

## **EVO Safety Precautions Operator's Manual (Back Loader)**

In the United States, many people are killed annually by refuse trucks. Please read this handbook carefully and do not operate the back loader until you understand all of the safety precautions. Failure to adhere to the safety regulations can result in serious injury or death.



### **Braking**

The holding brake must not be used to secure the vehicle when it is parked, or when the engine is not running. If the brake system pressure should drop below a safe level, the vehicle could roll away.

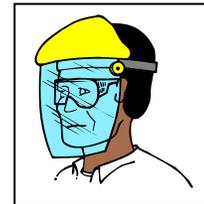
Immediately report any brake malfunction. Insist that the truck you drive is well maintained and fully safe. This is for your safety as well as others.

Braking on this vehicle functions differently when this vehicle is loaded or unloaded. Operators should fully familiarize themselves with the braking characteristics of the EVO in conditions with and without a load before driving in traffic.

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### **Working in Hopper**

When working in the hopper area, wear eye protection. Stay clear when packer panel is moving.



Keep hands and arms clear of the hopper during the compaction cycle. Do not operate the compactor from inside the cab unless the hopper is clear of all personnel.

Never enter the hopper or the sump area with the diesel engine running. Do a complete lock-out/tag-out before entering. If the sump is entered with the engine still running, unexpected, rapid, automatic retraction (or extension) could occur causing serious injury or death!

### **Instrumentation**

Never leave the cab unless the vehicle is in Neutral and the park brake is applied. If the brakes are not applied and the vehicle is left unattended in Neutral (N), Drive (D) or Reverse (R), it could roll away causing serious injury or death.



Objects in convex mirrors are closer than they appear.

## **Do's and Don'ts**

DO: Follow safe operating practices.

DO: Use grab handles when mounting or dismounting.



DO: Before starting the engine always: check transmission lever to make sure it is in neutral and the parking brake is applied.

DO: Drain all air tanks to sequence daily.

DO NOT: Operate this vehicle unless you have read and understand the instructions in this manual.

DO NOT: Step in or out of cab while vehicle is in motion.



## **Before Starting your EVO**

DO: A thorough inspection should be made before entering the cab to start the engine.

DO: Check around and under your vehicle for such items as lubricant, fuel or coolant leaks, loose bolts, trash build-up and condition of tires.

DO: Always check, clean and adjust mirrors as required for maximum viewing capacity.

DO NOT: Forget to “buckle up” your seat belt.



## **When Starting your EVO**

DO: Make sure the transmission selector control is in NEUTRAL and the parking brake applied.

## **When Operating your EVO**

DO: Be prepared! A loaded vehicle handles differently from an empty one, for example:

- Longer stopping distances
- Slower acceleration
- More leaning on curves and different steering response.

DO: Always use the holding brake to secure vehicle while loading at a collection stop with the transmission in Neutral and the engine running.

DO: Use extreme care when backing this vehicle.

DO: Use the parking brake to secure the vehicle whenever it is parked and left unattended.

DO: Always place the selector switch in the MAN position to dump the load.

DO: Keep hands and arms clear of the hopper during the compaction cycle.

DO: Wear eye protection when working in the hopper areas; stay clear when packer panel is in motion.

DO NOT: Operate the automatic compaction cycle if the pinch point is exposed and the compactor plate retracts automatically. Notify you service department immediately if this should occur.

DO NOT: Mount or dismount your vehicle while in motion.

DO NOT: Operate the compactor from inside the cab unless the hopper is clear of all personnel.

Before exposing RAM's Tail (and therefore its pinch-point), always turn selector-switch to manual mode. Under no circumstances is it acceptable to have the selector switch in AUTOMATIC, with the RAM's tail exposed... Unexpected, rapid, automatic retraction (or extension) could occur, causing death or serious injury. There are no exceptions to this rule. It applies to both maintenance related jobs and routine operation as well.

The EVO is equipped with a ROLLER ARM TRIP interlock that when properly maintained, will prevent AUTOMATIC RAM movements whenever the RAM's tail is exposed. This ROLLER ARM TRIP interlock is to be tested weekly and to be kept in proper working condition. Never assume the ROLLER ARM TRIP interlock will substitute a proper lock out procedure.

### **Pressure Washing the EVO**

Thoroughly clean and pressure was the EVO weekly. Accumulated oils, fluids, and greases can create a significant fire hazard. There are several flammable fluids on board the EVO, such as: hydraulic oil, transmission fluid, crankcase oil, and power steering fluid. Do not allow these fluids to accumulate.

Always do a complete lock-out/tag-out procedure before beginning a pressurized wash. The pressure wands spray could force a cycle "START" palm-button switch on, thereby causing rapid, unexpected retraction (or extension) of the RAM... causing serious injury or death if the diesel is running.



Painted steel surfaces can become very slippery when wet. Clean first the areas that would require you to stand on a steel surface, so it is dry. (An example: Open the hydraulics compartment cover, stand on dry utility body, pressure wash the hydraulics compartment. Later on, was off the utility body.

### **Other Safety Concerns**

Troubleshoot and repair any reported ABS fault before returning the EVO to route service.

Stay clear of the manual control levers during the automatic cycle to prevent possible injury.

Be sure area is clear behind the tailgate prior to opening ensuring the safety of others.

When traveling over the road, close cab door, be seated and fasten seat belts.

Always use restraining bar when driving the vehicle in the stand-up position.

Before driving, always adjust your mirrors to provide optimum viewing conditions while operating the vehicle. Properly adjusted mirrors are necessary for safe operation.

Before entering the cab to start the vehicle, make sure no one is behind the vehicle or in a danger area.

Batteries normally produce explosive gases which can cause human injury. Therefore, do not allow flames, sparks or lighted tobacco to come near the battery. When charging or working near battery, always shield your eyes. Always provide ventilation. Keep batteries out of reach of children. They contain sulfuric acid. Avoid contact with skin, eyes and clothing. In case of acid contact with skin, eyes or clothing, flush immediately with water for a minimum of 15 minutes. When lifting a plastic cased battery, excessive pressure on the end walls could



cause acid to spew through the vent caps resulting in personal injury. Lift with a battery carrier or with your hands on opposite corners.

To avoid harm to yourself or damage to your vehicle and battery, follow the JUMPER CABLE USAGE procedures listed in the Operator's Manual.



A loaded vehicle handles differently from an empty one. Be prepared for:

- Longer stopping distances.
- Slower acceleration.
- More leaning on curves and different steering response.

Never stand-up when driving above 10 MPH. During a panic stop situation, you will not be in control of the vehicle. When driving above 10 MPH you must be seated and fasten seat belt.

It is important that the left to right steering and brake balance be maintained for full control during panic-stop situations. Failure to maintain "balance" could cause the vehicle to swerve and skid to the left or right.



Use extreme care when backing this vehicle.

The EVO is not to be operated from the right hand side at speeds in excess of 10 MPH.

It is not recommended that the running board be used when the vehicle is exceeding 10 MPH or while operating in Reverse.

Be sure area is clear behind tailgate prior to opening ensuring the safety of others. Stand clear when tailgate is in motion and during unloading cycle. Do not stand under or cross under raised tailgate.

Kart Dumper (if equipped) - be sure the area is clear in front of the lift mechanism when raising or lowering the Kart Dumper.

Always drive the vehicle with the Kart Dumper upper catch in the raised position. Do not travel from stop to stop or to the disposal site with the upper catch in the lowered position.

Kart Dumper Slide (if equipped) – be sure the running board is clear of any obstacle or persons prior to actuation; damage or injury could occur.

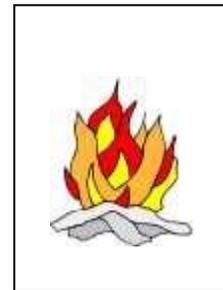
Be careful not to pinch your hands or fingers when moving the spring loaded catch.

Do not mix diesel fuel with gasoline or gasohol or alcohol. This could cause an explosion resulting in human injury or death.

Do not lift vehicle from tow loops. Use lower drop frame only located under cab. Tow loops may break off when used to lift vehicle (use for pulling or safety chains).



DO NOT: Allow flames, sparks or lighted tobacco to come near the battery. Batteries normally produce explosive gases which can cause injury.



Before exposing RAM's Tail (and therefore its pinch-point), always turn selector-switch to manual mode. Under no circumstances is it acceptable to have the selector switch in AUTOMATIC, with the RAM's tail exposed. Unexpected, rapid, automatic retraction (or extension) could occur, causing death or serious injury. There are no exceptions to this rule. It applies to both maintenance related jobs and routine operation as well.

Never cross under or stand beneath a raised and unsupported tailgate. The tailgate could suddenly fall causing serious injury or death. Never cross under or work under a raised tailgate with the diesel running, even when a prop is installed.

Some service/maintenance jobs (such as replacing the tailgate seal) will require working beneath the tailgate. Follow these steps:

1. Raise the tailgate about 1/3 to 1/2 upward (diesel running).
2. Turn the diesel **OFF**. (At the ignition key).
3. Remove the ignition key (and the person doing the job keeps the key in their pocket).
4. Place signs on both steering wheels that state "**DO NOT START**".
5. Follow all of your shops lock-out/tag-out procedures (That may not be listed above).
6. Using a steel horse or prop tube, manually lower the gate slowly (by gravity – do not power down) until it rests on prop.

Some service/maintenance jobs will require that you enter the hopper/sump area. In the event you must work in the hopper/sump area, use the following procedure:

1. With the diesel running, manually move the RAM to the location furthest from the point of work. Usually all the way to the tailgate opening. Park the RAM here.
2. Turn the diesel off. (At the ignition key)
3. Remove the ignition key. (The person doing the maintenance will put the keys in to their pocket)
4. Place signs on both steering wheels that state "**DO NOT START**".
5. Follow all of your shop's lock-out/tag-out procedures and policies.

In order to safely remove any debris from the sump, follow this procedure.

1. The body must be empty.
2. Manually extend the RAM completely to the rear until it bottoms out at the tail gate opening.  
Park the RAM here.

Warning: Always turn the selector switch to MANUAL mode before exposing the RAM'S tail. Under no circumstance is it acceptable to expose the RAM's tail with the selector switch in AUTOMATIC. Unexpected rapid retraction of the compactor RAM could result in serious injury or death!

3. Do a complete Lock-out/Tag-out procedure before entering the sump area.  
Turn diesel off  
Remove keys and pocket them  
Place signs on both steering wheels that stat "DO NOT START"  
Follow your shop's Lock-out/Tag-out policy

Never enter the sump area with the diesel running. Unexpected and rapid RAM retraction could occur causing serious injury or death!

Never leave truck cab while truck is still moving. Allow truck to completely stop and then exit the door.

Use extreme care when backing up your EVO. If you have a helper, he should direct the backing of the vehicle. ALWAYS know where your helper is standing, at all times.

