800 W. Artesia Blvd., Compton, CA 90244-9057

TOILET ASSEMBLY

PN 17000 & 17010 SERIES

COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST

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COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

TABLE OF CONTENTS

SUBJECT	PAGE
Introduction	INTRO-1
General	INTRO-1
Assembly Relationship	INTRO-1
Use of Parts List if Part Number is Not Known	INTRO-1
Usage Codes	INTRO-1
Vendor Codes	INTRO-2
Abbreviations	INTRO-3
Symbols	INTRO-3
Description and Operation	1
General	
Description	
Operation	2
Leading Particulars and Servicing	3
Servicing Instructions	3
Troubleshooting and Maintenance	7
Cleaning	9
Repair	10
Check	12
Illustrated Parts List	13
Introduction	
Purpose	
How to Use the Illustrated Parts List	
Parts Replacement Data	14
Service. Bulletin Incorporation	
Special Terms and Symbols	
Usage Code List	16
Usage Code List	28

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

ILLUSTRATIONS

<u>FIGURES</u>	<u>PAGE</u>
Leading Particulars Table	3
Troubleshooting Equipment Table	7
Wiring Diagram	12
Figure 1-Toilet Assembly	18
Figure 2-Tank Assembly	25
Figure 3-Motor-Pump Assembly	29

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

INTRODUCTION

General 1.

This publication lists, identifies and illustrates component assemblies, subassemblies and detail parts of 17000 and 17010 series toilet assemblies manufactured by Monogram Sanitation, 800 W. Artesia Blvd., Compton, California 90224-9057.

2. **Assembly Relationship**

Each assembly listed is followed immediately by a listing of its detail parts properly indented to show their relationship to the assembly. Parts are listed in general order of disassembly with the exception of attaching parts, which are listed immediately following the item which they attach and which precede the components, if any, of that assembly. Item numbers in the parts list correspond to item numbers in the accompanying exploded view illustration.

3. Use of Parts List If Part Number Is Not Known

Review the illustrations and identify the part by appearance or location. Note the item number in the exploded view and check the corresponding item number in the accompanying parts list to find the part number, description, and quantity for that application.

Usage Codes 4.

The applicability of a particular part to its primary assembly is indicated by a code letter in the USAGE CODE column of the parts list. If no entry is made in the "USAGE CODE" column, the part is applicable to all primary assemblies listed.

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

5. Vendor's Codes

Vendor's parts used in the equipment are listed by the vendor's part number, vendor's description of the part, and vendor's code preceded by the letter "V", listed in parentheses following the description of the part. The vendor codes used in this publication are listed immediately following this paragraph. The code identification for Monogram Sanitation, or standard parts (e.g., AN, MS or NAS) has not been included in the parts list and the absence of a code following a part description means the item is a Monogram Sanitation, part or a standard part.

CODE	VENDOR'S NAME AND ADDRESS
V00779	AMP Inc. 2800 Fulling Mill Rd. P.O. Box 3608, Harrisburg, PA 17105-3608
V02697	Parker-Hannifin Corp., Seal Group 2360 Palumbo Drive P.O. Box 11751, Lexington, KY 40509
V25220	Shamban W.S. and Co. 11543 W. Olympic Blvd., Los Angeles, CA 90064
V30327	Clevite An Imperial Clevite Co., Fluid Components Div. 6300 W. Howard St., Chicago, IL 60648
V59730	Thomas and Betts Corp. Hwy 218 S., Iowa City, IA 52240
V66295	Wittek Microdot Fastening Systems 1421 Barnsdale Rd., La Grange Park 60525
V76599	Murray Corp. Greater Baltimore Industrial Park, Schilling Circle Cockeysville, MD 21030
V81872	Olympic Plastics Co. 5800 W. Jefferson Blvd., Los Angeles CA 90016
V94222	Southco Inc. 210 N. Brinton Lake Rd., Concordville, PA 19331

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

6. **Abbreviations**

Abbreviations used throughout this manual are defined as follows:

As Required AR Assembly **ASSY** Figure FIG.

FRO Future Replacement Order **Next Higher Assembly NHA**

No. Number **REQ** Required RF Reference **REPLD** Replaced **REPLS** Replaces

Service Bulletin SB SN Serial Number **SUBS** Subsequent

TTL Total V Vendor

7. **Symbols**

*** Designates the end of each group of attaching parts.

A dash before an item indicates the item is not illustrated or does

not have a leader and assigned index number on the exploded view

illustration.

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

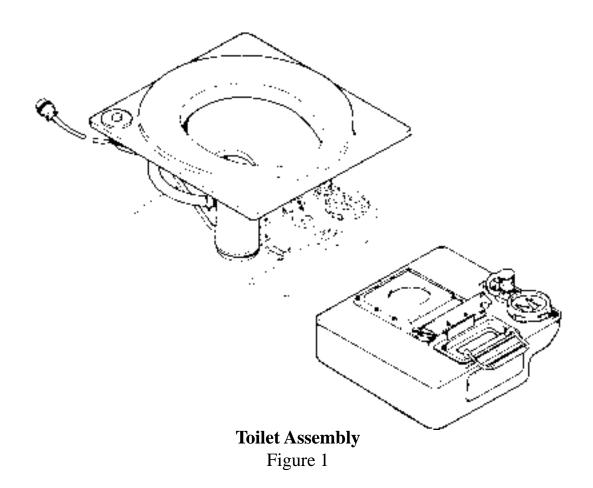
DESCRIPTION AND OPERATION

1. General

A. This publication is issued to provide instructions for servicing and maintenance of MONO-LAV® Aircraft Toilet Assembly, manufactured by Monogram Sanitation, Compton, California. The unit is a light weight, compact, electrically operated flushing toilet which utilizes ordinary tap water and a germicidal deodorant, Monogram's Chemkare, as a flush fluid.

2. <u>Description</u>

A. The recirculating flushing toilet is a completely self-contained unit requiring only the external connection of 24-28 volt DC electrical power. The toilet assembly is designed for permanent installation in the aircraft, requiring only the removal of the waste tank when servicing is desired.



COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

- B. The assembly consists basically of a seat and shroud assembly which rests on the toilet mounting plate. Attached to the mounting plate are the polished stainelss steel bowl assembly, the motor and pump assembly, and the PRESS TO FLUSH switch. Mounted to the bottom flange of the bowl is the slide assembly into which the removable tank assembly is installed.
- C. The removable tank assembly consists of a storage tank on which the knife valve, flush line quick disconnect and carrying handle are located. Extending through the cover of the knife valve is a manually operated actuator to open or close the knife valve, sealing the tank contents prior to removal of the tank. The position of the knife valve may be observed through the opening at the bottom of the bowl.
- D. The tank assembly detaches from the toilet at the front of the unit. Two Pres-Loc fasteners, one on each side of the knife valve, secure the installed tank in the sealed position against the bottom of the bowl. By detaching and draining the flush line at the quick disconnect, depressing the two Pres-Loc fasteners, and by pulling the carrying handle, the tank is easily removed for servicing.

3. Operation

A. The flush cycle is initiated by pressing the PRESS TO FLUSH button on the seat and shroud assembly. The push button switch applies 24-28 volt DC power to the motor section of the motor and pump assembly. Flushing continues until the push button is released. During the flush cycle, flushing fluid is pumped from the waste tank to the bowl by the self-priming pump section of the motor an pump assembly. The flush fluid enters the bowl through a nozzle in the upper rim and washes the inner surface of the bowl in a swirling pattern. Waste is carried to the waste tank through the knife valve below the bowl. When desired, the removable waste tank my be removed from the toilet for servicing after closing the knife valve.

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

4. <u>Leading Particulars</u>

Use	Aircraft Toilet Facilities
Electrical Power Requirement	+28 VDC, 7.5 AMPS
Pump Type	Self-priming Vane
Fluid Pump Rating (Nominal)	5 GPM
Flush Cycle	Continuous (with flush switch depressed)

Leading Particulars

Table 1

5. <u>Servicing Instructions</u>

WARNING:

FOR SANITARY REASONS, ALWAYS WEAR RUBBER GLOVES (ELBOW LENGTH) WHILE SERVICING OR WHEN HANDLING PARTS WHICH HAVE BEEN IN CONTACT WITH THE FLUSHING FLUID.

The toilet should be serviced during routine ground maintenance of the aircraft following any usage. It is more efficient and convenient to remove, clean and recharge the toilet tank on a regular basis than to wait until the tank is filled to capacity. If the tank becomes filled above the knife valve, follow the instructions below:

NOTE: To avoid spillage, do not remove tank when the fluid level is above the knife valve.

- (a) Hold a small paper or plastic cup against the bowl interior (preferably at the bowl flush ring outlet).
- (b) Depress the "Push to Flush" button to circulate flushing fluid.
- (c) Pour the flushing fluid into a bucket until the fluid level is below the knife valve.

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

A. Initial Precharge

The removable tank is to be precharged with a mixture of 2 quarts of water and 1 dissolvable package of germicidal deodorant, Monogram's Chemkare.

B. Servicing the Toilet

Instructions for servicing are provided on a decal applied to the front side of the removable tank. Instructions are as follows:

(1) Tank Removal

- (a) Open front access to the toilet, as applicable, to remove the toilet tank.
- (b) Depress the lock ring of the flush hose quick disconnect coupling located on the right side at the front of the tank top.
- (c) Drain any residue of flush fluid in the hose by partially disengaging the plug from the quick disconnect and manipulating the hose to assist drainage.
- (d) Remove the flush hose from the quick disconnect and place hose in the retaining clip located on the underside of the toilet mounting plate.
- (e) Install the plug attached to the quick disconnect to seal the coupling.
- (f) Close the knife valve at the bottom of the toilet bowl by pushing the actuator handle until the valve is fully closed.
- (g) Press the two Pres-Loc fasteners on each side of the knife valve actuator to unlock the tank.
- (h) Remove the tank by pulling the recessed carrying handle on the tank top.

(2) Tank Cleaning

(a) Remove cap from the pour spout to dispose of tank contents in a sewer or toilet. On earlier models without the pour spout, dispose of tank contents by holding the tank upside-down over a sewer or toilet and pull the knife valve actuator handle, opening the valve and allowing the tank to drain.

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

(2) Tank Cleaning (continued)

(b) Rinse the tank by filling one-half full with water. Close the knife valve and shake vigorously. Drain tank as in previous step (a).

NOTE: Commercial detergents and disinfectants can be included in the rinse water if desired. However, do not include these materials in the tank precharge.

- (c) Rinse and drain the tank several times to ensure that the tank is thoroughly clean.
- (d) Wipe the exterior surfaces of the tank using a cloth moistened with clear water and disinfectant.

(3) Tank Recharge

(a) Charge the tank with a mixture of 2 quarts of water and 1 dissolvable package of Monogram's Chemkare chemical.

NOTE: To assure toilet recirculation system operation during freezing weather, an ethylene glycol base antifreeze containing anti-foam agent may be added to the flush fluid.

(4) Tank Installation

- (a) Reinstall the tank by inserting the slides located on each side of the knife valve into the slide plate assembly on the bottom of the toilet bowl and slide tank into place.
- (b) Press the two Pres-Loc fasteners to the first detente to secure the tank.
- (c) Remove the plug in the flush hose quick disconnect and connect the hose coupling to the quick disconnect. Lock the disconnect lock ring.
- (d) Pull the knife valve actuator to fully open the valve.
- (e) Lift the toilet seat and shroud assy from the top of the toilet and wipe with cloth moistened with clear water and disinfectant. Wipe the bowl and surrounding area.

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

- (4) Tank Installation (continued)
 - Check flushing operation of the toilet and check for leaks. (f)
 - (g) Close access to the toilet.

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

TROUBLE SHOOTING AND MAINTENANCE

1. **Troubleshooting**

Unless the toilet has been suitably tagged to denote the nature of maintenance requirements, refer to the Troubleshooting Chart as necessary to isolate and identify possible troubles.

Problem	Possible Cause	Corrective Action
Toilet will not operate	Electrical power not applied (24-28 VDC)	Check aircraft power, fuse/ circuit breaker, electrical connection
	Defective wiring	Check wiring continuity
	Defective flush switch	Replace flush switch
	Defective motor	Replace motor and pump assy
Toilet operates but flush fluid not pumped into bowl	Inadequate flush fluid charge in tank	Charge toilet tank. Refer to Servicing Instructions
	Defective Pump	Replace motor and pump assy
	Bowl, nozzle, connecting hoses or strainer in tank clogged	Remove obstruction. Back flush to clean strainer. Refer to Cleaning.
	Flush (suction) hose not connected to tank quick disconnect	Connect hose to quick disconnect coupling.

Table Equipment

Table 102 (Page 1 of 2)

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

Problem	Possible Cause	Corrective Action
Excessive noise during during operation	Defective motor or pump	Replace motor and pump assy
	Strainer in tank clogged	Clean strainer (back flush)
Toilet has excessive odor	Excessive usage Service toilet. Refer to Servicing Instructions.	
	Improper deodorant/ chemical used	Use recommended chemical. Monogram Chemkare.

Table Equipment
Table 102 (Page 2 of 2)

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

CLEANING

1. Cleaning

The following methods should be used for cleaning the toilet before disassembly and also for cleaning the disassembled components. Use specified cleaning agents.

A. Back Flushing the Tank

(1) Back flush the toilet tank to clean the strainer inside the tank by connecting a water hose to the quick disconnect coupling on the tank top.

B. Cleaning Procedure

- (1) The toilet should be cleaned manually using a strong solution of hot soapy water and disinfectant. Rinse thoroughly with clean water and dry completely with a cloth and warm dry air.
- (2) Wash all mechanical parts in a strong solution of hot soapy water and disinfectant.

WARNING: WHEN USING TRICHLOROETHYLENE, WEAR SUITABLE PROTECTIVE GLOVES. TRICHLOROETHYLENE ABSORBS

MOISTURE READILY AND CAN CAUSE SERIOUS BURNS WHEN IN

PROLONGED CONTACT WITH SKIN.

- (3) Clean electrical parts manually, using cloth moistened sparingly with trichloroethylene.
- (4) Clean the tank and bowl manually, using a strong solution of disinfectant, hot soapy water and bristle brush. Scrub the flush channel in the upper rim of the bowl to remove buildup of deposits. Rinse thoroughly with clean hot water and dry completely.

ITEM	IDENTIFICATION	SOURCE
Disinfectant	Lysol (or equivalent)	Commercially Available
Soap	All purpose liquid soap	Commercially Available
Trichloroethylene	Federal Specification O-T-634C	Any Approved Source

Cleaning Materials
Table 401

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

REPAIR

1. Repair

Only a worn or damaged component should be removed from the toilet tank. Unnecessary disassembly is not recommended. The instructions which follow are provided to disassemble the components of the toilet into their respective detail parts in order to repair or replace and item. Refer to the Illustrated Parts List section for description and identification of detail parts.

- A. Item numbers appearing on the exploded view illustrations have been assigned in a typical order of disassembly. Disassemble only to the extent necessary to repair or replace a part.
- B. Follow the standard shop practice for inspection of detail parts.
- C. Using an ohmmeter, check circuit continuity with the flush button depressed. The motor windings should exhibit a low resistive circuit (3 ohms max).
- D. Any necessary soldering is confined to electrical connections only using SN60WARP2 solder. See the toilet wiring diagram.
- E. Repair of the toilet is confined to replacement of damaged or worn components, except that minor scratches can be repaired in accordance with standard shop practices.
- F. Replace any item found to be damaged or worn. Replace all gaskets, seals, packings and rubber items.
- G. Reassemble the toilet in the reverse order of disassembly with particular attention to the following:
 - <u>CAUTION:</u> The toilet mounting plate and tank top are honeycomb panel construction. To prevent compression damage, do not over torque hardware when attaching any component to these items.
 - (1) Bond new bowl gasket in place using Scotch Grip 1300 rubber adhesive (Minnesota Mining and Manufacturing Co.)
 - (2) Bond new knife valve seals in place using Uralane 5738 A/BX epoxy adhesive (Furane Plastics, Inc.)
 - (3) Apply Grade C locking compound (Loctite Corp.) to the threads of two No. 8 pan head screws (MS510957-46). Wipe excess compound from screws and install.

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

- (4) Install new motor and pump assembly to the toilet mounting plate as follows:
 - (a) Remove the two No. 8 slotted head screws and the two No. 10 hex head bolts from the pump cover.
 - (b) Discard the cover and the two slotted head screws.
 - (c) Install the unit to the mounting plate using the two No. 10 hex head bolts (NAS501-3H20A). Lockwire the bolts using MS20995C20 lockwire.
 - (d) Apply Grade C locking compound (Loctite Corp.) to the threads of two No. 8 pan head screws (MS51957-46). Wipe excess compound from screws and install.
 - (e) Connect the motor leads to the leads of the flush switch harness (Black to Black, Orange to Red). See the wiring diagram.

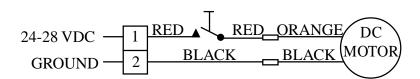
COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

CHECK

1. General

When assembly is completed, perform a functional check of the toilet as follows:

- A. Connect 24-28 VDC power to the toilet. See the wiring diagram for connection.
- B. Pour approximately 2 quarts of water into the toilet tank through the bowl.
- C. Press and hold the flush button. The flushing action should continue until the button is released. The swirl pattern should be consistent and vigorous, washing the complete inner surface of the bowl.



Wiring Diagram

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

ILLUSTRATED PARTS LIST

1. Introduction

A. Purpose

This section lists, describes, and illustrates all component assemblies, subassemblies, and detail parts of the toilet assembly. It is comprised of illustration sheets and DPLs. Illustration sheets show exploded views and DPLs are arranged in a tabular form providing information about each item. Parts listed are considered to be replaceable for reasons of wear, age, or excessive abuse.

B. How to Use the Illustrated Parts List

(1) Identifying a Part

The item numbers shown in the DPL correspond to the item numbers appearing on the illustration sheet(s). To determine a part number, visually identify the part on the applicable illustration sheet and note its item number. Reference the figure and item number to the corresponding DPL. Follow the row of that item number across to the part number field.

(2) Assembly Relationship

Each assembly listed is followed immediately by a breakdown of its detailed parts, properly indented (by dot(s)) to show their relationship. Parts are listed in general order of disassembly, with the exception of attaching parts which are listed immediately following the item which they attach and which precede the details, if any, of that assembly. This relationship is shown as follows:

1234567

Assembly or Installation Descriptive Title

.Assembly

.Attaching parts for Assembly

. . Detail Parts for Assembly

... Subassembly

... Attaching Parts for Subassembly

.... Detail Parts for Subassembly

.... Sub-Subassembly

. . . . Attaching Parts for Sub-Subassembly

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

(3) Effectivity

When two or more assemblies have a combined breakdown, an EFF CODE is assigned to distinguish any difference in their details. These codes are assigned alphabetically starting at the assembly level with the letter "A". This letter matches a detail item to its next higher assembly. Items where this column is left blank are applicable to all next higher assemblies

(4) Quantity

The UNITS PER ASSY column indicates the quantity of each item required for the next higher assembly or subassembly. The quantities shown in this column are the quantities required at a particular location and not necessarily the total quantity of parts in one assembly. "RF" is used to signify that an assembly has been previously listed and is being listed again for reference only. "AR" indicates that the quantity of this part is a bulk quantity and it is used as required.

C. Parts Replacement Data

The relationship between parts is defined in the nomenclature column. The following terms are used to show this relationship.

<u>TERM</u>	<u>ABBREVIATION</u>	<u>DEFINITION</u>
Superceded by	SUPSD BY	The part in the part number column is replaced by and not interchangeable with the part number shown in the notation.
Supersedes	SUPSDS	The part in the part number column replaces and is not interchangeable with the part shown in the notation.
Replaced by	REPLD BY	The part in the part number column is replaced by the item number shown in the notation. Both parts are of an alternate or interchangeable nature.
Replaces	REPLS	The part in he part number column replaces the item number shown in the notation. Both parts are of an alternate or interchangeable nature.

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

D. Service Bulletin Incorporation

- (1) Assemblies, subassemblies, and detail parts subject to modification, deletion, addition, or replacement by an issued service bulletin are identified. The term (PRESB-XXXX) in the nomenclature column designates the original configuration and the term (POST SB-XXXX) identifies the modified configuration.
- (2) Parts deleted by service bulletins show the deleted part number but omit its nomenclature. Only the term (DELETED BY SB-XXXX) is shown in the nomenclature field.
- (3) Parts added by service bulletins include the notation (ADDED BY SB-XXXX) in the nomenclature column.

E. Special Terms and Symbols

- (1) The term MOREF is used when the part number exceeds 15 digits. The actual part number is listed in the nomenclature column.
- (2) The term ORDERNHA is used in the part number column or nomenclature field when the part cannot be ordered. Order the NHA shown in the DPL to procure the desired part.
- (3) The term NONPROC is used in the part number column for an assembly or subassembly that is not procurable in its listed form. NONPROC assemblies or subassemblies are not procurable and should not be ordered: however, the parts for that assembly or assembly of the subassembly could be procurable. A NONPROC assembly is created to allow a group of parts to be illustrated and listed as an assembly or subassembly.
- (4) Parts that are deleted are identified in the NOMENCLATURE column as "DELETED". The part number will stay in the PART NUMBER column and quantity will stay in the UNITS PER ASSY column. The nomenclature and EFF CODE will be deleted.
- (5) Symbols
 ATTACHING PARTS
 * * *

_

Designates the beginning of a group of attaching parts. Designates the end of a group of attaching parts. A dash before an item indicates the item is not shown or does not have a leader line and item number on the illustration sheet.

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

USAGE CODE LIST

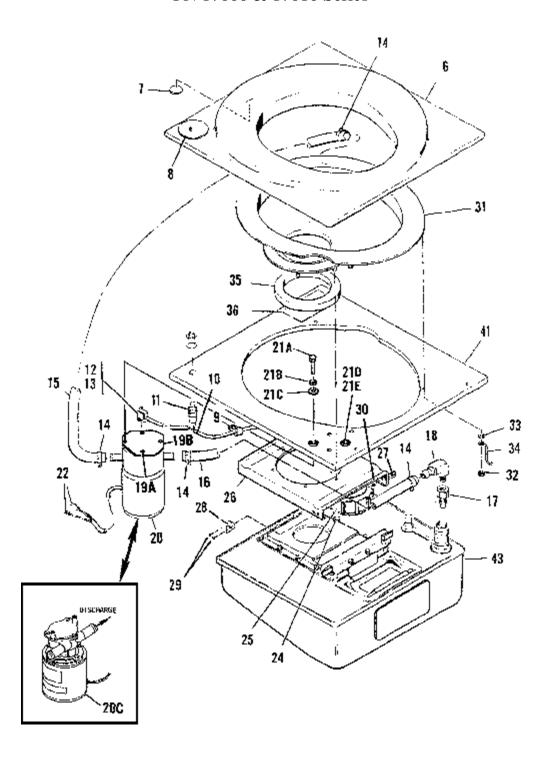
A17000-007
B17000-009
C17000-024
D17000-026
E17000-029
F17000-037
G17000-039
H17010-007
J17010-009
K17010-024
L17010-026
M17010-029
N17010-037
P17010-039
Q17010-043
R17010-042
AA17000-007, -009, -026, -029
AB17000-007, -009, -024, -037, -039
AC17000-029, (USED ON SN 001 THRU SN 003)
AD17000-007, -009, -024, -026, -037, -029 (USED ON SN 004 AND SUBS);
17010-007, -009, -024, -026, -029, -037, -043
AE17000-029 (USED ON SN 004 AND SUBS); 17010-029
AF17000-007, -009, -024, -037, -039;
17010-007, -009, -024, -037, -039, -042, -043
AG17000-024, -029, -037, -039;
17010-024, -029, -037, -039, -042
AH17010-007, -009, -024, -026, -029, -037, -039, -042, -043
AJ17000-024, -026, -037, -039,
17010-024, -026, -037, -039, -042
AK17000-029 (USED ON SN 001 THRU SN 007)
AL17000-007, -009, -024, -026, -037, -039;
17010-007, -009, -024, -026, -029, -037, -039, -042, -043
AM17000-007, -009, -029, -037;
17010-007, -009, -024, -026, -029, -037, -039, -042, -043
AN17000-024, -029 (USED ON SN 008 AND SUBS), -037, -039;
17010-024, -029, -037, -039, -042

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

USAGE CODE LIST CONTINUED

AP17000-007, -009, -026, -039
AQ17000-024, -037, -039;
AR 17000-029 (USED ON SN 001 THRUS SN 011)
AS17000-029;
AT17000-007, -009, -026;
17010-007, -009,-026
AU17000-024, -037, -039;
17010-007, -009, -024, -026, -029, -037, -039, -042, -043
AV17000-007, -009, -026, -029 (USED ON SN 004 AND SUBS);
17010-007, -009, -026, -029, -043
AW17000-007, -009, -024, -026, -029;
17010-007, -009, -024, -026, -029, -039, -043
AX17000-007, -009, -024, -026, -037, -039;
17010-007, -009, -024, -026, -037, -039, -043
AY17000-007, -009, -026, -029;
BA17000-037, -039;
17010-037, -039, -042
BB17000-007, -009, -026;
17010-007, -009, -043
BC17000-009, -026;
17010-009, -026
BD17000-007, -009;
BE17000-024, -037;
17010-037
BF17000-007, -009, -026
17010-007, -009, -026, -043
D.C. 15000.000
BG17000-039; 17010-024, -039, -042

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series



Toilet Assy FIGURE 1

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
1 -1	17000-007		TOILET ASSY (REPLD BY 17010-007)	A	RF
-1A	17000-009		TOILET ASSY (REPLD BY 17010-009)	В	RF
-B	17000-024		TOILET ASSY	C	RF
-1C	17000-026		(REPLD BY 17010-024) TOILET ASSY	D	RF
-1D	17000-029		(REPLD BY 17010-026) TOILET ASSY	Е	RF
-1E	17000-037		(REPLD BY 17010-029) TOILET ASSY	F	RF
-1F	17000-039		(REPLD BY 17010-037) TOILET ASSY	G	RF
-2	17010-007		(REPLD BY 17010-039) TOILET ASSY	Н	RF
-2A	17010-009		(REPLD BY 17000-007) TOILET ASSY	J	RF
-2B	17010-024		(REPLS 17000-009) TOILET ASSY	K	RF
-2C	17010-026		(REPLS 17000-024) TOILET ASSY	L	RF
-2D	17010-020		(REPLS 17000-026) TOILET ASSY	M	RF
-2E	17010-023		(REPLS 17000-029) TOILET ASSY	N	RF
			(REPLS 17000-037)		
-2F	17010-039		TOILET ASSY (REPLS 17000-039)	P	RF
-2G -2H	17010-043 17010-042		TOILET ASSY TOILET ASSY	Q R	RF RF

-ITEM NOT ILLUSTRATED

^{*} SUPPLIED LOOSE ITEM

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

	FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
	1 6	17000-105		. SEAT AND SHROUD ASSY	С	1
	-6A	17000-139		(REPLD BY ITEM -6C) . SEAT AND SHROUD ASSY (REPLD BY ITEM -6C)	A,B,Q	1
	-6B	17000-421		. SEAT AND SHROUD ASSY	AC	1
	-6C	17000-195		. SEAT AND SHROUD ASSY		1
	-6D	17000-197		(REPLD ITEMS 6 AND -6A) . SEAT AND SHROUD ASSY	AF	1
	7	2258-12-1		PAD, SUPPORT	AE	8
	8	17000-208		LABEL (PRESS TO FLUSH)		1
		17000-423		LABEL (PRESS TO FLUSH)	AF	1 1
	-8B	2393-15* C10DK3		. SEAT AND COVER ASSY . CLAMP, CABLE (V81872)	AE D,L	$\begin{vmatrix} & & 1 \\ & & 1 \end{vmatrix}$
		C10DK35		. CLAMP, CABLE (V81872)	AM	1
		120082		. SHIELD, PUSH BUTTON	C,F,G	1
R R	10	17000-140		. SWITCH AND HARNESS ASSY (REPLD BY ITEM -10B)	E,M AT	1
N.	-10A	17000-111		. SWITCH AND HARNESS ASSY	AI	1
R				. SWITCH AND HARNESS ASSY	AG	1
R	1.1	MG25000 2E		(REPLS ITEM 10)	Q	
		MS25089-3F 1-480698-0		SWITCH, FLUSH PLUG, CONNECTOR (V00779)	AG	1 1
		350690-1		PIN, CONNECTOR (V00779)	AG	$\begin{bmatrix} 2\\1 \end{bmatrix}$
		MS3101A10SL4P		CONNECTOR	AT	
	-13B	B14D		WRISTLOC, DISCONNECT (V59730)		2
	-13C	CA-3106F10SL- 4P-F80		. CONNECTOR	Q	1
R		MS3057-4A		STRAIN RELIEF	Q	1
		C8PS		. CLAMP, HOSE (V66295)	AA	4
		H8SS 17000-209-1		. CLAMP, HOSE (V66295) . HOSE, DISCHARGE	AU AC	4 1
		17000-209-1		. HOSE, PUMP DISCHARGE	AD	1
	-15B	17000-374-16		. HOSE, SUCTION	C,K	1
R	-15C	17000-374-19		(REPLS ITEM -16A) . HOSE, DISCHARGE	G,P,R	1
K	-130	17000-374-19		. HOSE, DISCHARGE	U,F,K	1

⁻ITEM NOT ILLUSTRATED

^{*} SUPPLIED LOOSE ITEM

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

	FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
R	-16A -16B -16C -16D -16E 17 -17A -17A -17B -17C -17D 18 19A 19B 20	TY24M 17000-374-2 17000-374-23 17000-374-24 B3T21 17000-175 17000-137 17000-344 17000-341 KF08-06PS90 NAS1189C3932N 17000-316 17000-102 17000-141		. HOSE, SUCTION . HOSE, SUCTION (REPLD BY ITEM -15B) . CABLE TIE . HOSE, PUMP SUCTION . HOSE, SUCTION . HOSE, SUCTION . PLUG, QUICK DISCONNECT (REPLD BY ITEMS -17A AND -17C) . NIPPLE, QUICK DISCONNECT (REPLS ITEMS 17, -17B AND -17C) . PLUG, DISCONNECT ASSY (REPLD BY ITEM -17A) .NIPPLE QUICK DISCONNECT (REPLS ITEM 17) . CONNECTOR, BARBED HOSE . ELBOW (V30327) . SCREW .PLATE, MOTOR MOUNTING . MOTOR-PUMP ASSY (REPLD BY 17000-382) . MOTOR-PUMP ASSY (REPLD BY 17000-102 AND 17000-141) (REPLD BY 17200-382*) (PRE SB17000-38-03	AC C C,K,N AV F,N G,P,R AK BF A,Q AN BA AW E AR A,B AZ	1 1 1 1 1 1 1 1 1 2 1 1 1
				*Uses Items 21D, 21E, -21J and -21K for attaching hardware.		

⁻ITEM NOT ILLUSTRATED

^{*} SUPPLIED LOOSE ITEM

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

	FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
	1 20C	17000-382*		. MOTOR-PUMP ASSY (SEE FIG. 3 FOR DETAILS) (REPLS 17000-382) (POST SB17000-38-03)		1
R	21A 21B 21C 21D 21E -21F -21G -21H -21J -21K	8-32UNCX1.00 NAS1189C08P16L MS35338-137 2392-25 A3135-017-024 MS35489-97 MS35489-94 3752-34 3752-35 MS15795-811 MS24693-C51 3752-3		ATTACHING PARTS . BOLT . SCREW . WASHER . WASHER . WASHER, COUNTERSUNK . GROMMET . GROMMET . SPACER . SPACER FLAT . WASHER . SCREW . SPACER	E AB E AL AS AB E AP AL AH C.F	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	22 -23 -23A	B14D 17000-104 17000-129 NAS679C3M		DISCONNECT (V59730) . SLIDE PLATE ASSY . SLIDE PLATE ASSY ATTACHING PARTS . NUT . WASHER	BB AG	2 1 1 6 6
	-26A 27 28 29	17000-205 17000-257 17000-235-1 17000-235-2 MS51957-14 NAS679C04M		*** PLATE, SLIDE PLATE, SLIDE BRACKET, RECEPTACLE BRACKET, RECEPTACLE ATTACHING PARTS SCREW NUT	BB AG A,B,D A,B,D	1 1 1 1 4 4
				*Uses Items 21D, 21E, -21J and -21K for attaching hardware.		

-ITEM NOT ILLUSTRATED

^{*} SUPPLIED LOOSE ITEM

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1 2 3 4 5 6 7	EFF CODE	UNITS PER ASSY
1					
31	17000-101		. BOWL ASSY		1
32	NAS679C3M		ATTACHING PARTS . NUT		4
33	AN960C10L		. WASHER		4
33	1117000101		***		
	17000-234		. CLIP, HOSE RETAINING	AY	1
	17000-234		. CLIP, HOSE RETAINING	AQ	3
			. GASKET, BOWL		1
36	17000-283		. LABEL, IDENTIFICATION	A	1
-37	17000-265		(REPLD BY ITEM -40A) . LABEL, IDENTIFICATION	В	1
-37	17000-203		(REPLD BY ITEM -40A)	"	1
-38	17000-329		. LABEL, IDENTIFICATION	C	1
			(REPLD BY ITEM -40A)		
-39	17000-348		. LABEL, IDENTIFICATION	D	1
40	15000 254		(REPLD BY ITEM -40A)		
	17000-354		. LABEL IDENTIFICATION	E AX	1 1
-40A	17000-350		. LABEL IDENTIFICATION (REPLS ITEMS 36, -37,	AA	1
			-38 AND -39)		
-40B	17200-350		(REPLD BY ITEM -40B)		
			. LABEL IDENTIFICATION	AH	1
41	17000-178		(REPLS ITEM -40A)		
41 A	17000 270		. PLATE, MOUNTING	C,D	1
-41A -41B	17000-278 17000-188		(REPLD BY ITEM -41C) . PLATE, MOUNTING	A,B	1
-41B	17000-188		. PLATE, MOUNTING	AC AC	1
	1,000 190		. PLATE, MOUNTING	AJ	1
	17000-194		(REPLS ITEM 41)		
-41E	17000-214		. PLATE, MOUNTING	AE	1
			. PLATE, MOUNTING	H,J,Q	1

-ITEM NOT ILLUSTRATED

^{*} SUPPLIED LOOSE ITEM

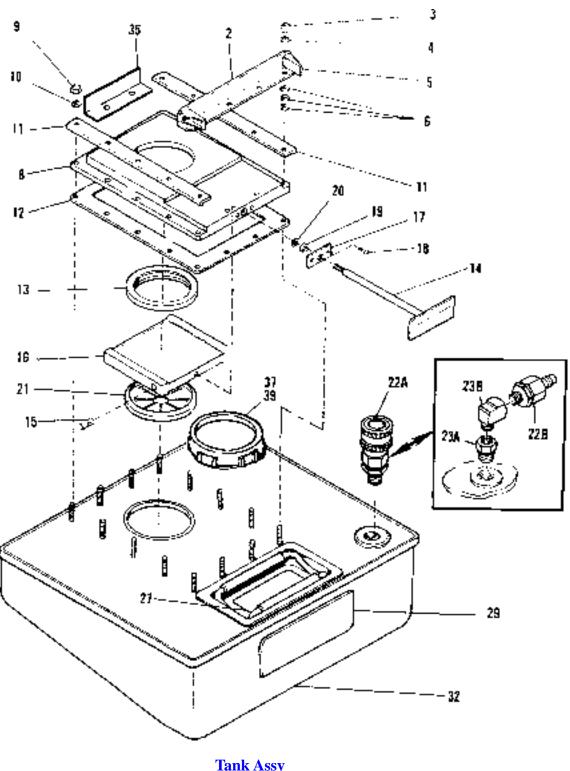
COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

	FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
R	1 -42 43	17000-142 17000-130		TANK ASSY (SEE FIG. 2 FOR DETAILS) . TANK ASSY (SEE FIG. 2 FOR DETAILS)	A,H,Q BC	1
	-44 -45 -45A	17000-179 17000-190 17000-364		. TANK ASSY (SEE FIG. 2 FOR DETAILS) (REPLD BY ITEM -45A) . TANK ASSY (SEE FIG. 2 FOR DETAILS) . TANK ASSY (SEE FIG. 2 FOR	C AC C,K	1 1 1
R	-45B -45C -45D -45E	17000-372 17000-425 17000-426 17000-434		DETAILS) (REPLS ITEM -44) TANK ASSY (SEE FIG. 2 FOR DETAILS) TANK ASSY (SEE FIG. 2 FOR	AE F,N G,P R	1 1 1
R R R R	-55 -60			DETAILS) . KITASSY, URINAL . CLIP, HOSE RETAINING ATTACHING PARTS . SCREW . SCREW . WASHER . NUT *** . LABEL, "PRESS TO FLUSH"	BD C,K,R BE BG AQ AQ D,L	1 1 1 1 2 1
				● FOR 17010-007 TOILET ASSY, THIS ITEM IS SUPPLIED IF REQUESTED BY CUSTOMER.		

⁻ITEM NOT ILLUSTRATED

^{*} SUPPLIED LOOSE ITEM

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series



Tank Assy FIGURE 2

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

	FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
R	-1A -1B -1C -1D -1 -1F -1G -1H 2 -2A 3 4 5 6 -7 8	17000-425 17000-426 17000-434 17000-254 17000-233 NAS679C08M AN960C8 19-10-081-10 AN960C8 AN960C8L 17000-215 NAS679C08M AN960C8 17000-220 17000-221 17000-222 17000-110	NO.	TANK ASSY TANK ASSY TANK ASSY (REPLD BY ITEM -1D) TANK ASSY BRACKET, FASTENER SUPPORT (REPLS ITEM -2A) BRACKET, FASTENER SUPPORT (REPLD BY ITEM 2) ATTACHING PARTS .NUT .WASHER *** FASTENER, SWELL (V94222) .WASHER .DELETED .COVER, KNIFE VALVE ATTACHING PARTS .NUT .WASHER *** SLIDE .GASKET .SEAL, KNIFE VALVE .ACTUATOR ATTACHING PARTS .NUT *** .VALVE, KNIFE .PLATE ATTACHING PARTS .SCREW, TAPPING ***	A B C D E F G H J A,B	RF R

-ITEM NOT ILLUSTRATED

^{*} SUPPLIED LOOSE ITEM

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

	FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
R R	20 21 -22 22A 22B -22C -23 23A 23B -24	17000-262 17000-138 17000-176 17000-343 3-S20 17000-242 17000-432		. CAP STRIP (V25220) . PACKING, O-RING (V02697) . SEAL . SOCKET, QUICK DISCONNECT (REPLD BY ITEM 22A) . COUPLER, QUICK DISCONNECT (REPLS ITEMS -22 AND -23) . NIPPLE, QUICK DISCONNECT . SOCKET, QUICK DISCONNECT . PLUG, QUICK DISCONNECT (REPLD BY ITEM 22A) . FITTING, ADAPTER . ELBOW, 90° STREET . LABEL, IDENTIFICATION (REPLD BY ITEM -28A) . LABEL IDENTIFICATION	A,B A,B AA C,D AB H,J G,H,J A	1 1 1 1 1 1 1 1 1 1
	27	17000-329 17000-355 17000-351 17000-330 17000-223		. LABEL, IDENTIFICATION (REPLD BY ITEM -28B) . LABEL IDENTIFICATION . LABEL IDENTIFICATION (REPLDS ITEMS -24) . LABEL IDENTIFICATION (REPLS ITEM 27) . LABEL SERVICE INSTRUCTION . TANK SUB-ASSY	D AC C	1 1 1 1 1
R R R	-31 32 -33 -33A -33B -33C	17000-134 17000-180 17000-191 17000-365 17000-373 17000-391 17000-435 17400-209		. TANK SUB-ASSY . BRACKET . CAP, POUR SPOUT . SEAL	B C D E,G F H J AD	1 1 1 1 1 1 1 1 1

⁻ITEM NOT ILLUSTRATED

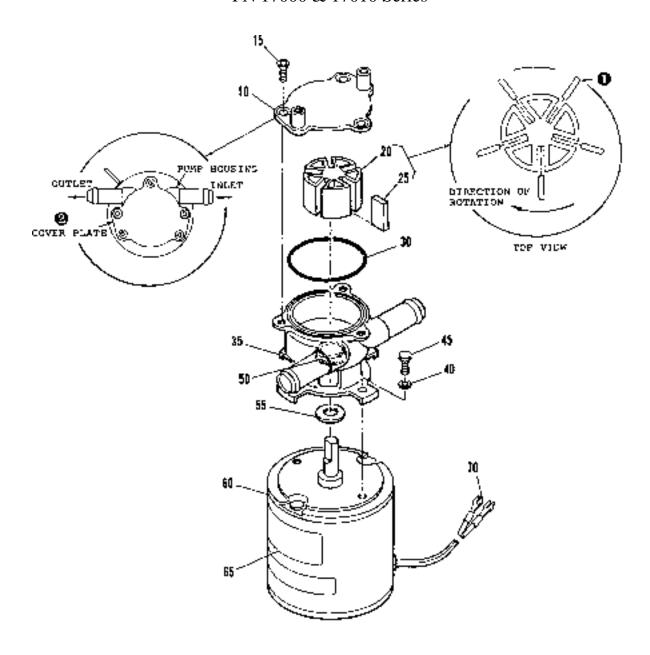
^{*} SUPPLIED LOOSE ITEM

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

USAGE CODE LIST

A17000-142
B17000-130
C17000-179
D17000-190
E17000-364
F17000-372
G17000-425
Н17000-426
J17000-434
AA17000-364, -372, -425, -426, -434
AB17000-142, -130, -179, -190
AC17000-042, -364, -372, -425, -426, -434
AD17000-142, 179, -190, -364, -372, -425, -426, -434

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series



- 1 Install fin (25) with corner radius facing outward and toward the direction of rotation.
- 2 Cover plate (10) shall be oriented as shown.

Motor-Pump Assy FIGURE 3

COMPONENT MAINTENANCE MANUAL PN 17000 & 17010 Series

	FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
	3 -1	17200-382		. MOTOR PUMP ASSY		RF
	-5 10	17000-520 17000-519		(SEE FIG. 1 FOR NHA) . MOTOR AND PUMP ASSY . PLATE, PUMP MTG		1 1
R	15	MS2469C69		ATTACHING PARTSSCREW ***		3
		17000-521 17000-522 2-032N506-65 17000-518		IMPELLERFIN, IMPELLERO-RING (V02697)PUMP HOUSING ATTACHING PARTS		1 5 1
		MS35333-73 NAS501-3-3A		WASHER BOLT		2 2
	50 55 60 65 70	17000-523 17000-524 17000-384 17200-507 B14D		*** SEAL MOTOR . DECAL, IDENTIFICATION . DISCONNECT (V59730)		1 1 1 1 2

-ITEM NOT ILLUSTRATED

^{*} SUPPLIED LOOSE ITEM