

ZETOR

3320	5320	7320
3340	5340	TURBO
4320	6320	7340
4340	6340	TURBO

***OPERATOR'S MANUAL
SUPPLEMENT***

2/2002

ZETOR



This supplement of the operator's manual for the tractors Z 3320 - Z 7340 will help you to become familiar with the operation and maintenance of your new tractor.

In spite of fact many of you have reach experiences in operation of various Zetor tractor models, please, read carefully all safety rules and operating instructions in this operator's manual before attempting to operate the tractor.

You will find a lot of new information and receive a perfect overview how to use the tractor with highest efficiency at various operations.

Your new Zetor tractor will be your reliable friend if observing the mentioned safety rules, tractor maintenance and safe operation.

Manufacturer of Your tractor wishes you thousands of satisfactorily worked hours.

ZETOR
Brno



Information about technical specifications, design, equipment, material, and external appearance is valid in the time of this operator's manual issue. Manufacturer reserves rights for changes.



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The operator's manual contains description, operation and maintenance of standard and optional tractor equipment.

Optional tractor equipment is marked (*) in this manual.

The option that isn't a part of standard tractor equipment can't be a subject of claim in case it isn't assembled from factory.

Service check book isn't a part of operator's manual. This is the separate booklet that is passed to you at purchasing of your new tractor.

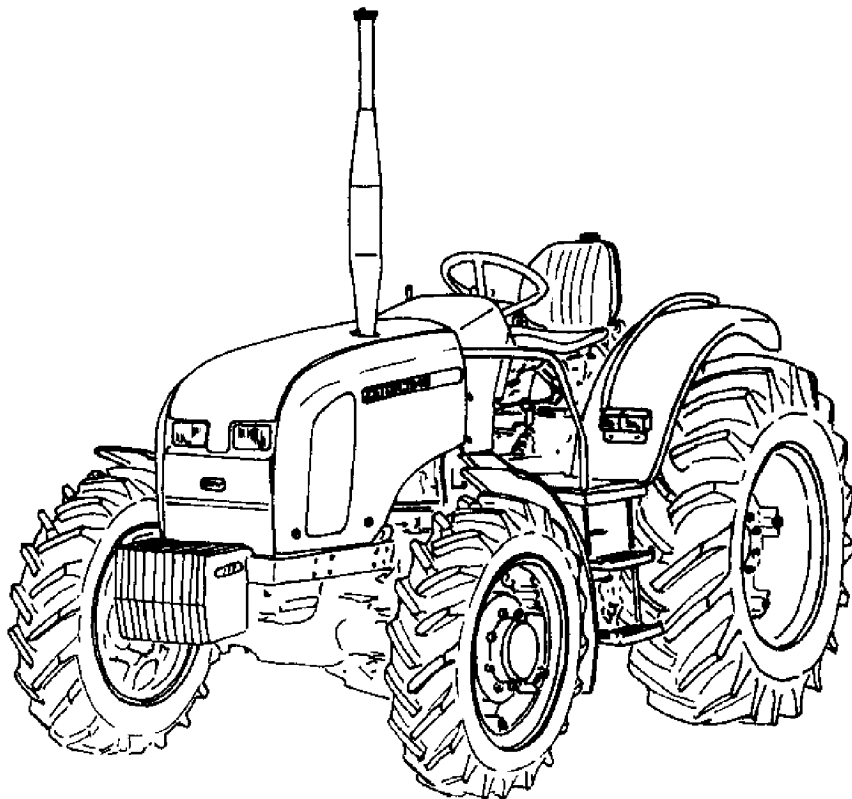


2WD TRACTORS

Tractor type	Nominal engine power (kW)	Nominal engine power EKO (kW)
ZETOR 3320	33,1	-
ZETOR 4320	-	43
ZETOR 5320	46	46
ZETOR 6320	51	48
ZETOR 7320	58	57

4WD TRACTORS

Tractor type	Nominal engine power (kW)	Nominal engine power EKO (kW)
ZETOR 3340	33,1	-
ZETOR 4340	-	43
ZETOR 5340	46	46
ZETOR 6340	51	48
ZETOR 7340	58	57



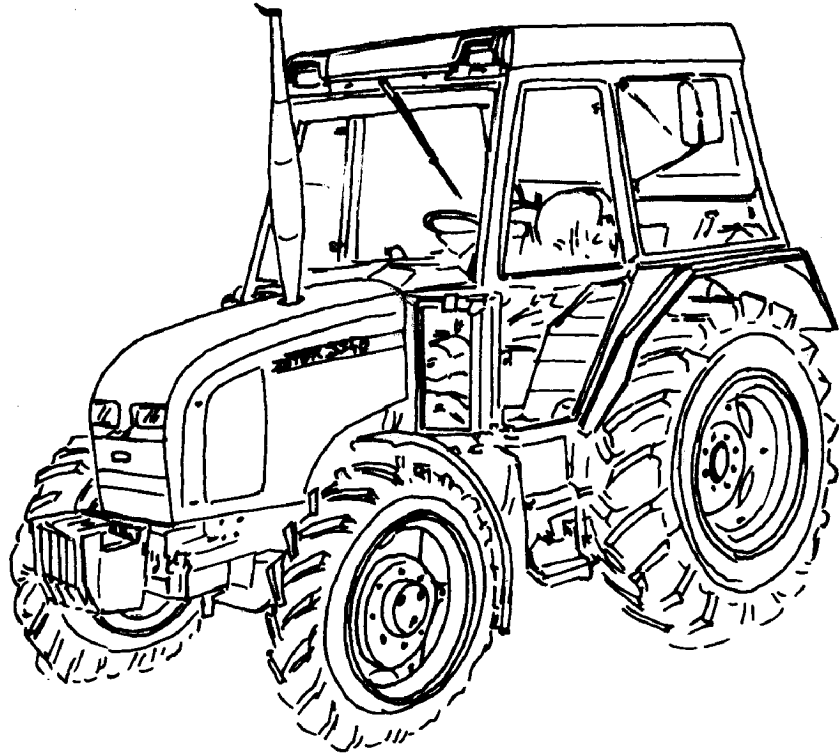
CAB TRACTORS

2WD TRACTORS

Tractor type	Nominal engine power (kW)	Nominal engine power EKO (kW)
ZETOR 3320	33,1	-
ZETOR 4320	-	43
ZETOR 5320	46	46
ZETOR 6320	51	48
ZETOR 7320	58	57

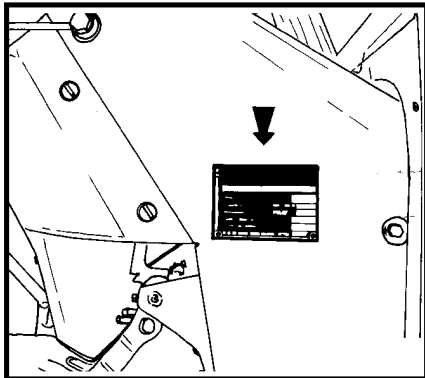
4WD TRACTORS

Tractor type	Nominal engine power (kW)	Nominal engine power EKO (kW)
ZETOR 3340	33,1	-
ZETOR 4340	-	43
ZETOR 5340	46	46
ZETOR 6340	51	48
ZETOR 7340	58	57

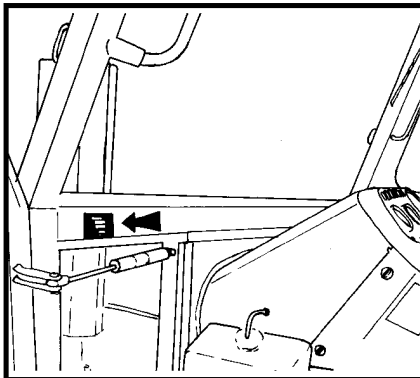


LOCATION OF SERIAL NUMBERS

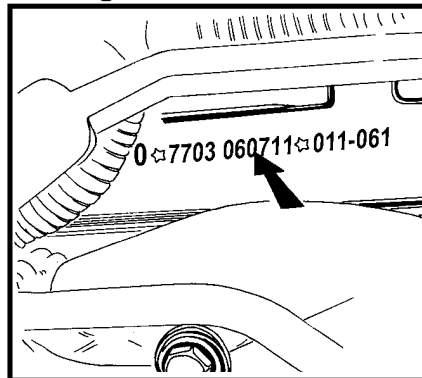
Tractor Serial Number Plate



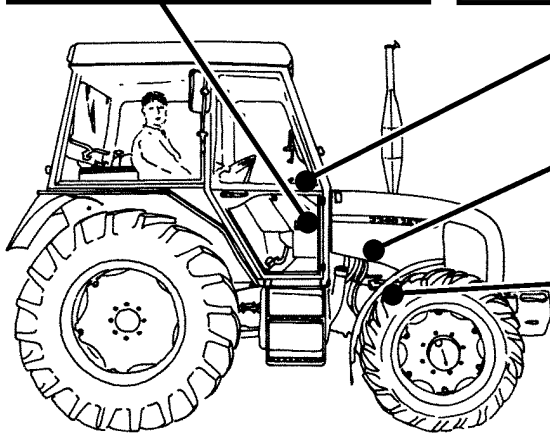
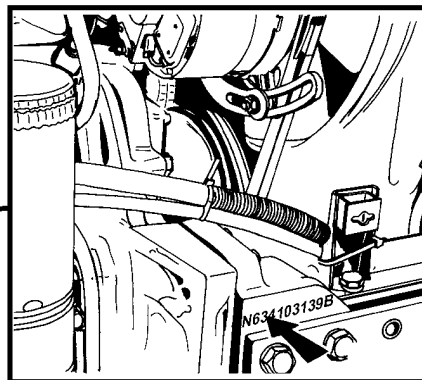
Cab Serial Number



Engine Serial Number



Tractor Serial Number



LOCATION OF SERIAL NUMBERS

Whenever you contact your authorized service dealer or the factory for order of service parts, always know the model and serial numbers of your tractor. For your convenience, write those numbers in the frames below.

Tractor model

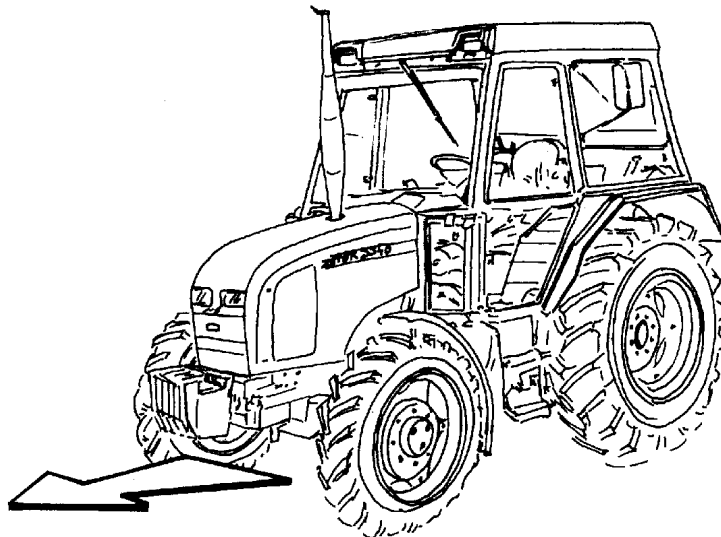
Tractor serial number

Engine serial number

ZETOR 3320
ZETOR 3340
ZETOR 4320
ZETOR 4340
ZETOR 5320
ZETOR 5340
ZETOR 6320
ZETOR 6340
ZETOR 7320 Turbo
ZETOR 7340 Turbo

The "left", "right", "front" and "back" side of the tractor is determined by sitting on the seat in the normal operator's position and in the travelling direction.

Manufacturer reserves rights for changes of design and option, that improves the tractor features.



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SAFETY INSTRUCTIONS FOR USERS

Keep extreme attention when reading parts of operator's manual that are marked by these symbols.



You will find this symbol at all important warnings identifying the safety of tractor operation.

Keep these safety messages and however regardless of the hazard, be extremely careful!

Inform your cooperators and other users about these messages.



Study carefully chapters marked by this symbol before starting with operating, servicing or adjusting the tractor.



You will find this symbol whenever important information on operation, adjustment and repairs of starter motor.

Keep these regulations and be extremely careful in these cases!



This symbol marks such tractor equipment that is not assembled as a standard

(optionally assembled equipment only).



This symbol marks all chapters of operator's manual speaking about environmental safety.



GENERAL REGULATIONS

SAFETY

1. Only a trained operator having a valid driving license and being properly acquainted with operating and safety rules can operate the tractor.

2. Except of safety warnings mentioned in this Supplement of the operator's manual you must respect all general safety and traffic regulations of country where the tractor works.

PROPER CLOTHING

3. Don't wear a loose clothing and free flying long hair at operation.

4. Use suitable (prescribed) personal protection means (working boots, gloves, spectacles etc.) at work.

ENGINE START

5. Don't start the engine by driving tractor downhill.

6. Starting tractor by means of towing with another tractor or vehicle is allowed when the pull bar is used only.

7. Start the tractor from driver's seat only with shifting lever in neutral position. Clutch pedal must be fully pressed down.

Life hazard at starting by starter connector short circuit.

8. The key must be at the key switch in position "I".

9. When preheating engine by electrical heater, plug the heater first and connect the cable into electricity after. After preheating disconnect the cable from electricity first.



Electrical shock hazard!

OPERATION

10. Hoses of hydrostatic steering, brakes and fuel system must be checked and replaced in case of any damage indication.

The damage indication is for example: surface cracks on hose, loosening of hose fittings (verify it by pulling of hose from fitting) and mechanical damage of hose. Hoses where the durability is mentioned on their surface must be



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SAFETY INSTRUCTIONS FOR USERS

changed before the expiration of the durability.

11. Brakes and steering must be permanently in perfect condition.

12. Brake pedal must be latched at driving on the road, transportation with trailers and implements.

13. Driving downhill without shifted gear is forbidden!

14. Pay special attention when driving on hilly, muddy, sandy, icy and uneven terrain.

15. Don't exceed the max. specified inclination angle 11° for 2WD tractors and 12° for 4WD tractors.

16. Don't exceed the max. total weight of trailers mentioned on the tractor serial number plate or the rear fender label.

17. Don't use the diff-lock when driving into the turning.

18. Never get out or into the driving tractor. It is forbidden.

19. The front axle load must not be lower than 18 to 20 % of total tractor weight when transportation with agricultural implements hitched in rear three point hitch.

20. Reduce the travel speed to 15 kmph when transportation with agricultural im-

plements hitched in front three point hitch.

21. Reduced gears 1R, 2R, 3R must not be used in case that tractors Z4320 -



Z7340 are implemented with machines and implements having a big resistance when engine speed is dropping and the tendency of engine is to be

stopped (hazard of serious injuring of the shafts).

TRANSPORTATION OF PERSONS, OPERATION

22. Number of persons transported by tractor must not exceed number mentioned in tractor technical license.

23. Persons, unauthorized to work with attached implement, must not stand between tractor and hitched implement (machine).

24. Make sure neither any person nor any obstacle allows driving before starting tractor move.

25. Don't exceed the max. specified inclination angle.

26. Max. allowed travel speed of tractor and trailer equipped with air trailer brakes is 30 kmph, with drum brakes it is 25 kmph.

TRACTOR RELEASE, PUSHING

27. Use a pull bar or a rope for releasing of immobilized tractor. The pull bar or the rope must be put on or put through the front hook only.

It is life dangerous to stand near the rope when releasing the tractor!

Never use the chains! Life hazard at tearing the chain!

28. Front hook assembled on front tractor frame serves for pulling of the tractor alone only, i.e. without trailer or another implement.

29. Releasing the tractor when the reduced gears are shifted is forbidden!

30. Never use free wooden blocks, planks or bars put between tractor and pushed subject when pushing other vehicles (trailers, wagons etc.).

LEAVING TRACTOR

31. Do not park the tractor with attached implement in lifted position.

32. Don't forget to brake the tractor with parking brake (shift the gear) remove the key from key switch and lock the cab before leaving tractor.

33. Brake the tractor with parking brake before leaving tractor with running engine.



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SAFETY INSTRUCTIONS FOR USERS

34. Usually use the left-hand side of tractor- left door when leaving tractor. Look round if any vehicle coming, that could jeopardize your safety when leaving and open the door.

35. Use steps and handles when leaving the tractor. When leaving tractor by the right door pay attention being in



in closed room and house only when the perfect ventilation works. Exhaust gases are health dangerous.

FIRE PREVENTIVE RULES

39. Refuel the tractor after finishing work and at stopped engine.

40. Don't refuel the fuel tank up to the top in summer season. Wipe the fuel immediately when spilled.

41. Don't refuel the tractor nearby the open flame! Don't smoke!

42. Don't smoke and don't use the open flame when inspecting the battery electrolyte level.

43. Keep properly the fire prevention regulations in areas with increased fire hazard (hay-lofts, straw-stocks etc.).

44. If the tractor is equipped with a fire extinguisher keep it ready for use.

space of shifting levers and hand throttle control.

36. Shift the reversor lever into forward position at tractor equipped with reversor gear.

AT STOPPED ENGINE ONLY

37. All activities like refueling cleaning, lubricating and adjusting tractor or

45. Use the spark arrestor when working in fire hazard environment.

HEALTH AND ENVIRONMENT PROTECTION

46. These tractors are not equipped with special cab air intake filters. They are therefor not intended for working with aerosols and other substances harmful to health.

47. Kerosen, Diesel oils, mineral oils and other oil products used for operation and attendace of tractor may cause an injury in direct skin contact and can irritate mucous membranes, eyes, digestive or respiratory organs. Some of them can cause total poisoning when swallowed.

48. The persons in contact with oil products are obliged to observe - with no exception - the respective safety and hygienic regulations, to use the suitable

attached implement can be done at stopped engine and stopped moving tractor parts only, except of brake, hydraulics and charging function inspection.

38. Stop the engine before removing bonnet side shields. The engine can run

protection aids and to work in well-ventilated areas.

49. Because of excession of the highest permitted noise level values for eight hour shifts at the driver's seat, the tractor cannot be used for long periods of time permanently.

The driver must not exceed 380 minutes of permanent work in an eight hour shift (for Z 4320, Z 5320, Z 5340) or 425 minutes (for Z 6320, Z 6340, Z 7320, Z 7340). Otherwise the work has to be interrupted so the total time does not exceed 380 or 425 minutes. The tractor working procedure must be adjusted to meet this requirement.

WORKING WITH CRUDE OIL PRODUCTS

50. Wash properly your hands with mild detergent and protect them with suitable



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SAFETY INSTRUCTIONS FOR USERS

skin ointment or cream after finishing work or before eating.

51. Remove oil drops from quickcouplers (from male and female) by textile material after disconnecting or connecting hydraulic circuit.

PREVENTIVE DAILY SERVICE

52. Do this service every day or at least every 8 to 10 hours.

SAFETY CAB

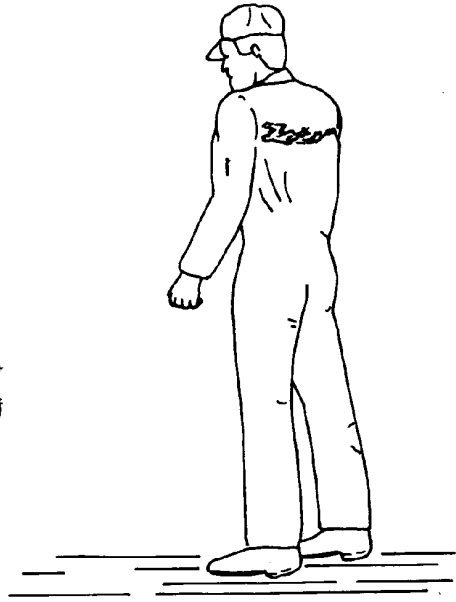
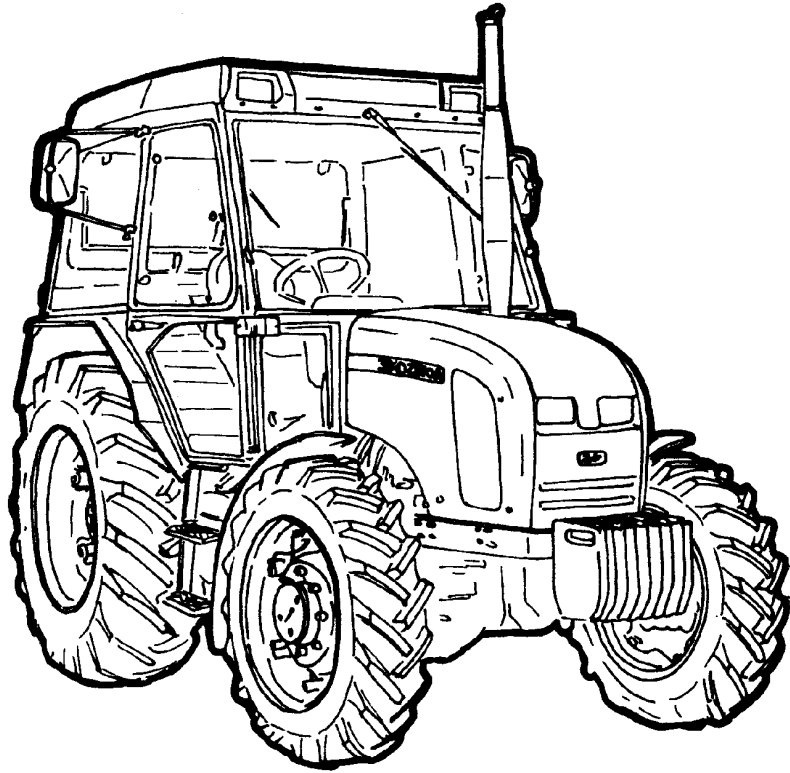
53. If corrosion or accident damages the frame of safety cab it is necessary to exchange the cab.



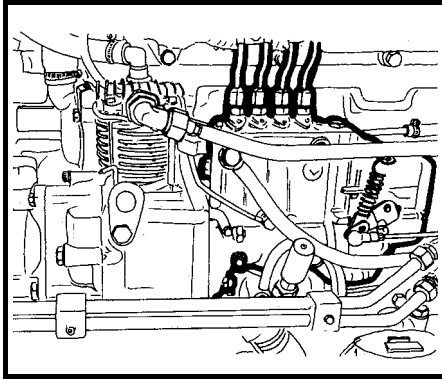
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PREVENTIVE DAILY SERVICE

Do this service every day or at least every 8 to 10 hours.



PREVENTIVE DAILY SERVICE

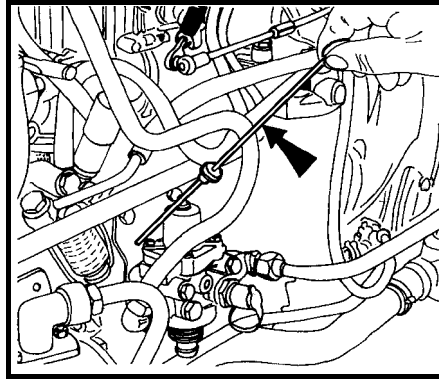


A9

FUEL SYSTEM LEAKAGE

Inspect the fuel system for leakage including the fuel tank. Repair immediately any leaks.

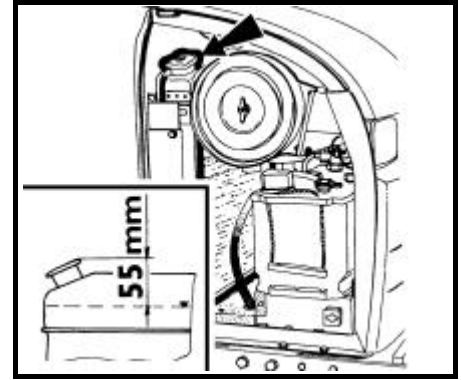
The drain plug for draining impurities and fuel is located in the bottom part of fuel tank.



A10

ENGINE OIL LEVEL

Check the engine oil level after unscrewing and removing of oil dipstick. Inspect the lubrication system for leakage. Maintain the oil level between dipstick marks.



S25

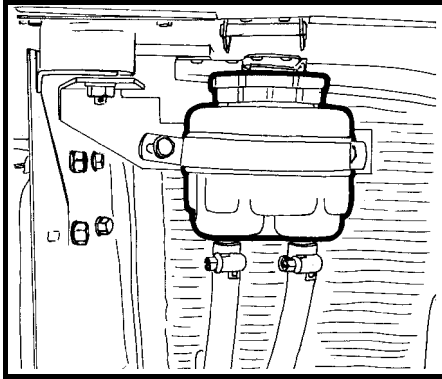
COOLING SYSTEM

Inspect the engine cooling system for leaks. Check the coolant level. Add the coolant to correct level. Correct level of the coolant is 55 mm from the top edge of the filling neck.



Release the filler cup after coolant temperature cooling down. Avoid scalding!

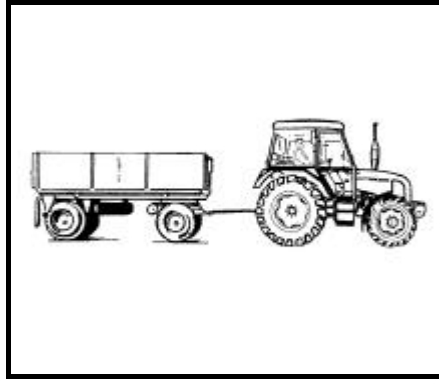
PREVENTIVE DAILY SERVICE



S3

SERVICE BRAKES

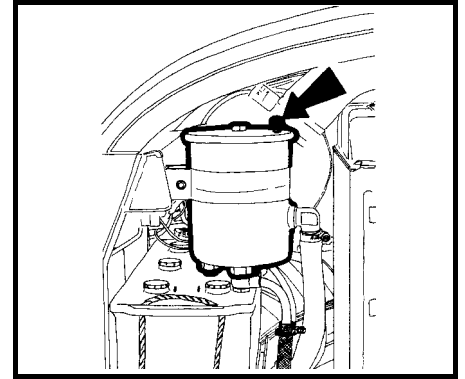
Check the brake fluid level in the brake fluid expansion reservoir. Inspect the brake and clutch circuit for leaks if loss of brake fluid level.



S33

AIR BRAKES

Inspect the air brake system leak and tractor break efficiency with trailer (see „inspection for air brake leak“).

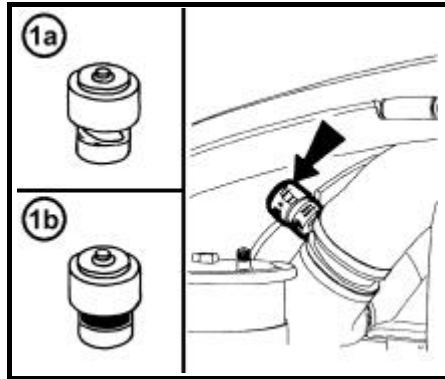


S4

STEERING

- check the oil level in the hydrostatic steering oil tank by dipstick
- check and retorque bolts and nuts of steering tie-rods and arms
- inspect status of hydrostatic steering circuit hoses for damage and oil leak

PREVENTIVE DAILY SERVICE



S26

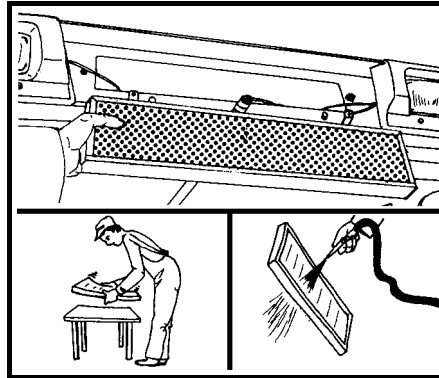
AIR CLEANER

Air cleaner maintenance is necessary to do after indication of the clogging indicator.

The indicator is accessible after side shield removal. The indicator is located on suction pipe.

Clogging of the air cleaner is mechanically indicated by red field appeared on the clogging indicator.

1a	air cleaner is not clogged
1b	air cleaner is clogged - do maintenance. See the part "Maintenance instructions"



M204

CAB FILTRATION

Inspect and clean the air filter elements for cab ventilation located under the front tiltable panel.

The interval for filter element replacement depends on dusty conditions of working environment. Partial recovery is possible by tapping or cleaning with pressure air.



NOTE



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ACQUAINTANCE WITH TRACTOR

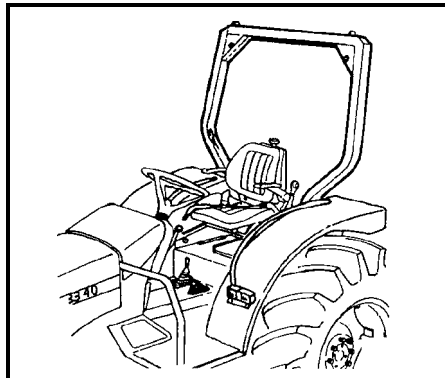
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Safety frame.....	20
Safety frame with canopy.....	20
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Average fuel consumption in liters per engine hour of tractor	20
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Gauge display	21
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Tractor lights switch	23
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Transmission control	24
Creeper speeds shifting lever	24
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Location of information and safety decals.....	27



Tractor user must be properly acquainted with recommended operating and safety rules in advance. It is too late to do it within operation!

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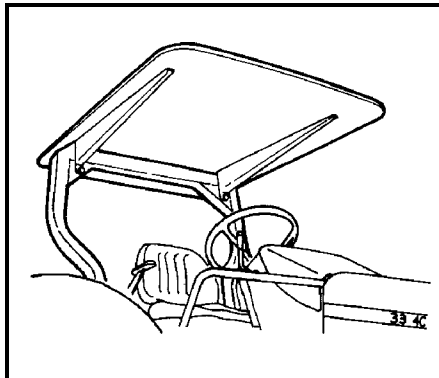
ACQUAINTANCE WITH TRACTOR



S11

SAFETY FRAME

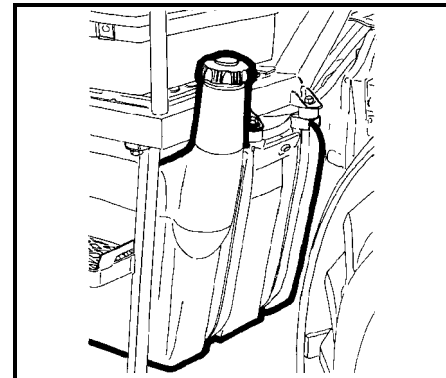
Open station tractors are equipped with a safety frame. The frame is attached to the tractor body and protects the driver in case of an accident.



S10

SAFETY FRAME WITH CANOPY

A polyester fibre-glass canopy can be mounted onto the safety frame.



S9

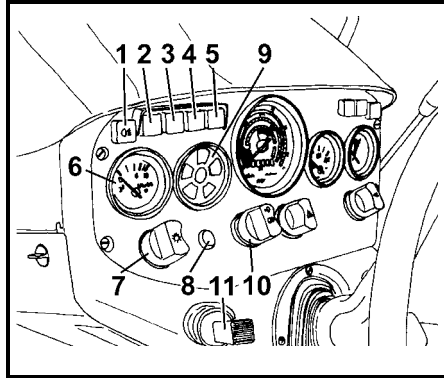
FUEL TANK

Fuel tank capacity is 85 litres.

AVERAGE FUEL CONSUMPTION IN LITERS PER ENGINE HOUR OF TRACTOR

Standard versions of engines			
Tractor type	Engine load		
	100%	80%	50%
Z 3320, Z 3340	10,1	8,1	5,3
Z 5320, Z 5340	13,7	11,0	7,3
Z 6320, Z 6340	15,2	12,1	8,0
Z 7320, Z 7340	16,7	13,4	8,9
EKO engines			
Tractor type	Engine load		
	100%	80%	50%
Z 4320, Z 4340	12,8	10,3	6,8
Z 5320, Z 5340	13,7	11,0	7,3
Z 6320, Z 6340	14,4	11,5	7,7
Z 7320, Z 7340	17,2	13,8	9,1

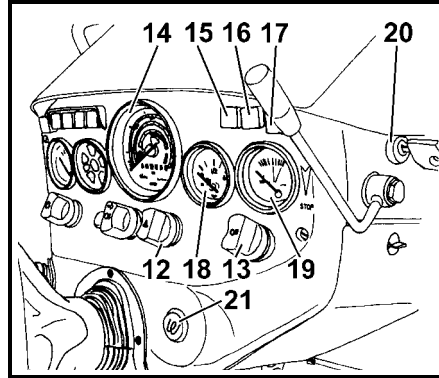
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ACQUAINTANCE WITH TRACTOR



S5

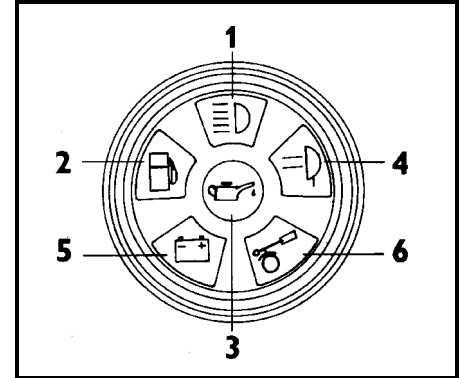
DASHBOARD

1. rear fog lamp control light
2. tractor turn signal control light
3. trailer turn signal control light (1st)
4. trailer turn signal control light (2nd)
5. hazard signal control light
6. air pressure gauge
7. tractor lightning switch
8. blind
9. gauge display
10. flood light and rear fog lamp change-over switch
11. light control switch (headlights, direction indicators, headlamp flasher, acoustic horn)
12. hazard light switch
13. dimmer switch of headlights in the radiator grill or on the cab roof



S6

14. tachometer (rpm) and service hour meter
15. PTO disengagement clutch control light (red)
16. minimum air pressure signal lamp. Starts to light in the case of a brake system failure or when the air pressure is below 380 kPa
17. cab headlights control lamp. Indicates the "ON" condition of headlights on the roof.
18. fuel gauge. If the respective lamp starts to light in the gauge display, the fuel tank still contains 1/6 to 1/10 of fuel.
19. coolant thermometer
20. switch box with key
21. * thermostart indicator light. It is mounted on all the tractors equipped with EKO engines.



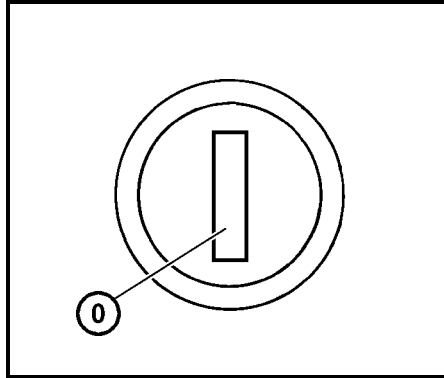
S39

GAUGE DISPLAY

1. high beam headlight (blue). Is "ON" when the high beam is on.
2. fuel (orange). Starts to light when only 1/6 to 1/10 of fuel capacity remains in fuel tank.
3. lubrication (red). Indicates low oil pressure (insufficient lubrication) below 60 to 120 kPa.
4. flood light (yellow). Indicates the flood light "ON" condition.
5. charge indicator (red). Indicates a malfunction in charging.
6. parking brake indicator (red). "ON" when the parking brake is engaged.

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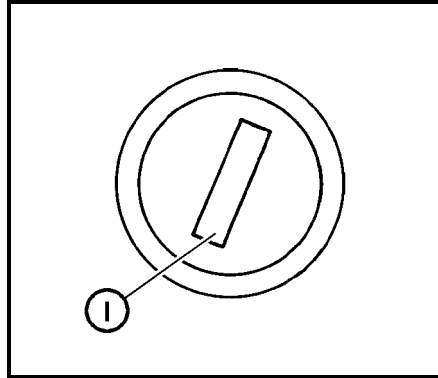
ACQUAINTANCE WITH TRACTOR



S43

KEY IN "0" POSITION

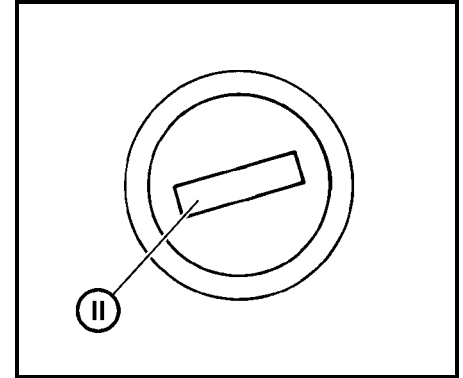
All electrical appliances controlled by the key switch are disconnected. The key can be removed.



S44

KEY IN "I" POSITION

All electrical appliances controlled by the key switch are connected except of starter motor. The key is located in this position when running the engine.



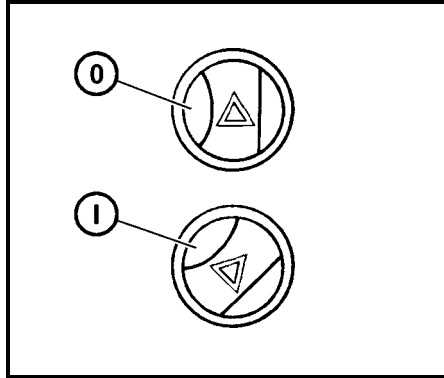
S45

KEY IN "II" POSITION

Starter motor is connected in this position. All electrical appliances controlled by the key switch are connected except of wipers, washer, blower of cab. The key is turned automatically to "I" position after starting.

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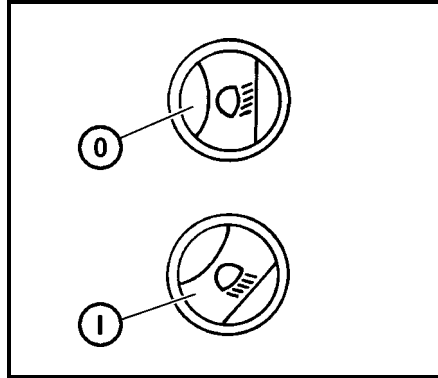
ACQUAINTANCE WITH TRACTOR



S15

CAB SWITCHES - HAZARD LIGHTS

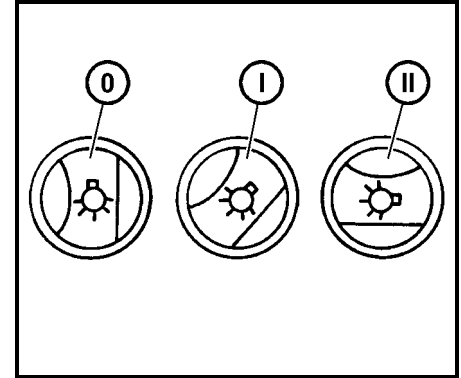
- "0" hazard lights turned off
- "I" hazard lights turned on



S13

LOW BEAM LIGHTS - CHANGE-OVER SWITCH

- "0" low beam or high beam lights in the radiator grill are "ON"
- "I" low beam lights on the cab roof are "ON" (may be used only when an implement attached to the front three point hitch is shading the lights in radiator in radiator grill)



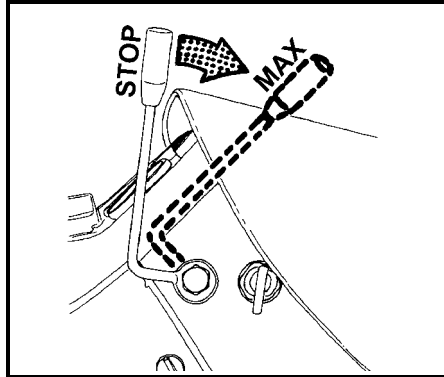
S14

TRACTOR LIGHTS SWITCH

- "0" tractor lights turned off
- "I" clearance lights and taillights, licence plate light, gauges are "ON". The rear flood light including its indication lamp can be turned on, too, by means of the separate switch.
- "II" all appliances as in "I" position. Moreover low and high beam lamps are "ON" according to the position of toggle switch.

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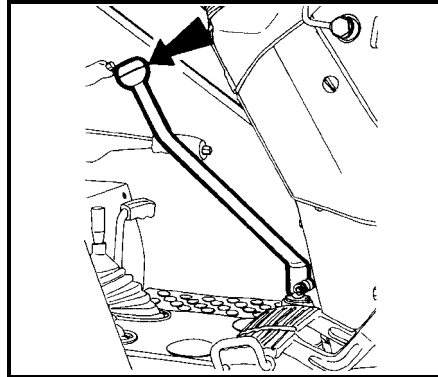
ACQUAINTANCE WITH TRACTOR



S12

HAND THROTTLE CONTROL LEVER

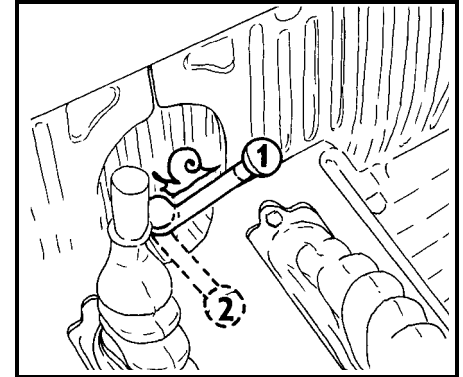
STOP	stops the engine
MAX	maximum fuel supply



S7

TRANSMISSION CONTROL

1. main transmission control lever



S2

CREEPER SPEEDS SHIFTING LEVER

1. engaged - low travel speed position
2. disengaged - normal travel speed position

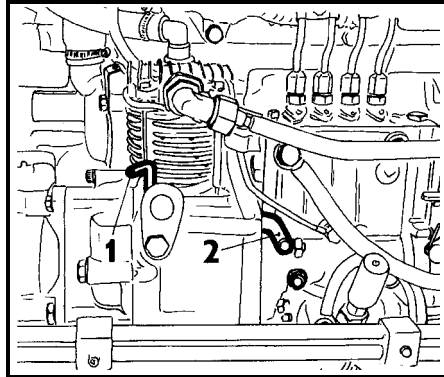
The creeper eliminates 1000 rpm PTO shaft speed.

For a certain type of work select the appropriate standard gear, High/Low and only then shift the creeper gear.



The shifting is done with clutch pedal fully pressed down and with TRACTOR STILL by moving the creeper lever to position 2.

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ACQUAINTANCE WITH TRACTOR



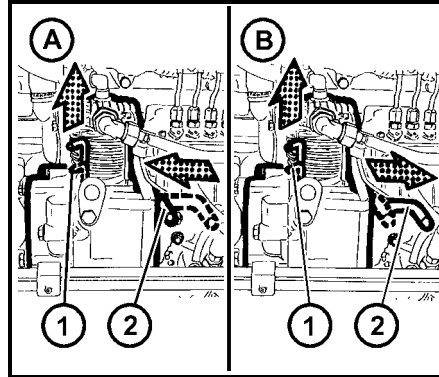
A55

COMPRESSOR DRIVE ENGAGEMENT

1. compressor drive engagement lever
2. engagement condition lock lever



The compressor must be ever engaged when driving the tractor with trailer or implement that is braked with air trailer brakes.



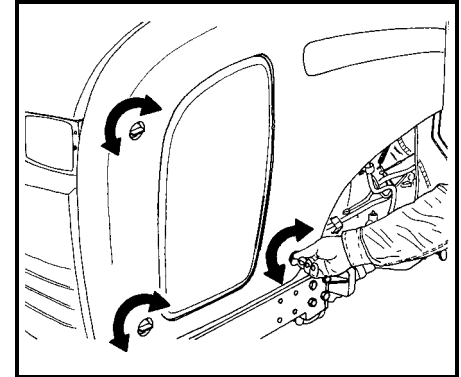
S57

Compressor drive engagement (A)

lever 1	to take up
lever 2	to push

Compressor drive disengagement (B)

lever 1	to take up
lever 2	to push out



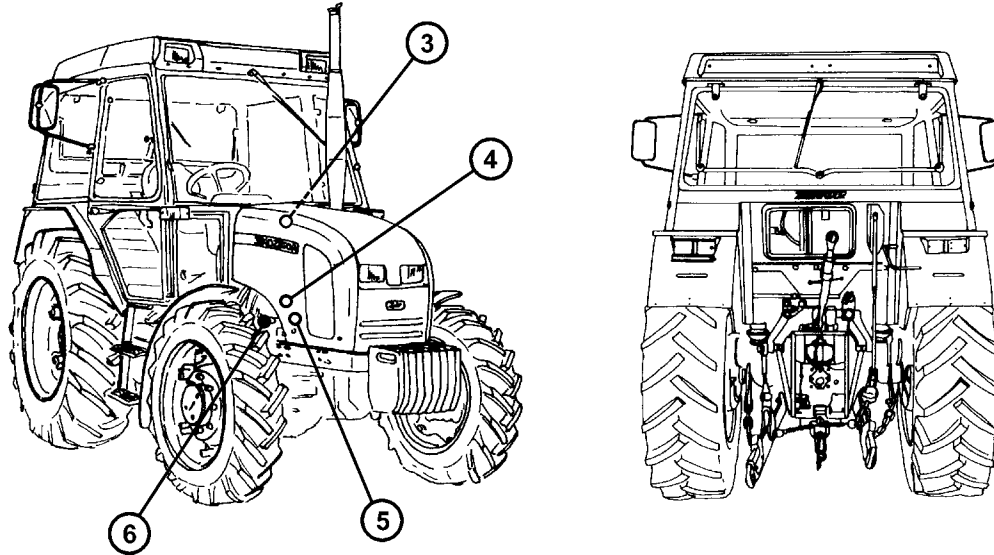
S27

DISASSEMBLING THE SIDE SHIELD

- push and turn three quick lockers of the tractor side shield
- lift a little the side shield and remove it from the tractor

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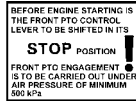
ACQUAINTANCE WITH TRACTOR



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ACQUAINTANCE WITH TRACTOR

LOCATION OF INFORMATION AND SAFETY DECALS



3. decal of the front PTO



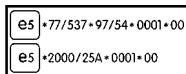
4. warning decal - hand



5. warning of starter motor



6. EPA label (for USA only)



6. EKO label (for EKO engines only)

NOTE

OPERATION

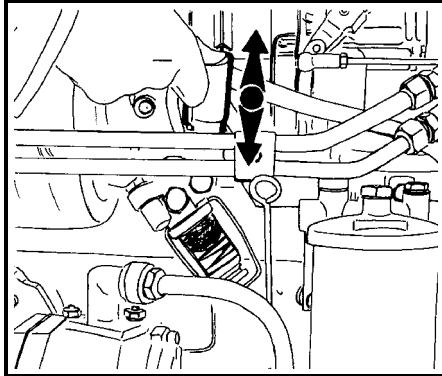
	Page
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Starting the Eko engine.....	30
Initial 10 service hours	31
After 10 service hours	31



Be familiar with shifting pattern and test all positions of shifting lever at stopped engine before driving the new tractor.

Be sure that the technical status of tractor corresponds to the safety traffic condition before driving.

OPERATION

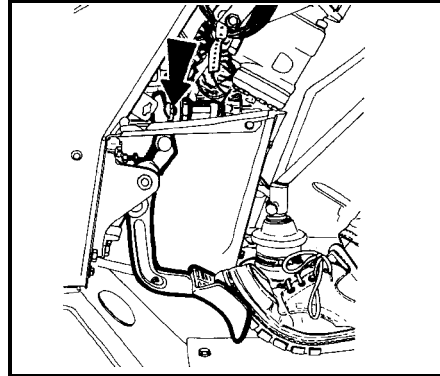


A59

STARTING THE ENGINE



Before starting the engine check to be sure the tractor is braked reliably and the transmission control lever in neutral position. When the engine is being started at the ambient temperature below 0°C, the hydraulic pump drive must be disengaged. With an independent hydraulic pump the pump drive must be turned off only if a disengagement mechanism is fitted. Use five to ten strokes of priming pump to fill up the fuel system.



S18

1. Insert the key into the key switch.
2. Depress the clutch pedal.
3. Turn the key through "I" position into "II" position (start). Crank the engine 3 - 5 second, then release the key and turn it into "0" position. Engine cranking can be eliminated at higher ambient temperature.
4. Set the max. throttle.
5. Turn the key through "I" position into "II" position (start). Release the key immediately after engine starting. Don't start engine longer than 15 second.
6. After starting engine, step by step reduce the throttle. Avoid running engine at high idle.

ENGINE STARTING FAIL

Repeat starting after 30 seconds. Max. 6 starting cycles are allowed (15 seconds starting and 30 seconds brake is one cycles). Farther starting engine is allowed after cooling of starter motor to ambient temperature.

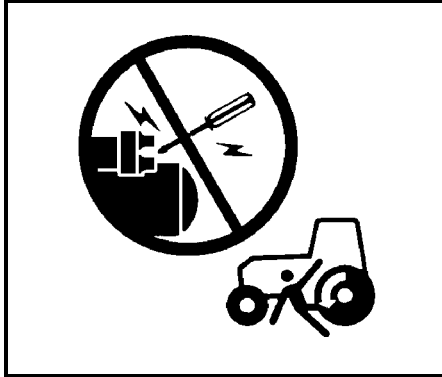


Never help to the stopping engine by starter motor. You will avoid starter damage!

STARTING THE EKO ENGINE

1. Insert the key into the key switch.
2. Depress the clutch pedal.
3. Set the MAX throttle.
4. Turn the key through "0" position into "I" position. Thermostart indicator light is "ON".
5. Wait until the thermostart indicator light is "OFF" (approx. 18 sec).
6. When the thermostart indicator light is "OFF" turn the key immediately into "II" position (start). Don't start engine longer than 15 seconds. Release the key immediately after starting the engine.
7. After starting engine, step by step reduce the throttle.
8. If the engine fails turn the key into the "0" position.
9. Set the throttle control lever into the STOP position.
10. Wait 30 seconds and repeat the points 2. - 7.

OPERATION

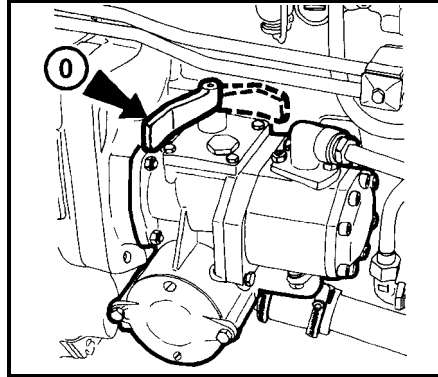


A60a



It is forbidden to start the tractor by short circuit of starter motor connector.

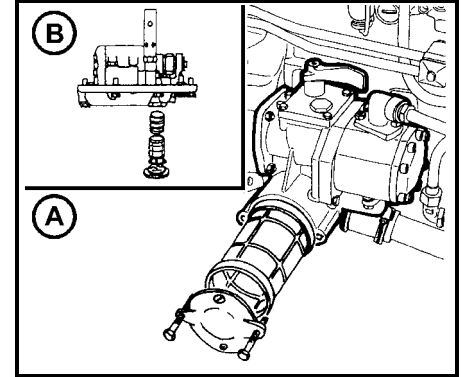
Start from the driver's seat only. Disconnect the ground battery pole, shift all levers into neutral position, including PTO engagement, when any manipulation with starter or repairing it. Avoid accidental starting that could cause life hazard of serviceman.



S16

INITIAL 10 SERVICE HOURS

If the tractor is equipped with the independent hydraulic pump the running-in should be carried out only in the traffic operation with hydraulic pump disengaged (the control lever in "0" position).



S17

AFTER 10 SERVICE HOURS

Remove and clean the magnetic insert and screen of the hydraulic pump suction strainer. Wash these two elements in petrol and install them back after dripping. Add oil to the upper mark on the transmission oil dipstick, if necessary. All the tractor hydraulic system may now be used without limitation.

- A - pump is located on engine cover. When installing the filter cover beware of the necessary clearance between engine and filter covers.
- B - the pump is located on the transmission cover within the lower portion of transmission.

NOTE

MAINTENANCE INSTRUCTIONS

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Filling up the brake fluid	40

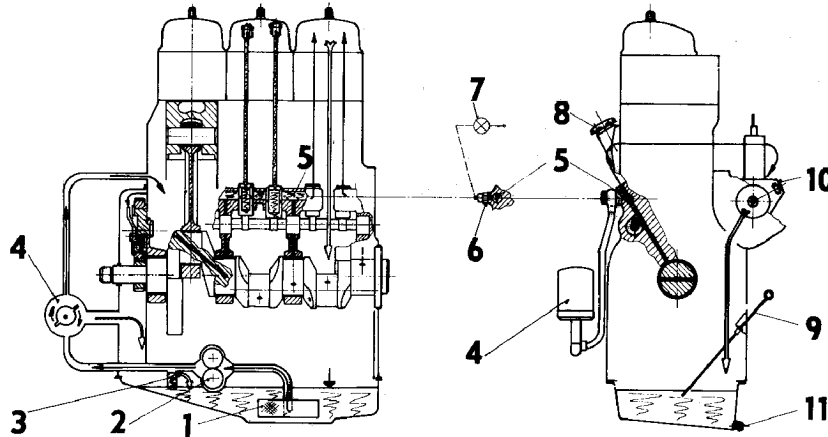
The tractor driver or user can perform the majority of scheduled technical service by himself. When you are not provided with sufficient technical means and equipment, entrust the more exacting elemental operations to a specialized workshop.



Concerning cleaning, lubrication and adjustment of tractor, trailing machine or implements, all the operations may be carried out only when the engine and the other moving parts are stopped, except for inspection of the brakes, battery charging and hydraulic system.

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MAINTENANCE INSTRUCTIONS

Z 5201



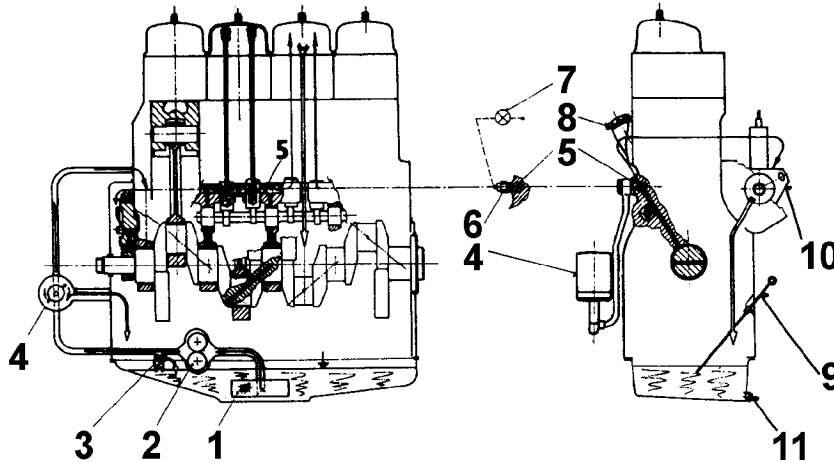
LUBRICATION SCHEMA OF Z 5201 ENGINE

1. suction strainer
2. oil pump
3. reduction valve
4. oil cleaner with exchangeable cartridge
5. main oil channel
6. pressure switch
7. indicator light
8. filler
9. oil dipstick
10. injection pump
11. oil drain plug

S54

Z 7201

Z 7701

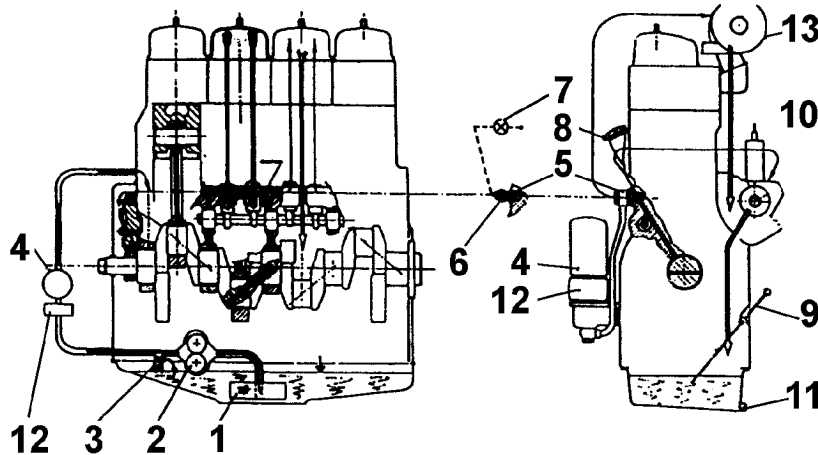


**LUBRICATION SCHEMA OF Z 7201,
Z 7701 ENGINES**

1. suction strainer
2. oil pump
3. reduction valve
4. oil cleaner with exchangeable cartridge
5. main oil channel
6. pressure switch
7. indicator light
8. filler
9. oil dipstick
10. injection pump
11. oil drain plug

S55

Z 7301 TURBO

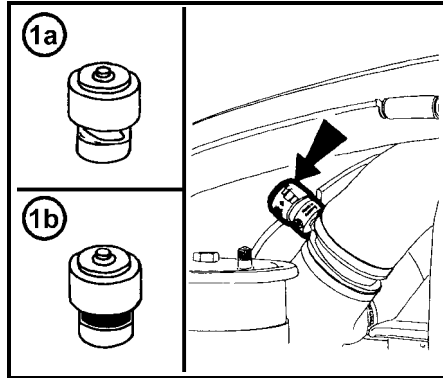


LUBRICATION SCHEMA Z 7301 TURBO ENGINE

1. suction strainer
2. oil pump
3. reduction valve
4. oil cleaner with exchangeable cartridge
5. main oil channel
6. pressure switch
7. indicator light
8. filler
9. oil dipstick
10. injection pump
11. oil drain plug
12. heat exchanger
13. turbocharger

S56

<https://truckmanualshub.com/>
MAINTENANCE INSTRUCTIONS



S26

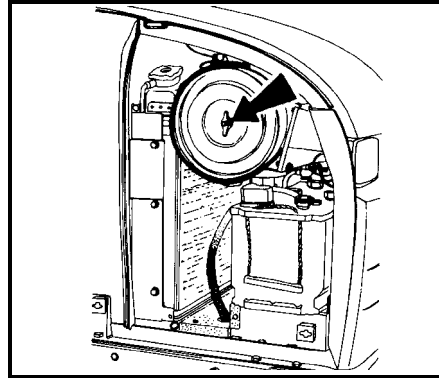
AIR CLEANER

Air cleaner maintenance is necessary to do after indication of the clogging indicator.

The indicator is accessible after side shield removal. The indicator is located on suction pipe.

Clogging of the air cleaner is mechanically indicated by red field appeared on the clogging indicator.

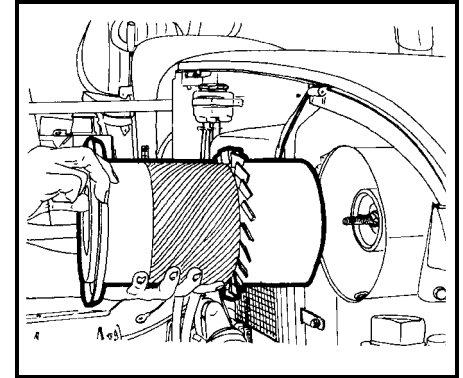
1a	air cleaner is not clogged
1b	air cleaner is clogged - do maintenance. See the part "Maintenance instructions"



S19

Maintain the air cleaner by the following way:

- push and turn three quick lockers on this tractor side shield where the air cleaner cover is located
- lift a little the side shield and remove it from the tractor
- remove the wing nut of air cleaner cover
- remove the air cleaner cover



S20

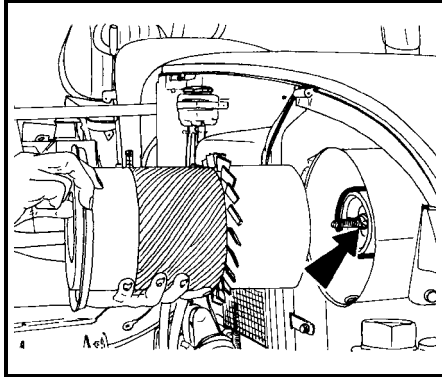
MAIN AIR FILTER ELEMENT REGENERATION

- remove the main air filter element

If the main air filter element is not damaged (dust on the inner side of air filter element must not be appeared) do regeneration by pressure air blown from the inner side of element. The main air filter element can be regenerated maximally three times by this way. The main air filter element needs to be replaced once per year.

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MAINTENANCE INSTRUCTIONS



S21

INNER SAFETY AIR FILTER ELEMENT EXCHANGE

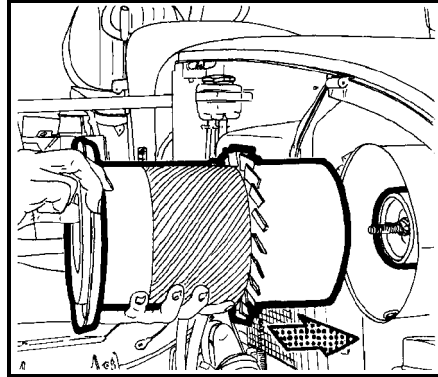
- remove the wing nut of inner safety air filter element
- remove the safety air filter element



Inner safety air filter element can not be regenerated!

It must be exchanged in the following cases:

- if the main air filter element is damaged
- after 5th maintenance of air cleaner
- minimally once per 2 years

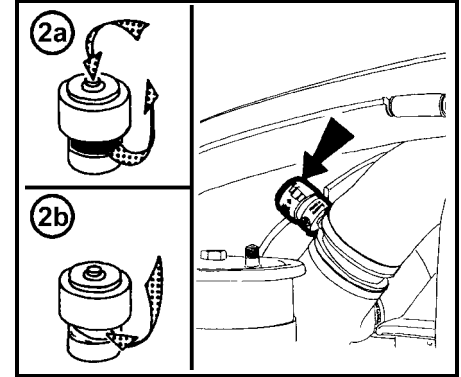


S28

AIR FILTER ELEMENT REASSEMBLY

Be careful at the air filter element re-assembly:

- keep the contact surfaces clean
- air filter elements must not be deformed and must not vibrate after assembly
- rubber sealing must be fitted properly round the complete circumference, the proper tightness of the complete cleaner must be assured after reassembly of air filter cover



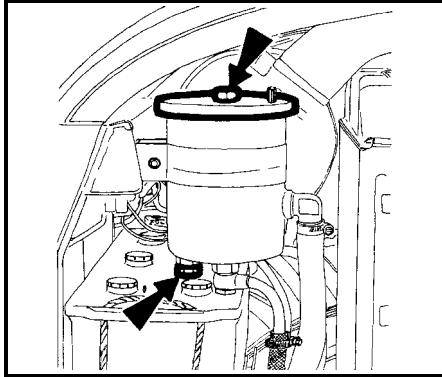
S8

CLOGGING INDICATOR RESET



Reset the clogging indicator after dry air cleaner maintenance.

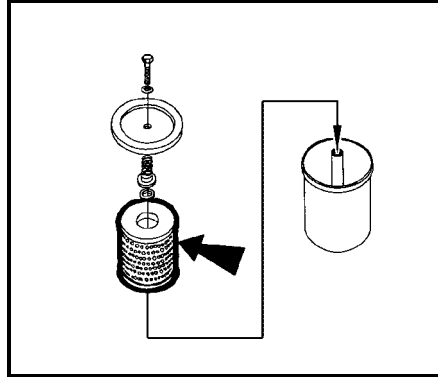
- push the push button on the indicator body (2a)
- you will mechanically release the indicator lock of red field indicating clogging
- indicator is again in function (2b)



S30

HYDROSTATIC STEERING OIL AND FILTER ELEMENT EXCHANGE

- remove the tractor side shield
-  - put the suitable vessel under the hydrostatic steering tank
- loosen the drain plug
- drain the oil from tank
- remove the nut of the oil tank cap
- remove the oil tank cap

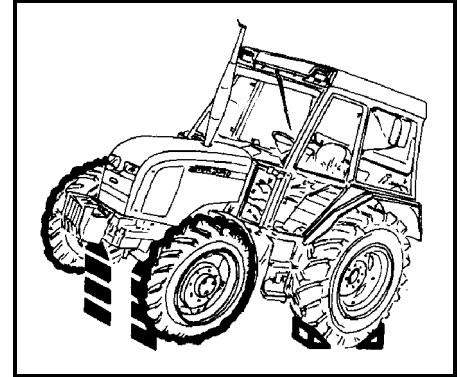


S32

- remove the cleaner element and install the new cleaner element
- reassemble the oil tank cap
- reassemble the nut of the oil tank cap and the drain plug
- remove both hoses from steering cylinder and return tube from tank

-  - put them together with return line tube into vessel for the old oil

- start the engine and turn the steering wheel twice or three times into both directions at low engine idle run (max. 10 sec.) to remove the oil from the steering unit



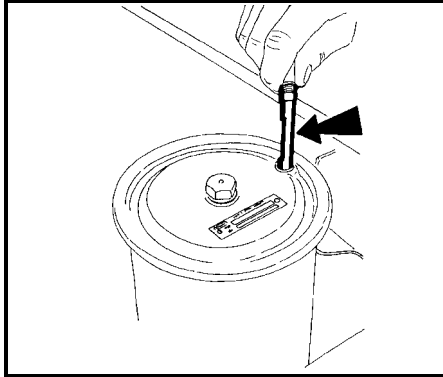
S37

- fix the tractor against movement and lift the front axle



- put a vessel for the old oil under the steering cylinder and remove the oil from cylinder by turning of wheels (by hand)
- reassemble all disconnected fittings
- fill the tank by oil and bleed the hydrostatic steering circuit

MAINTENANCE INSTRUCTIONS

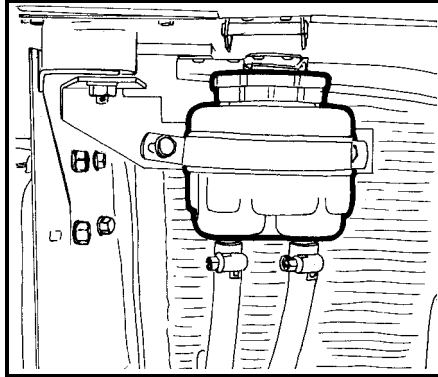


S59



At all actions within bleeding look at the oil level in tank to avoid aerating of steering system.

After bleeding check and eventually add the oil into tank up to the mark of oil dipstick. Check for leakage of all connections and lines. Leakage is not allowed.



S3

FILLING UP THE BRAKE FLUID

Maintain the brake fluid level within $\frac{3}{4}$ (max. level) up to $\frac{1}{2}$ (min. level) of tank capacity.



Keep the strict cleanness when manipulating with brake fluid. Daily inspect the brake fluid level before driving.

NOTE

NOTE

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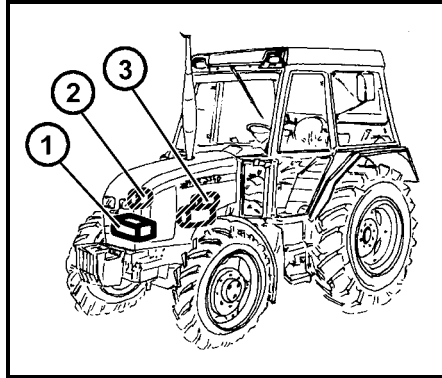
ELECTRICAL INSTALLATION

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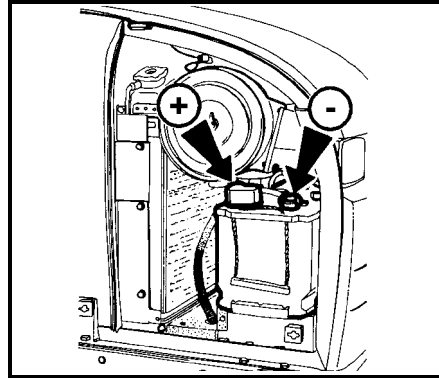


Pay special attention for manipulation with battery when repairing electrical installation to avoid contact of skin or clothes with electrolyte.

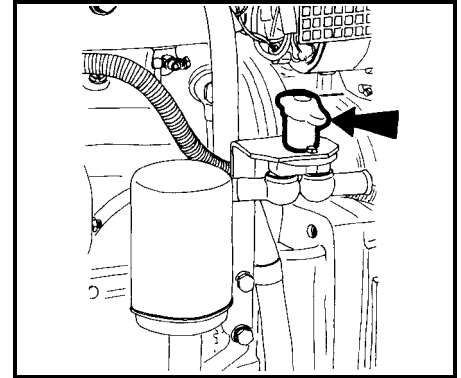
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ELECTRICAL INSTALLATION



S39



S23



S22

ELECTRICAL EQUIPEMENT

Nominal voltage (minus poll (-) grounded)	12 V
Battery (1) AKUMA VARTA	12 V/135 Ah 12 V/135 Ah
Alternator (2) with integrated voltage regulator	14V/55 A
Starter motor(3)	12V/2,9 kW
Drive belts for: - alternator - water pump	AVX 10- 1113 LA (2 pcs.) AVX 10- 1125 LA (2 pcs.)

BASIC SERVICE INFORMATIONS

Battery "minus" poll must be ever connected with the ground and "plus" poll connected with alternator. Vice versa connected battery destroys the complete electronics of alternator.

If starting tractor by means of another battery or auxiliary source don't forget to connect "plus" to "plus" and "minus" to "minus" and auxiliary source must be set to 12 V. Disconnect battery by * battery switch or remove the connector for tractor ground (-) if changing any part of charging circuit to avoid possible short circuit.



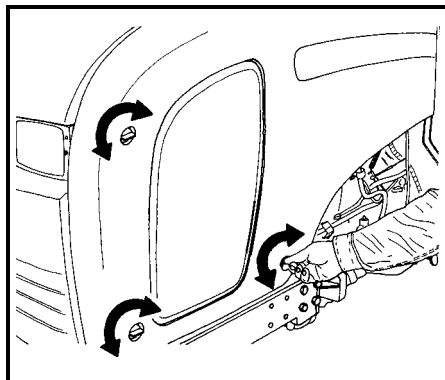
At any manipulation or repair of starter the battery must be disconnected and all shifting levers including PTO lever must be in neutral position to avoid self starting and life hazard.



*Starting tractor by short circuit of starter connectors is forbidden!
 Tractor must be always started from driver's seat.*

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ELECTRICAL INSTALLATION



S27

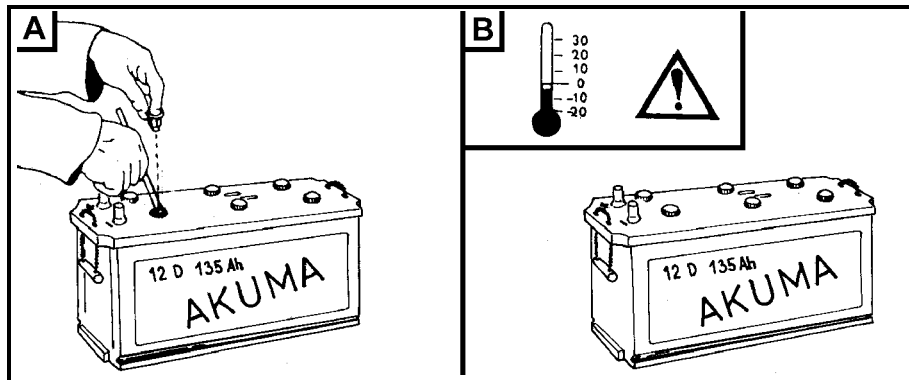
BATTERY

Battery is located behind the front mask of bonnet and is accessible after removing the side shields.

* Battery switch is located on the right hand side of engine compartment (see picture S22).



If the tractor is out of operation for longer period of time, it is necessary to charge the battery at least once in three month because of the battery selfdischarging and the spacing current of AEV warning lights breaker. It is recommended to disconnect the battery by means of the battery disconnecting switch in case the tractor is put out of action.



M232

BATTERY MAINTENANCE

Maintain the battery clean, good fixed to the vehicle. The fixing device mustn't deform the battery case. Electrolyte level mustn't be under the minimum mark that is on the case.



Add distilled water only!

1. First study the operator's manual before working with battery!
2. Safe your eyes by glasses or by safety shield!
3. Electrolyte is a caustic agent that's why keep attention when working with electrolyte! Neutralize the skin and wear stained by electrolyte with soap water. Wash them by clean water.
4. Hydrogen is released from electrolyte at charging the battery and this creates the explosive mixture being mixed with the air! That's why manipulation with open flame and smoking at battery is forbidden!
5. The explosion might be caused by a spark created at manipulation with battery terminals when the closed charging circuit!
6. Keep children out of battery and electrolyte!
7. Discarded battery is ecologically dangerous reject! Let it scrap by specialists (service network). They will do it free of charge when buying the new battery.

ELECTRICAL INSTALLATION

CHARGING AND MAINTAINING THE BATTERY

A) Charging on the vehicle and outside the vehicle

1. Systematic overcharging and discharging of battery damages and shortens its life. Correctly adjusted charging system maintains battery near to the fully charged status. At set level of voltage (13,8 - 14,4 V) in charging system and average tractor operation it is sufficient to check and maintain the level of electrolyte by distilled water once per six month.
2. At heavier operation and another level of regulated voltage it is necessary more frequent checking the level of electrolyte. Overcharging the battery on vehicle (more than 14,4 V) causes bigger loose of electrolyte.
3. It is necessary to charge the battery removed from the vehicle or in the vehicle which is not in operation (see storage of charged batteries with electrolyte). It is also suitable to charge battery in vehicle before wintertime and after wintertime. In winter season and strong frost the electrolyte might be frozen at almost discharged battery (density of electrolyte 1,12 - 1,15 g/cm³) in this case the life will be substantially reduced (disintegration of active

agent and destroy of battery case). Heavily discharged battery (density of electrolyte lower than 1,07 g/cm³) might be frozen already at several degrees below zero.

4. Charge the battery by current that is 0,1 of total battery capacity (or lower) up to fully charged status.
5. Charging device with constant voltage 14,4 V can be also used. Charging time can be max. 30 hours according to status of discharging.
6. Fully discharged battery must be charged as soon as possible, otherwise its full capacity can not be restored.

B) Charged battery

1. Battery is considered as fully charged if all battery cells generates the gas with same intensity. If the electrolyte density is 1,28 g/cm³ in all cells and if the total voltage of battery is within 15,3 - 16,5 V, measured with the prescribed charging current.
2. Status of full charging is confirmed when the received density of electrolyte and level of voltage is not changed within farther two measurements following after two hours.
3. For example the charging status for your orientation: status of charging corresponds to density of electrolyte. Charging status is characterized by

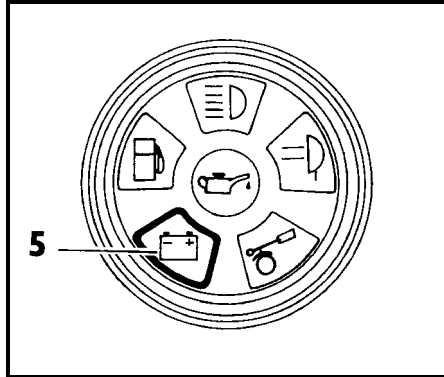
density of electrolyte and is measured by densimeter. Every cell needs to be measured.

Status of charging = density of electrolyte	
charging status	electrolyte density
100 %	1,28 g/cm ³
70 %	1,23 g/cm ³
50 %	1,20 g/cm ³
20 %	1,15 g/cm ³
0 %	1,12 g/cm ³

C) Storage of charged battery with electrolyte

1. Before storage the battery must be charged up to final symptoms of charging. It must be disconnected from charging system, cleaned and with plugs.
2. Battery that is built into a plastic case from polypropylene must be charged after three month of storage because of smaller self-discharging.
3. Intervals for checking the status of electrolyte are: when charging the battery or minimally once per 6 month, battery is maintained by adding the distilled water! If some electrical components are permanently connected even at disconnected key switch (for example Warning) it is necessary to check the status of charging - i.e. voltage w/o load and electrolyte density min. 1x after 1 month.

ELECTRICAL INSTALLATION



S42

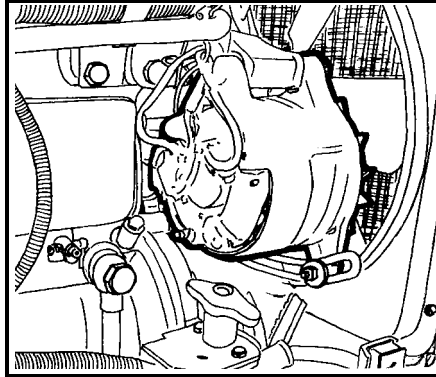
ALTERNATOR

Alternator is located on the right hand side of engine. Charging status is indicated by red indicator light on the gauge display.



Damaged indicator light bulb 12 V 2 W must be immediately exchanged. If the indicator light bulb is damaged the battery isn't charged!

All wires connected with the alternator must be disconnected when repairing tractor by electric arc welding. Protect the wire "+B" against short circuit.

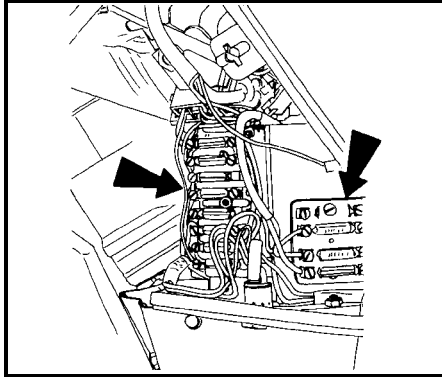


S38

ALTERNATOR MAINTENANCE

- Protect the alternator against penetration of water or diesel fuel when washing and cleaning tractor.
- Battery must never be disconnected at operation!
- The alternator must never run without load i.e. with disconnected terminal "+B" and connected terminal "+D". This status creates excessively high voltage of alternator at increased engine speed and this voltage damages the alternator electronics.
- Never create the short circuit of any alternator connector at operation.
- Alternator must not be additionally excited. Alternator electronics is damaged in this case.
- Keep the perfect electrical connection of alternator terminals and perfect alternator ground.

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ELECTRICAL INSTALLATION

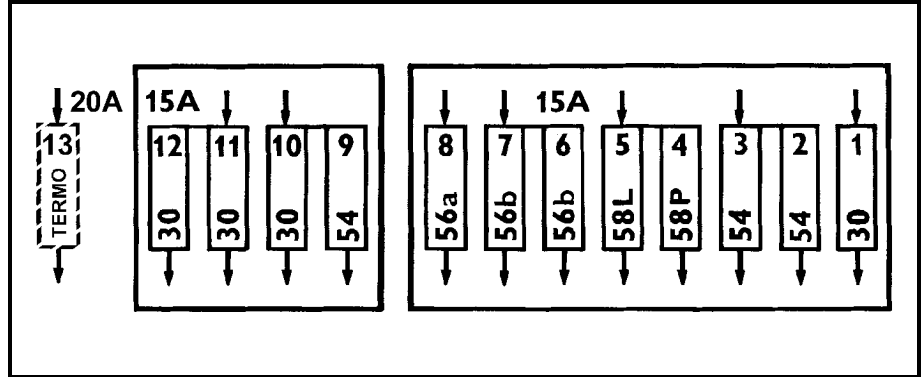


S24

FUSE BOX

Fuse box is accessible after removing of steering support cover. The main fuse box has eight poles. Tractors with safety cab have another four-pole fuse box installed near the main fuse box. All fuses have the rated value of 15 A.

Nearby the main fuse box is located the special thermostart fuse of the rated value 20 A. The thermostart fuse is mounted on the all tractors equipped with thermostart and all the tractors equipped with EKO engines.



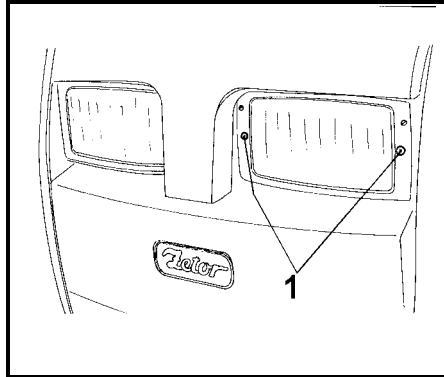
S53

ELECTRICAL CONNECTIONS OF FUSES WITHIN THE FUSE BOX

1. brakes, headlamp flasher, acoustic horn, warning lights, turn signal lights
2. PTO shaft clutch lights
3. hand-lamp socket, power supply of instrument and indication lamps
4. left hand tail and clearance lights, licence plate illumination
5. right hand tail and clearance lights, instrument panel light, working headlight
6. right-hand lower beam headlight in front mask or on the safety cab roof
7. left-hand lower beam headlight in front mask or on the safety cab roof
8. upper-beam headlamps and upper-beam light indicator lamp
9. front windshield wiper/washer, rear windshield wiper, control of cab heating and ventilation, (switching-on relay for rear windshield heating)
10. working headlights on the safety cab roof, radio
11. power supply for heating and ventilation, cab ceiling lamp
12. reserve
13. thermostart (20 A)

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ELECTRICAL INSTALLATION

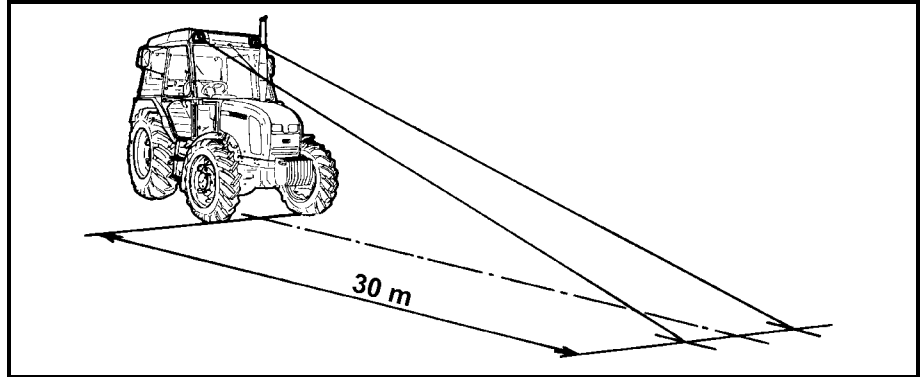


A202

ADJUSTMENT OF FRONT MASK HEADLIGHTS

Adjust the light by means of both screws (1) for vertical and horizontal direction simultaneously - horizontally $\pm 2^\circ$; vertically $+1^\circ$ to -6° .

Each light is adjusted separately. Bulb is exchanged from the rear part of parabola. Slide out or remove the battery because of limited space.



S41

CHECKING OF CAB ROOF HEADLIGHTS ADJUSTMENT

Any point of illuminated surface on the left side must not be far off 30 m from front tractor part. Headlight beams must be parallel with tractor axes.

Adjust the headlights at tractor shipping weight. Front roof headlights can be used on the road only in case, front implement is attached or machine covers mask headlights.

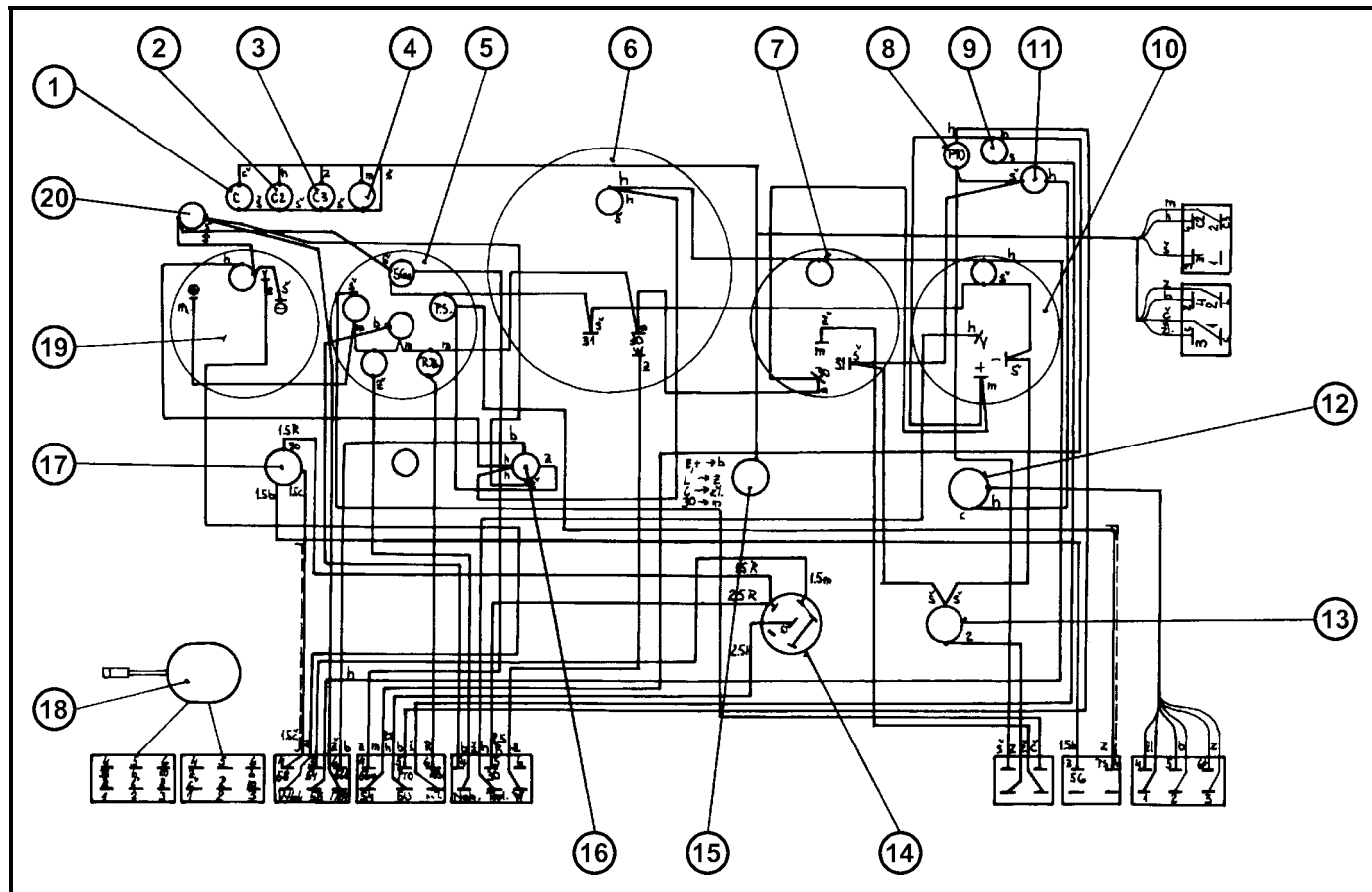


Front roof headlights can be used on the road only in case that front implement is attached or if the attached machine covers grill headlights.

CAB ROOF HEADLIGHTS ADJUSTMENT

Cab roof headlights are adjusted by the same way as the tractor mask headlights.

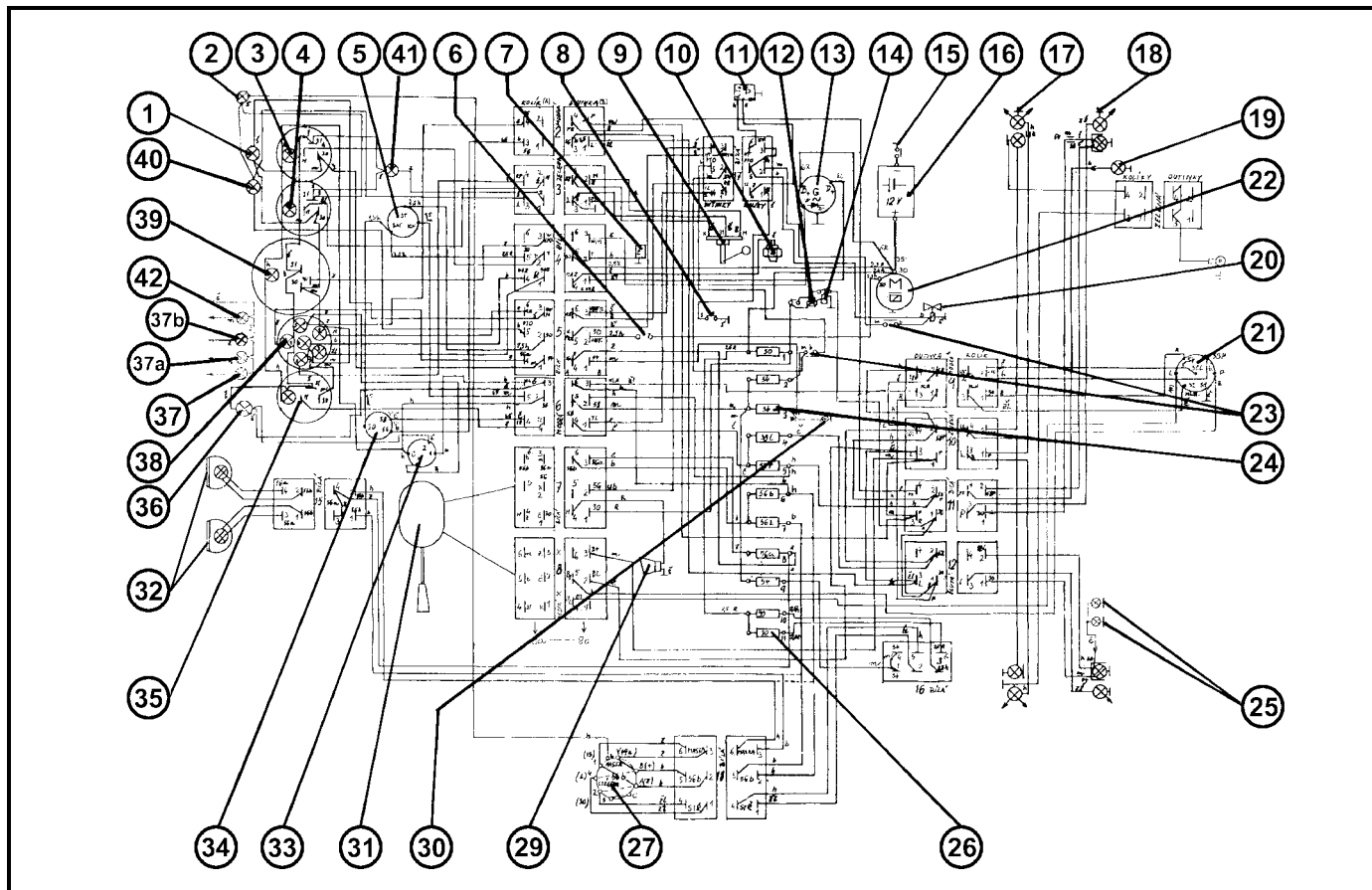
DASHBOARD WIRING DIAGRAM FOR TRACTORS Z 3320 - Z 7340



DASHBOARD WIRING DIAGRAM FOR Z 3320 - Z 7340 TRACTORS

1. tractor turn signal control light
2. trailer turn signal control light (1st trailer)
3. trailer turn signal control light (2nd trailer)
4. hazard control lamp
5. indicator cluster lamps
6. tachometer (rpm) and hour meter
7. fuel gauge
8. PTO clutch disengagement control light
9. minimum air pressure indicator lamp
10. coolant thermometer
11. cab headlights control lamp
12. dimmer switch of headlight in the radiator switch or on the cab roof
13. thermostart indicator
14. switch box with key
15. hazard light switch
16. flood light and rear fog lamp changeover switch
17. tractor lightning switch
18. multi-position switch for turn signal, horn and high beam headlights
19. air pressure gauge
20. rear fog lamp control light

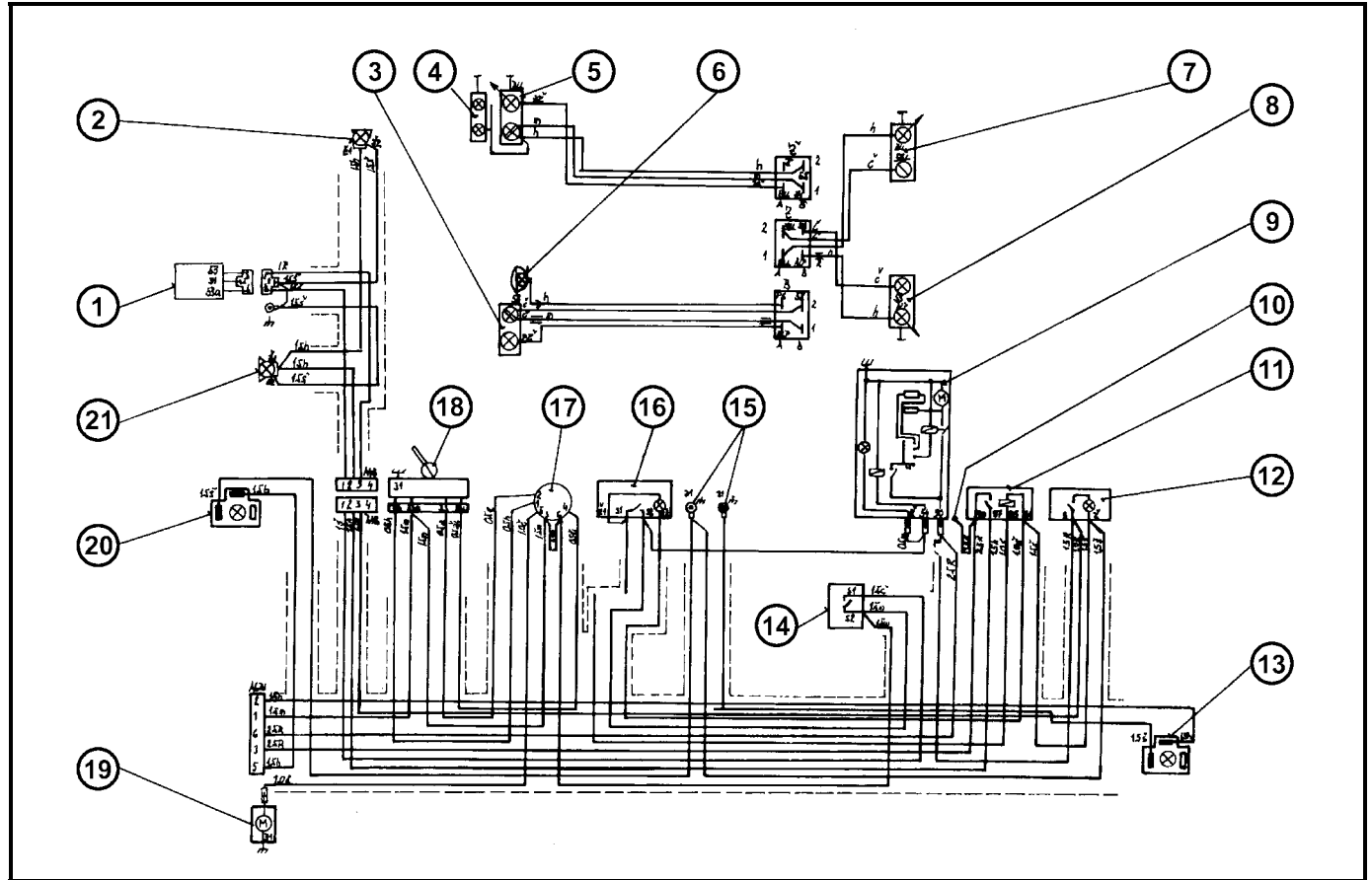
ELECTRICAL INSTALLATION FOR TRACTORS Z 3320 - Z 7340



ELECTRICAL INSTALLATION FOR TRACTORS Z 3320 - Z 7340

- | | |
|--|---|
| 21. minimum air pressure indicator lamp | 32. grill headlights |
| 22. cab headlights control lamp | 33. work and fog light switch |
| 23. coolant temperature gauge | 34. tractor lightning switch |
| 24. fuel gauge | 35. air pressure gauge |
| 25. switch box with key | 36. fog lights indicator lamp |
| 26. starter button | 37. tractor turn signal control light |
| 27. coolant temperature sensor | 37a.trailer turn signal control light (1 st trailer) |
| 28. park brake switch | 37b.trailer turn signal control light (2 nd trailer) |
| 29. fuel tank float | 38. indicator cluster lamps |
| 30. engine oil pressure sensor | 39. tachometer (rpm) and hour meter |
| 31. air pressure sensor | 40. PTO shaft indicator lamp |
| 32. brake light switch | 41. thermostart indicator lamp |
| 33. alternator | 42. hazard control lamp |
| 34. brake light relay | |
| 35. battery disconnect switch | |
| 36. battery | |
| 37. left front turn signal and clearance lights | |
| 38. right front turn signal and clearance lights | |
| 39. work-light | |
| 40. electromagnetic valve of PTO clutch | |
| 41. seven-pin trailer socket | |
| 42. starting motor | |
| 43. PTO clutch switch | |
| 44. eight-position fuse box | |
| 45. license plate lights | |
| 46. four-position fuse box (for tractors equipped with safety cab only) | |
| 47. grill-roof switch | |
| 29. horn | |
| 30. hand light jack | |
| 31. multi-position switch for turn signal, horn and high beam headlights | |

SAFETY CAB ELECTRICAL INSTALLATION FOR TRACTORS Z 3320 - Z 7340



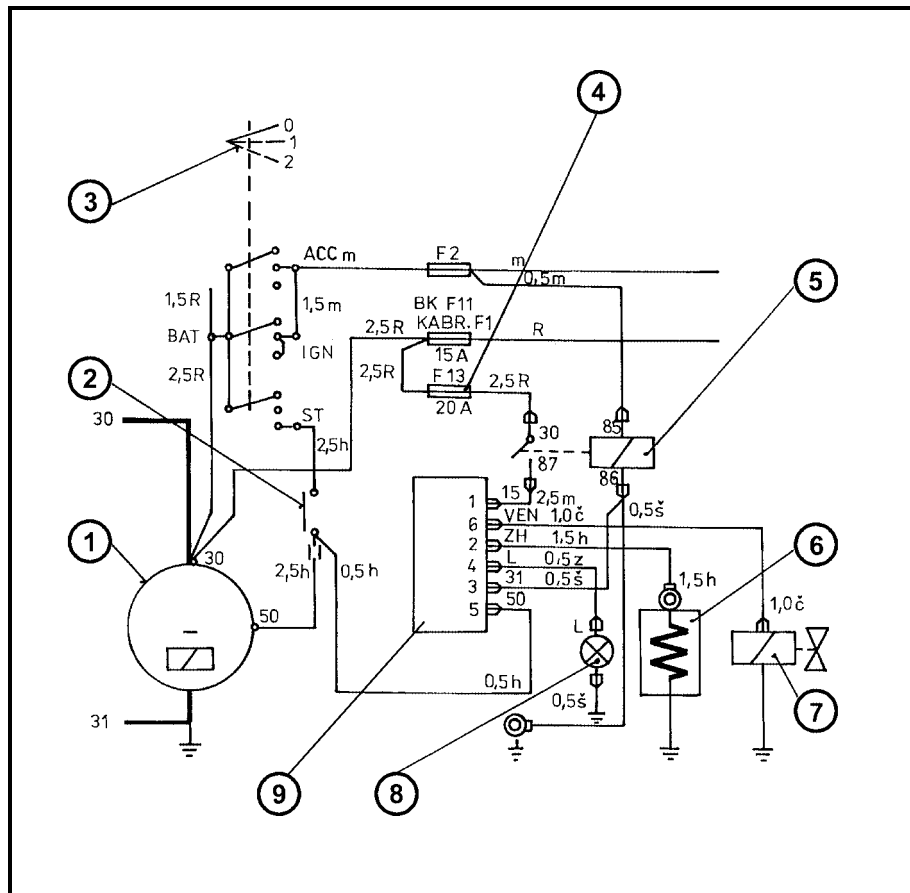
SAFETY CAB ELECTRICAL INSTALLATION FOR TRACTORS Z 3320 - Z 7340

1. rear windshield wiper
2. right rear flood-light on the roof
3. right rear light
4. licence plate lights
5. left rear light
6. work light
7. left front light
8. right front light
9. heating
10. radio connection
11. relay
12. ceiling light
13. right front flood-light on the roof
14. rear windshield wiper switch
15. frame connection points
16. flood light changeover switch
17. front windshield wiper and washer
changeover switch
18. front windshield wiper
19. washer
20. left front flood-light on the roof
21. left rear flood-light on the roof

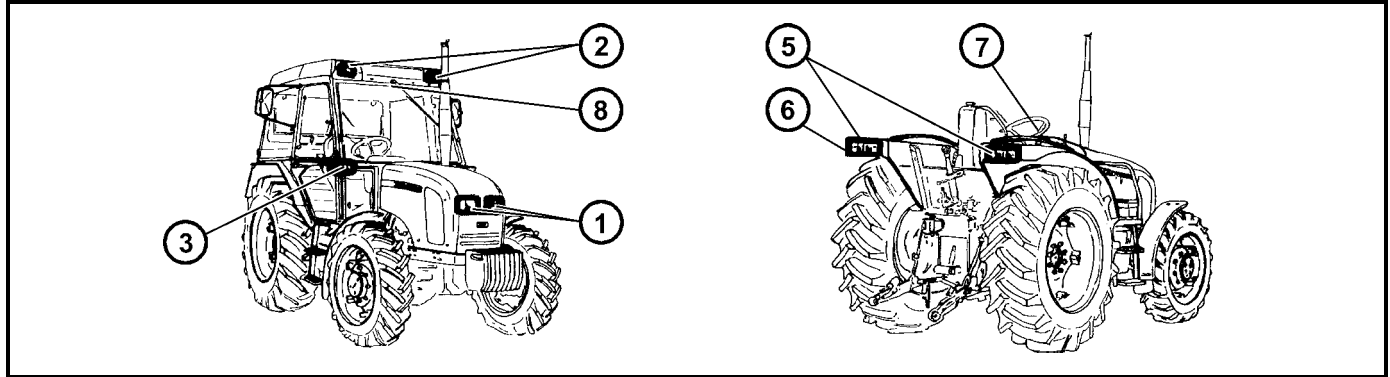
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THERMOSTART ELECTRICAL INSTALLATION FOR TRACTORS Z 3320 - Z 7340

1. starter
2. clutch start switch
3. switch box
4. thermostart fuse (20 A)
5. relay
6. thermostart glowplug
7. thermostart valve
8. thermostart indicator light
9. thermostart governor



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ELECTRICAL INSTALLATION



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LIST OF LAMPS BULB USED

Pos.	Bulb destination	Voltage	Outlet	Socket	Note
1	front asymmetric headlights	12 V	45/40 W	P 45t	
2	cab roof asymmetric headlights	12 V	45/40 W	P 45t	low beam filament connected
3	front combine headlights - turning lights - position lights	12 V 12 V	21 W 10 W	BA 15s BA 15s	
5	rear combined lights - tail lights - brake lights - turning lights	12 V 12 V 12 V	21/5 W 21/5 W 21 W	BAY 15D BAY 15D BA 15s	
6	licence plate light	2x12 V	5 W	S 8,5	
7	dashboard - turn signal control lights - other pilot lamps	12 V 12 V	4 W 2 W	BA 9s BA 9s	
8	cab dome illumination	12 V	5 W	S 8,5	

PLANNED TECHNICAL MAINTENANCE

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PLANNED TECHNICAL MAINTENANCE - USED LIQUIDS AND FILLS

General classifications of engine oils for tractors Z 3320 - Z 7340 (tab. 1)				
Viscosity class SAE J 300 JUN 87	API class SAE J 183 MAR 88	Suitability for ambient temperature (C°)	Specification	CCMC class APR 95
10W/30 10	CD+, CE, CF-4	below -7	MIL-L-2104	D-4/PD 2
20W/30 20W/40 15W/30 15W/40	CD+, CE, CF-4	below -7 up to +30	MIL-L-2104	D-4/PD 2
20W/30 20W/40 20W/50 30 40	CD+, CE, CF-4	above +30	MIL-L-2104	D-4/PD 2

PLANNED TECHNICAL MAINTENANCE - USED LIQUIDS AND FILLS

Oils for turbocharged engines Z 7320 - Z 7340 (tab. 1)			
Manufacturer	Oil mark	Viscosity class	API class
Paramo Pardubice	M7ADS III - Trysk	20W/40	SF/CD+
Paramo Pardubice	M7ADS III - Trysk Super	15W/40	SG/CE
Paramo Pardubice	M7ADS IV - Trysk Super Turbo	15W/40	SG/CF-4
Shell	RIMULA TX	10W/30	SG/CF-4
Aral	Multi Turboral	15W/40	CF-4/SH
Aral	Austrotrac	10W/30	CE/SF
Koramo Kolín	Mogul Diesel DTT Plus	10W/40	CF-4
ÖMV	ÖMV Truck M Plus	15W/40	CF-4/SG
	ÖMV Truck FE Plus	10W/40	CF-4
	ÖMV Truck FE	10W/40	CE/SG
	ÖMV Austrotrac	10W/30	CE
	ÖMV Truck LD	15W/40	CE
	ÖMV RME Plus	15W/40	CE/SG

Oils for naturally aspirated engines Z 3320 - Z 6340 (tab. 1)			
Manufacturer	Oil mark	Viscosity class	API class
ÖMV	Super Diesel	15W/30	CD CE
Koramo Kolín	M7ADX Mogul Super Stabil	15W/40	SF/CC
Koramo Kolín	Mogul Diesel DT	15W/40	SD/SE

PLANNED TECHNICAL MAINTENANCE - USED LIQUIDS AND FILLS

General specifications for transmission oils used for Z 3320 - Z 7340 (tab. 2)			
Viscosity class SAE J 306 MAR 85	API class SAE J 308 NOV 82	Suitability for ambient temperature	Specification
80W	GL-4	all season	MIL-L-2105

Oils for transmissions Z 3320 - Z 7340 (tab. 2)			
Manufacturer	Oil mark	Viscosity class	API class
ARAL	EP 80	80W	GL-4
Paramo Pardubice	Gyrol - UTTO	80W	GL-4
Paramo Pardubice	Gyrol - PP 80	80W	GL-4
Esso	Torque Fluid 62	80W	GL-4

Oils for front driving axle Z 3340 - Z 7340 (tab. 3)			
Manufacturer	Oli mark	Viscosity class	API class
Agip	Torque Fluid 62 Rotra Multi THT		

PLANNED TECHNICAL MAINTENANCE - USED LIQUIDS AND FILLS

Oils for hydrostatic steering Z 3320 - Z 7340 (tab. 4)	
Manufacturer	Classification
hydraulic oil OH - HM 32	ISO - L - HM 32

Plastic vaseline for Z 3320 - Z 7340 (tab. 5)	
Manufacturer	Classification
LITOL 24 PM - LA 2	GOST 21150.75 ISO 6743/9, ISO - L - XBCEA 2

Hydraulic brake fluids for Z 3320 - Z 7340 (tab. 6)	
Manufacturer	Classification
SYNTHOL 205	PND 31-656-80, ISO 4925, SAE - J 1703 Note: 1. Fluids of the same classification can be mutually used. 2. Brake fluid must be exchanged minimally once per two years independently on operation hours.

Fuel (tab. 7)
Summer diesel fuel NM - 4 according to ČSN 656506 for period from 1.4. to 31.10. Winter diesel fuel NM - 22 according to ČSN 656506 for period from 1.11. to 31.3. Note: Similarly the suitable fuels must be used abroad.

PLANNED TECHNICAL MAINTENANCE - USED LIQUIDS AND FILLS

Antifreeze for cooling system and heating Z 3320 - Z 7340 (tab. 8)

Antifreeze FRIDEX-STABIL or FRTIDIOL 91 and demineralized water in ratio 1:1,5 (add the mixture in this ratio).

Antifreeze for exchanging abroad must contain anticorrosion additives protecting all materials of cooling system and tractor heating (including rubber parts and cylinder head gasket).

Note:

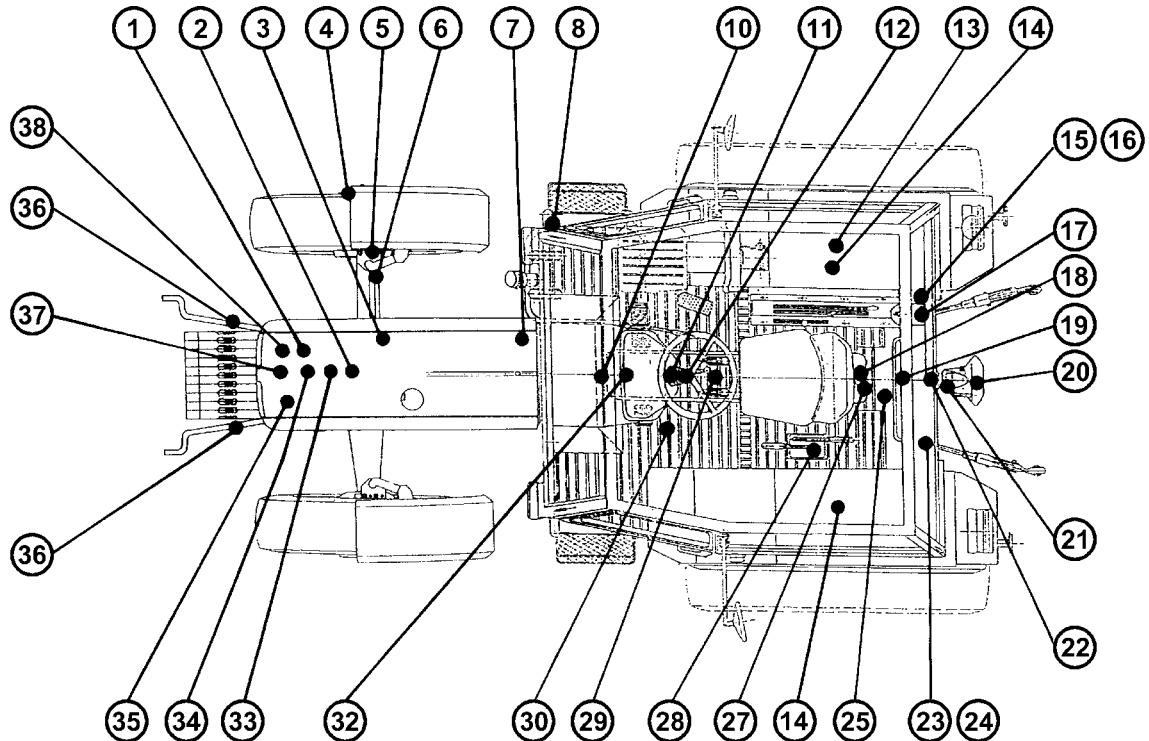
1. Antifreeze FRIDEX-STABIL and FRDIOL 91 are mutually mixable.
2. Above mentioned liquids must not be mixed with liquids of another marks.
3. Exchange the liquid after two years.

PLANNED TECHNICAL MAINTENANCE - USED LIQUIDS AND FILLS

Name, Destination	Fill sort	Z 3320 Z 3340 (in litres)	Z 4320 - Z 7340 (in litres)
coolant - w/o heating - w/ heating	Fridex Stabil (Fridol 91) + demineralized water	9,5 10,5	10,6 11,6
fuel	engine diesel 4, engine diesel 22	85	
engine oil	see (tab.1)	9,0	12,0
gear box and differential oil	see (tab.2)	30,0 - 34,0 •	
portal oil	PP - 80	2 x 1,9	
front drive axle housing oil	Torque Fluid 62 (Rotra Multi THT)	5,5	
front wheel drive planetary reduction housing oil	Torque Fluid 62 (Rotra Multi THT)	2x0,6	
front PTO shaft gearbox oil	see (tab.2)	0,8	
brake fluid	HD 205	0,5	
hydrostatic steering oil	see (tab.4)	5,55	
seat damper oil	damper oil	0,07	

- - Use 2 litres more of fluid on a tractor with front drive axle. The amount of fluid has to be increased by another 7 litres when working on a slope with the tractor. The same holds for outer hydraulic circuit attached implements.

PLANNED TECHNICAL MAINTENANCE - LUBRICATION CHART



PLANNED TECHNICAL MAINTENANCE - LUBRICATION CHART

Pos.	Lubrication point - inspection	Fluid type
1	cooling system - coolant exchange	antifreeze
2	pivot pin sliding bearing nipples	PM - LA 2
3	engine - oil exchange	see (tab. 1)
4	front wheel bearings	PM - LA 2
5	FW rigid extensions (2 grease nipples)	PM - LA 2
6	steering lever ball joints	PM - LA 2
7	brake fluid reservoir	Synthol 205
8	cab door hinges	PM - LA 2
10	front wiper drive bearings	see (tab. 5)
11	clutch release sleeve	see (tab. 2)
12	steering wheel shaft column	PM - LA 2
13	portal frames	see (tab. 2)
14	disc brake rollers	Termosize
15	telescopic control of lifting tie rod (1 nipple)	PM - LA 2
16	right lifting tie rod of three-point hitch (1 nipple)	PM - LA 2
17	tightening nuts of lower tie rods	PM - LA 2
18	operator's seat (handle and rollers of seat)	PM - LA 2
19	rear wiper drive bearings	see. (tab.5)
20	automatic traction gear for trailers (4 grease nipples)	PM - LA 2
21	lower pin of three-point hitch support	PM - LA 2
22	connecting rod of power control (1 grease nipple)	PM - LA 2
23	lift assisting cylinder pins (2 or 4 lub. nipples)	PM - LA 2
24	left-hand lifting arm journal	PM - LA 2
25	power control torsion bar (1 grease nipple)	PM - LA 2
27	operator's seat suspension	damper oil
28	push-pull cable of pick-up hitch, hand parking brake	PM - LA 2
29	transmission	see (tab. 2)
30	clutch disengagement shaft (2 grease nipples)	PM - LA 2

PLANNED TECHNICAL MAINTENANCE - LUBRICATION CHART

Pos.	Lubrication point - inspection	Fluid type
32	heating fan bearing	see (tab. 2)
33	front PTO shaft universal joint	PM - LA 2
34	front PTO shaft transmission casing	see (tab. 2)
35	steering system oil reservoir	see (tab. 4)
36	front three-point hitch journals	PM - LA 2
37	battery	distilled water
38	battery connecting cable terminals	PM - LA 2

NOTE

NOTE

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MAIN TECHNICAL PARAMETERS

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MAIN TECHNICAL PARAMETERS

TECHNICAL DATA OF ENGINES Z 5201, Z 7201, Z 7701, Z 7301					
Tractor model	Unit	Z 3320 / 3340	Z 5320 / 5340	Z 6320 / 6340	Z 7320 / 7340 Turbo
Engine model		Z 5201	Z 7201	Z 7701	Z 7301
Engine type		diesel, four stroke with direct fuel injection			
Engine execution		in line, water - cooled			
Number of cylinders		3	4	4	4
Displacement	cm ³	2696,5	3922	3922	3922
Bore x stroke	mm	102x110	102x110	102x120	102x120
Rated speed	min ⁻¹	2200			
Ignition sequence		1-3-2	1-3-4-2		
Compression ratio		17			
Max. overrun	min ⁻¹	2440			
Low idle speed	min ⁻¹	700-50			
Engine power	kW	33,1	46	51	58
Specific fuel consumption at rated speed	g.kW ⁻¹ .h ⁻¹	251	249	245	242
Engine lubrication		pressure type with splashing			
Max. engine oil consumption after 100 hour running in	g.kW ⁻¹ .h ⁻¹	0,8			0,9
Engine oil pressure at rated speed and oil temperature 90°C	MPa	0,2-0,5			
Min. oil pressure at 700 RPM and oil temperature 80°C	MPa	0,05			
Coolant temperature	°C	80-95			
Valve gear		OHV			
Oil cleaner		full flow			
Fuel cleaner		full flow			
Injection pump		PP3M85K1e-3143	PP4M85K1e-3145	PP4M9K1e-3137	PP4M9K1e-3149
Nozzle		DOP 160 S 430-1436			
Injector opening pressure	MPa	18,6 - 0,8			
Timing angle	°	25 + 1			
Valve clearance measurement at cold engine	mm mm				
- suction					
- exhaust					

<https://truckmanualshub.com/>
MAIN TECHNICAL PARAMETERS

TECHNICAL DATA OF EKO ENGINES Z 6203, Z 7203, Z 7703, Z 7303					
Tractor model	Unit	Z 4320 / 4340	Z 5320 / 5340	Z 6320 / 6340	Z 7320 / 7340 Turbo
Engine model		Z 6203	Z 7203	Z 7703	Z 7303
Engine type		diesel, four stroke with direct fuel injection			
Engine execution		in line, water - cooled			
Number of cylinders		4	4	4	4
Displacement	cm ³	3922	3922	3922	3922
Bore x stroke	mm	102x120	102x120	102x120	102x120
Rated speed	min ⁻¹	2200			
Ignition sequence		1-3-4-2			
Compression ratio		17			
Max. overrun	min ⁻¹	2440			
Low idle speed	min ⁻¹	700-50			
Engine power	kW	43	46	48	57
Increased of torque	%	15	15	15	15
Specific fuel consumption at rated speed	g.kW ⁻¹ .h ⁻¹	245	246	248	248
Engine lubrication		pressure type with spalshing			
Max. engine oil consumption after 100 hour running in	g.kW ⁻¹ .h ⁻¹	0,8			0,9
Engine oil pressure at rated speed and oil temperature 90°C	MPa	0,2-0,5			
Min. oil pressure at 700 RPM and oil temperature 80°C	MPa	0,05			
Coolant temperature	°C	80-95			
Valve gear		OHV			
Oil cleaner		fuel flow			
Fuel cleaner		fuel flow			
Injection pump		PP4M10P1f3463	PP4M10P1f3464	PP4M10P1f3465	PP4M10P1f3466
Injector		VA 78S 250 3016			
Nozzle		DOP 160 S 428 - 4144			
Injector opening pressure	MPa	18,6 - 0,8			
Timing angle	°	18 ± 0,5			14 + 1

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MAIN TECHNICAL PARAMETERS

TECHNICAL DATA OF EKO ENGINES Z 6203, Z 7203, Z 7703, Z 7303					
Tractor model	Unit	Z 4320 / 4340	Z 5320 / 5340	Z 6320 / 6340	Z 7320 / 7340 Turbo
Valve clearance measurement at cold engine					
- suction	mm	0,25 ± 0,05			
- exhaust	mm	0,25 ± 0,05			

NOTE

Operator's manual
Zetor 3320, Zetor 3340
Zetor 4320, Zetor 4340
Zetor 5320, Zetor 5340
Zetor 6320, Zetor 6340
Zetor 7320 Turbo, Zetor 7340 Turbo
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