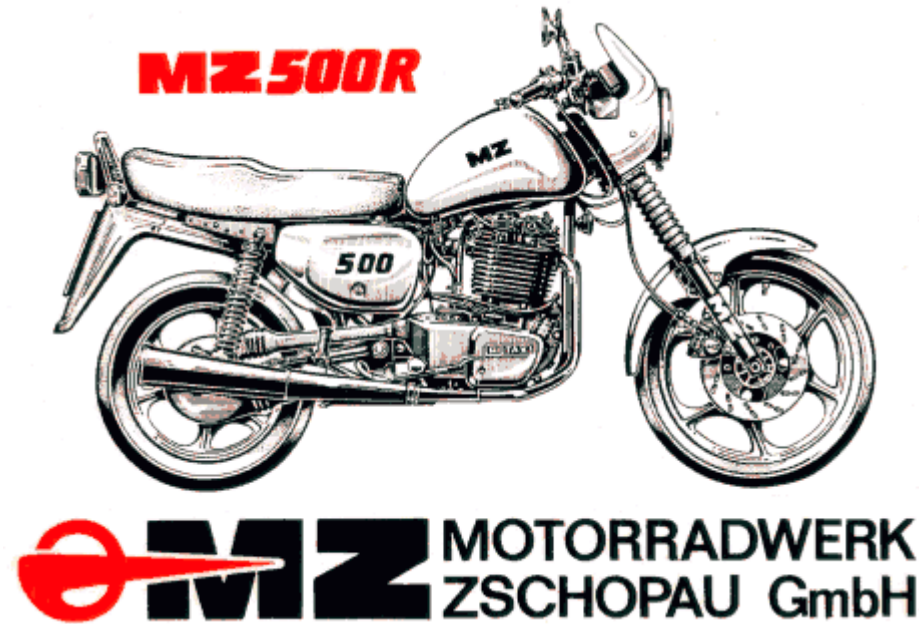


OPERATING INSTRUCTIONS MZ 500R



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MZ DEAR FRIEND! With these operating instructions we want to help ensure that you will be a reliable companion for your motorcycle always. The MZ 500 R is a result of our many years of experience in motorcycle a rugged, powerful, reliable, low-maintenance vehicle. So that always remains, we ask you to consider the following information about treatment and care. , the starting and operation of the vehicle requires that you read these operating instructions carefully, follow the advice given here for the proper use, for the country have valid legal authorization to use this vehicle and know and observe under which the vehicle may be used. conditions , the vehicle has to remain in the state passed by the engine manufacturer. Any damage caused by failure to observe the instructions and regulations by installing replacement parts and accessories from heterologous or improper repairs, the manufacturer accepts no liability. We wish 'good trip'! MOTORCYCLE FACTORY GmbH ZSCHOPAU

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1 SPECIFICATIONS

1.1. Engine and transmission

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Engine Type	Rotax 504 E
Working method	4-stroke, SOHC, 4 valves
Displacement	494 cm ³
Performance	ECE 20 kW (27 hp) at 6500 rev / min
Maximum torque	32 Nm at 4,500 r / min
Lubrication	Dry sump lubrication for engine and transmission with 2-fold trochoid pump
Gear	
Number of gears	5
Neutral gear indicator	the speedometer, combined with oil level indicator
Lubrication	Pump-spray lubrication
Power transmission to the rear wheel	
Roller chain	5/8 "x 1/4", 102 rolls
Translation gear wheel	2.11 (18/38 teeth)

1.2. Carburetor

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Type	Dell'orto PHF 34 GS
Suction pipe	34 mm
Main Jet	120
Needle jet	265
Part-load needle	K28
Part-load needle position from top	3
Starting jet	60
Idle air	45
Leerlaufkorrekturdüse	100
Idle mixture screw	1.5
Idle	
about	900 ... 1.100 U / min
set with	Throttle stop screw
Carbon monoxide content	2.5 to 4% at idle speed

1.3. Chassis

Suspension	
forward	Telescopic fork with hydraulic damping, 185 mm axle travel
at the back	Struts with hydraulic damping, 135 mm travel, preload adjustable angle of attack and
Wheels	Cast wheels made of aluminum alloy
Rims	
forward	1.85 x 18
at the back	2.50 x 16
Tyres	
forward	90/90-18 S
at the back	110/80-16 S
Tire air pressure (gauge pressure) solo	
forward	170 kPa (1.7 kgf / cm ²)
at the back	190 kPa (1.9 kgf / cm ²)
with maximum mass	
forward	170 kPa (1.7 kgf / cm ²)
at the back	250 kPa (2.5 kgf / cm ²)
Brakes	
forward	hydraulically actuated disc brake
at the back	Simplex Expanding brake

1.4. Electrical System

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Voltage	12 V
Ignition	Contactless ignition capacitor, fully electronic, with spark
Ignition	uninfluenced 3 ° BTDC at 1500 r / min, adjustment continuously from 2000 rev / min at 29 ° BTDC at 6000 r / min
Spark	NGK D8 EA
Electrode spacing	0.7 mm
Generator	3-phase AC generator 12V, 190W
Battery	12V / 14Ah
Bulbs	
Spotlight	H4, 12V, 60/55W, asymmetrical passing beam
Parking light	12V/4W, BA 9s base
Rear light	12V/5W, dual-filament lamp P25-2-12V (21/5W)
Brake light	12V/21W, double-filament lamp P25-2-12V (21/5W)
Flashing	12V/10W - DIN 72601-R 19/10
Telltails	12V / 1.2 W, Socket W 2x4, 6d (glass lamp)
Instrument lighting	12V/2W, Socket W 2,1 x9, 5d (glass lamp)
Fuses	
Main fuse	Fuse 16A
Direction indicator	Fuse 4A

1.5. Masses

[next point](#) ; [index](#)

Empty weight (with fuel and tool)	157 kg
Permissible mass	330 kg

1.6. Capacities

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Fuel tank	17.0 l
which reserve	1.5 l
Engine Oil	2.5 l

1.7. Performance

[next point](#) ; [index](#)

Top speed	140 km / h, depending on the load, weather conditions and driving position
Fuel	3.5 ... 5 l/100 km

2 RESOURCES

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Engine and transmission

carburetor fuel unleaded regular motor oil SAE 10 W 40 SAE 15 W 50 Chassis Brake Fluid SAE 70 R3 or SAE I 1703 bearing grease or engine oil SAE 10 W 40 Electrical system for a new battery Akkumulatorenschwefelsäure with a density of 1.28 g / cm^3 (in the tropics 1.23 g / cm^3 use) at 25° C and to refill the battery with distilled water only. Dielectric grease as corrosion of the battery terminals.

3 OPERATION

3.1. Controls

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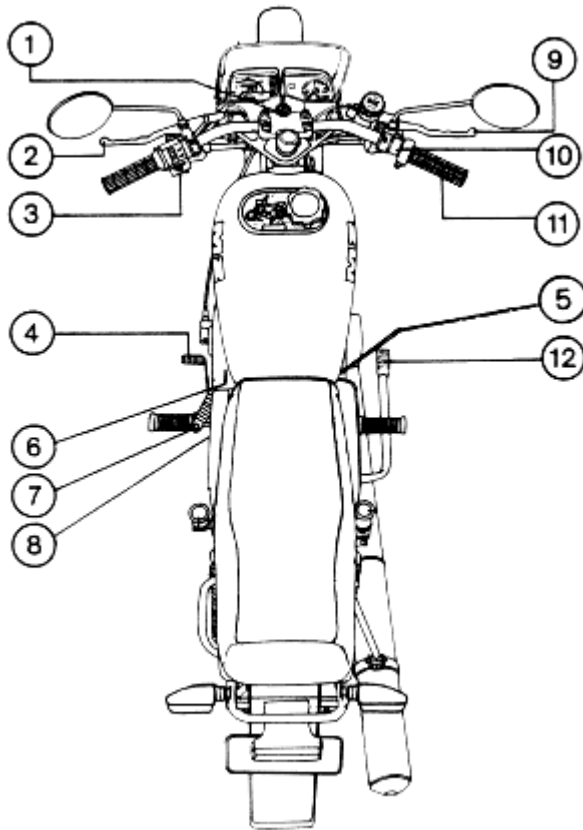


Image 1 Operating controls

- | | |
|-----------------------------------|------------------------------|
| 1. Ignition steering lock | 7. Kickstarter |
| 2. Clutch lever | 8. Kickstand |
| 3. Combination switch left | 9. Handbrake lever |
| 4. Pedal | 10. Right switch combination |
| 5. Fuel cock | 11. Throttle grip |
| 6. Lever for cold starting device | 12. Brake pedal |

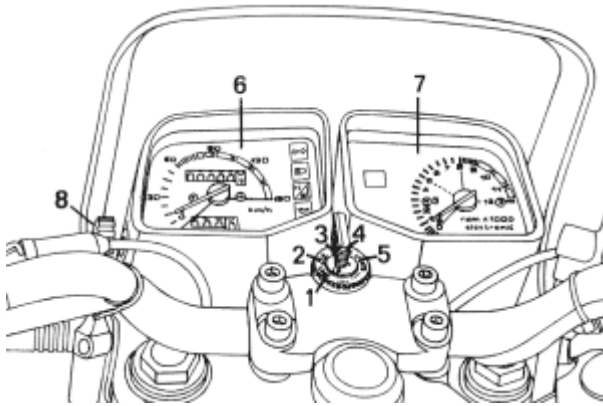


Image 2 Instrument box, ignition steering lock

- 1 Parking position (parking light turned on, steering locked)
- 2 Steering locked, ignition, lights out
- 3 Ignition off
- 4 Ignition on, parking lights illuminated with
- 5 functionless
- 6 Tachometer with indicator lights for



Direction indicator



High beam

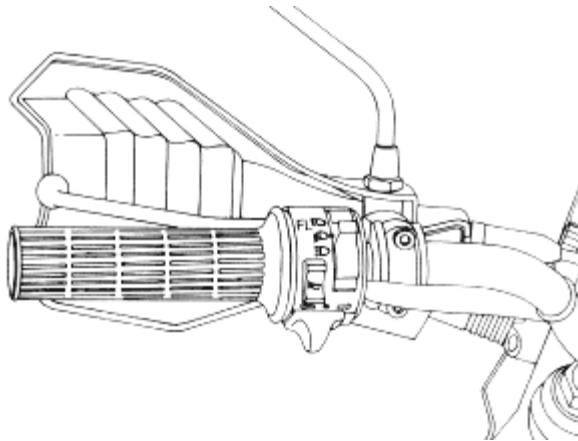


Idle gear / oil level in the oil reservoir

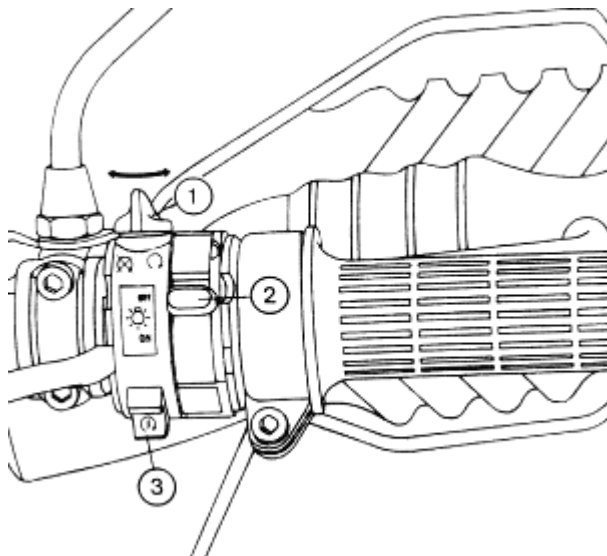
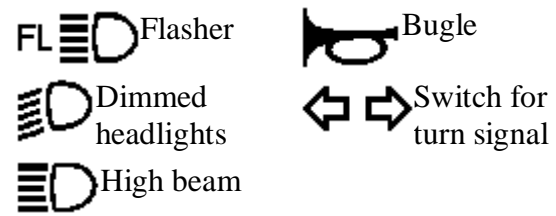


Oil Pressure

- 7 Tachometer (electronically driven)
- 8 (Pull the knob to the left and stand in place by turning it to zero) reset button for trip odometer



Picture 3 Combination switch left



Picture 4 Right switch combination

1 Engine stop switch (engine stop)



OFF Off



RUN A

2

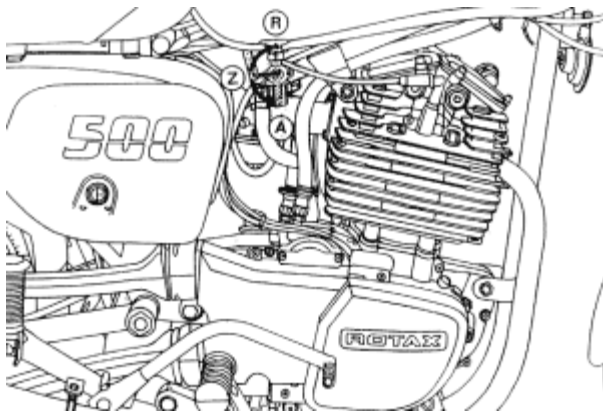


Light switch OFF Off ON A

3



Starter Pressure Switch

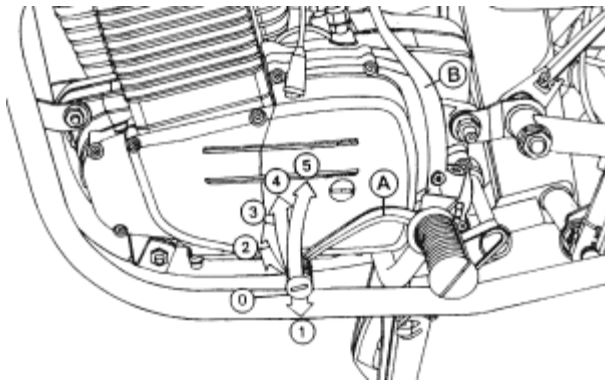


Picture 5 Fuel cock

(A) Open

(Z) closed

(R) Reserve



Picture 6 Foot switch

Numbers: position of the gears

(A) pedal

(B) Kickstarter

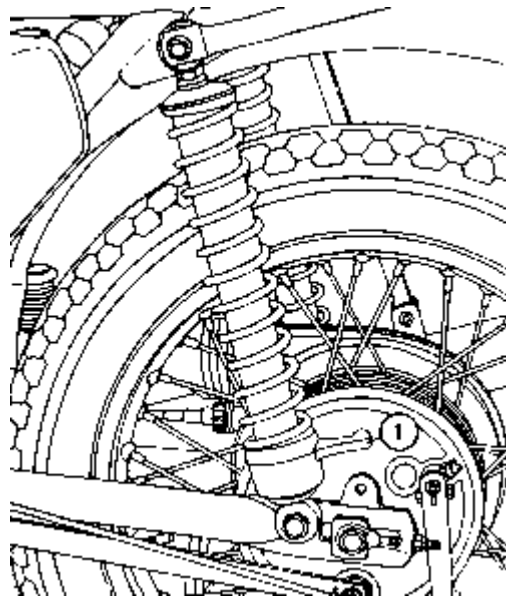
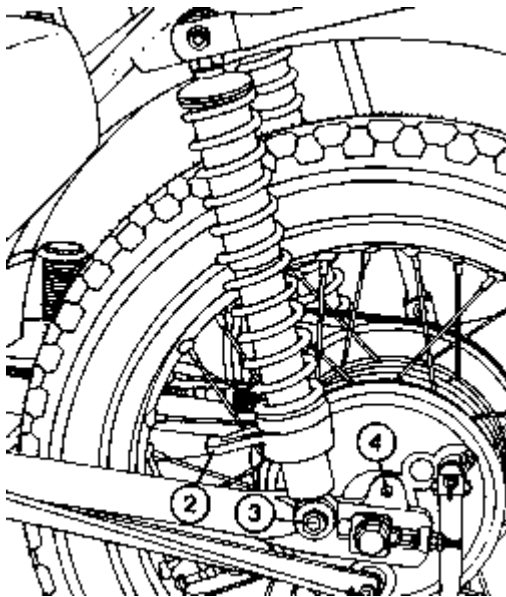
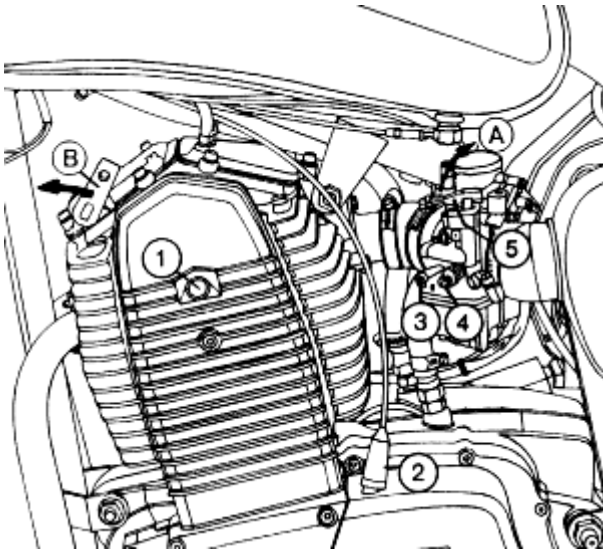


Image 7 Changing the spring preload

1. Adjustment for single-person
2. Setting for higher load
3. Attachment point for 'softer' suspension
4. Attachment point for 'harder' suspension



Picture 8 Cold start

1. Sight glass for top dead center marking
 2. Clutch cable
 3. Idle mixture screw
 4. Throttle stop screw
 5. Lever for starting carburetor
- (A) starting carburetor switched
push forward (B) decompressor (not fitted on all versions), when starting

3.2. Starting and driving

[next point](#) ; [index](#)

Before every ride is according to the maintenance plan (see section [4.2.](#)) to control the operation and safety of the vehicle. starting

1. The gear in neutral gear (0) switch (Figure [6](#)).
2. Ignition switch (Fig. [2](#)), engine stop switch to "RUN".
warning lights illuminate for neutral gear and oil pressure.
3. Open the fuel tap (Fig. [5](#)).
4. COLD ENGINE: Open the cold start device (Fig. [8](#)).
A WARM ENGINE: can cold-start device closed.
5. COLD ENGINE: throttle to idle position.
A WARM ENGINE: throttle open about a quarter turn.
6. Motor starter (Fig. [4](#)) start or kick start, to press forward given where appropriate decompressor.
7. Include cold-start device when the engine willingly accepts gas. The decompressor closes automatically after the engine starts.

Attention

If the starter pull through not immediately abort startup and restart. loading at extremely low outside temperatures and several unsuccessful attempts at starting a pause of about 20 s, so that the fuel can run after the cold start system. driving , the engine does not warm up, it is warmed up . The gears using the clutch switch, which is to take the first step. Attention only use the clutch for starting and switching. Into neutral gear with prolonged maintenance. Not useless at the throttle grip 'screw'. The engine gets else on the accelerator pump of carburetor too much fuel. This is reflected not least. Excessive fuel consumption brakes are always use both brakes at the right dose. Blocking brakes extended stopping distances and affect stability. Parking Switch off ignition. Press the key down, release and blocking the handlebar to the left to position (2) - Parking on the day - or (1) - Turn Valet parking light. The handlebar can be taken to the right or left. days - or (1) - Turn Valet parking light. The steering must be taken to the right.

3.3. Information for Running

[next point](#) ; [index](#)

A driving distance of up to 1,500 ... 2000 km is the motor to retract. During this time, the following instructions should be observed.

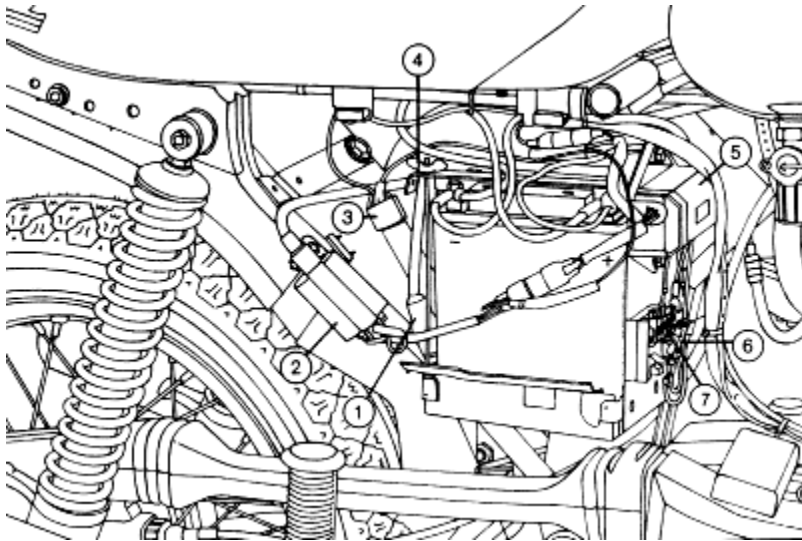
1. Allow the engine to run as little as possible in the state, but warm up or shut off for longer support.
2. The engine does not immediately demand a maximum performance.
3. Systematically increase the speeds and speeds up the end of the break-in.
4. Often, the speeds and speeds change. - Roads are better than highways for running!
5. Compliance with required inspections in a MZ-service workshop.

4 MAINTENANCE

4.1. General information

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The vehicle tool located under the right side panel allows not only roadside assistance and a large part of the planned maintenance in the maintenance schedule. During the warranty period, however, only your dealer should be entrusted with these tasks.



Picture 9 Battery and tool housing

1. Brake light switch on the brake pedal
2. Ignition Coil
3. Flasher
4. Battery holder
5. Control of the ignition
6. 15A fuse (positive lead)
7. Fuse 4A (Fahrtrichtungsanzeige)

4.2. Maintenance Schedule

[next point](#) ; [index](#)

Maintenance					
	before departure	after 500 km	after every 6000 km	after every 12,000 km	at least 1x per year
<u>Engine and transmission</u>					
Check clutch play	*				
Check the engine oil level (oil level indicator)	*				
Change Engine Oil		*	*		*
Change the oil filter		*	*		*
Clean the oil strainer in the sump cover			*		
Tighten the cylinder head		*			
Check engine mounting bolts for tightness				*	
Clean the carburetor		*	*		
Check carburetor adjustment, adjust if necessary		*	*		
Control of pollutant emission					*
Adjust valves		*	*		
Check belt condition, adjust voltage		*	*		
Replace timing belt				*	
<u>Electrical System</u>					

Check operation of lighting and signaling equipment	*				
Clean the spark plug, adjust electrode gap (0.7 mm)			*		
Replace spark plug				*	
Electronic spark control			*		
Check the electrolyte level of the battery and its connections and wait			* ¹⁾		
<u>Chassis</u>					
Check operation of brakes	*				
Check the level of brake fluid in the reservoir	*				
Change brake fluid	every two years				
Check covering the amount of the brake pads (disc brakes)			*		
Telescopic fork - Visual inspection for leaks	*				
Check the tire air pressure	*				
Check fuel level in fuel tank	*				
Remove the fuel tap, clean filter		*	*		
Tap out air filter			* ¹⁾		
Wipe the air filter housing			*		
Replace air filter				* ¹⁾	
Check all accessible screw connections for tightness		*		*	
Drive chain - check and adjust sag			* ¹⁾		
Lubricate the drive chain			* ¹⁾		

Lubricate lever and throttle			*		
Remove and shifting cables				*	
By oil drive shaft for speedometer				*	
, Clean brake shoes front and rear bearings and lubricate				*	
Lubricate rear brake key			*		
Visual inspection of wheel bearings and grease	every 20,000 km				
Check swing arm bearings and suspension				*	
Turn off all defects found during maintenance.					
¹ possibly more) depending on the substitution conditions					

4.3. Lubrication points

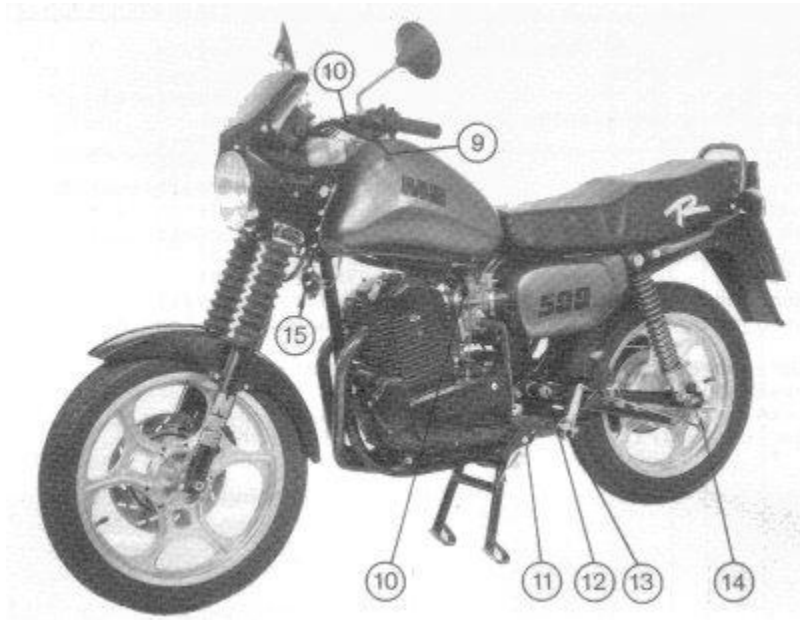
[next point](#) ; [index](#)

Smudge		Lubricants
1	Verstellmuffe for strut	Bearing grease
2	Speedometer drive	Bearing grease (lube)
3	Speedometer drive shaft	Transmission oil
4	Secondary chain	Bearing grease
5	Wheel	Bearing grease
6	Steering bearings	Bearing grease
7	Handbrake lever	Transmission oil
8	Throttle grip	Bearing grease

9	Clutch lever	Transmission oil
10	Cables	Transmission oil
11	Bearing tube for center stand	Bearing grease
12	Swing bearing bolts	Graphite oil (for mounting)
13	Fußbremshebelwelle	Bearing grease
14	Key rear brake and rear brake shoe storage	Bearing grease
15	Engine and transmission	Engine Oil



Picture 10 MZ 500 R, right lubrication points




Picture 11 MZ 500 R, left smudges

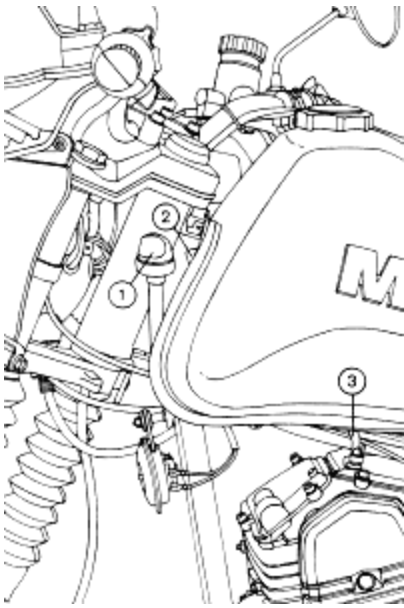
4.4. Engine and gearbox lubrication

[next point](#) ; [index](#)

The upper frame support serves as a reservoir for the lubrication of the engine and transmission. using the indicator 'neutral gear / oil level' (Figure 2), the oil level in the reservoir and the pilot 'oil pressure' (Figure 2), the oil pressure will be monitored. Assuming the system checking the oil level is electrically or mechanically without error, the result is the following operation:

	Ignition backlash	Ignition inlaid gear. gleichf. Driving sufficient amount of oil	Ignition inlaid gear. gleichf. Drive oil level is too low	Firing a transition inlaid. brakes or other uneven ride
lights	x		x	
not lit		x		
sometimes flickers				x
Remedy	-	-	Fill with oil	-

Indicator light begins to shine because of the lack of oil, are about 2000 cc oil refill (motorcycle is horizontal). The oil should contact refilled to about half way up the filler neck. The oil pressure warning lamp must go out after the engine starts. Lit, put the bike immediately and let eliminate the error cause.



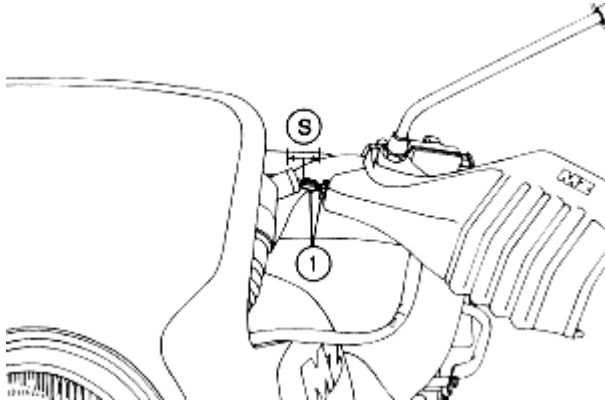
Picture 12 Add oil

1. Filler plug
2. Breather hose for oil system, upper connection
3. Breather hose for oil system, lower connection

Attention

leave oil change perform the merchants.

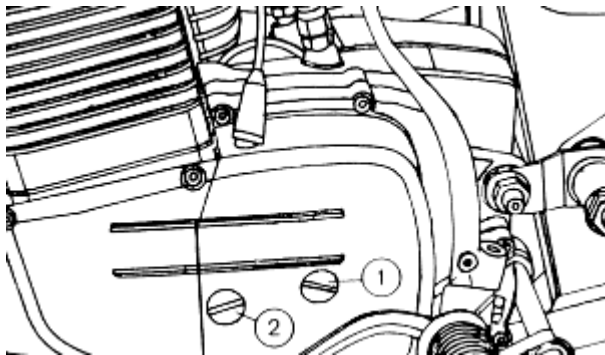
4.5. Coupling



Picture 13 Adjust clutch

1. Adjusting screw with lock nut (S) clutch play

At the clutch lever with the screw (1) Set the game to about 3 mm. Reaches the set screw no longer enough to correct the coarse adjustment. For this, the screw plugs (1) and (2) (Fig. [14](#)) open. Loosen the lock nut with the lock key (tool kit), loosen screw in the set screw until it stops and then turn back 0.5 turns. Tighten the lock nut. The lever for clutch cable under the plug (2) for a backlash of about 6 mm must be observed.



Picture 14 Adjust clutch roughly

1. Opening for screw
2. Control lever for opening game

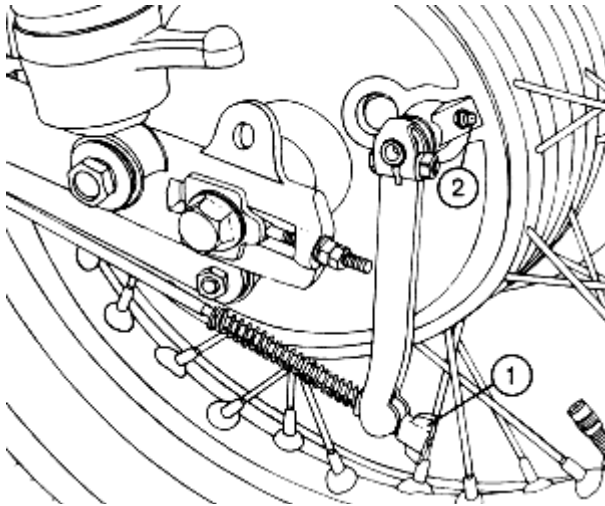
4.6. Brakes

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Foot brake

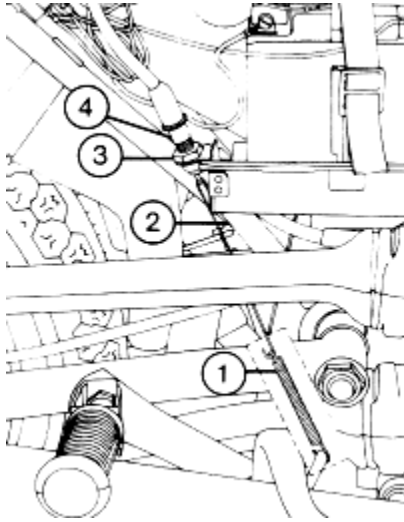
, the brake pedal adjusted so that a comfortable seating position with full braking power is achieved with minimal actuation of the pedal. After the brake light switch (rear) adjust:

- Switch on ignition;
- Press brake lever - brake shoes are just starting to grind;
- Adjusting nut (3) until the brake light to light up, like the brake light switch (4) to hold;
- Switch off ignition.



Picture 15 Adjust rear brake

1. The rear brake adjusting nut
2. Grease nipple

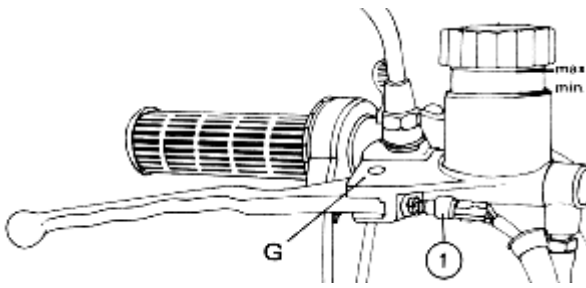


Picture 16 Adjust brake light switch-foot brake

1. Tension
2. Connecting wire
3. Adjusting
4. Brake light switch

Disc brake

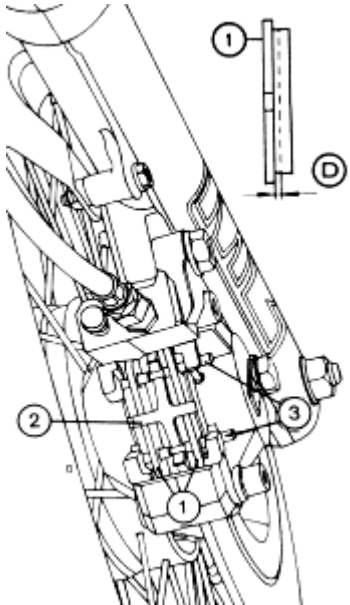
The brake lever is not adjustable. The brake light switch only so far into the joint piece (G) and tighten that the brake light comes on immediately at the start of operation of the brake lever, the brake lever in its rest position but is still present on the hinge piece. The brake fluid level must be between the marks 'max.' and 'min.' are located on the reservoir. When I close the lid of the container and the vent Hermetikbalg ring insert.



Picture 17 Adjust brake light switch front

1. Brake light switch front

(G) joint piece



Picture 18 Replacing the brake shoes

1. Brake Shoes
2. Return spring
3. Mounting bolts

(D) Minimum brake pad thickness (0.5 mm)

The brake shoes must be replaced by new ones when their surfaces are 'slowed' down to the minimum thickness. works on the disc should be performed by a specialist workshop.

4.7. Power supply

[next point](#) ; [index](#)

The fuel is cleaned in the fuel cock of two filters. The outer filter is accessible after unscrewing the filter housing. For cleaning of the inner filter, the fuel valve has to be screwed by draining the fuel from the tank. The carburettor is for the trader. In addition, however, you can clean the outside of the carburettor and the idle speed within the values provided (section [Technical Data](#)) with the throttle stop screw (Fig. [8.4](#)) Adjust to your personal preferences. before the combustion air entering the carburetor, it will be cleaned air filter. It is necessary to remove the battery to gently knock out the paper filter after removing the air filter cover. Change wet or dry air filter. The intake system must be tight, so ensure good fit of the filter in its housing and the air cleaner cover.

4.8. Wheels and tires

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Front

extension to solve the axle nut on the right, loosen the clamping screw on the right and pull out the wheel spindle. Attention not pull the hand brake after the wheel! after installation of the wheel (brake shoes to press apart)

1. Tighten the axle nut
2. By springs telescopic fork with pulled handbrake lever
3. Tighten the clamping screw of the right axle.

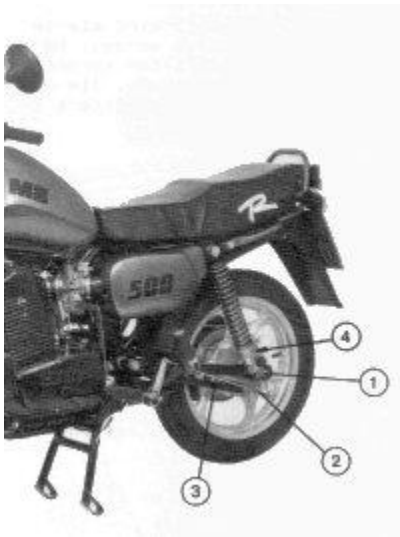


Picture 19 Remove the front wheel

1. Axle nut
2. Clamping screw of the wheel spindle

Rear

axle solve, Bremszugstange and strut brace, remove the rear wheel from the rear-wheel drive and remove the wheel left behind.



Picture 20 Remove the rear wheel

1. Axle
2. Bremszugstange
3. Strut brace
4. Cablehanger

Before installing the drive slots of the cushion rubbers if necessary moisten with rubber conditioner or soap. use rear wheel with brake support and spacer sleeve and align before tightening the axle.



Picture 21 Driver assignment - damping rubber

1. Driver
2. Damping rubber

Tire and inner tube.

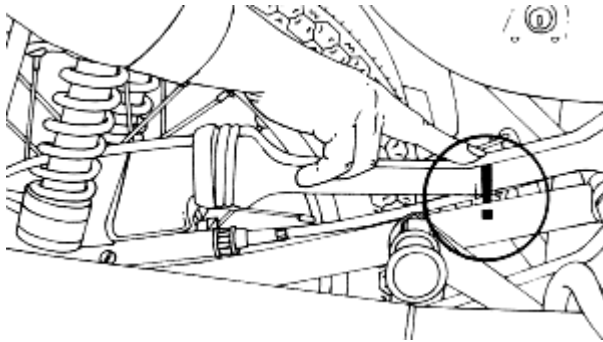
deflate and put the wheel on the ground. Protect the bearings with a set of tabs. First, the tire must be completely pushed off of the rim, before it can be pressed against the valve in the deep bed. Then, starting from the tire valve lift on both tire levers over the rim edge. Then remove the hose. Rub the new hose with talc only after inspection of the tire for foreign objects or damaged areas, and insert the tire, starting opposite the valve mount again. Attention not to pinch the tube. The tire must after installation run smoothly, the control edge therefore be at any point equidistant rim removed. Is on the tires, the direction in the arrow should point to the front. Tyre Care Before every ride you checked the tire air pressure. He must always conform with the current vehicle load. Tyres are to protect it from the strong sunlight and fuel, and similar harmful effects.

4.9. Rear-wheel drive

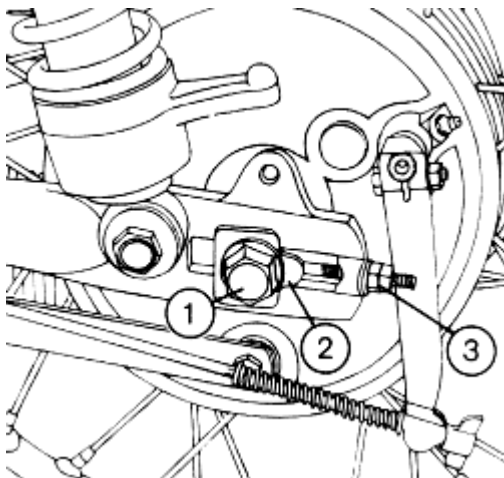
[next point](#) ; [index](#)

Check the chain slack

take the vehicle off the stand, burdened with a person, adjusting chain length so that the upper chain guard tube to about 10 - 15 mm spacing can be forced to oscillate transverse tube.



Picture 22 Check the chain slack

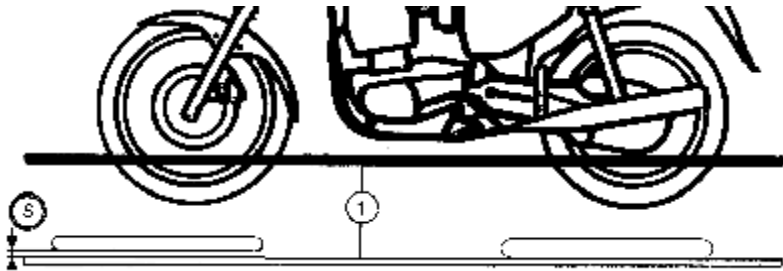


Picture 23 Adjust the chain slack

1. Axle
2. Chain tensioner left
3. Adjusting nuts

Adjust the chain slack

Loosen the axle (1) and nut for mounting the rear wheel drive. The adjusting nuts (3) of the chain tensioner (2) uniform twist and lock after adjustment. The wheel track of image [24](#) with track bar (1) or by visual inspection control over. The gap (S) results from the different widths of the front and rear. He is about 10 mm (90/90-18S front tires, rear tires 110/80-16S) wide.



Picture 24 Wheels tracks

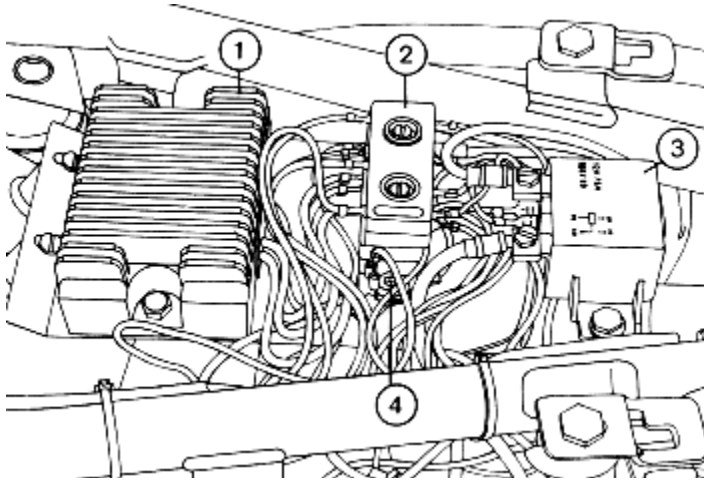
1. Track bar

(S) gap between front and yardstick

4.10. Electrical System

[next point](#) ; [index](#)

It is always to ensure that the insulation of cables and electrical equipment is in order and all cable connections are tight and free of oxide. Never replace fuses with other metal objects. allow electric welding on the motorcycle only after disconnecting the battery to run. There must be no positive line with the welding electrode come into contact. Likewise prevent getting on the electrical system unrelated cord contact with each other at work. Due to the resulting short circuit as the rectifier can be destroyed. Alternator and Ignition Both are maintenance free and do not need to be adjusted. Work on the electronic ignition system of the workshop are left. Clean the spark plug at the specified intervals and adjust the contact spacing. Keep the spark plug clean and dry inside. Variations in the color of the candles stone - normally depending on driving style gray yellow to light brown - suggest errors and defects that must eliminate a workshop. batteries Keep the battery terminals and connections clean and preserve pole after cleaning with terminal grease. The electrolyte level (markings on the battery) checked regularly after about four weeks. refill to use only distilled water. The battery is recharged when not in use the vehicle every month. ATTENTION! By mixing up the battery cables (positive and negative) you destroy the diodes of the rectifier and the battery.

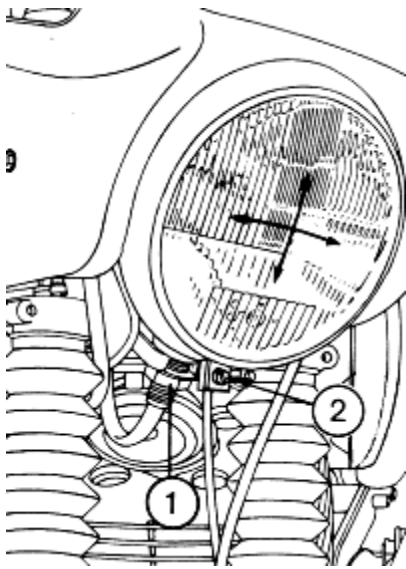


Picture 25 Electrics under the seat

1. Rectifier of the alternator
2. Cable Connector
3. Starter Relay
4. Mass point

Headlights

when you replace the Biluxlampe (Unscrew the reflector, remove contacts) on the correct snap into the reflector look. The contacts must be clean and properly plugged. To not touch the bulb glass with your fingers!



Picture 26 Headlight bracket

1. Mounting screw
2. Reflector mounting screw

The headlights according to the scheme in image [27](#) set. Burden to the vehicle with the driver and the shocks set on 'soft'. To adjust, loosen the headlight bracket - the headlamp swivel on all sides.

4.11. Notes for winter driving

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All of our customers who use your vehicle in the winter, we ask you to consider the following notes. Winters can cause severe corrosion damage by chemical de-icing agents. Therefore protect from the beginning of winter and the chrome exposed metal parts with suitable corrosion protection on wax basis. According to the maintenance schedule Lubricate the vehicle. Parts that you can not permanently protect, require in winter after every ride to treatment with anti-corrosion agents. Upon completion of the winter period, the preservative can be removed.

5 TROUBLESHOOTING GUIDE

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Error	Remedy
<u>No voltage in the electrical system</u>	
Defective fuse	Replace fuses and eliminate short circuit
Insufficiently charged or defective battery	Load or replace battery
Cable demolished or corrosion on the terminals	Cable repair, clean connections
Alternator defective	repair
<u>Neutral gear indicator light does not light up (ignition switched on)</u>	
Not inserted idle speed	Turn idle speed
No voltage in the electrical system	see there
Light bulb is defective	switch
Neutral gear switch defective	switch

Cables and their connections faulty	repair
<u>Oil level indicator light (while in gear, ignition on)</u>	
Oil level too low	Fill with oil
<u>Oil pressure light when the engine is not (ignition switched on)</u>	
No voltage in the electrical system	see there
Light bulb is defective	switch
Oil pressure switch faulty	switch
Cables and their connections faulty	repair
<u>Engine is running, oil pressure light</u>	
Low oil pressure	Motorcycle for, can eliminate causes
possible causes: oil circuit disturbed No oil in the reservoir oil pump is defective motor worn out	
<u>Battery always empty</u>	
Alternator defective	replacement / repair of
Regulator defective	switch
Cable or defective cable connections	repair
Electrolyte level is wrong	up with distilled water
<u>Light bulbs in the headlight or tail light not lit</u>	
no voltage in the electrical system	see there

Light bulbs are defective or poor contact	Repair or clean
Cable defective	repair
Dipped or defective Ignition	switch
<u>Brake light does not light</u>	
no voltage in the electrical system	see there
Light bulbs are defective or poor contact	Replace or clean
Cable defective	replace
Brake light switch incorrectly set	adjust
<u>Turn signal does not work</u>	
no voltage in the electrical system	see there
Blown fuse indicator lamps	Replace and repair short
Defective flasher	replace
Light bulbs are defective or poor contact	Replace or clean
Cable defective	repair
<u>Engine will not start</u>	
Operator error	Switch on the ignition, open the fuel tap, fuel fill, switch engine stop switch
Clogged fuel line	Clean the fuel tap, pipe and tank
Spark plug is dirty, wet or bridged	Clean or replace spark plug
Electrode gap is too large	Regap
Damaged spark plug wire or spark plug	Replace ignition coil and spark plug

Chafed short circuit in cable harness	Simply disconnect plug with black and white / brown-white wires and inspect spark. If ignition spark (ignition so fine)
Defective ignition or engine stop switch	resolve any Isolierschäden of cables, ignition or engine stop switch.
Ignition spark is too weak	Check ignition system
Water in carburetor or clogged nozzle	Remove and clean carburetor
<u>Engine has no idle</u>	
Clogged pilot jet	Clean idle jet
Adjust the carburetor adjustment screws	Adjust idling
Damaged ignition system	Check ignition system
<u>Engine has too little power</u>	
Fuel supply partially interrupted or dirty carburetor	Clean fuel system and carburetor
Dirty air filter	Clean or replace air filter
Compression loss due to loose spark plug loose Cylinder head, broken head gasket	Leak check and replace parts
No valve lash set too tight Decompressor	Adjust the valve clearance, adjust the decompressor
Electronic spark defective	Check the ignition timing
Leaking or clogged exhaust system	Exhaust flanges tighten, replace defective parts
Driving in the wrong gear	see section 3.2.
<u>Motor does not turn up</u>	
Carburetor running over because level set too high, dirty sealing cone of the float needle or knocked out, Loose carburetor jets, electronic spark defective	Clean the carburetor float needle may renew and adjust level jet tighten control ignition timing

<u>Knocking at full load</u>	
Carburetor set too lean	Adjusting the carburetor
Motor is too hot because cooling fins are heavily polluted to cylinder and cylinder head	Clean engine
Engine has too much spark advance	Check ignition timing at full load
Not anti-knock fuel	Fuel with more octane
<u>Engine popping into the carburetor</u>	
Lack of fuel	Inspect and clean fuel system and carburetor
Leaking intake valves	Check or replace the valve clearance valves
Valve timing adjusted (due to incorrect assembly of the toothed belt)	Valve timing control renew timing belt if necessary
Engine takes in false air	Check or replace the gaskets and flanges of the suction side
<u>Excessive fuel consumption</u>	
Clogged air filter wet or intake	replace, or dry clean
Carburetor setting is not correct	adjust
Incorrect operation	see section 3.2.
Cold start does not preclude	repair
Useless jerky throttle ('screw') at the throttle grip	Continuous operation of the throttle grip
<u>Loud noises during switching of gears</u>	
Defective or incorrectly adjusted clutch	adjust or repair
Idle speed too high	adjust
<u>Rear suspension beats by</u>	

Verstellmuffen not set to 'hard' (two up)	Change Verstellmuffen
Exceeded permissible mass	keep to the permissible total mass
<u>Poor road</u>	
Air pressure in the tires not in order	produce the prescribed air pressure
Worn tread	Change the tires
Wheel path is wrong	Setting the track
<u>Brake will not hold</u>	
Worn brake shoes	Adjust the brake, change brake pads
Oiled brake disc	Clean disc and pads
<u>Blocked brake</u>	
Oxidized brake ring or disc through disuse	brake carefully after long periods several times - always share the front brake
<u>Handbrake lever has too much backlash</u>	
Air in the brake system	Bleeding brakes can be a specialist workshop
Vent hole in the brake cylinder on the handlebar is not released	Can adjust brake light switch in workshop
<u>Brake fluid level in the reservoir is too low</u>	
Worn brake shoes	Change brake shoes
Leaking brake lines	Be repaired brake

6 CUSTOMER SERVICE

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You need information from us, we ask for exact details both the vehicle and the suspected defect. However, in general, you should take the help of our dealers to complete. We supply spare parts primarily to our dealers and to our importers in each country.

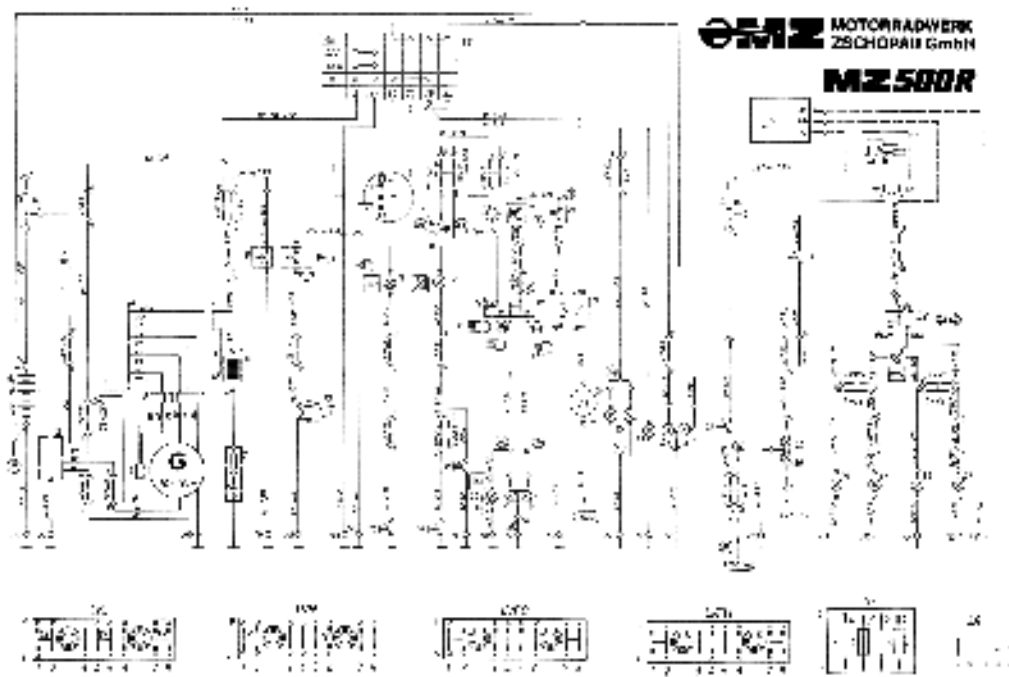
7 Complement OF MOTORCYCLES

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The bikes will be handed Kerb usually by the dealer. Get ready for the ride are the inputs and cultivation of front fender, front wheel, handlebars, mirrors and, depending on the version, additional accessories, and control the operational and road safety.

WIRING DIAGRAM (folding plate)

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KEY TO WIRING MZ 500 R

- ZS Ignition steering lock
- 1 Battery 12V, 14Ah
- 2 Regulators
- 3 Foreign donors of electronic ignition
- G Alternator 12V, 190W
- 4 Control of the ignition
- 5 Pins
- 6 Ignition Coil
- 7 Spark
- 8 Engine stop switch ²⁾
- 9 Horn button ^{1)> / sup>}
- 10 Bugle
- 11 Rev counter

- 12 Control lamp for oil pressure
- 13 Oil Pressure Switch
- 14 Control lamp for neutral gear and the oil level in the oil reservoir
- 15 Neutral gear switch
- 16 Contact for oil level
- 17 Light switch ²⁾
- 18 Switch for flasher ¹⁾
- 19 Dimmer ¹⁾
- 20 Headlight (H4 bulb)
- 20a Control lamp for main beam
- 21 Starter Pressure Switch
- 22 Starter Relay
- 23 Starter
- 24 Instrument lighting
- 25 Front parking light bulb
- 26 Tail light
- 27 Brake light bulb
- 28 Brake light switch front
- 29 Rear brake light switch
- 30 Electronic flasher (alternative equipment)
- 31 Electro-mechanical flasher (alternative equipment)
- 32 Switch for turn signal (blinker switch) ¹⁾
- 33 Control lamp for direction indicator (flashing check)
- 34 Indicator front left
- 35 Flashing light, rear left
- 36 Flashing light, front right
- 37 Flashing light, rear right
- 38 Symbols for
 - a) Blade Coupling
 - b) Sleeve for spade connector or socket
 - c) Mass
 - d) Detachable connection (screw terminal)
 - e) Fixed connection
- LVL Cable connector on the left
- LVR Cable connector right
- LVFO Chassis cable connector (on the air filter housing) above

LVFU Chassis cable connector (on air filtergehäuse) below

(O) Top

(U) below

(V) forward

(H) at the back

MA Mass point in the spotlight

ML Mass point Biluxlampe

MC Chassis ground point (on air filtergehäuse)

1) Combination switch on the left handlebar

2) Combination switch on the right handlebar

Cable colors

rt	red	or	Orange	br / ws	brown / white
red / black	red / black	rs	pink	ws / sw	white / black
br	brown	br	brown		
gr	gray	sw	black		
gn	green	sw / gn	black / green		
ws	white	black / white	black / white		
bl	blue	bl / bl	black / blue		
ge	yellow	bl / gr	black / gray		