### Glassdance Manual #2

Copyright © 2022 by Cris Forster Right Angle Gearmotor, Bodine Electric Company, Old Model No. 587. Gearmotor Speed Control, Old Model No. 906. Three Axial Fans, Dayton Electric Manufacturing Co., Old Model No. 4C548.



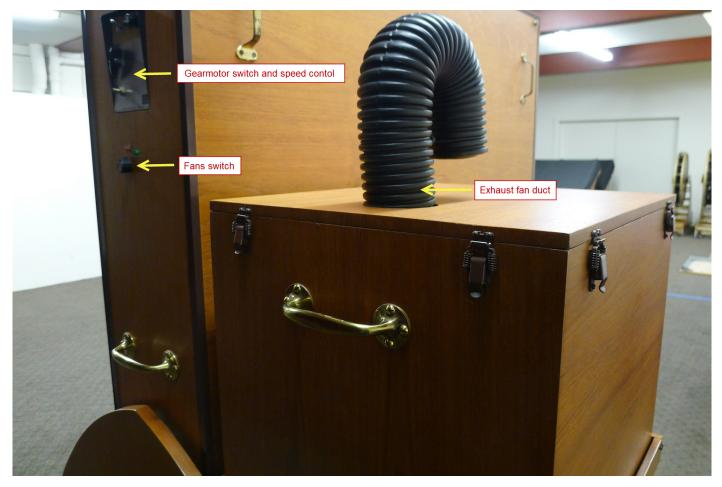






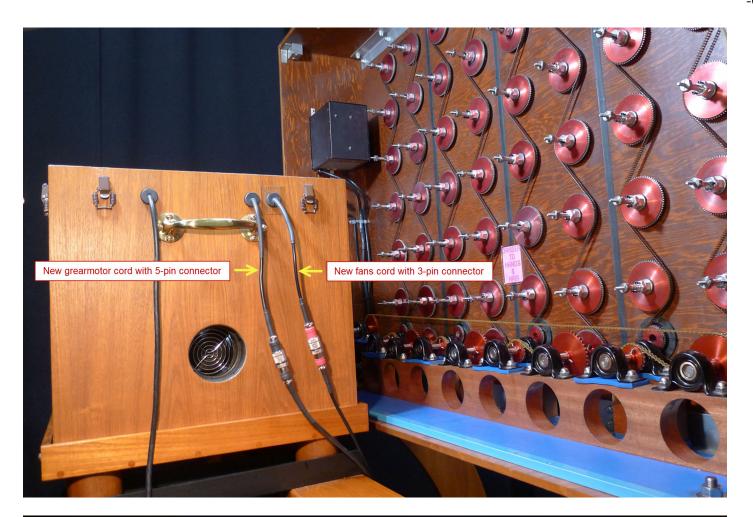


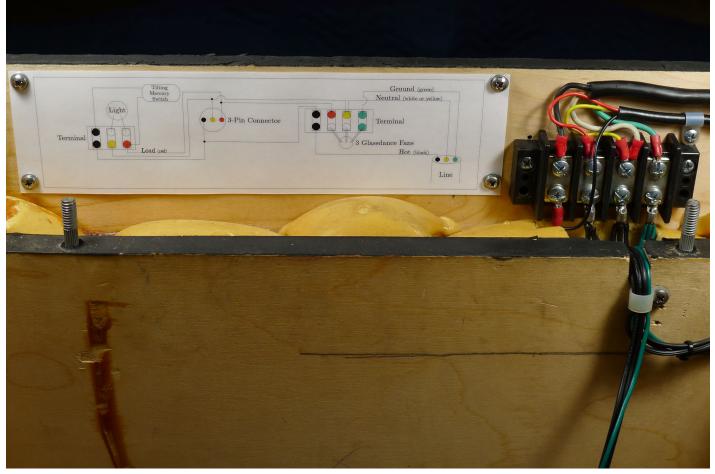


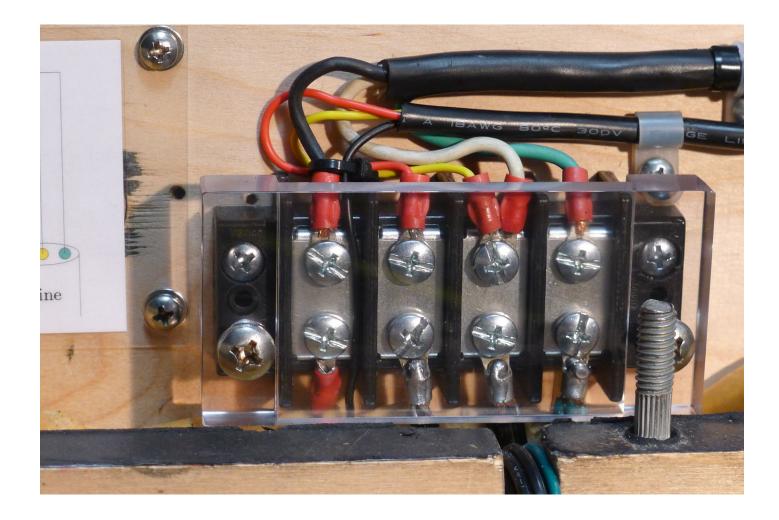




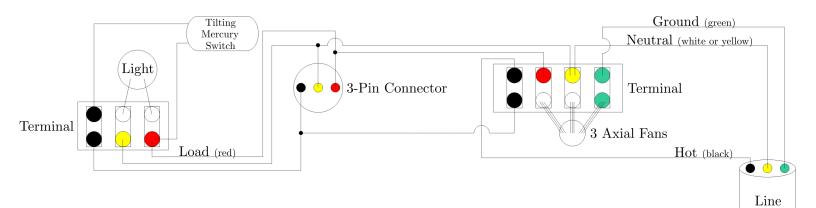








Wiring Diagram for Three Axial Fans That Cool the Glassdance Gearmotor



# TYPE "N-5RL" AND "42A-5L" GEARMOTORS (DC)

## Single reduction, right angle...to 77 Lb-in.



"N-5RL" Gearmotor



"42A-5L" Gearmotor

- Die Cast Shield and Gear Housing
- · Shielded Ball Bearings on Motor Shaft
- Separable Worm
- · Bronze Sleeve Bearings on Output Shaft
- · Oil Seal on Drive Shaft

#### General

Based on our "5R" gearhead, these sturdy single reduction worm gearmotors are designed for transmitting relatively substantial torque. The separable, hardened and ground, steel worm is key-slot and tongue driven. The gearhead is oil lubricated with a bronze gear. The output shaft is supported by bronze sleeve bearings which are lubricated via felt oiling wicks and reservoirs. Each gearmotor employs a seal on the output shaft and an additional motor shaft seal to prevent seepage to the motor portion.

Detail "C" is a gearbox breather hole on the gearmotor.

#### Notes

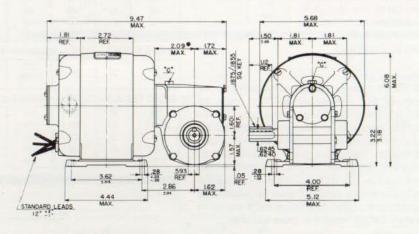
Mounting positions—see page 3.

See pages 3.

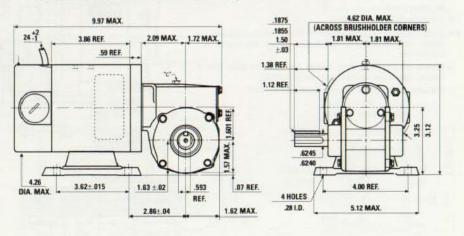
This dimension is the maximum allowable radius of any device attached to the drive shaft in order to clear motor housing. Available while supplies last after December 31, 1997.

Speed Rpm (Max.)	Safe Torque Lb-in.	Gear Ratio	Motor Hp	Bodine Type	Model No.	Connection Diagram *	Rotation *	Capacitor Part No.
HUNT W	OUND-1	15 VDC-T	otally Enc	losed				
44	77	40	1/8	NSH-54RL	589 🕸	074 10085 5-Lead	Reversible	None
58	75	30			588 🛱			
86	54	20			587 🕸			
170	31	10			586 合			
ERMANE	NT MAGN	IET FIELD-	-130VDC-	-Totally Enclo	sed			
50	77	40		42A4BEPM-5L	4119	074 10101 3-Lead	Reversible	None
67	75	30			4118			
100	63	20	1/6		4117			
200	37	10			4116			

"N-5RL" Gearmotor (Approximate shipping weight: 23 Lbs.)





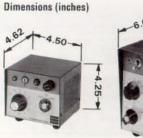


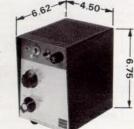
BODINE C

# **TYPE "ASH/BSH" SHUNT WOUND CONTROLS**

## ELECTR

BODINE



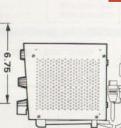


Model No. 901

000

Model Nos. 903, 906 -6.62-

4.50-



Model Nos. 905, 907, 914, 915

Diagram illustrates side view and connection cords of ASH and BSH controls.

R



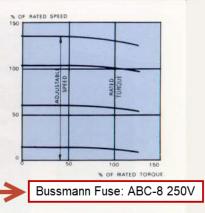
Model Nos. 911, 913, 916

The type BSH and ASH chassis kit controls, in addition to the complete chassis, include a speed control potentiometer with knob and dial plate, and an 18" cable with color coded receptacle at one end. All SH controls are supplied with connection diagram/operating instructions card, and a mounting template.

#### **Basic Speed Range Systems**

By means of a single potentiometer, speed can be controlled over a wider range than with comparable controls, and with greater stability over the entire range. Freedom from cogging at low speeds, and exceptionally good regulation are unique features of the Bodine system. Full rated torque is delivered over the basic speed range.

Motor Rating (1725 Rpm) Hp	AC Input Amps	Bodine Type	Model No.	Approx. Ship. W1. Lbs.
ENCASED CO	NTROLS-	-Basic Speer	d	
1/50	1.4	BSH-200	901	3-1/2
1/20 & 1/15	3.4	ASH-400	903	4
1/8	4.8	ASH-500	906	4-1/2
CHASSIS KIT	CONTROL	S		
1/50	1.4	BSH-250	911	2-1/2
1/20 & 1/15	3.4	ASH-450	913	2-3/4
1/8	4.8	ASH-550	916	3-1/2



#### **Basic plus Extended Speed Range Systems**

These controls have an extended speed range potentiometer in addition to the basic speed potentiometer. When operating in the basic speed range, the extended range speed potentiometer should be set in the "OFF" or fully CCW position, to provide full rated torque capability and good speed regulation.

Full rated torque is available on a continuous basis over the basic speed range, and full rated horsepower over the extended speed range. Note that the graph shows that if an application requires a particular torque throughout both the basic and the extended speed ranges a drive unit with a torque rating of twice that of the particular torque should be selected.

Motor Rating (1725 Rpm) Hp	AC Input Amps	Bodine Type	Model No.	Approx Ship. Wt Lbs.
ENCASED CO	NTROLS-	Basic plus I	Extended Sp	eed
1/50	1.4	ASH-203	914	4
1/20 & 1/15	3.4	ASH-403	915	4

