UPACKING AND MOUNTING THE REEL
1. Inspect the reel for shipping damage.
2. Check the wiring kit against the parts list.
3. Fasten the reel frame securely to a level surface.
4. Turn the reel discs by hand. The spool should turn freely. If it binds, adjust the self-aligning bearings.
5. Check motor voltage matches the supply voltage.

CONNECTING THE INLET
1. Threaded-type swivel joint inlets must be connected to the fluid supply by a flexible connector or the Hannay Warranty will be void.
2. Victaulic-type inlet connections must be carefully aligned. Two victaulic connections, correctly installed, will normally allow adequate flexibility for smooth rotation.
3. Install a union fitting as near as possible to the swivel joint so the joint can be easily removed for servicing.

WIRING THE REEL
1. Certain accessories have been provided to wire your reel (see following pages). You will, however, need to provide a few additional materials:
   - Insulated Cable (see motor nameplate for amperage)
   - Various Insulated Ring Terminal and Wire Nut Connectors (installation specific)
   - Circuit Breaker (see chart for amperage ratings)
   - Ground Strap for Reel - Vapor-proof Conduit (optional)
2. Follow the appropriate wiring diagram on the following pages to make the necessary connections. Check all ground connections before using motor. **NOTE:** #6 AWG wire should be sufficient in most installations to prevent significant voltage drop. However, you may choose to use heavier #4 AWG if the total circuit length is unusually long.
3. The solenoid (12V DC or 24V DC motors only) should be mounted as close as possible to the battery and/or starter and grounded securely. A circuit breaker MUST be wired into the circuit between the solenoid and battery.
4. The motor rotation can be reversed by interchanging the motor leads.
5. If you choose to use vapor-proof conduit between the solenoid and motor, then seal the open end of the conduit with a sealing compound and wrap with electrical tape.

WARNING: BEFORE WIRING MOTOR BE SURE TO VERIFY THE MOTOR VOLTAGE LISTED ON THE MOTOR TAG MATCHES THE SUPPLY VOLTAGE.
WARNING: BEFORE WIRING MOTOR BE SURE TO VERIFY THE MOTOR VOLTAGE LISTED ON THE MOTOR TAG MATCHES THE SUPPLY VOLTAGE.

E or EP Reels with either a 12V DC Motor OR a 24V DC Motor

- **12V OR 24V DC electric Motor**
- Momentary single pole single throw sealed push button switch w/ cap (Supplied with reel)
- **16/2 Cable**
- **Battery** (Positive terminal)
- **Circuit breaker** (see page 4 for amperage)
- **Solenoid** (Supplied with reel)
- **Ground** (24V or continuous duty solenoids only)
- **Ground** (12V solenoid only)
- **Ground**

NOTE: Size cable per amperage on motor name plate

WARNING: BEFORE WIRING MOTOR BE SURE TO VERIFY THE MOTOR VOLTAGE LISTED ON THE MOTOR TAG MATCHES THE SUPPLY VOLTAGE.

E, EP or EPJ Reels with either a 115V AC Motor OR a 230V AC Motor

- **115V OR 230V AC electric motor (DC motor rectified for AC service)**
- *Direction of rotation counter clockwise viewing output shaft. To reverse direction of rotation, interchange motor leads 5 & 6.*
- **3/4" Strain relief connectors** (3 supplied with reel)
- **3/4" Plugs** (2 supplied with reel)
- **16/5 SO Cable** (6 ft supplied with EPJ reels only)
- **Junction Box** (installed on reel)
- **Ground wire from junction box and switch box**
- **Connect to switch**
- **Connect to motor lead 1**
- **Explosion proof momentary double pole single throw (DPST) push button switch only supplied with EPJ Reels**
- **Switch Wiring Diagram**

NOTE: USING A 115V MOTOR ON A 230V CIRCUIT WILL VOID WARRANTY. BE SURE TO VERIFY THE MOTOR VOLTAGE LISTED ON THE MOTOR TAG MATCHES THE SUPPLY VOLTAGE.
EP Reels with 12 Volt DC Motor and Optional Electric Clutch

**NOTE:** If reel is equipped with Hannay Guidemaster (model prefix EPB-GMB or EPB-GMT), then switch and cord are replaced with Guidemaster switch and accompanying mounting hardware. Additionally, only 2 strain relief connectors are provided. See note on wiring diagram for installing Guidemaster switch.

EPJ or EPB Reels with either a 12V DC Motor OR a 24V DC Motor

**NOTE:** If reel is equipped with Hannay Guidemaster (model prefix EPB-GMB or EPB-GMT), then switch and cord are replaced with Guidemaster switch and accompanying mounting hardware. Additionally, only 2 strain relief connectors are provided. See note on wiring diagram for installing Guidemaster switch.
WARNING: BEFORE WIRING MOTOR BE SURE TO VERIFY THE MOTOR VOLTAGE LISTED ON THE MOTOR TAG MATCHES THE SUPPLY VOLTAGE.

Reels with either a 12V DC Gear Motor OR a 24V DC Gear Motor

12V OR 24V DC electric gear motor (To reverse direction of rotation, switch motor leads)

Momentary single pole single throw sealed push button switch with cap (Supplied with reel)

For TEF Series Reels add second switch and motor after circuit breaker (Supplied with reel)

Manual reset circuit breaker (10A for 12V and 5A for 24V motors) (Supplied with reel)

NOTE: Size cable per ampereage on motor name plate

CIRCUIT BREAKER RECOMMENDATIONS

All electric rewind reels manufactured by Hannay Reels require a properly sized circuit breaker to protect the motor from a sustained overload condition. Type 3 manual reset circuit breakers are required in all Hannay motor applications.

Hannay Circuit Breakers

Circuit Breaker (50 or 70 Amp)

Circuit Breaker (5 through 40 Amp)

Circuit Breaker Mounting Bracket 9917.0024

For TEF Series Reels add second switch and motor after circuit breaker (Supplied with reel)

MOUNTING – The larger-sized manual circuit breakers (50 and 70 Amp) sold by Hannay Reels can be purchased with a convenient mounting bracket. Mount the breaker away from any heat source such as an exhaust manifold or radiator. Since this style of breaker must be manually reset if tripped, it should also be mounted in a location convenient to the end user.

With the smaller manual reset circuit breakers (5 through 40 Amp), no mounting bracket is necessary since there are already mounting tabs provided on the circuit breaker itself.

AMPERAGE RATING – The goal in choosing an appropriately sized circuit breaker is to choose a breaker that will open the circuit in a short period of time (ideally in less than 30 seconds) when the reel motor is stalled, but not so quickly that ‘nuisance trips’ occur. Be aware that ambient temperature can cause trip times to vary.

The chart below shows recommended circuit breaker sizes to use with the motors used on Hannay-manufactured reels.

<table>
<thead>
<tr>
<th>Hannay Motor Model</th>
<th>Wire Sizes</th>
<th>Circuit Breaker Size</th>
<th>Circuit Breaker Part Number</th>
<th>Mtg. Bracket Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bodine 550 Gear Motor (12V)</td>
<td>16 AWG</td>
<td>10 Amp</td>
<td>9917.0018</td>
<td>Included</td>
</tr>
<tr>
<td>TEF Series Gear Motor (12V)</td>
<td>16 AWG</td>
<td>10 Amp</td>
<td>9917.0018</td>
<td>Included</td>
</tr>
<tr>
<td>AN250 (12V)</td>
<td>10 AWG</td>
<td>15 Amp</td>
<td>9917.0019</td>
<td>Included</td>
</tr>
<tr>
<td>AN239 (12V)</td>
<td>10 AWG</td>
<td>25 Amp</td>
<td>9917.0171</td>
<td>Included</td>
</tr>
<tr>
<td>AN227 (12V)</td>
<td>10 AWG</td>
<td>35 or 40 Amp</td>
<td>9917.0172</td>
<td>Included</td>
</tr>
<tr>
<td>SX001, SX007, SX038, or SX102 (12V)</td>
<td>8 AWG</td>
<td>50 Amp</td>
<td>9917.0021</td>
<td>9917.0024</td>
</tr>
<tr>
<td>SX043, SX103, SX139, or SX153 (12V)</td>
<td>6 AWG</td>
<td>70 Amp</td>
<td>9917.0022</td>
<td>9917.0024</td>
</tr>
<tr>
<td>Bodine 990 Gear Motor (24V)</td>
<td>16 AWG</td>
<td>5 Amp</td>
<td>9917.0017</td>
<td>Included</td>
</tr>
<tr>
<td>AN248 or AN249 (24V)</td>
<td>10 AWG</td>
<td>15 Amp</td>
<td>9917.0019</td>
<td>Included</td>
</tr>
<tr>
<td>SX123, or SX145 (24V)</td>
<td>8 AWG</td>
<td>25 Amp</td>
<td>9917.0171</td>
<td>Included</td>
</tr>
<tr>
<td>AN351 or SX163 (115V AC)</td>
<td>16 AWG</td>
<td>5 Amp</td>
<td>----------------------------</td>
<td>--------------------------</td>
</tr>
</tbody>
</table>

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