# VACUUM CLEANER PER KS-7507

# REQUIREMENTS AND ADJUSTING PROCEDURES

#### 1. GENERAL

- 1.01 This section covers the portable hand type vacuum cleaner per KS-7507 for use in routine cleaning of central office apparatus and for general cleaning purposes.
- 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 Reference shall be made to Section 020-010-711 covering General Requirements and Definitions, for additional information necessary for the proper application of the requirements listed herein.
- \*1.04 Requirements are marked with an asterisk (\*) when to check for them would
  necessitate the dismantling or dismounting
  of apparatus or would affect the adjustment
  involved or other adjustments. No check
  need be made for these requirements unless
  the apparatus or part is made accessible for
  other reasons or its performance indicates
  that such a check is advisable.
- 1.05 Satisfactory Commutation, for the purpose of this section, may be said to have been attained if neither the brushes nor commutator are burned or injured to the extent

that abnormal maintenance is required. The presence of visible sparking is not necessarily evidence of unsatisfactory commutation.

#### 2. REQUIREMENTS

- 2.01 Cleaning: The following parts shall be cleaned when necessary.
  - (a) Enameled Steel Can. Fig. 1
  - (b) Filter. Fig. 1
  - \*(c) Motor Commutator. Fig. 1
- \*2.02 Motor Brush Length: The brushes shall be replaced when their length, outside of the brush spring, measured to the top of the arc has been reduced through wear to a minimum of 1/4 inch. Gauge by eye.

#### \*2.03 Motor Commutator

- (a) Commutator Surface: The surface of the commutator, Fig. 1, shall be free from scoring, pitting or other deformation of the surface or structure save that caused by normal wear. Gauge by eye.
- (b) Undercut Commutator: The surface of the commutator segments shall be above the insulation. Gauge by eye.

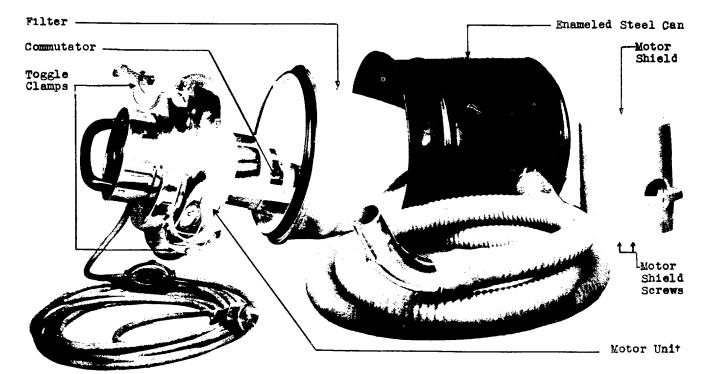


Fig. 1 - Vacuum Cleaner - Disassembled

© American Telephone and Telegraph Company, 1962 Printed in U.S.A. 2.04 Motor Bearings: The bearings of the motor shall be reasonably quiet. Gauge by ear.

## 5. ADJUSTING PROCEDURES

### 3.001 List of Tools and Materials

Code No. Description

Tools

- 3-1/2" cabinet screw-driver

Materials

- KS-14666 cloth

KS-8372 Trichloroethylene

### 3.01 Cleaning (Rq.2.01)

Perform the following cleaning operations at a point remote from central office apparatus.

- (2) Unfasten the toggle clamps, Fig. 2, and remove the motor unit and the filter, Fig. 1, from the enameled steel can.
- (3) Empty the dirt from the enameled steel can.
- (4) Remove loose dirt and dust from the filter. If the filter has become soiled to the extent that the efficiency of the machine is impaired, it shall be dry cleaned or replaced.
- (5) Remove screws (A) and (B), Fig. 3, using the 3-1/2 inch cabinet screw-driver. Remove the shield.
- (6) Clean the commutator, Fig. 4, as required by rubbing with a clean KS-14666 cloth.

Note: A bronze colored highly polished commutator is very desirable and it should not be mistaken for a burned commutator. If a commu-

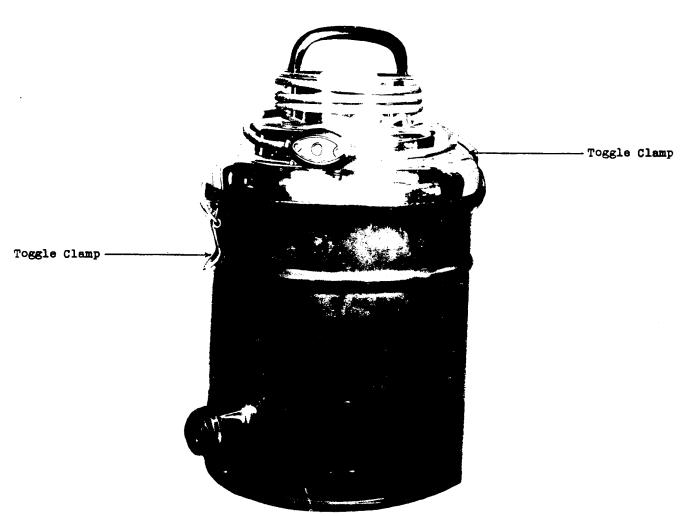


Fig. 2 - Vacuum Cleaner - Assembled

tator presents this condition, is smooth and commutation is satisfactory, leave it alone.

- (7) If the commutator becomes smutted from grease, clean with a KS-14666 cloth moistened with trichloroethylene.
- (8) Replace the shield making certain that the slotted holes are underneath the round holes.
- (9) Replace the filter and motor unit in the enameled steel can and fasten the toggle clamps.

3.02 Motor Brush Length (Rq.2.02)

- (1) Unfasten the toggle clamps (Fig. 2) and remove the motor unit from the enameled steel can.
- (2) Remove screws (A) and (B) (Fig. 3), using the 3-1/2 inch cabinet screw-driver. Remove the shield.
- (3) Remove the brush caps, Fig. 4. Notice the position of the brushes in the holders. Remove and inspect the brushes. If the brush lengths meet the requirement, place them back in the holders be-

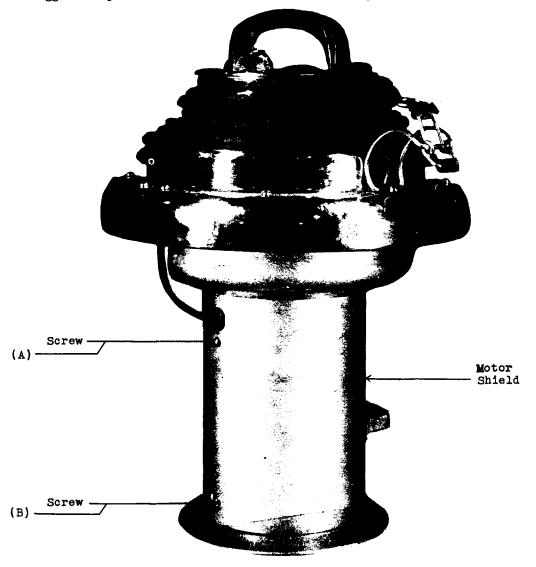


Fig. 3 - Motor Unit - Shield Mounted

ing sure that they are in the same position noticed before removal. If the brush length requirement is not met, replace with new brushes, which should be ordered as follows:

- (a) Pure Carbon Company anti-twist, G-32 brush and spring assemblies, equipped with pigtail type connectors for Fuse on Vacuum Cleaner per KS-7507 equipped with an undercut commutator.
- (b) Morrill and Morrill NK-111-100 brush for use on Vacuum Cleaner per KS-7507 equipped with a flush type commutator.
- (4) Inspect the commutator and proceed as covered in paragraph 3.03 when the commutator needs reconditioning.
- (5) Replace the shield making certain that the slotted holes are underneath the round holes.

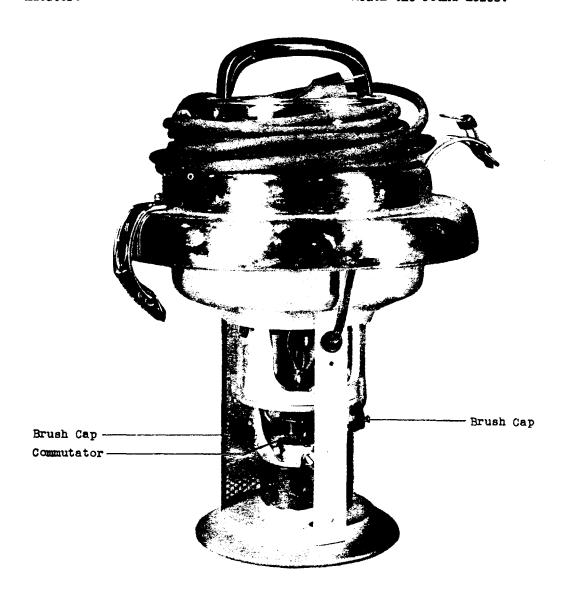


Fig. 4 - Motor Unit - Shield Removed

(6) Replace the motor unit in the enameled steel can and fasten the toggle clamps.

# 3.03 Motor Commutator (Rq.2.03)

(1) If the commutator becomes scored or otherwise deformed, or if the sufface of the undercut commutator wears

to the level of the insulation, the machine shall be referred to the supervisor.

# 3.04 Motor Bearings (Rq.2.04)

(1) When the bearings become objectionably noisy or cause poor commutation due to eccentric operation or chatter, the machine shall be referred to the supervisor.