but the movement is sensitive and there is no felt rebound action. The rear suspension by swinging arm on rubber in compression is

excellent and serves equally well solo or with pillion passenger.

The Rumi makes rather a lot of noise for a scooter and too much of it comes up at the rider by reason of the forward placing of the engine. A twin cylinder two-stroke fires for each revolution and the effect of speed reflected in the exhaust note is naturally great. For the enthusiast it gives real pleasure to wind up this willing little engine and hear it scream but the general public is less appreciative and an improvement in quietness would be to the good of the trade.

Worth Noticing

Apart from this noise factor there is little to criticise on the machine. The forward operated kickstarter is awkwardly placed relative to the rocking gear pedal and the right footboard seems to be cluttered up with this multiplicity of controls. There is a curiously limited steering lock that made itself noticed when manhandling and once when turning in the road. Taller legshields would be more practical and no less attractive in appearance than the very short ones fitted.

To sum up; this unique design is of great interest technically and a real pleasure to ride. It should serve satisfactorily as everyday transport for one or two people but its real role is as a pleasure machine and it is an excellent buy for the rider who takes a personal satisfaction in utilizing the performance of a lightweight machine to the full.

The concessionaires referred to it as "a motorcyclists' scooter" and the description is not inapt. Certainly it is a machine that deserves much more publicity than it has yet had. We expect to see the *Rumi* in greater numbers on the roads before very long.

damped front forks is rather short ROAD TEST REPORT



BOND Model "D"

FIRST of the many threewheelers in the lightweight class now on the roads to establish itself in Britain, the Bond Minicar came in straight from the aircraft industry and thus pioneered the light alloy stressed skin body idea in road vehicles.

The early models were definitely "stark", lacking even such refinements as rear springs, but the more recent *Bonds* shew the development over the years in the light of practical user experience and provide comfortable and convenient travel in comparison with any forms of personal transport available at anywhere near the cost.

Known as the Model "D", the latest Bond on the roads (The streamlined, sports car type Model "E" is still a promise for the future) has just been in our hands for a test, most of which was in the kind of weather that shews up road travel at its worst. We covered a considerable mileage at surprisingly high average speeds and found the machine did all that was claimed of it.

The only change in the speci-fication of the "D" as against its predecessor, the "C" is in the fitting of the new Villiers 9E engine with Siba Dynastart. The newer engine has a slightly higher power output than the earlier Marks and the Siba electrical equipment, besides providing the self-starter affords a 12-volt lighting and ignition system with automatic voltage control. The engine and its unit/construction gearbox is mounted over and slightly ahead of the front wheel and the secondary drive is by short open chain. Thus the whole engine, front suspension and wheel form a single unit which turns with the steering.

It is this design that enables the *Bond* to use its famous and fantastic 180 degree steering lock which makes a reverse gear unnecessary. The front suspension is by a large single coil spring with double acting hydraulic shock absorber on a trailing arm unit of forged light alloy. Rear suspension is by bonded rubber on to trailing link carriers. The rear wheels are in-

dependently mounted on short stub axles.

There is no separate chassis, the light alloy body being braced at various points with pressings and castings in alloy and steel. The rear wings are of fibreglass to eliminate denting and the hood and upholstery are in Vynide.

The Test

The model tested had no reverse gear fitted and was first taken over parked six inches behind a car in line. With any other vehicle this would have meant stalemate but the wheel of the *Bond* was simply put hard over, first gear engaged and the front end moved sideways out of the trap. We turned a half circle in our own length and shot away.

Next to this steering lock the engine is the surprise factor; the new Mark 9E Villiers produces $8\frac{1}{2}$ horse power and this is by no means confined to the peak of the power curve. From standstill up, the power available makes it difficult to believe that the unit is of only 197 c.c. and used in conjunction with the fast direct hand change under the steering wheel this performance meant a really lively getaway that beat most other traffic away from the lights and up to 30 m.p.h.

Maximum speed reached during the test was just under 50 m.p.h. and a cruising speed of 40/42 could be maintained indefinitely on the flat. Only on major hills was the small capacity of the engine noticed and even this problem was largely met by the ability of the engine to hold well over 30 m.p.h. uphill in Second gear.

The front suspension gave a smooth ride with plenty of movement and no adverse effect on the steering, but there appear to be no snubbers to limit travel and on very bad bumps on rough tracks the front end clashed hard several times without, however, doing any harm to anything. The independ-

ent rubber suspensions at the rear end are remarkably good for comfort and stability, in silence and needing no maintenance ever. Any three track vehicle feels a lot more bumps than a two tracker but despite its 8in. wheels the *Bond* afforded a very reasonable ride on fair roads.

Steering is positive and dead accurate but takes some getting used to and never becomes quite automatic owing to the tendency to run down the camber of the road. It is necessary to hold the wheel firmly all the time and to be steering consciously even on straight roads. On corners the advantage of the front wheel drive pulling the vehicle round instead of pushing it, is most marked. Full power could be applied as soon as the wheel was turned and high averages could be maintained over tortuous routes by using this stability to the

Although not bad, the brakes do not come quite up to the rest of the performance. It is easy to understand the diffidence of the makers about using effective front brakepower on a threewheeler with a 180 degrees lock—the results might be disastrous, but we found it very frustrating to have to hang back because of sheer inability to crash stop as quickly as the car in front, only to have our safety margin used as a cutting-in space by the clot in the car from behind! For a real emergency stop the gearbox could be used with the brakes and this was done on occasion without breaking anything so far as we could tell.

All this something for nothing in performance has to be paid for some way and the *Bond* must be admitted to be very noisy with the hood and screens in use, difficult to get in and out of and poor on all round visibility. Really it should be used open and the occupants dressed accordingly. That way the noise and vibration are felt much less, one can see all round and get in and out without

contortions or damage to clothes.

Some fancy claims are being made nowadays about the fuel consumption figures for these light threewheelers and it is worthy of note that we found the amount of fuel used varied widely and directly to the performance used. Claims of 80 m.p.g., averages can be substantiated while the same machine fully loaded and driven really hard would return less than 50 m.p.g. you get what you pay for out of petrol as most other things.

Comparisons

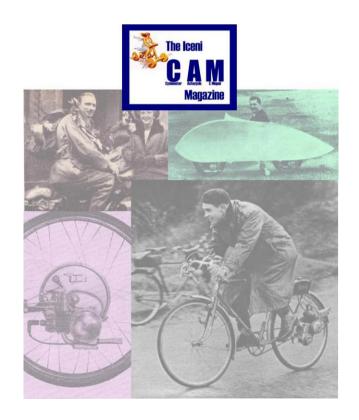
The Bond is often advertised as a car but to our mind this is unfair to it. The light threewheeler is a vehicle class of its own and compared with the conventional car it comes off badly for comfort, silence and long term reliability. It's nearest comparable competitor is the lightweight sidecar outfit similarly engined and in that field the threewheeler has much of the argument on its side.

Driver and passenger share the accommodation and weather protection, luggage carrying is simplified and comfort standards higher in some respects. The Siba starter works every time unfailingly and the electric screenwipers are something any motorcycle or scooter rider will envy.

Because of our stupid motoring laws the threewheeler can be driven by anyone holding a motor cycle driving licence without a reverse gear or with a car licence if the reverse is fitted. The makers therefore, offer the reverse gear as optional according to which licence the buyer happens to hold. Handling in congested spaces is so good that the reverse will rarely be needed but with it the machine should achieve everything except VTOL.

It is a handy vehicle, thoroughly practical for any journey, economical to run and very simple to maintain.

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