VERSION 1 (WITH CAB)

Electrohydraulic FWD models with electrohydraulic differential lock and mechanical lift, fitted for:

- Power Shuttle.
- Digital instrument.
- 30/40A power socket.

List of relay functions

I. Brake lights circuit.

II. Differential lock circuit.

III. Differential lock circuit.

IV. Differential lock circuit.

V. Full beam headlights circuit.

VI. Dipped beam headlights circuit.

VII. FWD circuit, BRAKE lights.

VIII. Front headlight switchover circuit.

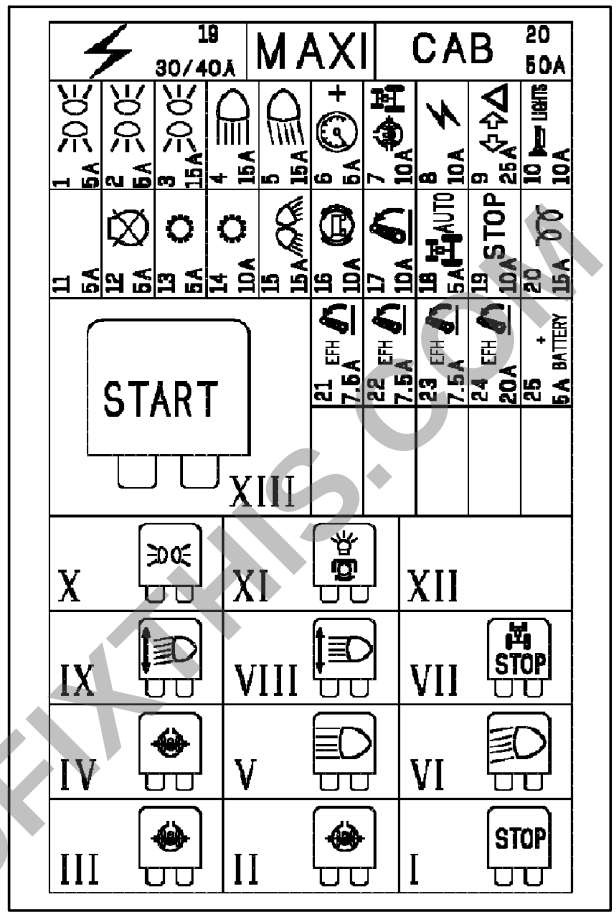
IX. Front headlight switchover circuit.

X. Side lights circuit.

XI. Front power take-off indicator light circuit.

XII Not used.

XIII Engine starter circuit maxi-relay.



62

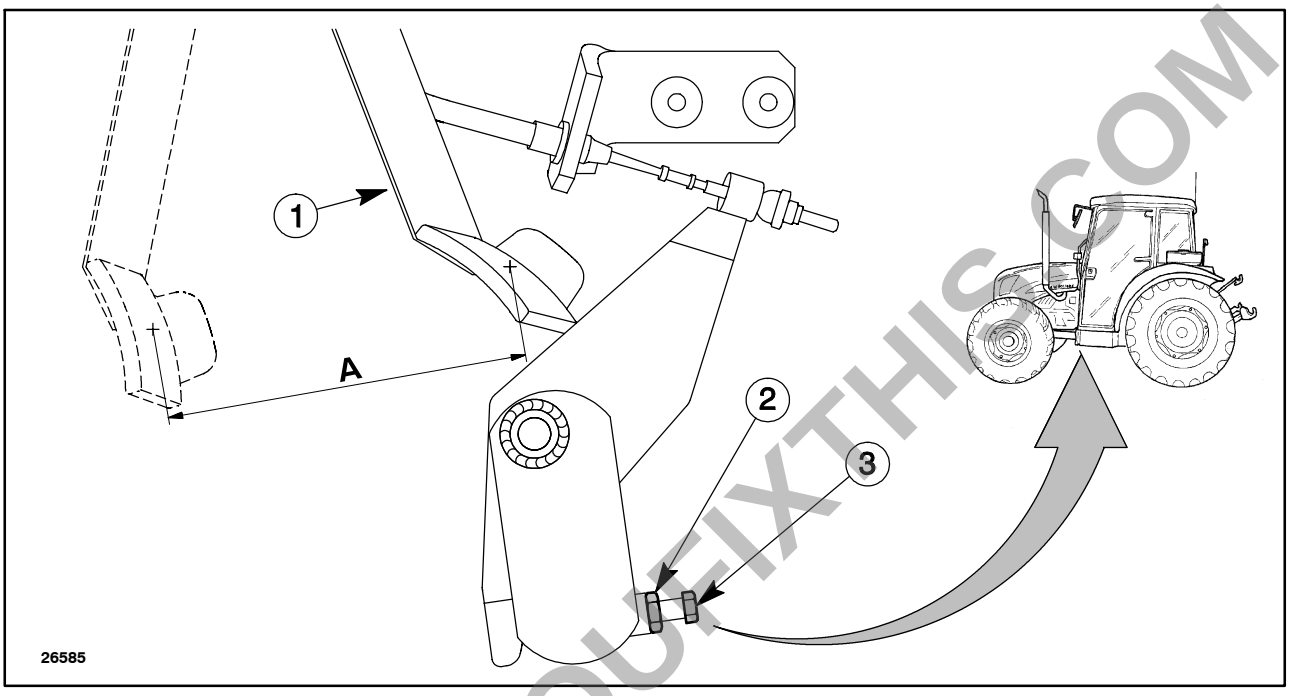
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FLEXIBLE MAINTENANCE

OPERATION 1.

GEARBOX CLUTCH PEDAL (MECHANICAL TRANSMISSIONS)



4

Adjustment

If pedal travel becomes uncomfortable, or to prevent the clutch from slipping, check that travel A on the engine/gearbox clutch pedal, 1, is A = 150 ± 2 mm (5.90 ± 0.08 in.). If not, adjust as follows:

- Release locknut, 2, and turn nut, 3, counterclockwise.
- Check that the distance A is correct.
- Tighten the locknut, 2.
- Verify that pedal travel is as specified.

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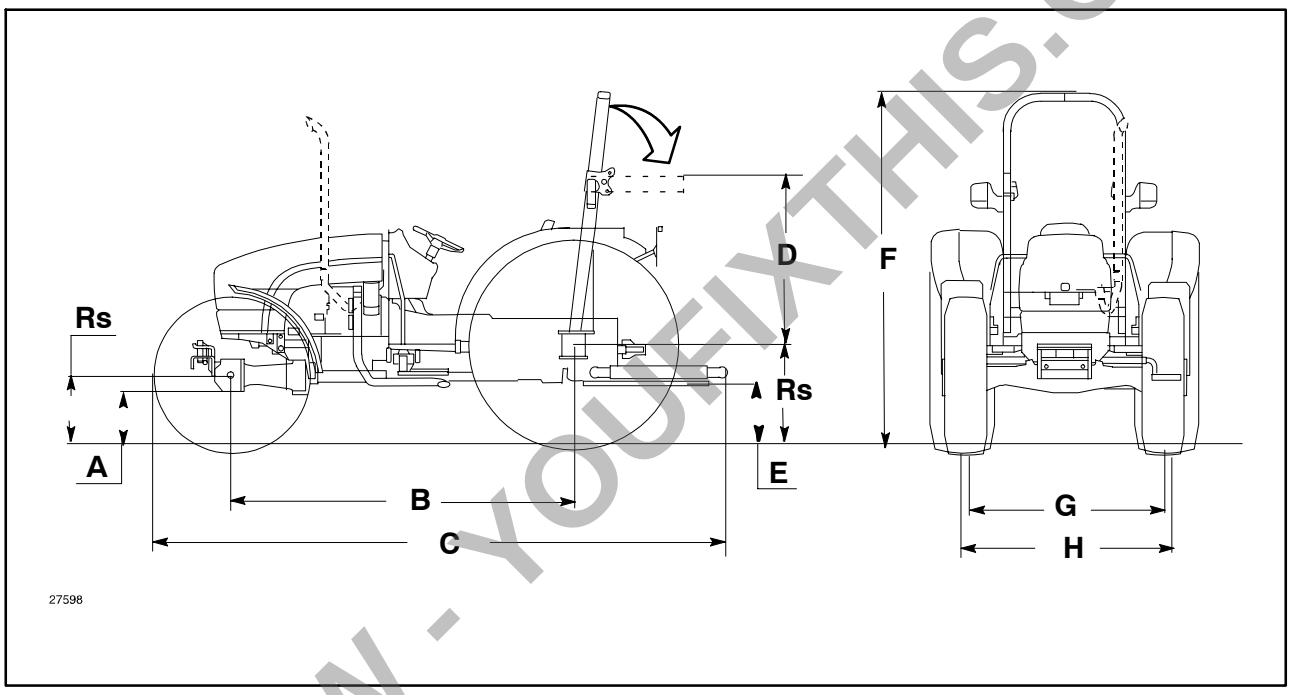
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SECTION 8
SPECIFICATIONS AND DATA

The data on the following pages is provided for your information and guidance. For further details concerning your tractor, contact your dealer.

DIMENSIONS OF MODELS WITH ROLL BAR

Tire combinations: Front 360/70-20 Rear 420/70-30



1

Rs = (tire radius under load)

A.		mm (in.)	330 (12.99)
B.		mm (in.)	2375 (93.50)
C.		mm (in.)	3937 (155)
D.		mm (in.)	1268 (49.92)
E.		mm (in.)	334 (13.15)
F.		mm (in.)	2451 (96.5)
G.	(front track setting)	mm (in.)	1236 to 1945 (48.7 to 76.6)
H.	(rear track setting)	mm (in.)	1260 to 1927 (49.6 to 75.9)

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LUBRICATION AND MAINTENANCE TABLE

The numbers in the second column are with reference to the operations shown in the following pages of this section.

Hours of work	Operation Number	Maintenance operation	Functional check	Fill-up level	Cleaning	Greasing	Adjustment	Replacement	Page
Flexible maintenance	1.	Gearbox clutch pedal					●		4-7
	2.	Windscreen wiper reservoir		●					4-8
	3.	Fan belt					●		4-8
	4.	Compressor belt					●		4-8
	5.	Air filter exhaust valve			●				4-9
With warning light ON	6.	Air filter			●				4-10
	7.	Brake reservoir	●	●					4-11
Every 10 hours	8.	Engine sump	●	●					4-12
	9.	Radiator expansion tank (Turbocharged models)	●	●					4-12
	10.	Cab air filters			●				4-12
	11.	Air conditioning system dehydration filter			●				4-13
	12.	Condenser			●				4-13
Every 50 hours	13.	Rear wheel hubs				●			4-14
	14.	Lift and limplement inkage device				●			4-14
	15.	Steering cylinder				●			4-15
	16.	Front axle pivot				●			4-15
	17.	Drive shaft with front axle				●			4-15
	18.	Fuel filter			●				4-16
	19.	Tire pressure	●						4-16

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ENGINE

CONDITION	POSSIBLE CAUSE	REMEDY
The engine will not start or starts with difficulty	Incorrect starting procedure	See starting procedure
	Fuel level low or empty	Check fuel level
	Air in fuel system	Bleed fuel system
	Engine oil viscosity not right	Use oil of right viscosity
	Fuel not suitable for ambient temperature	Use correct type of fuel for temperature conditions
	Fuel system contaminated	Clean system
	Fuel filter clogged	Replace filter element
	Fuel injector fault	Contact your dealer
The engine does not run properly and/or cuts out	Fuel system contaminated	Clean system
	Fuel injector fault	Contact your dealer
Engine does not develop full power	Engine overload	Change to lower gear or reduce load
	Air filter clogged	Carry out maintenance on air filter
	Incorrect fuel type	Use the right fuel
	Engine operating temperature	Check thermostat
	Implement incorrectly set	See equipment manual

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SECTION 3
FIELD OPERATION

⚠ WARNING ⚠

In order to prevent accidents and safeguard the operator, carefully read the use and safety instructions before starting the engine and using the tractor.

Read this section of the operator's manual carefully before using the tractor. This is particularly important if the tractor is to be used correctly as it contains all the information required on the layout and use of the tractor controls.

Even if you already have experience in using other makes of tractor, this section of the manual especially must be studied carefully and thoroughly.

After reading this section in full, ensure that you are fully familiar with the layout and use of the controls. Ensure too that you know the specifications of the tractors in question.

Never start the engine and tractor if you have not already familiarized yourself with all the controls.

Finding out once the tractor is moving may be too late.

If you have any doubts about any functional aspect of the tractor, contact you NEW HOLLAND dealer.

Particular attention needs to be paid to the tractor's running-in period, to obtain the best operating reliability and service life for which it is designed and built.

With regard to the reliability and service life of your tractor, read Section 4 completely.

Section 4 contains details of all the lubrication and general maintenance operations to be carried out on the tractor.

Section 8 contains tractor data and specifications.

⚠ CAUTION ⚠

Before starting the engine and moving the tractor, follow the instructions noted below:

- **Do not start or operate the tractor in an enclosed area.**
- **Before starting the engine, check that all controls are in neutral.**
- **All controls must only be operated from the driving position.**
- **Stop the engine before carrying out any service or maintenance operations on the tractor.**
- **Use the steps provided for entering and leaving the tractor.**
- **Keep the guards properly fitted.**
- **When driving on roads, indicate all intentions to stop, turn or slow down.**
- **Use the appropriate warning devices to signal the presence of a slow-moving vehicle.**

STARTING THE ENGINE

If the tractor has not been used for some time, or is started up for the first time in low outside temperature conditions, operate the fuel pump starting lever approximately twenty times and allow the engine to run for 5 to 10 seconds with the injection pump in the «stop» position.

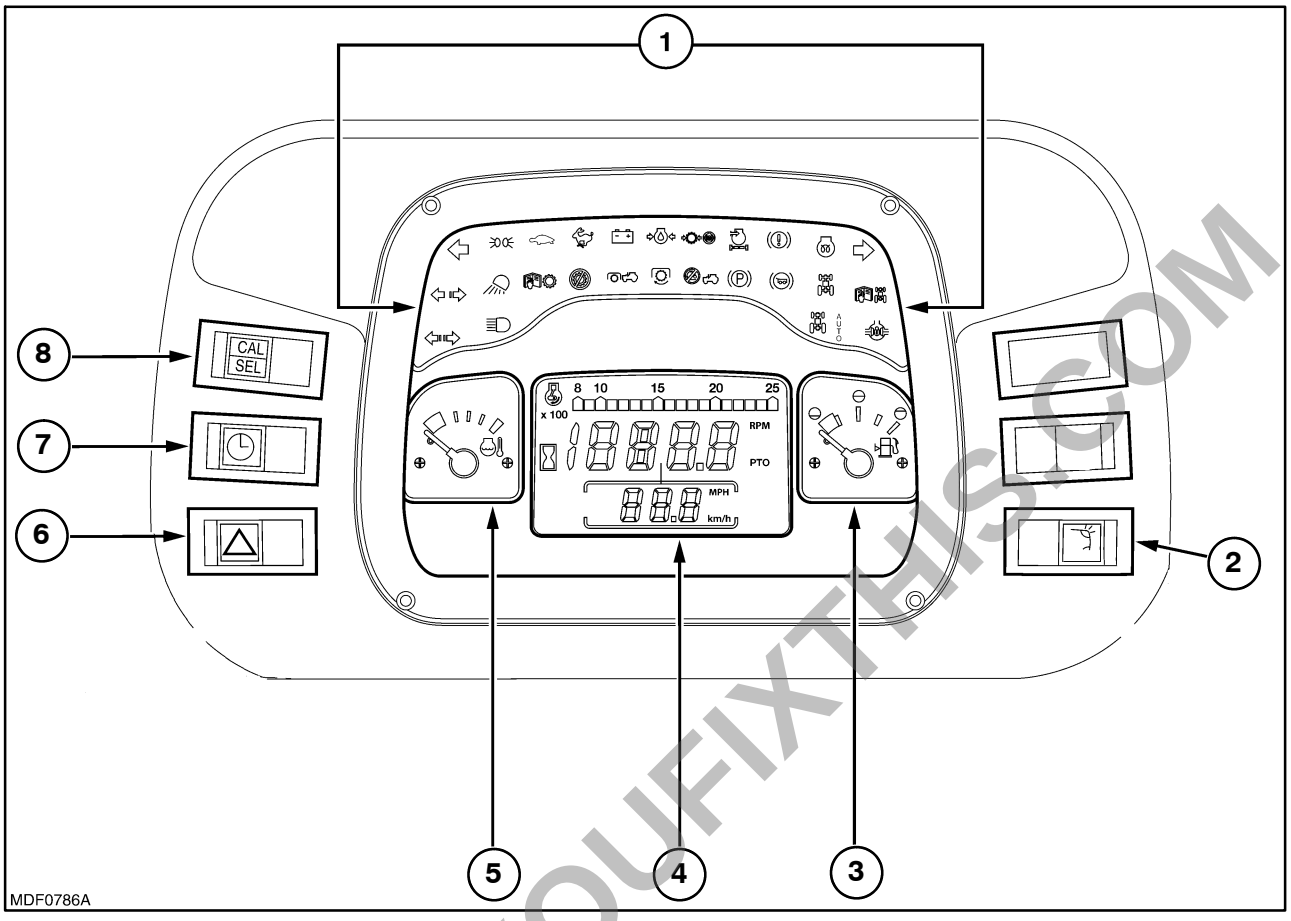
Press down the clutch pedal, place the shuttle control lever in neutral to close the starting safety device switch.

Move the throttle lever to approximately the half-way position.

Turn the starter key to position **C** (ON). then release the key as soon as the engine starts.

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1

Digital Instrument Control Panel

1. Indicator and Warning Lights
2. Corner Position Switch
3. Fuel Gauge
4. Digital Instrument Display
5. Engine Coolant Temperature Gauge
6. Hazard Warning Lights Switch
7. Clock Adjustment Switch
8. Digital Instrument Calibration Switch

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Main fusebox

Version 1 tractors, page 4-35		
Fuses	***Amps.***	***PROTECTED CIRCUITS***
1	5	Front right-hand and rear left-hand side lights, side lights indicator.
2	5	Front left-hand and rear right-hand side lights, control instrument panel light.
3	15	ISO side lights, or 7-pin work light (North America).
4	15	Full beam headlights.
5	15	Dipped beam headlights.
6	5	+instrument common.
7	10	Differential lock circuit, four-wheel drive circuit.
8	10	8A power socket, digital instrument.
9	25	Direction indicators, hazard lights.
10	10	Horn, full beam flasher, seat safety circuit.
11	5	Starter safety circuit.
12	5	Engine cut-out electromagnet
13	5	Power Shuttle circuit.
14	10	Power Shuttle circuit.
15	15	Swivel position lights, seat, cab users relay.
16	-	Not used.
17	-	Not used.
18	-	Not used.
19	10	Brake lights (STOP).
20	15	Thermostarter.
21	-	Not used.
22	-	Not used.
23	-	Not used.
24	-	Not used.
25	5	Electronic control unit input (+battery)/Radio
26	-	Not used.
27	-	Not used.
28	-	Not used.

Maxi-fuses

30A ISO power socket 40A North America power socket 50A Cab circuit

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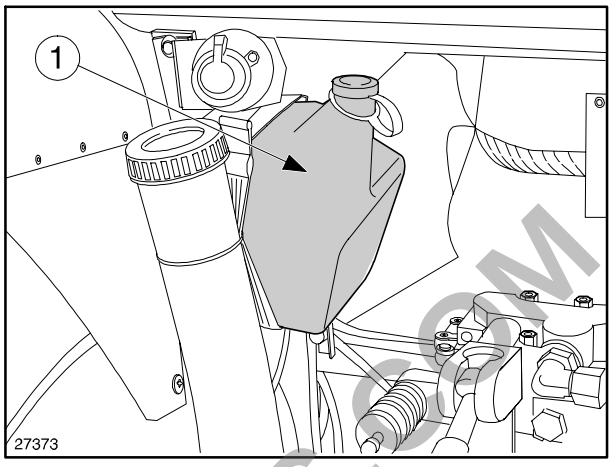
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OPERATION 2.

WINDSCREEN WIPER RESERVOIR

To fill-up the windscreen washer tank, remove filler cap and fill up the tank, 1, with washing liquid.

IMPORTANT: *In winter use water with an anti-freeze product.*



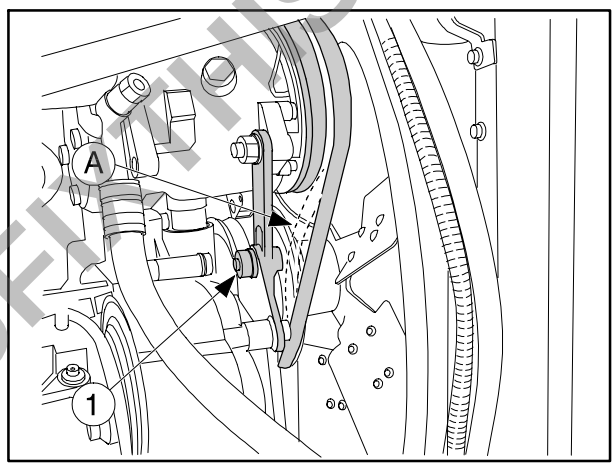
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OPERATION 3.

FAN BELT (VERSION WITHOUT CAB AND WITH NON-AIR CONDITIONED CAB)

At the center of the belt run, A, apply a load of 78 to 98 N (17.5 to 22 lbs) and check for a deflection of 10 to 11 mm (0.39 to 0.43 in.).

To adjust, loosen the screw, 1, and adjust to the values shown above.



6

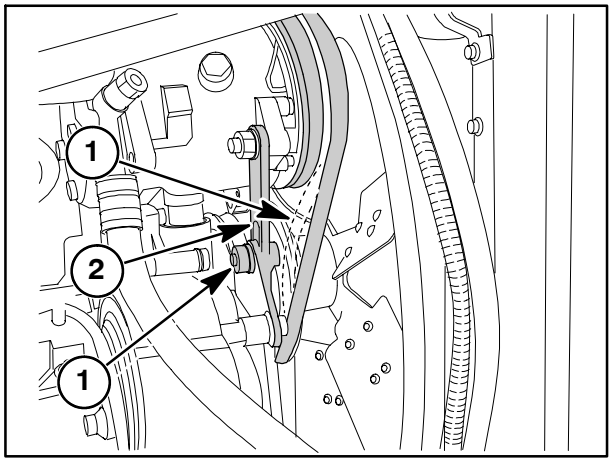
OPERATION 4.

COMPRESSOR BELT

At the center of the belt run, A, apply a load of 78 to 98 N (17.5 to 22 lbs) and check for a deflection of 12 to 13 mm (0.47 to 0.51 in.).

To adjust, loosen the screw, 1, and adjust the belt tensioner, 2.

NOTE: *If belts are cracked or require frequent adjustment, replace.*



7

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ENGINE DATA

Engine ..... IVECO

- TN60SA 8035.05C
- TN70SA 8035.25R
- TN75SA 8035.25

– Clutch ..... 11″

– Injection pump ..... BOSCH

– Inlet
  - TN60SA ..... Naturally Aspirated
  - TN70SA ..... Turbocharged
  - TN75SA ..... Turbocharged

– Number of cylinders 3

– Bore and stroke ..... 104 x 115 mm (4.09 x 4.53 in)

– Total displacement ..... 2.9 L (179 in^3)

– Compression ratio
  - TN60SA ..... 18 : 1
  - TN70SA ..... 18 ± 0.5 : 1
  - TN75SA ..... 18 ± 0.5 : 1

– Engine max. power DGM/DIN:
  - TN60SA ..... kw 42.5
    hp 57
  - TN70SA ..... kw 52
    hp 70
  - TN75SA ..... kw 56
    hp 75

– Torque increase (%)
  - TN60SA 27
  - TN70SA 35
  - TN75SA 33

– High idle speed ..... 2500 ± 50 rpm

– Low idle speed ..... 700 ± 50 rpm

– Corresponding speed ..... rpm 2300

– Maximum torque ..... rpm 1400

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Hours of work	Operation Number	Maintenance operation	Functional check	Fill–up level	Cleaning	Greasing	Adjustment	Replacement	Page
Every 300 hours	20.	Engine sump						●	4-17
	21.	Engine oil filter						●	4-17
	22.	Fuel filter						●	4-17
	23.	Fuel pump filter			●				4-18
	24.	Transmission oil filter and services						●	4-18
	25.	POWER-SHUTTLE transmission filter						●	4-18
	26.	Battery	●	●					4-19
	27.	Air filter			●				4-19
	28.	Transmission and lift	●	●					4-19
	29.	Front axle housing	●	●					4-20
	30.	Handbrake	●				●		4-20
	31.	Front axle final drives	●	●					4-20
	32.	Front stub axles				●			4-21
Every 900 hours	33.	Engine valves	●				●		4-22
Every 1200 hours or annualy	34.	Cab air filters						●	4-23
	35.	Air filter						●	4-23
	36.	Fuel tank			●				4-23
Every 1200 hours or every 2 years	37.	Supersteer front axle housing						●	4-24
	38.	Front axle final drive oil						●	4-24
	39.	Fuel injectors	●				●		4-24
	40.	Transmission and lift oil						●	4-25
	41.	Engine cooling system						●	4-26
General mainten-ance	Bleed fuel system								4-29
	Bleed brake system								4-30
	Electrical system								4-31
	Recommendations for bodywork maintenance								4-47
	Lubricants and fluids								4-48

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ENGINE

CONDITION	POSSIBLE CAUSE	REMEDY
Engine does not reach maximum power (cont.)	Implement incorrectly set	See equipment manual
	Improper valve clearance	Check and adjust
	Idling speed too low	Contact your dealer
Abnormal engine knocking	Oil level low	Top up fluid level
	Oil pressure low	Contact your dealer
Low engine operating temperature	Thermostat malfunction	Replace thermostat
Oil pressure low	Oil level low	Add oil as required
	Oil grade or viscosity wrong	Drain and refill with oil of correct grade and viscosity
Excessive oil consumption	Oil level too high	Reduce oil level
	Oil viscosity wrong	Use oil of correct viscosity
	Oil leaking	Repair leaks
	Breather pipe filter clogged	Replace breather pipe filter
Engine overheating	Radiator core clogged	Clean
	Engine overload	Change to lower gear or reduce load
	Engine oil level low	Top up fluid level
	Coolant level low	Top up fluid level in expansion tank. Check system for leaks
	Radiator cap defective	Replace cap
	Fan belt slipping or worn	Check tensioning device. If necessary, replace the belt

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