

## Master Parts Maker For Antique Oliver Tractors

Over the past 30 years, Ohio farmer Richard Lynch has turned his ability to make sheet metal parts for Oliver tractors into a thriving business. It started almost by accident when, in 1980, Lynch was restoring an old Hart-Parr 70. He needed side panels but he couldn't find them at collector shows or through his contacts. Another 70 owner loaned him a clean set of side panels and Lynch found a metal shop that could stamp new replacements for him. Richard asked the shop to stamp a few extras as long as they were at it. Within a few weeks, Lynch had sold those extra panels at a Hart Parr Oliver collector's show.

"I came home from that show excited about making side panels for old Olivers," Lynch says. "At the same time I knew I had to learn how to do the work myself in order to make any money at it." Although it took him nearly 10 years to acquire the know-how and equipment to do the work, Lynch was persistent. In 1990, he started Lynch Farms Tractor Parts after purchasing a milling machine at an auction. Today he and his son Ron build and stock more than

30 hoods and side panels for vintage Oliver tractors originally built between the 1930's to the 1960's. His reproduction panels are made for the Fleetline 66, 77 and 88's and the later "Super" models of those same numbers. He also makes parts for Oliver 3-digit tractors, the styled 60 and 70 series, and the Hart Parr Oliver model 70 side panels.

"Restoring old Olivers must be a huge business across the country," Ron says with first hand knowledge. "I have to order a new stock of sheet metal every couple months."

Their business has sold replacement panels throughout the U.S., Canada and even to New Zealand. "The cost to ship side panels 'down under' was outrageous," says Ron. "Luckily I was able to get 2 customers together. One was having a tractor shipped from the U.S. in a container, so we put the panels in with that tractor." All of the panels sold by the business are primed and ready to be painted by the customer ordering them.

Over the years, he's acquired and restored just about every Oliver ever made. He has about 45 in his personal collection, including a unique 1946 model 70 Orchard, which



**Richard Lynch builds and stocks more than 30 different replacement hoods and side panels for vintage Oliver tractors. All are primed and ready to be painted by the customer.**

gleams like it just came off the factory paint line.

Richard, his wife Peggy and their sons Ron and David are also farmers, raising food-grade corn and soybeans. Between farm jobs and parts manufacturing they find time to attend tractor shows in the Midwest and distant states like California and Florida to promote their business. What began as an only replacement panels business now includes refurbishing tractors, bulldozers,

plows, disks and even electric motors. "Once a person gets started in these things it just kind of leads from one thing to another," says the elder Lynch. "My sons are now a part of the business, and that's important because it means the show will go on."

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## They Repair Cast Iron Cracks And More

Cracks in cast iron can be drilled and filled with Lock-N-Stitch threaded inserts that seal cracks tight or seal patches in place.

"Whether you've got a cracked bolt hole, a cracked block, heat cracks, impact cracks or design failure, we offer a permanent fix," says Gary Reed, Lock-N-Stitch. "We make the repaired surface stronger than before the fix."

Lock-N-Stitch makes a variety of inserts, locks and other tools for metal repair. They also offer repair and training services.

"We are a manufacturing company making the insert pins, locks, thread repair inserts, kits and tooling for repair work," he explains. "However, we are also a cast iron welding and stitching company, and 50 percent of the parts we manufacture are used by us. We have crews travelling all over the world to repair everything from heavy industry jobs down to the smallest jobs."

Reed says company products and services are used by major OEM manufacturers like Detroit Diesel, Cat and Deere, as well as by the company's competitors. The company is currently using their products on the dome of the U.S. Capital.

"We have a 10-man crew repairing 27,000 in. of cracks in the dome," says Reed. "It will take them a year to do the stitching."

When Reed talks about stitching, he means drilling a hole or a set of holes using special jigs. Once stitching holes are threaded, they are filled with special inserts, depending on the situation.

As the pins are tightened their heads break off above the surface. Protrusions are ground down, and then a second set of holes is drilled, slightly overlapping the first set of pins. Once these have been ground down, the repair is finished and a solid surface remains.

In some cases, a standard, tapered, threaded pin is used to create radial pressure. This works if the cast has enough integrity to contain the pressure. The solid cast pushes back against the filler pins.

A crack running along an edge of a casting or into a core plughole doesn't have that integrity. Standard tapered pins will expand the crack due to what Reed describes as "cumulative spreading pressure".

Lock-N-Stitch offers a special pin design called the Castmaster. The bottom of the fastener thread is 45°, but the top is a negative

20° and acts like a hook. The shoulder of the pin has a reverse angle on it and when tightened into a matching machined counter bore, pulls up on the thread. This draws the metal together.

"Castmaster pins add strength instead of spreading pressure," says Reed.

The Full-Torque hole repair system uses a similar thread pattern for bolt hole repair. Reed notes that freeze or impact cracks often result in cracked bolt holes as well. Stripped or damaged threads in spark plugs and other bolt holes can also be repaired with Full-Torque inserts.

"We can take a bolt hole split right down the middle, put an insert in and pull the metal back together," says Reed. "The more you torque it, the stronger it gets. If it's repairable, we can come up with a way to do it."

Reed says Full-Torque inserts create a pressure-tight seal that can withstand 3,000 psi hydraulic pressure.

"We don't just do stitching," says Reed. "Damage to cast iron or other cast metals breaks into two categories. It's either an accident or a design failure where it has cracked under normal operating conditions."

In the first case, Reed uses stitching to repair the problem and bring it back to 100 percent. In the case of design failure, Reed adds reinforcements or brackets to attach.

Reed points out that cast iron is preferred for its traits of staying straight under heat and not warping. However, that same trait makes it extremely hard to weld any place but edges. Welding works best with things that can stretch and bend.

"Attempting to weld cast iron produces massive amounts of confined expansion and contraction that leads to more cracks, especially if the welding is in the middle of the cast," explains Reed. "Stitching avoids the heat issue."

"That can't be done on site or in frame," he says. "That's where stitching with pins and our inserts come in. They let you repair on-site quickly and get back in use. We do lots of ag equipment."

Contact: FARM SHOW Followup, Lock-N-Stitch, Inc., 1015 S. Soderquist Rd., Turlock, Calif. 95380 (ph 209 632-2345 or 209-614-4114; toll free 800 736-8261; www.locknstitch.com; www.fulltorque.com).



**Above "before and after" photos show how Lock-N-Stitch threaded inserts were used to repair a cracked Cat engine block.**



**Lock-N-Stitch can also be used to make patches by drilling a series of holes.**

## Ready Lift Levels Pickup Chassis

Pickup owners often complain about their vehicle's "nose diving" look when there's no weight in the box. A Nevada company has a solution to that problematic situation with a product called Ready Lift. It's an easy-to-install leveling kit that's available for all pickup brands on the market today.

"We came up with this product because we realized that truck owners didn't like the 'nose down' look, and furthermore they wanted to install larger tires," says Ready Lift's Brian McCormick. "The beauty of this product is that it's made of aircraft-quality 6061 billet aluminum, which is tough, light and rust resistant. It has a hardness rating of 10.9."

McCormick says the Ready Lift is easy to install by do-it-yourselfers. The spacers mount above the coil spring and bolt onto the spring pocket. The shocks and springs have to be loosened and removed for the leveler installation, but they don't have to be cut or altered. Mounting studs supplied with the spacers are used to hold them in place. A wheel alignment is suggested after installation.



**Ready Lift leveling kit keeps your pickup's front end from "nose diving".**

Since the Ready Lift provides only 2 to 3 in. of lift, depending on the vehicle, the OEM shocks are reinstalled. "The finished installation gives the vehicle a completely level appearance, front to back," says McCormick, "and it doesn't affect the ride or handling at all." Having a Ready Lift on a truck also allows the vehicle owner to install a larger 33 to 35-in. tire and wheel setup. The Ready Lift spacers are available in black, red or blue anodized finishes.

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