

G503 WWII 1945 Willys MB Jeep Vacuum Wipers assembly

This article shows the mystery behind the correct WWII Jeep vacuum Windshield wipers and the proper assembly.



Vacuum wipers were field mods in 1944 and production mods in 1945, but there are questions as to the correct parts used for the vacuum wiper it. To start with, let's look at a NOS vacuum wiper kit. The kit number was G503-5700249



In the kit you see there is 1/4" brass tubing for around the windshield, and a brass tube for connection to manifold, rubber hose tubing, clips for the windshield, motorized wipers, blades, the elusive metal "Y" connector, bushings for the exhaust manifold, and the clips/hardware.



A frequent question is, what is the correct Trico wiper motor? The model number is S 583-1 which does not have markings on the face of the wiper motors.



Don't be fooled! Some vendors are passing this wiper motor off as being correct for WWII because of the stamping at the bottom S-583-1. It is not! This wiper motor is April 1954-Dec 1955 according to TM manuals tracing the part number stamping.



Here you see some of the hardware that comes in the NOS kit. Clips, Screws around the windshield, the metal "Y" connector, the brass bushings for the connection to the manifold.



A close up inspection on the Y connector and the brass bushings. These brass fittings are a little hard to find now a days because todays standards use compression fits.



The wiper arms and blades are also included in this kit as well. If you can't find NOS sets, the repo sets are pretty close.



Here you see an two examples of the fixed length brass tubing that connects to the manifold. The brass tube to the left is the NOS one that comes with the kit. The one on the Right, has been fitted on the the bushing with a <td> fit. The angle in this example, is for a field mod with rubber tubing coming under the hood and not through the cowl (see further down the article).

This piece of brass tubing in 10 inches long.



A closer inspection you see the swedge fit on the brass bushing. This is now ready to insert into the next bushing which goes into the manifold.

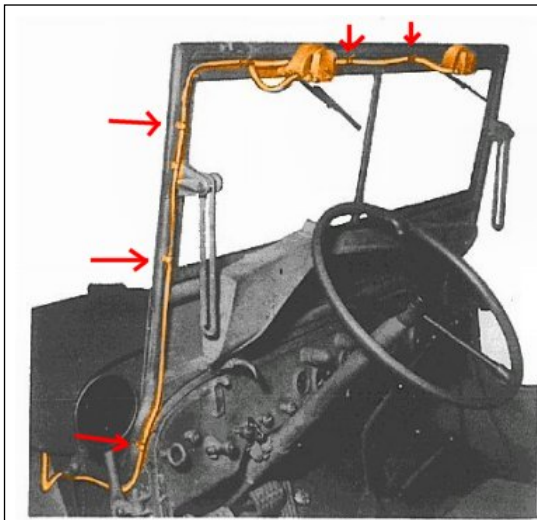


Here you see an example of how the bushings are tightened into a manifold. The brass tubing shown here is angled for a field mod with the rubber tubing going over the cowl and under the hood.

If you have a hole in your cowl, the angle will only be about 30 degrees.



Here is an example where the ACM II tub has the provision for the vacuum wipers hole. In this case, the brass tubing in #10 will be slightly bent meet the rubber tubing through the cowl.



In the Feb 15 1945 ORD9 manual you will see that they show the route for the vacuum wipers.

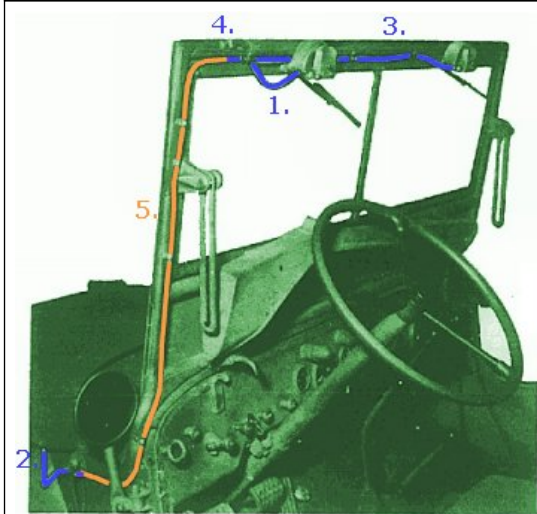
 Todd Paisley notes on the G that MB's with Vacuum Wipers were S/N's :
 252516 to 336270
363849 to 395156
437213 and up

 Fords, we are still researching this answer.

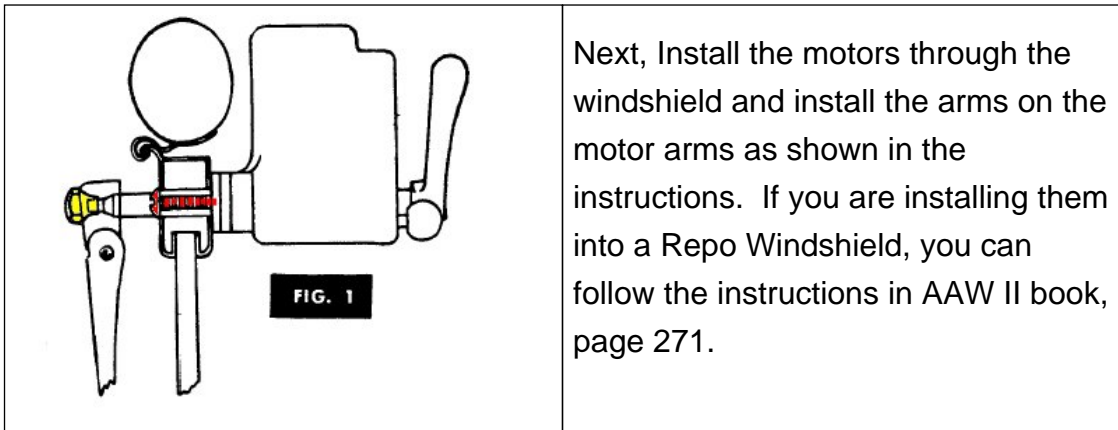


There are four rubber hoses that come with the NOS kit. Each are the following lengths:

1) Short: 5 1/4"
2) Medium: 14 1/2 in
3) Long: 28 in.
4) very Short: 1 1/4 in.
5) Brass: 44 1/8 in.



From the picture above, the rubber pieces and brass mounting is shown here. The brass piece in the NOS kit is already painted OD.



Next, Install the motors through the windshield and install the arms on the motor arms as shown in the instructions. If you are installing them into a Repo Windshield, you can follow the instructions in AAW II book, page 271.



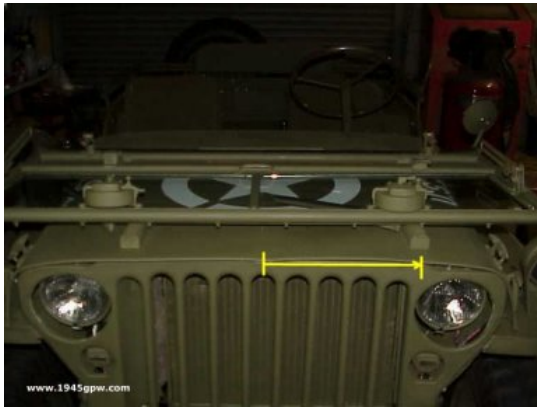
The tubing is pretty thick, here you see the OD 3/8 in. and the ID is a little less than 1/4in.



Here you see the brass fittings made by manufacturer EDELMANN and their part numbers. These are close but not exact. The bottom large bushing needs to tap the threads further for the middle piece to fit like original. The middle piece, has a slightly smaller Inside Diameter than the NOS piece.
Part #s:
111400
112420
210420



Here is a close up of the three bushings, note the middle piece and the larger inside diameter.



Hood Block
Note: Note: after installing the wiper motors you will note that putting your windshield down lands the wiper motor arm and blade on the driver hood block! Here you see in the picture, that you must move the hood block on the driver side. From the center of the hood seam, this appears to be about 13 inches. No documentation has been found to verify this length other than original hoods that have recorded this modification.