Norton Villiers develop new 171 c.c. vertical shaft engine with power take-off.

Norton Villiers have announced the development of a new vertical shaft engine for the rotary mower engine market in Britain and overseas.

Villiers re-enter the professional and domestic rotary grass cutter engine market with a 171 c.c. engine designed for manufacturers contemplating producing new rotary mowers as well as for existing machines. A prototype was displayed at the National Association of Groundsmen's Annual Show at Motspur Park.

The engine is continuously rated in the range 3½ to 4½ h.p. and is intended to be directly interchangeable with imported engines on existing machines. It has been specially developed to meet the need for a British product in the world's expanding rotary mower engine market, and an outstanding feature is its constant torque throughout a wide range of speeds.

This approaches the ideal characteristic required for engines required to maintain a high work rate and cutting power even when thick and wet grass is encountered.

The engine also features auxiliary power take-off points available from either side, which are suitable for driving wheels of a roller, and a two-stage low tone silencer with exhaust port below the machine deck gives a much lower noise level. A vertical recoil starter provides an easy starting position.

Operation testing by Villiers has already indicated the considerable potential of this newcomer and an essential part of development will be evaluation by equipment manufacturers. Prototypes, like the one exhibited at Motspur Park, will be submitted to rigorous testing on a range of machines before production begins, to ensure that the engine meets Villiers' high standards.

Subject to further development of the prototype, preliminary details of this new Villiers' engine are:

- B.H.P.—in the range 3½-4½; weight (approximately)—18-20 pounds; cubic capacity—160-195 c.c.; pull-up rewind starter; fuel tank capacity—3 pints; silencing—low tone two-stage unit with exhaust port below deck; auxiliary power take-off points from either side with 9 to 1 reduction at 0.5 h.p.; height (approximately)—9 inches; width (approximately)—9 inches; length—16 inches.