Form No. 3364-608 Rev A

TORO®

Count on it.

Setup Manual

MH-400 Material Delivery Unit

Model No. 44930--Serial No. 310000001 and Up
Model No. 44931--Serial No. 310000001 and Up
Model No. 44933--Serial No. 310000001 and Up
Model No. 44934--Serial No. 310000001 and Up
Model No. 44937
Model No. 44938

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Original Instructions (EN)

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Introduction

Read this Setup Manual carefully before setting up the MH-400 Material Delivery Unit. Keep it in an accessible location.

To get a replacement manual, contact an authorized Toro distributor.

See the Operator's Manual for MH-400 specifications, operating instructions, and safety information.

Throughout this manual, the terms "left" and "right" are used. When you stand behind the MH-400 facing towards the rear of it, your left side corresponds to the left side of the MH-400.

Message Boxes

The Setup Manual contains message boxes that are labelled **Warning** and **Important.** These boxes indicate potential safety concerns, and operating and servicing information. Read these message boxes carefully to avoid injury and equipment damage.



WARNING: Indicates a hazard that may cause serious injury or death if you do not follow the recommended precautions.

IMPORTANT: Indicates special mechanical or servicing information.

Setup Instructions

How to Set Up the MH-400 Base

1. Remove the rear support leg from the shipping position and place it in the down position.

2. Remove the hitch from the shipping position by cutting both straps securing the hitch to the fender (Figure 1). Remove both mounting brackets and discard.



Figure 1: Remove hitch from shipping position

Note – Two people are required to remove the hitch assembly.

3. Slide the hitch tube tongue into place at the front of the MH-400. Ensure that the jack mounting bracket faces out towards the left side.

4. Place one 25 x 162.5 mm (1 x 6½ in) bolt through the frame and hitch tube, and securely tighten the nylon locking nut (Figure 2).

5. Place the second 25 x 162.5 mm (1 x 6½ in) bolt through the top of the frame and down through the hitch tube. Tighten the nylon locking nut (Figure 2).

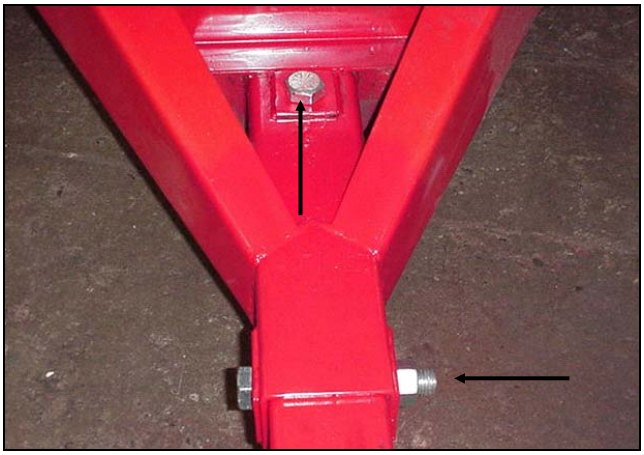


Figure 2: Bolt hitch to frame

6. Remove the jack assembly from the rear leg. Install the jack assembly onto the hitch tube, placing the pin horizontally.

Note – Do not place the pin through the top hole of the jack, or you will not be able to remove the pin when the weight case is secured to the hitch.

7. Remove the weights from the weight case.

8. Remove the 12.5 x 137.5 mm (½ x 5½ in) bolts from the mounting bracket holding the weight case. Discard the mounting bracket (Figure 3).



Figure 3: Remove bolts from weight case mounting bracket

9. Remove the two option attachment clamps from underneath the weight case and install them onto the rear of the MH-400 (Figure 4).



Figure 4: Install option attachment clamps

10. Install the weight case on the hitch (look for the hitch installation decal), as far forward on the hitch as possible.

11. Install the two 12.5 x 137.5 mm (½ x 5½ in) bolts and nylon locking nuts and tighten.

12. Fill the weight case with the weights and install the safety bar and safety pin (Figure 5).

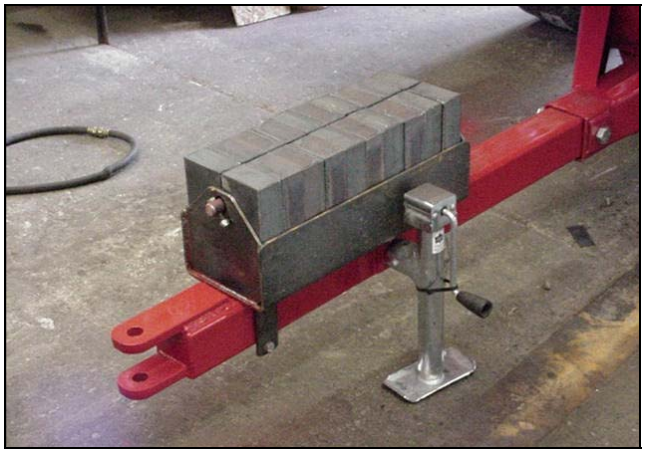


Figure 5: Fill weight case

13. Remove option caddy legs from rear cross member. Remove the 12.5 x 127 mm (¼ x 5 in) bolts, nuts, washers, and strapping before attempting to remove option caddy legs. Set the option caddy legs aside for future installation. Please refer to Figure 6 below.



Figure 6: Removing Option Caddy Legs

Note – Two people are required for the next step.

14. Remove the rear gate from the front of the MH-400 by lifting one of the corners up and out (Figure 7).



Figure 7: Remove the rear gate

15. Remove both 7.8 x 50 mm (5/16 x 2 in) bolts and nylon locking nuts (Figure 8).



Figure 8: Remove bolts and nuts from rear gate

16. Install the rear gate into position at the rear of the MH-400 (Figure 8).

17. Install both 7.8 x 50 mm (5/16 x 2 in) bolts and nylon locking nuts back into the rear gate assembly.

18. Remove the protective wrapping from the the mirror assembly and adjust it into position.

19. Tip the MH-400 back. Refer to Figure 9.



Figure 9: MH-400 tipped backward

20. Remove two 7.8 mm (5/16 in) nuts from the option caddy shipping brackets on the side of the option caddy that contains the wheels. The option caddy will drop approximately 25 mm (1 in) and the wheels will rest on the ground. Set nuts and washers aside. See Figure 10.

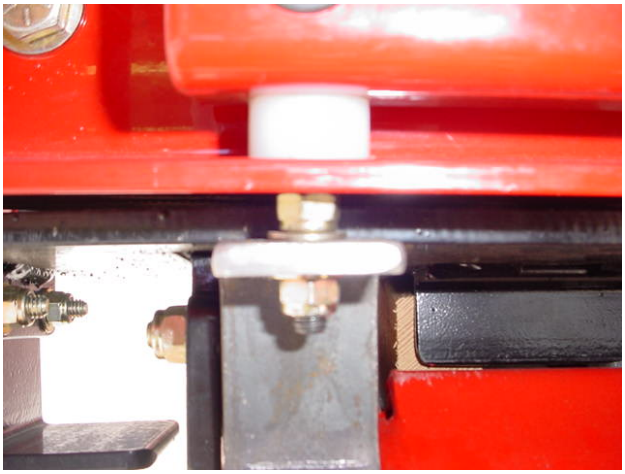


Figure 10: Removal of shipping nuts

21. Remove two 7.8 mm (5/16 in) nuts from the option caddy shipping brackets opposite to the wheel side of the option caddy as shown above in Figure 10. Before removing the second nut, ensure that the option caddy weight is supported. Set nuts and washers aside.

22. Carefully lower the option caddy to the ground and set aside for future installation. Remove the shipping brackets from the option caddy and set aside.

23. Tip the MH-400 to its upright position.

24. On SH models plug the on/off pendant switch (4-prong end) into the socket at the front left corner of the MH-400 (Figure 11).



Figure 11: Plug in on/off pendant switch on SH Models

The tow vehicle hydraulics are required to run the on/off pendant switch on SH Models.

25. Take the universal power feed wire (3.9 m [13 ft] length) and attach the alligator clips to the tow vehicle's battery.

26. Run the wire to the back of the tow vehicle and connect it to the wire located with the pressure and return hydraulic hoses.

27. Test the operation of the MH-400. Ensure that there are no hydraulic leaks. Make any adjustments required.

28. Attach and test each of the options to ensure proper operation (refer to the Operator's Manual).

29. If MH-400 is equipped with a brake kit, please refer to the setup manual for the set up procedure.

How to Set Up the Option Caddy (1)

The option caddy is designed for one person to easily lift, transport, and mount the Twin Spinner, swivel kit, or cross conveyor onto the MH-400.

1. Remove all wooden shipping blocks and banding before proceeding with installation.

2. Install the left and right side legs into the slots using the supplied 12.5 x 87.5 mm (½ x 3½ in) bolts, washers (top and bottom) and nylon locking nuts (Figure 12).



Figure 12: Install legs on option caddy

3. Remove the left and right lift fork stop plates (Figure 13).

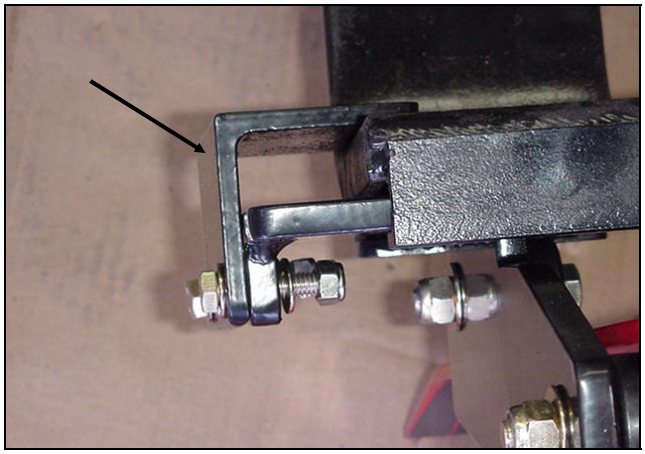


Figure 13: Remove lift fork stop plates

4. Install both forks onto the slide plate (Figure 14).

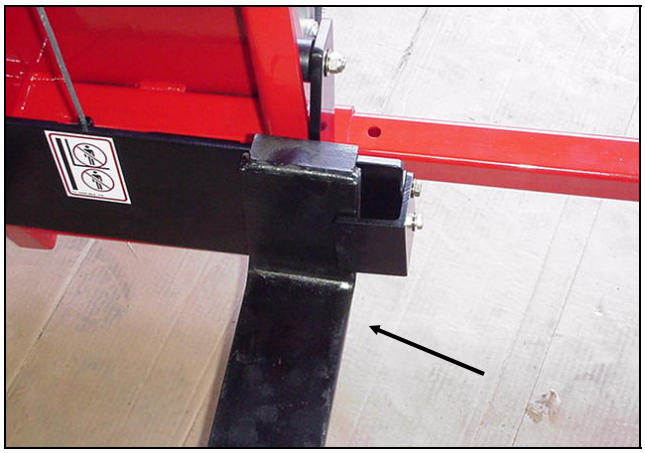


Figure 14: Install forks onto the slide plate

5. Re-install the lift fork stop plates using:
   - 7.8 x 31.25 mm (5/16 x 1¼ in) GR8 bolts
   - 7.8 mm (5/16 in) GR8 flat washers
   - 7.8 mm (5/16 in) GR8 nylon locking nuts

6. Check that the tire pressure on all tires is 206 kPa (30 psi) maximum.

How to Set Up the Option Caddy (2)

The option caddy is designed for one person to easily lift, transport, and mount the cross conveyor, with or without the swivel kit, onto the MH-400.

1. Remove all wooden shipping blocks and banding before proceeding with installation.

2. Install the handle into the frame and secure using the provided pins (2).

3. Check that the tire pressure on all tires is 206 kPa (30 psi) maximum.

How to Set Up the Twin Spinner

1. Remove the rubber scraper and retainer bar from their shipping position. Install them (Figures 15 and 16) using the supplied 7.8 x 25 mm (5/16 x 1 in) GR8 bolts, washers, and nylon locking nuts. Ensure the vertical portion of the rubber scraper is on the same side as the hopper opening (Figures 15 and 16).

2. Insert the handles into the handle openings (Figure 15).



Figure 15: Twin Spinner handle openings

3. Securely fasten the handles with washers and nuts (Figure 16).

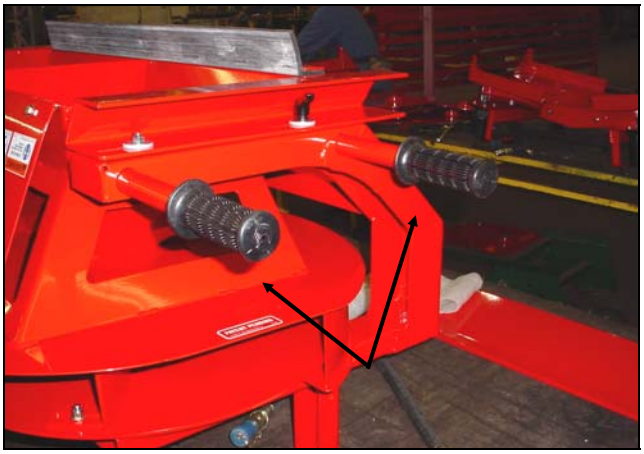


Figure 16: Install Twin Spinner handles

4. Remove the hopper front guard from its shipping position.

5. Turn it around and install it using the supplied 6.25 x 15.6 mm (¼ x ⅝ in) GR8 bolts, washers, and nylon locking nuts (Figures 17 and 18).

6. Install the Twin Spinner into the quick-attach brackets at the rear of the MH-400 (see How to Mount the Options in the Operator's Manual).



Figure 17: Hopper front guard



Figure 18: Install hopper front guard

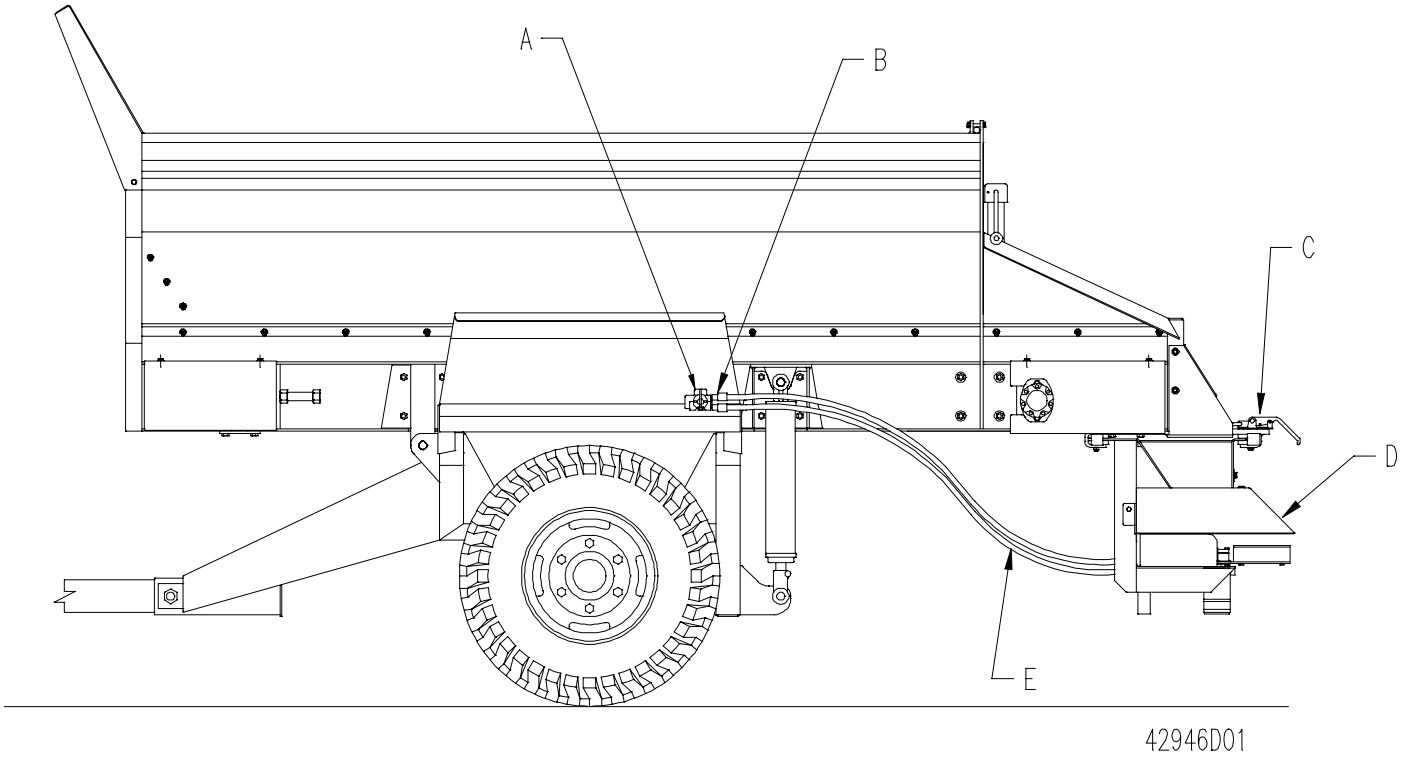


Figure 19: Twin Spinner option, side view

A. Option control valve
B. Hose connections
C. Quick-attach brackets
D. Twin Spinner
E. Hydraulic hoses

How to Set Up the Cross Conveyor

1. Install the front deflector shield, with the rubber hanging down, to the inside rail of the cross conveyor (on the motor end), using two 6.35 x 25 mm (¼ x 1 in) bolts and nylon locking nuts. These will be found loosely in place where the deflector shield is to be mounted. Place the flat washers between the side rail of the cross conveyor and the front deflector shield bar. Tighten only enough so that the deflector shield can still pivot.

2. Unbolt the guard and the mounting bracket from the hydraulic motor and keep all the bolts and washers to reinstall.

3. Slide the mounting bracket into position on the cross conveyor so that the side rail fits through the cut outs on the bracket. Place the shaft from the motor through the hole on the mounting bracket and into the coupler. Reinstall the 9.53 x 25 mm (3/8 x 1 in) bolts, lock washers and flat washers through the mounting bracket and into the hydraulic motor as they were shipped, keeping the hydraulic ports and hoses horizontal to the cross conveyor (Figure 20).

4. Tighten the set screws on the coupler to the hydraulic motor shaft.

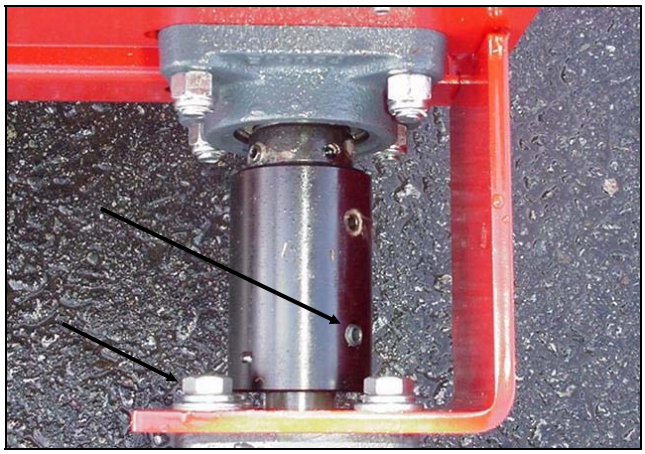


Figure 20: Install bolts and tighten set screws

5. Reinstall the guard onto the motor bracket using the 7.94 x 15.88 mm (5/16 x 5/8 in) bolt, lock washer and flat washer supplied.

6. Assemble the two storage stands (the base and cross members) using the 6.35 x 44.45 mm (1/4 x 1 ¾ in) bolts, flat washers and nylon locking nuts (Figure 21).

7. Install the conveyor handles to the unit. Attach the handles below the side rails, using the 6.35 x 19mm (¼ x ¾ in) bolts, flat washers and nylon locking nuts (Figure 22).



Figure 21: Cross conveyor storage stands

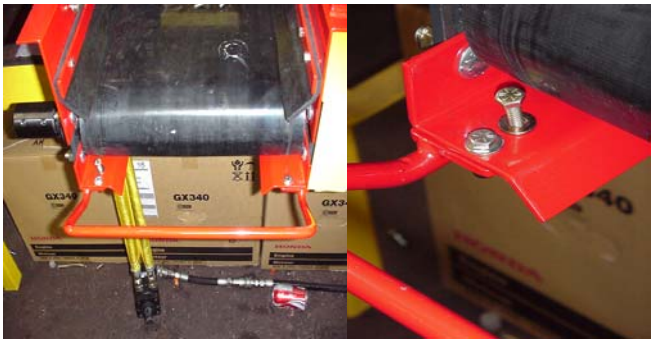


Figure 22: Cross conveyer handles

How to Set Up the Swivel Kit

8. Mount the rubber scraper on top of the swivel kit. Ensure the vertical portion of the rubber scraper is on the same side as the hopper opening (same orientation as the twin spinner rubber scraper, see Figure 15).

9. Mount the retainer bar across the rubber scraper, and tighten the five 7.8 mm (5/16 in) bolts with the nylon locking nuts.

How to Set Up the MH Processor

1. Remove all wooden shipping blocks and banding before proceeding with set up. Also remove the loose stand components and set them aside.

2. The hopper is shipped inverted on the conveyor. Install the hopper onto the conveyor so that the opening of the hopper is facing upwards and is at a 45 degree angle. Using six 3/8" x 1" (9.5 x 25 mm) bolts, six nylon locking nuts and twelve washers, fasten the base of the hopper to the conveyor.



Figure 23: MH Processor in shipping crate

3. Install the conveyor gate handle to the hopper using the 3/8" x 1-1/2" (9.5 x 38 mm) bolt, nylon locking nut and 3 washers, locating one washer on either side and one between the handle and hopper.

4. Refer to steps 2 to 5 of "How to set up the Cross Conveyor" to assemble the motor and motor guard.

5. Assemble the processor stand.

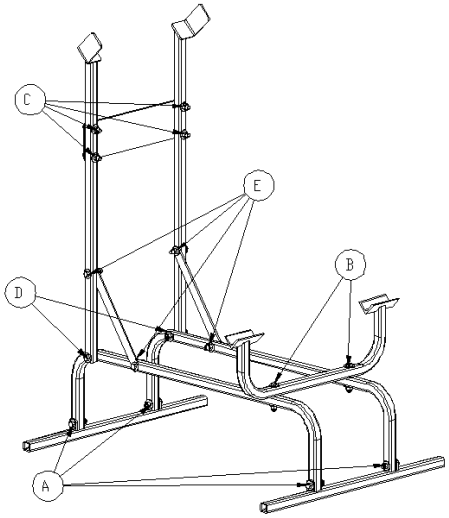


Figure 24: Processor stand

a. Install the bottom tubes to the tabs of the footer using four 3/8" x 2" (9.5 x 51mm) bolts and nylon locking with and washers.

b. Install the lower support using two 3/8" x 2-3/4" (9.5 x 70 mm) bolts and nylon locking with and washers.

c. Install the upright brace to the left and right uprights using four 3/8" x 2" (9.5 x 51mm) bolts and nylon locking with and washers.

d. Install the bottom of the uprights to the bottom tubes using two 3/8" x 2-3/4" (9.5 x 70 mm) bolts and nylon locking with and washers.

e. Finally, install the flat bar braces between the uprights and bottom tubes using a total of four 3/8" x 2" (9.5 x 51mm) bolts and nylon locking with and washers.

How to Set Up the Hydraulic Power Pack

Attach the power pack to the front hitch of the MH-400 using the parts supplied (Figure 25).

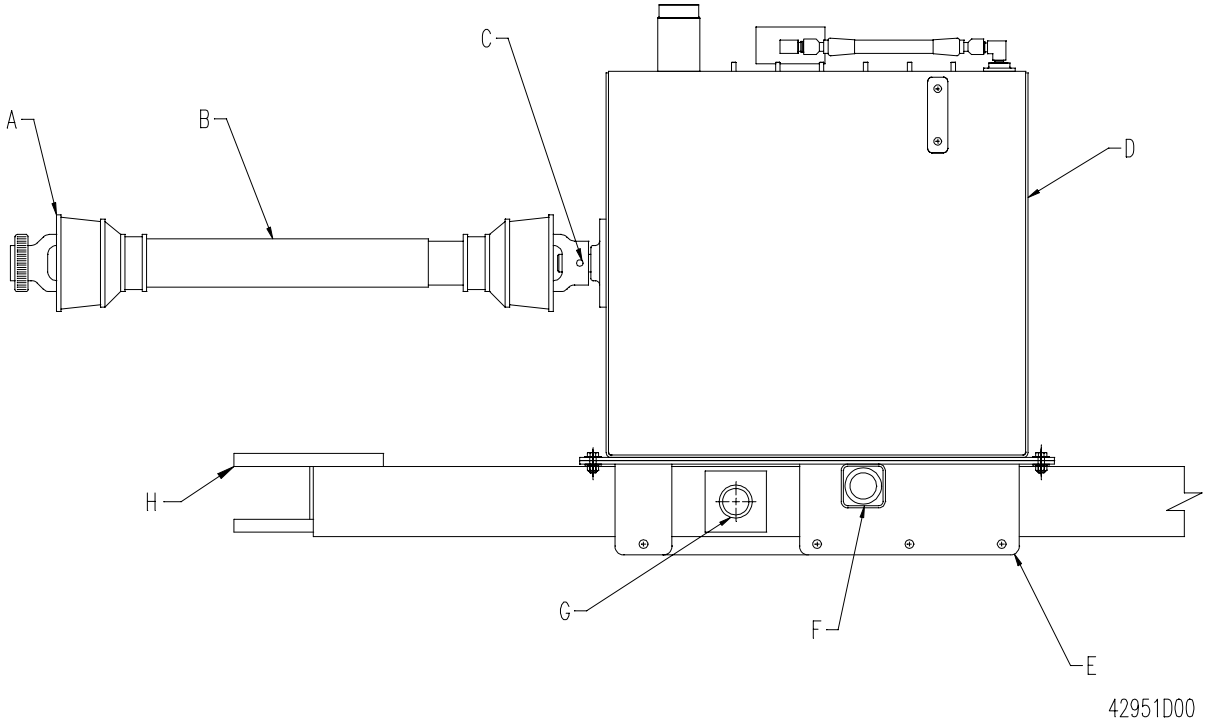


Figure 25: Install hydraulic power pack

A. Connect to tow vehicle PTO (power take-off unit)
B. PTO shaft
C. Set screw on PTO shaft hub
D. Power pack
E. Tank mount
F. PTO jack mount
G. MH-400 jack mount
H. MH-400 hitch

1. Support the hitch off the ground, as level as possible without using the jack for support, or connect it to the tow vehicle. Remove the jack assembly from the hitch.
2. Install the power pack on the hitch straddling the jack mount. Ensure that the output port of the pump faces forward.
3. Center the hitch jack mount between both edges of the mounting plate for the PTO (power take-off unit).
4. Install the four 12.5 x 137.5 mm (½ x 5½ in) bolts with nylon locking nuts and washers. Tighten the bolts to 27.6 kg/m (200 ft-lb).
5. Install the PTO shaft to the end of the pump shaft and tighten both set screws.
6. Attach the jack to the jack mount on the side of the power pack.
7. Attach the hitch to the tow vehicle.
8. Install the PTO shaft to the tow vehicle. Ensure that the PTO shafts overlap each other by one-third of

their total length. You may have to move the power pack forward or cut the PTO shaft.

9. Install the MH-400 pressure and return hoses to the PTO. The female quick coupler closest to the control lever is the pressure port. The return hose has an inline one way check valve.

10. Fill the hydraulic PTO tank with a recommended hydraulic fluid (see the hydraulic fluid chart in the Operator's Manual).

11. Test the PTO power pack to ensure proper operation.

12. After testing, top up the PTO hydraulic fluid if necessary.

WARNING: Do not operate the hydraulic power pack when making a sharp turn. Always disengage the power pack first.

How to Install the On/Off Pendant Switch On SH Models

1. Remove the hydraulic valve cover and hydraulic guard from the fender and the fender guard. (Figure 26) With a pair of side cutters, ensure that the tie straps are cut off from the lift cylinder control.

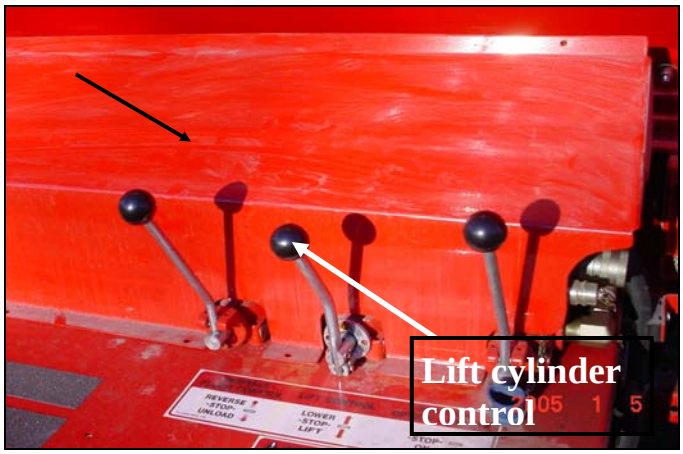


Figure 26: Remove hydraulic valve cover and hydraulic guard

2. Remove the fender guard from the fender by removing the three carriage bolts, which can be accessed in the wheel well.

3. Lay the fender guard on the bench with the angle facing up.

4. Measure, mark, center punch, and drill two holes (Figure 42 inset: L.H. Fender Panel).

5. Attach the solenoid to the fender panel with three 6.25 mm (¼ in) washers between the fender panel and the solenoid (to act as spacers).

Note – Ensure that the black solenoids do not touch the fender. Also ensure that the rubber clamp holding the wiring is attached to the left mounting bolt.

6. Re-install the fender guard onto the fender, with the hydraulic valve bank attached, using the three original carriage bolts and nylon locking nuts (Figure 27).

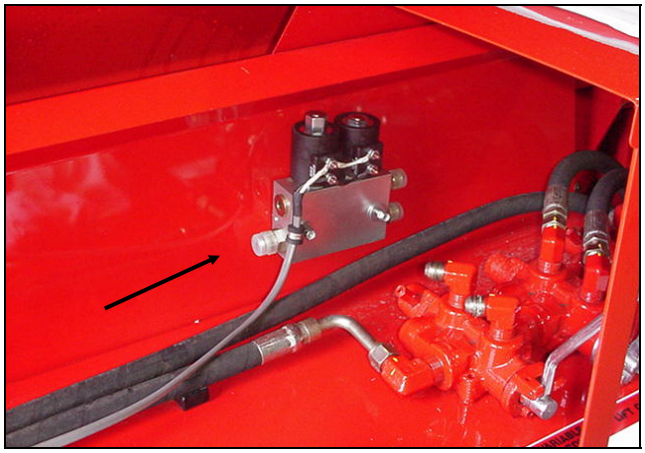


Figure 27: Re-install fender guard with hydraulic valve bank

7. Remove both hydraulic line clamps and hardware from the fender (Figure 28).



Figure 28: Remove hydraulic line clamps and hardware

8. Remove and discard the hydraulic hose that is farthest away from the valve control lever on the first hydraulic control valve (Figure 29, top arrow).



Figure 29: Remove and discard far hydraulic hose

9. Remove the hydraulic hose closest to the valve lever and move out of the way (Figure 27, bottom arrow). This hose will be re-attached later.

10. Remove the two hydraulic fittings (90-degree) from the top of the hydraulic control valve (Figure 30).

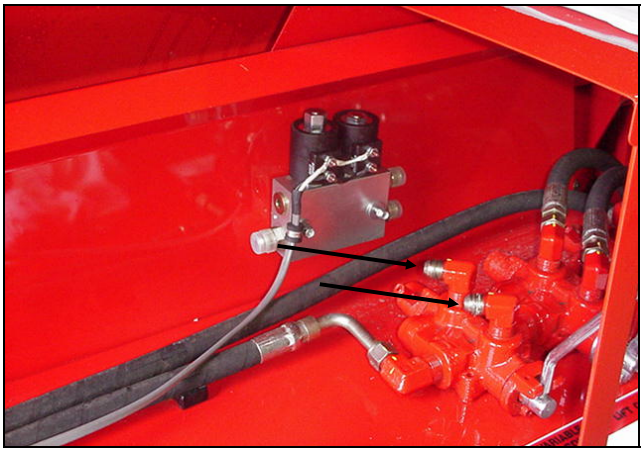


Figure30: Remove hydraulic fittings

Note – When installing hydraulic hoses or fittings, use Loctite #545 (sealant) and Loctite #7471 (primer).

11. Install the connector fitting (½ mjic – ½ mpt) to the inside valve port (Figure 31).

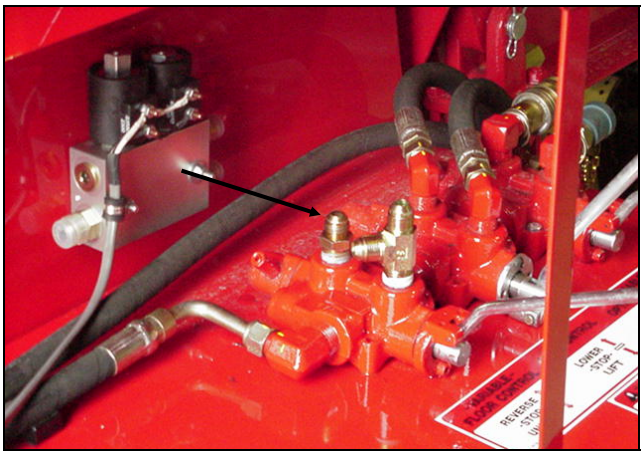


Figure 31 Install connector fitting to inside valve port

12. Install the tee fitting (½ mjic – ½ mjic – ½ mpt) to the outer valve port. Ensure that the angle of the tee fitting is the same as the angle of the 90-degree fittings that you removed (Figure 32).

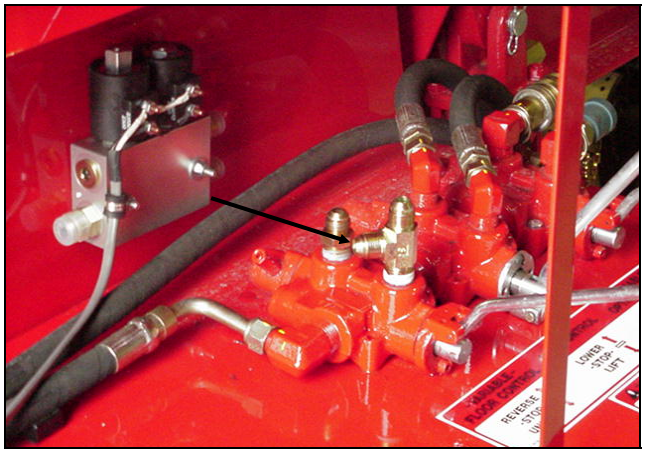


Figure 32: Install tee fitting to outer valve port

13. Re-install the hose that was disconnected in Step 9 to the side of the tee fitting (Figure 33).

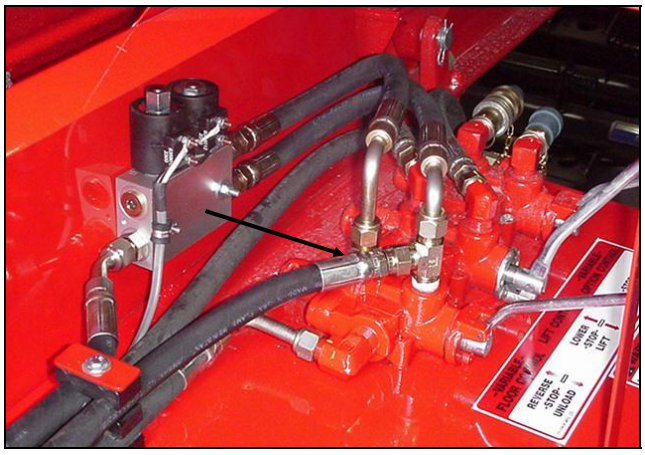


Figure 33: Re-install hose to side of tee fitting

14. Install the Item 8 hose to the hydraulic valve bank port #4 (Figure 44).

15. Install the opposite end of the Item 8 hose to the open hard line (Figure 34).

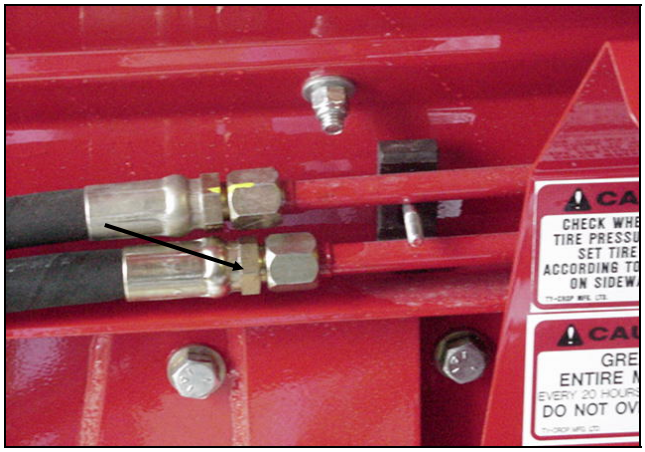


Figure 34: Install end of Item 8 hose to open hard line

16. Position both hoses side by side and re-install the hydraulic line clamps on the side of the MH-400 (Figure 35). You may need to loosen the hose ends to properly fit the clamps.

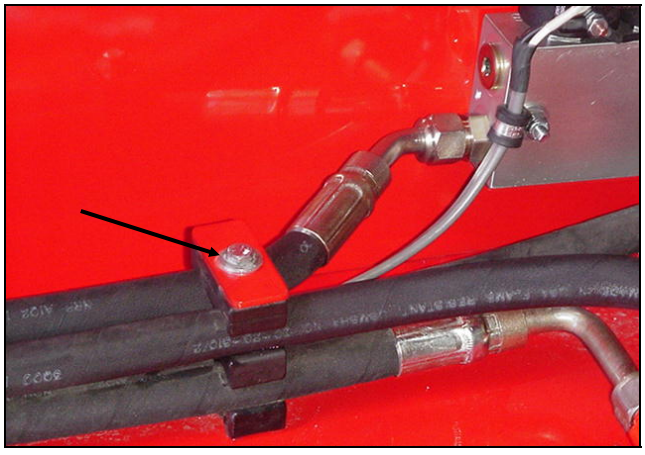


Figure 35: Re-install hydraulic line clamps

17. Install the Item 6 hose and the 90-degree fitting end to point B of the hydraulic control valve (Figure 36, right arrow, and Figure 44).

18. Attach the opposite end to the valve solenoid port #1 (Figure 36, left arrow, and Figure 44).



Figure 36: Install Item 6 hose and fitting end to point B

19. Install the Item 7 hose and 90-degree fitting end to point A of the hydraulic control valve (Figure 37, top arrow, and Figure 44).

20. Attach the opposite end to the valve solenoid port #2 (Figure 37, bottom arrow, and Figure 44).

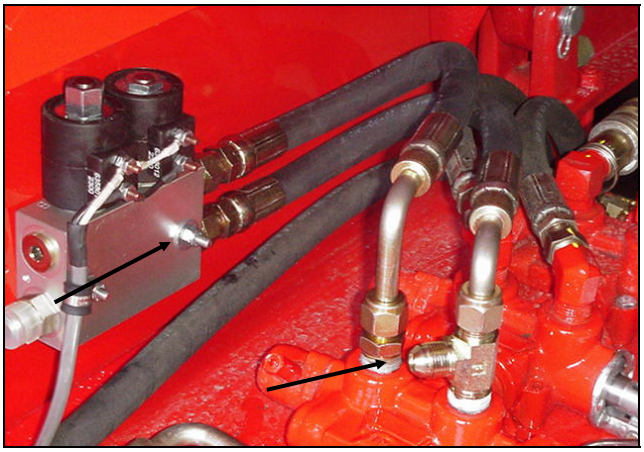


Figure 37: Install Item 7 hose and fitting ends to point A and B

21. Tighten the hoses so they will not come in contact with the other hoses.

22. Re-install the hydraulic valve cover to the fender and the fender guard.

23. Remove the hydraulic hose clamp at the front left corner of the MH-400. Discard the 6.25 cm (2½ in) bolt only (Figure 38).

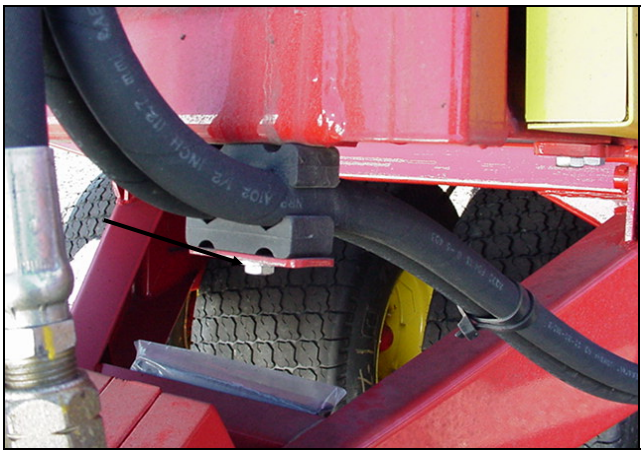


Figure 38: Remove hydraulic hose clamp

24. Route the grey wiring from the hydraulic valve solenoid along the return hose (the one with the one-way check valve).

25. Using cable ties, evenly space and attach the wiring harness from the hydraulic valve solenoid up to the first wiring harness juncture (Figure 39).

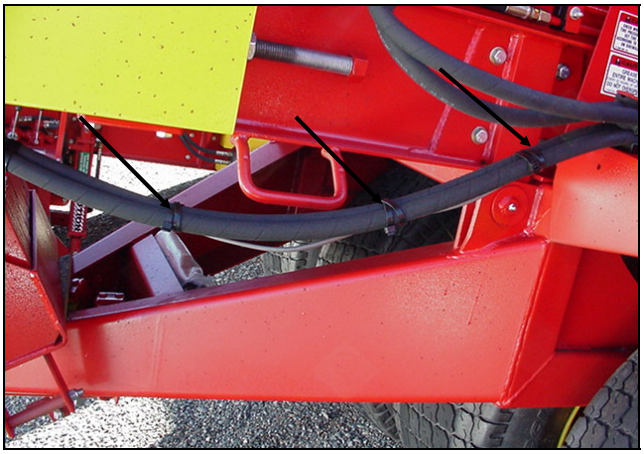


Figure 39: Space and attach grey wiring harness

26. Lay the hose sheath out on the bench. Fold both ends by 5 cm (2 in). (Folding both ends of the hose sheath will prevent it from fraying.)

27. On one end, cut a hole through the sheath 18.75 mm (¾ in) away from the end (ensure that you cut through both sides). This will be the front end of the sheathing.

28. On the opposite end, cut a hole through the sheath 37.5 mm (1½ in) away from the end. This will be the rear end of the sheathing.

29. On the front end, take five or six large paper clips and slide them over the end. These will help keep the fold in place when you slide through the hydraulic hose and wiring (Figure 43).

30. Slide the grey solenoid wiring harness and both pressure and return hoses through the rear end of the black protective hose sheath.

31. Slide the sheath up to the point where the hydraulic hoses are attached to the front of the MH-400 with the hydraulic line clamps (Figure 40).

32. Using the supplied 6.25 x 75 mm (¼ x 3 in) bolt, attach the hydraulic hoses and the wiring harness to the existing hydraulic line clamp mounting point. **Do not crush the wiring harness** (Figure 40).



Figure 40: Slide sheath to hydraulic hose attachment; attach hydraulic hoses

33. Pull both the hoses and the grey solenoid wiring harness straight. Ensure that the hose sheath is not bunching.

34. Install the 9.4 x 68.75 mm (⅜ x 2¾ in) bolt with two washers, one nylon locking nut, and two hydraulic line clamps at the hole you previously cut into the hose sheathing. Tighten. **Do not crush the wiring harness** (Figure 41).



Figure 41: Pull hoses straight and tighten

35. Attach the mounting bracket for the electric socket on the front left bottom lip of the MH-400. The mounting bracket should measure (from the center of the bracket) 16.25 cm (6½ in) away from the left front corner tube.

36. Use a 7 mm (9/32 in) drill bit to drill out holes for mounting (Figure 42).

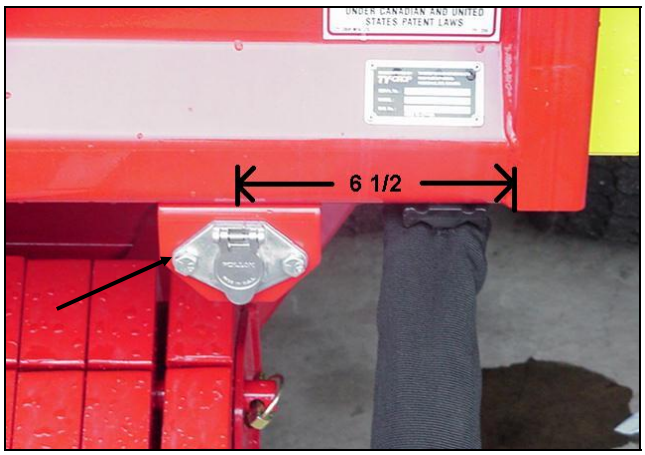


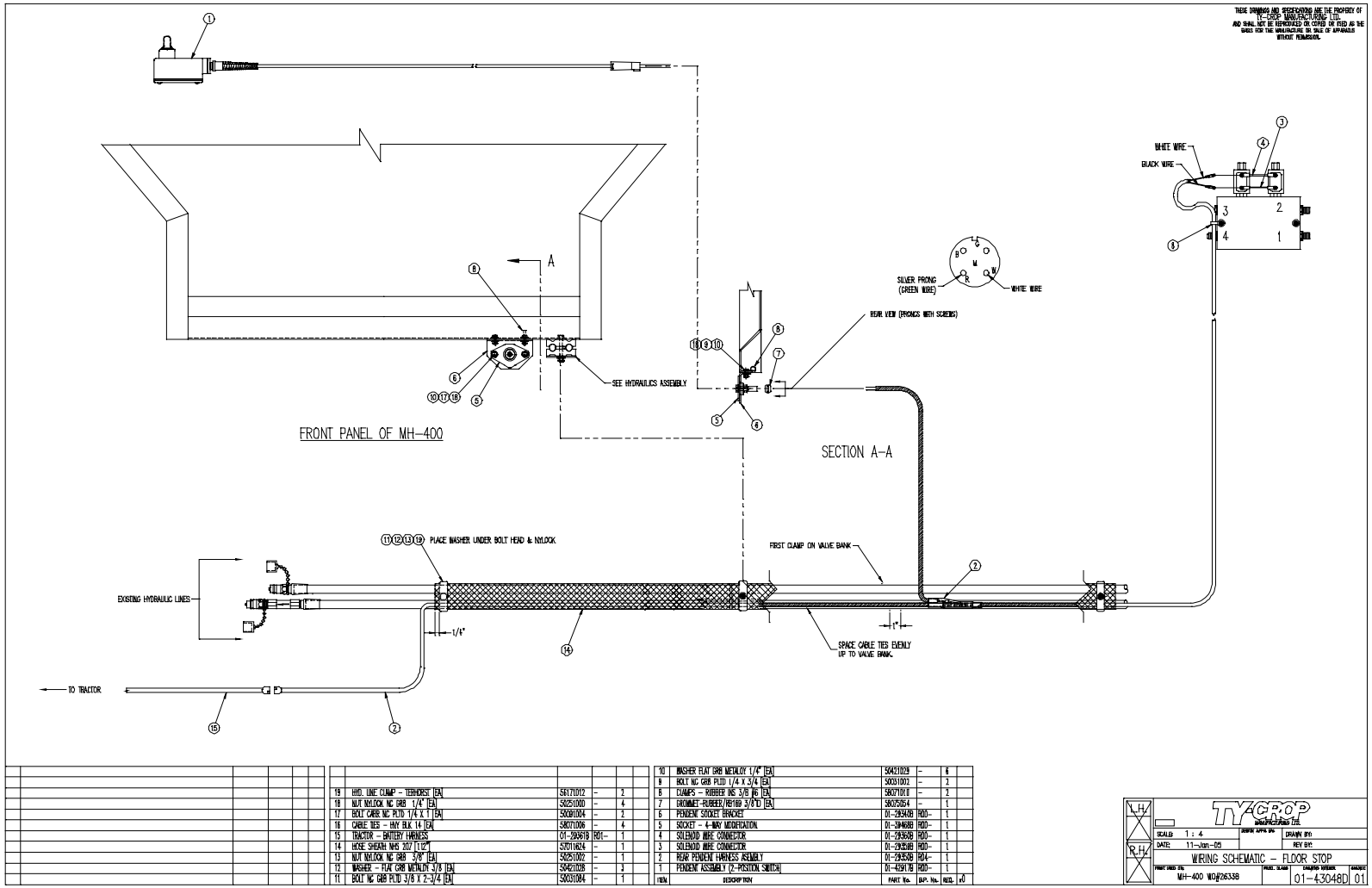
Figure 42: Attach mounting bracket for electric socket

37. Attach the 4-prong socket using 9.375 mm (⅜ in) bolts, washers, and nuts.

38. Take the Item 7 rubber grommet and slide it over the yellow wiring harness.

39. Attach the yellow wiring harness to the back side of the 4-prong socket. Follow the wiring schematic in Figure 41.

40. Slide the rubber grommet up into the back side of the socket.



ITEM	DESCRIPTION	PART No.	SPC. No.	REQ.	WT
19	HYD. LINE CLAMP - TERMINIST [EA]	5617012	-	2	
18	NUT NYLOCK NC GR8 1/4" [EA]	50251010	-	4	
17	BOLT CARR NC PLTD 1/4 X 1 [EA]	50081004	-	2	
16	CABLE TIES - HVY BLK 14 [EA]	58071006	-	4	
15	TRACTOR - BATTERY HARNESS	01-29361B	R01-	1	
14	HOSE SHEATH N45 207 [1/2"]	57011624	-	1	
13	NUT NYLOCK NC GR8 3/8" [EA]	50251002	-	1	
12	WASHER - FLAT GR8 METALOY 3/8 [EA]	50421028	-	3	
11	BOLT NC GR8 PLTD 3/8 X 2-3/4 [EA]	50031084	-	1	
10	WASHER FLAT GR8 METALOY 1/4" [EA]	50421028	-	6	
9	BOLT NC GR8 PLTD 1/4 X 3/4 [EA]	50031002	-	2	
8	CLAMPS - RUBBER INS 3/8 [6] [EA]	58071018	-	2	
7	GROMMET-RUBBER/RB16B 3/8"ID [EA]	58025054	-	1	
6	PENDENT SOCKET BRACKET	01-29340B	R00-	1	
5	SOCKET - 4-WAY MODIFICATION	01-31468B	R00-	1	
4	SOLENOID WIRE CONNECTOR	01-29350B	R00-	1	
3	SOLENOID WIRE CONNECTOR	01-29351B	R00-	1	
2	REAR PENDENT HARNESS ASSEMBLY	01-29352B	R04-	1	
1	PENDENT ASSEMBLY (2-POSITION SWITCH)	01-43917B	R00-	1	

Figure 43: Wiring Schematic For On/Off Pendant Switch On SH Models

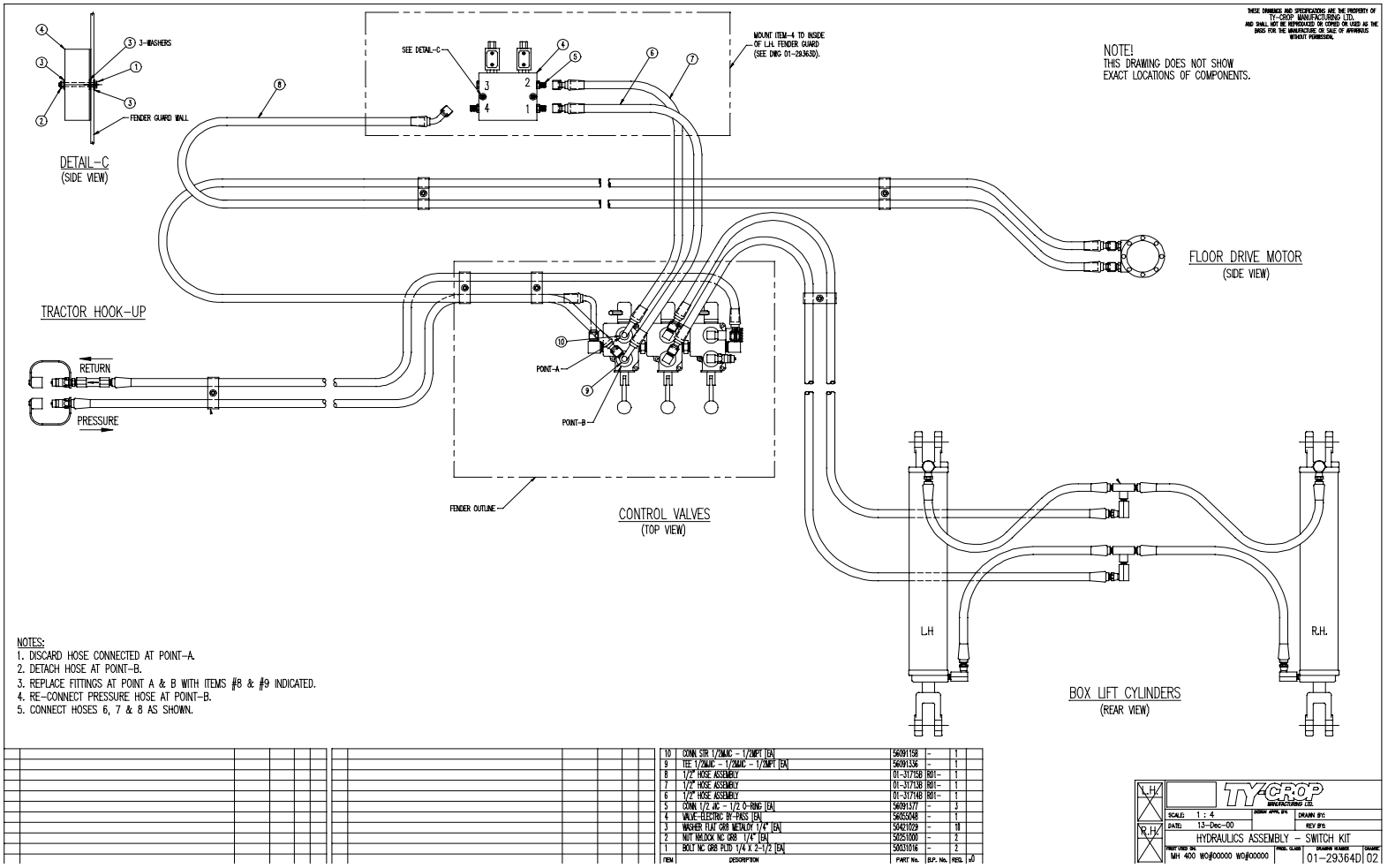


Figure 44: Hydraulic Assembly For On/Off Pendant Switch On SH Models

How to Install the Wiring for the Tow Vehicle

SH Models

1. Run the battery wiring harness through the tow vehicle and up to the battery.

2. Connect the white wire to the positive connector and the black wire to the ground using the clips provided.

3. Attach the SH battery wiring harness to the solenoid wiring harness coming from the hose sheathing (Figure 45).

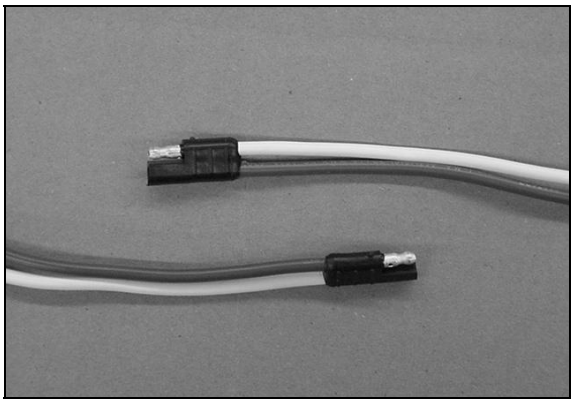


Figure 45: Attach SH Battery Harness to Solenoid Harness

4. Ensure that all the hose connections and wire harnesses are installed correctly and tightened.

> **IMPORTANT**: Always remove the on/off pendant switch cord or disconnect the power supply wire when the MH-400 and tow vehicle are not in use. Otherwise, the tow vehicle battery will lose power.

5. Verify operation of the MH-400. Ensure that there are no hydraulic leaks.

EH Models

1. Install the MH 400 EH electrical connection kit wiring harness through the tow vehicle and up to the battery.

2. Connect the "+ V" wire to the positive terminal and the "0 V" wire to the ground terminal (Figure 44).

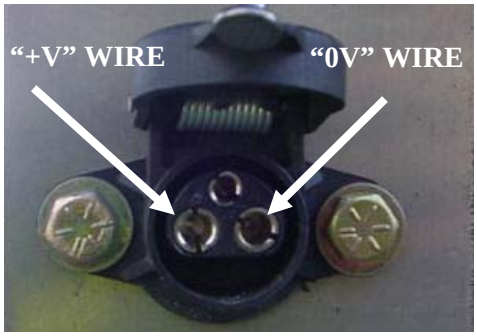


Figure 46: Plug Details

3. Attach the socket bracket to the tow vehicle using the 6.35 x 25.4 mm (¼ x 1 in) hardware provided.

4. Attach the battery wiring harness to the solenoid wiring harness coming from the hose sheathing (Figure 47).



Figure 47: Attach SH Battery Harness to Solenoid Harness

5. Ensure that all the hose connections and wire harnesses are installed correctly and tightened.

> **IMPORTANT**: Always remove the control pendant when the MH-400 and tow vehicle are not in use.

6. Verify operation of the MH-400. Ensure that there are no hydraulic leaks.

How to Install the EH Control Pendant on Tow Vehicle or Swing Arm

1. Remove the pendant and pendant bracket from the packaging.

2. Attach the pendant bracket to the pendant. Remove the two nuts and install the bracket, making sure the tension knob is on the right side of the pendant (Figure 48).



Figure 48: EH Control Pendant Mount

3. For Tow Vehicle mounting, determine an appropriate location for the control pendant mount. Surface should be flat and solid. For Swing Arm mounting, install the pendant bracket into the end of the swing arm.

4. Using the backing plate mark the four mounting holes.

5. Drill four 8.7mm (11/32") holes.

6. Attach the mount using the 7.9 x 38.1mm (5/16 x 1 ½ in) bolts with the hardware provided (Figures 46 and 47).



Figure 49: EH Control Pendant Mount



Figure 50: EH Control Pendant Mount Backing Plate

How to Install the Electric Brakes

Before installing the electric brakes, remove the protective LPS coating that is applied at the factory to protect the drums and the shoe backing plates from corrosion.

1. Remove all of the brake shoes and brake drums from the kit and place them in a well-ventilated area.

2. Use an automotive brake cleaner to spray the brake drums and brake shoes until the protective coating is completely removed. You may need to spray twice for best results.

Note: The following procedure covers how to install one brake shoe assembly onto the MH-400 axle. For a four wheel brake kit, there are four brake shoe assemblies: two for the left axle assembly, and two for the right axle assembly (Figure 52). For a two wheel brake kit, there are two brake shoe assemblies: one for the left axle assembly (outside wheel), and one for the right axle assembly (outside wheel) (Figure 52).

IMPORTANT: Do not mix up the brake shoe assemblies (Figure 48). To ensure correct placement on the axle assembly, check that the 6.25 mm (¼ in) bolt welded on the bottom of the main axle assembly faces down, and that the 6.25 mm (¼ in) bolt welded on the mounting shaft faces the front of the MH-400. (If you have any doubts or questions, call an authorized Toro distributor.)

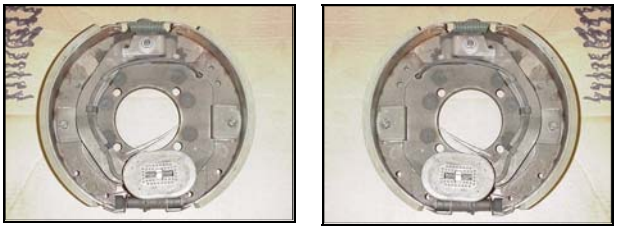


Figure 51: Brake shoe assemblies, left side/right side

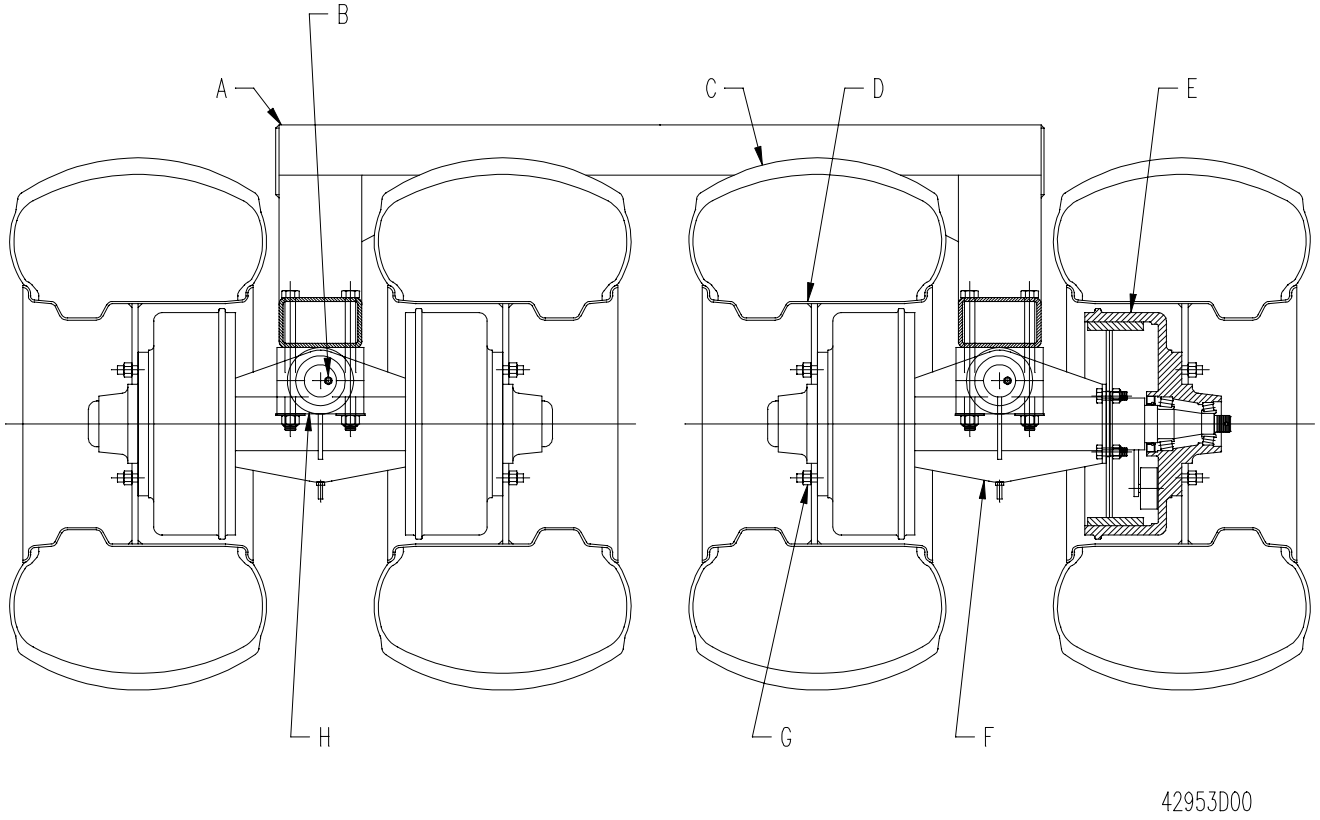


Figure 52: Install brake kit

A. Suspension chassis
B. Note – The threaded bolt welded to the end of the walking beam shaft must face towards the front of the MH-400
C. Existing tire
D. Wheel
E. Dexter brake assembly
F. Walking beam assembly
G. Wheel nuts
H. Walking beam bearing

Four Wheel Brake Kit Installation Procedure

1. The MH-400 must be stable. Start by carefully raising and safely supporting the MH-400 off of the ground, so that the four tires are off of the ground by about 5 cm (2 in) (Figures 53 and 54).



Figure 53: Raise and support the MH-400



Figure 54: MH-400 with tires raised in air

2. Loosen the lug nuts on the outside tires, one-half to three-quarters of the way off. This allows you to undo the bolts holding the suspension, while leaving room to remove the tires and axles from under the MH-400.

3. Remove the four nuts and bolts that go through the yellow bearing blocks and hold the axles onto the suspension on each side.

4. Remove the yellow bearing blocks and set them aside.

5. Roll out the tire and axle assemblies as a unit (two tires each) from under the MH-400 (Figure 51).

6. Flip the tire and axle assemblies on end with inner tire up. Remove the top tire from each assembly (Figure 55).



Figure 55: Flip tire and axle assemblies on end

7. Remove the dust cap, cotter pin, bearing tension nut, and washer.

8. Lastly, remove the hub assembly. The spindle and a fastening plate will be left (Figure 56).



Figure 56: Remove hub assembly

9. Check all bearings and races. Replace them if necessary.

10. Ensure that the hubs are free of moisture and dirt. Repack components with grease before re-installing.

Note – You must scrape the paint off of the hub and drum (where they contact each other) to make the drum fit properly.

11. Mount the inner side of the hub assembly onto the outside of the drum using six flathead bolts (allen key style, 12.5 x 31.25 mm [½ x 1½ in]). Thread the bolts by hand from the inside of the drum before using an impact tool (Figure 57).



Figure 57: Mount hub assembly onto drum

12. Torque in a crossover pattern (same as a tire) to 13.8 kg/m (100 ft-lb).

13. Install the dust cover onto the axle, ensuring that the adjusting hole on the brake shoe is on the bottom (Figure 58).



Figure 58: Install dust cover onto axle

14. Install the correct brake shoe with the backing plate against the dust cover. Ensure that the magnet arm faces the front of the MH-400 and the magnet is on the bottom (Figure 38). Remember that the 6.25 mm (¼ in) bolt welded on the mounting shaft faces the front of the MH-400.

15. Run the two wires through the back side hole in the backing plate and through the hole in the dust cover.

16. Install the four 12.5 x 31.25 mm (½ x 1½ in) bolts from the back side, using the nylon locking nuts on the inside of the brake shoe assembly. Torque to 15.2 kg-m (110ft-lbs).

Note – Do not use air tools when tightening the backing plate and shoe assembly.

17. Install the hub and drum assembly onto the spindle.

18. Adjust the wheel bearings (Figure 59).



Figure 59: Adjust wheel bearings

19. Install the cotter pin and a new dust cap.

20. Remount the tire. Remember to leave the outside tire loose for re-installation.

21. Repeat the above steps for the other three tires and brake shoe assemblies.

22. Torque the inside tire assemblies to 13.8 kg-m (100 ft-lb) and leave the outer tire assemblies loose for installation.

23. Set the brakes on the inside tire assemblies to slightly drag on the drum.

Follow these steps for **both** sets of brake shoe assemblies:

24. Take the white wires (one from each brake shoe assembly) and crimp them together into one end of a shrink connector.

25. Take the red wires (one from each brake shoe assembly) and crimp them together into one end of a shrink connector.

26. Take the 2-prong quick-connect plugs and pull them apart (Figure 60).

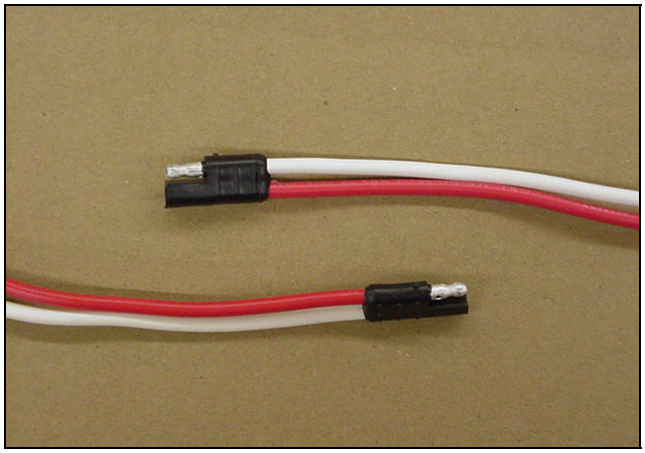


Figure 60: Prepare 2-prong plug

27. Crimp the red male wire plug into one of the shrink connectors from the brake shoes, and crimp the white wire plug into the other shrink connector.

28. Heat the shrink connectors with a torch or hot air dryer until they shrink tight onto the wire.

29. Attach the wiring from the drums to the bottom 6.25 mm (¼ in) bolt with a wire clamp and a 6.25 mm (¼ in) nylon locking nut.

30. Attach the wiring to the front 6.25 mm (¼ in) bolt with the wire clamp and the 6.25 mm (¼ in) nylon locking nut.

31. Roll both the axles back under the MH-400. Ensure that the bolt welded on the mounting shaft faces the front of the MH-400 and the other bolt on the axle assembly faces down.

Note – The tire with the loose lug nuts must be on the outside of the MH-400.

32. Line up all the holes and set the yellow block (the one without the grease nipple) on top of the mounting shaft.

33. Lower the bolts into the block and lower the MH-400 onto the block.

34. Add the other yellow block (the one with the grease nipple) to the bottom side. Install the nuts and tighten.

35. Tighten the outside tires. Torque to 13.8 kg/m (100 ft-lb).

36. Before lowering the MH-400, set the brakes on the outside tire assemblies to slightly drag on the drum.

How to Install the Brake Wiring

Install the mounting bracket for the 7-prong electrical plug onto the front panel beside the hydraulic hoses (Figure 61).



Figure 61: Install plug mounting bracket on front

Complete these steps on the right side brake assembly first.

1. Take the red wire of the 2-prong female plug and connect it to the black wire of the grey wiring harness with a shrink connector (this will be the positive wire).

2. Take the white wire of the same 2-prong plug and connect it to the white wire of the grey wiring harness with a shrink connector (this will be the ground wire).

3. Heat the shrink connectors with a torch or hot air dryer until they shrink onto the wire.

4. Plug the 2-prong plug into the other 2-prong plug that you wired into the brake shoes earlier.

5. Run the grey wiring harness to the electrical plug (Figures 59 and 60). Attach the spiral protection wrap to the wiring harness to prevent wear.

6. Run the wires for the right side up and under the pivot point of the MH-400, and along the cross member to the left side pivot point (Figure 62).

Note – When riveting the wire onto the frame, space the rivets evenly, and do not space them more than 25 cm (10 in) apart.



Figure 62: Run wires for left side up and under pivot point of MH-400

7. Run the wire along the hydraulic hoses to the 7-prong electrical plug (Figure 63).



Figure 63: Run wire along hydraulic hoses to 7-prong plug

8. Cut the grey wiring harness, leaving enough wire to connect to the 7-prong electrical plug. Repeat the above steps for the left side brake assembly.

9. Use tie-straps to hold the wires along the hydraulic hoses.

How to Wire the 7-Prong Harness

1. Strip off the ends of the two sets of wires—one from the left brake assembly and one from the right.

2. Connect the black wires together and the white wires together.

3. Install all the wires through the rubber protective boot of the 7-prong plugs.

4. Install the rubber boot on the back of the electrical plug (it protects the wires and keeps the connections clean).

5. Attach the wires to the 7-prong plug (Figure 66).

6. Place the black wires into the blue port and the white wires into the white port (black is for power and white is for ground).

7. Cover all the joints with the white plastic spiral wire wrap. This helps support the wiring connections.

IMPORTANT: Solder all connections and bared wire ends. Use heat shrink connectors on spliced joints.

Two Wheel Brake Kit Installation Procedure (Outer Brakes)

1. The MH-400 must be stable. Start by carefully raising and safely supporting the MH-400 off the ground, so that the four tires are off the ground by about 5 cm (2 in) (Figures 53 and 54).

2. Remove outside wheel on the left and right side of the unit.

3. Remove the dust cap, cotter pin, bearing tension nut, and washer.

4. Lastly, remove the hub assembly. The spindle and a fastening plate will be left (Figure 56).

5. Check all bearings and races. Replace them if necessary.

6. Ensure that the hubs are free of moisture and dirt. Repack components with grease before re-installing.

Note – You must scrape the paint off of the hub and drum (where they contact each other) to make the drum fit properly.

7. Mount the inner side of the hub assembly onto the outside of the drum using six flathead bolts (allen key style, 12.5 x 31.25 mm [½ x 1½ in]). Thread the bolts by hand from the inside of the drum before using an impact tool (Figure 57).

8. Torque in a crossover pattern (same as a tire) to 13.8 kg/m (100 ft-lb).

9. Install the dust cover onto the axle, ensuring that the adjusting hole on the brake shoe is on the bottom (Figure 55).

10. Install the correct brake shoe with the backing plate against the dust cover. Ensure that the magnet arm faces the front of the MH-400 and the magnet is on the bottom (Figure 49). Remember that the 6.25 mm (¼ in) bolt welded on the mounting shaft faces the front of the MH-400.

11. Run the two wires through the back side hole in the backing plate and through the hole in the dust cover.

12. Install the four 12.5 x 31.25 mm (½ x 1½ in) bolts from the back side, using the nylon locking nuts on the inside of the brake shoe assembly. Torque to 15.2kg-m (110ft-lbs).

Note – Do not use air tools when tightening the backing plate and shoe assembly.

13. Install the hub and drum assembly onto the spindle.

14. Adjust the wheel bearings as you would for any other axle assembly (Figure 59).

15. Install the cotter pin and a new dust cap.

16. Remount the tire.

17. Repeat the above steps for the tire and brake assembly on the other side of the unit.

18. Torque the tire assemblies to 13.8 kg/m (100 ft-lb).

19. Before lowering the MH-400, set the brakes to slightly drag on the drum.

Follow these steps for **both** the left and right brake shoe assemblies:

20. Take the white wire and crimp it into the end of a shrink connector.

21. Take the red wire and crimp it into the end of a shrink connector.

22. Take the 2-prong quick-connect plugs and pull them apart (Figure 60).

23. Crimp the red male wire plug into a shrink connector from the brake shoe, and crimp the white wire plug into the other shrink connector.

24. Heat the shrink connectors with a torch or hot air dryer until they shrink tight onto the wire.

25. Attach the wiring from the drum to the bottom 6.25 mm (¼ in) bolt with a wire clamp and a 6.25 mm (¼ in) nylon locking nut.

26. Attach the wiring to the front 6.25 mm (¼ in) bolt with the wire clamp and the 6.25 mm (¼ in) nylon locking nut.

Two Wheel Brake Kit Installation Procedure (Inner Brakes)

1. Follow procedure for four wheel brake kit installation steps 1-20.
2. Repeat steps 7-20 for other inside tire.
3. Continue with step 22 onwards.

Install brake wiring and 7-prong harness as described in the previous section.

How to Install Tow Vehicle Brake Components

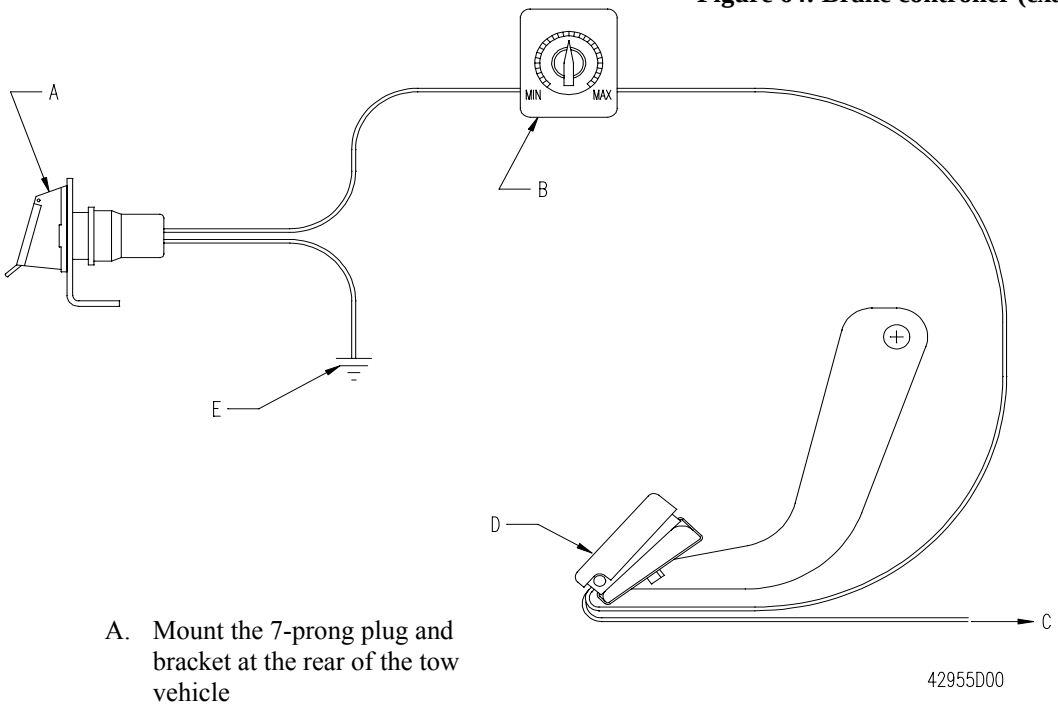
Follow the instructions on Figures 62 and 65 to install the brake controller on the tow vehicle.

Figure 61 shows a typical installation for the controller.

Note: For further information about brake controller and load controller installation, refer to Warner Electric document #P-1386 819-0129 and 819-0128.



Figure 64: Brake controller (example)



A. Mount the 7-prong plug and bracket at the rear of the tow vehicle
B. Mount the load controller in an accessible location on the dash or fender
C. Wire to fuse (15A for 4 brakes, 10A for 2 brakes, not provided) and 12VDC
D. Clamp the foot controller to the tow vehicle brake pedal, following the manufacturer instructions
E. Ground wire to tow vehicle (Figure 63)

Figure 65: Install brake controller on tow vehicle

How to Synchronize the Electric Brakes

Before operating the MH-400 for the first time, the electric brakes must be synchronized to the tow vehicle's brakes (so that they operate at the same time).

The MH-400 and the tow vehicle will seldom have the correct amperage flow to the brake magnets to provide comfortable, safe braking. Changing the load weight, as well as uneven alternator and battery output, can result in unstable current flow to the brake magnets.

The electric brake controller provides a modulation function, which varies the current to the electric brakes according to the pressure on the brake pedal or the deceleration of the tow vehicle.

- The brake controller must provide about 2 V to the braking system when the brake pedal is first depressed.
- As the brake pressure increases, this should gradually increase to 12 V.
- If the brake controller jumps quickly to a high voltage (for example, during a gradual stop), this will result in harsh, jerky braking and possible wheel locking.

To properly synchronize the brakes and achieve smooth braking, you must burnish the brake drums:

- With the MH-400 connected to the tow vehicle, conduct a driving test on a dry, paved road free of sand and gravel.
- Depress the brakes repeatedly, 20 to 30 times. Each time, decrease your speed by about 20 km/h (12 mph).
- Next, from a speed of 24 km/h (15 mph), make several hard stops.
- If the MH-400 brakes lock and slide, decrease the gain setting on the controller. If they do not slide, slightly increase the gain setting. Adjust the controller to the point just before the brakes lock up and the wheels skid.
- If the controller is applying the MH-400 brakes before the tow vehicle brakes, adjust the controller so that the MH-400 brakes are applied at the same time as the tow vehicle brakes.

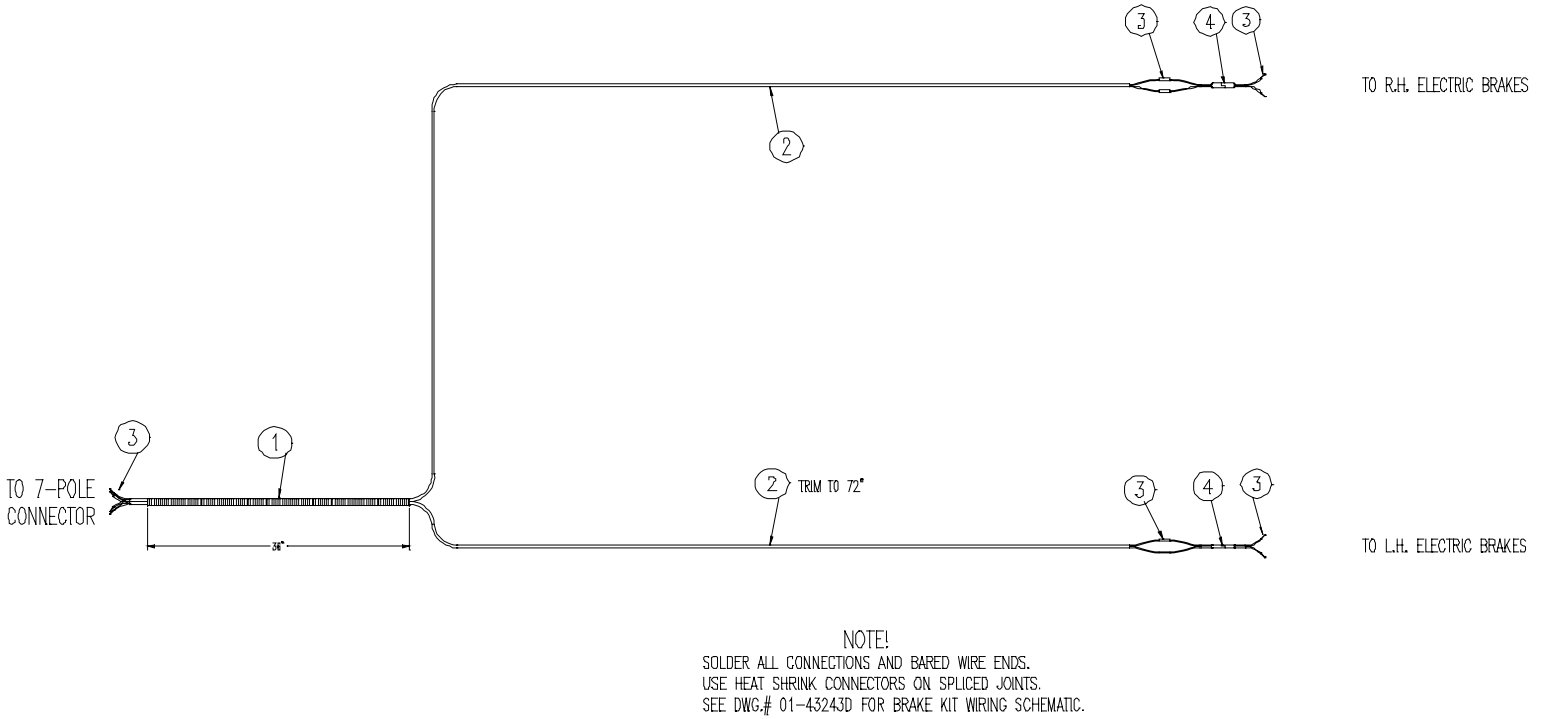


Figure 66: Connect wiring harness to electrical plug

To 7-pole connector
To right side electric brakes
To left side electric brakes

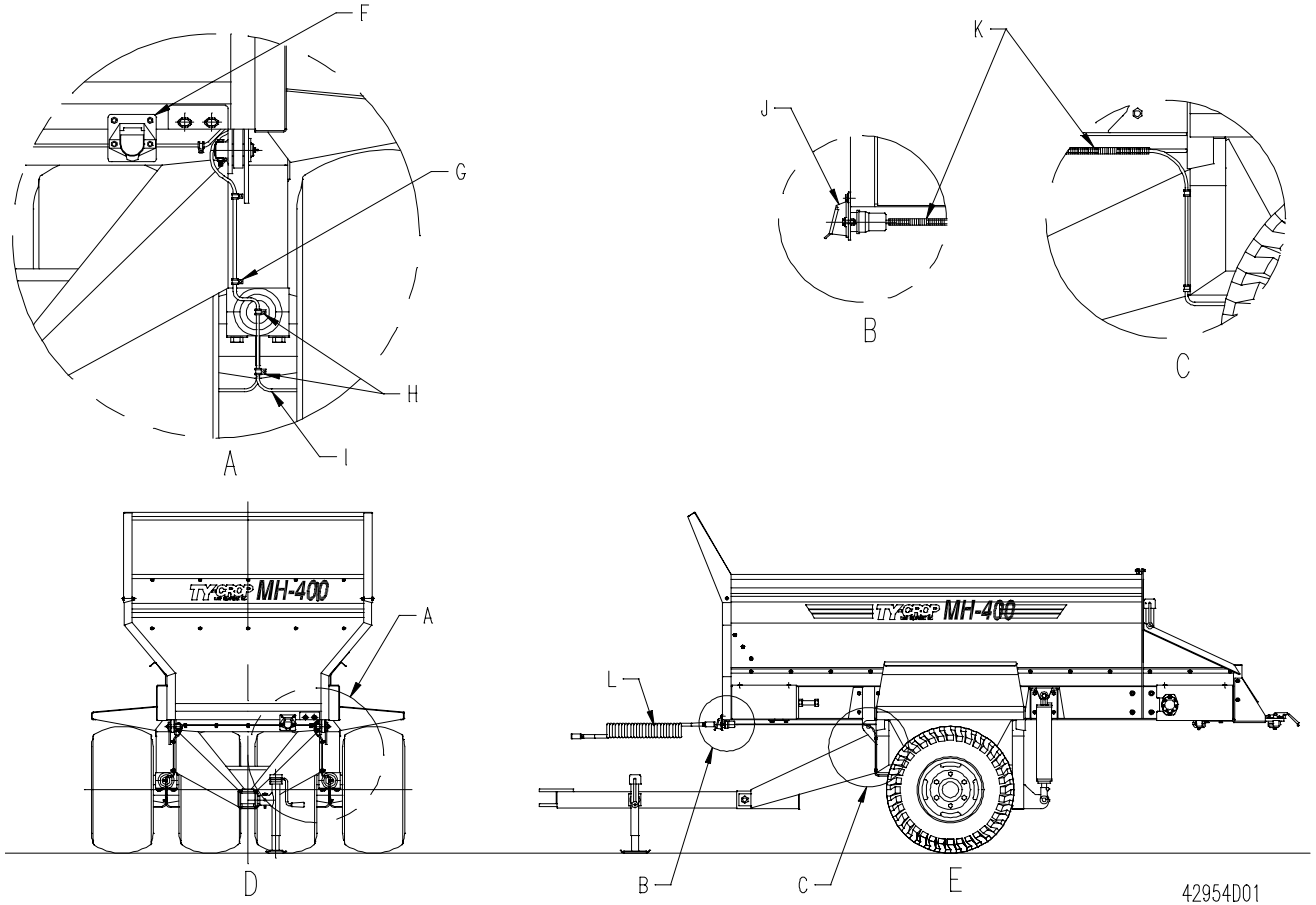
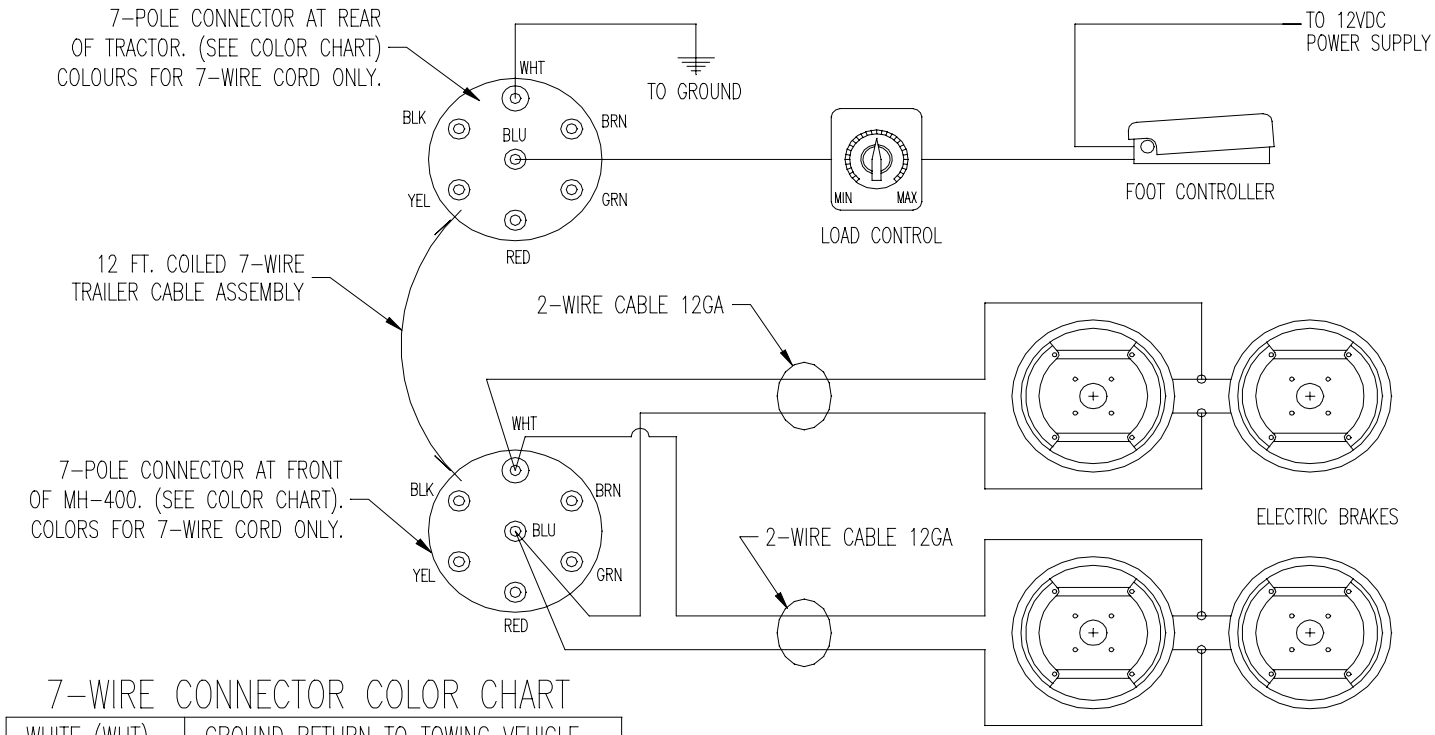


Figure 67: Install brake wiring

A. Detail A
B. Detail B
C. Detail C
D. Front view
E. Side view
F. Bolt 7-prong plug to front of MH-400
G. Drill and rivet clamps to chassis
H. Install clamp to bolts on walking beam assembly
I. Wiring to brakes (Four Wheel Kit Shown)
J. 7-prong plug
K. Fasten wiring harness to hoses with clamps
L. Connector cable



7-WIRE CONNECTOR COLOR CHART

WHITE (WHT)	GROUND RETURN TO TOWING VEHICLE
BLUE (BLU)	ELECTRIC BRAKES
GREEN (GRN)	RIGHT HAND BRAKE AND SIGNAL LAMP
YELLOW (YEL)	LEFT HAND BRAKE AND SIGNAL LAMP
BROWN (BRN)	TAIL AND CLEARANCE LAMPS
RED (RED)	AUXILIARY (NOT USED)
BLACK (BLK)	AUXILIARY (NOT USED)

ELECTRIC BRAKE KIT WIRING SCHEMATIC

NOTE!

SOLDER ALL CONNECTIONS AND BARED WIRE ENDS.
USE HEAT SHRINK CONNECTORS ON SPLICED JOINTS.

Figure 68: Electric brake wiring schematic

(Four Wheel Brake System Shown, Two Wheel Brake System Contains Only One Left and One Right Brake Assembly)

How to Install the Light Kit

1. Position the yellow marker light for the front side underneath the safety decal (Figure 69). Measure 50 mm (2 in) in from the front corner tube of the MH-400 and mark the top left hole.

2. Center punch and drill out the hole with a 5 mm (3/16 in) drill bit.

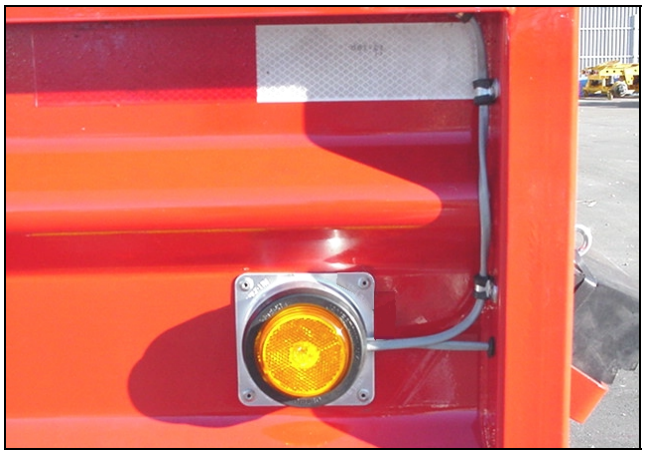


Figure 69: Position front side yellow marker light

3. Using the front side marker light as a template, mark a second hole. Center punch and drill out the hole.

4. Ensure that the holes line up, then drill the last two holes.

5. Drill two holes into the side of the hopper for the wiring clamps, using a 5 mm (3/16 in) drill bit.

6. Drill one 11 mm (7/16 in) hole into the front corner tube.

7. Attach the front marker light bracket to the MH-400 body using the four pop rivets supplied.

8. Remove the one hopper bolt and install the rear taillight bracket, using a 7.8 x 37.5 mm (5/16 x 1½ in) bolt (Figure 70).



Figure 70: Remove bolt for rear taillight bracket

9. Using the rear taillight bracket as a template, mark the second hole and pre-drill it using a 7 mm (9/32 in) drill bit. Then drill it out using a 9mm (11/32 in) drill bit.

10. Install a bolt to the rear hole of the taillight bracket using a 7.8 x 18.7 mm (5/16 x ¾ in) bolt, washer, and nylon locking nut (Figure 71).



Figure 71: Install rear taillight bracket

11. Loosely attach the rear taillight to the bracket. Ensure that the clear portion of the taillight faces downward.

12. Drill three 7 mm (9/32 in) holes on the rear edge of the side hopper wall (Figure 72).

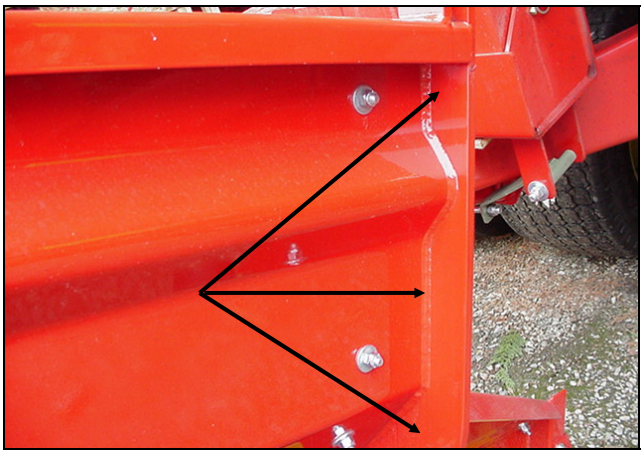


Figure 72: Drill holes on side hopper wall

13. Mark and drill ten evenly spaced holes with the 7 mm (9/32 in) drill bit along the upper lip of the side hopper wall. Start 25 mm (1 in) away from the front corner tube (Figure 76, left side view).

14. Repeat steps 1 through 13 on the opposite side of the MH-400.

15. Drill six holes on the front bottom lip of the front panel (Figure 73).

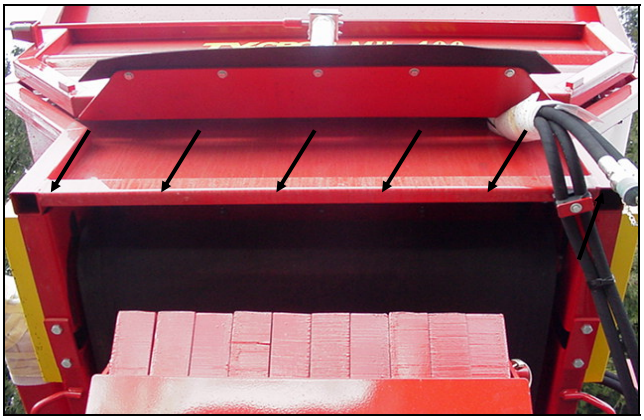


Figure 73: Drill holes on lip of front panel

16. Position the 7-prong socket into the connector bracket on the front of the MH-400, 20 cm (8 in) from the left side corner tube.

17. Drill two 9 mm (11/32 in) holes, and attach the connector bracket with two 7.8 x 13.75 mm (5/16 x ¾ in) bolts and nylon locking nuts (Figure 74).



Figure 74: Attach connector bracket

18. On the left side, run the Item 4 wire (3.45 m [11.5 ft] length) from the rear taillight along the underside of the lip on the hopper side wall, and down to the front marker light.

19. Secure the wiring with the rubber clamps and 7.8 x 13.75 mm (5/16 x ¾ in) bolts. Use nylon locking nuts on the inside of the hopper wall lip. See Figures 80 and 81 for wire lengths and routing.

20. Run the Item 6 wire (1.2 m [4 ft] length) through the front tube and out the bottom (Figures 75 and 80). Leave enough wire to connect the side marker light.



Figure 75: Wire front marker light

21. Place the number 6 grommet over the wiring and into the hole drilled previously (into the tube).

22. Finish running the wiring to the trailer plug. Secure it using the rubber clamps and 7.8 x 13.75 mm (5/16 x ¾ in) bolts.

Note – Ensure that you apply spiral wrap wire protector to any part of the wiring that may come into contact with sharp metal edges (Figure 79, Detail B).

23. On the right side, run the Item 4 wire (3.45 m [11.5 ft] length) from the rear taillight, along the underside of the lip on the hopper side wall, and down to the front marker light.

24. Secure the wiring using the rubber clamps and 7.8 x 13.75 mm (5/16 x ¾ in) bolts. Use nylon locking nuts on the inside of the hopper wall lip (Figure 76). See Figures 80 and 81 for wire lengths and routing.



Figure 76: Wire rear taillight

25. Place the Item 5 wire (2.1 m [7 ft] length) through the right front tube and out the bottom. Leave enough wire to connect the side marker light (Figure 77).



Figure 77: Wire side marker light

26. Place the number 6 grommet over the wiring and into the hole drilled previously (into the tube).

27. Finish running the wiring to the trailer plug. Secure it using the rubber clamps and 7.8 x 13.75 mm (5/16 x ¾ in) bolts.

28. Note – Ensure that you apply spiral wrap wire protector to any part of the wiring that may come into contact with sharp metal edges (Figure 79, Detail B).

29. Follow Figure 77 to connect all wiring to the lights and the trailer plug on both sides.

Note – The ground wire for the rear taillights must be connected to the taillight mounting bolts (Figure 78).



Figure 78: Connect ground wire to rear taillights

Note – Remember to apply heat to any shrink connectors you install. Do not overheat the connectors.

Note – When connecting the wiring to the rear of the 7-prong socket, ensure that you run the wiring through the protective rubber sleeve before attaching the wires to the socket.

30. Attach the tow vehicle and the 7-prong wiring socket to the tow vehicle in a convenient mounting place.

31. Follow Figure 80 to connect the necessary wiring to the 7-prong wiring socket from the tow vehicle.

32. Install the Item 11 reflective tape (15 cm [6 in]) to the front and rear outer edges of the fenders on the MH-400. Apply white tape on the front and red tape on the rear (Figure 80, rear view and front view).

33. Ensure that all bolts, wire connections, and routing are secure.

34. Test the wiring system to ensure proper installation.

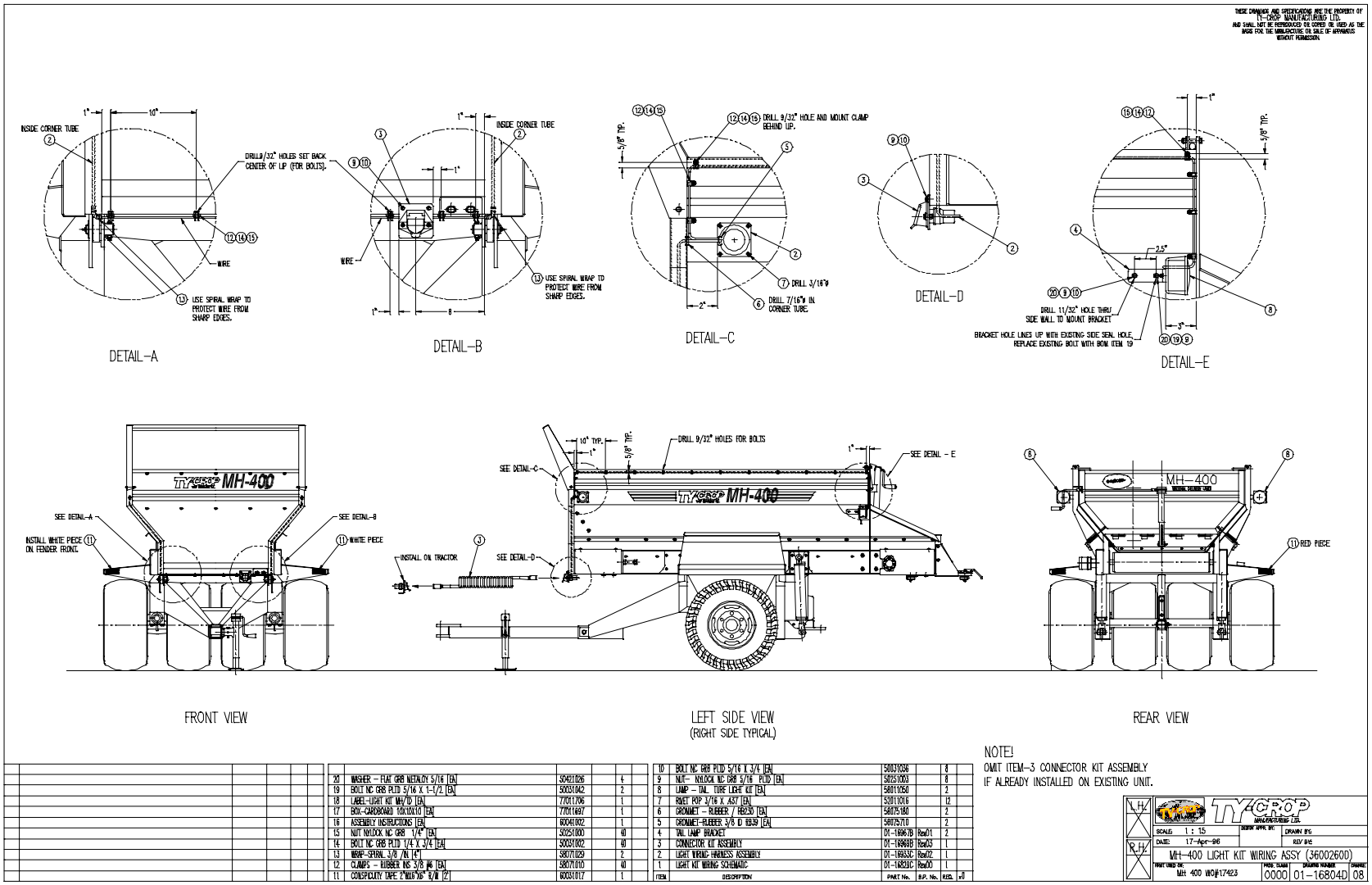


Figure 79: Light kit wiring assembly

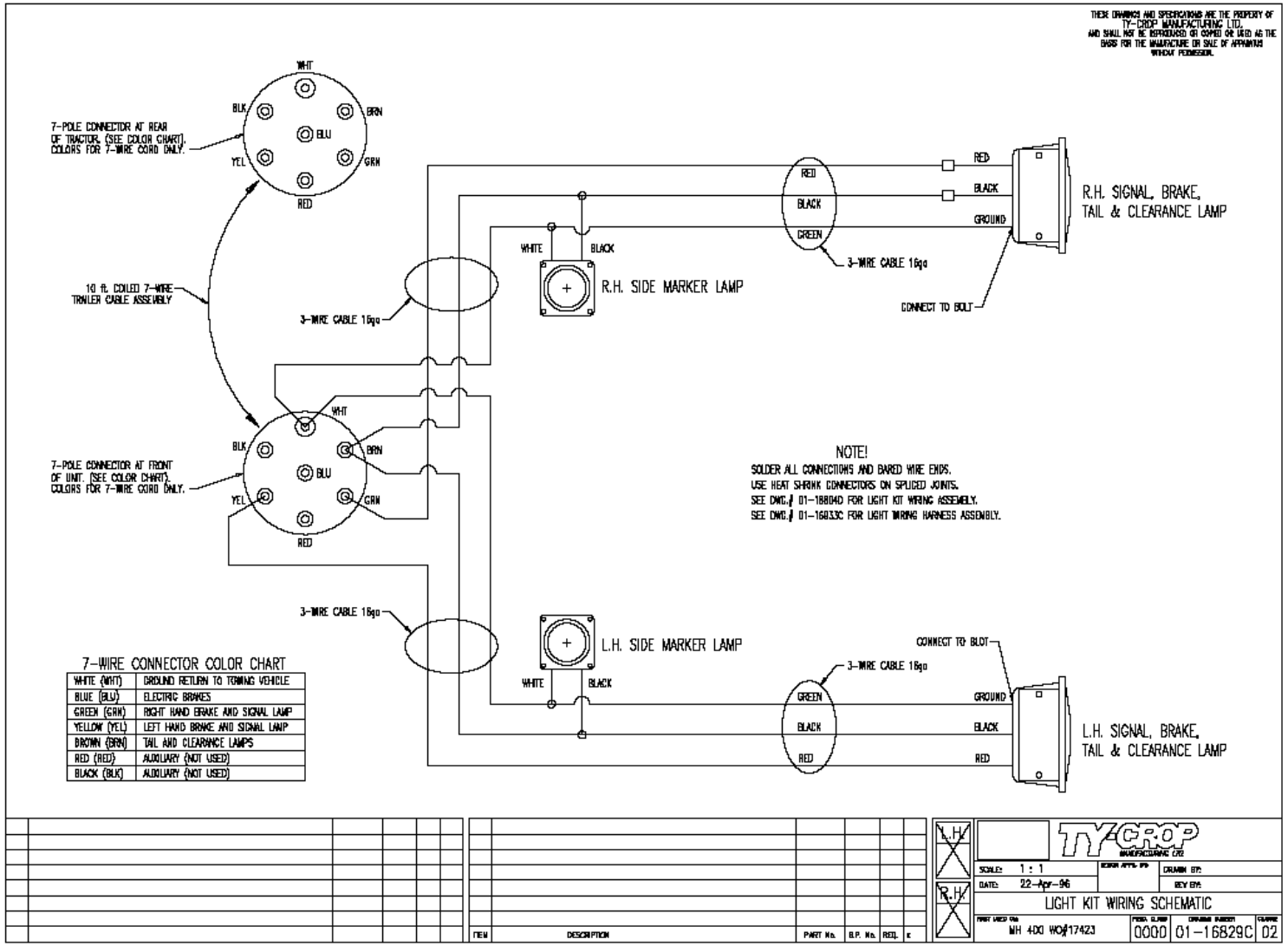


Figure 80: Light kit wiring schematic

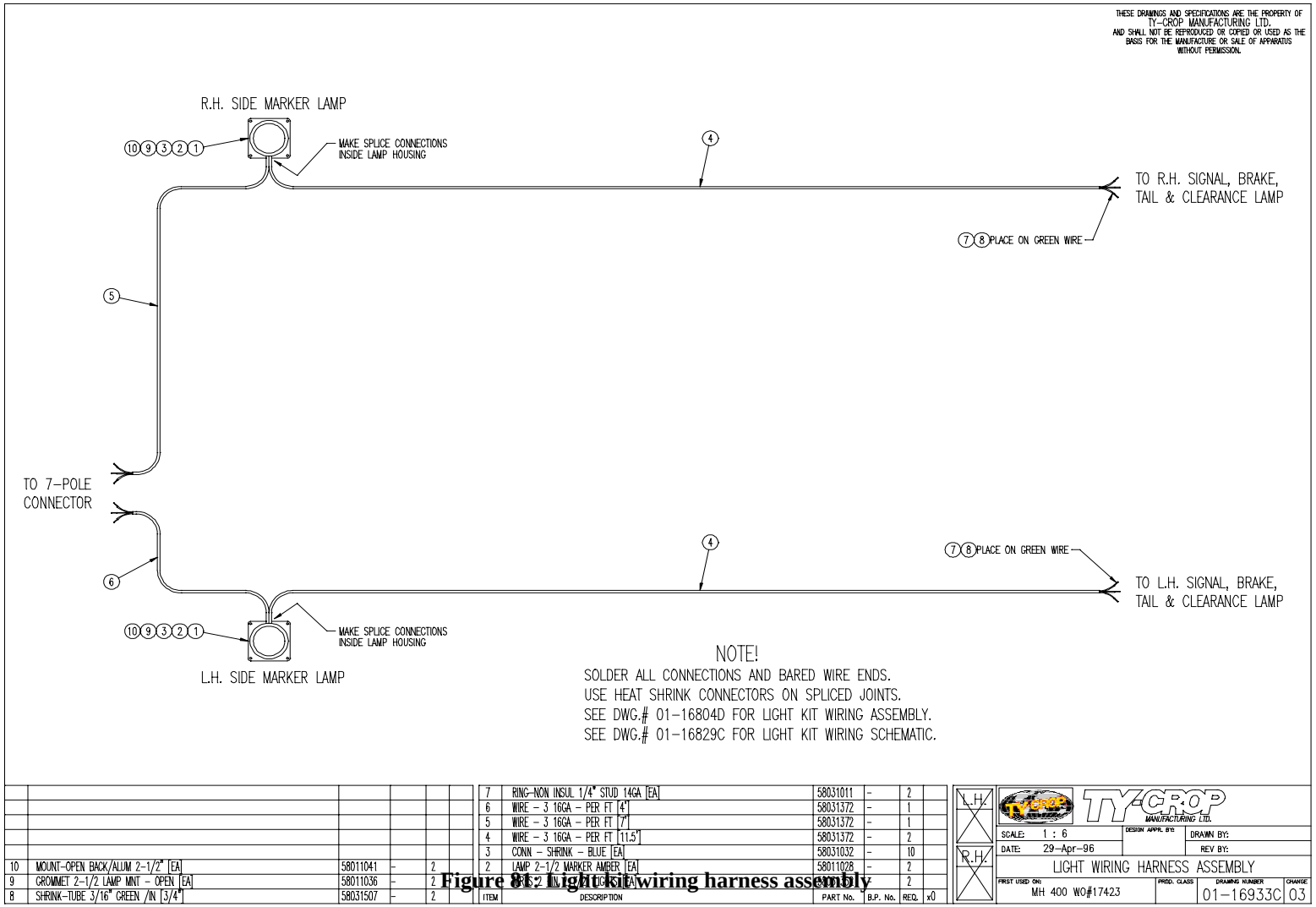


Figure 8.2 Light kit wiring harness assembly

Maintenance Instructions

How to Change Tires

How to Change an Outside Tire

1. Keep the MH-400 attached to the tow vehicle, remove any options, and apply the emergency brake.
2. Remove all material from the hopper.
3. Block the tires on the opposite side of the flat tire.
4. Loosen the six wheel bolts on the flat tire with a lug wrench, but do not remove them.
5. Hoist or jack the MH-400 until the tire is off the floor or ground. Ensure that the MH-400 is stable.
6. Remove the loose wheel bolts and remove the tire.
7. Repair the damaged tire.
8. Re-install the tire onto the MH-400 by reversing the above steps.

Note – Ensure that the wheel is centered on the hub and all six wheel bolts are tight. Torque in a crossover pattern to 11 kg/m (80 ft-lb).

How to Change an Inside Tire

9. Keep the MH-400 attached to the tow vehicle, remove any options, and apply the emergency brake.
10. Remove all material from the hopper.
11. Block the tires on the opposite side of the flat tire.
1. On the side with the tire to be changed, remove the four 15.6 mm (⅝ in) bolts holding the walking beam suspension's bearings to the chassis. (Loosen but do not remove the outside wheel nuts to give more clearance for bearing bolts.)
2. Hoist or jack the MH-400 until the inside tire and walking beam axle assembly can be rolled out from underneath. Ensure that the MH-400 is stable.
3. Remove the tire.
4. Repair the damaged tire.
5. Re-install the tire onto the MH-400 by reversing the above steps.

Note – Ensure that the wheel is centered on the hub and all six wheel bolts and the bearing bolts are tight to 13.8 kg/m (100 ft-lb).

How to Change the MH-400 Conveyor Belt

Read these instructions before removing the belt. If the belt is completely destroyed, simply use a knife to cut the belt in an undamaged area. If you intend to make a warranty claim, the belt supplier must inspect the belt to evaluate the damage and make recommendations for replacement.

How to Remove the Belt

1. Remove the yellow safety covers located on the four outer corners of the MH-400.
2. Remove the guides for the inner rubber liner from the front and both sides of the hopper, with the metal rails attached.
3. Remove the silicone sealer on the rear of the metal rails (but remember to re-apply the silicone sealer when re-installing them).
4. At both front corners, use two wrenches to hold the end of the tensioner rod stationary.
5. Loosen the nut closest to the end of the tensioning rod.
6. Move the inside-adjusting nut back until the tensioning rod clears the pillow block bearing.

Note – The front idler roller is supported by two pillow block bearings sitting in an upper and lower guide (one set on each side of the MH-400).

7. Support the front idler roller.
8. Go to the right front corner and remove the locking collar that holds the pillow block bearing on the shaft. Do this by backing off the set screws and turning the locking collar counter-clockwise. Using a hammer and punch, tap the locking collar counter-clockwise until it releases from the shaft.

9. Repeat this step for the left front corner.

10. Remove the pillow block bearings by sliding the idler roller back so the pillow block bearings slide out of their guides.

11. Remove the two safety brackets and slide the roller down through the open hole.

12. Go to the rear of the MH-400 and loosen the tensioning sprocket.

13. Remove the chain from the drive sprocket.

14. Loosen the set screws on the drive sprocket and remove the drive sprocket and key from the drive roller shaft.

15. Support the rear drive roller.

> **IMPORTANT:** Do not disturb the rear roller adjustment bracket assembly. It is designed to adjust the rear roller automatically if the belt is not tracking accurately.

16. Remove the four bolts in the flange bearings on both sides.

17. Remove the locking collars next to the flange bearings on the shaft, and slide both bearings off the shaft.

18. Remove the two option attachment brackets (Figure 82).



Figure 82: Remove the option attachment brackets

19. Lower the drive roller down through the slots.

20. Remove the rear gate for a better view.

21. Note the position of the cartridge inside the hopper, so that you can re-install it in the same position and direction. It is bolted in six places along the side of the MH-400 (three 4-bolt plates on each side).

22. Secure the cartridge by using straps from a lifting device on each of the four corners.

23. Remove the 24 bolts to release the cartridge (Figure 83).



Figure 83: Secure and remove the belt cartridge

24. Remove the cartridge by lifting it out from the top of the MH-400. Place it on the ground (Figure 81).



Figure 84: Lift out the belt cartridge

How to Install the Belt

To install a new belt, reverse the above instructions, but keep in mind the following important notes and instructions.

IMPORTANT: The conveyor belt is designed to work primarily in one direction. Ensure that the painted arrow in the middle of the belt is pointing towards the rear of the MH-400 (looking down from above).

IMPORTANT: Before sliding the rear drive roller back up through the slot and into place, ensure that you have already installed the four bolts (from the inside facing out) for connecting the pillow block bearings. Otherwise, you will have to remove the drive roller to gain enough clearance to install these bolts.

When installing the rear drive roller, ensure that the shaft connecting to the motor is on the left side. It has a keyhole cut into it for securing the drive sprocket.

Before applying tension with the tensioner rods at the front of the MH-400, use your hands to manually center the belt at the front and rear.

Track and tension the belt by following the instructions in the Maintenance section of the Operator's Manual.

The front idler and rear drive rollers provide excellent traction for pulling the belt under load, so do not over-tighten or stretch the belt.

Apply silicone sealer to the rear side of the metal rails and at the two front corners of the floor where the rails meet. The sealer deflects any material from getting past the rails.



Count on it.