

# DIGITAL DIAGNOSTIC DISPLAY

BY ADAM NUGENT ROSENBERGER

COMPRESSOR  
FAILS TO PUMP  
AIR

LEAK AIR HOSE OR GASKET

ANGLE OR DRAIN COCKS LEAK

CHECK COMPRESSOR VALVE  
BAD

TIGHTEN  
AIR HOSE

TIGHTEN  
CONNECTIONS

NOTIFY  
MAINTENCE



ENGINE OVERSPEED  
TRIPPED

LED

ALARM

MOTOR 1

ENGINE  
OVERSPEED  
TRIP  
SWITCH

RESET

ENGINE FAILS TO START

ENGINE STOPS IN OPERATION

CRANKS BUT FAILS TO START

ENGINE OVERSPEED  
TRIPPED

LED

ALARM

MOTOR 2

ENGINE  
OVERSPEED  
TRIP  
SWITCH

RESET

TRACTION MOTOR TEMPERATURE  
PROTECTION

TRACTION  
MOTORS

GAUGE

THERMAL  
SWITCH

LED

ALARM

ENGINE OVERHEATING

LED

ALARM

FLOAT SWITCH

LOW COOLANT LEVEL

PRESSURE SWITCH

CLOGGED RADIATOR FAN

CLOGGED RADIATOR FINS

COOLING HOSES COLLAPSED

ON

FAN

FAN BELTS

OFF

TEMPERATURE LEVEL

TEMPERUTE SWITCH

DEFECTIVE THERMOSTATS

SIDE DOOR  
OPENED

ALARM

DOOR

KNIFE  
SWITCH

LOW OIL  
PRESSURE

MOTOR 1

LED

ALARM

LOAD  
RESISTOR

ENGINE  
OIL  
PRESSURE  
SWITCH

LOW OIL  
PRESSURE

MOTOR 2

LED

ALARM

LOAD  
RESISTOR

ENGINE  
OIL  
PRESSURE  
SWITCH

LOW WATER  
PRESSURE

MOTOR 1

LED

ALARM

LOAD  
RESISTOR

WATER  
PRESSURE  
SWITCH

LOW WATER  
PRESSURE

MOTOR 2

LED

ALARM

LOAD  
RESISTOR

WATER  
PRESSURE  
SWITCH



COLD ENGINE  
(LOAD)

MOTOR 1

LED

ALARM

LOAD  
RESISTOR

ENGINE  
TEMPERATURE  
SWITCH

COLD ENGINE  
(LOAD)

MOTOR 2

ALARM

LED

LOAD  
RESISTOR

ENGINE  
TEMPERATURE  
SWITCH

HOT ENGINE  
(LOAD)

MOTOR 1

LED

ALARM

LOAD  
RESISTOR

ENGINE  
TEMPERATURE  
SWITCH

HOT ENGINE  
(LOAD)

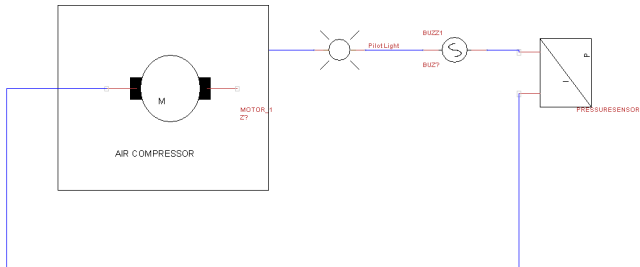
MOTOR 2

ALARM

LED

LOAD  
RESISTOR

ENGINE  
TEMPERATURE  
SWITCH



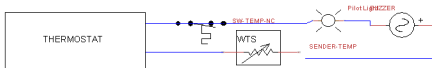
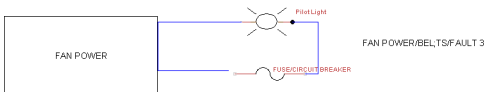
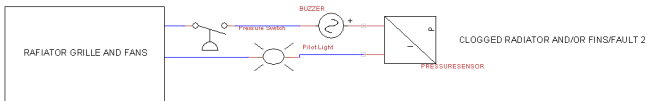
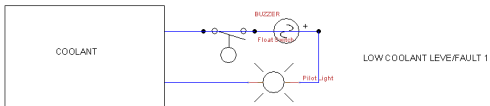
FAULT CODE 1 LEAK AIR HOSE OR GASKET

FAULT CODE 2 ANGLE OR DRAIN COCK LEAK

FAULT CODE 3 CHECK COMPRESSOR VAVLE BAD

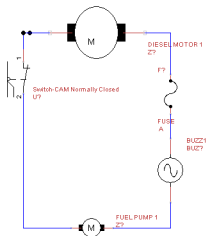
|  |                    |               |          |
|--|--------------------|---------------|----------|
| Title AIR COMPRESSOR FAILS TO PUMP AIR       |                    |               |          |
| Author ADAM NUGENT ROSENBERGER               |                    |               |          |
| File ...AIR COMPRESSOR FAILS TO PUMP AIR.dsn |                    |               | Document |
| Revision 1.0                                 | Date APRIL 26,2022 | Sheets 1 of 1 |          |

# ENGINE OVERHEATING

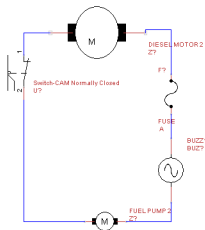


TEMPERATURE CONTROL AND/OR DEFECTIVE THERMOSTAT FAULT 4 AND 5

|          |   |        |                         |
|----------|---|--------|-------------------------|
| Title    |   |        | ENGINE OVERHEATING      |
| Author   |   |        | ADAM NUGENT ROSENBERGER |
| File     | sers\Adam\Desk ... ENGINE OVERHEATING.dsn |        | Document                |
| Revision | Date                                      | Sheets |                         |
| 1.0      | APRIL 26, 2022                            | 1 of 1 |                         |



ENGINE OVERSPEED TRIPPED



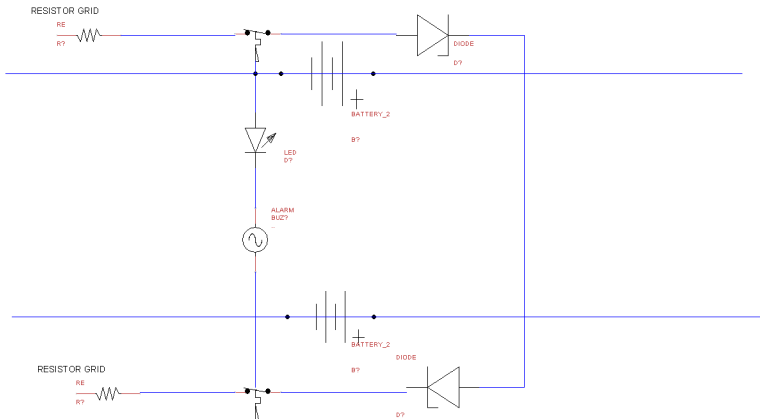
ENGINE OVERSPEED TRIPPED

FAULT CODE ENIGNE FAILS TO START

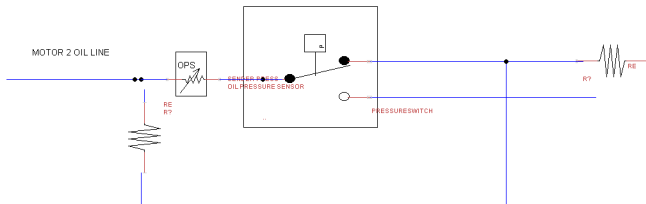
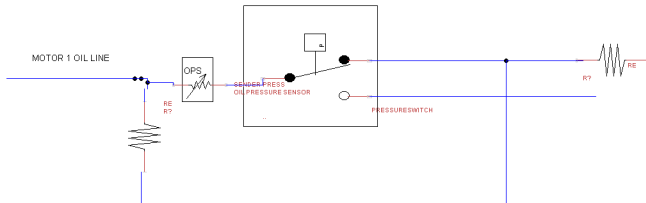
FAULT CODE2 ENGINE STOPS WHILE IN OPERATION

FAULT CODE3 CRANKS BUT FAILS TO START

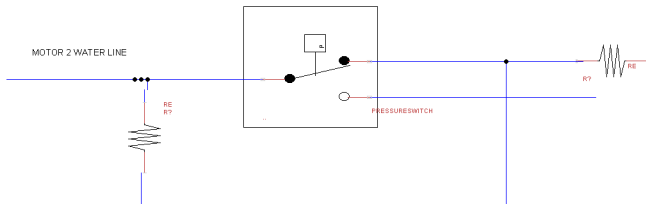
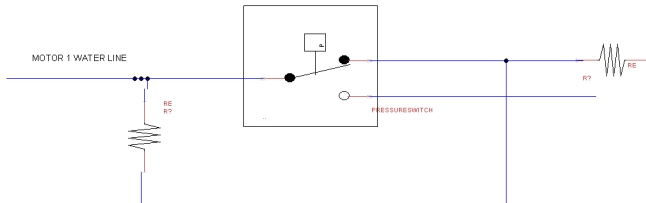
|          |  |                |                          |
|----------|--|----------------|--------------------------|
| Title    |  |                | ENGINE OVERSPEED TRIPPED |
| Author   |  |                | ADAM NUGENT ROSENBERGER  |
| File     | ers\Ada ... ENGINE OVERSPEED TRIPPED.dsn |                | Document                 |
| Revision | Date                                     | APRIL 26, 2022 | Sheets                   |
| 1.0      |  |                | 1 of 1                   |



|          |      |   |                         |          |        |
|----------|------|---|-------------------------|----------|--------|
| Title    |      |   | HOT DIODES              |          |        |
| Author   |      |   | ADAM NUGENT ROSENBERGER |          |        |
| File     |      | er... HOT DIODES FROM RESISTOR GRID.dsn |                         | Document |        |
| Revision | Date | APRIL 25, 2022                          |                         | Sheets   | 1 of 1 |
| 1.0      |      |   |                         |          |        |

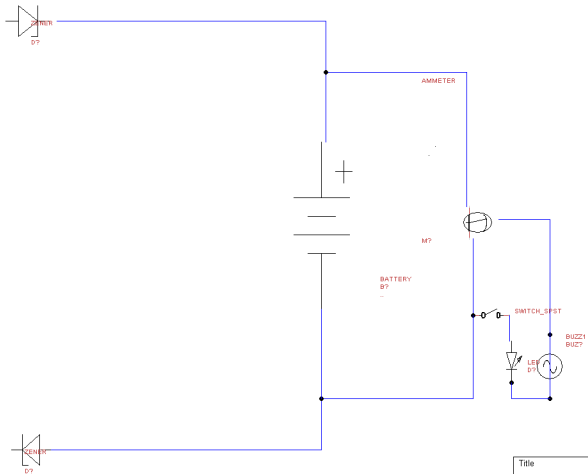


|          |   |                         |
|----------|---|-------------------------|
| Title    |   | LOW OIL PRESSURE        |
| Author   |   | ADAM NUGENT ROSENBERGER |
| File     | ers\Adam\Deskto... LOW OIL PRESSURE.dsn | Document                |
| Revision | Date                                    | APRIL 25, 2022          |
| 1.0      |   | Sheets<br>1 of 1        |

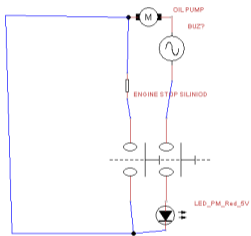


|                  |  |                |  |                         |  |
|------------------|--|----------------|--|-------------------------|--|
| Title            |  |                |  | LOW WATER PRESSURE      |  |
| Author           |  |                |  | ADAM NUGENT ROSENBERGER |  |
| File             |  |                |  | Document                |  |
| rs\Adam\Desk ... |  |                |  | LOW WATER PRESSURE.dsn  |  |
| Revision         |  | Date           |  | Sheets                  |  |
| 1.0              |  | APRIL 25, 2022 |  | 1 of 1                  |  |

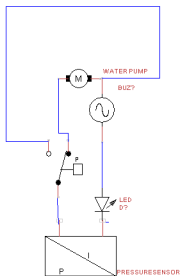




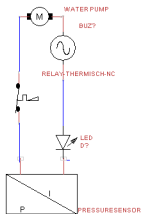
|          |                   |                         |
|----------|-------------------|-------------------------|
| Title    |                   | NO BATTERY CHARGE       |
| Author   |                   | ADAM NUGENT ROSENBERGER |
| File     | ers\Adam\Desk ... | NO BATTERY CHARGE.dsn   |
| Revision | Date              | APRIL 25, 2022          |
| 1.0      |                   | Sheets<br>1 of 1        |



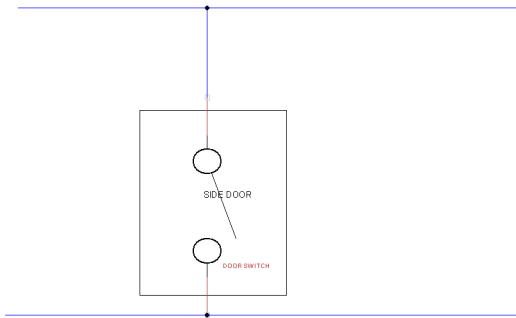
|   |                       |                  |
|---|-----------------------|------------------|
| Title SHUTDOWN LOW OIL PRESSURE               |                       |                  |
| Author ADAM NUGENT ROSNEBERGER                |                       |                  |
| File<br>W OIL PRESSURE DUAL TROW SWITCH 2.dsn | Document              |                  |
| Revision<br>1.0                               | Date<br>APRIL 25 2022 | Sheets<br>1 of 1 |



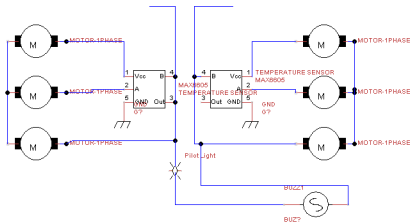
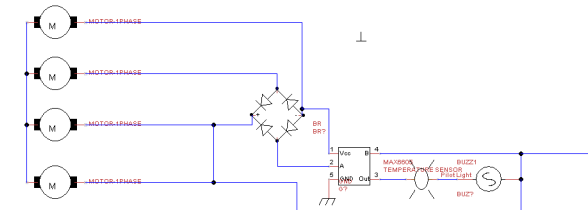
|                                     |  |               |                         |          |  |
|-------------------------------------|--|---------------|-------------------------|----------|--|
| Title                               |  |               | SHUTDOWN LOW WATER FLOW |          |  |
| Author                              |  |               | ADAM NUGENT ROSNEBERGER |          |  |
| File                                |  |               |                         | Document |  |
| LOW WATER FLOW DUAL TROW SWITCH.dsn |  |               |                         |          |  |
| Revision                            |  | Date          |                         | Sheets   |  |
| 1.0                                 |  | APRIL 25 2022 |                         | 1 of 1   |  |



|                                       |      |               |                         |
|---------------------------------------|------|---------------|-------------------------|
| Title                                 |      |               | SHUTDOWN LOW WATER FLOW |
| Author                                |      |               | ADAM NUGENT ROSNEBERGER |
| File                                  |      | Document      |                         |
| \Adam ... SHUTDOWN LOW WATER FLOW.dsn |      |               |                         |
| Revision                              | Date | APRIL 25 2022 | Sheets                  |
| 1.0                                   |      |               | 1 of 1                  |



|          |      |   |          |
|----------|------|---|----------|
| Title    |      | SIDE DOOR OPEN                            |          |
| Author   |      | ADAM NUGENT ROSENBERGER                   |          |
| File     |      | Jeers\Adam\Desktop\... SIDE DOOR OPEN.dsn | Document |
| Revision | Date | APRIL 25, 2022                            | Sheets   |
| 1.0      |      |   | 1 of 1   |



|  |                        |                  |
|--|------------------------|------------------|
| Title<br>4 AND 6 BOOGIE TRACTION MOTOR TEMP PROTECTION |                        | Document         |
| Author<br>ADAM NUGENT ROSENBERGER                      |                        |                  |
| File<br>ersVad ... TRACTION MOTOR PROTECTION.dsn       |                        |                  |
| Revision<br>1.0  | Date<br>APRIL 26, 2022 | Sheets<br>1 of 1 |

```
C>AUTOERROR.BAT
SAVE AS AUTOERROR.EXE
ERRORCODEaircompressorfailstopump.BAT
ERRORCODEengineoverheat.bat
ERRORCODEenginoverspeed.bat
ERRORCODEhotdiodes.bat
ERRORCODElowoilpressure.bat
ERRORCODEnobatterycharge.bat
ERRORCODElowoilpressure.bat
ERRORCODEshutdownlowwaterflow.bat
ERRORCODEsidedooropen.bat
ERRORCODEtractionmotortempprotection.bat
```

```
C>CONFIG.BAT >CONFIGURATION DEFAULTS
C>CONFIG.SYS*
C>CREATE CONFIG.SYS DIR>
AIRCOMPRESSORCONFIG.SYS
LOWCOOLANTLEVEL.SYS
RADIATOR PRESSURE MOTOR1.CONFIG.SYS
RADIATOR PRESSURE MOTOR2.CONFIG.SYS
FAN POWER MOTOR 1 CONFIG.SYS
FAN POWER MOTOR 2 CONFIG.SYS
THERMOSTATMOTOR1 CONFIG.SYS
THERMOSTATMOTOR2 CONFIG.SYS
DIESEL ENGINE 1 OVERSPEED CONFIG.SYS
DIESEL ENGINE 2 OVERSPEED CONFIG.SYS
HOT DIODES CONFIG.SYS
OIL PRESSURE CONFIG.SYS
BATTERYCHARGE CONFIG.SYS
DIESEL MOTOR1 OILPUMP CONFIG.SYS
DIESEL MOTOR2 OILPUMP CONFIG.SYS
WATERPUMPMOTOR1.CONFIG.SYS
WATERPUMPMOTOR2.CONFIG.SYS
SIDEDOOR CONFIG.SYS
TRACTIONMOTORTEMPCONFIG.SYS
TRUCK1TRACTIONMOTORCONFIG.SYS
TRUCK2TRACTIONMOTOR2CONFIG.SYS
```



```
GOTO FAULTBIN
c>FAULTBIN.BAT
c:\FAULTBIN>
STORE
the time is<SPACE>$t$_the date is<space>$d$
C:\FAULTBIN>ADD TO FAULTBIN DIRECTORY?<SPACE><ENTER>
C:AUTOERRORCODE.EXE> ERRORCODE.BAT> COPY (FAULT CODE).DOC TO FAULTBIN.BAT
C:AUTOERRORCODE.EXE> COPY ERRORCODE.BAT FAULT CODE .DOC
C:AUTOERRORCODE.EXE> COPY ERRORCODE.DOC FAULTBIN.BAT /V
c:\FAULTBIN>DISPLAY ERRORCODE ENTRIES?<SPACE><ENTER>
c:\FAULTBIN>DIR ERRORCODE*
c:\FAULTBIN> PRINT FAULTBIN?<SPACE><ENTER>
c:\FAULTBIN.BAT PRN

c:FAULTBIN.EXE/clear screen Y/N?
```

```
ERRORCODEaircompressorfailstopump.BAT
ERRORCODEaircompressorfailstopump.BAT.SYS*
C>CREATE ERRORCODEaircompressorfailstopump.BAT.SYS.DIR
```

```
aircompressor=:C\aircompressor\aircompressor.sys
aircompressorpressuresensor=:C\aircompressorpressuresensor\aircompressorpressuresensor.sys
aircompressorpilotlight=C:\aircompressorpilotlight\aircompressorpilotlight.sys
aircompressoralarm=C:\aircompressoralarm\aircompressoralarm.sys
```

```
AIRCOMPRESSORCONFIG.SYS
```

```
aircompressor.sys<OPERATIONAL>
aircompressorpressuresensor.sys<275-296CFM>
aircompressorpilotlight.sys<OFF>
aircompressoralarm.sys<OFF>
```

```
AIRCOMPRESSORFAILSTOPUMP.BAT
```

```
C>IF aircompressorpressuresensor.sys<VALUE LESS THAN 275CFM>WARNING!!! AIR COMPRESSOR FAILS
TO PUMP!!!<SPACE><ENTER>
```

```
THEN
```

```
C><aircompressorpressuresensor.sys><VALUE LESS THAN 275CFM> == <aircompressorpilotlight.sys>
<ON>
```

```
C><aircompressorpressuresensor.sys><VALUE LESS THAN 275CFM> == <aircompressoralarm.sys><ON>
```

```
ERRORCODEaircompressorfailstopump\aircompressorfailstopump.bat
```

```
C:ERRORCODEaircompressorfailstopump.exe>aircompressorpressuresensor.sys<VALUE LESS THAN
275CFM>WARNING!!! AIR COMPRESSOR FAILS TO PUMP!!!<SPACE><ENTER>
```

```
C:ERRORCODEaircompressorfailstopump.exe>aircompressorpressuresensor<VALUE LESS THAN 275CFM>
```

WARNING!!! AIR COMPRESSOR FAILS TO PUMP!!!<SPACE><ENTER>

C:AUTOERRORCODE.EXE>COPY ERRORCODEaircompressorfailstopump.BAT FAULTCODE.BAT OR  
COM

C>FAULT CODE1.COM> LEAK AIR HOSE OR GASKET

C>FAULT CODE2.COM>ANGLE OR DRAIN COCK LEAK

C>FAULT CODE3.COM>CHECK COMPRESSOR VAVLE BAD

C>FAULT CODE>CLS <Y/N>

C:AUTOERRORCODE.EXE>COPY ERRORCODEaircompressorfailstopump.BAT FAULTBIN.BAT /V

the time is <space>\$t\$\_the date is <space>\$d\$

C>ERRORCODEEngineoverheat.bat

C>ERRORCODEEngineoverheat.bat. SYS\*

C> CREATE ERRORCODEEngineoverheat.bat.sys dir

## **LOWCOOLANTLEVEL.SYS**

floatswitch1=C:\floatswitch1\floatswitch1.sys

lowcoolantalarm=C:\lowcoolantalarm\lowcoolantalarm.sys<off>

pilotlightcoolant=C:\pilotlightcoolant\pilotlightcoolant.sys<OFF>

## **LOWCOOLANTLEVELFAULT1.BAT**

C> IF floatswitch1.sys<OPENS>WARNING!!! LOW COOLANT LEVEL!!!<SPACE><ENTER>

C><floatswitch1.sys><OPENS> = = <lowcoolantalarm.sys><ON>

C><floatswitch1.sys><OPENS> = = <pilotlightcoolant.sys><ON>

C:ERRORCODEEngineoverheat.exe\LOWCOOLANTLEVELFAULT1.bat> copy  
floatswitch1.sys<close>WARNING!!! LOW COOLANT LEVEL!!!<SPACE><ENTER>

C:ERRORCODEEngineoverheat.exe\LOWCOOLANTLEVELFAULT1> copy floatswitch1<close>  
WARNING!!! LOW COOLANT LEVEL!!!<SPACE><ENTER>

C:AUTOERRORCODE.EXE> COPY ERRORCODEEngineoverheat.exe  
\LOWCOOLANTLEVELFAULT1.BAT FAULT CODE1.COM

C:AUTOERRORCODE.EXE> COPY ERRORCODEEngineoverheat.exe  
\LOWCOOLANTLEVELFAULT1.BAT FAULTNI.BAT/V

the time is <space>\$t\$\_the date is <space>\$d\$

## **LOWCOOLANTLEVEL.SYS**

floatswitch1=C:\floatswitch2\floatswitch2.sys

lowcoolantalarm2=C:\lowcoolantalarm2\lowcoolantalarm2.sys<off>

pilotlightcoolant2=C:\pilotlightcoolant2\pilotlightcoolant2.sys<OFF>

## **LOWCOOLANTLEVELFAULT2.BAT**

C> IF floatswitch2.sys<OPENS>WARNING!!! LOW COOLANT LEVEL!!!<SPACE><ENTER>

C><floatswitch2.sys><OPENS> = = <lowcoolantalarm2.sys><ON>

C><floatswitch2.sys><OPENS> = = <pilotlightcoolant2.sys><ON>

C:ERRORCODEEngineoverheat.exe\LOWCOOLANTLEVELFAULT2.bat> copy  
floatswitch2.sys<close>WARNING!!! LOW COOLANT LEVEL!!!<SPACE><ENTER>

C:ERRORCODEEngineoverheat.exe\LOWCOOLANTLEVELFAULT2> copy floatswitch2<close>  
WARNING!!! LOW COOLANT LEVEL!!!<SPACE><ENTER>

C:AUTOERRORCODE.EXE> COPY ERRORCODEEngineoverheat.exe  
\LOWCOOLANTLEVELFAULT2BAT FAULT CODE1.COM

C:AUTOERRORCODE.EXE> COPY ERRORCODEEngineoverheat.exe  
\LOWCOOLANTLEVELFAULT2BAT FAULTNI.BAT/V

the time is <space>\$t\$\_the date is <space>\$d\$

## **CLOGGED RADIATOR AND/OR FINS FAULT**

C>ERRORCODEEngineoverheat.bat

C>ERRORCODEEngineoverheat.bat. SYS\*

C> CREATE ERRORCODEEngineoverheat.bat.sys dir

radiatorpressswitchmotor1=C:\radiatorpressswitchmotor1\radiatorpressswitchmotor1.sys

radiatorpressswitchmotor2=C:\radiatorpressswitchmotor2\radiatorpressswitchmotor2.sys

radiatoralarm1=C:\radiatoralarm1\radiatoralarm1.sys

radiatoralarm2=C:\radiatoralarm2\radiatoralarm2.sys

radiatorpilotlight1=C:\radiatorpilotlight1\radiatorpilotlight1.sys

radiatorpilotlight2=C:\radiatorpilotlight2\radiatorpilotlight2.sys

radiatorpressuresensor1=C:\radiatorpressuresensor1\radiatorpressuresensor1.sys

radiatorpressuresensor2=C:\radiatorpressuresensor2\radiatorpressuresensor2.sys

## **RADIATOR PRESSURE MOTOR1.CONFIG.SYS**

C>radiatorpressswitchmotor1.sys<OPEN>

C>radiatoralarm1.sys<OFF>

C>radiatorpilotlight1.sys<OFF>

C>radiatorpressuresensor1<4-30 psi>

## **RADIATOR PRESSURE CRANKING MOTOR1.BAT**

C>radiatorpressuresensor1<value less tha 4 psi|/ ignore

C>radiatorpressuresensor1<4-30psi> = = <RADIATOR WATER PRESSURE MOTOR1.CONFIG.SYS>

## **RADIATORPRESSUREMOTOR1.BAT**

C> IF radiatorpressuresensor1<value less tha 4psi>WARNING!!! RADIATOR CLOGGED!!!<SPACE>  
<enter>

THEN

C>radiatorpressuresensor1<value less tha 4psi> = = <radiatorpressswitchmotor1.sys><CLOSES>

C>radiatorpressuresensor1<value less tha 4psi> = = <radiatoralarm1.sys><ON>

C>radiatorpressuresensor1<value less tha 4psi> = = <radiatorpilotlight1.sys><ON>

ERRORCODEEngineoveheating\RADIATORPRESSUREMOTOR1.BAT

C:\ERRORCODEengineoveheating\RADIATOR PRESSURE MOTOR1.CONFIG.SYS<value less tha  
4psiWARNING!!! RADIATOR CLOGGED!!!<SPACE><enter>

C:\ERRORCODEengineoveheating\RADIATOR PRESSURE MOTOR1<value less 4 psi>WARNING!!!  
RADIATOR CLOGGED!!!<SPACE><enter>

C:AUTOERRORCODE.EXE COPY

ERRORCODEenginoverheating.exe/RADIATORPRESSUREMOTOR1.BAT FAULTCODE2.COM

C:AUTOERRORCODE.EXE COPY

ERRORCODEenginoverheating.exe/RADIATORPRESSUREMOTOR1.BAT FAULTBIN.BAT /V

the time is<space>\$t\$\_the date is<space>\$d\$

## **RADIATOR PRESSURE MOTOR2.CONFIG.SYS**

C>radiatorpressswitchmotor2.sys<OPEN>

C>radiatoralarm2.sys<OFF>

C>radiatorpilotlight2.sys<OFF>

C>radiatorpressuresensor2<4-30 psi>

## **RADIATOR PRESSURE CRANKING MOTOR2.BAT**

C>radiatorpressuresensor2<value less tha 4 psi> /l ignore

C>radiatorpressuresensor2<4-30psi> = = <RADIATOR WATER PRESSURE MOTOR2.CONFIG.SYS>

## **RADIATORPRESSUREMOTOR2.BAT**

C> IF radiatorpressuresensor2<value less tha 4pis>WARNING!!! RADIATOR CLOGGED!!!<SPACE>  
<enter>

THEN

C> radiatorpressuresensor2<value less tha 4psi> = = <radiatorpressswitchmotor2.sys><CLOSES>

C> radiatorpressuresensor2<value less tha 4psi> = = <radiatoralarm2.sys><ON>

C> radiatorpressuresensor2<value less tha 4psi> = = <radiatorpilotlight2.sys><ON>

ERRORCODEengineoveheating\RADIATORPRESSUREMOTOR2.BAT

C:\ERRORCODEengineoveheating\RADIATOR PRESSURE MOTOR2.CONFIG.SYS<value less tha 4psi>WARNING!!! RADIATOR CLOGGED!!!<SPACE><enter>

C:\ERRORCODEengineoveheating\RADIATOR PRESSURE MOTOR2<value less tha 4psi>WARNING!!! RADIATOR CLOGGED!!!<SPACE><enter>

C:AUTOERRORCODE.EXE COPY

ERRORCODEEngienoverheating.exe/RADIATORPRESSUREMOTOR2.BAT FAULTCODE2.COM

C:AUTOERRORCODE.EXE COPY

ERRORCODEEngienoverheating.exe/RADIATORPRESSUREMOTOR2.BAT FAULTBIN.BAT /V

the time is<space>\$t\$\_the date is<space>\$d\$

C>ERRORCODEEngineoverheat.bat

C>ERRORCODEEngineoverheat.bat. SYS\*

C> CREATE ERRORCODEEngineoverheat.bat.sys dir

enginefan1=C:\enginefan1\enginefan1.sys

enginefan2=C:\enginefan2\enginefan2.sys

enginefancircuitbreaker1=C:\enginefancircuitbreaker1\enginefancircuitbreaker1.sys

enginefancircuitbreaker2=C:\enginefancircuitbreaker2\enginefancircuitbreaker2.sys

enginefanpilotlight1=C:\enginefanpilotlight1\enginefanpilotlight1.sys



FAN POWER MOTOR 1 CONFIG.SYS

enginefan1.sys<POWER SUPPLIED>

enginefancircuitbreaker1.sys<CLOSE>

enginefanpilotlight1.sys<OFF>

c>IF enginefan1.sys<POWERS OFF>WARNING!!! FAN BELTS/FAULTS MOTOR 1!!!<SPACE>  
<ENTER>

THEN

C>enginefan1.sys<POWERS OFF> = = <enginefancircuitbreaker1.sys><OPENS>

C><enginefan1.sys><POWERS OFF> = = <enginefanpilotlight1.sys<ON>

C>enginefancircuitbreaker1.sys<RESET> Y/N?<SPACE><ENTER>

C:AUTOERRORCODE.EXE COPY ERRORCODEEngienoverheating.exe/FANPOWERMOTOR1  
FAULTCODE3.COM

C:AUTOERRORCODE.EXE COPY ERRORCODEEngienoverheating.exe/FANPOWERMOTOR1.BAT  
FAULTBIN.BAT /V

the time is<space>\$t\$\_the date is<space>\$d\$

FAN POWER MOTOR 2 CONFIG.SYS

enginefan2.sys<POWER SUPPLIED>

enginefancircuitbreaker2.sys<CLOSE>

enginefanpilotlight2.sys<OFF>

c>IF enginefan2.sys<POWERS OFF>WARNING!!! FAN BELTS/FAULTS MOTOR 2!!!<SPACE>  
<ENTER>

THEN

C>enginefan2.sys<POWERS OFF> = = <enginefancircuitbreaker2.sys><OPENS>

C><enginefan2.sys><POWERS OFF> = = <enginefanpilotlight2.sys<ON>

C>enginefancircuitbreaker2.sys<RESET> Y/N?<SPACE><ENTER>

C:AUTOERRORCODE.EXE COPY ERRORCODEengienoverheating.exe/FANPOWERMOTOR2  
FAULTCODE3.COM

C:AUTOERRORCODE.EXE COPY ERRORCODEengienoverheating.exe/FANPOWERMOTOR2.BAT  
FAULTBIN.BAT /V

the time is<space>\$t\$\_ the date is<space>\$d\$

C>ERRORCODEEngineoverheat.bat

C>ERRORCODEEngineoverheat.bat. SYS\*

C> CREATE ERRORCODEEngineoverheat.bat.sys dir

watertempsensor1=C:\watertempsensor1\watertempsensor1.sys

watertempsensor2=C:\watertempsensor2\watertempsensor2.sys

pilotlightwatertemp1=C:\pilotlightwatertemp1\pilotlightwatertemp1.sys

pilotlightwatertemp2=C:\pilotlightwatertemp2\pilotlightwatertemp2.sys

watertempalarm1=C:\watertempalarm1\watertempalarm1.sys

watertempalarm2=C:\watertempalarm2\watertempalarm2.sys

watertempswitch1=C:\watertempswitch1\watertempswitch1.sys

watertempswitch2=C:\watertempswitch2\watertempswitch2.sys

## **THERMOSTATMOTOR1 CONFIG.SYS**

watertempsensor1.sys<170-180 F>

pilotlightwatertemp1.sys<off>

watertempalarm1.sys<off>

watertempswitch1.sys<closed>

## **WATERTEMPERATECRANKING MOTOR1.BAT**

C><watertempsensor1.sys> <value less tha 170 F> |/ ignore

C>watertempsensor1.sys<170-180 F> == <THERMOSTATMOTOR1 CONFIG.SYS>

## **WATERTEMPERATUREOVERHEATINGMOTOR1.BAT**

C> IF <watertempsensor1.sys> <value greater than 180 F>WARNiNG!!! ENGINE OVERHEATING  
HIGH WATER TEMP!!!<SPACE><ENTER>

C><watertempsensor1.sys> <value greater than 180 F> == < pilotlightwatertemp1.sys><ON>

C><watertempsensor1.sys> <value greater than 180 F> == < watertempalarm1.sys><ON>

C><watertempsensor1.sys> <value greater than 180 F> == <watertempswitch1.sys><OPENS>

C:AUTOERRORCODE.EXE COPY

ERRORCODEenginoverheating.exe/WATERTEMPERATUREOVERHEATINGMOTOR1.BAT

FAULTCODE4.COM

C:AUTOERRORCODE.EXE COPY

ERRORCODEEngienoverheating.exe/WATERTEMPERATUREOVERHEATINGMOTOR1  
FAULTBIN.BAT /V

the time is<space>\$t\$\_the date is<space>\$d\$

## **THERMOSTATMOTOR2 CONFIG.SYS**

watertempsensor2.sys<170-180 F>

pilotlightwatertemp2.sys<off>

watertempalarm2.sys<off>

watertempswitch2.sys<closed>

## **WATERTEMPERATECRANKING MOTOR2.BAT**

C><watertempsensor2.sys> <value less tha 170 F> I/ ignore

C>watertempsensor2.sys<170-180 F> = = <THERMOSTATMOTOR1 CONFIG.SYS>

## **WATERTEMPERATUREOVERHEATINGMOTOR2.BAT**

C> IF <watertempsensor2.sys> <value greater than 180 F>WARNiNG!!! ENGINE OVERHEATING  
HIGH WATER TEMP!!!<SPACE><ENTER>

C><watertempsensor2.sys> <value greater than 180 F> = = < pilotlightwatertemp2.sys><ON>

C><watertempsensor2.sys> <value greater than 180 F> = = < watertempalarm2.sys><ON>

C><watertempsensor2.sys> <value greater than 180 F> = = <watertempswitch2.sys><OPENS>

C:AUTOERRORCODE.EXE COPY

ERRORCODEEngienoverheating.exe/WATERTEMPERATUREOVERHEATINGMOTOR2.BAT  
FAULTCODE3.COM

C:AUTOERRORCODE.EXE COPY

ERRORCODEEngienoverheating.exe/WATERTEMPERATUREOVERHEATINGMOTOR2  
FAULTBIN.BAT /V

the time is<space>\$t\$\_the date is<space>\$d\$

C>ERRORCODEEngineoverheat.bat

C>ERRORCODEEngineoverheat.bat. SYS\*

C> CREATE ERRORCODEEngineoverheat.bat.sys dir

## **LOWCOOLANTLEVEL.SYS**

floatswitch1=C:\floatswitch1\floatswitch1.sys

lowcoolantalarm=C:\lowcoolantalarm\lowcoolantalarm.sys<off>

pilotlightcoolant=C:\pilotlightcoolant\pilotlightcoolant.sys<OFF>

## **LOWCOOLANTLEVELFAULT1.BAT**

C> IF floatswitch1.sys<OPENS>WARNING!!! LOW COOLANT LEVEL!!!<SPACE><ENTER>

C><floatswitch1.sys><OPENS> = = <lowcoolantalarm.sys><ON>

C><floatswitch1.sys><OPENS> = = <pilotlightcoolant.sys><ON>

C:ERRORCODEEngineoverheat.exe\LOWCOOLANTLEVELFAULT1.bat> copy  
floatswitch1.sys<close>WARNING!!! LOW COOLANT LEVEL!!!<SPACE><ENTER>

C:ERRORCODEEngineoverheat.exe\LOWCOOLANTLEVELFAULT1> copy floatswitch1<close>  
WARNING!!! LOW COOLANT LEVEL!!!<SPACE><ENTER>

C:AUTOERRORCODE.EXE> COPY ERRORCODEEngineoverheat.exe  
\LOWCOOLANTLEVELFAULT1.BAT FAULT CODE1.COM

C:AUTOERRORCODE.EXE> COPY ERRORCODEEngineoverheat.exe  
\LOWCOOLANTLEVELFAULT1.BAT FAULTNI.BAT/V

the time is <space>\$t\$\_the date is <space>\$d\$

## **LOWCOOLANTLEVEL.SYS**

floatswitch1=C:\floatswitch2\floatswitch2.sys

lowcoolantalarm2=C:\lowcoolantalarm2\lowcoolantalarm2.sys<off>

pilotlightcoolant2=C:\pilotlightcoolant2\pilotlightcoolant2.sys<OFF>

## **LOWCOOLANTLEVELFAULT2.BAT**

C> IF floatswitch2.sys<OPENS>WARNING!!! LOW COOLANT LEVEL!!!<SPACE><ENTER>

C><floatswitch2.sys><OPENS> = = <lowcoolantalarm2.sys><ON>

C><floatswitch2.sys><OPENS> = = <pilotlightcoolant2.sys><ON>

C:ERRORCODEEngineoverheat.exe\LOWCOOLANTLEVELFAULT2.bat> copy  
floatswitch2.sys<close>WARNING!!! LOW COOLANT LEVEL!!!<SPACE><ENTER>

C:ERRORCODEEngineoverheat.exe\LOWCOOLANTLEVELFAULT2> copy floatswitch2<close>  
WARNING!!! LOW COOLANT LEVEL!!!<SPACE><ENTER>

C:AUTOERRORCODE.EXE> COPY ERRORCODEEngineoverheat.exe  
\LOWCOOLANTLEVELFAULT2BAT FAULT CODE1.COM

C:AUTOERRORCODE.EXE> COPY ERRORCODEEngineoverheat.exe  
\LOWCOOLANTLEVELFAULT2BAT FAULTNI.BAT/V

the time is <space>\$t\$\_the date is <space>\$d\$

## **CLOGGED RADIATOR AND/OR FINS FAULT**

C>ERRORCODEEngineoverheat.bat

C>ERRORCODEEngineoverheat.bat. SYS\*

C> CREATE ERRORCODEEngineoverheat.bat.sys dir

radiatorpressswitchmotor1=C:\radiatorpressswitchmotor1\radiatorpressswitchmotor1.sys

radiatorpressswitchmotor2=C:\radiatorpressswitchmotor2\radiatorpressswitchmotor2.sys

radiatoralarm1=C:\radiatoralarm1\radiatoralarm1.sys

radiatoralarm2=C:\radiatoralarm2\radiatoralarm2.sys

radiatorpilotlight1=C:\radiatorpilotlight1\radiatorpilotlight1.sys

radiatorpilotlight2=C:\radiatorpilotlight2\radiatorpilotlight2.sys

radiatorpressuresensor1=C:\radiatorpressuresensor1\radiatorpressuresensor1.sys

radiatorpressuresensor2=C:\radiatorpressuresensor2\radiatorpressuresensor2.sys

## **RADIATOR PRESSURE MOTOR1.CONFIG.SYS**

C>radiatorpressswitchmotor1.sys<OPEN>

C>radiatoralarm1.sys<OFF>

C>radiatorpilotlight1.sys<OFF>

C>radiatorpressuresensor1<275-296 CFM>

## **RADIATOR PRESSURE CRANKING MOTOR1.BAT**

C>radiatorpressuresensor1<value less tha 275 CFM> /I ignore

C>radiatorpressuresensor1<275-296 CFM> = = <RADIATOR WATER PRESSURE  
MOTOR1.CONFIG.SYS>

## **RADIATORPRESSUREMOTOR1.BAT**

C> IF radiatorpressuresensor1<value less tha 275 CFM>WARNING!!! RADIATOR  
CLOGGED!!!<SPACE><enter>

THEN

C>radiatorpressuresensor1<value less tha 275 CFM> = = <radiatorpressswitchmotor1.sys>  
<CLOSES>

C>radiatorpressuresensor1<value less tha 275 CFM> = = <radiatoralarm1.sys><ON>

C>radiatorpressuresensor1<value less tha 275 CFM> = = <radiatorpilotlight1.sys><ON>



ERRORCODEengineoverheating\RADIATORPRESSUREMOTOR1.BAT

C:\ERRORCODEengineoverheating\RADIATOR PRESSURE MOTOR1.CONFIG.SYS<value less than 275 CFM>WARNING!!! RADIATOR CLOGGED!!!<SPACE><enter>

C:\ERRORCODEengineoverheating\RADIATOR PRESSURE MOTOR1<value less than 275 CFM>WARNING!!! RADIATOR CLOGGED!!!<SPACE><enter>

C:AUTOERRORCODE.EXE COPY

ERRORCODEengineoverheating.exe/RADIATORPRESSUREMOTOR1.BAT FAULTCODE2.COM

C:AUTOERRORCODE.EXE COPY

ERRORCODEengineoverheating.exe/RADIATORPRESSUREMOTOR1.BAT FAULTBIN.BAT /V

the time is<space>\$t\$\_the date is<space>\$d\$

## **RADIATOR PRESSURE MOTOR2.CONFIG.SYS**

C>radiatorpressswitchmotor2.sys<OPEN>

C>radiatoralarm2.sys<OFF>

C>radiatorpilotlight2.sys<OFF>

C>radiatorpressuresensor2<275-296 CFM>

## **RADIATOR PRESSURE CRANKING MOTOR2.BAT**

C>radiatorpressuresensor2<value less than 275 CFM> /I ignore

C>radiatorpressuresensor2<275-296 CFM> = = <RADIATOR WATER PRESSURE MOTOR2.CONFIG.SYS>

## **RADIATORPRESSUREMOTOR2.BAT**

C> IF radiatorpressuresensor2<value less than 275 CFM>WARNING!!! RADIATOR

CLOGGED!!!<SPACE><enter>

THEN

C>radiatorpressuresensor2<value less tha 275 CFM> = = <radiatorpressswitchmotor2.sys>  
<CLOSES>

C>radiatorpressuresensor2<value less tha 275 CFM> = = <radiatorialarm2.sys><ON>

C>radiatorpressuresensor2<value less tha 275 CFM> = = <radiatorpilotlight2.sys><ON>

ERRORCODEEngineoveheating\RADIATORPRESSUREMOTOR2.BAT

C:\ERRORCODEEngineoveheating\RADIATOR PRESSURE MOTOR2.CONFIG.SYS<value less tha  
275 CFM>WARNING!!! RADIATOR CLOGGED!!!<SPACE><enter>

C:\ERRORCODEEngineoveheating\RADIATOR PRESSURE MOTOR2<value less tha 275 CFM>  
WARNING!!! RADIATOR CLOGGED!!!<SPACE><enter>

C:AUTOERRORCODE.EXE COPY

ERRORCODEEngienoverheating.exe/RADIATORPRESSUREMOTOR2.BAT FAULTCODE2.COM

C:AUTOERRORCODE.EXE COPY

ERRORCODEEngienoverheating.exe/RADIATORPRESSUREMOTOR2.BAT FAULTBIN.BAT /V

the time is<space>\$t\$\_the date is<space>\$d\$

C>ERRORCODEenginoverspeed.bat

C>ERRORCODEenginoverspeed.bat .SYS\*

c> CREATE ERRORCODEengineoverspeed.sys dir

closedcamswitchdieselmotor1=C:\closedcamswitchdieselmotor1\closedcamswitchdieselmotor1.sys

closedcamswitchdieselmotor2=C:\closedcamswitchdieselmotor2\closedcamswitchdieselmotor2.sys

pilotlightdieselmotor1=C:\pilotlightdieselmotor1\pilotlightdieselmotor1.sys

pilotlightdieselmotor2=C:\pilotlightdieselmotor2\pilotlightdieselmotor2.sys

alarmdieselmotor1=C:\alarmdieselmotor1\alarmdieselmotor1.sys

alarmdieselmotor2=C:\alarmdieselmotor2\alarmdieselmotor2.sys

fuelpumpdieselmotor1=C:\fuelpumpdieselmotor1\fuelpumpdieselmotor1.sys

fuelpumpdieselmotor2=C:\fuelpumpdieselmotor2\fuelpumpdieselmotor2.sys

circuitbreakerdieselmotor1=C:\circuitbreakerdieselmotor1\circuitbreakerdieselmotor1.sys

circuitbreakerdieselmotor2=C:\circuitbreakerdieselmotor2\circuitbreakerdieselmotor2.sys

## DIESEL ENGINE 1 OVERSPEED CONFIG.SYS

C>DIESELENGINE1overspeedCONFIG.SYS

C>closedcamswitchdieselmotor1.sys<closed>

C>fuelpumpdieselmotor1.sys<On>

C><alarmdieselmotor1.sys> = = <pilotlightdieselmotor1.sys> <DEACTIVATED>

c><circuitbreakerdieselmotor1.sys><SET>

## DIESEL ENGINE 2 OVERSPEED CONFIG.SYS

```
C>DIESELENGINE2verspeedCONFIG.SYS
C>closedcamswitchdieselmotor2sys<closed>
C>fuelpumpdieselmotor2sys<On>
C><alarmdieselmotor2.sys> = = <pilotlightdieselmotor2sys> <DEACTIVATED>
c><circuitbreakerdieselmotor2.sys><SET>
```

## DIESEL ENGINE MOTOR 1 OVERSPEED

```
C>if closecamswitchdieselmotor1.sys<opens>WARNING!!! DIESEL ENGINE MOTOR 1
OVERSPEED!!!<SPACE><ENTER>
```

THEN

```
C> If closecamswitchdieselmotor1.sys<opens> = = <fuelpumpdieselmotor1.sys> <OFF>
```

```
C><alarmdieselmotor1.sys> = = <pilotlightdieselmotor1.sys> <ACTIVATE>
```

```
c><circuitbreakerdieselmotor1><RESET> Y/N? <SPACE> <ENTER>
```

```
C:ERRORCODEEngineoverspeed.exe> copy closecamswitchdieselmotor1.sys<opens>WARNING!!! DIESEL
ENGINE MOTOR 1 OVERSPEED!!!<SPACE><ENTER>
```

```
C:ERRORCODEEngineoverspeed.exe> copy closecamswitchdieselmotor1<opens>WARNING!!! DIESEL
ENGINE MOTOR 1 OVERSPEED!!!<SPACE><ENTER>
```

```
C:AUTOERRORCODE.EXE> COPY ERRORCODEEngineoverspeed.bat        FAULT CODE .COM
```

```
C:AUTOERRORCODE.EXE> COPY ERRORCODEEngineoverspeed.bat        FAULTBIN.BAT /V
```

```
the time is <space>$t$_the date is <space>$d$
```

C:FAULTBIN>ADD TO FAULTBIN DIRECTORY?<SPACE><ENTER>

## DIESEL ENGINE MOTOR 2 OVERSPEED

C>if closecamswitchdieselmotor2.sys<opens>WARNING!!! DIESEL ENGINE MOTOR 2  
OVERSPEED!!!<SPACE><ENTER>

THEN

C> If closecamswitchdieselmotor2.sys<opens> = = <fuelpumpdieselmotor2.sys> <OFF>

C><alarmdieselmotor2.sys> = = <pilotlightdieselmotor2.sys> <ACTIVATE>

c><circuitbreakerdieselmotor2><RESET> Y/N? <SPACE> <ENTER>

C:ERRORCODEengineoverspeed.exe> copy closecamswitchdieselmotor2.sys<opens>WARNING!!! DIESEL  
ENGINE MOTOR 2 OVERSPEED!!!<SPACE><ENTER>

C:ERRORCODEengineoverspeed.exe> copy closecamswitchdieselmotor2<opens>WARNING!!! DIESEL  
ENGINE MOTOR 2 OVERSPEED!!!<SPACE><ENTER>

C:AUTOERRORCODE.EXE> COPY ERRORCODEengineoverspeed.bat        FAULT CODE .COM

C:AUTOERRORCODE.EXE> COPY ERRORCODEengineoverspeed.bat        FAULTBIN.BAT /V

the time is <space>\$t\$\_the date is <space>\$d\$

C:FAULTBIN>ADD TO FAULTBIN DIRECTORY?<SPACE><ENTER>

```
C>ERRORCODEhotdiodes.bat
C>ERRORCODEhotdiodes.bat. SYS*
C> CREATE ERRORCODEhotdiodes.sys dir
resistor001=C:\resistor001\resistor001.sys
resistor002=C:\resistor002\resistor002.sys
relaythermo001=C:\relaythermo001\relaythermo001.sys
relaythermo002=C:\relaythermo002\relaythermo002.sys
diode001=C:\diode001\diode001.sys
diode002=C:\diode002\diode002.sys
ledlight002=C:\ledlight002\ledlight002.sys
hotdiodesalarm=C:\hotdiodesalarm\hotdiodesalarm.sys
```

## **HOT DIODES CONFIG.SYS**

```
C>resistor001.sys
C>relaythermo001.sys<closed>
C>diode001.sys
C>resistor002.sys
C>relaythermo002.sys<closed>
C>diode002.sys
C>ledlight002.sys<off
C>hotdiodesalarm<off>
```

## HOT DIODES

C> IF diode001.sys<value is greater than 300 degrees Celsius> WARNING!!! HOT DIODES!!!<SPACE><ENTER>

C><diode001.sys<value is greater than 300 degrees Celsius> = = <relaythermo001.sys> <open>

C><diode001.sys<value is greater than 300 degrees Celsius> = = <hotdiodesalarm><on>

C><diode001.sys<value is greater than 300 degrees Celsius> = = <ledlight002.sys><on>

C> IF diode002.sys<value is greater than 300 degrees Celsius> WARNING!!! HOT DIODES!!!<SPACE><ENTER>

C><diode002.sys<value is greater than 300 degrees Celsius> = = <relaythermo002.sys> <open>

C><diode002.sys<value is greater than 300 degrees Celsius> = = <hotdiodesalarm><on>

C><diode001.sys<value is greater than 300 degrees Celsius> = = <ledlight002.sys><on>

C:\ERRORCODEhotdiodes.exe> copy <diodes001.sys> = = <diodes002.sys> <value is greater than 300 degrees Celsius> WARNING!!! HOT DIODES!!!<SPACE> <ENTER>

C:\ERRORCODEhotdiodes.exe> copy <diodes001> = = <diodes002> <value is greater than 300 degrees Celsius> WARNING!!! HOT DIODES!!!<SPACE> <ENTER>

C:AUTOERRORCODE.EXE>COPY ERRORCODEhotdiodes.bat FAULT CODE.COM

C:AUTOERRORCODE.EXE>COPY ERRORCODEhotdiodes.bat FAULTBIN.BAT /V

the time<space>\$t\$\_the date is<space>\$d\$





C>ERRORCODElowoilpressure.bat

C>ERRORCODElowoilpressure.sys\*

C> CREATE ERRORCODElowoilpressure.sys dir>

oilpressuresensor1=C:\oilpressuresensor1\oilpressuresensor1.sys

oilpressuresensor2=C:\oilpressuresensor2\oilpressuresensor2.sys

oilpressureswitch1=C:\oilpressureswitch1\oilpressureswitch1.sys

oilpressureswitch2=C:\oilpressureswitch2\oilpressureswitch2.sys

ledlight003=C:\ledlight003\ledlight003.sys

ledlight004=C:\ledlight004\ledlight004.sys

alarmoilpressure1=C:\alarmoilpressure1\alarmoilpressure1.sys

alarmoilpressure2=C:\alarmoilpressure2\alarmoilpressure2.sys

## **OIL PRESSURE CONFIG.SYS**

### **DIESEL MOTOR 1**

C>oilpressuresensor1.sys<50-70 PSI>

C>oilpressureswitch1.sys<CLOSED>

C>ledlight003.sys<off>

C>alarmoilpressure1.sys<off>

### **DIESEL MOTOR 2**

C>oilpressuresensor2.sys<50-70 PSI>

C>oilpressureswitch2.sys<CLOSED>

C>ledlight004.sys<off>

C>alarmoilpressure2.sys<off>

## **OILPRESSURECRANKINGMOTOR1.BAT**

C> oilpressuresensor1.sys<value less than 50 PSI> /I IGNORE

C>oilpressuresensor1.sys<reaches greater than 50 PSI> == <oil pressure config.sys.>

or

C>oilpressuresensor2.sys<reaches greater than 50 PSI> == <LOWOILPRESSURE(RUNNING).BAT>

## **OILPRESSURECRANKINGMOTOR2.BAT**

C> oilpressuresensor2.sys<value less than 50 PSI> /I IGNORE

C>oilpressuresensor2.sys<reaches greater than 50 PSI> == <oil pressure config.sys.>

or

C>oilpressuresensor2.sys<reaches greater than 50 PSI> == <LOWOILPRESSURE(RUNNING).BAT>

## **LOWOILPRESSURE(RUNNING)MOTOR1.BAT**

**rem** ERRORCODElowoilpressuredieselmotor2.bat

C>IF oilpressuresensor1.sys<drops less than 50 PSI> WARNING!!! LOW OIL PRESSURE!!!<SPACE>  
<ENTER>

THEN

C><oilpressuresensor1.sys><drops less than 50 PSI> == <oilpressureswitch1.sys<OPEN>

C><oilpressuresensor1.sys><vdrops less than 50 PSI> == <ledlight003.sys><ON>

C>><oilpressuresensor1.sys><drops less than 50 PSI> = = <alarmoilpressure1.sys><ON>

ERRORCODElowoilpressuredieselmotor1

C:\ERRORCODElowoilpressure.exe> copy oilpressuresensor1.sys<drops less than 50 PSI> WARNING!!!  
LOW OIL PRESSURE!!!<SPACE><ENTER>

C:\ERRORCODElowoilpressure.exe> copy oilpressuresensor1<drops less than 50 PSI> WARNING!!! LOW  
OIL PRESSURE!!!<SPACE><ENTER>

C:AUTOERRORCODE.EXE> COPY ERRORCODElowoilpressuredieselmotor1.bat FAULT CODE.COM

C:AUTOERRORCODE.EXE> COPY ERRORCODElowoilpressuredieselmotor1.bat FAULTBIN.BAT /V

the time is<space>\$t\$\_the date is<space>\$d\$

## LOWOILPRESSURE(RUNNING)MOTOR2.BAT

**rem** ERRORCODElowoilpressuredieselmotor2.bat

C>IF oilpressuresensor2.sys<drops less than 50 PSI> WARNING!!! LOW OIL PRESSURE!!!<SPACE>  
<ENTER>

THEN

C><oilpressuresensor2.sys><drops less than 50 PSI> = = <oilpressureswitch2.sys><OPEN>

C><oilpressuresensor2.sys><drops less than 50 PSI> = = <ledlight004.sys><ON>

C>><oilpressuresensor2.sys><drops less than 50 PSI> = = <alarmoilpressure2.sys><ON>

ERRORCODElowoilpressuredieselmotor2

C:\ERRORCODElowoilpressure.exe> copy oilpressuresensor2.sys<drops less than 50 PSI> WARNING!!!  
LOW OIL PRESSURE!!!<SPACE><ENTER>

C:\ERRORCODElowoilpressure.exe> copy oilpressuresensor2<drops less than 50 PSI> WARNING!!! LOW  
OIL PRESSURE!!!<SPACE><ENTER>

C:AUTOERRORCODE.EXE> COPY ERRORCODElowoilpressuredieselmotor2.bat FAULT CODE.COM

```
C:AUTOERRORCODE.EXE> COPY ERRORCODElowoilpressuredieselmotor2.bat FAULTBIN.BAT /V  
the time is<space>$t$_the date is<space>$d$
```

```
C>ERRORCODEnobatterycharge.bat
C>ERRORCODEnobatterycharge.sys*
C>Create ERRORCODEnobatterycharge.sys dir>
battery=C:\battery\battery.sys
ammeter=C:\ammeter\ammeter.sys
ledlight001=C:\ledlight001\ledlight001.sys
batteryswitch=C:\batteryswitch\batteryswitch.sys
alarmbattery=C:\alarmbattery\alarmbattery.sys
```

## **BATTERYCHARGE CONFIG.SYS**

```
C>batterycharge.sys
C>batteryswitch.sys<closed>
C>ledlight001.sys<off>
C>ammeter.sys<value 72 volts>
C>alarmbattery.sys<off>
```

## **NO BATTERY CHARGE**

```
C> IF ammeter.sys<value is less than 72 volts> WARNING!!! NO BATTERY CHARGE!!!<SPACE>
<ENTER>
```

THEN

```
C><ammeter.sys<value less than 72 volts> = = <alarmbattery><on>
```

```
C><ammeter.sys<value less than 72 volts> = = <ledlight001.sys><on>
```

```
C:\ERRORCODEnobatterycharge.exe> copy ammeter.sys<value is less than 72 volts> WARNING!!!
```

NO BATTERY CHARGE!!!<SPACE> <ENTER>

C:\ERRORCODEnobatterycharge.exe> copy ammeter<value is less than 72 volts> WARNING!!! NO  
BATTERY CHARGE!!!<SPACE> <ENTER>

C:AUTOERRORCODE.EXE> COPY ERRORCODEnobatterycharge.bat           FAULT CODE .COM

C:AUTOERRORCODE.EXE> COPY ERRORCODEnobatterycharge.bat           FAULTBIN.BAT /V

the time<space>\$t\$\_the date is<space>\$d\$

```
C>ERRORCODElowoilpressure.bat
C>ERRORCODElowoilpressure.sys*
C> CREATE ERRORCODElowoilpressure.sys dir>
enginestopsiliniod1=C:\enginestopsiliniod1\enginestopsiliniod1.sys
enginestopsiliniod2=C:\enginestopsiliniod2\enginestopsiliniod2.sys
oilpumpswitch1=C:\oilpumpwitch1\oilpumpswitch1.sys
oilpumpswitch2=C:\oilpumpwitch2\oilpumpswitch2.sys
ledlight003=C:\ledlight005\ledlight005.sys
ledlight004=C:\ledlight006\ledlight006.sys
alarmoilpressure1=C:\alarmoilpressure1\alarmoilpressure1.sys
alarmoilpressure2=C:\alarmoilpressure2\alarmoilpressure2.sys
oilpumpdieselmotor1=C:\oilpumpdieselmotor1\oilpumpdieselmotor1.sys
oilpumpdieselmotor2=C:\oilpumpdieselmotor2\oilpumpdieselmotor2.sys
```

SHUTDOWN LOW OIL PRESSURE

DIESEL MOTOR1 OILPUMP CONFIG.SYS

```
C>oilpumpdieselmotor1.sys<ON>
C>enginestopsiliniod1.sys<DEENERGIZED>
C>ledlight005.sys<OFF>
C>alarmoilpressure1.sys<OFF>
C>oilpumpswitch1.sys<CLOSED>
```

DIESEL MOTOR2 OILPUMP CONFIG.SYS

```
C>oilpumpdieselmotor2.sys<ON>
C>enginestopsiliniod2.sys<DEENERGIZED>
C>ledlight006.sys<OFF>
C>alarmoilpressure2.sys<OFF>
C>oilpumpswitch2.sys<CLOSED>
```

SHUTDOWNLOWOILPRESSUREMOTOR1.BAT

```
C> IF <LOWOILPRESSURE(RUNNING)MOTOR1.EXE> == < enginestopsiliniod1.sys>
<ENERGIZED>
THEN
C>< enginestopsiliniod1.sys><ENERGIZED> == <oilpumpdieselmotor1.sys<OFF>
C> <LOWOILPRESSURE(RUNNING)MOTOR1.EXE> == < oilpumpswitch1.sys><OPEN>
C> <LOWOILPRESSURE(RUNNING)MOTOR1.EXE> == < alarmoilpressure1.sys><ON>
C>< alarmoilpressure1.sys><ON> == <ledlight005.sys><ON>
C>>< alarmoilpressure1.sys> == <ledlight005.sys> /I IGNORE
C><DIESEL MOTOR1 OILPUMP CONFIG.SYS> <RESET> Y/N? <SPACE> <ENTER>
```

ERRORCODEshutdownlowoilpressuremotor1

C:\ERRORCODEshutdownlowoilpressuremotor1> LOWOILPRESSURE(RUNNING)MOTOR1.EXE>  
WARNING!!! LOW OIL PRESSURE!!!<SPACE><ENTER>

C:\ERRORCODEshutdownlowoilpressuremotor1> LOWOILPRESSURE(RUNNING)MOTOR1.EXE>  
WARNING!!! LOW OIL PRESSURE!!!<SPACE><ENTER>

C:AUTOERRORCODE.EXE> COPY ERRORCODEshutdownlowoilpressuremotor1.bat        FAULT  
CODE.COM

C:AUTOERRORCODE.EXE> COPY ERRORCODEshutdownlowoilpressuremotor1    FAULTBIN.BAT /V  
the time is<space>\$t\$\_the date is<space>\$d\$

## SHUTDOWNLOWOILPRESSUREMOTOR2.BAT

```
C> IF <LOWOILPRESSURE(RUNNING)MOTOR2.EXE> == < enginestopsiliniod2.sys>  
<ENERGIZED>  
THEN  
C>< enginestopsiliniod2.sys><ENERGIZED> == <oilpumpdieselmotor2.sys<OFF>  
C> <LOWOILPRESSURE(RUNNING)MOTOR2.EXE> == < oilpumpswitch2.sys><OPEN>  
C> <LOWOILPRESSURE(RUNNING)MOTOR2.EXE> == < alarmoilpressure2.sys><ON>  
C>< alarmoilpressure2.sys><ON> == <ledlight006.sys><ON>  
C>>< alarmoilpressure2.sys> == <ledlight006.sys> /I IGNORE  
C><DIESEL MOTOR2 OILPUMP CONFIG.SYS> <RESET> Y/N? <SPACE> <ENTER>
```

ERRORCODEshutdownlowoilpressuremotor2

C:\ERRORCODEshutdownlowoilpressuremotor2> LOWOILPRESSURE(RUNNING)MOTOR2.EXE>  
WARNING!!! LOW OIL PRESSURE!!!<SPACE><ENTER>

C:\ERRORCODEshutdownlowoilpressuremotor2> LOWOILPRESSURE(RUNNING)MOTOR2.EXE>  
WARNING!!! LOW OIL PRESSURE!!!<SPACE><ENTER>

C:AUTOERRORCODE.EXE> COPY ERRORCODEshutdownlowoilpressuremotor2.bat        FAULT  
CODE.COM

C:AUTOERRORCODE.EXE> COPY ERRORCODEshutdownlowoilpressuremotor2    FAULTBIN.BAT /V  
the time is<space>\$t\$\_the date is<space>\$d\$





```
C>ERRORCODEshutdowlowwaterflow.bat
C>ERRORCODEshutdowlowwaterflow.sys*
C> CREATE ERRORCODEshutdowlowwaterflow.sys dir>
```

```
waterpumpmotor1=C:\waterpumpmotor1\waterpumpmotor1.sys
```

```
waterpumpmotor2=C:\waterpumpmotor2\waterpumpmotor2.sys
```

```
waterpumpalarm1=C:\waterpumpalarm1\waterpumpalarm1.sys
```

```
waterpumpalarm2=C:\waterpumpalarm2\waterpumpalarm2.sys
```

```
waterpumplight1=C:\waterpumplight1\waterpumplight1.sys
```

```
waterpumplight2=C:\waterpumplight2\waterpumplight2.sys
```

```
waterpressuresensor1=C:\waterpressuresensor1\waterpressuresensor1.sys
```

```
waterpressuresensor2=C:\waterpressuresensor2\waterpressuresensor2.sys
```

```
waterpressureswitch1=C:\waterpressureswitch1\waterpressureswitch1.sys
```

```
waterpressureswitch2=C:\waterpressureswitch2\waterpressureswitch2.sys
```

```
WATERPUMPMOTOR1.CONFIG.SYS
```

```
C>waterpumpmotor1.sys<ON>
```

```
C>waterpumpalarm1.sys<OFF>
```

```
C>waterpumplight1.sys<OFF>
```

```
C>waterpressuresensor1.sys<4-30 PSI>
```

```
C>waterpressureswitch1.sys<DEERNGIZED
```

```
WATERPUMPCRANKINGMOTOR1.BAT
```

```
C>waterpressuresensor1<value less than 4 PSI> I/ IGNORE
```

```
C>waterpressuresensor1<4-30 PSI> = = <WATERPUMPMOTOR1.CONFIG.SYS>
```

SHUTDOWNLOWWATERFLOWMOTOR1.BAT

C> IF waterpressuresensor1<value less than 4 PSI> WARNING!!! LOW WATER FLOW!!!

THEN

C> IF waterpressuresensor1<value less than 4 PSI> == <waterpressureswitch1><ENERGIZED>

C>waterpressuresensor1<value less than 4 PSI> == <waterpumpmotor1><OFF>

C>waterpressuresensor1<value less than 4 PSI> == < waterpumpalarm1.sys<ON>

C><waterpumpalarm1.sys<ON> == <waterpumplight1.sys<ON>

C:\ERRORCODEshutdowlowwaterflow.bat\SHUTDOWNLOWWATERFLOWMOTOR1.BAT<value less than4psi>WARNING!!! SHUTDOWN WATER FLOW!!!<SPACE><enter>

C:\ERRORCODEshutdowlowwaterflow\SHUTDOWNLOWWATERFLOWMOTOR1<value less than4psi>WARNING!!! SHUTDOWN WATER FLOW!!!<SPACE><enter>

C:AUTOERRORCODE.EXE COPY ERRORCODEshutdowlowwaterflow.bat  
\SHUTDOWNLOWWATERFLOWMOTOR1.BAT FAULTCODE .COM

C:AUTOERRORCODE.EXE COPY ERRORCODEshutdowlowwaterflow.bat  
\SHUTDOWNLOWWATERFLOWMOTOR1.BAT FAULTCODE .COM  
FAULTBIN.BAT /V  
the time is<space>\$t\$\_the date is<space>\$d\$

WATERPUMPMOTOR2.CONFIG.SYS

C>waterpumpmotor2.sys<ON>

C>waterpumpalarm2.sys<OFF>

C>waterpumplight2.sys<OFF>

C>waterpressuresensor2.sys<4-30 PSI>

C>waterpressureswitch2.sys<DEERNGIZED

WATERPUMPCRANKINGMOTOR2.BAT

C>waterpressuresensor2<value less than 4 PSI> I/ IGNORE

C>waterpressuresensor2<4-30 PSI> == <WATERPUMPMOTOR2.CONFIG.SYS>

SHUTDOWNLOWWATERFLOWMOTOR1.BAT

C> IF waterpressuresensor2<value less than 4 PSI> WARNING!!! LOW WATER FLOW!!!

THEN

C> IF waterpressuresensor2<value less than 4 PSI> == <waterpressureswitch2><ENERGIZED>

C>waterpressuresensor2<value less than 4 PSI> == <waterpumpmotor2><OFF>

C>waterpressuresensor2<value less than 4 PSI> == < waterpumpalarm2.sys<ON>

C><waterpumpalarm2.sys<ON> == <waterpumplight2.sys<ON>

C:\ERRORCODEshutdowlowwaterflow.bat\SHUTDOWNLOWWATERFLOWMOTOR2.BAT<value less than4psi>WARNING!!! SHUTDOWN WATER FLOW!!!<SPACE><enter>

C:\ERRORCODEshutdowlowwaterflow\SHUTDOWNLOWWATERFLOWMOTOR2<value less than4psi>WARNING!!! SHUTDOWN WATER FLOW!!!<SPACE><enter>

C:AUTOERRORCODE.EXE COPY ERRORCODEshutdowlowwaterflow.bat  
\SHUTDOWNLOWWATERFLOWMOTOR2.BAT FAULTCODE .COM

C:AUTOERRORCODE.EXE COPY ERRORCODEshutdowlowwaterflow.bat  
\SHUTDOWNLOWWATERFLOWMOTOR2.BAT FAULTCODE .COM  
FAULTBIN.BAT /V

the time is<space>\$t\$\_the date is<space>\$d\$

C>ERRORCODEsidedooropen.bat

C>ERRORCODEsidedooropen.sys\*

C>CREATE ERRORCODEsidedooropen.sys dir>

sidedoorswitch=C:\sidedooropen\sidedooropen.sys

alarmdoor=C:\alarmdoor\alarmdoor.sys

SIDEDOOR CONFIG.SYS

C>sidedoorswitch.sys<closed>

C>alarmdoor.sys<off>

SIDEDOOROPEN

c>if sidedoorswitch.sys<open>WARNING!!! SIDE DOOR OPEN!!!<Space><enter>

then

C>sidedoor.sys<open> = = <alarmdoor.sys><on>

C><alarmdoor.sys> <on/off> Y/N <space> <enter>.

C>alarmdoor.sys> I/ Ignore

C:\ERRORCODEsidedooropen.exe> copy sidedoorswitch.sys<open>WARNING!!! SIDE DOOR OPEN!!!<Space><enter>

C:\ERRORCODEsidedooropen.exe> copy sidedoorswitch<open>WARNING!!! SIDE DOOR OPEN!!!<Space><enter>

C:AUTOERRORCODE.EXE> COPY ERRORCODEsidedooropen.bat           FAULT CODE.COM

C:AUTOERRORCODE.EXE> COPY ERRORCODEsidedooropen.bat           FAULTBIN.BAT /V

THE TIME IS <SPACE>\$t\$ \_THE DATE IS <SPACE>\$d\$

```
C>ERRORCODEtractionmotortempprotection.bat
C>ERRORCODEtractionmotortempprotection.sys*
C> CREATE ERRORCODEtractionmotortempprotection.sys dir>
tractionmotor1=C:\tractionmotor1\tractionmotor1.sys
tractionmotor2=C:\tractionmotor2\tractionmotor2.sys
tractionmotor3=C:\tractionmotor3\tractionmotor3.sys
tractionmotor4=C:\tractionmotor4\tractionmotor4.sys
tractionmotor5=C:\tractionmotor5\tractionmotor5.sys
tractionmotor6=C:\tractionmotor6\tractionmotor6.sys
tractionmotortempalarm1=C:\tractionmotortempalarm1\tractionmotortempalarm1.sys
tractiontemppilotlight001=C:\tractiontemppilotlight001\tractiontemppilotlight001.sys
tractionmotortempsensor1=C:\tractionmotortempsensor1\tractionmotortempsensor1.sys
tractionmotortempsensor2=C:\tractionmotortempsensor2\tractionmotortempsensor2.sys
```

#### TRACTIONMOTORTEMPCONFIG.SYS

```
tractionmotor1.sys<RUNNING>
tractionmotor2.sys<RUNNING>
tractionmotor3.sys<RUNNING>
tractionmotor4.sys<RUNNING>
tractionmotor5.sys<RUNNING>
tractionmotor6.sys<RUNNING>
tractionmotortempalarm1.sys<OFF>
tractiontemppilotlight001.sys<OFF>
tractionmotortempsensor1.sys<ACTIVE AT 150 DEGREES CELSUIS>
tractionmotortempsensor2.sys<ACTIVE AT 150 DEGREES CELSUIS>
```

#### TRUCK1TRACTIONMOTORCONFIG.SYS

```
tractionmotor1.sys<RUNNING>
tractionmotor2.sys<RUNNING>
tractionmotor3.sys<RUNNING>
tractionmotortempalarm1.sys<OFF>
tractiontemppilotlight001.sys<OFF>
tractionmotortempsensor1.sys<ACTIVE AT 150 DEGREES CELSUIS>
```

tractionmotortempprotection.bat

```
C> IF tractionmotortempsensor1.sys<ACTIVE AT 150 DEGREES CELSUIS>WARNING!!! TRACTION MOTOR
TEMP!!!<SPACE><ENTER>
```

```
C> tractionmotortempsensor1.sys<ACTIVE AT 150 DEGREES CELSUIS> = =  
<tractionmotortempalarm1.sys<ON>  
C><tractionmotortempalarm1.sys<ON> = = <tractiontempilotlight001.sys<ON>
```

```
C><TRUCK1TRACTIONMOTORCONFIG.SYS> = = <tractionmotortempprotection.bat>/V  
TRACTIONTEMPTRUCK1.BAT
```

```
C>ERRORCODEtractionmotortempprotection.bat  
C>ERRORCODEtractionmotortempprotection.bat>WARNING!!! TRACTION MOTOR TEMP!!!<SPACE>  
<ENTER>  
C>ERRORCODEtractionmotortempprotection.bat>WARNING!!! TRACTION MOTOR TEMP!!!<SPACE>  
<ENTER>
```

```
C>AUTOERRORCODE.EXE>ERRORCODEtractionmotortempprotection.bat          FAULT CODE.COM  
C>AUTOERRORCODE.EXE>ERRORCODEtractionmotortempprotection.bat          FAULTBIN.BAT /V  
the time is<space>$t$_the date is$d$
```

```
TRUCK2TRACTIONMOTOR2CONFIG.SYS  
tractionmotor4.sys<RUNNING>  
tractionmotor5.sys<RUNNING>  
tractionmotor6.sys<RUNNING>  
tractionmotortempalarm2.sys<OFF>  
tractiontempilotlight002.sys<OFF>  
tractionmotortempsensor2.sys<ACTIVE AT 150 DEGREES CELSUIS>
```

```
tractionmotortempprotection.bat
```

```
C> IF tractionmotortempsensor2.sys<ACTIVE AT 150 DEGREES CELSUIS>WARNING!!! TRACTION MOTOR  
TEMP!!!<SPACE><ENTER>
```

```
C> tractionmotortempsensor2.sys<ACTIVE AT 150 DEGREES CELSUIS> = =  
<tractionmotortempalarm2sys<ON>  
C><tractionmotortempalarm2.sys<ON> = = <tractiontempilotlight002.sys<ON>
```



C><TRUCK2TRACTIONMOTORCONFIG.SYS> = = <tractionmotortempprotection.bat>/V  
TRACTIONTEMPTRUCK2.BAT