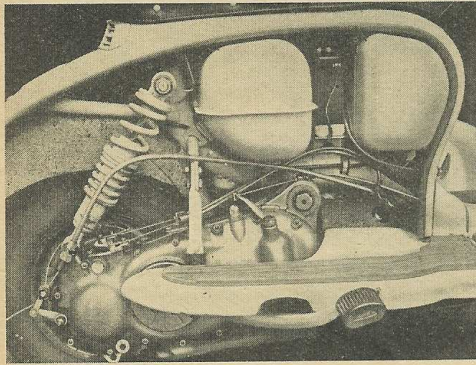


**MOTOR CYCLE**  
ROAD TESTS  
OF  
NEW MODELS

*Right: An extraordinarily high standard in styling has been achieved*

*Below: Two springs of different rates are a feature of the rear shock-absorber assembly. Transmission is by duplex chain and spur gears*



**170 c.c.**  
**Lambretta**  
**TV175**

**An Elegant Scooter of Great Merit : High Standard of Comfort, Handling, Braking and Hill-climbing**

**F**IRST-CLASS weather protection, fuel economy, ease of handling, a brisk performance and attractive lines are qualities essential to a scooter; they are possessed in good measure by the sparkling latest addition to the Lambretta range, the 170 c.c. TV175. The new model, which made its public bow at last December's Milan Show, differs in several notable respects from its 123 c.c. and 148 c.c. stablemates. Most significant innovations are that the cylinder of the two-stroke engine-transmission unit is horizontal and that the primary drive is partly duplex chain. The output shaft of the four-speed gear box forms the rear-wheel stub axle. The wheels are of 10in diameter and are shod with 3.50in-section tyres.

Styling of the TV175 is extremely elegant without being pretentious. The valanced front mudguard is attached to the weathershield and thus does not turn with the wheel as on the smaller capacity models. Especially neat is the cast light-alloy handlebar (which incorporates the speedometer), and design finesse is apparent in the beautifully contoured, hooded clutch and front-brake levers. The levers have built-in finger adjusters for the cables. Other riders' points are that the body side panels (each of which is secured by a single catch) can be removed and refitted in a matter of seconds and that the minimum amount of effort is required to pull the machine on to its centre stand. Among the most appealing features was the extreme flexibility of the engine. Except when threading through heavy city traffic the TV175 was virtually a top-and-third-gear-only machine.

Minimum non-snatch speed in top gear was 10 m.p.h., and it was normal driving procedure to hold top gear down to as low as 18 m.p.h. in the knowledge that opening the throttle would result in a smooth surge of power. Minimum usable speed in third gear was a shade under 15 m.p.h. In bottom gear and with the clutch fully home the machine would trickle along at walking pace.

The engine's ability to pull well at low r.p.m. is in no way achieved at the expense of power higher up the r.p.m. scale. Acceleration through the gears was decidedly brisk—shown by the fact that the TV175 would cover a standing quarter mile in 25s. Out-of-town cruising speed was anything up to almost 50 m.p.h. and on one occasion an 85-mile journey, mainly on A-class roads, was accomplished at an average speed of 37 m.p.h. All but the steeper gradients on the route were climbed at over 40 m.p.h. in top gear. Maximum speed with the rider bulkily clad in winter riding gear and normally seated was in the region of 55 m.p.h. The engine was well able to cope with a rider and pillion passenger whose weights totalled approximately 26 stones; in fact, so lusty are the power characteristics that the added load of a passenger made little difference to the performance.

Another admirable characteristic of the engine is that it was virtually vibrationless throughout its speed range save for a slight tremor felt through the handlebar at low speeds. The exhaust note was pleasant and extremely well subdued and mechanical noise was confined to a very faint transmission whine.

## INFORMATION PANEL

## SPECIFICATION

**ENGINE:** Lambretta 170 c.c. (60 x 60mm) single-cylinder two-stroke with fan cooling. Roller-bearing big end; crankshaft supported in two ball bearings. Cast-iron cylinder barrel; light-alloy cylinder head. Compression ratio, 7.6 to 1. Petrol lubrication.

**CARBURETTOR:** Dellorto with twistgrip throttle control; air filter; air strangler for starting controlled by knob mounted on the right-hand side of the body front panel.

**IGNITION and LIGHTING:** Filso flywheel magneto with lighting coils and remote high-tension coil. C.E.V. 4½in-diameter headlamp with 25/25-watt bulb fed direct from generator. Rectifier and 6.7-ampere-hour Fiamm battery for parking purposes.

**TRANSMISSION:** Four-speed gear box in unit with engine; twistgrip control. Gear ratios: bottom, 14.32 to 1; second, 9.77 to 1; third, 7.30 to 1; top, 5.69 to 1. Multi-plate, engine-speed clutch with cork inserts running in oil. Double-reduction primary drive by duplex chain and spur gears; direct final drive by gear-box output shaft.

**CONSTRUCTION:** Welded tubular frame with pressed-steel weather-shield, footboards and body panels.

**FUEL CAPACITY:** 1.9 gallons.

**WHEELS and TYRES:** Interchangeable pressed-steel wheels with 10in-diameter rims carrying 3.50in-section Pirelli studded tyres. Car-type attachment of wheels to hubs by four studs and nuts.

**BRAKES:** Front, 6½in diameter; rear, 5½in diameter.

**SUSPENSION:** Trailing-link front fork controlled by coil springs and separate hydraulic dampers. Rear wheel carried by pivoted arm formed by engine-gear-transmission unit and controlled by a hydraulically damped coil-spring unit.

**WHEELBASE:** 51in unladen. Ground clearance, 5½in unladen.

**SEATING:** Aquila dual-seat.

**WEIGHT:** 264 lb fully equipped and with ¾ gallon of petrol.

**PRICE:** £168 4s 9d. With purchase tax (in Great Britain only), £209 17s 6d.

**ROAD TAX:** £1 17s 6d a year.

**MAKERS:** Innocenti Soc. General per L'Industria Metallurgica e Meccanica, Milan, Italy.

**CONCESSIONAIRES:** Lambretta Concessionaires, Ltd., 424-426, Kingston Road, Raynes Park, London, S.W.20.

**DESCRIPTION:** *The Motor Cycle*, 5 December 1957.



Starting from cold was certain provided that the spring-loaded strangler knob (mounted on the right-hand side of the body front panel) was pulled out and a throttle opening of about one-third was employed. The engine would invariably fire at the third or fourth easy depression of the starter pedal and the strangler could be released after the engine had been running for approximately a minute. Once the engine was warm it would idle slowly and reliably. Two-stroking under light load was exceptionally good and carburation was clean.

Fuel consumption was average. At a steady 30 m.p.h. the consumption worked out at 113 m.p.g.; at a consistent 40 m.p.h. the figure was 81 m.p.g. Ridden under give-and-take conditions in town and on the open road the TV175 bettered 80 m.p.g.

As implied earlier one of the many factors contributing to the pleasure of riding the machine was the superb smoothness of the transmission. The clutch was light in operation and took up the drive progressively. Occasionally slight difficulty was experienced in engaging bottom gear from neutral. That apart, the action of the twistgrip-operated change mechanism was light and positive. Upward changes could be made rapidly and noiselessly. Downward changes were accompanied by a slight click.

The protection afforded by the well proportioned weathershield

was such that legs and feet remained unspotted when riding over wet and dirty roads. The mudguarding was likewise effective and an appreciated feature was that, even after a fortnight's riding in all weathers, the machine could be cleaned in a matter of minutes with a damp cloth.

Riders of normal height found the riding position well-nigh ideal, though taller folk would have preferred the longer reach afforded by a less swept-back handlebar. Comfort for an above-average size pillion passenger would benefit from a 2in increase in the length of the dual seat, the upholstery of which was, by British standards, on the hard side.

Handling qualities were excellent and exceptional for a scooter. The steering was light yet positive and the TV175 could be wafted through bends and corners with complete confidence; moreover the machine's behaviour on slippery surfaces was in keeping with the general high standard. Providing an excellent compromise between the requirements of solo and two-up riding, the trailing-link front fork and pivoted-arm rear springing (both of which are hydraulically damped) gave a high degree of insulation from road shocks irrespective of the nature of the surface underwheel.

The brakes were extremely powerful (from 30 m.p.h. the TV175 could be brought to rest in 33ft) yet smooth and progressive. The front brake especially gave such delicacy of control and was so effective that, in normal circumstances, it was used to the exclusion of the rear brake. As is customary with trailing-link front forks in which brake torque reaction is transmitted direct to one of the fork links, there was a noticeable dip at the nose when the front brake was applied hard.

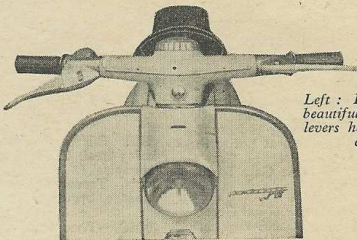
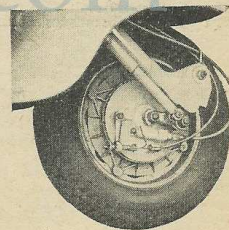
Light provided by the headlamp main beam was sufficient for cruising speeds of up to 45 m.p.h. on unlit main roads. The dipped beam had a well defined cut-off and proved inoffensive to oncoming traffic. The noise emitted by the horn can only be described as puny and was inadequate. Mounted on the right of the handlebar, the combined horn button and dip switch were within easy reach of the rider's thumb. Speedometer optimism was a consistent 10 per cent.

Contained in a roomy, lockable compartment situated in the body front panel, the tool kit was adequate for routine maintenance. Both wheels are readily detachable and, to support the rear of the scooter when the rear wheel is removed, there is a robust steel jack which fits into a lug in the gear-box casting.

A steering-head lock forms part of the standard equipment and the 1.9-gallon fuel tank incorporates a reserve of just over a quart—sufficient for between 18 and 20 miles. The single-colour finish is a pleasant shade of ivory relieved by plating.

Without question the TV175 is one of the world's outstanding scooters. It is deliberately designed to appeal to a wide range of tastes and its success over a long period is assured.

Right: Of trailing-link pattern the front fork has separate damper units. The front brake was extremely powerful yet completely controllable



Left: Handlebar layout is beautifully neat. The control levers have accessible inbuilt cable adjusters