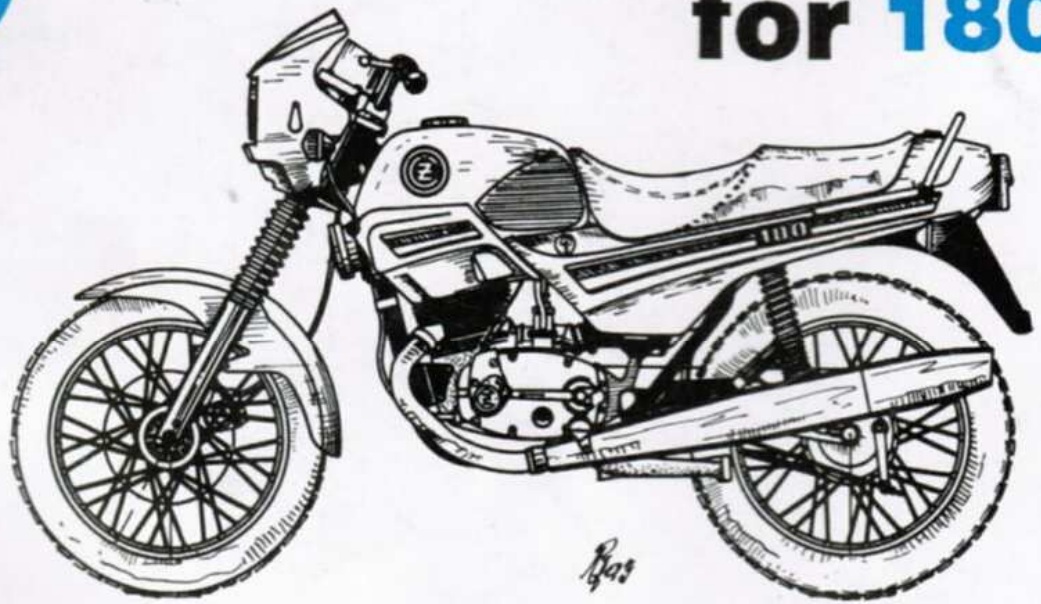
SUPPLEMENT 125/488.4.5 for 180/487.4.5



4519 487 09 151

EDITION 1994

OWNER'S MANUAL
SPARE PARTS LIST

MOTORCYCLE

type 125/488.4.5

type 180/487.4.5

SUPPLEMENT
for
OWNER'S MANUAL
SPARE PARTS LIST

451 9 487 09 151

EDITION 1994

50,-

The following is given in this technical information:

- introduction of a new motorcycle ČZ 125/488.4 and 180/487.4 into production as from April 1, 1994
- coloured versions of motorcycles
- motorcycles and spare parts ordering
- description of contactless ignition system - supplement to operating instructions
- description of the oil pump MIKUNI
- supplement of spare parts to contactless ignition system and the oil pump
- description, adjustment and repairs of MIKUNI oil pump

New version of motorcycles ČZ 125/488.4 and 180/487.4 with 12 V electric installation - contactless ignition system DUCATI and MIKUNI oil pump is introduced into production starting from April 1, 1994.

This new ignition cannot be mounted into the older version of motorcycles /a change of the right crank pin of crank mechanism/.

MOTORCYCLE COLOURED VERSION

ČZ 125/488.4
ČZ 180/487.4

	MOTORCYCLE - disk brake 451 211 488 400 125cc 451 211 487 400 180cc				
125/488.4	488 07 025 ČV.M	488 07 035 ČN	488 07 045 ST.M	488 07 085 B	488 07 095 MM
180/487.4	487 07 025 ČV.M	487 07 035 ČN	487 07 045 ST.M	488 07 085 B	487 07 095 MM
	MOTORCYCLE - drum brake 451 211 488 400 125cc 451 211 487 400 180cc				
125/488.4.00	488 07 125 ČV.M	488 07 135 ČN	488 07 145 ST.M	488 07 185 B	488 07 195 MM
180/487.4:00	487 07 125 ČV.M	487 07 135 ČN	487 07 145 ST.M	487 07 185 B	487 07 195 MM

ČV.M - red metallic paint R.M.
ČN - black B.
ST.M. - silver metallic paint S.M.
B - white W.
MM - blue metallic paint B.M

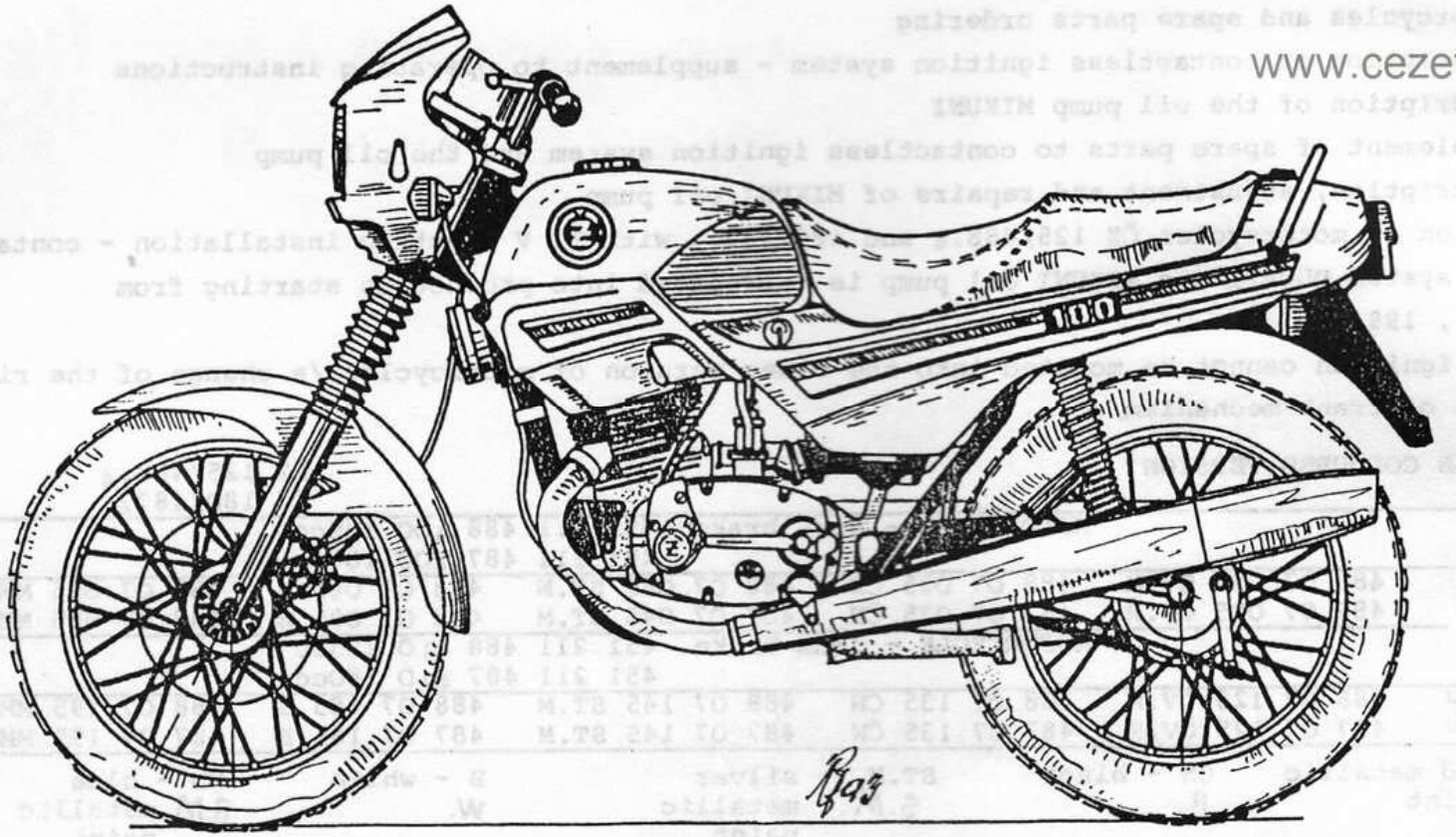


Fig. 1 Motorcycle ČZ 125/488.4 - ČZ 180/487.4

SPARE PARTS ORDERING:

Coloured parts: according to table of motorcycle coloured version:
front mud guard 487 43 042 00
front mud guard ČV.M. - drum brake

An order of motorcycles as units:

motorcycle 451 211 487 400 - 487 07 195 blue metallic paint
motorcycle 180/487.4 departure , drum brake, 12 V contactless ignition, oil pump

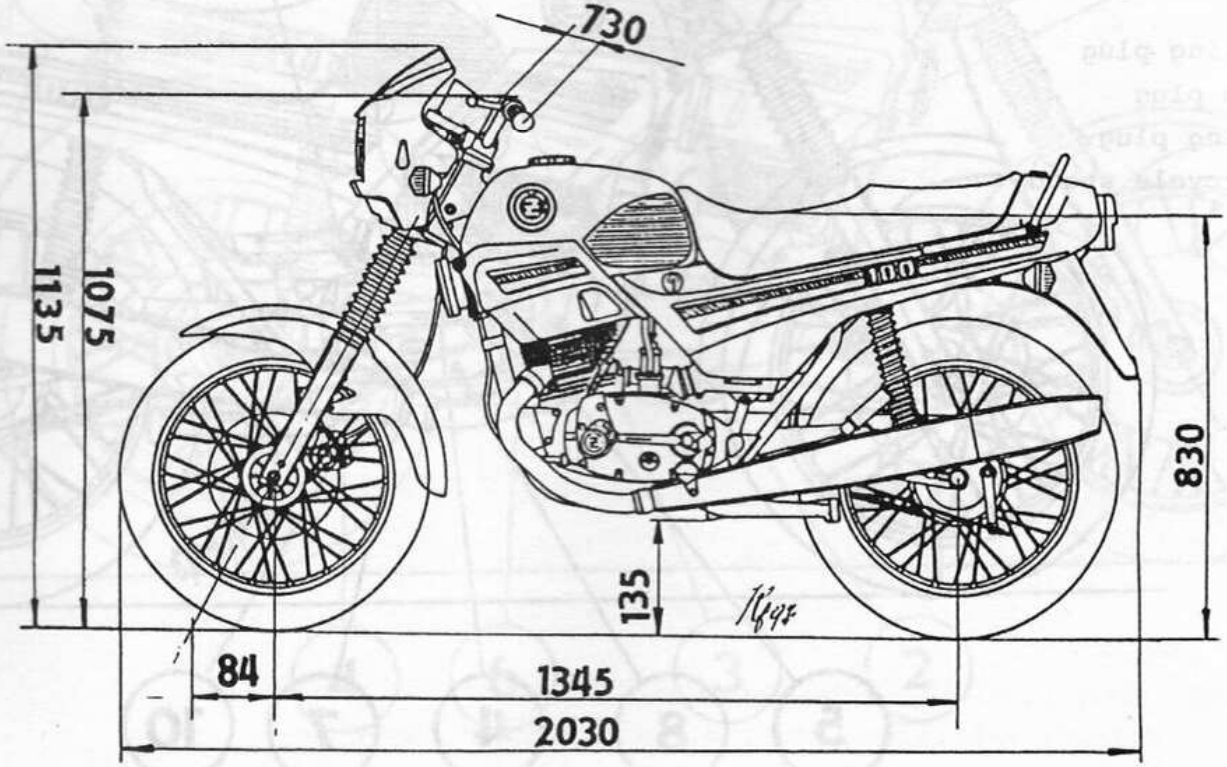
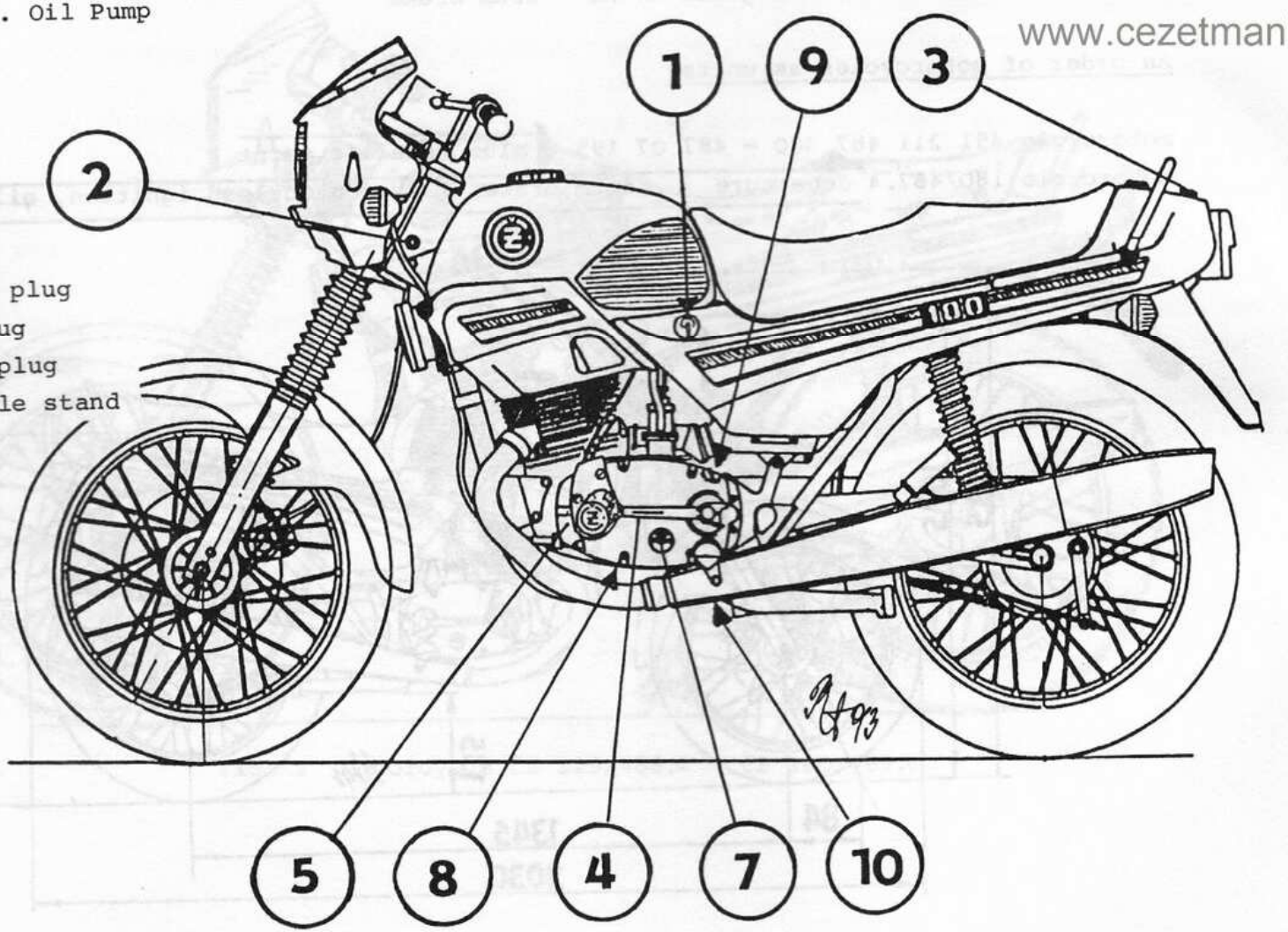
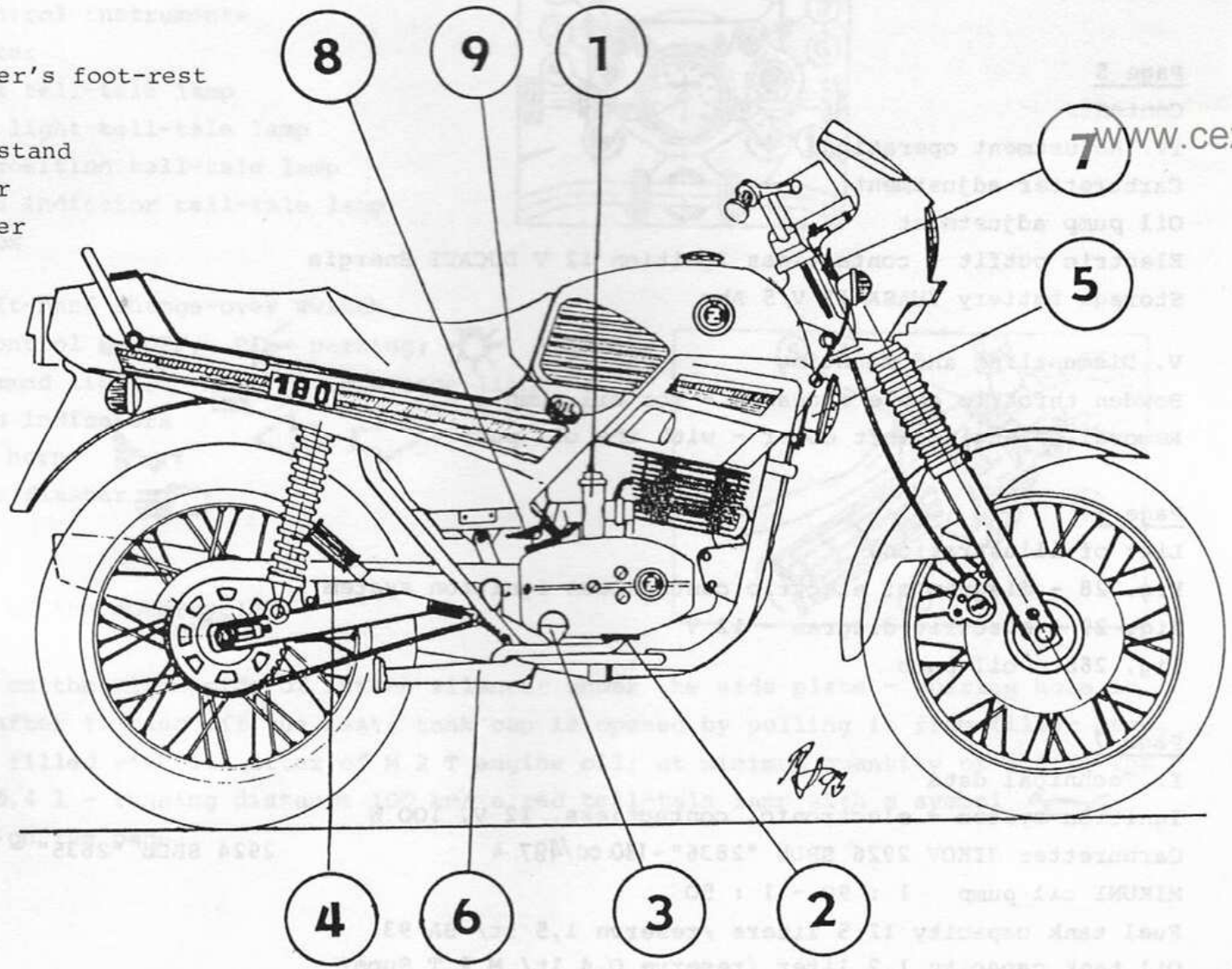


Fig. 3

1. Fuel cock
2. Steering lock
3. Seat lock
4. Foot-operated gear lever
5. Oil Pump
7. Checking plug
8. Drain plug
9. Filling plug
10. Motorcycle stand



1. Carburetter
2. Brake pedal
3. Foot rest
4. Pillion-rider's foot-rest
5. Horn
6. Motorcycle stand
7. Frame number
8. Engine number



SUPPLEMENT TO OPERATING INSTRUCTIONS FOR A MOTORCYCLE ČZ 180/487.4 , ČZ 125/488. 4

Page 5

Contents

IV. Adjustment operations

Carburetter adjustment

Oil pump adjustment

Electric outfit - contactless ignition 12 V DUCATI Energia

Storage battery YUASA 12 V/5 Ahr

V. Dismantling and mounting

Bowden throttle cable exchange - for oil pump

Removal of engine left cover - with the oil pump

Page 6

List of illustrations

Fig. 28 - diagram of electric contactless ignition system

Fig. 29 - electric diagram - 12 V

Fig. 26a - oil pump

Page 7

I. Technical data

Ignition system - electronic, contactless, 12 V, 100 W

Carburetter JIKOV 2926 SBDb "2836" - 180 cc/487. 4 2924 SBDb "2835" - 125 cc/488. 4.

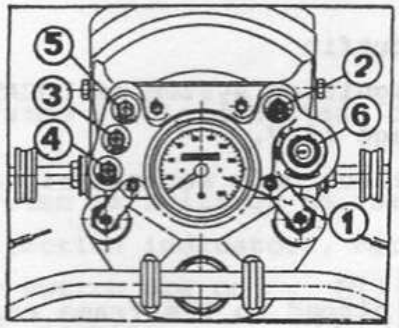
MIKUNI oil pump 1 : 90 - 1 : 50

Fuel tank capacity 12,5 liters /reserve 1,5 lt/ BA 93

Oil tank capacity 1,2 liter /reserve 0,4 lt/ M 2 T Super

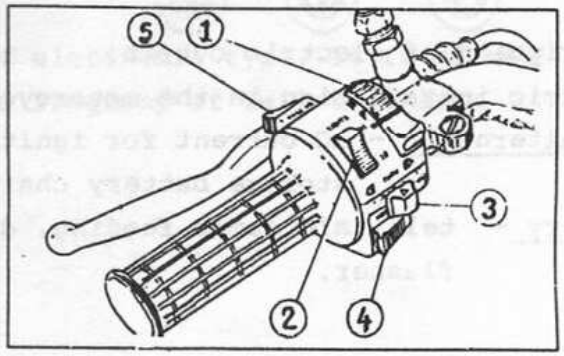
Page 12

Fig. 5 - control instruments



1. Speedometer
2. Oil level tell-tale lamp
3. Distance light tell-tale lamp
4. Neutral position tell-tale lamp
5. Direction indicator tell-tale lamp
6. Switch box

Fig. 6 - left-hand change-over switch



1. Lights control ● OFF; P parking; lights
2. dimmed light, distance light
3. Direction indicators
4. Electric horn
5. Headlight flasher

Page 13

Description of the motorcycle

Oil tank

is situated on the right side of intake silencer under the side plate - pouring hole is accessible after tilting off the seat; tank cap is opened by pulling it from filler neck. The tank is filled with 1,2 liter of M 2 T engine oil; at minimum quantity of oil in the tank makes ø,4 l - running distance 100 km/ a red tell-tale lamp with a symbol gets alight on the panel.

Description of electric outfit

Contactless, electronic ignition system of DUCATI trade mark. The alternator rated output makes 100 W, voltage 12 V.

Voltage regulator is of electronic workmanship and is located on the left side of intake silencer.

The electronic switch is placed on the frame under the fuel tank /ignition coil/. The accumulator 12 V, 5 Ahr is situated under the seat; it is connected to frame by negative pole /-/. Two fuses 8 A are placed in a sleeve in the vicinity of the accumulator.

Description of electric outfit:

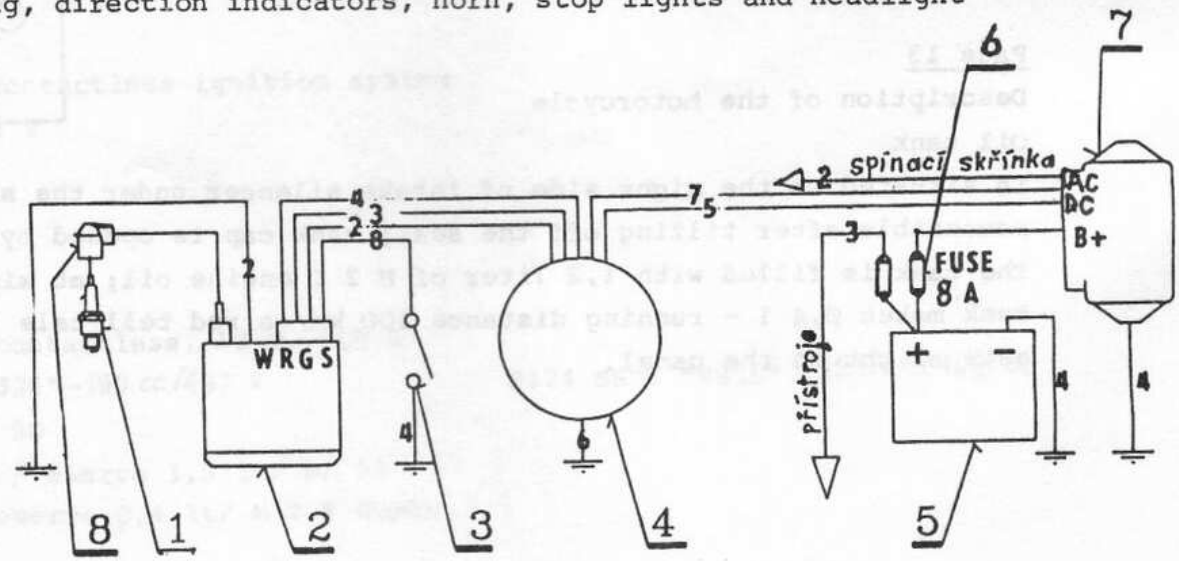
Electric installation in the motorcycle has 2 independent circuits.

The alternator - AC current for ignition system and lighting, for day and night ride-
storage battery charging

Battery - tell-tale lamps feeding, direction indicators, horn, stop lights and headlight flasher.

1. Spark plug
2. Ignition coil
3. Switch box
5. Battery
6. Fuse 8 A
7. Regulator
8. Terminal
4. Source 12/100 W

2. Green
3. Red
4. White
5. Brown
6. Black
7. Yellow
8. Blue



Page 16

Switch box key position

Key is pushed down completely OFF - ignition system is disconnected, other sources are without current

ON - ignition system is switched on, storage battery is charged; direction indicators, horn and lamps change-over switch are on

P - parking OFF, parking

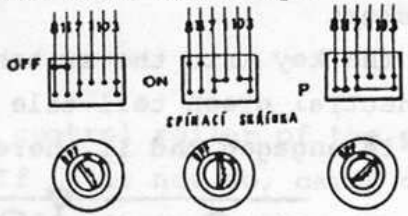


Fig. 13 - switch box position

Direction indicator lamps breaker 12 V/2 x 10 + 20 W is of electronic type. It is placed behind the headlight. In case that one lamp falls out, the frequeny of tell-tale lamp flashing is doubled.

Spark plugs - PAL N 15C or N 15

Lamps - headlight - double filament 12 V/45/40 W R 2
- parking - 12 V/4 W Ba 9s
- tail light - 12 V/4 W Ba9S - 2x
- brake light - 12 V/21 W Ba15s
- direction light - 12 V/10 W Ba15s
- tail lamps and instrument board illumination - 12 V/2 W Ba9s

Page 18

Note: the highest permissible speeds do not mean permanent speeds; they are used mainly at the beginning for a short period. At that time we employ a mixture of fuel and petrol BA 90 with oil M 2 T Super.

Proportion of lubrication /a mixture fuel-oil/ is ensured by MIKUNI pump in the range of engine speed in proportion 1 : 90 - 1 : 50.
Permanent speed, i. e. on express highway is 95 km/hr. for the engine 180 cu.cm; 85 km/hr. for 125 cu.cm.

Page 19

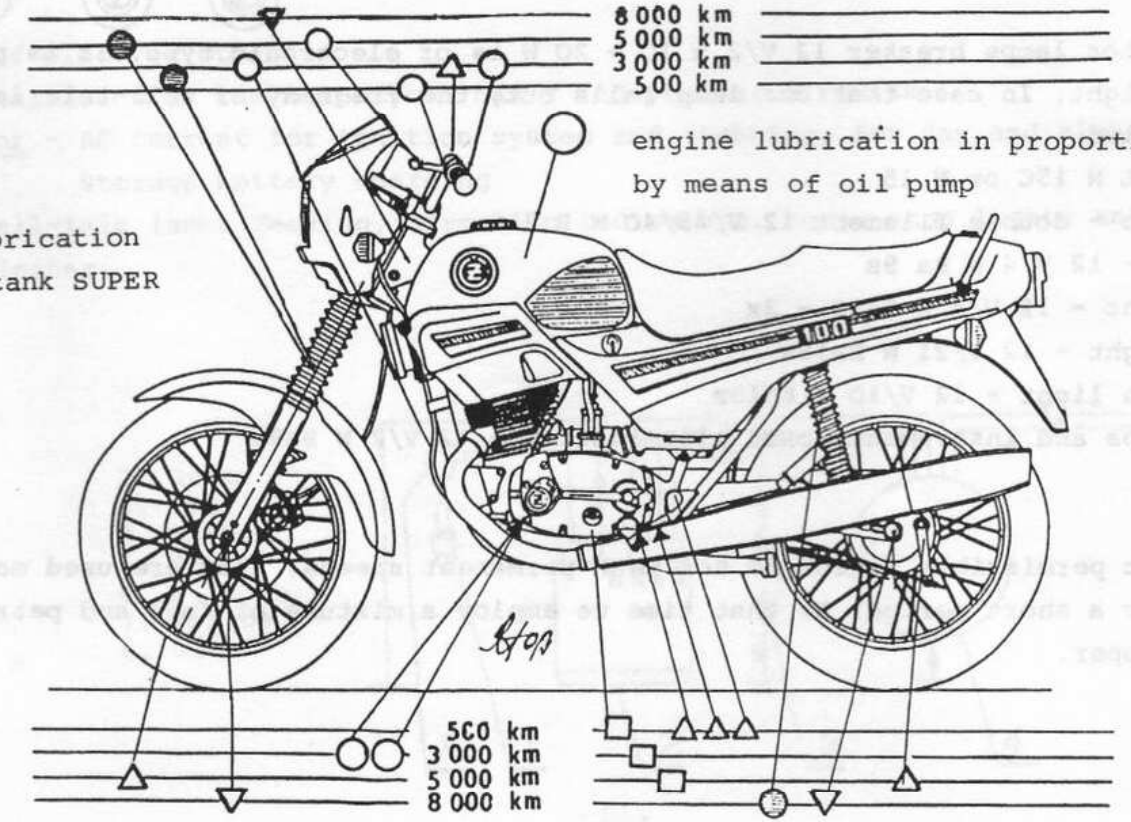
Engine start

2. Push the key into the switch box in "OFF" position and turn it to position "ON" - the neutral green tell-tale lamp and the other pilot lamp get alight; /when any gear step is engaged and if there is enough oil in the engine, both tell-tale lamps die out/.

Page 21

Machine lubrication

M 2 T oil tank SUPER



Oil pump adjustment

a/ After preliminary operations /accumulator, chains and bolts check-up/ it is necessary to fill the oil tank with oil.

Inland: in summer, in winter M 2 T, CASTROL TTS oil filling 1 1/4 liter

Abroad: in summer, in winter SAE 30-40, CASTROL TTS

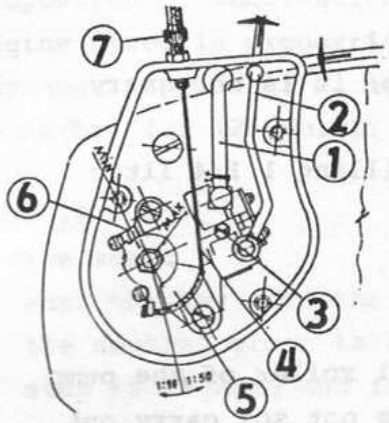
b/ Unscrew the pump cover lid.

c/ Check up Bowden cables length, at first visually whether the control roller of the pump is turned by its gauge mark /cut/ to the boss on pump body. If it is not so, carry out the adjustment of this position by means of adjustment screw /7/. It is further necessary to check whether the second Bowden cable, leaned against the adjustment screw of carburetter lid, has clearance of about 1 mm. Adjust the clearance of throttle handle by means of adjustment screw on the sleeve /3-4/ about 1 mm.

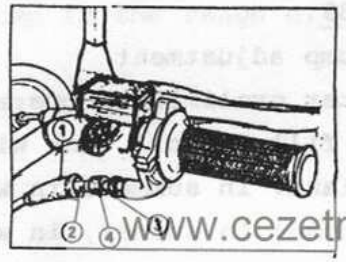
d/ Dismantle the breathing screw /3/ from the pump front side and blow off pipeline from the tank to the pump.

Provided that oil without air bubbles flows through the pump hole, close deaeration system. Pour a mixture of 1 liter of petrol with 2 % of specified oil /M 2 T/ at the engine newly introduced into operation, and start the motorcycle /in case of already employed engine, /it is no longer necessary to add oil into petrol/ and let the engine running at idle motion. Turn the pump roller manually to MAX position and hold it in this position until the oil column in delivery piping from the pump fills the piping up to suction port. Then the adjustment process is finished; it is further recommended to check up the adjust of cable guides after setting up the pump roller against the gauge mark.

e/ Cover the pump with covering lid.



1. Oil supply to the pump
2. Oil delivery from the pump
3. Deaerating screw
4. Pump control Bowden cable
5. Oil pump roller
6. Checking gauge mark - for adjustment
7. Adjusting screw



1 ruber cover
2 throttle Bowden cable
3-4 adjusting screw

Page 39, 40, 41 - dropped

Advanced ignition adjustment is not carried out. Advanced ignition is fast adjusted at the manufacturing plant.

Page 41

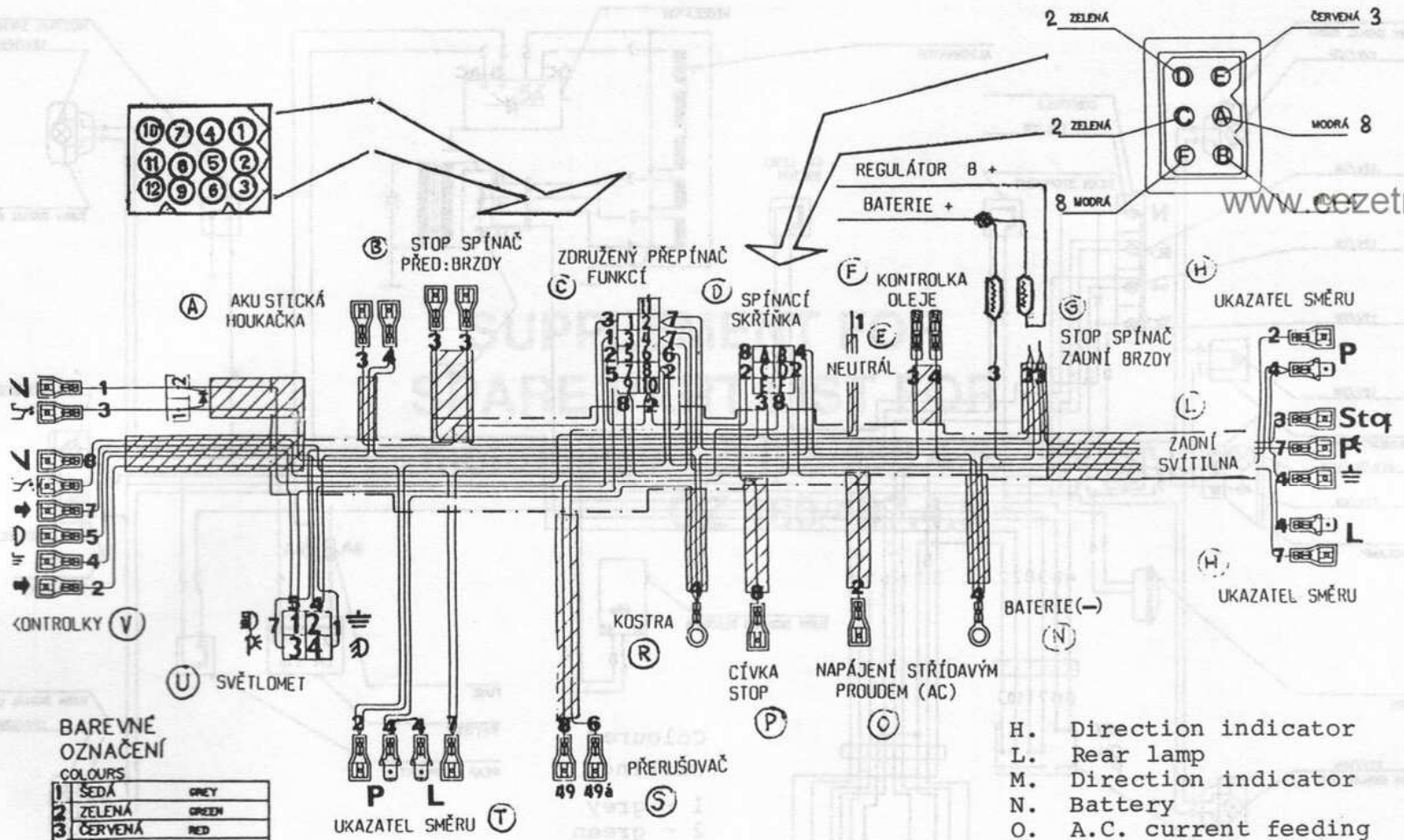
Storage battery - 12 V/5 Ahr.

Checking

Electrolyte density makes 1,28 g/cu.cm at 20°C at fully charged storage battery. Voltage on storage battery terminal connectors after approx. 5-6 hours of power source disconnection makes 12,5 to 12,6 V.

Caution!

All the other operating and maintaining tasks are the same as with other accumulators. Deaerating hose must be properly placed and must not be squeezed so that it may correctly accomplish its function, i. e. carry away the gases from the accumulator. Charging is executed with low intensity current from 0,5 up to 1 A.



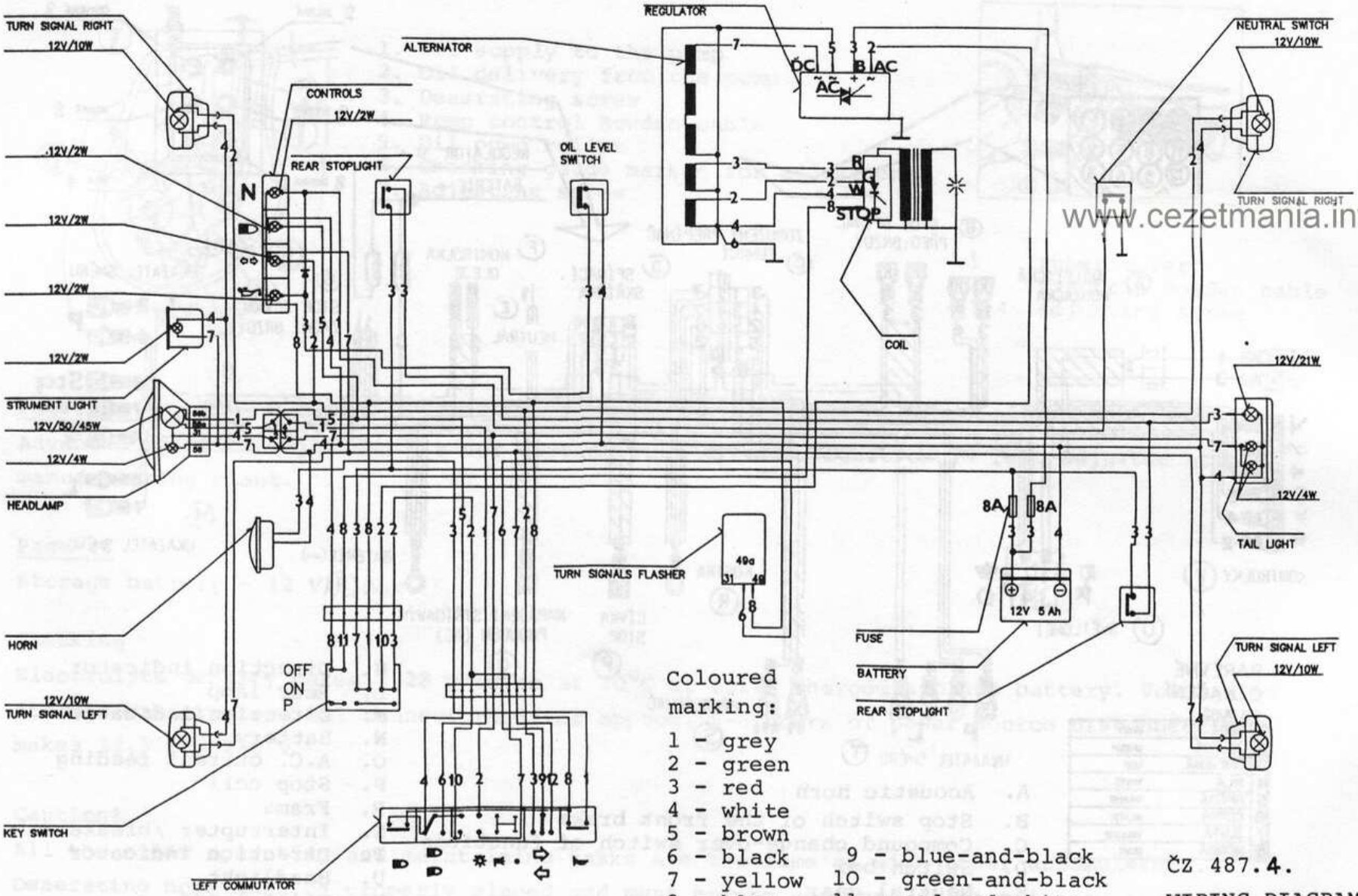
BAREVNÉ OZNAČENÍ

COLOURS

1	ŠEDÁ	GREY
2	ZELENÁ	GREEN
3	ČERVENÁ	RED
4	BÍLÁ	WHITE
5	HNĚDÁ	BRAUN
6	ČERNÁ	BLACK
7	ŽLUTÁ	YELLOW
8	MODRÁ	BLUE

A. Acoustic horn
B. Stop switch of the front brake
C. Compound change-over switch of functions
D. Switch box
E. Neutral gear
F. Oil pilot lamp
G. Stop switch of the rear brake
H. Direction indicator
L. Rear lamp
M. Direction indicator
N. Battery
O. A.C. current feeding
P. Stop coil
R. Frame
S. Interrupter /breaker/
T. Direction indicator
U. Headlight
V. Pilot lamps
Z. Coloured marking

CABLE HARNESS 488/4



Coloured marking:

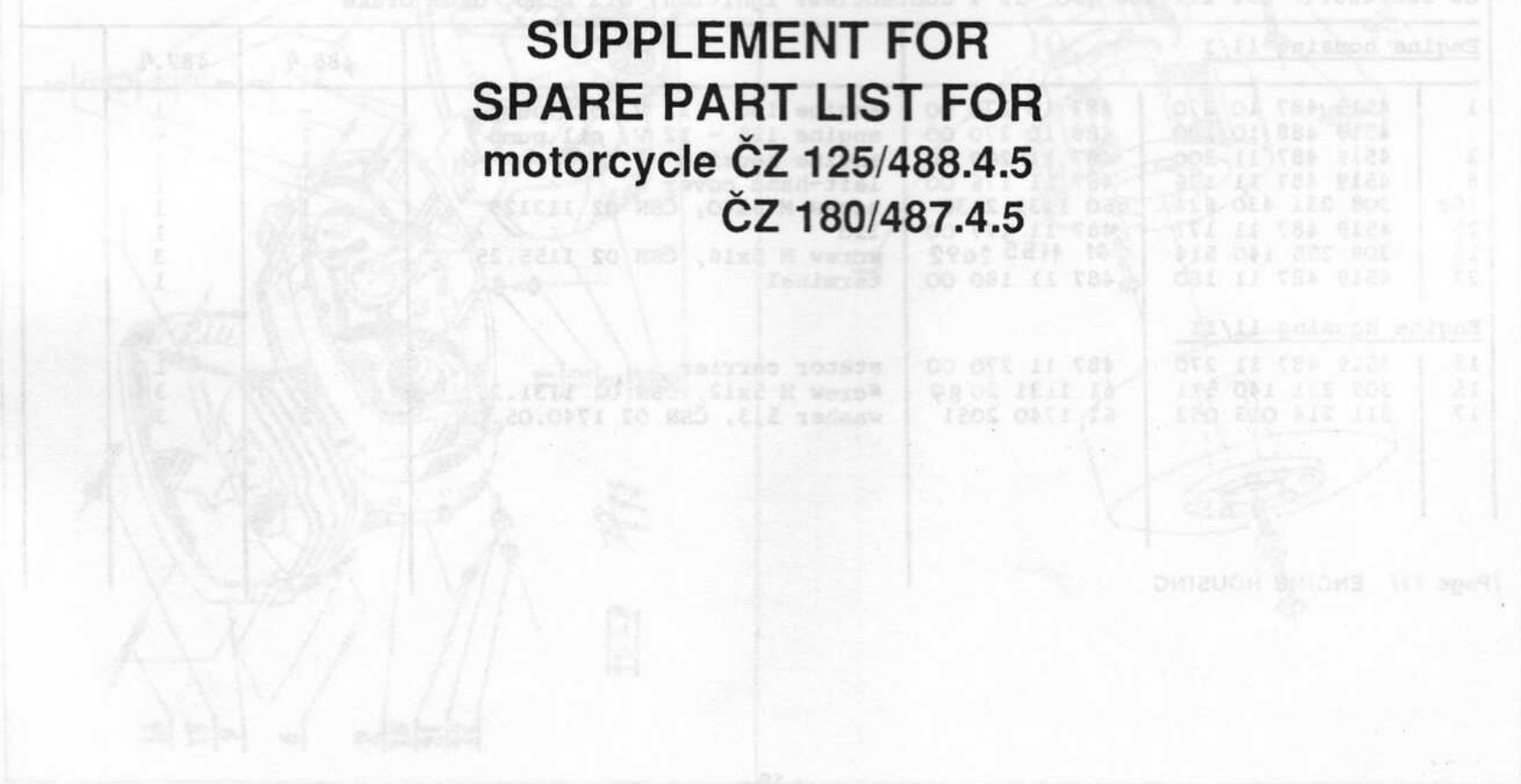
1 - grey
2 - green
3 - red
4 - white
5 - brown
6 - black
7 - yellow
8 - blue
9 - blue-and-black
10 - green-and-black
11 - red-and-white

ČZ 487.4.
WIRING DIAGRAM

SUPPLEMENT FOR SPARE PART LIST FOR

motorcycle ČZ 125/488.4.5

ČZ 180/487.4.5



S U P P L E M E N T to the list of spare parts for motorcycle

ČZ 180/487.4 12 V electrical installation, oil pump - as from April. 1, 1994

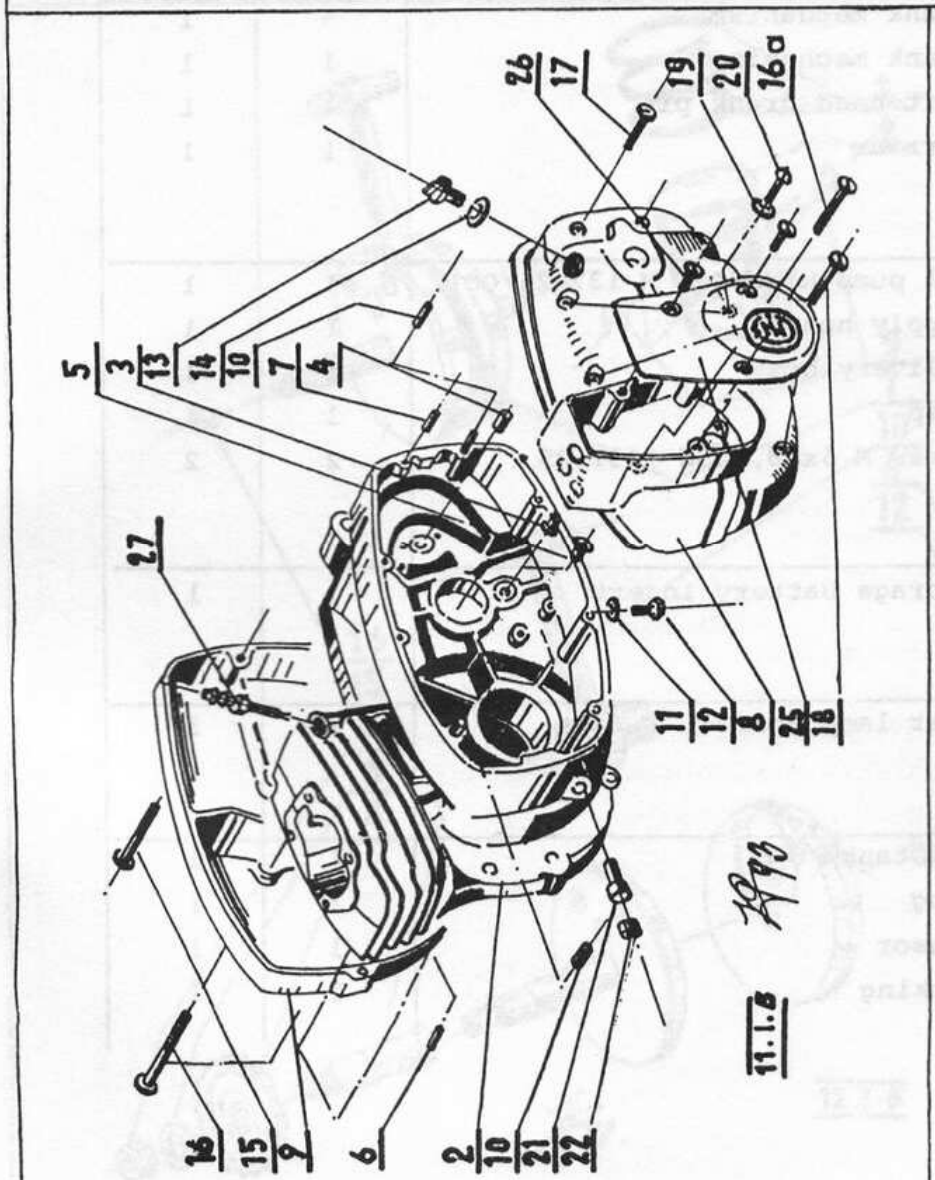
ČZ 125/488.4 12 V electrical installation, oil pump - as from April 1, 1994

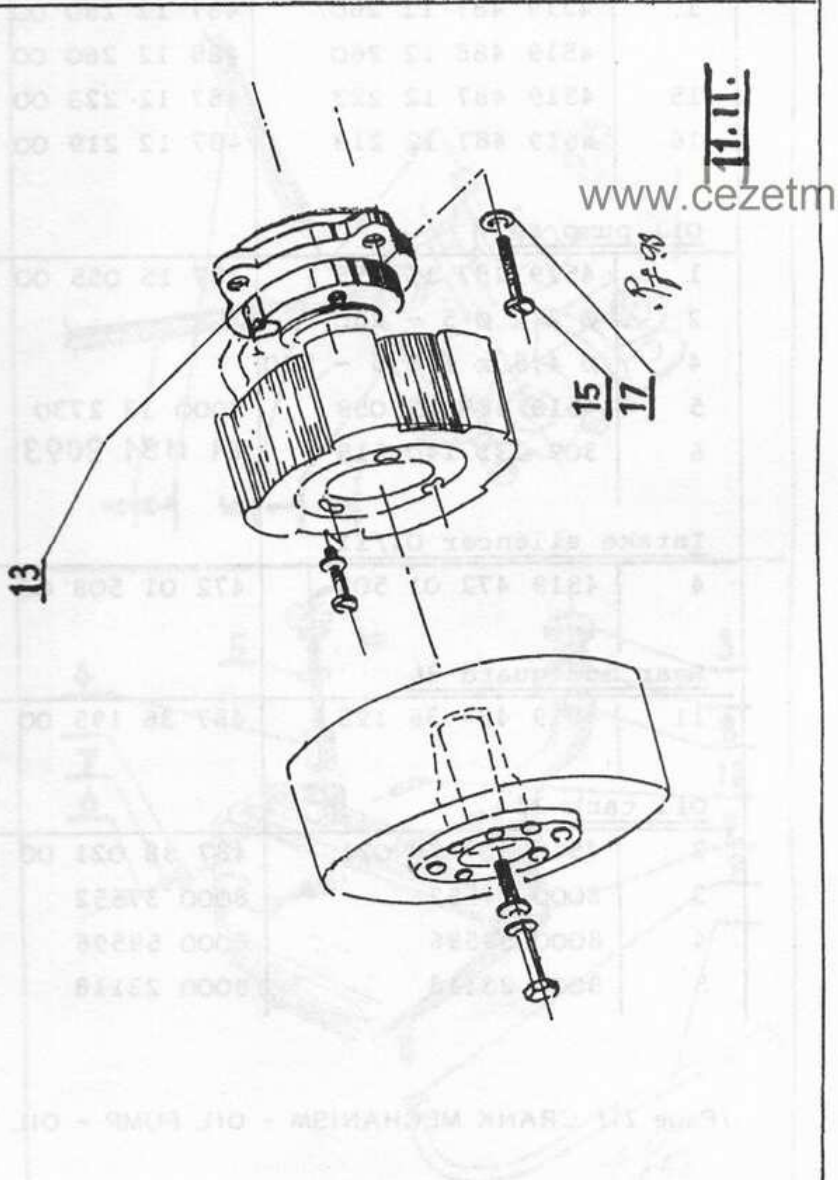
ČZ 180/487.4 451 211 487 400 12 V contactless ignition, oil pump, disk brake
ČZ 125 488.4 451 211 488 400 12 V contactless ignition, oil pump, disk brake

ČZ 180/487.4. 451 211 487 400 12 V contactless ignition, oil pump, drum brake
ČZ 125/488.4. 451 211 488 400 12 V contactless ignition, oil pump, drum brake

Engine housing 11/I				488.4	487.4	
1	4519 487 10 270	487 10 270 00	engine 180 - 12 V, oil pump	-	1	
	4519 488 10 270	488 10 270 00	engine 125 - 12 V, oil pump	1	-	
2	4519 487 11 200	487 11 200 00	engine housing	1	1	
8	4519 487 11 176	487 11 176 00	left-hand cover	1	1	
16a	309 231 430 624	60 1131 2130	screw M 6x40, ČSN 02 113125	1	1	
25	4519 487 11 177	487 11 177 00	lid	1	1	
26	309 255 140 514	61 1155 2092	screw M 5x16, ČSN 02 1155.25	3	3	
27	4519 487 11 180	487 11 180 00	terminal	1	1	
Engine housing 11/II						
13	4519 487 11 270	487 11 270 00	stator carrier	1	1	
15	309 231 140 511	61 1131 2089	screw M 5x12, ČSN 02 1131.25	3	3	
17	311 214 013 053	61 1740 2051	washer 5,3, ČSN 02 1740.05	3	3	

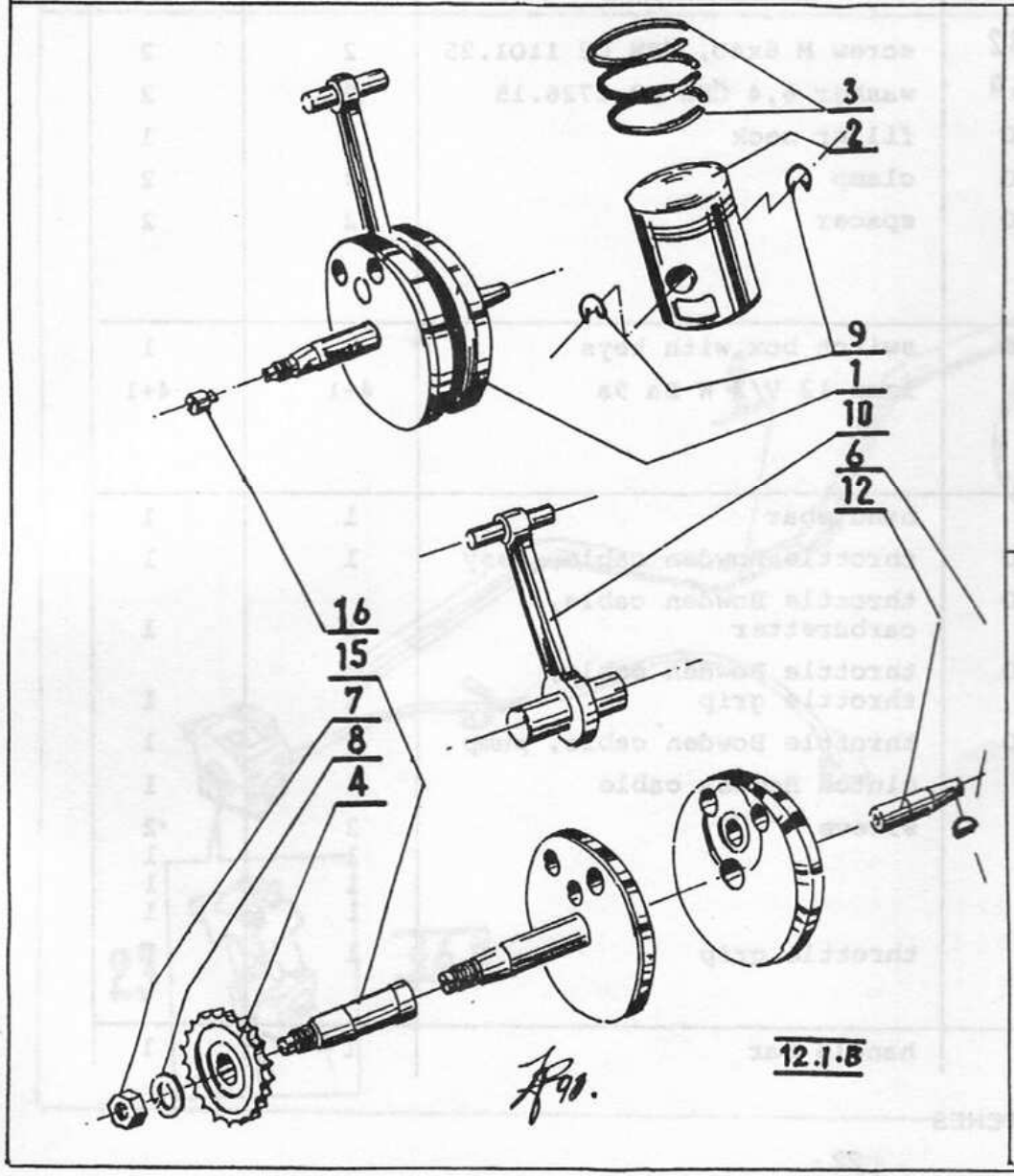
/Page 19/ ENGINE HOUSING

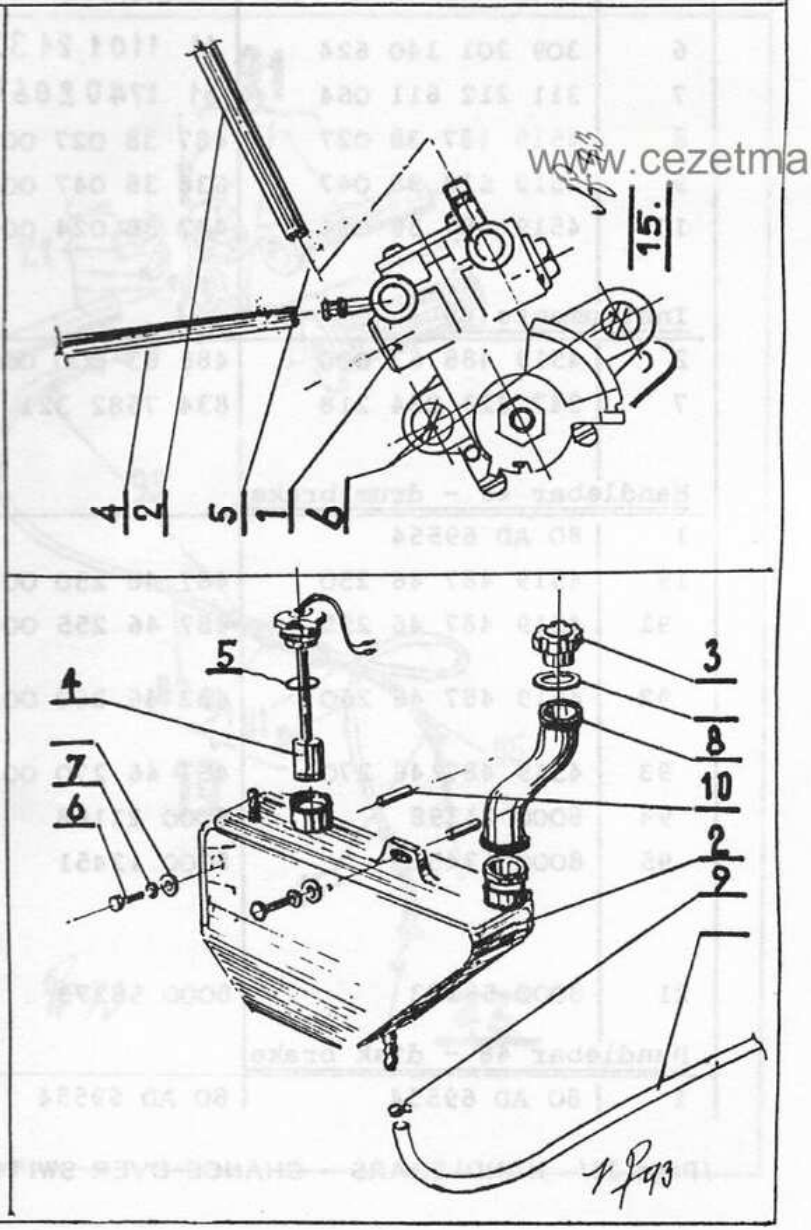




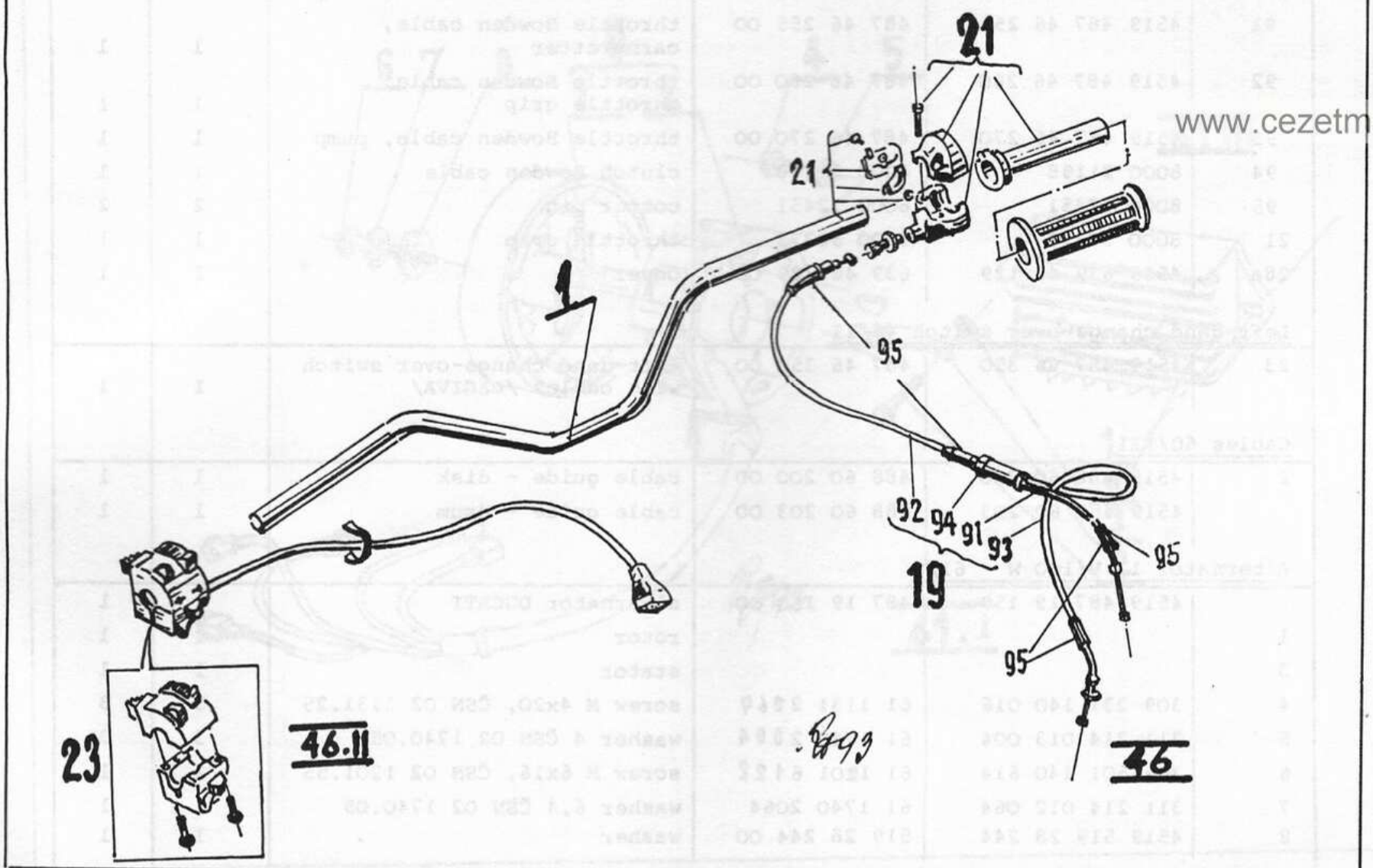
Crank mechanism 12/I				488.4	487.4
1	4519 487 12 260	487 12 260 00	crank mechanism	-	1
	4519 488 12 260	488 12 260 00	crank mechanism	1	1
15	4519 487 12 223	487 12 223 00	left-hand crank pin	1	1
16	4519 487 12 219	487 12 219 00	carrier	1	1
Oil pump 15					
1	4519 487 15 055	487 15 055 00	oil pump MIKUNI 1 M 137-26/001	1	1
2	Ø 2 x Ø 5 - 230		supply hose	1	1
4	Ø 4,5 x Ø 8,5 - 520		delivery hose	1	1
5	4519 487 15 059	8000 33 2730	clip	1	1
6	309 231 140 515	61 1131 2093	screw M 5x18, ČSN 1131.25	2	2
Intake silencer 01/II					
4	4519 472 01 508	472 01 508 00	storage battery insert	1	1
Rear mud guard 36					
11	4519 487 36 195	487 36 195 00	rear lamp holder	1	1
Oil tank 38					
2	4519 487 38 021	487 38 021 00	oil tank	1	1
3	8000 37552	8000 37552	plug	1	1
4	8000 59596	8000 59596	sensor	1	1
5	8000 23118	8000 23118	packing	1	1

/Page 21/ CRANK MECHANISM - OIL PUMP - OIL TANK



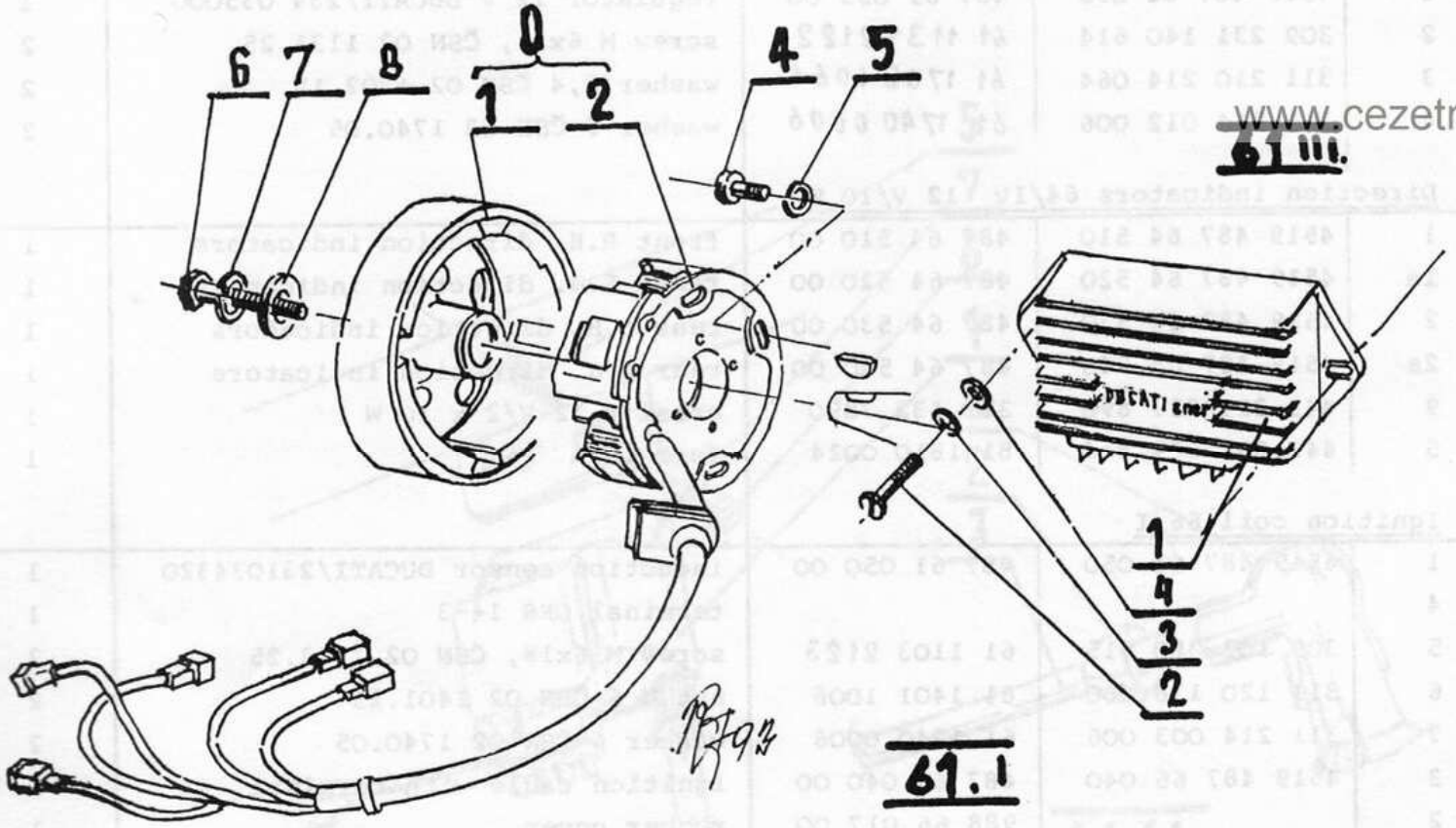


				488.4	487.4
6	309 201 140 624	61 1101 21 32	screw M 6x40, ČSN 02 1101.25	2	2
7	311 212 611 064	61 1740 2064	washer 6,4 ČSN 02 1726.15	2	2
8	4519 487 38 027	487 38 027 00	filler neck	1	1
9	4519 638 38 047	638 38 047 00	clamp	2	2
10	4519 487 38 024	487 38 024 00	spacer	2	2
Instruments 44					
2	4519 488 63 000	488 63 000 00	switch box with keys	1	1
7	347 229 234 218	834 7582 321	lamp 12 V/2 W Ba 9s	4+1	4+1
Handlebar 46 - drum brake					
1	80 AD 69554		handlebar	1	1
19	4519 487 46 250	487 46 250 00	throttle Bowden cable, assy	1	1
91	4519 487 46 255	487 46 255 00	throttle Bowden cable, carburetter	1	1
92	4519 487 46 260	487 46 260 00	throttle Bowden cable, throttle grip	1	1
93	4519 487 46 270	487 46 270 00	throttle Bowden cable, pump	1	1
94	8000 21198	8000 21198	clutch Bowden cable	1	1
95	8000 12451	8000 12451	sleeve	2 1 1 1	2 1 1 1
21	8000 58273	8000 58273	throttle grip	1	1
Handlebar 46 - disk brake					
1	80 AD 69554	80 AD 69554	handle bar	1	1



				488.4	487.4
19	4519 487 46 250	487 46 250 00	throttle Bowden cable, assy	1	1
91	4519 487 46 255	487 46 255 00	throttle Bowden cable, carburetter	1	1
92	4519 487 46 260	487 46 260 00	throttle Bowden cable, throttle grip	1	1
93	4519 487 46 270	487 46 270 00	throttle Bowden cable, pump	1	1
94	8000 21198	8000 21198	clutch Bowden cable	1	1
95	8000 12451	8000 12451	cotter pin	2	2
21	8000 58273	8000 58273	throttle grip	1	1
28a	4519 639 46 129	639 46 129 00	cover	1	1
Left-hand change-over switch 46/II					
23	4519 487 46 350	487 46 350 00	left-hand change-over switch with cables /CAGIVA/	1	1
Cables 60/III					
2	4519 488 60 200	488 60 200 00	cable guide - disk	1	1
	4519 488 60 203	488 60 203 00	cable guide - drum	1	1
Alternator 12 V/100 W - 61/I					
	4519 487 19 150	487 19 150 00	alternator DUCATI	1	1
1			rotor	1	1
3			stator	1	1
4	309 231 140 016	61 1131 2069	screw M 4x20, ČSN 02 1131.25	3	3
5	311 214 013 004	61 1740 2004	washer 4 ČSN 02 1740.05	3	3
6	309 501 140 614	61 1201 6122	screw M 6x16, ČSN 02 1201.55	1	1
7	311 214 012 064	61 1740 2064	washer 6,4 ČSN 02 1740.05	1	1
8	4519 519 28 244	519 28 244 00	washer	1	1

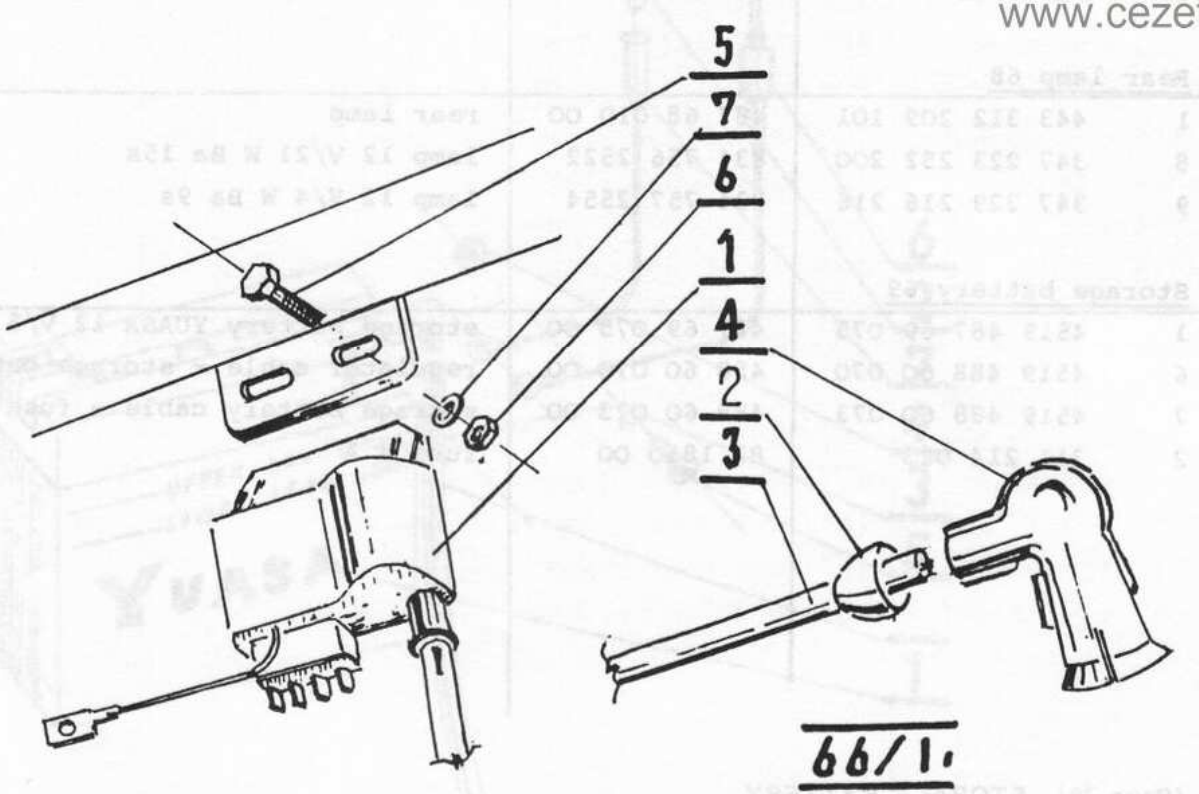
/Page 25/ ALTERNATOR - REGULATOR



				488.4	487.4
Regulator 12 V - 61/III					
1	4519 487 61 055	487 61 055 00	regulator 12 V DUCATI/234 035000	1	1
2	309 231 140 614	61 1131 2122	screw M 6x16, ČSN 02 1131.25	2	2
3	311 210 214 064	61 1702 1064	washer 6,4 ČSN 02 1702.15	2	2
4	311 214 012 006	61 1740 0006	washer 6 ČSN 02 1740.05	2	2
Direction indicators 64/IV 12 V/10 W					
1	4519 487 64 510	487 64 510 00	front R.H. direction indicators	1	1
1a	4519 487 64 520	487 64 520 00	front L.J. direction indicators	1	1
2	4519 487 64 530	487 64 530 00	rear R.H. direction indicators	1	1
2a	4519 487 64 540	487 64 540 00	rear L.J. direction indicators	1	1
9	443 311 327 890	331 132 7890	breaker 12 V/2 x 10 W	1	1
5	443 859 004 814	81 1810 0024	fuse 15 A	1	1
Ignition coil 66/I					
1	4519 487 61 050	487 61 050 00	induction sensor DUCATI/231034320	1	1
4			terminal OKS 14-3	1	1
5	309 103 380 615	61 1103 2123	screw M 6x18, ČSN 02 1103.25	2	2
6	311 120 138 060	61 1401 1006	nut M 6 ČSN 02 1401.25	2	2
7	311 214 003 006	61 1740 0006	washer 6 ČSN 02 1740.05	2	2
3	4519 487 66 040	487 66 040 00	ignition cable with terminal	1	1
2		988 66 017 00	rubber cover	1	1
Headlight 67/III					
3	443 311 813 101	331 181 3101	headlight inner piece	1	1
8		834 755 2553	lamp 12 V/45/40 W R2	1	1
9	347 229 216216	834 757 2554	lamp 12 V/4 W Ba 9s	1	1
18	4519 488 60 050	488 60 050 00	headlight cables	1	1

IGNITION COIL

488/487.4

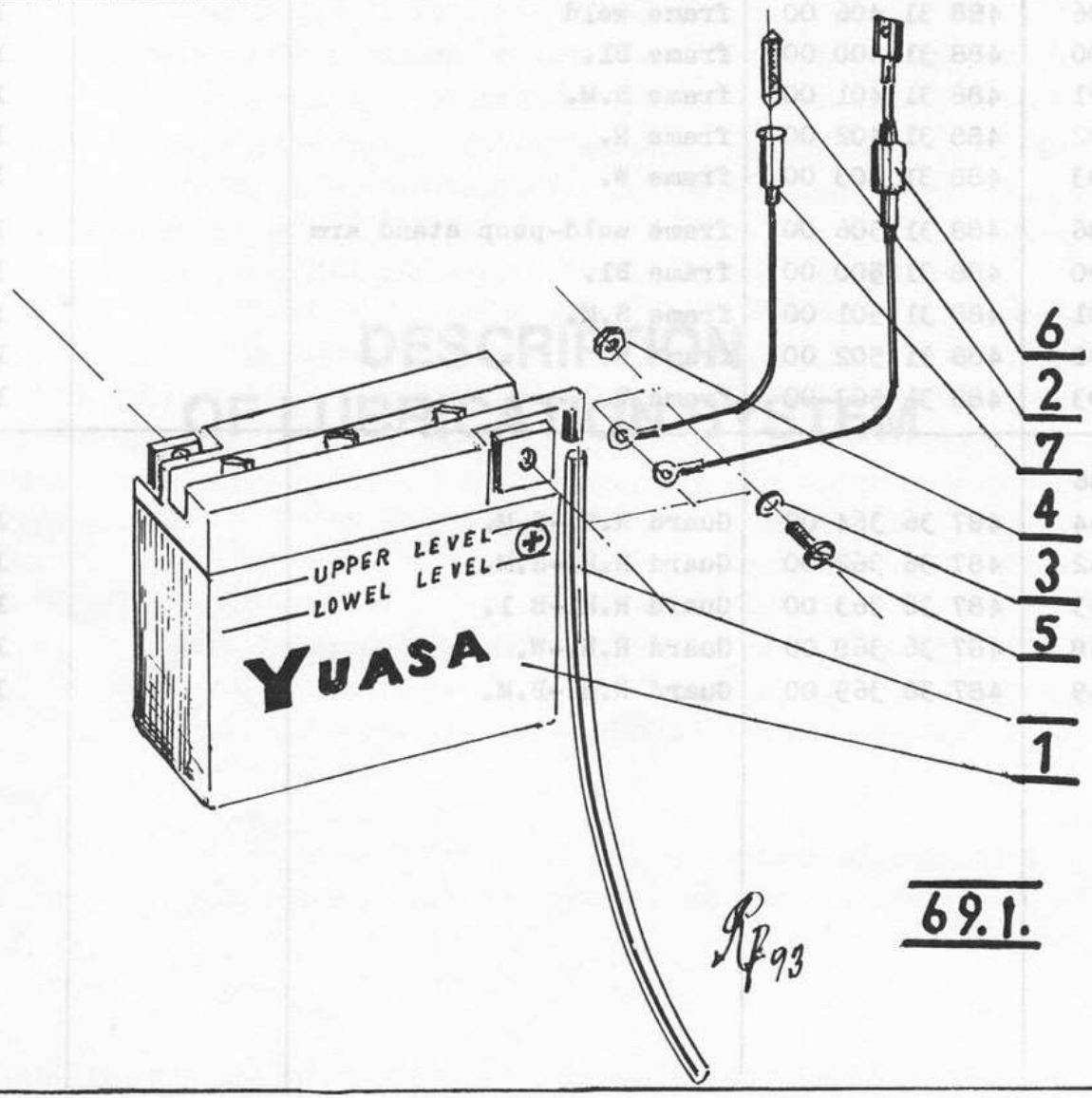


			488.4	487.4
Electric horn 62				
1 80A050555	80A050555	electric horn 12 V	1	1
Rear lamp 68				
1 443 312 209 101	487 68 010 00	rear lamp	1	1
8 347 223 252 200	834 756 2522	lamp 12 V/21 W Ba 15s	1	1
9 347 229 216 216	834 757 2554	lamp 12 V/4 W Ba 9s	2	2
Storage battery 69				
1 4519 487 69 075	487 69 075 00	storage battery YUASA 12 V/5 Ah	1	1
6 4519 488 60 070	488 60 070 00	regulator cable - storage battery	1	1
7 4519 488 60 073	488 60 073 00	storage battery cable - fuse	1	1
2 311 214 023	81 1810 00	fuse 8 A	2	2

/Page 29/ STORAGE BATTERY

STORAGE BATTERY

488/487.4



					488.4	487.4	
FRAME 31 valid from APRIL 1 .94.							
1	4519 488 31 406	488 31 406 00	frame weld		1	1	
	4519 488 31 400	488 31 400 00	frame Bl.		1	1	
	4519 488 31 401	488 31 401 00	frame S.M.		1	1	
	4519 488 31 402	488 31 402 00	frame R.		1	1	
	4519 488 31 403	488 31 403 00	frame W.		1	1	
1a	4519 488 31 506	488 31 506 00	frame weld-poop stand arm		1	1	
	4519 488 31 500	488 31 500 00	frame Bl.		1	1	
	4519 488 31 501	488 31 501 00	frame S.M.		1	1	
	4519 488 31 502	488 31 502 00	frame R.		1	1	
	4519 488 31 503	488 31 503 00	frame W.		1	1	
BOXES AND GUARDS 36							
2	4519 487 36 364	487 36 364 00	Guard R.H.-S.M.		1	1	
	4519 487 36 362	487 36 362 00	Guard R.H.-R.M.		1	1	
	4519 487 36 363	487 36 363 00	Guard R.H.-B 1.		1	1	
	4519 487 36 368	487 36 368 00	Guard R.H.-W.		1	1	
	4519 487 36 369	487 36 369 00	Guard R.H.-B.M.		1	1	

DESCRIPTION OF LUBRICATION SYSTEM

You have become and owner of the most modern type of ČZ motorcycle provided with an oil pump. That is why we consider it as useful to acquaint you in more details with operating conditions of this motorcycle. The reason is that knowledge of correct maintenance and adjustment influences troublefree operation of the machine and consequently it makes you satisfied with a perfect product which brings you these advantages:

- overall decrease in oil consumption, because the engine gets the specified oil dose in advance in the quantity which depends upon its speed and load; i. e. throttle grip turning;
- considerable decrease in motorcycle smokiness is occasioned, as the engine is not over-lubricated. From hygienic point of view this version reduces the quantity of undesirable combustion products from exhaust gases in atmosphere;
- carbon formation in piston head, piston ring grooves, combustion chamber of cylinder head, cylinder exhaust parts, exhaust manifold and exhaust silencer is significantly reduced;
- it enables to use suitable and guaranteed lubrication in the whole range of revolutions with respect to engine load. At the existing method of lubrication, when oil was directly added into fuel, the owner had to rely frequently on assiduity of the petrol station attendant in keeping the lubrication proportion;
- it enables to use attested oil brand, because the oil tank capacity is sufficient to cover a distance of about 800 to 1000 km. This distance is high enough and the owner has an opportunity to buy oil of original brand and kind. It also enables to use oil of guaranteed quality, as the oil can be replenished from original sealed packing.

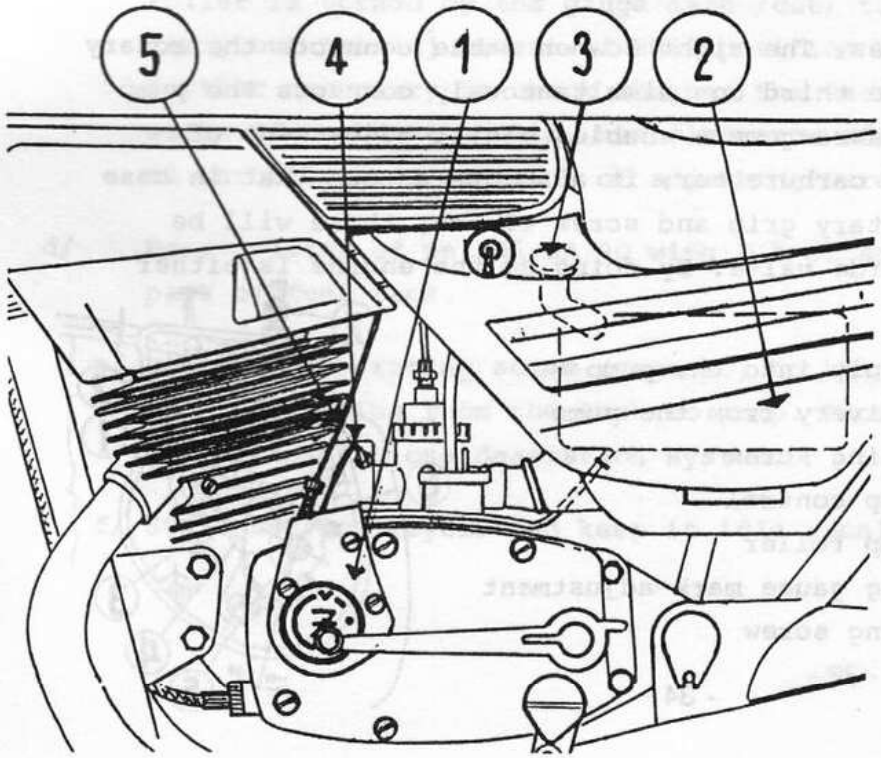
Important notice:

When the motorcycle is used in winter period, i. e. at temperatures below -5°C, it is necessary to use oil of SAE 20 viscosity class for lubrication while adding simultaneously 1 % of oil into the fuel tank.

1. DESCRIPTION OF LUBRICATING SYSTEM

a/ Oil pump

ČZ motorcycles equipped with an independent MIKUNI oil pump are lubricated with oil atomized in fuel. The pump enables to lubricate the engine in variable doses whose quantity is determined in advance with respect to slide valve stroke. This basic dose quantity delivered by the pump is not the same at all pumps, the pumps are adjusted by the manufacturer for different engine capacity and output. It is not therefore possible to change arbitrarily the pumps as spare parts. The pump is a piston-type driven by the crankshaft. Movable parts of the pump work in oil and that is why the pump parts need not be lubricated. The adjusting and controlling elements of the pump are accessible after removing the cover lid. The pump delivers oil into the engine in mixture in the range of 1 : 90 up to 1 : 50.



1. oil pump
2. oil tank - right side
3. tank cap
4. spray nozzle
5. pump Bowden control cable

b/ Oil tank

Maximum tank capacity makes 1,15 liter; 1 liter can be considered as operating capacity. Under current operating conditions this quantity is sufficient to cover the distance of 800 - 1000 km. When the oil level drops; i. e. about 0,4 l. of oil is left in the tank, the red pilot lamp gets alight on the panel. In case of necessity it is possible to continue in riding with oil left in the tank event at dropped level up to max. distance of 100 km. It is therefore necessary to carry out level checking in time.

c/ Intake manifold

is made by means of special oil resistant hose between the pump and the oil tank.

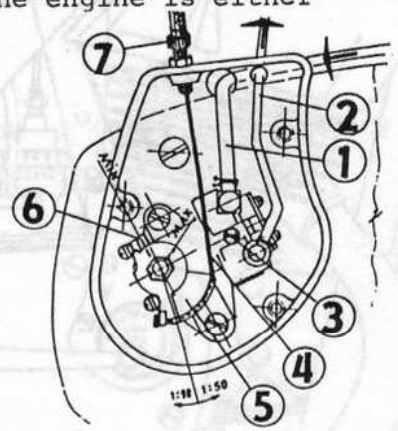
d/ Delivery piping

it is a transparent hose of smaller cross section.

e/ Pump control

is executed by means of three Bowden cables. The right Bowden cable connects the rotary grip with screw clutch, the second and the third one simultaneously connects the pump control roller and the slide valve. This arrangement enables easier adjustment of elements, i. e. rotary grip, oil pump and carburetter; it also guarantees that in case of failure of the Bowden cable and the rotary grip and screw clutch, there will be simultaneously closed the pump and the slide valve. By doing so the engine is either idle running or stalled.

1. oil supply into the pump
2. oil delivery from the pump
3. deaerating screw
4. oil pump control
5. oil pump roller
6. checking gauge mark-adjustment
7. adjusting screw



2. PUTTING THE NEW MOTORCYCLE INTO OPERATION

a/ After preliminary tasks /storage battery, chains and bolts checking/ it is necessary to fill the oil tank with additional oil for petrol for 2-T engines, efficiency class API-TC

- at temperatures -5°C + 40°C viscosity class SAE 30-40
- at temperatures -5°C - 10°C viscosity class SAE 20

with simultaneous addition of 1 % of oil into the fuel tank.

Recommended oils: M2T - S, MOGUL TS, ÖMV - Xbike, ÖMV - bioMix, Castrol Formala TTS-RS, EVROL RTC - TS

b/ Unscrew the pump cover lid.

c/ Carry out Bowden cable length inspection - at first visually, whether the pump control roller is turned by the gauge mark /cut/ to the boss on pump body. If it is not so, carry out the adjustment of this position by means of adjusting screw /fig. 7/. It is further necessary to check whether the second Bowden cable, leaned against the adjusting screw of carburetter lid, has clearance of about 1 mm. Adjust Bowden cable clearance at throttle grip by means of adjusting screw on the sleeve /fig. 3-4/ by about 1 mm.

d/ Pour 1 liter of petrol BA 90 with 2 % of specified oil /20 ml/ mixture into the left part of fuel tank.

e/ Dismount deaerating screw /page 10, to the left, pos. 3/ from the pump front side and blow-off piping from the tank to pump. Provided that oil without air bubbles flows out of the hole, close deaeration system.

f/ Start the motorcycle and keep it idle running.

g/ Turn slightly the pump roller to position MAX and hold it in this position until the oil column in delivery piping from the pump up to suction part does not fill piping completely. Afterwards the adjustment process is finished. Check again Bowden cable adjustment according to point "c".

h/ Screw on the pump cover lid.

3. LUBRICATION CHECKING DURING MOTORCYCLE OPERATION

a/ Make sure before the ride whether there is enough oil in the oil tank. The red pilot lamp on the panel with a symbol must be alight when the engine is running; it should die out when the gear is shifted.

b/ Verify visually whether both hoses are filled with oil and whether their attachment is reliable. If you find out there is no oil in delivery piping, it is necessary to remove the pump lid and perform breathing 2d/. After the engine is running, remove the delivery hose for a short time from the valve and check whether oil is dropping off in regular intervals.

c/ In case that the hose cannot be filled with oil even by additional pumping, the defect is more serious and should be removed as quickly as possible. One can continue riding on the assumption that oil is added into fuel tank from the oil tank in proportion 1 : 40 /by estimate/. After repairing the pump it is necessary to drain off fuel and oil mixture and fill new petrol - otherwise the engine would be undesirably overlubricated.

d/ After terminating your ride, be sure that both hoses are full of oil and there are no traces of leakage.

- - Turn slightly the pump roller to the right /return spring overstressing/ until the upper cut out for connector gripping is turned so that the cable end connector can be slid in. After sliding the connector in, the cable should be inserted into the pump roller groove.
- Carry out Bowden cable adjustment according to 2c/.

Exchange of Bowden cable - carburetter - screw clutch

- Slide one end of cable into the screw clutch.
- Screw in the lid of slide valve chamber; take out the slide valve with needle.
- Slide in the connector of the second cable end into the groove in slide valve; mount the slide valve on.
- Adjust idle running and Bowden cable clearance - /on the lid of slide valve chamber/.

4. REPAIR OF LUBRICATING SYSTEM

Incompetent interference may result in engine seizing up. That is why the manufacturer does not accept guarantee for the engines and pumps where the defect was caused by incompetent interference. It is therefore recommended to remove defects in lubrication system in professional repair shops. The machine can be moved to the repair shop according to point 3c.

Without violating the guarantee conditions it is possible to execute the following repairs in guarantee period:

a/ oil piping /hoses/ exchange

b/ exchange of packing at deaerating screw

c/ exchange of control Bowden cables

d/ exchange of lubricating tip-valve, or its packing.

The operation further quoted should be performed by professional repair shop within guarantee period:

a/ exchange of the pump as a unit and exchange of packing under the pump.

Exchange of Bowden cable, rotary grip - clutch - pump

- Slide the cable socket after dismounting the rotary grip into the capture - the other end of cable should be slid into screw clutch.
- Remove the pump cover lid.
- Slide the cable socket of the new Bowden of pump into screw clutch, the other end should be slid into pump space .

ČZ - CAGIVA, a.s.

STRAKONICE

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