

TEMPORARY REVISION**TR-OÄM-20-244/b****Instrument Panel Version D20-3110-00-00****supersedes TR-OÄM-20-244/a****and****TR-OÄM-20-245/b****External Alternator****supersedes TR-OÄM-20-245/a****and****TR-OÄM-20-267/a****NVFR****supersedes TR-OÄM-20-267**

This Temporary Revision TR-OÄM-20-244/b and TR-OÄM-20-245/b and TR-OÄM-20-267/a are approved in conjunction with the Optional Design Change Advisories OÄM 20-244/e and OÄM 20-245/c and OÄM 20-267/b and are valid in conjunction with the latest revision of the DV 20-100 Airplane Flight Manual until this temporary revisions have been incorporated into the Airplane Flight Manual.

The limitations and information contained herein either supplement or, in the case of conflict, override those in the Airplane Flight Manual.

The technical information contained in this document has been approved with EASA approval number EASA.A.A.02157, or under the authority of DOA No. EASA.21J.052.

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Instruction:

- Print this document on yellow paper (single-sided).
- Insert this cover page as the first page of the AFM.
- Insert the other pages of this Temporary Revision in front of the corresponding AFM pages.

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Affected Chapters:**2.16 FURTHER LIMITATIONS**

The paragraph “Electrical consumers” is amended to read:

Electrical consumers

If OÄM 20-245 (external alternator) is not installed, the landing and the position lights (optional equipment) may only be used during 10% of the engine operating time. Otherwise, adequate battery charging cannot be guaranteed.

3.3.9. Electrical Power Failure

The paragraph “(b) LOW VOLTAGE CAUTION LIGHT” is amended to read:

(b) LOW VOLTAGE CAUTION LIGHT (LO/V- CAUTION LIGHT or LOW VOLTS-CAUTION LIGHT)

This caution light illuminates if the on-board voltage (13.75V) drops below the threshold of 12.5 Volts.

If OÄM 20-244 (Instrument Panel Version D20-3110-00-00) or OÄM 20-267 (NVFR) and OÄM 20-245 (External alternator) are installed, this caution light illuminates if the on-board voltage (approx. 14 V) drops below the threshold of 12.75 Volts.

Possible reason for voltage drop:

- Defective Power Supply
- RPM too low
- Operation of too many electrical consumers (equipment)

I. LO/V-CAUTION LIGHT or LOW VOLTS-CAUTION LIGHT ILLUMINATED WHILE AIRPLANE ON GROUND

- | | | |
|----|---|--|
| 1. | RPM | 1200 RPM |
| 2. | Landing Lights | OFF |
| 3. | Position Lights | OFF |
| 4. | Ammeter | check |
| 5. | If the LO/V-caution light or the LOW VOLTS-caution light continues to be illuminated, and the ammeter is in the left side field (-) | discontinue any planned flight activity. |

II. LO/V-CAUTION LIGHT or LOW VOLTS-CAUTION LIGHT ILLUMINATED IN FLIGHT:

- | | | |
|----|---|------------------------------|
| 1. | Landing Lights | OFF |
| 2. | Ammeter | check |
| 3. | If the LO/V-caution light or the LOW VOLTS-caution light continues to be illuminated, and the ammeter is in the left side field (-):
Defective Generator | Refer to paragraph 3.3.9.(a) |

III. LO/V-CAUTION LIGHT or LOW VOLTS-CAUTION LIGHT ILLUMINATED DURING LANDING:

- | | | |
|----|---------------|--|
| 1. | After Landing | proceed in accordance with paragraph 3.3.9.(b)l. |
|----|---------------|--|

4.4.1. PREFLIGHT INSPECTION

The paragraph "In-Cabin Check", item (o) is amended to read:

I. In-Cabin Check

- (o) Emergency Locator Transmitter (ELT) AUTO or ARM

4.4.9. CRUISE

The CAUTION is amended to read:

CAUTION

If OÄM 20-245 (external alternator) is not installed, max.
operating time of position lights: 50 % of flight time.

4.4.11. LANDING APPROACH

The CAUTION is amended to read:

CAUTION

If OÄM 20-245 (external alternator) is not installed, maximum operating time of landing light: 10 % of flying time, but no longer than 5 minutes.

6.5 EQUIPMENT LIST AND EQUIPMENT INVENTORY

The following items are added to the Equipment List:

All equipment approved for installation in the DV 20-100 with this design change advisories is shown in the *Equipment List* below, which is grouped by application of the ATA-100 code.

NOTE

The equipment listed below cannot be installed in any arbitrary combination. The airplane manufacturer must be contacted for approved configurations.

DV 20 AFM



Temporary Revision
D20-3110-00-00 &
External Alternator
& NVFR

Airplane Serial No.:		Registration:		Date:	
Description	Type	Part No.	Manufacturer	S/N	inst'd
AVIONICS COOLING					
Avionics cooling fan	Cyclon 21-3 Port	CRB6457	Lone Star Aviation		
ELECTRICAL POWER					
Low voltage monitor		D20-2401-11-00	Diamond Aircraft		
External generator		887251	Rotax		
EQUIPMENT					
ELT unit	ME 406	453-6603	Artex		
ELT remote unit		452-6505	Artex		
ELT antenna		110-773	Artex		
ELT buzzer		452-6505	Artex		
FLIGHTS CONTROLS					
Flaps control unit (inst. panel)		DA40.500510	Krutz		
Flaps control circuit board		DA40.500520	Krutz		
INDICATING / REC. SYSTEM					
Digital chronometer with OAT	M803		Davtron		
LIGHTS					
Landing light		820-9033-40-01	Diamond Aircraft		
Lighting control module		WM-LCM001	White Wire		
Glareshield lamp		22-3310-10-01	Diamond Aircraft		
Glareshield lamp inverter		APVL-314-4-1-L-5QF	FTG		
COMMUNICATION / NAVIGATION					
Altimeter inHg/mbar, primary		5934PD-3	United Instr.		
Altimeter inHg/mbar, secondary		5934PD-3	United Instr.		
Directional gyro		505-0031-927	L-3 Communications		
Directional gyro		505-0031-902	L-3 Communications		
Attitude indicator	4300	4300-311	Mid Continent		
Turn coordinator		1394T100-(3Z)	Mid Continent		
Transponder	GTX 328	011-01684-00	Garmin		
Transponder antenna	KA 61	071-00221-0010	Bendix/King		
Altitude digitizer	SAE5-35	305154-00	Sandia Aerospace		
NAV antenna coupler	CI507		Comant		
NAV/COM/GPS	GNS 430	011-00280-10	Garmin		
CDI, VOR/LOC/GS	GI 106A	013-00049-01	Garmin		
GPS antenna	GA 56	011-00134-00	Garmin		
Intercomm	PM1000 II	11922	PS Engineering		

DV 20 AFM



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D20-3110-00-00 &
External Alternator
& NVFR

Airplane Serial No.:		Registration:		Date:	
Description	Type	Part No.	Manufacturer	S/N	inst'd
Magnetic compass		C2400L4P-14V	Airpath		
ENGINE INDICATING					
RPM indicator		SL1010-12009-N00	Superior Labs		

7.3 FLIGHT CONTROLS

The paragraphs “Flaps” and “Flaps Position Indicator” are amended to read:

Flaps

The electric flap actuator is protected by an automatic circuit breaker (3.5 A) located in the circuit breaker panel at the top of the instrument panel and can also be triggered manually. If OÄM 20-244 (Instrument Panel Version D20-3110-00-00) or OÄM 20-267 (NVFR) is installed, the electric flap actuator is protected by an automatic circuit breaker (5 A) located on the lower left side of the instrument panel and can also be triggered manually.

Flaps Position Indicator

The current flap position is indicated by three control lights beside the flap operating switch. When the upper light illuminates (green), the flaps are in cruise position (UP). When the center light illuminates (yellow or white) the flaps are in take-off (T/O) position. When the lower light (yellow or white) illuminates, the flaps are in landing (LDG) position. When two lights are illuminated at the same time, the flaps are between these two positions. This is the case when the flaps are in motion.

7.4 INSTRUMENT PANEL

The following figures are added:

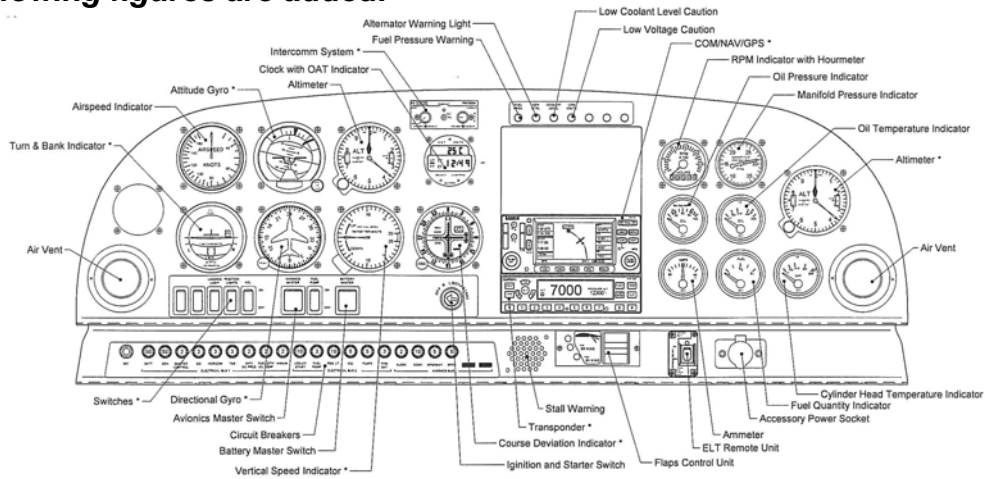


Figure 1: Instrument panel, if OÄM 20-244 is installed

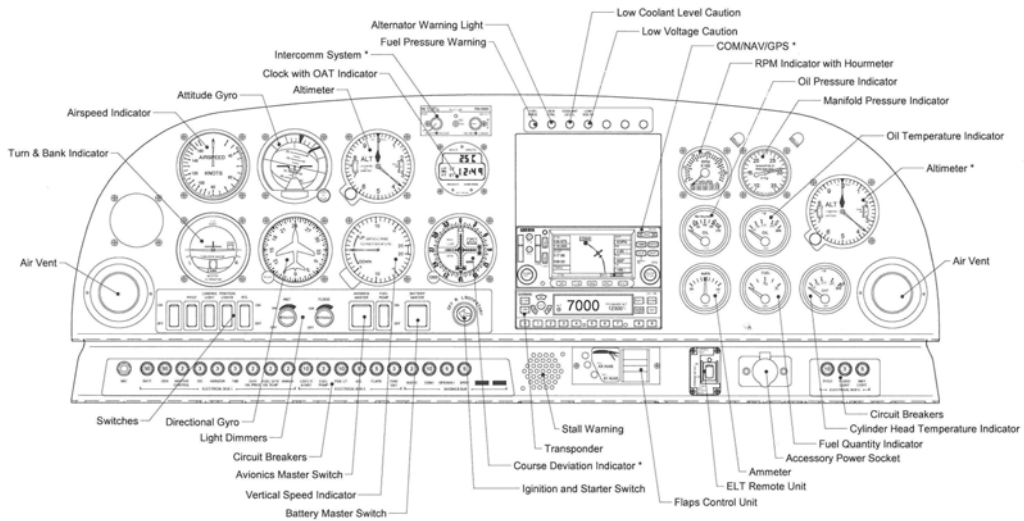
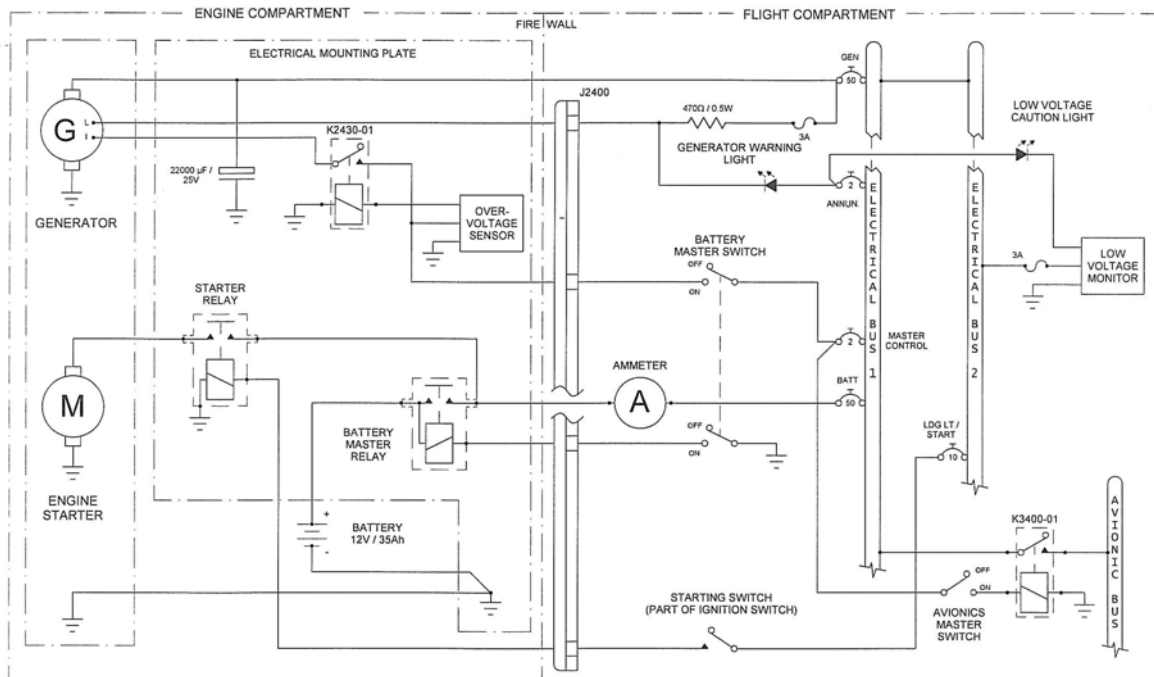


Figure 2: Instrument panel, if OÄM 20-267 is installed

7.11 ELECTRICAL SYSTEM

The following simplified schematic is added:



The paragraph "Power supply" is amended to read:

Power Supply

The battery is connected to the master bus via the master circuit breaker (50 Amps). The generator which is either integrated in the engine or external mounted recharges the battery via the generator circuit breaker (25 Amps or 50 Amps). Both circuit breakers can be triggered manually. The generator warning light is fed by the voltage regulator and illuminated when the generator is not charging the battery.

The CAUTION is amended to read:

CAUTION

The landing light must not be used for more than 6 min. (but not more than 5 min. continuous use), and the position lights must not be used for more than 30 min. per airplane operating hour, if the external alternator (OÄM 20-245) is not installed. At non-observation of this limitation, full charge of the battery is not ensured.

The paragraph "Low Voltage Caution Light" is amended to read.

Low Voltage Caution Light

This caution light illuminates when the airplane voltage drops below 12.5V. If OÄM 20-244 (Instrument Panel Version D20-3110-00-00) or OÄM 20-267 (NVFR) and OÄM 20-245 (external alternator) are installed, this caution light illuminates if the airplane voltage drops below 12.75 V. The color is amber. This indicates that the situation should be noted, but no immediate action is necessary.

CHAPTER 9 SUPPLEMENTS

The following item is added to the List of Available Supplements:

- Supplement O01 NVFR - Operation