

1 **Supplemental Information**  
2 **for**  
3 **461-571 or 22H54K Laygear Kit**  
4 **MGA, MGB 62-65 (3-bearing laygear)**

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6 The factory designed the  
7 laygear to be supported by  
8 two groups of 20 loose needle  
9 bearings. This bearing  
10 arrangement was replaced by  
11 sets of 12 caged roller  
12 bearings. In effect, this  
13 reduced the number of  
14 needles in contact with the  
15 layshaft because the cage  
16 takes up some room. This in  
17 turn increased the load on the  
18 layshaft considerably. Much  
19 has been written on how to  
20 deal with the situation, from  
21 adding more caged bearings  
22 to fitting an MGB gearbox.



23  
24 Our English Division, Moss Europe, has come up with a solution that goes back to loose needle rollers.  
25 The laygear is fitted with two sets of 20 needle rollers, each one being 3mm in diameter and 29mm long.  
26

27 This effectively doubles the number of load bearing needles from 4 to 8 at each end and, because they are  
28 much longer, these needles distribute the load over a larger area on the layshaft. This is all well and good,  
29 but it makes the assembly process more complicated. And this is where years of experience make the  
30 difference.

31  
32 The new laygear kit uses a special spacer in the middle to separate the two sets of needle bearings, and we  
33 install the spacer and the bearings for you. To hold the needles in place, we use a dummy layshaft which is  
34 long enough to allow the front thrust washer to be fitted as well. A new layshaft is also included in the kit.  
35 All in all, this is as close as we can get to a “drop-in installation”. If you are looking for a new layshaft &  
36 laygear, this kit provides a solution to a long standing problem.

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42 *Although every effort has been made to ensure the accuracy and clarity of this information, errors and/or omissions on*  
43 *our part are almost inevitable. Any suggestions that you may have that will improve the information (especially*  
44 *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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