

3320

3340

4320

4340

5320

5340

5340 HORAL

6320

6340

6340 HORAL

7320 TURBO

7340 TURBO



1/96

OPERATOR'S MANUAL

The present Instruction Manual we are delivering to you together with our product can make you familiar with operation and maintenance of your new tractor.

Though many of you have got much experience in operating other ZETOR tractors, we beg to ask you for making yourselves acquainted with this manual as thoroughly as possible.

You can find here many items of new information and get perfect view on how to make use of this tractor in the best way for various kinds of job.

If you adhere to the mentioned principles of operation, maintenance and safety of riding, the new ZETOR tractor will be your reliable assistant for many years.

The manufacturer of your tractor let himself to wish you many thousands of hours of convenient and trouble-free operation.

Z E T O R
Brno

Technical, construction, equipment, material and exterior data are valid at the moment of printing.
The producer reserves the right to make changes.

This Operating Instruction Manual contains descriptions, operation and maintenance instructions of standard tractor model and accessories the tractor can be equipped with.

The accessories not falling within the scope of standard outfit cannot be an object of claims in the cases when not installed.

The tractor service check is not a part of the instruction manual but forms a separate booklet passed over to you with your new tractor.

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Tractors without a cab

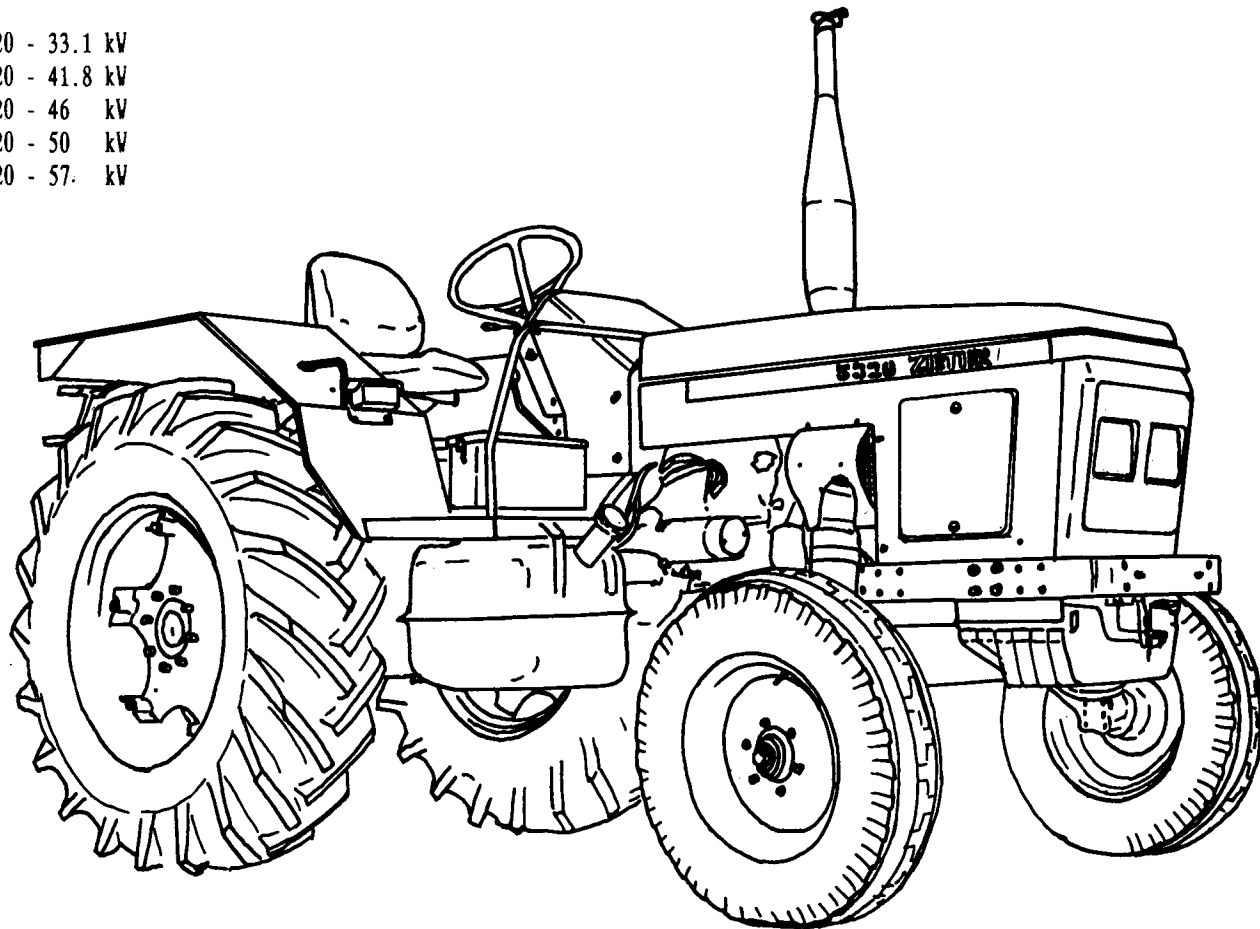
ZETOR 3320 - 33.1 kW

ZETOR 4320 - 41.8 kW

ZETOR 5320 - 46 kW

ZETOR 6320 - 50 kW

ZETOR 7320 - 57 kW



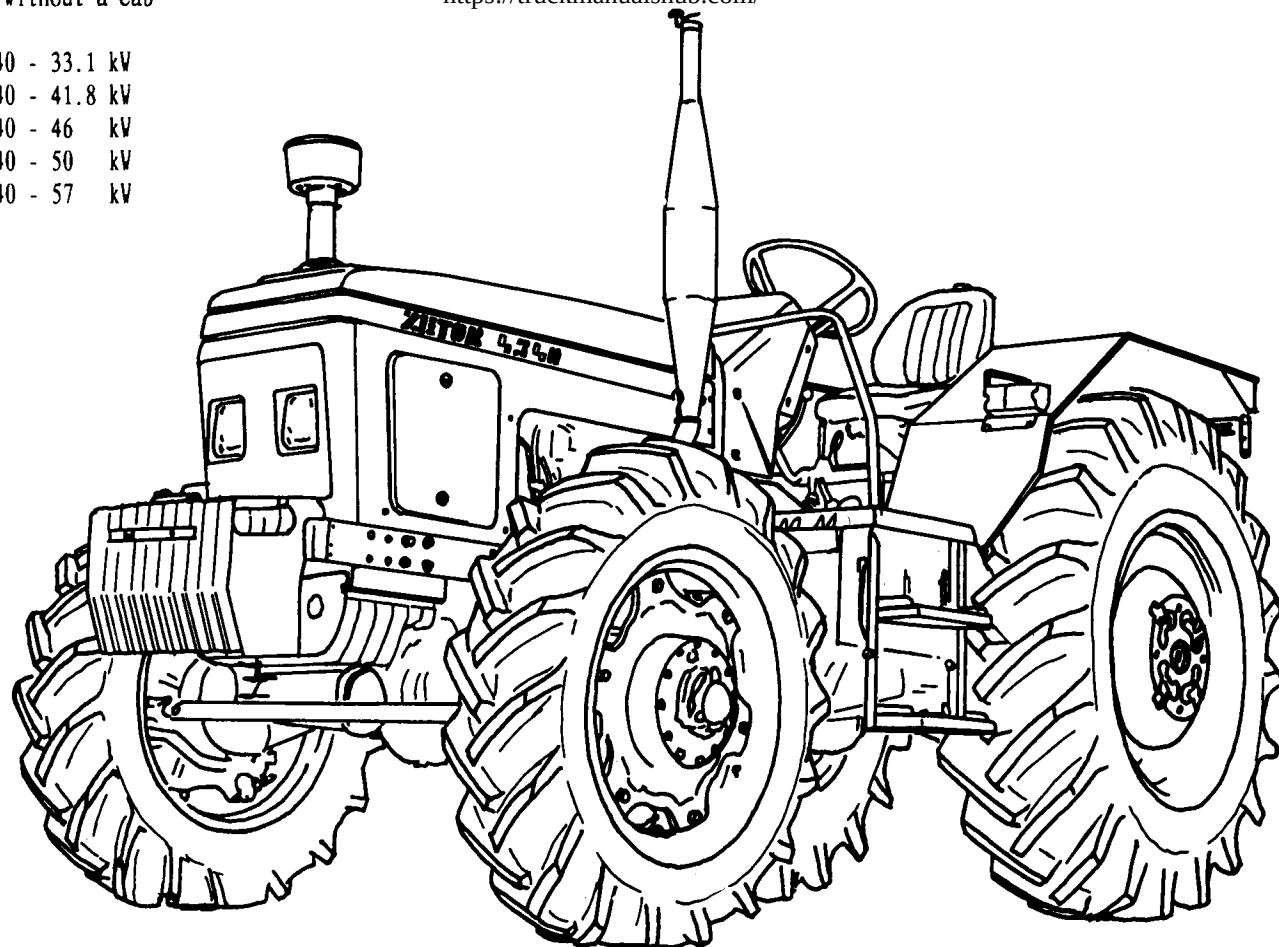
ZETOR 3340 - 33.1 kW

ZETOR 4340 - 41.8 kW

ZETOR 5340 - 46 kW

ZETOR 6340 - 50 kW

ZETOR 7340 - 57 kW



Tractors with a cab

<https://truckmanualshub.com/>

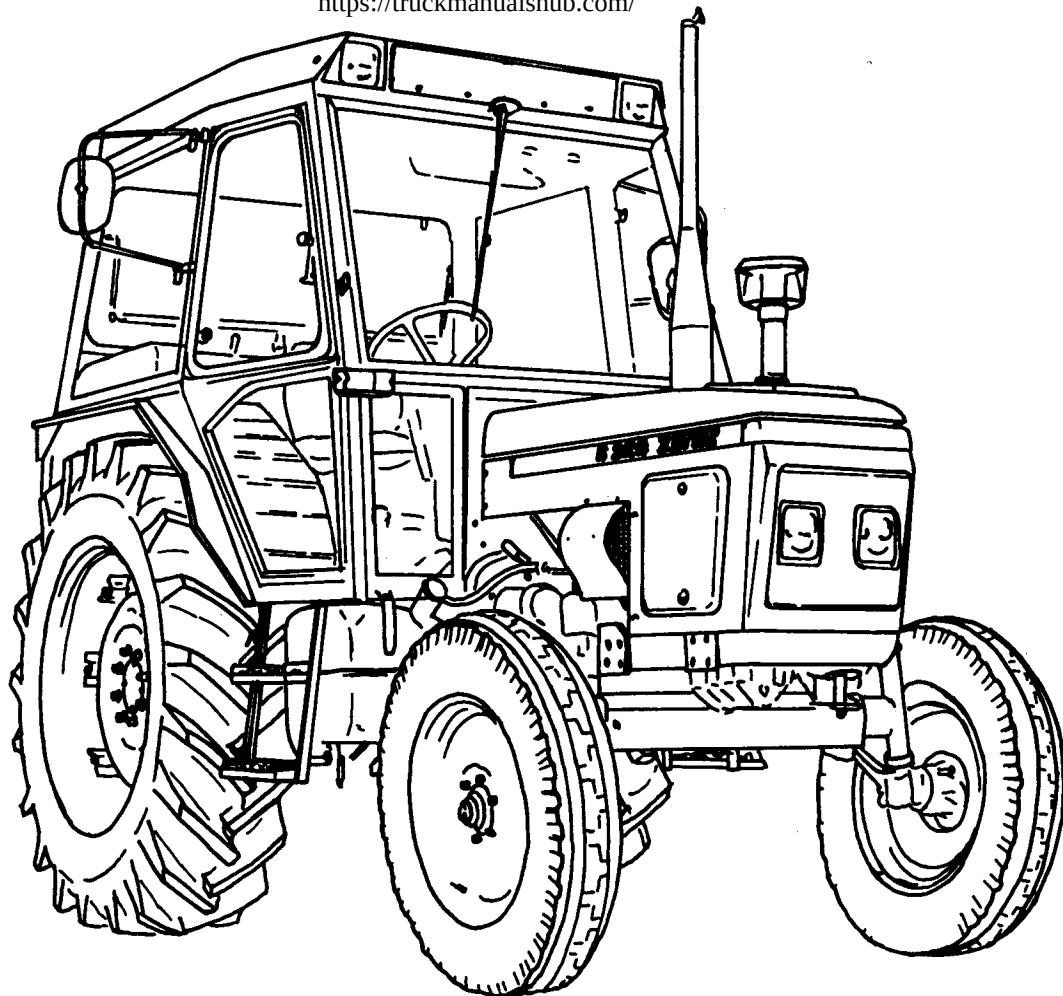
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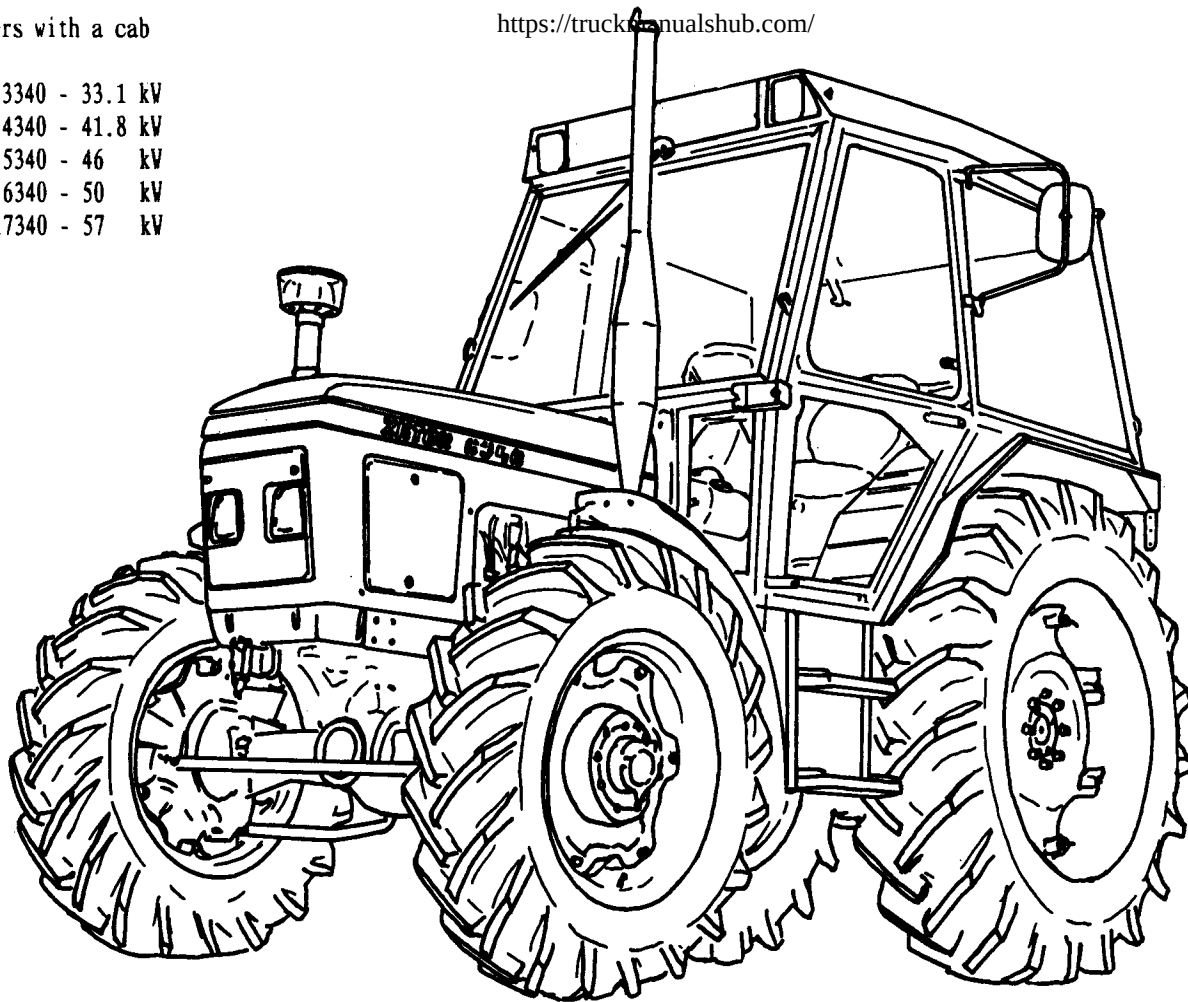
ZETOR 3340 - 33.1 kW

ZETOR 4340 - 41.8 kW

ZETOR 5340 - 46 kW

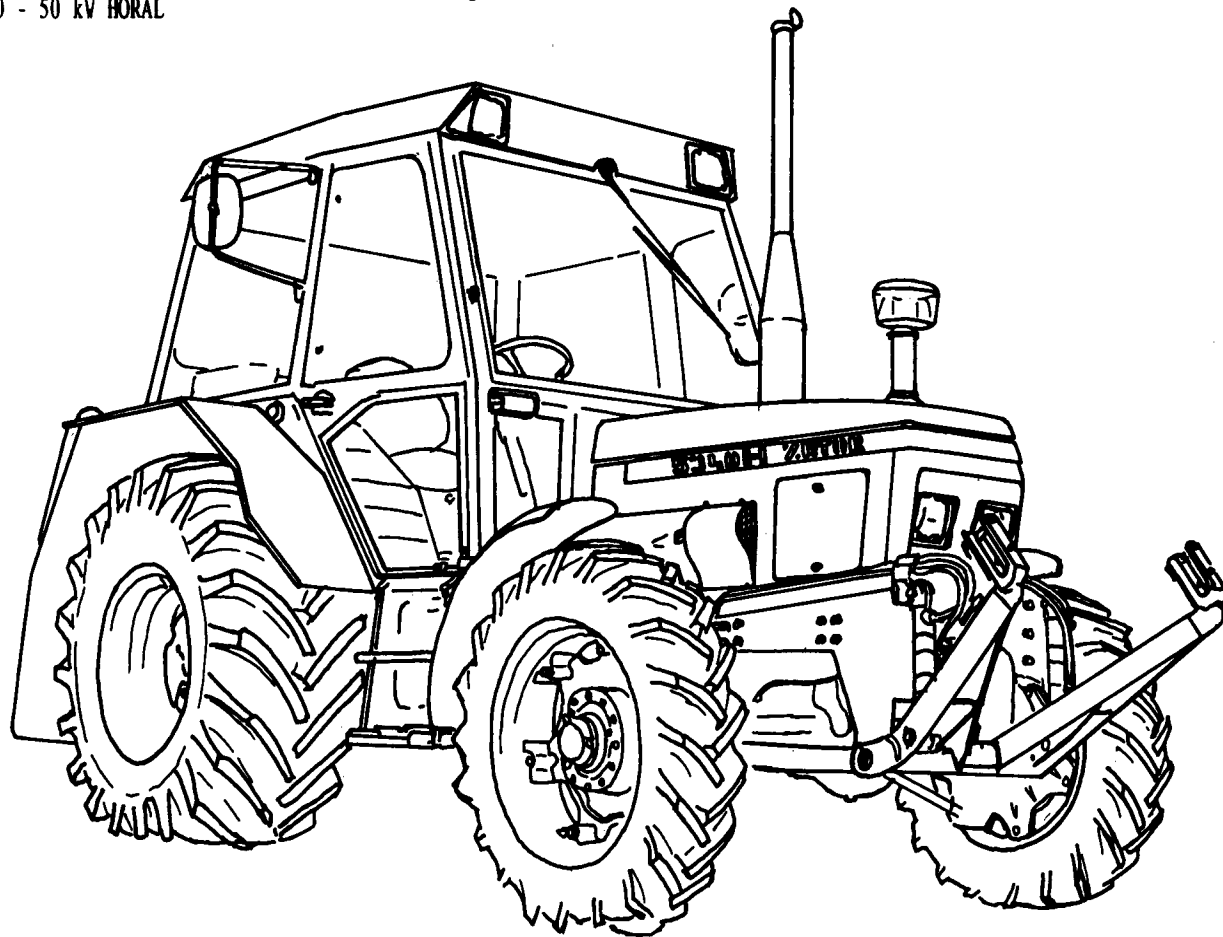
ZETOR 6340 - 50 kW

ZETOR 7340 - 57 kW

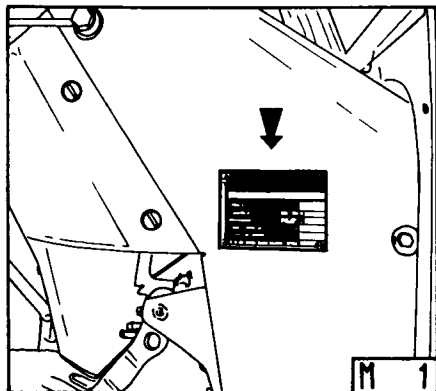


ZETOR 5340 - 46 kW HORAL
ZETOR 6340 - 50 kW HORAL

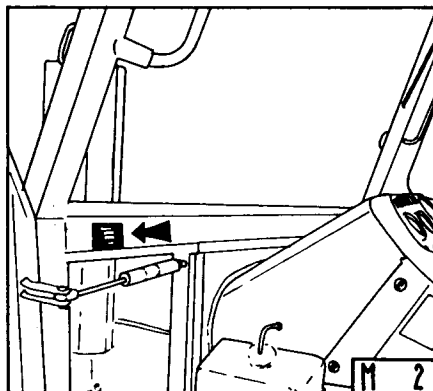
<https://truckmanualshub.com/>



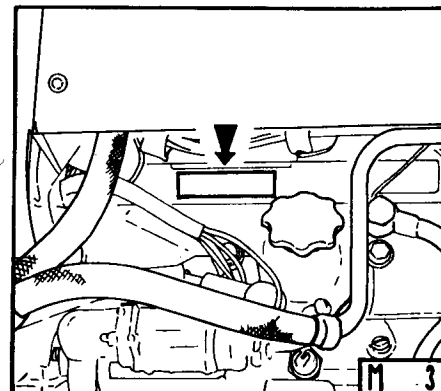
Tractor Rating Plate



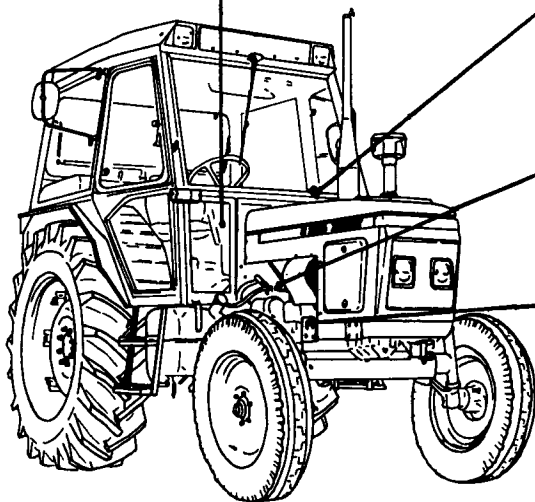
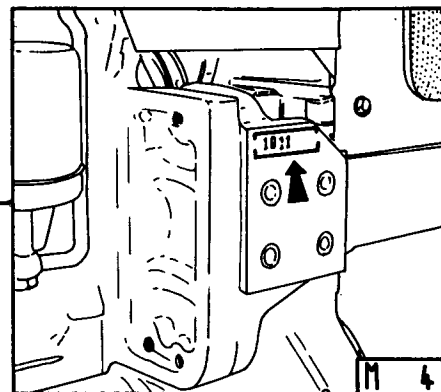
ROPS Cab Serial Number



Engine Serial Number



Tractor Serial Number



For quick references, spare parts ordering or any other contact in written or orally please record the identification data of your tractor in the windows provided below.

Tractor type

Tractor Serial Number

Engine Serial Number

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

Designations "on the RH side", "on the LH side", "fore" and "aft" relates to the direction of travelling forwards.

The manufacturer reserves his right to include changes in the tractor design and accessories for product improvement and development.



GENERAL SAFETY REGULATIONS



You can find this safety alert symbol at all important warnings which concern the safety of tractor operation. Adhere to these warnings and proceed precautiously in these cases especially. Inform your co-workers and other persons on these warnings or notices.

Only a trained operator having valid driving licence and acquainted well with the operating and safety principles is allowed to operate the tractor. In addition to the warnings contained in the operating instructions you are obliged to follow the general safety and traffic regulations applicable in the country where the tractor is in service.

PROPER CLOTHING

Do not wear loose clothing, nor free flying long hair. Use suitable (prescribed) personal protection aids when doing anything on the machine or with the machine (work clothing, gloves, etc.)

STARTING THE ENGINE

Starting the engine while riding downhill is not allowed.

To tow the tractor using another one or a vehicle for starting the engine is allowed only when using a tow bar.

The engine start switch must be in its "I" position.

For heating the engine by means of an electrical heater plug the cable plug in the heater socket, as first, and only then connect the cable to the mains. After heating disconnect the cable from the mains, as first.

WARNING!

An electrical accident hazard!

MACHINE OPERATION

Fuel system hoses should be checked and replaced, if any indication of damage is revealed.

The indications of hose damage could look like: cracks on hose surface, end fittings displaced (which can be verified by sliding the hose down with an ease), mechanical damage of hoses.

The conditions of brakes and steering must be permanently perfect.

The brake pedals must be coupled with one another using the latch prior to roading with trailers or implements. Driving downhill with no speed engaged is forbidden! The torque multiplier must not be used when driving downhill. Pay special attention to driving on slopes and muddy, sandy, icy or uneven surfaces.

Observe the specified angle of gradeability which is 11° , as maximum.

Tractors with front driving axle - max. 12° .

The HORAL tractors with inclinometer - up to 15° (see Inclinometer section).

Be respectful of total permissible weight of tractor-trailer unit as mentioned on the tractor rating plate or

on the warning label attached to the rear wheel fender.

Do not use the differential lock while driving in a turn. It is forbidden to get on or off a moving machine. When driving the tractor with agricultural implements in the front three-point suspension reduce the travel speed to 15 km.h^{-1} .

The steering axle load must not fall below 18 to 20 % of the instantaneous total unit weight when any implement is carried in the rear suspension.

Engage the parking brake after the tractor is stopped with the engine running.

TRANSPORT OF PERSONS, OPERATION

Number of persons transported on tractor must not exceed the data mentioned in the M.O.T. certificate. Persons not authorized to operate tractor attachments must not dwell between the tractor and its attachment (implements).

Before moving the tractor satisfy yourself that no one or no obstacle is standing in the tractor path.

The maximum permissible velocity of road train (tractor + trailer or semi-trailer) with single-hose air brakes is 30 km.h^{-1} , with drum brakes it is 25 km.h^{-1} .

TOWING, PUSHING

When delivering a bogged-down tractor, always use a tow bar or a wire rope cable, never use chains. It is dangerous to dwell in the vicinity of the rope cable in the course of delivering. The tractor frame is equipped with the front hook serving only for towing the tractor itself, i.e. without any trailer or other attachment. When pushing other vehicles (trailers, carriers or similar), never use free planks or bars inserted between the tractor and the object being pushed.

LEAVING THE TRACTOR

Always lower the implement to the ground before leaving the machine.

Do not forget to remove the key from the engine start switch and to lock the cab.

Engage the parking brake when leaving the tractor with engine running.

ONLY WITH THE ENGINE STOPPED

All the jobs in conjunction with refueling, cleaning, lubrication and adjustment of tractor or implements may be carried out only with the engine and other moving parts stopped except for checks on brakes, hydraulic system and battery charging functions.

Start and operate the engine in a well ventilated area only. Provide venting to the outside if the engine is to be running in an enclosed area or room. Exhaust gas is harmful to health.

FIRE PREVENTION PRINCIPLES

Refueling should always be carried out with the engine stopped at the end of working shift.

Do not refill fuel up to the top of fuel tank in the summer time. Wipe fuel immediately when spilled.

Do not refuel in the vicinity of open flame. Do not smoke while refueling or in a refueling area.

It is forbidden to smoke or to use open flame when inspecting the electrolyte level in the battery cells.

Take special care to observe the fire preventing regulations in environments with increased fire hazard (haylofts, straw stacks and similar).

If the tractor is equipped with a fire extinguisher, have the latter always ready for use.

Install a flame trap including exhaust flap valve, if necessary.

HEALTH AND ENVIRONMENT PROTECTION

These tractors are not equipped with special cab air intake filters. They are therefore not intended for working with aerosols and other substances harmful to health. Kerosene, Diesel oils, mineral oils and other oil products used for operation and attendance 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.

The persons in contact with oil products are obliged to observe - with no exception - the respective safety and hygienic regulations, to use the suitable protection aids and to work in well-ventilated areas.

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.

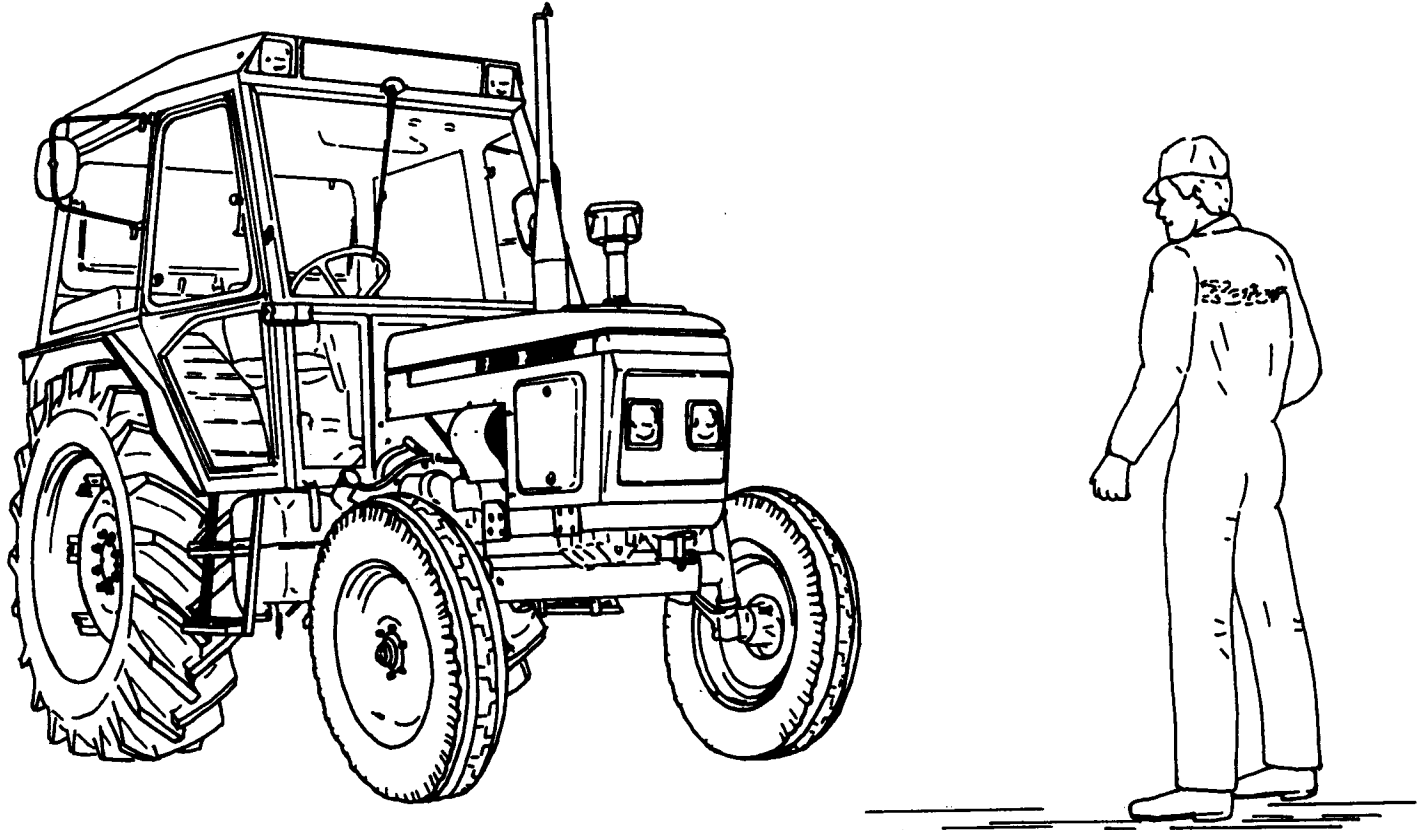
The driver must not exceed 380 minutes of permanent work in an eight hour shift (for Z 4320, 5320, 5340, 5340 HORAL) or 425 minutes (for Z 6320, 6340, 7320, 7340). Otherwise the work has to be interrupted so the total time does not exceed 380 or 425 min. The tractor working procedure must be adjusted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

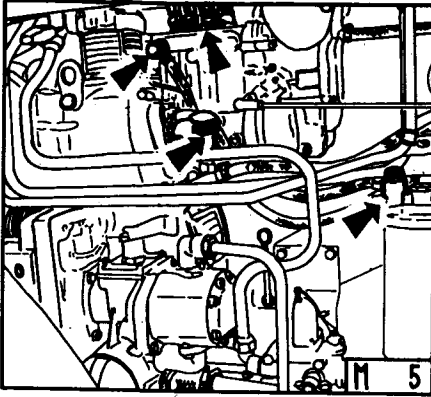
HANDLING THE OIL PRODUCTS

Having finished the job or before meal use a non-irritable washing agent and to treat hands using a suitable skin ointment or cream.

When disconnecting or reconnecting the hydraulic circuit quick couplers use a textile material or cloth to remove the residual oil remaining inside the socket or on the plug of quick coupler.

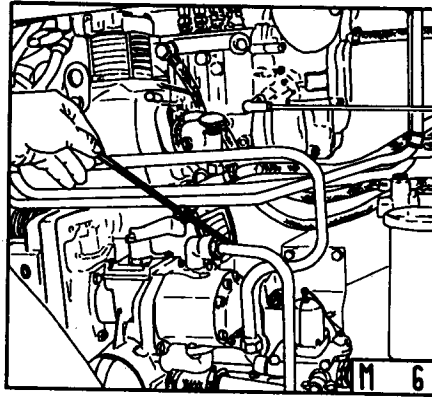
Should be carried out daily or every 8 to 10 service hours, not later





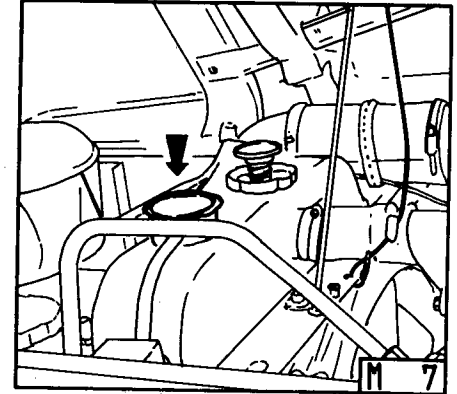
CHECK ON FUEL SYSTEM FOR LEAKS

Check the fuel system (including the fuel tank) for leaks. Remove any leak immediately. The drain plug for water and sediment is located in the fuel tank bottom.



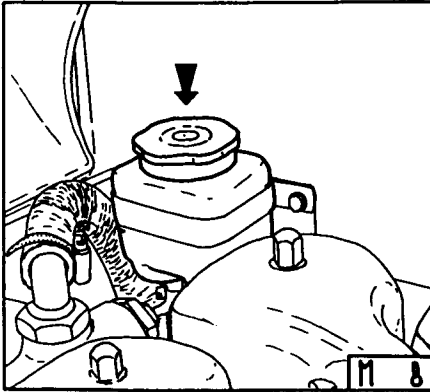
ENGINE OIL LEVEL

After screwing out and removing the dipstick, check the oil level in engine crankcase and the engine lubrication system for leaks. Maintain the oil level to be between the marks on the dipstick.



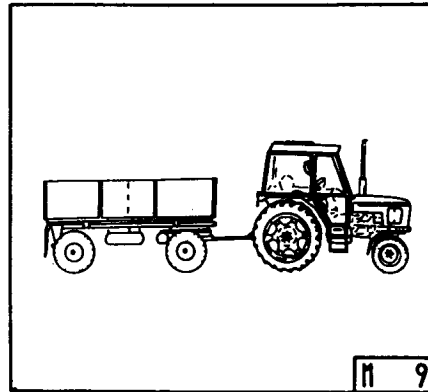
COOLANT SYSTEM

Check the engine coolant system for leaks and the coolant level in the coolant tank.
Add the missing oil.
The coolant level should be about 60mm below filler top.



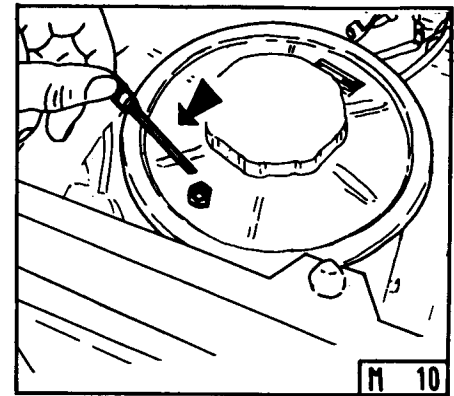
HYDRAULIC BRAKES

Check the hydraulic brakes and the hydraulic system of clutch control for leaks. Check the oil level in the brake fluid supply tank.



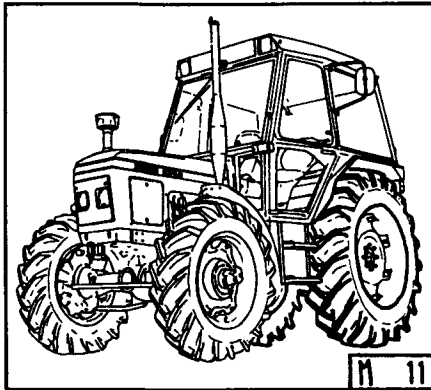
PNEUMATIC BRAKES

Check the air system of brakes for leaks and the tractor braking ability including trailer (see "Check of pneumatic brakes for leaks").



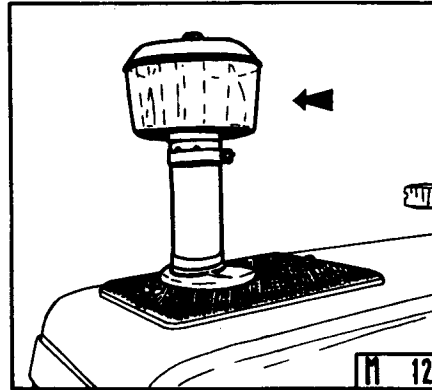
STEERING

Check the oil level within the hydrostatic steering reservoir. Check the steering tie-rods and arms for torque of screws and nuts. Check the conditions of all the hoses of hydraulic steering to be sure they are not damaged or leaking.



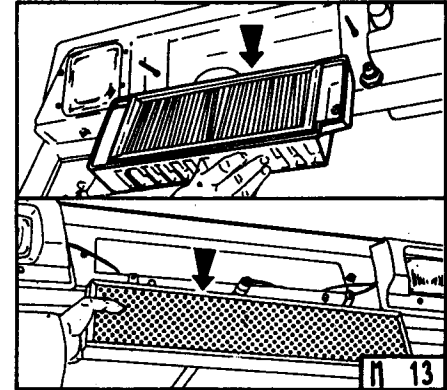
TIRES AND WHEELS

Check the inflation pressure both in front and rear tires. Adjust to the recommended values depending on the job nature. Check the torques of bolts on front and rear wheels - check all the screws.



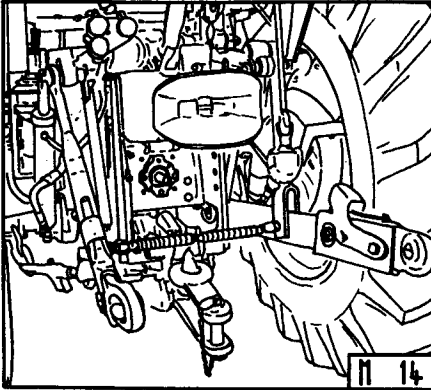
AIR CLEANER

Inspect the engine air pre-cleaner no matter whether it is installed above or under the engine hood. Clean it, if necessary.



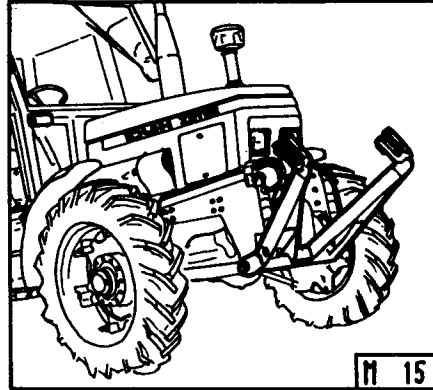
CAB AIR FILTER

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.



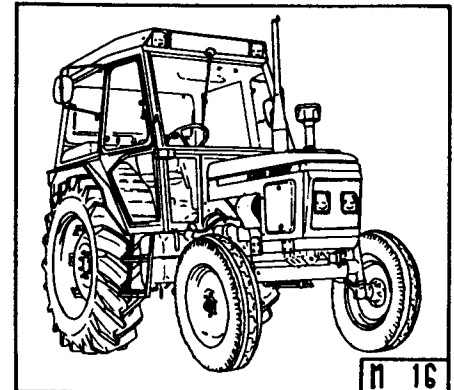
TRAILING ATTACHMENTS

Inspect the conditions of trailing and towing attachments including the trailer.



AFTER OPERATION WITH FRONT IMPLEMENTS

Clean the front wall of engine radiator using pressure air and check for leaks the external hydraulic circuitry fittings of the front three-point suspension.

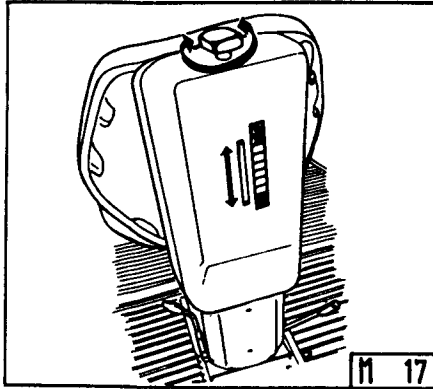


SHORT FUNCTIONAL TEST

After starting the engine check to be sure the engine lubrication indicator lamp is off, check the battery charging function (the indicator lamp should be off, too) and check the hydraulic control circuits for function and leaks.

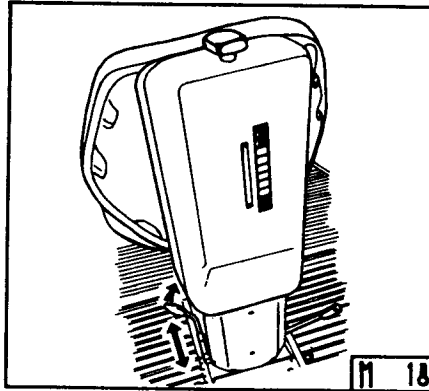
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The tractor user is obliged to make himself familiar with the recommended procedures and instructions concerning safety operation of the tractor. Doing this after putting the tractor into service is already late!



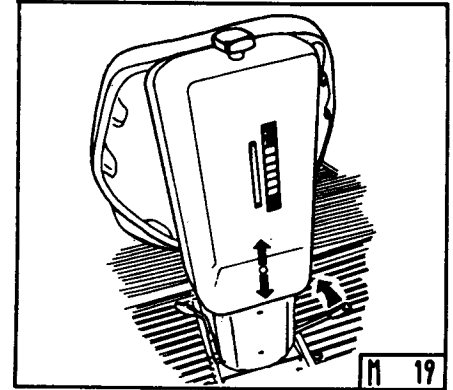
ADJUSTMENT TO OPERATOR'S WEIGHT

The suspension seat is adjustable to operator's weight within the limits from 50 to 120 kg. Adjustment can be carried out by means of the square handle. The weight adjustment indicator is in the rear within the rear cover of seat. The suspension stroke is 120 mm.



FORE-AND-AFT ADJUSTMENT

Use the LH lever to slide the seat forwards or backwards within the range of ± 75 mm (11 positions).

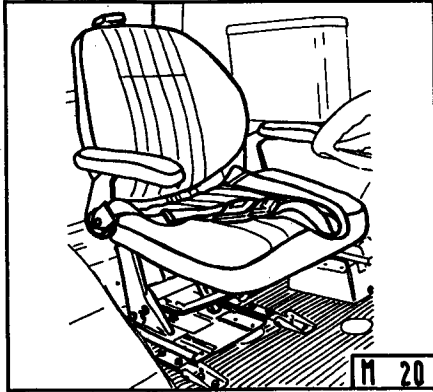


VERTICAL ADJUSTMENT

Use the RH lever to adjust the seat to desired height within the range of ± 30 millimetres (3 positions).

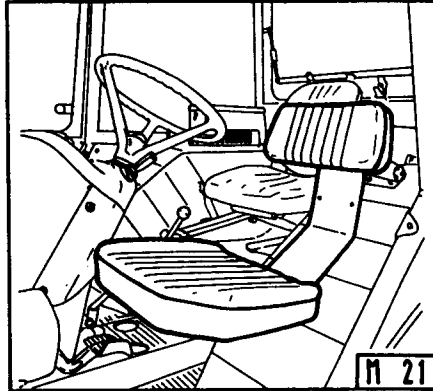


Do not adjust the seat while riding.
Danger of an accident!



SEAT IN TRACTOR "HORAL"

The seat is equipped with arm rests and seat belt as standard.

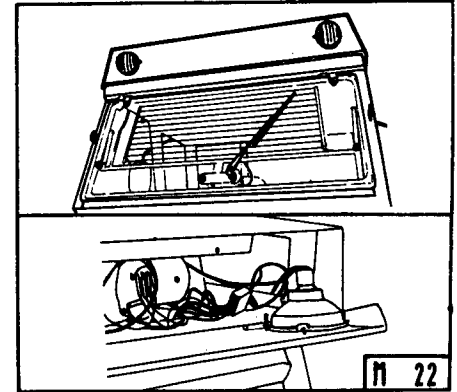


RIDER'S SEAT

The folding rider's seat is located on the fender in the cab.



The number of persons must not exceed that given in the M.O.T. certificate. It is possible to fold the rider's seat for facilitating the access to the driver's seat.

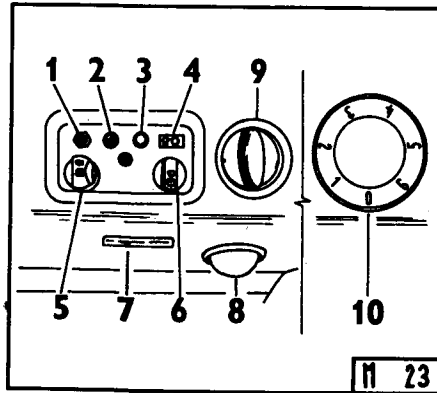


ROPS CAB (BK 7245)

The cab is equipped with a rear heated window, tiltable side windows and sun roof, a different type of rear wiper and rear flood lights.

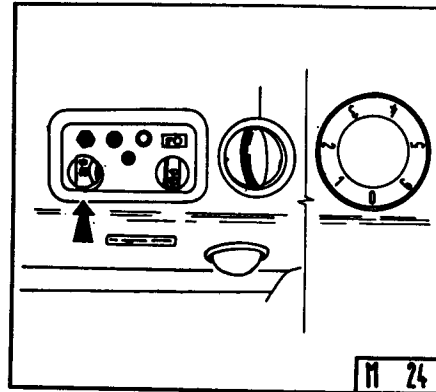
The cab air filters can be removed after screwing-off two M8 screws and tilting away the front cab face.

The front headlights on the cabin roof must not be used for roading except the case of an implement attached to the front three-point hitch shades the front headlights in the front grill.



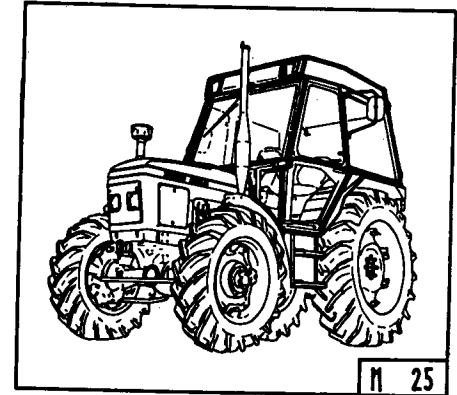
CAB CONTROL PANEL (BK 7245)

1. Indicating lamp of rear windshield heating (orange)
2. Switch of rear flood lights in the cab roof
3. Rear windshield wiper switch
4. Indicating lamp of the rear flood lights in the cab roof
5. Five-position switch for heating fans speed and rear windshield heating
6. Two speed windshield wiper/washer switch
7. Dome light (including switch)
- 8.9. Blowers for venting and heating
10. Control of heating valve



SELECTOR SWITCH POSITIONS (BK 7245)

- left position - rear windshield heating
- vertical position - all the consumers are off
- position 1 clockwise - high speed of fans
- position 2 clockwise - low speed of fans
- position 3 clockwise - low speed of fans and rear windshield heating

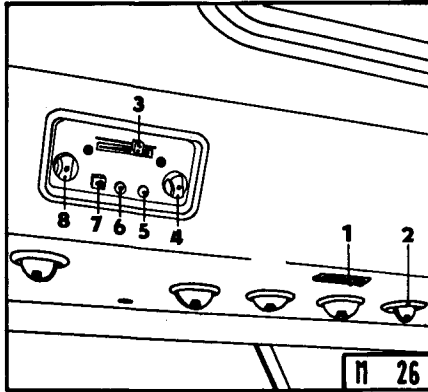


ROPS CAB (BK 6245)

Rear window and cab doors are equipped with inner handholds and telescopic stabilizers. The front windshield is equipped with an up-and-down sun visor while the rear window is tiltable. The inner space of cab is sound-proof. The cab roof can be equipped with a tiltable top.

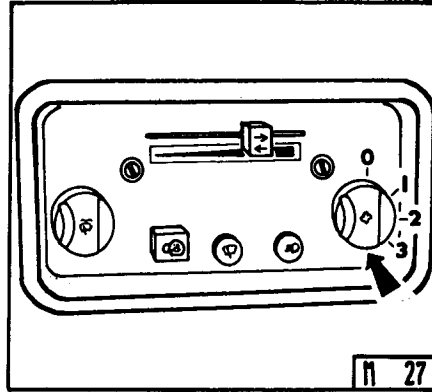


Use steps and handholds when mounting and dismounting the machine.



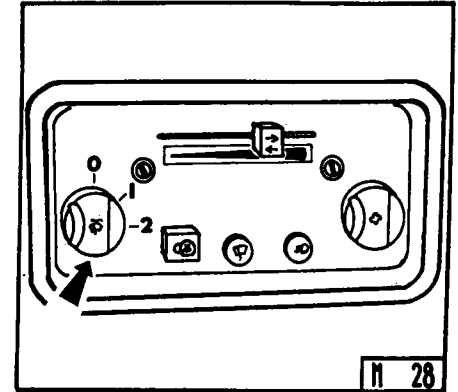
CAB CONTROL PANEL (BK 6245)

1. Dome light (including switch)
2. Cab air and heating inlets
3. Heating control lever.
4. Three-position heating fan speed selection switch
5. Rear cab roof flood lights switch
6. Rear windshield wiper switch
7. Rear cab roof flood lights indicator
8. Two-speed windshield wiper/washer switch



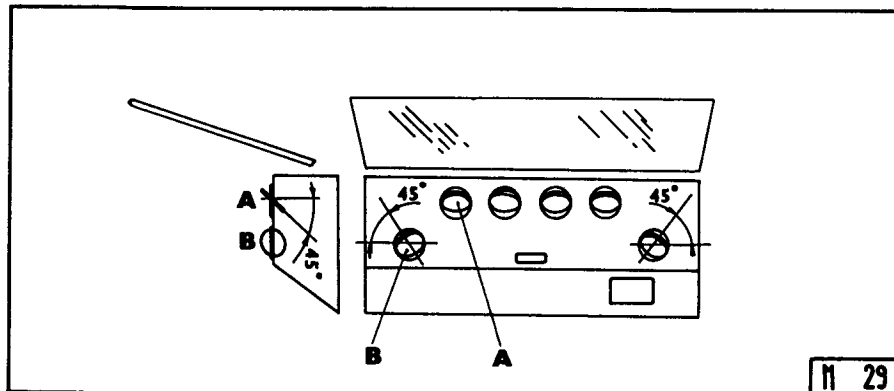
CONTROL PANEL (BK 6245)

- 0 - vertical position - heater off
- 1st position to right - low speed of fans
- 2nd position to right - medium speed of fans
- 3rd position to right - max speed of fans



FRONT WIPER SWITCH (BK 6245)

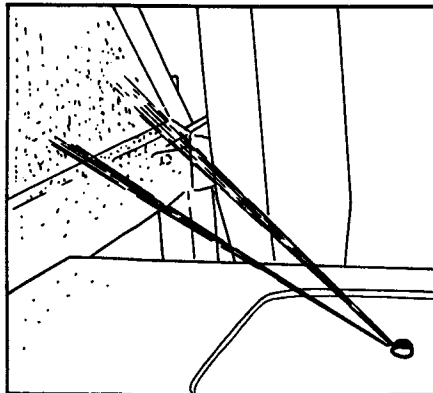
- 0 - vertical position - wiper off
 - 1st position to right - low speed of wiper
 - 2nd position to right - high speed of wiper
 - front windshield washer is turned on by pressing the switch
- Maximum time for which the washer can be in operation is 10 seconds.



DEFROSTING THE CAB (BK 6245) WINDSHIELD IN THE WINTER TIME

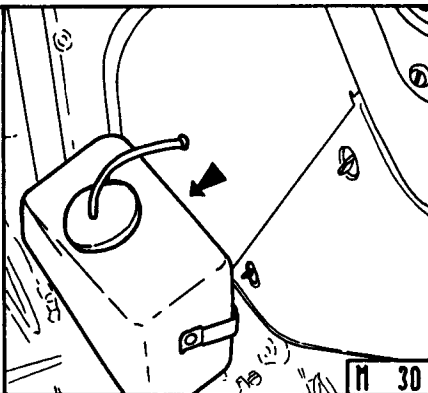
To provide quick defrosting of windshield it is necessary to set up the flaps of outlets "A" to the angle of 45° from vertical towards the front windshield and the outer flaps "B" should be turned to the angle of 45° from the windshield plane and tilt under the angle of 45° from the vertical axis towards the windshield so they point into the front corners of cab.

After defrosting the windshield (after about 20 to 30 minutes) the outside outlets can be directed to the side door windows. Having finished all the defrosting actions direct the warm air stream from outlets not on the driver directly but downwards to driver's legs and air from the upper outlets along the side walls of cab to the rear cab section.



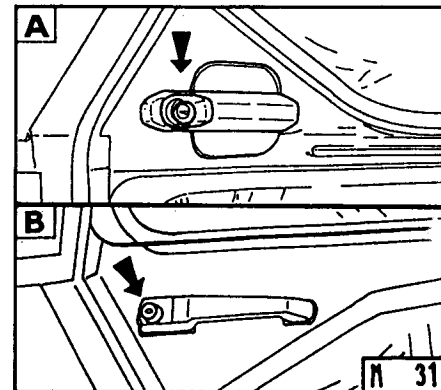
WASHER NOZZLE

The nozzle is installed in the upper cover of engine enclosure and the direction can be adjusted by means of a needle or a wire of 0.8 mm in diameter, as maximum.



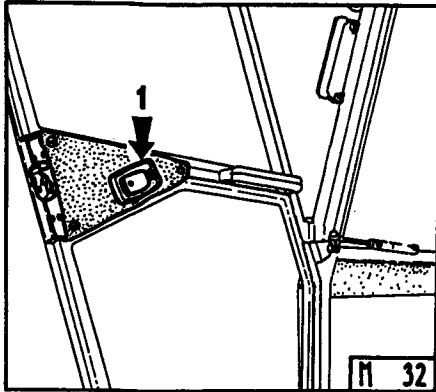
WASHER RESERVOIR

The washer reservoir is located on the LH steering console cover. The reservoir capacity is 2.5 dm³. Nonfreezing window washer solvent should be used for filling the washer reservoir during the winter time.



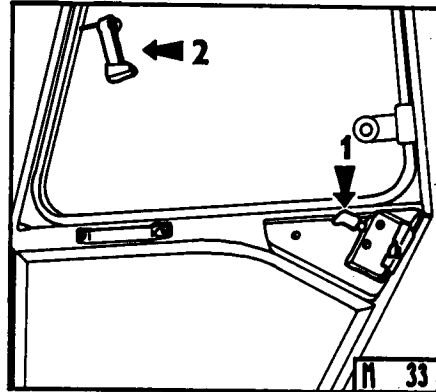
TO OPEN THE DOOR FROM THE OUTSIDE

The cab door can be key-locked from the outside. Depress the lock button after unlocking and use the handhold to open the door. The doors may be equipped with any of the two types of locks as illustrated above.



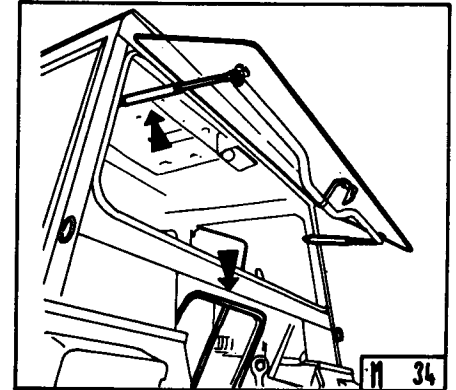
(BK 7245) CAB DOOR

1. Lever for opening the tractor from inside.



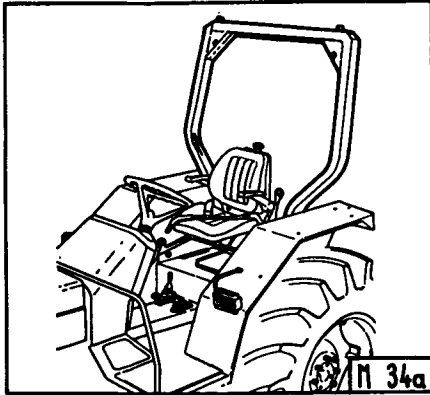
(BK 6245) CAB DOOR

1. Lever for opening the door from the inside.
2. Lever for tilting door window.



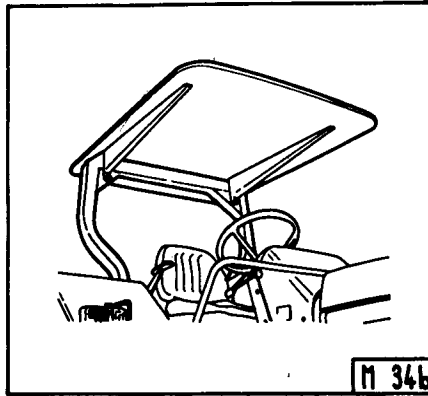
REAR WINDOW

It is equipped with a handhold and can be locked in open position by means of telescopic stabilizers.
The lower portion is slidable in the case of LUX cab.



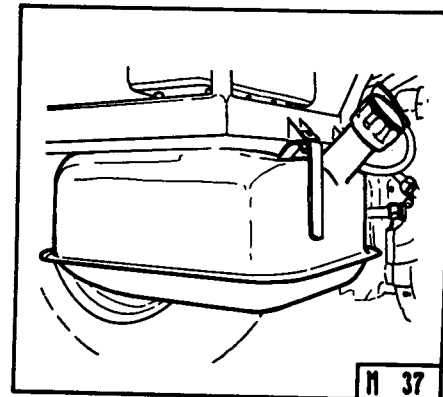
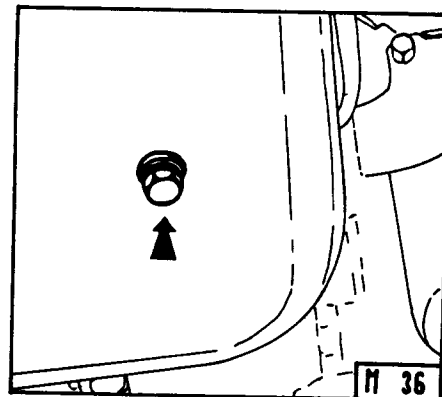
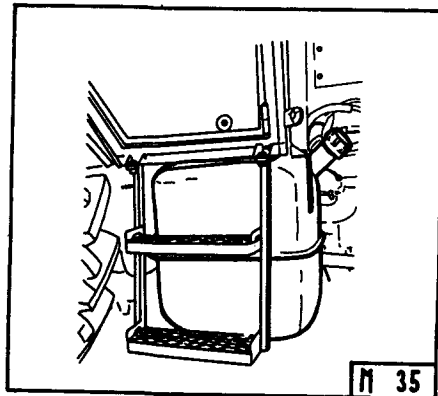
SAFETY FRAME

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.



SAFETY FRAME WITH CANOPY

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



FUEL TANKS

Fuel tanks installed as standard:

- 70 litres Z 4320 - 6340 and HORAL
- 55 litres Z 3320 and 3340
- 95 litres for Z 7320 and 7340 TURBO

Optionally:

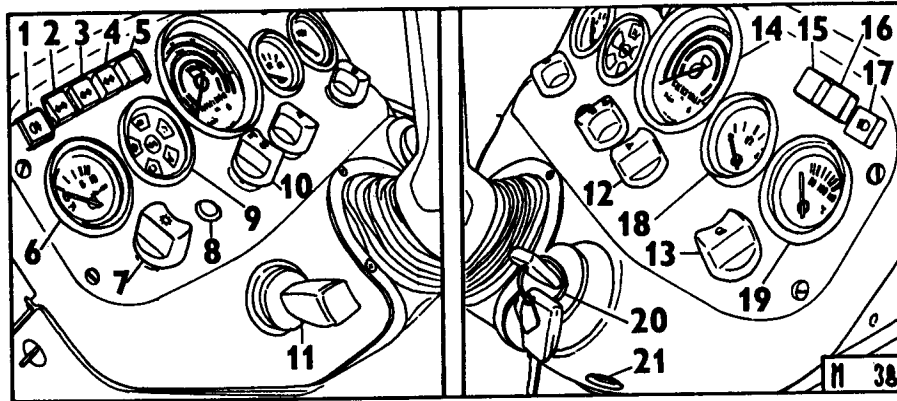
- 45 litres Z 3320 and 3340
- 55 litres Z 4320 - 6340 and HORAL
- 95 litres Z 6320 - 6340 and HORAL

DRAIN HOLE

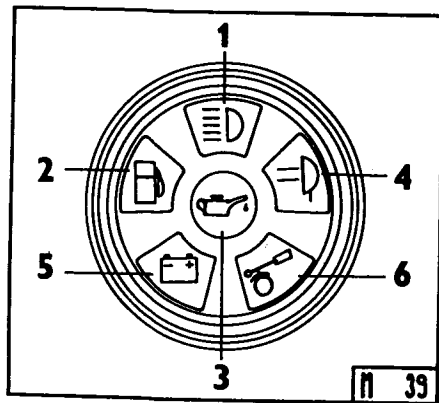
The drain hole for water and sediment is located in the fuel tank bottom.

AVERAGE FUEL CONSUMPTION IN LITRES PER ENGINE HOUR OF ZETOR TRACTOR

Tractor type	Engine load		
	100%	80%	50%
Z 3320, 3340	10.2	8.4	6.4
Z 4320, 4340	12.8	10.6	8.0
Z 5320, 5340 + HORAL	14.1	11.6	8.8
Z 6320, 6340 + HORAL	14.9	12.3	9.3
Z 7320, 7340	14.9	12.3	9.3

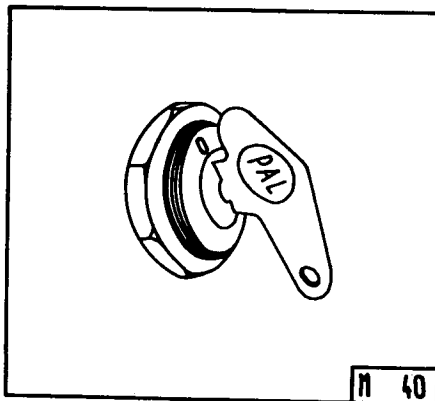


1. Rear fog lamp control light.
2. Tractor turn signal control light.
3. Trailer turn signal control light.
4. Trailer turn signal control light.
5. Hazard signal control light.
6. Air pressure gauge.
7. Tractor lighting switch. Installed only on tractors with steering lock and electromagnet interlock.
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 lights switch.
13. Dimmer switch of headlights in the radiator grill or on the cab roof.
14. Tachometer (rpm) and service hour meter
15. Power outlet shaft clutch control light.
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 (depending on fuel tank capacity).
19. Coolant thermometer.
20. Engine start switch with key or steering lock switch with interlocking by electromagnet.
21. Starter start push-button (installed only with engine start switch without steering lock).



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 the fuel tank.
3. Lubrication (red). Indicates low oil pressure (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.



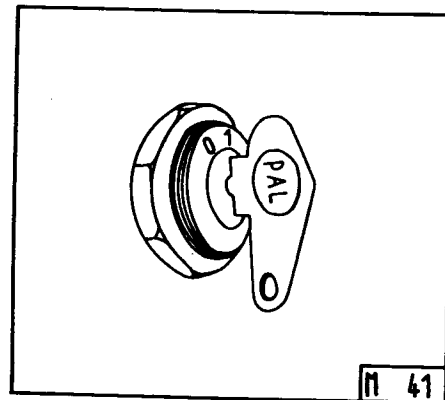
ENGINE START SWITCH KEY "0" POSITION

If the key is in all the way, it activates the following circuits: starter, gauges, direction indicators, windshield wiper/washer, rear washer, cab air fan, hand-lamp socket, charging and lubrication indicators (these must get off after starting the engine), parking brake indicator, minimum air pressure indicator and hazard lights.



NOTICE:

The key must be fully in when the engine is running!

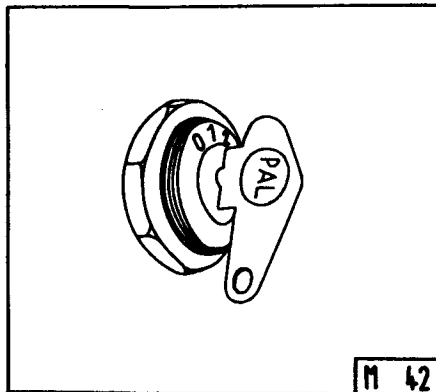


ENGINE START SWITCH KEY "1" POSITION

The following circuits are ON: Clearance lights and taillights, licence plate light, instrument panel light, all the consumers mentioned for the "0" position. The flood light can be switched on using its separate switch.

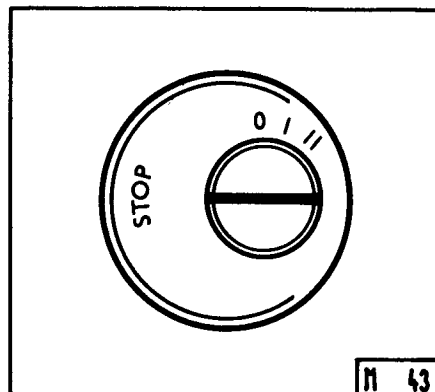
KEY IS IN ITS HALF WAY

If the key is in its half way or removed while in position "1" or "2", all the consumers are connected to power supply except for those mentioned for the "0" position.



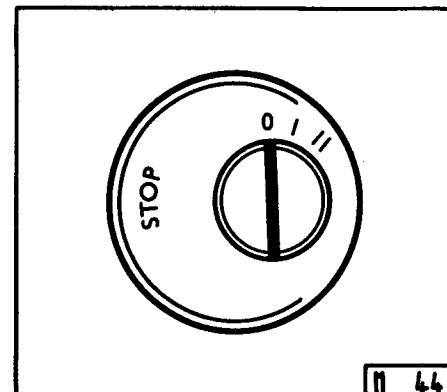
ENGINE START SWITCH KEY "2" POSITION

Activates the same circuits as the positions "0" and "I", switches on the headlight low or high beam (depending on the dimmer switch position). The rear fog light on trailer can also be switched on.



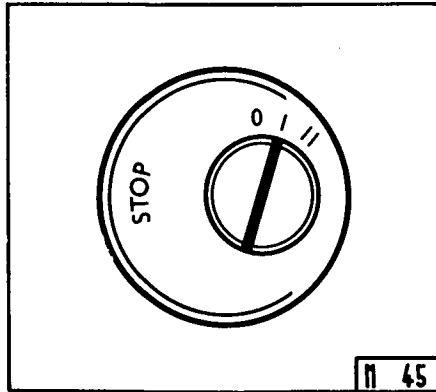
KEY REMOVED OR IN "STOP" POSITION

If the key is removed from the engine start switch with electromagnet locking, the steering wheel is locked. Insert the key and turn it to the "0" position to unlock the steering wheel. If the key is removed or in "STOP" position, the same electrical circuits as in the "0" position are alive.



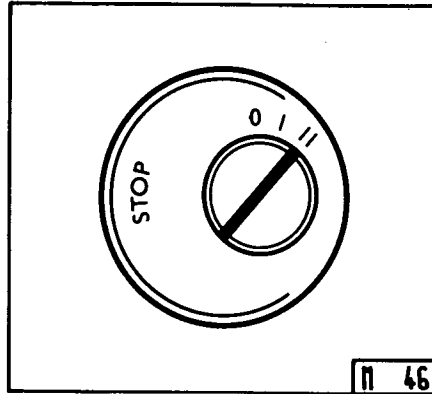
ENGINE START SWITCH KEY "0" POSITION

Live electrical circuits: stop lights, dome light, acoustic horn, headlamp flasher, tractor lights, P.T.O. shaft clutch switch, flood roof lights, hazard flashers including directional signal lights. The flood light can be switched on when the clearance lights are on, the rear fog light on trailer can be switched on when the low beam headlight is on.



ENGINE START SWITCH KEY "I" POSITION

In addition to all of the power consumers alive as in the STOP or "0" position: instruments and indicator on the instrument panel, directional signal lights, front and rear windshield wipers, hand-lamp socket. The key will be locked in this position while the engine is running.

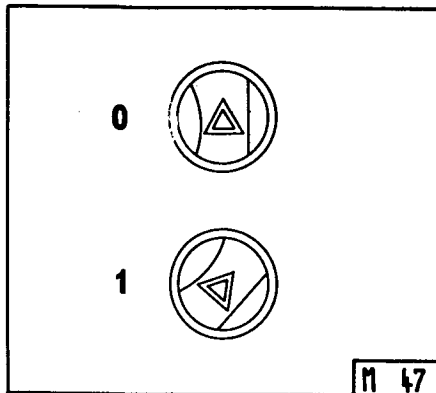


ENGINE START SWITCH KEY "II" POSITION

The starter circuit is alive. The position "II" of key is spring-loaded so that the key will be returned back to the position "I" after release. The key should be turned back to its position "0" and then to its position "II" through "I", if starting the engine is repeated.

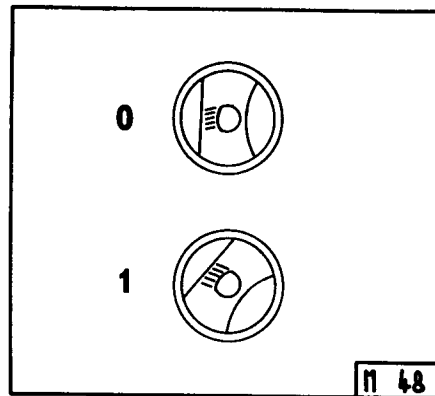
IMPORTANT CAUTIONS

1. Never use force to turn key from its position "I" while the engine is running. The built-in electromagnet prevents the key from turning.
2. The key can be turned from "I" to "0" only when the engine is stopped.
3. When towing the tractor at emergency (but with the battery connected), the key must be in "I". If the battery is not connected to, the key must be turned from the position "STOP" to the position "0" - to avoid its locking in "I" with consequent impossibility to turn it to "STOP" and to remove.
4. Never remove the key while driving the tractor - the steering action would be interlocked.
5. Turn the steering wheel slightly while unlocking the steering gear - to release the steering lock and avoid possible breakage of key.
6. If the key drags, then lubricate the steering lock using fine graphite through the key opening (no oil!).
7. The starter switch cover has to be turned to cover the key hole.



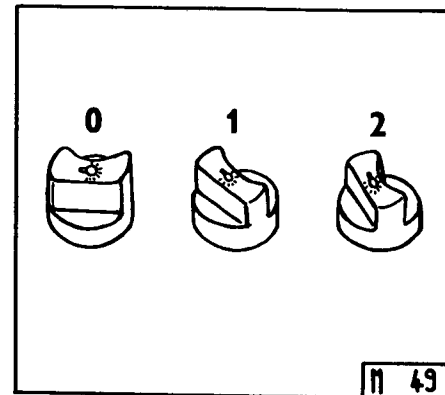
HAZARD LIGHTS

- "0" - Hazard lights turned off
- "1" - Hazard lights turned on



LOW BEAM LIGHTS - CHANGE-OVER SWITCH

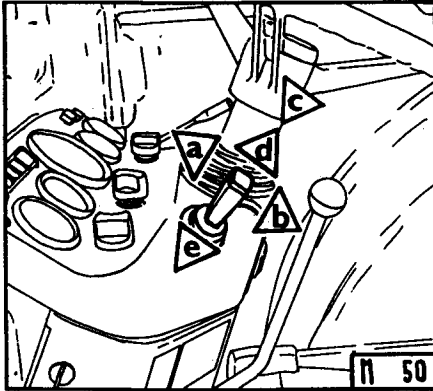
- "0" - Low beam or high beam lights in the radiator grill are ON
- "1" - Low beam lights on the cab roof are ON (may be used only when an implement attached to the front three point linkage is shading the lights in radiator grill)



TRACTOR LIGHTS SWITCH

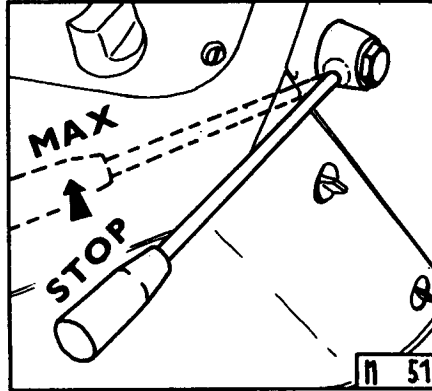
(Installed together with steering lock by electromagnet).

- "0" - Tractor lights turned off
- "1" - 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.
- "2" - All the lights as in "1" and the low or high beam headlights (depending on the dimmer switch position).



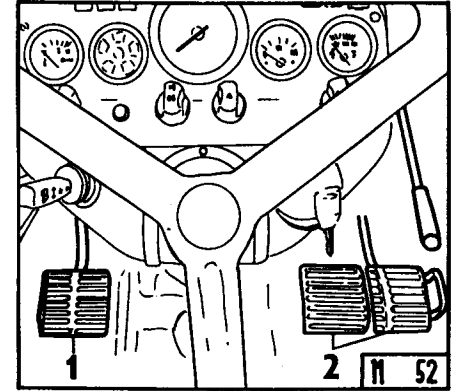
TURN SIGNAL LIGHTS, HEADLIGHTS AND HORN

- a - Position for a right turn
- b - Position for a left turn
- c - Acoustic horn
- d - Light flasher
- e - High beam headlights



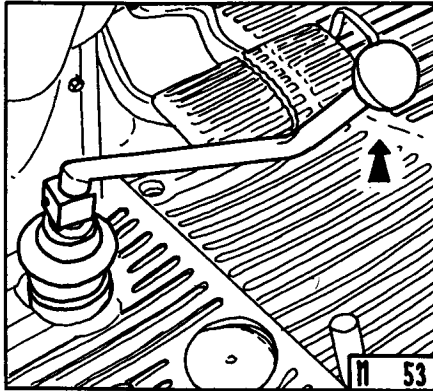
MANUALLY-OPERATED FUEL CONTROL LEVER

- STOP - Stops the engine
- MAX - Maximum fuel supply



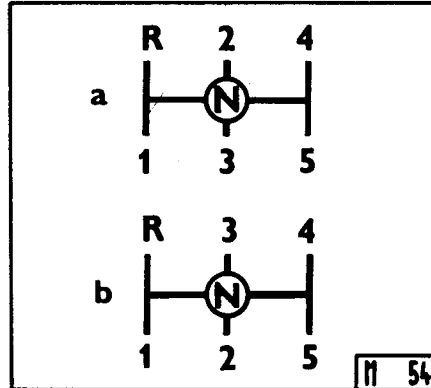
CONTROL PEDALS AND LEVERS

- 1 - Clutch pedal
- 2 - Service brake pedals coupled using a latch



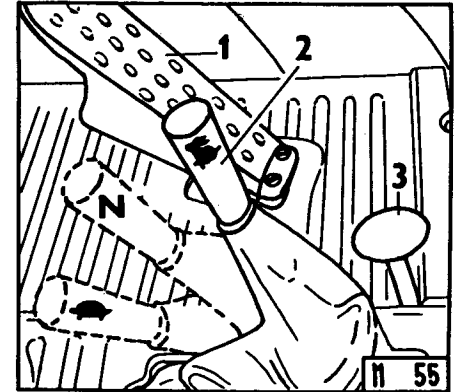
TRANSMISSION CONTROL

1 - Main transmission control lever



GEAR SHIFTING DIAGRAM

- a) with normal reverse gear
- b) with increased reverse gear
(optionally with Z 3320 and Z 3340 only)

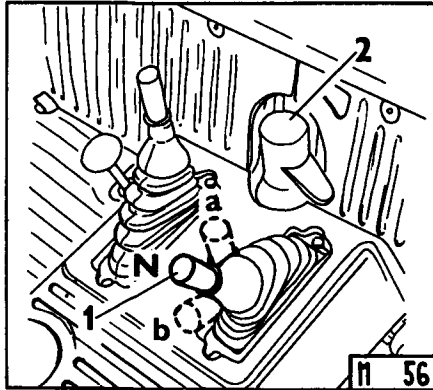


PEDALS AND LEVERS

- 1. Accelerator pedal
- 2. Travel speed control lever
hare - travel speeds for roading
N - neutral
turtle - reduced travel speeds
- 3. Differential lock pedal



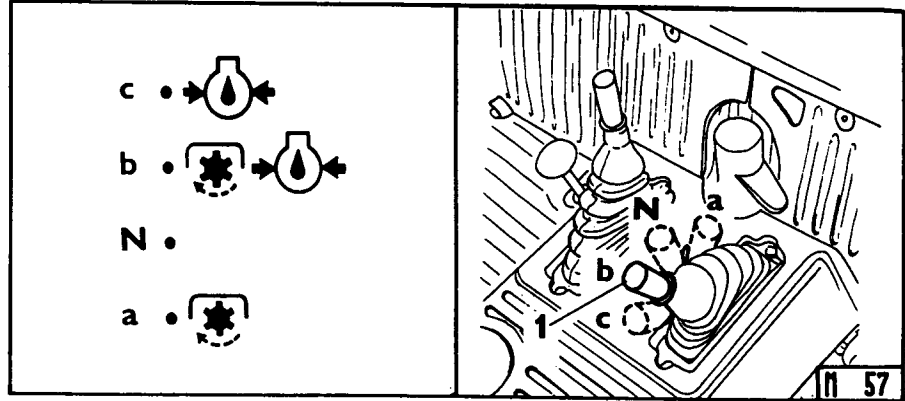
The differential lock must not be used when steering to a turn.



P.T.O. SHAFT ENGAGEMENT LEVER

(with no dependent hydraulic pump installed)

1. Lever for P.T.O. shaft engagement
 - a) P.T.O. shaft driven through the transmission - the shaft speed depends on the speed step engaged
- N - neutral position
- b) P.T.O. shaft drive for 540 and 1000 r.p.m.
2. Shifting the P.T.O. shaft speed to 540 and 1000 r.p.m. with interchangeable shaft end pieces

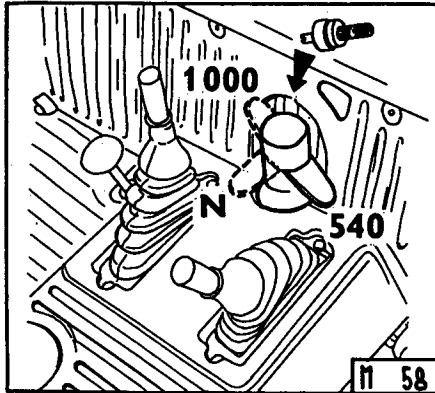


P.T.O. SHAFT ENGAGEMENT LEVER

(with dependent hydraulic pump installed)

1. Lever for P.T.O. shaft engagement
 - a) P.T.O. shaft driven through the transmission - the shaft speed depends on the speed step engaged
- N - neutral position

- b) P.T.O. shaft and hydraulic pump drive engaged (shifting lever is positioned downwards - the first position)
- c) hydraulic pump drive engaged - the P.T.O. shaft is not running (shifting lever is positioned in its lowest position)



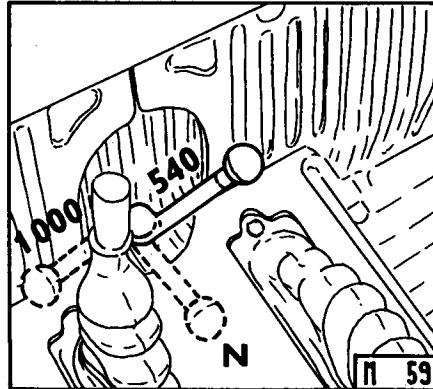
P.T.O. SHAFT ENGAGEMENT LEVER

(interchangeable shaft end pieces)

Shifting the P.T.O. shaft speed to 540 and 1000 r.p.m. with interchangeable shaft end pieces

- forward position - neutral
- to the left - 540 r.p.m.
- to the right - 1000 r.p.m.

CAUTION: Shift the lever to neutral, pull it upwards and use the correct extension when changing the speed from 540 to 1000 or vice versa. The extension for 540 r.p.m. has six splines while that for 1000 rpm - 21 splines.

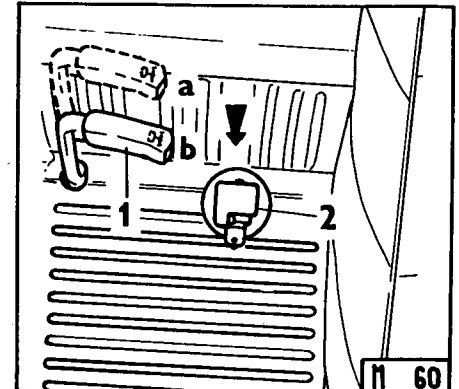


P.T.O. SHAFT ENGAGEMENT LEVER

(without interchangeable end pieces)

The speed-shift lever for shifting the P.T.O. shaft speed to 540 and 1000 r.p.m. without interchangeable shaft end pieces

- forward position - neutral
- to the left - 540 r.p.m.
- to the right - 1000 r.p.m.



LEVER FOR FRONT DRIVING AXLE ENGAGEMENT AND PEDAL OF TORQUE MULTIPLIER

1. Front driving axle engagement lever

- a) disengaged b) engaged

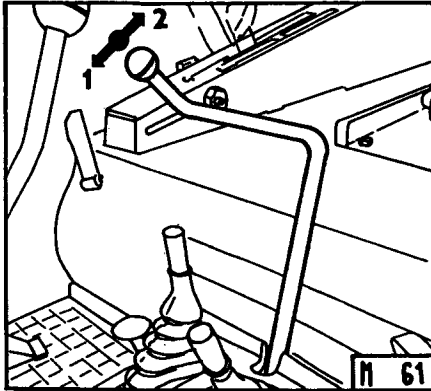
Turn the lever backwards, push it down and turn in the initial direction even with the tractor moving. Can be used when the rear wheels are slipping; the front wheel tires would be worn before time otherwise.

2. Torque multiplier engagement pedal.

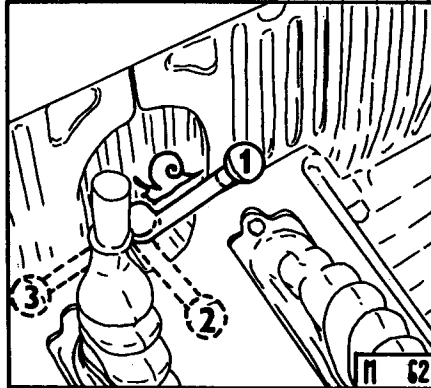
Push down the pedal for engagement.



The multiplier must not be used when driving downhill!



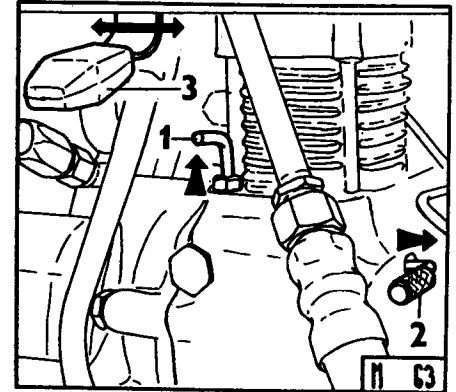
FORWARD/REVERSE CONTROL LEVER



CREEPER SPEEDS SHIFTING LEVER

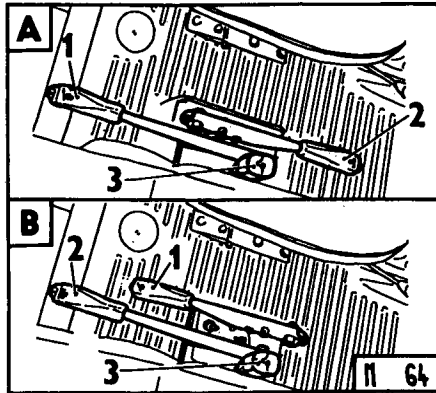
1. Travelling forward
 2. Travelling in reverse
 In combination with reduced gear ten speed steps forwards as well as in the reverse can be used.
 The main speed shift lever has five positions without the direction in reverse. The reverser excludes 1000 rpm of PTO.

1. Engaged - low travel speed position
 2. Disengaged - normal travel speed position
 The creeper speed eliminates 1000 rpm PTO shaft speed.



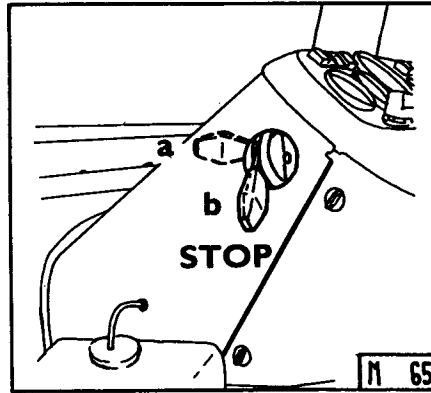
COMPRESSOR DRIVE ENGAGEMENT
 AND OPENING THE ENGINE HOOD

1. Compressor drive engagement lever
 2. Engaged condition lock lever
 3. Engine hood lever



PARKING BRAKE, P.T.O. SHAFT CLUTCH AND SUSPENSION FOR SINGLE-AXLE TRAILER

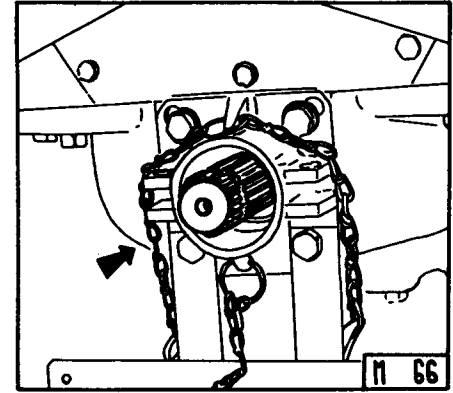
1. Parking brake lever
2. Lever for manual disengagement of P.T.O. shaft clutch
3. Single-axle trailer suspension control lever



LEVER FOR STARTING CLUTCH CONTROL VALVE OF THE FRONT P.T.O. SHAFT

1. Lever for the starting clutch control valve of front P.T.O. shaft
 - a) Engaged
 - b) Disengaged

Engagement can be carried out only after the air pressure exceeds 500 kPa (according to the pressure gauge). The valve provides automatic disengagement of the clutch, if the air pressure drops below 410 ± 60 kPa.



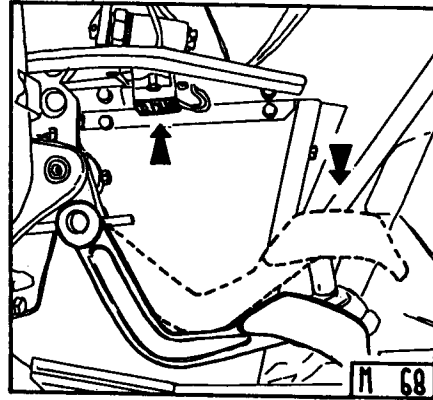
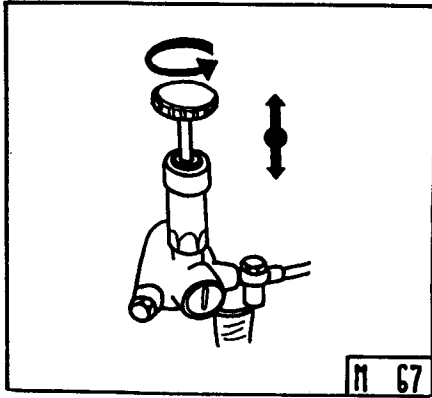
CAUTION: It is forbidden to repair or clean any part of attached implements driven through the front P.T.O shaft, unless the lever is in the STOP position.

Starting the engine	44
Immediately after starting the engine	46
Moving the machine	47
Speed shift lever	48
Service brakes	50
Pneumatic brakes of trailers and semi-trailers	51
Stopping the tractor	52
Stopping the tractor - parking brake	52
Stopping the engine with turbocharger	52
Leaving the tractor	52
Running-in the tractor	53



Make yourself acquainted well with the gear-shifting diagram prior to driving the new tractor and try out yourself the individual positions of the transmission control lever in advance with the engine stopped.

Before operating the machine under normal conditions check to be sure the machine condition complies with the safe operation requirements.



 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 with fuel and screw the handle in the pump body properly.

1. Insert the engine start switch key and turn it to the position "0".
2. Push down the clutch pedal fully to close the start breaker.
3. Turn the start switch through the position "I" to the position "II" (start). Let the engine cranking for about 3 to 5 seconds, then release the key and return it back to the position "0". The cranking can be omitted in the case of higher ambient temperature.
4. Set up the maximum fuel supply position on the accelerator lever.
5. Turn the start switch key through the position "I" to the position

"II" (start). Release the key after the engine starts. Do not crank the engine longer than 15 seconds.

6. After starting the engine reduce the supply of fuel. Avoid running the engine on high idle.

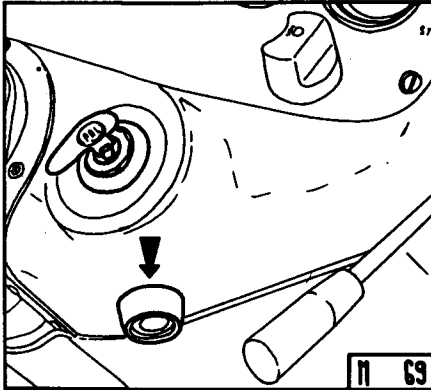
UNLESS THE ENGINE STARTS

Wait for 30 seconds, return the start switch key to the position "0" and repeat starting. Only 6 start cycles are permissible, as maximum (15 seconds of cranking and 30 seconds waiting is one cycle).

Let the starter to cool to the ambient temperature before cranking again.

 Never try to make use of the starter for supporting the running down engine - avoid a starter damage in this way.

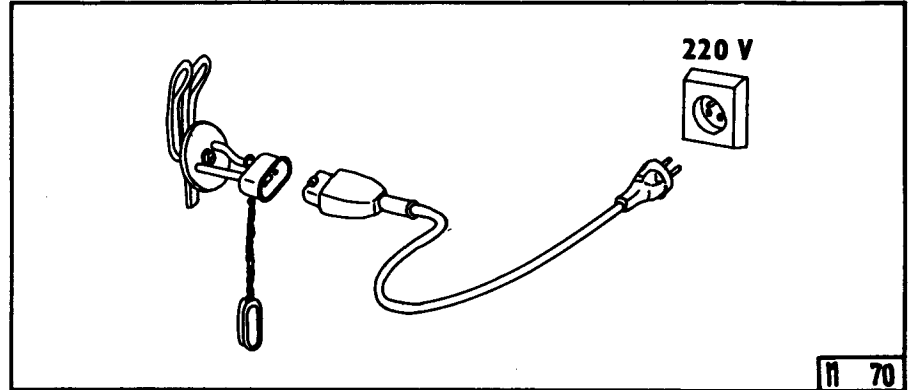
Always disconnect battery frame ground cable before doing any repair on starter. Do not start engine by shorting across starter terminals. Machine will start in gear if normal circuitry is bypassed. Never start engine while standing on ground. Start engine only from operator's seat, with transmission and PTO in neutral. Avoid possible injury or death from machinery runaway.



STARTING THE ENGINE USING STARTER PUSH-BUTTON

The key must be inserted into the engine start switch all the way in "0" position. Depress the push-button to start the engine.

All the instructions mentioned above are applicable, too.



COOLANT HEATER

The coolant heater is available per special order and can be installed in the engine cooling jacket. The power input - 1000 V, voltage - 220 V a.c.

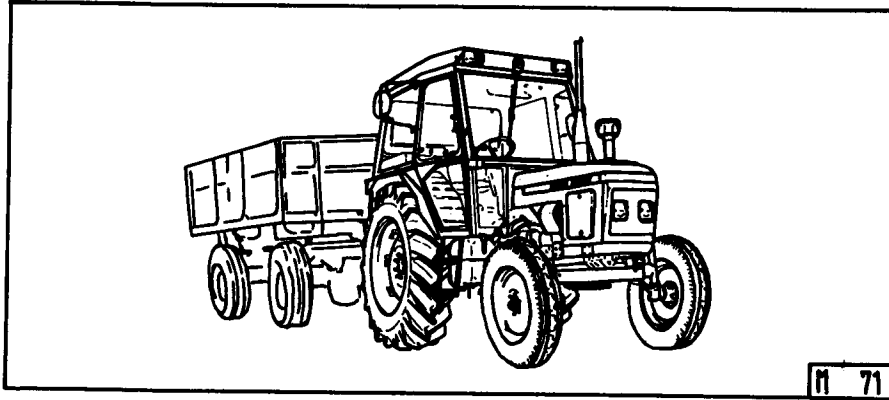
STARTING THE ENGINE WITH MAKING USE OF COOLANT HEATER

The infeed electrical installation and protection against dangerous contact must be in accordance with the applicable regulations. Check the power supply line prior to connecting to. Connect the plug to the heater and only then to the 220 V mains.

After warming up disconnect the device from the mains, as first, and then the plug from the heater.



AN ELECTRICAL ACCIDENT HAZARD!

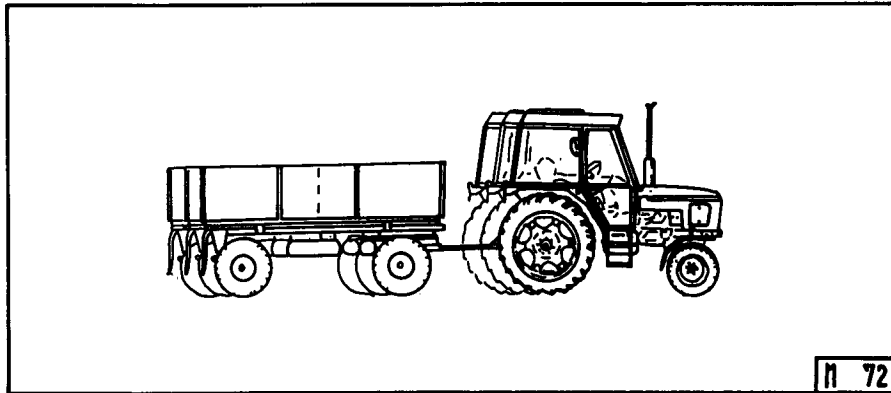


The tractor engine is turbo-charged (Z 7320, 7340 only). Set up the engine speed to be from 800 to 1000 r.p.m. and let it to run at this low idle for about 3 minutes. During that time check the correct lubrication and charging (both indicators should get off) as well as other functions ensuring proper engine operation.

The idle run time should be observed, especially in the winter time.

Continue to warm up the engine while travelling. Avoid long idle running or steep rise in engine speed when warming up the engine as this might damage the engine.

Do not exceed the engine speed of 2000 r.p.m. until the engine coolant temperature reaches 45 °C.



Select the road or reduced gear speeds and push the clutch pedal down. Start the engine and set up its speed to be within the range of 750 to 800 r.p.m. Engage the appropriate speed gear for starting the machine and increase slightly the engine speed.

Prepare the parking brake for releasing. Release the clutch pedal to the point of drive, then release the clutch pedal continuously while increasing the engine speed at the same time. Release the parking brake fully. Start moving smoothly and slowly. Very quick start could overload the power

train, be the cause of excessive fuel consumption, excessive wear of tires even damage to load.

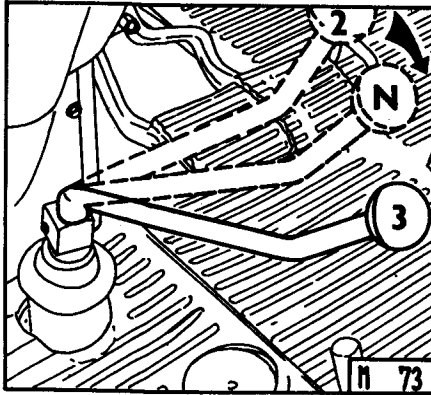
Use the 1st gear for acceleration only when driving with a heavy trailer up to the hill or in heavy ground conditions. When travelling, check regularly the engine running mode, the engine speed, lubrication, coolant temperature, air pressure, charging function and fuel indicator.

If a loaded trailer or other equipment is attached to the tractor, check the condition of load or attachment regularly.

Never use the differential lock when steering to a turn on a dry road.

When using the P.T.O. shaft with the tractor stopped, it is recommended to shift the directional control lever (if equipped) to neutral.

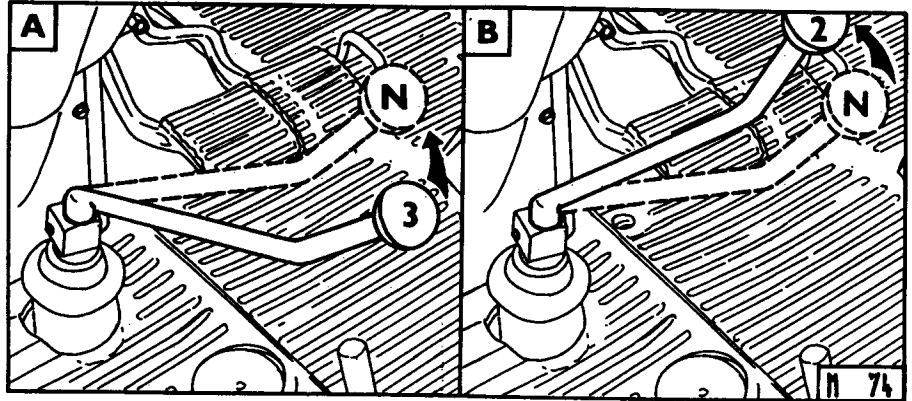
The 4th and 5th roading transmission gears are not recommended for use when the transmission reducer is engaged (if equipped).



GEAR SHIFTING UP

Push the clutch pedal down. Release the accelerator pedal at the same time and move transmission control lever to neutral. Release the clutch pedal (the clutch will engage) and push it down again. Move the transmission control lever to the desired speed, release the clutch pedal slowly (the clutch is engaging) while increasing the engine speed at the same time.

If the 2nd to 5th gears of the transmission are synchronized, the gear shifting to these gears can be done by pushing down the clutch pedal only once.



GEAR SHIFTING DOWN

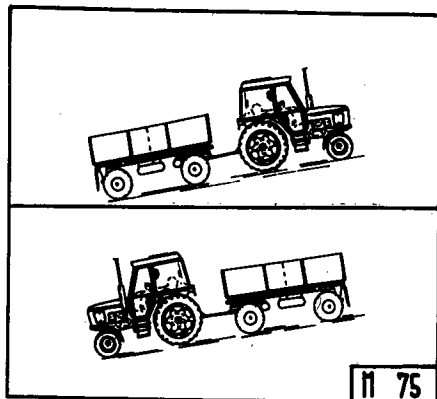
Shifting the gear down should be carried out as double declutch, on principle. Release the accelerator pedal to decrease the engine speed and brake the tractor slightly, if necessary.

A - Push down the clutch pedal and move the gear shift lever to neutral. Release the clutch pedal again and increase the engine speed simultaneously (the engine speed level depends on the tractor travel speed).

B - Push down the clutch pedal and engage the respective lower gear. Release the clutch pedal slowly while increasing the engine speed at the same time.

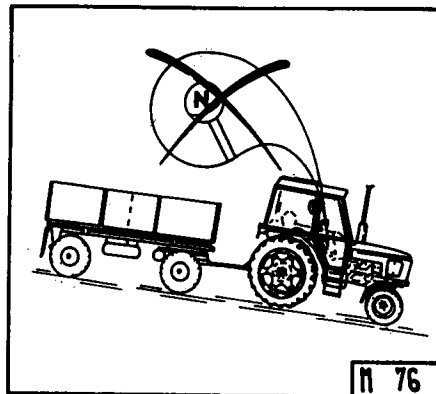
If only the 4th and 5th gears of the transmission are synchronized, we suggest to perform the shifting to 2nd and 3rd gear with double clutching.

If the 2nd, 3rd, 4th and 5th gear is synchronized, we suggest to perform the shifting to the 1st gear with double clutching.



GEAR SHIFTING DOWNHILL AND UPHILL

When shifting the gears down while driving uphill, use a smaller double-declutch acceleration - the travel speed of tractor is getting lower quickly. Use larger double-declutch acceleration while driving down a hill.



TRAVELLING DOWN A HILL



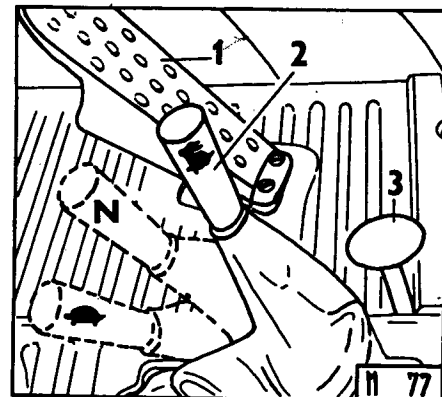
It is prohibited to drive the tractor down a hill with no gear speed engaged.

The sharper is the downhill slope the lower should be the gear speed engaged.

If possible, shift the gear down already before driving down-hill.

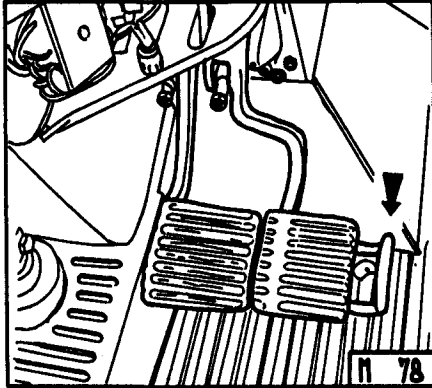
Remember:

The safe gear speed downhill is the same as that appropriate for driving uphill.



SHIFTING THE REDUCED GEARS

The way of shifting the gears for reduced speeds is identical with that used for roading. Because of the low speed of the tractor, the gear shifting is practically the same as getting the tractor moving from a standstill. The on-the-road/reduced gear shift lever 2 can only be moved with the tractor not moving.

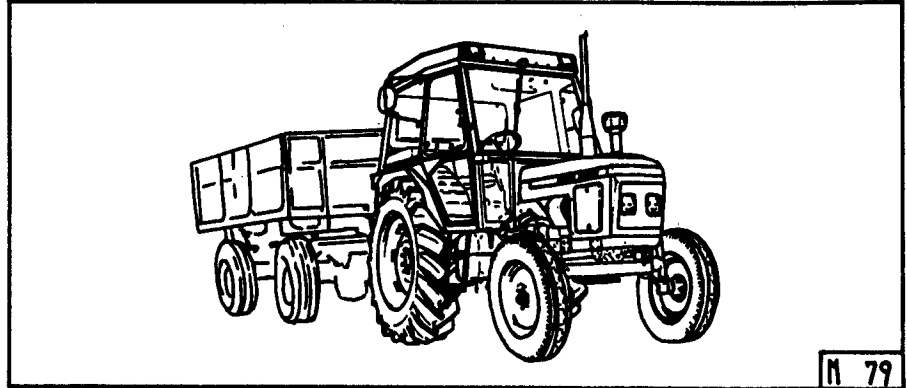


SERVICE BRAKE PEDALS

The dry disc service brakes are operated hydraulically, double-pedal with automatic pressure equalizer.



The two brake pedals must be locked with one another (using the latch) when roading. Dis-connected pedals for braking the LH and RH wheels separately can be used only when working on the ground or in the field.



DRUM SERVICE BRAKES (optional)

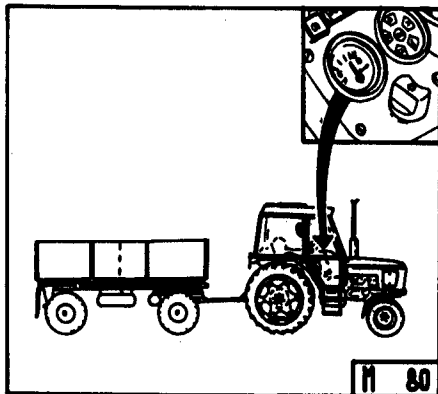
The dry drum service brakes are operated hydraulically, double-pedal with automatic pressure equalizer.



The two brake pedals must be locked with one another (using the latch) when roading. Dis-connected pedals for braking the LH and RH wheels individually can be used only when working on the ground or in the field.

PNEUMATIC BRAKES OF TRAILERS AND SEMI-TRAILERS

Operation of single - line pneumatic brakes of the trailers and semi-trailers is synchronized with braking the tractor including the brake effect. The working pressure has been adjusted by means of the regulator to be 590 ± 20 kPa. If the pressure value drops below 410 ± 60 kPa, the pressure-relief valve disables the secondary consumers (dis-engages the front P.T.O. shaft, the P.T.O. shaft clutch, the torque multiplier, etc.).

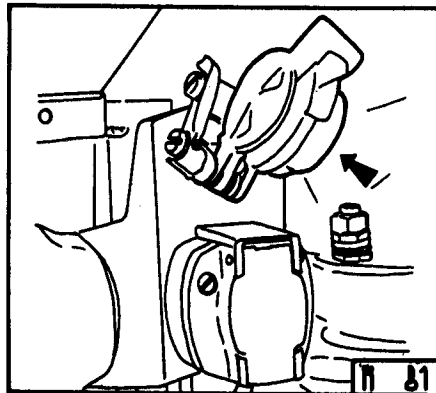


WARNING DEVICE

A decrease in pressure below 380 kPa is indicated by switching on the red signal lamp located on the instrument panel.



If the pressure drops below 380 kPa, the tractor with brake-equipped trailer or semi-trailer must not continue travelling until the pressure is increased.



SINGLE-LINE BRAKES

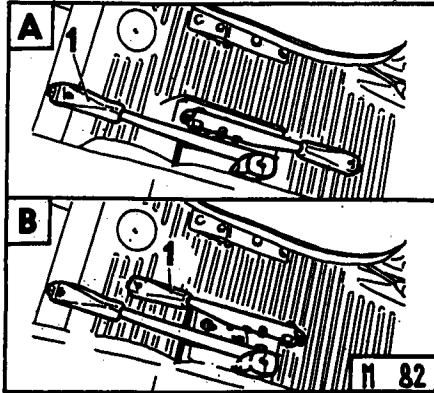
The single-line brake coupler head.



Connection of single-line brakes should be carried out when the tractor is stopped and the parking brake engaged.

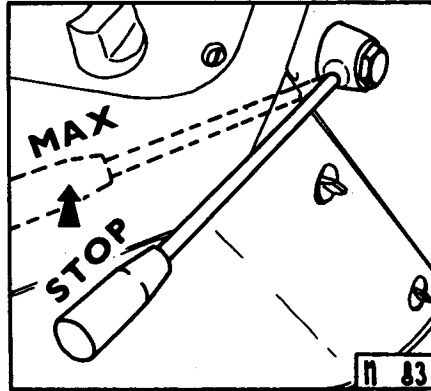
The coupler head should be closed by means of the cap when no trailer or semi-trailer is connected.

The air reservoir capacity is 20 dm³.



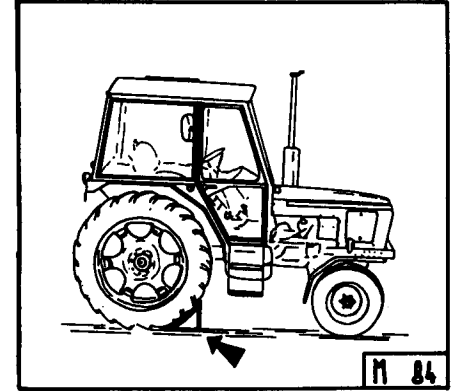
TRACTOR STOPPING - PARKING BRAKE

The service brake should be applied to stop the tractor slowly under normal operating conditions. Push down on the clutch pedal before stopping and shift the transmission control lever to neutral. Whenever you stop, engage the parking brake to prevent the machine from spontaneous moving. The respective indication lamp of parking brake engaged condition will be lighting on the instrument panel.



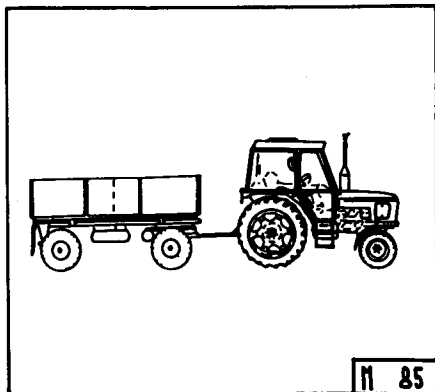
STOPPING THE TURBOCHARGED ENGINE

The tractors equipped with a turbocharged engine need the engine to be cooled after being loaded fully during operation. Therefore, operate the engine at low idle (800 to 1000 r.p.m) for five minutes with no load before stopping. Then, stop the engine by shifting the accelerator lever to the STOP position. The same is possible when the engine is not turbocharged. The procedure is not harmful.



LEAVING THE MACHINE

Before leaving the ROPS-cab-equipped machine, never forget to remove the start switch key and to lock the cab. If the machine is on a slope, its spontaneous moving must be prevented, as follows: engage the parking brake, stop the engine, shift the transmission control lever to the lowest gear, block the wheels front and rear.

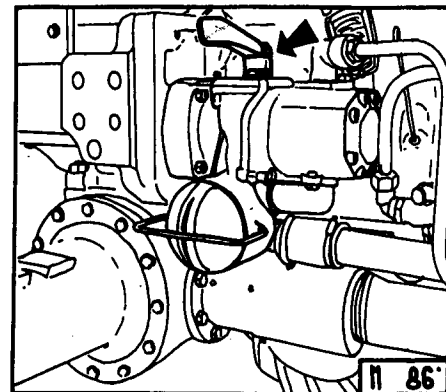


DURING RUNNING IN PERIOD - UP TO 100 SERVICE HOURS

During the first 100 service hours:

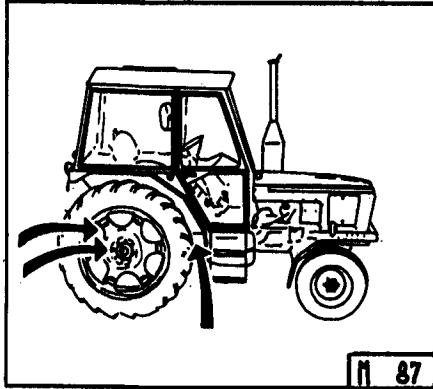
- load the engine normally
- avoid operation with partial loading of the engine
- avoid excessive operation with high idle speed
- check engine oil level frequently (during this period excessive oil consumption is normal)

- check threaded joints of tractor, especially those of the tractor carrying parts
- take care of all failures immediately to prevent damage and to secure safe operation
- use the same procedure after a general overhaul.



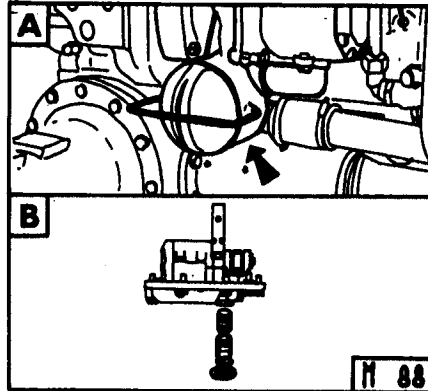
INITIAL 10 SERVICE HOURS

The running-in should be carried out only in the traffic operation with hydraulic pump disengaged (the control lever in "0" position).



AFTER 10 SERVICE HOURS

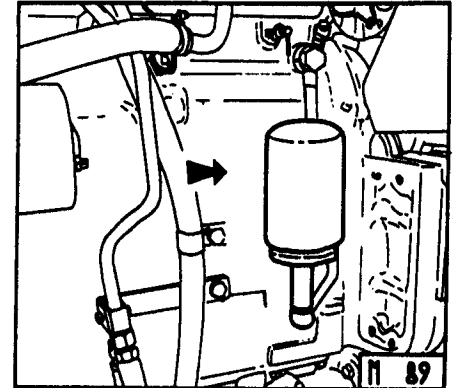
Clean warm gearbox oil through a filter device of 20 microns by pouring or by sucking the oil to the device. If the device is not available, pour the warm transmission and gearbox oil to a prepared container. There are four drain plugs in total (1x gearbox housing, 1x transmission, 2x portals). Let the oil settle for at least two hours and pour the clean oil back into the gearbox. The total volume of the oil is 33.8 litres (37.8 with an independent pump).



AFTER 10 SERVICE HOURS

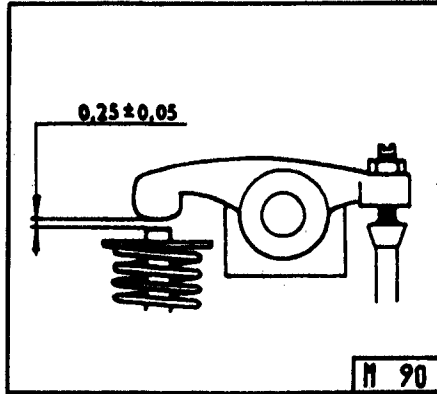
Remove and clean the magnetic insert and screen of the hydraulic pump suction strainer. Wash these two elements in petrol and install them back after dripping. Add oil to the upper mark on the transmission oil dipstick, if necessary. All the tractor hydraulic system may now be used without limitation.

- 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.



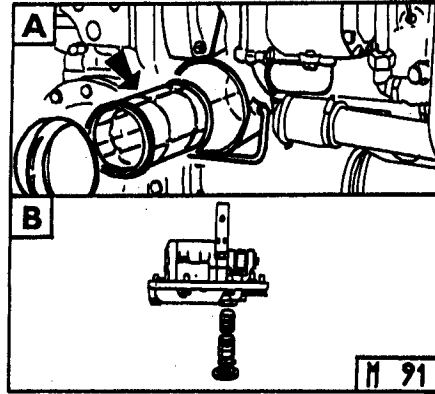
AFTER 70 SERVICE HOURS

Drain the warm engine oil and replace the full-flow oil filter. Fill up the engine crankcase with new oil up to the prescribed level (after cranking the engine and letting the level settle) to the upper mark of dipstick.



AFTER 70 SERVICE HOURS

Check cylinder head torque (the recommended torque on cold engine is 167 to 177 Nm) and engine valve clearances (0.25 ± 0.05 mm on cold engine).



AFTER 70 SERVICE HOURS

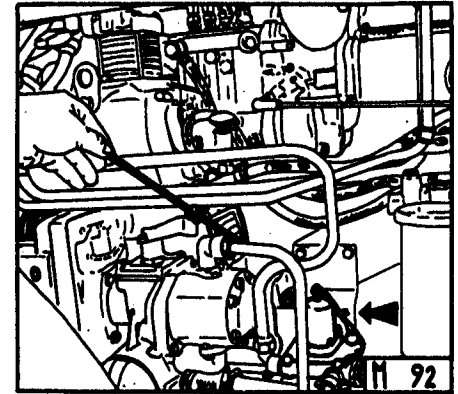
- A - the pump is located on the engine cover
- B - the pump is located on the transmission cover within the lower part of transmission.

Remove and clean:

- 1 - the magnetic element of gearbox suction strainer.
- 2 - gearbox suction strainer screen.

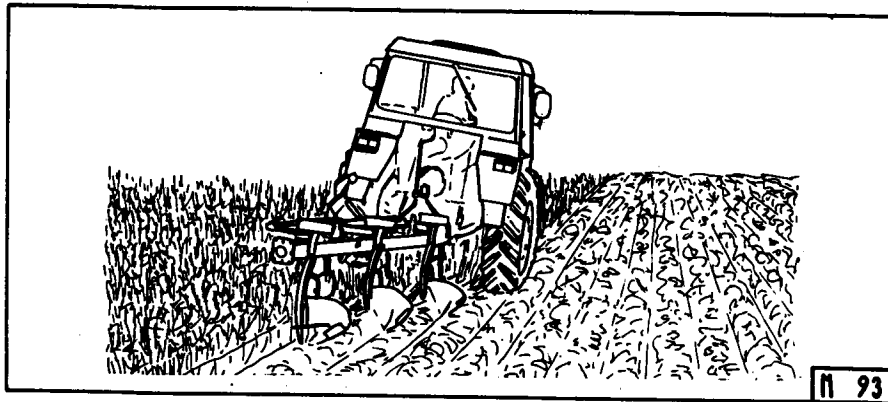
Replace:

- 3 - fine full-flow cleaner paper insert.



AFTER 70 SERVICE HOURS

Check air pressure governor bottom flange nuts.



AFTER 100 SERVICE HOURS

After the running-in period is over,
it is possible to make use of the
tractor without any restriction.

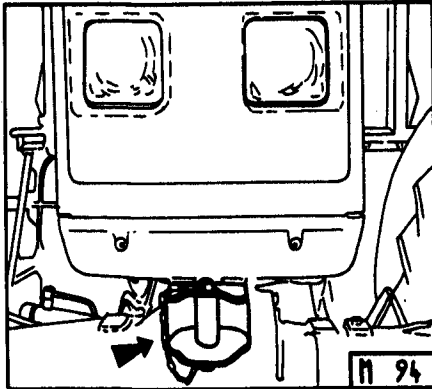
The operational mode of engine:

- the engine speed recommended:
1400 up to 2300 r.p.m.,
- low idle speed:
700 to 650 r.p.m.,
- working oil pressure: 0.2 to 0.5 MPa
- working oil pressure at low idle:
0.05 MPa, as minimum,
- coolant temperature: 80 to 95 °C

Front tow hook	58
Multistage trailer hitch	58
Mechanical coupling tail	58
Automatic coupling tail	59
Swinging tow bar	59
Hitch for single-axle trailer	60
Extension for trailer hitch	61
Tow bar	61
Integration with semi-trailer or trailer	61



Check to be sure the technical state of tractor meets the requirements of safe traffic service and start driving only after that. If a trailer or an implement is connected or attached, check it for the correct connection and proper fastening of load. Never leave the moving machine to couple a trailer by yourself. Take care of your assistant's safety, too.

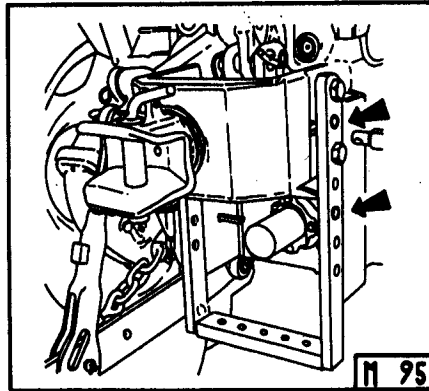


FRONT TOW HOOK

It serves for towing the tractor with no trailer or other attachments joined.

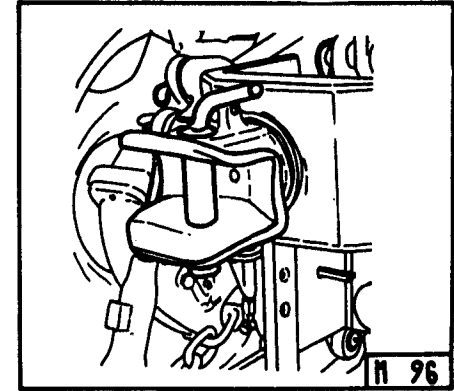


Use a towing bar or line for machine disengagement, from mud, e.g.; never use a chain.



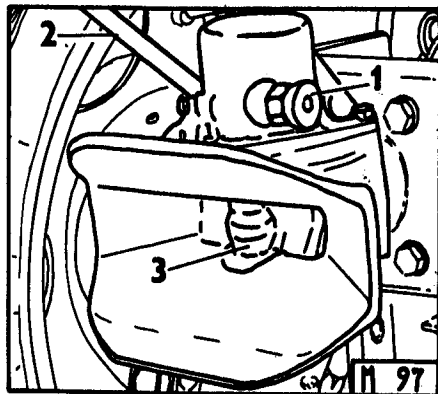
MULTI-LEVEL TRAILER HITCH

It serves for coupling four-wheel or smaller single-axle trailers with the tractor. The coupling tail is adjustable to height - five positions spaced 50 mm from one another - by means of bolts or pins with lockings. When working with various agricultural machines it is necessary to adjust the coupling tail, to tilt it or even dismantle (including the carrier).



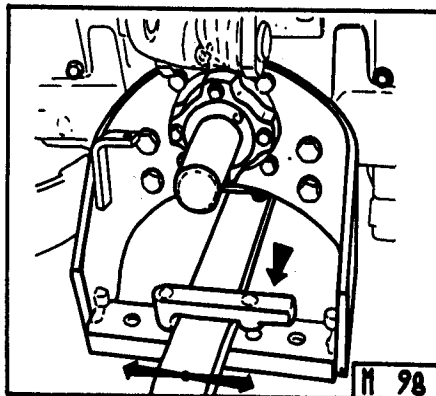
MECHANICAL COUPLING TAIL

The coupling tail journal diameter is 30 mm. The permissible vertical static load is 10 kN.



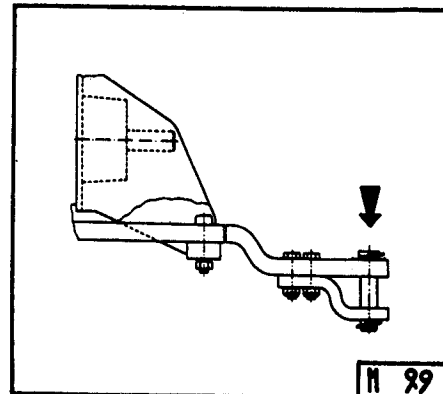
AUTOMATIC COUPLING TAIL

It makes possible to couple a trailer to the machine automatically. When joining these two vehicles, the lock (1) should be pulled out and the main journal (3) lifted to its upper position at the same time by means of the lever (2). As soon as the tail has passed over the tow bar eye the journal engages automatically into the eye of the trailer being coupled to. After completion of joining check to be sure the lock has turned back. The permissible vertical static load is 10 kN.



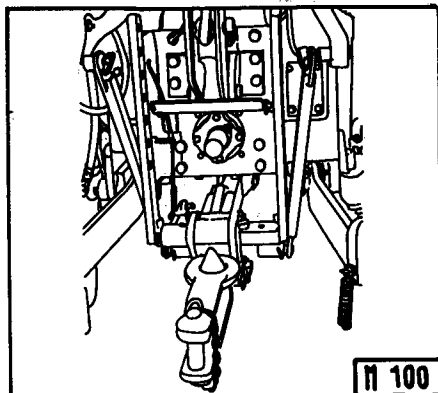
SVINGING TOW BAR

This tow bar can be set up to 3 various positions. Locking in position is provided by means of the retaining yoke. Adjustment to height is possible in four positions (by turning the whole tow rod round the longitudinal axis about 180° and reassembling the lower portion of fork).



SVINGING TOW BAR

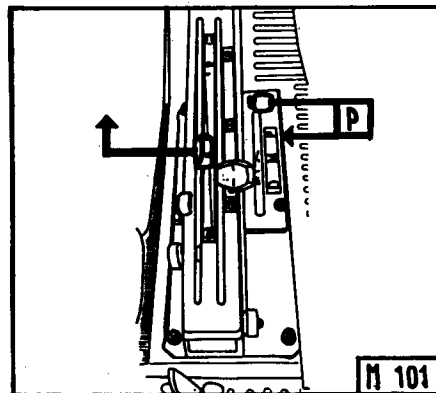
When working with the propeller shaft the necessary free space will be provided only if the fork of the swinging tow bar is set up to its lowest position. The permissible vertical static load is 6 kN.



HITCH FOR SINGLE-AXLE TRAILER

This hitch is intended for coupling single-axle trailers on the tow bar eye of 50 mm in diameter. The tow hook can be risen or lowered hydraulically by means of longitudinally adjustable telescopic tow bars. The permissible vertical static load is 15 kN. The hitch can transmit the maximum tractive force.

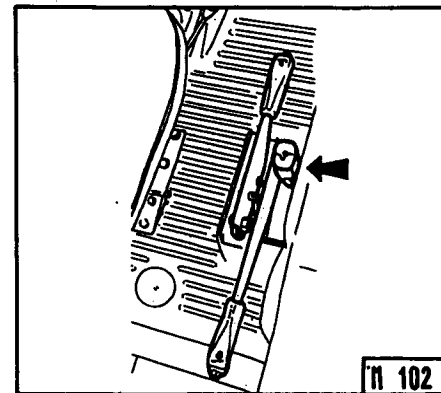
With Z 7320 and Z 7340 tractors, the single-axle trailer hitch is fitted in its reinforced version. Its permissible vertical static load is 30 kN. This version can also be fitted onto other tractors optionally.



COUPLING THE SINGLE-AXLE TRAILER

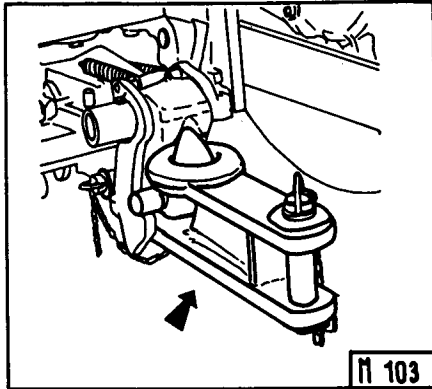
Accomplished this using lever of the inner hydraulic circuit with position control active (the selector lever in position "P"). The hitch hook and the trailer eye should be lifted hydraulically up to a position enabling the hook supports to engage the supports of the hitch bracket. The hydraulic lifting arm should be then lowered slightly to enable bearing of the hitch hook on the supporting hooks.

- The telescopic tow bars must not be stressed.
- Insert the hitch pin and its retainer to lock the supporting hooks.



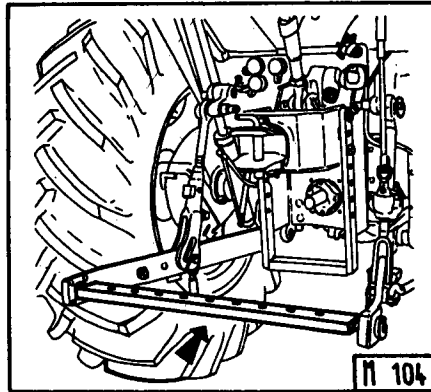
UNCOUPLING THE SINGLE-AXLE TRAILER

It can be carried out by lifting slightly the hitch and moving the hitch control lever backwards. Unlock the supporting hooks before lowering - remove the hitch pin located behind them. The hitch can be lowered after tilting the supporting hooks.



EXTENSION FOR TRAILER HITCH

It is available together with the hitch for the single-axle trailer. It makes possible to integrate in a set all the machines joined to the tilting tow bar. The trailer hitch extension substitutes for the swinging tow bar in the middle position. The permissible vertical static load is 6 kN.

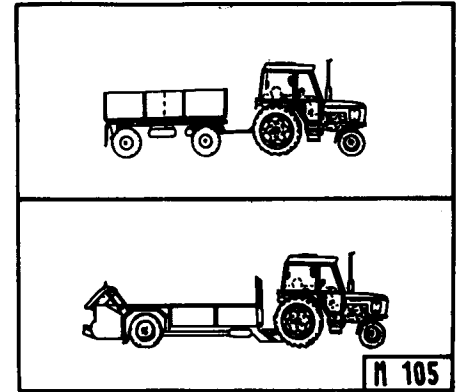


DRAW BAR

This draw bar is adjustable by means of the hydraulical lifting mechanism within the whole lifting range. Only those agricultural machines which load the draw bar permanently downwards are allowed to be coupled on it. The permissible vertical static load (at rest) is 5 kN.



Dismantle the carrier of multi-stage trailer hitch including the coupling tail when using the draw bar.



COUPLING IN TRAIN WITH A TRAILER AND SEMI-TRAILER

The load of rear machine axle in train with a semi-trailer must not exceed the maximum permissible load value. The maximum weight of the integrated brake-equipped trailer/semi-trailer in the train must not exceed the value mentioned on the warning label and the data given in the vehicle M.O.T. certificate.

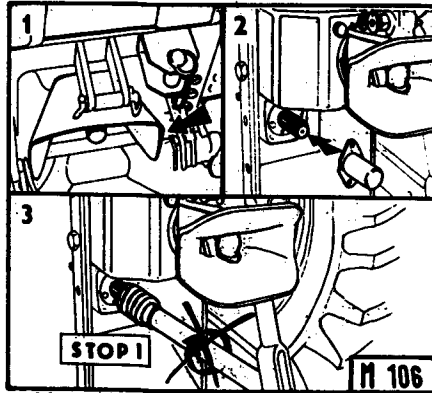
REMARKS

<https://truckmanualshub.com/>

Safety regulations for power take-off (P.T.O.) shaft utilization	64
Shifting the dependent and independent speeds of P.T.O. shaft	64
Changing the speeds	65
Front power take-off shaft	68



Prior to coupling an agricultural machine on the tractor power take-off (P.T.O.) shaft check to be sure that the tractor and machine P.T.O. shaft speeds are identical (540 or 1000). Serious damage and accidents may result in the case of different speeds.

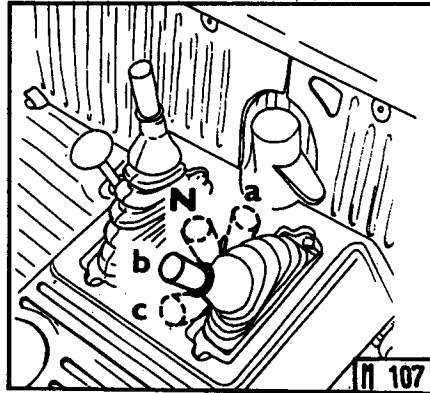


SAFETY REGULATIONS FOR MAKING USE OF THE P.T.O. SHAFT



Check to be sure all the guard covers are attached properly. After termination of a job while using P.T.O. shaft re-install the P.T.O. shaft cover. Carry out coupling/uncoupling of the driveline joint after the tractor P.T.O. shaft is stopped fully.

Persons not authorized to work with the tractor attachments must not dwell between the tractor and the machine coupled on.

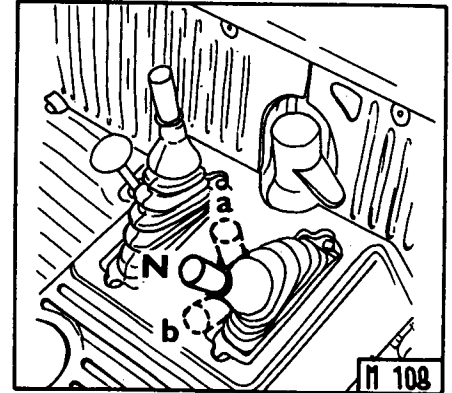


SHIFTING THE P.T.O. SHAFT DEPENDENT AND INDEPENDENT SPEEDS

(with dependent hydraulic pump installed)

- a - Dependent speed of P.T.O. shaft (depends on the gear speed engaged through the transmission)
- N - neutral position
- b - P.T.O. shaft speed independent of the machine travel speed (1000 r.p.m. or 540 r.p.m.)
- c - The P.T.O. shaft is stopped, only the hydraulic pump is running.

Shifting should be carried out when the engine is stopped.

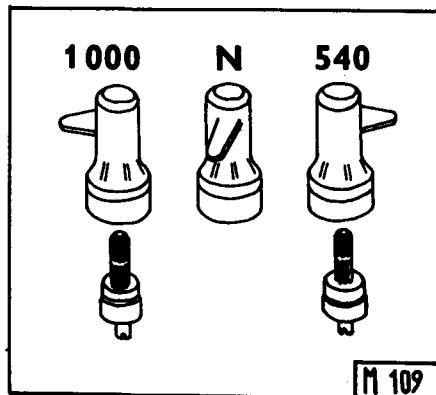


SHIFTING THE P.T.O. SHAFT DEPENDENT AND INDEPENDENT SPEEDS

(without dependent hydraulic pump installed)

- a - Dependent speed of P.T.O. shaft (depends on the gear speed engaged through the transmission)
- N - neutral position
- b - P.T.O. shaft speed independent of the machine travel speed (1000 r.p.m. or 540 r.p.m.)

Shifting should be carried out when the engine is stopped.

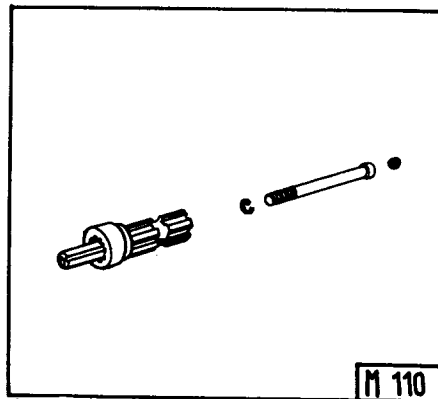


P.T.O. SHAFT - EXECUTION WITH SHAFT END PIECES

The shaft end piece for 540 r.p.m. has six splines.

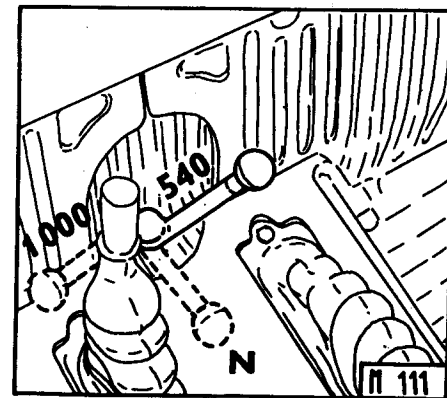
That for 1000 r.p.m. has twenty one splines.

Factory-installed is the six-spline end piece. When changing it, remove the P.T.O. shaft cover, screw off the plug and screw what the end piece is retained with. The new end piece is stored in the guides within the transmission cover. The locking mechanism makes possible to turn the control lever in on direction only, depending on the adapter used.



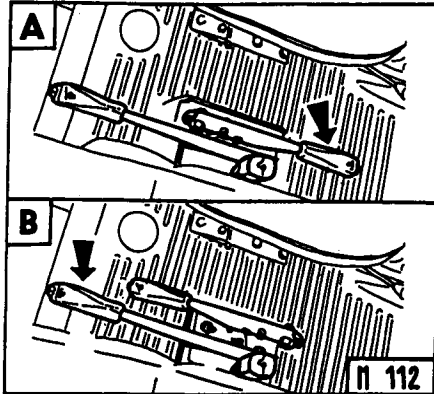
P.T.O. SHAFT - WITH SHAFT END PIECES - SPEED SHIFTING

Can be carried out by P.T.O. shaft end piece replacement after removal of the P.T.O. shaft, screwing off the plug and screw what the end piece is retained with inside the modified end of P.T.O. shaft.



P.T.O. SHAFT - WITHOUT SHAFT END PIECES

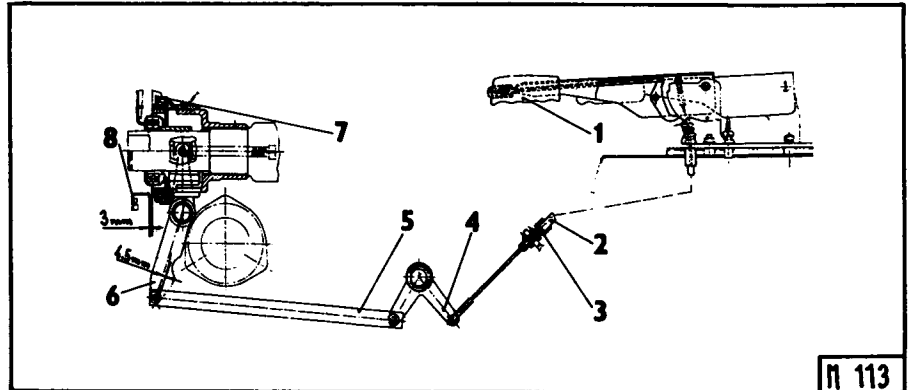
Speed shifting can be carried out using the control lever. The shaft end piece has six splines.



LEVER FOR MANUALLY-OPERATED P.T.O. SHAFT CLUTCH ENGAGEMENT

Upper position - engaged clutch
 Lower position - disengaged clutch

The correct action is signalled by means of the limit switch and signal light located on the control panel.



PTO CLUTCH CONTROL MECHANISM

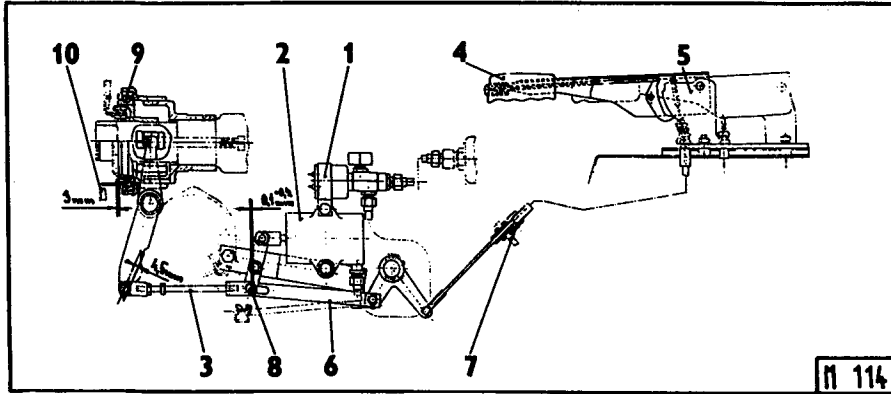
Consists of:

- 1 - Manually-operated lever
- 2 - Bowden cable
- 3 - Adjusting screw
- 4 - Double-arm lever
- 5 - Tie rod
- 6 - Shaft with arm
- 7 - Bearings
- 8 - Clutch levers

ADJUSTMENT PROCEDURE

1. Adjust clearance between bearing (7) and clutch levers (8) by means of an adjustment bolt so that clear-

- ance in lever hole (6) is 4.5 mm.
2. Clearance between bearing (7) and levers (8) should be set to 3 mm. This clearance must not drop below 2.5 mm.
3. By pulling lever (1) with clutch disengaged, the indicator on the control panel must light up.
4. With the travel clutch disengaging lever correctly set, the control force on the PTO shaft clutch hand lever (1) is 200 N as maximum. If the force grows inadequately (approx. 2x), the travel disengaging lever needs to be re-adjusted.



PNEUMATIC CONTROL WITH MECHANICAL LINKAGE

Consists of:

1. Electromagnet valve
2. Pneumatic cylinder
3. Adjustable tie rod
4. Manually-operated lever
5. Limit switch

Engagement can be carried out by pulling the handle up. The lever is locked in the upper position automatically. This mechanism provides disengagement of the P.T.O shaft clutch even without usage of the lever - by pushing down the clutch pedal to the stop.

CAUTION!

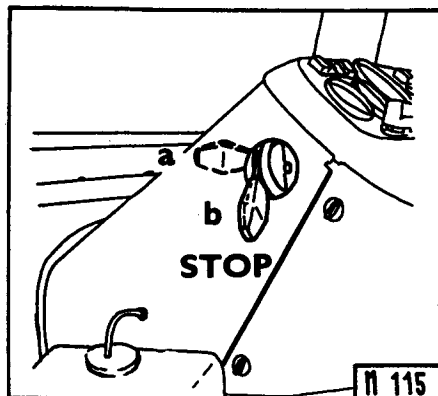
If the P.T.O. shaft is not used, it is recommended not to push down the clutch pedal to the stop. The P.T.O. shaft clutch wear can be thus reduced.

ADJUSTMENT PROCEDURE

1. Adjust clearance between bearing and clutch levers by means of adjustment links (3), so that it corresponds to the 4.5mm clearance on the fork hole axis with link disconnected (6).
2. Connect link (6) with spring, set

clearance between pin (8) and link hole (6) to $0.1^{+0.2}_{-0}$ mm by means of bowden cable adjustment screw.

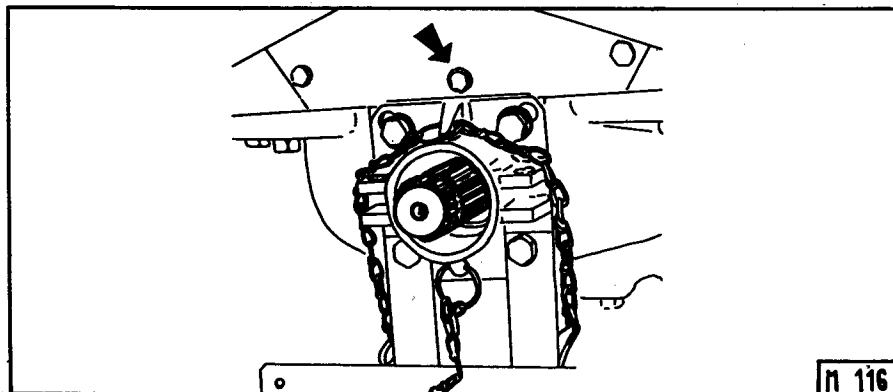
3. Set clearance between bearing (9) and clutch levers (10) by means of link (3) so that the clearance between bearing (9) and levers (10) is 3 mm, it must not fall below 2.5 mm.
4. Air cylinder piston (2) must be in its initial stop position during adjustment.
5. After adjustment pull hand control lever (without electricity connected to the switch) by force needed for disengaging the clutch. Check adjustment after releasing the lever according to procedure 2.
6. The indicator on the control panel will light up if the hand control lever is pulled.
7. With the travel clutch disengaging lever (10) correctly set, the control force on the hand disengaging lever (4) with electromagnetic valve switch (1) on is 120 N as maximum or 200 N with the switch off. If the force grows inadequately (up to 2x), the clutch disengaging lever (10) needs to be re-adjusted.



FRONT P.T.O. SHAFT STARTING CLUTCH
- CONTROL VALVE LEVER

1. The control valve lever of front P.T.O. shaft starting clutch
 - a) engaged position
 - b) disengaged position (STOP)

Clutch engagement can be carried out only when the air pressure reaches 500 kPa (on pressure gauge), as minimum. The valve provides automatic disengagement of the P.T.O. shaft clutch, if the air pressure drops below 410 ± 60 kPa.



CAUTION!

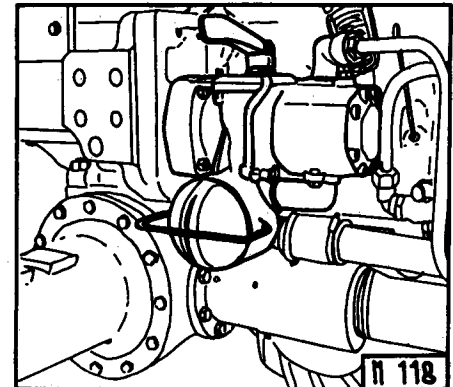
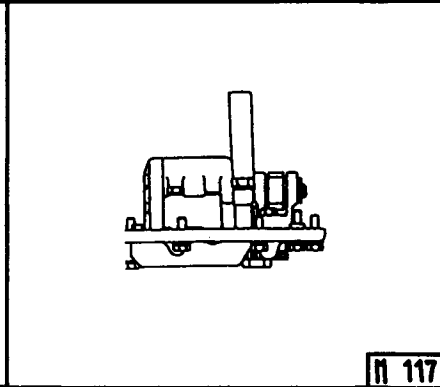
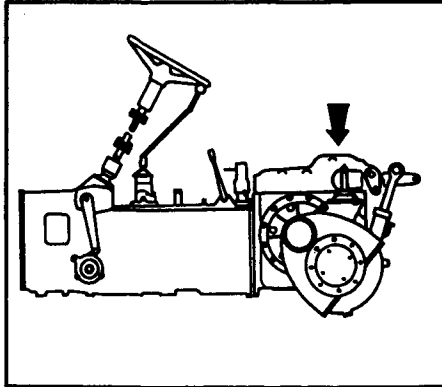
The clutch packing chamber must be clear of water condensate prior to the winter time. Screw off the plug and engage/disengage the clutch using the respective lever on instrument panel several times. Pressure air will blow out dirt and condensate from the packing room. Install the plug again!

FRONT P.T.O. SHAFT

The shaft end piece has 21 splines, 35 mm in diameter and 1000 r.p.m. at the engine speed of 1820 r.p.m. The shaft end piece rotates clockwise when viewing from the front. The maximum power transmitted via the front P.T.O shaft is 30 kW.

The hydraulic system serves for elevation and lowering the agricultural machines and implements attached to in the rear three-point suspension.

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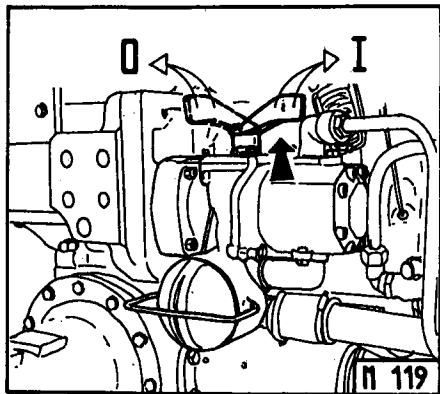


HYDRAULIC SYSTEM

The hydraulic system consists of internal and external circuitry. The oil is taken from the common charge of transmission and final drive casing. Pressure oil is delivered by means of disengageable gear pump driven either as independent from engine or dependent (option) from the P.T.O. shaft. The independent pump (located on the engine) can have permanent drive. The independent pump discharge rate is 32 litre/min (40 l/min optionally) at the engine nominal speed. The maximum pressure in the circuit is limited by the

pump safety valve to $18 + 2$ MPa. The optional pump discharge rate (in the final drive casing) is 32 l/min or 51 l/min at 540 r.p.m. or 1000 r.p.m. of P.T.O. shaft, respectively, when the engine speed is 2200 r.p.m. The pressure-relief valve limits the pressure to the maximum of $16 + 2$ MPa. The operation of dependent pump should be limited not to last longer than necessary for the implements attached when the engaged shaft speed required is 1000 r.p.m. The independent pump can have the permanent drive.

The relief valve is located inside the bottom cover of final drive casing in either case. The valve can be dismantled from the machine without draining the oil charge when the independent pump is used. Only the oil from pipe round the valve body can flow out in this case.



HYDRAULIC PUMP (independent)



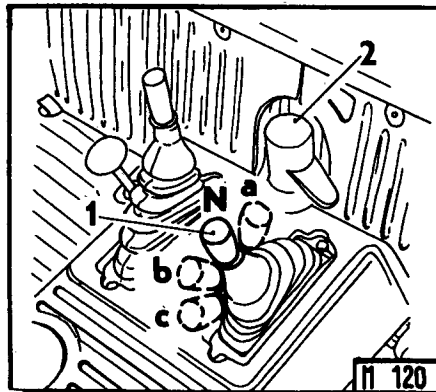
Engage the hydraulic pump drive by means of the lever only if you want to operate the hydraulic devices.

"0" - disengaged

"I" - engaged

Engage the hydraulic pump only if the engine is stopped, on principle.

When starting the engine in the winter time it is always recommended to have disengaged the hydraulic pump drive (the lever in "0" position).



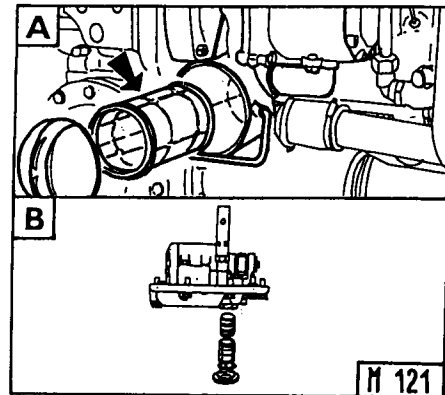
HYDRAULIC PUMP (dependent)



Engage the hydraulic pump drive by means of the lever (1) only if you want to operate the hydraulic devices.

Engage the hydraulic pump only if the engine is stopped, on principle.

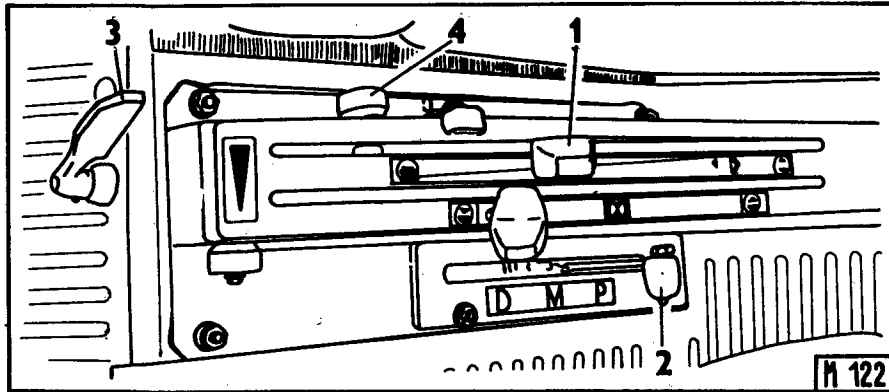
When starting the engine in the winter time it is always recommended to have disengaged the hydraulic pump drive.



FILTERING THE HYDRAULIC OIL

A - independent pump intake is through the strainer which is installed, together with the pump, on the engine LH side. It can be maintained without draining the transmission oil. Only the oil from filter body can flow out.

B - dependent pump intake is through the strainer installed together with the pump on the bottom of final drive casing. It can also be maintained without draining the transmission oil. Only the oil from filter body can flow out. The run-back oil from the sliding-spool valve of hydraulic control is passed to the fine filter with paper filter element.



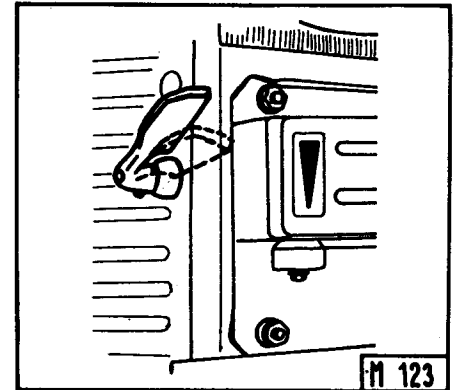
INNER CIRCUIT CONTROL LEVER

It controls:

- Lifting the implements to the transport position (max. lifting).
- Adjustment to height of the three-point suspension with an implement in the case of positioning.
- Adjustment of the tractive force (resistance of implements in the case of power or combined control mode).
- Setting up so called free (floating) position when the implements is equipped with its own small supporting wheel.

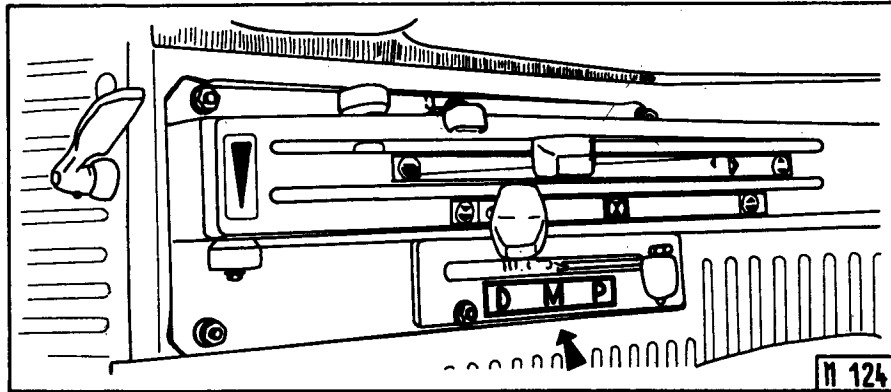
INNER HYDRAULIC CIRCUITRY

The inner hydraulic circuits can be operated by means of the inner circuit control lever (1), the mode selection control lever (2) and the response rate control lever (3). The set-up position of inner circuit control lever can be locked by means of the slidable stop (4).



RESPONSE RATE CONTROL LEVER

If the lever is moved forwards in the direction of driver's seat, the oil flow rate to the internal circuit is the lowest possible. The restriction of oil flow under the power and combined modes of operation will reduce the response rate of hydraulic system, e.g. when ploughing under various soil conditions.

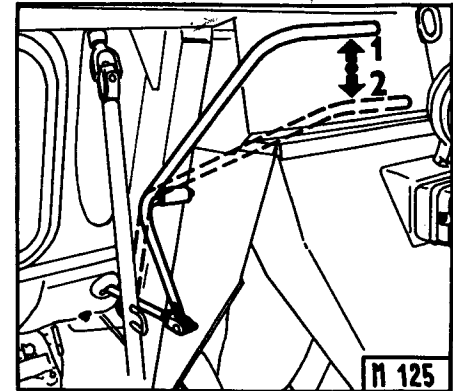


CONTROL MODE SELECTION LEVER

This control lever has three positions designated as P, M, D, which means:

- P - Designates the control mode under which the implements attached to in the three-point suspension will be kept automatically in a constant height (position) with respect to the tractor.
- M - Designates the combined control mode which is the combination of position and power control. Suitable especially for ploughing on lands of fluctuating ground resistance. This control mode also enables to operate implements having the small supporting wheels in so called free (floating) position.
- D - Designates the power control mode; the implements in the three-points suspension are automatically moved to an appropriate height in dependence on soil resistance fluctuations.

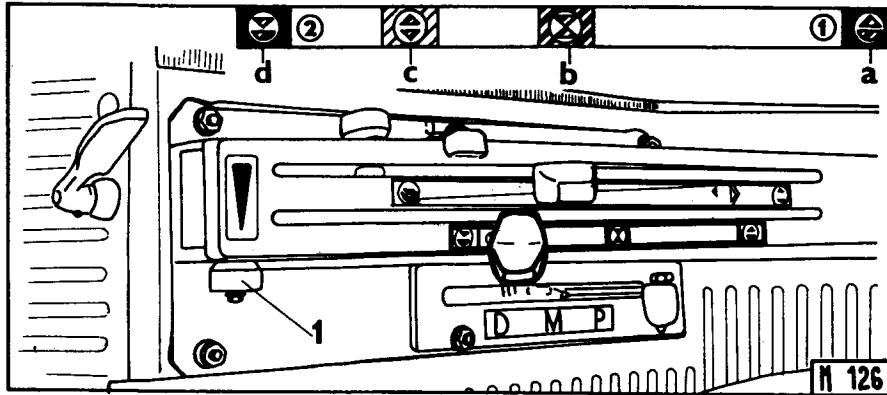
CAUTION: Shift system selector to position control in case of implement transportation. Through reaction of pulses coming from torsional bar this one or hydraulic control levers could be damaged if system selector placed in any other position during implement transportation.



HYDRAULIC INTERNAL CIRCUIT CONTROL FROM OUTSIDE (BEHIND THE TRACTOR)

Can be carried out using the internal hydraulic circuitry control lever. The lever is located at the rear right fender.

- 1 - lifted
- 2 - lowered

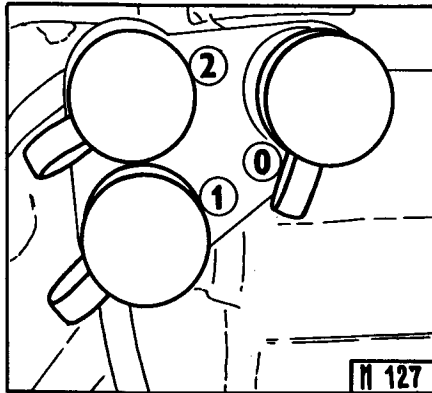


OUTER CIRCUIT CONTROL LEVER

This lever has 4 positions identified on the label:

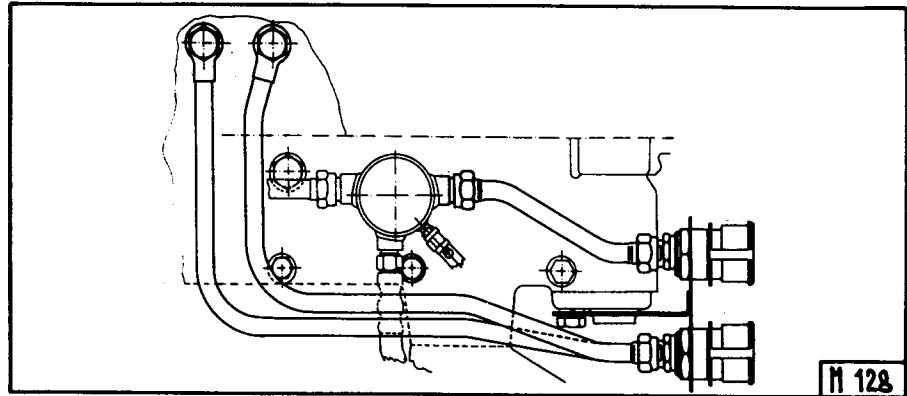
- a - Pressure in quick-disconnect coupling "1"; the quick-disconnect coupling "2" connected to the run-back line. The lever is moved to its extreme aft position. It must be held in this position not to return to "b" (neutral).
- b - Neutral position (locking). The outlets to couplings "1" and "2" are closed and oil is locked within the hydraulic device connected to. The spring-loaded lever is held in this position automatically.
- c - Floating (free) position. Both couplings "1", "2" are connected to the run-back line; oil can flow through freely in either direction. The lever is arrested in position by means of the ball lock in the sliding-spool valve.
- d - Pressure in coupling "2"; the coupling "1" is connected to the run-back line. The lever moved to its extreme fore position. It must be held in this position not to return automatically to "c" (floating position).

The outer circuit lever can be locked in the extreme position (a) by means of an adjustable stop (1) e.g. when driving a hydromotor on an attached implement.



OUTER HYDRAULIC CIRCUIT OUTLETS,
REAR

The outlets are terminated in three quick-disconnect couplings on the panel; the couplings identified as "1" and "2" are the pressure ones, alternately. The third coupling, identified as "0", is connected to the final drive space directly and is intended for run-back oil from the external hydraulic devices (e.g. from the rotary hydro-motors and similar). The outer circuit outlets are available without quick couplings, too, blinded only by plugs.

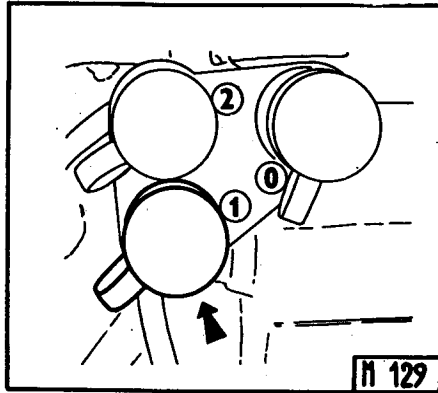


OUTER HYDRAULIC CIRCUITRY

This circuit supplies oil to hydraulic attachments connected to the external outlets of hydraulic system those outlets being terminated in quick-disconnect couplings. The sockets of quick-disconnect couplings, have the inner diameter (DN) of 12.5 mm and meet the requirements of the international ISO recommendations. Quick couplers RK 12 can be supplied optionally.

OIL VOLUMES TAKEN OUT FROM EXTERNAL
HYDRAULIC OUTLETS

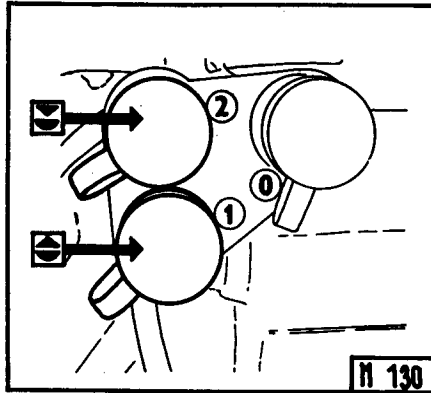
The external outlets can provide 10 litres of oil for filling up the implements attached to, as maximum. If the intake exceeds the volume mentioned, the hydraulic pump could draw-in air: damage to the pump is likely to occur. The transmission and final drive oil charge should be 30 l, or 34 l (independent pump). The tractors with front driving axle - 2 litres more. If the tractor is being operated on a slope, 7 litres need to be added. The same amount needs to be added with attached implements connected to the outer hydraulic circuit.



SINGLE-ACTING CYLINDER OPERATION

The cylinder connections should always be carried out to the quick-disconnect coupling "1" :

- lifting; the lever is in the extreme upper position (necessary to hold it by hand)
- neutral; the lever is in the middle position, spring-locked
- lowering, the lever is between the neutral and extreme low position and is locked in position automatically (so called floating position)



DOUBLE-ACTING CYLINDER OPERATION

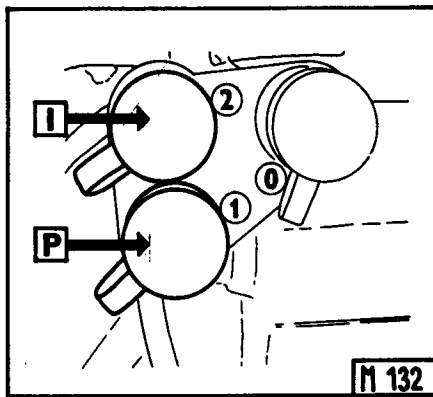
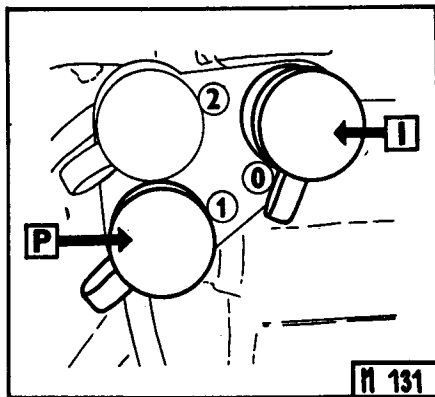
Oil from the quick-coupler "1" should extend the cylinder piston rod while from coupler 2- retract the piston rod

- lifting; the lever is in the extreme upper position (hold it by hand)
- neutral; the lever is in the middle position, spring-locked
- lowering; the lever is in the extreme low position
- "float", the lever is between the neutral and extreme low position and is locked in position automatically
- both quick-couplers are connected to the run-back line

DOUBLE-ACTING CYLINDER OPERATION

When operating the outer circuit double - acting cylinder, the control lever should be moved over the "c" (floating) position as quickly as possible due to the fact that both sides of the working cylinder are connected to the run-back line at this moment so that uncontrolled piston rod movement could result.





CONNECTIONS OF MACHINES AND IMPLEMENTS TO THE OUTER HYDRAULIC CIRCUITRY

ROTARY HYDRAULIC MOTOR OR ADDITIONAL SLIDING-SPOOL VALVE

The oil inlet line of these devices (identified as P) should be connected to the quick coupler "1", the run-back line (identified as "1") to the quick coupler "0". In the case of a reversible hydraulic motor - to the quick couplers "1" and "2", respectively. The control lever can be moved to the extreme upper position and locked there using the adjustable stop.

THREE-POINT SUSPENSION, REAR

The suspension serves for attachment of carrier-mounted and semi-carried agricultural machines and implements of the categories I and II (according to ISO) which differ from one another in the length of suspension centre line, i.e. in the distance between the centres of ball-and-socket joints with the implements attached to. The distances are 728 mm and 870 mm for the category I and category II, respectively.

The three-point suspension consists of:

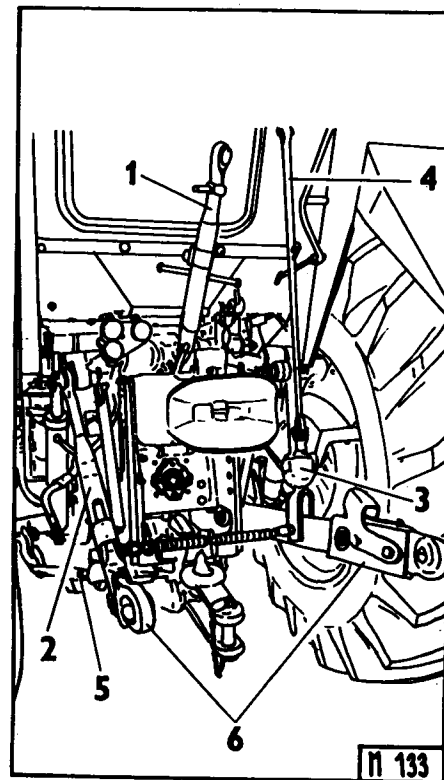
- 1 - Upper tie rod
- 2 - Lifting tie rod, left-hand
- 3 - Lifting tie rod, right-hand, including gearing for fine adjustment
- 4 - Telescopic shaft for the right-hand lifting tie rod operation from the driver's cab
- 5 - Tighteners of the three-point suspension lower tie bars
- 6 - Lower tie bars

The tractors Z 6320 and 7340 are equipped with extended brackets of lower tie bars enabling to attach the lower tie bars and their tighteners.



Persons not authorized to operate the tractor attachments must not dwell between the tractor and the machine or the implement coupled or attached.

Do not park the tractor with the carrier-mounted implements in lifted position.



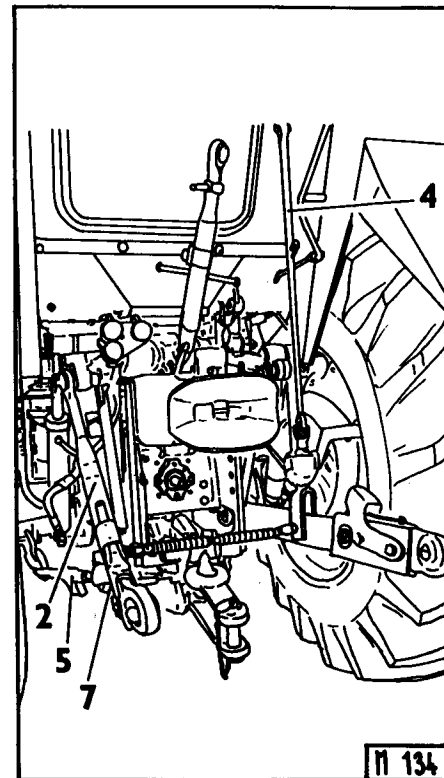
ATTACHMENT OF IMPLEMENTS TO THE THREE-POINT SUSPENSION

The left-hand tie rod (2) is adjustable after the upper end disconnection from the lifting arm pin and is intended for coarse setting up of position. The right-hand lifting tie rod (4) - equipped with gearing which can be operated from the driver's cab - is intended for fine adjustment. The ends of tie-rods can be adjusted to height, different to one another of about 200 mm in total.

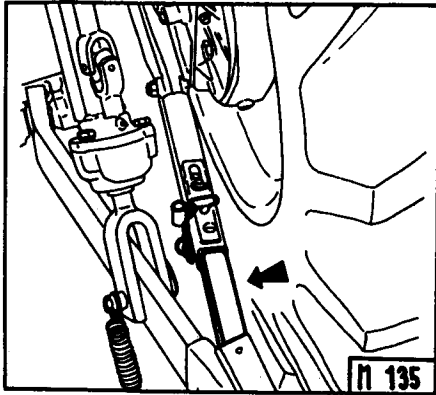
The free connection of implements to the tractor and mutual moving round the longitudinal axis is possible after displacement of the left-hand tie bar pin (7) into the slot. The mutual free displacement of both tie bar ends can reach 100 mm in height, as maximum. The lower tie-bar tighteners (5) serve to restrict the lateral swing of lower tie bars within the whole range of three-point suspension lift. When extended, it is possible to get the lateral swing of lower tie bar in lower joints as much as 125 mm to either side.



When driving with no implements attached, the lower tie bars should be mutually connected using springs and the upper tie rod put in the spring-mounted hitch. When transporting the implements, the tighteners of lower tie bars should be shortened to avoid unnecessary lateral movement of implements.



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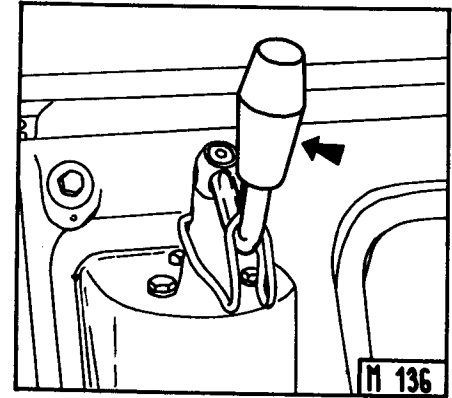
RESTRICTING TIE BARS

These tie rods allow the lateral swinging of lower tie bars at the lower joint about 125 mm and 90 mm to either side when using the implements of category I or II, respectively. The checking tie rods adjustment takes place automatically with suspension of implements.



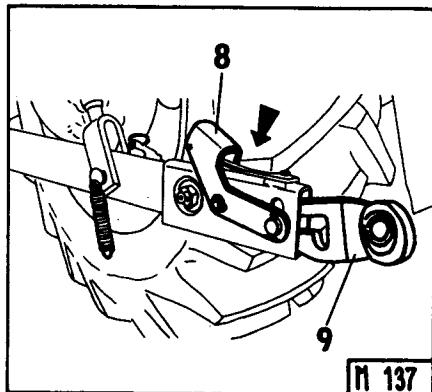
Two checking tie rods should always be installed. The lateral swing restriction can be achieved by locking the checking tie rods using the locking pin.

The category I has the hole near the slot, the category II has the remaining one. When operating a category II implement requiring lateral swing (e.g. plough), the rear wheel track should be re-adjusted. For tires 16.9-30 and 16.9-34 and the suspension centre line of 870 mm the rear wheel track should be changed from 1425 mm to 1500 mm.



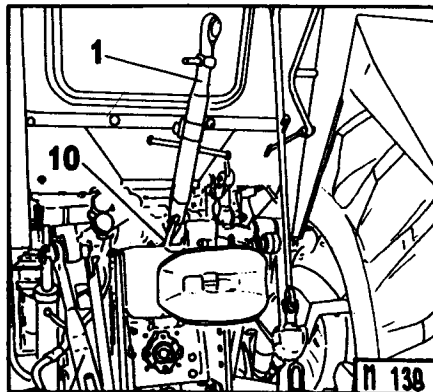
LIFTING TIE BAR CONTROL FROM CAB

It serves for adjustment to height of the the three-point suspension lower RH tie rod of the driver's cab using the handle located there.



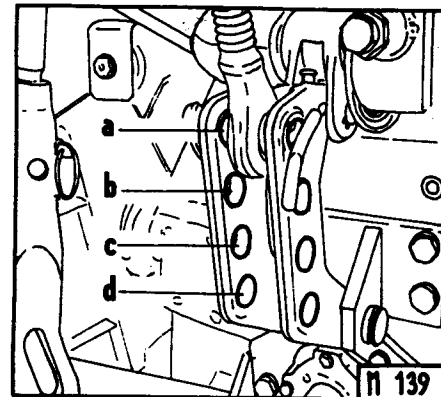
LOWER TIE BARS WITH EXTENDABLE ENDS

These bars facilitates attachment of implements. Push down the yokes (8) to loosen the end pieces (9). The end pieces shifted out can be then fitted onto both hinged pins of implements and locked by means of locking pins. Then, with driving the tractor in reverse gear, the end pieces will be pushed into the draw bars where there are locked automatically in the working position.



UPPER TIE BAR

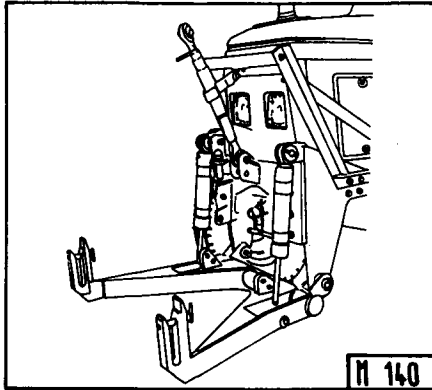
The upper tie rod (1) is adjustable in the range of 180 mm. It can be connected to one of four holes arranged in the tractor bracket (10) which transmits power from the attached implement to the torsion bar in the cover of control hydraulics. CAUTION: Attache the top link to the lowest hole (d) in tractor bracket in case of implement transportation. Through reaction of pulses coming from the top link the torsional bar or hydraulic control levers



SELECTION OF HOLES IN BRACKET

Connection of the upper tie rod to one of the holes "a" - "d" shows up the following effects:

- Sensitivity of control (the control mode selection lever in "D" or "M").
If the tie rod is connected to the hole "a", the highest sensitivity of control will result.
- Tilting of an implement in lifted position with respect to the height of carrier-mounted implement stand (460 mm to 600 mm). If the tie rod is connected to the hole "a", the minimum tilting will result.



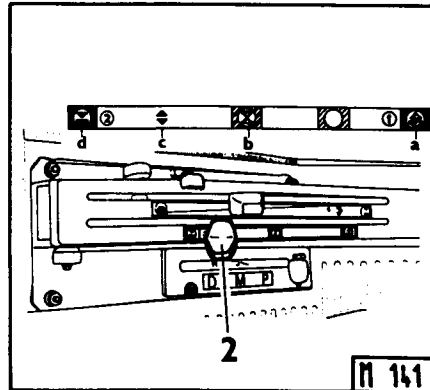
THREE-POINT SUSPENSION, FRONT

This arrangement is intended for front carrier-mounted agricultural machines and implements of ISO Category II.



When transporting any carrier-mounted implement it is always necessary to lock the carrier position mechanically.

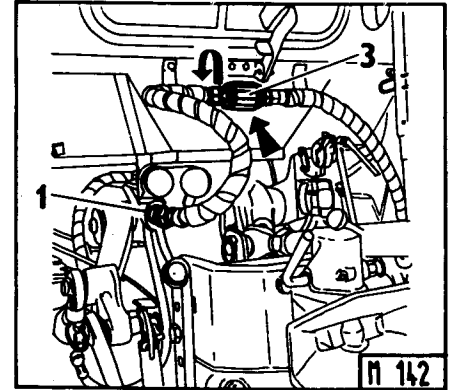
This mechanical locking in position is recommended even when no machine or implement is mounted in the carrier.



THE FRONT CARRIER OPERATION

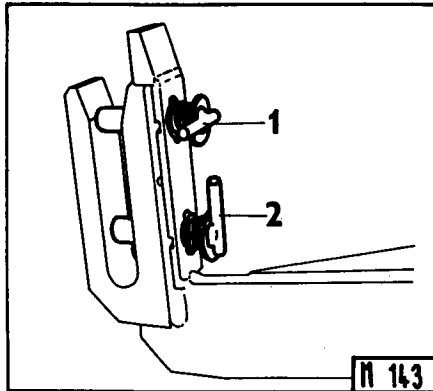
The front carrier is equipped with two single-acting hydraulic cylinders pressure-oil supplied from the outer hydraulic outlet (quick-disconnect coupling "1"). Lifting and lowering can be operated by means of the outer circuit control lever (2) - lever positions "a, b, c". Do not use the lever position "d" when making use of the front carrier.

The rate of carrier (and implement) lowering can be controlled by means of the non-return throttle valve.



THROTTLE VALVE ADJUSTMENT

Before starting operations of an agricultural implement attached to the front three-point suspension it is recommended to adjust the throttle valve (3) so that the time needed for implement lowering from the highest to the lowest positions will be within 1.0 to 1.5 sec. The rate of lowering increases with turning the valve body to the right (in the direction of arrow).

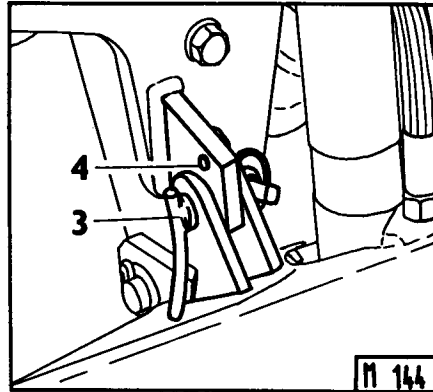


ATTACHMENT OF CARRIER-MOUNTED IMPLEMENT

Attachment of an implement will be provided in the carrier forks by means of the connecting pins.

- 1 - Pins in the upper position - the swing out of machine is provided within the limits of $\pm 8^\circ$.
- 2 - Pins in the lower position - when transporting the machines in sloping terrain or on the road.

The vertical position of pin handles means the pins are locked, turning through an angle of 90° to the horizontal position - the pins can be shifted out.

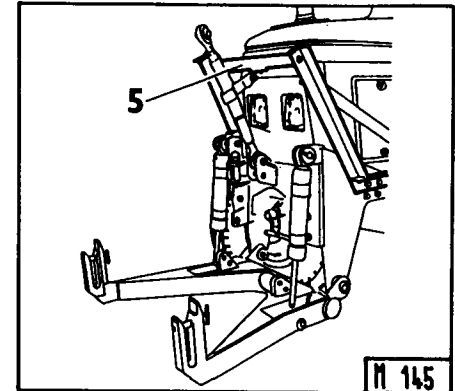


MECHANICAL LOCK OF FRONT THREE-POINT SUSPENSION

Locking of the implement carrier in position should be carried out in its uppermost position using the locking pins (3) and double eyes welded to the lower tie bars. The pins should be dislocated to the upper holes (4) before lowering the suspension; the latter could not be lowered otherwise.

ATTENTION:

Reduce the driving speed of tractor down to 15 km/h when driving it with agricultural machines attached to in the front three-point suspension.

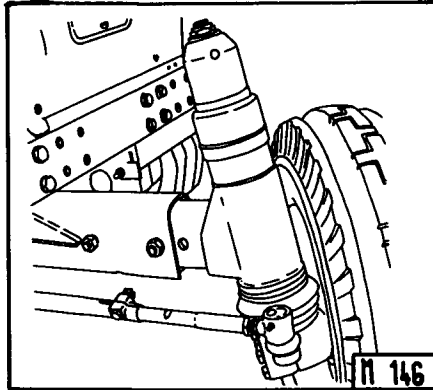


FRONT THREE-POINT SUSPENSION BRACKET

The cross bracket pipe (5) of the front three-point suspension bracket serves for attachment of the upper hinge of load-releasing spring of an agricultural machine attached.

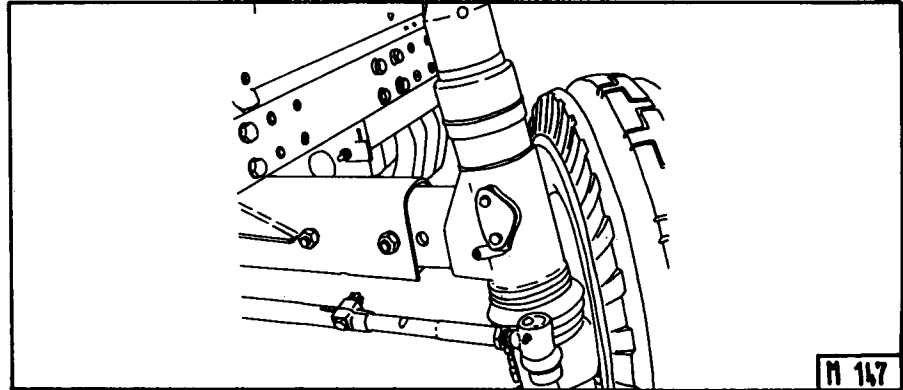
The Z 3320, 4320, 5320, 6320, 7320 tractors are equipped with light- or heavy-duty spring-mounted extensions and cannot be equipped with hydrostatic steering and are therefore equipped with power steering.

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Change of non-driving front axle wheel track	92
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**SPRING-MOUNTED LIGHT-DUTY EXTENSION
PIECES**

The front axles of Z 3320, Z 4320 are optionally equipped with spring-mounted light-duty extension pieces with 6.50-16 wheels. The front track is then adjustable to 1350 mm, 1500 mm, 1800 mm as required. These treads can also be adjusted in the case of axles with rigid extension pieces installed and wheels 6.50-16 (optionally per special order).

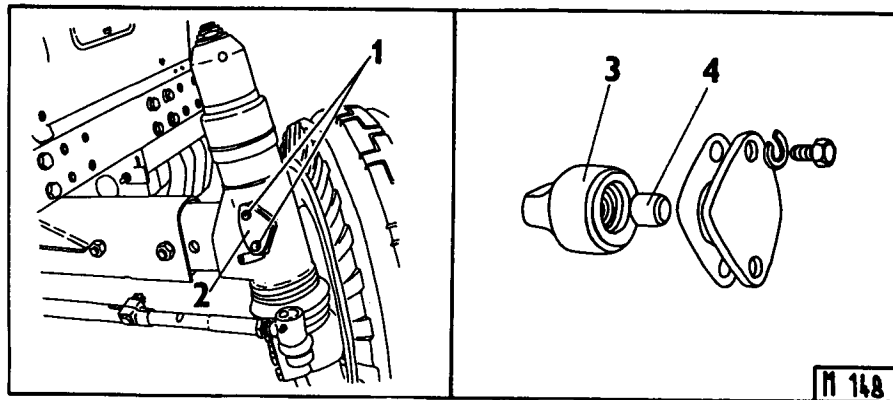


**SPRING-MOUNTED HEAVY-DUTY EXTENSION
PIECES WITH LOCKING**

It is possible to lock the springing suspension for some kinds of job, as required. The axle is then rigid and the load capacity of extensions is increased to 1660 kg or 2460 kg (up to the travel speeds of 20 or 8 km/h, respectively). Machines must be equipped with front HD extensions and with 7.50-16 or 7.50-20 wheels (see chapter "Main performance data...") when front loader buckets are installed.

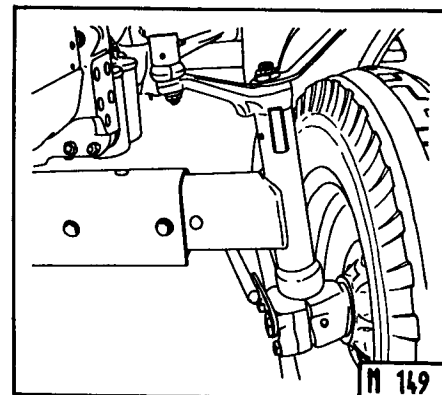
In this case, the loading capacity of spring-loaded extensions or of rigid extensions with wheels 7.50-16 is 2010 kg or 2980 kg (up to the travel speeds of 20 km/h or 8 km/h, respectively). The front track (wheels 7.50-16) can be adjusted to 1350 mm, 1425 mm, 1500 mm and 1800 mm.

UTILIZATION OF FRONT AXLE EXTENSION PIECES



CHANGE FROM SPRING-LOADED TO RIGID-LOCKED EXTENSION PIECE

1. Remove the screws (1) of lids on the extension piece body and remove the lid (2).
2. Check to be sure the slot in the locking coupler is aligned with the hole in the extension piece body and load or lift a bit the axle to get the correct position, if necessary.
3. Slide-in the locking insertion (3) into the hole of extension piece body. The machined portion should engage the slot within the locking coupler.
4. Slide-in resilient insertions (4) into hollows of the locking insertions.
5. Replace the lid (2) including seals and tighten the screws (1). The resistance of the resilient insertion must be overcome at that.



LIGHT-DUTY RIGID EXTENSION PIECES

Tractors Z 3320 front axles can optionally be equipped with light-duty rigid extension pieces and wheels 6.00-16; the front track is adjustable to 1350 mm, 1500 mm and 1800 mm.

Tractors Z 4320 can optionally be equipped with front axle HD rigid extension pieces or spring-loaded HD ones including the possibility of locking and wheels 7.50-16; the front track is then adjustable to 1350 mm, 1425 mm, 1500 mm and 1800 mm.

In addition to that, tractors Z 4320 can be equipped with front axle LD extension pieces and wheels 6.50-16 including the possibility of front track adjustment to 1350 mm, 1500 mm and 1800 mm; when HD rigid extensions are used with the same wheels, the front track can be 1375 mm, 1450 mm, 1525 mm and 1825 mm.

Tractors Z 5320, Z 6320 are equipped with spring-loaded HD extension pieces and front wheels 7.50-16. The front track can be adjusted to 1350 mm, 1425 mm, 1500 mm and 1800 mm.

Z 7320 tractors are equipped with 7.50-20 wheels.

It is possible to lock the springing suspension for some kinds of job, as required. The axle is then rigid and the load capacity of extensions is increased to 2010 kg or 2980 kg (up to the travel speeds of 20 or 8 km/h, respectively).

These loading capacities and front track capabilities are also applicable to rigid HD extensions with wheels 7.50-16 (optionally). The HD spring-mounted extension pieces with lockings or HD rigid extensions can be equipped (optionally) with 6.50-16 wheels in the case of light-duty jobs expected. The increased front axle loading capacity is then 1660 kg and 2460 kg (up to the travel speeds of 20 or 8 km/h, respectively) and the front tracks 1375 mm, 1455 mm, 1525 mm and 1825 mm. These extension pieces can optionally be equipped with HD wheels 7.50-20. The loading capacities are then 2360 kg and 3000 kg (up to the travel speeds of 20 km/h or 8 km/h, respectively).

The summary of permissible loads and front tracks (treads) is given in the following Table.

UTILIZATION OF FRONT AXLE EXTENSION PIECES

<https://truckmanualshub.com/>

The maximum permissible weight on front axles (Z 3320 - Z 7340 TURBO) in the standard execution. Considering the full utilization of axle loading capacities while using various supplemental accessories and carrier-mounted equipment, the axles of individual tractor types can be loaded to the values, as follows:

Zetor - data (kg)	Z 3320	Z 3340	Z 4320	Z 4340	Z 5320	Z 5340	Z 6320	Z 6340	Z 7320	Z 7340	Z 5340 HORAL	
Front spring-mounted axle (no locking) at 25 km/h	1215	-	1215	-	1215	-	1215	-	1215	-	-	
30 km/h	1215	-	1215	-	1215	-	1215	-	1215	-	-	
Front driving axle												
-light DR 25 km/h	-	2000	-	2000	-	-	-	-	-	-	-	DR - drum brakes
DB 25 km/h	-	2230	-	2230	-	-	-	-	-	-	-	
DB 30 km/h	-	2000	-	2000	-	-	-	-	-	-	-	
-heavy DR 25 km/h	-	-	-	2000	-	2000	-	-	-	-	-	DB - disc brakes
DB 25 km/h	-	-	-	2230	-	2230	-	2230	-	2570	2370	
DB 30 km/h	-	-	-	2000	-	2000	-	2000	-	2000	2000	
Rear axle DR 25 km/h	3590			3600			-			-		
DB 25 km/h	3590			3600			4000			3600		
DB 30 km/h	3360			3600			3600			3600		
Max. total DR 25 km/h	4805	5590	4805	5600	4815	5600	-	-	-	-	-	
tractor DB 25 km/h	4805	5820	4590	5830	4815	5830	5215	6230	5215	6570	5970	
weight at: DB 30 km/h	4575	5360	4575	5600	4815	5600	4815	5600	4815	5600	5600	

Notes: If the travel speed is limited to max. 20 km/h or 8 km/h or if the tractor is equipped with other than standard tires and front extension pieces, see the respective increased load capacities of axles in the following table.

When roading, the max. total weight of tractor including the extension pieces must not exceed the values given.

UTILIZATION OF FRONT AXLE EXTENSION PIECES

<https://truckmanualshub.com/>

Utilization of front axle extension pieces (Z 3320, 4320, 5320, 6320, 7320 TURBO)

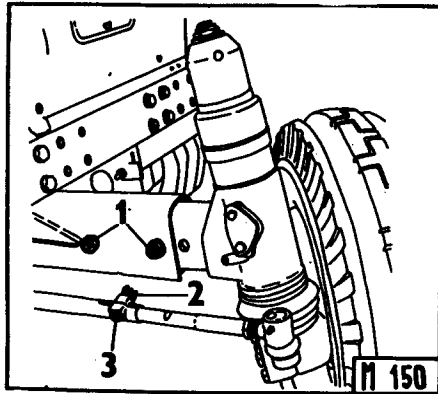
Tractor type	Front axle extensions installed as standard	Front axle extensions installed optionally
Z 3320	heavy duty rigid extensions, Group No. 7211 3400	a) rigid HD extensions, G/N 6911 3400 b) rigid LD extensions, G/N 5911 3400 c) rigid LD extensions, G/N 5013 3400 and 6213 3400 d) spring-loaded HD e/s, G/N 6911 3600 e) spring-loaded LD e/s, G/N 5911 3600 f) spring-loaded HD e/s, G/N 70.271.000
Z 4320	heavy duty rigid extensions, Group No. 7211 3400	a) rigid LD extensions, G/N 5911 3400 b) rigid HD extensions, G/N 6911 3400 c) rigid LD extensions, G/N 6013 3400 d) rigid LD extensions, G/N 6213 3400 e) spring-loaded HD e/s, G/N 6911 3600 f) spring-loaded LD e/s, G/N 5911 3600 g) spring-loaded HD e/s, G/N 70.271.000
Z 5320 Z 6320 Z 7320	heavy duty rigid extensions, Group No. 7211 3400	a) rigid HD extensions, G/N 6911 3400 b) rigid LD extensions, G/N 6013 3400 and 6213 3400 c) spring-loaded HD e/s, G/N 6911 3600 d) spring-loaded HD e/s, G/N 70.271.000

Note : If the tractor is equipped with steering servo unit (G/N 7211 3900, 5211 3950), then the battery casing position on the left-hand side of cab must be readjusted away from the tractor centre line when the front wheel track is set up to its maximum 1800 mm.

CARRARO FRONT DRIVE AXLE UTILIZATION

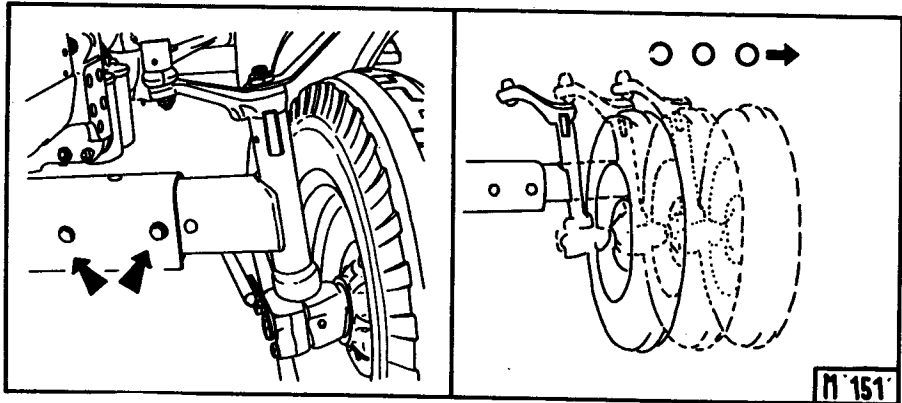
Maximum weights on front axle (Z 3340 - Z 7340 TURBO) in standard version. When loading down the axles with auxiliary accessories or hitched machines, the axles of individual tractor types can be loaded to the following values:

Zetor Data (kg)	Z 3340	Z 4340	Z 5340	Z 6340	Z 7340	Z 5340 HORAL Z 6340 HORAL
CARRARO front drive axle at speed of 25 (30) km/h -disc brakes	2230 (2000)	2230 (2000)	2230 (2000)	2230 (2000)	2570 (2000)	2000 -
Rear axle at speed 25 (30) km/h	3600 (3600)			4000 (3600)		3600
Total max. tractor weight at speed - 25 (30) km/h	5830 (5600)	5830 (5600)	5830 (5600)	6230 (5600)	6570 (5600)	5600



CHANGE OF FRONT NON-DRIVING AXLE WHEEL TRACK

The change of front wheel track can be carried out by shifting in or out the telescopic extensions of the front axle with the front axle lifted above the ground and adequate re-setting of the adjusting elements.

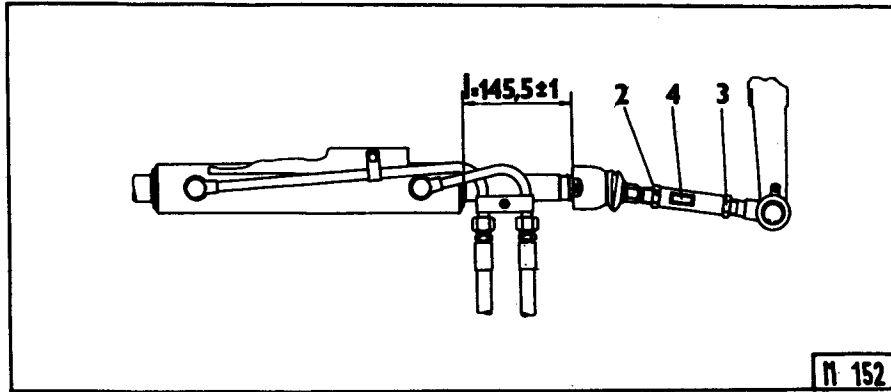


RE-ADJUSTMENT OF FRONT WHEEL TELESCOPIC EXTENSION PIECES

For tractors equipped with mechanical steering and power steering.



- Block the tractor to prevent any motion, lift the front wheel above the ground by means of the lifting jack, and support the axle.
- Screw off the nuts of axle screws and remove the screws (1).
- Loosen the tie rod sleeve bolt lock nut (2) and screw off the bolt (3).
- Shift out (or in) the telescopic extensions to the track required, install the axle bolts mentioned above. Tighten the nuts to a torque of 130 to 140 Nm.
- Lock the tie rod in the corresponding position by means of a screw and a lock nut. Tighten the nuts to a torque of 25 to 28 Nm, the screws to a torque of 58 to 63 Nm.
- Check the front wheels for the toe-in.

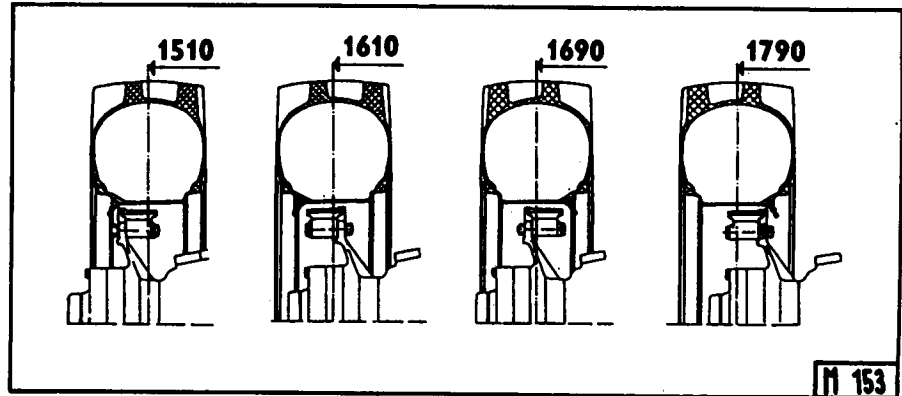


FRONT WHEEL TELESCOPIC EXTENSIONS RE-ADJUSTMENT

For tractors equipped with hydrostatic steering



- Block the tractor to prevent any motion, lift the front wheel above the ground by means of the lifting jack, and support the axle.
- Screw off the nuts of axle screws and remove the screws.
- Loosen ball joint lock nuts (2) and head ball pin lock nuts (3) and screw out both rods (4).
- Shift out (or in) the telescopic extensions to the track required, install the axle bolts mentioned above. Tighten the nuts to a torque of 130 to 140 Nm.
- Screw in the rods with the track width indication (supplied optionally), carry out toe-in adjustment and secure with lock nuts (2,3). Tighten the nuts to 122 - 136 Nm.



CHANGING FRONT DRIVEN AXLE WHEEL TRACK

Front wheel track for heavy front driven axle can be set to 1510, 1610, 1690 and 1790 mm with 11,2-24 front wheels or 1610, 1690, and 1790 mm with 12,4-24 wheels. Track is changed by changing the position of rim and disc.

Front wheel track for light front driven axle can be set to 1510 or and 1610 mm by turning disc wheels.



Only 1790 mm track can be set on the Z 5340 and Z 6340 HORAL tractor!

CHANGE OF RIM AND DISK POSITIONS

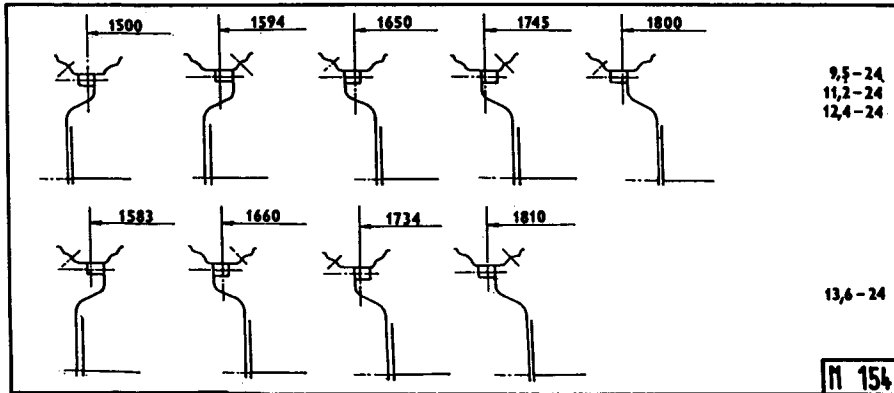


- Block the tractor to prevent any motion, lift the front wheel above the ground by means of the lifting jack and support the axle.
- Screw off the nuts of bolts connecting the wheel disk with the wheel rim and remove the screws including washers.
- Carry out the change of wheel track - set up the wheel rim to the position required.
- Install the screws, washers and nuts. Tighten the nuts to a torque of 155 to 175 Nm.

Caution: The torque for tightening front wheel bolt nuts of the CARRARO front driven axle is 270 - 300 Nm.

CARRARO FRONT DRIVE AXLES WHEEL TRACK ADJUSTMENT

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CARRARO FRONT DRIVE AXLES WHEEL TRACK ADJUSTMENT

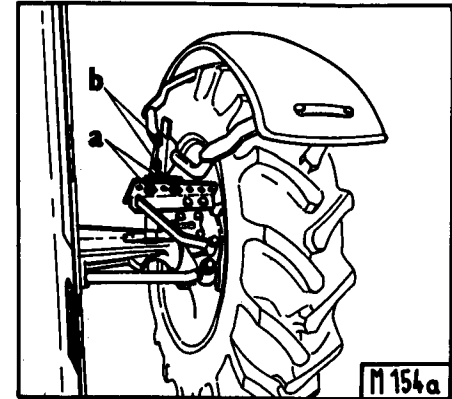
These wheel tracks can be set using 9.5-24, 11.2-24 and 12.4-24 tires for CARRARO front drive axle:

1500, 1594, 1650, 1745 and 1800 mm.

These tracks can be set using 13.6-24 tires:

1583, 1660, 1734 and 1810 mm

Tighten front wheel nuts by 270 - 300 Nm.

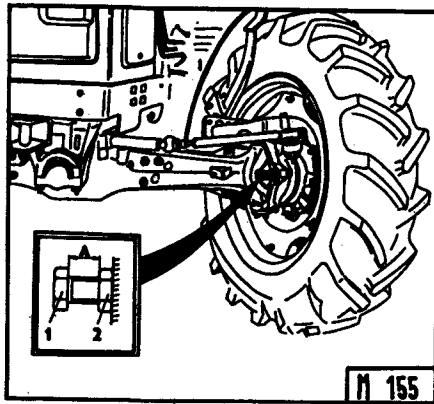


CARRARO FRONT DRIVE AXLE FENDERS

are fitted onto horizontally (bolts a) and vertically (bolts b) adjustable holders and can be adjusted according to the required wheel tracks and tire types used.

STEERING STOPS SETTINGS ON CARRARO FRONT DRIVE AXLE

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STEERING STOPS SETTINGS

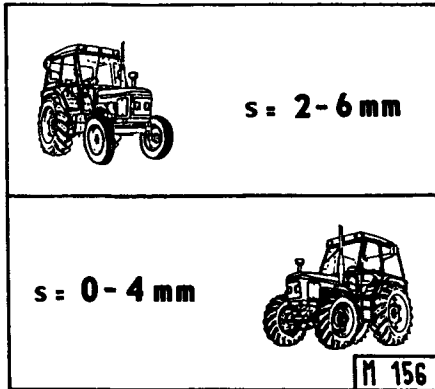
Set steering stops with any change of the front wheel track on CARRARO front drive axle according to the tables after loosening nut "2" and screwing in or screwing out bolt "1".

Z 3340 TRACTORS

tractor	with fenders	
tires	9.5-24	11.2-24
tracks	A = mm	A = mm
1500	33	44
1594	29	-
1650	22	-
1745	19	-
1800	-	-
tractor	without fenders	
tires	9.5-24	11.2-24
tracks	A = mm	A = mm
1500	29	36
1594	24	30
1650	19	25
1745	13	21
1800	13	17

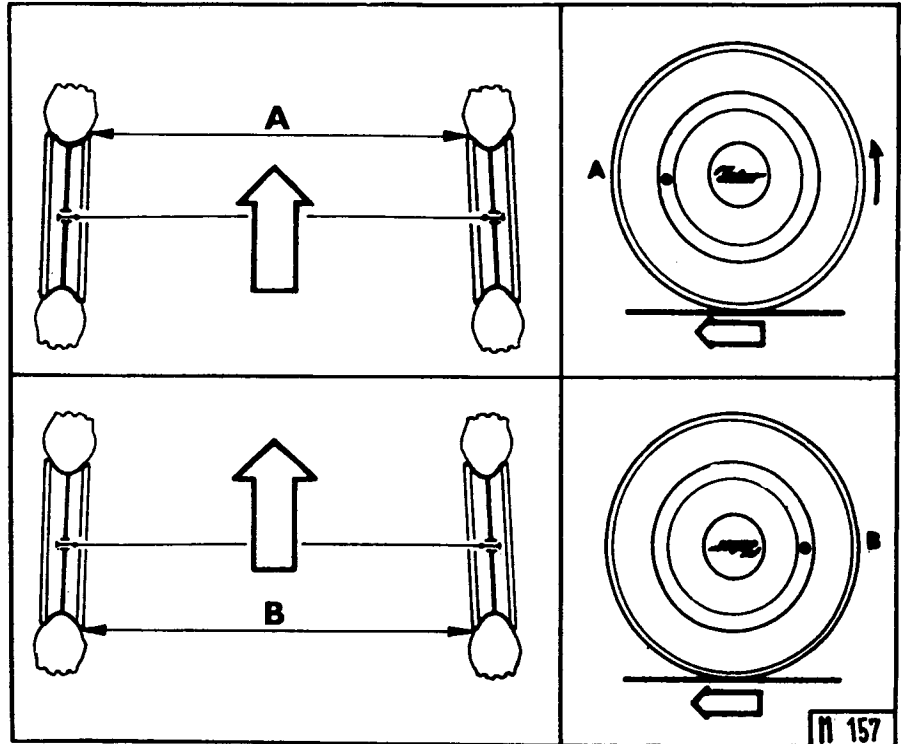
Z 4340,5340,6340,7340 TRACTORS

tractor	with fenders		with fenders	
tires	11.2-24	12.4-24	tires	13.6R24
tracks	A = mm	A = mm	tracks	A = mm
-	-	-	-	-
1594	43	43	1583	43
1650	37	37	1660	37
1745	29	30	1734	33
1800	25	26	1810	26
traktor	without fenders		without fenders	
tires	11.2-24	12.4-24	tires	13.6R24
tracks	A = mm	A = mm	tracks	A = mm
-	-	-	-	-
1594	26	31	1583	36
1650	22	27	1660	30
1745	18	21	1734	25
1800	14	17	1810	21

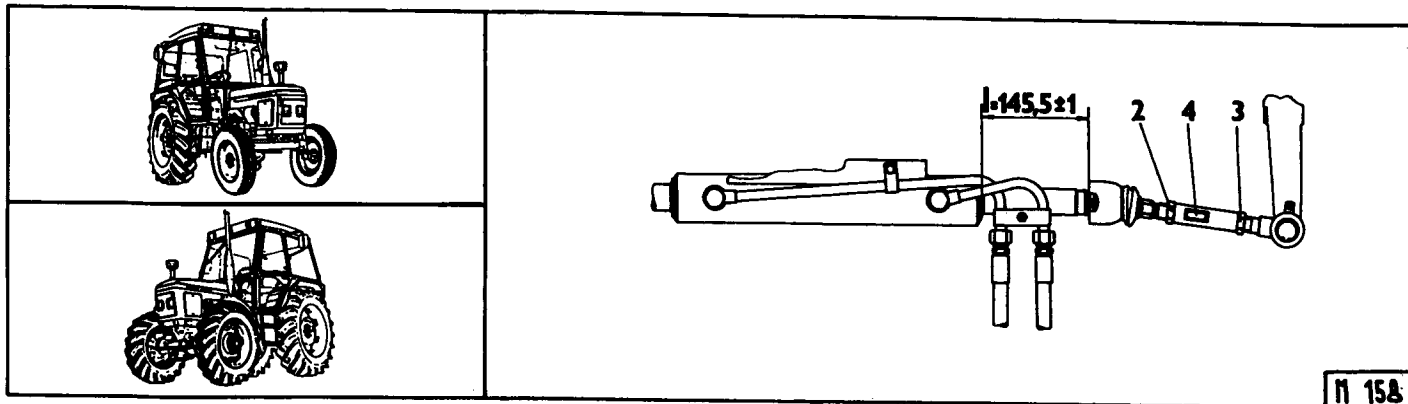


FRONT WHEEL TOE-IN

Front wheel tractor toe-in is measured on the rim. Toe-in on Z 3320, 4320, 5320, 6320, 7320 tractors is 2-6 mm. The value on front driven axle tractors - Z 3340, 4340, 5340, 6340, 7340 is 0 - 4 mm. Toe-in on tractors with CARRARO front driven axle is 0 - 4 mm. Prior to checking for the front wheel toe-in the end plays of front wheel bearings should be checked and adjusted, if necessary, and the front tires inflated to the pressure prescribed.



The toe-in measurement should be taken on the rims. The toe-in "S" is then calculated as the difference of values obtained: $S = B - A$



FRONT WHEEL TOE-IN ADJUSTMENT

FOR TRACTORS EQUIPPED WITH MECHANICAL STEERING AND POWER STEERING

- Loosen both joint head lock nuts of wheel tie rods.
- Adjust to required toe-in (measure on side of rim) by turning the mid part of rod.
- Tighten joint head lock nuts by 122 - 136 Nm. Top head flats must be parallel.

FOR TRACTOR EQUIPPED WITH HYDROSTATIC STEERING:

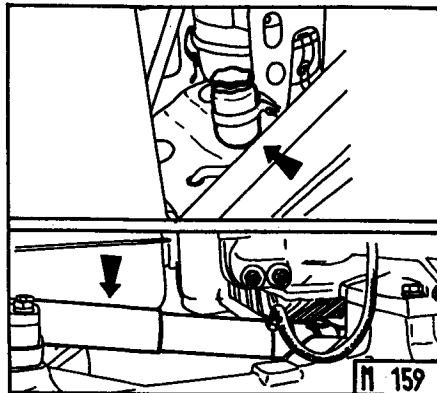
For non-front driven tractors

- Draw out cylinder piston to value 145.5 ± 1 .
- Loosen nuts (2,3) and adjust toe-in by turning rod (4) to the desired value (measure on side of rim).

For tractors with front drive axle

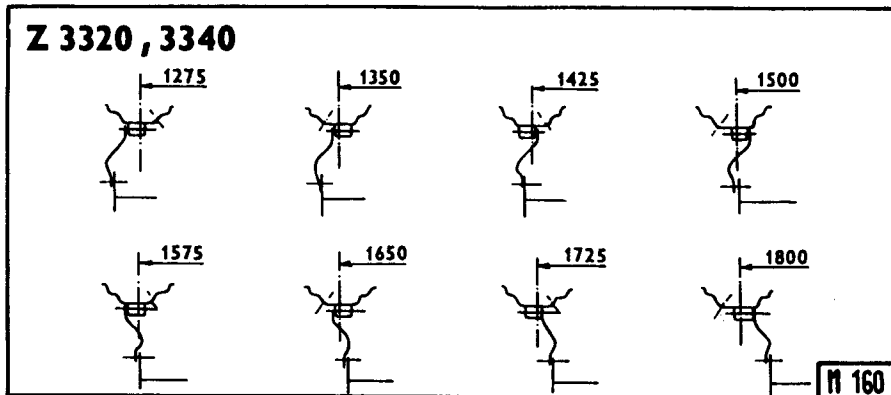
- Set wheels symmetrically to the lengthwise tractor axis regardless of the steering wheel position.
- Loosen tie rod joint heads lock nuts.

- Adjust to prescribed toe-in (measure on side of rim) by turning the middle part of rod.
- Measure the distance between rims at the horizontal level of wheel axes at the front. Mark the measurement point.
- Move the tractor so that marked points are at wheel axes horizontal level at the back (turned by 180°).
- Tighten tie rod joint head nuts by 122 - 136 Nm. Top flats must be parallel.



FRONT WHEEL SHIMMY DAMPER Z 4340, 5340, 6340, Z 5340 and 6340 HORAL, 7340

This damper is only used on the tractors with front heavy-duty driving axle with power steering. It absorbs both the vibrations in front wheels and impacts transmitted to the tractor steering. It is mounted at the right-hand front wheel and connected to the damping oil accumulator by means of hose.



CHANGE IN REAR WHEEL TRACK

Depending on the width of rear tires the rear wheel track can be adjusted within the ranges, as follows:

1275 - 1800 mm - Z 3320, 3340

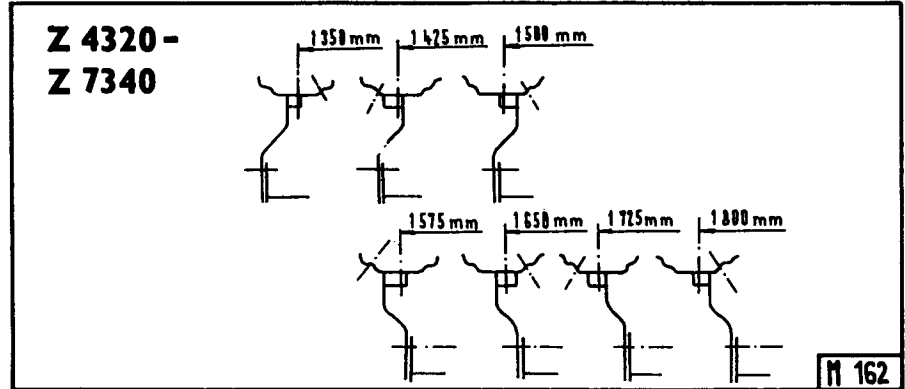
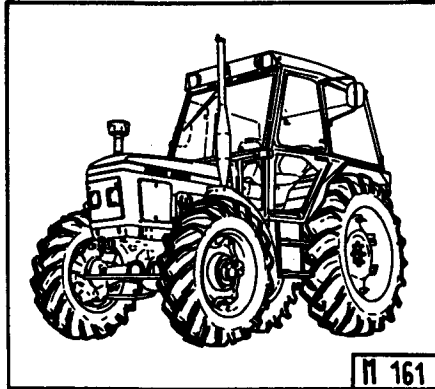
1350 - 1800 mm - Z 4320, 4340, 5320, 5340, 6320, 6340, 7320, 7340

1800 mm - Z 5340 HORAL, Z 6340 HORAL

The rear wheel tracks are adjustable in steps of 75 mm and can be carried out by changing the positions of rims and disks.



The rear wheel track of 1800 mm for HORAL must not be changed in any case.



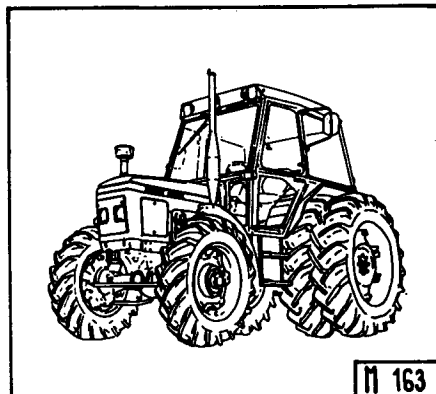
REAR WHEEL TRACK ADJUSTMENT

The rear wheel tracks are adjustable in increments of 75 mm and the adjustment can be carried out by changing the wheel rim and disk positions while having lifted the rear axle of tractor so that the rear wheels can be turned freely.



Do not omit to block the front wheels of tractor prior to lifting the rear wheels.

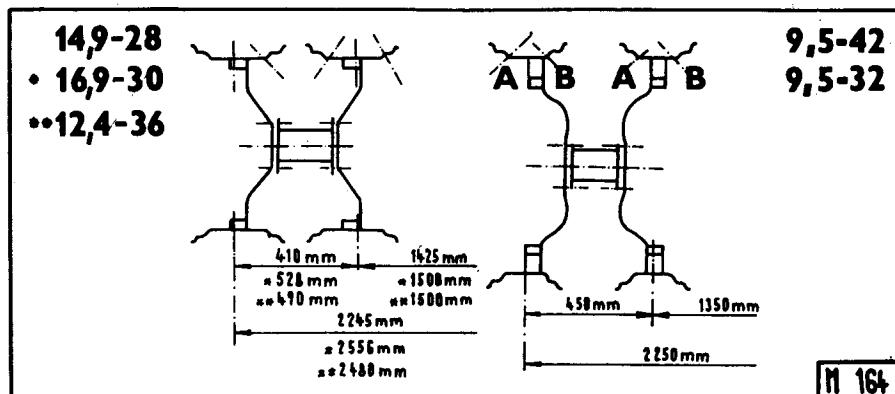
Having changed the rear wheel track tighten all the bolts connecting the disk to the rim. Use a torque of 160 to 180 Nm. Tighten the nuts of bolts connecting the disk to the wheel shaft. Use a torque of 400 to 470 Nm.



USAGE OF DOUBLE-MOUNTED REAR WHEELS

The double mounting of rear wheels is intended for both in-row and areal cultivation. The individual types of tractor can have the following double-mounted sizes:

- 2x 9.5-32 - for Z 3320,
- 2x14.9-28 - for Z 5340 HORAL,
Z 6340 HORAL
- 2x 9.5-42 - for Z 4320, 5320, 6320, 7320
- 2x16.9-30 - for Z 4320 - Z 7340
- 2x12.4-36 - for Z 3320, 4320 - 7340
except for HORAL



ADJUSTMENT OF WHEEL TRACKS WITH DOUBLE-MOUNTED REAR WHEELS

Double-mount type	Wheel track	
	inner w/s	outer w/s
2x 9.5-32	1350 mm	2250 mm
2x14.9-28	1425 mm	2245 mm
2x 9.5-42	1350 mm	2250 mm
2x16.9-30	1500 mm	2556 mm
2x12.4-36	1500 mm	2480 mm

- A - position of tube valve 9.5/9-42
- B - position of tube valve 9.5/9-32

The double-mounted rear wheels with tires 9.5-42, 9.5-32 and 12.4-36 are intended preferably for in-row cultivation of sugar beet, ensilage maize and some other special farm plants. It is also possible to use it with sugar beet sowing and harvest. The double-mounted rear wheels with tires 14.9-28 or 16.9-30 are intended for areal cultivation of lands, i.e. for aggregation with clod-crushers, harrow, combinators, etc.

DOUBLE-MOUNTED REAR WHEEL REMOUNTING

The remounting should be carried out with the rear axle of tractor lifted.



Do not omit to block the front wheels of tractor prior to lifting the rear wheels.

The remounting of double-mounted wheels should be carried out so that a wheel of the same size is outside-mounted by means of a distance piece to the inner wheel the latter having been set-up to the rated track.

The remounting should proceed, as follows:

- Dismantle 6 nuts M 22 connecting the disk and wheel shaft. Only the two opposite nuts should remain.
- Fit on the distance piece and tighten it using 6 nuts M 22 and four screws M 16x1.5x50.
- Fit the outer wheel onto the outer flange of distance piece and use 8 nuts M 22x1.5 to fasten the wheel. Tighten the nuts M 22 to a torque of 400 to 470 Nm.

RECOMMENDED TIRE INFLATION WITH DOUBLE-MOUNTED REAR WHEELS

tires	9.5-32 ...	pressure of 160 kpa,
	9.5-42	160 kpa,
	12.4-36	170 kpa,
	16.9-30	140 kpa
	14.9-28	140 kpa

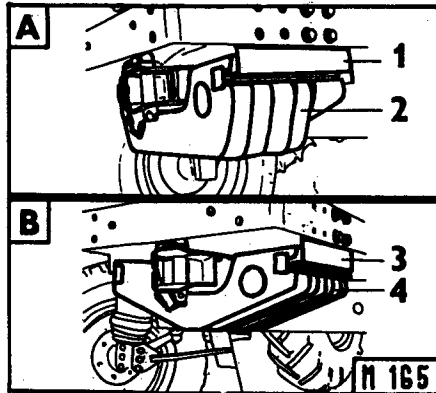


Neither ballast weights nor filling up tires with water are permissible.

The maximum permissible travel speed is 20 km/h when the double-mounted rear wheels are used.

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Filling up the tires with liquid	105
Draining the liquid from tires	106
Maximum weight of liquid used	107
Antifreeze solution for filling up the tires	107

Ballast weights are necessary for increasing the axle load to provide tractor manoeuvrability or stability (the manufacturer's instructions should be followed when using the front loader bucket).



FRONT AXLE BALLAST WEIGHTS UNDER THE FRAME (A)

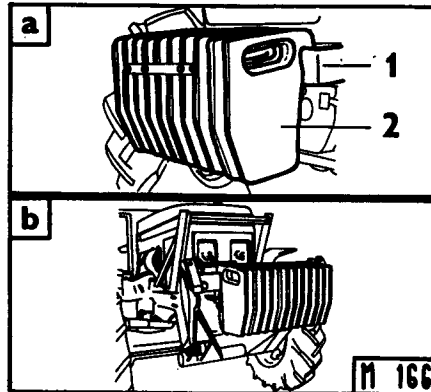
Frame of weight (1) - 20 kg
Weight (2) - 135 kg

FRONT AXLE BALLAST WEIGHTS UNDER THE FRAME (B)

Frame of weight (3) - 20 kg
Weight (4) - 100 kg

BALLAST WEIGHTS FOR TRACTORS WITH CARRARO AXLE (A)

Frame of weight (1) - 20 kg
Weight (2) - 100 kg

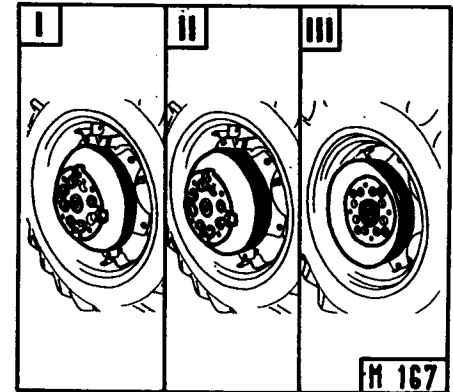


FRONT CARRIER BALLAST WEIGHTS

a) - frame of weight (1) - 20 kg
in front of the radiator grill
(2) - 210 kg

b) - of the front three-point suspension, beam + 12 pieces - 260 kg

Weights b) including beam should be hooked on the lower tie bars of front three-point suspension. Used to provide longitudinal stability of tractor when carrying some heavier implements attached to in the rear three-point suspension.

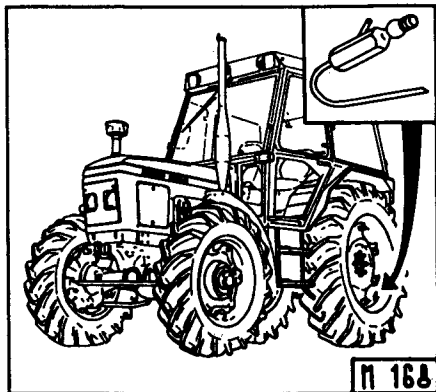


REAR WHEEL BALLAST WEIGHTS

I
2 + 4 pcs - 150 kg for the wheel track
of 1350 mm and 1500 mm

II
2 + 8 pcs - 270 kg for the wheel track
of 1575 mm up to 1800 mm

III
2 + 8 pcs - 270 kg for the wheel track
of 1350 mm up to 1500

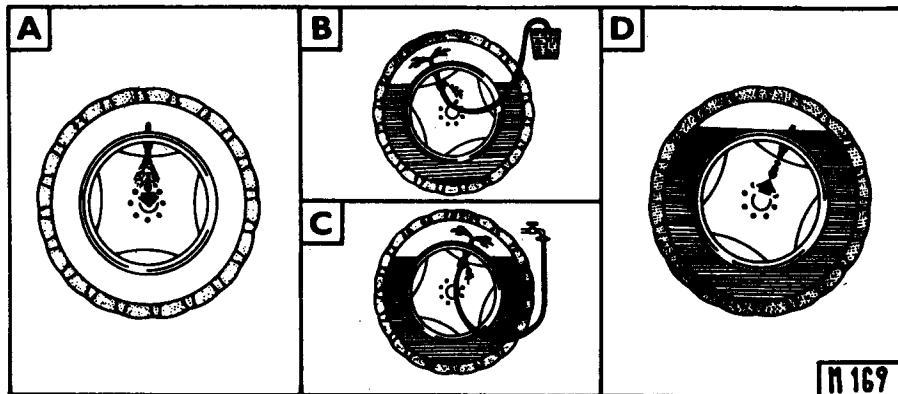


VALVE FOR FILLING UP THE TIRES WITH LIQUID

All the inner tubes of rear wheels are equipped with the valve which makes possible to fill up the inner tubes with liquid when using an adapter.



Filling up the front inner tubes as well as those used with double-mounted rear wheels is prohibited.

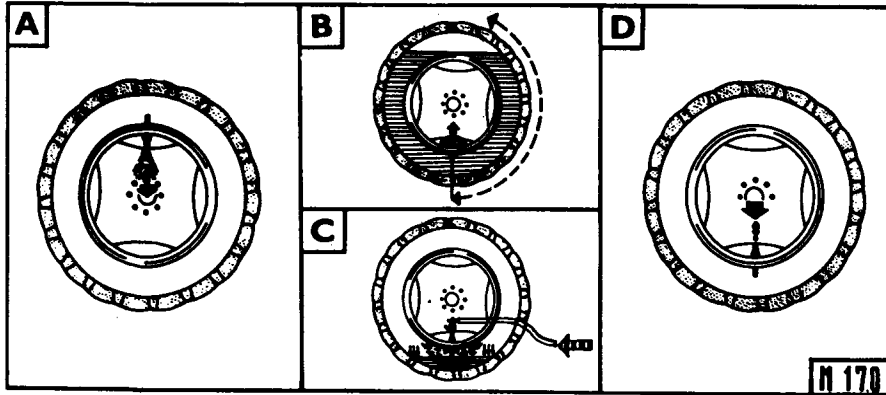


PROCEDURE OF FILLING UP THE TIRES WITH LIQUID

- Lift the tractor a bit to relieve the tire in question and turn the wheel to have the valve in the upper position (A).
- Deflate the inner tube and unscrew the tube air valve assembly.
- Screw on the adapter for filling up the tire with water, fit on a hose of liquid supply line.

Fill up the inner tube with specified volume of liquid. A gravity tank (B) can be used for filling up or pressure may be used (C).

- Remove the hose and screw off the adapter.
- Screw in the tube air valve assembly and inflate the tire to the specified pressure (D).
- Screw on the tire valve cap after inflation.
- Fill the other tire in the same procedure.

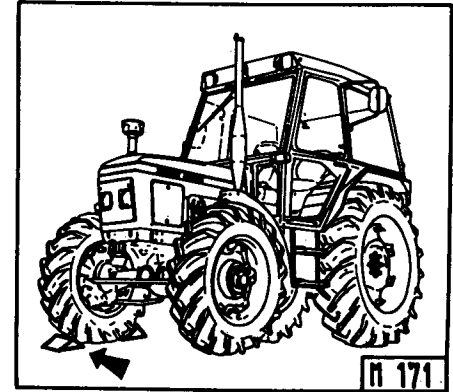


PROCEDURE WITH DRAINING THE LIQUID FROM TIRES

- Elevate the tractor a bit to relieve the tire and turn the wheel to have the tube valve in the upper position (A).
- Deflate the inner tube and screw off the tube air valve assembly. Turn then the wheel to have the valve in the lowest position.

CAUTION! Under-pressure may occur inside the inner tube in the course of draining the liquid. Turn the wheel so that the valve will be in the highest position from time to time (B).

- Remove the remaining liquid from the inner tube after screwing on the water or pressure air filling adapter (C). Force out the remaining liquid until no liquid is flowing out from the small-diameter tube of air adapter.
- Screw off the filling adapter, screw in the tube air valve again and inflate the tire to the specified pressure (D).
- Screw on the tire valve cap.
- Drain the other tire in the same procedure.



FRONT WHEELS LOCKING



To prevent any motion of the tractor block the front wheels before lifting the rear ones.

MAXIMUM WEIGHT (kg) OF LIQUID ACCORDING TO TIRE SIZES

TIRE SIZE	12.4-28	12.4-32	12.4-36	13.6-36	14.9-28	16.9-28	16.9-30	16.9-34
WEIGHT (kg)	125	140	160	180	180	215	240	250

ANTIFREEZE SOLUTION FOR FILLING UP THE TIRES

Water for mix, in litres	Calcium chloride CaCl_2 , in kg	Hydrated lime in kg	Solution density at 20 °C	Freezing point °C, approx.	Total volume, in litres	Additional weight, in kg
45	11.8	0.21	1.13	-18	50	57
45	13.9	0.23	1.18	-25	50	59
45	15.4	0.25	1.21	-30	50	61

Preparation of antifreeze solution:

1. Add the calcium chloride CaCl_2 to water. Never in the reversed way!
2. The solution is not dangerous, however, care should be taken where handling it. Wash the spilled drops using clean water.
3. Allow the solution to cool before starting to fill up the tires. Use only the specified amount of hydrated lime.
4. The solution must not come into contact with metallic parts and with electrical installation. It is not harmful to the inner tube valve parts, of course.
5. The antifreeze solution prepared in the above-mentioned mixture must not be used in the engine coolant system.

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Regular and correct technical service provides the trouble-free and safe operation of the tractor. All the necessary elemental operations should be included in the scheduled technical service which begins immediately after putting the machine into service. Consistent maintenance can prevent occurrence of possible troubles and downtimes during operation and extends the service life of your machine. Observe the safety regulations and principles with any job.

INSPECTION AND MAINTENANCE OF TRACTOR											1
Inspection and maintenance operations							Every .. service hours/Sh				
							10	70	100	200	600
							1200	1800	2400	3000	3600
							4200	4800	5400	6000	
ENGINE											
Change engine oil							x	x	Every 200 Sh		
Clean centrifugal filter and two-stage engine oil filter, or change								x	Every 200 Sh		
Replacement of full-flow engine oil filter							x	x	Every 200 Sh		
Retorque the cylinder head nuts							x				
Valve clearance check and adjustment							x				
Check on engine lubricating pressure after starting								x	x	x	x
Check on engine oil level and inspection for leaks of engine lubricating system							x	Every 10 service hours			
Cleaning the turbocharger compressor housing and the engine intake manifold							x	Every 10 service hours			
Check for turbocharger leaks and the turbocharger bearings for play									x		x
Water pump bearings - check clearances									x		x
ENGINE ACCESSORIES											
Hydraulic control of tractor clutch - check for leaks and function							x	Every 10 service hours			
Coolant system - check the coolant level and couplings for leaks							x	Every 10 service hours			
Fuel reservoir and fuel system - inspection for leaks							x	Every 10 service hours			
Air precleaner above or under the engine hood - inspection for clogging							x	Every 10 service hours			
Clean radiator fins by pressured air							x	x	Every 200 Sh		

INSPECTION AND MAINTENANCE OF TRACTOR														2																
Inspection and maintenance operations														Every .. service hours/Sh																
														10	70	100	200	600	1200	1800	2400	3000	3600	4200	4800	5400	6000			
1	Air cleaner maintenance and replacement of air cleaner oil charge														x		x	Every 200 Sh												
	Dry air cleaner maintenace (perform when indicator indicates that filter is blocked)														x			Every 10 Sh												
3	Change the coolant																		x	x		x		x		x				
	Inspection and adjustment of injection pump																			x		x		x						
	Turbocharger lubrication joints - inspection for leaks															x	x			x			x							
	Exhaust manifold - inspection for leaks															x		x	x	x	x	x	x	x	x	x				
	Check for injection discharge pressure and function of injection nozzle															x		x	x	x		x		x		x				
	Main fuel filter element - replacement																	x	x	x	x	x	x	x	x	x				
	Inspection and adjustment of engine Vee belt															x		x	Every 200 Sh											
	Primary fuel filter - inspection and replacement															x		x	Every 200 Sh											
TRANSMISSIONS																														
	Paper filter element of by-pass transmission oil filter - replacement															x		x	Every 600 Sh											
	Cleaning the magnetic and screen element of transmission oil suction strainer														*	x		x	Every 200 Sh											
	Transmission oil level - in transmission, final drive casing and axle shaft tube														*	x		x	Every 200 SH											
3	Transmission oil - replacement in transmission, final drive casing and axle shaft tube																	*	x	x	x	x	x	x	x	x				
	Gear-box of front power take-off shaft, oil level - inspection																	x	Every 200 Sh											
3	Front PTO gear housing oil change																	*	x	x	x	x	x	x	x	x				
	Front PTO driveline joint lubrication using mutipurpose grease																x	x	Every 100 Sh											

<https://ru.wikipedia.org/wiki/Traktor>

INSPECTION AND MAINTENANCE OF TRACTOR											3										
Inspection and maintenance operations										Every .. service hours/Sh											
										10	70	100	200	600	1200	1800	2400	3000	3600	4200	4800
AXLES AND STEERING																					
3	Oil replacement in reductors and in front driving axle housing												*	x	x	x	x	x			
	Oil level inspection in reductors and in front driving axle housing												x	Every 200 Sh							
	Change of oil and filter element in hydrostatic steering												*	x	x	x	x	x	x		
4	Change of hydrostatic steering hoses														x		x				
	Front axle bracket central pin - grease lubrication												x	Every 200 Sh							
	Front axle extension - grease lubrication												x	Every 200 Sh							
3	Front wheel hubs - add grease (max. 1/3 wheel hub volume)														x		x				
	Steering ball pins grease lubrication													x	x	x	x	x	x		
3	Axle shaft bearing at the right-hand reductor - grease lubrication														x		x				
3	Front axle cross pins and PTO splines - grease lubrication														x		x				
	Front wheel bearings - check for end play										x			x	x	x	x	x	x		
	Front wheel toe-in inspection										x			x	x	x	x	x	x		
	Tie rods, steering levers and wheel bolts and nuts - check for torque										x			Every 10 Sh							
	Tire inflation pressure check - all tires										x			Every 10 Sh							
	Steering function check, inspection of oil level in hydrostatic steering reservoir and steering dampers										x										

INSPECTION AND MAINTENANCE OF TRACTOR													4		
Inspection and maintenance operations	Every .. service hours/Sh														
	10	70	100	200	600	1200	1800	2400	3000	3600	4200	4800	5400	6000	
CARRARO FRONT DRIVE AXLE															
Reductor housings and front drive axle housing oil change				*		x		x		x		x		x	
Reductor housings and front drive axle housing oil check				x		Every 200 Sh									
Cardan shaft lubrication															
King pin lubrication				x		Every 200 Sh									
Axle pin plain bearings lubrication				x		Every 200 Sh									
HYDRAULIC SYSTEM															
Torsion bar pipe of mode selection control lever - grease lubrication						x	x	x	x	x	x	x	x	x	
Hydrostatic steering oil and filter element - replacement							x					x		x	
Connecting rod of mode selection control - grease lubrication				x		Every 200 Sh									
Mode selection control yoke - grease lubrication				x		Every 200 Sh									
Auxiliary hydraulic cylinder suspension pins - grease lubrication				x		Every 200 Sh									
Lifting tie-rod telescopic control - grease lubrication				x		Every 200 Sh									
Right-hand lifting tie-rod of three-point suspension - grease lubrication						x	x	x	x	x	x	x	x	x	
Front three-point suspension joints - grease lubrication						x	x	x	x	x	x	x	x	x	
Outer hydraulic circuit of front three-point suspension - check for leaks						Every 10 Sh									
Check for leaks and functions of individual hydraulic systems	x					Every 200 Sh									

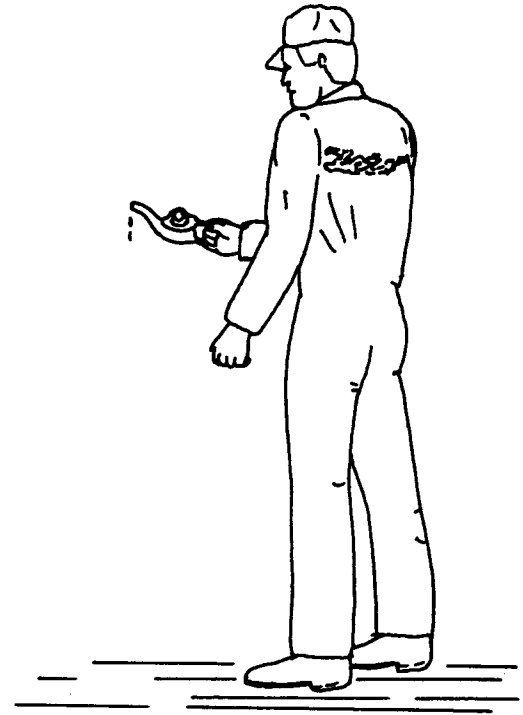
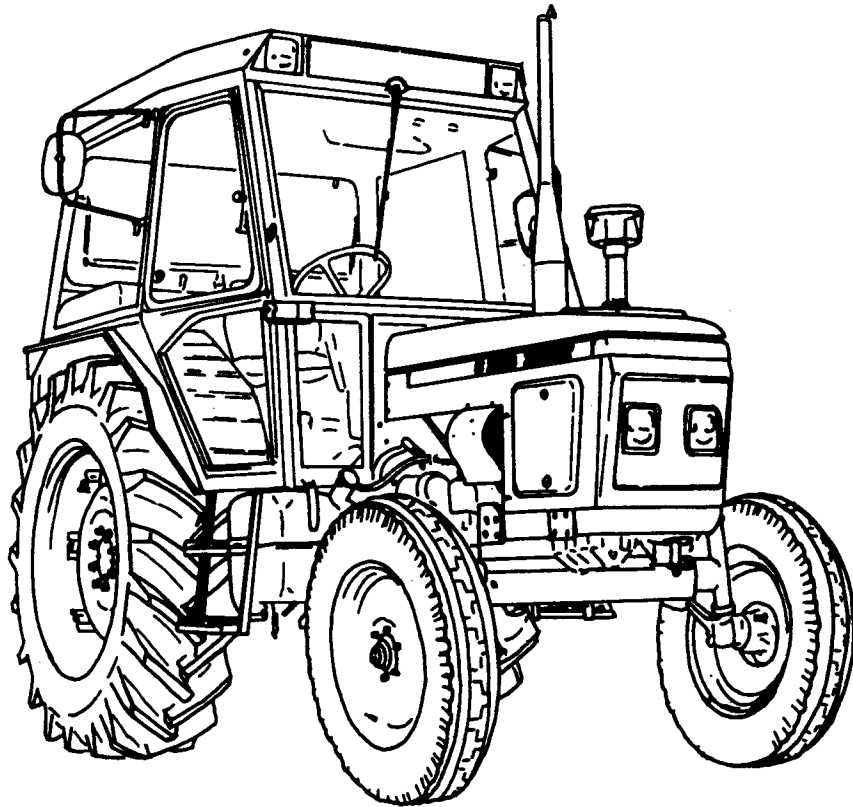
INSPECTION AND MAINTENANCE OF TRACTOR												5												
Inspection and maintenance operations											Every .. service hours/Sh													
											10	70	100	200	600	1200	1800	2400	3000	3600	4200	4800	5400	6000
BRAKE SYTEM																								
Inspection of brake fluid level and hydraulic brakes for leaks											x	Every 10 service hours												
Check for leaks of pneumatic brakes and for trailer and semi-traler brake efficiency											x	Every 10 service hours												
Service and parking brakes - check for function, adjustment														x	x	x	x	x	x	x	x	x	x	
Pneumatic brake adjustment												x				x		x		x		x		
Clutch and brake pedal clearance adjustment														x	Every 200 Sh									
Hydraulic brake system parts and Bowden cable of single-axle trailer coupling																x				x				
Lower flange nuts of air pressure governor - retorqure												x												
Draining of water condensate - air storage reservoir drain valve														x	x	x	x	x	x	x	x	x		
Sliding surfaces of all pneumatic instrument parts - grease lubrication																x				x				
5	Replacement of rubber components within braking system																x			x				
6	Air storage reservoir - inspection according to regulations																x			x				
Replacement of diaphragm, cleaning and adjustment of air pressure governor																x			x					
ELECTRICAL INSTALLATION																								
Check for battery charging function											x	Every 10 service hours												
7	Check on electrical outfit and accessories for conditions and functions												x		x	Every 200 Sh								
Tightening of contact clamps in fuse box														x	Every 200 Sh									

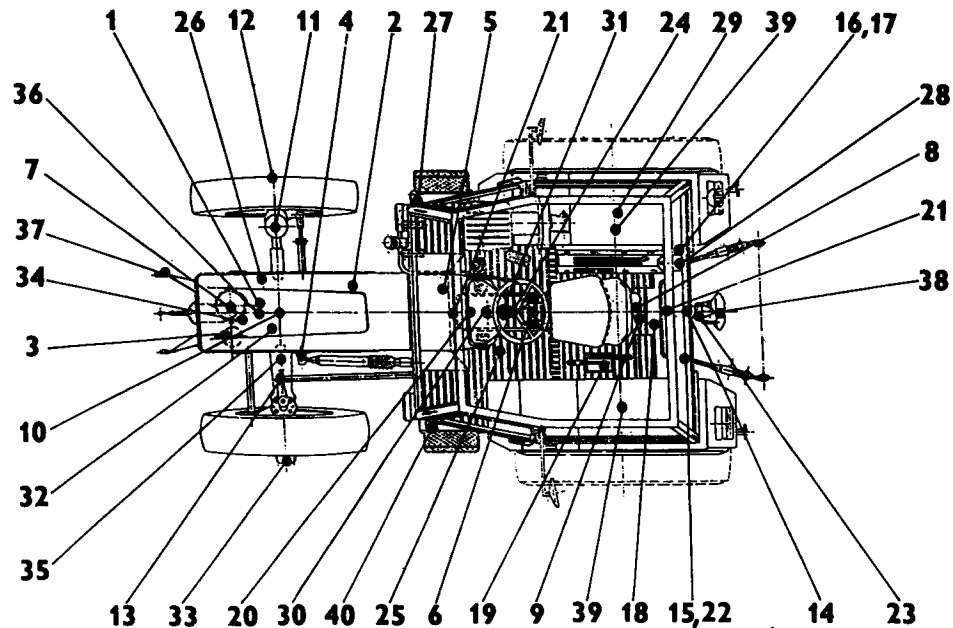
SCHEDULED TECHNICAL SERVICE

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Notes:

- * - After putting tractor first into operation or after tractor general overhaul.
- 1 - Depending on dustiness and dirt contained in the air intake (straw, etc.): every 50 to 200 Sh; during heavy snowfall, or with jobs raising snow: inspect oil daily, maintain it to the level prescribed or replace it, if necessary.
- 2 - Clean radiator daily when working with a front carrier-mounted implements, or shorten the intervals, if necessary.
- 3 - The maximum permissible period - 2 years.
- 4 - Replacement should be carried out not later than 4 years from the date of hose production.
New hoses used must not be older than 2 years from the date of production designated on the hose surface.
- 5 - Maximum permissible period - 5 years from the date of tractor production
- 6 - Maximum permissible period - 5 years from the date of air storage reservoir production or after a crash.
- 7 - It comprises the inspection for adjustment of front asymmetrical headlights and adjustment of gaps on stop lamp switches (the maximum clearance between the brake switch and the service brake pedal trip dog must be 0.5 to 1.0 mm.
- 8 - Every 100 service hours in summer months.
- 9 - In the case of liquid leaks remove the faulty sealing of piston rod, flush out the shock absorber using petrol and fill it up with 70 cu.cm of oil for shock absorbers.



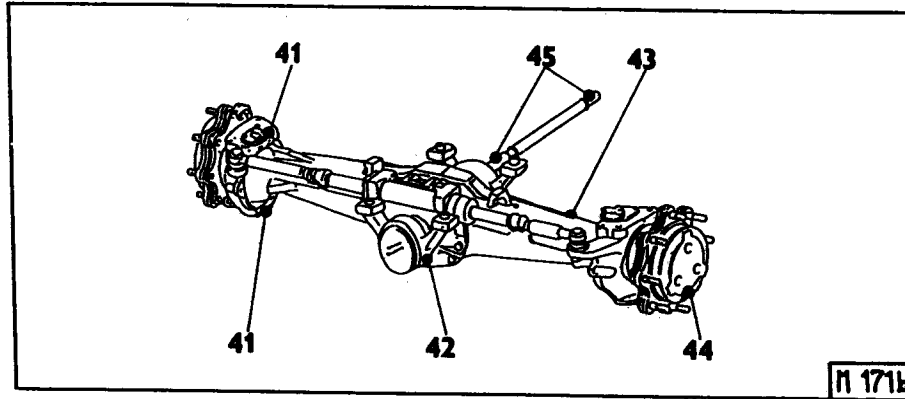


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Item	Lubrication point - inspection	Fluid type	
		Summer	Winter
1	Cooling system - coolant change	Coolant	
2	Engine - oil change	see TAB.1	
3	Steering system oil reservoir (holds also for HSS)	OH - HM 32	
4	Head of steering servo-unit cylinder	PM - LA 2	
5	Brake fluid reservoir (2)	Synthol 205	
6	Transmission	see TAB.2	
7	Air intake cleaner	see TAB.1	
8	Operator's seat (handle and rollers of seat)	PM - LA 2	
9	Operator's seat suspension	Damper oil	
10	Central pin of front axle housing (2 grease nipples)	PM - LA 2	
11	FW rigid or spring-mounted extensions (2 grease nipples)	PM - LA 2	
12	Front wheel bearings	PM - LA 2	
13	Ball joint of steering links	PM - LA 2	
14	Connecting rod of power control (1 grease nipple)	PM - LA 2	
15	Journals of supplemental hydraulic cylinder (2 or 4 nipples)	PM - LA 2	
16	Telescopic control of lifting tie rod (1 nipple)	PM - LA 2	
17	RH lifting tie rod of three-point suspension (1 nipple)	PM - LA 2	
18	Power control torsion bar (1 grease nipple)	PM - LA 2	
19	Control of two-wheel trailer Bowden cable, parking brake and P.T.O. shaft clutch	PM - LA 2	
20	Heating fan bearing	see TAB.2	
21	Front and rear wiper drive bearings	see TAB.2	
22	Left-hand lifting arm journal	PM - LA 2	
23	Three-point suspension lower pin	PM - LA 2	

HSS = Hydrostatic steering

Item	Lubrication point - inspection	Fluid type	
		Summer	Winter
24	Steering wheel shaft column	PM - LA 2	
25	Clutch disengagement shaft (2 grease nipples)	PM - LA 2	
26	Steering damper oil reservoir	Damper oil	
27	Cab door hinges	see TAB.2	
28	Tightening nuts of lower tie rods	PM - LA 2	
29	Portal frames	see TAB.2	
30	Steering-gear casing	see TAB.2	
31	Clutch release sleeve	see TAB.2	
32	Front driving axle housing	see TAB.2	
33	Front driving axle reductor	see TAB.2	
34	Front P.T.O. shaft universal joints	PM - LA 2	
35	Spiders of drive shaft joints, splines of drive shaft, universal joints and axle shaft bearing at the right-hand reductor	PM - LA 2	
36	Front P.T.O. shaft transmission casing	see TAB.2	
37	Front three-point suspension journals	PM - LA 2	
38	Automatic traction gear for trailers (4 grease nipples)	PM - LA 2	
39	Disc brake rollers	Termosize	
40	Battery	Distilled water	



Item	Lubrication point - inspection	Fluid type	
		Summer	Winter
41	CARRARO front drive axle king pin grease nipple	MOGUL LV 2 M	
42	CARRARO pin plain bearings grease nipple	MOGUL LV 2 M	
43	CARRARO front drive axle housing	Torque Fluid 62	
44	CARRARO front drive axle reductor housings	Torque Fluid 62	
45	CARRARO bushing of connecting shaft clutch	MOGUL LV 2 M	

Z 3320, Z 3340, Z 4320, Z 4340, Z 5320, Z 5340, Z 5340H, Z 6320, Z 6340, Z 6340H, Z 7320 TURBO, Z 7340 TURBO TRACTORS

ENGINE OILS TAB.1

Viscosity classification SAE J 300 JUN 87	Grade class API, SAE J 183 MAR 88	Suitable for temperatures	Specification	Grade class CCNC APR 95
	turbocharged naturally aspirated			turbocharged naturally aspirated
10W/30 10	CD+, CE, CF-4 CC	under -7°C	MIL-L-2104	D-4/PD 2
20W/30 20W/40 15V/30 15V/40	CD+, CE, CF-4 CC	under -7°C up to +30°C	MIL-L-2104	D-4/PD 2
20W/30 20W/40 20W/50 30 40	CD+, CE, CF-4 CC	above +30°C	MIL-L-2104	D-4/PD 2

The following oils have been tested in Zetor engines:

Producer	Oil identification	Viscosity class	Output grade
Oils for turbocharged engines:			
Paramo Pardubice	M7ADS III-TRYSK	20V/40	SF/CD+
Paramo Pardubice	M7ADS III-TRYSK SUPER	15V/40	SG/CE
Paramo Pardubice	M7ADS IV-TRYSK SUPER TURBO	15V/40	SG/CF-4
SHELL	RIMULA TX	10V/30	SG/CF-4
Oils for atmospheric engines:			
Koramo Kolín	M7ADX MOGUL SUPER STABIL	15V/40	SF/CC
ARAL	MULTI TURBORAL	15V/30	CD CE

TAB.2

OILS FOR GEARBOX, FRONT DRIVE AXLES, PTO TRANSMISSION

<https://truckmanualshub.com/>

Viscosity classification SAE J 306 MAR 85	Output grade API, SAE J 308 NOV 82	Suitable for temperatures	Specification
80V	GL-4	all year	MIL-L-2105

The following oils have been tested in Zetor tractor transmission system

Manufacturer	Oil identification	Viscosity classification	Output grade
Paramo Pardubice	GYROL - UTTO	80V	GL-4
Paramo Pardubice	GYROL-PP 80	80V	GL-4
ESSO	TORQUE FLUID 62	80V	GL-4
ARAL	EP 80	80V	GL-4

HYDROSTATIC STEERING OIL

Hydraulic oil OH - HM 32 is used for the tractors (this oil corresponds to high pressure hydraulic oils according to ISO 6743, ISO - L - HM 32).

SILICON LUBRICANT

Silicon lubricant LITOL 24 according to GOST 21150.75 (silicon lubricants classification) or PM - LA 2 (ISO 6743/9, ISO-L XBCEA 2 silicon lubricants classification).

HYDRAULIC BRAKE FLUID, ENGINE CLUTCH CONTROL FLUID

Brake fluid SYNTHOL 205 yellow according to PND 31-656-80 (fluid classification according to ISO 4925 or SAE J 1703) Fluid is not suitable for arctic climate.

ATTENTION: 1. Fluids of same classification can be mixed together.

2. Brake fluid has to be changed at least once every two years regardless of service hours.

FUEL

Summer grade diesel fuel NM-4 according to ČSN 656506 for period from 1.4. to 31.10.

Winter grade diesel fuel NM-22 according to ČSN 656506 for period from 1.11. to 31.3.

NOTE: Suitable analogous fuels should be used abroad.

ENGINE COOLING SYSTEM AND CAB HEATER FLUID

Anti-freeze FRIDEX-STABIL, FRIDOL 91 and demineralized water should be mixed 1 to 1.5 (when adding fluid, mixing ratio must be same). Anti-freeze fluids abroad must contain anticorrosive agents protecting all materials (including rubber and cylinder head gasket) of engine cooling system and cab heater.

ATTENTION: 1. Fluids FRIDEX-STABIL and FRIDOL 91 can be mixed together.

2. These fluids cannot be mixed with other fluid brands.

3. Change fluid after two years of operation.

AMOUNTS OF FLUIDS (values in liters)

<https://truckmanualshub.com/>

Fluid	Fluid type	Z 3320 Z 3340	Z 4320- Z 7340
Coolant - without heater - with heater	Fridex-Stabil (FRIDIOL 91) + demineralized water	9.5 10.5	10.6 11.6
Fuel	Engine diesel 4 Engine diesel 22	according to tank volume	
Engine oil	see TAB. 1	9.0	12.0
Oil air filter oil	see TAB. 1	1.2	
Gearbox and transmission oil	see TAB. 2	30 - 34 ***	
Portal oil	PP 80	2x1.9	
Front drive axle housing oil For CARRARO	TAB. 2	4.0	
	TAB. 2	5.5	

Fluid	Fluid type	Z 3320 Z 3340	Z 4320- Z 7340
Front wheel drive planetary reduction housing oil For CARRARO	TAB. 2	2 x 0.20 light 2 x 0.50 heavy	
	TAB. 2	2 x 0.60	
Front PTO shaft gearbox oil	TAB. 2	0.8	
Brake fluid	HD 205	0.5	
Hydrostatic steering oil	OH-HM 42	5.55	
Steering housing	TAB. 2	1.6	
Power steering oil	OH - HM 42	4.8	
Steering damper	damper oil	0.6	
Seat damper oil	damper oil	70 cm ³	

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

MEDIUM SCHEDULED REPAIR - SUPPLEMENTARY INFORMATION

(only for turbocharged tractors Z 7320 and 7340)

Should be accomplished after 2400 service hours.

1. Dismantle the turbocharger compressor housing including the intake manifold of engine.
2. Dismantle the spiral diffuser of compressor.
3. Use a brush soaked with a solvent and clear the inside of compressor housing and the rotor of deposited dirt.

It is prohibited to use any sharp object or a wire brush for cleaning.

Do not straighten blades, if bent or strained up!

CHECK ON TURBOCHARGER FOR LEAKS AND BEARING CLEARANCE

(only for turbocharged tractors Z 7320 and 7340)

If oil leaks round the shaft from the bearing body or when you have found that the permissible radial clearance or end play of bearing is exceeded, the turbocharger repair in a specialized workshop should be provided.

With re-assembling the turbocharger on the engine replace hoses to the intake manifold and on the turbocharger oil run-back line. Provide perfect leak-proof features of both joints.

Pour-in 0.1 litre of engine oil into the filling hole of turbocharger when re-assembling it.

CHANGE OF DIAPHRAGM, CLEANING AND ADJUSTMENT OF AIR PRESSURE GOVERNOR

Remove the air pressure governor from the tractor and provide in a specialized workshop change of the diaphragm, cleaning the control plunger under the diaphragm and the air vent hole in the diaphragm support.

The re-assembled air pressure governor should be adjusted on a test stand and sealed.

GREASE LUBRICATION OF HYDRAULIC BRAKES

Concerning the moving parts, i.e. the master brake and master clutch cylinders, the wheel brake cylinders, the clutch release cylinder and the brake pressure equalizer, grease the sliding surfaces starting from the sealing rings to the outer dust covers. Use special vaseline (Pentosin Special, e.g.) for that purpose. Inspect the rubber parts of brakes at the same time. Replace any rubber part, if damaged. All the rubber parts should be replaced after 5 years from the date of tractor production, regardless of appearance.

Remove semi-axles with portals after 600 Sh and clean foot disc brake area from dirt and lubricate rollers with grease. We recommend TERMOSIZE or MOLIKOTE - CU 7439 grease.



MAJOR OVERHAUL OF THE TRACTOR ASSEMBLY GROUPS

<https://truckmanualshub.com/>

The major overhaul of the tractor assembly groups should be performed, if the further usage would be not economical or if repairs of majority of components as well as the overall performance conditions of tractor endanger the safety of tractor operation.

Provided that all the maintenance instructions are followed in accordance with the manufacturer's technical documentation and that the tractor is in service in a mild climate region and on a plain terrain the medium service life of engine and power trains is 6000 service hours.

This number of service (engine) hours is applicable to provided that the tractor tasks have the following schedule:

- | | |
|--|------------|
| - ploughing and pre-sowing preparation of soil | 15 to 25 % |
| - sowing and planting | 10 to 15 % |
| - harvesting operations | 10 to 20 % |
| - agricultural transport | 40 to 65 % |

If the tractor is in service in mountain or hilly regions, the service life of the engine and power trains will be reduced by 15 to 20 % .

If the tractor is in service within severe climatic conditions, the service life of the engine and power trains will be reduced by 15 to 20 % .

Note:

The power trains include the front driving axle, too.

TECHNICAL SERVICE OF TRACTORS AFTER MAJOR OVERHAUL OF ASSEMBLY GROUPS

The running-in period of tractor after the major overhaul should be accomplished according to the same instructions as applicable for running-in period of a new tractor. The tractor maintenance should be then provided in the same way as if it were a new machine.

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

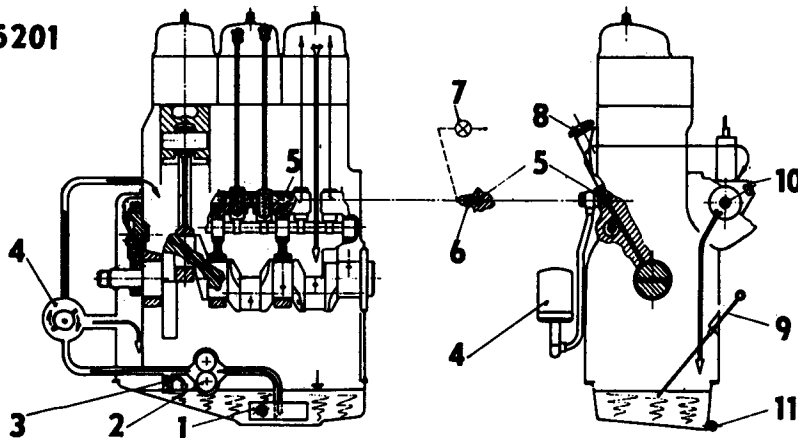


Concerning cleaning, lubrication and adjustment of tractor, trailing machine or implements, all the operations may be carried out only when the engine and the other moving parts are stopped, except for inspection of the brakes, battery charging and hydraulic system.

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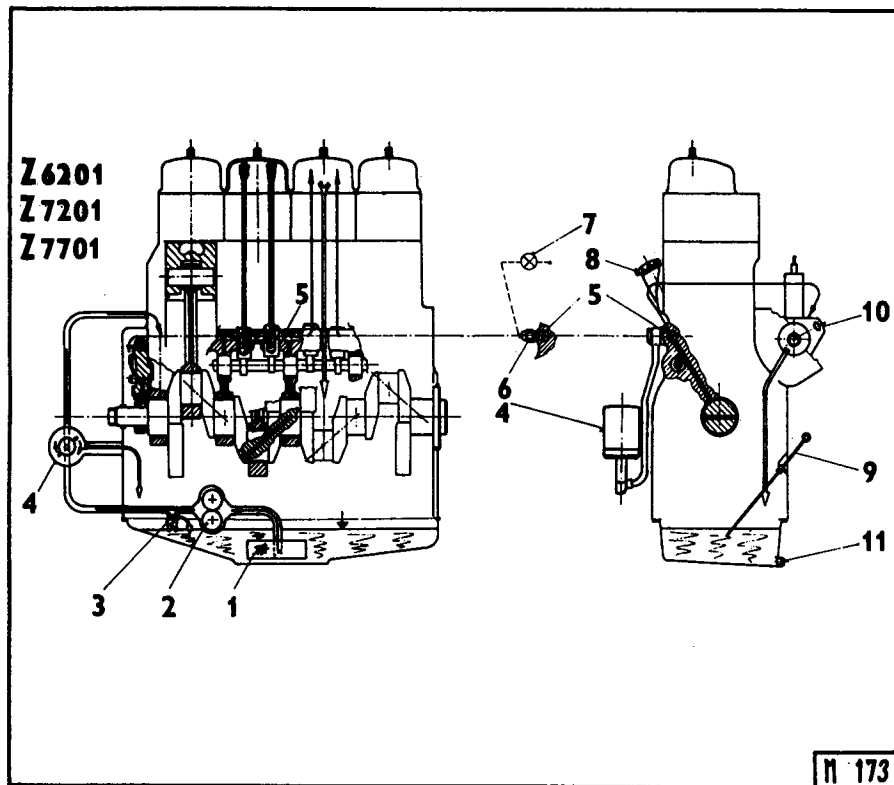
ENGINE Z 5201 LUBRICATION

Z 5201



- 1 - Suction strainer
- 2 - Oil pump
- 3 - Reduction valve
- 4 - Air cleaner with replaceable filter element
- 5 - Main oil channel
- 6 - Pressurized oil channel
- 7 - Warning light
- 8 - Fill tube
- 9 - Oil dipstick
- 10 - Injection pump
- 11 - Oil drain plug

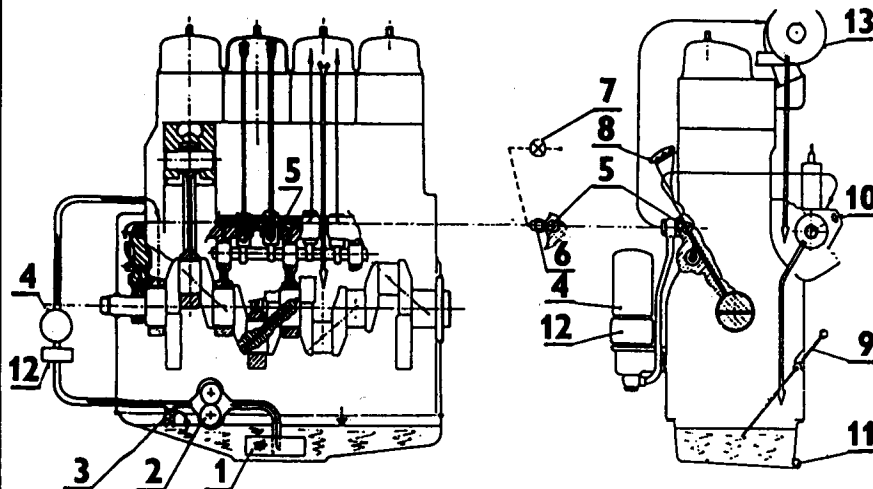
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ENGINE Z 6201-7701 LUBRICATION

- 1 - Suction strainer
- 2 - Oil pump
- 3 - Reducing valve
- 4 - Air cleaner with replaceable filter element
- 5 - Main oil channel
- 6 - Pressurized oil channel
- 7 - Indicating lamp
- 8 - Fill tube
- 9 - Oil dipstick
- 10 - Injection pump
- 11 - Oil drain plug

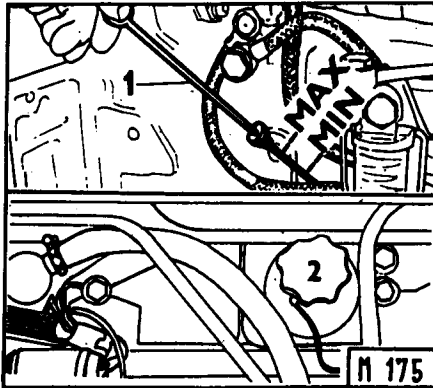
Z 7301 TURBO



ENGINE Z 7301 TURBO LUBRICATION

- 1 - Suction strainer
- 2 - Oil pump
- 3 - Reducing valve
- 4 - Oil cleaner
- 5 - Main oil channel
- 6 - Pressurized oil channel
- 7 - Indicating lamp
- 8 - Fill tube
- 9 - Oil level dipstick
- 10 - Injection pump
- 11 - Oil drain plug
- 12 - Heat exchanger
- 13 - Turbocharger

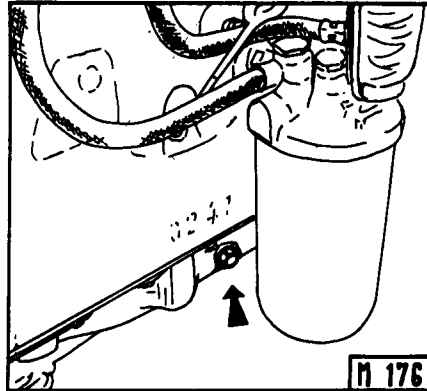
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CHECK THE ENGINE OIL LEVEL

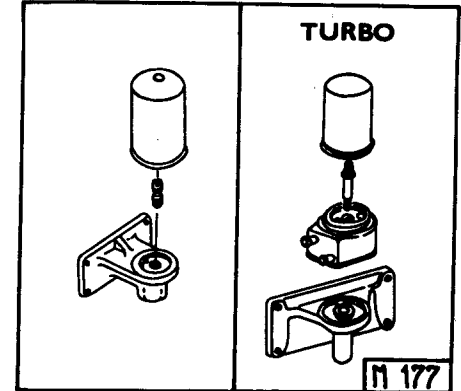
Inspect the oil level daily before starting the engine. The tractor must be on a horizontal plane. Screw off the dipstick (1), clean it using a cloth and screw it in again. Screw off the dipstick again - the level must not be below the lower mark.

Add oil through the fill opening (2), if necessary.



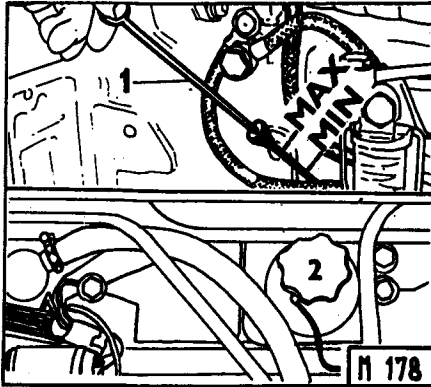
ENGINE OIL DRAINING

Screw off the drain plug and drain the engine oil. This should be carried out immediately after stop or after oil warming to the working temperature. Clean the drain plug and install it again.



ENGINE OIL FILTER REPLACEMENT

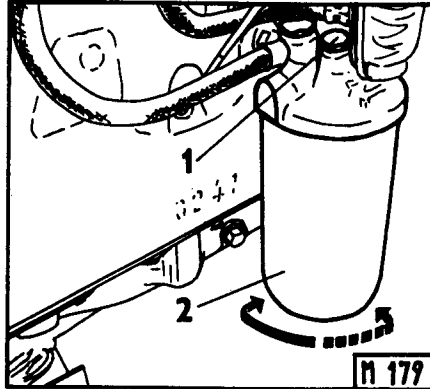
Should be carried out each time the oil is being changed. Loosen the filter. The oil will not run out because of the non-return flap. When replacing the filter, lubricate the sealing surfaces with oil. Mount the new filter and tighten only by hand. After a few minutes of operation and after oil is heated tighten the filter again by hand only and check for proper sealing.



FILLING UP THE ENGINE WITH OIL

Fill up the crankcase with new engine oil through the fill opening (2). Start the engine and allow it to run at 750 to 800 r.p.m. for 2 or 3 minutes.

Stop the engine and use the dipstick (1) to measure the oil level stabilization. Check the filter, the drain plug and other joints for leaks.

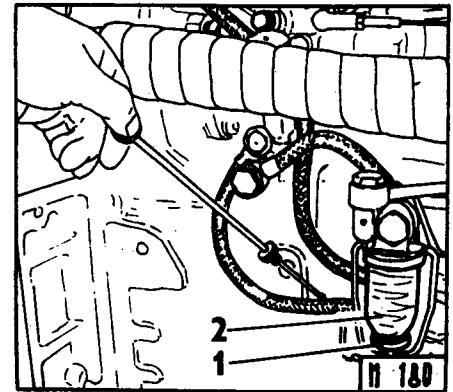


FUEL FILTER ELEMENT REPLACEMENT

Put a suitable container under the engine before replacement of filter element to trap fuel dripping from the filter.

Loosen the nut (1) and screw off the filter bowl (2). Replace the filter element.

Install the filter bowl including the new filter element. Check to be sure the bowl is seating properly. Fuel system priming must follow.

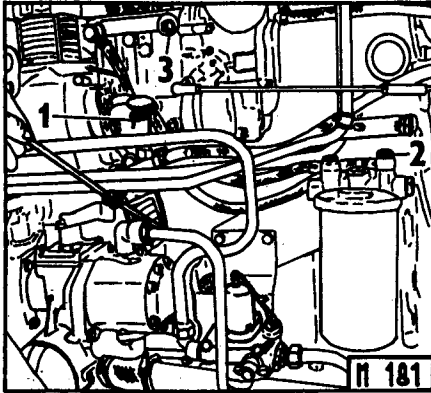


CLEANING THE PRELIMINARY FUEL FILTER

Unscrew the nut (1) and remove the filter cup (2) including the gasket and screen. Wash the cup and screen in Diesel oil.

Install the cup and screen back. Check to be sure the position of gasket is correct before tightening the nut.

Fuel system priming must follow.

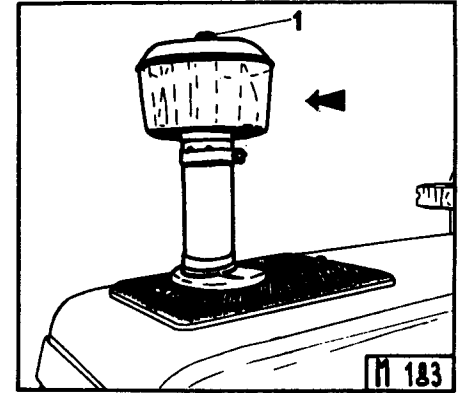
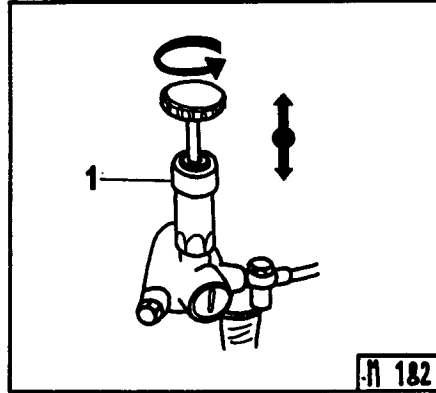


PRIMING THE FUEL SYSTEM

Put a suitable container under the engine to trap fuel dripping from the filter and the injection pump.

Proceed, as follows:

- Pressurize the fuel system using several manually-operated strokes of the priming pump (1)
- Loosen the screw of the fuel inlet union to the filter (2) and let foam escape.
- Tighten the screw (2) and repeat the procedure until clean foam-free fuel flows out after loosening the screw mentioned.
- Use the similar priming procedure for the injection pump - use the screw located on the injection pump body (3).

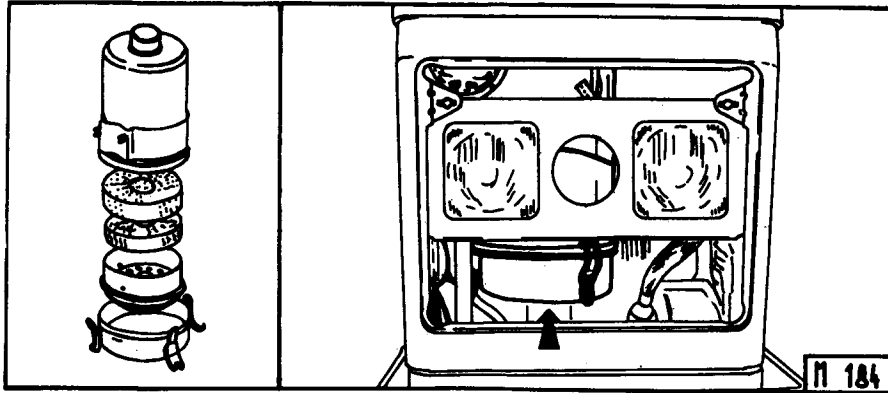


IFE-MANN AIR CLEANER WITH PRE-CLEANER ABOVE HOOD

Inspect the vertical air pre-cleaner (above the hood) daily. If the bowl is full of dust up to the indication mark, screw off the nut (1) on the top of cover, remove the cover and dump out dust.

IFE-MANN AIR CLEANER INCLUDING PRE-CLEANER UNDER THE HOOD

Maintenance of the air pre-cleaner under the hood is identical with that above the hood.



OIL CHARGE IN IFE-MANN AIR CLEANER

The oil charge is located in the dust collector within the bottom portion of air cleaner.

Change oil in the air filter always with the engine oil change. Dismantling of dust collector including the oil charge can be carried out after removal of the radiator grill and disconnection of clips.

MAINTENANCE OF IFE-MANN AIR CLEANER

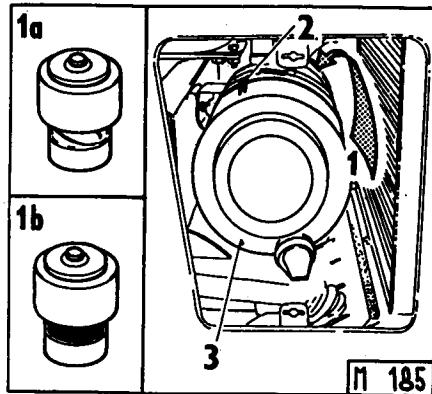
Having dismantled the dust collector proceed as follows:

- Pull down the holder gently to remove the deflector plate including the lower engine element and slide out the upper element from the shell. Oil charge must be replaced completely

- Separate the lower element from the deflector plate and clean either elements - it must not be replenished. If air by washing in Diesel oil or kerosene. Do not use petrol, water, benzol, spirit cleaner is to function under ambient and other organic solvents. temperatures lower than those of oil
- Fill up the cleaned dust collector with oil up to the mark (formed on the collector shell outer surface) and install it back onto the cleaner body.

The air cleaner must be filled up with the oil grade identical with that in the engine. If the air cleaner is working at lower temperatures than that of the minimum prescribed oil temperature, it is possible to dilute oil using Diesel oil (maximum 30% of Diesel oil).

The diluted charge must be replaced as soon as the ambient temperature is higher than freezing point, of course.



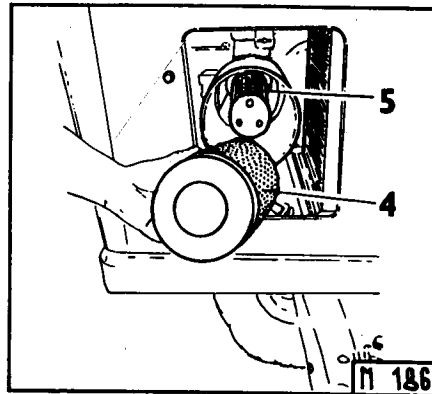
DRY AIR CLEANER MAINTENANCE

It is necessary to perform cleaner maintenance after the indicator indicates blocked filter (1). The indicator is accessible after tilting the top grill of tractor hood. It is located on the air cleaner body near the inlet piping elbow. Red area mechanically indicates blocked filter. This red area shows up directly on the indicator when filter elements are blocked.

1a - cleaner not blocked

1b - cleaner blocked, perform maintenance.

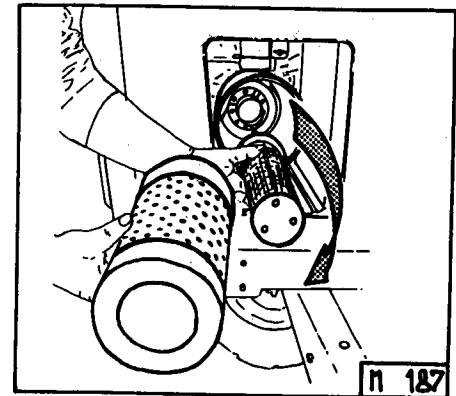
Perform maintenance after removing the side hood grill:



1. Unfasten the air cleaner cover clips (2) (unscrew cover fly nut if necessary)
2. Remove cover (3)
3. Remove main filter element (4)
4. Remove safety element (5)

CLEANING MAIN FILTER ELEMENT

If the main filter element is not damaged (inner side of element must be without dust) clean by blowing compressed air from the inner side of element. The filter element can be cleaned in this procedure three times as maximum. The element has to be replaced once a year.

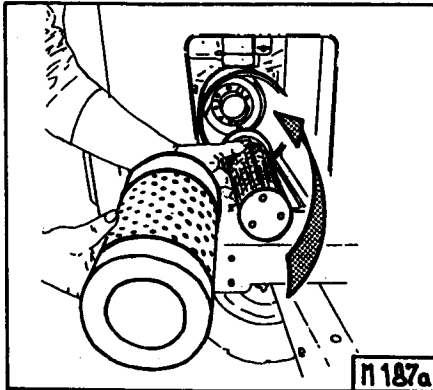


SAFETY ELEMENT REPLACEMENT



The safety element cannot be cleaned. It has to be replaced in these cases:

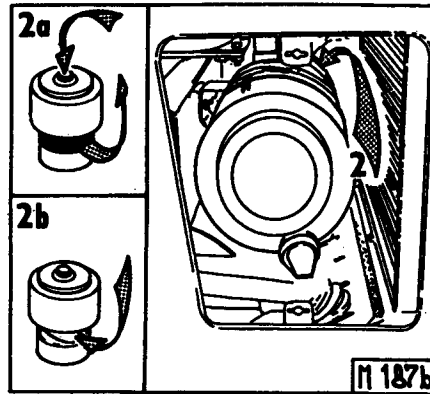
- if main element is damaged
- after air cleaner maintenance was performed five times
- at least once every two years



RE-INSTALLATION OF ELEMENTS

When mounting the elements back pay attention to:

- bearing surfaces - must be clean
- the elements must not be deformed during installation and must not vibrate after installation
- rubber gasket must bear all around, after closing the cleaner with the cover, perfect sealing of the whole cleaner must be secured

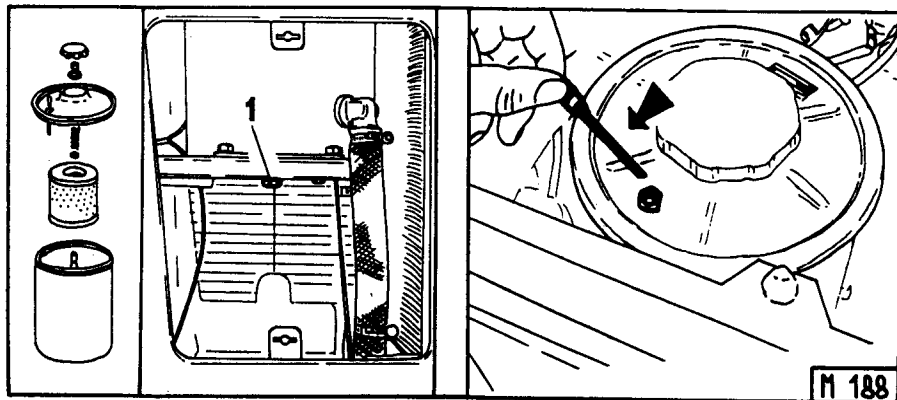


PUTTING THE INDICATOR INTO OPERATION



After finishing the air cleaner maintenance ensure that cleaner blockage indicator (2) is back in it's correct function.

Press button (2a) on indicator body. This way the red area indicating blockage will unblock mechanically (2a). The indicator is back in operation (2b).



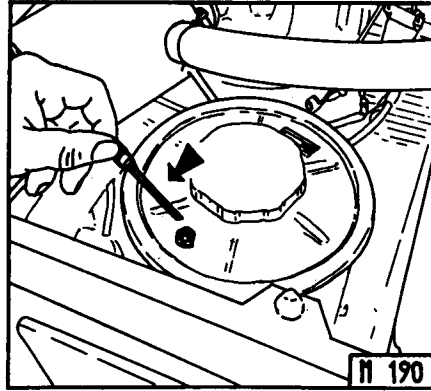
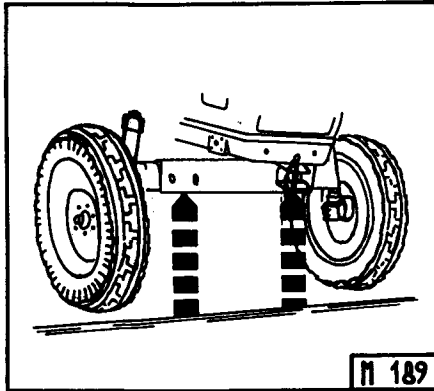
CHANGE OF OIL AND FILTER ELEMENT IN THE HYDROSTATIC STEERING MECHANISM

- Dismantle the lateral cover, unscrew the drain plug in the reservoir bottom and drain oil.
- Screw off the nut under the filler cap of reservoir, remove the cover and the pressure-relief valve and change the filter element.
- Install the reservoir cover again, screw in the drain plug.
- Disconnect both pressure hoses from the hydraulic cylinder and the return line from the reservoir (place canisters for old oil under the hydraulic cylinder and the line).

- Start the engine, let it running at low idle (max. 10 seconds) and steer the steering wheel two- or three-times to either side to force out oil from the steering unit and line.
- Block the tractor to prevent any motion and lift the front axle.
- Place an oil canister under the hydraulic cylinder and force out oil from the cylinder by turning the wheels manually.

Re-connect all disconnected joints and couplings.

- Fill up the reservoir with oil and perform air purging procedure of the hydrostatic steering hydraulic circuit.

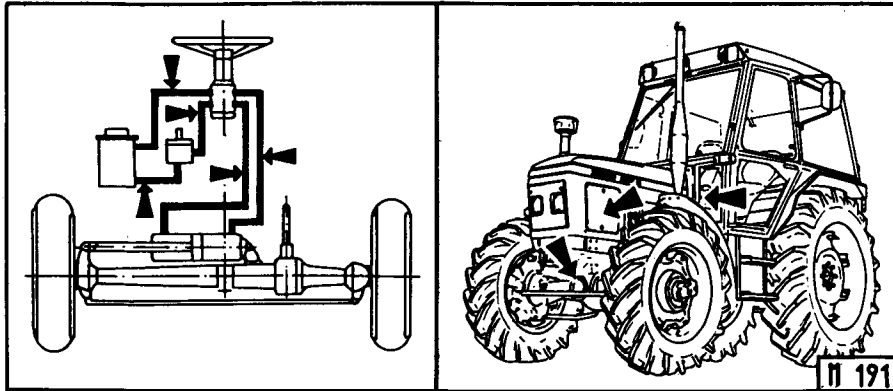


HYDROSTATIC STEERING AIR PURGING PROCEDURE

- Lift and support the front axle of tractor.
- Start the engine and let it running at low idle for about 1 minute.
- At the engine low idle steer the steering wheel to either side several times.
- Increase the engine speed to high idle. At this speed steer the steering wheel to either side 3-times slowly and quickly in alternate success to limiting stops of wheels.
- Stop the engine and lower the front tractor wheels to the ground.



Keep eyes on the oil level in reservoir during all the elemental operations mentioned above to avoid air entering into the steering system. Having completed the air purging procedure check the oil level and maintain it to the mark on the dipstick. Inspect all the joints and lines for leaks. No leaks are permissible, on principle.



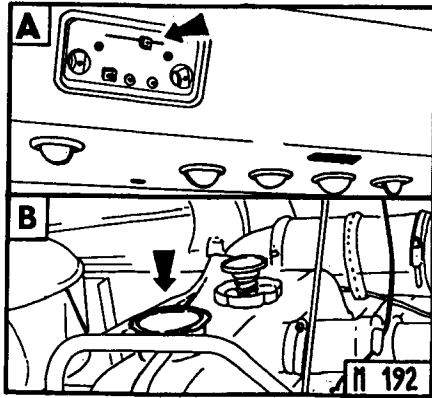
CHANGE OF HYDROSTATIC STEERING HOSES

The hydrostatic steering hoses should be changed after four years of service starting from the date of hose manufacture (the date being given on the hose surface) or after 3000 service hours, or immediately after any signs of damage are revealed ("sweating" of hoses, local bulging, working fluid leaking round end unions or through hose surface, mechanical wear or damage of hose jacket to metallic carcass, damage of outer yarn braiding on type 710 hoses).



The steering wheel must not be held for long in the extreme positions of steering (the maximum period being 20 seconds); the hydrostatic steering circuit oil temperature would be increased excessively otherwise.

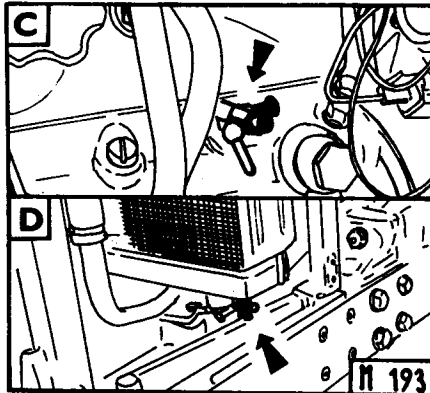
The tractor steering abilities are preserved even in the case of pump failure or if the engine is stopped, but the force necessary for steering will increase. Regardless of this, it is possible to drive the tractor on low driving speed to the nearest place suitable for repair.



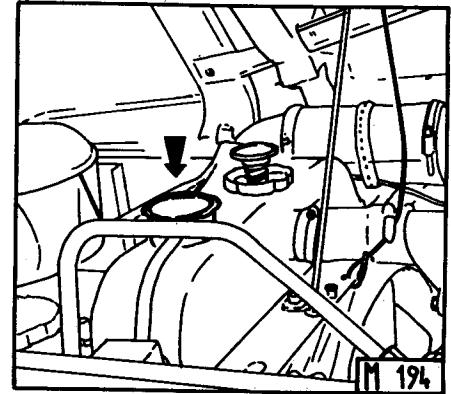
COOLANT REPLACEMENT

If the coolant is to be replaced, proceed as follows:

- Open the heating valve (A) (only tractors with cabs) and remove the radiator cap (B) slowly to relieve pressure.



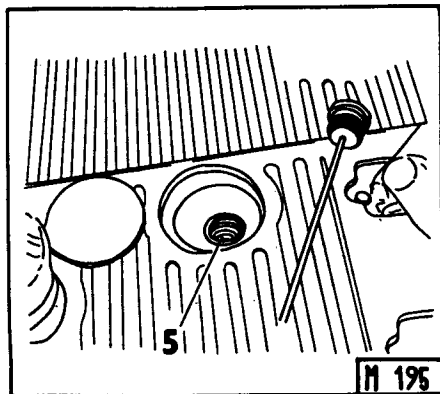
- Drain coolant from the cylinder block (C). The drain valve is accessible after dismantling the right-hand side cover.
- Drain coolant from the radiator (D). The drain valve is accessible after tilting away and removal of the left-hand side cover.
- Close the drain valves after coolant draining. (Let the heating valve open).



Fill up the cooling system with coolant mix of coolant and demineralized water (1:1.5 ratio). Start the engine and let it running about 1 minute. Maintain the coolant level and install the radiator cap.

Change coolant not later than after two years when anti-freeze is used in coolant solution.



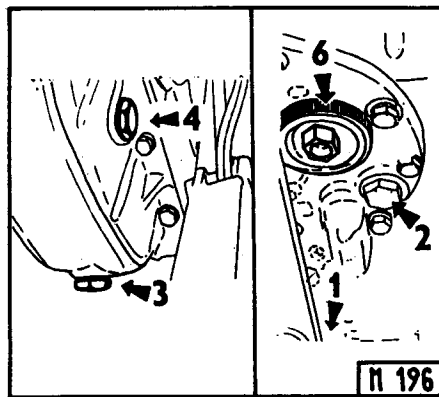


TRANSMISSION OIL INSPECTION AND CHANGE LEVEL PLUG OPENING

The transmission oil level can be inspected by means of the dipstick located in the fill hole plug located under the cover in tractor floor.

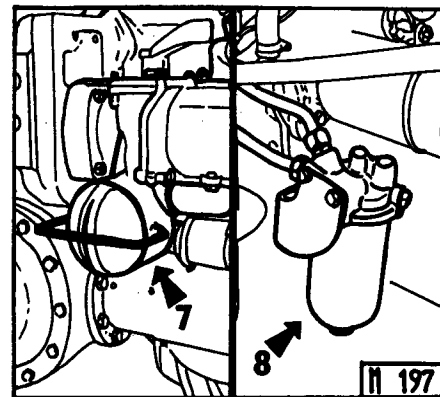


Check the oil level with the engine stopped.



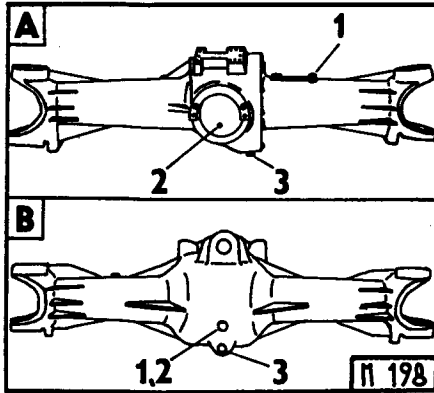
DRAIN AND CHECK HOLES

- 1 - Oil drain plug of transmission casing
- 2 - Oil drain plug of final drive housing
- 3 - Oil drain plug of the LH axle
- 4 - Oil level check and filler plug of the LH axle
- 5 - Gearbox check and filler hole



AFTER OIL DRAINING

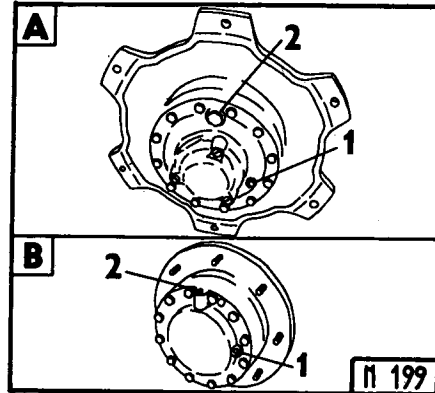
- Clean the magnetic element and the screen of hydraulic pump intake cleaner (6) at the dependent and independent pump(7).
- Change the paper filter element (8).
- Clean all the drain plugs and install them back.
- Fill up with 30 litres of oil, start the engine and let it running for about 2 minutes.
- Stop the engine and after oil stabilization inspect the oil level and add oil up to the middle or the upper mark on the dipstick according to tractor operation utilization (see further).



FRONT DRIVING AXLE HOUSING

A - Heavy-duty front driving axle
B - Light-duty front driving axle

- 1 - Fill plug
- 2 - Oil level plug opening
- 3 - Drain plug



FRONT DRIVING AXLE REDUCTOR

A - Heavy-duty front driving axle
B - Light-duty front driving axle

- 1 - Oil level port
- 2 - Fill plug

The oil level should be inspected after positioning the fill port (2) uppermost.

If the wheel is turned round through an angle of 180° , the fill port (2) serves for oil drain from reductor.

AUTOMATIC DISENGAGEMENT OF FRONT DRIVING AXLE DIFFERENTIAL LOCK (AUD) - CHECK FOR CORRECT FUNCTION

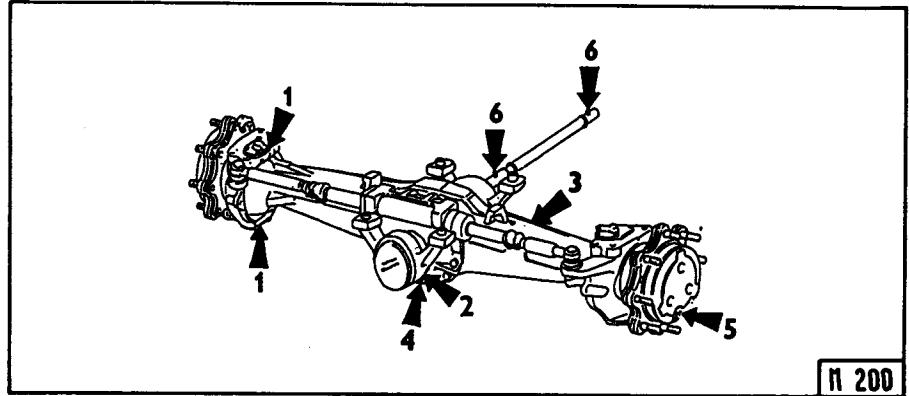
Excessive wear of the outer wheel tire when steering to a turn (a failure known as wheel gumming on concrete surface) could be due to:

1. Incorrect function of AUD, failure in disengagement of some clutch (see the static test of differential lock below).
2. The advance of front wheels is not provided (the front wheel circumferential velocity should be 2 to 5% higher than that of rear wheels) which can be due to
 - a) not permissible combination of front and rear tires used with tractor operation
 - b) incorrect inflation of front and rear tires (the worst case being under-inflation of front wheels and over-inflation of rear ones)
 - c) excessive wear of front tires

CORRECT FUNCTION OF AUTOMATIC DIFFERENTIAL LOCK (AUD)

Proceed as follows:

1. The test should be carried out with the tractor stopped.
2. Lift the tractor so that the wheels do not touch ground.
3. Engage a transmission gear and front driving axle drive.
4. Eliminate any clearance within the front drive axle drive train by rotating the wheel one side forwards and keep the clearance eliminated (by force). Rotate the other wheel in the opposite direction (backwards) after using a slight impact. The wheels must rotate smoothly, slight jumping over teeth must be hearable from the clutch disengaged. When the wheel is stopped and turned slightly in the other direction. The initial engagement of clutch must be recovered.
5. Use the same procedure to eliminate the clearance within drive trains in either direction of both wheels to test disengagement/engagement of clutches in either direction, i.e. with rotating both the LH and RH wheel forwards and backwards.

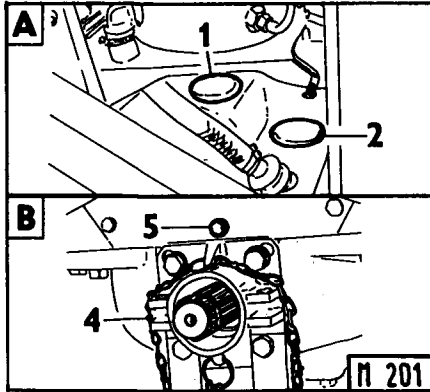


CARRARO FRONT DRIVE AXLE

The axle is designed with a central drive with a swinging axis around the pinion. A hydrostatic steering cylinder is fitted on the axle. The tractor is equipped with an automatic differential lock. The front drive engagement and disengagement is identical with other types.

- 1 - Grease nipple king pin - fill with grease.
- 2 - Front drive axle pin plain bearings - fill with grease.
- 3 - Front axle housing oil filler and check hole.

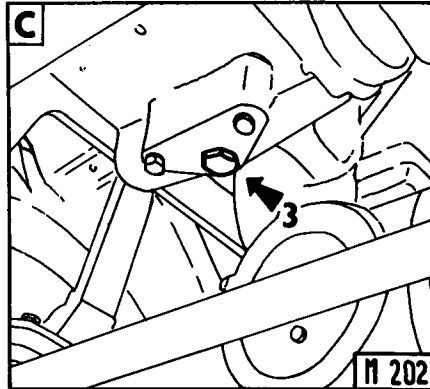
- 4 - Front axle housing oil drain plug.
- 5 - Front wheel reducers oil filler, check and drain hole.
- 6 - Drive shaft self aligning bushing - fill with grease.



FRONT POWER TAKE-OFF SHAFT CASING

- 1 - Fill hole
- 2 - Lubricating point of front universal joint
- 3 - Oil drain plug
- 4 - Oil level plug

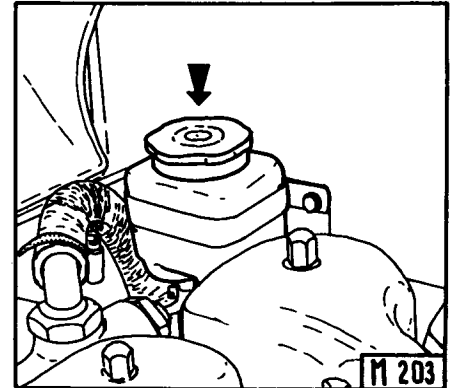
Holes 1,2 are accessible after side grill removal.



- 5 - Water and sediment drain plug



The clutch packing chamber must be clear of water condensate prior to the winter time. Screw off the plug, engage and disengage the clutch using the respective lever on instrument panel several times. Pressure air will blow out dirt and condensate from the packing room. Install the plug again!

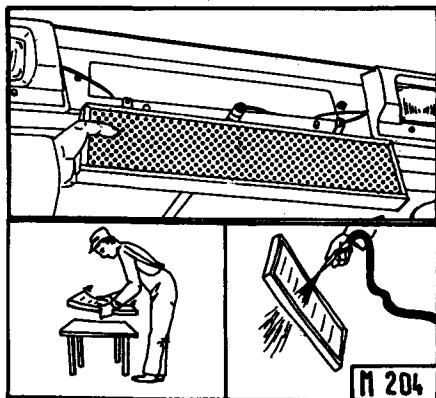


BRAKE FLUID REPLENISHMENT

Maintain the brake fluid level within the range from 1/2 of the reservoir capacity (minimum level) up to 3/4 of the capacity (maximum level).



Take care to observe strict cleanliness when handling the brake fluid. Inspect the brake fluid level daily before starting the engine.

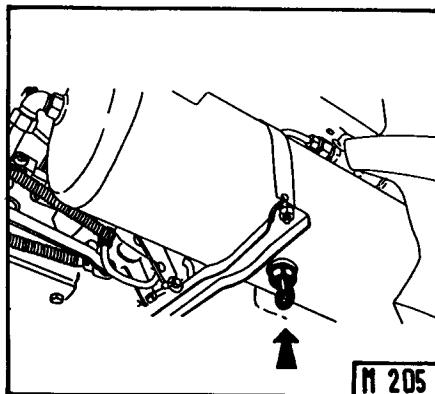


CLEANING THE CAB AIR FILTERS

The recovery of air filters installed under the front tiltable panel of cab should be carried out in dependence on level of clogging. Use tapping, pressurized air or wash filters in water with a detergent (BK VAD). Dry the filters thoroughly. Inspect filters daily. Change the bad clogged paper filter elements.

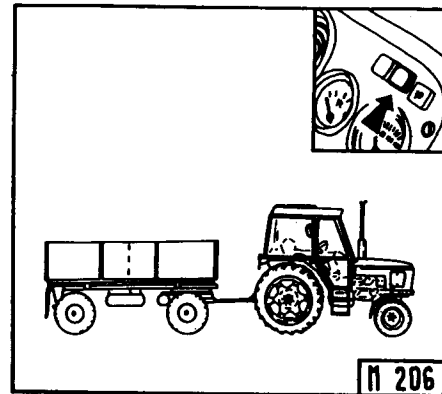


Tractors are not equipped with special filter of air intaken into the cab. Therefore, they are not intended for handling aerosols and other injurious to health matters.



DRAINING OF WATER CONDENSATE FROM AIR STORAGE RESERVOIR

Deflect or depress the extruding part of drain valve.

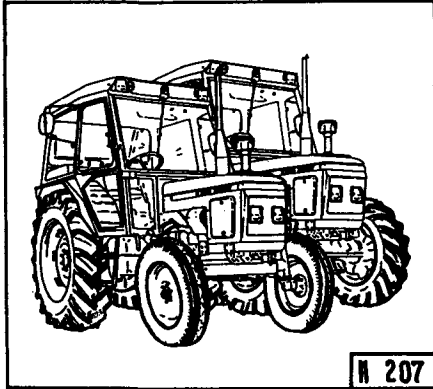


CHECK FOR LEAKS ON PNEUMATIC SYSTEMS

- Charge the air storage reservoir to the maximum pressure.
- Stop the engine and wait. The loss in pressure must not exceed 10 kPa during 10 minutes with the engine stopped.



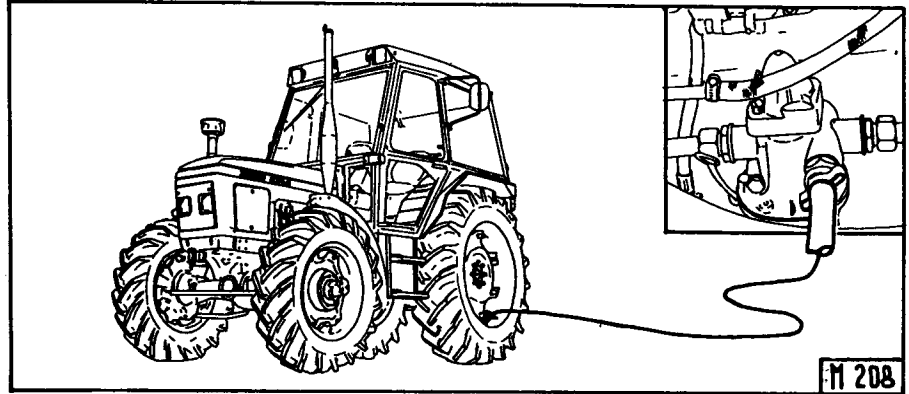
Check for leaks should be carried out daily before starting a travel with trailer or semi-trailer. With brake system failure or pressure drop under 380 kPa, the warning light on the control panel lights up.



MAINTENANCE AND ATTENDANCE ON TIRES

Inspect regularly the outer surface of tires and check to be sure the tire bodies are free of defects in the sidewall portion and in the portion above the bead and the carcass plies are not damaged.

Tires with defects should be rejected and discarded.



TIRE INFLATION INFORMATION

The rated values of recommended inflation pressure are mentioned in the following chart. Check the inflation pressure value regularly before driving - when the tires are still cold.

Make use of the inflation equipment regulator which fulfills also the function of the pressure equalizer, tire inflator and safety valve. Screw off the wing nut (or the rubber cap) of the inflation equipment regulator and screw on the tire-inflation hose instead. Screw on the hose to the end of thread to depress the non-return valve. It is not possible to inflate the tires, if there is the maximum pressure 0.6 MPa inside the air reservoir (or 0.7 MPa with two-line systems). In this case it is necessary to reduce the air storage pressure using the drain valve located in the lower portion of air reservoir. Having inflated the tires, screw the wing nut (or the rubber cap) onto the inflation equipment regulator again.

RECOMMENDED FRONT TIRE INFLATION PRESSURES - TRACTORS Z 3320, 4320, 5320, 6320, 7320

The sum of loading capacities for both tires used on the front axle must not exceed the value of permissible load of axle the tires are installed on.

The one and the same tractor axle must not be equipped with tires of different construction.

When used, the radial tires must be installed on the rear axle while the diagonal ones on the front axle, on principle.

Prevailing working operations		Tire size and ply rating			
		6.00 - 16 6 PR	6.50 - 16 6 PR	7.50 - 16 6 PR	7.50 - 20 6 PR
Cultivation using light implements	inflation (kPa)	280 - 330	280 - 310	230 - 280	230 - 280
	load capacity (kg)	505 - 560	575 - 615	660 - 745	795 - 875
Tillage jobs	inflation (kPa)	280 - 330	280 - 310	230 - 280	230 - 280
	load capacity (kg)	505 - 560	575 - 615	660 - 745	795 - 875
On-the-road transport	inflation (kPa)	280 - 330	280 - 310	230 - 280	230 - 280
	load capacity (kg)	505 - 560	575 - 615	660 - 745	795 - 875
Front loader bucket (up to 8 km/h)	inflation (kPa)	--	385	350	350
	load capacity (kg)	--	max. 1230	max. 1490	max. 1750

RECOMMENDED FRONT TIRE INFLATION PRESSURES - TRACTORS Z 3340, 4340, 5340, 5340 HORAL, 6340, 6340 HORAL, 7340

The sum of loading capacities for both tires used on the front axle must not exceed the value of permissible load of axle the tires are installed on.

Prevailing working operations		Tire size and ply rating						HORAL
		9.5 - 24 8 PR	11.2 - 24 8 PR	11.2 R 24	12.4 - 24 8 PR	12.4 R 24	13.6 R 24	9.5-24 8 PR
Cultivation using light implements	inflation (kPa)	150 - 190	150 - 190	100 - 140	150 - 190	100 - 140	100 - 140	150 - 190
	load capacity (kg)	770 - 890	935 - 1080	875 - 1086	1115 - 1280	1005 - 1250	1075 -1330	770 - 890
Tillage jobs	inflation (kPa)	190 - 240	190 - 240	140 - 160	190 - 230	140 - 160	140 - 160	190 - 240
	load capacity (kg)	890 -1010	1080 - 1225	1085 - 1180	1280 - 1415	1250 - 1360	1330 -1450	890 -1010
On-the-road transport	inflation (kPa)	240 - 280	240 - 280	200	230 - 270	200	200	240 - 280
	load capacity (kg)	max 1010	max 1225	max 1180	max 1415	max 1360	max 1450	max 1010
Front loader bucket (up to 8 km/h)	inflation (kPa)	300	300	200	300	200	200	300
	load capacity (kg)	1410	1715	1770	1980	2040	2175	1410
Front carrier-mounted implements up to 15 km/h	inflation (kPa))	290	290	200	300	200	200	260
	load capacity (kg)	1410	1500	1700	1600	2000	2100	1060

RECOMMENDED REAR TIRE INFLATION PRESSURES - TRACTORS Z 3320, 3340, 4320, 4340, 5320, 5340, 5340 HORAL, 6320, 6340, 6340 HORAL, 7320, 7340

The sum of loading capacities for both tires used on the front axle must not exceed the value of permissible load of axle the tires are installed on.

Prevailing working operations		Tire size and ply rating							
		12.4-28 6 PR	14.9-28 8 PR	16.9-28 8 PR	16.9-30 8 PR	12.4-32 6 PR	16.9-34 8 PR	13.6-36 6 PR	12.4-36 6 PR
Cultivation using light implements	inflation (kPa)	110 - 140	110-140	110-140	110-140	110 - 140	110-140	110-140	110-140
	load capacity (kg)	1005-1140	1405-1610	1675-1925	1730-1970	1120-1220	1830-2110	1300-1400	1135-1285
Tillage jobs	inflation (kPa)	140 - 170	140-180	140-170	140-170	140 - 170	140-170	140-160	140-170
	load capacity (kg)	1146-1275	1610-1880	1925-2175	1990-2245	1220-1355	2110-2380	1490-1615	1285-1440
On-the-road transport	inflation (kPa)	200	210	200	200	200	200	190	200
	load capacity (kg)	1275	1880	2175	2245	1355	2380	1615	1440

**RECOMMENDED REAR TIRE INFLATION PRESSURES - TRACTORS Z 3320, 3340, 4320, 4340, 5320, 5340, 5340 HORAL, 6320, 6340,
Z 6340 HORAL, 7320, 7340**

The sum of loading capacities for both tires used on the front axle must not exceed the value of permissible load of axle the tires are installed on.

Prevailing working operations		Tire size and ply rating							
		14.9R28	16.9R28	16.9R30	16.9R34	13.6R36	*9.5-32 6 PR	*9.5-42 8 PR	18.4-26 10 PR **
Cultivation using light implements	inflation (kPa)	100-140	100-140	100-140	100-140	100-140	*160	*160	180
	load capacity (kg)	1330-1655	1660-2055	1705-2110	1800-2230	1295-1605	975-1065	1040	2645
Tillage jobs	inflation (kPa)	140-160	140-160	140-160	140-160	140-160	-	-	100
	load capacity (kg)	1655-1800	2055-2270	2110-2300	2230-2430	1605-1750	-	-	1900
On-the-road transport	inflation (kPa)	200	200	200	200	200	210-230	-	150
	load capacity (kg)	1800	2240	2300	2430	1750	max.1065	-	max.2380

* Tires used only in rear double-mount wheel for cultivation

** Tires used only for tractors HORAL

INCREASED LOADING CAPACITY OF TIRES

With loading the tractor, the permissible axle loads must not exceed those given in the "TRACTOR SPECIFICATION - PERFORMANCE DATA".

The increased loading capacities of tires (in comparison with the rated ones) may be used in the following cases:

TIRES FOR STEERING WHEELS:

Concerning tractors with max. travel speed not exceeding 25 km/h, it is permissible to increase the loading capacity of tires about 15 % above the values mentioned in the "RECOMMENDED TIRE INFLATION PRESSURES".

Concerning tractors equipped with removable implements or with adapters, the loading capacity of tires may be increased about 35% above the values mentioned in the chart unless the travel speed of tractor does not exceed 20 km/h.

Concerning tractors with front loaders it is permissible to increase the load capacity by 100 % for 6PR tires (min. configuration) and the inflation pressure may be increased about 25 % unless the driving speed does not exceed 8 km/h. Except for the cases mentioned it is not permissible to increase the load of tires and the inflation pressures above the values given in the charts even when the travel speed is reduced below those given, at the same time.

TIRES FOR DRIVING WHEELS

If the max. travel speed of tractor does not exceed 25 km/h it is permissible to increase the load of driving tires by 7 % above the values mentioned in "RECOMMENDED TIRE INFLATION PRESSURES" charts.

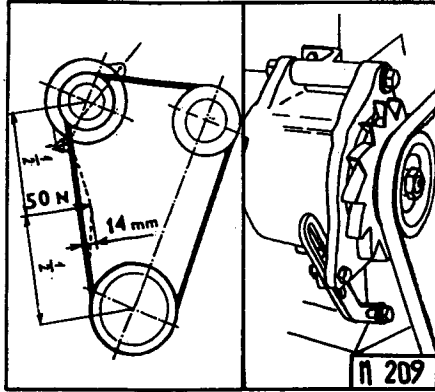
If the travel speed of a tractor with removable implements and front loader adapters does not exceed 8 km/hour, as maximum, the load capacity of tires of 6 PR (min. configuration) may be increased by 40 % provided that the inflation pressure is increased about 25 %, at the same time. Except for the cases mentioned, it is not permissible to increase the load of tires and the inflation pressures above the values given in the charts even when the travel speed is reduced below those given, at the same time.

PUTTING THE TRACTOR OUT OF SERVICE

If the tractor is to be put out of service for a shorter period, inflate the tires to the values specified for on-the-road service. If the tractor is to be put out of service for a longer period (storage), support the tractor and reduce the pressure inside tires to a minimum (the wheels must not touch the ground).

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The majority of following operations require certain experience and more exacting service and diagnostic facilities. It is therefore advisable entrust these works to specialized and authorized workshops.

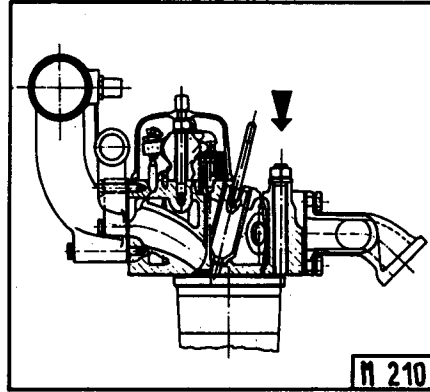


INSPECTION OF VEE BELT TENSION

Measure the deflection of the belt. Apply approx. 50 N force between the pulleys. The deflection must be 14 mm.

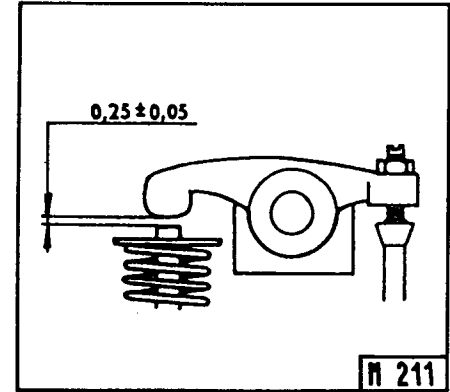
VEE BELT TENSION ADJUSTMENT

Loosen the fastening screws and adjust the Vee belt tension using the tensioning force of 250 N.



CYLINDER HEAD TIGHTENING TO TORQUE

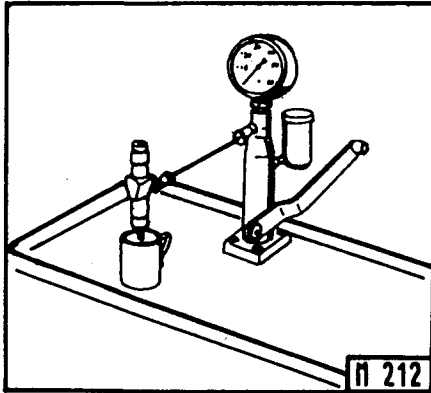
Tightening of the cylinder head should be carried out on the cold engine in the specified sequence. Tighten the cylinder head nuts to a torque of 167 to 177 Nm.



VALVE CLEARANCE ADJUSTMENT

Carry out the valve clearance adjustment with the engine stopped and cold. The correct clearance of both intake and exhaust valves is 0.25 ± 0.05 mm.

Engines Z 6201, 7201, 7701 and 7301: Adjust 4th cylinder with the shear of 1st cylinder rockers, and vice versa. Adjust 2nd cylinder with the shear of 3rd cylinder rockers, and vice versa.
Engine Z 5201: Turn the crankshaft one revolutions (360°) after shear of each cylinder rockers and continue adjustment on the next cylinder.



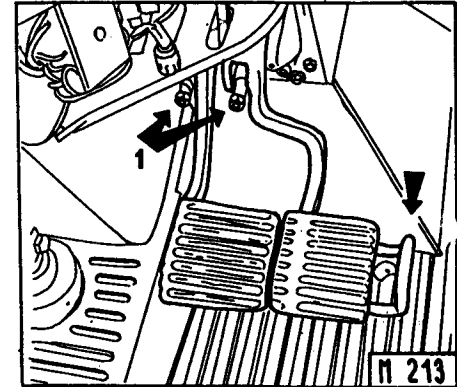
ADJUSTMENT OF THE INJECTOR

Adjustment is carried out with help of the test equipment NV 50 or the portable test equipment NV 251 which enable to test the injector directly on the engine without its disassembling. The adjustment and testing procedure are given in the Operator's Manual for these apparatuses which are supplied by Motorpal Jihlava. The opening pressure of the injector is 17.5-0.8 MPa for the engines Z 5201, Z 6201, Z 7201 and 7701 and 18.6 - 0.8 MPa for the engine Z 7301. Adjust at the upper limit of these ranges. If the injector has to

be removed when performing these checks, engine head bearing surfaces have to be cleaned. Repaired and adjusted injector has to be cleaned and lubricated with LT 2 silicone lubricant.

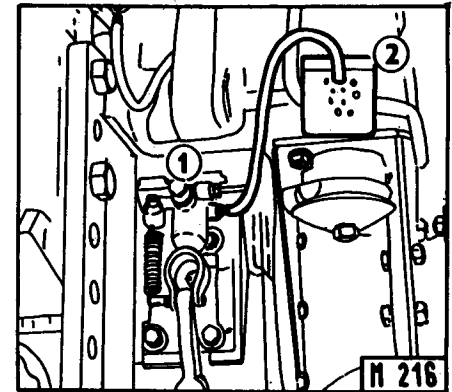
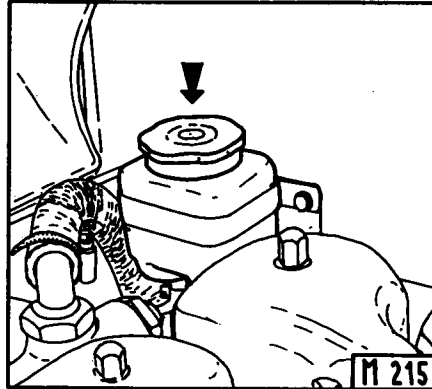
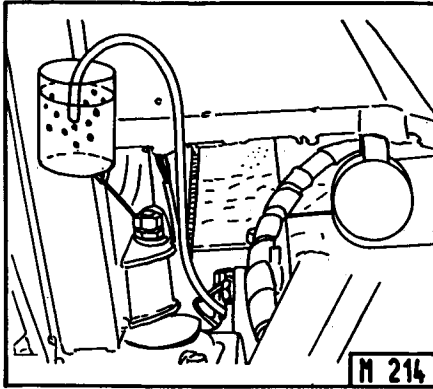
WARNING:

Beware of the correct injector position when installing it back onto the engine. The injector has to be positioned in the head so that distance between injector intake and stud does not exceed 1.5 mm.



BRAKE PEDAL FREE MOTION - ADJUSTMENTS

The correct gap between the piston rod of pedals and the master brake cylinder plunger is 0.5 to 1.0 mm which corresponds with 3.5 to 6.5 mm on the rear edge of the brake pedal plate. The adjustment should be carried out with the brake pedals separated from one another and after unlocking the adjusting nut (1) what the piston rod is screwed into.



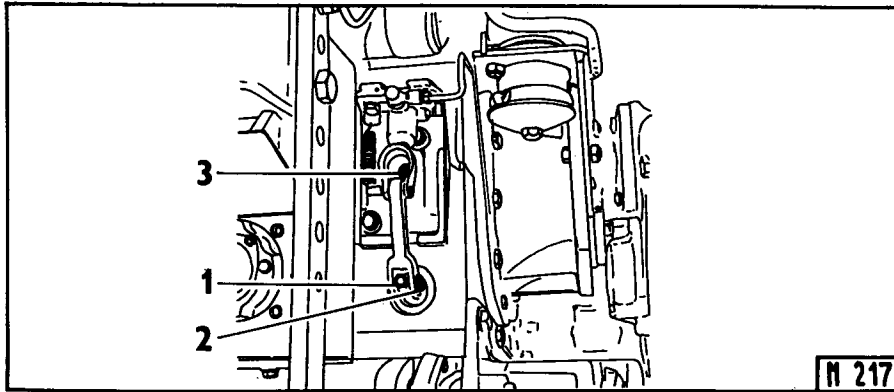
REAR SERVICE BRAKE SYSTEM - AIR PURGING PROCEDURE

The air purging procedure should be carried out with the brake pedals separated from one another and for each of wheels independently. Proceed as follows:

- Check the brake fluid level in the brake fluid reservoir, add fresh brake fluid up to the maximum possible level.
- Fit hose for brake bleeding on the air vent plug of wheel brake cylinder and submerge its another end to the bottom of transparent bowl partially filled up with brake fluid.
- Loosen the air vent plug about 1/4 of turn (as maximum), push down the brake pedal fully and tighten the air vent plug.
- Release the brake pedal and repeat the procedure until no air bubbles occur bleeding from the hose mentioned.

Keep eyes on the brake fluid level in the reservoir during the procedure to avoid air entering the brake system (1).

Take care to keep permanently the end of brake bleeding hose at the bowl bottom and submerged in the fluid. Hold the bowl as high as possible (2). It is necessary to change all the brake fluid volume in the brake system after two years of operation.

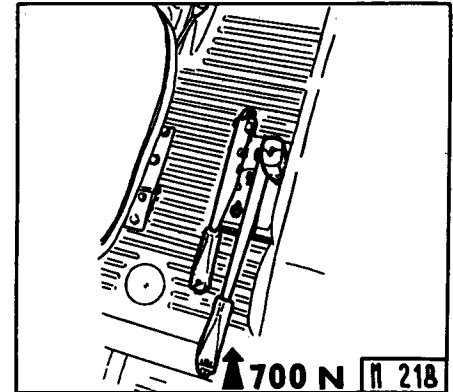


SERVICE BRAKES CHECK AND ADJUSTMENT

Check to be sure the lock bar of brake pedals is disengaged. Push the brake pedals down using the maximum force of 500 N.

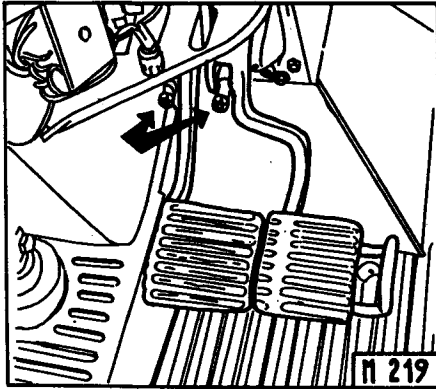
If the pedal almost bears against the stop formed as the lug at the bottom portion of brake support, adjustment of the service brake is inevitable. Tighten the nut (3) on the left-hand and right-hand sides to a torque of 10 Nm and loosen it one turn.

Test the brakes while moving and repeat the procedure.



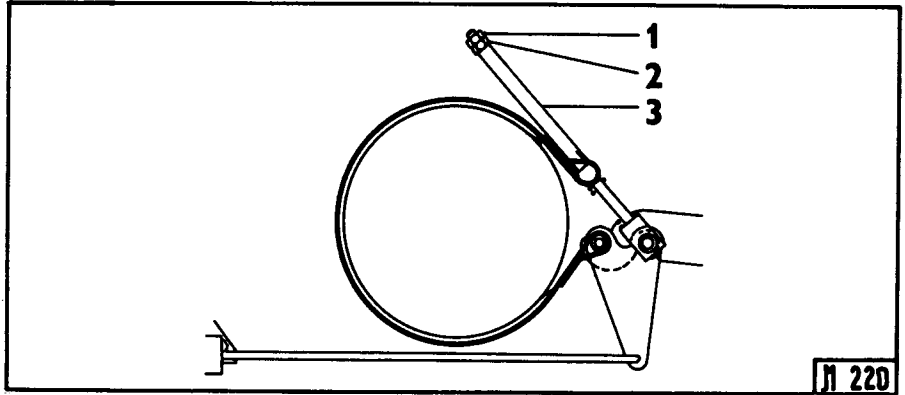
SERVICE AND PARKING DISK BRAKE ADJUSTMENT

The parking brake handle must be in its initial position (parking brake released) and the self-locking nut (1) in contact with the pin (2). If the clearance is found as being zero, loosen the nut (1) slightly (clearance of 0.3 to 1 mm). The adjustment should proceed as follows: Lift both rear wheels of tractor and let your assistant to turn one of them by hand. Tighten the adjusting nut at the same time until the wheel stops turning. Do not overtighten. Loosen then the adjusting nut about one turn and check to be sure the wheel can be turned freely. If the wheel is still dragging slightly, loosen the adjusting nut yet a half of turn - not more. Use the same procedure to adjust the service brake of the second wheel. The self-locking nut of parking brake must be in contact with the pin of disk brake handle. If not, re-adjust it. Take care not to turn the disk brake lever to its initial position. Test the brakes and loosen the nut on the side with more intensive brake effect, but one turn as maximum.



DRUM SERVICE BRAKE ADJUSTMENT

Should be carried out by means of the piston rods of master brake cylinders. It is essential to have a clearance of 0.5 mm (corresponding with 3.5 mm of pedal plate lift) on each of the two piston rods with the brake pedal separated prior to adjustment. The adjustment is then carried out with the pedals coupled by latch. If one of the brakes shows more intensive brake effect the piston rod nut of the respective master cylinder should be loosened and the piston rod loosened, too, so that the initial clearance of 0.5 mm is enlarged. This should be done until the brake effects of wheels are equalized. The maximum piston rod-to-master cylinder clearance may be 5 mm, the minimum - not below 0.5 mm. Lock the piston rods using locking nuts after adjustment.

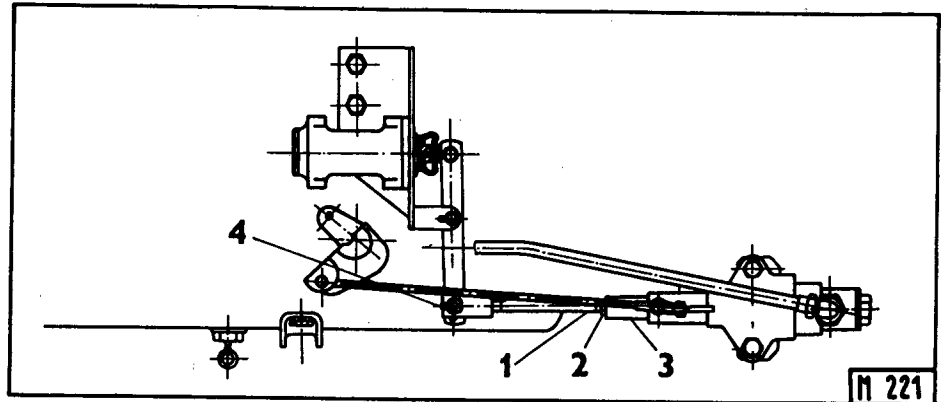


BAND BRAKE PARKING BRAKE ADJUSTMENT

1. Remove the cover of hydraulic control levers and loosen the adjusting nut on the RH band brake.
2. Loosen the adjusting nut(1) on the left-hand band brake.
3. Pull up the parking brake lever to engage the third tooth of ratchet and pawl. Adjust the nut (2) on the band brake to tension the brake band not to depress the spring element (3). When depressed, the ratchet and pawl can engaged the fifth tooth.
4. Adjust the other brake in the same way and test the brake for function.

CHECK ON SINGLE-LINE BRAKE SYSTEM

- Charge the air reservoir to the pressure of 590 ± 20 kPa and connect a pressure gauge to the coupler head.
- Push down the brake pedal using the force above 500 N or engage parking brake. The pressure must drop down from the value of 590 ± 20 kPa to zero.
- In the case of another results of inspection provide repair of the individual pneumatic brake elements and carry out adjustment of the brake valve tie rod after that.



- Screw the tie rod back about $1/4$ to $1/2$ of turn. Tighten to locking nut in this position and release the brake pedals.
- Check (with a trailer coupled) to be sure the trailer is released of brake sufficiently.

coupler head. When pushing down the pedal still more, the tie rod must displace more, too, about 2 mm - as minimum. Similarly, when pulling up the parking brake handle to engage the third tooth of ratchet and pawl, the pressure in the coupler head should drop to zero.

TIE ROD ADJUSTMENT

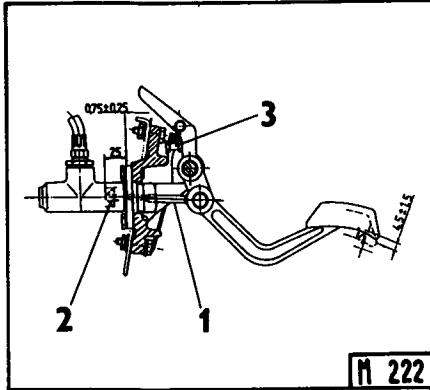
- Charge the air storage reservoir to the pressure of 590 ± 20 kPa and connect a pressure gauge to the coupler head.
- With the brake pedals pushed down using a force above 500 N loosen the locking nut (2) start to screw in the tie rod (1) slowly into the fork (3) until the pressure drops down to zero.

CHECK FOR FUNCTION

If the brake pedal is being pushed down slowly, the tie rod must displace about 1.2 to 2 mm. The pressure value should then drop to zero in the

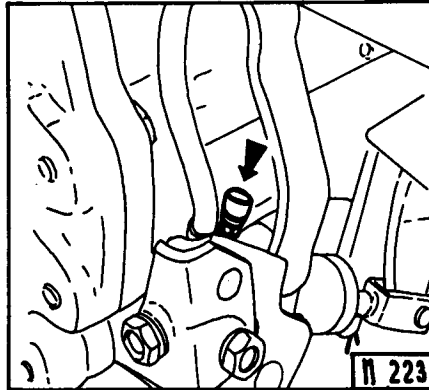


Connect the tie rod (1) to the second hole (4) on the lever from the bottom. Connection to the first or third hole can be used after considering the kind of trailer and testing the tractive unit.



CLUTCH PEDAL CLEARANCE ADJUSTMENT

The correct gap between the piston rod (1) of pedal and the master cylinder plunger (2) is 0.75 ± 0.25 mm which corresponds with 4.5 ± 1.5 mm on the pedal plate edge. Adjust the clearance by means of the adjusting screw (3).



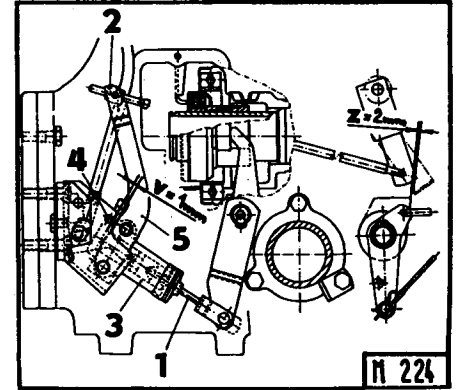
HYDRAULIC CIRCUIT OF CLUTCH - AIR PURGING PROCEDURE

The air purging procedure is similar to that for the rear brake system described above. The air vent screw of hydraulic circuit is located on the clutch release master cylinder (1).



The fluid reservoir should be re-filled with fresh fluid only.

It is necessary to replace all the capacity of brake fluid within the brake system after two years of operation, including the hydraulic circuit of clutch release.

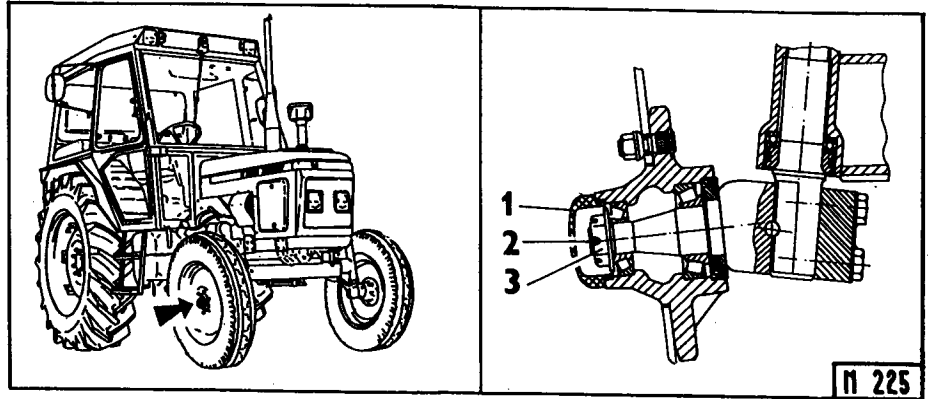


CLUTCH SLAVE CYLINDER AND GEARBOX BRAKE ADJUSTMENT

- Press down the clutch pedal from the most upper position to the distance of 20 mm (force on pedal 150 N as minimum).
- Adjust rod (1) by means of nuts (2) so that rod (1) is parallel with the clutch cylinder (3). During this adjustment the gearbox brake has to be in function. Adjust clearance "Z" to 2 mm.
- Press down clutch pedal fully. Clearance "V" between bracket pin (4) and lever (5) is to be adjusted to at least 1 mm.

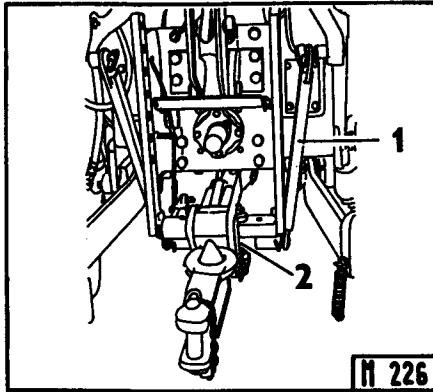
ENGINE CLUTCH ADJUSTMENT

All the three travel levers are in the same plane and bear against the bearing of clutch-release sleeve. If the clearance of one or two levers from bearing is more than 0.15 mm, use the nuts to adjust the levers for contact with bearing. Slippage indicates full wear of clutch plate. Change and adjust the clutch to the following value with the tractor still disassembled. Use the nuts to set up the travel levers to 25 mm from the counterbore on clutch shield. The difference may be 0.15 mm, as maximum. After engine/transmission re-assembly push the clutch pedal 5-times down to the stop.



FRONT WHEEL TAPERED ROLLER BEARINGS - AXIAL PLAY ADJUSTMENT
TRACTORS Z 3320, 4320, 5320, 6320, 7320.

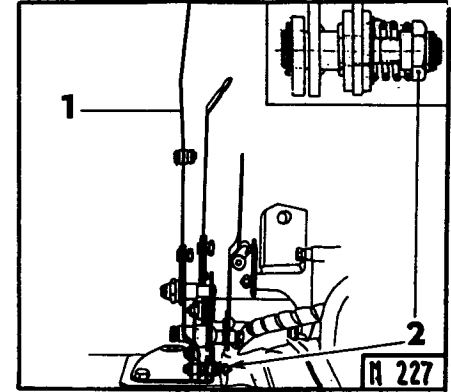
- Block the tractor to prevent any motion, raise and support the front axle.
- Dismantle the bearing cover (1) and remove the cotter pin (2) from the slotted nut (3).
- Tighten the slotted nut (3) to a torque of 15 Nm.
- Loosen the nut about 180° and use a wooden mallet for tapping on the wheel hub to release the bearing.
- Tighten the slotted nut (3) to a torque of 3 to 5 Nm. The wheel must turn over without evident play but also without evident dragging. (The hub sealing has a certain resistance to motion - take it into consideration).
- Lock the slotted nut using a new cotter pin.
- Screw on bearing cover (1).



SINGLE-AXLE TRAILER SUSPENSION ADJUSTMENT

Use the hydraulic control lever and select the positioning mode "P". Lift the hydraulic lifting arms to the highest position (the centres of arm journals are at the height of 219 ± 7 mm from the upper surface of main transmission casing). Adjust the telescopic tie bars (1): connect the towing tongue to the lower eye and rotate the upper eye to the right one or two revolutions to shorten the tie bar, step by step. Check to find after each shortening whether the supporting

hooks and the journal (2) of towing hook can engage. After engagement, turn the upper portion of telescopic tie bars $1/2$ of revolution to the right still more. Then put the upper eyes on journals, fit on the washers and lock using pins with rings. Having completed the adjustment and the hydraulic arms lifted fully check to be sure that there exists the minimum gap of 2 mm between the supporting hooks and the journal of each hook (lift the towing hook by hand after finding this gap). This gap provides engagement of the supporting hooks without the towing hook bearing against its carrier and thus without undesirable load of the hydraulic pump. The positions of hydraulic arms can differ from one another. The lengths of both telescopic tie bars should be adjusted so that the tow hook of suspension will not be lifted from one side only.

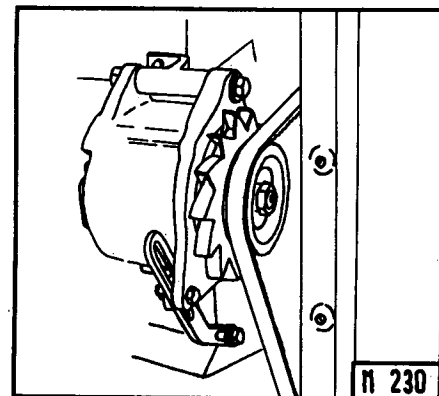
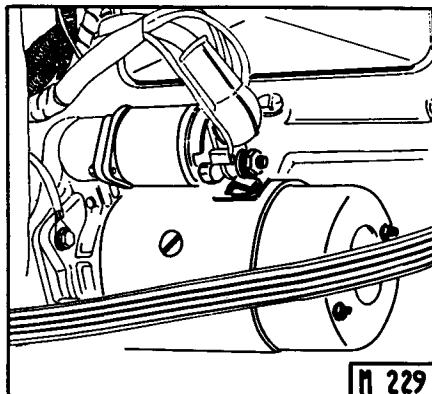
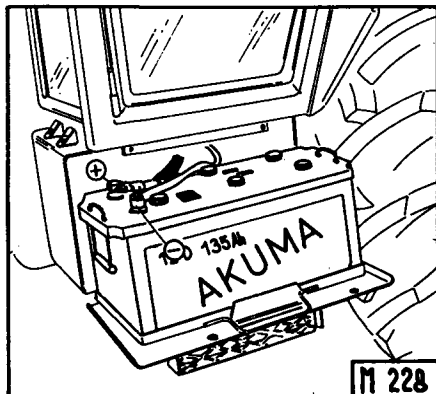


INNER HYDRAULIC CIRCUIT LEVER CONTROL FORCE ADJUSTMENT

Adjust inner hydraulic circuit lever friction (1) by tightening nut (2) so that with any selected position of the inner hydraulic circuit lever with the selected hydraulic control position the lever does not lower by itself. If this results into a gap between nut and safety ring that is smaller than a width of two washers, adjust the gap for installing two washers.

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Be cautious when repairing electrical installation and especially when handling the battery to avoid any contact of electrolyte with skin or clothes.



ELECTRICAL SYSTEM

Rated voltage	12 V
(pole "-" connected to frame)	
Battery AKUMA (VARTA)....	12 V/135 Ah
Alternator including built-in voltage controller	14 V
	55 A
Starter (3)	12 V
	2.9 kW
Alternator drive Vee belt	AVX 13-1175 LA

ESSENTIAL ITEMS OF SERVICE INFORMATION

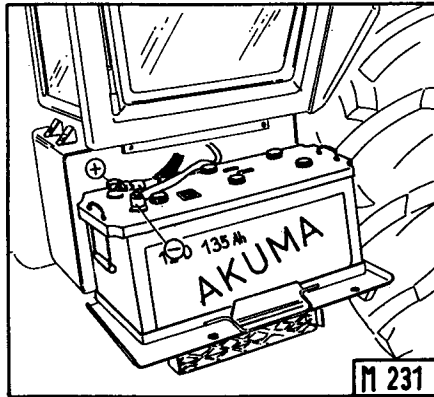
The battery "minus" pole must be connected to the tractor frame while the "plus" pole - to the alternator. If connected in the reversed manner, the battery could destroy all the solid-state devices of alternator.

When starting the tractor engine from an auxiliary power source with jumper cables always connect "plus" to "plus" and "minus" to "minus".

When replacing any device or component of charging circuit disconnect the battery from the tractor frame (-) in advance to preclude any random short circuit on the terminal clamps.

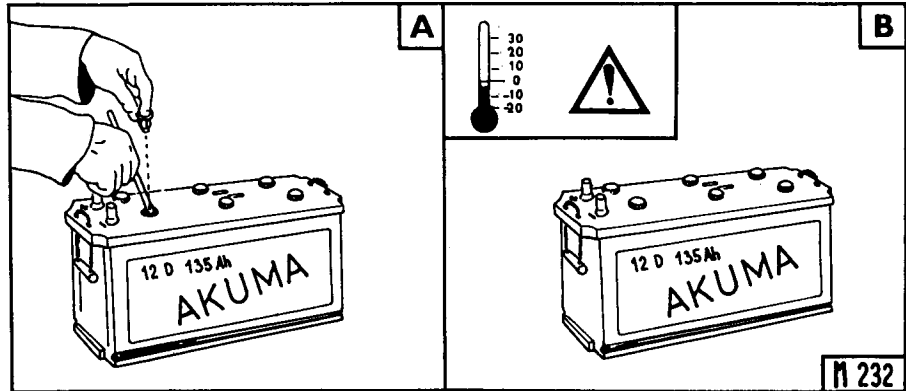
CAUTION: Always disconnect battery frame ground cable before doing any repair on starter. Do not start engine by shorting across starter terminals. Machine will start in gear if normal circuitry is bypassed. Never start engine while





BATTERY

The battery is accessible after removal of the battery cover screws and of the step which can be tilted away together with the cover. The battery can be lifted up on this cover. A battery disconnect switch can be installed optionally. Location: On the cover under the clutch pedal above battery.



BATTERY MAINTENANCE

The battery requires the attention to be paid it mainly in the summer time when increased evaporation occurs. Inspect the correct fastening, reliable cable connections, cleanness and electrolyte level every two weeks, not later (every 4 weeks in the winter season). Use only distilled water to maintain the electrolyte level 5 mm above the separators (A). Re-fill the distilled water before driving, on principle, to provide proper mixing with electrolyte. Maintain the electrolyte density at 1.28 g.cm^{-3} which corresponds with 32 °Bé (1.23 g.cm^{-3} , i.e. 27 °Bé in tropical regions). Electrolyte in severely discharged battery can get frozen in the winter time and thus destroy the battery (B). Therefore, never leave the battery discharged. Clean the oxidized cable clips and coat them with slight layer or grease (every 100 service hours in the summer time). Follow the battery manufacturer's instructions applicable to.

If the battery has been put into operation properly and the electrolyte density at a fully charged condition has been set to 1.28 g.cm^{-3} , then the condition of the battery is given by the electrolyte density according to the following table:

Battery condition (%)	Electrolyte density (g.cm^{-3})
100	1.28
70	1.23
50	1.20
20	1.15
discharged	1.12

The density values are valid for 25 C electrolyte temperature. If the electrolyte temperature drops by 15 C, the measured values are higher by 0.01 g.cm^{-3} .

The battery is charged in two stages:

1. By 15 A current up to point of bubbling (14.4 V).

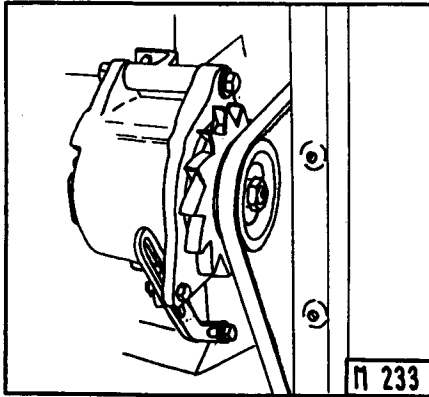
2. Continue with a 7.5 A current up to the fully charged condition according to the electrolyte density value in the table shown.

If you do not mind the charging time, the battery can be charged by a single 7.5 A current during the whole charging time.

SAFETY INSTRUCTIONS FOR WORKING WITH BATTERY

1. Protect your eyes with goggles or a protective shield. If the eye gets into contact with the electrolyte rinse the eye with a stream of clean water for a few minutes. Visit a doctor.
2. The electrolyte is caustic. Use protective gloves when handling with the battery, protect your skin and clothes. Areas that get into contact with the electrolyte are to be neutralized by soap water and rinsed with a stream of clean water.
3. Make sure children do not have access to the battery and electrolyte.

4. It is prohibited to work with an open fire or to smoke. Do not operate any equipment that could be a source of sparks.
5. When the battery is being charged hydrogen is being produced. This together with air creates an explosive mixture. Explosion could occur because of sparks resulting from handling with terminals while charging circuit is switched on.
6. A battery that has been put out of use is an ecologically dangerous waste - leave the disposal to the experts (service network).

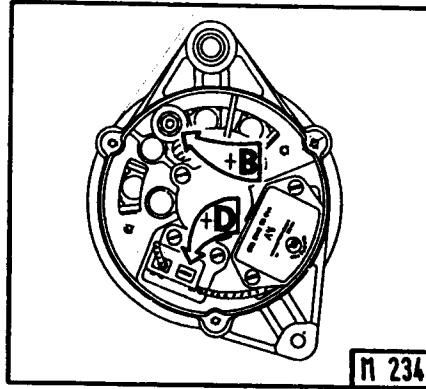


ALTERNATOR

The alternator is on the engine right-hand side. The check for battery charging is provided by means of the red indication lamp as located in the instrument panel. The faulty lamp (12 V, 2 V) should be replaced as soon as possible.

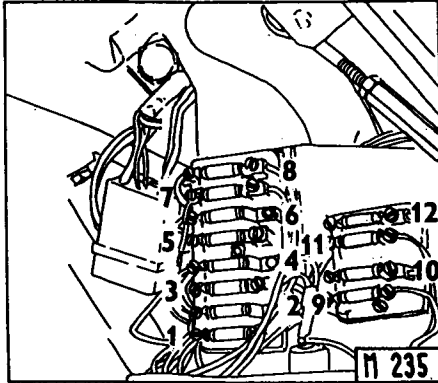


When electrical arc welding is used with tractor repairs, disconnect all the conductors from the alternator. Avoid short circuit to the conductor "+B".



ALTERNATOR MAINTENANCE

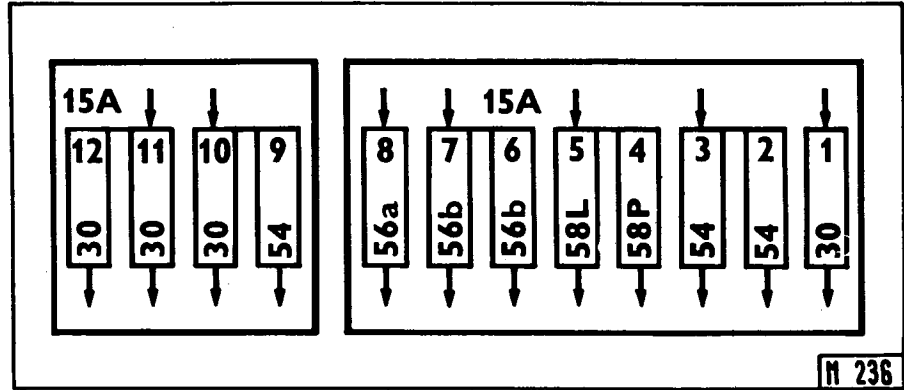
- Protect the alternator against water and Diesel oil penetration when washing up and cleaning the tractor.
- The alternator must not be disconnected while the engine is running.
- The alternator must never be running idle, i.e. with the conductor disconnected from the terminal "+B" and the terminal "+D" connected. Such a condition would increase the alternator voltage excessively with an increase of engine speed which in turn could destroy the solid-state devices of alternator.
- No alternator terminal clamp must be short-circuited during operation.
- The alternator must not be excited additionally. The solid-stated devices would be damaged consequently.
- Take care of perfect and reliable electrical contact on the connecting terminals (clamps) and reliable frame connection of alternator.



FUSE BOX

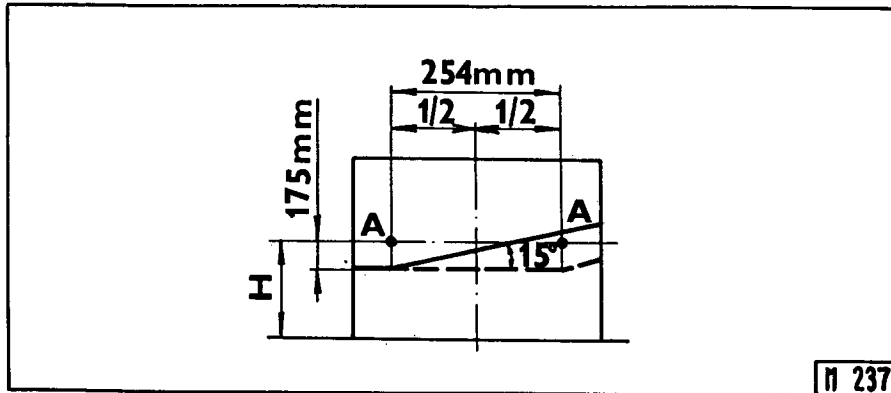
Open the right-hand cover of steering bracket to get access to this box. The main fuse box has eight poles. Tractors with ROPS cab have another four-pole fuse box installed near the main fuse box.

All the fuses have the rated value of 15 A.



ELECTRICAL CONNECTIONS OF FUSES WITHIN THE FUSE BOX

- 1 - Brakes, headlamp flasher, acoustic horn, warning lights, P.T.O shaft clutch switch.
- 2 - Turn signal lights.
- 3 - Hand-lamp socket, power supply of instrument and indication lamps.
- 4 - RH tail and clearance lights, instrument panel lights, working headlights.
- 5 - Left-hand tail and clearance lights, licence plate illumination.
- 6 - Right-hand lower beam headlight in radiator grill or on the ROPS cab roof.
- 7 - Left-hand lower-beam headlamps in radiator grill or on the ROPS cab roof.
- 8 - Upper-beam headlamps and upper-beam light indication lamp.
- 9 - Front windshield wiper/washer, rear windshield wiper, control of cab heating and ventilation, switching-on relay for rear windshield heating.
- 10 - Cab ceiling lamp, power supply of heating and ventilation fans.
- 11 - Power supply for heating and ventilation.
- 12 - Power supply for rear flood lights installed on the cab roof (VAD cab).



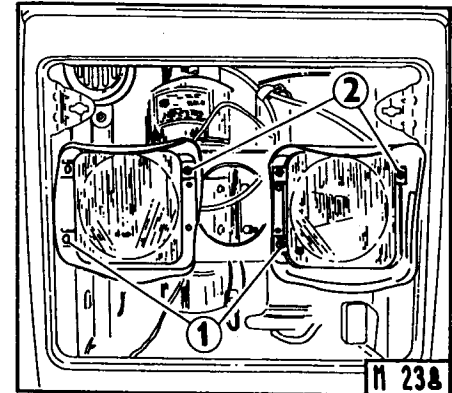
CHECK FOR HEADLIGHT ADJUSTMENTS IN RADIATOR GRILL

The adjustment should be checked and corrected when either lens or lamp bulb has been changed.

When testing the headlamps towards a testing wall the tractor must be standing on a horizontal plane and the tires inflated to the specified pressure.

The basic vertical setting for lower beam of a headlamp installed in the radiator grill (as measured at rest and with the tractor running weight) - 3.5 %.

- Tractor headlamp distance to the testing wall - 5 m
- Height of headlamp center above pavement (H). Subtract 175 mm from this value and draw a line parallel to ground on the wall.
- Check and adjust (if necessary) the centres of light areas to be in the points (A) with the high-beam lights.
- The low-beam light/dark boundary must be below the line drawn or on that line, as maximum. The RH portion of boundary should direct 15° upwards. The solid line in figure is valid for the LH headlamp, the dashed line - for the RH one.

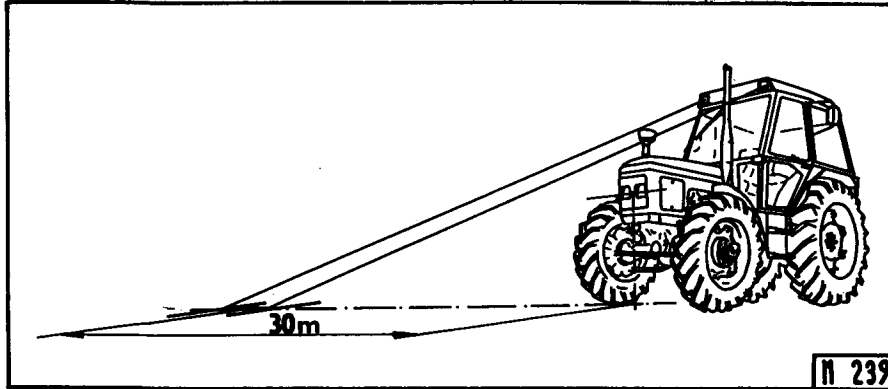


HEADLAMP ADJUSTMENTS IN RADIATOR GRILL

The adjusting screws are accessible after front grill screen removal.

- 1 - adjusting screw for vertical direction of beam
- 2 - adjusting screw for horizontal direction of beam

Either headlamp should be set up separately. The lamps can be removed and changed from the rear side of reflector.



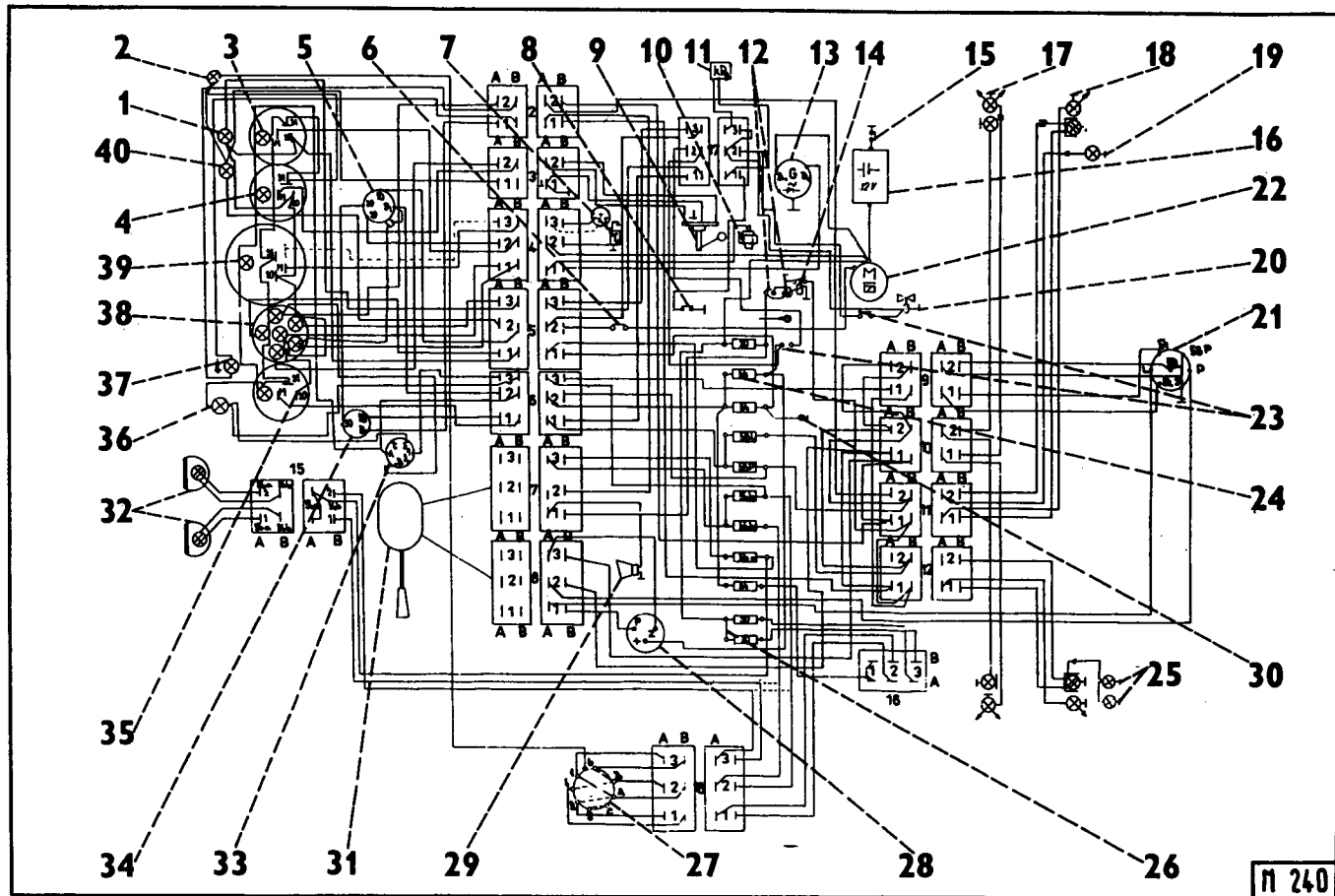
INSPECTION OF CAB ROOF HEADLAMP ADJUSTMENTS

Concerning vertical setting of headlamps, none of the points which falls within the illuminated pavement plane to the left of the vertical plane passing through the headlamp center must be in a distance exceeding 30 m from the front contour of tractor. Concerning the horizontal setting direction, the headlamp beam must be parallel to the longitudinal tractor axis of symmetry.

The inspection for headlamp adjustments should be carried out when the tractor has its running weight.

CAB ROOF HEADLAMPS ADJUSTMENT

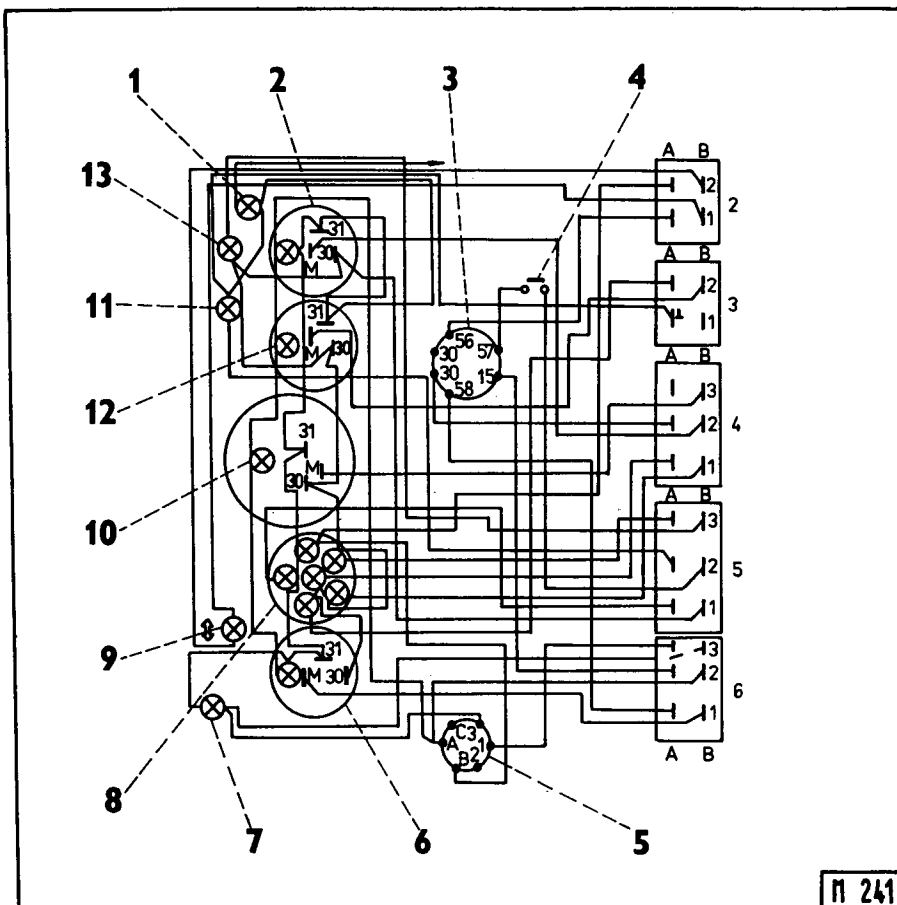
The procedure is identical with that used for the radiator grill headlamps.

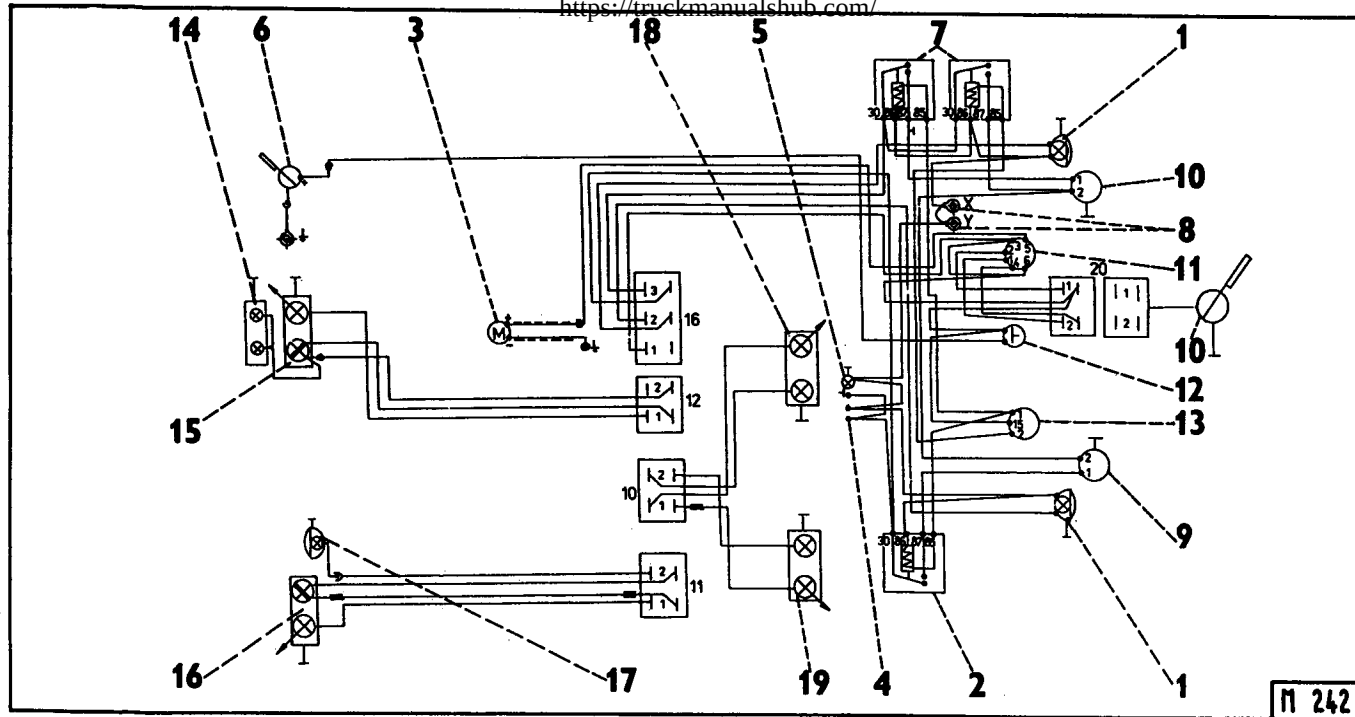


1. Minimum air pressure signal lamp
2. Asymmetric roof headlamps signal light
3. Coolant temperature gauge
4. Fuel gauge including minimum level warning lamp
5. Steering lock
6. Starter disable contact
7. Coolant temperature transducer
8. Parking brake indicator
9. Float
10. Engine oil pressure warning light
11. Air pressure transducer including warning contact
12. Stop lamps switch
13. Alternator
14. Booster relay
15. Battery disconnect switch
16. Battery
17. Turn signal, front
18. Turn signal, rear
19. Working flood-light
20. Electromagnetic valve of P.T.O. shaft clutch
21. Seven-pole trailer socket
22. Starter
23. P.T.O. shaft clutch switch
24. Eight-position fuse box
25. Licence label illumination
26. Four-pole fuse box
27. Radiator grill-roof change-over switch
28. Turn signal flasher unit
29. Horn
30. Hand-lamp socket
31. Turn signal, headlamps and horn switch
32. Radiator grill headlamps
33. Flood-light and fog light switch
34. Engine start switch
35. Pressure gauge
36. Fog lights signal lamp
37. Flasher control light
38. Instrument screen
39. Tachometer with service hour meter
40. P.T.O. shaft indicator

ELECTRICAL INSTALLATION OF Z 3320 - Z 7340 (WITHOUT CAB) - INSTRUMENT PANEL WIRING DIAGRAM
INCLUDING SELECTOR SWITCH
<https://truckmanualshub.com/>

1. Asymmetric roof headlamps signal light
2. Thermometer
3. Selector switch
4. Start push.button
5. Flood-light and fog light switch
6. Pressure gauge
7. Fog light signal lamp
8. Instrument screen
9. Flasher control light
10. Tachometer and service hour meter
11. P.T.O. shaft indicator
12. Fuel gauge
13. Pressure gauge





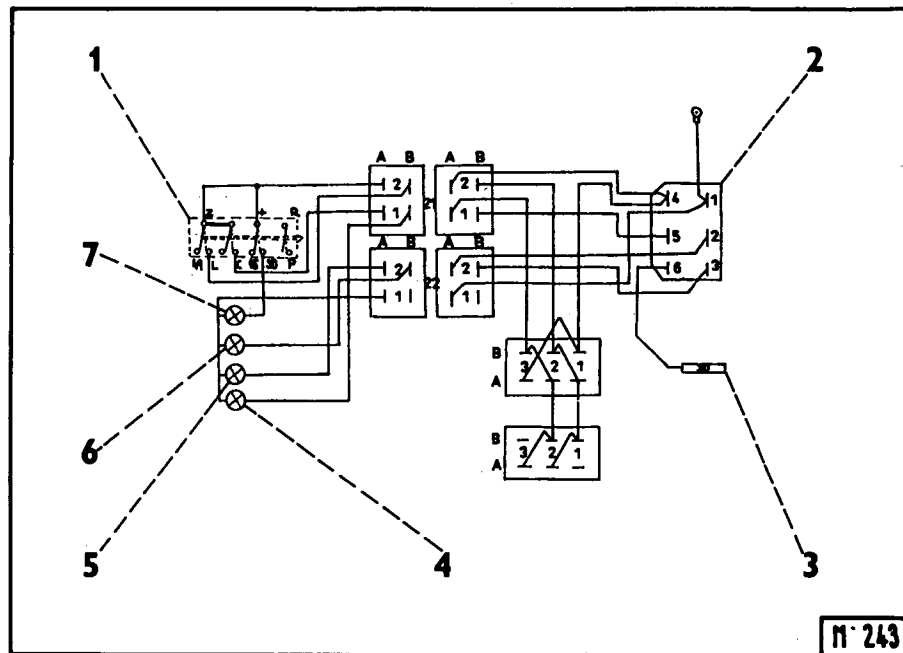
1. Roof flood-light
2. Booster relay
3. Windshield washer motor
4. Radio
5. Ceiling light
6. Rear windshield wiper
7. Relay

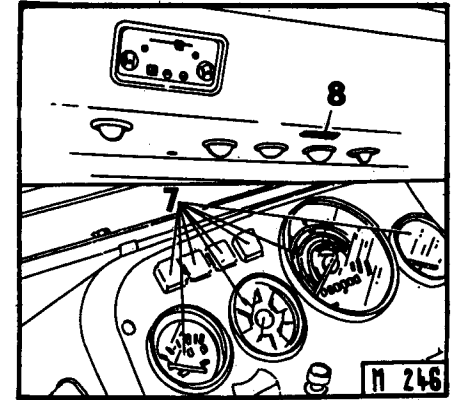
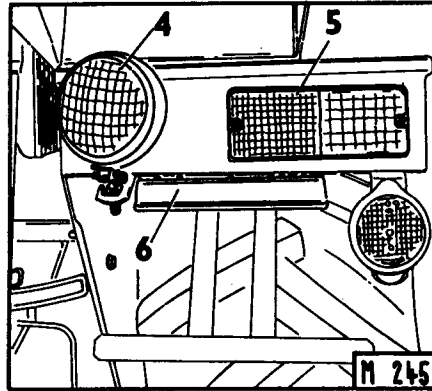
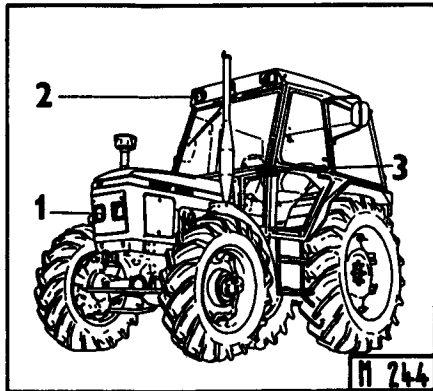
8. Frame connection points
9. Fan
10. Front windshield wiper
11. Viper speed selector
12. Rear windshield wiper selector
13. Fans selector

14. Licence label illumination
15. Left rear light
16. Right rear light
17. Vork light
18. Left front light
19. Right front light

WARNING LIGHTS ELECTRICAL INSTALLATION DIAGRAM OF Z-3320 - 7340

1. Warning light switch
2. Flasher
3. Fuse
4. Tractor turn signal indicator
5. 1st trailer turn signal indicator
6. 2nd trailer turn signal indicator
7. Warning lights indicator





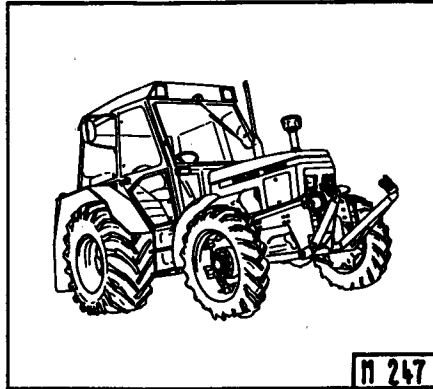
LIST OF LAMP BULBS USED

- 1 - Front asymmetric headlamps
12 V, 45/40 V, with P 45t base
- 2 - Asymmetric headlamp on cab
12 V, 45/40 V, with P 45t base
(only lower beam light filament is connected to)
- 3 - Front combined headlamps
12 V, 21 V, with BA 15s base
for turn signal lights,
12 V, 10 V, with BA 15s base
for clearance lights

- 4 - Flood-light
12 V, 55 V - H 3
- 5 - Rear combined lamp
12 V /21/5 V, with BAY 15D base
for tail and stop lights,
12 V, 21 V, with BA 15s base
for turn signal lights
- 6 - Licence plate illumination
lights
2x 12 V, 5 V, with S 8.5 base

- 7 - Instrument panel
turn signal control lights
12 V, 4 V, with BA 9s base
other pilot lamps
12 V, 2 V, with BA 9s base
- 8 - Cab dome illumination
12 V, 5 V, with S 8.5 base

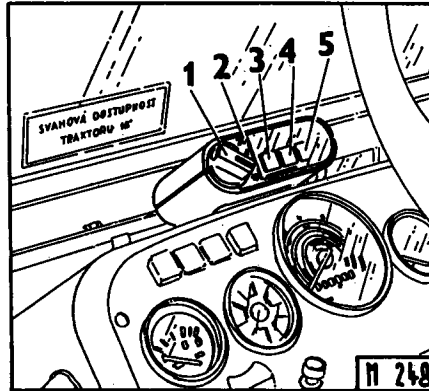
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Inclinometer	180
Utilization of tractor for aggregation	182
Essential instruction for tractor HORAL operation	183



DECLINE ACCESS CAPABILITIES OF TRACTOR

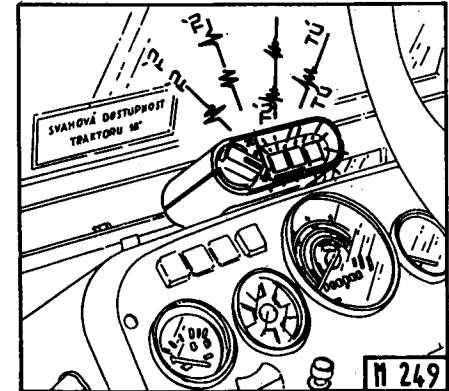
The inclinometer provides optical and acoustic signalling of tractor banking in both longitudinal and transverse directions. The decline access capabilities of tractors are 11° .

The tractors Z 5340 HORAL and Z 6340 HORAL equipped with an inclinometers and with the set-up rear wheel track of 1790 mm may operate on grades up to 18° .



TYPE DSH-606 INCLINOMETER

- 1 - Selector switch knob
- 2 - The scale of grade access availability (13° , 15° , 17° and 20°) for train (tractor + agricultural machine).
- 3 - Green pilot lamp signalling the safe grade.
- 4 - Yellow pilot lamp - spare of safety.
- 5 - Red pilot lamp - for signalling the threshold of grade access capability.



INCLINOMETER TESTING

- Turn over the selector switch to either TEST positions in success
- If the inclinometer function is correct, all the pilot lamps must be on and the warning horn must sound in the TEST positions of switch.
- Having tested the correct function turn over the selector switch to the position corresponding with the grade access capability.

INCLINOMETER SERVICE

manufacturer provides the inclinometer service.

TABLE I

Signalling category	Climatic conditions	Threshold of grade access availability (red pilot lamp)
I	wet	13°
II	dry	15°
III	dry	17°
IV	dry	20°

TABLE II

Signalling band	Pilot lamp colour	Kind of signalling
Zone of safety	green	optical
Spare of safety	yellow	optical
Threshold of grade access capability	red	optical
Warning signal	-	intermittent acoustic

The signalling bands mentioned in TABLE II are applicable to all 4 stages of signalling as given in TABLE I.

INCLINOMETER ATTENDANCE AND MAINTENANCE

After setting up the grade access availability threshold value the inclinometer requires no other attendance.

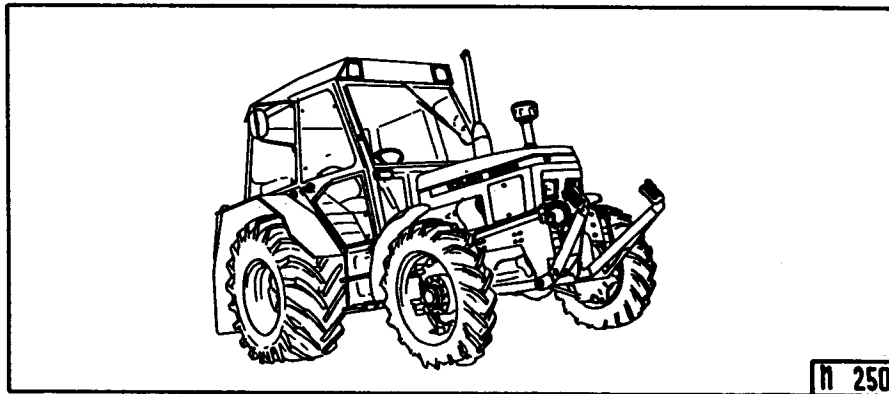
The green pilot lamp starts to light together with the other indication lamps as soon as the key is inserted in the engine start switch.

The yellow pilot lamp (spare for safety) starts to light when a tractor incline is 2° to 3° below the threshold value (red pilot lamp start) is achieved.

The warning acoustic signal starts to sound as soon as the threshold value of red pilot lamp is exceeded by 1.5° to 3°.

The inclinometer maintenance consists in replacement of faulty lamp bulbs only.

It is recommended to subject the inclinometer to the diagnostic maintenance once a year (before the field work season). This maintenance consists in testing the correct function and the precision of setting up the moment when the red pilot lamp starts to signal the threshold value of grade access availability.



UTILIZATION OF TRACTOR FOR AGGREGATION

- with rotary drum-type cutter bar ŽRT -165 carried in the rear three-point suspension, or with disk-type cutter bar SP2-201 carried in the front one
- with self-picking carriage HORAL MV3 -022 attached in the multi-stage suspension
- with meadow clod crusher PB 3-023 carried in the rear three-point suspension
- with synthetic fertilizer distributor spreader DS-RCV-3A-H, couple to in the single-axle trailer tail bar

- with working machines - side delivery rakes carried either in front or in rear three-point suspension

SAFETY REGULATION AND OPERATING PRINCIPLES FOR ZETOR 5340 HORAL, 6340 HORAL ON SLOPING LANDS

Operation of a Z 5340 HORAL, 6340 HORAL tractor with aggregated machines on grades above 12° involves the risk of possible sideslip of train.

DECISIVE CRITERIA FOR BOTH TRACTOR AND TRAIN ON GRADES

- a) both longitudinal and transversal stability not only of tractor

- b) conditions of land what the tractor or train is to operate on, i.e. the soil sort and moisture, growth moisture, turf condition, plentiful of root system and unevenness of land

- c) operator's experience and knowledge of local conditions
- d) the degree of land surface damage due to slippage of wheels
- e) the risk of tractor or train sideslip is increasing with moisture, grade area and not binded turf,
- f) operator's working position
- g) sensible control of the train, at start, stop speed shifting

ESSENTIAL INSTRUCTIONS FOR OPERATING THE TRACTORS Z 5340 HORAL, Z 6340 HORAL AND THE PARTICULAR AGGREGATED MACHINES

1. Before starting engagement on tractor Z 5340 HORAL, Z 6340 HORAL, the appointed operator must pass a physician examination aiming especially at the mobile system including backbone. Regular preventative examinations are recommended once a year.
 2. When using the tractors Z 5340 HORAL, Z 6340 HORAL on grades, the operating mode should be observed, as follows:
 - a) The maximum working hours of operator should not exceed 6 hours per day (is understood: while working on grades),
 - b) 10 to 15 minutes interruption for relaxation must be held after maximum 3 hours,
 - c) the operator must be relieved of duty not later than after 6 working hours
 - d) two day for relaxation must be included after 5 working days.
 3. The technical state of tractor and especially of its tires, brakes and steering system must be very good.
 4. Before putting the machine into operation on a grade it is necessary to verify the possibilities of machine unit usage. Proceed, as follows:
 - select the place for verification so that nobody would be endangered immediately by impending sideslip even when going on,
 - the operator must get acquainted (a walk-around inspection being the best way) with the land ground selected for verification before riding to the grade
 - the earth moisture must be examined by digging up a soil pattern. The moisture can be evaluated:
 - dry - the earth can be rubbed to powder
 - wet - the earth can be spread
 - on a maximum grade permissible for the given train: manoeuvring should be verified according to a recommended method; 100 % slippage and sideslip of train is not permissible
- a) STRAIGHT PATH UP A SLOPE
 - riding forwards - stop + smooth starting
 - stop and sudden starting
 - b) STRAIGHT PATH DOWN A SLOPE
 - riding forwards with slow (sensible) stop
 - c) DRIVING TO A CIRCLE
 - riding down and up a slope accomplish driving in a circle with steering wheel in the far left or far right position at the speed up to 2 km/h
- Unexpected situations on a slope can be eliminated by the described verification of working conditions.

ESSENTIAL INSTRUCTIONS FOR OPERATING THE TRACTORS Z 5340 HORAL, Z 6340 HORAL AND THE PARTICULAR AGGREGATED MACHINES

5. The front driving axle must always be engaged when working on slopes. When a front disk cutter bar is used, the transmission of front driving axle must be in function even when roading.
6. The torque multiplier must not be used while riding down slopes.
7. When working on slopes, it is forbidden to use other front and rear axle tracks than those adjusted in factory - 1790 mm for front axle, 1800 mm for rear axle.
8. The ballast weights of tractor must not be removed when working on slopes. When a meadow clod cluster is used, the front three-point suspension must be equipped with the respective ballast weight specified for this suspension.
9. The differential lock must not be used when riding down slopes or steering to a turn. When driving straight forwards, the differential lock may be used, but only for a short time in inevitable cases.
10. The grade availability of a tractor + agricultural machine train as well as the highest permissible speed gear (in dependence on the slope area and the soil moisture) are given in the respective Table III. The data and instructions are applicable to tractor Z 5340 HORAL, Z 6340 HORAL equipped with the inclinometer DSH 026. The heavier ground and imperfect connection of growth under wet conditions can cause undesirable injur of land surface already on the slopes of 13'.
11. The correct function of inclinometer (signal lamps) should be verified before riding on slopes; the two change-over switch TEST positions should be tested for that purpose.
12. No other riders are allowed in the cab.
13. Fasten the seat belt securely when riding the tractor on slopes above 11'.
14. It is forbidden to ride with no gear speed engaged or with the pedal clutch pushed down.
15. When using some attached machines or implements it is necessary to observe the safety rules mentioned in operating manuals of the particular machines and to ride up or down slopes under marginal grade conditions (16° to 18°); turning on headlands by reversal along contour line.
Be especially careful to observe principles contained in the operating manual for rotary mower ŽTR-165. When using coupled machines the loads of which are varying due to changes in material volumes transported (with an auto-picking carriage HORAL), the riding technique should be chosen as follows:

- a) filling up (of the carriage, e.g.) should not start on the upper side of slope
 - b) emptying (of fertilizer distributor spreader, e.g.) should not start on the lower side of slope.
16. When working on grades above 11°, the maximum permissible total weight of a trailer or semi-trailer is reduced to 4500 kg (this value being also mentioned on the warning label located on the RH fender of rear axle).

17. The machines should be laid on in groups (at least two machines) for the possibility of mutual help in a case of emergency.
18. If the inclinometer signals exceeding of the maximum permissible slope, it is necessary to reduce the speed immediately and to leave the critical spot (while observing the principles of safety on slopes).



If a failure of inclinometer occurs, the machine must not be used on grades.

19. All tools and accessories transported in Z 5340 HORAL and Z 6340 HORAL cab must be properly secure in their place so that in case of an accident danger of injury caused by freely moving objects is prevented.

Tab.III

ZETOR 5340 HORAL, ZETOR 6340 HORAL
<https://truckmanualshub.com/>

DRY GROUND for use of machine train		Highest speed gear engaged	MACHINE APPLICATION	VET GROUND for use of machine train	Highest speed gear engaged
15 ⁰ - 16 ⁰	4 R		Fertilizer spreader DS (RCV - 3A) H	no	--
			Auto-picking carriage HORAL MV3-022 Smooth-wheel roller set PB 5-027 Liquid fertilizer spreader RM6-014		
	5 R		Rotary mower ŽTR-165 modif.9 Face rotary mower SP2-201 Rotary mower SP9-061 Face counter-rotating mower SP2-213 Meadow knife-type harrow PB4-102 Fork-type hay tedder OZ-4A, SPA-039 Side delivery rake SB-4H Sprinkler HSU-1000 Three-share rotary plough PH1-441	13 ⁰	4 R
17 ⁰ - 18 ⁰	4 R		Meadow-pasture clod-crusher PB 3-023		
	5 R		Fork-type hay tedder OZ - AA Side delivery rake SB - AA Tedder - rake OS - 250, SP- 066 Rake SP 4 078 Sowing machine SE 1055 Universal tedder/rake SO-2U, SP407		
186	20 ⁰	5 R	Max. grade capability Z 5340, 6340 HORAL		

Performance data - engines Z 5201, Z 6201, Z 7201, Z 7701, Z 7301	188
Main performance data of tractors Z 3320	190
Main performance data of tractors Z 3340	194
Main performance data of tractors Z 4320	199
Main performance data of tractors Z 4340	203
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Main performance data of tractors Z 6320	218
Main performance data of tractors Z 6340, Z 6340 HORAL.....	223
Main performance data of tractors Z 7320	228
Main performance data of tractors Z 7340	233

PERFORMANCE DATA - ENGINES Z 5201, Z 6201, Z 7201, Z 7701, Z 7301

<https://truckmanuals.ru/>

Tractor type	Z 3320/3340	Z 4320/4340	Z 5320/5340 Z 5340 HORAL	Z 6320/6340 Z 6340 HORAL	Z 7320/7340
Engine type	Z 5201	Z 6201	Z 7201	Z 7701	Z 7301
Engine performance	four-stroke, direct-injection Diesel engine				
Engine arrangement	straight-type, vertical, water-cooled				
Number of cylinders	3	4	4	4	4
Cylinder displacement (cm ³)	2696.5	3456	3595	3922	3922
Cylinder bore x stroke..... (mm)	102 x 110	100 x110	102 x110	102 x 120	102x120
Rated speed (min ⁻¹)			2200		
Cylinder sequence	1-3-2			1-3-4-2	
Compression ratio			17		
Maximum overspeed (min ⁻¹)			2410		
Low idle (min ⁻¹)		700+50		600+50	600+50
Rated power output (kW)	33.1	41.8	46	50	57
Maximum specific fuel consumption at the power output specified (g.kW ⁻¹ .h ⁻¹)	251	249	246	245	242
Engine lubrication	forced-feed splash lubrication				
Max. engine oil consumption after 100 service hours of running-in period (g.kW ⁻¹ .h ⁻¹)			0.8		1
Oil pressure at the rated engine speed and 90 °C of engine oil (MPa)			0.2 - 0.5		
Minimum oil pressure at engine speed of 700 min ⁻¹ and oil temperature of 80°C (MPa)			0.05		
Coolant temperature (°C)			80 - 95		

PERFORMANCE DATA - ENGINES Z 5201, Z 6201, Z 7201, Z 7701, Z 7301

<https://truckmanuals.ru/>

Tractor type	Z 3320/3340	Z 4320/4340	Z 5320/5340	Z 6320/6340	Z 7320/7340
Engine type.....	Z 5201	Z 6201	Z 7201	Z 7701	Z 7301
Valve gears			overhead valves (OHV)		
Oil filter			full flow		
Fuel filter			full flow		
Injection pump type	PP3M85K1e-3143	PP4M85K1e-3144	PP4M85K1e-3145	PP4M9K1e-3137	PP4M9K1e-3149
Governor, Type		RV 3M 350/1100-3303		RV3M 300/1100-3300	RV3M 300/1100-3309
Injector nozzle			DOP 160 S 430-1436		
Injector discharge					
pressure (MPa)			18.6 - 0.8		
Injection advance angle..... (°)			25 + 1		
Valve clearance setting					
cool engine - intake (mm)			0.25 ± 0.05		
- exhaust (mm)			0.25 ± 0.05		

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://truckmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 3 3 2 0								
		6.00 - 16		6.50 - 16		7.50 - 16				
		12.4-28	12.4-32	12.4-32	14.9-28	12.4-32	12.4-36	13.6-36	14.9-28	16.9-28
Main dimensions (mm) (tolerance $\pm 2\%$)										
Clearance length without suspension device		3308	3358	3358	3360	3358	3410	3435	3360	3395
Clearance length including suspension device		3630	3630	3630	3630	3630	3630	3630	3630	3630
Width with standard track of rear wheels		1800	1800	1800	1800	1800	1800	1800	1800	1854
Height to the mouth of upper exhaust (exhaust muffler extended, with exhaust flap valve and without flame trap)		2614	2628	2651	2653	2668	2683	2691	2670	2676
Tractor height up to upper cab edge (cab with roof opening)		2512	2555	2553	2560	2565	2610	2644	2569	2642
Height to steering wheel edge)		1752	1784	1796	1800	1805	1839	1857	1810	1831
Ground clearance										
- without suspension device (under front axle carrier)		462	462	494	494	517	517	517	517	517
- with suspension device (under the swinging tie bar fork in the lowest position)		280	347	337	347	330	401	440	340	389
Towing attachment height (to tail unit centre), 50 mm increments		623-823	690-890	680-880	691-891	673-873	744-944	783-983	683-883	724-924

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)
<https://truckmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 3 3 2 0								
		6.00 - 16		6.50 - 16		7.50 - 16				
		12.4-28	12.4-32	12.4-32	14.9-28	12.4-32	12.4-36	13.6-36	14.9-28	16.9-28
Swinging tie bar height (to inner bottom area of fork)		320	387	377	388	370	441	480	380	413
Towing attachment for single axle trailer (to contact area of hook)		371	433	426	435	421	487	523	431	474
P.T.O. shaft height		603	664	666	665	653	714	748	662	700
Front wheel track (tractor with HSS)	- standard	1450		1450		1425				
	- adjustable	1450,1525,1825		1450,1525,1825		1425,1500,1800				
(for agricultural operation)										
Rear wheel track	- standard	1425	1425	1425	1425	1425	1425	1425	1425	1425
	- adjustable in 75 mm increments	1350-	1350-	1350-	1425-	1350-	1350-	1350-	1425-	1425-
(for agricultural operation)		1800	1800	1800	1800	1800	1800	1800	1800	1800
Wheel base		2123	2123	2123	2123	2123	2123	2123	2123	2123
Outside diameter of turning circle with braking one wheel		7000+500		7000+500		7000+500				
Minimum turning circle diameter with braking one wheel		6600+500		6600+500		6600+500				

HSS - Hydrostatic steering

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://truckmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 3 3 2 0							
		6.00 - 16		6.50 - 16		7.50 - 16			
		12.4-28	12.4-32	12.4-32	14.9-28	12.4-32	12.4-36	13.6-36	14.9-28 16.9-28
WEIGHTS (kg) - standard (tolerance $\pm$ 5%)									
Tractor running weight with cab		2680	2710	2710	2730	2715	2745	2785	2735 2805
including: front axle load		885	885	885	885	890	890	890	890 890
rear axle load		1795	1825	1825	1845	1825	1855	1895	1845 1915
- open station (without cab)		2380	2410	2410	2430	2415	2445	2485	2435 2505
including: front axle load		810	810	810	810	815	815	815	815 815
rear axle load		1570	1600	1600	1620	1600	1630	1670	1620 1690
Maximum additional ballast weight									
- forward		155 (135+20)		155 (135+20)		155 (135+20)			
- backward		270	270	270	270	270	270	270	270 270
Water ballast in rear tires		2x125	2x140	2x140	2x190	2x140	2x160	2x180	2x190 2x215
MAX. PERMISSIBLE LOADS ON AXLES:									
WEIGHT (kg) - INFLATION (kPa)									
Front rigid axle with HSS									
(wheel track 1450 or 1425 mm)									
at max. speed									
30 km/h		--	--	1220-310		1300-280			
25 km/h		--	--	1410-310		1500-280			
20 km/h		--	--	1600-310		2010-280			
8 km/h		--	--	1600-310		2980-350			

HSS - Hydrostatic steering

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight) <http://www.alshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 3 3 2 0								
		6.00 - 16		6.50 - 16		7.50 - 16				
		12.4-28	12.4-32	12.4-32	14.9-28	12.4-32	12.4-36	13.6-36	14.9-28	16.9-28
Rear axle at maximum travel speed of										
30 km/h disc brakes		2550-170	2710-170	2710-170	3360-150	2710-170	2880-170	3230-160	3360-150	3600-150
25 km/h disc brakes		2730-170	2900-170	2900-170	3590-150	2900-170	3080-170	3450-160	3590-150	3600-150
20 km/h disc brakes		3060-170	3250-170	3250-170	3600-150	3250-170	3450-170	3600-160	3600-150	3600-150
8 km/h disc brakes		3570-215	3600-200	3600-200	3600-150	3600-170	3600-190	3600-160	3600-150	3600-150
25 km/h drum brakes		2730-170	2900-170	2900-170	3590-150	2900-170	3080-170	3450-160	3590-170	3600-150
20 km/h drum brakes		3060-170	3250-170	3250-170	3600-150	3250-170	3450-170	3600-160	3600-150	3600-150
8 km/h drum brakes		3570-215	3600-200	3600-200	3600-150	3600-170	3600-190	3600-160	3600-150	3600-150

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight.)

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 3 3 4 0				
		9.5 - 24			11.2 - 24	
		12.4-32	14.9-28	16.9-28	12.4-36	16.9-28
Main dimensions (mm) (tolerance $\pm 2\%$)						
Clearance length without suspension device and front ballast		3358	3360	3395	3400	3420
Clearance length including suspension device without front ballast weights		3630	3630	3630	3657	3657
Clearance length with suspension device and front ballast weights		3630	3630	3630	3657	3657
Width with standard track of rear wheels		1850	1850	1850	1850	1850
Height to the mouth of upper exhaust (exhaust muffler extended, with exhaust flap valve and without flame trap)		2704	2706	2717	2730	2755
Tractor height up to upper cab edge (with cab roof opening)		2590	2595	2611	2660	2642
Height to steering wheel edge		1823	1829	1850	1862	1868
Ground clearance - without suspension device (under front axle carrier)		386	386	386	410	410

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 3 3 4 0				
		9.5-24			11.2-24	
		12.4-32	14.9-28	16.9-28	12.4-36	16.9-28
- with suspension device (under the swinging tie bar fork in the lowest position)		313	323	366	395	360
Towing attachment height (to tail unit centre), 50 mm increments		657-857	667-867	710-910	731-931	698-898
Swinging tie bar height (to inner bottom area of fork)		353	363	406	419	384
Towing attachment for single axle trailer (to contact area of hook)		410	420	460	483	454
P.T.O. shaft height		646	655	692	713	689
Front wheel track						
- standard		1510, (1500 Carraro)			1510, (1594 Carraro)	
- adjustable (for agricultural operation)		(see chapter steering stops settings)			(see chapter steering stops settings)	
Rear wheel track						
- standard		1425			1425	
- adjustable in 75 mm increments (for agricultural operation)		1425-1800			1425-1800	
Wheel base		2140 (2070 Carraro)			2140 (2070 Carraro)	
Outside diameter of turning circle with braking one wheel		8500+500			8500+500	

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 3 3 4 0				
		9.5-24			11.2-24	
		12.4-32	14.9-28	16.9-28	12.4-36	16.9-28
Minimum turning circle diameter with braking one wheel		8200+500			8200+500	
WEIGHTS (kg) - standard (tolerance $\pm$ 5%)						
Tractor running weight with cab		3060	3080	3100	3110	3120
including: front axle load		1200	1200	1200	1220	1220
rear axle load		1860	1880	1900	1890	1900
- open station (without cab)		2760	2780	2800	2810	2820
including: front axle load		1140	1140	1140	1160	1160
rear axle load		1620	1640	1660	1650	1660
Weight of tractor equipped with Carraro axle - with cab		-	-	-	3090	3100
including: front axle load		-	-	-	1200	1200
rear axle load		-	-	-	1890	1900
- open station (without cab)		-	-	-	2790	2800
including: front axle load		-	-	-	1140	1140
rear axle load		-	-	-	1650	1660
Maximum additional ballast weight						
- forward		155+210			155+210	
- backward		270			270	

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 3 3 4 0				
		12.4-32	9.5-24 14.9-28	16.9-28	11.2-24 12.4-36	16.9-28
Water ballast in rear tires		2x140	2x190	2x215	2x160	2x215
MAX. PERMISSIBLE LOADS ON AXLES: WEIGHT (kg) - INFLATION (kPa)						
Front rigid axle with 1510 wheel track at max. speed						
30 km/h disc brakes			2000-235		2000-170	
25 km/h disc brakes			2230-235		2230-180	
20 km/h disc brakes			2500-250		2500-180	
8 km/h disc brakes			3000-330		3000-240	
Front rigid axle (1510 mm wheel track) and Cararo axle (1500 or 1594 mm tracks) at max. speed						
25 km/h drum brakes			2000-235		2000-170	
20 km/h drum brakes			2500-250		2500-180	
8 km/h drum brakes			3000-330		3000-240	

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://truckmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 3 3 4 0					
		9.5-24			11.2-24		
		12.4-32	14.9-28	16.9-28	12.4-36	16.9-28	
Rear axle at max. speed							
30 km/h	disc brakes	2710-170	3360-150	3600-150	2880-170		
25 km/h	disc brakes	2900-170	3590-150	3600-150	3080-170	3600-150	
20 km/h	disc brakes	3250-170	3600-150	3600-150	3450-170	3600-150	
8 km/h	disc brakes	3600-200	3600-150	3600-150	3600-190	3600-150	
25 km/h	drum brakes	2900-170	3590-150	3600-150	3080-170	3600-150	
20 km/h	drum brakes	3250-170	3600-150	3600-150	3450-170	3600-150	
8 km/h	drum brakes	3600-200	3600-150	3600-150	3600-190	3600-150	

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight) <http://www.traktorshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 4 3 2 0									
		6.50 - 16				7.50 - 16			7.50-20		
		12.4-36	14.9-28	16.9-28	16.9-30	12.4-36	13.6-36	16.9-30	16.9-30	16.9-34	
Main dimensions (mm) (tolerance $\pm 2\%$)											
Clearance length without suspension device		3545	3495	3530	3555	3545	3570	3555	3555	4005	
Clearance length including suspension device		3765	3765	3765	3765	3765	3765	3765	3765	3765	
Width with standard track of rear wheels		1800	1800	1854	1854	1800	1800	1854	1854	1854	
Height to the mouth of upper exhaust (exhaust muffler extended, with exhaust flap valve without flame trap)		2665	2652	2661	2670	2731	2690	2687	2738	2741	
Tractor height up to upper cab edge (with cab roof opening)		2612	2560	2597	2632	2636	2643	2629	2668	2675	
Height to steering wheel edge)		1830	1800	1821	1841	1878	1858	1850	1876	1900	
Ground clearance without suspension - without suspension device (under front axle carrier)		492	492	492	492	515	515	515	571	571	
- with suspension device (under the swinging tie bar for in the lowest position)		408	348	390	431	400	440	424	399	468	

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://tractormanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 4 3 2 0									
		6.50 - 16				7.50 - 16			7.50-20		
		12.4-36	14.9-28	16.9-28	16.9-30	12.4-36	13.6-36	16.9-30	16.9-30	16.9-34	
Towing attachment height (to tail unit centre), 50 mm increments		750-950	691-891	732-932	773-973	743-943	781-981	766-966	735-935	811-1011	
Swinging tie bar height (to inner bottom area of fork)		448	388	430	471	440	480	464	423	508	
Towing attachment for single axle trailer (to contact area of hook)		491	436	475	513	486	523	508	489	554	
P.T.O. shaft height		716	665	701	736	713	747	734	720	780	
Front wheel track											
- standard		1350 (light duty extensions)				1425 (heavy duty extensions)			1425(heavy duty ext)		
- adjustable		1450 (heavy duty extensions)									
(for agricultural operation)		1350,1500,1800 (light duty ext.)				1350,1425,1500,1800			1350,1425,1500,1800		
		1375,1450,1525,1825(heavy duty ext)				(heavy duty ext.)			(heavy duty ext.)		
Rear wheel track											
- standard		1425	1425	1425	1425	1425	1425	1425	1425	1425	
- adjustable in 75 mm increments		1350-	1425-	1425-	1500-	1350-	1350-	1500-	1500-	1500-	
(for agricultural operation)		1800	1800	1800	1800	1800	1800	1800	1800	1800	
Wheel base		2257				2257			2257		
Outside diameter of turning circle with braking one wheel		7100+500				7100+500			7100+500		

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://truckmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 4 3 2 0									
		6.50 - 16				7.50 - 16			7.50-20		
		12.4-36	14.9-28	16.9-28	16.9-30	12.4-36	13.6-36	16.9-30	16.9-30	16.9-34	
Minimum turning circle diameter with braking one wheel		6700+500				6700+500			6700+500		
WEIGHTS (kg) - standard (tolerance $\pm$ 5%)											
Tractor running weight with cab		2870	2860	2880	2930	2880	2915	2935	2935	3015	
including: front axle load		975	975	975	975	980	980	980	980	980	
rear axle load		1895	1885	1905	1955	1900	1935	1955	1955	2035	
- open station (without cab)		2570	2560	2580	2630	2580	2615	2635	2635	2715	
including: front axle load		910	910	910	910	915	915	915	915	915	
rear axle load		1660	1650	1670	1720	1665	1700	1720	1720	1800	
Maximum additional ballast weight											
- forward		155 (135+20)				155 (135+20)			155 (135+20)		
- backward		270	270	270	270	270	270	270	270	270	
Water ballast in rear tires		2x160	2x190	2x215	2x240	2x160	2x180	2x240	2x240	2x250	
MAX. PERMISSIBLE LOADS ON AXLES:											
WEIGHT (kg) - INFLATION (kPa)											
Front rigid axle with HSS (1450 or 1425 mm wheel tracks)											
at max. speed											
30 km/h disc brakes		1230-310				1300-280			1300-280		
25 km/h disc brakes		1410-310				1500-280			1500-280		

HSS - hydrostatic steering

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 4 3 2 0									
		6.50 - 16				7.50 - 16			7.50-20		
		12.4-36	14.9-28	16.9-28	16.9-30	12.4-36	13.6-36	16.9-30	16.9-30	16.9-34	
20 km/h disc brakes					1600-310			2010-280		2010-280	
8 km/h disc brakes					1600-310			2980-350		2980-350	
Front spring-mounted axle (for 1425 or 1450 mm tracks, HD extensions with locking) at max. speeds:											
30 km/h (spring mounted without locking)					1215-310			1215-210		1215-150	
25 km/h (SM without locking)					1215-310			1215-210		1215-150	
30 km/h (SM with locking)					1230-310			1400-280		1600-250	
25 km/h (SM with locking)					1410-310			1600-280		1800-250	
20 km/h (SM with locking)					1660-310			2010-280		2360-280	
8 km/h (SM with locking)					2460-390			2980-350		3000-350	
Rear axle at max. speed											
30 km/h disc brakes		2880-170	3360-150	3600-150	3600-150	2880-170	3230-160	3600-150	3600-150	3600-150	
25 km/h disc brakes		3080-170	3590-150	3600-150	3600-150	3080-170	3450-160	3600-150	3600-150	3600-150	
20 km/h disc brakes		3450-170	3600-150	3600-150	3600-150	3450-170	3600-160	3600-150	3600-150	3600-150	
8 km/h disc brakes		3600-190	3600-150	3600-150	3600-150	3600-190	3600-160	3600-150	3600-150	3600-150	
25 km/h drum brakes		3080-170	3590-150	3600-150	3600-150	3080-170	3450-160	3600-150	3600-150	3600-150	
20 km/h drum brakes		3450-170	3600-150	3600-150	3600-150	3450-170	3600-160	3600-150	3600-150	3600-150	
8 km/h drum brakes		3600-190	3600-150	3600-150	3600-150	3600-190	3600-160	3600-150	3600-150	3600-150	

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 4 3 4 0								
		11.2 - 24			11.2 - 24			12.4 - 24		
		12.4-36	16.9-28	16.9-30	12.4-36	16.9-28	16.9-30	13.6-36	16.9-30	16.9-34
Main dimensions (mm) (tolerance $\pm 2\%$)		Light duty front drive axle and Carraro axle			Přední hnací náprava těžká a náprava Carraro			Přední hnací náprava těžká a náprava Carraro		
Clearance length without suspen- sion device and front ballast		3410	3495	3520	3410	3495	3520	3535	3520	3570
Clearance length including sus- pension device without front ballast weights		3765	3765	3765	3765	3765	3765	3765	3765	3765
Clearance length with suspension device and front ballast weights		3765	3765	4035	4035	4035	4035	4035	4035	4035
Width with standard track of rear wheels		1850	1850	2795	1960	1980	1980	1980	1980	1980
Height to the mouth of upper ex- haust (exhaust muffler extended, with exhaust flap valve and without flame trap)		2736	2733	2742	2740	2737	2745	2772	2782	2796
Tractor height up to upper cab edge (with cab roof opening)		2666	2660	2675	2668	2663	2678	2700	2667	2715
Height to steering wheel edge		1866	1859	1877	1867	1860	1879	1899	1892	1923
Ground clearance - without suspension device (under front axle carrier)		370	370	370	374	374	374	406	406	406

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)
<https://truckmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 4 3 4 0								
		11.2 - 24			11.2 - 24			12.4 - 24		
		12.4-36	16.9-28	16.9-30	12.4-36	16.9-28	16.9-30	13.6-36	16.9-30	16.9-34
- with suspension device (under the swinging tie bar fork in the lowest position)		Light duty front drive axle and Carraro axle			Light duty front drive axle and Carraro axle			Light duty front drive axle and Carraro axle		
		377	364	400	376	362	399	406	385	447
Towing attachment height (to tail unit centre), 50 mm increments		721-921	708-908	744-944	720-920	706-906	742-942	750-950	723-923	784-984
Swinging tie bar height (to inner bottom area of fork)		417	404	440	416	402	439	446	409	471
Towing attachment for single axle trailer (to contact area of hook)		471	459	492	470	457	491	500	480	537
P.T.O. shaft height		704	692	728	703	691	727	734	714	768
Front wheel track										
- standard		1510, (1594 Carraro)			1510, (1594 Carraro)			1610, (1594 Carraro)		
- adjustable		(1650, 1745, 1800 Carraro only)			(1650, 1745, 1800 Carraro only)			(1650, 1745, 1800 Carraro only)		
(for agricultural operation)										
Rear wheel track										
- standard		1425			1425			1425		
- adjustable in 75 mm increments		1500-1800	1425-1800	1500-1800	1500-1800	1425-1800	1500-1800	1575-1800	1500-1800	1500-1800
(for agricultural operation)										
Wheel base		2274 (2204 Carraro)			2222 (2204 Carraro)			2222 (2204 Carraro)		
Outside diameter of turning circle with braking one wheel		8700+500			8700+500			8700+500		

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://truckmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 4 3 4 0								
		11.2 - 24			12.4 - 24			12.4 - 24		
		12.4-36	16.9-28	16.9-30	12.4-36	16.9-28	16.9-30	13.6-36	16.9-30	16.9-34
Minimum turning circle diameter with braking one wheel		Light duty front drive axle and Carraro axle			Light duty front drive axle and Carraro axle			Light duty front drive axle and Carraro axle		
VEIGHTS (kg) - standard (tolerance $\pm$ 5%)		8400+500			8400+500			8400+500		
Tractor running weight with cab		3240	3250	3300	3330	3340	3390	3395	3415	3495
including: front axle load		1300	1300	1300	1390	1390	1390	1415	1415	1415
rear axle load		1940	1950	2000	1940	1950	2000	1980	2000	2080
- open station (without cab)		2940	2950	3000	3030	3040	3090	3095	3115	3195
including: front axle load		1250	1250	1250	1340	1340	1340	1365	1365	1365
rear axle load		1690	1700	1750	1690	1700	1750	1730	1750	1830
Veight of tractor equipped with Carraro axle & with cab		-	-	-	3210	3220	3270	3275	3295	3375
including: front axle load		-	-	-	1270	1270	1270	1295	1295	1295
rear axle load		-	-	-	1940	1950	2000	1980	2000	2080
- open station (without cab)		-	-	-	2910	2920	2970	2975	2995	3075
including: front axle load		-	-	-	1220	1220	1220	1245	1245	1245
rear axle load		-	-	-	1690	1700	1750	1730	1750	1830

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)
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MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 4 3 4 0								
		11.2 - 24			11.2 - 24			12.4 - 24		
		12.4-36	16.9-28	16.9-30	12.4-36	16.9-28	16.9-30	13.6-36	16.9-30	16.9-34
Maximum additional ballast weight		Light duty front drive axle and Carraro axle			Light duty front drive axle and Carraro axle			Light duty front drive axle and Carraro axle		
- forward		155			155+210			155+210		
- backward		270	270	270	270	270	270	270	270	270
Water ballast in rear tires		2x160	2x215	2x240	2x160	2x215	2x240	2x180	2x240	2x250
Max. permissible loads on axles:										
weight (kg) - inflation (kPa)										
Front drive light duty axle										
(1510 mm wheel track)										
at max. speed										
30 km/h disc brakes		2000-170			-			-		
25 km/h disc brakes		2230-180			-			-		
20 km/h disc brakes		2500-180			-			-		
8 km/h disc brakes		3000-240			-			-		
Front drive heavy duty axle										
(1510 or 1610 mm wheel tracks)										
and Carraro axle (1594 mm track)										
at max. speed										
30 km/h disc brakes		-			2000-170			2000-120		
25 km/h disc brakes		-			2230-180			2400-150		
20 km/h disc brakes		-			2500-180			2800-170		
8 km/h disc brakes		-			3400-300			3400-220		

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 4 3 4 0								
		11.2 - 24			11.2 - 24			12.4 - 24		
		12.4-36	16.9-28	16.9-30	12.4-36	16.9-28	16.9-30	13.6-36	16.9-30	16.9-34
Front drive light duty axle (1510 mm wheel track) at max. speed		Light duty front drive axle and Carraro axle			Light duty front drive axle and Carraro axle			Light duty front drive axle and Carraro axle		
25 km/h drum brakes		2000-170			-			-		
20 km/h drum brakes		2500-180			-			-		
8 km/h drum brakes		3000-240			-			-		
Front drive heavy duty axle (1510 or 1610 mm wheel tracks) and Carraro axle (1594 mm track) at max. speed										
25 km/h drum brakes		-			2000-170			2000-120		
20 km/h drum brakes		-			2500-180			2880-170		
8 km/h drum brakes		-			3400-300			3400-220		
Rear axle at max. speed										
30 km/h disc brakes		2880-170	3600-150	3600-150	2880-170	3600-150	3600-150	3230-160	3600-150	3600-130
25 km/h disc brakes		3080-170	3600-150	3600-150	3080-170	3600-150	3600-150	3450-160	3600-150	3600-130
20 km/h disc brakes		3450-170	3600-150	3600-150	3450-170	3600-150	3600-150	3600-160	3600-150	3600-130
8 km/h disc brakes		3600-190	3600-150	3600-150	3600-190	3600-150	3600-150	3600-160	3600-150	3600-130
25 km/h drum brakes		3080-170	3600-150	3600-150	3080-170	3600-150	3600-150	3450-160	3600-150	3600-130
20 km/h drum brakes		3450-170	3600-150	3600-150	3450-170	3600-150	3600-150	3600-160	3600-150	3600-130
8 km/h drum brakes		3600-190	3600-150	3600-150	3600-190	3600-150	3600-150	3600-160	3600-150	3600-130

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

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MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 5 3 2 0								
		6.50 - 16		7.50 - 16			7.50-20			
		12.4-36	16.9-28	12.4-36	16.9-28	16.9-30	13.6-36	16.9-30	16.9-34	
Main dimensions (mm) (tolerance +2%)										
Clearance length without suspension device		3545	3530	3545	3530	3555	3570	3555	3605	
Clearance length including suspension		3765	3765	3765	3765	3765	3765	3765	3765	
Width with standard track of rear wheels		1800	1854	1800	1854	1854	1800	1854	1854	
Height to the mouth of upper exhaust (exhaust muffler extended, with exhaust flap valve and without flame trap)		2665	2661	2682	2679	2687	2731	2738	2741	
Tractor height up to upper cab edge (with cab roof opening)		2612	2597	2609	2594	2629	2363	2668	2675	
Height to steering wheel edge		1830	1821	1838	1831	1850	1878	1876	1900	
Ground clearance										
- without suspension device (under front axle carrier)		492	492	515	515	515	571	571	571	
- with suspension device (under the swinging tie bar fork in the lowest position)		408	390	400	384	424	423	399	468	

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 5 3 2 0							
		6.50-16 12.4-36 16.9-28		7.50-16 12.4-36 16.9-28		16.9-30		7.50-20 13.6-36 16.9-30 16.9-34	
Towing attachment height (to tail unit centre), 50 mm increments		750-950	732-932	743-943	727-927	766-966	766-966	735-935	811-1011
Swinging tie bar height (to inner bottom area of fork)		448	430	440	424	464	463	423	508
Towing attachment for single axle trailer (to contact area of hook)		491	475	486	471	508	512	489	554
P.T.O. shaft height		716	701	713	699	734	741	720	780
Front wheel track (tractor with HSS)									
- standard		1450		1425			1425		
- adjustable		1450,1525,1825		1425,1500,1800			1425,1500,1800		
(for agricultural operation)									
Rear wheel track									
- standard		1425		1425			1425		
- adjustable in 75 mm increments		1350-1800	1425-1800	1350-1800	1425-1800	1425-1800	1350-1800	1425-1800	1425-1800
(for agricultural operation)									
Wheel base		2257		2257			2257		
Outside diameter of turning circle with braking one wheel		7100+500		7100+500			7100+500		

HSS - Hydrostatic steering

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 5 3 2 0							
		6.50-16 12.4-36 16.9-28		7.50-16 12.4-36 16.9-28 16.9-30			7.50-20 13.6-36 16.9-30 16.9-34		
Minimum turning circle diameter with braking one wheel		6700+500		6700+500			6700+500		
WEIGHTS (kg) - standard (tolerance $\pm$ 5%)									
Tractor running weight with cab		2880	2890	2885	2895	2945	2925	2945	3025
including: front axle load		975	975	980	980	980	980	980	980
rear axle load		1905	1915	1905	1915	1965	1945	1965	2045
- open station (without cab)		2580	2590	2585	2595	2645	2625	2645	2725
including: front axle load		910	910	915	915	915	915	915	915
rear axle load		1670	1680	1670	1680	1730	1710	1730	1810
Maximum additional ballast weight									
- forward		155 (135 + 20)		155 (135 + 20)			155 (135 + 20)		
- backward		270	270	270	270	270	270	270	270
Water ballast in rear tires		2x160	2x215	2x160	2x215	2x240	2x160	2x240	2x250
Max. permissible loads on axles: weight (kg) - inflation (kPa)									
Front drive rigid axle with HSS (1450 or 1425 mm wheel tracks) at max. speed									
30 km/h		1230-310		1300-280			1300-280		
25 km/h		1410-310		1500-280			1500-280		

HSS - Hydrostatic steering

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 5 3 2 0						
		6.50-16 12.4-36 16.9-28		7.50-16 12.4-36 16.9-28 16.9-30		7.50-20 13.6-36 16.9-30 16.9-34		
20 km/h 8 km/h Front spring mounted axle (1425 or 1450 mm wheel tracks, heavy duty extensions with locking) with power steering at max. speed 30 km/h (spring mounted without locking)		1660-310 2460-390		2010-280 2980-350		2010-280 2980-350		
25 km/h (SM without locking)		1215-310		1215-210		1215-150		
30 km/h (SM with locking)		1215-310		1215-210		1215-150		
25 km/h (SM with locking)		1230-310		1400-280		1600-280		
20 km/h (SM with locking)		1410-310		1600-280		1800-280		
8 km/h (SM with locking)		1660-310		2010-280		2360-280		
Rear axle at max. speed		2460-390		2980-350		3000-350		
30 km/h disc brakes		2880-170 3600-150	2880-170 3600-150 3600-150	3230-160 3600-150 3600-130				
25 km/h disc brakes		3080-170 3600-150	3080-170 3600-150 3600-150	3450-160 3600-150 3600-130				
20 km/h disc brakes		3450-170 3600-150	3450-170 3600-150 3600-150	3600-160 3600-150 3600-130				
8 km/h disc brakes		3600-190 3600-150	3600-190 3600-150 3600-150	3600-160 3600-150 3600-130				
25 km/h drum brakes		3080-170 3600-150	3080-170 3600-150 3600-150	3450-160 3600-150 3600-130				
20 km/h drum brakes		3450-170 3600-150	3600-190 3600-150 3600-150	3600-160 3600-150 3600-130				
8 km/h drum brakes		3600-190 3600-150	3600-190 3600-150 3600-150	3600-160 3600-150 3600-130				

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://truckmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 5 3 4 0						Z 5340 HORAL
		12.4-36	11.2-24 16.9-28	16.9-30	13.6-36	12.4-24 16.9-30	16.9-34	9.5-24 18.4-26
Main dimensions (mm) (tolerance $\pm 2\%$)								
Clearance length without suspension device and front ballast		3410	3495	3520	3535	3520	3570	3660
Clearance length including suspension device without front ballast weights		3765	3765	3765	3765	3765	3765	4450
Clearance length with suspension device and front ballast weights		4030	4030	4030	4030	4030	4030	4530
Width with standard track of rear wheels		1980	1980	1980	1980	1980	1980	2260
Height to the mouth of upper exhaust (exhaust muffler extended, with exhaust flap valve and without flame trap)		2740	2737	2745	2772	2782	2782	2710
Tractor height up to upper cab edge (with cab roof opening)		2668	2663	2678	2700	2667	2718	2618
Height to steering wheel edge		1867	1860	1879	1899	1892	1923	1842
Ground clearance								
- without suspension device (under front axle carrier)		374	374	374	406	406	406	340

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 5 3 4 0						Z 5340 HORAL
		12.4-36	11.2-24 16.9-28	16.9-30	13.6-36	12.4-24 16.9-30	16.9-34	9.5-24 18.4-26
- with suspension device (under the swinging tie bar fork in the lowest position)		376	362	399	406	385	450	372
Towing attachment height (to tail unit centre), 50 mm increments		720-920	706-906	742-942	750-950	723-923	793-993	700-900
Swinging tie bar height (to inner bottom area of fork)		416	402	439	446	409	490	397
Towing attachment for single axle trailer (to contact area of hook)		470	457	491	500	480	541	450
P.T.O. shaft height:								
- rear		703	691	732	734	714	777	688
- front		-	-	-	-	-	-	696
Front wheel track								
- standard		1510, (1594 Carraro)			1610, (1594 Carraro)			1790
- adjustable (for agricultural operation)		(1650, 1745, 1800 Carraro only)			(1650, 1745, 1800 Carraro only)			(1800Carraro) -
Rear wheel track								
- standard			1425			1425		1720
- adjustable in 75 mm increments (for agricultural operation)		1500-1800	1425-1800	1500-1800	1575-1800	1500-1800	1500-1800	-
Wheel base			2222 (2204 Carraro)			2222 (2204 Carraro)		2222 (2204Carraro)

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)
<https://truckmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 5 3 4 0						Z 5340 HORAL
		12.4-36	11.2-24 16.9-28	16.9-30	13.6-36	12.4-24 16.9-30	16.9-34	9.5-24 18.4-26
Outside diameter of turning circle with braking one wheel			8700+500			8700+500		8900+500
Minimum turning circle diameter with braking one wheel			8400+500			8400+500		8600+500
WEIGHTS (kg) - standard (tolerance $\pm$ 5% is accepted)								
Tractor running weight								
- with cab and front ballast		-	-	-	-	-	-	4100
including: front axle load		-	-	-	-	-	-	2020
rear axle load		-	-	-	-	-	-	2080
- with cab		3335	3345	3395	3400	3420	3500	-
including: front axle load		1390	1390	1390	1415	1415	1415	-
rear axle load		1945	1955	2005	1985	2005	2085	-
- open station (without cab)		3035	3045	3095	3100	3120	3200	-
including: front axle load		1340	1340	1340	1365	1365	1365	-
rear axle load		1695	1705	1755	1735	1755	1835	-
Weight of tractor equipped with Carraro axle								
- with cab and front ballast		-	-	-	-	-	-	3980
including: front axle load		-	-	-	-	-	-	1900
rear axle load		-	-	-	-	-	-	2080

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight) [hualshub.com/](http://www.hualshub.com/)

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 5 3 4 0						Z 5340 HORAL 9.5-24 18.4-26
		12.4-36	11.2-24 16.9-28	16.9-30	13.6-36	12.4-24 16.9-30	16.9-34	
- with cab		3215	3225	3275	3280	3300	3380	-
including: front axle load		1270	1270	1270	1295	1295	1295	-
rear axle load		1945	1955	2005	1985	2005	2085	-
- open station (without cab)		2915	2925	2975	2980	3000	3080	-
including: front axle load		1220	1220	1220	1245	1245	1245	-
rear axle load		1695	1705	1755	1735	1755	1835	-
Maximum additional ballast weight								
- forward			155+210			155+210		252+8
- backward		270	270	270	270	270	270	200
Water ballast in rear tires		2x160	2x215	2x240	2x180	2x240	2x250	-
Max. permissible loads on axles: weight (kg) - inflation (kPa)								
Front drive heavy duty axle (1510 or 1610 mm wheel tracks) and Carraro axle (1594 mm track) at max. speed								
30 km/h disc brakes			2000-170			2000-120		-
25 km/h disc brakes			2230-180			2400-150		-
20 km/h disc brakes			2500-180			2880-170		-
8 km/h disc brakes			3400-300			3400-220		-

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://traktormanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 5 3 4 0						Z 5340 HORAL
		12.4-36	11.2-24 16.9-28	16.9-30	13.6-36	12.4-24 16.9-30	16.9-34	9.5-24 18.4-26
Front drive axle (1510 or 1610 mm wheel tracks) and Carraro axle (1594 mm track) at max. speed								
25 km/h drum brakes			2000-170			2000-120		-
20 km/h drum brakes			2500-180			2880-170		-
8 km/h drum brakes			3400-300			3400-220		-
Front drive axle (1790 mm wheel track) and Carraro axle (1800 mm wheel track) at max. speed								
30 km/h			-			-		2000-240
25 km/h			-			-		2370-280
20 km/h			-			-		2660-280
15 km/h			-			-		2900-290
8 km/h			-			-		2900-290
Rear axle at max. speed								
30 km/h disc brakes		2880-170	3600-150	3600-150	3230-160	3600-150	3600-130	3600-150
25 km/h disc brakes		3080-170	3600-150	3600-150	3450-160	3600-150	3600-130	3600-150
20 km/h disc brakes		3450-170	3600-150	3600-150	3600-160	3600-150	3600-130	3600-150
8 km/h disc brakes		3600-190	3600-150	3600-150	3600-160	3600-150	3600-130	3600-150

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://ruccmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type	Z E T O R 5 3 4 0						Z 5340 HORAL
	Front tires	11.2-24				12.4-24		
	Rear tires	12.4-36	16.9-28	16.9-30	13.6-36	16.9-30	16.9-34	18.4-26
25 km/h drum brakes		3080-170	3600-150	3600-150	3450-160	3600-150	3600-130	3600-150
20 km/h drum brakes		3450-170	3600-150	3600-150	3600-160	3600-150	3600-130	3600-150
8 km/h drum brakes		3600-190	3600-150	3600-150	3600-160	3600-150	3600-130	3600-150*

*the inflation pressure is 100 kPa when working on slopes

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://truckmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 6 3 2 0								
		6.50-16		7.50-16			7.50-20			
		12.4-36	16.9-28	12.4-36	16.9-28	16.9-30	13.6-36	16.9-30	16.9-34	
Main dimensions (mm) (tolerance $\pm 2\%$)										
Clearance length without suspension device		3545	3530	3545	3530	3555	3570	3555	3605	
Clearance length including suspension		3765	3765	3765	3765	3765	3765	3765	3765	
Width with standard track of rear wheels		1800	1854	1800	1854	1854	1800	1854	1854	
Height to the mouth of upper exhaust (exhaust muffler extended, with exhaust flap valve and without flame trap)		2665	2661	2682	2679	2687	2731	2738	2741	
Tractor height up to upper cab edge (with cab roof opening)		2612	2597	2609	2594	2629	2363	2668	2675	
Height to steering wheel edge		1830	1821	1838	1831	1850	1878	1876	1900	
Ground clearance										
- without suspension device (under front axle carrier)		492	492	515	515	515	571	571	571	
- with suspension device (under the swinging tie bar fork in the lowest position)		408	390	400	384	424	423	399	468	

MAIN PERFORMANCE PARAMETERS (valid for tractor ~~working weight~~ ^{empty weight}) <https://traktorshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 6 3 2 0								
		6.50-16 12.4-36 16.9-28		7.50-16 12.4-36 16.9-28 16.9-30			7.50-20 13.6-36 16.9-30 16.9-34			
Towing attachment height (to tail unit centre), 50 mm increments		750-950	732-932	743-943	727-927	766-966	766-966	735-935	811-1011	
Swinging tie bar height (to inner bottom area of fork)		448	430	440	424	464	463	423	508	
Towing attachment for single axle trailer (to contact area of hook)		491	475	486	471	508	512	489	554	
P.T.O. shaft height		716	701	713	699	734	741	720	780	
Front wheel track (tractor with HSS)										
- standard		1450		1425			1425			
- adjustable		1450,1525,1825		1425,1500,1800			1425,1500,1800			
(for agricultural operation)										
Rear wheel track										
- standard		1425		1425			1425			
- adjustable in 75 mm increments		1350-1800	1425-1800	1350-1800	1425-1800	1425-1800	1350-1800	1425-1800	1425-1800	
(for agricultural operation)										
Wheel base		2257		2257			2257			
Outside diameter of turning circle with braking one wheel		7100+500		7100+500			7100+500			

HSS - Hydrostatic steering

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://truckmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 6 3 2 0								
		6.50-16		7.50-16			7.50-20			
		12.4-36	16.9-28	12.4-36	16.9-28	16.9-30	13.6-36	16.9-30	16.9-34	
Minimum turning circle diameter with braking one wheel		6700+500		6700+500			6700+500			
WEIGHTS (kg) - standard (tolerance $\pm$ 5%)										
Tractor running weight with cab		2880	2890	2885	2895	2945	2925	2945	3025	
including: front axle load		975	975	980	980	980	980	980	980	
rear axle load		1905	1915	1905	1915	1965	1945	1965	2045	
- open station (without cab)		2580	2590	2585	2595	2645	2625	2645	2725	
including: front axle load		910	910	915	915	915	915	915	915	
rear axle load		1670	1680	1670	1680	1730	1710	1730	1810	
Maximum additional ballast weight										
- forward		155 (135 + 20)		155 (135 + 20)			155 (135 + 20)			
- backward		270	270	270	270	270	270	270	270	
Water ballast in rear tires		2x160	2x215	2x160	2x215	2x240	2x160	2x240	2x250	
Max. permissible loads on axles: weight (kg) - inflation (kPa)										
Front drive rigid axle with HSS (1450 or 1425 mm wheel tracks)										
at max. speed										
30 km/h		1230-310		1300-280			1300-280			
25 km/h		1410-310		1500-280			1500-280			

HSS - Hydrostatic steering

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 6 3 2 0						
		6.50-16		7.50-16			7.50-20	
		12.4-36	16.9-28	12.4-36	16.9-28	16.9-30	13.6-36	16.9-30 16.9-34
20 km/h		1660-310		2010-280			2010-280	
8 km/h		2460-390		2980-350			2980-350	
Front rigid axle (1425 or 1450 mm wheel tracks, heavy duty extensions) at max. speed 30 km/h		1230-310		1400-280			1600-250	
25 km/h		1410-310		1600-280			1800-250	
20 km/h		1660-310		2010-280			2360-250	
8 km/h		2460-390		2980-350			3000-350	
Front spring mounted axle (1425 or 1450 mm wheel tracks, heavy duty extensions with locking) with power steering at max. speed								
30 km/h (spring mounted without locking)		1215-310		1215-210			1215-150	
25 km/h (SM without locking)		1215-310		1215-210			1215-150	
30 km/h (SM with locking)		1230-310		1490-280			1750-280	
25 km/h (SM with locking)		1410-310		1710-280			2010-280	
20 km/h (SM with locking)		1660-310		2010-280			2360-280	
8 km/h (SM with locking)		2460-390		2980-280			3000-350	

SM - spring mounted

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)
<https://truckmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 6 3 2 0							
		6.50-16		7.50-16			7.50-20		
		12.4-36	16.9-28	12.4-36	16.9-28	16.9-30	13.6-36	16.9-30	16.9-34
Rear axle at max. speed									
30 km/h disc brakes		2880-170	3600-150	2880-170	3600-150	3600-150	3230-160	3600-150	3600-130
25 km/h disc brakes		3080-170	4000-150	3080-170	4000-150	4000-150	3450-160	4000-150	4000-130
20 km/h disc brakes		3450-170	4000-150	3450-170	4000-150	4000-150	3870-160	4000-150	4000-130
8 km/h disc brakes		4000-215	4000-150	4000-215	4000-150	4000-150	4000-200	4000-150	4000-130

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)
<https://truckmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 6 3 4 0						Z 6340 HORAL
		12.4-36	11.2-24 16.9-28	16.9-30	13.6-36	12.4-24 16.9-30	16.9-34	9.5-24 18.4-26
Main dimensions (mm) (tolerance $\pm 2\%$)								
Clearance length without suspension device and front ballast		3410	3495	3520	3535	3520	3570	3660
Clearance length including suspension device without front ballast weights		3765	3765	3765	3765	3765	3765	4450
Clearance length with suspension device and front ballast weights		4035	4035	4035	4035	4035	4035	4530
Width with standard track of rear wheels		1980	1980	1980	1980	1980	1980	2260
Height to the mouth of upper exhaust (exhaust muffler extended, with exhaust flap valve and without flame trap)		2740	2737	2745	2772	2782	2782	2710
Tractor height up to upper cab edge (with cab roof opening)		2650	2640	2670	2686	2666	2728	2622
Height to steering wheel edge		1868	1860	1874	1902	1892	1928	1842
Ground clearance								
- without suspension device (under front axle carrier)		374	374	374	410	410	410	346

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://truckmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 6 3 4 0						Z 6340 HORAL
		12.4-36	11.2-24 16.9-28	16.9-30	13.6-36	12.4-24 16.9-30	16.9-34	9.5-24 18.4-26
- with suspension device (under the swinging tie bar fork in the lowest position)		376	362	399	406	385	450	367
Towing attachment height (to tail unit centre), 50 mm increments		720-920	706-906	742-942	750-950	722-922	798-998	700-900
Swinging tie bar height (to inner bottom area of fork)		416	402	439	446	409	490	398
Towing attachment for single axle trailer (to contact area of hook)		470	457	491	500	479	541	451
P.T.O. shaft height:								
- rear		708	691	732	734	714	778	682
- front		-	-	-	-	-	-	696
Front wheel track								
- standard		1510, (1594 Carraro)			1610, (1594 Carraro)			1790
- adjustable (for agricultural operation)		(1650, 1745, 1800 Carraro only)			(1650, 1745, 1800 Carraro only)			(1800Carraro)
Rear wheel track								
- standard			1425			1425		1800
- adjustable in 75 mm increments (for agricultural operation)		1500-1800	1425-1800	1500-1800	1575-1800	1500-1800	1500-1800	-
Wheel base			2222 (2204 Carraro)			2222 (2204 Carraro)		2222 (2204Carraro)

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 6 3 4 0						Z 6340 HORAL
		12.4-36	11.2-24 16.9-28	16.9-30	13.6-36	12.4-24 16.9-30	16.9-34	9.5-24 18.4-26
Outside diameter of turning circle with braking one wheel			8700+500			8700+500		8900+500
Minimum turning circle diameter with braking one wheel			8400+500			8400+500		8600+500
WEIGHTS (kg) - standard (tolerance $\pm 5\%$ is accepted)								
Tractor running weight								
- with cab and front ballast			-			-		4120
including: front axle load			-			-		2020
rear axle load			-			-		2100
- with cab		3355	3365	3415	3420	3440	3520	-
including: front axle load		1395	1395	1395	1420	1420	1420	-
rear axle load		1960	1970	2020	2000	2020	2100	-
- open station (without cab)		3055	3065	3115	3120	3140	3220	-
including: front axle load		1345	1345	1345	1370	1370	1370	-
rear axle load		1710	1720	1770	1750	1770	1850	-

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type	Z E T O R 6 3 4 0						Z 6340 HORAL
		11.2-24			12.4-24			9.5-24
	Front tires							
	Rear tires	12.4-36	16.9-28	16.9-30	13.6-36	16.9-30	16.9-34	18.4-26
Weight of tractor equipped with Carraro axle								
- with cab and front ballast		-	-	-	-	-	-	4000
including: front axle load		-	-	-	-	-	-	1900
rear axle load		-	-	-	-	-	-	2100
- with cab		3235	3245	3295	3300	3320	3400	-
including: front axle load		1275	1275	1275	1300	1300	1300	-
rear axle load		1960	1970	2020	2000	2020	2100	-
- open station (without cab)		2935	3295	2995	3000	3020	3100	-
including: front axle load		1225	1225	1225	1250	1250	1250	-
rear axle load		1710	1720	1770	1750	1770	1850	-
Maximum additional ballast weight								
- forward			155+210			155+210		252+8
- backward		270	270	270	270	270	270	200
Water ballast in rear tires		2x160	2x215	2x240	2x180	2x240	2x250	-
Max. permissible loads on axles:								
weight (kg) - inflation (kPa)								
Front drive heavy duty axle								
(1510 or 1610 mm wheel tracks)								
and Carraro axle (1594 mm track)								
at max. speed								
30 km/h disc brakes			2000-180			2000-170		-
25 km/h disc brakes			2230-180			2570-170		-

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight) <http://www.agriculturalshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 6 3 4 0						Z 6340 HORAL
		12.4-36	11.2-24 16.9-28	16.9-30	13.6-36	12.4-24 16.9-30	16.9-34	9.5-24 18.4-26
20 km/h disc brakes			2500-180			2880-170		-
8 km/h disc brakes			2920-225			3360-210		-
Front drive axle (1790 mm wheel tracks) and Carraro axle (1800 mm wheel track)								
at max. speed								
30 km/h			-			-		2000-240
25 km/h			-			-		2370-280
20 km/h			-			-		2660-280
15 km/h			-			-		2900-290
8 km/h			-			-		2900-290
Rear axle								
at max. speed								
30 km/h disc brakes		2880-170	3600-150	3600-150	3230-160	3600-150	3600-130	BASE 1800 3600-150
25 km/h disc brakes		3080-170	4000-150	4000-150	3450-160	4000-150	4000-130	3600-150
20 km/h disc brakes		3450-170	4000-150	4000-150	3800-160	4000-150	4000-130	3600-150
8 km/h disc brakes		4000-215	4000-150	4000-150	4000-160	4000-150	4000-130	3600-150*

*the inflation pressure is 100 kPa when working on slopes

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://tracmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 7 3 2 0				
		7.50-16 16.9-28	7.50-16 16.9-30	7.50-20 13.6-36	7.50-20 16.9-30	16.9-34
Main dimensions (mm) (tolerance $\pm 2\%$)						
Clearance length without suspension device		3530	3555	3570	3555	3605
Clearance length including suspension		3765	3765	3765	3765	3765
Width with standard track of rear wheels		1854	1854	1800	1854	1854
Height to the mouth of upper exhaust (exhaust muffler extended, with exhaust flap valve and without flame trap)		2679	2687	2731	2738	2741
Tractor height up to upper cab edge (with cab roof opening)		2594	2629	2363	2668	2675
Height to steering wheel edge		1831	1850	1878	1876	1900
Ground clearance						
- without suspension device (under front axle carrier)		515	515	571	571	571
- with suspension device (under the swinging tie bar fork in the lowest position)		384	424	423	399	468

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight) <https://traktorshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 7 3 2 0				
		7.50-16 16.9-28 16.9-30		7.50-20 13.6-36 16.9-30 16.9-34		
Towing attachment height (to tail unit centre), 50 mm increments		727-927	766-966	766-966	735-935	811-1011
Swinging tie bar height (to inner bottom area of fork)		424	464	463	423	508
Towing attachment for single axle trailer (to contact area of hook)		471	508	512	489	554
P.T.O. shaft height		699	734	741	720	780
Front wheel track (tractor with HSS)						
- standard		1425		1425		
- adjustable		1425, 1500, 1800		1425, 1500, 1800		
(for agricultural operation)						
Rear wheel track						
- standard		1425		1425		
- adjustable in 75 mm increments		1425-	1425-	1350-	1425-	1425-
(for agricultural operation)		1800	1800	1800	1800	1800
Wheel base		2257		2257		
Outside diameter of turning circle with braking one wheel		7100+500		7100+500		

HSS - Hydrostatic steering

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 7 3 2 0				
		7.50-16		7.50-20		
		16.9-28	16.9-30	13.6-36	16.9-30	16.9-34
Minimum turning circle diameter with braking one wheel		6700+500		6700+500		
WEIGHTS (kg) - standard (tolerance $\pm 5\%$)						
Tractor running weight with cab		2895	2945	2925	2945	3025
including: front axle load		980	980	980	980	980
rear axle load		1915	1965	1945	1965	2045
- open station (without cab)		2595	2645	2625	2645	2725
including: front axle load		915	915	915	915	915
rear axle load		1680	1730	1710	1730	1810
Maximum additional ballast weight						
- forward		155 (135 + 20)		155 (135 + 20)		
- backward		270	270	270	270	270
Water ballast in rear tires		2x215	2x240	2x160	2x240	2x250
Max. permissible loads on axles: weight (kg) - inflation (kPa)						
Front drive rigid axle with HSS (1450 or 1425 mm wheel tracks)						
at max. speed						
30 km/h		1300-280		1300-280		
25 km/h		1500-280		1500-280		

HSS - Hydrostatic steering

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://trucksmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 7 3 2 0				
		7.50-16		7.50-20		
		16.9-28	16.9-30	13.6-36	16.9-30	16.9-34
20 km/h		2010-280		2010-280		
8 km/h		2980-350		2980-350		
Front rigid axle (1425 or 1450 mm wheel tracks, heavy duty extensions) with power steering						
at max. speed 30 km/h		1400-280		1600-250		
25 km/h		1600-280		1800-250		
20 km/h		2010-280		2360-250		
8 km/h		2980-350		3000-350		
Front spring mounted axle (1425 or 1450 mm wheel tracks, heavy duty extensions with locking) with power steering						
at max. speed:						
30 km/h (spring mounted without locking)		1215-210		1215-150		
25 km/h (SM without locking)		1215-210		1215-150		
30 km/h (SM with locking)		1490-280		1750-280		
25 km/h (SM with locking)		1710-280		2010-280		
20 km/h (SM with locking)		2010-280		2360-280		
8 km/h (SM with locking)		2980-280		3000-350		

SM - spring mounted

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://tracmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 7 3 2 0				
		7.50-16		7.50-20		
		16.9-28	16.9-30	13.6-36	16.9-30	16.9-34
Rear axle at max. speed						
30 km/h disc brakes		3600-150	3600-150	3230-160	3600-150	3600-130
25 km/h disc brakes		4000-150	4000-150	3450-160	4000-150	4000-130
20 km/h disc brakes		4000-150	4000-150	3870-160	4000-150	4000-130
8 km/h disc brakes		4000-150	4000-150	4000-200	4000-150	4000-130

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type	Z E T O R 7 3 4 0						
		11.2-24 L-D F drive axle		12.4-24			13.6 R24	
	Front tires Rear tires	16.9-28	16.9-30	13.6-36	16.9-30	16.9-34	16.9-34	18.4-30
Main dimensions (mm) (tolerance $\pm 2\%$)								
Clearance length without suspension device and front ballast		3495	3520	3535	3520	3570	3570	3555
Clearance length including suspension device without front ballast weights		3765	3765	3765	3765	3765	3765	3765
Clearance length with suspension device and front ballast weights		4035	4035	4035	4035	4035	4035	4035
Width with standard track of rear wheels		1980	1980	1980	1980	1980	1980	2018
Height to the mouth of upper exhaust (exhaust muffler extended, with exhaust flap valve and without flame trap)		2737	2745	2772	2782	2782	2730	2765
Tractor height up to upper cab edge (with cab roof opening)		2640	2670	2686	2666	2728	2730	2708
Height to steering wheel edge		1860	1874	1902	1892	1928	1930	1908
Ground clearance								
- without suspension device (under front axle carrier)		374	374	410	410	410	425	425

L-D F drive axle - light duty front drive axle

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://truckmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 7 3 4 0						
		11.2-24 L-D F drive axle 16.9-28 16.9-30	12.4-24 13.6-36 16.9-30 16.9-34	13.6-36	16.9-30	16.9-34	13.6 R24 16.9-34 18.4-30	16.9-34 18.4-30
- with suspension device (under the swinging tie bar fork in the lowest position)		362 399	406 385 450	406	385	450	450	430
Towing attachment height (to tail unit centre), 50 mm increments		706-906 742-942	750-950 722-922 798-998	750-950	722-922	798-998	793-993	773-973
Swinging tie bar height (to inner bottom area of fork)		402 439	446 409 490	446	409	490	485	465
Towing attachment for single axle trailer (to contact area of hook)		457 491	500 479 541	500	479	541	540	520
P.T.O. shaft height:		691 732	734 714 778	734	714	778	777	758
Front wheel track								
- standard		1510, (1594 Carraro)	1610, (1594 Carraro)	1610, (1594 Carraro)			1610, (1583 Carraro)	
- adjustable		(1650, 1745, 1800 Carraro only)	(1650, 1745, 1800 Carraro only)	(1650, 1745, 1800 Carraro only)			(1660, 1734, 1810 Carraro only)	
(for agricultural operation)								
Rear wheel track								
- standard		1425	1425	1425			1425	
- adjustable in 75 mm increments		1425-1800 1500-1800	1575-1800 1500-1800 1500-1800	1575-1800	1500-1800	1500-1800	1500-1800	
(for agricultural operation)								
Wheel base		2140 (2204 Carraro)	2222 (2204 Carraro)	2222			2222 (2204 Carraro)	

L-D F drive axle - light duty front drive axle

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 7 3 4 0						
		11.2-24 16.9-28	L-D F drive axle 16.9-30	12.4-24 13.6-36	16.9-30 16.9-30	16.9-34 16.9-34	13.6 R24 16.9-34	18.4-30 18.4-30
Outside diameter of turning circle with braking one wheel		8700+500		8700+500			8700+500	
Minimum turning circle diameter with braking one wheel		8400+500		8400+500			8400+500	
WEIGHTS (kg) - standard (tolerance $\pm$ 5% is accepted)								
Tractor running weight								
- with cab		3365	3415	3420	3440	3520	3550	3575
including: front axle load		1395	1395	1420	1420	1420	1450	1450
rear axle load		1970	2020	2000	2020	2100	2110	2125
- open station (without cab)		3065	3115	3120	3140	3220	3260	3275
including: front axle load		1345	1345	1370	1370	1370	1400	1400
rear axle load		1720	1770	1750	1770	1850	1860	1875
Weight of tractor equipped with Carraro axle								
- with cab		-	-	3300	3320	3400	3430	3455
including: front axle load		-	-	1300	1300	1300	1330	1330
rear axle load		-	-	2000	2020	2100	2100	2125
- open station (without cab)		-	-	3000	3020	3100	3140	3155
including: front axle load		-	-	1250	1250	1250	1280	1280
rear axle load		-	-	1750	1770	1850	1860	1875

L-D F drive axle - light duty front drive axle

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://truckmanualshub.com/>

MAIN DIMENSIONS (mm) WEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 7 3 4 0					
		11.2-24 L-D F drive axle 16.9-28 16.9-30	12.4-24 13.6-36 16.9-30 16.9-34	13.6-36	16.9-30	16.9-34	13.6 R24 16.9-34 18.4-30
Maximum additional ballast weight							
- forward		155+210	155+210				155+210
- backward		270 270	270 270 270				270 270
Water ballast in rear tires		2x215 2x240	2x180 2x240 2x250				2x250 2x300
Max. permissible loads on axles: weight (kg) - inflation (kPa)							
Front drive light duty axle (1510 wheel track)							
at max. speed							
30 km/h disc brakes		2000-180	-				-
25 km/h disc brakes		2230-180	-				-
20 km/h disc brakes		2500-180	-				-
8 km/h disc brakes		3000-225	-				-
Front drive heavy duty axle (1610 mm wheel track) and Carraro axle (1594 mm wheel track)							
at max. speed							
30 km/h		-	2000-170				2000-130
25 km/h		-	2570-170				2570-140
20 km/h		-	2880-170				2880-160
8 km/h		-	3360-210				3360-130

L-D F drive axle - light duty front drive axle

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight)

<https://truckmanualshub.com/>

MAIN DIMENSIONS (mm) VEIGHTS (kg)	Tractor type Front tires Rear tires	Z E T O R 7 3 4 0						
		11.2-24	L-D F drive axle	12.4-24				13.6 R24
		16.9-28	16.9-30	13.6-36	16.9-30	16.9-34	16.9-34	18.4-30
Rear axle at max. speed								
30 km/h disc brakes		3600-150	3600-150	3230-160	3600-150	3600-130	3600-130	
25 km/h disc brakes		4000-150	4000-150	3450-160	4000-150	4000-130	4000-130	
20 km/h disc brakes		4000-150	4000-150	3800-160	4000-150	4000-130	4000-130	
8 km/h disc brakes		4000-150	4000-150	4000-460	4000-150	4000-130	4000-130	

L-D F drive axle - light duty front drive axle

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight including ROPS cab, tolerance of $\pm 2\%$)
<https://truckmanualshub.com/>

TRACTION, P/OUTPUT, CONSUMPTION	Z 3320	Z 3340	Z 4320	Z 4340	Z 5320	Z 5340	Z 5340H
TRACTION (kg)							
Tolerance of 5% is accepted							
Max. traction power in the swing- ing tie bar, on concrete, tractor in running arrangement, incl. ballast, at slippage of 15 % - with cab	23.24	28.53	24.56	28.92*30.82 ¹	24.63	30.86	31.37
- without cab	21.04	26.23	22.35	25.92*28.53 ¹	22.43	28.57	-
Max. traction power in the towing gear for trailer, tractor in run- ning arrangement, incl. ballast, water in rear tires - with cab	25.67	31.35	27.62	31.35*34.10 ¹	27.69	34.14	-
- without cab	23.46	29.05	25.41	29.06*31.80 ¹	25.47	31.84	-
Lifting power at the ends of lower three-point suspension tie bars provided in the whole range with auxiliary cylinder/without auxiliary cylinder (kN)	19.00	19.00	19/26	19/26	26/35 ⁴	26/35 ⁴	26/35 ⁴
Lifting power at the ends of lower three-point suspension tie bars provided in the whole range (kN)	-	-	12	12	12	12	12
NOTE: The power output and consumption values are meant after running-in period of tractor (100 service hours). Values in parentheses are for information only and valid before running-in.							

* - valid for front drive light duty axle ¹ - valid for front heavy-duty driving axle, ² - tires 6.50-16, ³ - tires 7.50-16
⁴ - with one auxiliary cylinder/with two auxiliary cylinders

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight including ROPS cab, tolerance of $\pm 2\%$)

<https://truckmanualshub.com/>

TRACTION, P/OUTPUT, CONSUMPTION	Z 3320	Z 3340	Z 4320	Z 4340	Z 5320	Z 5340	Z 5340H
OUTPUT AND CONSUMPTION (kW, g.kW ⁻¹ .h ⁻¹)							
Output of P.T.O. shaft at rated engine speed and 540 min ⁻¹ P.T.O. shaft speed	31(27.9)	31(27.9)	39(35.1)	39(35.1)	43(38.7)	43(38.7)	43(38.7)
Specific fuel consumption corresponding to P.T.O. output mentioned	268	268	266	266	263	263	263
NOTE: The power output and consumption values are meant after running-in period of tractor (100 service hours). Values in parentheses are for information only and valid before running-in.							

* - valid for front drive light duty axle ¹ - valid for front heavy-duty driving axle, ² - tires 6.50-16 , ³ -tires 7.50-16

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight including ROPS cab, tolerance of $\pm 2\%$)

<https://truckmanualshub.com/>

TRACTION, P/OUTPUT, CONSUMPTION	Z 6320	Z 6340	Z 6340H	Z 7320	Z 7340
TRACTION (kg)					
Tolerance of 5% is accepted					
Max. traction power in the swing- ing tie bar, on concrete, tractor in running arrangement, incl. ballast, at slippage of 15 % - with cab	24.75 ² 24.63 ³	31.02	31.52	24.63	31.02
- without cab	22.55 ² 22.43	28.72	-	22.43	28.72
Max. traction power in the towing gear for trailer, tractor in run- ning arrangement, incl. ballast, water in rear tires - with cab	27.73 ² 27.69 ³	34.29	-	27.69	34.29
- without cab	25.53 ² 25.47 ³	31.99	-	25.47	31.99
Lifting power at the ends of lower three-point suspension tie bars provided in the whole range with auxiliary cylinder/without auxiliary cylinder (kN)	35	35	35	35	35
Lifting power at the ends of lower three-point suspension tie bars provided in the whole range (kN)	12	12	12	12	12
NOTE: The power output and consumption values are meant after running-in period of tractor (100 service hours). Values in parentheses are for information only and valid before running-in.					

* - valid for front drive light duty axle ¹ - valid for front heavy-duty driving axle, ² - tires 6.50-16, ³ - tires 7.50-16

MAIN PERFORMANCE PARAMETERS (valid for tractor running weight including ROPS cab, tolerance $\pm 2\%$)

TRACTION, P/OUTPUT, CONSUMPTION	Z 6320	Z 6340	Z 6340H	Z 7320	Z 7340
OUTPUT AND CONSUMPTION (kW, g.kW ⁻¹ .h ⁻¹)					
Output of P.T.O. shaft at rated engine speed and 540 min ⁻¹ P.T.O. shaft speed	46.5+5%(41.8)	46.5+5%(41.8)	46.5+5%(41.8)	53.1+5%(47.8)	53.1+5%(47.8)
Specific fuel consumption corresponding to P.T.O. output mentioned	262	262	262	258	258
NOTE: The power output and consumption values are meant after running-in period of tractor (100 service hours). Values in parentheses are for information only and valid before running-in.					

* - valid for front drive light duty axle ¹ - valid for front heavy-duty driving axle, ² - tires 6.50-16, ³ - tires 7.50-16

TRACTOR IS EQUIPPED WITH FULLY SYNCHRONIZED GEARBOX, CARRARO FRONT DRIVE AXLE AND TORQUE MULTIPLIER
- TRAVEL SPEED OF 30 km/h

Speed gear	Dependent P.T.O. shaft speed	Tractor travel speed at rated engine speed - km/h									
		12.4-28	14.9-28	16.9-28	16.9-30	16.9-34	13.6-36	12.4-36	12.4-32	9.5-42	9.5-32
1	289.3	5.08	5.51	5.77	5.99	6.42	6.16	5.94	5.51	6.22	5.13
2	405.6	7.12	7.73	8.09	8.39	8.99	8.63	8.33	7.73	8.72	7.19
3	527.5	9.26	10.05	10.52	10.91	11.70	11.23	10.83	10.05	11.33	9.35
4	847.4	14.88	16.14	16.89	17.53	18.79	18.04	17.40	16.14	18.21	15.01
5	1344.4	23.61	25.61	26.80	27.82	29.81	28.62	27.61	25.61	28.89	23.82
1L	289.3	1.30	1.41	1.48	1.53	1.64	1.58	1.52	1.41	1.59	1.31
2L	405.6	1.82	1.98	2.07	2.15	2.30	2.21	2.13	1.98	2.23	1.84
3L	527.5	2.37	2.57	2.69	2.79	2.99	2.87	2.77	2.57	2.90	2.39
4L	847.4	3.81	4.13	4.32	4.49	4.81	4.62	4.45	4.13	4.66	3.84
5L	1344.4	6.04	6.55	6.86	7.12	7.63	7.32	7.06	6.55	7.39	6.09
1M	220.4	3.87	4.20	4.39	4.56	4.89	4.69	4.53	4.20	4.74	3.91
2M	309.0	5.43	5.89	6.16	6.39	6.85	6.58	6.34	5.89	6.64	5.47
3M	401.8	7.06	7.65	8.01	8.31	8.91	8.55	8.25	7.65	8.63	7.12
4M	645.5	11.34	12.30	12.87	13.36	14.31	13.74	13.26	12.30	13.87	11.44
5M	1024.1	17.99	19.51	20.42	21.19	22.71	21.80	21.03	19.51	22.01	18.15
1LM	220.4	0.99	1.07	1.12	1.17	1.25	1.20	1.16	1.07	1.21	1.00
2LM	309.0	1.39	1.51	1.58	1.64	1.75	1.68	1.62	1.51	1.70	1.40
3LM	401.8	1.81	1.96	2.05	2.13	2.28	2.19	2.11	1.96	2.21	1.82
4LM	645.5	2.90	3.15	3.29	3.42	3.66	3.52	3.39	3.15	3.55	2.93
5LM	1024.1	4.60	4.99	5.22	5.42	5.81	5.58	5.38	4.99	5.63	4.64

(60.122.000
assembly group)
L - reduction
(low)
M - multiplier

TRACTOR IS EQUIPPED WITH FULLY SYNCHRONIZED GEARBOX, CARRARO FRONT DRIVE AXLE AND TORQUE MULTIPLIER

- TRAVEL SPEED OF 30 km/h

Speed gear	Dependent P.T.O. shaft speed	Tractor travel speed at rated engine speed - km/h									
		12.4-28	14.9-28	16.9-28	16.9-30	16.9-34	13.6-36	12.4-36	12.4-32	9.5-42	9.5-32
R	- 393.7	6.91	7.50	7.85	8.14	8.73	8.38	8.09	7.50	8.46	6.92
RL	- 393.7	1.77	1.92	2.01	2.08	2.23	2.14	2.07	1.92	2.16	1.78
RM	- 299.8	5.27	5.71	5.98	6.20	6.65	6.38	6.16	5.71	6.44	5.31
RLM	- 299.8	1.35	1.45	1.53	1.59	1.70	1.63	1.58	1.46	1.65	1.36

(60.122.000

assembly group)

L - reduction

(low)

M - multiplier

R - reverse speed

(reverser

TRACTOR IS EQUIPPED WITH FULLY SYNCHRONIZED GEARBOX, CARRARO FRONT DRIVE AXLE AND TORQUE MULTIPLIER

- TRAVEL SPEED OF 25 km/h

Speed gear	Dependent P.T.O. shaft speed	Tractor travel speed at rated engine speed - km/h									
		12.4-28	14.9-28	16.9-28	16.9-30	16.9-34	13.6-36	12.4-36	12.4-32	9.5-42	9.5-32
1	289.3	4.58	4.97	5.20	5.40	5.79	5.56	5.36	4.97	5.61	4.62
2	405.6	6.42	6.97	7.29	7.57	8.11	7.79	7.51	6.97	7.86	6.48
3	527.5	8.36	9.06	9.48	9.84	10.55	10.13	9.77	9.06	10.22	8.43
4	847.4	13.42	14.56	15.24	15.81	16.95	16.27	15.69	14.56	16.42	13.54
5	1344.4	21.30	23.10	24.17	25.09	26.89	25.81	24.90	23.10	26.06	21.48
1L	289.3	1.17	1.27	1.33	1.38	1.48	1.42	1.37	1.27	1.43	1.18
2L	405.6	1.64	1.78	1.87	1.94	2.08	1.99	1.92	1.78	2.01	1.66
3L	527.5	2.14	2.32	2.43	2.52	2.70	2.59	2.50	2.32	2.62	2.16
4L	847.4	3.43	3.72	3.90	4.05	4.34	4.16	4.01	3.72	4.20	3.46
5L	1344.4	5.45	5.91	6.18	6.42	6.88	6.60	6.37	5.91	6.67	5.50
1M	220.4	3.49	3.79	3.96	4.11	4.41	4.23	4.08	3.79	4.27	3.52
2M	309.0	4.89	5.31	5.56	5.77	6.18	5.93	5.72	5.31	5.99	4.94
3M	401.8	6.36	6.90	7.22	7.50	8.04	7.71	7.44	6.90	7.79	6.42
4M	645.5	10.22	11.09	11.61	12.04	12.91	12.39	11.95	11.09	12.51	10.31
5M	1024.1	16.22	17.59	18.41	19.11	20.48	19.66	18.97	17.59	19.85	16.37
1LM	220.4	0.89	0.97	1.01	1.05	1.13	1.08	1.04	0.97	1.09	0.90
2LM	309.0	1.25	1.36	1.42	1.47	1.58	1.52	1.45	1.36	1.53	1.26
3LM	401.8	1.63	1.77	1.85	1.92	2.06	1.97	1.90	1.77	1.99	1.64
4LM	645.5	2.62	2.84	2.97	3.08	3.30	3.17	3.06	2.84	3.20	2.64
5LM	1024.1	4.15	4.50	4.71	4.89	5.24	5.03	4.85	4.50	5.08	4.19

(60.122.000
assembly group)
L - reduction
(low)
M - multiplier

TRACTOR IS EQUIPPED WITH FULLY SYNCHRONIZED GEARBOX, CARRARO FRONT DRIVE AXLE AND TORQUE MULTIPLIER

- TRAVEL SPEED OF 25 km/h

<https://truckmanuals.ru/>

Speed gear	Dependent P.T.O. shaft speed	Tractor travel speed at rated engine speed - km/h									
		12.4-28	14.9-28	16.9-28	16.9-30	16.9-34	13.6-36	12.4-36	12.4-32	9.5-42	9.5-32
R	- 393.7	6.24	6.76	7.08	7.35	7.87	7.56	7.29	6.76	7.63	6.29
RL	- 393.7	1.60	1.73	1.81	1.88	2.01	1.93	1.87	1.73	1.95	1.61
RM	- 299.8	4.75	5.15	5.39	5.59	6.00	5.76	5.55	5.15	5.81	4.79
RLM	- 299.8	1.22	1.32	1.38	1.43	1.53	1.47	1.42	1.32	1.49	1.23

(60.122.000

assembly group)

L - reducer

(low)

M - multiplier

R - reverse speed

(reverser)

TRACTOR IS EQUIPPED WITH FULLY SYNCHRONIZED GEARBOX, CARRARO FRONT DRIVE AXLE AND REVERSER

- TRAVEL SPEED OF 30 km/h

<https://truckmanualshub.com/>

Speed gear	Dependent P.T.O. shaft speed	Tractor travel speed at rated engine speed - km/h									
		12.4-28	14.9-28	16.9-28	16.9-30	16.9-34	13.6-36	12.4-36	12.4-32	9.5-42	9.5-32
1	289.3	5.08	5.51	5.77	5.99	6.42	6.16	5.94	5.51	6.22	5.13
2	405.6	7.12	7.73	8.09	8.39	8.99	8.63	8.33	7.73	8.72	7.19
3	527.5	9.26	10.05	10.52	10.91	11.70	11.23	10.83	10.05	11.33	9.35
4	847.4	14.88	16.14	16.89	17.53	18.79	18.04	17.40	16.14	18.21	15.01
5	1344.4	23.61	25.61	26.80	27.80	29.81	28.62	27.61	25.61	28.89	23.82
1L	289.3	1.30	1.41	1.48	1.53	1.64	1.58	1.52	1.41	1.59	1.31
2L	405.6	1.82	1.98	2.07	2.15	2.30	2.12	2.13	1.98	2.23	1.84
3L	527.5	2.37	2.57	2.69	2.79	2.99	2.87	2.77	2.57	2.90	2.39
4L	847.4	3.81	4.13	4.32	4.49	4.81	4.62	4.45	4.13	4.66	3.84
5L	1344.4	6.04	6.55	6.86	7.12	7.63	7.32	7.06	6.55	7.39	6.09
1R	-317.6	5.58	6.05	6.33	6.57	7.04	6.76	6.52	6.05	6.82	5.62
2R	-445.2	7.82	8.84	8.88	9.21	9.87	9.47	9.14	8.48	9.57	7.88
3R	-578.9	10.17	11.03	11.55	11.98	12.84	12.32	11.89	11.03	12.44	10.25
4R	-930.1	16.33	17.72	18.55	19.24	20.63	19.80	19.10	17.72	19.99	16.47
5R	-1475.6	25.92	28.11	29.43	30.53	32.72	31.41	30.31	28.11	31.71	26.13
1RL	-317.6	1.43	1.55	1.62	1.68	1.80	1.73	1.67	1.55	1.75	1.44
2RL	-445.2	2.00	2.17	2.27	2.36	2.53	2.42	2.34	2.17	2.45	2.02
3RL	-578.9	2.60	2.82	2.95	3.06	3.28	3.15	3.04	2.82	3.18	2.62
4RL	-930.1	4.18	4.53	4.75	4.92	5.28	5.06	4.89	4.53	5.11	4.21
5RL	-1475.6	6.63	7.19	7.53	7.81	8.37	8.03	7.75	7.19	8.11	6.69

(60.122.000
assembly group)
L - reduction
(low)
R - reverse speed
(reverser)

TRACTOR IS EQUIPPED WITH FULLY SYNCHRONIZED GEARBOX, CARRARO FRONT DRIVE AXLE AND REVERSER

- TRAVEL SPEED OF 25 km/h

<https://truckmanuals.ru/>

Speed gear	Dependent P.T.O. shaft speed	Tractor travel speed at rated engine speed - km/h									
		12.4-28	14.9-28	16.9-28	16.9-30	16.9-34	13.6-36	12.4-36	12.4-32	9.5-42	9.5-32
1	289.3	4.58	4.97	5.20	5.40	5.79	5.56	5.36	4.97	5.61	4.62
2	405.6	6.42	6.97	7.29	7.57	8.11	7.79	7.51	6.97	7.86	6.48
3	527.5	8.36	9.06	9.48	9.84	10.55	10.13	9.77	9.06	10.22	8.43
4	847.4	13.42	14.56	15.24	15.81	16.95	16.27	15.69	14.56	16.42	13.54
5	1344.4	21.30	23.10	24.17	25.09	26.89	25.81	24.90	23.10	26.06	21.48
1L	289.3	1.17	1.27	1.33	1.38	1.48	1.42	1.37	1.27	1.43	1.18
2L	405.6	1.64	1.78	1.87	1.94	2.08	1.99	1.92	1.78	2.01	1.66
3L	527.5	2.14	2.32	2.43	2.52	2.70	2.59	2.50	2.32	2.62	2.16
4L	847.4	3.43	3.72	3.90	4.05	4.34	4.16	4.01	3.72	4.20	3.46
5L	1344.4	5.45	5.91	6.18	6.42	6.88	6.60	6.37	5.91	6.67	5.50
1R	-317.6	5.03	5.46	5.71	5.92	6.35	6.10	5.88	5.46	6.16	5.07
2R	-445.2	7.05	7.65	8.01	8.31	8.90	8.54	8.25	7.65	8.63	7.11
3R	-578.9	9.17	9.95	10.41	10.80	11.58	11.11	10.72	9.95	11.22	9.25
4R	-930.1	14.73	15.98	16.73	17.35	18.60	17.85	17.23	15.98	18.03	14.86
5R	-1475.6	23.37	25.35	26.54	27.53	29.51	28.32	27.33	25.35	28.60	23.57
1RL	-317.6	1.29	1.40	1.46	1.52	1.62	1.56	1.50	1.40	1.57	1.30
2RL	-445.2	1.80	1.96	2.05	2.12	2.28	2.19	2.11	1.96	2.21	1.82
3RL	-578.9	2.35	2.54	2.66	2.76	2.96	2.84	2.74	2.54	2.87	2.37
4RL	-930.1	3.77	4.09	4.28	4.44	4.76	4.57	4.41	4.09	4.61	3.80
5RL	-1475.6	5.98	6.49	6.79	7.04	7.55	7.25	6.99	6.49	7.32	6.03

(60.122.000
assembly group)
L - reduction
(low)
R - reverse speed
(reverser)

TRACTOR IS EQUIPPED WITH FULLY SYNCHRONIZED GEARBOX, CARRARO FRONT DRIVE AXLE AND CREEPER GEAR

- TRAVEL SPEED OF 30 km/h

<https://truckmandalshub.com/>

Speed gear	Dependent P.T.O. shaft speed	Tractor travel speed at rated engine speed - km/h									
		12.4-28	14.9-28	16.9-28	16.9-30	16.9-34	13.6-36	12.4-36	12.4-32	9.5-42	9.5-32
1	289.3	5.08	5.51	5.77	5.99	6.42	6.16	5.94	5.51	6.22	5.13
2	405.6	7.12	7.73	8.09	8.39	8.99	8.63	8.33	7.73	8.72	7.19
3	527.5	9.26	10.05	10.52	10.91	11.70	11.23	10.83	10.05	11.33	9.35
4	847.4	14.88	16.14	16.89	17.53	18.79	18.04	17.40	16.14	18.21	15.01
5	1344.4	23.61	25.61	26.80	27.82	29.81	28.62	27.61	25.61	28.89	23.82
1L	289.3	1.30	1.41	1.48	1.53	1.64	1.58	1.52	1.41	1.59	1.31
2L	405.6	1.82	1.98	2.07	2.15	2.30	2.21	2.13	1.98	2.23	1.84
3L	527.5	2.37	2.57	2.69	2.79	2.99	2.87	2.77	2.57	2.90	2.39
4L	847.4	3.81	4.13	4.32	4.49	4.81	4.62	4.45	4.13	4.66	3.84
5L	1344.4	6.04	6.55	6.86	7.12	7.63	7.32	7.06	6.55	7.39	6.09
1S	31.2	0.55	0.59	0.62	0.65	0.69	0.66	0.64	0.59	0.67	0.55
2S	43.7	0.77	0.83	0.87	0.90	0.97	0.93	0.90	0.83	0.94	0.77
3S	56.9	1.00	1.08	1.13	1.18	1.26	1.21	1.17	1.08	1.22	1.01
4S	91.4	1.60	1.74	1.82	1.89	2.03	1.94	1.88	1.74	1.96	1.62
5S	145.0	2.55	2.76	2.89	3.00	3.21	3.09	2.98	2.76	3.12	2.57
1LS	31.2	0.14	0.15	0.16	0.17	0.18	0.17	0.16	0.15	0.17	0.14
2LS	43.7	0.20	0.21	0.22	0.23	0.25	0.24	0.23	0.21	0.24	0.20
3LS	56.9	0.26	0.28	0.29	0.30	0.32	0.31	0.30	0.28	0.31	0.26
4LS	91.4	0.41	0.45	0.47	0.48	0.52	0.50	0.48	0.45	0.50	0.41
5LS	145.0	0.65	0.71	0.74	0.77	0.82	0.79	0.76	0.71	0.80	0.66

(60.122.000
assembly group)
L - reduction
(low)
S - creeper
speeds

TRACTOR IS EQUIPPED WITH FULLY SYNCHRONIZED GEARBOX, CARRARO FRONT DRIVE AXLE AND CREEPER GEAR

- TRAVEL SPEED OF 30 km/h

<https://truckmanualshub.com/>

Speed gear	Dependent P.T.O. shaft speed	Tractor travel speed at rated engine speed - km/h									
		12.4-28	14.9-28	16.9-28	16.9-30	16.9-34	13.6-36	12.4-36	12.4-32	9.5-42	9.5-32
R	- 393.7	6.91	7.50	7.85	8.14	8.73	8.38	8.09	7.50	8.46	6.92
RL	- 393.7	1.77	1.92	2.01	2.08	2.23	2.14	2.07	1.92	2.16	1.78
RS	- 42.44	0.75	0.81	0.85	0.88	0.94	0.90	0.87	0.81	0.91	0.75
RLS	- 42.44	0.19	0.21	0.22	0.22	0.24	0.23	0.22	0.21	0.23	0.19

(60.122.000

assembly group)

L - reduction

(low)

S - creeper speeds

R - reverse speed (reverser)

TRACTOR IS EQUIPPED WITH FULLY SYNCHRONIZED GEARBOX, CARRARO FRONT DRIVE AXLE AND CREEPER GEAR

- TRAVEL SPEED OF 25 km/h

<https://truckmanualshub.com/>

Speed gear	Dependent P.T.O. shaft speed	Tractor travel speed at rated engine speed - km/h									
		12.4-28	14.9-28	16.9-28	16.9-30	16.9-34	13.6-36	12.4-36	12.4-32	9.5-42	9.5-32
1	289.3	4.58	4.97	5.20	5.40	5.79	5.56	5.36	4.97	5.61	4.62
2	405.6	6.42	6.97	7.29	7.57	8.11	7.79	7.51	6.97	7.86	6.48
3	527.5	8.36	9.06	9.48	9.84	10.55	10.13	9.77	9.06	10.22	8.43
4	847.4	13.42	14.56	15.24	15.81	16.95	16.27	15.69	14.56	16.42	13.54
5	1344.4	21.30	23.10	24.17	25.09	26.89	25.81	24.90	23.10	26.06	21.48
1L	289.3	1.17	1.27	1.33	1.38	1.48	1.42	1.37	1.27	1.43	1.18
2L	405.6	1.64	1.78	1.87	1.94	2.08	1.99	1.92	1.78	2.01	1.66
3L	527.5	2.14	2.32	2.43	2.52	2.70	2.59	2.50	2.32	2.62	2.16
4L	847.4	3.43	3.72	3.90	4.05	4.34	4.16	4.01	3.72	4.20	3.46
5L	1344.4	5.45	5.91	6.18	6.42	6.88	6.60	6.37	5.91	6.67	5.50
1S	31.2	0.49	0.54	0.56	0.58	0.62	0.60	0.58	0.54	0.60	0.50
2S	43.7	0.69	0.75	0.79	0.82	0.87	0.84	0.81	0.75	0.85	0.70
3S	56.9	0.90	0.98	1.02	1.06	1.14	1.09	1.05	0.98	1.10	0.91
4S	91.4	1.45	1.57	1.64	1.70	1.83	1.75	1.69	1.57	1.77	1.46
5S	145.0	2.30	2.49	2.61	2.70	2.90	2.78	2.69	2.49	2.81	2.32
1LS	31.2	0.13	0.14	0.14	0.15	0.16	0.15	0.15	0.14	0.15	0.13
2LS	43.7	0.18	0.19	0.20	0.21	0.22	0.21	0.21	0.19	0.22	0.18
3LS	56.9	0.23	0.25	0.26	0.27	0.29	0.28	0.27	0.25	0.28	0.23
4LS	91.4	0.37	0.40	0.42	0.44	0.47	0.45	0.43	0.40	0.45	0.37
5LS	145.0	0.59	0.64	0.67	0.69	0.74	0.71	0.69	0.64	0.72	0.59

(60.122.000
assembly group)
L - reduction
(low)
S - creeper
gears

TRACTOR IS EQUIPPED WITH FULLY SYNCHRONIZED GEARBOX, CARRARO FRONT DRIVE AXLE AND CREEPER GEAR
 - TRAVEL SPEED OF 25 km/h

Speed gear	Dependent P.T.O. shaft speed	Tractor travel speed at rated engine speed - km/h									
		12.4-28	14.9-28	16.9-28	16.9-30	16.9-34	13.6-36	12.4-36	12.4-32	9.5-42	9.5-32
R	- 393.7	6.24	6.76	7.08	7.35	7.87	7.56	7.29	6.76	7.63	6.29
RL	- 393.7	1.60	1.73	1.81	1.88	2.01	1.93	1.87	1.73	1.95	1.61
RS	- 42.44	0.67	0.73	0.76	0.79	0.85	0.81	0.79	0.73	0.82	0.68
RLS	- 42.44	0.17	0.19	0.20	0.20	0.22	0.24	0.20	0.19	0.21	0.17

(60.122.000 assembly group)
 L - reduction (low)
 S - creeper gears
 R - reverse speed (reverser)

TRACTOR IS EQUIPPED WITH 4TH AND 5TH GEAR SYNCHRONIZED GEARBOX, CARRARO FRONT DRIVE AXLE AND TORQUE MULTIPLIER
 - for 30 km/h speed

<https://truckmanualshub.com/>

Speed gear	Dependent P.T.O. shaft speed	Tractor travel speed at rated engine speed - km/h				
		16.9-28	12.4-36	16.9-30	13.6-36	16.9-34
1	379.6	7.92	8.03	8.26	8.40	8.82
2	493.9	10.29	10.44	10.73	10.92	11.47
3	688.4	14.36	14.56	14.97	15.24	16.00
4	979.9	20.43	20.72	21.30	21.68	22.76
5	1344.4	28.03	28.43	29.23	29.75	31.23
1M	289.1	6.02	6.10	6.27	6.39	6.70
2M	376.3	7.84	7.95	8.17	8.32	8.73
3M	524.4	10.93	11.08	11.39	11.60	12.17
4M	746.5	15.54	15.77	16.21	16.50	17.32
5M	1024.0	21.35	21.65	22.26	22.66	23.79
1L	379.6	1.87	1.90	1.95	1.99	2.09
2L	493.9	2.43	2.46	2.53	2.58	2.71
3L	688.4	3.38	3.43	3.52	3.59	3.76
4L	979.9	4.83	4.90	5.04	5.13	5.38
5L	1344.4	6.62	6.72	6.91	7.03	7.38
1LM	289.1	1.43	1.45	1.49	1.51	1.59
2LM	376.3	1.85	1.87	1.93	1.96	2.06
3LM	524.4	2.59	2.62	2.70	2.75	2.88
4LM	746.5	3.67	3.72	3.83	3.89	4.09
5LM	1024.0	5.04	5.11	5.26	5.35	5.62

Speed gear	Dependent P.T.O. shaft speed	Tractor travel speed at rated engine speed - km/h				
		16.9-28	12.4-36	16.9-30	13.6-36	16.9-34
R	-508.5	10.50	10.65	10.95	11.15	11.70
RL	-508.5	2.48	2.52	2.59	2.63	2.76
RM	-387.3	8.02	8.14	8.37	8.52	8.94
RLM	-387.3	1.90	1.93	1.98	2.02	2.12

(7211 1900 assembly group)

L - reduction (low)

M - multiplier

R - reverse speed
(reverser)

TRACTOR IS EQUIPPED WITH 4TH AND 5TH GEAR SYNCHRONIZED GEARBOX, CARRARO FRONT DRIVE AXLE AND TORQUE MULTIPLIER

- for 25 km/h speed

<https://truckmanualshub.com/>

Speed gear	Dependent P.T.O. shaft speed	Tractor travel speed at rated engine speed - km/h				
		16.9-28	16.9-30	12.4-36	13.6-36	16.9-34
1	379.6	7.13	7.44	7.23	7.55	7.95
2	493.9	9.28	9.68	9.41	9.83	10.34
3	688.4	12.94	13.49	13.12	13.69	14.41
4	979.9	18.42	19.20	18.68	19.49	20.52
5	1344.4	25.27	26.35	25.63	26.74	28.15
1M	289.1	5.43	5.67	5.51	5.75	6.05
2M	376.3	7.07	7.37	7.17	7.49	7.88
3M	524.4	9.85	10.28	9.99	10.43	10.98
4M	746.5	14.03	14.63	14.23	14.85	15.63
5M	1024.0	19.25	20.07	19.52	20.37	21.44
1L	379.6	1.68	1.76	1.71	1.78	1.88
2L	493.9	2.19	2.29	2.22	2.32	2.44
3L	688.4	3.05	3.19	3.10	3.23	3.40
4L	979.9	4.35	4.53	4.41	4.60	4.84
5L	1344.4	5.97	6.22	6.05	6.32	6.65
1LM	289.1	1.28	1.34	1.30	1.36	1.43
2LM	376.3	1.67	1.74	1.69	1.77	1.86
3LM	524.4	2.33	2.43	2.36	2.46	2.59
4LM	746.5	3.31	3.45	3.36	3.51	3.69
5LM	1024.0	4.54	4.74	4.61	4.81	5.06

Speed gear	Dependent P.T.O. shaft speed	Tractor travel speed at rated engine speed - km/h				
		16.9-28	16.9-30	12.4-36	13.6-36	16.9-34
R	-508.5	9.48	9.89	9.62	10.04	10.57
RL	-508.5	2.27	2.37	2.30	2.41	2.53
RM	-387.3	7.22	7.53	7.33	7.65	8.05
RLM	-387.3	1.72	1.80	1.74	1.82	1.92

(7211 1900)

assembly group

L - reduction (low)

M - multiplier

R - reverse speed
(reverser)

REAR INDEPENDENT PTO SHAFT
<https://truckmanualshub.com/>

GEAR	SHAFT SPEED / ENGINE SPEED	SHAFT SPEED / ENGINE SPEED
48/13	540 / 1994	596 / 2200
41/20	1000 / 2050	1073 / 2200

FRONT PTO SHAFT

GEAR	SHAFT SPEED / ENGINE SPEED	SHAFT SPEED / ENGINE SPEED
40/22	1000 / 1818	1210 / 2200

OPERATING MANUAL OF ZETOR TRACTORS
3320, 3340, 4320, 4340, 5320,
5340, 5340 HORAL, 6320, 6340,
6340 HORAL, 7320, 7340

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