

DOR-O-MATIC™

Astro-Slide Control Box

Instruction Manual 70598-900 Control Box

DOR - O - MATIC™

AUTOMATIC DIVISION
7350 W. Wilson Ave.
Harwood Heights, IL 60656

Toll Free: 1-800-543-4635
In Illinois: 708-867-7400
Automatic Sales FAX: 708-867-0291
Engineering FAX: 708-867-1177

INDEX

<u>TITLE</u>	<u>PAGE</u>
COVER PAGE.....	1
INDEX.....	2
GENERAL.....	2
FEATURES.....	3
PART IDENTIFICATION.....	4
DEVICES.....	4 & 5
IMPORTANT INFORMATION.....	5
OPERATION TEST.....	6
INSTALLATION WIRING DIAGRAM TOGGLE OR ROCKER SWITCH.....	7
INSTALLATION WIRING DIAGRAM KEY SWITCH.....	8
INSTALLATION WIRING DIAGRAM ELECTRIC LOCK AND BATTERY PACK.....	9

GENERAL

The NEW Astro-Slide Control Box 70596-900 is the replacement for the Astro-Slide Control Box 70588-900. The 70596-900 physically looks exactly the same and operates almost identically to the 70588-900. The main differences are as follows:

1. The 70598-900 has 2 potentiometers for adjustment of latch and backcheck location.
2. The 70598-900 will work with *both* the Look-See II and the Look-See I. A different harness must be used for the Look-See II and the Look-See I.
3. The 70596-900 contains even more improvements within the hardware for increased reliability and better operation.

The NEW Astro-Slide Control Box 70598-900 can be used as a direct replacement for all previous model Astro-Slide control boxes using a motor gearbox with the Hall Effect door position sensor.

NOTE: The 70598-900 control box **CAN NOT BE** used as a replacement for control boxes using motor gearboxes with the rotary switch door position assembly.

The NEW Astro-Slide Control Box 70598-900 can be used on a single slide door with an opening of 15" to 8' or a bi-parting door with an opening of 30" to 16'. For larger door openings, consult the factory for a special Astro-Slide control box.

FEATURES

1. Adjustable hold open time: A potentiometer on the control box allows the hold open time to be adjusted from 1 to 30 seconds. The hold open time should be adjusted in accordance with all applicable safety codes.
2. Selectable opening speed: A slide switch on the control box provides a choice of 3 different opening speeds - fast, medium, and slow. The opening speed should be selected in accordance with all applicable safety codes.
3. Selectable closing speed: A slide switch on the control box provides a choice of 2 different closing speeds - fast and slow. The closing speed should be selected in accordance with all applicable safety codes.
4. Easy morning entry and night exit: This feature allows the owner or manager to enter or leave the premises when the 3-way switch is placed in the "OFF" position. When the door is fully closed and it is manually opened a few inches, the door will automatically open the rest of the way under normal opening speed. The owner can then enter or leave and the door will close automatically.
5. Adjustable automatic reversing: If the door is stalled during the closing cycle, it will automatically stop and re-open fully. The door will then close at a very slow speed looking for the obstruction. The door will continue this cycle until the obstruction is removed. A potentiometer on the control box adjusts the closing force and should be adjusted in accordance with all applicable safety codes.
6. Energy-Wise (optional): The optional energy-wise feature allows the customer to reduce the door opening size. When the energy-wise switch is set to narrow, the door will be allowed to open to 75% of the normal door opening. If traffic flow through the door increases to a point where the door is not allowed to close completely, the control box will gradually increase the door opening back to the normal door opening. Once the door is allowed to close completely, the control box will allow the next activation signal to open the door to 75% of the normal door opening.
7. Safety beam shut-off: When the door is fully closed, the safety beam signal is disregarded so that it can not be used to open the door. Once the door is activated, the safety beam signal is allowed to re-open the door if either safety beam is broken during the closing cycle.
8. Safety sensing:
 - A. If the door is locked and given an activation signal, the control box will shut down the opening voltage. The next activation signal will open the door at a very slow speed.
 - B. If the door is stalled during the opening cycle, the control box will drop down to slow speed. When the door reaches full open and begins to close, it will close at slow speed.

PART IDENTIFICATION

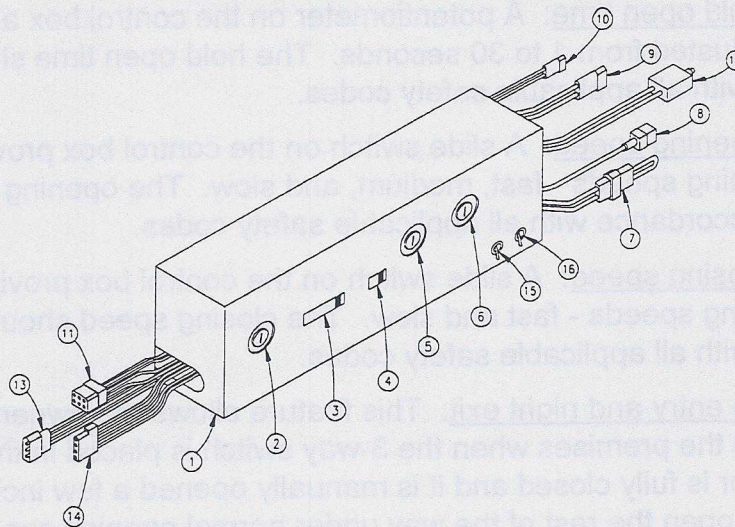


FIGURE 1: 70598-900 CONTROL BOX

- | | |
|--|---|
| 1. 115V Astro-Slide Control Box | 10. Safety Beam Harness
(2 pin-brown, white) |
| 2. 6 Amp Fast-Acting Fuse | 11. Look-See Harness (6 pin) |
| 3. Opening Speed Switch
(fast - medium - slow) | 12. 1.5A 250V Circuit Breaker |
| 4. Closing Speed Switch (fast - slow) | 13. Power Input Harness
(3 pin-black, white, green) |
| 5. Automatic Reversing Potentiometer | 14. Breakaway/Activation Harness
(4 pin-yellow, brown) |
| 6. Hold Open Time Delay Potentiometer
(1 to 30 seconds) | 15. Latch location adjustment |
| 7. Energy-Wise Harness (2 pin-orange) | 16. Backcheck location adjustment |
| 8. Hall Effect Cable (4 pin-gray) | |
| 9. Motor Harness (2 pin-black, red) | |

DEVICES

ACTIVATION

Buttons, Etc.: Push buttons are the most basic of activating devices. Actually this can be any normally open dry contact. This can include push buttons, push plates, card readers, keypads, relays, etc. as long as it is a normally open dry contact. **No voltage can be applied to the activating wires of the control box!** These devices are usually momentary contacts although sustained contacts may be used if necessary.

Carpets: Floor mounted activating device used to open the door. When someone stands on the carpet, the door will open and stay open as long as someone is standing on the carpet. When the activating carpet is clear, the door will time out and close.

Astro-Scan: Activating device that automatically opens the door when it senses motion.

SAFETY

Look-See I or Look-See II: Overhead mounted sensor that detects presence in the threshold area of an Astro-Slide door system. When the door is fully open, the Look-See will keep the door open as long as presence is detected.

Dual Pencil Safety Beam System: Two horizontal safety beams located approximately 21" and 54" above the finished floor. When the door is fully open and either of the safety beams is interrupted, the door will remain open. When the door is closing and either of the safety beams is interrupted, the door will re-open. When the door is fully closed, the safety beams are inactive.

ACCESSORIES

Electric Lock: (Contact Dor-O-Matic for details.)

Battery Pack: (Contact Dor-O-Matic for details.)

IMPORTANT INFORMATION

1. All devices connected to the NEW Astro-Slide control box 70598-900 must have a normally open dry contact. Any external voltage connected to the Astro-Slide control box will damage the control box.
2. Once power is applied to the Astro-Slide door system, the door will automatically start its sizing mode (on systems without the electric lock). During the sizing mode, the control box will set the backcheck and latch positions. The door must be allowed to complete its sizing mode without interruption. You may then adjust backcheck or latch location.
3. There is no stop adjustment. The door drives full open against the rubber stop unless the optional energy-wise switch is set to narrow.
4. There is no closed door shut off adjustment. The door drives full closed against the jamb (single slide) or the other door (bi-part).
5. Installation and service personnel must take the necessary time to check for and correct any binding conditions. An Astro-Slide door system with a binding condition will cause improper operation.
6. If the optional energy-wise switch is not used, the energy-wise jumper plug (orange) must be installed for normal door opening. If the energy-wise jumper plug is removed, the door will open to 75% of the normal door opening.
7. The NEW Astro-Slide control box 70598-900 will work with *both* the Look-See II and the Look-See I. If the Look-See II is used, the Look-See II cable 78210-900 must be used. If the Look-See I is used, the Look-See I cable 78025-900 must be used. Refer to the Look-See II or Look-See I instruction manual for more information.

OPERATION TEST

1. **Stand clear of the door area.** Apply 115V to the door system by placing the junction box switch to the ON position.
2. Once power has been applied, the door will begin its sizing mode. It should open at a slow speed, remain open while the Look-See threshold sensor performs its own sizing mode, and close at a slow speed. The door must be allowed to perform its entire sizing mode without interruption.
3. If an optional 3-way switch is used, place it in the AUTO position. Give the door an activation signal. The door should open at normal opening speed, remain open based on the time delay setting, and close at normal closing speed.
4. Adjust the opening speed, closing speed, and hold open time delay in accordance with all applicable safety codes.
5. Adjust the latch and backcheck location pots so the doors do not slam open or closed.
6. Cycle the door. The door should operate based on the adjustments in step 4.
7. Verify that the automatic reversing feature is working properly. Stall the door during its closing cycle. The door should stop, re-open fully, and close at a slow speed. If the door is stalled again, the process will repeat. Once the door is allowed to fully close, it will return to its normal operating speeds.
8. Adjust the automatic reversing force in accordance with all applicable safety codes.
9. Verify that the safety beam system is working properly.
 - A. With the door in the fully closed position, block either of the safety beams. The door should not open.
 - B. When the door is in its closing cycle, block either of the safety beams. The door should stop and re-open. Once both of the safety beams are unblocked, the door will close.
10. If a Look-See threshold sensor is used, verify that it is working properly. Refer to the appropriate Look-See instruction manual.
11. If the optional Energy-Wise switch is used, verify that it is working properly.
 - A. With the Energy-Wise switch in the WIDE position, the door should open to its normal opening.
 - B. With the Energy-Wise switch in the NARROW position, the door should open to 75% of the normal door opening.
12. If the optional 3-way switch is used, place it in the OFF position.
13. Give the door an activation signal. The door should not open. With the 3-way switch in the OFF position, all activation signals are ignored.
14. Verify that the easy morning entry and night exit feature is working properly. Manually slide the door open a few inches. The door should automatically open the rest of the way under normal opening speed.
15. If the optional 3-way switch is used, place it in the HOLD OPEN position. The door should open and remain open.
16. Return the 3-way switch to the AUTO position.
17. Make final adjustments and settings as required.
18. Install covers, labels, etc. and clean-up the door area.
19. Demonstrate door operation to the person in charge.

INSTALLATION WIRING DIAGRAM TOGGLE OR ROCKER SWITCH

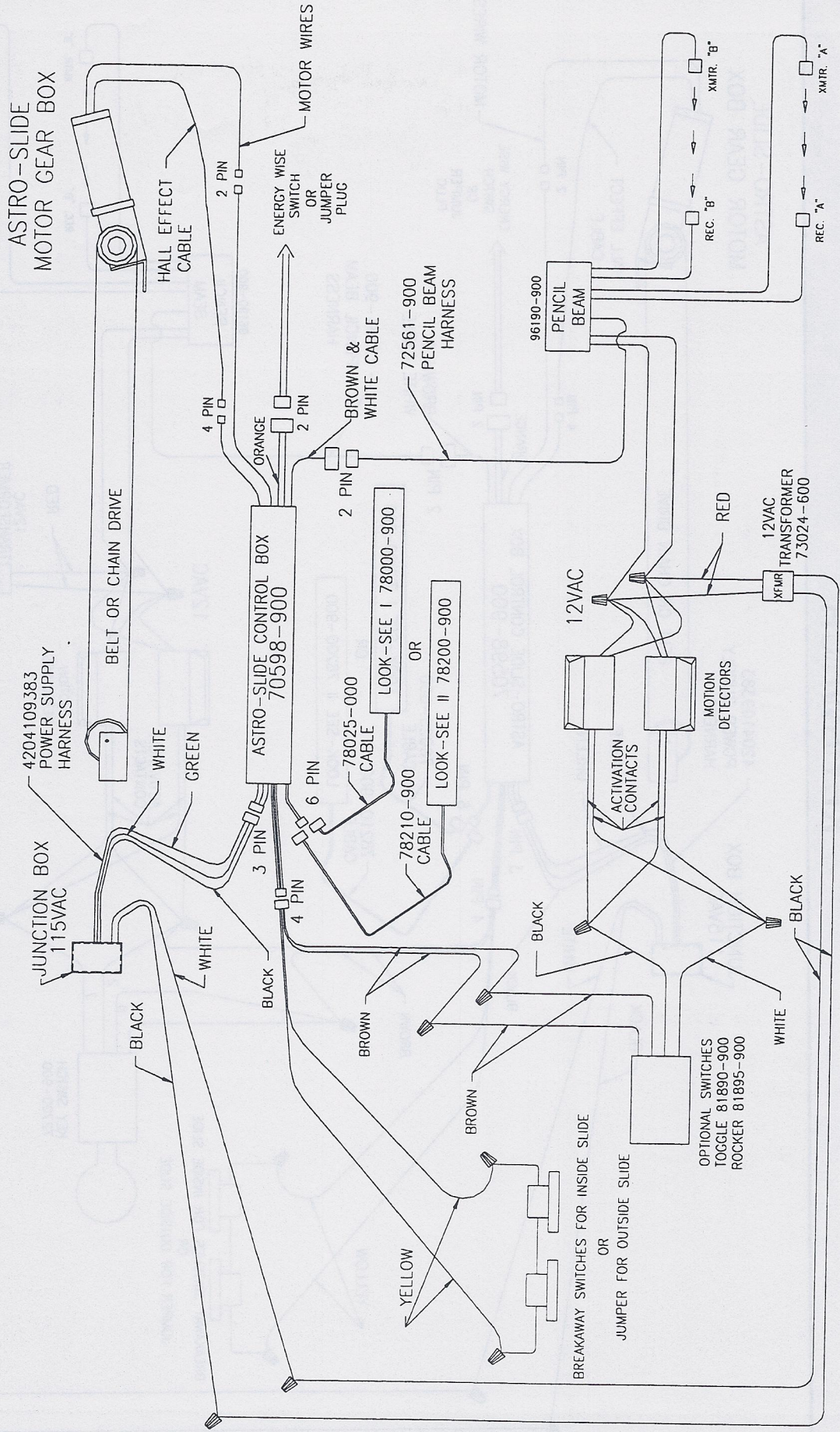


FIGURE 2

INSTALLATION WIRING DIAGRAM KEY SWITCH

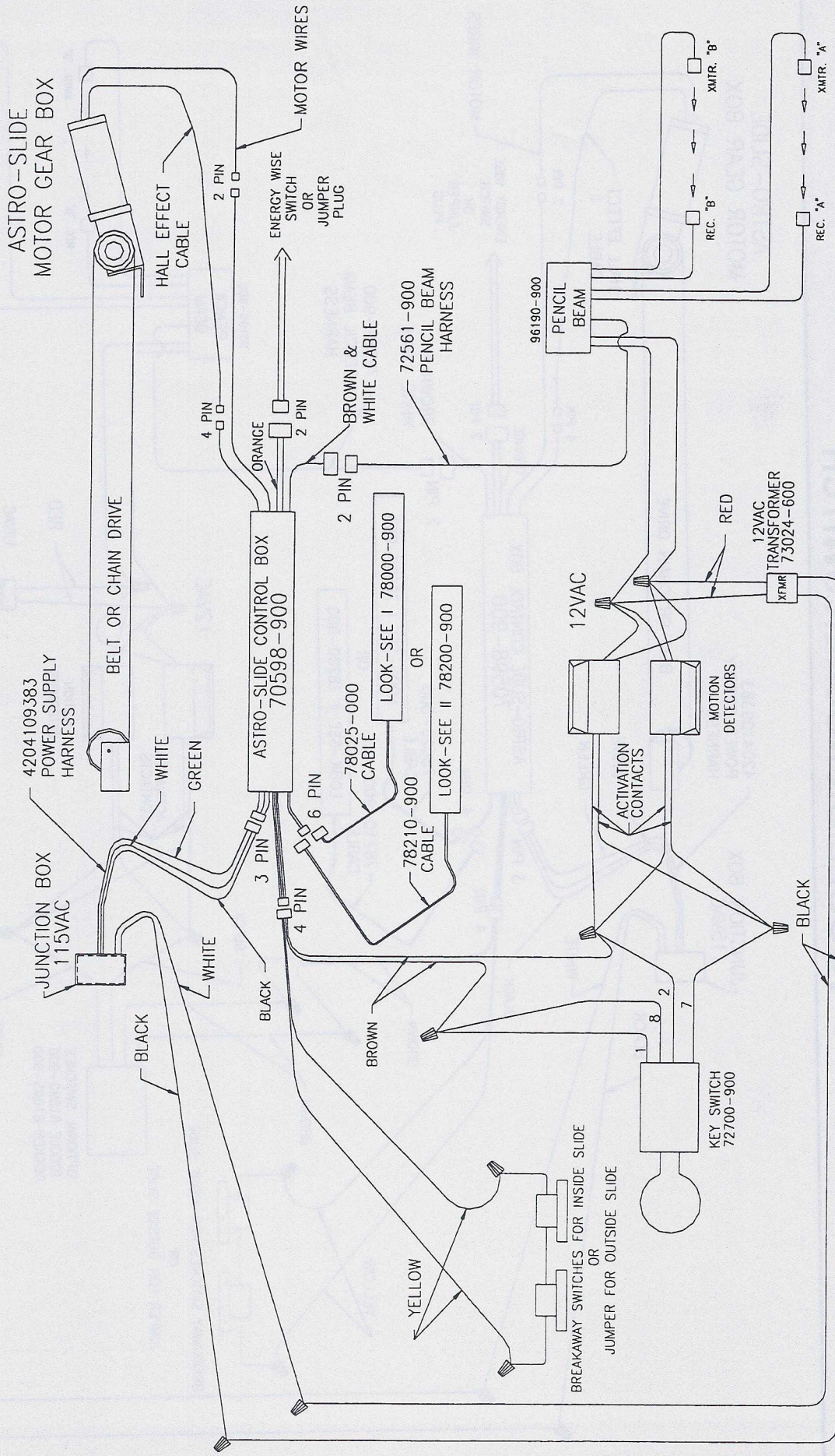


FIGURE 3

Feb-98

70596-984

INSTALLATION WIRING DIAGRAM ELECTRIC LOCK AND BATTERY PACK

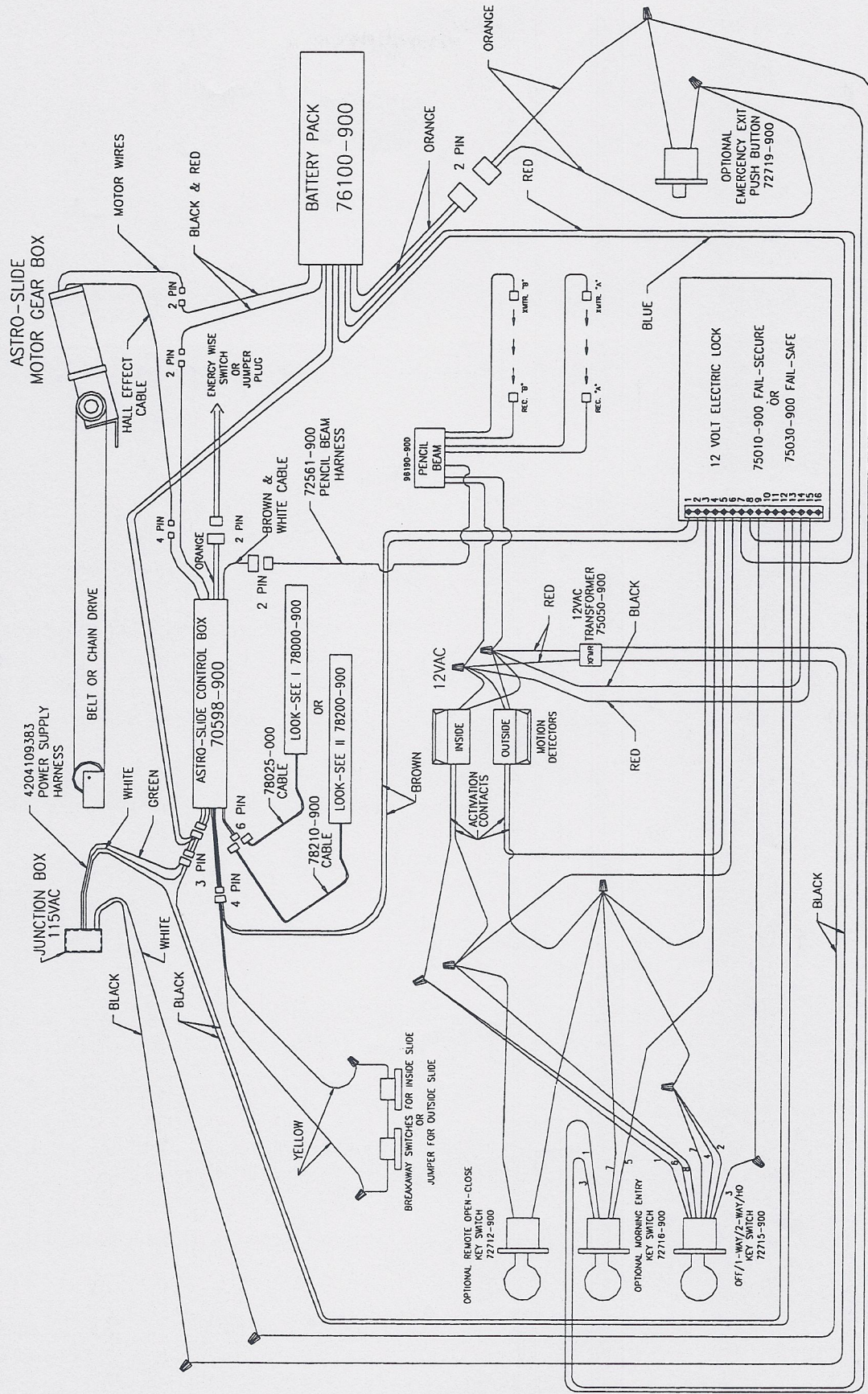


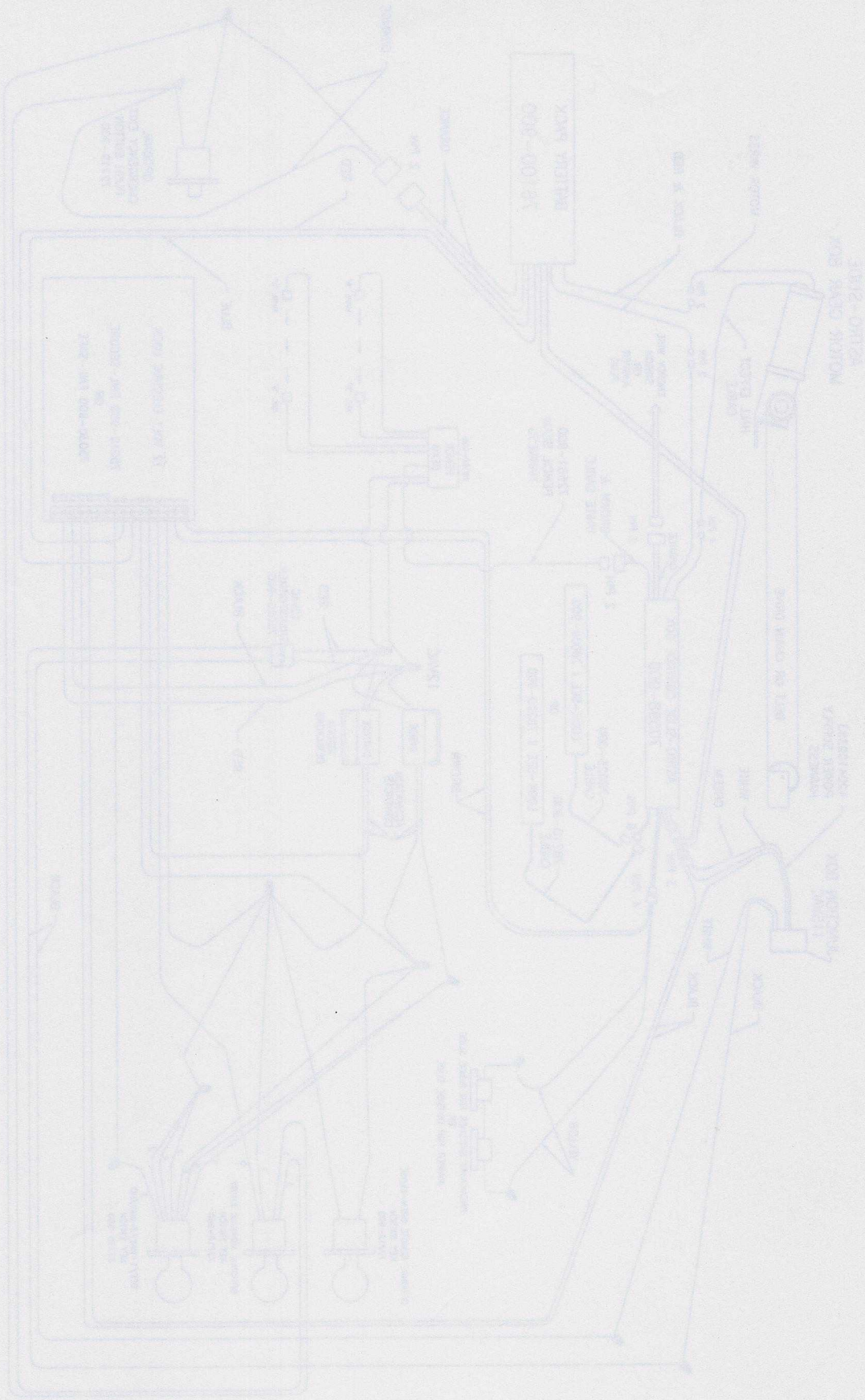
FIGURE 4

15000 2010

10000

10000

10000



ЭЛЕКТРИЧЕСКАЯ СИСТЕМА
 АВТОМОБИЛЯ