OPERATING MANUAL

4804 SOIL SAMPLER



2800 7TH Avenue North Fargo, ND 58102

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AMITY TECHNOLOGY, LLC PRODUCT WARRANTY

Amity Technology, LLC warrants to the original purchaser only, each new item of Amity Technology sold by it to be free of defects in workmanship materials for a period of twelve (12) months from the date the product is delivered to the Purchaser (Warranty Period).

The sole obligation of Amity is limited to the repair or replacement, whichever Amity chooses, of those parts which Amity, in its sole discretion, determines to have failed as a result of a defect in workmanship or material occurring during the Warranty Period. Such defective part will, at the option of Amity, either be repaired or replaced to the Purchaser through an authorized Amity dealer. The Purchaser must, within the Warranty Period, give written notice to an authorized Amity dealer and the dealer will have a reasonable time to repair or replace the defective part. Amity's dealer's claimed labor hours must be fair, reasonable and consistent with industry practice.

This Warranty does not cover damage to other parts of the product caused as a result of delay by the Purchaser to repair or replace defective parts. Amity will not be liable for direct or indirect costs other than those specified and this Warranty specifically excludes damage to crops, loss of use, transportation expense to a dealer, service calls, normal maintenance and upkeep costs, overtime labor costs, and any and all other injuries, claims or consequential damage or other economic loss. This Warranty does not cover damage caused to or by any equipment, accessories or parts attached to or used in connection with Amity equipment. This Warranty shall be void if alteration, modifications or additions are made to Amity products without written consent of Amity, or if in Amity's judgment, the failure was due to abuse or neglect in the operation or maintenance of the product. This Warranty shall only apply if Amity equipment is used for its recommended agricultural purpose. No dealer, salesman, or agent has any authority to alter or amend this Warranty.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

WARRANTY VOID IF NOT REGISTERED

WARRANTY REGISTRATION

PLEASE READ THE FOLLOWING INFORMATION REGARDING THE WARRANTY REGISTRATION OF YOUR NEW 4804 SOIL SAMPLER.

Thank you for your purchase. Amity Technology, LLC will warranty each new Soil Sampler to be free from factory defects in material and workmanship under normal use and service, when operated in accordance with factory instructions. Warranty will cover a period of one year from the date of purchase.

Amity Technology's obligation under this warranty is limited to the supplying of replacement parts in exchange for any parts which are defective. The warranty does not cover normal wear from usage. This warranty is void on any unit which has been tampered with or which has been subject to misuse, negligence or accident. Any part being returned for warranty service must be sent to Amity prepaid, and will be returned to you at our expense.

To obtain registered warranty coverage, please complete the section below and return it to Amity within 30 days of purchase.

| Customer Name | | |
|---------------|--------------------|--|
| | | |
| | State/Prov | |
| Zip Code | Phone # | |
| Dealer Name | | |
| | | |
| City | State/Prov | |
| Purchase Date | Customer Signature | |

Return to: Amity Technology, LLC

2800 7th Avenue North Fargo, ND 58102 701.232.4199 701.365.8323 fax

4804 SERIES OPERATING INSTURCTIONS

Field Preparations

1. The swing-away probe may now be installed placing the 3/8" bolt on the right hand side and the swing away probe pin on the left side for quick removal.

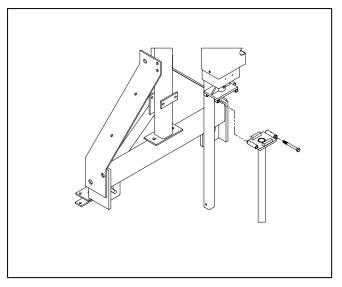


Figure 2

Figure 1

- 2. Adjust the third link on the 3-point hitch to ensure that the soil sampler is as close to vertical as possible.
- 3. Insure that your drawbar is extended to its maximum rearward position. Now install the tie down chain through the eye bolt provided insuring that the 3-point hitch is all the way to its upward maximum travel. It now becomes vitally important that the nut on the eye bolt is drawn down extremely tight. This will eliminate any upward movement of the soil sampler as you apply down pressure on the probe.
- 4. Install the drawbar supporting brace to the vertical tube with the bolts provided. Because very few drawbars are the same, it may be necessary for you to make a modification to the drawbar plates to fit your particular drawbar. This brace will not let the 3-point hitch lower when not in use.

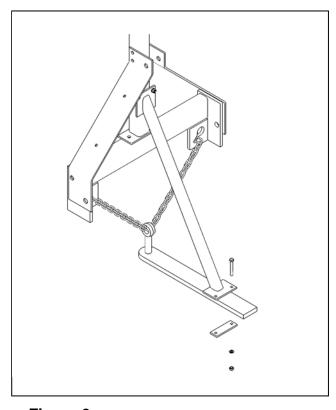


Figure 3

- Check all bolts and set screws to make sure that everything is tight before attempting to use sampler.
- 6. Install male ends onto the ends of the hydraulic hoses and connect to the tractor. Swing probe to the right and lock it in the horizontal position. Extend and retract the hydraulic cylinder to purge the air from it. If it is necessary to bleed the air form the cylinder, loosen vent on the outside wall near bottom of the cylinder.

SWING AWAY SOIL PROBES

AMITY PROBE SIZE

1" nominal (1" O.D. x .870" I.D.)

1 ¼" nominal (1 ¼" O.D. x 1.049" I.D.)

1 ½" nominal (1 5/8" O.D. x 1.495" I.D.)

2" nominal (2" O.D. x 1.870" I.D.)

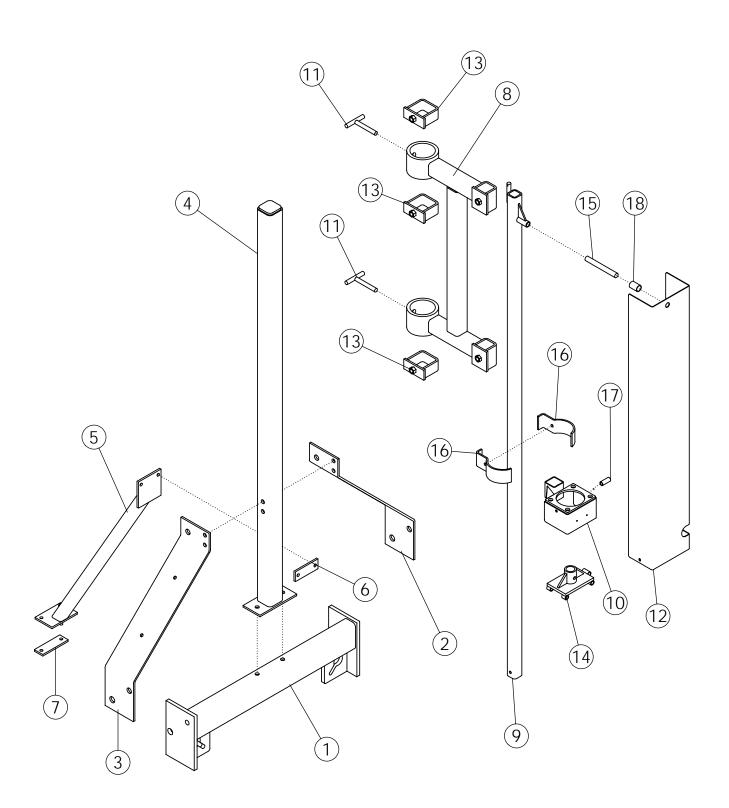
REMEMBER: Soil sampling is like moldboard plowing, if it will not scour, you have three alternatives:

- Try a different tip as provided
- Use PAM lubricant on tip and probe
- Quit sampling and wait for soil conditions to improve

Functions a cutting tip must perform to be successful:

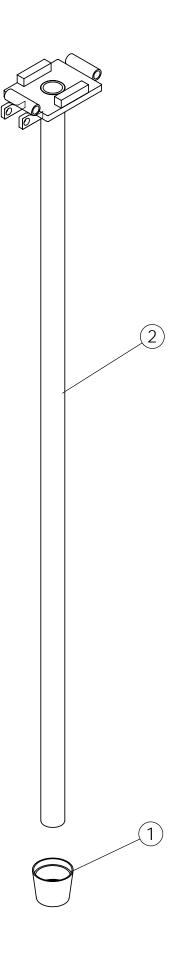
- Compress the soil
- Cut the core
- Allow the core to expand on the back side of the cutting tip immediately.

Amity makes various cutting tips available in an effort to match most soil conditions.



4804 ASSEBMLY

| ITEM | PART NO. | DESCRIPTION | QTY |
|------|----------|--------------------------|-----|
| | | | |
| 1 | 1026286 | WLDMT-3 PNT CROSS MEMBER | 1 |
| 2 | 1022574 | BAR-SIDE 3PT RH | 1 |
| 3 | 1022573 | BAR-SIDE 3PT LH | 1 |
| 4 | 1026137 | WLDMT-3 PNT UPRIGHT | 1 |
| 5 | 1026143 | WLDMT-3 PNT BRACE | 1 |
| 6 | 1026152 | PLATE-3 PNT UPPER CLAMP | 1 |
| 7 | 1026148 | PLATE-3 PNT LOWER CLAMP | 1 |
| 8 | 1026140 | WLDMT-ARM SIDE SWING J6 | 1 |
| 9 | 1021338 | WLDMT-ANCHOR TUBE | 1 |
| 10 | 1026362 | WLDMT-ROD GUIDE 4804 J2 | 1 |
| 11 | 1026739 | WLDMT-T HANDLE .500 J4 | 2 |
| 12 | 1021346 | COVER | 1 |
| 13 | 1026147 | WLDMT-LOCKING COLLAR | 3 |
| 14 | 1023604 | WLDMT-HINGE PLATE ZP | 1 |
| 15 | 1023629 | ROD-REDI | 1 |
| 16 | 1026319 | CLAMP-4804 CYLINDER | 2 |
| 17 | 1021348 | SPACER | 1 |
| 18 | 1021195 | SPACER-TUBE | 1 |



PROBE AND TIPS

| ITEM | PART NO. | DESCRIPTION | QTY |
|------|----------|----------------------|-----|
| | | | |
| 1 | 1027176 | 1-1/4" #1 TIP | 1 |
| | 1026757 | 1-1/4" #2 TIP | |
| | 1026879 | 1 1/2" - #1 TIP (HD) | |
| | 1024500 | 1 1/2" - #5 TIP (HD) | |
| | 1024495 | 2" - #1 TIP | |
| | 1024496 | 2" - #5 TIP | |
| | 1027178 | 2" - #1 TIP (HD) | |
| | 1027179 | 2" - #5 TIP (HD) | |
| | 1027181 | 2" - #7 TIP (HD) | |
| 2 | 1023618 | 1" X 48" PROBE | 1 |
| | 1023715 | 1-1/4" X 48" PROBE | |
| | 1024502 | 1-1/2" X 48" PROBE | |
| | 1024498 | 2" X 48" PROBE | |
| | 1027579 | 2" X 72" PROBE | |