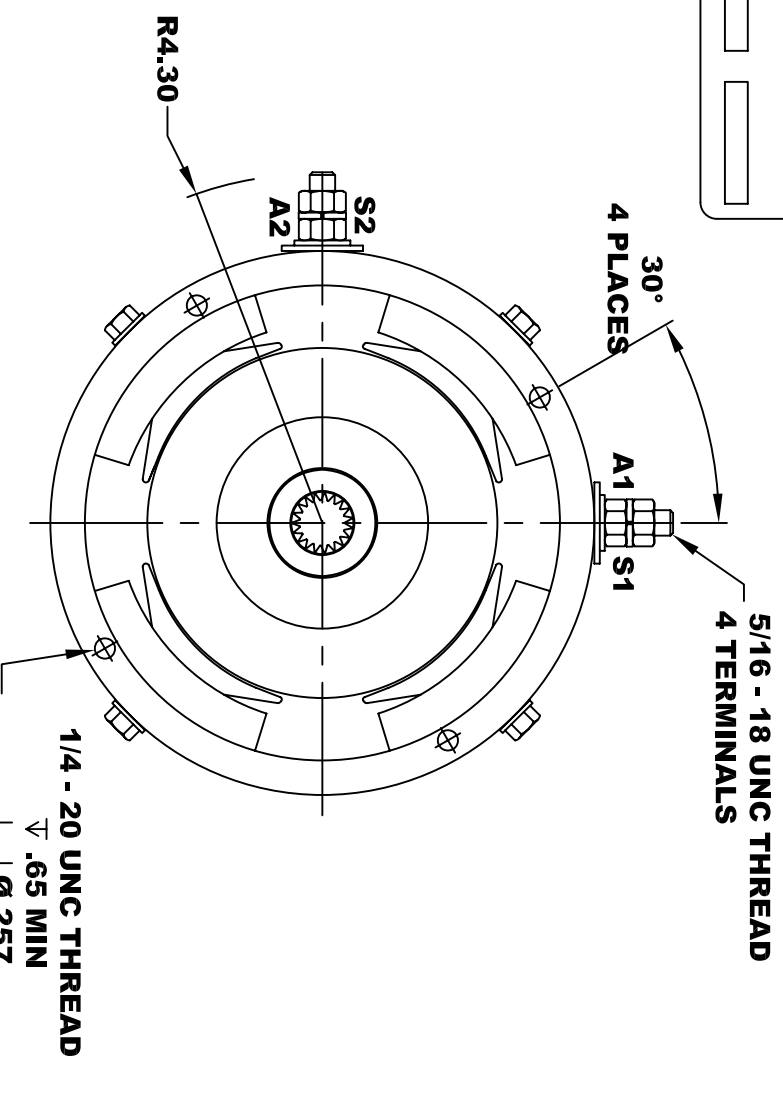
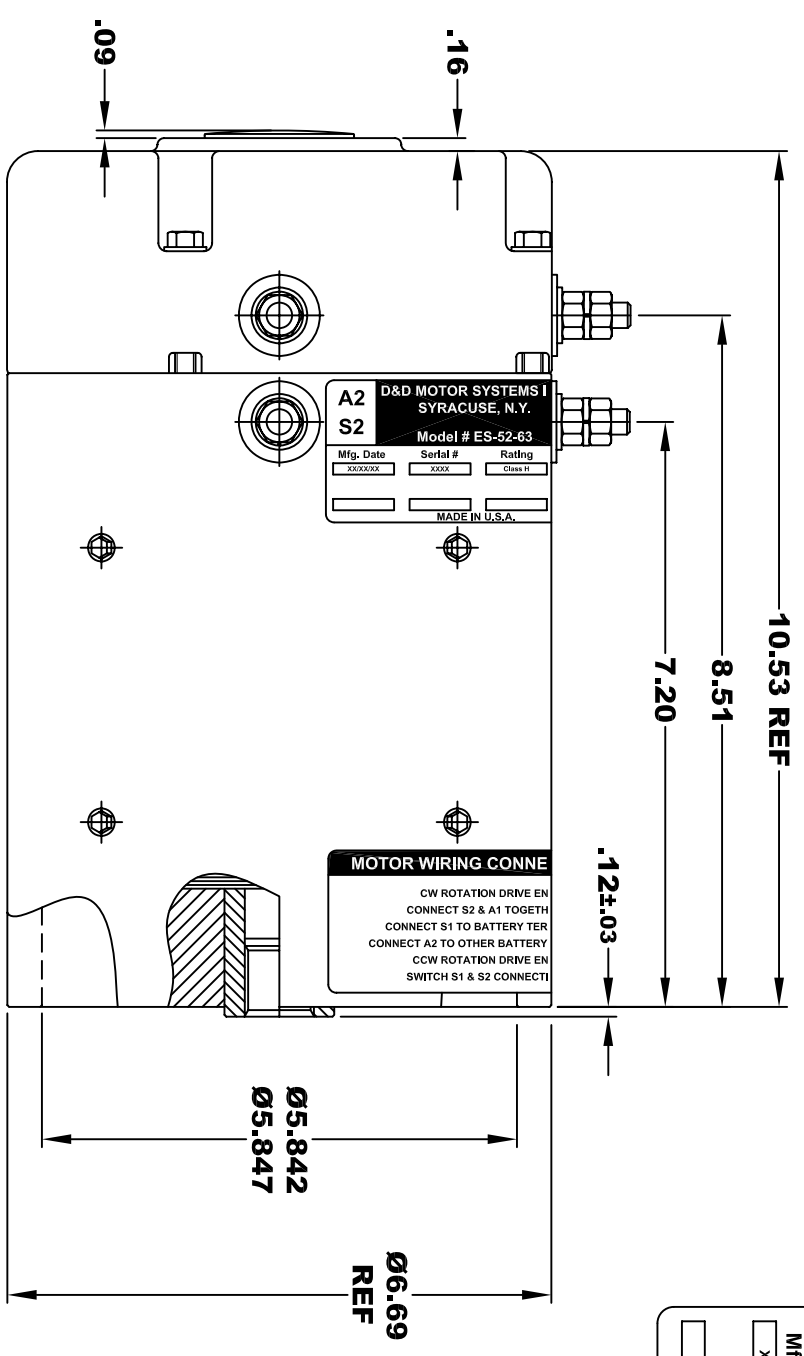


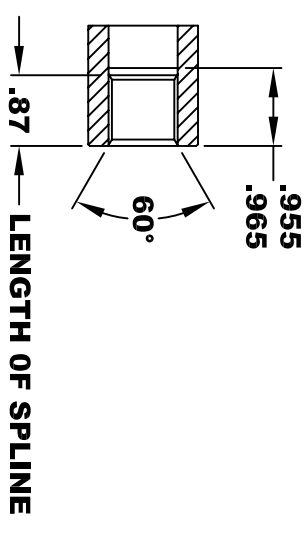
|                                   |          |           |         |
|-----------------------------------|----------|-----------|---------|
| <b>D&amp;D MOTOR SYSTEMS INC.</b> |          |           |         |
| <b>A2</b>                         |          | <b>A1</b> |         |
| <b>SYRACUSE N.Y.</b>              |          |           |         |
| <b>Model # ES-52-63</b>           |          |           |         |
| Mfg. Date                         | Serial # | Rating    | Voltage |
| XX/XX/XX                          | XXXX     | CLASS H   | XX      |
| MADE IN U.S.A.                    |          |           |         |

**TORQUE SPECIFICATION FOR  
POWER CABLE SECURING TOP NUTS**  
5/16-18 UNC - 110 IN / LBS MAX

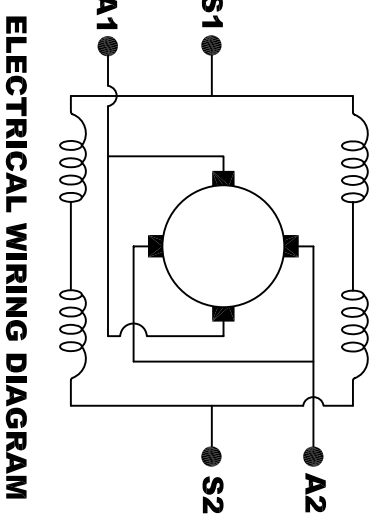


**INTERNAL INVOLUTE SPLINE SPECIFICATION  
CLASS 5 FILLET ROOT SIDE FIT (PER A.N.S.I. B92.1)**

|                           |             |
|---------------------------|-------------|
| 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: 63**



**MOTOR WIRING CONNECTIONS:**  
CW ROTATION DRIVE END  
CONNECT S2 & A1 TOGETHER  
CONNECT S1 TO BATTERY TERMINAL  
CCW ROTATION DRIVE END  
CONNECT A2 TO OTHER BATTERY TERMINAL  
SWITCH S1 & S2 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                                  | 3-13-08    |              | ES-52-63           |
| SCALE                              | DRAWN BY   | REV DATE     | REV                |
| STF                                | MJG        |              |                    |