

147400 to 147499

SERVICE ENGINE



SALES MANUAL

**MODEL 147400 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 1:** Cut off PTO shaft so it is 1-3/4" long from shoulder to outer end.
- 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 17:** Gear Red. @ 3 o'clock.
- NOTE 21:** If the Gear Reduction parts are suitable for additional service, use Model 196412 Type No. 1024.
- NOTE 30:** If the replacement engine supersedes to or is a Model 200000 series engine, refer to the illustrations located after the conversion data for this model series. To make the crankshaft center line the same add 695154 spacer kit, other overall dimensions which differ, are shown in the illustrations. If after making a visual inspection and it is determined the Model 200000 series engine cannot be used because of equipment interference, the original engine should be repaired with a short block and/or individual parts.
- NOTE 113:** Gear Red. @ 6 o'clock.

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 K:** Add 211592 Cylinder Head.

147400 to 147499

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
0110	147401	260607	202432	0036					15 30		All	3600		
0111	147402	260607	202432	0036					15 30		All	3600		
0115	147431	260358	No Replacement Repair With Individual Parts.						15		All	3600		
0116	147432	260358	No Replacement Repair With Individual Parts.						15		All	3600		
0120	147451	260389	202452	0049					15 30		All	3600		
0121	147452	260389	202452	0049					15 30		All	3600		
0130	147402	260607	202432	0036					15 30		All	4000		
0131	147431	260425	201432	0036					15 30		All	3200		
0132	147431	260425	201432	0036					15 30		All	3600		
0133	147451	260389	202452	0049					15 30		All	3600		
0134	147431	260425	No Replacement Repair With Individual Parts.						15		All	3600		
0135	147402	260607	202432	0036					15 30		All	3600		
0136	147432	260359	No Replacement Repair With Individual Parts.						15		All	3600		
0137	147432	260423	No Replacement Repair With Individual Parts.						15		All	3200		
0138	147431	260358	No Replacement Repair With Individual Parts.						15		All	3600		

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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	147432	260359	No Replacement Repair With Individual Parts.						15		All	3680		
0140	147431	260425	201432	0036					15 30		All	3800		
0141	147432	260358	No Replacement Repair With Individual Parts.						15		All	3600		
0142	147432	260359	No Replacement Repair With Individual Parts.						15		All	3600		
0143	147431	260423	No Replacement Repair With Individual Parts.						15		All	3600		
0144	147431	260423	No Replacement Repair With Individual Parts.						15		All	3600		
0145	147432	260425	No Replacement Repair With Individual Parts.						15		All	3600		
0146	147452	260389	No Replacement Repair With Individual Parts.						15		All	3600		
0147	147431	260425	201432	0036					15 30		All	4000		
0148	147431	260425	201432	0036					15 30		All	3600		
0149	147401	260425	No Replacement Repair With Individual Parts.						15		All	3600		
0150	147451	260389	202452	0049					15 30		All	3600		
0151	147431	260425	201432	0036					15 30		All	3800		
0152	147432	260425	201432	0036					15 30		All	3800		
0153	147452	260389	202452	0049					15 16 30		All	3600		
0154	147402	260607	202432	0036					15 30		All	4000		
0155	147402	260472	No Replacement Repair With Individual Parts.						15		All	3800		
0156	147404	260607	No Replacement Repair With Individual Parts.						15		All	4000		
0157	147402	260607	202432	0036					15 30		All	4000		
0158	147432	260425	201432	0036					15 30		All	3600		
0159	147431	260425	201432	0036					15 30		All	4000		
0160	147431	260425	201432	0036					15 30		All	3800		
0161	147431	260423	No Replacement Repair With Individual Parts.						15					
0162	147402	260607	202432	0036					15 30		All	3200		
0163	147431	260358	No Replacement Repair With Individual Parts.						15		All	3600		
0164	147431	260358	No Replacement Repair With Individual Parts.						15		All	3600		
0165	147432	260358	No Replacement Repair With Individual Parts.						15		All	3600		
0166	147402	260607	202432	0036					15 30		All	3600		
0167	147431	260358	No Replacement Repair With Individual Parts.						15		All	3600		
0168	147401	260607	202432	0036					15 30		All	3600		
0169	147452	260389	202452	0049					15 30		All	3600		
0170	147431	260432	No Replacement Repair With Individual Parts.						15		All	3600		
0171	147402	260607	202432	0036					15 30		All	4000		
0172	147431	260358	No Replacement Repair With Individual Parts.						15		All	3800		
0173	147432	260425	201432	0036					15 30		All	2600		
0174	147432	260425	201432	0036					15 30		All	3800		
0175	147431	260358	No Replacement Repair With Individual Parts.						15		All	3300		
0176	147432	260359	No Replacement Repair With Individual Parts.						15		All	3600		

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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
0177	147431	260358	No Replacement Repair With Individual Parts.						15		All	3800		
0178	147402	260607	202432	0036					15 30		All	4000		
0179	147412	260425	No Replacement Repair With Individual Parts.						15		All	2900		
0180	147402	260607	202432	0036					15 30		All	4000		
0181	147432	260359	No Replacement Repair With Individual Parts.						15 30		All	3700		
0182	147432	260425	201432	0036					15 30		All	3800		
0184	147402	260607	202432	0036					15 30		All	3000		
0185	147431	260425	201432	0036					15 30		All	3800		
0186	147401	260607	202432	0036					15 30		All	3800		
0187	147431	260358	No Replacement Repair With Individual Parts.						15		All	3800		
0188	147432	260425	201432	0036					15 30		All	3900		
0189	147432	260359	No Replacement Repair With Individual Parts.						15		All	3600		
0190	147432	260425	201432	0036					15 30		All	3600		
0191	147402	260607	202432	0036					15 30		All	3600		
0192	147432	260359	No Replacement Repair With Individual Parts.						15		All	3600		
0193	147431	260358	No Replacement Repair With Individual Parts.						15		All	3600		
0194	147451	260389	202452	0049					15 16 30		All	3600		
0195	147401	260607	202432	0036					15 30		All	2400		
0196	147451	260389	202452	0049					15 16 30		All	4000		
0197	147401	260607	202432	0036					15 30		All	4000		
0198	147401	260607	202432	0036					15 30		All	3600		
0199	147402	260607	202432	0036					15 30		All	4000		
0200	147402	260607	202432	0036					15 30		All	3000		
0201	147432	260359	No Replacement Repair With Individual Parts.						15		All	3700		
0202	147432	260472	No Replacement Repair With Individual Parts.						15		All	4000		
0203	147432	260425	No Replacement Repair With Individual Parts.						15		All	3600		
0204	147404	260425	No Replacement Repair With Individual Parts.						15		All	3300		
0205	147402	260472	No Replacement Repair With Individual Parts.						15		All	3800		
0206	147451	260389	202452	0049					15 30 113		All	3800		
0207	147402	260607	202432	0036					15 30		All	4000		
0208	147432	260425	201432	0036					15 30		All	3600		
0209	147431	260358	No Replacement Repair With Individual Parts.						15		All	3800		
0210	147432	260359	No Replacement Repair With Individual Parts.						15		All	3600		
0211	147402	260607	202432	0036					15 30		All	4000		

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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
0213	147402	260607	202432	0036					15 30		All	4000		
0214	147402	260607	202432	0036					15 30		All	3300		
0215	147431	260609	No Replacement Repair With Individual Parts.						15		All	4000		
0216	147402	260607	202432	0036					15 30		All	3300		
0217	147431	260359	No Replacement Repair With Individual Parts.						15		All	3600		
0218	147451	260389	202452	0049					15 16 30		All	3600		
0219	147432	260508	No Replacement Repair With Individual Parts.						15		All	3600		
0220	147414	260425	No Replacement Repair With Individual Parts.						15		All	2900		
0221	147402	260607	202432	0036					15 30		All	3600		
0222	147431	260425	201432	0036					15 30		All	3600		
0223	147431	260359	No Replacement Repair With Individual Parts.						15		All	3600		
0224	147431	260359	No Replacement Repair With Individual Parts.						15		All	2900		
0225	147434	260508	No Replacement Repair With Individual Parts.						15		All	3600		
0226	147401	260607	202432	0036					15 30		All	4000		
0227	147432	260425	201432	0036					15 30		All	4000		
0228	147431	260425	201432	0036					15 30		All	4000		
0229	147431	260425	201432	0036					15 30		All	3200		
0610	147401	260607	202432	0036					15 30		All	3600		
0611	147402	260607	202432	0036					15 30		All	3600		
0612	147403	260607	No Replacement Repair With Individual Parts.						15		All	3600		
0613	147404	260607	No Replacement Repair With Individual Parts.						15		All	3600		
0615	147431	260358	No Replacement Repair With Individual Parts.						15		All	3600	299771	
0616	147432	260358	No Replacement Repair With Individual Parts.						15		All	3600	299771	
0620	147451	260389	202452	0049					15 30		All	3600	390633	K
0621	147452	260389	202452	0049					15 30		All	3600	390633	K
0622	147452	260389	202452	0049					15 30		All	3600	390633	K
0631	147431	260452	201432	0036					15 30		All	3200		
0632	147402	260607	202432	0036					15 30		All	3600		
0633	147402	260607	202432	0036					15 30		All	3300		
0634	147431	260425	201432	0036					15 30		All	3200	390632	K
0635	147431	260425	201432	0036					15 30		All	3600	390632	K
0636	147432	260423	No Replacement Repair With Individual Parts.						15		All	3200		
0637	147432	260425	No Replacement Repair With Individual Parts.						15		All	3600	390632	K
0638	147451	260389	202452	0049					15 30		All	3600	390633	K
0639	147452	260389	No Replacement Repair With Individual Parts.						15		All	3600	390633	K

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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
0640	147401	260607	202432	0036					15 30		All	3600		
0641	147452	260389	202452	0049					15 17 30		All	2800	390633	K
0642	147431	260425	201432	0036					15 30		All	3800	390632	K
0643	147404	260425	No Replacement Repair With Individual Parts.						15		All	2900		
0644	147432	260358	No Replacement Repair With Individual Parts.						15		All	4000	299771	
0645	147431	260425	No Replacement Repair With Individual Parts.						15		All	4000	390632	K
0646	147402	260607	202432	0036					15 30		All	3000		
0647	147401	260607	202432	0036					15 30		All	3600		
0648	147431	260423	No Replacement Repair With Individual Parts.						15		All	3800		
0649	147432	260425	201432	0036					15 30		All	3900	390632	K
0650	147432	260425	201432	0036					15 30		All	4000	390632	K
0651	147432	260423	No Replacement Repair With Individual Parts.						15		All	3800		
0652	147432	260359	No Replacement Repair With Individual Parts.						15		All	3700	390634	K
0653	147402	260607	202432	0036					15 30		All	4000		
0654	147432	260359	No Replacement Repair With Individual Parts.						15		All	3600	390634	K
0655	147431	260358	No Replacement Repair With Individual Parts.						15		All	3800	299771	
0656	147432	260359	No Replacement Repair With Individual Parts.						15		All	3100	390634	K
0657	147431	260358	No Replacement Repair With Individual Parts.						15		All	3800	299771	
0658	147452	260389	202452	0049					15 30		All	3600	390633	K
0659	147401	260425	No Replacement Repair With Individual Parts.						15		All	3600		
0660	147431	260425	201432	0036					15 30		All	3600	390632	K
0661	147402	260607	202432	0036					15 30		All	4000		
0662	147431	260358	No Replacement Repair With Individual Parts.						15		All	3300	299771	
0663	147431	260358	No Replacement Repair With Individual Parts.						15		All	3600	299771	
0664	147402	260607	202432	0036					15 30		All	4000		
0665	147401	260607	202432	0036					15 30					
0666	147431	260423	No Replacement Repair With Individual Parts.						15		All	3600		
0667	147431	260423	No Replacement Repair With Individual Parts.						15		All	3600		
0668	147431	260359	No Replacement Repair With Individual Parts.						15		All	3600	390634	K
0669	147432	260425	201432	0036					15 30		All	3800	390632	K
0670	147431	260358	No Replacement Repair With Individual Parts.						15		All	3600	299771	
0671	147431	260425	201432	0036					15 30		All	3600	299771	
0672	147401	260607	No Replacement Repair With Individual Parts.						15		All	3600		
0673	147402	260607	202432	0036					15 30		All	3600		
0674	147401	260607	202432	0036					15 30		All	2400		
0675	147431	260358	No Replacement Repair With Individual Parts.						15		All	3600	299771	
0676	147432	260425	201432	0036					15 30		All	3800	390632	K
0677	147432	260359	No Replacement Repair With Individual Parts.						15		All	3700	390634	K

147400 to 147499

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
0678	147432	260359	No Replacement Repair With Individual Parts.						15		All	4000	390634	K
0679	147402	260607	202432	0036					15		All	3000		
									30					
0680	147402	260472	No Replacement Repair With Individual Parts.						15		All	3800		
0681	147402	260607	202432	0036					15		All	4000		
									30					
0682	147434	260359	No Replacement Repair With Individual Parts.						15		All	3600	390634	K
0683	147431	260423	No Replacement Repair With Individual Parts.						15		All	3600		
0684	147432	260359	No Replacement Repair With Individual Parts.						15		All	3600	390634	K
0685	147432	260359	No Replacement Repair With Individual Parts.						15		All	3600	390634	K
0686	147402	260607	202432	0036					15		All	3200		
									30					
0687	147431	260358	No Replacement Repair With Individual Parts.						15		All	3600	299771	
0688	147431	260359	No Replacement Repair With Individual Parts.						15		All	3600	390634	K
0689	147402	260607	202432	0036					15		All	4000		
									30					
0690	147432	260359	No Replacement Repair With Individual Parts.						15		All	3680	390634	K
0691	147431	260663	No Replacement Repair With Individual Parts.						15		All	3600		
0692	147431	260425	201432	0036					15		All	4000	390632	K
									30					
0693	147432	260359	No Replacement Repair With Individual Parts.						15		All	3600	390634	K
0694	147401	260607	202432	0036					15		All	1900		
0695	147451	260389	202452	0049					15		All	3600	390633	K
									16					
									30					
0696	147451	260389	202452	0049					15		All	3600	390633	K
									17					
									30					
0697	147432	260359	No Replacement Repair With Individual Parts.						15		All	3700	390634	K
0698	147432	260359	No Replacement Repair With Individual Parts.						15		All	3600	390634	K
0699	147431	260425	201432	0036					15		All	3800	299772	
0700	147402	260607	202432	0036					15		All	2600		
									30					
0701	147431	260358	No Replacement Repair With Individual Parts.						15		All	3600	299771	
0702	147402	260607	202432	0036					15		All	2500		
									30					
0703	147451	260389	202452	0049					15		All	4000	390633	K
									16					
									30					
0704	147432	260359	No Replacement Repair With Individual Parts.						15		All	3700	390634	K
0705	147451	260389	202452	0049					1		All	3000	390633	K
									15					
									17					
									30					
0706	147451	260389	202452	0049					15		All	3600	390633	K
									30					
0707	147401	260607	202432	0036					15		All	3600		
									30					
0708	147432	260358	No Replacement Repair With Individual Parts.						15		All	3600	299771	
0709	147432	260508	No Replacement Repair With Individual Parts.						15		All	3600		
0710	147401	260667	No Replacement Repair With Individual Parts.						15		All	3600		
0711	147452	260389	202452	0049					15		All	3600	390633	K
									16					
									30					
0712	147402	260425	No Replacement Repair With Individual Parts.						15		All	2900		
0713	147431	260425	201432	0036					15		All	4000	390632	K
									30					

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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
0714	147402	260607	202432	0036					15 30		All	3600		
0715	147432	260425	201432	0036					15 30		All	3600	390632	K
0716	147402	260607	202432	0036					15 30		All	4000		
0717	147431	260358	No Replacement Repair With Individual Parts.						15		All	3600	299771	
0718	147402	260607	202432	0036					15 30		All	3000		
0719	147432	260359	No Replacement Repair With Individual Parts.						15		All	3600	390634	K
0720	147432	260425	201432	0036					15 30		All	3600	390632	K
0721	147432	260425	201432	0036					15 30		All	3800	390632	K
0722	147401	260607	202432	0036					15 30		All	3800		
0723	147451	260389	202452	0049					15 30		All	3600	390633	K
0724	147432	260425	No Replacement Repair With Individual Parts.						15		All	3600	390632	K
0725	147401	260607	202432	0036					15 30		All	3600		
0726	147451	260389	202452	0049					15 30 113		All	3800	390633	K
0727	147402	260607	202432	0036					15 30		All	3800		
0728	147401	260607	202432	0036					15 30		All	4000		
0729	147431	260425	No Replacement Repair With Individual Parts.						15		All	2900	390632	K
0730	147431	260425	201432	0036					15 30		All	3600	390632	K
0731	147404	260425	No Replacement Repair With Individual Parts.						15		All	3300		
0732	147431	260359	No Replacement Repair With Individual Parts.						15		All	3600	390634	K
0733	147432	260359	No Replacement Repair With Individual Parts.						15		All	3700	390634	K
0734	147402	260607	202432	0036					15 30		All	4000		
0735	147402	260607	202432	0036					15 30		All	3600		
0736	147432	260358	No Replacement Repair With Individual Parts.						15		All	3600	299771	
0737	147451	260389	202452	0049					15 30		All	3600	390633	K
0738	147402	260607	202432	0036					15 30		All	3600		
0739	147431	260423	No Replacement Repair With Individual Parts.						15		All	2700		
0740	147432	260425	201432	0036					15	30	All	3800	390632	K
0741	147431	260425	201432	0036					15 30		All	3800	390632	K
0742	147431	260423	No Replacement Repair With Individual Parts.						15		All	2700		
0743	147432	260425	201432	0036					15 30		All	3000	390632	K
0744	147431	260425	201432	0036					15 30		All	3600	390632	K
0745	147431	260425	201432	0036					15 30		All	3600	390632	K
0746	147431	260423	No Replacement Repair With Individual Parts.						15		All	3600		
0747	147431	260358	No Replacement Repair With Individual Parts.						15		All	4000	299771	
0748	147431	260425	201432	0036					15 30		All	3800	390632	K

147400 to 147499

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
0749	147432	260423	No Replacement Repair With Individual Parts.						15		All	3800		
0750	147431	260423	No Replacement Repair With Individual Parts.						15		All	3800		
0751	147402	260607	202432	0036					15		All	3600		
									30					