The TRIUMPH Corporation

SERVICE BULLETIN

January 25, 1968 68/2

(This bulletin supersedes 64/3)

TO ALL EASTERN TRIUMPH DEALERS

SUBJECT: Use of CD456 Timing Kit and CD491 Crankshaft Locating Tool.

This bulletin applies to all "B" & "C" Range motorcycles since 1964 with the TDC or 38° BTDC flywheel notch. Accurate ignition timing can be accomplished as follows:

1) Remove both spark plugs and the contact cover.

2) Make sure the auto advance unit works freely - if not, remove, clean and oil it until it does. When reinstalling this unit torque the bolt to 8 lb. ft. MAX. Do Not Overtighten.

3) Clean or replace both contact sets as necessary and align the ground contact so both contacts are parallel.

4) Adjust both gaps (with a clean feeler gauge) to .015". For battery ignition models the gap should be checked just as the contacts are fully open turning engine forward. On A.C. ignition models the contact gap should be set when the rubbing block is on the high point of the ignition cam.

5) Using CD491 tool, locate the crankshaft at TDC or 38° BTDC.

6) Remove the auto advance bolt and washer. Hold the ignition cam fully advanced (all the way clockwise) and install the timing disc adaptor and washer with the advance locking washer cup side in. Tighten the adaptor no tighter than 8 lb. ft. torque.

7) Make an accurate reference point either on a piece of masking tape on the right exhaust pipe, or a stiff pointer attached to the frame or engine.

8) Install the timing disc on the adaptor and clamp it so either T.D.C. or 38° B.T.D.C. is directly opposite your reference point. Double check where the slot or hole in the crankshaft is (TDC or 38° BTDC) and be sure the disc is set at the proper corresponding position.

9) Remove the locating pin from the flywheel. Attach the clip end of a Tri-Cor 233 test light or an equivalent light or ohmmeter to a good clean ground on the engine.

10) Disconnect the B/W and B/Y leads from the coils under the gas tank (A.C. models only) and make sure the leads don't short together or to ground.

11) Rotate the engine in a FORWARD direction (by turning the rear wheel with high gear selected) while holding the other lead of the continuity tester against the contact spring. Note the number of degrees before TDC that the light goes out (the contacts just break) for each set of contacts. It is possible that this figure won't be the same for each cylinder. Rotate the contact plate until both contact sets break at 38° BTDC or as close as possible to 38° BTDC. Always check the timing with the two pillar bolts TIGHT! To ADVANCE the timing rotate the contact plate COUNTERCLOCKWISE. To RETARD the timing rotate the contact plate CLOCKWISE.

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Now, to obtain really accurate ignition timing:

1) If you have the earlier contact plate (#425379) or the CD450 contact plate, adjust the point gap so that both cylinders fire at 38° BTDC.

   a) INCREASE the contact gap to ADVANCE the timing.

   b) DECREASE the contact gap to RETARD the timing.

2) If you have the later contact plate (#54419097) with provision for radially indexing each breaker assembly, loosen the two clamping screws for the contact set you need to move and:

   A) Move the breaker assembly COUNTERCLOCKWISE to ADVANCE timing.

   B) Move the breaker assembly CLOCKWISE to RETARD timing.

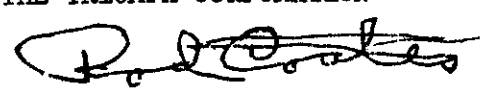
After moving the contact point assembly (1968 model type) it is a good idea to recheck the point gap.

12) Reconnect the B/W, B/Y leads to the coils. (A.C. models). Remove the adaptor and advance locking washer and install the auto advance bolt and washer. Torque this bolt to 8 lb. ft. and check again that the contact breaker cam turns freely. Reinstall the contact cover with a new gasket. Gap the spark plugs (.020") and tighten them to a torque of 25 lb. ft.

Following these suggestions will insure a fast, accurate ignition timing job. Remember that all 12 volt ignition Triumph Models should be fitted with the 160° contact breaker cam, Part No. 54419124.

Very truly yours,

THE TRIUMPH CORPORATION



Service Department

Rod Coates:mm