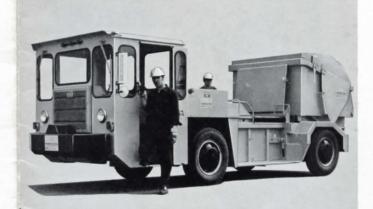
# TRANSFER SYSTEM





...a better method of refuse collection!



#### STEP 3

The EVO hydraulically pulls on an empty body and returns to its route. From 3 to 5 bodies may be filled in a day. These bodies contain a volume of refuse that equals or exceeds the daily collection quantity of conventional trucks under similar route conditions. The exact number of EVO bodies that are filled will depend on the type of collection, the frequency of service, and the number of homes that are collected per day. These same factors also affect rear packer service to the same extent.



### STEP 4

A complete transfer system is now in effect as the huge LAM truck self-loads the refuse from 4 or 5 EVO bodies and again compacts the material. This **one vehicle** with **one man** is all that is needed to transfer the refuse from several EVO routes and haul to the disposal site.

# The practical transfer method...

The EVO method meets the primary objective of all transfer systems . . . that is to make maximum time available for route collections by separating the function of collection from the time consuming act of hauling to a disposal site. But EVO is the only system that gives additional bonus features: first, it provides a specially designed collection vehicle that in most cases enables two crewmen to service more stops per hour than three men with a conventional compactor truck; second, it requires only the EVO and LAM vehicles. No added costs are involved for transfer station operators, expensive buildings or other specialized transfer station equipment. This unique simplicity, minimum equipment and labor saving productivity of the EVO system make it the most practical method of refuse removal for every community . . . regardless of size.

## The lowest total cost...

There are four elements of cost in all refuse removal operations . . . each of which must be considered as a part of total cost. These are: labor cost (including fringe benefits), equipment operating cost, amortization of equipment purchase cost and administrative costs (including supervision). The first three of these are variable and directly related to equipment performance. The fourth . . . administration and supervision . . . is an indirect cost that is usually fixed. A comparison of the daily direct costs between conventional 20 cubic yard compactor trucks with three man crews and the EVO system with two man crews is presented on the following pages. It will be noted that the annual cash savings earned by the EVO-LAM equipment are dramatic . . . even though the amortization cost of the equipment is higher. It is obvious in this total cost comparison that these annual cash savings have been earned by the use of more productive equipment . . . which cost a little more to buy.

### Comparisons of daily route costs

**NOTICE:** All cost figures given below are for comparative purposes only and are not intended to be used for any specific commercial purpose.

purpose.			
	DIRECT HAUL	EVO TRANSFER	
VEHICLE OPERATING COSTS PER DAY:	Rear Packers 20 Cu. Yds.	EVO w/ 2 Bodies	LAM 32 Cu. Yds.
(a) Vehicle Insurance & Fees (b) Service & Maintenance (c) Tire Repairs & Replacement (d) Gasoline & Oil (e) Miscellaneous Vehicle Expense	2.20 6.40 2.00 4.50 3.00	2.00 4.00 1.00 3.20 2.00	2.50 8.20 5.00 7.00 4.00
Total Vehicle Operating Costs	\$18.10	\$12.20	\$26.70
2 Equipment Amortization (6 Yr. Life) (Purchase Cost w/o Taxes)	\$ 7.90	\$10.80	\$16.30
DAILY LABOR COST w/BENEFITS @ 25%:  (a) Rear Packer Driver @ \$3.10 +25%  (b) Packer Collectors: 2 ea. @ \$3.00 +25%  (c) EVO Operators: 2 ea. @ \$3.25 +25%  (d) LAM Operator: 1 ea. @ \$3.50 +25%	31.00 60.00	65.00	35.00
Total Labor Costs w/Benefits*	\$ 91.00	\$65.00	\$35.00
4 Totals: Items 1+2+3	\$117.00	\$88.00	\$78.00
ROUTE VEHICLES NEEDED (To provide Comparable Service With 60 Min. Roundtrip to Disposal Site)**	7 ea.	6 ea.	1 ea.
6 TOTAL COSTS PER DAY (Item 5 x 4)	\$819.00	\$528.00 \$60	\$ 78.00 06.00
7 ANNUAL TOTAL COST (260 Days x Item 6)	\$212,940	\$157,560	

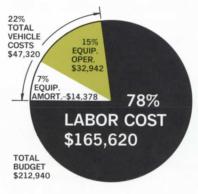
### 8 Annual Savings with EVO System \$55,380=26%

<sup>\*</sup>It is noteworthy that substantial wage increases for EVO and LAM crewmen have been included in their labor cost. If these raises had not been included, the annual savings would be greater than those shown in Item 8.

<sup>\*\*</sup>The six EVO vehicles are able to service the same number of stops per day as 7 conventional packers, because EVO features enable crewmen to service more stops per hour and extended dump haul trips are eliminated.

## EVO cuts costs because EVO saves time!

The graph (below left) represents the total annual direct cost budget required to operate the seven rear packer routes as shown on the previous page. Labor is the major expense, making up more than  $\frac{3}{4}$  of the pie . . . while the combined expenses of vehicle operation and amortization

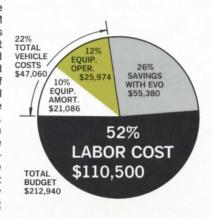


cost make up less than 1/4 of the pie (22%). Of this figure, only 7% (\$14,378) is due to annual amortization of the original purchase cost of the equipment. This is the least expensive direct cost factor of the total annual budget of \$212,940 that has been shown.

conventional compactor trucks

The graph (below right) indicates the distribution of the same \$212,940 direct operating budget when the EVO Transfer System is used to service the same number of stops. The most noticeable feature of this graph is that the cost of labor has been reduced considerably. This is true even though the employees have received a significant increase in wages. More than  $\frac{1}{4}$  of the pie has now become savings (26% . . . or \$55,380). This rate of savings out of current operating expense is sufficient to pay

for the entire purchase cost of the EVO and LAM equipment in less than 21/2 years. It will also be noted that the combined vehicle costs of operation and amortization are the same (22% ... \$47,000) with either system. The increased amortization cost of the EVO equipment has been offset by reduced operating costs.



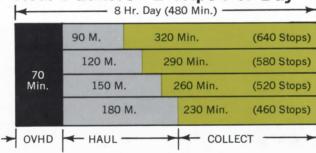
EVO transfer system

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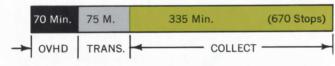
The two graphs below indicate how the EVO Transfer method makes more route collection time available each day. This is one of the reasons that EVO is able to service more stops per day than conventional compactor trucks. There are three elements of time in each day . . . route overhead time, hauling time (or EVO body transfer time) and collection time.

Overhead time consists of crew check in and check out, rest breaks, travel to and from route and the time lost on route due to other interferences. This time is shown to be 70 minutes for either type of equipment.

#### Rear Packers—2 Trips Per Day



### EVO 5 Bodies w/15 Min. Transfer



Collection time with rear packers varies inversely to dump haul time. As dump haul time increases . . . collection time decreases and fewer stops can then be serviced per day. The rear packer graph indicates total hauling times for two trips per day . . . from 45 minutes to 90 minutes per trip. It also indicates the severe drop in the number of stops that can be serviced per vehicle when less collection time is available. On all graphs we have shown the number of stops that can be serviced per day when the rate of collection for both the rear packer and the EVO is two stops per minute.

On the EVO graph, the time shown for body transfers is 75 minutes per day. This is an allowance of 15 minutes each for five full bodies. This time does not vary with the distance to the landfill site. Therefore, one of the most valuable features of the EVO Transfer method is that suitable landfill sites can be located further from the city without causing expensive interference to route collection.

## What's EVO got that makes this performance possible?

- The SEPARATION OF COLLECTION AND HAULING means increased route time for greater production.
- Midship loading means FEWER STEPS for the collectors at each stop. Steps saved are seconds earned. The increased productive time with hundreds of stops per day is substantial.
- Step-in, step-out cab with DUAL DRIVING CON-TROLS and fold-away doors. Either collector can step in and drive on either side. Major time saving features!
- REDUCED CREW FATIGUE with power steering, power brakes, automatic transmission, 360 degree cab visibility and improved maneuverability . . . all save time and increase productivity.
- Broad SIDE RIDING PLATFORMS that run full length of the vehicle amidships and are less than 12 inches from the ground. Crewman rides conveniently and safely within the width of the vehicle.
- EVO's high ENGINE POWER to VEHICLE WEIGHT ratio results in more rapid acceleration between stops than with rear packers. Its lighter weight saves wear and tear on the chassis . . . and cuts costs of tires and fuel.

### **Bonus Production** features for increased profits

- EVO's powerful compaction mechanism packs dense payloads into its detachable body with a SINGLE HYDRAULIC CYLINDER. This simplicity assures minimum maintenance and less vehicle down time.
- "POWER MODULE" engine assembly on its own sub-frame permits easy exchange of the entire power unit. Standby module reduces need for complete standby vehicles. Cuts downtime . . . improves maintenance . . . saves money.

- Huge LAM is the complete TRANSFER UNIT . . . and can also be used as a commercial container service vehicle. Just one man is needed to operate the LAM, which saves manpower and money.
- The LAM's exclusive TRIANGLE COUPLER and powerful front loader provide a fast self-aligning method for coupling and hoisting EVO detachable bodies and commercial containers. Saves route time! Saves manpower! Saves money!

## We'll be glad to personalize the cost facts for you

The cost figures presented in this booklet are approximate, based on experience in a number of cities. They indicate typical savings with EVO in comparison to rear packers. If you would like a more accurate analysis of what EVO can do on your routes, feel free to contact us. We'd like to show what this unique transfer method can do for YOU! There is no cost or obligation for this service!!