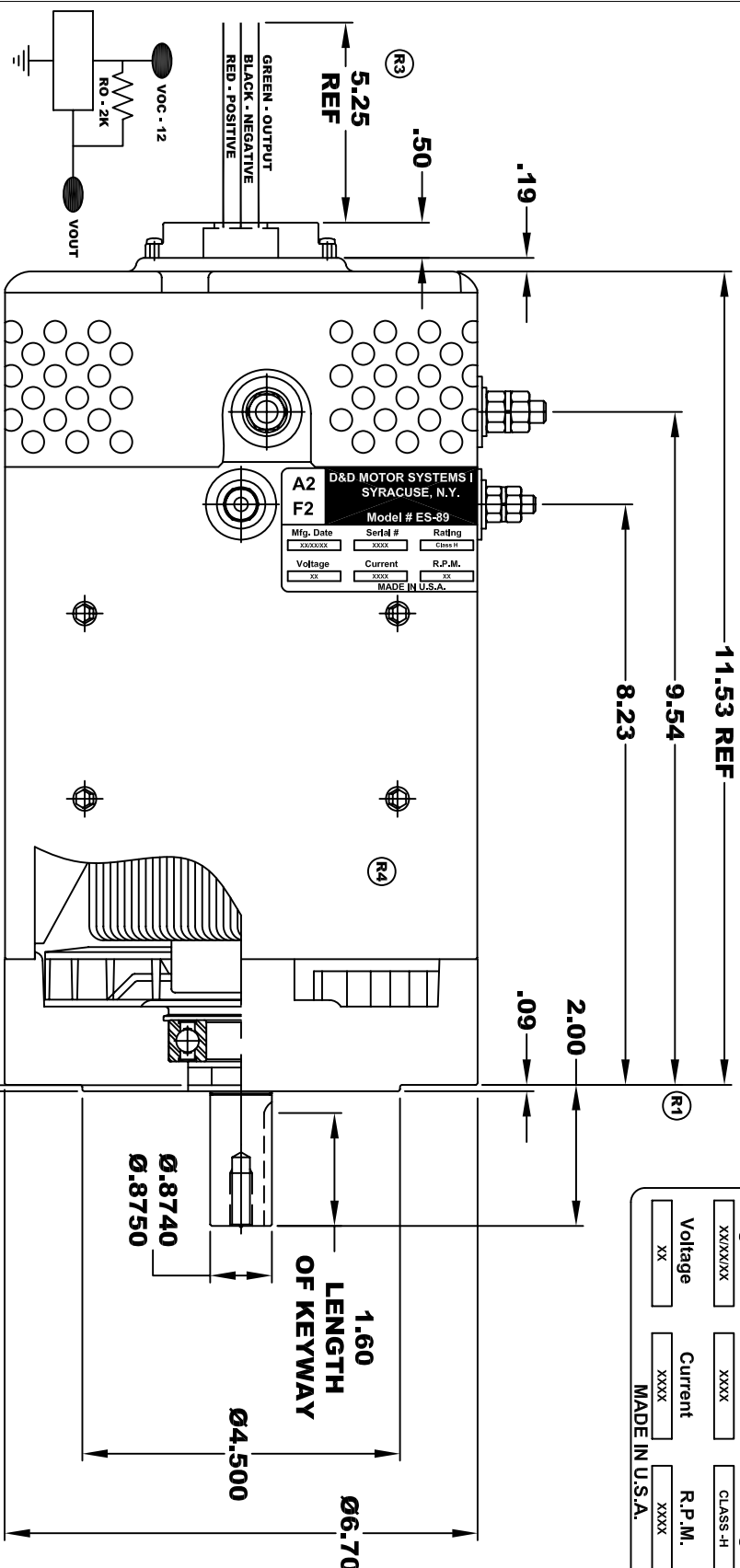
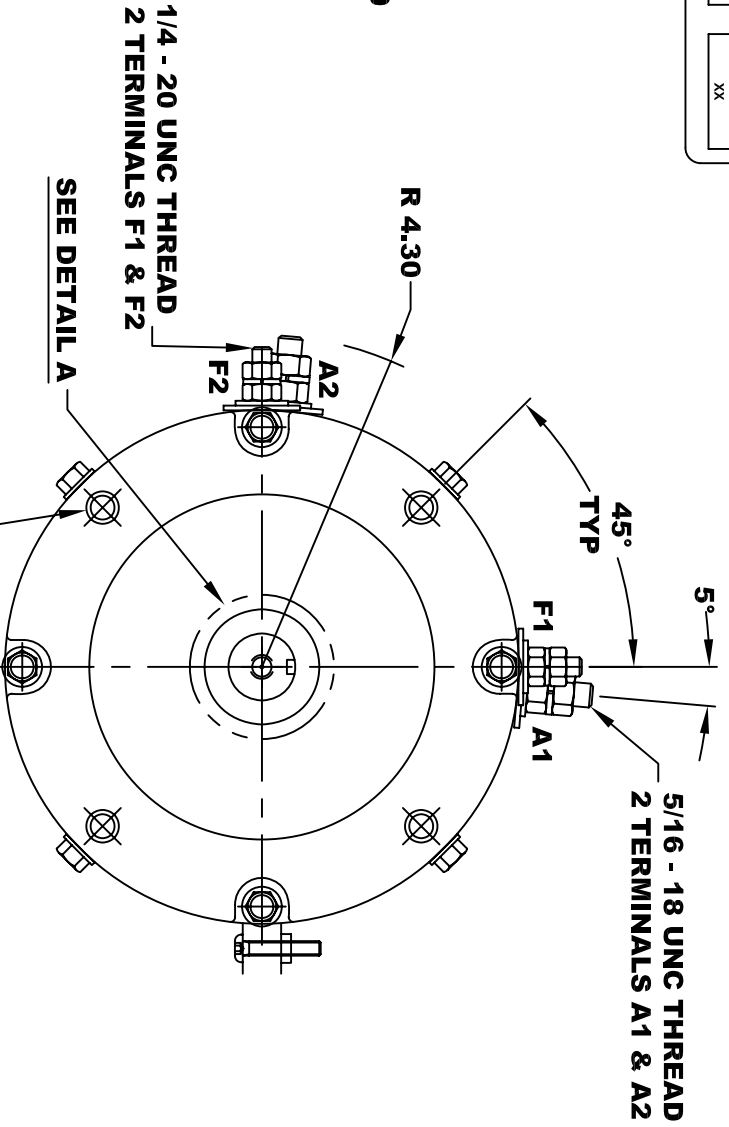
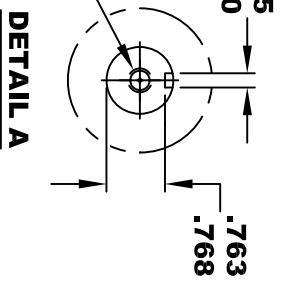


D&D MOTOR SYSTEMS INC.		A2		A1	
SYRACUSE N.Y.		F2		F1	
Model # ES-89					
Mfg. Date	Serial #	Rating	Duty		
XX/XX/XX	XXXX	CLASS-H	S2XX MIN		
Voltage	Current	R.P.M.	H.P.		
XX	XXXX	XXXX	XX		
MADE IN U.S.A.					



PRESS OIL SEAL
SUB FLUSH TO
TO CHAMFER

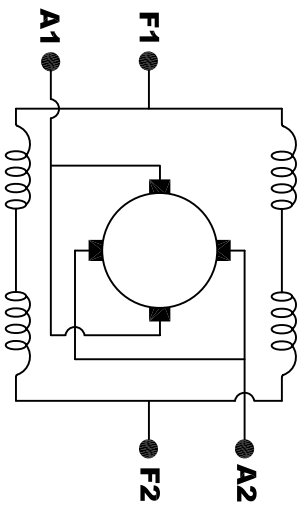
5/16 x 18 UNC THREAD
V .75



**TORQUE SPECIFICATION FOR
POWER CABLE SECURING TOP NUTS**
5/16-18 UNC (A1 / A2) - 110 IN / LBS MAX
1/4-20 UNC (F1 / F2) - 50 IN / LBS MAX

MOTOR WEIGHT: 57 LBS
CLASS "H" INSULATION
PERFORMANCE SPEC: 10

- SPEED SENSOR ELECTRICAL SPECIFICATION:**
- 4.5V TO 24V OPERATING VOLTAGE
 - 20°C TO 85°C OPERATING TEMPERATURE
 - CURRENT SINKING UP TO 25mA
 - AN EXTERNAL OUTPUT PULL UP RESISTOR IS REQUIRED
 - SENSOR IS DESIGNED TO OPERATE WITH 4 N/S POLEPAIRS
 - THE OPERATIONAL DISTANCE BETWEEN THE MAGNET AND THE HOUSING, INCLUDING ANY RUNOUT SHOULD NOT EXCEED .030 INCHES



ELECTRICAL WIRING DIAGRAM

- MOTOR WIRING CONNECTIONS:**
- CW ROTATION DRIVE END
 - CONNECT A1 & F1 TO ONE BATTERY TERMINAL
 - CCW ROTATION DRIVE END
 - CONNECT A2 & F2 TO OTHER BATTERY TERMINAL
 - SWITCH F1 & F2 CONNECTIONS

THIS PRINT IS THE PROPERTY OF D&D MOTOR SYSTEMS INC.
DO NOT SCALE
WORK TO DIMENSIONS
TOLERANCES UNLESS OTHERWISE SPECIFIED ARE AS FOLLOWS

.XX _____ .01
.XXX _____ .005
.XX ROUGH CASTING _____ .03
HOLES _____ -.001 / +.006
ANGLES _____ 0°30"

D & D MOTOR SYSTEMS INC			
MOTOR OUTLINE			
SIZE	DRAWN DATE	RELEASE DATE	DWG NO. / PART NO.
B	12-8-03		ES-89
SCALE	STF	DRAWN BY	MJG
		REV DATE	5-17-13
		REV	R4