

**93400 to 93499**

**SERVICE ENGINE**



**SALES MANUAL**

**MODEL 93400 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, regardless of the original Model.
- NOTE 16:** Gear Red. @ 12 o'clock.
- NOTE 46:** Original engine was equipped with special Gear and Shaft Assembly. Transfer these parts to the replacement engine.
- NOTE 48:** Remove Fuel Tank Assembly from 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

**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:

**93400 to 93499**

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
0010	93432	399006	No Replacement Repair With Individual Parts.						15 48		All	3150		
0011	93412	493632	93432	1036	1	495211	1	394909	15		01	3600		
					1	495484	1	493632			02	3600		
					1	495722								
0015	93412	492880	93412	1015					15		01	3600	497189	
0024	93412	493599	93452	1049					15 46		All	2800	497191	
0034	93432	399006	93432	1038					15		01	3800		
0035	93432	495210	STD.						15		All	4000	497193	
0036	93432	495211	93432	1036					15		All	3600	497194	
0037	93432	493767	93432	1037					15		01	3600	497192	
0038	93432	399006	93432	1038					15		All	3150		
0039	93412	399006	93412	0339					15		All	3750		
0040	93412	399006	93412	0339					15 48		All	3750		
0041	93432	495809	93432	1036	1	495211	1	495809	15		01	4000		
0049	93452	493599	93452	1049					15		01	3600	497191	
											03	3600		
											05	3600		
0060	93412	492086	93412	0360					15		01	3600		
											02	3600		
0136	93412	399006	93412	1236					15		01	3750		
0137	93432	495211	93432	1036					15		01	3600	497194	
0138	93432	495211	93432	1036					15 48 88		01	3600	497194	

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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
0139	93412	399006	93412	0339					15 48 88		01	3750		
0140	93432	495211	93432	1036					15		01	3600	497194	
0141	93452	493599	93452	1049					15 16		01	3600	497191	
0142	93432	399006	93432	1038					15 48 88		01	3150		
0143	93432	493767	93432	1037					15		01	2200	497192	
0144	93432	493767	93432	1037					15		01	2200	497192	
0145	93432	495211	93432	1036					15		01	3600	497194	
0146	93412	399006	93412	0339					15		01	3750		
0148	93432	495211	93432	1036					15		01	3000	497194	
0149	93432	495210	93432	0035					15		01	3400	497193	
0150	93412	493632	93412	0339	1	399006	1	493632	15 48 88	0150	01	3500		
0151	93432	495211	93432	1036							01	3600	497194	
0152	93432	399006	93432	1038					15 48		01	3150		
0153	93412	399006	93412	0339					15 48 88		01	3150		
0154	93412	497232	93412	0360	1	492086	1	497232	15		01	3600		
0155	93432	399006	93432	1038					15 48		01	3150		
0156	93452	493599	93452	1049					15 16		01	3300	497191	
0157	93432	399006	93432	1038					15		01	3150		
0158	93432	495809	93432	0035	1	495210	1	495809	15		01	4000		
0159	93432	399006	93432	1038					15 48 88		01	3150		
0168	93452	493599	93452	1049					15		01	3600	497191	
0169	93412	493632	93412	0339	1	399006	1	493632	15 48 88	0169	01 02	3500 3500		
0172	93412	493632	93412	0339	1	399006	1	493632	15 88	0172	01	3500		
0173	93432	399006	93432	1038					15 48		01	3150		
0174	93412	399006	93412	0339					15 48 88		01	3750		
0191	93432	495211	93432	1036					15		01	4000	497194	
0315	93412	492880	93412	1015					15		A1	3600	497189	
0335	93432	495210	STD.						15		A1	4000	497193	
0336	93432	495211	93432	1036					15		A1	3600	497194	
0337	93432	493767	93432	1037					15		A1	3600	497192	
0338	93432	399006	93432	1038					15		A1	3750		
0339	93412	399006	STD.						15		A1	3750		
0349	93452	493599	93452	1049					15		A1	3600	497191	
0360	93412	492086	STD.						15		A1	3600		
0636	93412	399006	93412	1236					15		A1	3750		
0641	93452	493599	93452	1049					15		A1	3200	497191	
0644	93432	493767	93432	1037					15		A1	2200	497192	

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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
0654	93412	497232	93412	0360	1	492086	1	497232	15		A1	3600		
0669	93412	493632	93412	0339	1	399006	1	493632	15		A1	3500		
									48					
									88					
0674	93412	399006	93412	0339					15		A1	3750		
									48					
									88					
0680	93432	495211	93432	1036					15		A1	3600	497194	
									88					
0690	93432	495211	93432	1036					15		A1	3600	497194	
1015	93412	492880	STD.						15		E1	3600	497189	
1035	93432	495210	STD.						15		E1	4000	497193	
											E2	4000		
1036	93432	495211	STD.						15		E1	3600	497194	
1037	93432	493767	STD.						15		E1	3600	497192	
1038	93432	399006	STD.						15		E1	3800		
1039	93412	399006	STD.						15		E1	3750		
1040	93412	399006	93412	1039					15		E1	3750		
									48					
1041	93432	495809	93432	1035	1	495210	1	495809	15	1041	E1	4000		
1049	93452	493599	STD.						15		E1	3600	497191	
											E5	3600		
1060	93412	492086	STD.						15		E1	3600		
1201	93432	690821	93432	1036					15		All	3600	497194	
1236	93412	399006	STD.						15		E1	3750		
											E2	3750		
1240	93432	495211	93432	1036					15		E1	3600	497194	
1241	93452	493599	93452	1049					15		E1	3600	497191	
									16					
1242	93452	493599	93452	1049	1	690608			15		All	3600	497191	
1253	93412	399006	93412	0339					15		All	3150		
									48					
									88					
1254	93412	497232	93412	1060	1	492086	1	497232	15		E1	3600		
1257	93432	399006	93432	1038					15		E1	3150		
1258	93432	495809	93432	1035	1	495210	1	495809	15		E1	4000		
1259	93412	493632	93412	0339	1	399006	1	493632	15		All	3500		
1274	93412	399006	93412	0339					15		E1	3750		
									48					
									88					
1276	93412	399006	93412	1236					15		E1	3750		
1277	93452	493599	93452	1049					15		E1	3600	497191	
1278	93412	493632	93412	1060	1	492086	1	493632	15	1278	E1	3500		
1279	93432	690821	93432	1036					15		E1	3600	497194	
									48					
1280	93432	492095	93432	1035					15		All	4000	497193	
1281	93432	690821	93432	1036					15		All	3600	497194	
1282	93432	692145	93432	1038					15		All	3150		
1283	93452	493599	93452	1049					15		All	3600	497191	