

93500 to 93599

SERVICE ENGINE



SALES MANUAL

**MODEL 93500 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 25: If the replacement engine supersedes to or is a Model 120000 series engine, refer to the illustrations located after the conversion data for this model series. The overall dimensions that differ, are shown in the illustrations. If after making a visual inspection and it is determined the Model 120000 series engine cannot be used because of equipment interference, the original engine should be repaired with individual parts.

NOTE 73: Transfer Flywheel Assembly to the 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:

NOTE .:

93500 to 93599

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
0101	93502	260124	122K02	0515	1	690319	1	691851	25		All	3500		
0121	93582	260911	No Replacement Repair With Individual Parts.								All	3500		
0151	93502	260098	122K02	0518					25		All	3000		
0152	93502	260124	9M902	0015							All	3000		
0153	93508	260098	9M902	0018							All	3000		
0154	93582	260911	No Replacement Repair With Individual Parts.								All	3000		
0155	93582	260911	No Replacement Repair With Individual Parts.								All	3000		
0156	93588	260911	No Replacement Repair With Individual Parts.								All	3000		
0157	93588	260911	No Replacement Repair With Individual Parts.								All	3000		
0158	93508	260096	122K02	0516					25		All	3100		
0159	93508	260097	No Replacement Repair With Individual Parts.								All	3100		
0160	93508	260097	No Replacement Repair With Individual Parts.								All	3100		
0161	93582	260912	No Replacement Repair With Individual Parts.								All	3100		
0162	93588	260912	No Replacement Repair With Individual Parts.								All	3100		
0163	93502	260096	122K02	0516					25		All	3100		
0164	93508	260124	No Replacement Repair With Individual Parts.								All	3200		
0165	93508	260096	122K02	0516	1	690319	1	691851	25		All	3500		
0166	93502	260124	122K02	0515	1	690319	1	691851	25		All	3500		
0167	93502	260124	122K02	0515					25		All	3100		
0168	93502	260124	9M902	0015					73		All	3700		
0169	93508	260124	122K02	0515	1	690319	1	691851	25		All	3500		
0170	93502	260124	9M902	0015					25		All	3300		
0171	93502	260096	9M902	0016							All	3300		
0172	93502	260096	9M902	0016							All	3500		
0173	93502	260096	9M902	0016							All	2900		
0174	93502	260124	9M902	0016							All	2900		
0175	93502	260097	No Replacement Repair With Individual Parts.								All	2900		
0176	93508	260124	122K02	0515					25		All	2900		

93500 to 93599

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	93508	260096	122K02	0516					25		All	2900			
0178	93582	260911	No Replacement Repair With Individual Parts.									All	2900		
0179	93588	260911	No Replacement Repair With Individual Parts.									All	2900		
0180	93588	260911	No Replacement Repair With Individual Parts.									All	3500		
0181	93588	260911	No Replacement Repair With Individual Parts.									All	3500		
0182	93508	260096	122K02	0516	1	690319	1	691851	25		All	3500			
0183	93582	260911	No Replacement Repair With Individual Parts.									All	3500		
0184	93502	260124	9M902	0015							All	3500			
0185	93502	260096	9M902	0016							All	3100			
0186	93582	260911	No Replacement Repair With Individual Parts.									All	3100		
0187	93502	260124	122K02	0515	1	690319	1	691851	25		All	3300			
0188	93502	260097	No Replacement Repair With Individual Parts.									All	3300		
0189	93508	260124	122K02	0515					25		All	3200			
0190	93508	261293	No Replacement Repair With Individual Parts.									All	2500		
0191	93508	261292	No Replacement Repair With Individual Parts.									All	2900		
0192	93508	261417	No Replacement Repair With Individual Parts.									All	2600		
0193	93508	261293	No Replacement Repair With Individual Parts.									All	2600		
0194	93508	261293	No Replacement Repair With Individual Parts.									All	3000		
0195	93508	261293	No Replacement Repair With Individual Parts.									All	2600		
0196	93508	261293	No Replacement Repair With Individual Parts.									All	3100		
0197	93508	261417	No Replacement Repair With Individual Parts.									All	3000		
0198	93508	261417	No Replacement Repair With Individual Parts.									All	2900		
0199	93502	260098	122K02	0518					25		All	3000			
0200	93502	260095	122K02	0515					25		All	3000			
0201	93502	260096	9M902	0016							All	3000			
0202	93508	260097	No Replacement Repair With Individual Parts.									All	3100		
0203	93502	260097	No Replacement Repair With Individual Parts.									All	3100		
0204	93505	260124	No Replacement Repair With Individual Parts.									All	3200		
0205	93508	260096	122K02	0516					25		All	3100			
0206	93508	260097	No Replacement Repair With Individual Parts.									All	3300		
0207	93508	260911	No Replacement Repair With Individual Parts.									All	3100		
0208	93582	260911	No Replacement Repair With Individual Parts.									All	2900		
0209	93508	260096	122K02	0516					25		All	3000			
0210	93582	260911	No Replacement Repair With Individual Parts.									All	3000		
0211	93588	260911	No Replacement Repair With Individual Parts.									All	3000		
0212	93502	260124	9M902	0015							All	3100			
0213	93502	260098	9M902	0018							All	3100			
0214	93508	260124	122K02	0515					25		All	3100			
0215	93508	260124	122K02	0515					25		All	3100			
0216	93508	260098	122K02	0518	1	690319	1	691851	25		All	3500			
0217	93508	260096	122K02	0516	1	690319	1	691851	25		All	3500			
0218	93508	260098	122K02	0518	1	690319	1	691851	25		All	3500			
0219	93508	260098	122K02	0518					25		All	3100			
0220	93582	260911	No Replacement Repair With Individual Parts.									All	3100		
0221	93582	260911	No Replacement Repair With Individual Parts.									All	3100		
0222	93582	260911	No Replacement Repair With Individual Parts.									All	3100		
0223	93588	260911	No Replacement Repair With Individual Parts.									All	3100		
0224	93588	260911	No Replacement Repair With Individual Parts.									All	3100		
0225	93588	260911	No Replacement Repair With Individual Parts.									All	3100		
0226	93588	260911	No Replacement Repair With Individual Parts.									All	3100		
0227	93588	260911	No Replacement Repair With Individual Parts.									All	3100		
0228	93502	260097	No Replacement Repair With Individual Parts.									All	3300		
0229	93502	260096	No Replacement Repair With Individual Parts.									All	3000		
0230	93508	260124	122K02	0515	1	690319	1	691851	25		All	3300			
0231	93508	260098	122K02	0518					25		All	3000			

93500 to 93599

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	
0232	93508	260098	122K02	0518					25		All	3000			
0233	93582	260911	No Replacement Repair With Individual Parts.									All	3000		
0234	93588	260911	No Replacement Repair With Individual Parts.									All	3000		
0235	93502	260124	122K02	0515	1	690319	1	691851	25		All	3300			
0236	93508	260124	122K02	0515	1	690319	1	691851	25		All	3500			
0237	93508	260097	No Replacement Repair With Individual Parts.									All	3500		
0238	93502	260098	122K02	0518	1	492177	1	492893	25		All	4000			
					1	690319	1	691290							
0239	93502	260124	122K02	0515	1	690319	1	691290	25		All	3700			
0240	93502	260096	122K02	0516					25		All	2900			
0241	93502	260096	9M902	0016							All	3000			
0242	93502	260096	122K02	0516					25		All	3000			
0243	93508	260124	122K02	0515	1	690319	1	691851	25		All	3300			
0244	93508	260096	122K02	0516					25		All	3000			
0245	93582	260911	No Replacement Repair With Individual Parts.									All	3000		
0246	93588	260911	No Replacement Repair With Individual Parts.									All	3000		
0247	93502	260096	9M902	0016							All	3100			
0248	93502	260096	9M902	0016					73		All	3200			
0249	93508	260124	122K02	0515	1	690319	1	691851	25		All	3300			
0250	93502	260124	122K02	0515	1	690319	1	691851	25		All	3300			
0251	93502	260124	122K02	0515	1	690319	1	691851	25		All	3300			
0252	93508	260096	122K02	0516					25		All	3200			
0253	93582	260911	No Replacement Repair With Individual Parts.									All	3200		
0255	93502	260124	No Replacement Repair With Individual Parts.									All	3200		
0256	93502	260124	122K02	0515					25		All	3200			
0257	93508	260097	No Replacement Repair With Individual Parts.									All	3500		
0258	93508	260124	122K02	0515	1	690319	1	691851	25		All	3300			
0259	93588	260912	No Replacement Repair With Individual Parts.									All	3500		
0260	93508	260124	122K02	0515					25		All	3000			
0261	93502	260124	122K02	0515	1	690319	1	691290	25		All	4000			
0262	93505	261050	No Replacement Repair With Individual Parts.									All	3100		
0263	93508	261050	No Replacement Repair With Individual Parts.									All	3200		
0264	93508	261050	No Replacement Repair With Individual Parts.									All	3500		
0265	93508	260096	122K02	0516	1	690319	1	691851	25		All	3500			
0266	93508	260124	122K02	0515	1	690319	1	691851	25		All	3300			
0267	93508	260096	122K02	0516					25		All	3300			
0268	93508	260124	122K02	0515					25		All	3100			
0269	93508	260124	122K02	0515	1	690319	1	691851	25		All	3500			
0270	93588	260911	No Replacement Repair With Individual Parts.									All	3100		
0271	93588	260911	No Replacement Repair With Individual Parts.									All	3500		
0272	93502	260124	122K02	0515	1	690319	1	691851	25		All	3500			
0273	93502	260124	9M902	0015							All	3500			
0274	93508	260124	122K02	0515	1	690319	1	691851	25		All	3500			
0275	93508	260096	122K02	0516	1	690319	1	691851	25		All	3700			
0276	93582	260911	No Replacement Repair With Individual Parts.									All	3200		
0277	93502	260098	122K02	0518	1	492177	1	492893	25		All	4000			
					1	690319	1	691290							
0278	93502	260124	122K02	0515	1	492177	1	492893	25		All	3500			
					1	690319	1	691851							
0279	93508	260096	122K02	0516	1	690319	1	691851	25		All	3300			
0280	93598	261028	No Replacement Repair With Individual Parts.									All	3300		
0281	93502	260124	9M902	0015							All	2900			
0282	93508	260096	122K02	0516					25		All	3300			
0283	93502	260096	122K02	0516	1	690319	1	691851	25		All	3500			

93500 to 93599

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	
0284	93502	260098	9M902	0018							All	3100			
0285	93508	260096	No Replacement Repair With Individual Parts.									All	3100		
0286	93508	260096	122K02	0516	1	690319	1	691851	25		All	3500			
0287	93508	260124	9M902	0015					73		All	4000			
0288	93502	260124	9M902	0015					73		All	3000			
0289	93585	261021	No Replacement Repair With Individual Parts.									All	3100		
0290	93588	261021	No Replacement Repair With Individual Parts.									All	3500		
0291	93508	260124	122K02	0515	1	690319	1	691851	25		All	3500			
0292	93588	261021	No Replacement Repair With Individual Parts.									All	3500		
0293	93502	260124	9M902	0015							All	3500			
0294	93502	260096	9M902	0016							All	3500			
0295	93508	260124	122K02	0515					25		All	3100			
0296	93502	260098	122K02	0518	1	492177	1	492893	25		All	3300			
0297	93508	260096	122K02	0516	1	690319	1	691851	25		All	3500			
0298	93582	260911	No Replacement Repair With Individual Parts.									All	2900		
0299	93508	260096	122K02	0516					25		All	3300			
0300	93502	260098	9M902	0018							All	3100			
0301	93502	260096	122K02	0516					25		All	3100			
0302	93502	260096	122K02	0516	1	690319	1	691851	25		All	3500			
0303	93582	260911	No Replacement Repair With Individual Parts.									All	3500		
0304	93502	260096	122K02	0516					25		All	3300			
0305	93508	260096	122K02	0516					25		All	3100			
0308	93508	260096	122K02	0516	1	390319	1	691951	25		All	3500			
0310	93508	260096	122K02	0516					25		All	3200			
0311	93502	260096	122K02	0516	1	690319	1	691851	25		All	3500			
0312	93502	260124	122K02	0515	1	690319	1	691851	25		All	4000			
0313	93502	260098	9M902	0018							All	3100			
0315	93508	260124	122K02	0515					25		All	3000			
0318	93502	260319	122K02	0516	1	492177	1	492893	25		All	3500			
					1	690319	1	691851							
0319	93508	260124	122K02	0515	1	690319	1	691851	25		All	3500			
0320	93588	260911	No Replacement Repair With Individual Parts.									All	3500		
0321	93508	260096	122K02	0516	1	690319	1	691851	25		All	3500			
0322	93508	260124	122K02	0515	1	690319	1	691851	25		All	3500			
0323	93508	260124	122K02	0515	1	690319	1	691851	25		All	3300			
0324	93508	260098	122K02	0518	1	690319	1	691851	25		All	3500			
0325	93508	260096	122K02	0516					25		All	3100			
0326	93502	260124	9M902	0015							All	3500			
0327	93588	260911	No Replacement Repair With Individual Parts.									All	3200		
0328	93508	260124	122K02	0515	1	690319	1	691851	25		All	3500			
0329	93508	260096	122K02	0516	1	690319	1	691851	25		All	3500			
0330	93502	260098	9M902	0018							All	3500			
0331	93502	260096	122K02	0516	1	690319	1	691851	25		All	3500			
0332	93502	260096	9M902	0016							All	3200			
0333	93502	260096	9M902	0016							All	3200			
0334	93502	260096	9M902	0016							All	3500			
0335	93502	260096	122K02	0516	1	690319	1	691681	25		All	3500			
0336	93508	260098	122K02	0518	1	690319	1	691851	25		All	3500			
0338	93502	260098	122K02	0518	1	492177	1	492893	25		All	3700			
					1	690319	1	691290							
0339	93502	260098	9M902	0018					73		All	3300			
0340	93508	260096	122K02	0516					25		All	3200			
0341	93502	260098	9M902	0018					73		All	3000			

93500 to 93599

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		
0342	93508	260124	122K02	0515	1	690319	1	691851	25		All	3500				
0343	93502	260124	9M902	0015					73		All	3300				
0344	93582	260911	No Replacement Repair With Individual Parts.										All	3200		
0345	93502	260124	9M902	0015					73		All	3200				
0346	93508	260124	122K02	0515					25		All	3200				
0347	93588	260911	No Replacement Repair With Individual Parts.													
0348	93508	260124	122K02	0515	1	690319	1	691851	25		All	3500				
0349	93508	260096	122K02	0516	1	690319	1	691851	25		All	3500				
0350	93508	260096	122K02	0516					25		All	3200				
0351	93508	260096	122K02	0515					25		All	3200				
0352	93505	260124	No Replacement Repair With Individual Parts.										All	3000		
0353	93502	260124	122K02	0515					25		All	3200				
0354	93582	260911	No Replacement Repair With Individual Parts.										All	3000		
0355	93508	260124	122K02	0515					25		All	3000				
0356	93502	260096	122K02	0516					25		All	3200				
0357	93588	260911	No Replacement Repair With Individual Parts.										All	3000		
0358	93582	260911	No Replacement Repair With Individual Parts.										All	3000		
0359	93502	260124	9M902	0015					73		All	3200				
0360	93502	260124	9M902	0015					73		All	3200				
0361	93588	260911	No Replacement Repair With Individual Parts.										All	3000		
0362	93502	260124	9M902	0015					73		All	3200				
0363	93508	260096	122K02	0516					25		All	3300				
0364	93588	260912	No Replacement Repair With Individual Parts.										All	3300		
0365	93508	260098	122K02	0518					25		All	3000				
0366	93508	260124	122K02	0515					25		All	3200				
0367	93502	260097	No Replacement Repair With Individual Parts.										All	3500		
0368	93508	260124	122K02	0515					25		All	3300				
0369	93502	260096	9M902	0016					73		All	3500				
0370	93588	260913	No Replacement Repair With Individual Parts.										All	3300		
0371	93508	260096	122K02	0516	1	690319	1	691851	25		All	3500				
0372	93508	260097	No Replacement Repair With Individual Parts.										All	3300		
0373	93502	260096	122K02	0516	1	690319	1	691851	25		All	3500				
0374	93508	260096	122K02	0516	1	690319	1	691851	25		All	3700				
0375	93502	260319	122K02	0516	1	492177	1	492893	25		All	3500				
					1	690319	1	691851								
0376	93502	260124	No Replacement Repair With Individual Parts.										All	4000		
0377	93508	260124	122K02	0515					25		All	3200				
0378	93502	260096	9M902	0016							All	3500				
0379	93502	260096	9M902	0016							All	3500				
0380	93588	260911	No Replacement Repair With Individual Parts.										All	3000		
0381	93502	260097	No Replacement Repair With Individual Parts.										All	3500		
0382	93502	260096	122K02	0516	1	492177	1	492893	25		All	3200				
0383	93502	260098	122K02	0518	1	690319	1	691851	25		All	4000				
0384	93508	260124	122K02	0515	1	690319	1	691851	25		All	3500				
0385	93508	260124	122K02	0515					25		All	3100				
0386	93508	260098	122K02	0518					25		All	3100				
0387	93582	260911	No Replacement Repair With Individual Parts.										All	3100		
0388	93588	260911	No Replacement Repair With Individual Parts.										All	3100		
0389	93508	260124	122K02	0515	1	690319	1	691851	25		All	3300				
0390	93508	260124	122K02	0515	1	690319	1	691851	25		All	3300				
0391	93505	261050	No Replacement Repair With Individual Parts.										All	3300		
0392	93508	260124	122K02	0515					25		All	3100				
0393	93588	260911	No Replacement Repair With Individual Parts.										All	3000		
0394	93502	260124	9M902	0015							All	3300				

93500 to 93599

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
0395	93508	260098	122K02	0518					25		All	3200		
0396	93502	260096	122K02	0516					25		All	3300		
0397	93508	260096	122K02	0516					25		All	3300		
0398	93588	260911	No Replacement Repair With Individual Parts.								All	3500		
0399	93508	260124	122K02	0515					25		All	3100		
0400	93502	260096	122K02	0516	1	690319	1	691851	25		All	3500		
0401	93502	260124	122K02	0515	1	690319	1	691851	25		All	3500		
0402	93502	260124	122K02	0515	1	690319	1	691851	25		All	3500		
0403	93508	260097	No Replacement Repair With Individual Parts.								All	3500		
0404	93502	260124	122K02	0515	1	690319	1	691851	25		All	3500		
0405	93508	260124	122K02	0515	1	690319	1	691851	25		All	3500		
0406	93582	260914	No Replacement Repair With Individual Parts.								All	3300		
0407	93502	260124	9M902	0015							All	3100		
0408	93508	260124	122K02	0515	1	690319	1	691290	25		All	3700		
0409	93508	260124	122K02	0515					25		All	3200		
0410	93502	260096	No Replacement Repair With Individual Parts.								All	4000		
0411	93502	260124	122K02	0515	1	690319	1	691290	25		All	3700		
0412	93508	260124	122K02	0515					25		All	3100		
0413	93502	260124	122K02	0515	1	690319	1	691290	25		All	3700		
0414	93502	260124	122K02	0515	1	690319	1	691851	25		All	3300		
0415	93508	260124	122K02	0515					25		All	3000		
0416	93508	260124	122K02	0515					25		All	3200		
0417	93502	260124	122K02	0515	1	690319	1	691851	25		All	3500		
0418	93582	260911	No Replacement Repair With Individual Parts.								All	3100		
0419	93508	260096	122K02	0516					25		All	3100		
0420	93502	260124	122K02	0515	1	690319	1	691851	25		All	3500		
0421	93508	260124	122K02	0515	1	690319	1	691290	25		All	3700		
0422	93508	260124	122K02	0515					25		All	3200		
0423	93582	260911	No Replacement Repair With Individual Parts.								All	3000		
0424	93502	260124	122K02	0515	1	690319	1	691851	25		All	3500		
0515	93502	260124	9M902	0015					73		All	3200		
0516	93502	260124	122K02	0515					25		All	3200		
0517	93502	260096	9M902	0016							All	3200		
0519	93502	260098	122K02	0518	1	492177	1	492893	25		All	3200		
0521	93502	260670	9M902	0015							All	3200		
0523	93502	260097	No Replacement Repair With Individual Parts.								All	3200		
0524	93502	260957	No Replacement Repair With Individual Parts.								All	3200		
0526	93502	260400	No Replacement Repair With Individual Parts.								All	3300		
0528	93502	260411	No Replacement Repair With Individual Parts.								All	4000		
0529	93502	260370	No Replacement Repair With Individual Parts.								All	3200		
0536	93502	260124	9M902	0015							All	3500		
0542	93592	260099	No Replacement Repair With Individual Parts.								All	3200		
0543	93592	260224	No Replacement Repair With Individual Parts.								All	3200		
0545	93598	260224	No Replacement Repair With Individual Parts.								All	3200		
0550	93582	260914	No Replacement Repair With Individual Parts.								All	3200		
0551	93582	260911	No Replacement Repair With Individual Parts.								All	3200		
0565	93588	260911	No Replacement Repair With Individual Parts.								All	3200		
0566	93588	260911	No Replacement Repair With Individual Parts.								All	3200		
0571	93508	260124	122K02	0515					25		All	3200		
0572	93508	260096	122K02	0516					25		All	3200		
0573	93508	260097	No Replacement Repair With Individual Parts.								All	3200		
0574	93508	260098	122K02	0518					25		All	3200		
0575	93508	261050	No Replacement Repair With Individual Parts.								All	3300		
0578	93508	261133	No Replacement Repair With Individual Parts.								All	3300		

93500 to 93599

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
0579	93508	261050	No Replacement Repair With Individual Parts.											
0580	93508	261293	No Replacement Repair With Individual Parts.											
5107	93507	260124	No Replacement Repair With Individual Parts.											
5135	93507	260098	No Replacement Repair With Individual Parts.											
5144	93508	260096	122K02	0516					25		All	3200	398211	
5157	93587	260911	No Replacement Repair With Individual Parts.											
5211	93507	260124	No Replacement Repair With Individual Parts.											
5212	93507	260124	No Replacement Repair With Individual Parts.											