OPERATOR AND SUPERVISOR CHAIRS BENTWOOD TYPE

PIECE-PART DATA, REPLACEMENT PROCEDURES AND RECONDITIONING

1. GENERAL

- 1.01 This section covers the information neccessary for the reconditioning and the ordering of parts to be used in the maintenance of KS-5168 bentwood-type operator chairs and KS-5367 bentwood-type supervisor chairs.
- 1.02 This section is reissued to incorporate material from the addendum in its proper location. In this process marginal arrows have been omitted.
- 1.03 Part 2 of this section covers the piece-part numbers and the corresponding names of the parts which it is practicable to replace in the field in the maintenance of KS-5168 operator chairs and KS-5367 supervisor chairs. No attempt should be made to replace parts not designated. Part 2 also contains explanatory figures showing the different parts. This information is called Piece-part Data.
- 1.04 Part 3 of this section covers the approved procedures for the replacement of the parts covered in Part 2. This information is called Replacement Procedures.
- 1.05 Part 4 of this section covers the approved procedures for making minor repairs on the operator chairs and supervisor chairs. This information is called Minor Repairs.

2. PIECE-PART DATA

2.01 The figures included in this part show the various piece parts in their proper relation to other parts of the chair. The piece-part numbers of the various parts are given together with the names of the parts as listed by the Western Electric Company Merchandise Department. When these names differ from those in general use in the field, the latter names, in some cases, are shown in parentheses.

- 2.02 When ordering parts for replacement purposes, give both the piece-part number and the name of the part, for example, KS-15531, L20 Foot Ring. Do not refer to the BSP number or to any information shown in parentheses following the piece-part number.
- 2.03 The only parts available for these chairs, other than supply cabinets and foot rests, are screws, nuts, bolts, and washers. However, it may be found practical to salvage certain parts such as back rest braces, back rest supports, and foot rings from chairs which are no longer satisfactory for service. When parts are not available, chairs should be returned to the Western Electric Company for repair.

Note: Since the manufacture of KS-15722, L2 purse holder has been discontinued, when purse holders are required on bentwood-type chairs, it will be necessary to salvage them from chairs no longer satisfactory for service. The KS-15830 type purse holders, which were designed for use on metal-type chairs, are not recommended for use on the bentwood-type chairs.

- 2.04 Cane seats of operator chairs that require recaning should be returned to the Western Electric Company.
- 2.05 Lower units of operator chairs of the type shown in Fig. 1 that require replacement of a rubber-covered foot ring, should be returned to the Western Electric Company.
- 2.06 If it is necessary to return the chair to the Western Electric Company for repair, accessories such as purse holders, supply cabinets, and ticket holders should be removed.

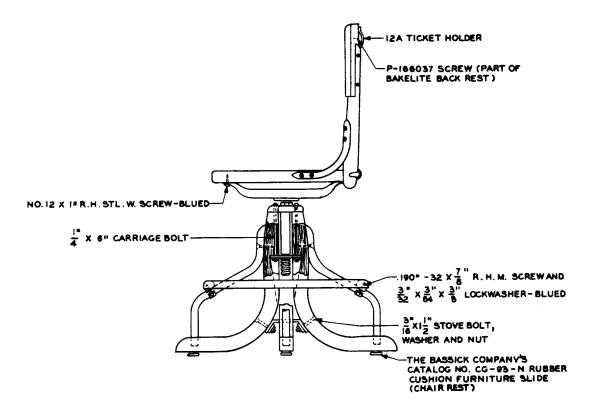


Fig. 1 - KS-5168 Bentwood-type Operator Chair (Center Spindle)

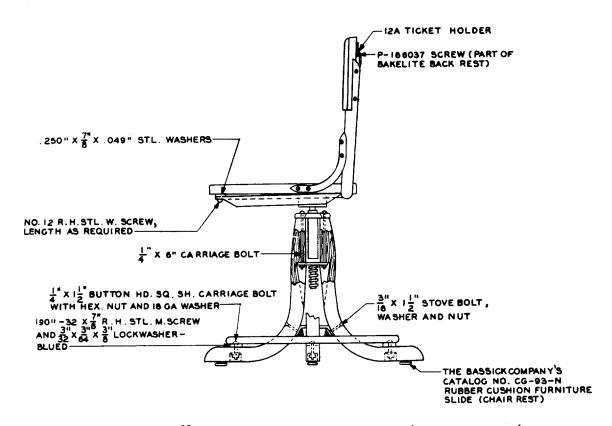


Fig. 2 - KS-5168 Bentwood-type Operator Chair (Offset Spindle)

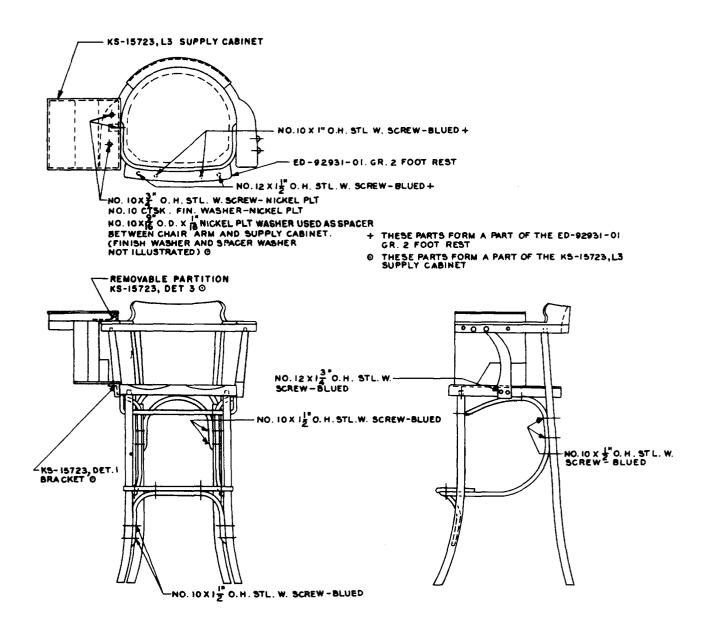


Fig. 3 - KS-5367 Bentwood-type Supervisor Chair

3. REPLACEMENT PROCEDURES		Code or Spec No.	Description
3.01 List of Tools and Materials		_	Black or Brown Paint as Re-
Code or	Description		quired for Iron Work
Spec No. Tools	<u>Description</u>	-	Garnet Finishing Paper, Grit No. 2/0-100
KS-2993	Flat Brush	-	Garnet Finishing Paper, Grit No. 6/0-200
R-1258	6-inch Adjustable Bench Level	-	Silicon Filler Polish
R-1482	H-type Combination File	-	00 Powdered Pumice
R-1626	1-3/4-inch Screwdriver	-	White Shellac Solution and Thinner per AT&TCo Spec
-	Ratchet-B Brace, 10 inches, With Countersink and Bits, as Required	-	No. 6623 Filler Stain (Mahogany) for 104AL Finish
-	Sign Painter's Brush, Devoe & Raynolds Co No. 244 (or equivalent), 1 inch	-	Filler Stain (Walnut) for 104AR Finish
-	Brush, Osborn Manufacturing Co No. 816 (or equivalent)	-	Filler Stain (Dark Cak) for 104AM Finish
-	Brush and File Card, Henry Disston & Sons No. 2 (or equivalent)	-	Stain (Light Oak) for 102AK Finish
-	Hand Drill, North Bros Mfg Co No. 1446 (or equiva- lent)	-	VD-2930 Rubbing Varnish, Pittsburgh Plate Glass Co or No. 8 Booth Rubbing Varnish, Pratt & Lambert Co, Inc
-	l-pound Ball-peen Hammer	3.02 Chair	Rests: To replace a chair rest,
-	Combination Pliers (or equivalent)	insert or equivalen and leg of t	a 4-inch regular screwdriver t tool between the chair rest the chair and pry the nail of
-	4-inch Regular Screwdriver	the chair rest out of the leg. A new chair rest shall then be placed on the leg by driving the nail of the chair rest into the leg with a ball-peen hammer.	
-	1/2-inch Offset Hexagon Socket Wrench, J. H. Williams & Co No. 264A, 2 required		
Materials		listed	the replacement of all parts I in Part 2, other than the
KS-6232	Oil	chair rests, involves simple operations, no replacement procedures are given for these parts.	
KS-6438	Lubricating Oil	4. MINOR RE	
KS-7452	Black Lacquer (or equivalent)		Bentwood-type Operator Chairs
KS- 7860	Petroleum Spirits		seats may be repaired, regard-
KS-14427	Cleaning Emulsion	less of the number of broken strands in the cane of a chair seat, provided the strands to be repaired are separated by at least two unbroken strands. Upturned, rough, or frayed strands should have the broken strands trimmed off and the cane	
KS-14666	Cleaning Cloth		
KS-14670	Commutator Cloth		
-	Burlap, Felt, or Similar Material	preserved by a coat of rubbing varnish or shellac on top and bottom.	
-	No. 150 Aluminum Oxide Cloth	4.02 Offset spindle chair seats which do not meet the seat slant requirement of	
-	Brown Air-drying Enamel M-7261, Pratt & Lambert Co, Inc	Section 065-100-501 should be corrected by	

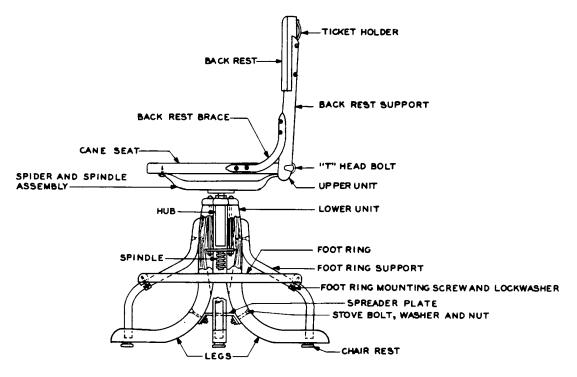


Fig. 4 - KS-5168 Bentwood-type Operator Chair (Center Spindle)

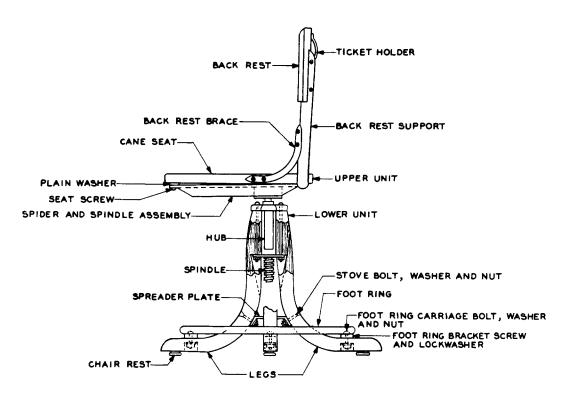
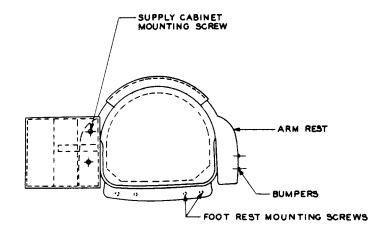


Fig. 5 - KS-5168 Bentwood-type Operator Chair (Offset Spindle)



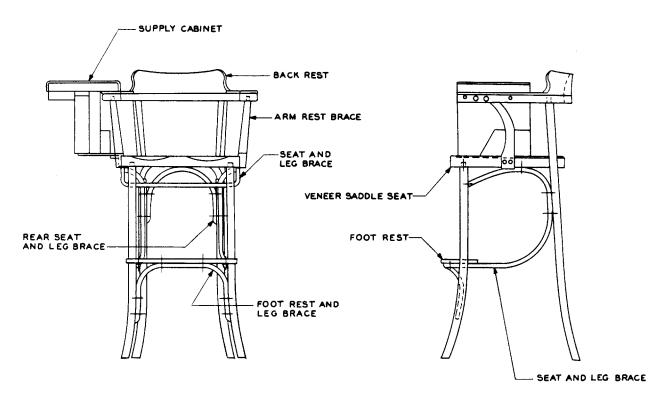


Fig. 6 - KS-5367 Bentwood-type Supverisor Chair

removing the seat screws which secure the front end of the spider to the seat, with the 4-inch screwdriver. Plain washers should be added between the spider and the seat, as required, and the screws replaced. If it is necessary to use longer screws, care should be exercised not to use screws so large that the wood may be split, or so long that the points extend through the upper surface of the seat.

4.03 Stability: If the chair can be rocked 1/16 inch or more when it is resting

on a smooth, flat surface, the length of the longer leg should be reduced by use of the H-type combination file, until the condition is corrected.

- 4.04 Spindle and Spider Assembly: When necessary to assemble a spindle and spider, the bolts should be inserted from the upper side of the spider with the seat in the normal position.
- 4.05 Metal Parts: Any sharp edges or burrs on the nuts, bolts, screws, and other

metal parts should be removed with the H-type combination file. Missing nuts, screws, bolts, and washers should be replaced. Plain washers should be placed under all nuts bearing against woodwork when it is necessary to replace such nuts. Lockwashers or split washers should be placed under the nuts of the T-head bolts and under the nuts on the bolts which fasten the lower assembly together at the hub and at the spreader plate.

- 4.06 Cleaning Chair: Oil, grease, excessive furniture polish, etc, should be removed from all parts of the chair with a clean KS-14666 cleaning cloth slightly moistened with KS-7860 petroleum spirits, when necessary.
- 4.07 Cleaning Spindle and Hub: Separate the upper unit of the chair from the lower unit by unscrewing the upper unit in a counterclockwise direction, looking down on the chair. The old lubricant and dirt should then be cleaned from the spindle and hub with a KS-14666 cleaning cloth moistened with KS-7860 petroleum spirits. Gummed lubricant and dirt should be removed from the spindle by rubbing with the KS-2993 flat brush so moistened with KS-7860 petroleum spirits that an excess of the fluid will not be deposited on the part being cleaned. The part should then be wiped clean and free from lubricant except that which is transferred from the KS-14670 commutator cloth. Gummed lubricant and dirt should be removed from the hub threads by rubbing with the Osborn Manufacturing Company's No. 816 brush so moistened with KS-7860 petroleum spirits that an excess of the fluid will not be deposited on the part being cleaned. The part should then be wiped clean and free from lubricant, except that which is transferred from the KS-14670 commutator cloth.
- 4.08 Lubricating the Spindle and Hub:

 After cleaning the parts as covered in 4.07, lubricate the spindle with a thin film of KS-6438 lubricating oil, by use of the KS-2993 flat brush. Reassemble the upper unit to the lower unit of the chair, and turn the seat unit all the way down and then up again until the top of the spindle thread is exposed. Any excess lubricant which may be on parts other than the threads should be removed with a clean KS-14670 commutator cloth.
- 4.09 Woodwork Finish: To retouch the finish of the cane seat frames, wooden back rests, or other wood parts worn through to the wood, either through ordinary wear or by sanding operations, proceed as follows:
 - (a) Smooth rough and splintered parts with grit No. 2/0-100 Garnet finishing paper.

(b) Apply one coat of filler stain to match the parts to be retouched with the Devoe & Raynolds No. 244 sign painter's brush. Two applications should be applied, if necessary, to produce the desired depth of color.

Note: In applying the filler stain, rebrush until the desired graining effect and depth of color are obtained. The filler stains used for refinishing chairs have been developed with a view to preventing diffusion. It is necessary, therefore, to adhere strictly to the filler stains specified. A toner or stain which is subject to diffusion should not be used.

- (c) Allow the stain to dry 16 hours.
 Sandpaper with grit No. 2/0-100
 Garnet finishing paper to remove fibers which may have been raised by the staining operation.
- (d) Apply one coat of rubbing varnish or shellac.

Note: Use shellac when it is necessary to hold the drying time to a minimum.

- (e) Allow varnish or shellac coat to dry thoroughly, then sand lightly with grit No. 2/0-100 Garnet finishing paper, and apply a finishing coat of rubbing varnish.
- (f) When dry, sand lightly with grit
 No. 6/0-220 Garnet finishing paper
 and rub dull with No. 00 powdered pumice
 mixed with KS-6232 oil. Use burlap, felt,
 or similar material for the rubbing operation. Remove all excess rubbing materials.
- 4.10. Finish of Metal Parts: To retouch the finish of worn metal parts, remove all rust with grit No. 2/0-100 Garnet finishing paper and wipe clean with a KS-14666 cleaning cloth slightly moistened with KS-7860 petroleum spirits, when necessary. Apply one coat of air-drying enamel to match the color of the part with the Devoe & Raynolds No. 244 sign painter's brush, and allow to dry thoroughly.
- 4.11 Rubber-covered Metal Foot Rings: The foot rings may be cleaned with a KS-14666 cleaning cloth slightly moistened with KS-14427 cleaning emulsion. Scratches and paint spots on the foot rings may be removed by rubbing with a silicon filler polish or by sanding with No. 150 aluminum oxide cloth, or an approved equivalent, and buffing.
- 4.12 Chair Rests: All operator chairs should be equipped with chair rests. The chair rests should be placed 1-1/2 inches from the end of the chair leg by driving the nail of the chair rest into the leg with a ball-peen hammer.

B. KS-5367 Bentwood-type Supervisor Chairs

- 4.13 Metal Parts: Any sharp edges or burrs on the nuts, screws, and other metal parts should be removed with the H-type combination file. Missing nuts, screws, and washers should be replaced.
- 4.14 Cleaning Chair: Oil, grease, excessive furniture polish, etc, should be removed from all parts of the chair with a clean KS-14666 cleaning cloth slightly moistened with KS-7860 petroleum spirits.
- 4.15 Woodwork Finish: To retouch the finish of the seat, back rest, or other wood parts worn through to the wood, either through ordinary wear or by sanding operations, proceed as follows:
 - (a) Smooth rough and splintered parts with grit No. 2/0-100 Garnet finishing paper.
 - (b) Apply one coat of filler stain to match the finish to the parts to be retouched with the Devoe & Raynolds No. 244 sign painter's brush. Two applications should be applied if necessary to produce the desired depth of color.

Note: In applying the filler stain, rebrush until the desired graining effect and depth of color are obtained. The filler stains used for finishing chairs have been developed with a view to preventing diffusion. It is necessary, therefore, to adhere strictly to the filler stains specified. A toner or stain which is subject to diffusion should not be used.

- (c) Allow stain to dry 16 hours. Sandpaper with grit No. 2/0-100 Garnet finishing paper to remove fibers which may have been raised by the staining operation.
- (d) Apply one coat of rubbing varnish or shellac.

Note: Use shellac when it is necessary to hold the drying time to a minimum.

- (e) Allow varnish or shellac coat to dry thoroughly, then sand lightly with grit No. 6/0-220 Garnet finishing paper and apply a finishing coat of rubbing varnish.
- (f) When dry, sand lightly with grit
 No. 6/0-220 Garnet finishing paper
 and rub dull with No. 00 powdered pumice
 mixed with KS-6232 oil. Use burlap, felt,
 or similar material for the rubbing operation. Remove all excess rubbing materials
- 4.16 Finish of Metal Parts: To retouch the finish of worn metal parts, remove all rust with grit No. 2/0-100 Garnet finishing paper and wipe clean with a KS-14666 cleaning cloth slightly moistened with KS-7860 petroleum spirits, if necessary. Apply one coat of air-drying enamel to match the color of the part with a Devoe & Raynolds No. 244 sign painter's brush and allow to dry thoroughly.