FORM MS-5898-1/05 REPLACES FORM MS-5898-7/04 FILE IN SECT.2B OF SERVICE ENGINE SALES

20E400 to 20E499



## MODEL 20E400 SERIES ENGINES REPLACED WITH STANDARD SERVICE ENGINES

In most cases, the Original Type numbers shown may be replaced by a Service Type Number without making any changes. Necessary changes of engine parts such as crankshafts, reduction parts, blower housings, etc., are noted. Other differences, such as mufflers, elbows, deflectors, etc., are not listed but are very important for safety and engine performance. Be sure the exhaust system on the replacement engine duplicates the system originally selected by the equipment manufacturer. Parts that are suitable for additional use should be transferred. Before making any conversion, check the data shown in the column labeled "REMOVE, ADD and NOTE." See if the changes, which are shown, are actually necessary on the application in question. Often a standard service engine will be a WORKABLE replacement without converting to such things as a special fuel tank or starter position.

If the crankshaft number does not appear in the "Original Engine" column, consult the Illustrated Parts List for the correct service replacement crankshaft number.

## **Engine Replacement Notes:**

- NOTE 15: For all Go-Karts use only a Model 136200 series engine as a replacement, regarless of the original Model.
- NOTE 68: Transfer Flywheel and Alternator Assembly from original to replacement engine.
- NOTE 88: Transfer Muffler and/or Spark Arrester Assembly from the original engine if suitable for additional service or add new parts as required
- NOTE 117: Original engine was equipped for or with a 230 volt Gear Drive Starter. Transfer all related parts as required.

## **Short Block Notes:**

The SHORT BLOCK part number shown, is the assembly which can be used to rebuild the Original Type Number. If a letter appears after the short block number, it indicates the short block must be modified. The change denoted by each letter is as follows:

## 20E400 to 20E499

Original Engine			Make From		Remove		Add			Change			Short Block	
Type	Model	Crank	Model	Type #	Qty	Part #	Qty	Part #	Note t	to Type	Trim	RPM	Part #	Notes
0105	20E412	695369	20F414	0019					15		All	3600		
0204	20E414	696412	20G414	0019					88 15		All	3600	790841	