

WALKER

A21 Hi-Dump® Kit

Operator's Manual

Safety, Assembly, Operation, and Maintenance
A21 compatible with Models D/T (10.0 Catcher Box)



Please Read and Save These Instructions

For Safety, Read All Assembly and Operation Instructions
Prior to Operating Attachment

Beginning S/N: 2018-5524
P/N: 8404-11



Foreword

Thank you. . . for purchasing the Walker Hi-Dump® Kit for your Walker Mower. Every effort has been made to provide you with the most reliable equipment on the market, and we are sure you will be among our many satisfied customers. If for any reason this product does not perform to your expectations, please contact your local dealer. Every customer is important to us. Your satisfaction is our goal.

Please. . . read this manual thoroughly! Before you operate your machine, please read this entire manual. Some of the information is crucial for proper operation—it will help protect your investment and ensure that the machine performs to your satisfaction. Some of the information is important to your safety, and must be read and understood to help prevent possible injury to the operator or others. If anything in this manual is confusing or hard to understand, please contact your local authorized dealer or call our service department, at (970) 221-5614, for clarification before operating or servicing this machine.

This manual covers the A21 (8400A) Hi-Dump® installed on Model D or T.

All shields and guards must be in place for the proper and safe operation of this machine. Where they are shown removed in this manual, it is for illustration purposes only. **Do not operate this machine unless all shields and guards are in place.**

Walker Mfg. Co. is continually striving to improve the design and performance of its products. We reserve the right to make changes in specifications and design without thereby incurring any obligation relative to previously manufactured products.

Sincerely,

WALKER MANUFACTURING COMPANY

Bob Walker, Chairman

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General Information

GENERAL INFORMATION

HIGHLIGHTED INFORMATION

Walker Manufacturing recommends that any service requiring special training or tools be performed by an authorized Walker Tractor dealer. There are several general practices to be aware of in the area of safety. Most accidents associated with the operation or maintenance of a Walker Tractor are caused by disregarding basic safety precautions or specific warnings. Such accidents, in most cases, can be prevented by being aware of the dangers present.

Information of special importance has been highlighted in bold type in this manual. Refer to Safety Instructions for the meanings of **DANGER**, **WARNING**, **CAUTION**, **IMPORTANT**, and **NOTE**.

GLOSSARY

There are many terms that are either unique to this equipment or that are used as acronyms. The following terms and their definitions will help while using this manual:

- **FORWARD SPEED CONTROL (FSC)** controls the maximum forward speed of the tractor; functioning as a cruise control.
- **Grass Handling System (GHS®)** collects mowed material and deposits it in the catcher.
- **Hi-Dump®** is a power lifting and dumping mechanism for the GHS catcher box controlled from the operator's seat.
- **LEFT HAND (LH)** refers to the left-hand side of the tractor when the operator is seated facing forward in the tractor seat.
- **POWER TAKE-OFF (PTO)** transmits engine power to run the cutter blades and GHS blower.
- **RIGHT HAND (RH)** refers to the right-hand side of the tractor when the operator is seated facing forward in the tractor seat.
- **STEERING LEVERS** steer the tractor by controlling the dual hydrostatic transmissions.
- **TRACTOR** is the prime mover, including the engine, drivetrain, operator seat, and controls to operate the mower.

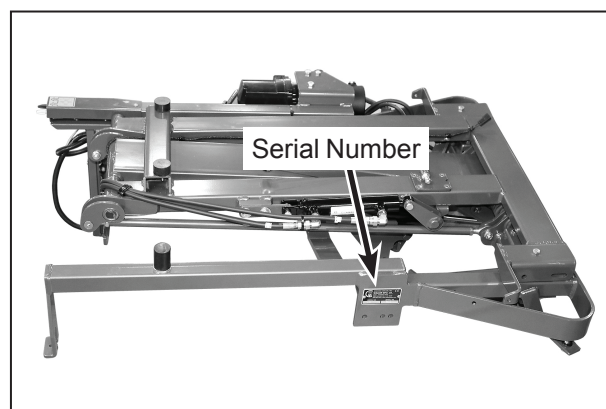
IDENTIFYING NUMBER LOCATIONS

The Hi-Dump® serial number is affixed to the LH side of the main frame weldment. Model and serial numbers are helpful when obtaining replacement parts and maintenance assistance. For ready reference, please record these numbers in the space provided.

Hi-Dump® Serial No. _____

Date of Purchase _____

Refer to the Operator's Manual that accompanies the tractor for the location of the tractor serial number.



**A21 Hi-Dump® Serial Number Location
(Top View)**

SERVICING OF HYDRAULIC POWER UNIT

Only routine maintenance and general service instructions are provided in this manual. For service of the hydraulic power unit during the limited warranty period, contact your authorized Walker dealer. **Any unauthorized work done** on the hydraulic power unit during the warranty period **may void the warranty**. If you have any difficulty finding an authorized outlet or obtaining warranty service, please contact our Service Department for assistance:

Walker Manufacturing Company

5925 E. Harmony Road
Fort Collins, CO 80528
1-970-221-5614
www.walker.com

UNIT DESCRIPTION

With the optional Hi-Dump® kit installed, the operator raises and dumps the GHS catcher box while seated in the seat. Two toggle switches operate independent hydraulic cylinders to raise, lower and dump the catcher. The back door automatically opens and closes during the dump cycle. The catcher may be dumped at any raised position (Normal Operating-Intermediate-Fully Raised).

CONFIGURATION NOTE

When Hi-Dump® is installed, the optional **single wide tail wheel** (P/N 8049) on the tractor is not recommended due to tail weight and extra turning resistance. Use the standard **dual tail wheel** (P/N 7420-20).

Specifications


SPECIFICATIONS

MODEL	A21
Catcher Lift Height in. (cm)	67 (170)
Maximum Lift Rating lb (kg)	200 (91)
Lift/Dump Cycle Time	20 seconds
Lift/Dump Controls	Individual Toggle Switch with Solenoid Activated Valves Operating Hydraulic Cylinders
Weight Installed lb (kg)	150 (68)
Height Increase (Tractor) in. (cm)	3 (8)
Hydraulic Oil	Chevron Rykon Premium Oil ISO 68 or Equivalent
Oil Capacity fl oz (L)	32 (.95)

NOTE: The manufacturer reserves the right to make changes in specifications shown herein at any time without notice or obligation.

SAFETY INSTRUCTIONS

Pay particular attention to any information labeled **DANGER, WARNING, CAUTION, IMPORTANT,** and **NOTE** in this manual.

When you see the Safety Alert Symbol (), read, understand, and follow the instructions. Failure to comply with safety instructions may result in personal injury.

The seriousness or degree of importance of each type of information is defined as follows:



DANGER

An **IMMEDIATE** hazard that **WILL** result in severe personal injury or **DEATH**, if warning is ignored and proper safety precautions are not taken.



WARNING

A **POTENTIAL** hazard that **COULD** result in severe personal injury or **DEATH**, if warning is ignored and proper safety precautions are not taken.



CAUTION

Possible hazards or unsafe practices that **MAY** result in **MODERATE** personal injury or property damage, or machine damage, if warning is ignored and proper safety precautions are not taken.

IMPORTANT: Identifies mechanical information demanding special attention, since it deals with the possibility of damaging a part or parts of the machine.

NOTE: Identifies information worthy of special attention.

Walker Manufacturing cannot predict every potentially dangerous situation. Therefore, items labeled as such in this manual do not cover all conceivable situations. Any person using procedures, tools, or control techniques not recommended by Walker

Manufacturing must take full responsibility for safety.

The Walker Rider Lawnmower has been designed with many safety features to protect the operator from personal harm or injury. However, it is necessary for the operator to use safe operating procedures at all times. **Failure to follow safety instructions contained in this manual and in that of the Operator Manual for the tractor may result in personal injury or damage to equipment or property.**

If you have any questions concerning setup, operation, maintenance, or safety, please contact your authorized Walker Mower dealer or call Walker Manufacturing Company at (970) 221-5614.

BEFORE OPERATING

Review all the safety information provided in the Operator's Manual for the tractor.

OPERATING

In addition to the safety information provided in the Operator's Manual for the tractor, follow these additional Hi-Dump® safety guidelines:

1. When operating the Hi-Dump®, the operator should be in the seat with feet on the footrests, the FSC in **NEUTRAL-PARK** position and the parking brake engaged.
2. To avoid tipping over, the tractor should be parked on **LEVEL GROUND** when raising/dumping the catcher with Hi-Dump®.
3. Make sure bystanders stay clear of the area when the Hi-Dump® is operating.
4. Do not attempt to use the optional dump bag or dump into any other bag with the Hi-Dump®.

Safety Instructions

MAINTENANCE

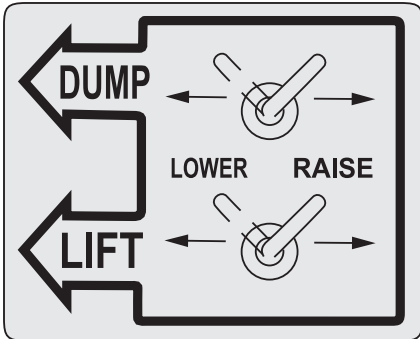
In addition to the safety information provided in the Operator's Manual for the tractor, follow these additional Hi-Dump® safety guidelines:

1. When the Hi-Dump® is in the **RAISED** position for access to the engine or drivetrain, **ALWAYS ENGAGE** the safety lock before service or repair work. Remember to **DISENGAGE** the lock before resuming operation of the Hi-Dump® (to avoid damaging the lock mechanism).
2. With the Hi-Dump® in the normal operating position (catcher down), the catcher cannot be **manually raised**. In the case of a dead battery, use the auxiliary power terminals to charge/boost the battery to raise the Hi-Dump®.

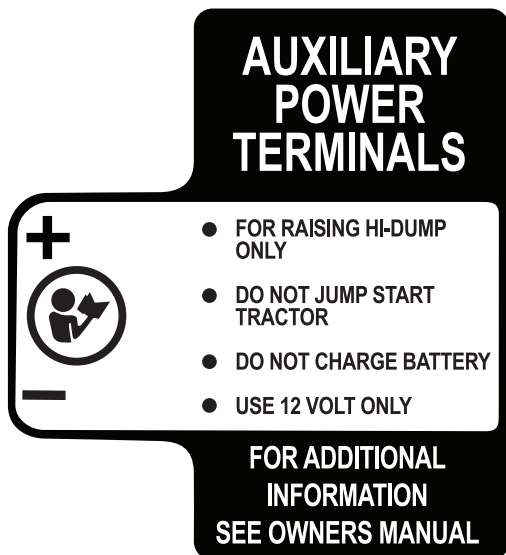
SAFETY, CONTROL, AND INSTRUCTION DECALS

Safety, Control, and Instruction Decals are installed on the machine; if any are missing, illegible, or damaged, a replacement should be ordered and installed before putting the machine into operation.

The Decal Part Number is listed below and in the Parts Manual.



Operation Decal: Hi-Dump® Operation
Location: Switch Cover
Part Number: 8400-9



Safety Decal: Auxiliary Power Terminals
Location: Auxiliary Power Terminal Plate
Part Number: 8400-7



Decal: Decal, Hi-Dump®
Location: Rear Bumper
Part Number: 8400-16



Safety Decal: Decal, Engine Exhaust
Location: LH Side of Chassis
Part Number: 8600-5



Safety Decal: Safety Lockout Arm
Location: Lower Lift Arm
Part Number: 8401-9

Installation Instructions

INSTALLATION

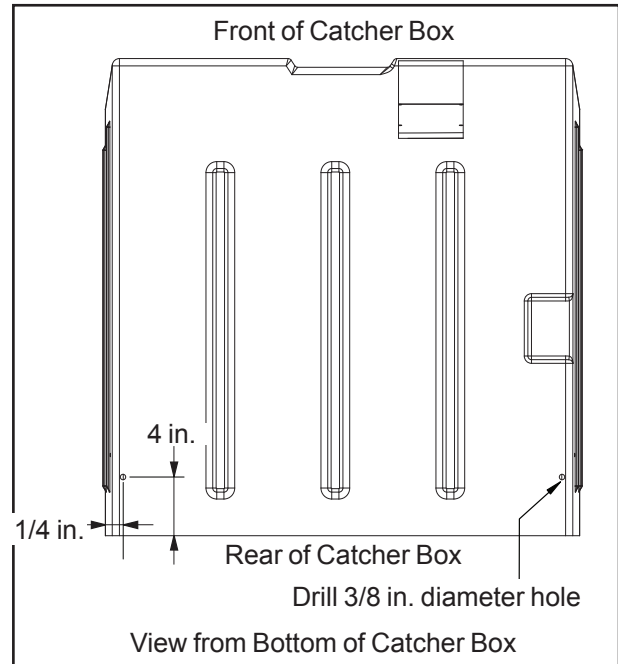
This section covers the installation of the A21 Hi-Dump® on the tractor.

1. Disconnect the negative (-) terminal and then the positive (+) terminal on the battery.
2. With the catcher box lifted up, unplug the main harness from the catcher box. Disconnect the gas spring from the rear body and the catcher box and retain it with the spring clips (P/N 7147) for reuse.
3. Remove the catcher box assembly. Retain catcher pivot plates (P/N 7517-3) and the catcher pivot bushings (P/N 7516-5) for reuse.

NOTE: This step will be more easily accomplished with the help of an assistant.

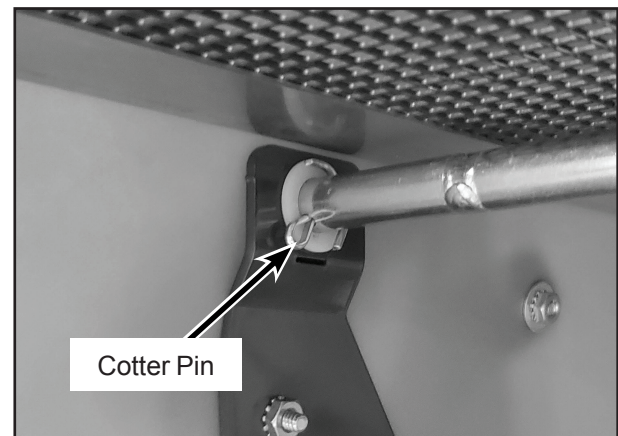
NOTE: If the tractor has a Power Dump installed, remove actuator, mount, electrical harness and switch.

4. Drill two (2) 3/8 in. (9.5 mm) holes in the bottom of the catcher box approximately 1/4 in. (6 mm) inside the radius of the catcher box and 4 in. (10 cm) from the opening of the catcher box as shown in **Drilling Dimensions for Power Dump Cable Guides** photo.



Drilling Dimensions for Power Dump Cables

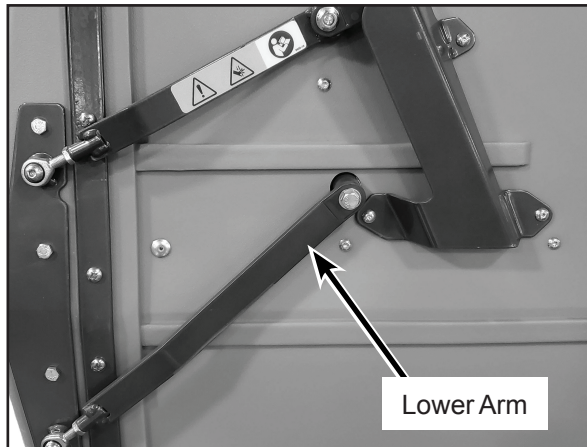
5. Inside the catcher box, remove the cotter pins securing the torsion bar and install a torsion spring hook (#7, P/N 8623-5) on each end of the bar with the hook oriented towards the door of the catcher box. Reinstall the bar using replacement 1/8 x 1 cotter pins (F068).



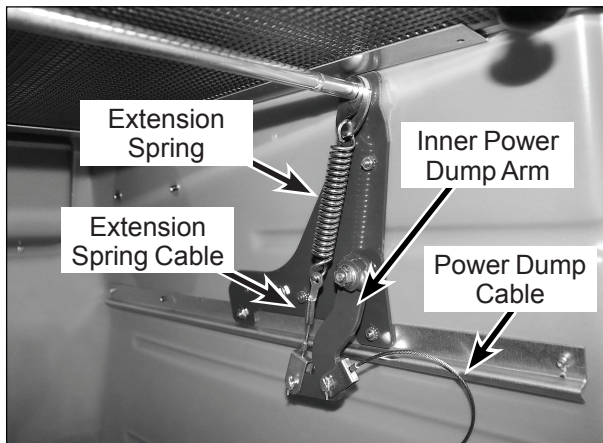
Torsion Bar Cotter Pin

6. Remove existing lower arms (outside of catcher box) and install the new lower power dump arms (#1, P/N 8607-10) replacing both the inner and outer pivot bushings with two (2) new pivot bushings (#2, P/N 7620-3) per side.

Before securing the arms with the 5/16 SAE washer (P/N F049) and 5/16-18 ESNA nut (P/N F020), install the inner power dump arms (P/N 8623-6 RH and P/N 8623-7 LH). Be sure to orient each one as shown in the photos **Replace Lower Arm** illustration and **Install Inner Power Dump Arm** illustration.



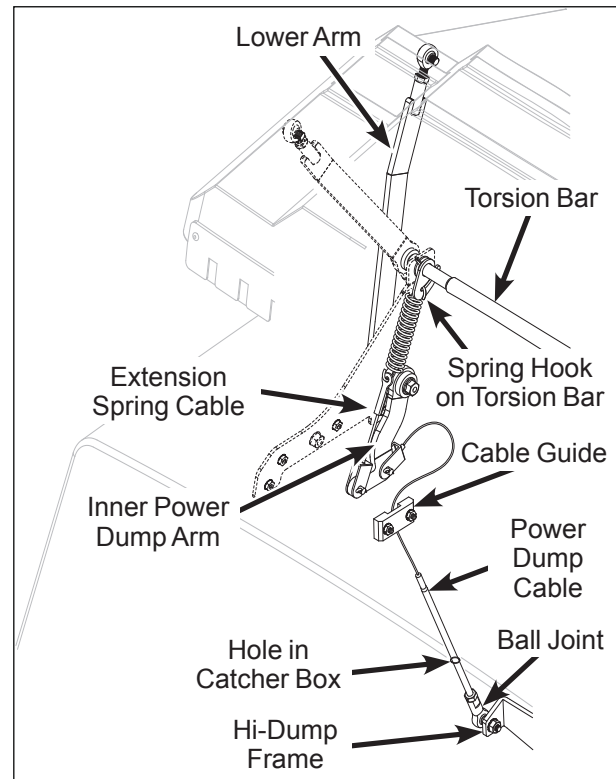
Replace Lower Arm



Install Inner Power Dump Arm

7. Install an extension spring (#6, P/N 5221-2) on each torsion spring hook and secure the connected extension spring cable (#5, P/N 8623-3) with a clevis pin (#3, P/N 7523-2) and a 3/32 x 1/2 cotter pin (P/N F069) through the front hole on each inner power dump arm (hole farthest from the door) as shown in the **Assemble Door Springs to Spring Hooks and Attach Extension Spring Clevis** illustration.
8. Attach the power dump cable (#10, P/N 8623-2) to the rear hole on each inner power dump

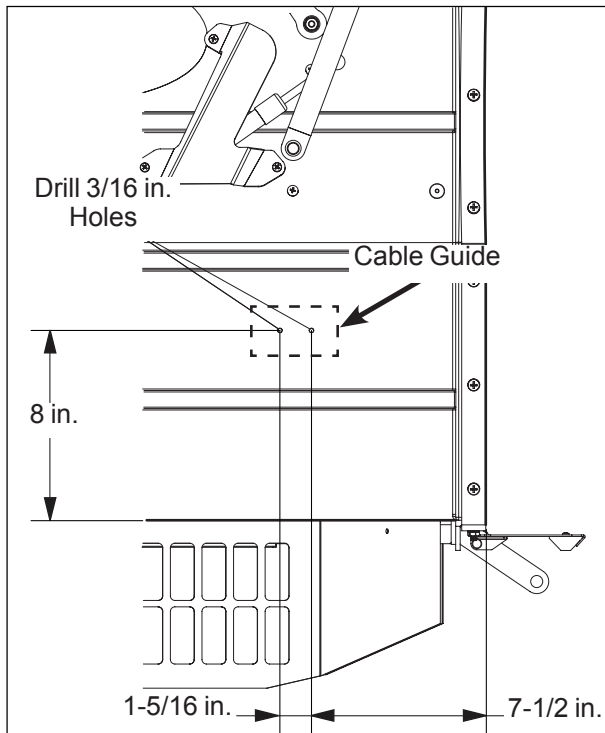
arm with a clevis pin (#3, P/N 7523-2) and cotter pin (P/N F069) as shown in the **Assemble Door Springs to Spring Hooks and Attach Extension Spring Clevis** illustration.



Assemble Door Springs to Spring Hooks and Attach Extension Spring Clevis

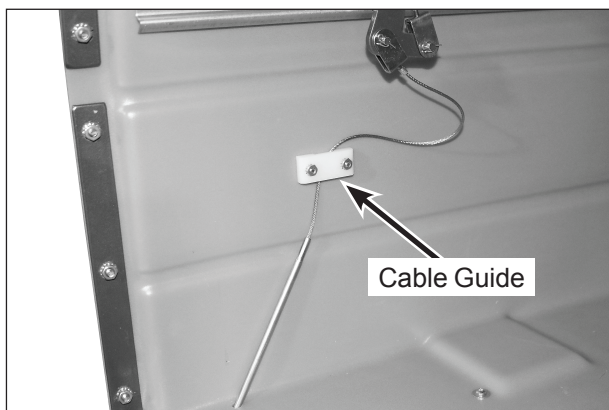
9. Drill holes in both sides of the catcher box as shown in the **Drilling Dimensions for Power Dump Cable Guides** illustration to mount the cable guides inside catcher.

Installation Instructions



Drilling Dimensions for Power Dump Cable Guides

10. Install the cable guides (#9, P/N 7620-6) on both sides, using 10-24 x 3/4 screws (P/N F028), 3/16 washers (P/N F085), and 10-24 keps nuts (P/N F002) as shown in the **Install Cable Guides** photo.



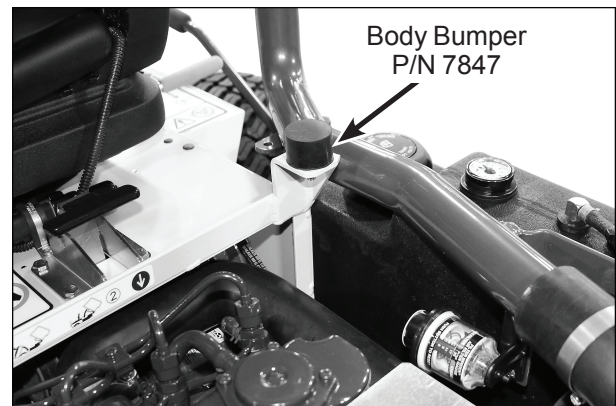
Install Cable Guides

11. Remove the body chute from the tractor and install the new (longer) body chute (#40, P/N 8430-1) using the replacement 10-24 x 3/8 PTHMS (P/N F128) and 10-24 Keps nuts (P/N F002).

NOTE: This new body chute is for the 10-1/2 in. (26.7 cm) blower. If installing on a tractor equipped with a 10 in. (25.4 cm) blower, a different body chute must be ordered (P/N 8430). The 10 in. blower has an opening that measures 4 in. (10.2 cm) inside compared to the 10-1/2 in. blower's opening that measures 4-1/4 in. (10.8 cm).

NOTE: It may be necessary to enlarge the hole in the body in order for the chute to fit.

12. Remove the two (2) body bumpers mounted on the back of the front body that the catcher contacts when lowered. Install one (1) new bumper (P/N 7847) on only the right side, as shown in the **Install RH Body Bumper** photo, and secure with a 5/16-18 whiz locknut (P/N F009).

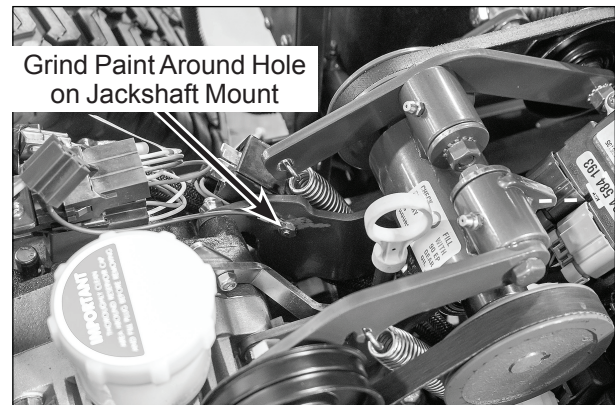


Install RH Body Bumper

13. **FOR AIR-COOLED MT TRACTORS:** Remove the engine bumper mount by removing the M6 nuts and washers. With the mount removed, leave the studs and remaining hardware in place. They are required to secure the regulator mount.
14. Unbolt the instrument panel from the chassis and gently set on transmissions. Remove the instrument panel guard and reserve the guard for reinstallation.

15. Remove the precleaner tube. Loosen the hose clamp and remove the three (3) 5/16-18 whiz locknuts (P/N F009) that secure the shock mounts (two in front, one in rear) to the mounting brackets. Reserve the precleaner tube and the hose clamp to be reinstalled.
16. Remove the rear precleaner mount (P/N 7028-20) and set aside for reinstallation.
17. Remove the two (2) 5/16-18 whiz locknuts (P/N F009) that attach the precleaner tube support arm to the fuel tank band (chassis) and remove and discard the support arm. Push the bolts back against the fuel tank, but do not remove the bolts or the PTO lever clutch mount. Place the spacer (#57, P/N 8400-77) on the bolts in front of the clutch mount and clamp it in place.

NOTE: The spacer (P/N 8400-77) is not used on the MT30i.
18. **FOR MD TRACTORS:** Remove the tailpipe and the coolant recovery tank and reserve both for reinstallation.
19. **FOR E-SERIES TRACTORS (CA ONLY):** Cut the cable ties that secure the carbon canister to the mount plate. Disconnect the hoses from the canister, and set the canister aside. See the **E-Series Tractor Supplement on page 25** for more details.
20. Remove the anti-scuff roller wheels from the rear bumper and reserve with hardware for reinstallation. Remove and discard the rear bumper.
21. **FOR T25i/T27i TRACTORS:** Remove the two (2) bolts mounting fuel pump module on the gas spring mount and stow the pump assembly to the side.
22. Grind paint around the hole on the inside of the jackshaft mount as shown in **Grind Paint on Jackshaft Mount** photo.



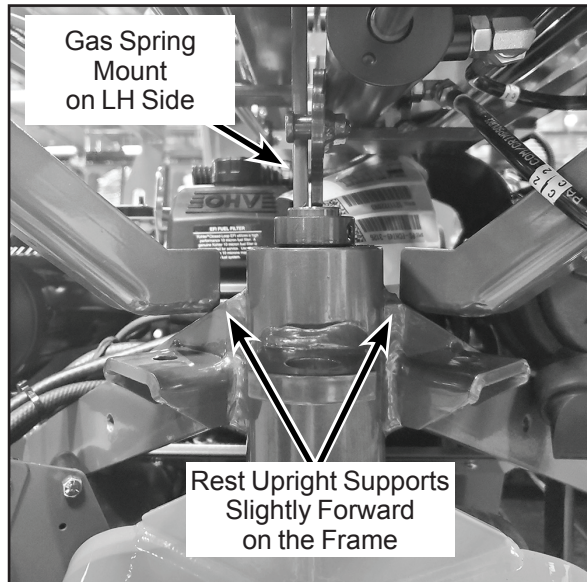
Grind Paint on Jackshaft Mount

23. **FOR AIR-COOLED MT TRACTORS:** Make sure the LH and RH chassis uprights are straight. Straighten them if necessary.
24. Secure the Hi-Dump harness by wrapping it above the auxiliary power terminal box to make sure it doesn't get pinched during the install.

Installation Instructions

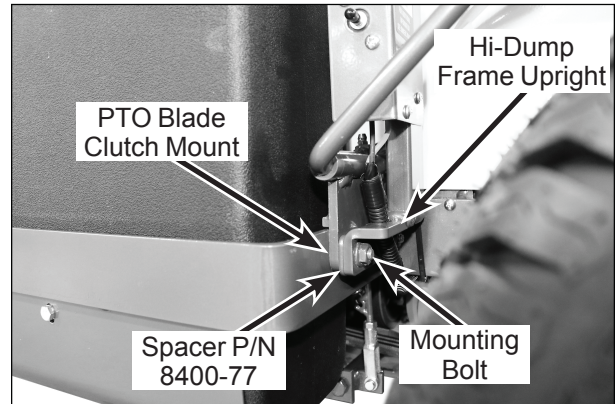
25. **Carefully** set the Hi-Dump assembly on the chassis. The assembly should slide down on the front RH side in front of the PTO lever clutch mount and the spacer—knocking off the clamp used to secure the spacer. The tractor's gas spring mount should be on the LH side of the Hi-Dump bumper bridge mount as shown in the **Position Hi-Dump on Chassis** photo. Rest the Hi-Dump bumper upright supports on the rear chassis frame in front of the bumper mount pads to give room for maneuvering the front of the frame at this point.

NOTE: Two people are recommended for this step or the use of a well-balanced lift/hoist.



Position Hi-Dump on Chassis

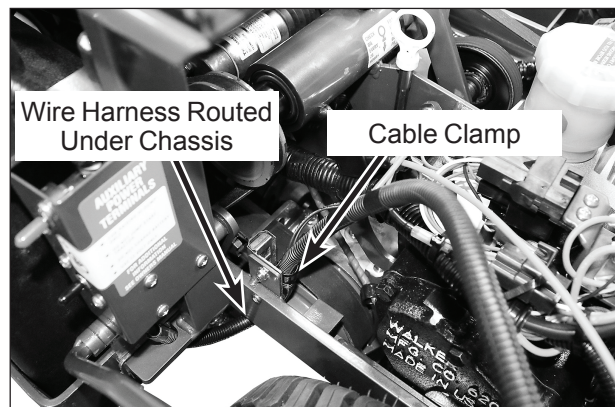
26. Using a flat head screw driver, push the two (2) bolts (previously left in place) through the fuel tank band, the PTO lever clutch mount, the spacer, and the Hi-Dump frame upright. Verify both bolts went through by running a finger along the bottom of the spacer to ensure it is flush with the Hi-Dump frame upright. Install the F009 nuts, and **tighten securely**, as shown in the **Install Front RH Hi-Dump Frame** photo.



Install Front RH Hi-Dump Frame

27. Slide the Hi-Dump bumper upright supports back onto the bumper mount pads.
28. Route the harness under the chassis and in front of the PTO safety switch. Remove the 1/4" cable clamp on the PTO safety switch mount. Use a replacement 3/8" clamp (P/N 5832-2) to secure safety switch wires and the harness. Install the clamp using the replacement F023 nut provided as shown in the **Install Cable Clamp to PTO Safety Switch Mount** photo being sure to capture the PTO safety switch wires in the cable clamp.

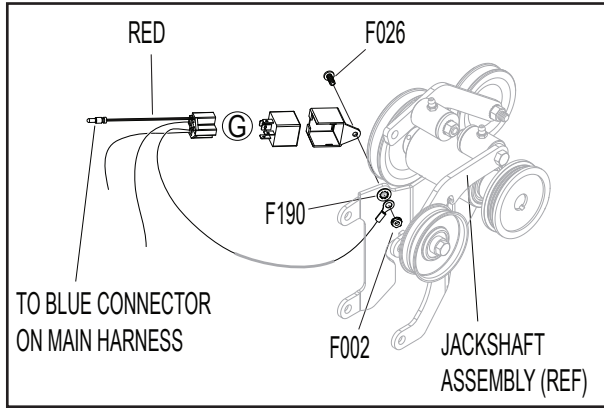
IMPORTANT: To avoid damage to the wire harness, be sure the wire harness is pulled snug under the chassis. Use a spray lubricant such as alcohol and then pull up on the harness to remove any slack. **Do not pull on the PTO safety switch wires.**



Install Cable Clamp to PTO Safety Switch Mount

29. Mount the relay switch (P/N 6941-8) to the jackshaft mount using a 10-24 x 1/2 (P/N

F026) screw, 1/4 star lock washer (P/N F190), and 10-24 keps nut (P/N F002) provided as shown in the **Install Relay Switch** illustration.

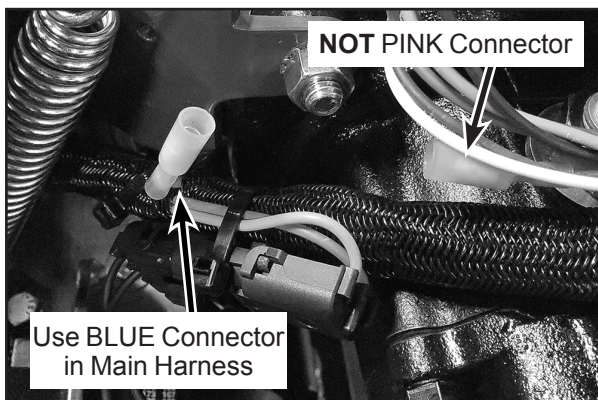


Install Relay Switch

30. Plug the Hi-Dump wire harness into the relay, and the RED wire coming off the relay into the BLUE connector on the main harness as shown in the **Blue Power Connector** photo.

NOTE: Do not plug the RED wire into the PINK connector on the time delay harness. This accessory plug does not provide adequate power for the Hi-Dump.

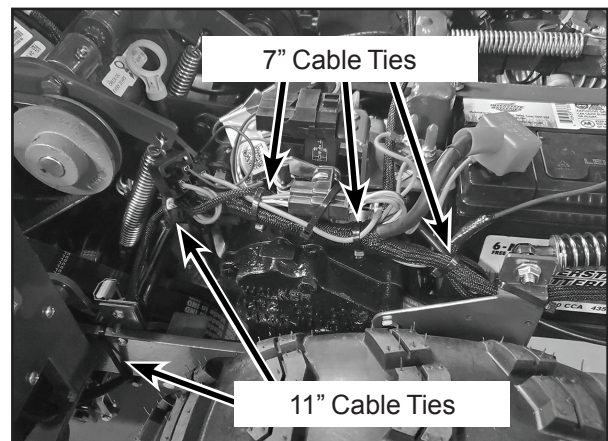
NOTE: It is recommended to use dielectric grease on the wire harness connectors to ensure a good connection, and to prevent dust and moisture from entering the plugs.



Blue Power Connector

31. Route the harness along the main harness to the battery wrapping it once around the harness to help incorporate it. Use three (3) 7" cable ties (P/N 5975-3) and two (2) 11" cable ties (P/N 5975-7) to secure it as shown in the **Route Wire Harness** photo.

NOTE: Tractors with ROPS will use one (1) 17" cable tie (P/N 5975-8) instead an 11" cable tie in to secure the harness to the ROPS mount as it goes under the chassis.

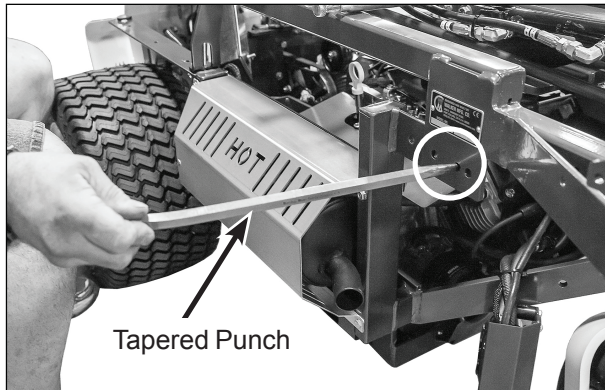


Route Wire Harness

32. Connect the battery cables and the red (+) and black (-) leads of the Hi-Dump harness to the battery. **Connect the red (+) lead first.** Install a cable tie (P/N 5975-1) on both battery terminal insulators if the tractor came with cable ties on the insulators; otherwise, they are not necessary.
33. Turn the ignition switch to the **ON (RUN)** position and use the **LIFT** control switch to carefully raise the Hi-Dump to the full **UP** position.

Installation Instructions

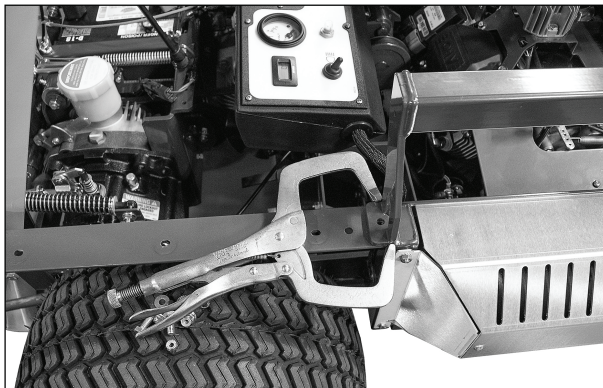
34. Using a tapered (drift) punch, align the left-rear Hi-Dump mounting holes to the chassis as shown in the **Align LH Mounting Holes** photo.



Align LH Mounting Holes

35. Secure the **left front** Hi-Dump mount at the instrument panel guard mount point using a 5/16-18 x 3/4 (P/N F034) hex bolt and a 5/16-18 (P/N F009) whiz locknut. Leave the bolt loose; DO NOT tighten.

NOTE: If the Hi-Dump mounting hole is not present in the chassis, it will be necessary to clamp the mount in place and drill a 5/16 in. (8 mm) hole using the Hi-Dump mount as a guide.



Clamp LH Front Hi-Dump Mount

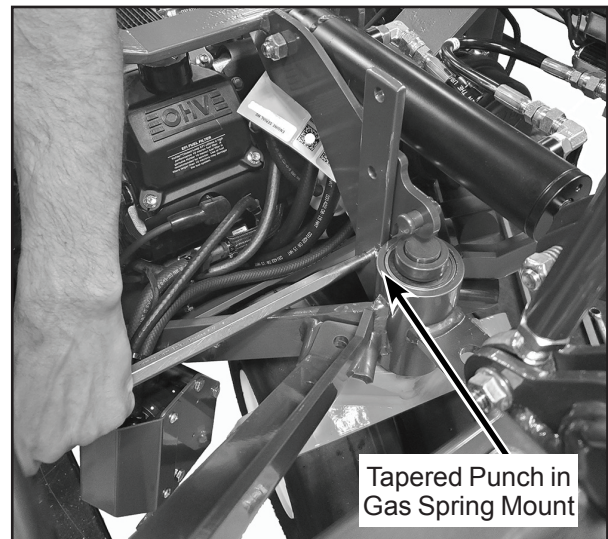
36. Return to the left-rear Hi-Dump mounting holes, install finger tight a 3/8-16 x 1-1/8 hex bolt (P/N F596) and 3/8-16 flange top lock nut (P/N F570) in the rear hole. Remove the punch and install a second F596 and F570.

NOTE FOR MD TRACTORS: Reinstall the tailpipe on the second bolt that goes through

the first hole. Leave bolts loose; DO NOT tighten.

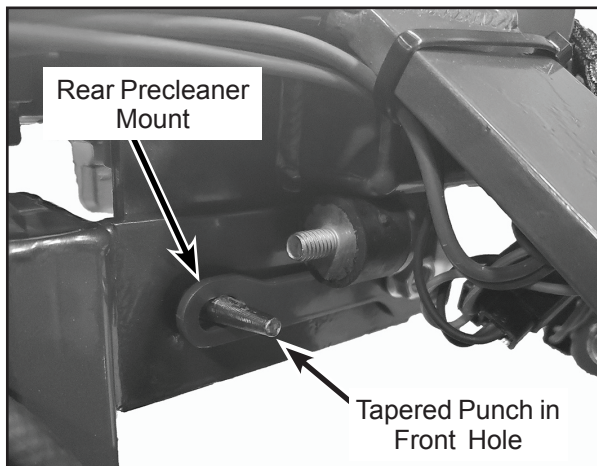
NOTE FOR E-SERIES TRACTORS (CA ONLY): Reinstall the carbon canister at this point. See the **E-Series Tractor Supplement** on page 25 for more details.

37. Position a tapered punch in the lower hole of the gas spring mount in front of tailwheel pivot housing as shown in the **Align Gas Spring Mount and Bumper Bridge Mount Holes** photo.



Align Gas Spring Mount and Bumper Bridge Mount Holes

38. With the tapered punch still in the gas spring mount, use a second tapered punch to align the front hole on the right-rear Hi-Dump mount. With the punch in place, position the rear precleaner mount (previously removed from the tractor) inside the chassis as shown in the **Rear Precleaner Mount on RH Side** photo, and install the rear 3/8-16 x 1-1/8 hex bolt (P/N F596) and 3/8-16 flange top lock nut (P/N F570) snug tight; do not over-tighten. Then remove the punch, and install finger tight the front bolt and nut. DO NOT tighten.

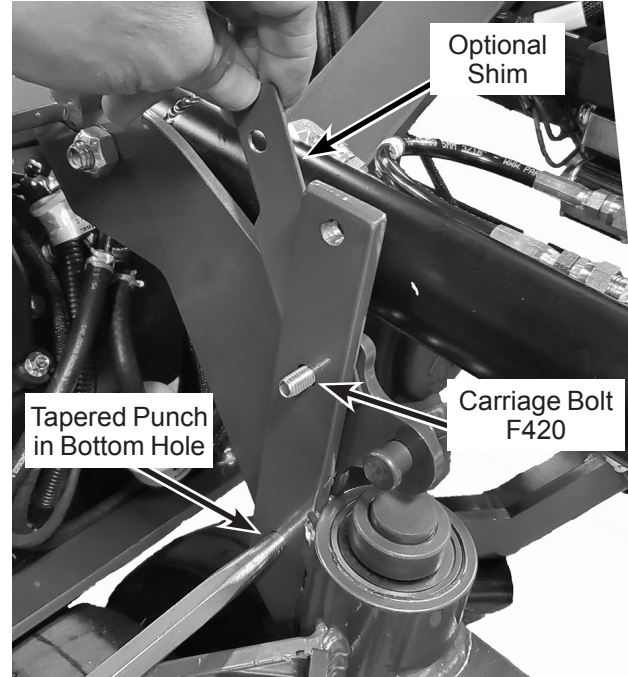


Rear Precleaner Mount on RH Side
(View from Inside Chassis)

39. Check for a gap between the gas spring mount and the Hi-Dump bumper bridge mount. Use the optional upright shim (P/N 8400-39) if the gap is large enough to easily accommodate it. If the space is too tight to easily fit the optional shim, it is not necessary.
40. Install a 5/16-18 x 1-1/4 carriage bolt (P/N F420) with the head towards the hydraulic cylinder and a 5/16-18 flange top lock nut (P/N F551) through the top hole of the bumper bridge mount including the top hole of the upright shim if applicable. The shim will rotate down into place once the punch is removed. Be sure to orient the shim correctly. The notched bottom corner of the shim accommodates the tailwheel pivot housing when it is installed. See the **Carriage Bolt in Gas Spring Mount** photo for details.

IMPORTANT: To avoid damage, the carriage bolt (P/N F420) must be installed with the head towards hydraulic cylinder.

FOR T25i/T27i TRACTORS: Reinstall the fuel pump mount on the LH side of the gas spring mount in this step.



Carriage Bolt in Gas Spring Mount

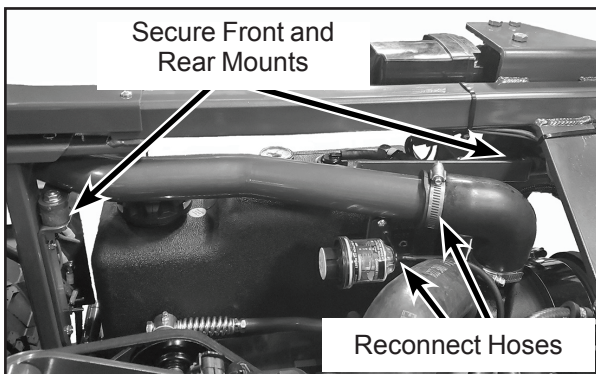
41. Align the holes where the bumper upright supports rest on the bumper mount pads. Starting with the LH side, secure finger tight with an 7/16-14 x 1-1/8 hex bolt (P/N F592), 7/16 SAE washer (P/N F256), and 7/16-14 flange top lock nut (P/N F591) on each side.

IMPORTANT: A production change was made at tractor S/N 2018-151222, and A21 S/N 2018-5402 that enlarged the hole from 3/8 in. to 7/16 in. It is possible that the Hi-Dump kit bumper and the tractor chassis could have differing hole dimensions. If hole dimensions are different, drill the smaller hole to 7/16 in.

42. Fully tighten all nuts and bolts.
43. Remove the punch from the bottom hole of the gas spring mount and install the 5/16-18 x 1-1/4 hex bolt (P/N F035) and the 5/16-18 flange top lock nut (P/N F551). Fully tighten.
44. Install the anti-scuff roller wheels removed from the original bumper. Fully tighten.

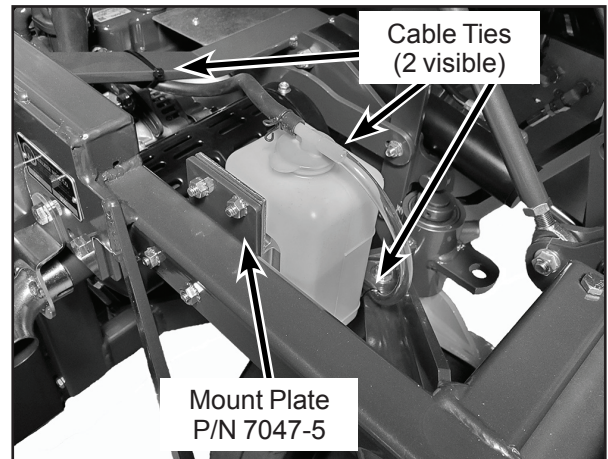
Installation Instructions

45. Reinstall the panel guard using two (2) 5/16-18 x 3/4 hex bolt (P/N F034) and the 5/16-18 whiz locknuts (P/N F009). Reinstall the instrument panel using the three (3) additional F009 whiz locknuts to secure it to the chassis. Fully tighten locknuts.
46. Reinstall the precleaner tube using replacement 5/16-18 whiz locknuts (P/N F009). Fully tighten. Reconnect the precleaner elbow using the existing hose clamp (P/N 7840-5) and slide on the air flow indicator hose. Use a spray lubricant such as alcohol to make sure both hoses get fully seated.



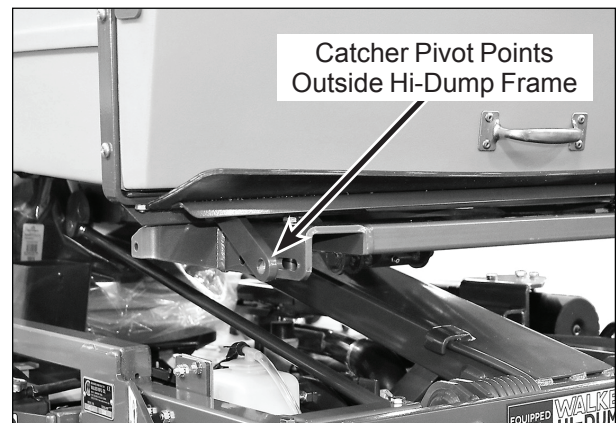
Reinstall Precleaner

47. **FOR MD TRACTORS:** Install the coolant recovery tank mount plate (P/N 7047-5) using two (2) 1/4-20 x 2 PFH bolts (P/N F402) and 1/4-20 keps nuts (P/N F004) provided. Then secure the coolant recover tank to the mount plate using 1/4-20 x 3/4 PFH bolts (P/N F104) and 1/4-20 keps nut (P/N F004) provided. Fully tighten the hardware. Secure the hose to the frame using three (3) 7" cable ties (P/N 5975-3). Make sure the cable ties are not so tight as to restrict coolant from flowing through the hose.



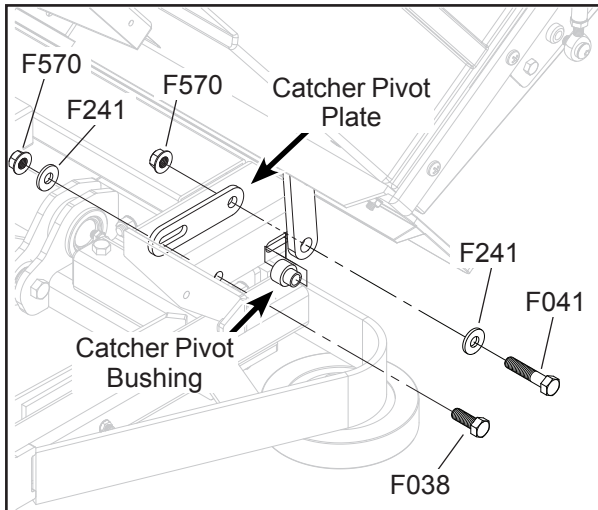
MD Coolant Recovery Tank

48. Lower the front body. Turn the ignition switch to the **ON (RUN)** position and use the **LIFT** control switch to lower the Hi-Dump to within 6-8 in. (15-20 cm) of the **DOWN** position.
49. Place the Engine Exhaust decal (P/N 8600-5) on the LH bumper strap.
50. Carefully place the catcher assembly on the Hi-Dump frame as shown in the **Install Catcher Box Assembly** photo.



Install Catcher Box Assembly

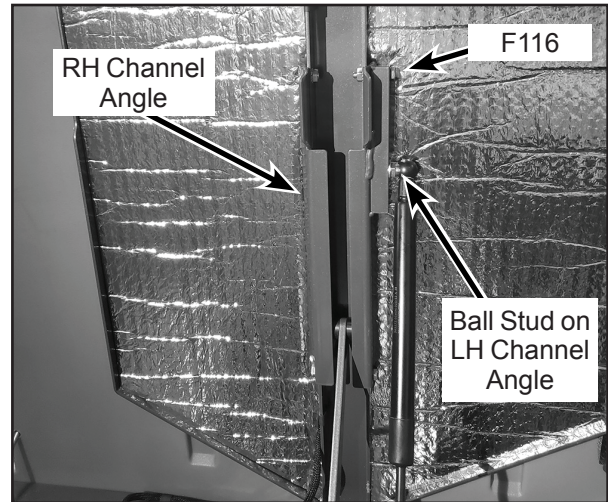
51. Install finger tight the catcher pivot plates (previously removed) using the hardware identified in the **Install Catcher Pivot Plates** illustration including the catcher pivot bushings (previously removed). **DO NOT** tighten.



Install Catcher Pivot Plates

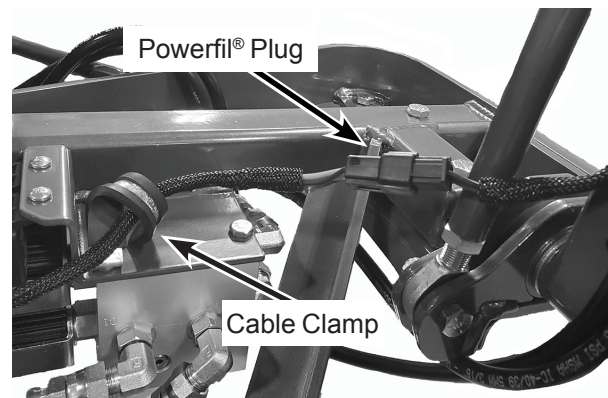
52. Using the **LIFT** switch, lower the assembly to the full down position. Align the catcher box to the GHS body chute (blower discharge chute). Make sure there is clearance on all sides. Make sure the catcher pivot arm is centered in the channel. **Fully tighten** the catcher pivot plate hardware.
53. Raise the catcher box half way up using the **LIFT** switch, and position it at a 45 degree angle using the **DUMP** switch. Attach the RH and LH channel angles (P/N 8404-12 and 8404-13) to the catcher frame support with the three (3) 1/4-20 x 1/2 (P/N F029) hex bolts, one (1) 1/4-20 x 1-1/4 hex bolt (P/N F116) and four (4) 1/4-20 (P/N F004) keps nuts.

NOTE: The channel angle with the ball stud mount attaches to the left side.



Install Power Dump Arm Channel Angles

54. Install the gas spring from step 2 and use the spring clips to secure it.
55. Plug the catcher adapter harness (P/N 8440-1) into the main tractor harness and the Powerfil® harness below the catcher box. Secure the catcher adapter harness with the cable clamp mounted above the manifold valve assembly as shown in the **Plug in Powerfil Harness** photo.



Plug in Powerfil Harness

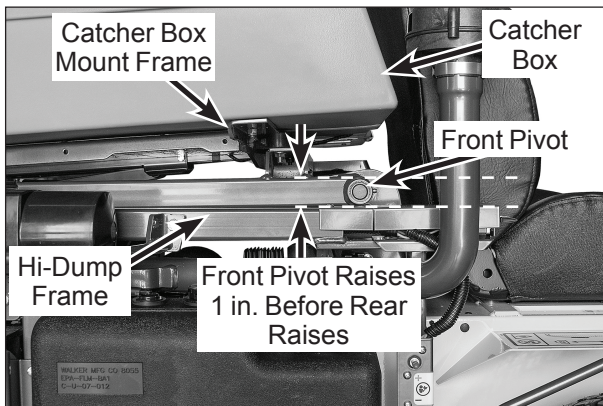
56. Place the threaded end of the power dump cable (#10, P/N 8623-2) through the holes drilled in to bottom of the catcher box. Install a 1/4-28 hex nut (P/N F003) as a jam nut on each end about half way up the threads and attach the ball joints (#11, P/N 5552) on each end. Keep the jam nut loose. Secure each ball joint to Hi-Dump frame bracket on the catcher frame with a 1/4-28 keps nut (P/N F287) nut.

Installation Instructions

57. Tilt the catcher to the full back position using the **DUMP** switch. Check the tension of both Powerfil cables. The tension should be equal. Adjust accordingly with the ball joints. Tighten the jam nuts.
58. With the ignition switch in the **ON (RUN)** position and the PTO engaged, check the operation of the Powerfil.

NOTE: Check that the spout is oscillating and the switch triggers the full signal horn to sound when the vane is pushed toward the LH direction while oscillating. Adjust the height of the vane if necessary to cause the horn to sound when the catcher box is full.

59. Use the **LIFT** and **DUMP** control switches to make sure the system operates properly.
60. Check the lift operation of the Hi-Dump. The front pivot should lift approximately 1 in. (2.5 cm) before the rear starts to rise as shown in the **Check Lift Operation** photo. If this does not occur, the control rods will need to be adjusted.



Check Lift Operation

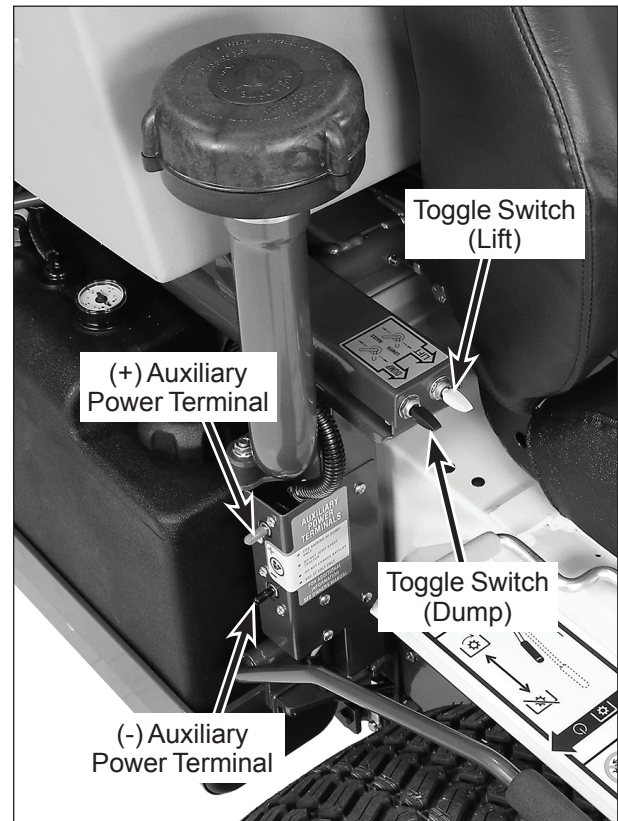
NOTE: The control rods and ball joints have RH and LH threads. They can be adjusted by loosening the jam nuts and turning the rod.

- If the front of the catcher raises more than 1 in. (2.5 cm) before the back raises, shorten the control rods. The rods need to be adjusted **equally**.
- If the back of the box raises before the front raises 1 in. (2.5 cm) or the back of the box is slightly raised in the full down position (not contacting the rear bumpers), lengthen the control rods. The rods need to be adjusted **equally**.

OPERATION

The operator raises and dumps the GHS catcher box while sitting in the seat. Two toggle switches operate independent hydraulic cylinders to raise, lower, and dump the catcher. The back door automatically opens and closes during the dump cycle.

NOTE: The ignition switch must be in the **ON (RUN)** position for the Hi-Dump® system to operate.



Lift/Dump Control Switches and Auxiliary Power Terminals

Hold the Lift toggle switch **UP** or **DOWN** to **RAISE** or **LOWER** the catcher. Hold the Dump toggle switch **UP** to **DUMP** the catcher and **down** to return to the normal operating position. The catcher may be dumped at any raised position (Normal Operating - Intermediate - Fully Raised).

NOTE: If grass tends to hang up in the catcher after raising the catcher with the Hi-Dump®, “jiggle” the steering levers and make the tractor bounce a little to loosen the grass and make it slide out of the catcher.

NOTE: With the Hi-Dump® mechanism in the normal operating position (catcher down), the catcher can be **manually raised**. In the case of a dead battery, use the auxiliary power terminals to charge/boost the battery to operate the Hi-Dump®.



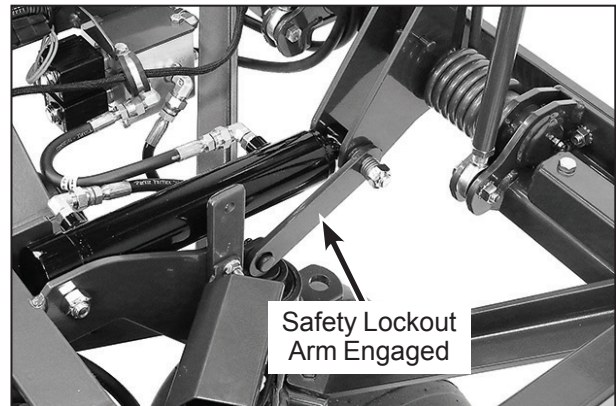
CAUTION

The operator should be in the seat with the machine in the **NEUTRAL-PARK** Position and the parking brake engaged and bystanders stay clear when the Hi-Dump® is operating. To avoid tipping over, the machine should be parked on **LEVEL GROUND** when raising/dumping the catcher with Hi-Dump®. Do not attempt to use the optional dump bag or any other bag with the Hi-Dump®.



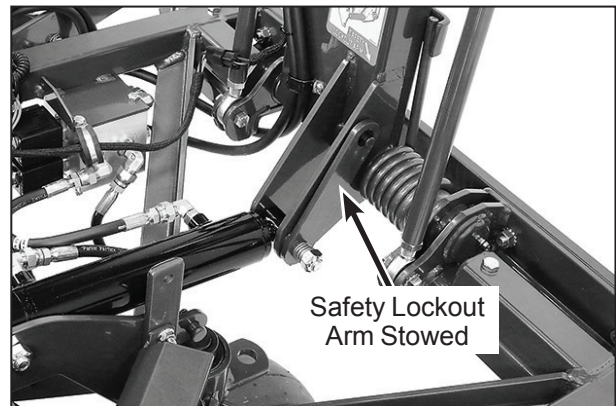
WARNING

When the Hi-Dump® is in the **RAISED** position for access to the engine and drivetrain, always **ENGAGE** the safety lock before service or repair work. Remember to **DISEN-GAGE** the lock before resuming operation of the Hi-Dump® (to avoid damaging the lock mechanism).



Safety Lockout Arm Engaged

Safety Lockout Arm Engaged Position



Safety Lockout Arm Stowed

Safety Lockout Arm Disengaged Position

MAINTENANCE

Regular maintenance and adjustments keep the Hi-Dump® performing optimally. This section provides details on how to perform these tasks.

ADJUSTMENTS

Catcher Box Clearance with Body Chute Adjustment

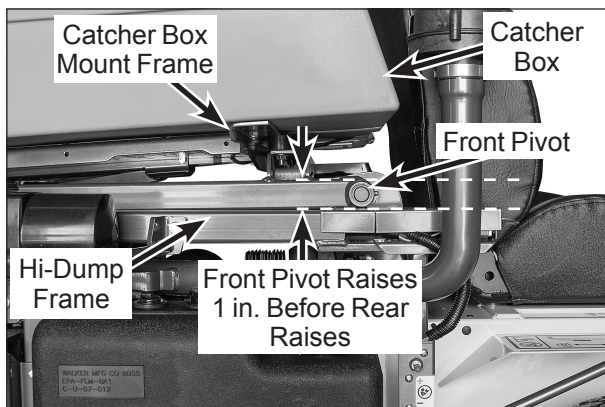
- Using the **Lift** switch, lower the catcher assembly to the full down position. Check alignment of the catcher box to the GHS body chute (blower discharge chute). Make sure there is clearance on all sides.
- To adjust clearance, loosen the bolts on both of the catcher pivot plates (P/N 7517-3) and position the catcher for proper clearance with the body chute. Re-tighten the pivot plate bolts.

Door Opening Cable Tension Adjustment

- Tilt the catcher to the full back position using the **DUMP** switch. Check the tension of both cables. The tension should be equal. Adjust accordingly with the ball joints. Tighten the jam nuts.

Control Lift Rod Adjustment

- Check the lift operation of the Hi-Dump®. The front pivot should lift approximately 1 in. (2.5 cm) before the rear starts to rise as shown in **Check Lift Operation** photo. If this does not occur the control rods will need to be adjusted.



Check Lift Operation

NOTE: The control rods and ball joints have RH and LH threads. They can be adjusted by loosening the jam nuts and turning the rod. If the front of the catcher raises more than 1 in. (2.5 cm) before the back raises, shorten the control rods. The rods need to be adjusted equally. If the back of the box raises before the front raises 1 in. (2.5 cm) or the back of the box is slightly raised in the full down position (not contacting the rear bumpers), lengthen the control rods. The rods need to be adjusted equally.

CHECKING OIL LEVEL

To check the oil in the hydraulic power unit, remove the plug from the unit and insert an Allen wrench (as a dipstick) until it touches the reservoir mounting bolt that runs through the center of the reservoir. Oil level should be approximately 1/2 in. to 3/4 in. above the bolt. To add hydraulic oil, use Chevron Rykon Premium Oil ISO 68 or equivalent. System capacity is 32 oz. (.95 liters) if system is completely empty.

NOTE: To completely fill, or refill, the hydraulic system, **DO NOT** fill with 32 oz. initially. When filling, add about 22 oz., operate the system and allow oil to flow throughout the system. Then, continue filling the reservoir with the additional 10 oz.

LUBRICATION

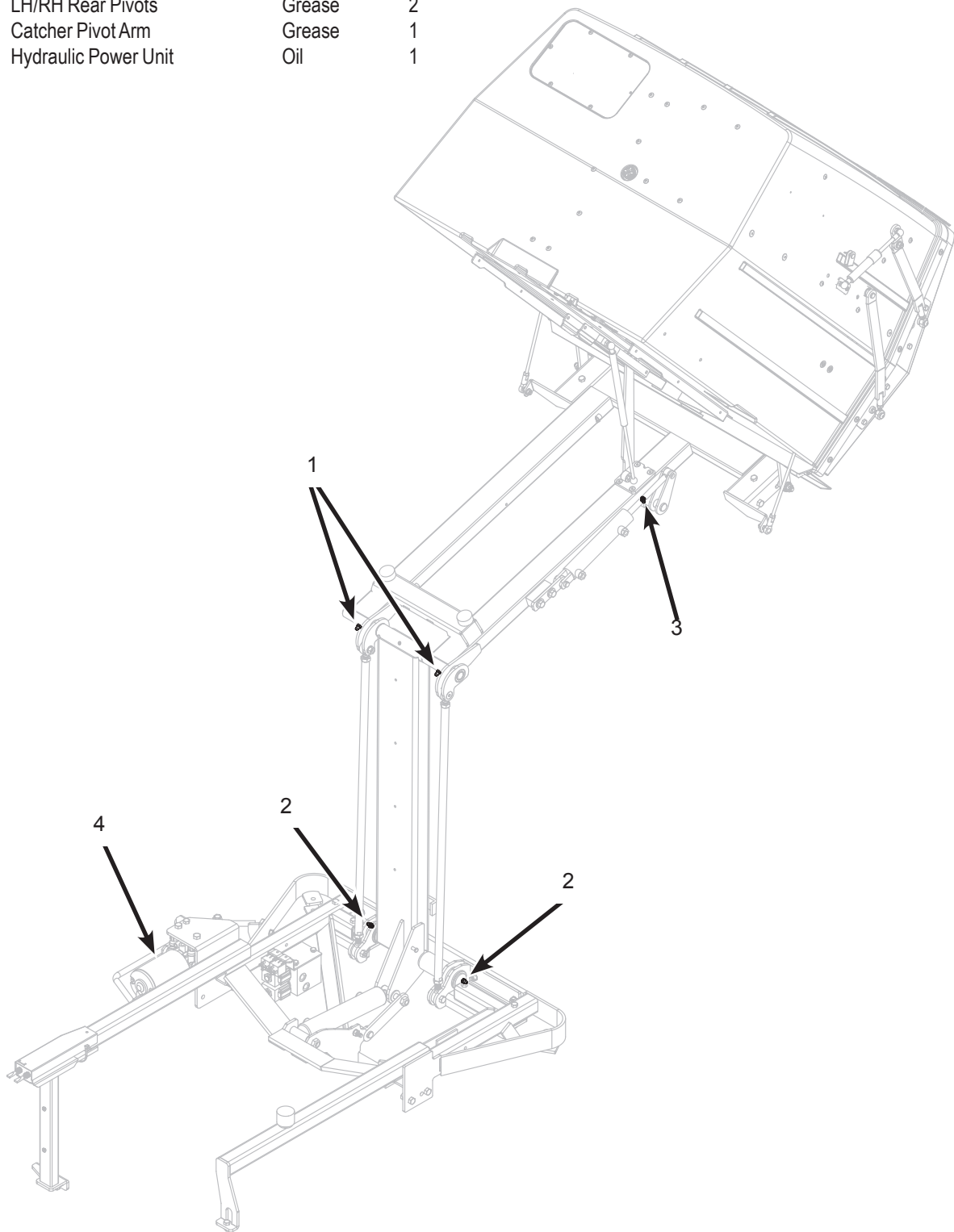
WARNING

DO NOT attempt to lubricate the machine with the tractor engine running. Disengage the PTO clutch, shut off the machine, and remove the ignition key.

Proper lubrication is an important maintenance procedure. It reduces wear and makes the machine quieter and easier to operate.

NOTE: Tractor Lubrication Points are not shown here. For Tractor Lubrication Points, refer to your Tractor's Operator's Manual. If you do not have an Operator's Manual, you can download a copy at www.walker.com.

Ident No.	Location	Lubrication Type	No. Places
1	Hi-Dump® Catcher Frame	Grease	2
2	LH/RH Rear Pivots	Grease	2
3	Catcher Pivot Arm	Grease	1
4	Hydraulic Power Unit	Oil	1



Grease Fitting and Oil Point Lubrication Point Diagram

A21 ASSEMBLY PARTS LIST

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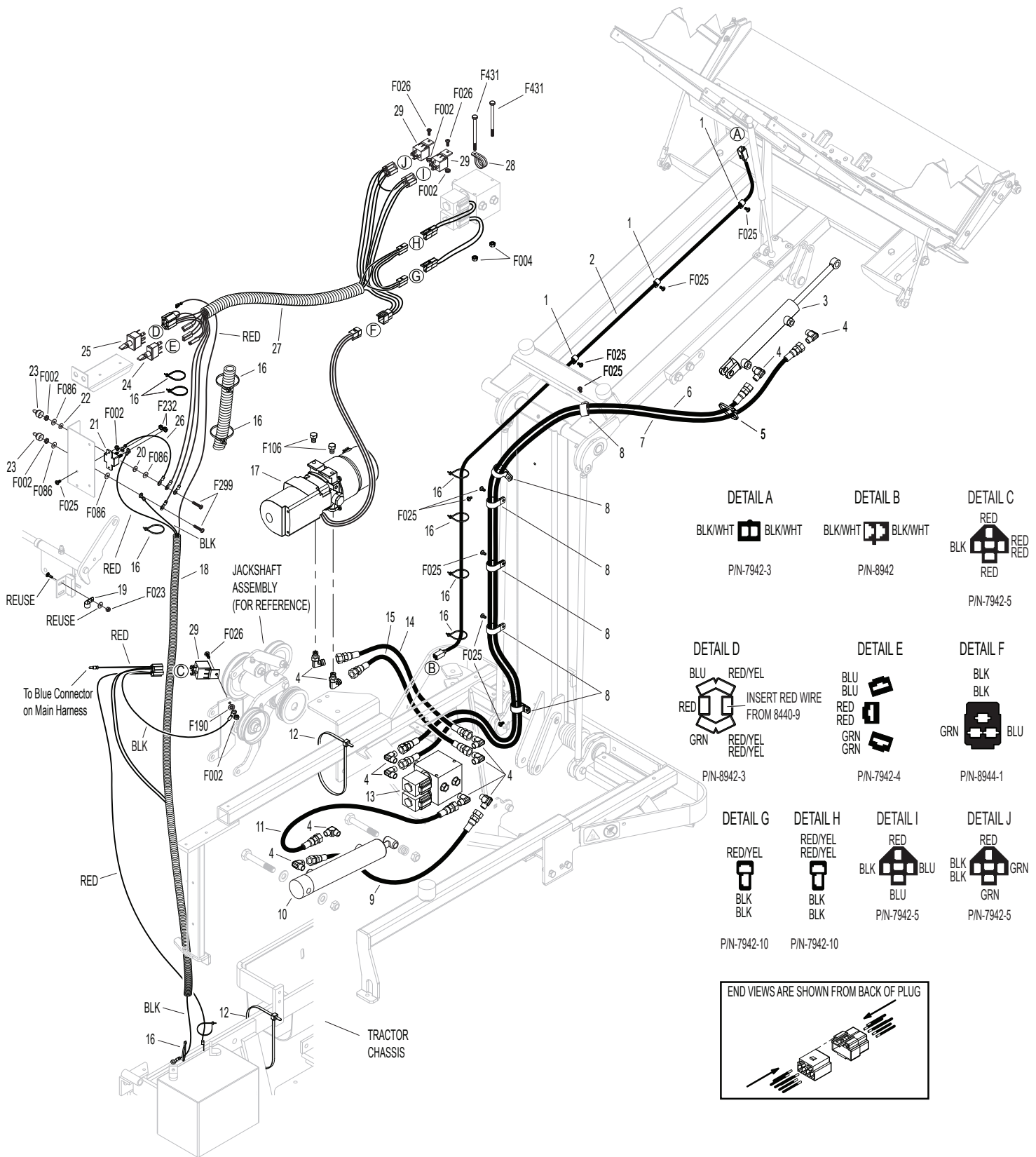
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A21 HYDRAULIC AND ELECTRICAL COMPONENTS PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
1	5833	Cable Clamp (1/4)	3		F002	10-24 Keps Nut	5
2	8440-1	Catcher Adapter Harness	1		F004	1/4-20 Keps Nut	2
3	8404	Dump Cylinder (Includes Item # 4)	1		F023	10-24 ESNA Nut	1
4	8403-7	90° Fitting	12		F025	10-24 x 3/8 PPHMS	11
5	5975-3	Cable Tie (50# x 7")	1		F026	10-24 x 1/2 PPHMS	3
6	8403-5	Hydraulic Hose, Catcher Box Dump (67.5)	1		F028	10-24 x 3/4 PPHMS	4
7	8403-6	Hydraulic Hose, Catcher Box Dump (73.5)	1		F086	#10 SAE Washer	4
8	5835	Cable Clamp (3/4)	6		F106	3/8-16 x 5/8 Hex Bolt	2
9	8403-3	Hydraulic Hose, Lift/Rear (11.5)	1		F190	#10 Internal Star Lock Washer	1
10	8404-1	Lift Cylinder	1		F299	10-24 x 1 PPHMS	2
11	8403-2	Hydraulic Hose, Lift/Front (16)	1		F431	1/4-20 x 3-1/2 Hex Bolt	2
12	5975-7	Cable Tie (50# x 11")	2				
13	8403-25	Manifold Valve Assembly (Includes Item # 4)	1				
14	8403-4	Hydraulic Hose, Valve to Pump (17-1/2) A/UP	1				
15	8403-20	Hydraulic Hose, Valve to Pump (17-1/2) B/DN	1				
16	5975-1	Cable Tie (18# x 3-3/4")	11				
17	8403-19	Hydraulic Power Unit (Includes Item # 4)	1				
18	8440-9	Hi-Dump Harness	1				
19	5832-2	Cable Clamp (3/8) .203 Hole	1				
20	8401-15	Nylon Shoulder Washer	1				
21	7941	Circuit Breaker 40 Amp (Auto Reset/Sealed)	1				
22	8401-16	Flat Nylon Washer	1				
23	8404-14	Plastic Cap/Black	2				
24	6623-22	Toggle Switch/SP	1				
25	6623-21	Toggle Switch/DP	1				
26	8440-3	Jumper Wire	1				
27	8440-8	Wire Harness/Hi-Dump	1				
28	7833	Cable Clamp (7/8 x 1/4)	1				
29	6941-8	Relay Switch 60/40 Amp	3				

A21 HYDRAULIC AND ELECTRICAL COMPONENTS PARTS DIAGRAM



Beginning S/N 2018-5524
Use only genuine **Walker®** replacement parts.

E-SERIES TRACTOR SUPPLEMENT

This section covers addition information unique to installing the Hi-Dump on E-Series tractors.

ADDITIONAL NECESSARY PARTS

The carbon canister must be relocated to the LH side of the tractor to accommodate the Hi-Dump. This will require the following additional components:

MT23 Components

- **Qty 1 - 8044-14**, Carbon Canister Hi-Dump Mount
- **M355**, Carb Line, 94" (2.4 m)
- **Qty 2 - 5975-7**, Cable Tie (50# x 11") to secure the line to the bridge
- **Qty 2 - 5975-11**, Cable Tie (120# x 18") to secure the canister to the mount
- **Qty 2 - 5879-10**, Stepless Ear Clamp (13/32) to secure the line between the engine and the PURGE connector on the canister
- **Qty 1 - 7832**, Wire Clamp (13/16 x #10) to secure the lines to the engine
- **Qty 1 - M6-1.0 x 10mm bolt** to mount the clamp

MT27i Components

- **Qty 1 - 8044-14**, Carbon Canister Hi-Dump Mount
- **M355**, Carb Line, 88" (2.3 m)
- **Qty 2 - 5975-7**, Cable Tie (50# x 11") to secure the lines to the bridge
- **Qty 2 - 5975-11**, Cable Tie (120# x 18") to secure the canister to the mount
- **Qty 1 - 5879-10**, Stepless Ear Clamp (13/32) to secure the engine line to PURGE connector on the canister

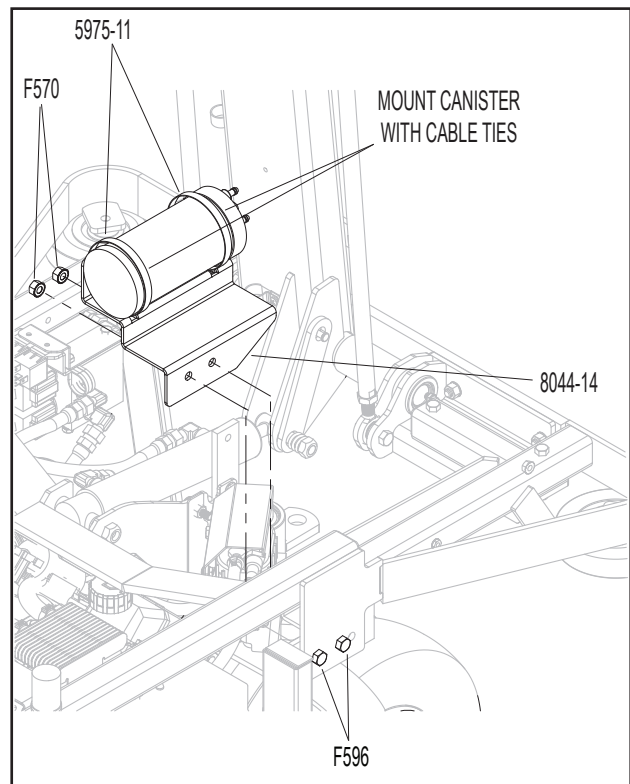
REMOVE THE CARBON CANISTER

1. Cut the cable ties and remove the canister from the mounting bracket.
2. Disconnect the carb lines from the canister, and set the canister aside. Continue with the Hi-Dump installation.

INSTALL THE CARBON CANISTER

Install the Canister Mount (MT23/MT27i):

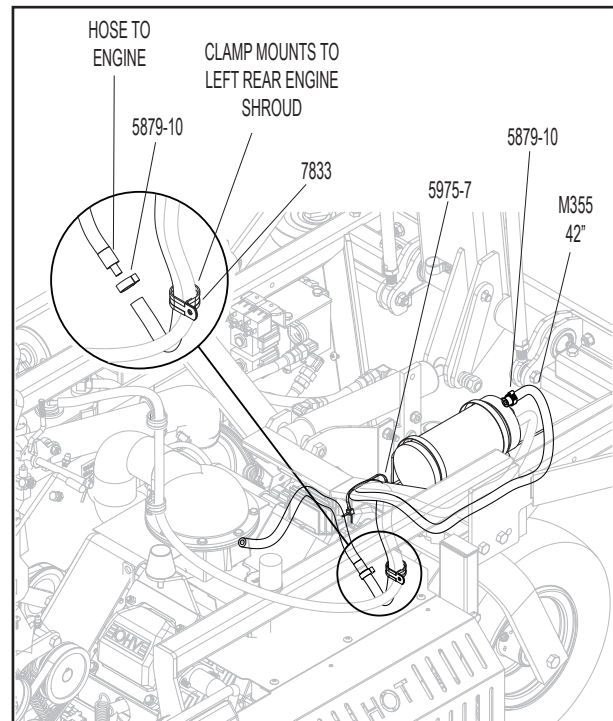
1. Secure the carbon canister to the new Carbon Canister Hi-Dump Mount (P/N 8044-14) using the 18" cable ties (P/N 5975-11).
2. Install the new mount on the inside of the chassis using the 3/8-16 x 1 hex bolt (P/N F038) and 3/8-186 flange top lock nut (P/N F570) hardware.



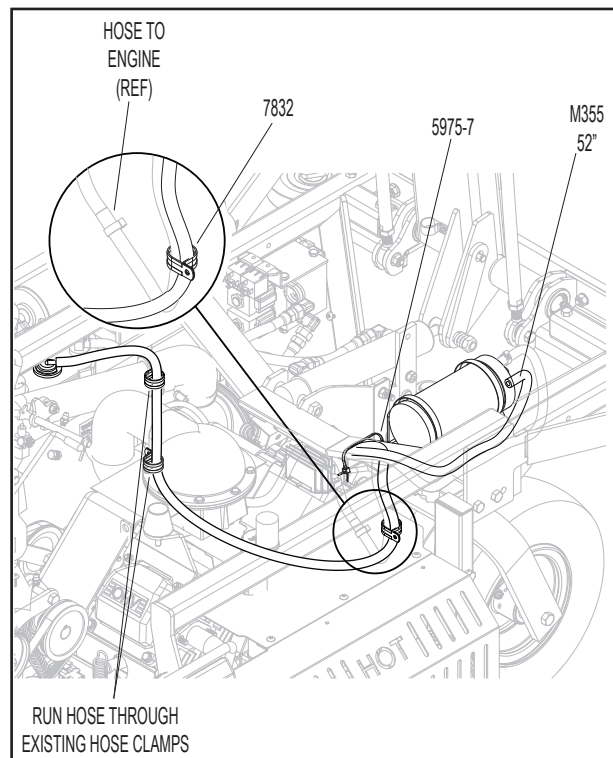
Mount CARB Canister

Route and Install Carb Line For the MT23:

1. Divide the carb line into two pieces 52" (132 cm) and 42" (107 cm).
2. Locate the carb line that originally ran between the canister to the engine. It connects to the engine at to a straight connector. Disconnect the line and remove it from the two (2) clamps riveted to the bumper support weldment behind the fuel tank.
3. Remove the original carb line from the gas tank and install the replacement 52" (132 cm) piece of carb line on the gas tank. Be sure to fully seat the hose on the connector. Feed the new carb line through the riveted clamps on the bumper support weldment.
4. Install the shorter piece of replacement carb line on the engine connector. Fully seat it. Secure it with a stepless ear clamp (5879-10).
5. Install the wire clamp (P/N 7832) on the LH rear engine shroud in a vacant hole using the M6-1.0 x 10mm bolt with the hose lines routed together through the clamp and up under the canister.
6. Use a cable tie to secure the hoses to the bottom of the Hi-Dump mount bridge cross plate.
7. Run the lines under the cannister and attach them to the connectors. The engine line goes to the connector labeled **PURGE** and gets secured with a stepless ear clamp (P/N 5679-10) and the gas tank line goes to the connector labeled **TANK**.



MT23 Engine to Canister Line

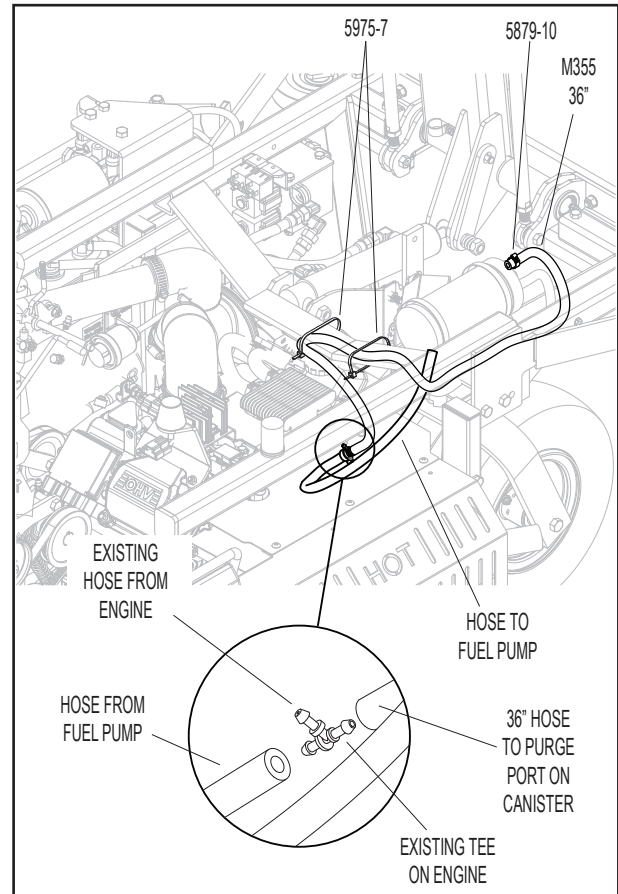


MT23 Gas Tank to Canister Line

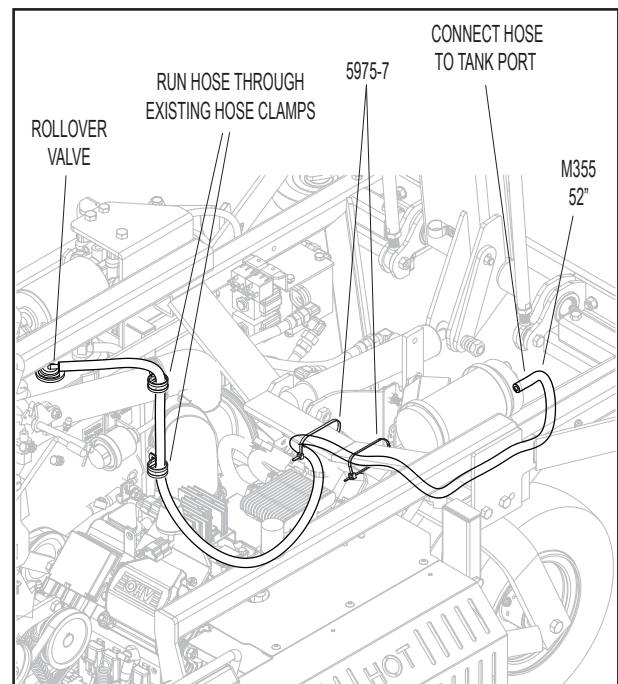
E-Series Supplement

Route and Install Carb Line For the MT27i:

1. Divide the carb line into two pieces: 52" (132 cm) and 36" (91 cm).
2. Locate the carb line that originally ran between the canister to the engine. It connects to the engine at to a T-connector. Disconnect the line and remove it from the two (2) clamps riveted to the bumper support weldment behind the fuel tank.
3. Remove the original carb line from the gas tank and install the replacement 52" (132 cm) piece of carb line on the gas tank. Be sure to fully seat the hose on the connector. Feed the new carb line through the riveted clamps on the bumper support weldment.
4. Install the shorter piece of replacement carb line on the engine connector. Fully seat it. The MT27i T-connector is barbed and should not require a clamp.
5. Use cable tie(s) to secure the hoses to the bottom of the Hi-Dump mount bridge cross plate.
6. Run the lines under the cannister and attach them to the connectors. The engine line goes to the connector labeled **PURGE** and gets secured with a stepless ear clamp (P/N 5679-10) and the gas tank line goes to the connector labeled **TANK**.



MT27i Engine to Canister Line



MT27i Gas Tank to Canister Line

EARLY TRACTOR SUPPLEMENT

This section covers addition information unique to installing the Hi-Dump on earlier model tractors.

TRACTORS PRIOR TO 2018-149639

The Catcher Pivot Plate was previously a single component with the bolt and the plate together. They were separated and redesigned for increased strength. Tractors prior to this change will need to replace the Catcher Pivot Plate (P/N 7517-2) with the current style.

Parts Required

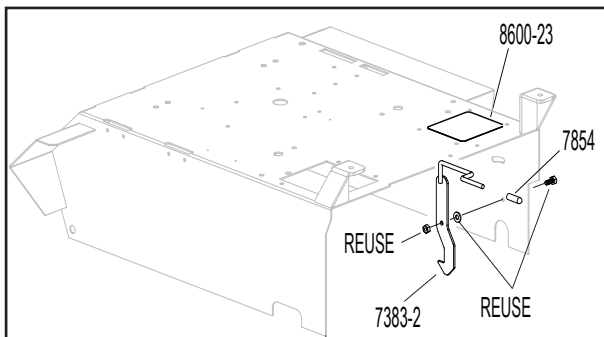
- Qty 2 - 7517-3, Catcher Pivot Plate

TRACTORS PRIOR TO 2017-147167

The Body Latch will need to be updated.

Parts Required

- Qty 1 - 8600-23, Decal,Danger Body Latch MT/MD (Symbolic)
- Qty 1 - 7383-2, Body Latch Hook
- Qty 1 - 7854, Plastic Tip/Red



TRACTORS PRIOR TO 2013-121062

The rear tire fork will need a spacer washer for clearance.

Parts Required

- Qty 1 - P/N 5842-1, Washer (1.0ID x 1.350OD)

ALL MTL TRACTORS

The coolant recover tank will need to be relocated to the left side of the Hi-Dump frame using the MTL adapter bracket and hardware as listed. This

bracket goes in the same location as the MD Mount Plate.

Parts Required

- Qty 1 - 8404-7, MTL Adapter Bracket
- Qty 2 - F398, 1/4-20 x 2 Hex Bolt
- Qty 2 - F002, 10-24 Keps Nut

MAINTENANCE AND SERVICE RECORD SHEET

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MAINTENANCE AND SERVICE RECORD SHEET

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LIMITED WARRANTY FOR WALKER A21 HI-DUMP®

1. What this warranty covers, and for how long:

Walker Manufacturing company will, at its option, repair or replace, without charge, any part covered by this warranty which is found to be defective in material and/or workmanship within one (1) year after date of sale to the original retail purchaser unless the product is used for rental purposes, in which case this warranty is limited to ninety (90) days. At Walker's request, customer will make the defective part available for inspection by Walker and/or return the defective part to Walker, transportation charges prepaid. All parts and components of the Walker Hi-Dump® are covered by this warranty.

2. What this warranty does not cover:

A. This warranty does not cover defects caused by depreciation or damage caused by normal wear, accidents, improper maintenance, improper use or abuse of the product, alterations, or failure to follow the instructions contained in the Operator's Manual for operation and maintenance.

B. The customer shall pay any charges for making service calls and/or for transporting the attachment to and from the place where the inspection and/or warranty work is performed.

3. How to obtain service under this warranty:

Warranty service can be arranged by contacting the dealer where you purchased the machine or by contacting Walker Manufacturing Company, 5925 East Harmony Road, Ft. Collins, CO 80528. Proof of the date of purchase may be required to verify warranty coverage.

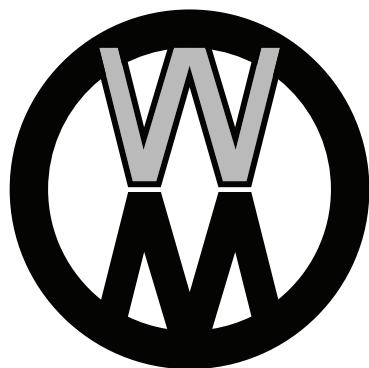
4. Warranty limitation:

A. THERE IS NO OTHER EXPRESS WARRANTY. ANY WARRANTY THAT MAY BE IMPLIED FROM THIS PURCHASE INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IS HEREBY LIMITED TO THE DURATION OF THIS WARRANTY AND TO THE EXTENT PERMITTED BY LAW ANY AND ALL IMPLIED WARRANTIES ARE EXCLUDED. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

B. WALKER WILL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES AND/OR EXPENSES IN CONNECTION WITH THE PURCHASE OR USE OF THE MACHINE. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation(s) or exclusion(s) may not apply to you.

C. Only the warranty expressed in this limited warranty shall apply and no dealer, distributor, or individual is authorized to amend, modify, or extend this warranty in any way. Accordingly, additional statements such as dealer advertising or presentations, whether oral or written, do not constitute warranties by Walker, and should not be relied upon.

D. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



WALKER

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