

Vermeer 604N/605N Installation Instructions

- 8) Make sure all brackets and fittings are tight and that all guards and shields are in place, then fill the oil tank. Cycle the cylinder that the pump is connected to until oil can be seen in all the oil lines. (If you experience problems priming the pump, you may need to bleed air out of the hydraulic hose where it is connected to the LUBE MINDER pump. Crack the fitting until oil comes out then re tighten). **IMPORTANT: When actuating the pump to prime it, make sure engine RPM is at least 1300 RPM to allow enough pressure to build up in the system.** Once oil is shown in all lines, fill the oil tank. Depending on the length of tubing involved, it may take 20-30 cycles to fill all the tubes and purge out air from the lines. Make sure there are no air pockets in the 5/8" tube that feeds oil from the tank to the pump.
- 9) The oiler pump is set at the factory to deliver the maximum amount of oil per cycle. If less oil is desired, loosen the jam nut on the bottom of the oiler and screw in the adjusting shaft 1/4", or approximately 5 turns. It is not recommended to screw the shaft in more than 15 turns as this may not allow for proper lubrication and may completely shut off the oil flow. **DO NOT BOTTOM OUT THE BRASS ADJUSTING ROD. IMPORTANT: Use new 30 weight oil. In cold weather use a SAE 10 or a mixture of two parts oil with one part diesel fuel.**

NOTE: IF YOU NEED HELP WITH ASSEMBLY INSTRUCTIONS PLEASE CALL TOLL FREE 1-800-782-5752 AND ASK FOR THE ENGINEERING DEPARTMENT.

Cutaway view of Lube Minder pump showing internal components



COMBINES: The pump may be cycled off the cylinder that actuates the unloader auger boom. The hydraulic hose assembly should be connected to the side of the cylinder that returns the boom back to the side of the combine for best results. Another cylinder would be the one that activates the feeder hose.



ROUND BALERS: The pump may be cycled off the cylinder that opens and closes the rear gate. For best results tee into the top of the cylinder, this will activate the LUBE MINDER as the rear gate closes.



FORAGE HARVESTERS: The pump may be cycled off of the cylinder that actuates the discharge chute or the header lift cylinder.

MOVER CONDITIONERS / WINDROWERS: The pump may be cycled off of the lift cylinder or the swing arm cylinder.

MANURE SPREADERS: The pump may be cycled off of the side discharge or rear gate cylinder.



POTATO / BEET HARVESTERS: The pump may be cycled off any double acting lift cylinder.

DISCS: The pump may be cycled off the lift cylinders (system can be used for oiling all pivot bushings every time the disc is raised or lowered).



Suburban Manufacturing Group
 10531 Dalton Ave NE, Monticello, Minnesota 55362
 800-782-5752 Fax (763) 295-6601 www.gosuburban.com

Vermeer Model 604N, 605N, 604N Cornstalk Special, and 605N Cornstalk Special Round Baler Installation Instructions

READ ALL INSTRUCTIONS CAREFULLY BEFORE INSTALLATION

Retain for future use



WARNING
 Do Not attempt to service any machine without exercising the mandatory safety shut down procedure as described in the operators manual.



The automatic chain oiler attachment gives a squirt of oil every time the hydraulic cylinder that it is connected to cycles. In this way, the machine is oiled in direct proportion to the number of cycles and adequate lubrication is assured. Clean oil, which is placed in the reservoir tank mounted on the machine, is all that is needed to lubricate the chains, sprockets, gears, or pivot bushings. The LUBEMINDER does not use any oil from the tractor hydraulic system. The hydraulic hose connected to the bottom of the oil pump assembly only serves to power a piston in the pump every time the cylinder is cycled.

TOOLING REQUIRED

- | | | |
|----------------------|--------------------------|------------------------|
| 1) Electric Drill | 3) Pliers | 5) 1/2" Diameter Drill |
| 2) Adjustable Wrench | 4) Standard Screwdrivers | |

LUBEMINDER COMPONENTS



Brass Manifold

This comes pre-installed into the Pump. There is one Manifold for each oil line.

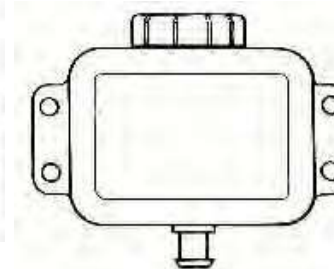
LubeMinder Pump

This is the unit that meters and dispenses the lubrication. This is a 2-piece unit, take care not to change the orientation of the top portion to the bottom portion as this will cause the unit to leak.



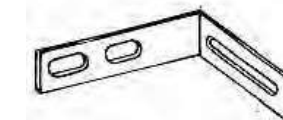
Brush Assembly

The Brush is located at the point of lubrication. Position this where it will contact the chain or sprocket without getting caught in the mechanism.



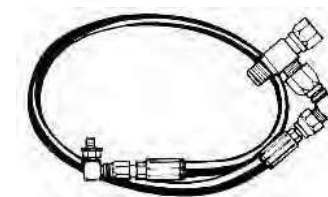
Reservoir Tank

This connects to the fitting at the top of the Pump with a short length of hose (supplied)



Brush Brackets

These are used to mount the Brush Assemblies.



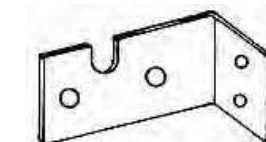
Hydraulic Hose Assembly

This connects the LubeMinder Pump to the hydraulic source. This will be a high-pressure connection—please observe all appropriate safety precautions.



Oil Feed Tubing

This tubing is used, as required, to connect the Brushes to the Manifolds.



Pump Bracket

Used to mount the Pump to your piece of equipment.

IMPORTANT

Components shown here may vary slightly depending on the make and model of equipment being lubricated. Refer to detailed installation instructions for specific information.

Our engineers are available to assist you with any installation questions during normal working hours, Central Standard Time, at 1-800-782-5752 or (763)295-5635

Suburban Manufacturing Group believes the information presented here to be accurate. Suburban Manufacturing Group shall not be held liable for damage or problems caused by possible design changes by the equipment manufacturer or customer-modifications of the equipment prior to the installation of this device. Liability limited to repair or replacement of the LubeMinder unit.

Vermeer 604N/605N Installation Instructions

Mount Tank, Pump, and Brushes first. Then run tubing starting with the longest run first and the shortest run last. Run oil tubing through black tubing to shield it around moving parts.

Step 1 Mount the oiler and reservoir on right side of baler. Use the supplied drill and 1/4" tap tight bolts to mount tank and bracket. Use the tank as a template on drilling the holes. Use the large hose clamp to attach oiler to bracket.

Plumb hydraulic hose into the circuit that closes the back gate. Kit comes with fittings for both #8 (1/2") and #6 (3/8") connections depending on baler options.



Note: It is easier to hold the tank on the front of the baler as a template for drilling the mounting holes.



NOTICE: If operating with a lower pressure tractor (generally 2005 and older). Remove restrictor with a 3/32 hex key wrench and hold elbow with 7/16 box end wrench.



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Clean oil, which is placed in the reservoir tank mounted on the machine, is all that is needed to lubricate the chains, sprockets, gears, or pivot bushings. The LUBE MINDER does not use any oil from the tractor hydraulic system. The hydraulic hose connected to the bottom of the oil pump assembly only serves to power a piston in the pump every time the cylinder is cycled.

1) Mount the oil reservoir to the side of the machine. Use the tank as a template mark and drill four 7/32" holes. Secure the tank with self-tapping screws.



2) Mount the pump bracket in the same manner, position the LUBE MINDER below the outlet of the oil tank and in a vertical position with the barbed fitting on top. Use the hose clamp, position so elbow fitting rests on clamp.

3) Cut the 5/8" ID hose as needed to connect the oil tank to the pump. Slide the hose clamps over each end of the hose and secure one end to the pump and one end to the tank.

4) At this time, pour about 1/8 cup of clean 30 weight oil into the tank. This will allow some time for the oil to run down into the pump and allow air to escape. When the entire installation is finished you may finish filling the tank.

5) **IMPORTANT – MAKE SURE ALL GATES, CYLINDERS, DOORS, BOOMS, ETC. HAVE NO PRESSURE ON THE HYDRAULIC LINES.** The hydraulic cylinder that the pump will be tied into must be DOUBLE ACTING and reach 300 PSI of pressure to actuate the LUBE MINDER pump. Disconnect the fitting and install the tee and

brass manifold fittings, reconnect the hydraulic hose that runs to the cylinder. Connect the new hose to the brass manifold fitting, route the hydraulic hose to the LUBE MINDER oil pump. Connect the end of the hose to the side of the oiler pump. Every time that this hydraulic cylinder cycles the LUBE MINDER oiling pump will cycle (examples of ways to cycle pump follows).

6) Install the brushes into the brackets, (**The 1/2-20 nuts should only be finger tight - after final adjustment of brushes - tighten the 1/2-20 nut NO MORE THAN 1/4 TURN - tightening brush more could BREAK THE BRUSH**). For best results place the brackets over the chain and on top of a sprocket. Using the bracket as a template, mark where the holes need to be drilled, and drill a 7/32" hole. Secure the brackets with the self tapping screws. Adjust brackets so brushes are pushed down into the chain approximately 1/2". At this time tighten the 1/2-20 nuts on the brushes 1/4 turn (**Be careful not to over tighten, as this could BREAK THE BRUSH**). Note: more brushes may be added to a system by installing union tees in the 5/32" oil lines. A small in-line check valve may be needed if lines are at different heights.



7) Route the oil lines. First, connect the 5/32" tubing to one of the compression fittings on the LUBE MINDER oil pump. **IMPORTANT: When installing tubing into brushes, please follow instructions exactly or the tubing may not stay in the fitting.** Route the longest lines first. Four feet of 1/4" black tubing has been provided to use as a protective cover if needed. This will help protect 5/32" oil lines if they are run through a panel cut-out. Cut as needed and slide over 5/32" tubing to protect against sharp edges. **IMPORTANT: Tubing can only be removed from fittings by pushing in on the orange plastic ring and pulling the tube out while holding the ring down.** Finish routing the remaining lines in the same manner to each brush. (Secure tubing to machine with cable ties). **IMPORTANT: When installing tubing into check valve fitting on oiler pump, do not over-tighten the compression fitting.** Connect the 5/32" tube into the fitting on the brush by pushing in on the orange plastic ring. While holding the ring in, insert the tube until it bottoms out. (Hint: if you make a mark 3/4" from the end of the tube, push the tube in until the mark becomes flush with the orange push ring.) Rotate the tube back and forth approximately 1/4 turn. This will cut a small groove in the OD of tube for grippers to hold. **IMPORTANT: Tubing can only be removed by pushing down on the orange plastic ring, holding it down and pulling the tube out.**

Liability limited to repair or replacement of the Lube Minder unit.

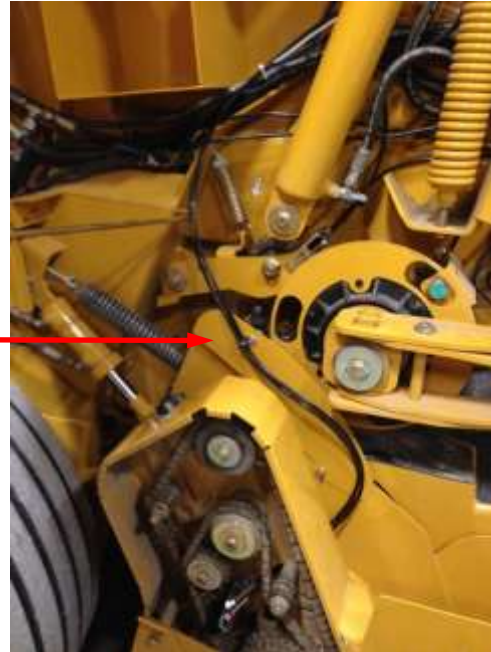
Vermeer 604N/605N Installation Instructions

Step 8: Route Tubing

Route the supplied 5/32" tubing from each brush to the oiler pump. Route the longest runs first. Secure loose tubing with hose clamps and zip ties. Route tubing away from moving parts wherever possible.

Note Slide black tubing over oil tubing to protect it when routing around moving parts.

Secure loose tubing with hose clamps.



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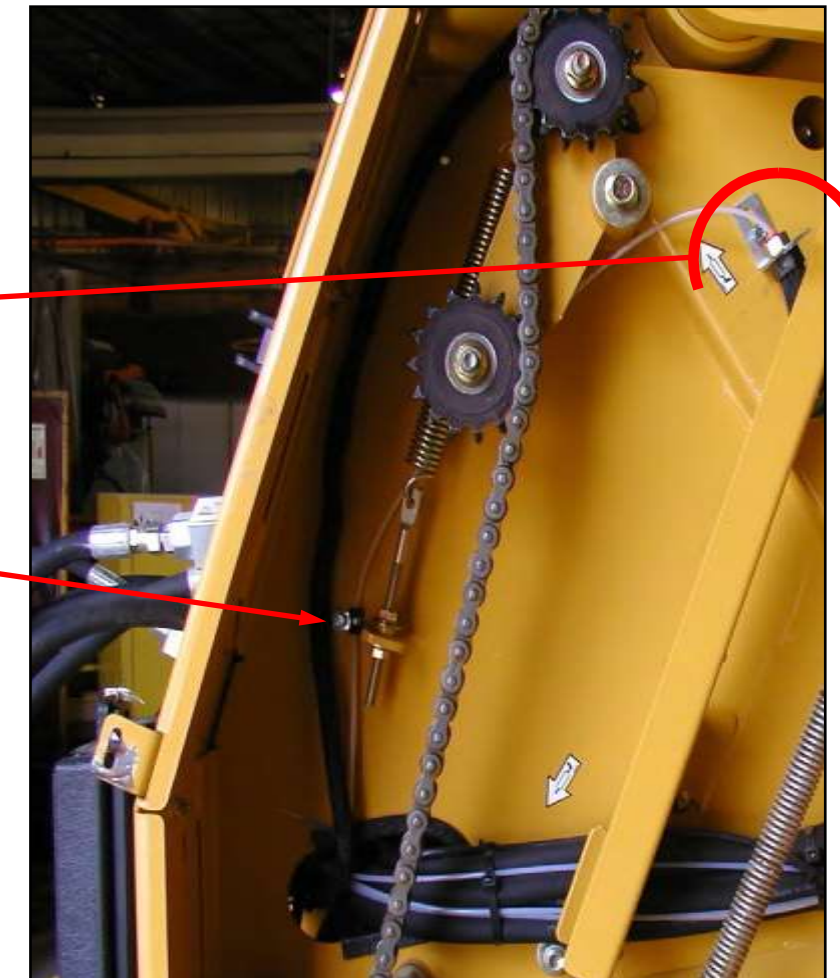
Step 2: Lower Drive Chain

On the left side mount the brush using a 1/4" tap tight bolt in the pre-punched hole

Step 3: Upper Drive Chain

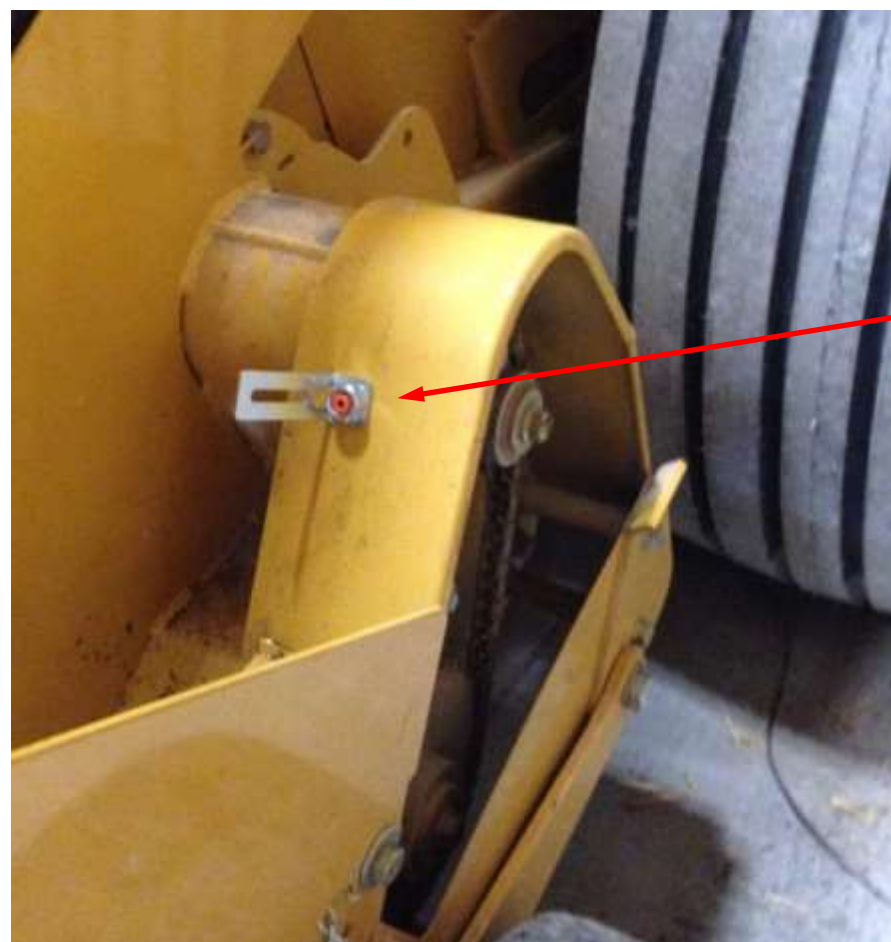
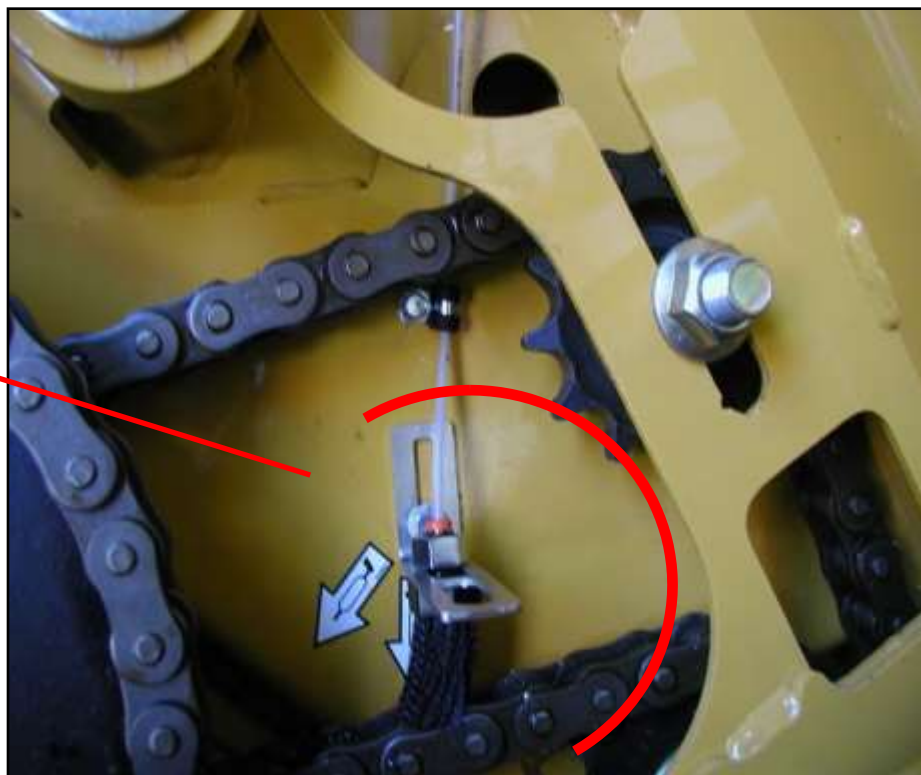
On the left side mount the brush using a 1/4" tap tight bolt in the pre-punched hole.

(Tie lines back with clamp)



Step 4: Drum Drive Chain

On the left side using the supplied drill, drill and mount using 1/4" tap tight bolt.

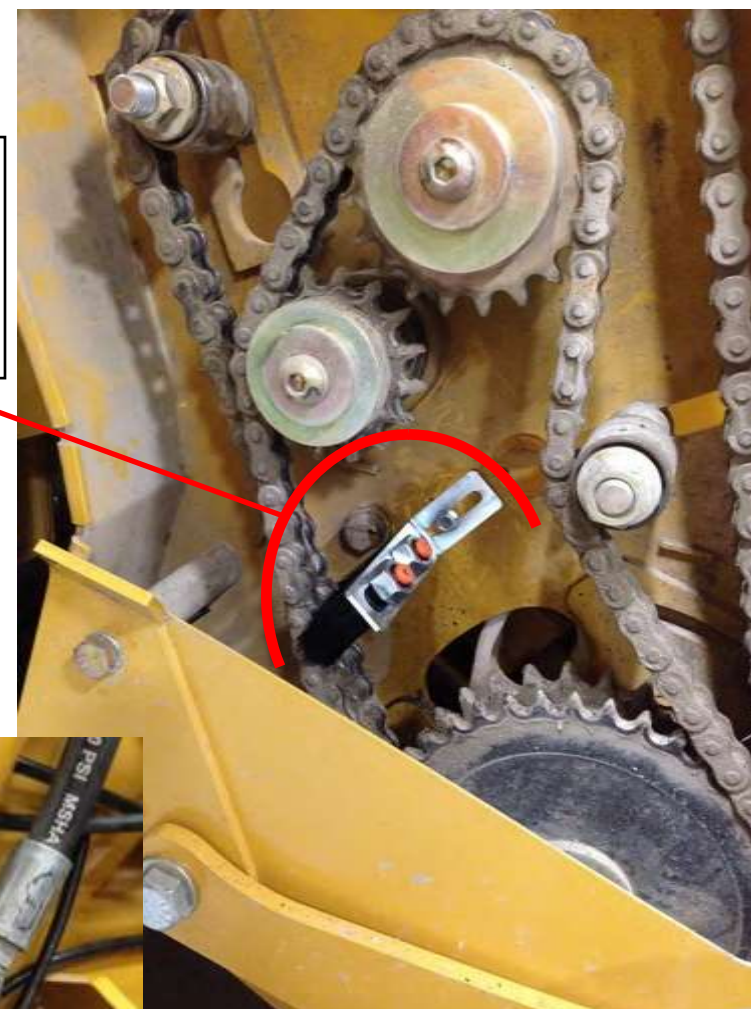


Step 5: Left Pick Up

On the left side put the pickup down and drill a 1/2" hole approximately 5-1/2" up from the weld and 3" from the outside edge. Mount brush directly in hole and place the short 45° bracket on the outside for protection.

Step 6: Right Pick-up

On the right pickup, using the supplied drill, drill and mount using 1/4" tap tight bolt. Position bracket so that both brushes are in contact with the chains.



Step 7: Right Pick-up Clutch

On the right side, using the supplied drill, drill and mount using 1/4" tap tight bolt on the chain tensioner. Use the long single bracket.