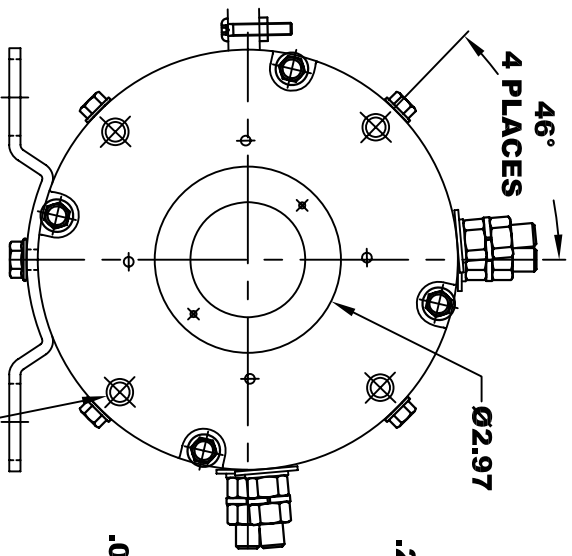
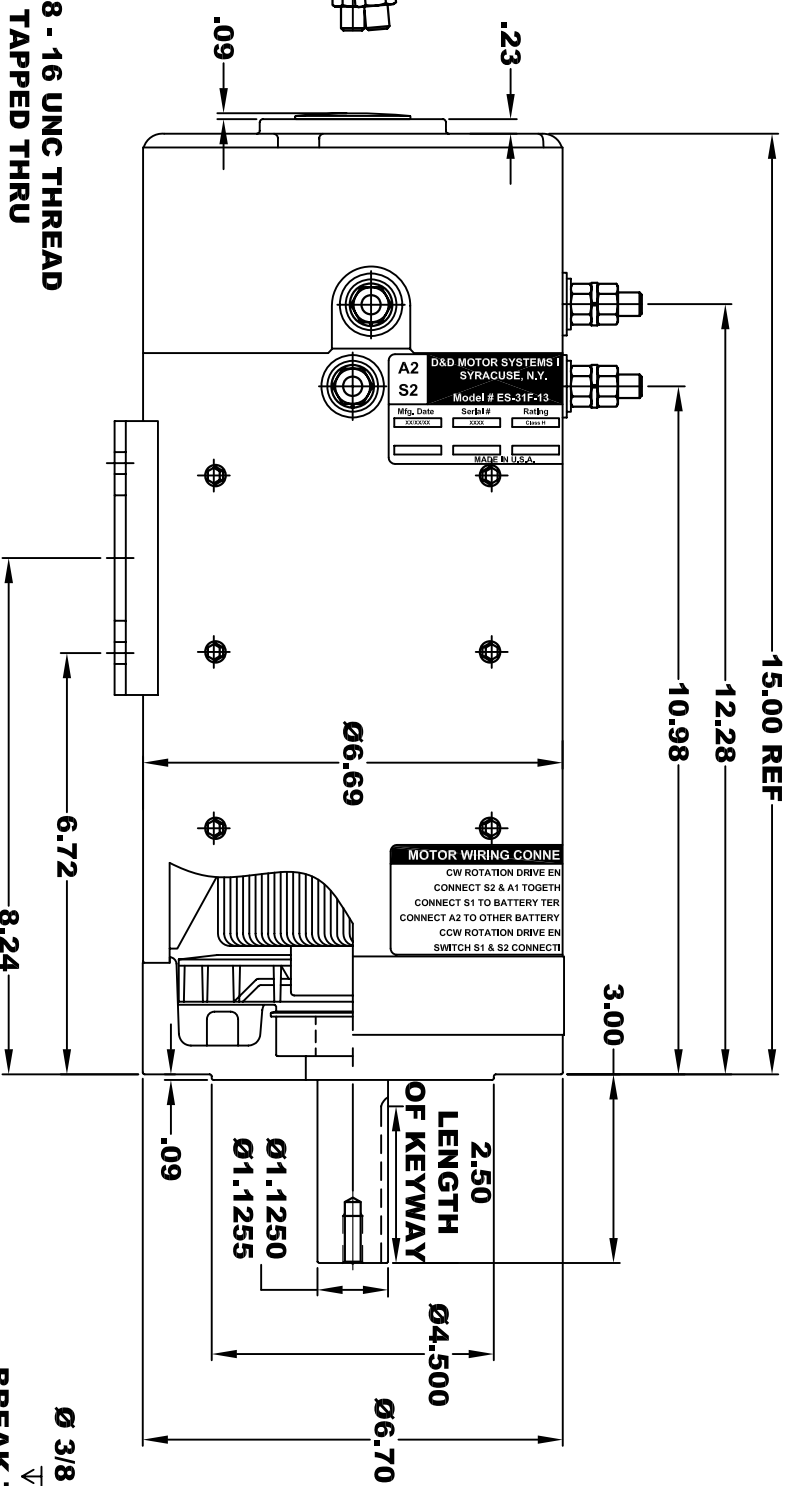


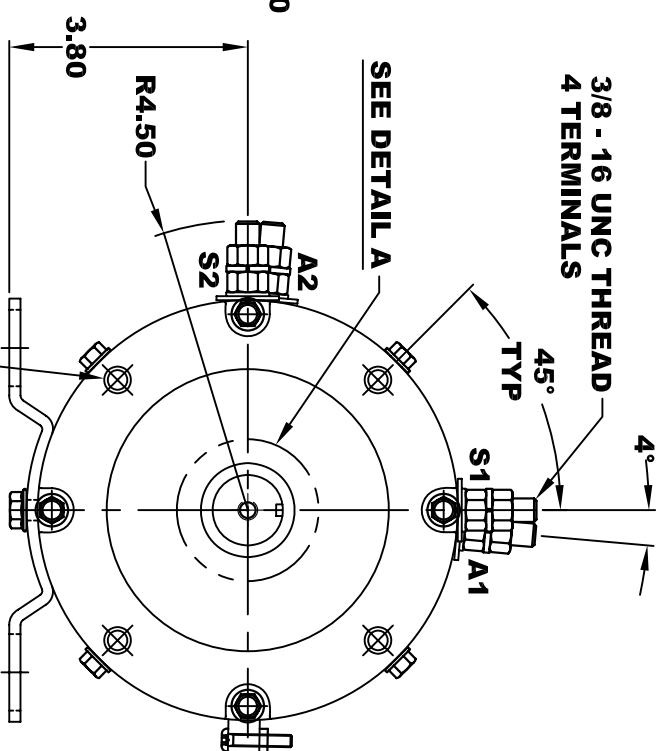
<b>A2</b>	<b>D&amp;D MOTOR SYSTEMS INC.</b>	<b>A1</b>
<b>S2</b>	<b>SYRACUSE N.Y.</b>	
<b>Model # ES-31F-13</b>		
Mfg. Date	Serial #	Rating
XXXXXX	XXXX	Class H
MADE IN U.S.A.		Voltage
		80



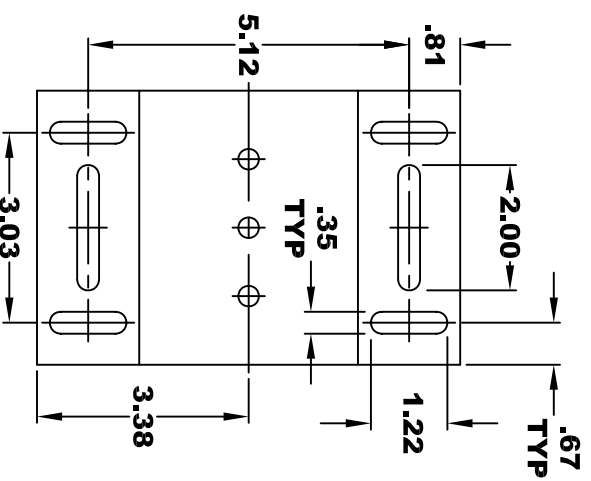
**Ø 3/8 - 16 UNC THREAD  
TAPPED THRU  
.03-.05 X 45° CHAMFER  
4 PLACES, ON A Ø5.875 B. C.**



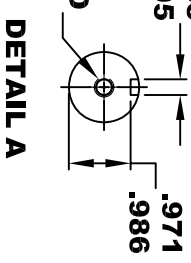
**TORQUE SPECIFICATION FOR  
POWER CABLE SECURING TOP NUTS  
3/8-16 UNC - 140 IN / LBS MAX**



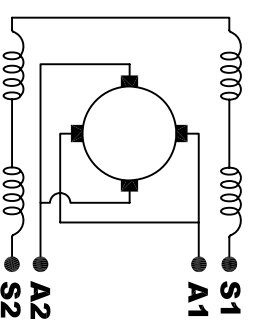
**Ø 3/8 - 16 UNC THREAD  
▽.65 MINIMUM  
BREAK THRU PERMISSABLE  
.03-.05 X 45° CHAMFER  
4 PLACES, ON A Ø5.875 B. C.**



**5/16 - 18 UNC THREAD  
▽.75  
DETAIL A**



**ELECTRICAL WIRING DIAGRAM**



**MOTOR WIRING CONNECTIONS:  
CW ROTATION DRIVE END  
CONNECT S2 & A1 TOGETHER  
CONNECT S1 TO BATTERY TERMINAL  
CONNECT A2 TO OTHER BATTERY TERMINAL  
CCW ROTATION DRIVE END  
SWITCH S1 & S2 CONNECTIONS**

**D & D MOTOR SYSTEMS INC**

**MOTOR OUTLINE**

**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"

SIZE	DRAWN DATE	RELEASE DATE	DWG NO. / PART NO.	REV
B	1-19-09		ES-31F-13	
SCALE	STF	DRAWN BY	MJG	REV DATE

**MOTOR WEIGHT: 83 LBS  
CLASS "H" INSULATION  
PERFORMANCE SPEC: 13**