# **Wiring Specifications**

Refer to the following steps for details on power and accessory wiring for the operator.

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ALL AC ELECTRICAL CONNECTIONS TO THE POWER SOURCE AND THE OPERATOR MUST BE MADE BY A LICENSED ELECTRICIAN AND MUST OBSERVE ALL NATIONAL AND LOCAL ELECTRICAL CODES.

## **USE COPPER WIRE ONLY!**

### **AC Power Wiring**

- 1. Find the listing on this page corresponding to the model, voltage and horsepower rating of your operator.
- 2. The distance shown in the table is measured in feet from the operator to the power source. DO NOT EXCEED THE MAXIMUM DISTANCE. These calculations have been based on standard 115 V and 230 V supplies with a 10% drop allowable. If your supply is under the standard rating, the runs listed may be longer than what your application will handle, and you should not run wire too near the maximum distance for the gauge of wire you are using.
- 3. When large-gauge wire is used, a separate junction box (not supplied) may be needed for the operator power connection.
- 4. Wire length calculations are based on the National Electrical Code, Article 430 and have been carefully determined based on motor inrush, brake solenoids, and operator requirements.
- Connect power in accordance with local codes. The green ground wire must be properly connected.
- 6. Wire insulation must be suitable to the application.
- 7. Electrical outlets are supplied in all 115 VAC models for convenience with occasional use or low power consumption devices only. If you choose to run dedicated equipment from these devices, it will decrease the distance for maximum length and the charts will no longer be accurate.

#### **DC Control and Accessory Wiring**

- 1. All control devices are now 24 VDC, which can be run up to 2000 feet with 14 AWG wire.
- Control wiring must be run in a separate conduit from power wiring.
  Running them together may cause interference and faulty signals in some accessories.
- 3. A three-wire shielded conductor cable is required to connect two operators together for dual operation. You must use Belden 8760 Twisted Pair Shielded Cable (or equivalent) only P/N 2500-1982, per foot). See Page 19 for details of this connection. Note: The shield wire should be connected in both the operators.

MODEL BGU POWER WIRING				
VOLTS & HP	MAXIMUM DISTANCE (FEET)		WIRE GAUGE	
	SINGLE	DUAL	WINE GAUGE	
115 VOLTS 1/3-HP	336	168	12	
	534	267	10	
	850	425	8	
	1350	675	6	
	2148	1074	4	
230 VOLTS 1/2-HP	764	382	12	
	1218	609	10	
	1936	968	8	
	3076	1538	6	
	4896	2448	4	

MODEL BGU-D POWER WIRING				
VOLTS & HP	MAXIMUM DISTANCE (FEET)		WIRE GAUGE	
	SINGLE	DUAL	WINE GAUGE	
115 VOLTS 1/2-HP	970	485	12	
	1542	771	10	
	2452	1226	8	
	3898	1949	6	
	6200	3100	4	