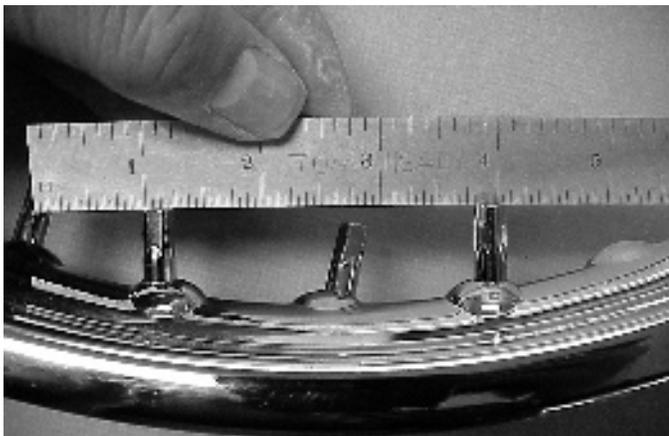
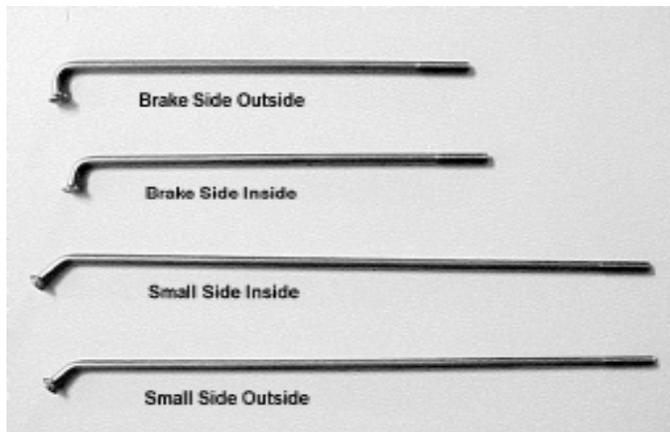

Lacing Triumph BSA 37-3818 Front Conical

by John Healy

37-3818 Rim Offset:

Rim is handed: See text.



Put a pair of nipples in one side of the rim as above. With a small scale measure how wide they are. Do the same to the other side. On a 1963-1970 Triumph rear rim # 37-1007 the difference between the two will be about 1/4 inch. The widest pair will go on the brake drum side of the hub. To ease assembly mark this side "brake drum."

The front conical rim (37-3818) is **handed**. You can see from the pictures that the angle the nipple exits the rim varies from one side to the other. To verify this place loose nipples in the rim and compare the angles of each side before offering the rim. This simple step will save you from having to remove and re-lace the rim if you guessed wrong.

If you are using Buchanan spokes you will have to check to see if they fit into the spoke holes in the hub. Typically you will have to increase the size of the hole in the hub to accommodate the new Buchanan spoke. This is normal. You will also have to have enough room in the hole to allow the spoke to be rotated to its final position. Care should be taken to be sure the inside set of 10 on the small-side of the hub (off-brake-drum-side) can turn freely as they are offered in position.

Each set of 10 spokes for this wheel is unique and must be placed in the proper hole. See picture of spokes for further explanation.

NOTE:

*The hub used in the pictures is **chromed plated** and special care must be taken to insure the spokes are able to be fit into the spoke holes and move freely in the hub before it is plated. This would be the same if you are going to paint the hub. It is an understatement to say: "it is a bit of a bother to have to drill out spoke holes after you have chrome plated the hub."*

First Set of 10 Spokes:

This rim laces differently to the conical rear rim. While there is a bit of leeway when you begin to lace the spokes to the rear wheel, the front wheel is not that forgiving. You must start with a specific spoke. What I like to call the **key spoke**.

With this wheel the **key spoke** is the **brake-side-inside** (the one I like to start with first). It is offered to the **clockwise** most spoke hole of the brake-side pair as viewed from the **large-side** of the hub.

Place the spoke into the hub from the outside, turning it so it radiates **clockwise** as viewed from the **brake-side** of the hub. Locate the dimple in the rim with the hole facing the spoke on the **rim's brake-side**. Offer the nipples so a couple of threads still show.

Second Set of 10 Spokes:

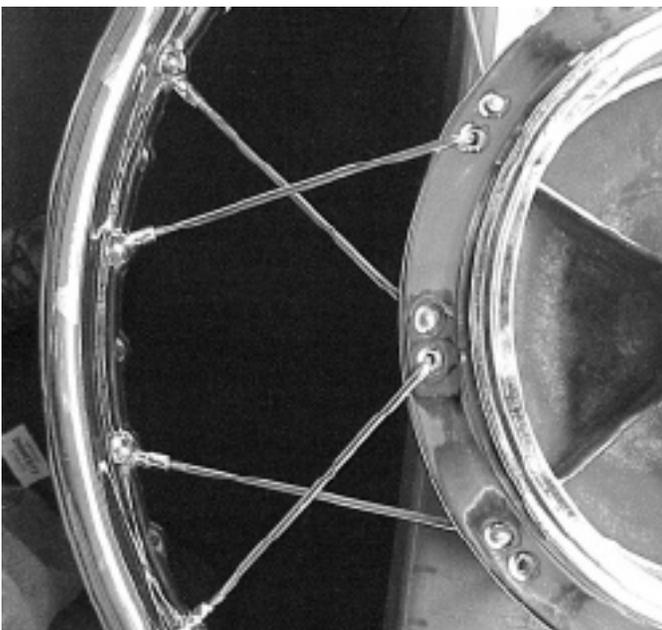
Still on the brake-side offer the next set of spokes. From the inside of the flange offer the remaining 10 spokes laying them so they radiate **counter-clockwise** when viewed from the **brake-side**. Locate the dimple on the rim with the hole facing the spoke on the rim's hub-large-side. Offer the nipples so a couple of threads still show.

Third Set of 10 Spokes:

Now move attention to the **small-side** of the hub offering the 10 **small-side-inside** spokes and lay them so they radiate **clockwise** as viewed from the **small-side** of the hub. Locate the dimple on the rim with the hole facing the spoke on the hub's small-side. Offer the nipples so a couple of threads still show.

Last Set of 10 Spokes:

Next offer the **small-side-outside** spokes and lay them so they radiate clockwise as viewed from the small-side of the hub. Locate the dimple on the rim with the hole facing the spoke on the rim's hub-small-side of the rim. Offer the nipples so a couple of threads still show.



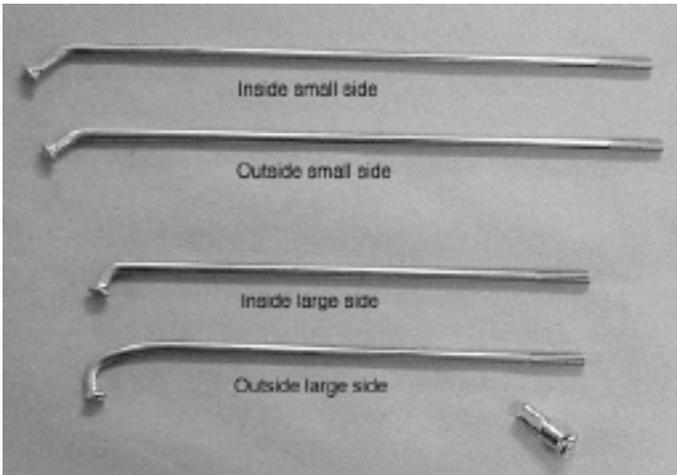
Lacing Triumph BSA 37-3784 Rear Conical

by John Healy

37-3784 rim offset:

The offset is 1 5/16" measured from the edge, or side, of the rim rim to the sprocket mounting surface of the hub.

Rim is handed: See text.



The set of 40 spokes for the rear conical wheel consists of 4 sets or 10 spokes each. Buchanan spoke sets are made to fit a rim that is dimpled and pierced to the original pattern.



Buchanan supplies a heavy duty spoke for these wheels. For the spokes to fit into the hub you will have to enlarge the holes in the hub.

The Conical wheel rim is handed. You can see from the pictures that the angle the nipple exits the rim varies from one side to the other. To verify this place loose nipples in the rim and compare the angles at each side before offering the rim. This simple step will save you from having to remove and relace the rim if you guessed wrong.

Note:

If you are using Buchanan spokes you will have to check to see if they fit into the holes in the hub. Typically you will have to increase the size of the hole in the hub to allow the spokes to enter the hole and be able to turn in the proper direction. Only enlarge the hole until you are able to insert the spoke and turn it toward the rim. It is important that you enlarge the holes in the same direction as the original holes.

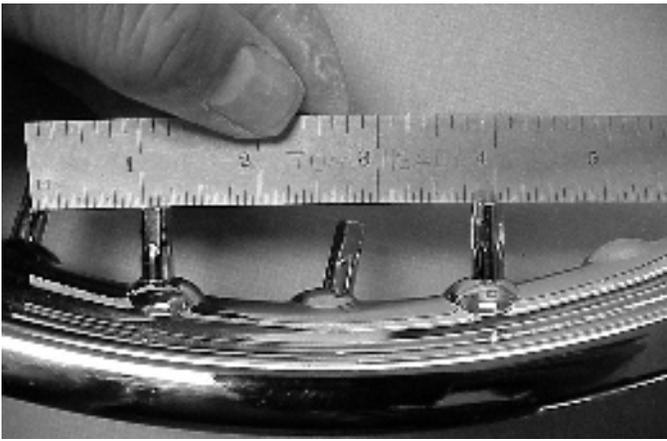
You will want to start with the off-drive side (right) set of twenty spokes. They are the longer ones. These spokes are made up of two sets of 10. An inner and an outer. The inner have a longer bend at the head as can be seen in the photo. Offer these first radiating counter clockwise as you view the hub from the right side. Run the nipple on these 10 spokes until there is still a couple of threads showing.

Now offer the 10 outside spokes and radiate them clockwise as viewed from the right side. Do not put the nipples on these spokes yet. You will want to be able to move them to get the drive side inside spokes in place.

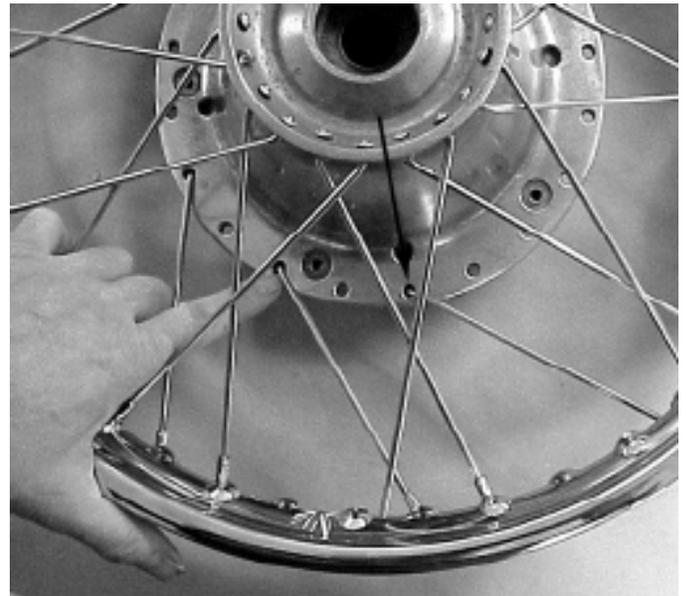
Now switch your attention to the drive side (left). You start with the inside set of 10. Offer the first inside spoke as shown in the picture. You will have to angle the spoke as you offer it to clear the right hand side spokes. These spokes radiate counter clockwise as you view the right side of the hub. Offer the nipples to these spokes running the nipple up until a couple of threads still show.

Now go back and offer the nipples to the 10 right side outside spokes and run the nipples on the spoke as above. Now is a simple matter to offer the 10 drive side outside 10 spokes which will radiate clockwise as viewed from the right side of the hub. Offer our nipples as above and you are ready to start truing your new rim.

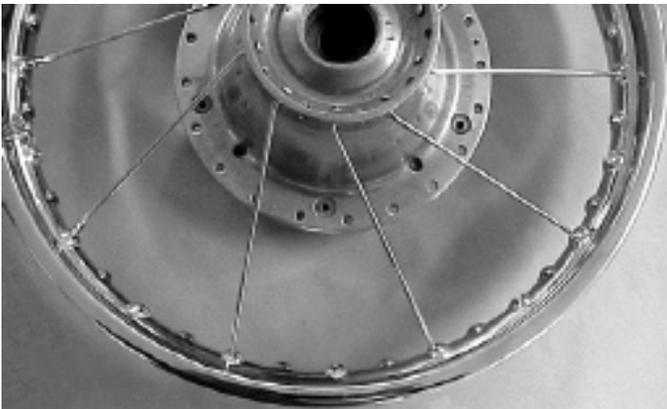
Copyright John W. Healy July 2006.



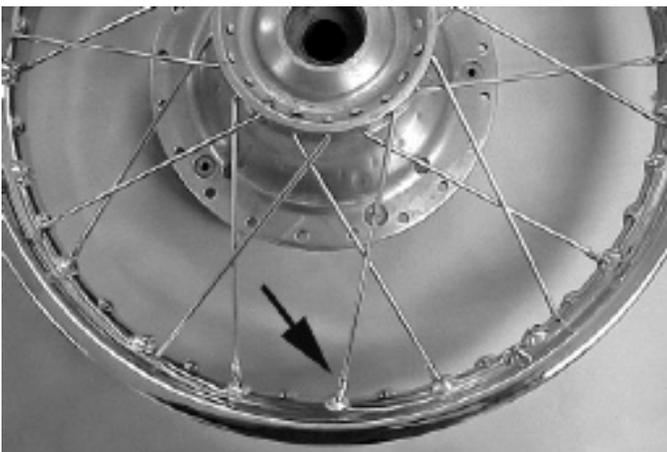
Put a pair of nipples in one side of the rim as above. With a small scale measure distance between the centerline of the nipples. Do the same to the other side. The widest pair will go on the brake drum side of the hub. To ease assembly mark this side "brake drum."



Turn your attention to the large side of the hub. Offer the 10 inside spokes and turn them counter clockwise. Notice that you start in the hole indicated by the arrow in the picture above.



Start with the 10 inside spokes on the small side of the hub. Pass the spoke through the hub and turn it counter clockwise. Offer the nipple to the spoke as shown



Offer the 10 outside spokes to the small side of the hub. Pass them through the hub and turn them clockwise. Do not attach them to a nipple at this time.



Offer the last set of ten outside spokes turning them clockwise on the large side of the hub and finish by affixing all the remaining nipples.



When first offering the nipples onto the spoke leave a couple of threads showing when first offering the nipples

PLEASE READ BEFORE INSTALLATION **Special knowledge and Training Required**

_____Working on a motorcycle often requires skills not normally acquired through daily living. We feel that special training is required to install this product. It is beyond the scope of this document to supply you with all the information and training required to lace, true and tension this product properly.

If feel you have the expertise and choose to perform this work it is with the understanding that you assume all liability arising from the installation and use of this product.If you do not wish to accept all liability for this product return it for a full refund. If the dealer fails to cooperate please call 1-508-946-1144 for further assistance..

Further information on lacing and truing wheel rims is available in the Triumph workshop manual. **Improper lacing, truing and tightening spokes can make the motorcycle extremely dangerous to operate. Operating a motorcycle with improperly installed, trued and tensioned wheel rims can lead to death or worse.**

If you feel that you do not have the required skills or lack the training **DO NOT INSTALL THIS PRODUCT!** Please, return this product to the dealer who sold it for installation or a refund of your purchase price. If the dealer fails to cooperate please call 1-508-946-1144 for further assistance..