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Triumph 650 cast Piston installation notes

These JCC 650 Pistons are a close reproduction of the OEM Hepolite/AE Triumph specification. We have found this piston set to be suitable for all Triumph 650 engines, both Pre Unit and Unit construction, when installed correctly.
They are a 9.0:1 compression ratio, however true C/R can only be determined by measuring, as there are many variables. Here is some information that will help with installation.

Cylinder boring should only be done by a shop that is set up for boring motorcycle cylinders.

Most automotive machine shops do not have this capability.
The cylinder must be bored from the base flange to maintain or correct the 90 degree relationship between the crankshaft and cylinder. Honing a cylinder to the next size will not correct a crooked bore.
Piston to wall clearance should be set at .0045" to .0055" for street bikes. Pistons should be measured just above the bottom of the skirt at a 90 degree angle from the wrist pin.
If you are having your cylinder bored at a shop that regularly does Japanese engines you may want to stress that this clearance is correct, as many modern clearances can be .002" or less.

Our procedure for setting up these pistons has worked well for us for the last hundred cylinders and is as follows:

Cylinder is bored from the clean base flange to .003" of the desired finished size using a Kwik Way FWS II boring bar on a Kwik Way stand
Cylinder is honed to .001" of the final size using Sunnen 150 grit stones (M27-J45) using an ample flow of honing oil
Final .001" is honed using Sunnen 220 grit stones (M27-J55) for Hastings cast ring set (Sunnen 280 grit stones {M27-J65} for Hastings Chrome top ring set)
Cylinder edges are deburred on head gasket surface, and thoroughly cleaned with a brush and washed in a 180˚ (82C) aqueous parts washer.

Bore straightness, roundness, and surface finish are equally important in the success of seating the piston rings. If you cannot find a local machine shop to do this work we would be happy to do it for you. Please email or call the shop for details.

A NON SYNTHETIC OIL SHOULD BE USED FOR BREAKING IN NEW RINGS