

## BOOTHS—OUTDOOR

### KS-14611

## MAINTENANCE

### 1. GENERAL

1.01 This section is reissued to:

- (a) Add information on KS-19207, List 4 light fixture.
- (b) Add information on light control units.
- (c) Change information on top hinge assembly.
- (d) Change Fig. 2, 3, and 6.

### 2. BOOTH CHECK POINTS

- Check electrical grounding as covered in appropriate section.
- Safe approach to booth (have dangerous conditions corrected).
- Appearance of booth.
- Door requirements.
- Door operation.
- Panels and signs.
- Booth lighting.
- Check that both dome fasteners are locked.
- Directories and binders.
- Security of booth anchorage (tighten if loose).
- Tighten loose screws and bolts.
- Use KS-19094 antiseize compound on screws threaded in aluminum.

### 3. CLEANING

- 3.01 Booth should be free of loose dirt or other objectionable material.
- File or sand sharp edges, burrs, or splinters on exposed surfaces.
  - Clean the ceiling assembly.

**THINK** → *Wear eye protection when filing metal or lowering ceiling.*

3.02 The KS-8446 solvent can be used to remove paint from aluminum surfaces.

3.03 The KS-19243, List 1 cleaner is available for use as a general cleaning agent for KS-14611 booths.

3.04 Detailed information on cleaning and restoring metal booths is covered in the plant series section 508-100-105.

### 4. DOOR REQUIREMENTS

4.01 Frames should not be broken or cracked (refer to 4.02).

- (a) Door remains open 2 to 3 inches when it is at normal position (see 5.01). This clearance can be eliminated in cold weather, if desired. Adjust so that door closes without slamming.
- (b) When pushed closed from inside, the door should remain completely closed.
- (c) A slight pull on the handle should open and restore the door to normal position.
- (d) Open-door clearance from the writing shelf is about 1 to 2 inches.

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(e) Door operation should be free without binding, squeaking, or chattering (see 5.03).

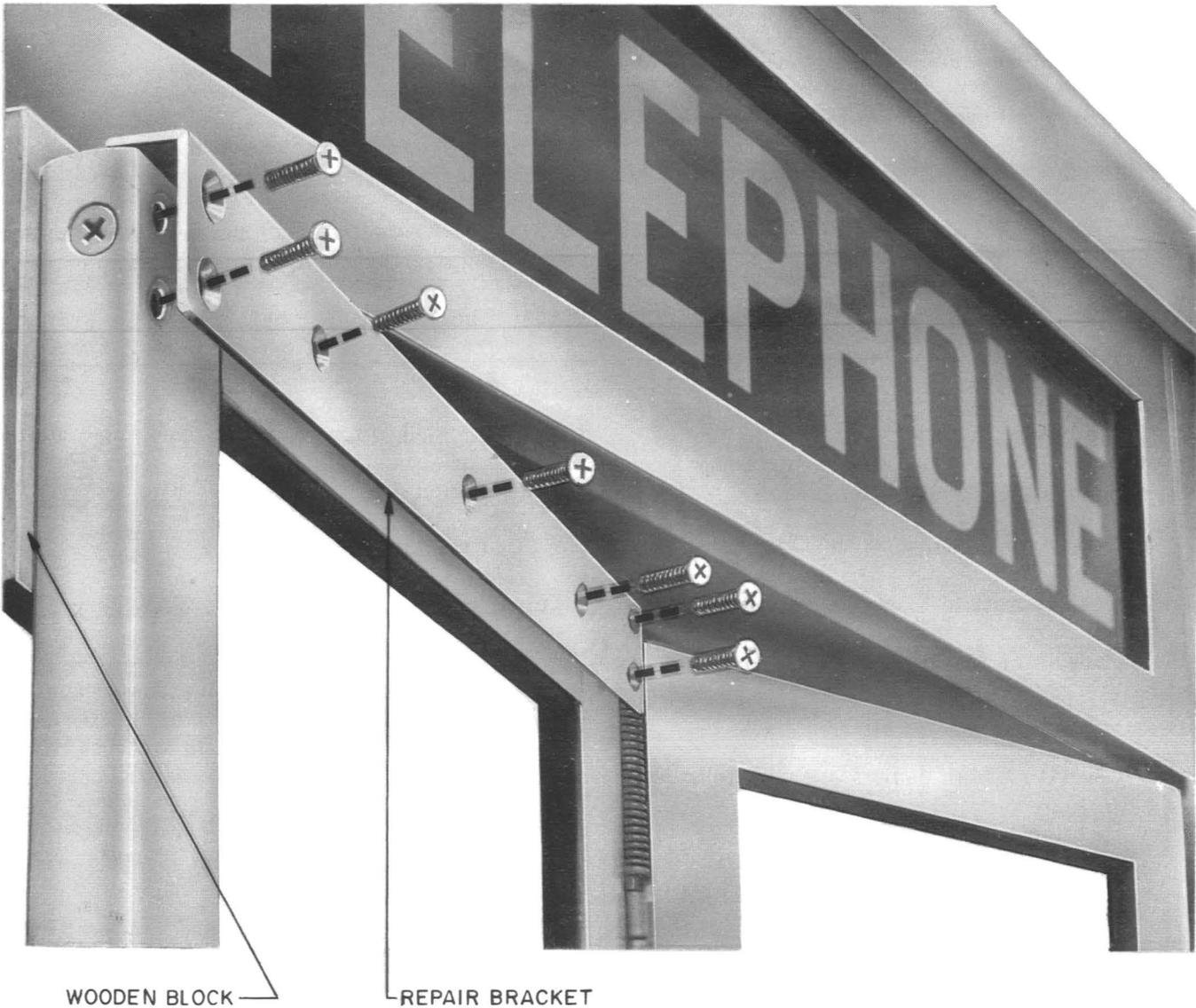
(f) Rubber frame bumpers shall be in place.

**4.02** Replace door sections that have broken mitered joints. Repair solid-type (one piece) sections. (See Fig. 1.) Fracture usually occurs because of misuse, improper adjustment, or because booth is not level. Check the cause and repair as follows:

(1) Close the door against a thin wooden block to close fracture.

(2) Place B-931522 door repair bracket on the top outside of the door. Align edge of bracket with edge of door that is closest to fracture.

(3) Drill seven mounting holes  $\frac{1}{2}$ -inch deep (drill size No. 26). Secure bracket with FH Phillips screws, No. 8-32 by  $\frac{1}{2}$ -inch, self-tapping, type F of corrosion resistant steel.



**Fig. 1 — B-931522 Door Repair Bracket**

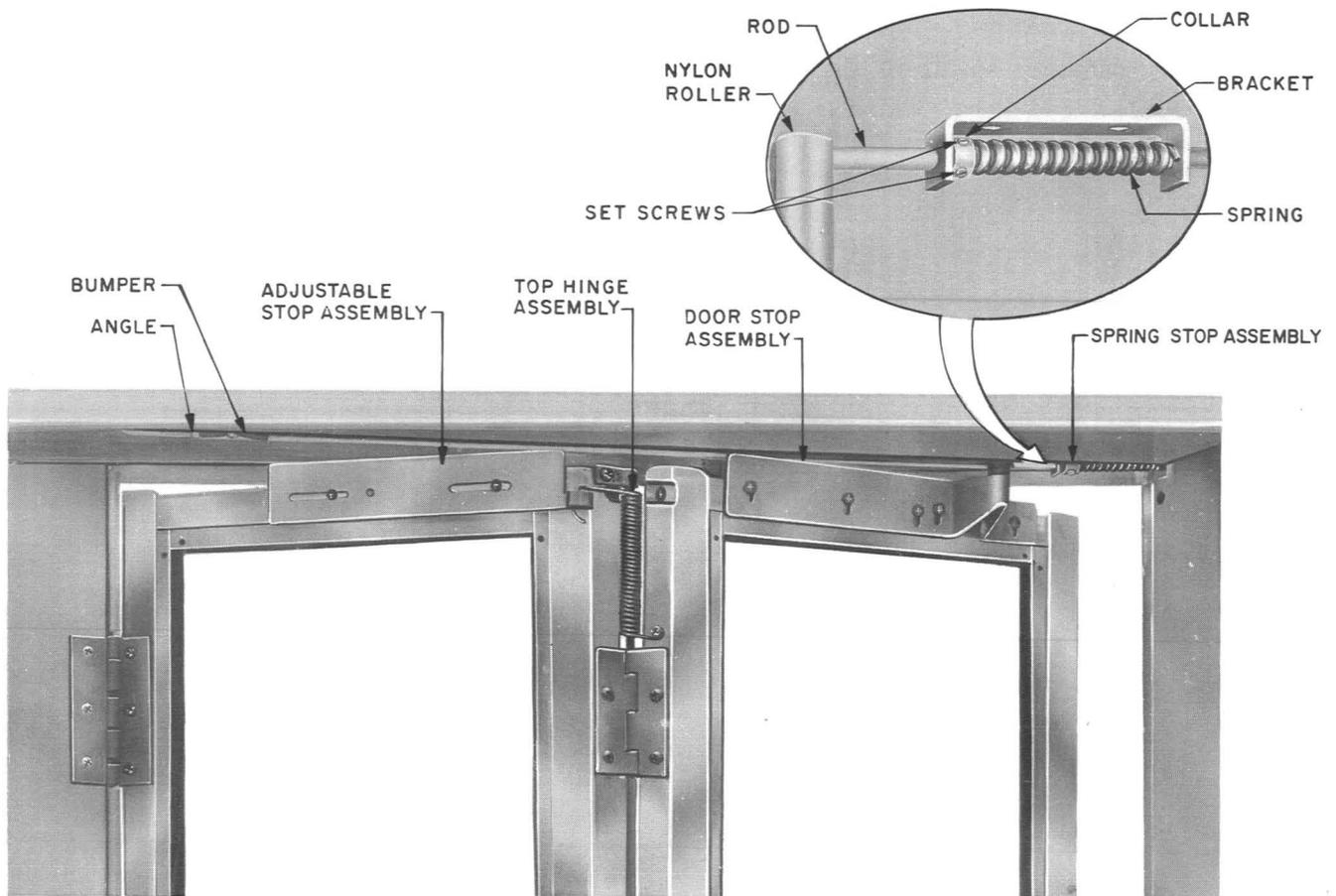
**Note:** When brackets are installed on both door sections, check that brackets do not interfere with open position of door. Relocate felt bumper if necessary.

## 5. DOOR ADJUSTMENTS (See Fig. 2.)

**5.01 Normal Positions,** these adjustments should be made in sequence:

- (1) Loosen setscrew on spring stop assembly.
- (2) Place door in normal position (2 to 3 inches) from corner column.

- (3) Position rod of spring stop assembly against door roller.
- (4) Secure rod in this position by placing collar of the spring stop assembly against the bracket of the spring stop assembly, and tighten setscrew.
- (5) Loosen mounting screws on the adjustable stop assembly. Move assembly left or right to obtain the spring tension required to return door to normal position. Tighten screws and re-check tension.



**Fig. 2 — KS-14611 Booth Door Adjustments**

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- (6) Check that door stop assembly is not loose or damaged. If top of roller is not inside track throughout door travel, reposition assembly.

**Open Door Clearance**

**5.02 Check Points:**

- (1) Angle associated with bumper should be tight.
- (2) Replace bumper if worn or damaged.

**Door Operation**

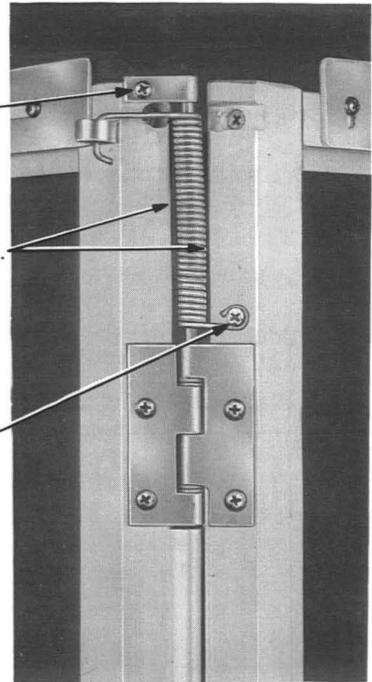
**5.03 Eliminate binding, squeaking, or chattering:**

- (1) Check hinge wear. Clearance between hinge barrels should not exceed 1/16-inch; gauge by eye. Replace worn hinges.
- (2) Replace defective spring of the top hinge assembly only if the assembly is the latest type. (See Fig. 3.) Replace all earlier type assemblies with the new top hinge assembly.

REMOVABLE SUPPORT  
DRILL HOLE  $\frac{1}{2}$  IN. DEEP.  
FASTEN WITH  
SELF TAPPING SCREW  
TYPE F, 8-32 X  $\frac{1}{2}$  IN.

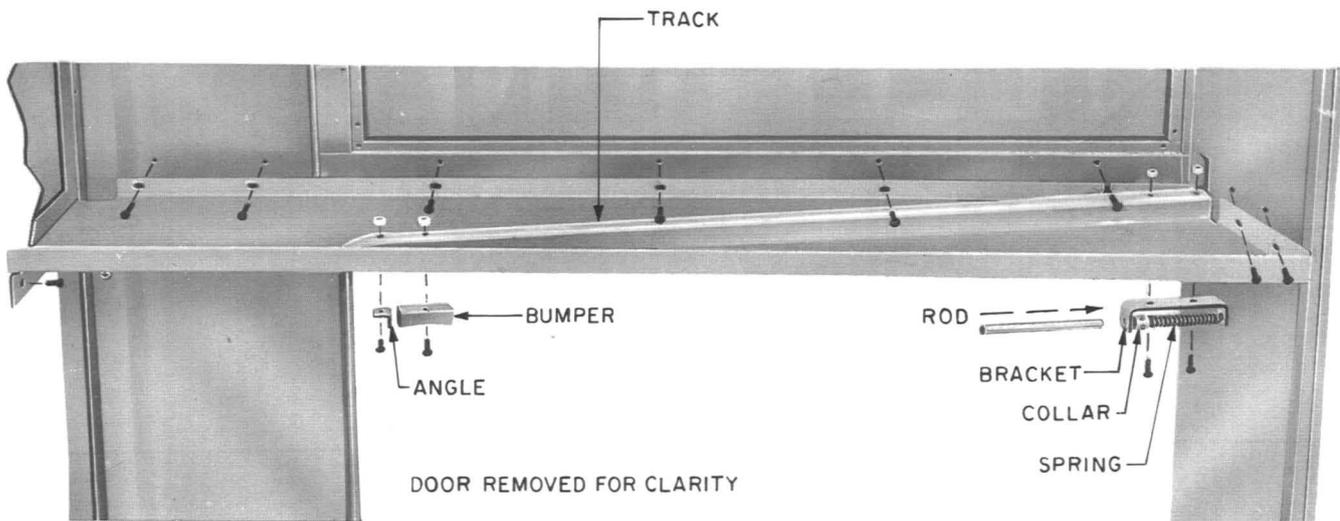
INCREASE  
SPRING CLEARANCE  
ON BOTH DOORS.  
FILE OR SAND  
 $\frac{1}{32}$  IN. DEEP X  $3\frac{7}{8}$  IN. LONG.

DRILL  $\frac{5}{32}$  IN. HOLE  
 $\frac{1}{2}$  IN. DEEP.  
FASTEN WITH  
SELF TAPPING SCREW  
TYPE F, 8-32 X  $\frac{5}{8}$  IN.



**Fig. 3 – Installation of Top Hinge Assembly**

- 5.04** When worn door track is interfering with operation of door, replace track, as shown in Fig. 4.



**Fig. 4 – Installation of Door Track**

## 6. PANEL REPLACEMENT

### *Safety First:*

**THINK** → Wear gloves and eye protection when handling glass panels to prevent personal injury.

Use care when handling tempered glass. Nicks or scratches will damage the glass and may cause it to shatter. Do not allow metal tool to come in contact with edge of tempered glass.

Before installation, examine glass for nicks or chips along edges. If such defects are apparent, do not use this glass.

**6.01** Damaged or broken panels should be replaced. Panels are listed in the identification section.

**6.02** Booth panels and signs are held in place by four interlocking retaining strips. They are inserted in sequence as shown in Fig. 5. The No. 4 strip is rippled and is held in place by interface friction. In older booths the No. 4 strip is secured by Allen screws; these strips should be replaced with the rippled strip when replacing signs or panels.

**6.03** Replace panels as follows:

- (1) Remove No. 4 locking strip.
- (2) Remove retaining strip No. 2 and No. 3.
- (3) Remove retaining strip No. 1.
- (4) Remove panel and rubber glazing strip.
- (5) Apply rubber glazing strip to replacement panel.
- (6) Insert panel into frame with the beaded edge on the outside.
- (7) Replace retaining strips in sequence as shown in Fig. 5.

## 7. BOOTH LIGHTING

**THINK** → For your safety, observe the following:

Work operations on booth lighting equipment and electrical wiring should be limited to locations where power can be turned off at a switch or a plug can be removed.

Wear eye protection when lowering ceiling and handling fluorescent lamps.

**7.01** KS-14611 booths are equipped with a KS-19207, List 4 light fixture. Installation and maintenance of this type light fixture is covered in the Section 508-820-100.

**7.02** Earlier model KS-14611 booths were equipped with a B-185379 light fixture. If major repairs are required for maintenance, replace the B-185379 light fixture with a KS-19207, List 4 light fixture. Conversion information is covered in Section 508-820-100.

**7.03** Maintenance instructions for the B-185379 light fixture are covered below:



Both ceiling lamps should be lighted when power is on, unless booth is equipped with a light control unit. For booths with a light control, refer to 7.07. For light failure in booths without light control proceed as follows:

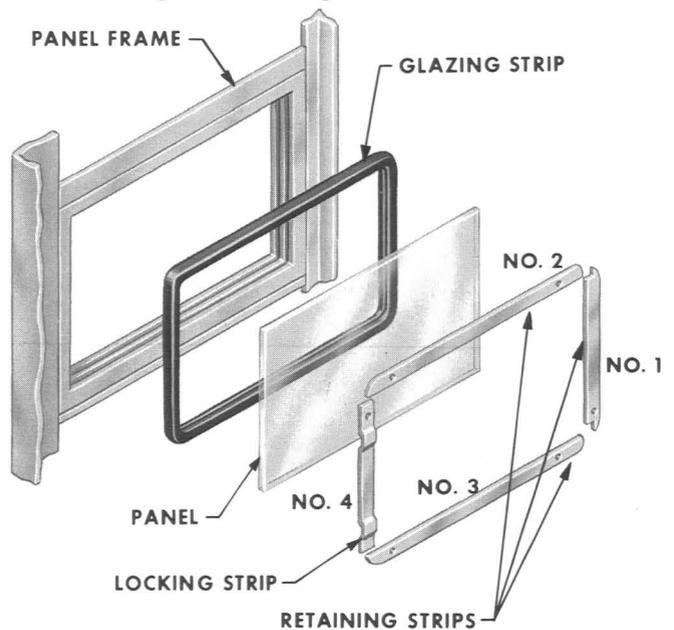


Fig. 5 — Panel Assembly

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- (1) Check that manual starter reset buttons are pushed in when this type starter is used. Allow 1 minute for lamps to light.
- (2) If lamps fail to light remove lamp plug from ceiling receptacle, and test for power.
- (3) (a) If power is off, check for intermediate switch.  
(b) If power is present, replace lamp plug.
- (4) If lamps fail to function, replace starters and allow 1 minute for lighting. Replace lamps that do not light. (Before discarding a starter, test in a good lamp fixture.)
- (5) If lamps still fail to function, trouble may be due to low voltage (below 95 volts) or a defective fixture.

**7.04** Automatic cutoff thermal-type starters are also used with the KS-14611 booth lamps. Bimetallic contacts control starter operation. If starter fails to light the lamp, a cutoff contact will open the lamp circuit. Starter remains in this cutoff condition until power is turned off, allowing bimetallic cutoff contact to cool.

- Purpose of cutoff is to prevent ballast transformer from overheating.

**7.05** Starter cutoff usually occurs from the following:

- (a) Low ac voltage or downward power surge (service interruptions, fluctuations, thunderstorms, etc) below operating range of lamp.
- (b) Defective lamp (flickers when starting to light).
- (c) Extremely low temperature at start. Gas in lamp does not ionize.
- (d) High temperature, either at start, or while lamp is lighted. External heat combined with current flow operates bimetallic cutoff contact.

**Note:** Remember, the lamp starting time is determined by the temperature present in conjunction with lamp condition and line voltage.

**7.06** Starter Selection (See Table A.)

- (a) *Automatic Reset* starters will reset after going into cutoff when the power is turned off to allow the contacts to cool. Operating range at 118 volts is from 0 to 135 F.
- (b) *Manual Reset* starters can be reset by pushing the reset button to render starter operative. Operating range at 118 volts is from 0 to 185 F.

**TABLE A**

**LAMP AND STARTER CODES**

Watts	Lamp Code*	Starter Code	
		Reset	
		Automatic	Manual
32	FC12T10	TC-12	TC-120
40	FC16T10	TC-4	TC-40

\*Lamp, fluorescent, 4-pin, standard, cool white.

**Note:** Permanent damage to ballast transformer may result if the starter used is not correct for lamp wattage. TC-4 or TC-40 starters should not be used as a replacement for TC-12 or TC-120 starter.

**7.07** For booths equipped with a KS-19261 or KS-16726 light unit, check lighting as follows:

- (1) Cover light cell to exclude external light; lamps should light within one minute.
- (2) If lamps do not light, remove upper access cover and test for power at receptacle. If power is off, check for intermediate switch.
- (3) If power is present, lower dome and light unit. Remove light control plug from receptacle and lamp cord from light control unit. Plug lamp cord into receptacle.

(4) If lamp lights, replace light control unit. To replace light control unit refer to appropriate section.

(5) If lamp does not light, see Step 1, 7.03.

**8. LIGHT CONTROL UNITS**

**8.01** Maintenance instructions for KS-19261 and KS-16726 light control units are covered in plant series Sections 508-825-100.

**9. DOME REPLACEMENT**

**9.01** Replace defective domes as follows:

- (1) Unlock dome fasteners and lower dome.
- (2) Remove machine screws and moulding assembly.
- (3) Remove defective dome and insert replacement as shown in Fig. 6.



**Fig. 6 - Dome Installation**

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- (4) Replace and secure moulding assembly.
- (5) *Raise dome and secure in position by locking dome fasteners.*

### 10. PROTECTOR GROUND

**10.01** When coverplate is removed, the station protector ground is removed. Under certain conditions this could present a hazard while working on protector, wiring, etc.

**10.02** New booths will be equipped with bonding wires at both wire entrances. One end will already be secured to booth. At time of installation, terminate other end on station protector ground terminal.



*When coverplate is removed and bonding strap is not present, place strap before proceeding with work. Use No. 14 wire from ground terminal of protector to screwhead of partition fastener separating the two wiring channels.*

### 11. DIRECTORIES AND BINDERS

**11.01** Telephone directories should be in good condition. Replace binders having signs of

excessive wear or damage. The KS-14611 booth directory rack should have rubber bumper in place to cushion the binder as it drops into rack.

**11.02** For replacement of OD-type binder and binder covers refer to section covering identification and installation of telephone directory holders.

**11.03** Install new rubber bumper B-179423 in the KS-14611 booth directory rack as follows:

- (1) Remove old adhesive after softening with trichloroethylene.
- (2) Install new bumper using 3M Company EC-880 adhesive or equivalent.

### 12. KS-14611, LIST 8 ALUMINUM FLOORS

**12.01** The nonskid paint finish of list 8 aluminum floors can be restored with the use of Good-year griptred flooring and protective coating, dark gray 592-7005 or equivalent. This can be applied with an ordinary paint brush.

**TABLE B  
PIECE PART NUMBERS**

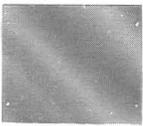
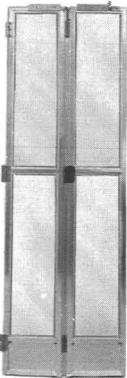
Part	Part Number		Description
	List 3 Booth	List 6 Booth	
 Cover Assembly, Right Rear	B-185432	B-185432-2	Mounts coin collector
 Cover Assembly, Right Rear Access	B-185443	B-185443-2	Includes a 123A1A protector
 Cover, Right Rear Access	B-185375-1	B-185375-3	Does not mount protector
 Cover, Left Front Access	B-179378	B-179378-2	Covers booth anchoring bracket on left front column
 Door Assembly	B-179333	B-179333-2	Door includes left and right door frame assemblies, hinges, handle, door stop assembly, and adjustable stop assembly
 Door Stop Assembly	B-176782		Component of door assembly

TABLE B (Cont)

Part	Part Number		Description
	List 3 Booth	List 6 Booth	
 <p>Door Frame Assembly, Left Side</p>	B-181729	B-181729-2	Left frame of door assembly
 <p>Door Frame Assembly, Right Side</p>	B-181728	B-181728-2	Right frame of door assembly
 <p>Roller Nylon</p>	P-12A332		Mounts on pin of door stop assembly
 <p>Adjustable Stop Assembly</p>	B-179336		Component of door assembly
 <p>Top Hinge Assembly</p>	B-185421		Top center door hinge
 <p>Spring</p>	B-179393		Component of top hinge assembly

TABLE B (Cont)

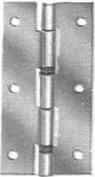
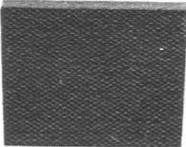
Part	Part Number		Description
	List 3 Booth	List 6 Booth	
 Butt Hinge Assembly	B-185419		Door post hinge
 Butt Hinge Assembly	B-185420		Center door hinge (middle and bottom positions)
 Handle	B-179392		Door handle
 Bumper	B-176635		Located on column of left side assembly
 Bumper	B-179423		Located on directory rack
 Dome	B-185369		Light dome
 Track Assembly	B-178483		Consists of track, spring stop assembly, angle, and bumper
 Track	B-185579		Component of track assembly

TABLE B (Cont)

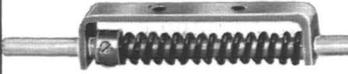
Part	Part Number		Description
	List 3 Booth	List 6 Booth	
 Angle	B-179424		Component of track assembly
 Bumper	B-179473		Component of track assembly
 Spring Stop Assembly	B-192543		Component of track assembly
 Rod Assembly	B-192404		Component of spring stop assembly
 Bracket	B-176686		Component of spring stop assembly
 Spring	B-176687		Component of spring stop assembly
 Collar	B-192403		Component of spring stop assembly
 Angle	B-179351		Component of booth anchoring bracket

TABLE B (Cont)

Part	Part Number		Description
	List 3 Booth	Booth List 6	
 Nut	B-179352		Component of booth anchoring bracket
 Bolt	B-185580		Component of booth anchoring bracket
 Washer Spring Cres 5/16 std	Obtain locally		Component of booth anchoring bracket
 Washer Plain Cres 5/16 std	Obtain locally		Component of booth anchoring bracket
 Grommet	B-183544		Located at telephone wire entrance
 Plug	Plastic Plug for Rear Assembly B-179324		Located at unused power entrance
 Bracket	B-931522		Door repair bracket