

**193700 to 193799**

**SERVICE ENGINE**



**SALES MANUAL**

**MODEL 193700 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 33:** If the replacement engine supersedes to or is a Model 210000 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 210000 series engine cannot be used because of equipment interference, the original engine should be repaired with a short block and/or individual parts.

**NOTE 64:** Transfer Alternator Assembly from original engine to replacement engine.

**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:

**193700 to 193799**

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
0015	193702	396876	215902	0020					33		01	3400		
0016	193702	396876	215902	0015					33		01	4000		
0025	193707	396876	215907	0028					33		01	3400		
0110	193701	396876	215902	0015					33		01	4000		
0111	193702	396876	215902	0015					33		01	4000		
0114	193705	396876	215907	0025					33		01	4000		
0115	193707	396876	215902	0015					33		01	4000		
0120	193702	396876	215902	0015					33		01	3400		
0121	193702	396876	215902	0020					33		01	4000		
0122	193702	396876	215902	0020					33		All	4000		
0123	193702	396876	215902	0020					33		All	3600		
0124	193702	396876	215902	0015					33		01	3600		
0125	193702	396876	215902	0020					33		01	3600		
0126	193702	396877	No Replacement Repair With Individual Parts.								01	3600		
0127	193707	396877	No Replacement Repair With Individual Parts.								01	3600		
0128	193707	396876	215907	0028					33		01	3600		
0129	193707	396876	215907	0028					33		All	3600		
0130	193702	396876	215902	0020					33		All	3600		
0131	193702	396876	215902	0020					33		01	3600		
0132	193702	396877	No Replacement Repair With Individual Parts.								01	3600		
0133	193707	396877	No Replacement Repair With Individual Parts.								01	3600		
0134	193707	396876	215907	0028					33		01	3600		
0135	193702	396876	215902	0020					33		01	3600		
0136	193702	396876	215902	0020					33		01	3500		
0137	193707	396876	215907	0026					33		01	3600		
0138	193707	396876	215907	0028					33		01	3500		
0139	193702	396876	215902	0020					33		01	3600		
0140	193702	396876	215902	0020					33		01	3000		

193700 to 193799

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
0141	193702	396876	215902	0020					33		01	3600		
0142	193707	396876	215907	0028					33		01	3600		
0143	193706	396876	No Replacement Repair With Individual Parts.								01	3200		
0144	193702	396876	215902	0020					33		01	3400		
0145	193707	396876	215907	0028					33		01	3400		
0146	193702	396876	215902	0020					33		01	3100		
0147	193707	396876	215907	0028					33		01	3600		
0148	193707	396876	215907	0026					33		01	3500		
0149	193707	396876	215907	0028					33		01	3200		
0150	193702	396876	215902	0020					33		01	3600		
0151	193707	396876	No Replacement Repair With Individual Parts.								01	3100		
0152	193707	396876	215907	0025					33		01	3300		
0153	193702	396876	215902	0020					33		01	3600		
0154	193707	396876	215907	0028					33		01	3600		
0155	193707	396876	215907	0028					33		01	3600		
											02	3400		
0156	193707	396876	215907	0026					33		01	3600		
0157	193707	396876	215907	0028					33		01	3600		
0158	193702	396876	215902	0020					33		01	3600		
0159	193707	396876	215907	0028					33		01	3700		
0160	193707	396876	215907	0026					33		01	3300		
0161	193707	396876	No Replacement Repair With Individual Parts.								01	3600		
0162	193702	396876	215902	0020					33		01	3600		
0163	193702	396876	215902	0020					33		01	3600		
0164	193702	396877	No Replacement Repair With Individual Parts.								01	3600		
0165	193707	396876	215907	0028					33		01	3600		
0166	193707	396876	215907	0026					33		01	3400		
0167	193702	396876	215902	0015					33		01	3400		
0168	193702	396876	215902	0015					33		01	3400		
0169	193707	396876	215907	0028	1	393474	1	392595	33		01	3400		
0170	193702	396876	215902	0015					33		01	3400		
0171	193702	396876	215907	0028					33		01	3500		
0172	193707	396876	215907	0026					33		01	3400		
0173	193707	396876	215907	0028					33		01	3600		
0174	193707	396876	215907	0026					33		01	3600		
0215	193702	396876	215902	0020					33		All	3400		
0216	193702	396876	215902	0020					33		01	4000		
0217	193702	396877	No Replacement Repair With Individual Parts.								01	3400		
0225	193707	396876	215907	0028					33		01	3400		
0227	193707	396877	No Replacement Repair With Individual Parts.								01	3400		
0249	193707	396876	215907	0026					33		01	3300		
0300	193702	396876	215902	0020					33		01	3600		
0302	193707	396876	215907	0028					33		01	3600		
0305	193707	396876	No Replacement Repair With Individual Parts.								01	3500		
0306	193707	396876	215907	0026					33		01	3300		
0307	193707	396876	215907	0025					33		01	3300		
0308	193702	396876	215902	0020					33		01	4000		
0309	193702	396876	215902	0020					33		01	3400		
0310	193707	396876	215907	0026					33		01	3400		
0311	193707	396876	215907	0026					33		01	3600		
0312	193707	396876	215907	0026					33		01	3300		
0313	193707	396876	215907	0026					33		01	3400		
0314	193707	396876	215907	0026	1	393474	1	392595	33		01	3400		
0315	193707	396876	215907	0028					33		01	3600		
0316	193707	396876	215907	0028					33		01	3600		

193700 to 193799

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
0317	193702	396876	215902	0020					33		01	4000		
0318	193702	396876	215902	0020					33		01	3100		
0319	193707	396876	215907	0028					33		01	3200		
0320	193702	396877	No Replacement Repair With Individual Parts.								01	3600		
0321	193707	396877	No Replacement Repair With Individual Parts.								01	3600		
0322	193702	396876	215902	0015					33		01	3600		
0323	193706	396876	No Replacement Repair With Individual Parts.								01	3400		
0324	193702	396876	215902	0020					33		01	3600		
0325	193702	396876	215902	0015					33		01	3600		
0326	193702	396876	215902	0015					33		01	3600		
0328	193707	396876	215907	0028					33		01	3000		
0329	193702	396876	215902	0020					33		01	3000		
0330	193702	396876	No Replacement Repair With Individual Parts.								01	3500		
0331	193707	396876	No Replacement Repair With Individual Parts.								01	3500		
0332	193702	396876	215902	0020					33		01	3000		
0333	193702	396876	215902	0020					33		01	3600		
0334	193702	396876	215902	0020					33		01	3400		
0335	193707	396876	215907	0028					33		01	3400		
0336	193702	396876	No Replacement Repair With Individual Parts.								01	3400		
0337	193707	396876	No Replacement Repair With Individual Parts.								01	3100		
0338	193702	396876	215902	0020					33		All	3400		
0339	193702	396876	215902	0020					33		01	3600		
0340	193707	396876	215907	0028					33		01	3600		
0341	193702	396876	215902	0020					33		01	3600		
0342	193702	396876	215902	0020					33		01	3600		
0343	193707	396876	215907	0028					33		01	3600		
0344	193707	396876	215907	0028					33		01	3000		
0345	193702	396876	215902	0020					33		01	3600		
0346	193702	396876	215902	0015					33		01	3400		
0347	193702	396876	215902	0015					33		01	3600		
0348	193707	396876	215907	0025					33		01	3400		
0349	193707	396876	215907	0028	1	393474	1	392595	33		01	3400		
0350	193702	396876	215902	0020					33		01	3600		
0351	193707	396876	215907	0028					33		01	3500		
0352	193707	396876	No Replacement Repair With Individual Parts.											
0353	193707	396876	215907	0025					33		01	3300		
0354	193702	396876	No Replacement Repair With Individual Parts.								01	3400		
0355	193702	396876	215902	0020					33		01	3600		
0356	193707	396876	215907	0026					33		01	3000		
0357	193707	396876	215907	0028					33		01	3000		
0358	193702	396876	No Replacement Repair With Individual Parts.								01	3000		
0359	193702	396876	215902	0020					33		01	3000		
0360	193707	396876	215907	0026					33		01	3000		
0361	193702	396876	215902	0020					33		01	3600		
0362	193702	396876	215902	0020					33		01	3000		
0363	193706	396876	No Replacement Repair With Individual Parts.								01	3600		
0364	193707	396876	215907	0028					33		01	2600		
0365	193707	396876	215907	0028					33		01	3600		
0366	193707	396876	215907	0025					33		01	2800		
0367	193707	396876	215907	0028					33		01	3500		
0368	193702	396876	215902	0020					33		01	3400		
0369	193707	396876	215907	0028					33		01	3000		
0370	193707	396876	215907	0026					33		01	3200		
0371	193702	396876	215902	0020					33		01	3600		
0372	193702	396876	215902	0015					33		01	3600		

193700 to 193799

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	
4001	193702	396876	215902	0020					33		01	3600			
4002	193702	396876	No Replacement Repair With Individual Parts.							33		01	3600		
4003	193702	396876	215902	0015					33		01	3600			
4004	193702	396876	215902	0015					33		All	3600			
4005	193702	396876	215902	0015					33		01	3600			
4006	193702	396876	215902	0020					33		01	3600			
4007	193707	396876	215907	0026					33		01	3600			
4008	193707	396876	No Replacement Repair With Individual Parts.									01	3600		
4009	193707	396876	No Replacement Repair With Individual Parts.									01	3600		
											02	3000			
4010	193707	396876	215907	0028					33		01	3600			
									64						
4011	193707	396877	No Replacement Repair With Individual Parts.									01	3600		
4012	193707	396876	215907	0028					33		01	3600			
4015	193702	396876	215902	0020					33		All	3600			
4016	193702	396876	215902	0020					33		01	3600			
4025	193707	396876	215907	0028					33		All	3600			
4027	193707	396877	No Replacement Repair With Individual Parts.									01	3600		
4028	193707	396876	215907	0025					33		01	2800			