

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 machine 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, President

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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, WARN-ING, 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:

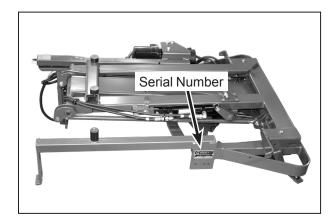
- FORWARD SPEED CONTROL (FSC) controls the maximum forward speed of the tractor; functioning as a cruise control.
- GRASS HANDLING SYSTEM (GHS®) collects mowed material and deposits it in the catcher.
- HI-DUMP® is a power lifting and dumping mechanism for the GHS catcher box controlled from the operator's 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)

General Information

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

A21 HI-DUMP® KIT

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.

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 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

1. Read and understand the contents of this Operator's Manual before starting and operating the machine. Become thoroughly familiar with all machine controls and how to stop the machine and disengage the controls guickly. Replacement Operator's Manuals are available by sending the Model and Serial Number to:

Walker Manufacturing Company 5925 East Harmony Road Fort Collins, CO 80528

- 2. Never allow children to operate rider mower. Do not allow adults to operate without proper instruction.
- 3. Clear the area to be mowed of any foreign objects which may be picked up and thrown by cutter blades. Pick up all sticks, stones, wire, and any other debris.
- 4. Keep everyone, especially children and pets, a safe distance away from the area being mowed. Do not mow with bystanders in the area.
- 5. Do not operate the machine barefoot or wearing sandals, sneakers, tennis shoes, or similar lightweight footwear. Wear substantial protective footwear.

- 6. Do not wear loose fitting clothing that could get caught in moving parts. Do not operate this machine while wearing shorts; always wear adequate protective clothing, including long pants. Wearing safety glasses, safety shoes, and a helmet is advisable and required by some local ordinances and insurance regulations.
- 7. Prolonged exposure to loud noise can cause impairment or loss of hearing. Operator hearing protection is recommended; particularly for continuous operation of the GHS Model due to blower noise level. Wear a suitable hearing protective device, such as earmuffs or earplugs.
- 8. Keep all protective shields and safety devices in place. If a protective shield, safety device, or decal is damaged, unusable, or missing, repair or replace it before operating the machine.
- 9. Be sure interlock switches are functioning correctly, so the engine cannot be started unless the Forward Speed Control lever is in the **NEUTRAL-PARK** position, the PTO clutch is in the **DISENGAGED** position, and the Parking Brake in the ENGAGED position. Also, the engine should stop if the operator lifts off the seat with any one or more of these controls in the operating position: (1) Forward Speed Control (FSC) out of NEUTRAL-PARK, (2) PTO Clutch ENGAGED, or (3) Parking Brake DISENGAGED.

NOTE: There is a 1/2 second time delay function on the seat switch to avoid engine power interruption when driving over bumps.

- 10. Handle gasoline with care. Gasoline is highly flammable and its vapors are explosive:
 - a. Use an approved fuel container.
 - b. Never add fuel to a running engine or hot engine (allow hot engine to cool several minutes).
 - c. Keep matches, cigarettes, cigars, pipes, open flames, or sparks away from the fuel tank and fuel container.
 - d. Always fill the fuel tank outdoors using care. Fill to about one inch from the top of the tank. Use a funnel or spout to prevent spilling.
 - e. Replace the machine fuel cap and container cap securely and clean up any spilled fuel before starting the engine.

- 11. Never attempt to make any adjustments while the engine is running, except where specifically instructed to do so.
- 12. The electrical system battery contains sulfuric acid. Avoid any contact with skin, eyes, and clothing. Keep the battery and acid out of reach of children.



WARNING

This product can expose you to chemicals including Di-(2-ethylhexyl) phthalate which is known to the State of California to cause cancer, and Di-(2-ethylhexyl) phthalate, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

OPERATING

- 1. Operate the machine only in daylight or in good artificial light with good visibility of areas being mowed.
- 2. Sit on the seat when starting the engine and operating the machine. Keep feet on the deck footrests at all times when the tractor is moving and/or the mower blades are operating. Never operate the tractor without a deck or implement installed.
- 3. For a beginning operator, learn to steer (maneuver) the tractor with a slow engine speed before attempting any mowing operation. Be aware that, with the front mounted mower configuration, the back of the machine swings to the outside during turns.



DANGER

Do not operate around overhanging tree branches or bushes at the same height as the operator's torso and head where inadvertent contact may cause injury.

- 4. Remember, for an emergency stop, the forward motion of the tractor can always be stopped by pulling the Forward Speed Control (FSC) into the **NEUTRAL-PARK** position.
- 5. In case either of the transmission drive belts break during operation, and if the machine is on a slope, the machine will freewheel down the slope. To maintain control, immediately (1) Release the steering levers and simultaneously (2) Move the FSC to the NEUTRAL-PARK position. When the machine is stopped or moving slowly, engage the parking brake.

NOTE: The emergency stop procedure is exactly the same procedure used to normally stop and park the machine.

6. Disengage the PTO clutch and put the FSC in the **NEUTRAL-PARK** position before starting the engine (an ignition interlock switch normally prevents starting of the tractor if these controls are in the **OPERATING** position).

- Do not operate machine if the operator presence safety switch system is not working. Verify proper operation by having the operator lift off the seat with the engine running and moving three controls, one at a time; (1) Move the FSC lever out of the **NEUTRAL-PARK** position, (2) Engage the PTO Clutch, and (3) Disengage the Parking Brake. Moving any of these controls should stop the engine after a 1/2 second delay.
- 8. Do not run the engine in a confined area without adequate ventilation. Exhaust fumes are hazardous and can be deadly.
- Do not carry passengers maximum seating capacity is one (1) person.
- 10. Watch for holes, rocks, and roots in the terrain and for other hidden hazards. When mowing tall grass, mow higher than desired to expose any hidden obstacles. Then, clean the area and mow to the desired height.
- 11. Avoid sudden starts or stops. Before backing the machine up, look to the rear to be sure no one is behind the machine. Watch carefully for traffic when crossing or working near road-
- 12. When moving forward, **do not** suddenly put the tractor in reverse by rapidly pulling on the steering levers, especially when going downhill, as this can lift the tractor tail wheel off the ground and set up a bucking motion due to operator overcontrol. If bucking does occur, immediately stop the bucking action by pulling the Forward Speed Control (FSC) lever into the NEUTRAL-PARK position.
- 13. Disengage the blade drive when transporting the machine across drives, sidewalks, etc. Never raise the mower deck while blades are rotating.



DANGER

Do not mow or dump grass within 5 feet (1.5 meters) of an embankment or retaining wall with drop off.

- 14. The maximum recommended slope operating angle is 15 degrees or 26% grade. When operating the machine on a slope, reduce speed and use caution to start, stop, and maneuver. To prevent tipping or loss of control of the machine, avoid sharp turns or sudden changes in direction. Do not operate the machine on a slope greater than 15 degrees.
- 15. Never adjust cutting height with the engine running. Before adjusting cutting height or servicing, disengage the blade clutch (PTO), stop the engine, and remove the ignition key. Wait for all movement to stop before getting off the seat.

NOTE: A blade/blower brake should normally stop drive line rotation within five (5) seconds of disengaging the PTO clutch.

- 16. For side discharge mower decks, do not operate with the grass deflector shield removed. Keep the deflector in the lowest possible position.
- 17. When using the tilt-up deck, **observe the fol-lowing:**
 - a. Do not move tractor with deck in tilt-up position.
 - b. Never tilt body forward with deck in tilt-up position.
- 18. For GHS equipped models, do not operate the machine with the grass catcher in the DUMP position or with the back door OPEN. Dangerous projectiles may be thrown out of the discharge chute or the back of the grass catcher.
- 19. In case of a clogged or plugged mower deck or GHS catching system:
 - Disengage the blade clutch (PTO), engage the parking brake, and turn the engine off before leaving the seat.
 - b. **LOOK** to make sure blade drive shaft and blower drive pulley movement has stopped before trying to unclog the system.
 - c. Disconnect the spark plug wires.
 - d. Never place hands under the deck or in the GHS blower use a stick or similar tool to remove clogged material.

- 20. If the cutting blades strike a solid object or the machine begins to vibrate abnormally, immediately disengage the blade clutch (PTO), stop the engine, and wait for all moving parts to stop. To prevent accidental starting, disconnect the spark plug wires. Thoroughly inspect the mower and repair any damage before restarting the engine and operating the mower. Make sure cutter blades are in good condition and blade nuts are torqued to 60 lb·ft (81 N·m) for gear driven decks, and blade bolts torqued to 70 lb·ft (95 N·m) for belt driven decks.
- 21. Do not touch the engine or muffler while the engine is running or immediately after stopping the engine. These areas may be hot enough to cause serious burns.
- 22. When leaving the machine unattended, disengage the blade clutch (PTO), stop the engine, and remove the key.

INSTRUCTIONS FOR HI-DUMP® OPERATION

- 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®.

MAINTENANCE

- To prevent accidental starting of the engine when servicing or adjusting the machine, remove the key from the ignition switch and disconnect the fuel solenoid wire [diesel engines] or the spark plug wire(s) [gasoline engines].
- 2. **To reduce fire hazards**, keep the engine free of grass, leaves, excessive grease, and dirt.
- Keep all nuts, bolts, and screws tight to ensure the machine is in a safe, working condition. Check the blade mounting nuts frequently, making sure they are tight.
- Perform only maintenance instructions described in this manual. Unauthorized maintenance operations or machine modifications may result in unsafe operating conditions.
- If the engine must be running to perform a maintenance adjustment, keep hands, feet and clothing away from moving parts. Do not wear jewelry or loose clothing.
- Always use the proper engine service manual when working on the engine. Unauthorized maintenance operations or modifications to the engine may result in unsafe operating conditions.
- Altering the equipment or engine in any manner which adversely affects its operation, performance, durability or use will VOID the warranty and may cause hazardous conditions.
- 8. Never attempt to disconnect any safety devices or defeat the purpose of these safety devices.
- Do not change the engine governor settings or overspeed the engine. The governor has been factory-set for maximum-safe engine operating speed.
- Use genuine factory replacement parts. Substitute parts may result in product malfunction and possible injury to the operator and/or others.

- 11. Use care when charging the battery or performing maintenance on the battery and electrical system:
 - a. Make sure the battery charger is unplugged before connecting or disconnecting cables to the battery.
 - b. Charge the battery in a well-ventilated space, so gases produced while charging can dissipate. Make sure the battery vents in the caps are open.
 - c. Keep sparks, flames, and smoking materials away from the battery at all times. To avoid sparks, use care when removing battery cables from posts.
 - d. Disconnect both battery cables before unplugging any wiring connectors or making repairs on the electrical system.
- 12. Do not attempt to service the engine fuel injection system, which contains high pressure fuel and may cause injury if mishandled. For service of the pressurized fuel system, including the fuel pump module, fuel lines, and fuel injectors, contact your Walker dealer or authorized Kohler service dealer.

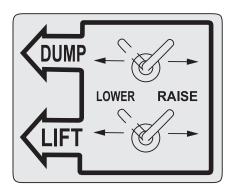
IMPORTANT: Keep all applicable manuals immediately accessible to anyone who may operate or service this machine.

INSTRUCTIONS FOR HI-DUMP® MAINTENANCE

- 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).
- 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®.

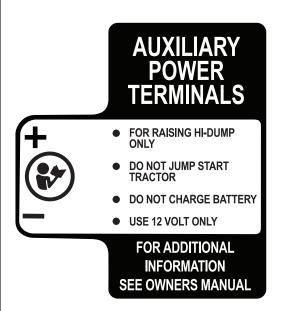
SAFETY, CONTROL, AND INSTRUCTION DECALS

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

INSTALLING A21 HI-DUMP® ON THE TRACTOR

- 1. Disconnect battery. Always disconnect the negative (-) terminal first.
- 2. Unplug catcher harness at the rear of the catcher box. Unbolt the gas spring at both ends. Remove the catcher assembly—retain the hardware, as it will be reused.

NOTE: If installing on tractor with Power Dump, remove actuator, mount, electrical harness and switch.

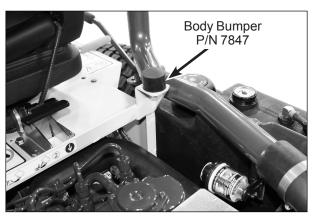
NOTE: This step will be more easily accomplished with the help of an assistant.

3. Remove the body chute from the tractor body. Install the new (longer) body chute.

NOTE: If installed on a tractor equipped with a 10 in. blower, order body chute, P/N 8430. If installed on a tractor equipped with a 10-1/2 in. blower, use body chute 8430-1 (included).

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

- 4. **FOR LIQUID COOLED UNITS ONLY:** Remove the coolant recovery tank from the mount. Remove tank mount from the bumper—retain the hardware, as it will be reused.
- 5. Remove rear bumper and discard—retain the hardware, as it will be reused.
- Remove the two (2) body bumpers mounted on the back of the front body that the catcher contacts when lowered. Install new bumper (P/N 7847) on the right side, as shown in Install Body Bumper photo.



Install Body Bumper

7. Unbolt the instrument panel from the chassis,

- and remove the instrument panel guard—retain all hardware, as it will be reused.
- 8. Remove the precleaner tube. Loosen hose clamp and remove three (3) shock mount nuts (two in front, one in rear); retain the hardware, as it will be reused.
- Remove the two (2) nuts that attach the precleaner tube support arm to the fuel tank strap (chassis) and remove and discard the precleaner tube support arm. Push bolts back against the fuel tank but do not remove the bolts or the PTO Blade Clutch Mount.

NOTE: For Model T25i only, remove two bolts mounting fuel pump module on rear upright bracket and stow pump assembly to the side.

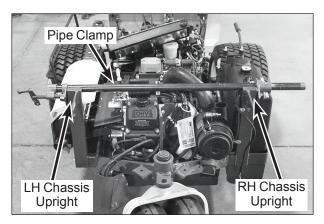
 Grind paint around the hole in the jackshaft mount to expose metal for ground (black wire) as shown in **Grind Paint on Jackshaft Mount** photo.



Grind Paint on Jackshaft Mount

 FOR AIR-COOLED MODELS ONLY: Use a pipe clamp to keep the chassis uprights from spreading to ease installation, as shown in Install Pipe Clamp to Keep Chassis from Spreading photo.

(See photo on next page)



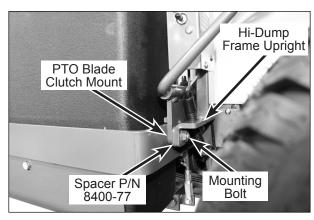
Install Pipe Clamp to Keep Chassis Uprights from Spreading

12. Carefully, set the Hi-Dump® assembly on the chassis being careful not to knock the PTO Blade Clutch Mount loose (off of the mounting bolts, RH side). Make sure the Hi-Dump® wire harness is not damaged as the assembly is positioned on the chassis frame.

NOTE: This step will be more easily accomplished with the help of an assistant, or a well-balanced lift/hoist.

- 13. If a pipe clamp was used, it can now be removed.
- 14. Using a flat head screw driver, push the two (2) bolts (partially removed in step 9) through the fuel tank saddle and install the Hi-Dump® spacer (P/N 8400-77) over the bolts, then the Hi-Dump® frame upright. Reinstall nuts, and tighten securely, as shown in **Install RH Hi-Dump® Frame** photo.

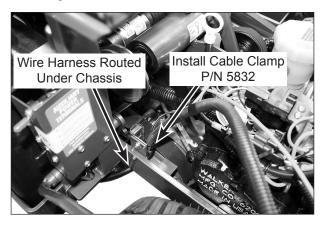
NOTE: The spacer (P/N 8400-77) is not used on the MT30i.



Install RH Hi-Dump® Frame

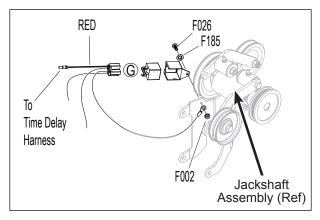
15. Route the harness under the chassis, and back up in front of the PTO safety switch. Remove and discard small cable clamp and replace with larger clamp (P/N 5832). Install clamp using the 10-24 x 7/8 (F418) screw and the 10-24 (F002) keps nut as shown in Install Cable Clamp to PTO Safety Switch Mount 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.



Install Cable Clamp to PTO Safety Switch Mount

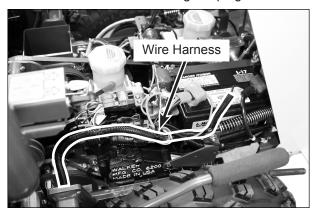
16. Mount new relay switch (P/N 6941-8) and bracket with one 10-24 x 1/2 (F026) screw, one 1/4 star lock washer (F185), and one 10-24 (F002) keps nut to the jackshaft mount as shown in Install Relay Switch illustration.



Install Relay Switch

17. Plug the wire harness into the relay and run the Hi-Dump® harness along the tractor's main harness to the battery as shown in **Route Wire Harness** photo. Use three 7 in. cable ties to hold in place. Plug connector on relay harness into connector on time delay harness.

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.

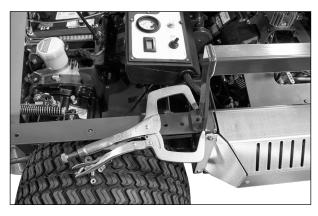


Route Wire Harness

18. Connect the battery cables and the Red (+) and Black (-) leads of the Hi-Dump® to the battery. Connect the Red (+) first.

NOTE: Connect the positive (+) leads first. Install a 4 in. cable tie, on both battery terminal insulators.

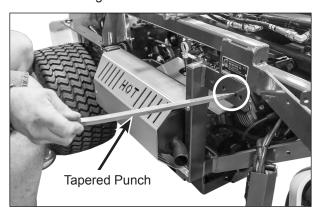
19. Clamp the left front Hi-Dump® mount (at the instrument panel guard mount point) flush with the chassis using a c-clamp as shown in **Clamp LH Front Hi-Dump® Mount** photo. Install the 5/16-18 x 3/4 (F034) hex bolt and the 5/16-18 (F009) whiz locknut. Reinstall the instrument panel and panel guard using existing hardware removed earlier.



Clamp LH Front Hi-Dump® Mount

NOTE: If the Hi-Dump® mounting hole is not present in the chassis, it will be necessary to drill a 5/16 in. hole using the Hi-Dump® mount as a guide. Install hardware through the Hi-Dump® frame and tractor chassis and hand tighten.

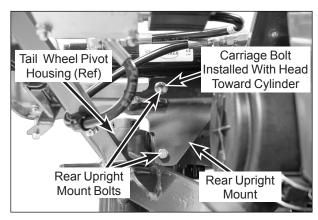
- Turn the ignition switch to the ON (RUN) position and use the LIFT control switch to raise the Hi-Dump® to the full UP position.
- 21. Using a tapered (drift) punch, align the left-rear Hi-Dump® mounting holes to the chassis as shown in **Align Mounting Holes** photo. Using existing hardware, install bolt and nut in the front hole and hand tighten. Remove punch and install second nut and bolt. Leave bolts loose, DO NOT tighten.



Align Mounting Holes

22. Using the tapered punch in the lower hole of the rear upright mount in front of tailwheel pivot housing, align the top hole as shown in **Install Hardware in Rear Upright Mount** illustration and install hardware.

IMPORTANT: To avoid damage, **top bolt** (carriage head, F420) must be installed with head towards hydraulic cylinder.



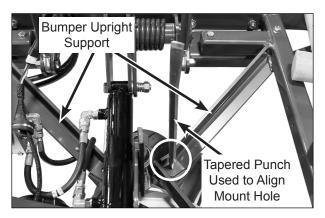
Install Hardware in Rear Upright Mount

NOTE: If there is a gap between the rear upright mount and the chassis frame, install the optional shim (P/N 8400-39) for best fit.

NOTE: For Model T25i only, reinstall the fuel pump module at the same time.

- 23. Using the tapered punch align the front holes of the right rear mount holes and install a bolt (from the inside to outside) through the rear precleaner mount, Hi-Dump® and chassis. Install nut finger tight. Remove the tapered punch and install a bolt (from outside to inside) through the front mount holes of the chassis, Hi-Dump® and rear precleaner mount and install nut finger tight (using existing hardware removed earlier).
- 24. Using the tapered punch, align the holes where the two (2) bumper upright supports connect to the chassis and install existing hardware, as shown in **Align Bumper Upright Supports to Chassis** photo.

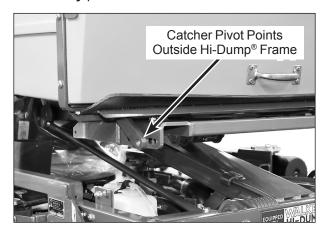
IMPORTANT: A production change was made at tractor S/N 2018-151222, and A21 S/N 2018-5402 that enlarged the hole from 3/8 in. to 7/16 in. It is possible that the Hi-Dump® kit bumper and the tractor chassis could have differing hole dimensions. If hole dimensions are different, drill the smaller hole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



Align Bumper Upright Supports to Chassis

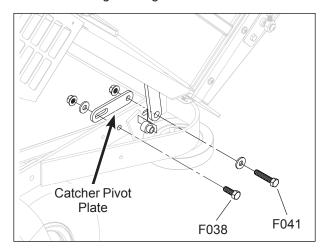
- 25. Tighten all bolts and nuts.
- Reinstall the precleaner tube and hose, using existing hardware. Ensure hose clamps are tight.
- 27. Lower the front body. Turn the ignition switch to the **ON (RUN)** position and use the lift control switch to lower the Hi-Dump[®] to within 6-8 in. (15-20 cm) of the **DOWN** position.

28. Place the catcher assembly on the Hi-Dump[®] frame as shown in **Install Catcher Box Assembly** photo.



Install Catcher Box Assembly

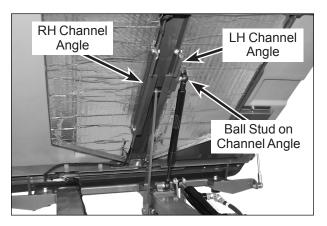
29. Install the two (2) new catcher pivot plates (P/N 7517-3), as shown in **Install Catcher Pivot Plates** illustration. Hand tighten the bolts and nuts reusing existing hardware.



Install Catcher Pivot Plates

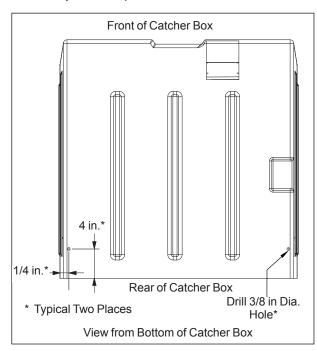
- 30. Using the LIFT switch, lower the assembly to the full down position. Align the catcher box to the GHS body chute (blower discharge chute). Make sure there is clearance on all sides. Tighten the catcher pivot plate hardware installed in the previous step.
- 31. Attach the RH and LH channel angles (P/N 8404-12 and 8404-13) to the catcher frame support with the two (2) 1/4-20 x 1/2 (F029) hex bolts and two (2) 1/4-20 (F004) keps nuts attaching the front of the channel finger tight.

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



Install Power Dump Arm Channel Angles

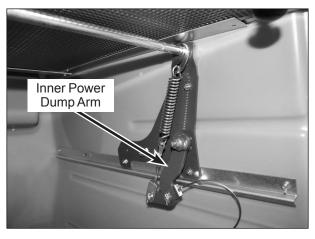
32. For installing the power dump cables (P/N 8623-2), drill two (2) 3/8 in. holes approximately 1/4 in. inside the radius of the catcher box and 4 in. from the opening of the catcher box as shown in **Drilling Dimensions for Power Dump Cables** photo.



Drilling Dimensions for Power Dump Cables

33. Remove the cotter pins on both ends of the torsion bar (inside catcher box). Insert spring hook ends on both ends of torsion bar and reinstall bar with new cotter pins.

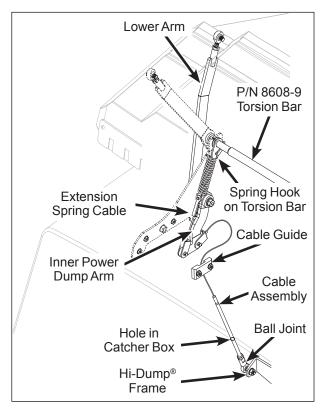
- 34. Remove existing lower arms (outside of catcher box) and install new Lower Power Dump Arms (P/N 8607-10) on both sides.
- 35. Install new inner power dump arms (P/N 8623-6 RH and P/N 8623-7 LH) on both sides and orient each one as shown in **Inner Power Dump Arm** photo.



Install Inner Power Dump Arm

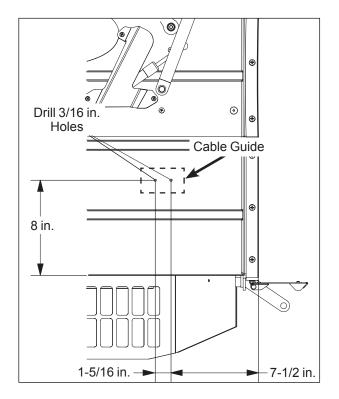
36. Assemble door springs to spring hooks (attached to torsion bar) and attach extension spring clevis end to inner power dump arm, as shown in Assemble Door Springs to Spring Hooks and Attach Extension Spring Clevis illustration.

(See next page)



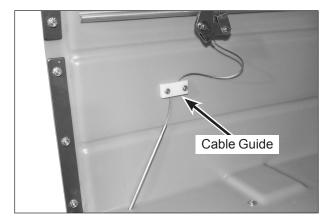
Assemble Door Springs to Spring Hooks and Attach Extension Spring Clevis

- 37. Attach cable assembly to inner power dump arms with clevis pin, as shown in **Assemble Door Springs to Spring Hooks and Attach Extension Spring Clevis** illustration. Install threaded end of cable assembly through each hole. Attach ball joints to cable ends. Attach ball joints to Hi-Dump® frame bracket.
- 38. 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.
- 39. Drill holes in both sides of the catcher box (as shown in **Drilling Dimensions for Cable Guide Installation**) to install cable guides (P/N 7620-6) inside catcher.



Drilling Dimensions for Cable Guide Installation

40. Install guides on both sides, using the two (2) 10-24 x 3/4 (F028) screws, two (2) 3/16 Rivet Backup Washer (F085), and two (2) 10-24 (F002) keps nuts as shown in Install Cable Guides photo.



Install Cable Guides

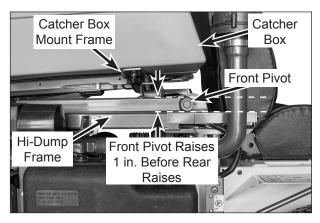
41. Plug the grass catcher harness into the main harness. With the ignition switch in the **ON** (**RUN**) position and the PTO engaged, check the operation of the Powerfil®.

NOTE: Check that the spout is oscillating and the Grass-Pak® switch triggers the Full Signal Horn to sound when the vane is pushed toward the LH direction while oscillating.

42. FOR LIQUID-COOLED MODELS ONLY: Remount the coolant recovery tank using the new mount plate and hardware provided. Tie the hose to the frame using two 7 in. cable ties. Make sure the cable ties are not so tight as to restrict coolant from flowing through the hose.

NOTE: It may be necessary to shorten the recovery tank hose by approximately 3 in. (7.6 cm)

43. 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.

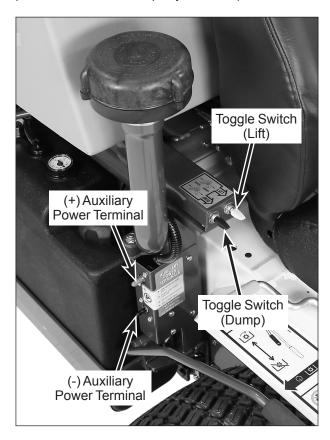
44. Use the **LIFT** and **DUMP** control switches to make sure the system operates properly.

Operating Instructions

HI-DUMP® 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 unstick 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 by-standers 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 DISENGAGE the lock before resuming operation of the Hi-Dump® (to avoid damaging the lock mechanism).



Safety Lockout Arm Engaged Position

Operating Instructions



Safety Lockout Arm Disengaged Position

Maintenance Instructions

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)*.

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

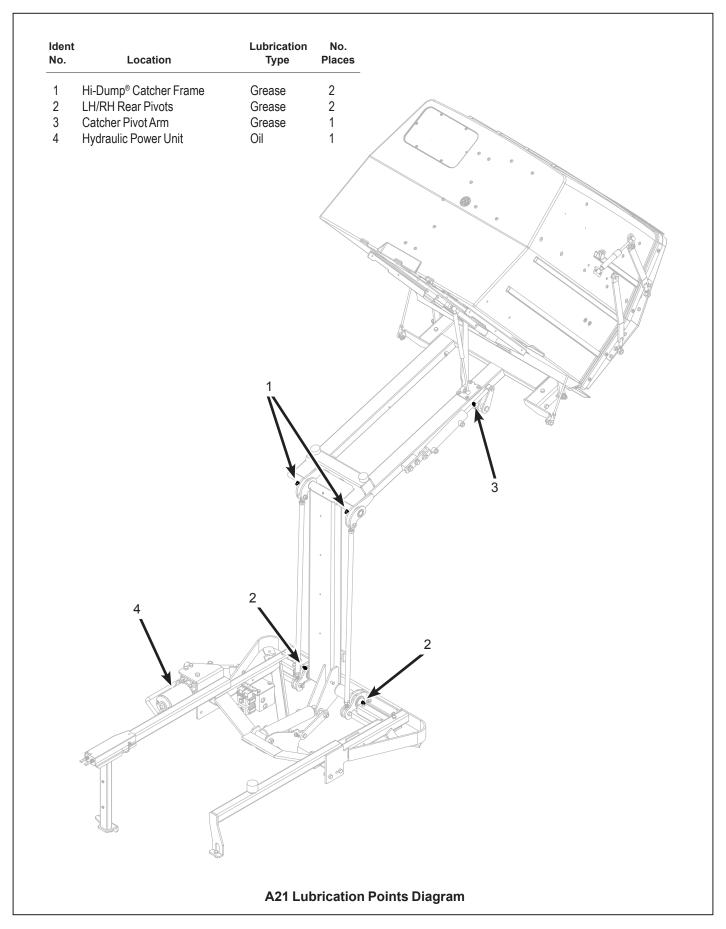
DO NOT attempt to lubricate the machine with the tractor engine running. Disengage the PTO clutch, shut off the machine, and remove the ignition key.

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.

^{* 32} oz (0.95 liters) is capacity if system is completely empty

Maintenance Instructions



Maintenance Instructions

ADJUSTMENTS

Catcher Box Clearance with Body Chute

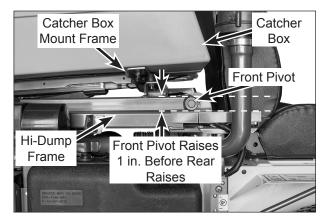
- Using the LIFT switch, lower the catcher assembly to the full down position. Check alignment of the catcher box to the GHS body chute (blower discharge chute). Make sure there is clearance on all sides.
- To adjust clearance, loosen the bolts on both of the catcher pivot plates (P/N 7517-3) and position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

Door Opening Cable Tension

 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.

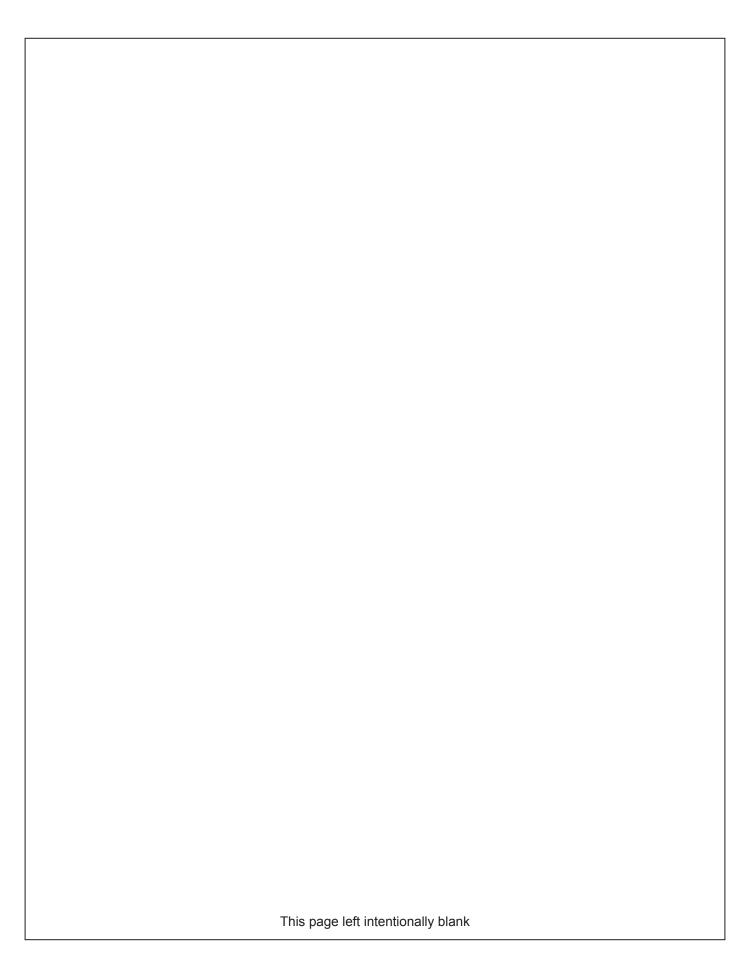
Control Lift Rod

 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

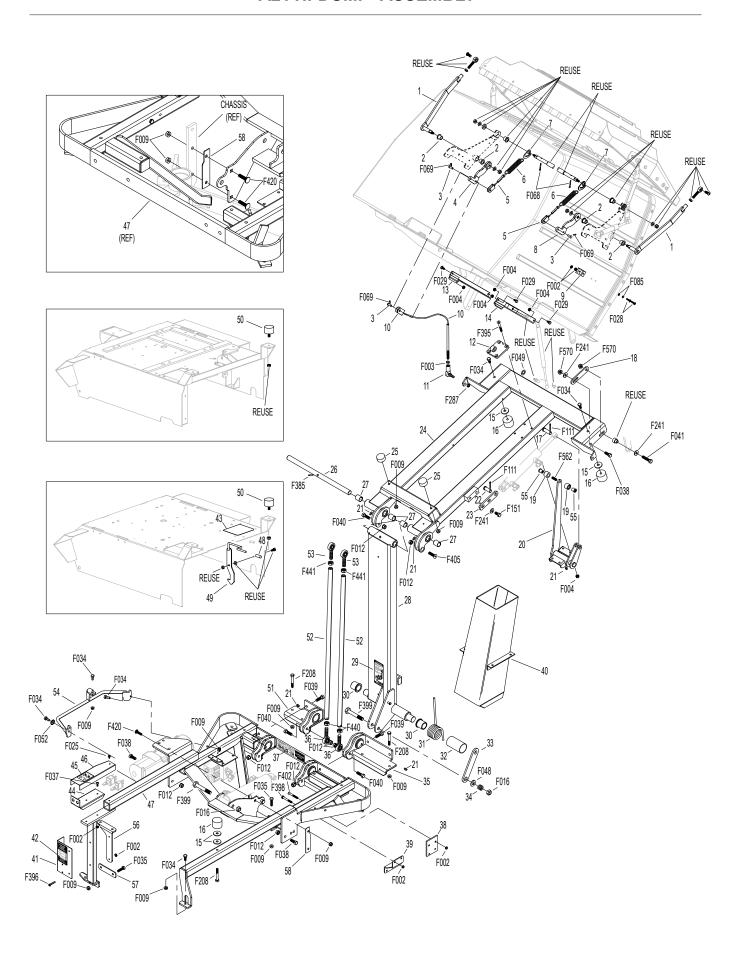
NOTE: The control rods and ball joints have RH and LH threads. They can be adjusted by loosening the jam nuts and turning the rod. If the front of the catcher raises more than 1 in. (2.5 cm) before the back raises, shorten the control rods. The rods need to be adjusted equally. If the back of the box 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.



A21 HI-DUMP® ASSEMBLY

NO.	PART NO.	DESCRIPTION	NO. REQ'D	NO.	PART NO.	DESCRIPTION	NO REQ'E
A21 H	i-Dump Kit	/10.0		52	8402-8	Control Lift Rod	2
				53	5214-11	Ball Joint (1/2-20LH) Hi Strength	2
1	8607-10	Lower Arm, Power Dump	2	54	8403-18	Pump Guard	1
	7620-3	Pivot Bushing (1/2 x 9/16)	4	55	7620-16	Roller Bushing	2
	7523-2	Clevis Pin W/Hole (1/4 x 5/8)	4	56	7031-4	Tube Support Arm/Hi-Dump	1
	8623-6	Inner Power Dump Arm, RH	1	57	8400-77	Spacer/Hi-Dump	1**
	8623-3	Extension Spring Cable	2	58	8400-39	High Dump Upright Shim	1 $^\Delta$
	5221-2	Ext Spring (3/4 x 3-1/2")	2			3 1 1 3	
,	8623-5	Torsion Spring Hook	2	Fast	eners		
}	8623-7	Inner Power Dump Arm, LH	1				
)	7620-6	Cable Guide	2		F002	10-24 Keps Nut	10
0	8623-2	Power Dump Cable, 10.0	2		F003	1/4-28 Hex Nut	2
1	5552	Ball Joint (1/4-28)	2		F004	1/4-20 Keps Nut	8
2	8402-3	Backup Plate	1		F009	5/16-18 Whiz Locknut	15
3	8404-12	Channel Angle/RH	1		F012	3/8-16 Keps Nut	12
4	8404-13	Channel Angle/Hi-Dump/LH	1		F016	1/2-13 Self-Locking Nut	2
5	5841	Retainer Washer (3/8 x 1-1/4)	4		F025	10-24 x 3/8 PPHMS	1
6	8845	Rubber Bumper (30mm OD x 40mm)			F027	10-24 x 5/8 PPHMS	
U	0040	5/16-18 Female	, ,		F028	10-24 x 3/4 PPHMS	2 4 6
17	8404-6	Clevis Pin (1/2 x 1-1/2)	1		F020	1/4-20 x 1/2 Hex Bolt	6
8	7517-3	Catcher Pivot Plate	2		F029		6
19	7620-15	Roller Wheel	2			5/16-18 x 3/4 Hex Bolt	2
20			4		F035	5/16-18 x 1-1/4 Hex Bolt	2
U	8402-9	Catcher Pivot Arm	ı		F037	10-24 x 5/8 PTH Screw	2
14	E000	(Includes Items # 19, 21, 55 & F562)			F038	3/8-16 x 1 Hex Bolt	6
21	5830	Grease Fitting	5		F039	3/8-16 x 1-1/4 Hex Bolt	4 3 2
22	8404-5	Clevis Pin (1/2 x 1-1/4)	1		F040	3/8-16 x 1-1/2 Hex Bolt	3
23	8402-4	Upper Cylinder Mount Arm	1		F041	3/8-16 x 1-3/4 Hex Bolt	2
24	8402-1	Catcher Frame/Hi-Dump	1		F048	1/2 SAE Washer	1
		(Includes Items # 21 & 27)			F049	5/16 SAE Washer	2
25	7845-1	Rubber Bumper (1.375 x .750)	2		F052	5/16 Ext. Star Lock Washer	1
26	8401-4	Upper Pivot Shaft	1		F068	1/8 x 1 Cotter Pin	2 4
27	8201-3	Fiberglide Bearing	4		F069	3/32 x 1/2 Cotter Pin	
28	8401-5	Pivot Arm (Includes Item # 29)	1		F085	3/16 Rivet Backup Washer	4
29	8401-9	Decal, Safety Lockout Arm	1		F111	1/8 x 3/4 Cotter Pin	2
0	5683	Pivot Bearing	2		F151	3/8-16 x 7/8 Hex Bolt	2
31	8401-1	Torsion Spring (1-1/2)	1		F183	.312 x .700 x .074 Washer	2
32	8401-6	Spring Bushing	1		F208	5/16-18 x 2-1/4 Hex Bolt	5
3	8401-3	Safety Lockout Arm	1		F241	.375 x .875 x .10 Washer	6
34	8401-2	Safety Lockout Spring	1		F287	1/4-28 Keps Nut	2
35	8400-3	Rear Pivot/LH	1		F385	1/4 x 1-1/4 Roll Pin	1
		(Includes Items # 21 & 30)			F395	1/4-20 x 2-1/4 FHA Screw, SS	4
36	5214-10	Ball Joint (1/2-20) Hi Strength	2		F396	10-24 x 1-1/4 PPH Bolt	2
37	8400-16	Decal, Hi-Dump	1		F398	1/4-20 x 2 Hex Bolt	2*
8	7047-5	Mount Plate	1**		F399	1/2-13 x 3-1/4 Hex Bolt	2
39	8404-7	MTL Adapter Bracket	1*		F402	1/4-20 x 2 PFH Bolt	2**
10	8430-1	Body Chute, Hi-Dump (10.5)	1		F405	3/8-16 x 1-1/2 FHA Screw, SS	1
‡1	8400-10	Auxiliary Power Terminal Plate	1		F403	5/16-18 x 1-1/4 Carriage Bolt	1
' 1	0400-10	(Includes Item # 42)	1		F440	1/2-20 Jam Nut RH	2
12	8400-7	Decal, Electrical Jumper Warning	1		F441		2
13			1			1/2-20 Jam Nut/Left Hand	
	8600-23	Decal, Danger/Body Latch	1		F562	5/16-18 x 1 Set Screw	1
ļ4 15	8400-19	Switch Mount	1		F570	3/8-16 Flange Top Lock Nut	4
5	8400-9	Decal, Hi-Dump Operation	1				
16	8400-14	Switch Cover (Includes Item # 45)	T		*	Model MTL Only	
17	8401-13	Bumper/Hi-Dump Mount	1		**	Model MDD Only	
		(Includes Item # 37)			***	Not Used on MT30i	
18	7854	Plastic Tip, Red	1		Δ	Use Optional Shim as Needed to	Close
19	7383-2	Body Latch Hook	1			Gap With Chassis Frame	
50	7847	Rubber Bumper (1.5 OD x 1.0)	1			•	
51	8400-2	Rear Pivot/RH					

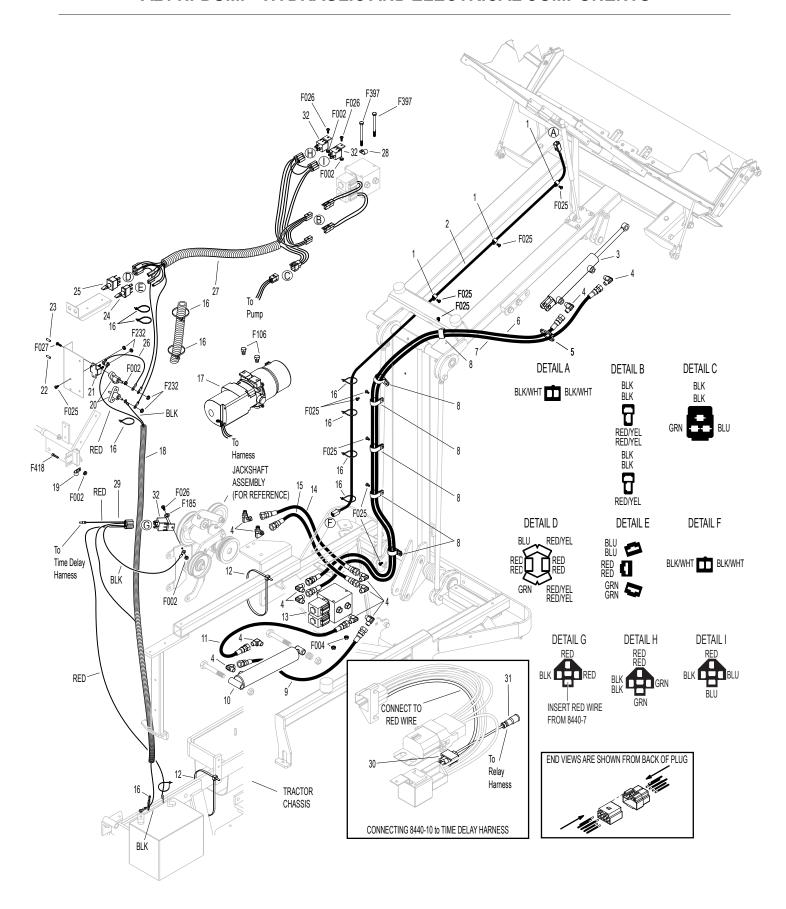
A21 HI-DUMP® ASSEMBLY



A21 HI-DUMP® HYDRAULIC AND ELECTRICAL COMPONENTS

ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D	ITEM NO.	PART NO.	DESCRIPTION	NO. REQ'D
Hi-Dur	mp Kit – Hy	draulic/Electrical		Fast	eners		
1	5833	Cable Clamp (1/4)	3		F002	10-24 Keps Nut	9
2	8440-1	Catcher Adapter Harness	1		F004	1/4-20 Keps Nut	2
3	8404	Dump Cylinder	1		F025	10-24 x 3/8 PPHMS	11
4	8403-7	90° Fitting	12		F026	10-24 x 1/2 PPHMS	3
5	5975-3	Cable Tie (50# x 7")	1		F027	10-24 x 5/8 PPHMS	4
6	8403-5	Hydraulic Hose, Catcher Box	1		F106	3/8-16 x 5/8 Hex Bolt	2
		Dump (67.5)			F185	1/4 Int. Star Lock Washer, SS	1
7	8403-6	Hydraulic Hose, Catcher Box	1		F232	10-32 Keps Nut	6
		Dump (73.5)			F397	1/4-20 x 3-3/8 Hex Bolt	2
8	5835	Cable Clamp (3/4)	6		F418	10-24 x 7/8 SHC Screw, GR5 (SS)	2
9	8403-3	Hydraulic Hose, Lift/Rear (11.5)	1			,	
10	8404-1	Lift Cylinder	1				
11	8403-2	Hydraulic Hose, Lift/Front (16)	1				
12	5975-7	Cable Tie (50# x 11")	2				
13	8404-2	Hydraulic Valve Box	1				
14	8403-4	Hydraulic Hose,	1				
		Valve to Pump (17-1/2) A/UP					
15	8403-20	Hydraulic Hose,	1				
		Valve to Pump (17-1/2) B/DN					
16	5975-1	Cable Tie (18# x 3-3/4")	11				
17	8403-19	Hydraulic Power Unit	1				
18	8440-7	Battery/Relay Harness	1				
19	5832	Cable Clamp (1/2)	1				
20	8401-7	Junction Block (10-32)	2				
21	7941	Circuit Breaker 40 Amp	1				
		(Auto Reset/Sealed)					
22	8404-9	Plastic Cover/Black	1				
23	8404-8	Plastic Cover/Red	1				
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	8440-6	Relay Harness	1				
30	8553	Splice Tap (18-14 Ga.)	1				
31	8440-10	Wire Assembly (3")	1				
32	6941-8	Relay Switch 60/40 Amp	3				

A21 HI-DUMP® HYDRAULIC AND ELECTRICAL COMPONENTS



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

MAINTENANCE AND SERVICE RECORD SHEET

DATE	SERVICE ITEM	ENGINI HOURS

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.

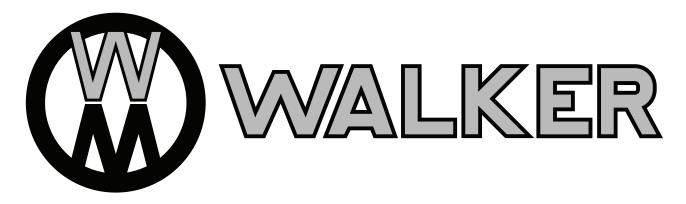
3. How to obtain service under this warranty:

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.



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