

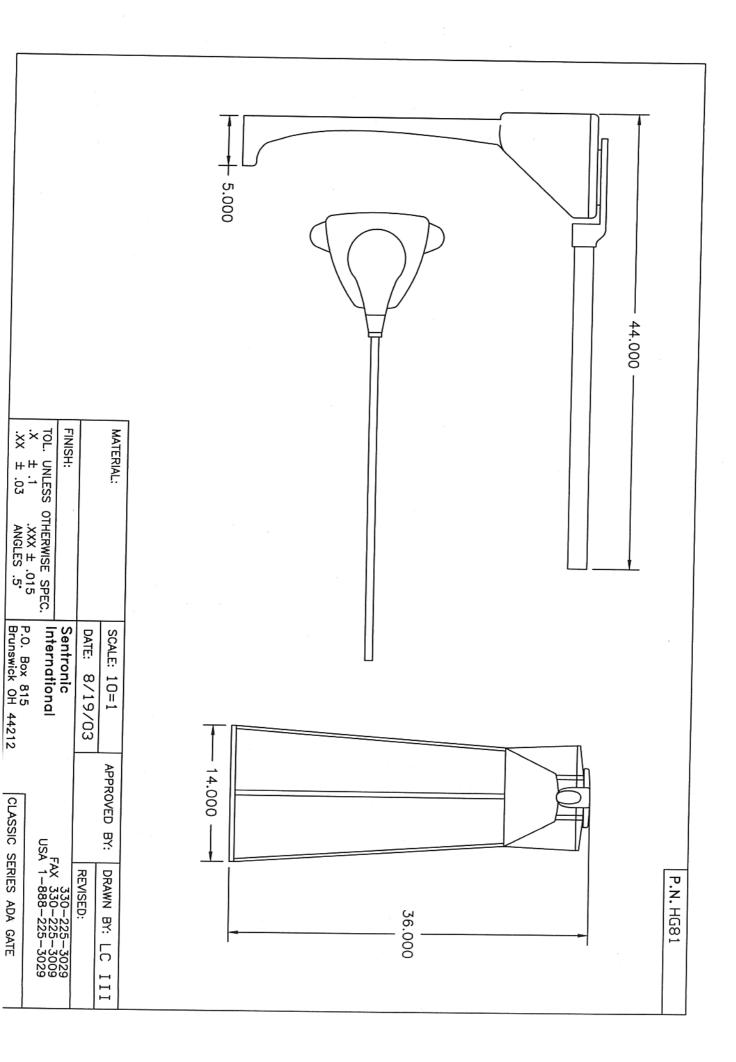
## Leaders in Access Control for Over 45 Years

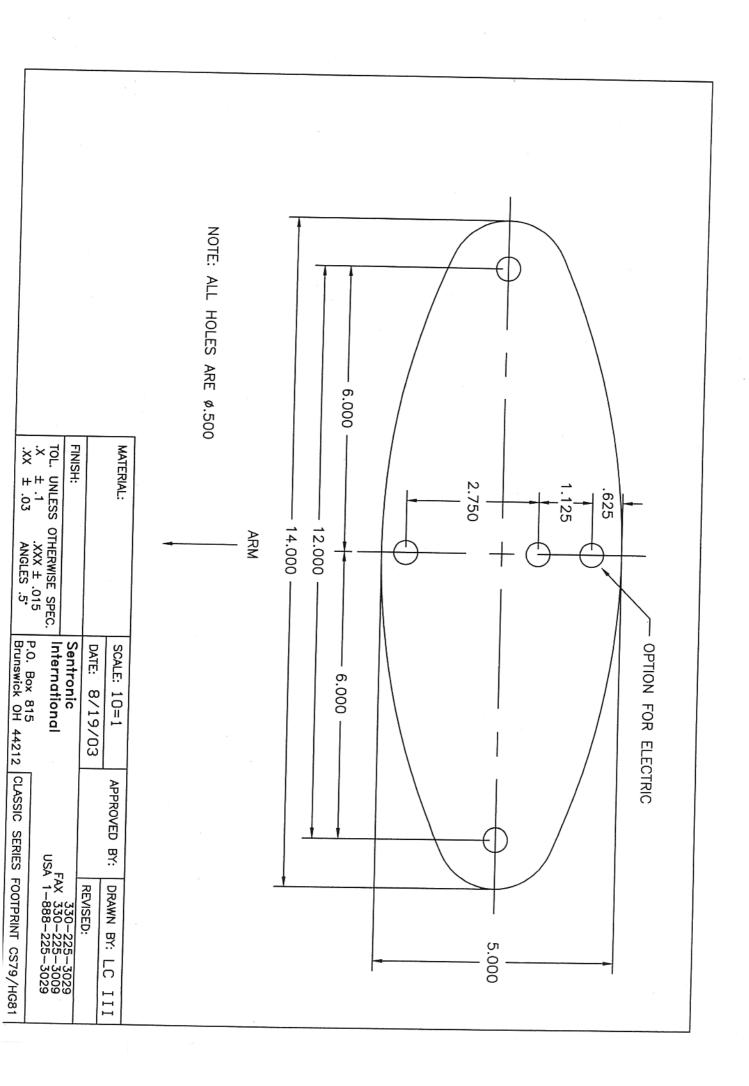
P.O. Box 815, Brunswick OH 44212-0815 Phone: 330-225-3029 Fax: 330-225-3009 Toll-Free: 1-888-225-3029

INSTALLATION
AND
SERVICE MANUAL
FOR
CLASSIC SERIES
HG-81
WAIST HIGH
HANDICAPPED GATE

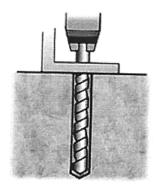
IMPORTANT: Please save this booklet after installation. If installation is done by Construction Company, please give this booklet to customer when installation is complete. They will require it for maintenance and repairs.

Thank you.

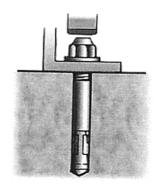




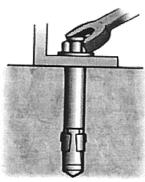
## **Concrete Wedge Anchor Installation Instructions**



1. Drill hole 1/2" to 1" deeper than anchor embedment. Clean hole of debris.



2. With nut threaded past the end of stud, hammer into position.



**3.** Tighten finger tight plus an additional 3-5 turns with wrench.

#### **Instructions for Using Wedge Anchors**

Determine the appropriate wedge anchor length for your project.

1. 1. Add:

The thickness of material to be fastened

The minimum embedment required

-to-

The thickness of the nut and washer (about one anchor diameter).

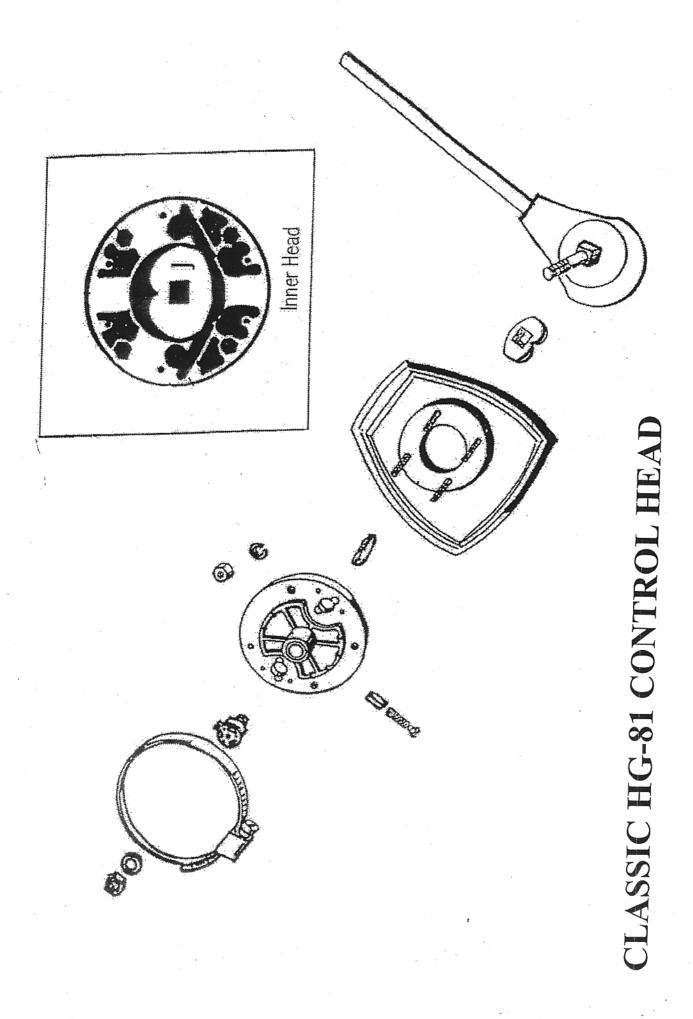
2. Once you have determined the appropriate wedge-type-anchor length, drill your hole using a bit with the same diameter,  $\frac{1}{2}$ " deeper than the anticipated anchor embedment.

Clean the drilled hole of any debris.

- Thread the nut and washer until the nut is flush with the top of the anchor.
- Hammer it into position (nut and washer flush with the surface of the material).
- Tighten finger completely and then take an additional 3-5 turns with the wrench.
- 7. If the anchor spins in the hole, force it up using a screwdriver until the clip binds into the concrete.

#### Thunderstud® Wedge Anchor Technical Information

Diam. & Length	Min. Embedment	Thread Length
1/4"	1-1/8"	3/4"
3/8"	1-1/2"	7/8"
3/8"	1-1/2"	1-1/8"
1/2"	2-1/4"	1-1/4"
1/2"	2-1/4"	1-1/4"
5/8"	2-3/4"	2"
5/8"	2-3/4"	2"
5/8"	2-3/4"	2"
3/4"	3-1/4"	2"
3/4"	3-1/4"	2"
3/4"	3-1/4"	2"
7/8"	3-7/8"	2-1/4"
L"	4-1/2"	2-1/4"
1-1/4"	5-1/2"	3-1/4"





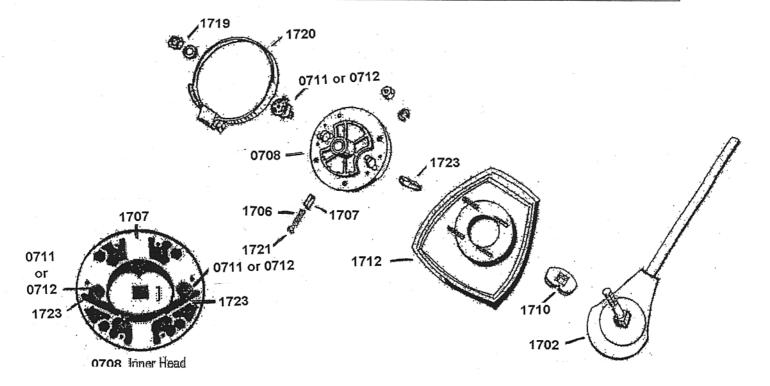
Leaders In Access Control For Half A Century

PO Box 815 Brunswick, OH 44212-0815 Tel: 330-225-3029 or 888-225-3029 Fax: 330-225-3009

Web: sentronicinternational.com Email: <u>sales@sentronicinternational.com</u> June 2007

## CLASSIC SERIES HG-81 PARTS LIST

PART NO.	PART NAME	COST	
0708	Inner Head	\$268.00	
0711	Rotary solenoid & pinion gear – CW	\$198.00	
0712	Rotary solenoid & pinion gear – CCW	\$198.00	
0780	24VDC 3amp Power Supply	\$42.11	
0789	PC Control Board	\$162.72	
1700	Limit Switch	\$52.79	
1702	Outer head/arm assembly	\$321.00	
1706	CF Compression Spring		
1707	Cam Follower	\$33.70	
1710	Cam	\$93.63	
1712	Cover Cap	\$81.21	
1716	Bottom Cover Plate	\$32.90	
1719	.625 nut/washer	\$1.19	
1720	Clamp	\$3.95	
1721	CF Spring Centerer	\$2.14	
1723	Geared Pawl	\$67.41	
1724	Plain Pawl	\$28.89	
	Manual Control Head	\$840.00	
	Control Head / Elect. 1 way	\$1,455.00	
	Control Head / Elect. 2 way	\$1,690.00	





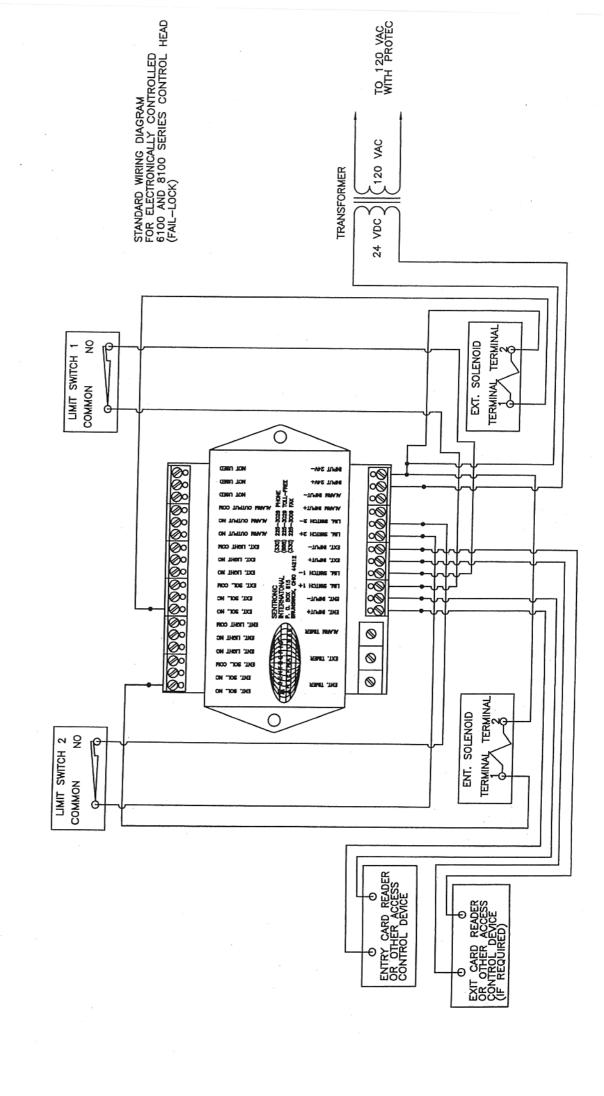
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# CLEANING & CARE INSTRUCTIONS FOR CLASSIC HG 81 HANDICAPPED GATE

- 1. Remove four mounting 10-24 pan head screws to release control head from housing.
- 2. Place control head upside down on a workbench or floor with M708hg inner head facing up.
- 3. Remove nut/lock washer of shaft M703 and clamp M 704; then remove the one N705hg spring centerer M706hg CF compression spring and cam follower M707.
- 4. Remove inner head M708hg from shaft along with bearing on top and the bottom of the inner head. Remove inner cover to inner head and carefully note location of geared pawl M709, but do not remove cam M710hg unless it is damaged and must be replaced. If cam is to be replaced, note its exact location on shaft.
- Rotary solenoid and pinion gear M711 is of the continuous duty type.
   Make sure pawl is advanced as far forward in inner head as possible when resetting solenoid, pinion gear and geared pawl; otherwise the cam will slip past the pawl and not lock properly.
- 6. Reverse procedure to reassemble after cleaning and applying silicone or teflon lubricant to all moving parts.

ENT. TIMER  ENT. SOL. NO ENT. SOL. NO ENT. SOL. COM ENT. LIGHT NO EXT. SOL. NO ENT. LIGHT NO EXT. SOL. NO EXT. SOL. NO EXT. SOL. NO EXT. LIGHT		*			
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SEN-789	11	NPUT 24V-		ANTI BACKUP COM	





# WIRING LEGEND FOR SEN-789 TURNSTILE CONTROL BOARD

NOTE!! THIS IS A MULTIPURPOSE CONTROL BOARD - NOT ALL FUNCTIONS ARE USED

All outputs on right side of board are 24 vdc+, use 24 vdc- terminal bottom left side for other leg when wiring solenoids and lights.

Timer controls length of time for person to enter	ENT TIMER	ENT SOL NO	Enter fail lock Solenoid 24 vdc+	
Timer controls length of time	EXT TIMER	ENT SOL NC	Enter fail open	
for person to exit	EXT TIMEN	ENT SOL COM	Solenoid 24 vdc+ Not Used	
Timer controls length of alarm to sound	ALARM TIMER	ENT LIGHT NO	Status light 24 vdc+	
Contact closer of these two	ENT INPUT + ENT INPUT -	ENT LIGHT NC	Status light 24 vdc+	
terminals by push button or card reader unlocks turnstile entrance		ENT LIGHT COM	Not Used	
Contact closer of these two	LIM SWITCH 1+	EXT SOL NO	Exit fail lock Solenoid 24 vdc+	
terminals by limit switch on control head relocks after one person enters	LIM SWITCH 1-	EXT SOL NC	Exit fail open	
Contact closer of these two terminals	EVELIDUE	EXT SOL COM	Solenoid 24 vdc+ Not Used	
by push button or card reader unlocks turnstile exit	EXT INPUT + EXT INPUT -	EXT LIGHT NO EXT LIGHT NC	Status light 24 vdc+ Status light 24 vdc+	
Contact closer of these two terminals by limit switch on control head	LIM SWITCH 2+ LIM SWITCH 2-	EXT LIGHT COM	Not Used	
relocks after one person exits		ALARM OUTPUT NO	Cover alarm 24 vdc+	
NOTE- If only one limit switch exits install jumper wire to LIM SWITCH 1+ and LIM SWITCH 2+		ALARM OUTPUT NC	Not Used	
Contact closer of these two terminals by cover tamper	ALARM INPUT + ALARM INPUT -	ALARM OUTPUT COM Not Used		
switch turns alarm on	ALARMINE OF	ANTI SOL NO	Anti-backup solenoid	
18 to 30 vdc power supply input and one leg from all	INPUT 24 V + INPUT 24 V -	ANTI SOL NC	Fail open 24 vdc+ Anti-backup solenoid Fail lock 24 vdc+ Not Used	
solenoids attached to vdc -	INPU1 24 V -	ANTI SOL COM		

#### 789 CIRCUIT BOARD TROUBLE SHOOTING

- 1) Isolate the card reader from the turnstile (card reader time should be less than 1 second anything more may allow two people to walk through the unit) A one shot timer is available for purchase if the time cannot be achieved.
- Using a jumper, make a <u>momentary</u> contact between either ent+ and ent- or exit + and exit - depending on which side you are trying to activate.
- 3) At this point the solenoid should release and the turnstile can be rotated. If successful the turnstile will lock back up after rotation is completed. The card reader is the problem.
  - A) If not successful look to see if the triangle cam is actuating the limit switch. The limit switch will lock the unit back up.
     Try actuating the limit switch by hand to see if it is working
  - B) Check for loose wires
  - C) Use meter to check for 24VDC

1st check transformer

- 2<sup>nd</sup> place one leg of meter on 24VDC negative on circuit board place the other leg of meter on ENT SOL NC contact or EXT SOL NC contact. This checks for current going through the relay. If power is not there then the jumper on the circuit board may be missing or the relay may be bad.
- Use meter to check Solenoid for 24VDC
   If solenoid is wired into a normally open contact then initiate the turnstile

A normally closed contact should have power going to the solenoid.

If using transformer to check solenoid, solenoid must be disconnected from the Circuit board or back-feed will occur and could possibly short out the board.

4) If still unsuccessful the return the control head to the factory & our technicians will fully test the unit and make any repairs needed.



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# <u>WARRANTY</u>

Seller warrants the goods against defective workmanship and materials provided that Buyer notify Seller within one (1) year after receipt by Buyer of the goods of any claim under this Warranty. The liability of Seller shall be limited to replacing or repairing defective goods returned by Buyer and delivered to the factory of the Seller, transportation charges prepaid. Replaced or repaired goods will be redelivered freight prepaid to the address of Buyer shown hereon. Except for the Warranty contained herein, there shall be no other warranties, such as warranties of fitness and merchantability or otherwise; expressed or implied, written or verbal, and Seller shall not be liable for consequential damages in any event.