ACTUATORS INSTALLATION

1. Remove door panels carefully

2. Install actuator in correct direction as shown in figures 1-a, 1-b and figure 2. Make sure that actuator will not block other moving parts inside of door (screen and its mechanism). Also make sure that actuator is moving parallel to door lock bolt.

3. Choose two holes inside of door or drill new (3/16") and screw controller on.

4. Using suitable joint connect door lock bolt lever to actuator lever. Tighten joint screws making sure that actuator can move easily. See figure 3 and 4.

CAUTION:

1. Make sure that actuator is moving parallel to door lock bolt. See figure 2. Otherwise closing/opening movement will be incorrect and/or actuator lifetime will be shortened.

2. Before tightening joint screws make sure that stroke of front door actuator (5 cables) and front door lock bolt is set to middle range position. See figure 4.

3. Before tightening joint screws make sure that stroke of rear door actuator (2 cables) is set to maximum or minimum range position and move it about 1/16” up or down. See figure 4. Then push and pull door lock bolt to make sure that actuator is working correctly and make adequate corrections if not.

Figure 1-a. Actuator installation example
Figure 1-b. Actuator installation example

Figure 2. Actuator and door lock levers position

Figure 3. Connecting levers with joint

Figure 4. Actuator stroke regulation
INSTALLING WIRES

1. Make sure that all actuators are installed and connected before connecting red and black wire to power supply +12V and ground.

2. During connecting bunch of wires to front door actuators (5-wires) make sure they are connected correctly taking into account colors. See figure 5.

   Front actuator | Bunch
   White         | White (1)
   Brown (1)     | Controls | Brown (1)
   Black         | Black    | Blue
   Blue          | Blue     | Green
   Green         | Green

e. Connecting white actuator wire to brown (1) wire in bunch (or blue wire to green wire) will automatically move actuator up and down.

   b. (1) White and black actuator wires (5-wires) are connected together when actuator is in up position.

      (2) Brown and black actuator wires (5-wires) are connected together when actuator is in down position.

   c. (1) Actuator will be pushed up when its blue and green wires are connected to +12V power supply and ground respectively.

      (2) Actuator will be pushed down when its blue and green wires are connected to ground and +12V power supply respectively.

3. During connecting bunch of wires to rear door actuators (2-wires) make sure that wires are connected correctly taking into account colors. If pushing up and down (opening/closing) rear door actuators is not set the same as front door actuators, you should swap blue and green wire (blue wire from actuator to green wire from bunch).

   CAUTION:

   Make sure that wires are installed without being pinched by screen mechanism or screws, which might cause short circuit.

4. Push down and up front door lock bolt (5-wires actuator), to check if all actuators are working correctly and moving in the same direction. If one of actuators is moving in other direction, you should swap blue and green wires as described in point 3).
Figure 5. Wires connection
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| 1. ACTUATORS NOT WORKING                     | a. Check +12V and ground wires connection and fuse.  
|                                              | b. Check wires connection to lock controller.  
|                                              | c. Check lock controller operation. Connect white (1) and brown (1) wire from bunch to ground. It will cause reversing actuators positions. (After connecting white (1) and brown (1) wire to ground you should hear “click” from lock controller). |
| 2. FUSE BLOWS CONTINUOUSLY                   | There is short circuit situation.  
|                                              | a. Move bunch of wires from actuators joints.  
|                                              | b. Bunch of wires can be damaged by screw or screen mechanism if fuse still blows after connecting white or brown wire to ground.  
|                                              | c. If bunch of wires is shorten, then check actuators one by one disconnecting them from the circuit (one by time) and checking if fuse still blows. |
| 3. FRONT DOOR ACTUATORS NOT WORKING          | a. Check actuator connection (figure 5)  
|                                              | b. Check if actuators joints are secured correctly.  
|                                              | c. Check if all mechanical parts are tightened.  
|                                              | d. Check and adjust actuator stroke (1,2 and 4)  
|                                              | e. Check actuator power supply +12V and connect actuators blue and green wire to ground, to check if it is not damaged. (disconnect actuator from bunch of wires before checking it) |
| 4. ACTUATOR PUSHES UP AND DOWN AUTOMATICALLY | a. Disconnect power supply +12V from actuator.  
|                                              | b. Make sure that white, brown and blue actuators wires are connected to correct wires from bunch.  
|                                              | c. If colors match, swap white and brown wires or blue and green wires. |
| 5. REAR DOOR ACTUATORS NOT WORKING           | a. Check all actuators connection.  
|                                              | b. Check if actuators joints are secured correctly.  
|                                              | c. As in 3-c point above.  
|                                              | d. As in 3-d point above.  
|                                              | e. As in 3-e point above. |
| 6. FRONT/REAR DOOR IS NOT SYNCHRONIZED CORRECTLY | a. Swap actuators blue and green wire in door where lock works incorrectly. |