



Count on it.

Form No. 3365-184 Rev A

Setup Manual

ProPass-200 Top Dresser

Model No. 44700-Serial No. 310000001 and Up

Model No. 44701-Serial No. 310000001 and Up

Model No. 44704

Model No. 44705

Model No. 44706

Model No. 44707

Table of Contents

Initial ProPass Base Model Setup 1

Toro Workman Truck Mount Configuration 8

John Deere ProGator Truck Mount Configuration 13

Truckster TDC Chassis..... 18

How to Install the Electrical Connection Kit 20

How to Install the Hopper Extension Kit 21

How to Install the ProPass Conveyor and Swivel Kit 22

Note: Throughout this manual, the terms “left” and “right” are used. When you stand behind the ProPass facing towards the rear of it, your left side corresponds to the left side of the ProPass.

Initial ProPass Base Model Setup

1. Remove the Base Model ProPass from the shipping crate.
2. Remove the 6.4 x 19.1 mm ($\frac{1}{4}$ x $\frac{3}{4}$ in) bolt and nut attaching the ProPass lifting device shipping bracket with the Twin Spinner (located at the rear of the Twin Spinner). Refer to **Figure 1**.

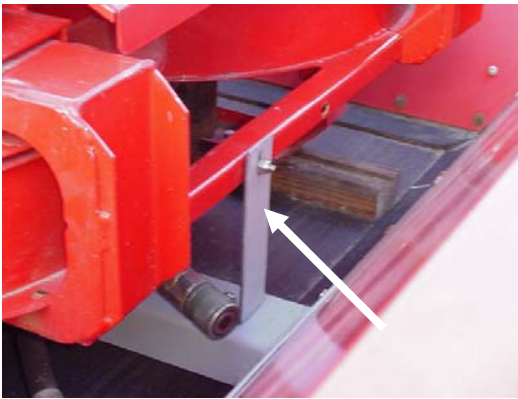


Figure 1: Removing shipping bracket

3. Remove the two 6.4 x 19.1 mm ($\frac{1}{4}$ x $\frac{3}{4}$ in) bolts and nuts attaching the ProPass lifting device shipping bracket with the Twin Spinner (located at the front of the Twin Spinner). Refer to **Figure 2**.

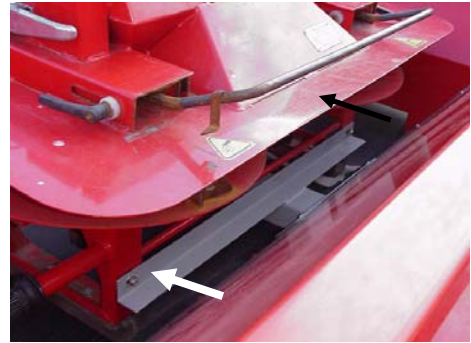


Figure 2: Removing shipping bracket

4. *This step requires two people.* Lift the Twin Spinner out of the hopper using the outer grab handles of the Twin Spinner. Place the Twin Spinner unit on the ground. Refer to **Figure 3**.



Figure 3: Removing Twin Spinner from hopper

5. Remove the woodscrew from the upper Twin Spinner guard. Remove the 9.5 mm ($\frac{3}{8}$ in) wood from the guard. Refer to **Figure 4**.



Figure 4: Removing wood from Twin Spinner guard

6. Remove the four screws from the legs of the Twin Spinner. With the help of a partner, lift the Twin Spinner and remove the packing studs and packing foam. Refer to **Figure 5**



Figure 5: Removing packing studs and foam

7. Install the hopper guard using the supplied 6.4 x 15.9 mm (1/4 x 5/8 in) button head bolts, washers, and nylon lock nuts (**Figure 6**).



Figure 6: Front view of the hopper front guard

8. Attach a lifting device to the lifting bracket bolted inside the hopper assembly. Refer to **Figure 7**.



Figure 7: Lifting ProPass from shipping crate

Note: Retain the lifting bracket for future use. **Do not** discard.



WARNING: Do not attempt to lift the bed and hopper with the Tow-Behind Chassis, ProGator, Workman or TDC Chassis connected. The lifting bracket is not capable of lifting the entire machine.

9. Lift the bed and hopper assembly from the crate and lower it onto the selected chassis. Refer to **Figure 8**.
10. Remove the lifting bracket from the inside of the hopper assembly. Reinstall the bolts to the hopper sides.



Figure 8: Lowering ProPass onto chassis

11. Install the Electric Connection Kit to the tow vehicle designated to be used with the ProPass.

12. Install the option to be used with the ProPass.

IMPORTANT: You may be required to change the quick couplers to adapt to your tow vehicle.

IMPORTANT: If the ProPass is going to be used without an option, you **MUST** connect the two option quick couplers together at the rear of the machine to complete the hydraulic circuit. Refer to **Figure 9**.



Figure 9: Connecting quick couplers

Tow-Behind Chassis

1. Place the two suspension assemblies upright approx. 63.5 mm (2½") apart with walking beam bearings (Plastic blocks) on underside of suspension tubes. Block the chassis tubes and at least one tire on each axle as shown in **Figure 10**.



Figure 10: Blocked Suspension Tubes

2. Lift Rear Brace up to one end of the suspension mount plates (suspension tubes are reversible) and insert three 12.7mm (½") bolts with 12.7mm (½") flat washers on both sides of mount. Tighten bolts finger tight, see **Figure 11**.



Figure 11: Finger Tighten Bolts

3. Lift Front Brace Assembly up to the opposite end of the suspension mount plates (you may need an assistant as the front brace is heavy, see **Figure 12**) and insert three 12.7mm (½") bolts with 12.7mm

(½") flat washers on both sides of mount. Tighten bolts finger tight.



Figure 12: Install Front Brace

4. Install the Upper Cross Members with the same 12.7mm (½") bolt, washer and nut combination used on the front and rear braces. Only use the inner two bolt holes at this stage, to allow installation of the fenders later, see **Figure 13**.



Figure 13: Only Use Inner Bolt Holes

5. Tighten and torque all of the previously finger tightened bolts on the chassis. Start with the bolts on the suspension tubes then move to the Upper Cross Member bolts. Torque all 12.7mm (½") bolts to 13.8 kg-m (100 ft-lbs).
6. Install Fenders with 12.7mm (½") bolts, washers and nuts, see **Figure 14**.



Figure 14: Fenders Installed

7. Torque the fender bolts to 13.8 kg-m (100 ft-lbs).
8. Install the fender brackets with two 9.5mm (3/8") bolts with flat washers and nylon lock nuts, see **Figure 15**.

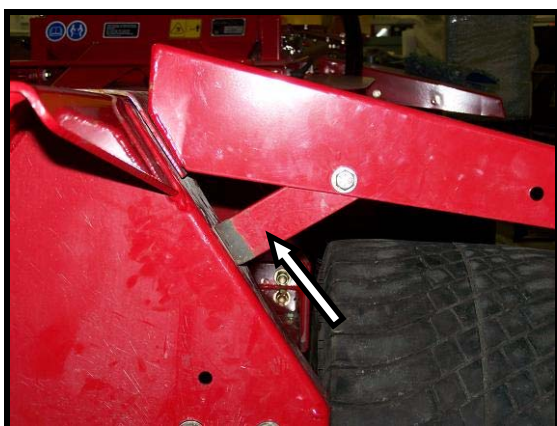


Figure 15: Fender Bracket Installed

****Note:** If you are planning to install a Honda Engine Power Pack on your Tow Chassis, disregard Step 9 and proceed to Step 10.

9. Attach the left and right side rear support gussets on the rear of your Tow Chassis using the four 9.5mm (3/8") bolts with the included flat washers and nylon lock nuts. Torque these bolts to 45 ft-lbs.

****Note:** The left side rear gusset has a small dimple in the triangular cut out to help distinguish it from the right side gusset, see **Figure 16**.



Figure 16: Left Side Gusset Has Dimple

10. The hitch tube is heavy so assistance may be required. For ease of installation, attach the jack to the hitch tube via the jack ring on the side of the hitch tube.
11. With the jack positioned perpendicular to the hitch tube, crank it up to its maximum stroke. Place the jack foot firmly on the ground and have your assistant install the hitch channel into the front brace assembly.

****Note:** The jack should be on the left side of the machine, and the gusset on the end of the hitch should be on the underside, see arrow **Figure 17**.

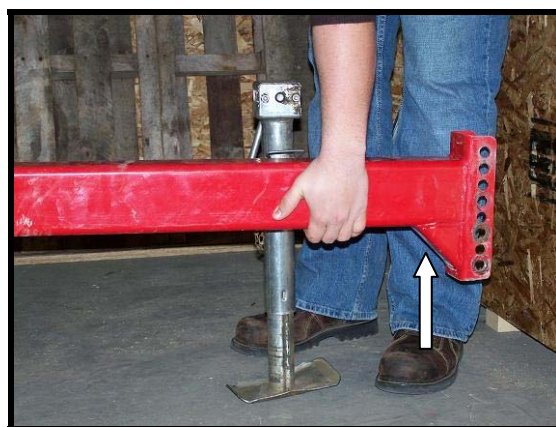


Figure 17: Jack Perpendicular to Hitch Tube

12. Slide the hitch tube into the channel and attach with two 19mm x 139.7mm ($\frac{3}{4}$ " x 5- $\frac{1}{2}$ ") bolts with 19mm ($\frac{3}{4}$ ") washers. Be sure to use 19mm ($\frac{3}{4}$ ") washers on both sides of the hitch crimp and a 19mm ($\frac{3}{4}$ ") Nylon lock nut. Torque the hitch bolts to 20 kg-m (150ft-lbs), see **Figure 18**.



Figure 18: Hitch Installed

13. With all the bolts in the Tow Chassis double checked, align your tow chassis with the desired tow vehicle. Using the jack on the hitch tube, raise the hitch until the Tow Chassis is level.
14. Install the hitch clevis so the top of the chassis is as level as possible. Use the two 15.9mm x 114.3mm ($\frac{5}{8}$ " x 4- $\frac{1}{2}$ ") bolts with the corresponding flat washers and nylon lock nuts as shown in **Figure 19**.

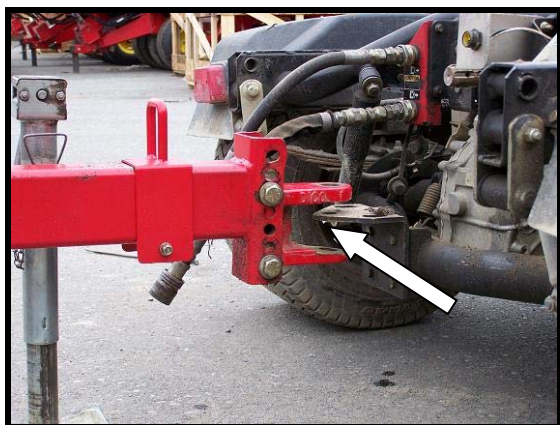


Figure 19: Aligned Hitch Clevis

15. Torque the clevis bolts to 17.0 kg-m (120ft-lbs).

16. Double check that all bolts on the Tow Chassis are tight and that no components are missing.
17. Using the lifting mechanism in the ProPass hopper, position the ProPass over the Tow Chassis.
18. Line up the six mounting holes (three per side) and install the 7.9 x 25.4 mm ($\frac{5}{16}$ x 1 in) bolts with the nylon lock nuts and two flat washers (one on either side) to the Tow-Behind Chassis. Refer to **Figure 20**.

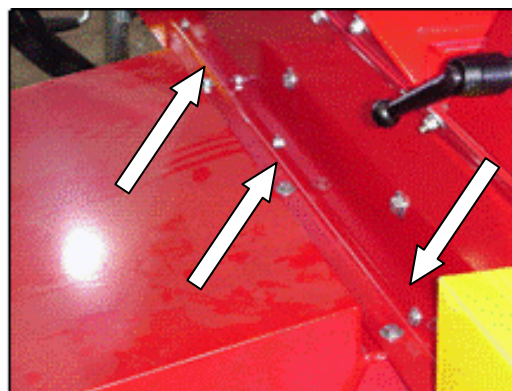


Figure 20: Mounting onto chassis

19. Remove the lifting bracket from the hopper sides and reinstall the bolts to the hopper sides.
20. Identify the return hose (contains a check valve) and the pressure hose included with the Tow-Behind Chassis. These are shown in the parts manual.
21. Connect the hoses to the ProPass as shown in **Figure 21**. For Wireless ProPass, refer to **Figure 22**.

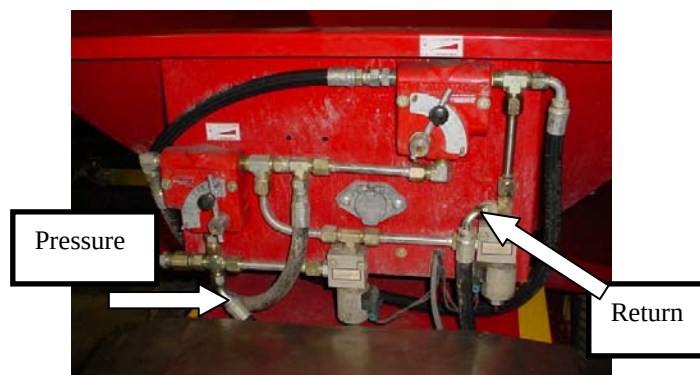


Figure 21: Installing Hoses on ProPass

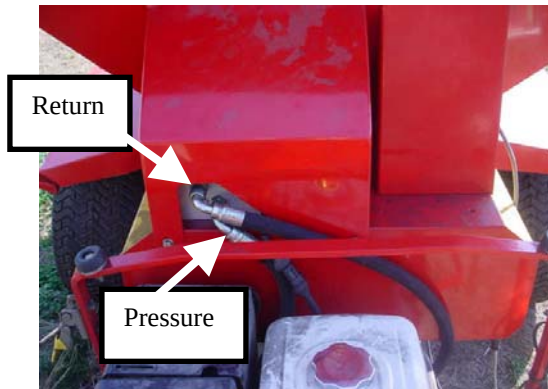


Figure 22: Installing Hoses on ProPass Wireless

22. Install the Pendant Plug into the four prong harness connector at the front of the ProPass. On Wireless ProPass, plug the control pendant into the control pendant lead on the ProPass then route the wire to the end of the pressure and return hose using the black spiral wrap included with the Wireless base model.
23. Connect the ProPass to the tow vehicle using a standard rated tow pin. Refer to the Operators Manual.
24. Connect the pressure and return hydraulic lines from the ProPass to the tow vehicle. The tow vehicle must have 22.7 L/min (6 Gal/min) of hydraulic oil flow at 138 Bar (2000 PSI) to operate the ProPass.
25. Attach the male power plug to the female plug on the rear of your tow vehicle.

Toro Workman Truck Mount Configuration

1. Remove the cargo box from the Toro Workman. Refer to the Workman owner's manual.
2. Install both the left and the right side inner brace tubes to the rear cross member brackets with two spacers using 9.5 x 63.5 mm (3/8 x 2-1/2 in) bolts, washers on both sides and nylon lock nuts. Leave the bolts loose at this time. Refer to **Figure 23**.

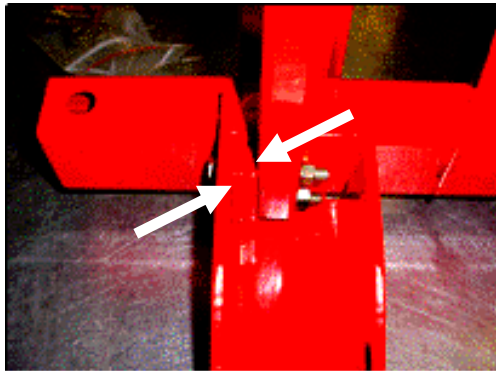


Figure 23: Installing inner brace tubes

3. Install the center cross member to the left and right side inner brace tubes using 9.5 x 44.5 mm (3/8 x 1-3/4 in) bolts, two washers and nylon lock nuts. Leave the bolts loose at this time. Refer to **Figure 24**.



Figure 24: Installing center cross member

4. Install the rear cross member onto the two rear pivot points using the provided pins and two to three washers on the inside of the cross member bracket

and on the outside of the Toro frame rail. Refer to **Figure 25**. This will keep the Toro mount assembly centered.

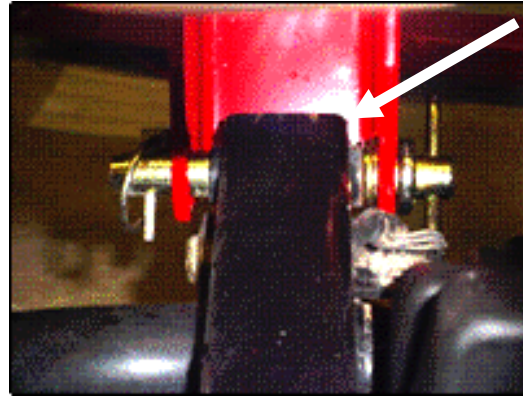


Figure 25: Installing rear cross member

IMPORTANT: Check and ensure that there is proper clearance between the center cross member and the Toro's rear fenders and the oil filter assembly.

5. Install both the left and right lift cylinder arms to the center cross member using the existing pins and locking pins. Refer to **Figure 26**.

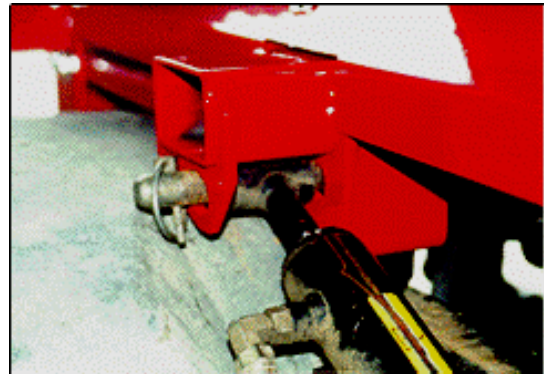


Figure 26: Installing lift cylinder arms

Note: When installing the four pivot pins, ensure that the locking pins are installed and completely latched.

Note: It may be necessary to move the hydraulic lift cylinder forward or backward until the pivot pins line up with the mounting holes.

6. Ensure that the center cross member is square to the rear cross member.

7. Ensure that the center cross member and the rear cross member are sitting level. Refer to Figure 27.



Figure 27: Center and rear cross member sitting level

8. Tighten both the left and right inner brace tube bolts.
9. Recheck that the center cross member and the rear cross member are sitting level and are square.
10. Install the front cross member on the frame of the Workman 76.2 cm (30 in) in front of the center cross member, arms facing forward.
11. Using the temporary lifting device, lift the ProPass up high enough to back the Workman underneath.
12. Lower the ProPass down onto the Workman and line up the center holes on the left side rail that measure 107.3cm (42-1/4in) from the front. Refer to **Figure 28**.



Figure 28: Lowering ProPass onto Workman

13. Install the 7.9 x 69.9 mm (5/16 x 2-3/4 in) bolts (left side only) then install the 7.9 x 25.4 mm (5/16 x 1 in) bolts (right side only). Fasten the bolts on both sides

with washers and nylon lock nuts. Refer to **Figure 29**.

14. Place the 7.9 x 25.4 mm (5/16 x 1 in) bolts (two on each side) through the rear cross member and the ProPass. Fasten the bolts with washers and nylon lock nuts.



Figure 29: Installing bolts

15. Lift the ProPass up 5 cm (2 in), using the hydraulic lift cylinders of the Toro Workman, to install the front cross member. Place the 7.9 x 69.9 mm (5/16 x 2-3/4 in) bolts (two each side) through the front cross member and the designated two holes on the ProPass side rail. Fasten the bolts with washers and nylon lock nuts.
16. Install the left side shield to the left side of the truck mount kit using 6.4 x 15.9 mm (1/4 x 5/8 in) Button head bolts and flat washers for the rear mounting holes. Install 6.4 x 25.4 mm (1/4 x 1 in) Button head bolts, washers and nylon lock nuts in the middle and front mounting holes.
17. Install the right side shield to the right side of the Truck Mount Kit using one 6.4 x 15.9 mm (1/4 x 5/8 in) regular bolt and washer and one 6.4 x 15.9 mm (1/4 x 5/8 in) Button head bolt and flat washer for the rear mounting holes. Refer to **Figure 30**.

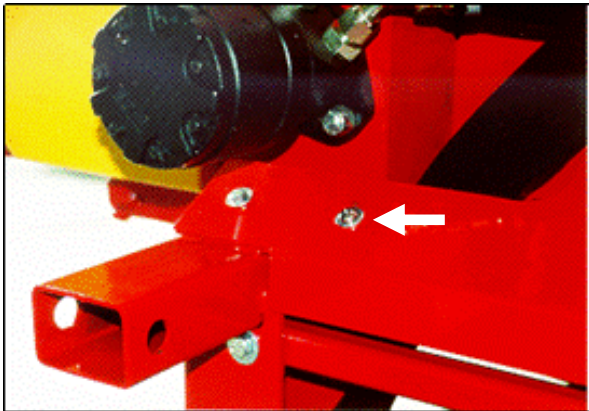


Figure 30: Installing right side shield

18. Install 6.4 x 25.4 mm (1/4 x 1 in) Button head bolts, washers and nylon lock nuts in the middle and front mounting holes. Refer to **Figure 31**.



Figure 31: Installing Button head bolts

19. Route the option hoses through the rear of the right side shield of the Truck Mount Kit and down to the option. Refer to **Figure 32**.



Figure 32: Routing option hoses



CAUTION: Do not raise the ProPass with the Workman hydraulic lift cylinders when an option is attached to the ProPass.

20. Lift the front of the ProPass up as high as possible using the lift cylinder. Install the lift cylinder safety brace as per the instructions in the Workman owner's manual.
21. Identify the return hose (marked with a flow direction decal) and the pressure hose included with the Toro Workman Truck Mount. These are shown in the parts manual.
22. Connect the hoses to the ProPass as shown in Figure 21. Wireless ProPasss refer to **Figure 22**.
23. Route the hydraulic pressure and return hoses along the right side of the ProPass. Clamp the hoses in place using three hose clamps on the Workman truck mount front, center and rear cross members. Use 6.4 x 63.5 mm (1/4 x 2-1/2 in) bolts, two hydraulic line clamps, one clamp plate, washers and a nylon lock nut. Refer to **Figure 33**, **Figure 34**, and **Figure 35**.

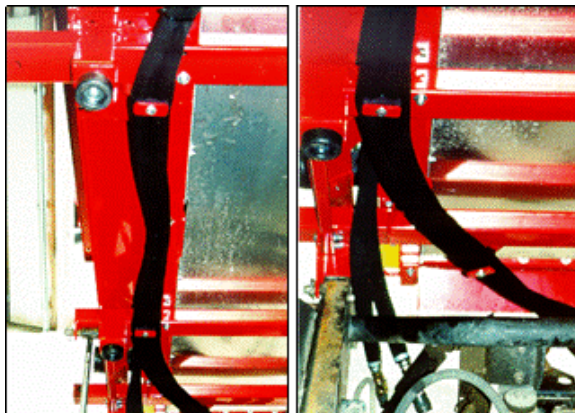


Figure 33: Routing hydraulic hoses

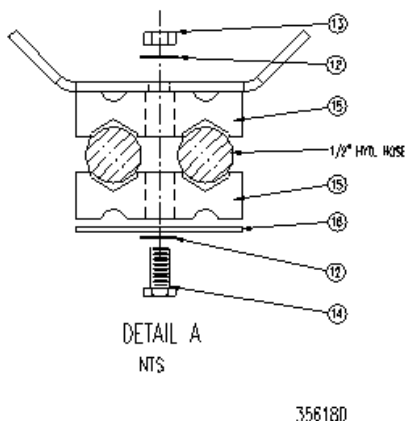


Figure 34: Hydraulic line clamps

IMPORTANT: When routing either the hydraulic hoses or the electrical wiring harness always remember to route them out of the way of all moving components and always ensure that there is no stress on the line. This may require loosening and repositioning the hydraulic hose at the front bulkhead. Refer to **Figure 35**.



Figure 35: Route hydraulic hose away from other components

24. Between the front and center hose clamp ensure that the hose bends upwards to clear the Workman's engine. To do this, install a cable tie around the pressure and return hoses and attach it to one of the ProPass' side rail mounting holes. When attaching the hose, ensure that there is proper tension on the hoses. Refer to **Figure 36**.



Figure 36: Ensure proper tension of hydraulic hoses

25. Route and connect the male electrical power plug to the Electrical Connection Kit.

Note: If the electrical connection kit is installed at the rear of the tow vehicle, route and secure the electrical power cord to the hydraulic pressure and return hoses from the front to the rear of the ProPass.

26. Remove the lift cylinder safety bar and lower the ProPass back down onto the chassis of the Workman.
27. Insert the pressure and return hoses into the proper hydraulic port at the rear of the Workman.
28. Install the option and connect the hydraulic hoses to the ProPass.

Note: Ensure that the pressure and return hoses are attached to the rear of the Workman and do not come in contact with the option.

NOTE: When truck mounting a Wireless ProPass, install the 45 degree elbow into the hydraulic block for the tow-vehicle hydraulic pressure hose.

29. Connect, and then place the electrical controller in the cab of the tow vehicle.
30. Remove the lifting bracket from the inside of the hopper assembly. Reinstall the bolts in the hopper assembly.

Your ProPass is now ready for operation. Refer to the Operator's Manual before operating the ProPass.

John Deere ProGator Truck Mount Configuration

1. Remove the cargo box from the John Deere ProGator. Refer to the ProGator owner's manual.
2. Install the rear cross member onto the rear pivot using the existing pins. Refer to **Figure 37**.



Figure 37: Installing rear cross member

3. Install the center cross member to the lift cylinder using the John Deere lift cylinder pin. Refer to **Figure 38**.

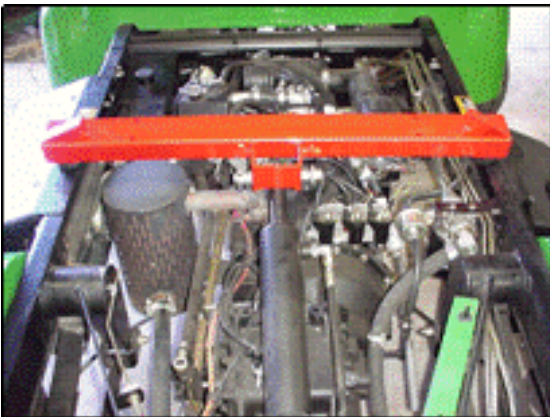


Figure 38: Installing center cross member

4. Take note of the inner brace tube, one is the left side and one will be the right side. Refer to **Figure 39** and **Figure 40**.

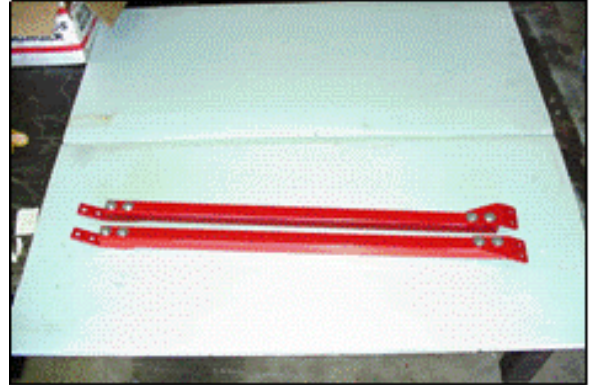


Figure 39: Inner brace tubes

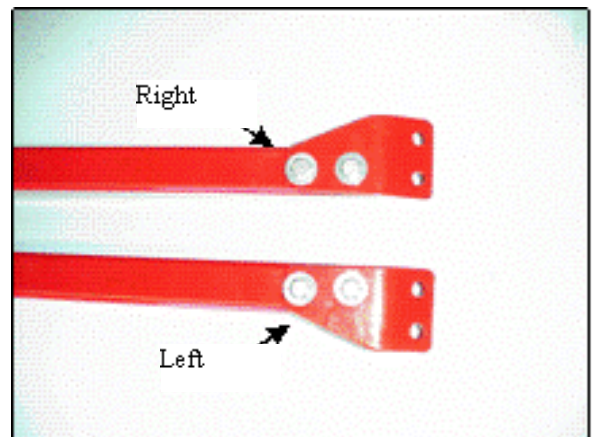


Figure 40: Inner brace tubes (close-up)

5. Install both left and right inner brace tubes to the inside of the rear cross member brackets. Refer to **Figure 41**.



Figure 41: Installing brace tubes

6. Install both the left and right front inner brace tubes to the brackets on the center cross members leaving the bolts loose. Refer to **Figure 42** and **Figure 43**.

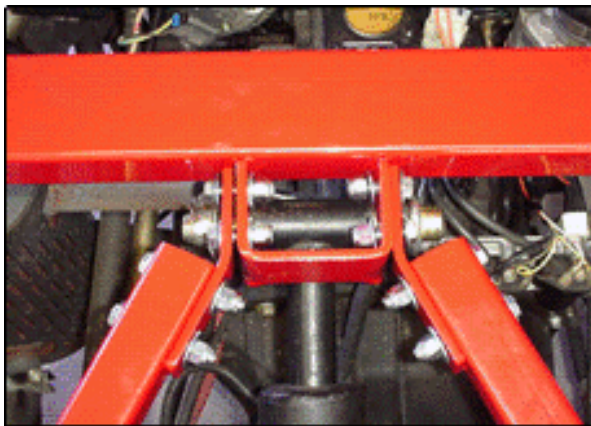


Figure 42: Installing braces to brackets



Figure 43: Installing braces on center cross member

7. Ensure that the center cross member is square to the rear cross member.
8. Ensure that the center cross member and the rear cross member are sitting level.
9. Tighten both the left and the right inner brace tube assembly bolts.
10. Check to ensure that there are ten mounting holes on the left side mounting channel and nine holes on the right side mounting channel of the ProPass.

IMPORTANT: It may be necessary to move the hydraulic lift cylinder forward until the bolt holes for the inner cross member line up.

11. Using the temporary lifting device, lift the ProPass up high enough to back the ProGator underneath.
12. Lower the ProPass down onto the ProGator and line up the middle holes that measure 67.9 cm (26-3/4 in) from the front of each side rail of the ProPass with the holes of the center cross member. Refer to **Figure 44**.



Figure 44: Mounting ProPass onto ProGator

13. Install the 7.9 x 76.2 mm (5/16 x 3 in) bolts (in 6 locations), and fasten them using washers and nylon lock nuts. Refer to **Figure 45**.

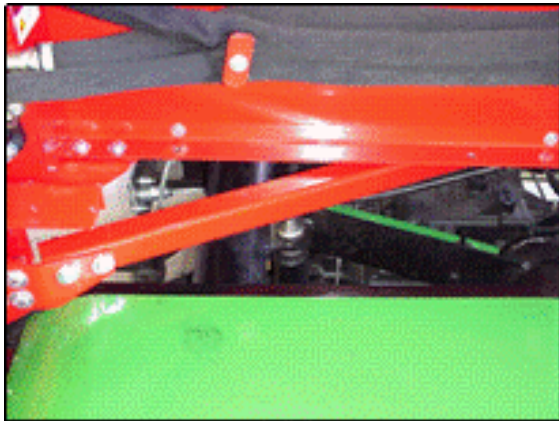


Figure 45: Installing bolts

14. Lift the ProPass 5 cm (2 in) to install the front cross member. Place the 7.9 x 76.2 mm (5/16 x 3 in) bolts (two on each side) through the front cross member and the ProPass. Fasten the bolts using washers and nylon lock nuts. Refer to **Figure 46**.

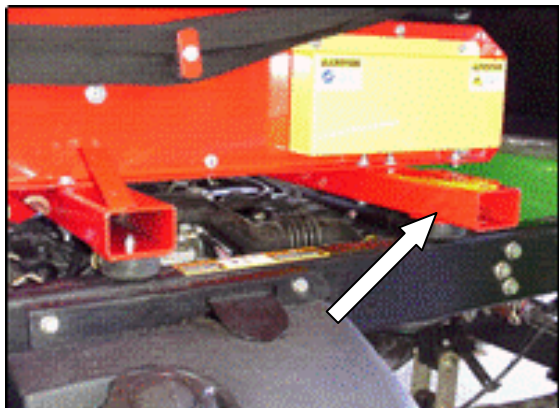


Figure 46: Installing front cross member

15. Install the right side shield to the right side of the truck mount kit using 6.4 x 15.9 mm (1/4 x 5/8 in) stainless steel button head bolts and flat washers in the rear mounting holes. Install 6.4 x 19.1 mm (1/4 x 3/4 in) stainless steel button head bolts, washers and nylon lock nuts in the middle and front mounting holes. Refer to **Figure 47**.

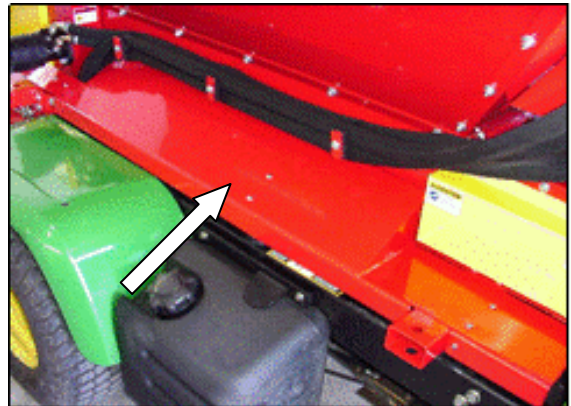


Figure 47: Installing right side shield

16. Install the left side shield to the left side of the Truck Mount Kit using 6.4 x 15.9 mm (1/4 x 5/8 in) stainless steel button head bolts and flat washers in the rear mounting holes. Install the 6.4 x 19.1 mm (1/4 x 3/4 in) stainless steel button head bolts, washers and nylon lock nuts in the middle and front mounting holes. Refer to **Figure 48**.

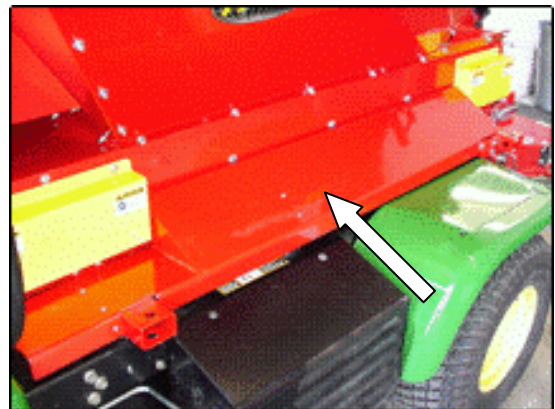


Figure 48: Installing left side shield

17. Route the Twin Spinner option hoses through the rear of the right side cover on the truck mount kit and down to the Twin Spinner. Refer to **Figure 49**.



Figure 49: Routing Twin Spinner hoses

18. Lift the front of the ProPass up as high as possible using the lift cylinder. Install the lift cylinder safety brace as per instructions in the ProGator owner's manual.



CAUTION: Do not raise the ProPass with the ProGator hydraulic lift cylinder when an option is attached to the ProPass.

19. Identify the return hose (marked with a flow direction decal) and the pressure hose included with the John Deere ProGator Truck Mount. These are shown in the parts manual.
20. On the ProPass connect the hoses as shown in **Figure 21**. For Wireless ProPass, refer to **Figure 22**.
21. Route both hydraulic pressure and return hoses underneath the ProPass between the ProGator Truck Mount cross members and the bottom of the ProPass. Refer to **Figure 50**.



Figure 50: Routing hydraulic hoses

IMPORTANT: When routing either the hydraulic hoses or the electrical wiring harness always remember to route them out of the way of all moving components and always ensure that there is never any stress on the line.

22. Attach the hydraulic pressure hose and the return hose to the hose clamp provided at the rear of the ProPass. When attaching the hose, ensure that there is proper tension on the hoses. Refer to **Figure 51**.



Figure 51: Attaching hydraulic hoses

23. Route and connect the male electrical power plug to the Electrical Connection Kit. **Note:** If the electrical connection kit is installed at the rear of the tow vehicle, route and secure the electrical power cord to the hydraulic pressure and return hoses from the front to the rear of the ProPass.

24. Remove the lift cylinder safety bar and lower the ProPass back down onto the chassis of the ProGator.
25. Insert the pressure and return hoses into the proper hydraulic port at the rear of the ProGator.
26. Install the option and connect the hydraulic hoses to the ProPass.

NOTE: When truck mounting a Wireless ProPass, install the 45 degree elbow into the hydraulic block for the tow-vehicle hydraulic pressure hose.

27. Connect, and then place the on/off control box into the cab of the tow vehicle.
28. Remove the lifting bracket from the inside of the hopper assembly. Reinstall the bolts in the hopper assembly.

Your ProPass is now ready for operation. Refer to the Operator's Manual before operating.

Truckster TDC Chassis

Notes before starting:

When your TDC chassis is complete the Propass Base Model will mount using the included 7.9mm (5/16") hardware.

The 11HP Honda Power Pack *cannot* be used on your TDC chassis.

1. Place the two suspension assemblies upright approx. 63.5mm (2 1/2") apart with walking beam bearings (plastic blocks) on underside of suspension tubes. Be sure to block the tires of both suspension assemblies. See **Figure 52**.



Figure 52: Block Suspension

2. Lift one of the braces to the suspension mount plates (suspension tubes are reversible), position a jack mount at each corner aligned to holes and insert three 12.7mm (1/2") bolts with 12.7mm (1/2") flat washers on both sides of mount. Tighten bolts finger tight. See **Figure 53**.



Figure 53: Jack Mount Installed

3. Repeat step 3 for the other brace.
4. Install the upper cross members with the same 12.7mm (1/2") bolt, washer and nylon lock nut combination. Only install the inner two bolts finger tight at this stage. See **Figure 54**.



Figure 54: Cross Members Installed

5. Loosely install the fenders using 12.7mm (1/2") bolts, washers and nylon locknuts through the fenders and outside holes of the upper cross members as installed in step 4. See **Figure 55**.



Figure 55: Install Fenders

6. Tighten all bolts on the chassis. Start with the bolts on the suspension tubes and move upwards. Torque all 12.7mm (1/2") bolts to 13.8kg-m (100 ft-lbs).
7. Install the fender brackets with two 9.5mm (3/8") bolts with flat washers and nylon lock nuts. See **Figure 56**.



Figure 56: Fender Supports

8. Install the TDC side rails using the 9.5mm (3/8") hardware finger tight. Ensure flat face of rail is facing inward. See **Figure 57**.



Figure 57: Side Rails Installed

9. Install the hitch assembly with 12.7mm (1/2") bolts, washers and nylon lock nuts. An assistant may be required as the hitch is heavy. See **Figure 58**.



Figure 58: Complete Chassis

10. Tighten the side rail and hitch bolts. Torque 9.5mm (3/8") bolts to 6.5 kg-m (45 ft-lbs) and 12.7mm (1/2") bolts to 13.8 kg-m (100 ft-lbs).

How to Install the Electrical Connection Kit

The electrical connection kit provides the electrical power required by the control systems of the ProPass. The kit should be installed on the vehicle that will be used to operate the ProPass. If more than one vehicle will be used to operate the ProPass, additional electrical connection kits can be purchased from your local distributor.

The electrical connection kit is primarily designed to be installed on a John Deere ProGator or a Toro Workman truck, however, the kit can also be easily installed on many other tow-vehicles.

To install the connection kit:

11. Mount the electrical plug bracket to a fixed point at the rear of the tow vehicle using one of the two mounting brackets provided. Refer to **Figure 59**.

Note: Ensure that the bracket will not come in contact with anything if the tow vehicle is equipped with a dump box.

IMPORTANT: Ensure that none of the wiring is loose or in the way of any mechanical components.



Figure 59: Mounting electrical plug bracket

12. Route and secure the electrical wiring from the battery to the electrical plug bracket.

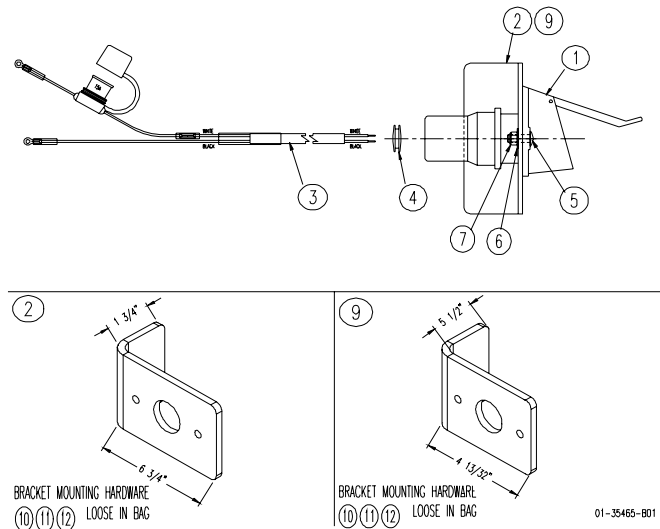
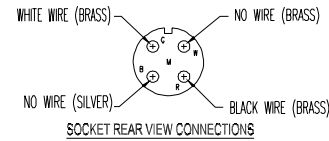


Figure 60: Electrical socket wiring and bracket

13. Feed the wiring through the electrical plug bracket, install the black rubber grommet over the wiring and then connect the wiring to the electrical socket. Refer to
14. **Figure 60**.
15. Bolt the socket to the electrical plug bracket using the 6.4 mm (1/4 in) bolts supplied with the kit.
16. Connect the red wire (power) to the positive post on the battery, then connect the black wire (ground) to the negative post on the battery.

How to Install the Hopper Extension Kit

1. Remove the hopper extensions from the box and identify the front and the rear (**Figure 61** and **Figure 62**).



Figure 61: Front hopper extension



Figure 62: Rear hopper extension

2. Using the hardware provided, attach the hopper extensions to the hopper. The washer and nut are to be placed on the outside of the hopper.
3. See **Figure 63** for completed installation.



Figure 63: Hopper extension kit installed

How to Install the ProPass Conveyor and Swivel Kit

Before installing the Cross Conveyor to the ProPass, the Side Rail Doublers must be installed on the ProPass. Using the bolts currently installed in the ProPass Scraper (arrows), install the left and right side Doublers (see **Figure 64**). Ensure the scraper remains in contact with the belt.

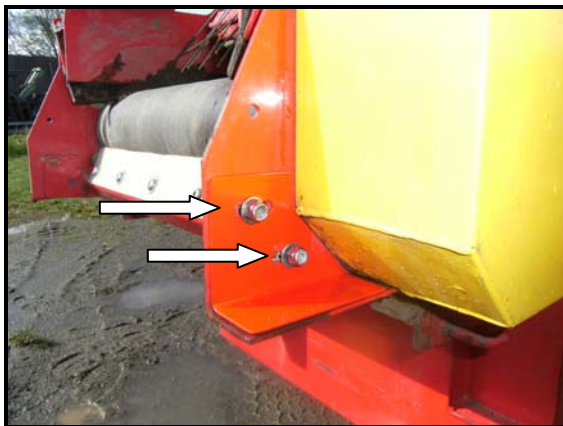


Figure 64: Install doublers onto ProPass

1. If there will be a twin spinner used on the same ProPass, remove the top 3/8" (9.5mm) UHMW spacer as shown in **Figure 65**, as well as the 1/4" (6.35mm) metal spacer and replace them with the 1/4" (6.35mm) UHMW and 5/16" (9.5mm) spacer provided. This will allow the previously installed side rail doublers to remain in place whether a twin spinner or conveyor and swivel kit are installed.

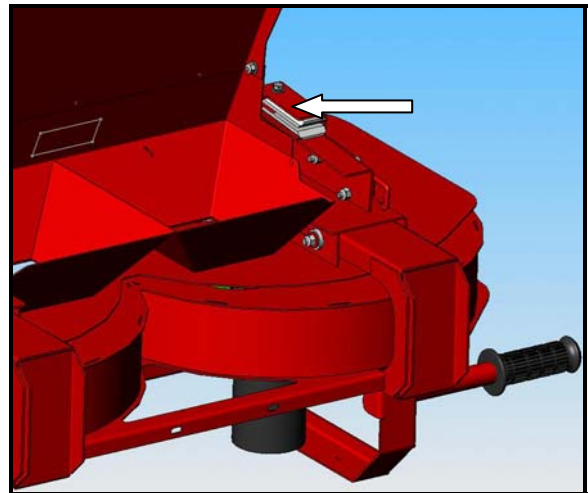


Figure 65: Twin Spinner UHMW Replacement

2. Remove the Swivel and Conveyor from the crate.
3. Leaving the Conveyor attached to the Swivel and with the aid of an assistant, lift the Swivel into position and align the plastic bearing locations with the mounting brackets (see **Figure 66** arrows).

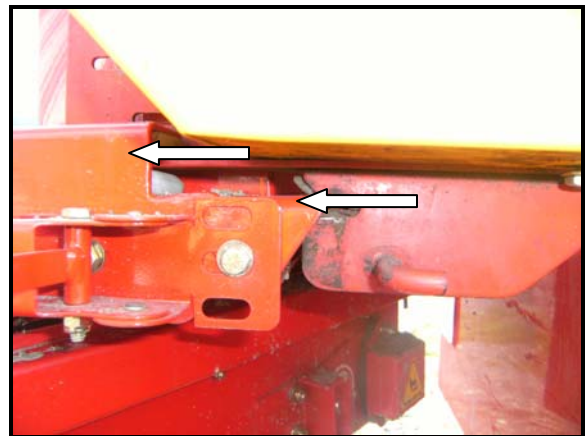


Figure 66: Lift the swivel into position on ProPass

4. Clamp the Swivel to the ProPass using the Quick Attach Latches. If the Latches are not snug when clamping, loosen the two 1/4" (6.35mm) bolts on the Latches and adjust them until the Latches clamp tight enough to keep the Swivel snug on the ProPass (see **Figure 67**).

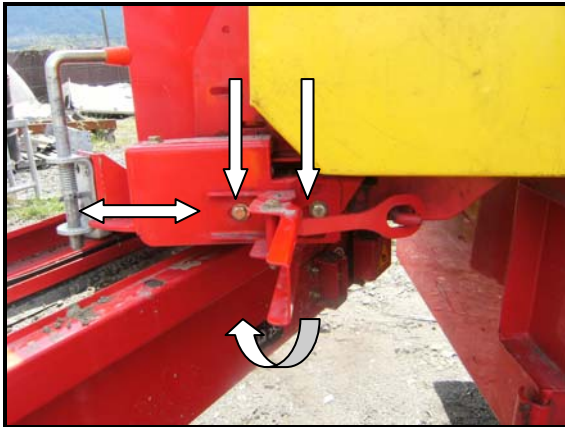


Figure 67: Clamp the swivel to the ProPass

5. Check the clearance of the Adjustable Belt Guard to the ProPass main conveyor belt. If the gap between the belt and the Adjustable guard (**Figure 68** [shown with belt scraper removed] black arrow) is greater than $\frac{1}{4}$ " (6.35mm), loosen the four $\frac{1}{4}$ " (6.35mm) bolts on the Adjustable Guard (**Figure 68** arrows) and slide the guard until it is spaced approximately $\frac{1}{4}$ " (6.35mm) from the ProPass main conveyor belt.

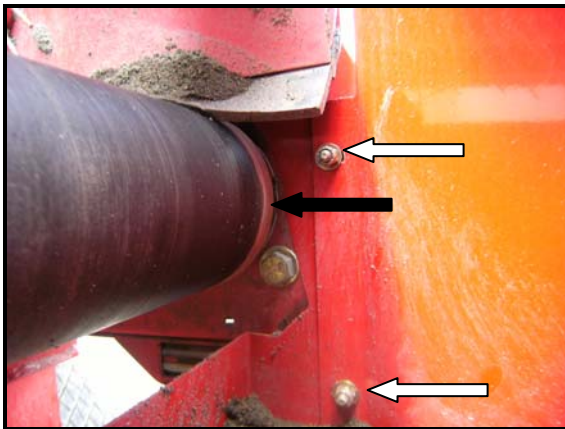


Figure 68: ProPass conveyor belt with clearance

6. Pin the conveyor in the "travel position" with the motor on the right hand side of the ProPass (**Figure 69**). Connect the hoses as shown in **Figure 70** (note the conveyor has been moved from its travel position for clarity of hose routing).



Figure 69: Conveyor pinned in the travel position



Figure 70: Conveyor hose routing



Count on it.