```
REM echo off
@REM /* ----------------------------------------------------------------------
@REM    Covidien Copyright 2008
@REM
@REM    File Name:  10039032 PB560 Pediatric Volume and Pressure Test Script
@REM
@REM    Function:   Script file to perform PB560 Pediatric Patient Circuit Tes
@REM            This file is executed by the OpenVent s/w tool p/n 10026042
@REM
@REM
@REM    History:
@REM
#REM    Revision     Date          Author       Comment
@REM    X1       12-June-09   B.Hurd        Initial Version from PB540 10025468 Re
@REM    A        23-Feb-10    A.Donnelly   Update to rev A for P4
@REM                                       No functional change to tests
@REM
@REM    B        15-March-12  B.Hurd       Add Targeted Vent for OpenVent 1.6.0.7
@REM                                       universal test PC and Map T:\ to
@REM                                       \\galway1apo3\TESTRES$\PB560\%COMPUTERNAME%
@REM
@REM    C   30-Nov-18    B.Hurd/          Changed I/E to Insp Time for all the c
@REM                C. Chiranji with CPU S/W.  Correct test titles for Insp Ti
@REM                             to be in seconds.
@REM                             Update to new Insp Sens settings: OFF1=0p,2=1p,3=2
@REM                             4=3,5=4,6=5.
@REM                             Changed %TI_SETTING% to I_ADJUST_ADJUST_TI_CONTROL
@REM                             Update alarm compare commands to use parms
@REM                             HIGH_PRESSURE_ALARM and DISCONNECTION_ALARM
@REM                             for test report readability. These parms default
@REM                             to zero.
@REM                          Update test limits for monitored PEEP and monitored Pi
@REM                          from +/-(2+8%) to +/-(2+4%) to align with new Homecare
@REM                          According to EN 80601-2-72:2015 Clause 201.12.4.102,
@REM                          Indicated Airway pressure accuracy shall be within ± (
@REM                          Update SafetyPressure from 60 to 90 to match change pe
@REM                          SCR195 CDP-00014971 which has been made to align with
@REM                          Homecare Standard (EN 80601-2-72:2015) Clause 201.12.4
@REM ----------------------------------------------------------------------
@REM
@REM ----------------------------------------------------------------------
@REM --------------- References ---------------
@REM [1] PB540/PB560 Volume and Pressure Tests, Manuf Test Spec Doc, P/N 10025
@REM [2] OpenVent Software Specification, P/N 10026043

@REM --------- Comparison Operators --------------
@REM
@REM EQU - Equal To
@REM NEQ - Not Equal To
@REM LSS - Less Than
@REM LEQ - Less Than or Equal To
@REM GTR - Greater Than
@REM GEQ - Greater Than or Equal To
@REM
@REM ---------------------------------------------


@REM ---------------------------------------------
     :CHK_DRV_MAP560

 ECHO   CHECK FOR MAPPED NETWORK DRIVE T:\PB560

 IF EXIST T:\PB560 GOTO CHK_DRV_MAP560_END

@REM delete previsous T:\ mapping to other PB model
 net use T:  /DELETE

 ECHO   T:\DRIVE IS NOT MAPED
 ECHO   MAPPING DRIVE T:\ to \\galway1apo3\TESTRES$\PB560\%COMPUTERNAME%

 net use T: \\galway1apo3\TESTRES$\PB560\%COMPUTERNAME%
```

```
        :CHK_DRV_MAP560_END
    @REM ----------------------------------------
75
    @REM ---------- Constants -------------------
    set output_dir="T:\PB560\Final Test\Ped"
    set report_name="PB560 Pediatric Volume and Pressure Tests"
    set compliance=C3
80  set resistance=R50

    @REM ---------- Test Program Link -------------------
    @REM This line inserts the link to program testventil.exe
    @REM  %TestProgram% represents the path for testventil.exe
85  set TestProgram="C:\Program Files\OpenVent\testventil\testventil.exe"
    set GenerateProgram="C:\Program Files\Openvent\GenerateReport.exe"

    REM ---------- Targeted vent ----------------------
    SET pTargetedVent=40966
90
    @REM ----------- Creation of the XML output file  ------------------
    REM add 'draw' at end of command to generate curves for report
    call %TestProgram% -F %output_dir% %report_name% %compliance% %resistance%
    IF %ERRORLEVEL% NEQ 0 GOTO end
95

    REM ------- Zero PTS2000 Low Pres Input --------
    call %TestProgram% -Z
    IF %ERRORLEVEL% NEQ 0 GOTO end
100

    REM ------------- Ped Circuit 'Yes' --------------
    call %TestProgram% -R CONFIG_ADJUST_PEDIATRIC_CIRCUIT 1
    IF %ERRORLEVEL% NEQ 0 GOTO end
105
    REM ------------- Relative pressure 'Yes' --------------
    call %TestProgram% -R CONFIG_PRESSURE_SUPPORT_RELATIVE 1
    IF %ERRORLEVEL% NEQ 0 GOTO end

110 REM ---------- VOL AC 50mL Test --------------------


        SET title="Mode= VOL, Vol=50mL, Rate=30, Insp time= 0.7s, Peep=0, Insp Sen

115     REM modes: VOL=0 PRES=1 PSVT=2  VSIMV=3 CPAP=4
        call %TestProgram% -R CONFIG_ADJUST_MODE 0
        IF %ERRORLEVEL% NEQ 0 GOTO end


120     REM Set PIP widest alarm imits 20-600 (note: 20 equals 2)
        call %TestProgram% -R ADJUST_ADJUST_LOW_PIP 20
        IF %ERRORLEVEL% NEQ 0 GOTO end
        call %TestProgram% -R ADJUST_ADJUST_HIGH_PIP 600
        IF %ERRORLEVEL% NEQ 0 GOTO end
125
        REM ---------- Set Alarm Limits to OFF -------------
        call %TestProgram% -R ADJUST_LOW_VTE_NO_SELECT 1
        IF %ERRORLEVEL% NEQ 0 GOTO end
        call %TestProgram% -R ADJUST_HIGH_VTE_NO_SELECT 1
130     IF %ERRORLEVEL% NEQ 0 GOTO end
        call %TestProgram% -R CONFIG_FIO2_HIGH_SELECT 0
        IF %ERRORLEVEL% NEQ 0 GOTO end
        call %TestProgram% -R CONFIG_FIO2_LOW_SELECT 0
        IF %ERRORLEVEL% NEQ 0 GOTO end
135
        REM Turn OFF Barometric Compensation (0 = OFF)
        call %TestProgram% -R CONFIG_ADJUST_BAROMETRIC_CORRECTOR 0
        IF %ERRORLEVEL% NEQ 0 GOTO end

140     REM set PEEP to 0
        call %TestProgram% -R ADJUST_PEEP_NO_SELECT 0
        IF %ERRORLEVEL% NEQ 0 GOTO end
        call %TestProgram% -R ADJUST_ADJUST_PEEP 0
        IF %ERRORLEVEL% NEQ 0 GOTO end
```

```
145
        REM RAMP 0 = Slope, RAMP 1 = Rectangle
        call %TestProgram% -R ADJUST_ADJUST_RAMP 0
        IF %ERRORLEVEL% NEQ 0 GOTO end

150     REM Insp Time
        call %TestProgram% -R ADJUST_ADJUST_TI_CONTROL 700


        REM allow insp sens trigger setting to 5
155     call %TestProgram% -R ADJUST_ADJUST_INSP_SENS 6
        IF %ERRORLEVEL% NEQ 0 GOTO end

        REM Set R-Rate
        call %TestProgram% -R ADJUST_ADJUST_CONTROL_R 30
160     IF %ERRORLEVEL% NEQ 0 GOTO end

        REM Set volume (mL)
        call %TestProgram% -R ADJUST_ADJUST_VOL_CONTROL 50
        IF %ERRORLEVEL% NEQ 0 GOTO end
165

        REM ----------- REFRESH VENTILATOR SCREEN ------------
        REM (cursor needs to be on the first setting at the top of the main menu i

170     call %TestProgram% -R KEYBOARD_KEYBOARD_UP_EVENT 1
        IF %ERRORLEVEL% NEQ 0 GOTO end
        REM
        call %TestProgram% -R KEYBOARD_KEYBOARD_VALID_EVENT 1
        IF %ERRORLEVEL% NEQ 0 GOTO end
175     REM
        call %TestProgram% -R KEYBOARD_KEYBOARD_DOWN_EVENT 1
        IF %ERRORLEVEL% NEQ 0 GOTO end
        REM
        call %TestProgram% -R KEYBOARD_KEYBOARD_VALID_EVENT 1
180     IF %ERRORLEVEL% NEQ 0 GOTO end
        REM
        call %TestProgram% -R KEYBOARD_KEYBOARD_VALID_EVENT 1
        IF %ERRORLEVEL% NEQ 0 GOTO end
        REM
185     call %TestProgram% -R KEYBOARD_KEYBOARD_UP_EVENT 1
        IF %ERRORLEVEL% NEQ 0 GOTO end
        REM
        call %TestProgram% -R KEYBOARD_KEYBOARD_VALID_EVENT 1
        IF %ERRORLEVEL% NEQ 0 GOTO end
190     REM
        call %TestProgram% -R KEYBOARD_KEYBOARD_DOWN_EVENT 1
        IF %ERRORLEVEL% NEQ 0 GOTO end
        REM ------------------------------------------------

195     REM --- SETTINGS COMPARISONS--- compares Vent settings to PTS2000 measurem

            SET peep_tolerance=1.5
            SET VOL_SETTING=50
            REM Vti/Vte Tolerance is 10% + 10ml
200
            call %TestProgram% -C %VOL_SETTING% VTI 10p+10
            IF %ERRORLEVEL% NEQ 0 GOTO end
            call %TestProgram% -C I_ADJUST_ADJUST_CONTROL_R RATE 1
            IF %ERRORLEVEL% NEQ 0 GOTO end
205         call %TestProgram% -C I_ADJUST_ADJUST_PEEP/10 PEEP %peep_tolerance%
            IF %ERRORLEVEL% NEQ 0 GOTO end
            call %TestProgram% -C I_ADJUST_ADJUST_TI_CONTROL TI 10p
            IF %ERRORLEVEL% NEQ 0 GOTO end

210
        REM --- MONITORED VALUES --- compares vent measurements to PTS2000 measure
            REM Vent measured PIP/PEEP Tolerance 8% + 2cmH2O

            call %TestProgram% -C I_COMPUTE_COMPUTED_VTI VTI 10p+10
215         IF %ERRORLEVEL% NEQ 0 GOTO end
            call %TestProgram% -C E_COMPUTE_COMPUTED_VTE VTI 10p+10
```

```
            IF %ERRORLEVEL% NEQ 0 GOTO end

            call %TestProgram% -C I_COMPUTE_MEASURE_R RATE 1
220         IF %ERRORLEVEL% NEQ 0 GOTO end
            call %TestProgram% -C PMAX I_COMPUTE_COMPUTED_PIP/10 4p+2
            IF %ERRORLEVEL% NEQ 0 GOTO end

            call %TestProgram% -C PEEP E_COMPUTE_COMPUTED_PEEP/10 %peep_tolerance%
225         IF %ERRORLEVEL% NEQ 0 GOTO end
            call %TestProgram% -C I_COMPUTE_MEASURE_TI/E_COMPUTE_MEASURE_TE IE 10p
            IF %ERRORLEVEL% NEQ 0 GOTO end


230       REM ---- Alarm Checks: Check High Pressure Alarm is not set
            call %TestProgram% -C HIGH_PRESSURE_ALARM I_ALARMS_ALARM_HIGH_PRESSURE
            IF %ERRORLEVEL% NEQ 0 GOTO end

          REM ---- Alarm Checks: Check Low Pressure Disconnection is not set
235         call %TestProgram% -C DISCONNECTION_ALARM I_ALARMS_ALARM_DISCONNECTION
            IF %ERRORLEVEL% NEQ 0 GOTO end

          REM ---- Starts ventilation ---
            call %TestProgram% -R KEYBOARD_KEYBOARD_START_VENTIL_UP_EVENT 1
240         IF %ERRORLEVEL% NEQ 0 GOTO end

          REM --- Perform 1 breath test after 20 breaths complete ---
            call %TestProgram% -E %title% 20 1
            IF %ERRORLEVEL% NEQ 0 GOTO end
245
          REM --- VENTILATION STOP ----
          call %TestProgram% -R KEYBOARD_KEYBOARD_STOP_VENTIL_EVENT 1
          IF %ERRORLEVEL% NEQ 0 GOTO end

250
      REM ---------- Pressure AC Ped 1 Test --------------------


          SET title="Mode=PRES, Pres=10cmH2O, Rate=15, Insp time=1.5s, Peep=0, Insp
255
          REM modes: VOL=0 PRES=1 PSVT=2  VSIMV=3 CPAP=4
          call %TestProgram% -R CONFIG_ADJUST_MODE 1
          IF %ERRORLEVEL% NEQ 0 GOTO end

260       REM ---------- Set Alarm Limits to OFF -------------
          call %TestProgram% -R ADJUST_LOW_VTI_NO_SELECT 1
          IF %ERRORLEVEL% NEQ 0 GOTO end
          call %TestProgram% -R ADJUST_HIGH_VTI_NO_SELECT 1
          IF %ERRORLEVEL% NEQ 0 GOTO end
265       call %TestProgram% -R ADJUST_LOW_VTE_NO_SELECT 1
          IF %ERRORLEVEL% NEQ 0 GOTO end
          call %TestProgram% -R ADJUST_HIGH_VTE_NO_SELECT 1
          IF %ERRORLEVEL% NEQ 0 GOTO end
          call %TestProgram% -R CONFIG_FIO2_HIGH_SELECT 0
270       IF %ERRORLEVEL% NEQ 0 GOTO end
          call %TestProgram% -R CONFIG_FIO2_LOW_SELECT 0
          IF %ERRORLEVEL% NEQ 0 GOTO end

          REM Turn OFF Barometric Compensation (0 = OFF)
275       call %TestProgram% -R CONFIG_ADJUST_BAROMETRIC_CORRECTOR 0
          IF %ERRORLEVEL% NEQ 0 GOTO end

          REM set PEEP to 0
          call %TestProgram% -R ADJUST_PEEP_NO_SELECT 0
280       IF %ERRORLEVEL% NEQ 0 GOTO end
          call %TestProgram% -R ADJUST_ADJUST_PEEP 0
          IF %ERRORLEVEL% NEQ 0 GOTO end

          REM RAMP 0
285       call %TestProgram% -R ADJUST_ADJUST_RAMP 0
          IF %ERRORLEVEL% NEQ 0 GOTO end

          REM  Insp Time
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        call %TestProgram% -R ADJUST_ADJUST_TI_CONTROL 1500
290
        REM allow insp sens trigger setting to 5
        call %TestProgram% -R ADJUST_ADJUST_INSP_SENS 6
        IF %ERRORLEVEL% NEQ 0 GOTO end

295     REM Set R-Rate
        call %TestProgram% -R ADJUST_ADJUST_CONTROL_R 15
        IF %ERRORLEVEL% NEQ 0 GOTO end

        REM Set Pressure Control (X 10)
300     call %TestProgram% -R ADJUST_ADJUST_P_CONTROL 100
        IF %ERRORLEVEL% NEQ 0 GOTO end


        REM ----------- REFRESH VENTILATOR SCREEN ------------
305     REM (cursor needs to be on the first setting at the top of the VOL menu)
        call %TestProgram% -R KEYBOARD_KEYBOARD_UP_EVENT 1
        IF %ERRORLEVEL% NEQ 0 GOTO end
        REM
        call %TestProgram% -R KEYBOARD_KEYBOARD_VALID_EVENT 1
310     IF %ERRORLEVEL% NEQ 0 GOTO end
        REM
        call %TestProgram% -R KEYBOARD_KEYBOARD_VALID_EVENT 1
        IF %ERRORLEVEL% NEQ 0 GOTO end
        REM
315     call %TestProgram% -R KEYBOARD_KEYBOARD_DOWN_EVENT 1
        IF %ERRORLEVEL% NEQ 0 GOTO end
        REM ------------------------------------------------

        REM --- SETTINGS COMPARISONS--- compares vent settings to PTS2000 measurem
320
            SET peep_tolerance=1.5
            call %TestProgram% -C I_ADJUST_ADJUST_P_CONTROL+I_ADJUST_ADJUST_PEEP/1
            IF %ERRORLEVEL% NEQ 0 GOTO end
            call %TestProgram% -C I_ADJUST_ADJUST_CONTROL_R RATE 1
325         IF %ERRORLEVEL% NEQ 0 GOTO end
            call %TestProgram% -C I_ADJUST_ADJUST_PEEP/10 PEEP %peep_tolerance%
            IF %ERRORLEVEL% NEQ 0 GOTO end
            call %TestProgram% -C I_ADJUST_ADJUST_TI_CONTROL TI 10p
            IF %ERRORLEVEL% NEQ 0 GOTO end
330

        REM --- MONITORED VALUES --- compares Vent measurements to PTS2000 measure
            REM Vent measured PIP/PEEP Tolerance 8% + 2cmH2O

335         call %TestProgram% -C I_COMPUTE_MEASURE_R RATE 1
            IF %ERRORLEVEL% NEQ 0 GOTO end
            call %TestProgram% -C PMAX I_COMPUTE_COMPUTED_PIP/10 4p+2
            IF %ERRORLEVEL% NEQ 0 GOTO end

340         call %TestProgram% -C PEEP E_COMPUTE_COMPUTED_PEEP/10 %peep_tolerance%
            IF %ERRORLEVEL% NEQ 0 GOTO end
            call %TestProgram% -C I_COMPUTE_MEASURE_TI/E_COMPUTE_MEASURE_TE IE 10p
            IF %ERRORLEVEL% NEQ 0 GOTO end

345
        REM ---- Alarm Checks: Check High Pressure Alarm is not set
            call %TestProgram% -C HIGH_PRESSURE_ALARM I_ALARMS_ALARM_HIGH_PRESSURE
            IF %ERRORLEVEL% NEQ 0 GOTO end

350     REM ---- Alarm Checks: Check Low Pressure Disconnection is not set
            call %TestProgram% -C DISCONNECTION_ALARM I_ALARMS_ALARM_DISCONNECTION
            IF %ERRORLEVEL% NEQ 0 GOTO end

        REM ---- Starts ventilation ---
355         call %TestProgram% -R KEYBOARD_KEYBOARD_START_VENTIL_UP_EVENT 1
            IF %ERRORLEVEL% NEQ 0 GOTO end

        REM --- Perform 1 breath test after 20 breaths complete ---
            call %TestProgram% -E %title% 20 1
360         IF %ERRORLEVEL% NEQ 0 GOTO end
```

```
REM ---------------- VENTILATION STOP ---------------
call %TestProgram% -R KEYBOARD_KEYBOARD_STOP_VENTIL_EVENT 1
IF %ERRORLEVEL% NEQ 0 GOTO end
365


REM ---------- Pressure AC Ped 2 Test --------------------

370 SET title="Mode=PRES, Pres=5cmH2O, Rate=15, Insp time=1.5s, Peep=5, Insp S

REM modes: VOL=0 PRES=1 PSVT=2  VSIMV=3 CPAP=4
call %TestProgram% -R CONFIG_ADJUST_MODE 1
IF %ERRORLEVEL% NEQ 0 GOTO end
375
REM Turn OFF Barometric Compensation (0 = OFF)
call %TestProgram% -R CONFIG_ADJUST_BAROMETRIC_CORRECTOR 0
IF %ERRORLEVEL% NEQ 0 GOTO end

380 REM set PEEP to adj mode
call %TestProgram% -R ADJUST_PEEP_NO_SELECT 0
IF %ERRORLEVEL% NEQ 0 GOTO end
call %TestProgram% -R ADJUST_ADJUST_PEEP 50
IF %ERRORLEVEL% NEQ 0 GOTO end
385
REM RAMP 0
call %TestProgram% -R ADJUST_ADJUST_RAMP 0
IF %ERRORLEVEL% NEQ 0 GOTO end

390 REM  Insp Time
call %TestProgram% -R ADJUST_ADJUST_TI_CONTROL 1500

REM allow insp sens trigger setting to 5
call %TestProgram% -R ADJUST_ADJUST_INSP_SENS 6
395 IF %ERRORLEVEL% NEQ 0 GOTO end

REM Set R-Rate
call %TestProgram% -R ADJUST_ADJUST_CONTROL_R 15
IF %ERRORLEVEL% NEQ 0 GOTO end
400
REM Set Pressure Control (X 10)
call %TestProgram% -R ADJUST_ADJUST_P_CONTROL 50
IF %ERRORLEVEL% NEQ 0 GOTO end

405
REM ----------- REFRESH VENTILATOR SCREEN ------------
REM (cursor needs to be on the first setting at the top of the main menu i

call %TestProgram% -R KEYBOARD_KEYBOARD_UP_EVENT 1
410 IF %ERRORLEVEL% NEQ 0 GOTO end
REM
call %TestProgram% -R KEYBOARD_KEYBOARD_VALID_EVENT 1
IF %ERRORLEVEL% NEQ 0 GOTO end
REM
415 call %TestProgram% -R KEYBOARD_KEYBOARD_DOWN_EVENT 1
IF %ERRORLEVEL% NEQ 0 GOTO end
REM
call %TestProgram% -R KEYBOARD_KEYBOARD_VALID_EVENT 1
IF %ERRORLEVEL% NEQ 0 GOTO end
420 REM
call %TestProgram% -R KEYBOARD_KEYBOARD_VALID_EVENT 1
IF %ERRORLEVEL% NEQ 0 GOTO end
REM
call %TestProgram% -R KEYBOARD_KEYBOARD_UP_EVENT 1
425 IF %ERRORLEVEL% NEQ 0 GOTO end
REM
call %TestProgram% -R KEYBOARD_KEYBOARD_VALID_EVENT 1
IF %ERRORLEVEL% NEQ 0 GOTO end
REM
430 call %TestProgram% -R KEYBOARD_KEYBOARD_DOWN_EVENT 1
IF %ERRORLEVEL% NEQ 0 GOTO end
REM ------------------------------------------------
```

```
        REM --- SETTINGS COMPARISONS--- compares vent settings to PTS2000 measurem
435         call %TestProgram% -C I_ADJUST_ADJUST_P_CONTROL+I_ADJUST_ADJUST_PEEP/1
            IF %ERRORLEVEL% NEQ 0 GOTO end
            call %TestProgram% -C I_ADJUST_ADJUST_CONTROL_R RATE 1
            IF %ERRORLEVEL% NEQ 0 GOTO end
            call %TestProgram% -C I_ADJUST_ADJUST_PEEP/10 PEEP 10p+1
440         IF %ERRORLEVEL% NEQ 0 GOTO end
            call %TestProgram% -C I_ADJUST_ADJUST_TI_CONTROL TI 10p
            IF %ERRORLEVEL% NEQ 0 GOTO end


445     REM --- MONITORED VALUES --- compares Vent measurements to PTS2000 measure
            REM Vent measured PIP/PEEP Tolerance 8% + 2cmH2O

            call %TestProgram% -C I_COMPUTE_MEASURE_R RATE 1
            IF %ERRORLEVEL% NEQ 0 GOTO end
450         call %TestProgram% -C PMAX I_COMPUTE_COMPUTED_PIP/10 4p+2
            IF %ERRORLEVEL% NEQ 0 GOTO end

            call %TestProgram% -C PEEP E_COMPUTE_COMPUTED_PEEP/10 4p+2
            IF %ERRORLEVEL% NEQ 0 GOTO end
455         call %TestProgram% -C I_COMPUTE_MEASURE_TI/E_COMPUTE_MEASURE_TE IE 10p
            IF %ERRORLEVEL% NEQ 0 GOTO end


        REM ---- Alarm Checks: Check High Pressure Alarm is not set
460         call %TestProgram% -C HIGH_PRESSURE_ALARM I_ALARMS_ALARM_HIGH_PRESSURE
            IF %ERRORLEVEL% NEQ 0 GOTO end

        REM ---- Alarm Checks: Check Low Pressure Disconnection is not set
            call %TestProgram% -C DISCONNECTION_ALARM I_ALARMS_ALARM_DISCONNECTION
465         IF %ERRORLEVEL% NEQ 0 GOTO end


        REM ---- Starts ventilation ---
            call %TestProgram% -R KEYBOARD_KEYBOARD_START_VENTIL_UP_EVENT 1
470         IF %ERRORLEVEL% NEQ 0 GOTO end

        REM --- Perform 1 breath test after 20 breaths complete ---
            call %TestProgram% -E %title% 20 1
            IF %ERRORLEVEL% NEQ 0 GOTO end
475
        REM ---------------- VENTILATION STOP ---------------
        call %TestProgram% -R KEYBOARD_KEYBOARD_STOP_VENTIL_EVENT 1
        IF %ERRORLEVEL% NEQ 0 GOTO end

480

    REM -------------- Safety Pressure Test -------------


485     SET title="Mode= Safety Pressure Test, Vol=400mL, Rate=15, Insp Time=1.5s,

        REM modes: VOL=0 PRES=1 PSVT=2  VSIMV=3 CPAP=4
        call %TestProgram% -R CONFIG_ADJUST_MODE 0
        IF %ERRORLEVEL% NEQ 0 GOTO end
490
        REM Set PIP alarm limits 20-900 (note: 20 equals 2) Set High limit = 90
        call %TestProgram% -R ADJUST_ADJUST_LOW_PIP 20
        IF %ERRORLEVEL% NEQ 0 GOTO end
495     call %TestProgram% -R ADJUST_ADJUST_HIGH_PIP 900
        IF %ERRORLEVEL% NEQ 0 GOTO end

        REM Turn OFF Barometric Compensation (0 = OFF)
        call %TestProgram% -R CONFIG_ADJUST_BAROMETRIC_CORRECTOR 0
500     IF %ERRORLEVEL% NEQ 0 GOTO end

        REM set PEEP to 0
        call %TestProgram% -R ADJUST_PEEP_NO_SELECT 0
        IF %ERRORLEVEL% NEQ 0 GOTO end
```

```
505       call %TestProgram% -R ADJUST_ADJUST_PEEP 0
          IF %ERRORLEVEL% NEQ 0 GOTO end

          REM RAMP 0 = Slope, RAMP 1 = Rectangle
          call %TestProgram% -R ADJUST_ADJUST_RAMP 0
510       IF %ERRORLEVEL% NEQ 0 GOTO end

          REM  Insp Time
          call %TestProgram% -R ADJUST_ADJUST_TI_CONTROL 1500

515       REM allow insp sens trigger setting to 5
          call %TestProgram% -R ADJUST_ADJUST_INSP_SENS 6
          IF %ERRORLEVEL% NEQ 0 GOTO end

          REM Set R-Rate
520       call %TestProgram% -R ADJUST_ADJUST_CONTROL_R 15
          IF %ERRORLEVEL% NEQ 0 GOTO end

          REM Set volume (mL)
          call %TestProgram% -R ADJUST_ADJUST_VOL_CONTROL 400
525       IF %ERRORLEVEL% NEQ 0 GOTO end


          REM --- REFRESH VENTILATOR SCREEN --- (cursor needs to be on the first set

530           call %TestProgram% -R KEYBOARD_KEYBOARD_UP_EVENT 1
              IF %ERRORLEVEL% NEQ 0 GOTO end
              rem FOR /L %%p IN (0,1,1000) DO REM
              call %TestProgram% -R KEYBOARD_KEYBOARD_VALID_EVENT 1
              IF %ERRORLEVEL% NEQ 0 GOTO end
535           rem FOR /L %%p IN (0,1,1000) DO REM
              call %TestProgram% -R KEYBOARD_KEYBOARD_VALID_EVENT 1
              IF %ERRORLEVEL% NEQ 0 GOTO end
              rem FOR /L %%p IN (0,1,1000) DO REM
              call %TestProgram% -R KEYBOARD_KEYBOARD_DOWN_EVENT 1
540           IF %ERRORLEVEL% NEQ 0 GOTO end

          REM --- Safety Pressure Limit Test: Check Pressure to be 70-94cmH2O
              REM (TestPressure=82 +/- 12 [70-94cmH2O])
              SET TestPressure=82
545           call %TestProgram% -C %TestPressure% PMAX 12
              IF %ERRORLEVEL% NEQ 0 GOTO end

          REM -------------- Start ventilation ----------------
              call %TestProgram% -R KEYBOARD_KEYBOARD_START_VENTIL_UP_EVENT 1
550           IF %ERRORLEVEL% NEQ 0 GOTO end

          REM --- Perform 1 breath test after 10 breath complete ---
              call %TestProgram% -E %title% 5 1
              IF %ERRORLEVEL% NEQ 0 GOTO end
555
          REM ---------------- VENTILATION STOP ---------------
          call %TestProgram% -R KEYBOARD_KEYBOARD_STOP_VENTIL_EVENT 1
          IF %ERRORLEVEL% NEQ 0 GOTO end

560


      REM -------------- High Pressure Alarm Test -------------

565       SET title="Mode= High Pressure Alarm Test, Vol=400mL, Rate=15, Insp Time=1

          REM modes: VOL=0 PRES=1 PSVT=2  VSIMV=3 CPAP=4
          call %TestProgram% -R CONFIG_ADJUST_MODE 0
          IF %ERRORLEVEL% NEQ 0 GOTO end
570

          REM Set PIP alarm limits 20-600 (note: 20 equals 2) High limit = 60
          call %TestProgram% -R ADJUST_ADJUST_LOW_PIP 20
          IF %ERRORLEVEL% NEQ 0 GOTO end
575       call %TestProgram% -R ADJUST_ADJUST_HIGH_PIP 600
          IF %ERRORLEVEL% NEQ 0 GOTO end
```

```
        REM Turn OFF Barometric Compensation (0 = OFF)
        call %TestProgram% -R CONFIG_ADJUST_BAROMETRIC_CORRECTOR 0
580     IF %ERRORLEVEL% NEQ 0 GOTO end

        REM set PEEP to 0
        call %TestProgram% -R ADJUST_PEEP_NO_SELECT 0
        IF %ERRORLEVEL% NEQ 0 GOTO end
585     call %TestProgram% -R ADJUST_ADJUST_PEEP 0
        IF %ERRORLEVEL% NEQ 0 GOTO end

        REM RAMP 0 = Slope, RAMP 1 = Rectangle
        call %TestProgram% -R ADJUST_ADJUST_RAMP 0
590     IF %ERRORLEVEL% NEQ 0 GOTO end

        REM  Insp Time
        call %TestProgram% -R ADJUST_ADJUST_TI_CONTROL 1500

595     REM allow insp sens trigger setting to 5
        call %TestProgram% -R ADJUST_ADJUST_INSP_SENS 6
        IF %ERRORLEVEL% NEQ 0 GOTO end

        REM Set R-Rate
600     call %TestProgram% -R ADJUST_ADJUST_CONTROL_R 15
        IF %ERRORLEVEL% NEQ 0 GOTO end

        REM Set volume (mL)
        call %TestProgram% -R ADJUST_ADJUST_VOL_CONTROL 400
605     IF %ERRORLEVEL% NEQ 0 GOTO end


        REM --- REFRESH VENTILATOR SCREEN --- (cursor needs to be on the first set

610         call %TestProgram% -R KEYBOARD_KEYBOARD_UP_EVENT 1
            IF %ERRORLEVEL% NEQ 0 GOTO end
            rem FOR /L %%p IN (0,1,1000) DO REM
            call %TestProgram% -R KEYBOARD_KEYBOARD_VALID_EVENT 1
            IF %ERRORLEVEL% NEQ 0 GOTO end
615         rem FOR /L %%p IN (0,1,1000) DO REM
            call %TestProgram% -R KEYBOARD_KEYBOARD_VALID_EVENT 1
            IF %ERRORLEVEL% NEQ 0 GOTO end
            rem FOR /L %%p IN (0,1,1000) DO REM
            call %TestProgram% -R KEYBOARD_KEYBOARD_DOWN_EVENT 1
620         IF %ERRORLEVEL% NEQ 0 GOTO end


        REM ---- High Pressure Alarm Triggering: Check for High Pressure Alarm Eve
            call %TestProgram% -C 3 I_ALARMS_ALARM_HIGH_PRESSURE 0
625         IF %ERRORLEVEL% NEQ 0 GOTO end

        REM ---- Alarm Checks: Check Low Pressure Disconnection is not set
            call %TestProgram% -C DISCONNECTION_ALARM I_ALARMS_ALARM_DISCONNECTION
            IF %ERRORLEVEL% NEQ 0 GOTO end
630
        REM ---- Alarm Checks: Check Proximal Pressure Disconnection is not set
            call %TestProgram% -C 0 I_ALARMS_ALARM_PROXI_DISCONNECTION 1
            IF %ERRORLEVEL% NEQ 0 GOTO end

635     REM -------------- Start ventilation ----------------
            call %TestProgram% -R KEYBOARD_KEYBOARD_START_VENTIL_UP_EVENT 1
            IF %ERRORLEVEL% NEQ 0 GOTO end

        REM --- Perform 1 breath test after 5 breath complete ---
640         call %TestProgram% -E %title% 5 1
            IF %ERRORLEVEL% NEQ 0 GOTO end

        REM ---------------- VENTILATION STOP ---------------
        call %TestProgram% -R KEYBOARD_KEYBOARD_STOP_VENTIL_EVENT 1
645     IF %ERRORLEVEL% NEQ 0 GOTO end

    REM ----------- Set Defualt Vent Settings ------------
```

```
650  REM --------------- in Volume mode -------------------

     REM modes: VOL=0 PRES=1 PSVT=2  VSIMV=3 CPAP=4
     call %TestProgram% -R CONFIG_ADJUST_MODE 0
     IF %ERRORLEVEL% NEQ 0 GOTO end
655
     REM set low Vte alarm limit to 300
     call %TestProgram% -R ADJUST_LOW_VTE_NO_SELECT 0
     IF %ERRORLEVEL% NEQ 0 GOTO end
     call %TestProgram% -R ADJUST_ADJUST_LOW_VTE 300
660  IF %ERRORLEVEL% NEQ 0 GOTO end

     REM set high Vte alarm limit to 1000
     call %TestProgram% -R ADJUST_HIGH_VTE_NO_SELECT 0
     IF %ERRORLEVEL% NEQ 0 GOTO end
665  call %TestProgram% -R ADJUST_ADJUST_HIGH_VTE 1000
     IF %ERRORLEVEL% NEQ 0 GOTO end

     REM set PEEP to 0
     call %TestProgram% -R ADJUST_PEEP_NO_SELECT 0
670  IF %ERRORLEVEL% NEQ 0 GOTO end
     call %TestProgram% -R ADJUST_ADJUST_PEEP 0
     IF %ERRORLEVEL% NEQ 0 GOTO end

     REM RAMP 0 = Slope, RAMP 1 = Rectangle
675  call %TestProgram% -R ADJUST_ADJUST_RAMP 0
     IF %ERRORLEVEL% NEQ 0 GOTO end

     REM  Insp Time
     call %TestProgram% -R ADJUST_ADJUST_TI_CONTROL 1300
680

     REM allow insp sens trigger setting to 5
     call %TestProgram% -R ADJUST_ADJUST_INSP_SENS 3
     IF %ERRORLEVEL% NEQ 0 GOTO end
685
     REM Set R-Rate
     call %TestProgram% -R ADJUST_ADJUST_CONTROL_R 13
     IF %ERRORLEVEL% NEQ 0 GOTO end

690  REM Set volume (mL)
     call %TestProgram% -R ADJUST_ADJUST_VOL_CONTROL 500
     IF %ERRORLEVEL% NEQ 0 GOTO end

     REM --------------- set pres mode -------------------
695  REM Set default settings: Pres A/C, P Control = 15, Peep = OFF, Rate = 13
     REM Set I/E = 1:2.0, rise time = 2

     REM modes: VOL=0 PRES=1 PSVT=2  VSIMV=3 CPAP=4
     call %TestProgram% -R CONFIG_ADJUST_MODE 1
700  IF %ERRORLEVEL% NEQ 0 GOTO end

     REM Turn ON Barometric Compensation (1 = ON)
     call %TestProgram% -R CONFIG_ADJUST_BAROMETRIC_CORRECTOR 1
     IF %ERRORLEVEL% NEQ 0 GOTO end
705
     REM set low Vte alarm limit to 300
     call %TestProgram% -R ADJUST_LOW_VTE_NO_SELECT 0
     IF %ERRORLEVEL% NEQ 0 GOTO end
     call %TestProgram% -R ADJUST_ADJUST_LOW_VTE 300
710  IF %ERRORLEVEL% NEQ 0 GOTO end

     REM set high Vte alarm limit to 1000
     call %TestProgram% -R ADJUST_HIGH_VTE_NO_SELECT 0
     IF %ERRORLEVEL% NEQ 0 GOTO end
715  call %TestProgram% -R ADJUST_ADJUST_HIGH_VTE 1000
     IF %ERRORLEVEL% NEQ 0 GOTO end

     REM set low Vti alarm limit to 300
     call %TestProgram% -R ADJUST_LOW_VTI_NO_SELECT 0
720  IF %ERRORLEVEL% NEQ 0 GOTO end
```

```
call %TestProgram% -R ADJUST_ADJUST_LOW_VTI 300
IF %ERRORLEVEL% NEQ 0 GOTO end

REM set high Vti alarm limit to 2000
call %TestProgram% -R ADJUST_HIGH_VTI_NO_SELECT 0
IF %ERRORLEVEL% NEQ 0 GOTO end
call %TestProgram% -R ADJUST_ADJUST_HIGH_VTI 2000
IF %ERRORLEVEL% NEQ 0 GOTO end

REM set High R = OFF
call %TestProgram% -R ADJUST_HIGH_R_NO_SELECT 1
IF %ERRORLEVEL% NEQ 0 GOTO end

REM set PEEP to 0
call %TestProgram% -R ADJUST_PEEP_NO_SELECT 0
IF %ERRORLEVEL% NEQ 0 GOTO end
call %TestProgram% -R ADJUST_ADJUST_PEEP 0
IF %ERRORLEVEL% NEQ 0 GOTO end

REM  Insp Time
call %TestProgram% -R ADJUST_ADJUST_TI_CONTROL 1300


REM allow insp sens trigger setting
call %TestProgram% -R ADJUST_ADJUST_INSP_SENS 3
IF %ERRORLEVEL% NEQ 0 GOTO end


REM Set R-Rate
call %TestProgram% -R ADJUST_ADJUST_CONTROL_R 13
IF %ERRORLEVEL% NEQ 0 GOTO end


REM Set Pressure Control
call %TestProgram% -R ADJUST_ADJUST_P_CONTROL 150
IF %ERRORLEVEL% NEQ 0 GOTO end

REM ------------- Relative pressure 'Off' --------------
call %TestProgram% -R CONFIG_PRESSURE_SUPPORT_RELATIVE 0
IF %ERRORLEVEL% NEQ 0 GOTO end

REM ------------- Ped Circuit 'Off' --------------
call %TestProgram% -R CONFIG_ADJUST_PEDIATRIC_CIRCUIT 0
IF %ERRORLEVEL% NEQ 0 GOTO end
goto final

:end

PAUSE

REM ------------- ERROR DETAILS ------------------
 IF %ERRORLEVEL% == 1 goto syntax_error

 IF %ERRORLEVEL% == 2 goto pts_error

 IF %ERRORLEVEL% == 3 goto ventil_error

 IF %ERRORLEVEL% == 4 goto oxy_error

 IF %ERRORLEVEL% == 5 goto internal_error

 goto final


 :syntax_error

echo ****************************************
echo *                                      *
echo *             Syntax error             *
echo *                                      *
echo ****************************************
```

```
        goto final_error

    795     :pts_error

        echo ****************************************
        echo *                                      *
        echo *              PTS com error           *
    800 echo *                                      *
        echo ****************************************

        goto final_error

    805     :ventil_error

        echo ****************************************
        echo *                                      *
        echo *           Ventil com error           *
    810 echo *                                      *
        echo ****************************************

        goto final_error

    815     :oxy_error

        echo ****************************************
        echo *                                      *
        echo *          Oxygraph com error          *
    820 echo *                                      *
        echo ****************************************

        goto final_error

    825     :internal_error

        echo  ****************************************
        echo  *                                      *
        echo  *          Internal error              *
    830 echo  *                                      *
        echo  ****************************************

        goto final_error

    835     :final_error

            pause
            exit ERRORLEVEL

    840     :final

        REM ----------- Short Report generation ---------------

        call %GenerateProgram% -simple
    845
        exit 0
```