

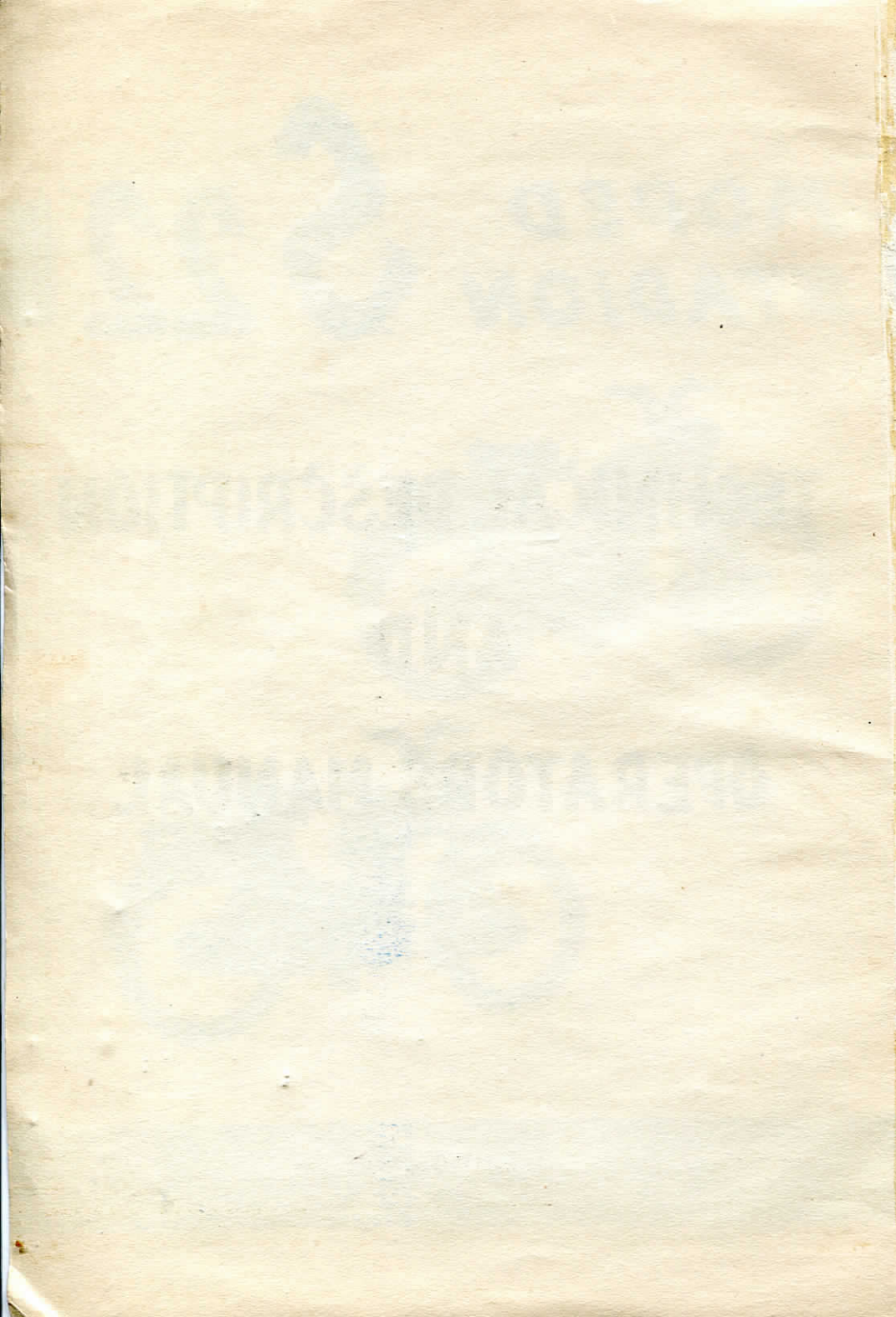
**MOPED  
STADION**

**S 22**



**TECHNICAL DESCRIPTION  
AND  
OPERATORS MANUAL**

**1. EDITION 1961**



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TECHNICAL DESCRIPTION

AND

OPERATORS MANUAL

1. EDITION 1961

M O P E D   S T A D I O N  
M O D E L   S   2 2  
E N G I N E   J A W A   C C   M O D E L   5 5 2

T E C H N I C A L   D E S C R I P T I O N

O P E R A T O R S   M A N U A L   A N D   I N S T R U C T I O N S   F O R   M A I N T E N A N C E

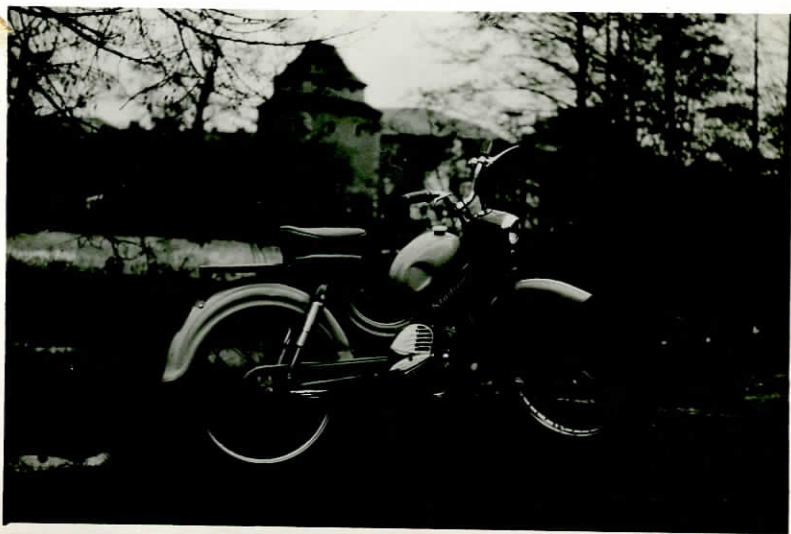
No. of cylinders . . . . . 1  
Cubic capacity of cylinder . . . 49,8 cc or 3.038 cu.in.  
Bore of cylinder . . . . . 38 mm  
Stroke of piston . . . . . 44 mm  
Output of engine . . . . . 1.8 HP at 4.250 r.p.m.

1st edition 1961

Produced by: M O T O R   N. C.   Č e š k é   B u d ě j o v i c e  
                  p l a n t   S T A D I O N ,   R a k o v n í k

M O T O K O V   F O R E I G N   T R A D E   C O R P O R A T I O N  
f o r   t h e   I m p o r t   a n d   E x p o r t   o f   V e h i c l e s   a n d   L i g h t   E n g i n e e r -  
i n g   P r o d u c t s

P R A H A   -   C z e c h o s l o v a k i a



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My dear Stadion Moped Rider,

You have become a Stadion moped owner, having purchased the new model S 22, which is a continuation of above 150,000 mopeds of the previously produced model S 11

We are proud to inform you that the production plant MOTOR - Stadion is the largest one manufacturing mopeds in Czechoslovakia and with the longest tradition too. The new model of the Stadion moped, the user of which you have become, had been introduced into series production after a long series of painstaking and very careful tests. Both the designers and the workers have done their very best to present to You an inexpensive vehicle, economic in running, offering the maximum riding comfort and requiring the minimum maintenance.

It is, undoubtedly, your desire to make use of the moped as long as possible and in a troublefree manner. Consequently, it is in your own interest to get acquainted with the present Manual and keep to the hints given.

We are convinced, due to the fact that the moped is a quality product, that troublefree operation will result and in consequence of that we are giving you the same six - months guarantee, as is the case for much larger and much more expensive other motor vehicles. Should in spite of all the care in designing and production, a trouble arise, refer to your nearest accredited repairshop.

Wishing you thousands of pleasant miles on Your moped STADION S 22 we are

Yours faithfully

S T A D I O N

## T e c h n i c a l   D a t a

Engine	petrol, two-stroke, air-cooled, with forward inclined cylinder
No. of cylinders	1
Bore of cylinder	38 mm
Stroke of piston	44 mm
Swept volume	49,8 cc or 3.0389 cu.in.
Compression ratio	1 : 7.5
Maximum output of engine	1,8 HP $\pm$ 10 % at 2500 r.p.m.
Noise of engine according to the ČSN standard 30 0512 max. 73 dB	
Rated fuel consumption according to the ČSN standard 30 0510 at a constant speed of 35 km p.h. or 21,7 m.p.h. 1,5l lit. per 100 km or 190 m.p.g.	
Rated fuel consumption at a constant speed of 40 km p. h. or 24,85 m.p.h. 1,6 lit./100 km or 176,5 m.p.g.	
Weight of machine dry	48 kg or 105,8 lbs
Weight of machine with fuel	51,6 kg or 113,76 lbs
Tolerated maximum speed	40 km p.h. or 24,8 m.p.h.
Maximum climbing ability (fully loaded)	16 per cent
Maximum payload	100 kg or 220,4 lbs
Maximum front wheel load	44,5 kg or 98,12 lbs
Maximum rear wheel load	82,5 kg or 181,88 lbs
Primary transmission	by means of gears
Secondary transmission	by means of roller chain mark "FAVORIT-Transport"
Transmission ratios-primary	1 : 4,75 (57/12)
-secondary	1 : 2,92 (35/12)
1st gear	1 : 2,01
2nd gear	1 : 1 (direct drive)
Overall transmission ratio 1	1 : 27,9
Overall transmission ratio 2	1 : 13,88
Overall transmission of the starting mechanism	1 : 24
Braking distance from the speed 40 km p.h. or 24,85 m.p.h-	
Front brake applied	21,3 metres or 69,87 feet
Rear brake applied	17,0 metres or 55,77 feet
Both brakes applied	9,7 metres or 31,82 feet



Maximum travel of front fork	65 mm or 2,559 inch
Maximum travel of rear fork	70 mm or 2,756 inch
Carburettor	JIKOV 2912 PS
Wheels - dimension of rims	23" x 2,25"
- dimension of tyres	23" x 2,25"
Dimensions of the moped:	
length	1820 mm or 71,653 inch
with over handlebars	640 mm or 25,197 inch
height	1040 mm or 40,945 inch
ground clearance	175 mm or 6,89 inch
wheelbase	1165 mm or 45,866 inch

#### DESCRIPTION OF THE MOPED STADION S 22

The MOPED STADION S 22 is the lightest Czechoslovak two-wheeled vehicle made for the purpose of forwarding a single person. Its light weight allows for carrying it from place, over staircases and similar, in case of garaging etc.

ENGINE of the moped is a two-stroke petrol unit with reverse scavenging. Specification of the engine unit is indicated in the part "Technical Data".

CARBURETTOR J I K O V model 2912 PS semi-down draught, provided with a very efficient intake silencer. Idling run adjustment is done by means of a stop screw of the throttle valve and further by means of an adjusting screw of the throttle valve operating cable. It is protected against heating from the cylinder with an insulating pad.

CLUTCH of the vehicle is a multi-plate one, with asbestos-resin lining and is located at the L.H. side of the crankshaft, under the engine cover.

GEARBOX of the engine is equipped with 2 gears. It is built-in in the crankcase. Gears are shifted through the medium of a twist-grip, located on the L.H. side of the handlebars.

TRANSMISSION OF TORQUE from the engine to the gearbox is done by the primary transmission bevel gears, located under the L.H. side crankcase cover. All the gears of the primary transmission, gearbox and the clutch run in an oil bath. The secondary transmission between the gearbox and the rear wheel is carried out by means of a roller - chain mark FAVORIT-Transport size 12,7 x 4,8 mm, 108 links, which is partly covered.

CHAIN GUARD is made of steel sheet and is enamelled on its surface. The chain cover pivots together with the rear wheel, the center of its pivoting being the pivoted fork pin. It protects the rider safely from the any dirt splashed by the transmission chain.

FRAME of the machine is of open, welded design, made of quality steel tubes, combined with a carrier case which is set up of steel sheets.

FRONT WHEEL SUSPENSION is carried out in a fork, welded of steel pressings, which is equipped with short pivoting arms and steel coil springs, into which rubber dampers are inserted.

SPRINGING OF THE REAR WHEEL is ensured by a pivoted fork with wide mounting base. The sliding bushes of the pivoted fork are assembled on a steel pin. This assembly need not be lubricated prior to the mileage of 10,000 km or 6214 miles. This mileage completed, it is necessary to take the fork assembly apart and after a thorough cleaning to fill it with fresh motorcar grease for chassis.

TELESCOPIC MEMBERS are used for springing. They are provided with steel springs and rubber buffers.

WHEELS are assembled of rims with steel spokes. Dimensions of the rims and tyres are 23" x 2,25", are mutually interchangeable and can be easily detached. Spokes dia 2,65 mm are made of steel wire, the wheel hubs are made of light alloy.

WHEEL BRAKES are highly efficient. The front one is governed by a cable on handlebars, the rear brake is operated

with a tie rod by means of its pedal. Brakes are adjusted with knurled nuts, no tools being required for this operation. The rear brake reaction buffer is carried out by a steel casting.

FUEL TANK capacity is 5,6 litres or 1,23 imp. gallons. It is closed with a filler neck cap made of plastic material. The cap is of a plug shape, designed with a double sealing ring reinforcement on its circumference. The fuel tank is elastically mounted in rubber pads. Its bottom part is provided with a draining cock equipped with a cleaning strainer, providing reserve of fuel of about 0,5 lit. or 0,109 imp. gall.

SEAT of the machine is made of formed foam rubber, covered with artificial leather. It is detachable after releasing its tightening wing nut. Under the saddle there is a space for tools and tyre pump.

HANDLEBARS are made of a single tube, adjustable to suit the figure and individual wishes of the rider.

STAND of the machine is a two-leg model, welded of steel pressings.

BELL in the usual execution for bicycles, single-tone.

LUGGAGE CARRIER is pressed of steel sheets. In its side walls there are recesses for fixing the luggage.

EXHAUST SILENCER of a cigar shape is arranged in the interior in such a way as to assist effectively to decreasing the exhaust noise level.

#### DESCRIPTION OF ELECTRIC EQUIPMENT

The flywheel magneto, a product of the PAL-MAGNETON N.C. feeds all of the electric appliances with A.C. current. The magneto is located under the R.H. side cover of the engine.

The flywheel magneto is composed of the base plate (stator) and the rotor made of special alloy, with sealed in per-

manent magnets. The rotating mass of the rotor is fully utilized for the purpose of securing a smooth, uniform run of the engine.

The ignition and lighting parts of the electric system are mounted on the base plate.

The ignition part of the base plate comprises the ignition coil provided with dual winding, the contact breaker and the condenser, which is located beside the base plate proper. The contact breaker is driven by means of a cam in the center of the rotor. In the instance of disconnection of the contact breaker points electric spark is produced at the ends of the spark plug electrodes.

Lighting electric current 6 V 18 watt is derived from an independent coil. Electric leads of the lighting harness have a diameter of 0,5 sq.mm.

HEADLAMP dia 80 mm or 3,15 in. is provided with a double-filament electric bulb 6 V 15/15 watt CSN standard 30 - 4311.

It is built into the front fork cowling. Switching - in and dipping of lights is carried out by means of the combined switch located on the l.h. side of handlebars.

TAIL LIGHT of the rear mudguard is provided with electric bulb 12 V 3 watt - E 10/13, model 5643.

SPARKING PLUG should be used of the model PAL 14/225.

## INSTRUCTIONS FOR OPERATION

In the first place make sure that there is a sufficient quantity of fuel in the fuel tank. The fuel tap is pulled upwards. Having run-in the moped, mix petrol with regular oil for two stroke Petrol engines (SAE - 50) premixed oil 1 : 20, i.e. for the quantity of 5 lit. of petrol make use of 0,25 lit. of oil.

Then test inflation of tyres. Open the fuel tap.

Flood the carburettor by means of depressing the tickler pin, located in the float chamber. When starting warm engine, do not flood carburettor.

To make starting as easy as possible, depress the decompressor lever. Pedal in the direction of riding and in the very instance, when one of the pedals is nearing its BDC, release the decompressor lever.

### SHIFTING THE GEARS AND RIDING

Depress the clutch lever, which is located on the l. h. side of handlebars, turn the twistgrip in the direction off the saddle (thus shifting in the 1st gear) and accelerating uniformly by means of the r.h. side throttle valve operating twistgrip, release slowly the clutch lever. As soon as approximately 15 km p.h. speed has been attained (i.e. 9,3 m.p.h.) close throttle valve a little, depress the clutch lever and turn the gear engaging twistgrip towards the saddle, engaging in this way the 2nd speed. Then release the clutch lever and open throttle valve simultaneously. The speed of the vehicle is regulated by means of throttle valve opening. If speed of the vehicle decreases below 15 km p.h. or 9,3 m. p. h. it is necessary to engage the 1st gear, using steps reversed to those described.

For the purpose of stopping the vehicle close throttle valve, depress the clutch lever and engage neutral gear in that the gear shifting twist grip is turned into its middle position. The engine is stopped by depressing the decompressor lever. When braking make use of the brake first, only then applying the front one if necessary. When the day's riding has been terminated, close the fuel tap.

### RUNNING-IN A NEW MOPED

When accepting the machine, inspect the gearbox oil level.

The correct oil level height is determined by the inspection orifice in the l.h. side crankcase cover, which is sealed by means of a screw M6 x 8.

Mix the fuel mixture in the following ratio:

0 - 1000 km or 621 miles:

( 1 : 20 ) i.e. for 5 lit. petrol make use of 0,3 lit. regular oil for two stroke Petrol engines ( SAE - 50 )

Having covered 1000 km or 621 miles:

( 1 : 25 ) - for 5 lit. of petrol make use of 0,25 lit. of this same oil.

Prior to covering the first 500 km or 310 miles ride the machine with only half-opened throttle valve.

Check from time to time tightening of all the nuts and screws. Having covered 500 km or 310 miles and then 1500 km or 932 miles respectively, carry out exchange of oil in the gearbox. The moped can be considered run-in after covering 1500 km or 932 miles.

## MAINTENANCE

CLEANING of the machine is a simple job indeed. Wash the moped with water, taking care that no water penetrates in to the carburettor, headlamp and brakes of the vehicle. Then wipe its enamelled and chromium plated parts dry and polish. It is to the better to polish the enamelled parts with an enamel polishing paste. Water is removed from between the cylinder ribs in that the engine is started and warmed up. Water gets evaporated in this way. All the rubber parts of the machine have to be protected from oil, kerosene, petrol or crude oil.

## LUBRICATION

ENGINE of the moped is lubricated directly by adding regular oil for two stroke Petrol engines ( SAE - 50 ) in

the ration 1 : 25, or premixed oil - the ration 1 : 20

GEARBOX is to be filled with oil PP7 both for winter and summer. Exchange of oil in the run-in engine is to be carried out once in 5000 km or 3110 miles, directly after ending a run, i.e. while oil is warm. The gearbox is rinsed with flushing oil (bearing oil), which is to be drained off the engine after its short operation into a clean vessel. Let thus saved flushing oil settle, so that its clean part (but not the sediments of dirt at the bottom of the vessel (can be used for a further rinsing). Beware rinsing the gearbox with kerosene or diesel oil, the remnants of which would depreciate the fresh filling of oil!

SECONDARY CHAIN is to be taken off after covering 5000 km or 3110 miles, washed in kerosene and let drip off and dry. Then put the chain into a bath of warm (approximately 60° to 80°C or 140° to 176 °F) motorcar grease for chassis for approximately an hour's time. Take the chain out of the bath after this period and wipe off excessive, solidified lubricant. Then assemble back on the machine.

FLYWHEEL MAGNETO. Lubricate rocker arm pin of the contact breaker with several drops of oil PP7 each 3000 km or 1864 miles covered. Take care not to soil the contact breaker points. Felt of the contact breaker is to be soaked in automobil grease for bearing. All the other spots are to be lubricated in accordance with the following table:

Having covered each km/miles	Lubricated spot	No. of spots	Kind of lubricant
500/310	Front suspension pins	2	Motor grease for chassis
1000/621	Check alternative level in gearbox	1	Oil SAE - 90
	Telescopes	2	Oil SAE - 90
3000/1864	Contact breaker arm pin	1	Oil SAE - 90
	Felt of contact breaker	1	Automobil grease for bearing
5000/3110	Gearbox - exchange	1	Oil SAE - 90

	Twistgrips	2	motorcar grease for chassis
	Secondary transmission chain	1	motorcar grease for chassis
	Cables and cable guides	6	Oil SAE = 90
	Brake cams	2	Oil SAE = 90
	Stand pin	1	motorcar grease for chassis
8000/4970	Balls in head fittings of front fork	2	automobil grease for bearing
	Bearings of wheels	2	automobil grease for bearing
10000/6214 <sup>x</sup>	Moánting of the rear pivoted fork (after its unassembly)		motor grease for chassis

<sup>x</sup>) Note: or at least once in three years.

## TYRES

Tyres of the moped should be adequately inflated. Longevity of tyres is determined to quite an extent by their correct inflation and by contact direct with oil, petrol or diesel fuel. The prescribed inflation pressure of the front tyre is 1,4 at. or 108,5 psi, that of the rear one 1,6 at. or 115,7 psi. (This indication is valid for riders of medium wight, i. e. approximately 85 kg or 187,40 lbs)

Leaky valve is detected by wetting it, after its covering nut has been unscrewed. The leaking air produces bubbles. To correct this defect, tighten the valve core by means of the reverse end of the valve covering cap. Should this operation fail to rectify the defect, replace the valve core for a new one.

A detective tyre tube is to be repaired by sticking. Take the wheel out of the frame and unassemble the tyre and tube off the rim in the following way: Slacken the valve tightening nut. Press the tyre opposite the valve into the rim depression. Slip the tyre cover over the rim by means



of tyre levers. Take care to prevent the tyre tube to be pierced. Press the valve of the rim and take out the tube. Screw in the valve core, inflate the tube a little and dip into water. The damaged spot will demonstrate itself by leaking bubbles. Dry the tube and repair the damaged spot by vulcanizing or sticking (in accordance with the instructions given by the manufacturers of the repair kit) Then powder the repaired spot with talcum to prevent it from getting stuck to the tyre cover.

Inspect the tyre cover and remove the nail or any other sharp object that caused the puncture of the tyre tube. The reassembly may be started in the following way: The partly inflated tube valve is slipped through its orifice in the rim and the tube proper inserted into the tyre cover. Slip the edge of the tyre tube over the edge of the rim opposite the tube valve and continue uniformly slipping the edge over rim along both directions by means of tyre levers, until this operations is finished at the tube valve from both sides. Do this operation carefully to prevent its seizing between the edges of the rim and of the tyre cover. Then inflate the tyre to the prescribed pressure.

#### TENSIONING THE SECONDARY CHAIN

Slacken the nut of the rear wheel spindle and the nut of the chainwheel bush. Then tighten the chain adjuster nuts uniformly so that the due tensioning of chain results. The maximum sack of the secondary chain should be approximately 1,5 mm. This operation finalized, do not omit to tighten well both the nut of the chainwheel bush and of the spindle. Check adjustment of the rear brake.

#### ADJUSTING THE CLUTCH

Elongation of the clutch operating cable is eliminated by means of its adjusting screw and safety nut, located on

the handlebars. There must be a clearance of approximately 2 mm between the lever and its bracket. If a larger wear is observed of the clutch lining, it is necessary to adjust the clutch in that operating cable is shortened at its lever at the bottom of the crankcase.

## CARBURETTOR

The assembled carburettor JIKOV model 2912 PS is an up-to-date semi-downdraught carburettor, equipped with an effective intake silencer, the front part of which constitutes the carburettor cover. Its adjusting organs are the main jet, the idling jet, the throttle valve needle, improve the transition from idle run. The independent idling-run circuit with an interchangeable jet ensures a regular idling run. Maintenance of the carburettor requires its cleaning and cleaning the air cleaner each 3000 km or 1864 miles covered with the machine. The carburettor is to be taken apart and all its component parts are to be washed in pure petrol, the air cleaner is to be wetted with a mixture of engine oil and petrol (ratio 1 : 1). When reassembling the carburettor back into the engine take care that the gasket as well as the insulating pad between the carburettor flange and the engine are mounted in their correct location and furthermore, that the gasket is undamaged.

## ADJUSTING THE IGNITION

Having covered 5000 km or 3110 miles check or adjust respectively the contact breaker points gap and the setting of ignition advance. The breaker points gap is checked by means of a feeler gauge, which is rivetted to the spanner in the tool kit of the machine. Piston of the engine must be in its TDC. The correct distance of contact points is set by slackening the fixing screw and turning the base plate. When checking the ignition advance, put a stripe

of cigarette paper between the opened contact points. Then turn the rotor against its working direction. The crankshaft is then turned very slowly in the working direction of the engine, until the points start to go apart and the slip of paper is released. In this instance the piston is to be 2,8 to 3,1 mm before its TDC. If the ignition advance is not in its prescribed position, the base plate of the ignition is to be turned to the correct position after its two fixing screws have been slackened.

In the end make sure once again that the ignition has been correctly adjusted and the contact points gap of the contact breaker is in conformity with the factory prescription.

#### DECARBONIZING THE ENGINE

Carry out decarbonizing of the engine after 5000 km or 3110 miles covered with the machine. Remove deposits of carbon off the cylinder head, off the piston top part and out of its piston ring grooves as well as off the transfer ports. In the course of reassembly take care to mount the piston rings into their original grooves. Wash and carry out assembly.

Each 2500 km or 1553 miles covered with the moped carry out decarbonization of the exhaust silencer in that the silencer tube is removed with pliers from the rear part of the exhaust silencer after the fixing screw M4 x 6 has been removed. The tube is to be thoroughly cleaned with a wire brush and then reassembly is to be carried out.

#### UNASSEMBLY AND ASSEMBLY IN THE ABSENCE OF SPECIAL TOOLS

##### REMOVING THE FRONT WHEEL

Release the front brake operating cable, unscrew the wheel spindle nut and take out its spring washer. Slacken the tightening screws of rockers, push out the spindle, remo-

ve two spacing inserts and take the wheel out.

On reassembly do not forget to mount the spacing inserts taking care that the larger one is to be located on the l.h. side (viewed in the riding direction). The spindle and rocker of the nuts are tightened after several hard depressing of the front wheel (by hard "pumping" the fork). Then adjust the front wheel brake.

#### REMOVING THE REAR WHEEL

Release the rear wheel tie-rod of the brake, unscrew the spindle nut, take out the spring washer and push out the spindle to the r.h. side. Then push out the brake reaction catch/stop rearwards and take the wheel off the driving dog. On reassembly take care to carry out adjustment of rear brake.

#### REMOVING THE CYLINDER HEAD AND THE CYLINDER BARREL

Remove the spark plug conduit terminal, disconnect the exhaust silencer and the decompressor control cable. Unscrew the nut of the silentblock screw in the cylinder head and push the screw out. Then remove the carburettor complete. By means of a box spanner OK 10 the nuts of the cylinder head are unscrewed and the cylinder head is removed. Put the piston into its BDC and push the cylinder barrel upwards. The orifice in the crankcase thus released must be covered with a clean cloth to prevent dirt, dust and other impurities from penetrating into the crankcase cavity. Make use of a brand new cylinder barrel gasket and cylinder head gasket for reassembly. Having finalized assembly, start the engine and let warm up. Then tighten finally the cylinder head nuts.

#### ADJUSTING THE GEAR SHIFTING MECHANISM

Beware trying to engage a gear with the engine and the ma

chine stationary. The control cable gets elongated after some time, especially in the initial stages of operation. Its adjustment is to be done by means of the adjusting screw. When adjusting the control cable, engage 2nd gear with the twistgrip. If neutral gear is engaged in the gearbox, slacken the securing nut and screw in the adjusting screw by the securing nut and screw in the adjusting screw by four to six revolutions. With neutral gear engaged push the moped forwards. When the adjustment has been correctly carried out, the gearbox teeth must not get into contact. Should they get into a slight contact, turn the adjusting screw back by about two revolutions, Make sure that adjustment is satisfactory and then tighten the safety nut.

A larger play in the gear engaging mechanism is eliminated by setting thread of the bottom cable end, which can be done after the r.h. side crankcase cover.

## T O O L S

The current servicing and maintenance operations can be done with the following tools:

- |                               |      |
|-------------------------------|------|
| 1) Box spanner 21/22          | 1 pc |
| 2) Box spanner 10             | 1 pc |
| 3) Multihole spanner          | 1 pc |
| 4) Double-sided spanner 14/17 | 1 pc |
| 5) Screwdriver No. 2          | 1 pc |
| 6) Tyre lever                 | 1 pc |

List of defects and their remedy

Symptoms		Defect	Remedy
Engine stops or cannot be started	Carburettor cannot be flooded	No fuel in fuel tank Fuel tap closed Fuel tap insufficiently open Strainer over fuel tap stopped up Fuel supply hose stopped up Filler cap air slot stopped up	Fill fuel tank Open fuel tap Open fully fuel tap Clean strainer, after fuel tap has been unscrewed first Clean fuel supply hose Clean filler cap air hole
	Carburettor can be flooded	Carburettor jet stopped up Dirt or water in carburettor Carburettor is flooded	Clean carburettor jet Clean carburettor Float needle valve is untight or float is pierced - replace faulty part
	Spark at the cable end	Oiled spark plug (carbon or spark-bridge) Defective spark plug Defective or loose ignition conduit	Clean spark plug or replace check electrode gap Replace for new one Have cable repaired in expert shop

		Soiled contact breaker Faulty condenser	Clean and check breaker points gap Replace with new one
	No compression in the cylinder	Spark plug gasket does not tighten well enough (blast) Cylinder head gasket blown Broken or carbon - stuck	Replace gasket by new one Replace by new one Disassemble piston ring and replace by new one
Engine runs irregularly and stops		Insufficient quantity of fuel Fuel supply partly stopped Carburettor soiled Faulty spark plug Ignition conduit loosened Soiled contact breaker Loosened condenser Defective condenser Poor mixture Water or oil in carburettor	Top fuel tank Clean fuel supply hose Clean carburettor thoroughly Replace spark plug by new one Fix ignition conduit properly Clean contact points and adjust gap to 0,4 mm Fix condenser properly Replace by new one Clean carburettor jet and adjust Clean carburettor properly

Symptoms	D e f e c t	R e m e d y
Jerky running (engine operates diesel-like)	Oversize jet Defective carburettor float Worn float needle and seat Fuel mixture not as indicated i.e. wrong ratio Oiled spark plug (soiled) Stopped air cleaner	Replace by jet 45 Replace float by a new one Replace float with needle valve Adhere to mixing ratio petrol : oil (see the Directions) Clean or replace spark plug by new one, check electrode gap, use prescribed plug Clean thoroughly
Engine performance insufficient (low output)	Engine is not run-in, heats Air cleaner stopped Non-adjusted carburettor Defective gasket between carburettor and cylinder barrel Air leaks into engine  Defective cylinder head gasket	Let cool down, run-in carefully Disassemble carburettor, clean Adjust jet and idling run cable Tighten or replace gasket  Separate crankcase halves, clean faces, apply seating matter, fix tightly (operation for expert shop) Replace by new one



<p>Engine performance insufficient (low output)</p>	<p>Badly adjusted ignition advance          Too much carbon deposit in cylinder and exhaust pipe          Worn cylinder barrel wall and piston          Faulty spark plug          Brake shoes rub brake drums</p>	<p>Adjust ignition advance correctly          Carry out decarboization          Replace piston and piston rings, carry out cylinder barrel, rebore, check bearings (expert shop)          Replace by new one          Adjust brakes properly</p>
<p>Engine fires into carburettor</p>	<p>Late spark in cylinder head          Faulty or defective spark plug          Spark plug of low thermal value          Insufficient fuel supply</p>	<p>Adjust advance of ignition          Clean, adjust or replace by new one          Use recommended spark plug          Adjust carburettor, clean fuel hose</p>
<p>Engine gets overheated</p>	<p>The petrol or oil mixture unsuitable or ratio wrong          Stopped up fuel jet          Late spark from spark plug          Too much speed in 1st gear</p>	<p>Seek advice from fuel supplier          Clean thoroughly          Adjust ignition properly          Engage 11nd gear in time</p>

Symptoms	D e f e c t	R e m e d y
Engine gets overheated	Exhaust pipe and silencer clogged with carbon  Soiled cooling fins of cylinders barrel and cylinder head	Carry out decarbonisation  Clean with water and dry (running engine will evaporate)
Excessive fuel consumption	Defective fuel supply line, loosened connections, untight tank, untight carburettor  Oversize carburettor jet  Carburettor not adjusted  Exhaust pipe and silencer clogged with carbon  Defective gaskets (cylinder head, carburettor)  Spark plug too cool  Dirt clogged air cleaner	Repair, clean carburettor, check parts and replace faulty ones  Replace by jet 45  Adjust jet and idling run  Carry out decarbonization  Replace by new ones  Use plug with higher thermal value  Clean thoroughly

## N O T E

This Operator's Manual is subject to alternations of design and equipment as well as accessories of the moped. The manufacturers are constantly improving their products and reserve therefore, their right to carry out alterations necessary for this purpose as compared to illustrations or descriptions given in the present Manual.

## S T A D I O N

" MARK OF PERFECT SERVICE "

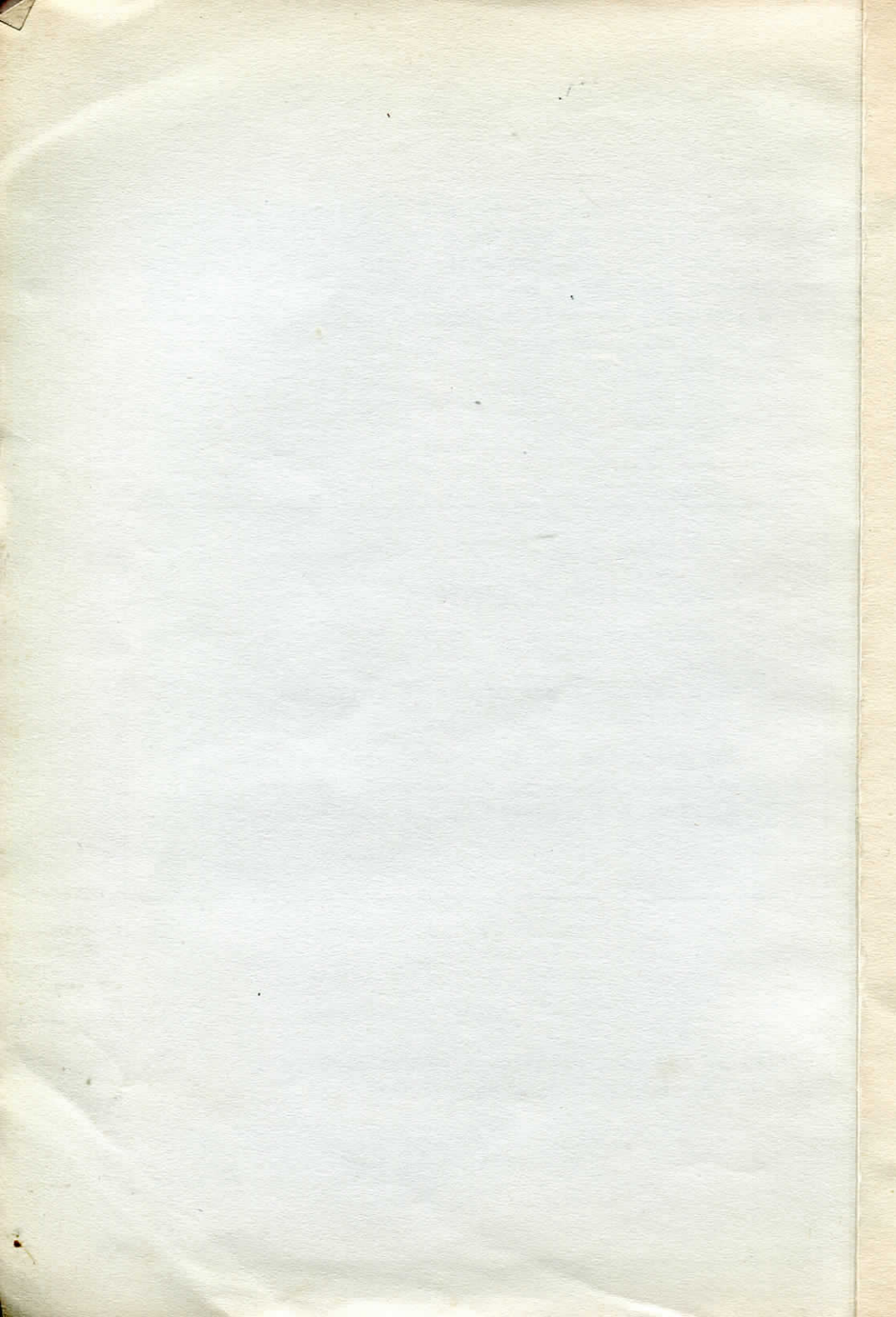
SERVICE STADION

Make exclusive use of the original spare parts trade mark STADION.

The guarantee of the manufacturer is cancelled by employing spare parts not produced or not approved by the manufacturer.

Edited by the Commercially-technical service of  
the MOTOR WORKS N.C. České Budějovice.

R 1049







„MARK OF PERFECT SERVICE“

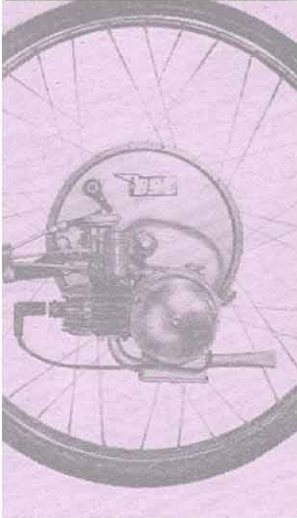
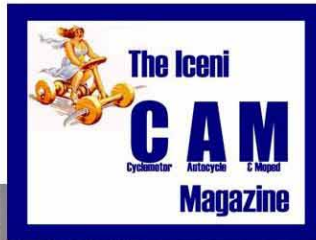


USE ONLY ORIGINAL SPARE PARTS  
OF TRADE MARK STADION

**MOTOKOV**

PRAHA 7. CZECHOSLOVAKIA

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