

## FLIP A LEVER TO SWITCH FROM GASOLINE TO ALCOHOL

# First Two-Fuel Kit Now On The Market

"So far as we know, it's the first dual-fuel engine conversion kit on the market," says Mike Brown, vice president of Alcohol Fuel Injection of Ohio, about the company's new alcohol/gas fuel system that lets you switch fuels, carburetors and timing in less than a second with a push-pull, dash-mounted lever.

The kit consists of two carburetors, linkage, a stainless steel storage tank, special manifold system designed to warm low-grade alcohol in cool temperatures, and other miscellaneous parts.

"The carburetors are linked together with a single control to the distributor. This dashboard control switches carburetors and advances the timing about 8°, which has the effect of raising the compression about 2 pts. A separate electric switch changes fuel lines," explains Brown, who is also the author of "Brown's Alcohol Motor Fuel Cookbook," which, according to Brown, sold more than 80,000 copies.

one-way conversion, upping the compression, drilling out carburetor jets, and changing the engine over permanently to alcohol. After the change, though, gasoline will run poorly in those vehicles. We're giving people a choice," says Brown.

After conversion, the two carburetors sit 6 in. higher than the original carburetor on top of an adapter/heat riser mechanism. For



Mike Brown works on one of the first installed two-fuel kits.

this reason, Brown says, "The kit is designed primarily for pickups. Cars don't ordinarily have the head-room required."

Although they're already installing units on a custom basis, the company plans to set up a dealer network to mass-market the kit. For \$7,000, a new dealer receives an installed dual-fuel system and an area dealership.

"We need about 500 qualified dealers to raise the cash for a mass marketing effort. We picked up 30 at our first show recently," Brown told FARM SHOW.

For more information, contact:

FARM SHOW Followup, Alcohol Fuel Injection of Ohio, Inc., Box 302, N. Dayton Station, Dayton, Ohio 45404 (ph 513 237-8850).

A group of Farmersville, Ill., farmers and mechanics have formed one of the first companies specializing in one-way, gas-to-alcohol conversions. For less than \$1,000, they convert your carburetor, install a fuel pre-heater and — the most expensive operation — increase your engine's compression by re-working cylinders and pistons.

"We normally increase compression to round 12:5 to 1, which still allows the car to run fairly well on

gasoline," says Gary Lott, chief mechanic of the group. "We've converted several pickups already. Takes about 18 to 25 hours to do the job."

The company is considering marketing a do-it-yourself kit which would include plans, pistons, rings and everything else needed for individual models and makes, but for now works out of the Farmersville shop.

For more information, contact: FARM SHOW Followup, Alcomotive Inc., Farmersville, Ill. 62533 (ph 217 227-3360).



Photo by Jennifer Richter, Panhandle Press.

Alcomotive Inc., Farmersville, Ill., makes one-way, gas-to-alcohol conversions.

## SAVES ENERGY, MINIMIZES LOSSES

# Cross Conveyor Builds Big Windrows

Consolidation of rows of straw or hay in the field can make baling more efficient, but it can also lead to quality losses resulting from handling with a side-delivery rake.

Agricultural engineers at Auburn University have come up with a system that consolidates the rows without a side-delivery rake. They rigged up a "cross conveyor" attachment for the combine that drops residue onto a conveyor belt and moves it sideways to be dumped on top of another windrow.

Using a short conveyor, they can place the crop residue onto the windrow from two or three rows away. Using a long conveyor, they can move the crop residue from four or five rows away. Thus, 10 rows can be consolidated into one.

The prototype conveyor was made for Auburn by the Lilliston Company, a major hay and tillage equipment manufacturer. The short conveyor runs on the tractor power take off, and the long one is belt-driven by the combine.

"Anybody could put one together in a small shop," says C. M. Stokes, the designer from Auburn Univer-



Cross conveyor is tested on a peanut combine. Normally, peanut hay would be raked into windrows, causing damage and loss of leaves.

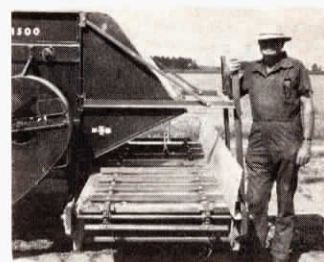
sity. "It just needs to fit the cutter head of the combine. The conveyor is geared up to run slightly faster than the ground speed of the combine, so the crop residue doesn't pile up."

The advantages of combining windrows are several. First, leaves are not lost because the rows don't need to be raked. Second, the heavy

windrows are ideal for rolling into big bales. And third, the whole process saves energy.

Stokes feels that the system is adaptable for harvesting all kinds of hay and crop residues, though it was designed and tested in peanut hay.

Any combine to be used with the cross conveyor must be modified.



Stokes says the conveyor could be adapted to handle any crop residue.

The rear hood needs to be raised to increase ground clearance, and the rear wheels need to be moved back to compensate for the added weight of the conveyor.

In spite of the modifications that are needed, Stokes is finding more and more interest in the cross conveyor because of the energy it will save.

For more details, contact: FARM SHOW Followup, C. M. Stokes, Dept. of Agricultural Engineering, Auburn University, Auburn, Ala. 36830 (ph 205 826-4180).