

Title (en)  
IMPROVED PORTABLE ROTARY POWER TOOL

Publication  
**EP 0320576 A3 19891123 (EN)**

Application  
**EP 88115042 A 19880914**

Priority  
US 13424587 A 19871217

Abstract (en)  
[origin: EP0320576A2] A gasoline engine driven flexible line trimmer is provided with a modularly constructed power head section which significantly facilitates the original manufacturing assembly, and subsequent service disassembly, of the power head. In a clutch drive embodiment thereof, the power head has four readily separable modules - an engine module comprising a main engine shroud to which the engine is internally secured; a fan housing module; a starter module comprising a starter housing and a recoil starter mechanism retained therein; and a coupling module comprising a clutch housing carrying therein structure for operatively interconnecting the engine's clutch to the flexible drive shaft disposed within the trimmer shaft. In a direct drive version thereof, the power head has two separable modules - the engine module and a combined fan housing, starter and coupling module defined by a single housing within which the starter and coupling structure is carried. The main shroud is provided with a specially designed wall section which supports the engine, defines a closure wall of its crankcase, forms an air-fuel mixture passage for a carburetor externally supported on the wall section and supports a reed valve within the crankcase. The shroud defines an external protective recess in which the carburetor is positioned and, in one embodiment, defines a portion of the engine's fuel tank. Pull rope installation in the starter mechanism is facilitated and made safer by pulley locking and retaining structure incorporated in the starter module, and improved air filter element sealing is provided by virtue of a specially designed air filter housing and choke plate assembly associated with the carburetor. Shaft vibration transmitted to the trimmer user through the supporting shoulder strap structure is significantly reduced by a specially designed resilient strap connector assembly securable to the trimmer shaft.

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Citation (search report)

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