

# Pioneer Rack 'n Pinion™



The Pioneer Rack 'n Pinion™ is recognized as the waste industry standard tarping system. The patented rack 'n pinion pivot assembly provides consistently precise tarp movement. This workhorse system is reliable and low maintenance with a proven track record of performance.

Look for the distinctive Rack 'n Pinion tarping system's tombstone design, a symbol of Pioneer's industry-leading quality for over a decade.

## Durability

- ½" thick pivot point in the tombstone side plate to withstand repeated use
- Stronger arms provide longer life: 3/16 A500B steel with ¼" extended, reinforced "C" Channel
- Telescoping arms have 36" stroke and nitrided rod cylinders for minimized corrosion and longer life
- Rack gear eliminates the need for the cylinder hold down strap on the rack hydraulic cylinder
- Self-lubricating polymer bolt-in bearing on rack gear is built to last the life of the arms; bearing can be easily replaced if needed
- Stabilizer bar features torque tube that passes through the end mounting plate for maximize service life
- Riveted-style serial number plate allows for permanent identification of a unit

## Ease of Maintenance

- Quick tarp attachment
- Cylinders mounted externally for maximum accessibility and maintenance
- Spring loaded Everlast roller assembly
- Offset stabilizer bar virtually eliminates roller damage
- Hydraulic gantry comes standard with light mounting brackets for two lights and a wiring protection tube preinstalled
- Swivel hose holder allows for quicker, easier replacement of arm extension cylinder hoses
- Redesigned upper extension arm to make it easier to preload the spring roller and minimize the potential for the tarp roller shaft to seize in the arm bushing
- Heavy duty mesh tarp is standard

## Options

- LED light kit for the gantry
- Tarp roll Trash Brush to close the gap between the tarp roller and stabilizer bar when arms are in the cover position
- Rear window screen that mounts to the gantry to protect the truck cab and operator

## Models

- RP4500SAR has a fixed gantry and covers containers up to 24' in length
- RP4500SARG has a telescopic gantry and covers containers up to 24' in length
- RP4500SATR is designed for trailers. It has fixed arms and a telescopic gantry that cover containers up to 32' in length



## Rugged side assembly



More durable, no cylinder strap required.

## Mounting arm channel



New mounting arm channels reinforce the flex area, preventing cracking.

## Swivel hose clamp



Hydraulic hoses easily snap into the slotted, pivoting hose holder for easy replacement. Nylon zip ties provide added security.

## Rack gear weldment



Rack gear weldment features a re-engineered cylinder mount, eliminating the need for a rack gear cylinder strap and reducing maintenance. A 3/8", self-lubricating polymer bearing is designed to last the life of the arm, but can be easily replaced if needed.

## Pivot point



Redesigned, double-wall tombstone pivot point mounting hole is twice as thick as the previous design to ensure tarp arms remain securely on the rear of the container without bouncing, reducing the potential for costly damage.



# Durable tarper and gantry

## Stabilizer bar

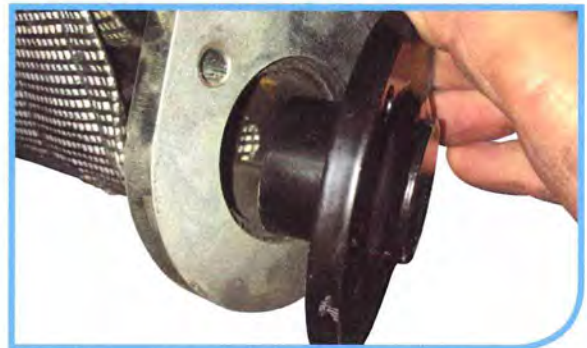
Redesigned stabilizer bar with reinforced mounting bracket and enhanced tarp anchor tube retention system are designed to withstand constant abuse while eliminating premature failures or breakage.



## Tarp roller shaft bushing

Increased the inside diameter of the roller shaft bushing to allow for easier preloading and to prevent the tarp from seizing. Reduces maintenance and downtime due to repair or replacement.

## Tarp anchor tube



Redesigned tarp anchor tube cap with inner shaft extension provides added safety by preventing the tarp anchor tube from pulling out of the roll rest.

## Gantry



Gantry comes standard with light mounting brackets and a tube to run electrical wiring through for the lights.

## Additional features



### Hydraulic flow divider valve

New hydraulic flow divider valve features a standard aluminum body and is rated at 3,800 psi and provides flows up to 50 gpm with full relief valve protection. The valve works on all hoist systems.



### Trash brush (optional)

Trash brush covers the full width between the stabilizer bar and the tarp roller.