Tire Pressure Gauges

by Steve Larsen

MOTORCYCLE TIRE PRESSURES are critically important since the small patch where your tire meets the road means everything to staying upright. The tire and inflation pressures you choose are largely responsible for your bike's handling and are also a key safety factor. Improperly inflated tires can blowout and cause you to lose control and will also impact gas mileage and tire lifespan. Experts recommend checking tire pressure before every ride. But when you check, are you sure what the gauge tells you is accurate? What if your gauge is wrong? Does your gauge fit tightly to the valve stem? Can you read it clearly? Has it suffered a crippling blow in your tool box?

Most of us have several gauges around the garage. Which one do you trust and why? In research for this article, we found confusion even among those we expected to be tire pressure experts.

We tested 22 gauges, from a couple of no-name toolbox finds to the very latest digital audio-visual types.

Cherished Beliefs

Even tire techs from Sears Tire Centers, Goodyear and Michelin tire stores have questionable practices for selecting gauges. We found the most common practice was to try a number of gauges, pick one that felt consistent and easy to use, and then use it nearly exclusively. With the exception of the Dunlop and Metzeler tents at Americade, no tire dealers interviewed had a way to calibrate or test the accuracy of their gauges.

Some motorcycle enthusiasts believe that the more money you spend on a pressure gauge, the better and more accurate it will be. Others believe "digital tire gauges are for limp-wristed technology trusters and real men use analog gauges." Some think gauges made in Germany or Switzerland are more accurate than gauges made in China. Are any of these beliefs based on fact?

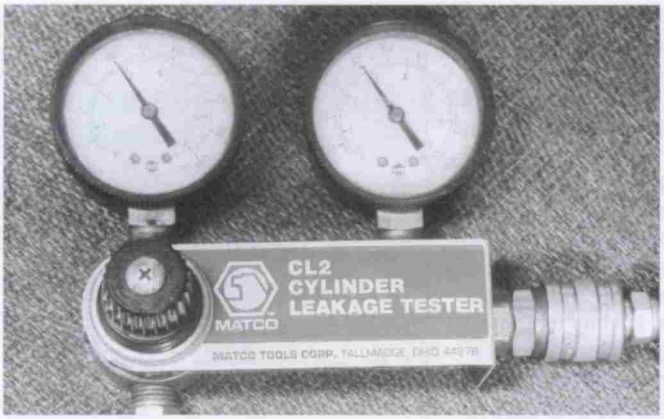
Those who race bikes and prepare bikes for others to race are fanatical about tire pressure. We visited AJ Ammann who operates AJ's Performance in Phoenix. In addition to doing high performance work on motorcycles, ATVs and PWC, the shop maintains a five-bike roadrace team. On a race track, 2 psi can be the difference between a tire sticking to the road or sliding. Ammann told us he visits the Dunlop or Michelin Tire tent at every AMA National Race and calibrates his gauges. "Dunlop has a 30 psi reference standard in their tent. I check my gauges and mark each gauge with how much it reads under or over."

Evaluation

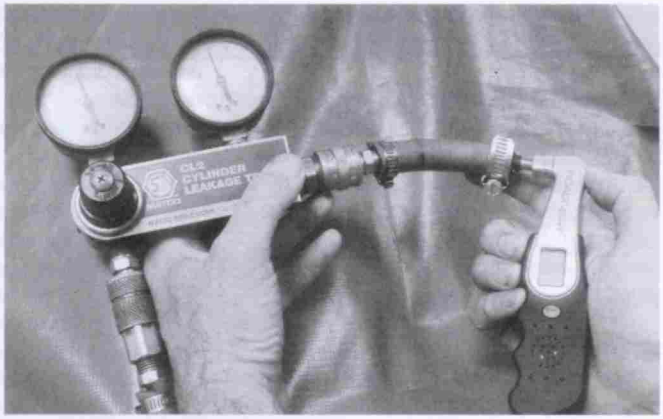
To find the best tire pressure gauges, *Motorcycle Consumer News* bought gauges from AutoZone, Checker Auto Parts, Cycle Gear, NAPA Auto Parts, Radio Shack and a Sears Auto Center. Then we went online and ordered gauges from specialty shops AutoSport, Griot's Garage, Myers Tire Supply, Intercomp, CyclePump, and the Tire Rack.

We tested each gauge for Accuracy, Form/Fit, Readability and Durability.

Accuracy—If the optimum tire pressure is 38 psi for your tire, a new gauge rated at ± 5% means your actual pressure could be as low as 36 psi or as high as 40 psi when the gauge indicates 38 psi. Tire gauge manufacturers often claim their products are highly accurate. One package read "Accurate to ±1%" and another, "± 1% + .5 psi." But, as the claims make no reference to any standards certification body, they are largely meaningless. Only one manufacturer, Accu-Gage®, claimed to meet ANSI



Testing was done using a MATCO leak down tester calibrated with a racing-type $395 Intercomp digital gauge guaranteed accurate to .5%. This leakage tester also has a very fine pressure regulator.



Each gauge was tested twice at three pressures; 20, 35 and 50 psi and the MATCO was zeroed and recalibrated between each reading. After this testing, we conducted durability testing after two 40" drops to a concrete floor.

Commercial Grade B standards, but only for their dial gauges. In the industry, ANSI grade B gauges are often referred to as 3-2-3. This is because they have an accuracy of ±2% over the middle half of the scale and ±3% over the first and last quarters of the scale. Said another way, the accuracy rating is ± 2% from 25% to 75% of the scale and ± 3% below 25% and above 75%.

ANSI Commercial Grade B gauges are considered adequate for commercial use on refrigeration units, pumps, compressors and fire extinguishers. They are not considered sufficiently accurate for laboratory or scientific work. (See details on accuracy testing below.)

Form/Fit—Fitting tire pressure gauges to motorcycle valve stems can be very different from checking automobile tires. The ease which a gauge fits around brake assemblies, spokes and other impediments near the valve stem affect its usefulness. Each gauge comes with a collared chuck that seals to the valve stem to minimize the amount of air escaping during a reading. Most gauges hold their readings when removed from the tire, which can be important because it is often impossible to read the gauge while holding it to the stem, unless it has a hose.

Some gauges are equipped with a bleed valve for removing air from an over-inflated tire, a very useful item. Two gauges in our comparison, the Accu-Gage EX02 and the Professional Tire Inflating Gun from Griot's Garage, are capable of monitoring pressure as the tire is inflated or deflated. This can also be a handy feature.

Readability—Gauges should be easy to read. We looked for appropriately spaced psi indicators (or index markings on pencil type gauges) and good contrast between the markings and the gauge needle or face. Precision was also a factor we considered under Readability. For instance, if an analog gauge only shows markings for 10, 20, 30, and 40 psi and then only 4 ticks in-between, it's fairly imprecise. Readability tests were also done in a variety of lighting situations.

Durability—Tire gauges often bounce around in tool boxes and saddle bags, are brushed off work benches or left on bike seats and then knocked off. To test durability we pushed each new gauge (twice) from a 40" high work bench onto a concrete floor. It was a typical cement garage floor painted with two-part epoxy paint. We then retested each gauge across the range to see if the readings had changed. The Durability score is based on the gauge's Accuracy afterward. (See below.)

Product Testing

For accuracy testing we worked with highly regarded engineer and mechanic Mark Basch. Mark operates Basch Accurate Service in Tempe, Arizona where he tunes, repairs and race-preps Acura NSXs. Mark loaned us a Matco Cylinder Leakage Tester (CLT2PB). Designed to measure cylinder leaks, this tool has two accurate 0-100 psi gauges. The large gauge faces, markings for each pound and the distance between each mark, as well as the fine adjustment needle allowed us to make highly precise and accurate settings. The Matco uses a very precise regulator, taking nearly a half turn of the regulator dial for a single pound of movement. We calibrated these gauges with a $395 (MSRP) Intercomp Digital Air Pressure Gauge before and during each test. The Intercomp gauge is guaranteed accurate to ± 0.5% (equal to 0.175 psi @ 35 psi, for instance) and automatically adjusts for ambient temperature and barometric pressure changes. The precise control of the regulator (0.1 psi increments) coupled with the accuracy and

PRESSURE GAUGE MAINTENANCE

Once you acquire a quality gauge, keep it in good working order by following some basic guidelines:

1. Don't drop the gauge. It's a calibrated instrument. As we learned, if you drop it, whack it or bang it into something, you can no longer trust it. Unless you keep it in a protective case, if you put it in your trunk or in a toolbox with heavy items, you are asking for trouble. AJ, of AJ's Performance, keeps his air pressure gauges in a padded box, away from his other tools.

2. Do not over-pressurize the gauge. If the pressure in a tire is unknown or may be greater than the range of the gauge, don't test it. For instance, bicycle tires often run nearly 100 psi. Do not put your 0-60 psi gauge on the bicycle tire. It will over-pressurize and damage the gauge and often void the tool's warranty as well.

3. Valve caps on your tire valves will keep dirt out and prevent the gauge from getting mucked up when you check your pressures. Always use valve stem caps. We recommend paying a little money and getting the good metal ones with the rubber seals. These can also prevent pressure loss from centrifugal force on the valve stem, which is not uncommon.

4. With pencil style gauges, keep the graduated shaft lubricated and work it back and forth a few times before using it.

readability of the calibrated gauges made it possible for us to deliver a known psi value to the valve stem.

We tested each gauge at three different pressure settings, 20, 35 and 50 psi, measuring the amount each gauge deviated from the calibrated Matco reference. Gauges were tested twice at each of the three settings and the Matco was recalibrated between each reading and brought completely to zero between each gauge test.

Scoring

We feel the most important score is Accuracy. Durability should be strongly considered if the gauge must be carried on the bike, rather than carefully packed in a tool box. Form/Fit are more important for certain types of valve stems. If your bike has 90° valve stems, for instance, any of these will be fine, most bikes don't. Lastly, Readability influences the Accuracy and makes the gauge much easier to use.

Results And Observations

Despite the wide variety in prices, most gauges were fairly accurate. Only one gauge (Accu-Gage DP120C Truck Tire Gauge) consistently measured significantly higher than the actual pressure at the stem. Two gauges, one from Griot's Garage and the other from TireRack, measured very close to spot-on with 0.0 deviation across two of the three test ranges.

One digital gauge, the $10 Sears Accutire MS-4820B, touted the ability to self calibrate. We suspect most digital gauges will self calibrate in the same way—momentarily touch them to the valve stem and get a zero reading. Zeroing them out seems to re-calibrate them.

One gauge was judged unacceptable, the BikeMaster 15-1506 from Cycle Gear. While it was a terrific gauge in every other respect, it failed to hold the pressure reading once it was removed from the valve stem, and, without a hose, getting a straight shot at the face to read the pressure made it almost useless for motorcycle use. Thinking our particular unit might have been defective, we returned it to Cycle Gear and tried another, but it worked the same way.

Digital and pencil-type gauges did much better on our durability test than did analog gauges. However, obtaining precise readings from pencil gauges is difficult because the scale is always partially obscured. Sadly, the most accurate and expensive analog gauges were the ones most affected by our drop test. Perhaps it should be no surprise that finely made instruments are more delicate and less resistant to rough treatment. Some of these analog gauges were surrounded by thick rubber covers. This could lead you to believe they are rugged enough for rough treatment and toolbox abuse. They're not, and the rubber housings did not protect the gauges from a drop. (See side bar) If you rely on such a gauge, know that you can't trust it if it has been dropped.

With the exception of CyclePump's EZAir Tire Gauge, none of these gauges claim to be designed specifically for motorcycles. Yet most work well on motorcycle tires. However, the two analog gauges with a solid 2–3" extension leading to a non-swivel chuck (the Monkey Grip M872 and the Accu-Gage S60X from Sears) are not good choices for most motorcycles. Their straight-on design makes it nearly impossible to fit on some bikes. The easiest gauges to use on motorcycle tires had features found on the EZAir gauge: A flexible hose, swivel chuck, peak hold button, pushbutton-to-zero, a thumb-operated bleeder and a valve stem on the side to allow the addition of air without removing the gauge. The Accu-Gage EX02 from AutoSport.com was the only other gauge to possess all of the same features as the EZAir.

Several gauges, the Roadgear, the RadioShack 63-1205 and the Sears Accu-Gage DT-171, actually *talk*. An audio chip and speaker recite your psi in a digitized voice in English or Spanish. The claim is that this feature allows them to be used at night or in bad weather when it may be difficult to see the display clearly. While there may be some truth to this, we suspect that riders seldom check air pressures in the dark or when it's raining. However, this novel feature did not seem to add any cost to these gauges, so we considered its inclusion neutral in making our evaluations and recommendations, and all three actually did very well.

Conclusion

Projects are more fun with quality tools and we have all heard admonitions to use "the right tool for the job." It makes no sense to spend money on good tires and quality suspension and then test the bike's air pressures with a $2 pencil gauge that's been bouncing around in your toolbox for years. Buy a good gauge, take care of it and you won't regret it.

In fact, proper tire pressure has become so important that Congress has gotten involved. Legislation recently passed will require all automobiles sold in the U. S. to incorporate onboard tire-pressure monitors as standard or optional equipment. The bill is called the Transportation Recall Enhancement, Accountability, and Documentation Act (TREAD). Although correct tire pressure is equally or more important for motorcycles, no such requirement has been enacted...yet.

Air Pressure Tech

Background: Air is in constant, random motion called "Brownian" motion. The speed of air molecules increases with rising temperature. When air molecules collide with a surface, momentum is imparted into the surface. If the molecule is heavy or moving fast, more momentum is imparted.

Pressure: The result of all these collisions is a force. The force per unit of area defines the pressure. If the air inside the tire is heated, the molecules speed up, impact with more momentum and increase pressure. Pressure and temperature, therefore, are related, which is why we check tire pressure when the tires are cold.

Units of Measure: There are numerous units of measurement for pressure. Since pressure is defined as a force per area, in the U.S. we commonly use units of pounds per square inch (psi). In Europe and Japan, the unit of pressure is, in Imperial units, pound-force per square inch; and in Metric units, kilogram-force per square Meter (Kg/cm2). Other pressure units of measure are the Atmosphere and the Bar, which are both roughly equivalent to atmospheric pressure at sea level on a "standard" day.

Conversion Factors:

1 psi=0.068947 Bar

1 psi=0.06804 Atmospheres (Note that 1 Bar is not exactly 1 Atmosphere)

1 psi=0.0703 Kg/cm2

1 psi=27.68 "WC (inches of water column)

1 psi = 6.894 kilopascals (KPa)

1 psi = 703 kilo Pond / square Meter (yes, Pond)

Source: The techsmart section of iProcesSmart's website (www.iprocess-mart.com), a supplier of gauges and other industrial supplies, and D. Michael Shields, an exacting and somewhat pedantic engineer.

Accu-Gage DP120C Truck Tire Gauge $4.99

Overall Score: 4.5

Accuracy	○○○○○
Durability	○○○○○
Form/Fit	●●○○○
Readability	●●◐○○
Type:	Pencil
Range:	20–120 psi

Claims: Dual Chuck (both ends)

Comments: **Poor accuracy.** +5–5.5 psi across range. Fits the valve stem like a vacuum. Best of any gauge in this test, no "pssst" when taking it off. Large, heavy duty gauge with dual chuck on both ends, neither works particularly well on motorcycles.

Contact: Sears Auto Center

Accu-Gage DT171 Talking Bilingual $19.99

Overall Score: 14.0

Accuracy	●●●○○
Durability	●●●○○
Form/Fit	●●●●○
Readability	●●●●○
Type:	Digital
Range:	5–100 psi

Claims: Hear tire pressure in English or Spanish

Comments: +1 psi @ 20, +1.5 @ 35, +2.0 @ 50. 3/8" LCD. "Voice" is difficult to hear and is delayed. Nice place to put thumb in back. No Auto-On like other units. Auto-off. Nice, light, red alloy, good feel.

Contact: Sears Auto Center

Accu-Gage EX02 $15.95

Overall Score: 13.5

Accuracy	●●●◐○
Durability	○○○○○
Form/Fit	●●●●●
Readability	●●●●●
Type:	Analog Dial
Range:	0–100 psi

Claims: Inflates with Air Pump

Comments: +1 psi @ 35, +1.5 psi @ 20 and 50. Super easy to read gauge face. Rubber bumper case doesn't adequately protect it. A fine instrument; drop it and you'll knock it out of whack. Locks to valve stem. 10" braided flexible hose. Holds reading solid until you press release valve.

Contact: AutoSport.com

Accu-Gage S60X $6.99

Overall Score: 16.0

Accuracy	●●●●◐
Durability	●●●●○
Form/Fit	●●◐○○
Readability	●●●●●
Type:	Analog Dial
Range:	5–60 psi
Claims:	None

Comments: +.5 psi across range. Big, easy to read dial. Holds pressure until released. No protective cover, so don't drop it, but accuracy was not too bad after drop test. No swivel on chuck. Length of fitting means it's not adaptable to all bikes.

Contact: Sears Auto Center

Accutire Key Chain MS-468 $13.99

Overall Score: 15.5

Accuracy	●●●●◐
Durability	●●●●○
Form/Fit	●●●●○
Readability	●●●○○
Type:	Digital
Range:	5–60 psi
Claims:	Accuracy: ± 1 psi

Comments: -1 psi @ 20. Works well, although tiny LCD is hard to see in poor light. Small enough to keep on key chain in your pocket. Small, key chain design, easy to push onto stem. Excellent accuracy.

Contact: TireRack.com

Accutire MS-4820B $9.99

Overall Score: 14.0

Accuracy	●●●◐○
Durability	●●●◐○
Form/Fit	●●●○○
Readability	●●○○○
Type:	Digital
Range:	5–99 psi
Claims:	± 1% plus .5 psi

Comments: ±1.5 psi @ high end. Smallest LCD window of all, it uses a magnifying plastic lens so you can read it. Can be recalibrated by resetting to zero. Smallish head makes you think it will break if you push it too hard. Sort of like a Digital Pencil gauge.

Contact: Sears Auto Center

Auto-on Digital Tire Gauge — $9.99

Overall Score: 18.0

Accuracy	●●●●◐
Durability	●●●●◐
Form/Fit	●●●●●
Readability	●●●●○
Type:	Digital
Range:	5–150 psi

Claims: ± 1% (Full Scale) +1 LSD

Comments: +.5 psi across range. LCD display is larger than others. Nearly as good as analog to read. Consistent readings. Styled well. Fits well on stem. Good hand feel. Nice case. Excellent accuracy.

Contact: Griot's Garage Griotsgarage.com

AutoSport PH60Xa — $19.95

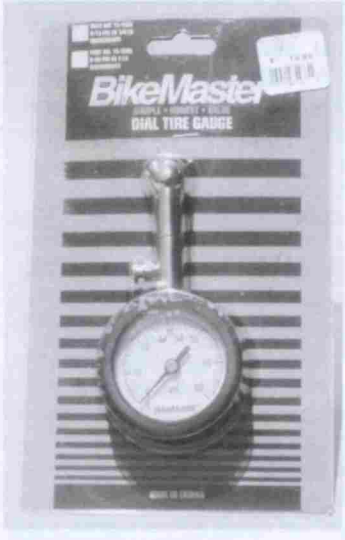
Overall Score: 14.0

Accuracy	●●●●○
Durability	○○○○○
Form/Fit	●●●●●
Readability	●●●●●
Type:	Analog Dial
Range:	0–60 psi
Claims:	None

Comments: ± .5–1 psi across range. Brass case gives quality feel. Release valve holds rock solid. Great gauge but dropping it ruined it. Swivel chuck. The 10" braided house makes it easy to use. We like the way it locks to the stem. Very good accuracy before drops.

Contact: AutoSport.com

BikeMaster #15-1506 — $10.99



Unacceptable

Accuracy	●●●○○
Durability	●●◐○○
Form/Fit	●●●○○
Readability	○○○○○
Type:	Analog Dial
Range:	0–60 psi

Claims: Simple, honest value

Comments: **Unacceptable.** -2 psi @ 20, ±1 psi @ 50. Easy to read. Fitted with a release valve and swivel chuck, but pressure reading begins to fall as soon as it's removed from the tire, making reading the gauge nearly impossible on a motorcycle.

Contact: Cycle Gear

CyclePump EZAir Gauge — $25.00

Overall Score: 13.0

Accuracy	●●●○○
Durability	○○○○○
Form/Fit	●●●●●
Readability	●●●●●
Type:	Analog Dial
Range:	0–100 psi
Claims:	None

Comments: +2 psi across range. Excellent readibility, big dial, good contrast, fine needle. Perhaps the best motorcycle gauge—hose, lock-to-stem, etc. Accurate, but it's delicate, as other analog gauges. Handle carefully.

Contact: Best Rest Products cyclepump.com

Intercomp #360070 — $38.95

Overall Score: 13.0

Accuracy	●●●●○
Durability	N/A
Form/Fit	●●○○○
Readability	●●●●●
Type:	Analog Dial
Range:	0–60 psi

Claims: 2½" high quality, glow-in-the-dark face

Comments: +1 psi @ 35 and 50. Easy to read. Big numbers, clear marks for every whole psi. Fine, precise needle. Heavy duty feel, swivel chuck, thick hose. Pressure falls when it's removed from valve.

Contact: intercomp-racing.com

Intercomp Digital #360045 — $395-$295

Master Calibration Gauge

Accuracy	●●●●●
Durability	N/A
Form/Fit	●●●●●
Readability	●●●●●
Type:	Digital
Range:	0–100 psi

Claims: Repeatable to 0.1 psi. Acccurate to 0.5% of readout.

Comments: Easy to use, keypad calibration, peak hold, thumb-operated bleeder, 20" hose and swivel nozzle. Our calibration Gauge. Only gauge to read in 0.1 psi increments. Automatic compensation for temperature & humidity.

Contact: intercomp-racing.com

Magnetic Mini Tire Gauge — $2.49

Overall Score: 5.0

Accuracy	●○○○○
Durability	○○○○○
Form/Fit	●●●○○
Readability	●○○○○
Type:	Pencil
Range:	10–50 psi
Claims:	None

Comments: ±4 psi @ 20–40, -1.5 psi @ 40+. Marks are 2 psi apart. Very small and hard to read. Fits in hand okay. Fell apart when dropped, but it was hard to push off bench due to clip-on magnet.

Contact: Checker Auto Parts

Monkey Grip #M872 — $6.99

Overall Score: 11.5

Accuracy	●●○○○
Durability	●●◐○○
Form/Fit	●●○○○
Readability	●●●●●
Type:	Analog Dial
Range:	0–60 psi
Claims:	Nothing Grips Like the Monkey

Comments: ±3 psi at times. Easy to read gauge. 1 psi increments. Heavy chrome, cheap vinyl carrying case, no real protection. Must be held straight on. Release valve holds pressure well. Accuracy better after drops!

Contact: Checker Auto Parts

Monkey Grip MG8859 — $2.29

Overall Score: 14.5

Accuracy	●●●●◐
Durability	●●●○○
Form/Fit	●●●●○
Readability	●●●○○
Type:	Pencil
Range:	5–50 psi
Claims:	Steel Body, Chrome Finish, Plastic Head

Comments: -.5 psi across range. Cheap feel. Lighter than Slime Tire Gauge 2005-A. Has pocket clip.

Contact: Checker Auto Parts

NAPA Tire Pressure Gauge 90-378 — $7.99

Overall Score: 16.0

Accuracy	●●●●○
Durability	●●●●◐
Form/Fit	●●●●○
Readability	●●●○○
Type:	Pencil
Range:	10–50 psi
Claims:	Gauge has been accurately calibrated and inspected.

Comments: ±.5–1 psi across range. Best pencil gauge. Very consistent readings. Standard style pencil gauge, slanted chuck. Works fine. Be careful when removing the stem. Bump it and the readings change.

Contact: NAPA Auto Parts Store

No name Pencil Gauge #2 — $2-$3

Overall Score: 15.0

Accuracy	●●●●○
Durability	●●●●○
Form/Fit	●●●●○
Readability	●●●○○
Type:	Pencil
Range:	10–50 psi

Comments: +1 psi @ 35 and 50. Pencil gauges can be accurate, but precise readings are difficult. Aluminum. Light, cheap feel, you almost don't want to trust it, but readings were consistent. Standard type pencil gauge, slanted chuck. Works fine, but care is required to not bump the slider as you remove it from the valve stem.

Contact: N/A

No name Pencil Gauge #3 — $2-$3

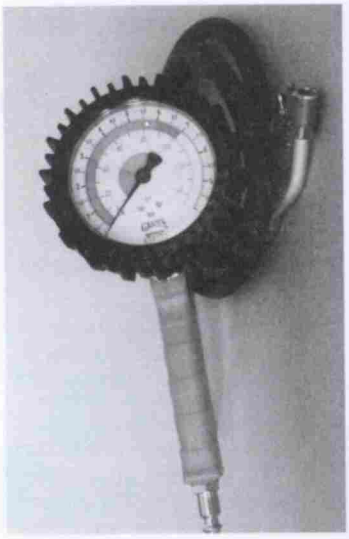
Overall Score: 14.5

Accuracy	●●●◐○
Durability	●●●●○
Form/Fit	●●●●○
Readability	●●●○○
Type:	Pencil
Range:	10–100 psi
Claims:	None

Comments: +1–1.5 psi across range. Found in tool box. Nothing to recommend it. Holds pressure until you push it back in. Good, so long as you don't bump it and change the reading. Accuracy improved after drops!

Contact: N/A

Professional Tire Inflating Gun 92549 $49.99



Overall Score: 19.0

Accuracy	●●●●●
Durability	●●●●●
Form/Fit	●●●●●
Readability	●●●●○
Type:	Analog Dial
Range:	0–140 psi
Claims:	None

Comments: ±.5 psi @ 20. For such a large gauge, they could have made the scale bigger for more precise readings. Garage use only, as it requires pressurized air source to work. Check air pressure as you fill. Large gauge, wide range. Super accurate.

Contact: Griotsgarage.com

Talking Tire Gauge 63-1205 $9.99-$12.99

Overall Score: 16.0

Accuracy	●●●●○
Durability	●●●●○
Form/Fit	●●●●○
Readability	●●●●○
Type:	Digital
Range:	5–99 psi
Claims:	None

Comments: +.5–1.5 psi across range. 3/8" LCD reads in tenths. Identical to RoadGear but black. Same Maxell battery. RS attempts to sell you a battery when you buy it, but comes with one. Good fit in hand. "Talk" is a bit of a gimmick. Recall button is a nice feature.

Contact: Radio Shack

RoadGear $24.90

Overall Score: 17.0

Accuracy	●●●●○
Durability	●●●●◐
Form/Fit	●●●●○
Readability	●●●●○
Type:	Digital
Range:	5–99.5 psi
Claims:	Accurate to ± 1%

Comments: +.5 psi mid-high range, ±1 psi low range. 3/8" LCD reads in tenths. Appears identical to Radio Shack gauge, except for chrome paint. Good feel. Voice loud enough to hear. Rubber handle. Good angle for bikes.

Contact: roadgear.com

Slime Sport Gauge $4.99

Overall Score: 13.0

Accuracy	●●○○○
Durability	●●●●○
Form/Fit	●●●○○
Readability	●●●○○
Type:	Analog Dial
Range:	10–75 psi
Claims:	with Trigger Reset Button

Comments: ±3 psi @ 50. Gauge face is very difficult to read. All plastic, feels cheap. Fits in hand okay, chuck angled correctly. Holds pressure well until you push plastic release button. Accuracy better after drops!

Contact: AutoZone

Slime Tire Gauge 2005-A $3.99

Overall Score: 14.5

Accuracy	●●●○○
Durability	●●●●○
Form/Fit	●●●●○
Readability	●●●○○
Type:	Pencil
Range:	20–120 psi
Claims:	Bonus: 4 piece standard black valve caps.

Comments: -2 psi @ 20, ±2 psi @ 35, ±1 psi @ 50. Pulling the slider out and trying to recall your mark is tough. Heavier feel than other pencil type gauges. Spot-on at 80 psi. Fits the valve stem well, difficult to get precise readings.

Contact: AutoZone

Sources

AutoSport.com—(800) 726-1199; online sales: www.autosportcatalog.com

Auto Zone—Store locator: www.autozone.com

Checker Auto Parts—Dealer locator: www.cskauto.com

Cycle Gear—Store locator: www.cyclegear.com; (707) 747-5053, Ext. 192 for online orders

cyclepump.com—(425) 673-1023

Griot's Garage—(800) 345-5789; www.griotsgarage.com

Intercomp Racing—(800) 328-3336; www.intercomp-racing.com

NAPA Auto Parts—Store locator www.napaonline.com

Radio Shack—Store locator www.radioshack.com

RoadGear—(800) 854-4327; online at www.roadgear.com

Sears Auto Center—Store locator www.sears.com

TireRack.com—(888) 541-1777