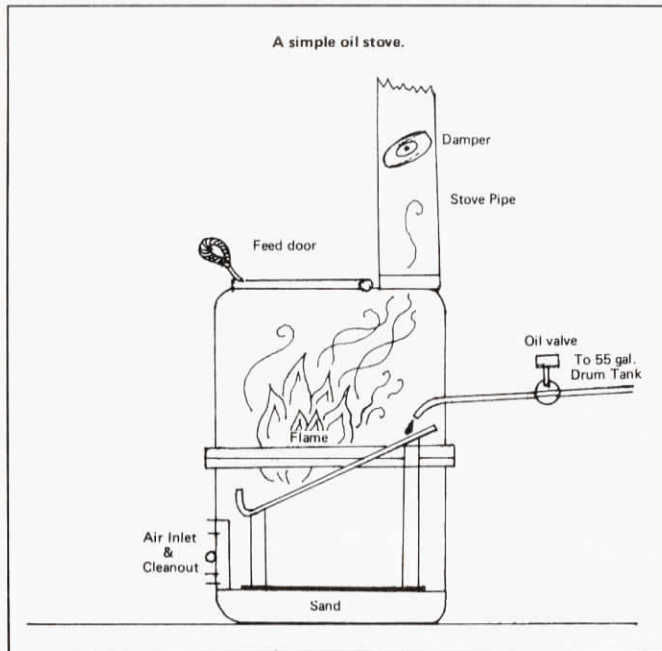


to burn waste oil. The "Winkler" burner was manufactured by U.S. Machine Co., which is now part of the Stewart Warner Company, headquartered in Lebanon, Ind. FARM SHOW checked with the Stewart Warner Company and discovered that although the burner designed for handling waste oil worked satisfactorily, there wasn't enough demand for it at the time and production was discontinued.

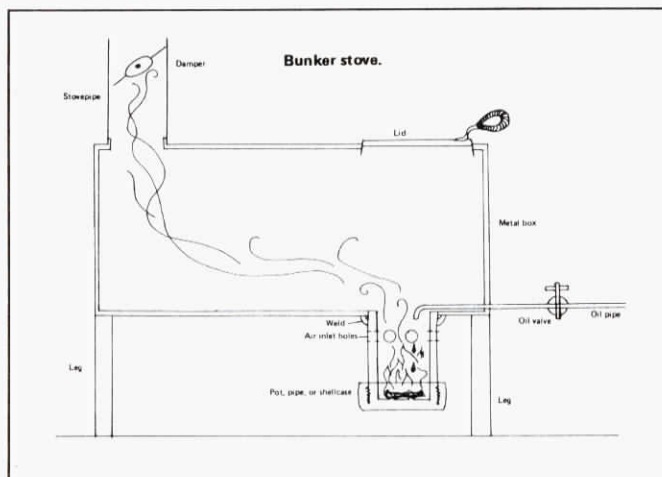
"If you're willing to take the time to

light them by hand, and clean them regularly, home-made waste oil heaters work great. And they're relatively easy to build," says Stan Stolen, of Wood Lake, Minn.

The accompanying photos show diagrams for home-made waste oil heaters which FARM SHOW obtained, courtesy Alternative Sources of Energy Magazine, Box 90A, Milaca, Mn., and John McGeorge, 11 Ells St., Norwalk, Conn.



This plate burner designed for burning waste oil features a plate approximately 3/4 the size of the stove's inside diameter. The plate on which the waste oil drips is inclined toward the front of the stove, and the front lip is turned up. A needle valve regulates the amount of oil trickled down over the plate. The oil is vaporized by the heat of combustion, taking fire as it reaches the turned-up lip. Size of the fire is regulated by the oil feed rate. The air inlet is left wide open to make the fire burn clean. While operation is simple, it is not fool-proof. If you feed too much oil it will spill off the plate and drip into the sand, setting the stage for a big blaze.



In this home-built waste oil heater, the oil is dripped into a pot and, being vaporized, it burns with a yellow-bluish flame. The system operates with good access to air so the lean mixture makes the oil burn clean.

EDDIE SCHULER INC



Eddie Schuler has gotten up to 69 mpg on this diesel-powered Chrysler test car. He gets up to 54 mpg on a Dodge Colt which has a diesel engine and runs on waste crankcase oil and diesel fuel.

GETS UP TO 54 MPG

Car Runs on Waste Oil

"I just hope the experimenting I've done sparks the imagination of others who will take the ball and run with it," said Eddie Schuler, Morrison, Ill., as he prepared to take FARM SHOW for a test drive in his 1976 diesel-powered Dodge Colt. I watched with amazement as Eddie poured waste crankcase oil into the fuel tank for our test drive.

As we drove down the highway, Eddie explained how he gets up to 54 miles per gallon on a mixture of waste oil and No. 2 diesel fuel. "I get this kind of mileage using anywhere from 5 to up to 25% waste oil," he explained.

His "waste oil burner" doesn't smoke, starts in cold weather and can run circles around any conventional car in its class. In short, it's Schuler's answer to skeptics who question the full potential of diesel power as a way to help stretch the nation's limited fuel supply.

In addition to waste crankcase oil and No. 2 diesel fuel, Schuler's diesel-powered Dodge Colt also runs on No. 1 diesel fuel, kerosene, some grades of heating oil, or a mixture of alcohol and low grade diesel fuel.

"We spent many hours figuring, laboring and trying things on this car," says Schuler, who along with his son, Mark, and Larry Bealer, mechanic, worked out the necessary gear ratios, axle combinations, transmission and other features that add up to 54 mpg on the waste oil-diesel fuel mixture.

The revamped Dodge Colt is powered by a 4 cyl. Chrysler diesel, has a 5 speed transmission with overdrive, a 3.7 rear axle ratio and larger tires. Traveling 55 mph at 2,000 engine rpm's, it achieves up to 54 mpg on No. 2 diesel fuel to

which 25% filtered waste crankcase oil has been added. There is no noticeable change in engine performance in using the waste oil, and the engine burns clean without smoking, says Schuler.

As a sideline to his large automobile and truck dealership, he specializes in custom repowering pickup trucks and a few cars, equipping them with 4 or 6 cyl. Chrysler diesel engines. He notes that these diesel engines turn up to 4,000 rpm's and gear ratios usually do not have to be changed in using them to repower cars or pickups. Dodge A727 transmissions are used with adapters for repowering pickups and cars originally equipped with standard or automatic transmissions. Vacuum actuated transmissions, however, aren't compatible with diesel engines, he points out.

"We have expended a great deal of time, money and engineering on the Chrysler diesel. We believe it's the best engine presently available for powering both cars and pickups.

"This engine has a life expectancy of 300,000 miles and is extremely economical to operate — always achieving twice the mileage and sometimes exceeding three times that of conventional engines. What's more, it's one of the few engines that will burn a wide variety of low cost fuels, including waste crankcase oil," Schuler points out.

If you'd like to compare notes with him on repowering cars or pickups, and running them on waste crankcase oil or other low-grade, inexpensive fuels, contact: FARM SHOW Followup, Eddie Schuler, Box 109, Morrison, Ill. 61270 (ph 815 772-2196).