

## Company Rebuilds Hydros With Care

Hydraulic component rebuilds can save a lot of money, but they're not usually do-it-yourself projects, says Cara Herrs of Herrs Machine. The company has been rebuilding hydraulic pumps and hydrostatic transmissions for 37 years, progressing from a home-based shop business to a high tech operation that can handle nearly anything hydraulic.

"We once rebuilt the pumps and motors on a mine sweeper, but our most common repairs are combine hydrostats," says Herrs. "We have an ag background, so we understand how quickly equipment needs to be up and running. In addition to our rebuild service, we keep a large inventory of parts, pumps and motors on hand. We can usually ship out the same day we get an order."

Herrs suggests making a toll-free call for a cost estimate. If time is tight, most agricultural hydro units are available in exchange. The company works with tractors, combines, skid steers and a wide range of other equipment. However, long-term specialties have been IH hydrostats and torque amplifiers.

Whether for rebuild or exchange, Herrs emphasizes carefully wrapping the part for shipment, especially if components are exposed. One ding or gouge in a plate can increase rebuild cost considerably.

"Plates in a stack have to be perfectly flat," says Herrs. "A scratch can cause a blow-by

and increase pressure on the hydraulics and raise the temperature."

When parts come in for rebuild, they are first 'mic'd' or inspected using a micrometer to make sure plates are within 1 millionth of an inch of flat. After inspection the part goes to lapping, where a zinc oxide drip is used to polish the plate to a mirror finish. If too far out of tolerance, parts will be replaced. Even though a single plate with a gouge can often be refinished, Herrs says the refinishing might reduce the required height of the total stack.

"We have to stay in tolerance the whole way through," she says.

Once the part or component has been rebuilt, it goes through testing. Each step in the process is recorded. If testing identifies any problem, it also shows where the problem occurred.

"We will then tear it down and fix the problem," says Herr. "We know it has to be done right."

Herrs handles pumps, motors, cylinders and valves. All remanufactured units come with a warranty.

Contact: FARM SHOW Followup, Herrs Machine, 1745 Prospect Blvd., Washington, Kan. 66968 (ph 785 325-2875; toll free 877 525-2875; caraherrs@sbcglobal.net; www.herrsmachine.com).



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## Where To Buy Tractor Service Manuals

By Jim Ruen, Contributing Editor

Not all tractor manuals are equal, warns Paul Jensen, Jensales Company. The second-generation tractor manual reseller warns that many original service manuals were sometimes not complete.

"Company service manuals were often incomplete," he explains. "Sometimes they put them out piecemeal as new models came out."

Many of the service manuals from Jensales are not original. "Part of our pitch is that our manuals may be better than the originals," he says. "In some cases we'll include value added content, such as serial numbers and paint code information essential for restoration."

Jensen notes that many original manuals are in a hard-to-read 6 by 9 format. It's also likely to be perfect bound, which won't lay flat unless the binding is broken.

"We put a spiral binding in our manuals so you can spread them out flat on the work bench," he says. "We also print ours on 8 1/2 by 11 paper."

Jensales has more than 16,000 manuals available for nearly every tractor made from 1900 to the present. In addition to reproductions, Jensales does offer many originals. There are also compilations of multiple manuals for a line of tractors such as the Oliver 3 that covers 11 models. Of special interest to restorers is the Char-Lynn power steering and hydraulic pump manual. It covers the installation kit and operators manuals for nearly a dozen applications of the popular accessory of the 1940's, 50's and 60's.

Jensen warns that manual quality varies greatly from vendor to vendor. How pages are scanned and how the scans are put back together can make a big difference in the quality of the final product.

"We adhere to Library of Congress archiving standards," says Jensen. "It calls for 600 dpi scans and clarity of picture and text. We will scan to get the text and then scan a



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second or third time to get the pictures."

Jensen takes pride in his firm's customer service. "We can print on demand," he says. "If we get an order by noon, it will be out that same day."

Contact: FARM SHOW Followup, Jensales, Inc., 200 Main St., Manchester, Minn. 56007 (ph 507 826-3666 or 800 443-0625; www.jensales.com).

**Of course Jensales is far from alone when it comes to supplying the antique tractor manuals. Here are a few to get you started. Many offer authentic and original manuals, while others offer reproductions. Most will be more than happy to help you find what you are looking for, whether reproduction or original.**

**Binder Books**, 27875 SW Grahams Ferry Rd, Sherwood, Ore. 97140 (ph 503 682-9328; www.binderbooks.com).

Binder Books specializes in IH tractors and trucks, offering manuals, books, toys, decals and collectibles.

**Clarence L. Goodburn**, 101 West Main, Madelia, Minn. 56062 (ph 507 642-8481; eBay password: goodlit).

Goodburn specializes in sales literature on farm tractors and equipment, crawlers and heavy equipment.

**TF Literature Sales**, Rt. 2, Box 8, Luverne, Minn. 56156 (ph 507 283-4730;

tfllitsals@myclearwave.net).

TF Literature handles all types of manuals and literature on most brands of farm equipment.

**Lloyd Wenger**, 831 South College St., P.O. Box 409, Myerstown, Penn. 17067 (ph 717 866-7147; lwenger@wengers.com; www.wengers.com).

Go to Collector's Corner on the Wenger Co. website to find listings of equipment literature, owners manuals, parts books, collectibles, antique tractor parts and more.

**Yesterday's Tractor Co.**, 751 Commerce Loop, PT Business Park, Port Townsend, Wash. 98368 (ph 360 379-4808; 800 853-2651; www.yesterdaystractor.com).

Yesterday's Tractors offers manuals, parts, engine kits and much, much more, including more than 90,000 tractor pictures.

**Floyd County Historical Society**, 500 Gilbert St., Charles City, Iowa 50616 (641 228-1099; fch@fiai.net; www.olivertractor-manuals.org).

Charles City is the birthplace of the first gas-powered tractor, and the museum has original and photocopied manuals for sale for Hart-Parr, Oliver, White Farm Equipment, Cockshutt, Minneapolis-Moline, Cletrac, New Idea (earlier) and some Frost Woods models.

**State Historical Society of Wisconsin**, Archives Reading Room, 816 State St., Madison, Wis. 53706 (ph 608 264-6460).

The Society has a large collection of parts catalogues, photos and operators manuals for virtually all IH implements, wagons and stationary equipment. The collection includes materials from five predecessor companies - McCormick, Deering, Champion, Plano and Milwaukee - as well as other IH subsidiaries (Chattanooga, Hoosier, Keystone, P&O and Weber). Call or send a letter with as much information as possible, such as parts and model number or even a photo.

**Deere & Co.**, P.O. Box 186, Moline, Ill. 61266 (ph 800 522-7448).

Call to access the John Deere archives for manuals and materials back to the introduction of two cylinders and even some drawn plows.

**Abraham Lincoln Presidential Library**, 112 North Sixth St., Springfield, Ill. 62701 (ph 217 558-8844).

Formerly the Illinois Historical Library, this library maintains archives on old Deere equipment, including horse-drawn tools.

**Del Bice**, 1026 South 88th Ave., Yakima, Wash. 98908 (ph 509 966-2844).

This former Deere dealer maintains a collection of more than 4,000 original Deere manuals for agricultural, industrial and lawn and garden equipment. Some are very rare and many are hard to find elsewhere.

**SSBTractor**, P.O. Box 455, Farmingville, N.Y. 11738 (ph 631 451-8706; 877 698-3033; sales@ssbtractor.com; www.ssbtractor.com).

SSB Tractor offers an extensive selection of tractor service, repair, shop, parts and owners/operators manuals for almost every make or model of farm tractor. They have an extremely easy to access web page for locating and ordering the manual you want.

**Farm Equipment Manual.com, Lee Valley, Inc.**, 1325 Hwy. 75, Tekamah, Neb. 68061 (ph 402 374-2792; susan@huntel.net; www.farmequipmentmanual.com).

Lee Valley has been collecting farm equipment manuals for over 40 years.