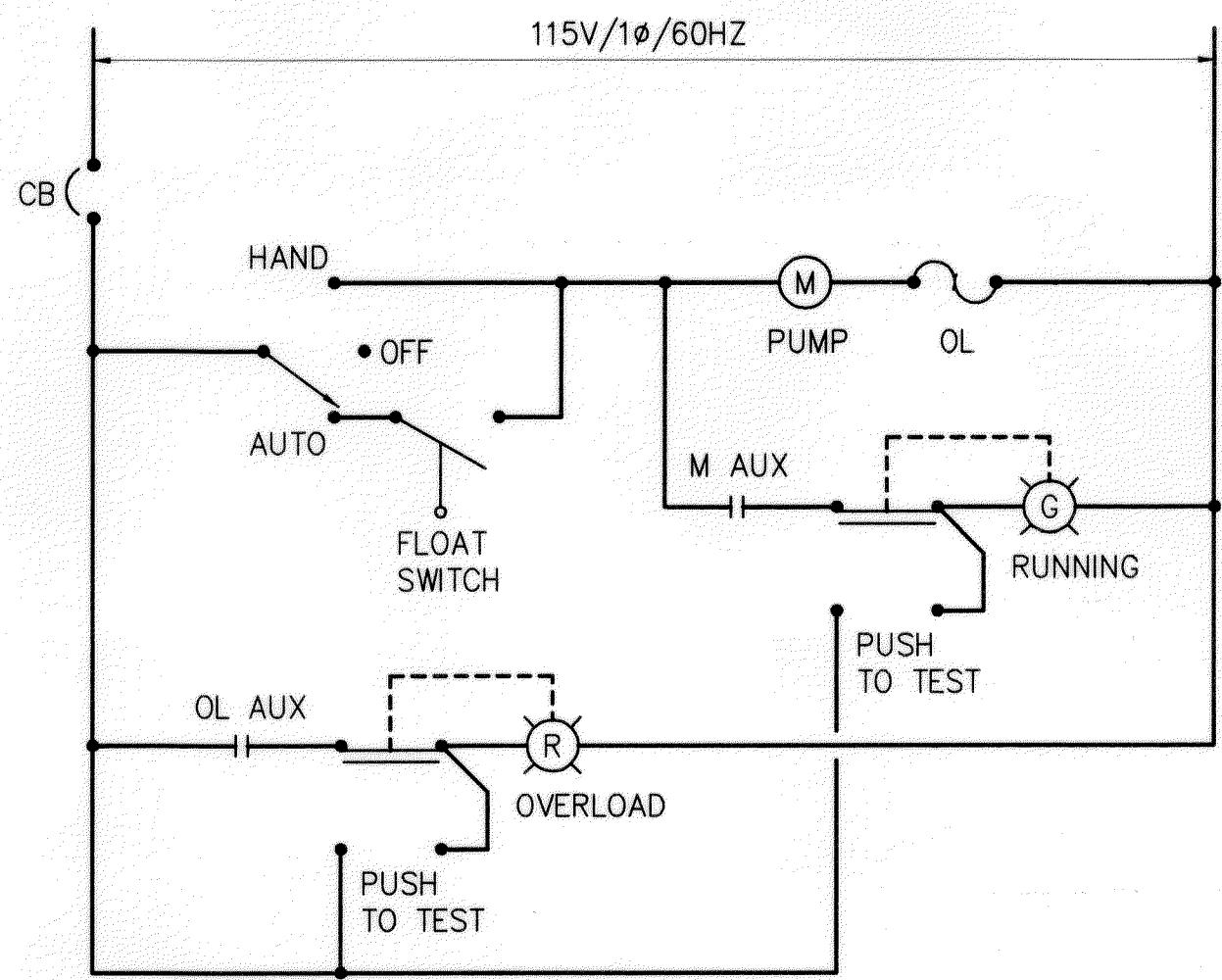


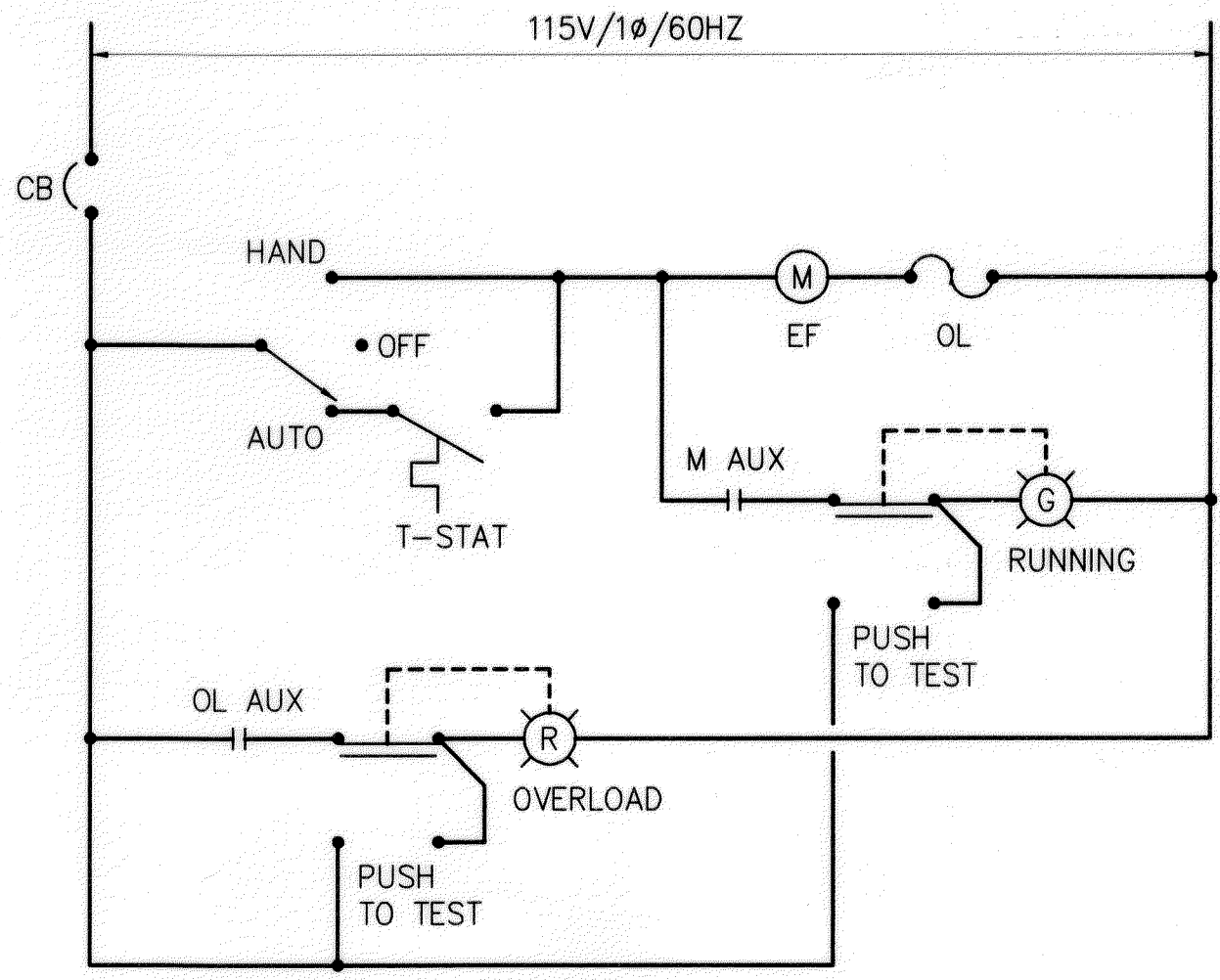
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-M-05-98	2002	86	99



- NOTES:
1. IN AUTO MODE, PUMP OPERATES BASED ON FLOAT SWITCH POSITION.
  2. IN HAND MODE, PUMP OPERATES UNTIL TURNED OFF.

SUMP PUMP CONTROL DIAGRAM

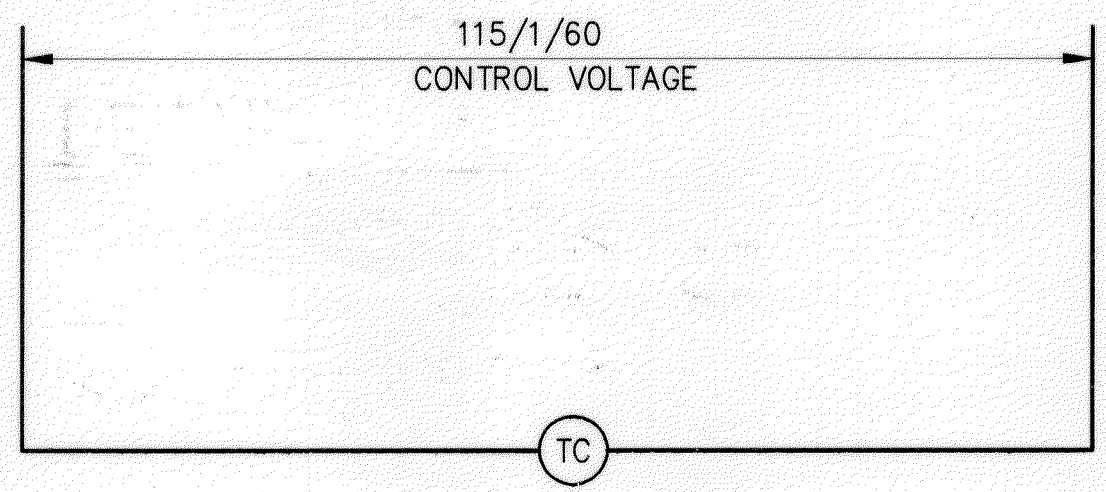
SCALE: NONE



- NOTES:
1. IN AUTO MODE, FAN OPERATES BASED ON THERMOSTAT POSITION.
  2. IN HAND MODE, FAN OPERATES UNTIL TURNED OFF.

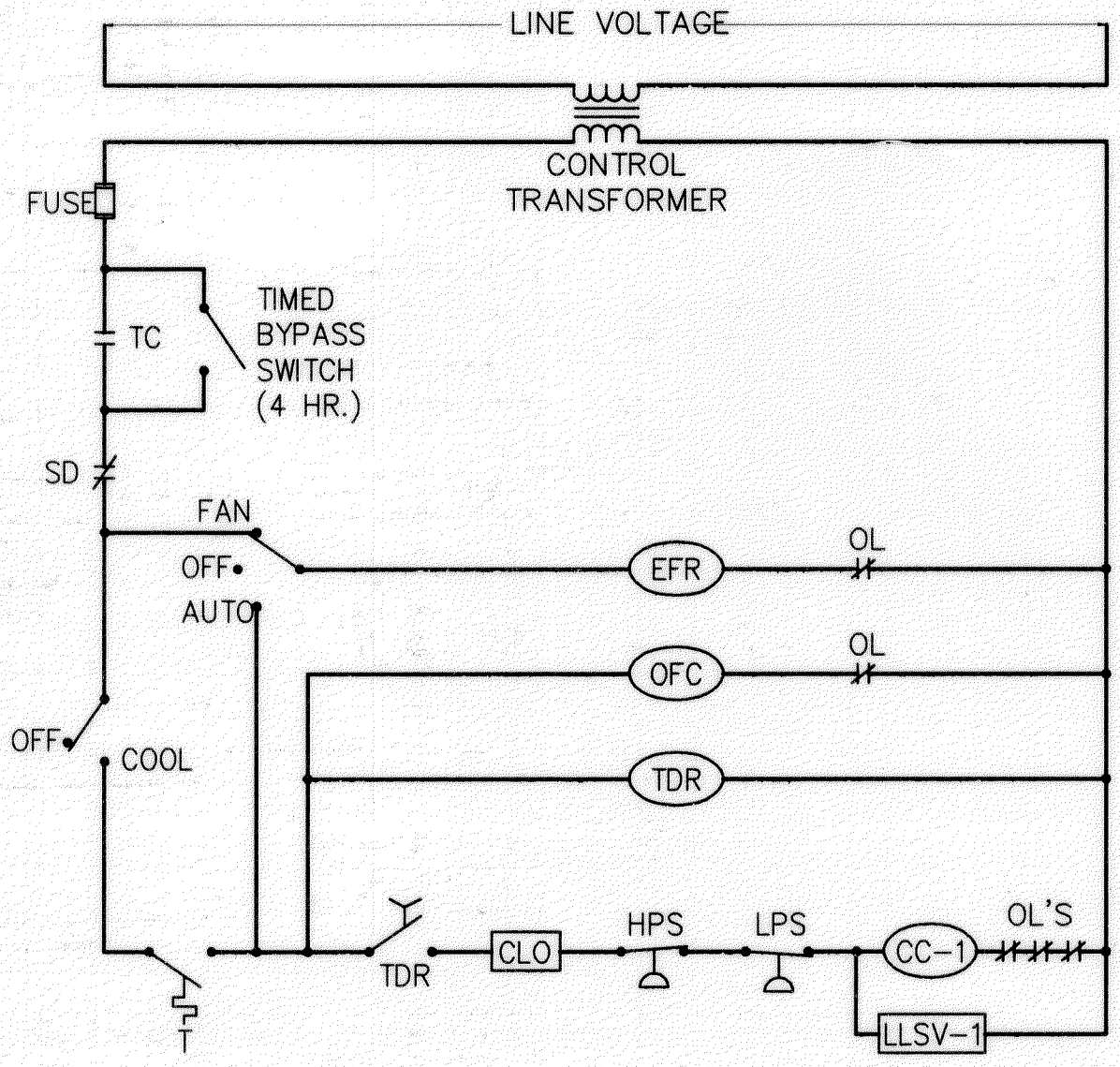
EF-3 CONTROL DIAGRAM

SCALE: NONE



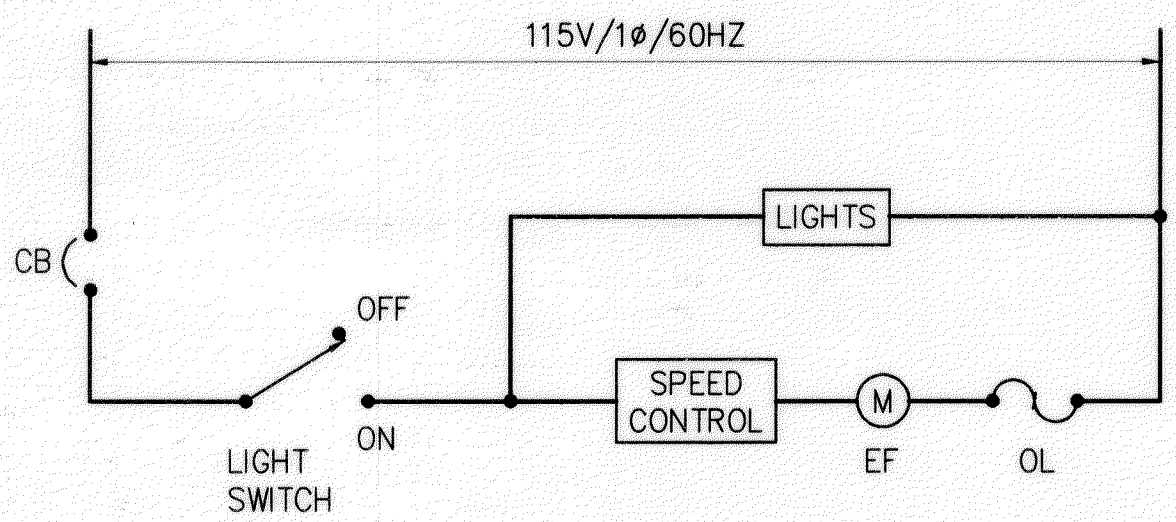
TIMECLOCK CONTROL DIAGRAM

SCALE: NONE



ACCU CONTROL DIAGRAM

SCALE: NONE



EF-1 OR EF-2 CONTROL DIAGRAM

SCALE: NONE

AIR CONDITIONING SEQUENCE OF OPERATION

1. THE TIME CLOCK IS PROGRAMMED TO START AND STOP THE A/C SYSTEM ACCORDING TO A PREDETERMINED SCHEDULE.
2. THE INDOOR FAN SHALL RUN CONTINUOUSLY DURING THE SCHEDULED HOURS OF OPERATION.
3. DURING THE SCHEDULED HOURS OF OPERATION AND A CALL FOR COOLING, THE THERMOSTAT CLOSES AND STARTS THE OUTDOOR FAN AND COMPRESSOR IF ITS SAFETIES ARE SATISFIED.
4. THE COMPRESSOR STARTS UNLOADED AND LOADS TO MEET THE DEMAND.
5. THE THERMOSTAT SENSES RETURN AIR TEMPERATURE AS INDICATED. THERMOSTAT SETPOINT SHALL BE ADJUSTED TO MAINTAIN 75 DEGREE F ROOM TEMPERATURE.
6. THE COMPRESSOR LOADS AND UNLOADS TO MEET DEMAND.
7. THE TIMED BYPASS SWITCH OVERRIDES THE TIME CLOCK SCHEDULE FOR AFTER HOURS OR OTHER UNSCHEDULED OPERATION. THE TIMED BYPASS SWITCH SHALL BE ADJUSTABLE FOR UP TO FOUR HOURS OF TIMED OVERRIDE OPERATION.
8. THE COMPRESSOR LOCK-OUT WILL LOCK OFF THE COMPRESSOR IN THE EVENT ANY SAFETY DEVICE IS ACTIVATED (HIGH OR LOW PRESSURE SWITH OR COMPRESSOR OVERLOAD).
9. THE TIME DELAY RELAY WILL LOCK OFF THE COMPRESSOR FOR THREE MINUTES WHEN EITHER THE THERMOSTAT OPENS OR THERE IS A MOMENTARY POWER OUTAGE.

CONTROL ABBREVIATIONS

- CC COMPRESSOR CONTACTOR
- CLO COMPRESSOR LOCK-OUT
- CR CONTACT RELAY
- EFR EVAPORATOR FAN RELAY
- HPS HIGH PRESSURE SWITCH
- LLSV LIQUID LINE SOLENOID VALVE
- LPS LOW PRESSURE SWITCH
- M MOTOR
- OFC OUTDOOR FAN CONTACTOR
- SD SMOKE DETECTOR
- T THERMOSTAT
- TC TIME CLOCK (7-DAY)
- TDR TIME DELAY RELAY



THIS WORK WAS PREPARED BY  
ME OR UNDER MY SUPERVISION

*Ken I. Mashima*

CONTROL DIAGRAMS

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

CONTROL DIAGRAMS

MOLOKAI BASEYARD  
MOLOKAI INDUSTRIAL PARK  
Project No. HWY-M-05-98

Scale: As Noted Date: SEPT 13, 2001

SHEET No. M12.1 OF M12.1 SHEETS