




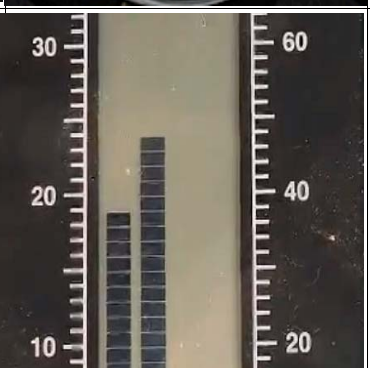
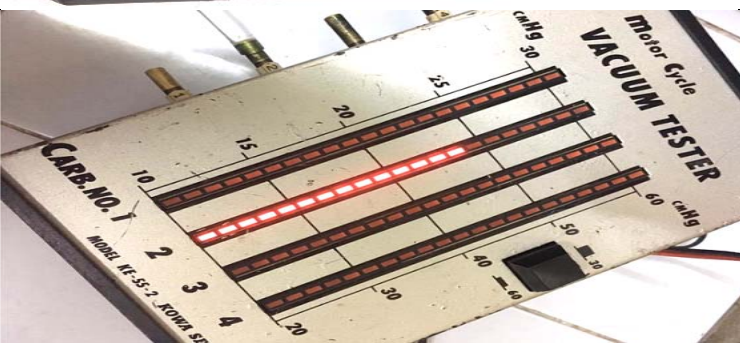



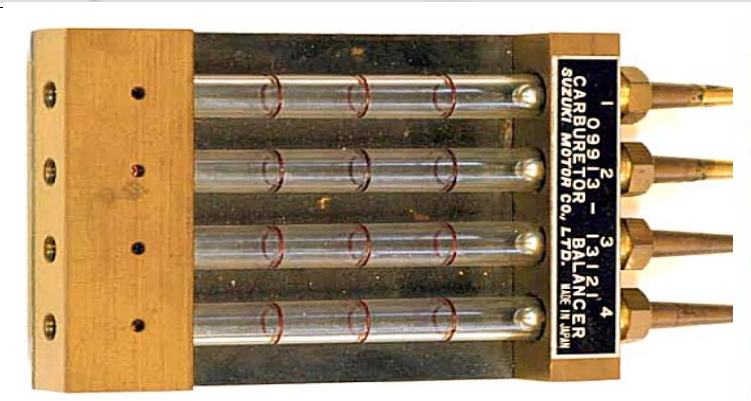


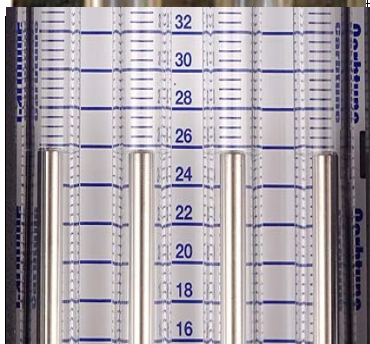














	TOOL	CLOSEUP	TYPE	PRICE	PROS	CONS	NOTE
BOEHM			Traditional Bourdon tube gauge (the needle is driven by a curled brass tube inside the gauge casing).	\$267	The closest you can get today with reasonable money to what Honda had in 1969.	Plastic casings.	From Germany. The cover has a removable plug for access to the calibration screw.
MEMO			Bourdon tube.	NA	None	Plastic casings and absent calibration feature.	Seems to be a lesser-cost unit by the same manufacturer but labeled differently and lacking the calibration feature.
KOWA SEIKI LATE			LCD (liquid crystal display).	\$688	Extremely portable and rugged, runs on 12v, uber-accurate. A very nice instrument.	Expensive.	Up to 2010 the official Honda and Kawasaki special tool. Still available from Webike in Japan. See my video of this tool on my YouTube channel, video "Brute Force Throttle Sync".
KOWA SEIKI EARLY			LED (light emitting diode).	NA	Extremely portable, runs on 12v, uber-accurate. Quality.	Expensive.	Earlier than the one above, when it was also the factory Honda and Kawasaki tool.

NA			Mercury column.	\$89	Very accurate, easy to read.	Lot of issues, only beginning with the bio hazard.	There used to be several brands of this type. This Motion Pro example is discontinued, but there is still one other brand available as of this writing.
SUZUKI			Steel weights, in this case, steel balls.	NA	Very storable, user friendly. Adjustable damping using screws.	Accuracy is questionable.	Factory Suzuki tool. Very hard to find. Long discontinued but these come up on eBay occasionally, for \$200-\$300.
CARBTUNE			Steel weights, in this case, steel rods.	\$90	Storability, ease of use, durable, inexpensive.	Very cheaply made. Accuracy may be in question.	A very popular tool on user forums. Widely available.
HONDALINE			<i>Bourdon</i> tube.	NA	A lot like the Boehm and other <i>Bourdon</i> tube types. Very readable. Easy to use and store.	Very cheap unit. Plastic casings. No calibration screw and no damping adjustment.	Honda sold two or three versions of this all-plastic tool. This is the 1970s Honda offering. In 1980 water cooler valves were added for needle damping purposes.

NA			Bourdon tube.	NA	Well-constructed, steel casings w/ plastic covers, damping valves, velcro-equipped kit bag, very nice adapters.	Lot of glitz but also critical glitches. No calibration screws and they need them badly. These gauges are way off even brand new.	This Taiwanese product is flooding the marine industry. It is less well known in powersports. Beautiful set, but deplorably inaccurate.
MARSH COMPANY			Bourdon tube.	\$200 in 1969	Marsh, American-made glass-fronted, all-metal with calibration screws, damping valves and high quality hoses.	Calibration and adjustable damping equipped.	Original 1969 CB750 Honda tool. The best of the analog types. To reproduce this set today would take close to \$1000. (Marsh is still in business.)
MOTION PRO			Traditional (scientific instrument) water-based manometer liquid type.	\$100	Non-bio hazardous. Easy to read, highly accurate.	Liquid-based tools require careful storage. Some of the same drawbacks as the mercury tool.	Widely available.
BOWMAN			Bourdon tube.	NA	Unique, single gauge mounted on a manifold, designed to be permanently installed on the bike behind a frame sidecover.	Good idea, but bad in practice. Accurate syncing demands real-time cylinder-to-cylinder comparison.	Jim Bowman was a 1960s inventor and machinist who developed a lot of interesting products for the motorcycle business. This item is extremely rare.

UNISYN		Mechanical vacuum sensor.	\$30	Cheap, portable.	Same issues as with the Bowman, and a few more. Much less vacuum on the air filter side, is an obvious issue.	A very traditional, familiar tool. Once popular with the car crowd, particularly for use on old Brit sports cars.
SYNX		Another LCD tool.	NA	Portable, accurate.	Not yet widely proven or distributed. Not the best readability due to display size.	This tool represents an emerging technology in this field. There are dozens similar to this one, some fairly home-brew, others more sophisticated like this example.
VACUUM MATE		Another LED tool.	\$629	Portable, accurate.	Expensive	This is marketed by K&L, the huge Japanese tool and parts wholesaler. Current product that has been available for over 25 years.
UBIQUITOUS EBAY		The least expensive Bourdon tube set available.	\$40	Cheap. And possibly, just possibly, a deal if that is a calibration screw, as one eBay seller claims. I am not sure.	Plastic casings, very cheap, almost surely Chinese-made. Not confirmed that this has a calibration screw.	Pep Boys automotive engine troubleshooting gauges ganged together. Very enterprising. And if as advertised that is a calibration screw, possibly the best buy.