Homer uses the hooked-together tractors to pull a 14-ft. offset disk followed by a 9-shank Soil Saver.

UNCOMPLICATED HOOK-UP MAKES OPERATION EASY

Doubled-Up Tractors Give Cheap 4-WD Power

"It gives me 4-WD power without the cost of a new 4-WD tractor," says Willis Homer, Brown City, Mich., who pulls his tillage implements with two 2-WD tractors hooked together.

Homer hooks a 1950's Massey Harris 44 gas tractor behind a 1960's Allis Chalmers XT190 diesel. A heavy 8-ft. long "pull" bar, 2 1/2 in. wide and 1 in. deep, runs from the front tractor's drawbar back under the narrow front wheels of the rear tractor, holding them off the ground, and back to the rear tractor's drawbar. Homer mounted the controls for the rear tractor's clutch and throttle in front of the tractor, allowing him to reach back and operate them from the front tractor. Hydraulic hoses from the front tractor connect to a pair of metal hydraulic lines that run alongside the rear tractor to the implement, allowing Homer to raise and lower the implement from the front tractor.

Homer uses the hooked-together tractors to pull a 14-ft. offset disk and a 9-shank Soil Saver.

"A lot of people who drive by on the highway slow down when they see me working in the field," says Homer, who has been using the hooked-together tractors for five years. "I bought the disk new and pulled it with the Allis Chalmers tractor for two years. The 110-hp tractor could barely pull the disk, but I didn't want to spend the money for a bigger tractor. The pull goes straight back on the pull bar to the rear tractor's drawbar so there's no stress on the tractor itself. The Allis Chalmers tractor's 20.8 by 38 radial tires are 80% filled with chloride to provide added traction.

"I run the Massey Harris tractor in second gear which works fine for most general farm work. I operate the clutch by pulling or pushing the handle, and the throttle by moving it up or down. I set the throttle so it's just nudging the front tractor. If I need extra horsepower going uphill or through a hard spot I might give it a little extra throttle.

"To disconnect the tractors I simply pull two pins that connect the pull bar to the front part of the rear tractor's drawbar, and the pin attached to the front tractor's rear drawbar."

Homer bought the Massey Harris tractor 10 years ago and used it for several years. When the engine wore out he replaced it with a 240 cu. in. Ford engine removed from a pickup. "The engine is rated at 150 hp but I only use about 50 hp to avoid spinning the tractor wheels or stripping the gears. The engine didn't have a governor so I installed a throttle. I wouldn't want a governor anyway because when I slow the Allis Chalmers tractor down at the end of a field, the governor would open up and push the tractor around. The two tractors turn as short as a single tractor and they turn easier. The front tractor's front wheels don't slide because there's no side pull like there is with a single tractor."

Homer beefed up the Massey Harris tractor's drawbar by welding another drawbar on top of it. A chain and bolt hooked to a push bar in front of the Massey Harris tractor keeps the pullbar at the same height as the drawbar on the Allis Chalmers tractor.

When he first used the doubled hook-up, corn stalks kicked up by the front tractor tended to collect on the Massey Harris tractor's radiator grille. So Homer replaced it with a raised screen that's high enough to avoid cornstalks and allows air to enter from either side. He also added an extra radiator on top of the tractor for additional cooling.

Contact: FARM SHOW Followup, Willis Homer, 5309 Van Dyke, Brown City, Mich. 48416 (ph 313 346-2689).

Willis Homer is shown holding the clutch and throttle lever in his right hand and the hydraulic hoses in his left.

The biggest challenge faced was coming up with a way to spread leaves evenly across the field. A rear-unload manure spreader works best, researchers found.

WISCONSIN RESEARCHER HOPES TO TURN CITY WASTE PROBLEM INTO A RURAL ASSET

They're Spreading City Leaves On Farmland

Getting rid of leaves is a major problem for towns and cities each fall especially since space in sanitary landfills is becoming more and more limited. University of Wisconsin soil scientist Arthur Peterson is working with both cities and farmers to try to turn leaves into an asset by spreading them on farmland.

Many communities have started composting leaves but Peterson says composting is too labor intensive and not necessary. He'd like to go as directly as possible from city yards to fields. For the past several years he's been spreading leaves on test plots, looking for the best tillage method to incorporate them for the fastest breakdown. Last fall, he supervised distribution of more than 80 tons of leaves on a 4-acre corn field near Madison.

The biggest challenge faced was how to spread leaves evenly across the field. "We tried a front-end loader first, but we couldn't get an even spread. Then we tried a side-unloading spreader but that was too slow. We finally found that a conventional rear-unload manure spreader with beaters does the best job," says Peterson.

Once the leaves are spread, the next problem is incorporating them into the soil. He tried chisel plows, offset disks and other tools but found that a rotary tiller does the best job. "Offset disks just rolled right over them but tillers break them up and work them down under ground."

The problem with tillers is that it takes a long time to till a big field. So Peterson has started chopping the leaves in a tub grinder and spreading the chopped-up pieces. "Once they're chopped, a disk can turn them under," he notes, adding that it costs cities as much as $80 a ton to dispose of leaves in sanitary landfills. For that price, they could purchase tub grinder and truck spreaders and spread the leaves on local farmland."

Researchers tried using a roto tiller to work leaves down into the soil.

Peterson says there are about 250 lbs. of nitrogen per acre in leaves when applied at a rate of 20 tons per acre. He's had good yields in test plots and notes that the increased organic mater greatly increases water absorption capacity of fields.

Contact: FARM SHOW Followup, Dr. Arthur Peterson, University of Wisconsin, Soil Science Dept., Madison, Wis. (ph 608 262-2631).

Lighted Combine Brings Christmas Cheer

Drivers on busy Highway 81 running through Geneva, Neb., found something to smile about when they drove past Nick's Farm Store this past Christmas.

Employees at the Massey Ferguson and White dealership celebrate the holiday season by putting lights on a different piece of equipment every year. From a distance all you see is the outline of the machinery. So far they've used lights on a tractor with grain cart, and a combine.