

CYL-V SERIES VERTICAL CYLINDER STORAGE CABINET ASSEMBLY & MAINTENANCE MANUAL



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Product Introduction

Thank you for purchasing a CYL-V series cylinder storage cabinet made by V estil Manufacturing Corporation ("Vestil"). CYL-V's are durable, high-quality products that combine safety features and dependable mechanisms. Even though these products are intuitive to assemble, install and maintain, all per sonnel should familiarize themselves with the instructions provided in this manual. Dimensions and other product specifications appear in the following table:

Model	Cylinder storage capacity	Dimensions in Inches (~cm)	Type of construction	Net weight in pounds (~kg)
CYL-V-510	5-10	33 x 37 x 72 ~(84 x 94 x 183)cm	Welded: assembly	205
G1L-V-510 5-10	3-10	33 x 37 x 72 ~(84 x 94 x 183)cili	not required	(93.2kg)
CYL-V-1020	10-20	60 x 38 x 72 ~(153 x 97 x 183)cm	Welded: assembly	315
CYL-V-1020 10-20	00 x 36 x 72 ~(155 x 97 x 165)ciii	not required	(143.2kg)	
CYL-V-1020-KD	10-20	60 x 38 x 72 ~(153 x 97 x 183)cm	Knock-down:	305
C1L-V-1020-KD	10-20	00 x 30 x 72 ~(153 x 97 x 163)cm	requires assembly	(139kg)

Safety Principles

Vestil Manufacturing Corp. recognizes the critical importance of workplace safety. However, although Vestil diligently strives to identify foreseeable hazardous situations, this manual cannot address every conceivable danger. The end-user is ultimately responsible for exercising sound judgment at all times.

This man ual will acquaint pe rsons authorized to assemble, install, a nd/or maintain this cylinder cabinet with recommended procedures. Therefore, each person who might assemble, install or perform maintenance on the cylinder cabinet, must read and understand every instruction BEFOREHAND. Users should have access to the manual at all times and should routinely review the directions.

This manual uses SIGNAL WORDS to classify personal injury risks and situations that might lead to property damage, as well a s to draw attention to safety message e(s). The reader must understand that each signal word indicates the seriousness of the identified hazard.

A DANGER

Identifies a hazardous situation which, if not avoided, <u>WILL</u> result in DEATH or SERIOUS INJURY. Use of this signal word is limited to the most extreme situations.

AWARNING

Identifies a hazardous situation which, if not avoided, COULD result in DEATH or SERIOUS INJURY.

ACAUTION

Indicates a hazardous situation which, if not avoided, COULD result in MINOR or MODERATE injury.

NOTICE

Identifies practices likely to result in produ ct/property damage, su ch a s ope ration that m ight damage the cylinder cabinet.

Employers are responsible for training employees to assemble, use, and maintain the product properly. If you do not understand an instruction, ask your supervisor or employer for assistance, because failure to follow the direction s in this manual might result in serious personal injury or even death.

Vestil is **not liable** for a ny injury or property damage that occurs as a consequence of failing to apply either: 1) the instructions in this manual; or 2) the information provided on labels affixed to the product. Furthermore, failure to exercise good judgment and common sense might result in property damage, serious personal injury or death. **Such failure is solely the fault of the person(s) using the cylinder cabinet.**

SAFETY GUIDELINES

Failure to read and understand the instructions included in this manual before assembling or using the cabinet constitutes misuse of the product.

DANGER Failure to st ore compressed gases or liquids in a manner consistent with O SHA recommendations (29 CFR 1910 subpart H) might create a serious safety hazard. Reduce the possibility that a cylinder(s) might sustain damage and/or explode by applying common sense: install the cabinet in a location consistent with local requirements at law.

AWARNING Improper use might result in serious personal injuries or cylinder damage. To minimize the possibility of injury, ALL persons who might assemble, install or maintain the cabinet should apply the following instructions:

- Inspect the cabi net reg ularly; DO NO T use it unless it is in norm al con dition (se e "In spection & Maintena nce Instructions" on p. 2-3).
- DO NOT use the cabinet to store cylinders if the chains, hooks, D-rings or cabinet feet are structurally damaged. If you notice such structural damage, im mediately remove all cylinders, tag the cabinet "Out of Service", and report the problem to appropriate maintenance personnel.
- DO NOT modify the ca binet without first receiving written authorization from Vestil. <u>Unauthorized modifications might</u> make the cabinet unsafe to use.
- DO NOT install the cabinet in a location where water pools. Standing water might damage the feet of the cabinet and could eventually make the cabinet unstable.

NOTICE [(CYL -H-##-KD & CYL -V-1020-KD m odels only] T o ma ximize the service life of the cabinet, only use replacement parts either supplied or approved by Vestil.

Inspection & Maintenance Instructions

The cylinder cabinet requires minimal maintenance:

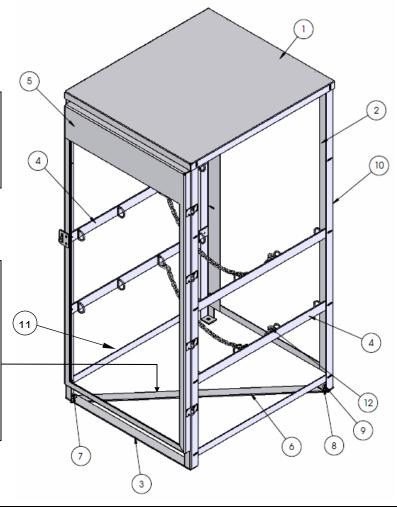
- 1) Apply grease to any hinge that squeaks or grinds;
- 2) Inspect the cabinet at least once ever y 2 weeks. Check the ca binet for corrosion and/or rust that might o ccur in places where the paint is damaged or missing:
 - i) Remove rust with a ste el bristle brush (or sandpaper); the n apply touchup paint or clear finish to the affected area;
 - ii) Inspect the feet of the cabinet to verify structural soundness:
 - Remove rust and reseal if necessary:

- Check for deformation (for example bending, warping, or cracking);
- iii) Inspect the cylinder supports (CYL-H models):
 - Remove rust and reseal if necessary;
 - Check for deformation (bending, warping, or cracking.
- iv) Inspect the chains, side bars (see Fig. 3 on p. 5) and D-rings, and snap hooks:
 - Replace damaged chains and snap hooks;
 - Contact Vestil to order replacement(s) if side bar or a D-ring(s) are damaged.

FIG. 1: CYL-V-510 parts identification diagram and parts list

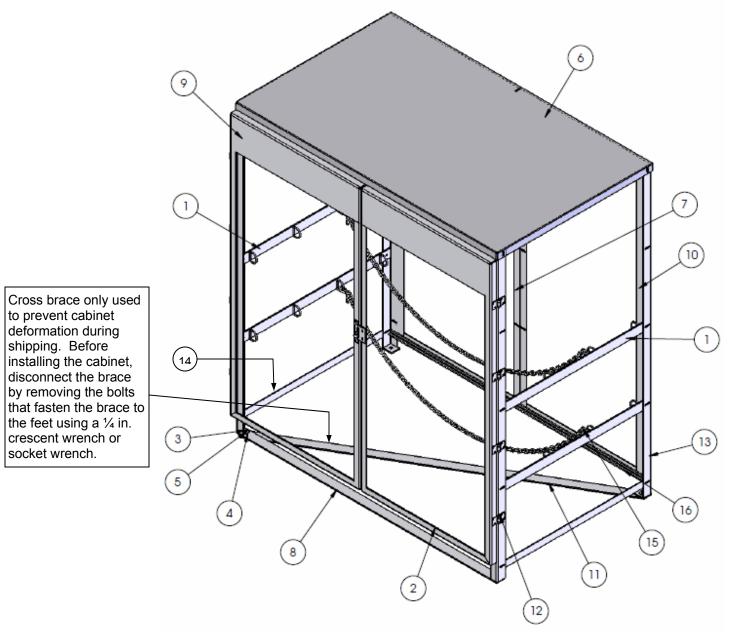
Attach the cabinet to the floor/supporting surface via the procedure described in "Step 8" on p. 11.

Cross brace only used to prevent cabinet deformation during shipping. Before installing the cabinet, disconnect the brace by removing the bolts that fasten the brace to the feet using a ¼ in. crescent wrench or socket wrench.



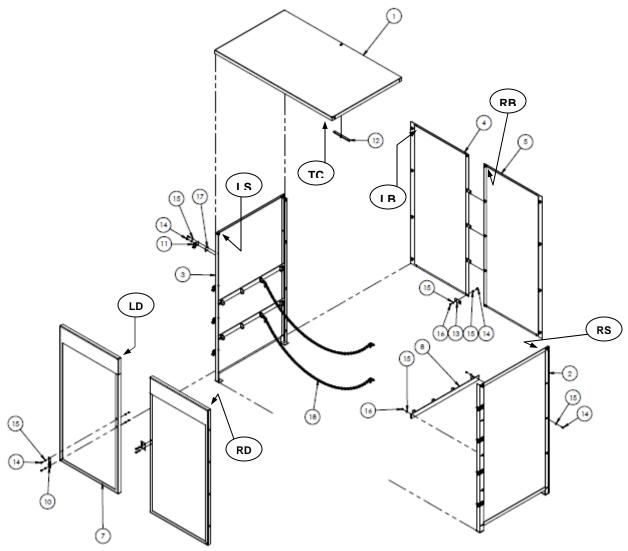
Item No.	Part No.	Description	Quantity
1	31-014-174	33in. x 38in. formed top panel	1
2	31-514-121	33in. x 70in. rear panel weldment	1
3	31-014-199	33in. frame brace	1
4	31-514-133	Chain attachment weldment with D-rings	4
5	31-514-124	30in. x 70in. door weldment	1
6	31-017-019	33in. shipping brace bar	1
7	11005	1/4 in. – 20 UNC x 1in. zinc-plated bolt	2
8	33208	1/4 in. x 11/4in. fender washer	4
9	37018	1/4 in. – 20 UNC zinc-plated nylock nut	2
10	31-514-154	70in. right side panel weldment	1
11	31-514-155	70in. left side panel weldment	1
12	99-645-014	3/16 in. x 36in. chain and snap hooks	2

FIG. 2: CYL-V-1020 parts identification diagram and parts list



Item No.	Part No.	Description	Quantity
1	31-514-133	Chain attachment weldment with D-rings	4
2	31-514-124	33in. x 70in. door weldment	1
3	1005	1/4 in. – 20 UNC x 1in. zinc-plated bolt	2
4	33208	1/4 in. x 11/4 in. fender washer	4
5	37018	1/4 in. zinc-plated nylock nut	2
6	31-014-196	65in. x 38in. formed top panel	1
7	31-514-130	65in. x 70in. left side rear panel weldment	1
8	31-014-201	65in. frame brace	1
9	31-514-128	65in. x 70in. left door weldment	1
10	31-514-131	65in. x 70in. right side rear panel weldment	1
11	31-017-020	65in. shipping brace	1
12	31-113-005	Door hinge shim	8
13	31-514-154	70in. x 33in. right side panel weldment	1
14	31-514-156	70in. x 33in. left side panel weldment	1
15	99-645-015	3/16in. x 70in. chain and snap hooks	2
16	31-014-265	63in. L-angle frame brace	1

FIG. 3: CYL-V-1020-KD parts identification diagram and parts list



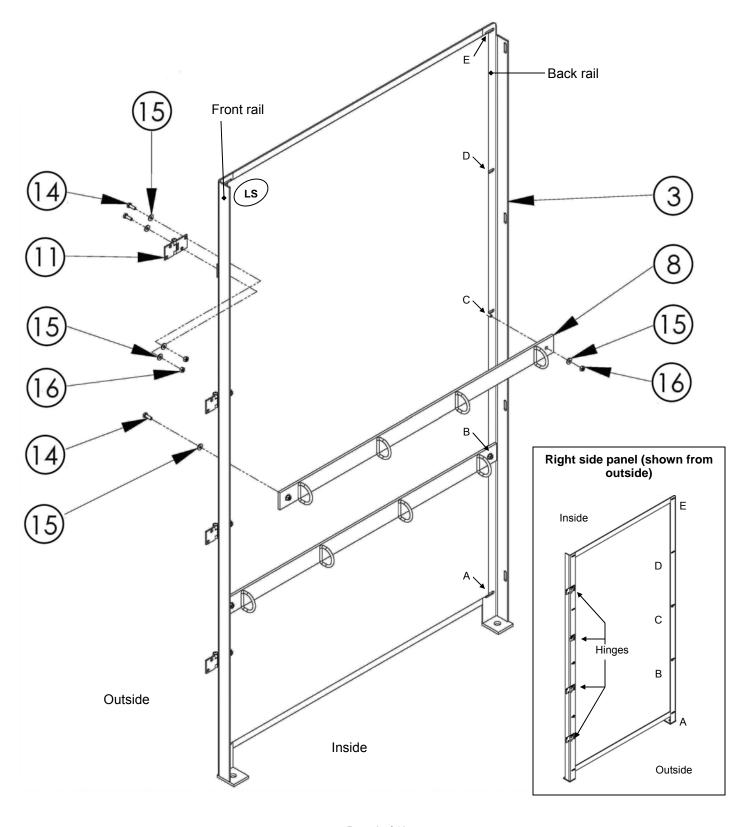
Item No.	Part No.	Description	Quantity
1	31-014-196	65in. x 38in. formed top cap (TC)	1
2	31-514-154	65in. x 70in. left side rear panel weldment (LB)	1
3	31-514-156	65in. x 70in. right side rear panel weldment	1
4	31-514-130	33in. x 70in. right side door panel	1
5	31-514-131	33in. x 70in. left side door panel	1
6	31-514-150	Side bar weldment (includes D-rings)	4
7	31-514-152	Door lock plate	1
8	31-514-133	Hinge	8
9	31-014-171	65in. frame brace	1
10	31-016-038	Formed top support	1
11	31-012-001	Bracket for rear panels	4
12	31-014-189	1/4 in. – 20 x 3/4 in. UNC bolt	67
13	31-016-042	1/4 in. narrow type A flat washer	134
14	11003	1/4 in20 zinc-plated nylock nut	67
15	33004	Door hinge shim	8
16	37018	70in. x 30in. right side panel	1
17	31-113-005	70in. x 30in. left side panel	1
18	99-645-015	3/16in. x 70in. chain with snap hooks	2

NOTE: In the diagram,
circled letters, like RB,
represent part identification
stickers applied to the
inside, upper left hand
corner of each panel.

RD = (#4) Right Door panel
LD = (#5) Left Door panel
RB = (#3) Right Back/rear
panel
RS = (#17) Right Side panel
LB = (#2) Left Back/rear
panel
LS = (#18) Left Side panel
TC = (#1) Top Cap

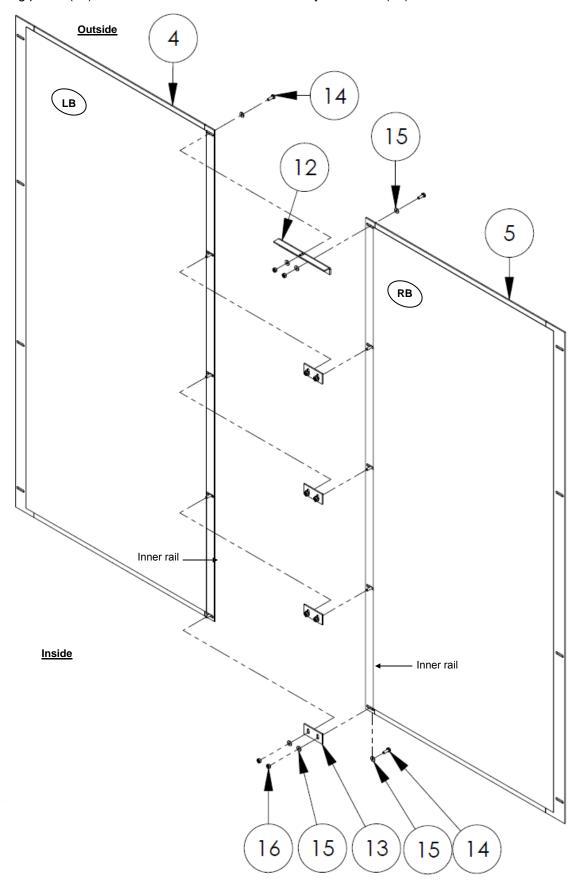
CYL-V-1020-KD Assembly Instructi ons: Each assembly step in cludes a dra wing which shows parts identified by circled n umbers. Num bers in pa rentheses correspond to the number rs in the drawings and to the item numbers of Fig. 3 on p. 5. [NOTE: Do not tighten the lock nuts completely until the cabinet is fully assembled and squared.] Assembly requires two ¼ in. crescent wrenches or socket wrenches.

Step 1: [Diagram below depicts attachments to the left side panel (3)] Fasten hinges (11) and side bars (8) to the left (3) and right (2) side panels. The front rail of bot h the left and right side panels have circular holes and elongated slots. The back rail only has 5 elongated slots (letters A-E). Slide a flat wa sher (15) onto fo ur bolts (14) and feed the b olts through slots B and C in the front and back rails, and then through the corresponding holes in the side bars (8). Secure the bars by putting another flat washer onto the free end of each bolt; then wind a lock nut (16) onto the end of each bolt.

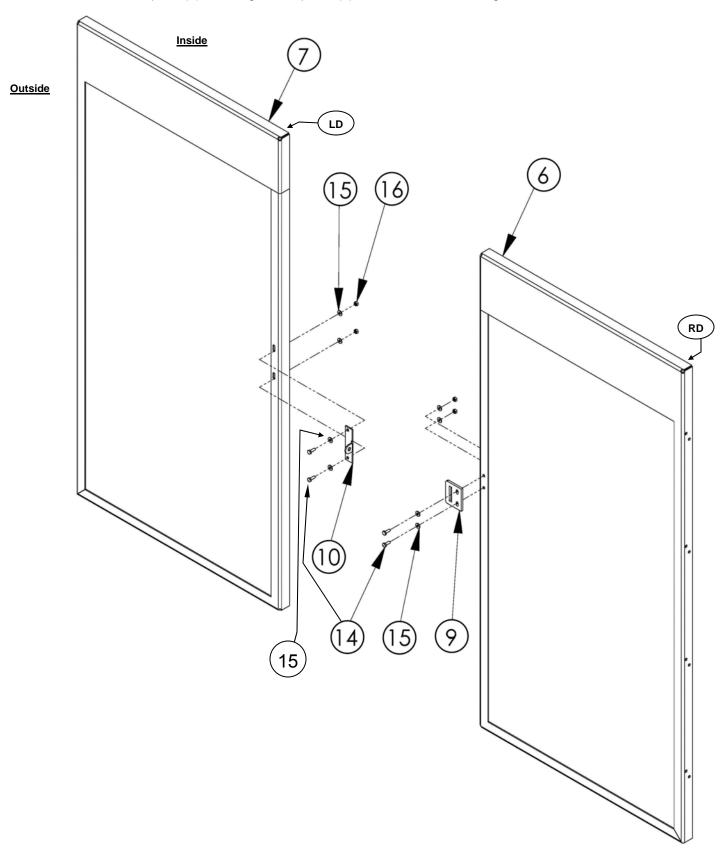


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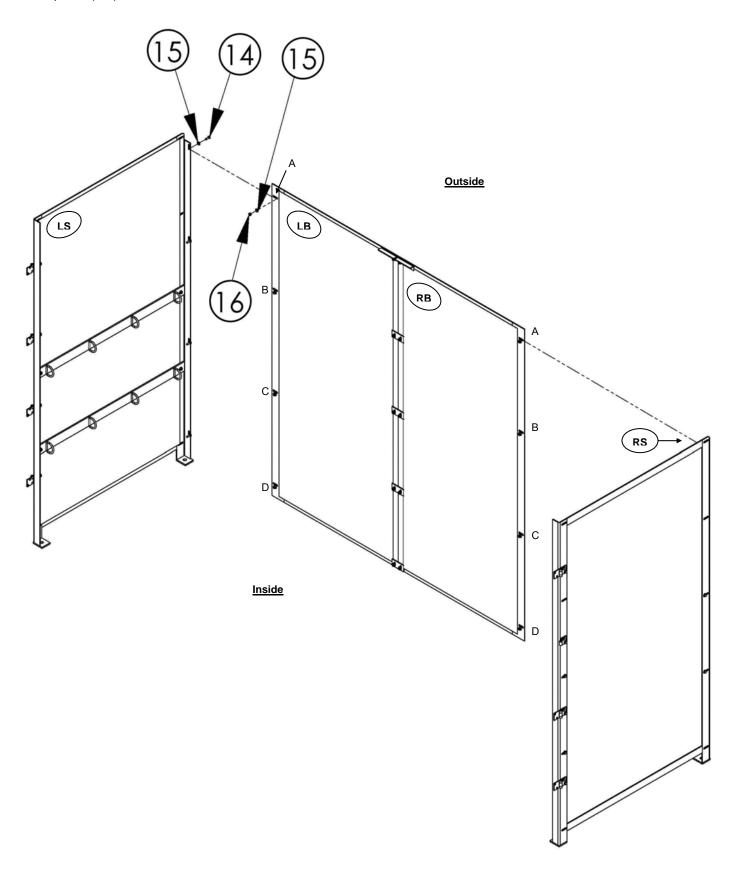
Step 2: Fasten the left (4) and right (5) rear panels together. Lay the rear/back weldments next to each other with the panel labeled "LB" to the left of panel "RB". Slide a flat washer onto ten bolts (14); feed the bolts through the slots in the inner rails of both panels as shown in the drawing below; then through the corresponding holes in the formed top support (12) and locking plates (13). Slide another flat washer followed by a lock nut (16) onto the free end of each bolt.



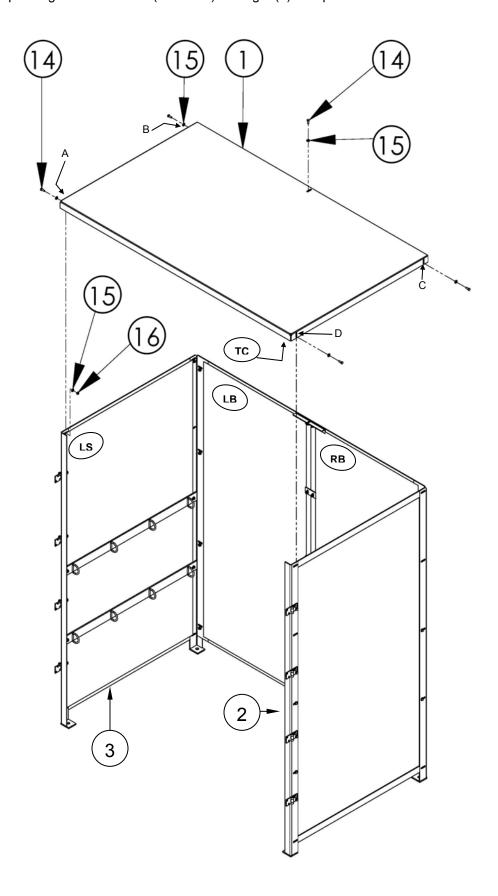
Step 3: Fasten door lock hardware to the left and right door panels. First, attach the formed door lock bracket (10) to the left door panel (7). Put a flat washer (15) onto two bolts (14); feed the bolts through the holes in the formed door lock bracket; then secure the connections by sliding another flat washer followed by a lock nut (16) onto the free ends of the bolts. Attach the door lock plate (9) to the right door panel (6) as shown in the drawing below.



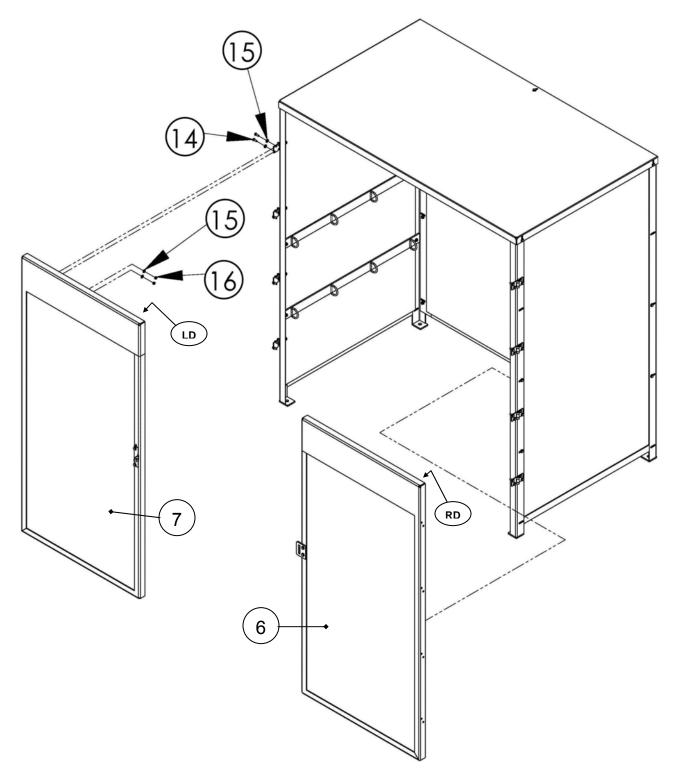
Step 4: Connect the side panels to the rear/back panels. Fasten the left side panel (LS) to the left rear/back panel (LB) using four bolts (14). Slide a flat washer onto the free end of four bolts (14); then feed a bolt through holes A-D in panel LB from the outside, and through the corresponding holes in panel LS. S ecure each connection with a flat washer followed by a lock nut. Repeat the fa stening process on the oth er side to connect the right side panel (RS) to the right back panel (RB).



Step 5: Fasten the formed top cap (1) to the supporting assembly. Set the formed top cap (1) on top of the supporting assembly. Sli de a flat washer onto each of four bolts (14); then feed the bolts through holes A-D in the top cap and through the corresponding holes in the left (LS and 3) and right (2) side panels



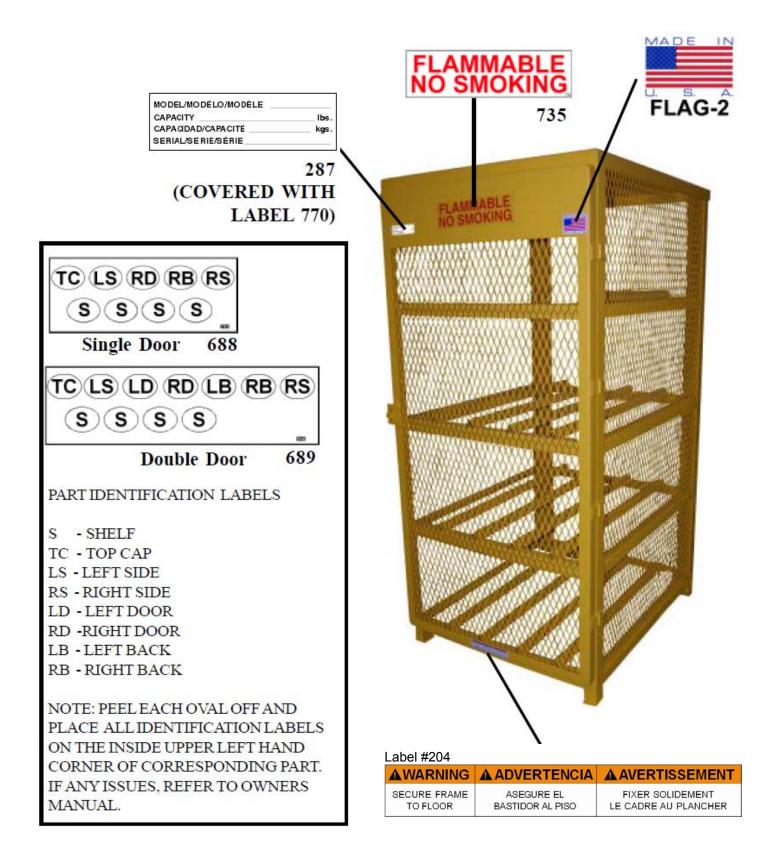
Step 6: Attach the doors to the cylin der cabinet. Connect the free ends of each hinge (fastened to the left side pan el (3)) to the left door panel (LD). First, put a flat washer (15) on a bolt (14); then feed the bolt through a hole in the top hinge and through the corresponding hole in the left door panel (7). Secure the connection with another flat washer and a lock washer (16). Repeat this process until every hinge on both the left and right door panels is securely fastened (via four bolts) to the cabinet.



Step 7: Square the assembled cabinet; then tighten the lock nuts on the bolts with ¼ in. crescent wrenches or socket wrenches.

Step 8: Secure the cabi net to the floor/su pporting surface. Mark the surface with the locations of the bolt holes in the feet; then dorill holes and install anchors and hardware according to the instructions provided by the anchor kit manufacturer.

FIG. 4: Label placement diagram, models CYL-H-KD & CYL-V-KD



LIMITED WARRANTY

Vestil Manufacturing Corporation ("Vestil") warrants this product to be free of defects in material and workmanship during the warranty period. Our warranty obligation is to provide a replacement for a defective original part if the part is covered by the warranty, after we receive a proper request from the warrantee (you) for warranty service.

Who may request service?

Only a warrantee may request service. You are a warrantee if you purchased the product from Vestil or from an authorized distributor AND Vestil has been fully paid.

What is an "original part"?

An original part is a part <u>used to make the product as shipped</u> to the warrantee.

What is a "proper request"?

A request for warranty service is proper if Vestil receives: 1) a photocopy of the <u>Customer Invoice</u> that displays the shipping date; AND 2) a <u>written request</u> for warranty service including your name and phone number. Send requests by any of the following methods:

MailFaxEmailVestil Manufacturing Corporation(260) 665-1339sales@vestil.com2999 North Wayne Street, PO Box 507PhoneAngola, IN 46703(260) 665-7586

In the written request, list the parts believed to be defective and include the address where replacements should be delivered.

What is covered under the warranty?

After Vestil receives your request for warranty service, an authorized representative will contact you to determine whether your claim is covered by the warranty. Before providing warranty service, Vestil may require you to send the entire product, or just the defective part or parts, to its facility in Angola, IN. The warranty covers defects in the following *original* dynamic components: motors, hydraulic pumps, electronic controllers, switches and cylinders. It also covers defects in *original* parts that wear under normal usage conditions ("wearing parts"): bearings, hoses, wheels, seals, brushes, batteries, and the battery charger.

How long is the warranty period?

The warranty period for original components is <u>90 days</u>. The warranty period begins on the date when Vestil ships the product to the warrantee. If the product was purchased from an authorized distributor, the period begins when the distributor ships the product. Vestil may extend the warranty period for products shipped from authorized distributors by *up to* 30 days to account for shipping time.

If a defective part is covered by the warranty, what will Vestil do to correct the problem?

Vestil will provide an appropriate replacement for any *covered* part. An authorized representative of Vestil will contact you to discuss your claim.

What is not covered by the warranty?

- 1. Labor;
- Freight;
- 3. Occurrence of any of the following, which automatically voids the warranty:
 - · Product misuse:
 - · Negligent operation or repair;
 - Corrosion or use in corrosive environments;
 - Inadequate or improper maintenance;
 - Damage sustained during shipping;
 - Collisions or other incidental contacts causing damage to the product;
 - <u>Unauthorized modifications</u>: DO NOT modify the product IN ANY WAY without first receiving written authorization from Vestil. Modification(s) might make the product unsafe to use or might cause excessive and/or abnormal wear.

Do any other warranties apply to the product?

Vestil Manufacturing Corp. makes no other express warranties. All implied warranties are disclaimed to the extent allowed by law. Any implied warranty not disclaimed is limited in scope to the terms of this Limited Warranty.

