



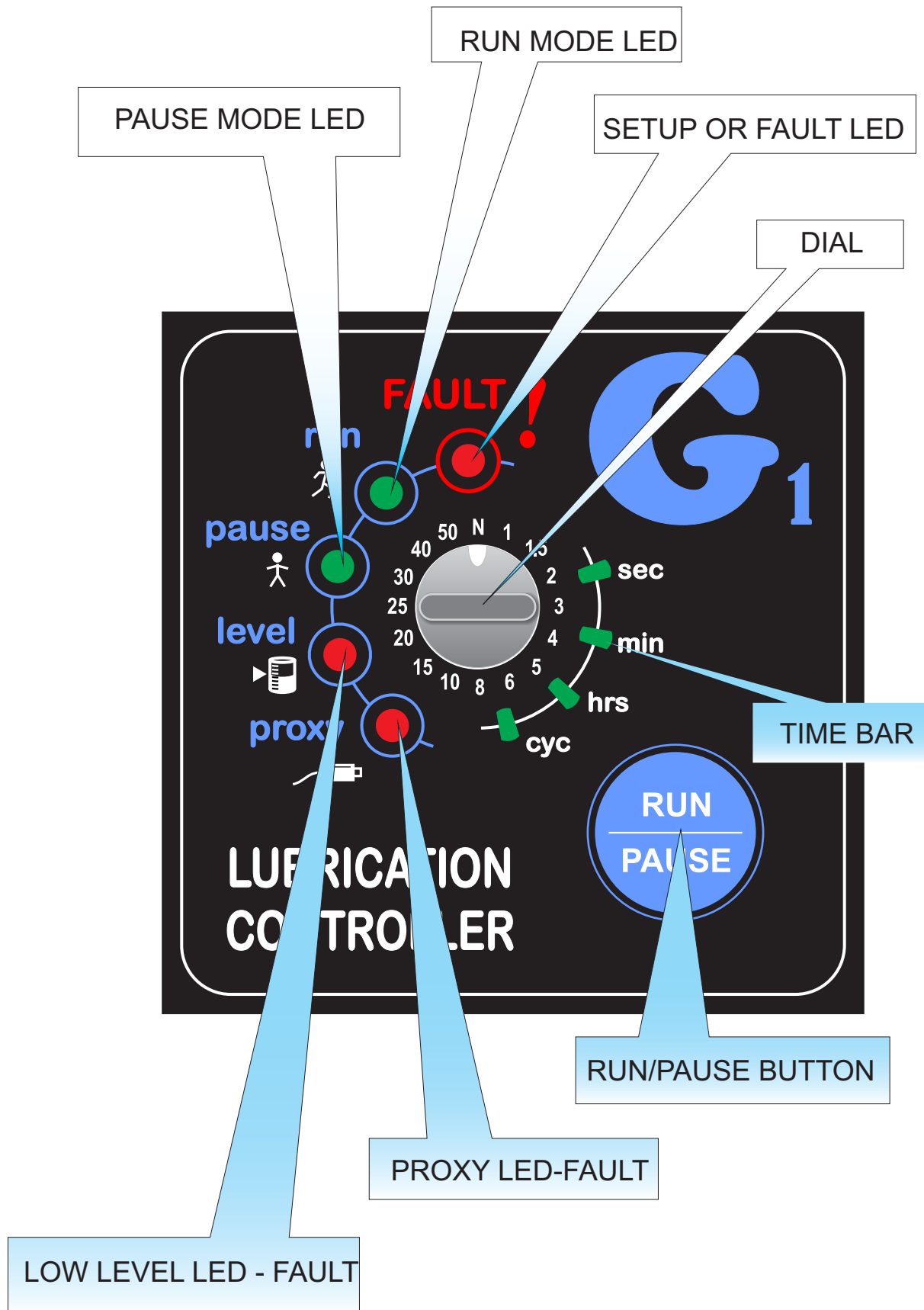
ultra-flow



G₁

Lubrication Controller

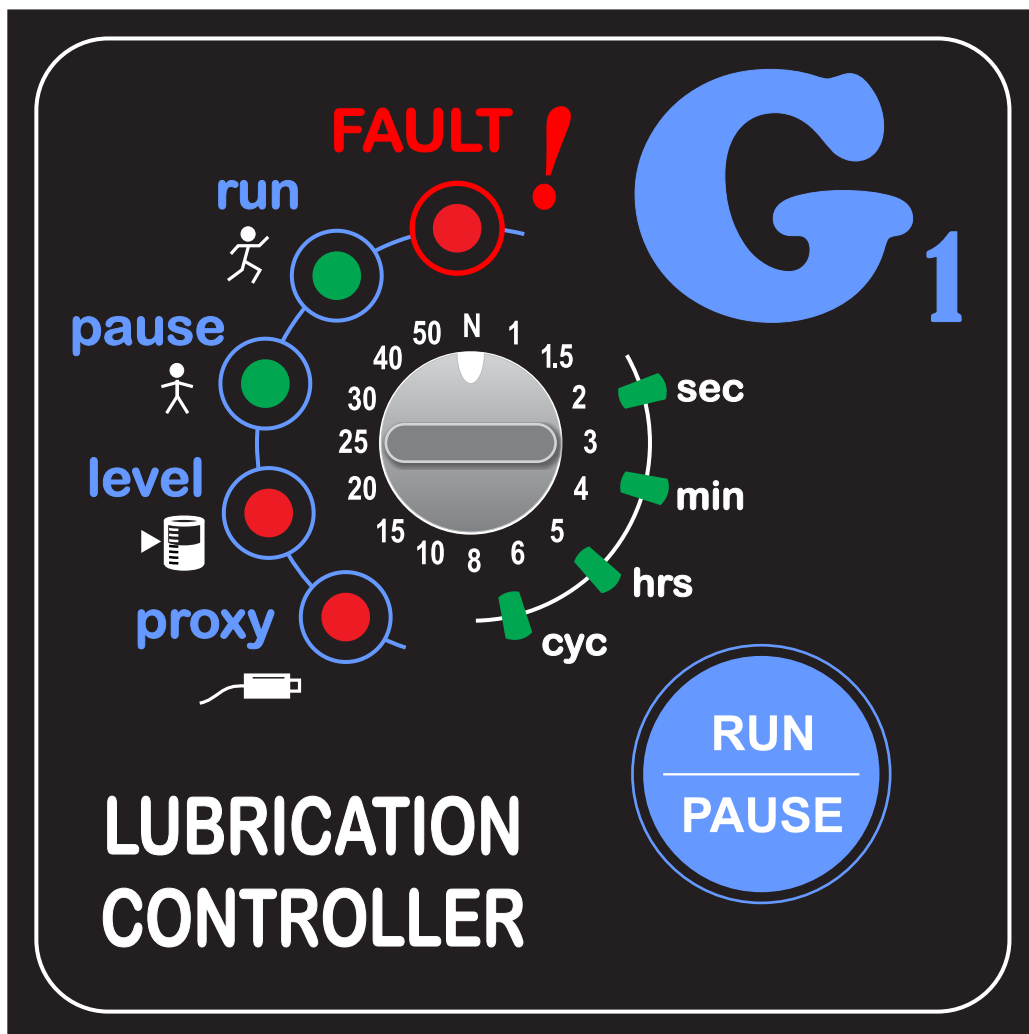
G1 GLOSSARY



SETUP FOR DUAL TIMER ONLY

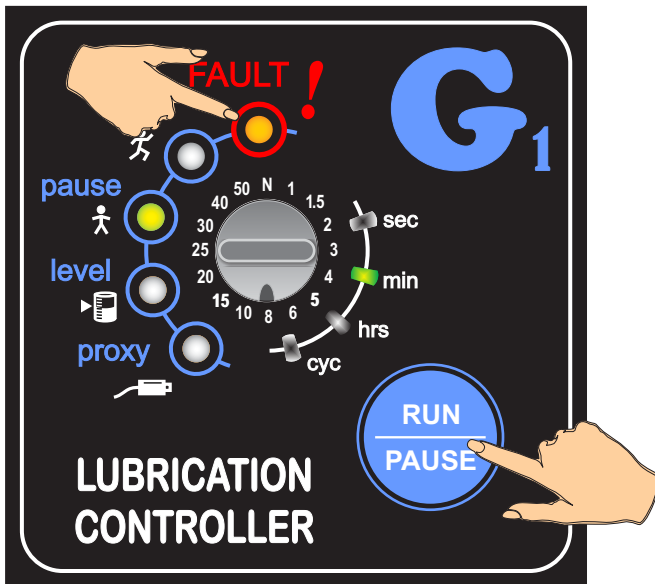
“NO PROXY OR FLOW SENSOR”

RUN TIME AND PAUSE TIME ONLY



PROGRESSIVE LINE SYSTEMS (PLS)

STEP 1

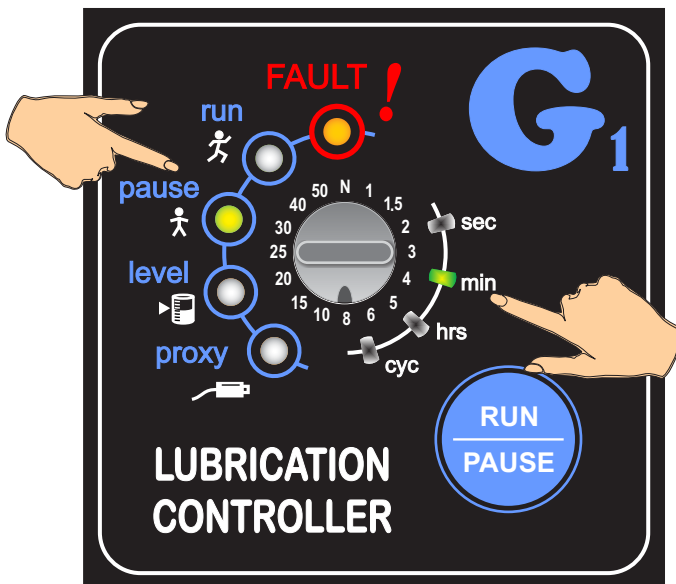


TO ENTER SETUP MODE

SWITCH VEHICLE POWER OFF
PRESS THE RUN/PAUSE BUTTON AND HOLD IN
SWITCH THE VEHICLE POWER ON
RELEASE RUN/PAUSE BUTTON AFTER 2 SEC

FAULT LIGHT “RED” SHOULD BE ON
PAUSE LIGHT “GREEN” SHOULD BE ON
GREEN LED ON RIGHT SHOULD BE ON, EITHER
ON SEC, MIN OR HRS.

STEP 2

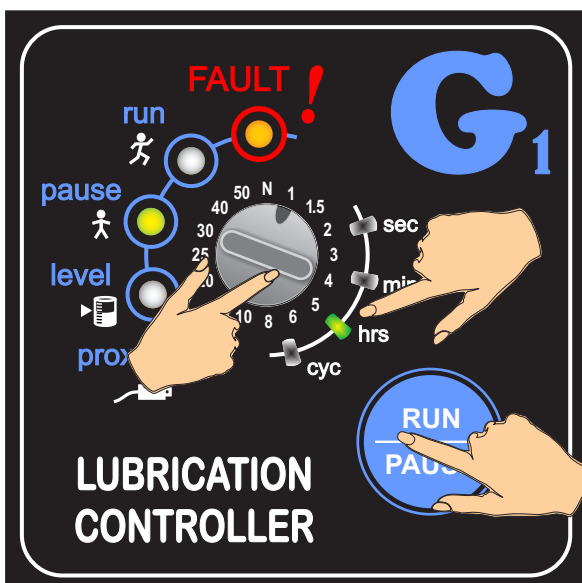


SETUP PAUSE (STOP) TIME

THE “**GREEN**” LED ON PAUSE MUST BE ON
TURN THE DIAL SLOWLY TILL THE LED ON
THE RIGHT STARTS TO FLASH. THIS IS THE
LAST PAUSE TIME THE UNIT WAS SET TO

IN THIS EXAMPLE “8 MIN” TURN THE DIAL
TO THE NEW PAUSE TIME REQUIRED

STEP 3



IN THIS EXAMPLE TURN THE DIAL 360 DEGREES
THE **MIN LED** WITH SWITCH OFF
THE **HRS LED** WILL BE ON. YOU ARE NOW IN
THE HOURS MODE.
TURN THE DIAL WITH THE NOTCH ON 1

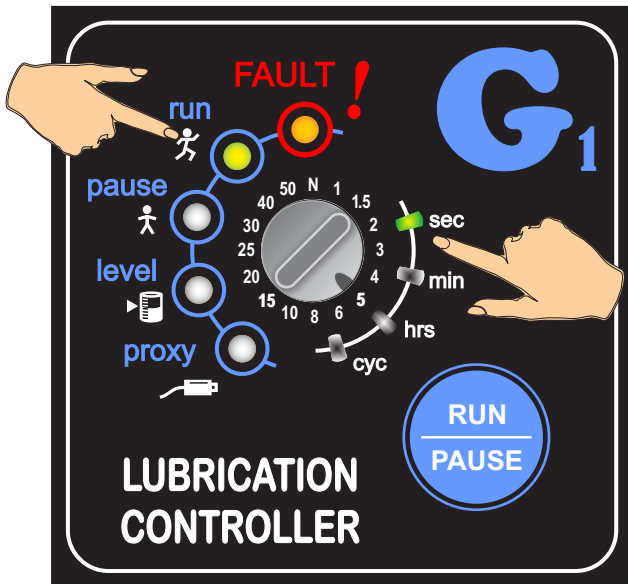
THE UNIT INDICATES YOU HAVE SELECTED
1 HOUR PAUSE (STOP) TIME

AT THIS POINT THE **HRS LED** WILL BE STATIC
PRESS THE RUN/PAUSE BUTTON AND HOLD
IN TILL THE **HRS LED** FLASHES.

RELEASE THE RUN/PAUSE BUTTON. THE **HRS LED**
WILL BE FLASHING, THIS IS THE NEW TIME
OF 1 HOUR SELECTED.

PRESS THE RUN/PAUSE BUTTON BRIEFLY
YOU WILL NOW ENTER THE “RUN MODE”

STEP 4



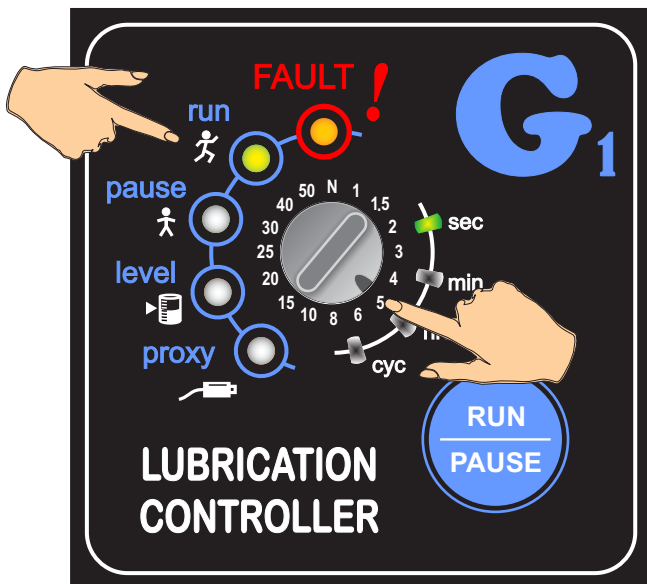
SETUP RUN (PUMP ON) TIME

THE **GREEN LED** "RUN" MUST BE ON THIS INDICATES YOU ARE IN RUN MODE

TURN THE DIAL CLOCKWISE OR ANTI CLOCKWISE TILL YOU REACH YOUR DESIRED SETTING.

IN THIS EXAMPLE WE ARE TURNING THE DIAL TILL THE **GREEN LED** ON SEC LIGHTS UP.

STEP 5

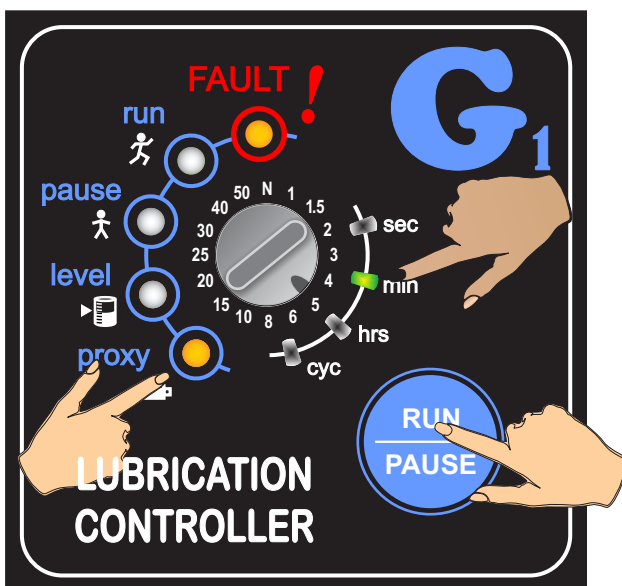


TURN THE DIAL TO THE NUMBER (TIME) YOU NEED THE UNIT TO RUN FOR

IN THIS EXAMPLE "5" SEC.

AT THIS POINT THE SELECTION INDICATES THE PUMP WILL RUN FOR 5 SECONDS.

STEP 6



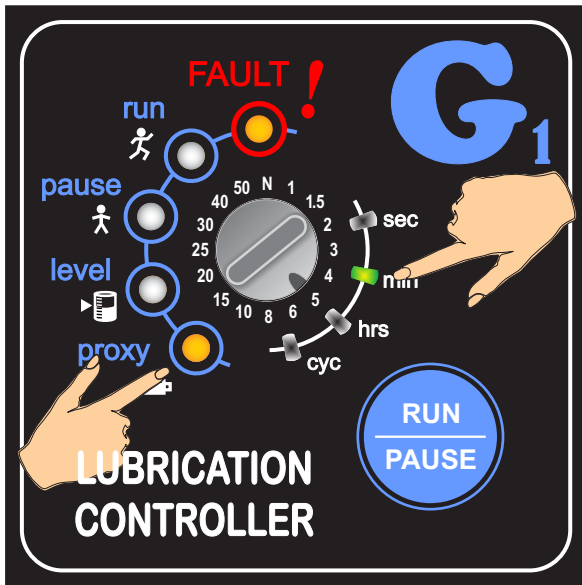
TO ACCEPT THE SETTING OF 5 SECONDS PRESS THE RUN/PAUSE BUTTON TILL THE **GREEN LED** ON SEC "FLASHES"

RELEASE THE RUN/PAUSE BUTTON. THE **GREEN LED** ON SEC WILL REMAIN FLASHING

PRESS THE RUN/PAUSE BUTTON BRIEFLY THE UNIT WILL NOW PROCEED TO THE NEXT LEVEL.

THE NEXT LEVEL WILL BE "PROXY" SETUP

STEP 7



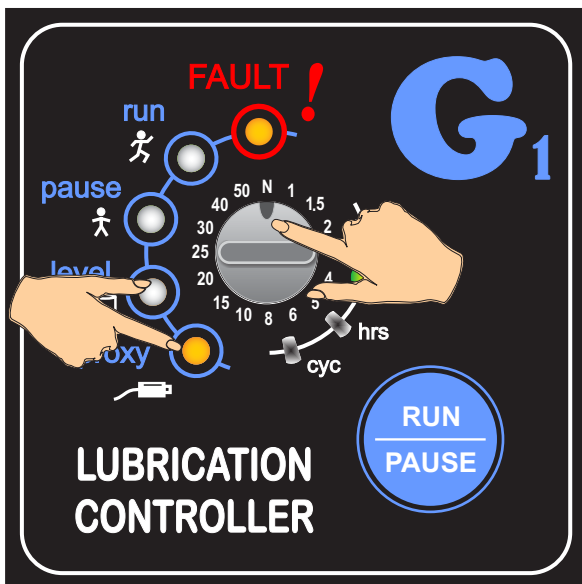
PROXY SETUP

IN THIS SETUP SEQUENCE WE DO NOT USE A PROXY SENSOR TO MONITOR THE MOVEMENT OF THE PISTON

THE SYSTEM WE ARE NOW SETTING UP IS RUN AND PAUSE TIME WITHOUT THE USE OF MONITORING.

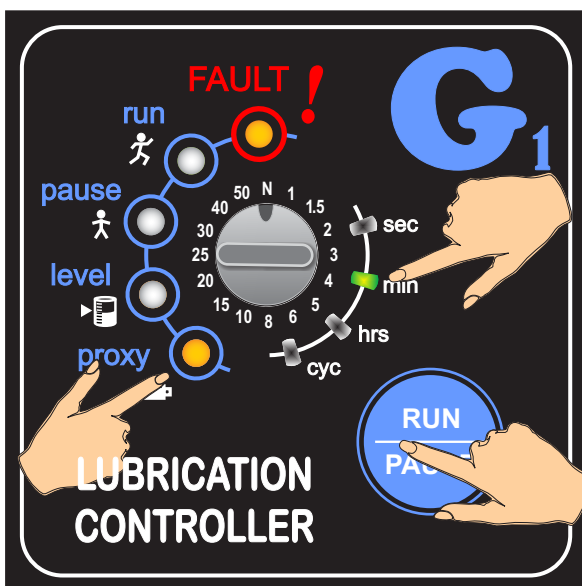
WITH THE **RED LED** ON PROXY PROCEED BY TURNING THE DIAL AS PER THE NEXT EXAMPLE

STEP 8



TURN THE DIAL TO THE POSITION MARKED "N" (NO) IF YOU SELECT THIS POSITION IT MEANS THAT YOU WILL NOT BE USING A PROXY

STEP 9

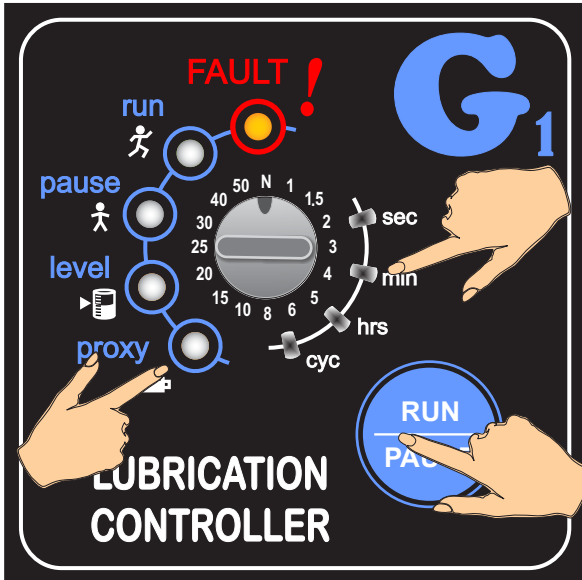


TO ACCEPT YOUR SETTING OF "N" (NO) PRESS THE RUN/PAUSE BUTTON TILL THE **GREEN LED** ON MIN STARTS TO FLASH

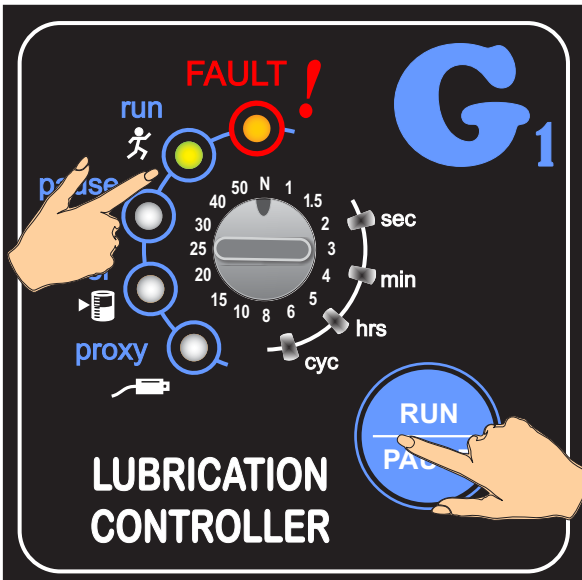
NOTE: THE **GREEN LED** ON THE TIME BAR CAN BE ON ANY STATUS, BY SELECTING "N" AND HOLDING IN THE RUN/PAUSE BUTTON IT MUST FLASH ON WHATEVER STATUS IT IS ON.

ONCE YOU SEE THE **GREEN LED** ON THE TIME BAR FLASHING RELEASE THE RUN/PAUSE BUTTON. PRESS AGAIN BRIEFLY TO MOVE TO THE NEXT LEVEL OF THE SETUP.

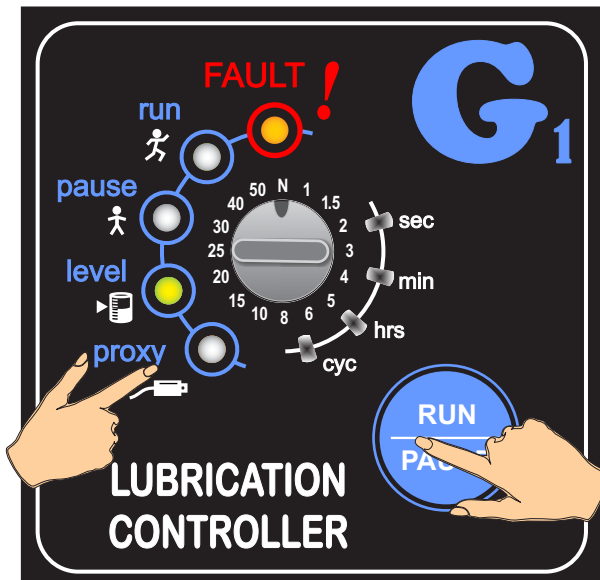
STEP 10



PRESS RUN/PAUSE RUN LED ON AND MOTOR TURNS



ACTIVATE LEVEL SENSOR - - GREEN LED WILL LIGHT UP



TEST AND ACCEPT MODE

AT THIS POINT AS YOU HAVE PRESSED THE RUN/PAUSE BUTTON ALL LED'S EXCEPT THE RED "FAULT" LED SHOULD REMAIN ON.

THE UNIT IS NOW IN "TEST MODE"

BY PRESSING THE RUN/PAUSE BUTTON WILL MAKE THE MOTOR TURN. THIS WAY YOU CAN TEST TO SEE IF THE MOTOR IS TURNING THE RIGHT WAY, OR TEST TO SEE IF OTHER PROBLEMS MAY OCCUR WITH THE MOTOR.

BY ACTIVATING THE LOW LEVEL MANUALLY (IF YOU HAVE CONNECTED- NO SETUP IS REQUIRED FOR THIS) THE **LOW LEVEL LED** WILL LIGHTUP INDICATING THAT IT IS WORKING

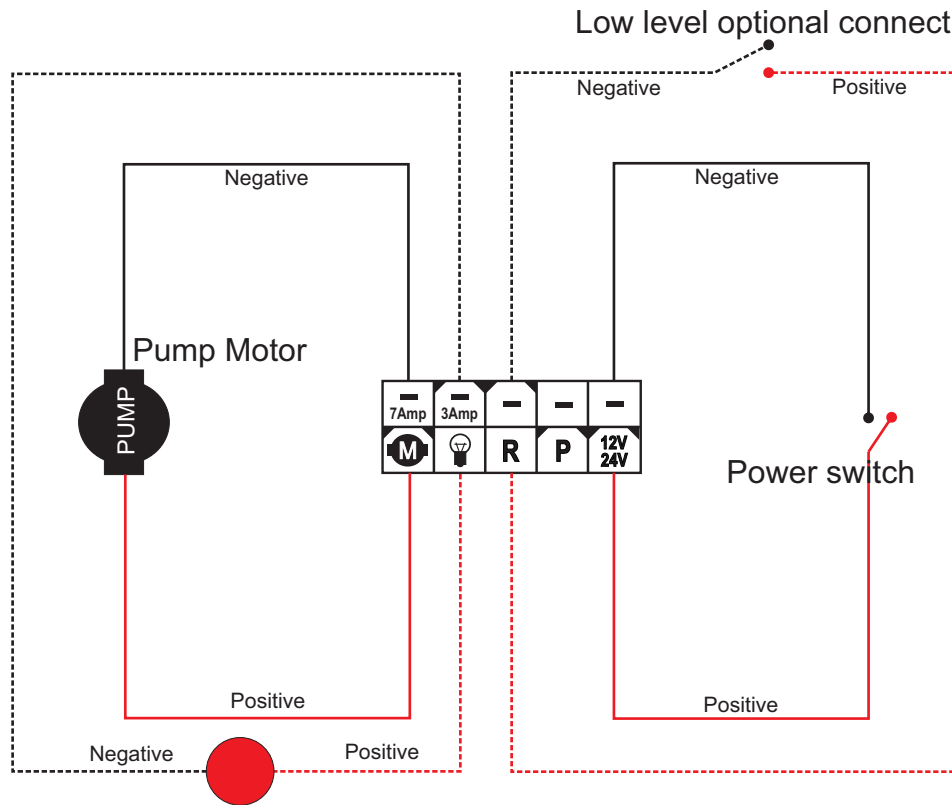
SHOULD YOU WANT TO MAKE CHANGES SIMPLY PRESS THE RUN/PAUSE BUTTON AND GO THROUGH THE SETUP AGAIN.

IT IS VERY IMPORTANT THAT THE DISPLAY AS SHOWN HERE IS THE MODE YOU NEED TO BE IN BEFORE SWITCHING POWER OFF.

FAILING TO DO SO WILL RESULT IN NO CHANGES MADE ACCEPTED.

THE TEST MODE IS TO TEST ALL DEVICES CONNECTED AND ALSO TO SWITCH POWER OFF, THEN ON. AT THIS POINT ALL CHANGES WILL BE ACCEPTED.

WIRING DIAGRAM FOR RUN-PAUSE TIME ONLY



External warning lamp - optional connect

NOTE: CONNECTING THE LOW LEVEL FROM THE PUMP TO THE G1 IS TOTALLY AUTOMATIC. NO SETUP PROCEDURE IS REQUIRED FOR THIS. THE G1 WILL AUTOMATICALLY KNOW IF A LOW LEVEL DEVICE IS CONNECTED OR NOT.

THE EXTERNAL WARNING IS ALSO OPTIONAL TO USER. IF YOU HAVE A LOW LEVEL DEVICE CONNECTED AND YOU WOULD LIKE TO CONNECT A ROTARY OR SOME SORT OF LAMP EXTERNALLY FROM THE G1 THEN YOU CAN SIMPLY WIRE UP FROM THE OUTPUT AS INDICATED TO YOUR EXTERNAL DEVICE.

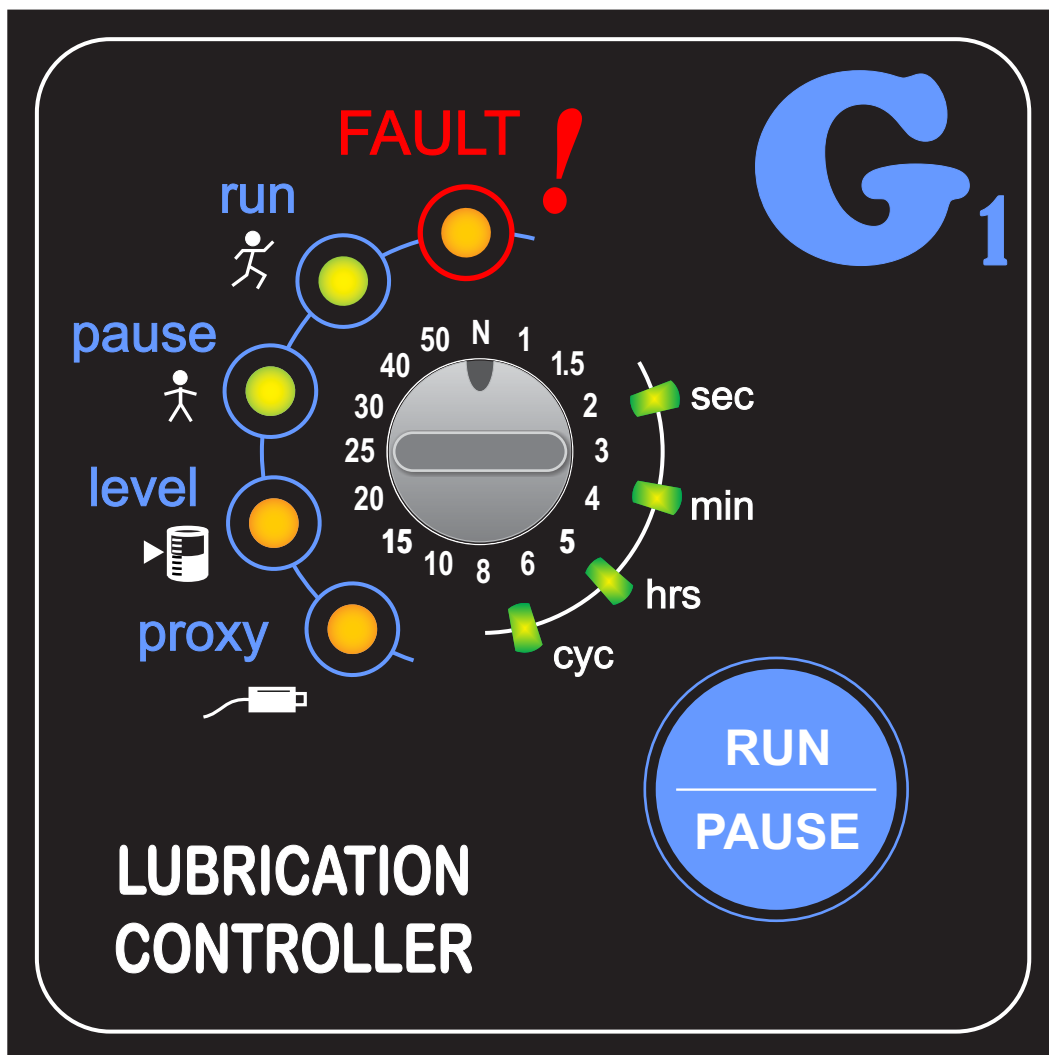
IN THE EVENT OF A WARNING THE EXTERNAL DEVICE WILL ACTIVATE. THE OUTPUT VOLTAGE IS DEPENDANT ON THE INPUT VOLTAGE. IF THE G1 IS USING A **24VDC** INPUT THE, EXTERNAL DEVICE SHOULD ALSO BE **24VDC**.

SETUP FOR DUAL TIMER ONLY

“USING PROXY OR PISTON SENSOR”

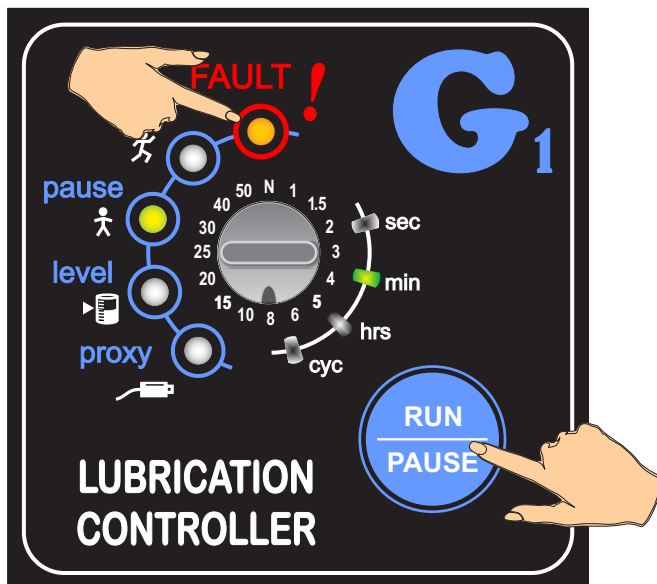
RUN TIME AND PAUSE TIME ONLY

MONITORING PISTON MOVEMENT



PROGRESSIVE LINE SYSTEMS (PLS)

STEP 1

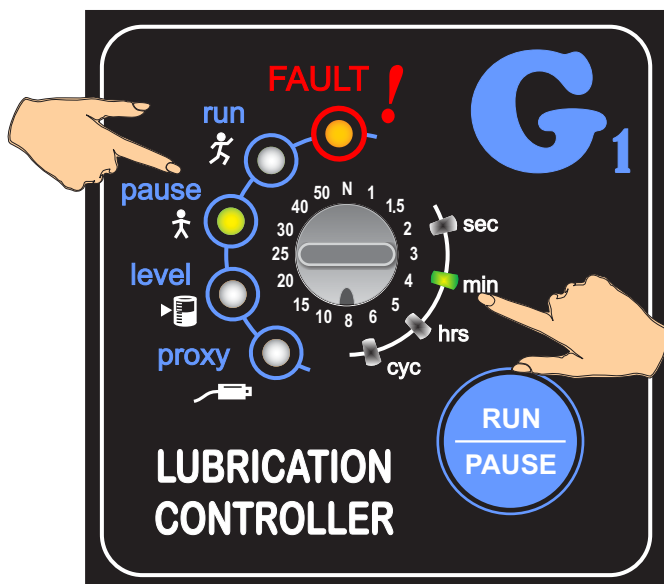


TO ENTER SETUP MODE

SWITCH VEHICLE POWER OFF
PRESS THE RUN/PAUSE BUTTON AND HOLD IN
SWITCH THE VEHICLE POWER ON
RELEASE RUN/PAUSE BUTTON AFTER 2 SEC

FAULT LIGHT "RED" SHOULD BE ON
PAUSE LIGHT "GREEN" SHOULD BE ON
GREEN LED ON RIGHT SHOULD BE ON, EITHER
ON SEC, MIN OR HRS.

STEP 2

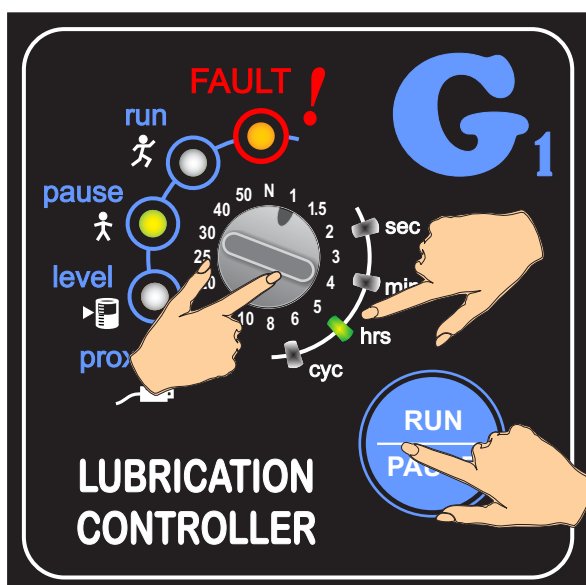


SETUP PAUSE (STOP) TIME

THE **"GREEN" LED** ON PAUSE MUST BE ON
TURN THE DIAL SLOWLY TILL THE **LED** ON
THE RIGHT STARTS TO FLASH. THIS IS THE
LAST PAUSE TIME THE UNIT WAS SET TO

IN THIS EXAMPLE "8 MIN" TURN THE DIAL
TO THE NEW PAUSE TIME REQUIRED

STEP 3



IN THIS EXAMPLE TURN THE DIAL 360 DEGREES
THE **MIN LED** WITH SWITCH OFF
THE **HRS LED** WILL BE ON. YOU ARE NOW IN
THE HOURS MODE.
TURN THE DIAL WITH THE NOTCH ON 1

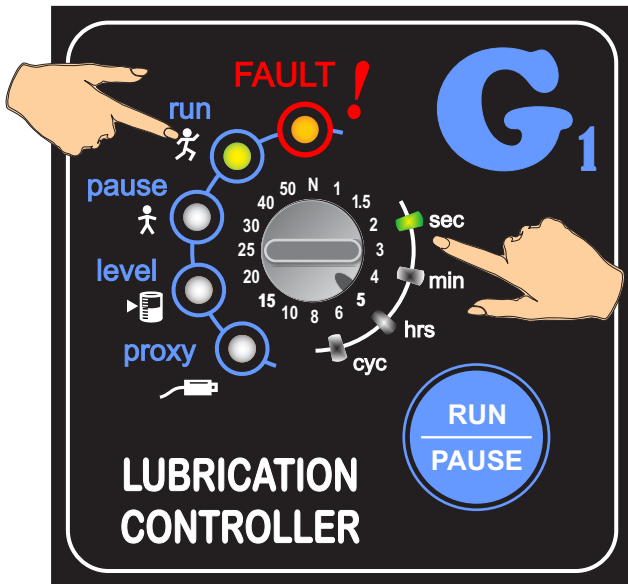
THE UNIT INDICATES YOU HAVE SELECTED
1 HOUR PAUSE (STOP) TIME

AT THIS POINT THE **HRS LED** WILL BE STATIC
PRESS THE RUN/PAUSE BUTTON AND HOLD
IN TILL THE **HRS LED** FLASHES.

RELEASE THE RUN/PAUSE BUTTON. **THE HRS LED**
WILL BE FLASHING, THIS IS THE NEW TIME
OF 1 HOUR SELECTED.

PRESS THE RUN/PAUSE BUTTON BRIEFLY
YOU WILL NOW ENTER THE "RUN MODE"

STEP 4



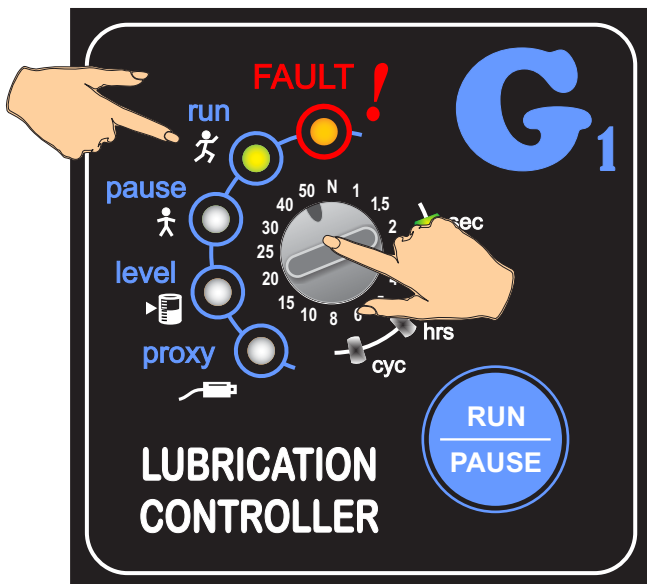
SETUP RUN (PUMP ON) TIME

THE **GREEN LED** "RUN" MUST BE ON
THIS INDICATES YOU ARE IN RUN MODE

TURN THE DIAL CLOCKWISE OR ANTI
CLOCKWISE TILL YOU REACH YOUR
DESIRED SETTING.

IN THIS EXAMPLE WE ARE TURNING THE
DIAL TILL THE **GREEN LED** ON SEC
LIGHTS UP.

STEP 5

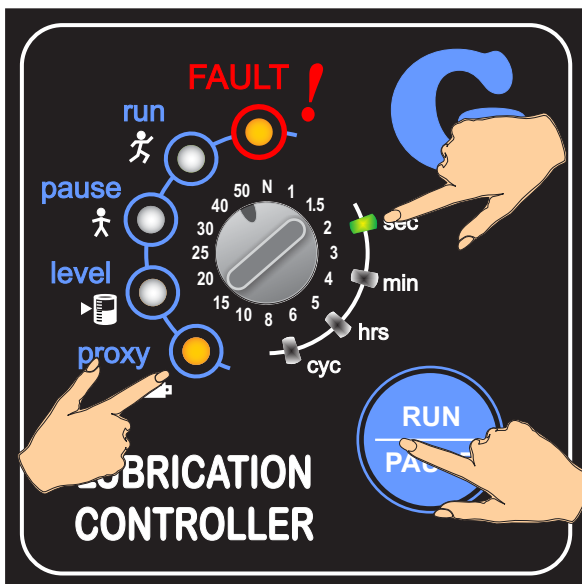


TURN THE DIAL TO THE NUMBER (TIME)
YOU NEED THE UNIT TO RUN FOR

IN THIS EXAMPLE "50" SEC.

AT THIS POINT THE SELECTION INDICATES
THE PUMP WILL RUN FOR 50 SECONDS.

STEP 6



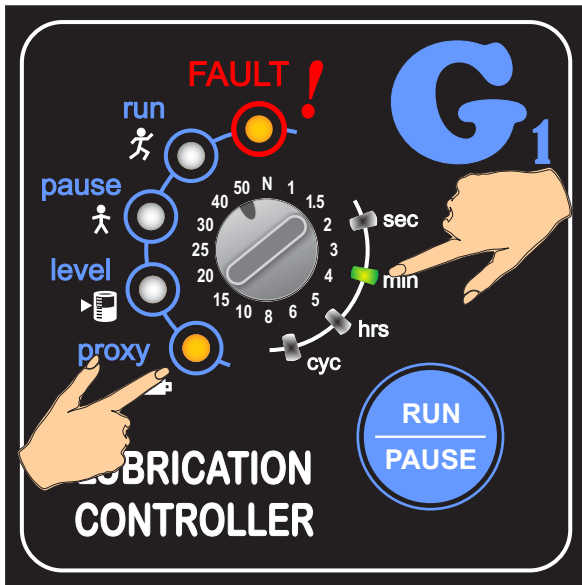
TO ACCEPT THE SETTING OF 50 SECONDS
PRESS THE RUN/PAUSE BUTTON TILL THE
GREEN LED ON SEC "FLASHES"

RELEASE THE RUN/PAUSE BUTTON. THE
GREEN LED ON SEC WILL REMAIN FLASHING

PRESS THE RUN/PAUSE BUTTON BRIEFLY
THE UNIT WILL NOW PROCEED TO THE
NEXT LEVEL.

THE NEXT LEVEL WILL BE "PROXY" SETUP

STEP 7



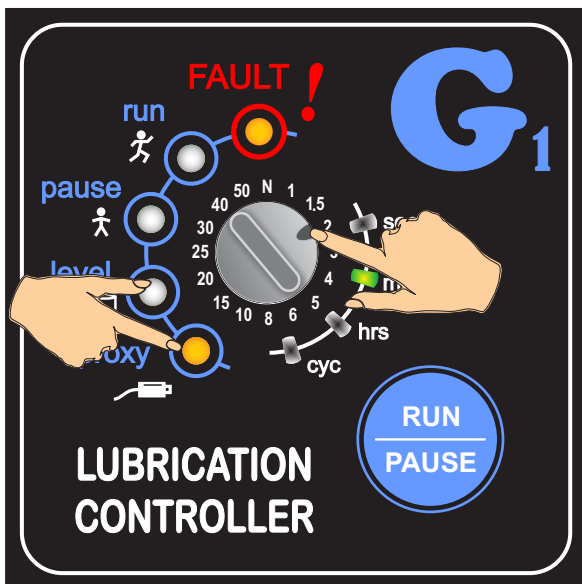
PROXY SETUP

IN THIS SETUP SEQUENCE WE WILL USE A PROXY SENSOR TO MONITOR THE MOVEMENT OF THE PISTON

THE SYSTEM WE ARE NOW SETTING UP IS RUN AND PAUSE TIME WITH THE USE OF MONITORING PISTON MOVEMENT

WITH THE **RED LED** ON PROXY PROCEED BY TURNING THE DIAL AS PER THE NEXT EXAMPLE

STEP 8

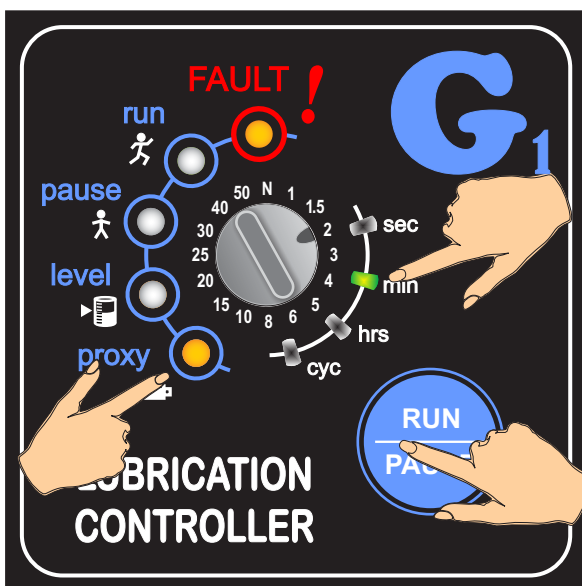


TURN THE DIAL TO THE POSITION MARKED NUMBER "1" IF YOU SELECT THIS POSITION IT MEANS THAT THE PROXIMITY SENSOR WILL TIMEOUT AFTER 1 MINUTE.

THESE TIMEOUT SETTINGS ARE IMPORTANT TO UNDERSTAND. DEPENDING ON WHERE YOU INSTALL THE SENSOR FOR EXAMPLE ON A MAIN DIVIDER OR SECONDARY DIVIDER YOU WILL HAVE TO TIME THE CYCLE.

IF YOUR SYSTEM TOOK 1 MINUTE TO CYCLE THEN YOU CAN SET YOUR TIMEOUT TO 2 MINUTES. ALWAYS SET YOUR TIMEOUT HIGHER THAN THE CYCLE TIME OF YOUR SYSTEM.

STEP 9

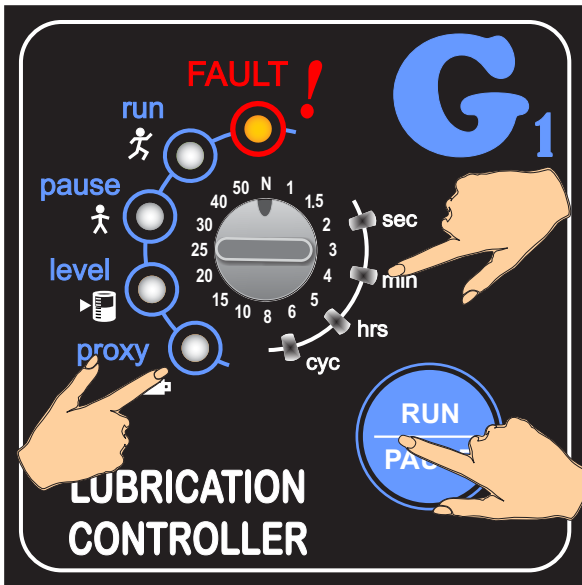


TO ACCEPT YOUR SETTING OF "2" MIN PRESS THE RUN/PAUSE BUTTON TILL THE **GREEN LED** ON MIN STARTS TO FLASH

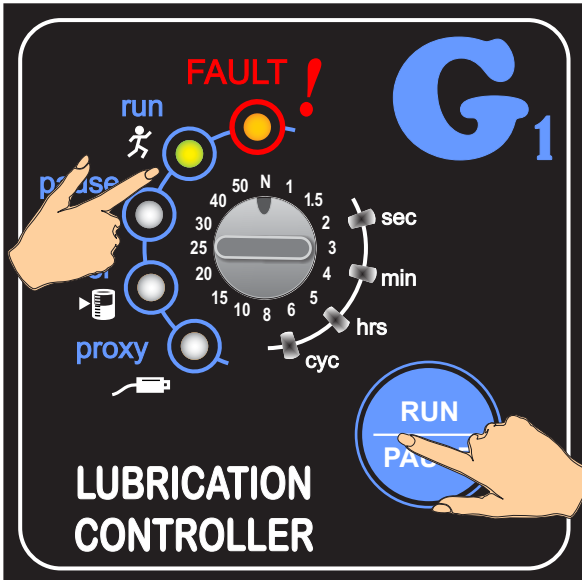
NOTE: THE **GREEN LED** ON THE TIME BAR CAN BE ON ANY STATUS, BY SELECTING "2" AND HOLDING IN THE RUN/PAUSE BUTTON IT MUST FLASH ON WHATEVER STATUS IT IS ON.

ONCE YOU SEE THE **GREEN LED** ON THE TIME BAR FLASHING RELEASE THE RUN/PAUSE BUTTON. PRESS AGAIN BRIEFLY TO MOVE TO THE NEXT LEVEL OF THE SETUP.

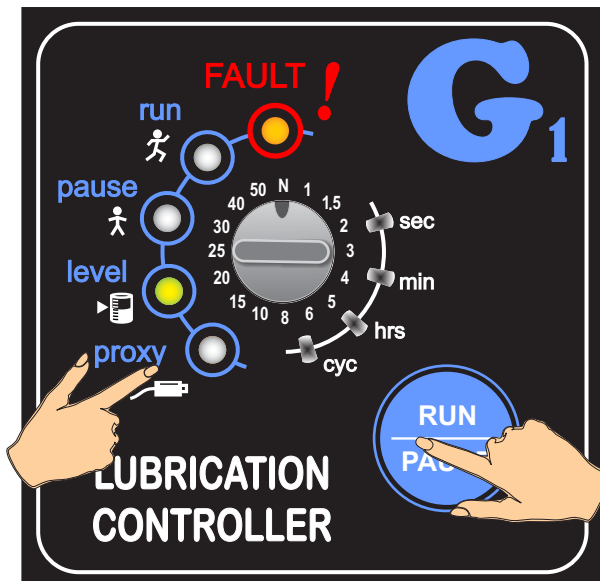
STEP 10



PRESS RUN/PAUSE RUN LED ON AND MOTOR TURNS



ACTIVATE LEVEL SENSOR - - GREEN LED WILL LIGHT UP



TEST AND ACCEPT MODE

AT THIS POINT AS YOU HAVE PRESSED THE RUN/PAUSE BUTTON ALL LED'S EXCEPT THE **RED "FAULT" LED** SHOULD REMAIN ON.

THE UNIT IS NOW IN "TEST MODE"

BY PRESSING THE RUN/PAUSE BUTTON WILL MAKE THE MOTOR TURN. THIS WAY YOU CAN TEST TO SEE IF THE MOTOR IS TURNING THE RIGHT WAY, OR TEST TO SEE IF OTHER PROBLEMS MAY OCCUR WITH THE MOTOR.

BY ACTIVATING THE LOW LEVEL MANUALLY (IF YOU HAVE CONNECTED- NO SETUP IS REQUIRED FOR THIS) THE **LOW LEVEL LED** WILL LIGHTUP INDICATING THAT IT IS WORKING

THE PROXY SWITCH CAN ALSO BE TESTED MANUALLY. THE **RED LED** WILL FLASH OFF THEN ON AS CONTACT IS MADE TO THE PROXY SENSOR.

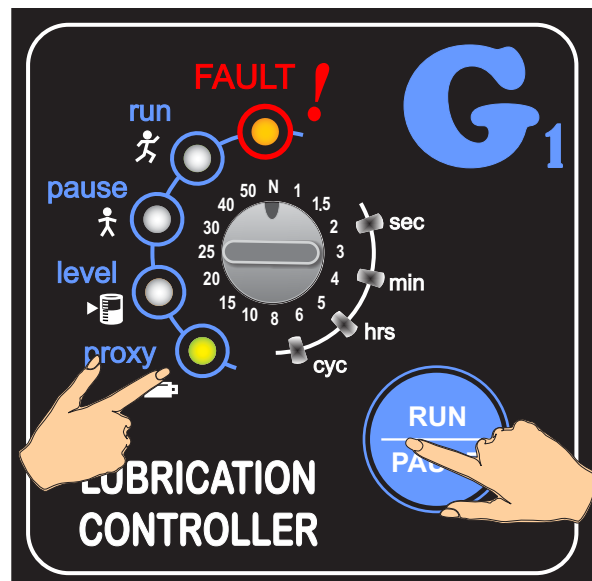
SHOULD YOU WANT TO MAKE CHANGES SIMPLY PRESS THE RUN/PAUSE BUTTON AND GO THROUGH THE SETUP AGAIN.

IT IS VERY IMPORTANT THAT THE DISPLAY AS SHOWN HERE IS THE MODE YOU NEED TO BE IN BEFORE SWITCHING POWER OFF.

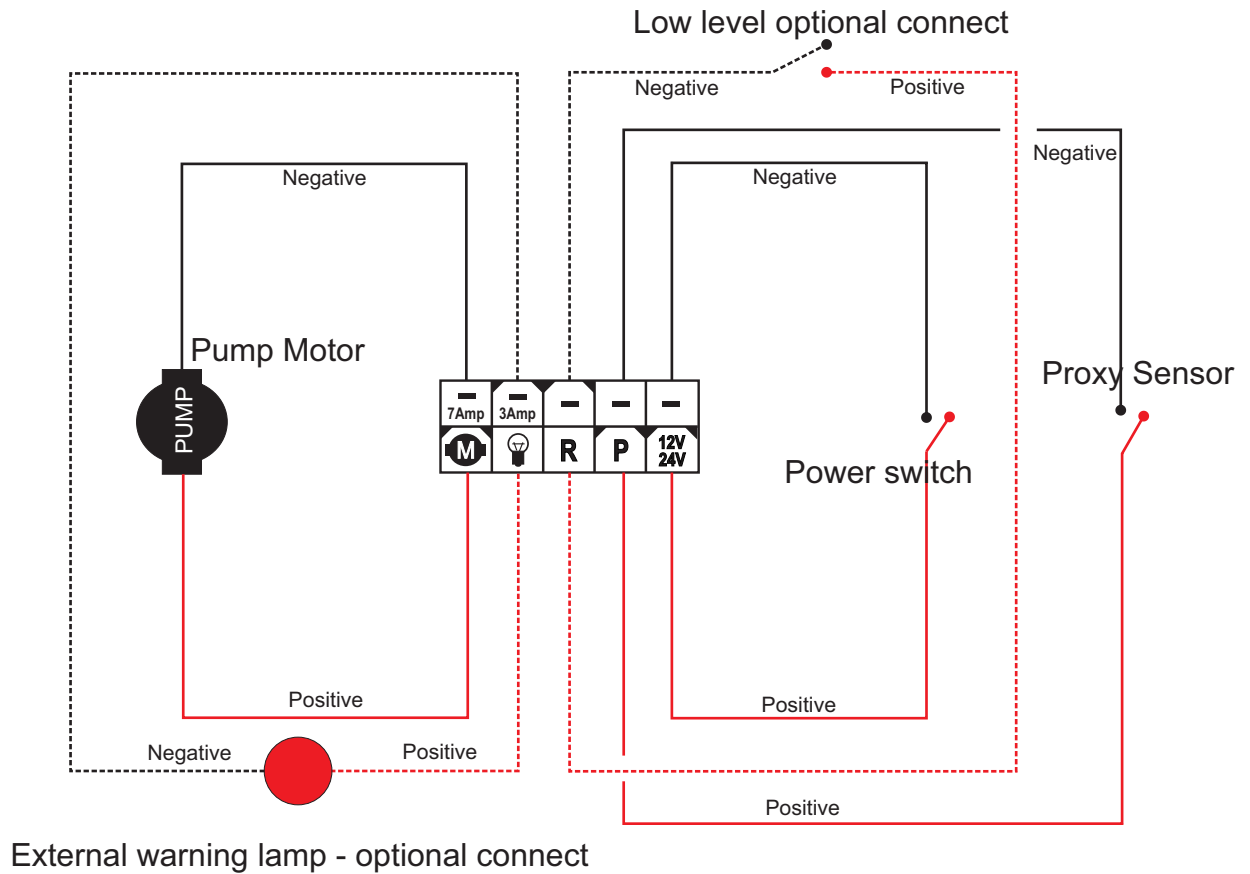
FAILING TO DO SO WILL RESULT IN NO CHANGES TO THE PROGRAM SETUP.

THE TEST MODE IS TO TEST ALL DEVICES CONNECTED AND ALSO TO SWITCH POWER OFF, THEN ON. AT THIS POINT ALL CHANGES WILL BE ACCEPTED.

ACTIVATE PISTON SENSOR - - GREEN LED WILL LIGHT UP



WIRING DIAGRAM FOR RUN-PAUSE TIME ONLY USING PROXY PISTON SENSOR



NOTE: CONNECTING THE LOW LEVEL FROM THE PUMP TO THE G1 IS TOTALLY AUTOMATIC. NO SETUP PROCEDURE IS REQUIRED FOR THIS. THE G1 WILL AUTOMATICALLY KNOW IF A LOW LEVEL DEVICE IS CONNECTED OR NOT.

THE EXTERNAL WARNING IS ALSO OPTIONAL TO USER. IF YOU HAVE A LOW LEVEL DEVICE CONNECTED AND YOU WOULD LIKE TO CONNECT A ROTARY OR SOME SORT OF LAMP EXTERNALLY FROM THE G1 THEN YOU CAN SIMPLY WIRE UP FROM THE OUTPUT AS INDICATED TO YOUR EXTERNAL DEVICE.

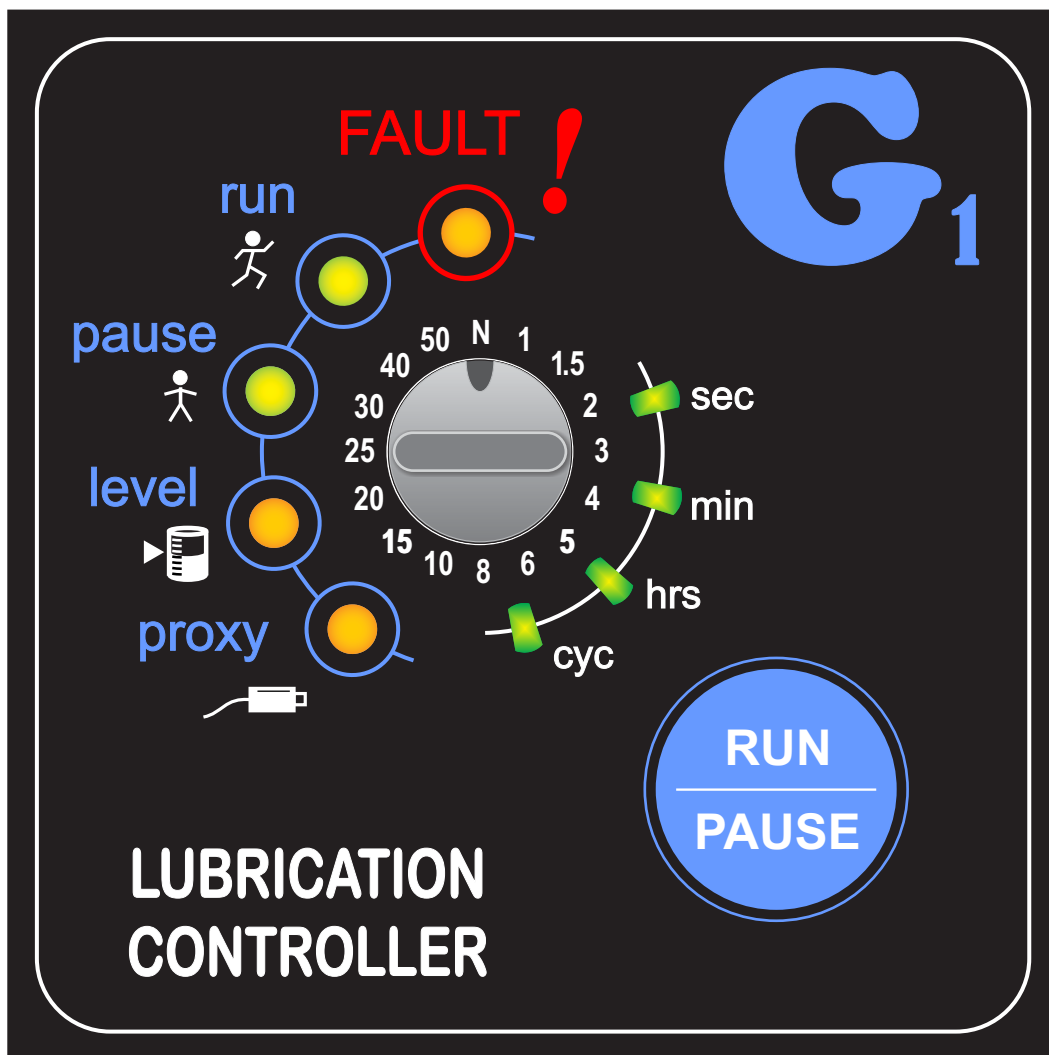
IN THE EVENT OF A WARNING THE EXTERNAL DEVICE WILL ACTIVATE. THE OUTPUT VOLTAGE IS DEPENDANT ON THE INPUT VOLTAGE. IF THE G1 IS USING A **24VDC** INPUT THE, EXTERNAL DEVICE SHOULD ALSO BE **24VDC**.

SETUP FOR CYCLE COUNTING ONLY

“USING PROXY OR PISTON SENSOR”

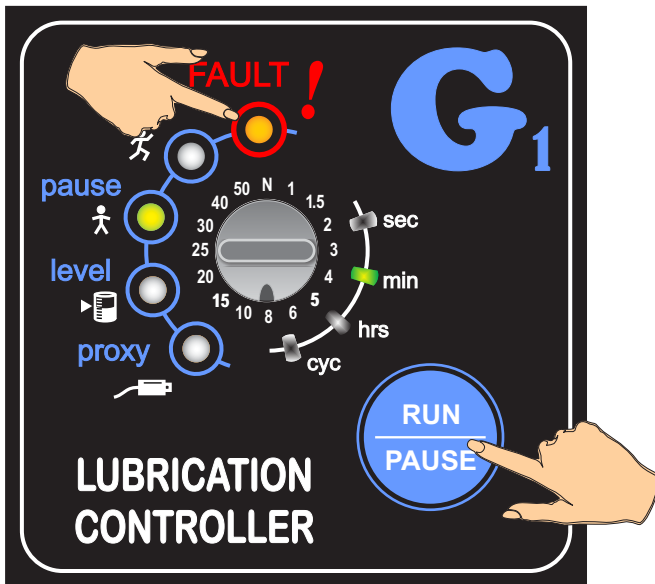
CYCLE COUNTING AND PAUSE TIME ONLY

MONITORING PISTON MOVEMENT



PROGRESSIVE LINE SYSTEMS (PLS)

STEP 1

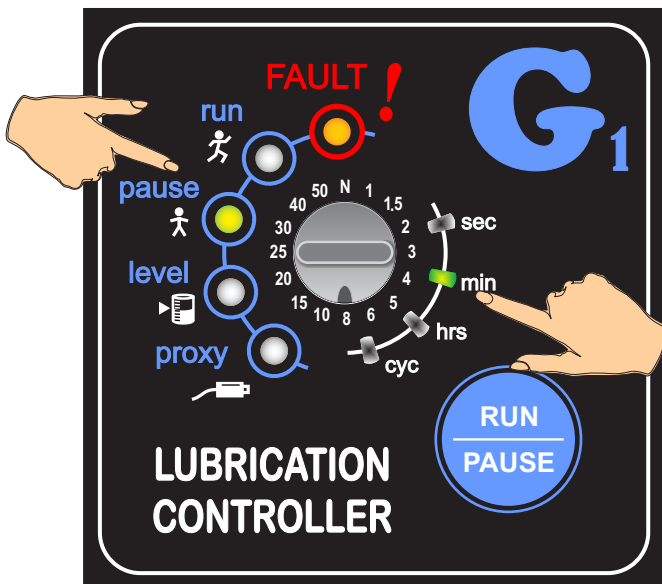


TO ENTER SETUP MODE

SWITCH VEHICLE POWER OFF
PRESS THE RUN/PAUSE BUTTON AND HOLD IN
SWITCH THE VEHICLE POWER ON
RELEASE RUN/PAUSE BUTTON AFTER 2 SEC

FAULT LIGHT "RED" SHOULD BE ON
PAUSE LIGHT "GREEN" SHOULD BE ON
GREEN LED ON RIGHT SHOULD BE ON, EITHER
ON SEC, MIN OR HRS.

STEP 2

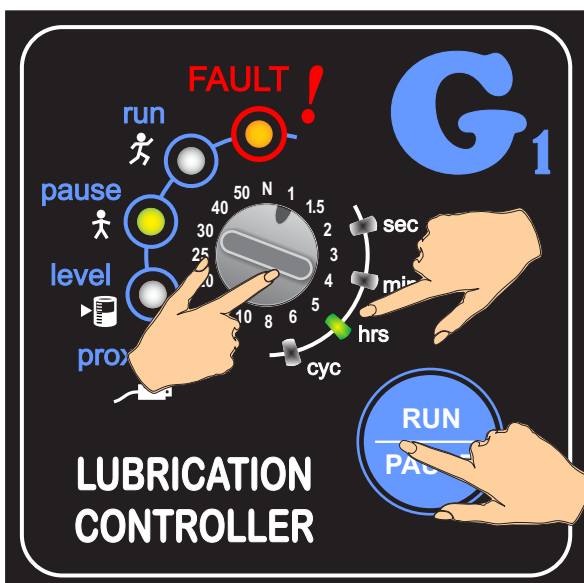


SETUP PAUSE (STOP) TIME

THE **"GREEN" LED** ON PAUSE MUST BE ON
TURN THE DIAL SLOWLY TILL THE **LED** ON
THE RIGHT STARTS TO FLASH. THIS IS THE
LAST PAUSE TIME THE UNIT WAS SET TO

IN THIS EXAMPLE "8 MIN" TURN THE DIAL
TO THE NEW PAUSE TIME REQUIRED

STEP 3



IN THIS EXAMPLE TURN THE DIAL 360 DEGREES
THE **MIN LED** WITH SWITCH OFF
THE **HRS LED** WILL BE ON. YOU ARE NOW IN
THE HOURS MODE.
TURN THE DIAL WITH THE NOTCH ON 1

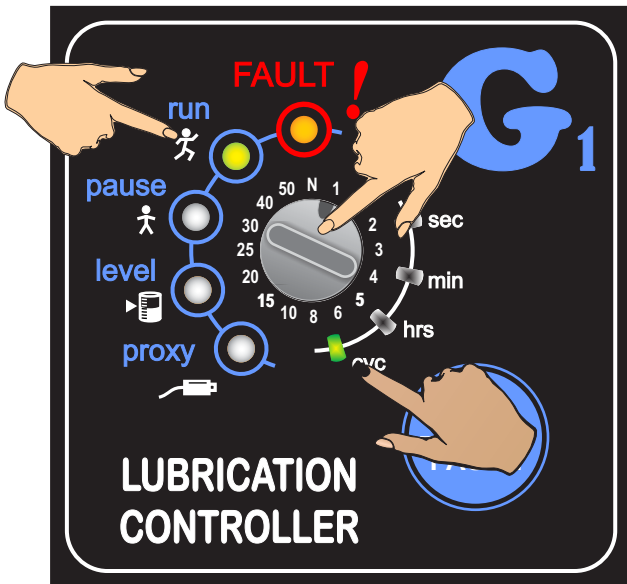
THE UNIT INDICATES YOU HAVE SELECTED
1 HOUR PAUSE (STOP) TIME

AT THIS POINT THE **HRS LED** WILL BE STATIC
PRESS THE RUN/PAUSE BUTTON AND HOLD
IN TILL THE **HRS LED** FLASHES.

RELEASE THE RUN/PAUSE BUTTON. THE **HRS LED**
WILL BE FLASHING, THIS IS THE NEW TIME
OF 1 HOUR SELECTED.

PRESS THE RUN/PAUSE BUTTON BRIEFLY
YOU WILL NOW ENTER THE "RUN MODE"

STEP 4



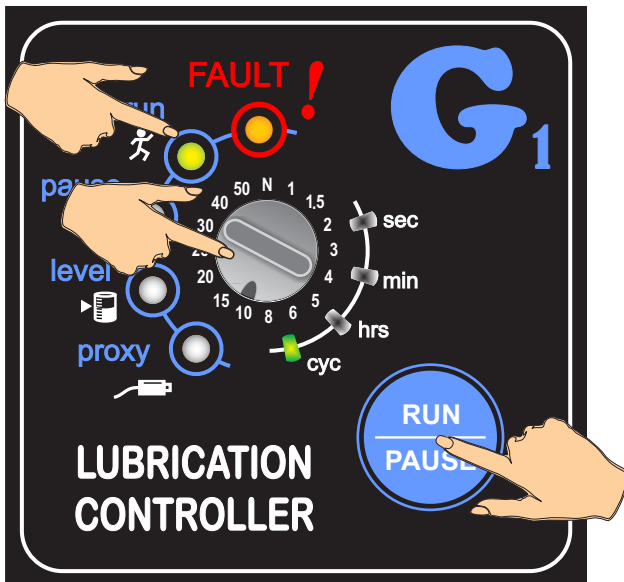
SETUP RUN CYCLE TIME

THE **GREEN LED** "RUN" MUST BE ON
THIS INDICATES YOU ARE IN RUN MODE

TURN THE DIAL CLOCKWISE OR ANTI
CLOCKWISE TILL THE **GREEN LED** ON
CYC LIGHTS UP.

IN THIS EXAMPLE WE ARE TURNING THE
DIAL TILL THE **GREEN LED** ON CYC
LIGHTS UP.

STEP 5

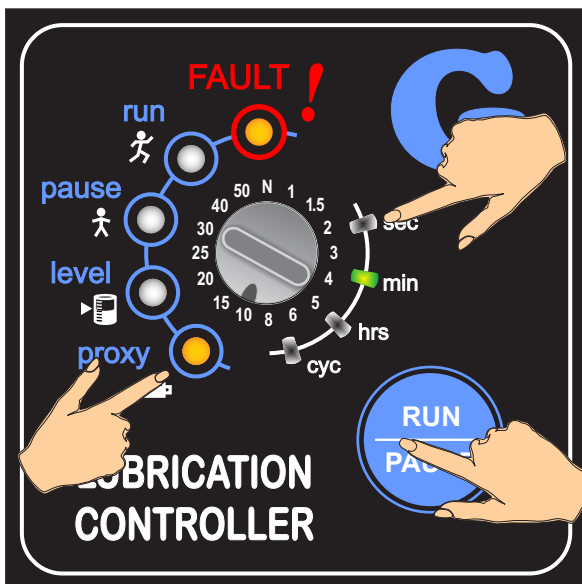


CONTINUE TO TURN THE DIAL TO A SPECIFIC
NUMBER OF CYCLES REQUIRED.
IN THE EXAMPLE WE HAVE TURNED THE DIAL
TO POSITION 10.

POSITION 10 MEANS 10 CYCLES

PUSH THE RUN/PAUSE BUTTON AND HOLD
IN TILL THE **GREEN LED** ON CYC FLASHES.

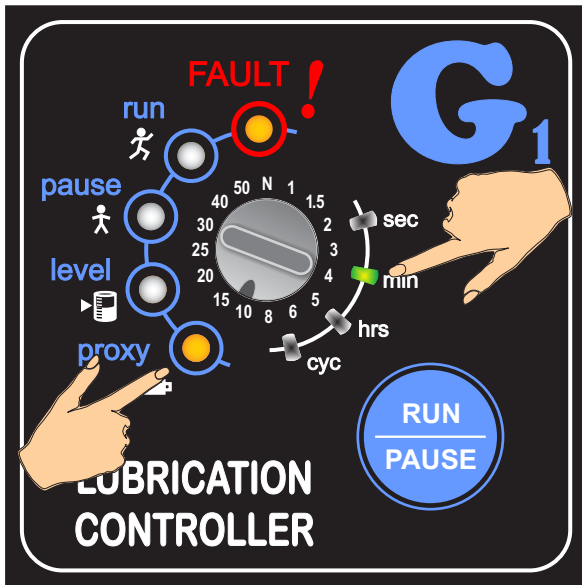
STEP 6



TO ACCEPT THE SETTING OF 10 CYCLES
PRESS THE RUN/PAUSE BUTTON BRIEFLY
THE UNIT WILL NOW PROCEED TO THE
NEXT LEVEL.

THE NEXT LEVEL WILL BE "PROXY" SETUP

STEP 7



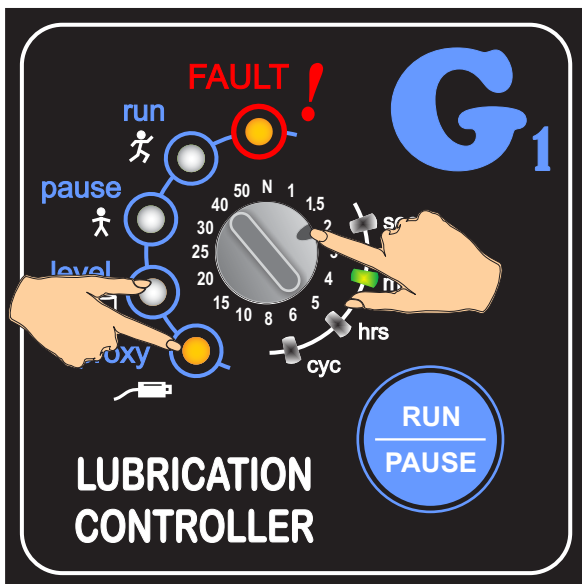
PROXY SETUP

IN THIS SETUP SEQUENCE WE WILL USE A PROXY SENSOR TO MONITOR THE MOVEMENT OF THE PISTON AND COUNT CYCLES

THE SYSTEM WE ARE NOW SETTING UP IS RUN AND PAUSE TIME WITH THE USE OF MONITORING PISTON MOVEMENT TO COUNT CYCLES

WITH THE **RED LED** ON PROXY PROCEED BY TURNING THE DIAL AS PER THE NEXT EXAMPLE

STEP 8

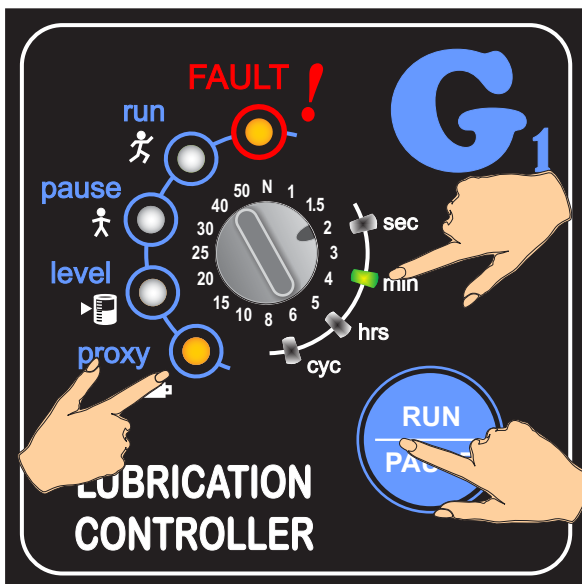


TURN THE DIAL TO THE POSITION MARKED NUMBER "1" IF YOU SELECT THIS POSITION IT MEANS THAT THE PROXIMITY SENSOR WILL TIMEOUT AFTER 1 MINUTE.

THESE TIMEOUT SETTINGS ARE IMPORTANT TO UNDERSTAND. DEPENDING ON WHERE YOU INSTALL THE SENSOR FOR EXAMPLE ON A MAIN DIVIDER OR SECONDARY DIVIDER YOU WILL HAVE TO TIME THE CYCLE.

IF YOUR SYSTEM TOOK 1 MINUTE TO CYCLE THEN YOU CAN SET YOUR TIMEOUT TO 2 MINUTES. ALWAYS SET YOUR TIMEOUT HIGHER THAN THE CYCLE TIME OF YOUR SYSTEM.

STEP 9



TO ACCEPT YOUR SETTING OF "2" MIN PRESS THE RUN/PAUSE BUTTON TILL THE **GREEN LED** ON MIN STARTS TO FLASH

NOTE: THE **GREEN LED** ON THE TIME BAR CAN BE ON ANY STATUS, BY SELECTING "2" AND HOLDING IN THE RUN/PAUSE BUTTON IT MUST FLASH ON WHATEVER STATUS IT IS ON.

ONCE YOU SEE THE **GREEN LED** ON THE TIME BAR FLASHING RELEASE THE RUN/PAUSE BUTTON. PRESS AGAIN BRIEFLY TO MOVE TO THE NEXT LEVEL OF THE SETUP.

AT THIS POINT AS YOU HAVE PRESSED THE RUN/PAUSE BUTTON ALL LED'S EXCEPT THE RED "FAULT" LED SHOULD REMAIN ON.

BY PRESSING THE RUN/PAUSE BUTTON WILL MAKE THE MOTOR TURN. THIS WAY YOU CAN TEST TO SEE IF THE MOTOR IS TURNING THE RIGHT WAY, OR TEST TO SEE IF OTHER PROBLEMS MAY OCCUR WITH THE MOTOR.

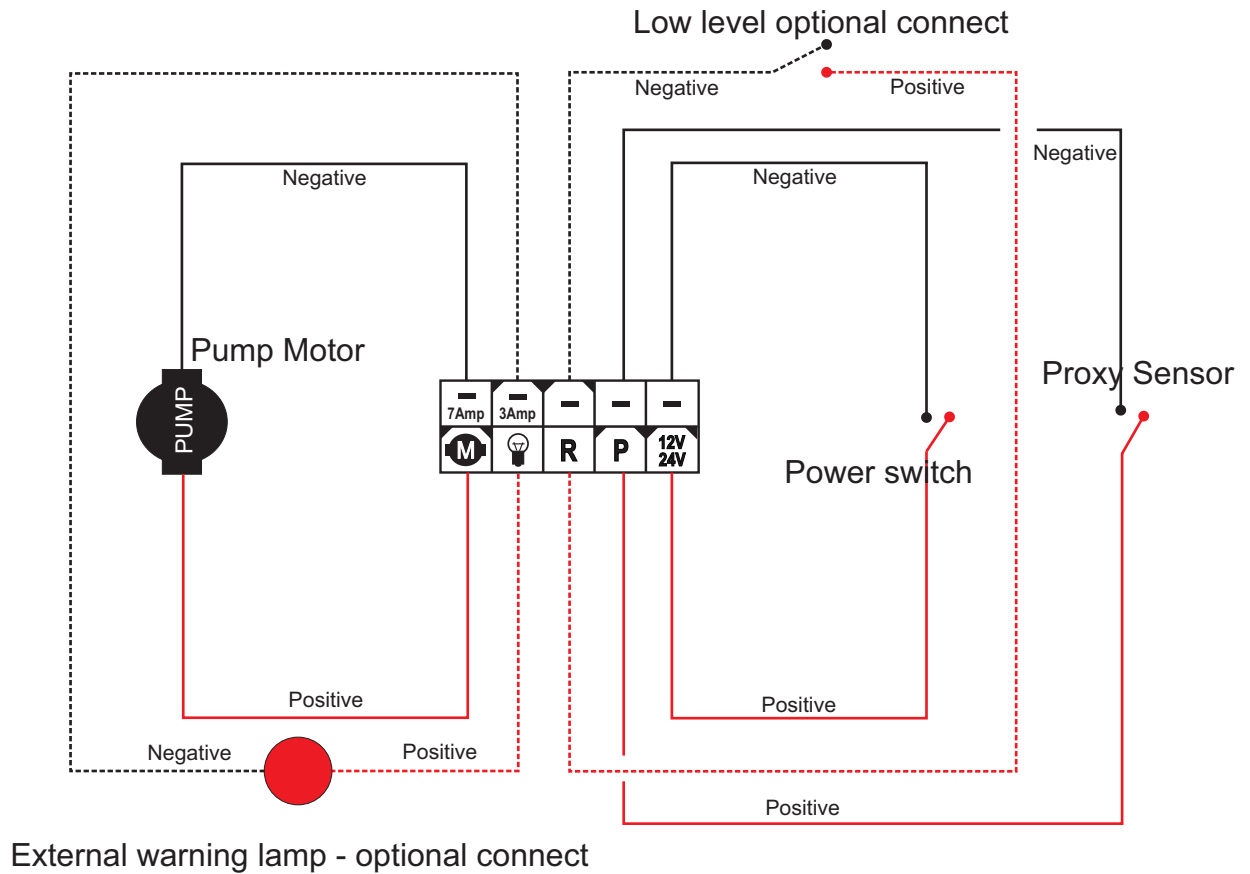
THE PROXY SWITCH CAN ALSO BE TESTED MANUALLY. THE **RED LED** WILL FLASH OFF THEN ON AS CONTACT IS MADE TO THE PROXY SENSOR.

IT IS VERY IMPORTANT THAT THE DISPLAY AS SHOWN HERE IS THE MODE YOU NEED TO BE IN BEFORE SWITCHING POWER OFF.

FAILING TO DO SO WILL RESULT IN NO CHANGES TO THE PROGRAM SETUP.

THE TEST MODE IS TO TEST ALL DEVICES
CONNECTED AND ALSO TO SWITCH POWER
OFF, THEN ON. AT THIS POINT ALL CHANGES
WILL BE ACCEPTED.

WIRING DIAGRAM FOR RUN-PAUSE TIME ONLY USING PROXY PISTON SENSOR



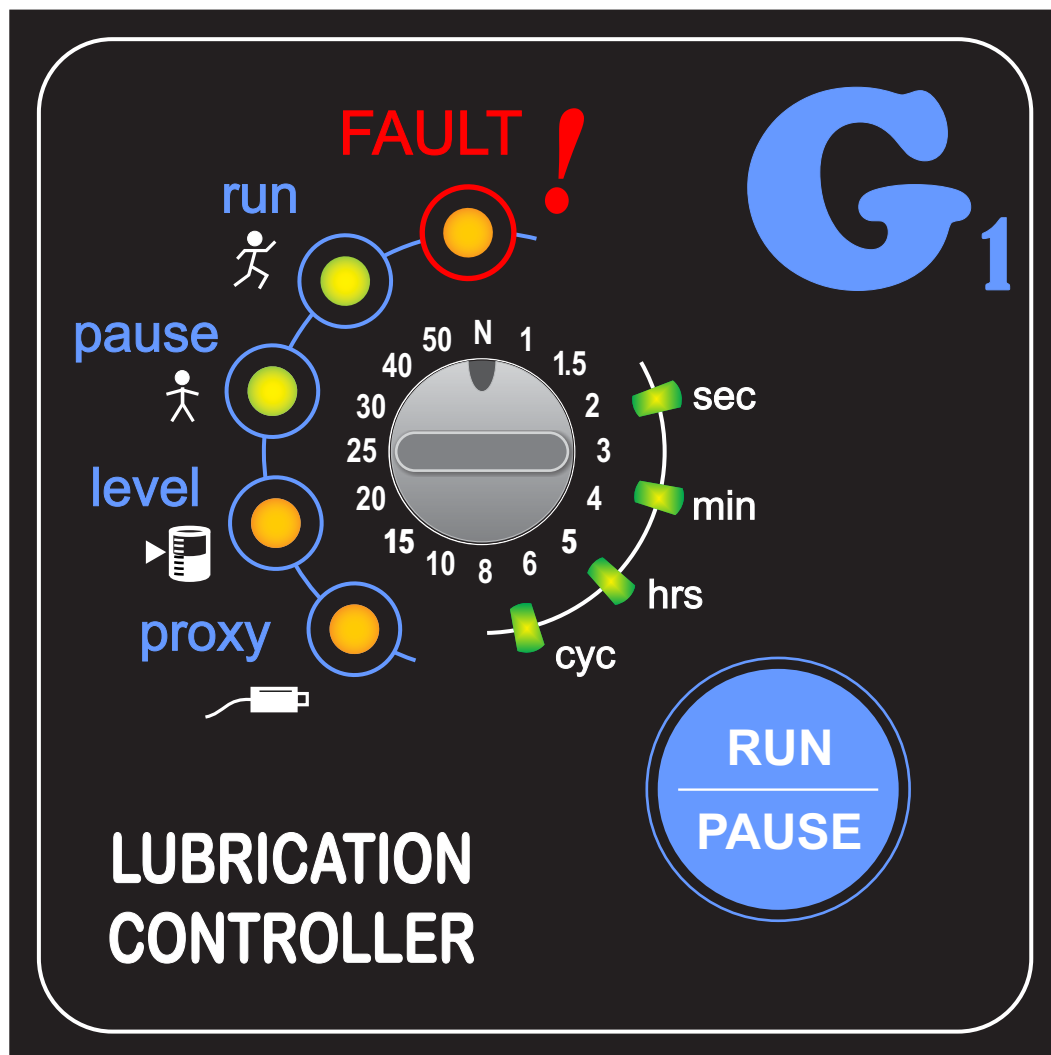
NOTE: CONNECTING THE LOW LEVEL FROM THE PUMP TO THE G1 IS TOTALLY AUTOMATIC. NO SETUP PROCEDURE IS REQUIRED FOR THIS. THE G1 WILL AUTOMATICALLY KNOW IF A LOW LEVEL DEVICE IS CONNECTED OR NOT.

THE EXTERNAL WARNING IS ALSO OPTIONAL TO USER. IF YOU HAVE A LOW LEVEL DEVICE CONNECTED AND YOU WOULD LIKE TO CONNECT A ROTARY OR SOME SORT OF LAMP EXTERNALLY FROM THE G1 THEN YOU CAN SIMPLY WIRE UP FROM THE OUTPUT AS INDICATED TO YOUR EXTERNAL DEVICE.

IN THE EVENT OF A WARNING THE EXTERNAL DEVICE WILL ACTIVATE. THE OUTPUT VOLTAGE IS DEPENDANT ON THE INPUT VOLTAGE. IF THE G1 IS USING A **24VDC** INPUT, THE EXTERNAL DEVICE SHOULD ALSO BE **24VDC**.

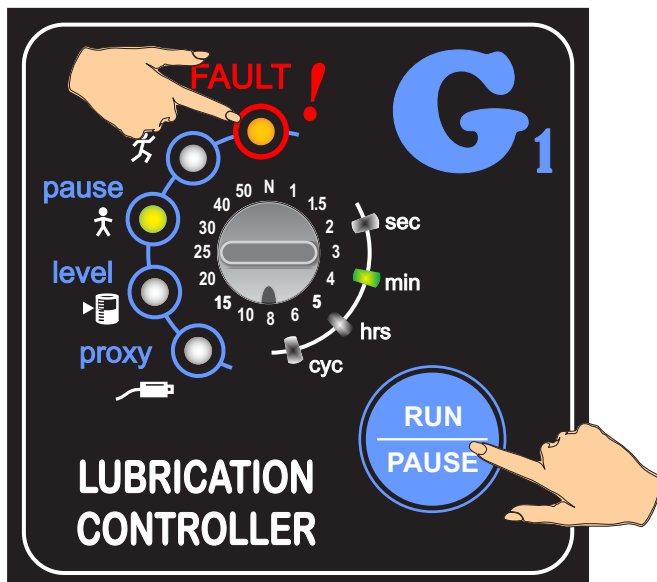
SETUP FOR SINGLE LINE SYSTEMS

“USING PROXY/ PRESSURE SWITCH”



SINGLE LINE SYSTEMS (SLS)

STEP 1

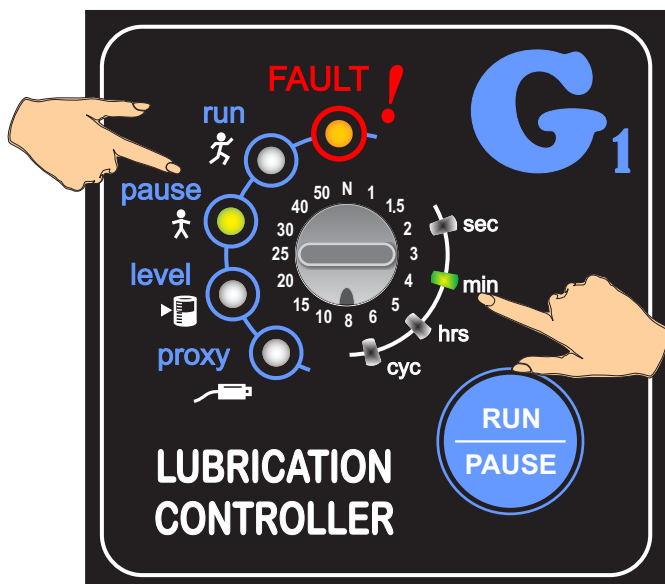


TO ENTER SETUP MODE

SWITCH VEHICLE POWER OFF
PRESS THE RUN/PAUSE BUTTON AND HOLD IN
SWITCH THE VEHICLE POWER ON
RELEASE RUN/PAUSE BUTTON AFTER 2 SEC

FAULT LIGHT "RED" SHOULD BE ON
PAUSE LIGHT "GREEN" SHOULD BE ON
GREEN LED ON RIGHT SHOULD BE ON, EITHER
ON SEC, MIN OR HRS.

STEP 2

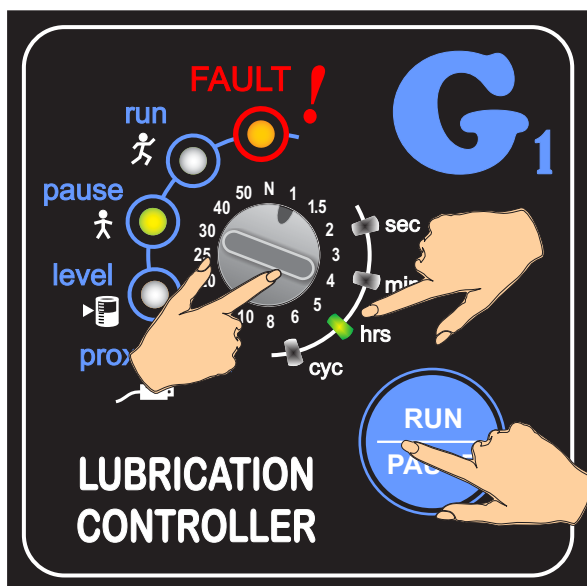


SETUP PAUSE (STOP) TIME

THE "GREEN" LED ON PAUSE MUST BE ON
TURN THE DIAL SLOWLY TILL THE LED ON
THE RIGHT STARTS TO FLASH. THIS IS THE
LAST PAUSE TIME THE UNIT WAS SET TO

IN THIS EXAMPLE "8 MIN" TURN THE DIAL
TO THE NEW PAUSE TIME REQUIRED

STEP 3



IN THIS EXAMPLE TURN THE DIAL 360 DEGREES
THE MIN LED WITH SWITCH OFF
THE HRS LED WILL BE ON. YOU ARE NOW IN
THE HOURS MODE.
TURN THE DIAL WITH THE NOTCH ON 1

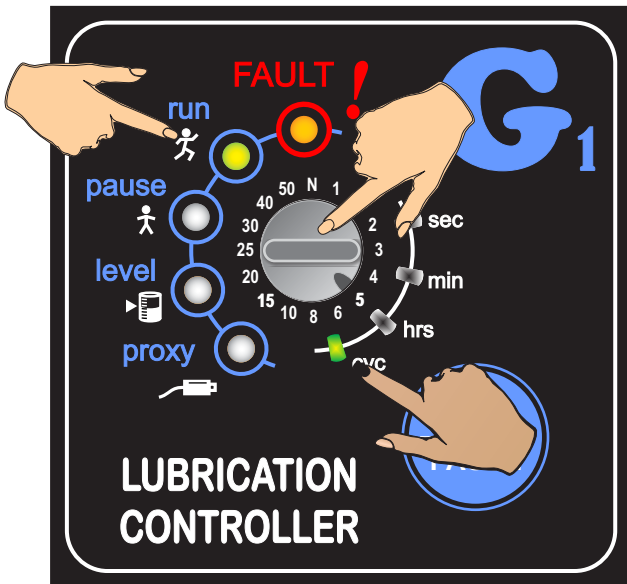
THE UNIT INDICATES YOU HAVE SELECTED
1 HOUR PAUSE (STOP) TIME

AT THIS POINT THE HRS LED WILL BE STATIC
PRESS THE RUN/PAUSE BUTTON AND HOLD
IN TILL THE HRS LED FLASHES.

RELEASE THE RUN/PAUSE BUTTON. THE HRS
LED WILL BE FLASHING, THIS IS THE NEW TIME
OF 1 HOUR SELECTED.

PRESS THE RUN/PAUSE BUTTON BRIEFLY
YOU WILL NOW ENTER THE "RUN MODE"

STEP 4



SETUP RUN CYCLE TIME

THE GREEN LED "RUN" MUST BE ON
THIS INDICATES YOU ARE IN RUN MODE

TURN THE DIAL CLOCKWISE OR ANTI
CLOCKWISE TILL THE GREEN LED ON
CYC LIGHTS UP.

IN THIS EXAMPLE WE ARE TURNING THE
DIAL TILL THE GREEN LED ON CYC
LIGHTS UP.

STEP 5



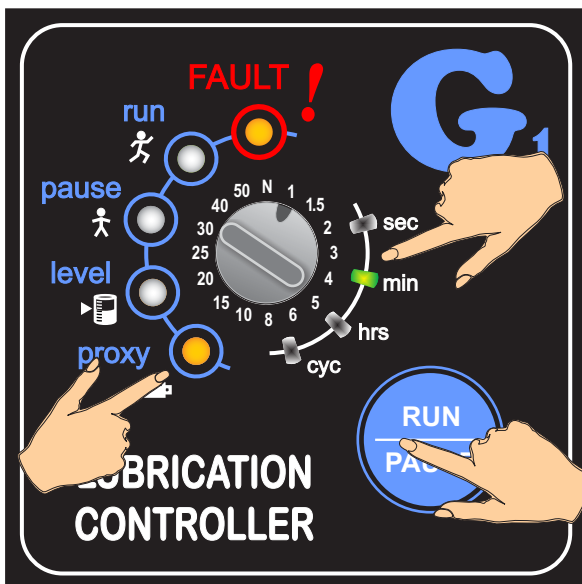
CONTINUE TO TURN THE DIAL TO A SPECIFIC
NUMBER OF CYCLES REQUIRED.
IN THE EXAMPLE WE HAVE TURNED THE DIAL
TO POSITION 1.

POSITION 1 MEANS 1 CYCLE

1 CYCLE IN SINGLE LINE SYSTEMS IS ALL
THAT MUST BE SET. THE PRESSURE SWITCH
WILL ONLY ALLOW 1 CONTACT. AS 1 CONTACT
IS REACHED THE PUMP WILL SWITCH OFF
AND PROCEED TO VENT THE MAIN LINE.

PUSH THE RUN/PAUSE BUTTON AND HOLD
IN TILL THE GREEN LED ON CYC FLASHES.

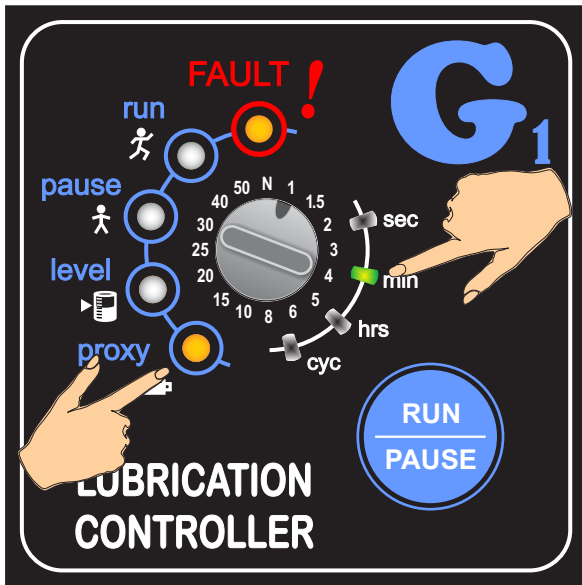
STEP 6



TO ACCEPT THE SETTING OF 1 CYCLE
PRESS THE RUN/PAUSE BUTTON BRIEFLY
THE UNIT WILL NOW PROCEED TO THE
NEXT LEVEL.

THE NEXT LEVEL WILL BE "PROXY" SETUP

STEP 7



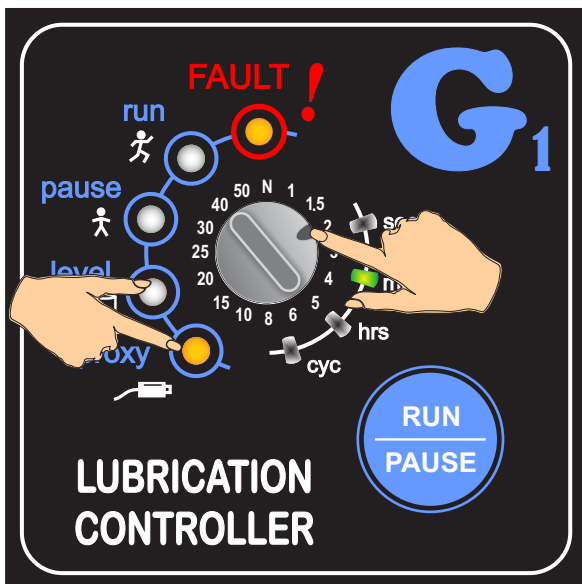
PROXY- PRESSURE SWITCH SETUP

IN THIS SETUP SEQUENCE WE WILL USE A PROXY - PRESSURE SWITCH TO MONITOR THE CLOSING OF THE PRESSURE SWITCH CONTACTS

THE SYSTEM WE ARE NOW SETTING UP IS RUN AND PAUSE TIME WITH THE USE OF A PRESSURE SWITCH TO SWITCH PUMP OFF

WITH THE RED LED ON PROXY PROCEED BY TURNING THE DIAL AS PER THE NEXT EXAMPLE

STEP 8

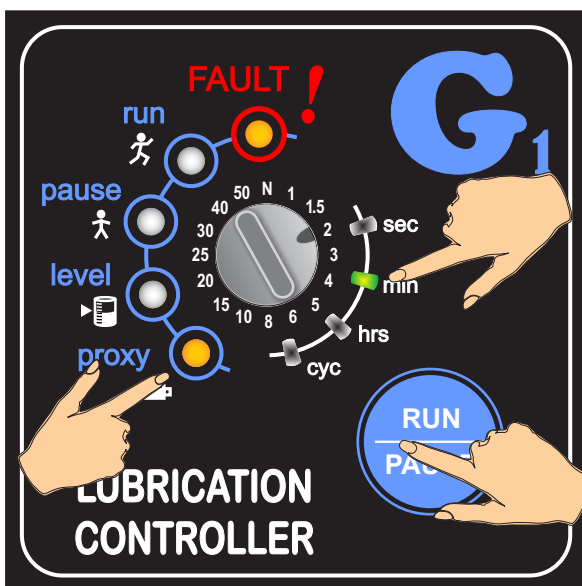


TURN THE DIAL TO THE POSITION MARKED NUMBER "1" IF YOU SELECT THIS POSITION IT MEANS THAT THE PRESSURE SWITCH WILL TIMEOUT AFTER 1 MINUTE.

THESE TIMEOUT SETTINGS ARE IMPORTANT TO UNDERSTAND. THE TIMEOUT OF THE PRESSURE SWITCH WILL DEPEND ON THE SIZE AND LENGTHS OF THE MAIN LINE USED ON THE SINGLE LINE SYSTEM.

TO CHECK THE TIMEOUT OF PRESSURE SWITCH RUN THE PUMP TILL THE CONTACTS OF THE PRESSURE SWITCH CLOSE. SHOULD IT TAKE 1 MINUTE THEN SET YOUR TIMEOUT TO 2 MIN.

STEP 9

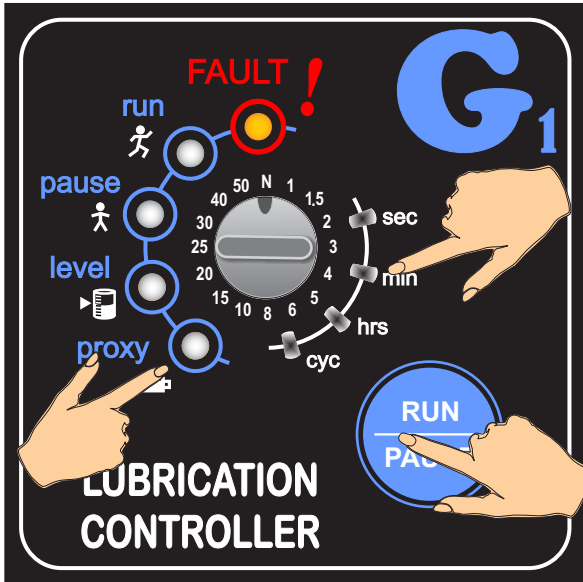


TO ACCEPT YOUR SETTING OF "2" MIN PRESS THE RUN/PAUSE BUTTON TILL THE GREEN LED ON MIN STARTS TO FLASH

NOTE: THE GREEN LED ON THE TIME BAR CAN BE ON ANY STATUS, BY SELECTING "2" AND HOLDING IN THE RUN/PAUSE BUTTON IT MUST FLASH ON WHATEVER STATUS IT IS ON.

ONCE YOU SEE THE GREEN LED ON THE TIME BAR FLASHING RELEASE THE RUN/PAUSE BUTTON. PRESS AGAIN BRIEFLY TO MOVE TO THE NEXT LEVEL OF THE SETUP.

STEP 10



TEST AND ACCEPT MODE

AT THIS POINT AS YOU HAVE PRESSED THE RUN/PAUSE BUTTON ALL LED'S EXCEPT THE RED "FAULT" LED SHOULD REMAIN ON.

THE UNIT IS NOW IN "TEST MODE"

BY PRESSING THE RUN/PAUSE BUTTON WILL MAKE THE MOTOR TURN. THIS WAY YOU CAN TEST TO SEE IF THE MOTOR IS TURNING THE RIGHT WAY, OR TEST TO SEE IF OTHER PROBLEMS MAY OCCUR WITH THE MOTOR.

BY ACTIVATING THE LOW LEVEL MANUALLY (IF YOU HAVE CONNECTED- NO SETUP IS REQUIRED FOR THIS) THE LOW LEVEL LED WILL LIGHTUP INDICATING THAT IT IS WORKING

THE PRESSURE SWITCH CAN ALSO BE TESTED MANUALLY. THE RED LED WILL FLASH OFF THEN ON AS CONTACT IS MADE TO THE PRESSURE SWITCH.

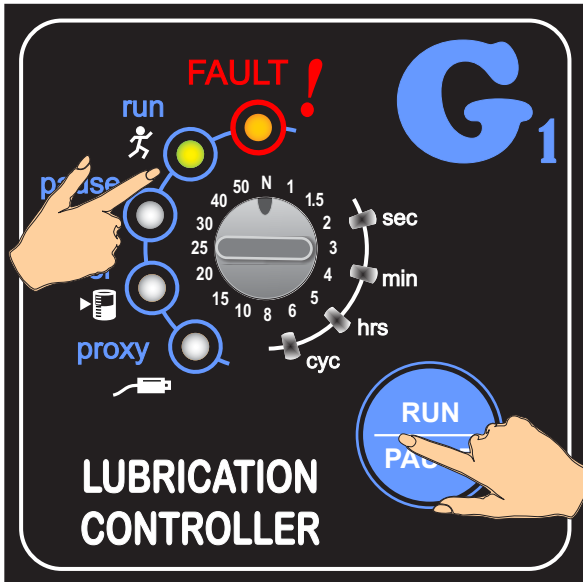
SHOULD YOU WANT TO MAKE CHANGES SIMPLY PRESS THE RUN/PAUSE BUTTON AND GO THROUGH THE SETUP AGAIN.

IT IS VERY IMPORTANT THAT THE DISPLAY AS SHOWN HERE IS THE MODE YOU NEED TO BE IN BEFORE SWITCHING POWER OFF.

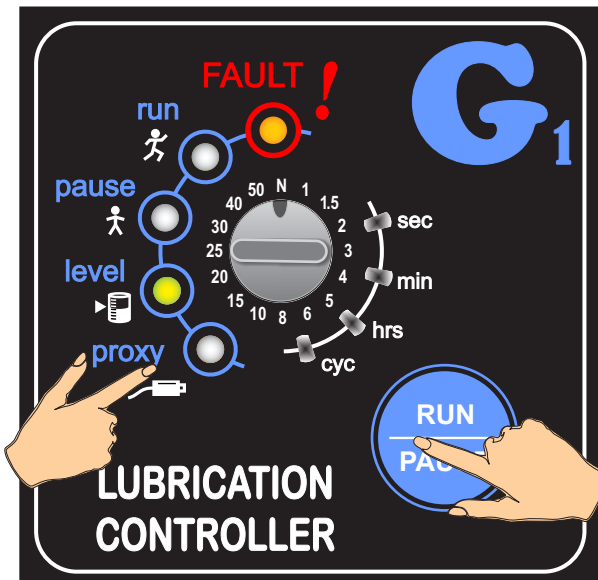
FAILING TO DO SO WILL RESULT IN NO CHANGES MADE ACCEPTED.

THE TEST MODE IS TO TEST ALL DEVICES CONNECTED AND ALSO TO SWITCH POWER OFF, THEN ON. AT THIS POINT ALL CHANGES WILL BE ACCEPTED.

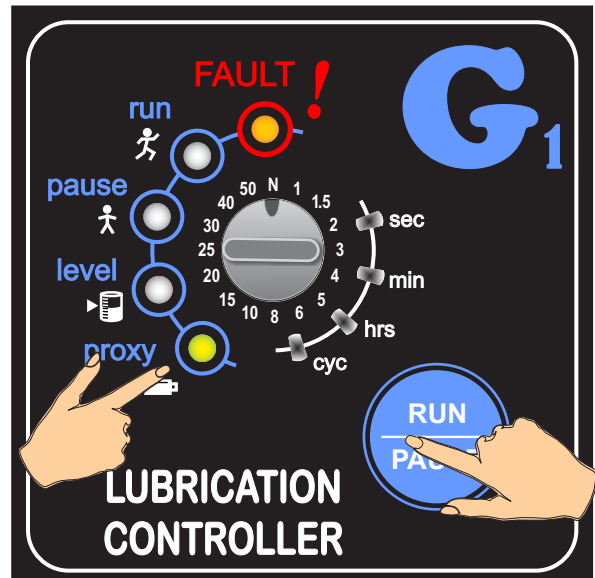
PRESS RUN/PAUSE RUN LED ON AND MOTOR TURNS



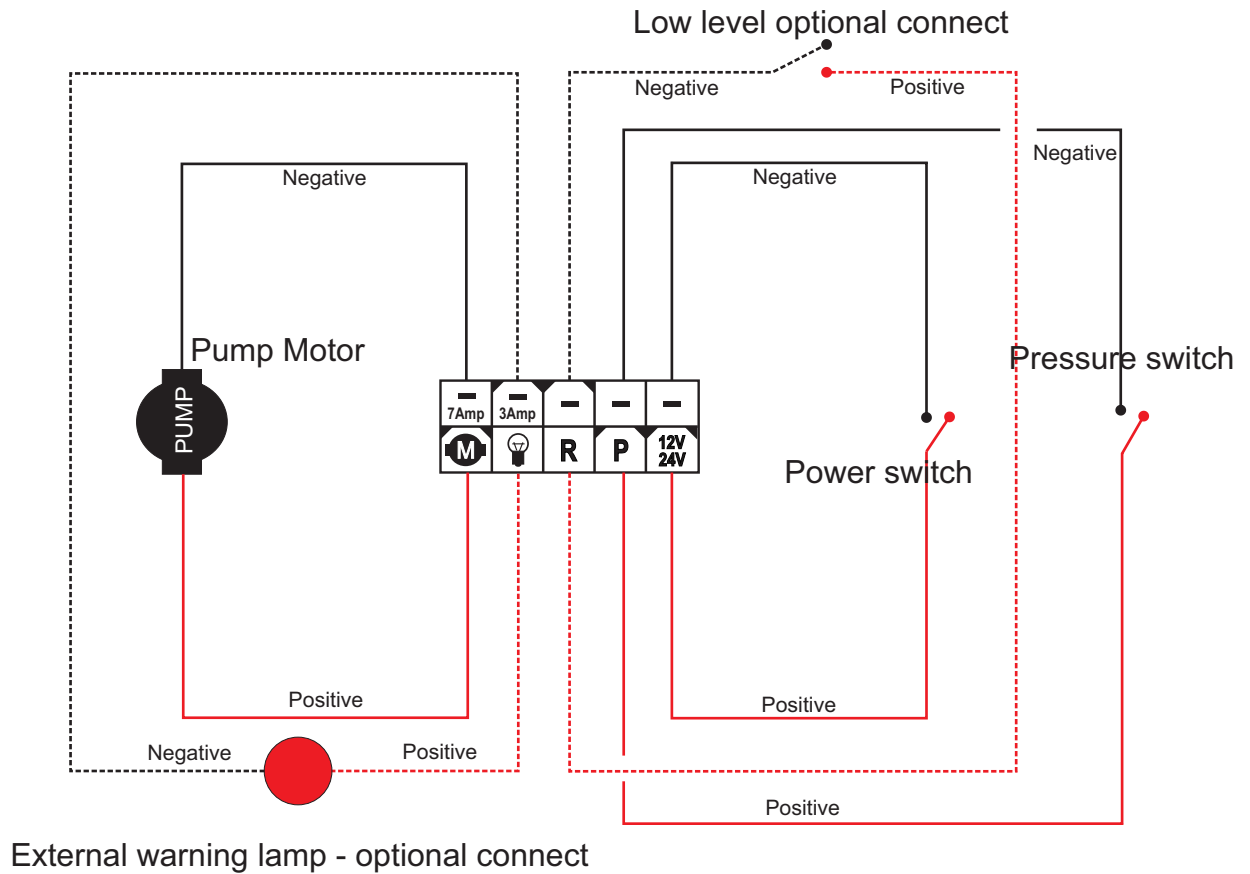
ACTIVATE LEVEL SENSOR - - GREEN LED WILL LIGHT UP



ACTIVATE PRESSURE SWITCH - - GREEN LED WILL LIGHT UP



WIRING DIAGRAM FOR SINGLE LINE SYSTEMS ONLY USING PRESSURE SWITCH



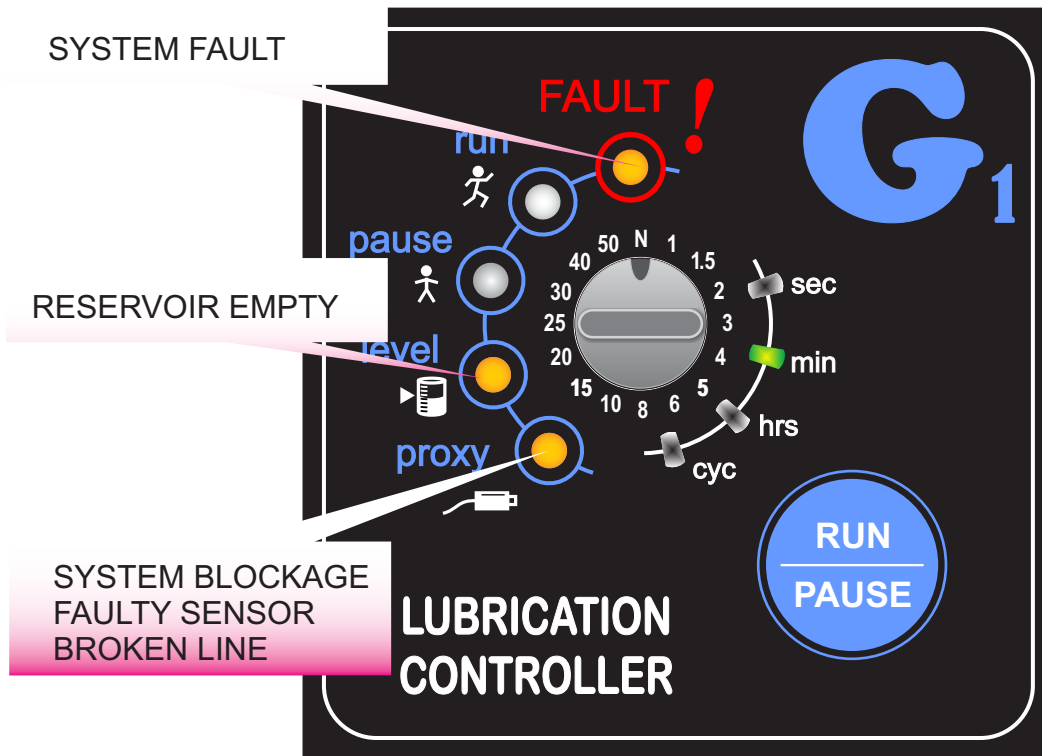
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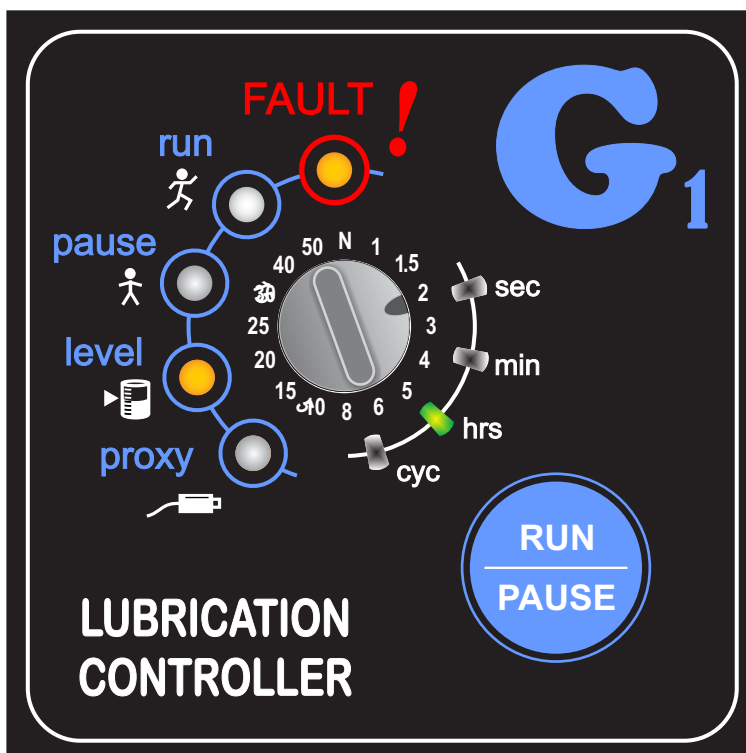
IN THE EVENT OF A WARNING THE EXTERNAL DEVICE WILL ACTIVATE. THE OUTPUT VOLTAGE IS DEPENDANT ON THE INPUT VOLTAGE. IF THE G1 IS USING A **24VDC** INPUT, THE EXTERNAL DEVICE SHOULD ALSO BE **24VDC**.

OTHER FEATURES OF THE GENIE G1

FAULTS



DURATION OF FAULTS



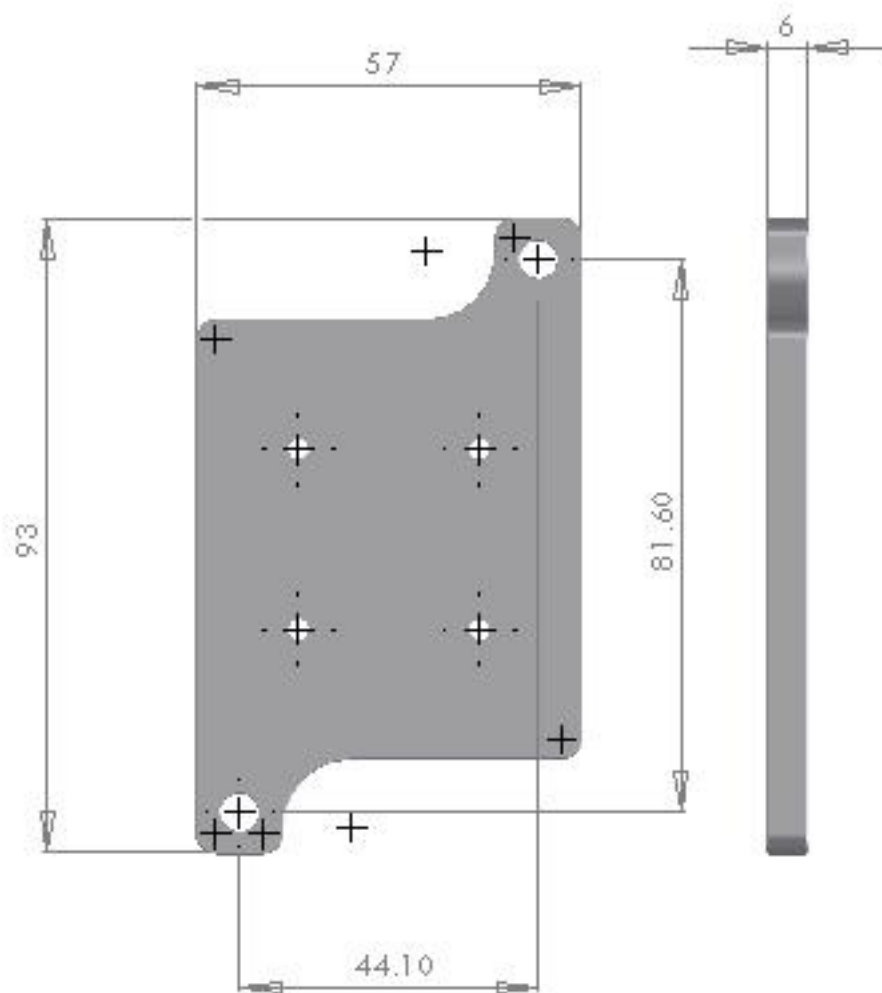
ON ANY FAULT FOR EXAMPLE LOW LEVEL OR SENSOR FAULT YOU ARE ABLE TO ESTABLISH THE DURATION OF THAT FAULT

BY TURNING THE DIAL "IN FAULT MODE" SLOWLY, NOTCH BY NOTCH IN A CLOCK WISE DIRECTION YOU WILL SEE THAT ON A SPECIFIC TIME THE GREEN LED WILL BEGIN TO FLASH.

AS PER THIS EXAMPLE WE HAVE A LOW LEVEL FAULT THAT HAS BEEN ACTIVE FOR 2 HOURS

BY PRESSING THE RUN/PAUSE BUTTON WILL RESET THE FAULT. IF THE FAULT HAS NOT BEEN RECTIFIED THE UNIT WILL RESUME ITS FAULT STATUS.

MOUNTING DIMENSIONS



General Precautions

The user manual is intended to familiarize the user with the G1 controller and its designated use. The operating instructions contain important information on how to operate the G1 controller safely, properly and efficiently. Observing these instructions will help reduce confusion and actual damage to the G1 controller. This manual must be read and applied by any person in charge of carrying out any form of setting up or work on the G1 controller.

Operational Precautions:

Includes the total understanding of the G1 specifications. Never connect to any other voltage supply other than that specified in the manuals contained within.

The owner/user must ensure at all times that installation or inspections are executed by authorized and qualified personnel who have thoroughly read the operating instruction manual.

Any setting up or work on the G1 controller must be done while the machine is off. The machine must be in such a position that it will not cause harm to any person should the machine be switched on for the setting up of the G1 controller.

In the event that the machine needs to be on for the setting up of the G1 controller it must be on condition that the operator or personnel working on the machine are advised.

Never switch the machine on without the prior knowledge of the operator/owner or somebody that has full knowledge of the machines operation.

Warnings:

Never weld on a machine while the main switch of the machine is on. Insure that the machines main switch is off and correctly tagged. Welding on a machine can cause serious damage to the G1 controller.

Do not alter or modify any part of the G1 controller.

Insure that the G1 controller is mounted in a suitable area.

Do not mount the G1 controller near excessive heat areas.

Always use the right specified fuse rating for the G1 controller.

Never exceed the voltage rating of the G1 controller.

Never expose the G1 controller to direct sunlight.

Never expose the G1 controller to water or other substances.

