Johnson OK Series – Part 2

Part 1 of the Johnson OK Series article appeared in our April 2019 Newsletter. Part 1 is also available on the mlaoc.ca website, in the "Archives" section. Now here is Part 2

Post War OKs

The OK-15 was the first OK model to receive any significant design changes since the OK-60 of 1932. The OK-15 was produced in 1945 through 1948. The OK-15 featured a new design for the lower unit and a 3 blade propeller that would continue to the end of the OK production (figure 10). The model OK-20 was introduced in 1949. The OK-15 and OK-20 models did not send the spent cooling water into the top of the muffler as previous models had done. The new lower unit received a water line from the powerhead and sent the water out below the anti-cavitation plate. Early OK-15's used leftover mufflers that still had a bung on top to receive the spent cooling water. A stainless hex head plug filled this hole until it was eliminated from production.

The OK-20 differs from the OK-15 only by way of having detachable cylinder heads (Figure 11). When running the engines on a oil rich fuel mixture, in a cold climate, carbon would build up in the cylinders, often requiring them to have the cylinders and pistons scraped clean. The removable heads simplified this operation. The last of the OKs were sold off by Canadian dealers in the early 1950's. As the new models became further advanced, sporting synchronized throttles and gear shift capability, the OKs became obsolete. The OK series always wore Dull Aluminium paint, and were never painted Sea Mist Green like the other Postwar Johnson motors. This added to the antiquated appearance of their late 1920's design.



Fig. 11

OK-20 with Detachable

Article & Photo's : Adam Gibb



Fig. 10 The OK-15 1945-1948.

The Canadian OKs were commonly referred to as Eskimo motors. Although the name is no longer considered politically correct, it speaks to the popularity of these motors in remote northern regions. The most commonly accepted explanation for continuing the production of the OK series in Canada is the simplicity of operation and repair of these reliable engines. These motors were essentially a late 1920's design. As an increasing number of features added complexity and parts to the newer models, these simple OK motors gave the user the most reliability and ease of service where parts and service stations were few and far between. The OKs shared many common parts, allowing multiple motors to be combined, or easily repaired in the field with current parts, both new and used. The basic bore and stroke of the engine had been unchanged since 1928.

Pistons and carburetors could be interchanged between motors as early as the K-40, all the way through to the last OKs. Most other major components were common to all OK models. The few exceptions were the early and late lower unit designs and propellers. The two and three blade props could not be substituted for each other. All of the OKs up to the OK-10 used a crankshaft with female splines at the base. Beginning with the OK-15 a crankshaft with male splines was introduced. The newer crankshaft could be installed in the older engines if the driveshaft was also

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Canadian Confusion

Because these durable and long lived engines found their way to remote areas on both sides of the border, many are still found by collectors today. The serial numbers used on the Canadian OKs often lead to confusion. The models OK-10, OK-15 and OK-20 were never built in the US and do not show up on most Johnson model lists. The serial numbers used at the Canadian plant were much lower than those used in the US, in the same years. As a result, the age of many motors is often misidentified by those who are unfamiliar with them. For example, my OK-15 is serial number 51751. The motor was built in 1946. However, if someone looks at a US serial number chart, that serial number falls in the range used for 1927 US built motors. Supporting the confusion, is the fact that the OKs are a pre-war design and could pass for a motor of that vintage. To properly identify any OK-10, 15 or 20, it is essential to look at a Canadian serial # chart.

In Canada, Johnson produced a line of fire pumps used at mills and for fighting forest fires. These pumps used OK powerheads and had cooling water supplied by the pump. The round steel fuel tank used on the OK -55 model seems to have had a longer run on the fire pumps (Figure 12), but I have not been able to establish the exact year range that it was used, before returning to the aluminum, wrap around tank. The water pumps had model HOK stamped on the rope plates and used three and four digit serial numbers that were entirely different from the outboards. I have seen outboards that have had their powerheads replaced with one from a fire pump. The only giveaway is the HOK designation stamped on the rope plate.





Fig. 13, a 1938-40 Sears Waterwitch built by Johnson.

And Now For Something Completely Different

Between 1938 and 1940 some Johnson OK motors left the factory with no mention of Johnson, Sea Horse or any other typical identification. These motors were sold by Sears as Waterwitch motors (Figures 13,14). Sold as an 8HP model 550.75, the motors wore a Waterwitch rope plate in place of the typical Johnson piece. I do not know if these motors were produced in the Peterborough or Waukegan plant. Peterborough eventually produced all of OMCs export motors, however. I cannot confirm that the Waterwitch models were produced there. From the late 1940's onward, the Gale division of OMC did a lot of private label manufacturing. The Waterwitch motors are the only instance of Johnson producing motors under contract for another brand that I am aware of. The selection of the OK model for this purpose, further reinforces its original design as a low cost, no frills motor.



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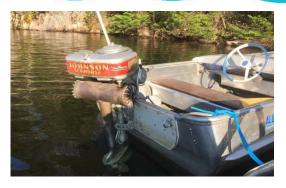
OK Series Decals

The OK series motors wore several different decals during the 20 years of production. I have seen 4 different decals used on the OKs including the one used on the round tank 1931 models. I will refer to these decals as Type 1 through 4. (See figures 15,16) Using sales literature as a guide for the type of decal used on each motor is not always 100% accurate. There are instances where brochures were printed before production took place or sales graphics were not updated when small decal changes were made. I have compiled a list based on the sales brochures and original condition motors that exist. I would like to hear from anyone that can help to confirm this list or clarify any errors and omissions. The 1932 OK-60 decal is not seen in the sales literature. The motor is always shown in a profile view.

More than OK

The OKs are a great motor to run. Like the Light Twin A series models, the OKs were produced in large numbers and are inexpensive to acquire. Parts are available due to the wide ranges of parts that interchange. They provide honest horsepower and any Johnson collector should have at least one in their stable.

Thanks to Ken Kirk, Jon Koranda, Jerry Ahrens, and Billy Hazlitt who provided both resources and clarification of various details. Thanks to Chuck Kober who started this off when he contacted me with a question about a OK-60 and got a longer answer then he bargained for.



The authors OK ready for Summer fun.

Fig. 15

Type 1



Type 2



Type 3



Type 4



Type 4

Fig. 16

Year	1931	1932	1933	1934	1935	1936	1937	1938	1939
Model Produced	OK-55	OK-60	OK-60	OK-60	OK-75	OK-75	OK-75	OK-75	OK-75
US Production	Yes	Yes	Yes*	Yes*	Yes*	NO	NO	NO	NO
Can Production	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Decal Used	Type 1	Type 2	Type 2	Type 2	Type 2	Type 2	Type 2	Type 2	Type 3
Year	1940	1941	1942-44	1945	1946	1947	1948	1949	1950
Model Produced	OK-10	OK-10	Wartime	OK-10/15	OK-15	OK-15	OK-15	OK-20	OK-20
	110	110			110	110	110	110	110