



**TOOLS &  
EQUIPMENT**



**SAMSON**



*A TRAINING PAMPHLET ON GROWING YOUR SALES*

**World Class Manufacturing  Professional Grade Products**

# LUBRICATION EQUIPMENT BASICS

*The purpose of lubrication equipment is to efficiently move the product from the container to the application. The payback for the shop is by operating efficiently and more quickly, the shop is more profitable. Another advantage of investing in a system is being able to purchase lubricants and other fluids in larger quantities enabling a better acquisition price for those products.*

*There are several major categories of components in a fluid handling system. In our continuing effort to educate, let's review each of those categories.*

## HOSE REELS:

- Used throughout the shop to keep hoses out of the way when not in use
- Oil bars are also sometimes used instead of hose reels; this allows several products to be installed on a wall with a tap valve for each product.



## CONTROL HANDLES:

- Control the flow of fluid
- Can be metered or non-metered
- Wide variety of meters
  - Digital, less prone to leaks than old style mechanical, require batteries to operate
  - Mechanical (old style) uses pointer on meter face to display amount dispensed, many moving parts are prone to leaks and wear which causes in-accuracy
  - Mechanical (odometer style) use same type oval gear as digital meters, display is an odometer, less prone to leaks, more rugged than digital and stand up well



## PUMPS

- The heart of the system

## PORTABLE EQUIPMENT

- Popular for gear oils, ATF, grease, and other products that are not used in large quantities
- Always moving the container close to the application rather than installing piping and hose reels
- Can be air operated or hand operated



## USED OIL

- Pressurized Evac
- Gravity/Pump evac
- Various sizes



## **WHERE TO FIND LUBRICATION EQUIPMENT SALES OPPORTUNITIES**

*As an auto parts salesperson with a strong Tool & Equipment program, there are several opportunities to sell lubrication handling equipment and parts.*

*The biggest opportunity for immediate sales is to sell your existing customers parts and pieces for their existing system. Most of your customers have at least one malfunctioning component in their current system. The goal of the rest of this training pamphlet is to educate you how to find these opportunities!*

*The concept is simple; follow the fluid. Walk in the bay door of your customer and find each piece of equipment that touches fluid. Follow how the fluid is handled from the shop back to the storage area. Use the pictures in this pamphlet to help remember what to look for; there is a handy check list to assist you. Then, ask your customer several key questions at the end of the check list. When completed, this checklist is your template for upgrading your customers system. Remember, your customer purchased equipment so they could be more productive. Using broken or worn out equipment does not increase productivity!*

*Due to consolidation of major motor oil companies over the last ten years, the lubricant supplier is not as active as in prior years with loaned equipment programs. In addition, many shops have discovered they can negotiate better purchasing prices for lubricants if they own their own equipment. Be aggressive in competing against the lubricant companies. With the growing popularity of a wider range of oil viscosities and the growing popularity of synthetics, today's shop needs to add more products to their existing system. Ask your customer what their plans are for adding more products to their system. Let us help you meet the opportunity to provide the solution to expanding the shop's efficiency.*

*Currently, opportunities to supply complete new systems are particularly available at your government customers. The stimulus money is trickling down to the local municipal and county level and it is an excellent time to be certain that you ask these customers if they have plans for their maintenance shop; not just for fluid handling equipment but for all the Tool & Equipment products in your program.*

***Prepare yourself for an extra ten minutes as you enter one of your regular customers.***

***Your goal is to look at how this customer handles all their various shop fluids and how you can improve that fluid handling—and sell some equipment!***

***Our goal with this pamphlet is help you understand where the opportunities are to upgrade your customers existing lubrication systems. There are hundreds of dollars in replacement parts and upgrades needed throughout your customer base.***

***Let's look at how you can tap into that business!***



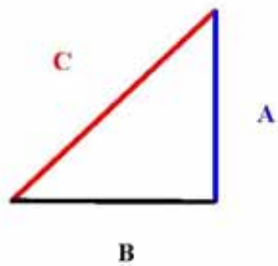


**A properly installed hose reel looks like this:**

- Ball valve
- Flex inlet hose
- Ball stop

**WHAT YOU NEED TO KNOW TO ORDER A NEW REEL**

- Low pressure (air & water)
- Medium pressure (oil)
- High pressure (grease)
- Hose diameter
- Hose length



**TO SOLVE FOR HOW MUCH FLOOR WILL A HOSE LENGTH REACH**

1.  $A^2$ : Square the mounting height
2.  $C^2$ : Square the hose length
3. Divide answer to 1 by the answer to 2
4. Take the square root of that number; this tells what the floor radius coverage will be

**A = Mounting (ceiling) Height**  
**B = Floor radius**  
**C = Hose Length**

$$A^2 + B^2 = C^2$$

**TO SOLVE FOR HOW LONG OF A HOSE IS NEEDED**

5.  $A^2$ : Square the mounting height
6.  $B^2$ : Square the hose length
7. Add the answers to 1 and 2
8. Take the square root of that number; this tells how long the hose needs to be

# HOSE REELS

## TYPICAL PROBLEMS

- Are they working—can each hose be pulled out, locked, and then retracted properly?
- Are they leaking along the hose or at the swivel inlet to the reel?
- Is the hose worn
- Do they need another reel—or longer reels?



Roller guides worn out

Hose worn, will burst soon



Leaking swivel



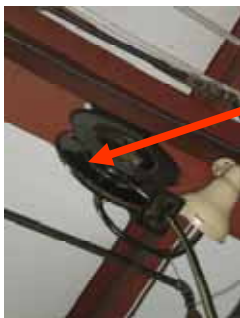
No ball stop

Weak spring; reel won't retract, meter laying on floor



No inlet hose

This causes vibration from piping to transfer to inlet swivel and cause leaks



Broken spring, hose completely unwound



Just plain broken!

## SOLUTIONS IN YOUR TOOL BOX



New Reel



Ball stop

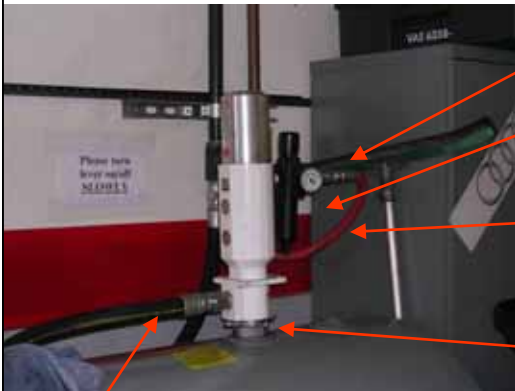


New Hose

*Find the fluid container for each product in the shop and check out how each fluid is handled*

- Is there a pump for that fluid?
- Does it work?
- Does it have an air regulator
- Does the airline have a filter
- Are there any leaks—air or fluid
- Is the shop satisfied with the flow and pressure coming from that pump
- Does the shop need any new pumps
- Don't forget to check the hand pumps; each drum or keg probably has a hand pump

A properly installed pump has:



- An air regulator for each pump
  - An airline filter either for the main air line feeding the pumps or for each pump
  - An air connecting hose with a method to shut off the air to the pump; either a quick connector or a ball valve
  - A tight connection between the pump and the container
- A fluid connecting hose with a ball valve to shut off the fluid to the pump



### WHAT YOU NEED TO KNOW TO ORDER A NEW PUMP

- What product do they want to pump?
- What type container will the product be in?
- How far do they want to pump it?
- What type flow rate do they want, what are they filling?
- What is the temperature of the area where the storage container and pump will be?



**Worn Hose**  
**Leaking product**  
**No air filter**



**Ni air regulator**



**No bung adaptor**  
**Open exposure to the elements**



**Broken components**

*Now let's look at oil control handles—but first let's define what they are.*

In an air operated oil pump system, when the oil line is opened, the pump operates because the pressure in the line has dropped. When the line is closed, the pressure in the line builds up until it equals the amount of air pressure pushing on the pump and the pump stops. The control valve is used to open and close the line.

Control valves can be metered or non-metered, the meters can be mechanical or digital. Remember, the meter must be accurate to do its job and a worn out broken meter is not very accurate.

*This is the most commonly replaced item in a shop!*

One more information piece; drip tips. This is the device on the end of the hose or spout of a control handle. It is designed to prevent drips—which is a very challenging mission! There are three basic kinds;

- Manual; this screws open and screws closed, it take approximately 3-4 revolutions to open or close - most techs do not bother to ever close it so it always drips
- Semi-automatic; this opens under the system pressure and must be closed manually most techs do not bother to ever close it so it always drips
- Automatic; this uses a machined seat with a spring and a ball check. It automatically opens and closes; until the spring losses strength and it does not seat any longer.

We recommend the semi-automatic tip; if closed after use (it snaps shut with a simple push), it is very dependable.

- Look at the control handles on the end of the hose;
  - Are they leaking?
  - Any broken pieces?



Broken pieces

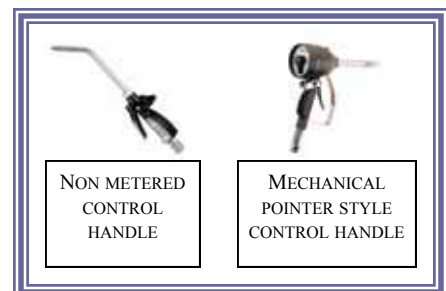


Dial face worn off



Leaking

**SOLUTIONS IN YOUR TOOL BOX**





Look for the portable equipment - oil and grease - hand operated and air operated

- Are the systems complete; dolly, cover, pump, hose, and handle?
- If it is a grease system, is there a follower plate?
- Are there any leaks?
- Check for broken pieces, especially the meters
- If it is an air-operated pump, it must have an air regulator
- If it is a hand pump, is it working
- Is the shop satisfied with their current portable equipment
- Do they need any new portable systems



Broken dolly wheel

Leaking  
Handle and  
swivel



No follower plate



Missing dolly

## USED FLUID HANDLING

Used Fluid Drains; normally oil and anti-freeze

- Do they have enough
- Do they have an efficient and safe method to empty the drain
- Does the storage tank have some type of high level overfill protection and does it work

### Gravity Discharge

*Units can be drained by either a valve on the bottom of the unit or by an external suction pump connection on the top of the tank.*

### Pressure Discharge

*Units are discharged through a 6.5 foot hose while pressurizing the tank at 0.5 bar with a tire inflator. The unit includes a safety valve for avoiding over-pressurization of the tank.*

Clean it up—more efficient—better working conditions

Environmentally Safer



Cars - Trucks - Buses - Planes - Rails - Industry - Mining - Agriculture



## SELL ALL YOUR CUSTOMERS

**CARS**

**BUSES**

**PLANES**

**TRAINS**

**INDUSTRY AND MANUFACTURING**

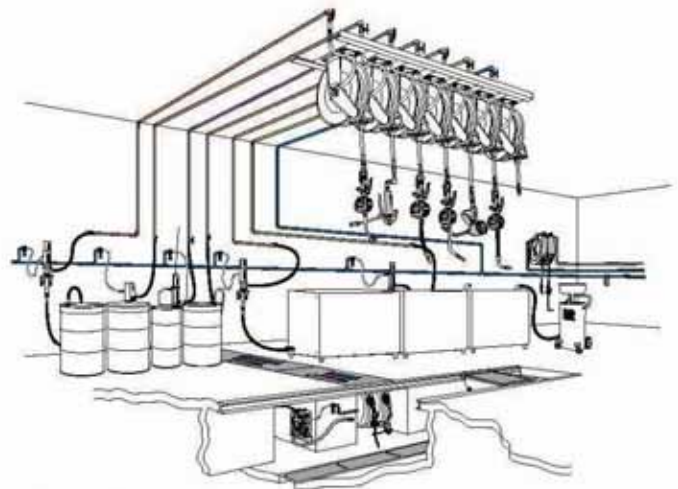
**FARM AND AGRICULTURAL EQUIPMENT**

**CONSTRUCTION EQUIPMENT**

**TRUCKS**

**World Class Manufacturing  Professional Grade Products**

**Bulk Systems  
of any Size**



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