

HERO

INNOVATIVE **COLOR** TECHNOLOGY

Manual Colorant Dispenser Inline D60 Series

4.5 Quart (4.25 Liter) Non-Magnetic Stainless Steel Canisters

7 Oz (200ml) Maximum Dispense Pumps

Equipped with Micro Gauges™ for fractional increment dispensing

Ergonomically designed valve handles

Modular stand for easy conversion from countertop to floorstand

Automatic electric time controlled bottom agitation



SAFETY AND OPERATING MANUAL



**WARNING: DO NOT OPERATE THIS EQUIPMENT WITHOUT READING
AND UNDERSTANDING ALL SAFETY AND OPERATING INSTRUCTIONS**



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D60 SERIES INLINES

4, 12, & 16 Position Models

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For greater user satisfaction, please familiarize yourself with all maintenance and operating instructions.

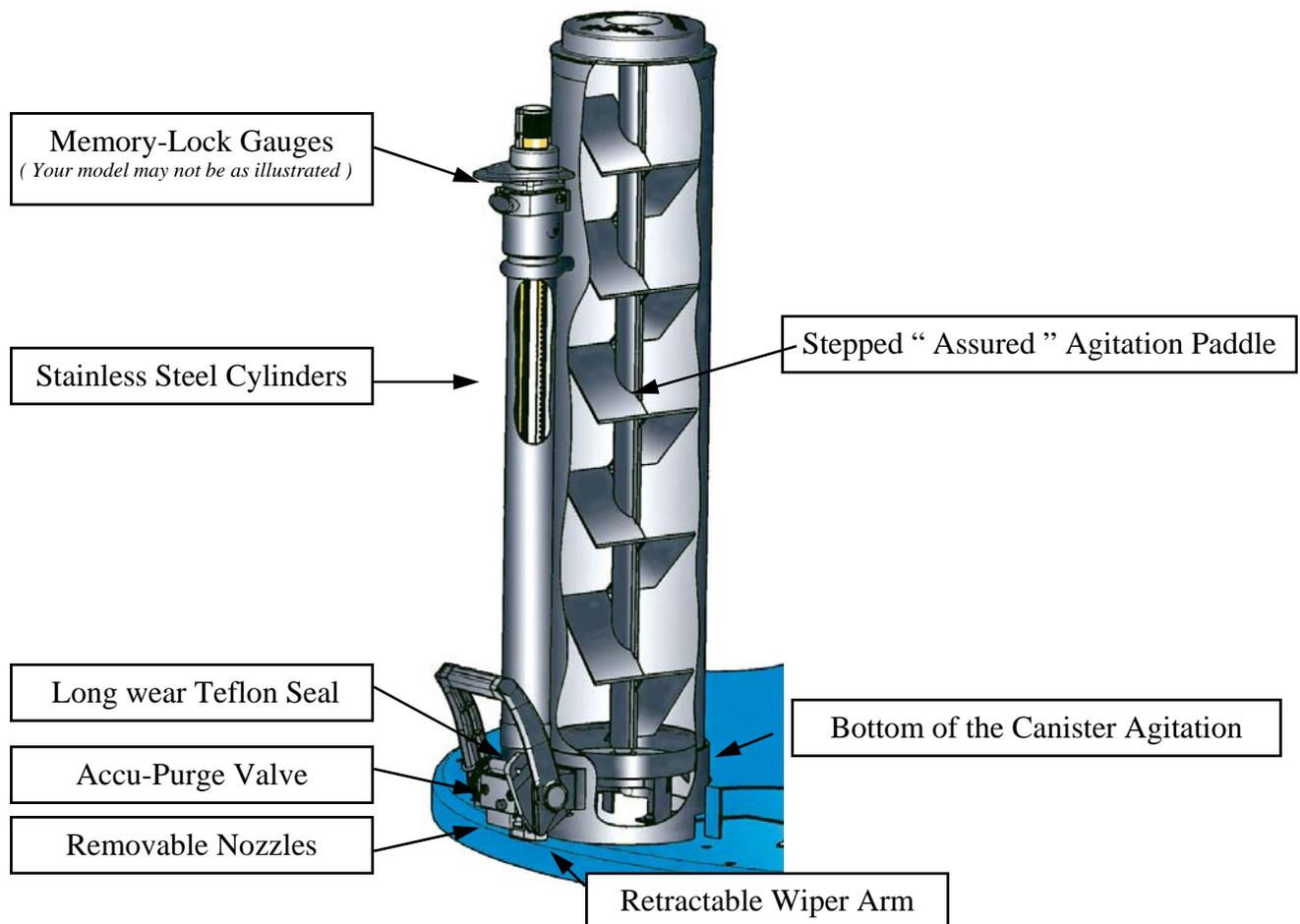
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INTRODUCTION

This **HERO D60 Series Colorant Dispenser, Model D60SRM** is a precision measuring device and should be treated as such. When operated and maintained in conjunction with the instructions contained within this manual, the equipment will provide a long and trouble free life. To ensure your complete satisfaction, please familiarize your self with all maintenance and operating instructions. Please keep this manual available for reference and training of new store personnel.

This unit features;

- ◆ Memory-Lock Gauges - *Easy, Accurate multiple can dispensing*
- ◆ Stainless Steel Cylinders - *Durable, corrosive resistant*
- ◆ Long wear Teflon Seal - *Durable, solvent resistant*
- ◆ Auto Accu-Purge Valve - *Assures clean dispensing nozzles*
- ◆ Retractable Wiper Arm - *Stops drips, keeps work area clean*
- ◆ Automatic, Bottom of the Canister Agitation - *Saves time, easy canister refilling*
- ◆ Stepped "Assured" Agitation Paddle - *Consistent mixing of colorant*
- ◆ Removable Nozzles - *Various sizes of "easy clean" nozzles available*



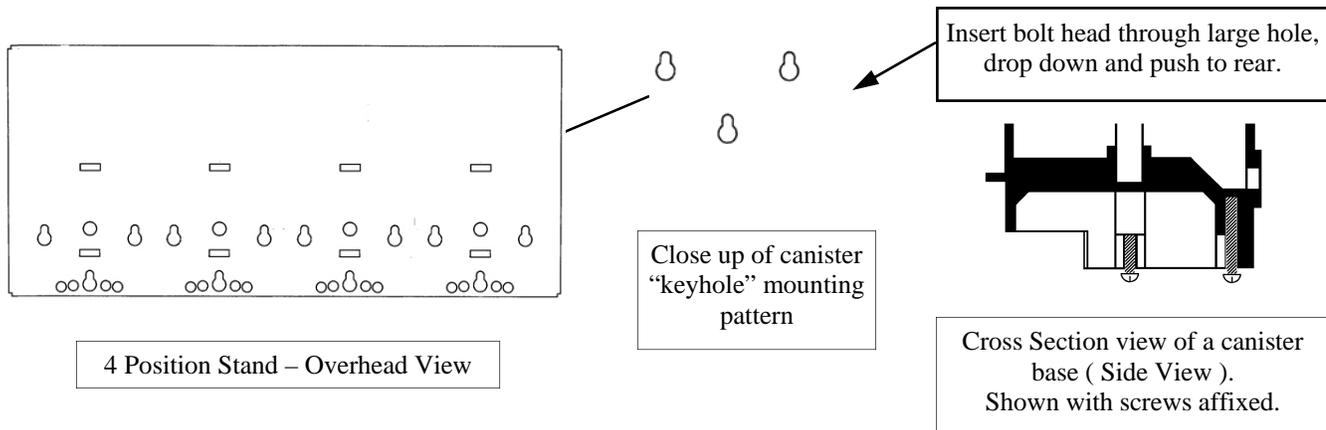
UNPACKING

Your **HERO D60 Series Colorant Dispenser** has been carefully inspected and the pumps calibrated to measure colorant with a high degree of accuracy. It should be carefully examined upon arrival to determine that the unit shows no signs of freight damage. If any parts are found to be broken or damaged, immediately contact the carrier and arrange for an inspection of the concealed damage. Claims for damage **must** be made by you, the **consignee**, and not the shipper. The carrier accepts full responsibility for the safe delivery of merchandise upon pick-up from the shipper.

Please read all instructions before using your **D60 Series Colorant Dispenser**.

ASSEMBLY INSTRUCTIONS

With inline models, the only assembly required is the mounting of canisters and the addition of . All canisters have been previously mounted at the factory during testing. The Canister mounting bolts are left in the canister for easy mounting. The canister mounting plate is designed with easy to use “keyhole” style mounting holes. Simply place the canister vertically over the three (3) hole mounting pattern. Allow the bolt heads to drop into the large holes and push the canister towards the back (away from you). The smaller diameter shoulder of the bolt will become engaged in the slotted portion of the keyhole. Tighten screws to secure canisters to the stand.



This product should be grounded. In the event of an electrical short circuit, grounding reduces the risk of electrical shock by providing an escape for the electrical current. This product is equipped with a cord having a grounding wire with an appropriate grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER: Improper installation of the grounding plug can result in a risk of electrical shock. If repair or replacement of the cord is necessary, do not connect the grounding wire to either flat blade terminal. The wire with insulation having an outer surface that is green with or without yellow stripes is the grounding wire. Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the product is properly grounded. Do not modify the plug provided; if it will not fit the outlet, have a proper outlet installed by a qualified electrician. This product is for use on a nominal 120-volt circuit and has a grounding plug that looks like the plug illustrated in sketch A in figure 65.1 of UL Standard 1450. Make sure that the product is connected to an outlet having the same configuration as the plug. No adapter should be used with this product.

EXTENSION CORDS; Only use a 3-wire extension cord that has a 3-blade grounding plug, and a 3-slot receptacle that will accept the plug on the product. Make sure that your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Refer to the following table:

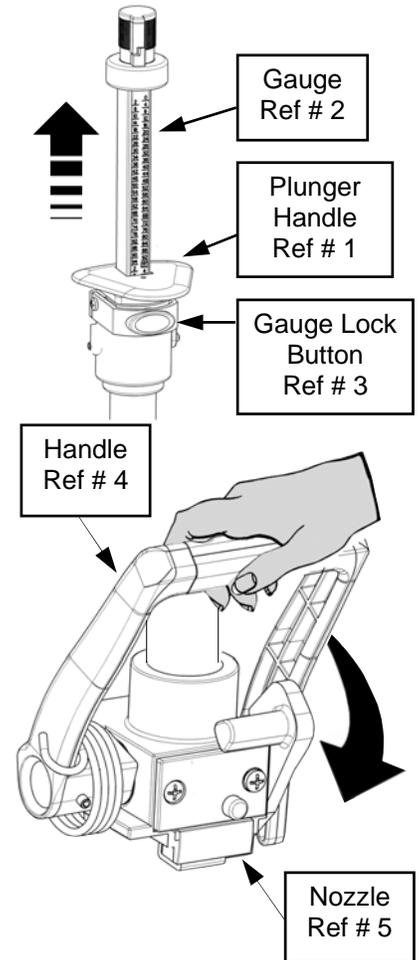
Length	25	50	100	150	200	250	300	400	500
Gauge	18	16	14	12	10	10	8	8	6

DISPENSER PREPARATION

PRIMING INSTRUCTIONS

With the unit assembled and canisters mounted, the following steps should be carried out to ensure that your machine is properly prepared for accurate and trouble-free dispensing. The canisters have a capacity of 4.5 quarts and it is recommended that only one (1) quart of colorant be used on the initial filling. Additional colorant can be added once proper operation is achieved.

- 1 Place each can of colorant into a mixer or shaker for approximately 5 minutes (or as specified by the colorant manufacturer) to mix any settled pigment.
- 2 Remove canister lids .
- 3 Pour the contents of each can of colorant into individual canisters.
NOTE: Apply the canister identification letters on each canister as the colorant is added. Applying the letter to the stainless steel cylinder tube, of the canister, provides the easiest reference.
- 4 Set the gauge, (Ref # 2) of each pump to the 7Y setting (by depressing the spring loaded button, (Ref # 3), and lifting the gauge by its handle).
- 5 Prime each cylinder by lifting the black plunger handle (Ref # 1) to its maximum travel. And pressing the plunger handle downward fully, **WITHOUT OPENING THE VALVE!** Repeat this Process 5-6 times This draws colorant from the canister into the cylinder and purges the air from the system.
- 6 Lift the plunger handle to its maximum travel. Place a clean can or paper cup under the dispense nozzle (Ref # 5). Open the discharge valve by pulling the valve lever (Ref # 4) downward its full travel. Push the plunger handle down fully to dispense colorant into the cup. Return the valve lever to the closed position. Repeat this procedure until the colorant emerges as an unbroken stream.
- 7 Once the cylinder is free of air, repeat steps 4 & 5 for all remaining canisters. Return all dispensed colorant to its respective canisters. Your machine is now ready for use!



DO NOT ADD COLORANT WHEN AGITATION IS TAKING PLACE

TINTING INSTRUCTIONS

- 1 Identify the color you wish to supply, either by name or code number.
- 2 Refer to your color formula reference book for the tint formula and note the tint base required.
- 3 Determine the formula required for the size of paint can being sold .
- 4 Ensure all gauges are set to zero before beginning.
- 5 Place the open can of paint under the dispensing nozzle. Depress brake lever and rotate the turntable until the appropriate canister is directly over the can of paint. If we find a formula which can not be measured in one dispense. Multiple dispenses will be required. It is **always** best to divide a formula into equal dispenses.

MICRO™ GAUGES

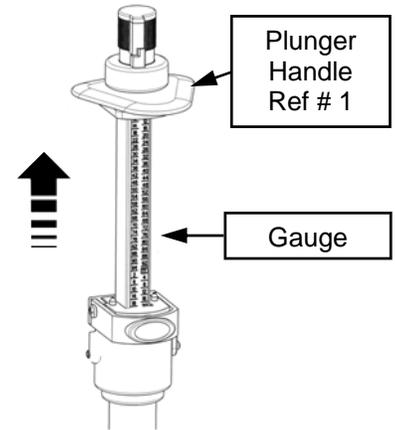
The Micro™-gauge is an innovative new way of dispensing increments smaller than 1 part. The Micro™ - Gauge allows you to dispense in 1/4 part increments. For formulas specifying dispenses of 1/2 or 1/4 part, rotate the micro-gauge knob until the appropriate number is aligned with the pointer. The Micro™-gauge settings can be used in combination with a regular setting, thereby making dispenses of 1Y-24-1/2 or 24-1/4 possible with a single discharge. **IMPORTANT:** **ALWAYS** return the Micro™ gauge knob to the "0" position after completing a paint order.

TINTING INSTRUCTIONS

CHARGING THE CYLINDER

NOTE: It is always best to divide the required formula into equal dispenses, even if it requires more dispenses than what might otherwise be required. Mis-tints are generally caused by operator error in setting the gauges. The fewer changes in the gauge settings, the lower the chances of errors.

- 1 With the gauge correctly set, slowly and gently lift the plunger handle until it reaches the gauge knob. Continue to hold for a few seconds to ensure that the cylinder has completely filled with colorant.

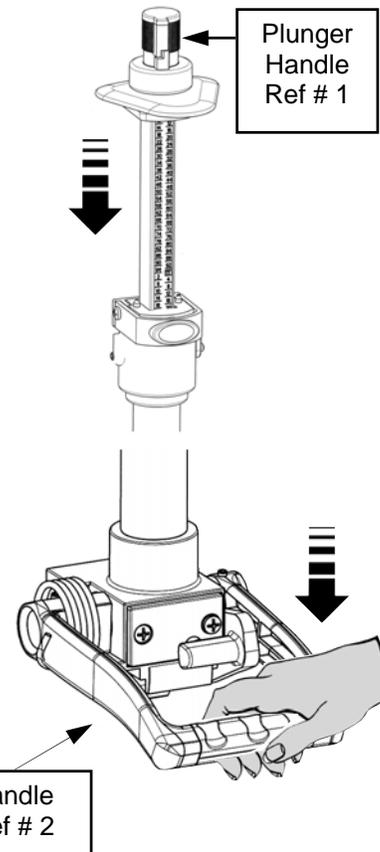


CAUTION: DO NOT open or operate the dispensing valve lever while charging the cylinder. If the valve is opened, even the slightest amount, air will be drawn into the cylinder chamber resulting in an inaccurate dispense. If the valve is accidentally opened during CHARGING, close valve and press the plunger handle down to return the colorant to the canister.

NOTE: If the colorant level is low in the canister, air can also be sucked into the cylinder. Press the plunger handle down to return the colorant to the canister. Add 1 or 2 quarts of new colorant. The cylinder must be re-primed. Refer to PRIMING INSTRUCTIONS on page 6.

DISPENSING FROM THE CYLINDER

- 1 With the plunger at the top and the cylinder full, pull the spring loaded valve handle (Ref # 2) forward its full travel.
- 2 Using your other hand, push the plunger handle (Ref # 1) down completely until it rests on the end cap.
- 3 Your full dispense is now complete.
- 4 Allow the lever to fully return to its normal position.
- 5 Repeat the charging and discharging process for the required strokes (total formula). Continue with the next required color.
- 6 When the entire paint order is complete, gently lower gauges to zero position. **DO NOT** push gauge release button and allow gauges to drop down. Lower manually to avoid damage.



ACCU-PURGE™ VALVE

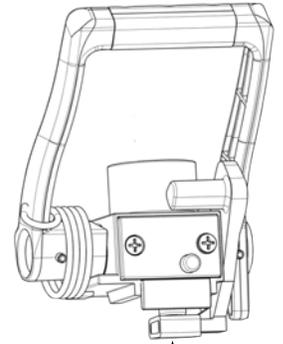
Activation of the Accu-Purge valve provides a small burst of air to clean the dispense nozzle of any remaining colorant and ensures clean dispensing ports and greater accuracy. The valve automatically works on each dispense.

MAINTENANCE INSTRUCTIONS

DAILY MAINTENANCE

Keeping the nozzle seal pad (Ref #33), clean and free of dried, dripping or collecting colorant is essential for trouble-free dispensing. It is recommended the nozzle seal arm / pad, be cleaned daily with a moist cloth., water or mineral spirits is satisfactory.

DO NOT use (lacquer thinner, MEK). Cleaning the colorant from the nozzle seal pad will lessen the possibility of mis-tints caused by the collection of colorant. If large accumulations of colorant on the seal arm/pad may be caused by a malfunction of the accu-purge™ valve.



Ref # 33

PERIODIC MAINTENANCE

When the machine is not being used on a regular daily bases, the following procedures should be carried out;

- 1 Check the level of colorant and top up if required.
- 2 Open and close each valve lever five (5) times.
- 3 Set gauge to the maximum 7Y and stroke the plunger handle up and down three (3) times **without** opening the valve handle.
- 4 Check valve handle and nozzle seal arms / pads for possible damage, and clean thoroughly.
- 5 Dispense colorant into a paper cup and return to canister. Constant movement of colorant is required to prevent hardening of colorant in nozzle and valve assembly.
- 6 Colorants are heavy bodied fluids containing particle of pigment. During the plunger operation, a slight amount of colorant may stick to the cylinder wall, which after a period of time, may cause drag or stiffness in the operation of the plunger. A small amount of stiffness should cause no concern, If the stiffness of operation becomes difficult, Complete cleaning of the canister and pump will be required.

CARE FOR YOUR MACHINE

DO keep the machine clean and practice good housekeeping to promote accuracy in color dispensing.

DON'T use the pump as a handle while rotating the turntable. Grab the edge of the turntable to rotate the turn table

DO keep this copy of the H.E.R.O. 2000 Series Operating Manual, and reusable piston seal tool in a convenient place to assist in regular maintenance.

DON'T use metal or hard objects to clear blocked nozzles. Nozzles are easily removed for cleaning. Damage to valve barrel will result from using hard objects to clear nozzles.

DO keep nozzles clean to prevent drying colorant from blocking and making dispensing difficult.

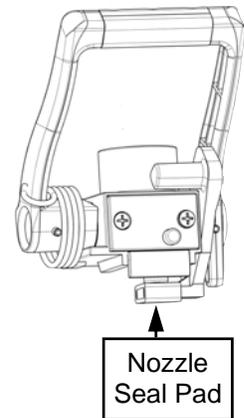
DON'T drop gauges down into end cap.

DO lower gauges manually back into end cap to protect and protect them from damage.

DRIPPING COLORANT – SERVICE & REPAIRS

Nozzle Seal Pad (Ref#33)

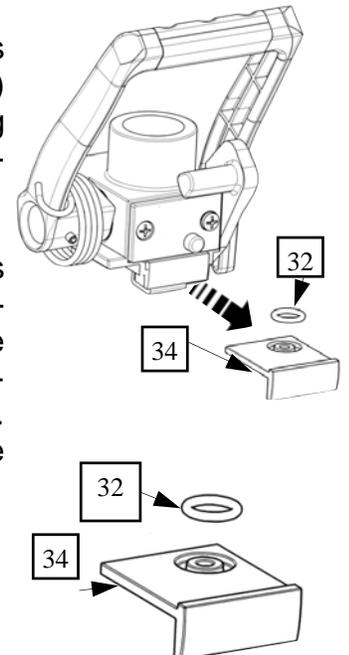
After each dispense, a very small amount of colorant will remain in the nozzle. Between valve operations, this colorant will settle down onto the nozzle seal pad. When the valve is opened to dispense, the pad moves into a horizontal position. The accumulated colorant will drain down and around the pad. With the valve closed, the colorant is now on the under side of the pad. This constant repetitive action, will lead to a build up of colorant that will eventually drip to the ground. Daily cleaning of this area will prevent the colorant accumulation / drips. Wipe area with a moist cloth.



Nozzle Replacement and Cleaning

The valve nozzle (Ref # 22) is located at the bottom of the valve, and directs the colorant in a steady stream into the paint pail. A sealing o-ring (Ref # 21) is used to prevent leakage between the two surfaces. Colorant collecting around the area of the nozzle may be the result of a damaged or missing o-ring (Ref # 21).

To ensure trouble free operation, it is recommended that the nozzle outlets (Ref # 22) be cleaned only if there is a problem dispensing colorant. Frequent removal of nozzle may cause loss or damage to o-ring. To remove the nozzle, pull valve handle down, to move arm/pad away from nozzle. Continue to hold the valve open while pulling the valve forward towards yourself. Clean the nozzle in warm water, making sure that you don't lose the nozzle O-ring. (Ref # 22).

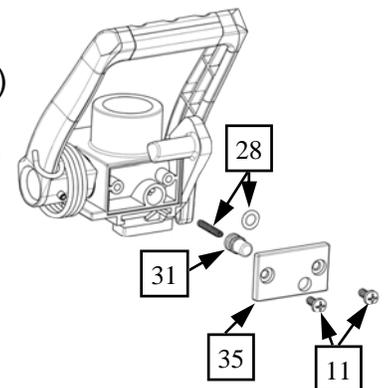


NEVER use hard sharp objects to clear the nozzle.

Accu - Purge™ Valve Repairs (Repair Kit BL-1620 Ref#28)

To repair the Accu-Purge Valve.

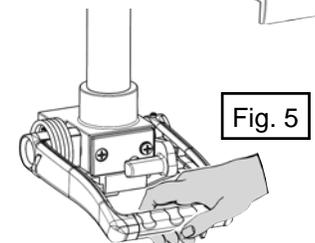
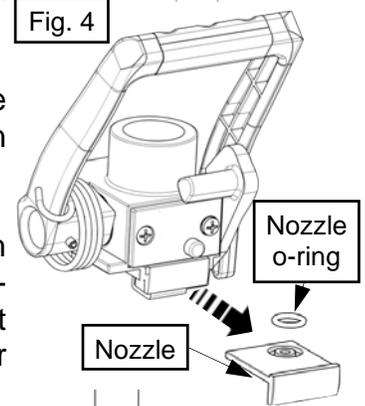
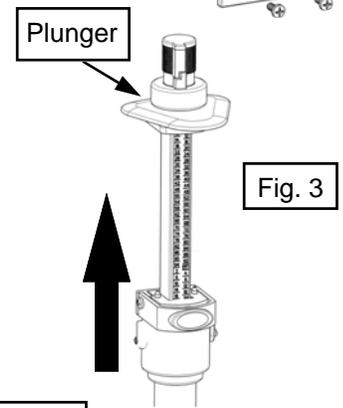
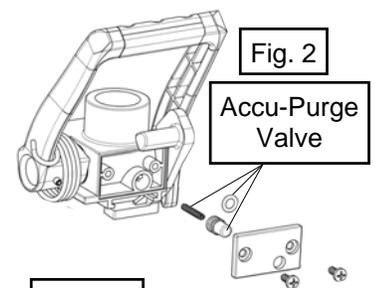
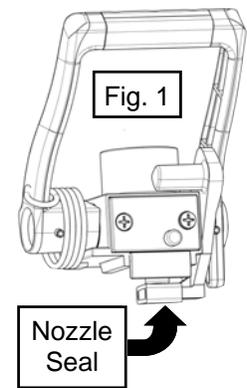
- 1 Remove the two (2) screws (Ref # 11) securing valve plate (Ref #35)
- 2 Remove the Accu-Purge assembly (Ref # 28) and (Ref # 31).
- 3 Clean entire valve cavity, paying attention to the hole from which the button is removed.
- 4 Remove the O-ring and clean or replace.
- 5 Do not over tighten the screws when you re-assemble.



PROBLEM SOLVING - DRIPPING COLORANT

Colorant drips around the equipment can be the result of many things and a series of steps must be taken to determine the solution to the problem. Before performing these tests, please review operating procedures in the owner's manual to ensure proper dispensing is being done. These steps must be performed in following order;

1. Check nozzle seal arm / pad for a collection of colorant. A small amount of colorant will collect on the nozzle seal pad. Cleaning of this area daily will ensure the collection does not reach the point where colorant drips from the nozzle seal pad. Clean this area daily. Fig. 1.
2. Check Accu-Purge operation. pull the valve handle down (see fig. 5), this will push accu-purge valve button. An air burst or colorant discharge should be felt / seen. If no action is felt or seen, remove the two screws holding accu-purge plate onto valve. Check for dried colorant in chamber. Clean and remove all residue. Ensure the passage is clear and O-ring is not damaged. Replace if required. See page 11. A non working accu-purge, will not remove the residual material from the nozzle, leading to greater colorant collection.
3. Set dispensing gauge to maximum setting. Raise plunger to the top. Let go of the plunger with the valve closed. The plunger handle should not move and remain stationary. Any movement in the plunger indicates the presence of air in the cylinder and the need to re-prime the pump. Air present in the cylinder will not allow the colorant to be drawn in properly and will result in inaccurate dispenses and leaking of colorant from the nozzle. Prime the cylinder, as per instructions on page 7.
4. Before continuing with steps 5 and 6, you must remove the nozzle. See Fig. 4. These final two tests, CAN NOT be performed until steps 1, 2 & 3 have been done.
5. If there is a constant drip of colorant from the nozzle, air is entering the cylinder as a result of worn "**Piston Seals**". Replace per instructions on pages 12-13.
6. Push plunger shaft down to the end cap. With the valve closed, watch the nozzle for drips. If a constant drip of colorant comes from the nozzle, the valve barrel, O-rings or valve body are worn and replacement is required. Use valve replacement number BL-1555P. Replace per instructions on page 14.

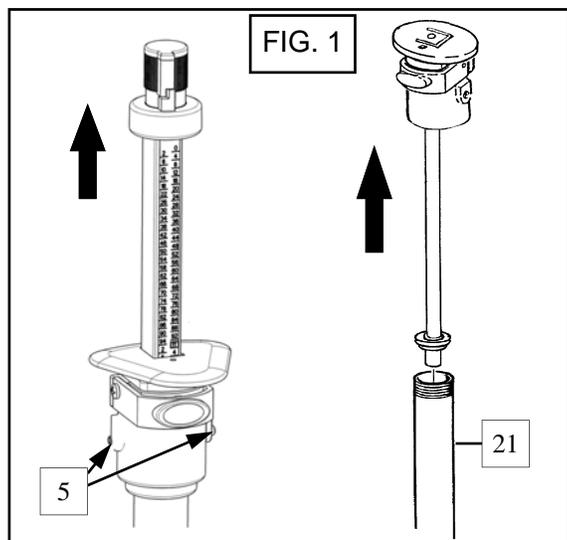


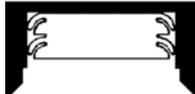
REPLACEMENT OF PISTON SEALS

To replace the piston seals you do not have to remove the canister from the turntable.

Figure 1

- 1 Remove gauge from canister.
- 2 Loosen the two set screws (Ref # 5) from the end cap assembly.
- 3 Remove the entire end cap assembly and plunger shaft from the cylinder, lifting vertically until it is fully removed from cylinder.
- 4 Clean colorant from piston assembly.




 Seal Installation Tool
 Part # BL-1590
 Supplied with each unit.
 Includes seal BL-1310

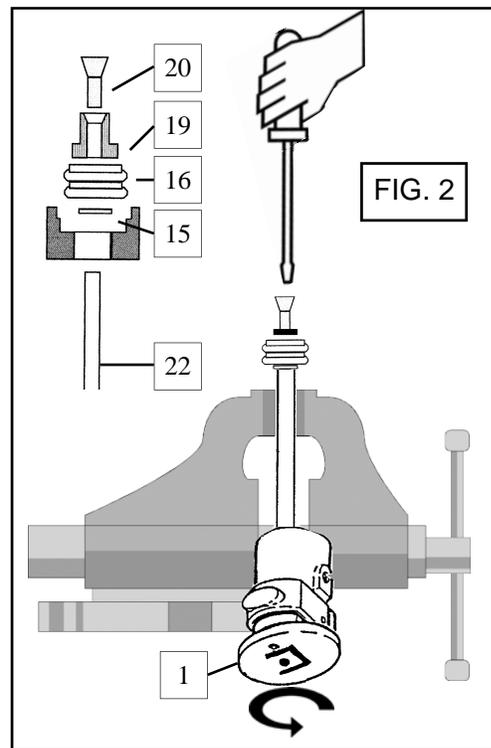


Figure 2.

- 1 Place plunger shaft in a “soft jaw” vise. **Do not** over tighten vise jaws.
- 2 Remove plunger handle (Ref #1) from shaft, turning counter-clockwise.
- 3 Slide end cap assembly off plunger shaft.
- 4 With a **Large** head, Phillips screwdriver, remove screw securing piston seals. Discard used seals, while retaining washer (Ref # 15), seal support (Ref # 19) and screw (Ref # 20).
NOTE: Screw is secured with Loc-Tite and may be difficult to remove. A large head screw driver is required to ensure screw head is not stripped or damaged during removal. If unable to remove screw, cut away old seals with knife and apply a small amount of heat to the screw. Heat will soften the Loc-Tite, allowing easier removal.
- 5 Remove **NEW** seal (One supplied free with each unit) from installation sleeve / tool.
- 6 Assemble seal lower support (Ref # 19), **NEW** piston seal (Ref # 16) , washer (Ref # 15), onto screw (Ref # 20). Apply 2 drops of Loc-Tite 271 to end of screw threads. Screw assembly into end of plunger shaft (Ref # 22).
NOTE: Tighten only until seal can no longer be rotated by hand. Do not over tighten. Over tightening will result in difficult or stiff operation of the plunger when re-fitted.
- 7 Remove plunger shaft from vise and slide installation sleeve / tool back over seals.

REPLACEMENT OF PISTON SEALS - CONTINUED

Figure 3.

- 1 Locate the installation sleeve (Ref#18), containing seals (Ref #16) and plunger shaft (Ref # 22), into a vertical position over the top of the cylinder. The tool will nestle / fit onto top of cylinder.
- 2 Gently press plunger shaft (Ref #22) down, while rotating slightly, until the piston assembly is fully within the cylinder (Ref #21).
- 3 With the piston assembly now contained within the cylinder, lift the installation sleeve (*) up and off the plunger shaft. Store sleeve for future use. *Replacement seals sold without tool.*
- 4 Raise seals to top of cylinder and ensure the seals have not been damaged during installation. Sealing edge / lip should not be curled, nicked or in any other way damaged.
- 5 Place end cap assembly (Ref # 3) over plunger shaft and re-attach plunger handle.

NOTE: Tighten until plunger handle has used all of the available threads of the plunger shaft. DO NOT OVER TIGHTEN. If the plunger handle is not in correct alignment with the end cap, when tight, release grip on plunger shaft and rotate to re-align. Plunger shaft should be flush with or extended above plunger handle.

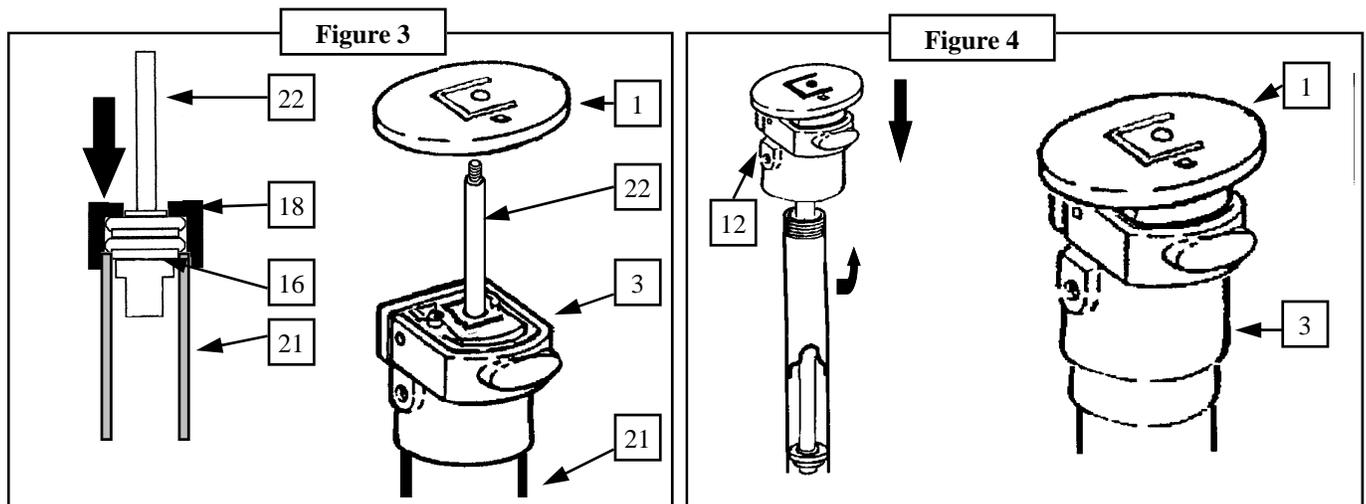


Figure 4.

- 1 Press the plunger shaft (Ref # 1) down until the seals have bottomed out in the valve body.
- 2 Slide the cylinder up and into the end cap assembly (Ref # 3).
- 3 While keeping the plunger shaft pressed down, raise the end cap until it engages the plunger handle. Confirm vertical alignment of end cap and valve, and secure end cap to cylinder with set screws (Ref # 5). **DO NOT OVER TIGHTEN.**
- 4 Refit gauge. Check calibration, see page 15 for details. Re-calibrate if not correct.
- 5 Prepare pump by following **PRIMING INSTRUCTIONS.**

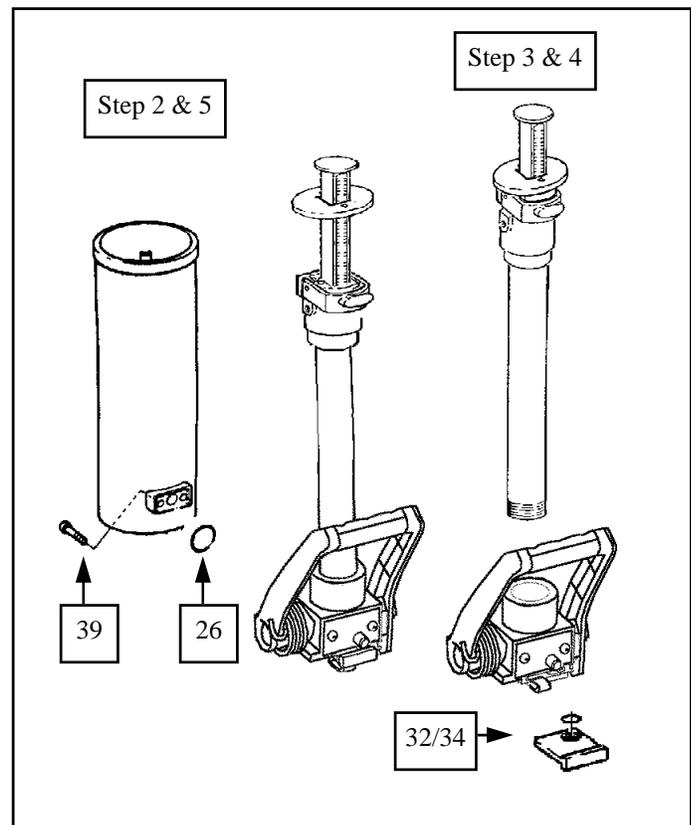
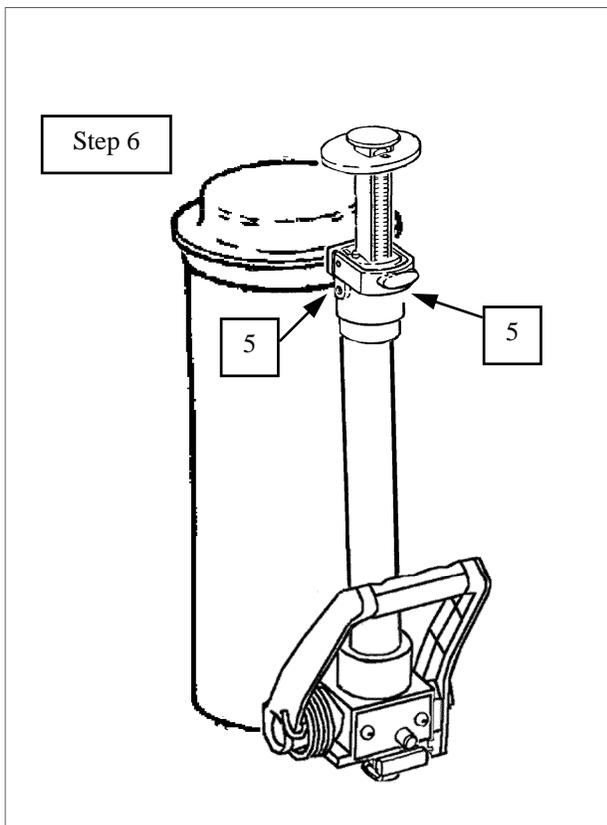
WARNING

If the seal remains out of the cylinder for a long period of time seal expansion will occur. Use the installation sleeve to compact seal before attempting installation.

BL-1555P - VALVE ASSEMBLY REPLACEMENT

All valve repairs require that the canister be removed from turntable and drained of colorant (Into a clean container). Clean canister will minimize mess associated with the repairs.

- 1 Remove canister from turntable and empty contents (colorant) into clean container. Rinse canister of residual colorant.
- 2 With Allen key, remove the two screws (Ref # 39) holding the valve to the canister base. These screws are accessed from the bottom of canister.
- 3 Unthread cylinder / endcap assembly from valve assembly and set used valve assembly aside.
NOTE: DO NOT use any tools to loosen cylinder. Tools may damage cylinder.
- 4 Thread cylinder / endcap assembly into new valve. Cylinder must be firmly, hand tight and the use of "SUPER" glue, on the cylinder threads is recommended.
NOTE: DO NOT use any tools to tighten. Review step 6 now.
- 5 Install o-ring (Ref # 25) to valve body and re-attach to canister (Reverse of step 1).
- 6 Re-installation of cylinder, may result in the endcap being out of alignment with the valve assembly. To align the endcap assembly with valve, loosen the set screws slightly (Ref # 5) and rotate endcap. Re-tighten set screws.
- 7 Install nozzle (Ref #34)and o-ring (Ref # 32), from old valve assembly, onto new valve.
- 8 Re-attach canister to turntable.
- 9 Add colorant and re-prime pump.



AUTOMATIC TIMER

Every HERO D23 Series Colorant Dispenser is equipped with an automatic timer. The timer operates for every 10 min every 7 hours at 110V 60Hz or 4 hours at 220V 50Hz. The timer requires no adjustment or attention on the part of the operator. When shipped the timer has been set to initiate agitation as soon as it is plugged in.

The timer is located on the cabinet / base, next to the power cord. A decal is located next to the timer, indicating the location of the start position. In order to rotate the timer adjustment knob you will require a flat end screw driver as the knob is inset into the machine for protection. By rotating the adjustment knob, the timer can be advanced to the start time. While rotating the knob, a faint clicking sound will be heard. Rotate the dial through the "off" cycle until agitation begins. The "on" cycle is very short so rotation of the adjustment knob must be done very slowly. You should hear a loud click during rotation, this will start the agitation. Once the ten (10) minute agitation cycle is complete the timer will then activate agitation every seven (7) or (4) hours from this point.

HERO

2000 COLORANT DISPENSERS
2000 DISTRIBUCES DE COLORANTS

MODEL #

SERIAL #

VOLTS A.C. AMP Hz


TOLL FREE
1-800-494-4376
U.S. & Canada

CAUTION
ARCING PARTS
Keep the unit at least 20 feet
Away from explosive vapors

READ OPERATING
INSTRUCTIONS
High pressure device.
Read instruction manual
before operating and observe
all warnings.

ATTENTION
ÉTINCELLES ÉLECTRIQUES
Ne Pas placer l'unité à moins de
20 pieds des vapeurs explosives

LIRE DE MODE
D'EMPLOI
Matériel à haute pression. Lire
les instruction du fabricant avant
de mettre en marche, et observer
toutes les consignes de sécurité.

VANCOUVER, B.C. CANADA
MADE IN CANADA - FRABRIQUE DU CANADA PAR



**TO TURN TIMER ON
SLOWLY ROTATE
CLOCKWISE UNTIL
FIRST LOUD CLICK**

**ADJUST TIMER
with flat blade
screwdriver**

DAILY ROUTINE CARE OF THE DISPENSER

It is recommended that the following daily routine be adopted to ensure trouble free operation of the dispenser.

1. Check the level of the colorant and top up if required.
2. Set all gauges to maximum dispense. Raise and lower each plunger without opening valve. Repeat the procedure 10 times slowly.
3. With a damp cloth, wipe down stand, canisters and pumps, paying particular attention to pump nozzles to prevent accumulation of excess colorant which may dry out and cause erratic discharge or blockage.

Located on right side
of cabinet / base
(when facing unit)

CALIBRATION INSTRUCTIONS - NEW MICRO GAUGES™

Micro gauges are precise measuring devices and are designed for use with one specific canister, the one it is originally installed in and calibrated to. Moving gauges from one canister to another will cause inaccurate dispenses. When installing new Micro-Gauges for the first time the following instructions must be followed closely. Each gauge must be calibrated to one specific canister, and should remain in that specific canister.

NOTE: Before attempting calibration of the gauges, make sure that the plunger handles (ref 1, Fig 1) are tight on the plunger shaft.

1. Insert new gauge into canister.
2. Set gauge to first locking hole or position (zero "0").
3. Make sure the micro knob is set to zero
4. Apply **Loc-Tite** to setscrew (HW2065, fig 2) and insert into micro knob (Setscrew found in parts bag). Tighten set screw (HW2065) so that the set screw makes contact. **DO NOT** over tighten.
5. Check the gauge locking operation (push Ref#12, fig 1) to ensure the gauge locks in on the zero setting. Over tightening will prevent the locking pin from engaging properly.
6. Rotate Micro-Knob and return it to zero (0) try to raise plunger handle (ref# 1, fig 1). No movement should be felt in the plunger handle with the Micro-Knob set at zero (0). If there is movement in the plunger tighten the set screw (HW2065) until there is no movement and the gauge locks in on the zero setting.
7. Place cap on Micro-Knob (cap found in parts bag).

MICRO GAUGE™ RECALIBRATION

If gauges have been moved from one canister to another the gauges will have to be recalibrated. To recalibrate the gauges you would follow the same procedures as above, except that instead of adjusting the set screw in the center of the gauge, as above. You adjust the calibration by turning the screw in the plunger handle. (see fig 1).

Fig 1

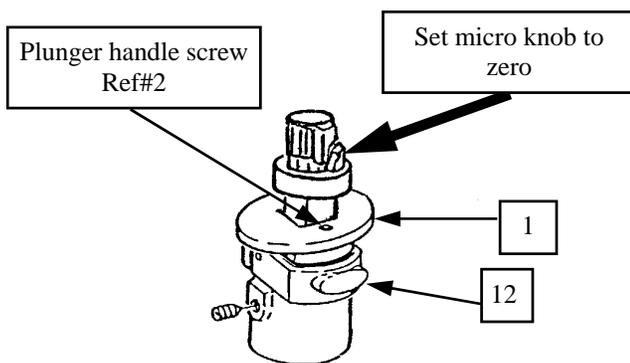
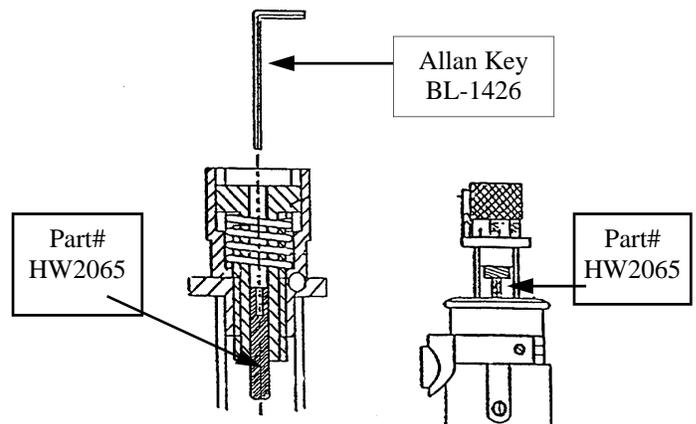


Fig 2



GAUGE RE-CALIBRATION

Fig. 1

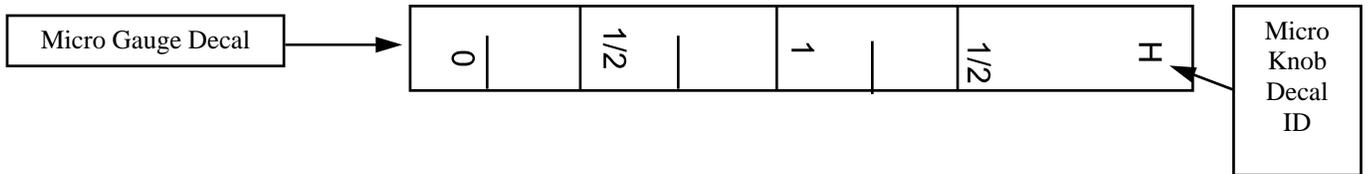


Fig. 2

CALIBRATION FIGURES FOR MICRO GAUGES					
DECAL	MICRO-GAUGE SETTING	FEELER GAUGE SIZE	DECAL	MICRO-GAUGE SETTING	FEELER GAUGE SIZE
C	1/4 SHOT	0.015	K	1/2 SHOT	0.023
D	1/4 SHOT	0.017	S	.2 SHOT	0.013
G	1/2 SHOT	0.015	CZ	1/128 SHOT	0.015
H	1/2 SHOT	0.017	J96	1/2 SHOT	0.019
J	1/2 SHOT	0.019	7P	1/128 SHOT	0.015

Fig. 3

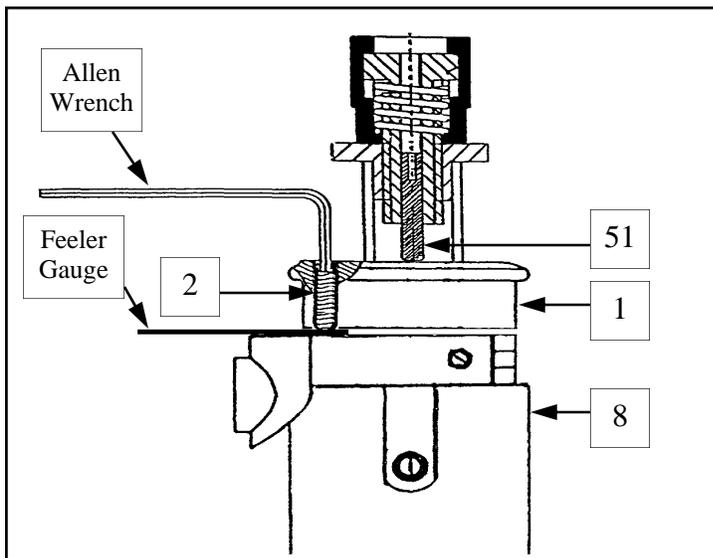
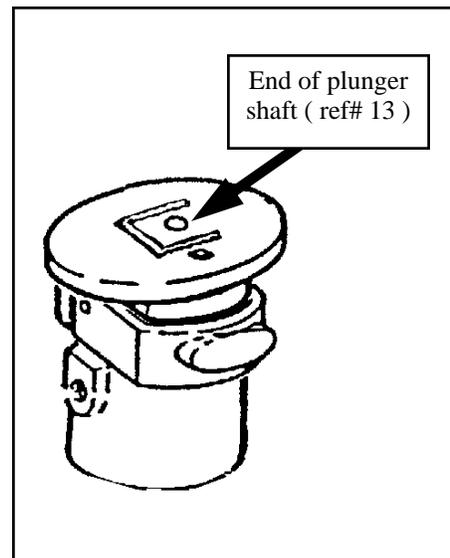
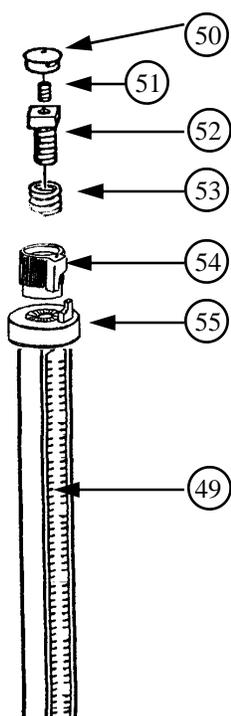


Fig. 4



MICRO-GAUGES



(48)

GAUGE Ref # 48	DECAL Ref # 49	MICRO CODE	DESCRIPTION	MODEL CODE
BL-5705	BL-5206	C	1/32 US	01
BL-5700	BL-5201	J	1/48 US	02
BL-5707	BL-5208	G	1/64 US	03
BL-5715	BL-5216	C	1/32 USM	04
BL-5710	BL-5211	J	1/48 USM	05
BL-5712	BL-5213	J96	1/96 USM	24
BL-5725	BL-5226	D	1/32 US IMP	07
BL-5720	BL-5221	K	1/48 US IMP	08
BL-5727	BL-5228	H	1/64 US IMP	09
BL-5735	BL-5236	S	1/10 Metric, 60 ml	12
BL-5750	BL-5251	H	1/48 @ 88%	14
BL-5760	BL-5206Z	CZ	1/32 US "OZ" Scale	17
BL-5755	BL-5208P	7P	1/64 US "P" Scale	16

WHAT ARE GAUGES ?

Gauges, measuring sticks, or dispense indicators, it does not make a difference what you call them. The gauge is simply an indexing device. Precision crafted to ensure precise indexing of colorant. Colorant manufacturer's create an entire spectrum of available color formulations based on their product. To create this spectrum of colors, often as many as 2000 to 5000 different colors or shades, a selection of 9 to 16 different colorants are commonly used. The formula requires that small portions of various colorants be added to the base paint. The amount of colorant added, is measured in "fluid ounces" or "milliliters". Whole ounce dispenses are rarely required, therefore smaller dispense increments are required. The ounce measurement is further broken down into fractional dispenses. The popular increments are 32, 48 and 64 parts per ounce. The size of the paint container into which the colorant is being added is very important. Formulas created with the US gallon as a basic size, must be altered when dispensing into Imperial Gallons (US IMP) or Metric Pails (USM). One (1) ounce of colorant is commonly referred to as "1Y" (Y = 1 ounce). Some companies will use "P" or "OZ" to designate 1 ounce. This does not change the dispense capacity, it simply is an alternative designation. Custom decals are available.

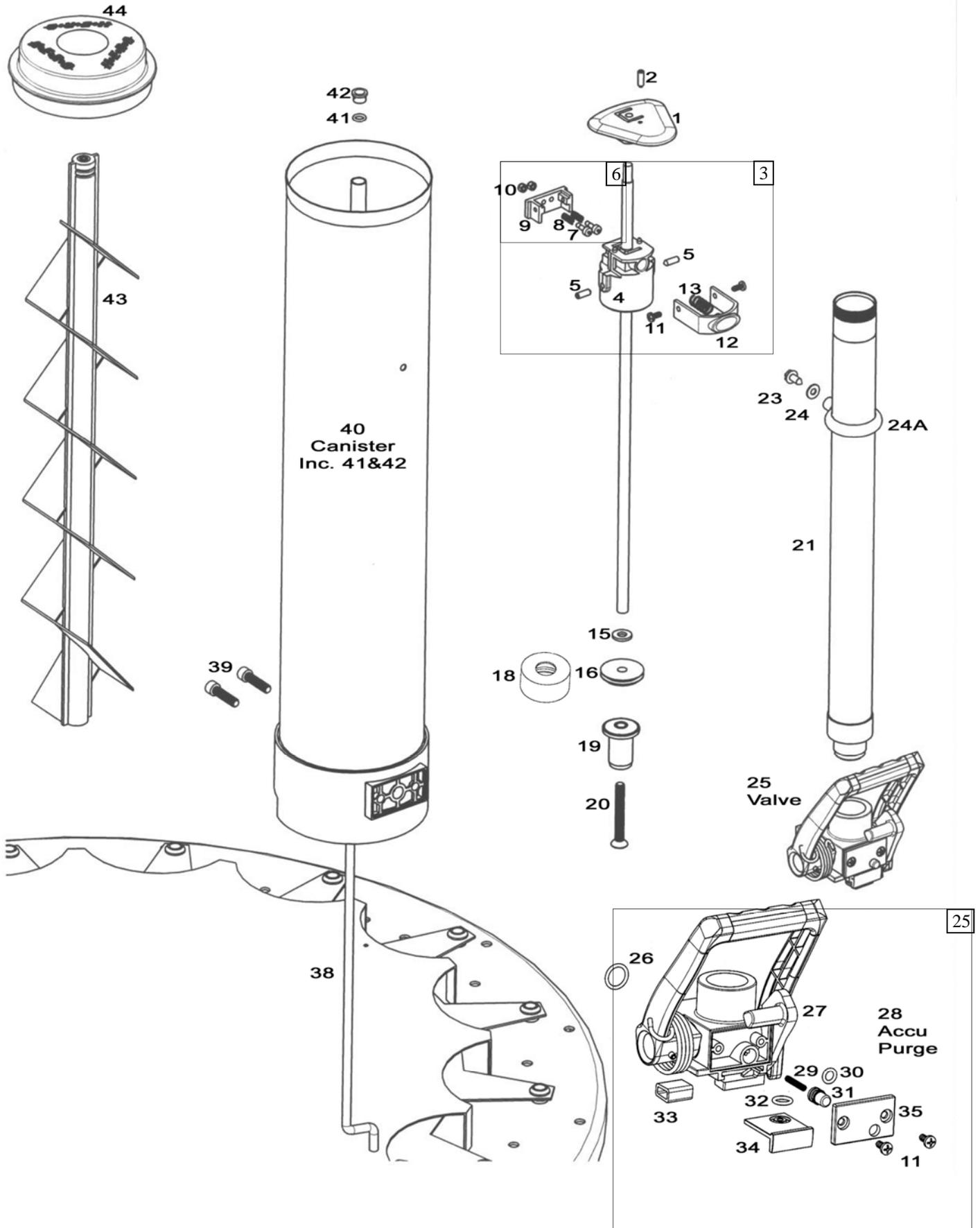
WHAT GAUGES DO I HAVE ?

Each unit model number has a code incorporated into the part number which designates the gauges being used. Each gauge decal also has a part number listed at the bottom of it. Refer to gauge decal number or the model code per chart above.

Sample model # ; D60SRM16F0204E = 1/48 US gauge (BL-5700), Decal # BL-5, Model code 02.

Change the unit model code and you change the gauges and their dispense capacity.

CANISTER SCHEMATIC MODEL D60SRM

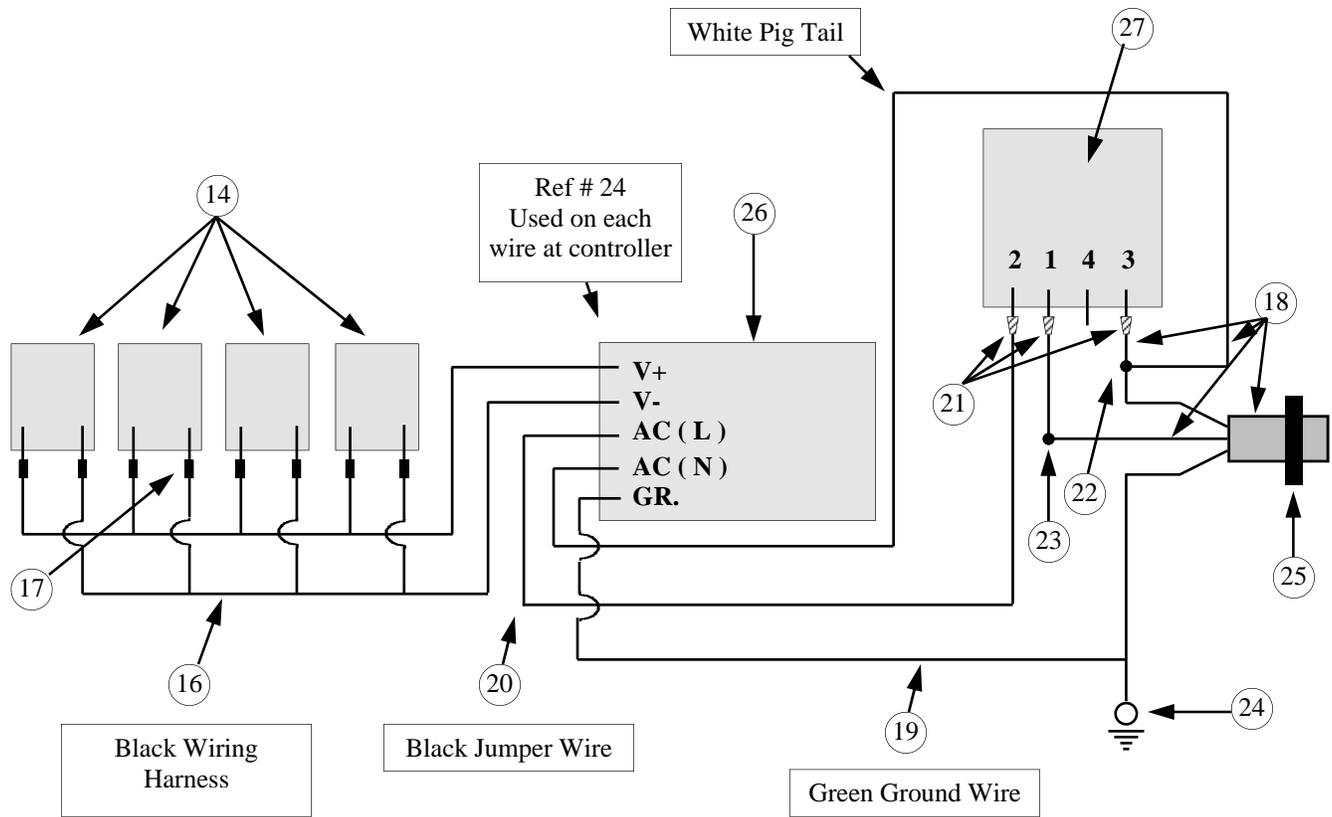
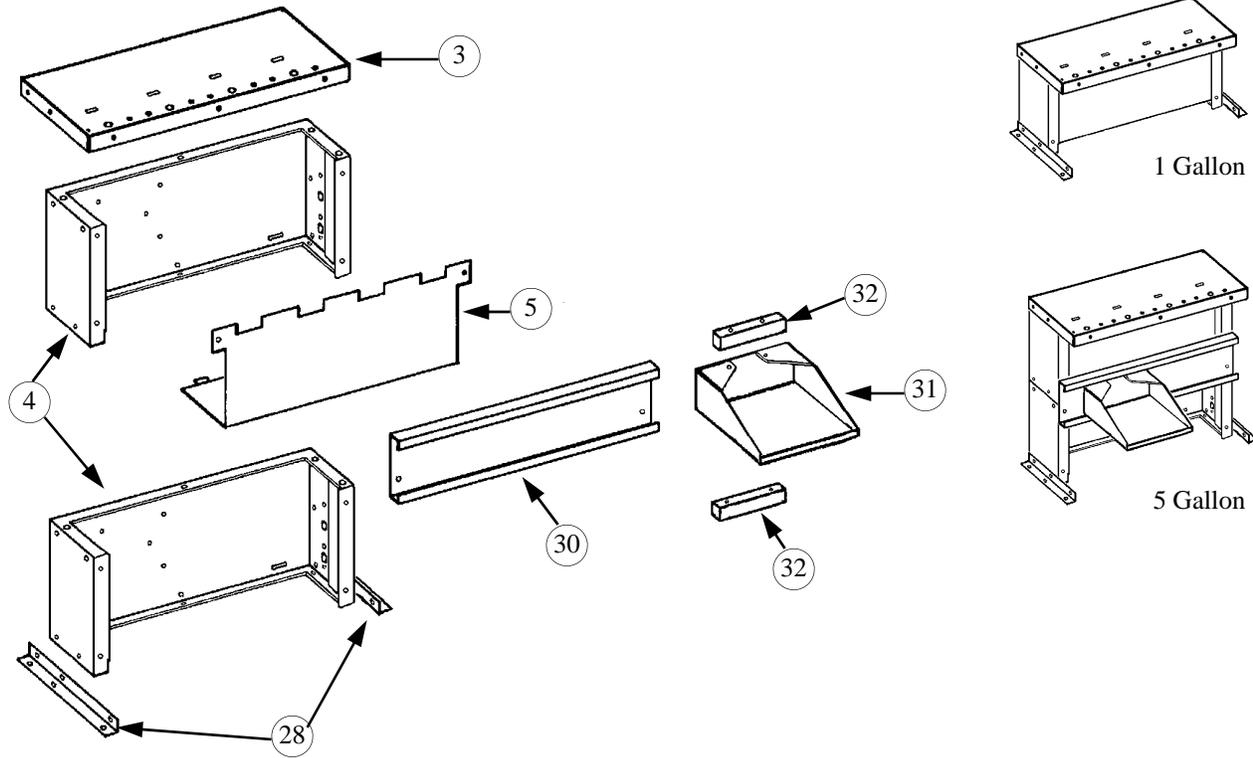


D60SRM CANISTER SCHEMATIC AND PARTS LIST

Please identify or order parts by the appropriate part number and not by reference number. The parts description indicates the quantity of each part per canister, if more than one is required.

Ref #	Part #	Description	Qty
	BL-1780	Canister / Pump Assembly, Less Gauge,	1
1	BL-1000	Plunger handle	1
2	HW2062	Setscrew, 8-32 X 1/2 half dog	1
3	BL-1502	End cap complete, Includes Ref # 4-13	1
4	BL-1015	End Cap	1
5	HW2070	Set Screw, 10-24 X 5/16 Cone Point	2
6	BL-1505	Pin Bar Assembly, Includes Ref # 10-13	Assy
7	BL-1050	Gauge Pin	1
8	BL-1045	Gauge Pin Spring	1
9	BL-1040	Gauge Pin Holder	1
10	HW4090	Hex nut, M3 X 5 nylon insert plated	2
11	HW30051P	Sheet Metal Screw, #6 X 5/16 Pan Head Phillips SS	2
12	BL-1030	Lock Bar Gauge	
13	BL-1032	Lock Bar Spring	
14	BL-1300	Plunger Shaft, 7 Oz.	
15	HW5032	Washer, #10, SS	1
16	BL-1310	Seal, 7 oz.	1
17	BL-1590	Seal, 7 oz., Includes Ref # 17 Installation tool	1
18	BL-1312	Installation Tool, 7 oz.	1
19	BL-1311	Plunger Seal Support	1
20	HW30655	Machine screw, 1/4NC X 2, flat head Phillips SS	1
21	BL-1600	Cylinder, 7 oz., SS	1
22	BL-1300	Plunger shaft, 7 oz.	1
23	HW30492	Sheet Metal Screw, #10 X1/2 Hex Head, Self Tap, Stainless Steel	1
24	HW5022	Nylon Washer, #10 X 7/16 .032	1
24A	BL-1328	Cylinder support, 7 oz., canister	1
25	BL-1555P	Valve Assembly Complete, less nozzle, Includes Ref # 26-31, 33, 35 & 36	Assy
26	BL-1136	O-ring, valve body	1
27	BL-1173	Auto wiper arm	1
28	BL-1620	Accu-Purge valve assembly containing spring & o-ring	1
29	BL-1400	Accu-Purge Spring	1
30	BL-1402	Accu-Purge O-Ring	1
31	BL-1405	Accu-Purge Piston	1
32	BL-1192	Nozzle O-ring	1
33	BL-1176	Wiper Pad	1
34	BL-1185	Nozzle, .094, - S = Small, Optional	Optional
	BL-1186	Nozzle, .125, - M = Medium, D23P	Optional
	BL-1187	Nozzle, .188, - L = Large, Standard on D60S	1
	BL-1188	Nozzle, .220, - X = X-Large, Optional	Optional
35	BL-1132	Valve Plate	1
36	HW30051P	Sheet Metal Screw, #6 X 5/16 , Pan Head Phillips, Stainless Steel	2
37	HW30629P	Machine Screw 1/4NC X 1, Pan Head Phillips, Plated	3
38	BL-1340	Paddle Drive Shaft, 4.5 Qt.	1
39	HW1018	Capscrew, Socket Head, 1/4NC X 3/4 Grade 8	2
40	BL-1610	Canister shell, 4.5 Qt. Includes Ref #41 & 42	1
41	BL-1105	Paddle Bushing O-ring	1
42	BL-1095	Paddle Bushing	1
43	BL-1630	Paddle, 4.5 Qt.	1
44	BL-1085	Lid	1

4 POSITION INLINE

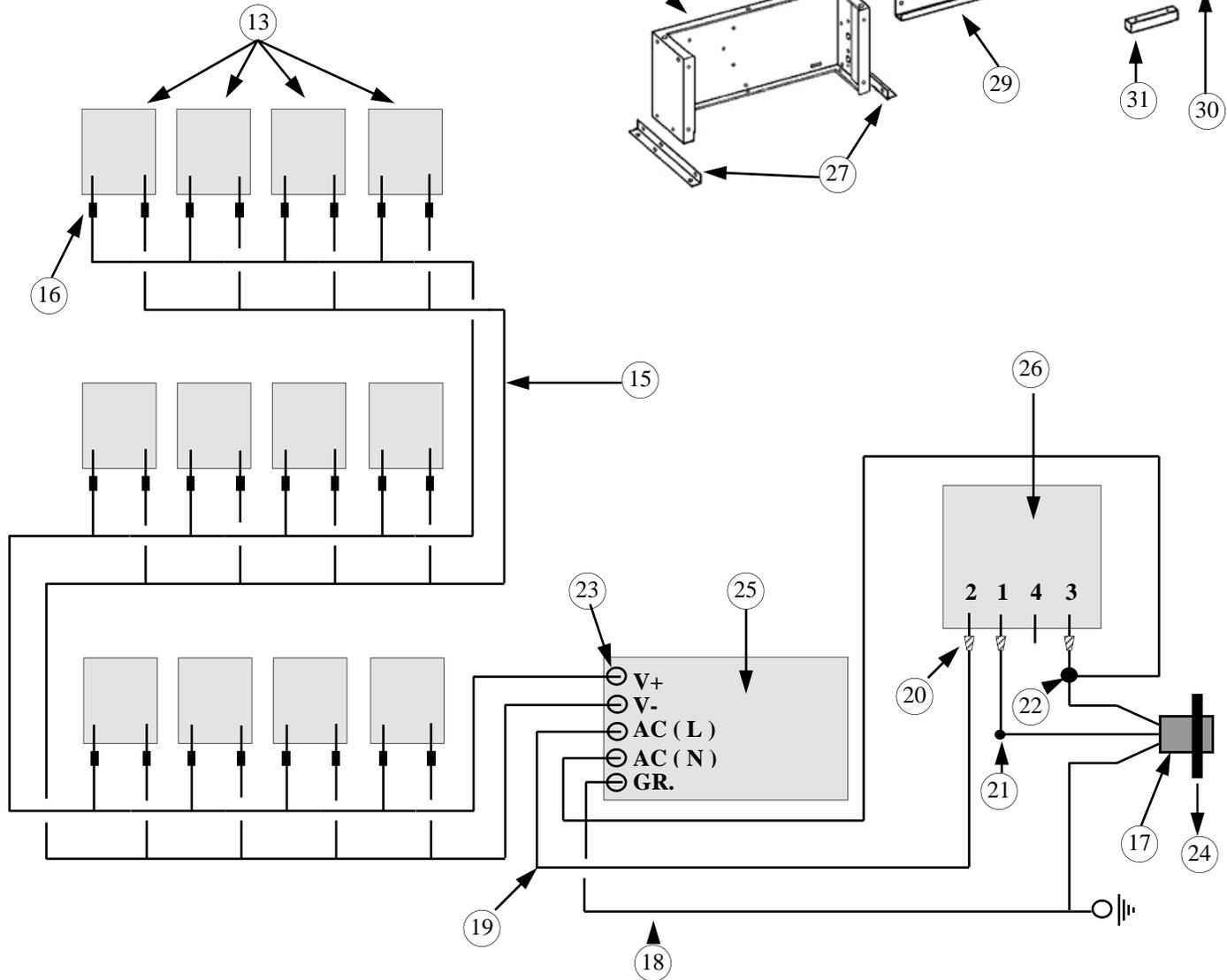
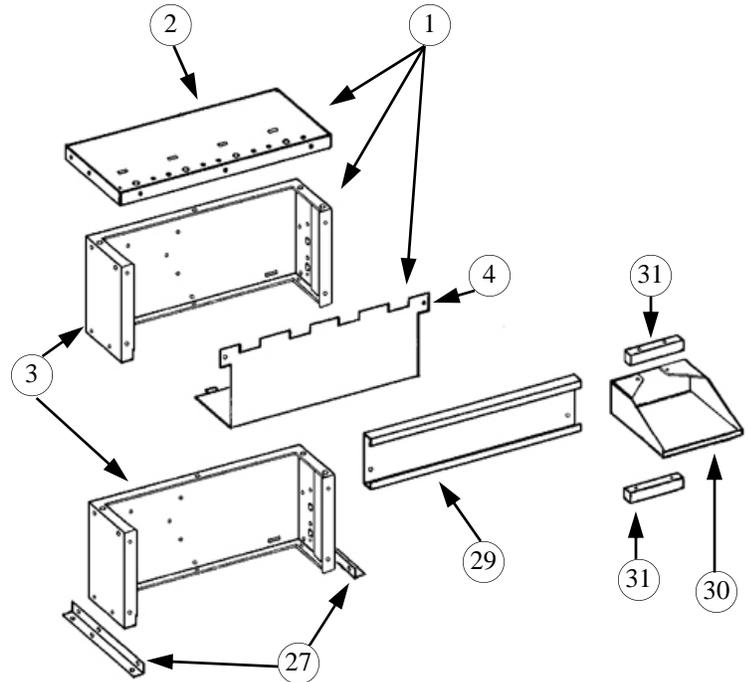
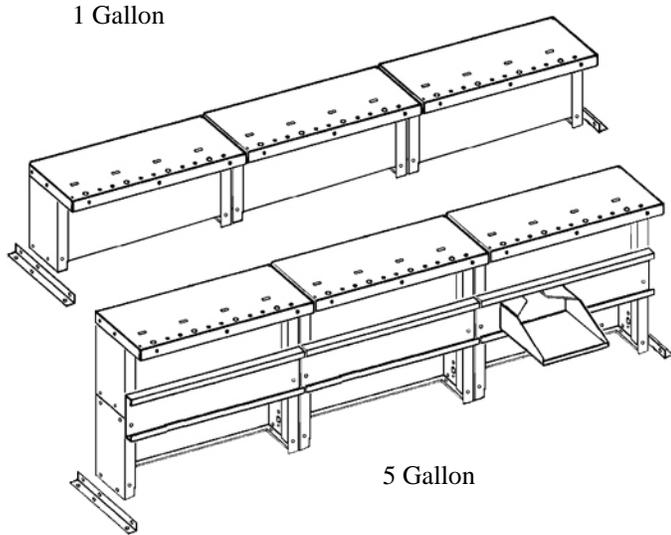


4 POSITION INLINE

Please identify or order parts by the appropriate part number and not by reference number. The parts description indicates the quantity of each part per canister, if more than one is required

REF #	PART #	DESCRIPTION		QTY
1	BL-3902	Dispenser-	Inline 4 Position, 1 Gallon Stand, 60HZ, c/w legs. <i>Includes Ref # 2-29</i>	1
2	BL-3900	Dispenser-	Inline 4 Position, 1 Gallon, Less Electrics & Legs <i>Includes ref # 3 – 13</i>	ASSY
3	BL-3470-1	Dispenser-	Top Plate, 4 Position Inline	1
4	BL-3470-2	Dispenser-	Frame, 4 Position Inline	1
5	BL-3470-3	Dispenser-	Motor Cover, 4 Position Inline	1
6	HW3066P	Hardware-	Screw, Sheet Metal, #14 x 3/4, HX WSR HD SL PL	7
7	HW3009P	Hardware-	Screw, Machine, #6 x 1/2, Self Tapping	2
8	HW30061P	Hardware-	Screw, Machine, 4-40 x 1, RD HD, SL, PL	2
9	HW3032P	Hardware-	Screw, Machine, #8 x 3/4, Pan HD, Phillips, Self Tap	2
10	HW1020P	Hardware-	Capscrew, HX HD, 1/4NC x 3/4, Gr. 5, PL	4
11	HW5030P	Hardware-	Washer, 1/4 SAE, PL	4
12	HW5040P	Hardware-	Washer, 1/4 Regular Lock, PL	4
13	HW4020P	Hardware-	Nut, Hex, 1/4NC PL	4
14	BL-2006	Dispenser-	Motor, 24 Volt – DC	4
15	BL-2550	Dispenser-	Crankshaft, for 24 V, DC motor	4
16	BL-3632	Dispenser-	Wiring Harness 4 Position Inline, 24V – DC motors <i>Includes ref # 17</i>	ASSY
17	BL-2006-1	Dispenser-	Terminal, Female Covered, 24V DC motor	8
18	BL-3620	Dispenser-	Power Cord Assembly, c/w white & black pig tails	ASSY
19	BL-3612	Dispenser-	Wire, GREEN Assy., c/w 2 x ref # 24	ASSY
20	BL-3613	Dispenser-	Wire, BLACK Assy., c/w ref # 21 & 24	ASSY
21	05-700-5176	Dispenser-	Connector, Female Covered, 16-14	3
22	85-251	Dispenser-	Connector, Wire Junction, Insulated, Pink	1
23	85-15	Dispenser-	Connector, Wire Junction, Insulated, White	1
24	65/113	Dispenser-	Connector, Ring Terminal	8
25	85-16	Dispenser-	Bushing, Heyco 1200	1
26	BL-2007	Dispenser-	Power Supply, 24V, DC motors (Power Converter)	1
27	BL-2000	Dispenser-	Timer, Automatic, 10 Min. ON / 8 Hrs OFF	1
28	BL-3470-4	Dispenser-	Leg, 4 Position Inline	2
5 GALLON STAND				
29	BL-3912	Dispenser-	Inline 12 Position, 1 to 5 gallon riser <i>Includes Ref # 2, 30-32</i>	ASSY
30	BL-3470-5	Dispenser-	Channel, 4 Position Inline	1
31	BL-3470-6	Dispenser-	Tray, Sliding, 5 Gallon Stand	1
32	BL-3470-7	Dispenser-	Glide, for Sliding Tray	2

12 POSITION INLINE

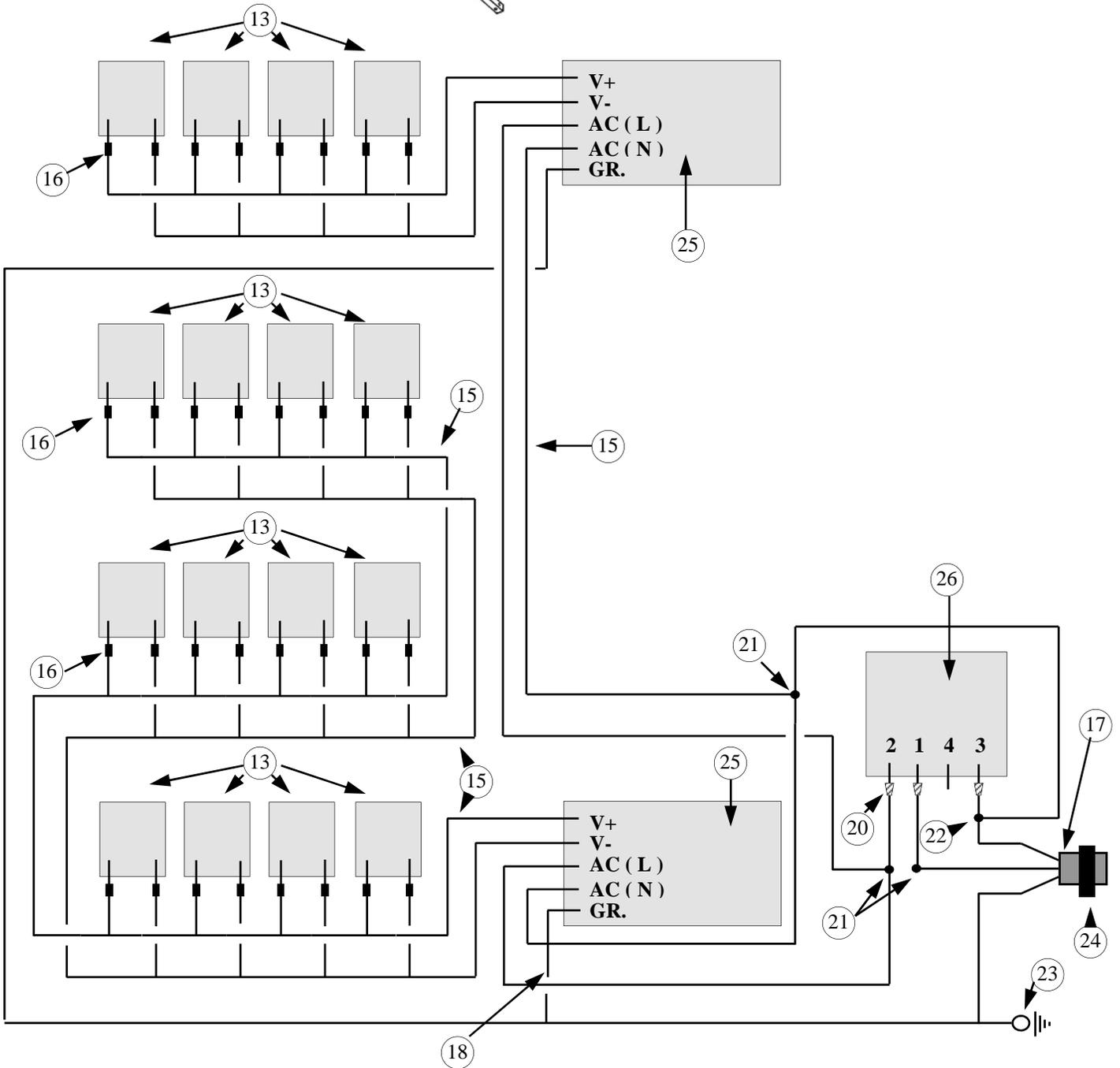
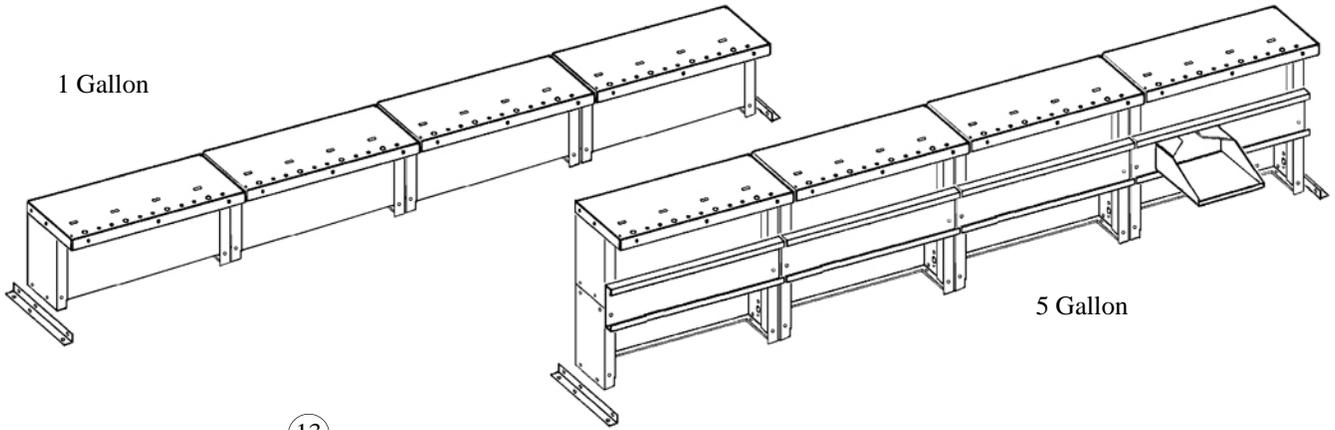


12 POSITION INLINE

Please identify or order parts by the appropriate part number and not by reference number. The parts description indicates the quantity of each part per canister, if more than one is required

REF #	PART #	DESCRIPTION		QTY
1	BL-3900	Dispenser-	Inline 4 Position, 1 Gallon, Less Electrics & Legs <i>Includes ref # 3 – 12</i>	3 ASSY
2	BL-3470-1	Dispenser-	Top Plate, 4 Position Inline	1
3	BL-3470-2	Dispenser-	Frame, 4 Position Inline	1
4	BL-3470-3	Dispenser-	Motor Cover, 4 Position Inline	1
5	HW3066P	Hardware-	Screw, Sheet Metal, #14 x 3/4, HX WSR HD SL PL	7
6	HW3009P	Hardware-	Screw, Machine, #6 x 1/2, Self Tapping	2
7	HW30061P	Hardware-	Screw, Machine, 4-40 x 1, RD HD, SL, PL	2
8	HW3032P	Hardware-	Screw, Machine, #8 x 3/4, Pan HD, Phillips, Self Tap	2
9	HW1020P	Hardware-	Capscrew, HX HD, 1/4NC x 3/4, Gr. 5, PL	4
10	HW5030P	Hardware-	Washer, 1/4 SAE, PL	4
11	HW5040P	Hardware-	Washer, 1/4 Regular Lock, PL	4
12	HW4020P	Hardware-	Nut, Hex, 1/4NC PL	4
13	AT-36235	Dispenser-	Motor, 24 Volt – DC (Request template & hardware)	12
14	BL-2550	Dispenser-	Crankshaft, for 24 V, DC motor	12
15	BL-3630	Dispenser-	Wiring Harness 12 Position Inline, 24V – DC motors <i>Includes ref # 16</i>	ASSY
16	BL-2006-1	Dispenser-	Terminal, Female Covered, 24V DC motor	24
17	BL-3620	Dispenser-	Power Cord Assembly, c/w black & white pig tails	ASSY
18	BL-3612	Dispenser-	Wire, GREEN Assy., Includes 2 x ref # 23	ASSY
19	BL-3613	Dispenser-	Wire, BLACK Assy., Includes ref # 20 & 23	ASSY
20	05-700-5176	Dispenser-	Connector, Female Covered, 16-14	3
21	85-251	Dispenser-	Connector, Wire Junction, Insulated, Pink	1
22	85-15	Dispenser-	Connector, Wire Junction, Insulated, White	1
23	65/113	Dispenser-	Connector, Ring Terminal	8
24	85-16	Dispenser-	Bushing, Heyco 1200	1
25	BL-2007	Dispenser-	Power Supply, 24V, DC motors (Power Converter)	1
26	BL-2000	Dispenser-	Timer, Automatic, 10 Min. ON / 8 Hrs OFF	1
27	BL-3470-4	Dispenser-	Leg, 4 Position Inline	2
28	BL-1592	Dispenser-	Parts Kit, 7 oz. Spare Seal & Tool, Nozzles, O-Rings	KIT
5 GALLON STAND				
29	BL-3912	Dispenser-	Inline 12 Position, 1 to 5 gallon riser <i>Includes 3 of Ref # 2, 31-33</i>	ASSY
30	BL-3470-5	Dispenser-	Channel, 4 Position Inline	3
31	BL-3470-6	Dispenser-	Tray, Sliding, 5 Gallon Stand	1
32	BL-3470-7	Dispenser-	Glide, for Sliding Tray	2

16 POSITION INLINE



16 POSITION INLINE

Please identify or order parts by the appropriate part number and not by reference number. The parts description indicates the quantity of each part per canister, if more than one is required

REF #	PART #	DESCRIPTION		QTY
1	BL-3900	Dispenser-	Inline 4 Position, 1 Gallon, Less Electrics & Legs <i>Includes ref # 3 – 12</i>	4 ASSY
2	BL-3470-1	Dispenser-	Top Plate, 4 Position Inline	1
3	BL-3470-2	Dispenser-	Frame, 4 Position Inline	1
4	BL-3470-3	Dispenser-	Motor Cover, 4 Position Inline	1
5	HW3066P	Hardware-	Screw, Sheet Metal, #14 x 3/4, HX WSR HD SL PL	7
6	HW3009P	Hardware-	Screw, Machine, #6 x 1/2, Self Tapping	2
7	HW30061P	Hardware-	Screw, Machine, 4-40 x 1, RD HD, SL, PL	2
8	HW3032P	Hardware-	Screw, Machine, #8 x 3/4, Pan HD, Phillips, Self Tap	2
9	HW1020P	Hardware-	Capscrew, HX HD, 1/4NC x 3/4, Gr. 5, PL	4
10	HW5030P	Hardware-	Washer, 1/4 SAE, PL	4
11	HW5040P	Hardware-	Washer, 1/4 Regular Lock, PL	4
12	HW4020P	Hardware-	Nut, Hex, 1/4NC PL	4
13	AT36235	Dispenser-	Motor, 24 Volt – DC	16
14	BL-2550	Dispenser-	Crankshaft, for 24 V, DC motor	16
15	BL-3631	Dispenser-	Wiring Harness 16 Position Inline, 24V – DC motors, complete with jumper wires. Includes ref # 16	ASSY
16	BL-2006-1	Dispenser-	Terminal, Female Covered, 24V DC motor	32
17	BL-3620	Dispenser-	Power Cord Assembly, c/w black & white pig tails	ASSY
18		Dispenser-	Wire, GREEN Assy., Includes 2 x ref # 23	ASSY
19		Dispenser-	Wire, BLACK Assy., Includes ref # 20 & 23	ASSY
20	05-700-5176	Dispenser-	Connector, Female Covered, 16-14	3
21	85-251	Dispenser-	Connector, Wire Junction, Insulated, Pink	1
22	85-15	Dispenser-	Connector, Wire Junction, Insulated, White	1
23	65/113	Dispenser-	Connector, Ring Terminal	8
24	85-16	Dispenser-	Bushing, Heyco 1200	1
25	BL-2007	Dispenser-	Power Supply, 24V, DC motors (Power Converter)	1
26	BL-2000	Dispenser-	Timer, Automatic, 10 Min. ON / 8 Hrs OFF	1
27	BL-3470-4	Dispenser-	Leg, 4 Position Inline	2
28	BL-1592	Dispenser-	Parts Kit, 7 oz. Spare Seal & Tool, Nozzles, O-Rings	KIT
5 GALLON STAND				
	BL-3913	Dispenser-	Inline 16 Position, 1 to 5 gallon riser <i>Includes 4 of Ref # 2, 31-33</i>	ASSY
	BL-3470-5	Dispenser-	Channel, 4 Position Inline	4
	BL-3470-6	Dispenser-	Tray, Sliding, 5 Gallon Stand	1
	BL-3470-7	Dispenser-	Glide, for Sliding Tray	2

HERO D60 SERIES COLORANT DISPENSER WARRANTY & CLAIM PROCEDURES

HERO Products Group is proud to offer an industry leading " Two Year Warranty " on all of its *Manual* Series Colorant Dispensers.

HERO Products Group warrants all it's Manual Series Colorant Dispensers to be free of defects in materials and workmanship, to the original user, for a period of Two (2) Years. The warranty entitles the owner to parts replacement at no charge. The parts warranty is valid for any necessary replacement, whether caused by material, workmanship defect or simple wear.

Electric motors, timers and pneumatic motors warranted for twelve (12) months only.

The warranty is applicable to the original owner only and is non-transferable. The equipment must be used, operated and maintained in accordance with all instructions, precautions and warnings contained in the owner's manual. For the purpose of this warranty, damage caused by accident, abuse, improper cleaning or lack thereof, or improper operation, is not covered. Cleaning and general maintenance is the responsibility of the owner / operator and is not covered by the warranty.

HERO's liability is limited to the replacement of parts found to be defective or worn and does not include; damage or other expenses of any kind incurred in connection with the purchase and use of the dispenser.

All parts required for warranty service are invoiced to the client, with credit provided upon submission of a valid warranty claim. A valid claim lists model number, serial number, date of installation, lists all parts used and provides provisions for parts installation labor charges.

Major parts replacement may require the return of defective parts. If uncertain, call for further instructions. All returns must be authorized and no return will be accepted without a Return Goods Authorization (RGA) number.



Serial Number: _____

Date Installed: _____

Purchased From: _____

WARNING: Handling the power cord on this product will expose you to lead, a chemical known to the State of California to cause [cancer, and] birth defects or other reproductive harm.

Wash hands after handling.

Published Aug 2008