TROUBLE (cont.)	PROBABLE CAUSE	REMEDY
	-One De-Icer Boot element (or wiring connections to De-Icer) in each cycle open.	Perform a heat test on each De-Icer. Turn De-Icer switch ON, and, after locating the De-Icer section being heated, follow the heating cycle, feeling each section for heating in turn. Replace defective components.
Ammeter reads excess current over entire cycle.	-Power lead shorted to ground.	Check power leads from ammeter to timer and then to De-Icers for evidence of damage or arcing. With de- icing system switch OFF and timer harness disconnected, check insulation resistance (use "Megger") to ground from timer harness Pin B. 12V, Terminal C, 24V. Disconnect harness at brush assembly and repeat check for applicable brush assembly harness connections. (See wiring schematic Section 30-60-01). If ground is indicated, locate and correct it.
	-Ammeter faulty.	Test ammeter per Section 30-62-00.
Ammeter reads normal current part of cycle, excess current rest of cycle.(24-0001 thru 24-2999) (12V)	-Short to ground or short between adjacent circuits, timer to brush block.	Disconnect leads at brush assembly and timer. With "Megger", check insulation resistance from power leads to ground and between adjacent circuits. If ground or short is indicated, locate and correct.
	-Short to ground or between adjacent timer circuits in brush block.	Electrically isolate brush assembly and test per Section 4-6, B.F. Goodrich Report No. 68-04-712B.
	-Short to propeller or short between two adjacent circuits - slip rings to De-Icers.	Isolate brush assembly. With "Megger", check insulation resistance from one ring of slip ring assembly to bare prop. Reading should be at least .5 megohms after one minute. If not OK, disconnect the slip ring leads one set at a time to trace short. If OK, disconnect slip ring leads and check insulation resistance between slip rings; reading should be at least .5 megohms after one minute. If not OK, clean assembly thoroughly with standard solvent and wipe clean with MEK and retest. Replace as required.
	-Timer faulty.	Test timer per Section 30-63-00.
Ammeter does not "cycle" each 90 seconds.	-Timer ground open; timer not cycling.	Disconnect harness at timer and check ground connection with ohmmeter from Pin A,12V; Terminal G,24V.
	-Timer contacts welded together (caused by short in electrical system).	Test timer per Section 30-63-00. If timer is faulty, repair or replace it but insure that short causing original failure has been located and corrected.
Ammeter flicks between 90 second phase periods.	-Loose connection between aircraft power supply and timer input.	Trace wiring from power source to timer input. Insure that good electrical contacts are made at each connection in circuit.