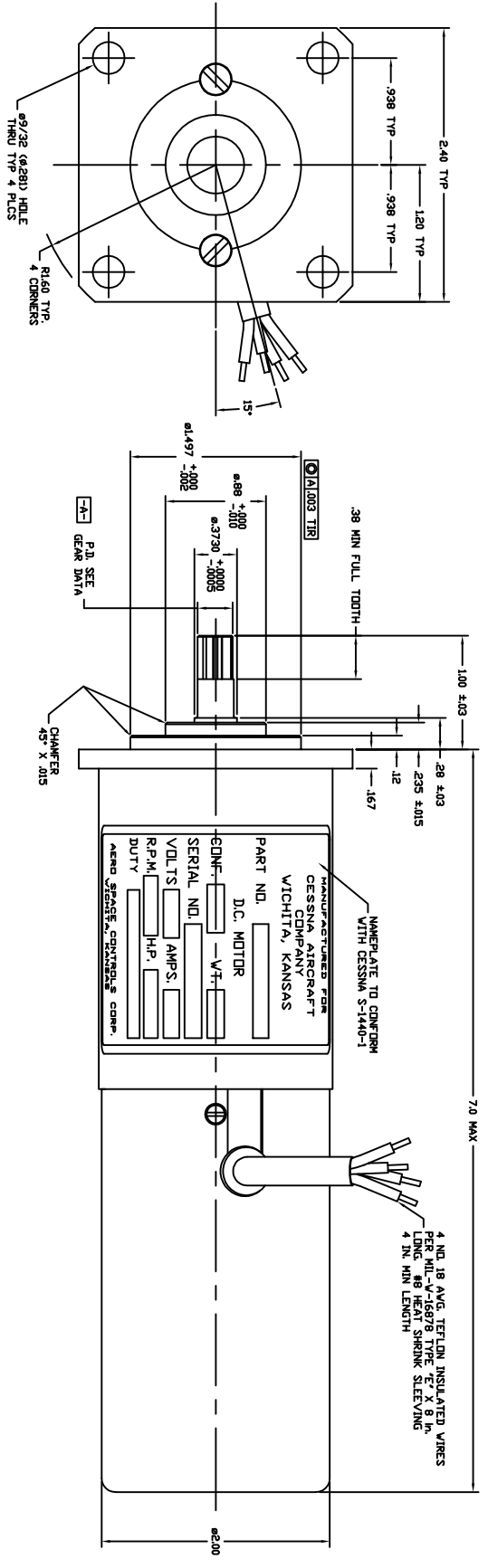
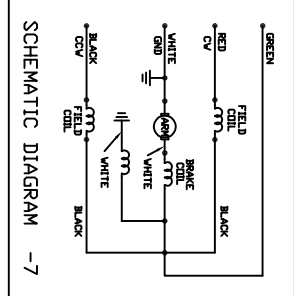


NOTICE - This drawing is a part of the property of the Cessna Aircraft Company. It is to be used only for the purpose of manufacturing or repairing Cessna Aircraft Company products. It is not to be used for any other purpose. All dimensions are in inches unless otherwise specified. All tolerances are as shown unless otherwise specified. All dimensions are to be held unless otherwise specified. All dimensions are to be held unless otherwise specified. All dimensions are to be held unless otherwise specified.

CLASS		SPUR GEAR DATA	
DIAMETRAL PITCH	32		
PRESSURE ANGLE	20°		
NUMBER OF TEETH	7		
PITCH DIAMETER - THEO	218/5		
OUTSIDE DIAMETER	315 ± .001		
ROOT DIAMETER	207.8		
WHALE TOOTH DEPTH	0.078		
CIRCULAR AT PITCH LINE THEO	0.0343		
THICKNESS	MAX		
MEASUREMENT BETWEEN TEETH	MAX		
WIRE'S DIAMETER	MIN	0.020	REF
TOTAL COMPOSITE ERROR	MAX	0.002	
CHECKING	MAX	0.002	
RADIUS	MIN	0.002	
SURFACE FINISH ON TEETH	32/		
MATING PART NUMBER			
NO. OF TEETH			
GEAR TOTAL SPEC			
BACKLASH			

MOTOR CHARACTERISTICS	
1. SPECIFICATION	MIL-88666A/B/D
2. VOLTAGE NOMINAL	28 VDC
3. VOLTAGE RANGE	18-30 VDC
4. VOLTAGE REDUCED	18 VDC
5. PHASE & CYCLE	
6. RATED AMPERES	23 AMPS
7. MAX. AMPS - STALL	45.5 AMPS
8. RATED TORQUE OZ-IN	50
9. STALL TORQUE OZ-IN	144
10. SPECIAL TORQUE	
11. RATED SPEED RPM	6400 MIN
12. ROTATION	SEE DIAGRAM
13. OPERATING ALTITUDE	SL. TO 20,000 FT.
14. AMBIENT TEMP.	-40° +130° F
15. SPECIAL TEMP.	
16. HUMIDITY	NONE
17. VIBRATION	NONE
18. TILT PROOF	NONE
19. EXPLOSION PROOF	YES
20. BRAKE (STEP-S)	40 REVS FROM NO LOAD AT 28 VDC
21. BRAKE RELEASE	18 VDC OR LESS
22. CLUTCH-BRAKE	NONE
23. CLUTCH	NONE
24. LIFE	
25. DUTY CYCLE	20 SEC. ON / 10 MIN OFF
26. NO LOAD SPEED	12,500 / 32,000 RPM
27. SWIFT END PLAY	0.05 MAX



- NOTES CONT'D.
- PINION TEETH HARDNESS 58-60 RC.
 - MOTOR COMPONENTS TO CESSNA SCD 9900002-3
 - WIRE CODE: WHITE - GROUND COMMON
RED - CV ROTATION
BLACK - CCV ROTATION
GREEN - FORWARD ROTATION
DARKEN FUNCTIONAL TESTS
 - SPEED/TORQUE DATA
A. 12,500/32,000 RPM AT NO LOAD, 80 AMPS MAX.
B. 6,400/12,600 RPM AT 50 INCH. LOAD, 230 AMPS MAX.

REV	DATE	DESCRIPTION
1	10-7-66	ISSUED FOR PRODUCTION
2	10-7-66	REVISION
3	10-7-66	REVISION
4	10-7-66	REVISION
5	10-7-66	REVISION
6	10-7-66	REVISION
7	10-7-66	REVISION
8	10-7-66	REVISION
9	10-7-66	REVISION
10	10-7-66	REVISION

DESIGNER: J. WILSON
CHECKER: J. WILSON
DATE: 10-7-66
SCALE: 2:1
SHEET: 1 OF 1

D.C. MOTOR OUTLINE
F514-7