

## INSTALLATION INSTRUCTIONS TRIUMPH-BSA

Remove spark plugs and gap .018. Remove cover (R.H. side of engine) over battery ignition points. Disconnect and tape (insulate) all battery connected wires.

Hold breaker cam in opposite direction of rotation (advanced position) and rotate engine until the points on #1 cylinder just start to open. Note: Use .0015 feeler guage or Joe Hunt timing device.

Remove breaker plate, breaker cam advance mechanism, and dowel pin from internal taper if your model used a dowel pin to position breaker cam and advance mechanism. (CAUTION) Do Not Rotate Engine. If engine is rotated, reverse rotation until piston is down and the cylinder at least one inch before top center on the compression stroke.

Rotate engine in normal direction of rotation until piston is 5/16 from top center on compression stroke. Install magneto adaptor plate and adaptor shaft in cam taper. DO NOT TIGHTEN SHAFT. (CAUTION) 1963 to 1970 Triumph unit construction twins have a different length taper on shaft and internal threads are dissimilar. Suggest checking threads and taper. 1963 to 1970 bolt has BSF 1/4 X 26 threads. 1971 and later bolt had 1/4 X 28 thread. Early shafts are marked with the letter "A". Late shafts are marked with "B".

NOTE: Some applications will require drilling and tapping engine with  $\overline{1/4}$  X 20 for better security. Some customers with severe service report that they heli arced adaptor to cam cover with approximately one inch length bead, top and bottom for security.

Remove Magneto cover. With shaft slightly loose in taper mount Magneto so that points are just starting to open and bolts are approximately in center of slot (for timing adjustment later).

Carefully remove Magneto and tighten center bolt in shaft. Re-install Magneto and time. Install cover and plug wires. Hook up ground wire to a seperate kill switch to ground only. DO NOT HOOK ANY BATTERY CURRENT TO MAGNETO.

Point Gap. . 012 to . 015



(916) 635 5387

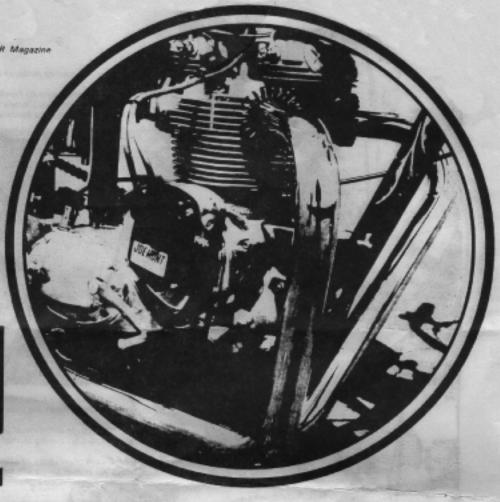
JOE HUNT MAGNETOS

11336 - A Sunco Drive
Rancho Cordova. CA 95670

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Whether you ride a stocker, chopper or all-out racer, Triumph ignition problems can be eliminated with the installation of the Joe Hunt Magneto. The guy with the chopper gets an added advantage along with a super ignition, he can trash five pounds of wires along with the coils and possibly the battery.

The magneto is simply a self-contained unit which generates its own electricity. Thus, where the coil system draws current from a generator and battery, the magneto doesn't even need them. The mag generates its own current with strong magnetic fields induced in a primary coil. When the points in the magneto open, the ground circuit is



by Steve Stillwell

## BIGFIRE for the TRIUMPH

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with the installation of the Joe Hunt Magneto.

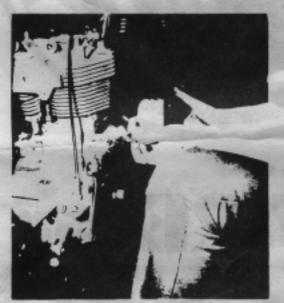
TOP LEFT-Magneto drive shaft mounted out of sequence to demonstrate how exhaust cam drives magneto to produce spark.

LEFT-Although not a necessity, installation of the magneto was aided by having mounting plate heli-arched to cam cover.











LEFT-Cam cover has mating surfaces coated with a gasket sealer and installed.

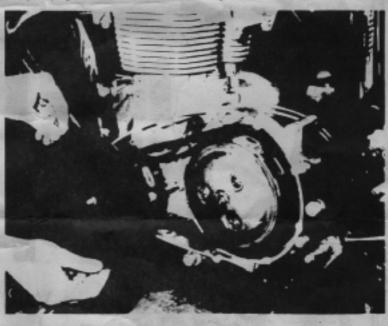
BELOW—It is a very good idea to familiarize yourself with the internal workings of magneto before mounting it. Inside the mag are the condenser, points and coll which eliminated the need for a battery, coils, distributor and mass of wiring.



LEFT-Magneto drive shaft is installed and secured. The mag body is then ready to be mounted. Allen screws are used as retainers and fit into slotted holes.

BELOW-Primary cover is removed and timing wheel is mounted to the end of the crankshaft. Ignition timing is then properly set to your engine specs.

BELOW LEFT—Last few steps of completing the installation are to mount the spark plug wires and also a kill button or ignition switch wire.



broken and the current "backs up" into the secondary coil which sends a low current but extremely high voltage power surge to the plugs.

These are the big advantages over the coil system, but there is one more important point to cover. Coil systems on bikes (which are the most popular type) tend to lose power as the rpm's increase because the coils just don't have time to fully charge. The magneto is just the

opposite. The magneto produces 36,000 volts at 6000 rpm while the coil system can deliver only 16,000 volts at the same engine speed. You can imagine just how much more fuel the mag can fire at high rpm compared to the coils. The Joe Hunt magneto is also made for several other makes and models of bikes. For further information, write to: Joe Hunt Magnetos, 2600 W. Vernon Avenue, Los Angeles, California.