NEW HOLLAND
TS90
TS100
TS110
TS120

12X12
24X24

OPERATOR'S MANUAL



NEW HOLLAND

MidWestTech | New Holland TS90, TS100, TS110, TS120 12x12, 24x24 Tractor Operator's Manual | Publication 73400916

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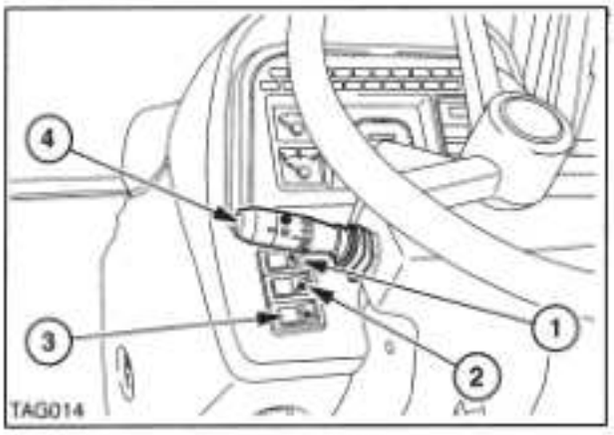
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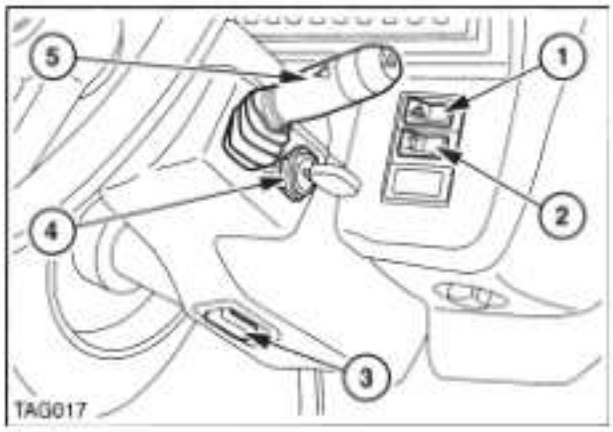
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INSTRUMENTS CONSOLE CONTROLS



6 Instruments console - left side

1. Front roof working lights switch
2. Lower working lights switch (when fitted)
3. Rear working lights switch (when fitted)
4. Multi-function Lever



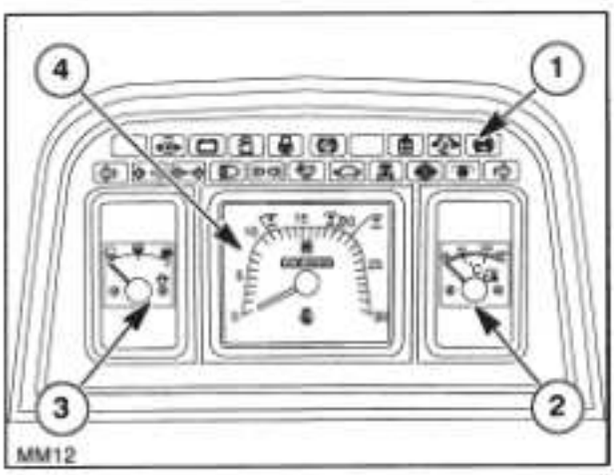
7 Instruments console - right side

1. Emergency signaling switch
2. Roof turning signal switch (when mounted)*
3. Telescopic lock/steering column tilt fixing lever
4. Starting key
5. Windscreen wiper/washer command lever (when mounted)

* Tractors without cab may have the creeper switch installed in this position.

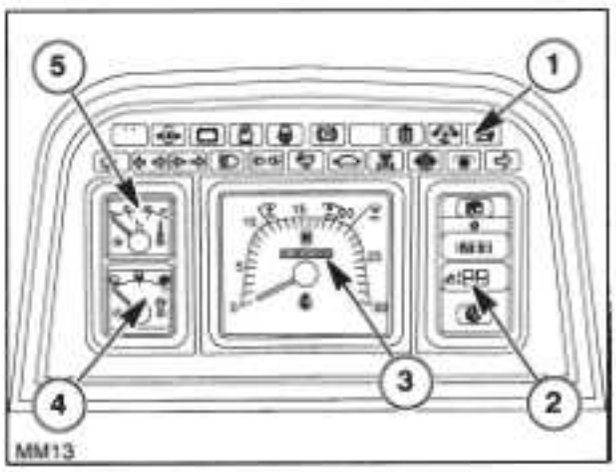
For complete instructions, see pages 17 to 19 and 25 to 27, in Section 2.

INSTRUMENT PANELS



8 Analogue instrument panel

1. Warning lights and gauges
2. Engine Cooling System Temperature Gauge
3. Fuel Gauge
4. Hour meter



9 Analogue/digital instruments panel

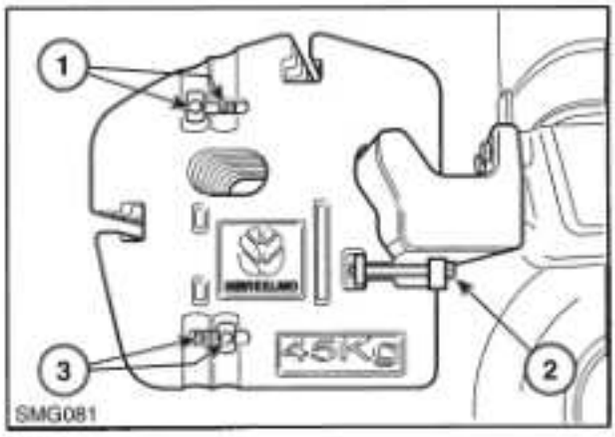
1. Warning lights and gauges
2. Liquid Crystal Display
3. Hour meter
4. Fuel Gauge
5. Engine Cooling System Temperature Gauge

For complete instructions, see pages 20 to 24, in Section 2.

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45 kg front weights - Figure 104

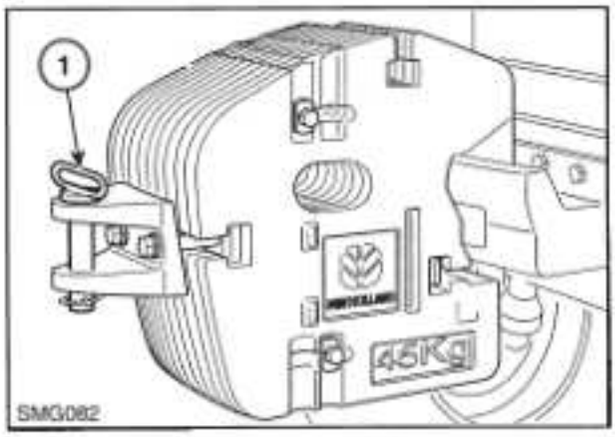
The 45 kg blade type front weights are available in sets of 6, and, together with the weight support weigh 360 kg. Alternatively, these weights are available in a 10-piece set, weighing 540 kg or, only for 4WD models, as an 18-piece set weighing 900 kg, including the weight support. The weights are held by long bolts (1) and (3) and fixed to the support by the bolts (2).



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The weights may be removed as a complete set with the aid of a lifting device. Loosen the fixing bolts (2) and slide the fixing set out of the weights package. Passing a bar through the central hole, the complete set may now be removed with the help of a lifting device.

As an alternative, the weights can be removed individually, after loosening the fixing bolts (2) and removing the four long bolts (1) and (3). The tow pin (3) is kept in place by an 'R' clamp that goes through the center of the pin.



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WARNING: *The tractor should not be used without the four long bolts and fixing bolts in place and tightened at a torque of 169 Nm (125 lbf.ft). Check again the torque after 50 hours of work.*

The front support has a towing device. However, when the weights are installed, a pin (1) Figure 105, is available to be installed in the front weights package.

If the front weights or front support are not fitted, there is a pin for towing that can be bolted directly to the front axle. See Figure 103.

LIQUID BALLAST

Filling the front and rear tires with a liquid ballast is a convenient method of increasing weight. The use of a solution of calcium chloride and water is recommended. This solution ensures a low freezing point and a higher density than pure water.

NOTE: *The liquid ballast in the front tires is not recommended for 2WD tractors.*

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LUBRICATION AND MAINTENANCE CHART

INTERVAL OF SERVICE	OPER NR.	MAINTENANCE REQUIREMENTS	Check	Clean	Lubricate	Change	Adjust	Drain	Wash
Warning light on See pp. 9 to 11.	1	Clean outer element of the engine filter		X					
	2	Pre-filter		X					
Every 10 hours or daily See pp. 12 to 14.	3	Engine oil level	X				X		
	4	Radiator, oil cooler and condenser (if fitted)	X	X					
	5	Engine cooling fluid level	X				X		
	6	windscreen washer reservoir	X						
	7	Cab air filters (if fitted)		X					
	8	Brake and clutch reservoir fluid level	X				X		
Every 50 hours. See pp. 15 to 22.	9	Wheels and tires	X				X		
	10	Water separator and fuel filter						X	
	11	Rear axle/transmission oil level	X				X		
	12	All lube points			X				
	#14	Engine oil and filter				X			
	15	Front axle sleeve bearing			X				
	16	Front axle differential oil level (4WD)	X				X		
Every 300 hours. See pp. 23 to 29.	17	Front axle hubs oil level (4WD)	X				X		
	18	Safety arch or cab bolts	X				X		
	19	Transmission filter (only 24 x 24)				X			
	20	Service brake	X				X		
	21	Parking brake	X				X		
	22	Cab air filters (if fitted)							X
	23	Hydraulic oil filter(s).				X			
	24	Outer element of the engine air filter				X			
Every 600 hours. See pp. 30 to 33.	25	Front axle hubs (2WD)	X	X	X		X		
	26	Engine valve clearance	X						
	27	Water separator and fuel filter		X		X			
	28	Air conditioner and drain hoses (if fitted)		X					
	29	Fuel injectors	X	X			X		
	30	Transmission/rear axle oil				X			
	31	Front axle/hubs oil (4WD)				X			
Every 1200 hours or annually See pp. 34 to 38.	32	Cab air filters (if fitted)				X			
	33	Batteries electrolyte level	X				X		
		(Only for tractors operating in temperate climates)							
	+34	Clutch calibration (16 x 16)					X		
	35	Filling time calibration (16 x 16)					X		
	36	Clutch calibration (24 x 24)					X		
Every 1200 hours or 2 years See pp. 39 to 41.	37	Cooling system						X	
	38	Inner element of the engine air filter				X			
	39	Lighting equipment	X			X	X		
	40	Fuses and relay switches	X			X			
Maintenance General See pp. 42 to 50.	41	Automatic tow hitch	X				X		
	42	Engine idle revolution	X				X		
	43	Clutch "interlock" cable	X				X		
	44	Alternator	X						
	45	Storing and preparing the tractor	X						

The oil change interval should be reduced if the fuel contains a high level of sulphur and if the tractor operates in extremely cold temperatures. See page 2-25.

+ Perform the clutch calibration more often in case there is a decrease in the quality of gear changes noted.

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