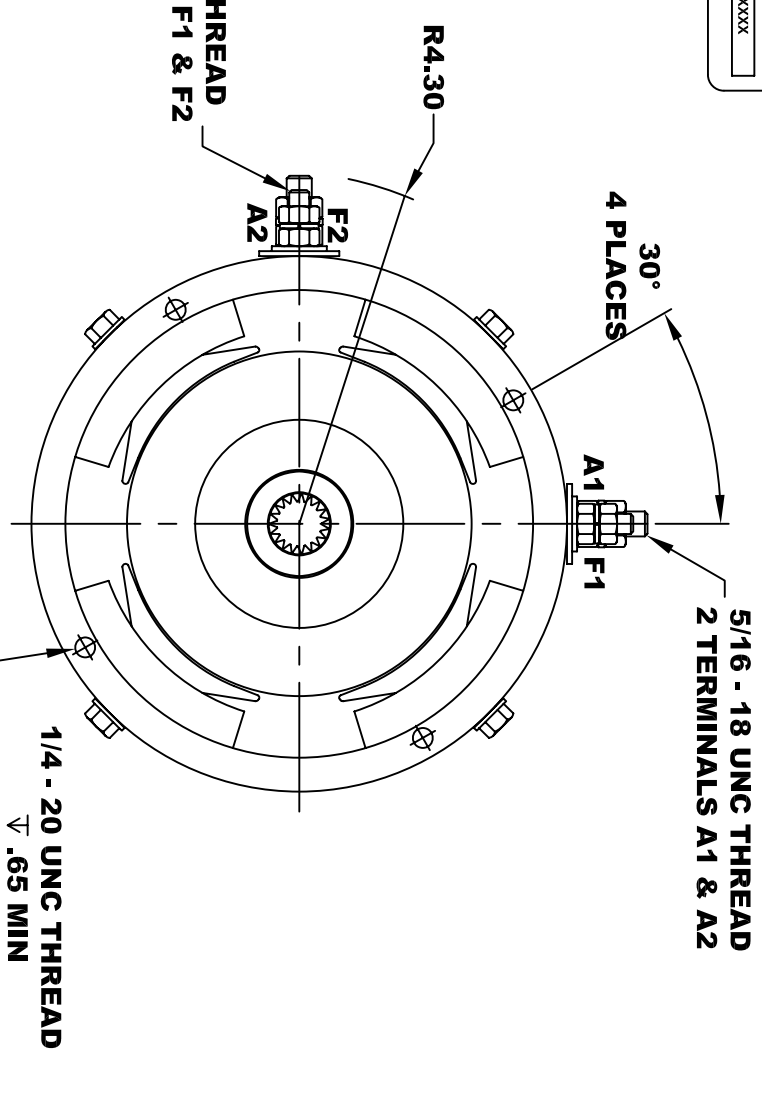
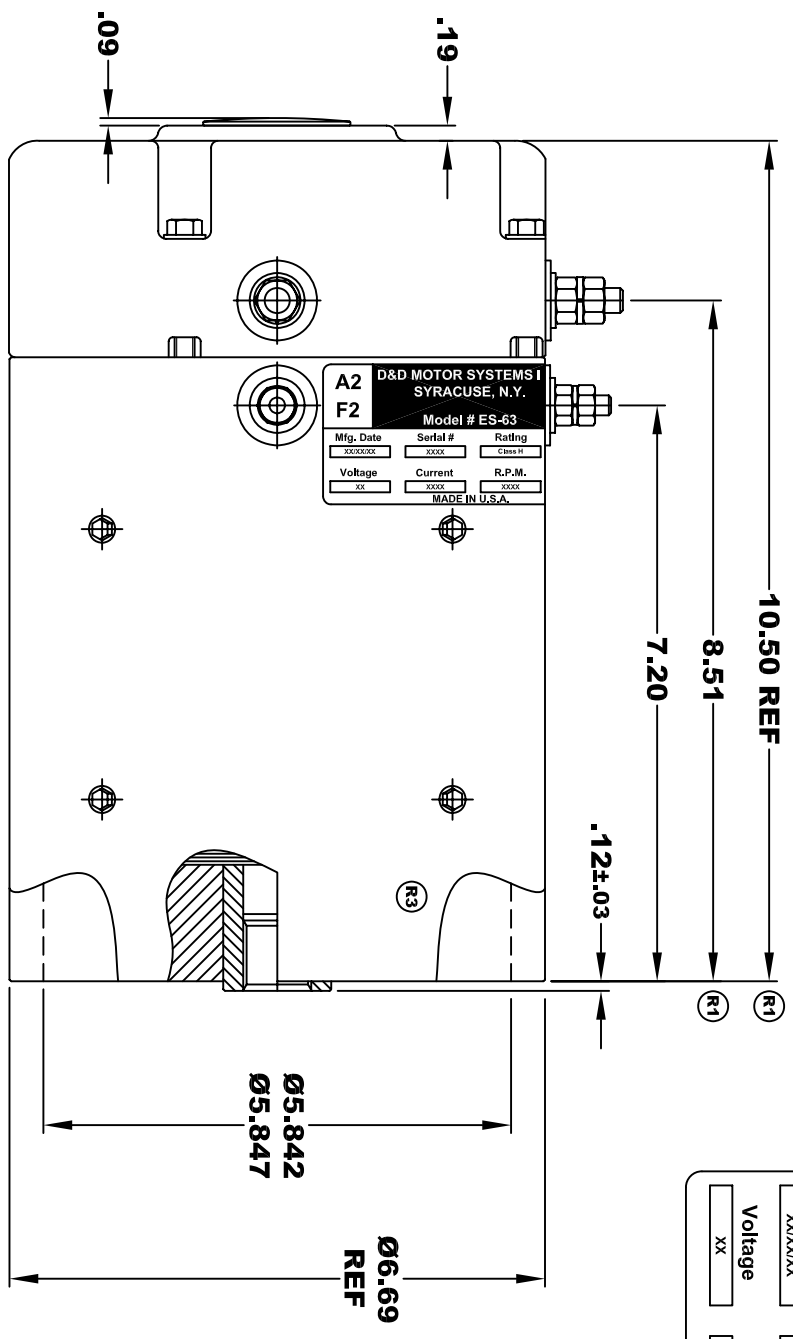


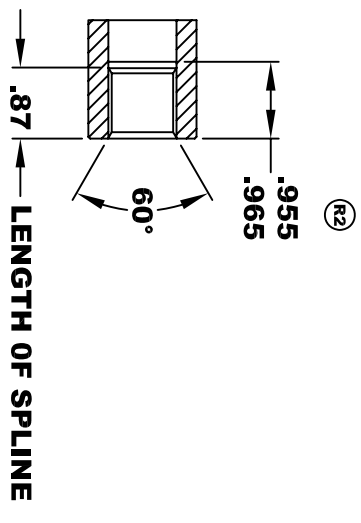
<b>D&amp;D MOTOR SYSTEMS INC.</b>			
<b>A2</b>		<b>A1</b>	
<b>SYRACUSE N.Y.</b>			
<b>Model # ES-63</b>			
Mfg. Date	Serial #	Rating	Duty
XXXXXX	XXXX	Class H	S2-60 MIN
Voltage	Current	R.P.M.	H.P.
XX	XXXX	XXXX	XXXX
MADE IN U.S.A.			



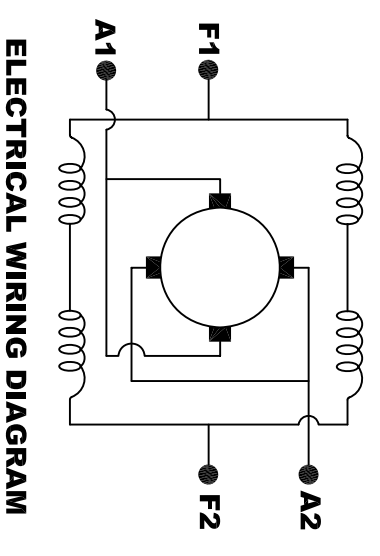
**TORQUE SPECIFICATION FOR POWER CABLE SECURING TOP NUTS**  
 5/16-18 UNC (A1 / A2) - 110 IN / LBS MAX  
 1/4-20 UNC (F1 / F2) - 50 IN / LBS MAX

**INTERNAL INVOLUTE SPLINE SPECIFICATION**  
**CLASS 5 FILLET ROOT SIDE FIT (PER A.N.S.I. B92.1)**

- NO. OF TEETH \_\_\_\_\_ 19
- SPLINE PITCH \_\_\_\_\_ 24 / 48
- PRESSURE ANGLE \_\_\_\_\_ 45°
- BASE Ø \_\_\_\_\_ .5597 REF
- PITCH Ø \_\_\_\_\_ .7916 REF
- MAJOR Ø \_\_\_\_\_ .850 - .859
- FORM Ø \_\_\_\_\_ .835
- MINOR Ø \_\_\_\_\_ .767 - .772
- CIRCULAR SPACE WIDTH \_\_\_\_\_ .0764
- EFFECTIVE SPACE WIDTH \_\_\_\_\_ .0738
- MAX. DIMENSION BETWEEN TWO PINS \_\_\_\_\_ .6714
- PIN Ø \_\_\_\_\_ .0800
- SPLINE HARDNESS TO BE R/C 26-34



**MOTOR WEIGHT: 57 LBS**  
**CLASS "H" INSULATION**  
**PERFORMANCE SPEC: 32**



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

<b>D &amp; D MOTOR SYSTEMS INC</b>			
<b>MOTOR OUTLINE</b>			
SIZE	DRAWN DATE	RELEASE DATE	DWG NO. / PART NO.
B	2-24-03		ES-63
SCALE	STF	DRAWN BY	MJG
			REV DATE
			5-13-13
			REV
			R3