

Optimum™ Series

Illustrated Parts Manual

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Approvals

Underwriters Laboratories:

U.L.File#	Products listed with U. L.
MH1941	All Gilbarco pumps and dispensers that bear the U.L. listing mark.

National Quality Assurance:

Certificate #	Gilbarco's registration
5119	Gilbarco is an ISO9001/BS5750 Part 1/EN29001 registered company.

California Air Resources Board (CARB):

Executive Order #	Product
G-70-52	Balance Vapor Recovery
G-70-150-AB	VaporVac

The Gilbarco approval for The Advantage motor fuel dispensers is on attachment "A."

New York City:

NYFD C of A. #	Product
4805	The Advantage Series
4879	Legacy Series

Patents

Gilbarco products are manufactured or sold under one or more of the following U.S. patents.:

RE.35,238	4,728,788	4,939,730	5,099,403	5,269,353	5,417,256	5,514,933	5,561,715
D.262,971	4,799,940	4,986,445	5,110,010	5,325,706	5,448,638	5,535,130	5,571,310
D.265,092	4,876,653	5,013,434	5,134,548	5,345,979	5,450,883	5,542,458	5,592,979
D.316,471	4,890,210	5,029,100	5,156,199	5,355,915	5,452,750	5,543,849	5,602,745
4,566,504	4,913,813	5,083,846	5,195,564	5,384,850	5,464,466	5,546,981	5,626,649
4,687,033	4,938,251	5,098,179	5,228,084	5,407,115	5,493,315	5,557,084	

Additional U.S. and foreign patents pending.

N.I.S.T. - Certificate of Compliance:

Gilbarco pumps and dispensers are evaluated by the National Institute of Standards and Technology (NIST) under the National Type Evaluation Program (NTEP).

NIST has issued the following Certificates of Compliance (COC):

COC#	Product	Model #
87-077A2	ProBlender	AU
	Precision Blender	AE
	Dispenser - Standard	AK
	Dispenser - Low Profile	AL
87-099	Fixed Blender	AP
	Salesmaker ProBlender	AB
	Salesmaker Series 2/2H/4/4A	AM
	H111B Series	AC
88-129	MPD-1 Series	AN
	Fixed Blender	AF, AG
	Dispenser - Low Profile	AR
	Card Reader/Infoscreen	
88-226.A4	Distribution Box	PA0242
89-019A1	VaporVac Kits	CV
89-066A1	The Advantage Series	Bxx
89-068A1	Trimline Series	AA
90-021	Meter - C Series	PA024
90-115.A5	Rebuilt Pumps/Dispensers	
91-088	MPD-A3 Series	AD
92-056A1	External Mount CRIND	CEC
92-197	Dimension Series	Dxx
92-211	Legacy Series	Jxxx
93-035.A1		
93-081A1		
94-027.A1		

Trademarks

Non-registered trademarks

C-PAM™	G-SKAN™	Surge Management System™
CRIND™	Highline™	Tank Monitor™
ECR™	MultiLine™	TCR™
EMC™	Optimum™ Series	Transac System 1000™
G-CAT™	PAM 1000™	TRIND™
Gilbert™	PAM™	Ultra-Hi™
G-Poll Interface™	Performer™	ValueLine™
G-SITE™	SmartPad™	

Additional U.S. and foreign trademarks pending.

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Registered trademarks

Dimension® Series	The Advantage® Series
Gilbarco®	Transac®
InfoScreen®	Trimline®
Legacy®	VaporVac®
Making Things Better®	
MPD®	

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Table of Contents

Introduction	1
How To Use Your Manual	1
Related Documents	1
Parts Tables	1
When Ordering Parts	2
Model Number Breakdown	2
Electronics Cabinet	3
Card Cage Assembly	4
Main Access Door	5
Front View	5
Rear View	7
Nozzle Boot	9

Introduction

This manual contains parts information for Gilbarco's Optimum™ Series pumps and dispensers. Use this manual to help identify part names, part numbers, and quantities required in a specific assembly.

This manual only includes parts specific to an Optimum unit. For additional parts, see PT-1728, The Advantage® Series Illustrated Parts Manual.

How To Use Your Manual

This manual provides detailed illustrations for Optimum Series pumps and dispensers. Match the callout numbers from an illustration to the corresponding table to find information on a part name, number, and quantity required for that assembly. All illustrations and tables are on the same or facing pages for easy reference.

Related Documents

The following documents provide additional information:

PT-1728	The Advantage 4x4 Illustrated Parts Manual
PT-1869	Recommended Spare Parts for Domestic Products

Parts Tables

The tables in this manual are set up as follows. Definitions for each column are provided below.

Item #	Description	Current Part	Previous Part	Quantity
1	Lifting Bracket	N23295 *	-	4

Item

The Item # column provides digits that match callouts on the related illustrations.

Description

The Description column provides a detailed name for each part from the illustration. Where applicable, information such as colors, dimensions, or other details are provided.

Current Part

The Current Part column provides current Gilbarco part numbers for each item. Items that are not available for sale are indicated by an asterisk (*).

Previous Part

The Previous Part column provides old Gilbarco part numbers that are no longer in use on current models. The previous part numbers are provided to help identify obsolete items that may still be in the field. Where possible, notes are provided to clarify the difference between old and new parts.

Quantity

The Quantity column shows how many of a particular part are used in that assembly.

When Ordering Parts

Keep the following items in mind when ordering Gilbarco parts.

- 1 Please furnish the model number, date code, and original options. This information is stamped on a serial plate riveted to the center of the main frame base. See “Serial Plate” below for more information.
- 2 Provide the following information:
 - Part number
 - Quantity of the part needed
 - Description of part
 - Color, graphics, and other details needed for order entry items.

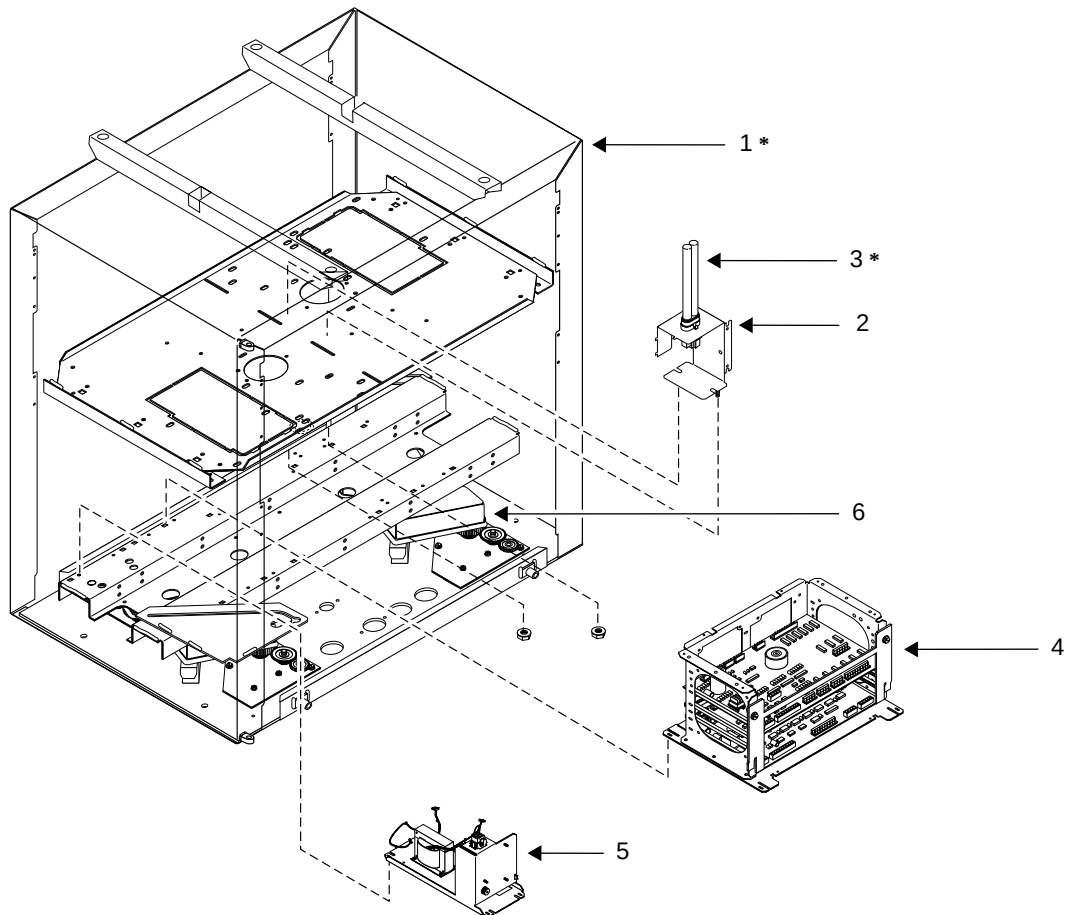
Model Number Breakdown

The model number provides information on the configuration and options for an Optimum unit. The following chart defines each column in the model number.

	X	X	X	X	XX	
Product						Electronic Configuration Options
B The Advantage® Series Family						
Family Member						
F Optimum MPD® Dispenser						
G Optimum MPD Pump						
H Optimum Dual Dispenser						
I Optimum Dual Pump						
J Optimum Quad Dispenser						
K Optimum Quad Pump						
L Optimum Single-Hose Quad Dispenser						
M Optimum Single-Hose Quad Pump						
N Optimum Single-Hose MPD Dispenser						
P Optimum Single-Hose MPD Pump						
Configuration						
0 1 Grade, 1 Side						
1 1 Grade, 2 Side						
2 2 Grade, 1 Side						
3 2 Grade, 2 Side						
4 3 Grade, 1 Side						
5 3 Grade, 2 Side						
Vapor Recovery Options						
0 Vapor Ready, without ATC						
1 Full Vapor, without ATC						
2 Non-Vapor, without ATC						
3 VaporVac, without ATC						

	Nozzle Boot	Pricing Type	CRIND Type	PPP	Cash Acceptor
00	Lever-On	Single-Level	None	No	No
02	Lever-On	Single-Level	None	Yes	No
0C	Push-to-Start	Single-Level	None	No	No
0E	Push-to-Start	Single-Level	None	Yes	No

Electronics Cabinet



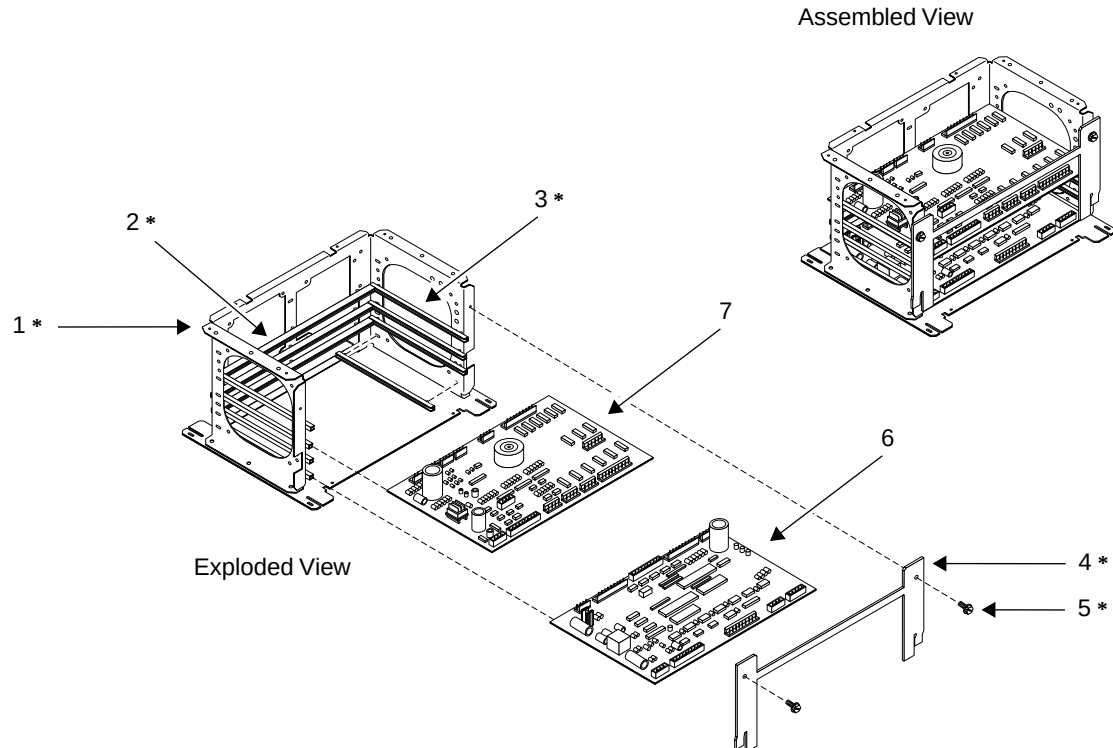
Item	Description	Current Part	Previous Part	Quantity
1	Electronics Cabinet (cabinet only)			
	• 36"	T17732-G03 *	-	1
	• 48"	T17502-G03 *	-	1
2	Backlight Assembly (See Note 2)	T19245-G3	-	1
3	Fluorescent Light (included with Item #2, Backlight Assembly)	Q12929-01 *	-	1
4	Card Cage Assembly (See page 4)	T18914-G37	-	1
5	Power Supply (See Note 2)	T19868-G1	-	1
6	Pulser Assembly	T18350-G4	-	(See Note 1)

Notes:

- Quantity per unit; includes both Side A and B.
- See page 4 for cables.
- 1. Quantity varies per model.
- 2. Recommended spare (see PT-1869 for more information).

* Reference only – cannot be ordered as a spare part.

Card Cage Assembly



Item #	Part Description	Current Part	Previous Part	Quantity
-	Card Cage Assembly (includes all parts)	T18914-G37	-	1
1	Card Cage	T19073-G1 *	-	1
2	Snap-In Card Guide, 8"	Q10233-06 *	-	3
3	Snap-In Card Guide, 6"	Q10233-05 *	-	10
4	Retainer Bracket	T19073-G1 *	-	1
5	Screw, #6-32 x 3/8"	Q11677-24 *	-	2
6	Pump Controller Board (inserts in bottom slot) (See Note 1)	T20011-G1	-	1
7	Hydraulic Interface Board (inserts in third slot from bottom) (See Note 1)	T20076-G1	-	1
<i>Card Cage Cables (not shown):</i>				
-	Regulator/Logic Cable	R17995-G7	-	1
-	Ribbon Cable	R19667-G1	-	1
-	Cable Tie	Q10178-07	-	1
<i>Electronics Cabinet Cables (not shown):</i>				
-	Cable Coil (See Note 1)	R20433-G1	-	1
-	Power Cable, 115/220V (See Note 1)	R20456-G1	-	1
-	STP Cable (See Note 1)	R20457-G1	-	1
-	Main Interface Cable	W03715-G1	-	1

Notes:

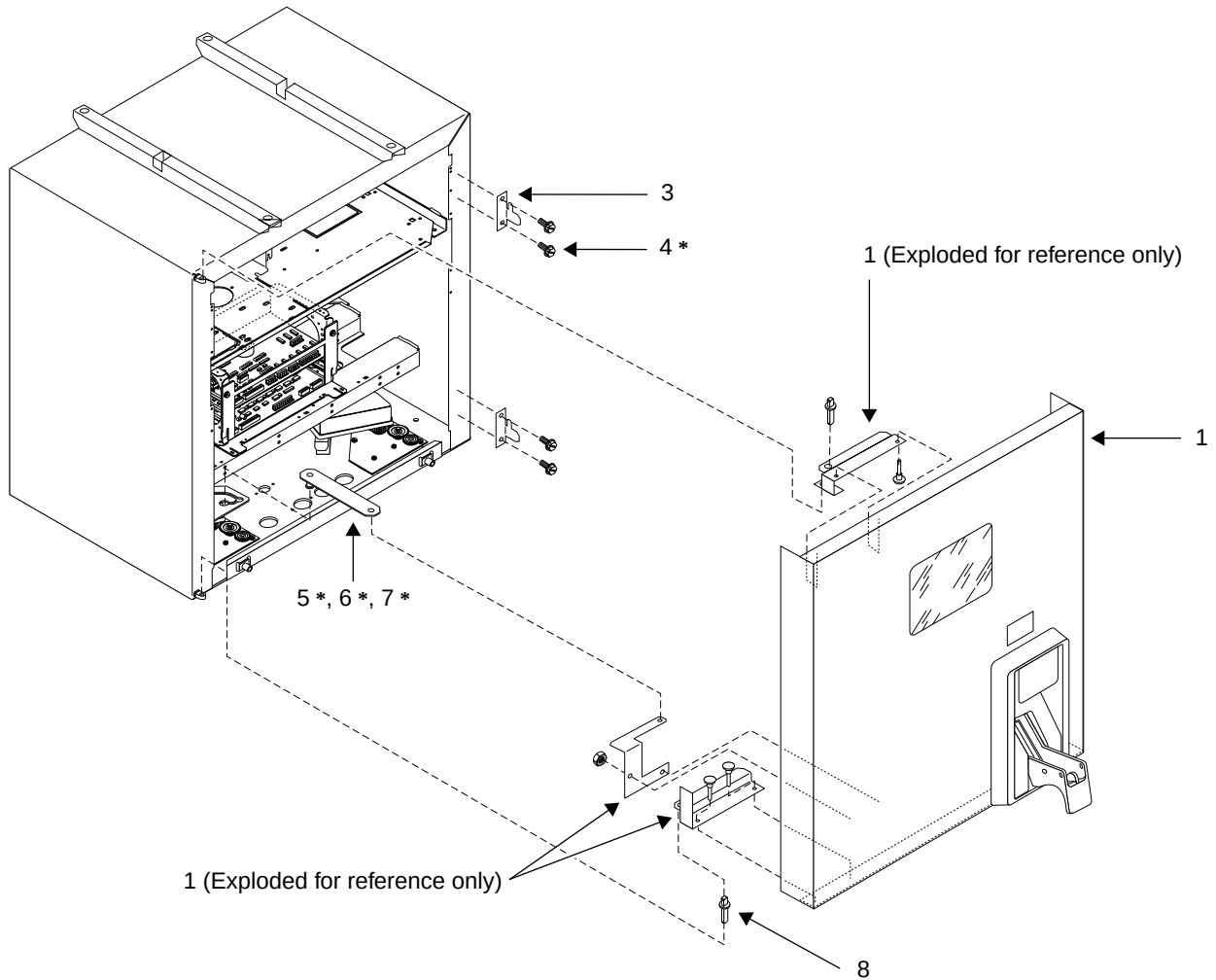
- Quantity per unit.

1. Recommended spare (see PT-1869 for more information).

* Reference only – cannot be ordered as a spare part.

Main Access Door

Front View



Main Access Door Assemblies

Unit Description	Door Assembly (See Note 1)	Door Only (See Note 2)
36", 1 grade, 1 boot	T20072-G1	T20067-G1
36", 2 grades, 1 boot	T20072-G2	T20067-G2
36", blank	T20072-G3	T20067-G3
36", 2 grades, 2 boots	T20072-G4	T20067-G4
48", 3 grades, 1 boot	T20072-G5	T20067-G5
48", 3 grades, 3 boots	T20072-G6	T20067-G6
48", blank	T20072-G7	T20067-G7

Notes:

1. Assembly includes all parts shown in illustration.
 2. Assembly includes door only.
- * Reference only – cannot be ordered as a spare part.

Item #	Part Description	Current Part	Previous Part	Quantity
1	Main Access Door Assembly (includes all parts)	See page 5	-	2
2	Main Access Door (Door Only)	See page 5	-	2
3	Lock Bracket (See Note 1)	R20427-01	-	2
4	Screw, #10-16 x 5/8"	Q13525-01 *	-	4
5	Door Restraint Link Assembly	R19277-G1 *	-	1
6	Washer, #6	Q11439-04 *	-	2
7	Screw, #6-32 x 7/16"	Q11270-35 *	-	2
8	Hinge Pin (See Note 1)	N23781-01	-	2

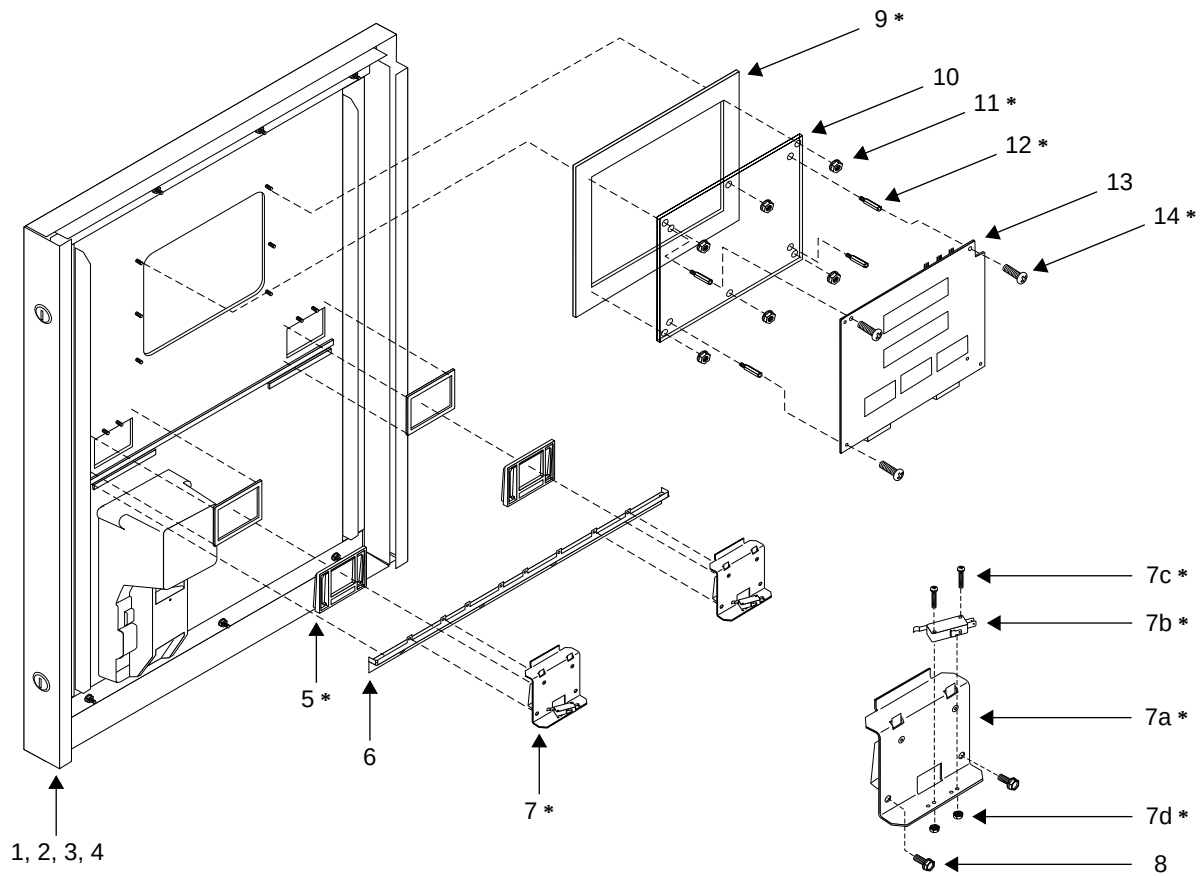
Notes:

- Quantities per main access door.

1. Recommended spare (see PT-1869 for more information).

* Reference only – cannot be ordered as a spare part.

Rear View



Main Access Door Assemblies

Unit Description	Door Assembly (See Note 1)	Door Only (See Note 2)
36", 1 grade, 1 boot	T20072-G1	T20067-G1
36", 2 grades, 1 boot	T20072-G2	T20067-G2
36", blank	T20072-G3	T20067-G3
36", 2 grades, 2 boots	T20072-G4	T20067-G4
48", 3 grades, 1 boot	T20072-G5	T20067-G5
48", 3 grades, 3 boots	T20072-G6	T20067-G6
48", blank	T20072-G7	T20067-G7

Notes:

1. Assembly includes all parts shown in illustration.
2. Assembly includes door only.

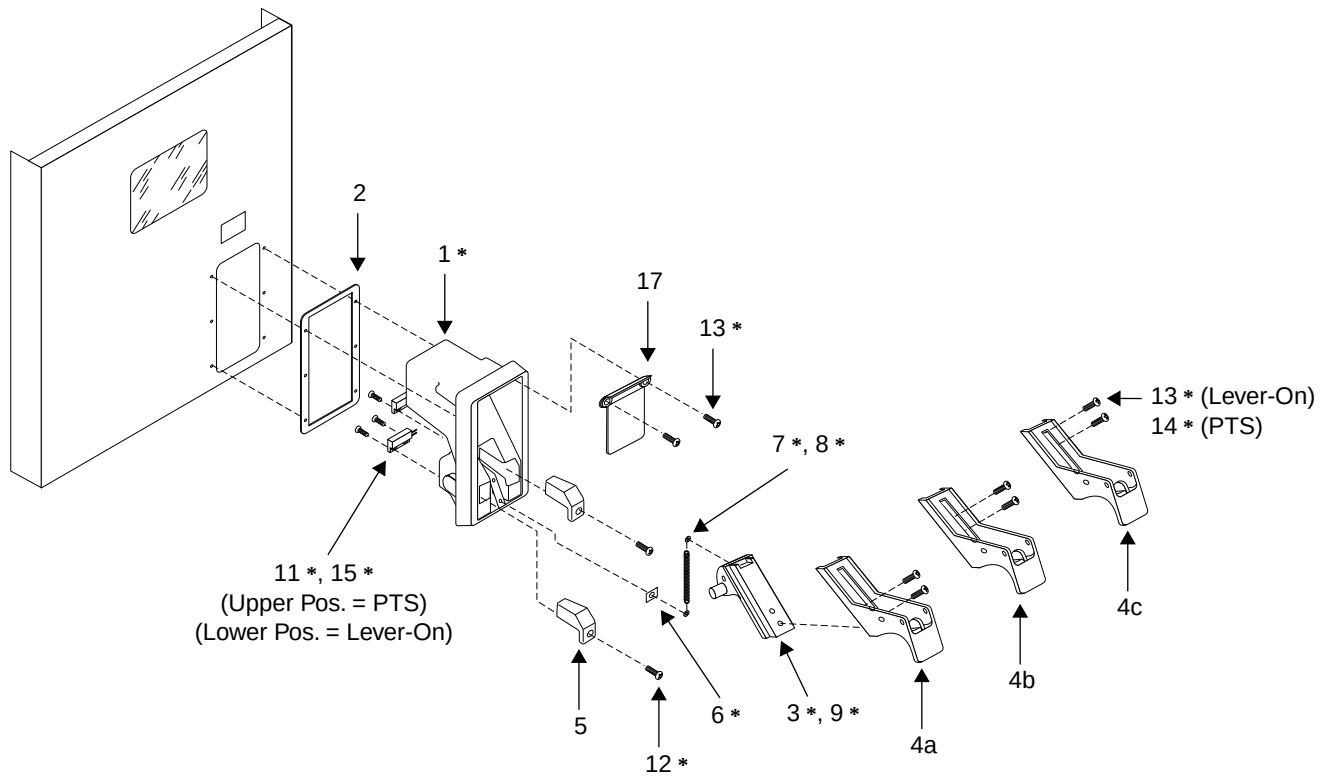
Item #	Part Description	Current Part	Previous Part	Quantity
1	Main Access Door Assembly (includes all parts)	See page 5	-	2
2	Main Access Door (Door Only)	See page 5	-	2
3	Top Gasket			
	• 36" (See Note 3)	Q12406-05	-	1
	• 48" (See Note 3)	Q12406-08	-	1
	Bottom Gasket			
	• 36" (See Note 3)	Q12406-06	-	1
	• 48" (See Note 3)	Q12406-09	-	1
	Side Gasket (See Note 3)	Q12406-07	-	2
4	Lock Cylinder (See Note 3)	Q12928-03	-	2
5	Grade Select Button	T19596-01	-	(See Note 2)
	Grade Select Button Gasket	R18842-01 *	-	(See Note 2)
6	Lower Selector Button Bracket (See Note 1)			
	• 36" (See Note 3)	T20063-01	-	1
	• 48" (See Note 3)	T20065-01	-	1
7	Switch Bracket Assembly			
7a	• Switch Bracket	T20079-01 *	-	(See Note 2)
7b	• Switch	Q12170-01 *	-	(See Note 2)
7c	• Screw, #4-40 x 5/8"	Q12083-07 *	-	(See Note 2)
7d	• Nut, #4-40	Q12068-01 *	-	(See Note 2)
7e	• Spacer, 11/64" x 1/5" (not shown)	Q10340-108 *	-	(See Note 2)
8	Screw, #10-24 x 1/4"	K85736-09	-	(See Note 2)
9	Display Window Gasket (See Note 1)	N23782-01 *	-	1
10	Main Display Window (See Note 1)	R20178-01	-	1
11	Nut, #8-32	Q11890-02 *	-	(See Note 2)
12	Screw, #10-24 x 3/8"	K93293-06 *	-	(See Note 2)
	Spacer, #6-32 x 1/2"	Q10340-88 *	-	(See Note 2)
13	Main Display			
	• 1 grade	T19993-G1 *	-	(See Note 2)
	• 2 grades	T19993-G2 *	-	(See Note 2)
	• 3 grades (See Notes 3 and 4)	T19993-G3	-	(See Note 2)
14	Screw, #6-32 x 1/4"	Q12083-11 *	-	8

Notes:

- Quantities per main access door.
- 1. Not used on blank main access doors (T20072-G3, -G7).
- 2. Quantity varies with model.
- 3. Recommended spare (see PT-1869 for more information).
- 4. Available as spare part option for all units.

* Reference only – cannot be ordered as a spare part.

Nozzle Boot



Nozzle Boot Assemblies

Unit Description	Assembly (See Note 1)
Lever-On, Short Nozzle	T20071-G300
Push-To-Start, Short Nozzle	T20071-G301
Lever-On, Medium Nozzle	T20071-G302
Push-To-Start, Medium Nozzle	T20071-G303
Lever-On, Long Nozzle	T20071-G304
Push-To-Start, Long Nozzle	T20071-G305

Notes:

- PTS = Push-To-Start.
- 1. Assembly includes all parts shown in illustration.
- * Reference only – cannot be ordered as a spare part.

Item #	Part Description	Current Part	Previous Part	Quantity
1	Nozzle Boot			
	• Sand-cast	W03718-10 *	-	1
	• Die-cast	W03714-10 *	-	1
2	Nozzle Boot Gasket	N23806-01 *	-	1
3	Cradle Base	R19272-G1 *	-	1
4	Nozzle Cradle Lever			
4a	• Short	T18400-10	-	(See Note 1)
4b	• Medium (See Note 5)	T18400-11	-	(See Note 1)
4c	• Long	T18400-12	-	(See Note 1)
5	Cradle Base Retainer	R20448-01	-	2
6	Spring Bracket (See Note 2)	N23780-01 *	-	1
7	Nozzle Hook Spring (See Note 2)	Q10226-06 *	-	1
8	Flat Washer (See Note 2)	N16599-45 *	-	1
9	Nozzle Hook Spring Pin (See Note 2)	K93540-01 *	-	1
10	Nozzle Lever Bumper (See Notes 2 and 4)	K93661-02 *	-	1
11	Proximity Switch	Q12514-06 *	-	1
12	Screw, #10-32 x 1/2 (black)	Q11270-274 *	-	2
13	Screw, #1/4-20 x 3/4"	Q12588-77 *	-	2
14	Screw, #12-24 x 1-1/2" (See Note 3)	Q12588-66 *	-	2
15	Screw, #6-32 x 3/8"	K85736-01 *	-	2
16	Screw, #10-32 x 1/2" (See Note 2)	K85736-15 *	-	1
17	Nozzle Flap (See Notes 3 and 5)	R19303-G1	-	1
18	Screw, #5-16/18 x 3/4" (See Note 4)	K85736-43 *	-	6
19	Pump Handle Cable (See Note 4)	N23730-G1	-	1

Notes:

- Quantities per nozzle boot.
- 1. Quantity varies per model.
- 2. Used with Lever-On models only.
- 3. Used with Push-To-Start models only.
- 4. Not shown.
- 5. Recommended spare (see PT-1869 for more information).

* Reference only – cannot be ordered as a spare part.

List of Parts

K

K85736-01	10
K85736-09	8
K85736-15	10
K85736-43	10
K93293-06	8
K93540-01	10
K93661-02	10

N

N16599-45	10
N23730-G1	10
N23780-01	10
N23781-01	6
N23782-01	8
N23806-01	10

Q

Q10178-07	4
Q10226-06	10
Q10233-05	4
Q10233-06	4
Q10340-108	8
Q10340-88	8
Q11270-274	10
Q11270-35	6
Q11439-04	6
Q11677-24	4
Q11890-02	8
Q12068-01	8
Q12083-07	8
Q12083-11	8
Q12170-01	8
Q12406-05	8
Q12406-06	8
Q12406-07	8
Q12406-08	8
Q12406-09	8
Q12514-06	10
Q12588-66	10
Q12588-77	10
Q12928-03	8
Q12929-01	3
Q13525-01	6

R

R17995-G7	4
R18842-01	8
R19272-G1	10
R19277-G1	6

R19303-G1	10
R19667-G1	4
R20178-01	8
R20427-01	6
R20433-G1	4
R20448-01	10
R20456-G1	4
R20457-G1	4

T

T17502-G03	3
T17732-G03	3
T18350-G4	3
T18400-10	10
T18400-11	10
T18400-12	10
T18914-G37	3, 4
T19073-G1	4
T19245-G3	3
T19596-01	8
T19868-G1	3
T19993-G1	8
T19993-G2	8
T19993-G3	8
T20011-G1	4
T20063-01	8
T20065-01	8
T20067-G1	5, 7
T20067-G2	5, 7
T20067-G3	5, 7
T20067-G4	5, 7
T20067-G5	5, 7
T20067-G6	5, 7
T20067-G7	5, 7
T20071-G300	9
T20071-G301	9
T20071-G302	9
T20071-G303	9
T20071-G304	9
T20071-G305	9
T20072-G1	5, 7
T20072-G2	5, 7
T20072-G3	5, 7
T20072-G4	5, 7
T20072-G5	5, 7
T20072-G6	5, 7
T20072-G7	5, 7
T20076-G1	4
T20079-01	8

W

W03715-G1	4
W03718-10	10

