

The TRIUMPH Corporation

SERVICE BULLETIN

BULLETIN #20

September 26, 1967

Service Notes on 1963 Thru 1967 "B" & "C" Range Models

CD474 ENGINE LOCKING TOOL

Many dealers have asked how this tool should be used. There are two ways to employ this tool when doing major engine work.

- 1) With the cylinder head off, bolt the square bar across the top of the cylinder barrel so the pistons will be blocked by the bar.
- 2) With the cylinder barrel off and the pistons removed from the connecting rods, pass the 11/16" dia. bar thru the connecting rod pin bushes. Place the square bar lengthwise under the round bar on the top of the crankcases so its ends rest over the tappet guide block holes in the crankcase.

TIMING COVER GASKETS

Some dealers are still not aware that we offer top quality gaskets for unit construction 650cc and 500cc timing covers. Use of these gaskets saves time, allows cleaner work, and prevents any leakage from the timing covers. The part numbers for these parts are:

650cc - CD338 timing cover gasket
500cc - CD451 timing cover gasket

FUSE RATINGS

Once again - we recommend using a 20 amp fuse on all model Triumphs in place of the original equipment 35 amp fuse. Wires can sometimes be damaged by a direct short if the 35 amp fuse is used in the electrical system.

NEW TRI-COR WRENCHES

We no longer supply Bonney and King Dick tools and are now selling Stahlwille wrenches and sockets. These tools are made of chrome alloy steel and are top quality German made wrenches. The same sizes are available as shown on page 29 of your latest Tri-Cor accessory catalog. An order blank is enclosed - order a sample set of these tools now - they are a compliment to any mechanic's tool box.

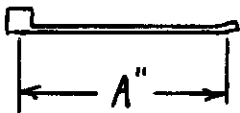
WORKSHOP MANUALS

If you don't have the latest CD411 Workshop Manual (identified by "from engine #DU44394" on the title page) for 650cc motorcycles order one now. These manuals contain information on the 1967 - 650cc and have complete coverage on model changes from 1963-1967. We also have a good stock of the CD446 Workshop Manuals for 500cc models. Both of these manuals are a necessity for any Triumph dealer and are also a popular accessory sales item.

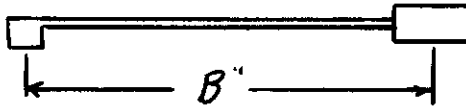
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ADAPTORS FOR TORQUING CYLINDER BASE NUTS

It is necessary to torque the cylinder base nuts on all 650cc and 500cc Triumph engines to avoid cylinder distortion and loosening of the cylinder barrel. To make the necessary adaptor wrenches use the CD515 box wrench as a start. Cut off the 5/16W end on one wrench and the 1/4W end of the other. Braze an old 3/8" drive socket to the cut end of each wrench. Now carefully grind down the outside of the box end of each wrench so they will fit the cylinder base nuts on 650cc and 500cc engines. Measure the center to center length of your adaptor wrench and torque wrench in inches. Add these two lengths together and plug the sum into the formula for computing the new torque you will use with the longer lever arm. Use the answer as the new torque with the adaptor attached in as straight a line as possible to the torque wrench. Do not let the adaptor to torque wrench angle exceed 10°.



$$X \text{ lb. ft.} = \frac{300}{\text{SUM}}$$



$$(\text{lb. ft.} \times 12 = \text{lb. in.})$$

$$A'' + B'' = \text{SUM}$$

We recommend a torque of 25 lb. ft. when the engine is COLD as a proper cylinder base nut torque figure on both 650 and 500cc engines. This is the torque figure to use with no adaptor. Your new torque figure (Xlb.ft.) will be less than 25 lb. ft. due to the added leverage of the torque wrench with the adaptor attached to it.

NEW ELECTRICAL TEST SET

Our new Tri-Cor "750" Electrical Test Set is now available for use on all model Triumphs. No shop is complete without one of these test sets. Model 102 Test Sets are no longer sold by Tri-Cor. Use the new "750" Test Set in conjunction with our latest Service Bulletin 67/8 for complete testing of all Lucas RM19 A.C. electrical systems. Dealer price on this new Electrical Test Unit will be \$35.00.

FRONT TIRES

Many owners and dealers report an improvement in handling and braking when using a 3.25-19 Dunlop K70 tire on the front wheel. Try one for yourself and see the difference!

Quick Tips Column:

- 1) Always balance rear wheels for increased riding smoothness on all model motorcycles.
- 2) Use Permatex Super 300 gasket cement on the high gear splines to stop oil seepage from the transmission at the countershaft sprocket.
- 3) Use thin white pushrod rubbers (E1497RT or E3547) under all E732 filler/adjuster plugs to stop oil seepage from these points.
- 4) On all 650's replace the aluminum strap that ties the alternator lead wires to the right frame tube under the engine with a rubber John Bull clip (#CD405) to prevent a possible electrical short.
- 5) Have you checked and repacked the wheel bearings on your high mileage customers' motorcycles? Wheel bearings should be repacked with a good quality grease every 12,000 miles!

Very truly yours,

THE TRIUMPH CORPORATION

Service Manager

Rod Coates:bjh