

## Supplemental Information

### Picking the Right Water Pump for your MGB

Water pumps for the MGB have been a problem in recent years. As the original equipment manufacturers stopped making them, replacement pumps from various sources became available. As the various original designs were consolidated, one pump after another was superseded or modified to fit a wider range of applications. It has been frustrating for everyone. We would order the appropriate part number from a supplier, but we'd get the latest design, and it would simply not work for some applications. Moss Motors, Ltd. has solved this problem. We now offer four Classic Gold water pumps for the MGB, covering all the original applications, while many suppliers offer only three pumps.

The Classic Gold pumps are faithful reproductions of the original water pumps, each one specific to the original application. Each pump design was based on an original sample of known origin. The Classic Gold water pump castings are made using high quality permanent metal molds. These are more expensive than the wooden molds generally used for limited production runs. The Classic Gold castings are therefore more faithful to the original design. Metal molds also produce parts with less "flashing", the ridges that form between the gaps in the tooling. This material is removed with hand held grinders, and that leave marks in the cast iron. Less flashing means less grinding and the overall finish is better.

The outside has to look like the original pump it is designed to replace, but there is no reason not to use modern manufacturing technology and components when assembling the pump. The pump casting is milled and bored to precise dimensions on a CNC machine to insure that every pump meets the same design tolerances. The means that the internal components fit properly and the holes for the mounting bolts are where they are supposed to be. The water pump shaft and the permanently lubricated and sealed bearings are of an upgraded design of the best quality available. The carbon seal is also made to current standards. The eight-hole hub design allows for fitting the OE and many aftermarket fans. The size of the impeller in each pump is based on the original design for each application, and they are designed for maximum flow. Every pump is oiled and sealed in plastic bags to protect the raw cast iron.

*Although every effort has been made to ensure the accuracy and clarity of this information, errors and/or omissions on our part are almost inevitable. Any suggestions that you may have that will improve the information (especially detailed installation notes) are welcome. Please use the simple email form on the "Contact Us" page on the Moss website: <http://www.mossmotors.com/AboutMoss/ContactUs.aspx> If you prefer, you may call our Technical Services Department at 805-681-3411. So many people call us for help that we are often not able to answer the calls as fast as we'd like, and you may be asked to leave a message. We apologize in advance for the inconvenience. We will get back to you within 2 business days.*



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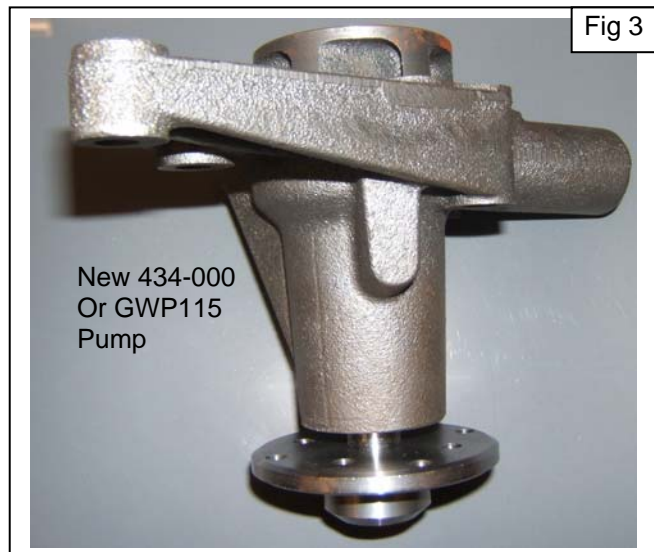
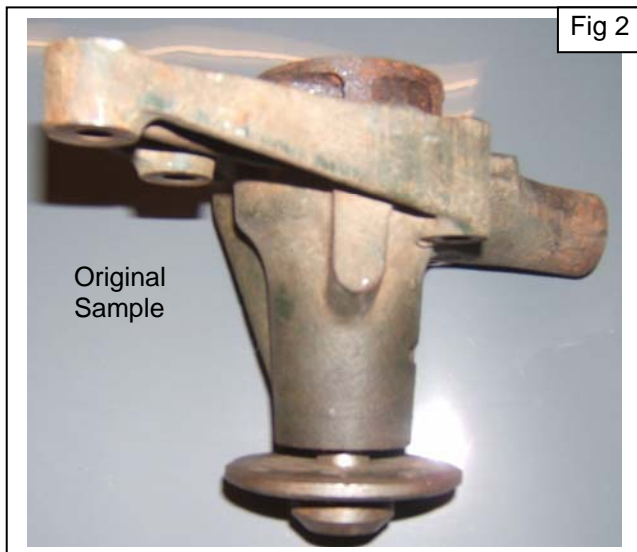
39 **A US or Non-US Spec MGB 1962-65 with 18G or 18GA 3 Main Bearing Engine**

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 41 **Use the 434-000 / GWP115 water pump.**  
 42 Cast iron, with no reinforcing ribs, as original.  
 43 Gasket included.

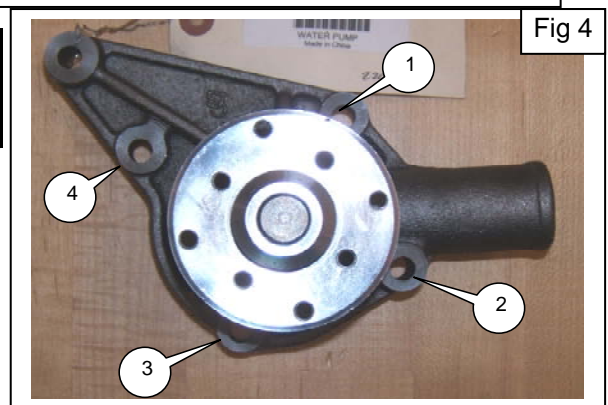
44  
 45 This water pump will only fit the 18G and 18GA three main engines. To  
 46 determine if you have a 3-main engine, you can check the engine number  
 47 plate for the 18G or 18GA prefix, or simply check for the mechanical tach  
 48 drive cable at the rear of the block on the left hand side; if you have the  
 49 mechanical tach drive (see Fig 1), you have a 3-main engine. The 5-main  
 50 bearing engine was introduced in October 1964 did not have the mechanical  
 51 tach drive (it was electric). The 5 main engines did not show up in the US  
 52 until 1965.



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| Boss    | Moss Eu  | Moss US | Catalog Listing                   | Qty |
|---------|----------|---------|-----------------------------------|-----|
| 1,2     | SH605141 | 322-440 | Bolt, water pump to block, 1 3/4" | 2   |
| 3,4     | SH605101 | 191-915 | Bolt, water pump to block, 1 1/4" | 2   |
| 1,2,3,4 | GHF332   | 365-730 | Washer, lock                      | 4   |



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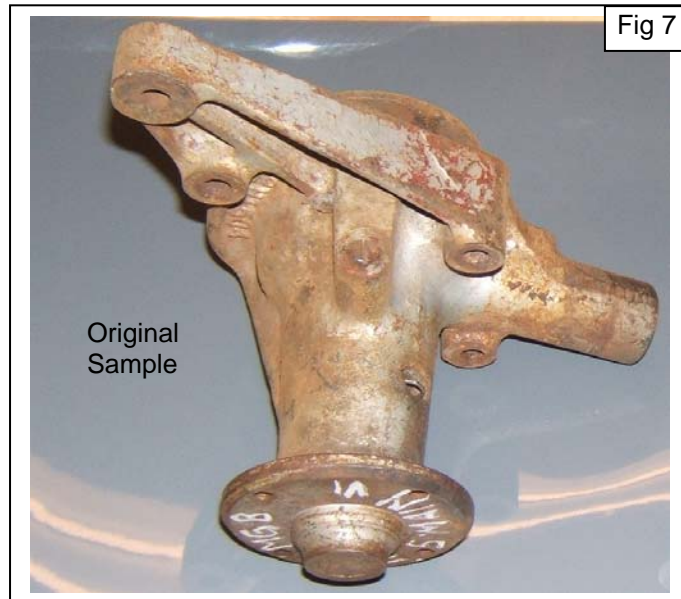
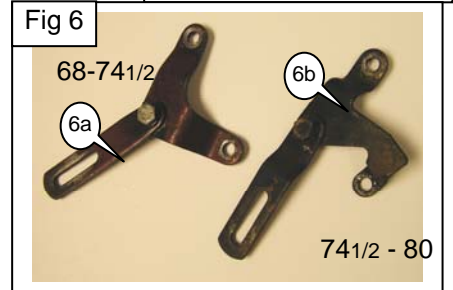
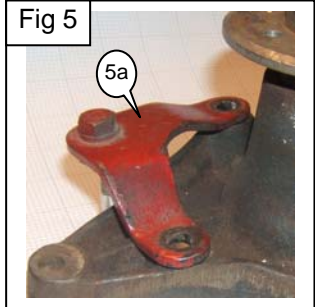
**For a US or Non-US Spec MGB 65-71 18GB or 18GG 5 Main Bearing Engine**

**Use the 434-030 / GWP114 water pump.**

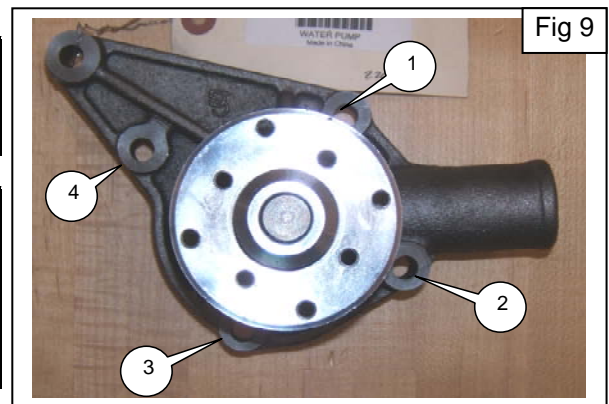
The OE pumps are cast iron, with no reinforcing ribs. The original pulley was about 3 inches deep; this pulley will need to be transferred to the new pump. If you don't have the right pulley, you will need to locate a used one as they are no longer in production.

The US spec MGBs from 1968 were fitted with a smog pump. The smog pump bracket 12H2448 (5a) is secured with the water pump mounting bolts on bosses #1 and #4. Note the difference between the early 12H2448 bracket (6a) and the later CAM1190 bracket (6b)

The 434-030 / GWP114 pump is cast iron, with no reinforcing ribs, as original. The pump-to-block gasket is included.



| <b>Pump without the Smog Pump bracket</b>                  |          |         |                                 |     |
|--|----------|---------|---------------------------------|-----|
| Boss   | Moss Eu  | Moss US | Catalog Listing                 | Qty |
| 1,2  | BH605141 | 322-440 | Bolt, pump to block, 1 3/4"     | 2   |
| 3,4  | SH605101 | 191-915 | Bolt, pump to block, 1 1/4"     | 2   |
| 1,2,3,4  | GHF332   | 365-730 | Washer, lock                    | 4   |
| <b>Pump with the Smog Pump bracket (US, Canada, 68-71)</b> |          |         |                                 |     |
| 1  | BH605161 | 052-773 | Bolt, pump to block 2"          | 1   |
| 2  | BH605141 | 322-440 | Bolt, pump to block, 1 3/4"     | 1   |
| 3  | SH605101 | 191-915 | Setscrew, pump to block, 1 1/4" | 1   |
| 4  | GHF104   | 320-415 | Bolt, pump to block, 1 1/2"     | 1   |
| 1,2,3,4  | GHF332   | 365-730 | Washer, lock                    | 4   |
| 1,4  | GHF301   | 365-720 | Washer, flat, 5/16"             | 2   |



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## US Spec MGB 72-74 1/2, with 18V Engine, and Fitted with a Smog Pump

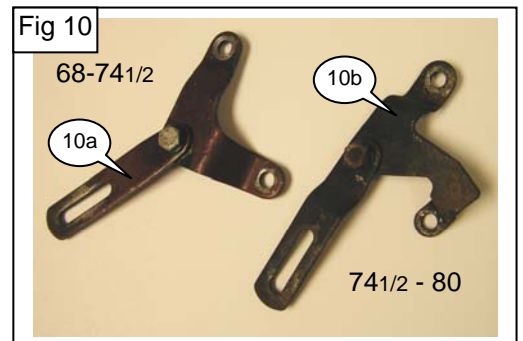
### Use the 434-035 / GWP117 water pump.

The OE pumps are cast iron, with no reinforcing ribs. The upper mounting bolt on the pump goes through a boss (11a) which is 1.25" thick. The bolt used here is much longer than used on the later pump. This boss supports the smog pump bracket 12H2448 (10a), which is secured with the water pump mounting bolts on bosses #1 and #4. If you order a GWP117 from many suppliers, you will receive a GWP130. This is based on an invalid supercession that originated in UNIPART Fast Moving Parts Book (August 1982, JRT302282, section 520). While perfectly logical outside the US and Canada, it is invalid because the GWP130 pump will not work with the 12H2448 smog pump bracket. If you have a GWP130 pump, the upper water pump mounting bolt may be too short for the 434-035 or GWP117 pump because the boss on the later pump is much shorter. (See hardware listed below). The 434-035 / GWP117 pump is cast iron, with no reinforcing ribs, as original. The pump-to-block gasket is included.

### Non-US Spec MGB 72-74.5

The GWP117 was fitted to all MGBs in production, regardless of their destination. Although the features of the GWP117 make it essential for use on cars with a smog pump, it is correct for all MGBs built during this time period. This brings up the issue of "Model Year" which became important in North America with the 1968 Federal Emissions and safety regulations. This is confusing, because many cars were registered based on the year sold, not the actual "Model Year". In addition, the cars for a given model year were in production months before the end of the calendar year; the first 1964 MGB was actually built in August of 1963. Model year remains important in North America, but it has less meaning outside that region.

To answer the question as to which pump you should order for a non-US spec MGB, it will depend on what is on the car now. If the pump on your MGB looks like the pump in Figure 11, order a 434-035 or GWP117. If it looks like the 434-045 or GWP130 on the next page and everything fits and lines up just fine, and you don't mind having a pump that is technically incorrect, you can buy another 434-045 or GWP130.

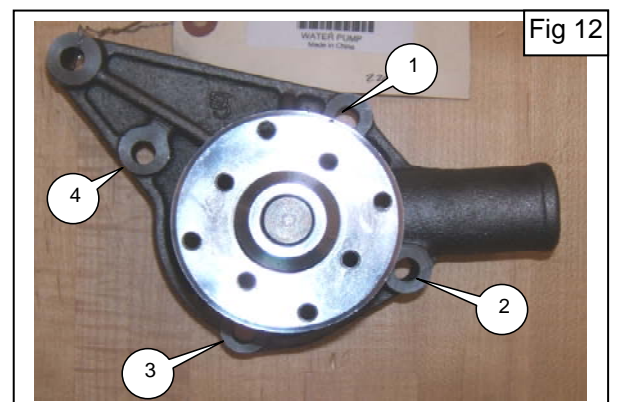


#### Pump without the Smog Pump bracket

| Boss    | Moss Eu  | Moss US | Catalog Listing             | Qty |
|---------|----------|---------|-----------------------------|-----|
| 1,2     | BH605141 | 322-440 | Bolt, pump to block, 1 3/4" | 2   |
| 3,4     | SH605101 | 191-915 | Bolt, pump to block, 1 1/4" | 2   |
| 1,2,3,4 | GHF332   | 365-730 | Washer, lock                | 4   |

#### Pump with the Smog Pump bracket (US, Canada, 68-71)

|         |          |         |                             |   |
|---------|----------|---------|-----------------------------|---|
| 1       | BH605161 | 052-773 | Bolt, pump to block 2"      | 1 |
| 2       | BH605141 | 322-440 | Bolt, pump to block, 1 3/4" | 1 |
| 3       | SH605101 | 191-915 | Bolt, pump to block, 1 1/4" | 1 |
| 4       | GHF104   | 320-415 | Bolt, pump to block, 1 1/2" | 1 |
| 1,2,3,4 | GHF332   | 365-730 | Washer, lock                | 4 |
| 1,4     | GHF301   | 365-720 | Washer, flat, 5/16"         | 2 |



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166 **A US spec MGB 74 1/2 - 80, with 18V Engine and Fitted with a Smog Pump**

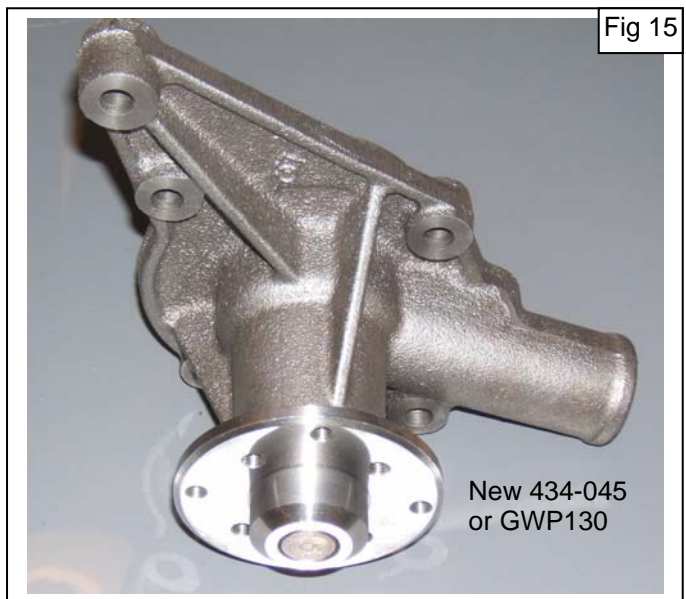
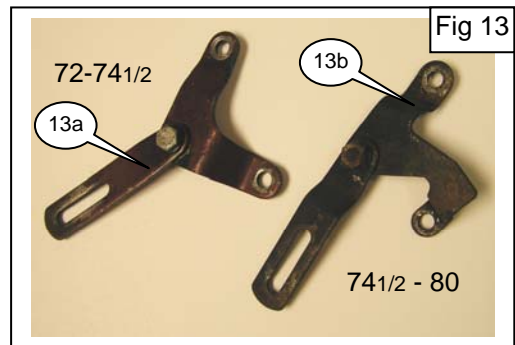
167 The OE pumps are cast iron, with reinforcing ribs.  
 168 The late smog pump bracket CAM1190 (13b) is quite different  
 169 from the earlier 12H2448 bracket (13a) in that it stands up  
 170 higher away from the water pump body. This is necessary to  
 171 clear the reinforcing ribs found on the GWP130 pumps. The  
 172 CAM1190 bracket is secured with the water pump mounting  
 173 bolts on bosses #1 and #4.

174  
 175 **Use the 434-045 or GWP130 water pump.**  
 176 Cast iron, with reinforcing ribs, as original.  
 177 Gasket included.  
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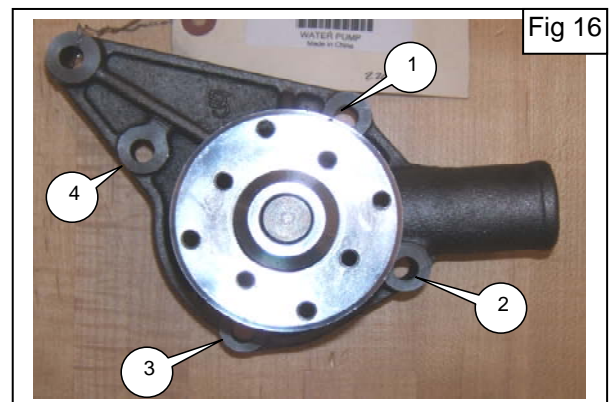
179 **A Non-US Spec MGB 74 1/2 - 80 with 18V Engine and No Smog Pump**

180 Without the smog pump, a non-US spec MGB should use the 434-045 or GWP130. Actually, any 18V  
 181 engine (model year 1972 and later, built May '71 on) can be fitted with a 434-045 or GWP130 so long as  
 182 there is no smog pump. Although not technically correct for the 72-74 1/2 cars which used the 434-035 or  
 183 GWP117, the GWP130 has been supplied for years for any MGB with an 18V engine. The only issue you  
 184 may have with our 242-045 or GWP130 may be the mounting hardware. There are GWP130s in  
 185 circulation that have non-standard boss heights. As a result, you may find that you need new bolts of  
 186 different lengths. See our hardware listing below.

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| <b>Pump without the Smog Pump bracket</b>                      |          |         |                             |     |
|--|----------|---------|-----------------------------|-----|
| Boss   | Moss Eu  | Moss US | Catalog Listing             | Qty |
| 1,3,4  | GHF103   | 322-290 | Bolt, pump to block, 1"     | 3   |
| 2  | BH605141 | 322-440 | Bolt, pump to block, 1 3/4" | 1   |
| 1,2,3,4  | GHF332   | 365-730 | Washer, lock                | 4   |
| <b>Pump with the Smog Pump bracket (US, Canada, 74.5 - 80)</b> |          |         |                             |     |
| 1, 4   | SH605101 | 191-915 | Bolt, pump to block, 1 1/4" | 2   |
| 2  | BH605141 | 322-440 | Bolt, pump to block, 1 3/4" | 1   |
| 3  | GHF103   | 322-290 | Bolt, pump to block, 1"     | 1   |
| 1,2,3,4  | GHF332   | 365-730 | Washer, lock                | 4   |
| 1,4  | GHF301   | 365-720 | Washer, flat, 5/16"         | 2   |



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