

Safe-Stop® 180 Improvements

Model 9182 vs Model 9181



Hydraulic Pump



9182 Hydraulic Pump



9181 Hydraulic Pump

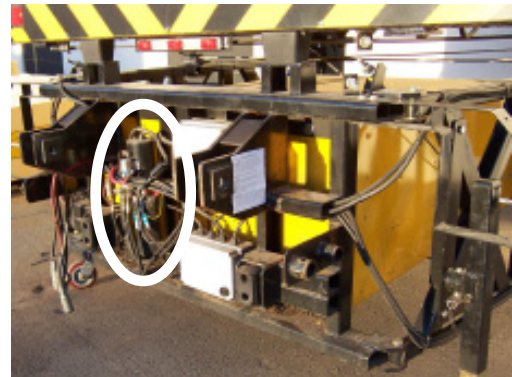
New Features

- Simplified design
 - *Reduced troubleshooting and maintenance
- Added thermal protection
 - *Improved pump life and protects electrical system
- Marine grade pump
 - *Protection against grime, salt and high pressure washing

Pump Location



9182 Pump Location

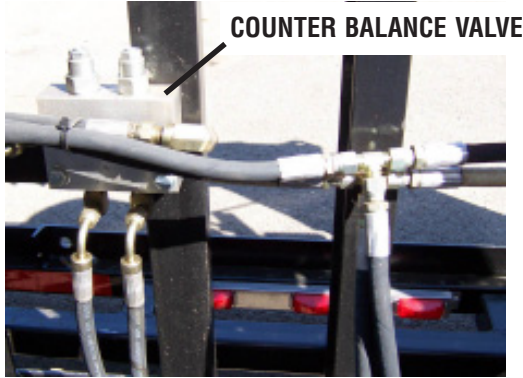


9181 Pump Location

New Features

- Improved maintenance access
 - *Outboard location is immediately accessible
 - *Improved shielding from road grime (truck mud flaps)

Control Complete Cycle Motion



9182 Counter Balance Valve



9181 Back Pressure in Pump and Solenoids

New Features

- Added counter balance valve
 - *Allows smooth motion through complete cycle
 - *Locks cylinder during pressure loss
 - *Simplified hydraulic system for reduced maintenance

Cylinder



9182 Cylinder



9181 Cylinder

New Features

- Metal Scraper
 - *Protects seal/reduces risk of possible leaks
- 1" Dia. Solid Stainless Steel Rod
 - *Increased corrosion resistance
 - *Increased strength
- 3000 psi rated
 - *Increased life/durability
- Polypack seal
 - *Reduces risk of internal contamination such as water from high pressure washing
- Pipe threads replaced with o-ring sealed connections
 - *Reduces possible leaks

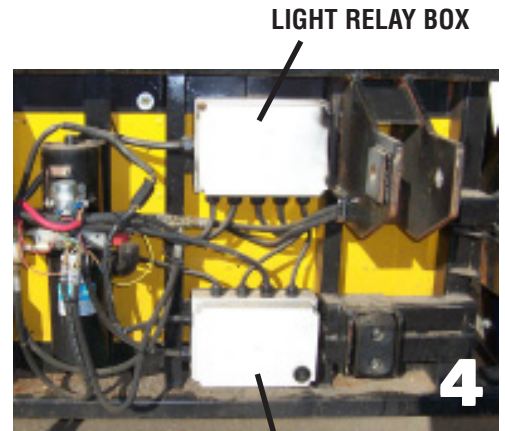
Light - Electrical



9182 Switch



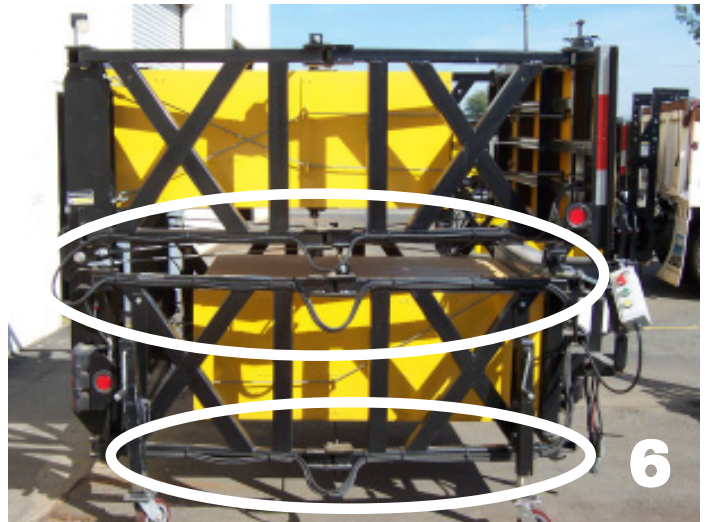
9181 Switch



9181 Electrical Boxes



9182 Wire Routing

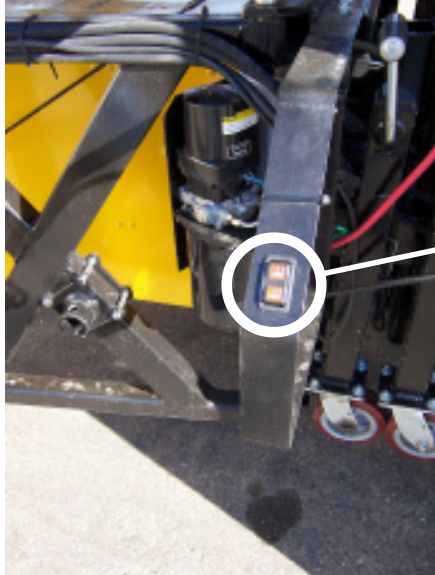


9181 Wire Routing

New Features

- Simplified design
 - * Replaced relays boxes (photo 4) and proximity switch (photos 2 and 3) with limit switch (photo 1)
 - * 50% reduction in wiring. Wiring rerouted to reduce potential for damage (photos 5 and 6)
- Lighting and hydraulics are on separate circuits
 - * Improved troubleshooting

Pump - Electrical



ROCKER SWITCH

9182 Pump Control



OPERATOR CONTROL BOX

9181 Pump Control

New Features

- Meets CE requirements
- Improved operator control
- Rocker switch light blinks to indicate the system is not in the complete folded or unfolded position
- Simplified design
 - *Improved troubleshooting
- Rocker switch
 - *Eliminated operator control box
 - *Proven history - Tractor manufacturers such as CAT and DEER
 - *Improved water resistance (IP68)

Note: New method of operation. When the button is released, the system instantly stops at that point.

Arms



9182 Arms



9181 Arms

New Features

- Simplified design
- Reduce replacement cost by improving arm interchangeability

*Individual arms can be easily replaced instead of field fitting or replacing the set (two arms).

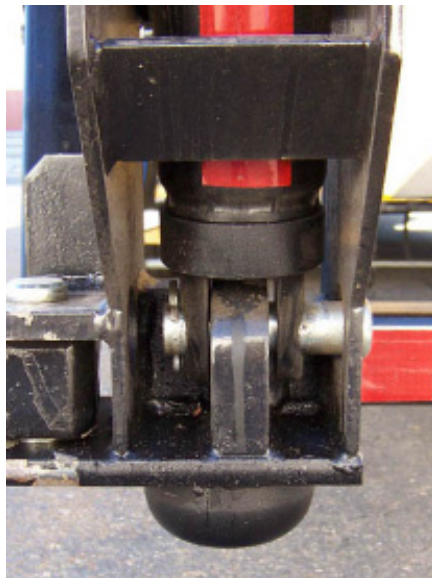
Hydraulic Linkage



9182 Upper Support



9181 Upper Support



9182 Lower Support



9181 Lower Support

New Features

- Utilizes block rod-eye-end on cylinder
 - *Higher strength
- Improved load distribution
 - *Smoother action