Read the operator’s manual entirely. When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

Illustrations may show optional equipment not supplied with standard unit.
Machine Identification
Record your machine details in the log below. If you replace this manual, be sure to transfer this information to the new manual.

If you, or the dealer, have added Options not originally ordered with the machine, or removed Options that were originally ordered, the weights and measurements are no longer accurate for your machine. Update the record by adding the machine weight and measurements provided in the Specifications & Capacities Section of this manual with the Option(s) weight and measurements.

| Model Number |  |
| Serial Number |  |
| Machine Height |  |
| Machine Length |  |
| Machine Width |  |
| Machine Weight |  |
| Delivery Date |  |
| First Operation |  |
| Accessories |  |

Dealer Contact Information

Name: ____________________________
Street: __________________________
City/State: ________________________
Telephone: ________________________
Email: ____________________________

California Proposition 65

⚠️ WARNING: Cancer and reproductive harm - www.P65Warnings.ca.gov
Important Safety Information

Look for Safety Symbol

The SAFETY ALERT SYMBOL indicates there is a potential hazard to personal safety involved and extra safety precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. In addition to design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

Be Aware of Signal Words

Signal words designate a degree or level of hazard seriousness.

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

Use Adequate Lifting Means

The frame sections and gangs of this machine are extremely heavy. If using multiple lifters, make sure each is rated for at least its share of the load.

Prepare for Emergencies

▲ Be prepared if a fire starts
▲ Keep a first aid kit and fire extinguisher handy.
▲ Keep emergency numbers for doctor, ambulance, hospital and fire department near phone.

Be Familiar with Safety Decals

▲ Read and understand the “Safety Decals” section of the Operators Manual.
▲ Read all instructions noted on the decals.
▲ Keep decals clean. Replace damaged, faded and illegible decals.
Implement Command System

Wear Protective Equipment

▲ Wear protective clothing and equipment.
▲ Wear clothing and equipment appropriate for the job. Avoid loose-fitting clothing.
▲ Because prolonged exposure to loud noise can cause hearing impairment or hearing loss, wear suitable hearing protection such as earmuffs or earplugs.
▲ Because operating equipment safely requires your full attention, avoid wearing entertainment headphones while operating machinery.

Avoid High Pressure Fluids
Escaping fluid under pressure can penetrate the skin, causing serious injury.

▲ Avoid the hazard by relieving pressure before disconnecting hydraulic lines.
▲ Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks.
▲ Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
▲ If an accident occurs, seek immediate medical assistance from a physician familiar with this type of injury.

Use Safety Lights and Devices
Slow-moving tractors and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.

▲ Use flashing warning lights and turn signals whenever driving on public roads.

Use lights and devices provided with implement.

Keep Riders Off Machinery
Riders obstruct the operator’s view. Riders could be struck by foreign objects or thrown from the machine.

▲ Never allow children to operate equipment.
▲ Keep all bystanders away from machine during operation.

Shutdown and Storage

▲ Lower implement, put tractor in park, turn off engine, and remove the key.
▲ Secure Hydraulic Reel Attachment using blocks and supports provided.
▲ Detach and store Hydraulic Reel Attachment in an area where children normally do not play.
Tire Safety

Tire changing can be dangerous and should be performed by trained personnel using correct tools and equipment.

- When inflating tires, use a clip-on chuck and extension hose long enough for you to stand to one side—not in front of or over tire assembly. Use a safety cage if available.
- When removing and installing wheels, use wheel-handling equipment adequate for weight involved.

Safety At All Times

Thoroughly read and understand the instructions in this manual before operation. Read all instructions noted on the safety decals.

- Be familiar with all machine functions.
- Operate machinery from the driver’s seat only.
- Do not leave machine unattended with tractor engine running.
- Do not stand between the tractor and machine during hitching.
- Keep hands, feet and clothing away from power-driven parts.
- Wear snug-fitting clothing to avoid entanglement with moving parts.
- Watch out for wires, trees, etc., when folding and raising machine. Make sure all persons are clear of working area.
Introduction

The Implement Command System has been designed with care and built by skilled workers using quality materials. Proper setup, maintenance, and safe operating practices will help the customer get years of satisfactory use from this system.

Description of Unit

The new Implement Command system now gives Turbo-Max owners access to more data and technology. The Implement Command System gives producers the data needed to make decisions about their fields, while making real-time adjustments to improve yields and soil health. Available on 18'-35' Turbo-Max models, the Implement Command system allows you to take command of all your adjustment and monitoring needs right at your fingertips. Set, adjust, and monitor your Turbo-Max right on your ISO-compatible monitor in your tractor cab.

Tools Required

- Basic Hand Tools

Pre-assembly Checklist

- Before assembling, read and understand “Important Safety Information” in front part of this manual.
- Have at least two people on hand while assembling.

Unpacking Boxes

- Position boxes in area that you can maneuver components up to machine to assembly.

Further Assistance

Great Plains Manufacturing, Inc. wants you to be satisfied with your new Turbo Chisel Narrow. If for any reason you do not understand any part of this manual or are otherwise dissatisfied with the product please contact:

Great Plains Service Department
1525 E. North St.
PO Box 5060
Salina, KS 67402-5060

Or go to www.greatplainsag.com and follow the contact information at the bottom of your screen for our service department.

- Make sure area is level and free of obstructions (preferably an open concrete area).
- Have all major components
- Have all fasteners and pins shipped with machine.

1. Carefully remove banding from boxes.
2. Locate and identify all components before assembling.
Assembly

Implement Command System
Refer to Figure 2
The Controller Assembly will be shipped in a container, with the installation hardware and will need installed on the top of the brace bar, on the left hand side of the center brace bar.

Implement Command Wiring Harness
The wiring may need to be routed and installed on the frame of the machine. The wiring harness is labeled near each of the connectors to indicate which sensor or solenoid it is to be plugged into. See “Wiring Connections Layout” on page 20.
Refer to Figure 3 & 4
Plug-in the GPIC hitch harness into the tractor and the other 2 ends into the ICS Control Box located on the front of the left hand side of the machine. Be sure the ICS box orientation is correct, the openings for the plugs will be facing the inside of the machine as shown in the parts manual.
The frame harness will plug into the ICS Control box and then run to the other connections on the rest of the machine. It will run under the frame tube and over to the valves.
Implement Command System

Refer to Figure 5 & 6

The cylinder that is located on the hitch will be connected to the FAS1wire on the harness. The harness will run under the cylinder, thru the “ears” that connect to the H-bracket and towards the center frame.

Refer to Figure 7

The gang angle is located on the right hand side of the front brace bar the wiring harness is labeled as GAS this will route along the rear of the tube and be connected using p-clamps to the bolt that are welded to the frame.

You may have to install the sensor on to the gauge bracket, use the #10 x 2\(\frac{1}{4}\) bolts and hardware to install as shown.
Refer to Figure 8

The Down Pressure Valve (1) is plugged into DPT1, DPT3, and DPC1, on the frame harness, and the Depth Control Valve (2) is attached to DCC1 and DCC2 harness plugs. After being attached to the Down Pressure (1) and Depth Control Valve (2) the hydraulic hoses and the wiring harness will be routed under the weight packs, if your unit has the weights installed. Be sure to keep the excess wiring short enough so that it does not drag on the ground or get caught in the blades. Use hose wrap or zip ties if needed.

Figure 8
Down Pressure & Depth Control Valves
Refer to Figure 9

The Splitter Valve is attached on the left hand side of the center fold bracket. This is located right behind the weight packs. The Splitter valve is attached to SVC1 and SVC2 on the center frame harness.

Refer to Figure 10

If the machine does not have proximity sensors then there will be jumper plugs that must be in place on those harness connections. These will come installed in the harness, but please note that they must be in place. This may be a trouble shooting point if you have issues in the future.

If your machine has proximity sensors (installed on Models 3000TM & 3500TM) then the harness will route out along the center frame following the hydraulic hose route, using zip ties to secure it to the hydraulic hoses and connect to the sensors. These plugs are labeled as ProxLH and ProxRH. Be sure to run them out to the correct wings.
Refer to Figure 11

The Depth Control Sensor and the hardware that connects to the torque tube will be shipped in place on the center frame, the adjustable link may need connected to the torque tube. This may be left unattached during shipment to keep it from bending. Connect the center frame harness, DCS lead to this sensor. The bolts must be installed with the head of the bolt towards the inside of the machine.

The adjustable link that attaches the sensor arm to the torque tube, is 4.25 inches long on the 1800-3000TM, and 5.50 inches on the 3500-4000TM. This can be adjusted later if needed.

**NOTICE**

Be sure to install the bolts with the head of the bolt to the inside of the frame tube. If not there will be clearance issues. Check Parts manual for location on frame tube.

Attach the harness to the main frame of the machine and connect wiring harnesses to tractor, splitter valve, depth control valve, and the lead that routes from the tractor to the GPAC controller box.

The hydraulic hoses will need to be routed from the hitch and hooked up to the depth control valve and the down pressure valve. Hoses will need to be routed to the reel attachment as well. Route the harness along the hitch and follow the hydraulic hoses.

**NOTICE**

See Parts manual for full break down of parts and connection diagram.

Refer to Figure 12

Location dimensions are taken from the front of the plate that attaches the torque tube to the center frame to the rear of the attachment plate bracket as shown in the figure.
Refer to Figure 13
The wiring will follow the hydraulic hoses that are hooked to the torque tube cylinder secured with zip ties.

Refer to Figure 14
There is a reel position sensor that is located on the rear of the machine the wiring will follow and be secured to the hydraulic hoses that run to the hydraulic cylinders for this attachment.
Refer to Figure 15
Attach the harness wire labeled RES1 to the reel gauge sensor on the gauge bracket. This is assembled and installed like the gang angle gauge.

Refer to Figure 16
After all the connections are made any extra wire can be bundled up and secured together with a zip tie and secured to the front center fold bracket.
Implement Command System

Refer to Figure 17

This system allows you to monitor and adjust Hydraulic Down Pressure and Working Depth from an ISOBUS Virtual Terminal.

You can also monitor Gang Angle, Fore & Aft leveling, & Reel position these must be adjusted by using the hydraulic lever in the tractor.

First Time Set Up

Plug in electronic wiring harness.

Once the monitor starts up navigate to the ISOBUS virtual terminal on the ISO VT. It may take a few minutes to load the object pool the first time.
The desired depth is set with the virtual terminal but you must use the hydraulic remote control lever to operate the machine. When you want to set a new depth you adjust it on the screen, then use the hydraulic remote control lever. There are 3 programmable presets that allow you to make adjustments quickly.

You are able to set the depth by using the arrow keys or by tapping one of the 3 preset buttons, or tap one of the target depth boxes and set the depth with the key pad.
Reel Position
Refer to Figure 19
The reel position can be set and monitored on the screen but you must use the hydraulic circuit lever to change the reel position. The reel down pressure is the default setting, be sure the lock icon shows locked before trying to adjust the reel position. The reel can be raised completely off the ground in muddy conditions.

Fore/Aft Leveling
Fore/Aft leveling can be monitored, and locked in place on the screen, and must be unlocked before using the hydraulic circuit to make changes. This will automatically reset to the default locked setting after a few seconds of inactivity. This may be used to navigate steep field entrances or when working over terraces.

Gang Angle
The gang angle can be monitored from the screen, you must adjust this with the hydraulic circuit lever.
Hydraulic Down Pressure (wings)

Refer to Figure 20

The down pressure is active and can be increased or decreased, on the go through the field. You may adjust this by using the up and down arrows under the down pressure title. Select the machine section (wings on 3 section models, or inside or outside wings on 5 section models) you want to adjust the pressure of and use the arrow keys or the key pad to adjust.
Implement Command System

Implement Command Hydraulic Layout 1800-3500TM

Retract to P1 on Splitter Valve

Extend to P2 on Splitter Valve

Rod End to 1A on top of Splitter Valve, Routes under weight pac if installed

Base End to 2A on top of Splitter Valve, Routes under weight pac if installed

Bracket mounts on top of fold bracket.

Routes to Attachments
Implement Command Hydraulic Lift Layout 1800-3500TM
Implement Command System

Implement Command Hydraulic Fold Layout 1800-3500TM

- Retract to T on Down Pressure Valve
- Extend to T on Down Pressure Valve
- Case Drain on tractor to DR Port
- T-Port on Down Pressure Valve to Base end of Fold Cylinders
- T-Port on Down Press Valve to Manual Inline valve to Rod End of Fold Cylinders
Implement Command Wiring Layout 1800-3500TM

**Models 1800 & 2400 will NOT use proximity connections. Jumper Plugs MUST be installed in these connections.**
Implement Command System

Wiring Connections Layout

- **To Tractor**
- **Fore & Aft**
- **FAS1**
- **DCC1**
- **DCC2**
- **Depth Control Valve**
- **DPT1**
- **DPT3**
- **GAS**
- **PROX LH**
- **PROX RH**
- **DCS**
- **SVC2**
- **SVC1**
- **DPC1**
- **Depth Control Sensor**
- **Connects to Torque Tube**
- **Splitter Valve**
- **Reel Angle Gauge**
- **Located on Reel Assy**

Wiring is labeled with corresponding text that is also on the wiring harness.

**Models 1800 & 2400 will NOT use proximity connections. Jumper plugs MUST be installed in these connections.**

Not to Scale/Approximate locations