

Galion-Godwin Truck Body Co. LLC

Dump Truck Operator Manual

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Section 1 Important Safety Information

Galion-Godwin

Important Safety Information

This Galion-Godwin dump truck body is considered heavy-duty equipment. While we have tried to make it as safe as possible, you and those around you can still be seriously hurt or killed if the unit is operated or maintained improperly. It is very important that you thoroughly understand this manual and that you fully and completely comply with all of the instructions contained in this manual. They are here for your safety; please follow them.

Occupational safety and health laws require that all dump trucks be equipped with locking control levers, body props and backup alarms. See **Figure 1.1**. It is against Federal law to operate this machinery without this equipment in place and operational.

In addition, we have provided your body with safety features which, while not mandated by federal law, are still important for your safety. These devices include warning decals, a hoist control lever that is spring loaded to return to neutral whenever you release the control lever (this is known as a "dead man" control) and a body-up light. **NEVER OPERATE THIS DEVICE IF ANY OF THE REQUIRED SAFETY FEATURES ARE MISSING OR INOPERATIVE. REMEMBER, SAFETY IS EVERYONE'S JOB.**

Control Tower

If your unit is not equipped with one of the three units shown, you should obtain, read and understand the instructions for the factory supplied control tower in your truck. See **Figure 1.1a-1.1c**.

Figure 1.1a - Single Lever Control Tower

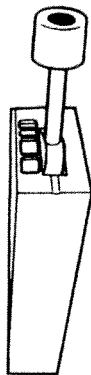


Figure 1.1b - Single Lever With Air Control Tower

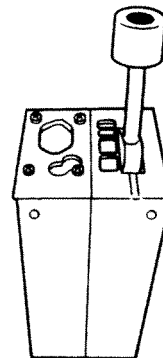
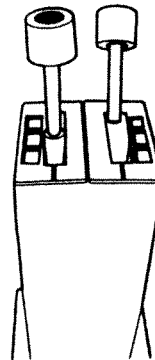


Figure 1.1c - Dual Lever Control Tower



Pre-Trip Inspection

! WARNING

Operate trucks only in well-ventilated areas. Running any vehicle in an enclosed area can lead to a build-up of carbon monoxide. Carbon monoxide can cause asphyxiation and death.

! WARNING

Never leave a raised body unattended.

A proper pre-trip inspection is necessary in order to insure that your dump truck is in a safe and roadworthy condition before you start out on the route. All of the items on this pre-trip inspection checklist are important. The unit should never be operated if any of its equipment is not in safe working order. Experience has shown that it is especially dangerous to operate this equipment if the dump body's safety equipment (the locking control lever, the deadman control, the body prop, the body-up light and the backup alarm) is not in good working order. **NEVER OPERATE A DUMP TRUCK UNLESS ALL OF THESE FEATURES ARE FULLY OPERATIONAL AND ALL OF THE VEHICLE'S SAFETY SYSTEMS (LIGHTS, BRAKES, WIPERS, ETC.) ARE IN GOOD OPERATING CONDITION.**

The procedures outlined here pertain only to the dump body and hoist assembly and generic items that should be checked before driving any motorized vehicle on the highway. In addition to the following items, you must follow all pre-trip recommendations by the manufacturer of the chassis and all state and federal pre- and post-trip inspection requirements.

Pre-Trip Inspection Checklist

Walk-around inspection.

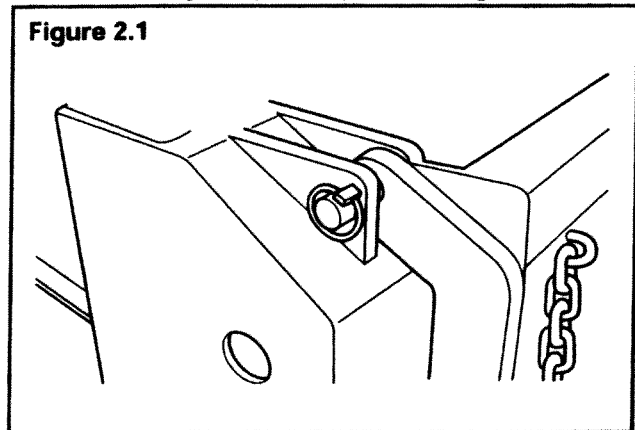
1. Check rear hinge area for visible damage, loose or missing pins, cracking, bending or other damage to the truck frame in the area of the rear hinge.

! WARNING

Use caution when climbing on the body. Make sure there is no oil, dirt or debris on either your shoes or any of the surfaces you climb on.

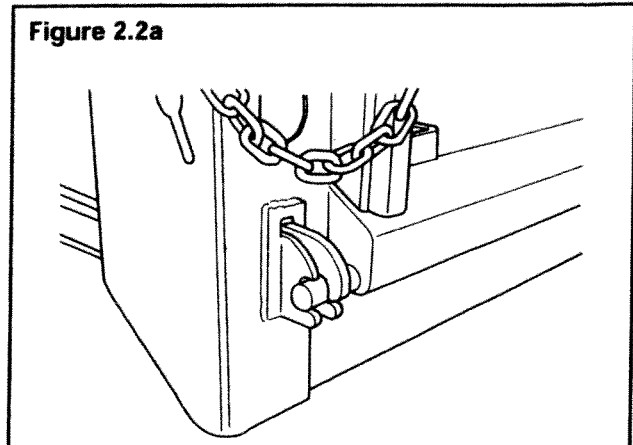
2. If you need to climb on the body or the truck at any time during the inspection process, make sure there is no oil, grease or other slippery substance on either your shoes or any of the truck surfaces. Remember to keep either both feet and one hand or both hands and one foot firmly and safely in contact with the truck or the body at all times while you are climbing.
3. Check to make sure the pins holding the tailgate at the top are fully engaged and secured by the pin keeper. See **Figure 2.1**.

Figure 2.1



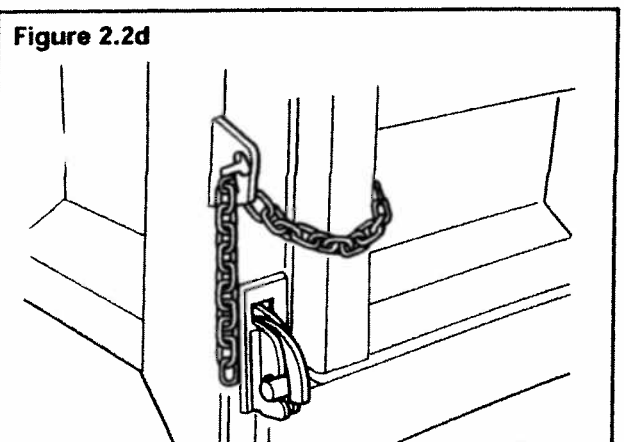
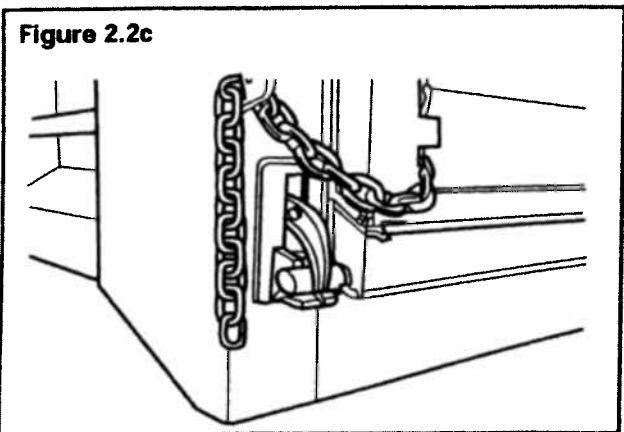
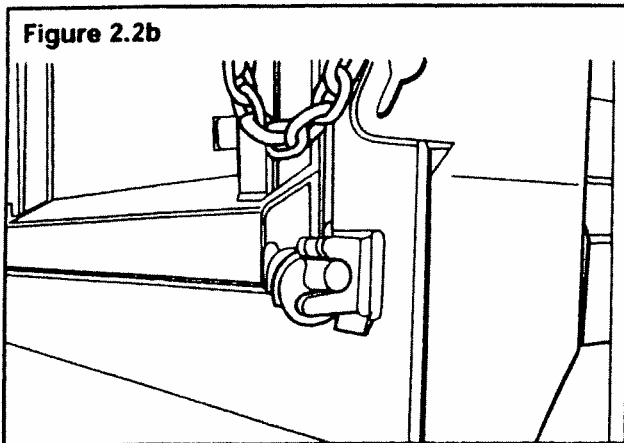
4. Check tailgate latching assembly. The hooks must be securely fastened over the pins on the tailgate. Four different bottom tailgate and latch assemblies are in use. See **Figure 2.2a-2.2d**.

Figure 2.2a



Section 2 Pre-Trip Inspection

Galion-Godwin



5. Look under the truck for any dripping oil or accumulation of oil or grease on the floor or other signs of leakage.
6. Check for broken windshield and door glass.

7. Check to make sure that all lights, lenses and reflectors are intact.
8. Check the general condition of the dump body. Make certain there is no excessive rust, damage, etc.
9. Check and clean ladders and steps. Grease, mud and other debris could make them slippery and extremely dangerous.
10. Check condition of the truck suspension, including springs, shackles, air bags, and other components.
11. Check, clean and adjust all mirrors.
12. Check tire pressure per markings on the tires.
13. Check to make certain all warning decals are on the body and are clean and legible. **Figure 2.3a-2.3f** - contains drawings showing the proper decals included in your decal packet.

Figure 2.3a



Figure 2.3b

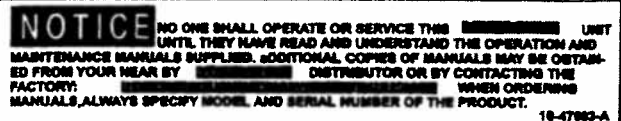


Figure 2.3c

CAUTION

DO NOT GO UNDER A RAISED LOADED BODY.
DO NOT GO UNDER A RAISED BODY WITHOUT PROPPING IT - BODY MUST BE EMPTY.
 DURING DUMPING OPERATIONS NO ONE SHALL STAND IN OR MOVE THROUGH THE AREA WHERE THE BODY AND HOIST OPERATE OR LOAD MIGHT DISCHARGE.
 OPERATOR MUST REMAIN AT CONTROLS IN CAB DURING DUMPING OPERATION.
DO NOT LEAVE BODY RAISED OR PARTLY RAISED WHILE VEHICLE IS UNATTENDED OR WHILE PERFORMING MAINTENANCE OR SERVICE UNDER BODY UNLESS BODY IS PROPPED TO PREVENT ACCIDENTAL LOWERING.

10-47800

Figure 2.3d

CAUTION

DO NOT GO UNDER A RAISED LOADED BODY.
DO NOT GO UNDER A RAISED BODY WITHOUT PROPPING IT - BODY MUST BE EMPTY.
DO NOT LEAVE RAISED BODY UNATTENDED WITHOUT PROPPING.
DO NOT POWER DOWN WHILE BODY IS PROPPED. SEE OWNERS MANUAL FOR CORRECT OPERATION OF BODY PROPS.

10-47813-B

Figure 2.3e

CAUTION

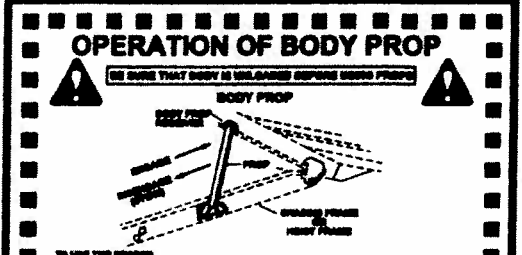
DO NOT GO UNDER A RAISED LOADED BODY.
DO NOT GO UNDER A RAISED BODY WITHOUT PROPPING IT. BODY MUST BE EMPTY.
 DURING DUMPING OPERATIONS NO ONE SHALL STAND IN OR MOVE THROUGH THE AREA WHERE THE BODY AND HOIST OPERATE OR LOAD MIGHT DISCHARGE.
 OPERATOR MUST REMAIN AT CONTROLS IN CAB DURING DUMPING OPERATIONS.
DO NOT LEAVE BODY RAISED OR PARTLY RAISED WHILE VEHICLE IS UNATTENDED OR WHEN PERFORMING MAINTENANCE OR SERVICE UNDER BODY UNLESS BODY IS PROPPED TO PREVENT ACCIDENTAL LOWERING.
 ALWAYS DISENGAGE P.T.O. WHEN HOIST IS NOT IN USE OR WHEN MOVING VEHICLE.
DO NOT ATTEMPT TO RAISE A LOADED BODY WHEN VEHICLE IS ON UNLEVEL GROUND.

10-47800-B

Figure 2.3f

OPERATION OF BODY PROP

BE SURE THAT BODY IS UNLOADED BEFORE BODY PROPS!



TO USE THE PROPS:

1. RAISE BODY TO HEIGHT WHERE PROPS CAN BE SWUNG UPWARD INTO POSITION. PLACE THE HOIST CONTROL VALVE IN THE NEUTRAL (HOLD) POSITION.
2. SWING PROPS "UP" TO SUPPORT POSITION.
3. LOWER BODY SLOWLY UNTIL PROPS REST ON PROP RESTS. DO NOT FORCE BODY DOWN. PLACE THE HOIST CONTROL VALVE IN THE NEUTRAL (HOLD) POSITION.

TO LOWER BODY:

4. MOVE HOIST TO LOWER. LOWER THE PROPS TO A POINT BELOW THE PROP RESTS. DO NOT FORCE THE HOIST CONTROL VALVE IN THE NEUTRAL (HOLD) POSITION.
5. SWING PROPS DOWN TO TRUCK POSITION. BEFORE LOWERING BODY BE SURE THE AREA IS CLEAR.

WHEN THE PROPS ARE SUPPLIED, BODY MUST BE DOWN.
 HOIST CONTROL VALVE IS SUPPLIED WITH TWO PROPS.

10-47700-B

14. Check the condition of spreader chains and their attachment. Make certain welds holding them to the tailgate are solid and no links are showing signs of damage.
15. Check the banjo eyes (the chain adjusting brackets) for signs of wear, cracking welds or mechanical damage.
16. Check the condition of the tailgate. If the tailgate is equipped with a coal door or similar device, make sure that it is operating smoothly and properly and latches securely.
17. Check for any signs of torn metal, rust or cracking welds.
18. Clear all debris off of any extension pans.
19. If your unit is equipped with sideboards, check to make sure that they are properly secured.
20. Check the condition of the cab shield. Be on the lookout for excessive damage, rust, torn metal or cracked welds.

Electrical Check

1. Turn on the ignition, place the transmission in reverse and check for operation of the backup alarm and backup lights, if so equipped.
2. Check headlights, taillights, and brake lights.
3. Check operation of windshield wipers.
4. Check operation of body-up light. Start engine, engage power takeoff (see Section 7) and raise the body approximately six inches. The body-up light should come on at that time.

Section 2 Pre-Trip Inspection

Galion-Godwin

5. Lower body.

Operational Check

WARNING

Do not operate the unit if any safety feature does not work. It is extremely dangerous to do so.

1. If your unit is equipped with a sight gage on the hydraulic tank, make certain that the oil level shown is in the normal operating range on the sight gage. If your unit is not equipped with a sight gage, proceed to Step 2.

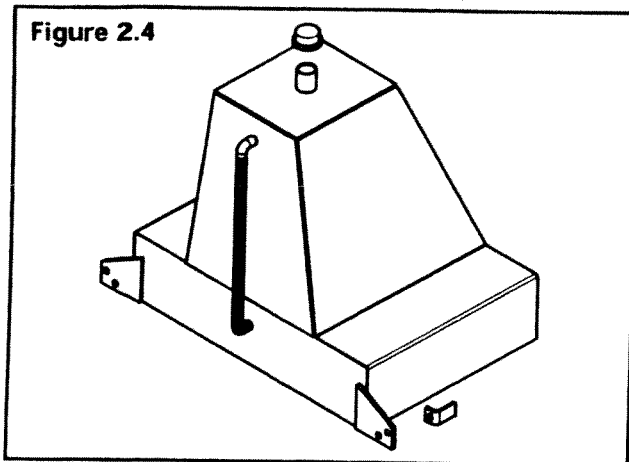


Figure 2.4.

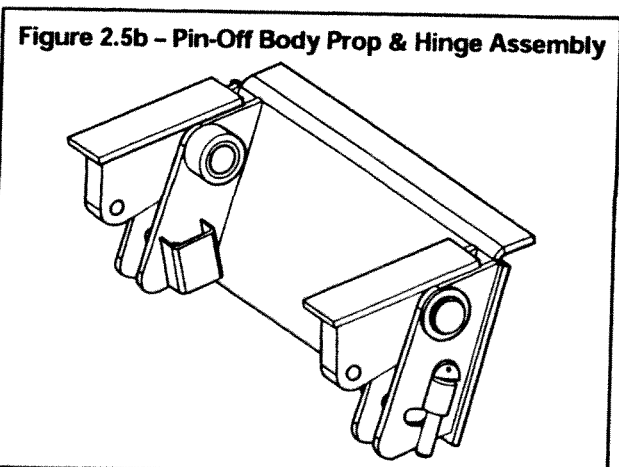
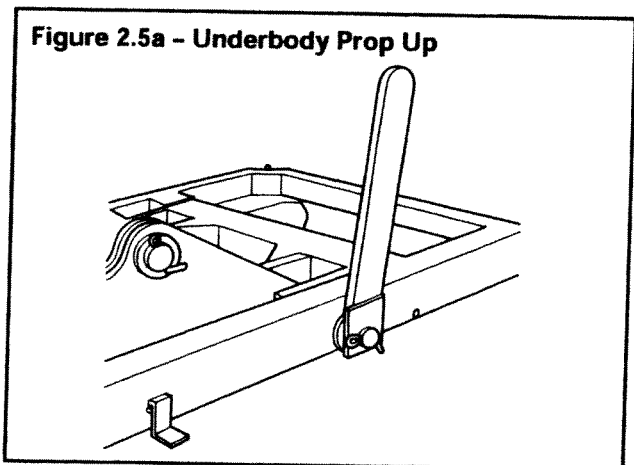
WARNING

Make certain that you have proper overhead clearance. Never raise a body underneath overhead obstructions, power lines, etc. If you are planning to spread, check overhead clearance for the entire length of the area over which you will be spreading.

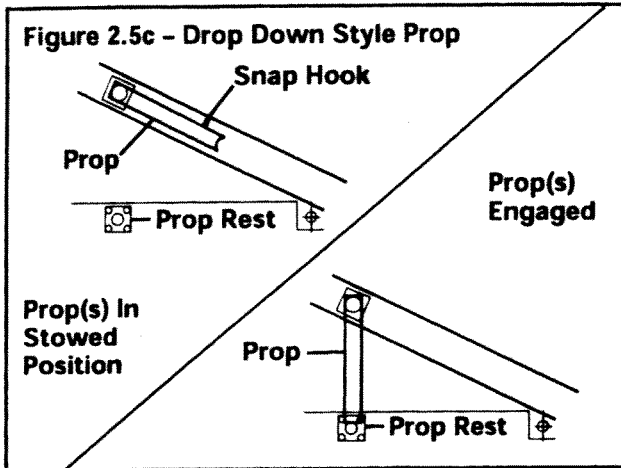
2. Start the unit, engage the power takeoff (see Section 7) and cycle the unit all the way up and down two or three times, making certain the unit goes all the way up and that it operates smoothly through its entire range of motion. If the unit fails to operate properly, it must be serviced before use.

NOTE: Galion-Godwin hoists are equipped with positive means of support, permanently attached, and capable of being placed in position to prevent accidental lowering of the body while maintenance or inspection work is being performed. The supports are designed to support an empty body only.

- On all Galion-Godwin hoists furnished for use with bodies under 17 feet, one prop is supplied.
 - For all Galion-Godwin hoists furnished for use with bodies over 17 feet, two props are supplied.
 - When a dump body is shipped without a hoist, body prop(s) are furnished as they are with the hoists.
3. Raise the body and deploy the body prop(s). (Refer to the decal on the truck for proper body prop operation.) Body prop(s) come in three

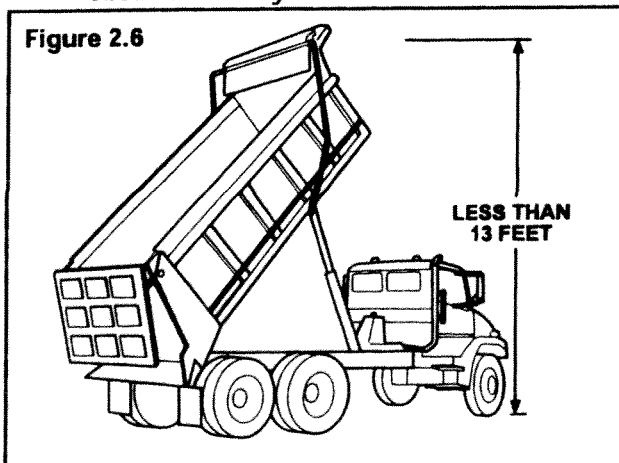


- basic styles. See **Figure 2.5a-2.5c.**
4. Inspect the condition of the props.
 - A. Make certain that the props show no signs of deterioration due to rust, mechanical damage or bending before deploying the prop.
 - B. If the props are damaged, do not deploy them and do not go further until the



damaged props are repaired.

5. With the body securely propped, remove the ignition key, lock the truck door, then inspect the cylinder and pump area for leaks. Check hoses for damage or leakage and check for worn or missing parts.
6. If you are engaged in highway spreading operations and use a cable cutoff or hoist stop to control body height, perform the following operations:
 - A. Extend the body to the maximum height.
 - B. Check to make certain that the height is several inches lower than the lowest obstruction on your route and in no event



greater than 13 feet. **Figure 2.6.**

! WARNING

Stow body props properly before lowering the body. For basic operations, see decal on body for proper instructions.

7. Lower the body. On the way down, release

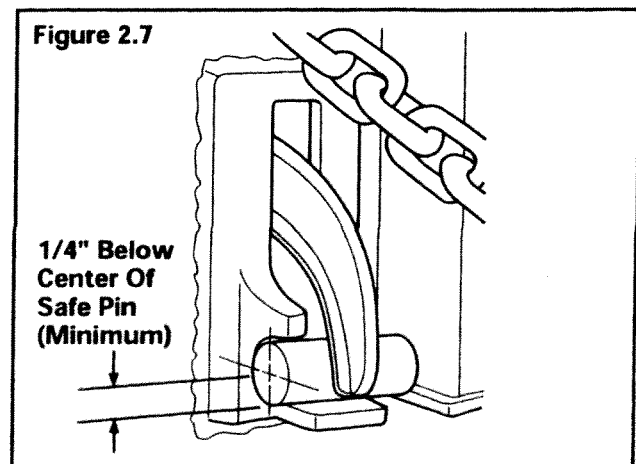
the handle to check hoist control. It must return to neutral and the body motion must stop when you release the handle.

8. Make certain that the locking control feature is operative. This requires you to push a button in order to move the control lever in either direction from neutral. (See Figure 1.1a - 1.1c on page 2)

! WARNING

An improperly adjusted tailgate release mechanism could cause a sudden and unintended discharge of the load. Component damage and personal injury can occur.

9. Check operation of the tailgate release.
 - For a manual control, please note that it should take approximately 50 to 60 pounds of force at the handgrip to release a properly adjusted tailgate.
 - For electrical or air controls, make sure that they are operating properly and that the pins and latches secure the tailgate completely.
10. After completing this check, make certain that the tailgate is properly and securely latched. The hooks should extend completely over the pins and should be difficult and require a considerable tug for each hook to move



across the pins. **Figure 2.7.**

*Hooks must extend at least 1/4" past centerline of pin.

11. If your unit is so equipped, check operation of tarp, spreaders, vibrators and any other optional or additional equipment. Refer to OEM operating instructions for these items.
12. Perform all inspections recommended by the chassis manufacturer or required by your company's pre-trip inspection checklist.

Section 3 Driving an Empty Truck

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Driving an Empty Truck

! WARNING

- **Make certain the body is down. Never drive a dump truck with the bed up, even slightly. If the body-up light is on, stop the truck immediately and determine the reason. Do not drive if the body is up.**
- **Never let anyone ride any place in, on or about your dump truck other than inside the cab in a designated seating position, securely restrained by seat and shoulder harnesses.**
- **Never drive a unit with the tailgate in the down or work position.**
- **Never drive a unit with a coal door (if so equipped) that is not fully closed and latched.**
- **If so equipped, never drive a dump truck with a barn door in the open position.**
- **Never drive a dump truck with the power take off engaged. This leads to the possibility of an inadvertent raising of the bed.**
- **Never drive an empty dump truck without making certain that the tailgate is locked and top hinge pins are properly installed.**
- **Never drive a dump truck without making certain that the hoist control is locked in the neutral position.**
- **Never drive an empty truck without making certain that you have swept all the debris off the cab protector, rub rails, extension pan, steps, ladder, etc. Make certain that there is no grease, oil or other slippery substance on your hands, feet or the surfaces you will touch. Remember that you must keep both hands and one foot or one hand and both feet in contact with the truck at all times when climbing on the truck.**

A dump truck is wider and higher than a car or light pickup truck. Make sure there is adequate clearance. It also has a higher center of gravity. Therefore, a dump truck is much more likely to roll over than a passenger car or light pickup truck.

Also, because of its size, it will take longer to accelerate and to stop than a passenger car or pickup truck. When the truck chassis is empty, the rear brakes may lock up or tend to skid, causing loss of vehicle control, particularly on wet, icy, snow-covered or other slippery surfaces.

You will have to adjust your driving to the characteristics of the dump truck.

In general, you must avoid sharp lane change maneuvers, go slowly on turns and give yourself more room to stop and more time to accelerate. Failure to do so could cause an accident involving potential serious injury or loss of life.

! WARNING

Always disengage power take-off when driving. Damage to PTO or pump and personal injury can occur.

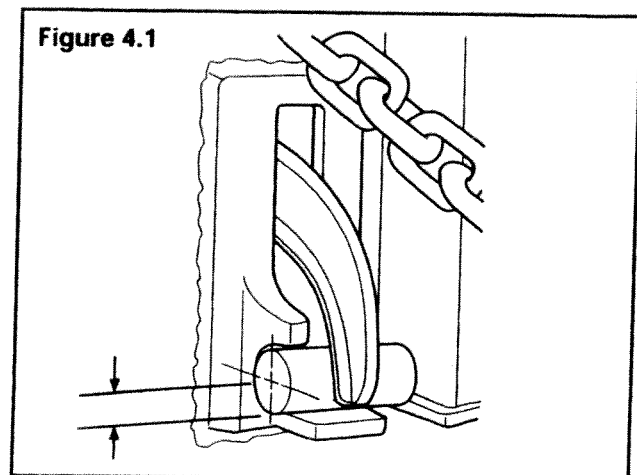
Loading the Truck

! WARNING

Do not attempt to load the body on soft ground or on ground that is not level. Loading on soft or unlevel ground could cause the unit to tip over and creates the risk of serious injury or death. Even though the truck appears to be stable when it is empty, it can still sink or tip as the load is being applied.

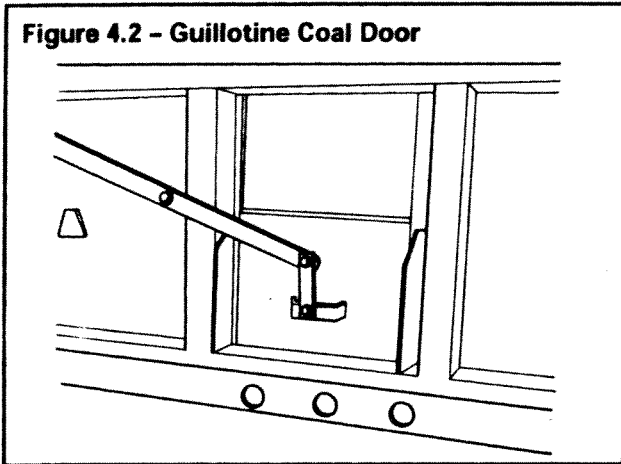
The proper procedure for loading the body is as follows:

1. Lower the body.
2. Disengage the power take off.
3. Securely latch the tailgate with the hooks completely over and securely holding the tailgate pins. Both hooks must be under equal tension when moved from side to side. The hook should extend completely over the pin and it should be difficult and require a considerable tug to cause each hook to move across the pins. **Figure 4.1.**

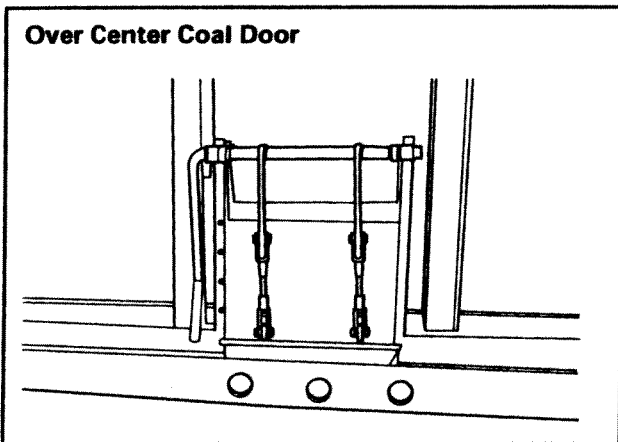


4. Fully close and securely latch the coal door, if so equipped. Guillotine and over center are typical latch coal doors. See Figure 4.2.

Figure 4.2 - Guillotine Coal Door



Over Center Coal Door

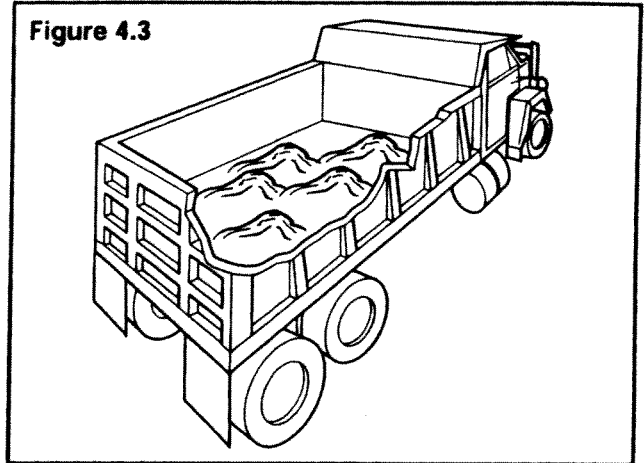


WARNING

Use caution when climbing on the body. Make sure there is no oil, dirt or debris on either your shoes or any of the surfaces you climb on.

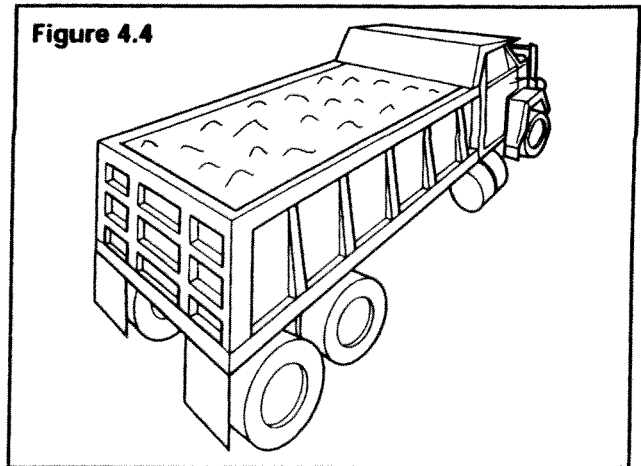
5. If you need to climb on the body or the truck at any time during the loading process, make sure there is no oil, grease or other slippery substance on either your shoes or any of the truck surfaces. Remember to keep either both feet and one hand or both hands and one foot firmly and safely in contact with the truck or the body at all times while you are climbing.
6. Make certain there is proper clearance for the loader both from side to side and overhead. Except when loading from a hopper, never attempt to load under any overhead obstruction.
7. Evenly distribute the load side to side. Do not operate truck if load is not centered. See Figure 4.3.

Figure 4.3



8. Load from front to rear, distributing the load as evenly as possible.
9. When loading with an end loader, load from the center of the body's sides.
10. When loading under a hopper, always park with the body of the truck centered from side to side under the hopper opening and with the hopper opening slightly forward of the center point of the body.
11. The load must not be higher than the sides of the dump body or the sideboards, if so equipped. Figure 4.4.

Figure 4.4



12. Before leaving the loading site, remove all debris from rails, sills and other horizontal surfaces.
13. Tarp the load according to your local and state requirements and as necessary to prevent any portion of the load from escaping.

Section 5 Driving a Loaded Truck

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Driving a Loaded Truck

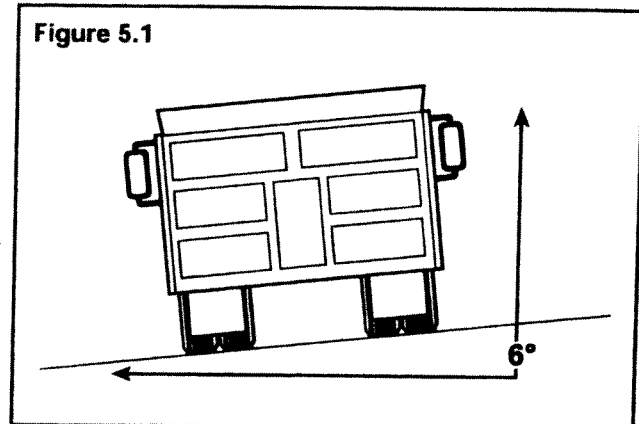
! WARNING

- Unless you are engaged in spreading operations, never drive a dump truck with the bed up, even slightly. Make certain the body is down. If the body-up light is on and you are not spreading, stop the truck immediately and determine the reason. Do not continue to operate until the body is down.
- Never let anyone ride any place in, on or about your dump truck other than in the cab in a designated seating position, securely restrained by a seat belt and shoulder harness.
- Never drive a unit with the tailgate in the down or work position.
- Never drive a unit with a coal door (if so equipped) that is not fully closed and latched. See Figure 4.2.
- Never drive a loaded dump truck with a barn door in the open position.
- Never drive a dump truck with the power take off engaged. This could result in an inadvertent raising of the bed.
- Never drive a loaded dump truck without making certain the tailgate is locked. See Figure 2.5.
- Never drive a loaded dump truck without making certain that the hoist control is locked in the neutral position. See Figure 1.1.
- Never drive a loaded dump truck without making certain that you have swept all the debris off the rub rails, extension pan, steps, ladder and other horizontal surfaces. When climbing on the truck, make certain there is no grease, oil or other slippery substance on your hands, feet or the surfaces you will touch. Remember that you must keep both hands and one foot or one hand and both feet firmly in contact with the truck at all times when climbing on the truck.
- Be aware of the possibility of load shift, particularly when hauling large objects, such as boulders, large chunks of broken concrete or liquids etc. If the load shifts outward as you are making a turn, it could cause you to lose control of the vehicle and possibly roll it over.
- If your truck is loaded toward the rear (or if you have dumped a partial load, which will cause the remaining load to shift to the rear), it could have

the effect of reducing the weight on the front wheels of the truck. If the unit was loaded to the rear or the load has shifted to the rear, you may encounter situations where you are unable to steer the truck, especially on wet, slippery or icy surfaces, or when braking. Further, braking could cause the front wheels to lock up, reducing the efficiency of the braking system and resulting in a much longer stopping distance, particularly on wet, slippery, snowy or icy surfaces.

- Use extreme caution when traveling across an inclined surface such as the side of a hill. Never travel on soft ground when crossing a hill side. Never cross an incline greater than 6° degrees, as the likelihood of the vehicle tipping over is too great. When crossing less steep inclines, be alert to any sign of the load shifting. See Figure 5.1.

Figure 5.1



- Never leave the driver's position of the truck without shutting off the ignition, locking the door, and taking the key.
- Never leave a raised body unattended.

Now that your truck has a load in it, it may have an even higher center of gravity and it will weigh considerably more than it did empty. Therefore, it will take even longer to accelerate and stop than it did when it was empty. It is even more prone to roll over on a curve or during a sudden evasive maneuver. You will have to once again adjust your driving to the characteristics of your loaded truck. In general, you must make even more gradual lane changes, go even slower on turns and give yourself much more room to stop or accelerate and merge with traffic. Failure to do so could cause an accident involving potentially serious injury or loss of life.

Dumping Operations

WARNING

Dumping operations are potentially extremely hazardous. There is a possibility that the truck can roll over, particularly if it is on uneven or soft ground. Persons on the ground could be severely injured or killed if struck by a discharging load. You or others can be injured if a load hangs up or if you have not opened the tailgate. Extreme caution must be exercised during dumping operations.

Perform the following steps when you reach the area where your load will be discharged:

WARNING

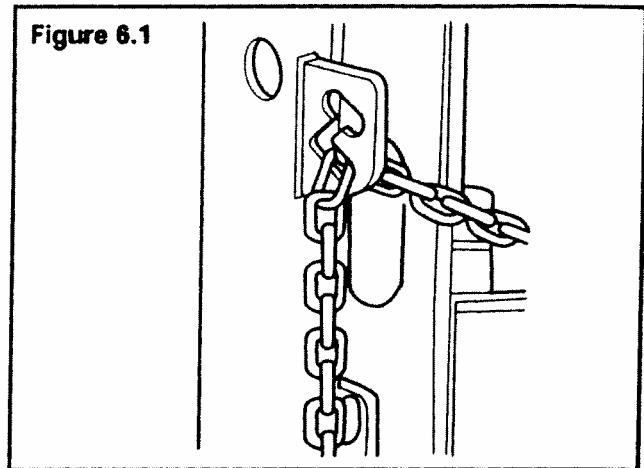
No one should ride in, on or around the truck during dumping or spreading operations except in a properly designated passenger seat with seat belts and shoulder harnesses securely fastened.

1. Check the terrain. Make sure it is level, even and firm. Do not attempt to dump if there is a significant sideways slope 6 degrees or greater to the ground, or if it appears exceptionally muddy or moist.
2. Check carefully for overhead obstructions. Never raise the body or dump under a power line, as you or someone else could be electrocuted and killed or you could knock out power to a large area.
3. Check to make certain how many persons are in the vicinity where dumping will take place.
 - Make certain all personnel are cautioned to stay out of the area where the load may discharge.
 - When dumping, make sure all personnel are accounted for, in sight and out of the discharge area.
4. If you are planning to use the spreader chains, set them to the appropriate length and fasten them in the mounting brackets provided. Chains should be set to an equal length. See Figure 6.1.

WARNING

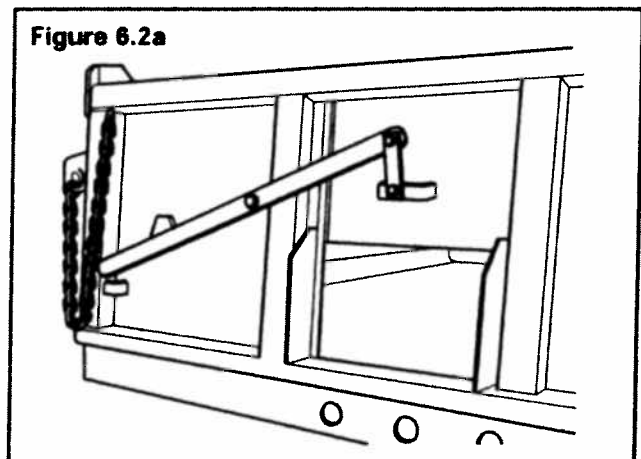
Contents of body may be extremely hot. Wear proper attire when operating body. Personal injury can result.

Figure 6.1



5. If you are planning to dump through a coal door, open and set the coal door at this point. See Figure 6.2a-6.2b.

Figure 6.2a



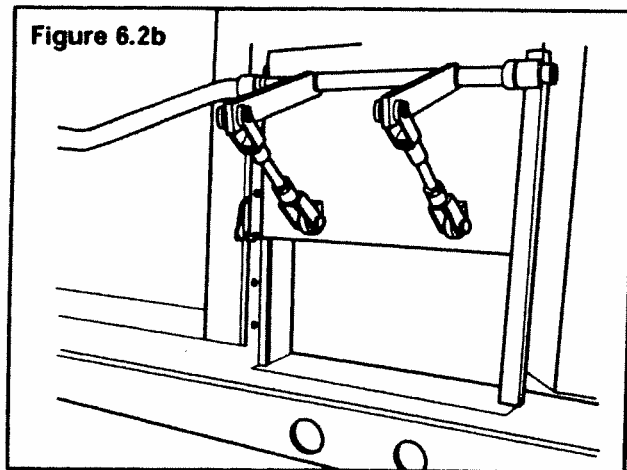
6. Check the dumping area carefully. Make certain that there is adequate clearance for the load to discharge, both to the rear and the side of the unit. Remember, when the load discharges, it will spread not only to the back of the truck, but also to the sides.

You are now ready to dump your load. Please follow the procedure outlined.

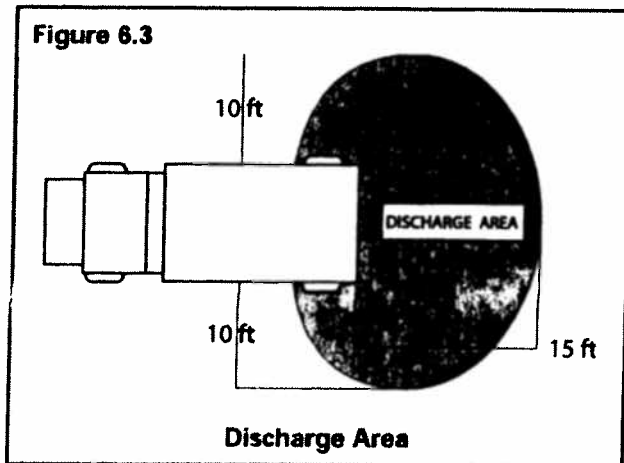
1. Make certain your safety belt and shoulder harness are securely fastened.
2. Release the tailgate. (If you forget to release the tailgate and the body will not come back down, see Section 9 for emergency lowering procedures.)
3. Engage power take off.

Section 6 Dumping Operations

Galion-Godwin



4. Double check to make certain that all personnel are in sight, accounted for and out of the discharge area. Double check the overhead clearance.
5. Begin to raise the body slowly to the desired dump angle. Continue to be vigilant to make certain that no one goes behind the truck or in discharge area during dumping operations. Be especially vigilant on this point when dumping in confined areas. See Figure 6.3



6. When the load begins to discharge, pull forward gradually until you have dumped the desired amount.
7. Lower the body slowly. Make sure the body is fully down and the body-up light is off.
8. Make sure the hoist control lever returns to and is locked in neutral.

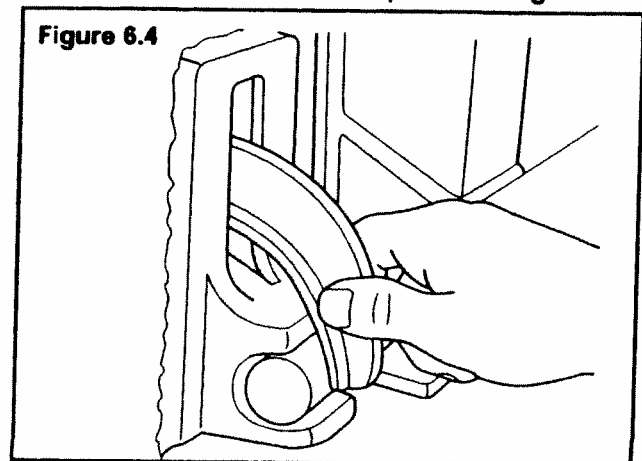
9. Disengage the power takeoff.
10. Turn off engine and remove ignition key so you can perform the following checks.

! WARNING

If you need to swing the tailgate manually, take great care not to get your fingers between the tailgate and the body of the truck, as the tailgate is extremely heavy and serious injury can occur.

NOTE: It may be necessary to clean out the end of the bed to allow the gate to swing fully closed, particularly if you have dumped a partial load.

11. Close the gate. Check to make certain that the hooks are completely over and securely holding the tailgate pins. Both hooks must be under equal tension when moved from side to side. The hook should extend completely over the pin and it should be difficult and require a considerable tug to cause each hook to move across the pins. See Figure 6.4.



12. If you have dumped a partial load, be especially careful that the tailgate is closed.
13. Clean off debris from all horizontal surfaces of the truck.

Instructions for Power Take Off Operation



WARNING

Disengage PTO before driving vehicle.

Power take off (PTO) operation is controlled by either a cable, electric hydraulic system, or air shift system.

To engage PTO on standard transmissions, perform the following steps:

1. Shift into neutral, disengage the clutch and move the control to shift PTO into gear.

NOTE: It may be necessary to let out the clutch momentarily for proper alignment so the gear may slide into position.

2. Engage the clutch and the PTO is in operation.

To engage the PTO on automatic transmissions, perform the following steps:

1. Apply the brake and shift into any one of the drive positions. This will stop the transmission gears from turning.
2. Shift PTO into gear, then shift transmission into neutral. This will start transmission gears turning, and in turn, put PTO into operation.

Section 8 Tailgate Removal

Galion-Godwin

Tailgate Removal

! WARNING

DO NOT attempt to lift the tailgate with the upper hinges, since release of the upper hinge pins could cause the tailgate to swing down with possible injury.

! WARNING

DO NOT attempt to lift the tailgate with the installed spreader chains, since these chains would provide an unstable center of gravity attachment point, which could swing down causing possible injury.

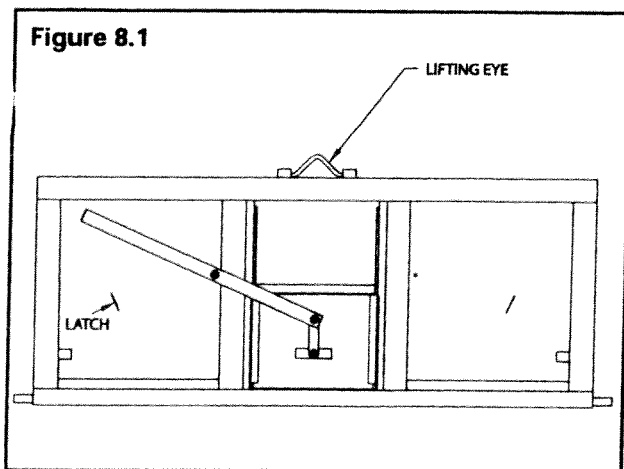
1. Before removing tailgate have unit setting level. Return body down to frame, shut off engine, set brakes and chock wheels.

! WARNING

If your tailgate is equipped with a center lifting eye, attach a chain or cable tailgate to a hoist or other means of lifting the tailgate. Make certain your cable or chain and hoist are rated adequately, since some larger tailgates can weigh as much as 800 pounds.

If your tailgate is not equipped with a lifting eye, install one to the top center of the tailgate as shown in Figure 8.1.

2. Raise the chain attached to the tailgate to the point of load transfer.
3. Remove the tailgate upper pins.
4. Open the tailgate lower hardware using the tailgate release mechanism.
5. Assuring the bottom pins are free and the upper hinges are not binding to allow removal, remove the tailgate carefully by using a combination of lifting and rearward travel.
6. Store the removed tailgate in a secure position, preferably horizontal one, to assure the tailgate does not fall and remove the chains or cable from the lifting eye.
7. Simply reverse the above procedure to install your tailgate.



Special Situations

Asphalt Spreading

⚠ WARNING

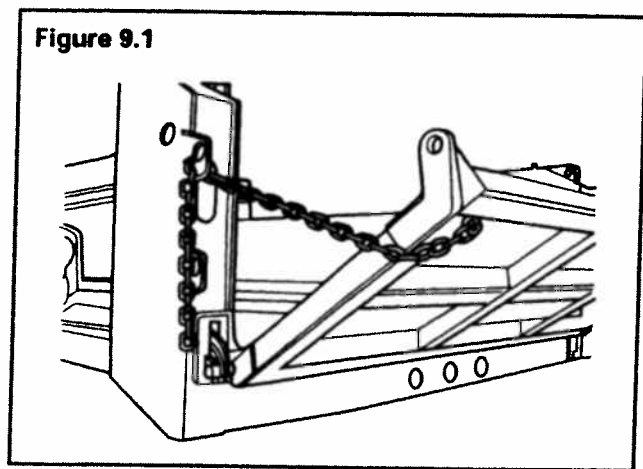
Contents of body may be extremely hot. Wear proper attire when operating body. Personal injury can result.

This section deals with the special cautions that need to be taken when spreading asphalt in paving operations on highway locations. Highway spreading of asphalt presents special hazards, due to not only the busy work area and the traffic hazards but also because the asphalt is hot.

Whenever you are performing operations in a public highway right of way, you should follow the regulations promulgated by the Occupational Safety and Health Administration and local laws and ordinances.

1. No one should ever ride on the truck during asphalt spreading operations except in the cab in a designated seating position with seat belts and shoulder harnesses, if so equipped, securely fastened.
2. Remember that asphalt is very hot. Use caution to avoid getting asphalt on clothes, shoes or exposed flesh. The hot asphalt will make the dump body hot and touching the hot metal may cause burns to unprotected body parts.
3. Never drive the truck from location to location with the tailgate in the down or lowered position.
4. When dumping into a paver use the same cautions as other dumping operations.
 - Make sure the area is level, even and firm. Do not attempt to dump into a paver if there is a significant sideways slope of 6 degrees or more or if the wheels must travel through potholes or other uneven terrain.
 - Check carefully for overhead obstructions. Never raise the body or dump under a power line or drive a raised body under a power line without making certain there is adequate clearance. As you or someone else could be electrocuted and killed or you could knock out power to a large area.

- When dumping make sure all personnel are cautioned to stay out of the discharge area, especially between the paver and the dump body. Make sure the spill shields on the side of the paver are set to prevent the load discharging to the sides.
- If you are planning to use the spreader chains, set them to the appropriate length and fasten them on the brackets provided. Chains should be set to an equal length. See Figure 9.1.



You are now ready to begin dumping into the asphalt paver. Please follow the procedure outlined below.

1. Make certain that your safety belt and shoulder harness are securely fastened.
2. Release the tailgate latch. (If you forget to release the tailgate and the body will not come back down, see Section 9 for emergency lowering procedures.)
3. Engage the power takeoff.
4. Double check to make certain that all personnel are clear of the dumping area
5. Begin to raise the dump body slowly to the desired dump angle. Continue to be vigilant that no one goes into the discharge area during dumping operations.
6. When the load begins to discharge, observe the instructions of the paver crew to prevent overfilling.

Section 9 Special Situations

Galion-Godwin

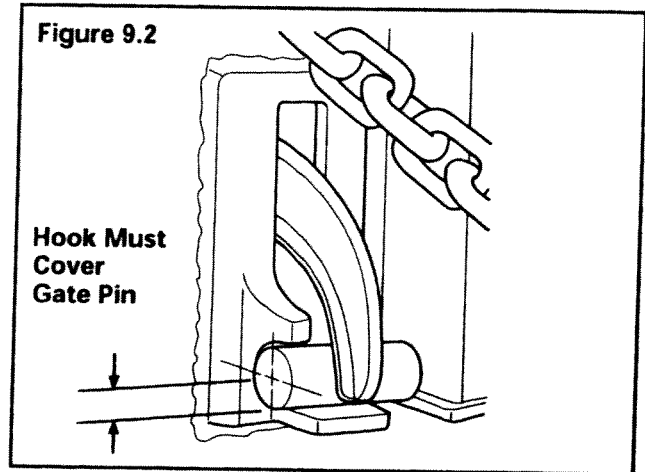
7. After the desired amount has been dumped, lower the body slowly. Make sure the body is down and the body-up light is off.
8. Make sure the hoist control lever returns to and is locked in neutral.

Asphalt Patching

This section deals with the special cautions that need to be taken when discharging asphalt in patching operations on highway or other locations. Highway patching of asphalt presents special hazards, due to not only the busy work area and the traffic hazards but also because the asphalt is hot.

Whenever you are performing operations in a public highway right of way, you should follow the regulations promulgated by the Occupational Safety and Health Administration and local laws and ordinances.

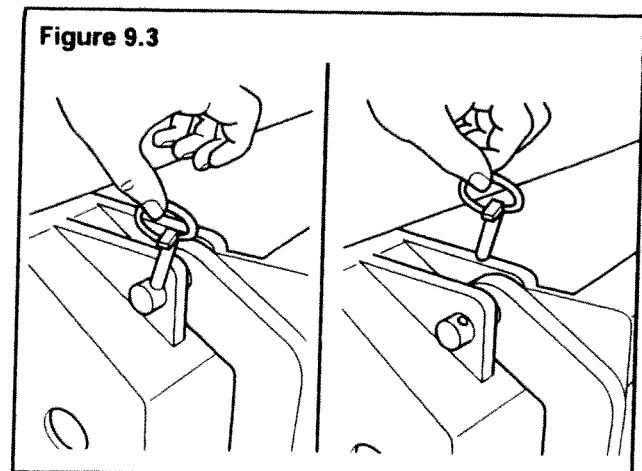
1. No one should ever ride on the truck during asphalt patching operations except in the cab in a designated seating position with seat belts and shoulder harnesses, if so equipped, securely fastened.
2. Remember that asphalt is very hot. Use caution to avoid getting asphalt on clothes, shoes or exposed flesh. The hot asphalt will make the dump body hot and touching the hot metal may cause burns to unprotected body parts.
3. To patch from the rear of the dump body - over the tailgate as a shelf or extension pan - Please follow the procedure outlined below. It is important that you use at least two persons to lower the gate because the gate weighs in excess of 250 pounds.
 - A. Put the body in the down position with the body-up light off.
 - B. Place the transmission in the park/neutral or first gear.
 - C. Set the emergency brakes.
 - D. Shut off the engine and remove the keys from the ignition before leaving the cab.
 - E. Set the chains to the proper length and secure them in the brackets provided.
 - F. Make sure that the lower hinges are latched securely with the hooks fully over the tailgate pins. See **Figure 9.2**.



! WARNING

Use caution when climbing on the body. Make sure there is no oil, dirt or debris on either your shoes or any of the surfaces you climb on. Personal injury can result.

- G. If you need to climb on the body or the truck at any time during this process make sure that there is no oil, grease or other slippery substance on either your shoes or the truck surfaces that you intend to climb on. Remember to keep either both feet and one hand or both hands and one foot firmly and safely in contact with the truck or body at all times while you are climbing.
- H. Remove the lynch pin retainers from the top tailgate hinge pins. See **Figure 9.3**.
- I. Remove the top hinge pins. (This may require a hammer to drive the pins through.) **Figure 9.4**.



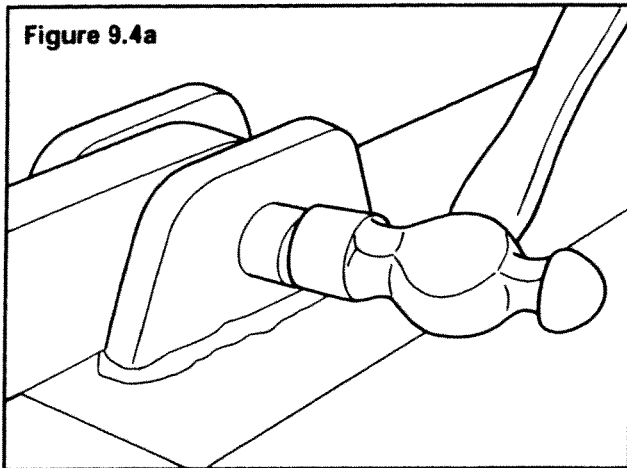


Figure 9.4a

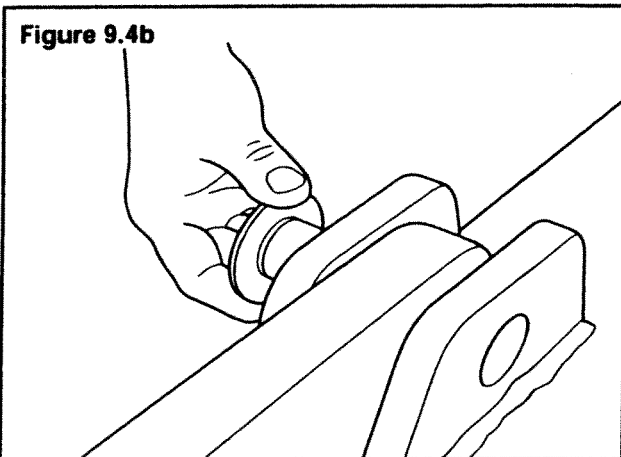


Figure 9.4b



WARNING

Never unlatch the lower latch when the gate is opened from the top. Severe personal injury can result.

- J. With both people assisting, slowly lower the tailgate to rest on the chains. Protect all body parts that will touch hot metal or hot asphalt.
- K. Never move between work sites without raising and closing the tailgate.
- L. Use extreme caution when raising the bed. If you raise the bed too high, you could discharge the entire load. Make sure that no one is behind or to the sides of the tailgate while you are raising the body. **See Fig 6.3**
- M. Lower the body completely and make sure the body-up light is off before shoveling or pulling asphalt off the body or tailgate.

4. If the patching operation is to be completed by using a small door (called a coal door) within the tailgate of the dump body to discharge small amounts of asphalt - Please follow the procedure outlined below.

1. No one should ever ride on the truck during asphalt patching operations except in the cab in a designated seating position with seat belts and shoulder harnesses, if so equipped, securely fastened.

2. Remember that asphalt is very hot. Use caution to avoid getting asphalt on clothes, shoes or exposed flesh. The hot asphalt will make the dump body hot and touching the hot metal may cause burns to unprotected body parts.

- A. Put the body in the down position with the body-up light off.
- B. Place the transmission in the park/neutral or first gear.
- C. Set the emergency brakes.
- D. Shut off the engine and remove the keys from the ignition before leaving the cab.
- E. Set the coal door opening to the desired position and secure See **Figure 9.5** and **Figure 9.6**.

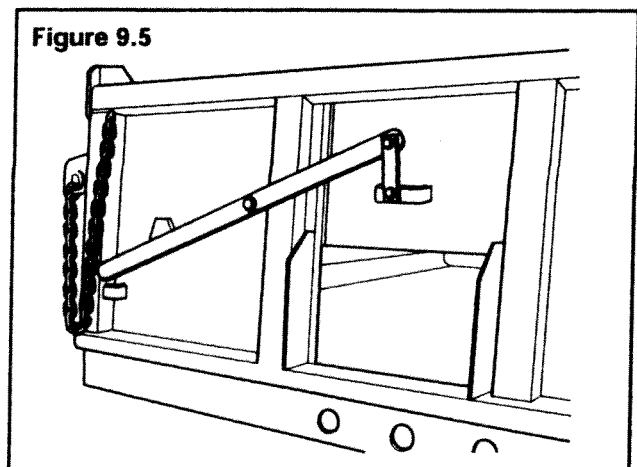


Figure 9.5

Section 9 Special Situations

Galion-Godwin

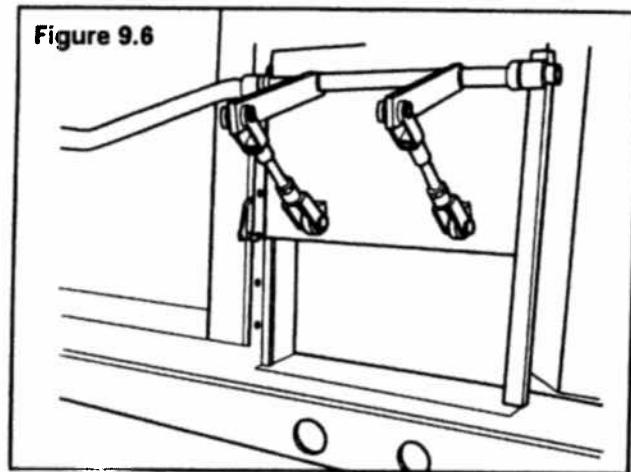


Figure 9.6

- F. Make sure that the lower hinges are latched securely with the hooks fully over the tailgate pins. See **Figure 9.2**.
- G. Use extreme caution when raising the dump bed not only to control the amount of material discharged and to make sure that no one is in or has moved into the discharge area. See **Figure 9.7**.

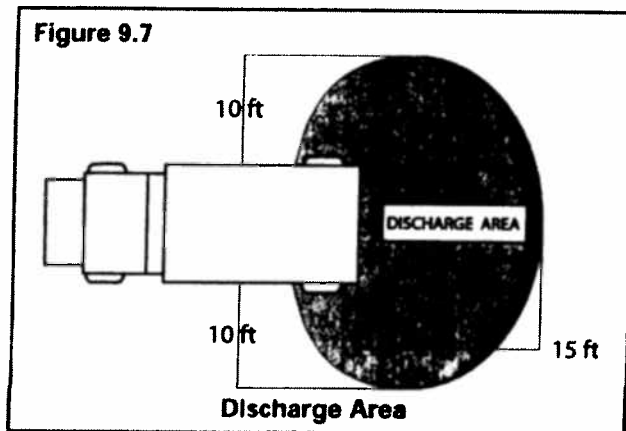


Figure 9.7

- H. Lower the body completely before shoveling or pulling asphalt out of the body.

When the patching is complete lower the body completely and assure the body-up light is off. Make sure the hoist control lever returns to neutral and is locked. Disengage the power take-off. Close the coal door before moving the between work sites.

Counterbalance and Emergency Lowering Instructions

If you raise your dump body with the tailgate latched and the load shifts to a position that counter-balances the body in the raised position, it will not come back down. For your own safety, you must follow these instructions:

⚠ WARNING

Do not stand on any part of the truck body, cab or chassis while attempting to unlatch the tailgate.

⚠ WARNING

Serious injury or death will result if you do not strictly follow these procedures:

- Return hoist control to the neutral position. Make sure it is locked in the neutral position.
- Remove the ignition key from the cab of the truck. Lock the doors of the truck upon exiting and place the key in your pocket.
- Make certain no one is in the dumping area.
- If one is available, use a ladder. If you choose to use a ladder, make certain that you place the ladder to the side of the dump body, not to the front. First, remove the safety chain, then pull the tailgate lever. Do not hang onto to the lever as the body may lower rapidly. See **Figure 9.8**.

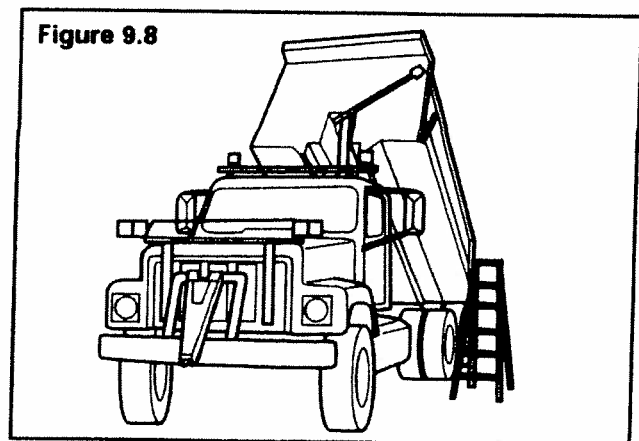


Figure 9.8

- If a ladder is not available, and you can do so without going under the raised body or in the area where it will travel, you may use a rake, long stick, shovel or similar implement to remove the safety chain from the release lever. After releasing the chain, make certain that you

are not standing underneath the dump body or in the area it will cover when it is in the down position. When you are satisfied that you are clear of the area through which the dump body will travel when it comes down, pull the tailgate release handle using the rake, rope or other implement you have obtained for the purpose.

- This should cause the tailgate to open and the load to discharge.
- After the load has discharged, return to the cab of the truck and lower the body in a normal fashion.

If you are unable to open the tailgate using either of these methods, it will be necessary to call for mechanical assistance to remove the load. Do not enter the body without having made certain that the hoist controls are locked in the neutral position, the doors to the truck cab have been closed and locked and the keys are in your pocket.

In the event that the previous methods cannot be used, attempt manual unloading by performing the following steps:

1. Secure the dump body in the elevated position. Make certain hoist control is locked in neutral.
2. Set the chassis brakes and chock the wheels.
3. Remove keys and lock door.
4. Rope off area to prevent access to area around truck.

**WARNING**

Do not use the factory supplied body props because they are designed to support only an empty body.

4. Before attempting removal of part of the load, assure personal safety by positioning and securing yourself and others away from where the load may discharge.
5. Remove contents of the dump body using front end loader or similar device until such time as the dump body will lower when the hoist control is shifted into the lowering position.
6. When the dump body is in the lowered position, release the tailgate latch, raise the dump body and allow the load to discharge.
7. Lower the dump body, place the hoist control in the neutral/locked position, shut off the engine, remove the ignition key and carefully inspect the tailgate and tailgate latching system for bending, stretching, or misalignment before the next use of the dump body.

Section 10 Options

Galion-Godwin

Heated Body



WARNING

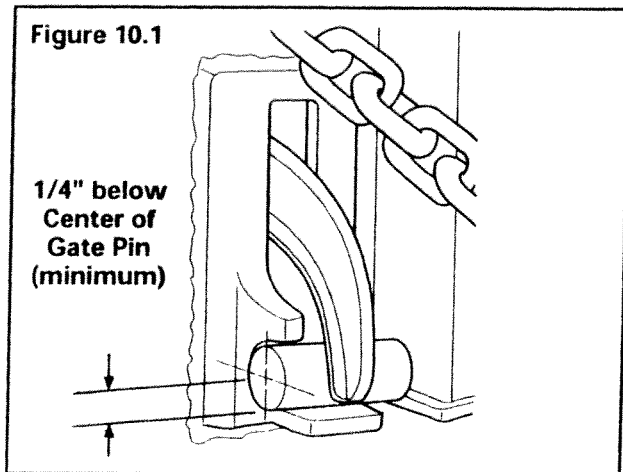
Body may be extremely hot. Wear proper attire when operating body. Personal injury can result.

Double Acting Tailgate Operation

The double acting tailgate has features that allow the discharge or spreading of materials by allowing the tailgate to open at the bottom. See the instructions in section 6 "DUMPING OPERATIONS". The double acting tailgate has the added feature of being able to be opened from the top of the tailgate to allow material removal from over the tailgate.

Please follow the procedure outlined below. It is important that you use at least two persons to lower the gate because the gate weighs in excess of 250 pounds.

- Put the body in the down position with the body-up light off.
- Place the transmission in the park/neutral or first gear.
- Set the emergency brakes.
- Shut off the engine and remove the keys from the ignition before leaving the cab.
- Set the chains to the proper length and secure them in the brackets provided.
- Make sure that the lower hinges are latched securely with the hooks fully over the tailgate pins. See Figure 10.1.



WARNING

Use caution when climbing on the body. Make sure there is no oil, dirt or debris on either your shoes or any of the surfaces you climb on. Personal injury can result.

- If you need to climb on the body or the truck at any time during this process make sure that there is no oil, grease or other slippery substance on either your shoes or the truck surfaces that you intend to climb on. Remember to keep either both feet and one hand or both hands and one foot firmly and safely in contact with the truck or body at all times while you are climbing.
- Remove the lynch pin retainers from the top tailgate hinge pins. See Figure 10.2.
- Remove the top hinge pins. (This may require a hammer to drive the pins through.) See Figure 10.3.

Figure 10.2

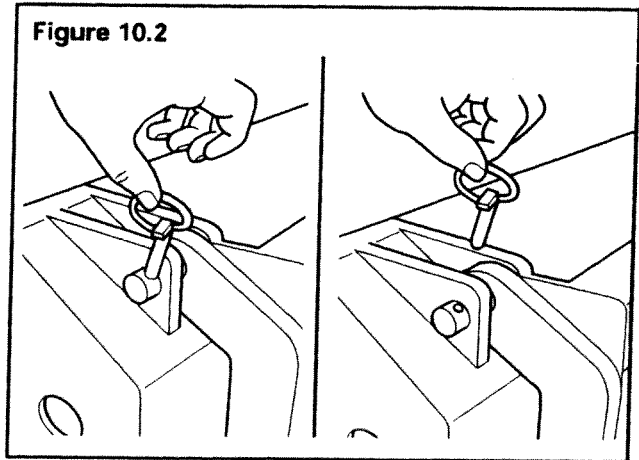
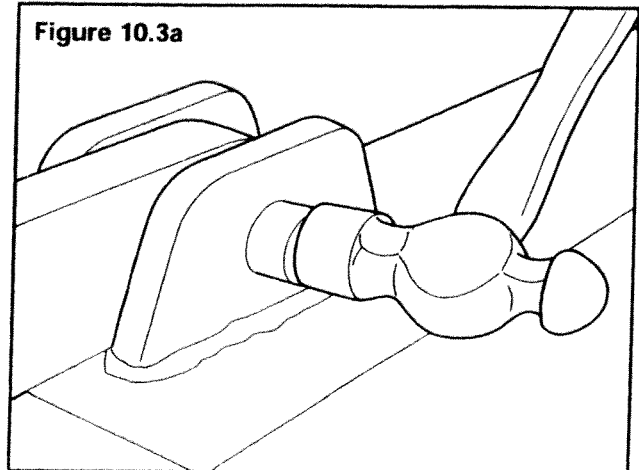
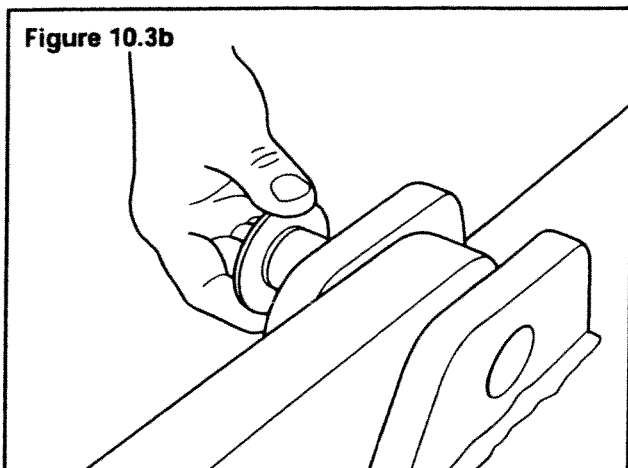


Figure 10.3a





WARNING
Never unlatch the lower latch when the gate is opened from the top. Severe personal injury can result.

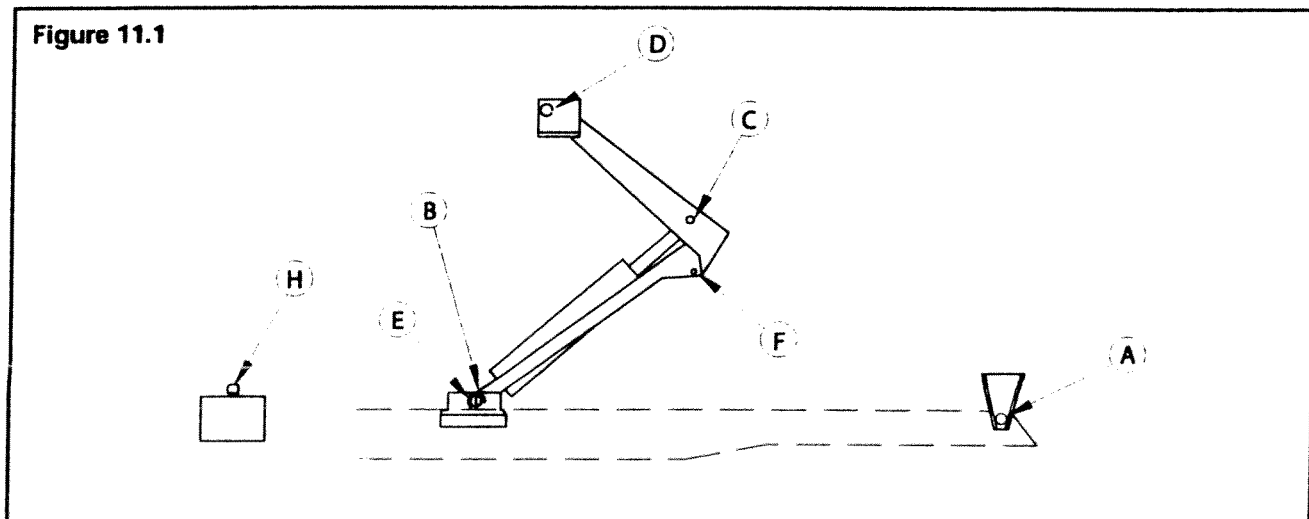
- J. With both people assisting, slowly lower the tailgate to rest on the chains.
- K. Never move between work sites without raising and closing the tailgate.
- L. Use extreme caution when raising the bed. If you raise the bed too high, you could discharge the entire load. Make sure that no one is behind or to the sides of the tailgate while you are raising the body.
- M. Lower the body completely and make sure the body-up light is off before shoveling or pulling materials off the body or tailgate.

Lubrication

NOTE: All maintenance procedures can be performed with the dump body attached.

See Figures 11.1 through 11.4 for lubrication points of Conversion Hoist, twin telescopic conversion hoists, front lift telescopic hoists and underbody lift hoists.

Lubrication Points for Conversion Hoist



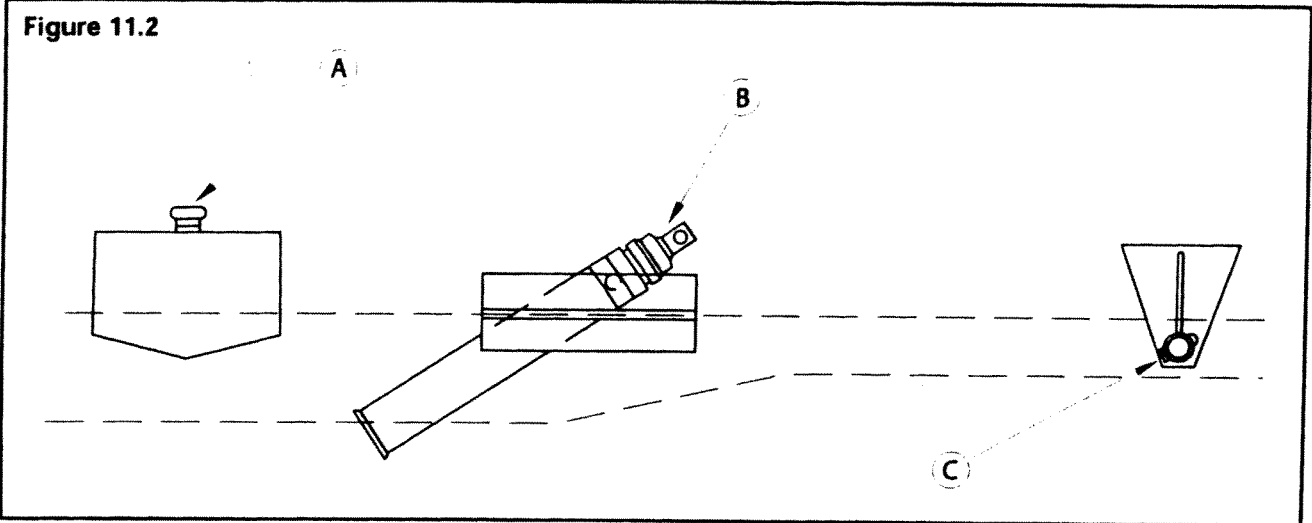
All Lo Body Type Hoist Change: To Broad Type Conversion Hoist

HOIST MODEL	A REAR HINGE	B CYLINDER BASE END	C CYLINDER ROD END	D BODY PIVOT	E CHASSIS PIVOT	F HOIST PIVOT
CD/CDE-411-DA	2	1	1	2	2	2
CD/CDE-511-DA	2	1	1	2	2	2
CD/CDE-519-DA	2	1	1	2	2	2
CD/CDE-624-DA	2	1	1	2	2	2
CD/CDE-626-DA	2	1	1	2	2	2
CD/CDE-5527-DA	2	2	2	2	2	3
CD-5530-DA	2	2	2	2	2	3

Section 11 Lubrication

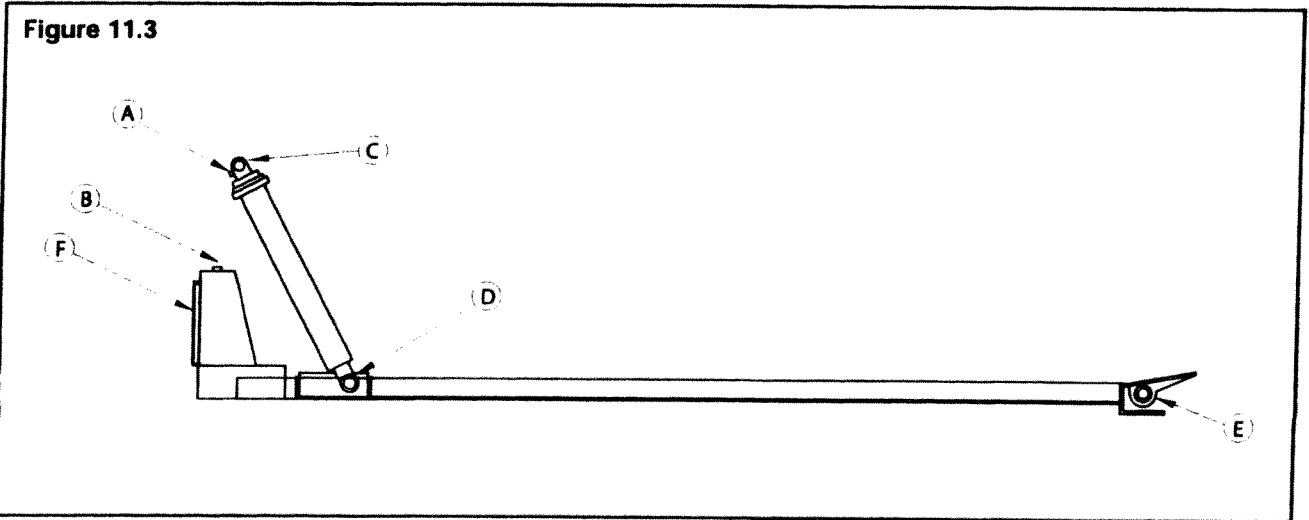


Lubrication Points for Twin Telescopic Conversion Hoists



A. Oil Filler	B. Air Bleeder Valve	C. Rear Hinges (2 places)
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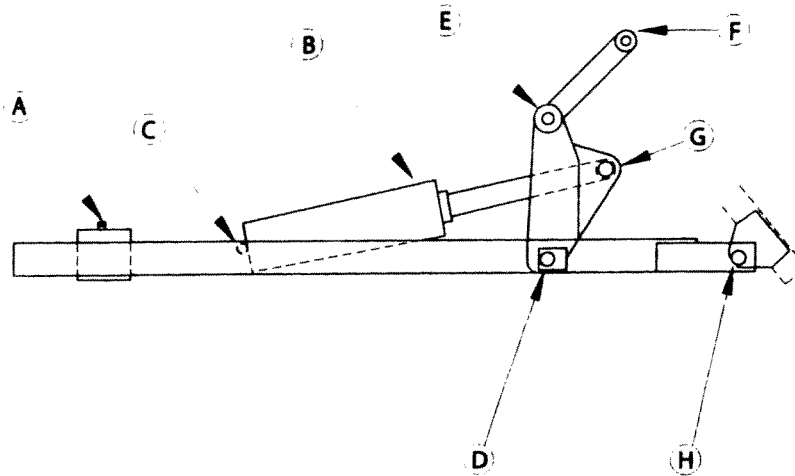
Lubrication Points for Front Telescopic Hoists



A. Air Bleeder Valve	D. Cylinder Base (2 places)
B. Oil Filler	E. Rear Hinge (2 places)
C. Cylinder Ram (1 place)	

Lubrication Points for Underbody Hoists

Figure 11.4



A. Oil Filler - Double Acting Cylinder	E. Lift Link On Lift Arm - (2 places)
B. Oil Filler - Single Acting Cylinder	F. Lift Link At Body - (2 places)
C. Cylinder Base - (1, 2 or 4 places)	G. Crosshead - (1 or 2 places)
D. Lift Arm Pivot - (2 places)	H. Rear Hinge (2 places)

Section 12 Hydraulic Oil

Galion-Godwin

Oil Supply

Whenever the hoist is lubricated, the condition and level of the oil supply should be checked. Dirty oil is the main cause of expensive pump and cylinder repair and likewise expensive downtime. Dirty oil is detectable and should be replaced before considerable damage is done. A sample on

a dipstick will show its condition. Take the sample and put a drop on a cloth or paper blotter. Any revealed residue means dirty oil. To replace the oil supply, drain and flush the entire system. Fill the system with suitable oil with the following specifications:

Oil Specifications

CODE 1657 RANDO OIL HD 32
Typical Characteristics:

Appearance.....	Pale
Gravity, API	30.7
Flash, COC, F.....	385
Pour Pt., °F.....	-25
Viscosity, at 40°C	30.1
at 100°C	5.3
at 100°F	155
at 210°F.....	44
Viscosity Index.....	106
Neutralization No.....	0.4

WARNING

Never use a detergent oil or used oil in the hydraulic system.

Rando Oils HD are light-colored, premium, anti-wear hydraulic oils blended from high quality paraffin distillate stock with excellent stability. They are rust and oxidation inhibited and contain a specially selected antifoamant that permits very rapid release of entrained air. This latter point is important because entrained air will cause system sponginess, thus affecting the rapidity and accuracy of system response. They also contain a very effective zinc-type antiwear agent that helps minimize wear in high-speed, high-pressure vane and gear pumps while meeting the lubrication requirements of axial piston pumps having bronze-on steel metallurgy.

When purchasing hydraulic oil, show these specifications to your local dealer and ask for a similar type product.

This oil is recommended for normal climatic conditions within the continental United States. Where sustained temperatures are 0°F (-18°C) and lower or in excess of +90°F (32°C), this oil should be removed and replaced with one of a viscosity rating suitable to the ambient temperature of your region. For suitable replacement, consult your local distributor or dealer.

Proper Procedure for Filling a Galion-Godwin Hoist with Hydraulic Oil

The following instructions are for filling single-acting hoists, double-acting hoists or telescopic hoists.

WARNING

Do not go under a raised loaded body.

WARNING

Do not go under a raised body without propping it. Body must be empty.

Single-Acting Hoists

To properly fill a single-acting hoist with hydraulic oil, perform the following steps:

1. Check to be sure that the unit is plumbed properly.
2. With everything properly installed, engage the PTO or electric power unit. Raise the body until the unit stops.
3. Add oil to the reservoir or cylinder until the hoist is fully raised to the bypass.

Install the pipe plug in the reservoir or special 25 PSI relief valve in the cylinder. Electric power units will have a breather.

Double-Acting Hoists

To properly fill a double-acting hoist with hydraulic oil, perform the following steps:

1. Check to be sure that the oil reservoir is installed properly.
2. Check to be sure that the unit is plumbed properly.
3. With everything properly installed, engage the PTO or electric power unit. At idle speed, extend the cylinder.
4. When the cylinder stops extending, add oil to the reservoir until the cylinder is fully extended. The lift arms should be touching the stop blocks or stop angle at this point.