

# **OPERATION MANUAL**

## **MYCO SELF INDEXING UNIT**



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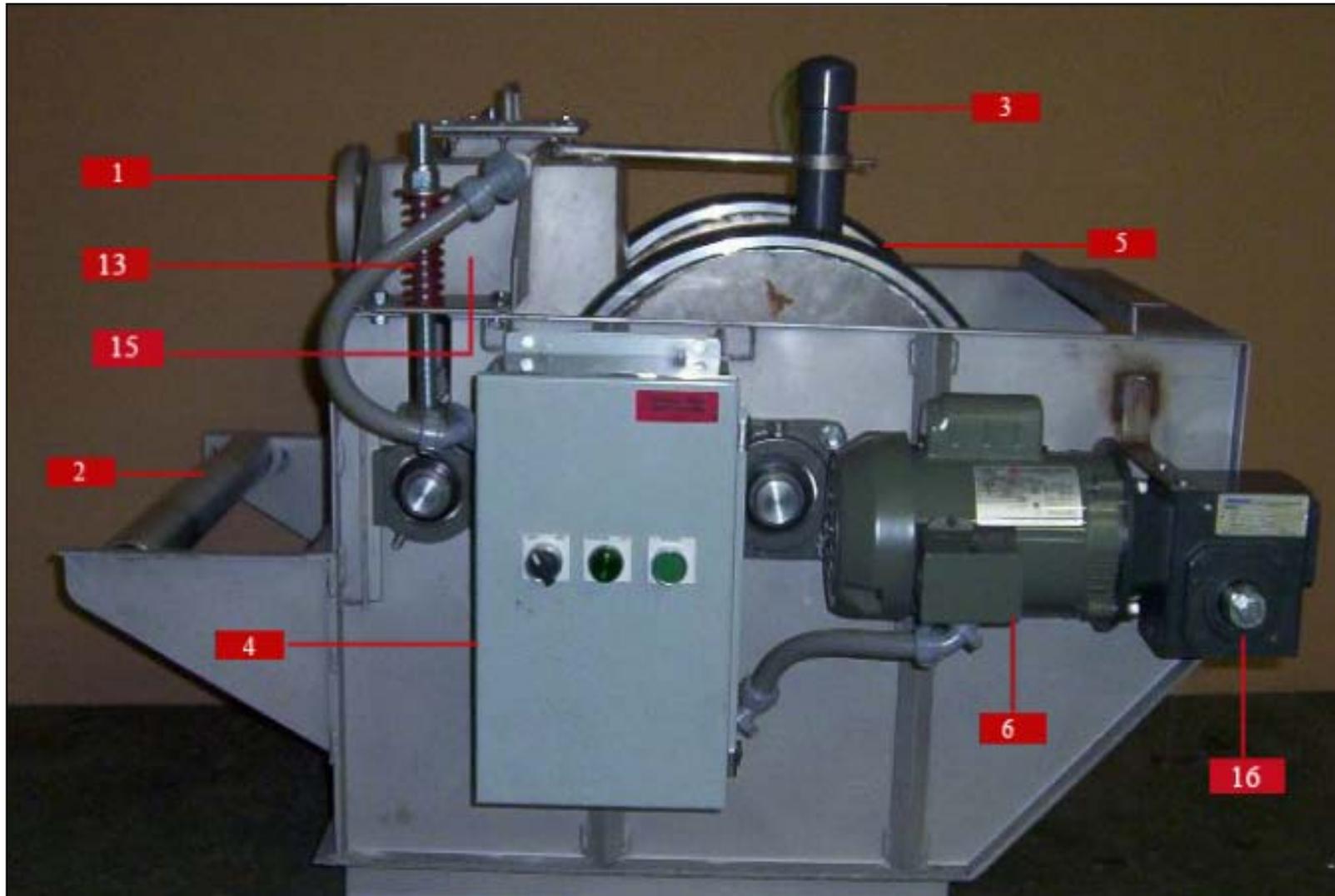
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# SYSTEM PHOTOGRAPHS

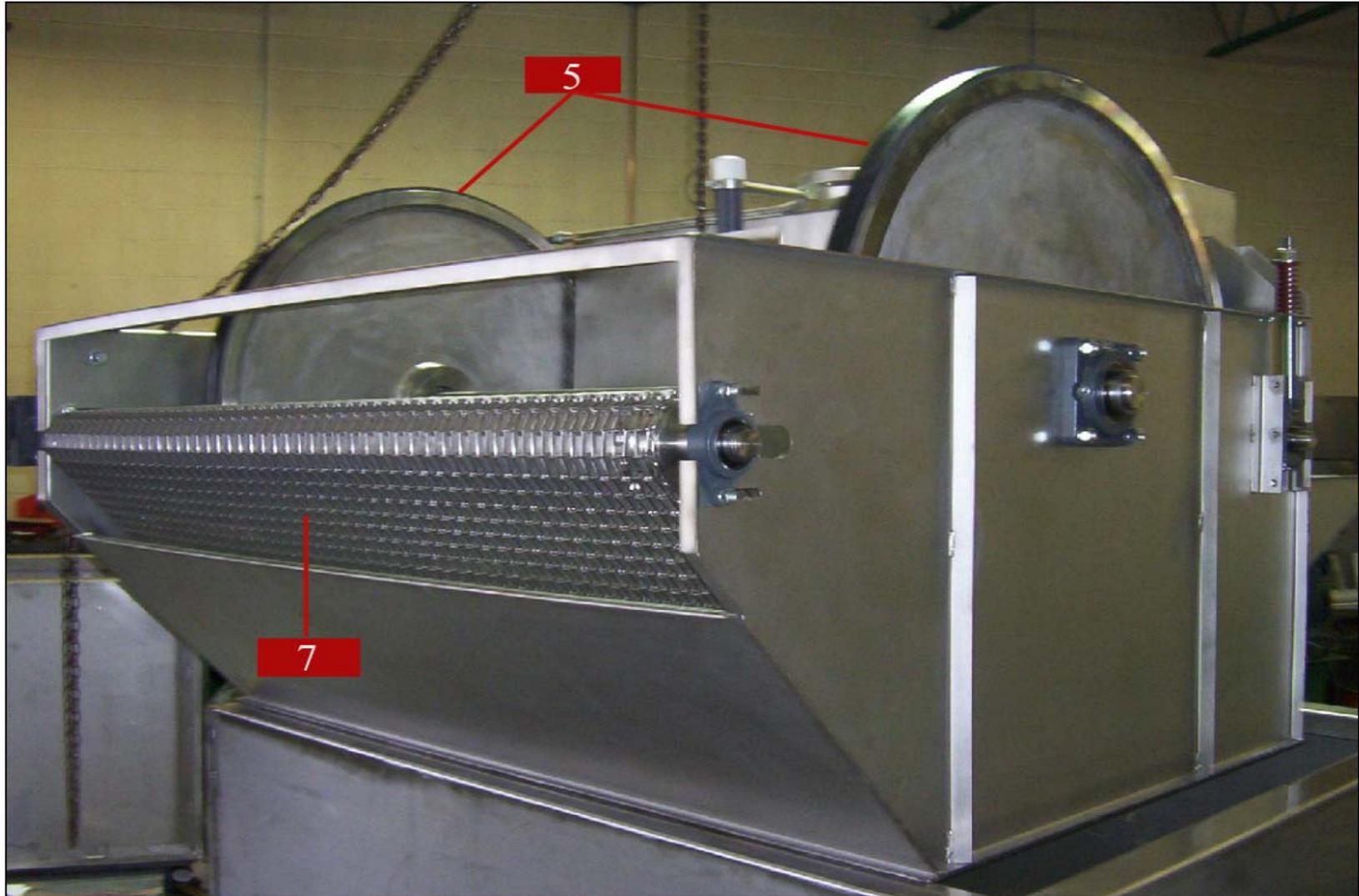
## MYCO SELF INDEXING SYSTEM COMPONENTS

1	System Inlet
2	Cloth Roll Support
3	Level Sensor
4	Control Panel
5	Wheel Disks
6	Motor
7	Metal Conveyor
8	System Outlet
9	Filter Media- Cloth
10	Delay Timer
11	Media Indexing Timer
12	Manual Index Button
13	Adjustment Spring
14	Spent Media Collection Container
15	Head Box
16	Gear reducer

# 1. Myco Self Indexing Unit (Side view)



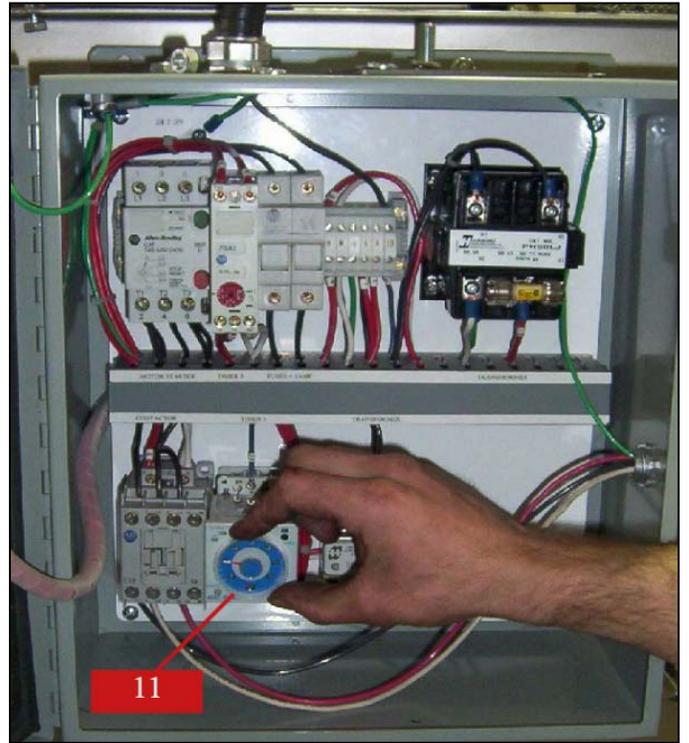
## 2. Myco Self Indexing (Wheel & Conveyor)



3. Myco Self Indexing front view



#### 4. Control Panel



# **SYSTEM INSTALLATION**

**Please refer to parts list for component identification.**

The MyCo Media Filter is designed as a stand-alone filtration system, if it is mounted above a suitable tank or equipped with a pump to remove the filtered fluid from the base of the filter.

Inspect Filter for any damage that may have been caused during shipment.

In order to ensure trouble free operation and easy maintenance of your MyCo Media Filter, installation should be carried out following the tips provided below.

The filter should be mounted or installed as close as possible to level position.

Ensure that sufficient space is provided for maintenance installation and removal of spent filter media.

Install an isolation valve upstream of the filter when the source of fluid supply cannot be shut off for maintenance. If fluid supply cannot be interrupted for service, by-pass line should be installed around the filter.

The outlet of the filter should not be restricted. If outlet is restricted, it can cause fluid backup in the main filter tank to the point where the fluid makes contact with the level probe. If this situation occurs, the filter will index filter media continuously.

Adjust level probe to about 2" (50mm) above filter media (honeycomb conveyor). After electrical power supply is connected check rotation of Speed Reducer. Ensure that it is turning in a clockwise direction (110V is factory set).

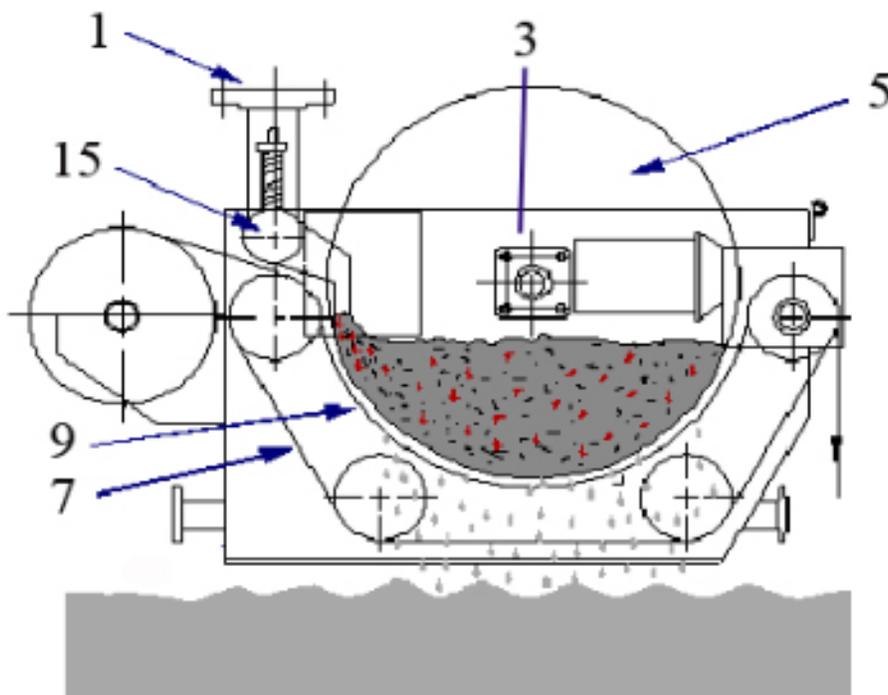
Adjustment spring (13) shown in photograph 1.0 is factory set to prevent leakage from filtration area and containment wheels. If leaks occur tighten appropriately.

# PRINCIPLE OF OPERATION

A motor driven metal conveyor (7) is used to carry filter media (9) and to form a trough between two wheel discs (5).

The liquid to be filtered is pumped or gravity fed into inlet (1). It is then distributed to the headbox (15), which slows the velocity and discharges the liquid over the width of the filter media (9). The liquid passes through the filter media, leaving the solids on the filter media. The clean liquid is collected in the tank or discharged into an open system.

As the solids are collected on the filter media, the liquid level rises to a preset level. A level sensor (3) initiates an index cycle and fresh media is indexed, displacing a portion of spent media. The spent media is discharged to waste.



# **SYSTEM OPERATION**

Place a roll of filter media on shaft provided and locate in mounting bracket with filter media unwinding from the topside of roll. Place the leading edge of the filter paper on the conveyor.

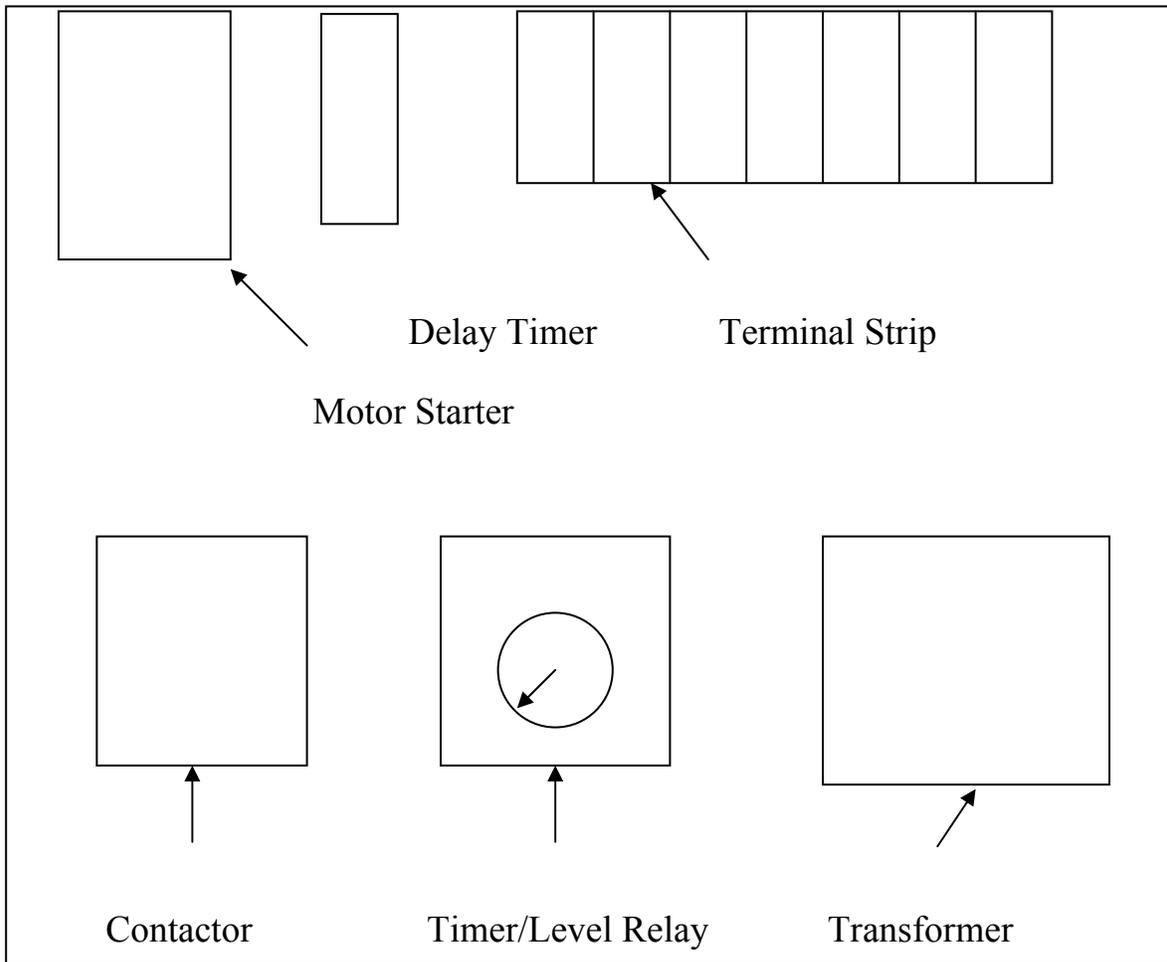
While holding on conveyor, press and hold the green manual index button (12) shown in photograph 4.0 on the control panel until the filter media is sandwiched between conveyor and seal wheels.

Continue to press and hold the manual index button until the filter media exits the filter unit.

# **CONTROL SYSTEM**

To adjust the amount of media indexed each time the maximum level is reached on the level probe, open the control panel door and adjust the timer shown below. The recommended amount of filter media to be indexed each time the level probe is activated is 4 to 6 inches (10 to 15 cm). This amount may have to be adjusted depending on the nature and the amount of solids.

To adjust the level probe, loosen the screw in the clamp ring and raise or lower the level probe to desired height. The height of the level probe may have to be adjusted, depending on nature of solids. For most typical installations the level probe should be set at 2" above conveyor's lowest point.



### **Timer adjustment:**

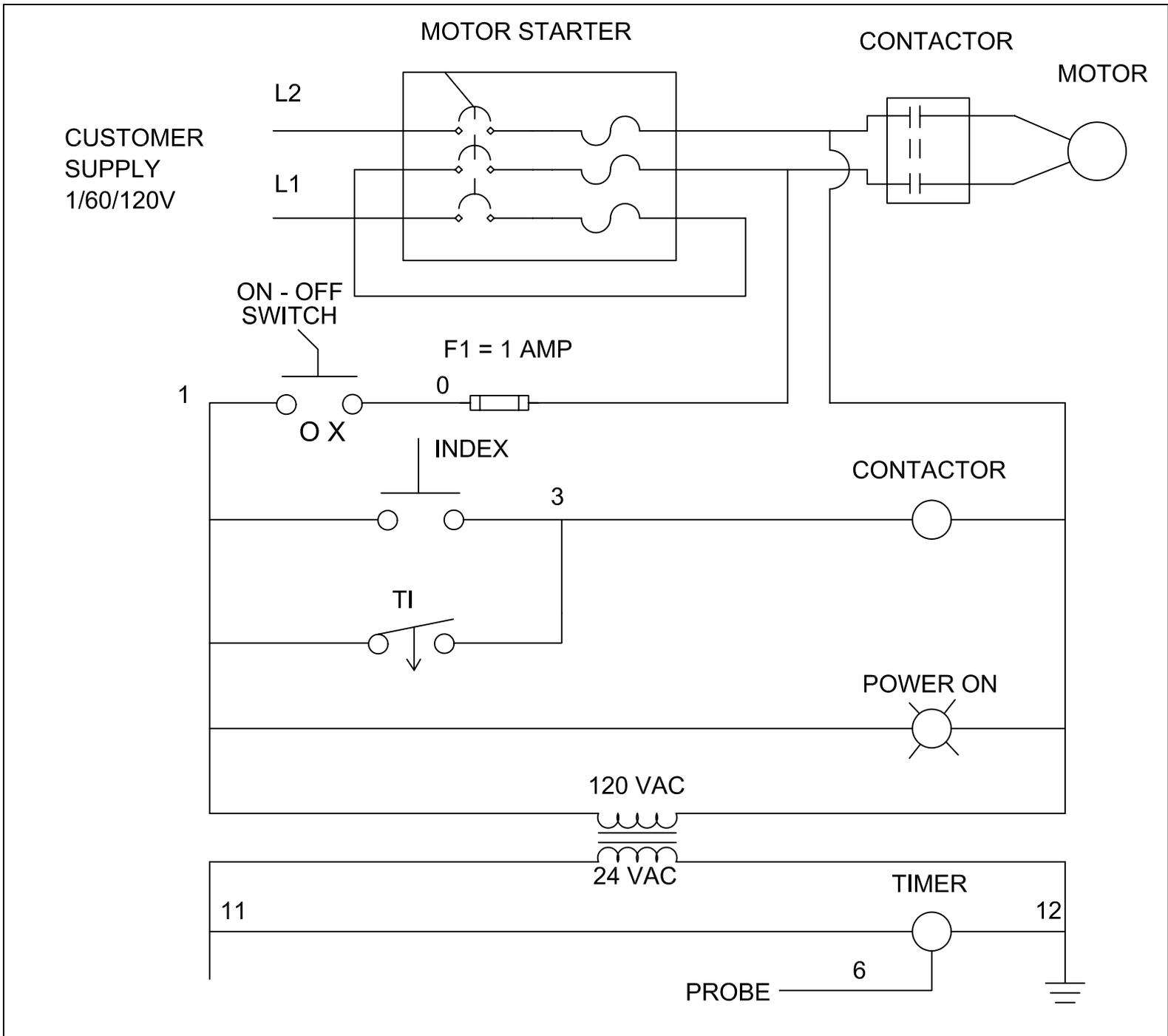
There are two timers in the control panel that need to be adjusted: the media indexing timer and the delay timer.

To adjust the amount of media indexed each time the maximum level is reached on the level probe, open the control panel door and adjust the media-indexing timer (11) shown in Photograph 4.0. The recommended amount of filter media to be indexed each time the level probe is activated is 4 to 6 inches (10 to 15 cm). The approximate setting is 0.5 seconds. This amount may have to be adjusted depending on the nature and the amount of solids.

The filter is also equipped with a delay on timer (10) shown in photograph 4.0 to prevent false media indexing from splashing liquid or other causes. This delay on timer is adjustable from 0 to 3 seconds and must be set with a time interval that is greater than the setting on the media index timer. (Note the scale on the delay on timer is in percentage and not seconds). A typical setting would be 3 = 30% of 3 seconds or 0.9 seconds. If the Media Index timer is set at 1.0 second, the delay on timer must be set higher than 1 second.

To adjust the level probe, loosen the screw in the clamp ring and raise or lower the level probe to desired height. The height of the level probe may have to be adjusted, depending on nature of solids. For most typical installations the level probe should be set at 2" above conveyor's lowest point

# **CONTROL PANEL SCHEMATIC**



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# **SYSTEM MAINTENANCE**

All Bearing Units are factory lubricated, ready to use. In extremely wet applications additional grease may be added to completely fill the bearing cavity.

For general purpose applications, use #2 consistency Lithium Base Grease, with rust and oxidation inhibitors.

Examples: Shell Alvania #2, Mobilux #2, Texaco Multifak #2

For many applications operating at slow speeds and in a clean environment, there is no need for re-lubrication.

For speed reducer, see separate manual attached.

# **PARTS LIST**

(Please refer to the instruction on Worm Gear Speed Reducer.)