Serving the World Fire Industry for more than 95 years

Assembly #1
HM500
Pump Only

Assembly #2 - HM500
with suction extension & discharge heads.

Assembly #3
Complete assembly with full manifolding, discharge valves, suction adapters and caps.
(Optional spacers and relief valve shown.)
Pump Theory Darley & Co.

Introduction to Pumps
Types of Pumps

- Piston Pumps
- Positive Displacement Pumps
- Rotary Vane Pumps
- Centrifugal Pumps
- 2 Stage Pumps
- High Pressure Booster Pumps
Piston Pumps

- High pressure low volume
- Require pressure relief valve
Uses for Piston Pumps

- Foam injection
- Pressure washer
- Air compressor
Positive Displacement Pump

- Rotary screw air compressor
- Hydraulic
- Requires Pressure Relief Valve
Positive Displacement Pump
Uses For Positive Displacement Pumps

- Air Compressor for CAFS
- Hydraulic Fluid Pumping
- High Pressure
Rotary Vane Pump

• Vacuum Pump
• Negative Pressure Pump
• No Pressure Relief Required
Rotary Vane Pump
Uses For Rotary Vane Pump

- Priming Main Pump
- Vacuum Pump
- Negative Pressure pump
Centrifugal Pump

- Fire Fighting Pump
- High volumes pressures up to 250 PSI
- Dirty Water Not A Big Challenge
Uses for Centrifugal Pumps

- High Volumes for Fire Fighting
- Tanker filling
- Water relay
- Pump and roll with PTO application
2 Stage pumps

- High pressure medium volume
- Pressures above 250 PSI
- Pressure/Volume Transfer Valve
JMP500 Pump
FLOW DIAGRAM OF DARLEY CHAMPION FIRE PUMPS
Uses for 2 Stage Pumps

- Relay pumping with long hose lays
- Reduced fuel usage
- Pump and roll with PTO application
High Pressure Pump

- High pressure low volume
High Pressure Pump
Uses for High Pressure Pump

- High pressure low volume
- Extended reach for tall buildings
High Pressure Booster Pump

- Use with Main Pump For High Pressure
- Independent High Pressure Line
High Pressure Booster Pump
FLOW DIAGRAM OF DARLEY CHAMPION FIRE PUMPS
TYPE S-SH-SE-SEH
Uses for High Pressure Booster Pump

- Simultaneous High and Low Pressures on Independent Hose Lines
- Hose Reel Booster Line
Types of Pump Packing

- Rope or Ring style packing
- Mechanical seal packing
- Injection style packing
Ring or Rope style Packing

RING PACKING
Uses for Rope or Ring Packing

- Portable Pump Shaft Seal
- Valve Stem Seal
Mechanical Seal Packing

MECHANICAL SEAL
Uses for Mechanical Seal Packing

• Centrifugal Pump Shaft Seal
• Non Adjustable for less maintenance
Uses for Injection Packing

- Centrifugal Pump Shaft Seal
- Adjustable for Less Maintenance Time
- Replenishable W/O disassembling the Pump
Summary

- 95 years of Service after the Sale
- Lowest parts maintenance cost
- Best parts delivery in the industry
- Injection packing
- No special tools required
- Free training classes twice a year
- Prices meet or beat competition
Serving the World Fire industry for more than 95 years

- Thank You for taking time from your busy schedule to learn more about Darley Pumps
- Are you ready to learn more about Darley Pumps?
- We’ll take a short break and return for more on Darley Pumps