#### LIKE RUNNING THE ENGINE WITHOUT TURNING THE KEY

# New Car 'Warmer Upper' Starts By Remote Control

"It's a trouble-free way to warm up your car, truck or tractor on cold winter mornings without starting the engine and without going outside," says Norm Hall, inventor of a car "warmer upper" that warms both the engine and the passenger compartments by heating and circulating engine coolant and activating heater and defrost controls.

Hall says other manufacturers have tried to start cars by remote control but there have always been problems with getting a reliable start of the engine. "With this unit you always know it comes on and that the car will be warm because there's nothing to go wrong," he explains.

The system consists of a heater, pump and electronic controls. The pump simply plumbs into the car's heater lines and the controls wire into the heater controls. The heater, pump and controls are powered by 110-volt power. You plug it in like a conventional hand-bolt or tank heater.

To operate, you simply press a button on a remote-controlled radio device that'll work from up to 300 ft. away. It turns on both the pump and heater controls so that coolant circulates freely through the engine and heater coil just as they would if the car were running. The engine warms up much faster than with a conventional heater and when you come out the interior of the car is warm and defrosted.

"It saves running the engine which saves gasoline and stress on the engine in cold weather starts. Takes about ½ hr. to thoroughly warm up a car, pickup or truck," says Hall, who's used the device himself for 3 years.

The H & S Car Warmer, as it's called, sells for \$350. A timer-controlled model that comes on automatically without remote control is also available.

For more information, contact: FARM SHOW Followup, H & S Production, 14851 Endicott Way, Apple Valley, Minn. 55124 (ph 612 423-1730 or 587-2005).



Transmitter activates pump and heater controls, circulating coolant to warm up both engine and inside of car.

#### **WORKS LIKE A SECOND RADIATOR**

## Add-On Cooler Stops Farm Truck "Boilovers"

A new add-on truck cooler channels heat away from truck engines to prevent "boilovers" during hot weather.

When Don Hutson started manufacturing the add-on device, it was designed for use as a heater for semi trailers. Hot engine coolant circulates through its coils to heat trailers. A farmer who was having trouble with overheating approached him with the idea of using the cooler to pull heat off the engine, and it's been used that way ever since.

"To install you simply plumb into the heater hose lines and mount it somewhere on the frame of the truck. It's small enough to mount out of the way. Then you wire up the fan, which blows through the unit. It runs wide open all the time. If you use the truck in the winter, you can shut it down," says Hutson.

He says the cooler has so far been used primarily on grain trucks with automatic transmissions because the transmission cooler is often mounted ahead of the radiator, restricting air flow. But he says it will work on any vehicle with an overheating problem. He recently installed one on a brand new International truck. Sells for \$600.

For more information, contact: FARM SHOW Followup, Don Hutson, Dakota Aviation, Inc., P.O. Box 172, Grafton, N. Dak. 58237 (ph 701 352-3257).



Truck cooler acts like a second radiator to prevent boilovers.

## REFRIGERATED SEMI-TRAILERS MAKE SOLID, WEATHER-PROOF BUILDINGS

### Pig Nursery Built From Old Trucks

By Dianne L. Beetler

Eugene Holt, Oneida, Ill. and his two sons, Gary and Michael, developed a "cool" idea for a pig nursery last year. They bought three refrigerated semi-trailers and placed them sideby-side on a concrete foundation.

The Holts came up with the idea after they heard about Nebraska farmers who used abandoned, underground Army ammunition dumps, Colorado farmers who used boxcars, and other pork producers who remodeled mobile homes for swine use.

The farming trio attached the nur-

sery trailers to an existing building and built a lean-to on the front of the trailers. A big advantage was that they didn't have to insulate the trailers, which they heat with natural gas. A heat exchanger that recycles exhausted warm air was installed at the rear of the unusual nursery, and the trailers were wired for electricity.

Each trailer contains 10 pens that hold nine pigs each. Waste collects in concrete pits poured on the trailer floors beneath the pens.

The Holts bought the 40-ft. trailers for \$1,800 each from a salvage yard.



Gary Holt built nursery from 3 trailers placed side by side. Each trailer holds 90 pigs.