**Test Cell Start-Up Procedure**

1. Turn air handler to TEST
2. Turn ON the battery box switch
3. Check engine oil level
4. Check coolant level
5. Check fuel level and type
6. Verify fuel valves are on
7. Ensure chilled water valves are on
8. Check coolant level in radiator tower and intercooler reservoir
9. Inspect driveshaft, engine mounts and exhaust system; verify everything is tight and connected
10. Turn on Hartzel fan directed at exhaust side of engine
11. ECM 4800 enable sensors and measure

**Scan Tool Hook-Up Procedure to Clear DTCs**

1. Test cell is shut down
2. iTest select OBD mode
3. Scan tool open toolbox, self-test, all CMDT
4. Clear all DTCs
5. Disconnect OBD connector

**RPECS Start-Up Procedure**

1. Login
2. RPECS – Mazda 6
3. Enable can
4. M - monitor

**iTest and Vehicle Start-Up Procedure**

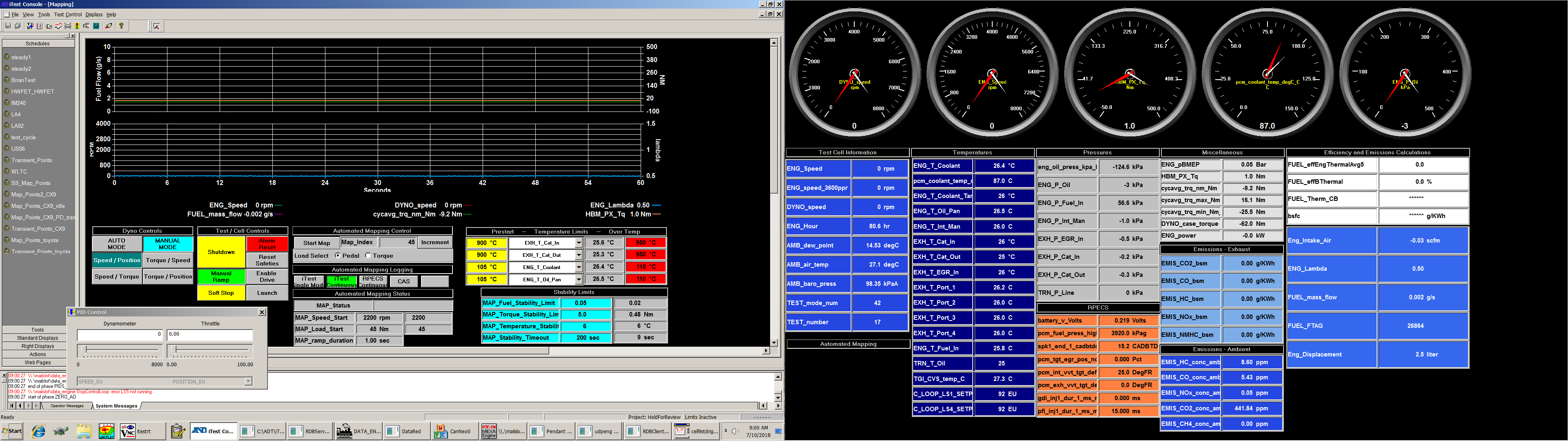
1. Vehicle PRNDL lever in P position
2. Transmission module on console in Park
3. Test cell power supplies on
4. Hartzel fan directed toward engine on
5. Launch iTest
6. Select starter and automatic
   1. Engine should start and idle
   2. Allow the engine to idle for 2 minutes
7. Ramp dyno speed = 1000 rpm, pedal = 0
8. Select itest brake pedal on
9. Vehicle shift lever to drive
10. Console trans module in D position
11. Select itest brake pedal off
12. Ramp dyno and engine: dyno = 2000 rpm in 10 sec

pedal = 20 in 10 seconds

1. Verify engine is running properly (oil pressure, ECM lambda = 1.0, cycle avg torque is smooth)
2. Verify no check engine, ABS, DTCs on dash - clear codes if DTCs are present
3. Run for 5 minutes
4. Ramp pedal to 25
5. Warm up until eng\_Tcoolant = 80C and oil temp = 70C

**Pre-Run Checks**

1. Verify engine is running
2. Verify oil pressure > 100 kPa
3. Verify fuel pressure ~ 60psi (490 kPa)
4. Set coolant temperature setpoint = 80 C
5. Set oil temperature setpoint = 70 C
6. iTest mapping display - verify temperature & stability criteria are correct



**Begin New Test With Deac**

1. Select **New Test**
   1. Change test info, date, etc.
   2. Continue
   3. Increment (new Test Number; run number reset to 0) or Continue (continue with previous Test and next run number)
2. Enable deac (deac is enabled by using stock oil temperature sensor)
   1. Switch rpecs oil temp switch to read stock oil temp sensor
   2. Engine will run in deac when oil is warm
3. Start each new test with a Common Mode Daily Check
   1. 2000 rpm 25% pedal until oil is 65 C minimum
   2. **Common mode is 2500 RPM & 30% throttle**
   3. Wait until Oil Temp is 80 C & Water Temp is 90 C
   4. Single mode log
   5. Ensure consistency with previous Common Mode runs
4. Begin mapping

**Begin New Test Without Deac**

1. Disable deac
   1. Switch rpecs oil temperature switch to read fake 25C (deac is disabled by faking the stock oil temperature sensor to 25C)
   2. Continue with steps 1, 3, 4 listed in the section above

**Engine Shut-Down Procedure**

1. Manual ramp down to dyno RPM = 1000, pedal = 0
2. Itest brake pedal on
3. Trans module to park
4. Vehicle shift lever to Park
5. Itest brake pedal off
6. Select iTest shutdown
7. Turn air handler to OFF
8. Turn battery switches to OFF
9. Turn off ECM sensors: sys, disable sensors