

Tile Pro Drainage Plow Instruction Manual

Wayne's Inc.

6/23/10

TILE PRO WITH UPPER HYDRAULIC LINKAGE

NORMAL USAGE

Notice: Do not operate the upper cylinders when the 4 1/2" x 36" lift cylinders are in the lift or locked mode. You will cause sever damage to the 36" cylinders an on the cylinder mounts on the plow. OLDER PLOW ONLY PRE 2010

TO BEGIN OPERATION

1. Lower plow into trench or pilot hole to desired depth (grade) with plow in a level position to begin hookup to the outlet.
2. Put your lift cylinders in lock position and adjust the draft on the tip of the plow to slightly raised. Roughly 3/4"
3. Put tile down into boot and pull thru at the bottom and complete your hookup to outlet.
4. Hold tile in place and drive plow forward about 10' to 15' forward until plow is in solid ground and the tile is covered.
5. Make sure to put lift cylinder in float position. Check all your hydraulics, flow in the right direction. Adjust the receiver on the mast until the green light comes on in the control box. **LASER ONLY.** Be sure you have your grade programmed into the transmitter and pointed in the upward grade direction. **Laser only**
7. Switch from manual to automatic on the control box and start forward as slow as possible so the laser or GPS can make grade changes. Tile at .8 to 1.2 MPH *Remember the slower the better.*
8. At the end of the tiling run turn the switch from auto to manual and lift plow slowly out of the ground while still moving forward. Pull the top cylinder in completely after the tile plow clears the ground.

GPS systems
Do your survey run first

Do steps 1-5

6. Once the plow is in the solid ground do your design on your computer and make sure every thing will work. Go to step 7.

TILE PRO WITH THE UPPER HYDRAULIC LINKAGE

PARALLEL MODE

What is parallel mode? A parallel mode is when you can raise your plow up and down with the long 4 1/2" x 36" cylinders, and not change the angle of the plow.

To do this you must set your plow to a true parallel linkage by measuring your bottom pin center from front to rear on your bottom A-Frame. That measurement should be 87 1/2" CTC. Now adjust your top A-Frame pin center to the same measurement CTC then mark your gauge rod on the top of the A-Frame so you can go back to it whenever you need to. Once this done the angle of the tip will stay the same no matter what depth the plow is.

This system is used when you have relatively even ground. When you are in very soft ground at the bottom of the plow such as quick sand or peat bottom you are actually carrying the plow with the tractor. This will also give you the maximum traction on your tractor because you have the full weight of the plow and the suction of the dirt pulling down on the plow.

TO BEGIN OPERATION

- 1. Lower plow into trench or pilot hole to desired depth (grade) with plow in a level position to begin hookup to the outlet.**
- 2. Put your lift cylinders in lock position and adjust the draft on the tip of the plow to level or desired draft on plow never nose high in this mode.**
- 3. Put tile down into boot and pull thru at the bottom and complete your hookup to outlet.**
- 4. Adjust the receiver on the mast until the green light comes on in the control box. **LASER ONLY** With the bottom cylinder in the lock position hold tile in place and drive forward and watch the light grade on the control box **or elevation on GPS** and adjust your 4 1/2" X 36" cylinders manually up or down to hold the grade until plow tip is in solid ground, about 10' forward.**
- 5. Check all your hydraulics, flow in the right direction, be sure you have your grade programmed into the transmitter and pointed in the upward grade direction. **Laser only****
- 7. Switch from manual to automatic on the control box and start forward as slow as possible so the laser or GPS can make grade changes. Tile at .8 to 1.2 MPH *Remember the slower the better.***
- 8. At the end of the tiling run turn the switch from auto to manual and lift plow slowly out of the ground while still moving forward. Pull the top cylinder in completely after the tile plow clears the ground.**

GPS Systems

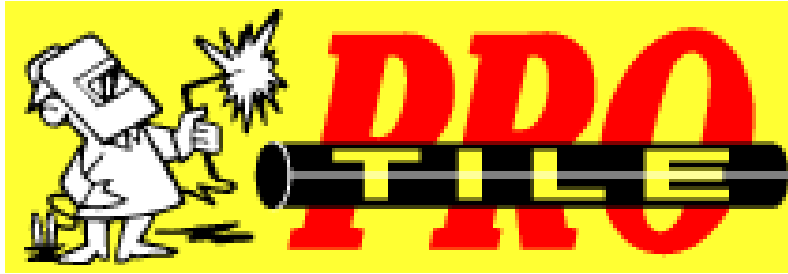
(Do your survey run first) Do steps 1-5

- 6. Once the plow is in the solid ground do your design on your computer and make sure every thing will work Go to step 7.**

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Things to look for and settings

- ✓ The hoses for the bottom two cylinders should be in your number two port. On your bottom two cylinders the 4.5" x 36", there is a valve with a gauge. This is for your altitude adjustment. This is how the plow goes through the ground, the toe and heel angle. A starting point is to turn the valve in 4 or 5 turns. Raise the plow out of the ground and put those cylinders in the float position, the plow should stay in the air. Have someone turn the knob out slowly until the plow starts to settle down. Then turn it back in about ½ turn. This is usually around 500lbs. of backpressure. You will only see pressure on this gauge when the plow is in the air with the cylinder in float, or when using the hydraulic pressure to lower the plow. To check make a dry run and watch your laser arm where your receiver is attached. This arm is parallel to the bottom of the plow. When you are plowing, the front of the laser arm should be a ½ to 1 inch higher than the back. If more than that, increase backpressure by turning the valve in. If the nose is down, decrease pressure.
- ✓ Set your flow control for your top cylinders. These should be on your number 1 port. 9400 JD should be set around 7 on your dial. A "Rule of Thumb", if the plow over reacts (goes from low to high, or vice-versa) slow your flow rate down. If the control box is flashing low and does not come up to green in a few flashes of the light, increase flow rate. Note the new 9520 series seems to have more flow, start out at 5 on your flow setting. If you have a Trimble laser or Field Level II or AGPS-FM or Pipe Pro GPS we can make some settings there as well by changing the pulse rate and speed. Check their manuals, or call Tile Pro, or your representative to make changes on this.
- ✓ **A must for both systems when you hit your up button on your control box the top cylinder, must extend and down retract, if not, nothing will work properly**
- ✓ **LASER ONLY** Number three port should be your hydraulic mast if you have one. Slow this rate to about two on your dial, this is because if you change it while your tiling you don't move it so fast and lose your laser beam.
- ✓ Number four port is for the power feeder. This should be set around three of four on your dial. You will need to change the speed on the feeder from your hydraulics control panel or the needle valve right before the hydraulics motor on the power feeder. Set the speed of the wheel a little faster than what the tile is actually moving in other words so it can spin a little. Don't forget to engage and disengage when you stop and start.



**Tile Pro
Wayne's Inc
P.O. Box 187
Morgan, MN 56266
507-249-3176
507-249-3146 FAX
waynes@redred.com
waynestilepro.com**

ALWAYS CALL BEFORE YOU DIG



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Always Call 811 Before You Dig**

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Visit call811.com for more information.

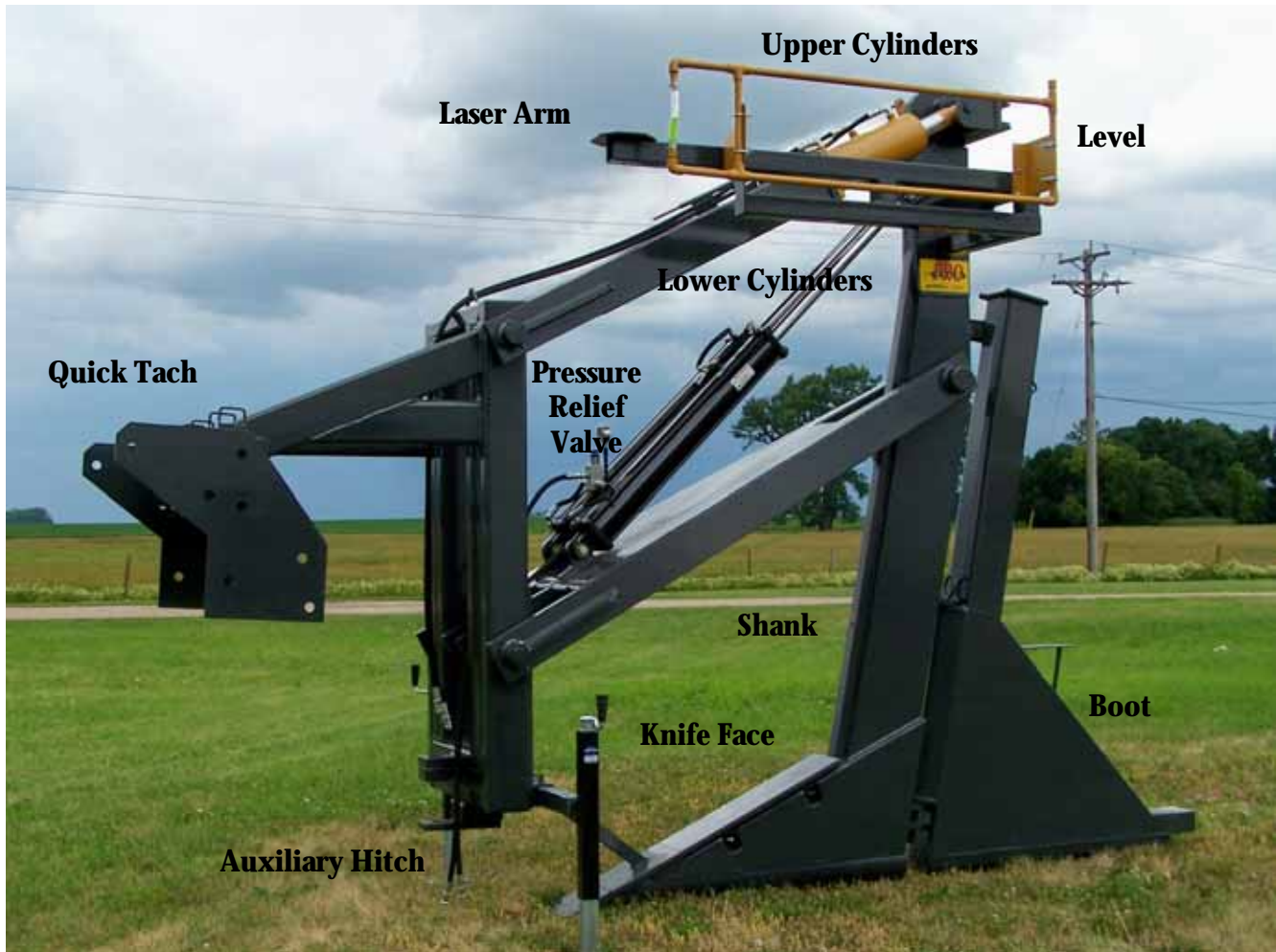


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TRAVELLERS

Contractors' Alliance



Plow Identification