

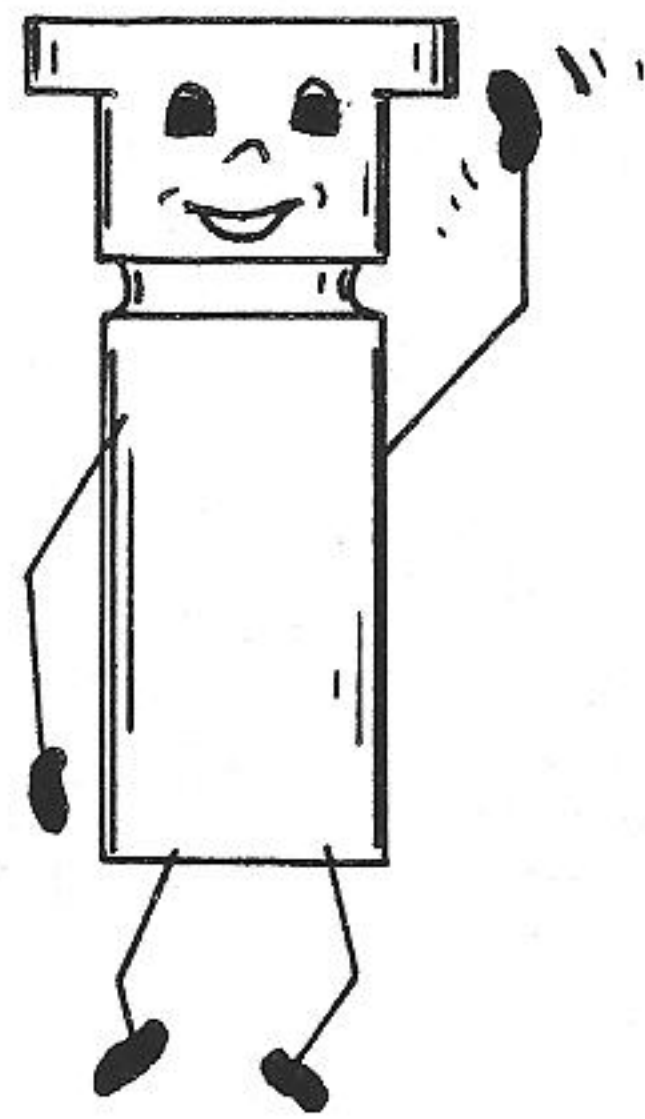
HYDROSTATIC TRANSMISSION  
OPERATON

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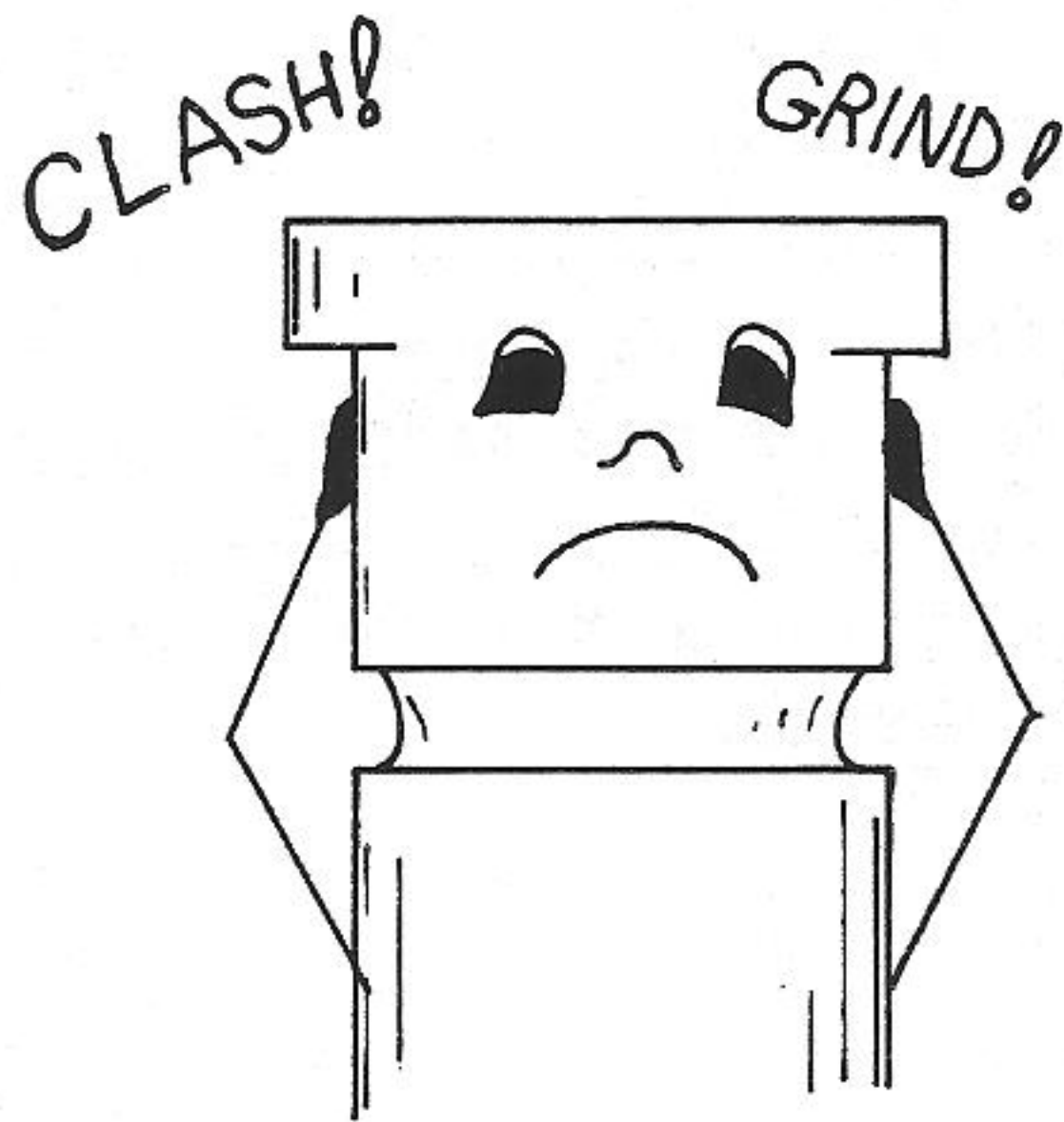


# HYDROSTATIC TRANSMISSION

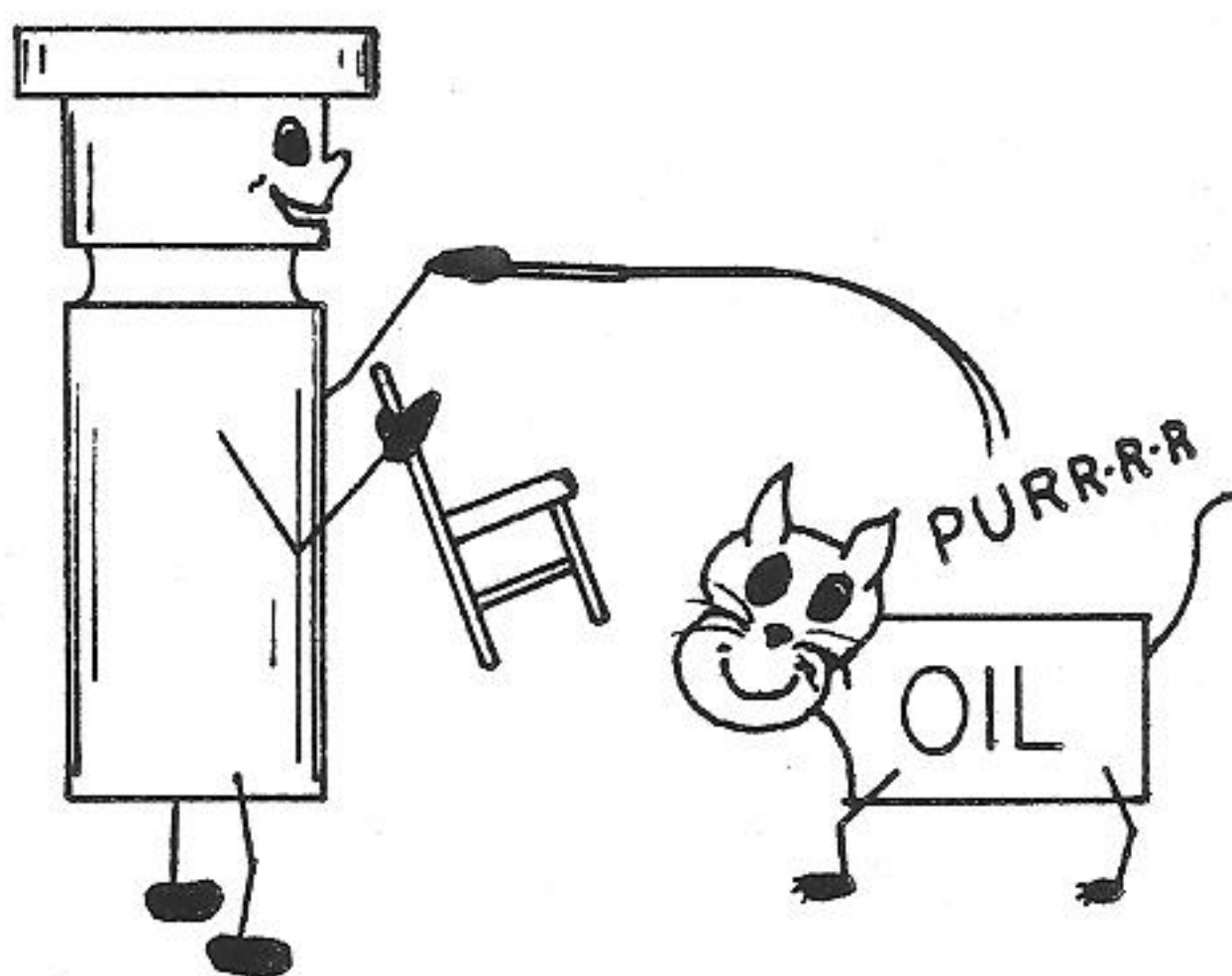
## OPERATION



"Let me tell you how piston type hydraulic units work for you."



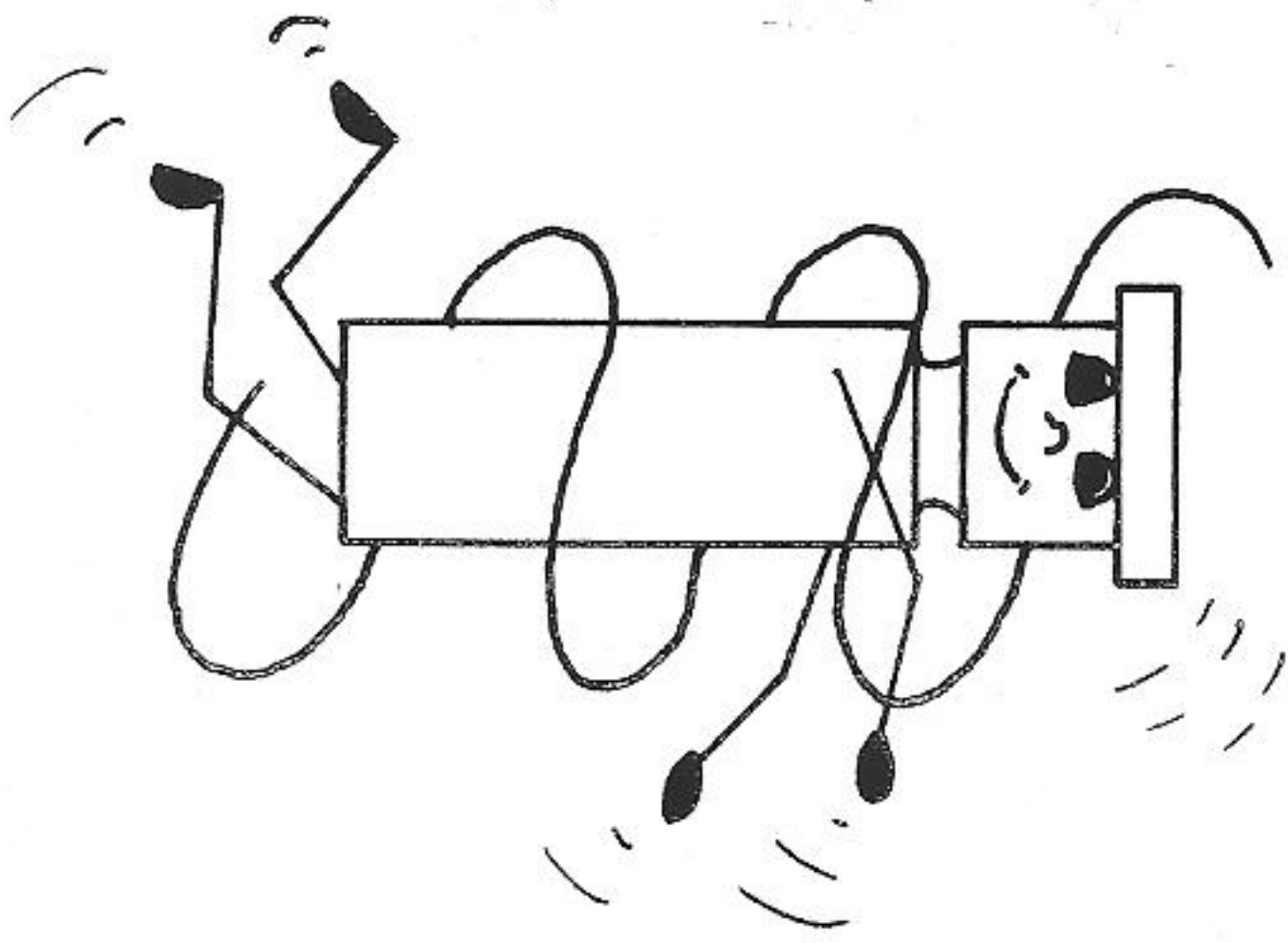
"You can apply power without the inherent disadvantages of mechanical drives."



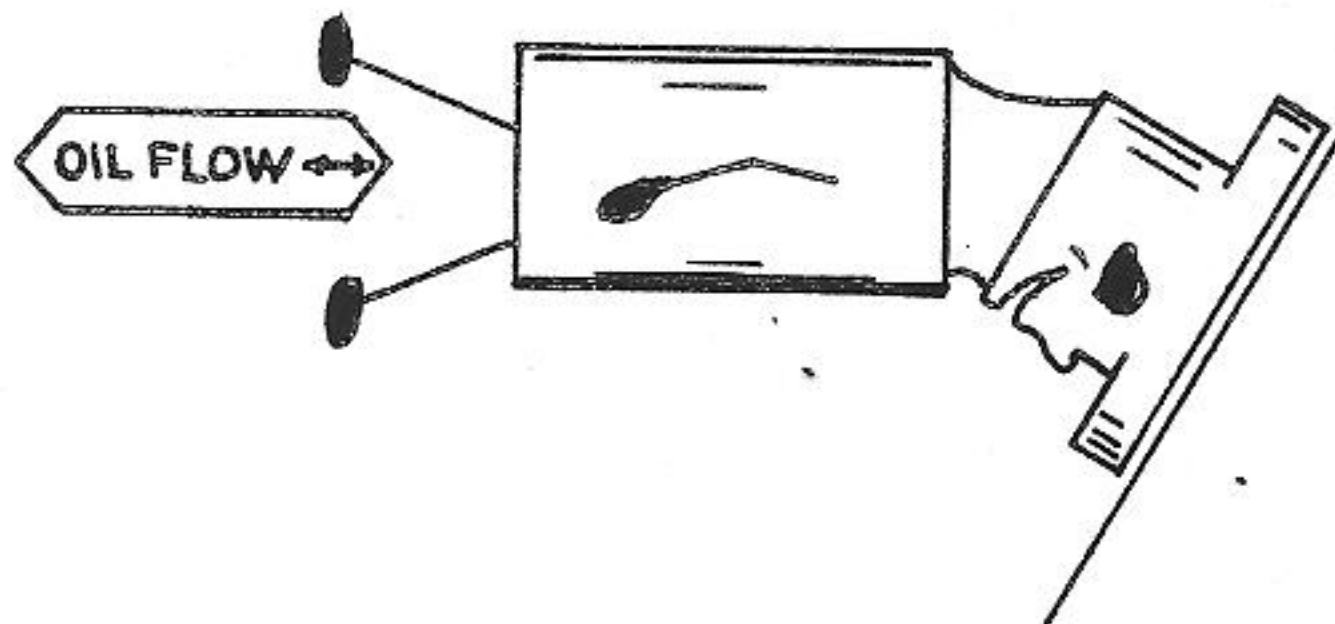
"The entire hydraulic transmission operates by controlling the oil."

"Only three factors have to be considered when the transmission is used. These are: (1) Controlling the flow of oil in the units, (2) Controlling the direction the oil flows, and (3) Controlling the pressure of the oil. These are generally identified as:

1. G.P.M. (Gallons Per Minute)
2. Rotation (  $\longleftrightarrow$  )
3. P.S.I. (Pounds Per Square Inch)."

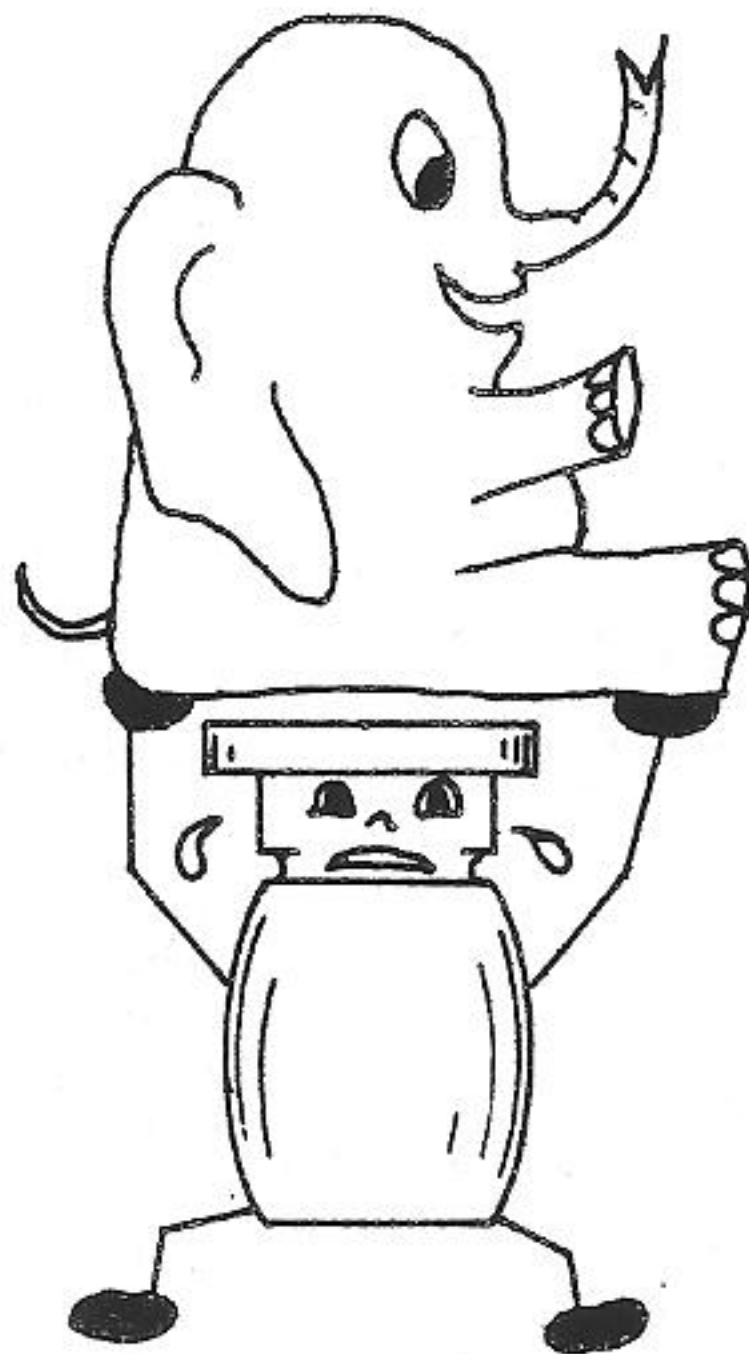


"You are putting me to work merely by rotating me across an incline and applying a load to my output shaft."



"The faster you want my output shaft to turn, the more oil (flow or GPM) I have to pump; therefore, the more of an incline I must have to work against."

"The direction you want my output shaft to rotate depends on the position of the incline to either side of zero degrees. One side of neutral (zero degrees) is forward and by moving the incline through neutral to the opposite position, I pump oil in the opposite direction. Now the machine is in reverse."

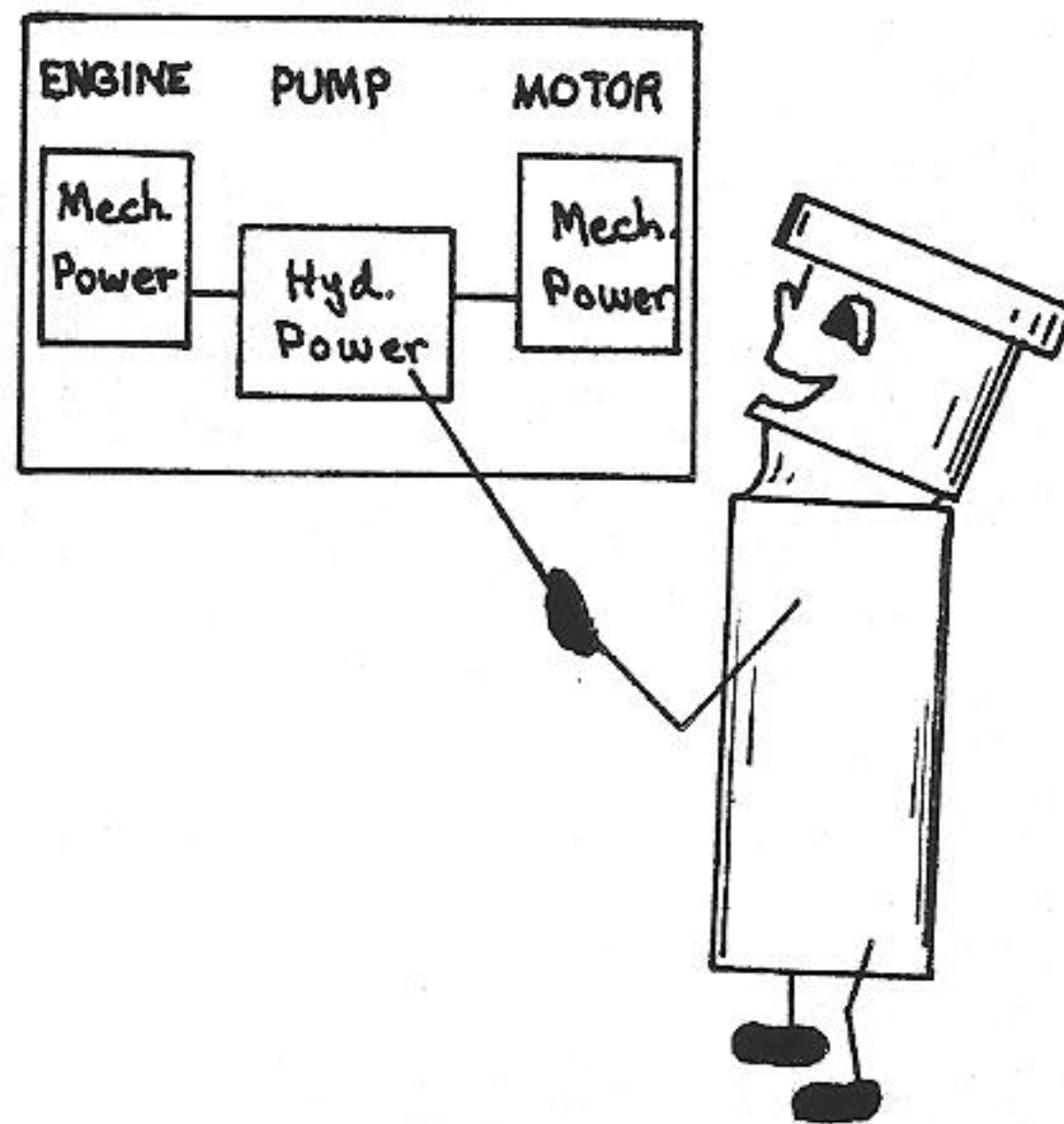


"The more resistance there is on my output shaft, the harder (PSI) I have to work."

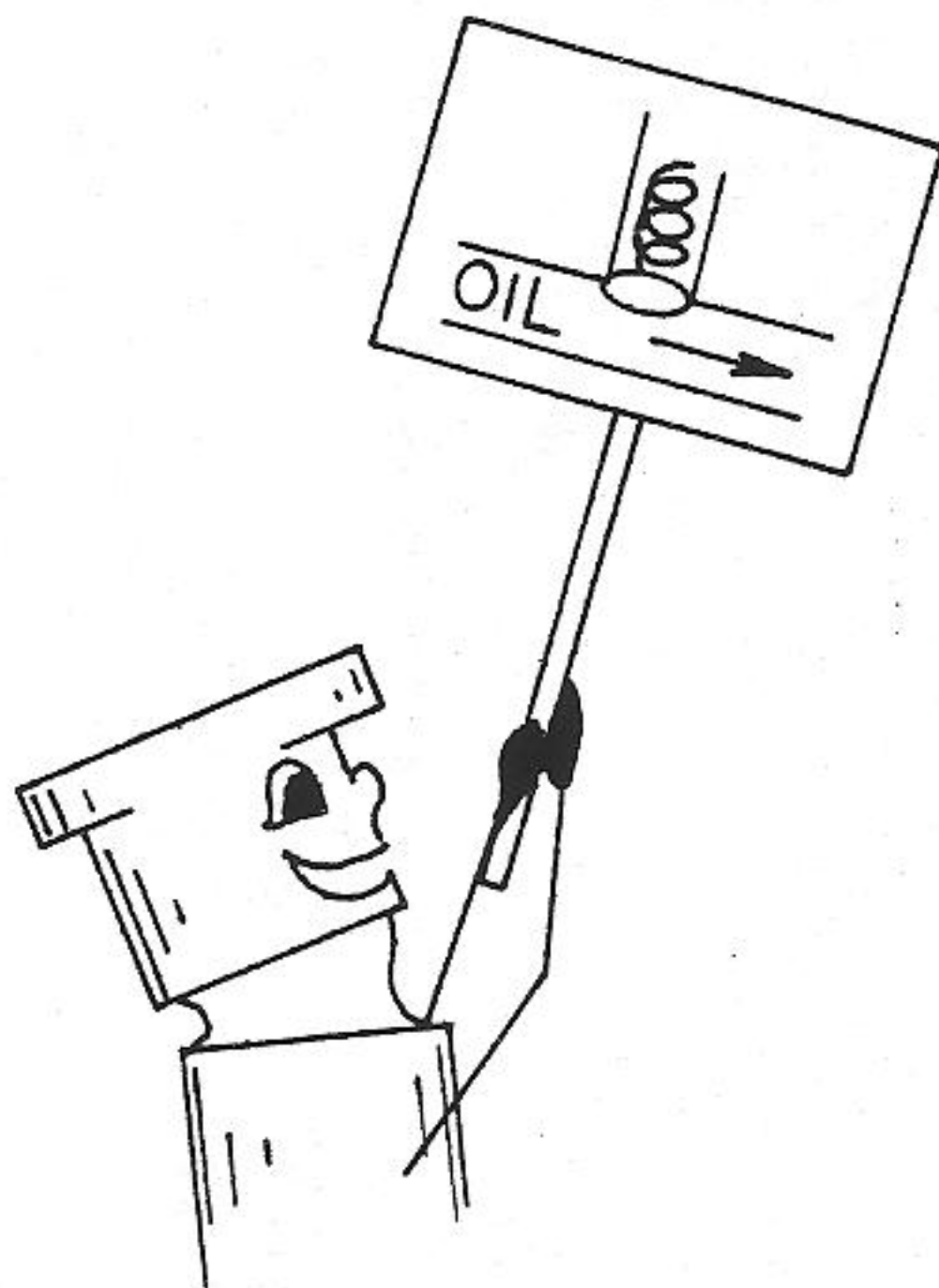
"That's all there is to operating me."



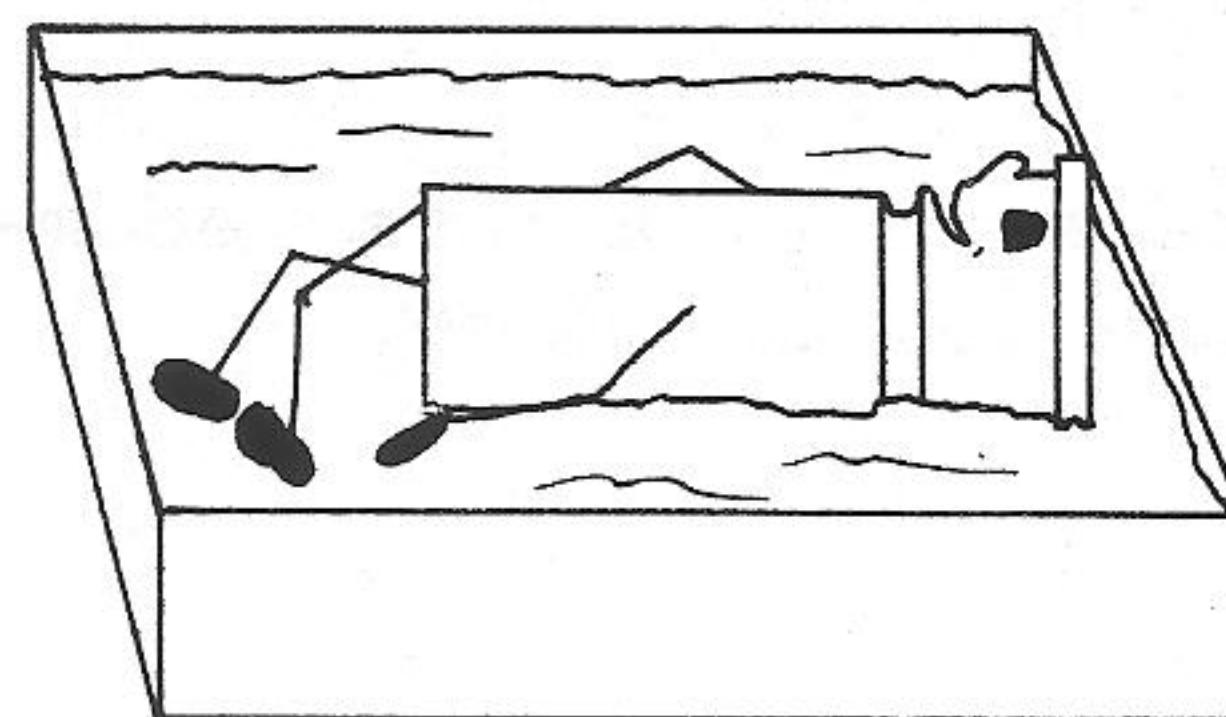
"Now let's see what my transmission consists of and what each part does."



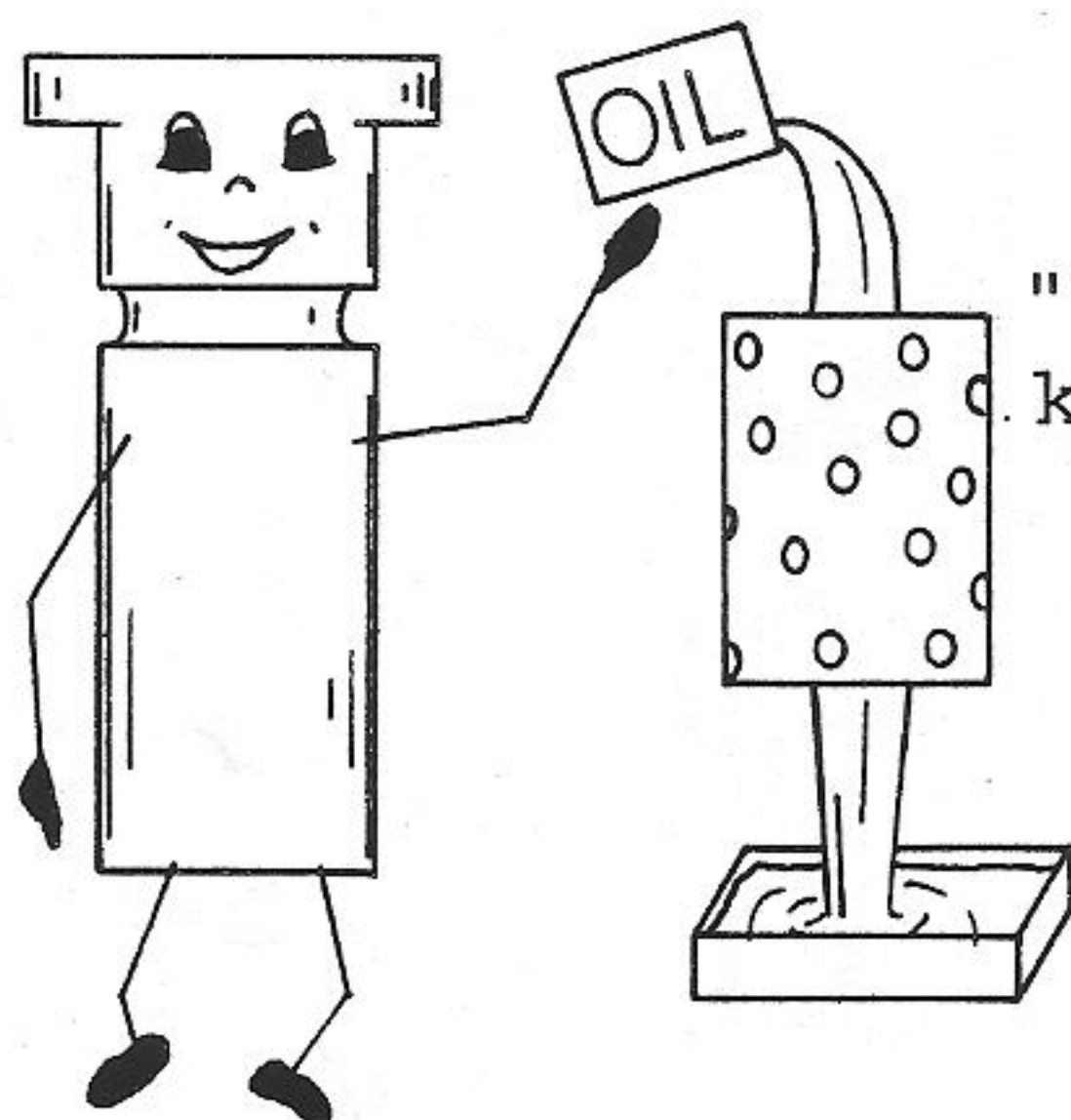
"To begin the transfer of power from an engine to the load, my pump takes the mechanical power of the engine and converts it to hydraulic power. Oil conveys the hydraulic power to my motor, and it converts the hydraulic power back to mechanical power for the output shaft."



"Also in my transmission, I need a system of valves to protect my transmission, the machine, and the operator;"

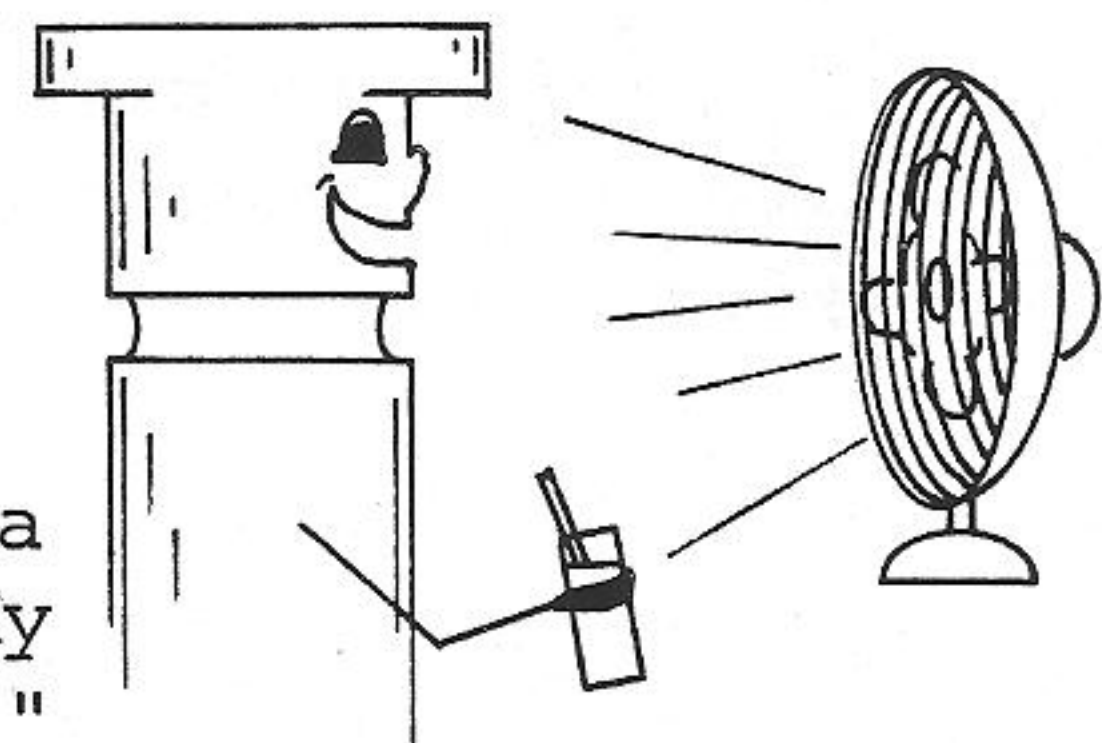


"I need a reservoir of oil;"



"I need a filter to keep the oil clean;"

"And I need a cooler to keep my system cool."

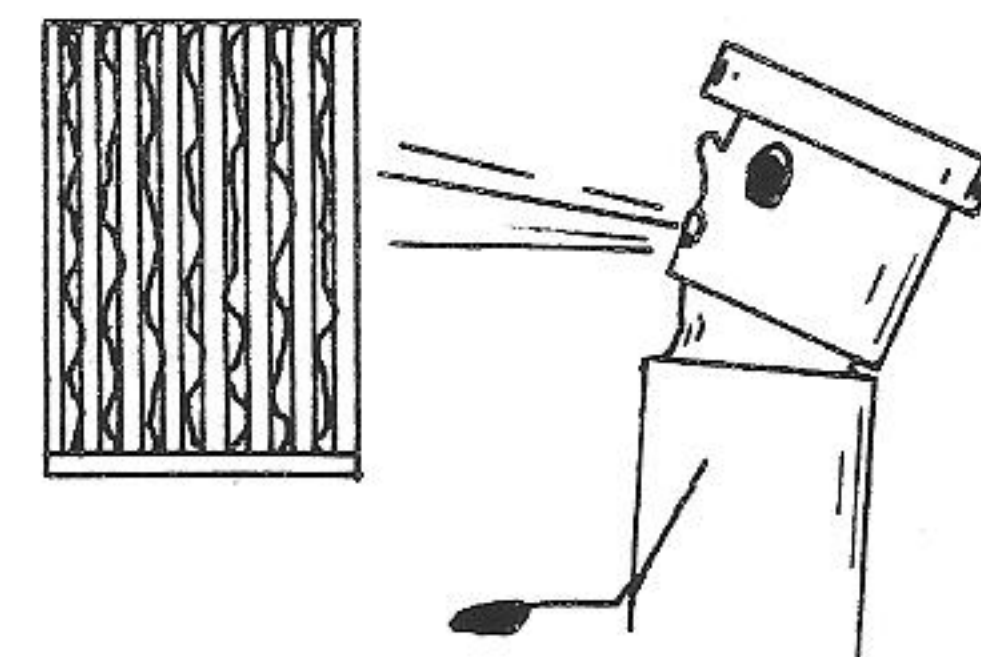
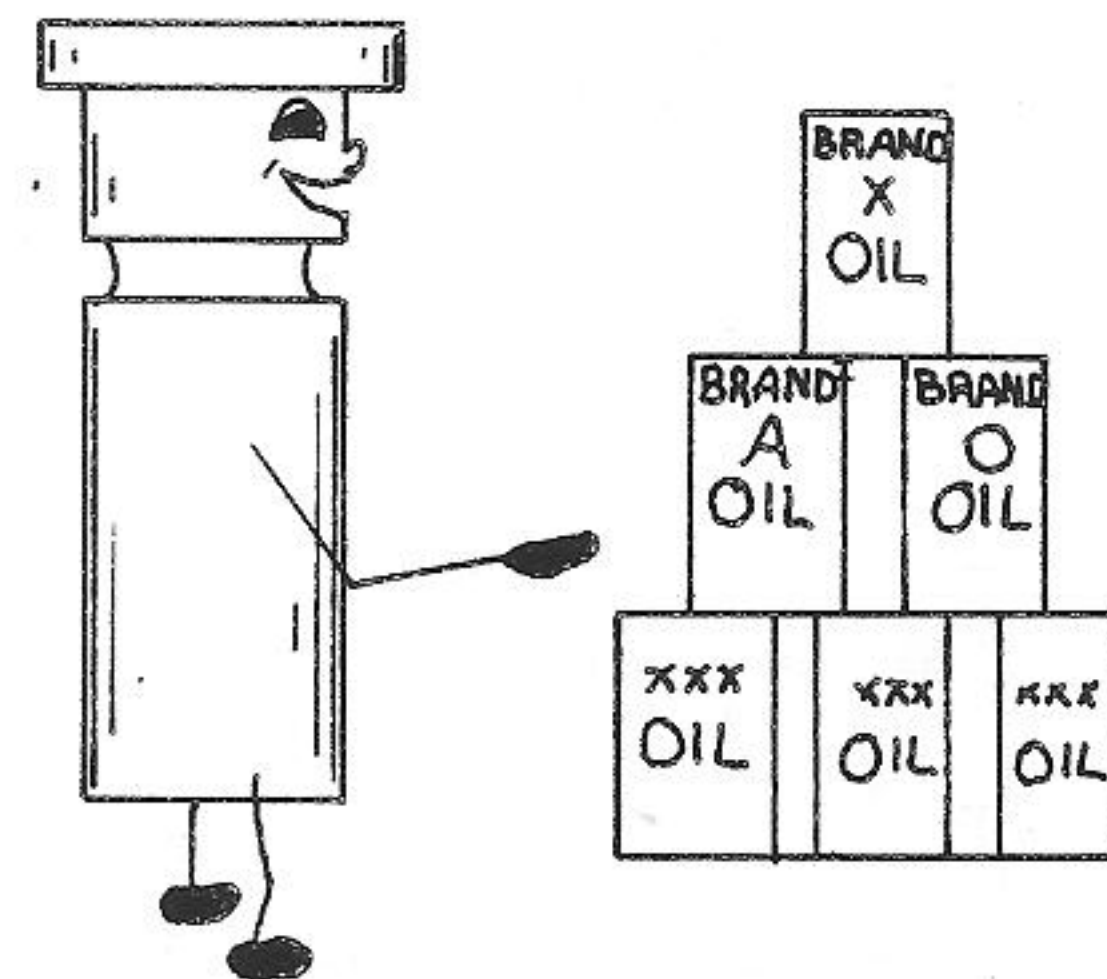
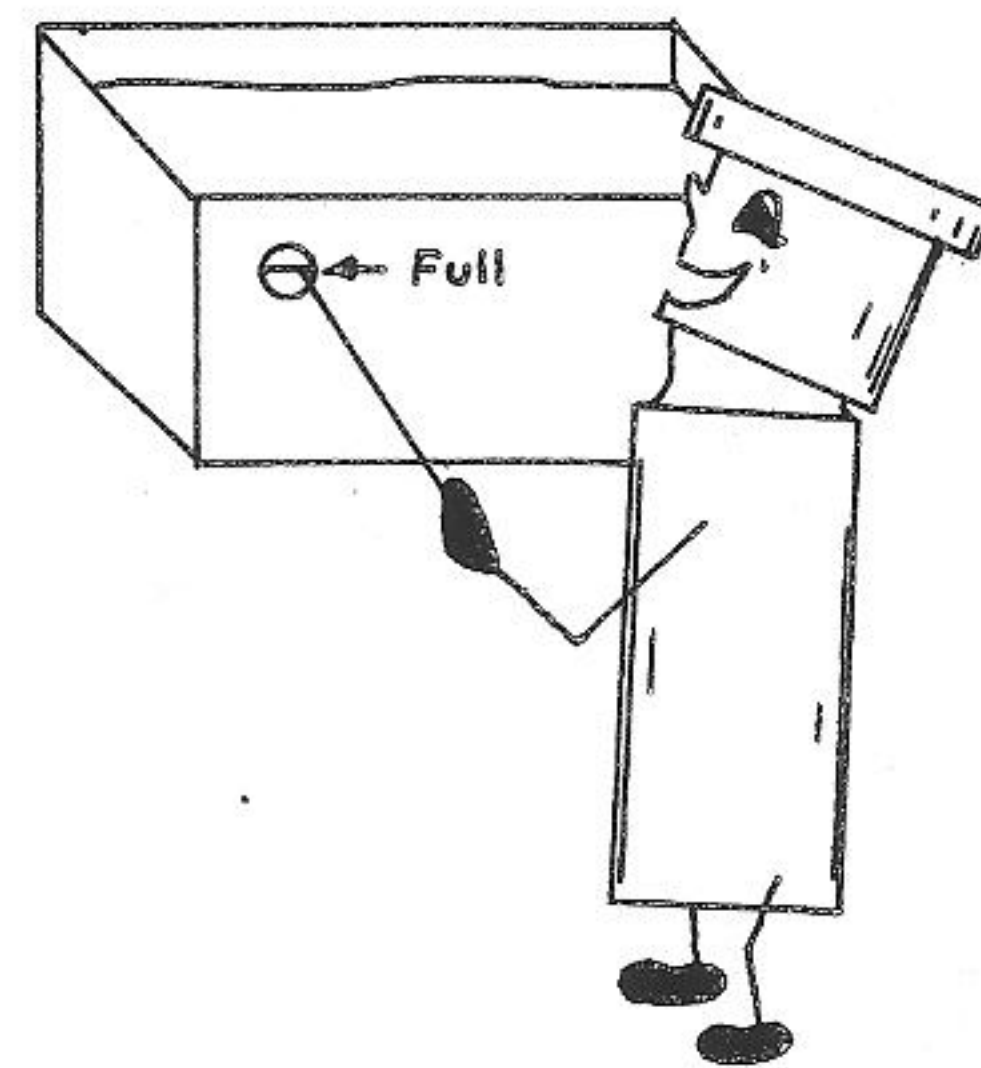
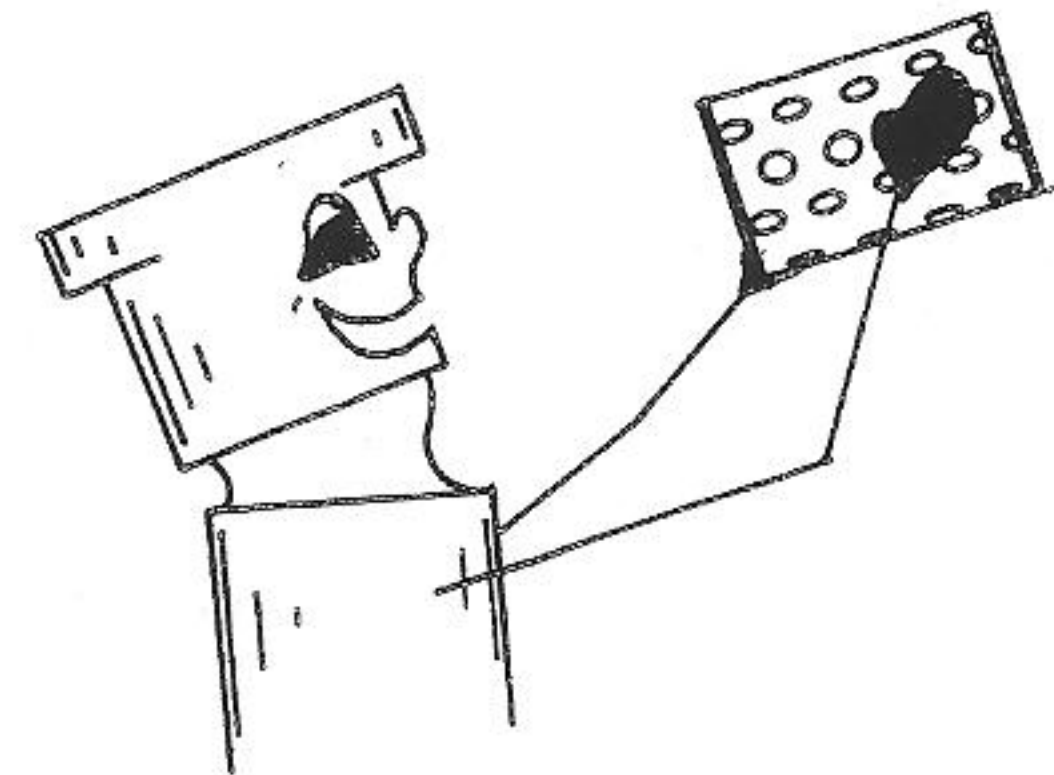


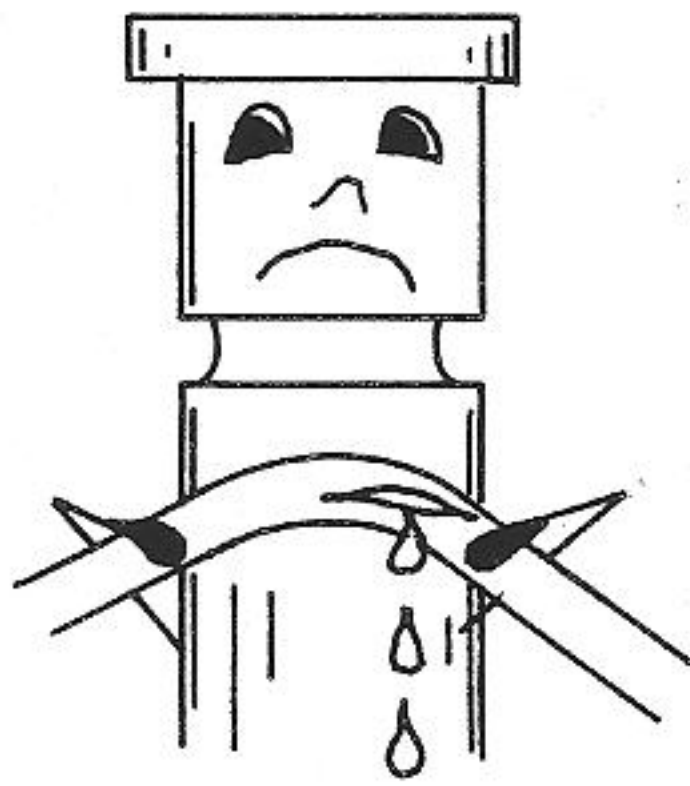


"Take care of me, and I will do my job."

"While you are checking the machine on your scheduled maintenance, why not include the following items for me?"

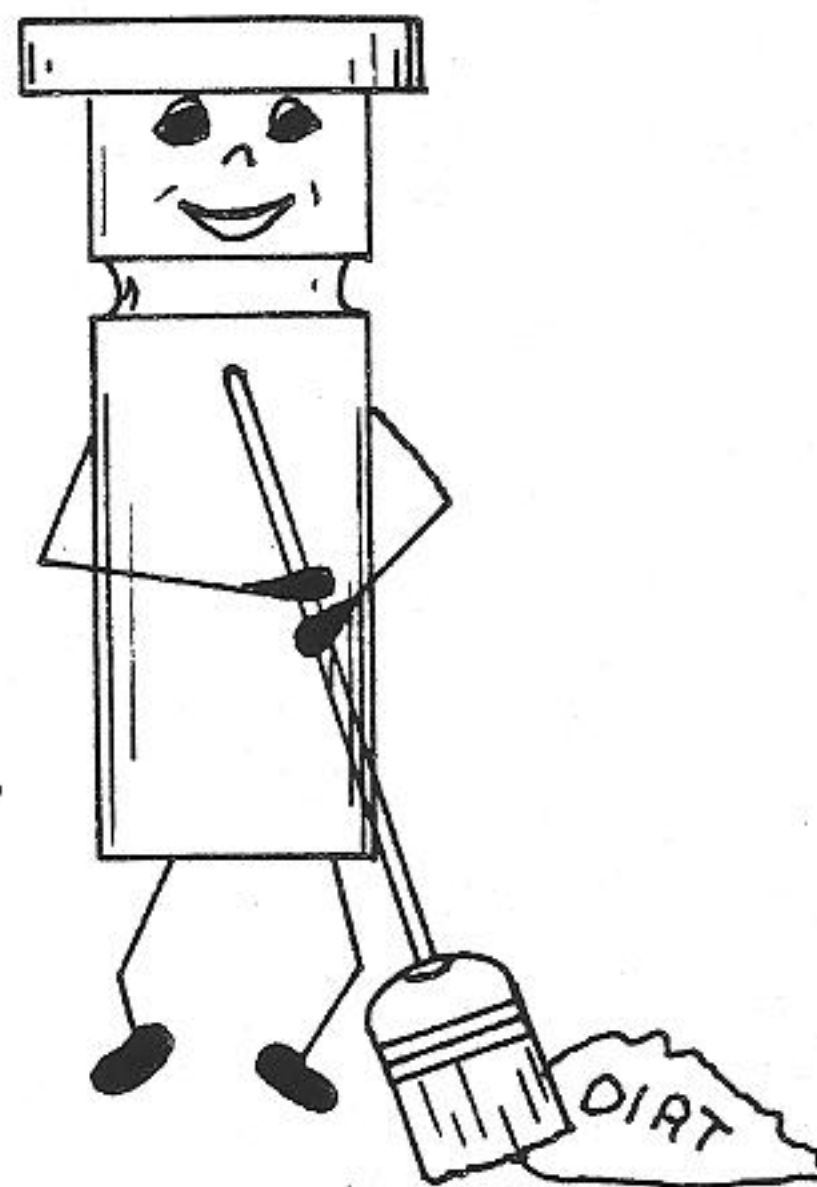
1. Filter - Make sure it is doing its job and is not allowing dirt to enter my system.
2. Reservoir - Check the sight glass to make sure the oil is to the full mark.
3. Oil - Make sure it is the recommended type and is clean.
4. Cooler - Be certain it is not plugged, thus cutting down its efficiency.



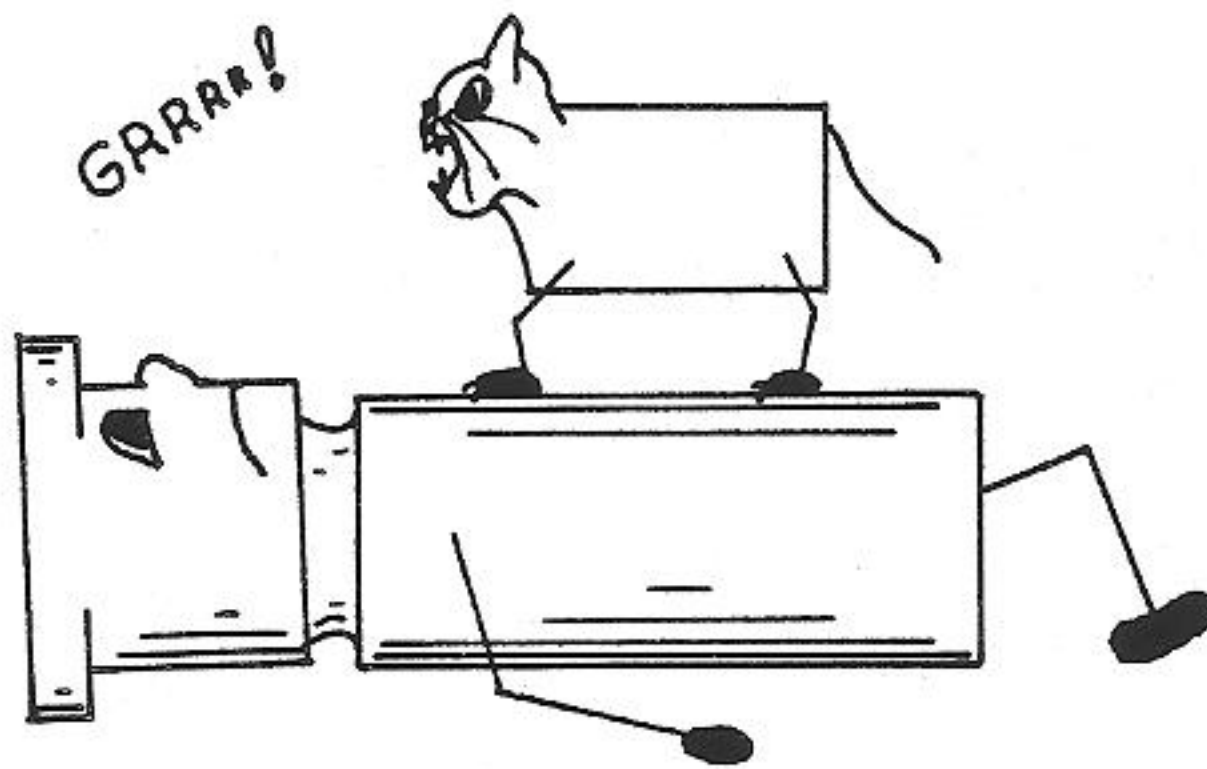


5. Lines and Hoses - Be sure all connections are tight and not leaking or cracked, allowing dirt or air into system."

"Let's go troubleshooting."



"Dirt is my biggest enemy. Keep him away, and all our problems are lessened."



"Remember what we talked about earlier about controlling oil? If something goes wrong with my system, it is because one or more of those three factors cannot be controlled. Review the troubleshooting procedure in the Operator's Manual for possible causes and remedies."