

THROTTLE RUN TERMINAL
CPR=C\CPR\CPR.SYS
CPR=C\CPR\CPRSENSOR.SYS

THROTTLESTOP.SYS
THROTTLESTOP<OPERATIONAL>

CPR.SYS
CPR.SYS<OPERATIONAL>
THROTTLERUNTERMINALPASS1.BAT

CONTROL FRONT LEFT THROTTLE RUN TERMINAL BOARD.BAT

C><IF CPR.SYS><CARRIES CURRENT> == <THROTTLESTOP><CARRIES CURRENT>
THEN
C> <THROTTLERUNTERMINALPASS1><OPERATIONAL>

C>IF<THROTTLE5-6><CARRIES CURRENT> == <ER><CARRIESCURRENT>
THEN
C><THROTTLERUNTERMINALPASS2><OPERATIONAL>

C>IF<THROTTLE3-6><CARRIES CURRENT> == <ER><CARRIES CURRENT>
THEN
C><THROTTLERUNTERMINALPASS3><OPERATIONAL>

C>IF<THROTTLE2,4,6,8><CARRIES CURRENT> == <ER><CARRIES CURRENT>
THEN
C><THROTTLERUNTERMINALPASS4><OPERATIONAL>

CONTROL FRONT RIGHTTHROTTLE RUN TERMINAL BOARD.BAT

C><IF CPR.SYS><CARRIES CURRENT> == <THROTTLESTOP><CARRIES CURRENT>
THEN
C> <THROTTLERUNTERMINALPASS1><OPERATIONAL>

C>IF<THROTTLE5-6><CARRIES CURRENT> == <ER><CARRIESCURRENT>
THEN
C><THROTTLERUNTERMINALPASS2><OPERATIONAL>

C>IF<THROTTLE3-6><CARRIES CURRENT> == <ER><CARRIES CURRENT>
THEN
C><THROTTLERUNTERMINALPASS3><OPERATIONAL>

C>IF<THROTTLE2,4,6,8><CARRIES CURRENT> == <ER><CARRIES CURRENT>
THEN
C><THROTTLERUNTERMINALPASS4><OPERATIONAL>

CONTROL REAR THROTTLE RUN TERMINAL BOARD.BAT

C><IF CPR.SYS><CARRIES CURRENT> == <THROTTLESTOP><CARRIES CURRENT>
THEN
C> <THROTTLERUNTERMINALPASS1><OPERATIONAL>

C>IF<THROTTLE5-6><CARRIES CURRENT> == <ER><CARRIESCURRENT>
THEN
C><THROTTLERUNTERMINALPASS2><OPERATIONAL>

C>IF<THROTTLE3-6><CARRIES CURRENT> == <ER><CARRIES CURRENT>
THEN
C><THROTTLERUNTERMINALPASS3><OPERATIONAL>

```
C>IF<THROTTLE2,4,6,8><CARRIES CURRENT> == <ER><CARRIES CURRENT>
THEN
C><THROTTLERUNTERMINALPASS4><OPERATIONAL>
```

LEFT FRONT CONTROL FORWARD/REVERSE TERMINAL BOARD

```
STARTCONFIG. SYS
START.SYS<ON/OFF>
FOWARD.SYS<ON/OFF>
REVERSE.SYS<ON/OFF>
THROTTLE<1-8>
```

LEFT FRONT CONTROL FORWARD/REVERSE TERMINAL BOARD.BAT

```
C>IF<START.SYS><ON> == <FOWARD.SYS><ON>
THEN
C><FORWARD/REVERSE TERMINAL BOARD PASS1><OPERATIONAL>
C>IF<START.SYS><ON> == <REVERSE.SYS><ON>
THEN
C><FORWARD/REVERSE TERMINAL BOARD PASS2><OPERATIONAL>
C>IF<START.SYS><ON> == <THROTTLE1-8><CARRIES CURRENT>
THEN<FORWARD/REVERSE TERMINAL BOARD PASS3><OPERATIONAL>
```

LEFT FRONT CONTROL FORWARD/REVERSE TERMINAL BOARD

```
STARTCONFIG. SYS
START.SYS<ON/OFF>
FOWARD.SYS<ON/OFF>
REVERSE.SYS<ON/OFF>
THROTTLE<1-8>
```

RIGHT FRONT CONTROL FORWARD/REVERSE TERMINAL BOARD.BAT

```
C>IF<START.SYS><ON> == <FOWARD.SYS><ON>
THEN
C><FORWARD/REVERSE TERMINAL BOARD PASS1><OPERATIONAL>
C>IF<START.SYS><ON> == <REVERSE.SYS><ON>
THEN
C><FORWARD/REVERSE TERMINAL BOARD PASS2><OPERATIONAL>
C>IF<START.SYS><ON> == <THROTTLE1-8><CARRIES CURRENT>
THEN<FORWARD/REVERSE TERMINAL BOARD PASS3><OPERATIONAL>
```

LEFT FRONT CONTROL FORWARD/REVERSE TERMINAL BOARD

```
STARTCONFIG. SYS
START.SYS<ON/OFF>
FOWARD.SYS<ON/OFF>
REVERSE.SYS<ON/OFF>
THROTTLE<1-8>
```

REAR CONTROL FORWARD/REVERSE TERMINAL BOARD.BAT

```
C>IF<START.SYS><ON> == <FOWARD.SYS><ON>
THEN
C><FORWARD/REVERSE TERMINAL BOARD PASS1><OPERATIONAL>
C>IF<START.SYS><ON> == <REVERSE.SYS><ON>
```

THEN
C><FORWARD/REVERSE TERMINAL BOARD PASS2><OPERATIONAL>
C><IF<START.SYS><ON> == <THROTTLE1-8><CARRIES CURRENT>
THEN<FORWARD/REVERSE TERMINAL BOARD PASS3><OPERATIONAL>

FRONT CAB MOTOR CUT OUT TERMINAL BOARD.BAT
MOTORCUTOUT CONFIG.SYS
MCOSWITCH1.SYS
MCOSWITCH2.SYS
MOTORCUTOSWITCH.SYS
FORWARD.SYS
REVERSE.SYS
TRACTIONMOTORCONFIG.SYS
AT1/TRACTION MOTOR1.SYS
AT2/TRACTION MOTOR2.SYS
AT3/TRACTION MOTOR3.SYS
AT4/TRACTION MOTOR4.SYS

C>IF <MCOSWITCH1.SYS/MOCOSWITCH2.SYS><CARRIES CURRENT> == <FORWARD.SYS/REVERSE.SYS><CARRIES CURRENT>
THEN
C><FRONT CAB MOTOR CUTOUT TERMINAL PASS1><OPERATIONAL>
C>IF <MOTORCUTOUT CONFIG.SYS><CARRIES CURRENT> == <TRACTIONMOTORCONFIG.SYS><CARRIES CURRENT>
THEN
FRONT CAB MOTOR CUTOUT TERMINAL PASS2> <OPERATIONAL>

REAR CAB MOTOR CUT OUT TERMINAL BOARD.BAT
MOTORCUTOUT CONFIG.SYS
MCOSWITCH1.SYS
MCOSWITCH2.SYS
MOTORCUTOSWITCH.SYS
FORWARD.SYS
REVERSE.SYS
TRACTIONMOTORCONFIG.SYS
AT1/TRACTION MOTOR1.SYS
AT2/TRACTION MOTOR2.SYS
AT3/TRACTION MOTOR3.SYS
AT4/TRACTION MOTOR4.SYS

C>IF <MCOSWITCH1.SYS/MOCOSWITCH2.SYS><CARRIES CURRENT> == <FORWARD.SYS/REVERSE.SYS><CARRIES CURRENT>
THEN
C><REAR CAB MOTOR CUTOUT TERMINAL PASS1><OPERATIONAL>
C>IF <MOTORCUTOUT CONFIG.SYS><CARRIES CURRENT> == <TRACTIONMOTORCONFIG.SYS><CARRIES CURRENT>
THEN
C> <REAR CAB MOTOR CUTOUT TERMINAL PASS2> <OPERATIONAL>

SANDERS TERMINAL BOARD FRONT CAB
SAND.SYS
E SAND.SYS
RVR1.SYS
RVF1.SYS
FSAFRESISTOR.SYS
FSARRESISTOR.SYS
RSAR.SYS
RSAF.SYS

C> IF<SAND.SYS><CARRIES CURRENT> == <E SAND.SYS><CARRIES CURRENT>
THEN
C> <SANDERSTERMINALBOARDPASS1><OPERATIONAL>

```

C>IF<E SAND.SYS><CARRIES CURRENT> == <SAND.SYS><CARRIES CURRENT>
THEN
C><SANDERSTERMINALBOARDPASS2><OPERATIONAL>
C>IF <SAND.SYS><CARRIES CURRENT> == <RVR1.SYS/RVF1.SYS><CARRIES CURRENT>
THEN
C><SANDERSTERMINALBOARDPASS3.<OPERATIONAL>
C>IF <FSAFRESISTOR.SYS/FSARRESISTOR.SYS><CARRIES CURRENT> == <RSAR.SYS/RSAF.SYS><CARRIES CURRENT>
THEN
C><SANDERSTERMINALBOARDPASS4><OPERATIONAL>

```

C>SANDERSTERMINALBOARDFRONTCAB.BAT

SANDERS TERMINAL BOARD REARCAB

```

SAND.SYS
E SAND.SYS
RVR1.SYS
RVF1.SYS
FSAFRESISTOR.SYS
FSARRESISTOR.SYS
RSAR.SYS
RSAF.SYS

```

```

C> IF<SAND.SYS><CARRIES CURRENT> == <E SAND.SYS><CARRIES CURRENT>
THEN
C> <SANDERSTERMINALBOARDPASS1><OPERATIONAL>
C>IF<E SAND.SYS><CARRIES CURRENT> == <SAND.SYS><CARRIES CURRENT>
THEN
C><SANDERSTERMINALBOARDPASS2><OPERATIONAL>
C>IF <SAND.SYS><CARRIES CURRENT> == <RVR1.SYS/RVF1.SYS><CARRIES CURRENT>
THEN
C><SANDERSTERMINALBOARDPASS3.<OPERATIONAL>
C>IF <FSAFRESISTOR.SYS/FSARRESISTOR.SYS><CARRIES CURRENT> == <RSAR.SYS/RSAF.SYS><CARRIES CURRENT>
THEN
C><SANDERSTERMINALBOARDPASS4><OPERATIONAL>

```

C>SANDERS TERMINAL BOARD REARCAB.BAT

,

**LEFT CONTROL STAND
START/SHUTDOWN TERMINAL BAORDS 1-4**

```

START/SHUTDOWN TERMINAL BOARD 1.CONFIG.SYS
START SW.SYS
FOR.SYS
REV.SYS
THROTTLE.SYS
IDLE.SYS
FPC.SYS
FSMDV.SYS
PCR.SYS

```

```

C> IF<START SW.SYS><CARRIES CURRENT> == <FOR.SYS/REV.SYS><CARRIES CURRENT>
THEN
C> <START/SHUTDOWNTERMINALBOARD1PASS1><OPERATIONAL>
C>IF<THROTTLE.SYS><CARRIES CURRENT> == <IDLE.SYS><CARRIES CURRENT>
THEN
C> <START/SHUTDOWNTERMINALBOARD1PASS2><OPERATIONAL>
C> IF<IDLE.SYS><CARRIES CURRENT> == <FPC><CARRIES CURRENT>
THEN
C> <START/SHUTDOWNTERMINALBOARD1PASS3><OPERATIONAL>
C>IF<FPC.SYS/FSMDV.SYS><CARRIES CURRENT> == <IDLE.SYS/THROTTLE.SYS><CARRIES CURRENT>
THEN

```

```

C> <START/SHUTDOWNTERMINALBOARD1PASS4><OPERATIONAL>
C>IF <IDLE.SYS><CARRIES CURRENT> == <PCR.SYS><CARRIES CURRENT>
THEN
C> <START/SHUTDOWNTERMINALBOARD1PASS5><OPERATIONAL>
C>IF<PCR><CARRIES CURRENT> == <IDLE.SYS><CARRIES CURRENT>

LEFT CONTROL STAND START/SHUTDOWN TERMINAL BOARD1.BAT

START/SHUTDOWN TERMINAL BOARD 2 CONFIG.SYS
PNEUMATICCUTOUT.SYS
ISOLATIONSWITCH.,SYS

START/SHUTDOWN TERMINAL BOARD 2

C>IF<PNEUMATICCUTOUT.SYS><CARRIES CURRENT> == <ISOLATIONSWITCH.SYS><CARRIES CURRENT>
THEN
C><START/SHUTDOWNTERMINALBOARD2PASS1>OPERATIONAL>

LEFT CONTROL STAND START/SHUTDOWN TERMINAL BOARD 2.BAT

START/SHUTDOWN TERMINAL BOARD 3 CONFIG.SYS
PNEUMATICCUTOUT.SYS
ZENER DIODE.SYS
WHEELSLIPRELAY.SYS
FPC.SYS
RE OHM.SYS

START/SHUTDOWN TERMINAL BOARD 3 CONFIG.SYS

C>IF <PNEUMATICCUTOUT.SYS><CARRIES CURRENT> == <ZENERDIODE><CARRIES CURRENT>
THEN
C><START/SHUTDOWNTERMINALBOARD3PASS1><OPERATIONAL>
C>IF<WHEELSLIPRELAY.SYS><CARRIES CURRENT> == <ZENERDIODE><CARRIES CURRENT>
THEN
C><START/SHUTDOWNTERMINALBOARD3PASS2><OPERATIONAL>
C>IF<FPC.SYS><CARRIES CURRENT> == <RE OHM><CARRIES CURRENT>
THEN
C><START/SHUTDOWNTERMINALBOARD3PASS3><OPERATIONAL>

START/SHUTDOWN TERMINAL BOARD 3 CONFIG.SYS
LEFTCONTROL STAND START/SHUTDOWN TERMINAL BOARD 3.BAT

START/SHUTDOWN TERMINAL BOARD 4 CONFIG.SYS
PNEUMATICCUTOUT.SYS
ISOLATION.SYS
GROUNDRELAY.SYS
FPC.SYS
ENGINERELAY.SYS

LEFT CONTROL STAND START/SHUTDOWN TERMINAL BOARD 4 CONFIG.SYS

C>IF<PNEUMATICCUTOUT.SYS><CARRIES CURRENT> == <ISOLATION.SYS><CARRIES CURRENT>
THEN
C><START/SHUTDOWNTERMINALBOARD4PASS1><OPERATIONAL>
C>IF<GROUNDRELAY.SYS><CARRIES CURRENT> == <ISOLATION.SYS><CARRIES CURRENT>
THEN
C><START/SHUTDOWNTERMINALBOARD4PASS2><OPERATIONAL>
C>IF<FPC.SYS><CARRIES CURRENT> == <ISOLATION.SYS><CARRIES CURRENT>
THEN
C><START/SHUTDOWNTERMINALBOARD4PASS3><OPERATIONAL>

```

C><ENGINERELAY.SYS><CARRIES CURRENT>
THEN
C><START/SHUTDOWNTERMINALBOARD4PASS4><OPERATIONAL>

LEFT CONTROL STAND START/SHUTDOWN TERMINAL BOARD 4.BAT

**RIGHT CONTROL STAND
START/SHUTDOWN TERMINAL BAORDS 1-4**

START/SHUTDOWN TERMINAL BOARD 1.CONFIG.SYS
START SW.SYS
FOR.SYS
REV.SYS
THROTTLE.SYS
IDLE.SYS
FPC.SYS
FSMDV.SYS
PCR.SYS

C> IF<START SW.SYS><CARRIES CURRENT> == <FOR.SYS/REV.SYS><CARRIES CURRENT>
THEN
C> <START/SHUTDOWNTERMINALBOARD1PASS1><OPERATIONAL>
C>IF<THROTTLE.SYS><CARRIES CURRENT> == <IDLE.SYS><CARRIES CURRENT>
THEN
C> <START/SHUTDOWNTERMINALBOARD1PASS2><OPERATIONAL>
C> IF<IDLE.SYS><CARRIES CURRENT> == <FPC><CARRIES CURRENT>
THEN
C> <START/SHUTDOWNTERMINALBOARD1PASS3><OPERATIONAL>
C>IF<FPC.SYS/FSMDV.SYS><CARRIES CURRENT> == <IDLE.SYS/THROTTLE.SYS><CARRIES CURRENT>
THEN
C> <START/SHUTDOWNTERMINALBOARD1PASS4><OPERATIONAL>
C>IF <IDLE.SYS><CARRIES CURRENT> == <PCR.SYS><CARRIES CURRENT>
THEN
C> <START/SHUTDOWNTERMINALBOARD1PASS5><OPERATIONAL>
C>IF<PCR><CARRIES CURRENT> == <IDLE.SYS><CARRIES CURRENT>

RIGHT CONTROL STAND START/SHUTDOWN TERMINAL BOARD1.BAT

START/SHUTDOWN TERMINAL BOARD 2 CONFIG.SYS
PNEUMATICCUTOUT.SYS
ISOLATIONSWITCH.,SYS

START/SHUTDOWN TERMINAL BOARD 2

C>IF<PNEUMATICCUTOUT.SYS><CARRIES CURRENT> == <ISOLATIONSWITCH.SYS><CARRIES CURRENT>
THEN
C><START/SHUTDOWNTERMINALBOARD2PASS1>OPERATIONAL>

RIGHT CONTROL STAND START/SHUTDOWN TERMINAL BOARD 2.BAT

START/SHUTDOWN TERMINAL BOARD 3 CONFIG.SYS
PNEMATICCUTOUT.SYS
ZENER DIODE.SYS
WHEELSLIPRELAY.SYS
FPC.SYS
RE OHM.SYS

START/SHUTDOWN TERMINAL BOARD 3 CONFIG.SYS

```
C>IF <PNEUMATICCUTOUT.SYS><CARRIES CURRENT> == <ZENERDIODE><CARRIES CURRENT>
THEN
C><START/SHUTDOWNWNTERMINALBOARD3PASS1><OPERATIONAL>
C>IF<WHEELSLIPRELAY.SYS><CARRIES CURRENT> == <ZENERDIODE><CARRIES CURRENT>
THEN
C><START/SHUTDOWNWNTERMINALBOARD3PASS2><OPERATIONAL>
C>IF<FPC.SYS><CARRIES CURRENT> == <RE OHM><CARRIES CURRENT>
THEN
C><START/SHUTDOWNWNTERMINALBOARD3PASS3><OPERATIONAL>
```

```
START/SHUTDOWN TERMINAL BOARD 3 CONFIG.SYS
RIGHT CONTROL STAND START/SHUTDOWN TERMINAL BOARD 3.BAT
```

```
START/SHUTDOWN TERMINAL BOARD 4 CONFIG.SYS
PNEUMATICCUTOUT.SYS
ISOLATION.SYS
GROUNDRELAY.SYS
FPC.SYS
ENGINERELAY.SYS
```

```
RIGHT CONTROL STAND START/SHUTDOWN TERMINAL BOARD 4 CONFIG.SYS
```

```
C>IF<PNEUMATICCUTOUT.SYS><CARRIES CURRENT> == <ISOLATION.SYS><CARRIES CURRENT>
THEN
C><START/SHUTDOWNWNTERMINALBOARD4PASS1><OPERATIONAL>
C>IF<GROUNDRELAY.SYS><CARRIES CURRENT> == <ISOLATION.SYS><CARRIES CURRENT>
THEN
C><START/SHUTDOWNWNTERMINALBOARD4PASS2><OPERATIONAL>
C>IF<FPC.SYS><CARRIES CURRENT> == <ISOLATION.SYS><CARRIES CURRENT>
THEN
C><START/SHUTDOWNWNTERMINALBOARD4PASS3><OPERATIONAL>
C><ENGINERELAY.SYS><CARRIES CURRENT>
THEN
C><START/SHUTDOWNWNTERMINALBOARD4PASS4><OPERATIONAL>
```

```
RIGHT CONTROL STAND START/SHUTDOWN TERMINAL BOARD 4.BAT
```

**REAR CONTROL STAND
START/SHUTDOWN TERMINAL BAORDS 1-4**

```
START/SHUTDOWN TERMINAL BOARD 1.CONFIG.SYS
START SW.SYS
FOR.SYS
REV.SYS
THROTTLE.SYS
IDLE.SYS
FPC.SYS
FSMDV.SYS
PCR.SYS
```

```
C> IF<START SW.SYS><CARRIES CURRENT> == <FOR.SYS/REV.SYS><CARRIES CURRENT>
THEN
C> <START/SHUTDOWNWNTERMINALBOARD1PASS1><OPERATIONAL>
C>IF<THROTTLE.SYS><CARRIES CURRENT> == <IDLE.SYS><CARRIES CURRENT>
THEN
C> <START/SHUTDOWNWNTERMINALBOARD1PASS2><OPERATIONAL>
C> IF<IDLE.SYS><CARRIES CURRENT> == <FPC><CARRIES CURRENT>
```

```

THEN
C> <START/SHUTDOWNTERMINALBOARD1PASS3><OPERATIONAL>
C>IF<FPC.SYS/FSMDV.SYS><CARRIES CURRENT> == <IDLE.SYS/THROTTLE.SYS><CARRIES CURRENT>
THEN
C> <START/SHUTDOWNTERMINALBOARD1PASS4><OPERATIONAL>
C>IF <IDLE.SYS><CARRIES CURRENT> == <PCR.SYS><CARRIES CURRENT>
THEN
C> <START/SHUTDOWNTERMINALBOARD1PASS5><OPERATIONAL>
C>IF<PCR><CARRIES CURRENT> == <IDLE.SYS><CARRIES CURRENT>

REARCONTROL STAND START/SHUTDOWN TERMINAL BOARD1.BAT

START/SHUTDOWN TERMINAL BOARD 2 CONFIG.SYS
PNEUMATICCUTOUT.SYS
ISOLATIONSWITCH.,SYS

START/SHUTDOWN TERMINAL BOARD 2

C>IF<PNEUMATICCUTOUT.SYS><CARRIES CURRENT> == <ISOLATIONSWITCH.SYS><CARRIES CURRENT>
THEN
C><START/SHUTDOWNTERMINALBOARD2PASS1><OPERATIONAL>

REAR CONTROL STAND START/SHUTDOWN TERMINAL BOARD 2.BAT

START/SHUTDOWN TERMINAL BOARD 3 CONFIG.SYS
PNEUMATICCUTOUT.SYS
ZENER DIODE.SYS
WHEELSLIPRELAY.SYS
FPC.SYS
RE OHM.SYS

START/SHUTDOWN TERMINAL BOARD 3 CONFIG.SYS

C>IF <PNEUMATICCUTOUT.SYS><CARRIES CURRENT> == <ZENERDIODE><CARRIES CURRENT>
THEN
C><START/SHUTDOWNTERMINALBOARD3PASS1><OPERATIONAL>
C>IF<WHEELSLIPRELAY.SYS><CARRIES CURRENT> == <ZENERDIODE><CARRIES CURRENT>
THEN
C><START/SHUTDOWNTERMINALBOARD3PASS2><OPERATIONAL>
C>IF<FPC.SYS><CARRIES CURRENT> == <RE OHM><CARRIES CURRENT>
THEN
C><START/SHUTDOWNTERMINALBOARD3PASS3><OPERATIONAL>

START/SHUTDOWN TERMINAL BOARD 3 CONFIG.SYS
REAR CONTROL STAND START/SHUTDOWN TERMINAL BOARD 3.BAT

START/SHUTDOWN TERMINAL BOARD 4 CONFIG.SYS
PNEUMATICCUTOUT.SYS
ISOLATION.SYS
GROUNDRELAY.SYS
FPC.SYS
ENGINEERELAY.SYS

REAR CONTROL STAND START/SHUTDOWN TERMINAL BOARD 4 CONFIG.SYS

C>IF<PNEUMATICCUTOUT.SYS><CARRIES CURRENT> == <ISOLATION.SYS><CARRIES CURRENT>
THEN
C><START/SHUTDOWNTERMINALBOARD4PASS1><OPERATIONAL>
C>IF<GROUNDRELAY.SYS><CARRIES CURRENT> == <ISOLATION.SYS><CARRIES CURRENT>
THEN

```



```

C><START/SHUTDOWNTERMINALBOARD4PASS2><OPERATIONAL>
C>IF<FPC.SYS><CARRIES CURRENT> = = < ISOLATION.SYS>CARRIES CURRENT>
THEN
C><START/SHUTDOWNTERMINALBOARD4PASS3><OPERATIONAL>
C><ENGINERELAY.SYS><CARRIES CURRENT
THEN
C><START/SHUTDOWNTERMINALBOARD4PASS4><OPERATIONAL>

```

REAR CONTROL STAND START/SHUTDOWN TERMINAL BOARD 4.BAT

```

START SW FRONT CAB TERMINAL BOARD
CIRCUITBREAKER.SYS
FORWARD.SYS
REVERSE.SYS
STOPCAB.SYS
EMERGENCY.SYS
FPC.SYS
THROTTLE 1-8.SYS
GENERATOR FIELD.SYS
START SWITCH

```

```

C> IF<CIRCUIT BREAKER><CARRIES CURRENT> = = <FORWARD.SYS/REVERSE.SYS/THROTTLE1-8.SYS><CARRIES CURRENT>
THEN
C><START SWITCH FRONT CAB TERMINAL BOARDPASS1><OPERATIONAL>
C>IF <CIRCUITBREAKER><CARRIES CURRENT> = = <STOP CAB><CARRIES CURRENT>
THEN
C><START SWITCH FRONT CAB TERMINAL BOARDPASS2><OPERATIONAL>
C>IF<CIRCUIT BREAKER<CARRIES CURRENT> = = <EMERGENCY><CARRIES CURRENT>
THE
C><START SWITCH FRONT CAB TERMINAL BOARDPASS3><OPERATIONAL>
C>IF<CIRCUITBREAKER><CARRIES CURRENT> = = <FPC.SYS>CARRIES CURRENT>
THEN
C><START SWITCH FRONT CAB TERMINAL BOARDPASS4><OPERATIONAL>
C>IF<THROTTLE 1-8><CARRIES CURRENT> = = <GENERATORFIELD.SYS><CARRIES CURRENT>
THEN
C><START SWITCH FRONT CAB TERMINAL BOARDPASS5><OPERATIONAL>
C>IF<CIRCUITBREAKER><CARRIES CURRENT> = = <START SW><CARRIES CURRENT>
THEN
C><START SWITCH FRONT CAB TERMINAL BOARDPASS6><OPERATIONAL>
C>STARTSWFRONTCABTERMINALBOARD.BAT

```

```

START SW REAR CAB TERMINAL BOARD
CIRCUITBREAKER.SYS
FORWARD.SYS
REVERSE.SYS
STOPCAB.SYS
EMERGENCY.SYS
FPC.SYS
THROTTLE 1-8.SYS
GENERATOR FIELD.SYS
START SWITCH

```

```

C> IF<CIRCUIT BREAKER><CARRIES CURRENT> = = <FORWARD.SYS/REVERSE.SYS/THROTTLE1-8.SYS><CARRIES CURRENT>
THEN
C><START SWITCH REAR CAB TERMINAL BOARDPASS1><OPERATIONAL>
C>IF <CIRCUITBREAKER><CARRIES CURRENT> = = <STOP CAB><CARRIES CURRENT>
THEN
C><START SWITCH REAR CAB TERMINAL BOARDPASS2><OPERATIONAL>
C>IF<CIRCUIT BREAKER<CARRIES CURRENT> = = <EMERGENCY><CARRIES CURRENT>
THE
C><START SWITCH REAR CAB TERMINAL BOARDPASS3><OPERATIONAL>

```

```

C>IF<CIRCUITBREAKER><CARRIES CURRENT> == <FPC.SYS>CARRIES CURRENT>
THEN
C><START SWITCH REAR CAB TERMINAL BOARDPASS4><OPERATIONAL>
C>IF<THROTTLE 1-8><CARRIES CURRENT> == <GENERATORFIELD.SYS><CARRIES CURRENT>
THEN
C><START SWITCH REAR CAB TERMINAL BOARDPASS5><OPERATIONAL>
C>IF<CIRCUITBREAKER><CARRIES CURRENT> == <START SW><CARRIES CURRENT>
THEN
C><START SWITCH REAR CAB TERMINAL BOARDPASS6><OPERATIONAL>
C>STARTSWREAR CAB TERMINAL BOARD.BAT

```

LIGHTS CAB/STEP TERMINAL FRONT

```

STEPLIGHTSWITCH..SYS
CABLIGHTSWITCH.SYS
STEPLIGHT1,2,3,4.SYS
CABLIGHT1,2.SYS

```

```

C>IF<STEPLIGHTSWITCH.SYS><CARRIES CURRENT> == <STEPLIGHT1,2,3,4.SYS>CARRIES CURRENT>
THEN
C><LIGHTSCAB/STEP TERMINAL FRONT PASS1><OPERATIONAL>
C>IF<CABLIGHTSWITCH.SYS>CARRIES CURRENT> == <CABLIGHT1,2.SYS><CARRIES CURRENT>
THEN
C><LIGHTSCAB/STEP TERMINAL FRONT PASS2><OPERATIONAL>

```

LIGHTS CAB/STEP TERMINAL REAR

```

STEPLIGHTSWITCH..SYS
CABLIGHTSWITCH.SYS
STEPLIGHT1,2,3,4.SYS
CABLIGHT1,2.SYS

```

```

C>IF<STEPLIGHTSWITCH.SYS><CARRIES CURRENT> == <STEPLIGHT1,2,3,4.SYS>CARRIES CURRENT>
THEN
C><LIGHTSCAB/STEP TERMINAL REAR PASS1><OPERATIONAL>
C>IF<CABLIGHTSWITCH.SYS>CARRIES CURRENT> == <CABLIGHT1,2.SYS><CARRIES CURRENT>
THEN
C><LIGHTSCAB/STEP TERMINAL REAR PASS2><OPERATIONAL>

```

COWLING LIGHT FRONT TERMINAL BOARD

```

COWLINGLIGHTSWITCH.SYS
COWLIGHTLIGHT.SYS
COWLING LIGHT1,2,3,4.SYS

```

```

C>IF<COWLINGLIGHTSWITCH.SYS><CARRIES CURRENT> == <COWLINGLIGHT.SYS>
THEN
C><COWLINGLIGHT FRONT TERMINAL BOARD PASS1><OPERATIONAL>
C>IF<COWLINGLIGHT.SYS><CARRIES CURRENT> == <COWLINGLIGHT1,2><CARRIES CURRENT>
THEN
C><COWLINGLIGHT FRONT TERMINAL BOARD PASS2><OPERATIONAL>
C>IF<COWLINGLIGHT.SYS><CARRIES CURRENT> == <COWLINGLIGHT3,4><CARRIES CURRENT>
THEN
C><COWLINGLIGHT FRONT TERMINAL BOARD PASS3><OPERATIONAL>
C>COWLINGLIGHT FRONT TERMINAL BOARD.BAT

```

COWLING LIGHT REAR TERMINAL BOARD

```

COWLINGLIGHTSWITCH.SYS
COWLIGHTLIGHT.SYS
COWLING LIGHT1,2,3,4.SYS

```

```

C>IF<COWLINGLIGHTSWITCH.SYS><CARRIES CURRENT> == <COWLINGLIGHT.SYS>
THEN
C><COWLINGLIGHT REAR TERMINAL BOARD PASS1><OPERATIONAL>

```

```

C>IF<COWLINGLIGHT.SYS><CARRIES CURRENT> == <COWLINGLIGHT1,2><CARRIES CURRENT>
THEN
C><COWLINGLIGHTREAR TERMINAL BOARD PASS2><OPERATIONAL>
C>IF<COWLINGLIGHT.SYS><CARRIES CURRENT> == <COWLINGLIGHT3,4><CARRIES CURRENT>
THEN
C><COWLINGLIGHTREAR TERMINAL BOARD PASS3><OPERATIONAL>
C>COWLINGLIGHTREAR TERMINAL BOARD.BAT

```

FRONT CAB THROTTLE ENGINE RELAY TERMINAL BOARD

```

ISOLATIONSWITCH.CONFIG.SYS
ISOLATIONSWITCH1.SYS
ISOLATIONSWITCH2.SYS
ISOLATIONSWITCH3.SYS
ISOLATIONSWITCH4.SYS
PNEUMATICCONTROLRELAY.SYS
GS.SYS
STARTFIELD.SYS
MOTORCUTOUT.SYS
SFMDV
POWERCONTACTOR1.SYS
POWERCONTACTOR2.SYS
POWERCONTACTOR3.SYS
POWERCONTACTOR4.SYS
WHEELSLIPRELAY.SYS
STARTFIELDRES.SYS

```

```

C><ISOLATIONSWITCH1><CARRIES CURRENT>
THEN
C><FRONT CAB THROTTLE ENGINE RELAY TERMINAL PASS1><OPERATIONAL>
C><ISOLATIONSWITCH2><CARRIES CURRENT> == <PNEUMATICCONTROLRELAY>
THEN
C><FRONT CAB THROTTLE ENGINE RELAY TERMINAL PASS2><OPERATIONAL>
C><ISOLATIONSWITCH3><CARRIES CURRENT> == <GS.SYS><CARRIES CURRENT>
THEN
C><FRONT CAB THROTTLE ENGINE RELAY TERMINAL PASS3><OPERATIONAL>
C><ISOLATIONSWITCH4><CARRIES CURRENT> == <PNEUMATICCONTROLRELAY.SYS><CARRIES CURRENT>
THEN
C><FRONT CAB THROTTLE ENGINE RELAY TERMINAL PASS4><OPERATIONAL>

```

```

C>IF<STARTINGFIELD.SYS><CARRIES CURRENT> == <MOTORCUTOUT.SYS><CARRIES CURRENT>
THEN
C><FRONT CAB THROTTLE ENGINE RELAY TERMINAL PASS5><OPERATIONAL>

```

```

C><STARTINGFIELD.SYS><CARRIES CURRENT> == <SFMDV.SYS><CARRIES CURRENT>
THEN
C><FRONT CAB THROTTLE ENGINE RELAY TERMINAL PASS6><OPERATIONAL>
C><POWERCONTACTOR1.SYS><CARRIES CURRENT> == <POWERCONTACTOR2.SYS/WHEELSLIPRELAY.SYS><CARRIES CURRENT>
THEN
C><FRONT CAB THROTTLE ENGINE RELAY TERMINAL PASS7><OPERATIONAL>

```

```

C><POWERCONTACTOR3.SYS><CARRIES CURRENT> == <POWERCONTACTOR4.SYS/WHEELSLIPRELAY.SYS><CARRIES CURRENT>
THEN
C><FRONT CAB THROTTLE ENGINE RELAY TERMINAL PASS8><OPERATIONAL>

```

```

C>IF<FRONT CAB THROTTLE ENGINE RELAY TERMINAL PASS9><CARRIES CURRENT>
THEN
C><FRONT CAB THROTTLE ENGINE RELAY TERMINAL PASS9><OPERATIONAL>
C><WHEELSLIPRELAY.SYS><CARRIES CURRENT> == <STARTFIELDRESISTOR.SYS><CARRIES CURRENT>
THEN
C><FRONT CAB THROTTLE ENGINE RELAY TERMINAL PASS10><OPERATIONAL>
C>FRONT CAB THROTTLE ENGINE RELAY TERMINAL BOARD.BAT

```

REAR THROTTLE ENGINE RELAY TERMINAL BOARD

ISOLATIONSWITCH.CONFIG.SYS
ISOLATIONSWITCH1.SYS
ISOLATIONSWITCH2.SYS
ISOLATIONSWITCH3.SYS
ISOLATIONSWITCH4.SYS
PNEUMATICCONTROLRELAY.SYS
GS.SYS
STARTFIELD.SYS
MOTORCUTOUT.SYS
SFMDV
POWERCONTACTOR1.SYS
POWERCONTACTOR2.SYS
POWERCONTACTOR3.SYS
POWERCONTACTOR4.SYS
WHEELSLIPRELAY.SYS
STARTFIELDRES.SYS

C><ISOLATIONSWITCH1><CARRIES CURRENT>
THEN
C><REAR CAB THROTTLE ENGINE RELAY TERMINAL PASS 1><OPERATIONAL>
C><ISOLATIONSWITCH2><CARRIES CURRENT> == <PNEUMATICCONTROLRELAY>
THEN
C><REAR CAB THROTTLE ENGINE RELAY TERMINAL PASS 2><OPERATIONAL>
C><ISOLATIONSWITCH3><CARRIES CURRENT> == <GS.SYS><CARRIES CURRENT>
THEN
C><REAR CAB THROTTLE ENGINE RELAY TERMINAL PASS 3><OPERATIONAL>
C><ISOLATIONSWITCH4><CARRIES CURRENT> == <PNEUMATICCONTROLRELAY.SYS><CARRIES CURRENT>
THEN
C><REAR CAB THROTTLE ENGINE RELAY TERMINAL PASS 4><OPERATIONAL>

C>IF<STARTINGFIELD.SYS><CARRIES CURRENT> == <MOTORCUTOUT.SYS><CARRIES CURRENT>
THEN
C><REAR CAB THROTTLE ENGINE RELAY TERMINAL PASS 5><OPERATIONAL>

C><STARTINGFIELD.SYS><CARRIES CURRENT> == <SFMDV.SYS><CARRIES CURRENT>
THEN
C><REAR CAB THROTTLE ENGINE RELAY TERMINAL PASS 6><OPERATIONAL>
C><POWERCONTACTOR1.SYS><CARRIES CURRENT> == <POWERCONTACTOR2.SYS/WHEELSLIPRELAY.SYS><CARRIES CURRENT>
THEN
C><REAR CAB THROTTLE ENGINE RELAY TERMINAL PASS 7><OPERATIONAL>

C><POWERCONTACTOR3.SYS><CARRIES CURRENT> == <POWERCONTACTOR4.SYS/WHEELSLIPRELAY.SYS><CARRIES CURRENT>
THEN
C><REAR CAB THROTTLE ENGINE RELAY TERMINAL PASS 8><OPERATIONAL>

C>IF<REAR CAB THROTTLE ENGINE RELAY TERMINAL PASS 9><CARRIES CURRENT>
THEN
C><REAR CAB THROTTLE ENGINE RELAY TERMINAL PASS 9><OPERATIONAL>
C><WHEELSLIPRELAY.SYS><CARRIES CURRENT> == <STARTFIELDRESISTOR.SYS><CARRIES CURRENT>
THEN
C><REAR CAB THROTTLE ENGINE RELAY TERMINAL PASS 10><OPERATIONAL>
C>REAR CAB THROTTLE ENGINE RELAY TERMINAL BOARD.BAT

REVERSER CONTROL CABINET TERMINAL BOARD LEFT FRONT

CIRCUITBREAK.SYS
REVERSE.SYS
FORWARD.SYS
FORWARD JUMPER.SYS
REVERSE JUMPER.SYS
RVR1.SYS
RVR2.SYS
RVF1.SYS

RVF2.SYS
RVR1RESISTOR.SYS
RVR2RESISTOR.SYS
RVF1RESISTOR.SYS
RVF2RESISTOR.SYS
RVR1RESISTOR.SYS
RVR2RESISTOR.SYS

REVERSER CONTROL CABINET TERMINAL BOARD RIGHT FRONT

CIRCUITBREAK.SYS
REVERSE.SYS
FOWARD.SYS
FORWARD JUMPER.SYS
REVERSE JUMPER.SYS
RVR1.SYS
RVR2.SYS
RVF1.SYS
RVF2.SYS
RVR1RESISTOR.SYS
RVR2RESISTOR.SYS
RVF1RESISTOR.SYS
RVF2RESISTOR.SYS
RVR1RESISTOR.SYS
RVR2RESISTOR.SYS

C>IF<LEFTCIRCUITBREAKERPARALLEL><CARRIES CURRENT> == <RIGHTFORWARD.SYS/REVERSE.SYS><CARRIES CURRENT>
THEN
C><REVERSERCONTROLCABINETTERMINALBOARDLEFTANDRIGHTPASS1><OPERATIONAL>
C>IF<LEFTREVERSE.SYSPARALLEL><CARRIES CURRENT> == <RIGHTFORWARD.SYS><CARRIES CURRENT>
THEN
C><REVERSERCONTROLCABINETTERMINALBOARDLEFTANDRIGHTPASS2><OPERATIONAL>
C>IF<LEFTFORWARD.SYSPARALLEL><CARRIES CURRENT> == <RIGHTRVR1.SYS/RVR2><CARRIES CURRENT>
THEN
C><REVERSERCONTROLCABINETTERMINALBOARDLEFTANDRIGHTPASS3><OPERATIONAL>
C>IF<LEFTREVERSE.SYSPARALLEL><CARRIES CURRENT> == <RIGHTRVF1RVF2><CARRIES CURRENT>
THEN
C><REVERSERCONTROLCABINETTERMINALBOARDLEFTANDRIGHTPASS4><OPERATIONAL>
C>IF<LEFTFORWARDJUMPERPARALLEL><CARRIES CURRENT> == <RIGHTRF1RESISTOR.SYS/RVF2RESISTOR.SYS><CARRIES CURRENT>
THEN
C><REVERSERCONTROLCABINETTERMINALBOARDLEFTANDRIGHTPASS5><OPERATIONAL>
C>IF<LEFTREVERSEJUMPERPARALLEL><CARRIES CURRENT> == < RIGHTRVR1RESISTOR1.SYSRVR2RESISTOR.SYS><CARRIES
CURRENT>
THEN
C><REVERSERCONTROLCABINETTERMINALBOARDLEFTANDRIGHTPASS6><OPERATIONAL>

REVERSER CONTROL CABINET TERMINAL BOARD REAR

FORWARD.SYS
REVERSE.SYS
RVR1.SYS
RVR2.SYS
RVF1.SYS
RVF2.SYS
RVF1RESISTOR.SYS
RVF2RESISTOR.SYS
RVR1RESISTOR.SYS
RVR2RESISTOR.SYS
CIRCUITBREAKER
FORWARDJUMPER.SYS
REVERSERJUMPER.SYS

C>IF <LEFTFORWARD/REVERSE.SYS><CARRIES CURRENT> == <RIGHTCIRCUITBREAKER.SYS><CARRIES CURRENT>
THEN
C><REVERSERCONTROLCABINETTERMINALBOARDREARPASS1><OPERARTIONAL>
C>IF<LEFTFORWARD.SYS><CARRIES CURRENT> == <RIGHTREVERSE.SYS><CARRIESCURRENT>

```

THEN
C><REVERSERCONTROL CABINETTERMINALBOARDREARPASS2><OPERATIONAL>
C>IF<LEFTRVR1.SYS/RVR2.SYS><CARRIES CURRENT> = = <RIGHTFORWARD.SYS><CARRIES CURRENT>
THEN
C><REVERSERCONTROL CABINETTERMINALBOARDREARPASS3><OPERATIONAL>
C>IF<LEFTRVF1.SYS/RVF2.SYS><CARRIES CURRENT> = = <RIGHTREVERSE.SYS><CARRIES CURRENT>
THEN
C><REVERSERCONTROL CABINETTERMINALBOARDREARPASS4><OPERATIONAL>
C>IF<LEFTRVF1RESISTOR.SYS/RVF2RESISTOR.SYS><CARRIES CURRENT> = = <RIGHTFORWARDJUMPER.SYS><CARRIES CURRENT>
THEN
C><REVERSERCONTROL CABINETTERMINALBOARDREARPASS5><OPERATIONAL>
C>IF<LEFTRVR1RESISTOR.SYS/RVR2RESISTOR.SYS><CARRIES CURRENT> = = <RIGHTREVERSE.SYS>
THEN
C><REVERSERCONTROL CABINETTERMINALBOARDREARPASS6><OPERATIONAL>
C>REVERSERCONTROL CABINETTERMINALBOARDREAR.BAT

```

LIGHTS CONTROL STAND LEFT FRONT

```

GLS 1.SYS
GLR RHEOSTAT.SYS
GLR300OHM.SYS
PIN1PIN2.SYS
GLR150OHM.SYS

```

GLT.SYS

GLT 150 OHM ALARMCONFIG.SYS

```

ENGINETEMP1ALARM.SYS
ENGINETEMP2ALARM.SYS
ENGINEPRESSURE1ALARM.SYS
ENGINEPRESSURE2ALARM.SYS
FUELENGINE1ALARM.SYS
FUELENGINE2ALARM.SYS
OILPRESSURE1ALARM.SYS
OILPRESSURE2ALARM.SYS
BATTERYVOLTMETERALARM.SYS
OILGUAGE1ALARM.SYS
OILGUAGE2ALARM.SYS
PRESSUREBRAKELTALARM.SYS
MAIN AIR RESERV LTALARM.SYS

```

```

C>IF<GLS1.SYS><CARRIES CURRENT> = = <GLR RHEOSTAT.SYS><CARRIES CURRENT>
THEN
C><LIGHTCONTROLSSTANDLEFTPASS1><OPERATIONAL>
C>IF<GLR300OHM><CARRIES CURRENT> = = <PIN1PIN2.SYS><CARRIES CURRENT>
THEN
C><LIGHTCONTROLSSTANDLEFTPASS2><OPERATIONAL>
C><GLR150OHM><CARRIES CURRENT> = = <GLT.SYS><CARRIES CURRENT>
C>IF<GLR150OHM><CARRIES CURRENT> = = <GLT 150 OHM ALARMCONFIG.SYS *ALARM.SYS>< CURRENT CARRIES>
THEN
C><LIGHTCONTROLSSTANDLEFTPASS2><OPERATIONAL>
C>IF<GLT150OHMALARMCONFIG.SYS*ALARM.SYS><VALUES LESS THAN 150 OHMS> = = <ALARM.SYS><SOUNDED>
C>LIGHTSCONTROLSTANDLEFTFRONT.BAT
LIGHTS CONTROL STAND RIGHT FRONT
C>IF<GLT.SYS><CARRIES CURRENT> = = <GLR.SYS><CARRIES CURRENT>
THEN
C><LIGHTCONTROLSTANDRIGHTPASS1><OPERATIONAL>
C>IF<GLT150OHMALARMCONFIG.SYS*ALARM.SYS><VALUES LESS THAN 150 OHMS> = = <ALARM.SYS><SOUNDED>
C>LIGHTSCONTROLSTANDRIGHTFRONT.BAT

```

FRONT CAB DIESEL ENGINE NO.1

```

LIGHTS CONTROL STAND LEFT FRONT
GLS 1.SYS

```

GLR RHEOSTAT.SYS
GLR300OHM.SYS
PIN1PIN2.SYS
GLR150OHM.SYS

GLT.SYS

GLT 150 OHM ALARMCONFIG.SYS

ENGINETEMP1ALARM.SYS
ENGINETEMP2ALARM.SYS
ENGINEPRESSURE1ALARM.SYS
ENGINEPRESSURE2ALARM.SYS
FUELENGINE1ALARM.SYS
FUELENGINE2ALARM.SYS
OILPRESSURE1ALARM.SYS
OILPRESSURE2ALARM.SYS
BATTERYVOLTMETERALARM.SYS
OILGUAGE1ALARM.SYS
OILGUAGE2ALARM.SYS
PRESSUREBRAKELTALARM.SYS
MAIN AIR RESERV LTALARM.SYS

```
C>IF<GLS1.SYS><CARRIES CURRENT> == <GLR RHEOSTAT.SYS><CARRIES CURRENT>
THEN
C><LIGHTCONTROLSSTANDLEFTPASS1><OPERATIONAL>
C>IF<GLR300OHM><CARRIES CURRENT> == <PIN1PIN2.SYS><CARRIES CURRENT>
THEN
C><LIGHTCONTROLSSTANDLEFTPASS2><OPERATIONAL>
C><GLR150OHM><CARRIES CURRENT> == <GLT.SYS><CARRIES CURRENT>
C>IF<GLR150OHM><CARRIES CURRENT> == <GLT 150 OHM ALARMCONFIG.SYS *ALARM.SYS>< CURRENT CARRIES>
THEN
C><LIGHTCONTROLSSTANDLEFTPASS2><OPERATIONAL>
C>IF<GLT150OHMALARMCONFIG.SYS*ALARM.SYS><VALUES LESS THAN 150 OHMS> == <ALARM.SYS><SOUNDED>
C>LIGHTSCONTROLSTANDLEFTFRONT.BAT
```

LIGHTS CONTROL STAND REAR

GLS 1.SYS
GLR RHEOSTAT.SYS
GLR300OHM.SYS
PIN1PIN2.SYS
GLR150OHM.SYS

GLT.SYS

GLT 150 OHM ALARMCONFIG.SYS

ENGINETEMP1ALARM.SYS
ENGINETEMP2ALARM.SYS
ENGINEPRESSURE1ALARM.SYS
ENGINEPRESSURE2ALARM.SYS
FUELENGINE1ALARM.SYS
FUELENGINE2ALARM.SYS
OILPRESSURE1ALARM.SYS
OILPRESSURE2ALARM.SYS
BATTERYVOLTMETERALARM.SYS
OILGUAGE1ALARM.SYS
OILGUAGE2ALARM.SYS
PRESSUREBRAKELTALARM.SYS
MAIN AIR RESERV LTALARM.SYS

```
C>IF<GLS1.SYS><CARRIES CURRENT> == <GLR RHEOSTAT.SYS><CARRIES CURRENT>
THEN
C><LIGHTCONTROLSSTANDREARPASS1><OPERATIONAL>
```

```

C>IF<GLR3000HM><CARRIES CURRENT> == <PIN1PIN2.SYS><CARRIES CURRENT>
THEN
C><LIGHTCONTROLSSTANDREARPASS2><OPERATIONAL>
C><GLR1500HM><CARRIES CURRENT> == <GLT.SYS><CARRIES CURRENT>
C>IF<GLR1500HM><CARRIES CURRENT> == <GLT 150 OHM ALARMCONFIG.SYS *ALARM.SYS>< CURRENT CARRIES>
THEN
C><LIGHTCONTROLSSTANDREARPASS2><OPERATIONAL>
C>IF<GLT1500HMALARMCONFIG.SYS*ALARM.SYS><VALUES LESS THAN 150 OHMS> == <ALARM.SYS><SOUNDED>
C>LIGHTSCONTROLSTANDREARFRONT.BAT
FRONT/REAR CAB DIESEL ENGINE NO1 TERMINAL BOARD
ENGINESTART.SYS
ENGINESTOP.SYS
ENGINEOILPRESS.SYS
ENGINE TEMP SW.SYS
OIL PRESSURE SW.SYS
MOTORCUTOOUT.SYS
TRACTIONMOTOR1.SYS
TRACTIONMOTOR2.SYS
TRACTIONMOTOR3.SYS
TRACTIONMOTOR4.SYS

C>IF<FRONT/REARCABENGINESTARTNO1><CARRIES CURRENT> == <FRONTCABDIESELENGINENO1TERMINALBOARDPASS1>
<OPERATIONAL>
C>IF<FRONT/REARCABENGINESTOP><CARRIES CURRENT> == <ENGINEO1OILPRESSURE>
THEN
C><FRONTCABDIESELENGINENO1TERMINALBOARDPASS2><OPERATIONAL>
C>IF<FRONT/REARCABENGINEOILPRESSURESW><CARRIES CURRENT> == <FRONT/REARCABENGINEOILPRESSURESW><CARRIES CURRENT>
THEN
C><FRONTCABDIESELENGINENO1TERMINALBOARDPASS3><OPERATIONAL>
C>IF<FRONT/REARCABEGINENO1MOTORCUTOOUTSERIES><CARRIES CURRENT> == <TRACTIONMOTOR1SERIES><CARRIES CURRENT>
THEN
C><FRONTCABDIESELENGINENO1TERMINALBOARDPASS4><OPERATIONAL>
C>IF<FRONT/REARCABEGINENO1MOTORCUTOOUTSERIES><CARRIES CURRENT> == <TRACTIONMOTOR2SERIES><CARRIES CURRENT>
THEN
C><FRONTCABDIESELENGINENO1TERMINALBOARDPASS4><OPERATIONAL>
C>IF<FRONT/REARCABEGINENO1MOTORCUTOOUTSERIES><CARRIES CURRENT> == <TRACTIONMOTOR3SERIES><CARRIES CURRENT>
THEN
C><FRONTCABDIESELENGINENO1TERMINALBOARDPASS4><OPERATIONAL>
C>IF<FRONT/REARCABEGINENO1MOTORCUTOOUTSERIES><CARRIES CURRENT> == <TRACTIONMOTOR4SERIES><CARRIES CURRENT>
THEN
C><FRONTCABDIESELENGINENO1TERMINALBOARDPASS4><OPERATIONAL>
FRONT/REAR CAB DIESEL ENGINE NO2 TERMINAL BOARD
ENGINESTART.SYS
ENGINESTOP.SYS
ENGINEOILPRESS.SYS
ENGINE TEMP SW.SYS
OIL PRESSURE SW.SYS
MOTORCUTOOUT.SYS
TRACTIONMOTOR1.SYS
TRACTIONMOTOR2.SYS
TRACTIONMOTOR3.SYS
TRACTIONMOTOR4.SYS

C>IF<FRONT/REARCABENGINESTARTNO2><CARRIES CURRENT> == <FRONTCABDIESELENGINENO1TERMINALBOARDPASS1>
<OPERATIONAL>
C>IF<FRONT/REARCABENGINESTOP><CARRIES CURRENT> == <ENGINEO2OILPRESSURE>
THEN
C><FRONTCABDIESELENGINENO2TERMINALBOARDPASS2><OPERATIONAL>
C>IF <FRONT/REARCABENGINEOILPRESSURESW><CARRIES CURRENT> == <FRONT/REARCABENGINEOILPRESSURESW><CARRIES CURRENT>
THEN
C><FRONTCABDIESELENGINENO2TERMINALBOARDPASS3><OPERATIONAL>
C>IF<FRONT/REARCABEGINENO2MOTORCUTOOUTSERIES><CARRIES CURRENT> == <TRACTIONMOTOR1SERIES><CARRIES CURRENT>
THEN

```



```
C><FRONTCABDIESELENGINENO2TERMINALBOARDPASS4><OPERATIONAL>  
C>IF<FRONT/REAR CAB BEGIN ENO2 MOTOR CUTOUT SERIES><CARRIES CURRENT> = = <TRACTION MOTOR 2 SERIES><CARRIES CURRENT>  
THEN  
C><FRONTCABDIESELENGINENO2TERMINALBOARDPASS4><OPERATIONAL>  
C>IF<FRONT/REAR CAB BEGIN ENO2 MOTOR CUTOUT SERIES><CARRIES CURRENT> = = <TRACTION MOTOR 3 SERIES><CARRIES CURRENT>  
THEN  
C><FRONTCABDIESELENGINENO2TERMINALBOARDPASS4><OPERATIONAL>  
C>IF<FRONT/REAR CAB BEGIN ENO2 MOTOR CUTOUT SERIES><CARRIES CURRENT> = = <TRACTION MOTOR 4 SERIES><CARRIES CURRENT>  
THEN  
C><FRONTCABDIESELENGINENO2TERMINALBOARDPASS4><OPERATIONAL>
```