Carrier TRANSICOLD — United Technologies

APX™ CONTROL SYSTEM

All alarms should be reported on a daily basis. Also, all alarms should be recorded prior to being cleared.

The information provided herein is a recommendation only. Always follow your company's guidelines whenever an alarm occurs.

Whenever and asterisk (*) appears, that alarm can be reset by placing the START/RUN – OFF switch in the OFF position and then back in the START/RUN POSITION.

GREEN = Notification Alarm
YELLOW = Caution Alarm
RED = Shut Down Alarm (or Alarm Only, as Configured)

NO.	MESSAGE	DESCRIPTION
DRIVER ALARMS		
00001	Low Fuel Level Warning	Add fuel, alarm will clear.
00002	Low Engine Oil Level Warning	Add oil, alarm will clear.
00003	Low Coolant Level	Check and repair at end of trip.
00004	Low Refrigerant Level	Report and repair immediately.
SHUTDOWN ALARMS		
00011	Check/Low Engine Oil Pressure	Unit will restart*, report reactivation.
00012	High Coolant Temp	Unit will restart*, report reactivation.
00013	High Discharge Pressure	Unit will restart*, report reactivation.
00014	High A/C Amps	Unit will restart*, report reactivation.
00015	Battery Voltage Too High	Report and repair immediately.
00016	Battery Voltage Too Low	Report and repair immediately.
00017	High Comp Disch Temp	Unit will restart*, report reactivation.
00018	Low Refrigerant Press	Unit will restart*, report reactivation.
00019	Low Fuel Shutdown	Add fuel, unit will restart*.
00020	Maximum Compr Alarms	Report and repair immediately.
00021	Technician Reset Required	Report and repair immediately.
00022	Low Suction Superheat	Unit will restart*, report reactivation.
00023	A/C Current Over Limit	Unit will restart*, report reactivation.
00024	Compression Ratio Exceeded	Unit will restart*, report reactivation.
00027	High Suction Pressure	Unit will restart*, report reactivation.
00028	Check Refrig System	Unit will restart*, report reactivation.
00029	Check Heat Cycle	Reset, report reactivation
START-UP / ENGINE ALARMS		
00030	Failed To Run Min Time	Report and repair immediately.
00031	Failed To Start – Auto Mode	Report and repair immediately.
00032	Failed To Start – Manual	Turn switch off then back on, unit will start automatically.
00034	Engine Failed to Stop	Move fuel arm to stop position (if equipped) or report & repair immediately.
00035	Check Starter Circuit	Report and repair immediately.
00036	Check Coolant Temp	Check and repair at end of trip.
00037	Check Low Speed RPM	Check and repair at end of trip.
00038	Check High Speed RPM	Check and repair at end of trip.
00039	Check Engine RPM	Unit will restart*, report reactivation.
00040	Check Engine Preheat Circuit	Unit will restart, report reactivation.

NO.	MESSAGE	DESCRIPTION
00041	Engine Stalled	Unit will restart*, report reactivation.
WARNING / STATUS ALARMS		
00051	Alternator (Battery Charger) Not Charging	Report and repair immediately.
00053	Box Temp Out of Range	Reset*, report reactivation.
00054	Defrost Not Complete	Check and repair at end of trip.
00055	Check Defrost Air Switch	Check and repair at end of trip.
00056	Check Evaporator Air Flow	Unit will restart*, report reactivation.
00057	Check Remote Switch 1	Close all compartment doors, unit should restart. If unit is shutdown, repair immediately
00058	Check Remote Switch 2	
00059	Datalogger Not Recording	Check and repair at end of trip.
00060	Datalogger Time Wrong	Check and repair at end of trip.
00061	Door Open	Close all compartment doors, unit should restart. If unit is shutdown, repair immediately.
00062	C2 Box Temp Out of Range	Reset*, report reactivation.
00063	C3 Box Temp Out of Range	Reset*, report reactivation.
ELECTRICAL ALARMS		
00071	Bad F2 or F3 Fuse	Report and repair immediately.
00072	Bad F4 or F6 Fuse	Report and repair immediately.
00073	No A/C Power – Check Cord	Switch to Diesel Operation & Repair
00074	AC Phase Reversed	Unit will restart*, report reactivation.
00075	Compressor Motor Overload	Unit will restart*, report reactivation.
00076	Condenser Motor Overheated	Unit will restart*, report reactivation.
00077	Evap Motor Overheated	Unit will restart*, report reactivation.
00078	Check SV1 Circuit	Reset*, report reactivation.
00079	Check SV4 Circuit	Reset*, report reactivation.
00080	Check SV3 Circuit	Reset*, report reactivation.
00081	Check FHR Circuit	Check and repair at end of trip.
00082	Check Remote Out of Range Light	Check and repair at end of trip.
00083	Check Remote Defrost Light	Check and repair at end of trip.
00084	Check Remote Alarm Light	Check and repair at end of trip.
00085	Check UL1 Circuit	Check and repair at end of trip.
00086	Check UL2 Circuit	Check and repair at end of trip.
00087	Check Remote Heat Light	Check and repair at end of trip.
00088	Check Remote Cool Light	Check and repair at end of trip.
00089	Check Remote Auto Light	Check and repair at end of trip.
00090	Check AFA Solenoid Circuit	Check and repair at end of trip.
00091	Check 1HTCON1 Relay Coil	Reset*, report reactivation.
00092	Check 1HTCON2 Relay Coil	Reset*, report reactivation.
00093	Check Start Up Buzzer	Report and repair immediately.

NO.	MESSAGE	DESCRIPTION
ELECTRICAL ALARMS (continued)		
00094	Check Comp Contactor 1	Reset*, report reactivation.
00095	Check CDCON Relay Coil	Reset*, report reactivation.
00096	Check GENCONR Relay Coil	Reset*, report reactivation.
00097	Check SV2 Circuit	Reset*, report reactivation.
00098	Check High Temperature Thermostat	Reset*, report reactivation.
00099	Check Standby Contactor	Reset*, report reactivation.
00100	Overload/Ground Fault	Report and repair immediately.
00101	C2 Evap Motor Overheated	Report and repair immediately.
00102	C3 Evap Motor Overheated	Report and repair immediately.
00103	Check 2HTCON1 Relay Coil	Reset*, report reactivation.
00104	Check 2HTCON2 Relay Coil	Reset*, report reactivation.
00105	Check 3HTCON1 Relay Coil	Reset*, report reactivation.
00106	Check 3HTCON2 Relay Coil	Reset*, report reactivation.
00107	Check 2LSV Circuit	Reset*, report reactivation.
00108	Check 3LSV Circuit	Reset*, report reactivation.
00109	Check 1EVCON Relay Coil	Reset*, report reactivation.
00110	Check 2EVCON Relay Coil	Reset*, report reactivation.
00111	Check 3EVCON Relay Coil	Reset*, report reactivation.
00112	Check Bypass Circuit	Reset, report reactivation.
00113	Check Economizer Circuit	Reset, report reactivation.
00114	Check LIV Circuit	Reset, report reactivation.
00117	Check DCR2 Circuit	Reset, report reactivation.
SENSOR ALARMS		
00121	Check Ambient Air Sensor	Check and repair at end of trip.
00122	Check Return Air Sensor	If shut down, repair immediately. Otherwise, report and repair at end of trip.
00123	Check Supply Air Sensor	
00124	Check Defrost Termination 1 Sensor	Check and repair at end of trip.
00125	Check Comp Discharge Sensor	Check and repair at end of trip.
00126	Check Fuel Sensor Circuit	Check and repair at end of trip.
00127	Check Suction Temp Sensor	Check and repair at end of trip.
00128	Low/Unbalanced A/C Amps	Check and repair at end of trip.
00129	Check Engine Coolant Sensor	Check and repair at end of trip.
00130	Check Engine RPM Sensor	If shut down, repair immediately. Otherwise, report and repair at end of trip.
00131	Check Evap Temp Sensor	Check and repair at end of trip.
00132	Check Defrost Termination 2 Sensor	Check and repair at end of trip.
00133	Check Remote Temp Sensor 1	Check and repair at end of trip.
00134	Check Remote Temp Sensor 2	Check and repair at end of trip.
00135	Check Remote Temp Sensor 3	Check and repair at end of trip.
00136	C2 Check Supply Air Sensor	Check and repair at end of trip.
00137	C2 Check Return Air Sensor	Reset*, report reactivation.
00138	C3 Check Return Air Sensor	Reset*, report reactivation.
00139	C2 Check Defrost Sensor	Check and repair at end of trip.
00140	C3 Check Defrost Sensor	Check and repair at end of trip.
PRETRIP ALARMS		
P00141	Pretrip Stopped By User	Report and repair immediately.

NO.	MESSAGE	DESCRIPTION
PRETRIP ALARMS (continued)		
P00143	Check Clutch Circuit	Report and repair immediately.
P00144	Check UL1 Circuit	Report and repair immediately.
P00145	Check Speed Sol Circ	Report and repair immediately.
P00146	C2 Check Heater 1 Circuit	Report and repair immediately.
P00147	C2 Check Heater 2 Circuit	Report and repair immediately.
P00148	Check SV1 Circuit	Report and repair immediately.
P00149	Check SV3 Circuit	Report and repair immediately.
P00150	Check SV4 Circuit	Report and repair immediately.
P00151	Check Eng Preheat Enable Circuit	Report and repair immediately.
P00152	Check Fuel Solenoid Circuit	Report and repair immediately.
P00153	Check Return Air Sensor	Report and repair immediately.
P00154	Check Supply Air Sensor	Report and repair immediately.
P00155	Check Coolant Temp Sensor	Report and repair immediately.
P00156	Check Bypass Circuit	Report and repair immediately.
P00157	Check Battery Current	Report and repair immediately.
P00158	Check Ambient Air Sensor	Report and repair immediately.
P00159	Check Defrost Term 1 Sensor	Report and repair immediately.
P00160	Check Disch Temp Sensor	Report and repair immediately.
P00161	Check Suction Temp Sensor	Report and repair immediately.
P00162	Check AFA Solenoid Circuit	Report and repair immediately.
P00163	C3 Check Heater 1 Circuit	Report and repair immediately.
P00164	Check UL2 Circuit	Report and repair immediately.
P00165	Can Not Pump Down	Report and repair immediately.
P00166	C2 Chk Supply Air Sensor	Report and repair immediately.
P00167	C3 Check Heater 2 Circuit	Report and repair immediately.
P00168	C2 Check LSV Valve	Report and repair immediately.
P00169	Check Economizer Circuit	Report and repair immediately.
P00170	Check LIV Circuit	Report and repair immediately.
P00171	System Not Equalized	Report and repair immediately.
P00172	Check Bypass	Report and repair immediately.
P00173	Check Economizer	Report and repair immediately.
P00174	Check Low Speed RPM	Report and repair immediately.
P00175	Check High Speed RPM	Report and repair immediately.
P00176	C3 Check LSV Valve	Report and repair immediately.
P00177	Check Evap Superheat	Report and repair immediately.
P00178	Check UL1	Report and repair immediately.
P00179	Check LIV	Report and repair immediately.
P00180	Check Suction Mod Valve	Report and repair immediately.
P00181	Check SV4 Valve	Report and repair immediately.
P00182	Check SV1 Valve	Report and repair immediately.
P00183	Check SV3 Valve	Report and repair immediately.
P00184	C2 Check Evap Fan Motor	Report and repair immediately.
P00185	C3 Check Evap Fan Motor	Report and repair immediately.
P00186	Check Evap Outlet Temp	Report and repair immediately.
P00187	Check Heater 1 Circuit	Report and repair immediately.
P00188	Check Heater 2 Circuit	Report and repair immediately.
P00189	Check Evap Fan Motor	Report and repair immediately.
P00190	Check Condenser Fan Motor	Report and repair immediately.
P00191	Check UL2	Report and repair immediately.
P00192	Check SV2 Circuit	Report and repair immediately.
P00194	High Suction Pressure	Report and repair immediately.
P00195	Low Suction Pressure	Report and repair immediately.
P00196	High Discharge Pressure	Report and repair immediately.
P00197	Check Clutch	Report and repair immediately.

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NO.	MESSAGE	DESCRIPTION
PRETRIP ALARMS (continued)		
P00198	Low Discharge Pressure	Report and repair immediately.
P00199	C2 Chk Return Air Sensor	Report and repair immediately.
P00200	Check UL1 Cylinders	Report and repair immediately.
P00201	Check UL2 Cylinders	Report and repair immediately.
P00202	High Side Leak	Report and repair immediately.
P00203	Check Discharge Check Valve	Report and repair immediately.
P00204	Low Suction Pressure	Report and repair immediately.
P00205	Check Defrost Term 2 Sensor	Report and repair immediately.
P00206	Check Condenser Fan Circuit	Report and repair immediately.
P00207	Check Comp Contact Circuit	Report and repair immediately.
P00208	Check Generator Cont Circ	Report and repair immediately.
P00209	Check Standby Cont Circuit	Report and repair immediately.
P00210	C3 Chk Return Air Sensor	Report and repair immediately.
P00211	C2 Check Defrost Sensor	Report and repair immediately.
P00212	C3 Check Defrost Sensor	Report and repair immediately.
P00213	Check Damper CR2 Circuit	Report and repair immediately.
P00214	Check Damper CR1 Circuit	Report and repair immediately.
P00215	Check Damper – Not Open	Report and repair immediately.
P00216	Check Damper – Not Closing	Report and repair immediately.
MAINTENANCE ALARMS		
00223	Engine Maintenance Due	Check and repair at end of trip.
00224	Standby Maintenance Due	Check and repair at end of trip.
00225	General Maintenance Due	Check and repair at end of trip.
00226	Service Soon PM 1 Due	Check and repair at end of trip.
00227	Service Soon PM 2 Due	Check and repair at end of trip.
00228	Service Soon PM 3 Due	Check and repair at end of trip.
00229	Service Soon PM 4 Due	Check and repair at end of trip.
00230	Service Soon PM 5 Due	Check and repair at end of trip.
MICROPROCESSOR ALARMS		
00232	Setpoint Error	Reset*, report reactivation.
00233	Model # Error	Reset*, report reactivation.
00237	Function Parameter Error	Reset*, report reactivation.
00238	Configurations Error	Reset*, report reactivation.
00242	Dis Press Calibrate Error	Reset*, report reactivation.
00243	Suct/Evap Calibrate Error	Reset*, report reactivation.
00244	Econo Calibrate Error	Reset*, report reactivation.
00245	Can Not Save Setting	Reset*, report reactivation.
00246	EEPROM Write Failure	Reset*, report reactivation.
00248	Config Mode / HP2 Error	Reset*, report reactivation.
00255	Microprocessor Error	Reset*, report reactivation.
DRIVER ALARMS 1000 – 1999; ALARMS 2000 – 2999		
02000	Update Software	Report and repair immediately.
02001	Rear Panel Shutdown Requested	Reset, report reactivation.
02002	Low Discharge Superheat	Reset, report reactivation.
02003	Display Module Error	Report and repair immediately.
START-UP/ENGINE ALARMS 3000 – 3999		
03000	Motor Overload 1	Report and repair immediately.
03001	Engine Load Calibration	Reset, report reactivation.
03002	Check Clutch Slip	Report and repair immediately.

NO.	MESSAGE	DESCRIPTION
WARNING/STATUS ALARMS 4000 – 4999		
04000	Check Remote Switch 3	Reset, report reactivation.
04001	Check Remote Switch 4	Reset, report reactivation.
04002	High Economizer Superheat	Reset, report reactivation.
04004	No Setpoint Change	Reset, report reactivation.
04005	No Setpoint Change C2	Reset, report reactivation.
04006	No Setpoint Change C3	Reset, report reactivation.
ELECTRICAL ALARMS 5000 – 5999		
05002	Fuel Pump Relay	Report and repair immediately.
05003	Diesel / Electric Relay	Report and repair immediately.
05004	Bad F13 Fuse	Reset, report reactivation.
05005	Bad F9 Fuse	Reset, report reactivation.
05006	Bad F5 Fuse	Report and repair immediately.
05007	Bad F3 Fuse	Report and repair immediately.
05008	Bad F10 Fuse	Report and repair immediately.
05009	Check Standby Contactor 1	Report and repair immediately.
05010	Check Standby Contactor 2	Report and repair immediately.
05011	Check High Speed Control Circuit	Report and repair immediately.
05012	Check ENSCU Power Circuit	Report and repair immediately.
05013	Check Clutch Circuit	Report and repair immediately.
05014	Check Starter Solenoid Circuit	Report and repair immediately.
05015	Check Hot Gas Valve Circuit	Report and repair immediately.
05016	Check Remote Amber Light	Reset, report reactivation.
05017	Check Eng Preheat Enable Circuit	Reset, report reactivation.
05018	Check Power Enable Control	Reset, report reactivation.
05019	Check CDCON Relay Coil Two	Reset, report reactivation.
05020	Check Htr Cntr One	Reset, report reactivation.
05021	Check Htr Cntr Two	Reset, report reactivation.
05022	C2 Check High Temp Thermostat	Reset, report reactivation.
05023	C3 Check High Temp Thermostat	Reset, report reactivation.
05024	Check Standby Contactor	Report and repair immediately.
05025	Check Standby Contactor	Report and repair immediately.
ELECTRICAL ALARMS 5000 – 5999		
06000	Cond. Motor 2 Overheated	Report and repair immediately.
06001	Check Light Bar	Reset, report reactivation.
SENSOR ALARMS 7000 – 7999		
07000	Economizer Temp Sensor	Reset, report reactivation.
07001	Economizer Press Sensor	Reset, report reactivation.
07002	C3 Chk Supply Air Sensor	Reset, report reactivation.
07003	C2 Chk Evap Temp Sensor	Reset, report reactivation.
07004	C3 Chk Supply Air Sensor	Reset, report reactivation.
07006	Suction Pressure Sensor	Reset, report reactivation.
PRE-TRIP ALARMS 12000 – 14003		
P12000	C3 Chk Supply Air Sensor	Reset, report reactivation.
P12001	C2 Chk Evap Outlet Temp	Reset, report reactivation.
P12002	C3 Chk Evap Outlet Temp	Reset, report reactivation.
P13000	Check Condenser Fan 2 Circuit	Report and repair immediately.
P14000	C2 Chk Evap1 Superheat	Reset, report reactivation.

NO.	MESSAGE	DESCRIPTION
PRE- TRIP ALARMS 12000 – 14003 (continued)		
P14001	C2 Chk Evap2 Superheat	Reset, report reactivation.
P14002	C3 Chk Evap1 Superheat	Reset, report reactivation.
P14003	C3 Chk Evap2 Superheat	Reset, report reactivation.
MICROPROCESSOR ALARMS 20000 – 29999 GTD ALARMS		
20100	No Comm From Micro to Display	Report and repair immediately.
20101	No Comm From Micro to Remote Display	Report and repair immediately.
MMB ALARMS		
21100	No Comm From Any Board to Main Micro	Report and repair immediately.
INPBD1 ALARMS		
22100	No Comm From Micro to INPBD1	Report and repair immediately.
22101	Sensor Input Voltage Low INP1	Check and repair at end of trip.
22102	Sensor Input Voltage High INP1	Check and repair at end of trip.
22103	Output Lost Configuration	Report and repair immediately.
OTBD1 ALARMS		
23100	No Comm From Micro to Outbd1	Report and repair immediately.
23101	Output Lost Configuration	Report and repair immediately.
CCB ALARMS		
24100	No Comm From Micro to CCB1	Report and repair immediately.
24101	Sensor Input Voltage Low CCB1	Check and repair at end of trip.
24102	Sensor Input Voltage High CCB1	Check and repair at end of trip.
24200	No Comm From Micro to CCB2	Report and repair immediately.
24201	Sensor Input Voltage Low CCB2	Check and repair at end of trip.
24202	Sensor Input Voltage High CCB2	Check and repair at end of trip.
24300	No Comm From Micro to CCB3	Report and repair immediately.
24301	Sensor Input Voltage Low CCB3	Check and repair at end of trip.
24302	Sensor Input Voltage High CCB3	Check and repair at end of trip.
24400	No Comm From Micro to CCB4	Report and repair immediately.
24401	Sensor Input Voltage Low CCB4	Check and repair at end of trip.
24402	Sensor Input Voltage High CCB4	Check and repair at end of trip.
STP ALARMS		
25100	No Comm From Micro to STP1	Report and repair immediately.
25101	Over Current STP1	Reset, report reactivation.
25102	Check Input Voltage STP1	Reset, report reactivation.
25200	No Comm From Micro to STP2	Report and repair immediately.
25201	Over Current STP2	Reset, report reactivation.
25202	Check Input Voltage STP2	Reset, report reactivation.
25300	No Comm From Micro to STP3	Report and repair immediately.
25301	Over Current STP3	Reset, report reactivation.
25302	Check Input Voltage STP3	Reset, report reactivation.
25400	No Comm From Micro to STP4	Report and repair immediately.

NO.	MESSAGE	DESCRIPTION
STP ALARMS (continued)		
25401	Over Current STP4	Reset, report reactivation.
25402	Check Input Voltage STP4	Reset, report reactivation.
ENCU1 ALARMS		
26100	No Comm From Micro to ENCU	Report and repair immediately.
26101	Engine Over Heat ENCU	Reset, report reactivation.
26102	Water Temp Low ENCU	Reset, report reactivation.
26103	Water Temp High ENCU	Reset, report reactivation.
26104	Battery Voltage High ENCU	Report and repair immediately.
26105	Engine Overrun ENCU	Report and repair immediately.
26106	Sensor Supply Voltage 1 Low ENCU	Report and repair immediately.
26107	Oil Pressure Error ENCU	Reset, report reactivation.
NO.	MESSAGE	DESCRIPTION
NO MESSAGE DESCRIPTION		
26108	Rack Position Abnormal ENCU	Reset, report reactivation.
26109	Actuator Abnormal ENCU	Report and repair immediately.
26110	Engine Speed Sensor ABN ENCU	Report and repair immediately.
26111	Intake Air Pressure Low ENCU	Report and repair immediately.
26112	Intake Air Pressure High ENCU	Report and repair immediately.
EES ALARMS		
26200	EES Loss of Communication to Controller	Reset, Report Reactivation.
26201	EES Service Required	Reset, report reactivation.
26202	EES High Back Pressure	Reset, report reactivation.
26203	EES Low Back Pressure	Reset, report reactivation.
26204	EES ECU Voltage Low	Check and repair at end of trip.
26205	EES Filter Inlet Temp	Reset, report reactivation.
26206	EES Check Fuel Pump Circuit	Reset, report reactivation.
26207	EES Check Air Control Valve	Reset, report reactivation.
26208	EES Check Fuel Injector Circuit	Reset, report reactivation.
26209	EES Filter Outlet Temp	Reset, report reactivation.
26210	EES Exhaust Inlet Temp	Reset, report reactivation.
26211	EES ECU Output Failure	Reset, report reactivation.
26212	EES ECU Log Failure	Check and repair at end of trip.
26213	EES ECU Clock Failure	Reset, report reactivation.
26214	EES ECU Temp Low	Check and repair at end of trip.
26215	EES ECU Temp High	Check and repair at end of trip.
26216	EES No Temperature Rise	Reset, report reactivation.
26217	EES System Failure	Report and repair immediately.
26218	EES System Overtemp	Report and repair immediately.
26219	Temp Sensor Drift	Report and repair immediately.
26220	EES Back Pressure Exceeded	Report and repair immediately.
26221	EES Frequent Regenerations	Report and repair immediately.
26222	EES Back Pressure Offset Exceeded	Report and repair immediately.
COMM ALARMS		
27100	No Comm from Micro to Comm Module	Report and repair immediately.
27200	No Comm from Micro to Optional Comm Module	Report and repair immediately.
Any Number Not Defined Should Display: XXXXX Undefined Alarm		