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# USER MANUAL

**MODEL NUMBER:  
FI-10N-B  
FI-10N-B-SSBV  
AND RELATED UNITS**

**10 Gallon Battery-Powered Portable Foam  
Equipment**

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**English (Original Instructions)**

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## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT



# WARNING



### Read this manual completely and understand the machine before operating or servicing it.

- Read all instructions before installing or operating unit.
- Always wear appropriate personal protective equipment (PPE) when operating or servicing unit.
- Always follow all chemical safety precautions and handling instructions provided by the chemical manufacturer and Material Safety Data Sheet (MSDS).
- Never use unit if it is damaged or leaking.
- Always disconnect the battery before servicing the unit.
- Do not use unit if the battery box cover is not in place. Contact with chemicals can damage the battery.
- Avoid excessive use of discharge trigger or ball valve. Repetitive triggering in short bursts can cause overheating. Apply foam evenly without constant starting and stopping.
- Avoid foam or spray coming into contact with the unit. Contact with chemicals can damage the battery and other electrical components.
- Never point the discharge wand at yourself, another person, or any object you do not want covered in chemical.
- Always depressurize unit after use (as described in the After Use Instructions). Always store unit depressurized, with the discharge trigger gun or ball valve in the closed position.
- Do not exceed a fluid temperature of 100°F (37.8°C).
- Always flush the unit with fresh water thoroughly when switching from an alkaline to an acid or an acid to an alkaline.
- To prevent premature battery failure, do not store battery in a depleted state for long periods of time. Do not recharge battery until it has been used to power the unit for a minimum of 30 minutes of use.

### PROTECT THE ENVIRONMENT

Please dispose of packaging materials, old machine components, and hazardous fluids in an environmentally safe way according to local waste disposal regulations.

Always remember to recycle.

\*Specifications and parts are subject to change without notice.



### Specifications:

Hose .....	12 ft. reinforced hose, 3/8 in. I.D. (3.7 m reinforced hose, 9.5 mm I.D.)
Tank Capacity .....	10 gallons (37.9 liters)
Foam Output .....	4 to 5 gal/min (15.1 to 18.9 l/min)
Foaming Distance .....	5 to 6 ft. (1.5 to 1.8 m)
Liquid Temperature .....	40°F to 100°F (4.4°C to 37.8°C)
Power Type.....	SLA battery
Operating Voltage .....	12 VDC

A fully charged battery will power the unit for approximately 45 minutes of continuous use.

A fully discharged battery will take approximately 8 hours of charging to regain full charge.

### Dimensions:

Length .....	18 in (45 cm) approximately
Width .....	14 in (36 cm) approximately
Height .....	42 in (106 cm) approximately
Weight, including discharge hose and wand: (Empty).....	65 lbs (29.4 kg) approximately

### Requirements:

Chemical Requirements: Follow all instructions from chemical manufacturer and Material Safety Data Sheet (MSDS).

### Air Operated Double Diaphragm Pump Models Offered:

- P56: Polypropylene body with Santoprene diaphragm
- P56V: Polypropylene body with Viton diaphragm
- P56K: Polypropylene body with Kalrez diaphragm

### Acceptable Products:

Alkaline cleaners, Caustic cleaners, Sanitizers, and Acids

- \* D-Limonene may only be used with Kalrez pump
- \* Chlorine may only be used with Viton or Kalrez pump

### DO NOT USE: All hydrocarbons

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Operation Instructions:

1. Follow all instructions from the chemical manufacturer. Fill the tank with water and the advised percentage of chemical concentrate.
2. Press the power button to turn the unit ON.
3. Point the discharge wand in a safe direction and squeeze the trigger gun or open the ball valve to activate the unit.
4. Adjust the needle valve handle to regulate the wetness or dryness of the foam by following the steps below:
  - a. Close needle valve completely by turning handle in clockwise direction until it stops.
  - b. Open needle valve by turning handle in counter-clockwise direction 3 complete turns.
  - c. Continue to open needle valve by turning handle counter-clockwise in ¼ turn increments, allowing 30 seconds between adjustments, until desired consistency of foam is achieved.

### After Use Instructions:

1. Thoroughly flush the unit with fresh water.
2. Press the power button to turn the unit OFF, and squeeze the discharge trigger gun or open the discharge ball valve to relieve any pressure remaining in the system.
3. Release the discharge trigger gun or close the discharge ball valve after all pressure has been relieved from the system. Store the unit with the discharge trigger gun or ball valve in the closed position.

### Maintenance Instructions:

To keep your foam unit operating properly, periodically perform the following maintenance procedures:

**Note:** Before performing any maintenance, ensure that the unit has been turned OFF and depressurized according to the "After Use Instructions" above.

- Inspect the air pump for wear and leaks.
- Inspect all hoses for leaks or excessive wear. Make sure all hose clamps are in good condition and properly secured.
- Check the suction line and screen for debris or blockages, and clean as needed.

### Battery Instructions:

#### Monitor Battery Power Level:


When the power button is in the ON position, the power button light will illuminate to indicate the battery power level:


- A continuous red light means that the battery has sufficient charge to power the unit.
- A blinking red light means that the battery is drained and must be recharged.


#### Charge Battery:


1. Verify the power button is in the OFF position.
2. Plug the NOCO Genius charger into AC power outlet.
3. Verify the charger is in 12V AGM mode (indicated when the 12V AGM LED is lit). If the charger is in a different mode, push the MODE button to toggle to 12V AGM mode. **Note:** *On its first use, the charger will be in standard 12V mode. For later uses, the charger remembers the last mode used.*
4. Charging will begin manually.
5. When battery is fully charged, unplug the charger cord. Use the cord bracket to store the cord while the unit is in use.


#### NOCO Genius Charging Status Indicator Lights:

 Red 25% LED - The 25% Charge LED will slowly pulse "on" and "off" when the battery is less than 25% charged.

 Red 50% LED - The 50% Charge LED will slowly pulse "on" and "off" when the battery is 25% - 50% charged

 Amber 75% LED - The 75% Charge LED will slowly pulse "on" and "off" when the battery is 50% - 75% charged

 Green 100% LED - The 100% Charge LED will slowly pulse "on" and "off", when the battery is less than 100% fully charged. When the battery is fully charged, the Green LED will be solid, and the 25%, 50% and 75% Charge LEDs will turn "off".

 Maintenance Green LED - During Optimization, the 100% Charge LED will pulse "on" and "off" slowly. Once the battery is fully optimized the 100% Charge LED will turn solid green. The charger can be left connected to the battery indefinitely

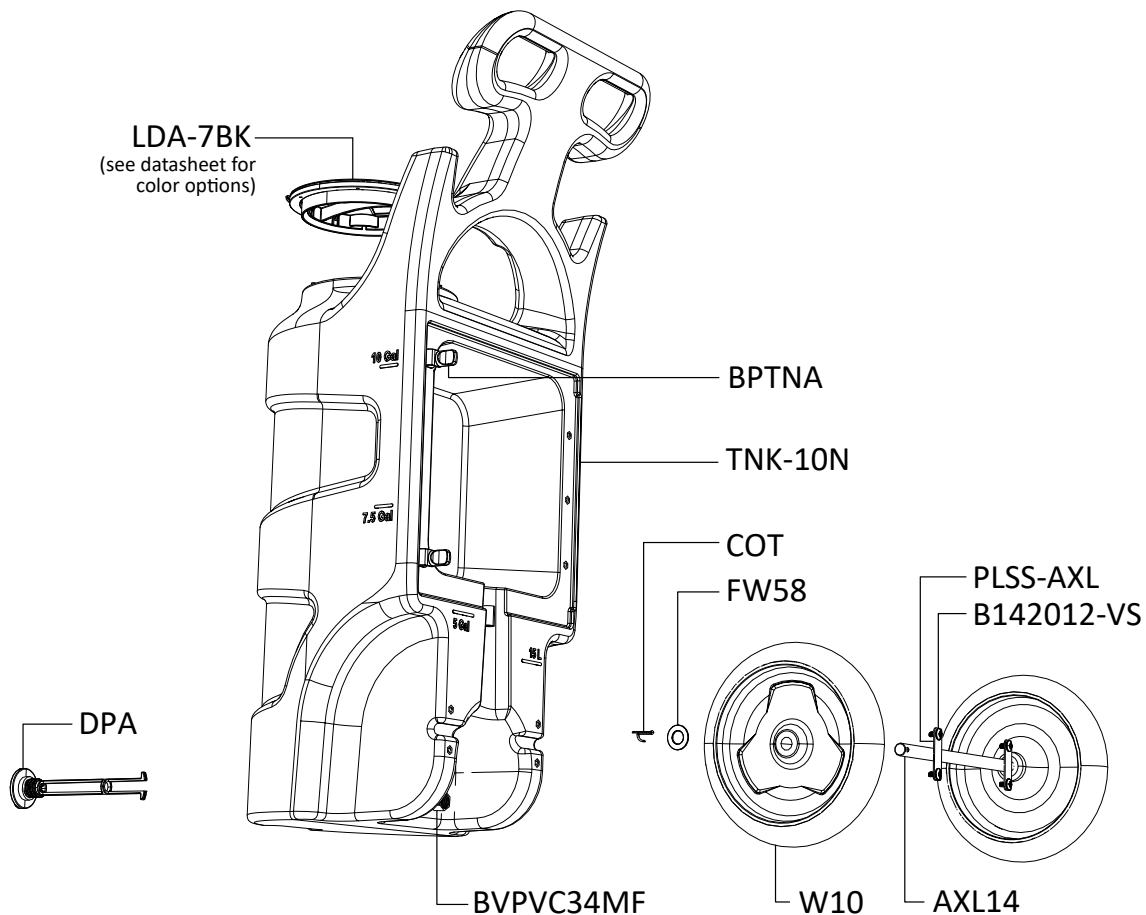
**Note:** For more information on charging the battery, see NOCO Genius instructions. To prevent battery failure, do not store battery in a depleted state for long periods of time. Do not recharge battery until it has been used to power the unit for a minimum of 30 minutes of use.

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

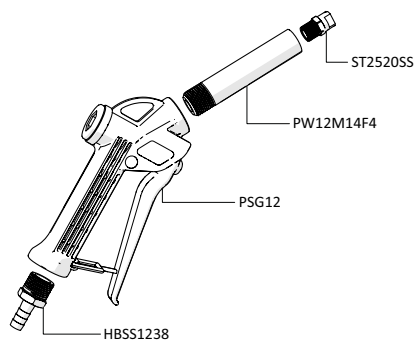
TROUBLESHOOTING GUIDE		
PROBLEM	CAUSE	SOLUTION
Foam too wet or too dry	Adjust needle valve handle to regulate wetness or dryness of the foam by following the steps below: <b>a.</b> Close needle valve completely by turning handle in clockwise direction until it stops. <b>b.</b> Open needle valve by turning handle in counter-clockwise direction 3 complete turns. <b>c.</b> Continue to open needle valve by turning handle counter-clockwise in ¼ turn increments, allowing 30 seconds between adjustments, until desired consistency of foam is achieved.	
Sporadic wet foam	• Improper mixture of cleaning solution	• Make sure the chemical is a foaming chemical • Make sure the chemical solution is mixed at an appropriate concentration to produce foam
	• Discharge hose kinked	• Straighten, repair or replace hose
	• Wadding clogged	• Replace wadding
	• Wadding next to spray tip	• Replace tubing between tip and trigger
Constant wet foam	• Wadding clogged	• Repair or replace wadding
	• Air check valve may be plugged or backwards	• Replace or reverse check valve
	• Air compressor not cycling	• Replace air compressor
Sporadic dry foam	• The strainer may be plugged	• Clean the strainer
	• Pump may be cycling improperly	• Replace the pump
Only air discharges from foam wand	• Pump not cycling	• Replace pump
	• Problem with intake hose	• Check intake hose and strainer and repair as needed
Unit leaks from behind the plate	• Fittings, clamps, or tubing not secured properly	• Find leak and replace or repair parts as necessary
	• Pump leaks from chemical attack	• Replace pump
Power light will not turn on	• Blown fuse	• Replace fuse
	• Battery leads are backwards	• Connect leads to correct terminals
Power switch light will not stop blinking	• Depleted battery	• Completely recharge battery
	• Bad battery	• Replace battery
	• Bad control relay	• Replace control relay
Battery will not completely charge	• Bad battery	• Replace battery
	• Bad charger	• Replace charger
Battery discharges too quickly	• Battery was stored in depleted state for long periods of time	• Replace battery
	• Battery has reached life expectancy	• Replace battery
	• Battery was charged and run for short periods of time (not allowed to fully charge or discharge)	• Replace battery

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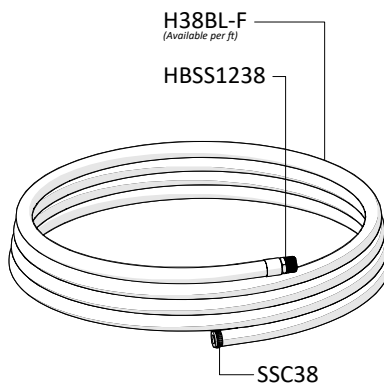
### TANK ASSEMBLY



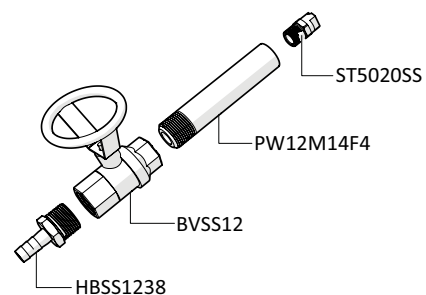
### DISCHARGE TRIGGER GUN ASSEMBLY



### DISCHARGE HOSE ASSEMBLY ITEM NUMBER: HA38BL-30

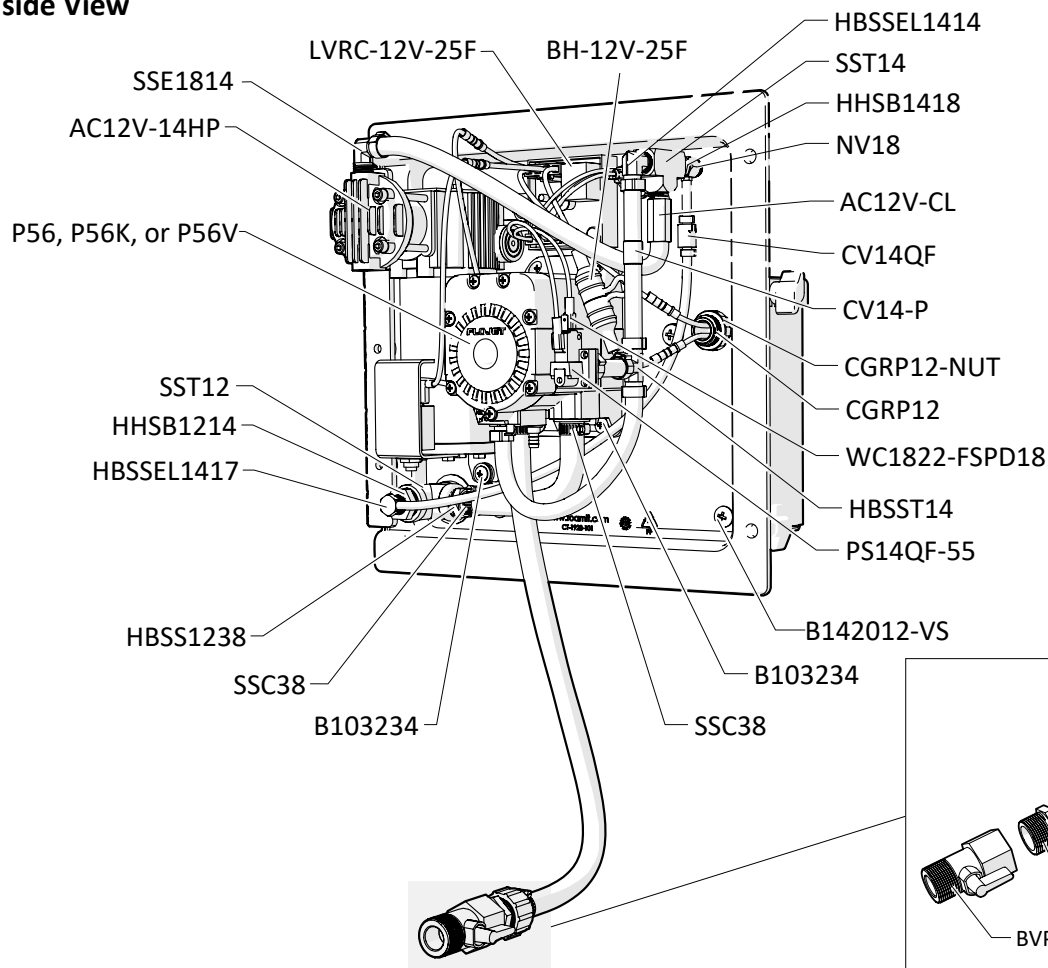


### DISCHARGE WAND ASSEMBLY

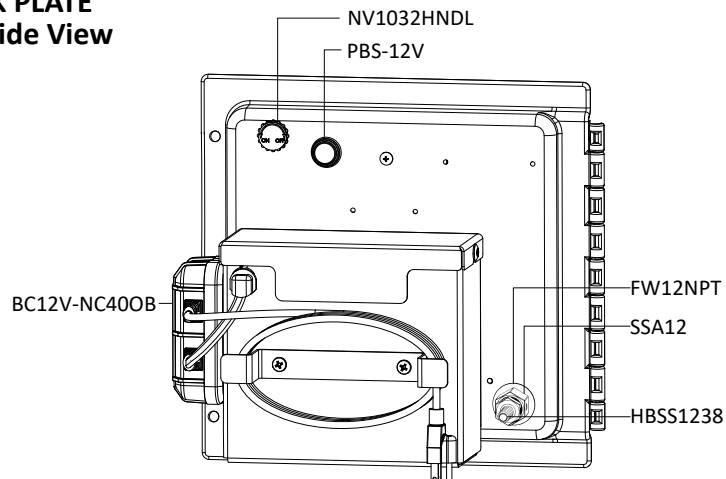


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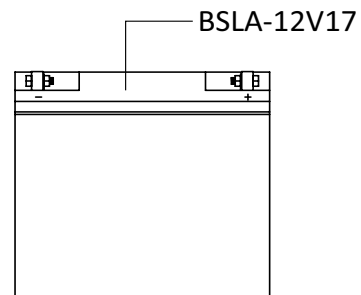
### BACK PLATE Inside View



### BACK PLATE Outside View



### REPLACEMENT BATTERY ITEM NUMBER: BSLA-12V17



## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

ITEM NUMBER	DESCRIPTION
A34M34G	3/4 MGMT X 3/4 MPT ADAPTER - PP
AC12V-14HP	BARE COMPRESSOR DC 12V 1/4HP -1.2 CFM
AC12V-CL	COMPRESSOR LEAD FOR AC12V-STAINLESS
AXL14	AXLE-STAINLESS-0.625 DIA X 14.5 IN
B142012-VS	BOLT - 1/4-20 X 1/2IN - STAINLESS STEEL - TRUSS HEAD PHILLIPS - VIBRASEAL
B142058-VS	BOLT - 1/4-20 X 5/8IN - STAINLESS STEEL - TRUSS HEAD PHILLIPS - VIBRASEAL
B10321	BOLT - 10-32 X 1IN - STAINLESS STEEL - TRUSS HEAD PHILLIPS
B103234	BOLT - 10-32 X 3/4IN - STAINLESS STEEL - TRUSS HEAD PHILLIPS
BB-17	STAINLESS STEEL BATTERY BOX for BSLA-12V17
BBC-17	STAINLESS STEEL COVER FOR BATTERY BOX FOR BSLA-12V17
BC12V-NC400B	5.0 AMP 12V BATTERY CHARGER-ON BOARD-WATERPROOF
B103212-PH	BOLT - 10-32 X 1/2IN - STAINLESS STEEL - PAN HEAD PHILLIPS
BH-12V-25F	BATTERY HARNESS -12 VOLT-25 AMP FUSE
BSLA-12V17	12 VOLT 20 AH SEALED LEAD ACID BATTERY-BATTERY LEADS NOT INCLUDED-FOR ONBOARD CHARGING UNITS
BVPVC34MF	BALL VALVE - PVC - 3/4 NPT TO 3/4 FNPT - EPDM SEAL
BPTNA	BACK PLATE THUMB NUT ASSEMBLY - INCLUDES BOLT, THUMB NUT, AND TETHER
<i>BST1420118-VS</i>	BOLT - SET - 1/4-20 X 1 1/8IN - STAINLESS STEEL - VIBRASEAL
<i>TN1420</i>	THUMB NUT - 1/4-20 X 1 1/4IN - PP - BRASS INSERT - ASSEMBLED WITH TPV TETHER
BVSS12	STAINLESS BALL VALVE-1/2IN NPT
CGRP12	CORD GRIP - 1/2IN MPT - BLACK NYLON - CORD RANGE 0.17IN TO 0.45IN - WATER RESISTANT - FOR 7/8IN HOLE - NO NUT INCLUDED
CGRP12-NUT	NUT - 1/2NPT - BLACK NYLON
COT	COTTER PIN - STAINLESS STEEL - 1/8IN DIAMETER X 1IN LONG
CV14QF	PVC QUICK CONNECT CHECK VALVE 1 LB-HASTELLOY SPRING-EP SEALS
DHB38	3/4 FLAT SEAT 3/8 HOSE BARB
DPA	DRAIN PLUG ASSEMBLY - INCLUDES GASKET
EC14	EAR CLAMP - OETIKER - STAINLESS STEEL - FOR 1/4IN HOSE
EC38TB	EAR CLAMP - OETIKER - STAINLESS STEEL - FOR 3/8IN OD TUBE
F38SS	FERRULE FOR 3/8IN HOSE - STAINLESS STEEL
FW1420	FLAT WASHER FOR 1/4-20 BOLT - STAINLESS - 0.28IN ID X 0.63IN OD X 0.05IN THK
FW58	FLAT WASHER FOR 5/8IN OD PIPE OR AXLE - STAINLESS - 0.64IN ID X 1.2IN OD X 0.05IN THK
FW12NPT	FLAT WASHER FOR 1/2IN NPT - STAINLESS - 0.88IN ID X 1.5IN OD X 0.05IN THK
H12BL-F	1/2 INCH ID BLUE HOSE-HYBRID TPE-AVAILABLE PER FT.
H14BL-F	1/4 INCH ID BLUE HOSE-HYBRID TPE-AVAILABLE PER FT.
H38BL-F	3/8 INCH ID BLUE HOSE-HYBRID TPE-AVAILABLE PER FT.
H14CL-PV	1/4IN ID 3/8IN OD CLEAR HOSE - PVC - AVAILABLE PER FT
HBB103217	HOSE BARB 10-32 MPT X B4 FITTING
HBSS1414	HOSE BARB - STAINLESS STEEL - ELBOW - 1/4IN MPT X 1/4IN BARB
HBSS1417	HOSE BARB - STAINLESS STEEL - ELBOW - 1/4IN MPT X .17IN BARB
HBSST14	HOSE BARB - STAINLESS STEEL TEE - 1/4IN BARB X 1/4IN BARB X 1/4IN BARB

HBSS1238	HOSE BARB - STAINLESS STEEL - 1/2IN MPT X 3/8IN BARB
HHSB1418	HEX HEAD STAINLESS BUSHING 1/4 MPT X 1/8 FPT
HHSB1214	HEX HEAD STAINLESS BUSHING 1/2 MPT X 1/4 FPT
LDA-7BK	LID ASSEMBLY - 7IN POLYPROPYLENE LID WITH FLANGE - BLACK - INCLUDES SS HINGE PIN AND MOUNTING SCREWS
<i>LD-7BK-LID</i>	LID - 7IN - POLYPROPYLENE - BLACK
<i>LD-7BK-FLNG</i>	LID FLANGE - 7IN - POLYPROPYLENE - BLACK
<i>LD-PIN</i>	HINGE PIN FOR 7IN LID AND FLANGE
LVRC-12V-25F	LOW VOLTAGE RELAY CONTROLLER-12V-25 AMP FUSE
MXPES-34	MIXING MEDIA - WHITE POLYESTER - WAD - FINE POROSITY - 3/4IN DIAMETER X 7/8IN TALL
MXPES-1X3	MIXING MEDIA - BROWN POLYESTER - WAD - MEDIUM POROSITY - 1IN X 7/8IN X 3IN TALL
N34GH	3/4 GARD HSE SWIVEL NUT
NVA-NV18	NEEDLE VALVE ASSEMBLY - VALVE, HANDLE, SET SCREW
<i>NV18</i>	NEEDLE VALVE-1/8 IN MPT-10-32F-VALVE ONLY-NO SETS-NO HANDLE
<i>NV1032HNDL</i>	BLACK HANDLE FOR NEEDLE VALVE
<i>NV1032SETS</i>	SET SCREW FOR NEEDLE VALVE
P56	PUMP WITH EPDM SEALS - INCLUDES HOSE BARBS, AIR FITTING, AND EXHAUST BARB
P56K	PUMP WITH KALREZ SEALS - INCLUDES HOSE BARBS, AIR FITTING, AND EXHAUST BARB
P56V	PUMP WITH VITON SEALS - INCLUDES HOSE BARBS, AIR FITTING, AND EXHAUST BARB
PBS-12V	PUSH BUTTON SWITCH WITH 12V LED LIGHT
PLPF	PORTABLE FOAMER BACK PLATE W/ HOLES-HINGE SOLD SEPARATELY
PLPF-PIN	STAINLESS HINGE PIN FOR PORTABLE PLATE
PLSS-AXL	AXLE PLATE - STAINLESS - 2.5 IN. X 1 IN. - 2 HOLES
PS14QF-55	PRESSURE SWITCH - 1/4IN QUICK FIT - POLYURETHANE DIAPHRAGM - 55 PS
PSG12	POLY SPRAY GUN WITH 2X 1/2IN STRAIGHT THREAD - GRAY HANDLE WITH RED CLIP - 316SS INTERNAL SPRING - INCLUDES 2X O-RING
<i>PSGORV</i>	O-RING FOR PSG12-VITON
PW12M14F4	1/2IN NPT AND 1/4IN FNPT WAND - BLACK UHMW - 4IN LONG
S812-FH	SCREW - #8 X 1/2IN - STAINLESS STEEL - FLAT HEAD PHILLIPS
SSA12	STAINLESS ADAPTOR 1/2 MPT X 1/2 FPT
SSC38	SCREW BAND CLAMP - STAINLESS STEEL - FOR 3/8IN HOSE
SSE1814	STAINLESS STREET ELBOW 1/8 IN MPT X 1/4 FPT
SST12	STAINLESS TEE 1/2 FPT
SST14	STAINLESS TEE 1/4 FPT
ST5020SS	SPRAY TIP-50 DEGREE-2.0 GPM-STAINLESS-1/4 MPT
STR34	1in SEAL/STRAINER FOR 3/4 GH FITTINGS
TB14BL-PU	1/4IN OD BLUE TUBE - POLYURETHANE - AVAILABLE PER FT
TB38N-PE	3/8IN OD NATURAL TUBE - POLYETHYLENE - AVAILABLE PER FT
TNK-10N	10 GALLON NATURAL TANK
W10	NONMARKING WHEEL FOR PORTABLE UNITS
WC1822-FSPD18	WIRE CONNECTOR - FOR 18 TO 22 GAUGE WIRE - 1/8IN FEMALE SPADE - RED PVC INSULATED