

THE ROLL OFF/REMOVABLE THING

There is a growing interest in Roll Off and/or Removable Asphalt Distributors.

The goal is utilization of the truck chassis. It is very understandable and desirable to not tie up a single truck chassis, with a single seasonal body such as a Distributor.

- Three challenges exist in making a Roll Off/Removable Distributor:
 - 1) The truck chassis does more than just simply carry the Distributor from point A to point B. The Distributor is married and dependent on the truck to drive the hydraulics and maintain specific ground speeds.
 - 2) There is a sizable control panel needed in the cab of the truck. Additionally on an Etnyre some of the circulation system is below and in between the chassis frame rails. The location of the circulation system and the spray bar makes the roll off system challenging.
 - 3) The Distributor is an oil truck. Oil trucks are oily; asphalt is sticky and builds up on the mechanisms.
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- **First Question:**

Do you plan to remove and reinstall the unit once a season or are you planning to remove and install numerous times throughout the season?

The term 'easily removable' needs to be defined so expectations are clarified.

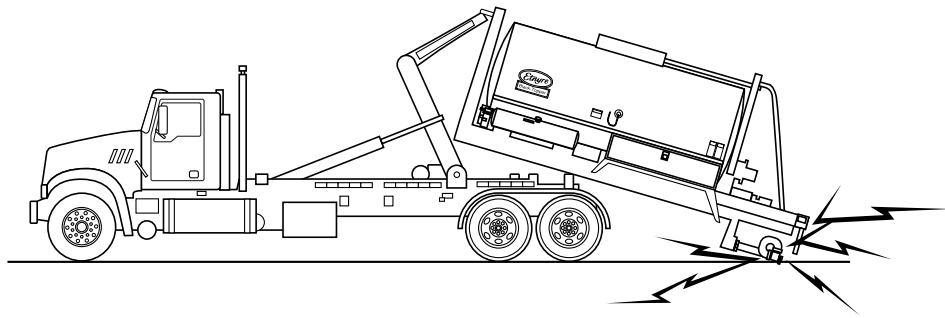
- **Second Question:**

Do you plan to use the same chassis with the Distributor body or do you plan to install this unit to multiple different trucks.

- **Another Question:**

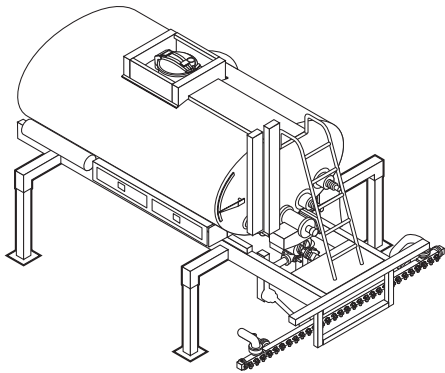
Does the removable unit need to have self lifting and supporting legs for removal and storage or can the unit be lifted off with a crane and stored on saw horses?

The ROLL OFF or REMOVABLE

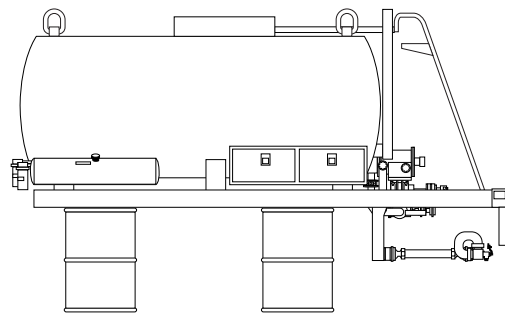


(+) Chassis utilization
(+) Easy on/off

(-) Weight of roll off mechanism
(-) Protection of the spray bar
(-) Hydraulic Interface
(-) Oily!

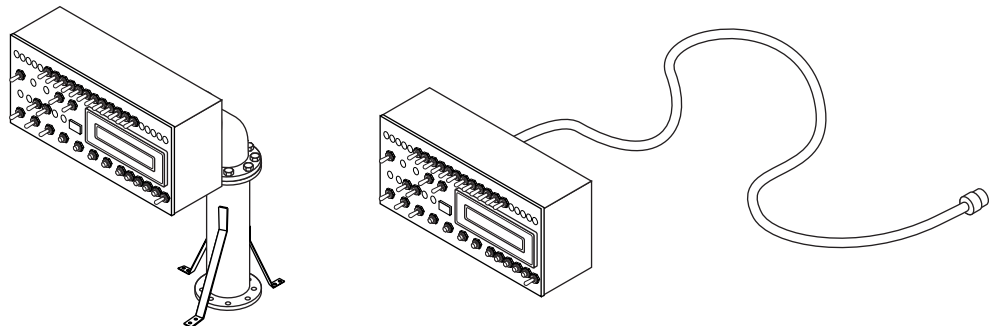


(+) Chassis utilization
(+) Removable



(-) Hydraulic interface
(-) Oily!

CAB CONTROLS

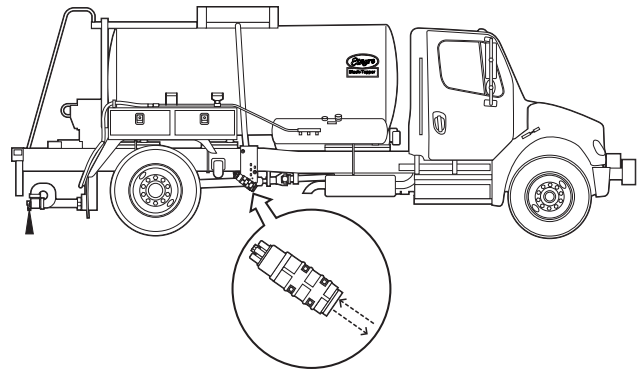


• Another question:

Can the cab controls be permanently mounted into a specific chassis or do they need to have an umbilical cord to be 'easily' removable?

RADAR

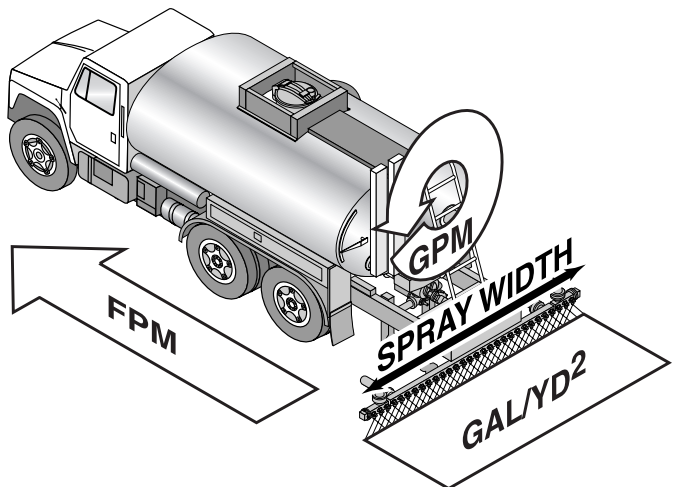
The radar feeds back actual forward ground speed to the computer. This information is critical to achieving accurate liquid application rates (gallon/sq yd). The radar will need to be addressed and calibrated at each installation.



PUMP DRIVE

To achieve and control the target application rate, the asphalt pump output is controlled by a computer. The EDC controlled hydraulic pump and the forward ground speed of the chassis along with bar/spray width inputs work together and control the speed of the asphalt pump to achieve the desired application rate.... gallon/yd sq.

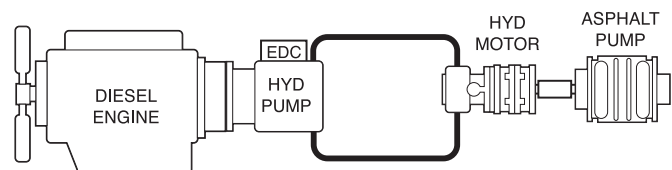
The asphalt Distributor is 'married' to the truck chassis, it is not just hitching a ride. The hydraulic interface is more complex than running a single hydraulic cylinder up and down or in and out function.



- There are four basic ways to drive the asphalt pump and control the application rate:

1) Engine drive:

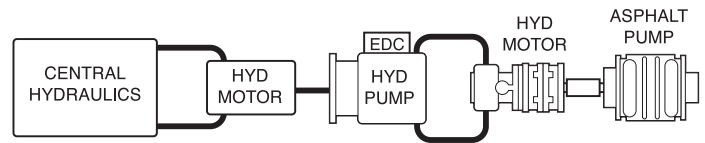
- (+) self contained
- (-) separate engine to maintain



2) Closed loop system w/central hydraulics

(+) Separates Distributor system from central hydraulics

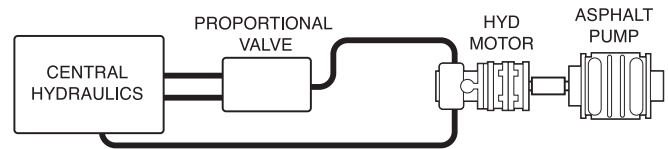
(-) Redundant component



3) Pressure compensating system w/central hydraulics

(+) Fewer components

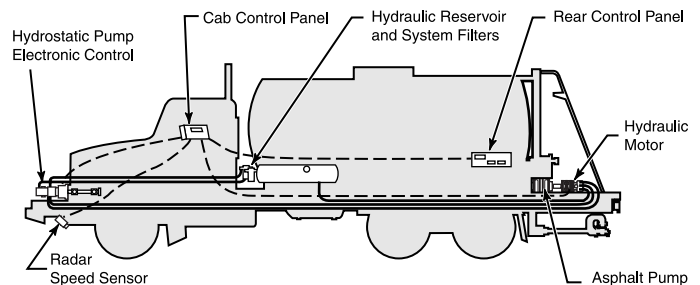
(-) More reliance on central hydraulics



4) Conventional hydraulic system married to truck chassis

(+) Works separately from central hydraulics

(-) More work to remove, must dedicate to one chassis

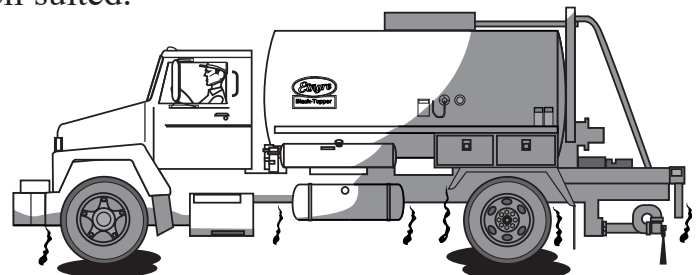


THE ROLL OFF/REMOVABLE QUANDRY

There are many questions and some challenges to overcome to build a removable or roll off Distributor.

The *BIG QUESTION* is the oil truck compatible or well suited to be a Roll Off or Removable Unit? The answer..... Not well suited.

The oil truck is oily; oil overspray builds up on both the Distributor and the truck chassis. Cleaning asphalt off is a chore.



Utilization of the truck chassis is a noble and worthy goal!

Most Distributor units do not build up mileage or travel far or fast. It is very common to mount a new Distributor body onto a used chassis.

Consider using and dedicating an older used chassis to be the oil truck.