

Soil-Max

Power Tile Feeder

Installation

And

User's Manual

Power Feeder Installation

Step 1: Install the power feeder bracket.

First remove the two 4 3/4" bolts holding on the water level & depth chain with a 3/4" socket/wrench. It may be helpful to remove one at a time and replace with the 5" bolts that came with the power feeder to secure the bracket. Next install the two 2 3/4" bolts below the five in bolts.

Note: Depending on when your plow was built hole may need to be drilled, use the power feeder bracket as a template/guide. The shank is made of 1 1/4" T1 (A514) Steel. Since the steel is both hard and thick, drilling by hand while standing on a ladder will be difficult. It is recommended you step drill the 1/2" diameter holes. First mark the hole with a 1/2" high-speed, high-quality bit. Then drill the hole with a 1/4" high-speed, high-quality bit. Turn bit slowly to help keep it cool, and use plenty lubricating fluid. Next drill the hole with a 3/8" bit. Drill the hole again with a 1/2" bit to finish. A mag drill may be available at a local rental shop as an option to step-drilling.

When mounting the feeder arm bracket to the shank, make sure the hinge/bolt goes toward the rear of the shank as shown in picture below.



Step Two: Install the hydraulic hose holder.

Look for the following hole on the left side of your plow. *Note, depending on when your plow was manufactured you may have to drill this hole.* Once you have the hole install the hose holder with 2 3/4" wrenches.



TILE FEEDER BRACKET INSTALLATION



- 1) REMOVE BACK BOLTS FROM WATER LEVEL ARM AND REPLACE WITH LONGER BOLT PROVIDED
 - 2) ATTACH FEEDER BRACKET TO SHANK AND SECURE WITH NUT ON LONGER REPLACEMENT BOLT
 - 3) REPLACE FRONT BOLT AND TIGHTEN
 - 4) MARK (2) LOWER HOLES ON SHANK USING TILE FEEDER BRACKET AS A GUIDE
 - 5) USE 1/2" HIGH SPEED, HIGH QUALITY BIT TO DRILL LOWER (2) HOLES
- NOTE: A MAG DRILL IS RECOMMENDED BECAUSE THE T1 STEEL OF THE SHANK IS VERY TOUGH TO DRILL
- REMEMBER: TO DRILL SLOW AND USE PLENTY OF COOLANT FLUID ON THE BIT WHILE DRILLING.

NOT TO SCALE

USE BRACKET AS TEMPLATE

Step 3: Mount the power feeder.

Next mount the power feeder onto the square tube. **Note:** Use something very sturdy to stand on and if possible have two people, the power feeder is heavy and awkward to handle. Once you have the power feeder slid on the square tube tighten both set bolts to prevent the power feeder from moving.

There are two bolts that act as pivot points that will need tightened once the power feeder is in the desired location. Line up the loop and wheel so that they are in line with the funnel, approximately perpendicular with the plow and funnel. Adjust the angle so that the tile will feed smoothly. Remember that the tile should be in a “J” shape as it lays on the ground, with the “Hook” of the “J” behind the plow. This prohibits the tile from being pulled across the field and possibly stretched as it feeds into the funnel.

After the feeder is securely mounted route the hoses through the hose holder, down towards the front of the plow and fasten with zip ties.



PIVOT POINTS:
ALIGN WITH FUNNEL,
THEN TIGHTEN

Step 4: Mount the power feeder control valve.

Mounting on a Pull-Type Tile Plow

Locate the down pressure valve on the front of the plow (black in color and has the pressure gauge). Remove the rear bolt that fastens down the valve with a ½" wrench. Attach the control valve bracket with the bolt that was just removed and retighten. Next attach the red control valve with the bolts provided with a 7/16" wrench.

REMOVE REAR BOLT to
attach valve bracket



ATTACH BRACKET with flange on inside, tile
feeder valve on outside of bracket



Hoses are preset and tested at shop for correct operation. Switch hoses at the tractor remote if wheel is moving in reverse, do not change hoses at the proportional valve or at the motor.

Step 4 continued: Mount the power feeder control valve.

Mounting on a 3pt Tile Plow

On 3pt plows made after August 2011 a bracket is welded on the 3pt tower. Bolt the valve bracket on the side of the 3pt tower. If you have a 3pt plow made before August 2011, a short piece of angle iron must be welded to the 3pt tower with a 5/16" hole in order to bolt the valve bracket on the angle iron as shown in the pictures below.



Step 5: Connect Control Box and Cable

Connect the two pin deutch connector to the control valve and route the box into your cab, then connect it to power. The top switch is for turning it on/off and the bottom dial is for increasing and decreasing the speed of the motor.

Step 6: Hydraulic Hose Hookup

The hydraulic hose feeding into the side of the control valve is the pressure line out of the tractor. The hose that is tied into the bottom of the valve is the return back to the tractor. You can verify proper hookup by running the feeder, if the wheel spins backwards it's likely the hoses need reversed.

PRESSURE Line

RETURN Line



Step 7: Hydraulic Remote Settings for Tractors with Variable Hydraulic Flow

Tractor hydraulics vary significantly from model to model. If the tractor is equipped with variable rate remotes, start out by setting the dial on the tile feeder control box to its lowest setting and the hydraulic remote on a high setting. Then slowly turn down the remote hydraulic flow until the wheel on the feeder stops moving. Now the speed of the tile can be controlled by the dial.

If the remote hydraulic flow is too high you may experience one of the following problems:

- 1) Valve may “squall” (feeder will need no more than 10 gallons/minute)
- 2) Feeder wheel may slip on tile
- 3) Speed adjustment dial will not work
- 4) Feeder wheel will not stop completely when dial is turned all the way down

Note: On some newer tractors, hydraulic flow can go forward or backward with on the control switch in the tractor. If the switch is accidentally put into reverse the tile feeder may try to pull the tile out of the funnel. To prevent this, make sure to turn down the flow on the reverse flow setting to zero.

General Rules of Operation

The tile feeder is designed to ASSIST tile movement, not to FORCE. As the plow slows and comes to a stop, the tile feeder should push the tile to the far side of the funnel and then come to a stop. If the tile feeder when does not stop with the tractor or it starts to spin on tile, then the pressure at the remote should be turned down.

Adjustments for Tile Size



Loosen bolt to adjust the wheel to tile size. Move spring to best fit for tile size.

Use front hole to feed tile down into funnel. Use back hole to put more arch in tile as it goes into funnel.

Contact Information

If you are experiencing difficulties with the set up or the operation of the tile feeder and cannot find the answer in these instructions, please contact your dealer first for assistance.

The Soil-Max technical support team at the home office is available, free of charge, from 8 AM to 5 PM, Monday through Friday, except on major holidays, at the number below:

Soil-Max Technical Support

(888) 764-5629 Option 2

