

JAWA 638.5 ROAD TEST LATE 1987 DUTCH MAGAZINE MOTOR

The first two stroke twin cylinder threefifty was manufactured by JAWA in 1948. The concept was being gradually developed, there were never radical changes, just minor improvements. However, the way has in the end led to the present-day threefifty model **638.5** resembling to its almost forty year's old predecessor in details only. Model **638.5** was derived from the 634 model introduced in 1974. The most evident changes are in styling. The present-day model was given a new tank, new seat and covers, so that the Czechoslovak motor cycle certainly looks good. The fuel tank is now more angular, the former very modest sign was replaced by a nearly diagonal position calling from a distance attention to the marque of the motor cycle.

Situated on either side are rubber knee grips in continuation of the shape of the dual seat provided with a protuberance at its rear. The finish of the front enclosure is the same as that of the other cycle parts either black, red or silver-grey.

Power Unit: Many Improvements

Possibly less obvious, but certainly not less important are the power unit changes. The JAWA employs again light alloy cylinder barrels with cast iron liners. The displacement is unchanged at 343.47 cc with **58** mm bore and **65** mm stroke. With respect to the electrical equipment the 6 Volt direct current dynamo was replaced by a 12 Volt alternator which, among other things, has a positive influence on the headlamp light intensity. Bronze bushes in the gearbox were replaced with needle roller bearings. The clutch diameter is greater and there are now five pressure springs instead of the former three. The gearbox ratios unlike the overall ratio had not been changed. As a consequence of the chainwheel with one less tooth employed the overall ratio is a little lower.

The engine block is now 8 kg lighter as a result of the light alloy ratio was raised from 9.2 1 to 10.2 1, the engine power is 19 kW, i.e. 25.8 HP (DIN) at **5,500** r.p.m., which is 3 HP more than before. Maximum torque — formerly 31.4 Nm at **4,500** r.p.m. — is now 33 Nm at **5,250** r.p.m. The Jikov carburettor venturi dia is 28 mm (formerly 26 mm) and the carburettor *is* provided with a fitted choke, so that gauntlets permeated with petrol smell are a thing of the past. Lubrication is by petrol mixture at the rate of 40 to 1. (**32:1 advised in the UK from member's experiences!**)

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Big Size

It will soon be seen that the disc brake is a big improvement on the standard drum brake. The disc is sensibly situated on the standard hub, so that in principle just the fork bottom part and the control mechanism need be adjusted. Regardless of the list price of less than 4000 Dutch Guilders (with disc brake) the threefifty is certainly not a promoted autocycle, but a machine on which big riders will feel at home. Since time immemorial JAWA motor cycles are started by a common kick-starter and gearchange pedal. When the engine is cold, it will start firing after a few prods, when warm a single kick will be enough.

The JAWA has a semiautomatic clutch disengaging by movement of the gearchange pedal. For those using the clutch lever it means to release the lever as soon as the gear is engaged. Once one gets accustomed to this rather peculiar control one becomes familiarized with gearchanging. The machine could do with five speeds, since its useful engine speed range is not too wide. To get good acceleration higher engine speed has to be taken advantage of. The best engine torque is between **3,000** and **5,250** r.p.m. Up to the speed of 90 km p.h. the Czechoslovak machine is a match for medium class motor cars and even above that there seems to be some connection between throttle twist-grip opening and speed increase. Maximum speed is 120 km p.h., though in truth it should be said that the tested machine had not many kilometres on the clock and that a property run-in motor cycle. The top speed cannot be used as cruising speed. The machine seems to feel best at 100 to 115 km p.h. Though not too bothering the JAWA vibrates and the vibration is felt in the footrests. Fuel consumption is roughly 1 litre per 16 km, so that in view of the 17 litre capacity tank its range is satisfactory.

Road Behaviour

This machine has certainly not bad handling. It is exceptionally stable and easy to control also on bad tracks and so a pleasure to ride. The good handling is due partly to the front fork, which is rigid enough, but comes up to any road unevenness. Exemplary is the machine's behaviour in wet in a rather less positive sense. The Barum tyres dimensioned for life-long service lack the necessary grip, adequate riding style is the only possible remedy.

Owing to its easy control the JAWA is in town a perfectly control-able means of transport, the 166 kg ready for road weight being a positive contribution in this respect. The Wiwo disc brake is fantastic in operation and has no trouble to check the Czech horses. The lever can be operated with one finger and in dependence on the pressure applied there is an option of proceeding so that the Barums will leave traces on the road surface or going slow or of anything between the two place rates. Nor can rain throw the cast iron disc off balance, the effect can be controlled at will. It can be said that the extra charge for the brake will be soon found to have been worth while. The experience was made by those who have been riding the 634 model or better said by those who had to put the brakes on. The rear brake gives its auxiliary service unobtrusively, but without problem and owing to the disc brake in front its once hard task was turned into easy work.

Comfort is of a very good standard. The sitting position at the available speeds is ideal. The rather hard dual seat does not give cause to complaints about back-ache on long trips. As mentioned the front fork is hard, but absorbs perfectly big and small shocks. The adjustable rear suspension units permit to get better of such shocks under heavy load. Owing to their large size the threefifty is well suited for two up, but of course at the price of tractive power loss. The statement is by no means to be understood as debasement of the engine power, but it is a factor to be reckoned with on long holiday trips with all the luggage.

Everyday Practice

The 350 JAWA runs on petrol mixture, which is not always an advantage. With a view to the prescribed 40 to 1 mixture rate it is impossible to refuel direct, but necessary to add the oil. In addition two stroke oil at the petrol pumps is exceedingly expensive. The best is to carry always half litre oil reserve.

In respect of equipment, all that a motor cycle is required to have the JAWA actually has even a rev counter, since some time standard equipment. The instrument needles, compared to the past, are big enough to enable accurate reading to some extent. In darkness the speedometer dial is hardly visible, but fortunately one can get a general idea of road and engine speed from the needle positions. The tell-tales between the two instruments are clearly visible even in poor light. The headlamp long beam tell-tale could be rather less intensive, since looking into the rearview mirror one sees one's face flooded with blue light. The light, horn etc. controls are concentrated on the left handlebar half and are quite good. However, the dipswitch should be moved to the right handlebar half to give the right hand something to do. Though the light and horn pushbuttons are close to each other, they are easily controlled owing to their half centimetre difference in height. The luminous capacity of the headlamp is perfectly satisfactory, both on long and dipped beam. The flashing direction indicators are situated high enough with the glass protruding far forward, aiming thus right into the field of vision and to miss them accidentally is quite impossible. The dual seat is removed as a whole and to replace it requires skill and patience. Lack of care may lead to cover finish damage. The total chain enclosure is still today a useful thing, although the necessity of such construction, if chains with 0 rings seen in many other machines are used, is less urgent than before. People purchasing for less than 4,000 Dutch Guilders (including disc brake) a new JAWA acquire a practical means of transport, which is very comfortable. Like with other products imported from socialist countries one does not find any sophisticated novelties but it will very well serve in everyday work. On very long trips one must not reckon with too high an average speed however the pace available is fast enough for passing trucks so that there is no need to avoid motorways. I wouldn't miss the disc brake for any money; it is a great thing contributing considerably to one's pleasure in riding.

JAWA motor cycles have a reputation that their owners have to dispense with many things; marginally there is some truth in it. If one begins to count in Dutch Guilders, it can be said that the JAWA is undoubtedly in a year or two a paying proposition compared with machines in a much higher price bracket.

Not discussed so far was one quality of the new two stroke machine. It is eminently suited for sidecar work for which it has the type approval certificate. The importer is able to supply the threefifty with two different sidecar models. With the orthodox 562 model the purchase price will be 1690 Guilders more, with the very modern 700 model the extra charge is 2,199 Dutch Guilders. The combination supplied by the importer can be used at once, there is no need to trouble with front fork and overall ratio adjustment.

Whether with a sidecar or solo the JAWA is a product from a different world. If one will realize this when buying the machine, the greater will be the pleasure with the machine.

Specification

Engine — air cooled piston controlled two stroke twin, light alloy cylinders with cast iron liners. Bore and stroke 58 x 65 mm, displacement 343.47 cc, compression ratio 10.2 to 1, maximum power output 19 kW (25.8 HP) at 5,500 r.p.m., maximum torque 33 Nm (3.36 kpm) at 5,250

r.p.m. Jikov 2928 CE dia 28 mm carburetter, petrol lubrication at the rate of 40 to 1, coil and battery ignition, 12 Volt electrical equipment, kickstarter. Transmission — primary drive by duplex chain 1.62 to 1, multiplate clutch in oil bath, four speed gearbox 3.16, 1.88, 1.33, 1.0 to 1. Final drive by chain 3.059 to 1 (52/17). **(UK 52/18**

normally)

Cycle part — duplex cradle type frame, simple top tube, telescopic front fork — 150 mm suspension travel, pivoted rear fork with two adjustable suspension units. Tyre size 3.25 — 18 front, 3.50 — 18 rear. Hydraulic control disc brake in front, simple drum brake rear. Frame prepared by manufacturer for sidecar fitting.

Dimensions and weight: length 2,080 mm, width 710 mm, height 1,090 mm, saddle height 810 mm, ready for road weight 166 kg, carrying capacity 180 kg, fuel tank capacity 17 litres. Performance: Maximum speed 120—130 km p.h., fuel consumption 1 litre per 16 km. Imported by: Greenib BV, Graftermeerstraat 55, 2131 Hoofddorp, phone 02503—35434. Manufactured by: JAWA, N.C., Tynec n. Saz., Czechoslovakia