

Mixing Trailer Operator's Manual



CMT 100

1-Yrd Mixing Trailer



CMK 175

1.75-Yrd **MixKing**

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Call a Cart-Away Expert.
1-800-909-9809



CMT 100 or MixKing Trailer

Material Loading Instructions

The ideal loading system for a CMK 175 (MixKing) or CMT 100 moves the dry aggregates and powdered cement into the mouth of the mixing drum. These dry materials mix with the water in the drum to produce concrete.

Optional loading can be accomplished using an auger that would charge the drum with pre-mixed concrete. In both cases the instructions for preparing the trailer for loading and towing will be the same.

1. It is critical that the trailer is safely connected to the towing vehicle and that the vehicle meets company hook-up policies. (See Hints for Hook-up in this manual)
2. Direct the towing vehicle to back the rear of the trailer into position in front of the loading belt or auger.
3. Use the vari-height adjustment screw on the trailer tongue to position the height of the drum opening in relation to the discharge height of the loading belt or auger.
4. Check and fill the fuel tank on the engine.
5. Check and fill the water tank when available.
6. Turn the GearSaver knob until the valve “clicks” into the center position.
7. Start the trailer’s engine and set it at full throttle.
8. Turn the GearSaver knob **clockwise** into the **MIX** direction until the drum is spinning at full speed.
9. Load some water prior to introducing dry materials. (this procedure will vary with the material loader that you are using. Please refer to the owner’s manual for your Cart-Away model CLS or your model CBL loader for pre-loading water into the mix).
10. Begin loading the trailer with the dry materials.
11. After the material loader has completed loading the materials into the drum, slow the drum rotation approximately 50% using the GearSaver knob in the **counter-clockwise** direction. This is the suggested “traveling speed” as the trailer is pulled to the jobsite.
12. Use the tongue adjustment screw on the trailer to level the trailer for safe towing.
13. Recheck the hook-up to the towing vehicle prior to sending the load with the customer.



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Operating Instructions to Unload the Concrete.

The advantage of using the mixing trailer is that water can be added at the jobsite to “freshen” the mix. When adding water to mixing trailer that is full of concrete, raise the mouth of the drum up to it’s highest position in order to blend the water into the mixture.

1. After arriving at the jobsite, check the mix and add water as needed but remember that excess water will weaken concrete.
2. Carefully back the trailer to a convenient spot to begin unloading the concrete. Use as level a spot as possible and always set the emergency brake on the towing vehicle.
3. Place a wheelbarrow behind the mixing trailer if necessary for moving the concrete to the form.
4. Turn the GearSaver knob **counter-clockwise** to the center position (it will click into neutral) to stop the drum from turning.
5. **Slowly** tilt the drum down using the “Raise/Lower” lever on the trailer controls until the wet concrete begins to flow out of the drum. **WARNING: By tilting the drum too quickly, you risk a weight shift in the drum that can cause the hydraulic systems to be overridden and dump all of the concrete onto the ground.**
6. After the wheelbarrow is full, raise the drum back to full height and turn the GearSaver knob clockwise to about 50%. This will allow the drum to mix the materials while you empty the wheelbarrow into the form.
7. Repeat steps 4 to 6 until the drum is nearly emptied.
8. Move the wheelbarrow under the mouth of the drum and tilt the drum all the way down.
9. Use GearSaver knob to reverse the drum rotation to full speed.
10. This will begin to screw the remaining concrete out of the drum.
11. Continue dumping the concrete into the wheelbarrow until it is full and then return the drum to the up position using the “Raise/Lower” lever.
12. Repeat steps 9 to 11 until all the concrete is removed from the drum.



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Drum Cleaning Procedures

It is not necessary to use a great deal of water to clean the mixing drum. Note that any water used to clean the very back of the drum, while the drum is in the "MIX" mode, will be pulled toward the front opening of the drum where it will also clean the mixing paddles and fins.

1. Return the drum to the full-up position using the "Raise/Lower" handle.
2. Turn the GearSaver clockwise to full speed. This is the MIX direction.
3. Use a spray nozzle on a garden hose to wash down the spiral fins and the mixing paddles (the ones with the holes). Pay special attention to the concrete build-up to the back side of the spiral fins near the mouth of the drum.
4. After the debris is removed from the fins and paddles, turn the GearSaver knob to neutral.
5. Move the wheelbarrow under the mouth of the drum so as to catch clean-up water.
6. Use the "Raise/Lower" handle to lower the drum for dumping.
7. Turn the GearSaver knob counter-clockwise to DUMP.
8. The wash water and debris will empty into the wheelbarrow.
9. When the drum is in the fully down position, use the spray nozzle to concentrate the water pressure on the front of the drum to let the water wash over the paddles and fins as it moves toward the wheelbarrow.
10. When the drum is clean, empty the wheel barrow, return the drum to the full up position and return the trailer. **IT IS VERY IMPORTANT THAT YOU LEAVE THE DRUM SPINNING DURING THE TRAVEL TO AND FROM THE MATERIAL LOADING LOCATION.**
11. Optional water systems will require the re-storage and securing of the water hose before traveling on the road.



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Maintenance And Precautions

Following a few simple precautions and a planned maintenance schedule will greatly extend the life of your equipment. Pay attention to and monitor regularly all of the safety devices on your trailer.

1. Lubricate the GearSaver parts every month or as needed.
2. Always train your customers to keep the drum turning and in the full-up position during transit to and from their jobsite. Failure to do this may result in early wear or damage to your casters and drum.
3. Check the engine oil level every day prior to starting the engine.
4. Follow the maintenance and service intervals of the Engine owner's manual.
5. Check the level of hydraulic fluid every day and keep it topped off.
6. Check the fluid level in the gearbox every month.
7. Grease the caster bearings every month or as needed.
8. Grease the tongue adjustment screw assembly every month or as needed.
9. Grease the bearing buddies every quarter or as needed (if applicable).

CUSTOMER SUPPORT

Cart-Away Concrete Systems, Inc. is committed to building quality equipment and supporting your ready-mix business. We want you to know that we are here to help you and your service staff.

Your satisfaction and positive "word of mouth" concerning our products and our company is our highest priority, so contact us with any issues.

On Weekdays from 6AM to 5PM (PST) toll free 800-909-9809 503-434-4444
Fax: 503-434-5888 email: info@cart-away.com

Cell: 503-437-4141 Product Manager

Our service department is available to come to your location if and when you need extra technical support (call for a complete pricing package).



Hints for Hook-Up

Safely hooking the trailer to your customer's tow vehicle is very important both to them and your employees. Take a moment to read these tips and train your employees to only hook a trailer safely.

- Teach your employees to be consistent. Always use the same hand signals to guide your customer as they back towards the trailer. As the employees become accustomed to this, so will your repeat customers and it will limit the confusion for everyone.
- Use hand signals that can be clearly seen by the customer from the rear view mirrors or over his shoulder. Use only one hand to make signals because two-handed signals can be confusing.
- Simple hand signals are the most easily understood, and taught. But it is important that the signal has a definite meaning. Moving your fingers is not a definite signal and may be difficult to see by your customer. We recommend using the forearm and hand together. For instance, to move your customer toward you: move your arm from the elbow, with your open palm facing you. Bring the palm of your hand towards you to indicate for the customer to come that way. Keep in mind that the speed that you move your arm will indicate to the customer how fast you want them to go. As they get closer to where you want them to be, slow your arm movements. Don't move your arm less, just move it slower. To move the customer to the left or right, use the index finger or thumb of the signaling hand while keeping the signal definite.
- DO NOT place one hand on the hitch while signaling with the other hand. DO NOT straddle the hitch between tow vehicle and trailer. These can result in personal injury at the pinch points between vehicle ball and trailer hitch.
- Stop your customer about 2-3" from the hitch using a fingers extended palm forward motion or a closed fist facing forward. Once they have completely stopped and have placed the vehicle in park or have set the brake, inspect their hitch for the correct rating of hitch and towing vehicle.

If any of the above are not correct, do not hook the trailer to the customer's vehicle. Sell or rent the customer the proper ball or hitch.

- Once satisfied with the condition and capabilities of the towing vehicle, use the tongue adjustment screw handle to align the hitch with the ball or pintle hook and pull the trailer forward the remaining short distance to seat the hitch on the ball or pintle hook. You may choose to back the customer up that distance, but it is not recommended as a full size vehicle is difficult to move safely and slowly for only a matter of inches.
- Close the jaws of the coupler of the pintle hitch over the hook, making sure that any locking mechanism is in its proper position to lock the coupler jaw or pintle hook down and keep it from coming off while towing the trailer.
- Secure the safety chains to the towing vehicle in a crossing pattern under the trailer tongue. Always connect safety chains as close to the center of the vehicle as possible. Unless you have no other option, never hook safety chains to the far left and/or right of the towing vehicle.
- Attach the emergency break-away cable to the towing vehicle at a point that is as close to center of the vehicle as possible. Never connect the cable to a safety chain.
- Level the trailer's fenders to the ground using the tongue adjustment screw handle.
- Inform your customer to drive safely, follow all traffic laws, and any policies of your own.

If you have any questions, please contact our Service Department between 6 a.m. and 5 p.m. at 800-909-9809 Monday through Friday. On weekends, or after hours, call 503-437-4141.

Cart-Away Equipment Safe Operation List

- Read and understand your equipment's operation manual prior to operation.
- Print this operational list and provide it, along with verbal training, to every person who operates this equipment.
- Any and all damaged or defective parts should be reported to equipment owner and then repaired or replaced prior to use.
- Safety guards must be in place and in good working order before the owner of the equipment allows it to be used.
- Carefully read and follow any safety decals and signs. Keep them in good condition and replace damaged decals. Replace any safety decals and signs following any repainting. Decals are available through the Cart-Away parts department.
- Follow all maintenance instructions – including turning off engines and disconnecting any power feeds, electrical cords, or spark plug wires prior to performing any service or repairs.
- Never operate any equipment while under the influence of drugs or alcohol.
- Dress appropriately for running equipment. Do not wear loose clothing, rings, and wristbands. It is recommended that you wear sturdy footwear, long pants and use OSHA approved eye and noise protection while operating this equipment.
- It is recommended that you wear an OSHA approved dust mask or respirator when needed.
- Never allow children to operate or play with any equipment. Keep children and pets at a safe distance and be aware of their location during the movement/operation of the equipment.
- Operate the equipment only on firm and level ground.
- Never un-hook a loaded trailer from the towing vehicle.
- Never lubricate or adjust functions while the equipment is in operation.
- Keep hands and other body parts a safe distance from any rotating pulley, caster or drum. Never attempt to stop the movement of any function using human contact.

CALIFORNIA PROPOSITION 65 WARNING: Engine exhaust and some of its constituents are known in the state of California to cause cancer, birth defects and other reproductive harm.

- Never operate an internal combustion engine in a confined space. Engines discharge carbon monoxide, a poisonous, odorless, invisible gas. Death or serious injury may result if inhaled. Operate only in areas with proper ventilation.
- Use extreme caution when handling, storing and using dangerous fuels. Fuels are highly volatile and explosive in a vapor state. Do not add fuel indoors or while the engine is running or when hot. Stop and cool the engine before adding fuel and storing the equipment. Do not smoke near fuels.
- Ignition and electrical systems can cause severe electrical shock. Avoid contact with breakers, magneto and battery ignition systems on engines or panels.
- Never work in any electrical panel without disconnecting electrical power.
- Servicing any electrical components should only be accomplished by qualified personnel.

