

NABCO TECHNICAL TIPS



VOLUME 1, ISSUE 1 SEPT 2, 2003

NABCO ENTRANCES INC, MUSKEGO, WI

Welcome to Our First Technical Newsletter



First off, please allow me to introduce myself. My name is Michael Buckley and for those of you who have not met me I am the Technical Services Manager for NABCO ENTRANCES INC.

What the heck is that you say? Well that's the person who is responsible for keeping you folks up to date and in the know on the technical side of our products.

This is a new endeavor for us here at Nabco Entrances Inc. and we are excited about it!

This newsletter will be published at least quarterly or more frequently if needs be. It is intended for technicians so don't let it sit around the office gathering dust! Please make copies of it and hand it out to all the technicians in your shop or forward this email on to your technicians.

In this newsletter we will try to keep you, the technician, up to date on new products, how they differ from previous models, and tips on how to install and service them. We will also be including service information on older products such as previous models of swingers, slid-

ers, and components. We will also be including special wiring diagrams that will illustrate the wide functionality of our products and what you can do with them.

Our intention is to provide this newsletter via email. A hard copy will be mailed to those we do not have email addresses for at this time. If you have received this by mail, please forward an email address for the next issues.

Please see the back page for my contact numbers and email address.

So let's get started!

Special points of interest:

- **Stay abreast of changes and revisions.**
- **Keep up to date on new products**
- **Learn the older systems for more service opportunities.**
- **Learn and share tips and tricks to make installs and service jobs go more smoothly**

Magnum 2 Control Supercedes Magnum 1

In an effort to make the Magnum control even more versatile we have upgraded it to a new Magnum 2 version. The main differences between the two versions are as follows:

1. Magnum 2 now has a shunt to allow the technician to switch the control from Barrier Free to Full Automatic Application. Moving the shunt to the

lower position gives the control more power for operating heavier doors.

2. The Magnum 2 now has a braking module for GT300/400/500 operators.

3. The new control does not affect motor braking when powered down on a GT 710.

4. The auxiliary AC output now has an automati-

cally resettable fuse rated at 500mA.

5. If safety goes active while opening, the door stops. Two seconds after the safety is released the door will continue to open.

We would like to point out a couple of special features that make this control unique.

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MAGNUM 2
NABCO'S NEW STANDARD
CONTROL FOR USE IN ALL SWINGER
APPLICATIONS

Magnum 2 continued ..

- The Magnum has an internal lockout so no external lockout is needed.

In fact, you should not attempt to use an external lockout with the Magnum control since the voltage to the motor is Pulse Width Modulated. This means the voltage is not true DC voltage that a lockout is designed to work off but rather a pulsed voltage.

This enables the Magnum to have better control of the door.

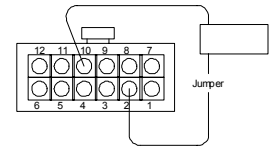
- The Magnum has two (2) safety inputs. The Violet wire is the continuous safety input. It connects to a swing side ACUGARD or mat.

The White wire is the safety with lockout. It connects to the header mounted presence sensor.

Did you know?

Did you know:

- The NABCO "U" series microprocessor can be set to hold a door closed to counteract stack pressures? Set Hold Close to "Y" on Handy Terminal.
- To have the Nabco microprocessor ignore the continuous safety input on the swing side ACUGARD stick when the door reaches backcheck, set SIG AT CLOSING = Y and SIG. FULL OPEN = N on Handy Terminal setting.
- The version number of the NABCO microprocessor control can be found on the microprocessor chip.
- On U04 microprocessor versions and higher it is not possible to unplug the main harness and work the door. Because the panic circuit (Blue wire) stays normally closed to the Common (Red wire) unplugging the harness disconnects this and shuts down the door. A test jumper plug is available for troubleshooting. This permits the control to be worked without the sensors and harness in the system.



Test Jumper
Part # 11-5941

Pre-Loading the Operator on a GT 300, GT 400 or GT 500 with Magnum 2 Control

It is very important when installing a GT 300/400/500 swing operator that the spindle is wound up approximately 130-140 degrees to give the spring proper tensioning and correct positioning of the microswitch cam on the top of the operator. If the operator is not preloaded the door will open very slowly at first, then, just before getting full open it will speed

up and slam open.

There are different ways of preloading the operator but the easiest way is as follows:

Be certain operator motor is plugged into control box. Install arm on spindle in the unwound position.

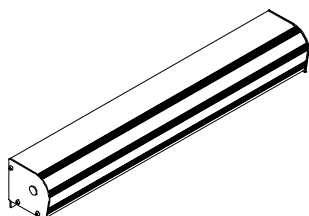
While tightly holding arm, wind up the operator in the

required rotational direction approximately 130 - 140 degrees. Insert a 1/8" Allen wrench or similar tool in the hole located on the bottom of the operator at the motor end. This will pin the gears and spindle in place.

Inspect scribe mark on the underside of the spindle. With door closed and arm installed in the proper posi-

tion, the scribe mark on the underside of the operator spindle will be parallel with the door in the closed position.

Introducing Retro-fit Kits for GT 710 Magnum



We now have retrofit kits available to convert any GT 710 Low Energy Unit over to the new Magnum 2 control. The kits come in two flavors:

To convert an original GT 700 or 710 controlled unit over to a Magnum 2 GT 710 or

To convert the Magnum 1 GT 710 over to a Magnum 2 GT 710.

Bear in mind any upgrade to the Magnum 2 from older style boards requires a conversion kit due to changes in the wiring harness and functions. Following are the kit part #'s.

Application	Single or Simultaneous Pair	Kit Part Number	List Price
Original GT 710 to Magnum 2	Single	11-10361-01	\$ 644.00 *
Original GT 710 to Magnum 2	Simultaneous Pair	11-10361-02	\$1158.00 *
Magnum 1 GT 710 to Magnum 2	Single	11-10362-01	\$ 485.00 *
Magnum 1 GT 710 to Magnum 2	Simultaneous Pair	11-10362-02	\$ 939.00 *

* For questions on pricing contact Customer Service at 1-877-622-2694.

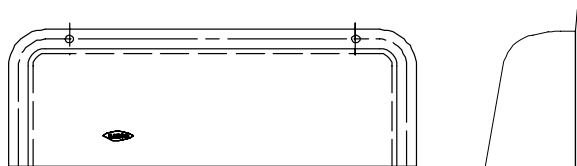
Rain cover Available for Acusensors

Clear plastic rain covers especially made for NABCO sensors are now available. The cover sports the NABCO logo. It fits very snugly over the top of the Acusensor and looks just like it was intended to ...great. It is a long way from the bulky or awkward looking accessory rain hoods available from others. The unit

secures very easily with a couple of screws and can be field painted any color. We recommend painting the inside instead of the outside for durability.

The price is also very attractive at only \$14.00 List *

* For questions on pricing contact Customer Service at 1-877-622-2694.



Rain cover for Acusensor line
Part # 14-10278

On the Topic of Acusensors ...

Talking about sensors for a minute ..

• Are you aware that when making changes to any of the Acusensor models you must first unplug the sensor, then make your changes, then plug the unit back in for the changes to take effect? It is similar to rebooting your computer.

• The Acusensor 1A works great as both a motion sensor on the approach side of a door or as a safety sensor on the swing side of a door. It also has a setting for use as motion sensor only (get one of our competitive infrared products to do that).

• The Acusensor has a

transistor output so current load through the output is limited to 0.12 amps.

• When powered from the NABCO control the common is shared between the 12 VDC and transistor common therefore there is only three wires needed for the sensor to function.

• Current draw is only

70 mA.

• The Acusensor 1A will work on 12-24 Volts AC or DC

• The Acusensor 1A pattern can be brought in very close to the door so it makes a great sidelite sensor on a sliding door.



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We're on the Web!

www.nabcoentrances.com

Thank you for taking time to read our newsletter. We hope you liked it.

We appreciate your questions & suggestions and will endeavor to make this a publication that you will find helpful in keeping you up to speed on changing technologies. For comments and suggestions contact:

Mike Buckley

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Tel: 1-866-622-8325

Doors with Electric Strikes? Use the SA-1 Door Sequencer

The SA-1 is a neat little door sequencer that works well with any of the GT swingers. The unit will first retract the strike then after an adjustable time delay it will activate the door control. For more information call Technical Support at 866-622-8325

GT 710 Wiring
Diagram Shown
at Right

