

Welcome To A&M Systems, Inc.





*The Industry Leader in
Bus Doors and Actuators*

4121 Eastland Drive
Elkhart, IN 46516
Ph: 574-522-5000
Fx: 574-522-9099
Web: www.anmsystems.com

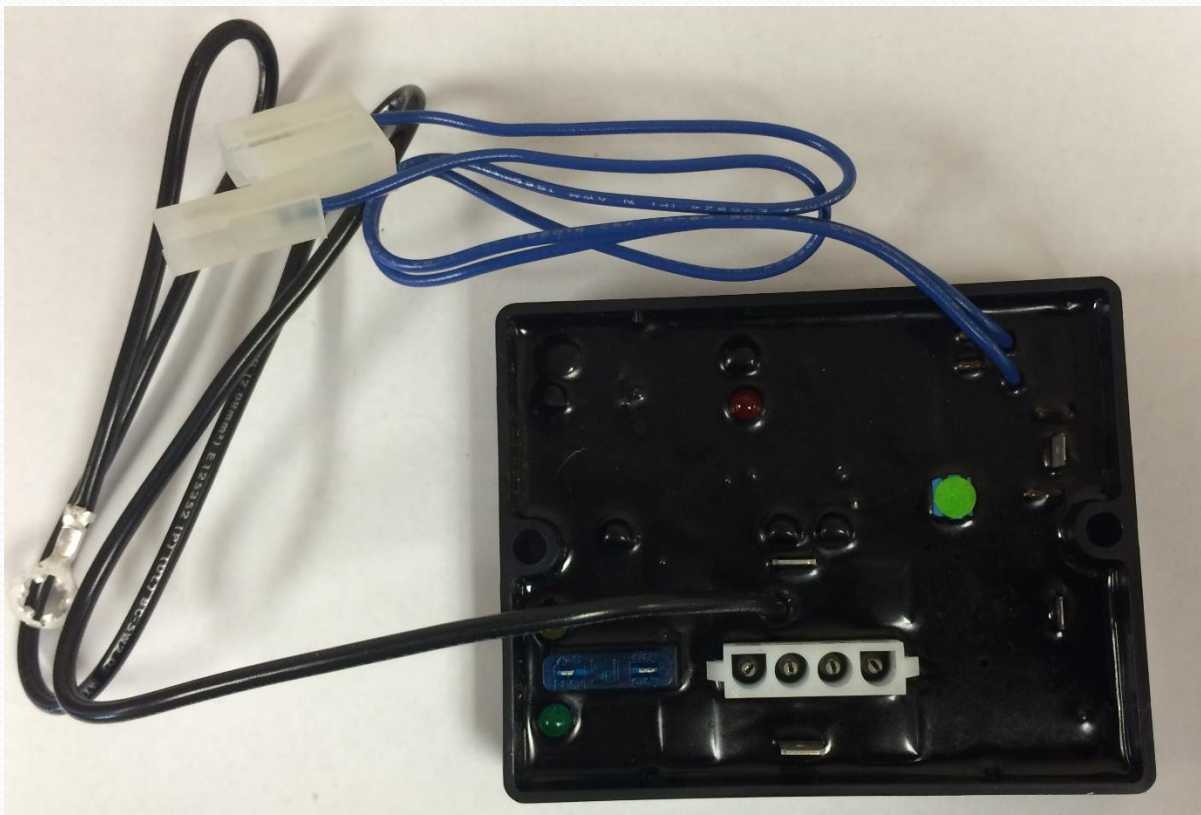
95+ Different Actuator Models

350+ Different Door Models

1,000s of Options

Even if we didn't build it, we can probably replace it.

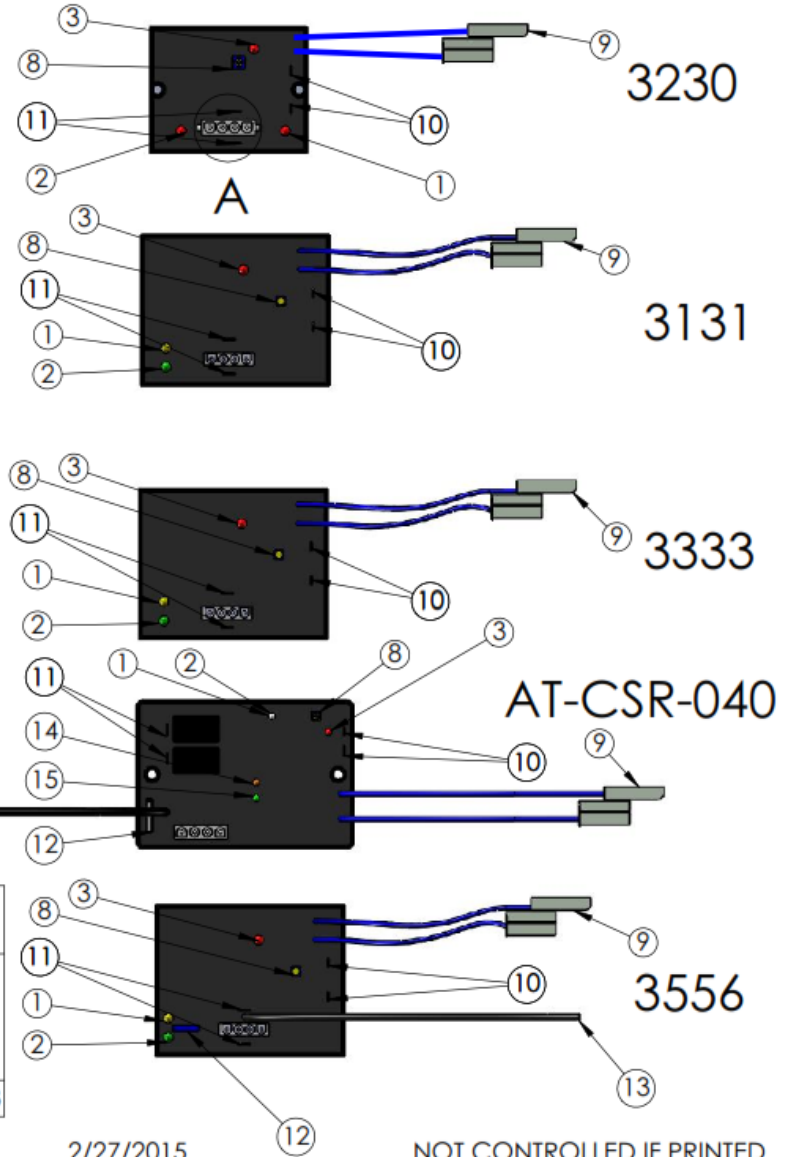
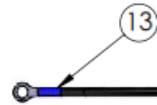
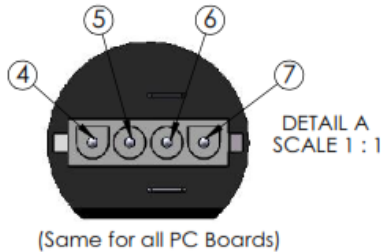
Model 3556 Control Board



Model AT-CSR-040 Control Board



Ref #	Description
1	Close Output Indicator
2	Open Output Indicator
3	Setpoint Indicator
4	Red, 12v Continuous
5	Blue, 12v, Open Signal
6	Orange, 12v, Close Signal
7	White, Ground
8	Potentiometer
9	Open Limit Terminals, Normally Closed
10	Auto Reopn Null Switch, Normally Closed
11	Motor Lead Terminals, 1/4" Spade
12	Fuse, 15 AMP
13	Ground, Secondary
14	Close Signal Input Indicator
15	Open Signal Input Indicator



PLEASE NOTE:

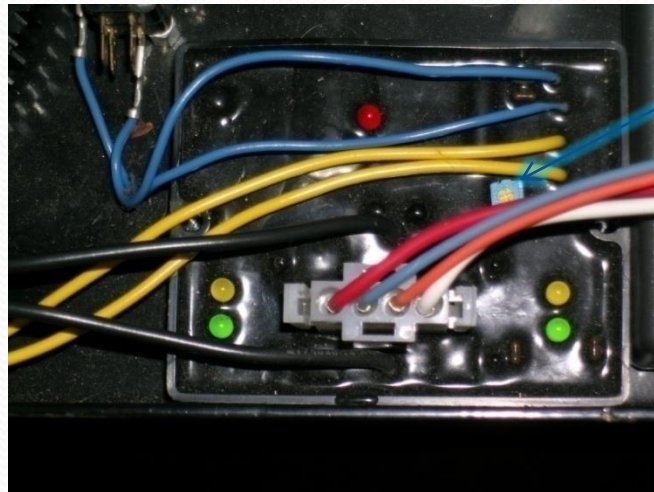
PC Boards models 3556 and AT-CSR-040 are current production models and can replace all previous models of PC Boards including those listed below. The function of the aforementioned boards is similar. These two models can also be interchanged.

2853	2899	3056	3131	3137	3149	3185	3193	3198	3230	3333
------	------	------	------	------	------	------	------	------	------	------

Common Maintenance

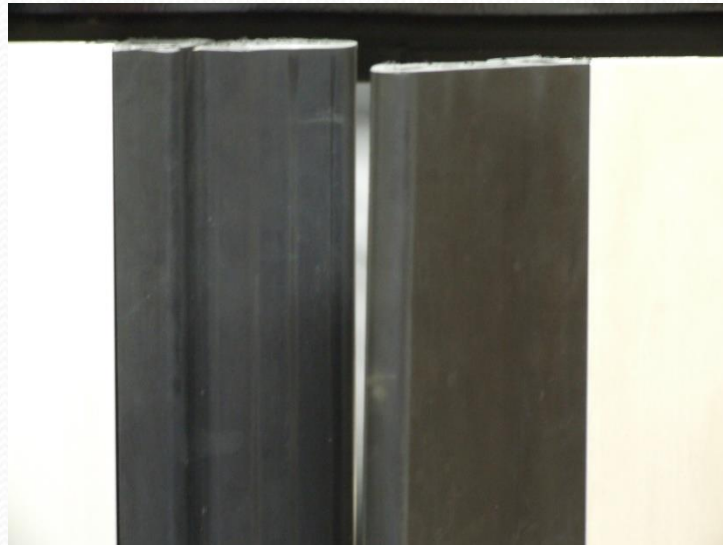
Doors Only Open or Close Part Way

- Rotate the emergency release lever and manually push doors open close to make sure there is no resistance in the door movement, repair as required.
- Re-engage emergency release lever and actuate the doors electrically. When the door stops, does the red LED illuminate? If yes, then increase the PC board set point by turning the adjusting pot clockwise $\frac{1}{4}$ turn.
- Actuate doors electrically and insure proper operation.



Center Seal Sticks Together in Hot Weather

- Thoroughly clean the seal with a mild detergent and dry. Apply a light coat of clear floor wax and let dry completely before closing the door.
- Doors built after October, 2010 are made using TPV center seal and therefore should never stick together.



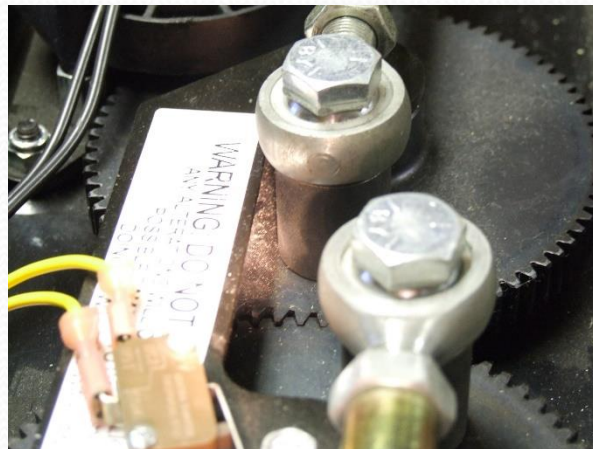
Slop in Doors

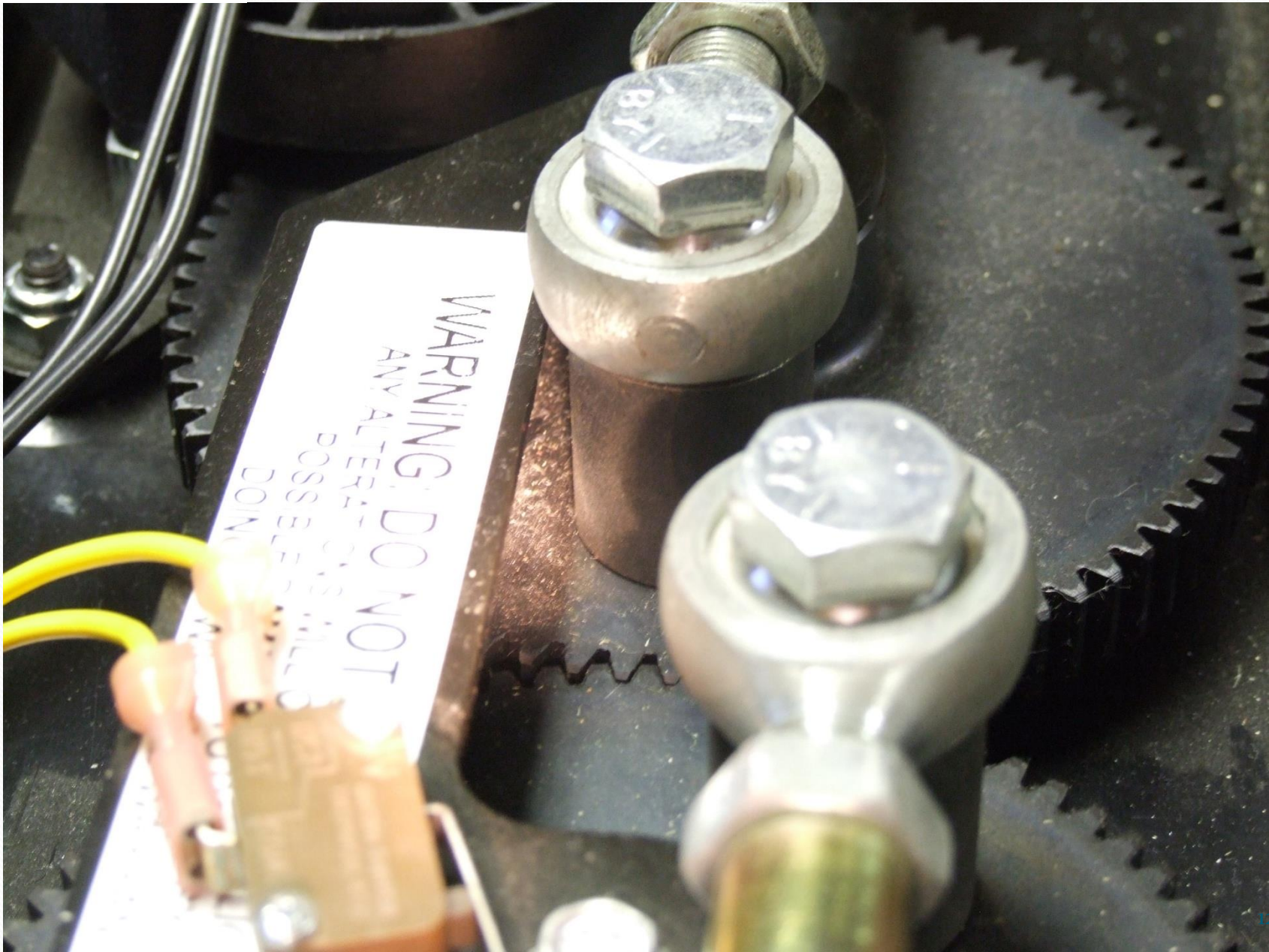
- Check the tightness of setscrew in the actuator arms. Tighten or replace as required.
- Replace actuator arm on actuator and/or torque arm on door if excessive wear is noted.



Open Limit Switch Does Not Function

- Electrically open doors and inspect the distance between the forward push-pull rod spacer and the gear stabilizer.
- Replace micro switch as required making sure the terminals are installed on the “NC”, normally closed set of wire terminals.
- Electrically open doors and inspect the distance between the forward push-pull rod spacer and the gear stabilizer.
- That distance should be 1/8". Move switch tab until 1/8" distance is obtained. Moving the switch tab toward the drive gears increases the distance between the gear stabilized and the push rod spacer.





PC Board Corrosion

- If the PC board shows signs of corrosion (green residue or rust) on the top of the board there is a water leak somewhere.
- Repair water leak and replace board.



Other intermittent or odd problems

- Does the coach have an external key switch? If so, disconnect for troubleshooting. Sometimes as key switches age the contacts deteriorate allowing voltages to backflow causing PC board the fail.
- Make sure the system ground is intact. All system grounding is through the white wire from the PC board. The motor frame is isolated from ground.

Overuse of the Manual Release

- The Manual Release Lever is for **EMERGENCY** use and is not intended for repeated usage.



Overuse of the Manual Release

- The Manual Release Lever is for **EMERGENCY** use and is not intended for repeated operation.



Updated Manual Release Built-in Stop to Reduce Overextension



Ratcheting Sound Coming From the Motor Drive

- Inspect motor and main drive gears for damaged or missing teeth.

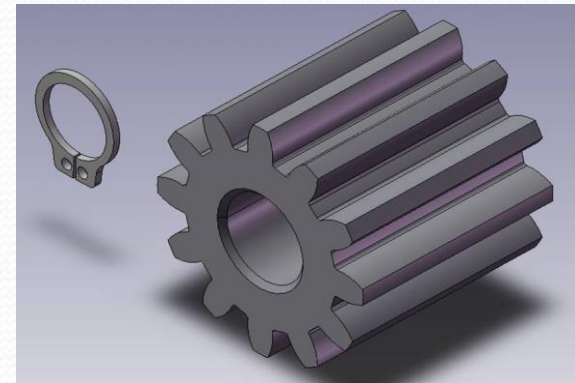


Ratcheting Sound Coming From the Motor Drive

- Inspect motor and main drive gears for damaged or missing teeth.

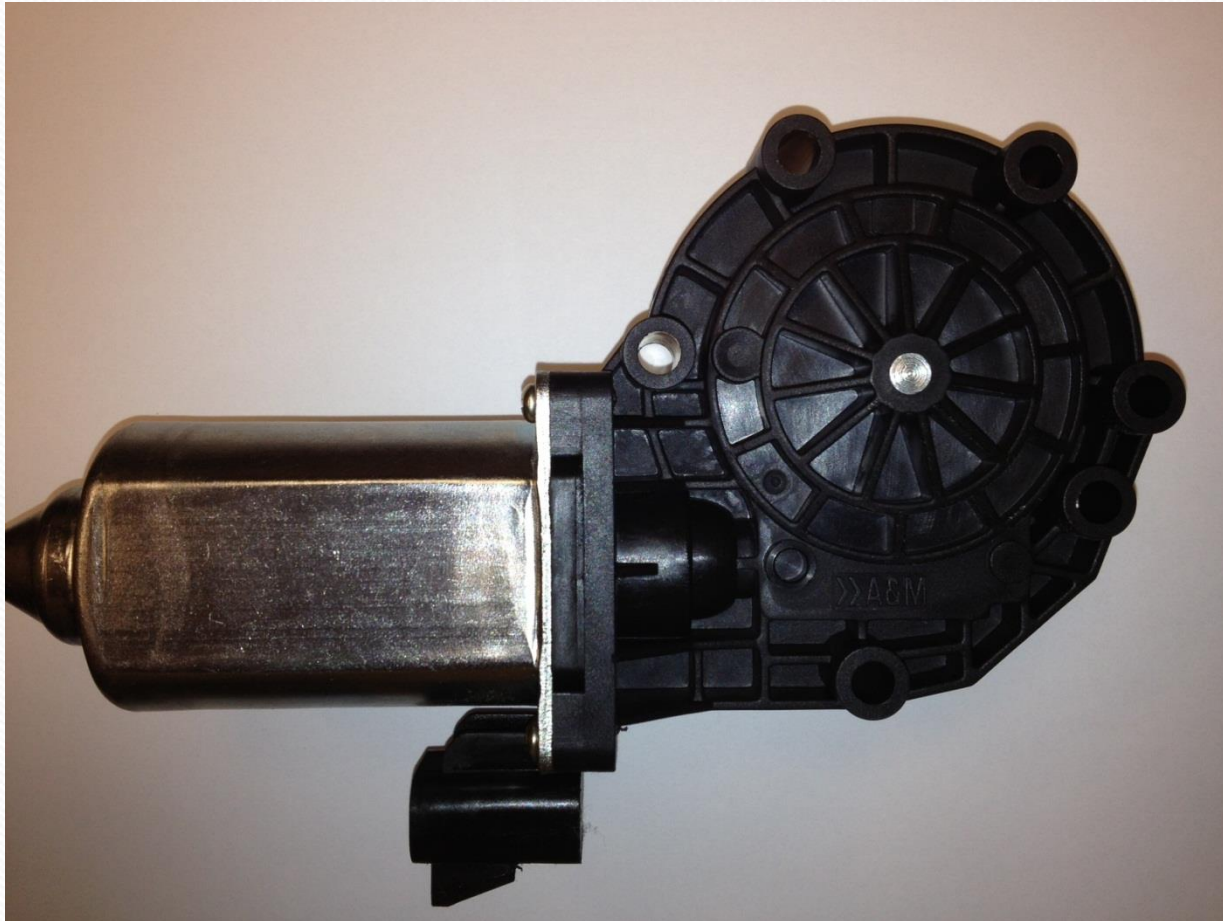


P/N K9049

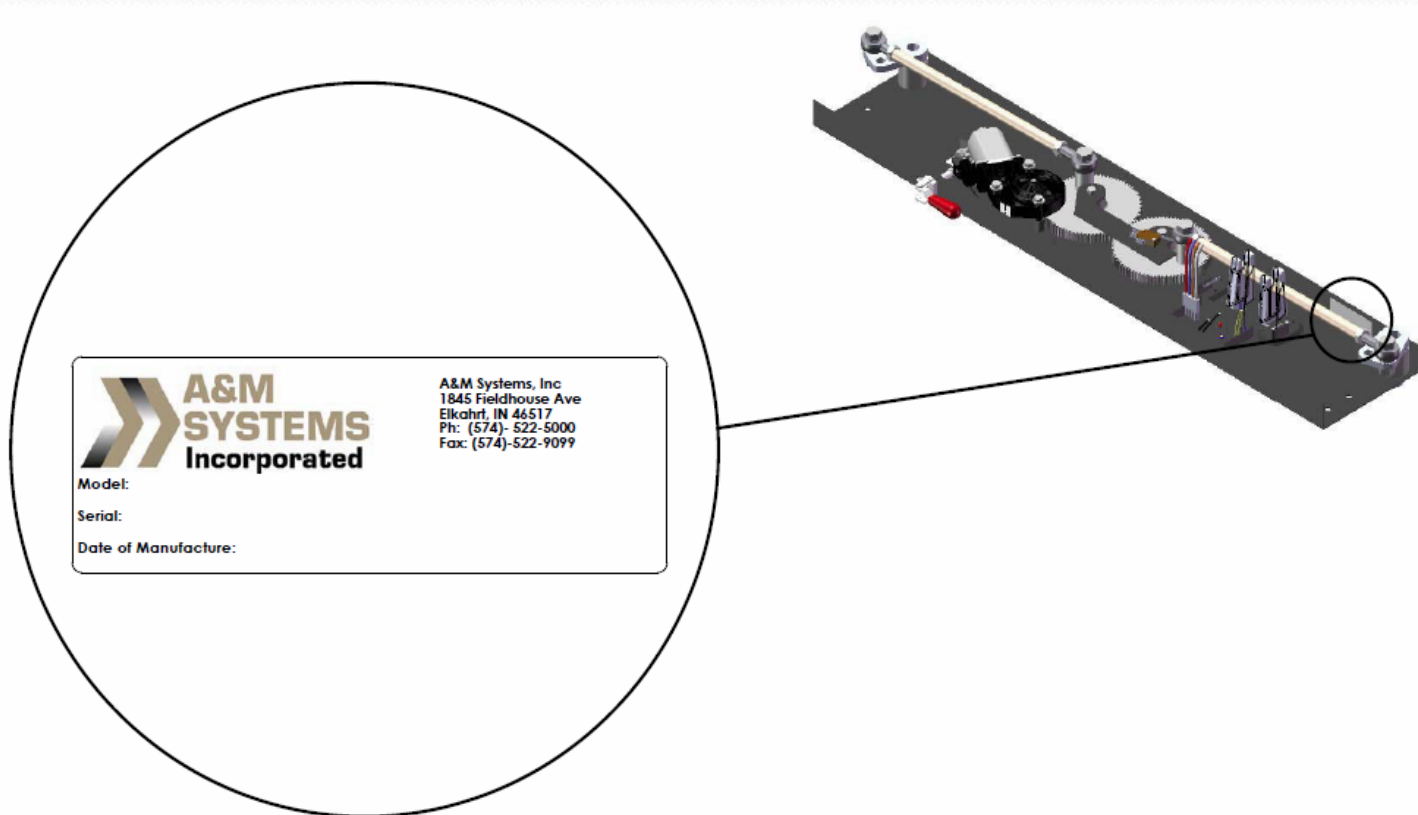


2014 and Newer A&M Motor

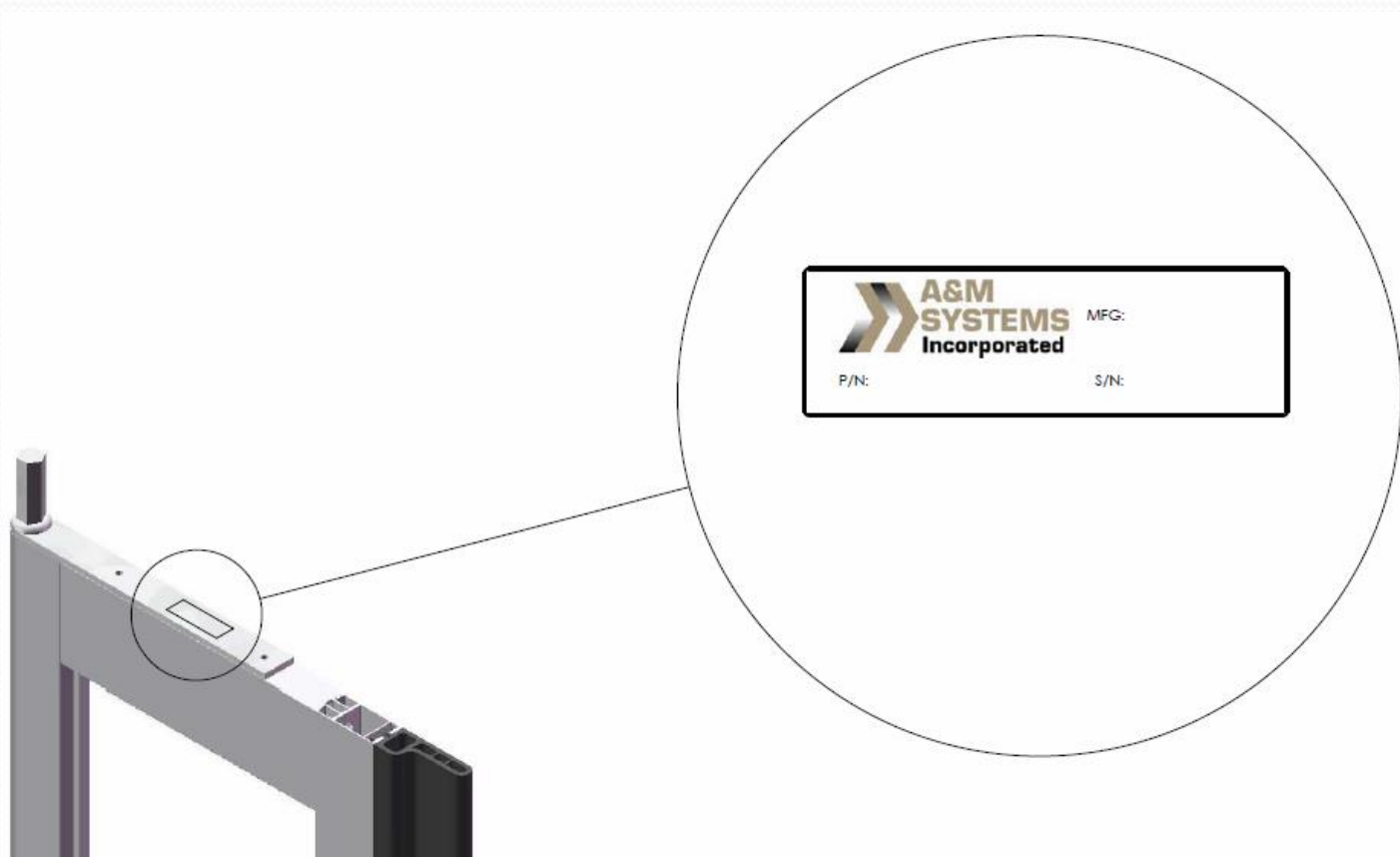
With Hardened Pinion Gear



How To Identify Our Products - Headers



How To Identify Our Products - Doors



PROGRAMMING INSTRUCTIONS FOR THE A&M TOUCH PAD OPENING SYSTEM

Note: All Touch Pads are programmed to the number 1845 as the factory code.
To change code:

1. Enter the number sequence: 1 – 8 – 4 – 5 for a new unit or the last code on a previously changed unit.
2. Press the following numbers: 3/4 – 5/6 – 7/8.
3. Press 3/4 and 7/8 simultaneously; the back lighting will blink three times.
4. Enter your new four-digit code; the back lighting will blink four times.
5. Enter your new four-digit code followed by <1/2> to OPEN or > 9/0< to CLOSE the doors.

If an error is made during reprogramming you must wait until the back lighting extinguishes before trying to reprogram.

PLEASE NOTE THAT IF THE LAST CODE IS NOT KNOWN REPROGRAMMING IS NOT POSSIBLE.



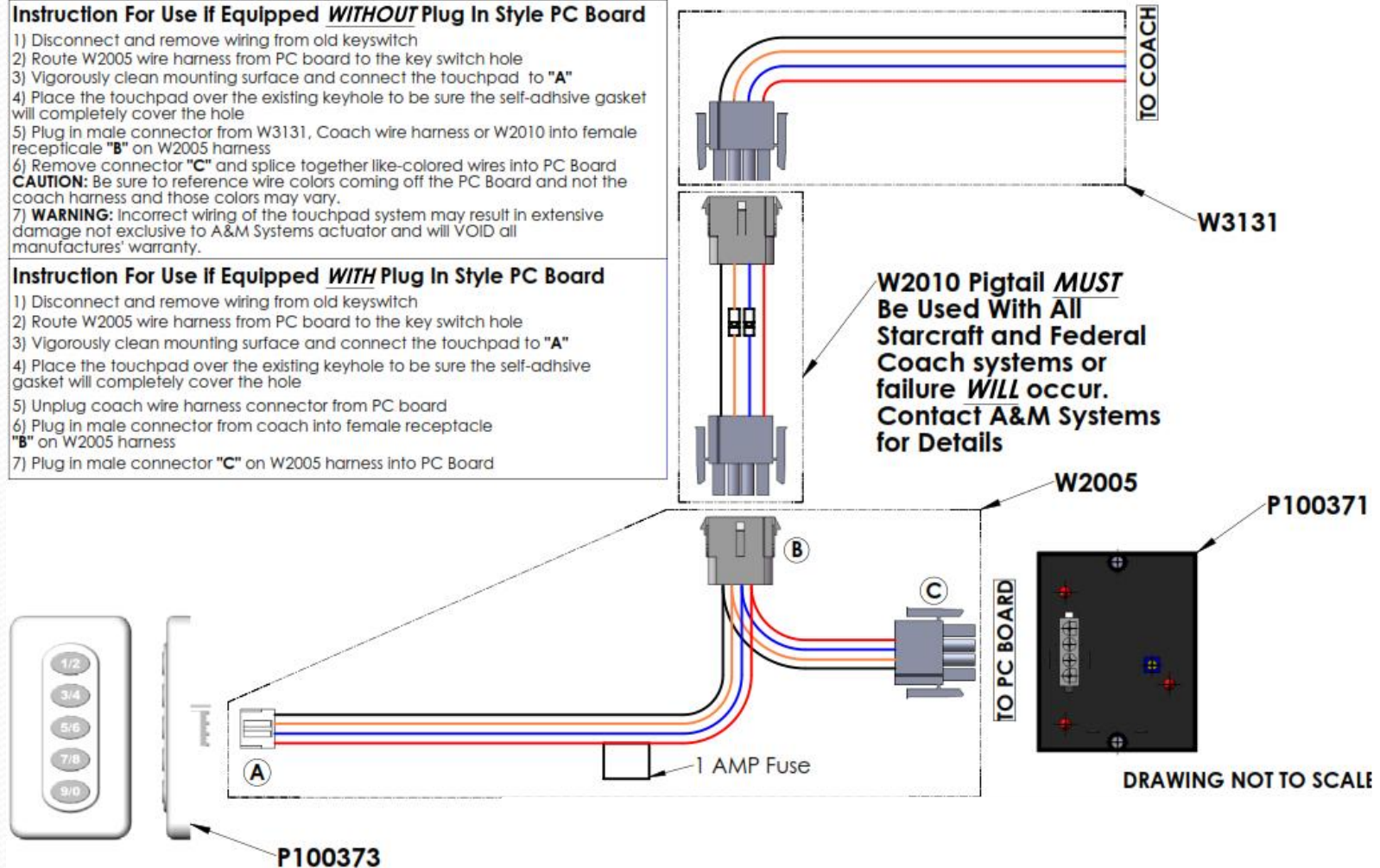
Easy Plug and Play Installation and Removal

Instruction For Use If Equipped *WITHOUT* Plug In Style PC Board

- 1) Disconnect and remove wiring from old keyswitch
- 2) Route W2005 wire harness from PC board to the key switch hole
- 3) Vigorously clean mounting surface and connect the touchpad to "A"
- 4) Place the touchpad over the existing keyhole to be sure the self-adhesive gasket will completely cover the hole
- 5) Plug in male connector from W3131, Coach wire harness or W2010 into female receptacle "B" on W2005 harness
- 6) Remove connector "C" and splice together like-colored wires into PC Board
CAUTION: Be sure to reference wire colors coming off the PC Board and not the coach harness and those colors may vary.
- 7) **WARNING:** Incorrect wiring of the touchpad system may result in extensive damage not exclusive to A&M Systems actuator and will VOID all manufactures' warranty.

Instruction For Use If Equipped *WITH* Plug In Style PC Board

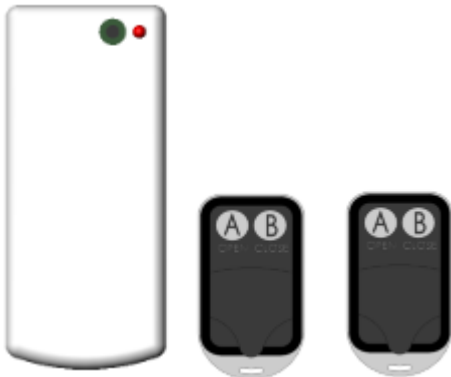
- 1) Disconnect and remove wiring from old keyswitch
- 2) Route W2005 wire harness from PC board to the key switch hole
- 3) Vigorously clean mounting surface and connect the touchpad to "A"
- 4) Place the touchpad over the existing keyhole to be sure the self-adhesive gasket will completely cover the hole
- 5) Unplug coach wire harness connector from PC board
- 6) Plug in male connector from coach into female receptacle "B" on W2005 harness
- 7) Plug in male connector "C" on W2005 harness into PC Board



SERVING THE BUS TRANSPORTATION INDUSTRY

PROGRAMMING INSTRUCTIONS FOR THE WHITE A&M PROGRAMMABLE REMOTE

1. Be sure that the receiver (P/N P100536) is plugged-in correctly as shown in DOC00034.
2. Place a soft, non-metallic object into the learning port of the receiver and press the learning button 1 time. The RED LED on the receiver will illuminate.
3. With the RED LED illuminated, press a button on the key FOB that you would like to program.
4. If the FOB was paired with the receiver, an audible beep will be heard, the RED LED in the receiver will flash briefly, and then turn off.
5. Test both open and close on the FOB, the pair should be complete. When a signal is received from the FOB, the RED LED on the receiver will illuminate and an audible beep will be heard.
6. Repeat steps 2-5 to pair up to 15 FOBs to a single receiver. Any single FOB can be paired to multiple receivers.
7. If at any time you would like to reset or remove a FOB from service, press and hold the learning button on the receiver for about 10 seconds and the RED LED turns off. Note: This will eliminate all learned codes in the receiver. Any FOBs that you would like to use after this point will need to be paired again using the proper steps outlined above.



K9102 – Single Key FOB System

K9103 – Dual Key FOB System

P100537 – Extra FOB

Also Useful for Troubleshooting Issues with a limited Maintenance Personnel

- Gives the ability to operate the door input signals and still see the diagnostic LEDs

Easy Plug and Play Installation and Removal

