## ENGINE ASSEMBLY - ENGINE TEST 003 - ENGINE ACCEPTANCE TEST

**TASK 72-00-00-760-003**

1. General.

A. This procedure gives the instructions for the Engine Acceptance Test. During the test you will operate the engine at different power settings (fan speeds) for the ambient conditions and collect performance data. You will then compare the performance data to the engine's certified performance levels.

B. The following abbreviations are used in performance calculations:

| Abbreviation | Full Name |
|---|---|
| A2 | Bellmouth Area (sq in) |
| AI | Approach Idle |
| OCPR | Overall Compressor Pressure Ratio |
| CPR | Compressor Pressure Ratio |
| CTR | Compressor Temperature Ratio |
| EGT | Exhaust Gas Temperature |
| EGTK | Corrected Exhaust Gas Temperature |
| EPR | Engine Pressure Ratio |
| EPRK | Corrected Engine Pressure Ratio |
| FPR | Fan Pressure Ratio |
| FMEGT | Exhaust Gas Temperature Facility Modifier |
| FMEPR | Engine Pressure Ratio Facility Modifier |
| FMFN | Thrust Facility Modifier |
| FMN2 | Core Speed Facility Modifier |
| FMWF | Fuel Flow Facility Modifier |
| FMW2 | Airflow Facility Modifier |
| FN | Thrust |
| FNK | Corrected Thrust |

| Abbreviation | Full Name |
|---|---|
| FNK Rated | Minimum Thrust for Test Power Rating |
| HPC | High Pressure Compressor |
| HPT | High Pressure Turbine |
| MC | Maximum Continuous |
| MI | Minimum Idle |
| N1 | Fan Speed Measured |
| N1K | Corrected Fan Speed, Humidity |
| N1K Rated | Specified N1K for Test Power Setting |
| N1R | Corrected Fan Speed, Dry |
| N1R Actual | Test Corrected N1R |
| N2 | Core Speed |
| N2K | Corrected Core Speed |
| N2CC3 | Hot Day Core Speed |
| PAMB | Ambient Barometric Pressure |
| PS3 | HPC Discharge Pressure |
| PS12 | Fan Inlet Static Pressure |
| PS13 | Fan Discharge Static Pressure |
| PT2/PS2 | Bellmouth Inlet Total-to-Static Pressure Ratio |
| PT17 | Fan Discharge Total Pressure |
| PT25 | Compressor Inlet Total Pressure |
| PT54 | LPT Discharge Total Pressure |
| PT495 | LPT Inlet Total Pressure |
| PS2 | Bellmouth Static Pressure |
| SFC | Specific Fuel Consumption |

| Abbreviation | Full Name |
|---|---|
| TC/T3 | Turbine Ring Ratio |
| TPR | HP Turbine Pressure Ratio |
| TO | Takeoff |
| T2 | Fan Inlet Temperature |
| T3 | Compressor Discharge Temperature |
| T5 | LPT Discharge Total Temperature |
| T12 | Fan Inlet Total Temperature |
| T25 | Compressor Inlet Temperature |
| T54 | LPT Temperature |
| T495 | Exhaust Gas Temperature |
| WF | Fuel Flow |
| WFK | Corrected Fuel Flow |
| W2AR | Corrected Total Airflow |

C. The engine must meet the minimum thrust requirements. In addition, the engine should also demonstrate positive EGT and N2 margins relative to the maximum EGT and N2 limits given in Figure 1301.

D. Characteristics of operation for N2, EPR, and WF are provided to help you control engine quality. You can also use this data to do troubleshooting if the performance of the engine is marginal. But, do not use the characteristics of operation to accept or reject an engine.

E. During this test, refer to TASK 72-00-00-760-001 (Test 001) for the applicable operating limits.

2. Acceleration Time Check and Acceptance Calibration.

**Subtask 72-00-00-760-080**

NOTE: These checks are made to be done at the same time.

A. This test makes sure the indicated EGT and N2 are in the performance limits. It also makes sure that when you set the N1, the engine produces the correct thrust at the applicable power setting.

B. Monitor the fuel flow (WF) and exhaust gas temperature (EGT) carefully. These parameters can help find possible problems and control quality.

C. Do the tests as follows:

(1) Start the engine. Refer to TASK 72-00-00-760-000 (Test 000).

(2) Record the corrected time to MI and peak EGT. Set N1 for the power settings in this test to plus or minus 5 rpm. Unless constrained by the FADEC N1 maximum limit (5356 rpm - ARINC 429 LABEL 342-) and the ambient temperature is below hot day conditions.

(3) Do the following warm-up procedure:

NOTE: Repeat the warm-up procedure each time the engine is shut down during the test.

(a) Keep the engine at MI for 5 minutes.

**Subtask 72-00-00-760-090**

(4) Record the oil quantity indication at 5 minutes. See Figure 1303 for correction.

**Subtask 72-00-00-760-088**

(5) Determine the TO power. Refer to Figure 1302.

**Subtask 72-00-00-760-089**

NOTE: This test must be done with all customer bleed off and no customer power extraction.

NOTE: If you want to run multiple engine ratings simultaneously, use the step-down method as shown in Figure 1313. Perform the break-in at the highest rating the engine is to be tested. Test cell connector is required to carry out testing for multiple ratings.

(6) Slowly accelerate to the TO power calculated in Subtask 72-00-00-760-088 (paragraph 2.C.(5)) and set the throttle stop at that position.

(7) Do a slow deceleration to 15 percent TO power. Refer to Figure 1313. Keep the engine at 15 percent TO power for 5 minutes.

## 7B20, 7B20/2, 7B20/3

| POWER SETTING (N1K RATED) | FLAT RATE TEMP | LIMITS | STANDARD DAY | HOT DAY | | |
|---|---|---|---|---|---|---|
| | | | FNK RATED | EGT* | PRE 7BU EEC N2 | 7BU EEC SOFTWARE AND HIGHER N2 |
| (RPM) | °F (°C) | | LBS (daN) | °F (°C) | RPM | RPM |
| TO (4587) | 86 (30) | MAX | - - | 1679 (915) | 14671 | 14425 |
| | | MIN | 20600 (9163) | - - | - - | - - |
| MC (4484) | 77 (25) | MAX | - - | 1639 (893) | - - | - - |
| | | MIN | 19400 (8630) | - - | - - | - - |

**NOTES:**

1. THE MINIMUM THRUST SHOWN IS THE INSTALLED THRUST THAT IS EQUIVALENT TO THE FAA CERTIFIED THRUST. THE ENGINE PERFORMANCE MUST BE THE SAME AS, OR BETTER THAN, THESE LIMITS.
2. * THIS LIMIT IS EQUIVALENT TO A PEAK EGT OF 1742 °F (950 °C) DURING A FULLY-RATED HOT DAY TO AT SEA LEVEL STATIC (SLS).
3. THE MAXIMUM HOT DAY N2 LIMITS ARE EQUIVALENT TO THE INSTALLED FAA CERTIFIED N2 (15183 RPM).
4. THE MAXIMUM FAA CERTIFIED N1 LIMIT IS 5382 RPM.
5. TAKEOFF EGT MARGINS QUOTED ARE FOR A WARM ENGINE TAKEOFF. COLD ENGINE TAKEOFFS MAY DECREASE THE EGT MARGIN BY AS MUCH AS 15°C.
6. TAKEOFF EGT MARGIN RELATIVE TO THE ABOVE LIMITS MUST BE REDUCED BY THE FOLLOWING ADJUSTMENTS FOR OPERATION AT AIRPORT ALTITUDES OTHER THAN SEA LEVEL.

| AIRPORT ALTITUDE (FT) | △EGTM °C | CORRECTION °F |
|---|---|---|
| 0 | 24 | 43.2 |
| 3000 | 24 | 43.2 |
| 5000 | 24 | 43.2 |
| 9000 AND ABOVE | 0 | 0.0 |

7. ADJUST THE HOT DAY EGT MARGIN AS APPLICABLE PER FIGURE 1322.
8. FOR ENGINES WITH PRE-7BV2 EEC SOFTWARE VERSION.

1284525-04

***** FOR 7B ALL *****

Performance Acceptance Checks
Figure 1301 (Sheet 1)

**7B20, 7B20/2, 7B20/3, 7B20/E**

| POWER SETTING (N1K RATED) | FLAT RATE TEMP | LIMITS | STANDARD DAY | HOT DAY | |
|---|---|---|---|---|---|
| | | | FNK RATED | EGT* | 7BV EEC SOFTWARE AND HIGHER N2 |
| (RPM) | °F (°C) | | LBS (daN) | °F (°C) | RPM |
| TO (4607) | 86 (30) | MAX | - - | 1679 (915) | 14425 |
| | | MIN | 20600 (9163) | - - | - - |
| MC (4504) | 77 (25) | MAX | - - | 1639 (893) | - - |
| | | MIN | 19400 (8630) | - - | - - |

**NOTES:**

1. THE MINIMUM THRUST SHOWN IS THE INSTALLED THRUST THAT IS EQUIVALENT TO THE FAA CERTIFIED THRUST. THE ENGINE PERFORMANCE MUST BE THE SAME AS, OR BETTER THAN, THESE LIMITS.
2. * THIS LIMIT IS EQUIVALENT TO A PEAK EGT OF 1742 °F (950 °C) DURING A FULLY-RATED HOT DAY TO AT SEA LEVEL STATIC (SLS).
3. THE MAXIMUM HOT DAY N2 LIMITS ARE EQUIVALENT TO THE INSTALLED FAA CERTIFIED N2 (15183 RPM).
4. THE MAXIMUM FAA CERTIFIED N1 LIMIT IS 5382 RPM.
5. TAKEOFF EGT MARGINS QUOTED ARE FOR A WARM ENGINE TAKEOFF. COLD ENGINE TAKEOFFS MAY DECREASE THE EGT MARGIN BY AS MUCH AS 15° C.
6. TAKEOFF EGT MARGIN RELATIVE TO THE ABOVE LIMITS MUST BE REDUCED BY THE FOLLOWING ADJUSTMENTS FOR OPERATION AT AIRPORT ALTITUDES OTHER THAN SEA LEVEL.

| AIRPORT ALTITUDE (FT) | △EGTM °C | CORRECTION °F |
|---|---|---|
| 0 | 24 | 43.2 |
| 3000 | 24 | 43.2 |
| 5000 | 24 | 43.2 |
| 9000 AND ABOVE | 0 | 0.0 |

7. FOR CONVERSION CAPABILITY TO 7B26/7B27 HIGHER RATINGS AT LEAST 1.9% THRUST MARGIN AT T/O AND M/C MUST BE DEMONSTRATED.
8. ADJUST THE HOT DAY EGT MARGIN AS APPLICABLE PER FIGURE 1322.
9. FOR ENGINES WITH 7BV2 EEC SOFTWARE VERSION OR HIGHER.

1355618-03

***** FOR 7B ALL *****

Performance Acceptance Checks
Figure 1301 (Sheet 2)

## 7B22/B1, 7B22/2B1, 7B22/3B1

| POWER SETTING (N1K RATED) | FLAT RATE TEMP | LIMITS | STANDARD DAY | HOT DAY | | |
|---|---|---|---|---|---|---|
| | | | FNK RATED | EGT* | PRE 7BU EEC N2 | 7BU EEC SOFTWARE AND HIGHER N2 |
| (RPM) | °F (°C) | | LBS (daN) | °F (°C) | RPM | RPM |
| TO (4757) | 96.8 (36) | MAX | - - | 1684 (918) | 14895 | 14707 |
| | | MIN | 22700 (10097) | - - | - - | - - |
| MC (4726) | 77 (25) | MAX | - - | 1611 (877) | - - | - - |
| | | MIN | 22300 (9920) | - - | - - | - - |

**NOTES:**

1. THE MINIMUM THRUST SHOWN IS THE INSTALLED THRUST THAT IS EQUIVALENT TO THE FAA CERTIFIED THRUST. THE ENGINE PERFORMANCE MUST BE THE SAME AS, OR BETTER THAN, THESE LIMITS.
2. * THIS LIMIT IS EQUIVALENT TO A PEAK EGT OF 1742 °F (950 °C) DURING A FULLY-RATED HOT DAY TO AT SEA LEVEL STATIC (SLS).
3. THE MAXIMUM HOT DAY N2 LIMITS ARE EQUIVALENT TO THE INSTALLED FAA CERTIFIED N2 (15183 RPM).
4. THE MAXIMUM FAA CERTIFIED N1 LIMIT IS 5382 RPM.
5. TAKEOFF EGT MARGINS QUOTED ARE FOR A WARM ENGINE TAKEOFF. COLD ENGINE TAKEOFFS MAY DECREASE THE EGT MARGIN BY AS MUCH AS 15° C.
6. TAKEOFF EGT MARGIN RELATIVE TO THE ABOVE LIMITS MUST BE REDUCED BY THE FOLLOWING ADJUSTMENTS FOR OPERATION AT AIRPORT ALTITUDES OTHER THAN SEA LEVEL.

| AIRPORT ALTITUDE (FT) | ΔEGTM °C | CORRECTION °F |
|---|---|---|
| 0 TO 15000 | 0 | 0 |

7. ADJUST THE HOT DAY EGT MARGIN AS APPLICABLE PER FIGURE 1322.
8. FOR ENGINES WITH PRE-7BV2 EEC SOFTWARE VERSION.

1284526-04

***** FOR 7B ALL *****

Performance Acceptance Checks
Figure 1301 (Sheet 3)

## 7B22/B1, 7B22/2B1, 7B22/3B1, 7B22E/B1

| POWER SETTING (N1K RATED) | FLAT RATE TEMP | LIMITS | STANDARD DAY | HOT DAY | |
|---|---|---|---|---|---|
| | | | FNK RATED | EGT* | 7BV EEC SOFTWARE AND HIGHER N2 |
| (RPM) | °F (°C) | | LBS (daN) | °F (°C) | RPM |
| TO (4777) | 96.8 (36) | MAX | - - | 1684 (918) | 14707 |
| | | MIN | 22700 (10097) | - - | - - |
| MC (4746) | 77 (25) | MAX | - - | 1611 (877) | - - |
| | | MIN | 22300 (9920) | - - | - - |

**NOTES:**

1. THE MINIMUM THRUST SHOWN IS THE INSTALLED THRUST THAT IS EQUIVALENT TO THE FAA CERTIFIED THRUST. THE ENGINE PERFORMANCE MUST BE THE SAME AS, OR BETTER THAN, THESE LIMITS.
2. * THIS LIMIT IS EQUIVALENT TO A PEAK EGT OF 1742 °F (950 °C) DURING A FULLY-RATED HOT DAY TO AT SEA LEVEL STATIC (SLS).
3. THE MAXIMUM HOT DAY N2 LIMITS ARE EQUIVALENT TO THE INSTALLED FAA CERTIFIED N2 (15183 RPM).
4. THE MAXIMUM FAA CERTIFIED N1 LIMIT IS 5382 RPM.
5. TAKEOFF EGT MARGINS QUOTED ARE FOR A WARM ENGINE TAKEOFF. COLD ENGINE TAKEOFFS MAY DECREASE THE EGT MARGIN BY AS MUCH AS 15° C.
6. TAKEOFF EGT MARGIN RELATIVE TO THE ABOVE LIMITS MUST BE REDUCED BY THE FOLLOWING ADJUSTMENTS FOR OPERATION AT AIRPORT ALTITUDES OTHER THAN SEA LEVEL.

| AIRPORT ALTITUDE (FT) | ΔEGTM °C | CORRECTION °F |
|---|---|---|
| 0 TO 15000 | 0 | 0 |

7. FOR CONVERSION CAPABILITY TO 7B26/7B27 HIGHER RATINGS, AT LEAST 1.5% THRUST MARGIN AT T/O AND M/C RATINGS MUST BE DEMONSTRATED.
8. ADJUST THE HOT DAY EGT MARGIN AS APPLICABLE PER FIGURE 1322.
9. FOR ENGINES WITH 7BV2 EEC SOFTWARE VERSION OR HIGHER VERSION.

1355619-03

***** FOR 7B ALL *****

Performance Acceptance Checks
Figure 1301 (Sheet 4)

## 7B22, 7B22/2, 7B22/3

| POWER SETTING (N1K RATED) | FLAT RATE TEMP | LIMITS | STANDARD DAY | HOT DAY | | |
|---|---|---|---|---|---|---|
| | | | FNK RATED | EGT* | PRE 7BU EEC SOFTWARE N2 | 7BU EEC SOFTWARE AND HIGHER N2 |
| (RPM) | °F (°C) | | LBS (daN) | °F (°C) | RPM | RPM |
| TO (4757) | 86 (30) | MAX | - - | 1686 (919) | 14802 | 14585 |
| | | MIN | 22700 (10097) | - - | - - | - - |
| MC (4726) | 77 (25) | MAX | - - | 1648 (898) | - - | - - |
| | | MIN | 22300 (9920) | - - | - - | - - |

**NOTES:**

1. THE MINIMUM THRUST SHOWN IS THE INSTALLED THRUST THAT IS EQUIVALENT TO THE FAA CERTIFIED THRUST. THE ENGINE PERFORMANCE MUST BE THE SAME AS, OR BETTER THAN, THESE LIMITS.
2. * THIS LIMIT IS EQUIVALENT TO A PEAK EGT OF 1742 °F (950 °C) DURING A FULLY-RATED HOT DAY TO AT SEA LEVEL STATIC (SLS).
3. THE MAXIMUM HOT DAY N2 LIMITS ARE EQUIVALENT TO THE INSTALLED FAA CERTIFIED N2 (15183 RPM).
4. THE MAXIMUM FAA CERTIFIED N1 LIMIT IS 5382 RPM.
5. TAKEOFF EGT MARGINS QUOTED ARE FOR A WARM ENGINE TAKEOFF. COLD ENGINE TAKEOFFS MAY DECREASE THE EGT MARGIN BY AS MUCH AS 15° C.
6. TAKEOFF EGT MARGIN RELATIVE TO THE ABOVE LIMITS MUST BE REDUCED BY THE FOLLOWING ADJUSTMENTS FOR OPERATION AT AIRPORT ALTITUDES OTHER THAN SEA LEVEL.

| AIRPORT ALTITUDE (FT) | △EGTM °C | CORRECTION °F |
|---|---|---|
| 0 TO 15000 | 0 | 0 |

7. ADJUST THE HOT DAY EGT MARGIN AS APPLICABLE PER FIGURE 1322.
8. FOR ENGINES WITH PRE-7BV2 EEC SOFTWARE VERSION.

1284527-04

***** FOR 7B ALL *****

Performance Acceptance Checks
Figure 1301 (Sheet 5)

## 7B22, 7B22/2, 7B22/3, 7B22E

| POWER SETTING (N1K RATED) | FLAT RATE TEMP | LIMITS | STANDARD DAY | HOT DAY | |
|---|---|---|---|---|---|
| | | | FNK RATED | EGT* | 7BV EEC SOFTWARE AND HIGHER N2 |
| (RPM) | °F (°C) | | LBS (daN) | °F (°C) | RPM |
| TO (4777) | 86 (30) | MAX | - - | 1686 (919) | 14585 |
| | | MIN | 22700 (10097) | - - | - - |
| MC (4746) | 77 (25) | MAX | - - | 1648 (898) | - - |
| | | MIN | 22300 (9920) | - - | - - |

**NOTES:**

1. THE MINIMUM THRUST SHOWN IS THE INSTALLED THRUST THAT IS EQUIVALENT TO THE FAA CERTIFIED THRUST. THE ENGINE PERFORMANCE MUST BE THE SAME AS, OR BETTER THAN, THESE LIMITS.
2. * THIS LIMIT IS EQUIVALENT TO A PEAK EGT OF 1742 °F (950 °C) DURING A FULLY-RATED HOT DAY TO AT SEA LEVEL STATIC (SLS).
3. THE MAXIMUM HOT DAY N2 LIMITS ARE EQUIVALENT TO THE INSTALLED FAA CERTIFIED N2 (15183 RPM).
4. THE MAXIMUM FAA CERTIFIED N1 LIMIT IS 5382 RPM.
5. TAKEOFF EGT MARGINS QUOTED ARE FOR A WARM ENGINE TAKEOFF. COLD ENGINE TAKEOFFS MAY DECREASE THE EGT MARGIN BY AS MUCH AS 15° C.
6. TAKEOFF EGT MARGIN RELATIVE TO THE ABOVE LIMITS MUST BE REDUCED BY THE FOLLOWING ADJUSTMENTS FOR OPERATION AT AIRPORT ALTITUDES OTHER THAN SEA LEVEL.

| AIRPORT ALTITUDE (FT) | ΔEGTM °C | CORRECTION °F |
|---|---|---|
| 0 TO 15000 | 0 | 0 |

7. FOR CONVERSION CAPABILITY TO 7B26/7B27 HIGHER RATINGS AT LEAST 1.5% THRUST MARGIN AT T/O AND M/C MUST BE DEMONSTRATED.
8. ADJUST THE HOT DAY EGT MARGIN AS APPLICABLE PER FIGURE 1322.
9. FOR ENGINES WITH 7BV2 EEC SOFTWARE VERSION OR HIGHER VERSION.

1355620-03

***** FOR 7B ALL *****

Performance Acceptance Checks
Figure 1301 (Sheet 6)

## 7B24/B1, 7B24/2B1, 7B24/3B1

| POWER SETTING (N1K RATED) | FLAT RATE TEMP | LIMITS | STANDARD DAY | HOT DAY | |
|---|---|---|---|---|---|
| | | | FNK RATED | EGT* | N2 |
| (RPM) | °F (°C) | | LBS (daN) | °F (°C) | RPM |
| TO (4880) | 105.8 (41) | MAX | - - | 1690 (921) | 14909 |
| | | MIN | 24200 (10765) | - - | - - |
| MC (4770) | 77 (25) | MAX | - - | 1607 (875) | - - |
| | | MIN | 22800 (10142) | - - | - - |

**NOTES:**

1. THE MINIMUM THRUST SHOWN IS THE INSTALLED THRUST THAT IS EQUIVALENT TO THE FAA CERTIFIED THRUST. THE ENGINE PERFORMANCE MUST BE THE SAME AS, OR BETTER THAN, THESE LIMITS.
2. * THIS LIMIT IS EQUIVALENT TO A PEAK EGT OF 1742 °F (950 °C) DURING A FULLY-RATED HOT DAY TO AT SEA LEVEL STATIC (SLS).
3. THE MAXIMUM HOT DAY N2 LIMITS ARE EQUIVALENT TO THE INSTALLED FAA CERTIFIED N2 (15183 RPM).
4. THE MAXIMUM FAA CERTIFIED N1 LIMIT IS 5382 RPM.
5. TAKEOFF EGT MARGINS QUOTED ARE FOR A WARM ENGINE TAKEOFF, COLD ENGINE TAKEOFFS MAY DECREASE THE EGT MARGIN BY AS MUCH AS 15 °C.
6. TAKEOFF EGT MARGIN RELATIVE TO THE ABOVE LIMITS MUST BE REDUCED BY THE FOLLOWING ADJUSTMENTS FOR OPERATION AT AIRPORT ALTITUDES OTHER THAN SEA LEVEL.

| AIRPORT ALTITUDE (FT) | Δ EGTM °C | CORRECTION °F |
|---|---|---|
| 0 | 5 | 9 |
| 4000 | 8 | 14.4 |
| 7000 AND ABOVE | 0 | 0 |

7. ADJUST THE HOT DAY EGT MARGIN AS APPLICABLE PER FIGURE 1322.
8. FOR ENGINES WITH PRE-7BV2 EEC SOFTWARE VERSION.

1156183-10

***** FOR 7B ALL *****

Performance Acceptance Checks
Figure 1301 (Sheet 7)

## 7B24/B1, 7B24/2B1, 7B24/3B1, 7B24E/B1

| POWER SETTING (N1K RATED) | FLAT RATE TEMP | LIMITS | STANDARD DAY | HOT DAY | |
|---|---|---|---|---|---|
| | | | FNK RATED | EGT* | N2 |
| (RPM) | °F (°C) | | LBS (daN) | °F (°C) | RPM |
| TO (4900) | 105.8 (41) | MAX | - - | 1690 (921) | 14909 |
| | | MIN | 24200 (10765) | - - | - - |
| MC (4790) | 77 (25) | MAX | - - | 1607 (875) | - - |
| | | MIN | 22800 (10142) | - - | - - |

**NOTES:**

1. THE MINIMUM THRUST SHOWN IS THE INSTALLED THRUST THAT IS EQUIVALENT TO THE FAA CERTIFIED THRUST. THE ENGINE PERFORMANCE MUST BE THE SEAM AS, OR BETTER THAN, THESE LIMITS.
2. * THIS LIMIT IS EQUIVALENT TO A PEAK EGT OF 1742 °F (950 °C) DURING A FULLY-RATED HOT DAY TO AT SEA LEVEL STATIC (SLS).
3. THE MAXIMUM HOT DAY N2 LIMITS ARE EQUIVALENT TO THE INSTALLED FAA CERTIFIED N2 (15183 RPM).
4. THE MAXIMUM FAA CERTIFIED N1 LIMIT IS 5382 RPM.
5. TAKEOFF EGT MARGINS QUOTED ARE FOR A WARM ENGINE TAKEOFF, COLD ENGINE TAKEOFFS MAY DECREASE THE EGT MARGIN BY AS MUCH AS 15 °C.
6. TAKEOFF EGT MARGIN RELATIVE TO THE ABOVE LIMITS MUST BE REDUCED BY THE FOLLOWING ADJUSTMENTS FOR OPERATION AT AIRPORT ALTITUDES OTHER THAN SEA LEVEL.

| AIRPORT ALTITUDE (FT) | Δ EGTM CORRECTION °C | °F |
|---|---|---|
| 0 | 5 | 9 |
| 4000 | 8 | 14.4 |
| 7000 AND ABOVE | 0 | 0 |

7. FOR CONVERSION CAPABILITY TO HIGHER RATINGS (7B26/7B27) AT LEAST 1.5% THRUST MARGIN AT T/O AND M/C MUST BE DEMONSTRATED.
8. ADJUST THE HOT DAY EGT MARGIN AS APPLICABLE PER FIGURE 1322.
9. FOR ENGINES WITH 7BV2 EEC SOFTWARE VERSION OR HIGHER VERSION.

1355762-04

***** FOR 7B ALL *****

Performance Acceptance Checks
Figure 1301 (Sheet 8)

## 7B24, 7B24/2, 7B24/3

| POWER SETTING (N1K RATED) | FLAT RATE TEMP | LIMITS | STANDARD DAY | HOT DAY | | |
|---|---|---|---|---|---|---|
| | | | FNK RATED | EGT* | PRE 7BU EEC SOFTWARE N2 | 7BU EEC SOFTWARE AND HIGHER N2 |
| (RPM) | °F (°C) | | LBS (daN) | °F (°C) | RPM | RPM |
| TO (4880) | 86 (30) | MAX | - - | 1686 (919) | 14808 | 14634 |
| | | MIN | 24200 (10765) | - - | - - | - - |
| MC (4770) | 77 (25) | MAX | - - | 1629 (887) | - - | - - |
| | | MIN | 22800 (10142) | - - | - - | - - |

**NOTES:**

1. THE MINIMUM THRUST SHOWN IS THE INSTALLED THRUST THAT IS EQUIVALENT TO THE FAA CERTIFIED THRUST. THE ENGINE PERFORMANCE MUST BE THE SAME AS, OR BETTER THAN, THESE LIMITS.
2. * THIS LIMIT IS EQUIVALENT TO A PEAK EGT OF 1742 °F (950 °C) DURING A FULLY-RATED HOT DAY TO AT SEA LEVEL STATIC (SLS).
3. THE MAXIMUM HOT DAY N2 LIMITS ARE EQUIVALENT TO THE INSTALLED FAA CERTIFIED N2 (15183 RPM).
4. THE MAXIMUM FAA CERTIFIED N1 LIMIT IS 5382 RPM.
5. TAKEOFF EGT MARGINS QUOTED ARE FOR A WARM ENGINE TAKEOFF. COLD ENGINE TAKEOFFS MAY DECREASE THE EGT MARGIN BY AS MUCH AS 15° C.
6. TAKEOFF EGT MARGIN RELATIVE TO THE ABOVE LIMITS MUST BE REDUCED BY THE FOLLOWING ADJUSTMENTS FOR OPERATION AT AIRPORT ALTITUDES OTHER THAN SEA LEVEL.

| AIRPORT ALTITUDE (FT) | △EGTM °C | CORRECTION °F |
|---|---|---|
| 0 TO 15000 | 0 | 0 |

7. ADJUST THE HOT DAY EGT MARGIN AS APPLICABLE PER FIGURE 1322.
8. FOR ENGINES WITH PRE-7BV2 EEC SOFTWARE VERSION.

1284528-04

***** FOR 7B ALL *****

Performance Acceptance Checks
Figure 1301 (Sheet 9)

## 7B24, 7B24/2, 7B24/3, 7B24E

| POWER SETTING (N1K RATED) | FLAT RATE TEMP | LIMITS | STANDARD DAY | HOT DAY | |
|---|---|---|---|---|---|
| | | | FNK RATED | EGT* | 7BV EEC SOFTWARE AND HIGHER N2 |
| (RPM) | °F (°C) | | LBS (daN) | °F (°C) | RPM |
| TO (4900) | 86 (30) | MAX | - - | 1686 (919) | 14634 |
| | | MIN | 24200 (10765) | - - | - - |
| MC (4790) | 77 (25) | MAX | - - | 1629 (887) | - - |
| | | MIN | 22800 (10142) | - - | - - |

**NOTES:**

1. THE MINIMUM THRUST SHOWN IS THE INSTALLED THRUST THAT IS EQUIVALENT TO THE FAA CERTIFIED THRUST. THE ENGINE PERFORMANCE MUST BE THE SAME AS, OR BETTER THAN, THESE LIMITS.
2. * THIS LIMIT IS EQUIVALENT TO A PEAK EGT OF 1742 °F (950 °C) DURING A FULLY-RATED HOT DAY TO AT SEA LEVEL STATIC (SLS).
3. THE MAXIMUM HOT DAY N2 LIMITS ARE EQUIVALENT TO THE INSTALLED FAA CERTIFIED N2 (15183 RPM).
4. THE MAXIMUM FAA CERTIFIED N1 LIMIT IS 5382 RPM.
5. TAKEOFF EGT MARGINS QUOTED ARE FOR A WARM ENGINE TAKEOFF. COLD ENGINE TAKEOFFS MAY DECREASE THE EGT MARGIN BY AS MUCH AS 15° C.
6. TAKEOFF EGT MARGIN RELATIVE TO THE ABOVE LIMITS MUST BE REDUCED BY THE FOLLOWING ADJUSTMENTS FOR OPERATION AT AIRPORT ALTITUDES OTHER THAN SEA LEVEL.

| AIRPORT ALTITUDE (FT) | ΔEGTM °C | CORRECTION °F |
|---|---|---|
| 0 TO 15000 | 0 | 0 |

7. FOR CONVERSION CAPABILITY TO HIGHER RATINGS (7B26/7B27) AT LEAST 1.5% THRUST MARGIN AT T/O AND M/C MUST BE DEMONSTRATED.
8. ADJUST THE HOT DAY EGT MARGIN AS APPLICABLE PER FIGURE 1322.
9. FOR ENGINES WITH 7BV2 EEC SOFTWARE VERSION OR HIGHER VERSION.

1355763-03

***** FOR 7B ALL *****

Performance Acceptance Checks
Figure 1301 (Sheet 10)

## 7B26, -7B26/2, -7B26/B1, 7B26/3, 7B26/3B1, 7B26E, -7B26E/B1

| POWER SETTING (N1K RATED) | FLAT RATE TEMP | LIMITS | STANDARD DAY | HOT DAY | |
|---|---|---|---|---|---|
| | | | FNK RATED | EGT* | N2 |
| (RPM) | °F (°C) | | LBS (daN) | °F (°C) | RPM |
| TO (5081) | 86 (30) | MAX | - - | 1684 (918) | 14788 |
| | | MIN | 26300 (11699) | - - | - - |
| MC (5042) | 77 (25) | MAX | - - | 1654 (901) | - - |
| | | MIN | 25900 (11521) | - - | - - |

**NOTES:**

1. THE MINIMUM THRUST SHOWN IS THE INSTALLED THRUST THAT IS EQUIVALENT TO THE FAA CERTIFIED THRUST. THE ENGINE PERFORMANCE MUST BE THE SAME AS, OR BETTER THAN, THESE LIMITS.
2. * THIS LIMIT IS EQUIVALENT TO A PEAK EGT OF 1742°F (950°C) DURING A FULLY-RATED HOT DAY TO AT SEA LEVEL STATIC (SLS).
3. THE MAXIMUM HOT DAY N2 LIMITS ARE EQUIVALENT TO THE INSTALLED FAA CERTIFIED N2 (15183 RPM).
4. THE MAXIMUM FAA CERTIFIED N1 LIMIT IS 5382 RPM.
5. TAKEOFF EGT MARGINS QUOTED ARE FOR A WARM ENGINE TAKEOFF. COLD ENGINE TAKEOFFS MAY DECREASE THE EGT MARGIN BY AS MUCH AS 15°C.
6. TAKEOFF EGT MARGIN RELATIVE TO THE ABOVE LIMITS MUST BE REDUCED BY THE FOLLOWING ADJUSTMENTS FOR OPERATION AT AIRPORT ALTITUDES OTHER THAN SEA LEVEL.

| AIRPORT ALTITUDE (FT) | Δ EGTM °C | CORRECTION °F |
|---|---|---|
| 0 | 7 | 12.6 |
| 3000 | 8 | 14.4 |
| 5000 | 4 | 7.2 |
| 6000 AND ABOVE | 0 | 0.0 |

7. ADJUST THE HOT DAY EGT MARGIN AS APPLICABLE PER FIGURE 1322.

1153122-08

***** FOR 7B ALL *****

Performance Acceptance Checks
Figure 1301 (Sheet 11)

## 7B26/B2, 7B26/3B2, 7B26E/B2

| POWER SETTING (N1K RATED) | FLAT RATE TEMP | LIMITS | STANDARD DAY | HOT DAY | |
|---|---|---|---|---|---|
| | | | FNK RATED | EGT* | N2 |
| (RPM) | °F (°C) | | LBS (daN) | °F (°C) | RPM |
| TO (5081) | 95 (35) | MAX | - - | 1675 (913) | 14881 |
| | | MIN | 26300 (11699) | - - | - - |
| MC (4770) | 77 (25) | MAX | - - | 1537 (836) | - - |
| | | MIN | 22800 (10142) | - - | - - |

**NOTES:**

1. THE MINIMUM THRUST SHOWN IS THE INSTALLED THRUST THAT IS EQUIVALENT TO THE FAA CERTIFIED THRUST. THE ENGINE PERFORMANCE MUST BE THE SAME AS, OR BETTER THAN, THESE LIMITS.
2. * THIS LIMIT IS EQUIVALENT TO A PEAK EGT OF 1742°F (950°C) DURING A FULLY-RATED HOT DAY TO AT SEA LEVEL STATIC (SLS).
3. THE MAXIMUM HOT DAY N2 LIMITS ARE EQUIVALENT TO THE INSTALLED FAA CERTIFIED N2 (15183 RPM).
4. THE MAXIMUM FAA CERTIFIED N1 LIMIT IS 5382 RPM.
5. TAKEOFF EGT MARGINS QUOTED ARE FOR A WARM ENGINE TAKEOFF. COLD ENGINE TAKEOFFS MAY DECREASE THE EGT MARGIN BY AS MUCH AS 15° C.
6. TAKEOFF EGT MARGIN RELATIVE TO THE ABOVE LIMITS MUST BE REDUCED BY THE FOLLOWING ADJUSTMENTS FOR OPERATION AT AIRPORT ALTITUDES OTHER THAN SEA LEVEL.

| AIRPORT ALTITUDE (FT) | △ EGTM °C | CORRECTION °F |
|---|---|---|
| 0 - 15000 | 0 | 0 |

7. ADJUST THE HOT DAY EGT MARGIN AS APPLICABLE PER FIGURE 1322.

1251924-03

***** FOR 7B ALL *****

Performance Acceptance Checks
Figure 1301 (Sheet 12)

## 7B26/3F, 7B26E/F

| POWER SETTING (N1K RATED) | FLAT RATE TEMP | LIMITS | STANDARD DAY | HOT DAY | |
|---|---|---|---|---|---|
| | | | FNK RATED | EGT* | N2 |
| (RPM) | °F (°C) | | LBS (daN) | °F (°C) | RPM |
| TO (5081) | 86 (30) | MAX | - - | 1720 (938) | 14788 |
| | | MIN | 26300 (11699) | - - | - - |
| MC (5042) | 77 (25) | MAX | - - | 1690 (921) | - - |
| | | MIN | 25900 (11521) | - - | - - |

**NOTES:**

1. THE MINIMUN THRUST SHOWN IS THE INSTALLED THRUST THAT IS EQUIVALENT TO THE FAA CERTIFIED THRUST. THE ENGINE PERFORMANCE MUST BE THE SAME AS, OR BETTER THAN, THESE LIMITS.
2. * THIS LIMIT IS EQUIVALENT TO A PEAK EGT OF 1742° F (950° C) DURING A FULLY-RATED HOT DAY TO AT SEA LEVEL STATIC (SLS).
3. THE MAXIMUM HOT DAY N2 LIMITS ARE EQUIVALENT TO THE INSTALLED FAA CERTIFIED N2 (15183 RPM).
4. THE MAXIMUM FAA CERTIFIED N1 LIMIT IS 5382 RPM.
5. TAKEOFF EGT MARGINS QUOTED ARE FOR A WARM ENGINE TAKEOFF. COLD ENGINE TAKEOFFS MAY DECREASE THE EGT MARGIN BY AS MUCH AS 15° C.
6. TAKEOFF EGT MARGIN RELATIVE TO THE ABOVE LIMITS MUST BE REDUCED BY THE FOLLOWING ADJUSTMENTS FOR OPERATION AT AIRPORT ALTITUDES OTHER THAN SEA LEVEL.

| AIRPORT ALTITUDE (FT) | △EGTM C° | CORRECTION F° |
|---|---|---|
| 0 | 7 | 12.6 |
| 3000 | 8 | 14.4 |
| 5000 | 4 | 7.2 |
| 6000 AND ABOVE | 0 | 0.0 |

7. ADJUST THE HOT DAY EGT MARGIN AS APPLICABLE PER FIGURE 1322.

1251921-04

***** FOR 7B ALL *****

Performance Acceptance Checks
Figure 1301 (Sheet 13)

7B ALL

## 7B26/3B2F, 7B26E/B2F

| POWER SETTING (N1K RATED) | FLAT RATE TEMP | LIMITS | STANDARD DAY | HOT DAY | |
|---|---|---|---|---|---|
| | | | FNK RATED | EGT* | N2 |
| (RPM) | °F (°C) | | LBS (daN) | °F (°C) | RPM |
| TO (5081) | 95 (35) | MAX | - - | 1711 (933) | 14881 |
| | | MIN | 26300 (11699) | - - | - - |
| MC (4770) | 77 (25) | MAX | - - | 1573 (856) | - - |
| | | MIN | 22800 (10142) | - - | - - |

**NOTES:**

1. THE MINIMUM THRUST SHOWN IS THE INSTALLED THRUST THAT IS EQUIVALENT TO THE FAA CERTIFIED THRUST. THE ENGINE PERFORMANCE MUST BE THE SAME AS, OR BETTER THAN, THESE LIMITS.
2. * THIS LIMIT IS EQUIVALENT TO A PEAK EGT OF 1742°F (950°C) DURING A FULLY-RATED HOT DAY TO AT SEA LEVEL STATIC (SLS).
3. THE MAXIMUM HOT DAY N2 LIMITS ARE EQUIVALENT TO THE INSTALLED FAA CERTIFIED N2 (15183 RPM).
4. THE MAXIMUM FAA CERTIFIED N1 LIMIT IS 5382 RPM.
5. TAKEOFF EGT MARGINS QUOTED ARE FOR A WARM ENGINE TAKEOFF. COLD ENGINE TAKEOFFS MAY DECREASE THE EGT MARGIN BY AS MUCH AS 15° C.
6. TAKEOFF EGT MARGIN RELATIVE TO THE ABOVE LIMITS MUST BE REDUCED BY THE FOLLOWING ADJUSTMENTS FOR OPERATION AT AIRPORT ALTITUDES OTHER THAN SEA LEVEL.

| AIRPORT ALTITUDE (FT) | Δ EGTM °C | CORRECTION °F |
|---|---|---|
| 0 - 15000 | 0 | 0 |

7. ADJUST THE HOT DAY EGT MARGIN AS APPLICABLE PER FIGURE 1322.

1251922-04

***** FOR 7B ALL *****

Performance Acceptance Checks
Figure 1301 (Sheet 14)

## 7B27/3F, 7B27/3B1F, 7B27E/F, 7B27E/B1F

| POWER SETTING (N1K RATED) | FLAT RATE TEMP | LIMITS | STANDARD DAY | HOT DAY | |
|---|---|---|---|---|---|
| | | | FNK RATED | EGT* | N2 |
| (RPM) | °F (°C) | | LBS (daN) | °F (°C) | RPM |
| TO (5229) | 86 (30) | MAX | - - | 1731 (944) | 14896 |
| | | MIN | 27300 (12144) | - - | - - |
| MC (5042) | 77 (25) | MAX | - - | 1690 (921) | - - |
| | | MIN | 25900 (11521) | - - | - - |

### NOTES:

1. THE MINIMUM THRUST SHOWN IS THE INSTALLED THRUST THAT IS EQUIVALENT TO THE FAA CERTIFIED THRUST. THE ENGINE PERFORMANCE MUST BE THE SAME AS, OR BETTER THAN, THESE LIMITS.
2. * THIS LIMIT IS EQUIVALENT TO A PEAK EGT OF 1742°F (950°C) DURING A FULLY-RATED HOT DAY TO AT SEA LEVEL STATIC (SLS).
3. THE MAXIMUM HOT DAY N2 LIMITS ARE EQUIVALENT TO THE INSTALLED FAA CERTIFIED N2 (15183 RPM).
4. THE MAXIMUM FAA CERTIFIED N1 LIMIT IS 5382 RPM.
5. TAKEOFF EGT MARGINS QUOTED ARE FOR A WARM ENGINE TAKEOFF. COLD ENGINE TAKEOFFS MAY DECREASE THE EGT MARGIN BY AS MUCH AS 15° C.
6. TAKEOFF EGT MARGIN RELATIVE TO THE ABOVE LIMITS MUST BE REDUCED BY THE FOLLOWING ADJUSTMENTS FOR OPERATION AT AIRPORT ALTITUDES OTHER THAN SEA LEVEL.

| AIRPORT ALTITUDE (FT) | ΔEGTM °C | CORRECTION °F |
|---|---|---|
| 0 | 0 | 0 |
| 3000 | 5 | 9 |
| 4000 | 5 | 9 |
| 10000 AND ABOVE | 0 | 0 |

7. ADJUST THE HOT DAY EGT MARGIN AS APPLICABLE PER FIGURE 1322.

1156184-10

***** FOR 7B ALL *****

Performance Acceptance Checks
Figure 1301 (Sheet 15)

## 7B27, 7B27A, TB27A/3, 7B27/B1, 7B27/B3, 7B27/2, 7B27/3, 7B27/3B1, 7B27/3B3, 7B27E, 7B27E/B1, 7B27E/B3

| POWER SETTING (N1K RATED) | FLAT RATE TEMP | LIMITS | STANDARD DAY | HOT DAY | |
|---|---|---|---|---|---|
| | | | FNK RATED | EGT* | N2 |
| (RPM) | °F (°C) | | LBS (daN) | °F (°C) | RPM |
| TO (5229) | 86 (30) | MAX | - - | 1695 (924) | 14896 |
| | | MIN | 27300 (12144) | - - | - - |
| MC (5042) | 77 (25) | MAX | - - | 1654 (901) | - - |
| | | MIN | 25900 (11521) | - - | - - |

### NOTES:

1. THE MINIMUM THRUST SHOWN IS THE INSTALLED THRUST THAT IS EQUIVALENT TO THE FAA CERTIFIED THRUST. THE ENGINE PERFORMANCE MUST BE THE SAME AS, OR BETTER THAN, THESE LIMITS.
2. * THIS LIMIT IS EQUIVALENT TO A PEAK EGT OF 1742°F (950°C) DURING A FULLY-RATED HOT DAY TO AT SEA LEVEL STATIC (SLS).
3. THE MAXIMUM HOT DAY N2 LIMITS ARE EQUIVALENT TO THE INSTALLED FAA CERTIFIED N2 (15183 RPM).
4. THE MAXIMUM FAA CERTIFIED N1 LIMIT IS 5382 RPM.
5. TAKEOFF EGT MARGINS QUOTED ARE FOR A WARM ENGINE TAKEOFF. COLD ENGINE TAKEOFFS MAY DECREASE THE EGT MARGIN BY AS MUCH AS 15° C.
6. TAKEOFF EGT MARGIN RELATIVE TO THE ABOVE LIMITS MUST BE REDUCED BY THE FOLLOWING ADJUSTMENTS FOR OPERATION AT AIRPORT ALTITUDES OTHER THAN SEA LEVEL.

| AIRPORT ALTITUDE (FT) | ΔEGTM CORRECTION °C | °F |
|---|---|---|
| 0 | 0 | 0 |
| 3000 | 5 | 9 |
| 4000 | 5 | 9 |
| 10000 AND ABOVE | 0 | 0 |

7. ADJUST THE HOT DAY EGT MARGIN AS APPLICABLE PER FIGURE 1322.

1279917-06

***** FOR 7B ALL *****

Performance Acceptance Checks
Figure 1301 (Sheet 16)

## 7B27AE

| POWER SETTING (N1K RATED) | FLAT RATE TEMP | LIMITS | STANDARD DAY | HOT DAY | |
|---|---|---|---|---|---|
| | | | FNK RATED | EGT* | N2 |
| (RPM) | °F (°C) | | LBS (daN) | °F (°C) | RPM |
| TO (5229) | 86 (30) | MAX | - - | 1695 (924) | 14896 |
| | | MIN | 27300 (12144) | - - | - - |
| MC (5042) | 77 (25) | MAX | - - | 1654 (901) | - - |
| | | MIN | 25900 (11521) | - - | - - |

### NOTES:

1. THE MINIMUM THRUST SHOWN IS THE INSTALLED THRUST THAT IS EQUIVALENT TO THE FAA CERTIFIED THRUST. THE ENGINE PERFORMANCE MUST BE THE SAME AS, OR BETTER THAN, THESE LIMITS.
2. * THIS LIMIT IS EQUIVALENT TO A PEAK EGT OF 1742°F (950°C) DURING A FULLY-RATED HOT DAY TO AT SEA LEVEL STATIC (SLS).
3. THE MAXIMUM HOT DAY N2 LIMITS ARE EQUIVALENT TO THE INSTALLED FAA CERTIFIED N2 (15183 RPM).
4. THE MAXIMUM FAA CERTIFIED N1 LIMIT IS 5382 RPM.
5. TAKEOFF EGT MARGINS QUOTED ARE FOR A WARM ENGINE TAKEOFF. COLD ENGINE TAKEOFFS MAY DECREASE THE EGT MARGIN BY AS MUCH AS 15° C.
6. TAKEOFF EGT MARGIN RELATIVE TO THE ABOVE LIMITS MUST BE REDUCED BY THE FOLLOWING ADJUSTMENTS FOR OPERATION AT AIRPORT ALTITUDES OTHER THAN SEA LEVEL.

| AIRPORT ALTITUDE (FT) | Δ EGTM °C | CORRECTION °F |
|---|---|---|
| 0 | 0 | 0 |
| 3000 | 5 | 9 |
| 4000 | 5 | 9 |
| 10000 AND ABOVE | 0 | 0 |

7. ADJUST THE HOT DAY EGT MARGIN AS APPLICABLE PER FIGURE 1322.

1355817-04

***** FOR 7B ALL *****

Performance Acceptance Checks
Figure 1301 (Sheet 17)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| TAMB (°C) | TAMB (°F) | PHYSICAL FAN SPEED 7B20, 7B20/2, 7B20/3, 7B20E TKOF | MXCN |
|---|---|---|---|
| -30.0 | -22.0 | 4226 | 4130 |
| -29.5 | -21.1 | 4230 | 4134 |
| -29.0 | -20.2 | 4234 | 4138 |
| -28.5 | -19.3 | 4239 | 4142 |
| -28.0 | -18.4 | 4243 | 4146 |
| -27.5 | -17.5 | 4247 | 4150 |
| -27.0 | -16.6 | 4251 | 4154 |
| -26.5 | -15.7 | 4255 | 4158 |
| -26.0 | -14.8 | 4259 | 4162 |
| -25.5 | -13.9 | 4264 | 4167 |
| -25.0 | -13.0 | 4268 | 4171 |
| -24.5 | -12.1 | 4272 | 4175 |
| -24.0 | -11.2 | 4276 | 4179 |
| -23.5 | -10.3 | 4280 | 4183 |
| -23.0 | -9.4 | 4284 | 4187 |
| -22.5 | -8.5 | 4288 | 4191 |
| -22.0 | -7.6 | 4293 | 4195 |
| -21.5 | -6.7 | 4297 | 4199 |
| -21.0 | -5.8 | 4301 | 4203 |
| -20.5 | -4.9 | 4305 | 4207 |
| -20.0 | -4.0 | 4309 | 4211 |
| -19.5 | -3.1 | 4313 | 4215 |
| -19.0 | -2.2 | 4317 | 4219 |
| -18.5 | -1.3 | 4321 | 4223 |
| -18.0 | -0.4 | 4325 | 4227 |
| -17.5 | 0.5 | 4329 | 4231 |
| -17.0 | 1.4 | 4334 | 4235 |
| -16.5 | 2.3 | 4338 | 4239 |
| -16.0 | 3.2 | 4342 | 4243 |
| -15.5 | 4.1 | 4346 | 4247 |
| -15.0 | 5.0 | 4350 | 4251 |
| -14.5 | 5.9 | 4354 | 4255 |
| -14.0 | 6.8 | 4358 | 4259 |
| -13.5 | 7.7 | 4362 | 4263 |
| -13.0 | 8.6 | 4366 | 4267 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B20, 7B20/2, AND 7B20/3 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B20E RATING T/O AND MXCN, ADD +20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1279918-03

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 1)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | ← PHYSICAL FAN SPEED → 7B20, 7B20/2, 7B20/3, 7B20E | |
|---|---|---|---|
| TAMB (°C) | TAMB (°F) | TKOF | MXCN |
| -12.5 | 9.5 | 4370 | 4271 |
| -12.0 | 10.4 | 4374 | 4275 |
| -11.5 | 11.3 | 4378 | 4279 |
| -11.0 | 12.2 | 4382 | 4283 |
| -10.5 | 13.1 | 4386 | 4287 |
| -10.0 | 14.0 | 4390 | 4291 |
| -9.5 | 14.9 | 4394 | 4295 |
| -9.0 | 15.8 | 4398 | 4299 |
| -8.5 | 16.7 | 4402 | 4303 |
| -8.0 | 17.6 | 4406 | 4307 |
| -7.5 | 18.5 | 4410 | 4311 |
| -7.0 | 19.4 | 4414 | 4315 |
| -6.5 | 20.3 | 4418 | 4319 |
| -6.0 | 21.2 | 4422 | 4322 |
| -5.5 | 22.1 | 4426 | 4326 |
| -5.0 | 23.0 | 4430 | 4330 |
| -4.5 | 23.9 | 4434 | 4334 |
| -4.0 | 24.8 | 4438 | 4338 |
| -3.5 | 25.7 | 4442 | 4342 |
| -3.0 | 26.6 | 4446 | 4346 |
| -2.5 | 27.5 | 4450 | 4350 |
| -2.0 | 28.4 | 4454 | 4354 |
| -1.5 | 29.3 | 4458 | 4358 |
| -1.0 | 30.2 | 4462 | 4362 |
| -0.5 | 31.1 | 4466 | 4365 |
| 0.0 | 32.0 | 4470 | 4369 |
| 0.5 | 32.9 | 4474 | 4373 |
| 1.0 | 33.8 | 4478 | 4377 |
| 1.5 | 34.7 | 4482 | 4381 |
| 2.0 | 35.6 | 4486 | 4385 |
| 2.5 | 36.5 | 4490 | 4389 |
| 3.0 | 37.4 | 4494 | 4392 |
| 3.5 | 38.3 | 4498 | 4396 |
| 4.0 | 39.2 | 4502 | 4400 |
| 4.5 | 40.1 | 4506 | 4404 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B20 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B20E RATING T/O AND MXCN, ADD +20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1279920-03

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 2)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| TAMB (°C) | TAMB (°F) | PHYSICAL FAN SPEED -7B20, -7B20/2, -7B20/3, -7B20E TKOF | MXCN |
|---|---|---|---|
| 5.0 | 41.0 | 4509 | 4408 |
| 5.5 | 41.9 | 4513 | 4412 |
| 6.0 | 42.8 | 4517 | 4416 |
| 6.5 | 43.7 | 4521 | 4419 |
| 7.0 | 44.6 | 4525 | 4423 |
| 7.5 | 45.5 | 4529 | 4427 |
| 8.0 | 46.4 | 4533 | 4431 |
| 8.5 | 47.3 | 4537 | 4435 |
| 9.0 | 48.2 | 4541 | 4438 |
| 9.5 | 49.1 | 4545 | 4442 |
| 10.0 | 50.0 | 4548 | 4446 |
| 10.5 | 50.9 | 4552 | 4450 |
| 11.0 | 51.8 | 4556 | 4454 |
| 11.5 | 52.7 | 4560 | 4458 |
| 12.0 | 53.6 | 4564 | 4461 |
| 12.5 | 54.5 | 4568 | 4465 |
| 13.0 | 55.4 | 4572 | 4469 |
| 13.5 | 56.3 | 4575 | 4473 |
| 14.0 | 57.2 | 4579 | 4476 |
| 14.5 | 58.1 | 4583 | 4480 |
| 15.0 | 59.0 | 4587 | 4484 |
| 15.5 | 59.9 | 4591 | 4488 |
| 16.0 | 60.8 | 4595 | 4492 |
| 16.5 | 61.7 | 4599 | 4495 |
| 17.0 | 62.6 | 4602 | 4499 |
| 17.5 | 63.5 | 4606 | 4503 |
| 18.0 | 64.4 | 4610 | 4507 |
| 18.5 | 65.3 | 4614 | 4510 |
| 19.0 | 66.2 | 4618 | 4514 |
| 19.5 | 67.1 | 4621 | 4518 |
| 20.0 | 68.0 | 4625 | 4522 |
| 20.5 | 68.9 | 4629 | 4525 |
| 21.0 | 69.8 | 4633 | 4529 |
| 21.5 | 70.7 | 4637 | 4533 |
| 22.0 | 71.6 | 4640 | 4536 |
| 22.5 | 72.5 | 4644 | 4540 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B20 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B20E RATING T/O AND MXCN, ADD +20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1279921-03

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 3)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| TAMB (°C) | TAMB (°F) | PHYSICAL FAN SPEED -7B20, -7B20/2, -7B20/3, 7B20E TKOF | PHYSICAL FAN SPEED -7B20, -7B20/2, -7B20/3, 7B20E MXCN |
|---|---|---|---|
| 23.0 | 73.4 | 4648 | 4544 |
| 23.5 | 74.3 | 4652 | 4548 |
| 24.0 | 75.2 | 4656 | 4551 |
| 24.5 | 76.1 | 4659 | 4555 |
| 25.0 | 77.0 | 4663 | 4559 |
| 25.5 | 77.9 | 4667 | 4562 |
| 26.0 | 78.8 | 4671 | 4566 |
| 26.5 | 79.7 | 4674 | 4570 |
| 27.0 | 80.6 | 4678 | 4574 |
| 27.5 | 81.5 | 4682 | 4577 |
| 28.0 | 82.4 | 4686 | 4581 |
| 28.5 | 83.3 | 4690 | 4585 |
| 29.0 | 84.2 | 4693 | 4588 |
| 29.5 | 85.1 | 4697 | 4592 |
| 30.0 | 86.0 | 4701 | 4596 |
| 30.5 | 86.9 | 4694 | 4599 |
| 31.0 | 87.8 | 4689 | 4603 |
| 31.5 | 88.7 | 4684 | 4607 |
| 32.0 | 89.6 | 4679 | 4610 |
| 32.5 | 90.5 | 4675 | 4614 |
| 32.8 | 91.0 | 4672 | 4616 |
| 33.0 | 91.4 | 4670 | 4618 |
| 33.5 | 92.3 | 4665 | 4621 |
| 34.0 | 93.2 | 4660 | 4625 |
| 34.5 | 94.1 | 4655 | 4629 |
| 35.0 | 95.0 | 4650 | 4632 |
| 35.5 | 95.9 | 4645 | 4636 |
| 36.0 | 96.8 | 4641 | 4640 |
| 36.5 | 97.7 | 4636 | 4636 |
| 37.0 | 98.6 | 4631 | 4631 |
| 37.5 | 99.5 | 4626 | 4626 |
| 38.0 | 100.4 | 4621 | 4621 |
| 38.5 | 101.3 | 4616 | 4616 |
| 39.0 | 102.2 | 4612 | 4612 |
| 39.5 | 103.1 | 4607 | 4607 |
| 40.0 | 104.0 | 4602 | 4602 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B20 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B20E RATING T/O AND MXCN, ADD +20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1279923-03

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 4)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| TAMB (°C) | TAMB (°F) | PHYSICAL FAN SPEED -7B20, -7B20/2, -7B20/3, -7B20E TKOF | PHYSICAL FAN SPEED -7B20, -7B20/2, -7B20/3, -7B20E MXCN |
|---|---|---|---|
| 40.5 | 104.9 | 4597 | 4597 |
| 41.0 | 105.8 | 4592 | 4592 |
| 41.5 | 106.7 | 4587 | 4587 |
| 42.0 | 107.6 | 4582 | 4582 |
| 42.5 | 108.5 | 4578 | 4578 |
| 43.0 | 109.4 | 4573 | 4573 |
| 43.5 | 110.3 | 4568 | 4568 |
| 44.0 | 111.2 | 4563 | 4563 |
| 44.5 | 112.1 | 4558 | 4558 |
| 45.0 | 113.0 | 4553 | 4553 |
| 45.5 | 113.9 | 4549 | 4549 |
| 46.0 | 114.8 | 4544 | 4544 |
| 46.5 | 115.7 | 4539 | 4539 |
| 47.0 | 116.6 | 4534 | 4534 |
| 47.5 | 117.5 | 4529 | 4529 |
| 48.0 | 118.4 | 4524 | 4524 |
| 48.5 | 119.3 | 4520 | 4520 |
| 49.0 | 120.2 | 4515 | 4515 |
| 49.5 | 121.1 | 4510 | 4510 |
| 50.0 | 122.0 | 4505 | 4505 |
| 50.5 | 122.9 | 4500 | 4500 |
| 51.0 | 123.8 | 4495 | 4495 |
| 51.5 | 124.7 | 4490 | 4490 |
| 52.0 | 125.6 | 4486 | 4486 |
| 52.5 | 126.5 | 4481 | 4481 |
| 53.0 | 127.4 | 4476 | 4476 |
| 53.5 | 128.3 | 4471 | 4471 |
| 54.0 | 129.2 | 4466 | 4466 |
| 54.5 | 130.1 | 4461 | 4461 |
| 55.0 | 131.0 | 4457 | 4457 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B20 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B20E RATING T/O AND MXCN, ADD +20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1279924-03

***** FOR 7B ALL *****

Power Settings Chart
Figure 1302 (Sheet 5)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | PHYSICAL FAN SPEED (RPM) | | | |
|---|---|---|---|---|---|
| | | 7B24, 7B24/2, 7B24/3, 7B24E | | 7B22, 7B22/2, 7B22/3, 7B22E | |
| TAMB (C) | TAMB (F) | TKOF | MXCN | TKOF | MXCN |
| -30.0 | -22.0 | 4501 | 4396 | 4387 | 4356 |
| -29.5 | -21.1 | 4505 | 4400 | 4391 | 4361 |
| -29.0 | -20.2 | 4509 | 4405 | 4396 | 4365 |
| -28.5 | -19.3 | 4514 | 4409 | 4400 | 4369 |
| -28.0 | -18.4 | 4518 | 4413 | 4404 | 4373 |
| -27.5 | -17.5 | 4523 | 4418 | 4408 | 4378 |
| -27.0 | -16.6 | 4527 | 4422 | 4413 | 4382 |
| -26.5 | -15.7 | 4531 | 4426 | 4417 | 4386 |
| -26.0 | -14.8 | 4536 | 4431 | 4421 | 4090 |
| -25.5 | -13.9 | 4540 | 4435 | 4426 | 4395 |
| -25.0 | -13.0 | 4545 | 4439 | 4430 | 4399 |
| -24.5 | -12.1 | 4549 | 4444 | 4434 | 4403 |
| -24.0 | -11.2 | 4553 | 4448 | 4438 | 4407 |
| -23.5 | -10.3 | 4558 | 4452 | 4443 | 4412 |
| -23.0 | -9.4 | 4562 | 4456 | 4447 | 4416 |
| -22.5 | -8.5 | 4566 | 4461 | 4451 | 4420 |
| -22.0 | -7.6 | 4571 | 4465 | 4455 | 4424 |
| -21.5 | -6.7 | 4575 | 4469 | 4460 | 4429 |
| -21.0 | -5.8 | 4579 | 4474 | 4464 | 4433 |
| -20.5 | -4.9 | 4584 | 4478 | 4468 | 4437 |
| -20.0 | -4.0 | 4588 | 4482 | 4472 | 4441 |
| -19.5 | -3.1 | 4592 | 4486 | 4476 | 4445 |
| -19.0 | -2.2 | 4597 | 4491 | 4481 | 4450 |
| -18.5 | -1.3 | 4601 | 4495 | 4485 | 4454 |
| -18.0 | -0.4 | 4605 | 4499 | 4489 | 4458 |
| -17.5 | 0.5 | 4609 | 4503 | 4493 | 4462 |
| -17.0 | 1.4 | 4614 | 4507 | 4497 | 4466 |
| -16.5 | 2.3 | 4618 | 4512 | 4502 | 4471 |
| -16.0 | 3.2 | 4622 | 4516 | 4506 | 4475 |
| -15.5 | 4.1 | 4627 | 4520 | 4510 | 4479 |
| -15.0 | 5.0 | 4631 | 4524 | 4514 | 4483 |
| -14.5 | 5.9 | 4635 | 4529 | 4518 | 4487 |
| -14.0 | 6.8 | 4639 | 4533 | 4522 | 4491 |
| -13.5 | 7.7 | 4644 | 4537 | 4527 | 4496 |
| -13.0 | 8.6 | 4648 | 4541 | 4531 | 4500 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C).
3. FOR 7B24, 7B24/2, 7B24/3, 7B22, 7B22/2, AND 7B22/3 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, 7B24E AND 7B22E RATINGS T/O AND MXCN, ADD+20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1355820-02

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 6)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | PHYSICAL FAN SPEED (RPM) | | | |
|---|---|---|---|---|---|
| | | 7B24, 7B24/2, 7B24/3, 7B24E | | 7B22, 7B22/2, 7B22/3, 7B22E | |
| TAMB (C) | TAMB (F) | TKOF | MXCN | TKOF | MXCN |
| -12.5 | 9.5 | 4652 | 4545 | 4535 | 4504 |
| -12.0 | 10.4 | 4656 | 4550 | 4539 | 4508 |
| -11.5 | 11.3 | 4661 | 4554 | 4543 | 4512 |
| -11.0 | 12.2 | 4665 | 4558 | 4547 | 4516 |
| -10.5 | 13.1 | 4669 | 4562 | 4551 | 4520 |
| -10.0 | 14.0 | 4673 | 4566 | 4556 | 4525 |
| -9.5 | 14.9 | 4678 | 4570 | 4560 | 4529 |
| -9.0 | 15.8 | 4682 | 4575 | 4564 | 4533 |
| -8.5 | 16.7 | 4686 | 4579 | 4568 | 4537 |
| -8.0 | 17.6 | 4690 | 4583 | 4572 | 4541 |
| -7.5 | 18.5 | 4695 | 4587 | 4576 | 4545 |
| -7.0 | 19.4 | 4699 | 4591 | 4580 | 4549 |
| -6.5 | 20.3 | 4703 | 4595 | 4584 | 4553 |
| -6.0 | 21.2 | 4707 | 4600 | 4588 | 4557 |
| -5.5 | 22.1 | 4711 | 4604 | 4593 | 4562 |
| -5.0 | 23.0 | 4716 | 4608 | 4597 | 4566 |
| -4.5 | 23.9 | 4720 | 4612 | 4601 | 4570 |
| -4.0 | 24.8 | 4724 | 4616 | 4605 | 4574 |
| -3.5 | 25.7 | 4728 | 4620 | 4609 | 4578 |
| -3.0 | 26.6 | 4732 | 4624 | 4613 | 4582 |
| -2.5 | 27.5 | 4736 | 4628 | 4617 | 4586 |
| -2.0 | 28.4 | 4741 | 4633 | 4621 | 4590 |
| -1.5 | 29.3 | 4745 | 4637 | 4625 | 4594 |
| -1.0 | 30.2 | 4749 | 4641 | 4629 | 4598 |
| -0.5 | 31.1 | 4753 | 4645 | 4633 | 4602 |
| 0.0 | 32.0 | 4757 | 4649 | 4637 | 4606 |
| 0.5 | 32.9 | 4761 | 4653 | 4641 | 4610 |
| 1.0 | 33.8 | 4766 | 4657 | 4645 | 4614 |
| 1.5 | 34.7 | 4770 | 4661 | 4649 | 4618 |
| 2.0 | 35.6 | 4774 | 4665 | 4653 | 4622 |
| 2.5 | 36.5 | 4778 | 4669 | 4657 | 4626 |
| 3.0 | 37.4 | 4782 | 4673 | 4661 | 4631 |
| 3.5 | 38.3 | 4786 | 4677 | 4666 | 4635 |
| 4.0 | 39.2 | 4790 | 4682 | 4670 | 4639 |
| 4.5 | 40.1 | 4794 | 4686 | 4674 | 4643 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B24, 7B24/2, 7B24/3, 7B22, 7B22/2, AND 7B22/3 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, 7B24E AND 7B22E RATINGS T/O AND MXCN, ADD+20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1355824-02

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 7)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | PHYSICAL FAN SPEED (RPM) | | | |
|---|---|---|---|---|---|
| | | 7B24, 7B24/2, 7B24/3, 7B24E | | 7B22, 7B22/2, 7B22/3, 7B22E | |
| TAMB (C) | TAMB (F) | TKOF | MXCN | TKOF | MXCN |
| 5.0 | 41.0 | 4799 | 4690 | 4678 | 4647 |
| 5.5 | 41.9 | 4803 | 4694 | 4682 | 4651 |
| 6.0 | 42.8 | 4807 | 4698 | 4686 | 4655 |
| 6.5 | 43.7 | 4811 | 4702 | 4690 | 4659 |
| 7.0 | 44.6 | 4815 | 4706 | 4694 | 4663 |
| 7.5 | 45.5 | 4819 | 4710 | 4698 | 4667 |
| 8.0 | 46.4 | 4823 | 4714 | 4702 | 4671 |
| 8.5 | 47.3 | 4827 | 4718 | 4706 | 4675 |
| 9.0 | 48.2 | 4831 | 4722 | 4710 | 4679 |
| 9.5 | 49.1 | 4835 | 4726 | 4713 | 4683 |
| 10.0 | 50.0 | 4839 | 4730 | 4717 | 4686 |
| 10.5 | 50.9 | 4844 | 4734 | 4721 | 4690 |
| 11.0 | 51.8 | 4848 | 4738 | 4715 | 4694 |
| 11.5 | 52.7 | 4852 | 4742 | 4729 | 4698 |
| 12.0 | 53.6 | 4856 | 4746 | 4733 | 4702 |
| 12.5 | 54.5 | 4860 | 4750 | 4737 | 4706 |
| 13.0 | 55.4 | 4864 | 4754 | 4741 | 4710 |
| 13.5 | 56.3 | 4868 | 4758 | 4745 | 4714 |
| 14.0 | 57.2 | 4872 | 4762 | 4749 | 4718 |
| 14.5 | 58.1 | 4876 | 4766 | 4753 | 4722 |
| 15.0 | 59.0 | 4880 | 4770 | 4757 | 4726 |
| 15.5 | 59.9 | 4884 | 4774 | 4761 | 4730 |
| 16.0 | 60.8 | 4888 | 4778 | 4765 | 4734 |
| 16.5 | 61.7 | 4892 | 4782 | 4769 | 4738 |
| 17.0 | 62.6 | 4896 | 4786 | 4773 | 4742 |
| 17.5 | 63.5 | 4900 | 4790 | 4777 | 4746 |
| 18.0 | 64.4 | 4904 | 4794 | 4781 | 4750 |
| 18.5 | 65.3 | 4908 | 4798 | 4784 | 4753 |
| 19.0 | 66.2 | 4912 | 4802 | 4788 | 4757 |
| 19.5 | 67.1 | 4916 | 4806 | 4792 | 4761 |
| 20.0 | 68.0 | 4920 | 4810 | 4796 | 4765 |
| 20.5 | 68.9 | 4924 | 4814 | 4800 | 4769 |
| 21.0 | 69.8 | 4928 | 4818 | 4804 | 4763 |
| 21.5 | 70.7 | 4932 | 4821 | 4808 | 4767 |
| 22.0 | 71.6 | 4936 | 4825 | 4812 | 4771 |
| 22.5 | 72.5 | 4940 | 4829 | 4816 | 4775 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B24, 7B24/2, 7B24/3, 7B22, 7B22/2, AND 7B22/3 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, 7B24E AND 7B22E RATINGS T/O AND MXCN, ADD+20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1355825-03

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 8)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | PHYSICAL FAN SPEED (RPM) | | | |
|---|---|---|---|---|---|
| | | 7B24, 7B24/2, 7B24/3, 7B24E | | 7B22, 7B22/2, 7B22/3, 7B22E | |
| TAMB (C) | TAMB (F) | TKOF | MXCN | TKOF | MXCN |
| 23.0 | 73.4 | 4944 | 4833 | 4820 | 4789 |
| 23.5 | 74.3 | 4948 | 4837 | 4823 | 4792 |
| 24.0 | 75.2 | 4952 | 4841 | 4827 | 4796 |
| 24.5 | 76.1 | 4956 | 4845 | 4831 | 4800 |
| 25.0 | 77.0 | 4960 | 4849 | 4835 | 4804 |
| 25.5 | 77.9 | 4964 | 4853 | 4839 | 4808 |
| 26.0 | 78.8 | 4968 | 4857 | 4843 | 4812 |
| 26.5 | 79.7 | 4972 | 4861 | 4847 | 4816 |
| 27.0 | 80.6 | 4976 | 4865 | 4850 | 4819 |
| 27.5 | 81.5 | 4980 | 4868 | 4854 | 4823 |
| 28.0 | 82.4 | 4984 | 4872 | 4858 | 4827 |
| 28.5 | 83.3 | 4988 | 4876 | 4862 | 4831 |
| 29.0 | 84.2 | 4992 | 4880 | 4866 | 4835 |
| 29.5 | 85.1 | 4996 | 4884 | 4870 | 4839 |
| 30.0 | 86.0 | 4999 | 4888 | 4874 | 4842 |
| 30.5 | 86.9 | 4995 | 4892 | 4867 | 4846 |
| 31.0 | 87.8 | 4991 | 4896 | 4862 | 4850 |
| 31.5 | 88.7 | 4986 | 4899 | 4857 | 4854 |
| 32.0 | 89.6 | 4982 | 4903 | 4853 | 4853 |
| 32.5 | 90.5 | 4977 | 4907 | 4848 | 4848 |
| 32.8 | 91.0 | 4975 | 4909 | 4845 | 4845 |
| 33.0 | 91.4 | 4973 | 4911 | 4843 | 4843 |
| 33.5 | 92.3 | 4969 | 4915 | 4838 | 4838 |
| 34.0 | 93.2 | 4964 | 4919 | 4834 | 4834 |
| 34.5 | 94.1 | 4960 | 4923 | 4829 | 4829 |
| 35.0 | 95.0 | 4955 | 4926 | 4824 | 4824 |
| 35.5 | 95.9 | 4951 | 4930 | 4820 | 4820 |
| 36.0 | 96.8 | 4947 | 4934 | 4815 | 4815 |
| 36.5 | 97.7 | 4942 | 4938 | 4810 | 4810 |
| 37.0 | 98.6 | 4938 | 4938 | 4805 | 4805 |
| 37.5 | 99.5 | 4933 | 4933 | 4801 | 4801 |
| 38.0 | 100.4 | 4929 | 4929 | 4796 | 4796 |
| 38.5 | 101.3 | 4925 | 4925 | 4791 | 4791 |
| 39.0 | 102.2 | 4920 | 4920 | 4786 | 4786 |
| 39.5 | 103.1 | 4916 | 4916 | 4782 | 4782 |
| 40.0 | 104.0 | 4911 | 4911 | 4777 | 4777 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B24, 7B24/2, 7B24/3, 7B22, 7B22/2, AND 7B22/3 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGER, 7B24E AND 7B22E RATINGS T/O AND MXCN, ADD+20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS. 1355826-02

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 9)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | PHYSICAL FAN SPEED (RPM) | | | |
|---|---|---|---|---|---|
| | | 7B24, 7B24/2, 7B24/3, 7B24E | | 7B22, 7B22/2, 7B22/3, 7B22E | |
| TAMB (C) | TAMB (F) | TKOF | MXCN | TKOF | MXCN |
| 40.5 | 104.9 | 4907 | 4907 | 4772 | 4772 |
| 41.0 | 105.8 | 4903 | 4903 | 4767 | 4767 |
| 41.5 | 106.7 | 4898 | 4898 | 4763 | 4763 |
| 42.0 | 107.6 | 4894 | 4894 | 4758 | 4758 |
| 42.5 | 108.5 | 4889 | 4889 | 4753 | 4753 |
| 43.0 | 109.4 | 4885 | 4885 | 4749 | 4749 |
| 43.5 | 110.3 | 4881 | 4881 | 4744 | 4744 |
| 44.0 | 111.2 | 4876 | 4876 | 4739 | 4739 |
| 44.5 | 112.1 | 4872 | 4872 | 4734 | 4714 |
| 45.0 | 113.0 | 4867 | 4867 | 4730 | 4730 |
| 45.5 | 113.9 | 4863 | 4863 | 4725 | 4725 |
| 46.0 | 114.8 | 4859 | 4859 | 4720 | 4720 |
| 46.5 | 115.7 | 4854 | 4854 | 4715 | 4715 |
| 47.0 | 116.6 | 4850 | 4850 | 4711 | 4711 |
| 47.5 | 117.5 | 4845 | 4845 | 4706 | 4706 |
| 48.0 | 118.4 | 4841 | 4841 | 4701 | 4701 |
| 48.5 | 119.3 | 4837 | 4837 | 4696 | 4696 |
| 49.0 | 120.2 | 4832 | 4832 | 4692 | 4692 |
| 49.5 | 121.1 | 4828 | 4828 | 4687 | 4687 |
| 50.0 | 122.0 | 4823 | 4823 | 4682 | 4682 |
| 50.5 | 122.9 | 4819 | 4819 | 4678 | 4678 |
| 51.0 | 123.8 | 4815 | 4815 | 4673 | 4673 |
| 51.5 | 124.7 | 4810 | 4810 | 4668 | 4668 |
| 52.0 | 125.6 | 4806 | 4806 | 4663 | 4663 |
| 52.5 | 126.5 | 4801 | 4801 | 4659 | 4659 |
| 53.0 | 127.4 | 4797 | 4797 | 4654 | 4654 |
| 53.5 | 128.3 | 4793 | 4793 | 4649 | 4649 |
| 54.0 | 129.2 | 4788 | 4788 | 4644 | 4644 |
| 54.5 | 130.1 | 4784 | 4784 | 4640 | 4640 |
| 55.0 | 131.0 | 4779 | 4779 | 4635 | 4635 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B24, 7B24/2, 7B24/3, 7B22, 7B22/2, AND 7B22/3 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B24E AND 7B22E RATINGS T/O AND MXCN, ADD+20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1355827-02

***** FOR 7B ALL *****

Power Settings Chart
Figure 1302 (Sheet 10)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | PHYSICAL FAN SPEED (RPM) | | | |
|---|---|---|---|---|---|
| | | 7B27 RATINGS | | 7B26, 7B26/2, 7B26/3, 7B26/3F, 7B26/B1, 7B26/3B1, 7B26E, 7B26E/B1, 7B26E/F | |
| TAMB (C) | TAMB (F) | TKOF | MXCN | TKOF | MXCN |
| -30.0 | -22.0 | 4872 | 4666 | 4707 | 4666 |
| -29.5 | -21.1 | 4876 | 4670 | 4712 | 4670 |
| -29.0 | -20.2 | 4880 | 4675 | 4716 | 4675 |
| -28.5 | -19.3 | 4884 | 4679 | 4720 | 4679 |
| -28.0 | -18.4 | 4888 | 4684 | 4725 | 4684 |
| -27.5 | -17.5 | 4892 | 4688 | 4729 | 4688 |
| -27.0 | -16.6 | 4897 | 4692 | 4733 | 4692 |
| -26.5 | -15.7 | 4901 | 4697 | 4738 | 4697 |
| -26.0 | -14.8 | 4905 | 4701 | 4742 | 4701 |
| -25.5 | -13.9 | 4909 | 4705 | 4746 | 4705 |
| -25.0 | -13.0 | 4913 | 4710 | 4751 | 4710 |
| -24.5 | -12.1 | 4917 | 4714 | 4755 | 4714 |
| -24.0 | -11.2 | 4921 | 4718 | 4759 | 4718 |
| -23.5 | -10.3 | 4925 | 4723 | 4763 | 4723 |
| -23.0 | -9.4 | 4930 | 4727 | 4768 | 4727 |
| -22.5 | -8.5 | 4934 | 4731 | 4772 | 4731 |
| -22.0 | -7.6 | 4938 | 4735 | 4776 | 4735 |
| -21.5 | -6.7 | 4942 | 4740 | 4781 | 4740 |
| -21.0 | -5.8 | 4946 | 4744 | 4785 | 4744 |
| -20.5 | -4.9 | 4950 | 4748 | 4789 | 4748 |
| -20.0 | -4.0 | 4954 | 4753 | 4793 | 4753 |
| -19.5 | -3.1 | 4958 | 4757 | 4798 | 4757 |
| -19.0 | -2.2 | 4962 | 4761 | 4802 | 4761 |
| -18.5 | -1.3 | 4966 | 4765 | 4806 | 4765 |
| -18.0 | -0.4 | 4970 | 4770 | 4810 | 4770 |
| -17.5 | 0.5 | 4974 | 4774 | 4815 | 4774 |
| -17.0 | 1.4 | 4979 | 4778 | 4819 | 4778 |
| -16.5 | 2.3 | 4983 | 4783 | 4823 | 4783 |
| -16.0 | 3.2 | 4987 | 4787 | 4827 | 4787 |
| -15.5 | 4.1 | 4991 | 4791 | 4832 | 4791 |
| -15.0 | 5.0 | 4995 | 4795 | 4836 | 4795 |
| -14.5 | 5.9 | 4999 | 4800 | 4840 | 4800 |
| -14.0 | 6.8 | 5003 | 4804 | 4844 | 4804 |
| -13.5 | 7.7 | 5007 | 4808 | 4848 | 4808 |
| -13.0 | 8.6 | 5011 | 4812 | 4853 | 4812 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 1 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.

1355828-00

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 11)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | PHYSICAL FAN SPEED (RPM) | | | |
|---|---|---|---|---|---|
| | | 7B27 RATINGS | | 7B26, 7B26/2, 7B26/3, 7B26/3F, 7B26/B1, 7B26/3B1, 7B26E, 7B26E/B1, 7B26E/F | |
| TAMB (C) | TAMB (F) | TKOF | MXCN | TKOF | MXCN |
| -12.5 | 9.5 | 5015 | 4816 | 4857 | 4816 |
| -12.0 | 10.4 | 5019 | 4821 | 4861 | 4821 |
| -11.5 | 11.3 | 5023 | 4825 | 4865 | 4825 |
| -11.0 | 12.2 | 5027 | 4829 | 4869 | 4829 |
| -10.5 | 13.1 | 5031 | 4833 | 4874 | 4833 |
| -10.0 | 14.0 | 5035 | 4837 | 4878 | 4837 |
| -9.5 | 14.9 | 5039 | 4842 | 4882 | 4842 |
| -9.0 | 15.8 | 5043 | 4846 | 4886 | 4846 |
| -8.5 | 16.7 | 5047 | 4850 | 4890 | 4850 |
| -8.0 | 17.6 | 5051 | 4854 | 4894 | 4854 |
| -7.5 | 18.5 | 5055 | 4858 | 4898 | 4858 |
| -7.0 | 19.4 | 5059 | 4863 | 4903 | 4863 |
| -6.5 | 20.3 | 5063 | 4867 | 4907 | 4867 |
| -6.0 | 21.2 | 5067 | 4871 | 4911 | 4871 |
| -5.5 | 22.1 | 5071 | 4875 | 4915 | 4875 |
| -5.0 | 23.0 | 5074 | 4879 | 4919 | 4879 |
| -4.5 | 23.9 | 5078 | 4883 | 4923 | 4883 |
| -4.0 | 24.8 | 5082 | 4887 | 4927 | 4887 |
| -3.5 | 25.7 | 5086 | 4892 | 4932 | 4892 |
| -3.0 | 26.6 | 5090 | 4896 | 4936 | 4896 |
| -2.5 | 27.5 | 5094 | 4900 | 4940 | 4900 |
| -2.0 | 28.4 | 5098 | 4904 | 4944 | 4904 |
| -1.5 | 29.3 | 5102 | 4908 | 4948 | 4908 |
| -1.0 | 30.2 | 5106 | 4912 | 4952 | 4912 |
| -0.5 | 31.1 | 5110 | 4916 | 4956 | 4916 |
| 0.0 | 32.0 | 5114 | 4920 | 4960 | 4920 |
| 0.5 | 32.9 | 5118 | 4925 | 4964 | 4925 |
| 1.0 | 33.8 | 5122 | 4929 | 4968 | 4929 |
| 1.5 | 34.7 | 5125 | 4933 | 4972 | 4933 |
| 2.0 | 35.6 | 5129 | 4937 | 4977 | 4937 |
| 2.5 | 36.5 | 5133 | 4941 | 4981 | 4941 |
| 3.0 | 37.4 | 5137 | 4945 | 4985 | 4945 |
| 3.5 | 38.3 | 5141 | 4949 | 4989 | 4949 |
| 4.0 | 39.2 | 5145 | 4953 | 4993 | 4953 |
| 4.5 | 40.1 | 5149 | 4957 | 4997 | 4957 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 1 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.

1355829-01

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 12)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | PHYSICAL FAN SPEED (RPM) | | | |
|---|---|---|---|---|---|
| | | 7B27 RATINGS | | 7B26, 7B26/2, 7B26/3, 7B26/3F, 7B26/B1, 7B26/3B1, 7B26E, 7B26E/B1, 7B26E/F | |
| TAMB (C) | TAMB (F) | TKOF | MXCN | TKOF | MXCN |
| 5.0 | 41.0 | 5153 | 4961 | 5001 | 4961 |
| 5.5 | 41.9 | 5156 | 4965 | 5005 | 4965 |
| 6.0 | 42.8 | 5160 | 4970 | 5009 | 4970 |
| 6.5 | 43.7 | 5164 | 4974 | 5013 | 4974 |
| 7.0 | 44.6 | 5168 | 4978 | 5017 | 4978 |
| 7.5 | 45.5 | 5172 | 4982 | 5021 | 4982 |
| 8.0 | 46.4 | 5176 | 4986 | 5025 | 4986 |
| 8.5 | 47.3 | 5179 | 4990 | 5029 | 4990 |
| 9.0 | 48.2 | 5183 | 4994 | 5033 | 4994 |
| 9.5 | 49.1 | 5187 | 4998 | 5037 | 4998 |
| 10.0 | 50.0 | 5191 | 5002 | 5041 | 5002 |
| 10.5 | 50.9 | 5195 | 5006 | 5045 | 5006 |
| 11.0 | 51.8 | 5199 | 5010 | 5049 | 5010 |
| 11.5 | 52.7 | 5202 | 5014 | 5053 | 5014 |
| 12.0 | 53.6 | 5206 | 5018 | 5057 | 5018 |
| 12.5 | 54.5 | 5210 | 5022 | 5061 | 5022 |
| 13.0 | 55.4 | 5214 | 5026 | 5065 | 5026 |
| 13.5 | 56.3 | 5218 | 5030 | 5069 | 5030 |
| 14.0 | 57.2 | 5221 | 5034 | 5073 | 5034 |
| 14.5 | 58.1 | 5225 | 5038 | 5077 | 5038 |
| 15.0 | 59.0 | 5229 | 5042 | 5081 | 5042 |
| 15.5 | 59.9 | 5233 | 5046 | 5085 | 5046 |
| 16.0 | 60.8 | 5237 | 5050 | 5089 | 5050 |
| 16.5 | 61.7 | 5240 | 5054 | 5093 | 5054 |
| 17.0 | 62.6 | 5244 | 5058 | 5097 | 5058 |
| 17.5 | 63.5 | 5248 | 5062 | 5101 | 5062 |
| 18.0 | 64.4 | 5252 | 5066 | 5105 | 5066 |
| 18.5 | 65.3 | 5255 | 5070 | 5109 | 5070 |
| 19.0 | 66.2 | 5259 | 5074 | 5113 | 5074 |
| 19.5 | 67.1 | 5263 | 5078 | 5117 | 5078 |
| 20.0 | 68.0 | 5267 | 5082 | 5120 | 5082 |
| 20.5 | 68.9 | 5270 | 5086 | 5124 | 5086 |
| 21.0 | 69.8 | 5274 | 5090 | 5128 | 5090 |
| 21.5 | 70.7 | 5278 | 5094 | 5132 | 5094 |
| 22.0 | 71.6 | 5282 | 5098 | 5136 | 5098 |
| 22.5 | 72.5 | 5285 | 5101 | 5140 | 5101 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 1 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.

1355834-01

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 13)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | PHYSICAL FAN SPEED (RPM) | | | |
|---|---|---|---|---|---|
| | | 7B27 RATINGS | | 7B26, 7B26/2, 7B26/3, 7B26/3F, 7B26/B1, 7B26/3B1, 7B26E, 7B26E/B1, 7B26E/F | |
| TAMB (C) | TAMB (F) | TKOF | MXCN | TKOF | MXCN |
| 23.0 | 73.4 | 5289 | 5105 | 5144 | 5105 |
| 23.5 | 74.3 | 5293 | 5109 | 5148 | 5109 |
| 24.0 | 75.2 | 5296 | 5113 | 5152 | 5113 |
| 24.5 | 76.1 | 5300 | 5117 | 5156 | 5117 |
| 25.0 | 77.0 | 5304 | 5121 | 5160 | 5121 |
| 25.5 | 77.9 | 5308 | 5125 | 5163 | 5125 |
| 26.0 | 78.8 | 5311 | 5129 | 5167 | 5129 |
| 26.5 | 79.7 | 5315 | 5133 | 5171 | 5133 |
| 27.0 | 80.6 | 5319 | 5137 | 5175 | 5137 |
| 27.5 | 81.5 | 5322 | 5141 | 5179 | 5141 |
| 28.0 | 82.4 | 5326 | 5145 | 5183 | 5145 |
| 28.5 | 83.3 | 5330 | 5148 | 5187 | 5148 |
| 29.0 | 84.2 | 5333 | 5152 | 5191 | 5152 |
| 29.5 | 85.1 | 5337 | 5156 | 5194 | 5156 |
| 30.0 | 86.0 | 5341 | 5160 | 5198 | 5160 |
| 30.5 | 86.9 | 5336 | 5164 | 5194 | 5164 |
| 31.0 | 87.8 | 5331 | 5168 | 5189 | 5168 |
| 31.5 | 88.7 | 5326 | 5172 | 5184 | 5172 |
| 32.0 | 89.6 | 5320 | 5176 | 5179 | 5176 |
| 32.5 | 90.5 | 5315 | 5180 | 5174 | 5174 |
| 32.8 | 91.0 | 5313 | 5182 | 5172 | 5172 |
| 33.0 | 91.4 | 5310 | 5183 | 5169 | 5169 |
| 33.5 | 92.3 | 5305 | 5187 | 5164 | 5164 |
| 34.0 | 93.2 | 5300 | 5191 | 5160 | 5160 |
| 34.5 | 94.1 | 5295 | 5195 | 5155 | 5155 |
| 35.0 | 95.0 | 5290 | 5199 | 5150 | 5150 |
| 35.5 | 95.9 | 5285 | 5203 | 5145 | 5145 |
| 36.0 | 96.8 | 5280 | 5206 | 5140 | 5140 |
| 36.5 | 97.7 | 5275 | 5210 | 5135 | 5135 |
| 37.0 | 98.6 | 5269 | 5214 | 5131 | 5131 |
| 37.5 | 99.5 | 5264 | 5218 | 5126 | 5126 |
| 38.0 | 100.4 | 5259 | 5222 | 5121 | 5121 |
| 38.5 | 101.3 | 5254 | 5226 | 5116 | 5116 |
| 39.0 | 102.2 | 5249 | 5229 | 5111 | 5111 |
| 39.5 | 103.1 | 5244 | 5233 | 5106 | 5106 |
| 40.0 | 104.0 | 5239 | 5237 | 5102 | 5102 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 1 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.

1355835-01

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 14)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | PHYSICAL FAN SPEED (RPM) | | | |
|---|---|---|---|---|---|
| | | 7B27 RATINGS | | 7B26, 7B26/2, 7B26/3, 7B26/3F, 7B26/B1, 7B26/3B1, 7B26E, 7B26E/B1, 7B26E/F | |
| TAMB (C) | TAMB (F) | TKOF | MXCN | TKOF | MXCN |
| 40.5 | 104.9 | 5234 | 5234 | 5097 | 5097 |
| 41.0 | 105.8 | 5229 | 5229 | 5092 | 5092 |
| 41.5 | 106.7 | 5224 | 5224 | 5087 | 5087 |
| 42.0 | 107.6 | 5218 | 5218 | 5082 | 5082 |
| 42.5 | 108.5 | 5213 | 5213 | 5077 | 5077 |
| 43.0 | 109.4 | 5208 | 5208 | 5073 | 5073 |
| 43.5 | 110.3 | 5203 | 5203 | 5068 | 5068 |
| 44.0 | 111.2 | 5198 | 5198 | 5063 | 5063 |
| 44.5 | 112.1 | 5193 | 5193 | 5058 | 5058 |
| 45.0 | 113.0 | 5188 | 5188 | 5053 | 5053 |
| 45.5 | 113.9 | 5183 | 5183 | 5048 | 5048 |
| 46.0 | 114.8 | 5178 | 5178 | 5043 | 5043 |
| 46.5 | 115.7 | 5173 | 5173 | 5039 | 5039 |
| 47.0 | 116.6 | 5167 | 5167 | 5034 | 5034 |
| 47.5 | 117.5 | 5162 | 5162 | 5029 | 5029 |
| 48.0 | 118.4 | 5157 | 5157 | 5024 | 5024 |
| 48.5 | 119.3 | 5152 | 5152 | 5019 | 5019 |
| 49.0 | 120.2 | 5147 | 5147 | 5014 | 5014 |
| 49.5 | 121.1 | 5142 | 5142 | 5010 | 5010 |
| 50.0 | 122.0 | 5137 | 5137 | 5005 | 5005 |
| 50.5 | 122.9 | 5132 | 5132 | 5000 | 5000 |
| 51.0 | 123.8 | 5127 | 5127 | 4995 | 4995 |
| 51.5 | 124.7 | 5122 | 5122 | 4990 | 4990 |
| 52.0 | 125.6 | 5116 | 5116 | 4985 | 4985 |
| 52.5 | 126.5 | 5111 | 5111 | 4981 | 4981 |
| 53.0 | 127.4 | 5106 | 5106 | 4976 | 4976 |
| 53.5 | 128.3 | 5101 | 5101 | 4971 | 4971 |
| 54.0 | 129.2 | 5096 | 5096 | 4966 | 4966 |
| 54.5 | 130.1 | 5091 | 5091 | 4961 | 4961 |
| 55.0 | 131.0 | 5086 | 5086 | 4956 | 4956 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 1 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.

1355836-01

***** FOR 7B ALL *****

Power Settings Chart
Figure 1302 (Sheet 15)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| TAMB (C) | TAMB (F) | PHYSICAL FAN SPEED (RPM) 7B24/B1, 7B24/2B1, 7B24/3B1, 7B24E/B1 TKOF | MXCN |
|---|---|---|---|
| -30.0 | -22.0 | 4501 | 4396 |
| -29.5 | -21.1 | 4505 | 4400 |
| -29.0 | -20.2 | 4509 | 4405 |
| -28.5 | -19.3 | 4514 | 4409 |
| -28.0 | -18.4 | 4518 | 4413 |
| -27.5 | -17.5 | 4523 | 4418 |
| -27.0 | -16.6 | 4527 | 4422 |
| -26.5 | -15.7 | 4531 | 4426 |
| -26.0 | -14.8 | 4536 | 4431 |
| -25.5 | -13.9 | 4540 | 4435 |
| -25.0 | -13.0 | 4545 | 4439 |
| -24.5 | -12.1 | 4549 | 4444 |
| -24.0 | -11.2 | 4553 | 4448 |
| -23.5 | -10.3 | 4558 | 4452 |
| -23.0 | -9.4 | 4562 | 4456 |
| -22.5 | -8.5 | 4566 | 4461 |
| -22.0 | -7.6 | 4571 | 4465 |
| -21.5 | -6.7 | 4575 | 4469 |
| -21.0 | -5.8 | 4579 | 4474 |
| -20.5 | -4.9 | 4584 | 4478 |
| -20.0 | -4.0 | 4588 | 4482 |
| -19.5 | -3.1 | 4592 | 4486 |
| -19.0 | -2.2 | 4597 | 4491 |
| -18.5 | -1.3 | 4601 | 4495 |
| -18.0 | -0.4 | 4605 | 4499 |
| -17.5 | 0.5 | 4609 | 4503 |
| -17.0 | 1.4 | 4614 | 4507 |
| -16.5 | 2.3 | 4618 | 4512 |
| -16.0 | 3.2 | 4622 | 4516 |
| -15.5 | 4.1 | 4627 | 4520 |
| -15.0 | 5.0 | 4631 | 4524 |
| -14.5 | 5.9 | 4635 | 4529 |
| -14.0 | 6.8 | 4639 | 4533 |
| -13.5 | 7.7 | 4644 | 4537 |
| -13.0 | 8.6 | 4648 | 4543 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B24/B1, 7B24/2B1, AND 7B24/3B1 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B24E/B1 RATING T/O AND MXCN, ADD+20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1355837-02

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 16)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| TAMB (C) | TAMB (F) | PHYSICAL FAN SPEED (RPM) 7B24/B1, 7B24/2B1, 7B24/3B1, 7B24E/B1 TKOF | MXCN |
|---|---|---|---|
| -12.5 | 9.5 | 4652 | 4545 |
| -12.0 | 10.4 | 4656 | 4550 |
| -11.5 | 11.3 | 4661 | 4554 |
| -11.0 | 12.2 | 4665 | 4558 |
| -10.5 | 13.1 | 4669 | 4562 |
| -10.0 | 14.0 | 4673 | 4566 |
| -9.5 | 14.9 | 4678 | 4570 |
| -9.0 | 15.8 | 4682 | 4575 |
| -8.5 | 16.7 | 4686 | 4579 |
| -8.0 | 17.6 | 4690 | 4583 |
| -7.5 | 18.5 | 4695 | 4587 |
| -7.0 | 19.4 | 4699 | 4591 |
| -6.5 | 20.3 | 4703 | 4595 |
| -6.0 | 21.2 | 4707 | 4600 |
| -5.5 | 22.1 | 4711 | 4604 |
| -5.0 | 23.0 | 4716 | 4608 |
| -4.5 | 23.9 | 4720 | 4612 |
| -4.0 | 24.8 | 4724 | 4616 |
| -3.5 | 25.7 | 4728 | 4620 |
| -3.0 | 26.6 | 4732 | 4624 |
| -2.5 | 27.5 | 4736 | 4628 |
| -2.0 | 28.4 | 4741 | 4633 |
| -1.5 | 29.3 | 4745 | 4637 |
| -1.0 | 30.2 | 4749 | 4641 |
| -0.5 | 31.1 | 4753 | 4645 |
| 0.0 | 32.0 | 4757 | 4649 |
| 0.5 | 32.9 | 4761 | 4653 |
| 1.0 | 33.8 | 4766 | 4657 |
| 1.5 | 34.7 | 4770 | 4661 |
| 2.0 | 35.6 | 4774 | 4665 |
| 2.5 | 36.5 | 4778 | 4669 |
| 3.0 | 37.4 | 4782 | 4673 |
| 3.5 | 38.3 | 4786 | 4677 |
| 4.0 | 39.2 | 4790 | 4682 |
| 4.5 | 40.1 | 4794 | 4686 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B24/B1, 7B24/2B1, AND 7B24/3B1 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B24E/B1 RATING T/O AND MXCN, ADD+20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1355839-02

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 17)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| TAMB (C) | TAMB (F) | PHYSICAL FAN SPEED (RPM) 7B24/B1, 7B24/2B1, 7B24/3B1, 7B24E/B1 TKOF | MXCN |
|---|---|---|---|
| 5.0 | 41.0 | 4799 | 4690 |
| 5.5 | 41.9 | 4803 | 4694 |
| 6.0 | 42.8 | 4807 | 4698 |
| 6.5 | 43.7 | 4811 | 4702 |
| 7.0 | 44.6 | 4815 | 4706 |
| 7.5 | 45.5 | 4819 | 4710 |
| 8.0 | 46.4 | 4823 | 4714 |
| 8.5 | 47.3 | 4827 | 4718 |
| 9.0 | 48.2 | 4831 | 4722 |
| 9.5 | 49.1 | 4835 | 4726 |
| 10.0 | 50.0 | 4839 | 4730 |
| 10.5 | 50.9 | 4844 | 4734 |
| 11.0 | 51.8 | 4848 | 4738 |
| 11.5 | 52.7 | 4852 | 4742 |
| 12.0 | 53.6 | 4856 | 4746 |
| 12.5 | 54.5 | 4860 | 4750 |
| 13.0 | 55.4 | 4864 | 4754 |
| 13.5 | 56.3 | 4868 | 4758 |
| 14.0 | 57.2 | 4872 | 4762 |
| 14.5 | 58.1 | 4876 | 4766 |
| 15.0 | 59.0 | 4880 | 4770 |
| 15.5 | 59.9 | 4884 | 4774 |
| 16.0 | 60.8 | 4888 | 4778 |
| 16.5 | 61.7 | 4892 | 4782 |
| 17.0 | 62.6 | 4896 | 4786 |
| 17.5 | 63.5 | 4900 | 4790 |
| 18.0 | 64.4 | 4904 | 4794 |
| 18.5 | 65.3 | 4908 | 4798 |
| 19.0 | 66.2 | 4912 | 4802 |
| 19.5 | 67.1 | 4916 | 4806 |
| 20.0 | 68.0 | 4920 | 4810 |
| 20.5 | 68.9 | 4924 | 4814 |
| 21.0 | 69.8 | 4928 | 4818 |
| 21.5 | 70.7 | 4932 | 4821 |
| 22.0 | 71.6 | 4936 | 4825 |
| 22.5 | 72.5 | 4940 | 4829 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B24/B1, 7B24/2B1, AND 7B24/3B1 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B24E/B1 RATING T/O AND MXCN, ADD+20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1355840-02

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 18)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| TAMB (C) | TAMB (F) | PHYSICAL FAN SPEED (RPM) 7B24/B1, 7B24/2B1, 7B24/3B1, 7B24E/B1 TKOF | MXCN |
|---|---|---|---|
| 23.0 | 73.4 | 4944 | 4833 |
| 23.5 | 74.3 | 4948 | 4837 |
| 24.0 | 75.2 | 4952 | 4841 |
| 24.5 | 76.1 | 4956 | 4845 |
| 25.0 | 77.0 | 4960 | 4849 |
| 25.5 | 77.9 | 4964 | 4853 |
| 26.0 | 78.8 | 4968 | 4857 |
| 26.5 | 79.7 | 4972 | 4861 |
| 27.0 | 80.6 | 4976 | 4865 |
| 27.5 | 81.5 | 4980 | 4868 |
| 28.0 | 82.4 | 4984 | 4872 |
| 28.5 | 83.3 | 4988 | 4876 |
| 29.0 | 84.2 | 4992 | 4880 |
| 29.5 | 85.1 | 4996 | 4884 |
| 30.0 | 86.0 | 4999 | 4888 |
| 30.5 | 86.9 | 5003 | 4892 |
| 31.0 | 87.8 | 5007 | 4896 |
| 31.5 | 88.7 | 5011 | 4899 |
| 32.0 | 89.6 | 5015 | 4903 |
| 32.5 | 90.5 | 5019 | 4907 |
| 32.8 | 91.0 | 5021 | 4909 |
| 33.0 | 91.4 | 5023 | 4911 |
| 33.5 | 92.3 | 5027 | 4915 |
| 34.0 | 93.2 | 5031 | 4919 |
| 34.5 | 94.1 | 5035 | 4923 |
| 35.0 | 95.0 | 5039 | 4926 |
| 35.5 | 95.9 | 5042 | 4930 |
| 36.0 | 96.8 | 5046 | 4934 |
| 36.5 | 97.7 | 5050 | 4938 |
| 37.0 | 98.6 | 5054 | 4942 |
| 37.5 | 99.5 | 5058 | 4946 |
| 38.0 | 100.4 | 5062 | 4949 |
| 38.5 | 101.3 | 5066 | 4953 |
| 39.0 | 102.2 | 5070 | 4957 |
| 39.5 | 103.1 | 5074 | 4961 |
| 40.0 | 104.0 | 5077 | 4965 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B24/B1, 7B24/2B1, AND 7B24/3B1 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B24E/B1 RATING T/O AND MXCN, ADD+20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1355844-02

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 19)

| | | PHYSICAL FAN SPEED (RPM) | |
|---|---|---|---|
| | | 7B24/B1, 7B24/2B1, 7B24/3B1, 7B24E/B1 | |
| TAMB (C) | TAMB (F) | TKOF | MXCN |
| 40.5 | 104.9 | 5081 | 4969 |
| 41.0 | 105.8 | 5085 | 4972 |
| 41.5 | 106.7 | 5081 | 4976 |
| 42.0 | 107.6 | 5077 | 4980 |
| 42.5 | 108.5 | 5073 | 4984 |
| 43.0 | 109.4 | 5069 | 4988 |
| 43.5 | 110.3 | 5065 | 4991 |
| 44.0 | 111.2 | 5061 | 4995 |
| 44.5 | 112.1 | 5057 | 4999 |
| 45.0 | 113.0 | 5053 | 5003 |
| 45.5 | 113.9 | 5049 | 5006 |
| 46.0 | 114.8 | 5045 | 5010 |
| 46.5 | 115.7 | 5041 | 5014 |
| 47.0 | 116.6 | 5037 | 5018 |
| 47.5 | 117.5 | 5033 | 5022 |
| 48.0 | 118.4 | 5029 | 5025 |
| 48.5 | 119.3 | 5025 | 5025 |
| 49.0 | 120.2 | 5021 | 5021 |
| 49.5 | 121.1 | 5017 | 5017 |
| 50.0 | 122.0 | 5013 | 5013 |
| 50.5 | 122.9 | 5009 | 5009 |
| 51.0 | 123.8 | 5005 | 5005 |
| 51.5 | 124.7 | 5001 | 5001 |
| 52.0 | 125.6 | 4997 | 4997 |
| 52.5 | 126.5 | 4993 | 4993 |
| 53.0 | 127.4 | 4989 | 4989 |
| 53.5 | 128.3 | 4985 | 4985 |
| 54.0 | 129.2 | 4981 | 4981 |
| 54.5 | 130.1 | 4977 | 4977 |
| 55.0 | 131.0 | 4973 | 4973 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B24/B1, 7B24/2B1, AND 7B24/3B1 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B24E/B1 RATING T/O AND MXCN, ADD+20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1355845-03

***** FOR 7B ALL *****

Power Settings Chart
Figure 1302 (Sheet 20)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | PHYSICAL FAN SPEED (RPM) | | | |
|---|---|---|---|---|---|
| | | 7B22/B1, 7B22/2B1, 7B22/3B1, 7B22E/B1 | | 7B26/B2, 7B26/3B2, 7B26/3B2F, 7B26E/B2, 7B26E/B2F | |
| TAMB (C) | TAMB (F) | TKOF | MXCN | TKOF | MXCN |
| -30.0 | -22.0 | 4384 | 4355 | 4707 | 4398 |
| -29.5 | -21.1 | 4388 | 4359 | 4712 | 4402 |
| -29.0 | -20.2 | 4392 | 4363 | 4716 | 4407 |
| -28.5 | -19.3 | 4397 | 4367 | 4720 | 4411 |
| -28.0 | -18.4 | 4401 | 4372 | 4725 | 4415 |
| -27.5 | -17.5 | 4405 | 4376 | 4729 | 4420 |
| -27.0 | -16.6 | 4410 | 4380 | 4733 | 4424 |
| -26.5 | -15.7 | 4414 | 4385 | 4738 | 4428 |
| -26.0 | -14.8 | 4418 | 4389 | 4742 | 4433 |
| -25.5 | -13.9 | 4423 | 4393 | 4746 | 4437 |
| -25.0 | -13.0 | 4427 | 4397 | 4751 | 4441 |
| -24.5 | -12.1 | 4431 | 4402 | 4755 | 4445 |
| -24.0 | -11.2 | 4435 | 4406 | 4759 | 4450 |
| -23.5 | -10.3 | 4440 | 4410 | 4763 | 4454 |
| -23.0 | -9.4 | 4444 | 4415 | 4768 | 4458 |
| -22.5 | -8.5 | 4448 | 4419 | 4772 | 4462 |
| -22.0 | -7.6 | 4453 | 4423 | 4776 | 4467 |
| -21.5 | -6.7 | 4457 | 4427 | 4781 | 4471 |
| -21.0 | -5.8 | 4461 | 4432 | 4785 | 4475 |
| -20.5 | -4.9 | 4465 | 4436 | 4789 | 4479 |
| -20.0 | -4.0 | 4470 | 4440 | 4793 | 4484 |
| -19.5 | -3.1 | 4474 | 4444 | 4798 | 4488 |
| -19.0 | -2.2 | 4478 | 4448 | 4802 | 4492 |
| -18.5 | -1.3 | 4482 | 4453 | 4806 | 4496 |
| -18.0 | -0.4 | 4487 | 4457 | 4810 | 4501 |
| -17.5 | 0.5 | 4491 | 4461 | 4815 | 4505 |
| -17.0 | 1.4 | 4495 | 4465 | 4819 | 4509 |
| -16.5 | 2.3 | 4499 | 4469 | 4823 | 4513 |
| -16.0 | 3.2 | 4503 | 4474 | 4827 | 4517 |
| -15.5 | 4.1 | 4508 | 4478 | 4832 | 4522 |
| -15.0 | 5.0 | 4512 | 4482 | 4836 | 4526 |
| -14.5 | 5.9 | 4516 | 4486 | 4840 | 4530 |
| -14.0 | 6.8 | 4520 | 4490 | 4844 | 4534 |
| -13.5 | 7.7 | 4524 | 4495 | 4848 | 4538 |
| -13.0 | 8.6 | 4531 | 4499 | 4853 | 4543 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR 22/B1 RATINGS AND 1 RPM FOR 26/B2 RATINGS FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B22/B1 AND 7B22/3B1 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B22E/B1 RATING T/O AND MXCN, ADD+20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1355846-03

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 21)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | PHYSICAL FAN SPEED (RPM) | | | |
|---|---|---|---|---|---|
| | | 7B22/B1, 7B22/3B1, 7B22E/B1 | | 7B26/B2, 7B26/3B2, 7B26/3B2F, 7B26E/B2, 7B26E/B2F | |
| TAMB (C) | TAMB (F) | TKOF | MXCN | TKOF | MXCN |
| -12.5 | 9.5 | 4533 | 4503 | 4857 | 4547 |
| -12.0 | 10.4 | 4537 | 4507 | 4861 | 4551 |
| -11.5 | 11.3 | 4541 | 4511 | 4865 | 4555 |
| -11.0 | 12.2 | 4545 | 4515 | 4869 | 4559 |
| -10.5 | 13.1 | 4550 | 4520 | 4874 | 4563 |
| -10.0 | 14.0 | 4554 | 4524 | 4878 | 4567 |
| -9.5 | 14.9 | 4558 | 4528 | 4882 | 4572 |
| -9.0 | 15.8 | 4562 | 4532 | 4886 | 4576 |
| -8.5 | 16.7 | 4566 | 4536 | 4890 | 4580 |
| -8.0 | 17.6 | 4570 | 4540 | 4894 | 4584 |
| -7.5 | 18.5 | 4574 | 4544 | 4898 | 4588 |
| -7.0 | 19.4 | 4579 | 4548 | 4903 | 4592 |
| -6.5 | 20.3 | 4583 | 4553 | 4907 | 4696 |
| -6.0 | 21.2 | 4587 | 4557 | 4911 | 4601 |
| -5.5 | 22.1 | 4591 | 4561 | 4915 | 4605 |
| -5.0 | 23.0 | 4595 | 4565 | 4919 | 4609 |
| -4.5 | 23.9 | 4599 | 4569 | 4923 | 4613 |
| -4.0 | 24.8 | 4603 | 4573 | 4927 | 4617 |
| -3.5 | 25.7 | 4608 | 4577 | 4932 | 4621 |
| -3.0 | 26.6 | 4612 | 4581 | 4936 | 4625 |
| -2.5 | 27.5 | 4616 | 4585 | 4940 | 4629 |
| -2.0 | 28.4 | 4620 | 4589 | 4944 | 4633 |
| -1.5 | 29.3 | 4624 | 4594 | 4948 | 4637 |
| -1.0 | 30.2 | 4628 | 4598 | 4952 | 4642 |
| -0.5 | 31.1 | 4632 | 4602 | 4956 | 4646 |
| 0.0 | 32.0 | 4636 | 4606 | 4960 | 4650 |
| 0.5 | 32.9 | 4640 | 4610 | 4964 | 4654 |
| 1.0 | 33.8 | 4644 | 4614 | 4968 | 4658 |
| 1.5 | 34.7 | 4648 | 4618 | 4972 | 4662 |
| 2.0 | 35.6 | 4652 | 4622 | 4977 | 4666 |
| 2.5 | 36.5 | 4657 | 4626 | 4981 | 4670 |
| 3.0 | 37.4 | 4661 | 4630 | 4985 | 4674 |
| 3.5 | 38.3 | 4665 | 4634 | 4989 | 4678 |
| 4.0 | 39.2 | 4669 | 4638 | 4993 | 4682 |
| 4.5 | 40.1 | 4673 | 4642 | 4997 | 4686 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR 22/B1 RATINGS AND 1 RPM FOR 26/B2 RATINGS FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B22/B1 AND 7B22/3B1 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B22E/B1 RATING T/O AND MXCN, ADD+20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1355852-02

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 22)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | PHYSICAL FAN SPEED (RPM) | | | |
|---|---|---|---|---|---|
| | | 7B22/B1, 7B22/3B1, 7B22E/B1 | | 7B26/B2, 7B26/3B2, 7B26/3B2F, 7B26E/B2, 7B26E/B2F | |
| TAMB (C) | TAMB (F) | TKOF | MXCN | TKOF | MXCN |
| 5.0 | 41.0 | 4677 | 4646 | 5001 | 4690 |
| 5.5 | 41.9 | 4681 | 4650 | 5005 | 4694 |
| 6.0 | 42.8 | 4685 | 4654 | 5009 | 4698 |
| 6.5 | 43.7 | 4689 | 4658 | 5013 | 4702 |
| 7.0 | 44.6 | 4693 | 4662 | 5017 | 4706 |
| 7.5 | 45.5 | 4697 | 4666 | 5021 | 4710 |
| 8.0 | 46.4 | 4701 | 4670 | 5025 | 4714 |
| 8.5 | 47.3 | 4705 | 4674 | 5029 | 4718 |
| 9.0 | 48.2 | 4709 | 4678 | 5033 | 4722 |
| 9.5 | 49.1 | 4713 | 4682 | 5037 | 4726 |
| 10.0 | 50.0 | 4717 | 4686 | 5041 | 4730 |
| 10.5 | 50.9 | 4721 | 4690 | 5045 | 4734 |
| 11.0 | 51.8 | 4725 | 4694 | 5049 | 4738 |
| 11.5 | 52.7 | 4729 | 4698 | 5053 | 4742 |
| 12.0 | 53.6 | 4733 | 4702 | 5057 | 4746 |
| 12.5 | 54.5 | 4737 | 4706 | 5061 | 4750 |
| 13.0 | 55.4 | 4741 | 4710 | 5065 | 4754 |
| 13.5 | 56.3 | 4745 | 4714 | 5069 | 4758 |
| 14.0 | 57.2 | 4749 | 4718 | 5073 | 4762 |
| 14.5 | 58.1 | 4753 | 4722 | 5077 | 4766 |
| 15.0 | 59.0 | 4757 | 4726 | 5081 | 4770 |
| 15.5 | 59.9 | 4761 | 4730 | 5085 | 4774 |
| 16.0 | 60.8 | 4765 | 4734 | 5089 | 4778 |
| 16.5 | 61.7 | 4769 | 4738 | 5093 | 4782 |
| 17.0 | 62.6 | 4773 | 4742 | 5097 | 4786 |
| 17.5 | 63.5 | 4777 | 4746 | 5101 | 4790 |
| 18.0 | 64.4 | 4781 | 4750 | 5105 | 4794 |
| 18.5 | 65.3 | 4785 | 4754 | 5109 | 4798 |
| 19.0 | 66.2 | 4789 | 4758 | 5113 | 4802 |
| 19.5 | 67.1 | 4793 | 4761 | 5117 | 4805 |
| 20.0 | 68.0 | 4797 | 4765 | 5120 | 4809 |
| 20.5 | 68.9 | 4800 | 4769 | 5124 | 4813 |
| 21.0 | 69.8 | 4804 | 4773 | 5128 | 4817 |
| 21.5 | 70.7 | 4808 | 4777 | 5132 | 4821 |
| 22.0 | 71.6 | 4812 | 4781 | 5136 | 4825 |
| 22.5 | 72.5 | 4816 | 4785 | 5140 | 4829 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR 22/B1 RATINGS AND 1 RPM FOR 26/B2 RATINGS FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B22/B1 AND 7B22/3B1 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B22E/B1 RATING T/O AND MXCN, ADD+20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1355879-02

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 23)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | PHYSICAL FAN SPEED (RPM) | | | |
|---|---|---|---|---|---|
| | | 7B22/B1, 7B22/3B1, 7B22E/B1 | | 7B26/B2, 7B26/3B2, 7B26/3B2F, 7B26E/B2, 7B26E/B2F | |
| TAMB (C) | TAMB (F) | TKOF | MXCN | TKOF | MXCN |
| 23.0 | 73.4 | 4820 | 4789 | 5144 | 4833 |
| 23.5 | 74.3 | 4824 | 4793 | 5148 | 4837 |
| 24.0 | 75.2 | 4828 | 4797 | 5152 | 4841 |
| 24.5 | 76.1 | 4832 | 4800 | 5156 | 4845 |
| 25.0 | 77.0 | 4836 | 4804 | 5160 | 4848 |
| 25.5 | 77.9 | 4840 | 4808 | 5163 | 4852 |
| 26.0 | 78.8 | 4844 | 4812 | 5167 | 4856 |
| 26.5 | 79.7 | 4847 | 4816 | 5171 | 4860 |
| 27.0 | 80.6 | 4851 | 4820 | 5175 | 4864 |
| 27.5 | 81.5 | 4855 | 4824 | 5179 | 4868 |
| 28.0 | 82.4 | 4859 | 4828 | 5183 | 4872 |
| 28.5 | 83.3 | 4863 | 4831 | 5187 | 4876 |
| 29.0 | 84.2 | 4867 | 4835 | 5191 | 4879 |
| 29.5 | 85.1 | 4871 | 4839 | 5194 | 4883 |
| 30.0 | 86.0 | 4875 | 4843 | 5198 | 4887 |
| 30.5 | 86.9 | 4878 | 4847 | 5202 | 4891 |
| 31.0 | 87.8 | 4882 | 4851 | 5206 | 4895 |
| 31.5 | 88.7 | 4886 | 4855 | 5210 | 4899 |
| 32.0 | 89.6 | 4890 | 4858 | 5214 | 4903 |
| 32.5 | 90.5 | 4894 | 4862 | 5218 | 4906 |
| 32.8 | 91.0 | 4896 | 4864 | 5220 | 4908 |
| 33.0 | 91.4 | 4898 | 4866 | 5221 | 4910 |
| 33.5 | 92.3 | 4902 | 4870 | 5225 | 4914 |
| 34.0 | 93.2 | 4905 | 4874 | 5229 | 4918 |
| 34.5 | 94.1 | 4909 | 4878 | 5233 | 4922 |
| 35.0 | 95.0 | 4913 | 4881 | 5237 | 4925 |
| 35.5 | 95.9 | 4917 | 4885 | 5232 | 4929 |
| 36.0 | 96.8 | 4921 | 4889 | 5227 | 4933 |
| 36.5 | 97.7 | 4919 | 4893 | 5222 | 4937 |
| 37.0 | 98.6 | 4918 | 4897 | 5217 | 4941 |
| 37.5 | 99.5 | 4917 | 4900 | 5212 | 4945 |
| 38.0 | 100.4 | 4916 | 4904 | 5207 | 4948 |
| 38.5 | 101.3 | 4914 | 4908 | 5202 | 4952 |
| 39.0 | 102.2 | 4913 | 4912 | 5197 | 4956 |
| 39.5 | 103.1 | 4912 | 4912 | 5192 | 4960 |
| 40.0 | 104.0 | 4910 | 4910 | 5187 | 4964 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR 22/B1 RATINGS AND 1 RPM FOR 26/B2 RATINGS FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B22/B1 AND 7B22/3B1 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B22E/B1 RATING T/O AND MXCN, ADD+20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1355880-02

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 24)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | PHYSICAL FAN SPEED (RPM) | | | |
|---|---|---|---|---|---|
| | | 7B22/B1, 7B22/3B1, 7B22E/B1 | | 7B26/B2, 7B26/3B2, 7B26/3B2F, 7B26E/B2, 7B26E/B2F | |
| TAMB (C) | TAMB (F) | TKOF | MXCN | TKOF | MXCN |
| 40.5 | 104.9 | 4909 | 4909 | 5182 | 4967 |
| 41.0 | 105.8 | 4908 | 4908 | 5177 | 4971 |
| 41.5 | 106.7 | 4906 | 4906 | 5172 | 4975 |
| 42.0 | 107.6 | 4905 | 4905 | 5167 | 4979 |
| 42.5 | 108.5 | 4904 | 4904 | 5162 | 4982 |
| 43.0 | 109.4 | 4902 | 4902 | 5157 | 4986 |
| 43.5 | 110.3 | 4901 | 4901 | 5152 | 4990 |
| 44.0 | 111.2 | 4900 | 4900 | 5147 | 4994 |
| 44.5 | 112.1 | 4898 | 4898 | 5142 | 4997 |
| 45.0 | 113.0 | 4897 | 4897 | 5137 | 5001 |
| 45.5 | 113.9 | 4896 | 4896 | 5132 | 5005 |
| 46.0 | 114.8 | 4894 | 4894 | 5127 | 5009 |
| 46.5 | 115.7 | 4893 | 4893 | 5122 | 5013 |
| 47.0 | 116.6 | 4892 | 4892 | 5117 | 5016 |
| 47.5 | 117.5 | 4891 | 4891 | 5112 | 5020 |
| 48.0 | 118.4 | 4889 | 4889 | 5107 | 5024 |
| 48.5 | 119.3 | 4888 | 4888 | 5102 | 5027 |
| 49.0 | 120.2 | 4887 | 4887 | 5097 | 5031 |
| 49.5 | 121.1 | 4885 | 4885 | 5092 | 5035 |
| 50.0 | 122.0 | 4884 | 4884 | 5087 | 5039 |
| 50.5 | 122.9 | 4883 | 4883 | 5082 | 5042 |
| 51.0 | 123.8 | 4881 | 4881 | 5077 | 5046 |
| 51.5 | 124.7 | 4880 | 4880 | 5072 | 5050 |
| 52.0 | 125.6 | 4879 | 4879 | 5067 | 5054 |
| 52.5 | 126.5 | 4877 | 4877 | 5062 | 5050 |
| 53.0 | 127.4 | 4876 | 4876 | 5057 | 5045 |
| 53.5 | 128.3 | 4873 | 4875 | 5052 | 5040 |
| 54.0 | 129.2 | 4873 | 4873 | 5047 | 5035 |
| 54.5 | 130.1 | 4872 | 4872 | 5042 | 5030 |
| 55.0 | 131.0 | 4871 | 4871 | 5037 | 5025 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR 22/B1 RATINGS AND 1 RPM FOR 26/B2 RATINGS FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B22/B1 AND 7B22/3B1 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B22E/B1 RATING T/O AND MXCN, ADD+20 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1355884-02

***** FOR 7B ALL *****

Power Settings Chart
Figure 1302 (Sheet 25)

| T12 DEG F | T12 DEG C | PHYSICAL FAN SPEED — 7B22, 7B22/2, 7B22/3, 7B22E 15% T O 2073 N1 | PHYSICAL FAN SPEED — 7B22, 7B22/2, 7B22/3, 7B22E 95% T O 4668 N1 | PHYSICAL FAN SPEED — 7B20, 7B20/2, 7B20/3, 7B20E 15% T O 1987 N1 | PHYSICAL FAN SPEED — 7B20, 7B20/2, 7B20/3, 7B20E 95% T O 4499 N1 |
|---|---|---|---|---|---|
| -22.0 | -30 | 1905 | 4302 | 1826 | 4144 |
| -20.2 | -29 | 1909 | 4311 | 4830 | 4152 |
| -18.4 | -28 | 1913 | 4319 | 4833 | 4160 |
| -16.6 | -27 | 1917 | 4328 | 1837 | 4168 |
| -14.8 | -26 | 1921 | 4336 | 1841 | 4177 |
| -13.0 | -25 | 1924 | 4344 | 1844 | 4185 |
| -11.2 | -24 | 1928 | 4353 | 1848 | 4193 |
| -9.4 | -23 | 1932 | 4361 | 1852 | 4201 |
| -7.6 | -22 | 1936 | 4370 | 1856 | 4209 |
| -5.8 | -21 | 1940 | 4378 | 1859 | 4217 |
| -4.0 | -20 | 1944 | 4386 | 1863 | 4225 |
| -2.2 | -19 | 1947 | 4395 | 1867 | 4234 |
| -0.4 | -18 | 1951 | 4403 | 1870 | 4242 |
| 1.4 | -17 | 1955 | 4411 | 1874 | 4250 |
| 3.2 | -16 | 1959 | 4420 | 1877 | 4258 |
| 5.0 | -15 | 1963 | 4428 | 1881 | 4266 |
| 6.8 | -14 | 1966 | 4436 | 1885 | 4274 |
| 8.6 | -13 | 1970 | 4444 | 1888 | 4282 |
| 10.4 | -12 | 1974 | 4452 | 1892 | 4290 |
| 12.2 | -11 | 1978 | 4461 | 1896 | 4298 |
| 14.0 | -10 | 1981 | 4469 | 1899 | 4305 |
| 15.8 | -9 | 1985 | 4477 | 1903 | 4313 |
| 17.6 | -8 | 1989 | 4485 | 1906 | 4321 |
| 19.4 | -7 | 1993 | 4493 | 1910 | 4329 |
| 21.2 | -6 | 1996 | 4501 | 1913 | 4337 |
| 23.0 | -5 | 2000 | 4509 | 1917 | 4345 |
| 24.8 | -4 | 2004 | 4517 | 1921 | 4353 |
| 26.6 | -3 | 2008 | 4526 | 1924 | 4361 |
| 28.4 | -2 | 2011 | 4534 | 1928 | 4368 |
| 30.2 | -1 | 2015 | 4542 | 1931 | 4376 |
| 32.0 | 0 | 2019 | 4550 | 1935 | 4384 |
| 33.8 | 1 | 2022 | 4558 | 1938 | 4392 |
| 35.6 | 2 | 2026 | 4556 | 1942 | 4400 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 20K AND 22K RATINGS OF 7B AND 7BE (7B20, 7B20/2, 7B20/3, 7B20E, AND 7B22, 7B22/2, 7B22/3, AND 7B22E) 95% T/O N1, ADD 19 RPM TO THE N1 POWER SETTINGS SHOWN ABOVE.

1279943-02

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 26)

| T12 DEG F | T12 DEG C | PHYSICAL FAN SPEED — 7B22, 7B22/2, 7B22/3, 7B22E 15% T O 2073 N1 | 7B22, 7B22/2, 7B22/3, 7B22E 95% T O 4668 N1 | 7B20, 7B20/2, 7B20/3, 7B20E 15% T O 1987 N1 | 7B20, 7B20/2, 7B20/3, 7B20E 95% T O 4499 N1 |
|---|---|---|---|---|---|
| 37.4 | 3 | 2030 | 4574 | 1945 | 4407 |
| 39.2 | 4 | 2033 | 4581 | 1949 | 4415 |
| 41.0 | 5 | 2037 | 4589 | 1952 | 4423 |
| 42.8 | 6 | 2041 | 4597 | 1956 | 4430 |
| 44.6 | 7 | 2044 | 4605 | 1959 | 4438 |
| 46.4 | 8 | 2048 | 4613 | 1963 | 4446 |
| 48.2 | 9 | 2051 | 4621 | 1966 | 4453 |
| 50.0 | 10 | 2055 | 4629 | 1970 | 4461 |
| 51.8 | 11 | 2059 | 4637 | 1973 | 4469 |
| 53.6 | 12 | 2062 | 4645 | 1977 | 4476 |
| 55.4 | 13 | 2066 | 4652 | 1980 | 4484 |
| 57.2 | 14 | 2069 | 4660 | 1984 | 4491 |
| 59.0 | 15 | 2073 | 4668 | 1987 | 4499 |
| 60.8 | 16 | 2077 | 4676 | 1990 | 4507 |
| 62.6 | 17 | 2080 | 4684 | 1994 | 4514 |
| 64.4 | 18 | 2084 | 4691 | 1997 | 4522 |
| 66.2 | 19 | 2087 | 4699 | 2001 | 4529 |
| 68.0 | 20 | 2091 | 4707 | 2004 | 4537 |
| 69.8 | 21 | 2094 | 4714 | 2008 | 4544 |
| 71.6 | 22 | 2098 | 4722 | 2011 | 4552 |
| 73.4 | 23 | 2101 | 4730 | 2014 | 4559 |
| 75.2 | 24 | 2105 | 4738 | 2018 | 4567 |
| 77.0 | 25 | 2108 | 4745 | 2021 | 4574 |
| 78.0 | 26 | 2112 | 4753 | 2024 | 4581 |
| 80.6 | 27 | 2116 | 4760 | 2028 | 4589 |
| 82.4 | 28 | 2119 | 4768 | 2031 | 4599 |
| 84.2 | 29 | 2123 | 4776 | 2035 | 4604 |
| 86.0 | 30 | 2126 | 4783 | 2038 | 4611 |
| 87.8 | 31 | 2130 | 4791 | 2041 | 4618 |
| 89.6 | 32 | 2133 | 4798 | 2045 | 4626 |
| 91.4 | 33 | 2136 | 4806 | 2048 | 4633 |
| 93.2 | 34 | 2140 | 4813 | 2051 | 4640 |
| 95.0 | 35 | 2143 | 4821 | 2055 | 4648 |
| 96.8 | 36 | 2147 | 4815 | 2058 | 4641 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B20, 7B20/2, 7B20/3, AND 7B22, 7B22/2, 7B22/3 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B20E AND 7B22E RATINGS 95% T/O N1, ADD 19 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1279944-02

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 27)

| | | PHYSICAL FAN SPEED | | | |
|---|---|---|---|---|---|
| | | 7B22, 7B22/2, 7B22/3, 7B22E | 7B22, 7B22/2, 7B22/3, 7B22E | 7B20, 7B20/2, 7B20/3, 7B20E | 7B20, 7B20/2, 7B20/3, 7B20E |
| T12 DEG F | T12 DEG C | 15% T O 2073 N1 | 95% T O 4668 N1 | 15% T O 1987 N1 | 95% T O 4499 N1 |
| 98.6 | 37 | 2150 | 4805 | 2061 | 4631 |
| 100.4 | 38 | 2154 | 4796 | 2064 | 4621 |
| 102.2 | 39 | 2157 | 4786 | 2068 | 4612 |
| 104.0 | 40 | 2161 | 4777 | 2071 | 4602 |
| 105.8 | 41 | 2164 | 4768 | 2074 | 4592 |
| 107.6 | 42 | 2168 | 4759 | 2078 | 4582 |
| 109.4 | 43 | 2171 | 4750 | 2081 | 4572 |
| 111.2 | 44 | 2174 | 4741 | 2084 | 4562 |
| 113.0 | 45 | 2178 | 4732 | 2088 | 4552 |
| 114.8 | 46 | 2181 | 4723 | 2091 | 4542 |
| 116.6 | 47 | 2185 | 4714 | 2094 | 4532 |
| 118.4 | 48 | 2188 | 4705 | 2097 | 4522 |
| 120.2 | 49 | 2191 | 4696 | 2101 | 4512 |
| 122.0 | 50 | 2195 | 4687 | 2104 | 4502 |
| 123.8 | 51 | 2198 | 4673 | 2101 | 4495 |
| 125.6 | 52 | 2201 | 4663 | 2110 | 4486 |
| 127.4 | 53 | 2204 | 4654 | 2113 | 4476 |
| 129.2 | 54 | 2207 | 4644 | 2116 | 4466 |
| 131.0 | 55 | 2210 | 4635 | 2119 | 4457 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B20, 7B20/2, 7B20/3, AND 7B22, 7B22/2, 7B22/3 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B20E AND 7B22E RATINGS 95% T/O N1, ADD 19 RPM TO THE N1 POWER SETTINGS ABOVE SHOWN.

1279945-02

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 28)

| T12 DEG F | T12 DEG C | PHYSICAL FAN SPEED – ALL 7B27 15 % T O 2253 N1 | ALL 7B27 95 % T O 5077 N1 | ALL 7B26 EXCEPT /B2 15 % T O 2214 N1 | ALL 7B26 EXCEPT /B2 95 % T O 4961 N1 | ALL 7B24 EXCEPT /B1 15 % T O 2132 N1 | ALL 7B24 EXCEPT /B1 95 % T O 4785 N1 |
|---|---|---|---|---|---|---|---|
| -22.0 | -30 | 2071 | 4728 | 2035 | 4595 | 1959 | 4414 |
| -20.2 | -29 | 2075 | 4737 | 2039 | 4604 | 1963 | 4422 |
| -18.4 | -28 | 2079 | 4745 | 2043 | 4612 | 1967 | 4431 |
| -16.6 | -27 | 2083 | 4753 | 2047 | 4621 | 1971 | 4440 |
| -14.8 | -26 | 2088 | 4761 | 2051 | 4629 | 1975 | 4448 |
| -13.0 | -25 | 2092 | 4769 | 2056 | 4638 | 1979 | 4457 |
| -11.2 | -24 | 2096 | 4777 | 2060 | 4646 | 1983 | 4465 |
| -9.4 | -23 | 2100 | 4785 | 2064 | 4655 | 1987 | 4474 |
| -7.6 | -22 | 2104 | 4793 | 2068 | 4663 | 1991 | 4482 |
| -5.8 | -21 | 2109 | 4801 | 2072 | 4671 | 1995 | 4491 |
| -4.0 | -20 | 2113 | 4809 | 2076 | 4680 | 1999 | 4499 |
| -2.2 | -19 | 2117 | 4817 | 2080 | 4688 | 2003 | 4508 |
| -0.4 | -18 | 2121 | 4825 | 2084 | 4696 | 2007 | 4516 |
| 1.4 | -17 | 2125 | 4833 | 2088 | 4705 | 2011 | 4524 |
| 3.2 | -16 | 2129 | 4841 | 2092 | 4713 | 2015 | 4533 |
| 5.0 | -15 | 2133 | 4849 | 2096 | 4721 | 2019 | 4541 |
| 6.8 | -14 | 2137 | 4856 | 2100 | 4729 | 2022 | 4550 |
| 8.6 | -13 | 2141 | 4864 | 2104 | 4738 | 2026 | 4558 |
| 10.4 | -12 | 2146 | 4872 | 2108 | 4746 | 2030 | 4566 |
| 12.2 | -11 | 2150 | 4880 | 2112 | 4754 | 2034 | 4575 |
| 14.0 | -10 | 2154 | 4888 | 2116 | 4762 | 2038 | 4583 |
| 15.8 | -9 | 2158 | 4895 | 2120 | 4770 | 2042 | 4591 |
| 17.6 | -8 | 2162 | 4903 | 2124 | 4778 | 2046 | 4599 |
| 19.4 | -7 | 2166 | 4911 | 2128 | 4786 | 2049 | 4608 |
| 21.2 | -6 | 2170 | 4919 | 2132 | 4795 | 2053 | 4616 |
| 23.0 | -5 | 2174 | 4926 | 2136 | 4803 | 2057 | 4624 |
| 24.8 | -4 | 2178 | 4934 | 2140 | 4811 | 2061 | 4632 |
| 26.6 | -3 | 2182 | 4942 | 2144 | 4819 | 2065 | 4640 |
| 28.4 | -2 | 2186 | 4949 | 2148 | 4827 | 2068 | 4649 |
| 30.2 | -1 | 2190 | 4957 | 2152 | 4835 | 2072 | 4657 |
| 32.0 | 0 | 2194 | 4965 | 2156 | 4843 | 2076 | 4665 |
| 33.8 | 1 | 2198 | 4972 | 2160 | 4851 | 2080 | 4673 |
| 35.6 | 2 | 2202 | 4980 | 2164 | 4559 | 2084 | 4681 |

**NOTE:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR 24K RATING AND 1 RPM FOR 26K/27K RATING FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR ALL 7B24 ENGINES, EXCEPT / B1, WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B24E 95% T/O N1, ADD 18 RPM TO THE N1 POWER SETTINGS SHOWN.

1153142-03

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 29)

| T12 DEG F | T12 DEG C | PHYSICAL FAN SPEED: ALL 7B27 15 % T O 2253 N1 | ALL 7B27 95 % T O 5077 N1 | ALL 7B26 EXCEPT /B2 15 % T O 2214 N1 | ALL 7B26 EXCEPT /B2 95 % T O 4961 N1 | ALL 7B24 EXCEPT /B1 15 % T O 2132 N1 | ALL 7B24 EXCEPT /B1 95 % T O 4785 N1 |
|---|---|---|---|---|---|---|---|
| 37.4 | 3 | 2206 | 4987 | 2168 | 4867 | 2087 | 4689 |
| 39.2 | 4 | 2210 | 4995 | 2172 | 4875 | 2091 | 4697 |
| 41.0 | 5 | 2214 | 5002 | 2175 | 4883 | 2095 | 4705 |
| 42.8 | 6 | 2218 | 5010 | 2179 | 4891 | 2099 | 4713 |
| 44.6 | 7 | 2222 | 5017 | 2183 | 4898 | 2102 | 4721 |
| 46.4 | 8 | 2226 | 5025 | 2187 | 4906 | 2106 | 4729 |
| 48.2 | 9 | 2230 | 5032 | 2191 | 4914 | 2110 | 4737 |
| 50.0 | 10 | 2234 | 5040 | 2195 | 4922 | 2114 | 4745 |
| 51.8 | 11 | 2237 | 5047 | 2199 | 4930 | 2117 | 4753 |
| 53.6 | 12 | 2241 | 5055 | 2203 | 4938 | 2121 | 4761 |
| 55.4 | 13 | 2245 | 5062 | 2206 | 4945 | 2125 | 4769 |
| 57.2 | 14 | 2249 | 5070 | 2210 | 4953 | 2128 | 4777 |
| 59.0 | 15 | 2253 | 5077 | 2214 | 4961 | 2132 | 4785 |
| 60.8 | 16 | 2257 | 5084 | 2218 | 4969 | 2136 | 4793 |
| 62.6 | 17 | 2261 | 5092 | 2222 | 4976 | 2139 | 4801 |
| 64.4 | 18 | 2265 | 5099 | 2225 | 4984 | 2143 | 4809 |
| 66.2 | 19 | 2268 | 5106 | 2229 | 4992 | 2147 | 4816 |
| 68.0 | 20 | 2272 | 5114 | 2233 | 5000 | 2150 | 4824 |
| 69.8 | 21 | 2276 | 5121 | 2237 | 5007 | 2154 | 4832 |
| 71.6 | 22 | 2280 | 5128 | 2241 | 5015 | 2158 | 4840 |
| 73.4 | 23 | 2284 | 5136 | 2244 | 5023 | 2161 | 4848 |
| 75.2 | 24 | 2288 | 5143 | 2248 | 5030 | 2165 | 4856 |
| 77.0 | 25 | 2291 | 5150 | 2252 | 5038 | 2168 | 4863 |
| 78.8 | 26 | 2295 | 5157 | 2256 | 5046 | 2172 | 4871 |
| 80.6 | 27 | 2299 | 5164 | 2259 | 5053 | 2176 | 4879 |
| 82.4 | 28 | 2303 | 5172 | 2263 | 5061 | 2179 | 4887 |
| 84.2 | 29 | 2307 | 5179 | 2267 | 5068 | 2183 | 4894 |
| 86.0 | 30 | 2310 | 5186 | 2271 | 5076 | 2186 | 4902 |
| 87.8 | 31 | 2314 | 5193 | 2274 | 5083 | 2190 | 4910 |
| 89.6 | 32 | 2318 | 5200 | 2278 | 5091 | 2194 | 4917 |
| 91.4 | 33 | 2322 | 5207 | 2282 | 5098 | 2197 | 4925 |
| 93.2 | 34 | 2326 | 5215 | 2285 | 5106 | 2201 | 4933 |
| 95.0 | 35 | 2329 | 5222 | 2289 | 5113 | 2204 | 4940 |
| 96.8 | 36 | 2333 | 5229 | 2293 | 5121 | 2208 | 4942 |

**NOTE:**

1. INCREASE THE N1 BY 2 RPM EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR 24K RATING AND 1 RPM FOR 26K AND 27K RATINGS FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR ALL 7B24 ENGINES, EXCEPT / B1, WITH EEC SOFTWARE VERSION 7.B.V.2.OR HIGHER, AND 7B24E 95% T/O N1, ADD 18 RPM TO THE ABOVE SHOWN N1 POWER SETTINGS.

1153143-04

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 30)

| T12 DEG F | T12 DEG C | ALL 7B27, 15 % T O 2253 N1 | ALL 7B27, 95 % T O 5077 N1 | ALL 7B26 EXCEPT /B2 15 % T O 2214 N1 | ALL 7B26 EXCEPT /B2 95 % T O 4961 N1 | ALL 7B24 EXCEPT /B1 15 % T O 2132 N1 | ALL 7B24 EXCEPT /B1 95 % T O 4785 N1 |
|---|---|---|---|---|---|---|---|
| | | ← PHYSICAL FAN SPEED → | | | | | |
| 98.6 | 37 | 2337 | 5236 | 2296 | 5124 | 2211 | 4933 |
| 100.4 | 38 | 2341 | 5243 | 2300 | 5115 | 2215 | 4924 |
| 102.2 | 39 | 2344 | 5246 | 2304 | 5105 | 2219 | 4916 |
| 104.0 | 40 | 2348 | 5236 | 2307 | 5095 | 2222 | 4907 |
| 105.8 | 41 | 2352 | 5226 | 2311 | 5085 | 2226 | 4898 |
| 107.6 | 42 | 2355 | 5216 | 2315 | 5075 | 2229 | 4889 |
| 109.4 | 43 | 2359 | 5206 | 2318 | 5065 | 2233 | 4880 |
| 111.2 | 44 | 2363 | 5196 | 2322 | 5055 | 2236 | 4871 |
| 113.0 | 45 | 2367 | 5186 | 2326 | 5045 | 2240 | 4863 |
| 114.8 | 46 | 2370 | 5176 | 2329 | 5035 | 2243 | 4854 |
| 116.6 | 47 | 2374 | 5166 | 2333 | 5025 | 2247 | 4845 |
| 118.4 | 48 | 2378 | 5156 | 2337 | 5015 | 2250 | 4836 |
| 120.2 | 49 | 2381 | 5146 | 2340 | 5005 | 2254 | 4827 |
| 122.0 | 50 | 2385 | 5136 | 2344 | 4995 | 2257 | 4818 |
| 123.8 | 51 | 2389 | 5126 | 2348 | 4987 | 2261 | 4811 |
| 125.6 | 52 | 2393 | 5116 | 2352 | 4977 | 2265 | 4802 |
| 127.4 | 53 | 2397 | 5106 | 2356 | 4967 | 2269 | 4793 |
| 129.2 | 54 | 2401 | 5096 | 2360 | 4957 | 2273 | 4785 |
| 131.0 | 55 | 2405 | 5086 | 2364 | 4948 | 2277 | 4776 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR 24K AND 1 RPM FOR 26K/27K RATINGS FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR ALL 7B24 ENGINES, EXCEPT /B1, WITH EEC SOFTWARE VERSION 7.B.V.2 OR HIGHER, AND 7B24E 95% T/O N1, ADD 18 RPM TO THE N1 POWER SETTINGS SHOWN ABOVE.

1156212-05

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 31)

| T12 DEG F | T12 DEG C | PHYSICAL FAN SPEED 7B24/B1 7B24/2B1 7B24/3B1 7B24E/B1 15 % T O 2132 N1 | 7B24/B1 7B24/2B1 7B24/3B1 7B24E/B1 95 % T O 4785 N1 | 7B22/B1 7B22/3B1 7B22E/B1 15 % T O 2073 N1 | 7B22/B1 7B22/3B1 7B22E/B1 95 % T O 4668 N1 |
|---|---|---|---|---|---|
| -22.0 | -30 | 1959 | 4414 | 1905 | 4302 |
| -20.2 | -29 | 1963 | 4422 | 1909 | 4311 |
| -18.4 | -28 | 1967 | 4431 | 1913 | 4319 |
| -16.6 | -27 | 1971 | 4440 | 1917 | 4328 |
| -14.8 | -26 | 1975 | 4448 | 1921 | 4336 |
| -13.0 | -25 | 1979 | 4457 | 1924 | 4344 |
| -11.2 | -24 | 1983 | 4465 | 1928 | 4353 |
| -9.4 | -23 | 1987 | 4474 | 1932 | 4361 |
| -7.6 | -22 | 1991 | 4482 | 1936 | 4370 |
| -5.8 | -21 | 1995 | 4491 | 1940 | 4378 |
| -4.0 | -20 | 1999 | 4499 | 1944 | 4386 |
| -2.2 | -19 | 2003 | 4508 | 1947 | 4395 |
| -0.4 | -18 | 2007 | 4516 | 1951 | 4403 |
| 1.4 | -17 | 2011 | 4524 | 1955 | 4411 |
| 3.2 | -16 | 2015 | 4533 | 1959 | 4420 |
| 5.0 | -15 | 2019 | 4541 | 1963 | 4428 |
| 6.8 | -14 | 2022 | 4550 | 1966 | 4436 |
| 8.6 | -13 | 2026 | 4558 | 1970 | 4444 |
| 10.4 | -12 | 2030 | 4566 | 1974 | 4452 |
| 12.2 | -11 | 2034 | 4575 | 1978 | 4461 |
| 14.0 | -10 | 2038 | 4583 | 1981 | 4469 |
| 15.8 | -9 | 2042 | 4591 | 1985 | 4477 |
| 17.6 | -8 | 2046 | 4599 | 1989 | 4485 |
| 19.4 | -7 | 2049 | 4608 | 1993 | 4493 |
| 21.2 | -6 | 2053 | 4616 | 1996 | 4501 |
| 23.0 | -5 | 2057 | 4624 | 2000 | 4509 |
| 24.8 | -4 | 2061 | 4632 | 2004 | 4517 |
| 26.6 | -3 | 2065 | 4640 | 2008 | 4526 |
| 28.4 | -2 | 2068 | 4649 | 2011 | 4534 |
| 30.2 | -1 | 2072 | 4657 | 2015 | 4542 |
| 32.0 | 0 | 2076 | 4665 | 2019 | 4550 |
| 33.8 | 1 | 2080 | 4673 | 2022 | 4558 |
| 35.6 | 2 | 2084 | 4681 | 2026 | 4566 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B24/B1, 7B24/2B1, AND 7B24/3B1 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B24E/B1 95% T/O N1, ADD 18 RPM TO THE N1 POWER SETTINGS SHOWN ABOVE.
4. FOR 7B22/B1, 7B22/2B1, AND 7B22/3B1 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B22E/B1 95% T/O N1, ADD 19 RPM TO THE N1 POWER SETTINGS SHOWN ABOVE.

1156213-04

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 32)

| T12 DEG F | T12 DEG C | PHYSICAL FAN SPEED 7B24/B1 7B24/2B1 7B24/3B1 7B24E/B1 15 % T O 2132 N1 | PHYSICAL FAN SPEED 7B24/B1 7B24/2B1 7B24/3B1 7B24E/B1 95 % T O 4785 N1 | PHYSICAL FAN SPEED 7B22/B1 7B22/3B1 7B22E/B1 15 % T O 2073 N1 | PHYSICAL FAN SPEED 7B22/B1 7B22/3B1 7B22E/B1 95 % T O 4668 N1 |
|---|---|---|---|---|---|
| 37.4 | 3 | 2087 | 4689 | 2030 | 4574 |
| 39.2 | 4 | 2091 | 4697 | 2033 | 4581 |
| 41.0 | 5 | 2095 | 4705 | 2037 | 4589 |
| 42.8 | 6 | 2099 | 4713 | 2041 | 4597 |
| 44.6 | 7 | 2102 | 4721 | 2044 | 4605 |
| 46.4 | 8 | 2106 | 4729 | 2048 | 4613 |
| 48.2 | 9 | 2110 | 4737 | 2051 | 4621 |
| 50.0 | 10 | 2114 | 4745 | 2055 | 4629 |
| 51.8 | 11 | 2117 | 4753 | 2059 | 4637 |
| 53.6 | 12 | 2121 | 4761 | 2062 | 4645 |
| 55.4 | 13 | 2125 | 4769 | 2066 | 4652 |
| 57.2 | 14 | 2128 | 4777 | 2069 | 4660 |
| 59.0 | 15 | 2132 | 4785 | 2073 | 4668 |
| 60.8 | 16 | 2136 | 4793 | 2077 | 4676 |
| 62.6 | 17 | 2139 | 4801 | 2080 | 4684 |
| 64.4 | 18 | 2143 | 4809 | 2084 | 4691 |
| 66.2 | 19 | 2147 | 4816 | 2087 | 4699 |
| 68.0 | 20 | 2150 | 4824 | 2091 | 4707 |
| 69.8 | 21 | 2154 | 4832 | 2094 | 4714 |
| 71.6 | 22 | 2158 | 4840 | 2098 | 4722 |
| 73.4 | 23 | 2161 | 4848 | 2101 | 4730 |
| 75.2 | 24 | 2165 | 4856 | 2105 | 4738 |
| 77.0 | 25 | 2168 | 4863 | 2108 | 4745 |
| 78.8 | 26 | 2172 | 4871 | 2112 | 4753 |
| 80.6 | 27 | 2176 | 4879 | 2116 | 4760 |
| 82.4 | 28 | 2179 | 4887 | 2119 | 4768 |
| 84.2 | 29 | 2183 | 4894 | 2123 | 4776 |
| 86.0 | 30 | 2186 | 4902 | 2126 | 4783 |
| 87.8 | 31 | 2190 | 4910 | 2130 | 4791 |
| 89.6 | 32 | 2194 | 4917 | 2133 | 4798 |
| 91.4 | 33 | 2197 | 4925 | 2136 | 4806 |
| 93.2 | 34 | 2201 | 4933 | 2140 | 4813 |
| 95.0 | 35 | 2204 | 4940 | 2143 | 4821 |
| 96.8 | 36 | 2208 | 4948 | 2147 | 4829 |

**NOTE:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B24/B1, 7B24/2B1, AND 7B24/3B1 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B24E/B1 95% T/O N1, ADD 18 RPM TO THE N1 POWER SETTINGS SHOWN ABOVE.
4. FOR 7B22/B1, 7B22/2B1, AND 7B22/3B1 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B22E/B1 95% T/O N1, ADD 19 RPM TO THE N1 POWER SETTINGS SHOWN ABOVE.

1156214-04

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 33)

PHYSICAL FAN SPEED

| T12 DEG F | T12 DEG C | 7B24/B1 7B24/2B1 7B243B1 7B24E/B1 15 % T O 2132 N1 | 7B24/B1 7B24/2B1 7B243B1 7B24E/B1 95 % T O 4785 N1 | 7B22/B1 7B22/3B1 7B22E./B1 15 % T O 2073 N1 | 7B22/B1 7B22/3B1 7B22E./B1 95 % T O 4668 N1 |
|---|---|---|---|---|---|
| 98.6 | 37 | 2211 | 4955 | 2150 | 4836 |
| 100.4 | 38 | 2215 | 4963 | 2154 | 4844 |
| 102.2 | 39 | 2219 | 4971 | 2157 | 4851 |
| 104.0 | 40 | 2222 | 4978 | 2161 | 4858 |
| 105.8 | 41 | 2226 | 4986 | 2164 | 4866 |
| 107.6 | 42 | 2229 | 4993 | 2168 | 4873 |
| 109.4 | 43 | 2233 | 5001 | 2171 | 4881 |
| 111.2 | 44 | 2236 | 5008 | 2174 | 4888 |
| 113.0 | 45 | 2240 | 5016 | 2178 | 4896 |
| 114.8 | 46 | 2243 | 5023 | 2181 | 4896 |
| 116.6 | 47 | 2247 | 5026 | 2185 | 4894 |
| 118.4 | 48 | 2250 | 5018 | 2188 | 4892 |
| 120.2 | 49 | 2254 | 5010 | 2191 | 4890 |
| 122.0 | 50 | 2257 | 5002 | 2195 | 4888 |
| 123.8 | 51 | 2261 | 4994 | 2198 | 4879 |
| 125.6 | 52 | 2265 | 4986 | 2201 | 4877 |
| 127.4 | 53 | 2269 | 4978 | 2204 | 4874 |
| 129.2 | 54 | 2273 | 4970 | 2207 | 4871 |
| 131.0 | 55 | 2277 | 4962 | 2210 | 4869 |

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 0.5 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.
3. FOR 7B24/B1, 7B24/2B1, AND 7B24/3B1 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B24E/B1 95% T/O N1, ADD 18 RPM TO THE N1 POWER SETTINGS.
4. FOR 7B22/B1, 7B22/2B1, AND 7B22/3B1 WITH EEC SOFTWARE VERSION 7.B.V.2. OR HIGHER, AND 7B22E/B1 95% T/O N1, ADD 19 RPM TO THE N1 POWER SETTINGS.

1156215-05

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 34)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | ◄ PHYSICAL FAN SPEED ► | |
|---|---|---|---|
| TAMB(°C) | TAMB(°F) | 7B26/B2, 7B26/3B2 7B26/3B2F, 7B26E/B2, 7B26E/B2F 15% TKOF 2214 N1 | 7B26/B2, 7B26/3B2, 7B26/3B2F, 7B26E/B2, 7B26E/B2F 95% TKOF 4961 N1 |
| -30.0 | -22.0 | 2035 | 4594 |
| -29.0 | -20.2 | 2039 | 4603 |
| -28.0 | -18.4 | 2043 | 4612 |
| -27.0 | -16.6 | 2047 | 4620 |
| -26.0 | -14.8 | 2052 | 4628 |
| -25.0 | -13.0 | 2056 | 4637 |
| -24.0 | -11.2 | 2060 | 4645 |
| -23.0 | -9.4 | 2064 | 4654 |
| -22.0 | -7.6 | 2068 | 4662 |
| -21.0 | -5.8 | 2072 | 4671 |
| -20.0 | -4.0 | 2076 | 4679 |
| -19.0 | -2.2 | 2080 | 4687 |
| -18.0 | -0.4 | 2084 | 4696 |
| -17.0 | 1.4 | 2088 | 4704 |
| -16.0 | 3.2 | 2092 | 4712 |
| -15.0 | 5.0 | 2096 | 4720 |
| -14.0 | 6.8 | 2100 | 4729 |
| -13.0 | 8.6 | 2104 | 4737 |
| -12.0 | 10.4 | 2108 | 4745 |
| -11.0 | 12.2 | 2112 | 4753 |
| -10.0 | 14.0 | 2116 | 4762 |
| -9.0 | 15.8 | 2120 | 4770 |
| -8.0 | 17.6 | 2124 | 4778 |
| -7.0 | 19.4 | 2128 | 4786 |
| -6.0 | 21.2 | 2132 | 4794 |
| -5.0 | 23.0 | 2136 | 4802 |
| -4.0 | 24.8 | 2140 | 4810 |
| -3.0 | 26.6 | 2144 | 4818 |
| -2.0 | 28.4 | 2148 | 4827 |
| -1.0 | 30.2 | 2152 | 4835 |
| 0.0 | 32.0 | 2156 | 4843 |
| 1.0 | 33.8 | 2160 | 4851 |
| 2.0 | 35.6 | 2164 | 4859 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 1 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.

1279947-01

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 35)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | ◄ PHYSICAL FAN SPEED ► | |
|---|---|---|---|
| TAMB(°C) | TAMB(°F) | 7B26/B2, 7B26/3B2 7B26/3B2F, 7B26E/B2, 7B26E/B2F 15% TKOF 2214 N1 | 7B26/B2, 7B26/3B2 7B26/3B2F, 7B26E/B2, 7B26E/B2F 95% TKOF 4961 N1 |
| 3.0 | 37.4 | 2168 | 4867 |
| 4.0 | 39.2 | 2172 | 4874 |
| 5.0 | 41.0 | 2176 | 4882 |
| 6.0 | 42.8 | 2179 | 4890 |
| 7.0 | 44.6 | 2183 | 4898 |
| 8.0 | 46.4 | 2187 | 4906 |
| 9.0 | 48.2 | 2191 | 4914 |
| 10.0 | 50.0 | 2195 | 4922 |
| 11.0 | 51.8 | 2199 | 4930 |
| 12.0 | 53.6 | 2203 | 4938 |
| 13.0 | 55.4 | 2206 | 4945 |
| 14.0 | 57.2 | 2210 | 4953 |
| 15.0 | 59.0 | 2214 | 4961 |
| 16.0 | 60.8 | 2218 | 4969 |
| 17.0 | 62.6 | 2222 | 4977 |
| 18.0 | 64.4 | 2225 | 4984 |
| 19.0 | 66.2 | 2229 | 4992 |
| 20.0 | 68.0 | 2233 | 5000 |
| 21.0 | 69.8 | 2237 | 5007 |
| 22.0 | 71.6 | 2241 | 5015 |
| 23.0 | 73.4 | 2244 | 5023 |
| 24.0 | 75.2 | 2248 | 5030 |
| 25.0 | 77.0 | 2252 | 5038 |
| 26.0 | 78.8 | 2256 | 5046 |
| 27.0 | 80.6 | 2259 | 5053 |
| 28.0 | 82.4 | 2263 | 5061 |
| 29.0 | 84.2 | 2267 | 5069 |
| 30.0 | 86.0 | 2270 | 5076 |
| 31.0 | 87.8 | 2274 | 5084 |
| 32.0 | 89.6 | 2278 | 5091 |
| 33.0 | 91.4 | 2282 | 5099 |
| 34.0 | 93.2 | 2285 | 5106 |
| 35.0 | 95.0 | 2289 | 5114 |
| 36.0 | 96.8 | 2293 | 5121 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 1 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.

1279948-01

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 36)

## CFM56-7B PHYSICAL FAN SPEED RATING TABLE

| | | ◄ PHYSICAL FAN SPEED ► | |
|---|---|---|---|
| | | 7B26/B2, 7B26/3B2, 07B26/3B2F, 7B26E/B2, 7B26E/B2F | 7B26/B2, 7B26/3B2 7B26/3B2F, 7B26E/B2, 7B26E/B2F |
| TAMB(°C) | TAMB(°F) | 15% TKOF 2214 N1 | 95% TKOF 4961 N1 |
| 37.0 | 98.6 | 2296 | 5129 |
| 38.0 | 100.4 | 2300 | 5136 |
| 39.0 | 102.2 | 2304 | 5144 |
| 40.0 | 104.0 | 2307 | 5151 |
| 41.0 | 105.8 | 2311 | 5159 |
| 42.0 | 107.6 | 2315 | 5155 |
| 43.0 | 109.4 | 2318 | 5145 |
| 44.0 | 111.2 | 2322 | 5135 |
| 45.0 | 113.0 | 2326 | 5125 |
| 46.0 | 114.8 | 2329 | 5115 |
| 47.0 | 116.6 | 2333 | 5105 |
| 48.0 | 118.4 | 2336 | 5095 |
| 49.0 | 120.2 | 2340 | 5085 |
| 50.0 | 122.0 | 2344 | 5075 |
| 51.0 | 123.8 | 2347 | 5065 |
| 52.0 | 125.6 | 2351 | 5055 |
| 53.0 | 127.4 | 2354 | 5045 |
| 54.0 | 129.2 | 2358 | 5035 |
| 55.0 | 131.0 | 2362 | 5025 |

**NOTES:**

1. INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.
2. INCREASE THE N1 BY 1 RPM FOR EACH 1°F (0,5°C) TEMPERATURE RISE.

1279949-01

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 37)

| | | PHYSICAL FAN SPEED | | | |
|---|---|---|---|---|---|
| T12 DEG F | T12 DEG C | 3300 N1K | 3500 N1K | 4200 N1K | 4600 N1K |
| -22.0 | -30 | 3036 | 3220 | 3867 | 4238 |
| -20.2 | -29 | 3042 | 3226 | 3875 | 4247 |
| -18.4 | -28 | 3048 | 3233 | 3882 | 4255 |
| -16.6 | -27 | 3054 | 3239 | 3890 | 4263 |
| -14.8 | -26 | 3060 | 3246 | 3898 | 4272 |
| -13.0 | -25 | 3066 | 3252 | 3905 | 4280 |
| -11.2 | -24 | 3072 | 3259 | 3913 | 4288 |
| -9.4 | -23 | 3078 | 3265 | 3921 | 4297 |
| -7.6 | -22 | 3084 | 3272 | 3928 | 4305 |
| -5.8 | -21 | 3090 | 3278 | 3936 | 4313 |
| -4.0 | -20 | 3096 | 3284 | 3943 | 4321 |
| -2.2 | -19 | 3102 | 3291 | 3951 | 4330 |
| -0.4 | -18 | 3108 | 3297 | 3959 | 4338 |
| 1.4 | -17 | 3114 | 3303 | 3966 | 4346 |
| 3.2 | -16 | 3120 | 3310 | 3974 | 4354 |
| 5.0 | -15 | 3126 | 3316 | 3981 | 4362 |
| 6.8 | -14 | 3132 | 3322 | 3989 | 4371 |
| 8.6 | -13 | 3138 | 3329 | 3996 | 4379 |
| 10.4 | -12 | 3144 | 3335 | 4004 | 4387 |
| 12.2 | -11 | 3150 | 3341 | 4011 | 4395 |
| 14.0 | -10 | 3156 | 3347 | 4019 | 4403 |
| 15.8 | -9 | 3162 | 3354 | 4026 | 4411 |
| 17.6 | -8 | 3168 | 3360 | 4033 | 4419 |
| 19.4 | -7 | 3174 | 3366 | 4041 | 4427 |
| 21.2 | -6 | 3179 | 3372 | 4048 | 4435 |
| 23.0 | -5 | 3185 | 3379 | 4055 | 4443 |
| 24.8 | -4 | 3191 | 3385 | 4063 | 4451 |
| 26.6 | -3 | 3197 | 3391 | 4070 | 4459 |
| 28.4 | -2 | 3203 | 3397 | 4078 | 4467 |
| 30.2 | -1 | 3209 | 3403 | 4085 | 4475 |
| 32.0 | 0 | 3214 | 3409 | 4092 | 4483 |
| 33.8 | 1 | 3220 | 3415 | 4099 | 4491 |
| 35.6 | 2 | 3226 | 3422 | 4107 | 4499 |
| 37.4 | 3 | 3232 | 3428 | 4114 | 4507 |
| 39.2 | 4 | 3237 | 3434 | 4121 | 4514 |
| 41.0 | 5 | 3243 | 3440 | 4128 | 4522 |
| 42.8 | 6 | 3249 | 3446 | 4136 | 4530 |
| 44.6 | 7 | 3255 | 3452 | 4143 | 4538 |

**NOTE:**
INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.

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***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 38)

| T12 DEG F | T12 DEG C | PHYSICAL FAN SPEED 3300 N1K | 3500 N1K | 4200 N1K | 4600 N1K |
|---|---|---|---|---|---|
| 46.4 | 8 | 3260 | 3458 | 4150 | 4546 |
| 48.2 | 9 | 3266 | 3464 | 4157 | 4554 |
| 50.0 | 10 | 3272 | 3470 | 4164 | 4561 |
| 51.8 | 11 | 3277 | 3476 | 4172 | 4569 |
| 53.6 | 12 | 3283 | 3482 | 4179 | 4577 |
| 55.4 | 13 | 3289 | 3488 | 4186 | 4585 |
| 57.2 | 14 | 3294 | 3494 | 4193 | 4592 |
| 59.0 | 15 | 3300 | 3500 | 4200 | 4600 |
| 60.8 | 16 | 3306 | 3506 | 4207 | 4608 |
| 62.6 | 17 | 3311 | 3512 | 4214 | 4615 |
| 64.4 | 18 | 3317 | 3518 | 4221 | 4623 |
| 66.2 | 19 | 3322 | 3524 | 4228 | 4631 |
| 68.0 | 20 | 3328 | 3530 | 4235 | 4638 |
| 69.8 | 21 | 3334 | 3536 | 4242 | 4646 |
| 71.6 | 22 | 3339 | 3542 | 4249 | 4654 |
| 73.4 | 23 | 3345 | 3547 | 4256 | 4661 |
| 75.2 | 24 | 3350 | 3553 | 4263 | 4669 |
| 77.0 | 25 | 3356 | 3559 | 4270 | 4676 |
| 78.8 | 26 | 3361 | 3565 | 4277 | 4684 |
| 80.6 | 27 | 3367 | 3571 | 4284 | 4691 |
| 82.4 | 28 | 3372 | 3577 | 4291 | 4699 |
| 84.2 | 29 | 3378 | 3583 | 4298 | 4706 |
| 86.0 | 30 | 3383 | 3588 | 4305 | 4714 |
| 87.8 | 31 | 3389 | 3594 | 4312 | 4721 |
| 89.6 | 32 | 3394 | 3600 | 4319 | 4729 |
| 91.4 | 33 | 3400 | 3606 | 4326 | 4736 |
| 93.2 | 34 | 3405 | 3611 | 4333 | 4744 |
| 95.0 | 35 | 3411 | 3617 | 4339 | 4751 |
| 96.8 | 36 | 3416 | 3623 | 4346 | 4759 |
| 98.6 | 37 | 3422 | 3629 | 4353 | 4766 |
| 100.4 | 38 | 3427 | 3635 | 4360 | 4774 |
| 102.2 | 39 | 3432 | 3640 | 4367 | 4781 |
| 104.0 | 40 | 3438 | 3646 | 4374 | 4788 |
| 105.8 | 41 | 3443 | 3652 | 4380 | 4796 |
| 107.6 | 42 | 3449 | 3657 | 4387 | 4803 |
| 109.4 | 43 | 3454 | 3663 | 4394 | 4810 |
| 111.2 | 44 | 3459 | 3669 | 4401 | 4818 |
| 113.0 | 45 | 3465 | 3674 | 4407 | 4825 |

**NOTE:**
INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.

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***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 39)

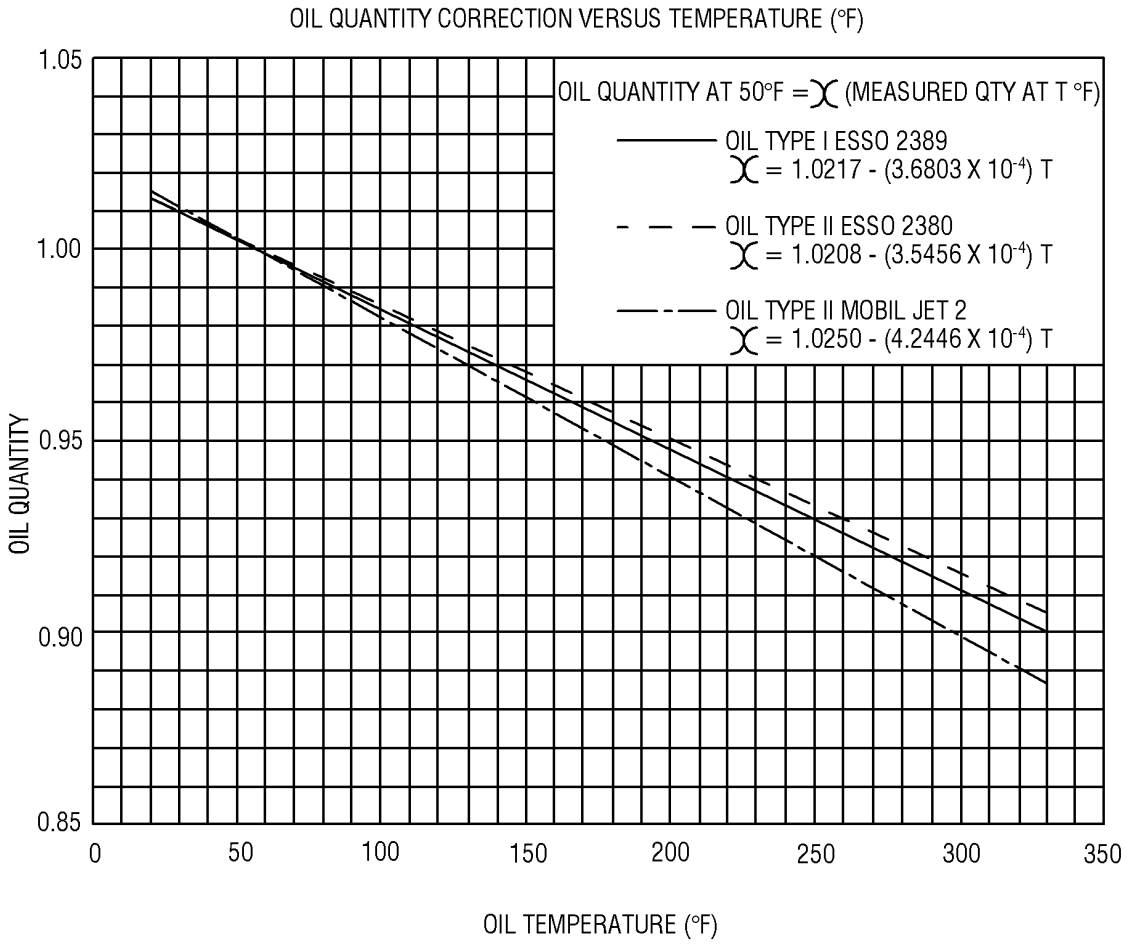
| | | PHYSICAL FAN SPEED | | | |
|---|---|---|---|---|---|
| T12 DEG F | T12 DEG C | 3300 N1K | 3500 N1K | 4200 N1K | 4600 N1K |
| 114.8 | 46 | 3470 | 3680 | 4414 | 4832 |
| 116.6 | 47 | 3475 | 3686 | 4421 | 4840 |
| 118.4 | 48 | 3481 | 3691 | 4428 | 4847 |
| 120.2 | 49 | 3486 | 3697 | 4434 | 4854 |
| 122.0 | 50 | 3491 | 3703 | 4441 | 4862 |
| 123.8 | 51 | 3496 | 3708 | 4448 | 4869 |
| 125.6 | 52 | 3501 | 3713 | 4455 | 4876 |
| 127.4 | 53 | 3506 | 3718 | 4462 | 4884 |
| 129.2 | 54 | 3511 | 3723 | 4469 | 4891 |
| 131.0 | 55 | 3516 | 3728 | 4476 | 4898 |

**NOTE:**
INCREASE THE N1 BY 2 RPM FOR EACH 10 GRAINS OF HUMIDITY.

1156216-01

***** FOR 7B ALL *****

Power Setting Chart
Figure 1302 (Sheet 40)

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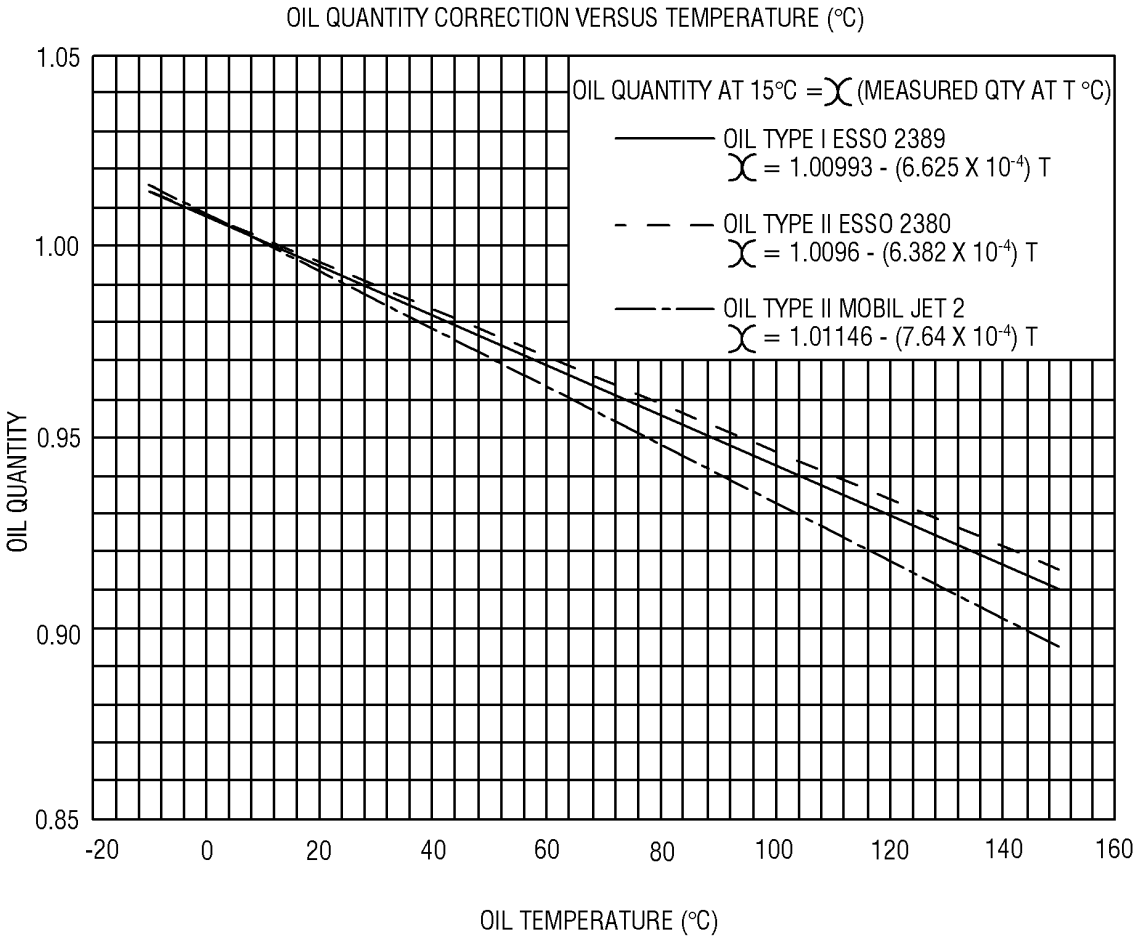
***** FOR 7B ALL *****

Oil Quantity Correction Versus Temperature (°F)

Figure 1303 (Sheet 1)




1153050-01

***** FOR 7B ALL *****

Oil Quantity Correction Versus Temperature (°C)

Figure 1303 (Sheet 2)

**Subtask 72-00-00-760-081**

(8) Quickly accelerate (one second) to the throttle stop calculated in Subtask 72-00-00-760-088 (paragraph 2.C.(5)) to produce a stable TO power N1, and at the same time record the elapsed acceleration time to 95 percent maximum TO power. Refer to Figure 1312. Keep the engine at TO power N1 for 30 seconds, then do a quick deceleration (one second) to MC. Keep the engine at MC for 8 minutes.

(a) The elapsed acceleration time must not be more than 5 seconds. If the acceleration time is more than 5 seconds, do troubleshooting for the cause.

NOTE: For engines to be tested at multiple ratings, the acceleration check should be done at highest rating of the multiple ratings.

NOTE: The following steady state data points are necessary to complete the acceptance test requirements. Conduct these data points with a fan speed modifier level of zero.

**Subtask 72-00-00-760-083**

(9) Record the indications after maintaining the required engine stabilization time shown at each power setting.

(10) Accelerate to TO power. Keep the engine at TO power for 5 minutes. Record the indications.

(11) Decelerate to MC power. Keep the engine at MC power for 3 minutes. Record the indications.

NOTE: Refer to Figure 1313 for an engine test at multiple ratings in one test run (example: 26K and 24K ratings).

(a) Break-in and mechanical check-out at highest rating (26K for this example).

(b) Acceptance test at 26K and 24K settings.

(12) Slowly decelerate (2 minutes) to MI. Keep the engine at MI for 7 minutes. Record the indications.

NOTE: Also use the AI power setting test indications taken during break-in test sequence for acceptance test.

**Subtask 72-00-00-760-091**

(13) Record the oil quantity indication at 5 minutes.

(14) Subtract oil quantity recorded in from oil quantity recorded in Subtask 72-00-00-760-090 (paragraph 2.C.(4)).

(15) If oil quantity used is out of limits, do the servicing of the engine oil system, then do a penalty run. Refer to Figure 1305.

(15).A. If oil quantity used is out of limits, perform an oil consumption penalty run. Refer to Figure 1305 (Sheet 1) for engines that have been shutdown after performance cycle or Figure 1305 (Sheet 2) for engines that have not been shutdown after performance cycle.

NOTE: The engine oil consumption obtained by calculation with oil level indications must be considered for information only, as the tolerance of the indicator can be equal to the oil consumption limit.

(16) If oil quantity increased, examine fuel/oil heat exchanger and servo fuel heater for fuel in the oil system.

(17) Do an engine shutdown procedure. Refer to TASK 72-00-00-760-000 (Test 000).

NOTE: You must run all of the acceptance steady state test points with a fan speed modifier level (N1 Trim Level) of zero.

(18) Find a fan speed modifier (FMN1) based on the takeoff thrust margin of the engine model. Refer to Figure 1320.

(19) Install the FMN1 plug onto the engine. Do an electronic test.

**Subtask 72-00-00-350-051**

(20) Engrave updated information on the nameplate. Refer to Figure 1307. Fill the next available blank line on the nameplate with the applicable engine configuration information. Mark the part to a depth of 0.07-0.10 inch (1,8-2,5 mm). Refer to TASK 70-10-12, VIBRO-PEEN MARKING or equivalent method maintaining legibility and depth.

NOTE: Initial production engine configuration will be the first information listed on the nameplate, until all lines on the nameplate have been filled and the nameplate is replaced. CFMI recommends that the customer, for record keeping purposes, retain removed nameplates.

**Subtask 72-00-00-760-078**

(21) Calculate engine performance (thrust, EGT, fuel flow, and N2 at takeoff power only). Calculate on both a modified and unmodified fan speed basis. Refer to Figure 1308.

**Subtask 72-00-00-760-066**

(a) Alternative Procedure Available. All engines can be tested with its own rating plug (set the fan speed modifier/N1 trim level to zero), with the exception of the following ratings: 7B26/3F, 7B26E/F, 7B26/3B2F, 7B26E/B2F, 7B27/3F, 7B27E/F, 7B27/3B1F, 7B27E/B1F and 7B27AE. These engine ratings must be tested with the appropriate test cell connector, refer to Subtask 72-00-00-760-067 (paragraph 2.C.(21)(a)A or a 27K nameplate rating plug (P/N 390-660-501-0).

**Subtask 72-00-00-760-067**

(a).A. Alternative Procedure. To help testing the engine at more than one thrust rating. If the electronic engine control (EEC) is configured with P/N 1853M78P16 or higher versions of EEC software, do the engine test with a test cell connector installed on the EEC. Enter the aircraft application as 737-800 model in the test cell input to the EEC.

1 Testing with full authority digital engine control (FADEC) 2 type EEC (P/N 1853M33PXX)

The test cell connector must not be used with FADEC 2 type EEC and the following software:

EFFECT 7B ALL

| Software P/N | Version Reference |
|---|---|
| 1853M78P27 | 7.B.R3F2 (7B67) |
| 1853M78P28 | 7.B.SF2 (7B70) |
| 1853M78P31 | 7.B.U1F2 (7B8A) |
| 1853M78P29 | 7.B.TF2 (7B79) |

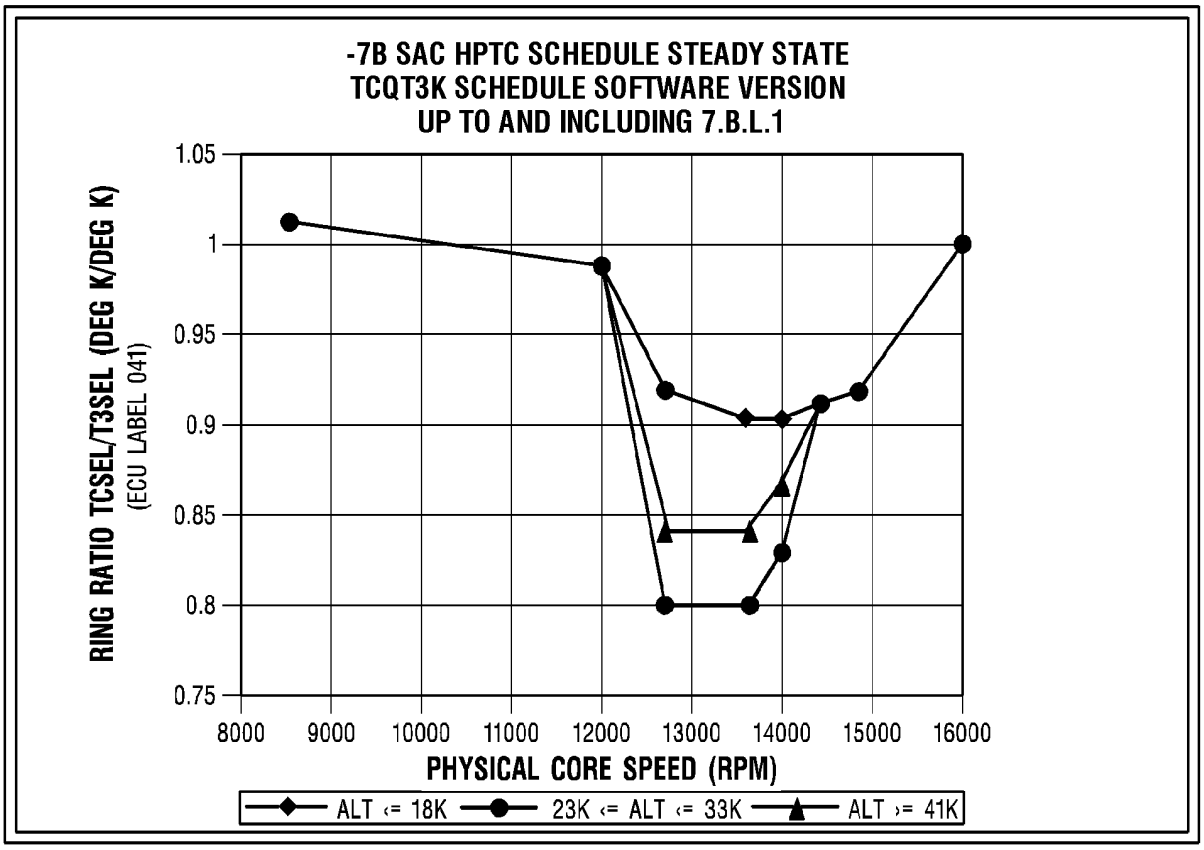
Engines in these configurations must be tested with a 27K nameplate rating plug (P/N 390-660-501-0) in lieu of the test cell connector. Set the fan speed modifier (N1 Trim level) to zero. However, the test

cell connector can be used for engines with 7.B.V2 and up software.

2 Testing with FADEC 3 Type EEC (P/N 2042M67PXX)

The test cell connector can be used with any version of software P/N 2044M25P03 or higher. The applicable test cell connector P/N's are as follows:

| Engine Configuration | Test Cell Connector P/N |
|---|---|
| SAC Engines with Burner Staging Valves (BSV) | 856A2807, test cell connector G46 |
| SAC non/3 Engines without BSV | 856A2807, test cell connector G45 |
| SAC/3 Engines without BSV | 856A2807, test cell connector G49 |
| DAC Engines | 856A2807, test cell connector G44 |
| 7BE SAC Engines without BSV | 856A2807, test cell connector G52 |
| 7B/3 SAC without BSV + 7BE LPT | 856A2807, test cell connector G53 |
| 7B SAC with BSV + 7BE LPT | 856A2807, test cell connector G54 |
| 7B SAC without BSV + 7BE LPT | 856A2807, test cell connector G55 |




| N2ACTSEL | ALT ‹= 18K | 23K ‹= ALT ‹= 33K | ALT ›= 41K |
|---|---|---|---|
| 8500 | 1.01 | 1.01 | 1.01 |
| 12000 | 0.99 | 0.99 | 0.99 |
| 12800 | 0.918 | 0.8 | 0.84 |
| 13600 | 0.902 | 0.8 | 0.84 |
| 14000 | 0.902 | 0.83 | 0.87 |
| 14400 | 0.91 | 0.91 | 0.91 |
| 14900 | 0.92 | 0.92 | 0.92 |
| 16000 | 1 | 1 | 1 |

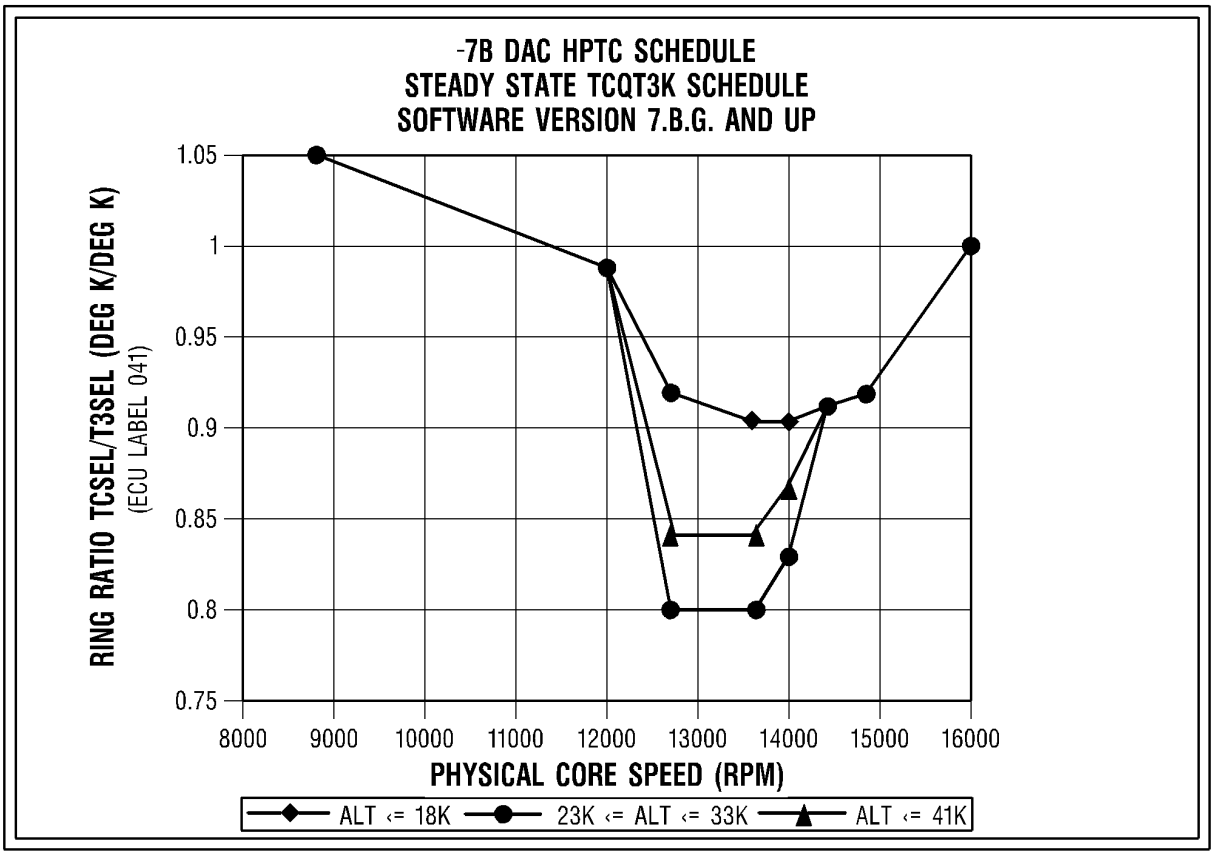
**NOTE:**
FOR ECU SOFTWARE VERSION 7.B.M & UP (SAC ENGINES ONLY)
THE TRING/T3 CRITERIA DOES NOT APPLY.

1167337-03

***** FOR 7B ALL *****

Steady State Ring Ratio
Figure 1304 (Sheet 1)

7B ALL




| N2ACTSEL | ALT <= 18K | 23K <= ALT <= 33K | ALT <= 41K |
|---|---|---|---|
| 8500 | 1.055 | 1.055 | 1.055 |
| 12000 | 1.005 | 1.005 | 1.005 |
| 12800 | 0.918 | 0.8 | 0.84 |
| 13600 | 0.902 | 0.8 | 0.84 |
| 14000 | 0.902 | 0.83 | 0.87 |
| 14400 | 0.91 | 0.91 | 0.91 |
| 14900 | 0.92 | 0.92 | 0.92 |
| 16000 | 1 | 1 | 1 |

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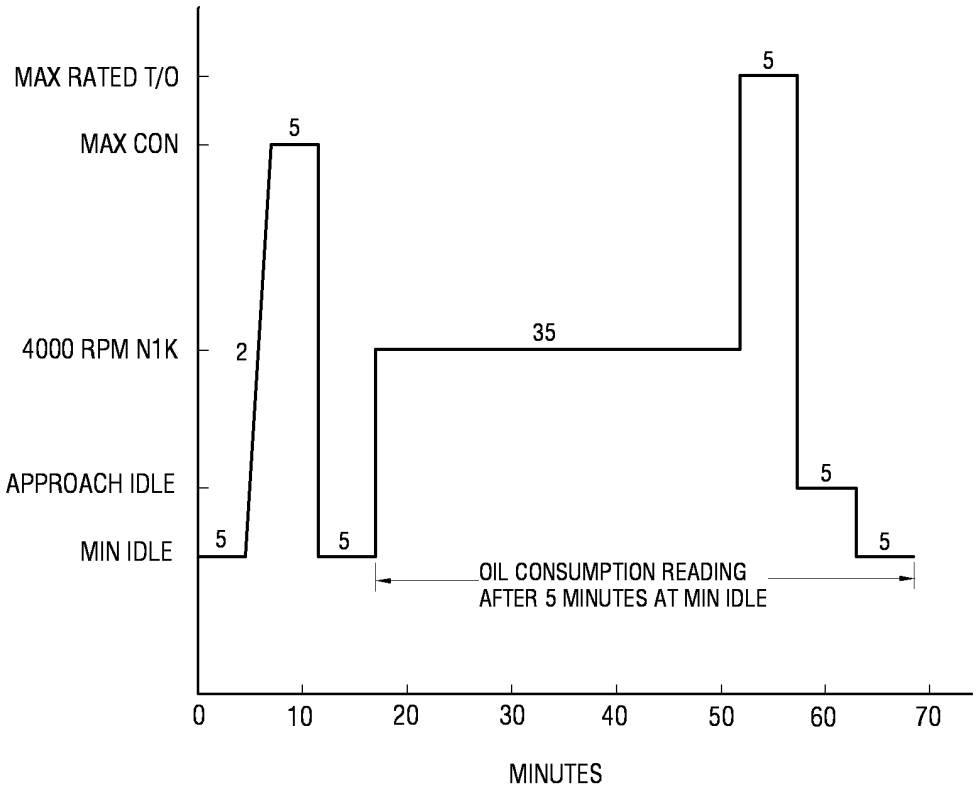
***** FOR 7B ALL *****

Steady State Ring Ratio
Figure 1304 (Sheet 2)

7B ALL

## OIL CONSUMPTION PENALTY RUN (AFTER ENGINE SHUTDOWN)

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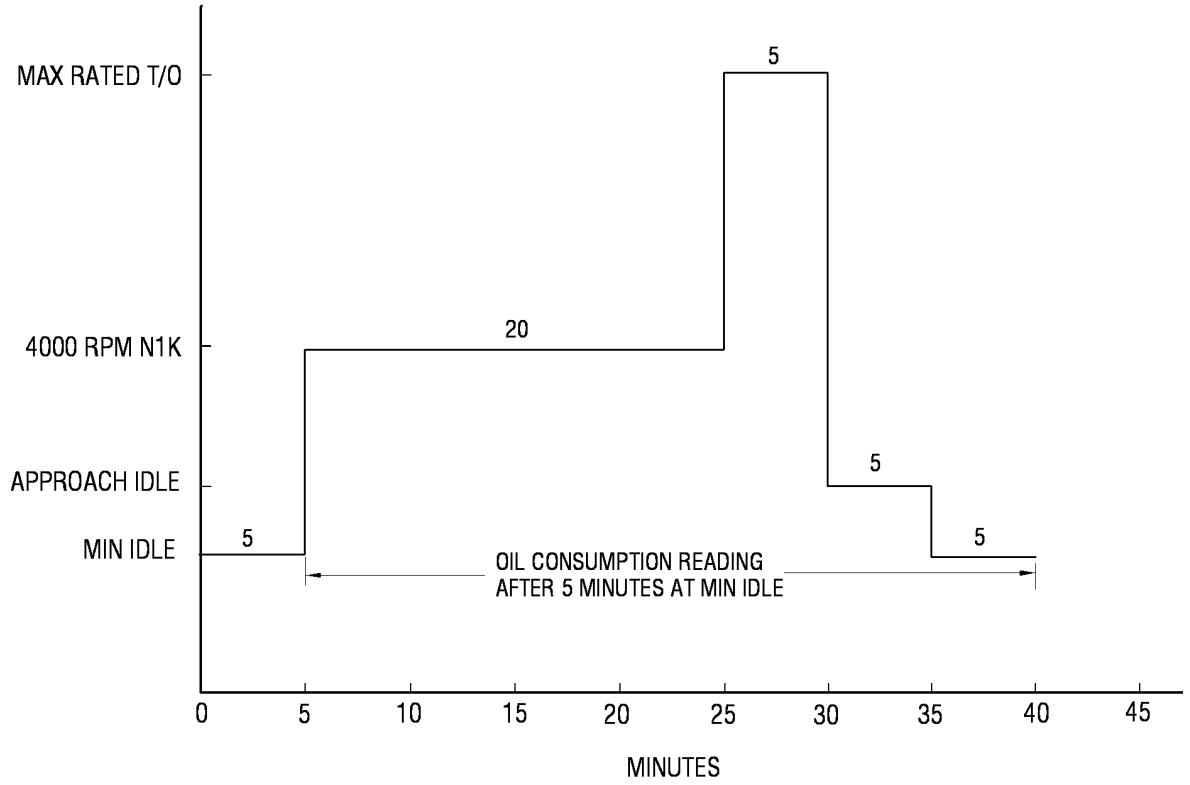
***** FOR 7B ALL *****

Penalty Test Run/Simulated Flight Cycle
Figure 1305 (Sheet 1)

## OIL CONSUMPTION PENALTY RUN
## (ENGINE NOT SHUTDOWN AFTER CYCLE)

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***** FOR 7B ALL *****

Penalty Run Test/Simulated Flight Cycle
Figure 1305 (Sheet 2)

EFFECT 7B ALL

**Subtask 72-00-00-760-087**

D. Performance Troubleshooting.

(1) If the engine fails any performance test point, examine the test data for instrumentation faults, and then repeat the test point, if necessary.

(2) Some of the possible reasons for poor component performance are:

| | | |
|---|---|---|
| (a) | Fan | Too much dirt<br>Blended too much<br>Large tip clearance<br>Leading edge contour |
| (b) | Fan duct | Damage to flowpath surfaces (steps and gaps) |
| (c) | HPC | Large tip clearances<br>Stator schedule error<br>Too much dirt<br>Too much damage<br>Blended too much |
| (d) | HPT | Large tip clearances<br>High parasitics (seal leaks)<br>Large HPT nozzle area |
| (e) | LPT | Large tip clearance<br>Large LPT nozzle area |
| (f) | Parasitics (internal cooling flow and seal leaks) | Increased seal clearance<br>Blocked passages |

E. Performance Calculations.

(1) General.

Correct FN, EGT, N2, WF, and EPR to the Standard Day conditions with the applicable parameter adjustments referenced in this procedure (refer to Figure 1306 and Figure 1308). Compare the

results to the applicable power setting specifications. Refer to Figure 1301.

(2) Do the performance calculation corrections in the sequence that follows:

(a) Standard Day correction factors for PT2/PS2, T2, humidity, and clearance control effects.

(b) Condensation correction factors.

(c) Test cell correlation facility modifiers, unique to each customer facility. You can get these from the applicable Test Cell Correction Report.

NOTE: The facility modifiers are multipliers as function of corrected dry thrust, prior to applying the facility-modifier for thrust (FMFN).

(d) Adjustments for the test cell bellmouth.

(e) Derivatives to adjust parameters from N1R ACTUAL to N1K RATED for appropriate power setting.

NOTE: Use these derivatives to adjust the data for tests done at inlet temperatures higher than the flat-rated temperature. Also use the derivatives to adjust off-speed data because of errors when you set the necessary N1 test speed.

(3) Calculations.

Correct the applicable data to standard day conditions. Include condensation and humidity factors. Use the equations that follow in Figure 1306 and Figure 1308.

1. THETA 2 ($\Theta_2$)

$$\Theta_2 = \left( \frac{T_2\ ^\circ F + 459.67}{518.67} \right) \text{ OR } \left( \frac{T_2\ ^\circ C + 273.15}{288.15} \right)$$

2. N1K AND N1R

$$N1K = N1\ MEAS \bullet KHN1 \left( \frac{1}{\Theta_2\ EXPN1} \right)$$

$$N1R = N1K \times KCONDN1$$

WHERE

N1MEAS = ACTUAL ENGINE FAN SPEED IN RPM. ( ARINC ECU LABEL 045 * 51.75 IN % )

KHN1 = HUMIDITY CORRECTION FACTOR. REFER TO FIGURE 1309.

KCONDN1 = INLET CONDENSATION CORRECTION. REFER TO FIGURE 1314 AND FIGURE 1315.

EXPN1 = THETA EXPONENT TO ACCOUNT FOR CLEARANCE CONTROL AND NON-ISA ATMOSPHERIC CONDITIONS. REFER TO FIGURE 1311.

TO GET EXPN1, CALCULATE N1R2XX, THEN INTERPOLATE BETWEEN POINTS.

$$N1R2XX = N1\ MEAS \times KHN1 \Big/ \left( \Theta_2^{0.XX} \right)$$

WHERE XX = 0.47 INITIALLY. THEN RECALCULATE N1R2XX WITH EXPONENT FROM FIGURE 1311 AT LEAST TWICE.

**NOTE:**
100% N1 = 5175 RPM

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***** FOR 7B ALL *****

Condensation and Humidity Corrections (Theta 2 and T2)
Figure 1306 (Sheet 1)

3. FNK

$$FNK = \frac{FN}{\delta_2} = FN\ MEAS \bullet KHFN \bullet \frac{1}{\delta_2}$$

WHERE

FN MEAS = TARE ADJUSTED MEASURED THRUST

KHFN = HUMIDITY CORRECTION FACTOR. REFER TO FIGURE 1309.

$$\delta_2 = \left( \frac{PT2\ IN\ PSIA}{14.696} \right) OR \left( \frac{PT2\ IN\ KPA}{101325} \right)$$

4. WFK

$$WFK = \frac{WF}{\delta_2 \ominus_2^{EXPWF}} = WF\ MEAS \bullet \frac{1}{\delta_2} \bullet \frac{1}{\ominus_2^{EXPWF}} \bullet KHWF \bullet KCONDW \bullet \frac{LHV\ (BTU/LBS)}{18580}\ OR\ \frac{LHV\ (KCAL/KG)}{10322}$$

WHERE

WF MEAS = MEASURED FUEL FLOW IS THE AVERAGE OF THE 2 FACILITY FUEL FLOW METERS CORRECTED FOR SPECIFIC GRAVITY, LBS/HR (KG/HR). THE 2 METERS MUST AGREE WITHIN 0.5 PERCENT. IF NOT, CORRECT THE CAUSE.

EXPWF = THETA EXPONENT TO ACCOUNT FOR CLEARANCE CONTROL AND NON-ISA ATMOSPHERIC CONDITIONS. REFER TO FIGURE 1311.

KHWF = HUMIDITY CORRECTION FACTOR. REFER TO FIGURE 1309.

KCONDW = INLET CONDENSATION CORRECTION. REFER TO FIGURE 1313 AND FIGURE 1314.

LHV = LOWER HEATING VALUE OF TEST FUEL.

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***** FOR 7B ALL *****

Condensation and Humidity Corrections (FNK and WFK)
Figure 1306 (Sheet 2)

5. EGTK (°C) FOR ENGINES TESTED WITH ITS OWN RATING PLUG

$$EGTK\ (^{\circ}C) = \frac{EGT}{\Theta_2\ EXPEGT} = \left[\left(\frac{EGTM\ (^{\circ}C) - KSHUNT2}{KSHUNT1} + 273.15\right)\left(\frac{1}{\Theta_2\ EXPEGT}\right) KHEGT \bullet KCONDT - 273.15\right] KSHUNT1 + KSHUNT2$$

WHERE

| | |
|---|---|
| EGTM | = MEASURED T495 (°C). USE ARINC BUS LABEL 345. |
| EXPEGT | = THETA EXPONENT TO ACCOUNT FOR CLEARANCE CONTROL AND NON-ISA ATMOSPHERIC CONDITIONS. REFER TO FIGURE 1311. |
| KHEGT | = HUMIDITY CORRECTION FACTOR. REFER TO FIGURE 1309. |
| KCONDT | = INLET CONDENSATION CORRECTION FACTOR. REFER TO FIGURE 1314 AND FIGURE 1315. |
| KSHUNT1 | = EGT SHUNT FACTOR. REFER TO FIGURE 1317. |
| KSHUNT2 | = EGT SHUNT FACTOR. REFER TO FIGURE 1317. |

5A. EGTK (°C) FOR ENGINES TESTED WITH TEST CELL CONNECTOR (OR) 27K (OR) 26K ENGINE RATING PLUG.

$$EGTK\ (^{\circ}C) = \frac{EGT}{\Theta_2\ EXPEGT} = \left[\left(\frac{EGTM\ (^{\circ}C)}{KSHUNT1} + 273.15\right)\left(\frac{1}{\Theta_2\ EXPEGT}\right) KHEGT \bullet KCONDT - 273.15\right] KSHUNT1 + KSHUNT2$$

WHERE

| | |
|---|---|
| EGTM | = MEASURED T495 (°C). USE ARINC BUS LABEL 345. |
| EXPEGT | = THETA EXPONENT TO ACCOUNT FOR CLEARANCE CONTROL AND NON-ISA ATMOSPHERIC CONDITIONS. REFER TO FIGURE 1311. |
| KHEGT | = HUMIDITY CORRECTION FACTOR. REFER TO FIGURE 1309. |
| KCONDT | = INLET CONDENSATION CORRECTION FACTOR. REFER TO FIGURE 1314 AND FIGURE 1315. |
| KSHUNT1 | = EGT SHUNT FACTOR. REFER TO FIGURE 1317. |
| KSHUNT2 | = EGT SHUNT FACTOR. REFER TO FIGURE 1317. |

1153109-04

***** FOR 7B ALL *****

Condensation and Humidity Corrections (EGTK and N2K)
Figure 1306 (Sheet 3)

6. N2K

N2HC = N2 MEAS * KHN2

a) CALCULATE TEMPERATURE AT 14300 PHYSICAL CORE SPEED:

IF N2HC ≤ 14300

T2143 = 518.67 * EXP (LN(14300 / (N2HC/ $\Theta$2 ** EXPN2)) /EXPN2)

IF N2HC > 14300

T2143 = 518.67 * EXP (LN(14300 / (N2HC/ $\Theta$2 ** EXPN2C)) /EXPN2C)

b) CALCULATE CORRECTED CORE SPEED:

IF T2143 ≤ 518.67

N2K = (14300/ (T2143 / 518.67) ** EXPN2C) * KCONDN2

IF T2143 > 518.67

N2K = (14300/ (T2143 / 518.67) ** EXPN2) * KCONDN2

N2R = N2K

c) $N2/\sqrt{\Theta_{25}}$ = N2 MEAS * $1/\sqrt{\Theta_{25}}$ USE $N2/\sqrt{\Theta_{25}}$ TO MAKE A CHECK OF THE CONTROL SCHEDULE ONLY.

WHERE

KHN2 = HUMIDITY CORRECTION FACTOR. REFER TO FIGURE 1309.

N2 MEAS (RPM) = FADEC BUS LABEL 344 MULTIPLIED BY 144.6.

KCONDN2 = INLET CONDENSATION CORRECTION. REFER TO FIGURE 1313 AND FIGURE 1314.

$\Theta_{25} = \frac{T25\ (^{\circ}R)}{518.67}$ OR $\frac{T25\ (^{\circ}K)}{288.15}$

T25 = FADEC T25 (i.e. ECU LABEL 263) IN DEG C.

EXPN2 = THETA EXPONENT TO ACCOUNT FOR CLEARANCE CONTROL AND NON-ISA ATMOSPHERIC CONDITIONS BELOW 14300 RPM. REFER TO FIGURE 1311.

EXPN2C = THETA EXPONENT TO ACCOUNT FOR CLEARANCE CONTROL AND NON-IS ATMOSPHERIC CONDITIONS ABOVE 14300 RPM.

1225663-01

***** FOR 7B ALL *****

Condensation and Humidity Corrections (EGTK and N2K)
Figure 1306 (Sheet 4)

7. W2AR

$$W2AR = 1.32395 \bullet A2 \bullet KCONDA \bullet BMCFWX \left[ \left( \frac{PS2W}{PT2} \right)^{1.427} - \left( \frac{PS2W}{PT2} \right)^{1.7135} \right]^{0.5}$$

A2 = BELLMOUTH AREA IN SQUARE INCHES.

KCONDA = INLET CONDENSATION CORRECTION. REFER TO FIGURE 1313 AND FIGURE 1314.

BMCFWX = BELLMOUTH FLOW COEFFICIENT AS A FUNCTION OF (PT2/PS2W). REFER TO FIGURE 1319.

PS2W = BELLMOUTH WALL STATIC PRESSURE - PSIA.

PT2 = TOTAL PRESSURE AT FAN INLET, PSIA.

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***** FOR 7B ALL *****

Condensation and Humidity Corrections (EGTK and N2K)
Figure 1306 (Sheet 5)

8. OCPR = OVERALL COMPRESSOR PRESSURE RATIO

OCPR = PS3/PT2

WHERE

PS3 = PS3SEL IN PSIA (FADEC LABEL 264)

PT2 = TOTAL PRESSURE AT FAN INLET - PSIA.

9. CTR AND T3R

CTR = T3/T2

$$T3R = \frac{T3}{(\Theta_2)^{EXPT3}}$$

WHERE

T3 (°R) = T3 MEASURED (°F) + 459.67 (ARINC BUS LABEL 265)

T3 (°K) = T3 MEASURED (°C) + 273.15

EXPT3 = THETA EXPONENT FOR T3 TO ACCOUNT FOR CLEARANCE CONTROL AND NON-ISA ATMOSPHERIC CONDITIONS. REFER TO FIG. 1311.

T2 (°R) = T2 MEASURED (°F) + 459.67

T2 (°K) = T2 MEASURED (°C) + 273.15

10. FPR

FPR = PT17/PT2

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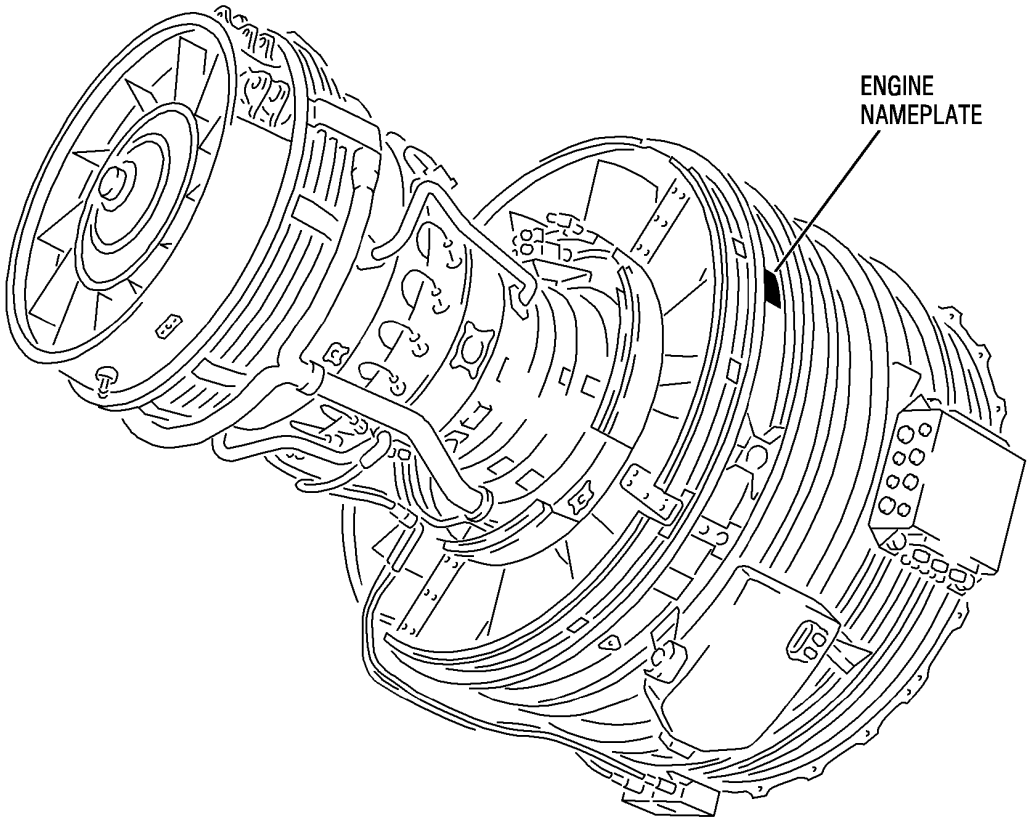
***** FOR 7B ALL *****

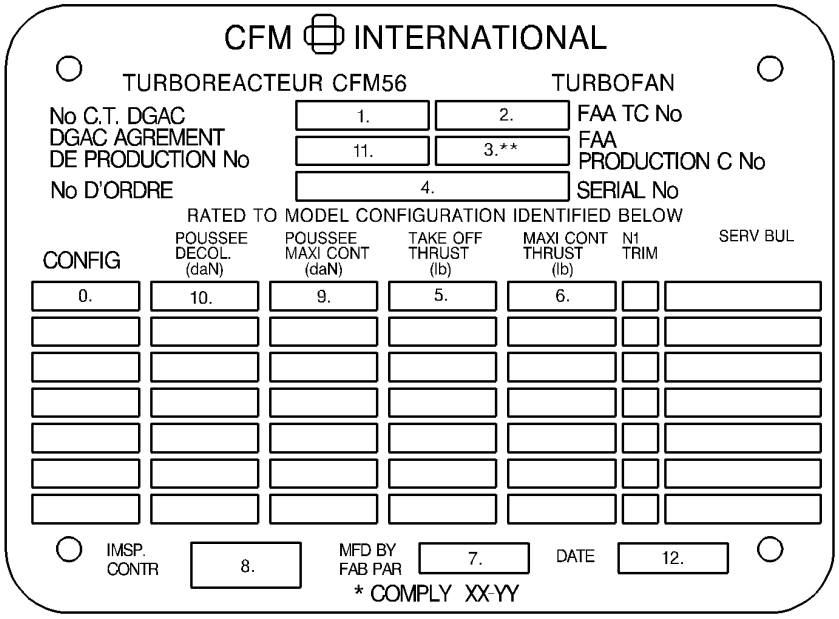
Condensation and Humidity Corrections (CPR, TPR, and CTR)
Figure 1306 (Sheet 6)




1142235-00

***** FOR 7B ALL *****

Nameplate
Figure 1307 (Sheet 1)




* IN ADDITION TO THE WORD "COMPLY" A 5 CHARACTER DATE CODE WILL APPEAR HERE AS FOLLOWS: XX-YY, XX = MONTH, YY = YEAR, WITH A DASH BETWEEN THE SETS.
** IF PRODUCED UNDER PRODUCTION CERTIFICATION NO. PC108, OTHERS "BLANK".

**LEGEND:**

EVEN DIGIT HERE, USE THIS COLUMN

XX4XXX (ESN)

0. -7B24 (EXAMPLE)
1. MIM45 OR BLANK
2. E00055EN
3. PC108**
4. SAME AS ON ORGINAL NAMEPLATE
5. 24,200 (EXAMPLE)
6. 22,800 (EXAMPLE)
7. GE CO.
8. BLANK
9. 10,142 (EXAMPLE)
10. 10,765 (EXAMPLE)
11. BLANK
12. DATE OF MANUFACTURE FROM ORIGINAL NAMEPLATE

ODD DIGIT HERE, USE THIS COLUMN

XX5XXX (ESN)

0. -7B24 (EXAMPLE)
1. M21
2. E00056EN OR BLANK
3. BLANK
4. SAME AS ON ORIGINAL NAMEPLATE
5. 24,200 (EXAMPLE)
6. 22,800 (EXAMPLE)
7. SNECMA
8. SNECMA INSPECTION STAMP (ON ORIGINAL PRODUCTION NAMEPLATE) OR BLANK
9. 10,142 (EXAMPLE)
10. 10,765 (EXAMPLE)
11. P03 OR FG007
12. DATE OF MANUFACTURE FROM ORIGINAL NAMEPLATE

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***** FOR 7B ALL *****

Nameplate
Figure 1307 (Sheet 2)

7B ALL

1. APPLY THE FACILITY MODIFIERS (FROM THE TEST CELL CORRELATION REPORT AT FNK) TO ADJUST THE STANDARD DAY DATA FOR DIFFERENCES WITH THE BASELINE, SO THAT:

FNK1 = FNK • FMFN

WFK1 = WFK • FMWF

$$EGTK1\ (^{\circ}C) = \left[\left(\frac{EGTK - KSHUNT2}{KSHUNT1} + 273.15\right) \bullet FMEGT - 273.15\right] \bullet KSHUNT1 + KSHUNT2$$

N2K1 = N2K • FMN2

EPRK1 = EPR • FMEPR

W2K1 = W2AR • FMW2R

2. INSTALLATION EFFECTS

ADJUST THE STANDARD DAY PARAMETERS FOR INSTALLATION EFFECTS (WHICHEVER IS APPLICABLE) SO THAT:

FNK2 = FNK1 • FN ADJ

WFK2 = WFK1 • WF ADJ

$$EGTK2\ (^{\circ}C) = \left[\left(\frac{EGTK1 - KSHUNT2}{KSHUNT1} + 273.15\right) \bullet EGT\ ADJ - 273.15\right] \bullet KSHUNT1 + KSHUNT2$$

N2K2 = N2K1 • N2 ADJ

W2K2 = W2K1 • W2 ADJ

WHERE

FN ADJ, WF ADJ, EGT ADJ, N2 ADJ, AND W2 ADJ = ACCEPTANCE ADJUSTMENT. REFER TO FIGURE 1316.

**NOTES:**

1. IF YOU DID NOT INSTALL THE CSD OIL COOLER ON THE ENGINE, APPLY ONLY THE INSTALLATION EFFECTS FOR ATC, BELLMOUTH AND NACELLE PROBES FROM THE TABLE
2. IF YOU INSTALLED THE CSD OIL COOLER IN THE FLOWPATH, APPLY THE PERFORMANCE EFFECTS FOR THE CSD OIL COOLER IN ADDITION TO ATC, BELLMOUTH AND NACELLE PROBE ADJUSTMENTS FROM THE TABLE.
3. FOR ENGINES TESTED WITH THE CSD OIL COOLER, DO A CHECK OF THE TEST CELL CORRELATION REPORT TO MAKE SURE THAT THE CORRELATION FACTORS INCLUDE THE CSD OIL COOLER EFFECTS. IF THIS IS TRUE, APPLY ONLY THE INSTALLATION EFFECTS FOR ATC, BELLMOUTH, AND NACELLE PROBE LOSS.

1153112-04

***** FOR 7B ALL *****

Performance Calculations (Facility Modifiers and Installation Effects)
Figure 1308 (Sheet 1)

3. N1K RATED. REFER TO FIGURE 1301.
ADJUST THE DATA TO N1K RATED.

$$FNK3 = FNK2 + \Delta FN$$

$$WFK3 = WFK2 + \Delta WF$$

$$EGTK3\ (°C) = \left[ \left( \frac{EGTK2 - KSHUNT2}{KSHUNT1} + 273.15 \right) + \Delta EGT\ (°K) - 273.15 \right] \bullet KSHUNT1 + KSHUNT2$$

$$N2K3 = N2K2 + \Delta N2$$

$$W2K3 = W2K2 + \Delta W2$$

WHERE

$\Delta$ FN, $\Delta$ WF, $\Delta$ EGT, $\Delta$ N2, AND $\Delta$ W2 ARE CALCULATED USING FIGURE 1316.

1153113-02

***** FOR 7B ALL *****

Performance Calculations (N1K)
Figure 1308 (Sheet 2)

4. CALCULATE SFCK3 AT RATED THRUST

$$SFCK3 = \left( \frac{WFK2 - \Delta WFFN}{FNK\ RATED} \right)$$

WHERE

$\Delta$WFFN = WFDR AT FNK2 - WFDR AT FNK RATED.

WFDR = FUEL FLOW VALUES FROM FIGURE 1315.

$$SFC\ MARGIN = \left( \frac{SFC\ REF - SFCK3}{SFC\ REF} \right) \bullet 100 \left( IN\ PERCENT \right)$$

WHERE:

| SFC REF. @ TAKE-OFF | SAC LBS/HR/LB (KG/HR/DAN) | DAC LBS/HR/LB (KG/HR/DAN) |
|---|---|---|
| ALL 7B27 MODELS | 0.378 (0.385) | 0.378 (0.385) |
| ALL 7B26 MODELS | 0.369 (0.376) | 0.370 (0.377) |
| ALL 7B24 MODELS | 0.359 (0.366) | 0.360 (0.367) |
| ALL 7B22 MODELS | 0.354 (0.361) | 0.355 (0.362) |
| ALL 7B20 MODELS | 0.349 (0.356) | 0.350 (0.357) |

5025224-00

***** FOR 7B ALL *****

Performance Calculations (SFC)
Figure 1308 (Sheet 3)

5. HOT DAY PERFORMANCE.
A. CALCULATE THE EGT.

$$EGT_{HD}\ (°C) = \left[ \left( \frac{EGTK3\ (°C) - KSHUNT2}{KSHUNT1} + 273.15 \right)_{(\theta_{2HD})}^{EXPECT} - 273.15 \right] KSHUNT1 + KSHUNT2$$

WHERE
KSHUNT1 AND KSHUNT2 = EGT SHUNT FACTOR FROM FIGURE 1317

| | CFM56-7B27, 7B27/B1, 7B27/F 7B27E/F 7B27E/B1, 7B27/B1F, 7B27E/B1F 7B27B3, 7B27A, 7B27E, 7B27E/B1, 7B27E/B3, 7B27AE | CFM56-7B26, 7B26/B1 7B26E, 7B26E/B1, 7B26/F 7B26E/F | CFM56-7B24 | CFM56-7B24/B1 | CFM56-7B22 | CFM56-7B22/B1 | CFM56-7B20 | CFM56-7B26/B2, 7B26E/B2, 7B26/B2F 7B26E/B2F |
|---|---|---|---|---|---|---|---|---|
| SEE NOTE: | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1 |
| TKOF EXPEGT = | 0.8870 | 0.8852 | 0.8773 | 0.8807 | 0.8724 | 0.8742 | 0.8654 | 0.8867 |
| MXCN EXPEGT = | 0.8821 | 0.8821 | 0.8713 | 0.8713 | 0.8696 | 0.8696 | 0.8598 | 0.8713 |
| TKOF $\theta_{2HD}$ = | 1.052056 | 1.052056 | 1.052056 | 1.09023 | 1.052056 | 1.072878 | 1.052056 | 1.069408 |
| MXCN $\theta_{2HD}$ = | 1.034704 | 1.034704 | 1.034704 | 1.034704 | 1.034704 | 1.034704 | 1.034704 | 1.034704 |

| | CFM56-7B24 | CFM56-7B24/B1 | CFM56-7B22 | CFM56-7B22/B1 | CFM56-7B20 |
|---|---|---|---|---|---|
| SEE NOTE: | 3 | 3 | 3 | 3 | 3 |
| TKOF EXPEGT = | 0.8781 | 0.8815 | 0.8732 | 0.8750 | 0.8662 |
| MXCN EXPEGT = | 0.8721 | 0.8721 | 0.8704 | 0.8704 | 0.8606 |
| TKOF $\theta_{2HD}$ = | 1.052056 | 1.09023 | 1.052056 | 1.072878 | 1.052056 |
| MXCN $\theta_{2HD}$ = | 1.034704 | 1.034704 | 1.034704 | 1.034704 | 1.034704 |

**NOTES:**
1. THESE CORRECTION FACTORS APPLY TO BOTH SAC AND DAC MODELS AND RESPECTIVE /3 RATING MODELS.
2. THESE CORRECTION FACTORS APPLY TO ALL ENGINES WITH PRE 7.B.V.2 EEC SOFTWARE VERSION.
3. THESE CORRECTION FACTORS APPLY TO ALL ENGINES WITH 7.B.V.2 EEC SOFTWARE VERSION OR HIGHER VERSION.

1279952-07

***** FOR 7B ALL *****

Performance Calculations (Hot Day Performance)
Figure 1308 (Sheet 4)

B. CALCULATE THE N2CC3 AT TAKEOFF:
1. CALCULATE THE TEMPERATURE AT 14300 PHYSICAL CORE SPEED:

IF N2K3 ≤ 14300
T2143H = 518.67 (EXP(LN(14300/N2K3)/EXPN2HD) °R

IF N2K3 › 14300
T2143H = 518.67 * (EXP(LN(14300/N2K3)/EXPN2CHD) °R

2. CALCULATE HOT DAY CORRECTED CORE SPEED:

IF T2143H ≤ THD IN °R
N2CC3 = (14300/(T2143H/518.67) ** EXPN2CHD)*(θ2HD ** EXPN2CHD)

IF T2143H › THD IN °R
N2CC3 = (14300/(T2143H/518.67) ** EXPN2HD)*(θ2HD ** EXPN2HD)

WHERE

EXPN2HD = THETA EXPONENT BELOW PHYSICAL N2 OF 14300. CALCULATED FROM FIGURE 1311.
USE HOT DAY PHYSICAL FAN SPEED DEFINED AS N1HD = N1K RATED * θ2HD ** EXPN1.

EXPN2CHD = THETA EXPONENT ABOVE PHYSICAL N2 OF 14300. CALCULATED FROM FIGURE 1311.
USE HOT DAY PHYSICAL FAN SPEED DEFINED AS N1HD = N1K RATED * θ2HD ** EXPN1.

THD = FLAT RATE TEMPERATURE FROM FIGURE 1301.
N1K RATED = RATED FAN SPEED FROM FIGURE 1301.

1355908-02

***** FOR 7B ALL *****

Performance Calculations (Hot Day Performance)
Figure 1308 (Sheet 5)

6. PERFORMANCE WITH FMN1 INSTALLED

A. ENTER FIGURE 1320 WITH THE THRUST MARGIN CALCULATED IN STEP 8.A. AND CHOOSE A MODIFIER LEVEL. USE THE TABLE CORRESPONDING TO THE EEC SOFTWARE VERSION.

B. ENTER FIGURE 1321 WITH THE MODIFIER FROM STEP 6.A. AND FIND THE CHANGE IN FAN SPEED.

C. CALCULATE FNM, N2M AND EGTM BY USING FIGURE 1316, ENTER THE TABLE ONCE WITH N1K RATED AND READ FNDR, N2DR AND EGTDR. ENTER THE TABLE AGAIN AT N1K RATED LESS THE SPEED DETERMINED IN STEP 6.B. AND READ FNDR, N2DR AND EGTDR. DIFFERENCES BETWEEN THESE TWO SETS OF NUMBERS BECOMES △ FNM, △ N2M AND △ EGTM RESPECTIVELY.

D. FNK3M = FNK3 - ΔFNM

N2K3M = N2K3 - ΔN2M

EGTK3M = EGTK3 (°C) - ΔEGTM (°C)

7. HD PERFORMANCE WITH FMN1 INSTALLED

A. ENTER FIGURE 1320 WITH THE FAN SPEED MODIFIER LEVEL AND GET ΔN1K

N1KRM = N1K RATED - ΔN1K
(FIGURE 1301)

1153116-09

***** FOR 7B ALL *****

Performance Calculations (with FMN1 Installed)
Figure 1308 (Sheet 6)

B. HD EGT

EGTHDM = EGTHD (°C) – Δ EGTM (°C)

C. N2HD

N2CC3M = N2CC3 – Δ N2M IN RPM

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***** FOR 7B ALL *****

Performance Calculations (Hot Day Performance)

Figure 1308 (Sheet 7)

8. PERFORMANCE MARGINS

A. THRUST MARGIN (%) = $\dfrac{\left[\text{FNK3 (OR) FNK3M} - \text{FNK}_{\text{RATED FROM FIG. 1301}}\right] \cdot 100}{\text{FNK}_{\text{RATED}}}$

B. HOT DAY EGT MARGIN (°C) = (HOT DAY EGT LIMIT (°C) FROM FIG. 1301 − EGTHD (°C) (OR) EGTHDM)

C. HOT DAY N2 (%) = $\dfrac{\left[\text{HOT DAY N2 LIMIT REFER TO FIGURE 1301} - \text{N2CC3 (OR) N2CC3M}\right] \cdot 100}{\text{HOT DAY N2 LIMIT}}$

D. SFC MARGIN (%) = $\left(\dfrac{\text{SFC}_{\text{REF}} - \text{SFCK3}}{\text{SFC}_{\text{REF}}}\right) \cdot 100$

GSM-1153118-02-A

***** FOR 7B ALL *****

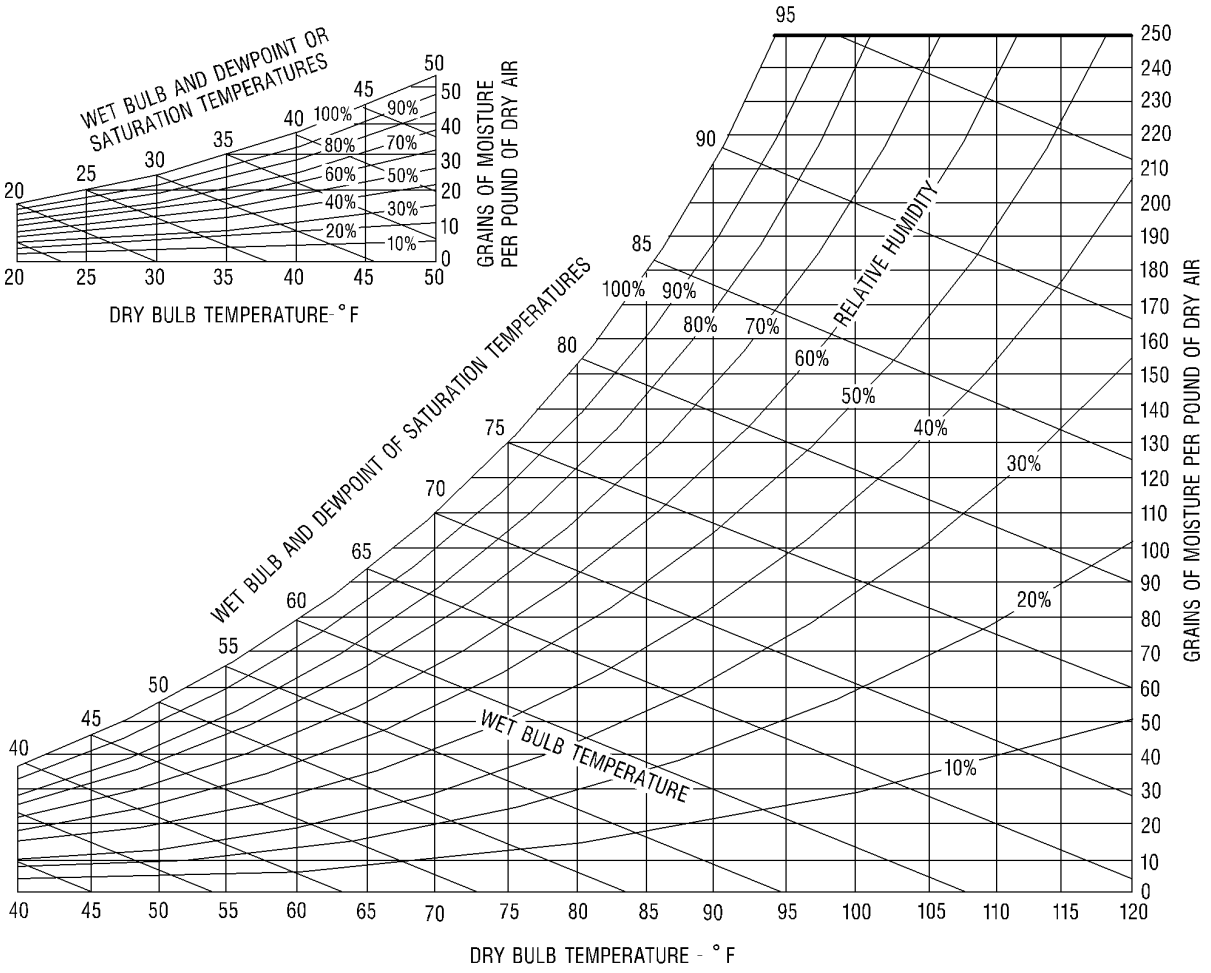
Performance Calculations (Performance Margins)
Figure 1308 (Sheet 8)

| SPECIFIC HUMIDITY* GRAINS/LB (GRAMS/KG) | FAN SPEED KHN1 | CORE SPEED KHN2 | EGT KHEGT | THRUST KFN | FUEL FLOW KHWF |
|---|---|---|---|---|---|
| 0 (0) | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 |
| 10 (1.4) | 0.99956 | 0.99978 | 1.00013 | 1.00003 | 0.99931 |
| 20 (2.9) | 0.99913 | 0.99956 | 1.00026 | 1.00005 | 0.99862 |
| 30 (4.3) | 0.99869 | 0.99934 | 1.00039 | 1.00008 | 0.99793 |
| 40 (5.7) | 0.99826 | 0.99911 | 1.00051 | 1.00010 | 0.99724 |
| 50 (7.1) | 0.99782 | 0.99889 | 1.00064 | 1.00013 | 0.99654 |
| 60 (8.6) | 0.99739 | 0.99867 | 1.00077 | 1.00015 | 0.99585 |
| 70 (10.0) | 0.99695 | 0.99845 | 1.00090 | 1.00018 | 0.99516 |
| 80 (11.4) | 0.99651 | 0.99823 | 1.00103 | 1,00021 | 0.99447 |
| 90 (12.9) | 0.99608 | 0.99801 | 1.00116 | 1.00023 | 0.99378 |
| 100 (14.3) | 0.99564 | 0.99778 | 1.00129 | 1.00026 | 0.99309 |
| 110 (15.7) | 0.99521 | 0.99756 | 1.00141 | 1.00028 | 0.99239 |
| 120 (17.1) | 0.99477 | 0.99734 | 1.00154 | 1.00031 | 0.99170 |
| 130 (18.6) | 0.99434 | 0.99712 | 1.00167 | 1.00033 | 0.99101 |
| 140 (20.0) | 0.99390 | 0.99690 | 1.00180 | 1.00036 | 0.99032 |
| 150 (21.4) | 0.99346 | 0.99668 | 1.00193 | 1.00039 | 0.98963 |
| 160 (22.9) | 0.99303 | 0.99646 | 1.00206 | 1.00041 | 0.98894 |
| 170 (24.3) | 0.99259 | 0.99624 | 1.00219 | 1.00044 | 0.98825 |
| 180 (25.7) | 0.99216 | 0.99602 | 1.00231 | 1.00046 | 0.98755 |
| 190 (27.1) | 0.99172 | 0.99579 | 1.00244 | 1.00049 | 0.98686 |
| 200 (28.6) | 0.99129 | 0.99557 | 1.00257 | 1.00051 | 0.98617 |

1153146-01

***** FOR 7B ALL *****

Factors for Humidity Correction
Figure 1309

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***** FOR 7B ALL *****

Humidity Chart
Figure 1310

7B ALL

| N1R2XX | EXPN1 |
|---|---|
| 0 | 0.5000 |
| 1552.05 | 0.5000 |
| 2070.00 | 0.4980 |
| 2587.50 | 0.4950 |
| 3105.00 | 0.4930 |
| 3622.50 | 0.4910 |
| 4140.00 | 0.4880 |
| 4657.50 | 0.4840 |
| 4800.00 | 0.4800 |
| 4916.25 | 0.4750 |
| 5071.50 | 0.4520 |
| 5123.25 | 0.4410 |
| 5175.00 | 0.4200 |
| 5226.75 | 0.4170 |
| 6210.00 | 0.4170 |

WHERE: **N1R2XX** = $\frac{\text{N1MEAS*KHN1}}{\text{THETA2**XX}}$ AND **XX = 0.47** INITIALLY, AND THEN RECALCULATE **N1R2XX** WITH **EXPN1** FROM ABOVE AT LEAST TWICE

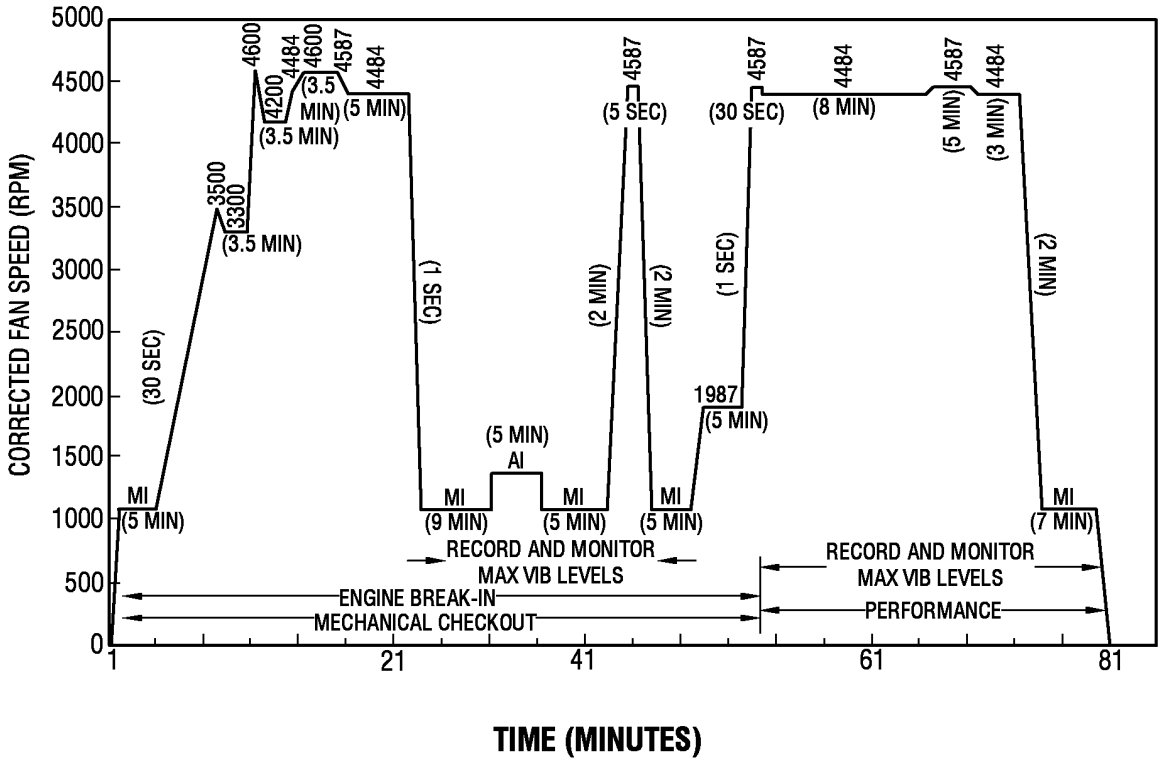
| N1MEAS | EXPEGT | N1MEAS | EXPWF | BELOW 14300 RPM EXPN2 | ABOVE 14300 RPM EXPN2C | EXPT3 |
|---|---|---|---|---|---|---|
| 500 | 0.844 | 500 | 0.358 | 0.500 | 0.378 | 0.975 |
| 4163 | 0.844 | 1200 | 0.358 | 0.500 | 0.378 | 0.975 |
| 4563 | 0.860 | 1400 | 0.428 | 0.500 | 0.378 | 0.967 |
| 4863 | 0.872 | 2000 | 0.428 | 0.500 | 0.378 | 0.950 |
| 5163 | 0.884 | 2250 | 0.518 | 0.500 | 0.378 | 0.945 |
| 5244 | 0.887 | 2500 | 0.607 | 0.500 | 0.378 | 0.945 |
| 6000 | 0.887 | 2650 | 0.607 | 0.500 | 0.378 | 0.945 |
| | | 3000 | 0.607 | 0.500 | 0.378 | 0.945 |
| | | 3500 | 0.607 | 0.500 | 0.378 | 0.940 |
| | | 4000 | 0.615 | 0.500 | 0.378 | 0.918 |
| | | 4250 | 0.619 | 0.500 | 0.378 | 0.913 |
| | | 4500 | 0.623 | 0.500 | 0.378 | 0.905 |
| | | 4650 | 0.629 | 0.500 | 0.378 | 0.900 |
| | | 4750 | 0.636 | 0.500 | 0.378 | 0.898 |
| | | 5000 | 0.650 | 0.500 | 0.378 | 0.875 |
| | | 5150 | 0.650 | 0.500 | 0.357 | 0.855 |
| | | 5250 | 0.650 | 0.500 | 0.357 | 0.840 |
| | | 5500 | 0.650 | 0.500 | 0.357 | 0.830 |

1284529-03

***** FOR 7B ALL *****

Theta Exponents (SAC and DAC Unless Specified)
Figure 1311

## 7B20, 7B20/2, AND 7B20/3 ACCEPTANCE SCHEDULE
## PRE 7BV EEC SOFTWARE

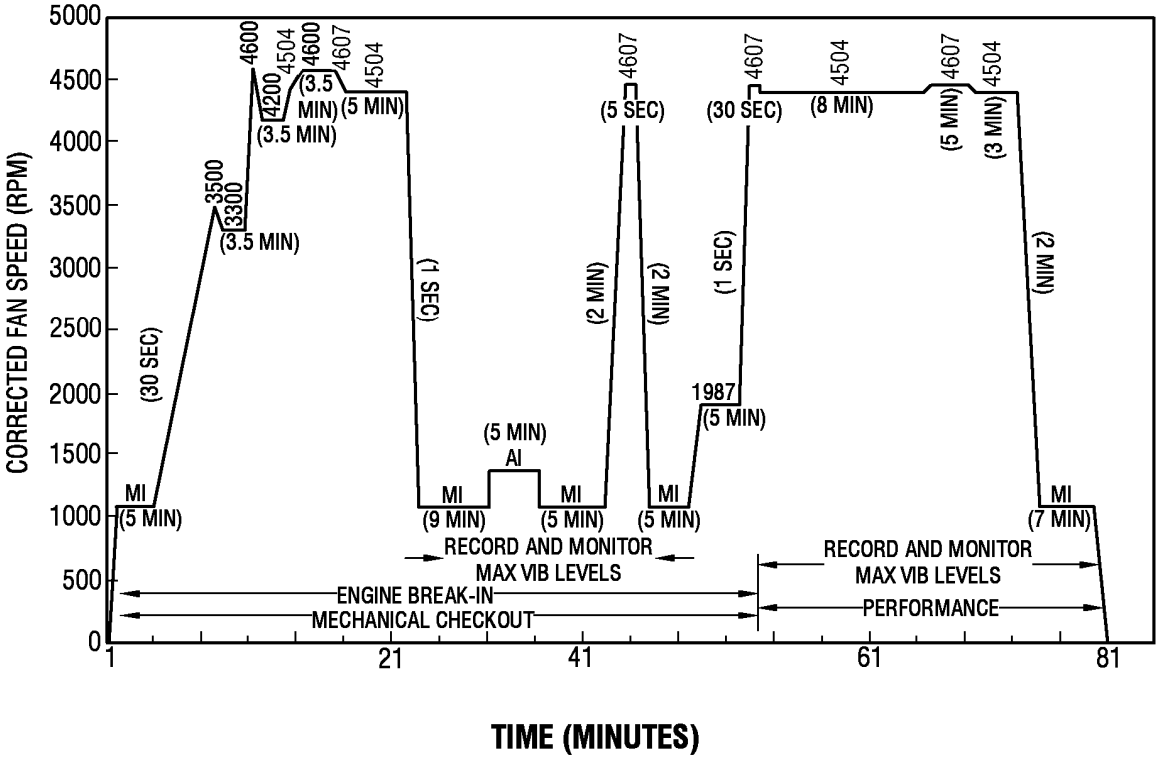



1251916-02

***** FOR 7B ALL *****

Acceptance Test Schedule
Figure 1312 (Sheet 1)

## 7B20, 7B20/2, 7B20/3 AND 7B20E ACCEPTANCE SCHEDULE WITH 7BV EEC SOFTWARE AND HIGHER

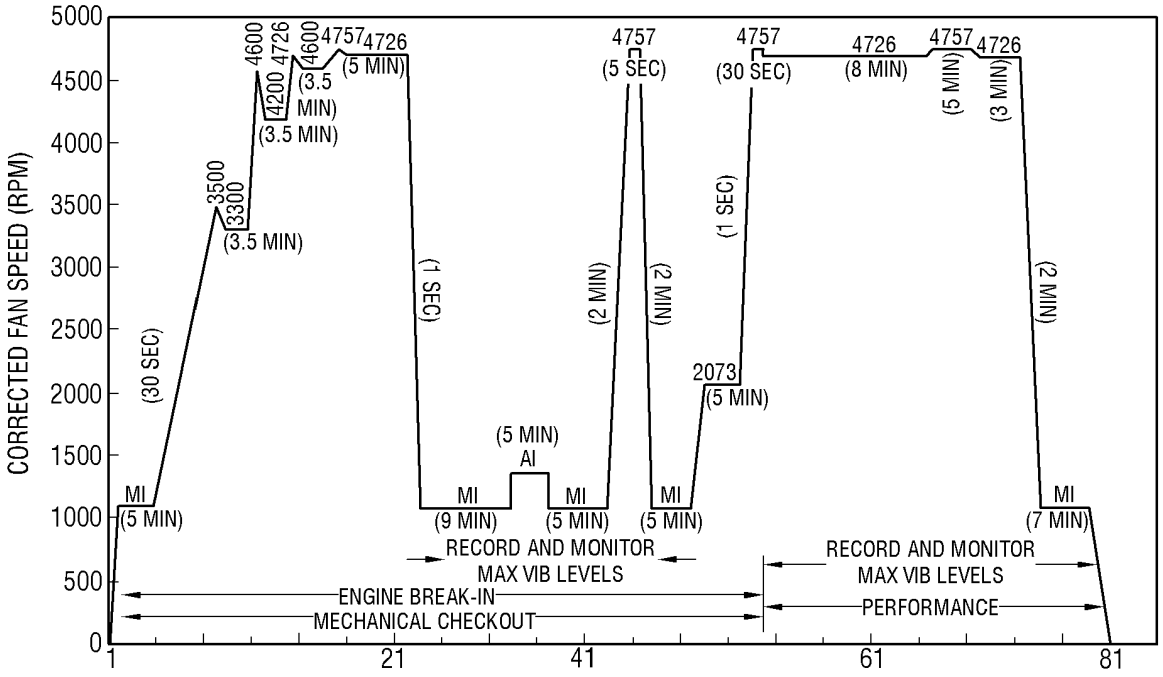



1355912-00

***** FOR 7B ALL *****

Acceptance Test Schedule
Figure 1312 (Sheet 2)

## 7B22, 7B22/2, 7B22/3, 7B22/B1, AND 7B22/3B1
## ACCEPTANCE SCHEDULE
## PRE 7BV EEC SOFTWARE



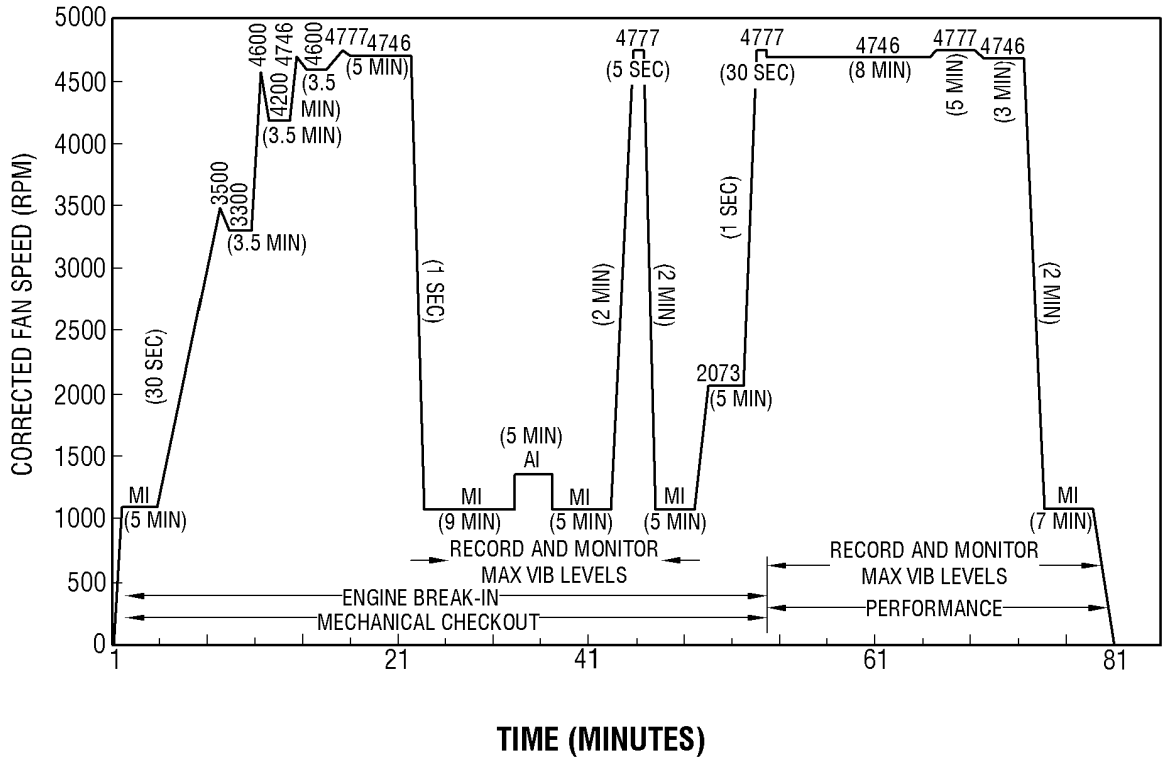

**TIME (MINUTES)**

1279953-01

***** FOR 7B ALL *****

Acceptance Test Schedule
Figure 1312 (Sheet 3)

## 7B22, 7B22/2, 7B22/3, 7B22/B1, 7B22/3B1, 7B22E AND 7B22E/B1
## ACCEPTANCE SCHEDULE
## WITH 7BV EEC SOFTWARE AND HIGHER

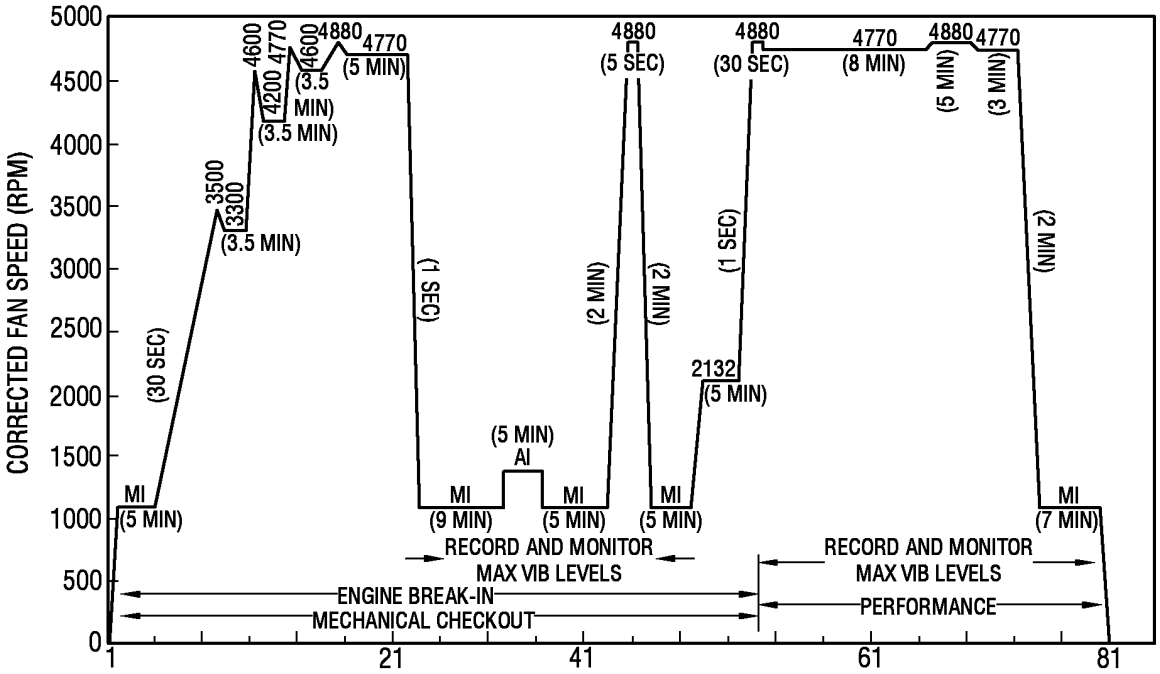



1355913-00

***** FOR 7B ALL *****

Acceptance Test Schedule
Figure 1312 (Sheet 4)

## 7B24, 7B24/2, 7B24/3, 7B24/B1, 7B24/2B1, AND 7B24/3B1
## ACCEPTANCE SCHEDULE
## PRE 7BV EEC SOFTWARE



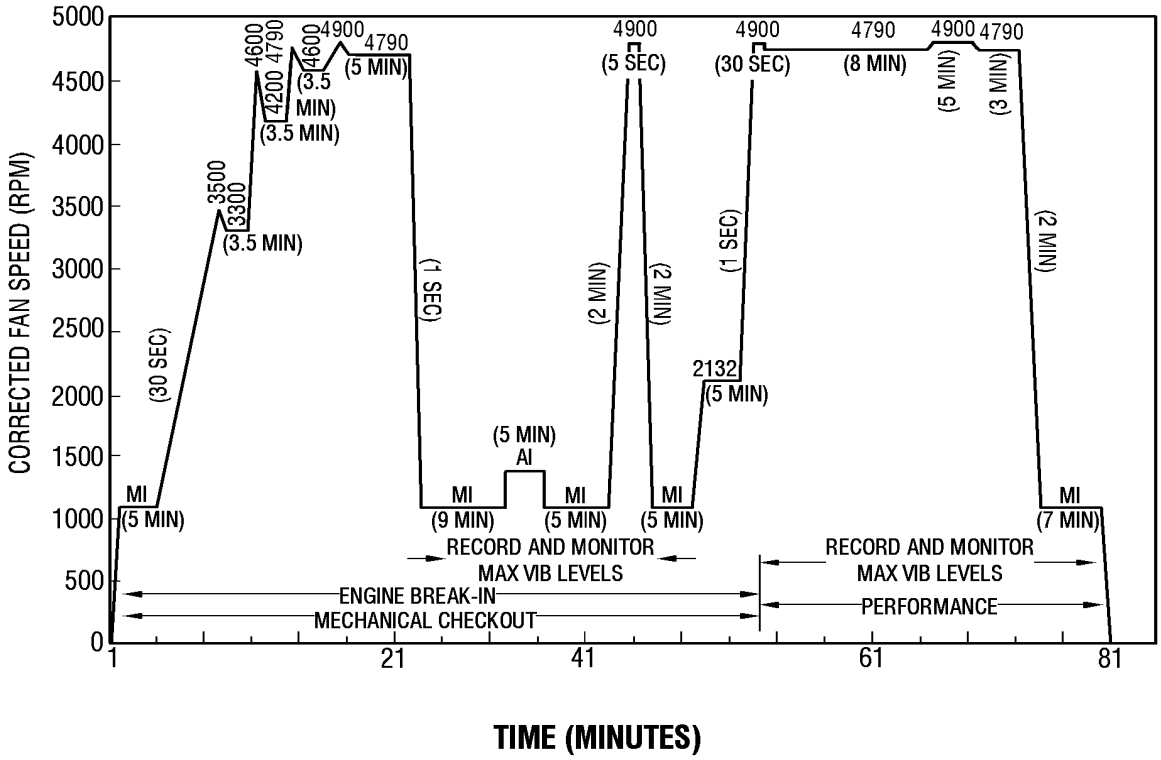

TIME (MINUTES)

1251918-02

***** FOR 7B ALL *****

Acceptance Test Schedule
Figure 1312 (Sheet 5)

## 7B24, 7B24/2, 7B24/3, 7B24/B1, 7B24/2B1, 7B24/3B1, 7B24E, 7B24E/B1 ACCEPTANCE SCHEDULE WITH 7BV EEC SOFTWARE AND HIGHER

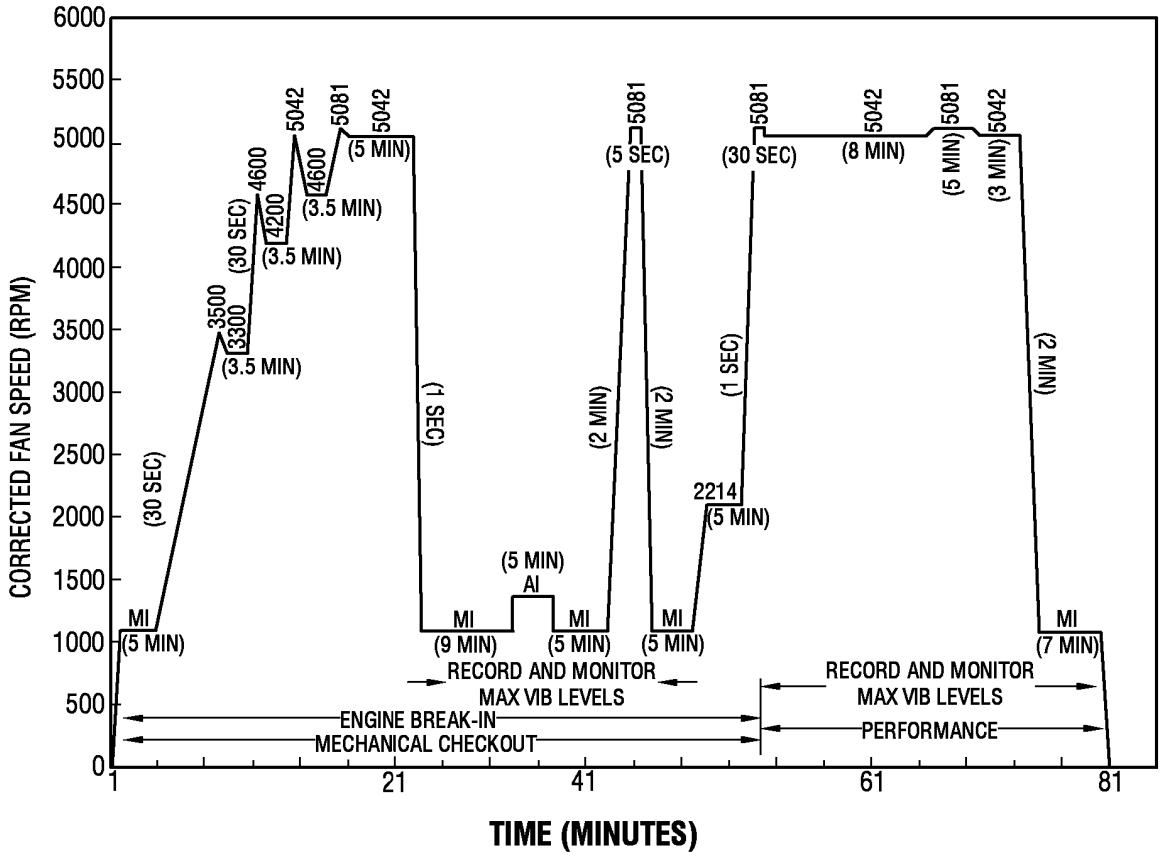



1355914-00

***** FOR 7B ALL *****

Acceptance Test Schedule
Figure 1312 (Sheet 6)

## 7B26, 7B26/2, 7B26/3, 7B26/B1, 7B26/3B1, 7B26/3F, 7B26E, 7B26E/B1, 7B26E/F, 7B26E/B1F ACCEPTANCE SCHEDULE



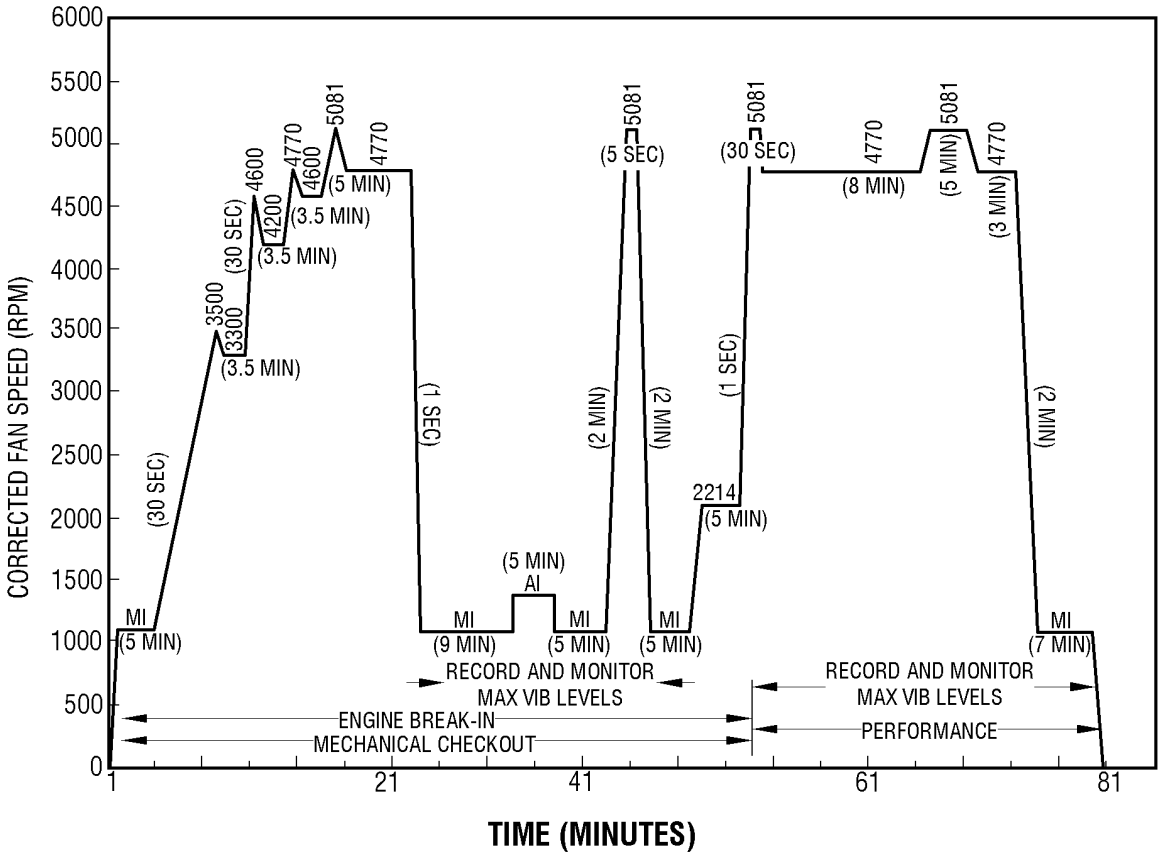

1251925-02

***** FOR 7B ALL *****

Acceptance Test Schedule
Figure 1312 (Sheet 7)

7B ALL

## 7B26/B2, 7B26/3B2, 7B26/3B2F, 7B26E/B2 AND 7B26E/B2F ACCEPTANCE SCHEDULE



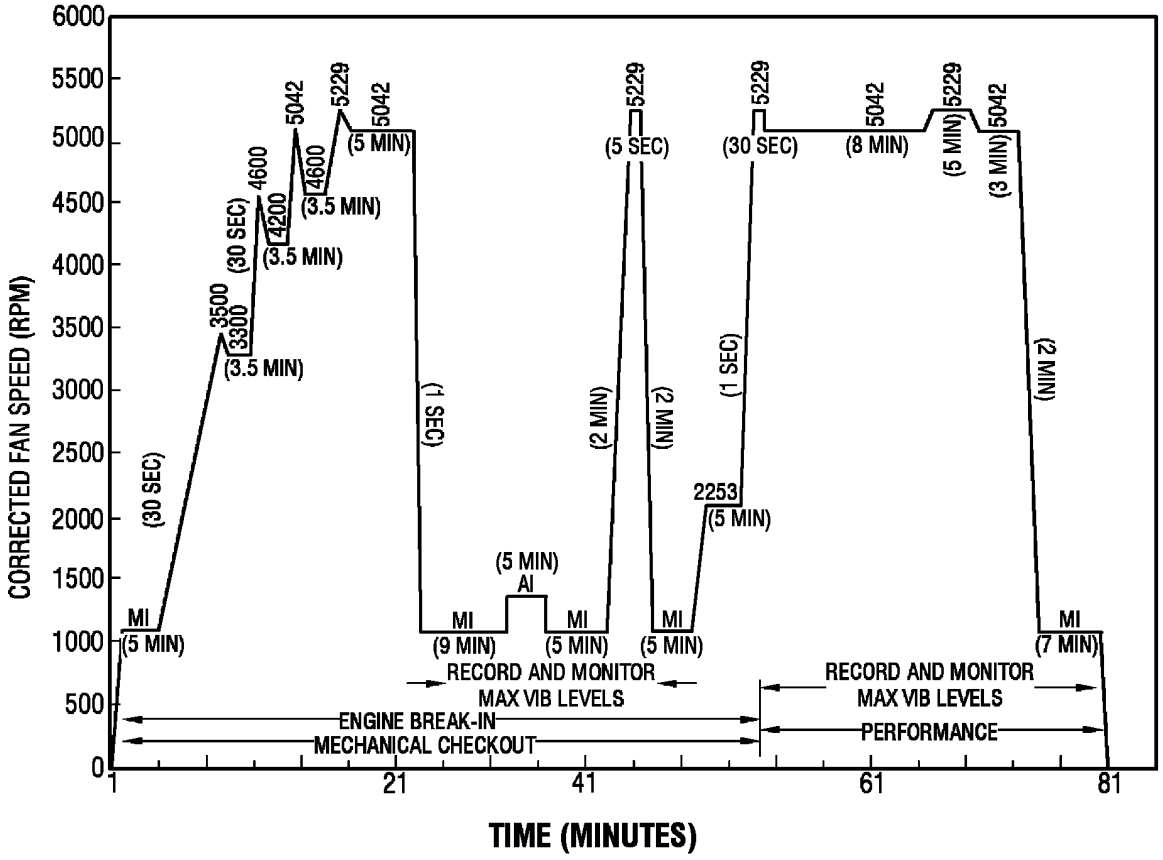

1222242-03

***** FOR 7B ALL *****

Acceptance Test Schedule
Figure 1312 (Sheet 8)

7B ALL

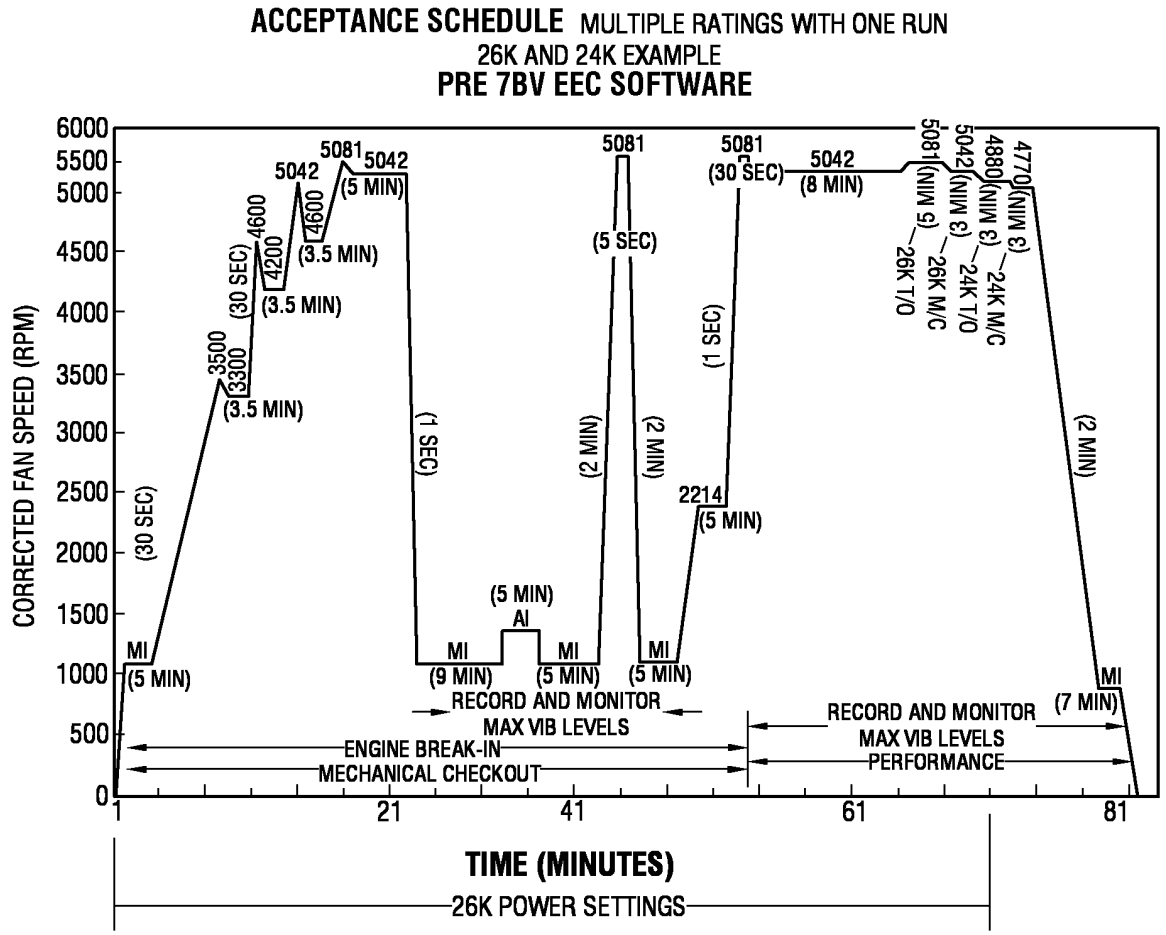
## 7B27, 7B27/A, 7B27A/3, 7B27/B1, 7B27/B3, 7B27/2, 7B27/3, 7B27/3F, 7B27/3B1, 7B27/3B1F, 7B27/3B3, 7B27AE, 7B27E, 7B27E/B1, 7B27E/B3, 7B27E/F, AND 7B27E/B1F ACCEPTANCE SCHEDULE




1279954-01

***** FOR 7B ALL *****

Acceptance Test Schedule
Figure 1312 (Sheet 9)



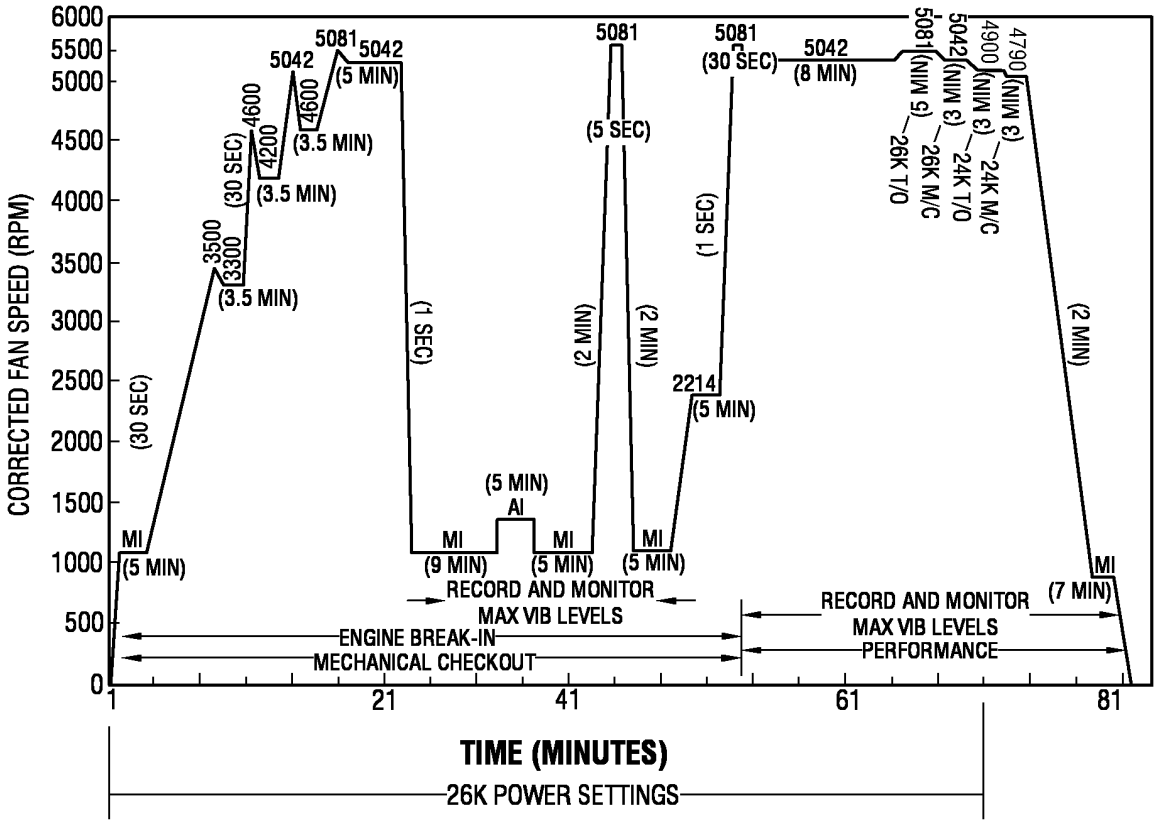

**NOTE:**
A TEST CELL CONNECTOR MUST
BE USED WHEN MULTIPLE RATINGS
IN ONE RUN.

1279955-01

***** FOR 7B ALL *****

Multiple Rating Acceptance Test Schedule
Figure 1313 (Sheet 1)

**ACCEPTANCE SCHEDULE** MULTIPLE RATINGS WITH ONE RUN
26K AND 24K EXAMPLE
**WITH 7BV EEC SOFTWARE AND HIGHER**




**NOTE:**
A TEST CELL CONNECTOR MUST
BE USED WHEN MULTIPLE RATINGS
IN ONE RUN.

1355920-00

***** FOR 7B ALL *****

Multiple Rating Acceptance Test Schedule
Figure 1313 (Sheet 2)

## INLET CONDENSATION CORRECTIONS

| | | |
|---|---|---|
| N1 | KCONDN1 | = 1 + (N1KFAC • T RISE) |
| N2 | KCONDN2 | = 1 + (N2KFAC • T RISE) |
| EGT | KCONDT | = 1 + (TKFAC • T RISE) |
| WF | KCONDW | = 1 + (WKFAC • T RISE) |
| W2 | KCONDA | = 1 + (AKFAC • T RISE) |

**NOTES:**

(1) GET THE INLET CONDENSATION K FACTORS FROM THE TABLE BELOW AS A FUNCTION OF N1K RATED.

(2) READ T RISE ( ° F ) AS A FUNCTION OF POWER SETTING, T12, AND PERCENT OF RELATIVE HUMIDITY.

## INLET CONDENSATION K FACTORS

| N1K | N1 | N2 | EGT | WF | W2 |
|---|---|---|---|---|---|
| RPM | N1KFAC | N2KFAC | TKFAC | WKFAC | AKFAC |
| 5229 | -0.0002 | 0 | -0.0002 | -0.0001 | 0 |
| 5042 | -0.0001 | 0 | -0.0002 | -0.0001 | 0 |
| 4880 | -0.0001 | 0 | -0.0002 | -0.0001 | 0 |
| 4587 | -0.0001 | 0 | -0.0002 | -0.00005 | 0 |
| 3716 | -0.0001 | 0 | -0.0002 | -0.00005 | 0 |

**NOTE:**

MAKE A LINEAR INTERPOLATION BETWEEN THE CORRECTED N1 POINTS WHERE

$$N1K = N1MEAS \bullet \left( \theta_2^{\frac{KHN1}{EXPN1}} \right)$$

1106308-03

***** FOR 7B ALL *****

Inlet Condensation Corrections
Figure 1314

## INLET CONDENSATION - DEG F
## 7B20, 7B20/2, 7B20/3, 7B20E TO

| T2 DEG F REL. HUM. | -30 | -20 | -10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50 | 0.2 | 0.3 | 0.4 | 0.6 | 0.8 | 1.1 | 1.4 | 1.6 | 1.9 | 2.1 | 2.1 | 2.1 | 1.9 | 1.6 | 1.1 | 0.6 |
| 60 | 0.3 | 0.4 | 0.7 | 1.0 | 1.4 | 1.9 | 2.6 | 3.3 | 4.0 | 4.7 | 5.3 | 5.7 | 6.0 | 6.1 | 6.1 | 6.0 |
| 70 | 0.4 | 0.6 | 0.9 | 1.4 | 2.0 | 2.8 | 3.8 | 4.9 | 6.1 | 7.2 | 8.3 | 9.2 | 9.8 | 10.3 | 10.6 | 10.8 |
| 80 | 0.5 | 0.7 | 1.2 | 1.8 | 2.6 | 3.7 | 5.0 | 6.5 | 8.1 | 9.7 | 11.1 | 12.4 | 13.4 | 14.2 | 14.8 | 15.2 |
| 90 | 0.6 | 0.9 | 1.4 | 2.2 | 3.2 | 4.5 | 6.2 | 8.1 | 10.1 | 12.0 | 13.8 | 15.4 | 16.7 | 17.8 | 18.6 | 19.2 |
| 100 | 0.6 | 1.1 | 1.7 | 2.6 | 3.8 | 5.4 | 7.3 | 9.6 | 12.0 | 14.3 | 16.4 | 18.3 | 19.8 | 21.1 | 22.1 | 22.9 |

## 7B20, 7B20/2, 7B20/3, 7B20E MC

| T2 DEG F REL. HUM. | -30 | -20 | -10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50 | 0.1 | 0.2 | 0.3 | 0.5 | 0.6 | 0.8 | 1.0 | 1.1 | 1.2 | 1.2 | 1.1 | 0.9 | 0.6 | 0.2 | 0.0 | 0.0 |
| 60 | 0.2 | 0.4 | 0.6 | 0.9 | 1.2 | 1.7 | 2.2 | 2.8 | 3.3 | 3.8 | 4.2 | 4.5 | 4.7 | 4.7 | 4.6 | 4.3 |
| 70 | 0.3 | 0.5 | 0.8 | 1.2 | 1.8 | 2.5 | 3.4 | 4.4 | 5.4 | 6.3 | 7.2 | 7.9 | 8.4 | 8.8 | 9.0 | 9.1 |
| 80 | 0.4 | 0.7 | 1.1 | 1.6 | 2.4 | 3.4 | 4.6 | 5.9 | 7.3 | 8.7 | 10.0 | 11.1 | 11.9 | 12.6 | 13.1 | 13.4 |
| 90 | 0.5 | 0.9 | 1.3 | 2.0 | 3.0 | 4.2 | 5.8 | 7.5 | 9.2 | 11.0 | 12.6 | 14.0 | 15.2 | 16.2 | 16.9 | 17.4 |
| 100 | 0.6 | 1.0 | 1.6 | 2.4 | 3.6 | 5.1 | 6.9 | 8.9 | 11.1 | 13.2 | 15.2 | 16.9 | 18.3 | 19.4 | 20.4 | 21.1 |

**NOTE:**
BOTH SAC AND DAC MODELS.

1153152-04

***** FOR 7B ALL *****

Temperature Rise Values
Figure 1315 (Sheet 1)

## INLET CONDENSATION - DEG F
## 7B22, 7B22/2, 7B22/B1, 7B22/3, 7B22E, 7B22/3B1, 7B22E/B1, TO

| T2 DEG F REL. HUM. | -30 | -20 | -10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.7 | 0.8 | 0.9 | 0.9 | 0.8 | 0.6 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50 | 0.2 | 0.4 | 0.5 | 0.8 | 1.1 | 1.6 | 2.1 | 2.6 | 3.2 | 3.7 | 4.1 | 4.3 | 4.4 | 4.4 | 4.1 | 3.8 |
| 60 | 0.3 | 0.5 | 0.8 | 1.2 | 1.8 | 2.5 | 3.3 | 4.3 | 5.4 | 6.4 | 7.3 | 8.1 | 8.7 | 9.1 | 9.3 | 9.3 |
| 70 | 0.4 | 0.7 | 1.1 | 1.6 | 2.4 | 3.3 | 4.6 | 6.0 | 7.5 | 9.0 | 10.4 | 11.6 | 12.6 | 13.4 | 13.9 | 14.2 |
| 80 | 0.5 | 0.8 | 1.3 | 2.0 | 3.0 | 4.2 | 5.8 | 7.6 | 9.6 | 11.5 | 13.3 | 15.0 | 16.3 | 17.4 | 18.1 | 18.7 |
| 90 | 0.6 | 1.0 | 1.6 | 2.4 | 3.6 | 5.1 | 7.0 | 9.2 | 11.6 | 14.0 | 16.2 | 18.1 | 19.7 | 21.0 | 22.0 | 22.8 |
| 100 | 0.7 | 1.2 | 1.8 | 2.8 | 4.2 | 6.0 | 8.2 | 10.8 | 13.6 | 16.3 | 18.8 | 21.1 | 22.9 | 24.4 | 25.6 | 26.5 |

## 7B22, 7B22/2, 7B22/B1, 7B22/3,7B22E, 7B22/3B1, 7B22E/B1 MC

| T2 DEG F REL. HUM. | -30 | -20 | -10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.7 | 0.7 | 0.5 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50 | 0.2 | 0.3 | 0.5 | 0.8 | 1.1 | 1.5 | 2.0 | 2.4 | 2.9 | 3.3 | 3.7 | 3.9 | 3.9 | 3.8 | 3.5 | 3.1 |
| 60 | 0.3 | 0.5 | 0.8 | 1.2 | 1.7 | 2.4 | 3.2 | 4.1 | 5.1 | 6.1 | 6.9 | 7.6 | 8.2 | 8.5 | 8.6 | 8.6 |
| 70 | 0.4 | 0.7 | 1.1 | 1.6 | 2.3 | 3.2 | 4.4 | 5.8 | 7.2 | 8.7 | 10.0 | 11.1 | 12.1 | 12.8 | 13.2 | 13.5 |
| 80 | 0.5 | 0.8 | 1.3 | 2.0 | 2.9 | 4.1 | 5.6 | 7.4 | 9.3 | 11.2 | 12.9 | 14.4 | 15.7 | 16.7 | 17.5 | 18.0 |
| 90 | 0.6 | 1.0 | 1.5 | 2.4 | 3.5 | 5.0 | 6.9 | 9.0 | 11.3 | 13.6 | 15.7 | 17.6 | 19.1 | 20.4 | 21.3 | 22.0 |
| 100 | 0.7 | 1.1 | 1.8 | 2.8 | 4.1 | 5.9 | 8.1 | 10.6 | 13.3 | 15.9 | 18.3 | 20.5 | 22.3 | 23.8 | 24.9 | 25.8 |

**NOTE:**
BOTH SAC AND DAC MODELS.

1279956-01

***** FOR 7B ALL *****

Temperature Rise Values
Figure 1315 (Sheet 2)

## INLET CONDENSATION - DEG F
## 7B24, 7B24/2, 7B24/B1,7B24/2B1, 7B24/3, 7B24E, 7B24/3B1, 7B24E/B1 TO

| T2 DEG F REL HUM. | -30 | -20 | -10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40 | 0.2 | 0.2 | 0.4 | 0.5 | 0.8 | 1.0 | 1.3 | 1.6 | 1.8 | 1.9 | 2.0 | 1.9 | 1.6 | 1.2 | 0.6 | 0.0 |
| 50 | 0.3 | 0.4 | 0.6 | 1.0 | 1.4 | 1.9 | 2.6 | 3.3 | 4.1 | 4.9 | 5.5 | 6.1 | 6.4 | 6.5 | 6.5 | 6.2 |
| 60 | 0.4 | 0.6 | 0.9 | 1.4 | 2.0 | 2.8 | 3.8 | 5.1 | 6.4 | 7.7 | 8.9 | 9.9 | 10.8 | 11.3 | 11.7 | 11.9 |
| 70 | 0.4 | 0.7 | 1.2 | 1.8 | 2.6 | 3.7 | 5.1 | 6.8 | 8.6 | 10.4 | 12.1 | 13.6 | 14.8 | 15.8 | 16.5 | 16.9 |
| 80 | 0.5 | 0.9 | 1.4 | 2.2 | 3.2 | 4.6 | 6.4 | 8.5 | 10.7 | 13.0 | 15.1 | 17.0 | 18.6 | 19.8 | 20.8 | 21.4 |
| 90 | 0.6 | 1.1 | 1.7 | 2.6 | 3.9 | 5.5 | 7.6 | 10.1 | 12.8 | 15.5 | 18.0 | 20.2 | 22.1 | 23.6 | 24.7 | 25.6 |
| 100 | 0.7 | 1.2 | 1.9 | 3.0 | 4.5 | 6.4 | 8.9 | 11.8 | 14.8 | 17.9 | 20.8 | 23.2 | 25.3 | 27.1 | 28.4 | 29.4 |

## 7B24, 7B24/2, 7B24/B1, 7B24/2B1 7B24/3, 7B24E, 7B24/3B1, 7B26/B2, 7B26/3B2, 7B26/3B2F 7B24E/B1, 7B26E/B2, 7B26E/B2F MC

| T2 DEG F REL HUM. | -30 | -20 | -10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40 | 0.1 | 0.2 | 0.3 | 0.4 | 0.6 | 0.7 | 0.8 | 1.0 | 1.0 | 0.9 | 0.7 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50 | 0.2 | 0.4 | 0.5 | 0.8 | 1.2 | 1.6 | 2.1 | 2.7 | 3.3 | 3.8 | 4.2 | 4.5 | 4.6 | 4.6 | 4.3 | 4.0 |
| 60 | 0.3 | 0.5 | 0.8 | 1.2 | 1.8 | 2.5 | 3.4 | 4.4 | 5.5 | 6.5 | 7.5 | 8.3 | 8.9 | 9.3 | 9.5 | 9.5 |
| 70 | 0.4 | 0.7 | 1.0 | 1.6 | 2.4 | 3.4 | 4.6 | 6.1 | 7.6 | 9.2 | 10.6 | 11.8 | 12.8 | 13.6 | 14.1 | 14.4 |
| 80 | 0.5 | 0.8 | 1.3 | 2.0 | 3.0 | 4.3 | 5.8 | 7.7 | 9.7 | 11.7 | 13.5 | 15.2 | 16.5 | 17.6 | 18.4 | 18.9 |
| 90 | 0.6 | 1.0 | 1.6 | 2.4 | 3.6 | 5.2 | 7.1 | 9.3 | 11.7 | 14.1 | 16.3 | 18.3 | 19.9 | 21.3 | 22.3 | 23.0 |
| 100 | 0.7 | 1.2 | 1.8 | 2.8 | 4.2 | 6.0 | 8.3 | 10.9 | 13.7 | 16.5 | 19.0 | 21.3 | 23.1 | 24.7 | 25.9 | 26.8 |

**NOTE:**
BOTH SAC AND DAC MODELS.

1153150-05

***** FOR 7B ALL *****

Temperature Rise Values
Figure 1315 (Sheet 3)

## INLET CONDENSATION - DEG F
## 7B26, 7B26/2, 7B26/B1, 7B26/B2, 7B26/3, 7B26/3B1, 7B26/3B2, 7B26/3F, 7B26/3B2F 7B26E, 7B26E/B1, 7B26E/B2, 7B26E/F, 7B26E/B2F TO

| T2 DEG F REL. HUM. | -30 | -20 | -10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 0.1 | 0.2 | 0.2 | 0.3 | 04 | 0.6 | 0.6 | 0.6 | 0.6 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40 | 0.2 | 0.3 | 0.5 | 0.7 | 1.1 | 1.5 | 1.9 | 2.5 | 3.1 | 3.6 | 4.0 | 4.3 | 4.4 | 4.3 | 4.0 | 3.5 |
| 50 | 0.3 | 0.5 | 0.8 | 1.2 | 1.7 | 2.4 | 3.3 | 4.3 | 5.5 | 6.6 | 7.7 | 8.6 | 9.3 | 9.8 | 10.0 | 10.0 |
| 60 | 0.4 | 0.6 | 1.0 | 1.6 | 2.3 | 3.3 | 4.6 | 6.1 | 7.8 | 9.5 | 11.2 | 12.7 | 13.9 | 14.8 | 15.4 | 15.8 |
| 70 | 0.5 | 0.8 | 1.3 | 2.0 | 3.0 | 4.3 | 5.9 | 7.9 | 10.1 | 12.4 | 14.5 | 16.5 | 18.1 | 19.4 | 20.3 | 21.0 |
| 80 | 0.6 | 1.0 | 1.6 | 2.4 | 3.6 | 5.2 | 7.2 | 9.6 | 12.3 | 15.1 | 17.7 | 20.0 | 22.0 | 23.6 | 24.8 | 25.6 |
| 90 | 0.7 | 1.1 | 1.8 | 2.8 | 4.2 | 6.1 | 8.5 | 11.4 | 14.5 | 17.7 | 20.7 | 23.4 | 25.6 | 27.4 | 28.9 | 29.9 |
| 100 | 0.8 | 1.3 | 2.1 | 3.2 | 4.8 | 7.0 | 9.8 | 13.0 | 16.6 | 20.2 | 23.6 | 26.5 | 29.0 | 31.0 | 32.6 | 33.8 |

## 7B26, 7B26/2, 7B26/B1, 7B26/3, 7B26E, 7B26/3B1, 7B26E/B1, 7B26E/F, 7B26/3F, MC

| T2 DEG F REL. HUM. | -30 | -20 | -10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40 | 0.2 | 0.3 | 0.5 | 0.7 | 1.0 | 1.4 | 1.8 | 2.3 | 2.9 | 3.3 | 3.7 | 3.9 | 3.9 | 3.8 | 3.4 | 2.9 |
| 50 | 0.3 | 0.5 | 0.7 | 1.1 | 1.6 | 2.3 | 3.2 | 4.2 | 5.3 | 6.4 | 7.4 | 8.2 | 8.9 | 9.3 | 9.5 | 9.4 |
| 60 | 0.4 | 0.6 | 1.0 | 1.5 | 2.3 | 3.3 | 4.5 | 5.9 | 7.6 | 9.3 | 10.9 | 12.2 | 13.4 | 14.3 | 14.9 | 15.2 |
| 70 | 0.5 | 0.8 | 1.3 | 2.0 | 2.9 | 4.2 | 5.8 | 7.7 | 9.9 | 12.1 | 14.1 | 16.0 | 17.6 | 18.8 | 19.7 | 20.3 |
| 80 | 0.6 | 1.0 | 1.5 | 2.4 | 3.5 | 5.1 | 7.1 | 9.5 | 12.1 | 14.7 | 17.3 | 19.6 | 21.5 | 23.0 | 24.1 | 25.0 |
| 90 | 0.7 | 1.1 | 1.8 | 2.8 | 4.2 | 6.0 | 8.4 | 11.2 | 14.2 | 17.4 | 20.3 | 22.9 | 25.1 | 26.8 | 28.2 | 29.2 |
| 100 | 0.8 | 1.3 | 2.1 | 3.2 | 4.8 | 6.9 | 9.6 | 12.8 | 16.3 | 19.9 | 23.1 | 26.0 | 28.4 | 30.4 | 32.0 | 33.1 |

**NOTE:**
BOTH SAC AND DAC MODELS.

1224626-05

***** FOR 7B ALL *****

Temperature Rise Values
Figure 1315 (Sheet 4)

## INLET CONDENSATION - DEG F
## 7B27, 7B27/2, 7B27A, 7B27/B1, 7B27/B3, 7B27/3
## 7B27A/3, 7B27/3B1, 7B27/3B1F, 7B27/3B3, 7B27/3F
## 7B27AE, 7B27E, 7B27E/B1, 7B27E/B3, 7B27E/F, 7B27E/B1F TO

| T2 DEG F<br>REL. HUM. | -30 | -20 | -10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.7 | 0.9 | 1.0 | 1.0 | 1.0 | 0.8 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40 | 0.2 | 0.3 | 0.5 | 0.8 | 1.2 | 1.6 | 2.2 | 2.8 | 3.6 | 4.2 | 4.8 | 5.2 | 5.5 | 5.5 | 5.3 | 4.9 |
| 50 | 0.3 | 0.5 | 0.8 | 1.2 | 1.8 | 2.6 | 3.5 | 4.7 | 6.0 | 7.3 | 8.6 | 9.6 | 10.5 | 11.1 | 11.5 | 11.6 |
| 60 | 0.4 | 0.7 | 1.1 | 1.6 | 2.4 | 3.5 | 4.9 | 6.5 | 8.4 | 10.3 | 12.1 | 13.8 | 15.2 | 16.2 | 17.0 | 17.4 |
| 70 | 0.5 | 0.8 | 1.3 | 2.1 | 3.1 | 4.5 | 6.2 | 8.3 | 10.7 | 13.2 | 15.5 | 17.7 | 19.4 | 20.9 | 21.9 | 22.7 |
| 80 | 0.6 | 1.0 | 1.3 | 2.5 | 3.7 | 5.4 | 7.5 | 10.1 | 13.0 | 15.9 | 18.8 | 21.3 | 23.4 | 25.1 | 26.4 | 27.4 |
| 90 | 0.7 | 1.2 | 1.9 | 2.9 | 4.3 | 6.3 | 8.8 | 11.8 | 15.2 | 18.6 | 21.8 | 24.7 | 27.1 | 29.1 | 30.6 | 31.7 |
| 100 | 0.8 | 1.3 | 2.1 | 3.3 | 5.0 | 7.2 | 10.1 | 13.5 | 17.3 | 21.2 | 24.8 | 27.9 | 30.6 | 32.7 | 34.4 | 35.6 |

## 7B27, 7B27/2, 7B27A, 7B27A/3, 7B27/B1, 7B27/B3, 7B27/3
## 7B27/3B1, 7B27/3B1F, 7B27/3B3, 7B27/3F
## 7B27AE, 7B27E, 7B27E/B1, 7B27E/B3, 7B27E/F, 7B27E/B1F MC

| T2 DEG F<br>REL. HUM. | -30 | -20 | -10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40 | 0.2 | 0.3 | 0.5 | 0.7 | 1.0 | 1.4 | 1.8 | 2.3 | 2.9 | 3.3 | 3.7 | 3.9 | 3.9 | 3.8 | 3.4 | 2.9 |
| 50 | 0.3 | 0.5 | 0.7 | 1.1 | 1.6 | 2.3 | 3.2 | 4.2 | 5.3 | 6.4 | 7.4 | 8.2 | 8.9 | 9.3 | 9.5 | 9.4 |
| 60 | 0.4 | 0.6 | 1.0 | 1.5 | 2.3 | 3.3 | 4.5 | 5.9 | 7.6 | 9.3 | 10.9 | 12.2 | 13.4 | 14.3 | 14.9 | 15.2 |
| 70 | 0.5 | 0.8 | 1.3 | 2.0 | 2.9 | 4.2 | 5.8 | 7.7 | 9.9 | 12.1 | 14.1 | 16.0 | 17.6 | 18.8 | 19.7 | 20.3 |
| 80 | 0.6 | 1.0 | 1.5 | 2.4 | 3.5 | 5.1 | 7.1 | 9.5 | 12.1 | 14.7 | 17.3 | 19.6 | 21.5 | 23.0 | 24.1 | 25.0 |
| 90 | 0.7 | 1.1 | 1.8 | 2.8 | 4.2 | 6.0 | 8.4 | 11.2 | 14.2 | 17.4 | 20.3 | 22.9 | 25.1 | 26.8 | 28.2 | 29.2 |
| 100 | 0.8 | 1.3 | 2.1 | 3.2 | 4.8 | 6.9 | 9.6 | 12.8 | 16.3 | 19.9 | 23.1 | 26.0 | 28.4 | 30.4 | 32.0 | 33.1 |

**NOTE:**
BOTH SAC AND DAC MODELS.

1153148-10

***** FOR 7B ALL *****

Temperature Rise Values
Figure 1315 (Sheet 5)

## PERFORMANCE DERIVATIVES FOR ADJUSTING TO FAN SPEED OR THRUST (APPLY TO ALL CFM56-7B ENGINE MODELS)

| N1DR RPM | FNDR lbf | FNDR daN | WFDR lb/hr | WFDR kg/hr | EGTDR deg R | EGTDR deg K | N2DR RPM | W2DR lb/sec | W2DR kg/sec |
|---|---|---|---|---|---|---|---|---|---|
| 5360 | 28542 | 12696 | 11229 | 5093 | 2008 | 1116 | 14545 | 804 | 365 |
| 5300 | 28163 | 12528 | 10891 | 4940 | 1982 | 1101 | 14508 | 801 | 363 |
| 5250 | 27911 | 12415 | 10661 | 4836 | 1967 | 1093 | 14482 | 799 | 362 |
| 5200 | 27659 | 12303 | 10432 | 4732 | 1953 | 1085 | 14457 | 798 | 362 |
| 5150 | 27345 | 12164 | 10210 | 4631 | 1938 | 1077 | 14429 | 795 | 361 |
| 5100 | 26968 | 11996 | 9973 | 4524 | 1923 | 1068 | 14395 | 791 | 359 |
| 5050 | 26526 | 11800 | 9725 | 4411 | 1907 | 1060 | 14356 | 785 | 356 |
| 5000 | 26028 | 11578 | 9467 | 4294 | 1892 | 1051 | 14311 | 779 | 353 |
| 4950 | 25483 | 11336 | 9202 | 4174 | 1876 | 1042 | 14262 | 771 | 350 |
| 4900 | 24903 | 11077 | 8932 | 4052 | 1860 | 1033 | 14210 | 763 | 346 |
| 4850 | 24298 | 10808 | 8660 | 3928 | 1843 | 1024 | 14155 | 754 | 342 |
| 4800 | 23672 | 10530 | 8387 | 3804 | 1827 | 1015 | 14098 | 745 | 338 |
| 4750 | 23034 | 10246 | 8115 | 3681 | 1810 | 1006 | 14040 | 735 | 333 |
| 4700 | 22393 | 9961 | 7848 | 3560 | 1793 | 996 | 13981 | 725 | 329 |
| 4650 | 21757 | 9678 | 7587 | 3442 | 1777 | 987 | 13923 | 715 | 324 |
| 4600 | 21135 | 9401 | 7335 | 3327 | 1760 | 978 | 13866 | 706 | 320 |
| 4550 | 20552 | 9142 | 7103 | 3222 | 1745 | 970 | 13813 | 696 | 316 |
| 4500 | 19964 | 8881 | 6872 | 3117 | 1730 | 961 | 13764 | 687 | 312 |
| 4450 | 19389 | 8625 | 6647 | 3015 | 1714 | 952 | 13714 | 677 | 307 |
| 4400 | 18825 | 8374 | 6429 | 2916 | 1699 | 944 | 13664 | 668 | 303 |
| 4350 | 18273 | 8128 | 6217 | 2820 | 1683 | 935 | 13614 | 659 | 299 |
| 4300 | 17732 | 7888 | 6012 | 2727 | 1668 | 927 | 13564 | 649 | 295 |
| 4250 | 17203 | 7652 | 5813 | 2637 | 1653 | 918 | 13514 | 640 | 290 |
| 4200 | 16686 | 7422 | 5619 | 2549 | 1637 | 910 | 13464 | 631 | 286 |
| 4100 | 15688 | 6978 | 5253 | 2383 | 1607 | 893 | 13365 | 612 | 278 |
| 4000 | 14734 | 6554 | 4912 | 2228 | 1577 | 876 | 13266 | 594 | 270 |

HOW TO USE THE DERIVATIVE TABLE:

(A) TO COMPUTE ΔFN, ΔWF, ΔEGT, ΔN2, AND ΔW2:

1) ENTER TABLE AT N1K RATED FAN SPEED AND READ FNDR, WFDR, EGTDR, N2DR, AND W2DR.

2) ENTER TABLE AT N1R ACTUAL FAN SPEED AND READ FNDR, WFDR, EGTDR, N2DR, AND W2DR.

3) SUBTRACT FNDR, WFDR, EGTDR, N2DR, AND W2DR VALUES AT STEP 2 FROM THE CORRESPONDING VALUES OBTAINED AT STEP 1. THIS WILL PROVIDE ΔFN, ΔWF, ΔEGT, ΔN2, AND ΔW2.

(B) TO COMPUTE ΔWFFN:

1) ENTER THE TABLE AT FNK RATED THRUST AND FNK2 THRUST AND READ WFDR VALUES.

1153154-02

***** FOR 7B ALL *****

Performance Derivative to Adjust to Rated Fan speed or Rated Thrust for CFM56-7B

Figure 1316 (Sheet 1)

## PERFORMANCE DERIVATIVES FOR ADJUSTING TO FAN SPEED OR THRUST (APPLY TO ALL CFM56-7B ENGINE MODELS)

| N1DR RPM | FNDR lbf | FNDR daN | WFDR lb/hr | WFDR kg/hr | EGTDR deg R | EGTDR deg K | N2DR RPM | W2DR lb/sec | W2DR kg/sec |
|---|---|---|---|---|---|---|---|---|---|
| 3900 | 13824 | 6149 | 4592 | 2083 | 1548 | 860 | 13168 | 576 | 261 |
| 3800 | 12957 | 5764 | 4285 | 1944 | 1520 | 844 | 13071 | 559 | 253 |
| 3700 | 12134 | 5397 | 3996 | 1813 | 1493 | 829 | 12975 | 541 | 245 |
| 3600 | 11354 | 5050 | 3729 | 1691 | 1466 | 815 | 12881 | 524 | 238 |
| 3500 | 10616 | 4722 | 3485 | 1581 | 1441 | 801 | 12788 | 507 | 230 |
| 3400 | 9922 | 4413 | 3257 | 1477 | 1418 | 788 | 12698 | 491 | 223 |
| 3300 | 9277 | 4127 | 3044 | 1381 | 1397 | 776 | 12602 | 475 | 216 |
| 3200 | 8661 | 3853 | 2840 | 1288 | 1374 | 763 | 12484 | 459 | 208 |
| 3100 | 8070 | 3590 | 2649 | 1201 | 1353 | 752 | 12379 | 444 | 201 |
| 3000 | 7504 | 3338 | 2469 | 1120 | 1333 | 741 | 12284 | 428 | 194 |
| 2500 | 5036 | 2240 | 1741 | 790 | 1255 | 697 | 11870 | 352 | 160 |
| 2000 | 3128 | 1391 | 1224 | 555 | 1213 | 674 | 11314 | 278 | 126 |
| 1500 | 1724 | 767 | 858 | 389 | 1213 | 674 | 10286 | 205 | 93 |
| 1000 | 765 | 340 | 584 | 265 | 1253 | 696 | 8453 | 135 | 61 |

HOW TO USE THE DERIVATIVE TABLE:

(A) TO COMPUTE △FN, △WF, △EGT, △N2, AND △W2:

1) ENTER TABLE AT N1K RATED FAN SPEED AND READ FNDR, WFDR, EGTDR, N2DR, AND W2DR.
2) ENTER TABLE AT N1R ACTUAL FAN SPEED AND READ FNDR, WFDR, EGTDR, N2DR, AND W2DR.
3) SUBTRACT FNDR, WFDR, EGTDR, N2DR, AND W2DR VALUES AT STEP 2 FROM THE CORRESPONDING VALUES OBTAINED AT STEP 1. THIS WILL PROVIDE △FN, △WF, △EGT, △N2, AND △W2.

(B) TO COMPUTE △WFFN:

1) ENTER THE TABLE AT FNK RATED THRUST AND FNK2 THRUST AND READ WFDR VALUES.

1156329-02

***** FOR 7B ALL *****

Performance Derivative to Adjust to Rated Fan speed or Rated Thrust for CFM56-7B

Figure 1316 (Sheet 2)

## EGT SHUNT VALUES

| MODEL | EGT SHUNT KSHUNT1 | KSHUNT2 (DEG C) |
|---|---|---|
| 7B27AE | 1.0 | 12.0 |
| **ALL 7B27** | **1.0** | **0.0** |
| **ALL 7B27/B1** | **1.0** | **0.0** |
| ALL 7B27/B3 | 1.0 | 0.0 |
| **7B27A**, 7B27A/3 | **1.0** | **0.0** |
| **ALL 7B26** | **1.0** | **0.0** |
| **ALL 7B26/B2** | **1.0** | **0.0** |
| **ALL 7B26/B1** | **1.0** | **0.0** |
| **ALL 7B24** | **1.0** | **12.0** |
| **ALL 7B24/B1** | **1.0** | **0.0** |
| **ALL 7B22** | **1.0** | **34.0** |
| **ALL 7B22/B1** | **1.0** | **13.0** |
| **ALL 7B20** | **1.0** | **36.0** |

**NOTE:**
SAC, DAC, /3 AND E RATINGS MODELS.

1279959-01

***** FOR 7B ALL *****

EGT Shunt Values
Figure 1317

## INSTALLATION ADJUSTMENTS - THRUST (FN ADJ)

| N1R RPM | ATC LOSS | NACELLE PROBE LOSS | BELLMOUTH LOSS |
|---|---|---|---|
| 5300 | 0.9964 | 1.0000 | 1.0078 |
| 5250 | 0.9965 | 1.0000 | 1.0078 |
| 5200 | 0.9965 | 1.0000 | 1.0077 |
| 5175 | 0.9966 | 1.0000 | 1.0077 |
| 5150 | 0.9967 | 1.0000 | 1.0076 |
| 5125 | 0.9968 | 1.0000 | 1.0076 |
| 5100 | 0.9968 | 1.0000 | 1.0075 |
| 5050 | 0.9969 | 1.0000 | 1.0074 |
| 5000 | 0.9969 | 1.0000 | 1.0073 |
| 4950 | 0.9969 | 1.0000 | 1.0071 |
| 4900 | 0.9968 | 1.0000 | 1.0070 |
| 4850 | 0.9967 | 1.0000 | 1.0069 |
| 4800 | 0.9966 | 1.0000 | 1.0068 |
| 4750 | 0.9965 | 1.0000 | 1.0066 |
| 4700 | 0.9964 | 1.0000 | 1.0065 |
| 4650 | 0.9964 | 1.0000 | 1.0064 |
| 4600 | 0.9964 | 1.0000 | 1.0063 |
| 4550 | 0.9963 | 1.0000 | 1.0062 |
| 4500 | 0.9961 | 1.0000 | 1.0061 |
| 4450 | 0.9959 | 1.0000 | 1.0060 |
| 4400 | 0.9959 | 1.0000 | 1.0059 |

**NOTE:**

FN ADJ IS THE PRODUCT OF THE ADJUSTMENTS ABOVE.
TO OBTAIN ADJUSTMENTS, LINEARLY INTERPOLATE.

GSM-1153157-01-A

***** FOR 7B ALL *****

Installation Adjustments - Thrust (FN ADJ)
Figure 1318 (Sheet 1)

## INSTALLATION ADJUSTMENTS - THRUST (FN ADJ)

| N1R RPM | ATC LOSS | NACELLE PROBE LOSS | BELLMOUTH LOSS |
|---|---|---|---|
| 4350 | 0.9959 | 1.0000 | 1.0059 |
| 4300 | 0.9959 | 1.0000 | 1.0057 |
| 4250 | 0.9958 | 1.0000 | 1.0057 |
| 4200 | 0.9958 | 1.0000 | 1.0056 |
| 4100 | 0.9956 | 1.0000 | 1.0054 |
| 4000 | 0.9954 | 1.0000 | 1.0053 |
| 3900 | 0.9952 | 1.0000 | 1.0052 |
| 3800 | 0.9948 | 1.0000 | 1.0050 |
| 3700 | 0.9945 | 1.0000 | 1.0049 |
| 3600 | 0.9940 | 1.0000 | 1.0048 |
| 3500 | 0.9935 | 1.0000 | 1.0048 |
| 3400 | 0.9930 | 1.0000 | 1.0048 |
| 3300 | 0.9928 | 1.0000 | 1.0048 |
| 3200 | 0.9923 | 1.0000 | 1.0048 |
| 3100 | 0.9921 | 1.0000 | 1.0047 |
| 3000 | 0.9918 | 1.0000 | 1.0046 |
| 2900 | 0.9916 | 1.0000 | 1.0045 |
| 2800 | 0.9913 | 1.0000 | 1.0044 |
| 2600 | 0.9906 | 1.0000 | 1.0042 |
| 2500 | 0.9903 | 1.0000 | 1.0042 |
| 2400 | 0.9899 | 1.0000 | 1.0042 |

**NOTE:**
FN ADJ IS THE PRODUCT OF THE ADJUSTMENTS ABOVE.
TO OBTAIN ADJUSTMENTS, LINEARLY INTERPOLATE.

GSM-1153158-01-A

***** FOR 7B ALL *****

Installation Adjustments - Thrust (FN ADJ)
Figure 1318 (Sheet 2)

## INSTALLATION ADJUSTMENTS - THRUST (FN ADJ)

| N1R RPM | ATC LOSS | NACELLE PROBE LOSS | BELLMOUTH LOSS |
|---|---|---|---|
| 2300 | 0.9894 | 1.0000 | 1.0042 |
| 2200 | 0.9890 | 1.0000 | 1.0042 |
| 2100 | 0.9884 | 1.0000 | 1.0043 |
| 2000 | 0.9879 | 1.0000 | 1.0043 |
| 1900 | 0.9872 | 1.0000 | 1.0043 |
| 1800 | 0.9865 | 1.0000 | 1.0043 |
| 1548 | 0.9844 | 1.0000 | 1.0038 |
| 1204 | 0.9801 | 1.0000 | 1.0042 |
| 1000 | 0.9764 | 1.0000 | 1.0042 |

**NOTE:**
FN ADJ IS THE PRODUCT OF THE ADJUSTMENTS ABOVE.
TO OBTAIN ADJUSTMENTS, LINEARLY INTERPOLATE.

GSM-1156572-01-A

***** FOR 7B ALL *****

Installation Adjustments - Thrust (FN ADJ)
Figure 1318 (Sheet 3)

## INSTALLATION ADJUSTMENTS - FUEL FLOW (WF ADJ)

| N1R RPM | ATC LOSS | NACELLE PROBE LOSS | BELLMOUTH LOSS |
|---|---|---|---|
| 5300 | 0.9977 | 1.0000 | 1.0035 |
| 5250 | 0.9977 | 1.0000 | 1.0037 |
| 5200 | 0.9977 | 1.0000 | 1.0036 |
| 5175 | 0.9976 | 1.0000 | 1.0035 |
| 5150 | 0.9976 | 1.0000 | 1.0035 |
| 5125 | 0.9976 | 1.0000 | 1.0034 |
| 5100 | 0.9976 | 1.0000 | 1.0033 |
| 5050 | 0.9976 | 1.0000 | 1.0032 |
| 5000 | 0.9976 | 1.0000 | 1.0031 |
| 4950 | 0.9976 | 1.0000 | 1.0028 |
| 4900 | 0.9977 | 1.0000 | 1.0027 |
| 4850 | 0.9978 | 1.0000 | 1.0026 |
| 4800 | 0.9980 | 1.0000 | 1.0025 |
| 4750 | 0.9981 | 1.0000 | 1.0023 |
| 4700 | 0.9984 | 1.0000 | 1.0022 |
| 4650 | 0.9986 | 1.0000 | 1.0021 |
| 4600 | 0.9990 | 1.0000 | 1.0020 |
| 4550 | 0.9991 | 1.0000 | 1.0019 |
| 4500 | 0.9991 | 1.0000 | 1.0018 |
| 4450 | 0.9990 | 1.0000 | 1.0018 |
| 4400 | 0.9989 | 1.0000 | 1.0017 |

**NOTE:**
WF ADJ IS THE PRODUCT OF THE ADJUSTMENTS ABOVE.
TO OBTAIN ADJUSTMENTS, LINEARLY INTERPOLATE.

GSM-1153159-01-A

***** FOR 7B ALL *****

Installation Adjustments - Fuel Flow (WF ADJ)
Figure 1318 (Sheet 4)

## INSTALLATION ADJUSTMENTS - FUEL FLOW (WF ADJ)

| N1R RPM | ATC LOSS | NACELLE PROBE LOSS | BELLMOUTH LOSS |
|---|---|---|---|
| 4350 | 0.9987 | 1.0000 | 1.0016 |
| 4300 | 0.9987 | 1.0000 | 1.0015 |
| 4250 | 0.9986 | 1.0000 | 1.0015 |
| 4200 | 0.9986 | 1.0000 | 1.0013 |
| 4100 | 0.9986 | 1.0000 | 1.0012 |
| 4000 | 0.9987 | 1.0000 | 1.0012 |
| 3900 | 0.9989 | 1.0000 | 1.0010 |
| 3800 | 0.9991 | 1.0000 | 1.0008 |
| 3700 | 0.9994 | 1.0000 | 1.0007 |
| 3600 | 0.9996 | 1.0000 | 1.0006 |
| 3500 | 0.9997 | 1.0000 | 1.0005 |
| 3400 | 0.9998 | 1.0000 | 1.0005 |
| 3300 | 0.9998 | 1.0000 | 1.0006 |
| 3200 | 0.9998 | 1.0000 | 1.0006 |
| 3100 | 0.9998 | 1.0000 | 1.0004 |
| 3000 | 0.9996 | 1.0000 | 1.0004 |
| 2900 | 0.9991 | 1.0000 | 1.0004 |
| 2800 | 0.9987 | 1.0000 | 1.0004 |
| 2600 | 0.9982 | 1.0000 | 1.0002 |
| 2500 | 0.9981 | 1.0000 | 1.0001 |
| 2400 | 0.9981 | 1.0000 | 1.0001 |

**NOTE:**
WF ADJ IS THE PRODUCT OF THE ADJUSTMENTS ABOVE.
TO OBTAIN ADJUSTMENTS, LINEARLY INTERPOLATE.

GSM-1153160-01-A

***** FOR 7B ALL *****

Installation Adjustments - Fuel Flow (WF ADJ)
Figure 1318 (Sheet 5)

## INSTALLATION ADJUSTMENTS - FUEL FLOW (WF ADJ)

| N1R RPM | ATC LOSS | NACELLE PROBE LOSS | BELLMOUTH LOSS |
|---|---|---|---|
| 2300 | 0.9983 | 1.0000 | 1.0001 |
| 2200 | 0.9985 | 1.0000 | 1.0001 |
| 2100 | 0.9988 | 1.0000 | 1.0003 |
| 2000 | 0.9993 | 1.0000 | 1.0003 |
| 1900 | 0.9998 | 1.0000 | 1.0001 |
| 1800 | 1.0004 | 1.0000 | 1.0002 |
| 1548 | 1.0020 | 1.0000 | 1.0000 |
| 1204 | 1.0032 | 1.0000 | 1.0000 |
| 1000 | 1.0018 | 1.0000 | 1.0000 |

**NOTE:**
WF ADJ IS THE PRODUCT OF THE ADJUSTMENTS ABOVE.
TO OBTAIN ADJUSTMENTS, LINEARLY INTERPOLATE.

GSM-1156571-01-A

***** FOR 7B ALL *****

Installation Adjustments - Fuel Flow (WF ADJ)
Figure 1318 (Sheet 6)

## INSTALLATION ADJUSTMENTS - CORE SPEED (N2 ADJ)

| N1R RPM | ATC LOSS | NACELLE PROBE LOSS | BELLMOUTH LOSS |
|---|---|---|---|
| 5300 | 1.0004 | 1.0000 | 0.9999 |
| 5250 | 1.0004 | 1.0000 | 0.9999 |
| 5200 | 1.0004 | 1.0000 | 1.0000 |
| 5175 | 1.0006 | 1.0000 | 0.9999 |
| 5150 | 1.0007 | 1.0000 | 0.9999 |
| 5125 | 1.0008 | 1.0000 | 0.9999 |
| 5100 | 1.0009 | 1.0000 | 0.9999 |
| 5050 | 1.0009 | 1.0000 | 0.9999 |
| 5000 | 1.0008 | 1.0000 | 0.9999 |
| 4950 | 1.0006 | 1.0000 | 0.9999 |
| 4900 | 1.0004 | 1.0000 | 0.9999 |
| 4850 | 1.0001 | 1.0000 | 0.9999 |
| 4800 | 0.9999 | 1.0000 | 0.9999 |
| 4750 | 0.9998 | 1.0000 | 0.9999 |
| 4700 | 0.9997 | 1.0000 | 0.9999 |
| 4650 | 0.9998 | 1.0000 | 0.9999 |
| 4600 | 0.9999 | 1.0000 | 0.9999 |
| 4550 | 1.0000 | 1.0000 | 0.9999 |
| 4500 | 1.0000 | 1.0000 | 0.9999 |
| 4450 | 1.0001 | 1.0000 | 0.9999 |
| 4400 | 1.0002 | 1.0000 | 0.9999 |

**NOTE:**
N2 ADJ IS THE PRODUCT OF THE ADJUSTMENTS ABOVE.
TO OBTAIN ADJUSTMENTS, LINEARLY INTERPOLATE.

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***** FOR 7B ALL *****

Installation Adjustments - Core Speed (N2 ADJ)
Figure 1318 (Sheet 7)

## INSTALLATION ADJUSTMENTS - CORE SPEED (N2 ADJ)

| N1R RPM | ATC LOSS | NACELLE PROBE LOSS | BELLMOUTH LOSS |
|---|---|---|---|
| 4350 | 1.0002 | 1.0000 | 0.9999 |
| 4300 | 1.0003 | 1.0000 | 0.9999 |
| 4250 | 1.0004 | 1.0000 | 0.9999 |
| 4200 | 1.0004 | 1.0000 | 0.9999 |
| 4100 | 1.0006 | 1.0000 | 0.9999 |
| 4000 | 1.0006 | 1.0000 | 0.9999 |
| 3900 | 1.0007 | 1.0000 | 0.9999 |
| 3800 | 1.0007 | 1.0000 | 0.9999 |
| 3700 | 1.0006 | 1.0000 | 0.9999 |
| 3600 | 1.0005 | 1.0000 | 1.0000 |
| 3500 | 1.0003 | 1.0000 | 1.0000 |
| 3400 | 1.0004 | 1.0000 | 1.0000 |
| 3300 | 1.0006 | 1.0000 | 1.0000 |
| 3200 | 1.0009 | 1.0000 | 1.0000 |
| 3100 | 1.0011 | 1.0000 | 1.0000 |
| 3000 | 1.0012 | 1.0000 | 1.0000 |
| 2900 | 1.0012 | 1.0000 | 1.0000 |
| 2800 | 1.0011 | 1.0000 | 1.0000 |
| 2600 | 1.0008 | 1.0000 | 1.0000 |
| 2500 | 1.0005 | 1.0000 | 1.0000 |
| 2400 | 1.0002 | 1.0000 | 1.0000 |

**NOTE:**
N2 ADJ IS THE PRODUCT OF THE ADJUSTMENTS ABOVE.
TO OBTAIN ADJUSTMENTS, LINEARLY INTERPOLATE.

GSM-1153162-01-A

***** FOR 7B ALL *****

Installation Adjustments - Core Speed (N2 ADJ)
Figure 1318 (Sheet 8)

## INSTALLATION ADJUSTMENTS - CORE SPEED (N2 ADJ)

| N1R RPM | ATC LOSS | NACELLE PROBE LOSS | BELLMOUTH LOSS |
|---|---|---|---|
| 2300 | 0.9999 | 1.0000 | 1.0000 |
| 2200 | 0.9995 | 1.0000 | 1.0000 |
| 2100 | 0.9992 | 1.0000 | 1.0001 |
| 2000 | 0.9989 | 1.0000 | 1.0001 |
| 1900 | 0.9987 | 1.0000 | 1.0001 |
| 1800 | 0.9985 | 1.0000 | 1.0001 |
| 1548 | 0.9984 | 1.0000 | 1.0000 |
| 1204 | 0.9996 | 1.0000 | 1.0000 |
| 1000 | 1.0018 | 1.0000 | 1.0000 |

**NOTE:**

N2 ADJ IS THE PRODUCT OF THE ADJUSTMENTS ABOVE.
TO OBTAIN ADJUSTMENTS, LINEARLY INTERPOLATE.

GSM-1156570-01-A

***** FOR 7B ALL *****

Installation Adjustments - Core Speed (N2 ADJ)
Figure 1318 (Sheet 9)

## INSTALLATION ADJUSTMENTS - EGT (EGT ADJ)

| N1R RPM | ATC LOSS | NACELLE PROBE LOSS | BELLMOUTH LOSS |
|---|---|---|---|
| 5300 | 0.9980 | 1.0000 | 0.9996 |
| 5250 | 0.9979 | 1.0000 | 0.9996 |
| 5200 | 0.9978 | 1.0000 | 0.9997 |
| 5175 | 0.9977 | 1.0000 | 0.9996 |
| 5150 | 0.9976 | 1.0000 | 0.9997 |
| 5125 | 0.9975 | 1.0000 | 0.9996 |
| 5100 | 0.9975 | 1.0000 | 0.9996 |
| 5050 | 0.9974 | 1.0000 | 0.9996 |
| 5000 | 0.9974 | 1.0000 | 0.9995 |
| 4950 | 0.9974 | 1.0000 | 0.9995 |
| 4900 | 0.9975 | 1.0000 | 0.9995 |
| 4850 | 0.9976 | 1.0000 | 0.9995 |
| 4800 | 0.9977 | 1.0000 | 0.9995 |
| 4750 | 0.9979 | 1.0000 | 0.9996 |
| 4700 | 0.9980 | 1.0000 | 0.9995 |
| 4650 | 0.9982 | 1.0000 | 0.9995 |
| 4600 | 0.9984 | 1.0000 | 0.9995 |
| 4550 | 0.9984 | 1.0000 | 0.9995 |
| 4500 | 0.9984 | 1.0000 | 0.9995 |
| 4450 | 0.9983 | 1.0000 | 0.9996 |
| 4400 | 0.9981 | 1.0000 | 0.9995 |

**NOTE:**
EGT ADJ IS THE PRODUCT OF THE ADJUSTMENTS ABOVE.
TO OBTAIN ADJUSTMENTS, LINEARLY INTERPOLATE.

GSM-1153163-01-A

***** FOR 7B ALL *****

Installation Adjustments - EGT (EGT ADJ)
Figure 1318 (Sheet 10)

## INSTALLATION ADJUSTMENTS - EGT (EGT-ADJ)

| N1R RPM | ATC LOSS | NACELLE PROBE LOSS | BELLMOUTH LOSS |
|---|---|---|---|
| 4350 | 0.9981 | 1.0000 | 0.9996 |
| 4300 | 0.9980 | 1.0000 | 0.9996 |
| 4250 | 0.9981 | 1.0000 | 0.9996 |
| 4200 | 0.9981 | 1.0000 | 0.9996 |
| 4100 | 0.9984 | 1.0000 | 0.9996 |
| 4000 | 0.9987 | 1.0000 | 0.9997 |
| 3900 | 0.9991 | 1.0000 | 0.9996 |
| 3800 | 0.9994 | 1.0000 | 0.9996 |
| 3700 | 0.9997 | 1.0000 | 0.9996 |
| 3600 | 0.9998 | 1.0000 | 0.9996 |
| 3500 | 0.9998 | 1.0000 | 0.9995 |
| 3400 | 0.9998 | 1.0000 | 0.9996 |
| 3300 | 0.9997 | 1.0000 | 0.9996 |
| 3200 | 0.9995 | 1.0000 | 0.9997 |
| 3100 | 0.9994 | 1.0000 | 0.9994 |
| 3000 | 0.9991 | 1.0000 | 0.9997 |
| 2900 | 0.9986 | 1.0000 | 0.9997 |
| 2800 | 0.9982 | 1.0000 | 0.9998 |
| 2600 | 0.9980 | 1.0000 | 0.9997 |
| 2500 | 0.9981 | 1.0000 | 0.9997 |
| 2400 | 0.9984 | 1.0000 | 0.9996 |

**NOTE:**

EGT ADJ IS THE PRODUCT OF THE ADJUSTMENTS ABOVE.
TO OBTAIN ADJUSTMENTS, LINEARLY INTERPOLATE.

GSM-1153164-01-A

***** FOR 7B ALL *****

Installation Adjustments - EGT (EGT ADJ)
Figure 1318 (Sheet 11)

## INSTALLATION ADJUSTMENTS - EGT (EGT ADJ)

| N1R RPM | ATC LOSS | NACELLE PROBE LOSS | BELLMOUTH LOSS |
|---|---|---|---|
| 2300 | 0.9988 | 1.0000 | 0.9997 |
| 2200 | 0.9992 | 1.0000 | 0.9997 |
| 2100 | 0.9997 | 1.0000 | 0.9997 |
| 2000 | 1.0002 | 1.0000 | 0.9999 |
| 1900 | 1.0008 | 1.0000 | 0.9997 |
| 1800 | 1.0012 | 1.0000 | 0.9998 |
| 1548 | 1.0021 | 1.0000 | 0.9998 |
| 1204 | 1.0018 | 1.0000 | 0.9999 |
| 1000 | 1.0005 | 1.0000 | 0.9999 |

**NOTE:**

EGT ADJ IS THE PRODUCT OF THE ADJUSTMENTS ABOVE.
TO OBTAIN ADJUSTMENTS, LINEARLY INTERPOLATE.

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***** FOR 7B ALL *****

Installation Adjustments - EGT (EGT ADJ)
Figure 1318 (Sheet 12)

## INSTALLATION ADJUSTMENTS - W2AR (W2 ADJ)

| N1R RPM | ATC LOSS | NACELLE PROBE LOSS | BELLMOUTH LOSS |
|---|---|---|---|
| 5300 | 1.0005 | 1.0000 | 1.0000 |
| 5250 | 1.0005 | 1.0000 | 1.0000 |
| 5200 | 1.0005 | 1.0000 | 1.0000 |
| 5175 | 1.0005 | 1.0000 | 1.0000 |
| 5150 | 1.0005 | 1.0000 | 1.0000 |
| 5125 | 1.0005 | 1.0000 | 1.0000 |
| 5100 | 1.0005 | 1.0000 | 1.0000 |
| 5050 | 1.0004 | 1.0000 | 1.0000 |
| 5000 | 1.0002 | 1.0000 | 1.0001 |
| 4950 | 1.0000 | 1.0000 | 1.0002 |
| 4900 | 0.9998 | 1.0000 | 1.0002 |
| 4850 | 0.9996 | 1.0000 | 1.0003 |
| 4800 | 0.9993 | 1.0000 | 1.0004 |
| 4750 | 0.9991 | 1.0000 | 1.0004 |
| 4700 | 0.9988 | 1.0000 | 1.0005 |
| 4650 | 0.9986 | 1.0000 | 1.0005 |
| 4600 | 0.9984 | 1.0000 | 1.0005 |
| 4550 | 0.9983 | 1.0000 | 1.0006 |
| 4500 | 0.9981 | 1.0000 | 1.0006 |
| 4450 | 0.9979 | 1.0000 | 1.0006 |
| 4400 | 0.9978 | 1.0000 | 1.0007 |

**NOTE:**
W2 ADJ IS THE PRODUCT OF THE ADJUSTMENTS ABOVE.
TO OBTAIN ADJUSTMENTS, LINEARLY INTERPOLATE.

GSM-1153165-01-A

***** FOR 7B ALL *****

Installation Adjustments - W2AR (W2 ADJ)
Figure 1318 (Sheet 13)

## INSTALLATION ADJUSTMENTS - W2AR (W2 ADJ)

| N1R RPM | ATC LOSS | NACELLE PROBE LOSS | BELLMOUTH LOSS |
|---|---|---|---|
| 4350 | 0.9977 | 1.0000 | 1.0007 |
| 4300 | 0.9976 | 1.0000 | 1.0008 |
| 4250 | 0.9975 | 1.0000 | 1.0007 |
| 4200 | 0.9974 | 1.0000 | 1.0008 |
| 4100 | 0.9972 | 1.0000 | 1.0008 |
| 4000 | 0.9970 | 1.0000 | 1.0009 |
| 3900 | 0.9967 | 1.0000 | 1.0010 |
| 3800 | 0.9965 | 1.0000 | 1.0010 |
| 3700 | 0.9963 | 1.0000 | 1.0010 |
| 3600 | 0.9961 | 1.0000 | 1.0011 |
| 3500 | 0.9958 | 1.0000 | 1.0011 |
| 3400 | 0.9956 | 1.0000 | 1.0012 |
| 3300 | 0.9954 | 1.0000 | 1.0013 |
| 3200 | 0.9953 | 1.0000 | 1.0013 |
| 3100 | 0.9953 | 1.0000 | 1.0013 |
| 3000 | 0.9953 | 1.0000 | 1.0014 |
| 2900 | 0.9953 | 1.0000 | 1.0014 |
| 2800 | 0.9952 | 1.0000 | 1.0014 |
| 2600 | 0.9952 | 1.0000 | 1.0015 |
| 2500 | 0.9952 | 1.0000 | 1.0015 |
| 2400 | 0.9953 | 1.0000 | 1.0015 |

**NOTE:**

W2 ADJ IS THE PRODUCT OF THE ADJUSTMENTS ABOVE.
TO OBTAIN ADJUSTMENTS, LINEARLY INTERPOLATE.

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***** FOR 7B ALL *****

Installation Adjustments - W2AR (W2 ADJ)
Figure 1318 (Sheet 14)

## INSTALLATION ADJUSTMENTS - W2AR (W2 ADJ)

| N1R RPM | ATC LOSS | NACELLE PROBE LOSS | BELLMOUTH LOSS |
|---|---|---|---|
| 2300 | 0.9953 | 1.0000 | 1.0016 |
| 2200 | 0.9953 | 1.0000 | 1.0016 |
| 2100 | 0.9953 | 1.0000 | 1.0017 |
| 2000 | 0.9954 | 1.0000 | 1.0018 |
| 1900 | 0.9954 | 1.0000 | 1.0018 |
| 1800 | 0.9955 | 1.0000 | 1.0018 |
| 1548 | 0.9956 | 1.0000 | 1.0018 |
| 1204 | 0.9957 | 1.0000 | 1.0019 |
| 1000 | 0.9956 | 1.0000 | 1.0019 |

**NOTE:**
W2 ADJ IS THE PRODUCT OF THE ADJUSTMENTS ABOVE.
TO OBTAIN ADJUSTMENTS, LINEARLY INTERPOLATE.

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***** FOR 7B ALL *****

Installation Adjustments - W2AR (W2 ADJ)
Figure 1318 (Sheet 15)

## INSTALLATION ADJUSTMENTS FOR CSD OIL COOLER

| N1R (RPM) | FN ADJ | WF ADJ | EGT ADJ | N2 ADJ | W2AR ADJ |
|---|---|---|---|---|---|
| 5300 | 1.0000 | 0.9977 | 0.9990 | 1.0000 | 1.0002 |
| 5244 | 1.0000 | 0.9978 | 0.9991 | 1.0000 | 1.0003 |
| 5084 | 1.0004 | 0.9982 | 0.9993 | 1.0000 | 1.0006 |
| 5044 | 1.0005 | 0.9982 | 0.9994 | 1.0000 | 1.0007 |
| 4878 | 1.0020 | 0.9994 | 1.0000 | 1.0000 | 1.0014 |
| 4767 | 1.0024 | 0.9996 | 1.0000 | 1.0000 | 1.0016 |
| 4755 | 1.0024 | 0.9996 | 1.0000 | 1.0000 | 1.0016 |
| 4723 | 1.0025 | 0.9997 | 1.0000 | 1.0000 | 1.0017 |
| 4585 | 1.0028 | 0.9998 | 1.0000 | 1.0000 | 1.0018 |
| 4489 | 1.0031 | 1.0000 | 1.0000 | 1.0000 | 1.0019 |
| 4427 | 1.0032 | 1.0000 | 1.0000 | 1.0000 | 1.0020 |
| 3713 | 1.0040 | 1.0000 | 1.0000 | 1.0000 | 1.0023 |

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***** FOR 7B ALL *****

Installation Adjustments - CSD Oil Cooler
Figure 1318 (Sheet 16)

## BELLMOUTH FLOW COEFFICIENTS

| PT2/PS2W PRESSURE RATIO | BELLMOUTH FLOW COEFFICIENT BMCFWX |
|---|---|
| 1.00 | 0.9599 |
| 1.05 | 0.9638 |
| 1.10 | 0.9671 |
| 1.15 | 0.9702 |
| 1.20 | 0.9731 |
| 1.25 | 0.9758 |
| 1.30 | 0.9784 |
| 1.35 | 0.9808 |
| 1.40 | 0.9830 |
| 1.45 | 0.9851 |
| 1.50 | 0.9869 |

WHERE:

PT2 = INLET TOTAL PRESSURE
PS2W = AVERAGE WALL STATIC PRESSURE

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***** FOR 7B ALL *****

Bellmouth Flow Coefficients
Figure 1319

## CFM56-7B FADEC N1 MODIFIER LEVELS (FOR SOFTWARE VERSION 7.B.J THROUGH 7.B.U)

| THRUST MARGIN | | MODIFIER | | | | |
|---|---|---|---|---|---|---|
| EQUAL TO OR GREATER THAN | BUT LESS THAN | 7B27 7B27/B1 7B27/B3 MOD LEVEL | 7B26 7B26/B1 MOD LEVEL | 7B24 7B24/B1 MOD LEVEL | 7B22 7B22/B1 MOD LEVEL | 7B20 MOD LEVEL |
| 0% | 1.399% | 0 | 0 | 0 | 0 | 0 |
| 1.4% | 1.799% | 1 | 1 | 0 | 0 | 0 |
| 1.8% | 2.199% | 2 | 2 | 1 | 1 | 0 |
| 2.2% | 2.599% | 3 | 3 | 2 | 2 | 1 |
| 2.6% | 2.999% | 4 | 4 | 3 | 3 | 2 |
| 3.0% | 3.399% | 5 | 5 | 4 | 4 | 3 |
| 3.4% | 3.799% | 6 | 6 | 5 | 5 | 4 |
| 3.8% | 4.199% | 7 | 7 | 6 | 6 | 5 |
| 4.2% | 4.599% | 7 | 7 | 7 | 7 | 6 |
| 4.6% | | 7 | 7 | 7 | 7 | 7 |

**NOTE:**
FOR SAC/DAC AND /3 RATINGS MODELS.

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***** FOR 7B ALL *****

CFM56-7B FADEC N1 Modifer Levels
Figure 1320 (Sheet 1)

## CFM56-7B FADEC N1 MODIFIER LEVELS (FOR SOFTWARE VERSION 7.B.V AND UP)

| THRUST MARGIN | | MODIFIER | | | | |
|---|---|---|---|---|---|---|
| EQUAL TO OR GREATER THAN | BUT LESS THAN | 7B27 7B27/B1 7B27/B3 MOD LEVEL | 7B26 7B26/B1 MOD LEVEL | 7B24 7B24/B1 MOD LEVEL | 7B22 7B22/B1 MOD LEVEL | 7B20 MOD LEVEL |
| 0% | 1.399% | 0 | 0 | 0 | 0 | 0 |
| 1.4% | 1.799% | 1 | 1 | 0 | 0 | 0 |
| 1.8% | 2.199% | 2 | 2 | 0 | 0 | 0 |
| 2.2% | 2.599% | 3 | 3 | 0 | 0 | 0 |
| 2.6% | 2.999% | 4 | 4 | 1 | 1 | 1 |
| 3.0% | 3.399% | 5 | 5 | 2 | 2 | 2 |
| 3.4% | 3.799% | 6 | 6 | 3 | 3 | 3 |
| 3.8% | 4.199% | 7 | 7 | 4 | 4 | 4 |
| 4.2% | 4.599% | 7 | 7 | 5 | 5 | 5 |
| 4.6% | 4.999% | 7 | 7 | 6 | 6 | 6 |
| 5.0% | | 7 | 7 | 7 | 7 | 7 |

**NOTE:**
FOR SAC/DAC, /3 AND E RATINGS MODELS.

1355921-00

***** FOR 7B ALL *****

CFM56-7B FADEC N1 Modifer Levels
Figure 1320 (Sheet 2)

## CFM56-7B N1K TRIM LEVELS (RPM)

## FADEC CORRECTED INDICATED FAN SPEED

| MODIFIER LEVEL | 0 | 4000 | 4431 | 4493 | 4607 | 4746 | 4777 | 4790 | 4900 | 5000 | 5081 | 5229 | 5400 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 6 | 7 | 7 | 7 | 7 | 7 | 8 | 10 | 12 | 12 | 12 |
| 2 | 0 | 0 | 12 | 13 | 13 | 13 | 14 | 14 | 16 | 19 | 23 | 23 | 23 |
| 3 | 0 | 0 | 18 | 20 | 20 | 20 | 21 | 21 | 24 | 29 | 35 | 35 | 35 |
| 4 | 0 | 0 | 24 | 27 | 27 | 27 | 28 | 28 | 32 | 39 | 46 | 46 | 46 |
| 5 | 0 | 0 | 29 | 33 | 33 | 33 | 34 | 35 | 40 | 48 | 57 | 57 | 57 |
| 6 | 0 | 0 | 34 | 39 | 39 | 39 | 40 | 40 | 46 | 56 | 67 | 67 | 67 |
| 7 | 0 | 0 | 39 | 44 | 44 | 44 | 45 | 46 | 53 | 63 | 76 | 76 | 76 |

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***** FOR 7B ALL *****

CFM56-7B N1K Trim Levels
Figure 1321

**ADJUST THE HOT DAY EGT MARGIN TO MAKE ALLOWANCES FOR INITIAL ON-WING INSTALLATION LOSSES.**

| WORKSCOPE LEVEL | Δ EGTM |
|---|---|
| A. FOR ENGINES WITH A PERFORMANCE RESTORATION OR A FULL OVERHAUL WORKSCOPE WHICH INCLUDES BOTH HPC AND HPT BLADES AND SEALS CLEARANCE RESTORATION. | + 5° C |
| B. FOR ENGINES WITH A WORKSCOPE FALLING BETWEEN A. AND C. | + 8° C |
| C. FOR ENGINES THAT ARE FIELD RETURN WITH NO FLOWPATH RESTORATION, I.E., ENGINES THAT ARE INBOUND TESTED OR THAT HAVE EXTERNAL CHANGES (EX: GEARBOX REPLACEMENT), VIBES FIX, OR INSPECTIONS. | + 10° C |

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***** FOR 7B ALL *****

Hot Day EGT Margin Adjustment
Figure 1322