Handy Tips To Solve Carburetor Problems

If plugged or overflowing carburetors are a problem in your seldom-used older tractors, Dale McLaen has some suggestions. Over his 27 years of repairing all types of farm engines in his on-farm shop, he has cleaned and used carb kit parts to refurbish dozens of updraft carburetors. He blames most of the problems he has seen on poor-quality fuel and modern carb kits.

"I've learned to make modifications that can reduce carb problems," says McLaen. "I said reduce, not eliminate them, as it's nearly impossible to fix these problems forever."

McLaen grew up driving gasoline-powered tractors in the 60's and 70's without ever installing a carb kit. The only time he shut off the fuel line was to clean the sediment bowl. That's no longer the case.

"Modern reformulated fuel quickly turns to stinky, sticky varnish if it sits too long," says McLaen. "Tractors that once burned hundreds of gallons of fuel each season may only burn a tank or so a year. The result is gummed up and overflowing carburetors."

Another problem with fuel, he notes, is the addition of ethanol. While he uses E10 in everything he drives, he does not use it in equipment that may sit idle for months.

"Alcohol absorbs moisture, making the reformulated fuel problem worse," says McLaen. "It also contributes to rusting the inside of fuel tanks."

Carb kits are another problem, even new ones. "I recently put kits in carbs on A, C, H, and 300 IH tractors," says McLaen. "Three of the four carbs overflowed and leaked fuel on the floor within a day, and the fourth did so within a week."

While he could make the problem better, he couldn't fix it. He blames the Viton tipped needles found in today's carb kits.

"The Viton tips should be better, but they just don't seal as reliably in a carburetor with constant fuel pressure present in a gravity-type fuel supply," says McLaen. "To prove my theory, I found a brass needle in my spare carb parts and installed it in the H carb. Problem solved."

McLaen says OEM-type brass needles tended to seal better when new and could be easily cleaned and reused. If one seeped, a tiny amount of polishing compound on the tip and twirling the tip against the seat sealed the surface.

300 IH carburetor with drain line, filter, and brass drain valve.

One solution to the overflow problem is to manually shut off the fuel line every time the engine is turned off. A one-time fix is to install an electric fuel shut-off solenoid ($15 online) in the fuel line. This automatically shuts off the fuel line when the ignition is turned off.

Recently McLaen ran into another carburetor problem. The inlet portion of the carb on his 300 IH had a drain with a felt filter plug intended to allow any overflow to drip out. It plugged up after 60 years, causing overflow fuel to puddle in the inlet hose.

"I removed the plug and installed a 1/4-in. hose barb fitting and attached a short section of hose and a small filter on its end," says McLaen. "The filter is simply to prevent any dirty air from being sucked back into the air inlet when the engine is running. I also replaced the fuel bowl drain plug with a brass petcock drain valve, so I can easily empty the carb if needed or check to see if fuel is reaching the carb properly.

"You might not be able to do this on some carbs," says McLaen. "However, the general idea is to manage a leaky carb rather than have it drip uncontrollably and be a fire hazard."

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TreadSure App Helps Analyze Tire Wear

Dawson Tire and Wheel is taking the guesswork out of estimating tread life on ag equipment tires and tracks with their TreadSure app. Measure the tread, and the app will tell you what percent is left by comparing it with the original tread depth.

"Anyone can do that by going to the data book for the tire, but that is increasingly difficult with international suppliers who may not have data books in English," says Eric MacPherson, Dawson Tire and Wheel. "More than 90 percent of ag tires sold in North America are in our database. You enter your tread depth, and our app will give you the remaining tread life."

Knowing tread life remaining can be money in the bank when trading off old equipment or buying used. He points out that estimating tread life on an R Series Deere tractor at 95 percent when it's 65 percent can overvalue it by $35,000. That kind of error is why Dawson Tire and Wheel developed TreadSure.

"Farm Equipment dealers are 60 to 70 percent of our business," says MacPherson. "When we asked how we could help them, they often said, 'Help our salespeople evaluate tires on trade-ins.'"

Dawson Tire and Wheel introduced TreadSure in 2021 to give salespeople just that kind of tool. Then they took it a step further.

"We spent all of 2022 building out our Pro version," says MacPherson. "It puts the tire information in a TreadSure report that can be uploaded with photos online. It also provides an option for adding information to the form, as well as adding up to two recipients for email reports. The app also provides users the option of requesting trade-in values from Dawson Tire and Wheel.

TreadSure is more than just an aide to salespeople. It also gives farmers buying and selling the equipment accurate estimates. Dealers are posting the evaluations with online listings. MacPherson reports that auction companies are now sharing tread life reports with prospective buyers.

"We haven't marketed the app to producers, but we are starting to get producer feedback anyway," says MacPherson.

TreadSure App has 90 percent of ag tires used in the U.S. in its database.

While a standard metal tread gauge is suggested, Dawson Tire and Wheel is helping users who don't have one. At the user's request, the company will send out a cardboard tread gauge. Just punch out the ruler and slide it through the holder for a functional gauge.

It's one more way that Dawson Tire and Wheel is attempting to fulfill its stated mission: "To improve equipment valuations through accessible and transparent information."

Another way they do that is through videos on the app, as well as how to measure tread depth and how to read an ag tire sidewall. The latter is vital for understanding the proper carrying load, speed, and pressure for a specific tire.

These items and more are also available as blog posts on the TreadSure website's resources page.

For a better understanding of tire pairings, front and back, ply rating symbols, speed rating symbols, bias to metric conversions, carrying capacity, and more, go to the website and download the Dawson Tire and Wheel tire chart.

Like the TreadSure app and the tire tread depth gauge, the tire chart is free. The Pro version of the app is priced according to the user, whether auction or dealer, and the size of the dealership.

Contact: FARM SHOW Followup, Dawson Tire and Wheel, P.O. Box 128 Gothenburg, Neb. 69138 (ph 888-302-5926; TreadSure@dawsontire.com; www.treadsure.app).

Recycled Tires Make Great Cutting Edges and More

Cutting edges for skid steer buckets are only one of a wide variety of products Schuyler Rubber Company makes out of old bus and truck tires. The company has been recycling tires and other rubber products for more than 70 years. They make cutting edges, snow-plow blades, roll-off wheels, bumpers and backhoe pads. All are made from 100 percent recycled, laminated rubber and recycled steel.

"The more we can recycle, the less goes to landfill, and people get better products that last longer," says Brittany Wright, Schuyler Rubber Company. "Originally, we were known for marine fendering of tugs and barges. Over the past 20 years, we moved into other applications in construction, farming, waste energy, and seed plants."

Cutting edges for skid steers, wheel loaders, and backhoes outlast molded cutting edges 2:1. All use a universal T-track system. Grade 8 plow bolts slide into the channel to match the bucket's existing bolt pattern. Just measure the bucket from edge to edge and select the desired wear service of 3 to 10 in. Eight general bucket widths are kept in stock, but other cutting edges are custom-cut.

Schuyler makes its laminated cutting edges by compressing rubber sections onto 1 1/4-in. steel rods and securing them every 12 in. with fault bar retaining plates.

The cutting edges provide a squeegee effect for pushing liquids, as well as solids. They prolong the wear life of concrete floors while providing an effective bucket edge.

"Most of our sales are direct to the customer," says Wright. "Prices start at $112 per linear ft. for the 3-in. 911S and go to $232 per ft. for the 10-in. 911X."

Heavy-duty stabilizer pads designed for CAT backhoes are also made from truck and bus tires and mounted in steel housing.

"We introduced these pads at the request of one of our dealers," says Wright. "They were having a hard time getting them from CAT and faced a 6 to 10-week waiting period. We give them a green alternative with a short lead time at half the price that will outlast the OEM design."

The 10 3/8 by 18-in. pads are available in bias and radial ply rubber and priced at $262.76. A trial set has been in regular use with a municipality for more than a year and has shown only 1/4 in. wear, according to Wright.

"Our pads are 4 in. thick compared to CAT's 2 1/4 in.," she says. "Ours are much more cost-effective and available. They're stocked on-site, and we provide next-day service."

Other products include the rubber roll-off wheels in 6, 8, and 10-in. diameters with widths of up to 12 in. The laminated wheels are quieter and last longer than steel wheels. They also eliminate wear to floors, driveways, and other solid surfaces. An 8 by 8-in. wheel is rated for 40,000 lbs. compression. Axles and assemblies are available for additional fees.

Snowplow blades are 8 9/16 in. tall with a 3-in. wear surface and a depth of 6 in. Each blade is custom-cut to accommodate a specific snowplow size. They're available in straight and curved plow options.

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