

Where Did Your Latest **New Tractor Originate?**

Many FARM SHOW readers have told us they don't buy foreign cars, trucks or farm equipment because they want to support U.S. industry. But many would be surprised if they knew that the 70 hp tractor they bought from Deere and Co. last year was actually made in Japan. The truth is that it's almost impossible nowadays to buy a U.S. or Canadian-made tractor under 100 hp.

"Let's face it. Imports are rapidly penetrating the tractor market. In terms of actual tractors sold, they have a larger share of market than they do in automobiles," reports Ag Engineer Frank Buckingham, writing in a recent issue of Buying for The Farm (published at 2645 Maple Hill Lane, Brookfield, Wis., by Elmbrook Publishing Co.).

Says Buckingham: "Most American manufacturers apparently have concluded that it's safer and less expensive to commit themselves to import rather than design and produce new models of under-100 hp tractors. An important exception to that trend is Ford which assembles all tractors from the 2310 (32 pto hp) through the TW-35 (170 pto hp) in the U.S. However, some engine and hydraulic systems for tractors up to and including the 87 hp 7710 are made by Ford in England, and axles and transmissions for some of those same models are made in Ford plants in Belgium.

Buckingham notes that "there is a strong, continuing debate as to whether or not the industry misjudged the current small tractor market in the U.S. . . . Apparently few, if any, people in the industry accurately estimated how many small tractors could be sold in the U.S. until the import market was well established. It appears unlikely that U.S. firms will restart domestic production of small tractors. All major tractor makers have contracts with Japanese manufacturers to supply small tractors with American paint and names. A number of Japanese companies are also selling in the U.S. under their own brands, with the recognized leader, Kubota, reportedly selling more than

20,000 under-40 hp tractors in the U.S. annually." Here, courtesy of Buckingham and Buying for The Farm, is a summary of where tractors are made:

Deere: Models 650, 750, 850, 950, 1050, 1250, 1450, 1650 built in Japan by Yanmar. Models 2150, 2350, 2550, 2750, 2950 built by Deere in West Germany. Models 4050, 4250, 4450, 4650, 4850, 8450, 8650, 8850 built in U.S. by Deere.

International: Models 234, 244, 254 made in Japan by Mitsubishi models 274, 284, 284D made in Japan by Komatsu; models 484, 584, 684, 784, 884 and the hydro 84 made in Great Britain by IH; models 3088, 3288, 3488, 3688, 5088, 5288, 5488, 6388, 6588, 6788 built in U.S. by IH.

Allis-Chalmers: Models 5015, 5020, 5030, 6140 made in Japan by Toyosho; models 5045, 5050 made in Italy by Fiat; models 6060, 6080, 8010, 8030, 8050, 8070, 4W220, 4W305 made in U.S. by A-C (6060, 6080 power trains made by Fiat in Italy).

Case: Models 1194, 1294, 1394, 1494, 1594 made in England by Case (formerly David Brown); models 2094, 2294, 2394, 2594, 3294, 4490, 4690, 4890, 4494, 4694, 4894, 4994 made in U.S. by Case,

Ford: Models 1110, 1210, 1310, 1510, 1710, 1910 made in Japan by Shibaura; models 2310, 2910, 3910, 4110, 4610, 5610, 6610, 6710, 7610, 7710, TW-5, TW-15, TW-25, TW-35 made in U.S. by

Massey-Ferguson: Models 1010, 205, 210, 220 made in Japan by Toyosho; models 240, 250, 270, 290, 298 made in England by MF; models 254, 274, 294 made in Italy by Landini (MF subsidiary); models 670, 690, 698, 2640 made in France by MF; models 4800, 4840, 4880, 4900 made in Canada by

White: Models 2-30, 2-35, 2-55, 2-65, 2-75 made in Japan by Iseki; models 2-88, 2-110, 2-135, 2-155, 2-180, 4-210, 4-225, 4-270 made in U.S. by White (some Perkins engines from England)

All models of Belarus are made in Russia; all models of Deutz-Fahr are made in West Germany; all models of Hesston are made in Italy by Fiat; all models of Kubota, Yanmar and Mitsubishi are made by the respective companies in Japan and all models of Same are made in Italy.

All models of Steiger are made in the U.S. by Steiger, and all models of Versatile are made in Canada by Versatile (U.S. engines from the U.S.).

"Cabbage Patch" Engine Regulator - As a young carburetor mechanic, 26-year-old Ray Tierney confronted the most frustrating problem that car and truck owners face today - hesitation, jerking or cutting out of the engine at moderate to low rpm's. The problem, which is particularly annoying when pulling away from stop signs or lights, results from an improperly set "exhaust gas recirculating valve", or EGR, which has been a part of the pollution controls on every car or truck sold in the U.S. since 1973. Tierney says that when he found out many car owners had spent hundreds, or even thousands, of dollars trying to solve the problem, he began to experiment on his own car - a 1976 Lincoln with lots of power but which hesitated and bucked at moderate rpm's - and came up with a new regulator valve.

Called the "Reg-Rite", the simple, easy-to-install valve is selling so fast they're calling it the "Cabbage Patch Doll' of the auto world. The valve is already selling in some 1,500 stores around the country, spreading quickly to new areas as mechanics and car owners hear about it.

Here's the problem. With just the right proportion - about 10% - of exhaust gas added to the air-fuel mixture, most cars run fine. But if too much exhaust gas is added, the car will hesitate. If there's not enough, it will ping. Because manufacturers want to make certain cars don't ping, they sacrifice performance by opening the EGR too far on most cars. Tierney says the problem is particularly bad on 6-cyl. engines because they're often equipped with EGR valves designed for 8-cyl. engines.

The valve Tierney came up with consists simply of a small 1-in. dia. round cannister with fittings on either side and an adjustment screw on top. It installs in less than a minute in the line coming out of the EGR valve. No tools are needed and, once installed, the flow from the EGR valve can be adjusted to decrease hesitation or stop pinging, as needed. The Reg Rite valve sells for \$19.95 and fits any gas-powered domestic or foreign car or pickup.

Contact: FARM SHOW Followup, Ray Tierney, Sun-Ray Co., 203 W. 78th St., Bloomington, Minn. 55420 (ph 612 881-7988).

"Big Wheel Pump" strikes out - "Revolutionary ... fascinating ... highly workable." That's what some observers were saying about the "Big Wheel Pump Jack", a new invention tested last year in

Pecos County, Texas, and featured in a number of newspapers and farm magazines.

Although we knew about it, we were awaiting more solid evidence to back up the inventor's claims before featuring it in FARM SHOW.

Latest word is that the project has been abandoned. The huge unconventional pump weighs about 45,000 lbs. and has a 16-ft. dia. wheel was designed to use counterweight to lift half



Photo courtesy Fort Stockton (Texas) Pic

the water load and thus drastically reduce pumping costs. Its inventor claimed the prototype was strong enough to pump water from 2,000 ft. at 1,000 gpm, and that it used less than 30 hp to pump more than 700 gpm from a 600 ft. well, cutting fuel costs from \$6,000 a month (using a conventional turbine pump) to only \$1,000 a month for the new "breakthrough" pump.

"Our experiment fell far short of what we'd hoped . . . claims made by the inventor could not be proved," reports one of the backers in announcing his group's decision to abandon the project.

All may not be lost, however. The testing group believes that the Big Wheel, because of its extremely strong mechanism, may in time be altered for use in oil fields to pump deep oil wells.

An Amish farmer was calmly milking a sometimes cantankerous cow, when she placed her foot right square in the half-full pail of milk. The farmer walked up to her and whispered in her ear, "Thou knowest that I cannot curse thee," and sat down on his milking stool again. Soon she smacked him in the face with her wet, messy tail. The farmer walked up to her and whispered again in her ear, "Thou knowest that I cannot strike thee," and resumed his milking. When she let loose with a vicious kick that sent the pail flying and put him in the gutter, he brushed himself off, walked up to her and again whispered in the cow's ear, "What thou dost not know is that I can sell thee to a Lutheran.'

Catching Up On What You've Missed!

Many new subscribers have asked if they can obtain back issues of FARM SHOW. The answer is yes. Here's what's available:

1978 - Vol. 2, No. 3 still available.

1979 — Four issues still available — Vol. 3, No. 1; Vol. 3, No. 3; Vol. 3, No. 4; and Vol. 3. No. 6.

1980 - Vol. 4, No. 4, still available.

1982 — Three issues still available -6, No. 1; Vol. 6, No. 4; and Vol. 6, No. 6.

1983 — All six issues still available except Vol. 7, No. 6.

Send your check for \$2.00 per issue to: Back Issues, FARM SHOW Magazine, P.O. Box 704, Lakeville, Minn. 55044. Make your check payable to "FARM SHOW".