

## **BS8117 - CARBURETOR SYNCHRONISER VACUUM GUAGE SET**

This set is used to quickly, easily and accurately assist with balancing up to 4 carburettors simultaneously. The set contains precision gauges, each with its own damping control, mounted to a portable heavy duty metal base for bench top use. Hoses, adaptors, extensions and spare parts are also included for use with multiple applications.

## Prior to use:

- Ensure motorcycle is in good tune before attempting to balance carburettors. This includes (pending on application) valve clearances, cam chain tension, spark plug gap, point gap, ignition timing, air filter condition etc. All these items should meet manufacturer specifications.
- Confirm there are no air leaks present on the inlet manifold, as this will cause incorrect readings.
- Consider engine temperatures whilst running in test conditions. Some air cooled models will need a source of cooling before balancing is carried out.

## Instructions for use:

- Start and warm engine to normal operating temperatures.
- Gain access to inlet manifold, making sure the motorcycle can still run (fuel tank still connected etc.).
- Remove plug screws on the intake runners (normally found between carburettor and engine block) and install suitable adaptors to engine. Please note some models may require use of the extensions supplied in the set. These extensions assists with hard to access inner cylinders.
- Connect the gauges to the adaptors using the hoses supplied. Ensure the gauges are setup in the same order of the engine cylinders. This will assist in suspect cylinder diagnosis.
- Start the motorcycle and take readings from the gauge set. A well balanced engine is shown by similar reading across all cylinders.
- Upon test completion, ensure all steps are reversed. Ensure there are no fuel leaks etc. upon completion.

## Notes:

- This tool is designed to balance carburettors, not tune them.
- Exact specification of vacuum will differ model to model and should be observed from manufacturer sources only.