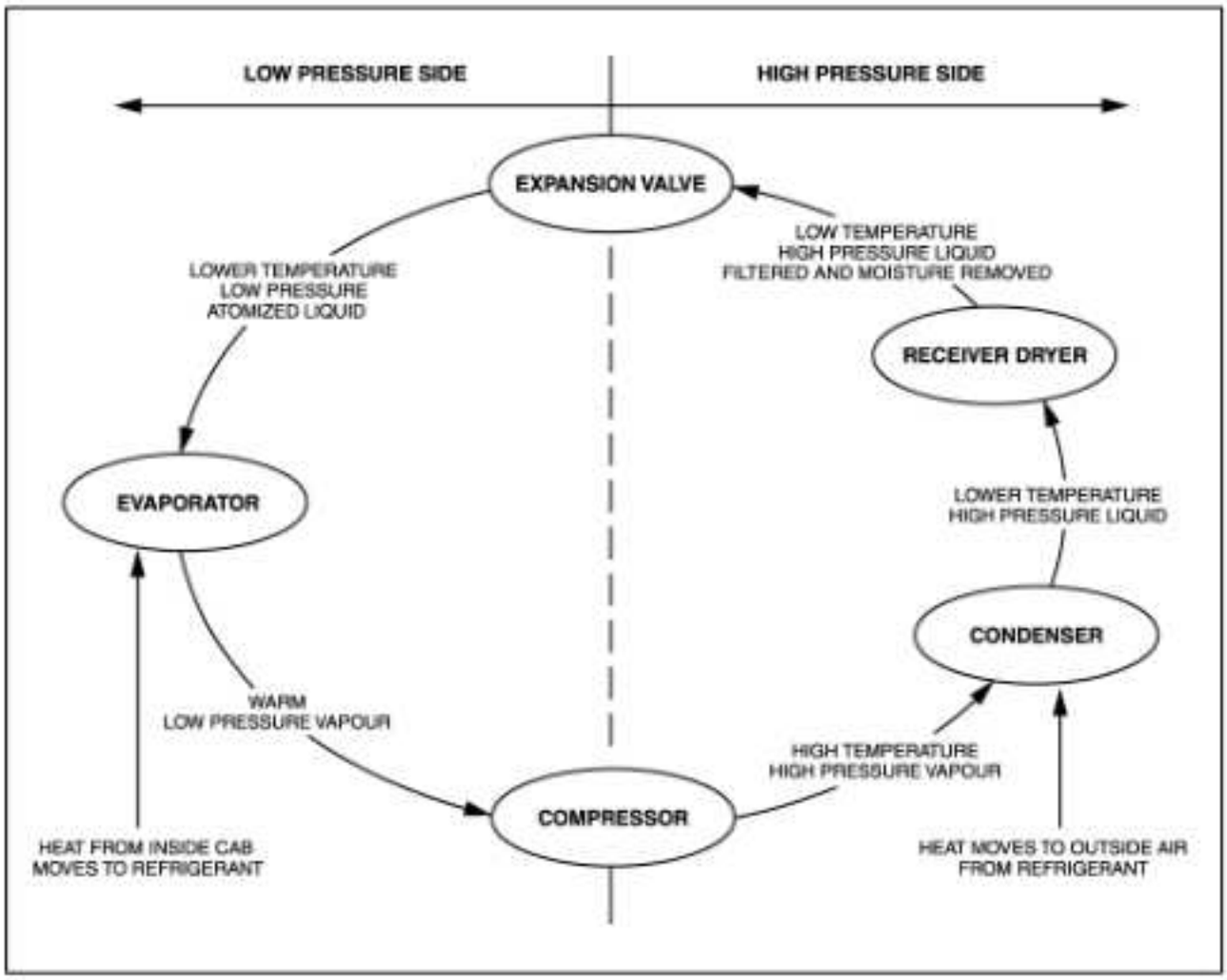
Maximum Trailer Brake Pressure	bar	150
Italian Trailer Brakes		
Trailer Brake Disengagement Pressure	bar	10-12
Brake Reservoir Oil		Ambra Brake LHM

TORQUE VALUES



1

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6

Air Conditioning Flow Diagram

Figure 6, shows in schematic form the flow of refrigerant through the five major components of an air conditioning system. Refer to, Figure 6, for the location of these components on the tractor.

Refrigerant is drawn into the compressor as a cool, low pressure vapor which is compressed and then pumped out as a hot, high pressure vapor to the condenser.

As the hot, high pressure vapor passes through the condenser core it gives off heat to the cooler outside air, being drawn past the fins by the engine cooling fan.

By giving off heat to the outside air, the vapor is condensed to a liquid which moves under high pressure to the receiver dryer where it is stored until released to the evaporator by the temperature sensing expansion valve.

As liquid refrigerant passes through the metered orifice in the expansion valve the refrigerant changes from a high pressure liquid to a low pressure atomized liquid with a lower temperature.

This low pressure, low temperature, atomized liquid enters the evaporator coils and absorbs heat from the cab warm air blown across the coils and fins by the cab blower motor. The refrigerant now changes from a cold low pressure atomized liquid to a warm low pressure vapor and leaves the evaporator outlet, moving to the suction (low pressure) side of the compressor to repeat the cycle.

As this heat loss is taking place, moisture (humidity) in the cab air will condense on the outside of the evaporator and drain off as water through the drain hoses attached to the evaporator drain pan, thereby reducing the humidity level of the cab.

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ERROR CODE 4117 – REMOTE NO.2 SWITCHED TO FAILSAFE

Cause:

Major fault detected within the EHR system. The EHR system is disabled until keystart OFF and fault cleared.

Possible failure modes:

1. Other EHR error code(s) detected
2. Faulty EHR valve

Solution:

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

1. Check for other EHR error code(s).

   A. Make a note of the error code(s), clear the error code(s) and test the system for normal operation. If any other error codes are still displayed, continue to these tests.

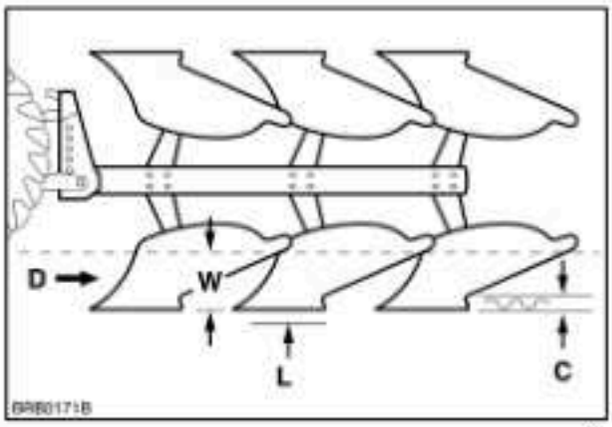
   B. If only error code 4117 is still displayed, download the correct level of software and configure the EHR valve. If the fault re–occurs, remove, replace, and configure the EHR valve.

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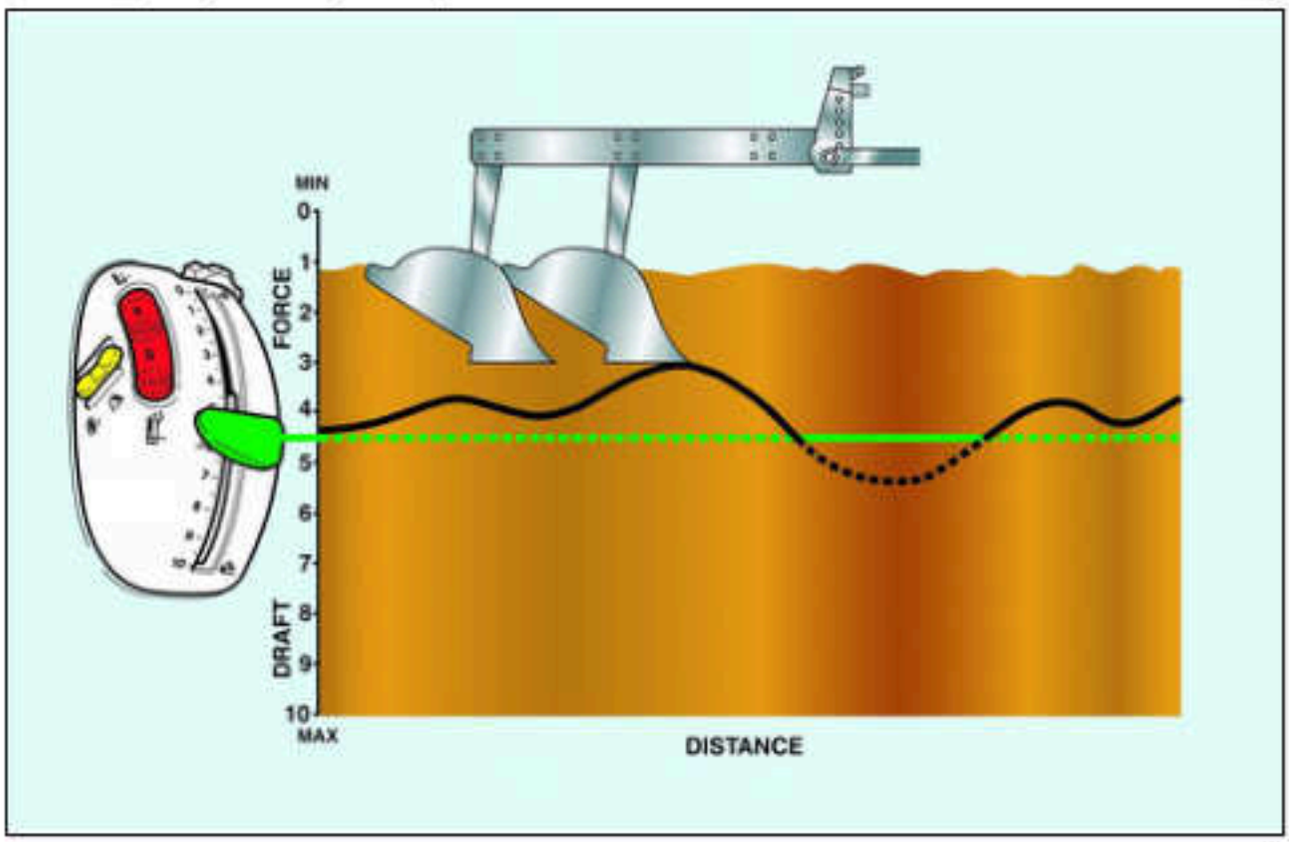
OPERATION OF DRAFT CONTROL

In draft control the working position of the lift arms is affected by the lift arm position control lever, draft loading control, draft sensitivity and slip limit control. All these controls interact with each other to achieve the desired operation of the hydraulic lift.

- **D** Draft Load on Implement
- **W** Working Depth (Set by Draft Loading Control)
- **L** Lower Limit (Set By Lift Arm Position Control Lever)
- **C** Correction Band (Set by Sensitivity Control)



21

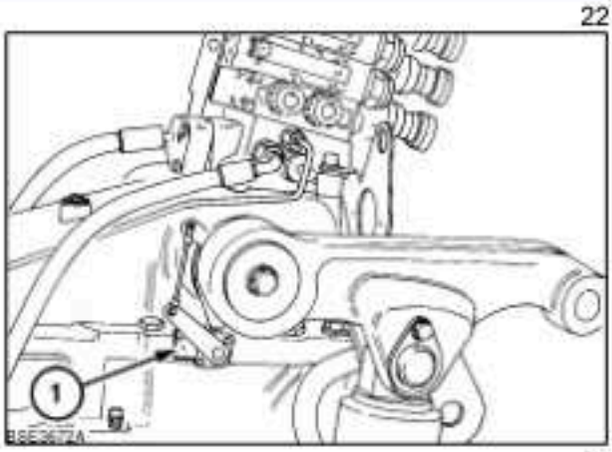


22

The lower limit working depth of an implement in the soil is controlled by the lift arm position control lever.

Irrespective of any draft loading applied to the implement the maximum depth of the implement will never exceed this setting.

The depth of the implement is sensed using the lift arm position control potentiometer (1) which sends a signal to the microprocessor to turn off power to the lower solenoid of the hydraulic control valve when maximum depth has been reached.



23

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

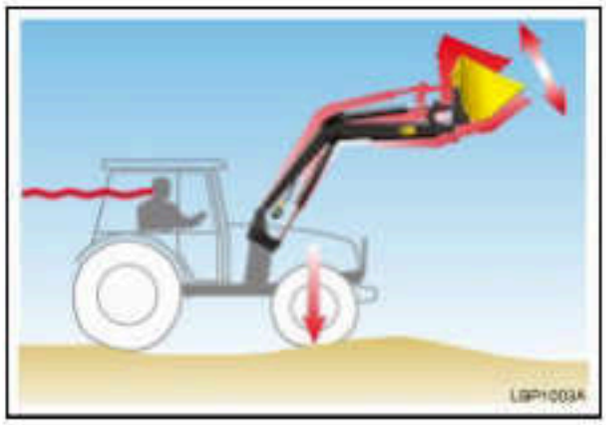
Without SMOOTH RIDE CONTROL



36

When a tractor fitted with a conventional frontloader, i.e. without the SMOOTH RIDE CONTROL system, travels at high speed on a bumpy lane, the resulting hunting effect will still be increased by the frontloader. 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



37

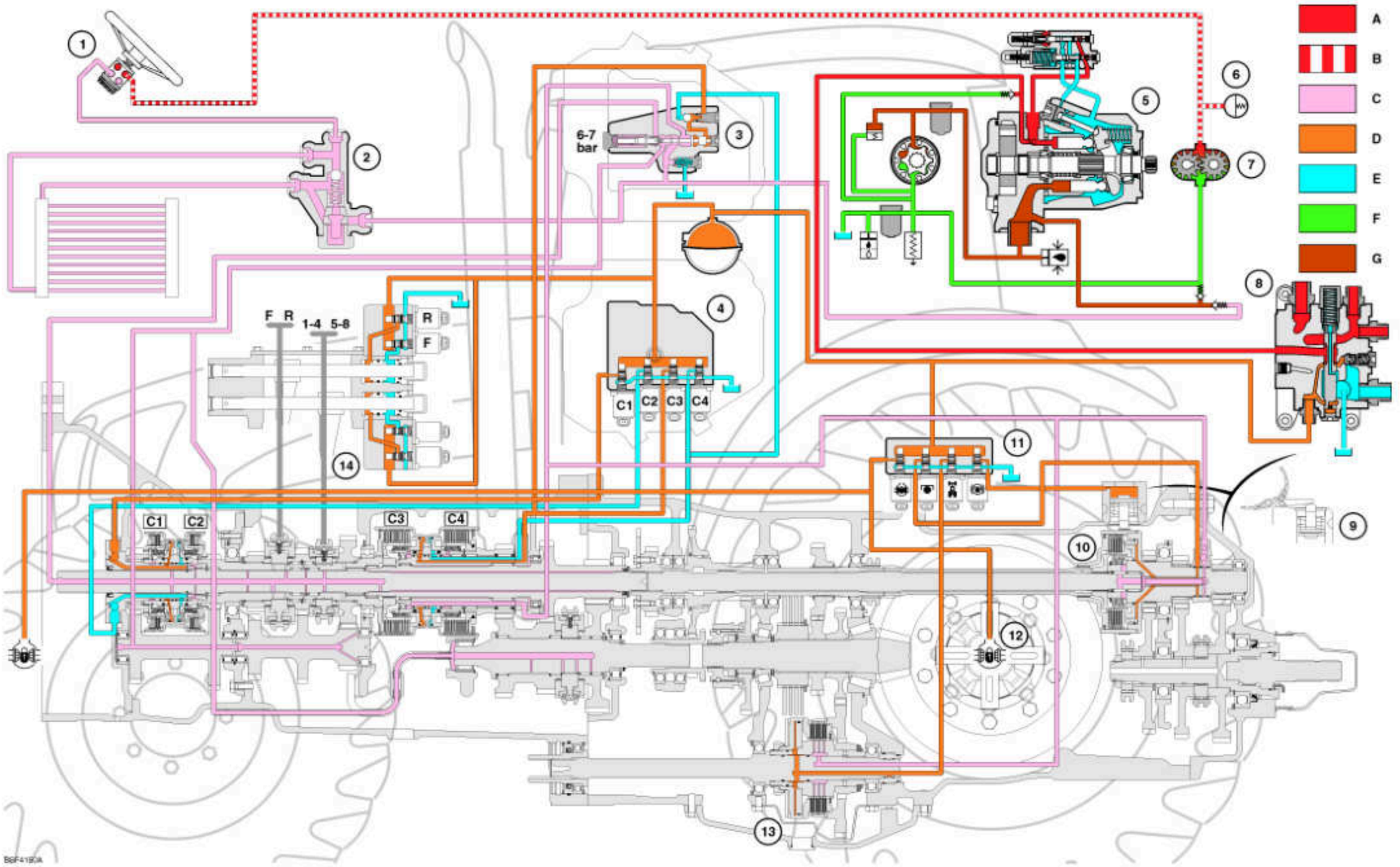
If fitted with the SMOOTH RIDE CONTROL system, the frontloader effectively cushions the movement of the tractor under the same conditions. Sitting relaxed in his cab, the driver securely steers the tractor along the road. Shocks acting on the frontloader are smoothly compensated by the two pneumatic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

General instruction

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, i.e. earthwork the cock valve of SMOOTH RIDE CONTROL should be closed between the lift side of the liftarm ram and the accumulator. At maximum load of frontloader 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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Low Pressure Hydraulic Circuit - 16 x 16 Models

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