

SELF-DUMPING HOPPER  
TRAINING MANUEL



**FABRICATION**

*A division of Reequip Manufacturing Inc*



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## **About JT Fabrication**

JT Fabrication was established in 2003 and has become a reputable manufacturer in the material handling industry. JT makes a wide range of Self-dumping Hoppers, Lugger Bins, Lugger and Roll-off Truck Bodies, and other custom containers.

With over 75 years of combined experience, JT Fabrication is no newcomer to the material handling industry. Since 2019, JT Fabrication has been in Welland, Ontario along with its sister plant WARD Industrial Equipment.

## **Safety First**

At JT Fabrication we pride ourselves on creating safe and easy to use products. Self-dumping hoppers are one of the most used products that we manufacture. Stopping injury caused by misuse of the product is what we have been striving to do. Keeping surroundings clear and having the safety equipment attached while operating the hopper is the first step towards operating self-dumping hopper safely.

## **Keys for Safety**

1. Make sure the area is clear of people and obstructions while moving the hopper.
2. Make sure that the safety chain is securely wrapped around the mast of the forklift.
3. Make sure that when discharge the hopper the area is clear of people and equipment.
4. Keep a safe distance from hopper while discharging contents.

## What is a Self-Dumping Hopper

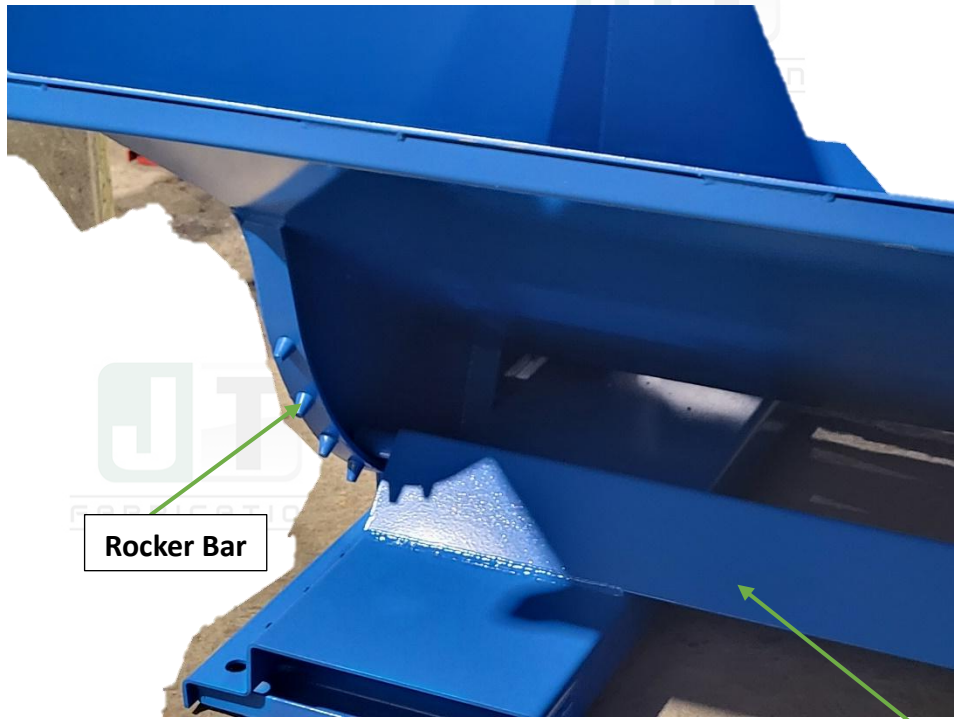
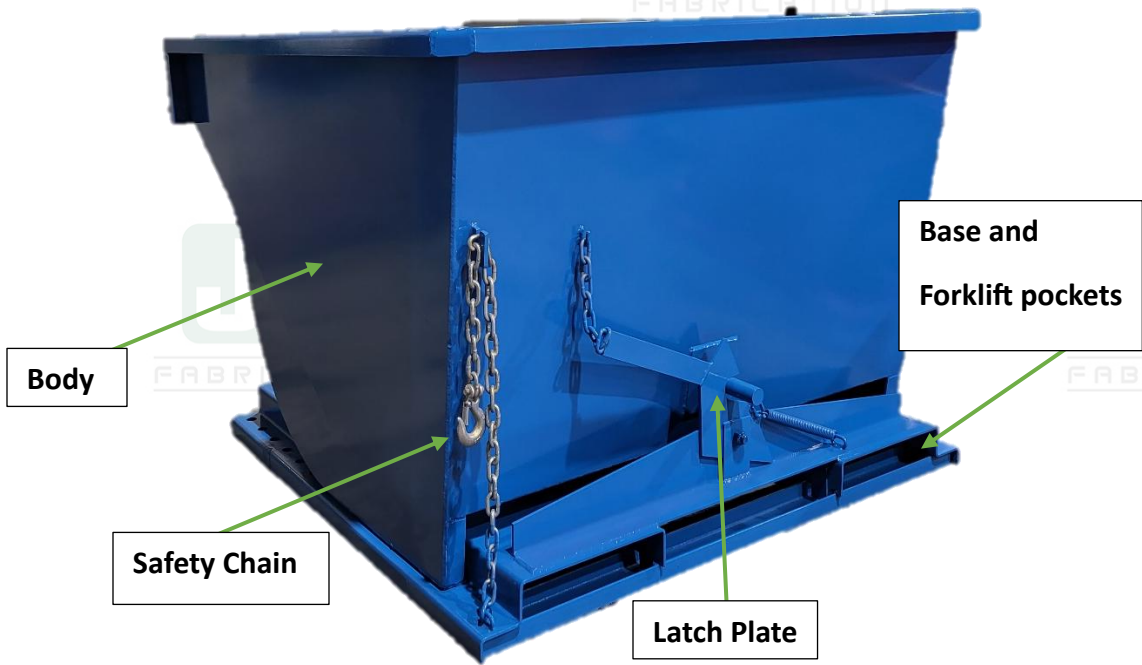
A self-dumping hopper is a bin that has multiple uses in a wide variety of industries. Self-dumping hoppers can be used easily for material handling, allowing the operator to move material from one location to another.

## How it Works

Self-dumping hoppers work by releasing the latch on the back, to allow the hopper instant tips forward and discharge. Once the content has been discharged, the hopper will return on its own and re-latch to secure the hopper. ***Self-Dumping Hoppers should not be used with forklift extensions.***



**What are the arts?**



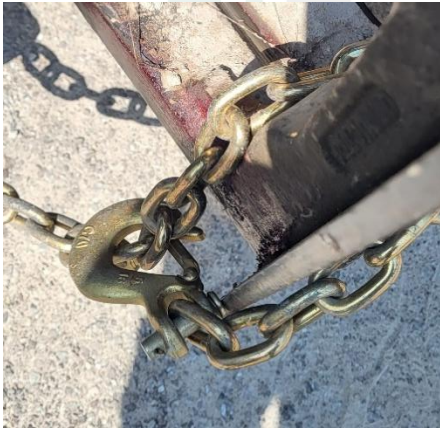
## Weight Capacity

Self-dumping hoppers come in different sizes. That means there are different capacities (in pounds) for each size.

VOLUME	Body thickness		
	1/8"	3/16"	1/4"
1/4 CU YD	500	1000	2000
1/2 CU YD	1000	2000	4000
3/4 CU YD	1500	3000	6000
1 CU YD	2000	4000	6000
1-1/2 CU YD	2000	4000	6000
2 CU YD	2000	4000	6000
3 CU YD	2000	4000	6000
4 CU YD	2000	4000	6000
5 CU YD	2000	4000	6000

## How to Operate

1. Drive a forklift into fork pockets
2. Attach the safety chain to the forklift mast and ensure the safety latch on the hook is closed. (See Figure 1)



(Figure 1)



3. Lift the hopper to desired height
4. Check the hopper surrounding area to make sure there is not anyone around that could get injured from falling debris.
5. Stand behind the hopper and disengage latch with attached chain or cable extension.
6. Tilt forks forward slightly if the hopper does not tip on its own.
7. Allow some time for the hopper to empty the contents inside.
8. Tilt forks back up so the hopper returns to resting position.
9. Check the surroundings and return hopper to safe travel position.
10. After putting the hopper to its desired location, unhook the safety chain from the forklift mast before driving away.
11. Place the safety chain back on the safety chain holder on back of the hopper.

## What Not to Do with Your Self-dumping Hopper

1. Do not exceed the weight capacity of the hopper and always load the dumper evenly.
2. Do not load hopper beyond the loading lip at front of hopper and material being loaded into hopper should not protrude beyond the hopper.
3. Do not stand near the hopper while in operation.
4. This product is a self-propelling dump body and people must be cleared during discharge action.
5. Do not stack hoppers upon one another.
6. Handle only with a suitable fork truck by lifting with the fork receptacles provided in the base of the hopper.
7. The operator must be behind and clear of the hopper while tripping the latch.
8. Never dump while the hopper is resting on the ground. This could cause the hopper body to strike the ground, or the unit could tip over. Dump only when handled by a capable fork truck.
9. Do not allow the forks to protrude through the front of the base, or the hopper may become dislocated and/or damaged when the body rolls forward during dumping.
10. The hopper may only be lifted with a crane if lifting lugs are supplied, never attempt to dump the loaded hopper while suspended from a crane.
11. Do not add lifting lugs – a lifting device requires certification.
12. JT bins with lifting lugs will have a maximum capacity indicated. Do not exceed the maximum capacity
13. Do not stand inside or on top of any hopper.
14. Use a chain or cable with a hook to unlatch a load elevated on a lift truck. Do not climb the fork truck mast to reach the latch handle.
15. All safety chains must be used at all times.



16. This equipment must be inspected regularly to ensure all the components are in proper working condition. All worn or damaged components must be repaired or replaced before the unit is placed back into service.

### **Quick Fix**

If your self-dumping hopper becomes dislodged from its riding tracks and pivoted point.

Equipment required: **Prybar**.

1. Insert prybar between rocker bar and base of the side that is disconnected.
2. Lift the body of the hopper with prybar and recenter the pin in the hole.

This is the most common issue with self-dumping hoppers, the way to stop this from happening is to:

1. Do not overload the hopper.
2. Do not rapidly move the hopper up and down with the forklift while emptying its contents.
3. Do not use forklift extensions.

### **Counterweight**

A steel bar that is generally added to the slope side of the hopper to help the hopper propel forward when the latch is disengaged. Mostly added during production if requested by the

customer. Counterweights are helpful if the hopper is holding material that is improperly stacked or too light or heavy to allow the hopper to tip.

### Casters

Casters on the base of the hopper are useful for a person to move around the shop or work site.

As with hoppers, casters will come in sizes ranging from 4" to 6" and are welded to the bottom of the hoppers. Casters can also have a rotation point at the front so they can move around corners with ease.

- Do not overload casters.
- Do not bins with casters on uneven surfaces.

