

VACUUM CLEANERS

KS-14377 TYPE

REPLACEMENT PARTS AND PROCEDURES

1. GENERAL

1.01 This section covers the information necessary for ordering parts to be used in the maintenance of KS-14377 type vacuum cleaners. It also covers approved procedures for replacing these parts.

1.02 This section is reissued to add information covering the KS-14377 L5 and L6 vacuum cleaners, to add paragraph 1.04, and to revise Fig. 1.

1.03 The KS-14377 L3 and L4 vacuum cleaners are the same as the KS-14377 L1 and L2 cleaners, respectively, except that the former provide a disposable paper filter in conjunction with the felt-cambic filter. Use of the paper filter requires a rubber baffle inside of the dust container at the hose connection as shown in Fig. 1. The baffle may be applied to the KS-14377 L1 and L2 vacuum cleaners by the KS-14377 L25 conversion kit. Pamphlet No. 6013, supplied with the kit, gives the necessary information for converting KS-14377 L1 and L2 vacuum cleaners to L3 and L4.

1.04 ♦The KS-14377 L5 and L6 vacuum cleaners are the same as the KS-14377 L3 and L4 cleaners, respectively, except for the power cords. In order to provide for grounding the KS-14377 vacuum cleaner, the KS-7586, 25-foot two-wire cord, equipped with a nonpolarized plug, has been replaced by the KS-14377 L31, 25-foot three-wire cord, equipped with a parallel blade grounding type plug. The L3 and L4 may be updated to the equivalent of the L5 and L6 by changing the existing power cord to the three-wire type. It is recommended that a wholesale replacement of existing two-wire power cords be undertaken whenever power cord replacement becomes necessary due to wear or damage. A three-wire power cord should be substituted. Section 010-111-010 also provides information on ac receptacle adaptors for

locations not equipped to accept the standard parallel-blade type grounding plug associated with the three-wire cord. Whenever power cord replacement becomes necessary, due to wear or damage, a three-wire power cord should be substituted.♦

1.05 Part 2 of this section covers the part numbers and names of parts which it is practicable to replace in the field in the maintenance of this apparatus. No attempt should be made to replace parts not designated. Part 2 also contains an explanatory figure showing the different parts. This information is called Replacement Parts.

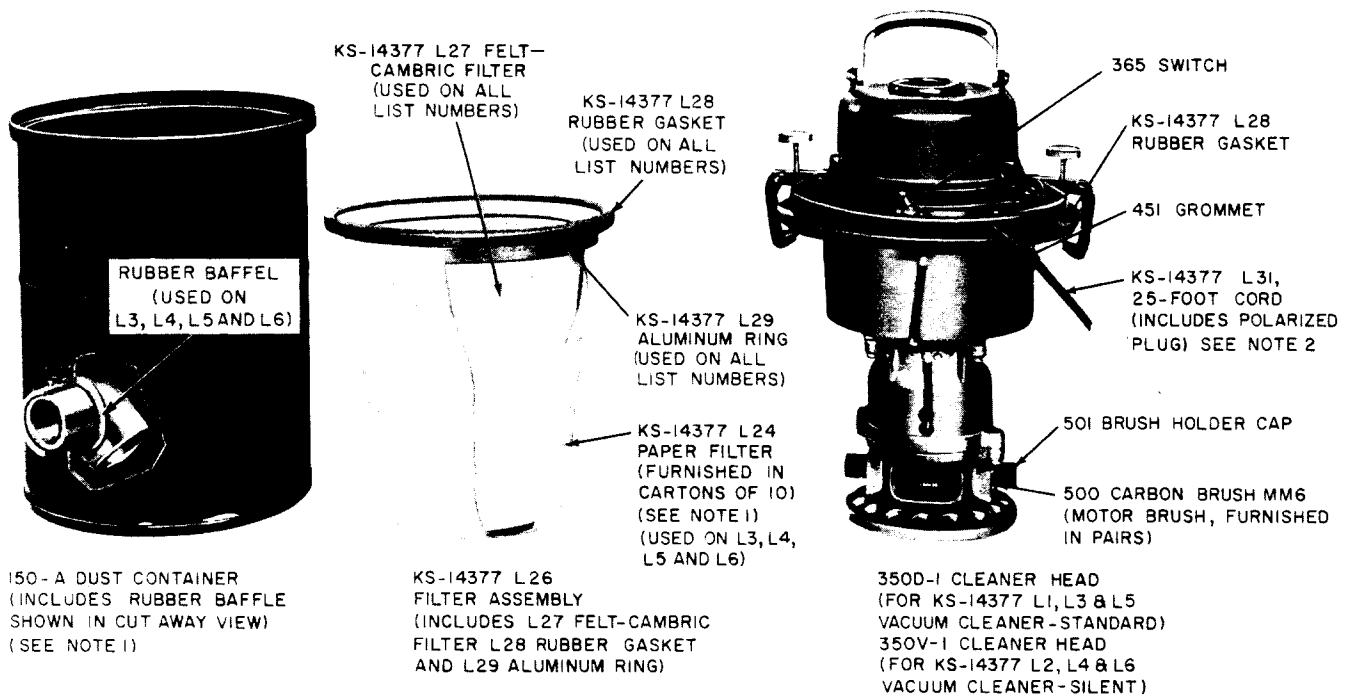
1.06 Part 3 of this section covers the approved procedures for the replacement of the parts covered in Part 2. This information is called Replacement Procedures.

2. REPLACEMENT PARTS

2.01 Fig. 1, included in this part of the section, shows various parts in their proper relation to other parts of the apparatus together with the numbers and names of the parts which it is practicable to replace in the field. When the part names differ from those in general use in the field, the latter names, in some instances, are shown in parentheses.

2.02 Information enclosed in parentheses () is not ordering information. This information may be references to notes, parts referred to in other portions of the section and not considered replaceable, or part names in general use in the field if these names differ from those assigned by the manufacturer.

2.03 When ordering a replacement part, give the KS and list number and name of the part. If the part is identified by other than a KS number, give the number and name of the part and the



NOTES:

1. KS-14377 L24 PAPER FILTER CAN BE USED ON KS-14377 L3 AND L4 VACUUM CLEANERS ONLY. KS-14377 L1 AND L2 VACUUM CLEANERS CAN BE CONVERTED TO KS-14377 L3 AND L4 VACUUM CLEANERS, RESPECTIVELY, BY ADDING THE RUBBER BAFFLE WHICH IS OBTAINED BY ORDERING THE KS-14377 L25 CONVERSION KIT. SEE 1.03
2. KS-14377 L3 AND L4 VACUUM CLEANERS CAN BE CONVERTED TO KS-14377 L5 AND L6 VACUUM CLEANERS, RESPECTIVELY, BY REPLACING THE KS-7586 CORD WITH THE KS-14377 L3I CORD.

Fig. 1—KS-14377 Type Vacuum Cleaners

KS and list number of the vacuum cleaner. For example:

KS-14377 L24 Paper Filters
 500 Carbon Brush MM6 for KS-14377 L3 Vacuum Cleaner

Do not refer to the Bell System Practice number or to any information given in parentheses.

3. REPLACEMENT PROCEDURES

3.01 List of Tools

CODE OR SPEC NO.	DESCRIPTION
TOOLS	
236	9/16-Inch Open Single-End Offset Wrench
—	3-Inch C Screwdriver
—	4-Inch E Screwdriver
—	Combination Pliers

3.02 Before starting work, disconnect the vacuum cleaner from the power supply.

3.03 Cleaner Head: To replace the cleaner head, remove it from the dust container as covered in (1) and mount it as covered in (2).

(1) To remove the cleaner head from the dust container, loosen the two screw clamps on opposite sides of the head by turning out the knurled screws with the fingers. Disengage the clamp hooks from the rim of the container and remove the head from the container, using the clamps as handles.

(2) Mount the cleaner head in the dust container. If it is necessary to turn the head with reference to the container, lift the head clear of the felt-cambic filter so the filter will not be twisted. Engage the clamp hooks in the rim of the container and then tighten the knurled screws with the fingers. Make sure the cleaner head, filter assembly, and dust container are firmly clamped together to prevent leakage of air which would reduce the suction of the vacuum cleaner.

3.04 Paper Filter: To replace the disposable paper filter, proceed as follows:

(1) Remove the cleaner head as covered in 3.03 (1). Hold down the aluminum ring in the dust container with one hand and tap the inside of the felt-cambic filter with the other hand to dislodge dust from the outside of the filter. Give the dust time to settle. Then remove the filter assembly from the dust container and remove the paper filter from outside the felt-cambic filter. If necessary, remove the hose before emptying the dust container.

(2) Slip the new disposable paper filter over the outside of the felt-cambic filter until the cardboard ring of the paper filter contacts the rubber gasket of the filter assembly. Place the filter assembly in the dust container and mount the cleaner head as covered in 3.03 (2).

3.05 Felt-Cambic Filter, Rubber Gaskets, and Aluminum Ring:

To replace any of these parts, remove the cleaner head from the dust container as covered in 3.03 (1). Remove the filter assembly from the dust container and, if provided, remove the paper filter from the filter assembly as covered in 3.04 (1).

(1) **Felt-Cambic Filter:** To remove this filter from the aluminum ring, hold the ring with one hand and grasp the filter near the ring with the other hand. Pull the filter retaining ring (sewed in around the top of the filter) and the filter out of the top of the aluminum ring. To mount the replacing filter, push it through the top of the aluminum ring with the felt side of the fabric out and then seat the filter retaining ring in the aluminum ring.

Caution: Do not wash or dry-clean the felt-cambic filter.

(2) **Rubber Gaskets:** The gasket on the flange of the aluminum ring is the same as that on the flange of the cleaner head. To remove a gasket, turn it off the flange at one point with the fingers and then pull it sideways. To mount the new gasket, fit it on the flange, as far around as possible, then stretch the unfitted part and slide it over the flange.

(3) **Aluminum Ring:** To replace the aluminum ring, remove the filter and gasket from the old ring and remount them on the new ring as described in (1) and (2).

(4) Reassemble the parts in the vacuum cleaner, as covered in 3.04 (2). ♦The L1 and L2 vacuum cleaners are not equipped with the rubber baffle which is required for use with the disposable paper filter. See Fig. 1. In the case of L1 or L2 units the disposable paper filter must be omitted and the felt-cambric filter used alone. However, these units may be converted to L3 or L4 respectively by the installation of the KS-14377 L25 conversion kit (1.03). In L3, L4, L5 and L6 units the disposable paper filter is used in conjunction with the felt-cambric filter.♦

3.06 Motor Brushes and Brush Holder Cap:

To replace the two motor brushes or a brush holder cap, remove the cleaner head from the dust container as covered in 3.03 (1). To remove a brush holder cap, unscrew it with the fingers. To remove the brush, insert a thumbnail between the brush spring plate and the brush holder and pull the plate out of the holder. The spring and brush will come out with the plate as a unit. Place the new brush in the slots of the holder and push the brush and spring into the holder. Take care when doing this not to twist the brush spring. Start the tabs on the brush spring plate in the slots and then push the plate against the holder. Mount the brush holder cap, replacing it if necessary. Check that the brush rests on the commutator surface. Proceed similarly to replace the other brush. Reassemble the vacuum cleaner as covered in 3.03 (2).

3.07 Cord and Grommet: To replace either of these parts, remove the cleaner head from the dust container as covered in 3.03 (1). Remove the cord clamp screw and nut with the 4-inch E screwdriver and remove the clamp. Push the cord and grommet in through the hole in the housing until the cord is out of the way of the terminal screws of the switch. Disconnect the cord leads

from the terminal screws with the 3-inch C screwdriver. Pull the cord and grommet in through the hole in the housing until the grommet is out of the hole. Remove the grommet from the cord and pull the cord out of the housing. Replace the grommet if worn or damaged. Pass the new cord in through the hole in the housing and push it through the grommet. Pull the cord and grommet back through the housing until the grommet shoulder is about an inch from the housing. Connect the cord leads to the switch. ♦Green lead-ground should be attached to motor frame beneath clamp mounting screws.♦ Seat the grommet shoulder against the housing. Remount the cord clamp loosely, check that the cord is properly held by the clamp and then tighten the clamp screw in the nut. Reassemble the vacuum cleaner as covered in 3.03 (2).

3.08 Switch: To replace the switch, remove the cleaner head as covered in 3.03 (1). Remove the cord clamp screw and nut with the 4-inch E screwdriver and remove the clamp. Push the cord and grommet in through the hole in the housing about an inch to provide slack in the cord. Unscrew the locknut on the switch stem with the combination pliers and the mounting nut with the 236 wrench. Remove the mounting screw in the wire clamp just below the switch with the 4-inch E screwdriver. Pull the switch stem down out of the hole in the housing with the fingers. Note that the motor and condenser leads are connected to the same terminal screws on one end of the switch and that the cord leads are connected to the terminal screws on the opposite end of the switch. Disconnect the leads from the old switch with the 3-inch C screwdriver and reconnect them to the new switch as previously noted. Push the stem of the switch through the hole in the housing, remount, and tighten the nuts. Seat the grommet shoulder against the housing. Remount the cord clamp loosely, check that the cord is properly held by the clamp, and then tighten the clamp screw in the nut. Reassemble the vacuum cleaner as covered in 3.03 (2).