

LOW-COST POWER BOOST

LP Injection for Diesel Tractors

Farmers from all corners of the U. S. are beating a path to Acme Carburetion, Mankato, Minn., to buy do-it-yourself Red Rooster kits for injecting LP-gas into older model diesel tractors.

"It's the hottest thing going for getting more tractor power for least cost," says Don Fettes, sales manager. The basic Red Rooster kit was developed by C. F. Butterworth, founder of the company and internationally-known expert on LP-gas carburetion.

Key advantages cited for injecting LP-gas into diesels, according to Fettes, include: 20 to 25% more power, 15 to 20% less fuel consumption, less engine maintenance, and 2 to 10 times longer engine life.

Here's how Fettes explains the power-boosting effect of LP-gas injection: "Carbon and oil dilution are the greatest problems with diesel en-

gines. A diesel has no throttle butterfly and a full charge of air goes in for each stroke of the piston. It's what is called an excess air burning unit, seldom utilizing more than 75% of the air inducted. In order to get more power, many have opened up the pump but this causes problems with carbon, smoke and oil dilution. By injecting a little LP-gas into the air stream, in carefully calibrated amounts, it utilizes this excess air and burns what would otherwise be unburned diesel fuel. This is why so many farmers using injection report that, even with the extra power, they use fewer gallons of the combined fuels than when operating on straight diesel."

Cost for the kit, with complete do-it-yourself instructions, is \$137.50, purchased direct from the factory (tank not included). "Assuming a 20% boost in horsepower, the 20 ad-



Dennis Johnson, Litchfield, Minn., says his John Deere 4230, equipped with LP-gas injection and set for a 15% power increase, will run rings around a 4020. "When the going gets tough, just flip the LP switch and she walks right through."

ditional horses cost only about \$7 each, versus the going rate of more than \$100 per factory engineered horsepower," Fettes points out.

The Red Rooster kit works on either naturally aspirated or turbocharged diesels. No change or adjustment is needed if the engine is in good condition, and is not being over fueled or doesn't smoke excessively, says Fettes.

He notes that although Acme's Red Rooster kit is designed so the micro-switch cuts LP-gas in at any desired RPM, say at 2/3 load, many farmers set it so LP-gas injects at much lighter loads, such as for blowing snow, haying or cultivating.

How does LP gas injection compare with turbo charging?

"The cost of LP-injection, including the fuel tank, is less than half the cost of a turbocharger," Fettes answers. "And injection is easier on the engine because LP gives an explosion or power push more like steam. When you inject LP into the air stream, a diesel purrs like a kitten."

Here's how users size up the power-booster:

Dave Hagstrom, Kimball, Neb.: "On my 1500 Massey with a V-8 Caterpillar engine, I use the Red Rooster only part time. I put the tractor in a gear that will just pull the chisel plow or disk in easy going. Then, when I hit a tough spot or hill and the engine pulls down to 2,500 RPM, I flip the switch. It picks up 300 RPM faster than by lifting the implement slightly with the hydraulic control. I call the injector my 'poor boy' shift transmission."

Bob Dasher, Buffalo Lake, Minn.: "On straight diesel, our IHC 800 did 98 hp. Opened up the LP injector and it walked up to 128 but we set it back to 115 hp and sealed it. Pyrometer showed a drop of over 300 degrees on exhaust temperature."

Norman Kracke, Big Springs, Neb.: My main interest in installing LP injection on my 1070 Case was to keep the engine clean and responsive. I adjusted the Red Rooster for a 10% hp increase. When I pull the dip stick after 60 hours operation, the oil is clean. It's a good investment."

Steve Mellot, Bourbon, Ind.: Wouldn't go to the field without it. Our John Deere was putting out 65 hp and, with the Red Rooster, we set it up to 80 and hooked six 16 in. plows behind it."

Acme Carburetion also offers an optional dash-mounted Pyrometer to show exhaust temperature. It lists for \$94.55. Although not required, it's beneficial in adjusting the load in the field, or where a dynamometer isn't available, says Fettes.

For more details, contact: FARM SHOW Followup, Acme Carburetion, Box 2168, Mankato, Minn. (ph. 507 387-2646).



Mechanical cow goes forward, backwards, sideways and stops on a dime.

Meet 'MAC' the Mechanical Cow

Even though it doesn't give milk or provide steaks, Ed Heany believes his new mechanical cow is better than the real thing.

Called "Mac" — which stands for Mechanical Animated Cows — it's powered by batteries and drives like a tractor. It moves faster in all directions than a real cow and is tailor-made for training horses to work cattle. Top speed is 30 mph. It goes forward, backwards, sideways and stops on a dime.

"Using real cattle to work and train horses is expensive," explains Heany, vice president and general manager of Mechanical Animated Animals, developer and manufacturer of the mechanical cow. "Mac does a better job, never gets tired and does exactly what you want it to do.

It's an ideal training device for

starting young horses and novice riders because of its ability to work at whatever speed you desire. It will save your cattle from being soured and reduce the amount of live cattle needed. It's also great for tuning the finished horse since you can repeat the needed action over and over."

Two 1.5 hp motors, one for each drive wheel, are powered by storage batteries. The drive is similar to that used on electric golf carts.

Mac is available as a Hereford, Angus, or black white face. Brahman bulls are also available on request. Sells for \$3,395.

For more details, contact: FARM SHOW Followup, Mechanical Animated Animals, Inc., 1345 Schaumburg Road, Elgin, Ill. 60120 (ph. 312 741-7601).



Fastest Gun in the West

New from NASCO is a pellet pistol that lets you mark livestock right from the seat of your saddle or pickup. Operated by CO₂ gas "enerjets," it shoots marking pellets which break on impact without hurting the animal.

"Just point it and pull the trigger," says Grant Cummings, of NASCO. "It leaves a bright color mark without having to get near the animal. Works great for marking cattle, hogs, sheep or horses for breeding, sorting, treatment, marketing and so forth."

Cummings notes that the pellets are made of completely leadless latex paint. Sells for \$110.60, including the pistol, holster, box of 12 CO₂ "enerjets" and a carton of 168 spherical pellets in your choice of red, blue, yellow, orange, white or light green.

For more details, contact: FARM SHOW Followup, NASCO, 901 Janesville Ave., Fort Atkinson, Wis. 53538 (ph 414 563-2446).