



FLIGHT CREW OPERATING MANUAL

CRUISE TABLE CF6-80C2D1F ENGINES

.82 MACH CRUISE

KEY
REQUIRED %N ₁
EGT (DEG C)
%N ₂
FUEL FLOW/ENGINE (KG/HR)
INDICATED AIRSPEED (KT)
TAT (DEG C)

3 ENGINES OPERATING ISA °C TEMPERATURE				ONE A/C PACK PER OPERATING ENGINE ICE PROTECTION OFF														3 ENGINES OPERATING ISA °C TEMPERATURE			
PR ALT STD SAT TAS	GROSS WEIGHT (1000 KG)																				
	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290.					
43,000 -56.5 470	89.4	90.8	92.5	94.7	97.9																
	582	599	617	639	670																
	94.4	95.1	95.8	96.8	98.2																
	1526	1620	1732	1878	2080																
	232	232	232	232	232																
	-27	-27	-27	-27	-27																
41,000 -56.5 470	87.7	88.9	90.2	91.5	93.2	95.4	98.6														
	564	577	591	607	625	647	677														
	93.6	94.1	94.7	95.4	96.2	97.2	98.4														
	1561	1638	1726	1826	1950	2109	2329														
	243	243	243	243	243	243	243														
	-27	-27	-27	-27	-27	-27	-27														
39,000 -56.5 470	86.3	87.3	88.4	89.5	90.7	92.0	93.5	95.6	98.6												
	548	559	571	584	597	612	628	649	677												
	93.0	93.4	93.9	94.4	95.0	95.6	96.3	97.3	98.4												
	1615	1681	1754	1836	1928	2034	2164	2328	2550												
	255	255	255	255	255	255	255	255	255												
	-27	-27	-27	-27	-27	-27	-27	-27	-27												
37,000 -56.5 470	85.1	86.0	86.9	87.8	88.8	89.8	90.9	92.1	93.5	95.4	97.9										
	535	545	555	565	576	587	600	613	628	647	671										
	92.5	92.8	93.2	93.6	94.0	94.5	95.1	95.7	96.3	97.2	98.2										
	1682	1742	1806	1875	1952	2036	2131	2238	2369	2530	2739										
	267	267	267	267	267	267	267	267	267	267	267										
	-27	-27	-27	-27	-27	-27	-27	-27	-27	-27	-27										
35,000 -54.3 473	84.5	85.2	86.0	86.8	87.6	88.5	89.4	90.3	91.3	92.4	93.6	95.3	97.3								
	531	539	548	557	566	576	586	597	608	620	634	650	670								
	92.5	92.8	93.1	93.5	93.8	94.2	94.6	95.1	95.5	96.1	96.7	97.4	98.3								
	1774	1828	1886	1949	2015	2086	2165	2251	2346	2452	2580	2734	2924								
	279	279	279	279	279	279	279	279	279	279	279	279	279								
	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25								
33,000 -50.4 477	84.3	85.0	85.6	86.3	87.0	87.8	88.5	89.4	90.2	91.0	91.9	92.9	94.0	95.5	97.8						
	536	542	550	557	565	574	582	592	601	611	621	632	644	660	683						
	91.2	93.2	93.5	93.8	94.1	94.4	94.7	95.1	95.5	95.9	96.3	96.8	97.3	98.0	99.0						
	1892	1941	1994	2051	2111	2176	2243	2317	2397	2483	2578	2683	2805	2965	3203						
	292	292	292	292	292	292	292	292	292	292	292	292	292	292	292						
	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20						
31,000 -46.4 481	84.3	84.8	85.4	86.0	86.6	87.3	87.9	88.6	89.3	90.1	90.8	91.6	92.4	93.4	94.6	96.3					
	543	548	553	559	566	574	581	589	597	606	614	623	633	644	658	675					
	91.7	91.9	94.0	94.2	94.5	94.7	95.0	95.3	95.6	95.9	96.3	96.7	97.1	97.5	98.1	98.9					
	2026	2070	2118	2170	2225	2283	2346	2411	2480	2554	2635	2721	2814	2926	3079	3268					
	306	306	306	306	306	306	306	306	306	306	306	306	306	306	306	306					
	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16					

ISA DEV. CORRECTION: INCREASE/DECREASE PER 5°C ABOVE/BELOW STD SAT

%N ₁	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
FF/ENG	27	27	28	29	30	31	32	33	34	35	36	37	38	40	42	45
TAS	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

FOR ENGINE ICE PROTECTION ON: INCREASE FUEL FLOW BY 2.0%.

FOR ENGINE AND AIRFRAME ICE PROTECTION ON: INCREASE FUEL FLOW BY 4.0%.

MD-11

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CRUISE TABLE CF6-80C2D1F ENGINES

.82 MACH CRUISE

KEY	
REQUIRED %N ₁	
EGT (DEG C)	
%N ₂	
FUEL FLOW/ENGINE (KG/HR)	
INDICATED AIRSPEED (KT)	
TAT (DEG C)	

3 ENGINES OPERATING ISA °C TEMPERATURE				ONE A/C PACK PER OPERATING ENGINE ICE PROTECTION OFF												3 ENGINES OPERATING ISA °C TEMPERATURE			
PR ALT STD SAT TAS	GROSS WEIGHT (1000 KG)																		
	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290			
29,000 -42.5 485	84.3	84.8	85.3	85.9	86.4	86.9	87.5	88.1	88.7	89.4	90.0	90.7	91.4	92.2	93.1	94.1			
	551	555	559	564	569	575	582	589	596	603	611	619	626	635	646	658			
	92.4	92.4	92.7	92.9	94.9	95.1	95.4	95.6	95.9	96.1	96.4	96.7	97.0	97.4	97.9	98.4			
	2182	2223	2267	2313	2363	2417	2474	2534	2598	2664	2734	2808	2887	2979	3096	3227			
	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319			
	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11			
27,000 -38.5 489	84.5	84.9	85.3	85.8	86.3	86.8	87.3	87.8	88.3	88.9	89.4	90.0	90.6	91.3	92.0	92.9			
	560	563	567	571	575	579	584	590	597	603	610	616	623	631	640	649			
	92.8	93.0	93.1	93.4	93.6	95.0	95.2	95.4	95.6	95.9	96.1	96.3	96.6	96.9	97.2	97.6			
	2354	2392	2433	2476	2522	2570	2623	2678	2736	2797	2862	2928	2998	3077	3173	3280			
	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333	333			
	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7			
25,000 -34.5 494	84.7	85.0	85.4	85.8	86.2	86.7	87.1	87.6	88.1	88.5	89.0	89.5	90.1	90.6	91.3	92.0			
	569	572	575	579	582	585	589	594	599	604	610	616	622	629	636	644			
	93.4	93.5	93.7	93.9	94.0	94.2	94.4	94.6	94.8	95.0	95.2	95.5	95.7	95.9	96.2	96.5			
	2549	2585	2623	2663	2705	2750	2797	2847	2900	2956	3015	3077	3142	3212	3294	3385			
	347	347	347	347	347	347	347	347	347	347	347	347	347	347	347	347			
	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2			

ISA DEV. CORRECTION: INCREASE/DECREASE PER 5°C ABOVE/BELOW STD SAT

%N ₁	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
FF/ENG	27	27	28	29	30	31	32	33	34	35	36	37	38	40	42	45
TAS	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

FOR ENGINE ICE PROTECTION ON: INCREASE FUEL FLOW BY 2.0%.

FOR ENGINE AND AIRFRAME ICE PROTECTION ON: INCREASE FUEL FLOW BY 4.0%.