

145400 to 145499

SERVICE ENGINE  **SALES MANUAL**

**MODEL 145400 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 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 116:** If necessary, to make the original engine crankshaft center line the same add 695154 spacer kit.

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:

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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 |
| 0110 | 145401 | 260607 | 202432 | 0036 | | | | | 15 116 | | All | 3600 | | |
| 0111 | 145402 | 260607 | 202432 | 0036 | | | | | 15 116 | | All | 3600 | | |
| 0115 | 145431 | 260358 | No Replacement Repair With Individual Parts. | | | | | | 15 | | All | 3600 | | |
| 0116 | 145432 | 260358 | No Replacement Repair With Individual Parts. | | | | | | 15 | | All | 3600 | | |
| 0120 | 145451 | 260389 | 202452 | 0049 | | | | | 15 116 | | All | 3600 | | |
| 0121 | 145452 | 260389 | 202452 | 0049 | | | | | 15 116 | | All | 3600 | | |
| 0130 | 145431 | 260425 | 201432 | 0036 | | | | | 15 116 | | All | 3600 | | |
| 0131 | 145432 | 260472 | No Replacement Repair With Individual Parts. | | | | | | 15 | | All | 4000 | | |
| 0132 | 145431 | 260359 | No Replacement Repair With Individual Parts. | | | | | | 15 | | All | 3600 | | |
| 0133 | 145432 | 260359 | No Replacement Repair With Individual Parts. | | | | | | 15 | | All | 1860 | | |
| 0134 | 145432 | 260425 | No Replacement Repair With Individual Parts. | | | | | | 15 | | All | 3600 | | |
| 0135 | 145432 | 260389 | 202452 | 0049 | | | | | 15 17 116 | | All | 2800 | | |
| 0136 | 145432 | 260359 | No Replacement Repair With Individual Parts. | | | | | | 15 | | All | 3000 | | |
| 0137 | 145432 | 260425 | 201432 | 0036 | | | | | 15 116 | | All | 3800 | | |
| 0138 | 145402 | 260607 | 202432 | 0036 | | | | | 15 116 | | All | 3600 | | |
| 0139 | 145402 | 260607 | 202432 | 0036 | | | | | 15 116 | | All | 4000 | | |
| 0140 | 145401 | 260667 | 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 |
| 0141 | 145402 | 260607 | 202432 | 0036 | | | | | 15 116 | | All | 2450 | | |
| 0142 | 145432 | 260359 | No Replacement Repair With Individual Parts. | | | | | | 15 | | All | 3600 | | |
| 0143 | 145401 | 260607 | No Replacement Repair With Individual Parts. | | | | | | 15 | | All | 4000 | | |
| 0144 | 145451 | 260389 | 202452 | 0049 | | | | | 15 17 116 | | All | 3600 | | |
| 0145 | 145402 | 260607 | 202432 | 0036 | | | | | 15 116 | | All | 4000 | | |
| 0146 | 145402 | 260607 | 202432 | 0036 | | | | | 15 116 | | All | 3000 | | |
| 0147 | 145402 | 260607 | 202432 | 0036 | | | | | 15 116 | | All | 4000 | | |
| 0148 | 145432 | 260423 | No Replacement Repair With Individual Parts. | | | | | | 15 | | All | 3600 | | |
| 0149 | 145451 | 260389 | 202452 | 0049 | | | | | 1 15 21 116 | | All | 3000 | | |
| 0150 | 145401 | 260425 | No Replacement Repair With Individual Parts. | | | | | | 15 | | All | 3600 | | |
| 0151 | 145401 | 260667 | No Replacement Repair With Individual Parts. | | | | | | 15 | | All | 3600 | | |
| 0152 | 145431 | 260425 | 201432 | 0036 | | | | | 15 116 | | All | 3600 | | |
| 0153 | 145452 | 260389 | No Replacement Repair With Individual Parts. | | | | | | 15 | | All | 3000 | | |
| 0154 | 145402 | 260607 | 202432 | 0036 | | | | | 15 116 | | All | 2200 | | |
| 0155 | 145401 | 260607 | 202432 | 0036 | | | | | 15 116 | | All | 3600 | | |
| 0156 | 145401 | 260607 | 202432 | 0036 | | | | | 15 116 | | All | 3600 | | |