



# **WARREN**

## **DUMP BODIES**

### **Installation & Operation Manual**

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Read and understand this manual before installing or operating the truck body. Follow all of the safety instructions. Keep all manuals provided with your truck body in a safe place inside your truck at all times.

Some components may have separate instruction manuals. Where this manual indicates that you should read another manual, and you do not have that manual, contact your dealer or Warren, Inc. for assistance.

Information provided in this manual was current as of the issue date. Warren, Inc. reserves the right to make design changes without further notice or liability.

# CAUTION

**BEFORE OPERATING OR  
BEFORE PERFORMING ANY  
SERVICE OR MAINTENANCE ON  
THIS WARREN PRODUCT, ALL  
APPROPRIATE OSHA  
REGULATIONS MUST BE  
OBSERVED.**

**FEDERAL LAW REQUIRES US TO NOTIFY YOU IN THE EVENT OF A  
SAFETY RELATED DEFECT DISCOVERY. PLEASE KEEP YOUR  
WARREN DISTRIBUTOR INFORMED OF ANY CHANGE OF VEHICLE  
OWNERSHIP OR ADDRESS.**

# SAFETY

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## SAFETY ALERT SYMBOL AND SIGNAL WORDS

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This Owner's Manual covers dump bodies produced by Warren, Inc. Before installing a dump body, you must read, understand and follow the instructions and safety warnings in this manual. Your dump body may not be equipped with some of the optional equipment shown in the illustrations in this manual.

The safety information in this manual is denoted by the safety alert symbol: ^

The level of risk is indicated by the following signal words.

### **^ DANGER**

**DANGER** – Indicates a hazardous situation, which, if not avoided, will result in death or serious injury.

### **^ WARNING**

**WARNING** – Indicates a hazardous situation, which, if not avoided, could result in death or serious injury.

### **^ CAUTION**

**CAUTION** – Indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury.

### **NOTICE**

**NOTICE** – Indicates a situation that could result in damage to the equipment or other property.

## HAZARDS

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Hazards from installation and operation of the dump body are:

- Incorrect installation
- Overloading.
- Improper load distribution
- Inappropriate cargo
- Not using body prop

### INCORRECT INSTALLATION

Install the dump body as described. If you are unsure about any part of the installation procedure, contact Warren, Inc. before continuing with the installation.

### OVERLOADING

An overloaded truck can result in loss of control, which may result in death or serious injury. Overloading may also result in tire, wheel, axle or structural failure, and also increased stopping distances.

## **^ WARNING**

### **Collision Hazard**

**Overloading can result in death or serious injury.**

**Do not load a truck so that the Gross Vehicle Weight Rating (GVWR) or Gross Axle Weight Rating (GAWR) is exceeded.**

## **IMPROPER LOAD DISTRIBUTION**

Improper load distribution can result to poor stability and handling.

Uneven load distribution can cause tire, wheel, axle or structural failure. Be sure your load is evenly distributed front-to-rear and side-to-side.

## **^ WARNING**

### **Collision Hazard**

**An improperly loaded body can result in failure or loss of control, leading to death or serious injury.**

**Evenly distribute the load throughout the body.**

## **INAPPROPRIATE CARGO**

Carry only the cargo that your truck body was designed for. A dump body must not be used to carry certain items, such as people, containers of hazardous substances or containers of flammable substances.

## **^ WARNING**

**Never transport people in or on a dump body.**

**Do not transport flammable, explosive, poisonous or other dangerous materials in or on your dump body unless specifically designed to do so.**

## **CLEARANCE**

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## **^ WARNING**

### **Collision Hazard**

**Know the height, width and length of the truck with the dump body.**

**Always be aware of clearances.**

## **HYDRAULICS**

---

## **^ WARNING**

Pressurized fluids can penetrate the skin.

Hydraulic hoses can fail from age, damage and exposure.

Do not search for hydraulic leaks without body and face protection. A tiny, almost invisible leak can penetrate the skin, thereby requiring immediate medical attention.

Use wood or cardboard to detect hydraulic leaks, never use your hands.



## MAINTENANCE

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### **^ WARNING**

#### Crushing Hazard

Before performing inspections, service or maintenance:

- Park truck on firm, level surface.
- Set brakes, turn truck engine off and remove ignition key.
- Use body prop to support raised empty dump body.



## LOADING AND UNLOADING

---

### **^ DANGER**

#### Electrocution Hazard

Contact with overhead electrical lines will cause serious injury or death.

Electrocution can occur without contact.

Be sure there are no electrical lines over or near the dump body before raising.

## BODY PROP

---

### **^ DANGER**

#### Crushing Hazard

The body props are designed to support an empty dump body only.

**NEVER** support a loaded dump body with the body prop(s).

Never enter the area under a raised dump body unless body is supported with body prop(s).

## HAZARDS FROM MODIFYING EQUIPMENT

---

Before making any alteration to your Warren, Inc equipment, contact your dealer or Warren, Inc. and describe the alteration you are contemplating. Altering may cause your equipment to be unsafe and may void the manufacturers' warranty.

## SAFETY WARNING LABELS



Label on Dashboard



Label Near Body Prop



Label Near Body Prop



Label On Dashboard



Label On Left And Right Rear Side Of Body



# **CAUTION**

## **HOIST AND BODY INSTRUCTIONS**

1. Improper operation of this unit can result in serious injury. Do not operate unless you have been properly instructed, have read, and are familiar with the operating instructions. If you do not have a copy of these instructions, please obtain them from your employer, distributor, or leaseholder, as appropriate before you attempt to operate this unit.
2. Do not dump on unlevel ground or ground having insufficient footing to maintain the unit level, for example, ground that has been recently excavated and/or refilled, and which is soft and uncompacted.
3. Be certain the vehicle is properly and securely braked before using the hoist.
4. Be certain that adequate overhead clearance is assured before dumping (to clear power lines or any other overhead obstructions).
5. Never move the vehicle when the body is in a raised position.
6. Always inspect the hoist and body before using the unit. If there are signs of improper or lack of maintenance, damage to any part, or loose mounting, do not use the hoist. Do not attempt your own repair unless you are specifically trained.
7. Do not move the vehicle when the power take-off is engaged.
8. **DO NOT OVERLOAD!** The payload capacity of the completed vehicle will be controlled by one of the following criteria. The criteria which yields the lowest permissible capacity dictates the maximum payload capacity of the completed vehicle:
  - A. By the hoist capacity of body and payload, as established by the manufacturer's literature and/or operations manual, if the hoist capacity is less than either the Gross Axle Weight Rating (GAWR), or the Gross vehicle Weight Rating (GVWR).
  - B. By the Gross Axle Weight Rating (GAWR) as stated on the Certification Label, for any of the vehicle axles, even though the hoist, body and payload capacity or the Gross vehicle Weight Rating (GVWR) are greater.
  - C. By the Gross vehicle Weight Rating (GVWR) as stated on the Certification Label, even though the hoist, body and payload capacity or the Gross Axle Weight Rating (GAWR) for any of the axles may be greater.
9. Each load should be loaded in a stable position equally distributed through the body.
10. Do not leave the vehicle during the dumping cycle. Remain at the controls. Release the tailgate controls before lifting the body.
11. Never stand or move through or allow anyone else to stand or move through the area when the hoist operates, or into an area where an upset load, or the discharge from the body may fall.
12. Precautions should be loaded in a stable position equally distributed through the body.
13. When the body is stored or not in use, the body must be in the full lowered position, and resting on the chassis or hoist frame. **IGNITION KEY SHOULD BE REMOVED TO PREVENT TAMPERING BY UNAUTHORIZED PERSONNEL!**
14. Whenever the body is in an elevated or raised position for any repairs, adjustments, service, or any other reason, it must be securely blocked or propped so that it cannot fall, however, under no circumstances should any repair, adjustments, or service be attempted on a loaded body when it is in a raised position.
15. Regularly inspect the vehicle to see that all safety equipment required by Federal, State, County, Municipal and/or Local regulations have been installed, are operable, and used.

800-30021

**Label on Front of Body**

## **^ WARNING**

**To protect against death or serious injury, all labels must be on the truck body and must be legible.**

**If any of these labels are missing or cannot be read, call Warren, Inc. at 1-601-765-8221 for replacement labels.**

## **REPORTING SAFETY DEFECTS**

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If you believe that your vehicle has a defect that could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Warren, Inc.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Warren Manufacturing.

To contact NHTSA, you may either call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153), go to <http://www.safercar.gov>; or write to: Administrator, NHTSA, 400 Seventh Street, SW., Washington, DC 20590. You can also obtain other information about motor vehicle safety from <http://www.safercar.gov>.

## **DUMP BODY INSTALLATION**

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### **PROVIDING AN ADEQUATE TRUCK**

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The truck must be matched to the Gross Vehicle Weight Rating (GVWR) of your dump body.

## **^ DANGER**

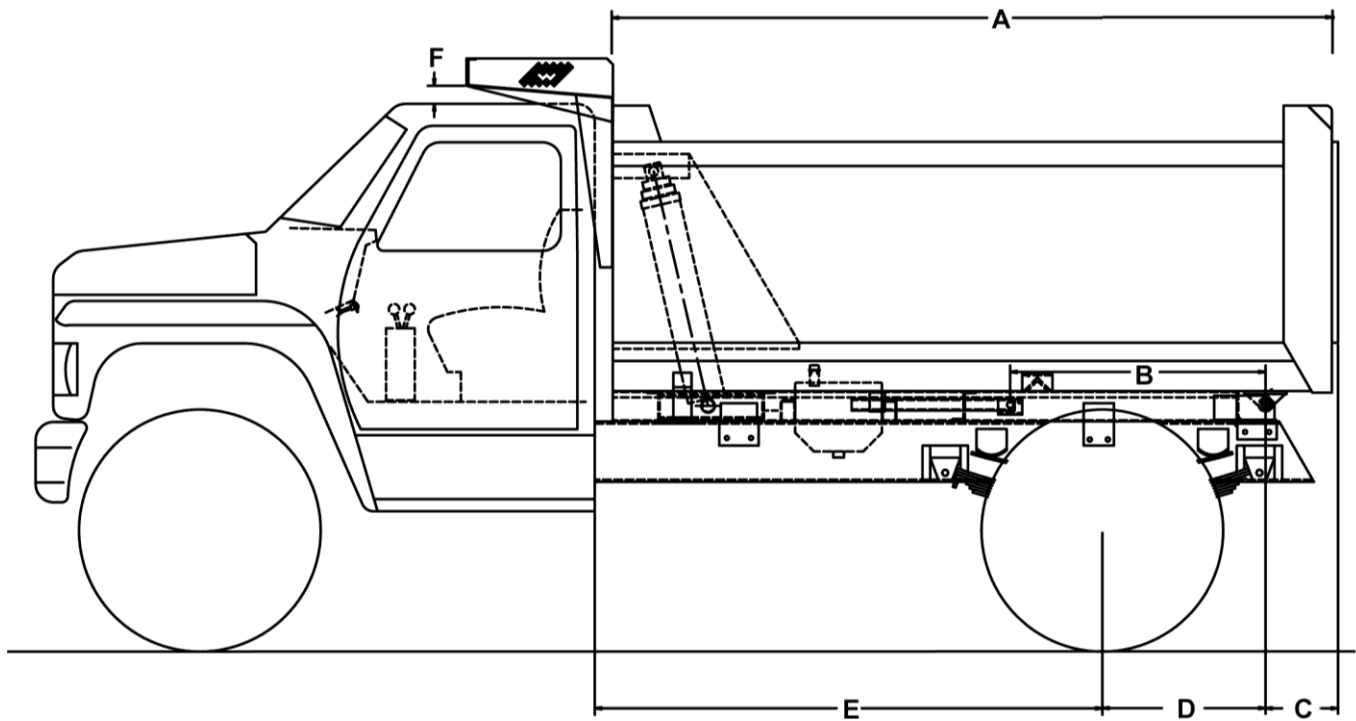
**Loss of control hazard**

**Use of an under-rated truck could result in loss of control and can lead to death or serious injury.**

**Be sure your truck is rated and sized for the body.**

## T MODEL

### INSTALL SUBFRAME



A	B	C	D	E	F
8 Ft.	42-1/4 In.	12 In.	27 In.	60 In.	3 - 4 In. Typ.
9 Ft.	42-1/4 In.	12 In.	27 In.	72 In.	3 - 4 In. Typ.
10 Ft.	42-1/4 In.	12 In.	27 In.	84 In.	3 - 4 In. Typ.

#### **^ WARNING**

##### **Crushing Hazard**

##### **Before performing installation:**

- Park truck on a firm and level surface.
- Set parking brakes, turn truck engine off and remove ignition key.

1. Carefully check and verify the dimensions before starting the installation.

#### **^ WARNING**

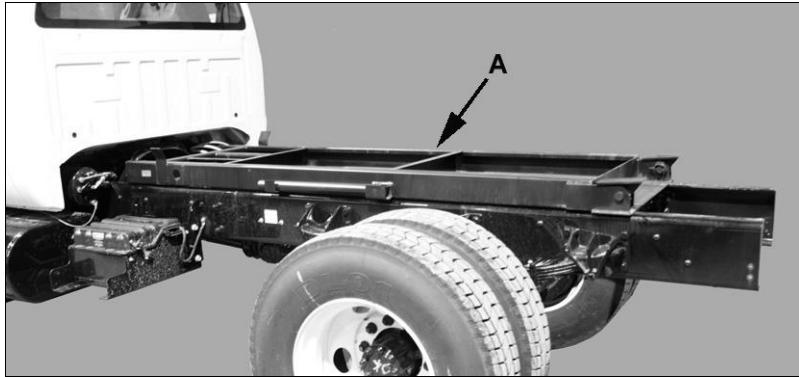
##### **Crushing Hazard**

The weight of the subframe assembly is 250 lbs.

Use an adequate lifting device to raise subframe.

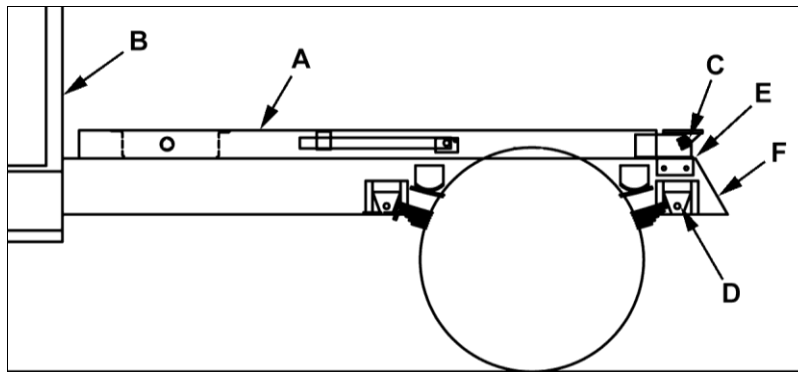


2. Connect an adequate lifting device to the subframe (A) and position on truck frame with the hinge at the rear of the truck.



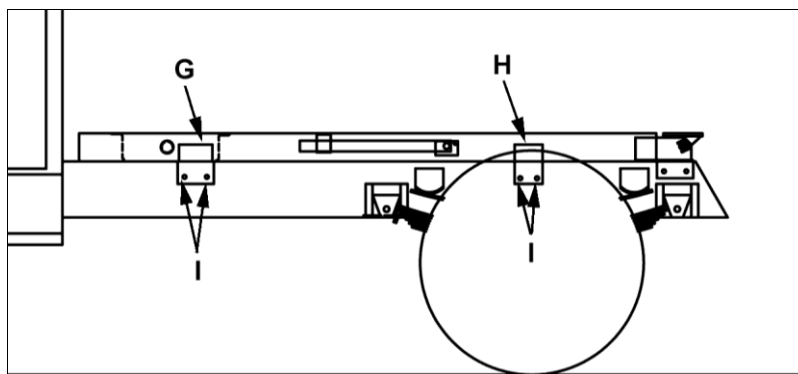
**Install Subframe On Truck Frame**

3. Position subframe (A) 3-4 inches from rearmost part of cab (B) or obstructions behind cab. Verify that dump hinge pivot pin (C) on subframe is not forward of the rear spring hanger pin (D). Verify that subframe is square with truck frame. Clamp subframe to truck frame.
4. The truck frame may need to be cut off to allow clearance for the dump body. Measure one inch (E) behind the subframe and mark the top of both truck frame rails. Cut the truck frame at an angle (F).



**Position Subframe on Truck Frame**

5. Install the front mounting plates (G) as close to the cylinder mount as possible and clamp in position. Position the rear mounting plates (H) as close to the dump hinge as possible and clamp in position. Plates must not extend above the top of the subframe. Weld mounting plates to the subframe. Do not weld mounting plates to the truck frame. Using mounting plates as a guide, drill 11/16 inch holes through truck frame and install  $\frac{5}{8}$  x 2 inch cap screws (I), flat washers and lock nuts.





## Front Mounting Plates

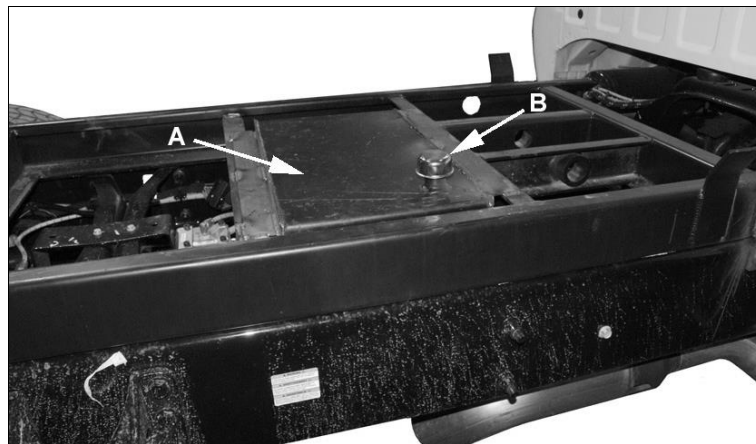
6. Install hinge supports (J) on each side directly below the hinges. Supports plates may require modification. Weld supports to subframe. Do not support plates to the truck frame. Drill 11/16 inch holes through hinge support and truck frame. Install  $\frac{5}{8}$  x 2 inch cap screws, flat washers and lock nuts.



**Rear Hinge Supports**

## INSTALL HYDRAULIC RESERVOIR AND CYLINDER

1. Install hydraulic reservoir (A) between frame rails rearward of the hydraulic cylinder mount. Installed oil fill cap (B) height must not exceed 3 inches above subframe. Modify mounting brackets as necessary.



**Install Hydraulic Oil Reservoir**

### **^ WARNING**

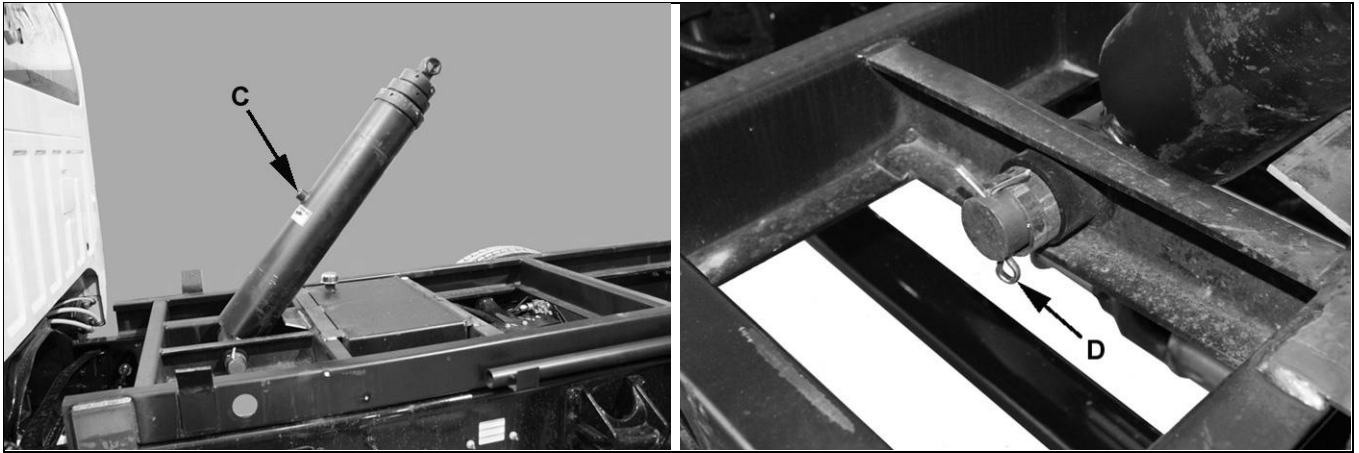
**Crushing Hazard**

**The weight of the cylinder is 200 lbs.**

**Use an adequate lifting device to raise cylinder.**

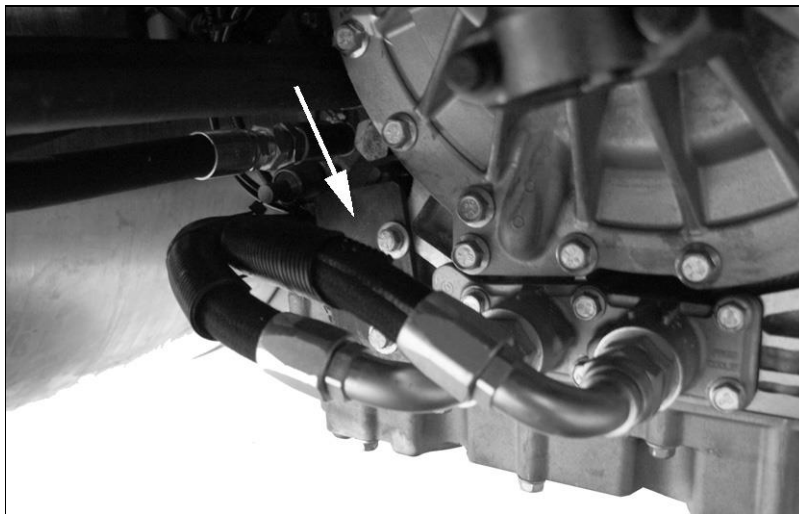


2. Raise hydraulic cylinder with an adequate lifting device.
3. Position cylinder as shown with port (C) facing the cab and install pin and bushings. Install cotter pins (D) on each end of pin. Spread cotter pins.



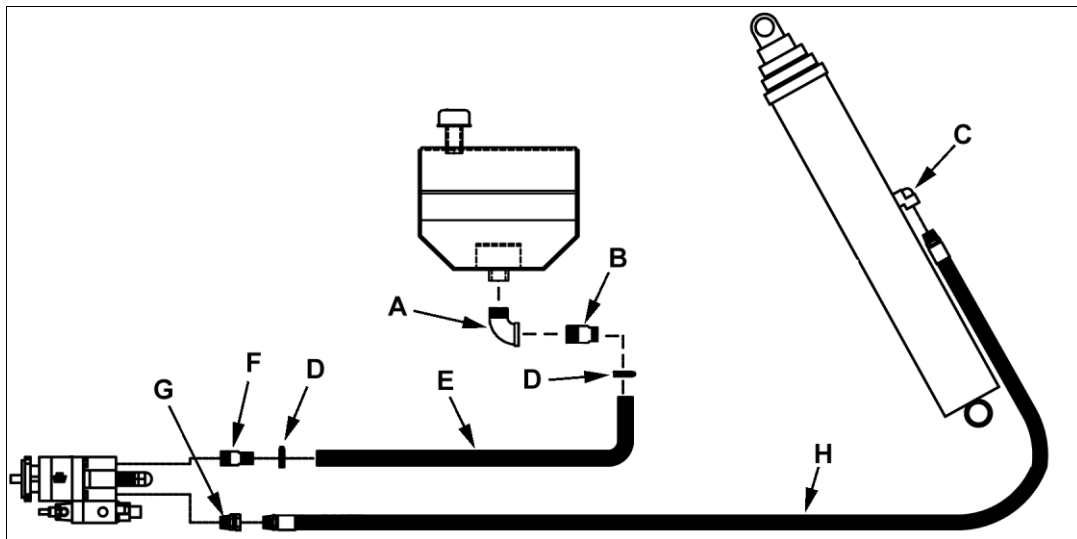
**Install Hydraulic Cylinder**

4. Install PTO pump and controls per the manufacturers' specifications. Warren recommends installing a rear support bracket on the PTO pump. Fabricate and connect bracket to rear of pump and to truck transmission.



**Install Pump Support**

5. Connect hydraulic hoses between reservoir, pump and cylinder.



### Install Hydraulic Hoses

A – Elbow, 1 ¼ Inch  
 B – Nipple, 1¼ Inch  
 C – Elbow, ¾ x ¾ Inch  
 D – Clamp, 1 ¼ Inch

E – Suction Hose, 1 ¼ Inch  
 F – Nipple, 1 ¼ Inch  
 G – Swivel Adapter, 1 Inch  
 H – Hose, ¾ Inch

#### 6. Fill reservoir with hydraulic oil and check for leaks.

#### **^ WARNING**

Pressurized fluids can penetrate the skin.

Hydraulic hoses can fail from age, damage and exposure.

Use wood or cardboard to detect hydraulic leaks, never your hands.



### INSTALL BODY

#### **^ WARNING**

Crushing Hazard

The weight of the body is approximately 3000 lbs.

Use an adequate lifting device to raise body.

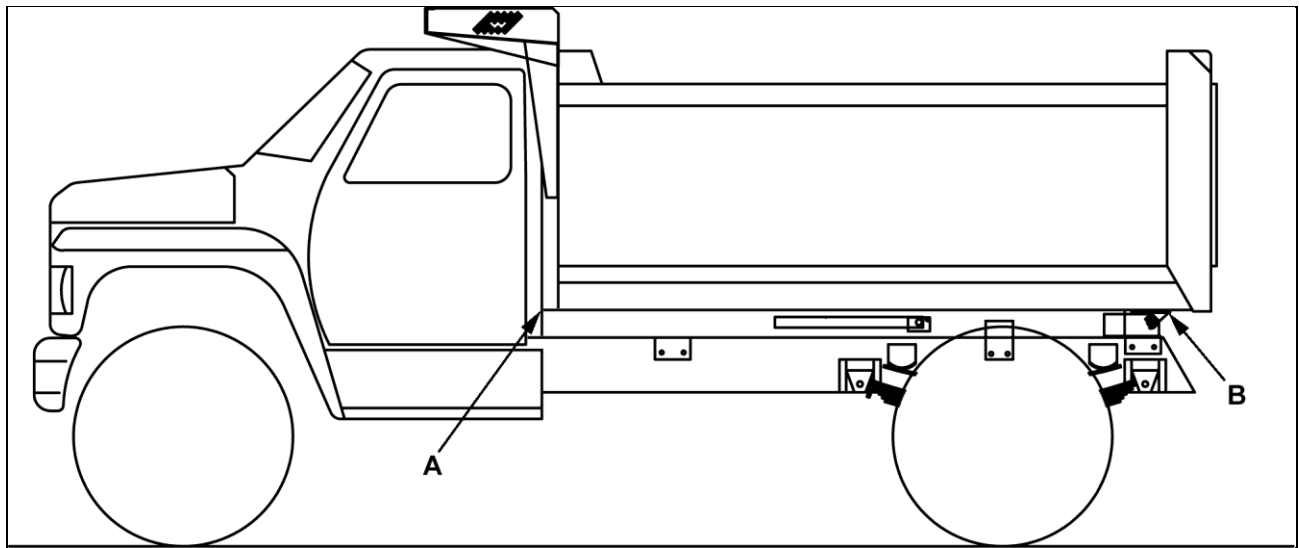


1. Using properly rated lifting devices, raise the body and install on subframe.



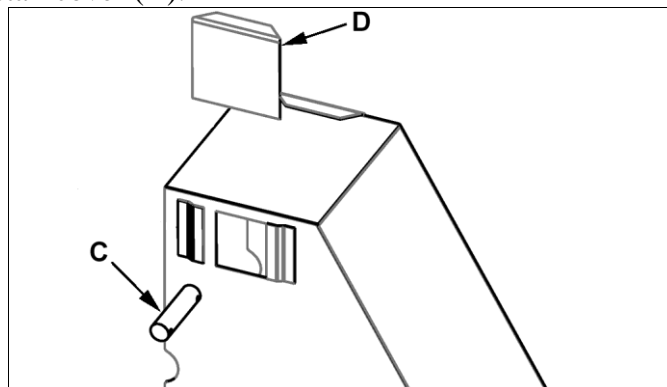
### **Install Body**

2. Position so front of body is flush with subframe at (A). Verify that dump body frame is square with subframe and truck frame. Clamp body frame to subframe. Weld body to rear hinges (B).



### **Position Body On Subframe**

3. Connect rod end of hydraulic cylinder to body with pin (C). Install cotter pin on each end of pin (C). Spread cotter pins and install cover (D).

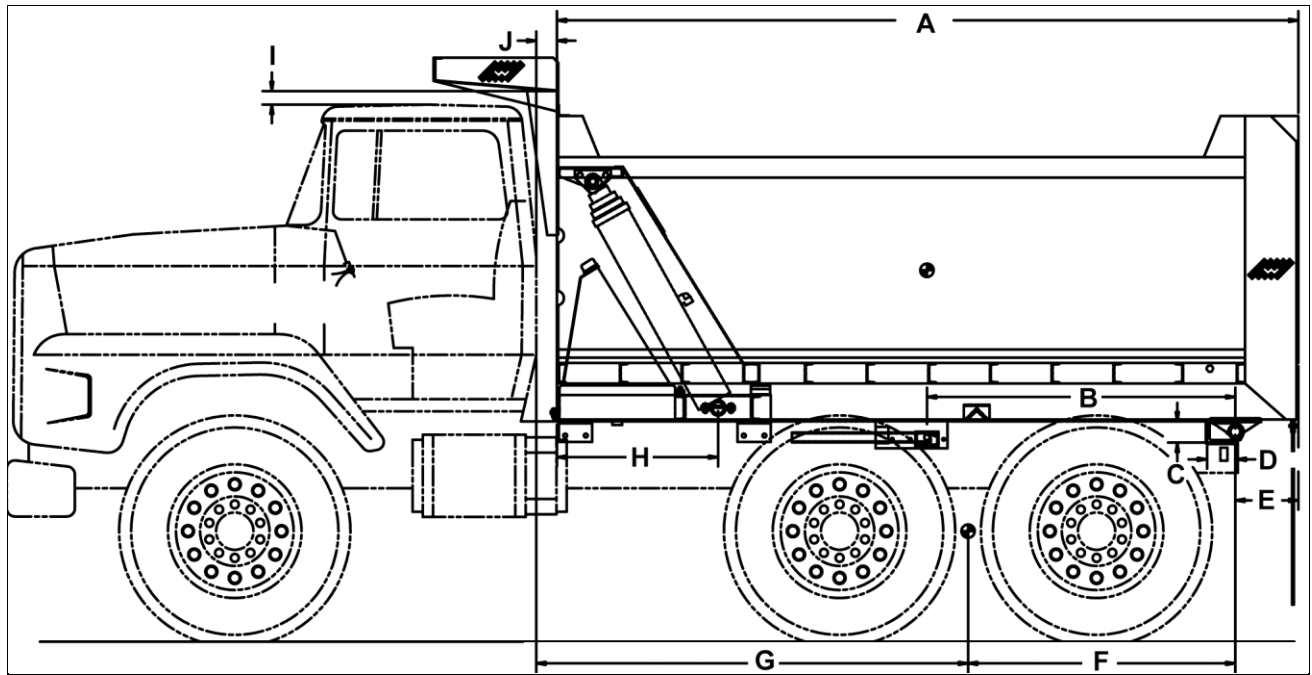




## Connect Cylinder To Dump Body

**VTBW**

### INSTALL CYLINDER FRAME AND HINGE



A	B	C	D	E	F	G	H	I	J
12 Ft.	60 In.	4-1/8 In.	5-3/4 In.	12 In.	48 - 50 In.	84 In.	31-3/8 In.	3 - 4 In. Typ.	3 - 4 In. Typ.
13 Ft.	60 In.	4-1/8 In.	5-3/4 In.	12 In.	48 - 50 In.	96 In.	31-3/8 In.	3 - 4 In. Typ.	3 - 4 In. Typ.
14 Ft.	60 In.	4-1/8 In.	5-3/4 In.	12 In.	48 - 50 In.	108 In.	31-3/8 In.	3 - 4 In. Typ.	3 - 4 In. Typ.
15 Ft.	60 In.	4-1/8 In.	5-3/4 In.	12 In.	48 - 50 In.	120 In.	31-3/8 In.	3 - 4 In. Typ.	3 - 4 In. Typ.
16 Ft.	60 In.	4-1/8 In.	5-3/4 In.	12 In.	48 - 50 In.	132 In.	31-3/8 In.	3 - 4 In. Typ.	3 - 4 In. Typ.
17 Ft.	60 In.	4-1/8 In.	5-3/4 In.	12 In.	48 - 50 In.	144 In.	31-3/8 In.	3 - 4 In. Typ.	3 - 4 In. Typ.

**^ WARNING**

**Crushing Hazard**

**Before performing installation:**

- Park truck on a firm and level surface.
- Set parking brakes, turn truck engine off and remove ignition key.

1. Carefully check and verify the dimensions before starting the installation.

**^ WARNING**

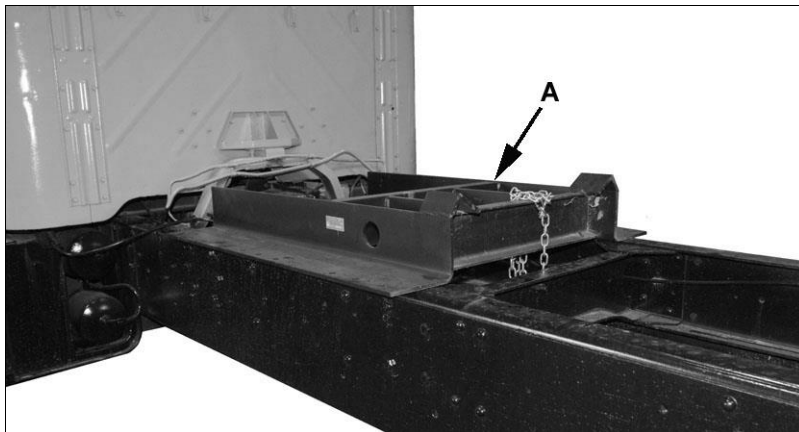
**Crushing Hazard**

**The weight of the cylinder frame assembly is 200 lbs.**

**Use an adequate lifting device to raise subframe.**

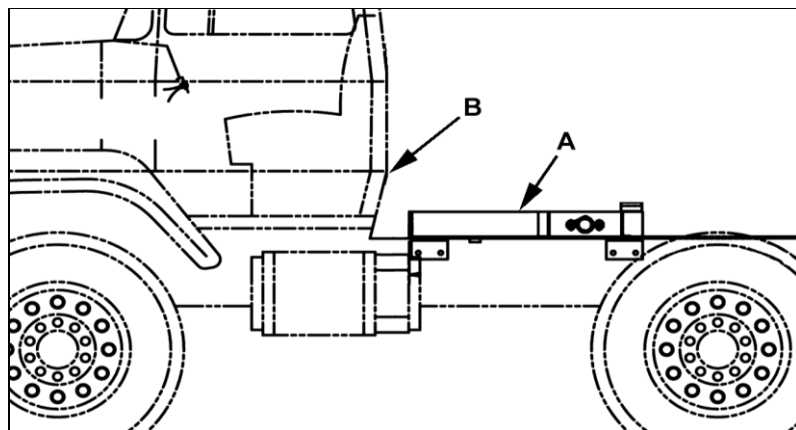


2. Connect an adequate lifting device to the cylinder frame (A) and position on truck frame.



**Install Cylinder Frame on Truck Frame**

3. Position cylinder frame (A) 3-4 inches from rearmost part of the cab (B) or obstructions behind cab. Verify that cylinder frame is square with truck frame. Center cylinder frame on truck frame and clamp in position.

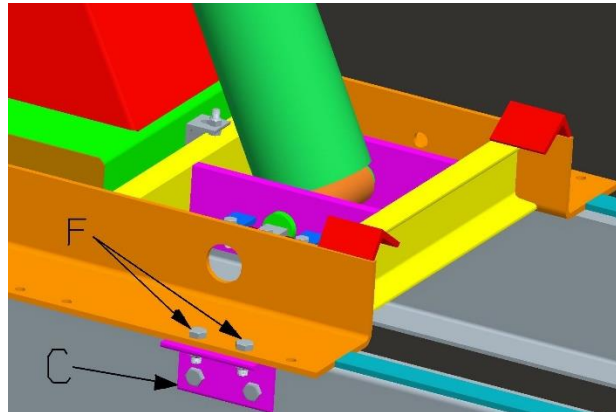


**Position Cylinder Frame on Truck Frame**

4. Install four cylinder frame mounting plates (C) as close to the cylinder mount as possible and clamp in position. Using mounting plates as a guide, drill  $\frac{3}{4}$  inch holes through truck frame and install  $\frac{5}{8}$  x 2 inch cap screws, flat washers and lock nuts. Weld mounting plates to the cylinder frame. Do not weld mounting plates to the truck frame.

#### NOTICE

**Install (2)  $\frac{5}{8}$  x 2 inch cap screws (F) through subframe and mounting angle (C). Cut or drill holes as needed.**



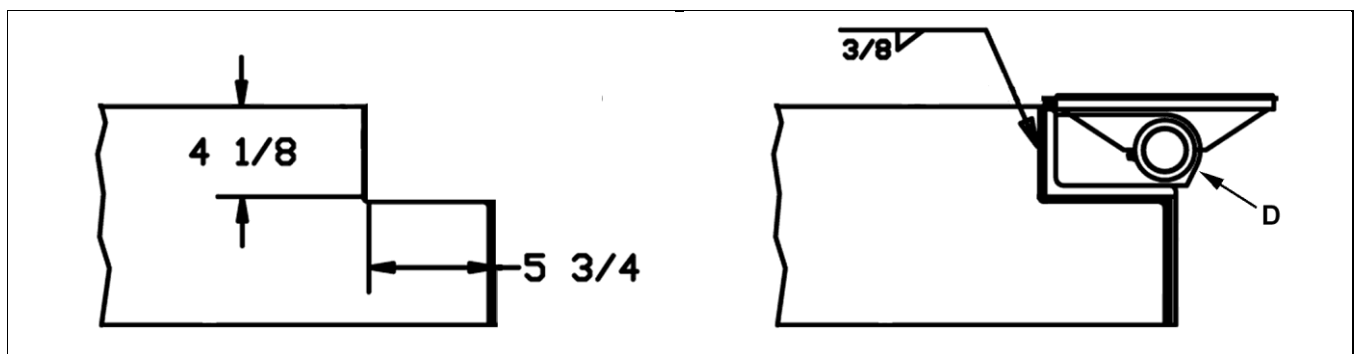
**Install Cylinder Frame Mounting Plates**

5. Install  $\frac{3}{8}$  x 1 inch spacer pad on top of truck frame. The spacer will go from the rear of the cylinder frame to the front of the hinge.

#### NOTICE

**Dimensions in step 6 are approximate. Top of hinge pad must be flush with top of spacer pad.**

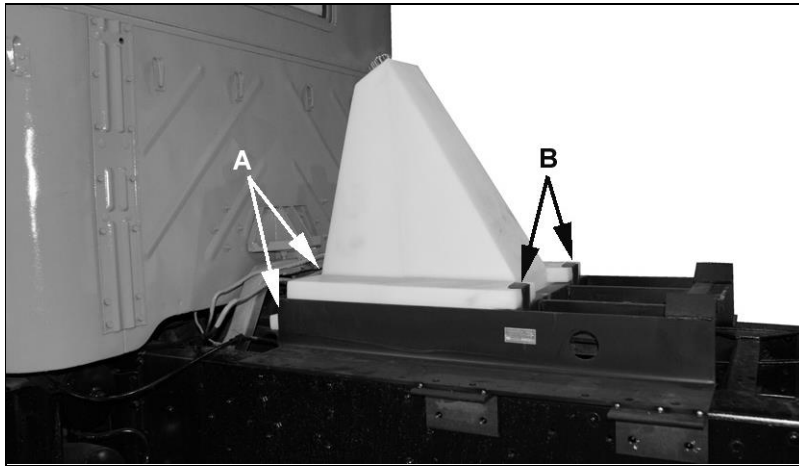
6. The truck frame will require modification for the rear hinge assembly. Carefully measure and verify the dimensions from the layout drawing in this section. The top of the hinge pad must be flush with the top of the spacer pad. Remember, measure twice and cut once. Cut the truck frame to accept the rear hinge assembly (D). Verify that rear hinge assembly is square with truck frame and centered. Weld to the truck frame.



**Install Rear Hinge Assembly**

## INSTALL HYDRAULIC RESERVOIR AND CYLINDER

1. Attach front of hydraulic reservoir to cylinder frame with two ½ x 3 inch cap screws (A), four flat washers and two lock nuts. Weld two rear reservoir brackets (B) to cross member to retain rear of reservoir. Brackets should be tight enough to retain reservoir while allowing the frame to flex.



**Install Hydraulic Reservoir**

### **^ WARNING**

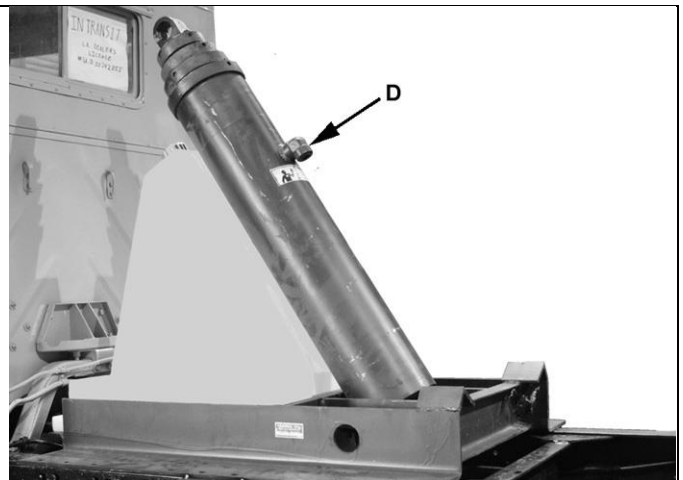
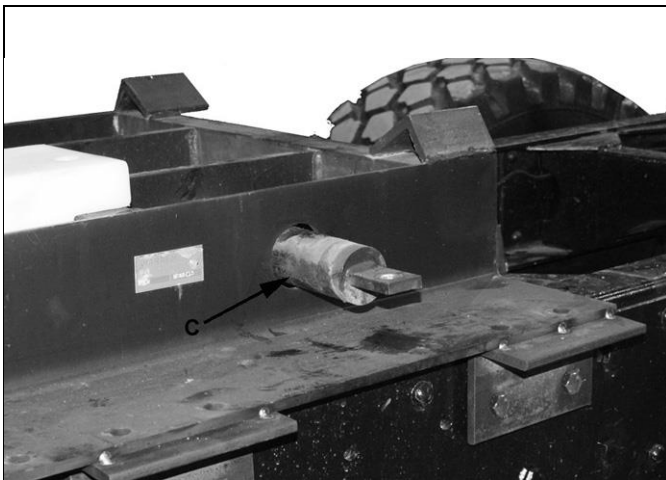
**Crushing hazard.**

**The weight of the cylinder is 350 lbs.**

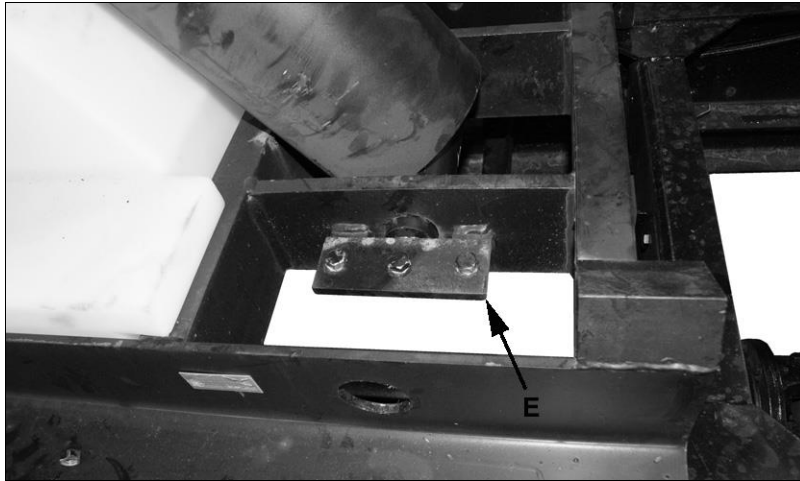
**Use an adequate lifting device to raise cylinder.**



2. Remove three cap screws on retaining plate pull cylinder pin (C) out.
3. Raise hydraulic cylinder with an adequate lifting device.
4. Position cylinder as shown with port (D) facing rearward and install pin (C). Install retaining plate (E) and three cap screws.

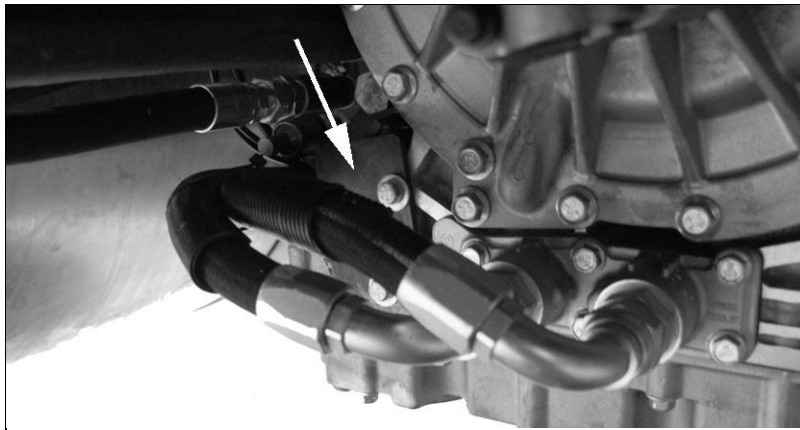


**Install Hydraulic Cylinder**



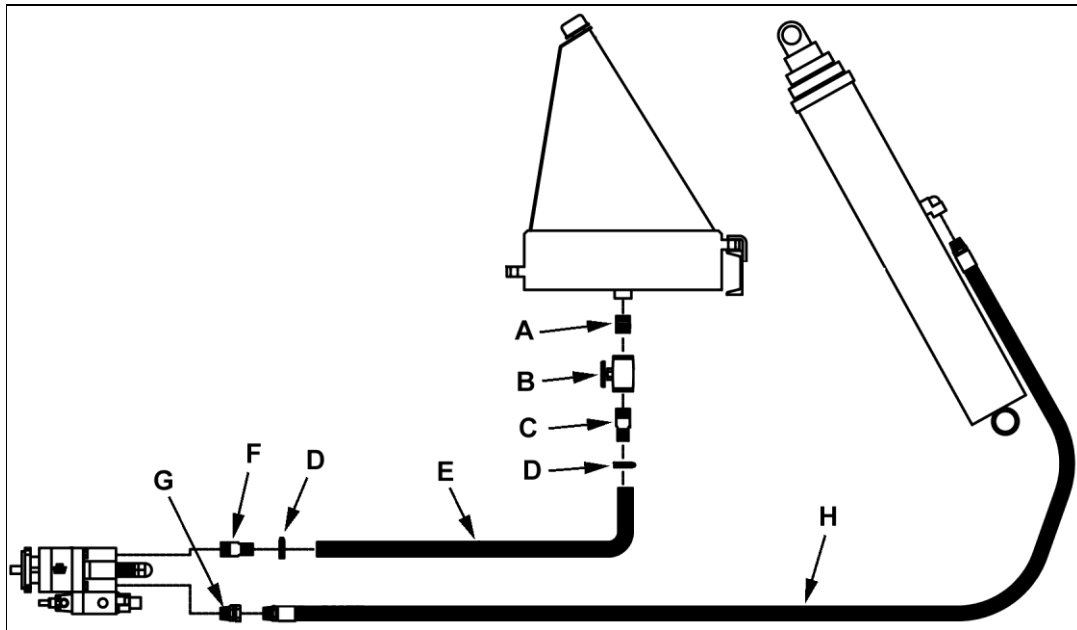
### **Install Hydraulic Cylinder**

5. Install PTO pump and controls per the manufacturers' specifications. Warren recommends installing a rear support bracket on the PTO pump. Fabricate and connect bracket to rear of pump and to truck transmission.



### **Install Pump Support**

6. Connect hydraulic hoses between reservoir, pump and cylinder.



### Install Hydraulic Hoses

A – Nipple, 1 ¼Inch  
 B – Gate Valve, 1 ¼ Inch  
 C – Nipple, 1 ¼Inch  
 D – Clamp, 1 ¼ Inch

E – Suction Hose, 1 ¼ Inch  
 F – Nipple, 1 ¼Inch  
 G – Swivel Adapter, 1 Inch  
 H – Hose, 1 Inch

### 7. Fill reservoir with hydraulic oil and check for leaks.

#### **^ WARNING**

Pressurized fluids can penetrate the skin.

Hydraulic hoses can fail from age, damage and exposure.

Use wood or cardboard to detect hydraulic leaks, never your hands.



### INSTALL BODY

#### **^ WARNING**

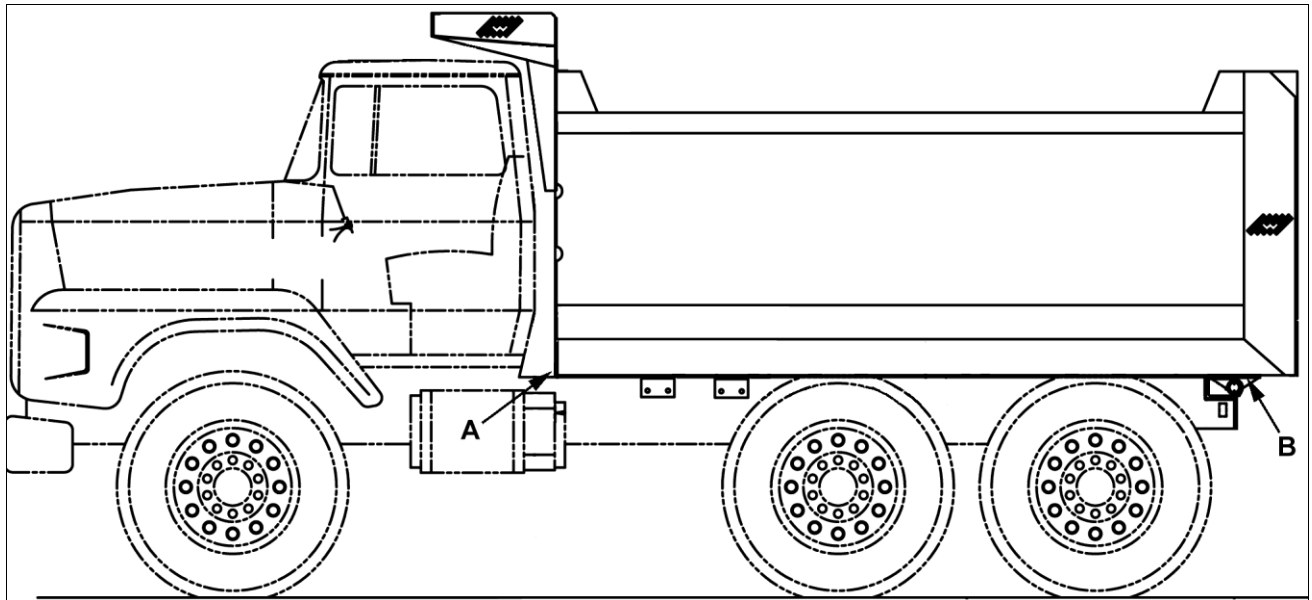
Crushing hazard.

The weight of the body is approximately 5000 lbs.

Use an adequate lifting device to raise body.

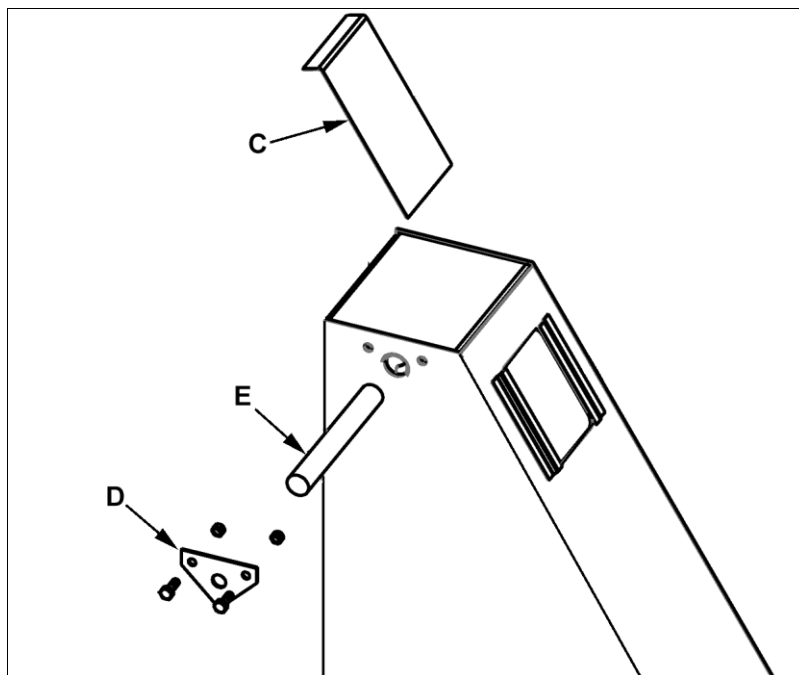


1. Position so front of body is flush with cylinder frame at (A). Verify that dump body is square with cylinder frame and truck frame. Clamp body frame to subframe. Weld body to rear hinges (B).



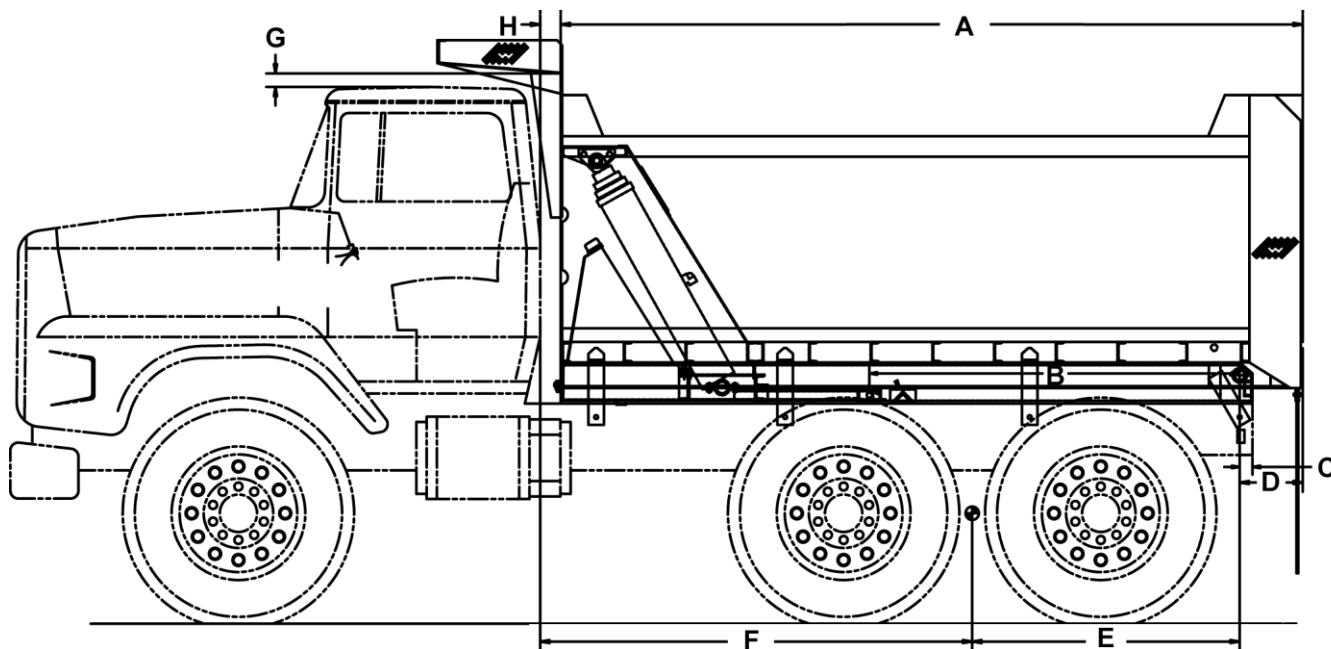
### **Install Dump Body**

2. To connect rod end of cylinder to dump body, remove access cover (C), cap screws, nuts, pin retainer (D) and pin (E).
3. Weld retainer (D) to pin (E).
4. Insert retainer/pin through body and rod end of cylinder.
5. Install cap screws, nuts and access cover (C).



### **Connect Cylinder To Dump Body**

## INSTALL CYLINDER FRAME AND HINGE



A	B	C	D	E	F	G	H
12 Ft.	72 In.	2-1/2 In.	12 In.	48 - 50 In.	84 In.	3 - 4 In. Typ.	3 - 4 In. Typ.
13 Ft.	72 In.	2-1/2 In.	12 In.	48 - 50 In.	96 In.	3 - 4 In. Typ.	3 - 4 In. Typ.
14 Ft.	72 In.	2-1/2 In.	12 In.	48 - 50 In.	108 In.	3 - 4 In. Typ.	3 - 4 In. Typ.
15 Ft.	72 In.	2-1/2 In.	12 In.	48 - 50 In.	120 In.	3 - 4 In. Typ.	3 - 4 In. Typ.
16 Ft.	72 In.	2-1/2 In.	12 In.	48 - 50 In.	132 In.	3 - 4 In. Typ.	3 - 4 In. Typ.

**^ WARNING****Crushing Hazard****Before performing installation:**

- Park truck on a firm and level surface.
- Set parking brakes, turn truck engine off and remove ignition key.

1. Carefully check and verify the dimensions before starting the installation.

**^ WARNING****Crushing Hazard**

The weight of the cylinder frame assembly is 600 lbs.

Use an adequate lifting device to raise subframe.



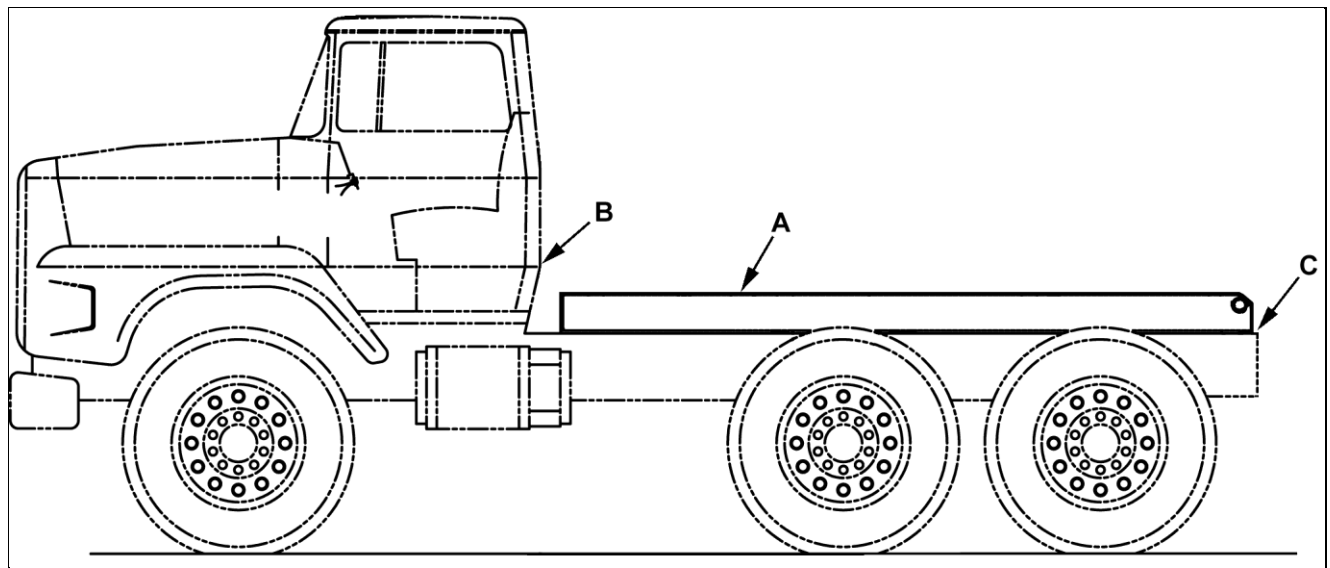
2. Connect an adequate lifting device to the subframe (A) and position on truck frame with the hinge at the rear.





### **Install Cylinder Frame On Truck Frame**

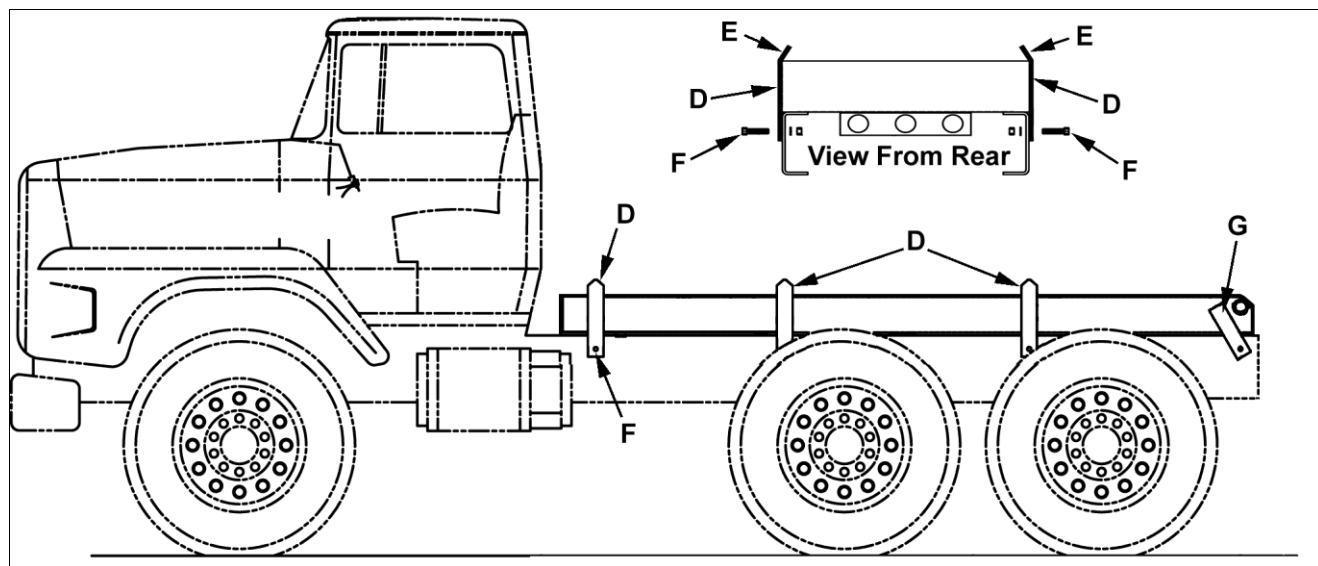
3. Position subframe (A) 3-4 inches from rearmost part of cab (B) or obstructions behind cab. Verify that subframe is square with truck frame. Clamp subframe to truck frame.
4. The truck frame may need to be cut off to allow clearance for the dump body. Measure one inch (C) behind the subframe and mark the top of both truck frame rails. Cut the truck frame rails straight down.



### **Position Subframe on Truck Frame**

5. Measure from the front of the subframe and mark the subframe every twelve inches on each frame rail. These marks indicate the cross members on the dump body. Evenly space body guides (D) on outside of subframe so they will not interfere with the dump body cross members. The bend (E) on top of guides faces inward and must not exceed 3 inches above subframe. Position rear hold downs (G) as close as possible to the hinge. Verify position of body guides and hold downs. Weld body guides and hold downs to subframe. Do weld body guides and hold downs to truck frame. Dump bodies up to 14' have eight guides and bodies over 14' will have 10 guides.

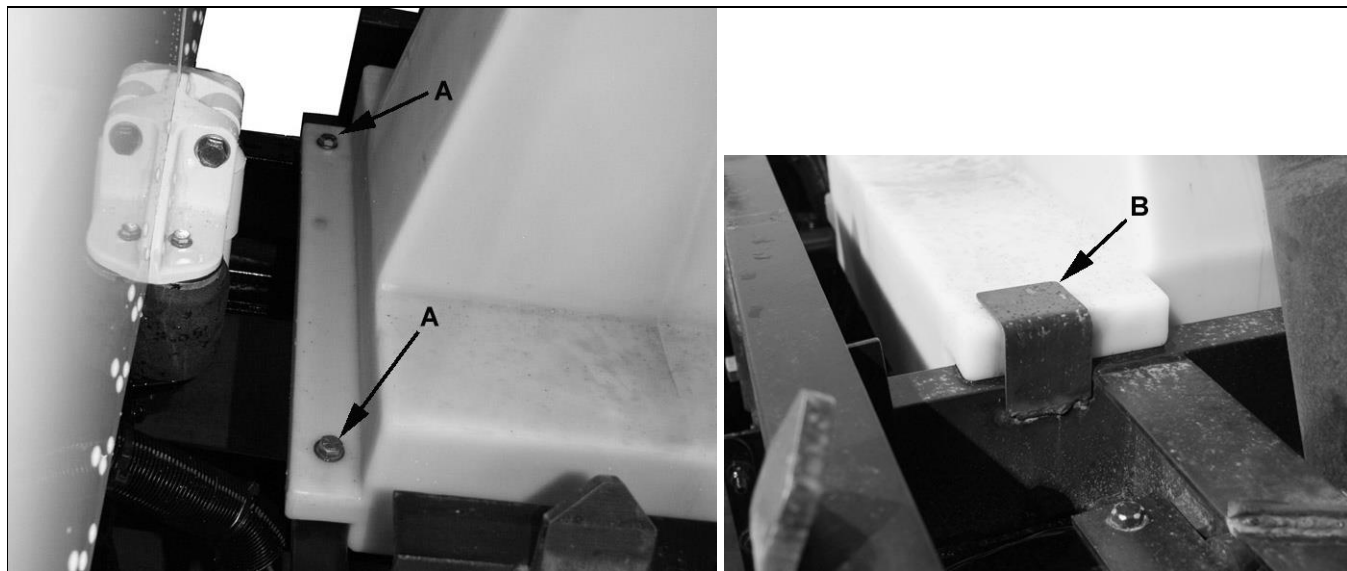
6. Using body guides and hold downs as a guide, drill  $\frac{7}{8}$  inch holes through truck frame and install  $\frac{3}{4}$  x 3 inch grade eight cap screws (F), flat washers and lock nuts.



**Install Body Guides / Hold Downs**

### **INSTALL HYDRAULIC RESERVOIR AND CYLINDER**

1. Attach front of hydraulic reservoir to subframe with two  $\frac{1}{2}$  x 3 inch cap screws (A), four flat washers and two lock nuts. Weld two rear reservoir brackets (B) to cross member to retain rear of reservoir. Brackets should be tight enough to retain reservoir while allowing the frame to flex.



**Install Hydraulic Reservoir**

**^ WARNING**

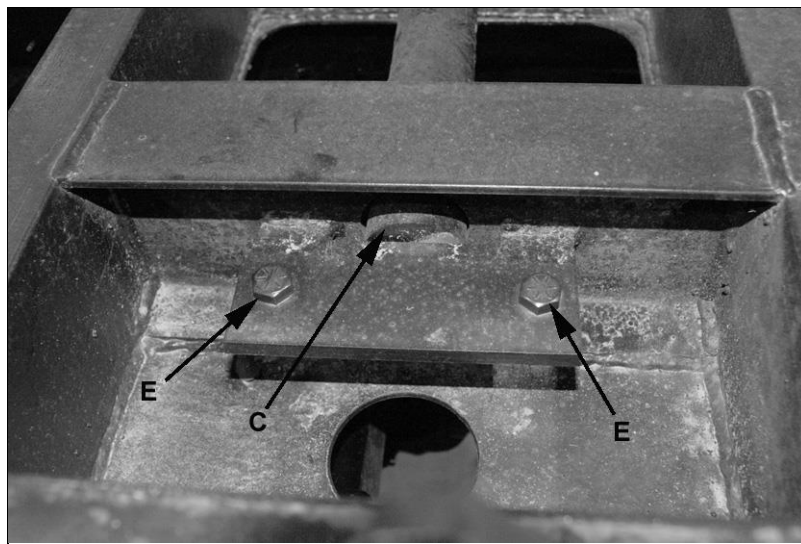
**Crushing Hazard**

**The weight of the cylinder is 350 lbs.**

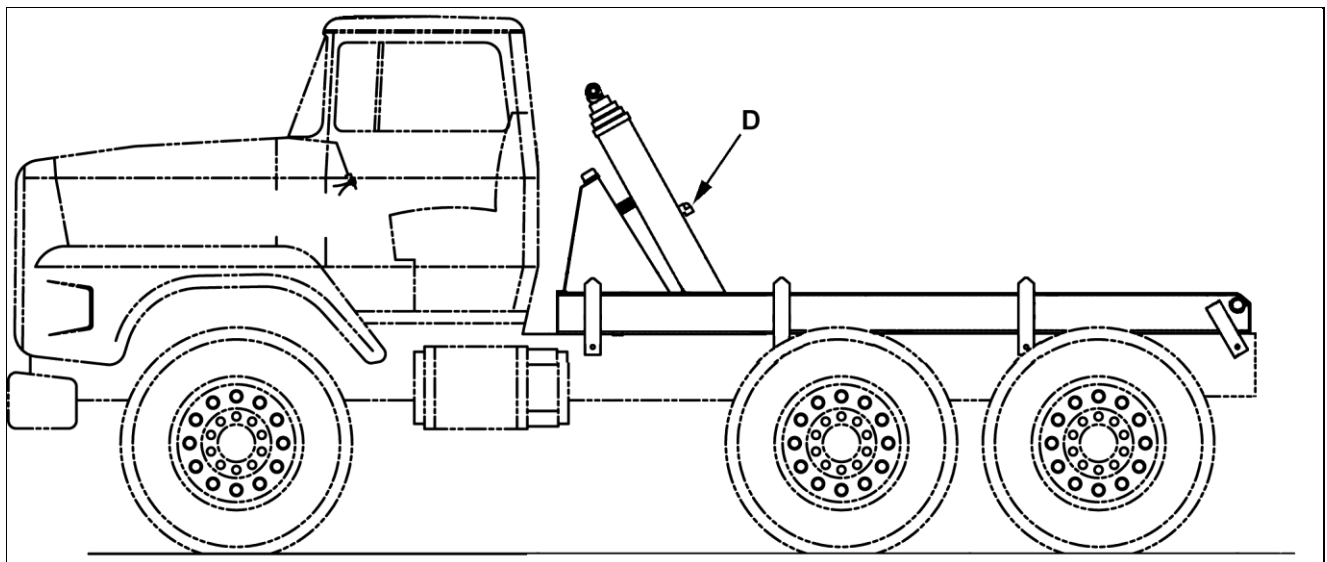
**Use an adequate lifting device to raise cylinder.**



2. Remove two cap screws on retaining plate and pull cylinder pin (C) out.
3. Raise hydraulic cylinder with an adequate lifting device.
4. Position cylinder as shown with port (D) facing rearward and install pin (C). Install retaining plate (E) and three cap screws.

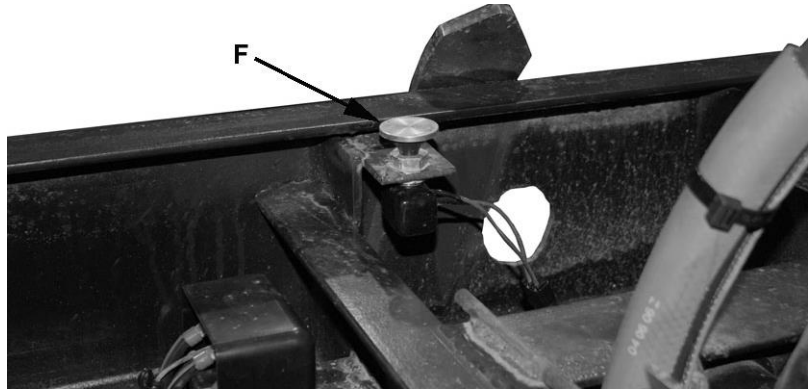


**Install Cylinder Pin**



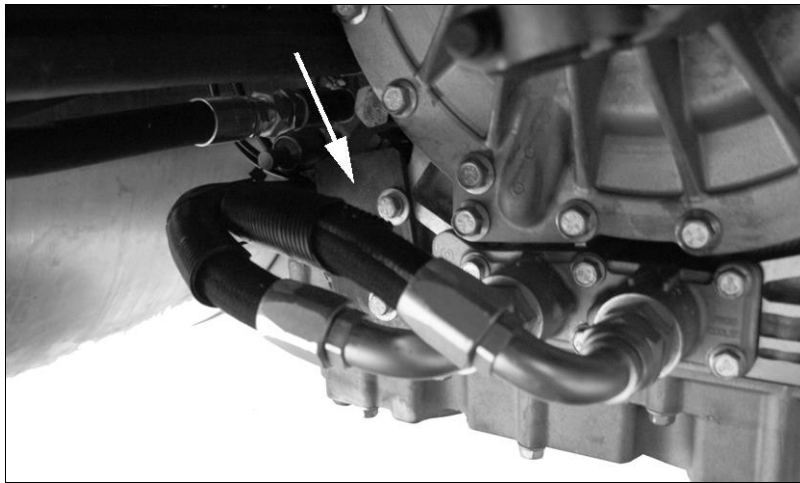
**Install Hydraulic Cylinder**

5. Weld bracket with body down switch (F) to cylinder mount cross member. Switch must be flush with top of subframe with switch closed (compressed).



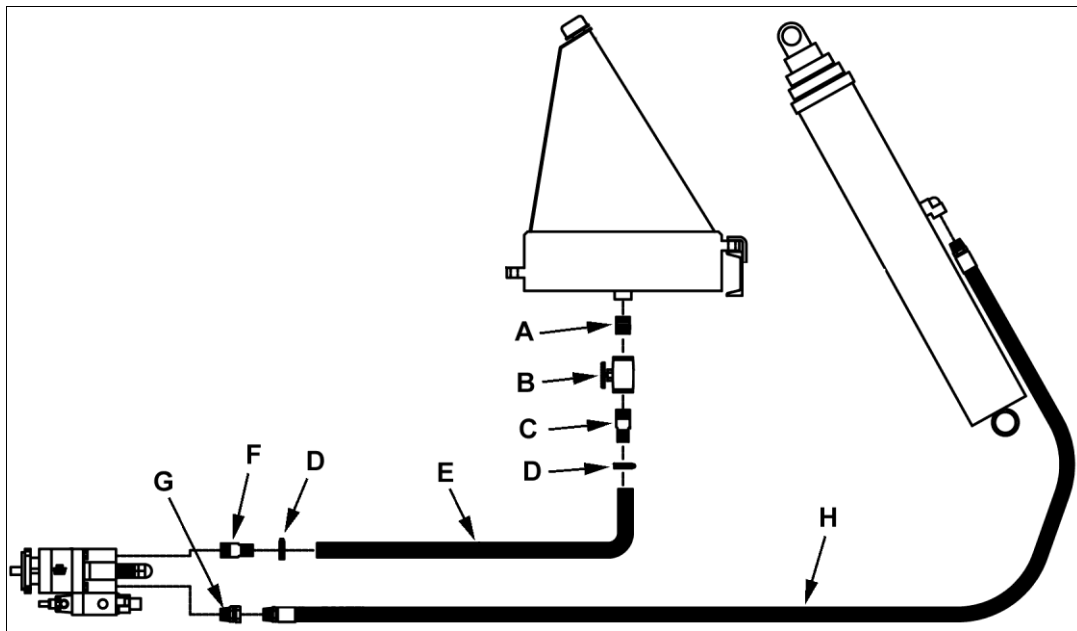
### **Install Body Down Switch**

6. Install PTO pump and controls per the manufacturers' specifications. Warren recommends installing a rear support bracket on the PTO pump. Fabricate and connect bracket to rear of pump and to truck transmission.



### **Install Pump Support**

7. Connect hydraulic hoses between reservoir, pump and cylinder.



### Install Hydraulic Hoses

A – Nipple, 1 ¼Inch  
 B – Gate Valve, 1 ¼Inch  
 C – Nipple, 1 ¼Inch  
 D – Clamp, 1 ¼ Inch

E – Suction Hose, 1 ¼Inch  
 F – Nipple, 1 ¼Inch  
 G – Swivel Adapter, 1 Inch  
 H – Hose, 1 Inch

#### 8. Fill reservoir with hydraulic oil and check for leaks.

#### ^ WARNING

Pressurized fluids can penetrate the skin.

Hydraulic hoses can fail from age, damage and exposure.

Use wood or cardboard to detect hydraulic leaks, never your hands.



#### INSTALL BODY

#### ^ WARNING

Crushing Hazard

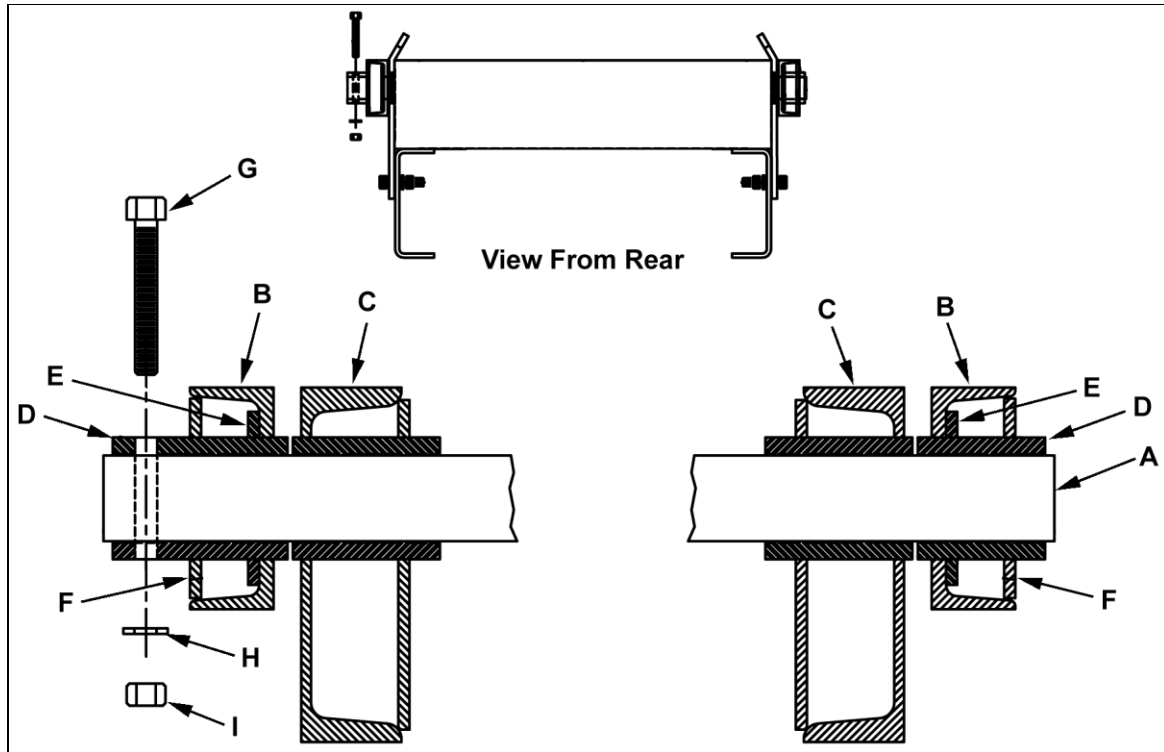
The weight of the body is approximately 5000 lbs.

Use an adequate lifting device to raise body.



1. Position body on subframe and align hinge at rear of body.
2. Insert hinge shaft (A) through dump body rails (B) and subframe rails (C).

3. Install hinge boss (D) on each side. The boss with hole goes over the hole on the end of the hinge shaft.
4. Install hinge reinforcements (E) and weld to dump body rails (B) and hinge bosses (D). Install hinge plates (F) and weld to dump body rails (B) and hinge bosses (D).
5. Install cap screw, (G), flat washer (H) and nut (I) through hinge boss (D) and hinge shaft (A). Tighten cap screw.

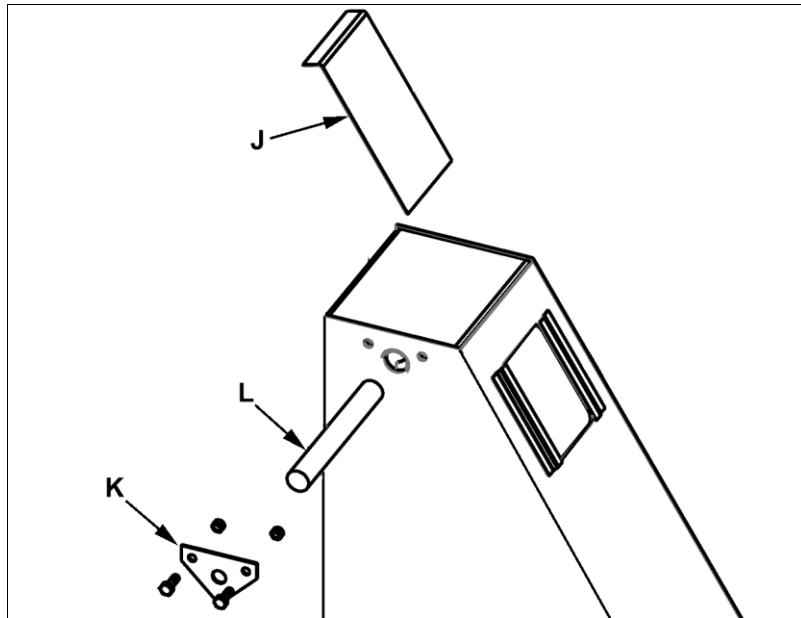


### Install Hinge Shaft

A – Hinge Shaft  
 B – Dump Body Rail  
 C – Subframe Rail  
 D – Hinge Boss  
 E – Hinge Reinforcement

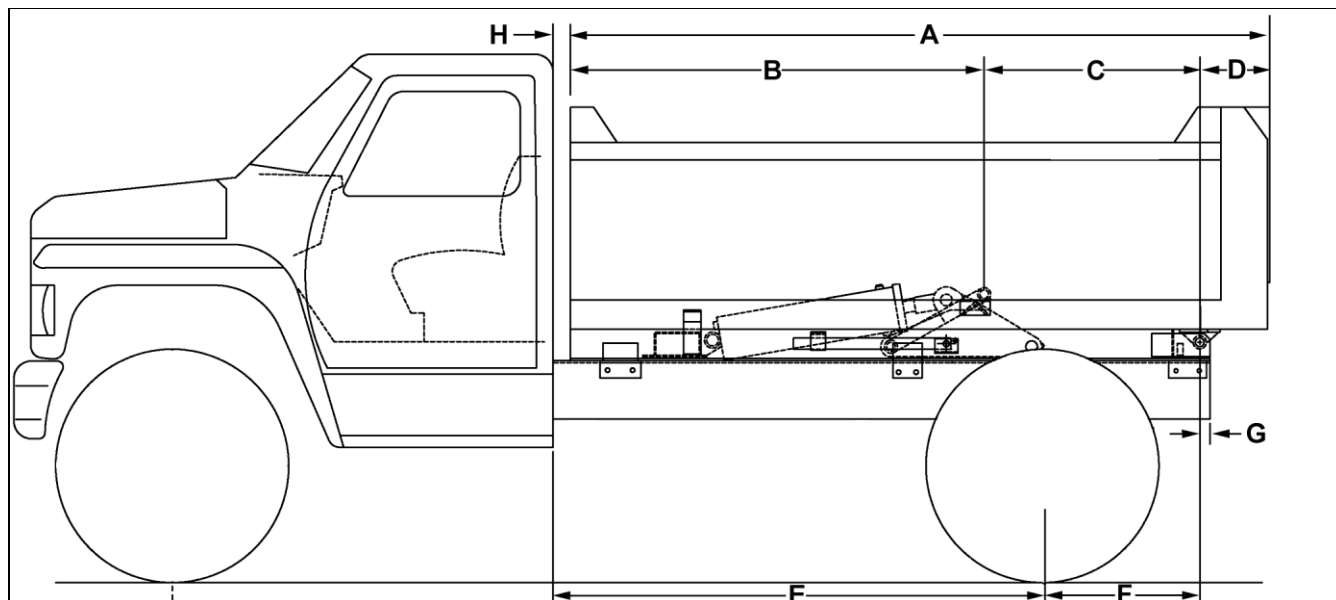
F – Hinge Plate  
 G – Cap Screw  $\frac{1}{2}$  x  $3 \frac{1}{2}$   
 H –  $\frac{1}{2}$  Inch Flat Washer  
 I –  $\frac{1}{2}$  Inch Lock Nut

6. To connect rod end of cylinder to dump body, remove access cover (J), cap screws, nuts, pin retainer (K) and pin (L). Insert pin (L) through body and rod end of cylinder.
7. Weld retainer (K) to pin (L).
8. Insert retainer/pin through body and rod end of cylinder.
9. Install cap screws, nuts and access cover (J).



**Connect Cylinder to Dump Body**

## INSTALL SUBFRAME



A	B	C	D	E	F	G	H
9 Ft.	59 In.	37 In.	12 In.	72 In.	27 In.	1-3/4 In.	3 In.
10 Ft.	71 In.	37 In.	12 In.	84 In.	27 In.	1-3/4 In.	3 In.

**^ WARNING****Crushing Hazard**

Before performing installation:

- Park truck on a firm and level surface.
- Set parking brakes, turn truck engine off and remove ignition key.

1. Carefully check and verify the dimensions before starting the installation.

**^ WARNING****Crushing Hazard**

The weight of the subframe assembly is app. 600 lbs.

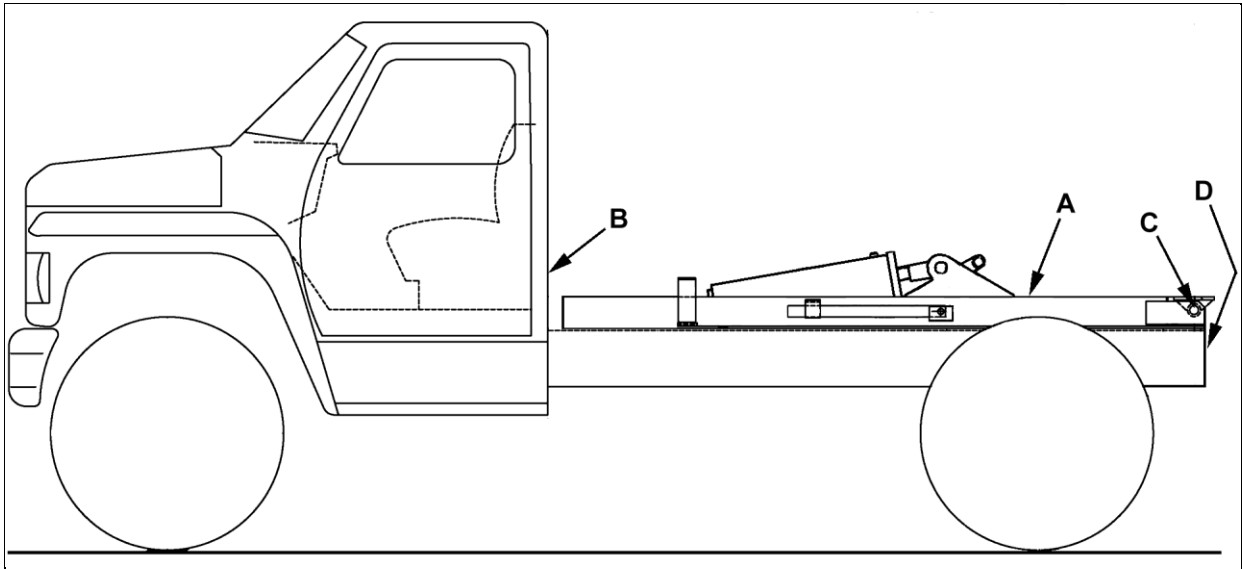
Use an adequate lifting device to raise subframe.



2. If necessary, install  $\frac{3}{8}$  x 1 inch spacer pad on top of truck frame. The spacer will go from the rear of the cylinder frame to the front of the hinge. Cut holes in pad to clear rivet heads if necessary.

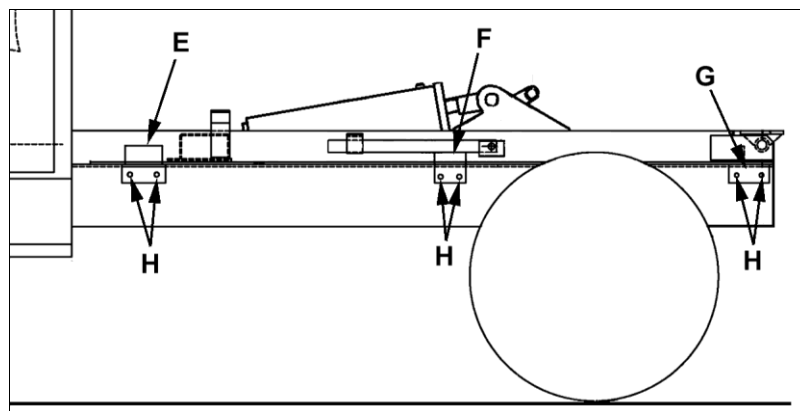


3. Connect an adequate lifting device to the subframe (A) and position on truck frame with the hinge at the rear of the truck.
4. Position subframe (A) 3 inches from rearmost part of cab (B) or obstructions behind cab. Verify that dump hinge pivot pin (C) on subframe is not forward of the rear spring hanger pin. Verify that subframe is square with truck frame. Clamp subframe to truck frame.
5. The truck frame may need to be cut off to allow clearance for the dump body. Measure one inch behind the subframe and mark the top of both truck frame rails. Cut the truck frame (D) straight down.



**Position Subframe on Truck Frame**

6. Install the front mounting plates (E) as close to the cylinder mount as possible and clamp in position. Position the center mounting plates (F) as close to the cylinder pivot as possible and clamp in position. Position the rear mounting plates (G) as close to the dump hinge as possible and clamp in position. Plates must not extend above the top of the subframe. Weld mounting plates to the subframe. Do not weld mounting plates to the truck frame. Using mounting plates as a guide, drill 11/16 inch holes through truck frame and install  $\frac{5}{8}$  x 2 inch cap screws (H), flat washers and lock nuts.



**Front Mounting Plates**

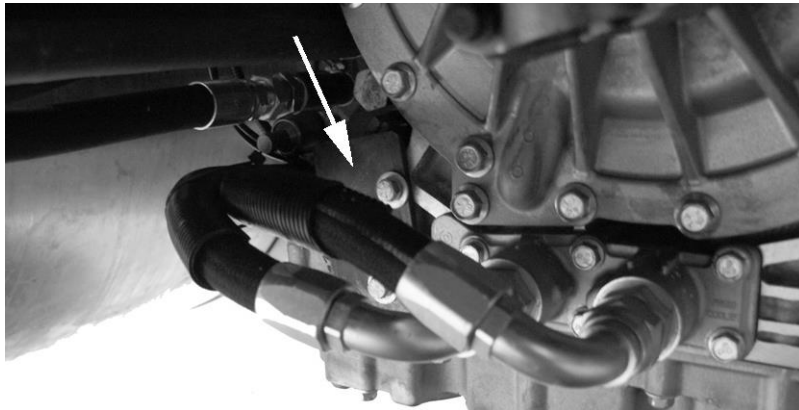
## **INSTALL HYDRAULIC RESERVOIR (OPTIONAL) AND PUMP**

1. Install the optional hydraulic reservoir on the side of the truck frame rail where space will allow. Installed oil fill cap (B) height must not be above subframe. Modify mounting brackets as necessary.



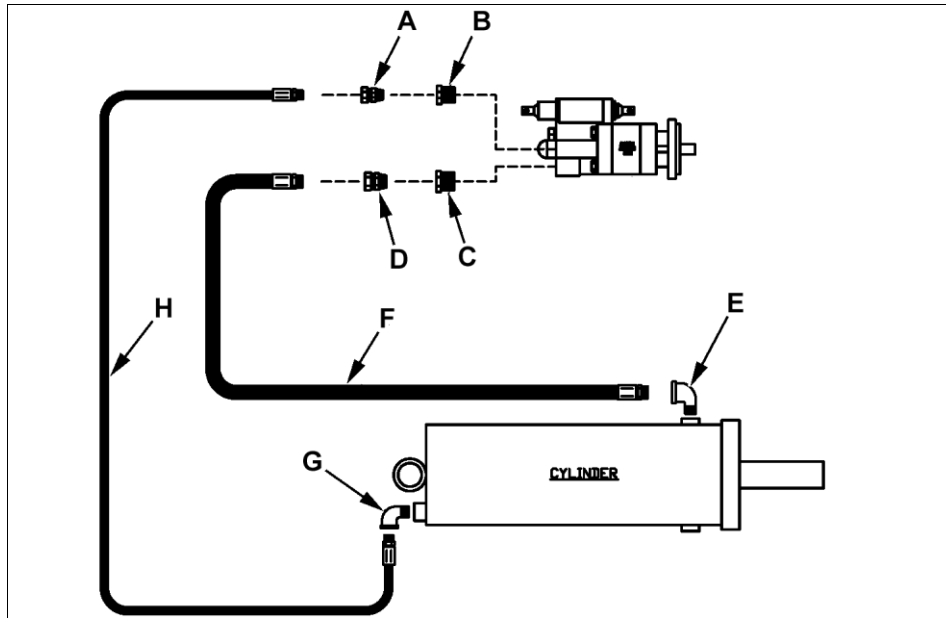
**Install Hydraulic Oil Reservoir**

2. Install PTO pump and controls per the manufacturers' specifications. Warren recommends installing a rear support bracket on the PTO pump. Fabricate and connect bracket to rear of pump and to truck transmission.



**Install Pump Support**

3. Connect hydraulic hoses between pump and cylinder. Closed system illustrated below. If installing a double acting system, contact Warren for schematic.



### Install Hydraulic Hoses

A – Swivel Adapter,  $\frac{3}{4}$  Inch  
 B – Bushing, 1 x  $\frac{3}{4}$  Inch  
 C – Bushing, 1  $\frac{1}{4}$  x 1 Inch  
 D – Swivel Adapter, 1 Inch

E – Elbow, 1 x  $\frac{3}{4}$  Inch  
 F – Hose, 1 Inch  
 G – Elbow,  $\frac{3}{4}$  Inch  
 H – Hose,  $\frac{3}{4}$  Inch

4. Fill reservoir with hydraulic oil and check for leaks. If a reservoir is not used, disconnect line at cylinder and fill hydraulic system through this line. Connect and tighten hydraulic line after filling system.

#### **^ WARNING**

**Pressurized fluids can penetrate the skin.**

**Hydraulic hoses can fail from age, damage and exposure.**

**Use wood or cardboard to detect hydraulic leaks, never your hands.**



### INSTALL BODY

#### **^ WARNING**

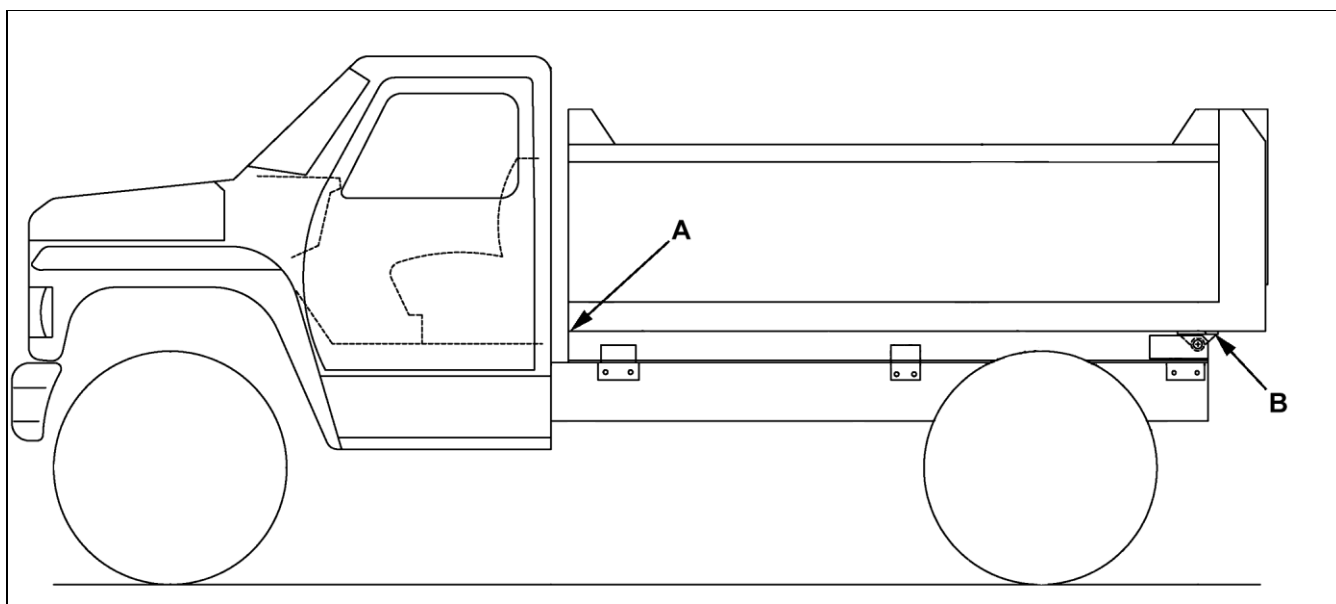
**Crushing Hazard**

**The weight of the body is approximately 3000 lbs.**

**Use an adequate lifting device to raise body.**



1. Using properly rated lifting devices, raise the body and install on subframe.
2. Position so front of body is flush with subframe at (A). Verify that dump body frame is square with subframe and truck frame. Clamp body frame to subframe. Weld body to rear hinges (B).



**Position Body on Subframe**

**^ WARNING**

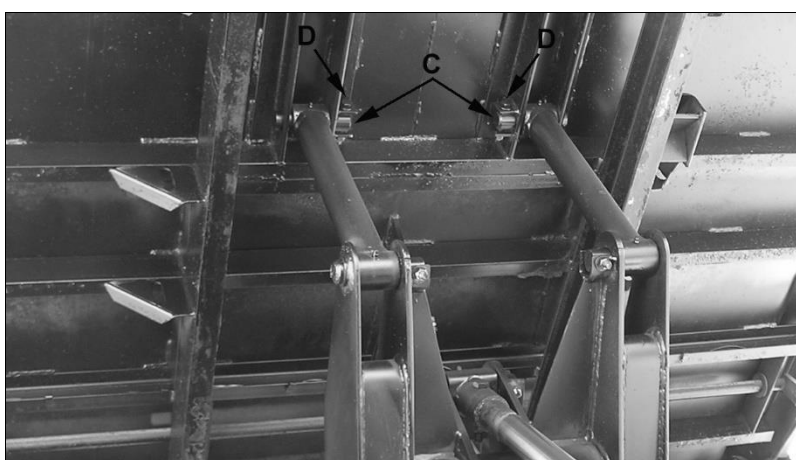
**Crushing Hazard**

**A lowering or falling dump body can cause death or severe injury.**

**Support the empty dump body with a secure device before entering area under a raised dump body.**



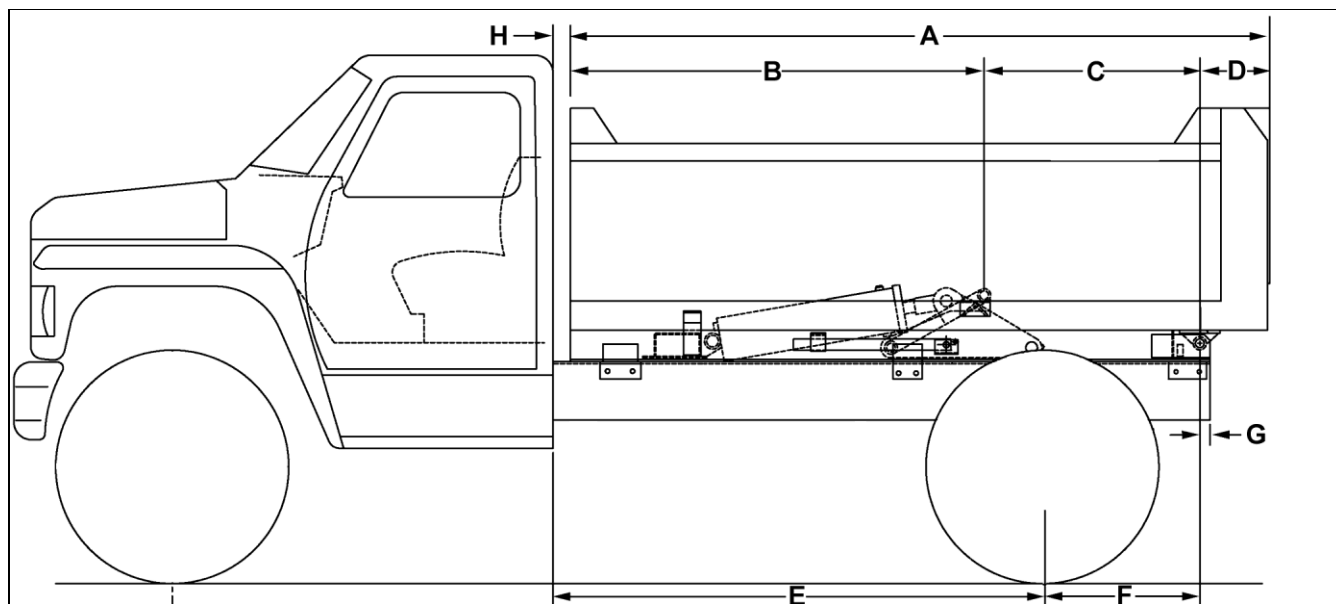
3. Raise dump body and support with secure devices. Connect lift links to body with pins (C). Install  $\frac{1}{2}$  x 3 inch cap screws (D) and  $\frac{1}{2}$  inch lock nuts on pins (C).



**Connect Lift Links to Dump Body**

4. Lower dump body with lifting device.

## INSTALL SUBFRAME



A	B	C	D	E	F	G	H
9 Ft.	59 In.	37 In.	12 In.	72 In.	27 In.	1-3/4 In.	3 In.
10 Ft.	71 In.	37 In.	12 In.	84 In.	27 In.	1-3/4 In.	3 In.

### **^ WARNING**

#### **Crushing Hazard**

#### **Before performing installation:**

- Park truck on a firm and level surface.
- Set parking brakes, turn truck engine off and remove ignition key.

1. Carefully check and verify the dimensions before starting the installation.

### **^ WARNING**

#### **Crushing Hazard**

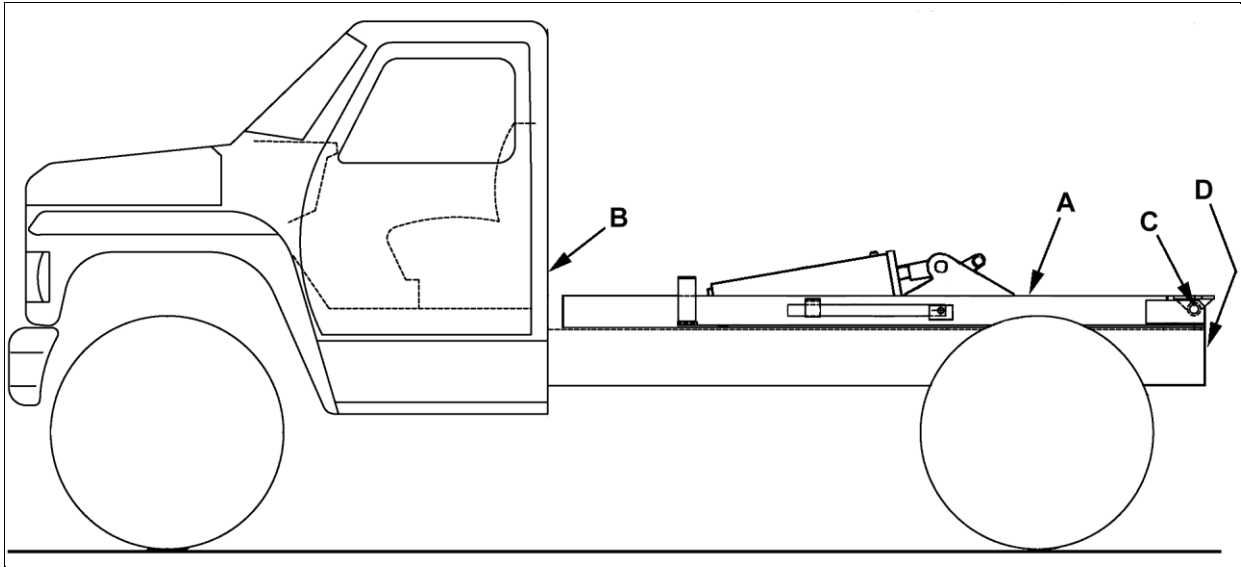
**The weight of the subframe assembly is app. 600 lbs.**

**Use an adequate lifting device to raise subframe.**



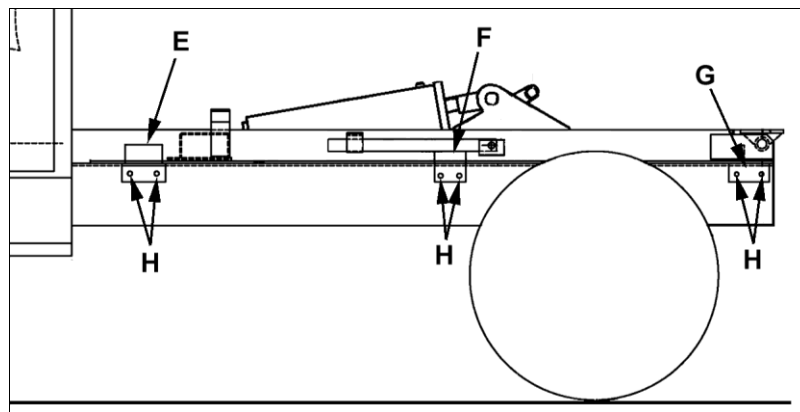
2. If necessary, install  $\frac{3}{8}$  x 3 inch spacer pad on top of truck frame. The spacer will go from the rear of the cylinder frame to the front of the hinge. Cut holes in pad to clear rivet heads if necessary.
3. Connect an adequate lifting device to the subframe (A) and position on truck frame with the hinge at the rear of the truck.

4. Position subframe (A) 3 inches from rearmost part of cab (B) or obstructions behind cab. Verify that dump hinge pivot pin (C) on subframe is not forward of the rear spring hanger pin. Verify that subframe is square with truck frame. Clamp subframe to truck frame.
5. The truck frame may need to be cut off to allow clearance for the dump body. Measure one inch behind the subframe and mark the top of both truck frame rails. Cut the truck frame (D) straight down.



**Position Subframe on Truck Frame**

6. Install the front mounting plates (E) as close to the cylinder mount as possible and clamp in position. Position the center mounting plates (F) as close to the cylinder pivot as possible and clamp in position. Position the rear mounting plates (G) as close to the dump hinge as possible and clamp in position. Plates must not extend above the top of the subframe. Weld mounting plates to the subframe. Do not weld mounting plates to the truck frame. Using mounting plates as a guide, drill 11/16 inch holes through truck frame and install  $\frac{5}{8}$  x 2 inch cap screws (H), flat washers and lock nuts.



**Front Mounting Plates**

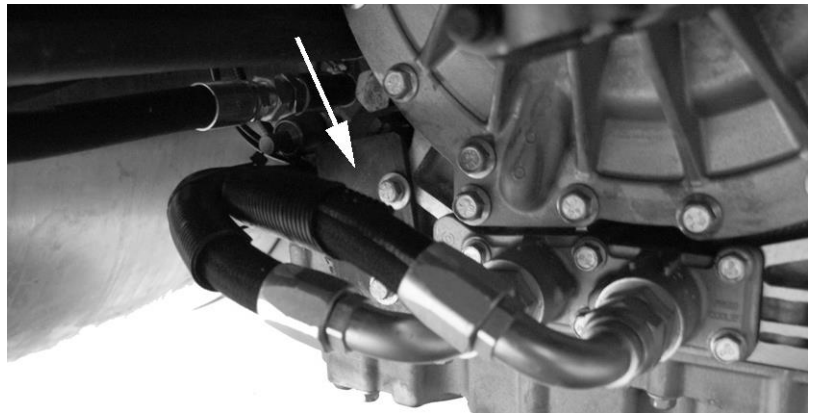
### **INSTALL HYDRAULIC RESERVOIR (OPTIONAL) AND PUMP**

1. Install the optional hydraulic reservoir on the side of the truck frame rail where space will allow. Installed oil fill cap (B) height must not be above subframe. Modify mounting brackets as necessary.



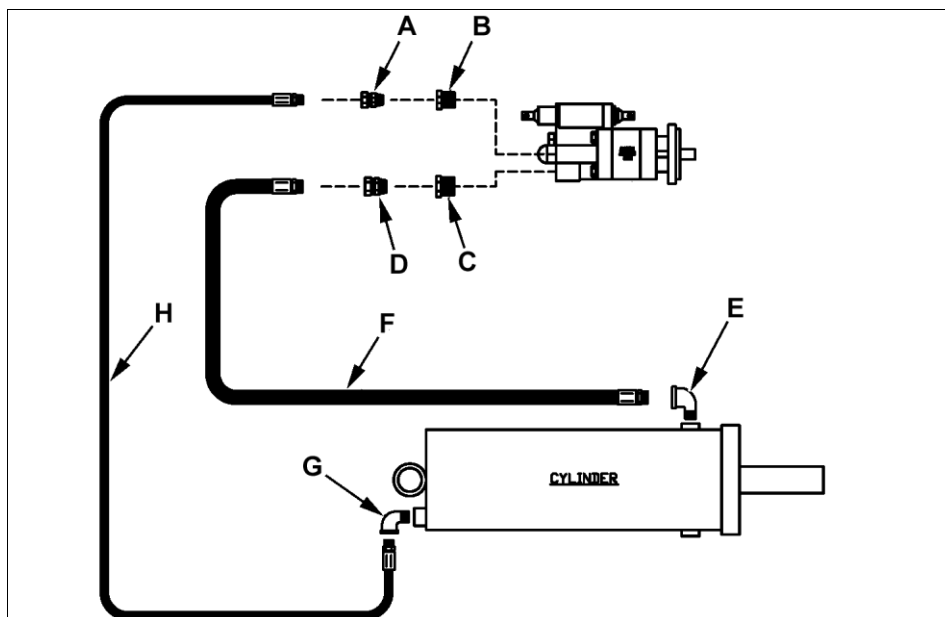
**Install Hydraulic Oil Reservoir**

2. Install PTO pump and controls per the manufacturers' specifications. Warren recommends installing a rear support bracket on the PTO pump. Fabricate and connect bracket to rear of pump and to truck transmission.



**Install Pump Support**

3. Connect hydraulic hoses between pump and cylinder. Closed system illustrated below. If installing a double acting system, contact Warren for schematic.



**Install Hydraulic Hoses**

A – Swivel Adapter,  $\frac{3}{4}$  Inch  
B – Bushing, 1 x  $\frac{3}{4}$  Inch  
C – Bushing, 1  $\frac{1}{4}$  x 1 Inch  
D – Swivel Adapter, 1 Inch

E – Elbow, 1 x  $\frac{3}{4}$  Inch  
F – Hose, 1 Inch  
G – Elbow,  $\frac{3}{4}$  Inch  
H – Hose,  $\frac{3}{4}$  Inch

4. Fill reservoir with hydraulic oil and check for leaks. If a reservoir is not used, disconnect line at cylinder and fill hydraulic system through this line. Connect and tighten hydraulic line after filling system.

**^ WARNING**

**Pressurized fluids can penetrate the skin.**

**Hydraulic hoses can fail from age, damage and exposure.**

**Use wood or cardboard to detect hydraulic leaks, never your hands.**



## INSTALL BODY

**^ WARNING**

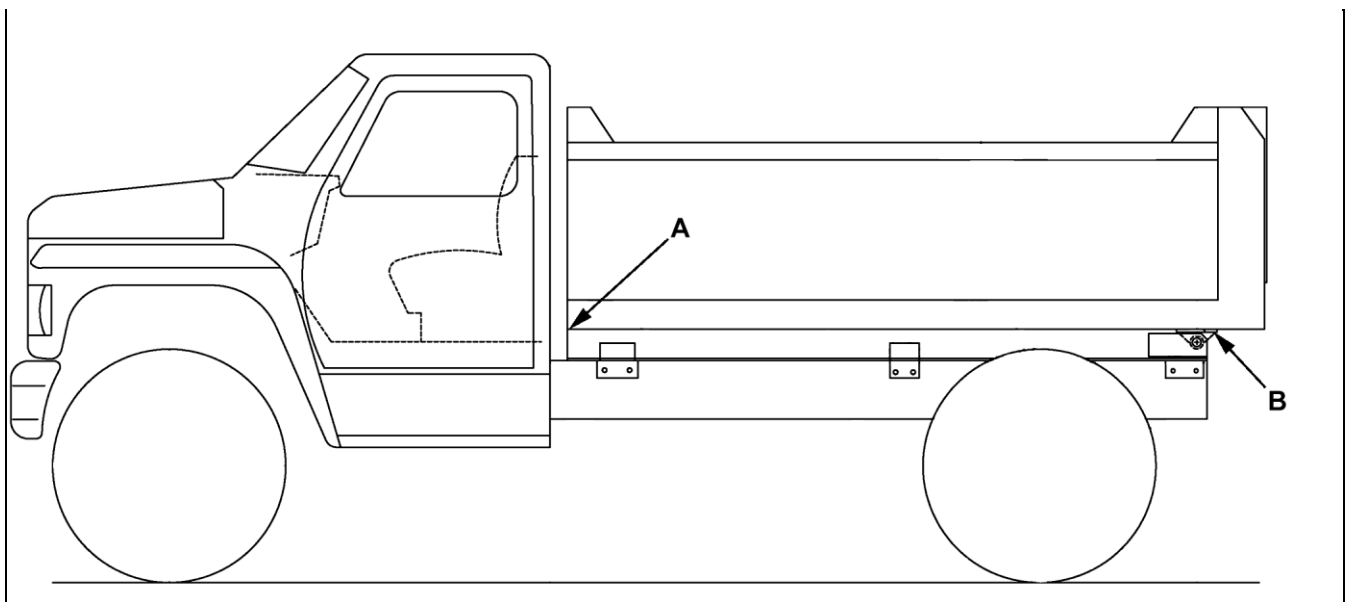
**Crushing Hazard**

**The weight of the body is approximately 3000 lbs.**

**Use an adequate lifting device to raise body.**



1. Using properly rated lifting devices, raise the body and install on subframe.
2. Position so front of body is flush with subframe at (A). Verify that dump body frame is square with subframe and truck frame. Clamp body frame to subframe. Weld body to rear hinges (B).





## Position Body on Subframe

### **^ WARNING**

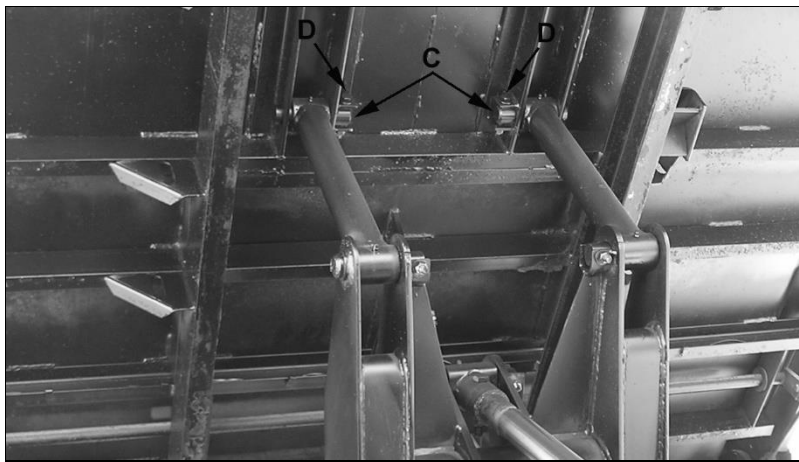
#### **Crushing Hazard**

**A lowering or falling dump body can cause death or severe injury.**

**Support the empty dump body with a secure device before entering area under a raised dump body.**



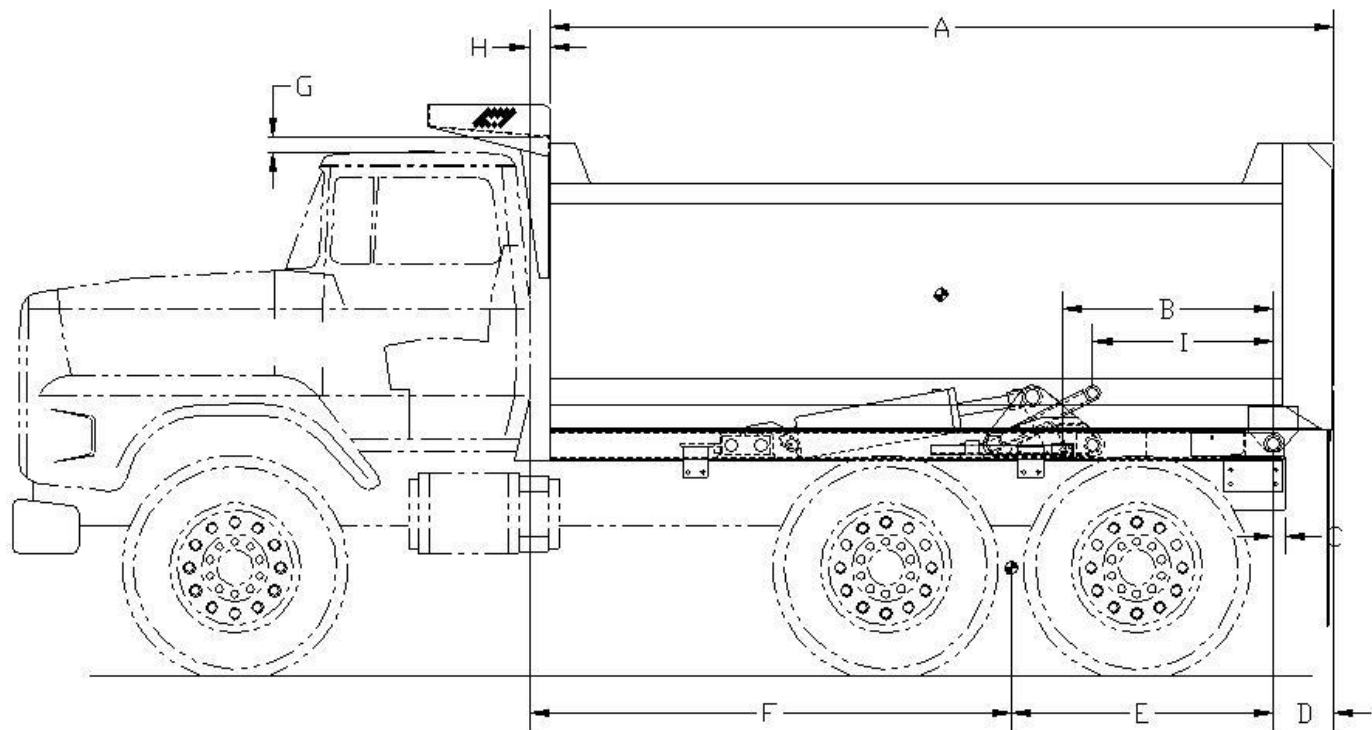
3. Raise dump body and support with secure devices. Connect lift links to body with pins (C). Install  $\frac{1}{2}$  x 3 inch cap screws (D) and  $\frac{1}{2}$  inch lock nuts on pins (C).



#### **Connect Lift Links to Dump Body**

4. Lower dump body with lifting device.

**INSTALL SUBFRAME**



A	B	C	D	E	F	G	H	I
12 Ft.	42 In.	2-1/4 In.	12 In.	48 In.	84 In.	3 - 4 In Typ.	3 - 4 In Typ.	36 In.
13 Ft.	42 In.	2-1/4 In.	12 In.	48 In.	96 In.	3 - 4 In Typ.	3 - 4 In Typ.	36 In.
14 Ft.	42 In.	2-1/4 In.	12 In.	48 In.	108 In.	3 - 4 In Typ.	3 - 4 In Typ.	36 In.

**^ WARNING**

**Crushing Hazard**

**Before performing installation:**

- Park truck on a firm and level surface.
- Set parking brakes, turn truck engine off and remove ignition key.

1. Carefully check and verify the dimensions before starting the installation.

**^ WARNING**

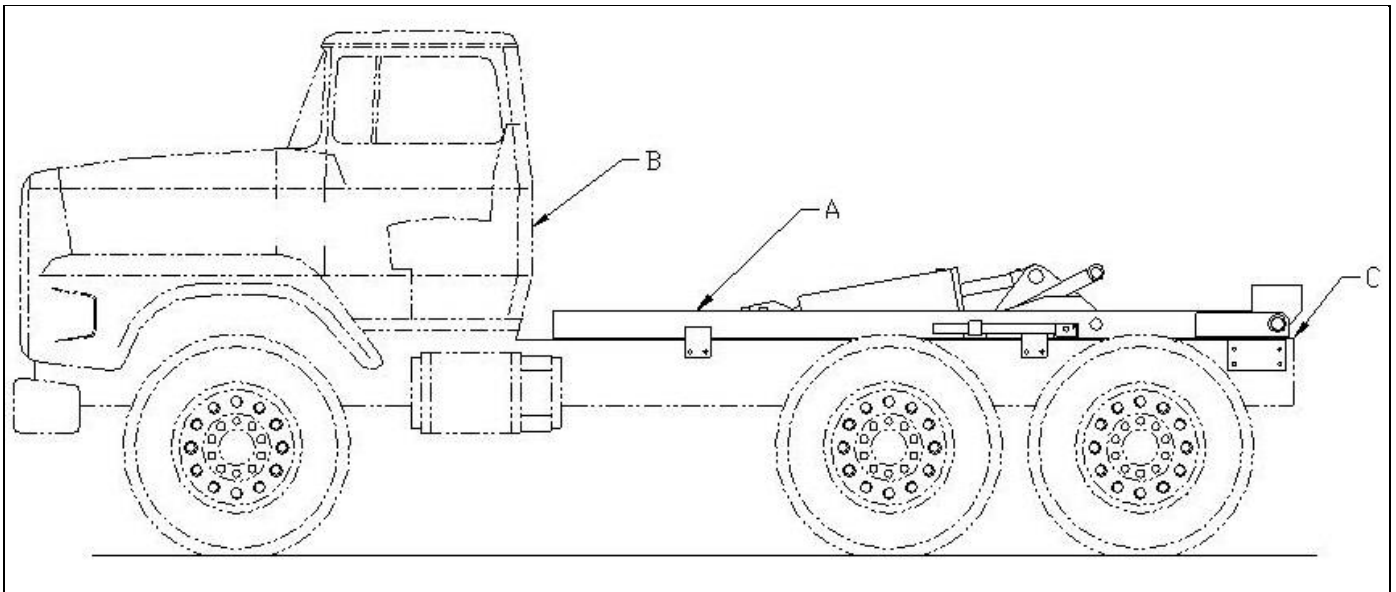
**Crushing Hazard**

The weight of the subframe assembly is app. 600 lbs.

Use an adequate lifting device to raise subframe.

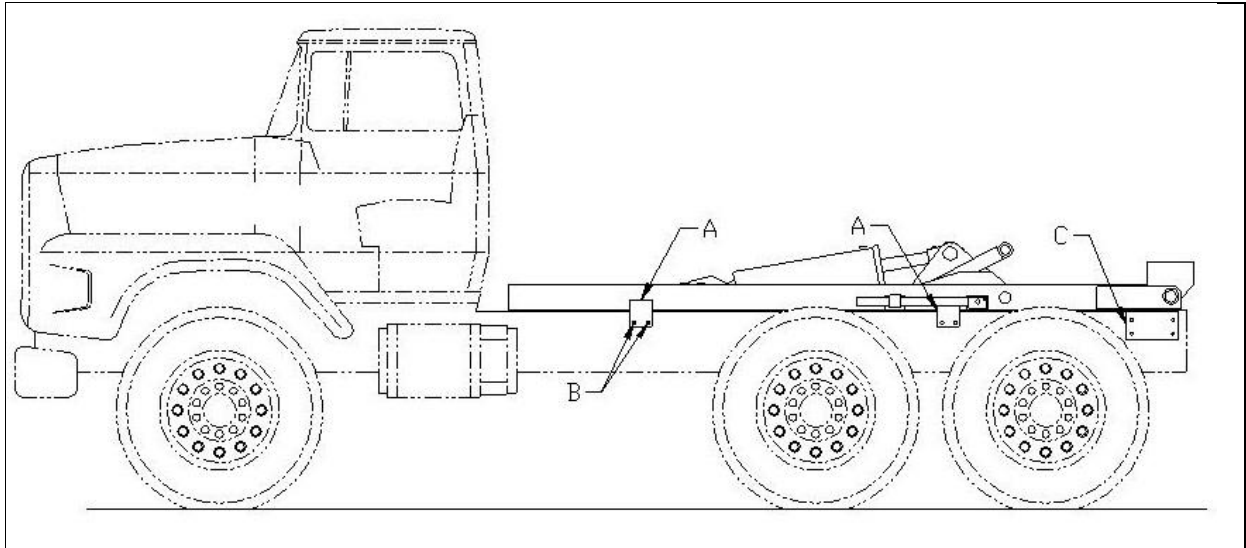


2. If necessary, install  $\frac{3}{8}$  x 3 inch spacer pad on top of truck frame. The spacer will go from the rear of the cylinder frame to the front of the hinge. Cut holes in pad to clear rivet heads if necessary.
3. Connect an adequate lifting device to the subframe (A) and position on truck frame with the hinge at the rear of the truck.
4. Position subframe (A) 3 inches from rearmost part of cab (B) or obstructions behind cab. Verify that dump hinge pivot pin on subframe is not forward of the rear spring hanger. Verify that subframe is square with truck frame. Clamp subframe to truck frame.
5. The truck frame may need to be cut off to allow clearance for the dump body. Measure one inch behind the subframe and mark the top of both truck frame rails. Cut the truck frame (C) straight down.



**Position Subframe on Truck Frame**

6. Install the front mounting plates (A) as close to the cylinder mount as possible and clamp in position. Position the center mounting plates (A) as close to the cylinder pivot as possible and clamp in position. Position the rear mounting plates (C) as close to the dump hinge as possible and clamp in position. Plates must not extend above the top of the subframe. Weld mounting plates to the subframe. Do not weld mounting plates to the truck frame. Using mounting plates as a guide, drill  $\frac{11}{16}$  inch holes through truck frame and install  $\frac{5}{8}$  x 2 inch cap screws (B), flat washers and lock nuts.



**Mounting Plates**

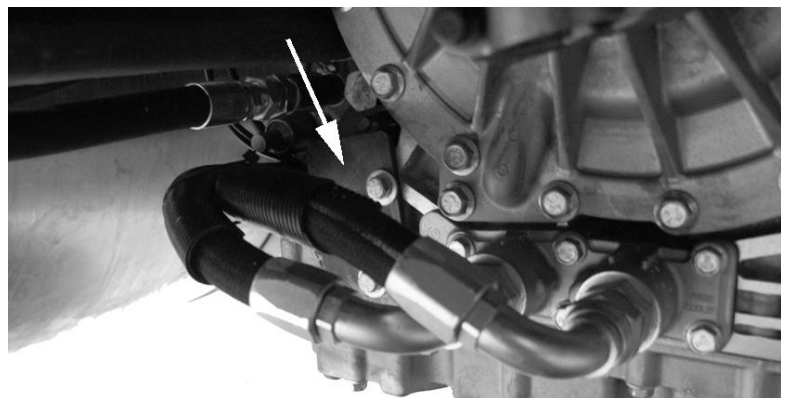
## **INSTALL HYDRAULIC RESERVOIR (OPTIONAL) AND PUMP**

1. Install the optional hydraulic reservoir on the side of the truck frame rail where space will allow. Installed oil fill cap (B) height must not be above subframe. Modify mounting brackets as necessary.



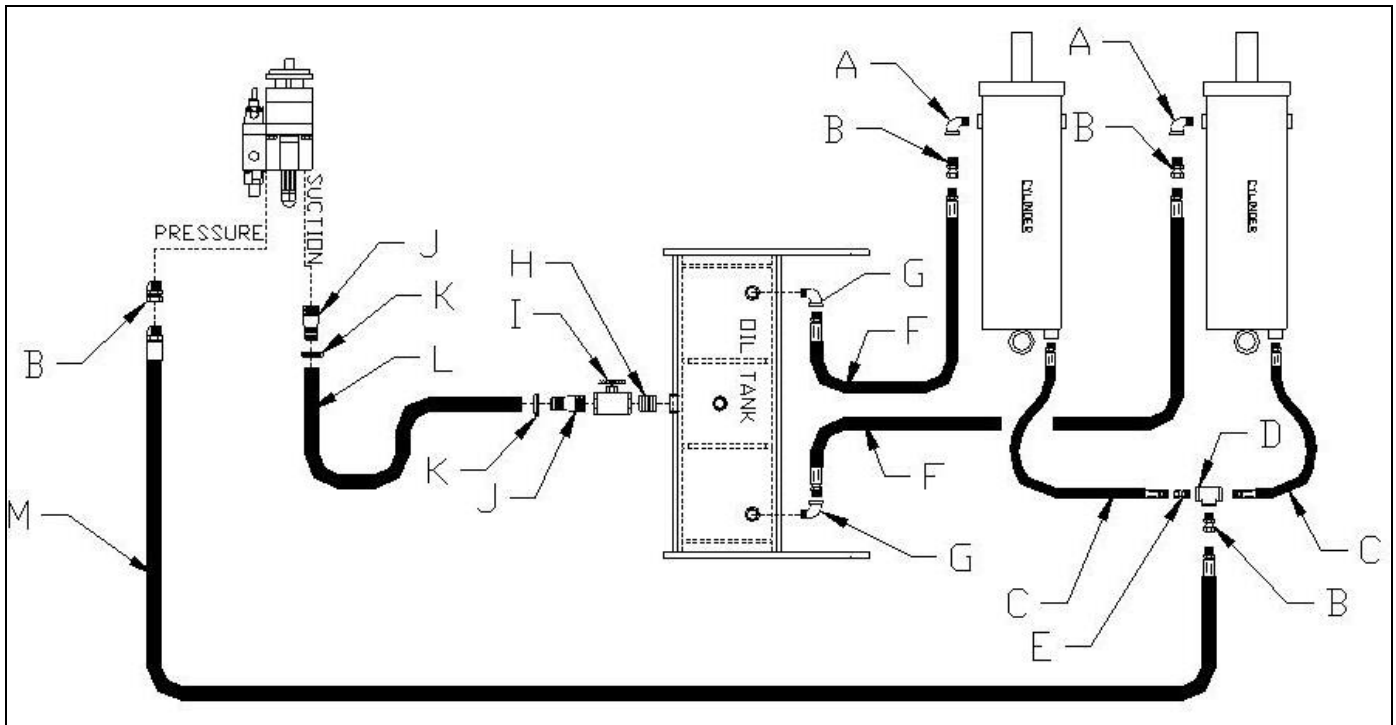
**Install Hydraulic Oil Reservoir**

2. Install PTO pump and controls per the manufacturers' specifications. Warren recommends installing a rear support bracket on the PTO pump. Fabricate and connect bracket to rear of pump and to truck transmission.



**Install Pump Support**

3. Connect hydraulic hoses between pump and cylinder. Closed system illustrated below. If installing a double acting system, contact Warren for schematic.



### Install Hydraulic Hoses

A – Elbow, 1" x 3/4 Inch  
 B – Swivel Adapter, 1 Inch  
 C – Hose, 3/4 Inch x 24"  
 D – Tee – 1" x 3/4 x 3/4  
 E – Swivel Adapter, 3/4  
 F – Hose, 1 Inch x 36"  
 G – Elbow, 1 Inch

H – Nipple, 1"  
 I – Gate Valve, 1-1/4 Inch  
 J – King Nipple, 1-1/4 Inch  
 K – Clamp, 1-1/4 Inch  
 L – Hose, 1-1/4" x 72"  
 M – Hose, 1 Inch x 96"

4. Fill reservoir with hydraulic oil and check for leaks. If a reservoir is not used, disconnect line at cylinder and fill hydraulic system through this line. Connect and tighten hydraulic line after filling system.

### **^ WARNING**

**Pressurized fluids can penetrate the skin.**

**Hydraulic hoses can fail from age, damage**



**and exposure.**

**Use wood or cardboard to detect hydraulic leaks, never your hands.**

## INSTALL BODY

### **^ WARNING**

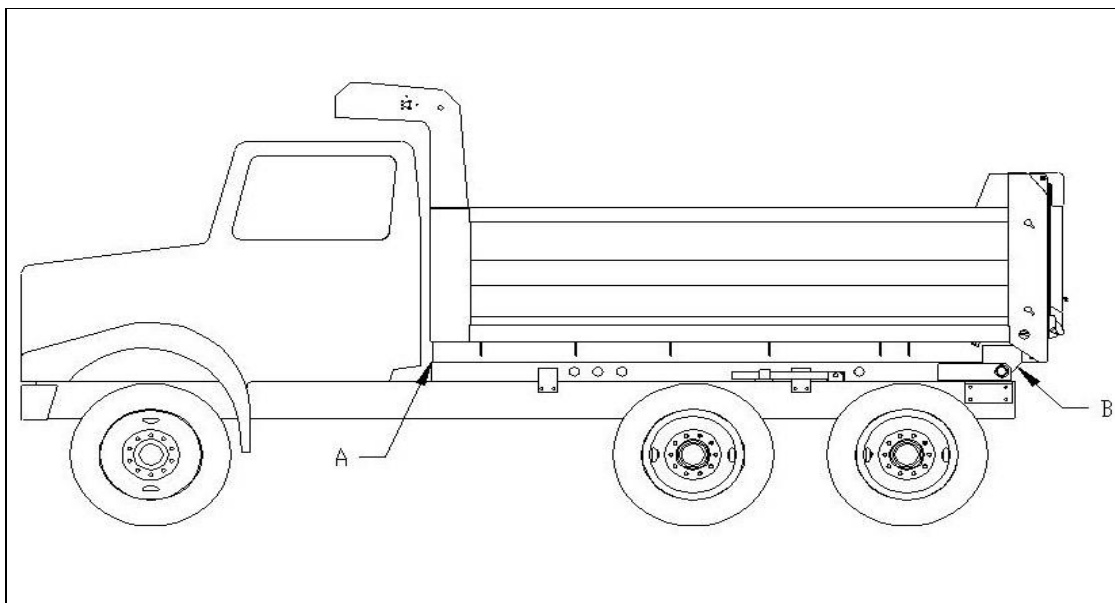
#### **Crushing Hazard**

**The weight of the body is approximately 3000 lbs.**

**Use an adequate lifting device to raise body.**



1. Using properly rated lifting devices, raise the body and install on subframe.
2. Position so front of body is flush with subframe at (A). Verify that dump body frame is square with subframe and truck frame. Clamp body frame to subframe. Weld body to rear hinges (B).



**Position Body on Subframe**

### **^ WARNING**

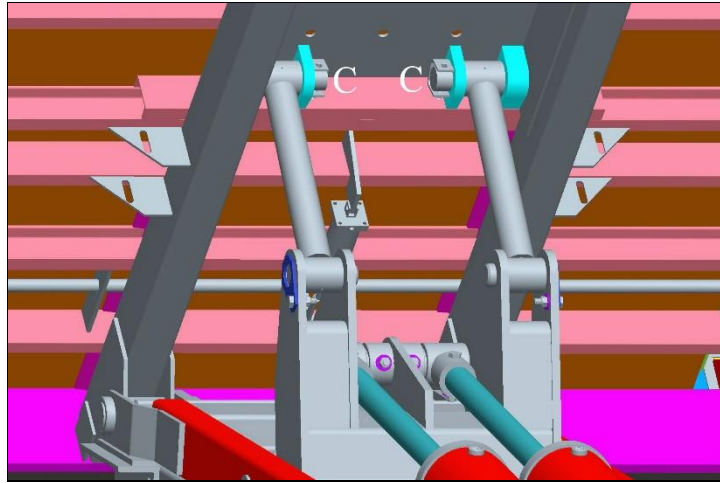
#### **Crushing Hazard**

**A lowering or falling dump body can cause death or severe injury.**

**Support the empty dump body with a secure device before entering area under a raised dump body.**



3. Raise dump body and support with secure devices. Connect lift links to body with pins (C). Install  $\frac{1}{2}$  x 3- $\frac{1}{2}$  inch cap screws (D) and  $\frac{1}{2}$  inch lock nuts on pins (C).



**Connect Lift Links to Dump Body**

4. Lower dump body with lifting device.

## CFT

### INSTALL CYLINDER FRAME AND HINGE

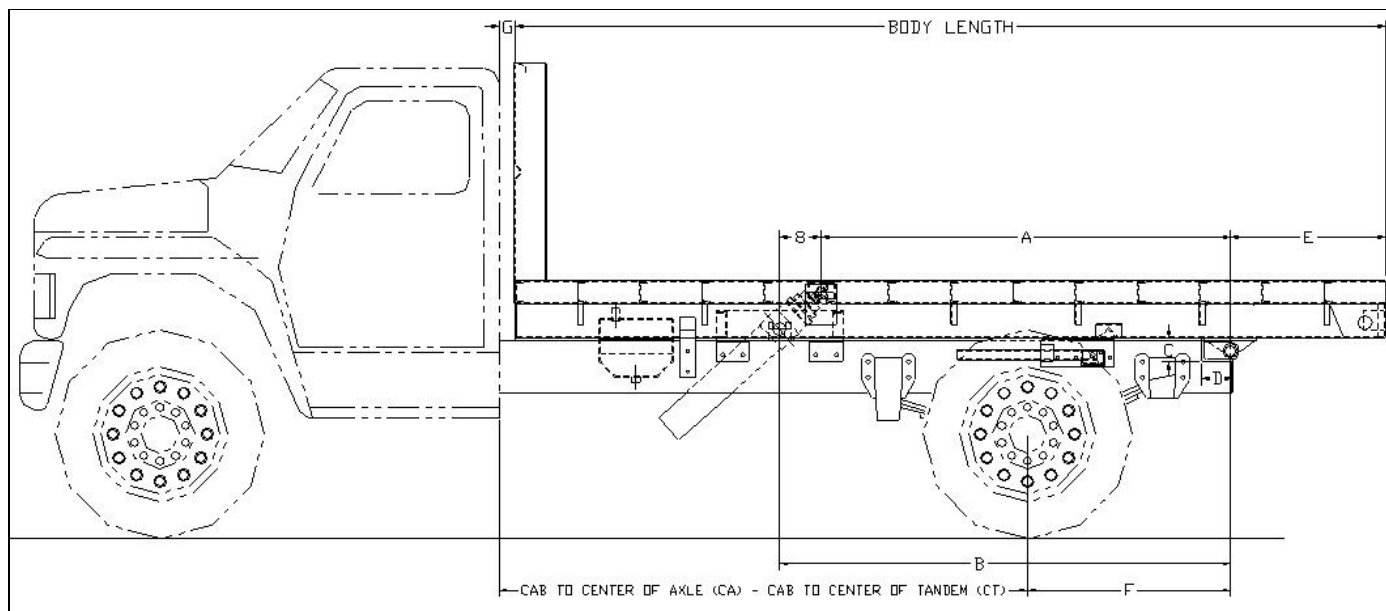


CHART (A)

	A	B	C	D	E	F (SINGLE AXLE)	F (TANDEM AXLE)	G
4243	53	61	4-1/8 In.	5-3/4 In.	18 - 48 In. Typ.	30 - 42 In. Typ.	48 - 60 In. Typ.	3 - 4 In. Typ.
4254	66	72	4-1/8 In.	5-3/4 In.	18 - 48 In. Typ.	30 - 42 In. Typ.	48 - 60 In. Typ.	3 - 4 In. Typ.
5363	79	87	4-1/8 In.	5-3/4 In.	18 - 48 In. Typ.	30 - 42 In. Typ.	48 - 60 In. Typ.	3 - 4 In. Typ.
5373	92	100	4-1/8 In.	5-3/4 In.	18 - 48 In. Typ.	30 - 42 In. Typ.	48 - 60 In. Typ.	3 - 4 In. Typ.
5385	109	117	4-1/8 In.	5-3/4 In.	18 - 48 In. Typ.	30 - 42 In. Typ.	48 - 60 In. Typ.	3 - 4 In. Typ.
5397	124	132	4-1/8 In.	5-3/4 In.	18 - 48 In. Typ.	30 - 42 In. Typ.	48 - 60 In. Typ.	3 - 4 In. Typ.

#### **^ WARNING**

#### **Crushing Hazard**

#### **Before performing installation:**

- Park truck on a firm and level surface.
- Set parking brakes, turn truck engine off and remove ignition key.



1. Carefully check and verify the dimensions before starting the installation.

**^ WARNING**

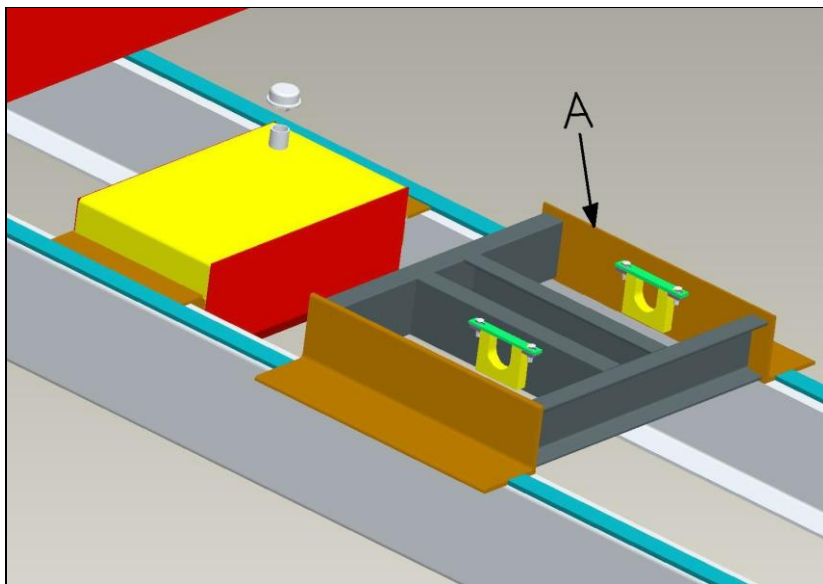
**Crushing Hazard**

**The weight of the cylinder frame assembly is 200 lbs.**

**Use an adequate lifting device to raise subframe.**

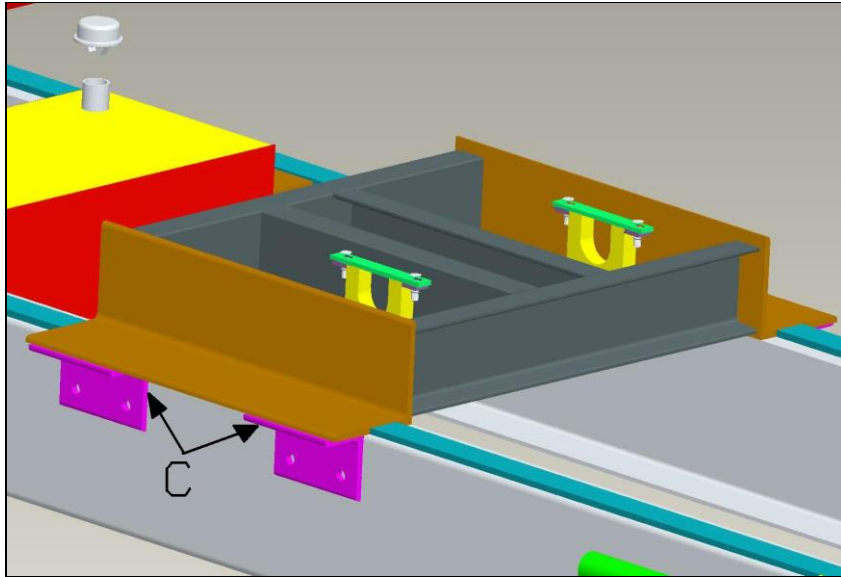


2. Connect an adequate lifting device to the cylinder frame (A) and position on truck frame.



**Install Cylinder Frame on Truck Frame**

3. Position cylinder frame (A) according to CHART (A) above. Verify that cylinder frame is square with truck frame. Center cylinder frame on truck frame and clamp in position.
4. Install four-cylinder frame mounting plates (C) approximately  $\frac{1}{2}$ " from edge of frame and clamp in position. Using mounting plates as a guide, drill  $\frac{3}{4}$  inch holes through truck frame and install  $\frac{5}{8}$  x 2 inch cap screws, flat washers and lock nuts. Weld mounting plates to the cylinder frame. Do not weld mounting plates to the truck frame.



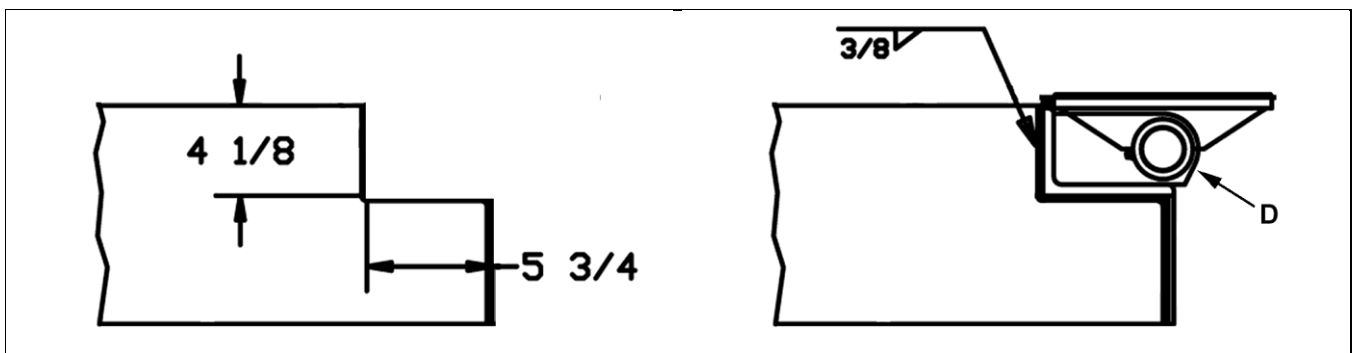
### Install Cylinder Frame Mounting Plates

5. Install  $\frac{3}{8}$  x 3 inch spacer pad on top of truck frame. The spacer will go from the rear of the cylinder frame to the front of the hinge and from the front of the frame to the front of the body.

#### NOTICE

**Dimensions in step 6 are approximate. Top of hinge pad must be flush with top of spacer pad.**

6. The truck frame will require modification for the rear hinge assembly. Carefully measure and verify the dimensions from the layout drawing in this section. The top of the hinge pad must be flush with the top of the spacer pad. Remember, measure twice and cut once. Cut the truck frame to accept the rear hinge assembly (D). Verify that rear hinge assembly is square with truck frame and centered. Weld to the truck frame.



### Install Rear Hinge Assembly

## INSTALL HYDRAULIC RESERVOIR AND CYLINDERS

1. Install the optional hydraulic reservoir on the side of the truck frame rail where space will allow. Installed oil fill cap (D) height must not be above truck frame. Modify mounting brackets as necessary.



### Install Hydraulic Reservoir

#### **^ WARNING**

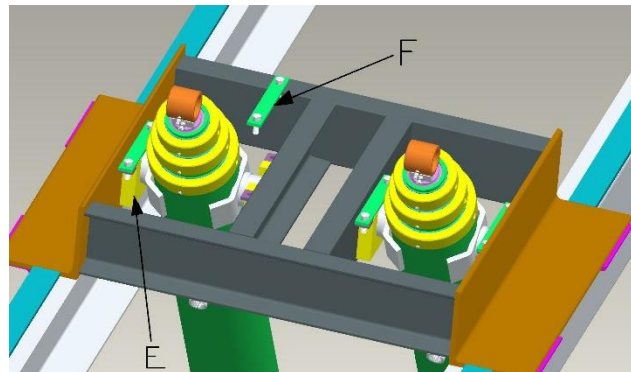
**Crushing hazard.**

**The weight of the cylinder is 350 lbs.**

**Use an adequate lifting device to raise cylinder.**



2. Install cylinders into cylinder pivot saddles (E) using adequate lifting device
3. Attach pin lock bar (F) to cylinder pivot saddles (E) with 3/8" x 1-1/4" cap screws, flat washers and lock nuts.



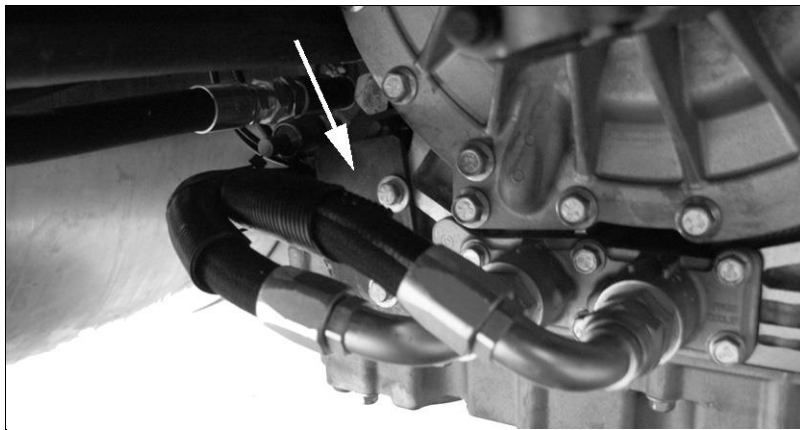
### Install Hydraulic Cylinders

4. Raise hydraulic cylinder with an adequate lifting device.
4. Position cylinder as shown with port (D) facing rearward and install pin (C). Install retaining plate (E) and three cap screws.



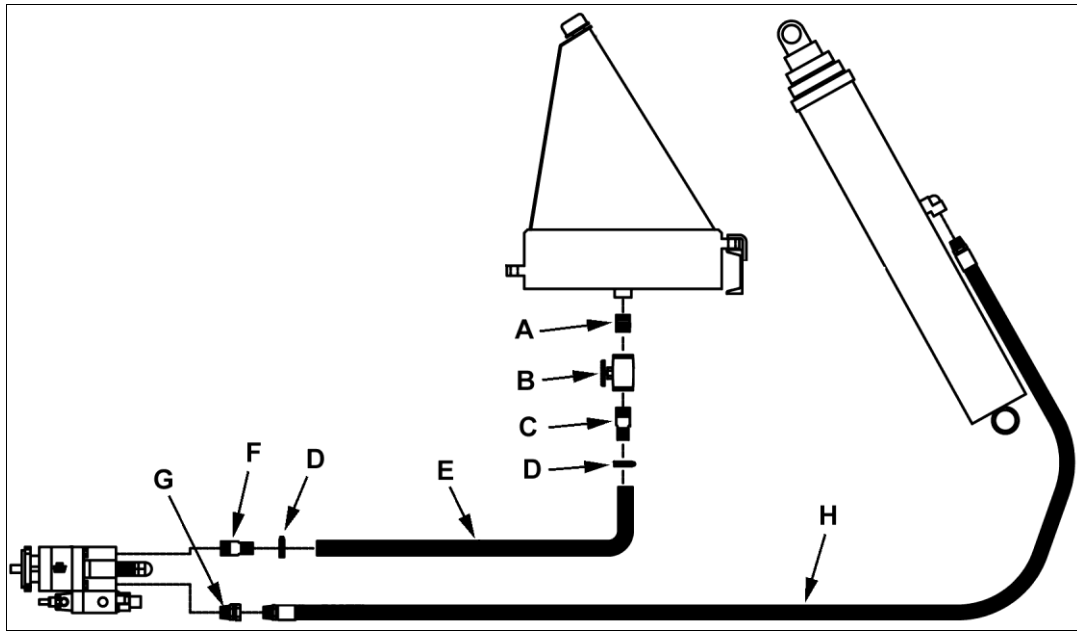
### **Install Hydraulic Cylinder**

5. Install PTO pump and controls per the manufacturers' specifications. Warren recommends installing a rear support bracket on the PTO pump. Fabricate and connect bracket to rear of pump and to truck transmission.



### **Install Pump Support**

6. Connect hydraulic hoses between reservoir, pump and cylinder.



### Install Hydraulic Hoses

A – Nipple, 1 ¼Inch  
 B – Gate Valve, 1 ¼ Inch  
 C – Nipple, 1 ¼Inch  
 D – Clamp, 1 ¼ Inch

E – Suction Hose, 1 ¼ Inch  
 F – Nipple, 1 ¼Inch  
 G – Swivel Adapter, 1 Inch  
 H – Hose, 1 Inch

### 7. Fill reservoir with hydraulic oil and check for leaks.

#### **^ WARNING**

Pressurized fluids can penetrate the skin.

Hydraulic hoses can fail from age, damage and exposure.

Use wood or cardboard to detect hydraulic leaks, never your hands.



### INSTALL BODY

#### **^ WARNING**

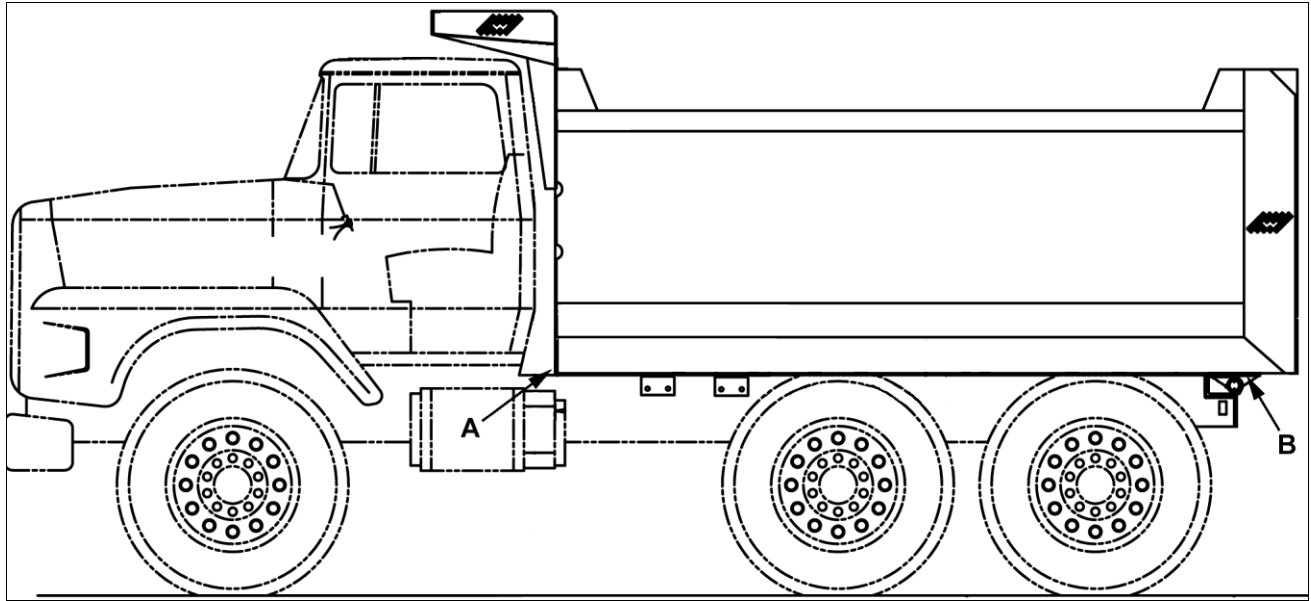
Crushing hazard.

The weight of the body is approximately 5000 lbs.

Use an adequate lifting device to raise body.

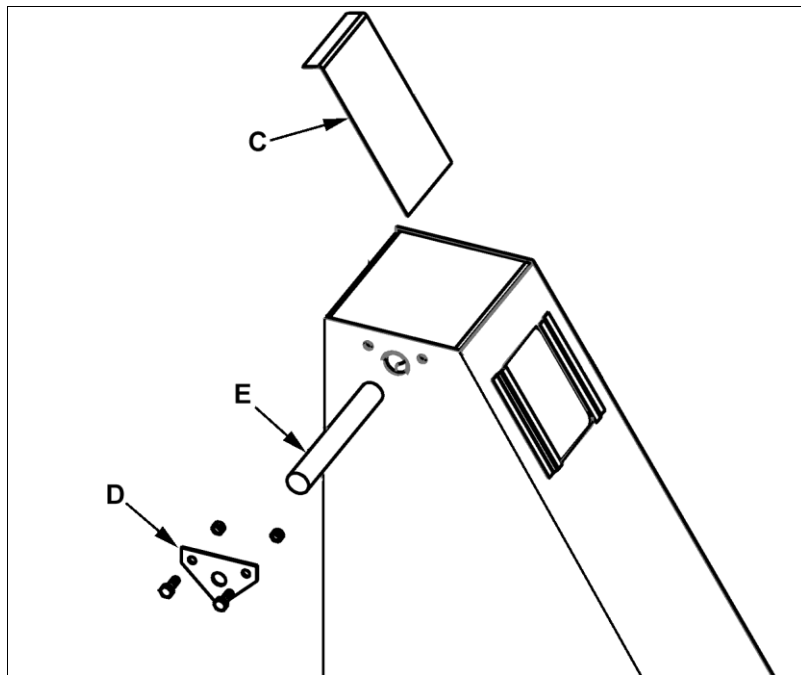


1. Position so front of body is flush with cylinder frame at (A). Verify that dump body is square with cylinder frame and truck frame. Clamp body frame to subframe. Weld body to rear hinges (B).



### **Install Dump Body**

2. To connect rod end of cylinder to dump body, remove access cover (C), cap screws, nuts, pin retainer (D) and pin (E).
3. Weld retainer (D) to pin (E).
4. Insert retainer/pin through body and rod end of cylinder.
5. Install cap screws, nuts and access cover (C).



### **Connect Cylinder To Dump Body**

## INITIAL OPERATION & FINAL ASSEMBLY

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### RELEIVE AIR FROM HYDRAULIC SYSTEM

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#### **^ WARNING**

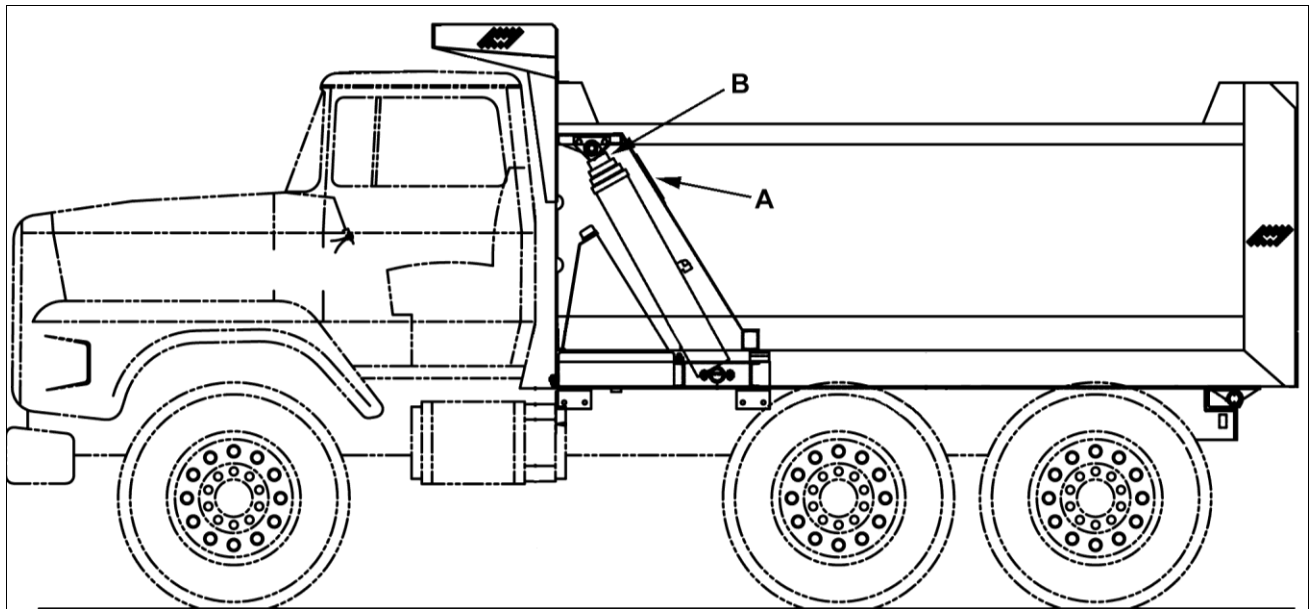
Pressurized fluids can penetrate the skin.

A tiny, almost invisible leak can penetrate the skin, thereby requiring immediate medical attention.

Turn off PTO and stop truck engine before loosening cylinder screw.



1. Fully raise the dump body and lower completely. Remove access cover (A) and loosen screw (B) at the top of the hydraulic cylinder to relieve trapped air. Tighten screw and repeat cycle three times or until dump body operates smoothly.



Relieve Trapped Air

### INSTALL SHUTOFF SWITCH

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#### **^ WARNING**

Crushing Hazard

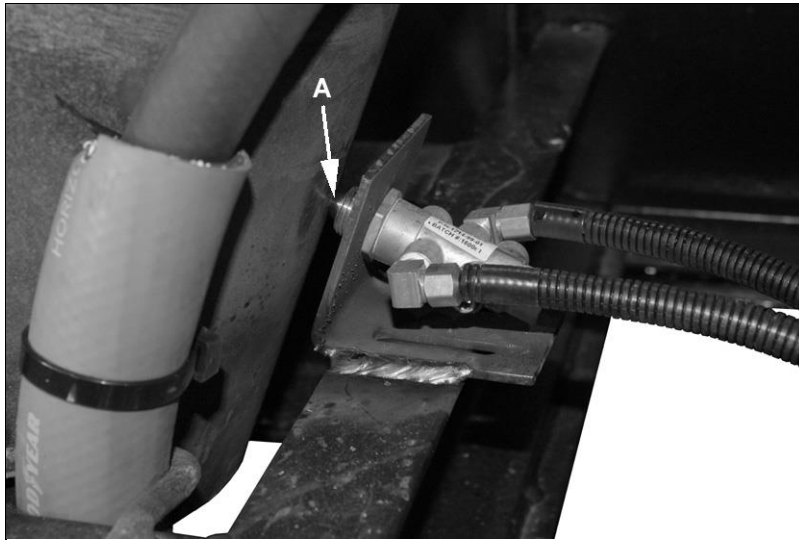
A lowering or falling dump body can cause death or severe injury.

Support the empty dump body with a secure device before enter area under a raised dump body.



1. Fully raise dump body with truck hydraulic system.

2. Lower body approximately twelve inches.
3. Turn off PTO and stop truck engine.
4. Support the dump body.
5. Position shut off switch on cross member rearward of the hydraulic cylinder. Push bracket forward until switch is closed (compressed). Clamp in place and weld bracket to cross member.



**Install Shut Off Switch**

6. Raise dump body, remove supports and lower dump body.

## **INSTALL BODY PROPS**

1. Refer to the layout drawing for the body you are installing for correct placement of the body props.

### **^ WARNING**

#### **Crushing Hazard**

**A lowering or falling dump body can cause death or severe injury.**

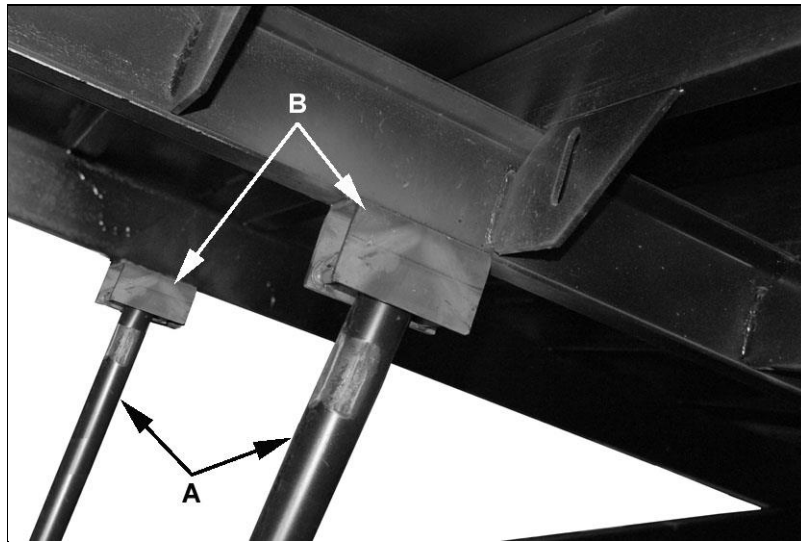
**Support the empty dump body with a secure device before entering the area under a raised dump body.**



2. Fully raise dump body with truck hydraulic system.
3. Turn off PTO and stop truck engine.
4. Safely support the dump body.



5. Position and attach body props. If the body props are mounted to the truck frame, you must drill holes and bolt body props to truck frame. Do not weld to truck frame. If the body props are mounted to the dump body subframe, the body props are to be welded to the subframe.
6. Pivot body props (A) up to the raised position.
7. Lower dump body until body prop receivers (B) can be positioned and clamped to body rail. Weld receivers (B) in position.



**Install Body Prop Receivers**

## **INSTALL MUD FLAPS**

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1. Install mud flaps with 5/16 x 1 ¼ inch cap screws and lock nuts.

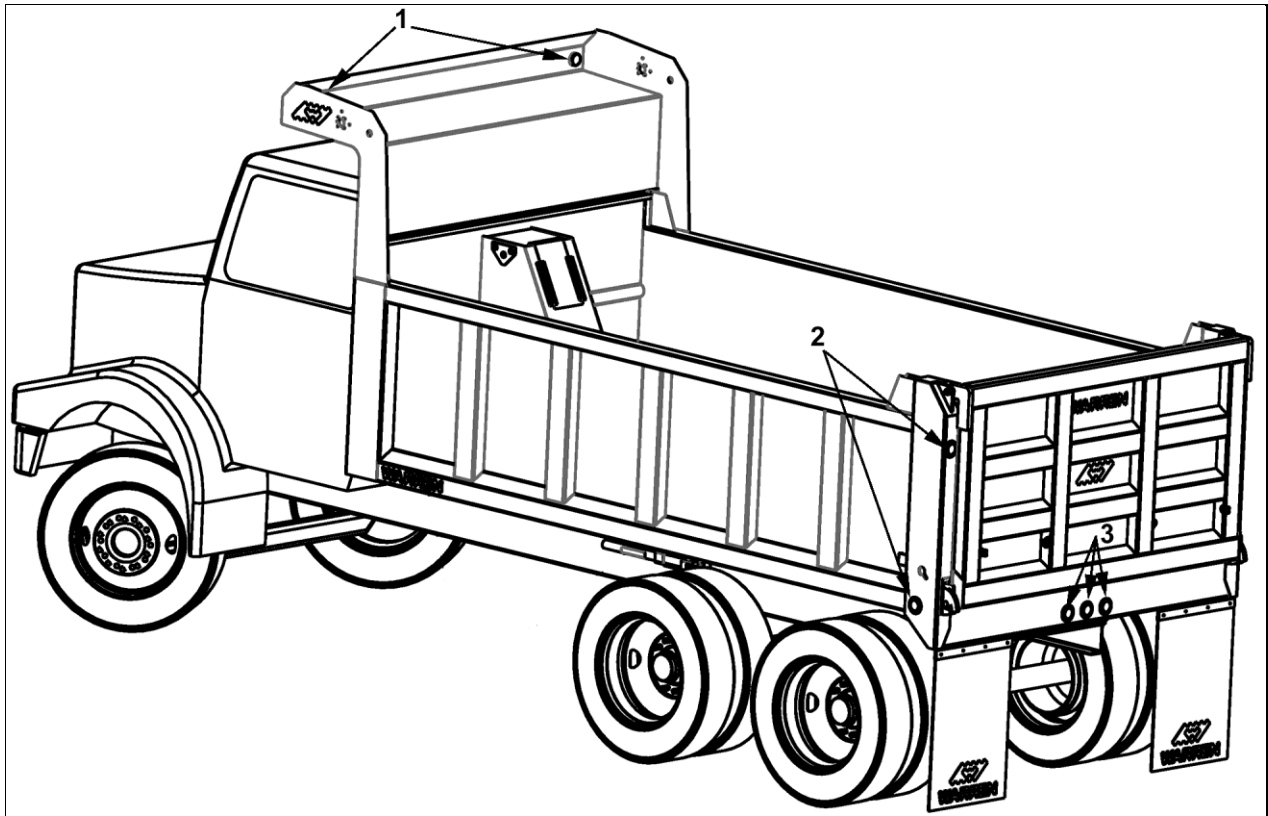


**Install Mud Flaps**

## INSTALL LIGHTS

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1. If truck rear lights were removed during body installation or truck frame modification, install the 3-light bar (3) on the rear of the truck frame or dump body subframe.
2. Install lights (1) on the cab shield. Install two lights (2) on each rear side post. Connect wiring harness and route to rear of body and through the hinge area and connect to truck harness. Avoid pinch points.



Install Lights

## OPERATION

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### SPREADING MATERIAL

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**^ DANGER**

**Crushing Hazard**

**The body props are designed to support an empty dump body only.**

**NEVER support a loaded dump body with the body prop(s).**

1. Park the truck on a firm and level surface. Attempting to unload on a soft or uneven surface may cause the truck to overturn, which can result in death or serious injury.

2. Clear the area around the truck.
3. The surface in which the truck will travel **MUST** be firm and level. Set the metering chains at the desired number of links to control the opening distance of the spreader gate. Be sure to set both chains at equal length.
4. Check for overhead power lines and other obstructions before raising dump body.



#### **Electrocution Hazard**

**Contact with overhead electrical lines will cause serious injury or death.**

**Electrocution can occur without contact.**

**Be sure there are no electrical lines over or near the dump body before raising.**

5. Engage the truck PTO.
6. Raise the dump body until it has reached approximately the halfway point of its dumping angle, or if the load begins to shift rearward.
7. Unlatch rear gate.
8. Watch for and avoid obstructions such as tree limbs, overhead lines, potholes, etc. and **SLOWLY** drive the truck ahead to spread the material.

**DO NOT** drive forward and stop quickly to “shock” the load out of the dump body. **DO NOT** “jerk” the control button up and down to dislodge the load. **The proper procedure for a stuck load is to fully lower the dump body and dislodge the material by hand or with equipment designed to do so.**

You may need to raise the dump body higher after a portion of the load has been spread to place the remaining material at the rear of the dump body.

9. Stop truck after all material has exited the dump body.
10. Fully lower the dump body.
11. Close and latch rear gate.

## DUMPING MATERIAL IN A PILE

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### **^ DANGER**

#### **Crushing Hazard**

**The body props are designed to support an empty dump body only.**

**NEVER support a loaded dump body with the body prop(s).**

1. Park the truck on a firm and level surface. Attempting to unload on a soft or uneven surface may cause the truck to overturn, which can result in death or serious injury.
2. Clear the area around the truck.
3. Check for overhead power lines and other obstructions before raising dump body.

### **^ DANGER**

#### **Electrocution Hazard**

**Contact with overhead electrical lines will cause serious injury or death.**

**Electrocution can occur without contact.**

**Be sure there are no electrical lines over or near the dump body before raising.**

4. Engage the truck PTO.
5. Unlatch rear gate.
6. Raise dump body.

**DO NOT** drive forward quickly and/or stop quickly to “shock” the load out of the dump body. **DO NOT** “jerk” the control to dislodge the load. **The proper procedure for a stuck load is to fully lower the dump body and dislodge the material by hand or with equipment designed to do so.**

7. Fully lower the dump body.
8. Close and latch rear gate.

# MAINTENANCE

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## LUBRICATION

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### **^ WARNING**

#### **Crushing Hazard**

**Before performing inspections, service or maintenance:**

- **Park truck on firm, level surface.**
- **Set brakes, turn truck engine off and remove ignition key.**
- **Use body prop to support raised dump body.**



### **^ DANGER**

#### **Crushing Hazard**

**The body props are designed to support an empty dump body only.**

**NEVER support a loaded dump body by the body props.**

Pump grease into all zerks at least once per week. Every hinge and pivot point has a grease zerk. The number of grease zerks at each location will vary by models.

Grease zerk locations:

- Base end of cylinder(s)
- Rod end of cylinder(s)
- Cylinder scissor mechanism
- Rear hinge(s)
- Tail gate hinges
- Tail gate latch mechanism

## DUMP BODY & TRAILER WARRANTY

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WARREN, INC., (hereinafter called Warren) warrants each new trailer, dump body and item of hydraulic equipment manufactured by it to be free from defects in material and workmanship under normal use and service with loads not exceeding the vehicle manufacturer's rated capacity for a period of 12 months after delivery to the original purchaser direct or by an authorized Distributor.

***Exclusions from Warranty.*** This Warranty shall not apply to (1) components manufactured by persons other than Warren (such as hydraulic pumps, motors, valve, bearings, etc.) beyond warranty, if any, which may be made by such manufacturer (2) any unit which shall have been subject to misuse, negligence, alteration or accident or which shall have been repaired by anyone other than Warren or its authorized service distributor in any way so as in the judgment of Warren to affect adversely its performance or reliability, (3) normal maintenance services.

***Purchaser's Exclusive Remedies.*** Warren's sole obligation under this warranty will be to repair or replace, at its option, any warranted unit or part as described above which shall be returned to Warren's factory or authorized service distributor and which examination shall disclose to Warren's satisfaction to have been defective. Freight or other transportation costs to and from the factory or authorized service distributor must be paid by the purchaser. Warren will not assume any charges for repairs made by anyone other than Warren or its authorized service distributor.

***Exclusion of other Warranties.*** No other warranty is made by Warren and in particular Warren makes **NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.** Warren neither assumes nor authorizes any person to assume for it any liability other than described herein.

***Limitations of Actions.*** Without extending the period of warranty stated above, any action for breach of warranty must be commenced within one year of the breached claimed or forever barred.

***Limitation of Damages.*** The purchaser's remedy stated above shall be exclusive for any and all claims against Warren whether based on contract, negligence, tort, or any other theory. In no event shall Warren be liable for any consequential damages which may result from any defect or failure of a unit or part.

Warren, Inc. 707 North Fir Ave., P.O. Box 1719, Collins, MS 39428

