

90100 to 90199

SERVICE ENGINE



SALES MANUAL

**MODEL 90100 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 2:** Cut off the PTO extension so it is 1-11/16" from the shoulder to the end of the shaft.
- NOTE 15:** For all Go-Karts use only a Model 136200 series engine as a replacement, regardless of the original Model.
- NOTE 34:** If the replacement engine supersedes to or is a Model 90000 series engine, refer to the illustrations located after the conversion data for this model series. The overall dimensions which differ, are shown in the illustrations. If after making a visual inspection and it is determined the Model 93400 series engine cannot be used because of equipment interference, the original engine should be repaired with a short block and/or individual parts.

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:

- NOTE D:** Cut off Crankshaft so that extension is 1-11/16" from shoulder to end of shaft.

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Original Engine			Make From		Remove		Add		Note	Change to Type	Trim	RPM	Short Block	
Type	Model	Crank	Model	Type #	Qty	Part #	Qty	Part #					Part #	Notes
0002	90112	493767	93312	0002					15 34		01	3300		
0004	90112	493767	93312	0002					15 34		01	3600		
0005	90112	497232	93312	0002					15 34		01	3000		
0007	90112	493767	93312	0002					15 34		01	3600		
0015	90102	493767	93302	0017					15 34		01	3300	495915	
0016	90102	493767	93302	0017					15 34		01	3600	495915	
0022	90112	493767	93312	0002					15 34		01	3600		
0114	90112	492880	93312	0022					15 34		01	3300	495920	
0115	90102	493767	93302	0017					15 34		01	3600	495915	
0116	90102	497232	93302	0017					2 15 34		01	3600	495915	D
0117	90102	493767	93302	0017					15 34		01	3900	495915	
0118	90102	493767	93302	0017					15 34		01	3600	495915	
0119	90102	493767	93302	0017					15 34		01	3300	495915	
0120	90112	493767	93312	0002					15 34		01 02	3000 2800		

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Original Engine			Make From		Remove		Add		Note	Change to Type	Trim	RPM	Short Block	
Type	Model	Crank	Model	Type #	Qty	Part #	Qty	Part #					Part #	Notes
0121	90112	493767	93312	0002					15 34		01	3600		
0122	90102	493767	93302	0017					15 34		01	3300	495915	
0123	90102	493767	93302	0017					15 34		01	3600	495915	
0124	90102	492880	93302	0016					15 34		All	3600	495914	
0125	90112	492880	93312	0022					15 34		01	3100	495920	
0126	90102	497232	93302	0017					2 15 34		01	3800	495915	D
0127	90102	493767	93302	0017					15 34		01	3100	495915	
0128	90112	492880	93312	0022					15 34		01	3400	495920	
0129	90102	493767	93302	0017					15 34		01	2900	495915	
0130	90102	493767	93302	0017					15 34		01	3300	495915	
0131	90102	497232	93302	0017					2 15 34		01	3600	495915	D
0132	90112	493767	93312	0002					15 34		01	3600		
0133	90102	492880	93302	0016					15 34		01	3600	495914	
0134	90102	497232	93302	0017					2 15 34		01	3600	495915	D