

Supplemental Information for Wire Wheel Conversion Kits for MG TF 111-338 with Painted 60 Spoke Wire Wheels 111-348 with Chrome 60 Spoke Wire Wheels

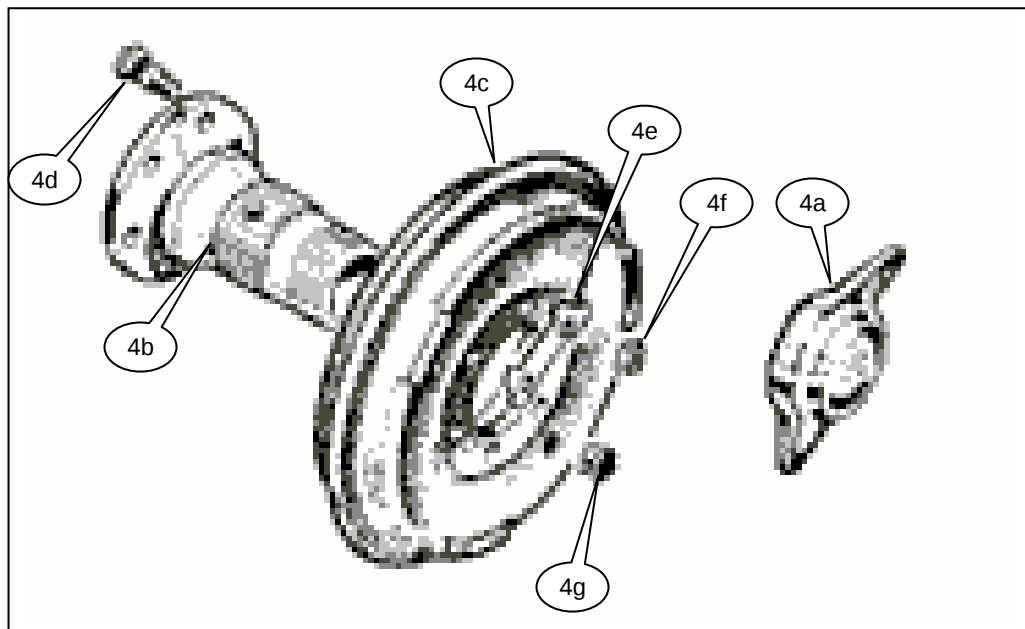
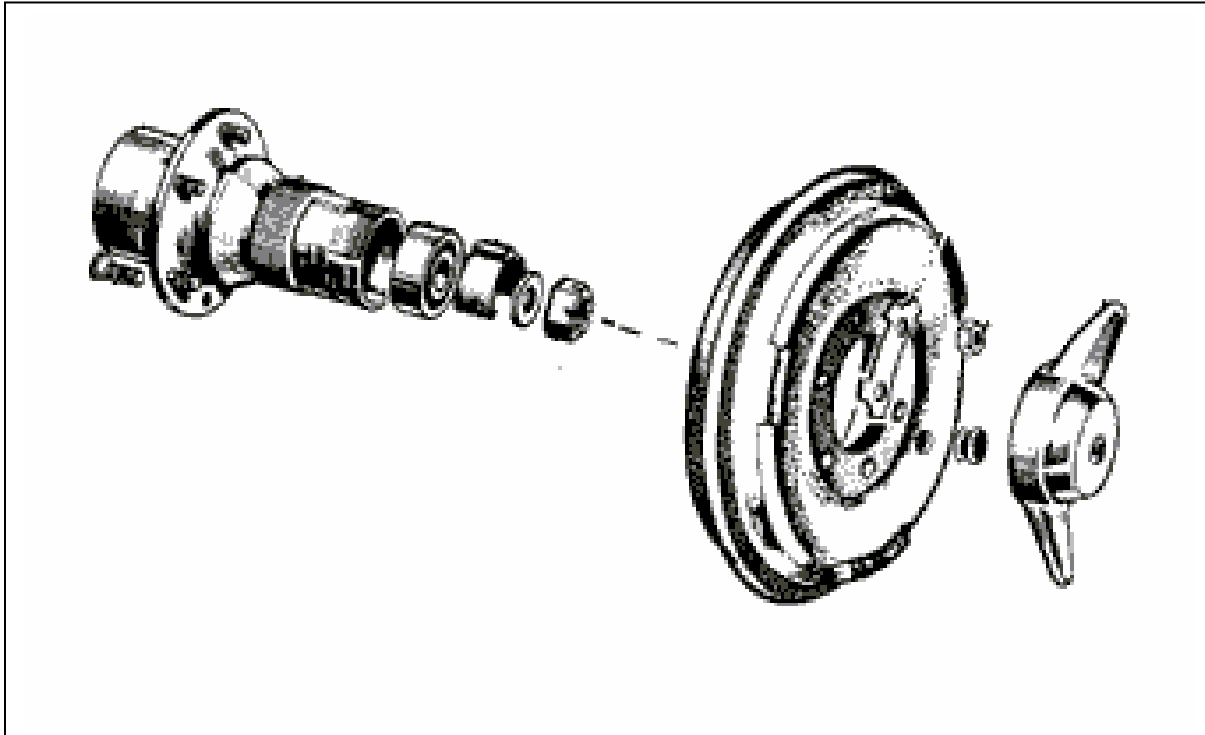
The factory offered a wire wheel conversion kit which allowed the owner to convert his MG TF with disc wheels to wire wheels. We have reproduced this kit in two versions, one with painted wires wheels, the other with chrome. Each kit includes everything you need to make the conversion. The conversion is quite straightforward, with the essential operations covered as routine service operations in the factory workshop manual. There is only one step that actually requires some cutting and welding, and more detailed information is provided for that operation.

List of the Components in the Two Kits

Ref	No.	Qty	Description	111-338	111-348
	454-620	5	WIRE WHEEL, 15 X 4.5, 60S, PAINTED	Yes	
	454-630	5	WIRE WHEEL, 15 X 4.5, 60S, CHROME		Yes
3a,4a	200-210	2	WHEEL NUT, MG CREST,12TPI, R/H	Yes	Yes
3a,4a	200-220	2	WHEEL NUT, MG CREST,12TPI, L/H	Yes	Yes
3b	264-300	1	HUB, WIRE WHEEL, FRONT, R/H	Yes	Yes
3b	264-310	1	HUB, WIRE WHEEL, FRONT, L/H	Yes	Yes
4b	266-390	1	HUB, W/WHL, R/H REAR	Yes	Yes
4b	266-400	1	HUB, W/WHL, L/H REAR	Yes	Yes
3c,4c	264-320	4	BRAKE DRUM	Yes	Yes
1a	200-260	1	KNOCKOFF, SPARE WHEEL	Yes	Yes
1b	201-030	1	MEDALLION, MG OCTAGON, BLACK/WHITE	Yes	Yes
1c	NA	1	NUT (included w/medallion)	Yes	Yes
1d	NA	1	LOCK WASHER (included w/medallion)	Yes	Yes
1e	315-235	1	WASHER, FLAT, 3/16 ID, 5/8 OD	Yes	Yes
2a	234-157	1	ADAPTER, SPARE WHEEL	Yes	Yes
3d,4d	264-140	24	STUD, W/WHEEL HUB	Yes	Yes
3e,4e	264-150	12	TAB WASHER	Yes	Yes
3f,4f	310-230	24	NUT, JAM, 3/8 UNF, PLAIN	Yes	Yes
3g,4g	328-410	4	PLUG, RUBBER, IN BRAKE DRUM	Yes	Yes
	386-000	1	HAMMER, KNOCKOFF, COPPER, 1 LB	Yes	Yes



The two MG medallions (1b) are included in the photo so we could show you both sides of the medallion. There is only one medallion supplied in the kit. The picture in the middle shows the medallion installed.



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Instruction Sheet 111-338_111-348 February 2008

Supplemental Information for 234-157 Spare Wheel Adaptor MGTF

As supplied with the following kits:

111-338 W/WHL CONV KIT, PAINTED, 60S

MG TF

111-348 W/WHL CONV KIT, CHROME, 60S

MG TF

Installation Tips

The factory spare tire rack on an MG TFs fitted with disc wheels is very similar to the spare tire rack on an MG TF with wire wheels. The three main support tubes and the main body of the large diameter center tube are identical. It is only the outermost portion of the large center tube that is different, and that is relatively easy to change. These instructions are not comprehensive. Please read through them carefully before you begin. If you do not have the necessary tools, or if you have any doubts about your ability to complete this project, have it done by a professional.

Converting the outer part of this assembly from disc wheel to wire wheel specification with our 234-157 Spare Wheel Adaptor (Fig 1) is accomplished as follows:

The flange which secures the disc wheel, along with a small portion of the large diameter tube to which the flange is attached, must be cut off. Measure 2 13/16 inches from the **forward** end of the tube, and mark a line all the way around the tube at that distance from the forward end of the tube. (Fig 2) You may find that it is easier to make a mark on a piece of masking tape wrapped around the tube.

Cut the tube at the line marked. The cut-off flange is no longer required.

Insert the threaded steel adaptor (Fig 1) into the end of the tube.

Weld it in place with a continuous bead where it joins the tube.

Clean up the paint around the weld using Prep-Sol or the equivalent.

Mask off the area so you can re-spray with automotive primer, and finally, with paint matching the rest of the car.

Original wire wheel racks had a steel "finger" or peg (3.1) which fit between the wire wheel spokes. This finger kept the spare wheel from rotating. As you can imagine, the spokes in contact with this steel peg suffered, and in many cases the paint was chipped off the spokes. For this reason, Moss does not recommend fitting this steel finger or peg, and we do not supply these "fingers" with the 234-157 Spare Wheel Adaptor. If you want 100% originality, a reasonable facsimile may be bent from 3/8" round bar stock and welded to the top edge of the cut down tube (3.1).

The shape and size of the peg is roughly that shown in Fig 4

Fig 1

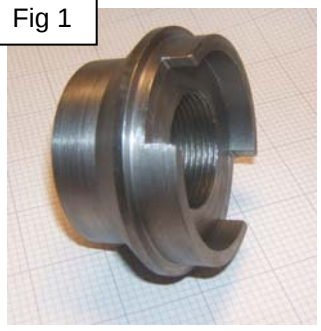


Fig 2

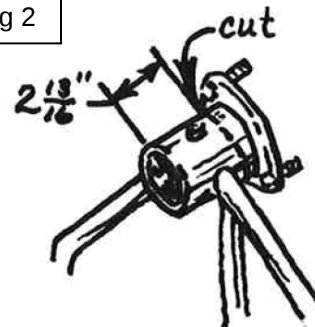


Fig 3

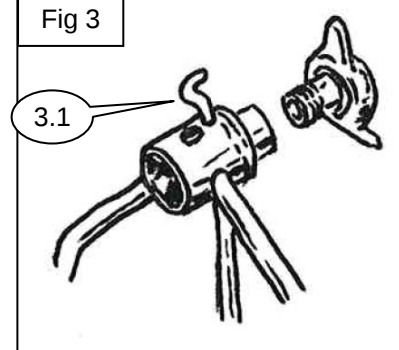
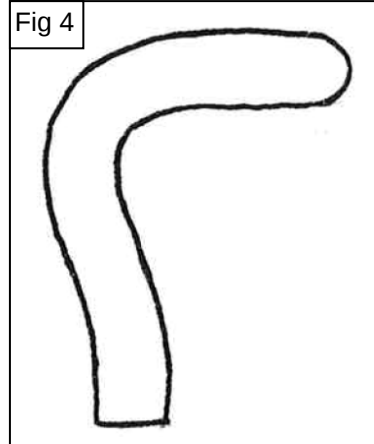


Fig 4



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Instruction 234-157_980-046 October 1997, revised February 2008

Supplemental Information & Instructions for Balancing Center Lock Wire Wheels

A Little History

Back in the 1980s, we began receiving complaints about wire wheels that were “egg shaped” or so far out of round they could not be balanced. We wound up checking every wire wheel upon receipt using a jig mounted wire wheel hub and a pair of dial indicators. After 6 months, we knew beyond the shadow of a doubt that 99.99% of the wheels were within tolerances. Why then, were we getting so many complaints?

I turned out to be the equipment used to balance the wheels. As the new computer controlled balancing machines came into use, our problems increased because the new equipment (and the new technicians) did not understand how the wire wheels had to be mounted in order to be balanced. We prepared these instructions and since then, they have been included with all our wire wheels. Complaints about wire wheels essentially stopped in a matter of weeks. Now, when we get a complaint about wire wheels, it almost invariably comes down to a shop that has ignored our instructions because they have total faith in their “universal” state-of-the-art equipment.

Before you take your wheels to be balanced...

There are a couple of things that need to be done.

Check the splines

Jack up the car. Support it on jack stands.

Remove one wheel at a time, and thoroughly degrease and clean the splines on the wire wheel hub.

Inspect the splines carefully. Fig 1 shows new splines. Fig 2 gives you the traditional guide to worn splines. If the splines are worn, replace the hubs. Putting new wire wheels on hubs with worn or damaged splines will quickly damage the splines in the wheels.

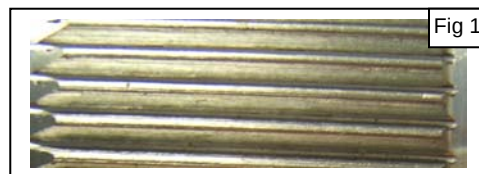


Fig 1

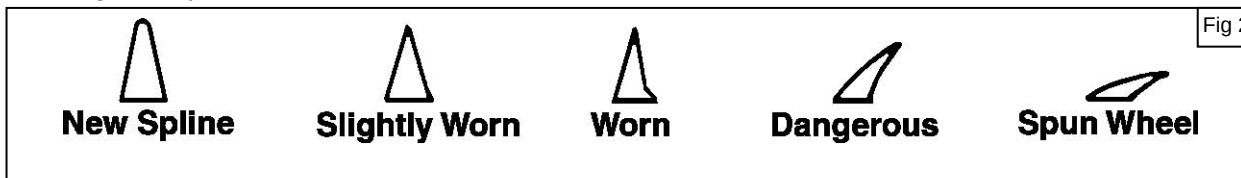


Fig 2

Check the wheels

If the splines are OK, pick a hub to use to check the new wire wheels.

Thoroughly clean off the beveled surface on the hub where the wire wheel makes contact (3a). Use a tooth brush and solvent first, then a wire brush if necessary and take your time. Clean and degrease the wheel nut, particularly the bevel (which contacts the wheel) and the threads. Once the hub and wheel nut are clean and dry, mount a new wheel, and tighten the knockoff normally. Attach a sharpened pencil to something high enough to bring the pointer up level with the rim of the wheel. I tape a pencil to a jack stand, but a stack of wood will work fine. The point of the pencil should almost touch the wheel at the point shown (4a). Do not use the rim bead (4B) as a reference. Rotate the wheel, looking for the section of the wheel that comes closest to the point of the pencil. Move the pencil in until it just touches the rim. Now rotate the wheel until there is a gap between the pencil and the rim. Measure it and record the number. Repeat this with all of the new rims.

Triumph specifications call for a maximum “wobble” of 0.094” (~ 3/32”). MG was more particular, calling for 0.055”.

If your wheels check out OK, they can be balanced.



Fig 3

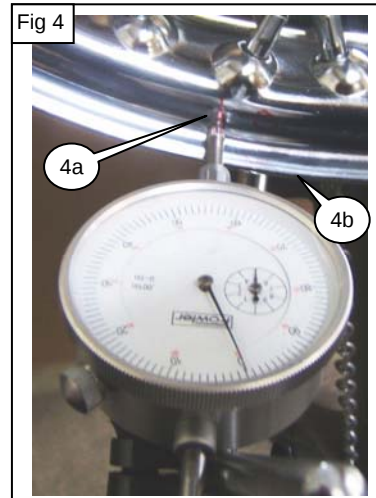


Fig 4

Balancing Center Lock Wire Wheels

The best way to have wheels balanced is on the car. That way you balance all the rotating mass, and it always produces the best results. However, many shops no longer have the proper equipment. Static balancing, also called bubble balancing is simple and very effective. Most shops will want to use the computer balancing machine because it is quick and very precise.

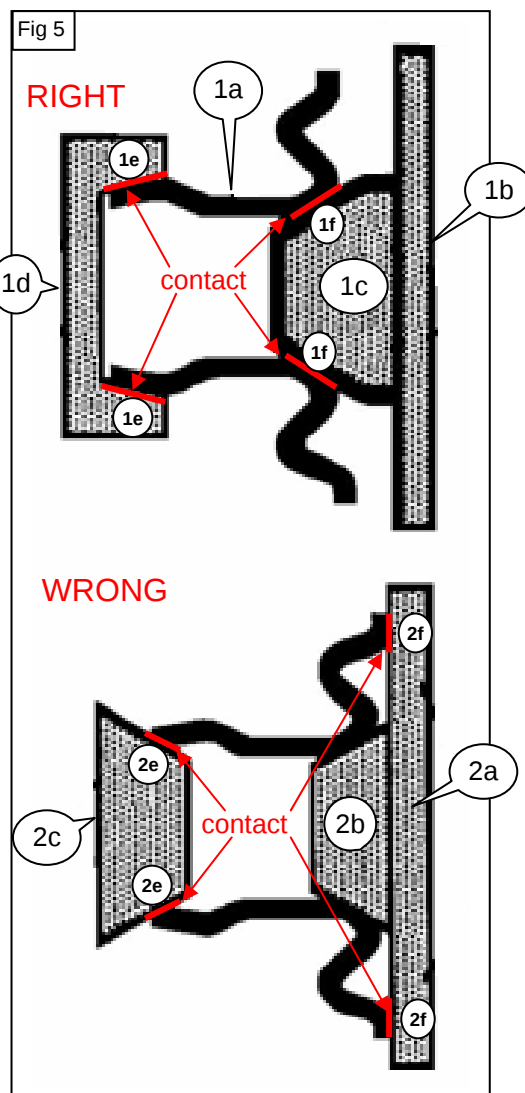
The illustration (Fig 5) shows the right way and one of the many wrong ways to mount a center lock wire wheel on a balancing machine.

RIGHT

The splined hub or center section of a wire wheel (1a) is mounted on a computerized wheel balancing machine, which consists of the base plate (1b), the sprung cone (1c), and the balancer lock nut (1d). There are only two machined contact surfaces on the hub of the wheel. The outer surface (1e) is where the wheel nut makes contact. The inner surface (1f) is machined to match the sloped or angled surface machined into the wire wheel hub. *If the sprung cone (1c) and lock nut (1d) touch the hub of the wire wheel anywhere else, the wheel will appear to be "out of round", and if they balance the wheel, it will take an unusual amount of wheel weights to "balance the wheel". Once on the car, the wheels will vibrate terribly because they have not really been balanced.*

WRONG

Wire wheels are frequently mounted on computerized balancing equipment using two "universal cones". This causes several problems. If the sprung cone (2b) is too small, the outer edge of the wire wheel hub will contact the base plate at (2f). This area of the wire wheel hub is not a machined surface and it will cause the wheel to wobble on the machine, making it look like a defective wheel. If the outer cone (2c) goes inside the lip of the hub of the wire wheel, it is touching on two surfaces (2e) that are uneven, and this will also cause the wheel to wobble. There are a number of other problems which vary from machine to machine, but these are the main problems.



How Do I Get This Done Right?

Remember that they are your wheels and your car. Have them balanced on the car if possible. If that cannot be done, ask the members of your club who balances British wire wheels in town. Call the shops yourself- ask them if they have balanced center lock wire wheels. You want to talk to the technician that did it. If they tell you they wobbled a lot and took lots of weight, find another shop. If they say they have done it and they have the proper adapters, check it out. If they have the pieces to mount the wheel correctly (as shown above) see what happens with one wheel. If you checked the wheels before you had them balanced, you know that the technician telling you the wheels are out of round is mistaken, and you can share this document with them and see if they have the proper equipment. If they don't, take your wheels to another shop or have the wheels balanced statically (bubble balanced). Remember to grease the bevels, splines, and threads on the hubs with white lithium grease before you fit the wheels.



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