

422400 to 422499

SERVICE ENGINE



SALES MANUAL

**MODEL 422400 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:

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 QQ: Change Crankcase Cover in Short Block. Remove 394535. Add 394309.

NOTE SS: Change Crankcase Cover in Short Block. Remove 491810. Add 491711.

422400 to 422499

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	422437	394430	No Replacement Repair With Individual Parts.								All	3400		
0016	422437	394430	No Replacement Repair With Individual Parts.								01	3400		
0019	422437	394430	No Replacement Repair With Individual Parts.								01	3400		
0020	422437	394430	No Replacement Repair With Individual Parts.								01	3400		
0021	422437	394384	No Replacement Repair With Individual Parts.								All	3400		
0022	422437	394585	No Replacement Repair With Individual Parts.								All	3700		
0023	422437	394585	No Replacement Repair With Individual Parts.								01	3700		
0070	422437	394382	No Replacement Repair With Individual Parts.											
0111	422437	394430	No Replacement Repair With Individual Parts.								01	3600		
0112	422437	394430	No Replacement Repair With Individual Parts.								01	3600		
0127	422435	394430	No Replacement Repair With Individual Parts.								01	3400		
0128	422437	394430	No Replacement Repair With Individual Parts.								01	3400		
0129	422431	394430	No Replacement Repair With Individual Parts.								01	3600		
0130	422437	394430	No Replacement Repair With Individual Parts.								01	3400		
0131	422437	394430	No Replacement Repair With Individual Parts.								01	3300		
0132	422437	394430	No Replacement Repair With Individual Parts.								01	3600		
0133	422437	394430	No Replacement Repair With Individual Parts.								01	2800		
0134	422437	394430	No Replacement Repair With Individual Parts.								01	3600		
0135	422435	394382	No Replacement Repair With Individual Parts.								01	3600		
0136	422435	394382	No Replacement Repair With Individual Parts.								01	3300		
0137	422437	394430	No Replacement Repair With Individual Parts.								01	3600		
0138	422437	394430	No Replacement Repair With Individual Parts.								01	3600		
0139	422437	394430	No Replacement Repair With Individual Parts.								01	4000		
0140	422431	394430	No Replacement Repair With Individual Parts.								01	3000		
0141	422431	394430	No Replacement Repair With Individual Parts.								01	3600		
0142	422431	394585	No Replacement Repair With Individual Parts.								01	3000		
0143	422437	394430	No Replacement Repair With Individual Parts.								01	3600		
0144	422437	394430	No Replacement Repair With Individual Parts.								01	3600		
0145	422437	394430	No Replacement Repair With Individual Parts.								01	3600		
0148	422437	394430	No Replacement Repair With Individual Parts.								01	3500		

422400 to 422499

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
0149	422437	394430	No Replacement	Repair With Individual Parts.						01	3500			
0515	422437	394430	No Replacement	Repair With Individual Parts.						All	3400			
0516	422437	394430	No Replacement	Repair With Individual Parts.						01	3400			
0519	422437	394430	No Replacement	Repair With Individual Parts.						01	3900			
0520	422437	394430	No Replacement	Repair With Individual Parts.						01	3400			
0521	422437	394384	No Replacement	Repair With Individual Parts.						All	3400			
0522	422437	394585	No Replacement	Repair With Individual Parts.						All	3700			
0523	422437	394585	No Replacement	Repair With Individual Parts.						01	3700			
0570	422437	394382	No Replacement	Repair With Individual Parts.						01	3600			
0610	422431	394430	No Replacement	Repair With Individual Parts.						01	3600			
0611	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
0612	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
0623	422432	394101	No Replacement	Repair With Individual Parts.						01	3600			
0624	422432	394106	No Replacement	Repair With Individual Parts.						01	3600			
0625	422432	394108	No Replacement	Repair With Individual Parts.						01	3600			
0630	422435	394382	No Replacement	Repair With Individual Parts.						01	3300			
0631	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
0632	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
0633	422437	394430	No Replacement	Repair With Individual Parts.						01	3500			
0634	422437	394430	No Replacement	Repair With Individual Parts.						01	3500			
0635	422437	394430	No Replacement	Repair With Individual Parts.						01	3150			
0636	422435	394382	No Replacement	Repair With Individual Parts.						01	3600			
0637	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
0638	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
0639	422431	394585	No Replacement	Repair With Individual Parts.						01	3000			
0640	422432	394108	No Replacement	Repair With Individual Parts.						01	3150			
0641	422435	394430	No Replacement	Repair With Individual Parts.						01	3400			
0642	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
0643	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
0644	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
0646	422431	394384	No Replacement	Repair With Individual Parts.						01	3600			
0647	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
0648	422437	394585	No Replacement	Repair With Individual Parts.						01	3750			
0649	422432	394106	No Replacement	Repair With Individual Parts.						01	3600			
0651	422437	394430	No Replacement	Repair With Individual Parts.						01	3400			
0660	422435	394430	No Replacement	Repair With Individual Parts.						01	3400			
0661	422432	394108	No Replacement	Repair With Individual Parts.						01	3150			
0662	422435	394430	No Replacement	Repair With Individual Parts.						01	3400			
0663	422437	394430	No Replacement	Repair With Individual Parts.						01	3300			
0664	422437	394585	No Replacement	Repair With Individual Parts.						01	3750			
0665	422437	394430	No Replacement	Repair With Individual Parts.						01	3400			
0666	422437	394430	No Replacement	Repair With Individual Parts.						01	2800			
0667	422437	394430	No Replacement	Repair With Individual Parts.						01	3500			
0668	422431	394384	No Replacement	Repair With Individual Parts.						01	3600			
0669	422432	394106	No Replacement	Repair With Individual Parts.						01	3600			
0670	422435	394382	No Replacement	Repair With Individual Parts.						01	3300			
0671	422435	394382	No Replacement	Repair With Individual Parts.						01	3600			
0672	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
0673	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
0674	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
0675	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
0676	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
0677	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
0678	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
0679	422437	394430	No Replacement	Repair With Individual Parts.						01	3400			
0680	422437	394106	No Replacement	Repair With Individual Parts.						01	4000			

422400 to 422499

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
0681	422437	394430	No Replacement Repair With Individual Parts.						01	3600				
0682	422437	394430	No Replacement Repair With Individual Parts.						01	4000				
0683	422432	394108	No Replacement Repair With Individual Parts.						01	3150				
0684	422437	394430	No Replacement Repair With Individual Parts.						01	3600				
0685	422431	394430	No Replacement Repair With Individual Parts.						01	3600				
0686	422431	394430	No Replacement Repair With Individual Parts.						01	3000				
0687	422431	394585	No Replacement Repair With Individual Parts.						01	3000				
0688	422432	394106	No Replacement Repair With Individual Parts.						01	3150				
0689	422437	394430	No Replacement Repair With Individual Parts.						01	3600				
0690	422437	394430	No Replacement Repair With Individual Parts.						01	3400				
0691	422437	394430	No Replacement Repair With Individual Parts.						01	3500				
0692	422431	394585	No Replacement Repair With Individual Parts.						01	3000				
0693	422437	394430	No Replacement Repair With Individual Parts.						01	3600				
0694	422437	394430	No Replacement Repair With Individual Parts.						01	3400				
0695	422437	394430	No Replacement Repair With Individual Parts.						01	3800				
0696	422437	394430	No Replacement Repair With Individual Parts.						01	3500				
0697	422437	394106	No Replacement Repair With Individual Parts.						01	3600				
0698	422437	394430	No Replacement Repair With Individual Parts.						01	3600				
0699	422435	394430	No Replacement Repair With Individual Parts.						01	3400				
0700	422432	394106	No Replacement Repair With Individual Parts.						All	3200				
0701	422437	394585	No Replacement Repair With Individual Parts.						01	3750				
0702	422437	394430	No Replacement Repair With Individual Parts.						01	3400				
0703	422431	394585	No Replacement Repair With Individual Parts.						01	3700				
0704	422437	394430	No Replacement Repair With Individual Parts.						01	3200				
0705	422437	394430	No Replacement Repair With Individual Parts.						01	3600				
0706	422437	394430	No Replacement Repair With Individual Parts.						01	3400				
0707	422437	394106	No Replacement Repair With Individual Parts.						01	4000				
0708	422437	394430	No Replacement Repair With Individual Parts.						01	3700				
0709	422437	394430	No Replacement Repair With Individual Parts.						01	3400				
0710	422437	394430	No Replacement Repair With Individual Parts.						01	3400				
0711	422435	394430	No Replacement Repair With Individual Parts.						All	2700				
0712	422437	394430	No Replacement Repair With Individual Parts.						01	3600				
0713	422437	394430	No Replacement Repair With Individual Parts.						01	3600				
0714	422437	394430	No Replacement Repair With Individual Parts.						01	4000				
0715	422437	394430	No Replacement Repair With Individual Parts.						01	4000				
0716	422437	394430	No Replacement Repair With Individual Parts.						01	3800				
0717	422437	394106	No Replacement Repair With Individual Parts.						01	3600				
0718	422437	394430	No Replacement Repair With Individual Parts.						01	3600				
0719	422437	394430	No Replacement Repair With Individual Parts.						01	3600				
0721	422437	394430	No Replacement Repair With Individual Parts.						01	3400				
									02	3400				
									03	3600				
									04	3600				
0722	422437	394108	No Replacement Repair With Individual Parts.						01	3150				
0724	422437	394430	No Replacement Repair With Individual Parts.						01	3400				
0725	422437	394430	No Replacement Repair With Individual Parts.						01	3500				
0726	422437	394430	No Replacement Repair With Individual Parts.						01	3500				
0727	422437	394430	No Replacement Repair With Individual Parts.						01	3600				
0728	422437	394106	No Replacement Repair With Individual Parts.						01	3600				
0729	422437	394430	No Replacement Repair With Individual Parts.						01	3600				
0730	422432	394108	No Replacement Repair With Individual Parts.						01	3150				
0731	422436	394108	No Replacement Repair With Individual Parts.						01	3150				
0732	422437	394430	No Replacement Repair With Individual Parts.						01	3400				
0733	422437	394430	No Replacement Repair With Individual Parts.						01	3400				
0734	422437	394430	No Replacement Repair With Individual Parts.						01	3400				
0735	422437	394585	No Replacement Repair With Individual Parts.						01	3750				

422400 to 422499

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
0736	422437	394384	No Replacement Repair With Individual Parts.							01	3400			
0737	422437	394430	No Replacement Repair With Individual Parts.							01	3300			
0738	422431	394430	No Replacement Repair With Individual Parts.							01	3600			
0739	422432	394108	No Replacement Repair With Individual Parts.							01	3150			
0740	422436	394108	No Replacement Repair With Individual Parts.							01	3700			
0741	422437	394430	No Replacement Repair With Individual Parts.							01	3600			
0742	422437	394430	No Replacement Repair With Individual Parts.							01	3600			
0743	422437	394430	No Replacement Repair With Individual Parts.							01	3400			
0744	422437	394430	No Replacement Repair With Individual Parts.							01	3600			
0745	422437	394430	No Replacement Repair With Individual Parts.							01	3400			
0746	422437	394585	No Replacement Repair With Individual Parts.							01	3100			
0747	422437	394430	No Replacement Repair With Individual Parts.							01	3900			
0748	422432	394108	No Replacement Repair With Individual Parts.							01	3150			
0749	422437	394430	No Replacement Repair With Individual Parts.							01	3600			
0750	422437	394430	No Replacement Repair With Individual Parts.							01	3600			
0751	422437	394430	No Replacement Repair With Individual Parts.							01	3600			
0752	422437	394430	No Replacement Repair With Individual Parts.							01	3600			
0753	422437	394585	No Replacement Repair With Individual Parts.							01	3700			
0754	422437	394430	No Replacement Repair With Individual Parts.							01	3200			
0755	422437	394430	No Replacement Repair With Individual Parts.							01	3600			
0756	422437	394430	No Replacement Repair With Individual Parts.							01	3600			
0757	422435	394382	No Replacement Repair With Individual Parts.							01	3750			
0758	422437	394430	No Replacement Repair With Individual Parts.							01	3600			
0759	422437	394430	No Replacement Repair With Individual Parts.							01	3600			
1010	422432	394106	No Replacement Repair With Individual Parts.							All	3400			
1011	422432	394106	No Replacement Repair With Individual Parts.							All	3400			
1015	422437	394430	No Replacement Repair With Individual Parts.							All	3400			
1016	422437	394430	No Replacement Repair With Individual Parts.							All	3400			
1018	422437	394430	No Replacement Repair With Individual Parts.							All	3400			
1019	422437	394430	No Replacement Repair With Individual Parts.							All	3900			
1020	422437	394430	No Replacement Repair With Individual Parts.							All	3400			
1021	422437	394384	No Replacement Repair With Individual Parts.							All	3400			
1022	422437	394585	No Replacement Repair With Individual Parts.							All	3700			
1023	422437	394585	No Replacement Repair With Individual Parts.							All	3700			
1024	422437	394384	No Replacement Repair With Individual Parts.							All	3400			
1025	422437	394430	No Replacement Repair With Individual Parts.							All	3900			
1026	422437	394384	No Replacement Repair With Individual Parts.							All	3400			
1030	422437	394585	No Replacement Repair With Individual Parts.							All	3700			
1031	422437	394585	No Replacement Repair With Individual Parts.							All	1900			
1032	422437	394382	No Replacement Repair With Individual Parts.							01	1600			
1045	422437	394430	No Replacement Repair With Individual Parts.							All	3400			
1046	422437	394430	No Replacement Repair With Individual Parts.							All	3400			
1048	422437	394430	No Replacement Repair With Individual Parts.							All	3400			
1049	422437	394430	No Replacement Repair With Individual Parts.							All	3400			
1050	422437	394430	No Replacement Repair With Individual Parts.							All	3400			
1051	422437	394384	No Replacement Repair With Individual Parts.							All	3400			
1052	422437	394585	No Replacement Repair With Individual Parts.							01	3700			
										02	3700			
										03	3700			
										04	3150			
1070	422437	304392	No Replacement Repair With Individual Parts.							All	3600			
1109	422432	394106	No Replacement Repair With Individual Parts.							01	3400			
1110	422442	491812	No Replacement Repair With Individual Parts.							01	3400			
1125	422437	394384	No Replacement Repair With Individual Parts.							01	3400			
1145	422437	394430	No Replacement Repair With Individual Parts.							All	3400			
1146	422437	394430	No Replacement Repair With Individual Parts.							All	3400			

422400 to 422499

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
1149	422437	394430	No Replacement	Repair With Individual Parts.						All	3400			
1150	422437	394430	No Replacement	Repair With Individual Parts.						All	3400			
1151	422437	394384	No Replacement	Repair With Individual Parts.						01	3400			
1155	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
1156	422447	491715	No Replacement	Repair With Individual Parts.						All	3400			
1159	422447	491715	No Replacement	Repair With Individual Parts.						All	3400			
1160	422447	491715	No Replacement	Repair With Individual Parts.						All	3400			
1162	422447	491811	No Replacement	Repair With Individual Parts.						01	3600			
1205	422437	394430	No Replacement	Repair With Individual Parts.						01	3900			
1206	422437	394430	No Replacement	Repair With Individual Parts.						01	3400			
1207	422437	394430	No Replacement	Repair With Individual Parts.						01	3400			
1208	422437	394585	No Replacement	Repair With Individual Parts.						01	3150			
1209	422437	394430	No Replacement	Repair With Individual Parts.						All	3600			
1210	422437	394430	No Replacement	Repair With Individual Parts.						All	3600			
1211	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
1212	422437	394430	No Replacement	Repair With Individual Parts.						01	3400			
1213	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
1214	422437	394585	No Replacement	Repair With Individual Parts.						01	3750			
1215	422435	394382	No Replacement	Repair With Individual Parts.						01	3750			
1216	422447	491715	No Replacement	Repair With Individual Parts.						01	3600			
1217	422447	491715	No Replacement	Repair With Individual Parts.						01	3500			
1218	422447	491715	No Replacement	Repair With Individual Parts.						01	3200			
1219	422447	491812	No Replacement	Repair With Individual Parts.						01	4000			
1220	422447	491715	No Replacement	Repair With Individual Parts.						01	3500			
1221	422447	491812	No Replacement	Repair With Individual Parts.						01	4000			
1222	422437	394430	No Replacement	Repair With Individual Parts.						01	3400			
1223	422437	394430	No Replacement	Repair With Individual Parts.						01	3400			
1224	422437	491715	No Replacement	Repair With Individual Parts.						01	3900			
1225	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
1226	422437	394106	No Replacement	Repair With Individual Parts.						01	4000			
1227	422437	394430	No Replacement	Repair With Individual Parts.						01	3500			
1228	422437	394585	No Replacement	Repair With Individual Parts.						01	3700			
1229	422447	491811	No Replacement	Repair With Individual Parts.						01	3700			
1230	422437	394430	No Replacement	Repair With Individual Parts.						01	3500			
1231	422437	394430	No Replacement	Repair With Individual Parts.						01	3200			
1232	422437	394430	No Replacement	Repair With Individual Parts.						01	3400			
1233	422437	394430	No Replacement	Repair With Individual Parts.						All	3400			
1234	422437	394585	No Replacement	Repair With Individual Parts.						01	3150			
1235	422432	394108	No Replacement	Repair With Individual Parts.						01	3150			
1236	422442	492262	No Replacement	Repair With Individual Parts.						01	3150			
1237	422432	394106	No Replacement	Repair With Individual Parts.						01	3600			
1238	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
1239	422437	394106	No Replacement	Repair With Individual Parts.						01	4000			
1240	422447	491715	No Replacement	Repair With Individual Parts.						01	3600			
1241	422445	491715	No Replacement	Repair With Individual Parts.						01	2700			
1242	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
1243	422442	492262	No Replacement	Repair With Individual Parts.						01	3150			
1244	422442	492262	No Replacement	Repair With Individual Parts.						01	3150			
1245	422447	491811	No Replacement	Repair With Individual Parts.						01	3750			
1246	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
1247	422447	492262	No Replacement	Repair With Individual Parts.						01	3150			
1248	422437	394384	No Replacement	Repair With Individual Parts.						01	3400			
1249	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
1250	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
1251	422447	491715	No Replacement	Repair With Individual Parts.						01	3900			
1252	422447	491811	No Replacement	Repair With Individual Parts.						01	3150			

422400 to 422499

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
1253	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
1254	422447	491715	No Replacement	Repair With Individual Parts.						01	3600			
1255	422447	491715	No Replacement	Repair With Individual Parts.						01	3600			
1256	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
1257	422437	394430	No Replacement	Repair With Individual Parts.						01	3600			
1258	422447	491811	No Replacement	Repair With Individual Parts.						01	3750			
1259	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
1260	422447	491715	No Replacement	Repair With Individual Parts.						01	3500			
1261	422437	394430	No Replacement	Repair With Individual Parts.						01	3100			
1262	422442	492262	No Replacement	Repair With Individual Parts.						01	3150			
1263	422445	491811	No Replacement	Repair With Individual Parts.						01	3700			
1264	422447	491715	No Replacement	Repair With Individual Parts.						01	3500			
1265	422447	491811	No Replacement	Repair With Individual Parts.						01	3300			
1266	422437	394430	No Replacement	Repair With Individual Parts.						01	3400			
1267	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
1268	422437	394430	No Replacement	Repair With Individual Parts.						01	3500			
1269	422447	491812	No Replacement	Repair With Individual Parts.						01	3400			
1270	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
1271	422437	394430	No Replacement	Repair With Individual Parts.						01	3300			
1276	422437	394430	No Replacement	Repair With Individual Parts.						01	3300			
1277	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
1278	422437	394430	No Replacement	Repair With Individual Parts.						01	3400			
1279	422437	394430	No Replacement	Repair With Individual Parts.						01	3400			
1280	422447	491811	No Replacement	Repair With Individual Parts.						01	3750			
1281	422437	394430	No Replacement	Repair With Individual Parts.						01	3400			
1282	422447	491715	No Replacement	Repair With Individual Parts.						01	3500			
1283	422447	491715	No Replacement	Repair With Individual Parts.						01	3500			
1284	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
1285	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
1286	422437	394430	No Replacement	Repair With Individual Parts.						01	3400			
1287	422442	492262	No Replacement	Repair With Individual Parts.						01	3150			
1288	422437	394106	No Replacement	Repair With Individual Parts.						02	3900			
1289	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
1290	422445	498711	No Replacement	Repair With Individual Parts.						01	3700			
1291	422447	491715	No Replacement	Repair With Individual Parts.						01	3200			
1877	422447	491715	No Replacement	Repair With Individual Parts.						A1	3400			
1879	422437	394430	No Replacement	Repair With Individual Parts.						E1	3400			
1880	422447	491811	No Replacement	Repair With Individual Parts.						E1	3750			
1882	422437	394384	No Replacement	Repair With Individual Parts.						E1	4000			
1883	422447	491715	No Replacement	Repair With Individual Parts.						E1	3500			
1892	422447	491811	No Replacement	Repair With Individual Parts.						E1	3750			
1893	422447	491811	No Replacement	Repair With Individual Parts.						E1	3750			
1894	422447	491715	No Replacement	Repair With Individual Parts.						E1	3400			
1895	422437	394430	No Replacement	Repair With Individual Parts.						E1	3400			
1896	422437	394106	No Replacement	Repair With Individual Parts.						E1	3600			
1897	422447	491715	No Replacement	Repair With Individual Parts.						E1	3600			
1898	422437	394430	No Replacement	Repair With Individual Parts.						E1	3600			
1899	422437	394430	No Replacement	Repair With Individual Parts.						E1	3600			
4001	422437	394384	No Replacement	Repair With Individual Parts.						01	3700			
4003	422437	394585	No Replacement	Repair With Individual Parts.						01	3150			
4006	422437	394106	No Replacement	Repair With Individual Parts.						All	4000			
4007	422447	491811	No Replacement	Repair With Individual Parts.						All	3750			
4008	422447	492501	No Replacement	Repair With Individual Parts.						All	3400			
4009	422432	394106	No Replacement	Repair With Individual Parts.						01	3400			
4010	422442	491812	No Replacement	Repair With Individual Parts.						01	3400			
4013	422447	491812	No Replacement	Repair With Individual Parts.						01	4000			

422400 to 422499

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
4015	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
4016	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
4017	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
4018	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
4019	422447	491811	No Replacement	Repair With Individual Parts.						01	3150			
4020	422442	492262	No Replacement	Repair With Individual Parts.						All	3150			
4023	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
4024	422442	492262	No Replacement	Repair With Individual Parts.						All	3150			
4025	422447	491811	No Replacement	Repair With Individual Parts.						01	3750			
4026	422437	394430	No Replacement	Repair With Individual Parts.						01	3400			
4027	422447	491715	No Replacement	Repair With Individual Parts.						01	3400			
4028	422447	491811	No Replacement	Repair With Individual Parts.						01	3700			
4029	422447	491812	No Replacement	Repair With Individual Parts.						All	4000			
4030	422437	394585	No Replacement	Repair With Individual Parts.						01	3150			
4034	422442	492262	No Replacement	Repair With Individual Parts.						All	3150			
4037	422447	491811	No Replacement	Repair With Individual Parts.						01	3750			
4038	422447	491715	No Replacement	Repair With Individual Parts.						All	3400			
4045	422437	394430	No Replacement	Repair With Individual Parts.						All	3400			
4046	422437	394430	No Replacement	Repair With Individual Parts.						All	3400			
4049	422437	394430	No Replacement	Repair With Individual Parts.						All	3400			
4050	422437	394430	No Replacement	Repair With Individual Parts.						All	3400			
4051	422437	394384	No Replacement	Repair With Individual Parts.						All	3400			
4055	422447	491715	No Replacement	Repair With Individual Parts.						All	3400			
4056	422447	491715	No Replacement	Repair With Individual Parts.						All	3400			
4059	422447	491715	No Replacement	Repair With Individual Parts.						All	3400			
4060	422447	491715	No Replacement	Repair With Individual Parts.						All	3400			
4062	422447	491811	No Replacement	Repair With Individual Parts.						01	3750			
4070	422437	394382	No Replacement	Repair With Individual Parts.						01	3600			
4071	422442	492262	No Replacement	Repair With Individual Parts.						01	3150			
4072	422442	492262	No Replacement	Repair With Individual Parts.						01	3150			
4073	422447	492262	No Replacement	Repair With Individual Parts.						01	3150			
4098	422445	491715	No Replacement	Repair With Individual Parts.										
4110	422447	491715	No Replacement	Repair With Individual Parts.						E1	3200			
4111	422437	394384	No Replacement	Repair With Individual Parts.						01	4000			
4145	422437	394430	No Replacement	Repair With Individual Parts.						E1	3400			
4146	422437	394430	No Replacement	Repair With Individual Parts.						E1	3400			
4149	422437	394430	No Replacement	Repair With Individual Parts.						E1	3400			
4150	422437	394430	No Replacement	Repair With Individual Parts.						E1	3400			
4155	422447	491715	No Replacement	Repair With Individual Parts.						E1	3400			
4156	422447	491715	No Replacement	Repair With Individual Parts.						E1	3400			
4159	422447	491715	No Replacement	Repair With Individual Parts.						E1	3400			
4160	422447	491715	No Replacement	Repair With Individual Parts.						E1	3400			
4811	422437	394585	No Replacement	Repair With Individual Parts.						E1	4000			
4815	422447	491715	No Replacement	Repair With Individual Parts.						E1	3400			
4816	422447	491715	No Replacement	Repair With Individual Parts.						E1	3400			
4817	422447	491715	No Replacement	Repair With Individual Parts.						E1	3400			
4828	422447	491811	No Replacement	Repair With Individual Parts.						All	3700			
4829	422447	491812	No Replacement	Repair With Individual Parts.						E1	4000			
4830	422437	394384	No Replacement	Repair With Individual Parts.						E1	4000			
4838	422447	491715	No Replacement	Repair With Individual Parts.						E1	3400			
4845	422437	394430	No Replacement	Repair With Individual Parts.						E1	3400			
4846	422437	394430	No Replacement	Repair With Individual Parts.						E1	3400			
4850	422437	394430	No Replacement	Repair With Individual Parts.						E1	3400			
4851	422437	394384	No Replacement	Repair With Individual Parts.						E1	3400			
4852	422437	690638	No Replacement	Repair With Individual Parts.						E1	3600			
4855	422447	491715	No Replacement	Repair With Individual Parts.						All	3400			

422400 to 422499

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
4860	422447	491715	No Replacement Repair With Individual Parts.								E1	3400		
4888	422437	491812	No Replacement Repair With Individual Parts.								E2	3900		
4910	422447	491715	No Replacement Repair With Individual Parts.								E1	3200		