GASBOY

Commercial and Retail Series

Atlas® Pump and Dispenser Illustrated Parts Manual

PT-1949G

Computer Programs and Documentation

All Gasboy computer programs (including software on diskettes and within memory chips) and documentation are copyrighted by, and shall remain the property of, Gasboy. Such computer programs and documents may also contain trade secret information. The duplication, disclosure, modification, or unauthorized use of computer programs or documentation is strictly prohibited, unless otherwise licensed by Gasboy.

Federal Communications Commission (FCC) Warning

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

Approvals

Gasboy, Greensboro, is an ISO 9001:2000 registered facility.

Underwriters Laboratories (UL):

UL File#	Products listed with UL
MH4314	All dispensers and self-contained pumping units
MH10581	Key control unit, Model GKE-B Series
	Card reader terminals, Models 1000, 1000P
	Site Controller, Model 2000S CFN Series
	Data entry terminals, Model TPK-900 Series
	Fuel Point Reader System

California Air Resources Board (CARB):

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

National Conference of Weights and Measures (NCWM) - Certificate of Compliance (CoC):

Gasboy pumps and dispensers are evaluated by NCWM under the National Type Evaluation Program (NTEP). NCWM has issued the following CoC:

CoC#	Product	Model #	CoC#	Product	Model #	CoC#	Product	Model #
95-179	Dispenser	9100 Retail Series, 8700 Series, 9700 Series	91-019	Dispenser	9100 Commercial Series	05-002	Atlas	8700K, 8800K, 9100K, 9200K, 9800K
95-136	Dispenser	9800 Series	91-057	Controller	1000 Series FMS, 2000S-CFN Series			

Trademarks

Non-registered trademarks	Registered trademarks
Consola™	ASTRA®
Infinity™	Atlas®
TopKAT™	Fuel Point®
	Gasboy®
	Keytrol®
	Slimline®

Additional US and foreign trademarks pending.
Other brand or product names shown may be trademarks or registered trademarks of their respective holders.

This document is subject to change without notice.
http://www.gasboy.com
© 2018 GASBOY · All Rights Reserved

PEI PETROLEUM EQUIPMENT INSTITUTE

Table of Contents

1 – Introduction 1-1

How to Use This Manual 1-1
- Parts Tables 1-1
- When Ordering Parts 1-2
- Related Documents 1-4
- Abbreviations and Acronyms 1-5

2 – Sheathing, Doors, and Bezels 2-1

Side Panel 2-2
- Side Panel Cosmetic Plugs 2-3

Top Panels 2-3
- Screws - All Top Panels 2-3
- Top Panels - Stainless Steel 2-3
- Top Panels - Painted 2-3

Lower Doors 2-4
- Additional Door Parts 2-4

Bezels 2-5
- Bezel Parts 2-5

3 – Nozzle Boots, Hose Hook, and Internal Hose Retrievers 3-1

Side-load Mechanical 3-1
Side-load Electronic. 3-2
Side-load Activation Assembly (Reset Assembly) 3-3
Front-load Nozzle Boot 3-4
Auto-on Nozzle Boot, Reset, and Boot Cover 3-5
Hose Hanger and Hose Retriever 3-6

4 – Lights 4-1

Fluorescent Light and Ballast 4-1
LED Light and Driver 4-2

5 – Frame Section 5-1

Weldment Top Housing Assembly 5-1
Dispenser Frame 5-2
Upper Frame (Self-contained) 5-3
Lower Dispenser Welded Frame 5-4
Lower Frame (Self-contained) 5-5
Lower Welded Frame (Self-contained) 5-6
Lower Dispenser Frame (Upper Hydraulic Frame) 5-7

6 – Hydraulic Area Section 6-1

Upper Hydraulics - Meter, Manifold, and Valve 6-1
Center Flow Through (CFT) Meter, Manifold, and Valve Assembly 6-1
Fuel Filter Options 6-3
Meter Gears - Mechanical Models 6-3
Solenoid Valve Conduit 6-4
Lower Hydraulics - Self-contained 6-6
Inlet Manifold - TW1-M and Super-Hi Models 6-7
Lower Hydraulics - Dispenser 6-8
9153 and 9853 Satellite Discharge Piping - Dispenser Only 6-9
9140K, 9840K Super-Hi Discharge Piping 6-10
Junction Box (J-box) - Parts, Unit Descriptions, and Options 6-12
J-box Parts 6-12
J-box - Unit Descriptions 6-14
Hand Drive Option - Mechanical Self-contained Pump Models Only 6-15

7 – Commercial Electronics Section 7-1

Commercial Front (Dual Depicted) 7-1
Base Electronics 7-2
Power Supply 7-2
Pulser Assembly 7-2
Motor Relays 7-3
Main AC Conduit and Wire Assembly 7-5
DC Conduit and Wire Assembly 7-5
Electro-mechanical Totalizers 7-5

8 – Meter, Pump, and Motor Section 8-1

CFT Meter Assembly 8-1
GPU Self-contained Pumping Unit 8-2
Self-contained Motors - 8700, 8800, 9100, 9840, 9852/53 8-3

9 – Air Gap - 8800, 9100, 9840, 9852/53 9-1

Air Gap Hardware and Computer Display (CD) Module Housing 9-1
Diesel Exhaust Fluid (DEF) Air Gap Hardware 9-2
E85 Air Gap Hardware 9-3
Lower Pulser Seal Assembly - 8800, 9840, 9852, 9853 9-5
Retail Front-load Activation Assembly (Retail) 9-6

10 – Software Kits 10-1

11 – Commercial PCB 11-1

Commercial PCBs (Non-Ultra-Hi) 11-1
PCA (CPU and Serial EEPROM) 11-1
Commercial Power Supply 11-2
Pulse-out I/F/RS-485 I/F 11-3
Displays and Display Panels 11-4
New Super Cap Main Display [M11714A002 (Atlas 9800 only)] 11-5
Diffuser 11-6
New Main Display Backlight [M12019A001 (Atlas Commercial only)] 11-6
Display Panel Stop Bracket 11-6

12 – Commercial Cables 12-1

13 – Retail Electronics Section 13-1

Retail Electronics Assembly - CD Module . . . 13-1
Power Supply . . . 13-2
Card Cage Assembly . . . 13-3
Pulser Assembly . . . 13-4
Motor Relays . . . 13-5
Main AC Conduit and Wire Assembly . . . 13-5
DC Conduit and Wire Assembly . . . 13-5
Keypad Assembly . . . 13-6
Electro-mechanical Totalizers . . . 13-6

14 – Retail Printed Circuit Boards 14-1

Electronic Retail PCBs . . . 14-1
Displays and Display Panels . . . 14-5
Display Panel Stop Bracket . . . 14-7
ATC T-Meter Module . . . 14-8

15 – Retail Cables 15-1

Standard Cables . . . 15-1
Pulse-out Option . . . 15-7
ATC Option . . . 15-9
PPP Option . . . 15-12

16 – Mechanical Computer and Reset Section 16-1

Registers, Resets, Linkage, and Conduit - No Electric Keytrol . . . 16-1
Reset Cover Assembly (G022289) . . . 16-3
Reset Box and Conduit Assembly . . . 16-5
9140K Super-Hi Mechanical - Meter, Differential Gearbox, and Computer . . . 16-6
Mechanical Computer, Reset, and Pulser with Electrical Keytrol . . . 16-7
9140 Super-Hi Unit . . . 16-7
Single and Dual (Dual Unit Shown) . . . 16-10
Split-twin Unit . . . 16-12

17 – Mechanical Pulser Option 17-1

Single Unit Volume . . . 17-1
Single Unit Money . . . 17-3
Dual Unit Volume . . . 17-4
Dual Unit Money . . . 17-6
Super-Hi Volume . . . 17-7

18 – Ultra-Hi Frame Section 18-1

Dispenser Frame . . . 18-1
Ultra-Hi Dispenser Lower Hydraulic Upper Frame . . . 18-3
Ultra-Hi 9853 KXTW1 Lower Hydraulic Upper Frame . . . 18-4
Self-contained Pump Frame . . . 18-5
Ultra-Hi Self-contained Lower Hydraulic Frame . . . 18-7
Lower Welded Frame - Ultra-Hi (Self-contained) . . . 18-8
Air Gap . . . 18-9

19 – Ultra-Hi Meter and Pulser Section 19-1

Liquid Control (LC) Meter 19-1
Meter and Pulser Assembly 19-1
Mechanical Totalizer 19-2

20 – Ultra-Hi Hydraulics Section 20-1

9850K Self-contained Pump 20-1
9850KX Single Inlet, Single Discharge Dispenser 20-5
9850KXTW1 Single Inlet, 9850KXTW2 Dual Inlet, Dual Discharge Dispenser 20-7
Satellite Piping for 9850KTW3 Combo Pump and 9850KXTW3 Combo Dispenser 20-9

21 – Ultra-Hi J-box and Conduit Section 21-1

AC J-box and Conduit 21-1
DC J-box and Conduit 21-5

22 – Ultra-Hi Electronics Section 22-1

Commercial Rear View 22-1
Power Supply 22-1
CPU 22-1
Base Electronics Mounting Platform 22-2
Motor Relay Ultra-Hi 22-3

23 – Ultra-Hi Commercial Printed Circuit Boards 23-1

Commercial Ultra-Hi PCBs 23-1
PCA (CPU and Serial EEPROM) 23-1
Pulse-out I/F/RS-485 I/F 23-2
Ultra-Hi Power Supply 23-3
Combo Satellite Control Board 23-4
Displays and Display Panels 23-5
Ultra-Hi Display Panel and PCBs - Single and Combo Dual 23-5
Ultra-Hi Display Panel and PCBs - Dual Side Load 23-6
Display Panel Stop Bracket 23-7

24 – Ultra-Hi Commercial Cables 24-1

25 – Atlas E85 and DEF Pump 25-1

Atlas E85 Unit 25-1
Pulser 25-2
Main Conduit and Cable Assembly 25-2
Cables 25-3
Filter 25-5
Display Panel 25-5
Valve Coil 25-6
Valve Controller PCA 25-6
Valve Interface PCA 25-7
Switching Power Supply 25-7
Power Supply 25-7
Dual Pulse Output PCA 25-7
E85 CPU Board 25-8

DEF Unit 25-8
M10092A003 Cable Assembly and 140941824 Pump Handle 25-8
Cold Weather DEF Front Panel 25-9
Cold Weather DEF Insulation and Hose Reel 25-11
Two-stage Valve Assembly 25-12
J-box 25-13
Coriolis Interface 25-14
Heater/Fan Assembly. 25-14
Temperature Control PCA 25-15
Fan/Heater 25-15
Fuse 25-15
Cables 25-16
WW DEF 25-17
CW DEF 25-18
Power Line Filter 25-21
Coriolis Meter 25-22
AC Bracket Assembly 25-23

26 – Atlas Kits 26-1

Index Index-1

This page is intentionally left blank.

1 – Introduction

This manual contains parts information for Gasboy® Atlas® Series pumps and dispensers. Use this manual to identify part names, part numbers, and quantities required in a specific assembly.

How to Use This Manual

This manual provides detailed illustrations for Atlas 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.

Parts Tables

The tables in this manual are set up as follows. Definitions for each column are provided after the table:

Item #	Description	Current Part	Previous Part	Quantity
1	Printed Circuit Assembly (PCA), Terminal Block Board	M00044A001	-	1
	• Plastic Printed Circuit Board (PCB) stand-off, 1/4-inch	Q10651-02	-	2

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. Information such as colors, dimensions, or other details are provided, wherever applicable.

Current Part

The current Part column provides current Gasboy part numbers for each item.

Previous Part

The previous part column provides old Gasboy part numbers that are no longer in use on current models. The previous part numbers are provided to identify obsolete items that may still be in the field. Notes are provided to clarify the difference between old and new parts, wherever possible.

Note: When substituting an old part for a new part, always ensure that parts are compatible.

Quantity

Quantity shown is per assembly. Quantity per unit will vary depending on unit configuration. Use specification in parts table to obtain fasteners locally. Most kits contain hardware required for installation.

Bulleted Items (Located under Description)

These items are directly related to the previous part number listed. Parts are generally used for mounting or fastening hardware.

When Ordering Parts

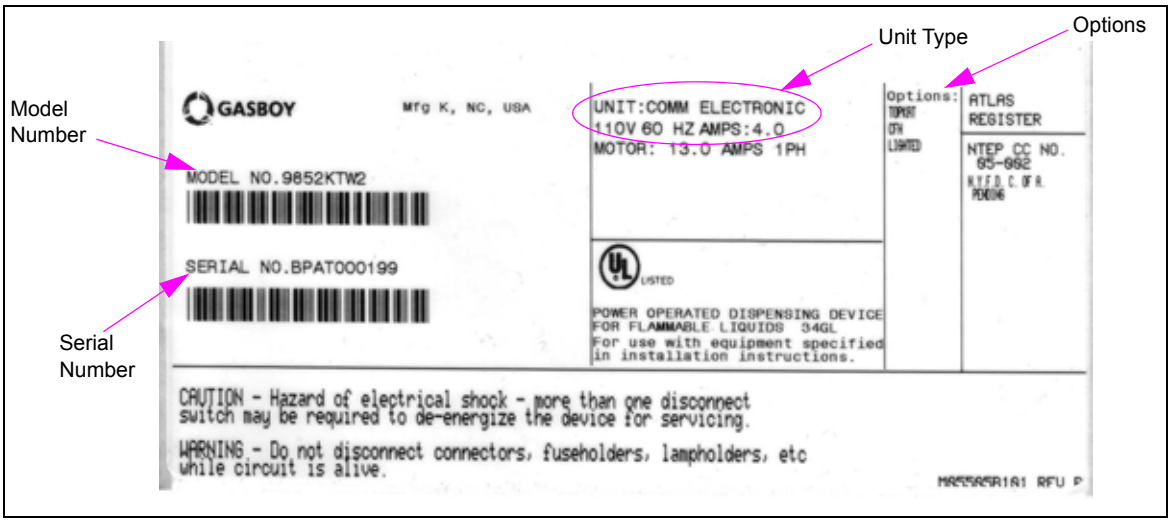
Keep the following items in mind when ordering Gilbarco® parts:

1 Furnish the model number, date code, and original options. This information is stamped on a serial plate located on the rail in the lower frame section (see Figure 1).

2 Provide the following information:
- Part number
- Quantity of the part required
- Description of part
- Color, graphics, and other details required for order-entry items.

Note: ***Order-entry item****: An item that can be ordered individually using its individual part number (not a part that is available only as part of a kit).*

Figure 1: Serial Plate



Model Number

The model number provides information on the configuration and options of the unit.

The serial plate is located in the upper cabinet:
- Mechanical models - On the side of the frame in front of the electric reset.
- Electronic models - On the upper cabinet base plate in front of the display panel.

Date Code

The date code provides the month and year of manufacture. For example, a unit stamped BK was built in February 2001. Use the following chart as reference to determine date codes:

Month Codes		
A = January	E = May	J = September
B = February	F = June	K = October
C = March	G = July	L = November
D = April	H = August	M = December
Year Codes		
A = 2012	H = 2019	R = 2026
B = 2013	J = 2020	S = 2027
C = 2014	K = 2021	T = 2028
D = 2015	L = 2022	U = 2029
E = 2016	M = 2023	W = 2030
F = 2017	N = 2024	X = 2031
G = 2018	P = 2025	

Paint Codes

Certain parts, such as side panels, require paint code information. Use the following paint code information when ordering painted parts:

Paint Color	Current Paint Code	Previous Paint Code
Gromark White	N1	040403
White	A0	040433
Agway White	N5	040404
Cenex® Beige	N2	040405
Yellow	N8	040398
Orange	R1	040412
Red/Orange	R2	040414
Standard Red	G8	040402
Red	N3	040415
Texas Red	N7	040409
Esso™ Blue	F8	040451
Light Blue	R3	040463
Dark Blue	F3	039988
Standard Green	N4	040406
Metallic Grey	C7	040407
Grey	N6	040394
Soyoil Grey	N9	040410
Brown	R8	040447
Black	B0	040401

Serial Number

The serial number identifies the unit, by customer.

Options

The options is a list of customer driven options per unit.

Unit Type

The unit type specifies the type of unit, that is, Gasboy Atlas commercial or mechanical.

Related Documents

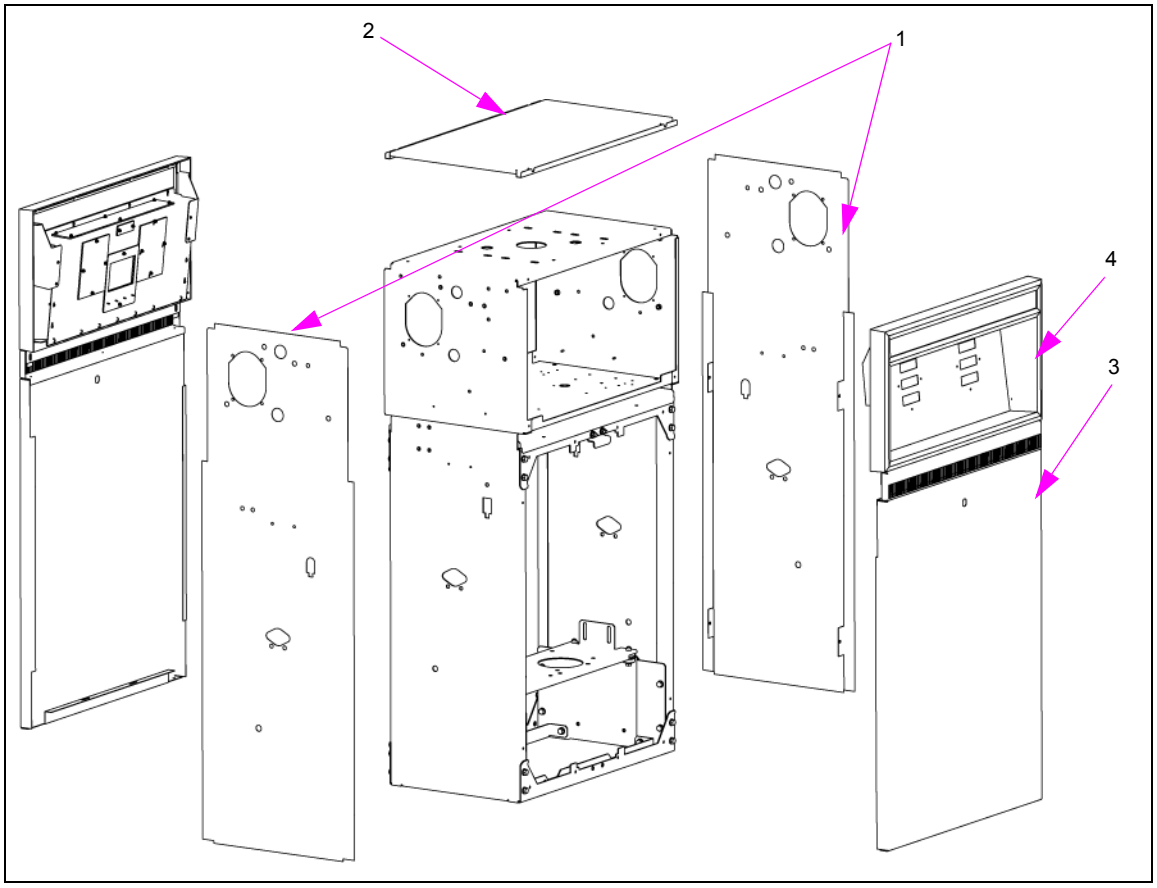
Document Number	Title	GOLD℠ Library
M02775	Pump & Dispenser Software	N/A
MDE-4652	Atlas 9800 Electronics Field Installation Instructions	N/A
MDE-2188	C, C+, and HD Meter Quad Ring Top Seal Replacement Kits (K35222 and K35222-01)	Advantage® and Legacy®
MDE-3892	Meter Master Seal Service Kits (K96618 and M08182K001) Installation Instructions	Encore® and Eclipse®
MDE-4320	Gasboy UHF Pump, Blackmer® XU2A Rebuild Kit Installation Manual	Gasboy Q, A and E Series Pumps/Dispensers
MDE-4331	Atlas Fuel Systems Installation Manual	Gasboy Atlas Pumps/Dispensers
MDE-4334	Commercial and Retail Series Atlas Start-up/Service Manual	• Gasboy Atlas Pumps/Dispensers • Service Manual
MDE-4430	Important Warnings and Safeguards	• Gasboy Consumer • Gasboy Safety & Warranty Docs
MDE-4447	Gilbarco Global Pumping Unit Operation and Service Manual	• Pump & Dispenser Start-up • Service Manual
MDE-4487	Atlas Dispenser Vapor Recovery Kit (M06184K00X) Installation Instructions	Gasboy Pump and Dispenser Kit Instructions
MDE-4506	Atlas Pulser Kits M06245K0XX Installation	Gasboy Pump and Dispenser Kit Instructions
MDE-4511	Card System Interface and Electro-mechanical Totalizer Retrofit Kits for Atlas Commercial Electronic Units Installation Instructions	Gasboy Pump and Dispenser Kit Instructions
MDE-4512	Lamp Kit (M06227K00X) Installation Instructions for Atlas 8700K/9100K and 8800K/9800K	• Gasboy Pump and Dispenser Kit Instructions • Gasboy Consumer
MDE-4514	Instructions for Installing Atlas Hi-Flow Satellite Piping Conversion Kits M06391K00X	Gasboy Pump and Dispenser Kit Instructions
MDE-4522	Atlas Self-Contained Pump Vapor Recovery Kit M06430K00X Installation	Gasboy Pump and Dispenser Kit Instructions
MDE-4533	Instructions for Installing Atlas NPT Discharge Kit (M06648K001)	Gasboy Pump and Dispenser Kit Instructions
MDE-4541	Atlas Motor Kit M06699KXXX Installation	Gasboy Pump and Dispenser Kit Instructions
MDE-4548	Atlas Rain Baffle Air Gap Kit M06804K002 Installation Instructions	Gasboy Pump and Dispenser Kit Instructions
MDE-4556	Gasboy ATC Kits M06875K00X Installation Manual	Gasboy Pump and Dispenser Kit Instructions
MDE-4557	Atlas Hand Drive Kit M06874K001 Installation Instructions	Gasboy Pump and Dispenser Kit Instructions
MDE-4568	Atlas Ultra-Hi™ Mechanical Totalizer Kit Installation Instructions	Gasboy Pump and Dispenser Kit Instructions
MDE-4596	Atlas Submersible Drive Relay Kits (M05816K00X) Installation Instructions	Gasboy CFN Series Controllers & POS
MDE-4740	Atlas Bezel Upgrade Kit (M08400K001) Installation Instructions	Gasboy Atlas Pumps/Dispensers
MDE-4998	Main Display Assembly (M12158A004) for Atlas 9800	Gasboy Pump and Dispenser Kit Instructions
PT-1950	Atlas Recommended Spare Parts List	Gasboy Atlas Pumps/Dispensers

Abbreviations and Acronyms

Term	Description
ATC	Automatic Temperature Compensation
CD	Computer Display
CFT	Center Flow Through
CPU	Central Processing Unit
DEF	Diesel Exhaust Fluid
E-CAL	Electronic Calibration
EEPROM	Electronically Erasable Programmable Read Only Memory
GOLD	Gilbarco Online Documentation
GPU	Global Pumping Unit
HHR	High Hose Retriever
I.S.	Intrinsic Safety
J-box	Junction Box
LC	Liquid Control
LCD	Liquid Crystal Display
LED	Light Emitting Diode
MTR	Material Test Report
NPT	National Pipe Thread
PCA	Printed Circuit Assembly
PCB	Printed Circuit Board
PCN	Pump Control Node
PPP	Programmable Pump Preset
PSI	Pounds (of Pressure) per Square Inch
RTD	Resistance Temperature Detectors
SEMS	Pre-assembled Washers and Screws

This page is intentionally left blank.

2 – Sheathing, Doors, and Bezels



Item #	Description	Part Number
1	Side Panels	Refer to “Single-sided Units” on page 2-2 and/or “Dual-sided Units” on page 2-2.
2	Top Panel	Refer to “Top Panels - Stainless Steel” on page 2-3 and/or “Top Panels - Painted” on page 2-3.
3	Door	Refer to “Lower Doors” on page 2-4.
4	Bezel	Refer to “Bezels” on page 2-5.

Side Panel

Single-sided Units

All single-sided units feature one blank panel and unit-specific panel as noted in the following table.

Dual-sided Units

All dual-sided units feature two unit-specific panels as noted in the following table.

Note: To order painted panels, you must include both panel numbers and paint code. Refer to "Paint Codes" on page 1-3.

All panels are attached to the frame with four 12-24 X 1/2-inch long thread-forming pan head screws.

Stainless Steel	Painted	Panel Description
Models 9140, 9840, and 9850 Super-Hi™ and Ultra-Hi Flow		
M06485B001	M06485B101	Standard Blank Panel
M06485B002	M06485B102	Pump, Electronic Side-load
M06485B003	M06485B103	Pump, Front-load
M06485B004	M06485B104	Pump Auto-on with Keypad, Side-load
M06485B005	M06485B105	Pump, Auto-on, Side-load
M06485B006	M06485B106	Pump, Mechanical
M06485B007	M06485B107	Dispenser, Electronic Side-load
M06485B008	M06485B108	Dispenser, Front-load
M06485B009	M06485B109	Dispenser, Auto-on with Keypad, Side-load
M06485B010	M06485B110	Dispenser, Auto-on, Side-load
M06485B011	M06485B111	Dispenser, Mechanical
Models 8753KX, 8853KX, 9153KX, and 9853KX High Flow with Satellite Connections		
M06485B001	M06485B101	Standard Blank Panel
M06487B006	M06487B106	Dispenser, Electronic Side-load with Satellite Piping
M06487B007	M06487B107	Dispenser, Front-load with Satellite Piping
M06487B008	M06487B108	Dispenser, Auto-on with Keypad, Side-load, with Satellite Piping
M06487B009	M06487B109	Dispenser, Auto-on, Side-load, with Satellite Piping
M06487B010	M06487B110	Dispenser, Mechanical
Models 9140, 9840, and 9850 Super-Hi and Ultra-Hi Flow		
M06486B001	M06486B101	Super-Hi Blank Panel
M06486B002	M06486B102	Super-Hi Flow, Electronic Side-load, Pump or Dispenser
M06486B003	M06486B103	Super-Hi Flow, Front-load, Pump or Dispenser
M06486B004	M06486B104	Super-Hi Flow, Auto-on with Keypad, Side-load, Pump or Dispenser
M06486B005	M06486B105	Super-Hi Flow, Auto-on Side Load, Pump or Dispenser
M06486B006	M06486B106	Super-Hi Flow, Mechanical Pump or Dispenser
M06486B008	M06486B108	Ultra-Hi Flow, Side-load, Pump or Dispenser
M06486B009	M06486B109	Ultra-Hi Flow, Front-load, Pump or Dispenser

Side Panel Cosmetic Plugs

Note: Side panels have holes for all options offered on the specific model noted in the side panel table above. These kits contain plugs to cover un-used holes. Quantities are one per panel.

Kit Number	Description
M06506K001*	Panel Plug Kit, Standard-flow and High-flow Models
	Panel Plug Kit, Super-Hi Flow Models
	Panel Plug Kit, Ultra-Hi Flow Models
*Quantity is one per hose.	

Top Panels

Newer units use an industrial strength tape (K85492-78) to secure the top panel. Older top panels used four screws as shown in the first table below. Use the following tables to select the appropriate top panel for your unit:

Screws - All Top Panels

Part Description	Current Part	Previous Part	Quantity
Screw, Thread Forming Pan M6	N/A	M04287B001	4 per Panel

Top Panels - Stainless Steel

Unit Description	Part Description	Current Part	Previous Part	Quantity
Standard Electronic and Mechanical Units (Stainless Steel)	Top Sheath - Standard (Stainless Steel)	M04887B001	-	1 per Unit
Electronic Units with TopKAT™ Option (Stainless Steel)	Top Sheath - TopKAT (Stainless Steel)	M04887B002	-	1 per Unit
Mechanical One-sided Units with Electrical Keytrol Option (Stainless Steel)	Top Sheath - Electrical Keytrol, Single (Stainless Steel)	M04887B003	-	1 per Unit
Mechanical Dual-sided Units with Electrical Keytrol Option (Stainless Steel)	Top Sheath - Electrical Keytrol, Dual (Stainless Steel)	M04887B004	-	1 per Unit

Top Panels - Painted

Note: To order a painted panel, you must include the part number and paint code. Refer to "Paint Codes" on page 1-3.

Unit Description	Part Description	Current Part	Previous Part	Quantity
Standard Electronic and Mechanical Units (Painted)	Top Sheath - Standard (Painted)	M04887B011	-	1 per Unit
Electronic units with TopKAT option (Painted)	Top Sheath - TopKAT (Painted)	M04887B012	-	1 per Unit
Mechanical One-sided Units with Electrical Keytrol Option (Painted)	Top Sheath - Electrical Keytrol, Single (Painted)	M04887B013	-	1 per Unit
Mechanical Dual-sided Units with Electrical Keytrol Option (Painted)	Top Sheath - Electrical Keytrol, Dual (Painted)	M04887B014	-	1 per Unit

Lower Doors

Select appropriate door or door part for your unit from the following table:

Note: All units have two doors.

Unit Description	Door Description	Part Number	Quantity
Mechanical Model	Lower, Stainless Steel	GK01003GA001	2 per Unit
	Lower Panel, Painted or Decaled	GK01003GA___	2 per Unit
Electronic Model, Side-load	Lower Panel, Stainless Steel	GK01001GA001	2 per Unit
	Lower Panel, Painted or Decaled	GK01001GA___	2 per Unit
	Lower Panel with Front Totalizer, Stainless Steel	GK01006GA001	2 per Unit
	Lower Panel with Front Totalizer, Painted	GK01006GA___	2 per Unit
Electronic Model, Front-load Single-sided	Lower Panel with Boot Cutout, Stainless Steel	GK01002GA001	1 per Unit
	Lower Panel, No Cutout, Stainless Steel	GK01001GA001	1 per Unit
	Lower Panel with Boot Cutout, Painted or Decaled	GK01002GA___	1 per Unit
	Lower Panel, No Cutout, Painted or Decaled	GK01001GA___	1 per Unit
	Lower Panel with Front Totalizer and Boot Cutout, Stainless Steel	GK01007GA001	1 per Unit
	Lower Panel, No cutout, Stainless Steel	GK01001GA001	1 per Unit
	Lower Panel with Front Totalizer and Boot Cutout, Painted or Decaled	GK01007GA___	1 per Unit
	Lower Panel, No cutout, Painted	GK01001GA___	1 per Unit
Electronic Model, Front-load Dual-sided	Lower Panel, Stainless Steel	GK01002GA001	2 per Unit
	Lower Panel, Painted or Decaled	GK01002GA___	2 per Unit
	Lower Panel with Front Totalizer and Boot Cutout, Stainless Steel	GK01007GA001	2 per Unit
	Lower Panel with Front Totalizer and Boot Cutout, Painted or Decaled	GK01007GA___	2 per Unit

Notes: 1) All electronic models using the above doors must also have two Rain Guard Air Gap Baffle Plates (M06690B001). Refer to "Air Gap Hardware and Computer Display (CD) Module Housing" on page 9-1.

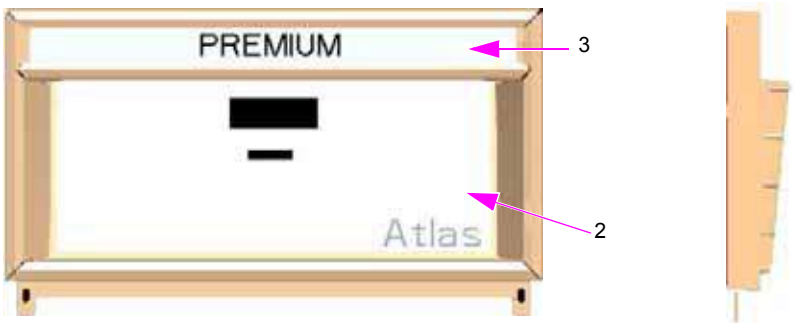
2) Nozzle boot covers are included with front-load doors.

3) Ensure to include full part numbers when ordering painted or decaled doors.

Additional Door Parts

Part Description	Part Number	Quantity
Panel Lock and Key Kit	K34673	1 per Door

Bezels

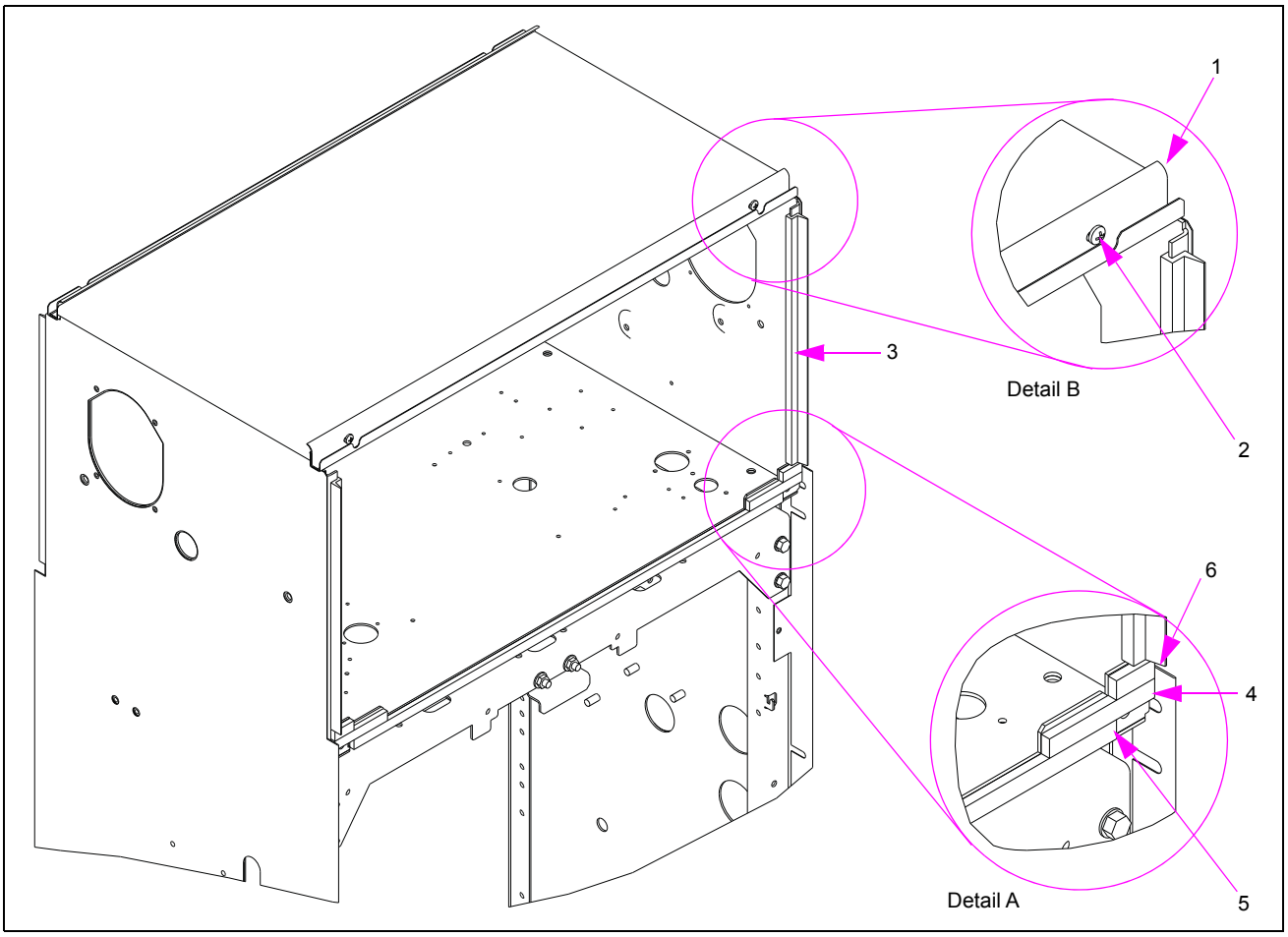


M08400A001

Bezel Parts

Item #	Part Description	Where Used	Current Part	Previous Part	Quantity
1	Bezel Assembly (see note 4)	All	M08400A001	-	1 per Bezel
2	Dial Face Graphic	All	(see note 1)	-	1 per Bezel
3	Brand Panel Graphic	All	(see note 2)	-	1 per Bezel

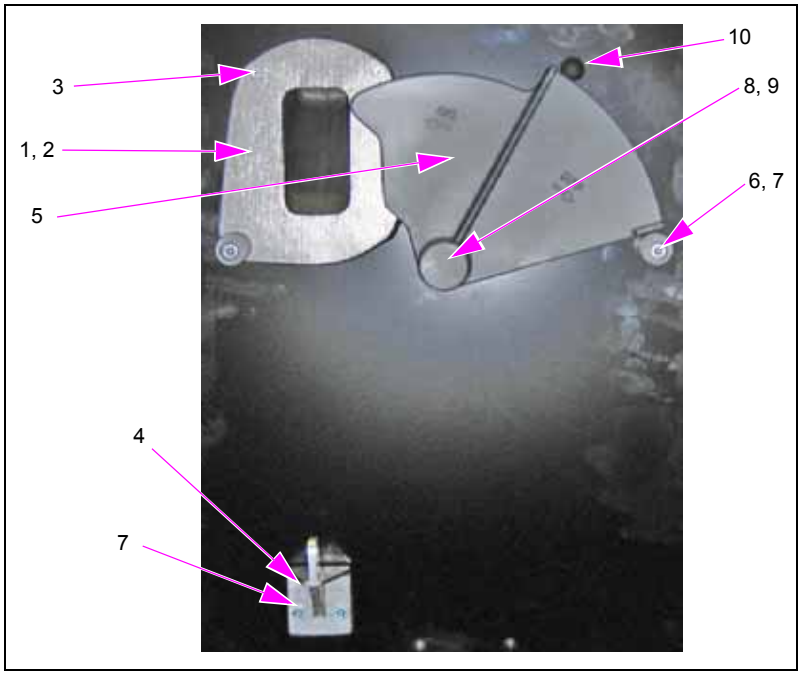
Notes:
1. *To specify dial face graphic, the unit model number and unit of measure must be provided.*
2. *To specify the brand panel graphic, the description of the brand and color of print must be provided.*
3. *A Wiper Gasket (M08340B001) is used to seal the top inner edge of the bezel, to prevent water leaks. Detail B in the figure shows this gasket. It is attached by the two screws that attach the metal top cover.*
4. *Bezel Assembly (M08400A001) is sold as Atlas Bezel Kit.*



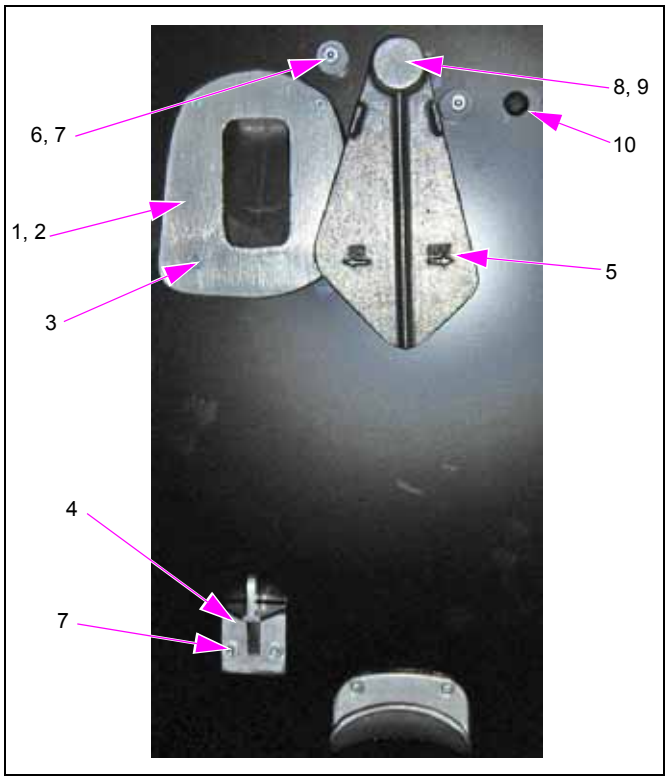
Item #	Part Description	Current Part	Previous Part	Quantity
Following parts are sold as Atlas Bezel Sealing Gasket Kit (M08685K001):				
1	Seal, Bezel Top	M08340B001	-	2
2	Screw, Thread FRM PH, 12-24 (Silver Painted Head)	M04287B001	-	4
3	Gasket, Upper Housing Side	M05095B001	-	4
4	Gasket 1/4 X 1/2 X 3.15	Q11899-08	-	4
5	Gasket 1/4 X 1/2 X 25.7	Q11899-08	-	2
6	Gasket 1/4 X 1/2 X 1	Q11899-08	-	4

3 – Nozzle Boots, Hose Hook, and Internal Hose Retrievers

Side-load Mechanical



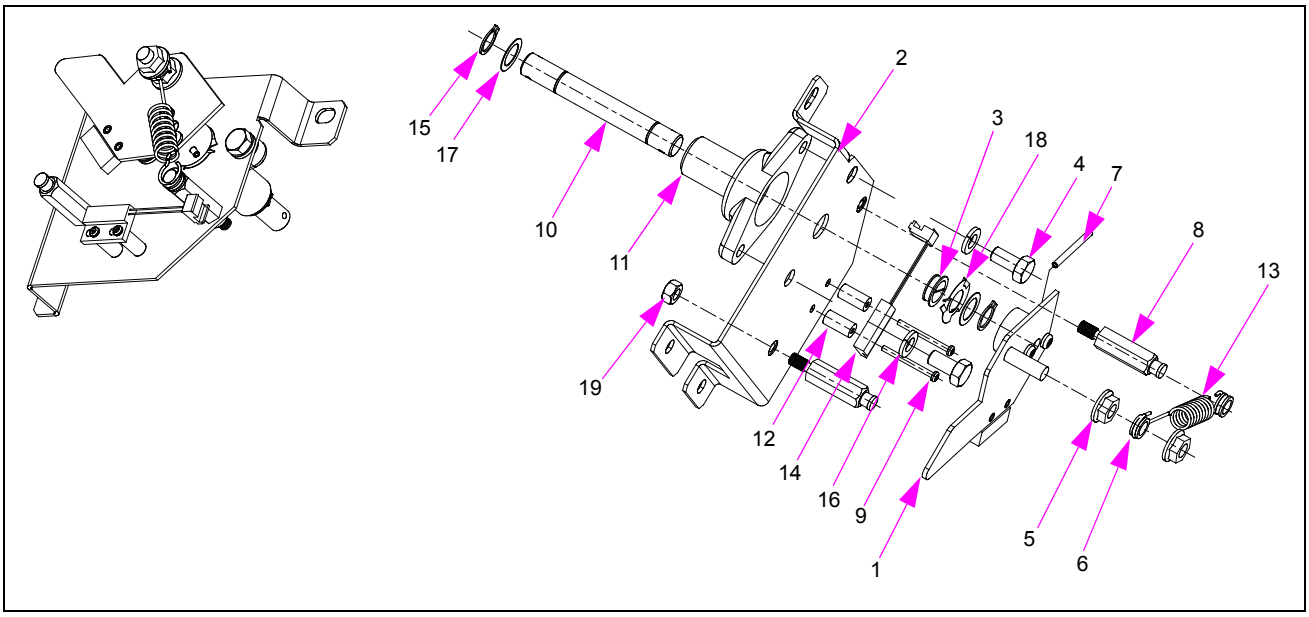
Side-load Electronic



Item #	Part Description	Used On	Current Part	Previous Part	Quantity
1	Nozzle Boot; 98 A, 88B/D (MACH)	STD Electronic	G003338	-	1
	Nozzle Boot; 88B/D VR (MACH)	Electronic Vapor	G003336	-	1
	Nozzle Boot Machined	STD Mechanical	M05142B001	-	1
	Boot, Nozzle	Mechanical Vapor	M05632B001	-	1
2	Gasket-nozzle Boot	All	G026850	-	1
3	Screw, TPT Phillips® Flat-head 8-32	All	Q13399-03	-	4
4	Nozzle Hook	All	M05574B001	-	1
5	Lever Control 8800B/D (MACH)	Electronic	G003347	-	1
	Lever Control (Plastic) 87E	Mechanical	G003354	-	1
6	Stop-eccentric Plastic	All	M07990B001	-	2
7	Screw, SCK Head Cap Metric	All	M04973B006	-	4
8	Grommet, 1.500 OD X 0.875	All	N15941-44	-	1
9	Pin Roll P/N SZ-125-1.375	All	G042657	-	1
10	Plug Snap IN TW Fastex	Electronic	G047210	-	1

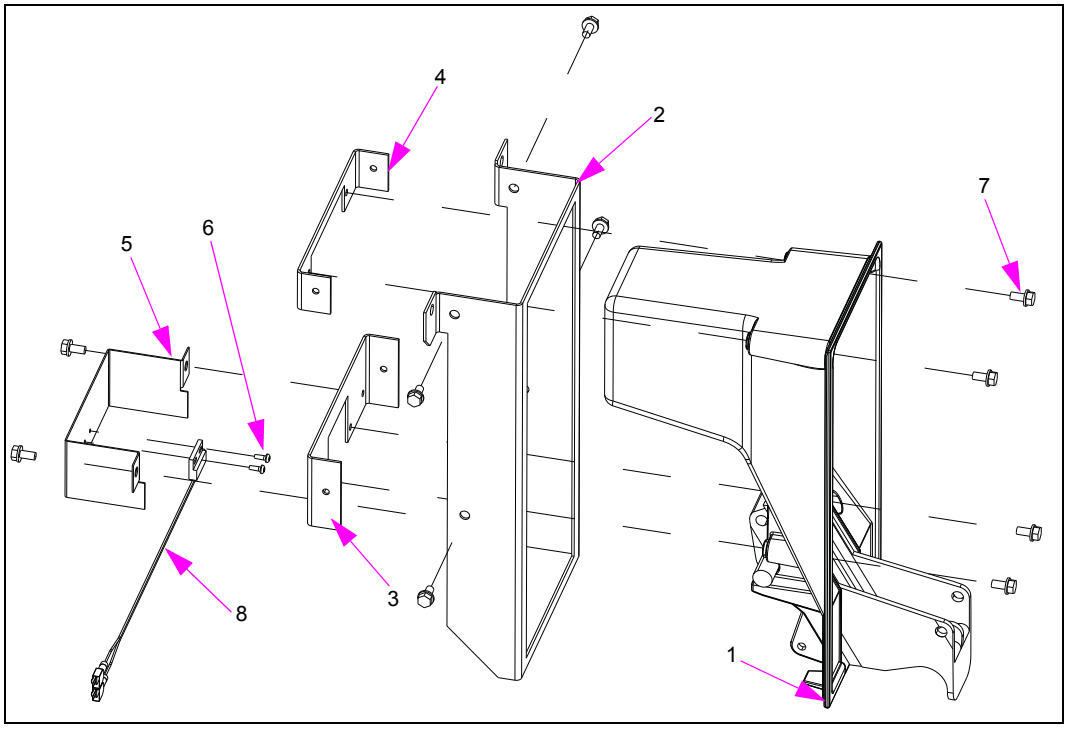
Side-load Activation Assembly (Reset Assembly)

Note: M04623A001 is not compatible with model A series pumps.



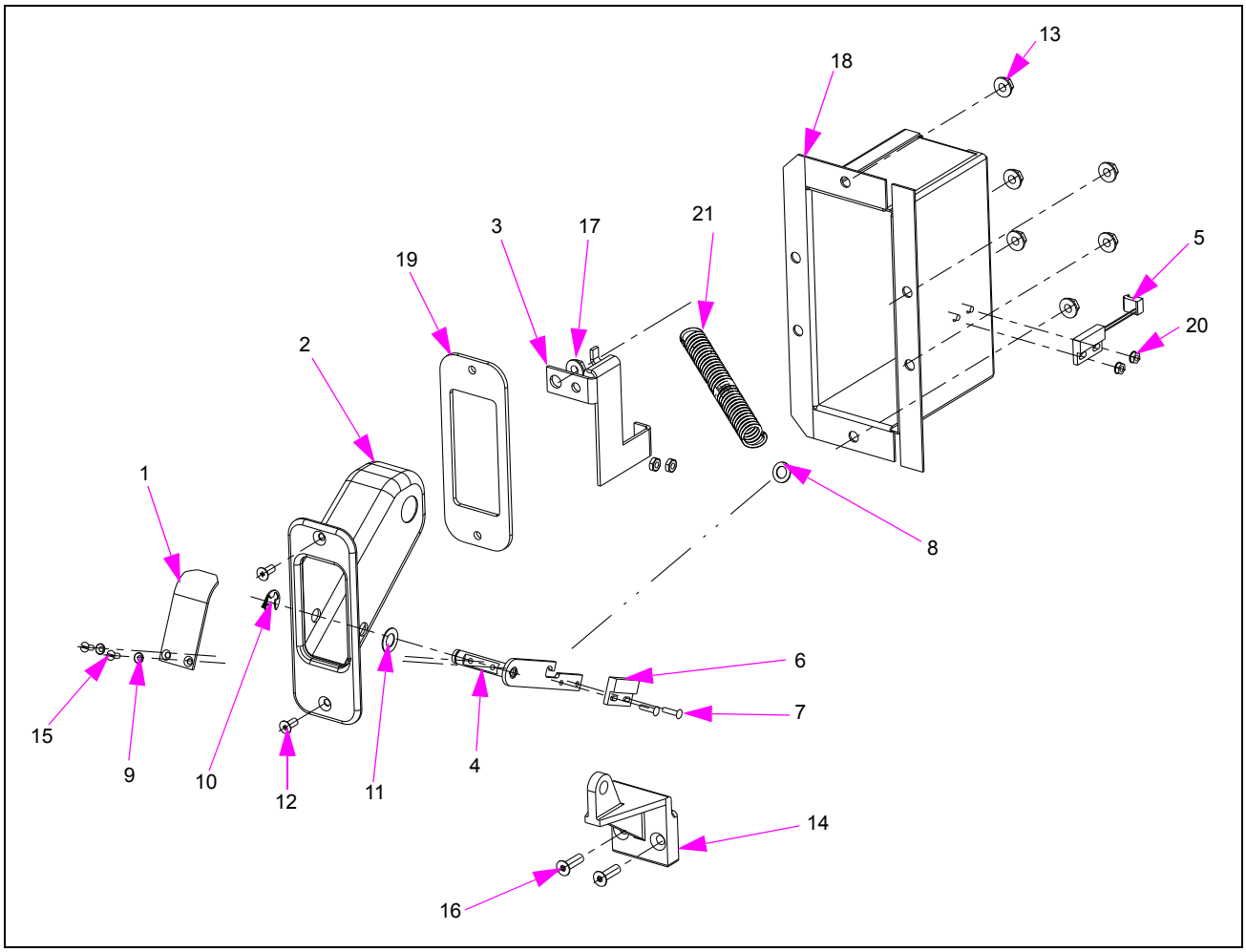
Item #	Part Description	Current Part	Previous Part	Quantity
Assembly, Electronic Reset		M04623A001	-	1
1	Assembly, Reset Cam	M05295A001	-	1
2	Assembly, Reset Switch Bracket - 9800Q	M04617A001	-	1
3	Bearing, Nyliner Type 7, 1/2' Shaft	G011958	-	1
4	Bolt Hexagonal Head Finished	K51194	-	2
5	Nut, Metric, Hexagonal Serrated Flange (M8)	M00414B003	-	2
6	Pin Collar Delrin	G042912	-	2
7	Pin, Spirol 0.125 X 1.375	G042657	-	1
8	Post, Spring Retainer	M08220B002	-	2
9	Screw, Phillips Pan-head Machine 4-40 X 1.25	Q11270-28	-	2
10	Shaft, Start	G054447	-	1
11	Shaft, Start Bearing	G003184	-	1
12	Spacer, Nylon	G013190	-	2
13	Spring, Handle	M13977B001	029363	1
14	Switch Magnetic Reed	Q12514-10	-	1
15	Truarc Retaining Ring	K76238-20	-	2
16	Lockwasher Spring, 5/16 inch	K73278-28	-	2
17	Washer, Brass	G067109	-	2
18	Washer, Wave Bearing Loading	G068951	-	1
19	Hexagonal Nut 1/4-20 UNC-2B	K01941	-	1

Front-load Nozzle Boot



Item #	Part Description	Current Part	Previous Part	Quantity
Assembly, Front-load Nozzle Boot		M04827A001	-	1
1	• Assembly, Nozzle Boot	W03879-G1	-	1
2	• Bracket, Nozzle Boot Mounting	M04826B001	-	1
3	• Bracket, Nozzle Boot Mounting	M04829B001	-	1
4	• Bracket, Nozzle Boot Mounting	M04829B002	-	1
5	• Bracket, Switch Mounting	M05314B001	-	1
6	• Screw, 6-32 X 3/8 Panhead	Q11769-15	-	2
7	• Screw, T8, Hexagonal Washer Head M6 X 12	K85736-51	-	10
8	• Sensor Assembly - Nozzle Boot	C04243	-	1

Auto-on Nozzle Boot, Reset, and Boot Cover



Item #	Part Description	Current Part	Previous Part	Quantity
1	Flap, Nozzle Boot	N23687-01	-	1
2	Nozzle Boot	R20269-01	-	1
3	Bracket, Nozzle Support	M04639B001	-	1
4	Assembly Cam and Shaft Nozzle Boot	N23693-G1	-	1
5	Switch Magnetic Reed	Q12514-10	-	1
6	Switch Magnetic Reed	Q12514-05	-	1
7	Rivet Pop	Q10084-16	-	2
8	Washer, Flat 0.328 X 0.562 X 0.0299	N16599-45	-	1
9	Washer, External Thread Flat-head #6 X 0.020	K50411-38	-	2
10	Ring, Retaining	K76238-37	-	1
11	Washer, Flat 0.328 X 0.687 X 0.026	N16599-71	-	1
12	Screw, Phillips Flat-head Metric M5 X 12	M05825B001	-	2
13	Nut, Metric, Hexagonal Serrated Flange (M6)	M00414B002	-	7
14	Nozzle Hook	M05574B001	-	1

Item #	Part Description	Current Part	Previous Part	Quantity
15	82º Flat Head Machine Screw	K78552-21	-	2
16	Screw, SCK Head Cap Metric	M04973B006	-	2
17	Hexagonal Nut 8-32 Unc-28 Stl Zn Pl	Q12068-03	-	2
18	Assembly, Nozzle Boot Cover	M04641A003	-	1
19	Gasket, Nozzle Boot, Auto	M05627B001	-	1
20	Nut, Metric, Hexagonal with External M4 Blue	Q12885-05	-	2
21	Spring	K89852	-	1

Hose Hanger and Hose Retriever

Hose Hanger Option

Item #	Part Description	Current Part	Previous Part	Quantity
1	Hook-hose, 9100	G003740	-	1
2	Screw	-	-	2

Internal Hose Retriever - 5/8-inch

Item #	Part Description	Current Part	Previous Part	Quantity
1	Stud Metric Clinch	Q12887-48	-	1
2	Bracket, Hose Retriever	M04752B001	-	1
3	Nut, Metric M8 Serrated	M00414B003	-	1
4	Retriever and Cable Assembly	N20545-02	-	1
5	Grommet Hose Cable 45º	R18453-01	-	1
6	Nut, Hexagonal 1/4-20	K01941	-	1
7	Clamp, Hose (Inner Half)	N18319-03	-	2
8	Nut, Hexagonal	Q12068-05	-	1
9	Clamp, Hose, and Cable	N18320-21	-	2
10	Ring, Retaining	K85573-01	-	1
11	End Cable Block	K86055-01	-	1
12	Tie Clamp	Q13641-01	-	1
13	Screw Cap OV Flst 1/4-20	K04585	-	1
14	Washer	K50411-25	-	1

Internal Hose Retriever - 3/4-inch

Item #	Part Description	Current Part	Previous Part	Quantity
1	Assembly, Retriever, and Cable	N20545-02	-	1
2	Grommet Hose Cable 45º	R18453-01	-	1
3	Nut, Hexagonal 1/4-20	K01941	-	1
4	Clamp, Hose (Inner Half) 3	N18319-03	-	2
5	Nut Hexagonal KEPS with External Lockwasher 4	Q12068-05	-	1
6	Clamp, Hose, and Cable	N18320-21	-	2
7	Ring, Retaining	K85573-01	-	1
8	End Cable Block	K86055-01	-	1
9	Tie Clamp	Q13641-01	-	1
10	Screw Cap OV Flst 1/4-20	K04585	-	1
11	Lockwasher Internal Thread 1/4 X 0.018	K50411-25	-	1

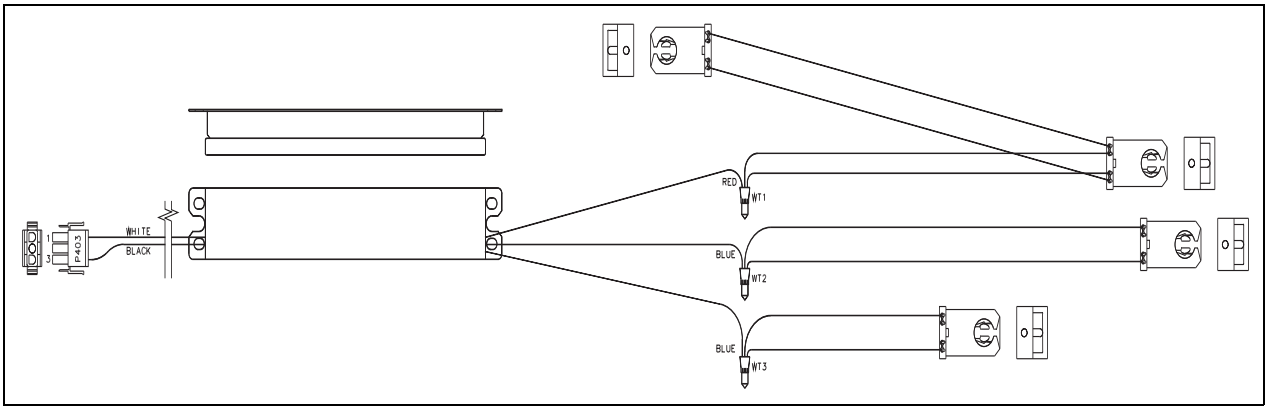
Internal Hose Retriever - 1-inch

Item #	Part Description	Current Part	Previous Part	Quantity
1	Assembly, Retriever, and Cable	N20545-02	-	1
2	Grommet Hose Cable 45º	R18453-01	-	1
3	Nut, Hexagonal 1/4-20	K01941	-	1
4	Screw, Phillips Pan-head 10-32 X 0.50	Q11270-174	-	1
5	Nut, Screw, Clamp, Hose	K75766	-	1
6	Adapter Cable	K85940	-	1
7	Assembly, Hose Clamp 1-1/2”	N15680-01	-	1

This page is intentionally left blank.

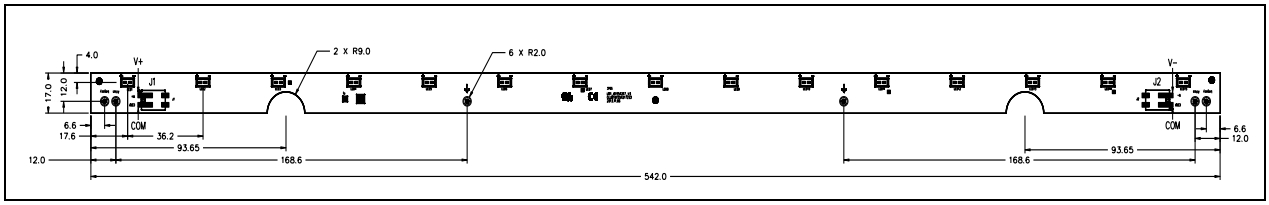
4 – Lights

Fluorescent Light and Ballast



Item #	Part Description	Current Part	Previous Part	Quantity
1	Assembly, Ballast, and Two Lamp	M04890A001	-	1
2	Fluorescent Lamp	Q10557-01	-	2
3	Light Bracket	M04813B001	-	2
Note: On welded frame unit, the light bracket is part of the welded cover.				

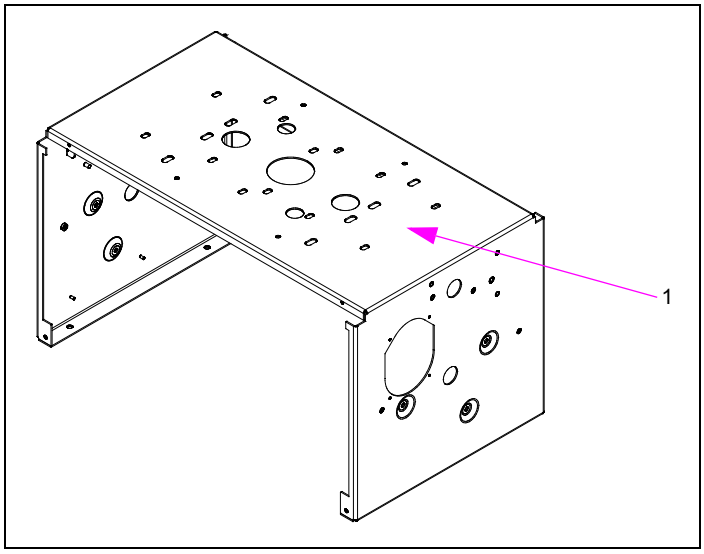
Light Emitting Diode (LED) Light and Driver



Item #	Part Description	Current Part	Previous Part	Quantity
1	LED Light Strip	M13924A001	-	-
2	LED Driver Assembly	M13929B001	-	-
3	Cable, LED Driver AC Power Extension	M13928A001	-	-
4	Cable, LED Driver Output Extension	M13980A001	-	-
5	Cable, LED Strip Interconnect	M13981A001	-	-

5 – Frame Section

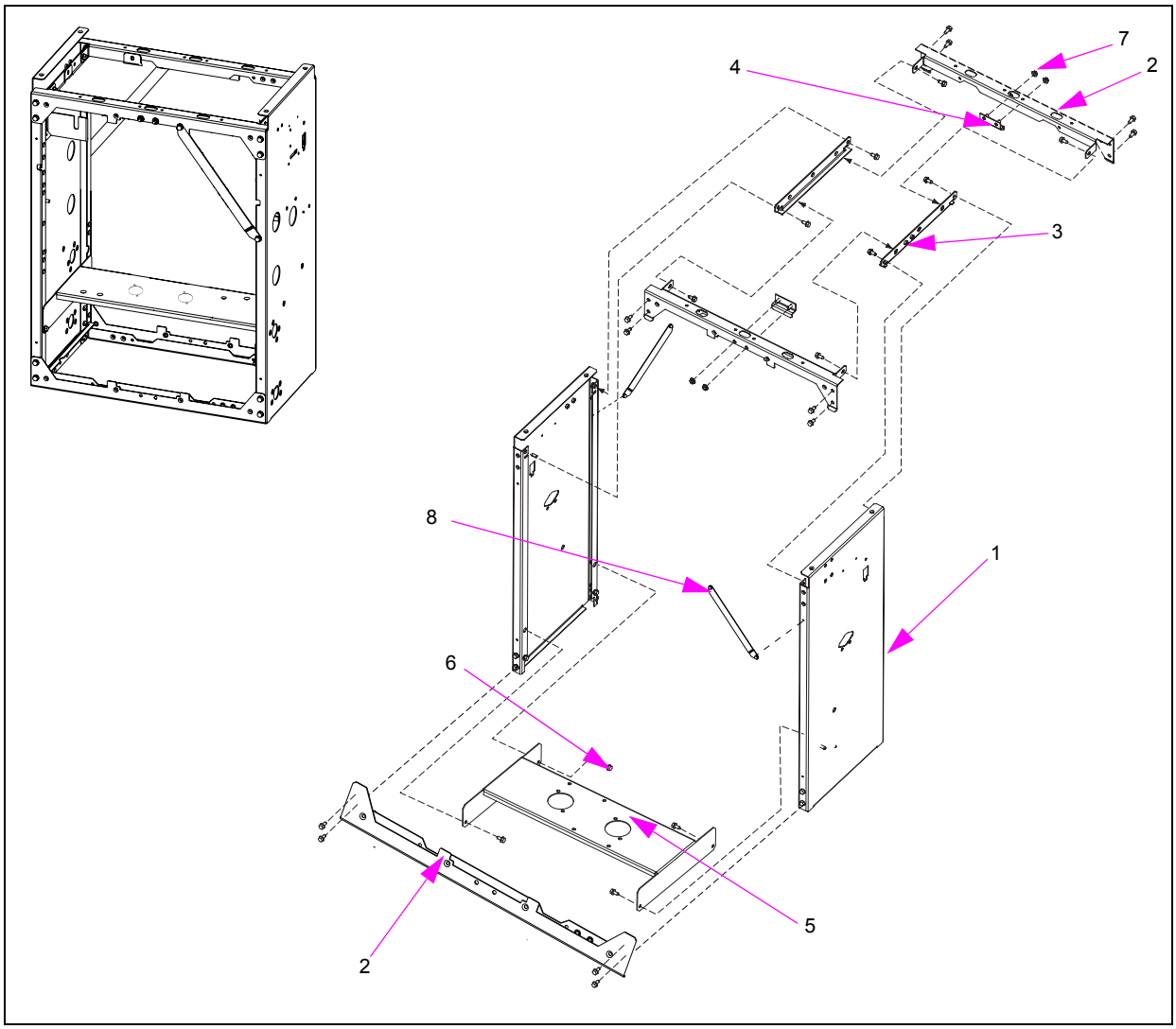
Weldment Top Housing Assembly



Item #	Part Description	Current Part	Previous Part	Quantity
1	Weldment Top Housing Assembly	M08909A001	-	1

Dispenser Frame

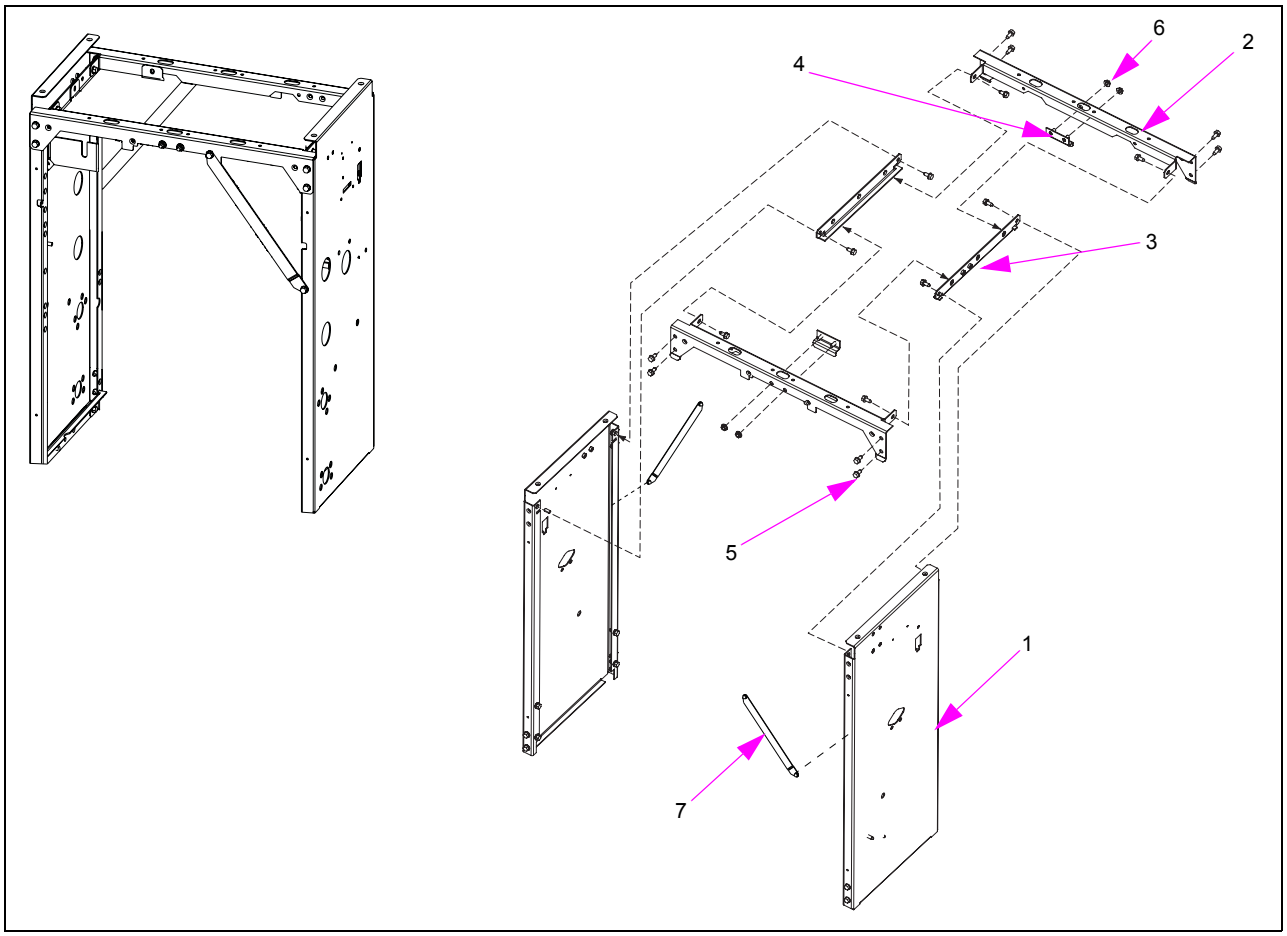
Note: Units built before November 12, 2008.



Item #	Part Description	Current Part	Previous Part	Quantity
1	Lower Frame Column	M06628A001	-	2
2	Base Rail Frame	M04460B001	-	4
3	Column Cross Bracket	M04251B001	-	4
4	Lock Plate Bracket	M04774A001	-	2
5	Dispenser Inlet Rail (Dispenser only)	M05645B001	-	1
6	Screw (M8 X 18)	-	-	28
7	Nut (M8 Serrated)	-	-	4
8	Brace, Frame	M06733B001	-	2

Upper Frame (Self-contained)

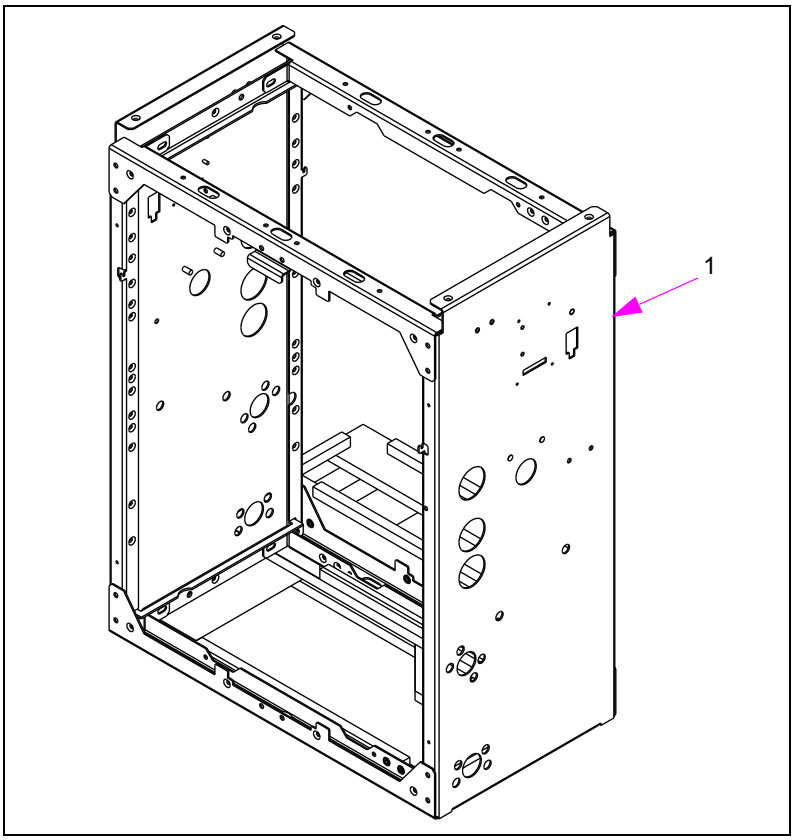
Note: Units built before November 12, 2008.



Item #	Part Description	Current Part	Previous Part	Quantity
1	Lower Frame Column	M06628A001	-	2
2	Base Rail Frame	M04460B001	-	2
3	Column Cross Bracket	M04251B001	-	2
4	Lock Plate Bracket	M04774A001	-	2
5	Screw (M8 X 18)	-	-	28
6	Nut (M8 Serrated)	-	-	4
7	Brace, Frame	M06733B001	-	2

Lower Dispenser Welded Frame

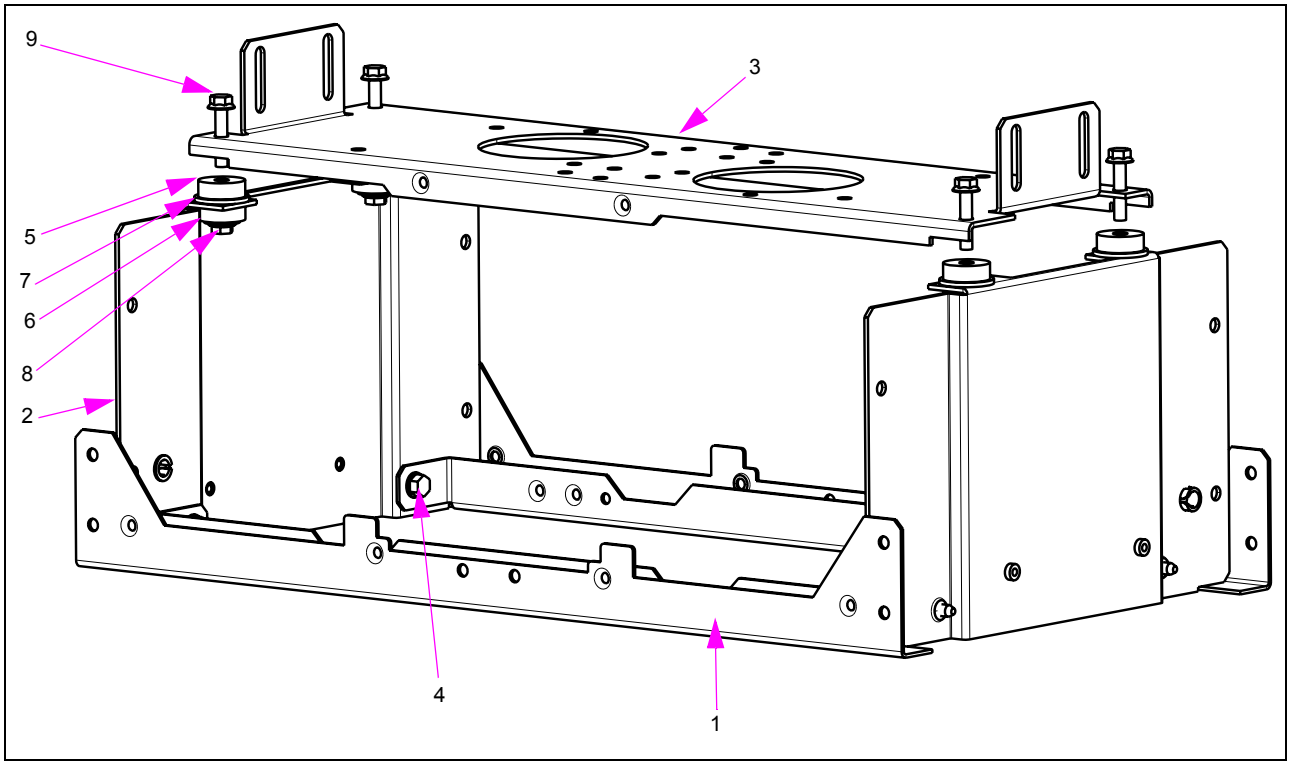
Note: Units built after November 12, 2008.



Item #	Part Description	Current Part	Previous Part	Quantity
1	Assembly, Frame Weldment	M08928A003	M08928A002	1

Lower Frame (Self-contained)

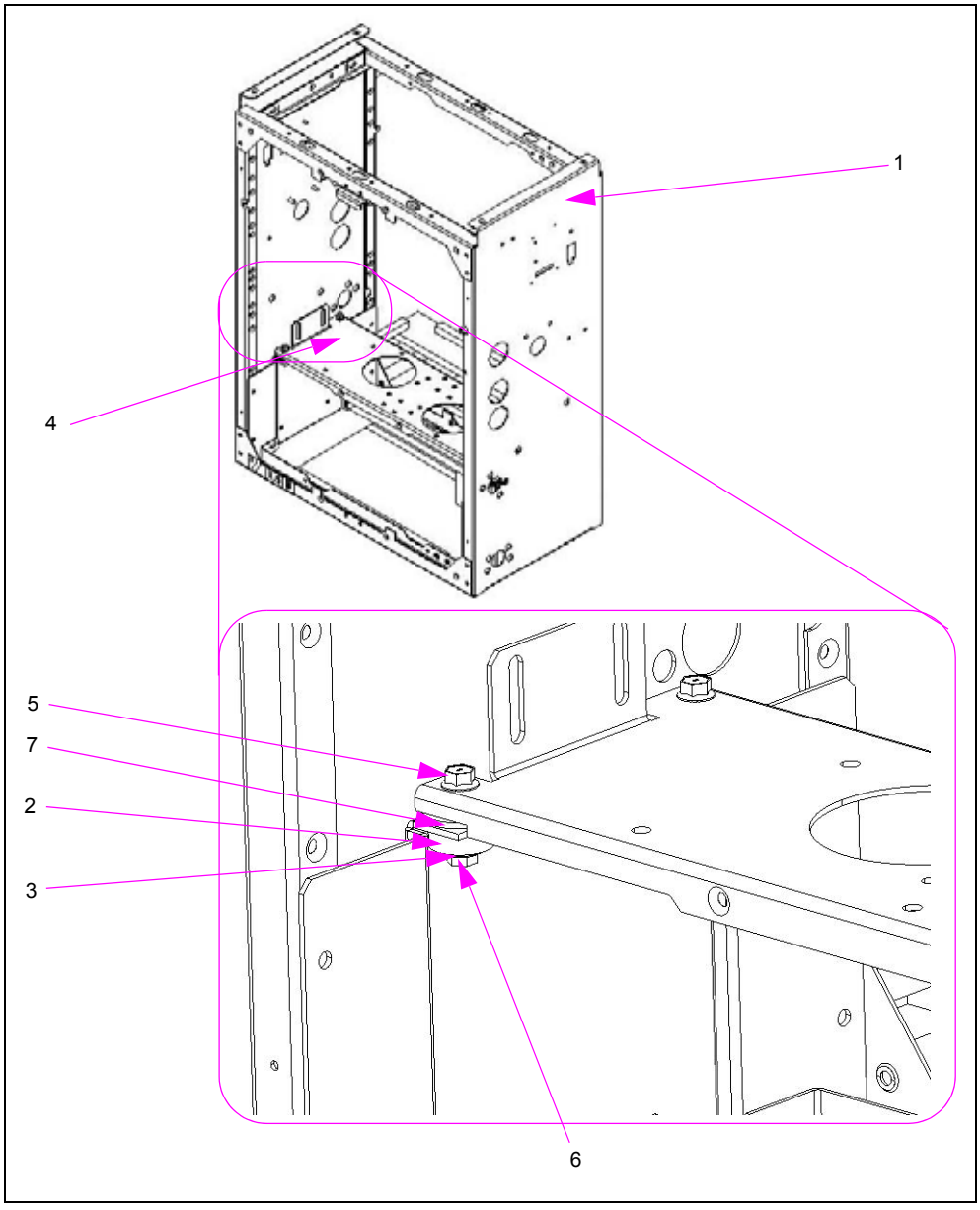
Note: Units built before November 12, 2008.



Item #	Part Description	Current Part	Previous Part	Quantity
1	Base Rail Frame Support	M04460B001	-	2
2	Assembly Lower Frame Brace	M04868A001	-	2
3	Plate, Pump Support	M06684B001	-	1
4	Screw, Thread Forming, Hexagonal Washer Head, M8 X 18	M00417B009	-	4
5	Universal Isolation Mount	M04871B001	-	4
6	Flat Washer Metric M8 Zinc Plate	M00959B008	-	4
7	Flat Washer Metric - Yellow Chromate	M00959B019	-	4
8	Nut, Metric, Hexagonal Serrated Flange (M8)	M00414B003	-	4
9	Screw, Metric M8 X 40	M00415B017	-	4

Lower Welded Frame (Self-contained)

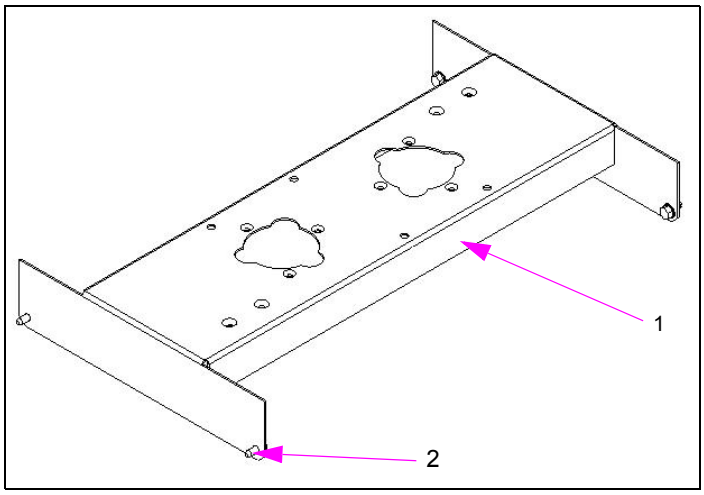
Note: Units built after November 12, 2008.



Item #	Part Description	Current Part	Previous Part	Quantity
1	Assembly, Frame Weldment	M08928A013	M08928A012	1
2	Mount, Universal	M04871B001	-	4
3	Flat Washer	M00959B008	-	4
4	Plate, Pump Support	M06684B001	-	1
5	Screw, Metric M8 X 40	M00415B017	-	4
6	Nut, Metric M8 Serrated	M00414B003	-	4
7	Washer, Flat M20 STL ZNPL	M00959B019	-	4

Lower Dispenser Frame (Upper Hydraulic Frame)

Note: Units built after November 12, 2008.



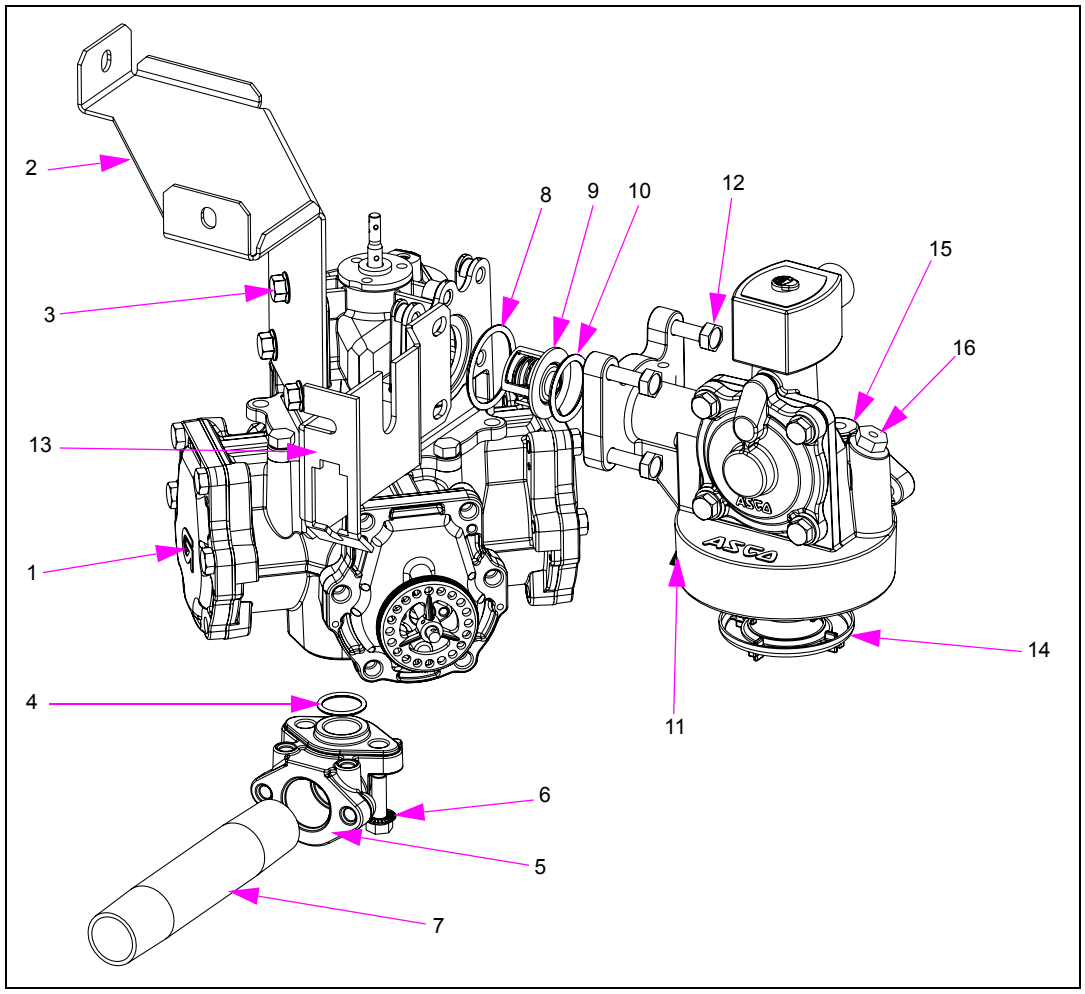
Item #	Part Description	Current Part	Previous Part	Quantity
1	Plate, Dispenser Inlet Support	M05645B001	-	1
2	Screw, Metric M8 X 18	M00417B009	-	4

This page is intentionally left blank.

6 – Hydraulic Area Section

Upper Hydraulics - Meter, Manifold, and Valve

Center Flow Through (CFT) Meter, Manifold, and Valve Assembly



Note: Quantities are in per meter.

Item #	Part Description	Current Part	Previous Part	Quantity
1	CFT Meter Assembly Electronic	T20150-G5	-	1
	CFT Meter Assembly Mechanical Gallons	T20150-G6	-	1
	CFT Meter Assembly Mechanical Liters	T20150-G7	-	1
2	Bracket Meter Manifold Support	M04259B001	-	1
3	Screw, Hexagonal Serrated Flange Head 5/16 - 18 X 0.62	Q10253-02	-	3
4	O-ring, 0.862 X 0.104 X 0.103	N16891-32	-	1
5	Fitting, Discharge Meter X Hose	M04624B020	-	1
	Fitting Discharge, Super-Hi	M04624B040	-	1

Item #	Part Description	Current Part	Previous Part	Quantity
6	Screw, Metric M8 X 25	M00415B011	-	2
7	1-inch STD Pipe X 6.75	R11495-38	-	1
8	O-ring, 1-5/8 X 1-7/8 X 1/8	Q10068-14	-	1
9	Assembly Meter Check Valve	K94254-01	-	1
10	O-ring, 1-1/4 X 1-1/2 X 1/8	Q10068-09	-	1
11	2-stage Solenoid Valve and Filter Manifold	Refer to "Valve and Manifold Options (Item 11)"	-	-
12	Bolt, Hexagonal Head SEMS, 5/16 - 18 X 1" LG	Q10865-36	-	4
13	Bracket Meter Stabilizer and Hose Retriever	M06217B001	-	1
14	Strainer Insert High Capacity	R19457	-	1
15	Resistance Temperature Detectors (RTD) Probe Assembly (Canada Retail Only)	Q13131-01	-	1
16	Thermowell, Meter Cover (Canada Retail Only)	Q13130-01	-	1
Not Shown - For 9140 only				
-	Pipe Plug C-sunk 1/8 (Canada Commercial Only)	K44283	-	2
-	Pipe Plug C-sunk 1/8	K46444	-	2
-	Angle Bracket	M07342B001	-	1
-	Screw, 5/16 X 7/8	Q11889-15	-	5

Valve and Manifold Options (Item 11)

Part Description	Current Part	Previous Part	Quantity
Valve and Manifold 120 V	M04607B001	-	1
Valve and Manifold 220 V	M04607B002	-	1
Valve and Manifold 120 V with Automatic Temperature Compensation (ATC)	M04607B003	-	1
Manifold, no Valve*	M04607B005	-	1
Manifold, no Valve with ATC*	M04607B006	-	1
**Super-Hi and High Flow with Satellite Feed.*			

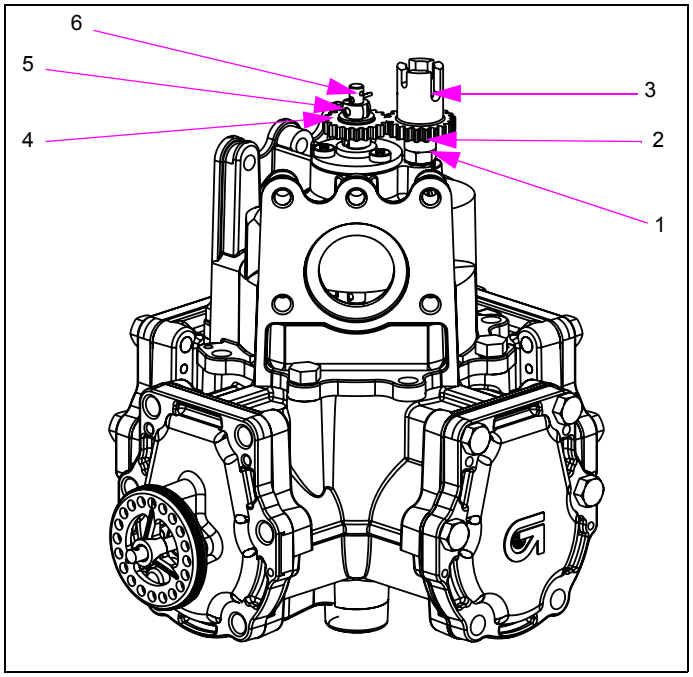
Fuel Filter Options

Fuel filter options quantities are 1 per meter/manifold.

Filter Description	Gasboy Part Number	Cim-Tek® Part Number
400-10 High Flow Particulate - 10 Micron	R18189-10	70015
400-30 High Flow Particulate - 30 Micron	R18189-30	70016
400HS-10 High Flow Water Alert - 10 Micron (obsolete, see notes 1 and 2)	R20039	70060
400HS-30 High Flow Water Alert - 30 Micron (see note 2)	G026019	70065
400MB-10 High Flow Alcohol Monitor - 10 Micron (see note 3)	R19736-10	70120
Manifold Strainer (see note 4)	R19457	N/A
Filter Cap - No Filter	R18896-G2	R18896-G1

Notes:
1. *R20039 is replaced by M08007B010.*
2. *Water alert filters are for use with gasoline, ether blended fuels and diesel fuel. Not for use with alcohol blended fuels.*
3. *Alcohol monitor filter are for use with ethanol blended fuels containing up to 20% ethanol. not for use with any other fuels.*
4. *Manifold strainer use is highly recommended with use of filter cap.*
5. *Fuel filter option listed here are for protection of dispenser components. Fuel filter options listed here are not sufficient for filtering aviation fuel.*

Meter Gears - Mechanical Models

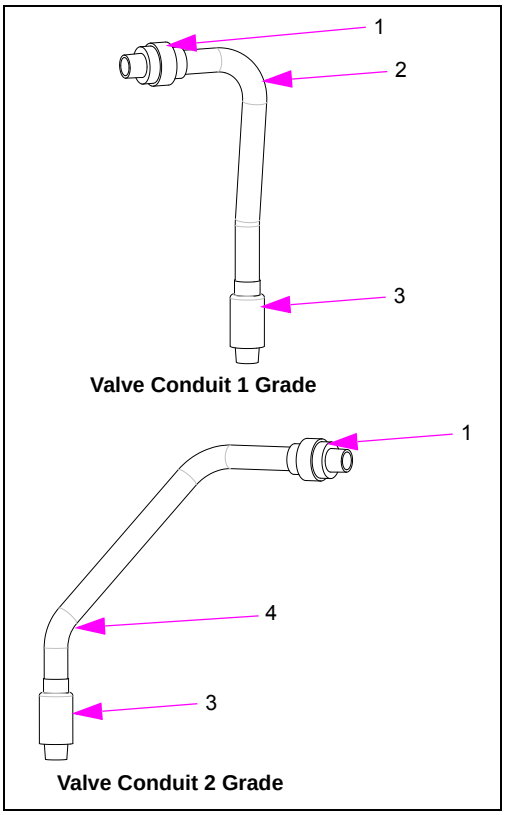


Item #	Part Description	Current Part	Previous Part	Quantity
1	Lockwasher External Thread 1/4 X 0.025	K50411-31	-	1
2	Stud, Drive Gear	N23567	-	1
3	Assembly Driven Gear - US Gallons	M07296A001	-	1
	Assembly Driven Gear - IMP Gallons	M07340A001	-	1
	Assembly Driven Gear - Liters	K55152	-	1

Item #	Part Description	Current Part	Previous Part	Quantity
4	Drive Pinon - US Gallons	M07298B003	-	1
	Drive Pinon - IMP Gallons	M07341B003	-	1
	Drive Pinon - Liters	K55151-21	-	1
5	Swivel Ball	K93546-01	-	1
6	Pin Cotter 1/16 X 1/2 Stl	K02124	-	1

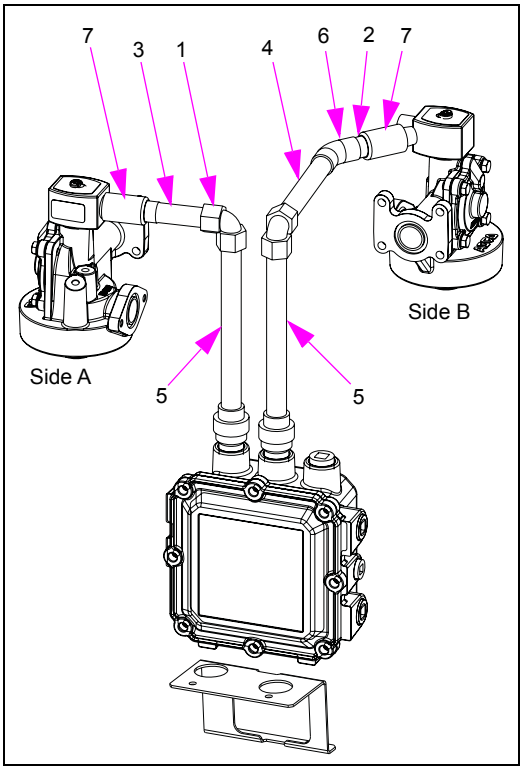
Solenoid Valve Conduit

Note: Units built after February 21, 2012.



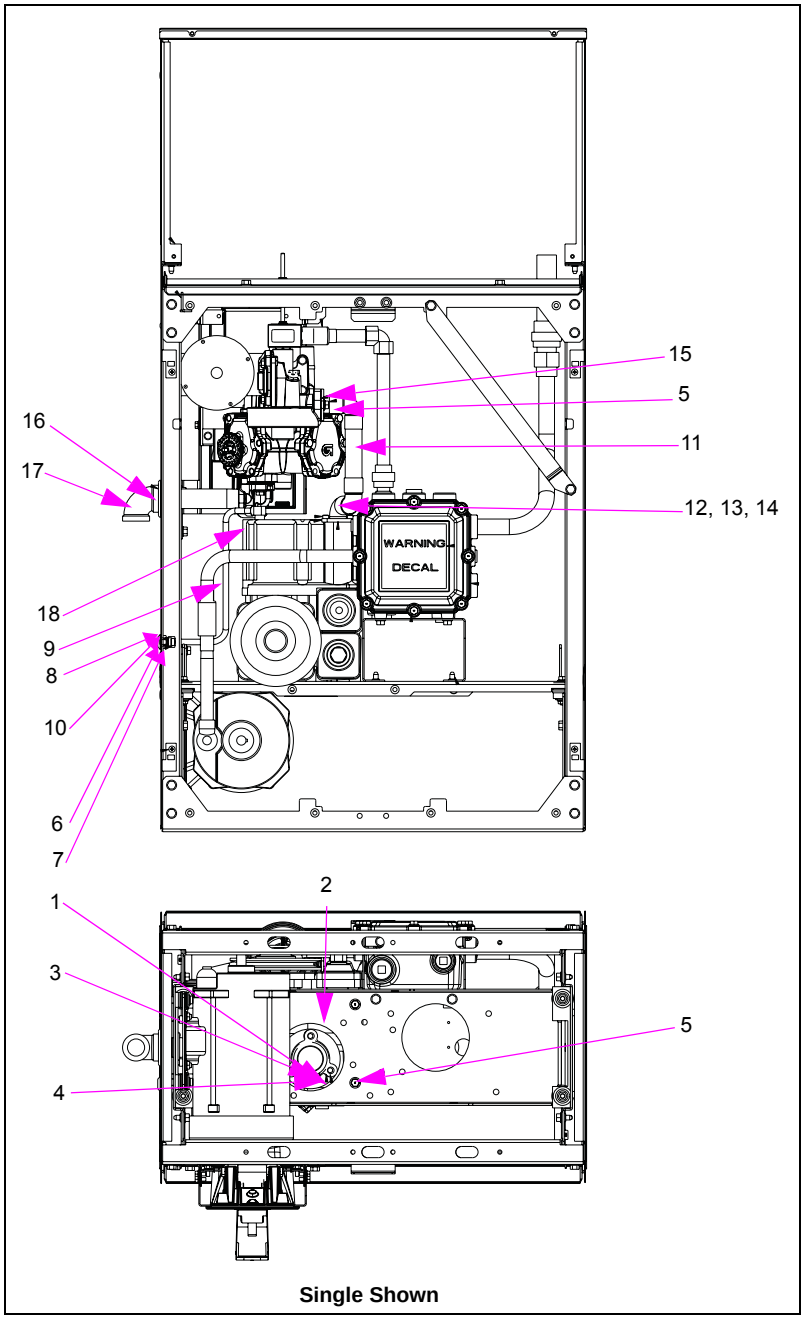
Item #	Part Description	Current Part	Previous Part	Quantity
1	Union, Conduit M X F	Q10016-04	-	2
2	Valve Conduit	M12315B001	-	1
3	Expansion Union (Conduit)	N16289-20	-	2
4	Valve Conduit	M12315B003	-	1

Note: Units built before February 21, 2012.



Item #	Part Description	Current Part	Previous Part	Quantity
1	Conduit Elbow 1/2” National Pipe Thread (NPT) 90º	K42428	-	2
2	Conduit 1/2” X 1-1/8	R11976-39	-	1
3	Conduit 1/2” X 3-1/4	R11976-52	-	1
4	Conduit 1/2” X 6-3/8	R11976-67	-	1
5	Conduit 1/2” X 9-1/8	R11976-76	-	2
6	Conduit Elbow 1/2” X 45	K49306	-	1
7	Expansion Union (Conduit)	N16289-20	-	2

Lower Hydraulics - Self-contained

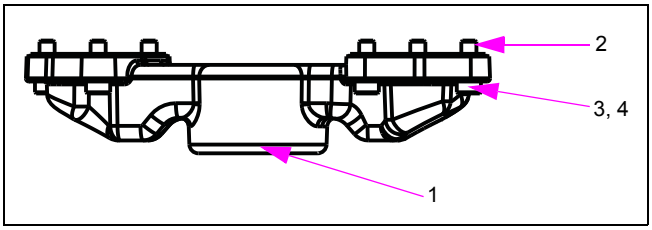


Single Shown

Note: Quantities are in per grade.

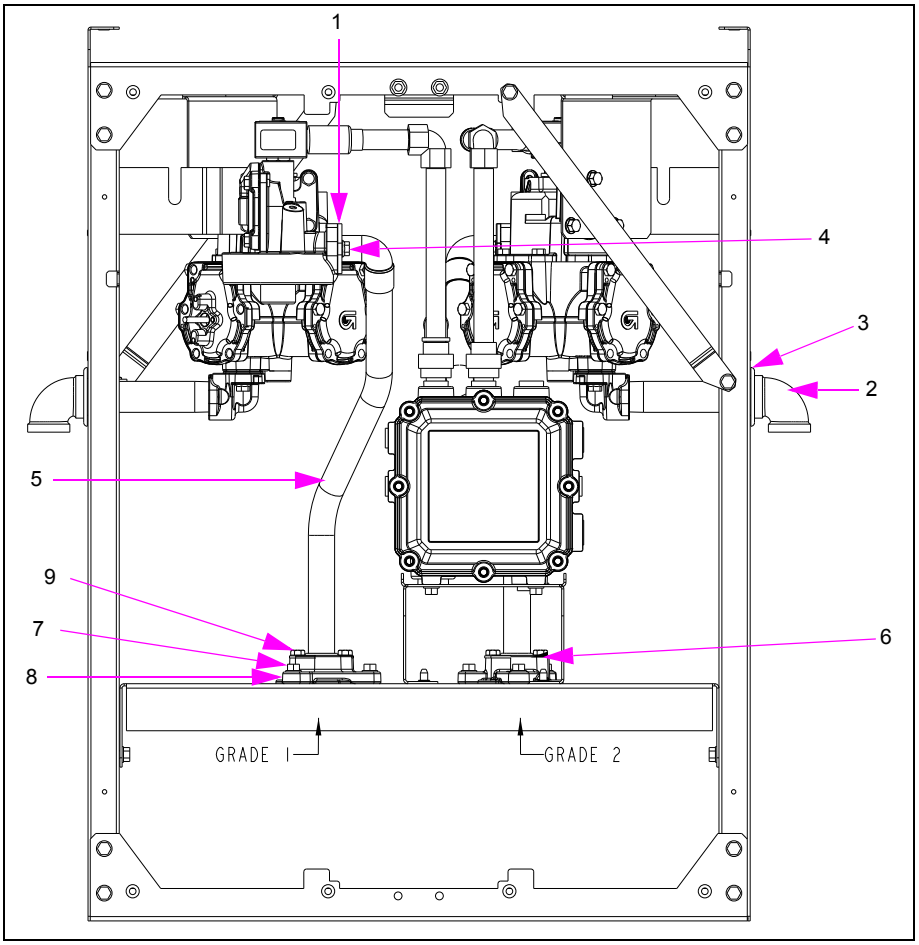
Item #	Part Description	Current Part	Previous Part	Quantity
1	O-ring, 2.37 X 0.103	Q10067-31	-	1
2	Adaptor - EP2 Inlet	G023146	-	1
3	Lockwasher Metric M10 Zinc Plate	M01071B001	-	3
4	Socket Head Cap Screw, M10 X 25	M04973B005	-	3
5	Screw, Metric M8 X 16	M00415B009	-	8
6	Ferule Compression	K43260	-	2
7	Nut, Compression Fitting	Q12505-01	-	2
8	Finished Hexagonal Check Nuts	Q10985-02	-	1
9	Tube, Sump Vent	M07391B001	M04754B001	1
10	Fitting, Sump Vent	N21861-02	-	1
11	Feedline Assembly Single 1 Grade	M04830A001	-	1
	Feedline Assembly Dual 1 Grade	M04831A001	-	1 per Unit
12	O-ring, 1-1/8 X 1-3/8 X 1/8	Q10068-07	-	1
13	Pump Discharge Flange	M04686B001	-	1
14	Socket Head Cap Screw, M6 X 26	M04973B001	-	2
15	O-ring 1-1/4 X 1-1/2 X 1/8	Q10068-09	-	1
16	Grommet, Discharge 1-inch, Pipe	G028960	-	1
17	Elbow 1-inch, X 50º, Painted	G024895	-	1
18	Gilbarco Global Pumping Unit (GPU)	M04920B003	M04920B001	1
Not Shown				
-	V-belt 4L290	R06711-52	-	1
Note: For details on motor and conduit, refer to "Self-contained Motors - 8700, 8800, 9100, 9840, 9852/53" on page 8-3.				

Inlet Manifold - TW1-M and Super-Hi Models



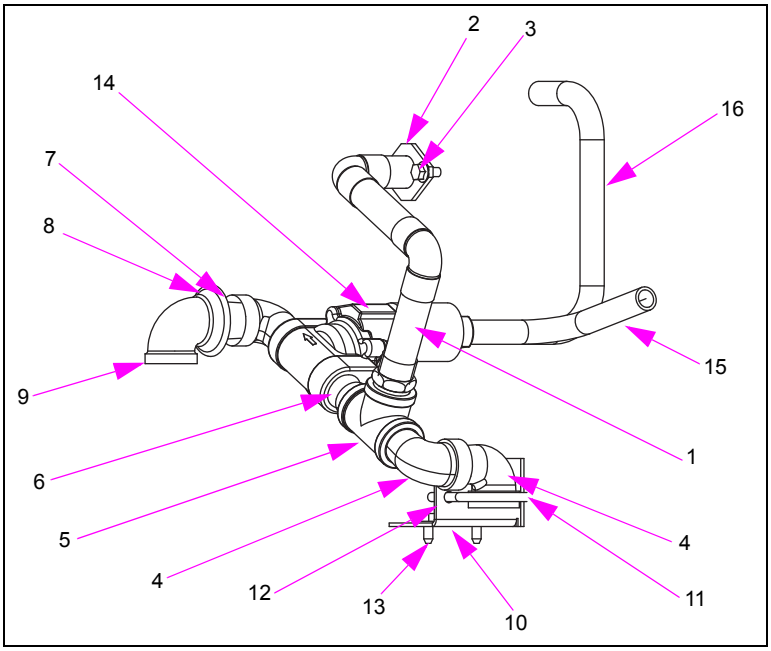
Item #	Part Description	Current Part	Previous Part	Quantity
1	Inlet Manifold, Twin Pump	M05347B010	-	1
2	Gasket, Twin Manifold	M06101B001	-	2
3	Lockwasher Metric M10 Zinc Plate	M01071B001	-	6
4	Socket Head Cap Screw, M10 X 25	M04973B005	-	6

Lower Hydraulics - Dispenser



Item #	Part Description	Current Part	Previous Part	Quantity
1	O-ring, 1-1/4 X 1-1/2 X 1/8	Q10068-09	-	1 per Hose
2	Elbow 1-inch X 90° Painted	G024895	-	1 per Hose
3	Grommet, Discharge 1-inch Pipe	G028960	-	1 per Hose
4	Screw, Metric M8 X 16, Serrated Flange Head	M00415B009	-	2 per Hose
5	Feedline Assembly Dispenser 1GR 1HS	M13978A001	M05646A001	1 per Grade
6	O-ring, 1-1/8 X 1-3/8 X 1/8	Q10068-07	-	1 per Grade
7	Flange, Feedline, Compression	M04662B001	-	1 per Grade
8	Inlet Adapter Dispenser	M05582B010	-	1 per Grade
9	Screw, Metric M8 X 16, Hexagonal Head with Extension Tooth Lockwasher (SEMS)	M05230B009	-	2 per Grade
Not Shown				
-	Feedline Assembly Dispenser 1GR 2HS	M05647A001	-	1 per Unit

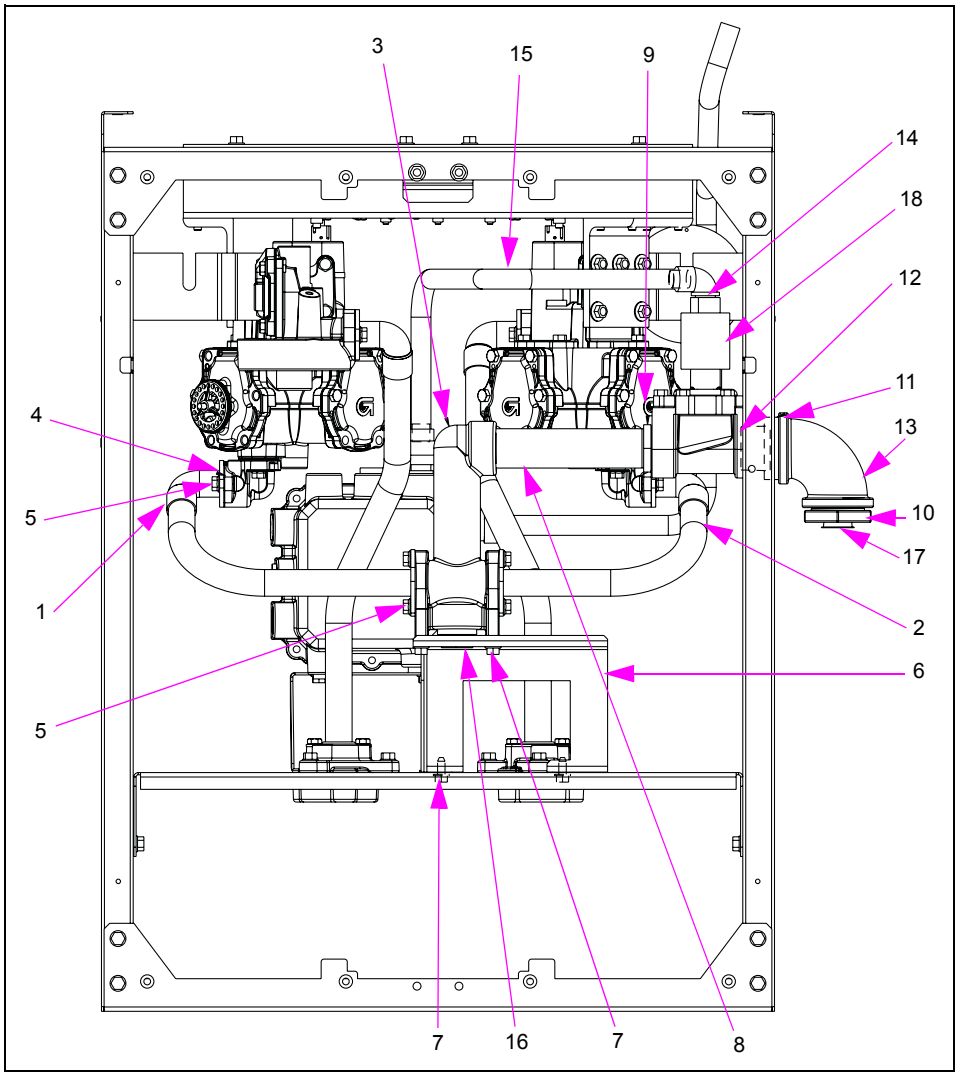
9153 and 9853 Satellite Discharge Piping - Dispenser Only



Following parts are only used on units with satellite outlet:

Item #	Part Description	Current Part	Previous Part	Quantity
1	Discharge Line Assembly	M05677A001	-	1
2	O-ring, 1-1/4 X 1-1/2 X 1/8	Q10068-09	-	1
3	Screw, Metric Serrated Flange Hexagonal Head	M00415B009	-	2
4	Elbow Street, 90º	K02321-20	-	3
5	Tee Pipe 1 X 1 X 1	K12630	-	1
6	1-inch Standard Pipe and Nipple 1 X 2	R11495-51	-	1
7	1-inch Standard Pipe and Nipple 1 X 1 1/2	R11495-20	-	1
8	Grommet, Discharge 1-inch Pipe	G028960	-	1
9	Painted Elbow, 1-inch X 90º	G024895	-	1
10	Bracket Piping Support, SAT OUT	M05690B001	-	1
11	U-bolt, Metric M8	M00703B002	-	1
12	Nut, Metric M8 Serrated Flange	M00414B003	-	2
13	Screw, Metric Thread Forming, Hexagonal Washer Head and Pozidrive Pan-head M8 X 18	M00417B009	-	2
14	Solenoid Valve, 1-inch 2 Stage	-	-	-
	• 115 V Solenoid Valve	G067034	-	1
	• 230 V Solenoid Valve	G067036	-	1
15	Formed Conduit Valve 1 Grade	M05681B001	-	1
16	Formed Conduit Valve 2 Grade	M05680B001	-	1
Note: Figure and table show the parts for 1 grade. For 2 grade, quantity will be double.				

9140K, 9840K Super-Hi Discharge Piping



Item #	Part Description	Current Part	Previous Part	Quantity
1	Discharge Line Assembly Super-Hi 1 Grade	M05560A001	-	1
2	Discharge Line Assembly Super-Hi 2 Grade	M05561A001	-	1
3	Hydraulic Manifold	M05552B010	-	1
4	O-ring, 1-1/4 X 1-1/2 X 1/8	Q10068-09	-	4
5	Screw, Metric M8 X 16	M00415B009	-	8
6	Bracket Manifold Support	M06244B001	-	1
7	Screw, Thread Forming, Hexagonal Washer Head M8 X 16	M00417B009	-	4
8	Nipple Std Pipe 1-1/4 X 7-9/16 inch NPT	R11494-68	-	1
9	Bushing, Hexagonal Reducer	K57268	-	1
10	Reducing Bushing Hexagonal 1-1/4 X 1	K02309-22	-	1
11	Discharge Grommet	G028975	-	1
12	Nipple FE Pipe 1-1/2 X 2.50 EH	R11493-52	-	1
13	Elbow, 1-1/2 X 1-1/4 X 90º Painted Red	Z07941	-	1
14	Elbow, 1/2 X 90M X F	K42448	-	1
15	Conduit, Valve	M07354B001	-	1
16	Pipe Plug Sq. Head 1-1/4	K02284	-	1
17	1-inch NPT Plug	K78953-27	-	1
18	Solenoid Valve 115 V	G067028	-	1
	Solenoid Valve 230 V	G067062	-	1

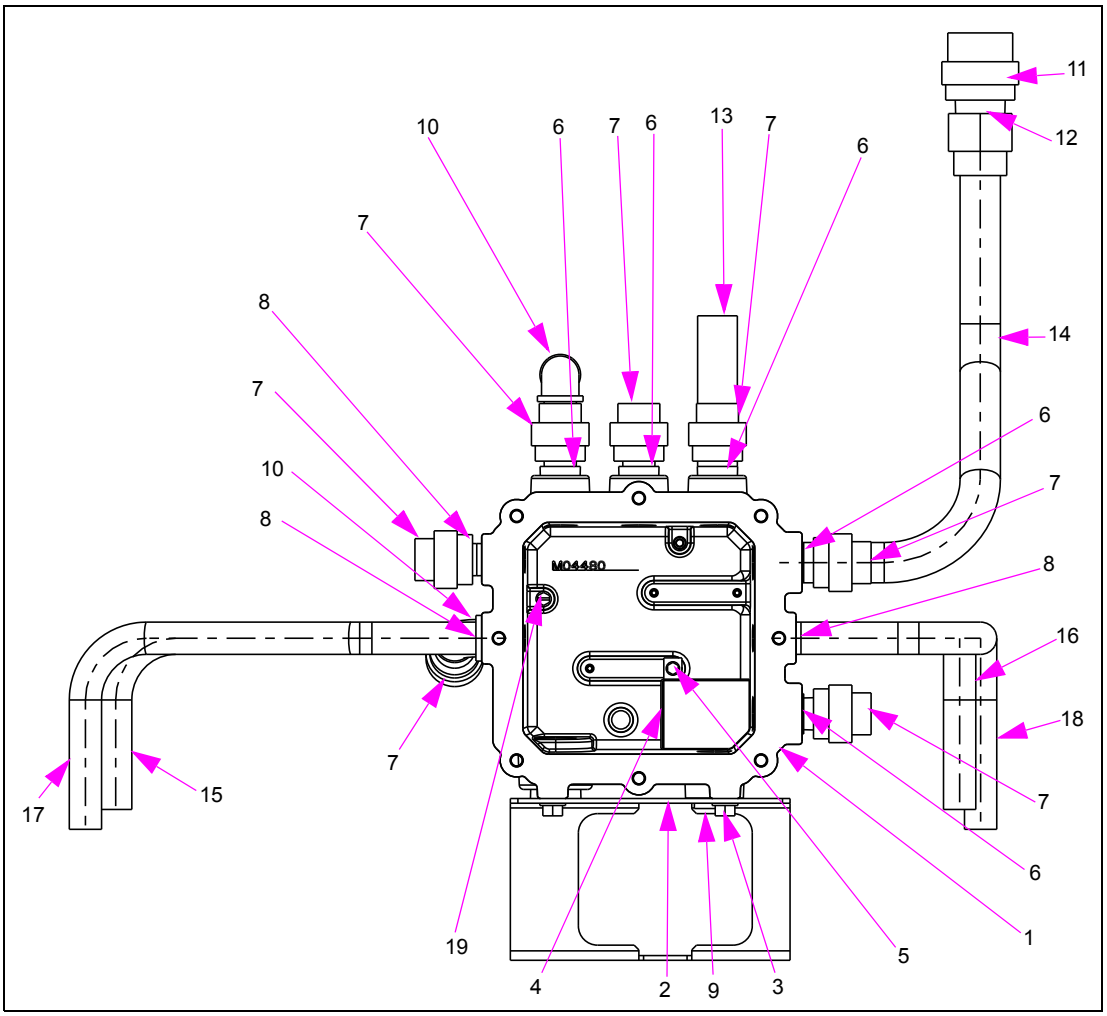
Note: The GPU inlet check valve is not included with the Bennet Pumping Unit GPU 90 (M04920B003) assembly for the Gasboy Atlas KTWIM twin hose, single product series units. You must order GPU Inlet Check Valve (M04920K109) if the existing check valve is defective.

⚠ WARNING

Atlas Model TW1M is equipped with check valves in the pump block. Any replacement pump block must have M04920K109 Check Valve installed by the service technician for proper operation.

Junction Box (J-box) - Parts, Unit Descriptions, and Options

J-box Parts



Item #	Part Description	Current Part	Previous Part
1	J-box	M04480B010	-
2	Bracket, J-box Mounting	M05776B001	-
3	Screw, Thread Forming, Hexagonal Washer Head M8 X 18	M00417B009	-
4	Bracket, J-box DC Shield	M05235B001	-
5	Screw, Thread Forming, Hexagonal Washer Head M4 X 8	M00417B113	-
6	Bushing, Reducing 3/4 - 1/2	K49827	-
7	Union, Conduit 1/2 inch	Q10016-04	-
8	Pipe Plug C-sunk 1/2	K43850	-
9	Pipe Plug C-sunk 3/4	K57624	-
10	Elbow, 1/2 X 90 M X F	K42448	-
11	Union, Conduit 1-inch	Q10016-03	-
12	Conduit Red Coup 1 X 3/4” NPT	M05084B001	-
13	Intrinsic Safety (I.S.) Barrier Assembly (115)	T19428-G1	-
14	Formed Conduit	M05338B001	-
15	Conduit, Motor 1 1 PH	M05038B001	-
16	Conduit, Motor 2 1 PH	M05039B001	-
17	Conduit, Motor 1 3 PH	M05048B001	-
18	Conduit, Motor 2 3 PH	M05049B001	-
19	Screw, Hexagonal, Thread Forming, Washer Head (10-32 X 1/2)	K85736-05	-
Not Shown			
-	Cover, J-box	M04536B010	-
-	Decal Warning	M05098B001	-
-	Screw, Metric M8	M00415B010	-

J-box - Unit Descriptions

Following table lists unit descriptions for J-boxes. The item numbers correspond to the where used information for parts listed in the parts table in "J-box Parts" on page 6-12.

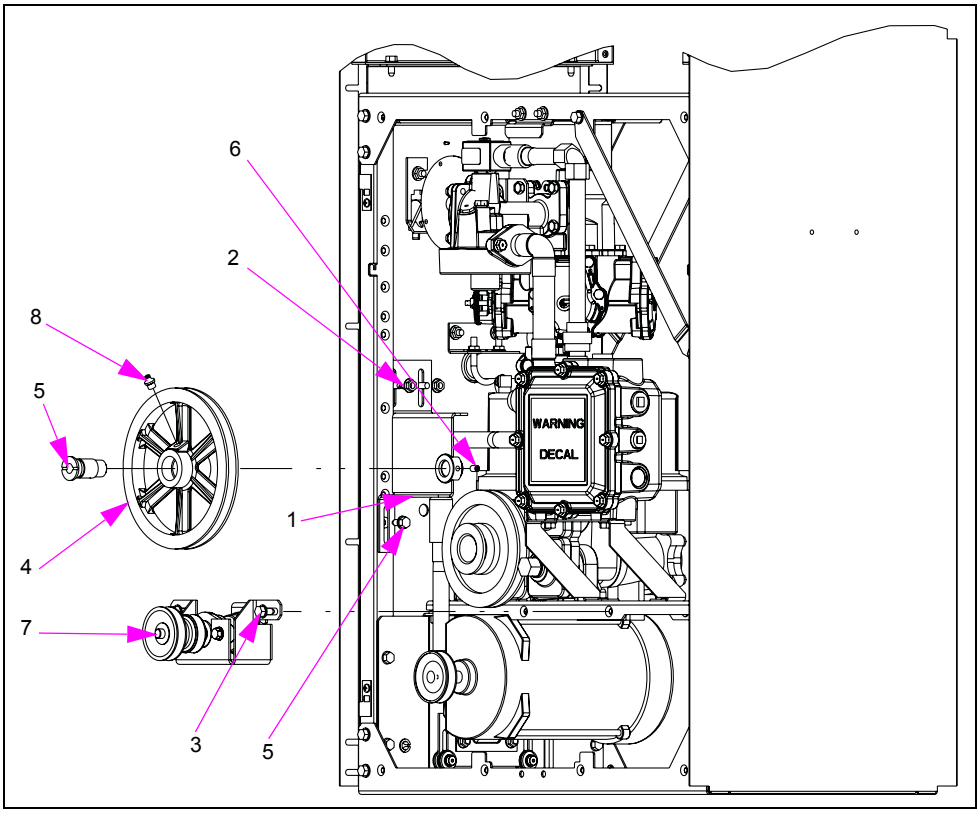
		QUANTITY																												
ITEM	PART NO.	Mech Pump, 1G1H 1P	Mech Pump, 1G2H 1P	Mech Pump, 2G2H 1P	Mech Pump, 1G1H 3P	Mech Pump, 1G2H 3P	Mech Pump, 2G2H 3P	Mech Pump, Super-Hi 1P	Mech Pump, Super-Hi 3P	Mech Disp, 1H	Mech Disp, 2H	Mech Disp, Super-Hi	Mech Disp, HF 1H with Sat-out	Mech Disp, HF 2H with Sat-out	Elec Pump, 1G1H 1P	Elec Pump, 1G2H 1P	Elec Pump, 2G2H 1P	Elec Pump, 1G1H 3P	Elec Pump, 1G2H 3P	Elec Pump, 2G2H 3P	Elec Pump, Super-Hi 1P	Elec Pump, Super-Hi 3P	Elec Disp, 1H	Elec Disp, 2H	Elec Disp, HF 1H with Sat-out	Elec Disp, HF 2H with Sat-out	Elec Disp, Super-Hi	ATC Option	Mech Pulser Option	DC Connection Option	Elec Disp, E85
1	M04480B010	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	1
2	M05776B001	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-
3	M00417B009	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-
4	M05235B001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
5	M00417B113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
6	K49827	1	3	3	1	3	3	1	1	1	3	1	-	2	1	2	2	-	2	-	1	1	1	2	-	1	1	-	1	1	-
7	Q10016-04	2	4	4	2	4	4	2	2	2	4	2	2	4	1	2	3	-	2	1	2	2	1	2	1	2	1	-	1	1	-
8	K43850	1	1	-	1	1	-	-	-	2	2	2	1	1	2	2	1	2	2	1	1	1	3	3	2	2	3	-	-	-	3
9	K57624	2	1	1	2	1	1	3	3	2	1	2	4	2	2	1	1	3	1	3	2	2	2	1	3	2	2	-	-	-	3
10	K42448	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-
11	Q10016-03	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	1
12	M05084B001	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	1
13	T19428-G1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
14	M05338B001	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	1
15	M05038B001	1	1	1	-	-	-	1	-	-	-	-	-	-	1	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-
16	M05039B001	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-
17	M05048B001	-	-	-	1	1	1	-	1	-	-	-	-	-	-	-	-	1	1	1	-	1	-	-	-	-	-	-	-	-	-
18	M05049B001	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-
19	K85736-05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	1
Not Shown																															
-	M04536B010	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-
-	M05098B001	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-
-	M00415B010	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	-	-	-	-
-	K51440	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	1

Abbreviations:

1G1H	1 Grade 1 Hose
1G2H	1 Grade 2 Hose
2G2H	2 Grade 2 hose
1P	Single Hose
3P	3 Phase

with Sat-out with discharge piping for connection to satellite

Hand Drive Option - Mechanical Self-contained Pump Models Only



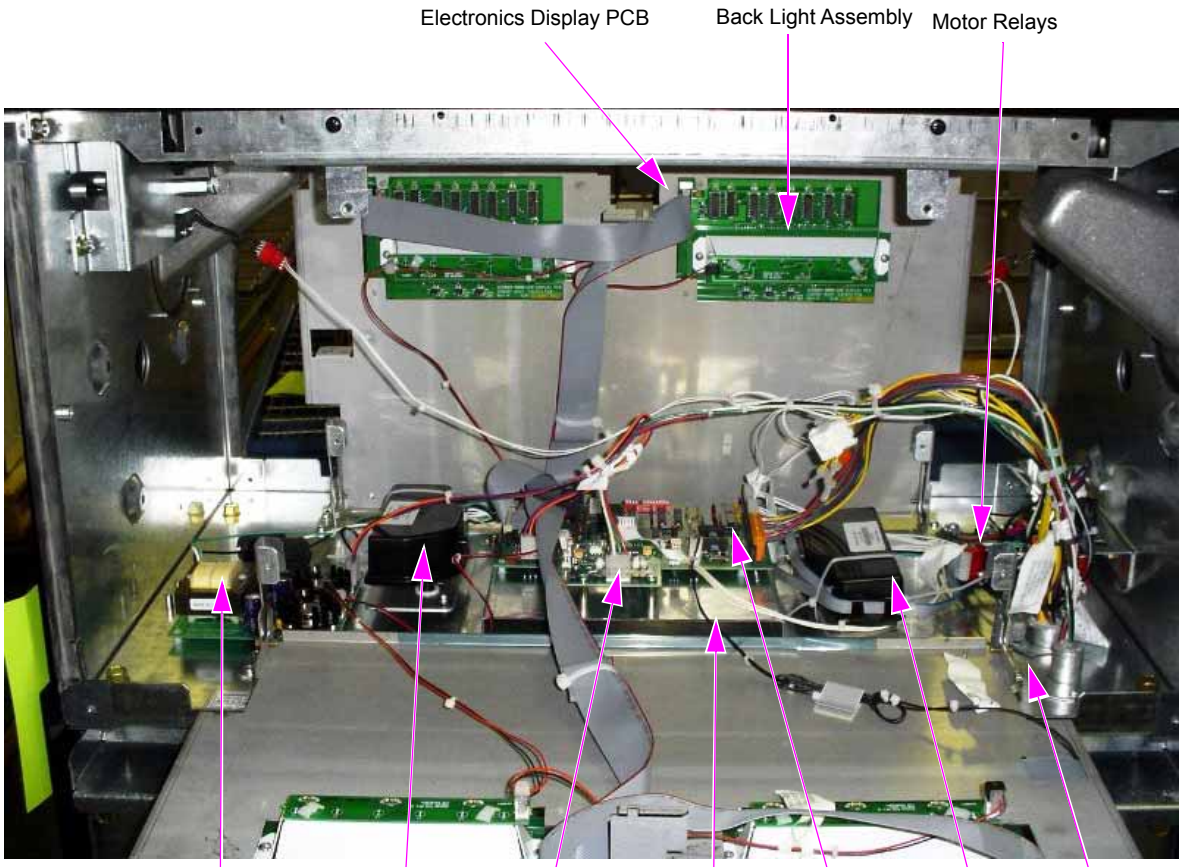
Note: Quantities are in per grade.

Item #	Part Description	Current Part	Previous Part	Quantity
1	Bracket, Hand Drive Pulley	M05567A001	-	1
2	Nut, Metric, Hexagonal Serrated Flange (M8)	M00414B003	-	2
3	Screw, Thread Forming, Hexagonal Washer Head M8 X 18	M00417B009	-	3
4	Pulley, Hand Drive	R13824-02	-	1
5	Stud, Pulley	K85561	-	1
6	Set Screw, 5/16-18 X 1/2 Hexagonal Set Head Cup Pkt	K18719	-	1
7	Assembly, Shaft and Hub Hand Drive	M05767A001	-	1
8	Hydraulic Fitting	K76145-21	-	1
Not Shown				
-	Belt V 4L 400	R06711-61	-	1
-	Belt V 4L 200	R06711-75	-	1
-	Hand Crank	N18539	-	1

This page is intentionally left blank.

7 – Commercial Electronics Section

Commercial Front (Dual Depicted)



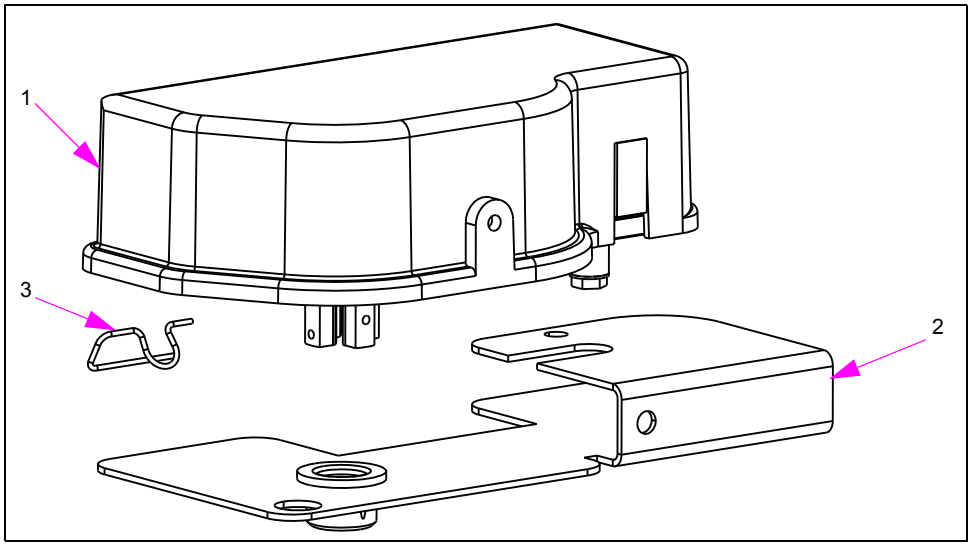
Base Electronics

Refer to “Commercial PCBs (Non-Ultra-Hi)” on page 11-1.

Power Supply

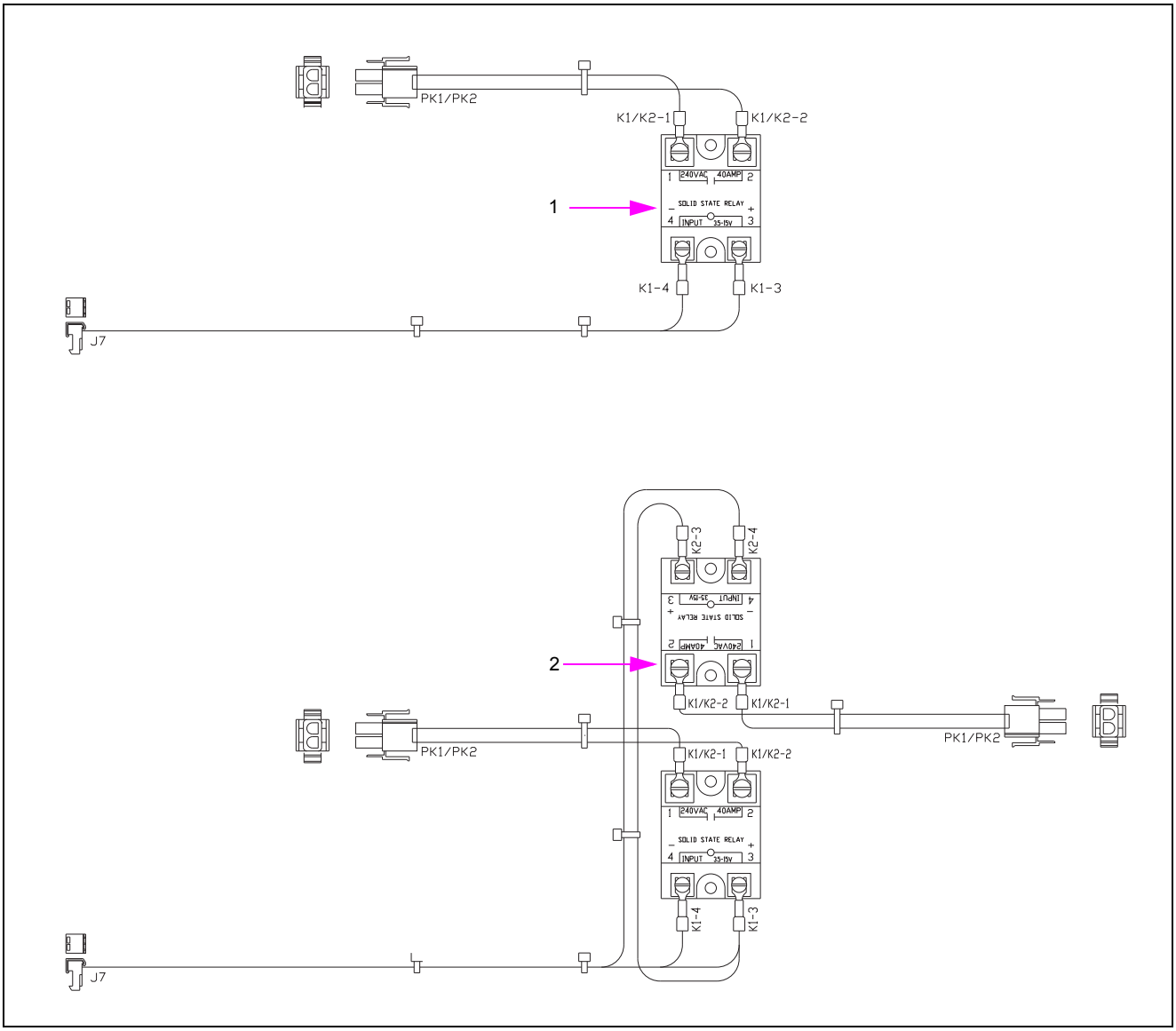
Refer to “Commercial PCBs (Non-Ultra-Hi)” on page 11-1.

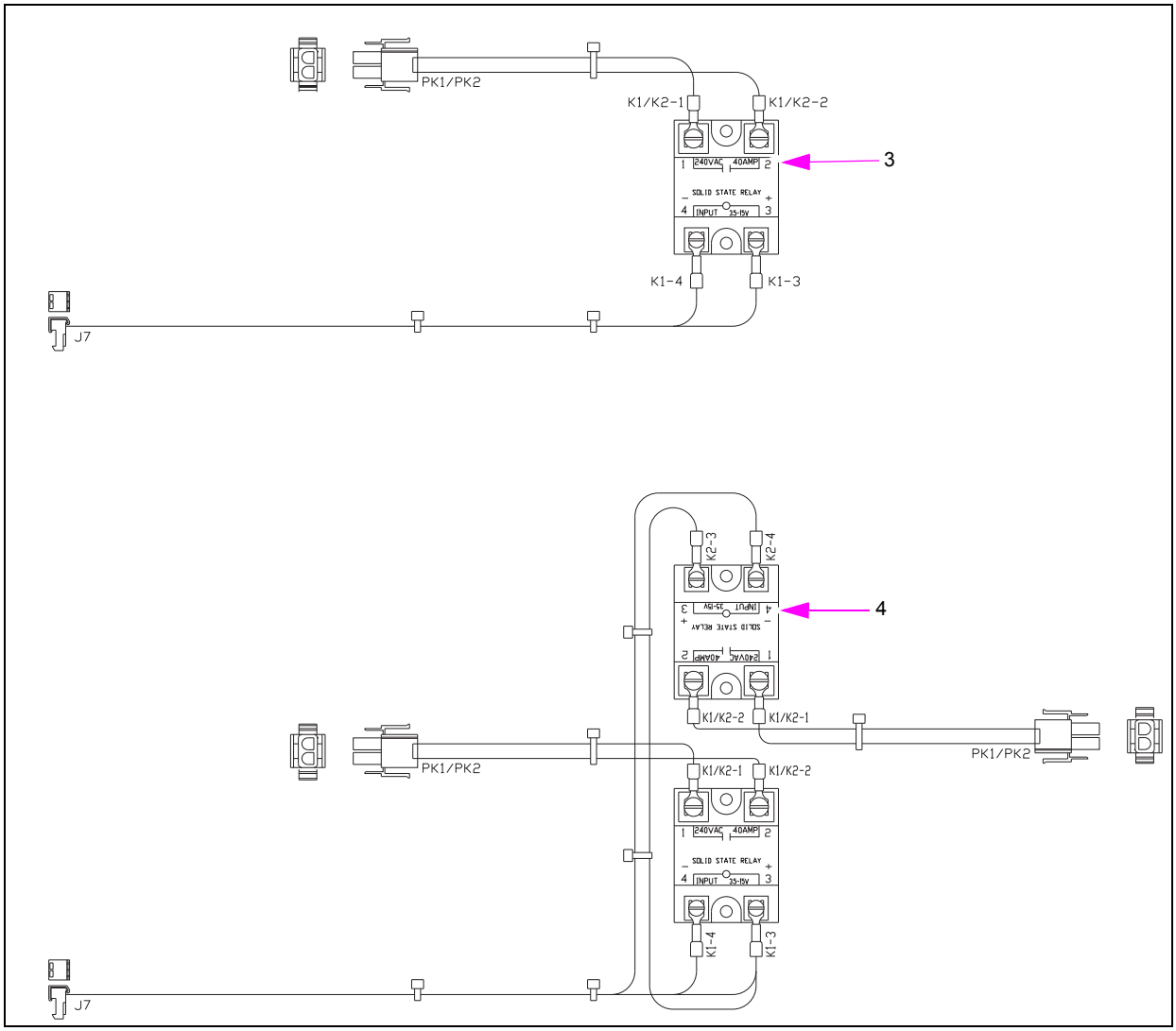
Pulser Assembly



Item #	Description	Current Part	Previous Part	Quantity
1	Assembly, Pulser	M04011B001	T18350-G3	1
2	Assembly, Pulser Supt Bracket	M04485A001	-	1
3	Spring Retainer Pulser Shaft	M01207B001	-	1

Motor Relays





Item #	Description	Current Part	Previous Part	Quantity
1	Motor Relay, Comm Single	M04956A008	M04956A004	1
2	Motor Relay, Comm Dual	M04956A009	M04956A005	1
3	Motor Relay, E85 Single	M04956A010	-	1
4	Motor Relay, E85 Dual	M04956A011	-	1

Main AC Conduit and Wire Assembly

Refer to “Commercial Cables” on page 12-1.

DC Conduit and Wire Assembly

Refer to “Commercial Cables” on page 12-1.

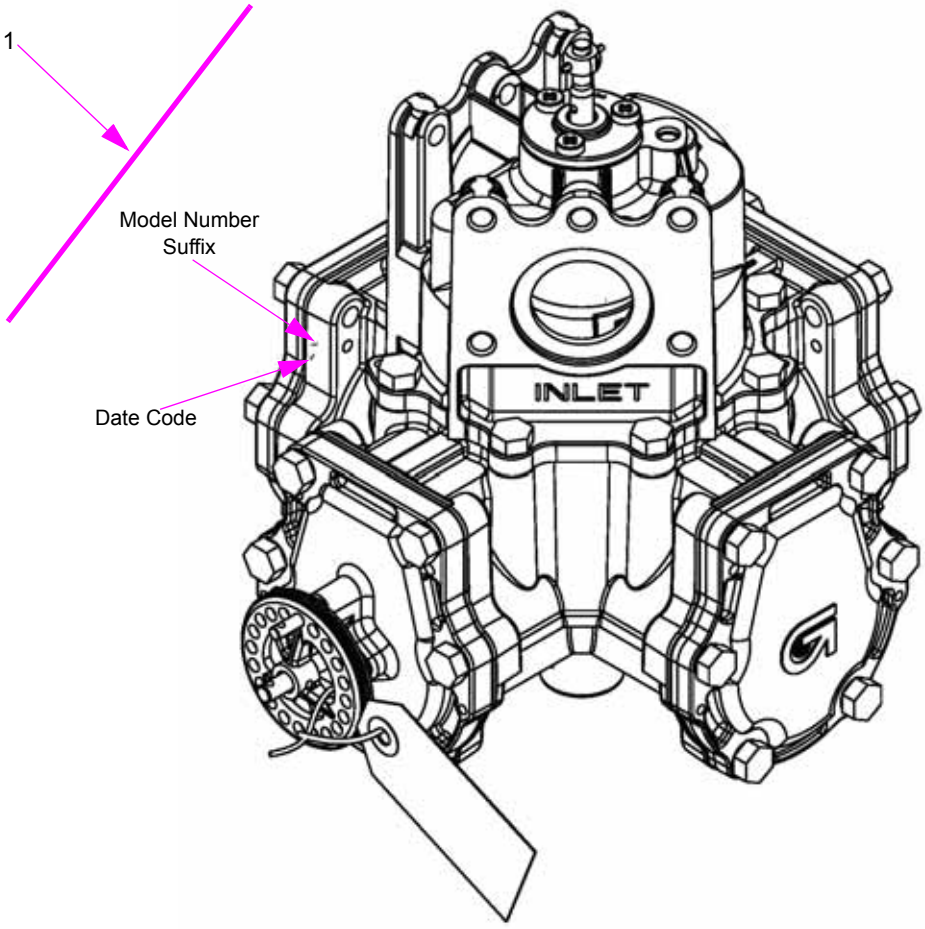
Electro-mechanical Totalizers

Refer to “Commercial Cables” on page 12-1.

This page is intentionally left blank.

8 – Meter, Pump, and Motor Section

CFT Meter Assembly

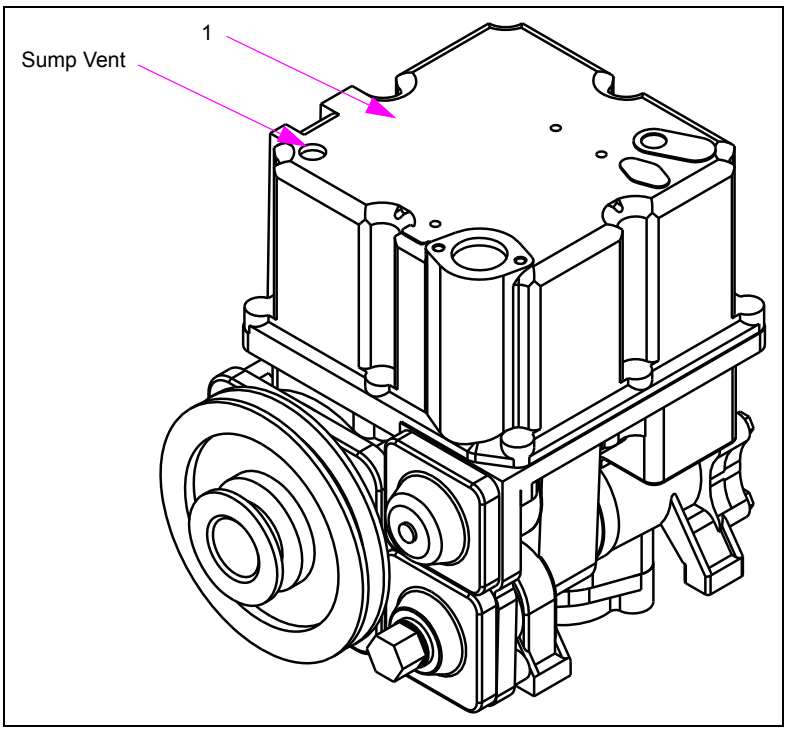


Assembled View of CFT Meter

Item #	Description	Current Part	Previous Part	Quantity
1	CFT Meter Assembly - Electronic Models (*Spare Parts item*)	T20150-G5	-	(see note 1)
	CFT Meter Assembly - Mechanical Computer Models, Gallons (*Spare Parts item*)	T20150-G6	-	(see note 1)
	CFT Meter Assembly - Mechanical Computer Models, Liters (*Spare Parts item*)	T20150-G7	-	(see note 1)
	• Meter Master Seal Service Kit Installation (*Reference Only*)	K96618	-	(see note 2)
	• Meter Quad Ring Top Seal Replacement Kit *(Reference Only)*	K35222	-	(see note 3)

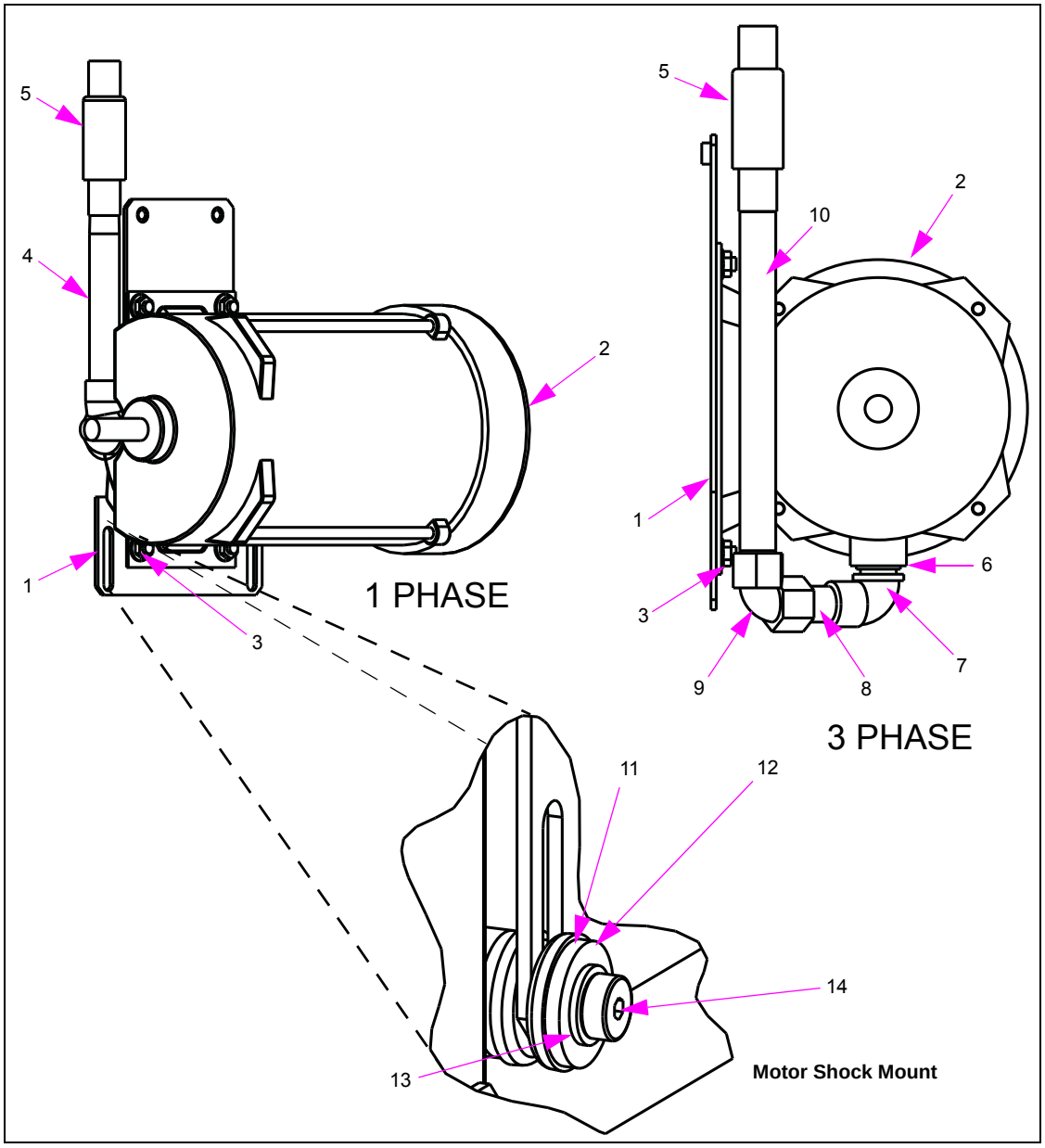
Notes:
1. CFT meter is ordered as an assembly only.
2. MDE-3892 Meter Master Seal Service Kits (K96618 and M08182K001) Installation Instructions provides information on how to install Meter Master Seal Service Kit (K96618). Kit provides materials and instructions for complete changeout of all seals as a major rebuild.
3. MDE-2188 C, C+, and HD Meter Quad Ring Top Seal Replacement Kits (K35222 and K35222-01) provides information on how to install K35222 Kit. Kit contains enough top seals to service 10 meters.

GPU Self-contained Pumping Unit



Item #	Description	Current Part	Previous Part	Quantity
1	Gilbarco GPU	M04920B003	M04920B001	1 per Grade
Note: MDE-4447 Gilbarco Global Pumping Unit Operation and Service Manual provides service and kit information.				

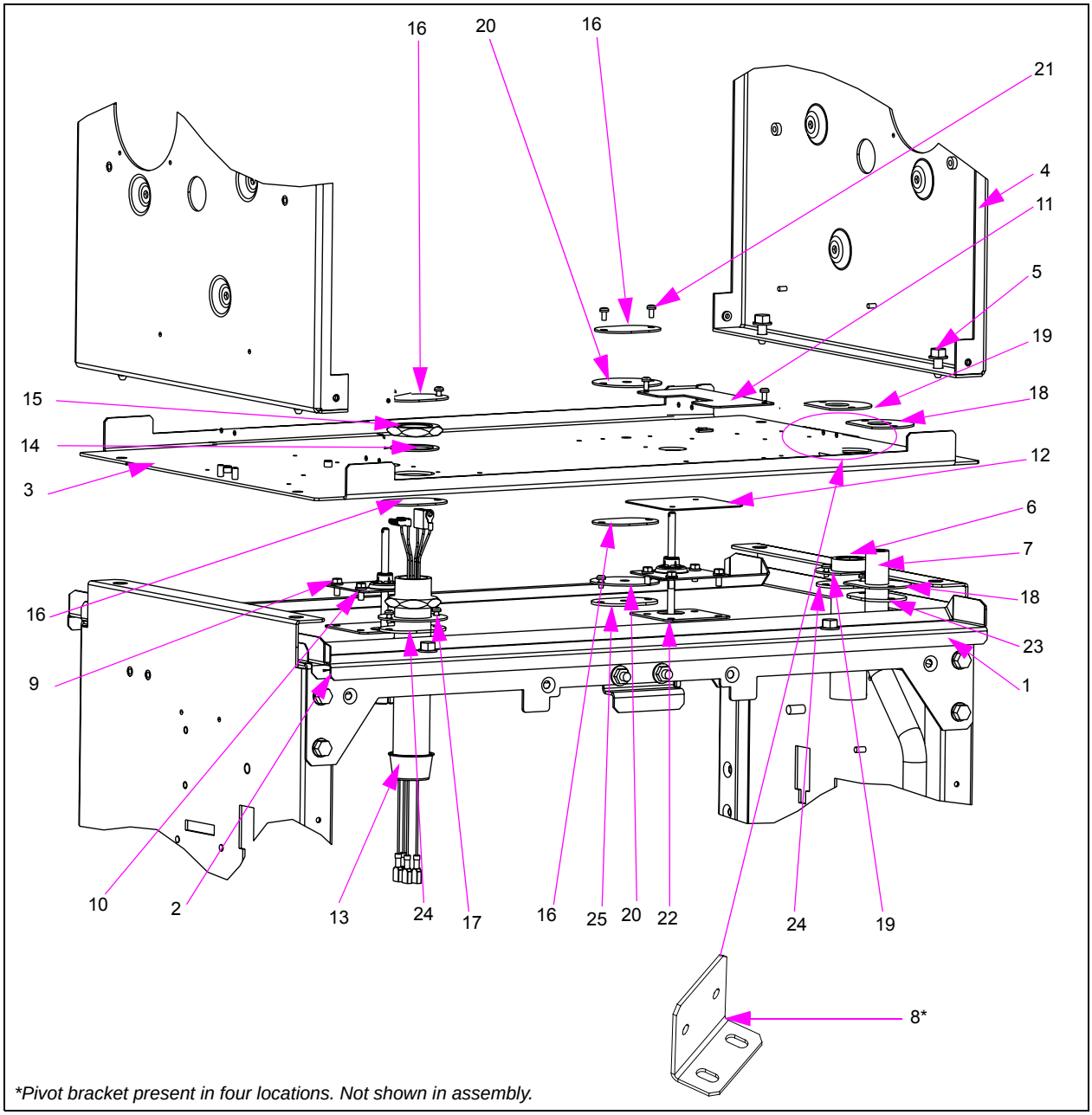
Self-contained Motors - 8700, 8800, 9100, 9840, 9852/53



Item #	Part Description	Current Part	Previous Part	Quantity
1	Assembly, Motor Plate	M04867A001	-	1
2	Motor 1 HP 115/230 V 1 PH 60 Hz	R14213-32	-	1
	Motor 1 HP 110/230 V 1 PH 50 Hz	R14213-33	-	1
	Motor 3/4 HP 220/380 V 3 PH 50/60 Hz	M01068B303	-	1
3	Nut, Metric, Hexagonal Serrated Flange (M8)	M00414B003	-	4
4	Conduit Nipple 1/2 X 5-1/4	R11976-62	-	1
5	Expansion Union (Conduit)	N16289-22	-	1
6	Bushing 3/4 X 1/2	K49827	-	1
7	Elbow, St 1/2 X 90	K42448	-	1
8	Nipple, 1/2 X 1-3/4	R11976-44	-	1
9	Elbow, 1/2 X 90	K42428	-	1
10	Nipple, 1/2 X 9	R11976-72	-	1
Motor Shock Mounts				
11	Cup Washer	G067735	-	4
12	Rubber Mount	G037885	-	4
13	Flat Washer, M8	M00959B016	-	2
14	Metric Socket Head Shoulder Bolt	M04869B001	-	2

9 – Air Gap - 8800, 9100, 9840, 9852/53

Air Gap Hardware and Computer Display (CD) Module Housing

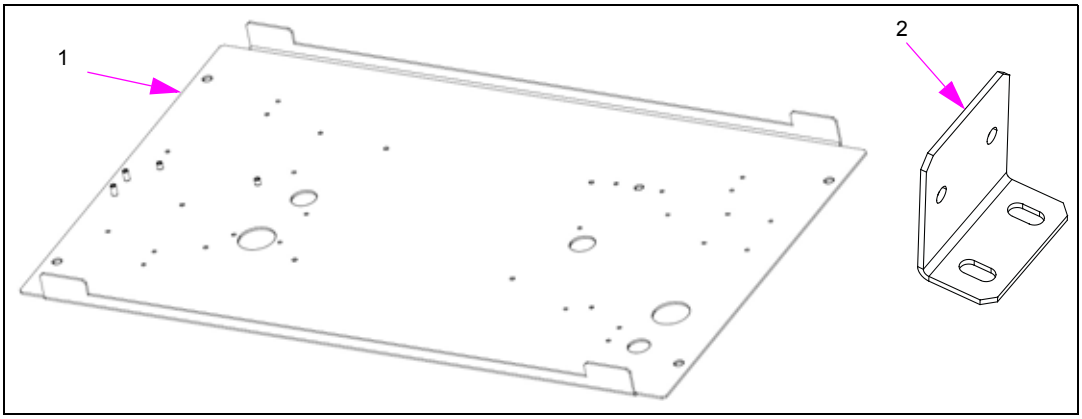


**Pivot bracket present in four locations. Not shown in assembly.*

Item #	Description	Part Number	Usage	Quantity
1	Lower Air Gap Plate	M04299B001	Comm Side-load Non-ATC, All Retail	1
	Lower Air Gap Plate	M04299B003	Comm Front-load and/or Comm ATC	
2	Rain Baffle Plate	M06690B001	All	2
3	Upper Air Gap Plate	M04461A001	Comm Side-load Non-ATC, All Retail	1
	Upper Air Gap Plate	M04461A002	Comm Front-load and/or Comm ATC	

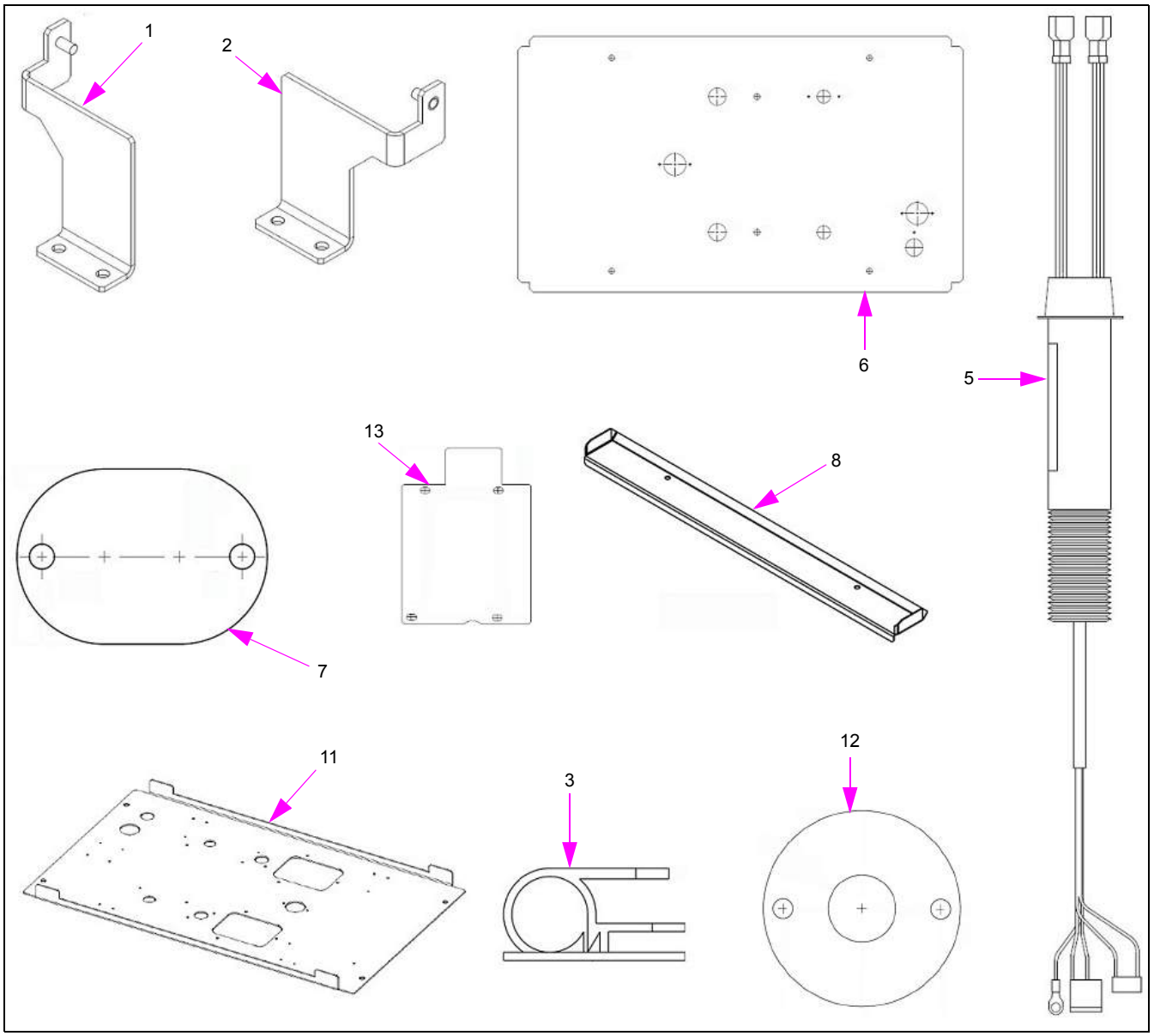
Item #	Description	Part Number	Usage	Quantity
4	Top Housing Assembly	M04483A001	All	1
5	Screw, M8 X 18 WH X Head	M00417B009	All	8
6	AC Conduit and Wire	M04850A006	Retail	1
	AC Conduit and Wire	M04850A008	Commercial	
7	DC Conduit and Wire	M05189A002	Commercial Pulse-out	1
	DC Conduit and Wire	M05189A004	Retail Pulse-out	
	DC Conduit and Wire	M05189A006	Commercial with TopKAT	
	DC Conduit and Wire	M05189A008	Commercial with TopKAT PLUS	
8	Pivot Bracket	M04884B001	All	4
9	Lower Pulser Seal Assembly	M03023A002	All Single or Dual	1 or 2
10	Screw, M5 X 10 WH X Head	M00417B101	All Single or Dual	4 or 8
11	Upper Pulser Blanking Plate	M05083B001	All Single	1
12	Lower Pulser Blanking Plate	M05244B001	All Single	1
13	I.S. Barrier	C06766	Commercial Front-load	1
14	Washer, 1.35 X 1.75 X 0.06	N16599-108	Commercial Front-load	1
15	Conduit Nut	N23655-01	Commercial Front-load	2
16	Conduit Blanking Plate	N23746-01	Comm Front-load or Comm ATC	2
17	Conduit Seal Washer	N23760-03	Commercial Front-load	1
18	Conduit Seal Washer	N23760-04	All with Pulse-out or RS-485	2
19	Conduit Seal Washer	N23760-06	All	2
20	Conduit Seal Washer	N23760-07	Commercial ATC	2
21	Screw, M4 X 8 Pan-head	M00417B224	All	
22	Pulser Drive Gasket	M03081B001	All Canada Single or Dual	1 or 2
23	Conduit Seal Gasket	N23761-01	All Canada Pulse-out or RS-485	1
24	Conduit Seal Gasket	N23761-03	All Canada or Canada Front-load	1 or 2
25	Conduit Seal Gasket	N23761-04	Commercial Canada ATC	1

Diesel Exhaust Fluid (DEF) Air Gap Hardware



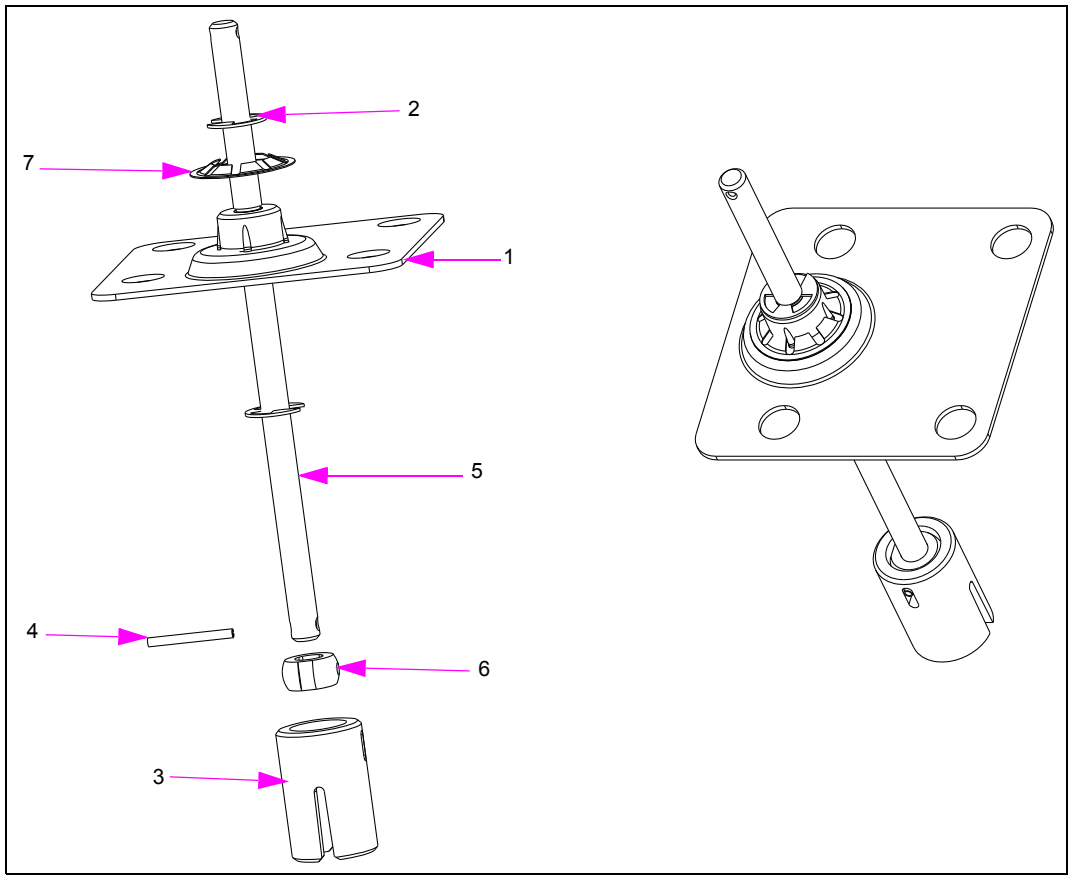
Item #	Description	Part Number	Quantity
1	Plate, Upper Electric Cabinet	M04461A002	1
2	Bracket, Pivot	M04884B001	4
Not Shown			
-	Screw, Metric M8 X 18	M00417B009	4
-	Screw, Metric M4 X 18	M00417B224	8

E85 Air Gap Hardware



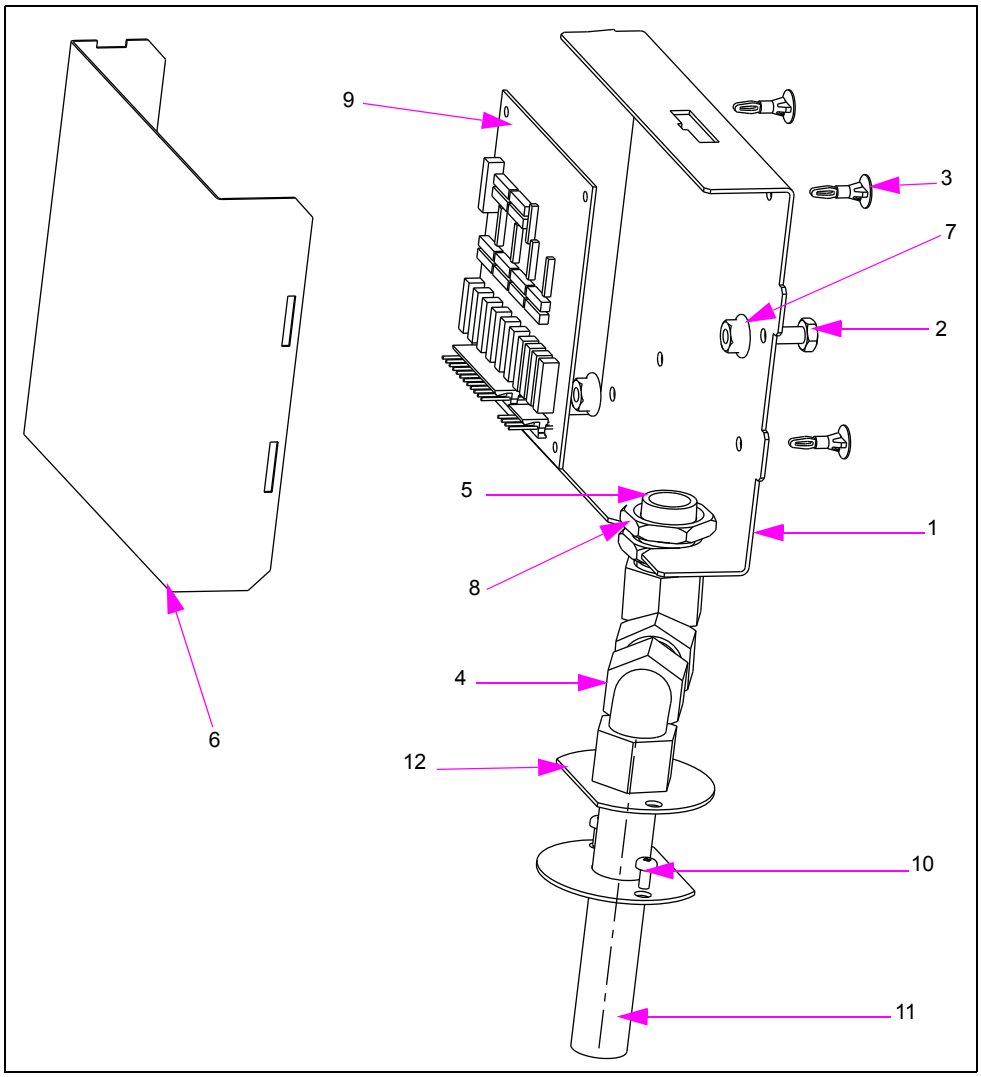
Item #	Description	Part Number	Quantity
E85 Front Load - Dual Side			
1	Assembly, Bracket, Pivot Left	M11419A001	2
2	Assembly, Bracket, Pivot Right	M11419A002	2
3	Cable Mount, Adhesive	Q13558-04	5
4	Nut Conduit 1.00	N23655-01	2
5	I.S. Barrier Assembly	C06766	1
6	Plate, Vapor Barrier Lower	M11615B001	1
7	Plate, Conduit Seal	N23746-01	2
8	Plate Air Gap Rain Baffle	M06690B001	2
9	Screw, Metric M4 X 8	M00417B113	16
10	Screw, Metric M8 X 18	M00417B009	8
11	Vapor Barrier, Upper	M05539B003	1
12	Washer 1” Conduit Seal	N23760-03	2
E85 Front Load - Single Side			
1	Assembly, Bracket, Pivot	M11419A001	2
2	Assembly, Bracket, Pivot	M11419A002	2
3	Cable Mount, Adhesive	Q13558-04	5
4	Nut Conduit 1.00	N23655-01	2
5	I.S. Barrier Assembly	C06766	1
6	Plate, Vapor Barrier Lower	M11615B001	1
7	Plate, Conduit Seal	N23746-01	2
8	Plate Air Gap Rain Baffle	M06690B001	2
9	Screw, Metric M4 X 8	M00417B113	16
10	Screw, Metric M8 X 18	M00417B009	8
11	Vapor Barrier, Upper	M05539B003	1
12	Washer 1” Conduit Seal	N23760-03	2
13	Plate, Cover Prop Valve	M11569B001	1
E85 Side Load - Single Side			
1	Assembly, Bracket, Pivot	M11419A001	2
2	Assembly, Bracket, Pivot	M11419A002	2
3	Cable Mount, Adhesive	Q13558-04	5
4	Plate, Conduit Seal	N23746-01	4
6	Plate, Vapor Barrier Lower	M11615B001	1
8	Plate Air Gap Rain Baffle	M06690B001	2
9	Screw, Metric M4 X 8	M00417B113	18
10	Screw, Metric M8 X 18	M00417B009	8
11	Vapor Barrier, Upper	M05539B003	1
13	Plate, Cover Prop Valve	M11569B001	1

Lower Pulser Seal Assembly - 8800, 9840, 9852, 9853



Item #	Description	Current Part	Previous Part	Quantity
Assembly, Lower Pulser Seal		M03023A002	-	1
1	• Assembly Plate Lower Pulser	M03015A002	-	1
2	• Fastener Push-on Prong - Slotted	M03025B001	-	1
3	• Link, Pulser Drive	M00136B002	-	1
4	• Roll Pin 5/64 X 3/4 SSTL	K78378-47	-	1
5	• Shaft Pulser	M00137B004	-	1
6	• Swivel Ball	K93546	-	1
7	• Truarc Retaining Ring	K76238-22	-	2

Retail Front-load Activation Assembly (Retail)



Item #	Description	Current Part	Previous Part	Quantity
Retail Front-load Activation Assembly		M06050A001	-	1
1	• Base, I.S. Barrier Encore Ultra-Hi	M05860B001	-	1
2	• Bolt, 1/4-20 X 1/2 HHC	K05287	-	2
3	• Circuit Board Support	Q10651-29	-	4
4	• Conduit Elbow 1/2	G025030	-	2
5	• Conduit Nipple 1/2 X 1-1/2	R11976-42	-	2
6	• Cover, I.S. Barrier	M05861B001	-	1
7	• Nut Hexagonal Flanged 1/4 - 20	Q11890-04	-	2
8	• Lock Nut, 1/2 NPT Machined	K89681	-	2
9	• PCA, I.S. Barrier	T19301-G1	-	1
10	• Screw, Thread Forming, Phillips Pan-head M4 X 8	M00417B224	-	2
11	• Conduit and Cable Assembly	M05969A002	-	1
12	• Washer, Conduit Seal	N23760-04	-	2

10 – Software Kits

Following table details the type of dispenser or pump and relevant software kits required:

Dispenser or Pump	Type	Conversion Factor	PCB Used on	Software
Electronic Commercial Units	Standard 9800K	Gallons	M05346A002 CPUs, M05346A004 CPUs	M03946K001
	Standard 9800K	Liters		M03946K002
	Standard 9800K	Imperial Gallons		M03946K003
	Super-Hi 9840K	Gallons		M03946K004
	Super-Hi 9840K	Liters		M03946K005
	Super-Hi 9840K	Imperial Gallons		M03946K006
	Ultra-Hi 9850K	Gallons	C06392 CPUs, C06394 CPUs, C06501 CPUs, C06503 CPUs	C06426K9850G
	Ultra-Hi 9850K	Liters		C06426K9850L
	Ultra-Hi 9850K	Imperial Gallons		C06426K9850M (obsolete)
Electronic Commercial Units	Standard 9800K (Models: 9852K, 9853K)	Selectable at M06333KXXXX CPU	M06333K9800K CPU	M06656K001 (see note 1)
	Ultra-Hi 9850 (Models: 9850A/Q, 9850K) (see note 2)		M06333K9850 CPU	M06656K002 (see note 1)
	Super-Hi 9840K (Model: 9840K)		M06333K9840K CPU	M06656K003 (see note 1)
	Standard 9800Q (Models: 9852A/Q, 9853A/Q, 9822A/Q, 9823A/Q/K)		M06333K9800AQ CPU	M06656K004 (see note 1)
	Super-Hi 9840Q (Model: 9840A/Q)		M06333K9840AQ CPU	M06656K005 (see note 1)
	Standard Electronic Calibration [E-CAL (Models: 9862K, 9872K)]		M06333KECAL CPU	M06656K006 (see note 1)
Electronic Retail Units	Standard 8800K	Programmable	-	K93682-G1
	Standard 8800K	Liters Only	-	K93682-G7
	8800K (With Pulse-out)	Programmable	-	M07889K001
	8800K (With Pulse-out)	Liters Only		M07889K002
	ATC Software	Programmable	-	K94160-01

Notes:

1. Atlas 9800 serial Electronically Erasable Programmable Read Only Memory (EEPROM) boards used for reprogramming CPU Boards (M06333KXXXX) Software Kit M06656K100 contains parts of M06656K001 - K006 (one of each).

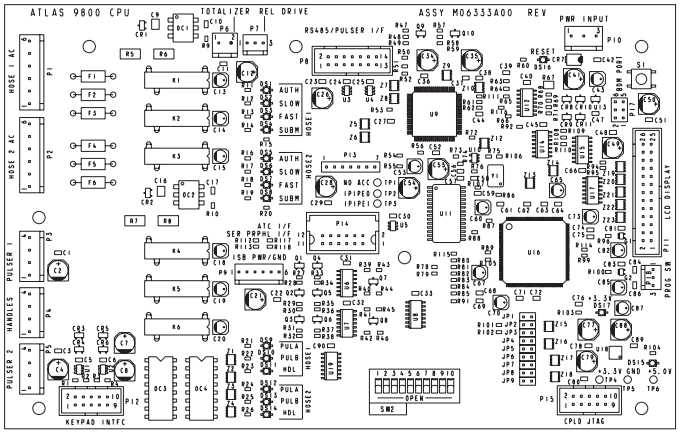
2. Verify the 9850A model units serial number on the outside model /serial tag: If the serial number is 472238 or higher, use the 9850 Software on the CPU. If the serial number is lower than 472238 use the 9800AQ Software on the CPU M06333K.

This page is intentionally left blank.

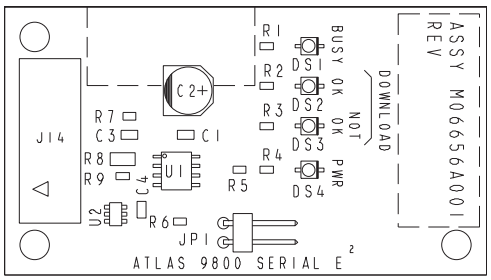
11 – Commercial PCB

Commercial PCBs (Non-Ultra-Hi)

PCA (CPU and Serial EEPROM)



PCA, CPU



PCA, Serial EEPROM

Part Description	Current Part	Previous Part	Quantity	Software Type
PCA, Atlas 9800 CPU, Dual, 115 V/230 V (see notes 1 and 2)	M06333K9800K (Models: 9852K, 9853K)	M05346A001 - A004	1	Standard 9800K
	M06333K9840K (Model: 9840K)	M05346A001 - A004	1	Super-Hi 9840K
	M06333K9800AQ (Models: 9852A/Q, 9853A/Q, 9822A/Q, 9823A/Q/K)	C06392, C06394, C06501, C06503	1	Standard 9800AQ
	M06333K9840AQ (Models: 9840A/Q)	C06392, C06394, C06501, C06503	1	Super-Hi 9840AQ
	M06333KECAL (Models: 9862KX, 9872KX)	N/A	1	Standard DEF (9862KX), E85 (9872KX)
PCA, Atlas 9800 Serial EEPROM [Reprogramming card for M06333KXXXX CPU PCA (see note 3)]	M06656K001	N/A	1	Standard 9800K
	M06656K003		1	Super-Hi 9840K
	M06656K004		1	Standard 9800Q
	M06656K005		1	Super-Hi 9840Q
	M06656K006		1	Standard DEF (9862KX), E85 (9872KX)

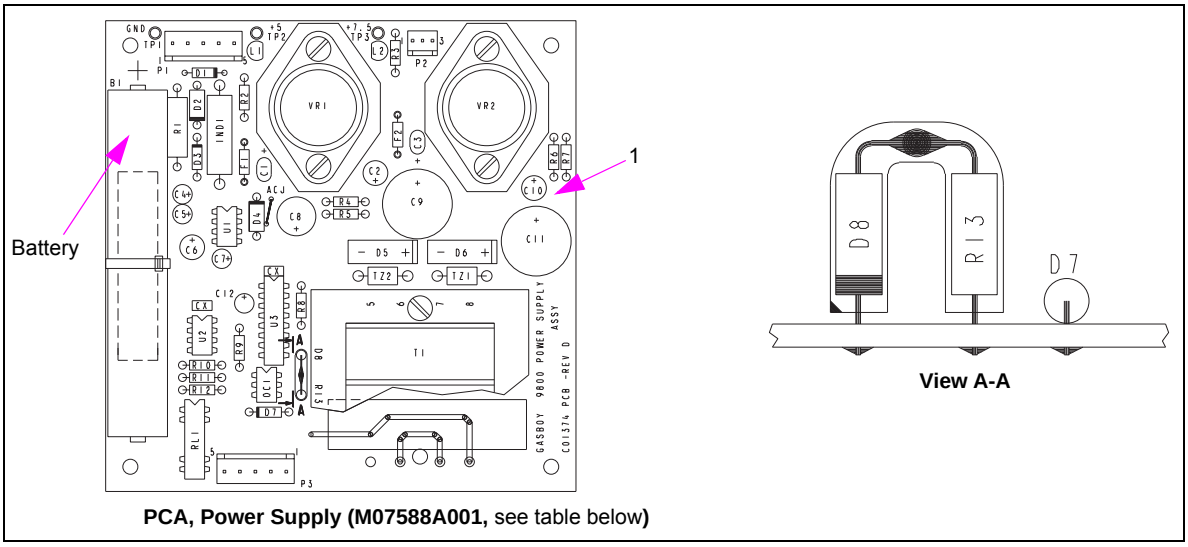
Notes:

1. M06333KXXXX requires an Atlas 9800 Power Supply (M07588A00X).

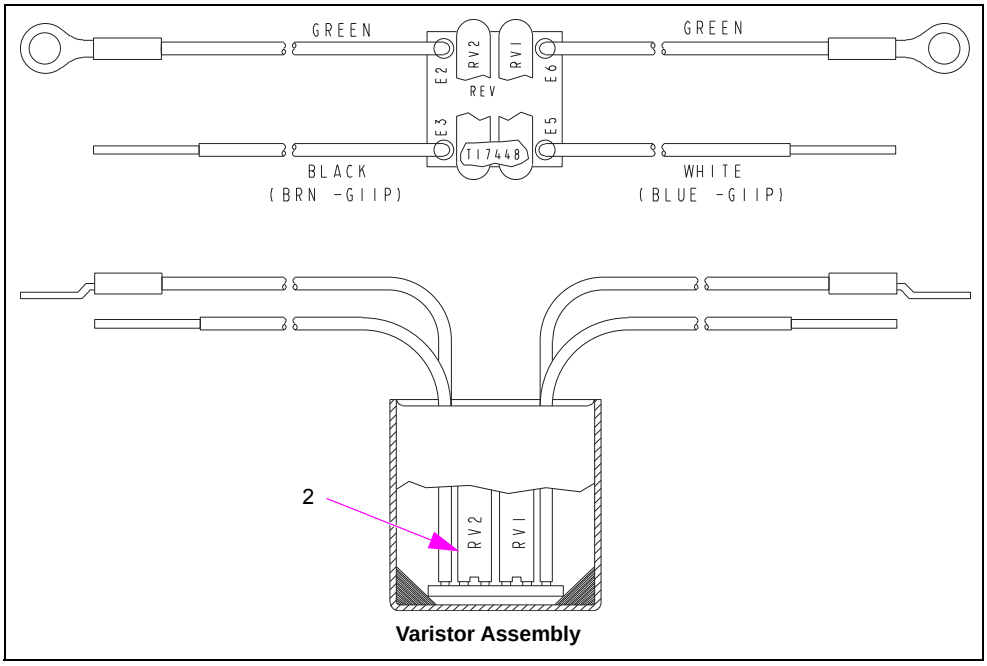
2. The only difference between the Atlas 9800 CPU Boards (M06333KXXXX) is the software type.

3. Software Kit M06656K100 contains parts of M06656K001 - K006 (one of each).

Commercial Power Supply



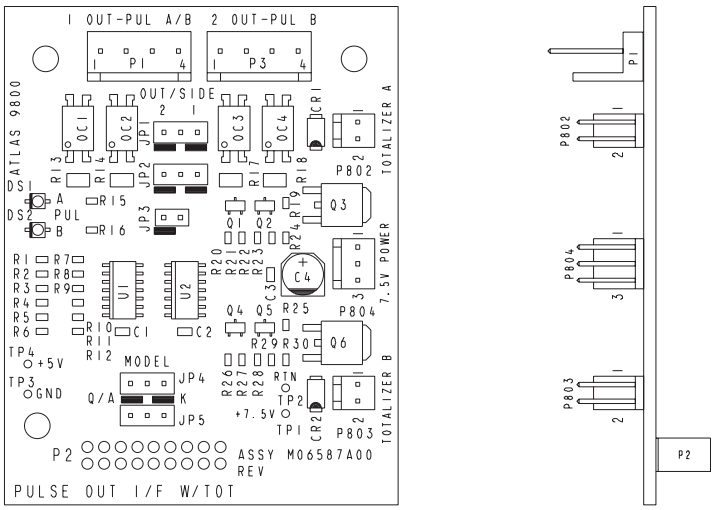
PCA, Power Supply (M07588A001, see table below**)**



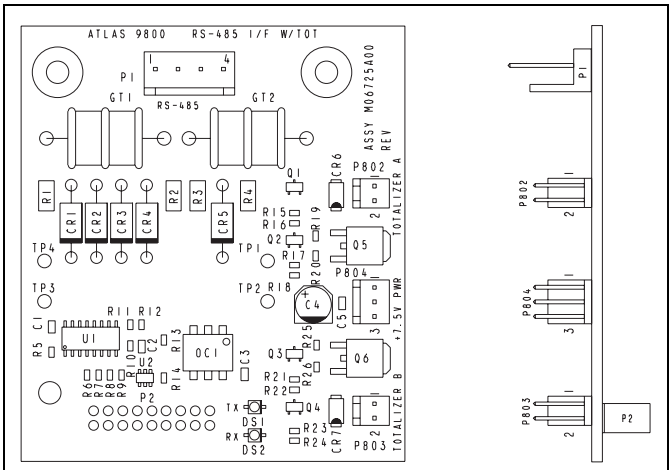
Varistor Assembly

Item #	Part Description	Current Part	Previous Part	Quantity
1	Kit, Atlas 9800 Power Supply, 115 V with Battery	M12421K00X	M07588A001, C06397	1
	PCA, Atlas 9800 Power Supply, 115 V Without Battery	M07588A002	C06396	1
	Kit, Atlas 9800 Power Supply, 230 V with Battery	M12422K00X	M07588A003, C06489	1
	PCA, Atlas 9800 Power Supply, 230 V Without Battery	M07588A004	C06488	1
2	Varistor Assembly, 115 V	T17448-G1	-	1
	Varistor Assembly, 230/380 V	T17448-G3	-	1
Note: For M12421K00X and M12422K00X Kits, the number of displays needed defines the kit number. If only one display is needed, the kit number is either M12421K001 or M12422K001. For two displays, the kit number is M12421K002 or M12422K002. If four displays are needed, the kit number is M12421K003 or M12422K003.				

Pulse-out I/F/RS-485 I/F



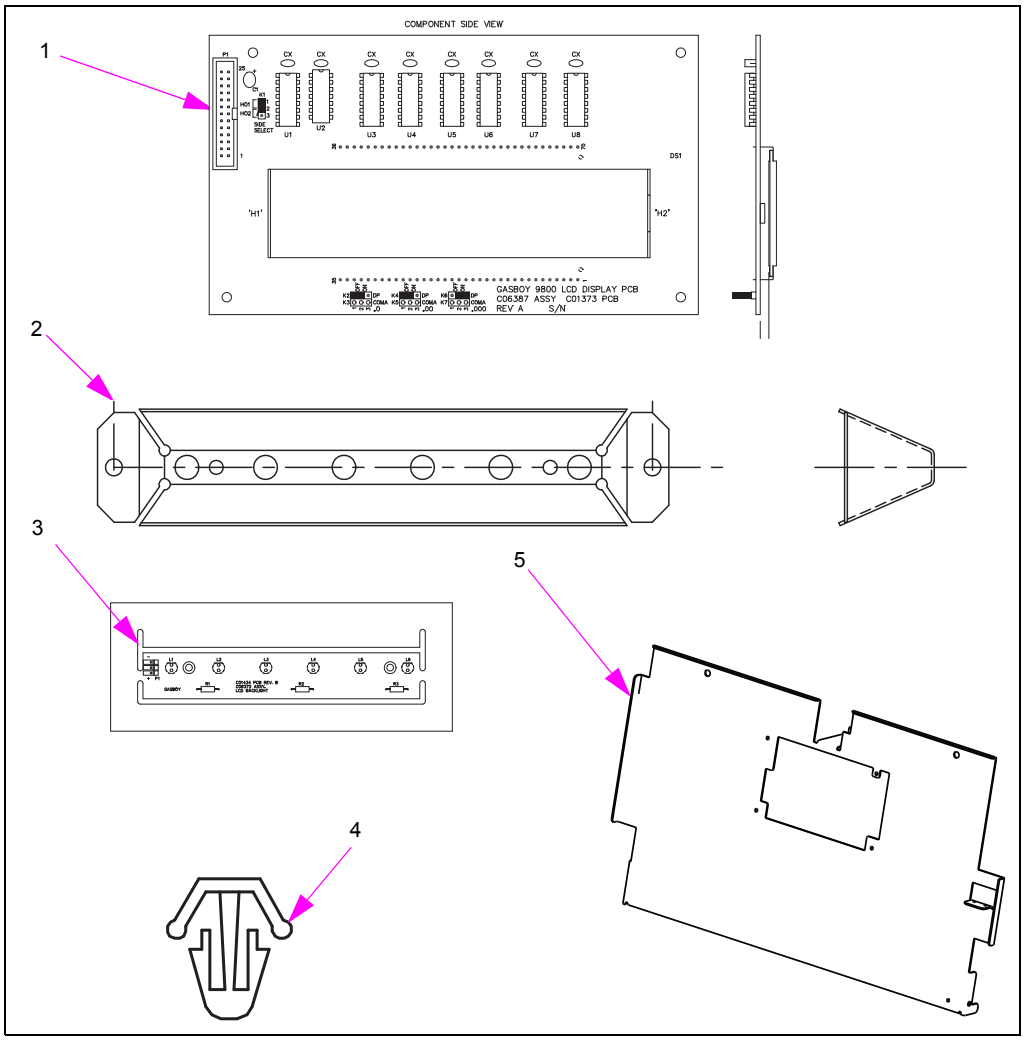
PCA, Pulse-out I/F with Electro-mechanical Totalizer



PCA, Atlas 9800 RS-485, Interface with Totalizer

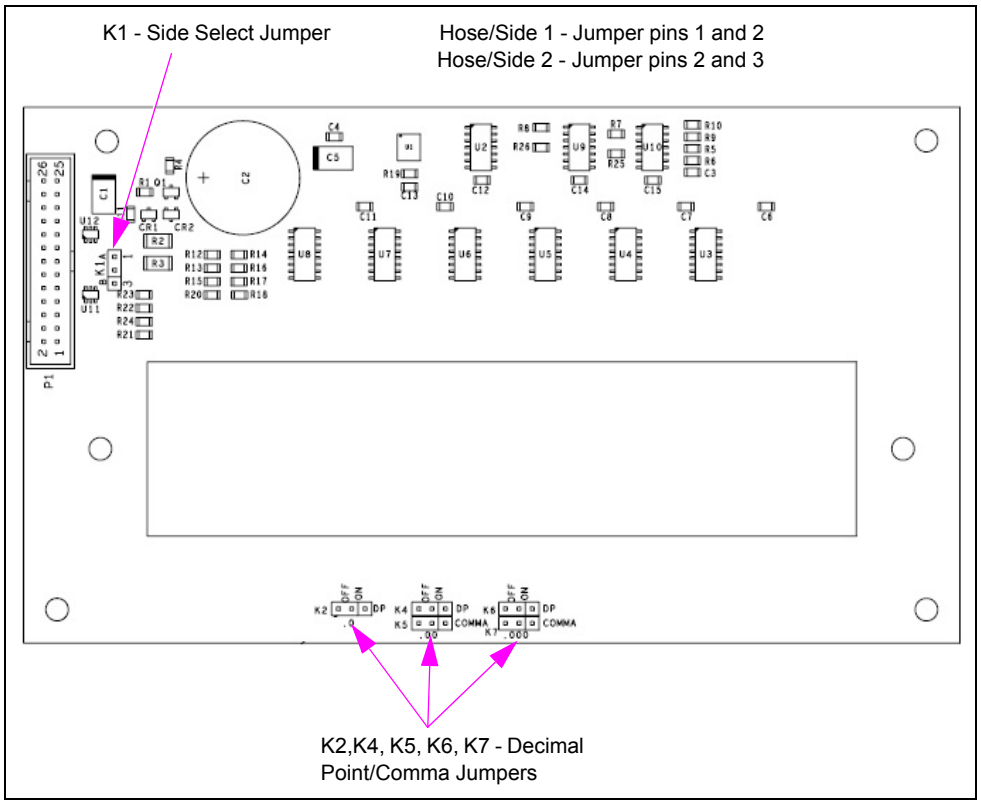
Item #	Part Description	Current Part	Previous Part	Quantity
1	PCA Atlas 9800, Pulse-out I/F (Dual Common/Distinct Outputs, Two Dual Common Outputs) with Electro-mechanical Totalizer	M06587A001	M05158A001 (Dual Distinct Outputs) M05158A002 (Dual Common Outputs) and M05158A003	1
2	PCA, Atlas 9800 RS-485, Interface with Totalizer	M06725A001	M05248A001 (obsolete)	1

Displays and Display Panels



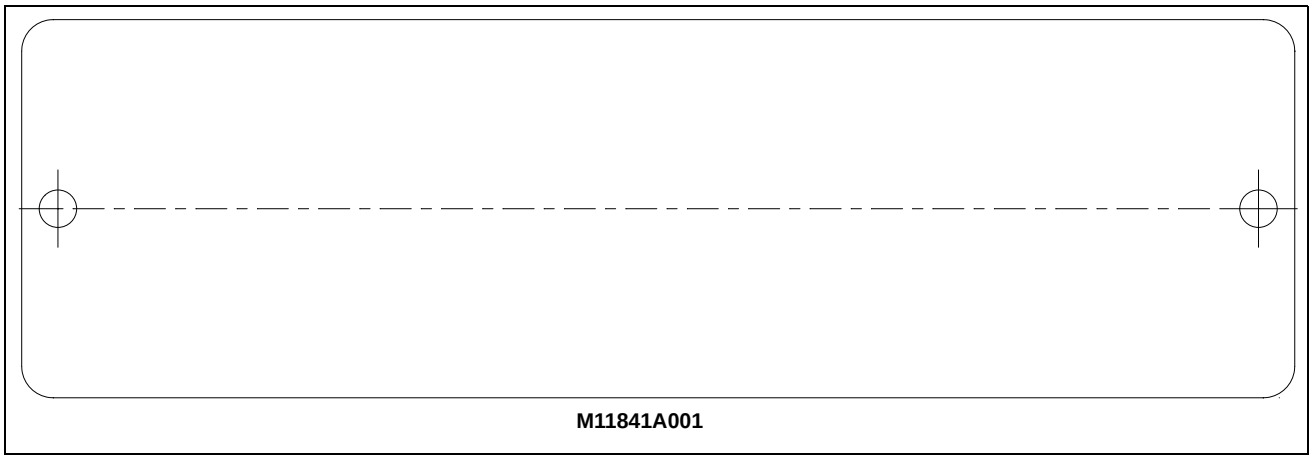
Item #	Part Description	Current Part	Previous Part	Quantity
1	PCB Assembly Liquid Crystal Display (LCD)	M12158A004	C06387	1
2	Reflector-LCD Backlight 9	C35399	-	1
3	PCB Assembly LED Sale Backlight	C06372	-	1
4	Mounting Button	C09701	-	2
5	Panel, PC Board Support (Used on Commercial Single only)	M05045B001	-	1
	Panel, PC Board Support (Used on Commercial Dual only)	M05044B001	-	1

New Super Cap Main Display [M11714A002 (Atlas 9800 only)]



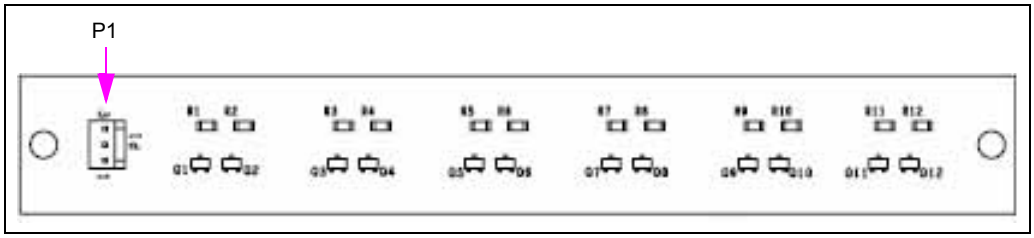
Display	K2	K4	K5	K6	K7
000000	OFF	OFF	OFF	OFF	OFF
00000.0	ON	OFF	OFF	OFF	OFF
0000.00	OFF	ON	OFF	OFF	OFF
0000,00	OFF	ON	ON	OFF	OFF
000.000	OFF	OFF	OFF	ON	OFF
000,000	OFF	OFF	OFF	ON	ON

Diffuser

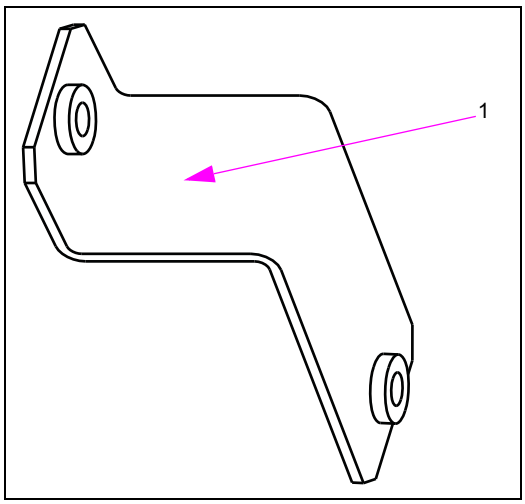


Item #	Part Description	Current Part	Quantity
1	Display, Diffuser Solid White	M11841A001	-

New Main Display Backlight [M12019A001 (Atlas Commercial only)]



Display Panel Stop Bracket

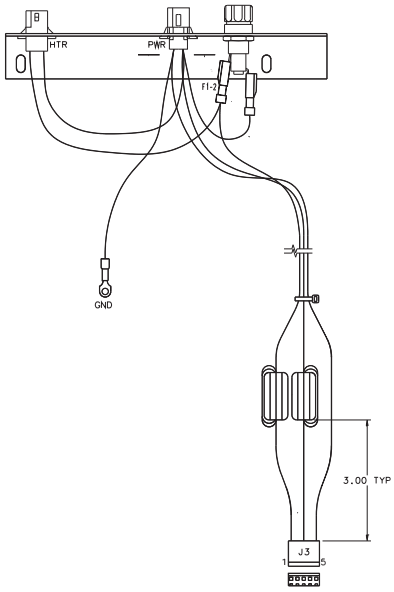


Item #	Part Description	Current Part	Previous Part	Quantity
1	Bracket, PC Board Support	M05611A002	M05611A001	1

12 – Commercial Cables

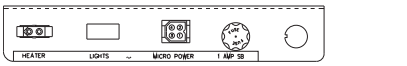
Note: For cable block diagram, refer to MDE-4334 Commercial and Retail Series Atlas Start-up/Service Manual.

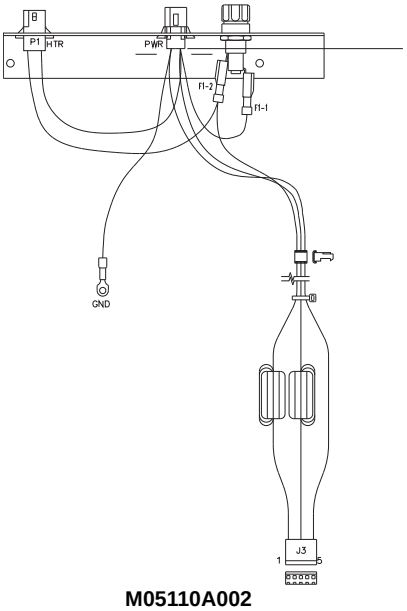
Part Description	Current Part	Previous Part
AC Fuse Cable Assembly (standard)	M05110A001	-
AC Fuse Cable Assembly (DEF)	M05110A002	-
Main AC Power Cable Assembly (standard)	M04850A008	-
Main AC Power Cable Assembly (E85)	M04850A010	-
DC Cable Assembly, Pulse-out/RS-485	M05189A002	-
DC Cable Assembly, Dispenser Mount TopKAT	M05189A006	-
DC Cable Assembly, Dispenser Mount TopKAT PLUS	M05189A008	-
Display Panel Ground Cable Assembly (E85)	C06178	-
Display Cable, Single	C06455	-
Display Cable, Dual	M05109A001	-
Backlight Power Cable	M05108A001	-
Pulser Adapter Cable	M05201A001	-
Handle Switch Cable, Single	M05105A002	-
Handle Switch Cable, Dual	M05105A001	-
Handle Switch Cable, Single WWDEF	M05105A003	-
Heater Cable, 115 V (see note)	M05120A001	-
Heater Cable, 230 V	M05120A002	-
Authorization Cable (10 W Power Resistor Assembly), 115 VAC	C05818	-
Totalizer/ATC Sensor Cable	M05119A001	-
Varistor, 115 V	T17448-G1	-
Varistor, 230 V	T17448-G3	-
Electro-mechanical Totalizer	M00455A002	-
Display Panel Ground Cable Assembly (standard)	C06454	-
I.S Barrier, Front-load	C06766	-
Not Shown		
Magnet, Actuator	Q12514-02	-
Note: Available as spare part only.		

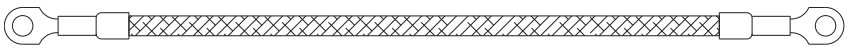


C05818

M05110A001

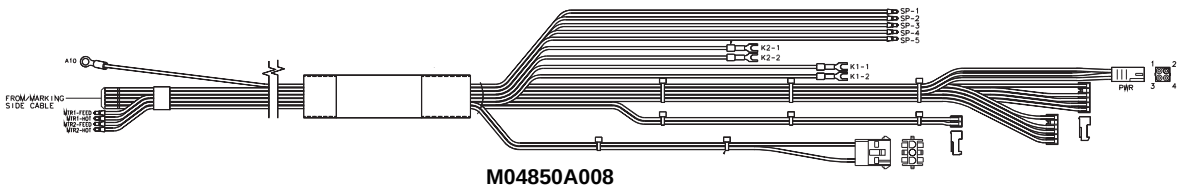




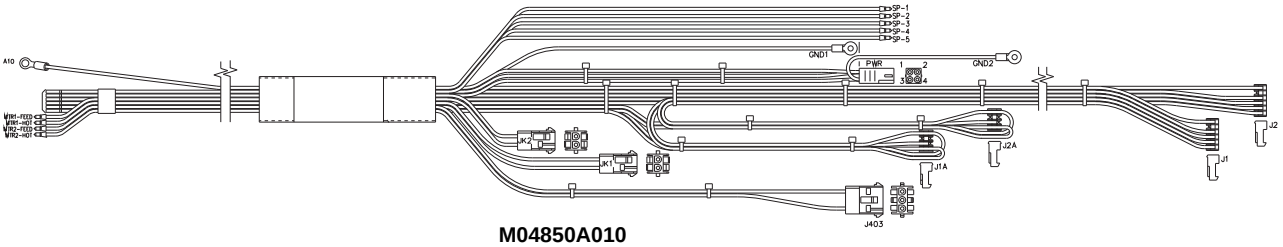


C06178

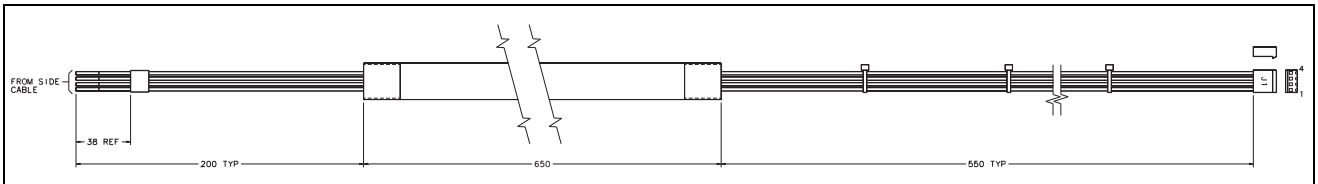
M05110A002



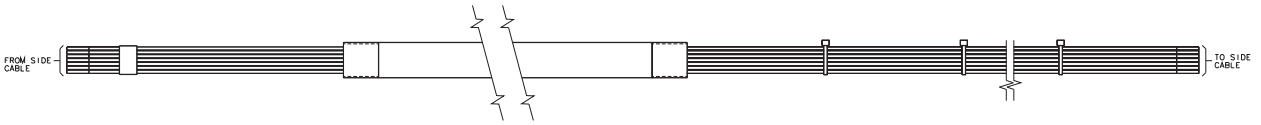
M04850A008



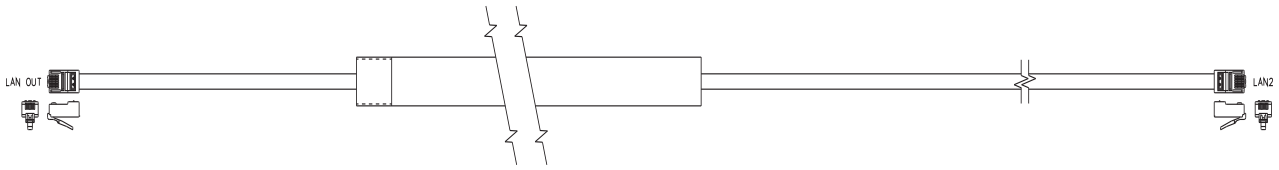
M04850A010



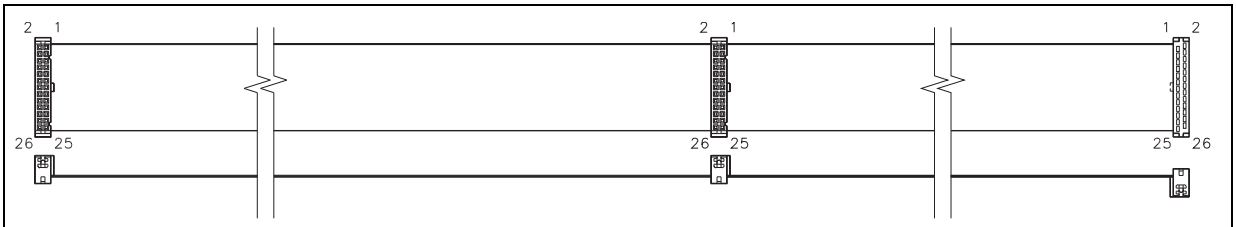
M05189A002



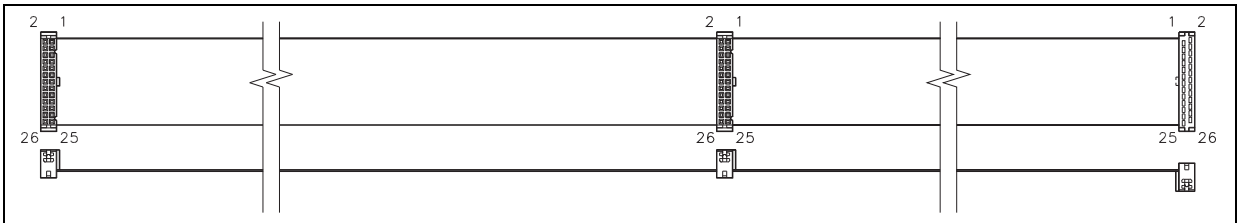
M05189A006



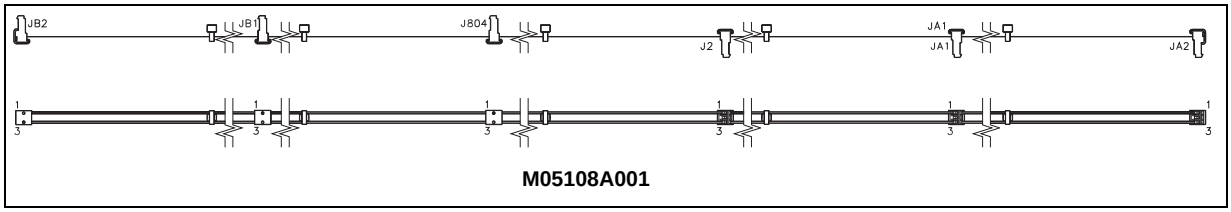
M05189A008



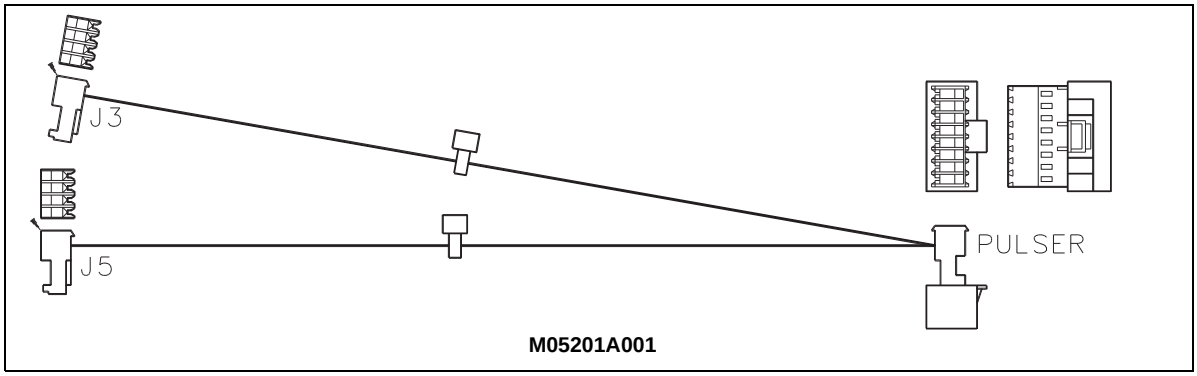
C06455



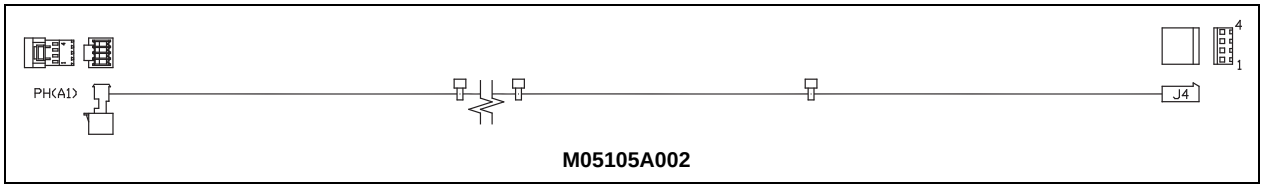
M05109A001



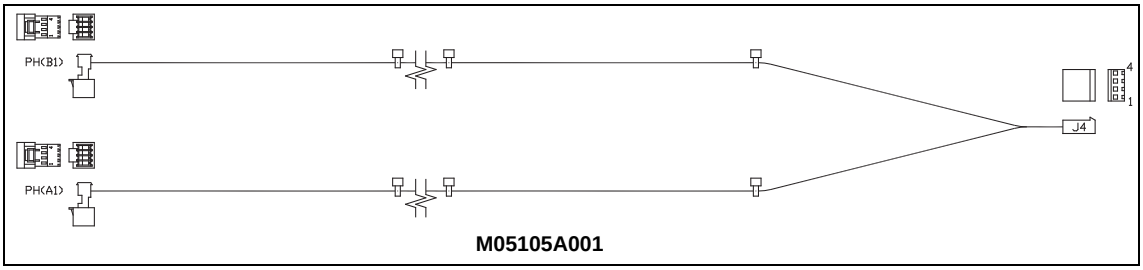
M05108A001



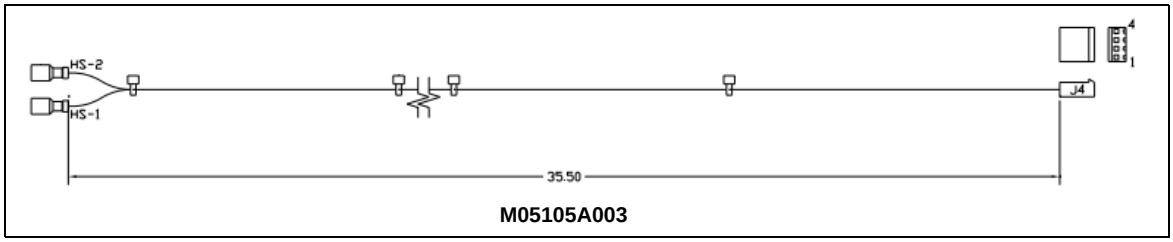
M05201A001



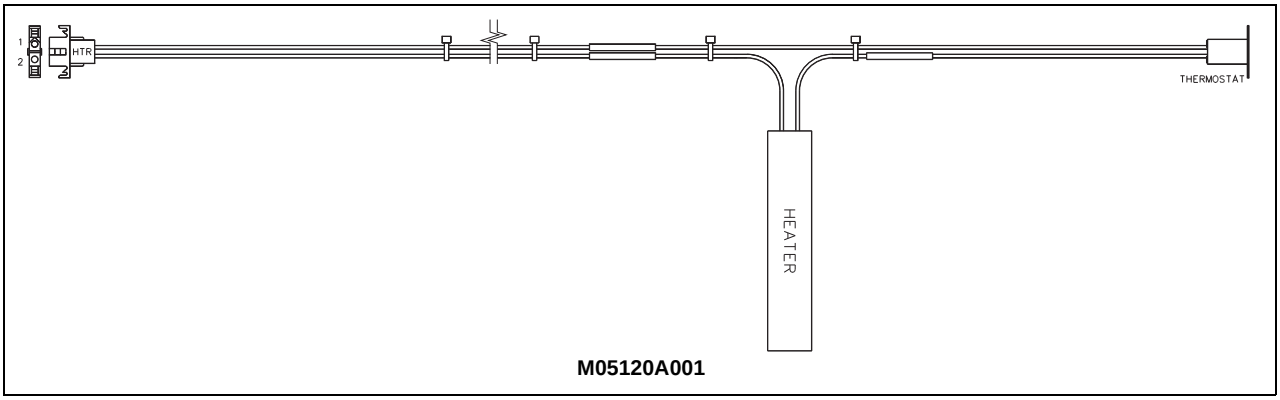
M05105A002



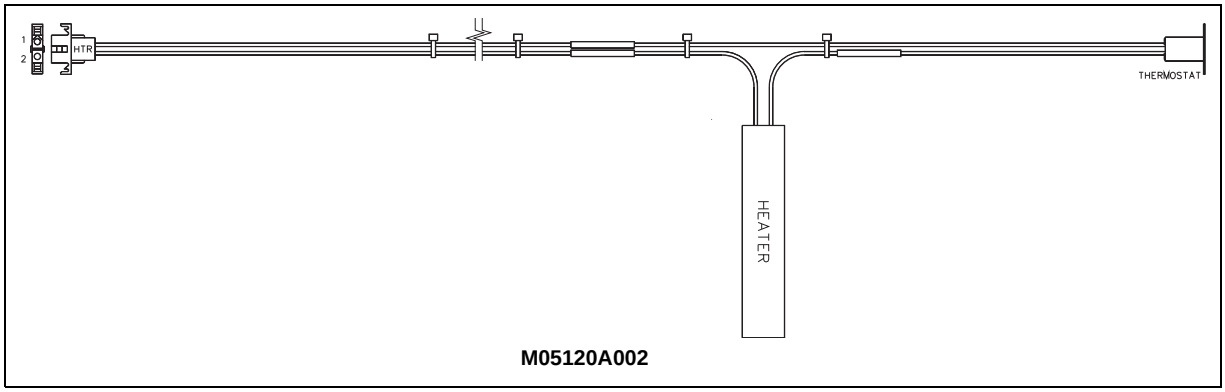
M05105A001



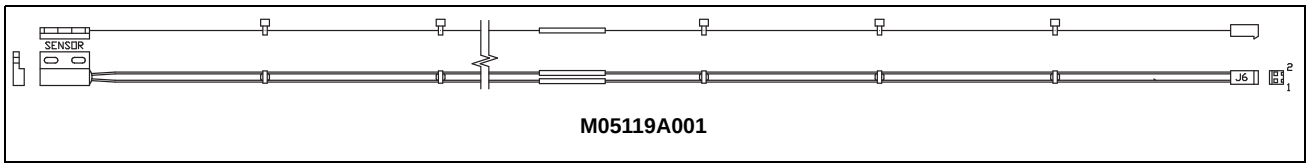
M05105A003



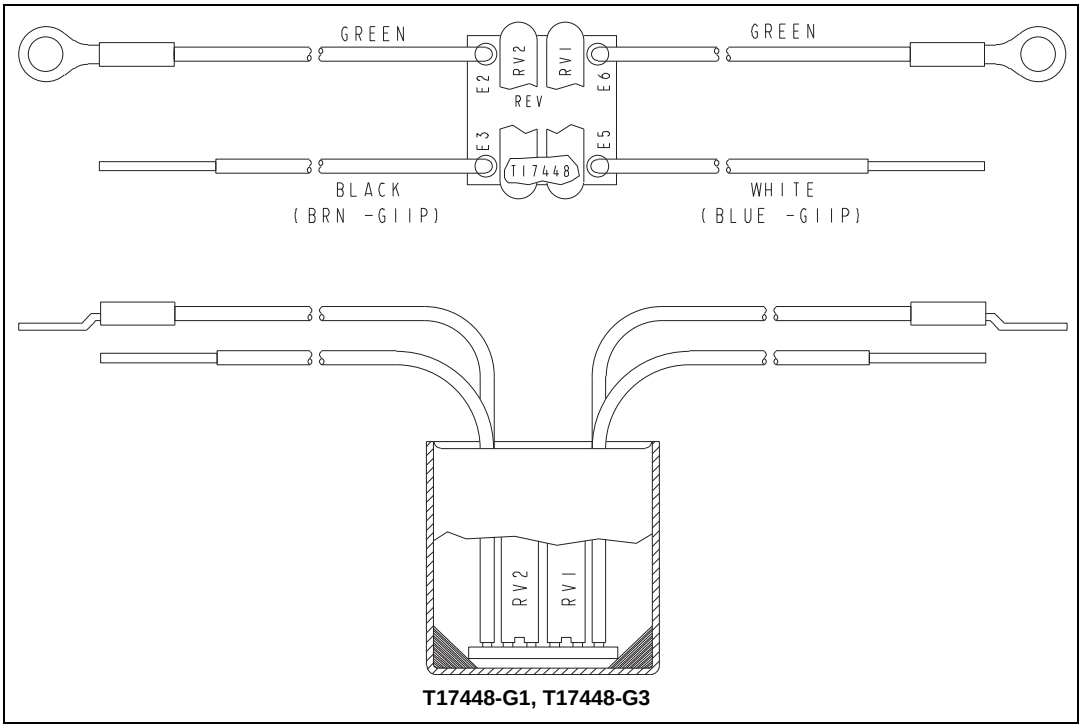
M05120A001



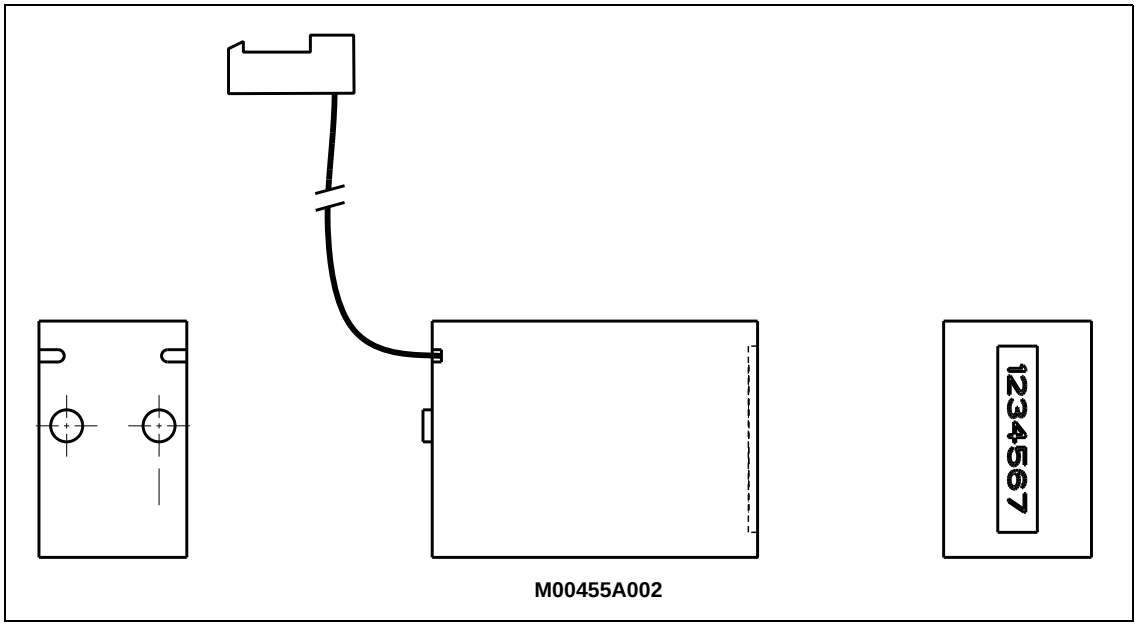
M05120A002



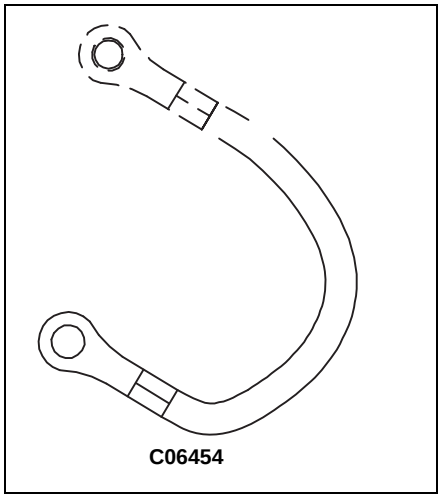
M05119A001



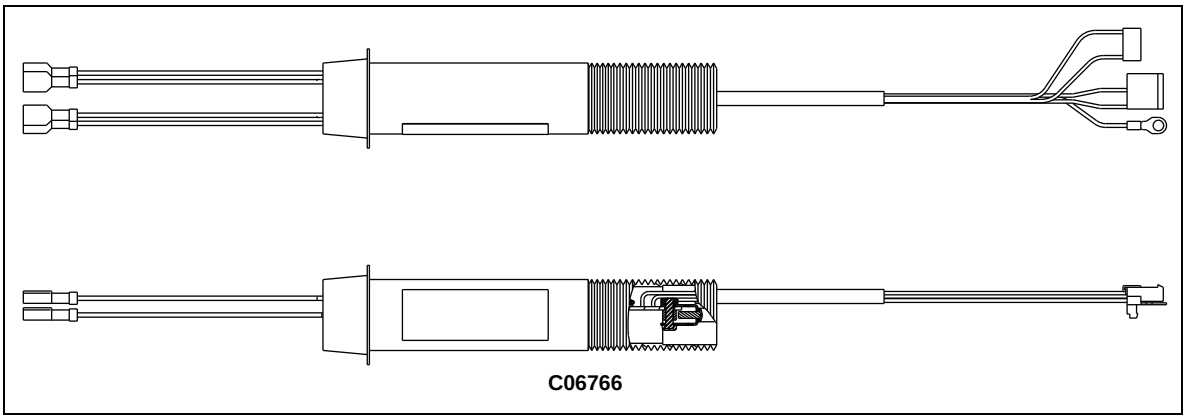
T17448-G1, T17448-G3



M00455A002



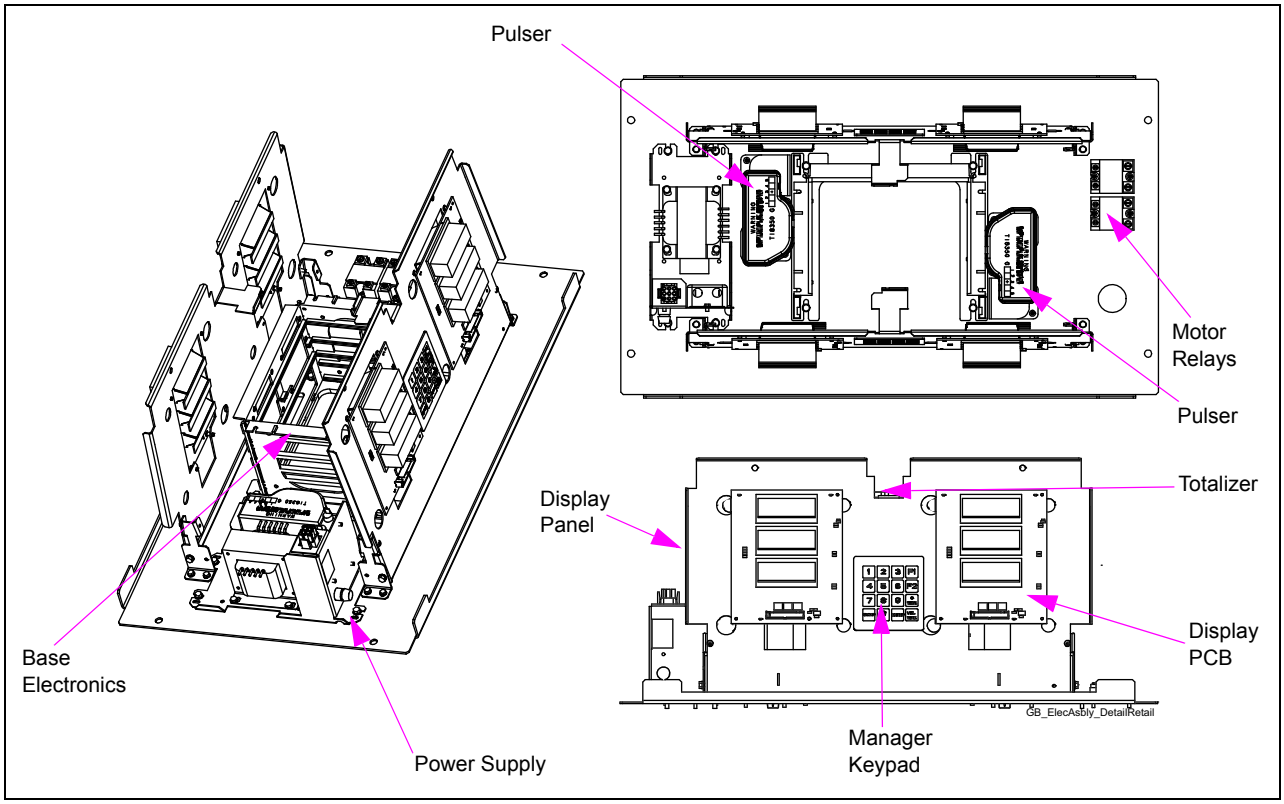
C06454



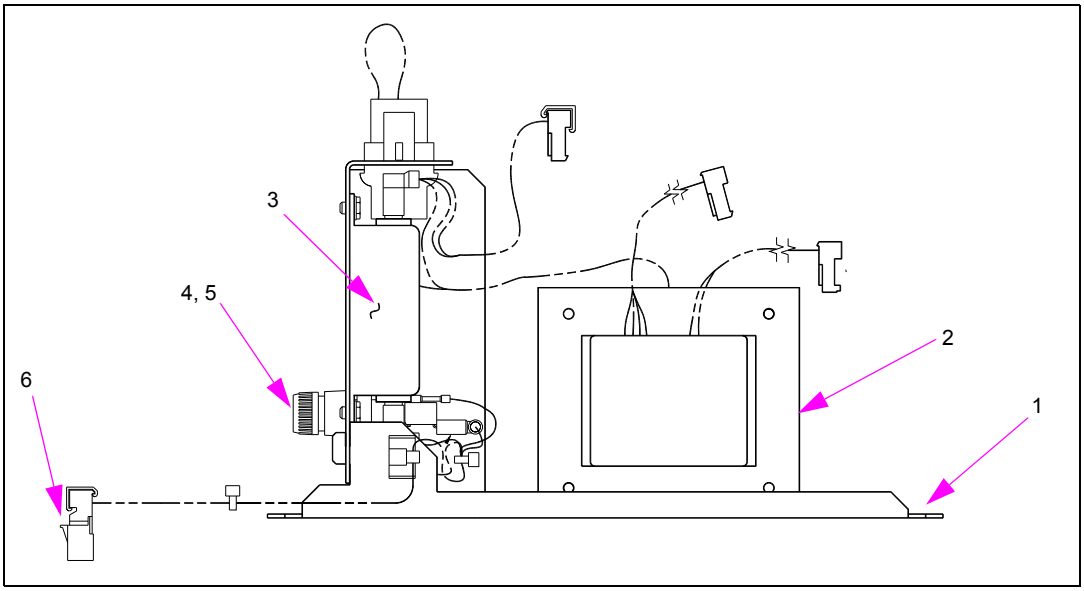
C06766

13 – Retail Electronics Section

Retail Electronics Assembly - CD Module

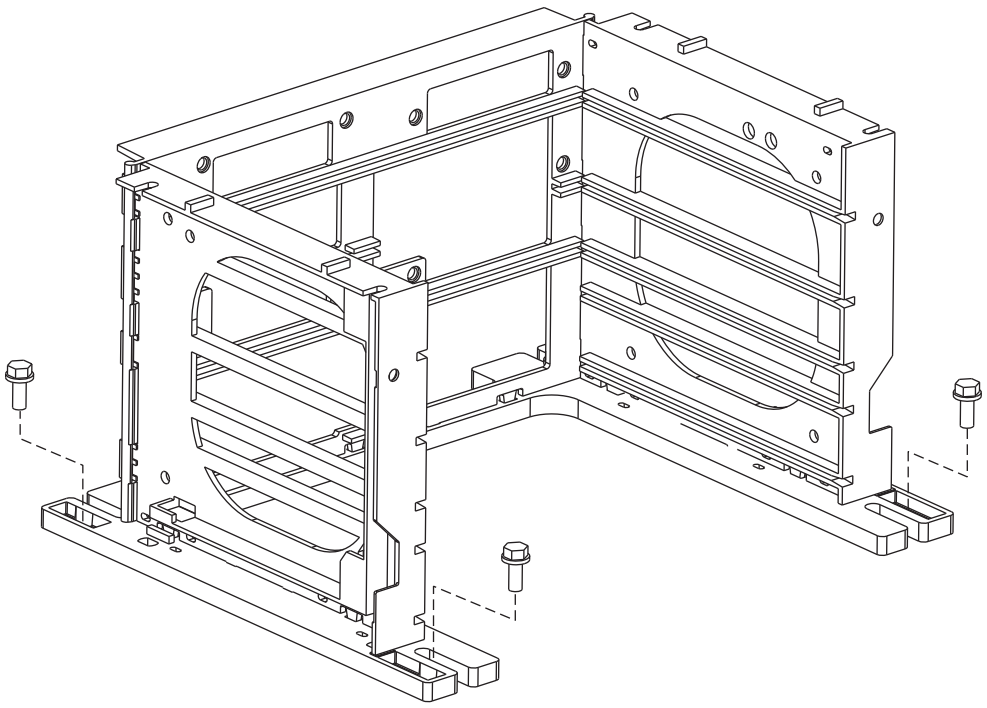


Power Supply

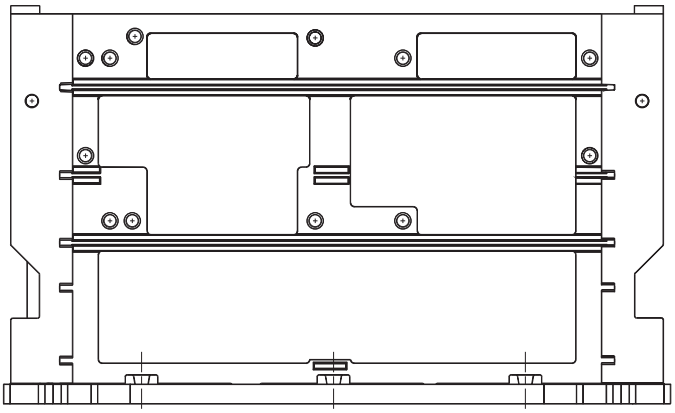


Item #	Part Description	Current Part	Previous Part	Quantity
Power Supply Assembly		T19868-G1	-	1
1	• Bracket, Power Supply	T19696-01	-	1
2	• Transformer, Sub-assembly	R20333-G1	-	1
3	• Filter	Q10895-07	-	1
4	• Fuse Holder Assembly	Q11781-01	-	1
5	• Fuse 3 A, 250 SB	Q10131-03	-	1
6	• Cable, Power Supply	R20283-G1	-	1
Not Shown				
-	Varistor Assembly	Refer to "Retail Cables" on page 15-1.		
-	Voltage Select Plug	Refer to "Retail Cables" on page 15-1.		

Card Cage Assembly



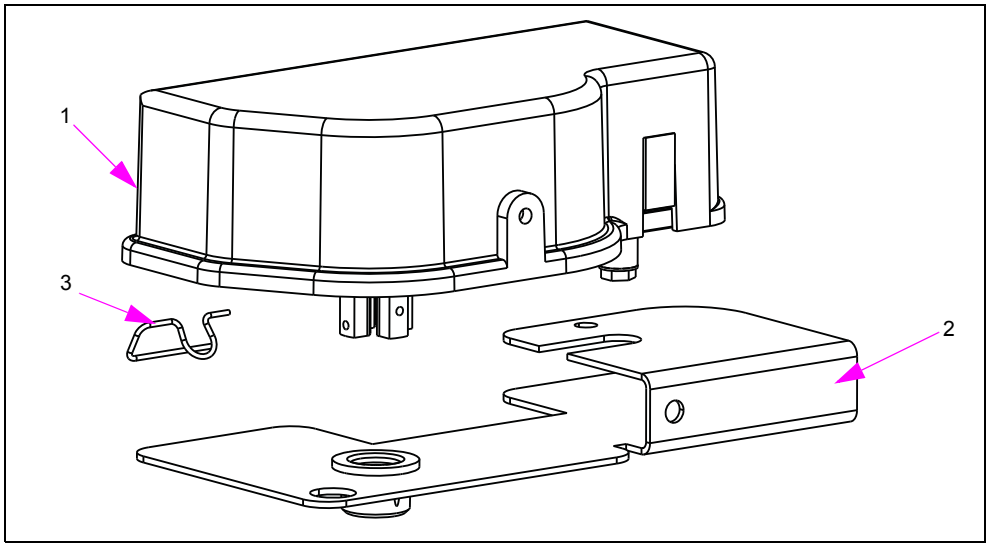
T20361-G1



T20361-05

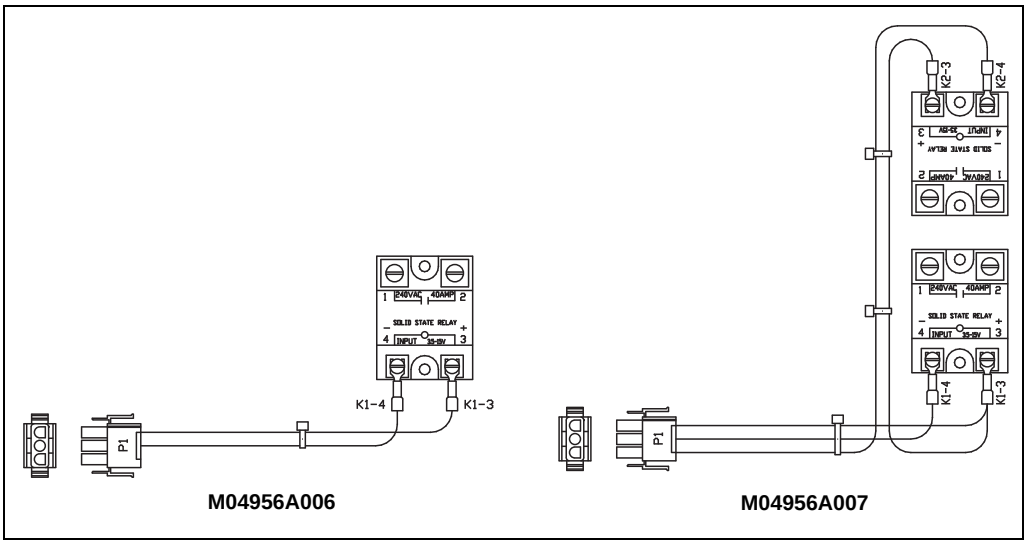
Item #	Part Description	Current Part	Previous Part	Quantity
1	Card Cage Assembly, Plastic	T20361-G1	-	1
2	Front Bracket	T20361-05	-	1

Pulser Assembly



Item #	Description	Current Part	Previous Part	Quantity
1	Assembly, Pulser	M04011B001	T18350-G3	1
2	Assembly, Pulser Supt Bracket	M04485A001	-	1
3	Spring Retainer Pulser Shaft	M01207B001	-	1

Motor Relays



M04956A006 M04956A007

Item #	Description	Current Part	Previous Part	Quantity
1	Motor Relay, Retail Single	M04956A006	M04956A001	1
2	Motor Relay, Retail Dual	M04956A007	M04956A002	1

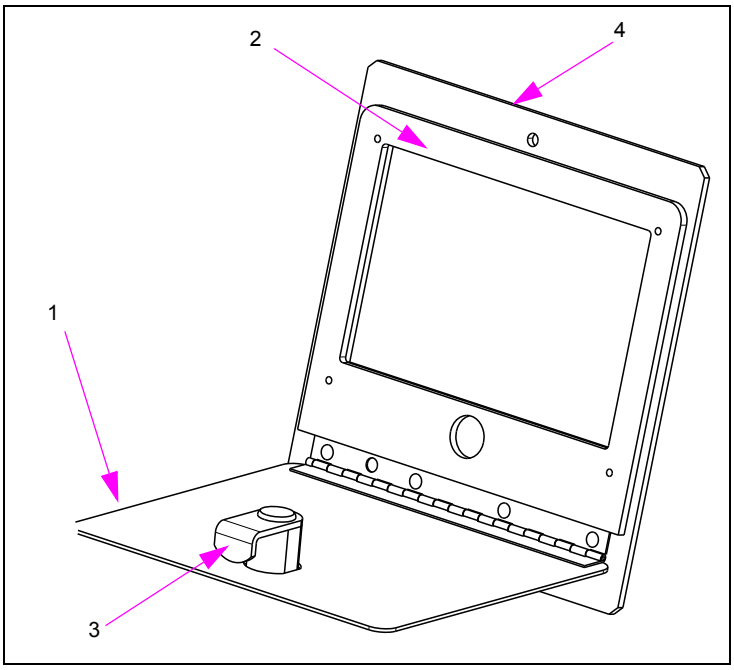
Main AC Conduit and Wire Assembly

Refer to “Standard Cables” on page 15-1.

DC Conduit and Wire Assembly

Refer to “Pulse-out Option” on page 15-7.

Keypad Assembly



Item #	Part Description	Current Part	Previous Part	Quantity
Keypad Access Door Assembly (obsolete, see note)		M07851A001	-	1
1	• Door Keypad Access, Black	R15186-G2**N1	-	1
2	• Gasket, Door	R15181	-	1
3	• Cylinder Lock	Q12928-02	-	1
4	• Mounting Hinge Plate	M04808B001	-	1
Note: M07851A001 has been replaced by the ATL Bezel Kit. Contact a Gilbarco representative before placing order.				

Electro-mechanical Totalizers

Refer to “Standard Cables” on page 15-1.

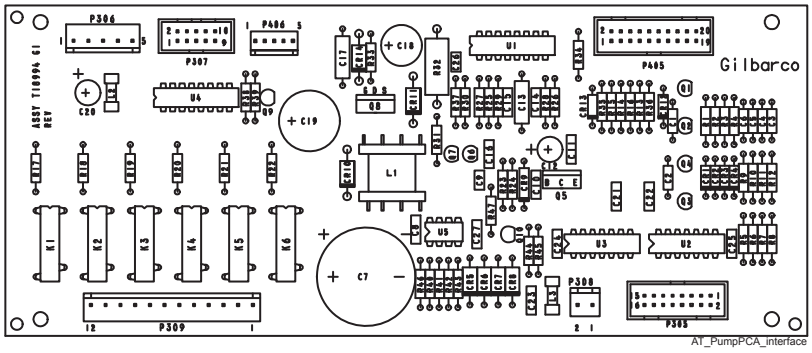
14 – Retail PCBs

Electronic Retail PCBs

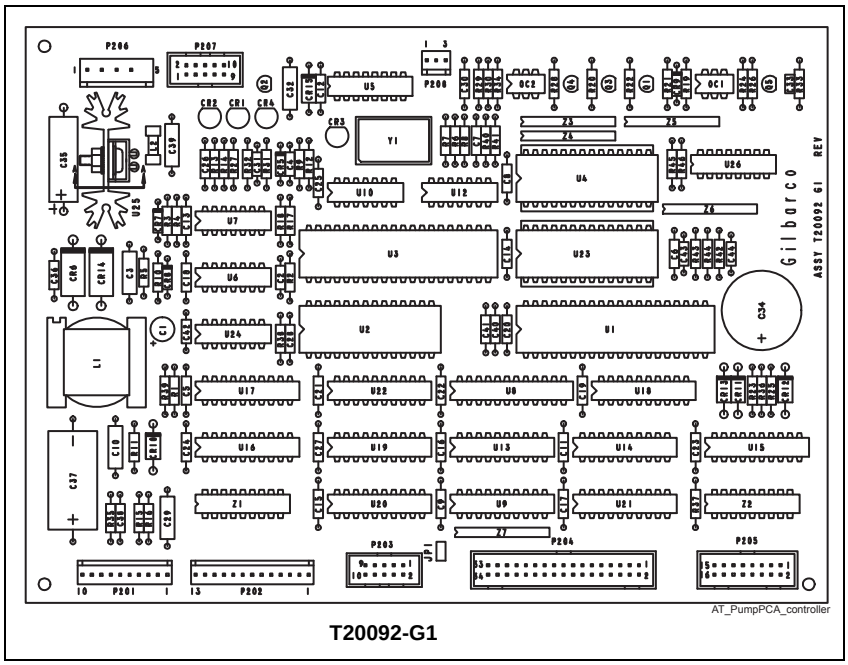
Part Description	Where Used	Current Part	Previous Part	Quantity
PCA, Pump Interface	1, 2, 3, 4	T18994-G1	-	1 per Unit
PCA, Pump Controller	1, 2, 3, 4	T20092-G1	-	1 per Unit
PCA, Optimum ATC Grade 4	2, 4	T20569-G1	-	1 per Unit
PCA, Pump Interface, Retail Pulse-out	5	M05200A001	-	1 per Unit
PCA, Pump Controller	5	T20011-G1	-	1 per Unit
PCA, Programmable Pump Preset (PPP)	3, 4	T17331-G3	-	1 per Unit
PCA, Front-load I.S. Barrier	6	T19301-G1	-	1 per Unit

Where Used:
All = All Electronic Retail Units
1 = Standard Electronic Retail Units
2 = Electronic Retail Units with ATC
3 = Electronic Retail Units with PPP
4 = Electronic Retail Units with ATC and PPP
5 = Electronic Retail Units with Pulse-out
6 = Electronic Retail Units with Front-load Nozzle Boot

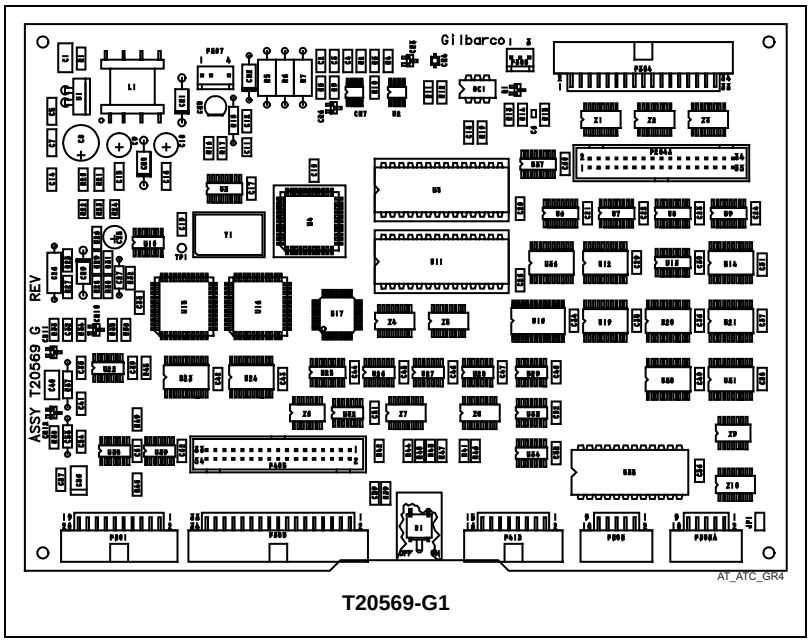
See the following Electronic Retail PCB graphics:



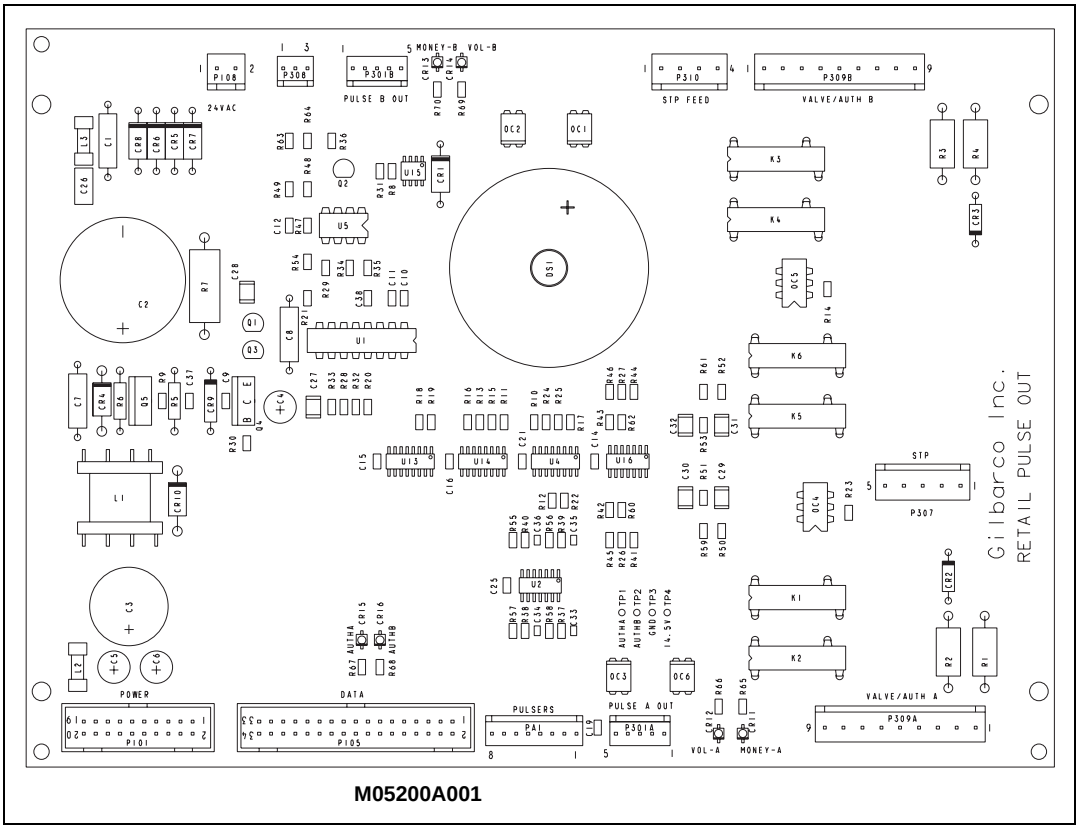
T18994-G1



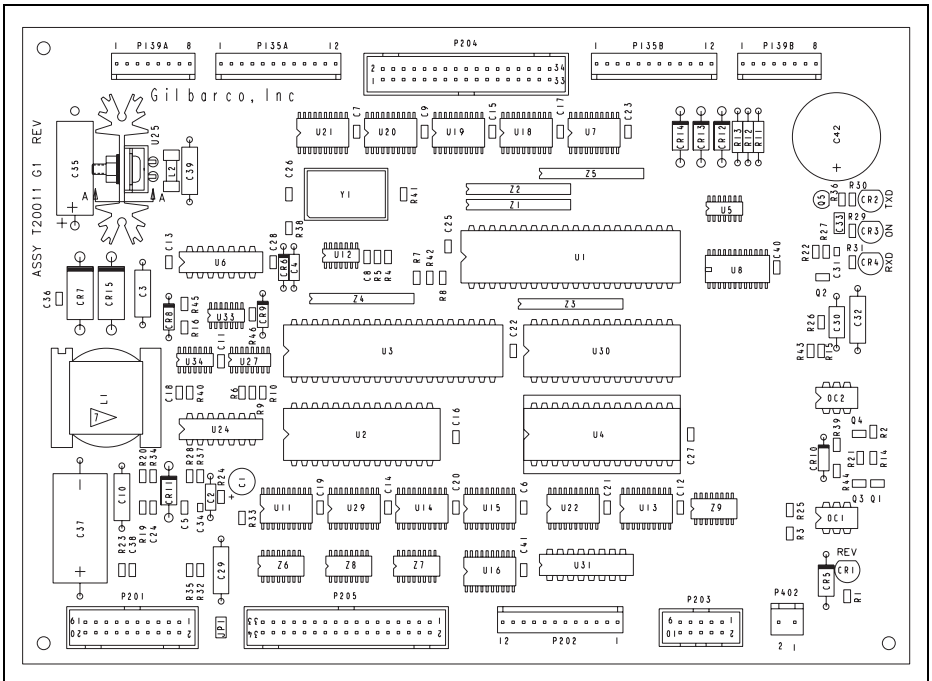
T20092-G1



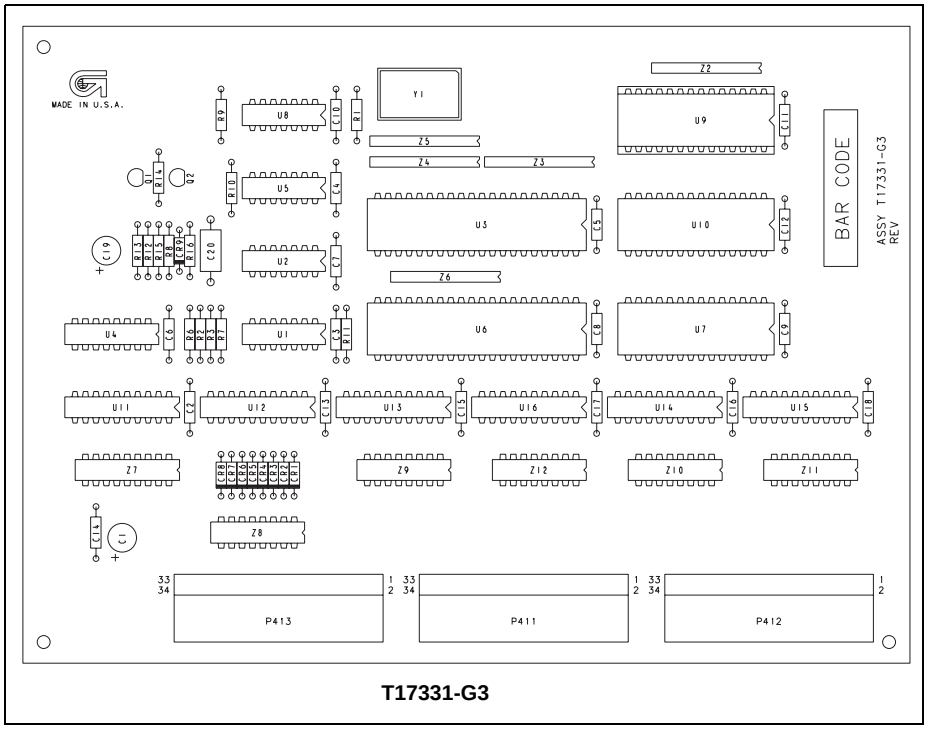
T20569-G1



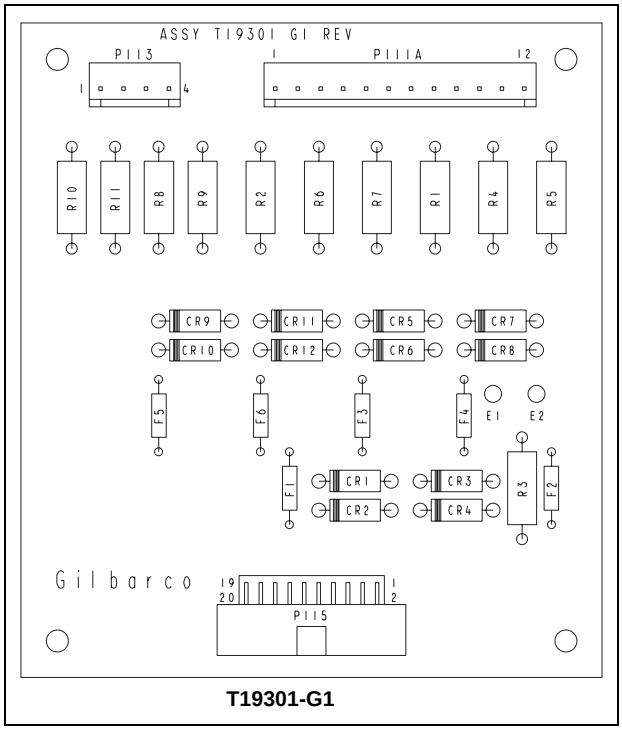
M05200A001



T20011-G1

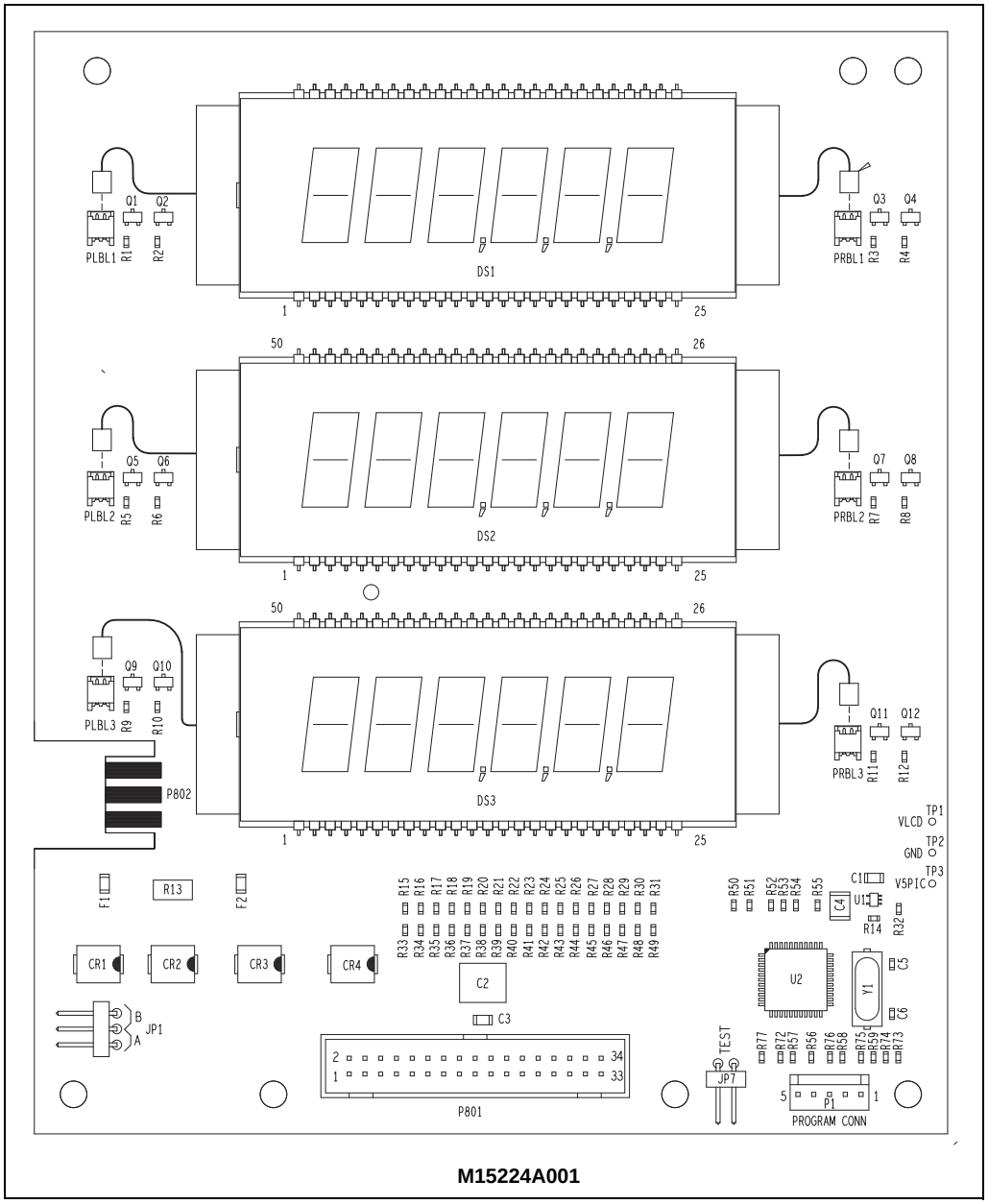


T17331-G3

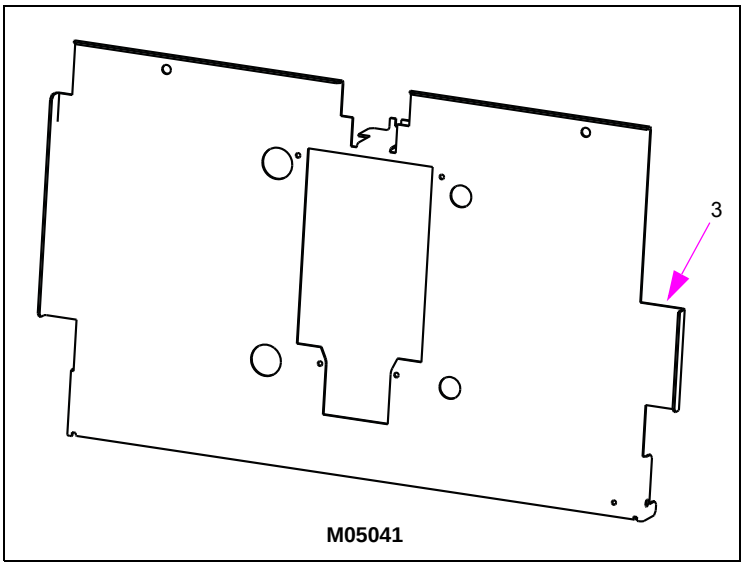


T19301-G1

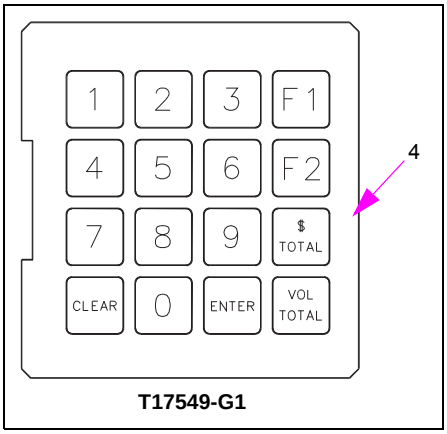
Displays and Display Panels



M15224A001



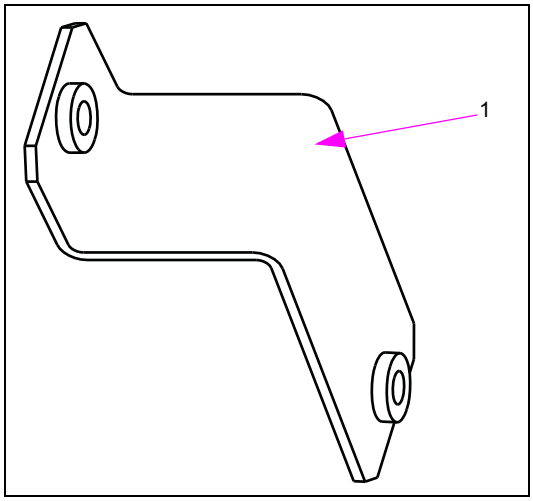
M05041



T17549-G1

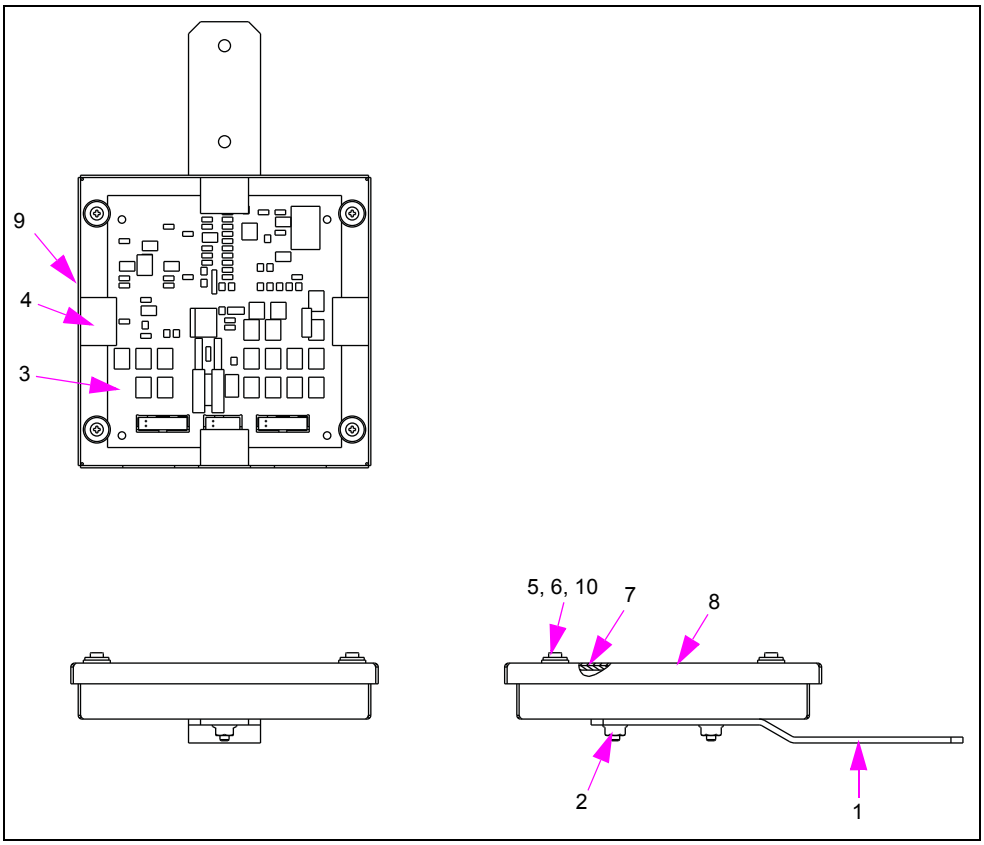
Item #	Part Description	Current Part	Previous Part	Quantity
1	PCB, LCD Main Display	M15224A001	T18981-G1	2 per Meter
2	Display Panel Single	M05041B001	-	1 per Side
	Display Panel Dual	M05040B001	-	1 per Side
3	Manager Keypad	T17549-G1	-	1 per Unit
Note: T17622-G9 is obsolete.				

Display Panel Stop Bracket



Item #	Part Description	Current Part	Previous Part	Quantity
1	Bracket, PC Board Support	M05611A002	M05611A001	1

ATC T-Meter Module



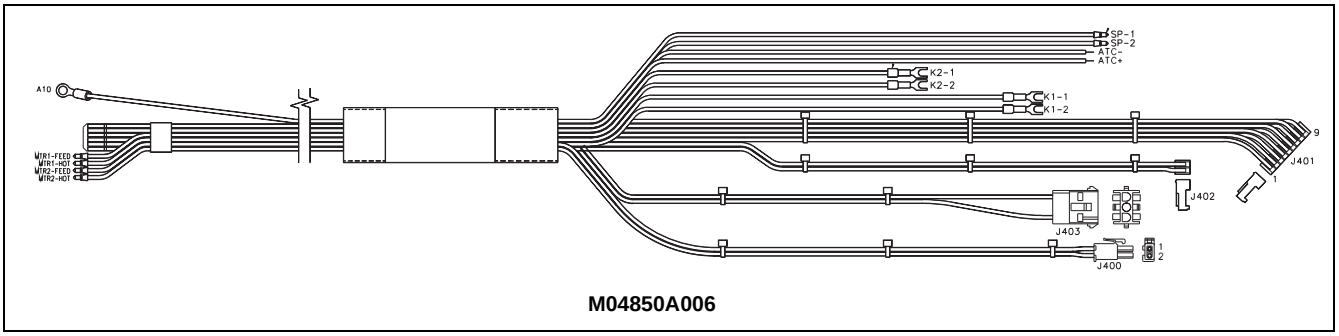
Item #	Part Description	Current Part	Previous Part	Quantity
T-Meter Module		T19405-G4	-	1
1	• Bracket, T-Meter Module Mounting	M05625B001	-	1
2	• Nut Hexagonal Flanged #10-32	Q11890-03	-	2
3	• PCB Assembly, T-Meter	T19386-G1	-	1
4	• Ribbon Cable Support Block	N23616-02	-	4
5	• Screw, Self Locking PPDH 6-32 X 0.38	K93293-06	-	4
6	• Spacer/Washer Tabulation	Q10385-32	-	4
7	• T-Meter Housing Cover Gasket	R20129-01	-	1
8	• T-Meter Module Cover	T19397-01	-	1
9	• T-Meter Module Housing	T19319-G1	-	1
10	• Washer, Flat 0.149 X 0.500 X 0.056	N16599-48	-	4
Not Shown				
-	• Cable Assembly, T-Meter I.S. Barrier	R20147-G1	-	1
-	• Cable Assembly, T-Meter Probe	R20148-G3	-	2

15 – Retail Cables

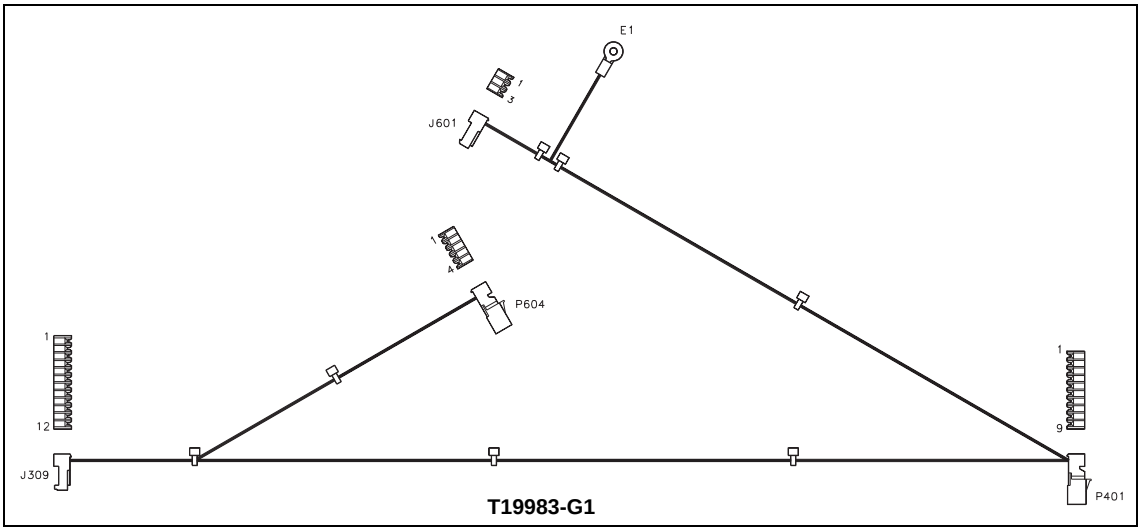
Note: For cable block diagrams, refer to MDE-4334 Commercial and Retail Series Atlas Start-up/Service Manual.

Standard Cables

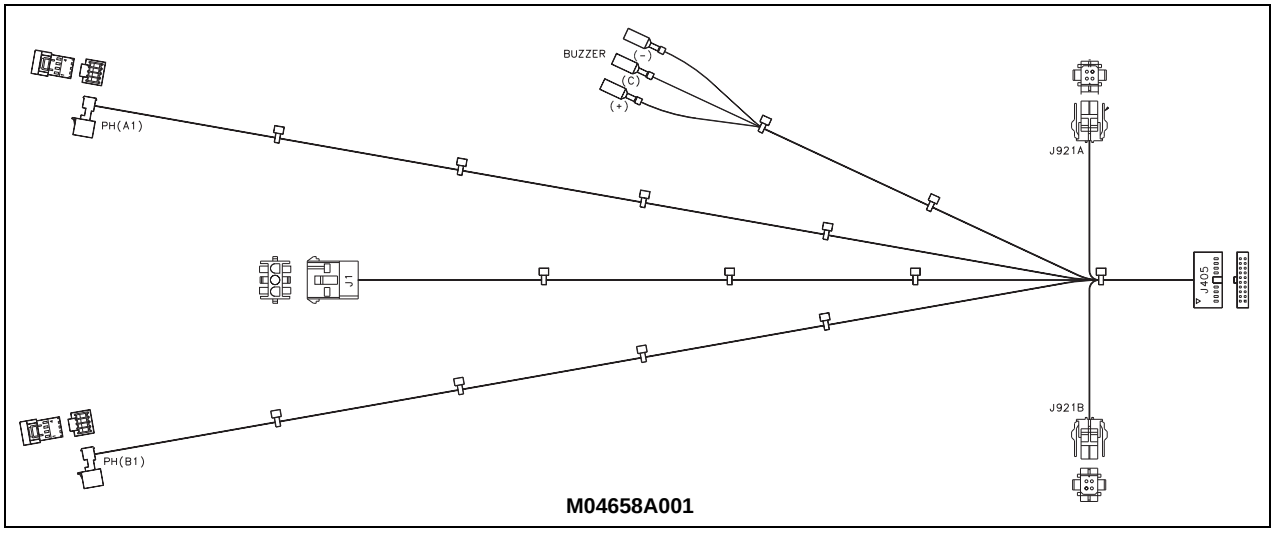
Part Description	Current Part	Previous Part
Main AC Power Cable and Conduit Assembly	M04850A006	-
Main AC Cable	T19983-G1	-
Main DC Interface Cable (obsolete, see note)	M04658A001	-
LCD Main Display Cable	T17768-G1	-
Backlight Cable	T19872-G1	-
Manager Keypad Cable and Controller to Interface Cable	R19951-G1	-
Cable Two-wire Assembly	R20412-G3	-
Controller to Interface Cable	R19939-G1	-
Pulser Cable	R19072-G1	-
Motor Relay Cable 115 V	M04659A001	-
Motor Relay Cable 230 V	M04659A002	-
Motor Relay Cable 380 V	M04659A003	-
Power Select Plug for 115 V Power Supply	N21120-G6	-
Power Select Plug for 220 V Power Supply	N21120-G8	-
Power Select Plug for 230 V Power Supply	N21120-G9	-
Power Select Plug for 240 V Power Supply	N21120-G10	-
Varistor Assembly 115 V	T17448-G1	-
Varistor Assembly 230 V	T17448-G3	-
Electro-mechanical Totalizer	M00455A003	-
Totalizer Retail Atlas Cable	M04889A001	-
Display Panel Ground Cable Assembly (standard)	C06454	-
Front-load Conduit and Cable Assembly	M05969A002	-
Not Shown		
Audio Transducer	Q11763-01	-
Magnet, Actuator	Q12514-02	-
Note: No replacement.		



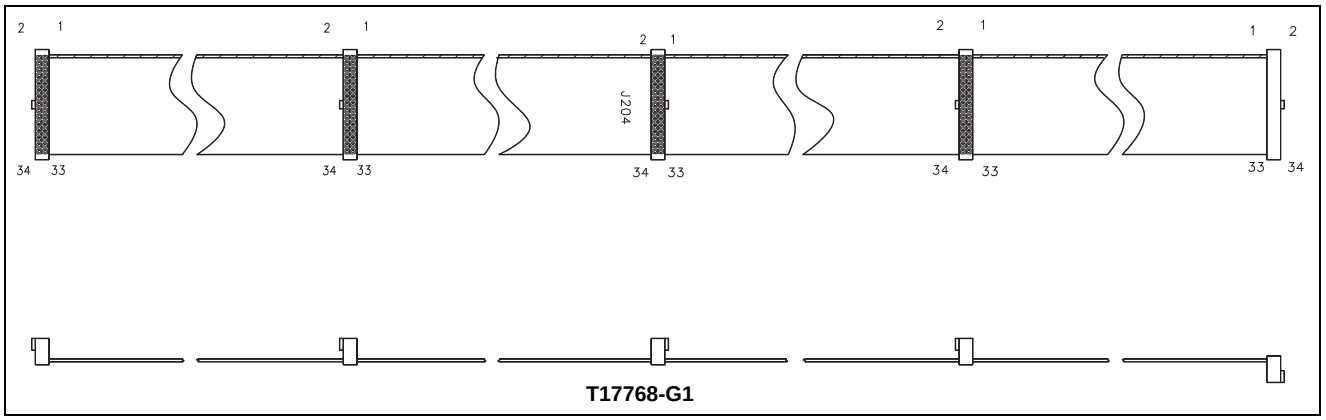
M04850A006



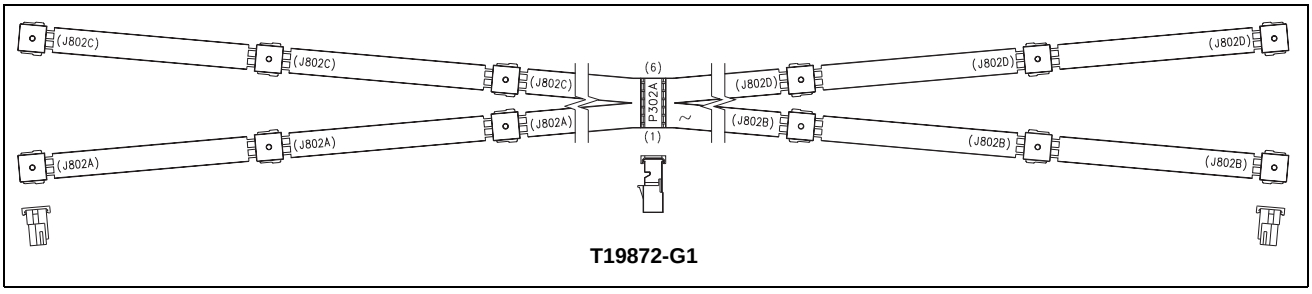
T19983-G1



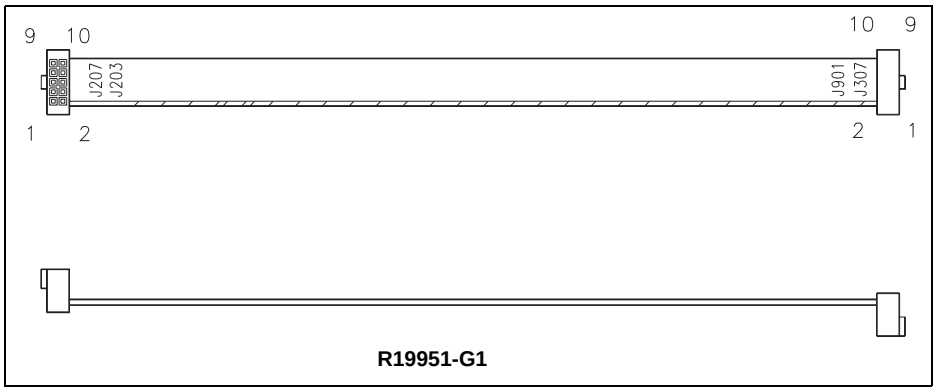
M04658A001



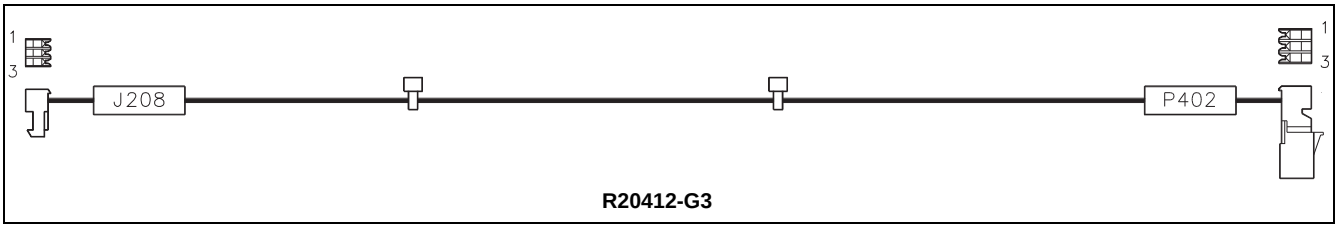
T17768-G1



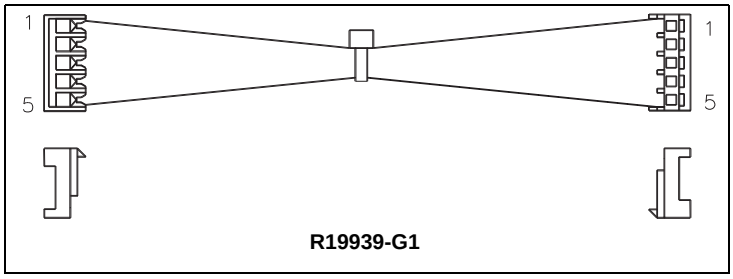
T19872-G1



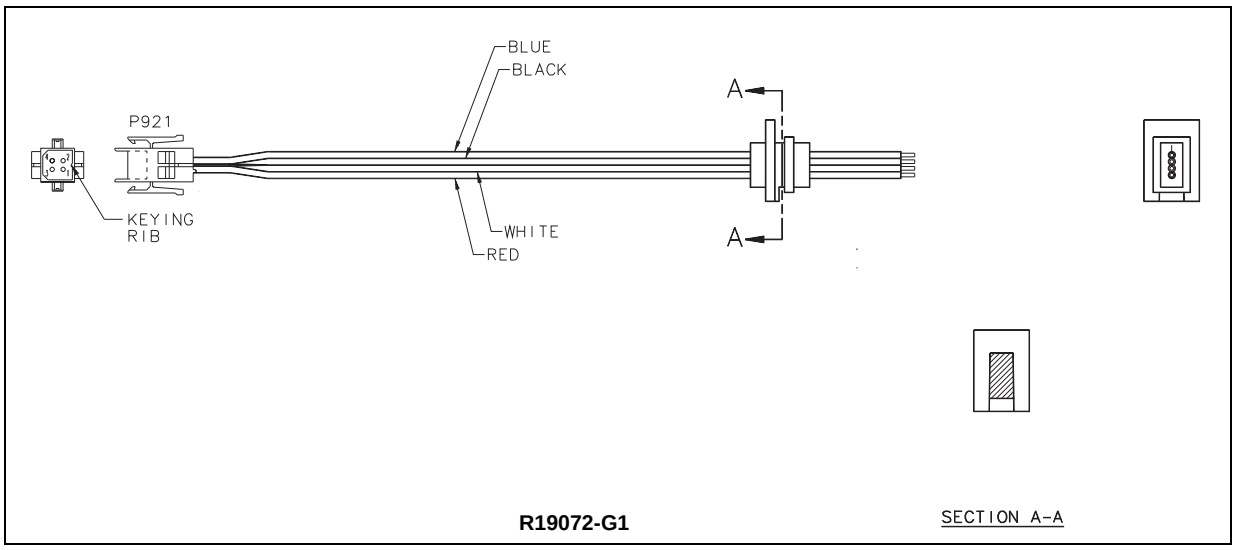
R19951-G1



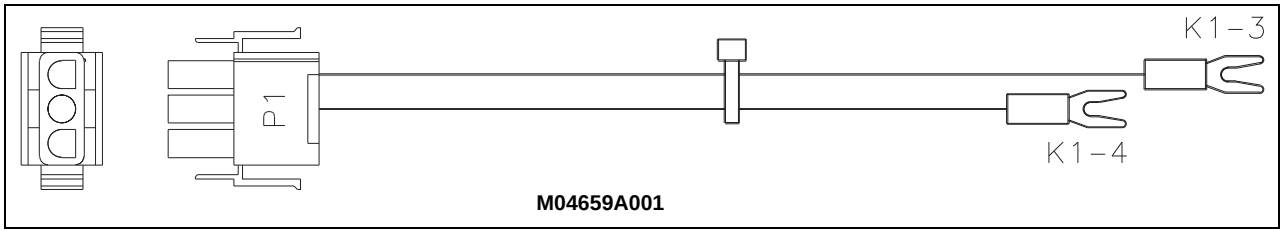
R20412-G3



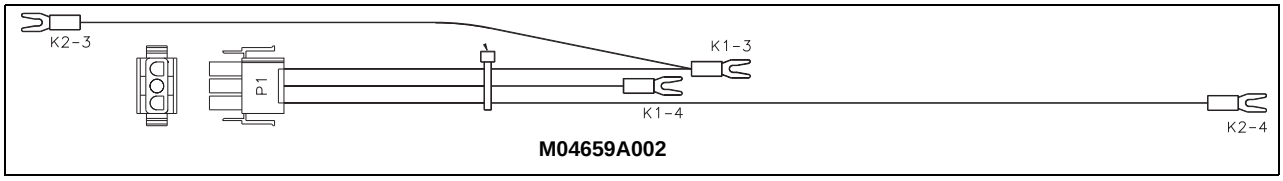
R19939-G1



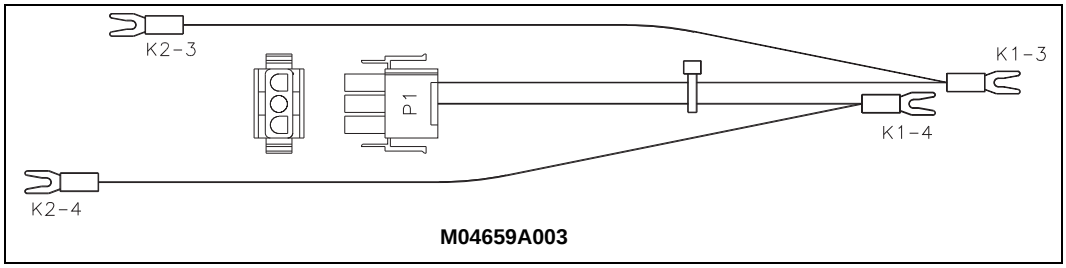
R19072-G1



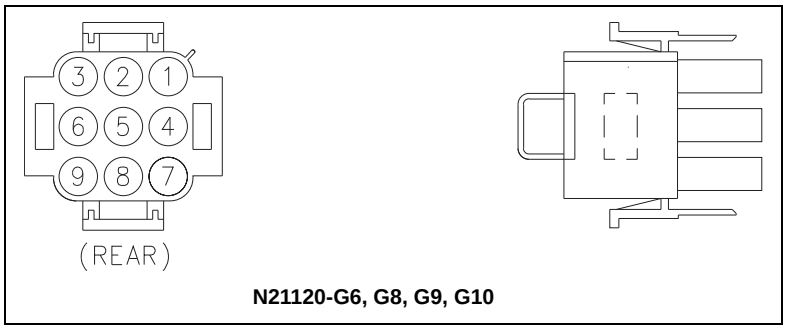
M04659A001



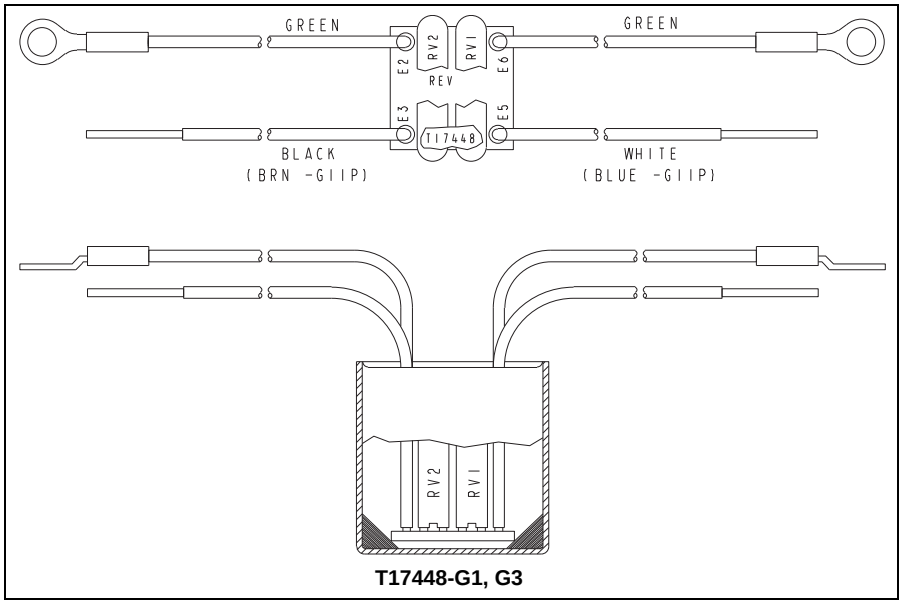
M04659A002



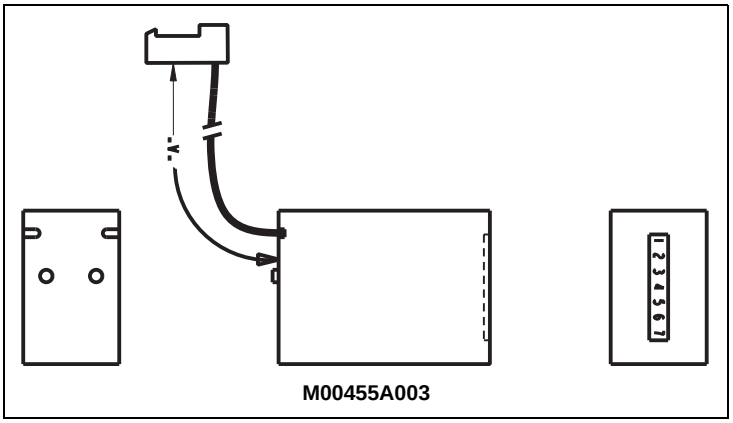
M04659A003



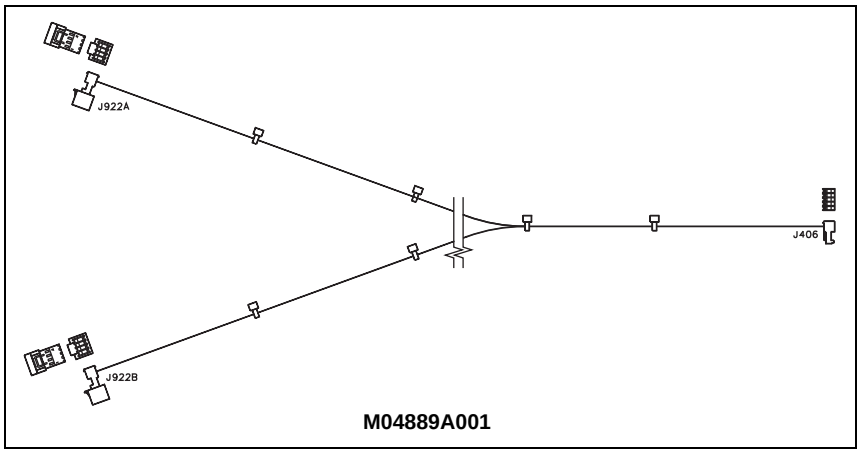
N21120-G6, G8, G9, G10



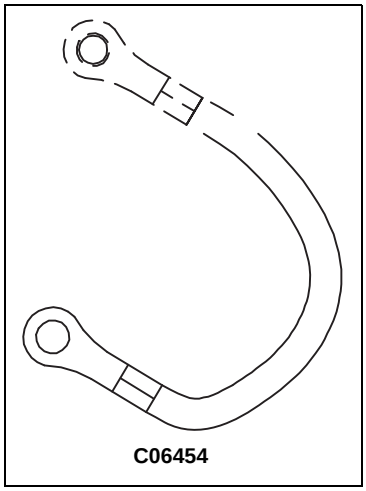
T17448-G1, G3



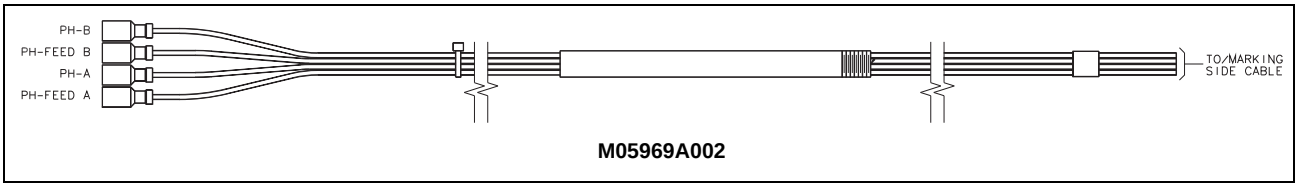
M00455A003



M04889A001



C06454

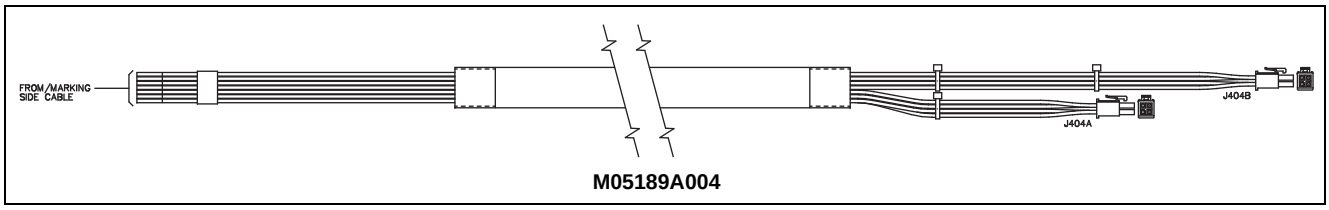


M05969A002

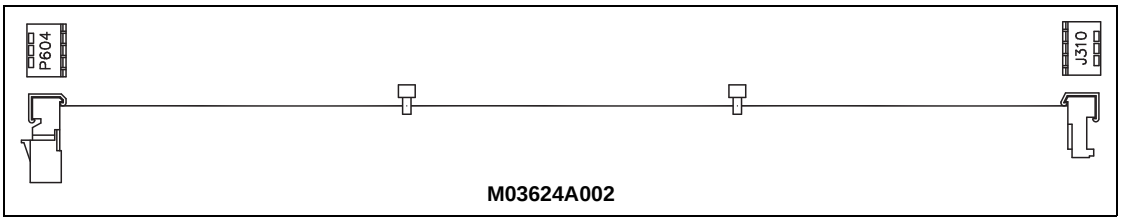
Pulse-out Option

Note: For cable block diagrams, refer to MDE-4334 Commercial and Retail Series Atlas Start-up/Service Manual.

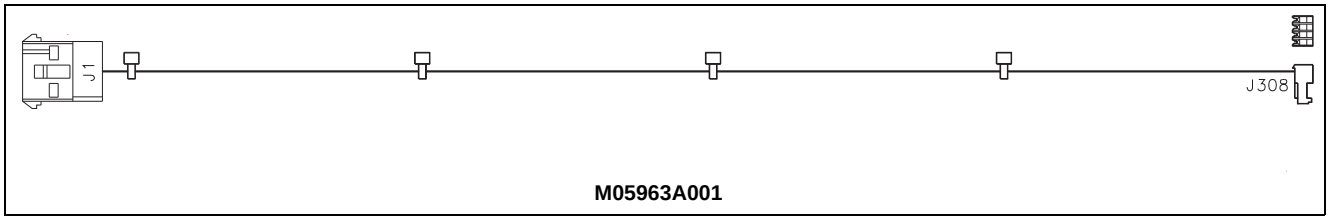
Part Description	Current Part	Previous Part
DC Power Cable and Conduit Assembly, Pulse-out	M05189A004	-
Valve Feed Cable, Pulse-out	M03624A002	-
Relay Adapter Cable, Pulse-out	M05963A001	-
Reg/Logic Cable Assembly (see note 1)	R17995-G7	-
Reg/Logic Cable Assembly (see note 2)	R17995-G8	-
Pump Handle Cable	M05719A001	-
Notes: *1. Used with Pulse-out, Pulse-out and PPP, or Pulse-out and ATC.* *2. Used with Pulse-out, PPP and ATC.*		



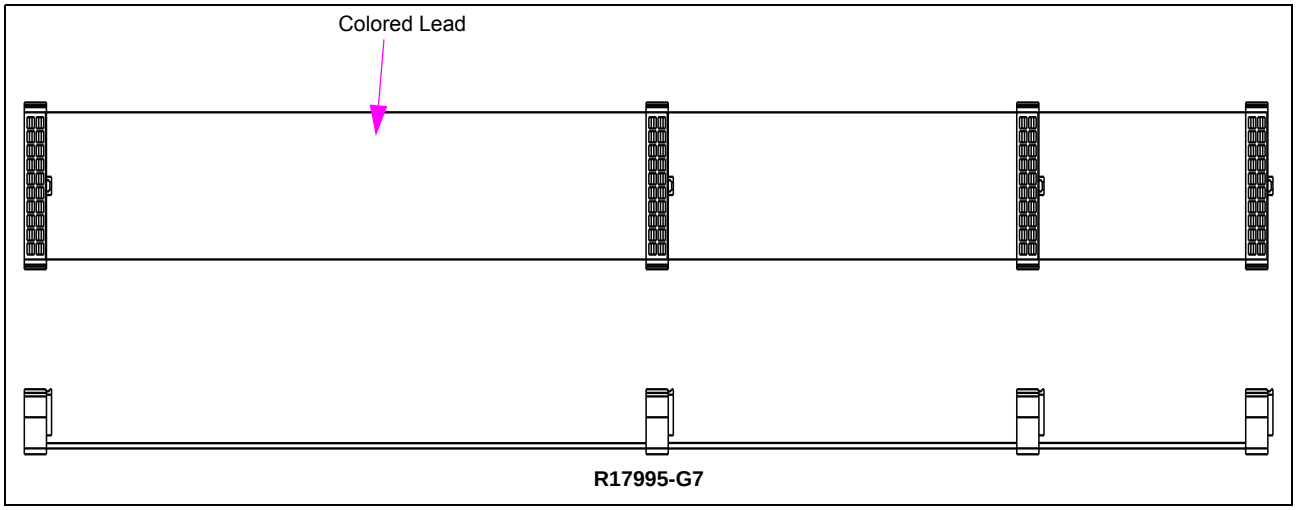
M05189A004



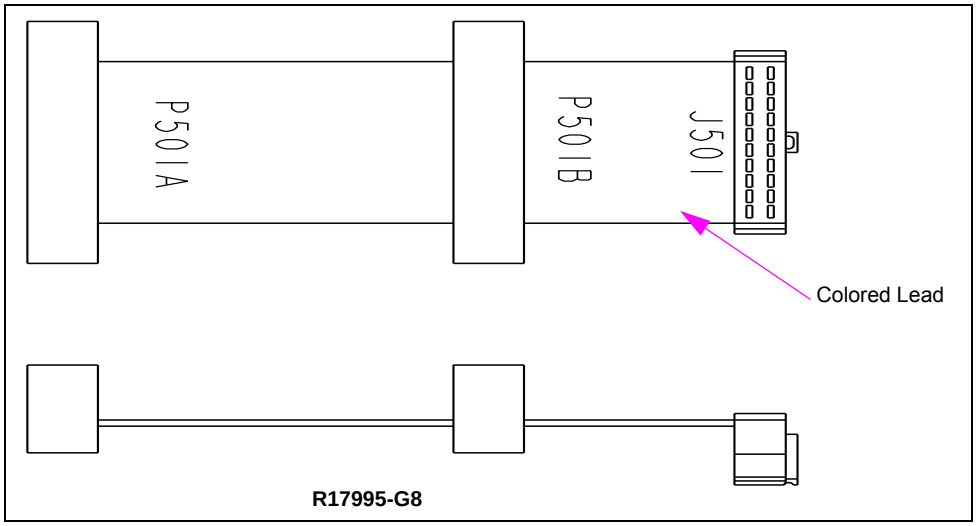
M03624A002



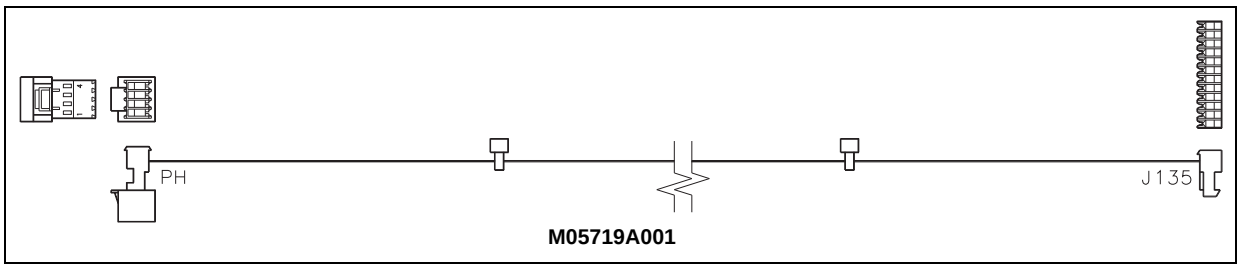
M05963A001



R17995-G7



R17995-G8

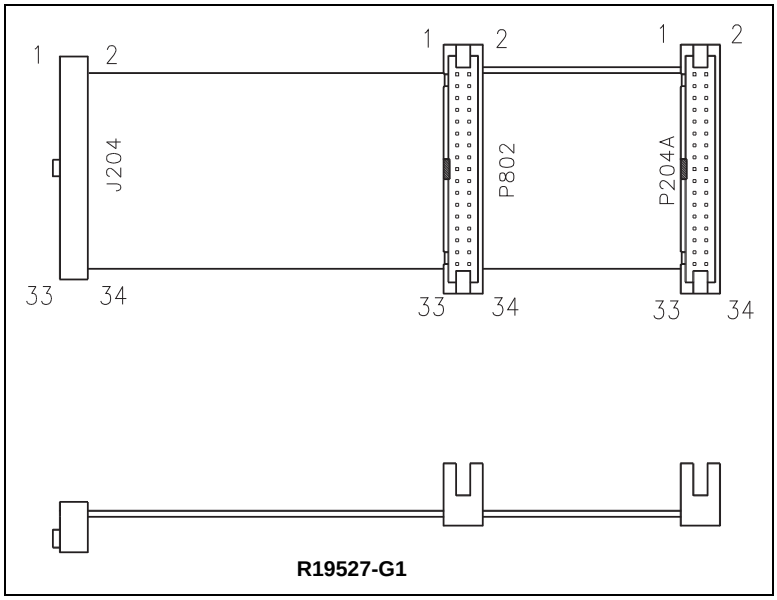


M05719A001

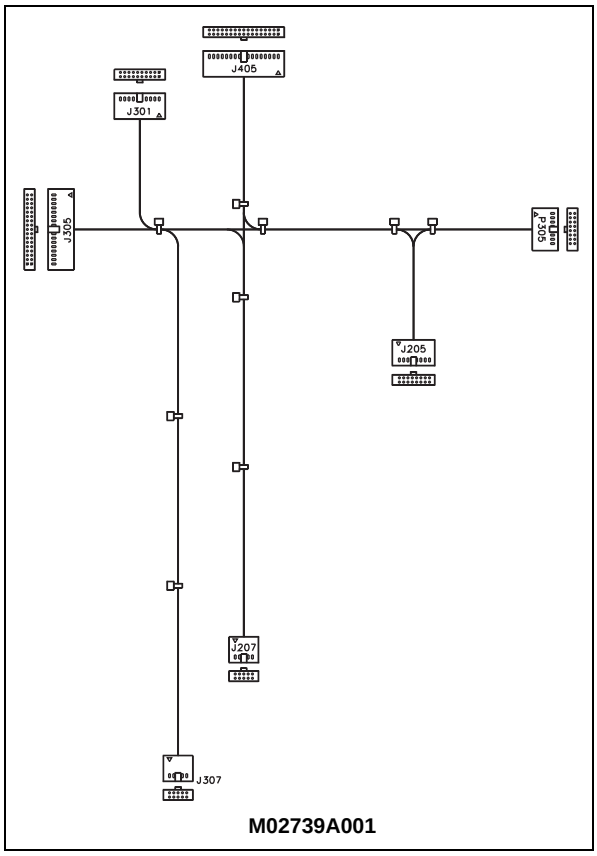
ATC Option

Note: For cable block diagrams, refer to MDE-4334 Commercial and Retail Series Atlas Start-up/Service Manual.

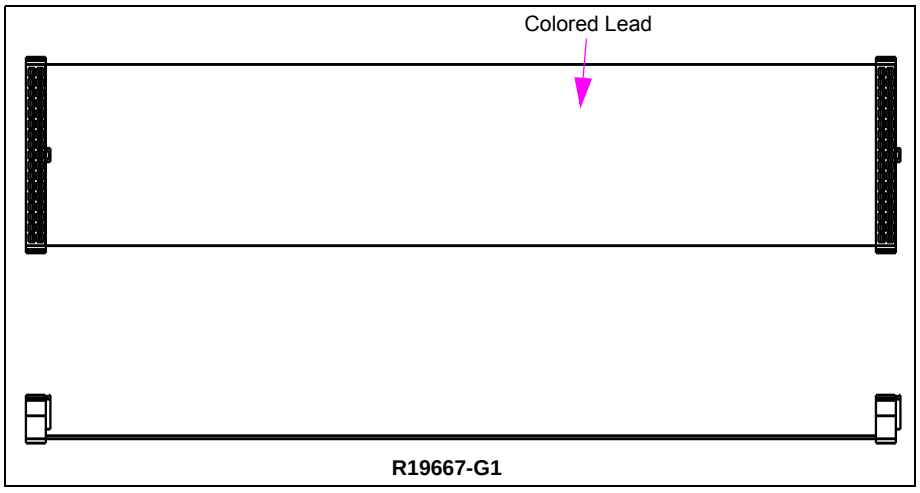
Part Description	Current Part	Previous Part
Calibration Switch Cable (also used in PPP Location)	R19527-G1	-
Main Interface ATC Cable	M02739A001	-
Pump Controller to ATC Control Cable	R19667-G1	-
Power Data Cable	R20128-G1	-
Keypad Interface Cable	R20146-G2	-
T-Meter Cable Assembly (I.S. Barrier)	R20147-G1	-
T-Meter Cable (Meter Probe)	R20148-G3	-
I.S. Barrier - ATC Retail	T19428-G1	-
RTD Probe and Thermowell	Refer to "Upper Hydraulics - Meter, Manifold, and Valve" on page 6-1.	-



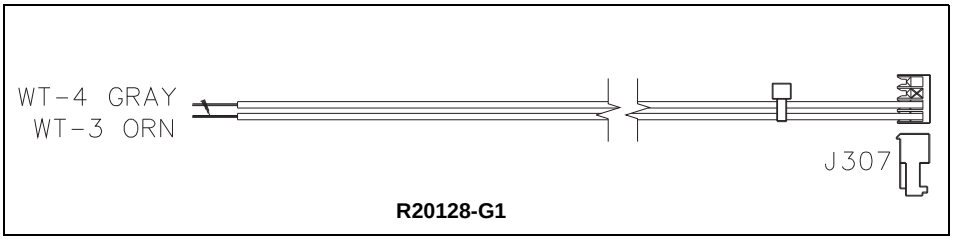
R19527-G1



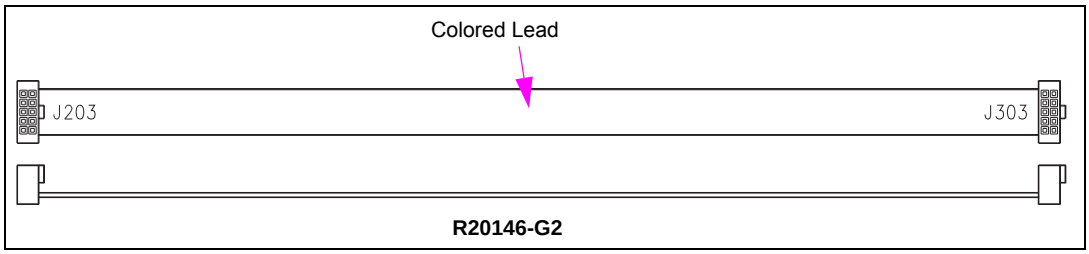
M02739A001



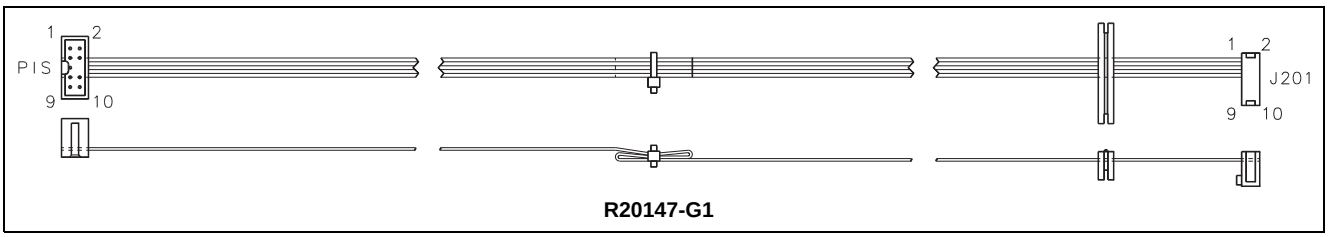
R19667-G1



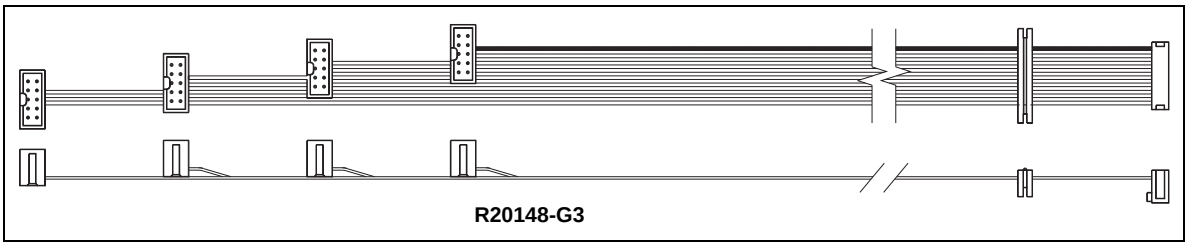
R20128-G1



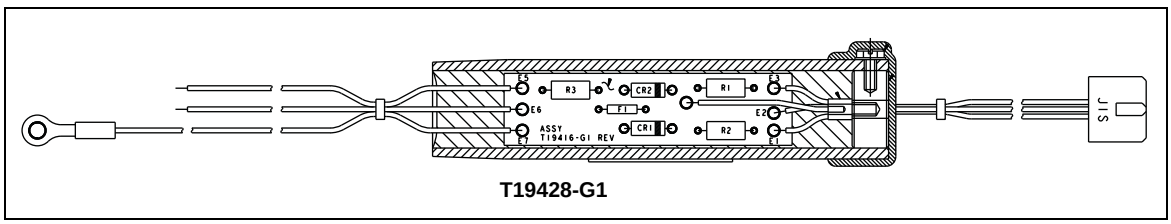
R20146-G2



R20147-G1



R20148-G3

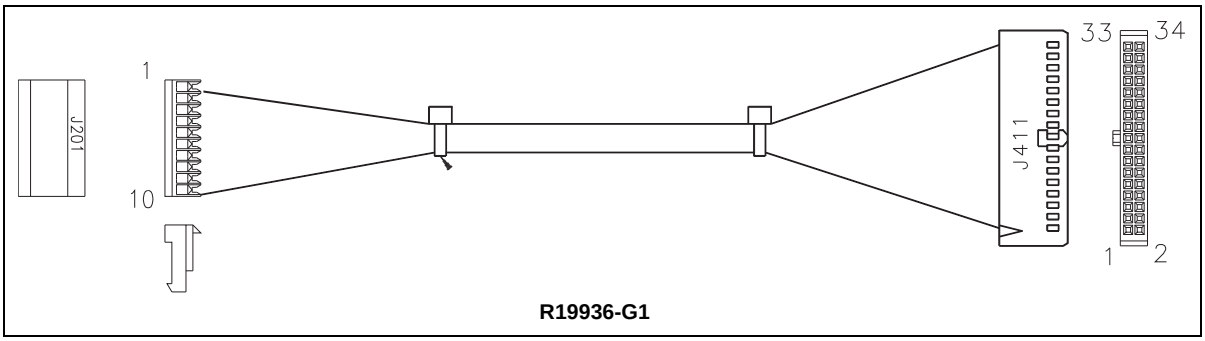


T19428-G1

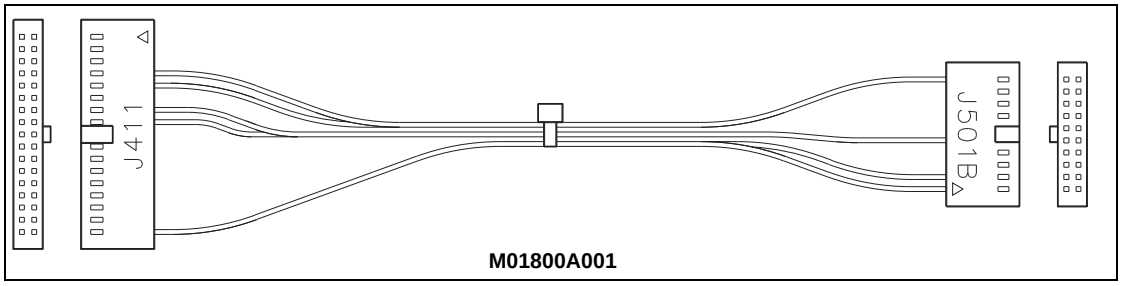
PPP Option

Note: For cable block diagrams, refer to MDE-4334 Commercial and Retail Series Atlas Start-up/Service Manual.

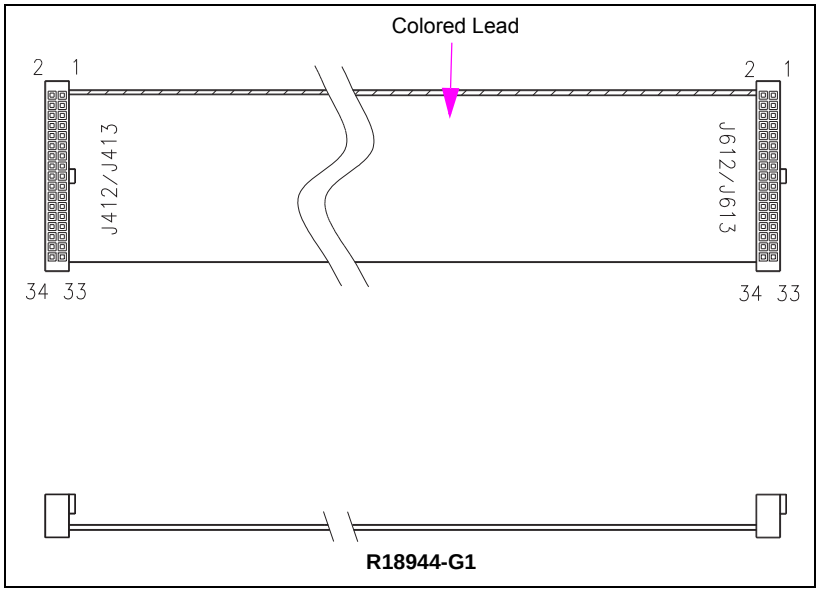
Part Description	Current Part	Previous Part
Controller to PPP Cable	R19936-G1	-
PPP Cable	M01800A001	-
Display Cable	R18944-G1	-



R19936-G1



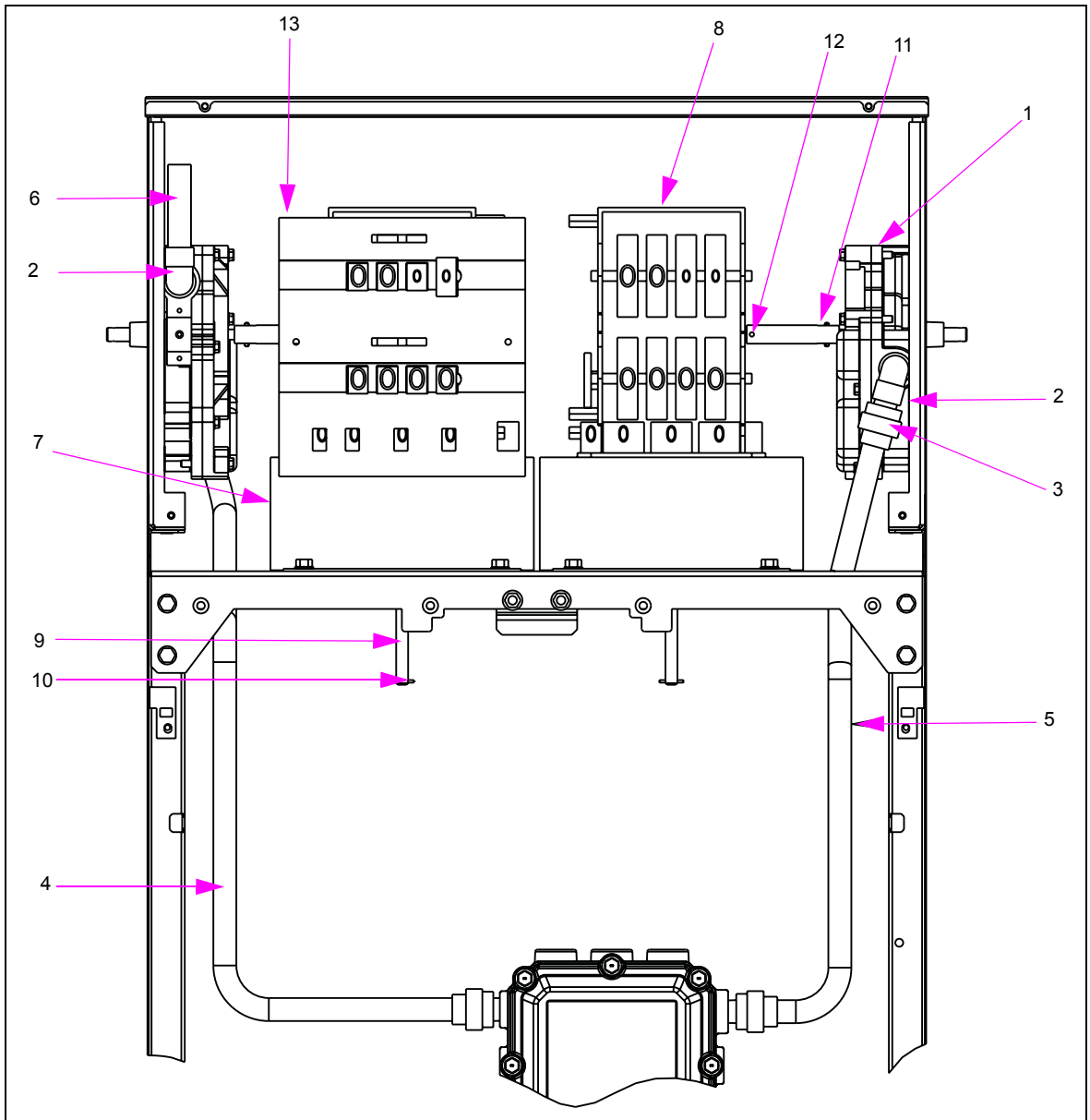
M01800A001



R18944-G1

16 – Mechanical Computer and Reset Section

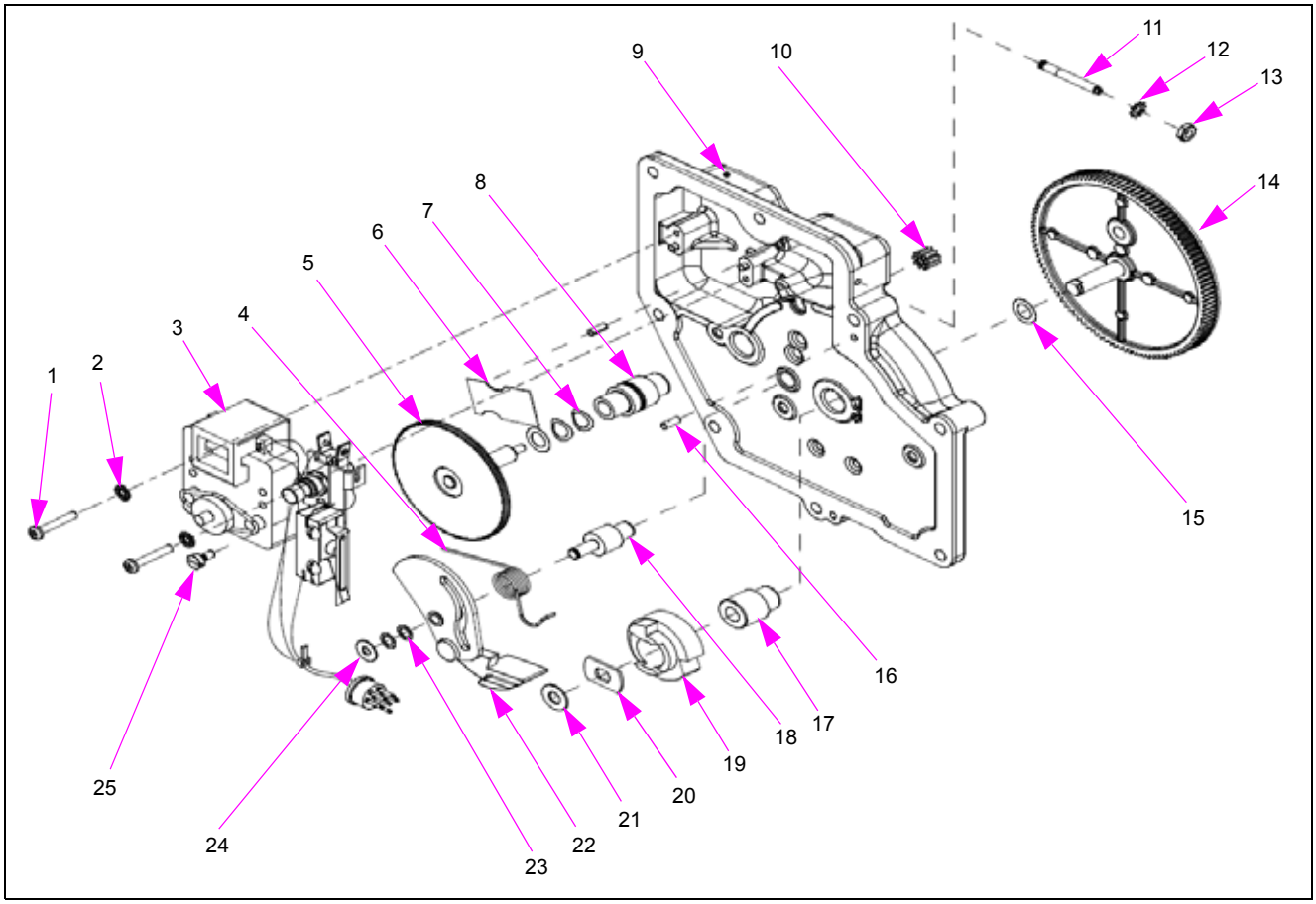
Registers, Resets, Linkage, and Conduit - No Electric Keytrol



Dual Unit Shown with Grade 2 Computer Dial Face Missing

Item #	Part Description	Current Part	Previous Part	Quantity
1	Electric Reset - 110 V/60 Hz Unlighted	M09919A101	048568	1 per Meter
	Electric Reset - 230 V/60 Hz Unlighted	M09919A203	-	
	Electric Reset - 230 V/50 Hz Unlighted	M09919A201	-	
	Manual Reset - Unlighted	G048662	-	
	Electric Reset - 110 V/60 Hz Lighted	M09918A101	-	
	Electric Reset - 230 V/60 Hz Lighted	M09918A201	-	
	Electric Reset - 230 V/50 Hz Lighted	M09918A202	-	
	Manual Reset - Lighted	G049022	-	
2	Elbow, 1/2 X 90 M X F	K42448	-	1 per Meter
3	Union, Conduit - 1/2 inch	Q10016-04	-	1 per Meter
4	Reset Conduit - 1 Grade	M05121B001	-	1
5	Reset Conduit - 2 Grade	M05122B001	-	1
6	Nipple, Conduit 1/2 X 3-1/2 inch	R11976-54	-	1
7	Plate, Computer Mounting	M04265B001	-	1 per Meter
8	Register, Commercial (Volume) Gallons	G021079	-	1 per Meter
	Register, Commercial (Volume) Liters	G021071	-	
	Register, Retail (Money) Gallons	G021009	-	
	Register, Retail (Money) Liters	G021065	-	
9	Shaft, Drive VR Compt to Meter	M05143B001	-	
10	Groove Pin Tyoe E 3-/32 X 7/8	G042115	-	1 per Meter
11	Coupling, Electric Reset	G022605	-	1 per Meter
12	Tapered Groove Pin 1/8 Dia X 1.00	K42757-31	-	1 per Meter
13	Computer Dial Face, Commercial (Volume)	G025548	-	2 per Register
	Computer Dial Face, Retail (Money)	G025777	-	

Reset Cover Assembly (G022289)

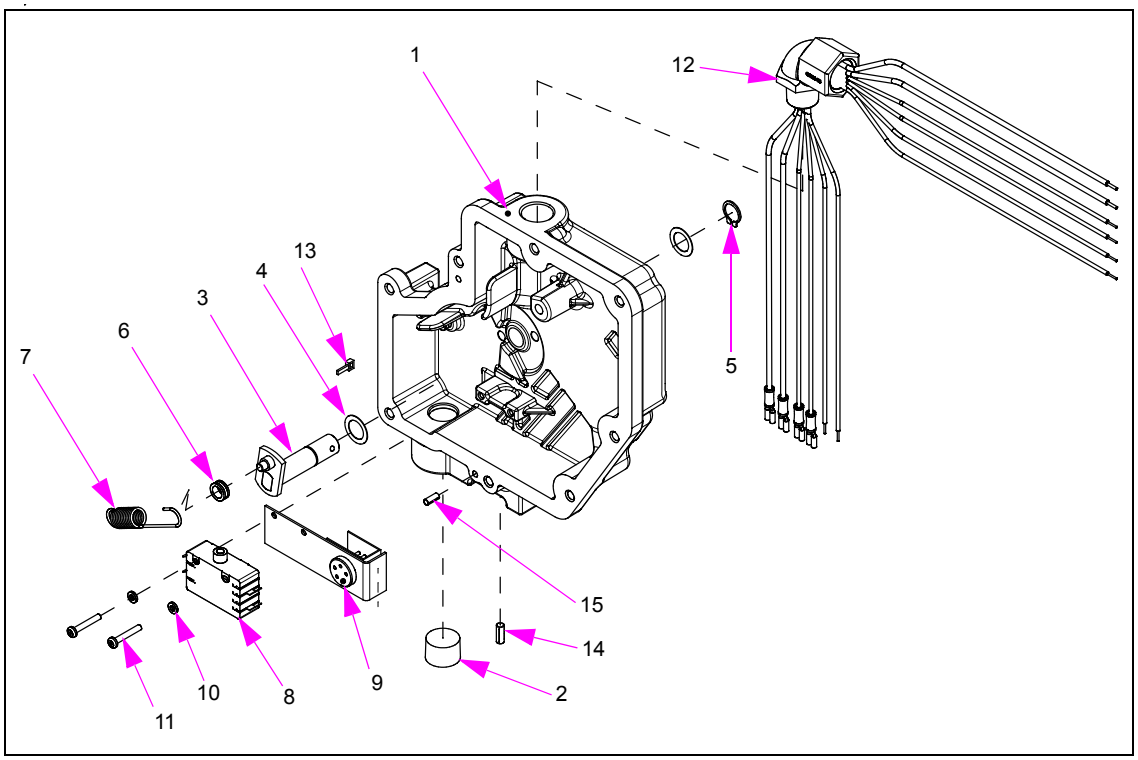


Item #	Part Description	Part Number	Quantity
1	Screw, Phillips Pan-head Mach 8-32 X 1	Q11270-58	2
2	Lock Washer, External Thread	G068842	2
3	Reset MOT and SW Assembly 115/60	G013063 (see note 1) G013114 (see note 2)	1
4	Spring Operator Model 77	G013031 (see note 1)	1
5	Assembly Idler Shaft Model 77	M12191A001	1
6	Insulator Model 77	G013019	1
7	Washer Bowed Type 3.390 X 0.552 X 0.006	K81856-28	2
8	Idler Bearing, Model 77	G013042	1
9	Reset Cover, Machined	M09860B001	1
10	Pinion Model 77	G013025	1
11	Adjusting Screw, Model 77	G013052	1
12	Lock Washer, External Tooth	C02404	1
13	Hexagonal Nut 10-24 UNC -2B STL ZN PL	K11489	1
14	Computer Drive Assembly	G013045	1
15	Thrust Washer	G013007	2
16	Roll Pin 5/32 X 3/8	K78378-78	4

Item #	Part Description	Part Number	Quantity
17	Cam Hub, Model 77	G013041	1
18	Operator Post Model 77	M14270B001	1
19	Cam Model 77	G013037	1
20	Drive	G013013	1
21	Truarc Retaining Ring	K76238-28	1
22	Interponent Assembly	G013049	1
23	Shim Washer	G013018	2
24	Truarc Retaining Ring	K76238-41	1
25	Shoulder Screw	G013051	1

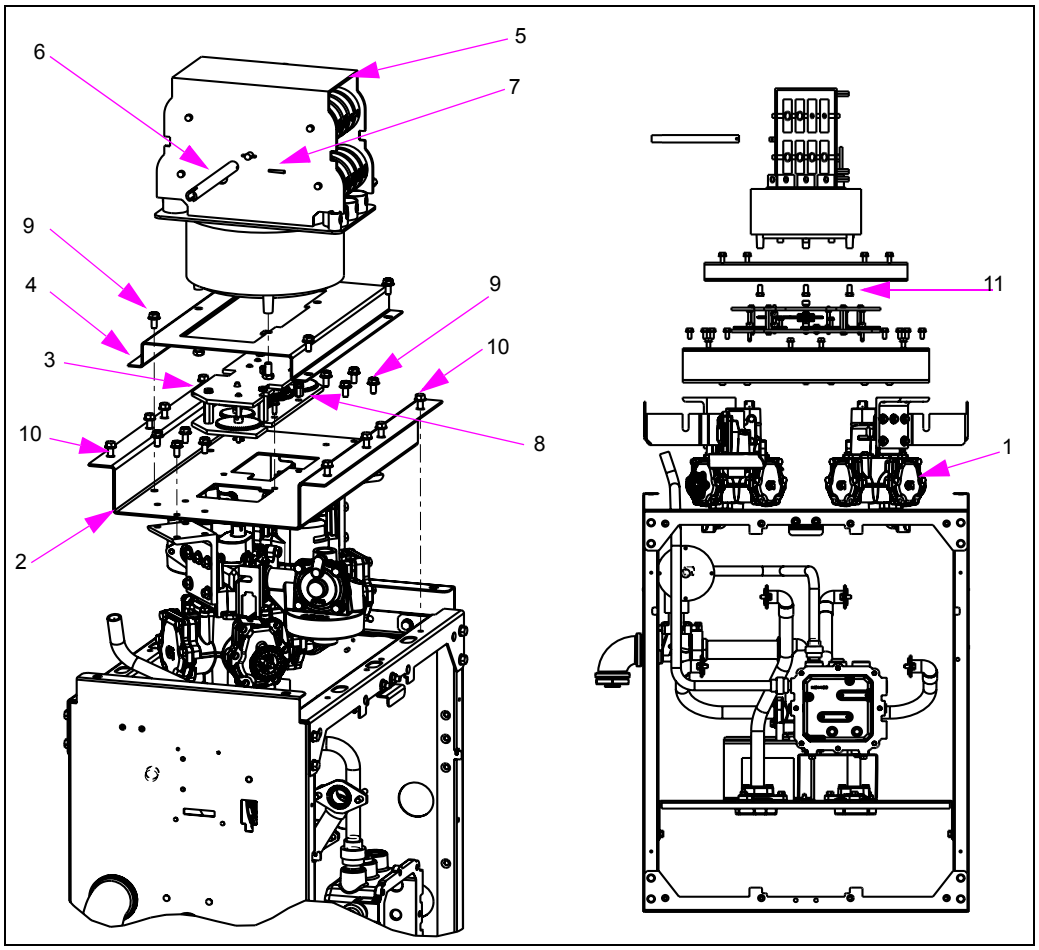
Notes:
1. G013063 and G013019 are used for lighted reset assemblies.
2. G013114 is used for unlighted reset assemblies and is for the G022289 Assembly.

Reset Box and Conduit Assembly



Item #	Part Description	Part Number	Quantity
1	Reset Box and Pin Assembly	G048555	1
2	Pipe Plug C-sunk 1/2	K43850	1
3	Handle Operator Assembly	G029359	1
4	Brass Washer	G067109	2
5	Truarc Retaining Ring	K76238-20	1
6	Pin Collar Delrin	G042912	1
7	Handle Spring Model 77	G057806	1
8	Switch (Model 77 Reset)	G064466	1
9	Terminal Bracket Assembly	G064875	1
10	Lockwasher #6 External Tooth	G068843	2
11	Screw, Phillips Pan-head Mach 6-32 X 0.875	Q11270-40	2
12	Potted Elbow and Wires	G024918	1
13	Cable-tie	Q10178-01	1
14	Groove Pin Type U (3H) 3/16 X 1/2	G042825	1
15	Roll Pin 5/32 X 3/8	K78378-78	1

9140K Super-Hi Mechanical - Meter, Differential Gearbox, and Computer



Item #	Part Description	Current Part	Previous Part	Quantity
1	Meter Assembly, Gallons	M04996A020	-	2
	Meter Assembly, Liters	M04996A021	-	2
2	9140 Meter and Gearbox Plate	M07343A001	-	1
3	Differential Assembly 40Q	M05274A001	-	1
4	Plate, 9140 Computer MTG	M07345B001	-	1
5	Register, Gallons	G021079	-	1
	Register, Gallons with Ticket Printer	G021082	-	1
	Register, Liters	G021071	-	1
6	Coupling, Elec Reset Single/40	G017561	-	1
7	Tapered Groove Pin 1/8 Dia X 1.00	K42757-31	-	1
8	Screw, Metric M6 X 16	M00415B006	-	3
9	Screw, Metric M8 X 16	M00415B009	-	12
10	Screw, Thread Forming, Hexagonal Washer Head M8 X 18	M00417B009	-	8
11	Screw, Self Locking Hexagonal Head Cap 3/8-24 75 Grade 5	K93293-10	-	3

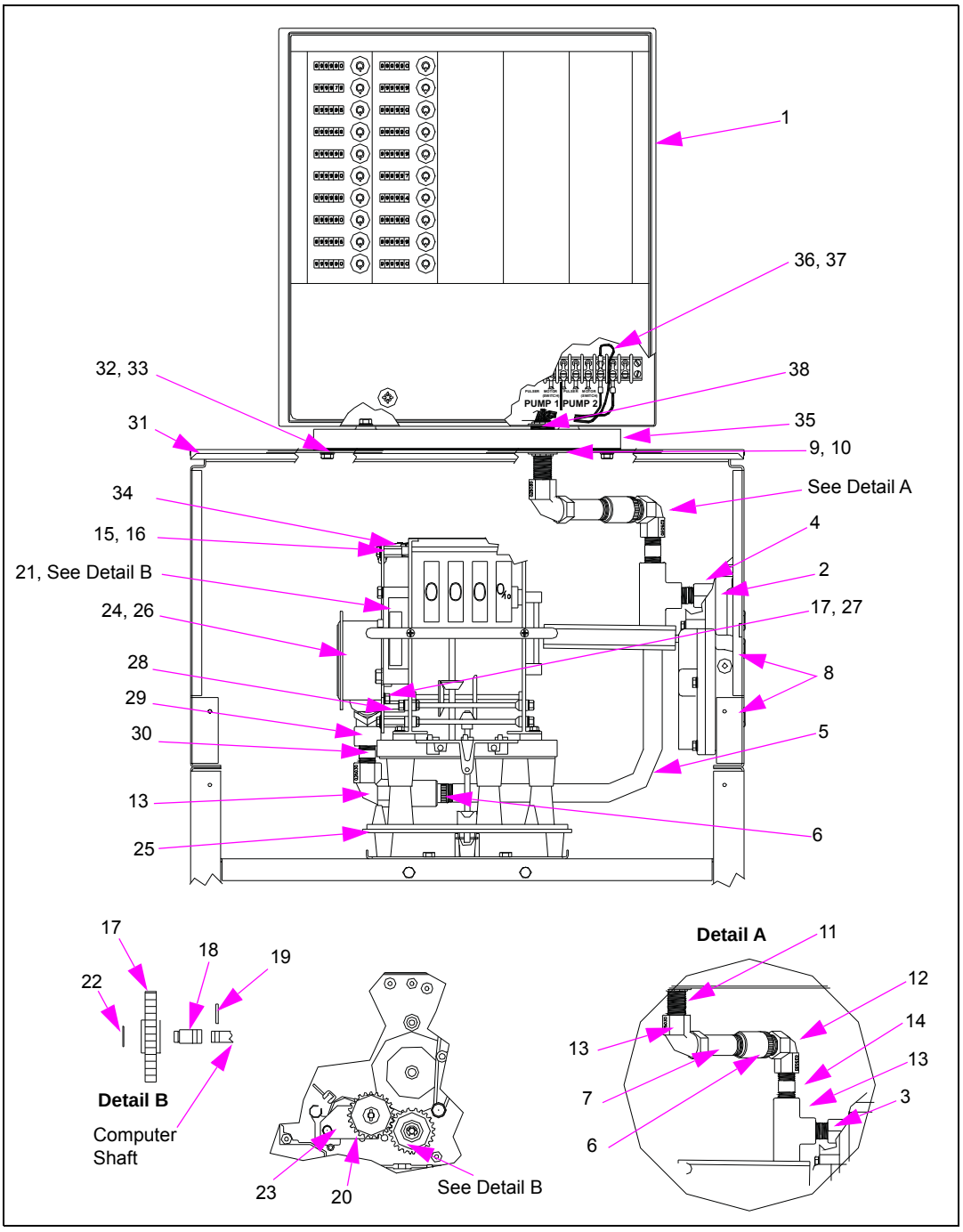
Notes:

1. For specific parts associated with Meter Assemblies (M04996A020 and M04996A021), refer to "Center Flow Through (CFT) Meter, Manifold, and Valve Assembly" on page 6-1.

2. This model with the gearbox is no longer in production.

Mechanical Computer, Reset, and Pulser with Electrical Keytrol

9140 Super-Hi Unit

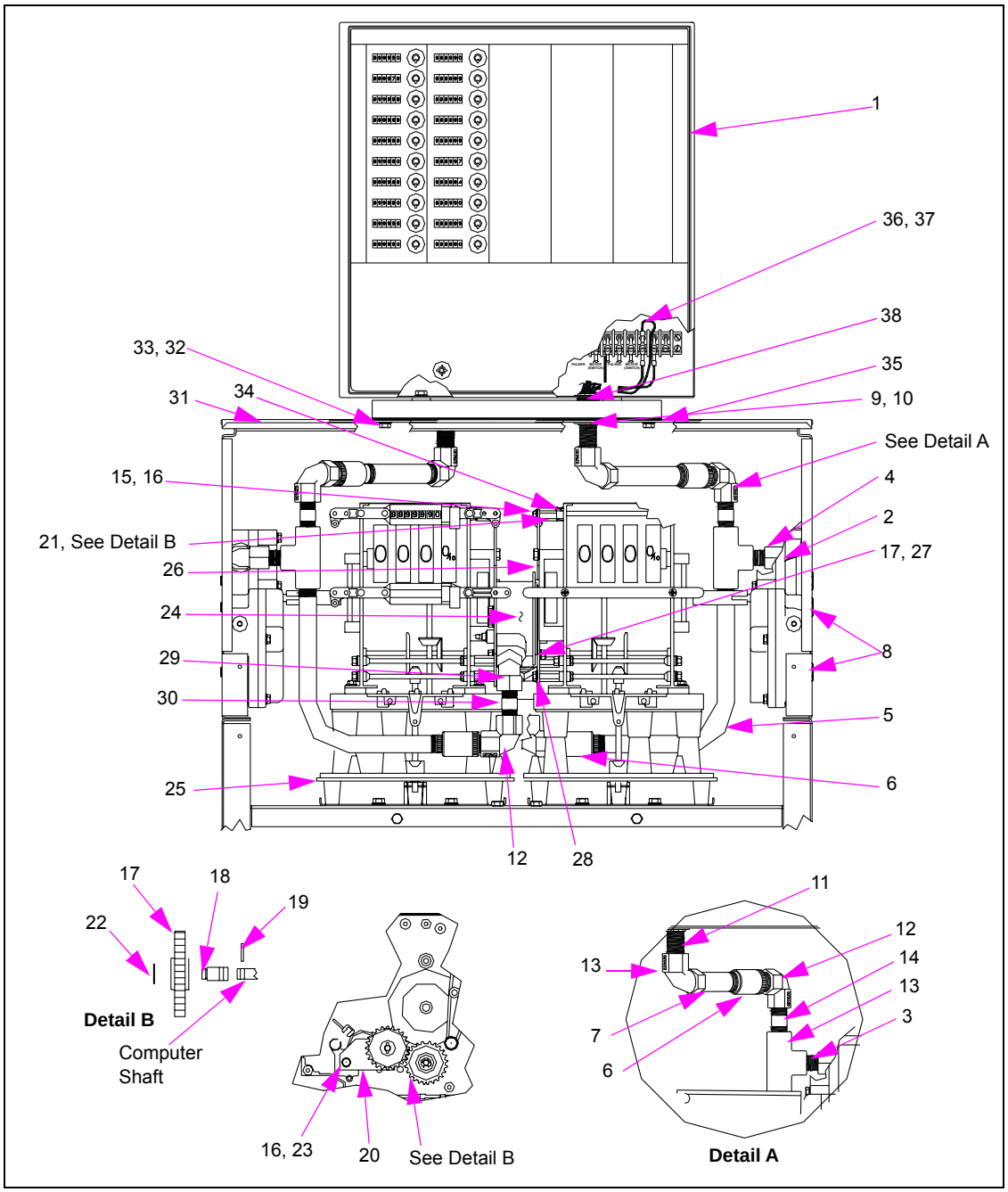


Item #	Part Description	Current Part	Previous Part
1	Electrical Keytrol	-	-
2	Reset Assembly 115 V 60 Hz EK Pump	M09919A102	-
	Reset Assembly 230 V 60 Hz EK Pump	G048811	-
	Reset Assembly 230 V 50 Hz EK Pump	M09919A202	-
	Reset Assembly 110 V 60 Hz EK Dispenser	G048813	-
	Reset Assembly 230 V 60 Hz EK Dispenser	G048814	-
	Reset Assembly 230 V 50 Hz EK Dispenser	G048815	-
3	Pipe TBE, 1/2 X 1-1/8 Zinc Plated	N16771-78	-
	Conduit, 1/2 X 4, 9140, 9140AX	G038125	-
4	Elbow, Conduit 1/2 X 90 M/F	G025045	-
5	Conduit	G069737	-
6	1/2 UNY Explosion-proof Conduit Union	N16289-20	-
7	Conduit, 1/2 X 6	G021377	-
8	Screw, 1/4-20 X 1/2 HHC	K05287	-
9	Lock Nut, 1/2 NPT Machined	K89681	-
10	Washer Flat 0.875 X 1.62 X 0.056	N16599-59	-
11	Conduit, 1/2 X 3 NPS Threads	G021737	-
12	Elbow-conduit, 1/2 X 90 F/F	G025030	-
13	Conduit Tee	G064830	-
14	Pipe TBE, 1/2 X 1-1/2 Zinc Plated	R11979-39	-
15	Screw, 1/4-28 X 5/8 HHC	Q10624-37	-
16	Lockwasher - External 1/4 1114	G068891	-
17	Gear, Quantity	G027041	-
18	Hub, Quan. Shaft Extension	G031035	-
19	Pin, Spirol 5/64 X 7/16 STD PL	Q10038-35	-
20	Plate and Idler Gear Assembly	G027044	-
21	Plate, Mounting	G046970	-
22	Ring Retaining 5133-25-ZF	K76238-41	-
23	Screw, 1/4-20 X 5/8 Wash Head Type-T	K85736-39	-
24	Decal, 10:1 Pulser	G023596	-
25	Non-computer, Gallon	G021079	-
	Non-computer, Liter	G021071	-
26	Pulser Assembly 10:1	G046973	-
	Pulser Assembly 1:1	G046969	-
	Pulser Assembly 100:1	G046972	-
27	Screw, 1/4-20 X 5/8 HHC	K14830	-
28	Spacer	G056877	-
29	Elbow, Conduit 1/2 X 45 M/F	G025015	-
30	Conduit, 1/2 X 2	G021337	-

Item #	Part Description	Current Part	Previous Part
31	Cover, Top, 9100AEK Master, Painted (see note)	G022479	-
	Cover, Top, 9100AEK Master, SS	G022478	-
	Cover, Top, 9100AEK Master/Auxiliary, Painted (see note)	G022482	-
	Cover, Top, 9140ATWEK Master/Auxiliary, Painted (see note)	G022488	-
	Cover, Top, 8753E Master/Auxiliary, SS	G022481	-
	Cover, Top, 9140ATWEK Master/Auxiliary, SS	G022487	-
	Cover, Top, 9140ATWEK Master/Split, Painted (see note)	G022486	-
	Cover, Top, 9140ATWEK Master/Split, SS	G022485	-
32	Screw, 5/16-18 X 3/4 HHC	Q10624-01	-
33	Lockwasher, 5/16 PL	K73278-28	-
34	Spacer, Top	G056895	-
35	Gasket, 1/8 X 1/4 X 3' LG	G027146	-
36	Term, Wire Spade #8 (16-14)-BLU	Q11024-02	-
37	Term, Wire Spade #6 (22-16)-RED	C01028	-
38	Square Cut Ring, #7-214	G049001	-

Note: Specify standard color (black, white, red). If not a standard color, specify serial number of pump/dispenser.

Single and Dual (Dual Unit Shown)



Item #	Part Description	Current Part	Previous Part
1	Electrical Keytrol	-	-
2	Reset Assembly 115 V 60 Hz EK Pump	M09919A102	-
	Reset Assembly 230 V 60 Hz EK Pump	G048811	-
	Reset Assembly 230 V 50 Hz EK Pump	M09919A202	-
	Reset Assembly 110 V 60 Hz EK Dispenser	G048813	-
	Reset Assembly 230 V 60 Hz EK Dispenser	G048814	-
	Reset Assembly 230 V 50 Hz EK Dispenser	G048815	-
3	Pipe TBE, 1/2 X 1-1/8 Zinc Plated	N16771-78	-

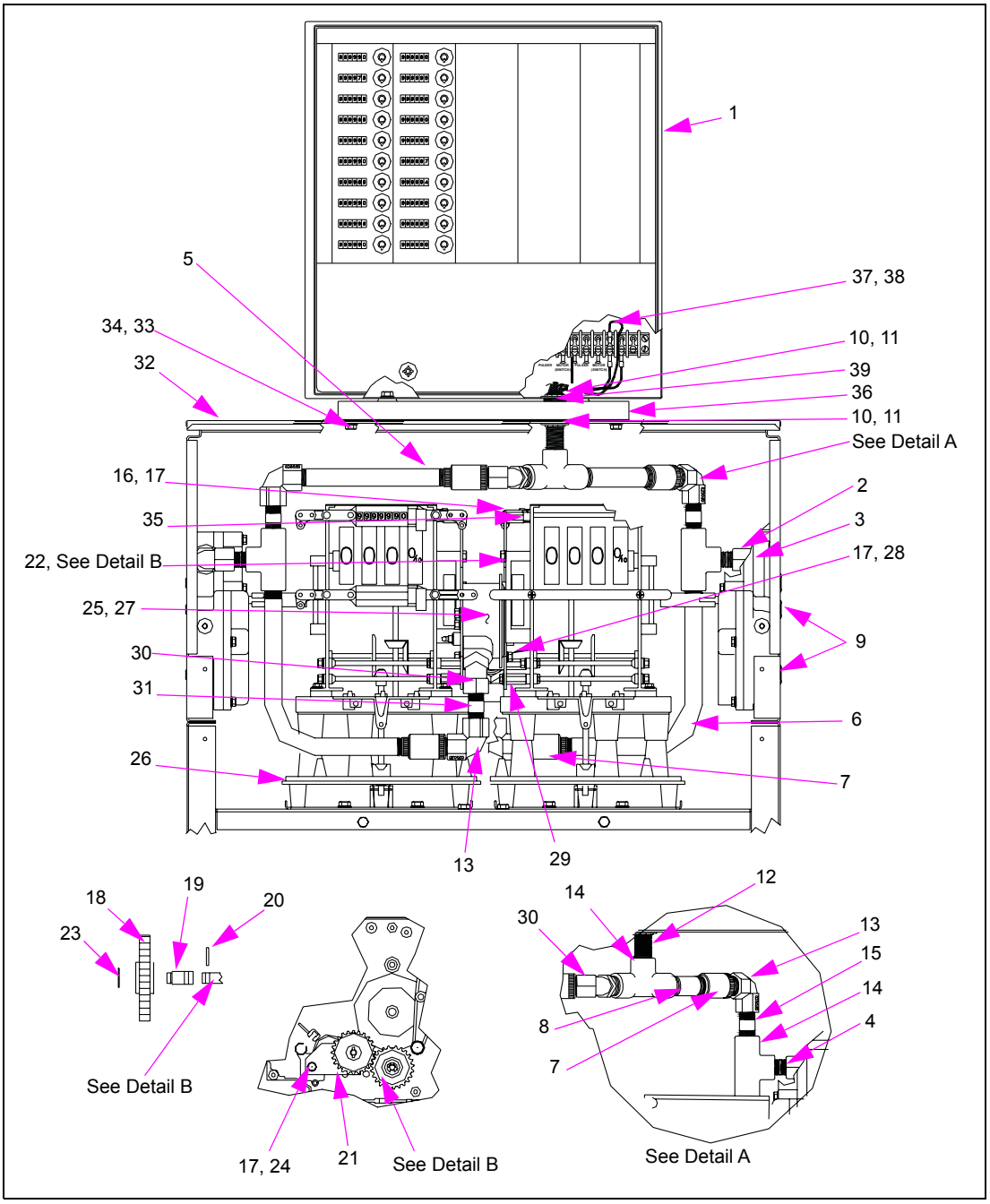
Item #	Part Description	Current Part	Previous Part
4	Elbow, Conduit 1/2 X 90 M/F	G025045	-
5	Conduit, 9100 ATW EK	G069726	-
6	1/2 UNY Explosion-proof Conduit Union	N16289-20	-
7	Conduit	G021347	-
8	Screw, 1/4-20 X 1/2 HHC	K05287	-
9	Lock Nut, 1/2 NPT Machined	K89681	-
10	Washer Flat 0.875 X 1.62 X 0.056	N16599-59	-
11	Conduit, 1/2 X 3 NPS Threads	G021737	-
12	Elbow, Conduit 1/2 X 90 F/F	G025030	-
13	Conduit Tee	G064830	-
14	Conduit, 1/2 X 2	G021337	-
15	Screw, 1/4-28 X 5/8 HHC	Q10624-37	-
16	Lockwasher, External 1/4 1114	G068891	-
17	Gear, Quantity	G027041	-
18	Hub, Quan. Shaft Extension	G031035	-
19	Pin, Spirol 5/64 X 7/16 STD PL	Q10038-35	-
20	Plate and Idler Gear Assembly	G027044	-
21	Plate, Mounting	G046970	-
22	Ring Retaining 5133-25-ZF	K76238-41	-
23	Screw, 1/4-20 X 5/8 Wash Head Type-T	K85736-39	-
24	Decal, 10:1 Pulser	G023596	-
25	Non-computer, Gallon	G021079	-
	Non-computer, Liter	G021071	-
26	Pulser Assembly 10:1	G046973	-
	Pulser Assembly 1:1	G046969	-
	Pulser Assembly 100:1	G046972	-
27	Screw, 1/4-20 X 5/8 HHC	K14830	-
28	Spacer	G056877	-
29	Elbow, Conduit 1/2 X 45 M/F	G025015	-
30	Pipe TBE, 1/2 X 1-1/2 Zinc Plated	R11979-39	-
31	Cover, Top 9100 ATW Master/Auxiliary, Painted (obsolete, see note 1)	-	022619
	Cover, Top 9100 ATW Master/Auxiliary, SS (obsolete, see note 1)	-	022618
32	Screw, 5/16-18 X 3/4 HHC	Q10624-01	-
33	Lockwasher, 5/16 PL	K73278-28	-
34	Spacer, Top	G056895	-
35	Gasket, 1/8 X 1/4 X 3 Ft Lg	G027146	-
36	Term, Wire Spade #8 (16-14) - BLU	Q11024-02	-
37	Term, Wire Spade #6 (22-16) - RED	C01028	-
38	Square Cut Ring, #7-214	G049001	-

Notes:

1. No replacement.

2. Specify standard color (black, white, red). If not a standard color, specify serial number of pump/dispenser.

Split-twin Unit



Item #	Part Description	Current Part	Previous Part
1	Electrical Keytrol	-	-
2	Elbow, Conduit, 1/2" X 90º M/F	G025045	-

Item #	Part Description	Current Part	Previous Part
3	Reset Assembly 115 V 60 Hz EK Pump	M09919A102	-
	Reset Assembly 230 V 60 Hz EK Pump	G048811	-
	Reset Assembly 230 V 50 Hz EK Pump	M09919A202	-
	Reset Assembly 110 V 60 Hz EK Dispenser	G048813	-
	Reset Assembly 230 V 60 Hz EK Dispenser	G048814	-
	Reset Assembly 230 V 50 Hz EK Dispenser	G048815	-
4	Pipe TBE, 1/2 X 1-1/8 Zinc Plated	N16771-78	-
5	Conduit, 1/2 X 8-3/4	G021301	-
6	Conduit, 9100 ATW EK	G069726	-
7	1/2 UNY Explosion-proof Conduit Union	N16289-20	-
8	Conduit, 1/2 X 6-3/4	G021347	-
9	Screw, 1/4-20 X 1/2 HHC	K05287	-
10	Lock Nut, 1/2 NPT Machined	K89681	-
11	Washer Flat 0.875 X 1.62 X 0.056	N16599-59	-
12	Conduit, 1/2 X 3 NPS Threads	G021737	-
13	Elbow, Conduit 1/2 X 90 F/F MCH	G025030	-
14	Conduit Tee	G064830	-
15	Conduit, 1/2 X 2	G021337	-
16	Screw, 1/4-28 X 5/8 HHC	Q10624-37	-
17	Lockwasher, External 1/4 1114	G068891	-
18	Gear, Quantity	G027041	-
19	Hub, Quan. Shaft Extension	G031035	-
20	Pin, Spirol 5/64 X 7/16 STD PL	Q10038-35	-
21	Plate and Idler Gear Assembly	G027044	-
22	Plate, Mounting	G046970	-
23	Ring Retaining 5133-25-ZF	K76238-41	-
24	Screw, 1/4-20 X 5/8 Wash Head Type-T	K85736-39	-
25	Decal, 10:1 Pulser	G023596	-
26	Non-computer, Gallon	G021079	-
	Non-computer, Liter	G021071	-
27	Pulser Assembly 10:1	G046973	-
	Pulser Assembly 1:1	G046969	-
	Pulser Assembly 100:1	G046972	-
28	Screw, 1/4-20 X 5/8 HHC	K14830	-
29	Spacer	G056877	-
30	Elbow, Conduit 1/2 X 45 M/F	G025015	-
31	Pipe TBE, 1/2 X 1-1/2 Zinc Plated	R11979-39	-
32	Cover, Top 9100 ATW EK Master, Painted (see note 1)	G022486	-
	Cover, Top, SS, 9100 ATW EK Master	G022485	-
	Cover, Top 9100 ATW Master/Auxiliary, Painted (obsolete, see note 2)	-	022619
	Cover, Top 9100 ATW Master/Auxiliary, SS (obsolete, see note 2)	-	022618
33	Screw, 5/16-18 X 3/4 HHC	Q10624-01	-

Item #	Part Description	Current Part	Previous Part
34	Lockwasher, 5/16 PL	K73278-28	-
35	Spacer, Top	G056895	-
36	Gasket, 1/8 X 1/4 X 3 Ft Lg	G027146	-
37	Term, Wire Spade #8 (16-14)-BLU	Q11024-02	-
38	Term, Wire Spade #6 (22-16)-RED	C01028	-
39	Square Cut Ring, #7-214	G049001	-

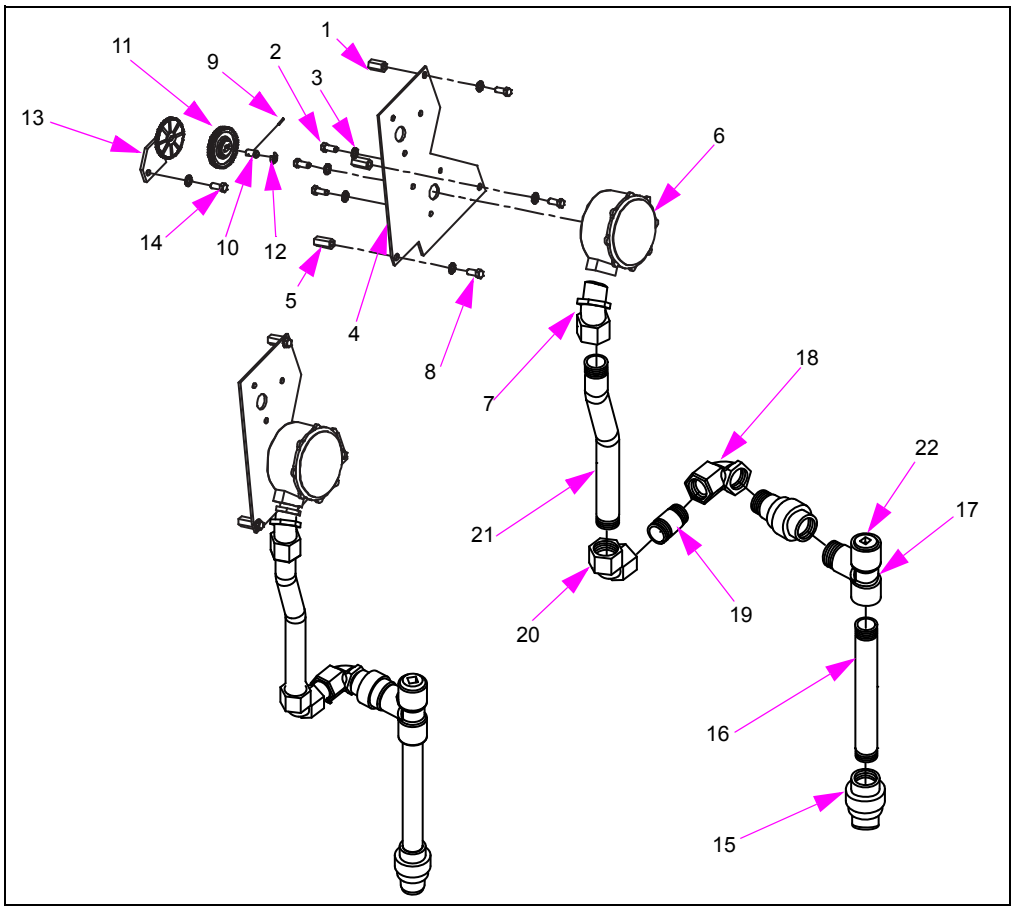
Notes:

1. Specify standard color (black, white, red). If not a standard color, specify serial number of pump/dispenser.

2. No replacement.

17 – Mechanical Pulser Option

Single Unit Volume

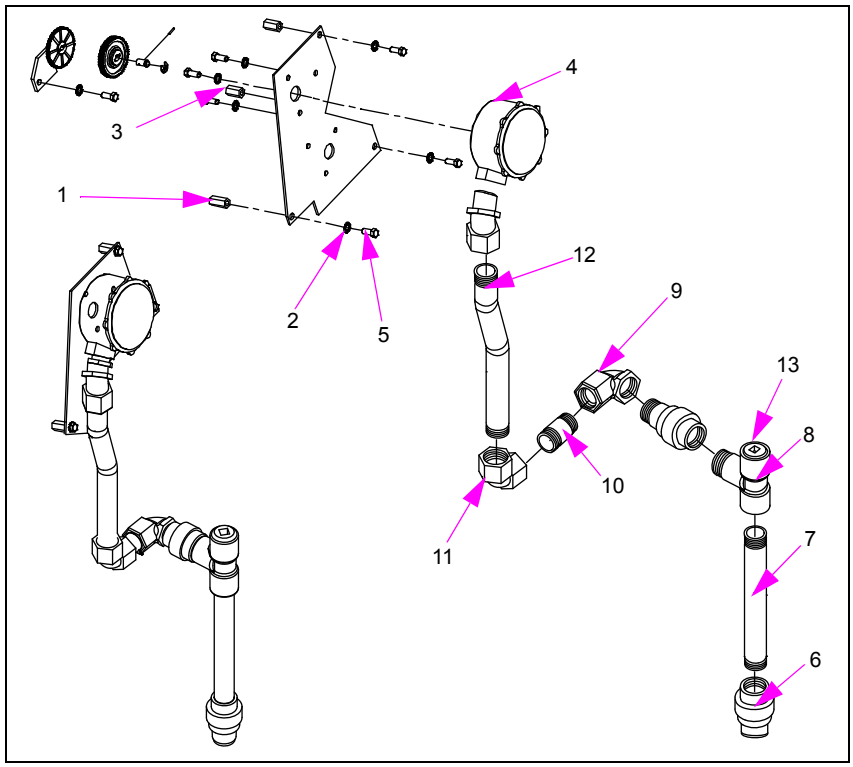


Item #	Part Description	Where Used	Current Part	Previous Part	Quantity
1	Top Spacer	All	G056895	-	1
2	Screw, Hexagonal Head Cap, Finished	All	-	-	3
3	Lockwasher External 1114	All	G068891	-	6
4	Plate Mounting Pulser	All	G046970	-	1
5	Spacer, 0.944	All	G056877	-	2
6	Pulser and Coupling Assembly				
	• Pulser and Coupling Assembly 10:1 Volume	1	G046973	-	1
	• Pulser and Coupling Assembly 100:1 Volume	4	G046972	-	1
	• Pulser and Coupling Assembly 1:1 Volume	5	G046969	-	1
7	Elbow Conduit 1/2 X 45 M/F	All except 3	G025015	-	1
8	Screw, Hexagonal Head Cap, Finished	All	-	-	3

Item #	Part Description	Where Used	Current Part	Previous Part	Quantity
9	Pin, Spirol 5/64 X 7/16 STD PL	All	Q10038-35	-	1
10	Hub, Quantity Shaft Extension	All	G031035	-	1
11	Gear, Quantity	All	G027041	-	1
12	Ring Retaining 5133-25-ZF	All	K76238-41	-	1
13	Plate and Idler Gear Assembly	All	G027044	-	1
14	Screw, Hexagonal, Washer Head 1/4-2	All	-	-	1
15	Union Conduit M and F 1/2	All	Q10016-04	-	1
16	Nipple Conduit	1, 3, 4, 5	R11976-57	R11976-74	1
17	Conduit Tee, Machined	All	G064830	-	1
18	Elbow Conduit 1/2 X 90 M/F	1, 3, 4, 5	G025045	-	1
19	Nipple Conduit 1/2 X 1-5/8	1, 3, 4, 5	R11976-43	-	1
20	Elbow Conduit 1/2 X 90 F SPT	1, 3, 4, 5	K42428	-	1
21	Conduit	1, 4	M05292B001	-	1
22	Plug Pipe 1/2 SQ Socket	1, 3, 4, 5	K43850	-	1
Not Shown					
-	Tie-wrap	All	C08682	-	1
-	Conduit 1/2 X 3	2, 6	G038125	-	1
-	Conduit, EK	2, 6	M05221B001	-	1
-	Conduit Formed	3, 4, 5	M05368B001	-	1
-	Washer, Flat 0.875 X 1.62 X 0.56	2, 6	N16599-59	-	2
-	Conduit 1/2 - 3-3/4 NPS	2, 6	G021737	-	1
-	Pipe TBE, 1/2 X 1-1/2 Zinc Plated	2, 6	R11979-39	-	1
-	Elbow Conduit 1/2 X 90 F/F	2, 6	G025030	-	3

Where Used:
All = All mechanical single units
1 = Pulser 10:1, gallons, commercial and retail, no EK
2 = Pulser 10:1, gallons, commercial only, with EK
3 = Pulser 100:1, gallons, retail only (money)
4 = Pulser 100:1, gallons, commercial and retail, no EK
5 = Pulser 1:1, liters, commercial only, no EK
6 = Pulser 1:1, liters, commercial only, with EK

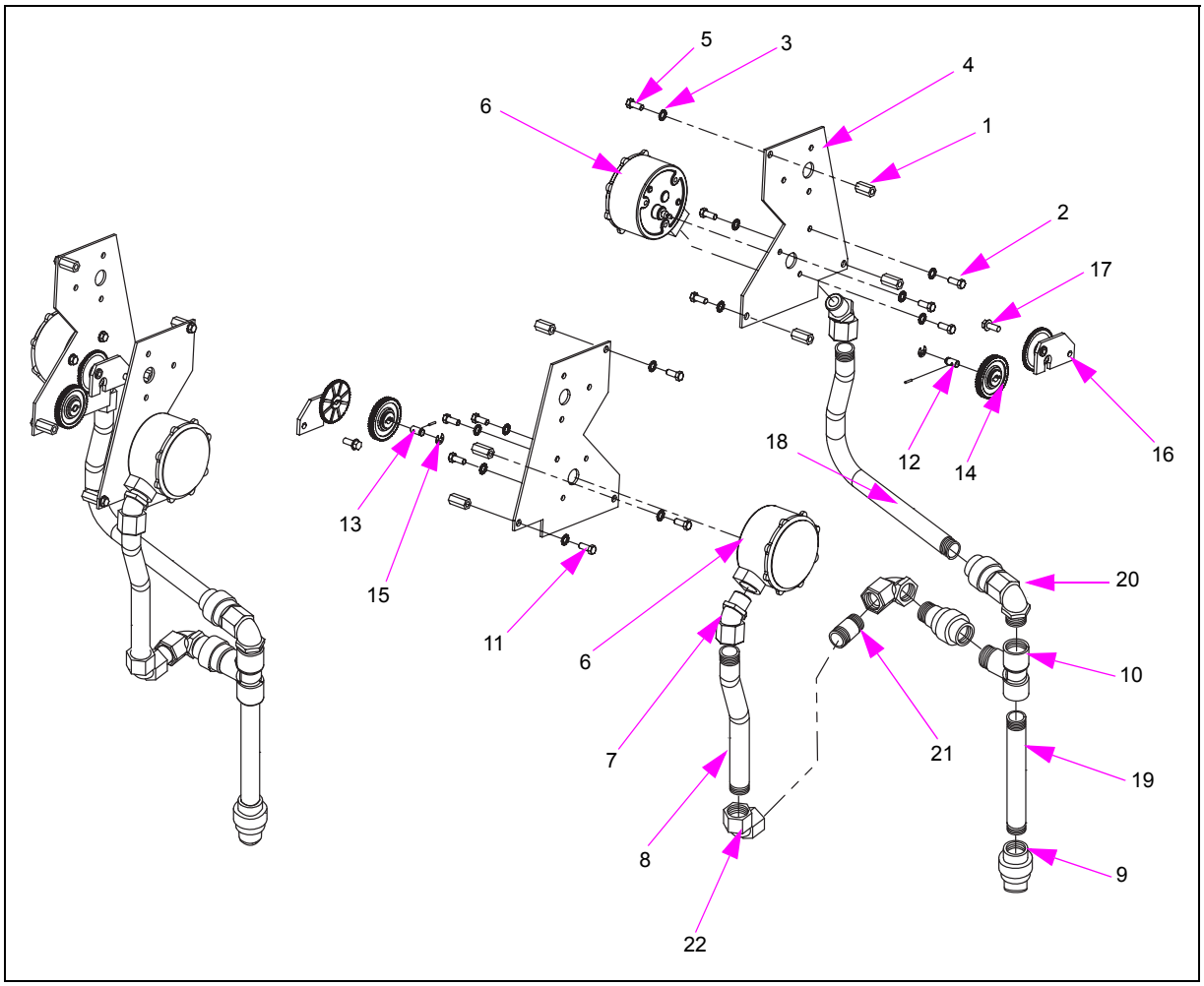
Single Unit Money



Item #	Part Description	Where Used	Current Part	Previous Part	Quantity
1	Top Spacer	All	G056895	-	1
2	Lockwasher External 1114	All	G068891	-	1
3	Spacer, 0.944	All	G056877	-	1
4	Kit, Pulser VR 312020-924 100:1 Money	4	G032942	-	1
5	Screw, Hexagonal Head Cap, Finished	All	-	-	3
6	Union Conduit M&F 1/2	All	Q10016-04	-	1
7	Nipple Conduit	1, 3, 4, 5	R11976-57	R11976-74	1
8	Conduit Tee, Machined	All	G064830	-	1
9	Elbow Conduit 1/2 X 90 M/F	1, 3, 4, 5	G025045	-	1
10	Nipple Conduit 1/2 X 1-5/8	1, 3, 4, 5	R11976-43	-	1
11	Elbow Conduit 1/2 X 90 F SPT	1, 3, 4, 5	K42428	-	1
12	Conduit Formed	3, 4, 5	M05368B001	-	1
13	Plug Pipe 1/2 SQ Socket	1, 3, 4, 5	K43850	-	1
Not Shown					
-	Tie-wrap	All	C08682	-	1

Where Used:
All = All mechanical single units
1 = Pulser 10:1, gallons, commercial and retail, no EK
2 = Pulser 10:1, gallons, commercial only, with EK
3 = Pulser 100:1, gallons, retail only (money)
4 = Pulser 100:1, gallons, commercial and retail, no EK
5 = Pulser 1:1, liters, commercial only, no EK
6 = Pulser 1:1, liters, commercial only, with EK

Dual Unit Volume

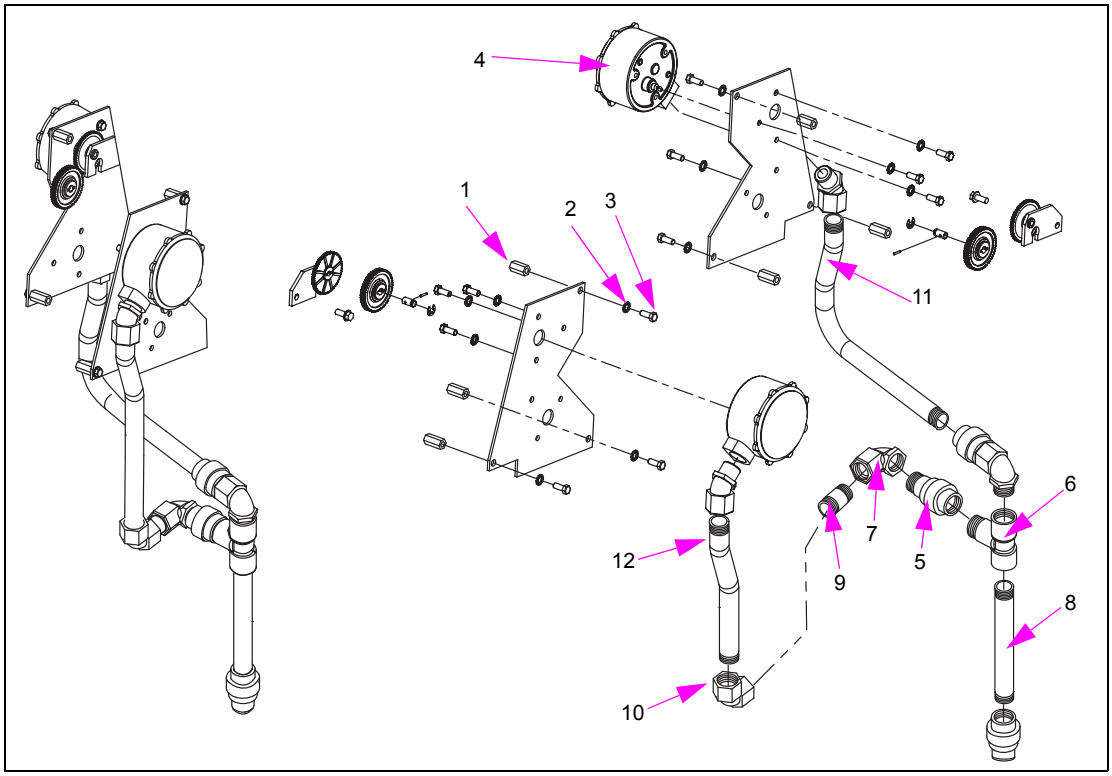


Item #	Part Description	Where Used	Current Part	Previous Part	Quantity
1	Top Spacer	All	G056895	-	2
2	Screw, Hexagonal Head Cap, Finished	All	-	-	6
3	Lockwasher External 1114	All	G068891	-	12
4	Plate Mounting Pulser	All	G046970	-	2
5	Spacer, 0.944	All	G056877	-	4
6	Pulser and Coupling Assembly				
	• Pulser and Coupling Assembly 10:1 Volume	1	G046973	-	2
	• Pulser and Coupling Assembly 100:1 Volume	5	G046972	-	2
	• Pulser and Coupling Assembly 1:1 Volume	6	G046969	-	2
7	Elbow Conduit 1/2 X 45 M/F	All except 4	G025015	-	2
8	Conduit	1, 6	M05292B001	-	1
9	Union Conduit M/F 1/2	All	Q10016-04	-	Varies per pulser
10	Conduit Tee, Machined	All	G064830	-	Varies per pulser

Item #	Part Description	Where Used	Current Part	Previous Part	Quantity
11	Screw, Hexagonal Head Cap, Finished	All	-	-	6
12	Pin, Spirol 5/64 X 7/16 STD PL	All	Q10038-35	-	2
13	Hub, Quantity Shaft Extension	All	G031035	-	2
14	Gear, Quantity	All	G027041	-	2
15	Ring Retaining 5133-25-ZF	All	K76238-41	-	2
16	Plate and Idler Gear Assembly	All	G027044	-	2
17	Screw, Hexagonal, Washer Head 1/4-2	All	-	-	2
18	Conduit	1, 5, 6	M05293B001	-	1
19	Nipple Conduit	1, 4, 5, 6	R11976-57	R11976-74	1
20	Elbow Conduit 1/2 X 90 M/F	1, 4, 5, 6	G025045	-	2
21	Nipple 3/4 X 3-3/8	1, 4, 5, 6	R11496-43	-	1
22	Elbow Conduit 1/2 X 90 F SPT	1, 4, 5, 6	K42428	-	1
Not Shown					
-	Tie-wrap	All	C08682	-	2
-	Pipe TBE, 1/2 X 1-1/8 Zinc Plated	2, 3, 7, 8	N16771-78	-	2
-	Conduit 9100 ATW Electrical Keytrol	2, 3, 7, 8	G069726	-	2
-	Lock Nut, 1/2 NPT Machined	2, 3, 7, 8	K89681	-	4
-	Washer, Flat 0.875 X 1.62 X 0.56	2, 3, 7, 8	N16599-59	-	4
-	Conduit 1/2 - 3-3/4 NPS	2, 3, 7, 8	G021737	-	2
-	Elbow Conduit 1/2 X 90 F/F	2, 3, 7, 8	G025030	-	6
-	Conduit 1/2 X 2	2, 3, 7, 8	G021337	-	2
-	Pipe TBE, 1/2 X 1-1/2 Zinc Plated	2, 3, 7, 8	R11979-39	-	2
-	Conduit 1/2 X 8-3/4	3, 8	G021301	-	1
-	Conduit	6	M05293B001	-	1

Where Used:
All = All mechanical single units
1 = Pulser 10:1, gallons, commercial and retail, no EK
2 = Pulser 10:1, gallons, commercial only, with EK
3 = Pulser 100:1, gallons, retail only (money)
4 = Pulser 100:1, gallons, commercial and retail, no EK
5 = Pulser 1:1, liters, commercial only, no EK
6 = Pulser 1:1, liters, commercial only, with EK

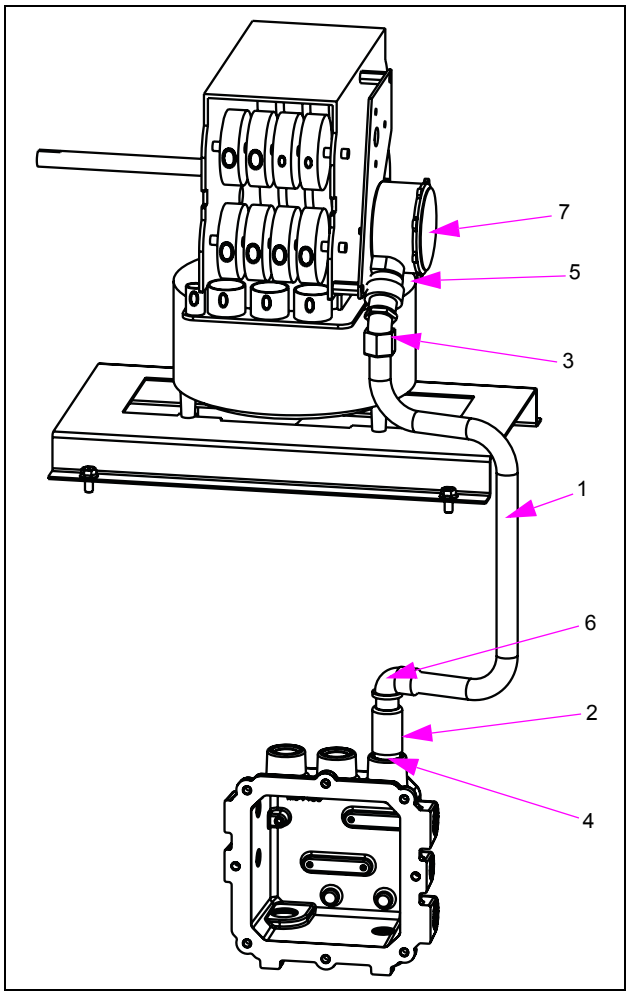
Dual Unit Money



Item #	Part Description	Where Used	Current Part	Previous Part	Quantity
1	Top Spacer	All	G056895	-	2
2	Lockwasher External 1114	All	G068891	-	6
3	Spacer, 0.944	All	G056877	-	4
4	Kit, Pulser VR 312020-924 100:1 Money	4	G032942	-	2
5	Union Conduit M and F 1/2	All	Q10016-04	-	2
6	Conduit Tee, Machined	All	G064830	-	1
7	Elbow Conduit 1/2 X 90 M/F	1, 4, 5, 6	G025045	-	2
8	Nipple Conduit	1, 4, 5, 6	R11976-57	R11976-74	1
9	Nipple 3/4 X 3-3/8	1, 4, 5, 6	R11496-43	-	1
10	Elbow Conduit 1/2 X 90 F SPT	1, 4, 5, 6	K42428	-	1
11	Conduit, Formed	4	M05368B001	-	1
12	Conduit, Formed	4	M05369B001	-	1
Not Shown					
-	Tie-wrap	All	C08682	-	2
-	Screw, Hexagonal Head Cap, Finished	All	-	-	6

Where Used:
All = All mechanical single units
1 = Pulser 10:1, gallons, commercial and retail, no EK
2 = Pulser 10:1, gallons, commercial only, with EK
3 = Pulser 100:1, gallons, retail only (money)
4 = Pulser 100:1, gallons, commercial and retail, no EK
5 = Pulser 1:1, liters, commercial only, no EK
6 = Pulser 1:1, liters, commercial only, with EK

Super-Hi Volume

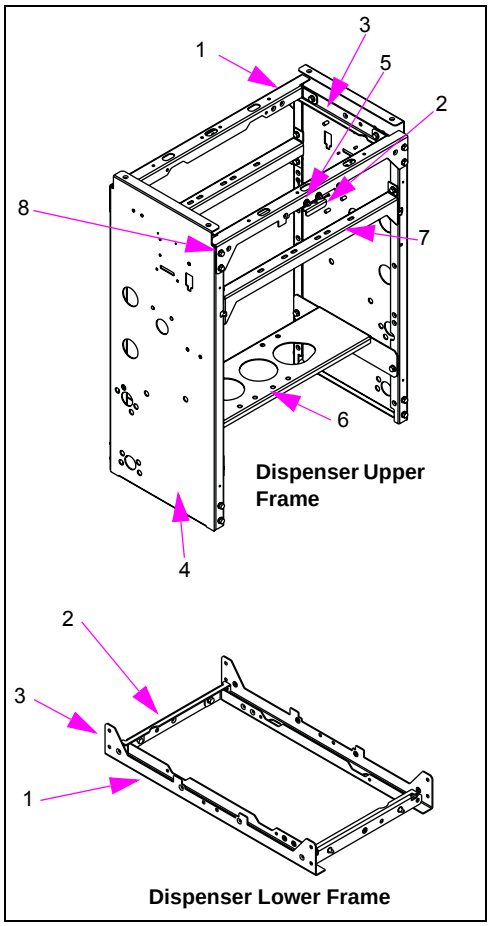


Item #	Part Description	Current Part	Previous Part	Quantity
1	Conduit, Pulser Mechanical Super-Hi	M07356B001	-	1
2	Expansion Union (Conduit)	N16289-20	-	1
3	Elbow, Conduit 1/2 X 45	G025015	-	1
4	Bushing, Reducing 3/4 - 1/2	K49827	-	1
5	Union, Conduit 1/2 inch	Q10016-04	-	1
6	Elbow, 1/2 X 90 M X F	K42448	-	1
7	Pulser Assembly 10:1 Volume	G046973	-	1
	Pulser Assembly 100:1 Volume	G046972	-	1
	Pulser Assembly 1:1 Volume	G046969	-	1

This page is intentionally left blank.

18 – Ultra-Hi Frame Section

Dispenser Frame



Dispenser Upper Frame

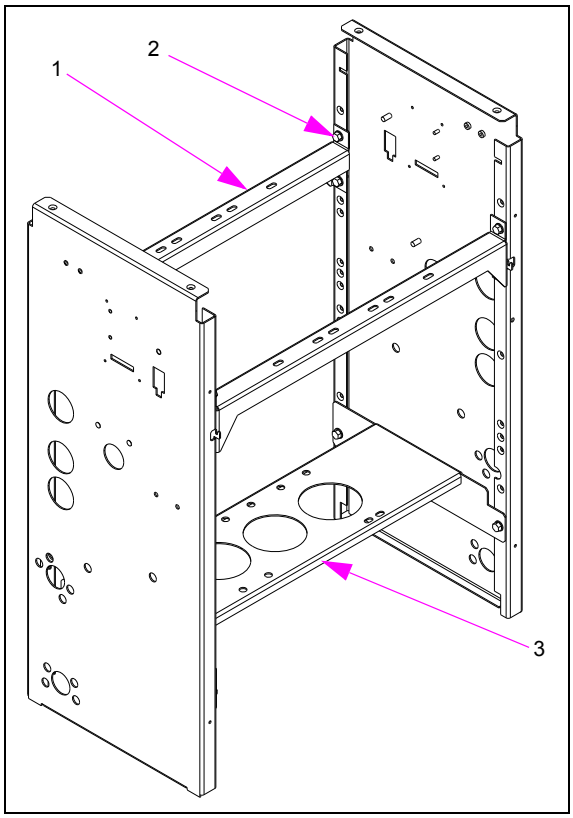
Item #	Part Description	Current Part	Previous Part	Quantity
1	Base Rail Frame Support	M04460B001	-	2
2	Bracket, Lower Panel Lock	M04774A001	-	2
3	Column Cross Support Bracket	M04251B001	-	2
4	Column, Lower Frame	M06628A001	-	2
5	Nut, Metric, Hexagonal Serrated Flange (M8)	M00414B003	-	4
6	Plate, Inlet Fitting Support	M05538B001	-	1
7	Rail Meter Support	M05537B001	-	2
8	Screw, Thread Forming, Hexagonal Washer Head M8 X 18	M00417B009	-	40

Dispenser Lower Frame

Item #	Part Description	Current Part	Previous Part	Quantity
1	Base Rail Frame Support	M04460B001	-	2
2	Column Cross Support Bracket	M04251B001	-	2
3	Screw, Thread Forming, Hexagonal Washer Head M8 X 18	M00417B009	-	4

Ultra-Hi Dispenser Lower Hydraulic Upper Frame

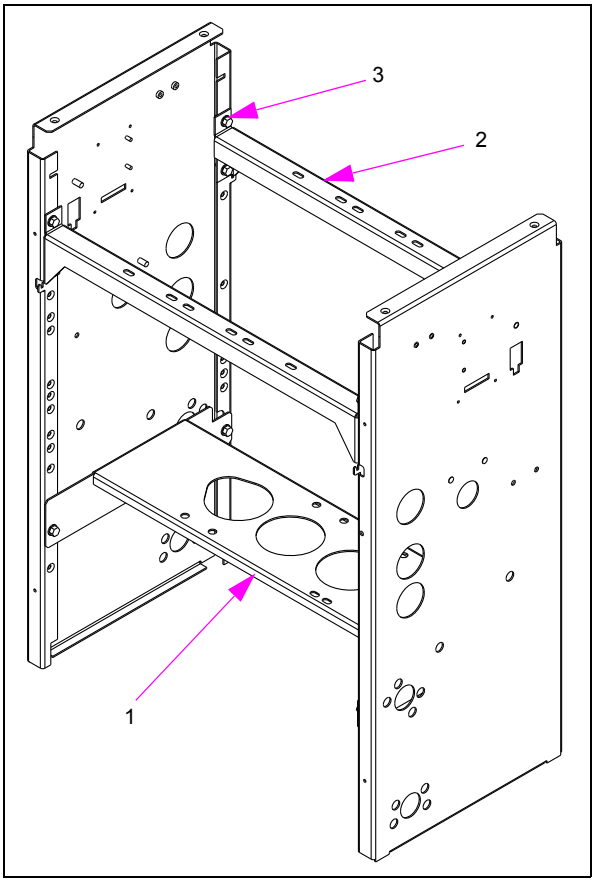
Note: Units built after December 11, 2008.



Item #	Part Description	Current Part	Previous Part	Quantity
1	Rail Meter Support	M05537B001	-	2
2	Screw, Metric M8 X 18	M00417B009	-	16
3	Plate Inlet Fitting Support	M05538B001	-	1

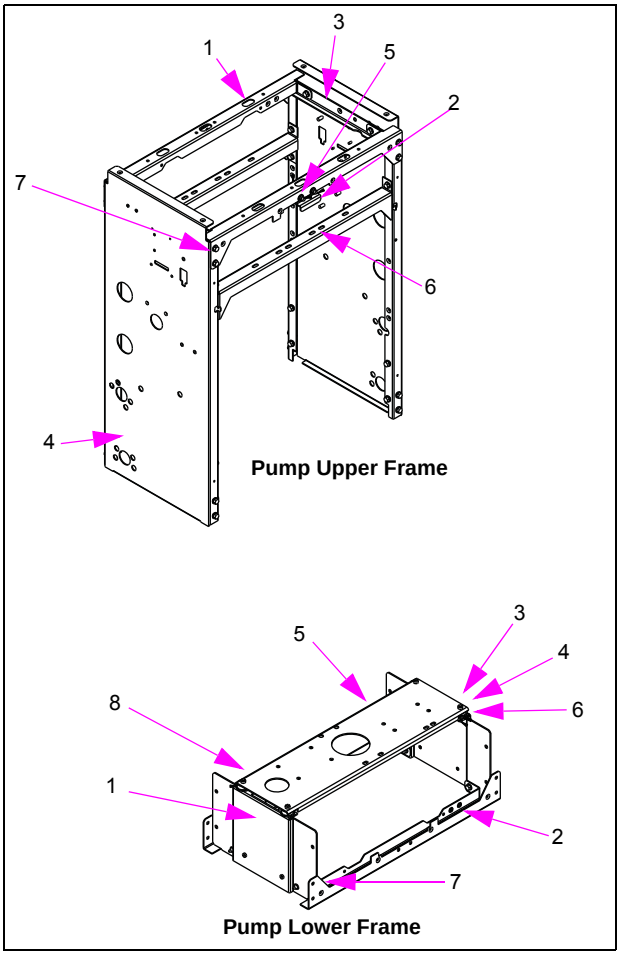
Ultra-Hi 9853 KXTW1 Lower Hydraulic Upper Frame

Note: Units built after December 11, 2008.



Item #	Part Description	Current Part	Previous Part	Quantity
1	Plate Inlet Fitting Support	M05538B001	-	1
2	Rail Meter Support	M05537B001	-	2
3	Screw, Metric M8 X 18	M00417B009	-	16

Self-contained Pump Frame



Pump Upper Frame

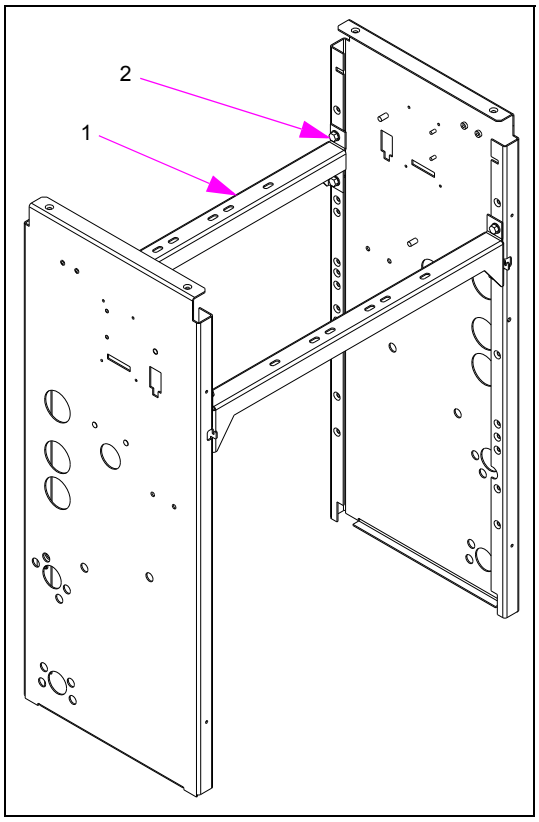
Item #	Part Description	Current Part	Previous Part	Quantity
1	Base Rail Frame Support	M04460B001	-	2
2	Bracket, Lower Panel Lock	M04774A001	-	2
3	Column Cross Support Bracket	M04251B001	-	2
4	Column, Lower Frame	M06628A001	-	2
5	Nut, Metric, Hexagonal Serrated Flange (M8)	M00414B003	-	4
6	Rail Meter Support	M05537B001	-	2
7	Screw, Thread Forming, Hexagonal Washer Head M8 X 18	M00417B009	-	44

Pump Lower Frame

Item #	Part Description	Current Part	Previous Part	Quantity
1	Assembly Lower Frame Base	M04868A001	-	2
2	Base Rail Frame Support	M04460B001	-	2
3	Flat Washer Metric - Yellow Chromate	M00959B019	-	4
4	Flat Washer Metric - M8 Zinc Plate	M00959B008	-	4
5	Plate, Pump Support	M05536A001	-	1
6	Screw, Metric M8 X 40	M00415B017	-	4
7	Screw, Thread Forming, Hexagonal Washer Head M8 X 18	M00417B009	-	4
8	Universal Isolation Mount	M04871B001	-	4

Ultra-Hi Self-contained Lower Hydraulic Frame

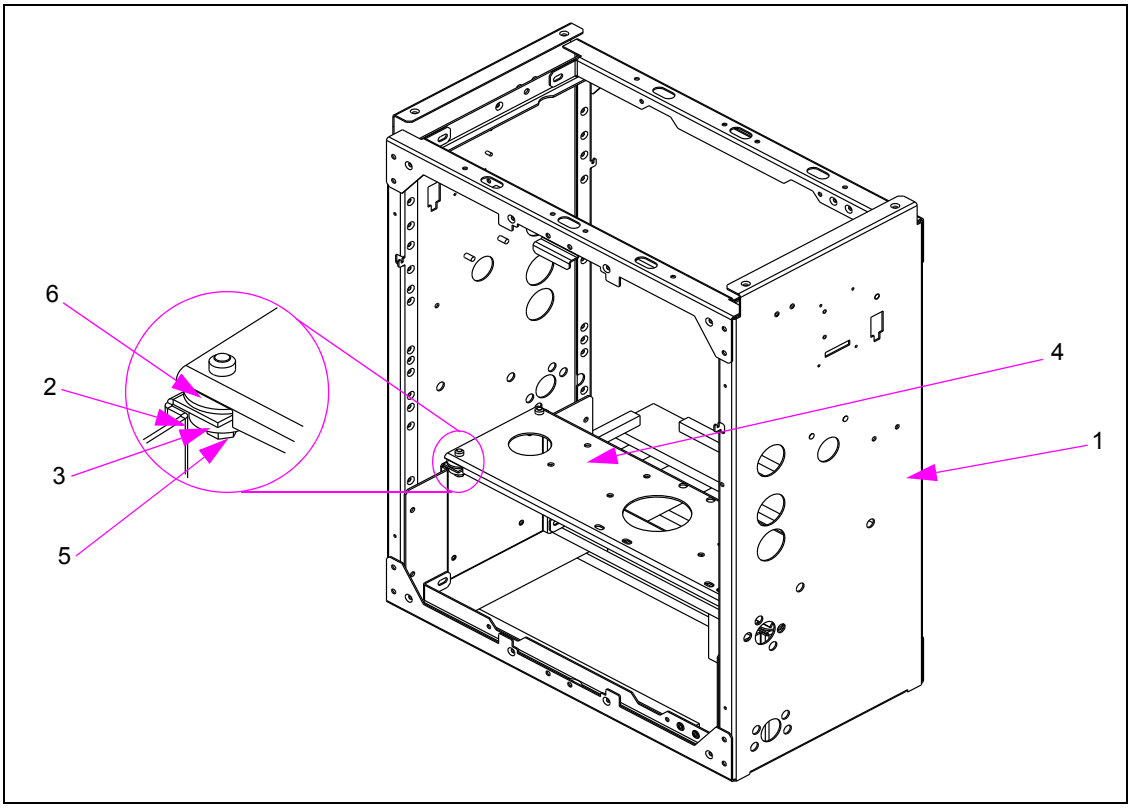
Note: Units built after December 11, 2008.



Item #	Part Description	Current Part	Previous Part	Quantity
1	Rail Meter Support	M05537B001	-	2
2	Screw, Metric M8 X 18	M00417B009	-	12

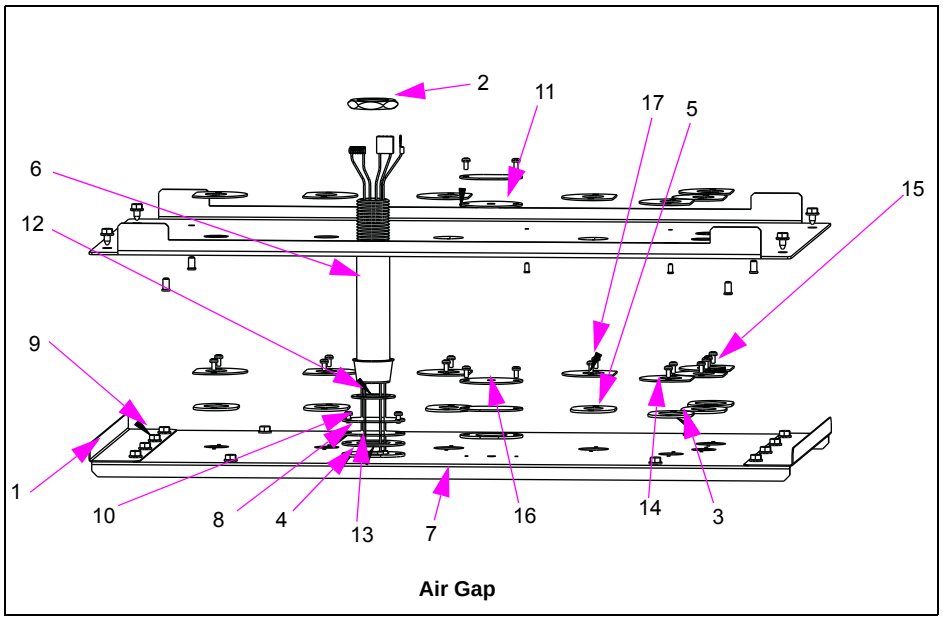
Lower Welded Frame - Ultra-Hi (Self-contained)

Note: Units built after December 11, 2008.



Item #	Part Description	Current Part	Previous Part	Quantity
1	Assembly, Frame Weldment	M08928A013	M08928A012	1
2	Mount, Universal	M04871B001	-	4
3	Flat Washer	M00959B008	-	4
4	Assembly, Pump Support Plate	M05536A001	-	1
5	Screw, Metric M8 X 40	M00415B017	-	4
6	Washer, Flat M20 STL ZNPL	M00959B019	-	4

Air Gap



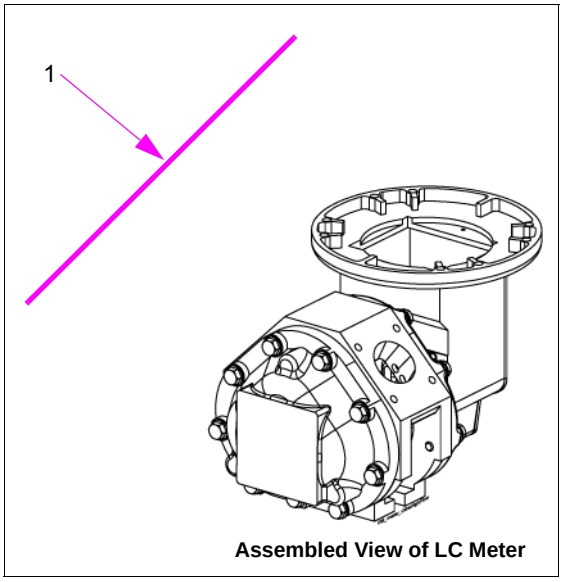
Air Gap

Item #	Part Description	Current Part	Previous Part	Quantity
1	Bracket Vapor Barrier Lower Plate	M05682B001	-	2
2	Conduit Nut 1-11 1/2 NPSL	N23655-01	-	1
3	Gasket, Conduit Seal	N23761-01	-	4
4	Gasket, Conduit Seal	N23761-02	-	3
5	Gasket, Conduit Seal	N23761-03	-	2
6	I.S. Barrier Assembly Front Load	C06766	-	6
7	Plate Vapor Barrier Lower	M05540B002	-	1
8	Plate, Conduit Seal	N23746-01	-	4
9	Screw, Thread Forming, Hexagonal Washer Head M6 X 10	M00417B004	-	16
10	Screw, Thread Forming, Phillips Pan-head M4 X 8	M00417B224	-	20
11	Upper Vapor Barrier ATC and Front Load	M05539A002	-	1
12	Washer Mach, 1.353 X 1.75 X 0.06	N16599-108	068446	1
13	Washer, Conduit Seal	N23760-03	-	1
14	Washer, Conduit Seal	N23760-04	-	8
15	Washer, Conduit Seal	N23760-05	-	2
16	Washer, Conduit Seal	N23760-07	-	2
17	Washer, Conduit Seal	N23760-01	-	4

This page is intentionally left blank.

19 – Ultra-Hi Meter and Pulser Section

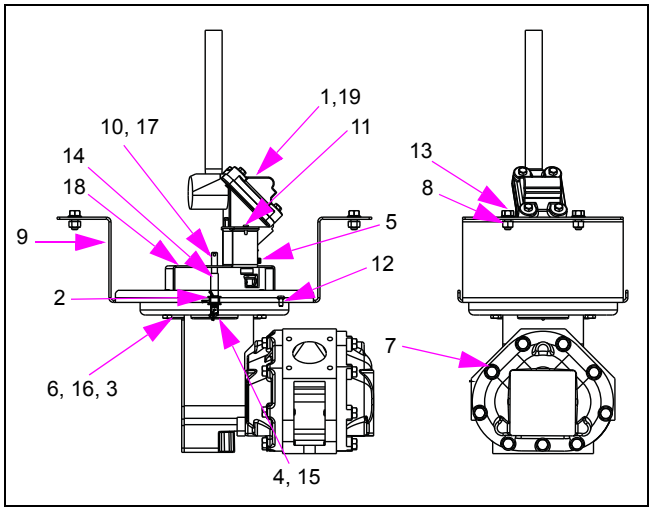
Liquid Control (LC) Meter



Assembled View of LC Meter

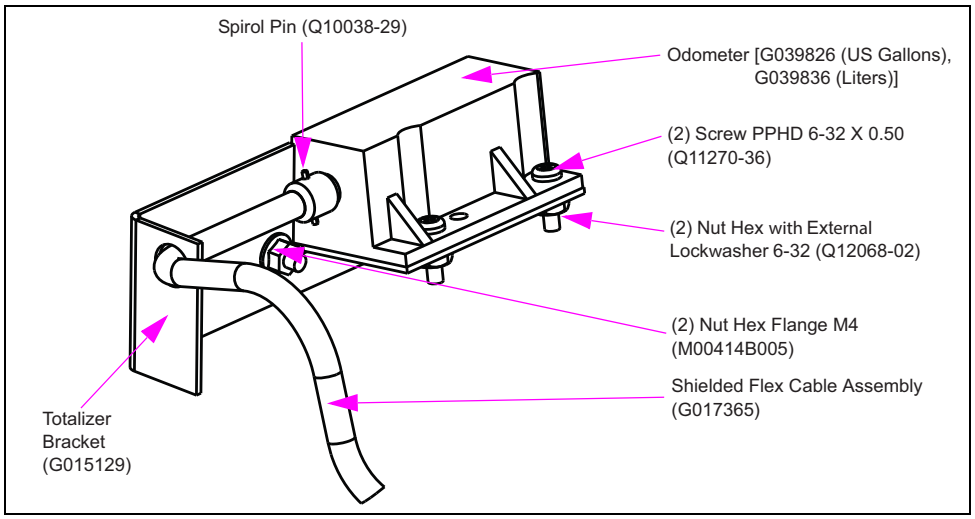
Item #	Description	Current Part	Previous Part	Quantity
1	LC Meter Assembly	T18767	-	1

Meter and Pulser Assembly



Item #	Part Description	Current Part	Previous Part	Quantity
1	Assembly Pulser Conduit	M05689A001	-	1
		M05689A002 (see note)	-	1
2	Bearing, Flange	G011948	-	1
3	Bolt Hexagonal Head Finished 1/4-20 X 1.25	K01914-28	-	4
4	Coupling Drive	G022073	-	1
5	Gear Train Assembly 9850A (Gallons)	G028212	-	1
	Gear Train Assembly 9850A (Liters)	G028211	-	1
6	Nut, Hexagonal 1/4-20	K01941	-	4
7	Meter, LCs	T18767	-	1
8	Nut Hexagonal with External Lockwasher 5/16-18 Thread	Q12068-06	-	4
9	Platform, Meter	M05542B001	-	1
		M05542B002 (see note)	-	1
10	Retaining, Ring	K76238-37	-	2
11	Screw, PPMD TMD Forming 6 - 32 X 0.38	Q11769-15	-	2
12	Screw, PPMD Type F Thread Cutting 8 - 32 X 0.25	G053017	-	4
13	Screw, Hexagonal Screw Flange Head 5/16 - 18 X 0.62	Q10253-02	-	4
14	Shaft - 9850 Pulser	G054033	-	1
15	Spirol Pin	Q10038-26	-	1
16	Washer Spring Lock 1/4”	K73278-29	-	4
17	Washer SS	N16599-124	-	2
18	Gear, Spur 60T	G028202	-	1
19	Kit, Optical Encoder Replacement	G013078	-	1
Note: This part is for 9850KXTW1. Units built after August 2007.				

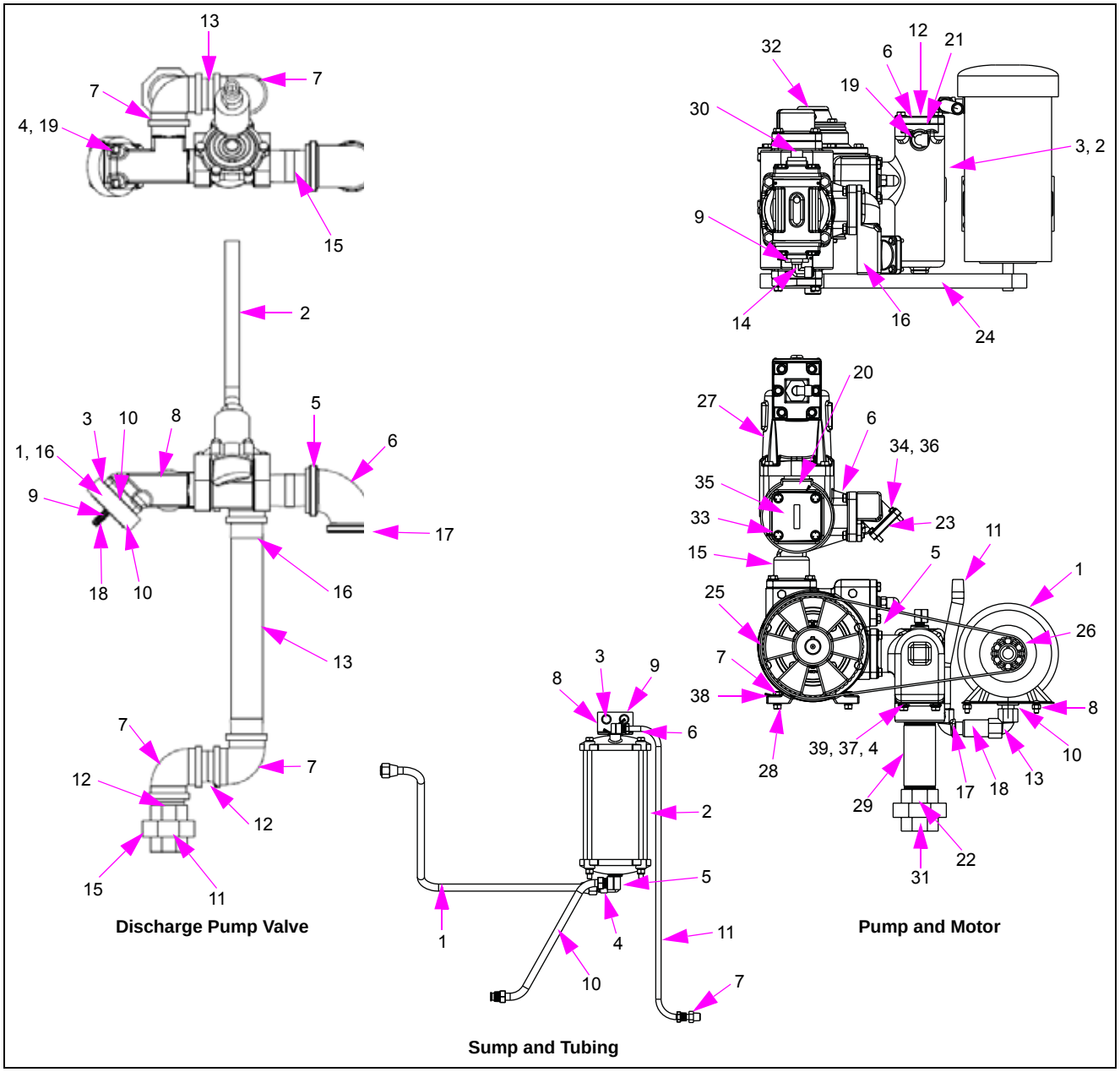
Mechanical Totalizer

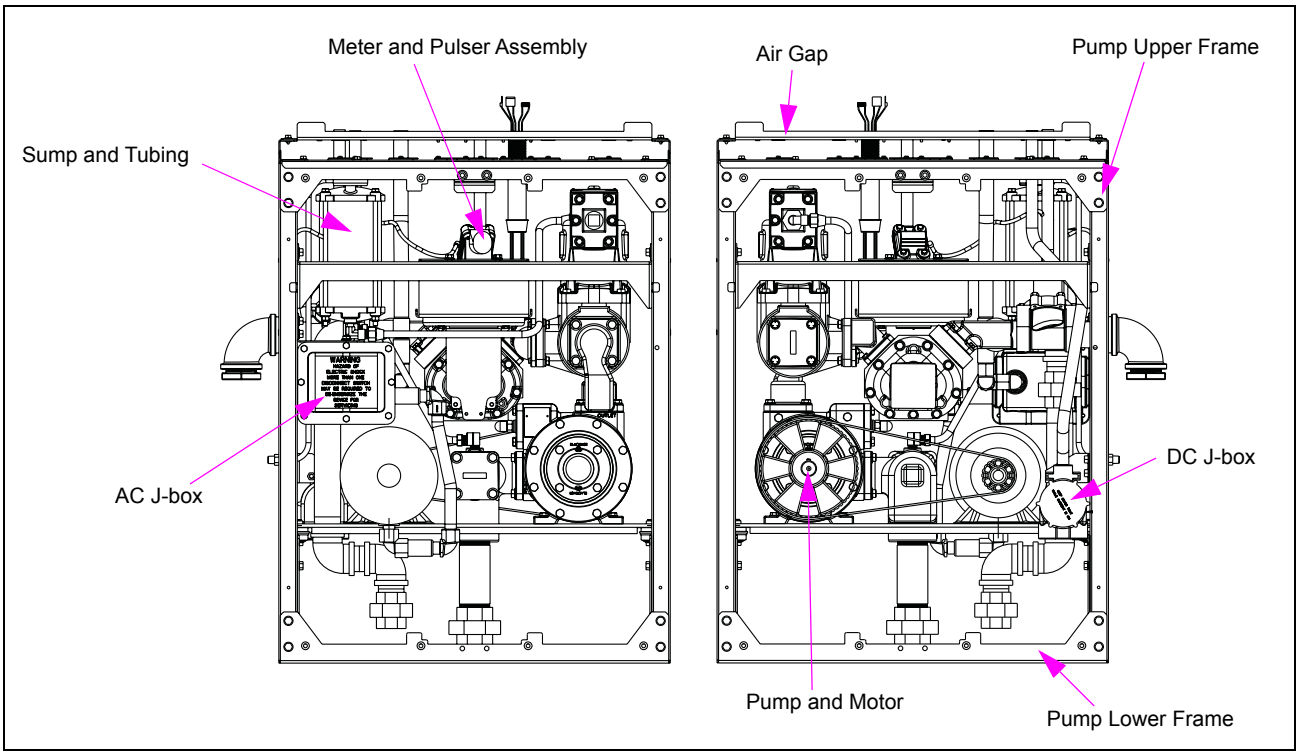


Description	Current Part	Previous Part	Quantity
Not Shown			
Totalizer Window	G069077	-	1
Cotter Pin-meter Gear	K02137-29	-	1
Totalizer Bracket, Front	M16292B001	015129	1

20 – Ultra-Hi Hydraulics Section

9850K Self-contained Pump




Meter and Pulser Assembly
Air Gap
Pump Upper Frame
Sump and Tubing
AC J-box
DC J-box
Pump and Motor
Pump Lower Frame

Pump and Motor

Item #	Part Description	Current Part	Previous Part	Quantity
1	Motor, 1-1/2 HP 230 V 1PH 60Hz	F37340	-	1
2	Assembly, Strainer 150	G063369	-	1
3	Base - Pump (Strainer Housing)	G003071	-	3
4	Bolt Hexagonal Head Finished 3/8-16 X 0.88	K47659	-	2
5	Bolt Hexagonal Head Finished 3/8-16 X 1.00	K01902	-	8
6	Bolt Hexagonal Head Finished 3/8-16 X 1.25	K01903	-	12
7	Bolt Hexagonal Head Finished 5/16-18 X 1.00	K07565	-	4
8	Bolt, Carriage 5/16 -18 X 3/4	G013030	-	4
9	Bushing, Hexagonal Reducer	G017169	-	1
10	Pipe TBE, 1/2 X 1-1/2 Zinc Plated	R11979-39	-	1
11	Conduit Pump Motor	M05602B001	-	1
12	Cover, Base Pump (Strained Housing)	G003502	-	2
13	Elbow-conduit 1/2 X 90 F/F Casting	G025030	-	1
14	Elbow 90 Flare Male Pipe 3/4	Q10001-20	-	1
15	Elbow Flanged	G003602	-	1
16	Elbow Flanged	G003603	-	1
17	Elbow-conduit 1/2 X 90º	G025045	-	1
18	Expansion Union (Conduit)	N16289-20	-	1
19	Fitting 1/2 C Elbow Inv Flanged	G026045	-	1
20	Gasket - Flange (2-3/4)	G027363	-	1
21	Gasket - Flange (2)	G027361	-	5
22	Gasket - Suction Seal	G054205	-	1
23	Gasket - Flange (1-1/2”)	G027362	-	1
24	Gearbelt	G012129	-	1
25	Gearbelt, Pulley	G047611	-	1
26	Gearbelt, Pulley (50 Hz)	G047614	-	1
	Gearbelt, Pulley	G047612	-	1
27	Lock P9567 Air Eliminator/Strainer Assembly (includes A8196)	G063287	-	1
28	Nut Hexagonal with External Lockwasher 5/16 - 18 Thread	Q12068-06	-	8
29	Pipe 2 X 3	R11501-22	-	1
30	Pipe Plug Square Head 1	K02283	-	1
31	Pipe Union, Female	K22468	-	1
32	Pump Blackmer X 2 UA	M04731B101	-	1
33	Screw, 3/8 - 16 X 1 1/4 HHC ZP Grade 5	G052020	-	4
34	Screw, 1/4 - 20 X 1	G051813	-	4
35	Strainer Basket 40 Mesh Lock	G063284	-	1
36	Washer 21/64 X 19/32 X 1/16 P	G068605	-	4
37	Washer 3/8 SAE - N 0.81 X 0.41 X 0.06	K66314	-	22
38	Washer 5/16 SAE - N 0.69 X 0.34 X 0.06	K65235-33	-	8
39	Washer Spring Lock 3/8-inch	K73278-25	-	2

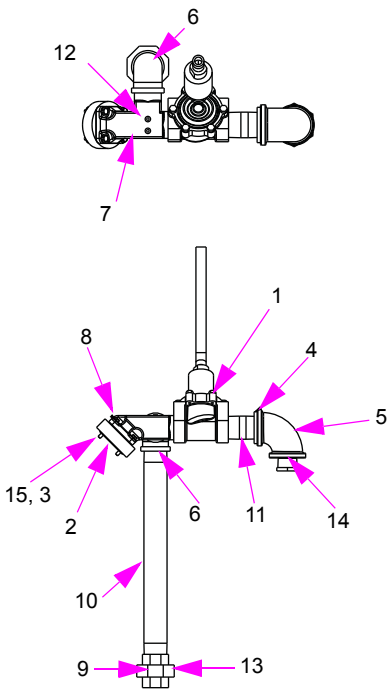
Discharge Pump Valve

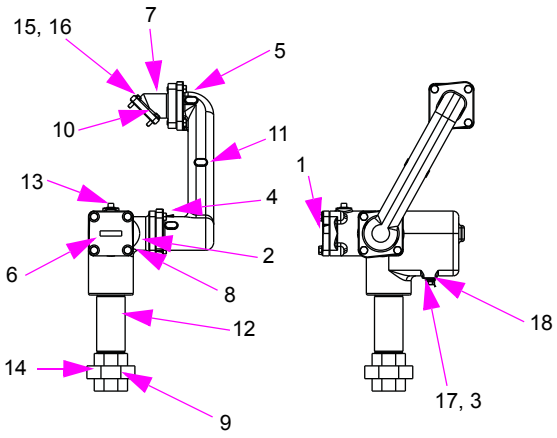
Item #	Part Description	Current Part	Previous Part	Quantity
1	Assembly Check Valve Stem	G062472	-	1
2	Assembly Conduit Valve Single 115 V	M05687A001	-	1
	Assembly Conduit Valve Single 230 V	M05687A002	-	1
3	Body - Check Valve	G012003	-	1
4	Bolt 1/4-20 X 2 HHC	K01914-71	-	4
5	Discharge Grommet	G028975	-	1
6	Elbow 1 1/2 X 1 1/4 X 90 Painted Red	Z07941	-	1
7	Elbow 1-1 1/2 90 150 PSI MI	K46046	-	4
8	Elbow, Meter Discharge	G003608	-	1
9	Nut Hexagonal Self Lock 10-32	Q10218-05	-	1
10	Gasket Flange (1-1/2”)	G027362	-	2
11	Gasket Seal Suction; 2-7/16	G054190	-	1
12	Nipple FE Pipe 1 1/2 X 1.75	R11493-77	-	3
13	Nipple FE Pipe 1 1/2 X 14.00	R11533-28	-	1
14	Nipple FE Pipe 1 1/2 X 3.75	R11493-26	-	1
15	Pipe Union, Female	K12179	-	2
16	Plate Plunger Check Valve	G046050	-	1
17	Reducing Bushing Hexagonal 1 1/4 X 1	K02309-22	-	1
18	Spring - Compression	G057897	-	1
19	Washer 21/ 64 X 19/32 X 1/16 P	G068605	-	4

Sump and Tubing

Item #	Part Description	Current Part	Previous Part	Quantity
1	Assembly, Tube Supply	M06615A001	-	1
2	Assembly, Float	G026407	-	1
3	Bracket Sump	M05577B001	-	1
4	Elbow 90º Flare Male Pipe 3/4	Q10001-21	-	1
5	Fitting, 1/2 C Elbow Inv Flanged	G026045	-	1
6	Fitting, 3/8 C Elbow Inv Flanged	G026044	-	1
7	Fittings - Vent Cap	G017915	-	1
8	Screw, Hexagonal Serrated Flange Head 5/16 - 18 X 0.62	Q10253-02	-	1
9	Screw, Thread Forming, Hexagonal Washer Head M8 X 18	M00417B009	-	2
10	Tube Assembly Return	M05624A001	-	1
11	Tube Assembly Vent	M05622A001	-	1

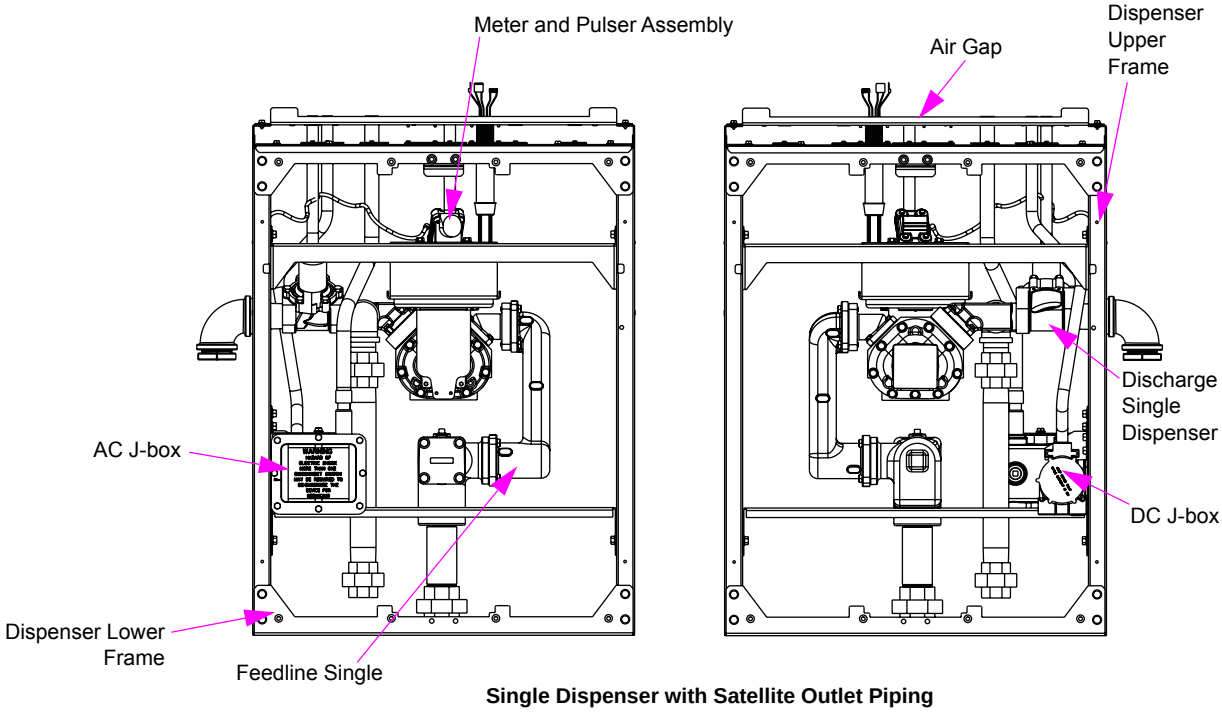
9850KX Single Inlet, Single Discharge Dispenser





Feedline Single

Discharge Single Dispenser Valve with Satellite



Single Dispenser with Satellite Outlet Piping

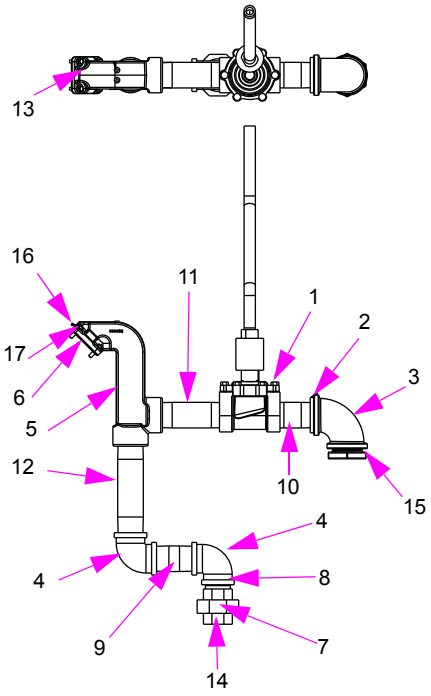
Discharge Single Dispenser Valve with Satellite

Item #	Part Description	Current Part	Previous Part	Quantity
1	Assembly, Conduit Valve Single 115 V	M05687A001	-	1
	Assembly, Conduit Valve Single 230 V	M05687A002	-	1
2	Body - Check Valve	G012003	-	-
3	Bolt 1/4-20 X 2 HHC	K01914-71	-	4
4	Discharge Grommet	G028975	-	1
5	Elbow 1-1/2 X 1-1/4 X 90º Painted Red	Z07941	-	1
6	Elbow 1 - 1-1/2 90º 150 PSI MI	K46046	-	1
7	Elbow, Meter Discharge ATC	G097907	-	1
8	Washer 21/64 X 19/32 X 1/16 P	G068605	-	4
9	Gasket - Seal Suction; 2-7/16	G054190	-	1
10	Nipple FE Pipe 1-1/2 X 18.12	R11493-106	-	1
11	Nipple FE Pipe 1-1/2 X 3.75	R11493-26	-	1
12	Pipe Plug C-sunk 1/8	K46444	-	2
13	Pipe Union, Female	K12179	-	2
14	Reducing Bushing Hexagonal 1-1/4 X 1	K02309-22	-	1
15	Gasket Flange (1-1/2”)	G027362	-	2

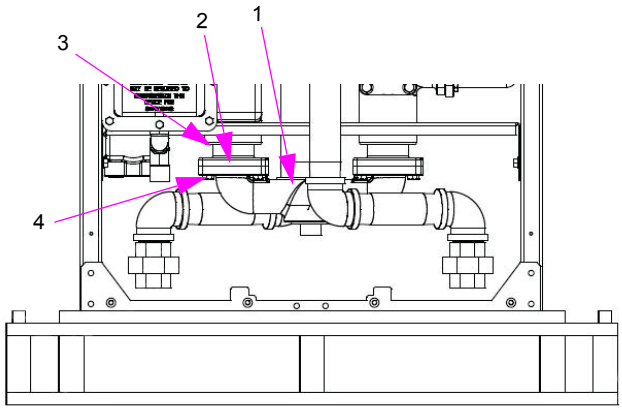
Feedline Single

Item #	Part Description	Current Part	Previous Part	Quantity
1	Assembly, Strainer 150	G063369	-	1
2	Base - Pump (Strainer Housing)	G003071	-	2
3	Bolt Hexagonal Head Finished 3/8-16 X 0.88	K47659	-	6
4	Bolt Hexagonal Head Finished 3/8-16 X 1.00	K01902	-	4
5	Bolt Hexagonal Head Finished 3/8-16 X 1.25	K01903	-	4
6	Cover, Base Pump (Strainer Housing)	G003502	-	1
7	Flanged Elbow	M08350B010	026082	1
8	Gasket - Flange (2”)	G027361	-	3
9	Gasket - Suction Seal	G054205	-	1
10	Gasket Flange (1-1/2”)	G027362	-	1
11	Manifold Strain/Material Test Report (MTR) 9850AXT	M08776B010	003017	1
12	Pipe Nipple 2 X 3” Steel	R11501-22	-	1
13	Pipe Plug Square Head 3/8	K02280	-	1
14	Pipe Union, Female	K22468	-	1
15	Screw, 1/4 20 X 1	G051813	-	4
16	Washer 21/64 X 19/32 X 1/16 P	G068605	-	4
17	Washer 3/8 SAE - N 0.81 X 0.41 X 0.06	K66314	-	6
18	Washer Spring Lock 3/8-inch	K73278-25	-	2

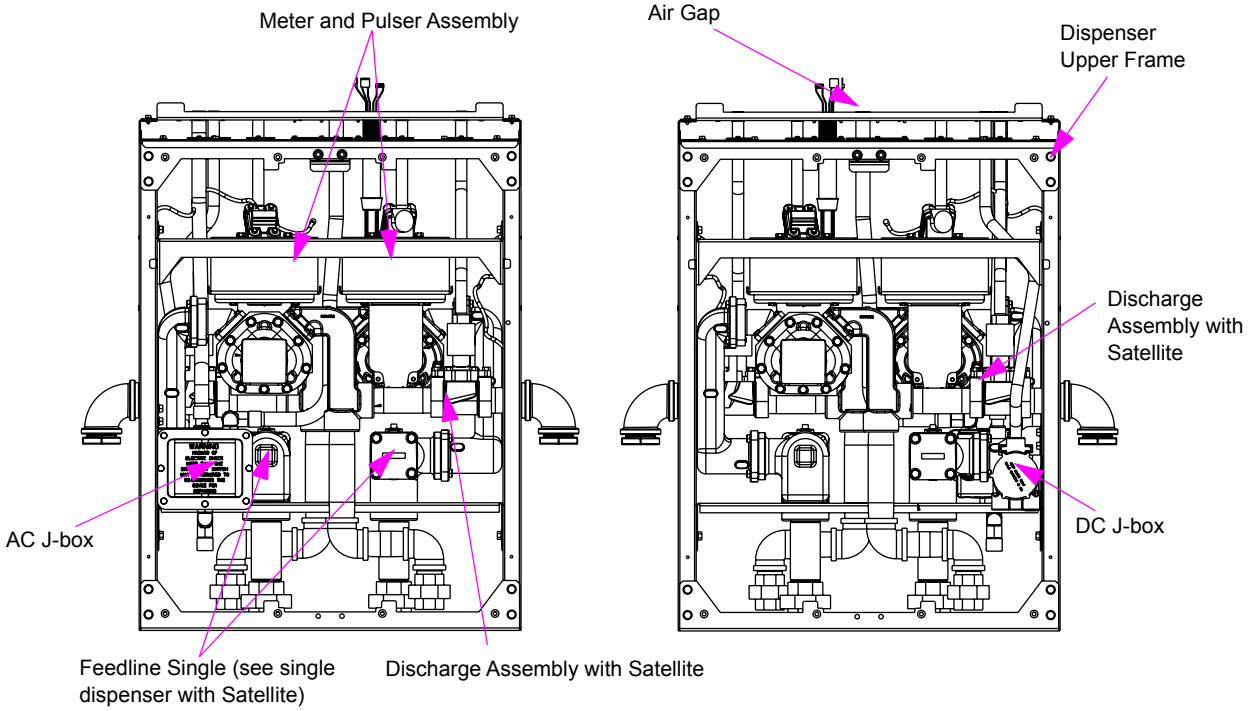
9850KXTW1 Single Inlet, 9850KXTW2 Dual Inlet, Dual Discharge Dispenser



Discharge Dual Dispenser with Satellite



Model 9850KXTW1-M Inlet Manifold



9850KXTW2 Dual Dispenser with Satellite Outlet Piping

Discharge Dual Dispenser Valve (115 V) with Satellite

Item #	Part Description	Current Part	Previous Part	Quantity
1	Assembly, Conduit Valve Dual 115 V	M05688A001 (see note 1)	-	2
	Assembly, Conduit Valve Dual 230 V	M05688A002 (see note 1)	-	2
	Assembly, Conduit Valve Dual 115 V	M05687A003 (see note 2)	-	2
	Assembly, Conduit Valve Dual 230 V	M05687A004 (see note 2)	-	2
2	Discharge Grommet	G028975	-	2
3	Elbow 1-1/2 X 1-1/4 X 90º Painted Red	Z07941	-	2
4	Elbow 1 - 1-1/2 90º 150 PSI MI	K46046	-	4
5	Elbow, Meter Discharge 9850 AXTW ATC	G003151	-	2
	Elbow, Meter Discharge 9850 AXTW	G003152	-	2
6	Gasket Flange (1-1/2”)	G027362	-	4
7	Gasket - Seal Suction: 2-7/16	G054190	-	2
8	Nipple FE Pipe 1-1/2 X 1.50	R11493-22	-	2
9	Nipple FE Pipe 1-1/2 X 6.56	R11493-46	-	2
10	Nipple FE Pipe 1-1/2 X 4.50	R11493-21	-	2
11	Nipple FE Pipe 1-1/2 X 6.12	R11493-93	-	2
12	Nipple FE Pipe 1-1/2 X 7.50	R11493-20	-	2
	Nipple FE Pipe 1-1/2 X 10.00	R11493-96 (see note 2)	-	2
13	Pipe Plug C-sunk 1/8 ATC	K46444	-	4
14	Pipe Union, Female	K12179	-	2
15	Reducing Brush Hexagonal 1-1/4 X 1	K02309-22	-	2
16	Screw, 1/4 - 20 X 1	G051813	-	8
17	Washer 21/64 X 19/32 X 1/16 P	G068605	-	8

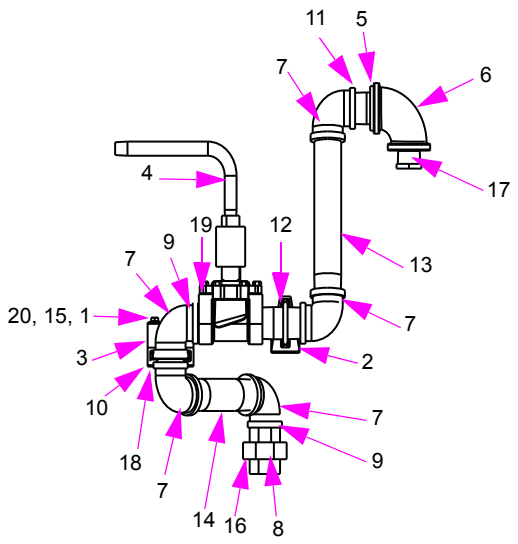
Notes:
1. This part is for 9850KXTW2.
2. This part is for 9850KXTW1 and 9850KSXTW1-M. Units built after August 2007.

Inlet Manifold, Model 9850KXTW1-M

Item #	Part Description	Current Part	Previous Part	Quantity
1	Manifold Strainer 9850AXT W1	G003018	-	1
2	Gasket Meter	G027005	-	2
3	Flange Strainer Machined 9850AXTW1	G026205	-	2
4	Bolt Hexagonal Head Finished 3/8-16 X 1.00	K01902	-	16

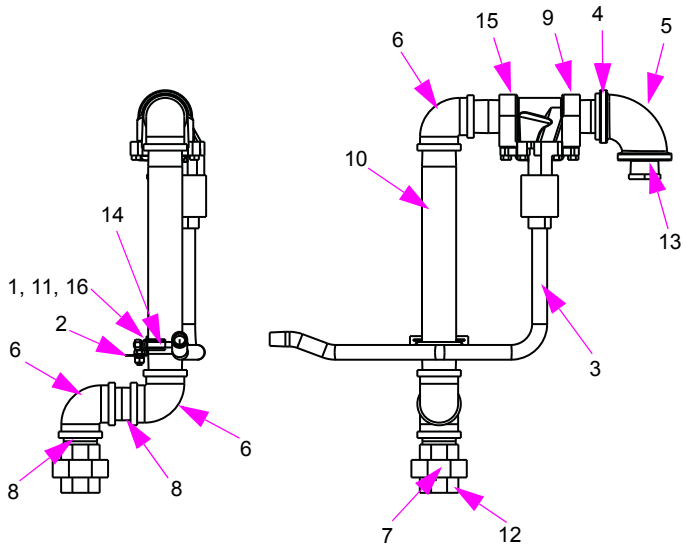
Satellite Piping for 9850KTW3 Combo Pump and 9850KXTW3 Combo Dispenser

Model 9850KTW3

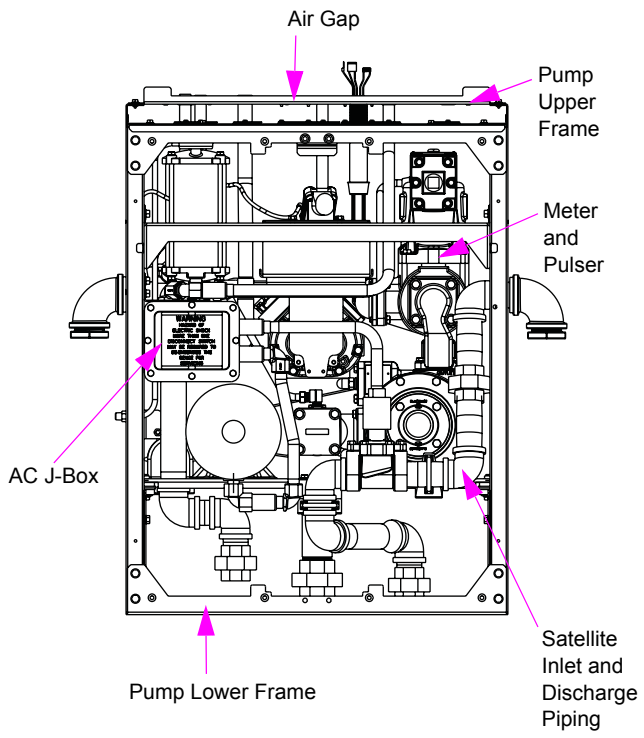


1 - Satellite Inlet and Discharge piping

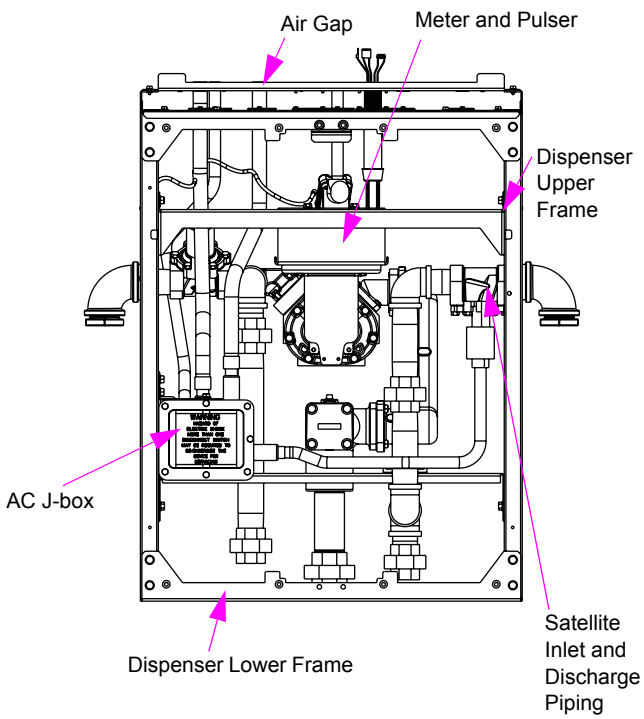
Model 9850KXTW3



2 - Satellite Inlet and Discharge Piping



9850KTW3 Combo Pump



9850KXTW3 Combo Dispenser

Note: All parts for combos are same as standard units except for the addition of satellite inlet and discharge piping.

9850KTW3 Combo Pump

Item #	Part Description	Current Part	Previous Part	Quantity
1	Bolt Hexagonal Head Finished 5/16-18 X 0.16	K51194	-	4
2	Bracket Master/Satellite Combo Pump 1	M06085B001	-	1
3	Bracket Master/Satellite Combo Pump 2	M06086B001	-	1
4	Conduit Combo Pump/Satellite	M05600B001	-	1
5	Discharge Grommet	G028975	-	1
6	Elbow 1-1/2 X 1-1/4 X 90º Painted Red	Z07941	-	1
7	Elbow 1 - 1-1/2 90º 150 PSI MI	K46046	-	5
8	Gasket - Seal Suction: 2-7/16	G054190	-	1
9	Nipple FE Pipe 1-1/2 X 1.38 EH	R11493-58	-	2
10	Nipple FE Pipe 1-1/2 X 1.75 EH	R11493-77	-	1
11	Nipple FE Pipe 1-1/2 X 2.62	R11493-30	-	1
12	Nipple FE Pipe 1-1/2 X 4.00	R11493-90	-	1
13	Nipple FE Pipe 1-1/2 X 10.38	R11493-108	-	1
14	Nipple FE Pipe 1-1/2 X 6.56	R11493-46	-	1
15	Nut Hexagonal with External Lockwasher 5/16 -18 Thread	Q12068-06	-	4
16	Pipe Union, Female	K12179	-	1
17	Reducing Bushing Hexagonal 1-1/4 X 1	K02309-22	-	1
18	U-bolt 1-1/2”	G013294	-	2
19	VI Solenoid 1.5” Skin 2STG 115 V	G067028	-	1
	VI Solenoid 1.5” Skin 2STG 230 V	G067062	-	1
20	Washer 5/16 SAE - N 0.69 X 0.34 X 0.06	K65235-33	-	4

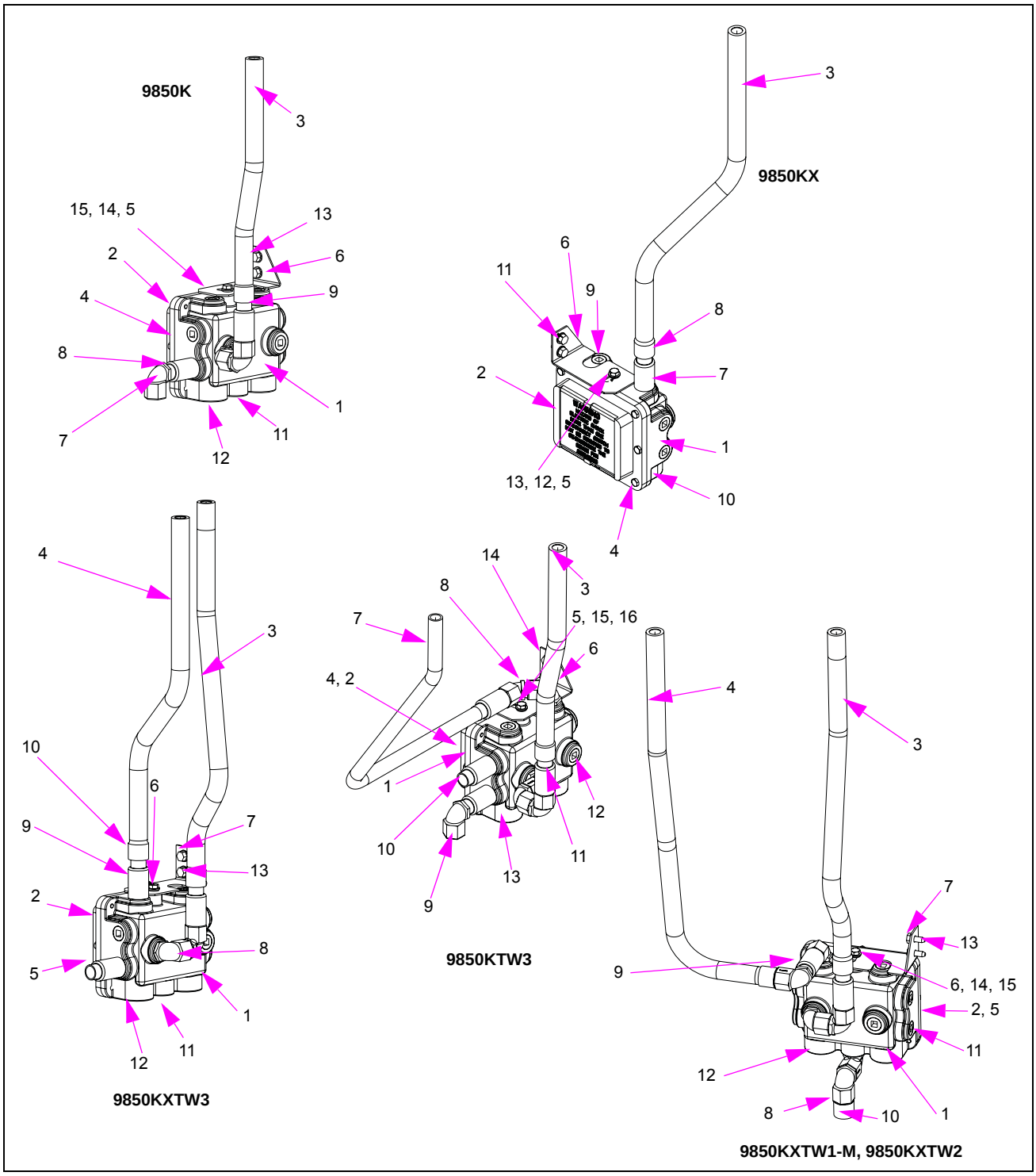
9850KXTW3 Combo Dispenser

Item #	Part Description	Current Part	Previous Part	Quantity
1	Bolt Hexagonal Head Finished 5/16-18 X 0.16	K51194	-	2
2	Bracket Master/Satellite Combo Dispenser	M06087B001	-	1
3	Conduit Combo Dispenser/Satellite	M05601B001	-	1
4	Discharge Grommet	G028975	-	1
5	Elbow 1-1/2 X 1-1/4 X 90º Painted Red	Z07941	-	1
6	Elbow 1 - 1-1/2 90º 150 PSI MI	K46046	-	3
7	Gasket - Seal Suction: 2-7/16	G054190	-	1
8	Nipple FE Pipe 1-1/2 X 1.75	R11493-77	-	2
9	Nipple FE Pipe 1-1/2 X 2.62	R11493-30	-	2
10	Nipple FE Pipe 1-1/2 X 13.88	R11493-107	-	1
11	Nut Hexagonal with External Lockwasher 5/16 -18 Thread	Q12068-06	-	2
12	Pipe Union, Female	K12179	-	1
13	Reducing Bushing Hexagonal 1-1/4 X 1	K02309-22	-	1
14	U-bolt 1-1/2”	G013294	-	1
15	VL Solenoid 1.5” Skin 2STG 115 V	G067028	-	1
	VL Solenoid 1.5” Skin 2STG 230 V	G067062	-	1
16	Washer 5/16 SAE - N 0.69 X 0.34 X 0.06	K65235-33	-	2

This page is intentionally left blank.

21 – Ultra-Hi J-box and Conduit Section

AC J-box and Conduit



9850K

Item #	Part Description	Current Part	Previous Part	Quantity
1	AC J-box, Mach 8753E	G003116	-	1
2	AC J-box, Cover	G003117	-	1
3	Assembly, Conduit AC Pump	M05685A002	-	1
4	Bolt Hexagonal Head Finished 1/4 - 20 X 0.88	K56467	-	8
5	Screw, 5/16-18 X 3/4 HHC	Q10624-01	-	1
6	Bracket J-box, AC	M05575B001	-	1
7	Elbow, Conduit 1/2 X 90º	G025045	-	2
8	Expansion Union (Conduit)	N16289-20	-	2
9	Male Conduit Enlargers (NPT)	K81090-20	-	1
10	Pipe Plug C-sunk 1/2	K43850	-	7
11	Pipe Plug C-sunk 3/4	K57624	-	1
12	Screw, Thread Forming, Hexagonal Washer Head M8 X 18	M00417B009	-	2
13	Washer 5/16 SAE - N 0.69 X 0.34 X 0.06	K65235-33	-	1
14	Lockwasher, 5/16 PL	K73278-28	-	1
Not Shown				
-	Nut 10-32 Ground Screw	G067500	-	1
-	Terminal Wire Ring	G064874	-	1
-	Screw, 10-32 X 3/8 BND Head SLT	G052976	-	1

9850KX

Item #	Part Description	Current Part	Previous Part	Quantity
1	AC J-box, Mach 8753E	G003116	-	1
2	AC J-box, Cover	G003117	-	1
3	Assembly, Conduit AC Single	M05684A002	-	1
4	Bolt Hexagonal Head Finished 1/4 - 20 X 0.88	K56467	-	8
5	Screw, 5/16-18 X 3/4 HHC	Q10624-01	-	1
6	Bracket J-box, AC	M05575B001	-	1
7	Expansion Union (Conduit)	N16289-20	-	1
8	Male Conduit Enlargers (NPT)	K81090-20	-	1
9	Pipe Plug C-sunk 1/2	K43850	-	8
10	Pipe Plug C-sunk 3/4	K57624	-	1
11	Screw, Thread Forming, Hexagonal Washer Head M8 X 18	M00417B009	-	2
12	Washer 5/16 SAE - N 0.69 X 0.34 X 0.06	K65235-33	-	1
13	Lockwasher, 5/16 PL	K73278-28	-	1
Not Shown				
-	Nut 10-32 Ground Screw	G067500	-	1
-	Screw, 10-32 X 3/8 BND Head SLT	G052976	-	1
-	Terminal Wire Ring	G064874	-	1

9850KXTW3

Item #	Part Description	Current Part	Previous Part	Quantity
1	AC J-box, Mach 8753E	G003116	-	1
2	AC J-box, Cover	G003117	-	1
3	AC Satellite Conduit and Wire Assembly	M07275A004	-	1
4	Assembly, Conduit AC Single	M05684A002	-	1
5	Bolt Hexagonal Head Finished 1/4 - 20 X 0.88	K56467	-	8
6	Bolt Hexagonal Head Finished 5/16 - 18 X 0.75	Q10624-01	-	1
7	Bracket J-box, AC	M05575B001	-	1
8	Elbow, Conduit 1/2 X 90°	G025045	-	2
9	Expansion Union (Conduit)	N16289-20	-	3
10	Male Conduit Enlargers (NPT)	K81090-20	-	2
11	Pipe Plug C-sunk 1/2	K43850	-	6
12	Pipe Plug C-sunk 3/4	K57624	-	1
13	Screw, Thread Forming, Hexagonal Washer Head M8 X 18	M00417B009	-	2
Not Shown				
-	Nut 10-32 Ground Screw	G067500	-	1
-	Screw, 10-32 X 3/8 BND Head SLT	G052976	-	1
-	Terminal, Wire Ring	G064874	-	1
-	Washer 5/16 SAE - N 0.69 X 0.34 X 0.06	K65235-33	-	1
-	Lockwasher, 5/16 PL	K73278-28	-	1

9850KTW3

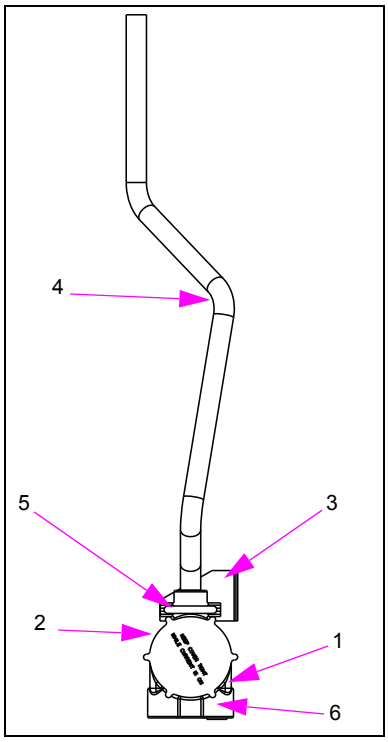
Item #	Part Description	Current Part	Previous Part	Quantity
1	AC J-box, Mach 8753E	G003116	-	1
2	AC J-box, Cover	G003117	-	1
3	Assembly, Conduit AC Pump	M05685A002	-	1
4	Bolt Hexagonal Head Finished 1/4 - 20 X 0.88	K56467	-	8
5	Bolt Hexagonal Head Finished 5/16 - 18 X 0.75	Q10624-01	-	1
6	Bracket J-box, AC	M05575B001	-	1
7	AC Satellite Conduit and Wire Assembly	M07275A002	-	1
8	Elbow, Conduit 1/2 X 45	G025015	-	2
9	Elbow, Conduit 1/2 X 90°	G025045	-	3
10	Expansion Union (Conduit)	N16289-20	-	4
11	Male Conduit Enlargers (NPT)	K81090-20	-	1
12	Pipe Plug C-sunk 1/2	K43850	-	5
13	Pipe Plug C-sunk 3/4	K57624	-	1
14	Screw, Thread Forming, Hexagonal Washer Head M8 X 18	M00417B009	-	2
15	Washer 5/16 SAE - N 0.69 X 0.34 X 0.06	K65235-33	-	1
16	Lockwasher, 5/16 PL	K73278-28	-	1
Not Shown				
-	Nut 10-32 Ground Screw	G067500	-	1
-	Screw, 10-32 X 3/8 BND Head SLT	G052976	-	1
-	Terminal, Wire Ring	G064874	-	1

9850KXTW1, 9850KXTW1-M, 9850KXTW2

Item #	Part Description	Current Part	Previous Part	Quantity
1	AC J-box, Mach 8753E	G003116	-	1
2	AC J-box, Cover	G003117	-	1
3	AC Conduit and Wire Assembly	M05686A002 (see note 1)	-	1
		M05686A003 (see note 2)	-	1
4	Conduit AC Single	M05692A002 (see note 1)	-	1
		M05692A003 (see note 2)	-	1
5	Bolt Hexagonal Head Finished 1/4 - 20 X 0.88	K56467	-	8
6	Bolt Hexagonal Head Finished 5/16 - 18 X 0.75	Q10624-01	-	1
7	Bracket J-box, AC	M05575B001	-	1
8	Elbow, Conduit 1/2 X 90°	G025045	-	6
9	Expansion Union (Conduit)	N16289-20	-	2
10	Male Conduit Enlargers (NPT)	K81090-20	-	3
11	Pipe Plug C-sunk 1/2	K43850	-	6
12	Pipe Plug C-sunk 3/4	K57624	-	1
13	Screw, Thread Forming, Hexagonal Washer Head M8 X 18	M00417B009	-	2
14	Washer 5/16 SAE - N 0.69 X 0.34 X 0.06	K65235-33	-	1
15	Lockwasher, 5/16 PL	K73278-28	-	1
Not Shown				
-	Nut 10-32 Ground Screw	G067500	-	1
-	Screw, 10-32 X 3/8 BND Head SLT	G052976	-	1
-	Terminal, Wire Ring	G064874	-	1

Notes:
1. This part is for 9850KXTW2.
2. This part is for 9850KXTW1 and 9850KXTW1-M. Units built after August 2007.

DC J-box and Conduit

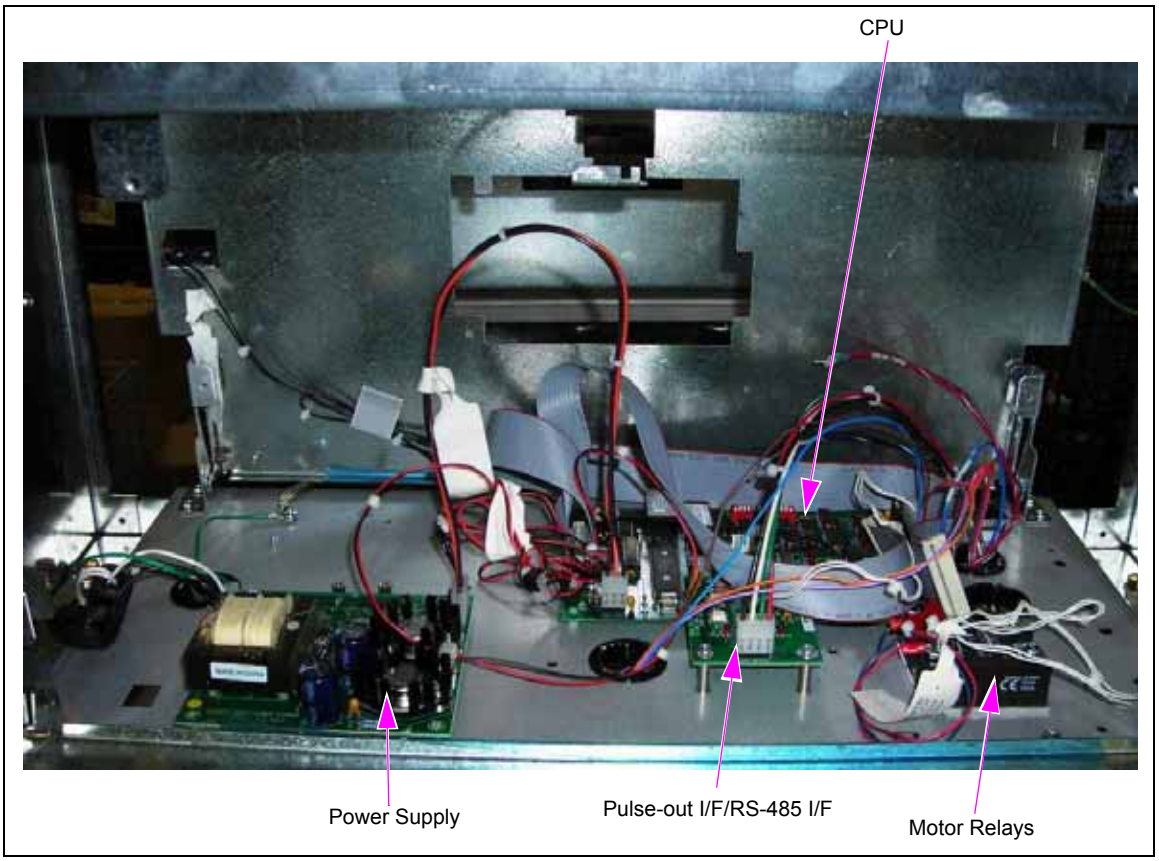


Item #	Part Description	Current Part	Previous Part	Quantity
1	J-box	G003337	-	1
2	Cover, J-box	G003461	-	1
3	Bracket, DC J-box	M05576B001	-	1
4	Assembly, DC Conduit and Wire - TopKAT	M05683A002	-	1
	Assembly, DC Conduit and Wire - Pulse-out/RS-485	M05683A004	-	1
	Assembly, DC Conduit and Wire - TopKAT PLUS	M05683A006	-	1
5	U-bolt and Bracket	G013295	-	1
6	Pipe Plug, 1/2”	K43850	-	1

This page is intentionally left blank.

22 – Ultra-Hi Electronics Section

Commercial Rear View



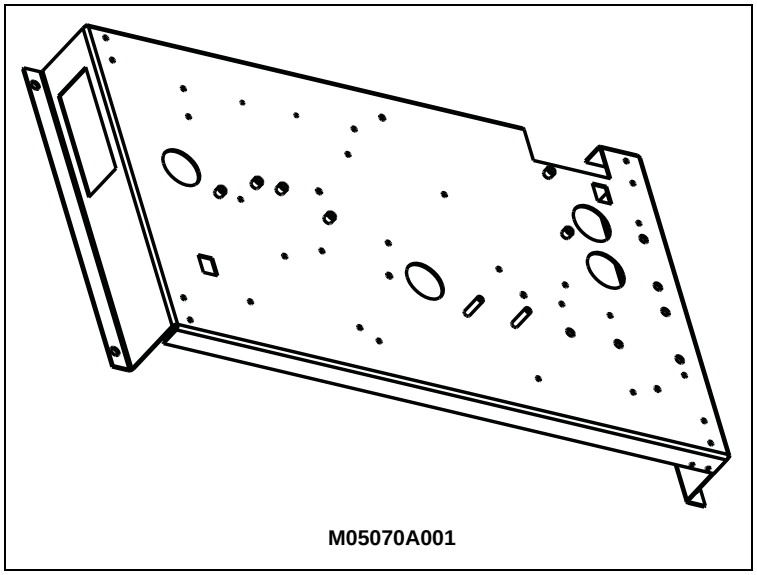
Power Supply

Refer to “Commercial Ultra-Hi PCBs” on page 23-1.

CPU

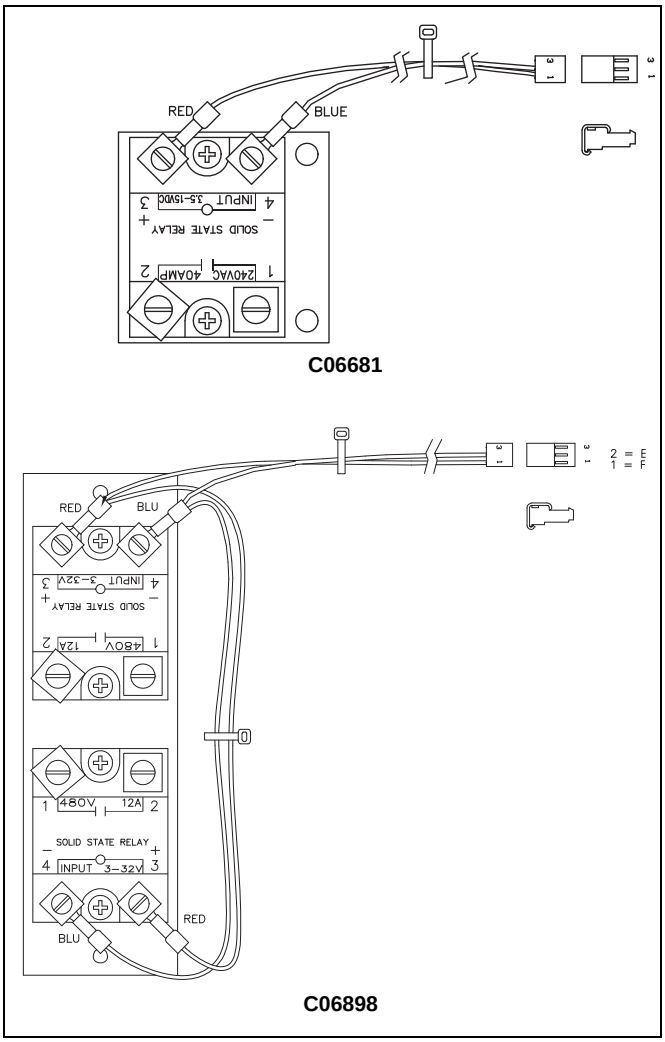
Refer to “Commercial Ultra-Hi PCBs” on page 23-1.

Base Electronics Mounting Platform



M05070A001

Motor Relay Ultra-Hi



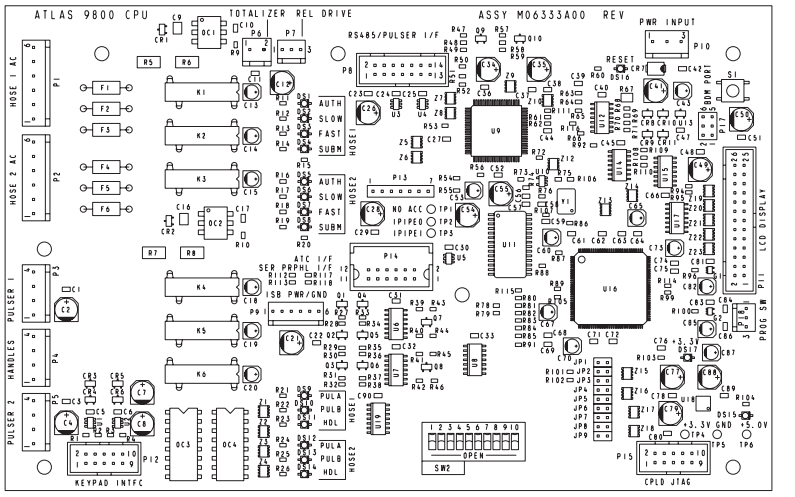
Item #	Part Description	Current Part	Previous Part	Quantity
1	Motor Relay, Single	C06681	-	1
2	Motor Relay, Dual	C06898	-	1

This page is intentionally left blank.

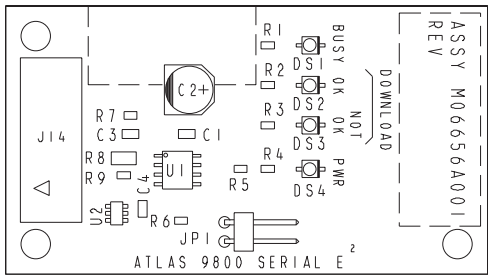
23 – Ultra-Hi Commercial PCBs

Commercial Ultra-Hi PCBs

PCA (CPU and Serial EEPROM)



PCA, CPU



PCA, Serial EEPROM

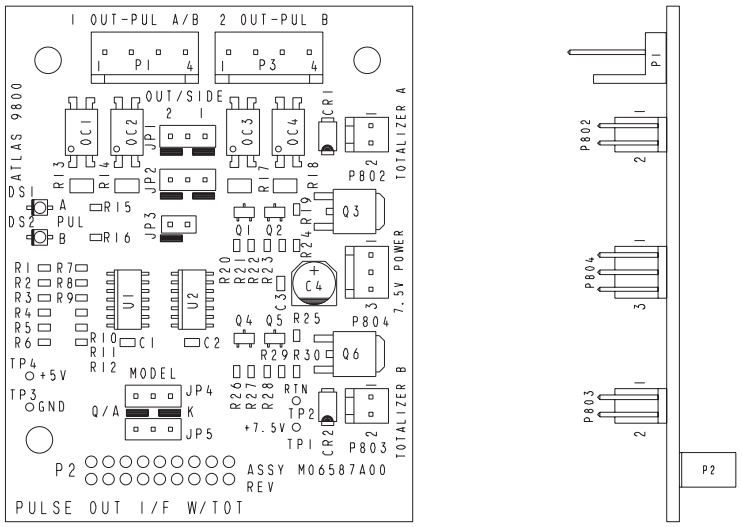
Part Description	Current Part	Previous Part	Quantity	Software Type
PCA, Atlas 9800 CPU, Dual, 115 V/230 V (see notes 1 and 2)	M06333K9850 (Models: 9850A/Q/K)	C06394 / C06503	1	Ultra-Hi 9850
PCA, Atlas 9800 Serial EEPROM (Reprogramming card for M06333KXXXX CPU PCA)	M06656K002	N/A	1	Ultra-Hi 9850

Notes:

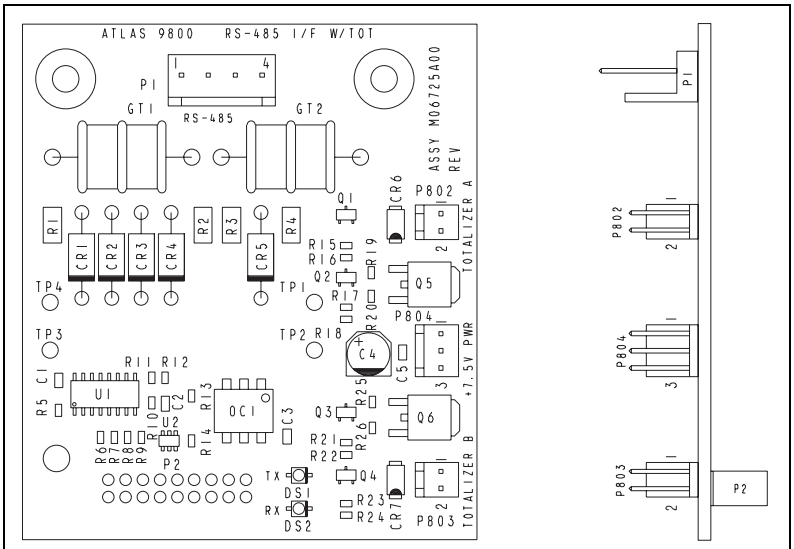
1. M06333KXXXX requires an Atlas 9800 Power Supply (M07588A00X).

2. M06333KXXXX requires an ATC Kit M08218K001 for models 9850A/Q, 9850K, 9852A/Q, 9853A/Q, 9840A/Q, where ATC is present.

Pulse-out I/F/RS-485 I/F



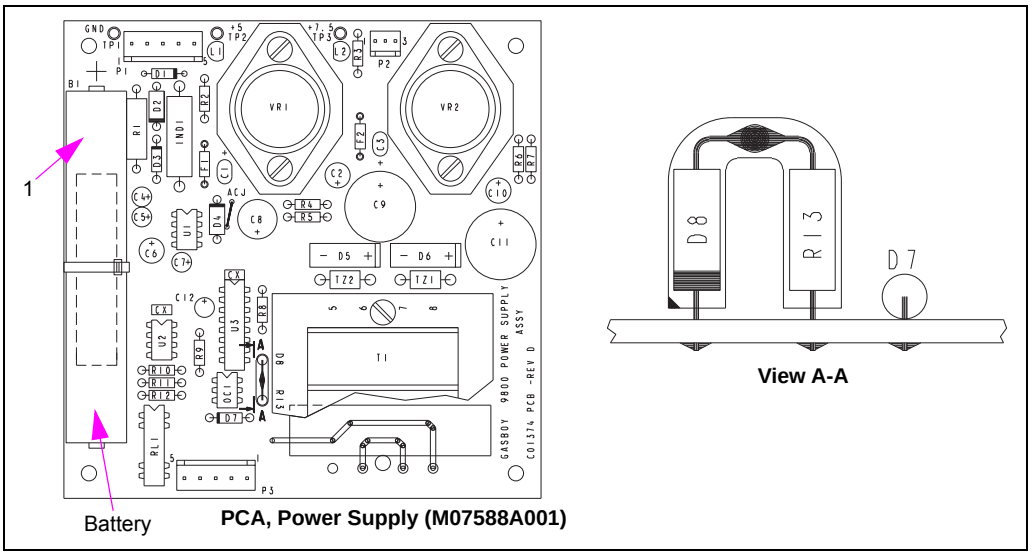
PCA, Pulse-out I/F with Electro-mechanical Totalizer



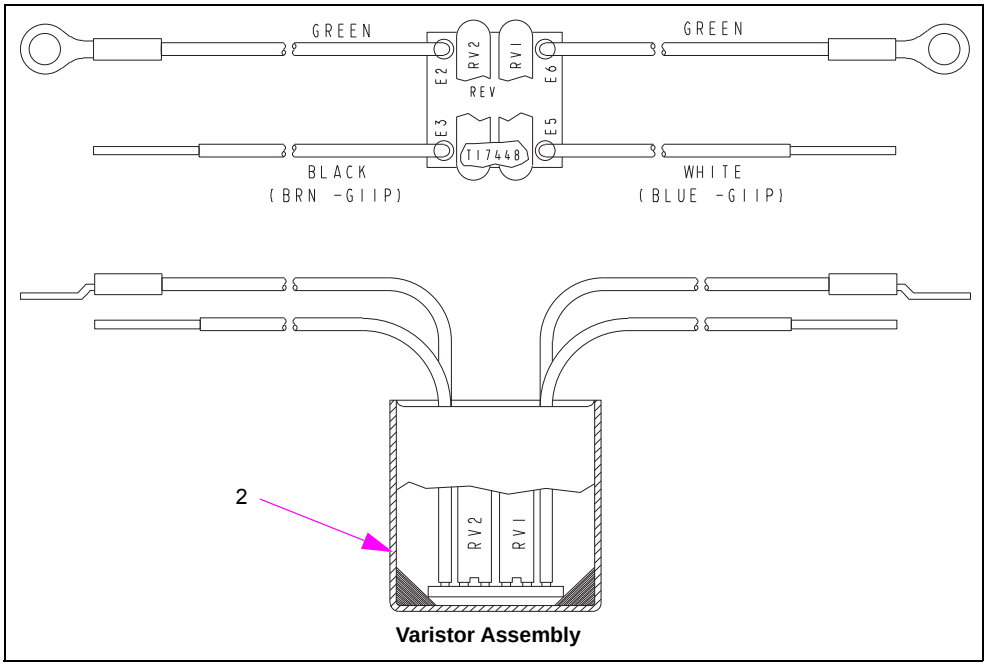
PCA, Atlas 9800 RS-485, Interface with Totalizer

Item #	Part Description	Current Part	Previous Part	Quantity
1	PCA Atlas 9800, Pulse-out I/F (Dual Common/Distinct Outputs, Two Dual Common Outputs) with Electro-mechanical Totalizer*	M06587A001	C06425 (Dual Distinct Outputs) C06746 (Dual Common Outputs)	1
2	PCA, Atlas 9800 RS-485, Interface with Totalizer*	M06725A001	C06389 (obsolete)	1
**Electro-mechanical totalizers are not available on Ultra-Hi units.*				

Ultra-Hi Power Supply



PCA, Power Supply (M07588A001)

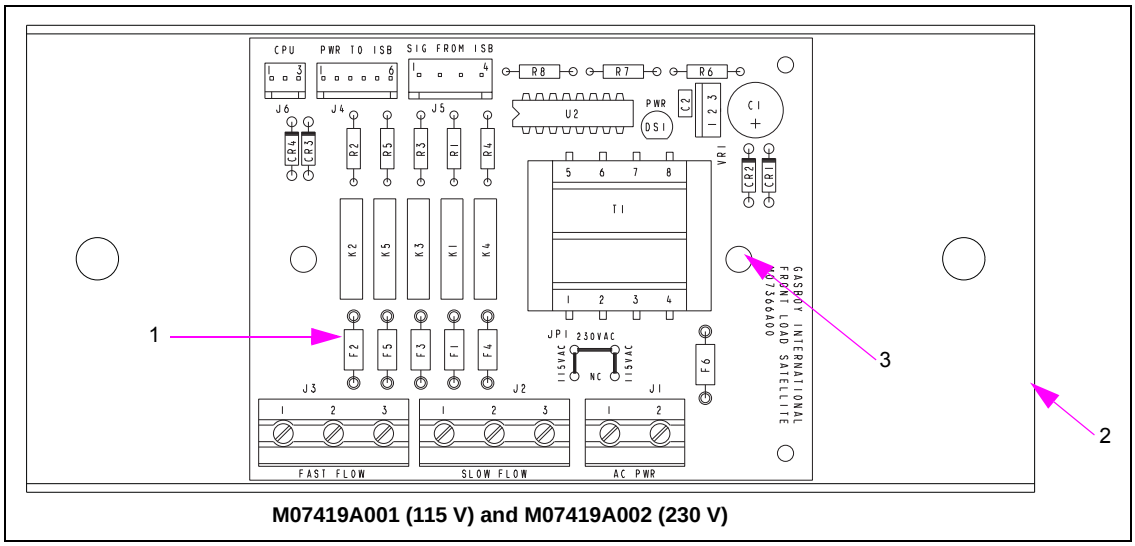


Varistor Assembly

Item #	Part Description	Current Part	Previous Part	Quantity
1	Kit, Atlas 9800 Power Supply, 115 V with Battery	M12421K00X	M07588A001, C06397	1
	PCA, Atlas 9800 Power Supply, 115 V without Battery	M07588A002	C06396	1
	Kit, Atlas 9800 Power Supply, 230 V with Battery	M12422K00X	M07588A003, C06489	1
	PCA, Atlas 9800 Power Supply, 230 V without Battery	M07588A004	C06488	1
2	Varistor Assembly, 115 V	T17448-G1	-	1
	Varistor Assembly, 230/380 V	T17448-G3	-	1

Note: For M12421K00X and M12422K00X Kits, the number of displays needed define the kit number. If only one display is needed, the kit number is either M12421K001 or M12422K001. For two display, the kit number is M12421K002 or M12422K002. And if four displays are needed, the kit number is M12421K003 or M12422K003.

Combo Satellite Control Board

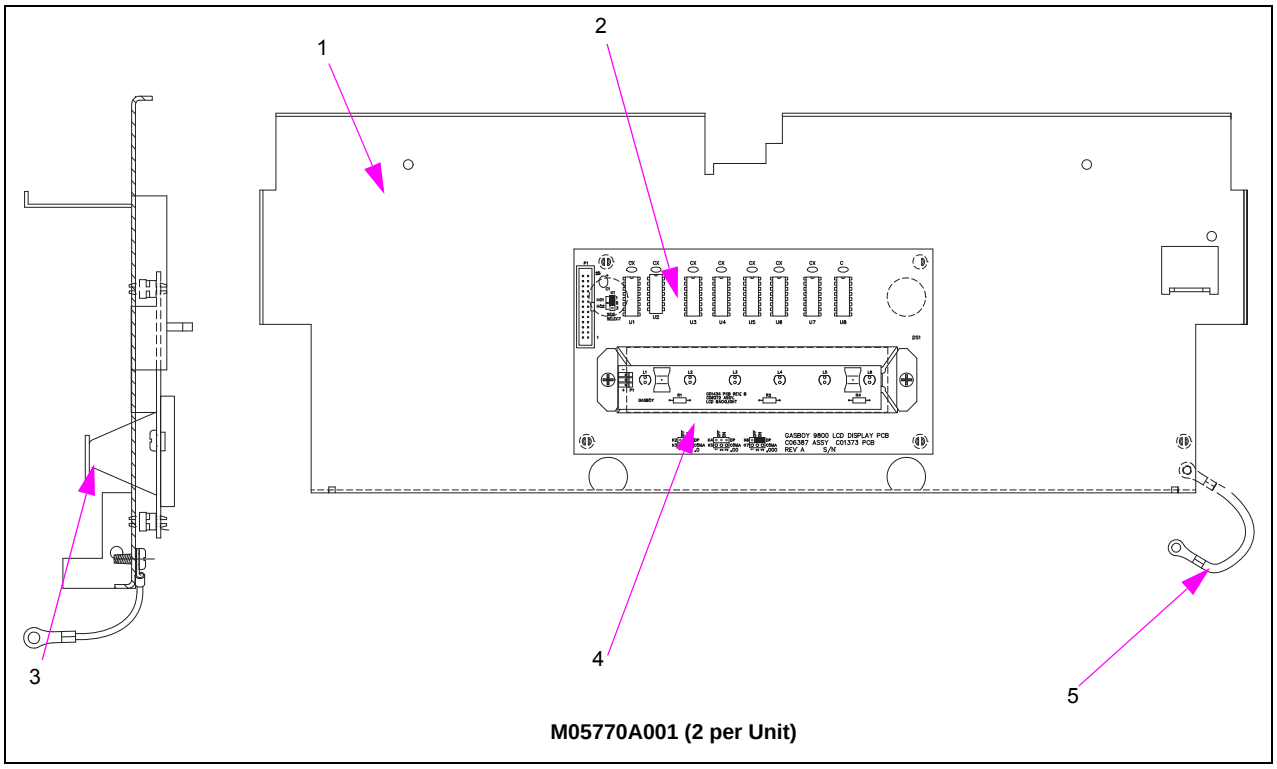


M07419A001 (115 V) and M07419A002 (230 V)

Item #	Part Description	Current Part	Previous Part	Quantity
1	Board, SAT Control 115 V	M07366A001	-	1
	Board, SAT Control 230 V	M07366A002	-	1
2	Bracket, SAT Board	M07276A001	-	1
3	Screw, Metric Pan-head SEMS M4 X 12	Q12845-59	-	2
Not Shown				
-	Circuit Board Support	Q10651-46	-	4

Displays and Display Panels

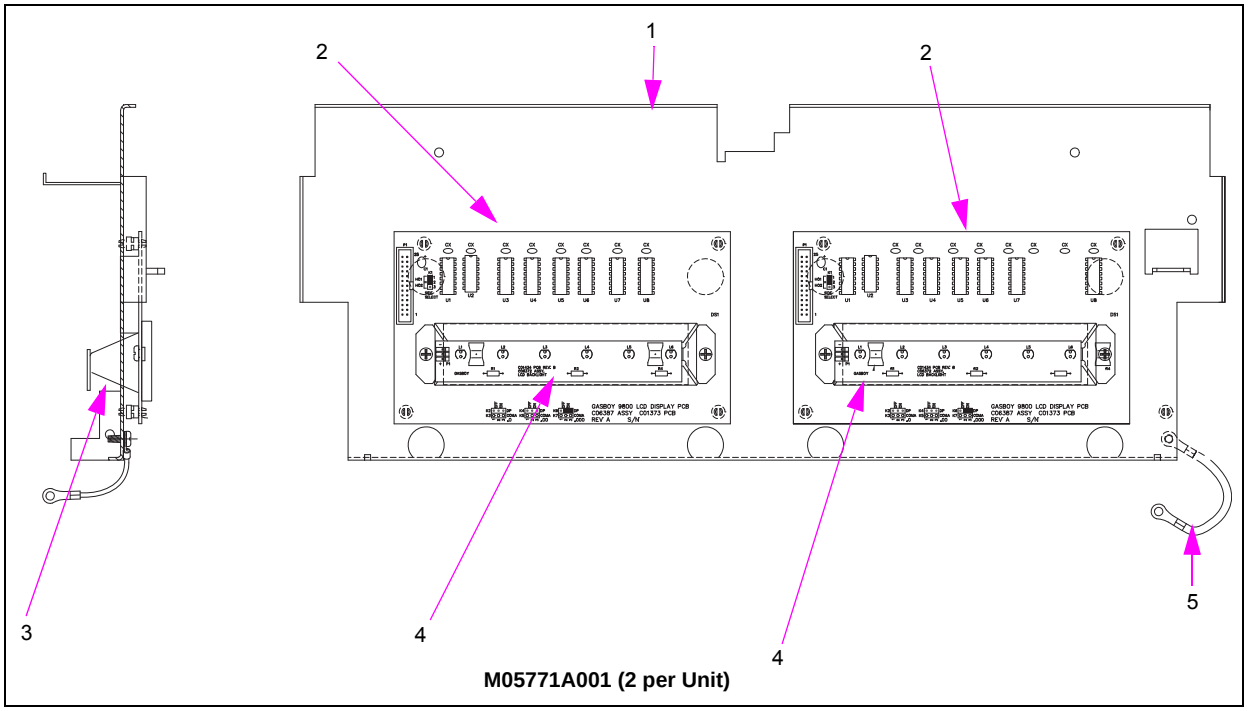
Ultra-Hi Display Panel and PCBs - Single and Combo Dual



M05770A001 (2 per Unit)

Item #	Part Description	Current Part	Previous Part	Quantity
1	Panel PCB Support Single	M05641B001	-	1
2	PCB Assembly, LCD Display	M12158A004	C06387	1
3	Reflector LCD-backlight (for C06387 display)	C35399	-	1
4	PCB Assembly, LED Sale Backlight (for C06387 display)	C06372	-	1
	PCB Assembly, LED Sale Backlight (for M11714A002 display)	M12019A001	-	1
5	Cable Assembly, Ground #8R+Braid	C06178	-	1
Not Shown				
-	Mounting Button, 0.031/0.094 Grip	C09701	-	2

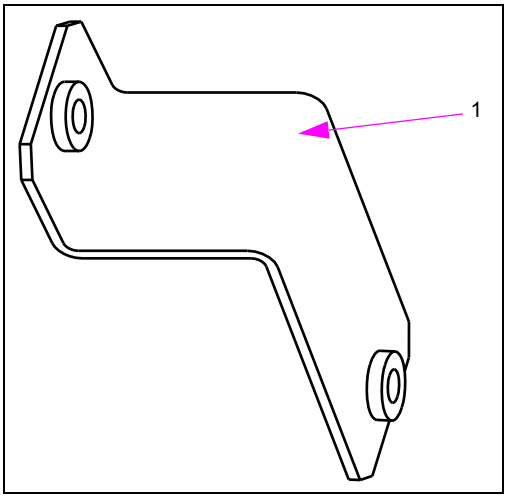
Ultra-Hi Display Panel and PCBs - Dual Side Load



M05771A001 (2 per Unit)

Item #	Part Description	Current Part	Previous Part	Quantity
1	Panel PCB Support Dual	M05642B001	-	1
2	PCB Assembly, LCD Display	M12158A004	C06387	2
3	Reflector LCD-backlight (for C06387 Display)	C35399	-	2
4	PCB Assembly, LED Sale Backlight (for C06387 Display)	C06372	-	2
	PCB Assembly, LED Sale Backlight (for M11714A002 Display)	M12019A001	-	2
5	Cable Assembly, Ground #8R+Braid	C06454	-	1
Not Shown				
-	Mounting Button, 0.031/0.094 Grip	C09701	-	4

Display Panel Stop Bracket



Item #	Part Description	Current Part	Previous Part	Quantity
1	Bracket, PC Board Support	M05611A002	M05611A001	1

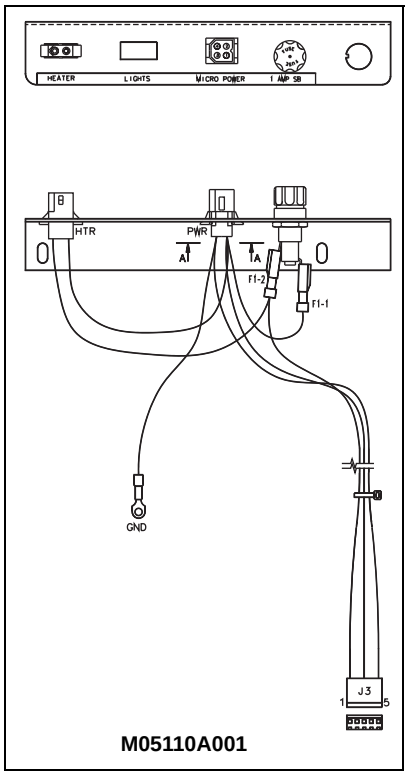
This page is intentionally left blank.

24 – Ultra-Hi Commercial Cables

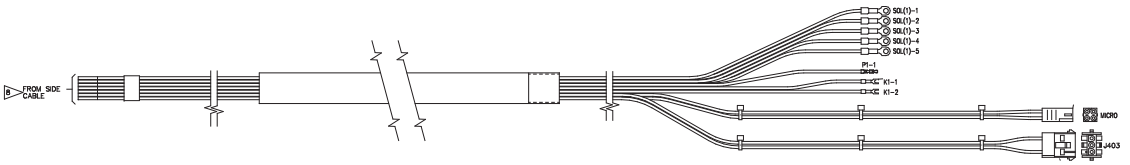
Commercial Ultra-Hi Cables

Note: For cable block diagrams, refer to MDE-4334 Commercial and Retail Series Atlas Start-up/Service Manual.

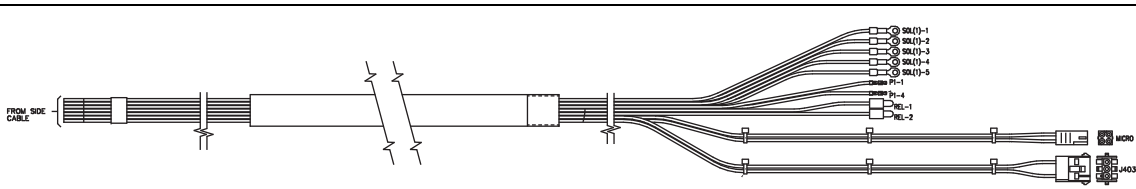
Part Description	Current Part	Previous Part
AC Fuse Cable Assembly	M05110A001	-
Main AC Power Conduit and Wire Assembly - Pump	M05685A002	-
Main AC Power Conduit and Wire Assembly - Single Dispenser	M05684A002	-
Main AC Power Conduit and Wire Assembly - Dual Dispenser	M05686A002	-
Main AC Power Conduit and Wire Assembly (see note)	M05686A003	-
Assembly, AC Dual Conduit and Cable	M05692A002	-
Assembly, AC Dual Conduit and Cable (see note)	M05692A003	-
Display Cable, Single Side-load	C06455	-
Display Cable, Dual Side-load	M05109A001	-
Display Cable, Single Front-load	C06574	-
Backlight Power Cable - Side-load	M05108A001	-
Backlight Power Cable - Front-load	C06519	-
DC Conduit and Wire Assembly - Dispenser Mount TopKAT	M05683A002	-
DC Conduit and Wire Assembly - RS-485/Pulse-out	M05683A004	-
DC Conduit and Wire Assembly - Dispenser Mount TopKAT PLUS	M05683A006	
DC Power Cable	M05107A001	-
Handle Switch Cable, Single	M05105A002	-
Handle Switch Cable, Dual	M05105A001	-
Heater Cable 115 V	M05120A001	-
Heater Cable 230 V	M05120A002	-
Solenoid Cable and Terminal Block Assembly, Single	M04193A001	-
Solenoid Cable and Terminal Block Assembly, Dual	C06518	-
AC Combo Satellite Control Conduit and Wire - Pump	M07275A002	-
AC Combo Satellite Control Conduit and Wire - Dispenser	M07275A004	-
Totalizer ATC Sensor Cable	M05119A001	-
I.S. Barrier, Front-load	C06766	-
Not Shown		
Magnet, Actuator	Q12514-02	-
Note: This part is for 9850KXTW1. Units built after August 2007.		



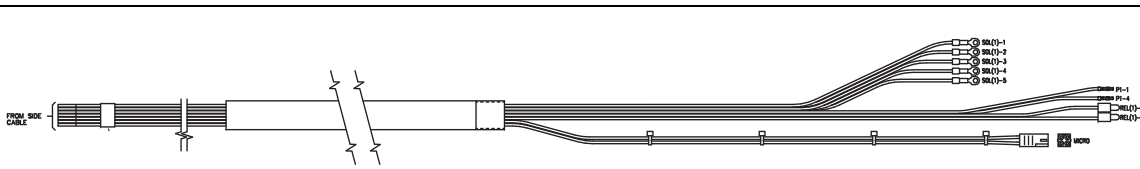
M05110A001



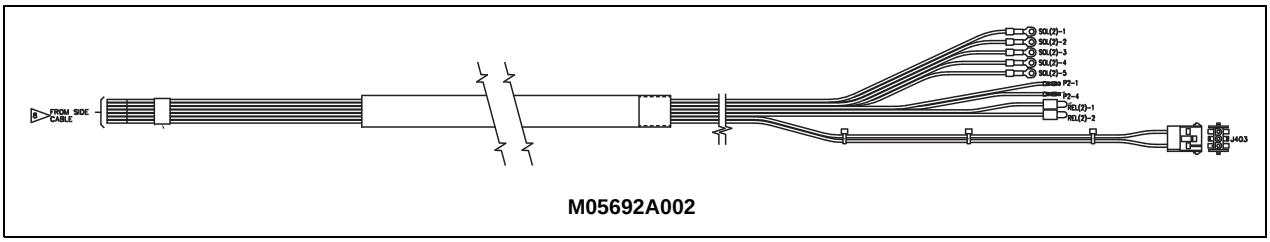
M05685A002



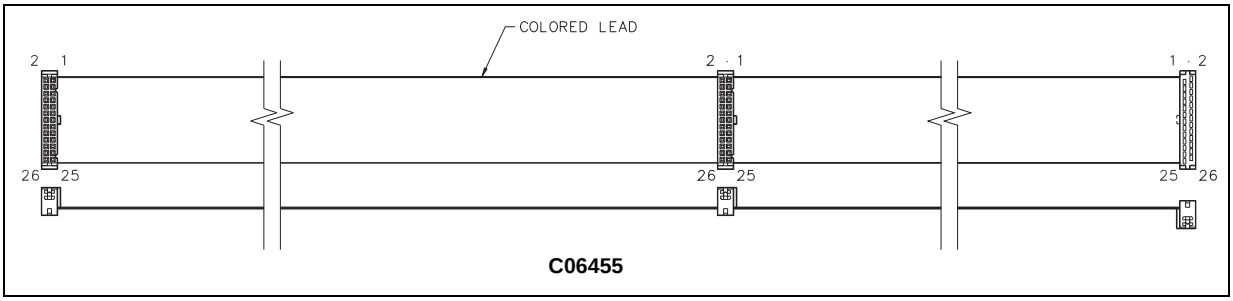
M05684A002



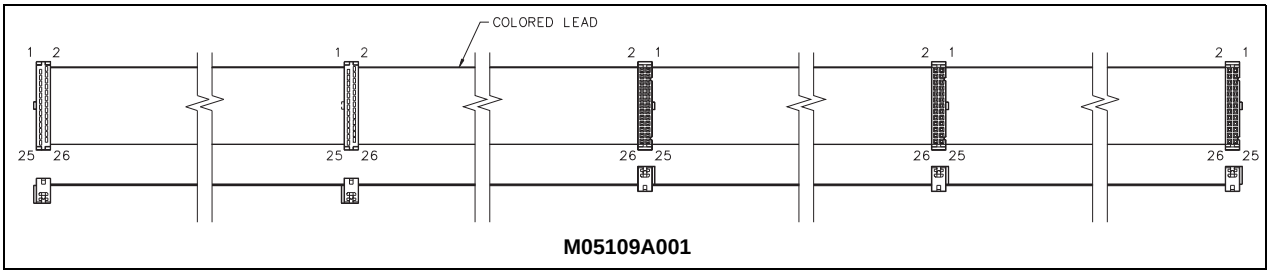
M05686A002



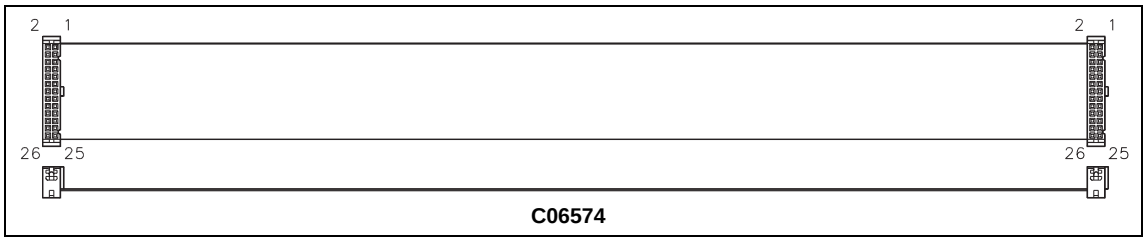
M05692A002



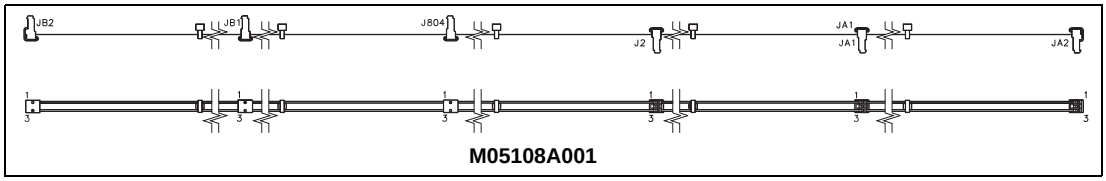
C06455



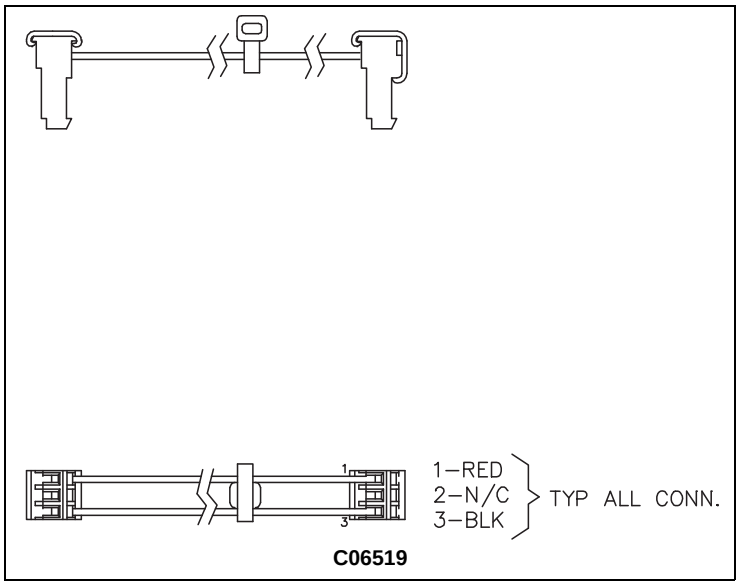
M05109A001



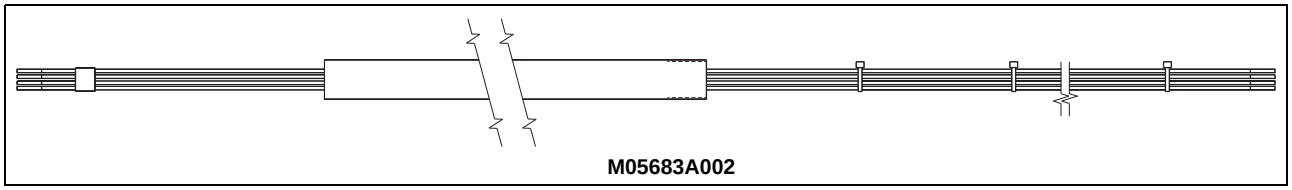
C06574



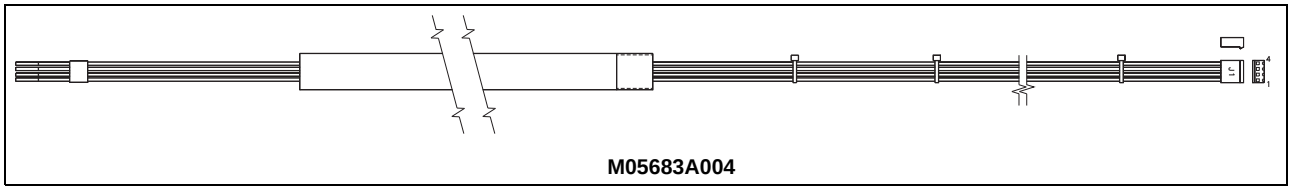
M05108A001



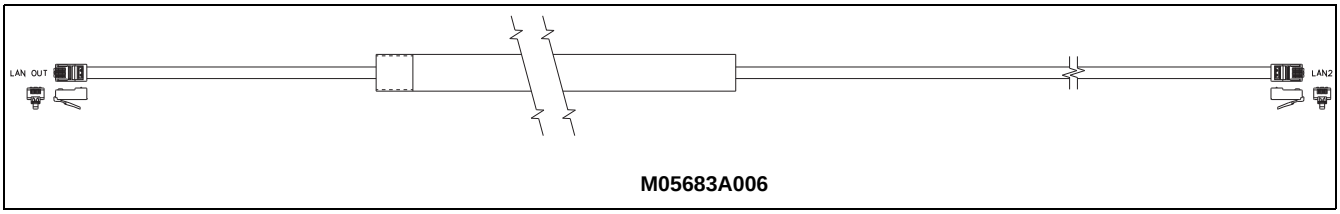
C06519



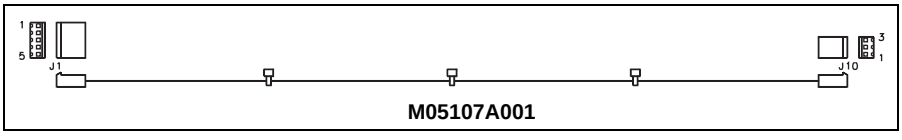
M05683A002



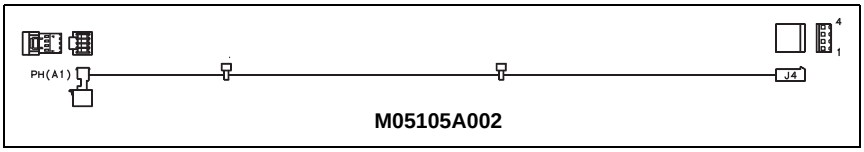
M05683A004



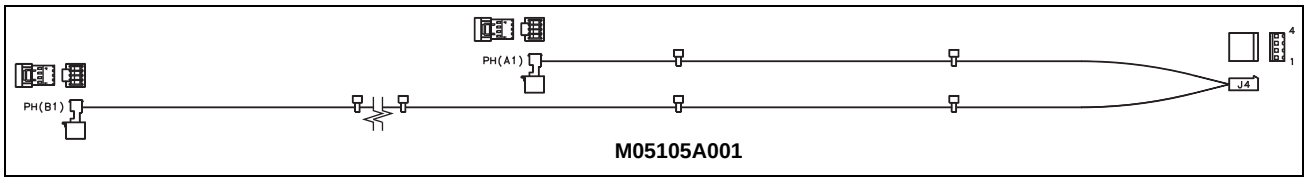
M05683A006



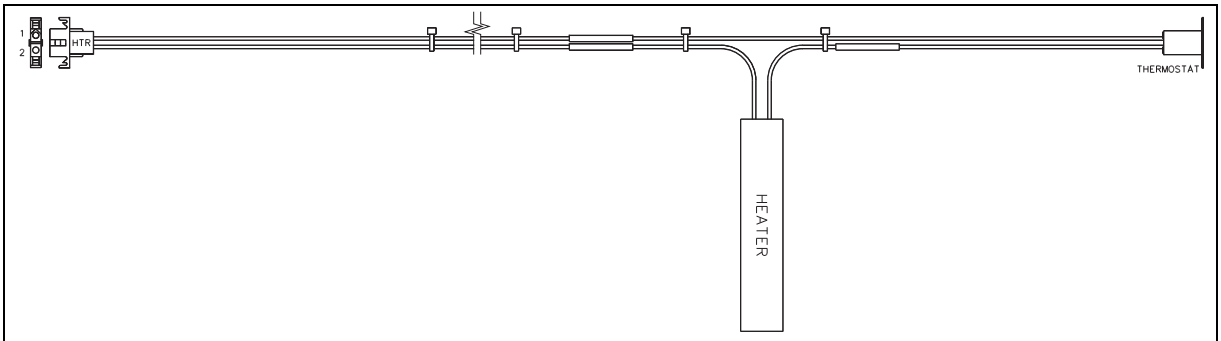
M05107A001



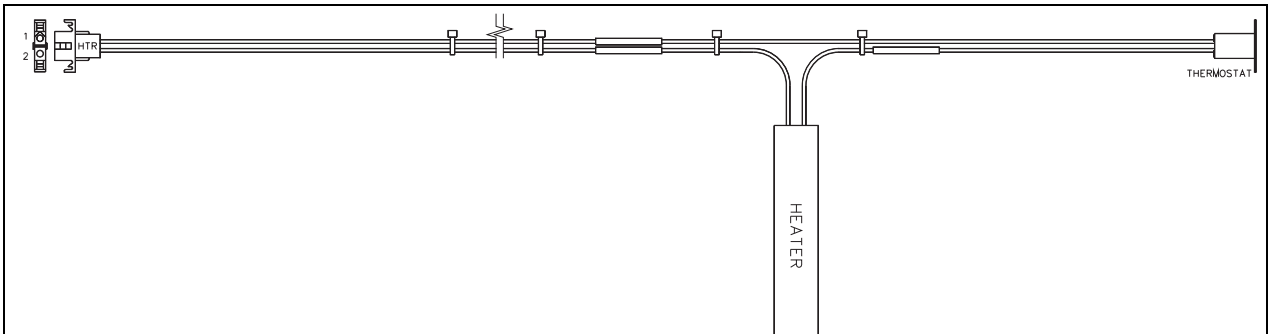
M05105A002



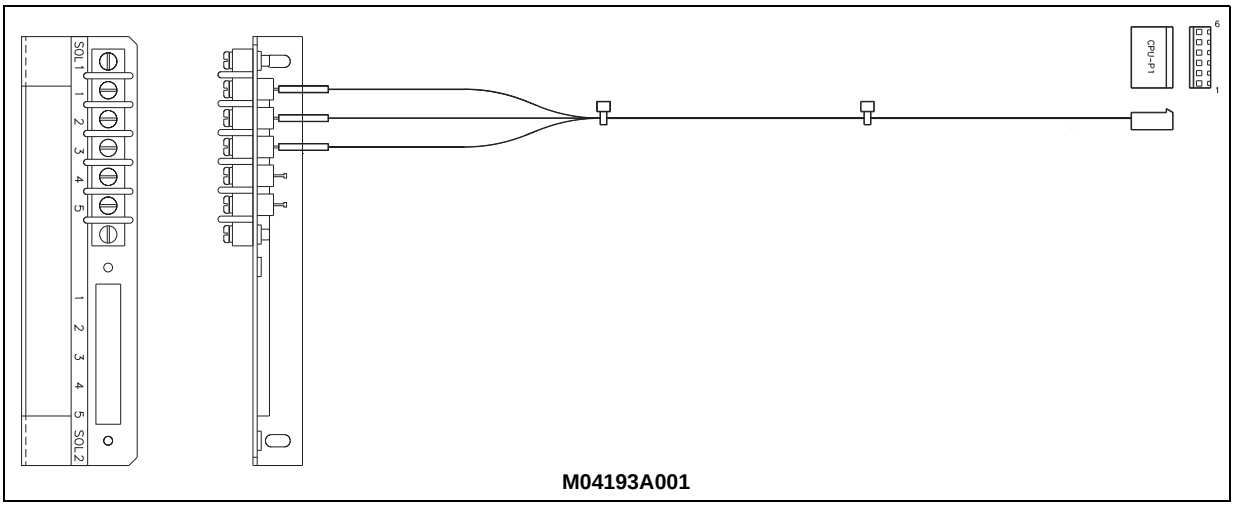
M05105A001



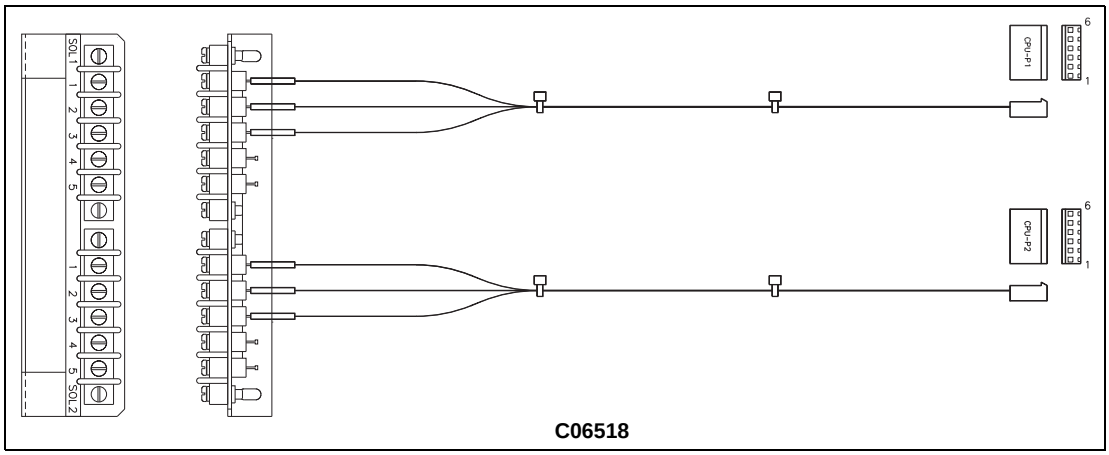
M05120A001



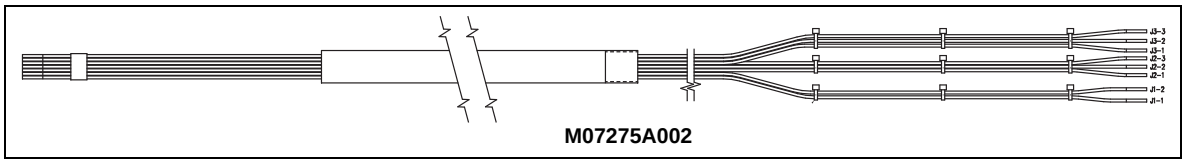
M05120A002



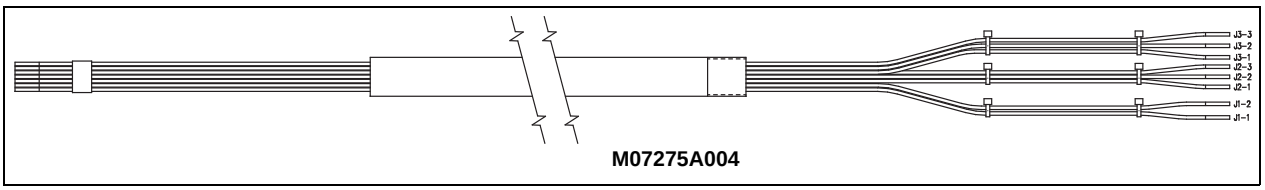
M04193A001



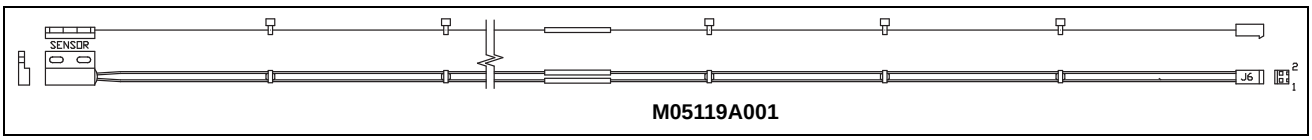
C06518



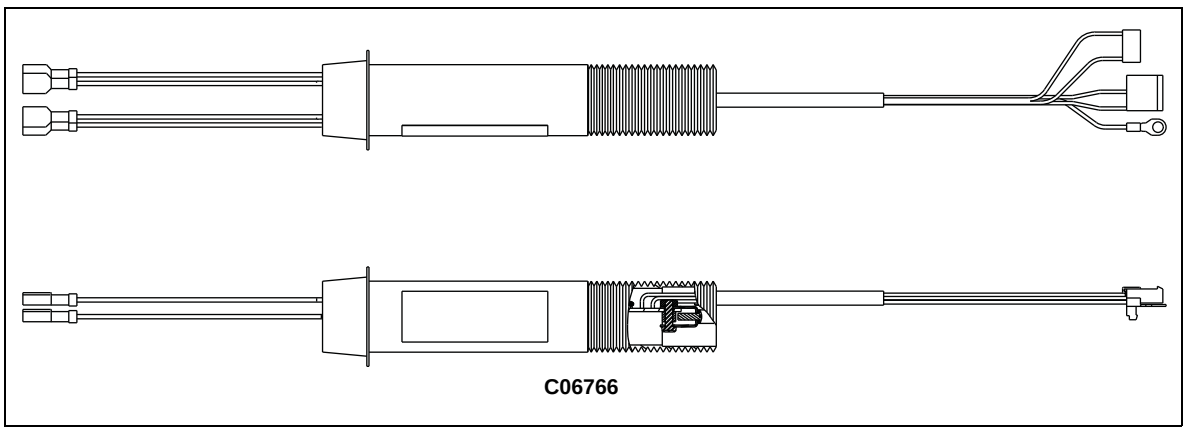
M07275A002



M07275A004



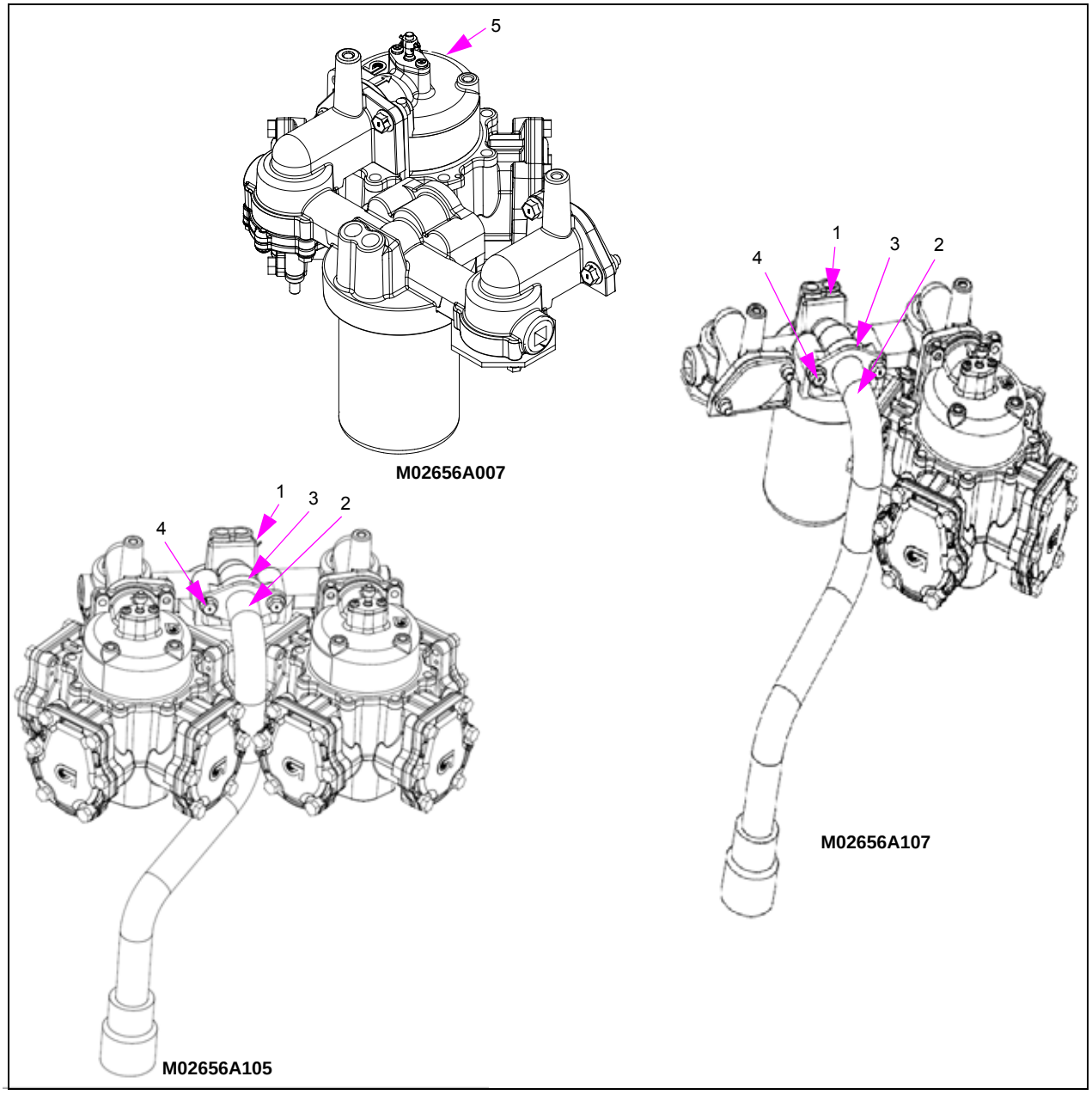
M05119A001



C06766

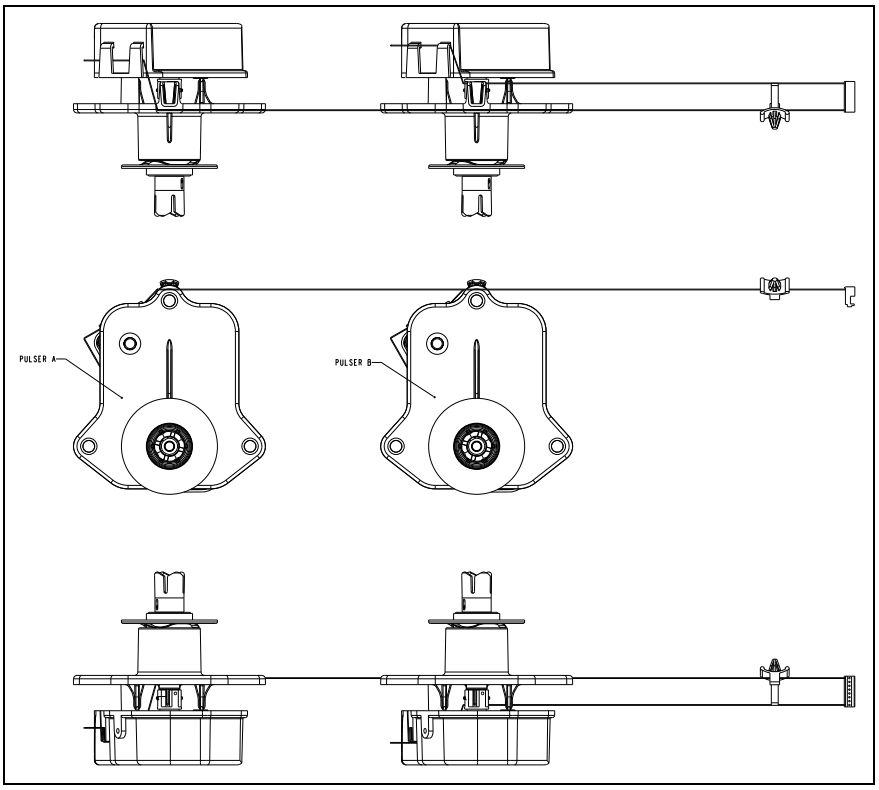
25 – Atlas E85 and DEF Pump

Atlas E85 Unit



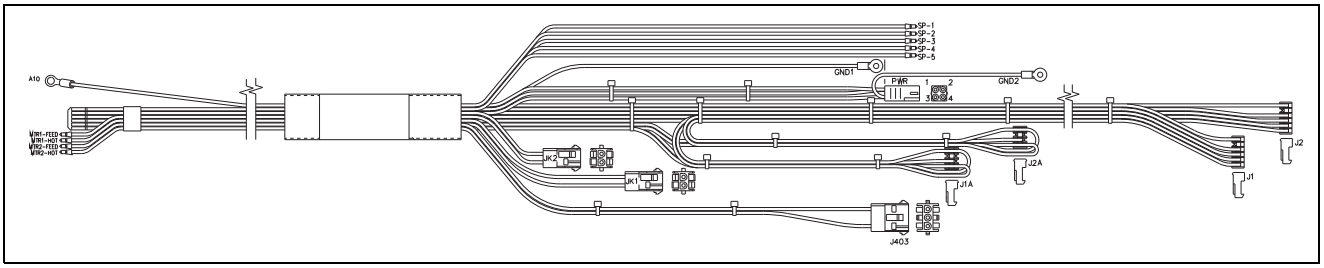
Item #	Part Description	Current Part	Quantity
1	Assembly MOA C+ Meter and Manifold	M02656A007	1
2	Encore Dispenser Feedline Assembly	M00302A001	1
3	O-ring, 1-1/4 X 1-1/2 X 1/8	Q10068-09	1
4	Screw, Metric M8 X 20	M00415B010	2
5	Assembly C+ Meter Plated	T19976-G5	1

Pulser



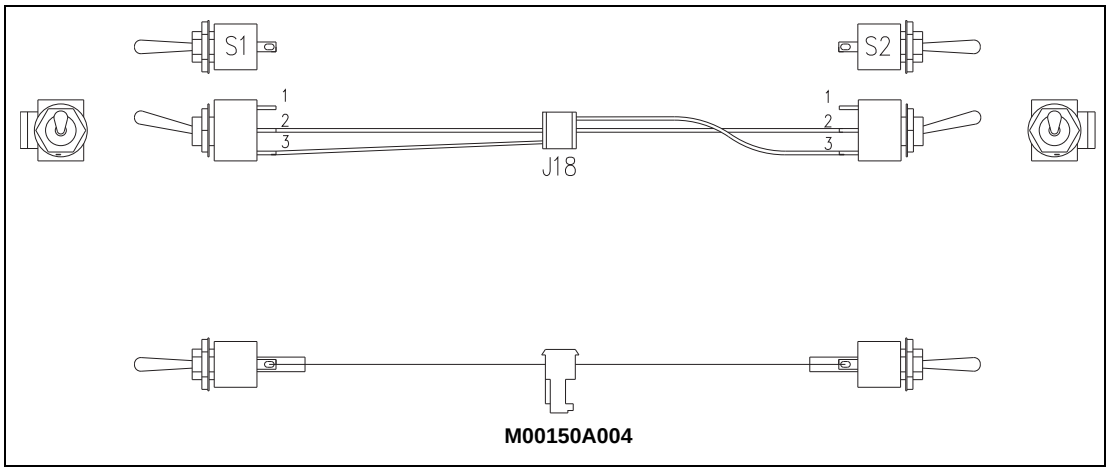
Item #	Part Description	Current Part	Quantity
1	Pulser	M05839B002	1

Main Conduit and Cable Assembly

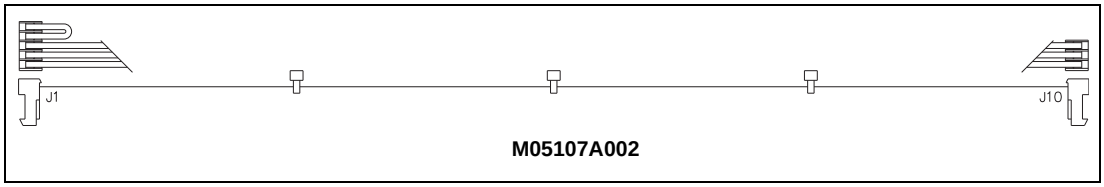


Item #	Part Description	Current Part	Quantity
1	Main Conduit and Cable Assembly	M04850A010	1

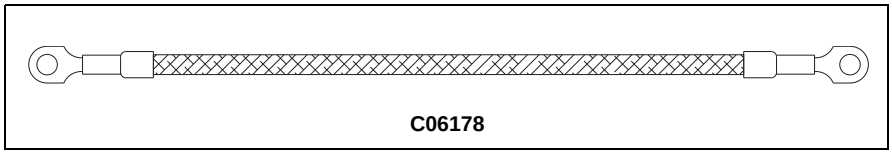
Cables



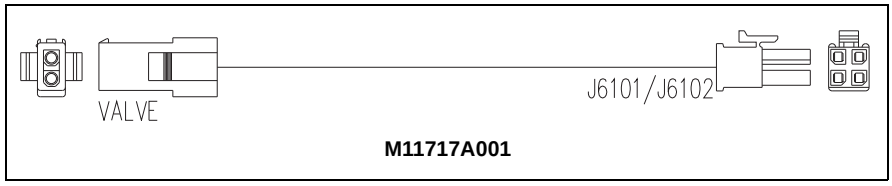
M00150A004



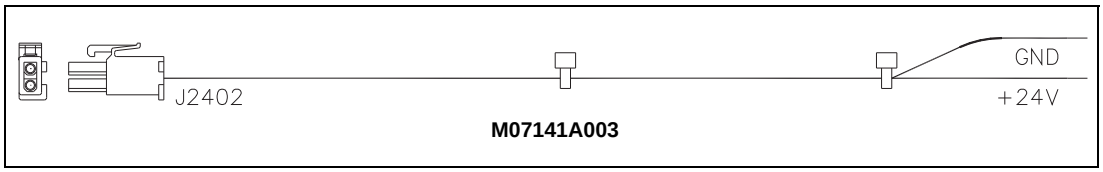
M05107A002



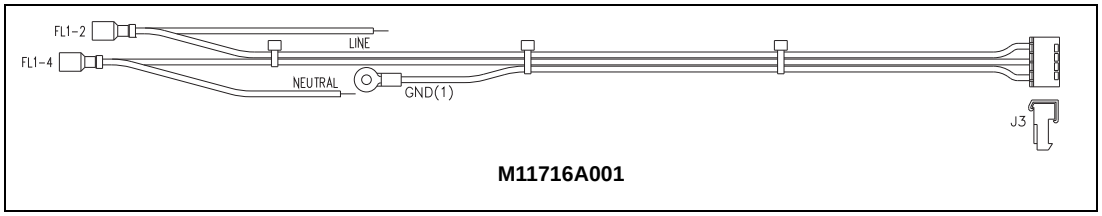
C06178



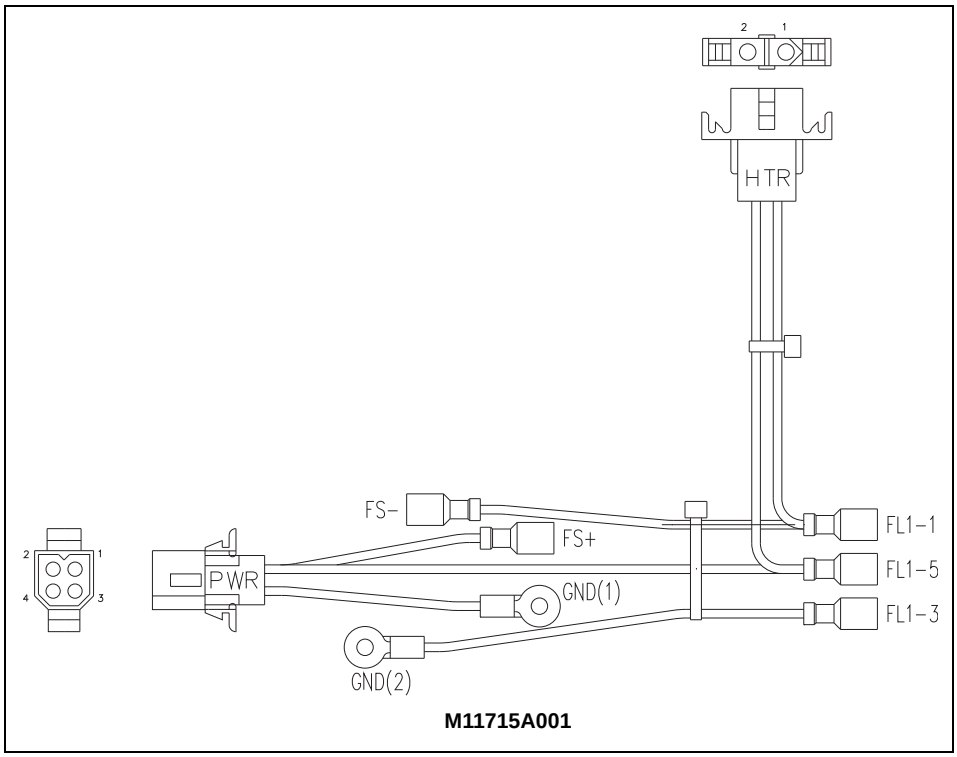
M11717A001



M07141A003



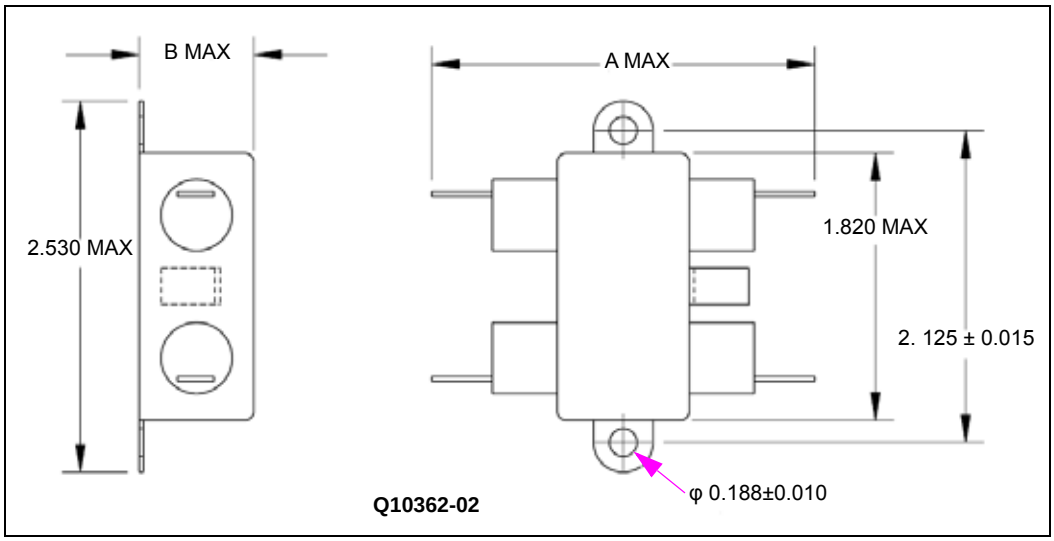
M11716A001



M11715A001

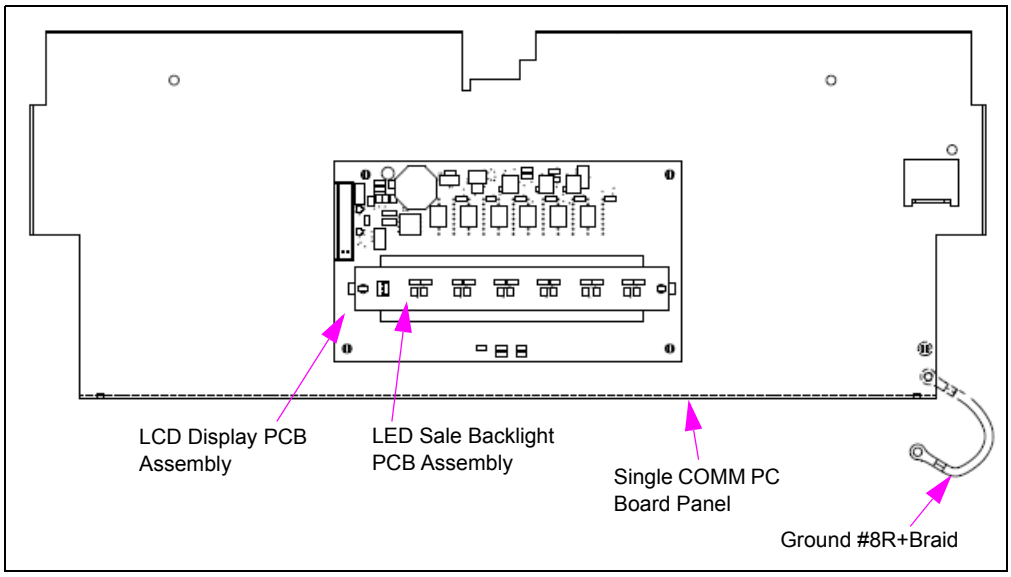
Item #	Part Description	Current Part	Quantity
1	Cable, E-CAL Switch	M00150A004	1
2	Cable, DC Power Atlas Commercial	M05107A002	1
3	Wire Assembly (S), Ground Strap-to-ring Term's	C06178	1
4	Cable, Valve Adapter	M11717A001	1
5	Cable, Coriolis Power	M07141A003	1
6	Cable, AC Filter to PS	M11716A001	1
7	Cable, AC in to Filter	M11715A001	1

Filter



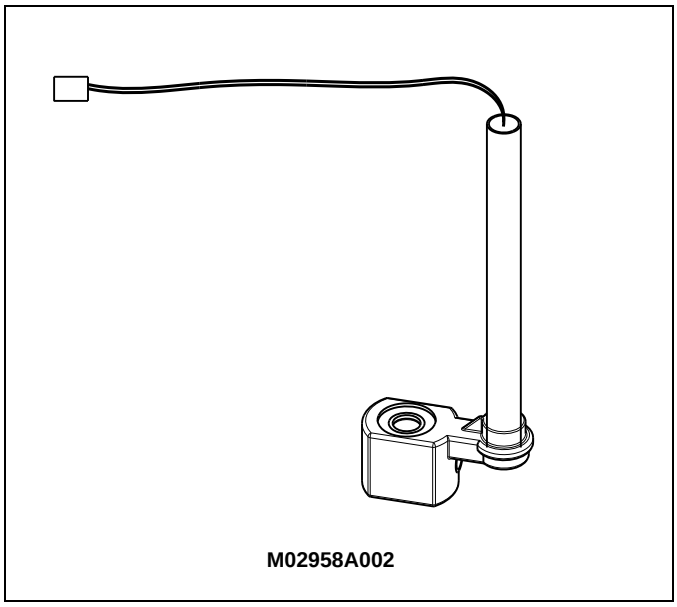
Item #	Part Description	Current Part	Quantity
1	Filter, Power Line 2 A/115-250 VAC	Q10362-02	1

Display Panel



Item #	Part Description	Current Part	Quantity
1	Panel, PC Board Support, Single COMM, E85	M05045B002	1
2	PCB Assembly, LCD Display	M11714A002	1
3	PCB Assembly, LED Sale Backlight (for M11714A002 Display)	M12019A001	1
4	Cable Assembly, Ground #8R+Braid	C06178	1

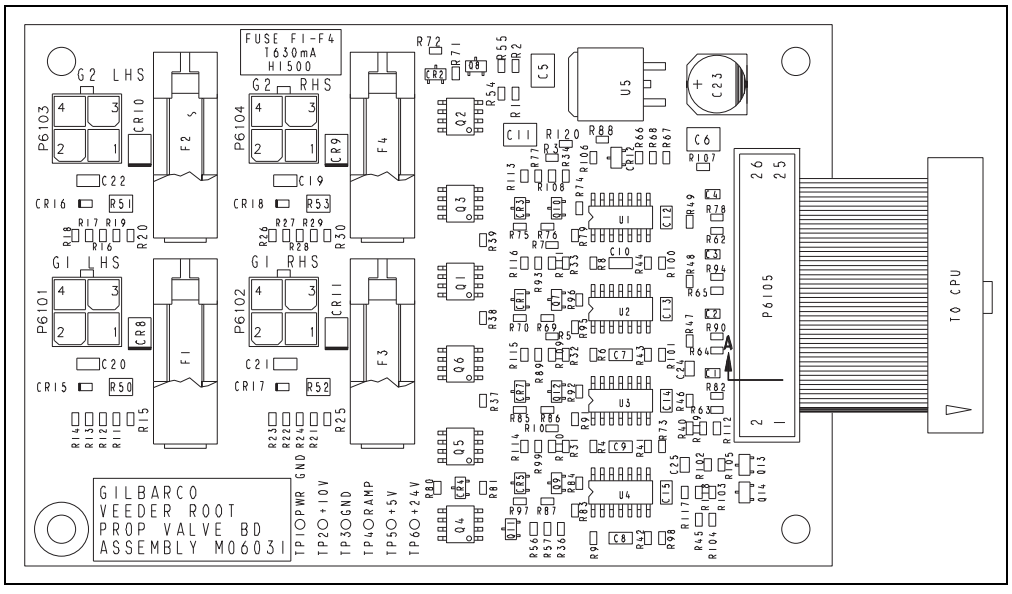
Valve Coil



M02958A002

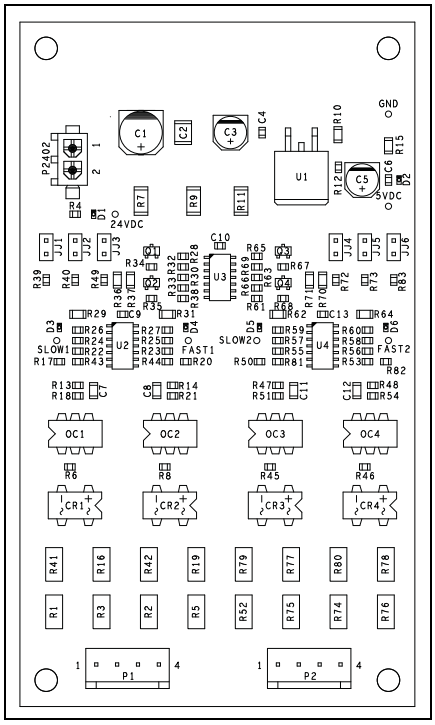
Item #	Part Description	Current Part	Quantity
1	Assembly Valve Coil with Conduit	M02958A002	1

Valve Controller PCA



Item #	Part Description	Current Part	Quantity
1	Valve Controller PCA	M06031A001	1

Valve Interface PCA



Item #	Part Description	Current Part	Quantity
1	Valve Interface PCA	M11480A001	1

Switching Power Supply

Item #	Part Description	Current Part	Quantity
1	Power Supply - Switching	M04161B005	1

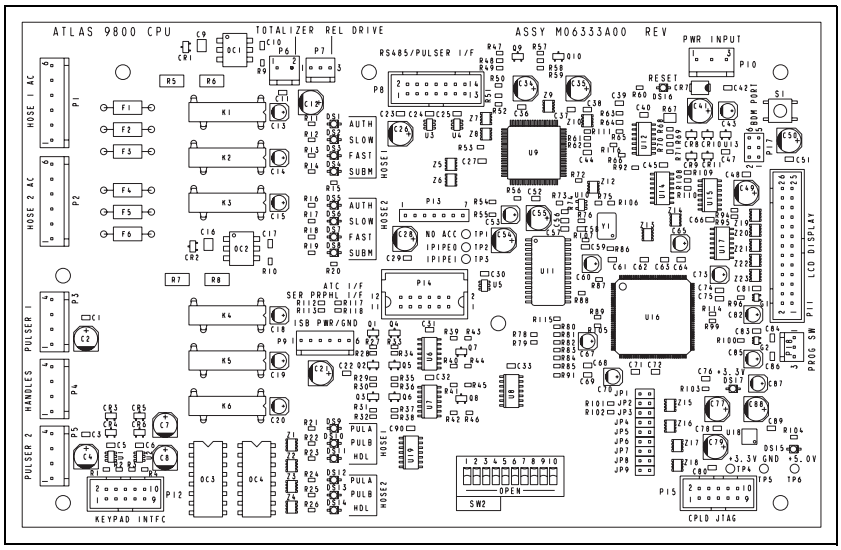
Power Supply

Refer to “Commercial Power Supply” on page 11-2.

Dual Pulse Output PCA

Refer to “Pulse-out I/F/RS-485 I/F” on page 11-3.

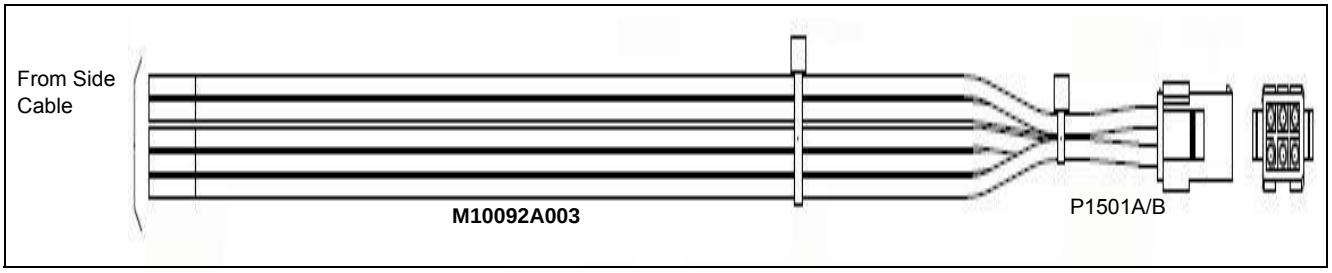
E85 CPU Board



Item #	Part Description	Current Part	Quantity
1	E85 CPU Board (with P-18 Connector)	M06333KECAL	1

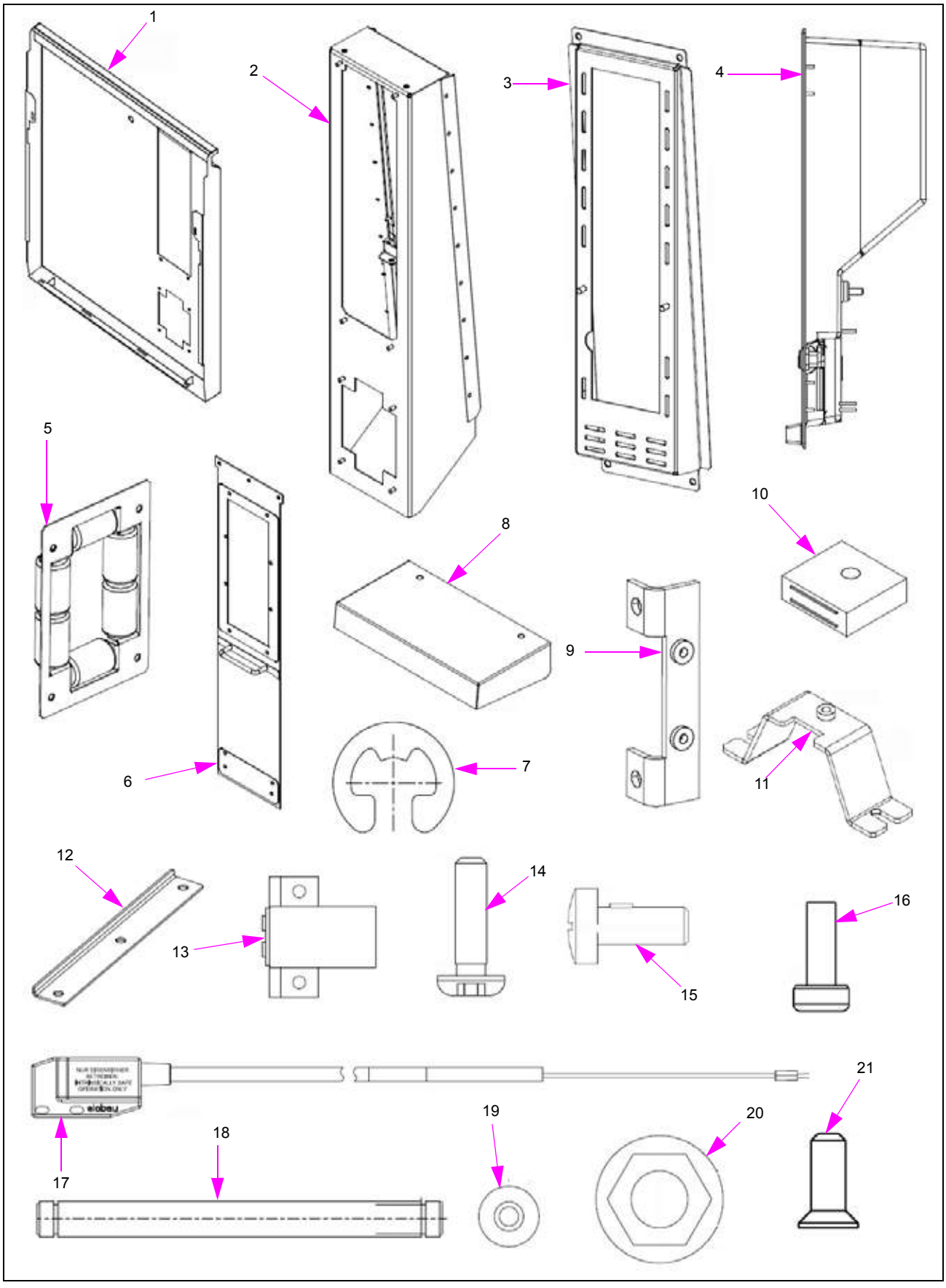
DEF Unit

M10092A003 Cable Assembly and 140941824 Pump Handle



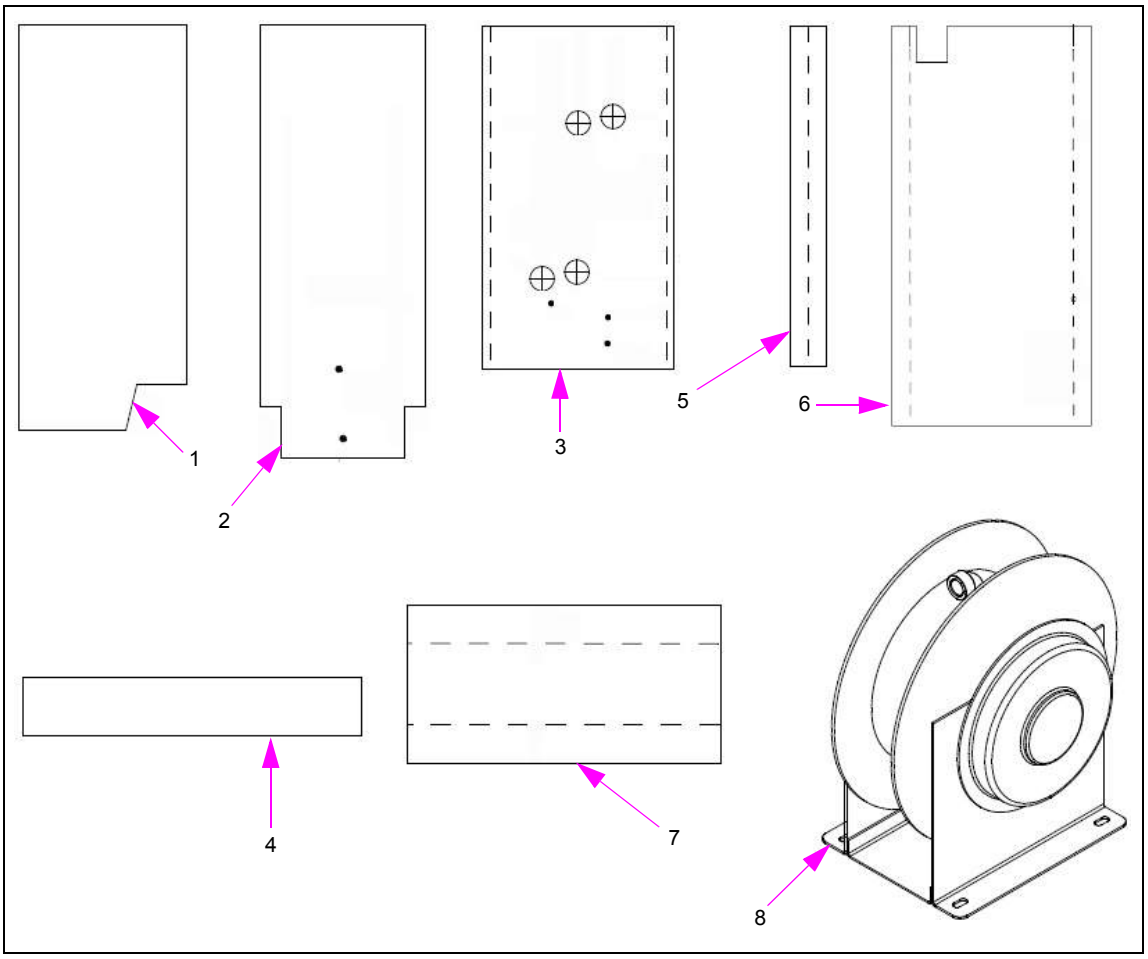
Item #	Part Description	Current Part	Quantity
1	Assembly, Coriolis Meter Conduit and Cable	M10092A003	1

Cold Weather DEF Front Panel



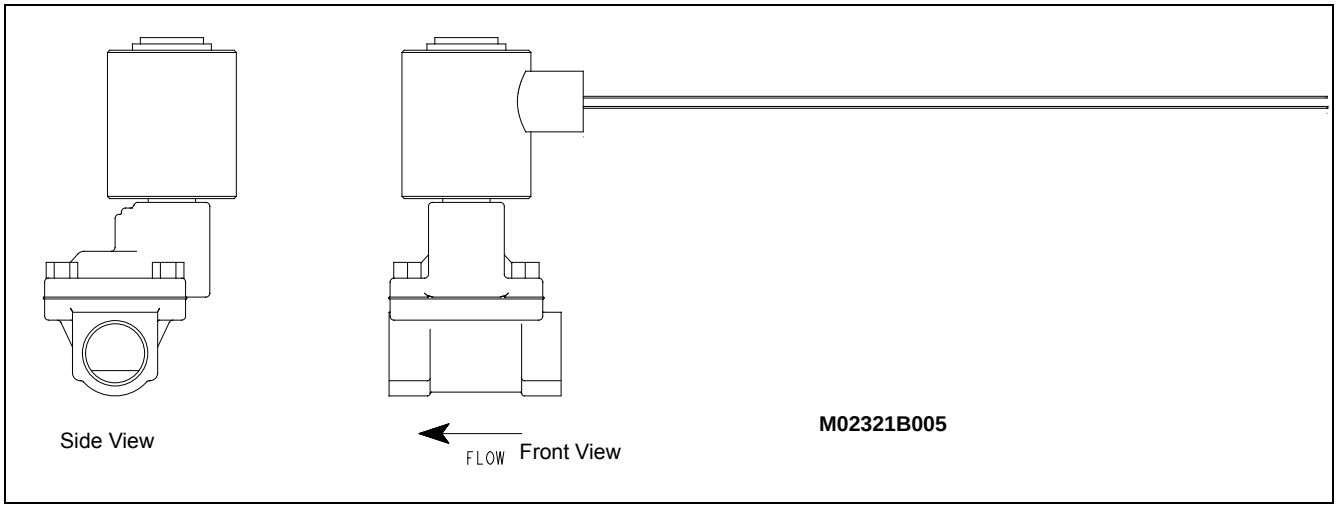
Item #	Part Description	Current Part	Quantity
Cold Weather DEF Front Panel			
1	Assembly, Panel Lower Door	M12101A101	1
2	Assembly, Weldment Frame	M12099A001	1
3	Assembly, Bracket Boot Pocket	M11991A001	1
4	Nozzle with Lock and Holder	M02428A001	1
5	Assembly, Hose Guide	M12104A001	1
6	Assembly, Flap Door (obsolete, see note)	M11997A002	1
7	Ring Retaining 1/4”	K82468-32	6
8	Cover, DEF Atlas	M12096B001	1
9	Assembly, Bracket, Magnet	M12188A001	2
10	Magnet, Type 5	M12211B001	1
11	Assembly, Bracket Nozzle Boot	M11992A001	1
12	Plate, DEF Atlas	M11999B001	1
13	Magnet, Type 2	M12168B001	2
14	Screw, Metric M6 X 12	M01257B101	5
15	Screw, Metric Phillips Pan-head M3 X 8	M00590B106	4
16	Screw, SEMS Phillips Pan-head M4 X 12	Q12845-59	2
17	Switch, Magnet ELOBAU	140941824	1
18	Pin, Clevis	M11078B003	2
	Pin, Clevis	M11078B004	1
19	Roller, Hose Protector	M12166B001	5
20	Nut, Metric Serrated	M00414B002	10
21	Screw, Metric M3 X 12 Flat-head	M00419B313	2
Not Shown			
-	Nut, Metric, Flange	M00414B005	4
Note: Flap Door Assembly (M11997A002) is replaced by (M13855A001).			

Cold Weather DEF Insulation and Hose Reel



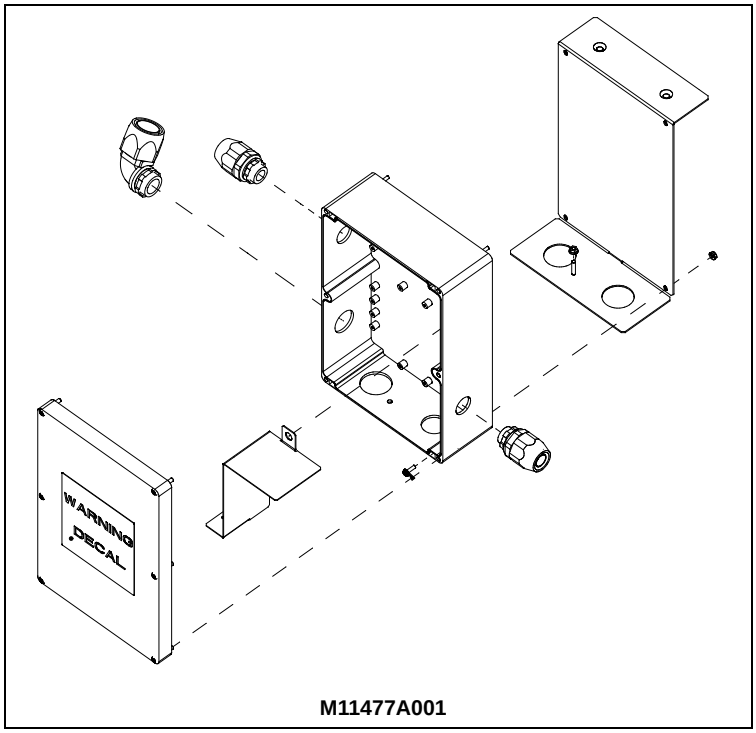
Item #	Part Description	Current Part	Quantity
Cold Weather DEF Insulation			
1	Insulation, Side	M11166B001	2
2	Assembly, Insulation	M11166A002	2
3	Assembly, Insulation	M11166A004	1
4	Insulation	M11166B005	2
5	Assembly, Insulation	M11166A007	1
6	Assembly, Insulation	M11166A008	1
7	Assembly, Insulation	M11166A009	1
8	Hose Reel DEF Assembly	M11270B001	1

Two-stage Valve Assembly

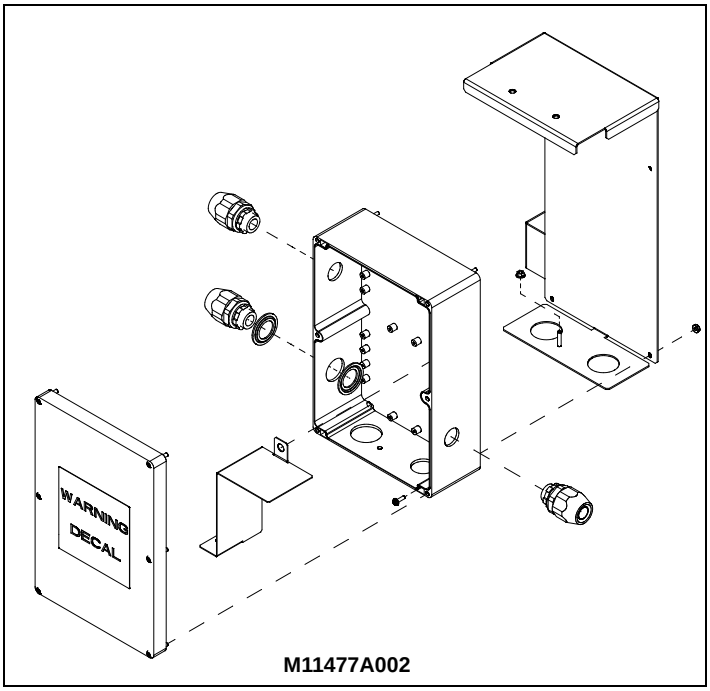


Item #	Part Description	Current Part	Quantity
1	Two-stage Valve Assembly	M02321B005	1

J-box



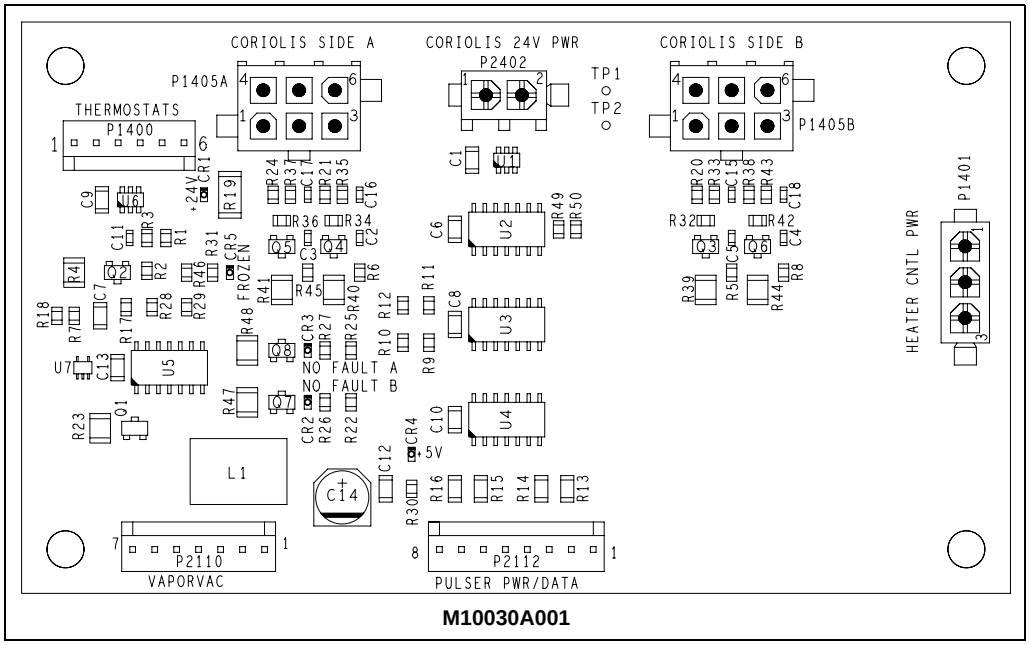
M11477A001



M11477A002

Item #	Part Description	Current Part	Quantity
1	Assembly, J-box (Cold Weather)	M11477A001	1
2	Assembly, J-box (Warm Weather)	M11477A002	1

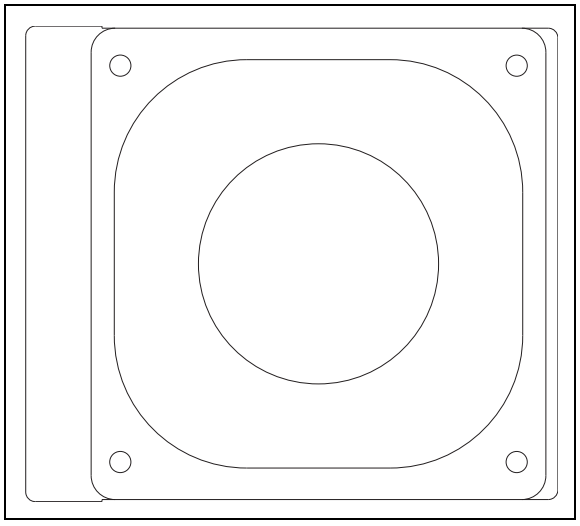
Coriolis Interface



M10030A001

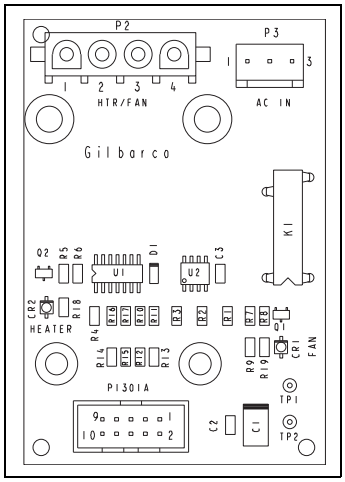
Item #	Part Description	Current Part	Quantity
1	PCA, Coriolis Interface	M10030A001	1

Heater/Fan Assembly



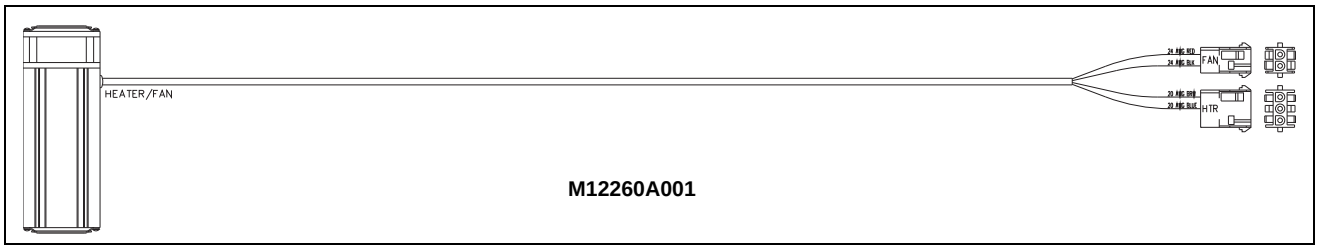
Item #	Part Description	Current Part	Previous Part	Quantity
1	Heater/Fan Assembly 750 W	Q13254-05	Q13254-03	1

Temperature Control PCA



Item #	Part Description	Current Part	Quantity
1	Temperature Control PCA	M06783A001	1

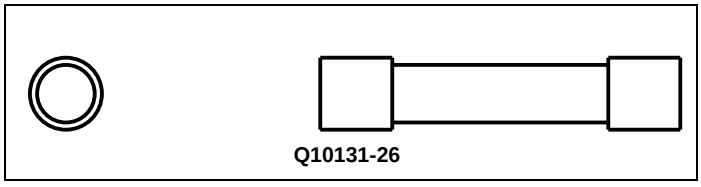
Fan/Heater



M12260A001

Item #	Part Description	Current Part	Quantity
1	Fan/Heater 230 W	M12260A001	1

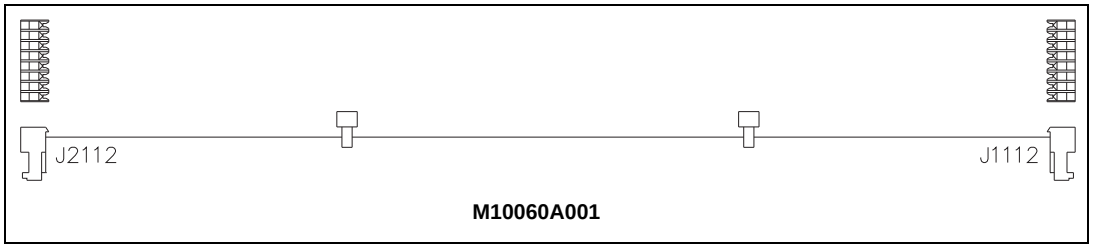
Fuse



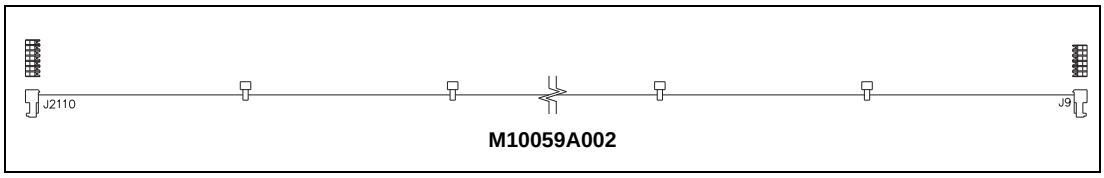
Q10131-26

Item #	Part Description	Current Part	Quantity
1	4 A Fuse	Q10131-26	1

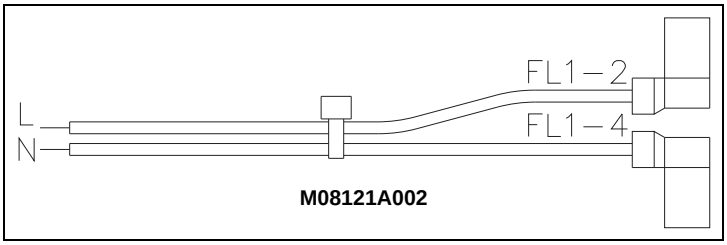
Cables



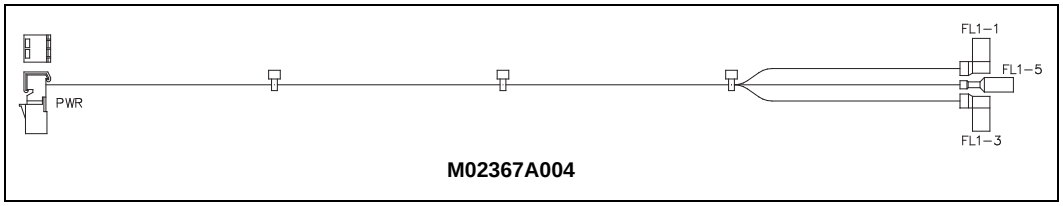
M10060A001



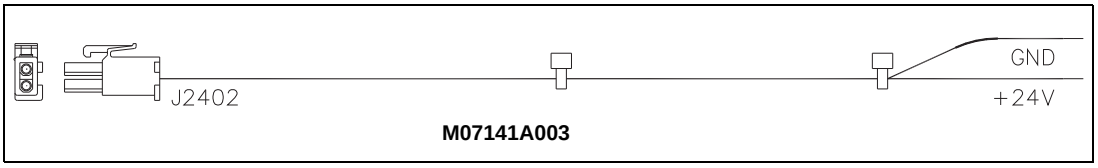
M10059A002



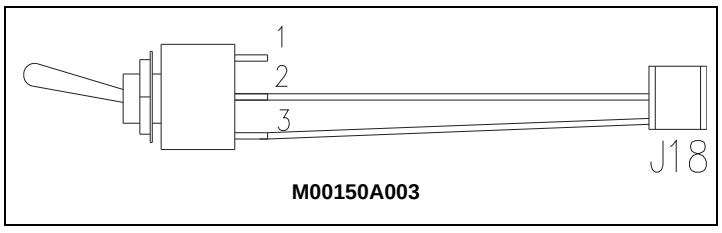
M08121A002



M02367A004



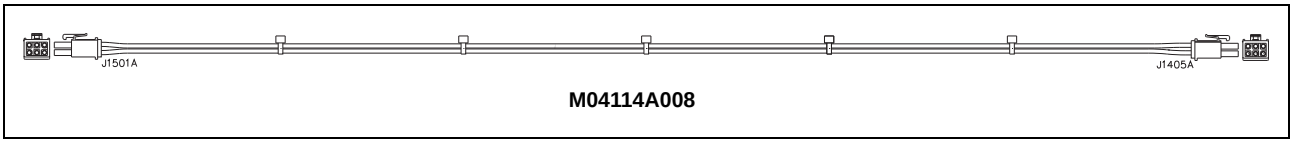
M07141A003



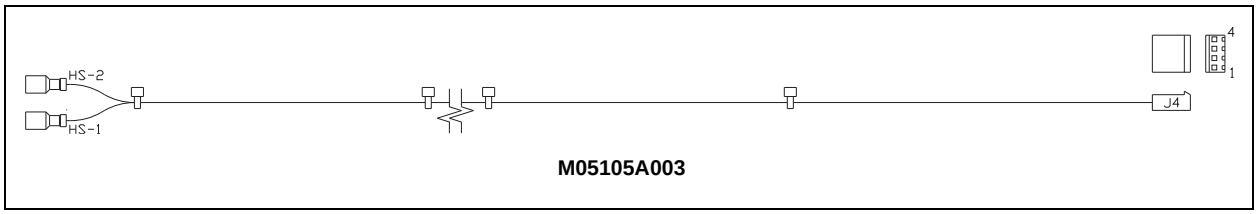
M00150A003

Item #	Part Description	Current Part	Quantity
1	Cable, Coriolis Interface Pulser to Pump Control Node (PCN)	M10060A001	1
2	Cable, Coriolis Interface Frozen Thermo to VaporVac® Input	M10059A002	1
3	Cable, AC Line Filter Power Supply	M08121A002	1
4	Cable, Cash Acceptor Line Filter	M02367A004	1
5	Cable, +24 VDC Power	M07141A003	1
6	Cable, E-CAL Switch	M00150A003	1

WW DEF



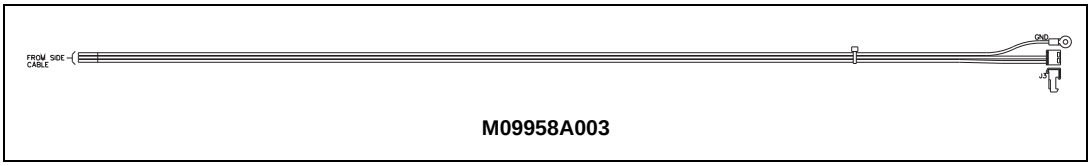
M04114A008



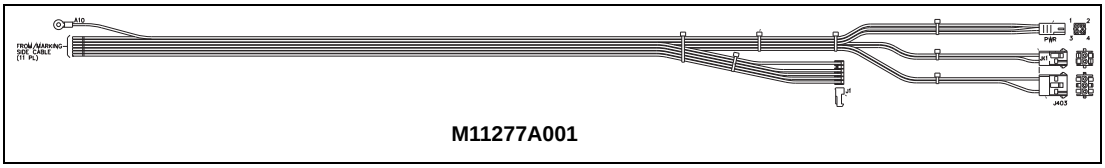
M05105A003

Item #	Part Description	Current Part	Quantity
1	Assembly, Conduit and Cable, DEF, and SMART Meter™ Pulser	M04114A008	1
2	Cable, Handle Switch Dual/Single	M05105A003	1

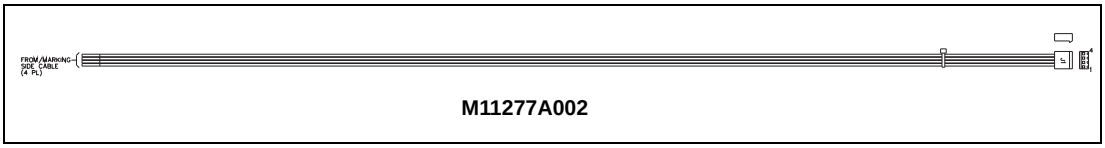
CW DEF



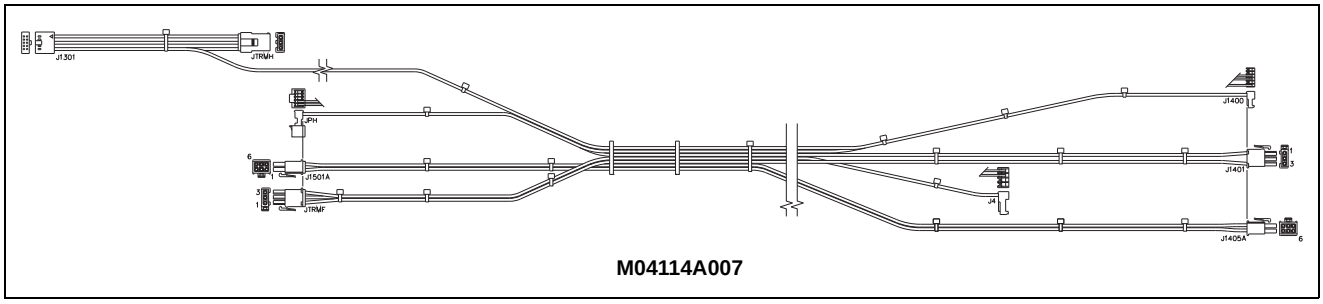
M09958A003



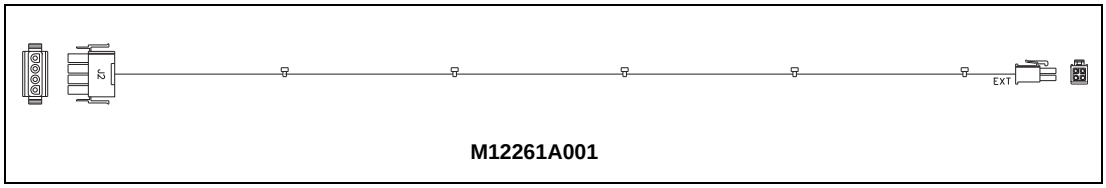
M11277A001



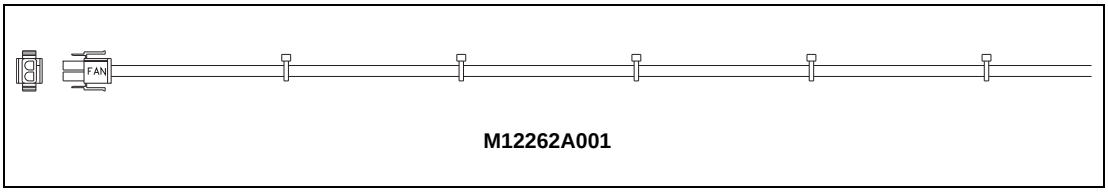
M11277A002



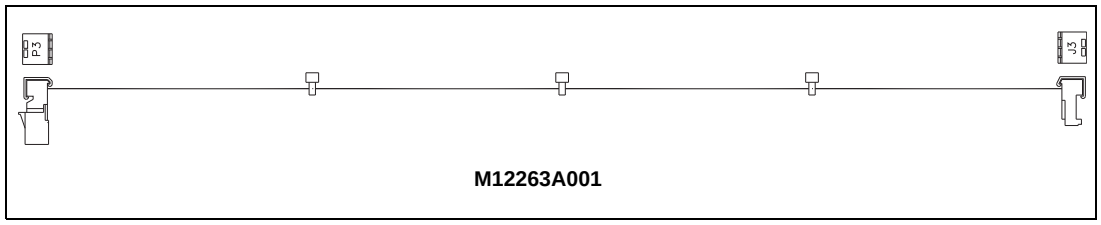
M04114A007



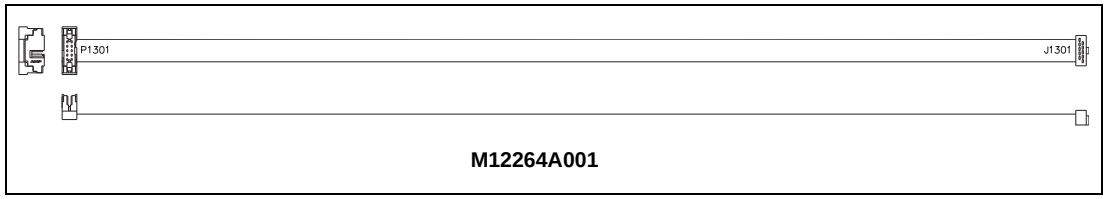
M12261A001



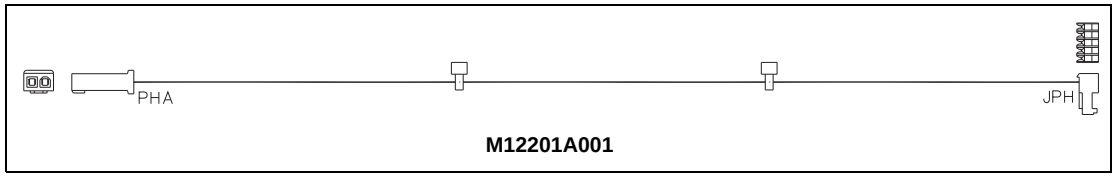
M12262A001



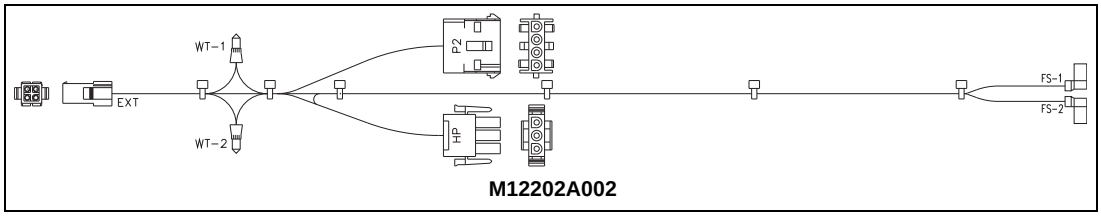
M12263A001



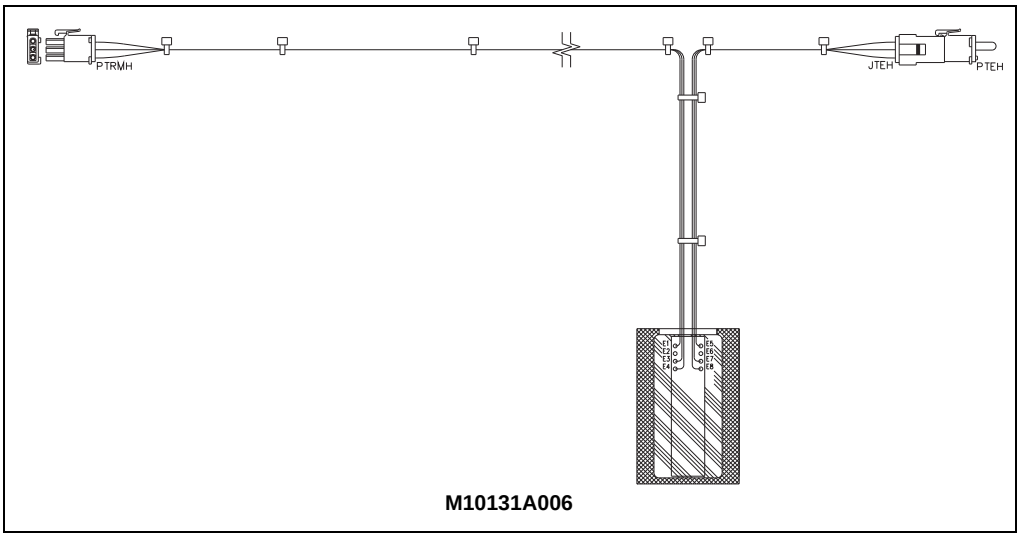
M12264A001



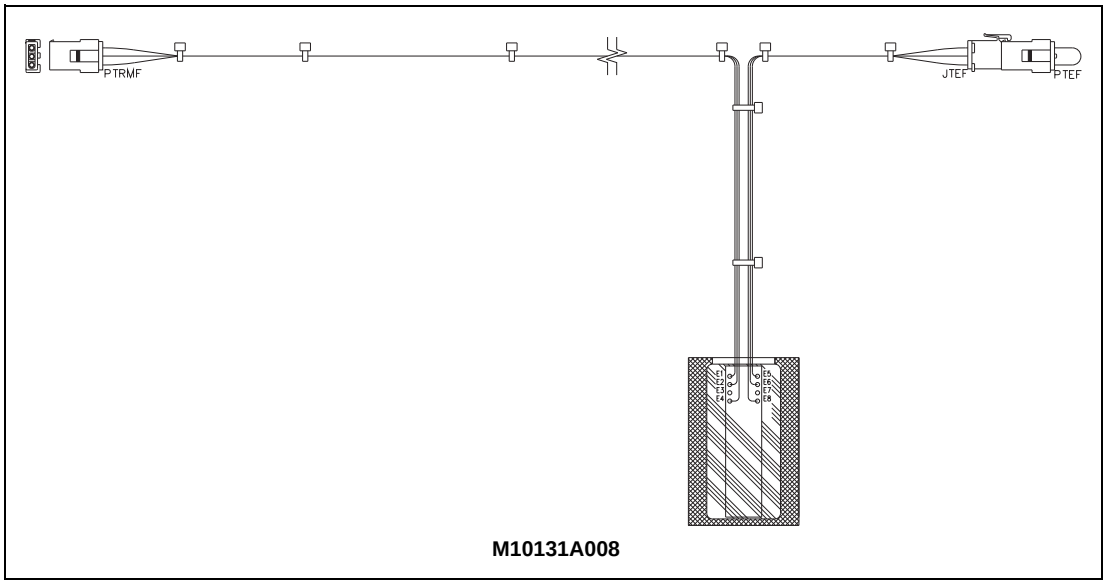
M12201A001



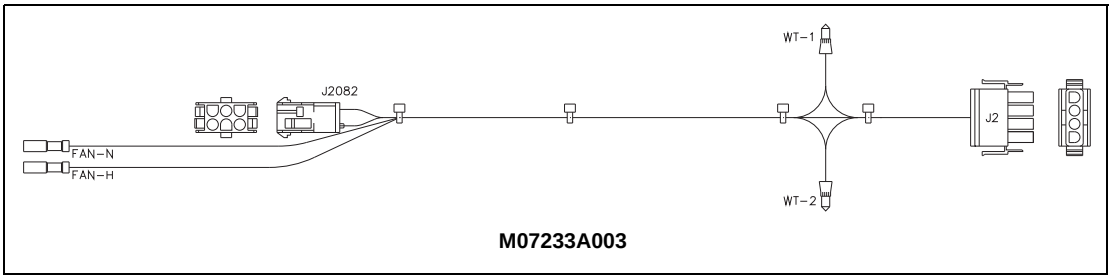
M12202A002



M10131A006



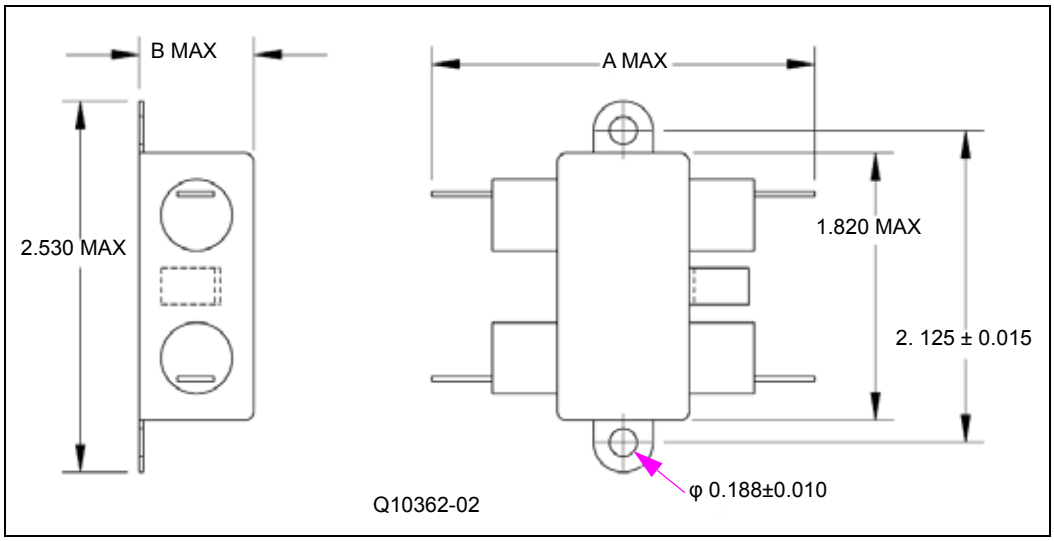
M10131A008



M07233A003

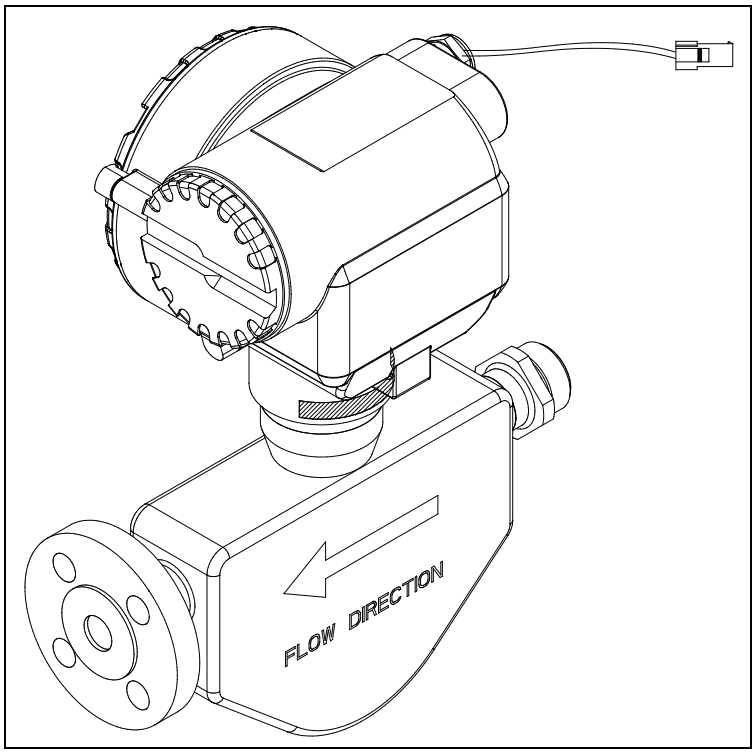
Item #	Part Description	Current Part	Quantity
1	Assembly, Conduit and Cable	M09958A003	1
2	Assembly, Main DEF AC Cable	M11277A001	1
3	Assembly, Main DEF DC Cable	M11277A002	1
4	Assembly, Conduit and Cable, DEF and SMART Meter Pulser	M04114A007	1
5	Cable, Heater Relay Extender	M12261A001	1
6	Cable, +24 V to Heater	M12262A001	1
7	Cable, AC Extender	M12263A001	1
8	Cable, Heater Relay Extender	M12264A001	1
9	Cable, Pump Handle	M12201A001	1
10	Cable, Splitter Heater	M12202A002	1
11	Cable, Temperature Sensor DEF (Heater)	M10131A006	1
12	Cable, Temperature Sensor DEF (Frozen)	M10131A008	1
13	Cable, Heater Adapter	M07233A003	1

Power Line Filter



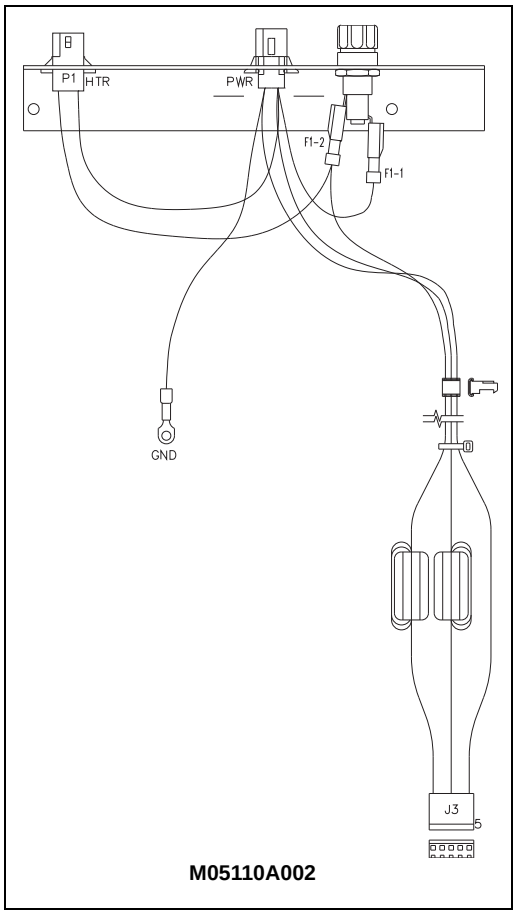
Item #	Part Description	Current Part	Quantity
1	Filter, Power Line 2 A/115-250 VAC	Q10362-02	1

Coriolis Meter



Item #	Part Description	Current Part	Previous Part	Quantity
1	Coriolis Meter	M10006A003	M10006A001	1

AC Bracket Assembly



M05110A002

Item #	Part Description	Current Part	Quantity
1	AC Bracket Assembly	M05110A002	1

This page is intentionally left blank.

26 – Atlas Kits

Following table details the Atlas Kit numbers with their description, quantity, and MDE/drawing numbers:

Kit Number	Description	Used On	Quantity	MDE/Drawing
G032752	External Filter Kit, Particulate	Atlas Ultra-Hi	1 per Hose	MDE-4430
G032753	External Filter Kit, Water Alert			
G032754	External Filter Kit, Particulate	Atlas STD and SHF		
G032755	External Filter Kit, Water Alert			
C06426K9850G	S/W, Ultra-Hi 9850K Gallons	9800 CPUs, C06391-C06394, C06500-C06503	1 per Unit	M02775
C06426K9850L	S/W, Ultra-Hi 9850K Liters			
C06426K9850M (obsolete, see note 1)	S/W, Ultra-Hi 9850K IMP Gallons			
M03946K001	S/W, Standard 9800K Gallons	Atlas 9800K CPU, M05346	1 per Unit	M02775
M03946K002	S/W, Standard 9800K Liters			
M03946K003	S/W, Standard 9800K IMP Gallons			
M03946K004	S/W, Super-Hi 9840K Gallons	Atlas 9840K CPU, M05346		M02775
M03946K005	S/W, Super-Hi 9840K Liters			
M03946K006	S/W, Super-Hi 9840K IMP Gallons			
M04607K010	Asco Solenoid Valve Diaphragm Kit	Atlas Standard Models	1 per Hose	Gasboy approved supplier provided instructions.
M04607K012	Asco Solenoid Valve Coil Kit, 110/120 V			
M04607K013	Asco Solenoid Valve Coil Kit, 220/240 V			
M04731K-Series	XU2A Pumping Unit Repair Kits - Contact Gasboy for specific kit listing, or refer to *MDE-4320 Gasboy UHF Pump, Blackmer XU2A Rebuild Kit Installation Manual.*	Atlas UHF (9850K) Models only	1 per Unit	MDE-4320
M04920K-Series	GPU Repair Kits - Contact Gasboy for specific kit listing, or refer to *MDE-4447 Gilbarco Global Pumping Unit Operation and Service Manual.*	Atlas STD and SHF Models only	1 per grade	Gasboy approved supplier provided instructions.
M05559K001	Universal Seals Kit	Atlas/Titan	1 per Unit	
M05813K004 (see note 2)	Main Totalizer Relocation Kit	Atlas Single Comm Mech Model 9100 except 9140	1 per Unit	G032933
	Main Totalizer Relocation Kit	Atlas Dual Comm Mech Model 9100 except 9140		
	Main Totalizer Relocation Kit	Atlas 9140 Comm Mech Super-Hi		
M05816K001	Submersible Drive Relay Kit, Single	Atlas Electronic Units	1 per Unit	MDE-4596
M05816K002	Submersible Drive Relay Kit, Dual			
M05819K001	ATC Comm Field Kit, Single	Atlas Electronic Commercial STD and SHF	1 per Unit	MDE-4331
M05819K002	ATC Comm Field Kit, Dual			
M05819K003	ATC UHF Field Kit - Single	Atlas Ultra-Hi Comm 1-hose		
M05819K004	ATC UHF Field Kit - Dual	Atlas Ultra-Hi Comm 2-hose		
M14476K001	High Hose Retriever (HHR) Post and Hardware Kit	HHR Kit for Mechanical Atlas Models 91/87	1 per Hose	MDE-4462
		HHR Kit for Electronic Atlas Models 98/88		

Kit Number	Description	Used On	Quantity	MDE/Drawing
M06184K003	Vapor Recovery Kit	Atlas Electronic Dispensers		
M06184K004	Vapor Recovery Kit	Atlas Mechanical Dispensers	1 per Hose	MDE-4487
M06227K001	Lamp Kit	Mechanical Units	1 per Unit	MDE-4512
M06227K002	Lamp Kit	Electronic Units		
M06245K001	Pulser Retrofit Kit 10:1 Volume Dual	Mech 87K, 91K except 9140K	1 per Unit	MDE-4506
M06245K002	Pulser Retrofit Kit 100:1 Volume Dual			
M06245K003	Pulser Retrofit Kit 1:1 Volume Dual			
M06245K004	Pulser Retrofit Kit 10:1 Volume SGL			
M06245K005	Pulser Retrofit Kit 100:1 Volume SGL			
M06245K006	Pulser Retrofit Kit 1:1 Volume SGL			
M06245K007	Pulser Retrofit Kit 100:1 Money SGL	Mech 87K		
M06245K008	Pulser Retrofit Kit 100:1 Money Dual			
M06245K009	Pulser Retrofit Kit 10:1 Volume 9140	Mech 9140K		
M06245K010	Pulser Retrofit Kit 1:1 Volume 9140			
M06245K011	Pulser Retrofit Kit 100:1 Volume 9140			
M06301K009	Electro-mech Tot with Pulse-out	Atlas Retail Elec Sgl and Dual Units, except UHF	1 per Unit	MDE-4511
M06301K010	Electro-mech Tot without Pulse-out			
M06333K002	Atlas 9800 CPU Generic Spare Kit (115 VAC)	Contains: M06333K9800K M07588A002 M06656K001-K006 M08218K001 (ATC Kit)	1 per Unit	MDE-4334
M06333K003	Atlas 9800 CPU Generic Spare Kit (230 VAC)	Contains: M06333K9800K M07588A004 M06656K001-K006 M08218K001 (ATC Kit)	1 per Unit	MDE-4334
M06382K003	Electro-mech Tot with RS-485 I/F	Atlas Comm Elec Units	1 per Unit	MDE-4511
M06382K004	Electro-mech Tot with Pulse-out I/F (Dual Common/Distinct outputs, Two Dual Common Outputs)	Atlas Comm Elec Units		
M06391K001	Satellite Piping Conversion Kit	9153KX and 9853KX, 115 V SGL	1 per Unit	MDE-4514
M06391K002	Satellite Piping Conversion Kit	9153KX and 9853KX, 115 V Dual		
M06391K003	Satellite Piping Conversion Kit	9153KX and 9853KX, 230 V SGL		
M06391K004	Satellite Piping Conversion Kit	9153KX and 9853KX, 230 V Dual		
M06422K001	Satellite Piping Kit	Ultra-Hi 1 Grade Dispenser	1 per Unit	M06945
M06422K002	Satellite Piping Kit	Ultra-Hi 2 Grade Dispenser		
M06422K003	Satellite Piping Kit	Ultra-Hi 1 Grade Pump		
M06430K007	Vapor Recovery Kit	Atlas Self-contained Electronic 1GR 1HS	1 per Unit	MDE-4522
M06430K008	Vapor Recovery Kit	Atlas Self-contained Electronic 2GR		
M06430K009	Vapor Recovery Kit	Atlas Self-contained Electronic 1GR 2HS		
M06430K010	Vapor Recovery Kit	Atlas Self-contained Mechanical 1GR 1HS		
M06430K011	Vapor Recovery Kit	Atlas Self-contained Mechanical 2GR		
M06430K012	Vapor Recovery Kit	Atlas Self-contained Mechanical 1GR 2HS		
M06648K001	Discharge Piping Kit, 1” NPT	Atlas STD Models	1 per Hose	MDE-4533
M06656K001	S/W, Standard 9800K	M06656K00X are Atlas 9800 Serial EEPROM boards used for reprogramming M06333KXXXX CPU Boards	1 per Unit	M02775, M06656
M06656K002	S/W, Ultra-Hi 9850			
M06656K003	S/W, Super-Hi 9840K			
M06656K004	S/W, Standard 9800Q			
M06656K005	S/W, Super-Hi 9840Q			
M06656K006	S/W, Standard 9862KX and 9872KX			

Kit Number	Description	Used On	Quantity	MDE/Drawing
M06656K100	S/W, Standard 9800K, Ultra-Hi 9850, Super-Hi 9840K, Standard 9800Q, Super-Hi 9840Q	Consists of M06656K001 - K006 (Used for reprogramming M06333KXXXX CPU Boards)	1 per Unit	M02775, M06656
M06699K001	Motor Kit, 1 HP 60 Hz 1PH	Atlas Self-contained	1 per Hose	MDE-4541
M06699K002	Motor Kit, 1 HP 50 Hz 1PH	Atlas Self-contained		
M06874K001	Mechanical Hand Drive	Atlas STD and Self-contained Pumps	1 per Grade	MDE-4557
M06875K001	ATC Retail Kit Single with Pulse-out	Atlas Electronic Retail Models 88K	1 per Unit	MDE-4556
M06875K002	ATC Retail Kit Dual with Pulse-out			
M06804K002	Air Gap Rain Baffle Kit	Atlas Electronic Models Only	1 per Unit	MDE-4548
M06943K001	Mechanical Tot, Gal	Atlas Ultra-Hi Models	1 per Hose	MDE-4568
M06943K002	Mechanical Tot, Lit			
M08400K001	Kit, Atlas Bezel Installation	Atlas Standard Models	1 per Unit	MDE-4740
M12421K001	Kit, 115 V PS W/1 Display	Atlas Electronic Commercial Models only	1 per Unit	MDE-4998
M12421K002	Kit, 115 V PS W/2 Displays	Atlas Electronic Commercial Models only	1 per Unit	MDE-4998
M12421K003	Kit, 115 V PS W/4 Displays	Atlas Electronic Commercial Models only	1 per Unit	MDE-4998
M12422K001	Kit, 230 V PS W/1 Display	Atlas Electronic Commercial Models only	1 per Unit	MDE-4998
M12422K002	Kit, 230 V PS W/2 Displays	Atlas Electronic Commercial Models only	1 per Unit	MDE-4998
M12422K003	Kit, 230 V PS W/4 Displays	Atlas Electronic Commercial Models only	1 per Unit	MDE-4998

Notes:

1. No replacement.

2. New bezel with totalizer opening may be required.

This page is intentionally left blank.

Index

Numerics

003017 20-6
013063 16-4
013114 16-4
022618 16-11, 16-13
022619 16-11, 16-13
026082 20-6
029363 3-3
048568 16-2
068446 9-2, 18-9
140941824 25-10

C

C01028 16-9, 16-11, 16-14
C02404 16-3
C04243 3-4
C05818 12-1
C06178 12-1, 12-2, 25-3, 25-4
C06372 11-4, 14-6, 23-5, 23-6
C06387 11-4, 23-5, 23-6
C06389 23-2
C06391 26-1
C06392 10-1, 11-1
C06394 10-1, 11-1, 23-1, 26-1
C06396 11-2, 23-3
C06397 11-2, 23-3
C06424K9850M 10-1
C06425 23-2
C06426K9850G 10-1, 26-1
C06426K9850L 10-1, 26-1
C06426K9850M 26-1
C06454 12-1, 15-1, 23-5, 23-6
C06455 12-1, 24-1
C06488 11-2, 23-3
C06489 11-2, 23-3
C06500 26-1
C06501 10-1, 11-1
C06503 10-1, 11-1, 23-1, 26-1
C06518 24-1
C06519 24-1
C06574 24-1
C06681 22-3
C06746 23-2
C06766 9-2, 9-4, 12-1, 18-9, 24-1
C06898 22-3
C08682 17-2, 17-3, 17-5, 17-6
C09701 11-4, 23-5, 23-6
C35399 11-4, 23-5, 23-6

F

F37340 20-3

G

G003018 20-8
G003071 20-3, 20-6
G003116 21-2, 21-3, 21-4
G003117 21-2, 21-3, 21-4
G003151 20-8
G003152 20-8
G003184 3-3
G003336 3-2
G003337 21-5
G003338 3-2
G003347 3-2
G003354 3-2
G003461 21-5
G003502 20-3, 20-6
G003602 20-3
G003603 20-3
G003608 20-4
G003740 3-6
G011948 19-2
G011958 3-3
G012003 20-4, 20-6
G012129 20-3
G013007 16-3
G013013 16-4
G013018 16-4
G013019 16-3
G013025 16-3
G013030 20-3
G013031 16-3
G013037 16-4
G013041 16-4
G013042 16-3
G013045 16-3
G013049 16-4
G013051 16-4
G013052 16-3
G013063 16-3
G013078 19-2
G013114 16-3
G013190 3-3
G013294 20-11
G013295 21-5
G017169 20-3
G017561 16-6
G017915 20-4
G021009 16-2
G021065 16-2
G021071 16-2, 16-6, 16-8, 16-11, 16-13
G021079 16-2, 16-6, 16-8, 16-11, 16-13
G021082 16-6
G021301 16-13, 17-5
G021337 16-8, 16-11, 16-13, 17-5
G021347 16-11, 16-13
G021377 16-8
G021737 16-8, 16-11, 16-13, 17-2, 17-5
G022073 19-2
G022289 16-3
G022478 16-9
G022479 16-9
G022481 16-9
G022482 16-9
G022485 16-9, 16-13
G022486 16-9, 16-13
G022487 16-9
G022488 16-9
G022605 16-2
G023146 6-7
G023596 16-8, 16-11, 16-13
G024895 6-7, 6-8, 6-9
G024918 16-5
G025015 16-8, 16-11, 16-13, 17-1, 17-4, 17-7, 21-3
G025030 9-6, 16-8, 16-11, 16-13, 17-2, 17-5, 20-3
G025045 16-8, 16-11, 16-12, 17-2, 17-3, 17-5, 17-6, 20-3, 21-2, 21-3, 21-4
G025548 16-2
G025777 16-2
G026019 6-3
G026044 20-4
G026045 20-3, 20-4
G026205 20-8
G026407 20-4
G026850 3-2
G027005 20-8
G027041 16-8, 16-11, 16-13, 17-2, 17-5
G027044 16-8, 16-11, 16-13, 17-2, 17-5
G027146 16-9, 16-11, 16-14
G027361 20-3, 20-6
G027362 20-3, 20-4, 20-6, 20-8
G027363 20-3

G028202 19-2
G028211 19-2
G028212 19-2
G028960 6-7, 6-8, 6-9
G028975 6-11, 20-4, 20-6, 20-8, 20-11
G029359 16-5
G031035 16-8, 16-11, 16-13, 17-2, 17-5
G032752 26-1
G032753 26-1
G032754 26-1
G032755 26-1
G032933 26-1
G032942 17-3, 17-6
G037885 8-4
G038125 16-8, 17-2
G042115 16-2
G042657 3-2, 3-3
G042825 16-5
G042912 3-3, 16-5
G046050 20-4
G046969 16-8, 16-11, 16-13, 17-1, 17-4, 17-7
G046970 16-8, 16-11, 16-13, 17-1, 17-4
G046972 16-8, 16-11, 16-13, 17-1, 17-4, 17-7
G046973 16-8, 16-11, 16-13, 17-1, 17-4, 17-7
G047210 3-2
G047611 20-3
G047612 20-3
G047614 20-3
G048555 16-5
G048662 16-2
G048811 16-8, 16-10, 16-13
G048813 16-8, 16-10, 16-13
G048814 16-8, 16-10, 16-13
G048815 16-8, 16-10, 16-13
G049001 16-9, 16-11, 16-14
G049022 16-2
G051813 20-3, 20-6, 20-8
G052020 20-3
G052976 21-2, 21-3, 21-4
G053017 19-2
G054033 19-2
G054190 20-4, 20-6, 20-8, 20-11
G054205 20-3, 20-6
G054447 3-3
G056877 16-8, 16-11, 16-13, 17-1, 17-3, 17-4, 17-6
G056895 16-9, 16-11, 16-14, 17-1, 17-3, 17-4, 17-6
G057806 16-5
G057897 20-4
G062472 20-4
G063284 20-3
G063287 20-3
G063369 20-3, 20-6
G064466 16-5
G064830 16-8, 16-11, 16-13, 17-2, 17-3, 17-4, 17-6
G064874 21-2, 21-3, 21-4
G064875 16-5
G067028 6-11, 20-11
G067034 6-9
G067036 6-9
G067062 6-11, 20-11
G067109 3-3, 16-5
G067500 21-2, 21-3, 21-4
G067735 8-4
G068605 20-3, 20-4, 20-6, 20-8
G068842 16-3
G068843 16-5
G068891 16-8, 16-11, 16-13, 17-1, 17-3, 17-4, 17-6
G068951 3-3
G069077 19-2
G069726 16-11, 16-13, 17-5
G069737 16-8
G097907 20-6
GK01001GA___ 2-4
GK01001GA001 2-4
GK01002GA___ 2-4
GK01002GA001 2-4
GK01003GA___ 2-4
GK01003GA001 2-4
GK01006GA___ 2-4
GK01006GA001 2-4

K

K01902 20-3, 20-6, 20-8
K01903 20-3, 20-6
K01914-28 19-2
K01914-71 20-4, 20-6
K01941 3-3, 3-6, 3-7, 19-2
K02124 6-4
K02137-29 19-2
K02280 20-6
K02283 20-3
K02284 6-11
K02309-22 6-11, 20-4, 20-6, 20-8, 20-11
K02321-20 6-9
K04585 3-6, 3-7
K05287 9-6, 16-8, 16-11, 16-13
K07565 20-3
K11489 16-3
K12179 20-4, 20-6, 20-8, 20-11
K12630 6-9
K14830 16-8, 16-11, 16-13
K18719 6-15
K22468 20-3, 20-6
K34673 2-4
K35222 8-1
K42428 6-5, 8-4, 17-2, 17-3, 17-5, 17-6
K42448 6-11, 6-13, 6-14, 8-4, 16-2, 17-7
K42757-31 16-2, 16-6
K43260 6-7
K43850 6-13, 6-14, 16-5, 17-2, 17-3, 21-2, 21-3, 21-4, 21-5
K44283 6-2
K46046 20-4, 20-6, 20-8, 20-11
K46444 6-2, 20-6, 20-8
K47659 20-3, 20-6
K49306 6-5
K49827 6-13, 6-14, 8-4, 17-7
K50411-25 3-6, 3-7
K50411-31 6-3
K50411-38 3-5
K51194 3-3, 20-11
K55151-21 6-4
K55152 6-3
K56467 21-2, 21-3, 21-4
K57268 6-11
K57624 6-13, 6-14, 21-2, 21-3, 21-4
K65235-33 20-3, 20-11, 21-2, 21-3, 21-4
K66314 20-3, 20-6
K73278-25 20-3, 20-6
K73278-28 3-3, 16-9, 16-11, 16-14, 21-2, 21-3, 21-4
K73278-29 19-2
K75766 3-7
K76145-21 6-15
K76238-20 3-3, 16-5
K76238-22 9-5
K76238-28 16-4
K76238-37 3-5, 19-2
K76238-41 16-4, 16-8, 16-11, 16-13, 17-2, 17-5
K78378-47 9-5
K78378-78 16-3, 16-5
K78552-21 3-6
K78953-27 6-11
K81090-20 21-2, 21-3, 21-4
K81856-28 16-3
K82468-32 25-10
K85561 6-15
K85573-01 3-6, 3-7
K85736-05 6-13, 6-14
K85736-39 16-8, 16-11, 16-13
K85736-51 3-4
K85940 3-7
K86055-01 3-6, 3-7
K89681 9-6, 16-8, 16-11, 16-13, 17-5
K89852 3-6
K93293-06 14-8
K93293-10 16-6

K93546 9-5
K93546-01 6-4
K93682-G1 10-1
K93682-G7 10-1
K94160-01 10-1
K94254-01 6-2
K96618 8-1

M

M00136B002 9-5
M00137B004 9-5
M00150A003 25-17
M00150A004 25-4
M00302A001 25-1
M00414B002 3-5, 25-10
M00414B003 3-3, 3-6, 5-5, 5-6, 6-9, 6-15, 8-4, 18-1, 18-5
M00414B005 25-10
M00415B006 16-6
M00415B009 6-7, 6-8, 6-11, 16-6
M00415B010 6-13, 6-14, 25-1
M00415B011 6-2
M00415B017 5-5, 5-6, 18-6, 18-8
M00417B004 18-9
M00417B009 5-5, 5-7, 6-11, 6-13, 6-14, 6-15, 9-2, 9-4, 16-6, 18-1, 18-2, 18-3, 18-4, 18-5, 18-6, 18-7, 20-4, 21-2, 21-3, 21-4
M00417B101 9-2
M00417B113 6-13, 6-14, 9-4
M00417B224 9-2, 9-6, 18-9
M00419B313 25-10
M00455A002 12-1
M00455A003 15-1
M00590B106 25-10
M00703B002 6-9
M00959B008 5-5, 5-6, 18-6, 18-8
M00959B016 8-4
M00959B019 5-5, 5-6, 18-6, 18-8
M01068B303 8-4
M01071B001 6-7
M01207B001 7-2, 13-4
M01257B101 25-10
M01598A001 14-1
M01800A001 15-12
M02321A005 25-12
M02367A004 25-17
M02428A001 25-10
M02656A007 25-1
M02739A001 15-9
M02958A002 25-6
M03015A002 9-5
M03023A002 9-5
M03025B001 9-5
M03081B001 9-2
M03624A002 15-7
M03946K001 10-1, 26-1
M03946K002 10-1, 26-1
M03946K003 10-1, 26-1
M03946K004 10-1, 26-1
M03946K005 10-1, 26-1
M03946K006 10-1, 26-1
M04011B001 7-2, 13-4
M040662B001 6-8
M04114A007 25-20
M04114A008 25-17
M04161B005 25-7
M04193A001 24-1
M04251B001 5-2, 5-3, 18-1, 18-2, 18-5
M04259B001 6-1
M04265B001 16-2
M04287B001 2-3, 2-6
M04299B001 9-1
M04299B003 9-1
M04460B001 5-2, 5-3, 5-5, 18-1, 18-2, 18-5, 18-6
M04461A001 9-1
M04461A002 9-1, 9-2
M04480B010 6-13, 6-14
M04483A001 9-2
M04485A001 7-2, 13-4
M04536B010 6-13, 6-14
M04607B001 6-2
M04607B002 6-2
M04607B003 6-2
M04607B005 6-2
M04607K010 26-1
M04607K012 26-1
M04607K013 26-1
M04617A001 3-3
M04623A001 3-3
M04624B020 6-1
M04624B040 6-1
M04639B001 3-5
M04641A003 3-6
M04656A001 9-2
M04658A001 15-1
M04659A001 15-1
M04659A002 15-1
M04659A003 15-1
M04686B001 6-7
M04731B101 20-3
M04731K 26-1
M04752B001 3-6
M04774A001 5-2, 5-3, 18-1, 18-5
M04808B001 13-6
M04813B001 4-1, 4-2
M04826B001 3-4
M04827A001 3-4
M04829B001 3-4
M04829B002 3-4
M04830A001 6-7
M04831A001 6-7
M04850A006 9-2, 15-1
M04850A008 9-2, 12-1
M04850A010 12-1, 12-3, 25-2
M04867A001 8-4
M04868A001 5-5, 18-6
M04869B001 8-4
M04871B001 5-5, 5-6, 18-6, 18-8
M04884B001 9-2
M04887B001 2-3
M04887B002 2-3
M04887B003 2-3
M04887B004 2-3
M04887B011 2-3
M04887B012 2-3
M04887B013 2-3
M04887B014 2-3
M04889A001 15-1
M04890A001 4-1, 4-2
M04920B001 6-7, 8-2
M04920B003 6-7, 8-2
M04920K 26-1
M04956A001 13-5
M04956A002 13-5
M04956A004 7-4
M04956A005 7-4
M04956A006 13-5
M04956A007 13-5
M04956A008 7-4
M04956A009 7-4
M04956A010 7-4
M04956A011 7-4
M04973B001 6-7
M04973B005 6-7
M04973B006 3-2, 3-6
M04996A020 16-6
M04996A021 16-6
M05038B001 6-13, 6-14
M05039B001 6-13, 6-14
M05040B001 14-6
M05044B001 11-4
M05045B001 11-4
M05048B001 6-13, 6-14
M05049B001 6-13, 6-14
M05083B001 9-2
M05084B001 6-13, 6-14
M05095B001 2-6
M05098B001 6-13, 6-14
M05105A001 12-1, 24-1
M05105A002 12-1, 24-1
M05105A003 25-17
M05107A001 24-1
M05107A002 25-4
M05108A001 12-1, 24-1

M05109A001 12-1, 24-1
M05110A001 12-1, 24-1
M05110A002 12-1, 12-2, 25-23
M05119A001 12-1, 24-1
M05120A001 12-1, 24-1
M05120A002 12-1, 24-1
M05121B001 16-2
M05122B001 16-2
M05142B001 3-2
M05143B001 16-2
M05158A001 11-3, 23-2
M05158A002 11-3
M05158A003 11-3
M05189A002 9-2, 12-1
M05189A004 9-2, 15-7
M05189A006 9-2, 12-1
M05189A008 9-2, 12-1, 12-3
M05200A001 14-1
M05201A001 12-1
M05221B001 17-2
M05230B009 6-8
M05235B001 6-13, 6-14
M05244B001 9-2
M05248A001 11-3, 23-2
M05274A001 16-6
M05292B001 17-2, 17-4
M05293B001 17-5
M05295A001 3-3
M05314B001 3-4
M05338B001 6-13, 6-14
M05346 26-1
M05346A001 - A004 11-1
M05346A002 10-1
M05346A004 10-1
M05347B010 6-7
M05368B001 17-2, 17-3, 17-6
M05369B001 17-6
M05536A001 18-6, 18-8
M05537B001 18-1, 18-3, 18-4, 18-5, 18-7
M05538B001 18-1, 18-3, 18-4
M05539A002 18-9
M05539B003 9-4
M05540B002 18-9
M05542B001 19-2
M05542B002 19-2
M05552B010 6-11
M05559K001 26-1
M05560A001 6-11
M05561A001 6-11
M05567A001 6-15
M05574B001 3-2, 3-5
M05575B001 21-2, 21-3, 21-4
M05576B001 21-5
M05577B001 20-4
M05582B010 6-8
M05600B001 20-11
M05601B001 20-11
M05602B001 20-3
M05611A001 11-6, 14-7, 23-7
M05611A002 11-6, 14-7, 23-7
M05622A001 20-4
M05624A001 20-4
M05625B001 14-8
M05627B001 3-6
M05632B001 3-2
M05641B001 23-5
M05642B001 23-6
M05645B001 5-2, 5-7
M05647A001 6-8
M05677A001 6-9
M05680B001 6-9
M05681B001 6-9
M05682B001 18-9
M05683A002 21-5, 24-1
M05683A004 21-5, 24-1
M05683A006 21-5, 24-1, 24-4
M05684A002 21-2, 21-3, 24-1
M05685A002 21-2, 21-3, 24-1
M05686A002 21-4, 24-1
M05686A003 21-4, 24-1
M05687A001 20-4, 20-6
M05687A002 20-4, 20-6
M05687A003 20-8
M05687A004 20-8
M05688A001 20-8
M05688A002 20-8
M05689A001 19-2
M05689A002 19-2
M05690B001 6-9
M05692A002 21-4, 24-1
M05692A003 21-4, 24-1
M05719A001 15-7
M05767A001 6-15
M05776B001 6-13, 6-14
M05813K004 26-1
M05816K001 26-1
M05816K002 26-1
M05819K001 26-1
M05819K002 26-1
M05819K003 26-1
M05819K004 26-1
M05825B001 3-5
M05839B002 25-2
M05860B001 9-6
M05861B001 9-6
M05963A001 15-7
M05969A002 9-6, 15-1
M06031A001 25-6
M06050A001 9-6
M06085B001 20-11
M06086B001 20-11
M06087B001 20-11
M06101B001 6-7
M06110A002 25-23
M06184K001 26-2
M06184K002 26-2
M06217B001 6-2
M06227K001 26-2
M06227K002 26-2
M06244B001 6-11
M06245K001 26-2
M06245K0010 26-2
M06245K0011 26-2
M06245K002 26-2
M06245K003 26-2
M06245K004 26-2
M06245K005 26-2
M06245K006 26-2
M06245K007 26-2
M06245K008 26-2
M06245K009 26-2
M06301K009 26-2
M06301K010 26-2
M06333A001 10-1
M06333A002 25-8
M06333K002 26-2
M06333K003 26-2
M06333K9800AQ 10-1, 11-1
M06333K9800K 10-1, 11-1
M06333K9840AQ 10-1, 11-1
M06333K9840K 10-1, 11-1
M06333K9850 10-1, 23-1
M06333KECAL 10-1, 11-1, 25-8
M06333KXXXX 11-1
M06382K001 26-2
M06382K003 26-2
M06391K001 26-2
M06391K002 26-2
M06391K003 26-2
M06391K004 26-2
M06422K001 26-2
M06422K002 26-2
M06422K003 26-2
M06430K001 26-2
M06430K002 26-2
M06430K003 26-2
M06430K004 26-2
M06430K005 26-2
M06430K006 26-2
M06485B001 2-2
M06485B002 2-2
M06485B003 2-2
M06485B004 2-2
M06485B005 2-2
M06485B006 2-2
M06485B007 2-2
M06485B008 2-2

M06485B009 2-2
M06485B010 2-2
M06485B011 2-2
M06485B101 2-2
M06485B102 2-2
M06485B103 2-2
M06485B104 2-2
M06485B105 2-2
M06485B106 2-2
M06485B107 2-2
M06485B108 2-2
M06485B109 2-2
M06485B110 2-2
M06485B111 2-2
M06486B001 2-2
M06486B002 2-2
M06486B003 2-2
M06486B004 2-2
M06486B005 2-2
M06486B006 2-2
M06486B008 2-2
M06486B101 2-2
M06486B102 2-2
M06486B103 2-2
M06486B104 2-2
M06486B105 2-2
M06486B106 2-2
M06486B108 2-2
M06487B006 2-2
M06487B007 2-2
M06487B008 2-2
M06487B009 2-2
M06487B010 2-2
M06487B106 2-2
M06487B107 2-2
M06487B108 2-2
M06487B109 2-2
M06487B110 2-2
M06506K001 2-3
M06615A001 20-4
M06628A001 5-2, 5-3, 18-1, 18-5
M06648K001 26-2
M06656K001 10-1, 11-1, 26-2
M06656K002 10-1, 23-1, 26-2
M06656K003 11-1, 26-2
M06656K003* 10-1
M06656K004 11-1, 26-2
M06656K004* 10-1
M06656K005 10-1, 11-1, 26-2
M06656K006 10-1, 11-1, 26-2
M06656K100 10-1, 11-1, 26-3
M06684B001 5-5, 5-6
M06690B001 9-1, 9-4
M06699K001 26-3
M06699K002 26-3
M06725A001 11-3, 23-2
M06733B001 5-2, 5-3
M06783A001 25-15
M06804K002 26-3
M06874K001 26-3
M06875K001 26-3
M06875K002 26-3
M06943K001 26-3
M06943K002 26-3
M07141A003 25-4, 25-17
M07233A003 25-20
M07275A002 21-3, 24-1
M07275A004 21-3, 24-1
M07276A001 23-4
M07296A001 6-3
M07298B003 6-4
M07340A001 6-3
M07341B003 6-4
M07342B001 6-2
M07343A001 16-6
M07345B001 16-6
M07354B001 6-11
M07356B001 17-7
M07366A001 23-4
M07366A002 23-4
M07391B001 6-7
M07588A001 11-2, 23-3
M07588A002 11-2, 23-3
M07588A003 11-2, 23-3, 26-2
M07588A004 11-2, 23-3
M07588A00X 11-1
M07851A001 13-6
M07889K001 10-1
M07889K002 10-1
M07990B001 3-2
M08121A002 25-17
M08220B002 3-3
M08340B001 2-6
M08350B010 20-6
M08400A001 2-5
M08400K001 26-3
M08776B010 20-6
M08909A001 5-1
M08928A002 5-4
M08928A003 5-4
M08928A012 5-6, 18-8
M08928A013 5-6, 18-8
M09860B001 16-3
M09918A101 16-2
M09918A201 16-2
M09918A202 16-2
M09919A101 16-2
M09919A102 16-8, 16-10, 16-13
M09919A201 16-2
M09919A202 16-8, 16-10, 16-13
M09919A203 16-2
M09958A003 25-20
M10006A001 25-22
M10006A003 25-22
M10030A001 25-14
M10059A002 25-17
M10060A001 25-17
M10092A003 25-8
M10131A006 25-20
M10131A008 25-20
M11078B003 25-10
M11078B004 25-10
M11166A002 25-11
M11166A004 25-11
M11166A007 25-11
M11166A008 25-11
M11166A009 25-11
M11166B001 25-11
M11166B005 25-11
M11270B001 25-11
M11277A001 25-20
M11277A002 25-20
M11419A001 9-4
M11419A002 9-4
M11477A001 25-13
M11477A002 25-13
M11480A001 25-7
M11569B001 9-4
M11615B001 9-4
M11714A002 11-5, 23-5, 23-6
M11715A001 25-4
M11716A001 25-4
M11717A001 25-4
M11841A001 11-6
M11991A001 25-10
M11992A001 25-10
M11997A002 25-10
M11999B001 25-10
M12019A001 23-5
M12096B001 25-10
M12099A001 25-10
M12101A101 25-10
M12104A001 25-10
M12158A004 11-4, 23-5, 23-6
M12166B001 25-10
M12168B001 25-10
M12188A001 25-10
M12191A001 16-3
M12201A001 25-20
M12202A002 25-20
M12211B001 25-10
M12260A001 25-15
M12261A001 25-20
M12262A001 25-20
M12263A001 25-20

M12264A001 25-20
M12315B001 6-4
M12315B003 6-4
M12421K001 11-2, 26-3
M12421K002 11-2, 26-3
M12421K003 11-2, 26-3
M12421K00X 11-2, 23-3
M12422K001 11-2, 26-3
M12422K002 11-2, 26-3
M12422K003 11-2, 26-3
M12422K00X 11-2, 23-3
M13929B001 4-2
M13977B001 3-3
M13978A001 6-8
M13980A001 4-2
M13981A001 4-2
M14270B001 16-4
M14476K001 26-1
M15224A001 14-6
M16292B001 19-2

N

N15680-01 3-7
N15941-44 3-2
N16289-20 6-4, 6-5, 16-8, 16-11, 16-13, 17-7, 20-3, 21-2, 21-3, 21-4
N16289-22 8-4
N16599-108 18-9
N16599-124 19-2
N16599-45 3-5
N16599-48 14-8
N16599-59 16-8, 16-11, 16-13, 17-2, 17-5
N16599-71 3-5
N16771-78 16-8, 16-10, 16-13, 17-5
N18319-03 3-6, 3-7
N18320-21 3-6, 3-7
N18539 6-15
N20545-02 3-6, 3-7
N21120-G10 15-1
N21120-G6 15-1
N21120-G8 15-1
N21120-G9 15-1
N21861-02 6-7
N23567 6-3
N23616-02 14-8
N23655-01 9-2, 9-4, 18-9
N23687-01 3-5
N23693-G1 3-5
N23746-01 9-2, 9-4, 18-9
N23760-01 18-9
N23760-03 9-2, 9-4, 18-9
N23760-04 9-2, 9-6, 18-9
N23760-05 18-9
N23760-06 9-2
N23760-07 9-2, 18-9
N23761-01 9-2, 18-9
N23761-02 18-9
N23761-03 9-2, 18-9
N23761-04 9-2

Q

Q10001-20 20-3
Q10001-21 20-4
Q10016-03 6-13, 6-14
Q10016-04 6-4, 6-14, 16-2, 17-2, 17-3, 17-4, 17-6, 17-7
Q10038-26 19-2
Q10038-35 16-8, 16-11, 16-13, 17-2, 17-5
Q10067-31 6-7
Q10068-07 6-7, 6-8
Q10068-09 6-2, 6-7, 6-9, 6-11, 25-1
Q10068-14 6-2
Q10084-16 3-5
Q10131-03 13-2
Q10131-26 25-15
Q10178-01 16-5
Q10218-05 20-4
Q10253-02 6-1, 19-2, 20-4
Q10362-02 25-5, 25-21
Q10385-32 14-8
Q10557-01 4-1
Q10624-01 16-9, 16-11, 16-13, 21-2, 21-3, 21-4
Q10624-37 16-8, 16-11, 16-13
Q10651-02 1-1
Q10651-29 9-6
Q10651-46 23-4
Q10865-36 6-2
Q10895-07 13-2
Q10985-02 6-7
Q11024-02 16-9, 16-11, 16-14
Q11270-174 3-7
Q11270-28 3-3
Q11270-40 16-5
Q11270-58 16-3
Q11763-01 15-1
Q11769-15 3-4, 19-2
Q11781-01 13-2
Q11889-15 6-2
Q11890-03 14-8
Q11890-04 9-6
Q11899-08 2-6
Q12068-03 3-6
Q12068-05 3-6, 3-7
Q12068-06 19-2, 20-3, 20-11
Q12505-01 6-7
Q12514-02 12-1, 15-1, 24-1
Q12514-05 3-5
Q12514-10 3-3, 3-5
Q12845-59 23-4, 25-10
Q12885-05 3-6
Q12887-48 3-6
Q12928-02 13-6
Q12974-118 6-1
Q13130-01 6-2
Q13131-01 6-2
Q13254-03 25-14
Q13399-03 3-2
Q13558-04 9-4
Q13641-01 3-6, 3-7

R

R06711-52 6-7
R06711-61 6-15
R06711-75 6-15
R11493107 20-11
R11493108 20-11
R11493-20 20-8
R11493-21 20-8
R11493-22 20-8
R11493-26 20-4, 20-6
R11493-30 20-11
R11493-46 20-11
R11493-50 20-11
R11493-52 6-11
R11493-58 20-11
R11493-77 20-4, 20-11
R11493-90 20-8, 20-11
R11493-93 20-8
R11493-96 20-8
R11494-68 6-11
R11495-38 6-2
R11495-90 6-9
R11496-43 17-5, 17-6
R11501-22 20-3, 20-6
R11533-28 20-4, 20-6
R11976 74 17-3, 17-6
R11976-39 6-5
R11976-42 9-6
R11976-43 17-2, 17-3
R11976-44 8-4
R11976-52 6-5
R11976-54 16-2
R11976-57 17-2, 17-5
R11976-62 8-4
R11976-67 6-5
R11976-72 8-4
R11976-74 17-2, 17-3, 17-5
R11976-76 6-5
R11979-39 16-8, 16-11, 16-13, 17-2, 17-5, 20-3
R13824-02 6-15

R14213-32 8-4
R14213-33 8-4
R15181 13-6
R15186-G2**N1 13-6
R17995-G7 15-7
R17995-G8 15-7
R18189-10 6-3
R18189-30 6-3
R18453-01 3-6, 3-7
R18896-G1 6-3
R18896-G2 6-3
R18944-G1 15-12
R19072-G1 15-1
R19457 6-2, 6-3
R19527-G1 15-9
R19667-G1 15-9
R19736-10 6-3
R19936-G1 15-12
R19939-G1 15-1
R19951-G1 15-1
R20039 6-3
R20128-G1 15-9
R20129-01 14-8
R20146-G2 15-9
R20147-G1 14-8, 15-9
R20148-G3 14-8, 15-9
R20269-01 3-5
R20283-G1 13-2
R20333-G1 13-2
R20412-G1 15-1

T

T17448-G1 11-2, 12-1, 15-1, 23-3
T17448-G3 11-2, 12-1, 15-1, 23-3
T17549-G1 14-6
T17768-G1 15-1
T18767 19-1, 19-2
T18981-G1 14-6
T18994-G1 14-1
T19301-G1 9-6
T19319-G1 14-8
T19386-G1 14-8
T19397-01 14-8
T19405-G4 14-8
T19428-G1 6-13, 6-14, 15-9
T19696-01 13-2
T19868-G1 13-2
T19872-G1 15-1
T19976-G5 25-1
T19983-G1 15-1
T20011-G1 14-1
T20092-G1 14-1
T20150-G5 6-1, 8-1
T20150-G6 6-1, 8-1
T20150-G7 6-1, 8-1
T20361-05 13-3
T20361-G1 13-3
T20569-G1 14-1

W

W03879-G1 3-4

Z

Z07941 6-11, 20-4, 20-6, 20-8, 20-11

The Advantage® Series, Encore®, Eclipse®, Gilbarco®, Legacy®, and VaporVac® are registered trademarks of Gilbarco Inc. Blackmer® is a registered trademark of Dover Corporation. Cenex® is a registered trademark of CHS Inc. Cim-Tek® is a registered trademark of Central Illinois Manufacturing Company. Esso™ is a trademark of Imperial Oil Limited. GOLD℠ is a service mark of Gilbarco Inc. Phillips® is a registered trademark of Phillips Screw Company. SMART Meter™, Super-Hi™, and Ultra-Hi™ are trademarks of Gilbarco Inc.

© 2018 GASBOY
7300 West Friendly Avenue · Post Office Box 22087
Greensboro, North Carolina 27420
Phone 1-800-444-5529 · http://www.gasboy.com · Printed in the U.S.A.
PT-1949G Gasboy® Atlas® Pump and Dispenser Illustrated Parts Manual · November 2018