



# Vestil Manufacturing Corp.

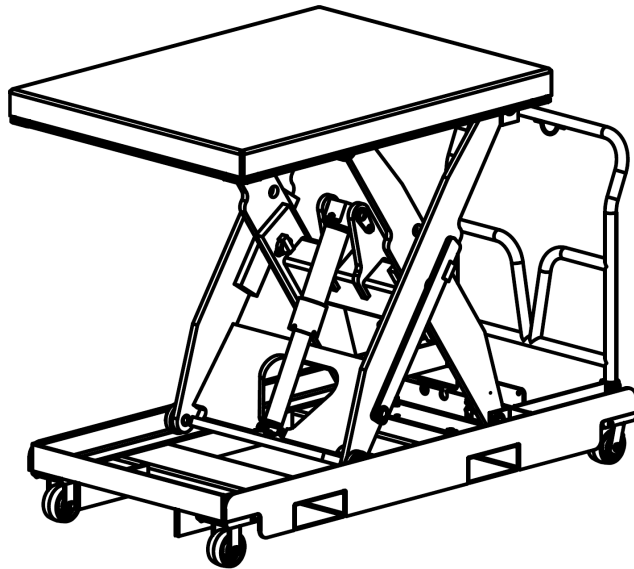
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## EHLTP-Series Portable Electric-Hydraulic Lift Tables



### Receiving Instructions

After delivery, remove the packaging from the product. Inspect the product closely to determine whether it sustained damage during transport. If damage is discovered, record a complete description of it on the bill of lading. If the product is undamaged, discard the packaging.

**NOTE:** The end-user is solely responsible for confirming that product design, use, and maintenance comply with laws, regulations, codes, and mandatory standards applied where the product is used.

### Technical Service & Replacement Parts

For answers to questions not addressed in these instructions and to order replacement parts, labels, and accessories, call our Technical Service and Parts Department at (260) 665-7586. The Department can also be contacted online at <https://www.vestil.com/page-parts-request.php>.




### Electronic Copies of Instruction Manuals

Additional copies of this instruction manual may be downloaded from <https://www.vestil.com/page-manuals.php>.

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## SIGNAL WORDS

This manual uses SIGNAL WORDS to indicate the likelihood of personal injuries, as well as the probable seriousness of those injuries, if the product is misused in the ways described. Other signal words call attention to uses of the product likely cause property damage. The following are signal words used in this manual and their definitions.

 <b>DANGER</b>	Identifies a hazardous situation which, if not avoided, <b>WILL</b> result in <b>DEATH</b> or <b>SERIOUS INJURY</b> . Use of this signal word is limited to the most extreme situations.
 <b>WARNING</b>	Identifies a hazardous situation which, if not avoided, <b>COULD</b> result in <b>DEATH</b> or <b>SERIOUS INJURY</b> .
 <b>CAUTION</b>	Indicates a hazardous situation which, if not avoided, <b>COULD</b> result in <b>MINOR</b> or <b>MODERATE</b> injury.
<b>NOTICE</b>	Identifies practices likely to result in product/property damage, such as operation that might damage the product.

## SAFETY INSTRUCTIONS

Vestil strives to identify all hazards associated with the use of our products. However, material handling is dangerous and no manual can address every risk. The most effective way to avoid injury is for the end-user to exercise sound judgment whenever using this product.

### **WARNING**

Improper or careless operation might result in serious personal injuries or death.

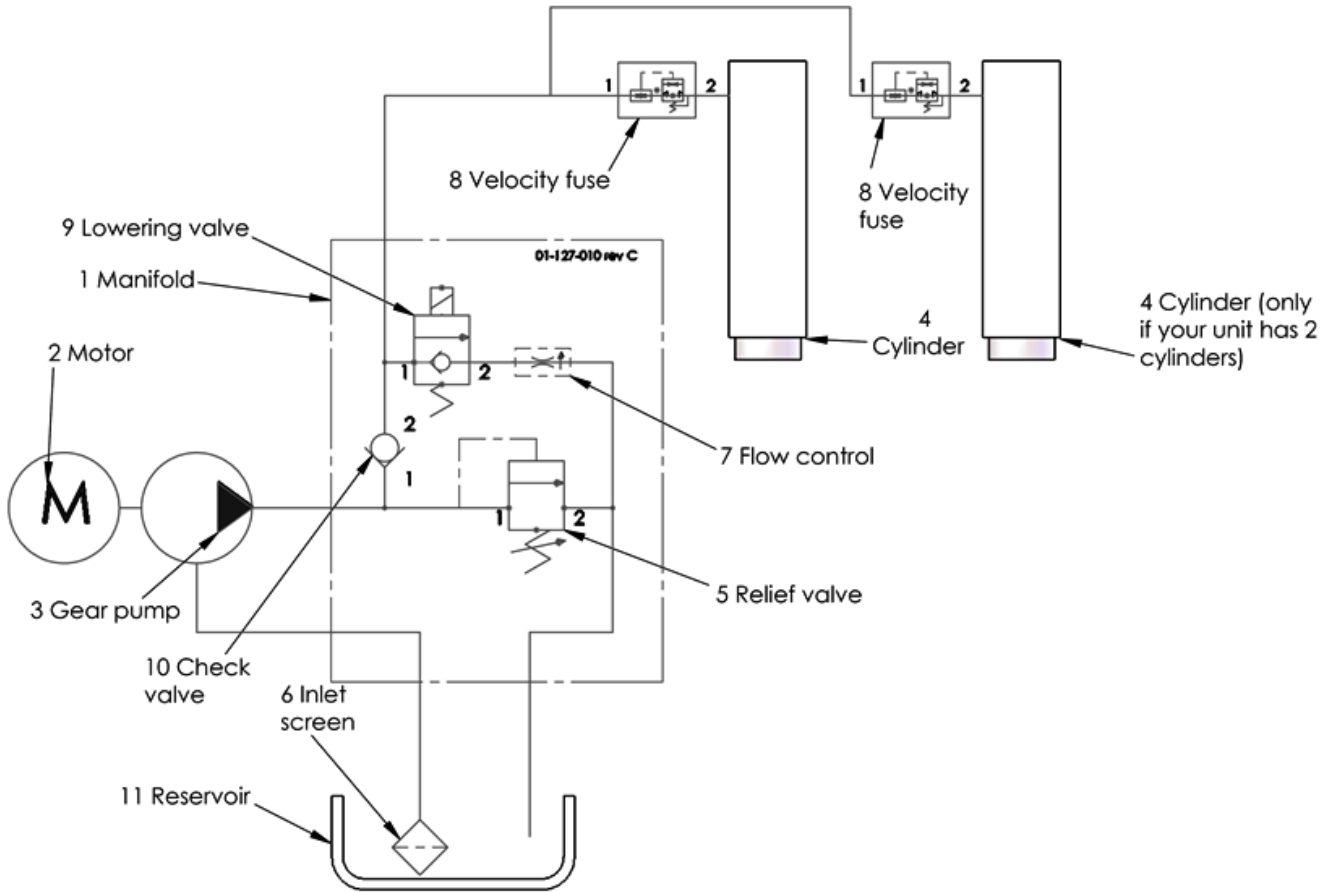
- Read the entire manual before assembling, using, or servicing the cart. A copy of this manual must be available at all times to persons who assemble, use, or service the cart. Read the manual whenever necessary to refresh your understanding of use and maintenance procedures.
- This product presents pinch point and hydraulic pressure hazards to the user and bystanders. ALWAYS follow the instructions provided in this manual to avoid injury.
- DO NOT operate a lift table with its perimeter toe guard removed, disabled, or inoperable.
- DO NOT attempt to lift a load that weighs more than the capacity of your cart. The cart is labeled with its capacity. See Label 1153 as shown in [LABELING DIAGRAM](#) on p. 25. Also see [SPECIFICATIONS](#) on p. 19. Handle only stable and safely arranged loads within the capacity of the cart.
- DO NOT allow people to stand or sit on either the cart or the load. DO NOT transport people.
- Stand clear of the cart while raising or lowering the tabletop. Particularly avoid pivot/pinch points while the tabletop rises and lowers.
- DO NOT attempt to lift an overhanging or cantilevered load.
- DO NOT reach through the legs or crawl under the tabletop unless maintenance props are deployed.
- DO NOT use the cart in corrosive environments.
- ONLY use the cart on compacted, improved surfaces capable of supporting the combined weight of the cart plus a maximum rated load. ONLY use on even, level surfaces.
- DO NOT perform maintenance on this cart or its power unit UNLESS the cart is unloaded and maintenance props are in place. If repairs are necessary, ONLY install manufacturer-approved replacement parts.
- Center and evenly distribute loads on the tabletop. Strap loads to the tabletop when necessary to prevent rolling or sliding.
- Inspect the unit according to the [INSPECTIONS](#) instructions on p. 21, 22, & 23. DO NOT use the cart unless it is in [SATISFACTORY CONDITION](#). See [RECORD OF SATISFACTORY CONDITION](#), p. 20.
- ALWAYS observe the cart while raising and lowering the tabletop. It should rise smoothly and evenly from side-to-side. Watch for binding or jerky movement and listen for unusual noises. Tag the unit "Out of order" and remove it from service if you notice damage or observe (see or hear) anything about the cart that is abnormal.
- Always watch the load carefully while raising and lowering the tabletop.
- DO NOT continue to press the UP button if the tabletop is fully elevated.
- Before leaving the cart unattended, unload it and relieve hydraulic pressure by pressing the DOWN button and holding it until the tabletop is completely lowered.
- DO NOT use the cart UNLESS all labels are in place & easily readable. See [LABELING DIAGRAM](#), p. 25.
- DO NOT modify this product in any way. Modifications automatically void the limited warranty and might make the cart unsafe to use.

## NOTICE

Proper use and maintenance are essential for this product to function properly.

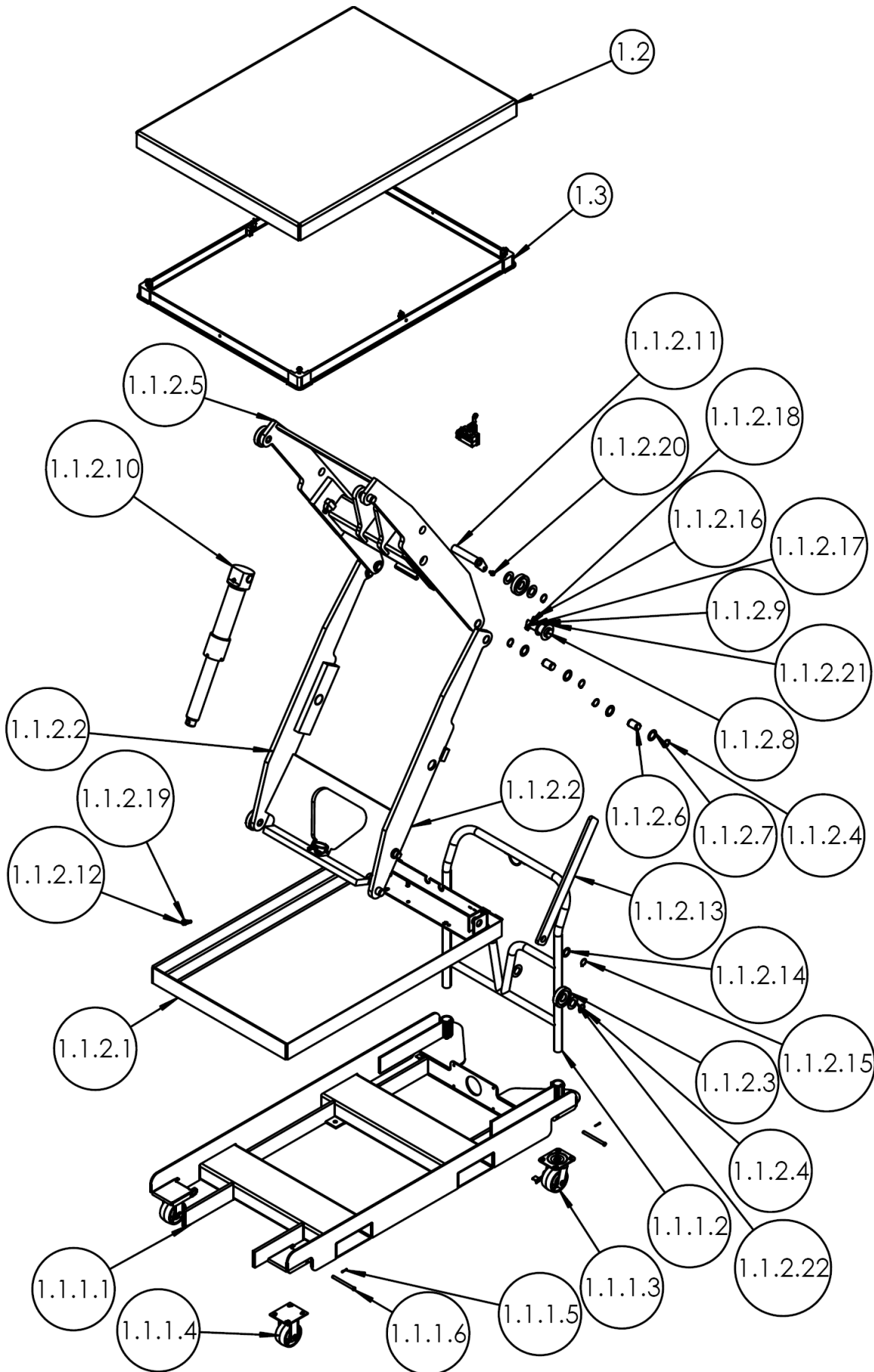
- Periodically lubricate pivot points with bearing grease.
- Keep the product clean & dry. Store this cart indoors.
- Only use manufacturer-approved replacement parts. Order replacement/spare parts for this equipment by contacting the [TECHNICAL SERVICE DEPARTMENT](#).
- DO NOT use brake fluid or jack oils in the hydraulic system. If oil is needed, only use an anti-wear hydraulic oil with a viscosity grade of 150 SUS at 100°F, (ISO 32 cSt @ 40°C), or Dexron transmission fluid.
- Contact the manufacturer for SDS (Safety Data Sheet) documentation

### HYDRAULIC CIRCUIT DIAGRAM (01-125-010 REV. C)



Item	Description	Qty.
1	Manifold	1
2	Motor	1
3	Gear pump	1
4	Cylinder, ram style	2
5	Relief valve, 210 bar, size 08	1
6	Inlet screen, 100 mesh 2" pancake	1
7	Flow control, pressure compensated	1
8	Velocity fuse, adjustable, brass	2
9	Lowering solenoid valve, cartridge, NC, no coil, w/ nut	1
10	Check valve	1
11	Reservoir	1

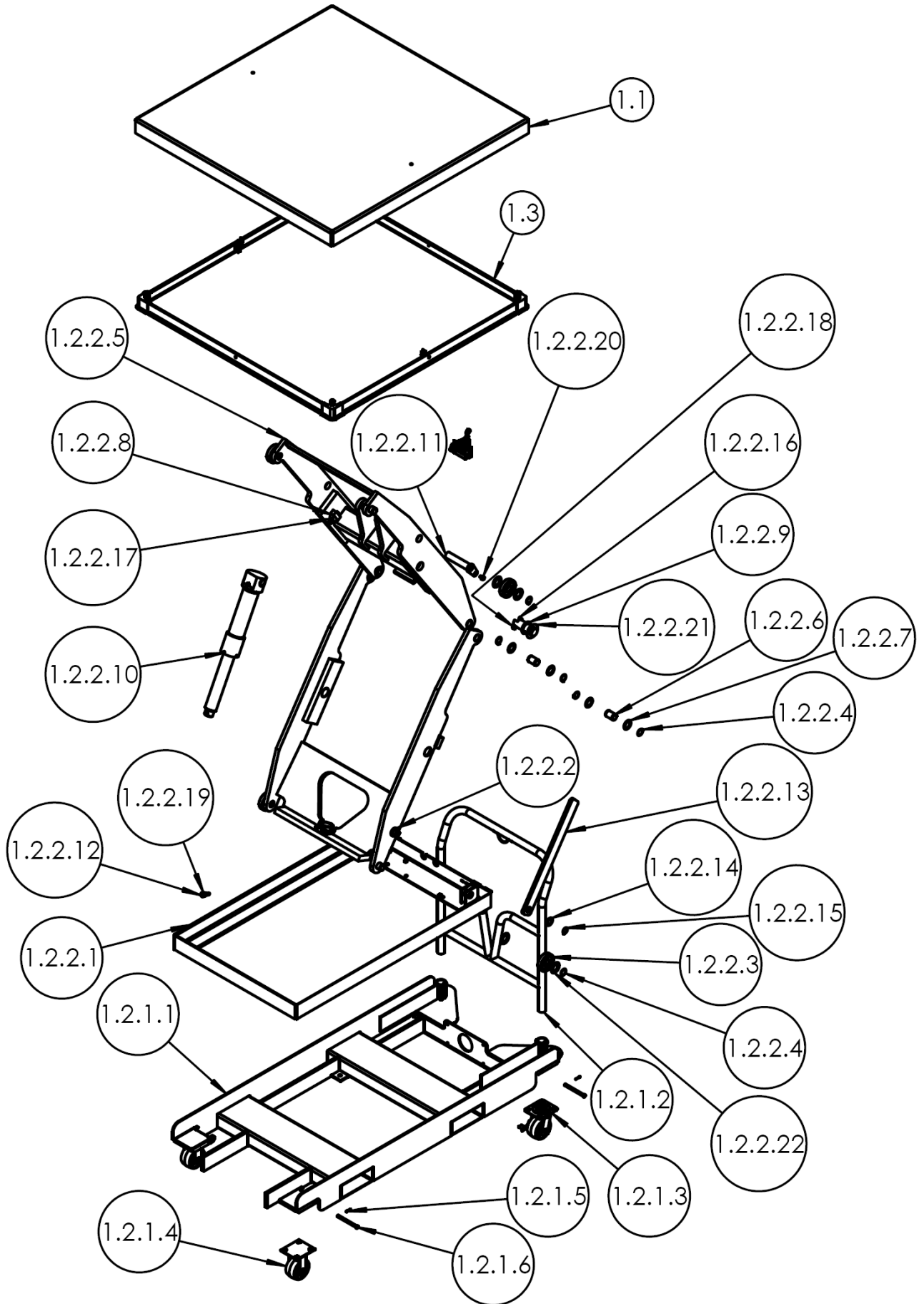
### EXPLODED VIEW: EHLTP-3648-1/2/3-48-D2 (01-006-424)



**BILL OF MATERIALS: EHLTP-3648-1/2/3-48-D2 (01-006-424)**

ITEM NO	PART NO	DESCRIPTION	QTY.
1	01-002-424	FINAL ASSEMBLY W/O POWER UNIT	1
	01-002-430	EHLTP-3648-1-48-D2	1
	01-002-436	EHTLP-3648-2-48-D2	1
1.1	01-514-202	EHLTP-3648-3-48-D2	1
	01-514-196	WELDMENT, SUB-FRAME & FRAME/LEG SET, 48 LG, DC	1
	01-514-197	EHLTP-3648-1-48-D2: 1K	1
1.1.1	01-514-189	EHTLP-3648-2-48-D2: 2K	1
1.1.1.1	01-514-185	EHLTP-3648-3-48-D2: 3K	1
1.1.1.2	16-025-030	SUB-ASSEMBLY, BASE W/ CASTERS AND HANDLE, DC, 48"	1
1.1.1.3	16-132-259-801	WELDMENT, SUB-FRAME, PORTABLE, 30" WIDE X 48" LG, DC	1
1.1.1.4	16-132-260-801	HANDLE, CHROMED, PUSH CARTS	1
1.1.1.5	65076	CASTER, SWIVEL W/ BRAKE, 4X2	2
1.1.1.6	99-112-006	CASTER, RIGID, 4X2	2
1.1.2	24-002-030	Ø1/8" X 1" COTTER PIN, Z-PLATED	4
	24-002-040	PIN, CLEVIS	4
	24-002-050	FINAL ASSEMBLY W/O POWER UNIT (NO DECK)	1
1.1.2.1	01-514-007	EHLTP-3648-1-48-D2	1
1.1.2.2	24-510-008	EHTLP-3648-2-48-D2	1
1.1.2.3	01-527-001	EHLTP-3648-3-48-D2	1
1.1.2.4	68021	WELDMENT, FRAME ASSEMBLY	1
1.1.2.5	24-510-014	WELDMENT, LEG, OUTER, SINGLE CYL.	1
1.1.2.6	01-112-004	ROLLER W/ BUSHING	4
1.1.2.7	33454	EXTERNAL RETAINING RING, PHOSPHATE FINISH, 1-1/8"	12
1.1.2.8	01-112-019	WELDMENT, LEG, INNER, SINGLE CYL	1
1.1.2.9	33474	PIN, CLEVIS	4
1.1.2.10	99-021-903-001	NARROW MACHINERY BUSHING, PLAIN FINISH, 1 3/4" X 18GA	8
	99-521-906-002	PIN, SCISSOR PIVOT, Ø1 1/2"	2
	99-521-901-002	SPACER, SHIM, 1 1/2" ID X 2 1/4 OD X 18 GA	2
1.1.2.11	24-612-003	CYLINDER, HYDRAULIC	1
1.1.2.12	01-118-001	EHLTP-3648-1-48-D2: Ø2" X 10" RAM STYLE, MACHINED END	1
1.1.2.13	24-037-001	EHTLP-3648-2-48-D2: Ø2.5" X 10" RAM STYLE, MACHINED END	1
1.1.2.14	33444	EHLTP-3648-3-48-D2: Ø3" X 10" RAM STYLE, MACHINED END, 3GPM VF	1
1.1.2.15	20-117-003	WELDMENT, CYLINDER PIN	1
1.1.2.16	26333	BOLT, CYLINDER RETAINING	1
1.1.2.17	33006	MAIN PROP, EHLT	2
1.1.2.18	37021	MACHINE BUSHING, Ø 1 X 18 GA.	2
1.1.2.19	36209	EXTERNAL RETAINING RING, 1" DIA SHAFT	2
1.1.2.20	32415	SHOULDER SCREW, GRADE 2, 0.375x1.5" LG	2
1.1.2.21	01-115-002	FLAT WASHER, ZINC PLATED, USS, Ø5/16"	2
1.1.2.22	01-115-001	NYLON INSERT LOCK NUT, GRADE 2, ZINC FINISH, 5/16"-18	2
1.2	24-513-103	1/2 - 13 HEX JAM NUT PLAIN, GRADE A	1
1.3	01-515-015	Ø5/16 - 18 x 1/2 HWH THREAD CUTTING SCREW, TYPE F, ZINC	1
*2	*01-160-001	WASHER, THRUST BEARING	2
		WASHER, THRUST BEARING, 1 1/8 ID	8
		WELDMENT, DECK (3" SIDES)	1
		<a href="#">SUB-ASSEMBLY, TOE GUARD, 36" X 48", INCLUDES HARDWARE &amp; SWITCHES</a> (see exploded view on p. 19)	1
		<a href="#">*POWER UNIT SUB-ASSEMBLY</a> (see p. 16, 17)	1

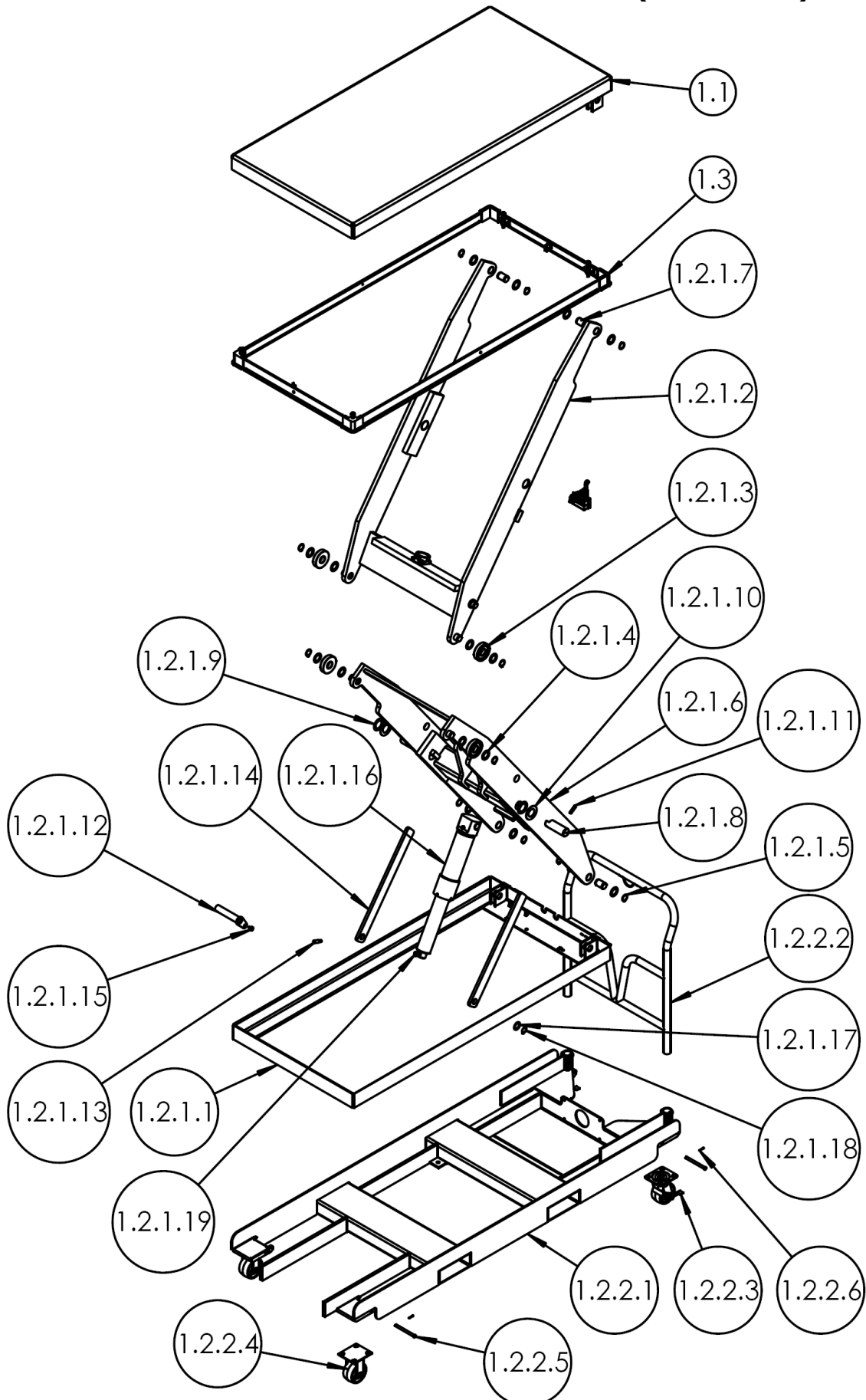
### EXPLODED VIEW: EHLTP-4848-1/2/3-48-D2 (01-006-442)



**BILL OF MATERIALS: EHLTP-4848-1/2/3-48-D2 (01-006-442)**

ITEM NO	PART NO	DESCRIPTION	QTY.
1	01-002-442	FINAL ASSEMBLY W/O POWER UNIT	1
	01-002-448	EHLTP-4848-1-48-D2	1
	01-002-454	EHLTP-4848-2-48-D2	1
1.1	24-513-005	EHLTP-4848-3-48-D2	1
1.2	24-513-005	WELDMENT,DECK (3" SIDES)	1
	01-514-202	WELDMENT, SUB-FRAME & FRAME/LEG SET, 48 LG, DC	1
	01-514-196	EHLTP-4848-1-48-D2: 1K	1
	01-514-197	EHLTP-4848-2-48-D2: 2K	1
1.2.1	01-514-189	EHLTP-4848-3-48-D2: 3K	1
1.2.1.1	01-514-189	SUB-ASSEMBLY, BASE W/ CASTERS AND HANDLE, DC, 48"	1
1.2.1.1	01-514-185	WELDMENT, SUB-FRAME, PORTABLE, 30" WIDE X 48" LG, DC	1
1.2.1.2	16-025-030	HANDLE, CHROMED, PUSH CARTS	1
1.2.1.3	16-132-259-801	CASTER, SWIVEL W/ BRAKE, 4X2	2
1.2.1.4	16-132-260-801	CASTER, RIGID, 4X2	2
1.2.1.5	65076	Ø1/8" X 1" COTTER PIN, Z-PLATED	4
1.2.1.6	99-112-006	PIN, CLEVIS	4
1.2.2	24-002-030	FINAL ASSEMBLY W/O POWER UNIT (NO DECK)	1
	24-002-040	EHLTP-4848-1-48-D2	1
	24-002-050	EHLTP-4848-2-48-D2	1
1.2.2.1	01-514-007	EHLTP-4848-3-48-D2	1
1.2.2.1	01-514-007	WELDMENT, FRAME ASSEMBLY	1
1.2.2.2	24-510-008	WELDMENT, LEG, OUTER, SINGLE CYL.	1
1.2.2.3	01-527-001	ROLLER W/ BUSHING	4
1.2.2.4	68021	EXTERNAL RETAINING RING, PHOSPHATE FINISH, 1-1/8"	12
1.2.2.5	24-510-014	WELDMENT, LEG, INNER, SINGLE CYL	1
1.2.2.6	01-112-004	PIN, CLEVIS	4
1.2.2.7	33454	NARROW MACHINERY BUSHING, PLAIN FINISH, 1 3/4" X 18 GA	8
1.2.2.8	01-112-019	PIN, SCISSOR PIVOT, Ø1 1/2"	2
1.2.2.9	33474	SPACER, SHIM, 1 1/2" ID X 2 1/4 OD X 18 GA	2
1.2.2.10	99-021-903-001	CYLINDER, HYDRAULIC	1
	99-521-906-002	EHLTP-4848-1-48-D2: Ø2" X 10" RAM STYLE, MACHINED END	1
	99-521-901-002	EHLTP-4848-2-48-D2: Ø2.5" X 10" RAM STYLE, MACHINED, 3GPM VF	1
1.2.2.11	24-612-003	EHLTP-4848-3-48-D2: Ø3" X 10" RAM STYLE, MACHINED, 3GPM VF	1
1.2.2.11	24-612-003	WELDMENT, CYLINDER PIN	1
1.2.2.12	01-118-001	BOLT, CYLINDER RETAINING	1
1.2.2.13	24-037-001	MAIN PROP, EHLT	2
1.2.2.14	33444	MACHINE BUSHING, Ø 1 X 18 GA.	2
1.2.2.15	20-117-003	EXTERNAL RETAINING RING, 1" DIA SHAFT	2
1.2.2.16	26333	SHOULDER SCREW, GRADE 2, 0.375x1.5" LG	2
1.2.2.17	33006	FLAT WASHER,ZINC PLATED,USS, Ø5/16"	2
1.2.2.18	37021	NYLON INSERT LOCK NUT, GRADE 2, ZINC FINISH, 5/16"-18	2
1.2.2.19	36209	1/2 - 13 HEX JAM NUT PLAIN, GRADE A	1
1.2.2.20	32415	Ø5/16 - 18 x 1/2 HWH THREAD CUTTING SCREW, TYPE F, ZINC	1
1.2.2.21	01-115-002	WASHER, THRUST BEARING	2
1.2.2.22	01-115-001	WASHER, THRUST BEARING, 1 1/8 ID	8
1.3	01-515-013	<a href="#">SUB-ASSEMBLY, TOE GUARD, 48" X 48", INCLUDES HARDWARE &amp; SWITCHES</a> (see exploded view on p. 19)	1
*2	*01-160-001	* <a href="#">POWER UNIT SUB-ASSEMBLY</a> (see p. 16, 17)	1

### EXPLODED VIEW: EHLTP-3064-1/2/3-60-D2 (01-006-460)

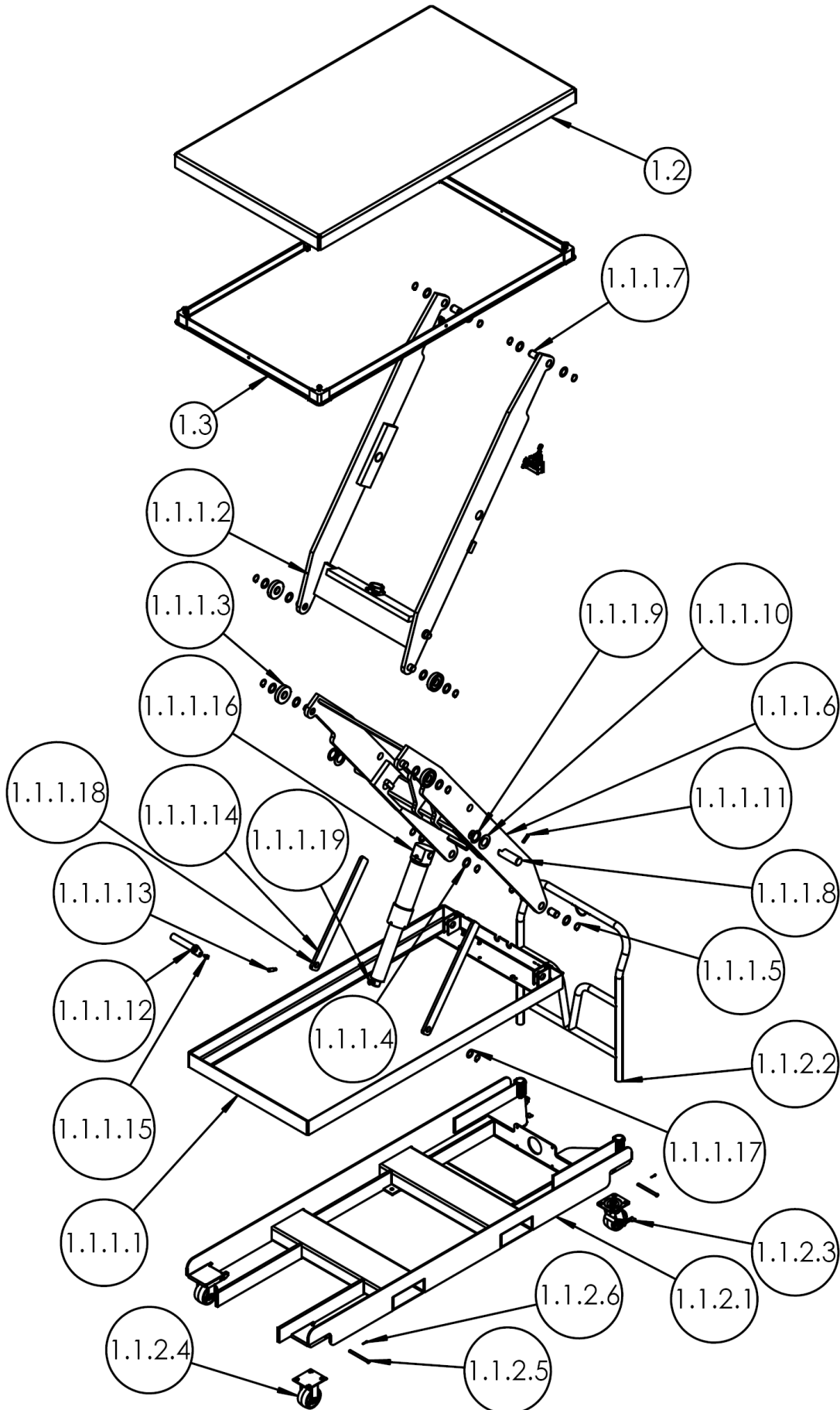




**BILL OF MATERIALS: EHLTP-3064-1/2/3-60-D2 (01-006-460)**

ITEM NO	PART NO	DESCRIPTION	QTY.
1	01-002-460	FINAL ASSEMBLY W/O POWER UNIT	1
	01-002-466	EHLTP-3064-1-60-D2	1
	01-002-472	EHLTP-3064-2-60-D2	1
1.1	01-513-027	WELDMENT, DECK (3" SIDES)	1
1.2	01-514-198	WELDMENT, SUB-FRAME & FRAME/LEG SET, 60 LG, DC	1
	01-514-199	EHLTP-3064-1-60-D2: 1K	1
	01-514-200	EHLTP-3064-2-60-D2: 2K	1
1.2.1	24-002-170	FINAL ASSEMBLY. W/O POWER UNIT, W/O DECK	1
	24-002-180	EHLTP-3064-1-60-D2	1
	24-002-230	EHLTP-3064-2-60-D2	1
1.2.1.1	01-514-008	WELDMENT, FRAME ASSEMBLY	1
1.2.1.2	24-510-033	WELDMENT, LEG, OUTER	1
	24-510-033	EHLTP-3064-1-60-D2: SINGLE CYL., 30" FRAME	1
	24-510-036	EHLTP-3064-2-60-D2: SINGLE CYL., 30" FRAME	1
1.2.1.3	01-527-001	ROLLER W/ BUSHING	4
1.2.1.4	33454	NARROW MACHINERY BUSHING, PLAIN FINISH, 1 3/4" X 18 GA	16
1.2.1.5	68021	EXTERNAL RETAINING RING, PHOSPHATE FINISH, 1-1/8"	12
1.2.1.6	24-510-041	WELDMENT, LEG, INNER, SINGLE CYL., 30" FRAME	1
	24-510-	EHLTP-3064-1-60-D2: SINGLE CYL.	1
	24-510-	EHLTP-3064-2-60-D2: SINGLE CYL.	1
1.2.1.7	01-112-004	EHLTP-3064-3-60-D2: DOUBLE CYL.	1
1.2.1.7	01-112-004	PIN, CLEVIS	4
1.2.1.8	01-112-019	PIN, SCISSOR PIVOT, Ø1 1/2"	2
1.2.1.9	33474	SPACER, SHIM, 1 1/2" ID X 2 1/4 OD X 18 GA	2
1.2.1.10	01-115-002	WASHER, THRUST BEARING	2
1.2.1.11	64311	PIN, SPRING Ø 3/8 X 1 1/2" LG	2
1.2.1.12	24-612-003	WELDMENT, CYLINDER PIN	1
1.2.1.13	01-118-001	BOLT, CYLINDER RETAINING	1
1.2.1.14	24-037-001	MAIN PROP, EHLT	2
1.2.1.15	32415	Ø5/16 - 18 x 1/2 HWH THREAD CUTTING SCREW, TYPE F, ZINC	1
1.2.1.16	99-521-906-002	CYLINDER, HYDRAULIC	1
	99-521-901-002	EHLTP-3064-1-60-D2: Ø2 1/2" X 10" RAM STYLE, MACHINED END, 3GPM VF	1
	99-521-906-001	EHLTP-3064-2-60-D2: Ø3" X 10" RAM STYLE, MACHINED END, 3GPM VF	2
1.2.1.17	33444	EHLTP-3064-3-60-D2: Ø2 1/2" X 10" RAM STYLE, MACHINED END, 2GPM VF	2
1.2.1.17	33444	MACHINE BUSHING, Ø 1 X 18 GA.	2
1.2.1.18	20-117-003	EXTERNAL RETAINING RING, 1" DIA SHAFT	2
1.2.1.19	36209	1/2 - 13 HEX JAM NUT PLAIN, GRADE A	1
1.2.2	01-514-195	SUB-ASSEMBLY, BASE W/ CASTERS AND HANDLE, DC, 64"	1
1.2.2.1	01-514-186	WELDMENT, SUB-FRAME, PORTABLE, 30" WIDE X 64" LG, DC	1
1.2.2.2	16-025-030	HANDLE, CHROMED, PUSH CARTS	1
1.2.2.3	16-132-259-801	CASTER, SWIVEL W/ BRAKE, 4X2	2
1.2.2.4	16-132-260-801	CASTER, RIGID, 4X2	2
1.2.2.5	99-112-006	PIN, CLEVIS	4
1.2.2.6	65076	Ø1/8" X 1" COTTER PIN, Z-PLATED	4
1.3	<a href="#">01-515-068</a>	<a href="#">SUB-ASSEMBLY, TOE GUARD, 30" X 64", INCLUDES HARDWARE &amp; SWITCHES</a> (see exploded view on p. 19)	1
*2	*01-160-001	*POWER UNIT SUB-ASSEMBLY (see p. 16, 17)	1

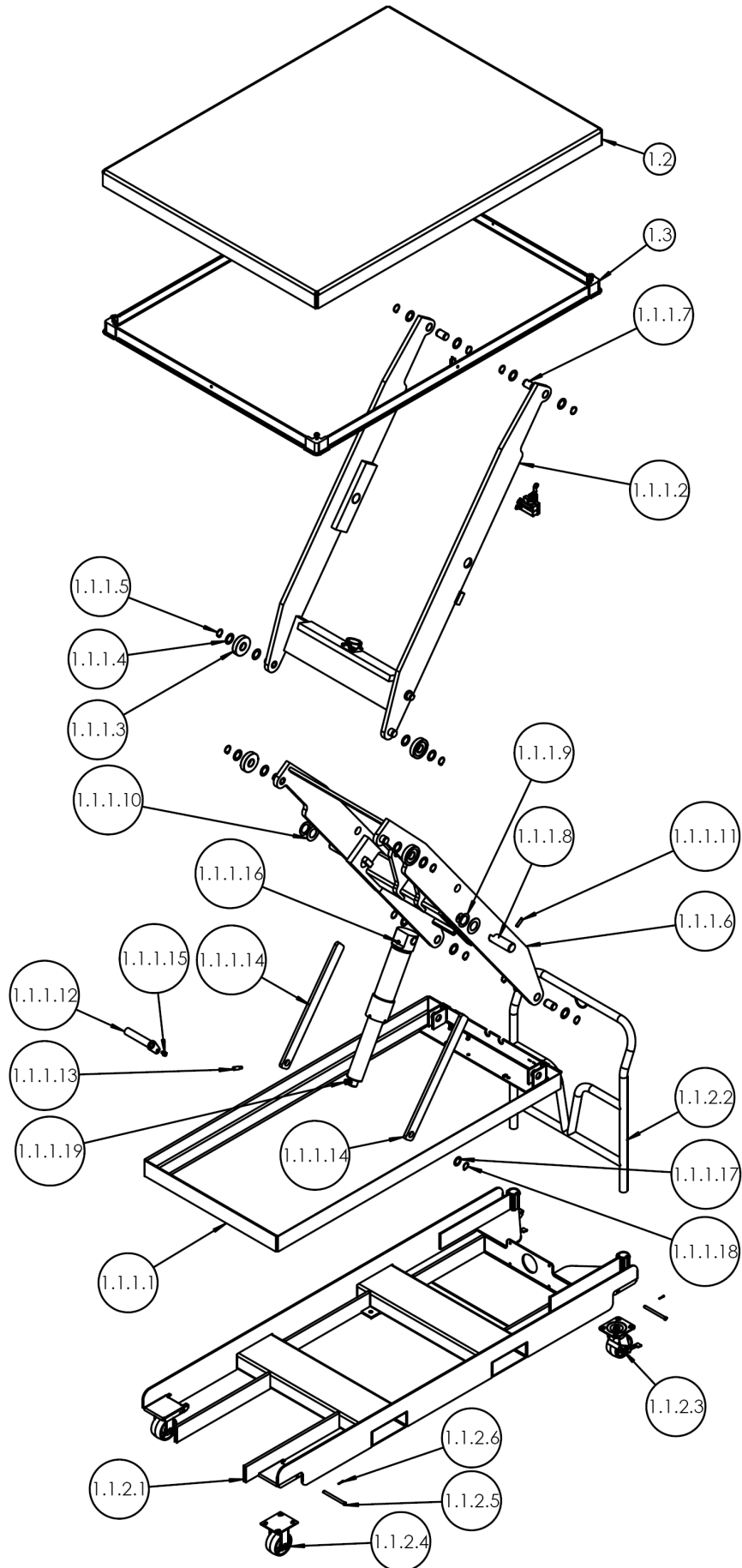
### EXPLODED VIEW: EHLTP-3664-1/2/3-60-D2 (01-006-478)



**BILL OF MATERIALS: EHLTP-3664-1/2/3-60-D2 (01-006-478)**

ITEM NO	PART NO	DESCRIPTION	QTY.
1	01-002-478	FINAL ASSEMBLY W/O POWER UNIT	1
	01-002-484	EHLTP-3664-1-60-D2	1
	01-002-490	EHTLP-3664-2-60-D2 EHLTP-3664-3-60-D2	1
1.1	01-514-198	WELDMENT, SUB-FRAME & FRAME/LEG SET, 60 LG, DC	1
	01-514-199	EHLTP-3664-1-60-D2: 1K	1
	01-514-200	EHTLP-3664-2-60-D2: 2K EHLTP-3664-3-60-D2: 3K	1
1.1.1	24-002-170	FINAL ASSEMBLY. W/O POWER UNIT, W/O DECK	1
	24-002-180	EHLTP-3664-1-60-D2	1
	24-002-230	EHTLP-3664-2-60-D2 EHLTP-3664-3-60-D2	1
1.1.1.1	01-514-008	WELDMENT, FRAME ASSEMBLY	1
1.1.1.2	24-510-033	WELDMENT, LEG, OUTER, SINGLE CYL., 30" FRAME	1
1.1.1.3	01-527-001	ROLLER W/ BUSHING	4
1.1.1.4	33454	NARROW MACHINERY BUSHING, PLAIN FINISH, 1 3/4" X 18 GA	16
1.1.1.5	68021	EXTERNAL RETAINING RING, PHOSPHATE FINISH, 1-1/8"	12
1.1.1.6	24-510-041	WELDMENT, LEG, INNER, 30" FRAME	1
	24-510-041	EHLTP-3664-1-60-D2: SINGLE CYL.	1
	24-510-044	EHTLP-3664-2-60-D2: SINGLE CYL. EHLTP-3664-3-60-D2: DOUBLE CYL.	1
1.1.1.7	01-112-004	PIN, CLEVIS	4
1.1.1.8	01-112-019	PIN, SCISSOR PIVOT, Ø1 1/2"	2
1.1.1.9	33474	SPACER, SHIM, 1 1/2" ID X 2 1/4 OD X 18 GA	2
1.1.1.10	01-115-002	WASHER, THRUST BEARING	2
1.1.1.11	64311	PIN, SPRING Ø 3/8 X 1 1/2" LG	2
1.1.1.12	24-612-003	WELDMENT, CYLINDER PIN	1
1.1.1.13	01-118-001	BOLT, CYLINDER RETAINING	1
1.1.1.14	24-037-001	MAIN PROP, EHLT	2
1.1.1.15	32415	Ø5/16 - 18 x 1/2 HWH THREAD CUTTING SCREW, TYPE F, ZINC	1
1.1.1.16	99-521-906-002	CYLINDER, HYDRAULIC	1
	99-521-901-002	EHLTP-3664-1-60-D2: Ø2 1/2" X 10" RAM STYLE, MACHINED END, 3GPM VF	1
	99-521-906-001	EHTLP-3664-2-60-D2: Ø3" X 10" RAM STYLE, MACHINED END, 3GPM VF EHLTP-3664-3-60-D2: Ø2 1/2" X 10" RAM STYLE, MACHINED END, 2GPM VF	2
1.1.1.17	33444	MACHINE BUSHING, Ø 1 X 18 GA.	2
1.1.1.18	20-117-003	EXTERNAL RETAINING RING, 1" DIA SHAFT	2
1.1.1.19	36209	1/2 - 13 HEX JAM NUT PLAIN, GRADE A	1
1.1.2	01-514-195	SUB-ASSEMBLY, BASE W/ CASTERS AND HANDLE, DC, 64"	1
1.1.2.1	01-514-186	WELDMENT, SUB-FRAME, PORTABLE, 30" WIDE X 64" LG, DC	1
1.1.2.2	16-025-030	HANDLE, CHROMED, PUSH CARTS	1
1.1.2.3	16-132-259-801	CASTER, SWIVEL W/ BRAKE, 4X2	2
1.1.2.4	16-132-260-801	CASTER, RIGID, 4X2	2
1.1.2.5	99-112-006	PIN, CLEVIS	4
1.1.2.6	65076	Ø1/8" X 1" COTTER PIN, Z-PLATED	4
1.2	24-513-076	WELDMENT, DECK (3" SIDES)	1
<a href="#">1.3</a>	<a href="#">01-515-017</a>	<a href="#">SUB-ASSEMBLY, TOE GUARD, 36" X 64", INCLUDES HARDWARE &amp; SWITCHES</a> (see exploded view on p. 19)	1
<b>*2</b>	<b>*01-160-001</b>	<b>*POWER UNIT SUB-ASSEMBLY</b> (see p. 16, 17)	1

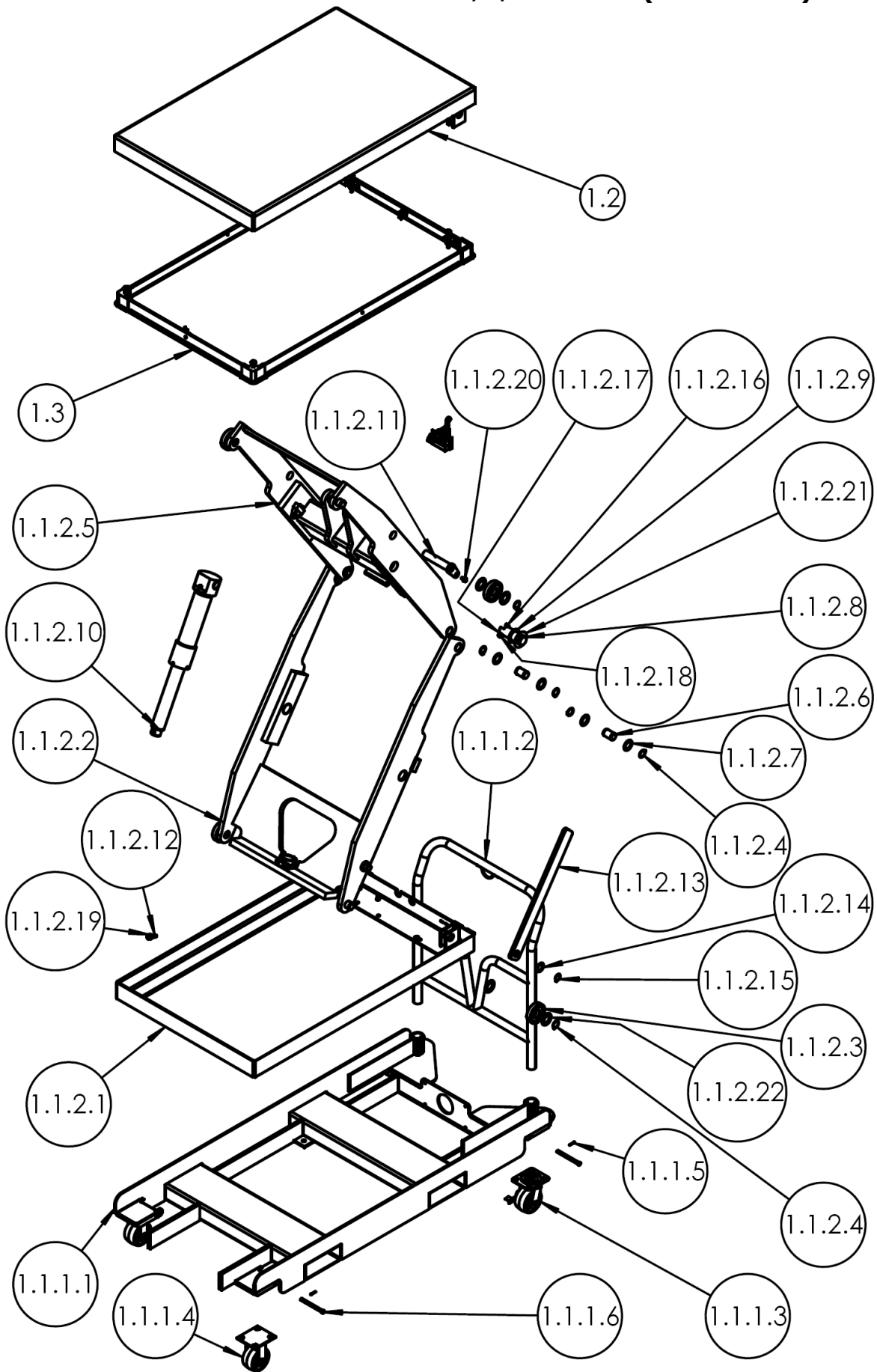
### EXPLODED VIEW: EHLTP-4864-1/2/3-60-D2 (01-006-496)



**BILL OF MATERIALS: EHLTP-4864-1/2/3-60-D2 (01-006-496)**

ITEM NO	PART NO	DESCRIPTION	QTY.
1	01-002-496	FINAL ASSEMBLY W/O POWER UNIT	1
	01-002-502	EHLTP-4864-1-60-D2	1
	01-002-508	EHTLP-4864-2-60-D2 EHLTP-4864-3-60-D2	1
1.1	01-514-198	WELDMENT, SUB-FRAME & FRAME/LEG SET, 60 LG, DC	1
	01-514-199	EHLTP-4864-1-60-D2: 1K	1
	01-514-200	EHTLP-4864-2-60-D2: 2K EHLTP-4864-3-60-D2: 3K	1
1.1.1	24-002-170	FINAL ASSEMBLY. W/O POWER UNIT, W/O DECK	1
	24-002-180	EHLTP-4864-1-60-D2	1
	24-002-230	EHTLP-4864-2-60-D2 EHLTP-4864-3-60-D2	1
1.1.1.1	01-514-008	WELDMENT, FRAME ASSEMBLY	1
1.1.1.2	24-510-033	WELDMENT, LEG, OUTER, 30" FRAME	1
	24-510-033	EHLTP-4864-1-60-D2: SINGLE CYL.	1
	24-510-036	EHTLP-4864-2-60-D2: SINGLE CYL. EHLTP-4864-3-60-D2: DOUBLE CYL.	1
1.1.1.3	01-527-001	ROLLER W/ BUSHING	4
1.1.1.4	33454	NARROW MACHINERY BUSHING, PLAIN FINISH, 1 3/4" X 18 GA	16
1.1.1.5	68021	EXTERNAL RETAINING RING, PHOSPHATE FINISH, 1-1/8"	12
1.1.1.6	24-510-041	WELDMENT, LEG, INNER, 30" FRAME	1
	24-510-041	EHLTP-4864-1-60-D2: SINGLE CYL.	1
	24-510-044	EHTLP-4864-2-60-D2: SINGLE CYL. EHLTP-4864-3-60-D2: DOUBLE CYL.	1
1.1.1.7	01-112-004	PIN, CLEVIS	4
1.1.1.8	01-112-019	PIN, SCISSOR PIVOT, Ø1 1/2"	2
1.1.1.9	33474	SPACER, SHIM, 1 1/2" ID X 2 1/4 OD X 18 GA	2
1.1.1.10	01-115-002	WASHER, THRUST BEARING	2
1.1.1.11	64311	PIN, SPRING Ø 3/8 X 1 1/2" LG	2
1.1.1.12	24-612-003	WELDMENT, CYLINDER PIN	1
1.1.1.13	01-118-001	BOLT, CYLINDER RETAINING	1
1.1.1.14	24-037-001	MAIN PROP, EHLT	2
1.1.1.15	32415	Ø5/16 - 18 x 1/2 HWH THREAD CUTTING SCREW, TYPE F, ZINC	1
1.1.1.16	99-521-906-002	CYLINDER, HYDRAULIC	1
	99-521-901-002	EHLTP-4864-1-60-D2: Ø2 1/2" X 10" RAM STYLE, MACHINED END, 3GPM VF	1
	99-521-906-001	EHTLP-4864-2-60-D2: Ø3" X 10" RAM STYLE, MACHINED END, 3GPM VF EHLTP-4864-3-60-D2: Ø2 1/2" X 10" RAM STYLE, MACHINED END, 2GPM VF	2
1.1.1.17	33444	MACHINE BUSHING, Ø 1 X 18 GA.	2
1.1.1.18	20-117-003	EXTERNAL RETAINING RING, 1" DIA SHAFT	2
1.1.1.19	36209	1/2 - 13 HEX JAM NUT PLAIN, GRADE A	1
1.1.2	01-514-195	SUB-ASSEMBLY, BASE W/ CASTERS AND HANDLE, DC, 64"	1
1.1.2.1	01-514-186	WELDMENT, SUB-FRAME, PORTABLE, 30" WIDE X 64" LG, DC	1
1.1.2.2	16-025-030	HANDLE, CHROMED, PUSH CARTS	1
1.1.2.3	16-132-259-801	CASTER, SWIVEL W/ BRAKE, 4X2	2
1.1.2.4	16-132-260-801	CASTER, RIGID, 4X2	2
1.1.2.5	99-112-006	PIN, CLEVIS	4
1.1.2.6	65076	Ø1/8" X 1" COTTER PIN, Z-PLATED	4
1.2	24-513-135	WELDMENT, DECK (3" SIDES)	1
<a href="#">1.3</a>	<a href="#">01-515-026</a>	<a href="#">SUB-ASSEMBLY, TOE GUARD, 48" X 64", INCLUDES HARDWARE &amp; SWITCHES</a> (see exploded view on p. 19)	1
<a href="#">*2</a>	<a href="#">*01-160-001</a>	<a href="#">*POWER UNIT SUB-ASSEMBLY</a> (see p. 16, 17)	1

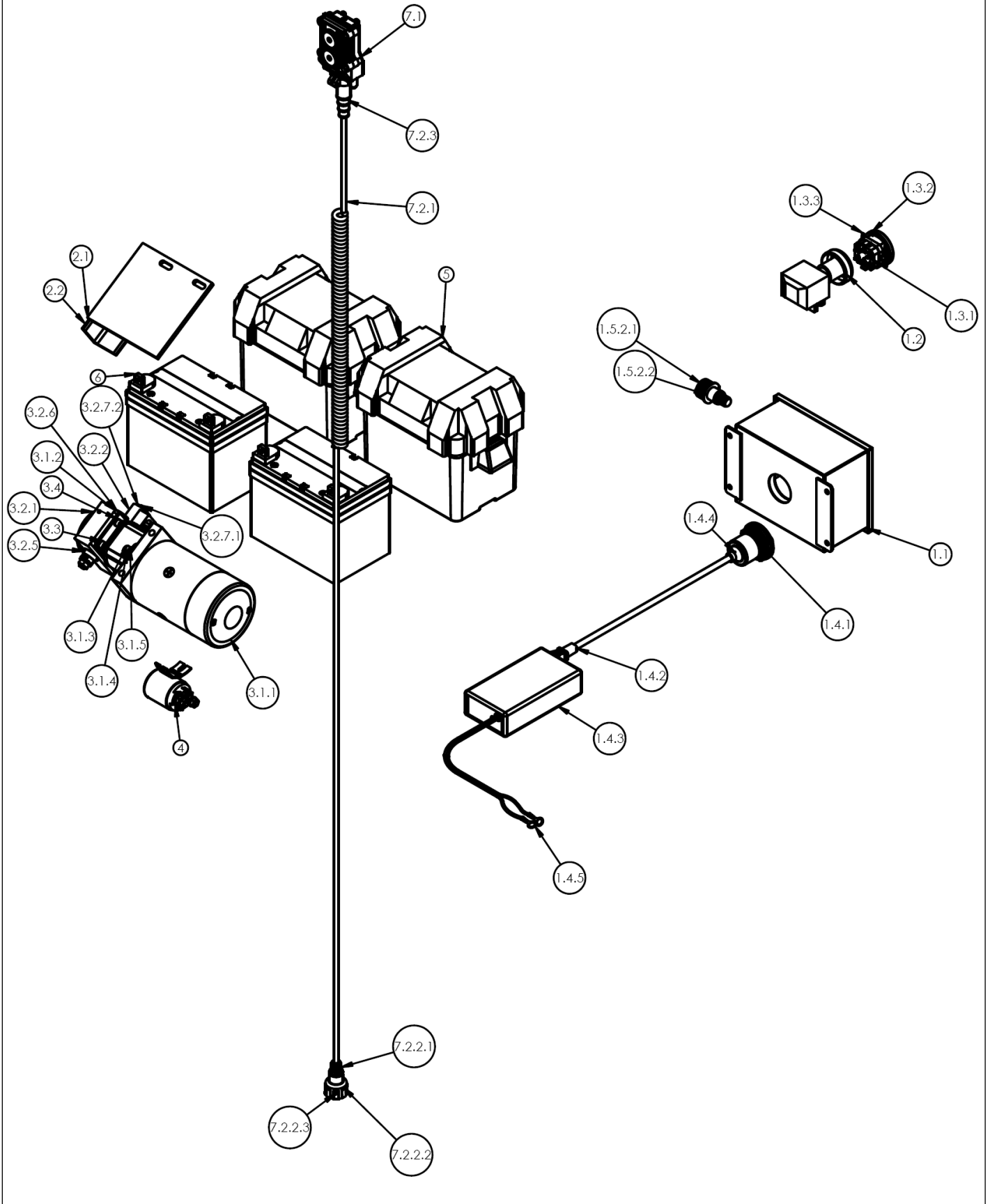
### EXPLODED VIEW: EHLTP-3048-1/2/3-48-D2 (01-006-513)



**BILL OF MATERIALS: EHLTP-3048-1/2/3-48-D2 (01-006-513)**

ITEM NO	PART NO	DESCRIPTION	QTY.
1	01-002-513	FINAL ASSEMBLY W/O POWER UNIT	1
	01-002-518	EHLTP-3048-1-48-D2	1
	01-002-523	EHTLP-3048-2-48-D2 EHLTP-3048-3-48-D2	1
1.1	01-514-202	WELDMENT, SUB-FRAME & FRAME/LEG SET, 48 LG, DC	1
	01-514-196	EHLTP-3048-1-48-D2: 1K	1
	01-514-197	EHTLP-3048-2-48-D2: 2K EHLTP-3048-3-48-D2: 3K	1
1.1.1	01-514-189	SUB-ASSEMBLY, BASE W/ CASTERS AND HANDLE, DC, 48"	1
1.1.1.1	01-514-185	WELDMENT, SUB-FRAME, PORTABLE, 30" WIDE X 48" LG, DC	1
1.1.1.2	16-025-030	HANDLE, CHROMED, PUSH CARTS	1
1.1.1.3	16-132-259-801	CASTER, SWIVEL W/ BRAKE, 4X2	2
1.1.1.4	16-132-260-801	CASTER, RIGID, 4X2	2
1.1.1.5	65076	Ø1/8" X 1" COTTER PIN, Z-PLATED	4
1.1.1.6	99-112-006	PIN, CLEVIS	4
1.1.2	24-002-030	FINAL ASSEMBLY W/O POWER UNIT (NO DECK)	1
	24-002-040	EHLTP-3048-1-48-D2	1
	24-002-050	EHTLP-3048-2-48-D2 EHLTP-3048-3-48-D2	1
1.1.2.1	01-514-007	WELDMENT, FRAME ASSEMBLY	1
1.1.2.2	24-510-008	WELDMENT, LEG, OUTER, SINGLE CYL.	1
1.1.2.3	01-527-001	ROLLER W/ BUSHING	4
1.1.2.4	68021	EXTERNAL RETAINING RING, PHOSPHATE FINISH, 1-1/8"	12
1.1.2.5	24-510-014	WELDMENT, LEG, INNER, SINGLE CYL	1
1.1.2.6	01-112-004	PIN, CLEVIS	4
1.1.2.7	33454	NARROW MACHINERY BUSHING, PLAIN FINISH, 1 3/4" X 18 GA	8
1.1.2.8	01-112-019	PIN, SCISSOR PIVOT, Ø1 1/2"	2
1.1.2.9	33474	SPACER, SHIM, 1 1/2" ID X 2 1/4 OD X 18 GA	2
1.1.2.10	99-021-903-001	CYLINDER, HYDRAULIC	1
	99-521-906-002	EHLTP-3048-1-48-D2: Ø2" X 10" RAM STYLE, MACHINED END	1
	99-521-901-002	EHTLP-3048-2-48-D2: Ø2.5" X 10" RAM STYLE, MACHINED END, 3GPM VF EHLTP-3048-3-48-D2: Ø3" X 10" RAM STYLE, MACHINED END, 3GPM VF	1
1.1.2.11	24-612-003	WELDMENT, CYLINDER PIN	1
1.1.2.12	01-118-001	BOLT, CYLINDER RETAINING	1
1.1.2.13	24-037-001	MAIN PROP, EHLT	2
1.1.2.14	33444	MACHINE BUSHING, Ø 1 X 18 GA.	2
1.1.2.15	20-117-003	EXTERNAL RETAINING RING, 1" DIA SHAFT	2
1.1.2.16	26333	SHOULDER SCREW, GRADE 2, 0.375x1.5" LG	2
1.1.2.17	33006	FLAT WASHER, ZINC PLATED, USS, Ø5/16"	2
1.1.2.18	37021	NYLON INSERT LOCK NUT, GRADE 2, ZINC FINISH, 5/16"-18	2
1.1.2.19	36209	1/2 - 13 HEX JAM NUT PLAIN, GRADE A	1
1.1.2.20	32415	Ø5/16 - 18 x 1/2 HWH THREAD CUTTING SCREW, TYPE F, ZINC	1
1.1.2.21	01-115-002	WASHER, THRUST BEARING	2
1.1.2.22	01-115-001	WASHER, THRUST BEARING, 1 1/8 ID	8
1.2	24-513-153	WELDMENT, DECK (3" SIDES)	1
<a href="#">1.3</a>	<a href="#">01-515-064</a>	<a href="#">SUB-ASSEMBLY, TOE GUARD, 30" X 48", INCLUDES HARDWARE &amp; SWITCHES</a> (see exploded view on p. 19)	1
<a href="#">*2</a>	<a href="#">*01-160-001</a>	<a href="#">*POWER UNIT SUB-ASSEMBLY</a> (see p. 16, 17)	1

### \*12VDC POWER UNIT (0-160-001)

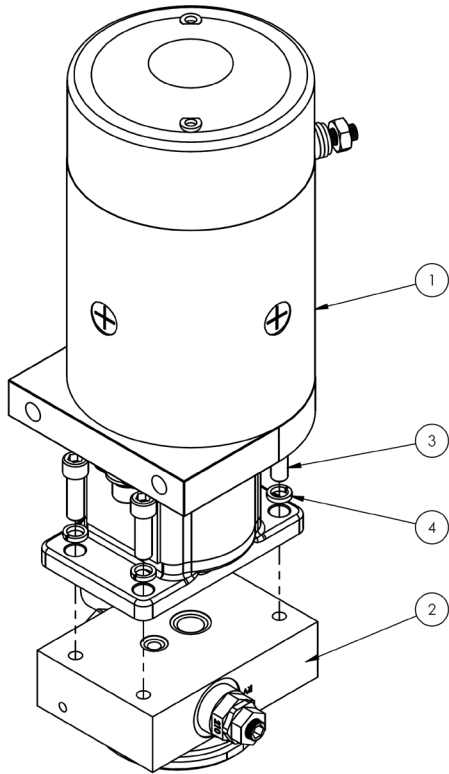




**\*POWER UNIT BILL OF MATERIALS (01-160-010)**

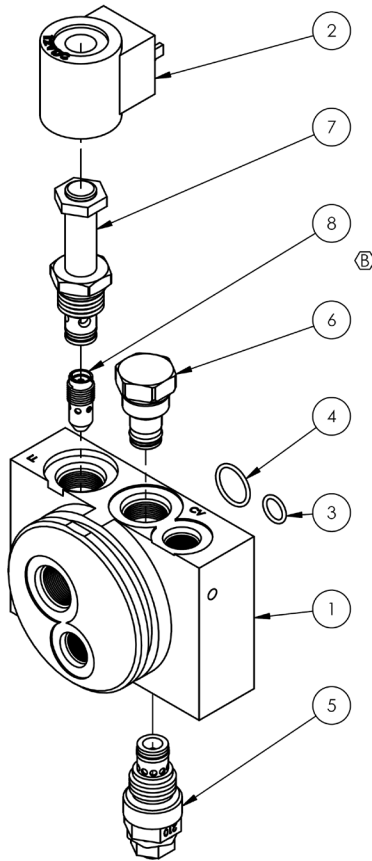
ITEM	PART NO.	DESCRIPTION	QTY.
1	99-529-130-007	SUB-ASSEMBLY, CONTROLS, ELECTRIC (MOTOR CONTROLLER)	1
1.1	99-029-130-007	ELECTRICAL ENCLOSURE, 8" X 6" X 4", MACHINED FOR EHLTP	1
1.2	99-034-154	ACCESSORIES, ELECTRICAL, EMERGENCY STOP SWITCH ZDK31-25	1
1.3	99-534-015	ASSEMBLY, BATTERY CHARGE INDICATOR, DIGITAL VOLT METER 24V/12V	1
1.3.1	99-034-136	BATTERY CHARGE INDICATOR, DIGITAL	1
1.3.2	99-034-136-001	BCI GASKET	1
1.3.3	99-034-136-002	BATTERY CHARGE INDICATOR, BACK CLAMP	1
1.4	99-534-025-001	SUB-ASSEMBLY, CHARGER & CORD	1
1.4.1	21-034-005	CONNECTOR, FLANGED INLET PLUG, FRONT MOUNT W/ COVER, 15A, 125V	1
1.4.2	99-033-092-001	CORD, CHARGER	1
1.4.3	21-034-008	ELECTRICAL CHARGER, 12V, 5A	1
1.4.4	99-034-188	FERRULE CONNECTOR, 18 GA	3
1.4.5	99-034-187	RING TERMINAL, RED, #3/8, 18-22 AWG	2
1.5	99-533-017	ASSEMBLY, CORD, STRAIGHT, 18/5, 30" MOLDED FEMALE RECEPTACLE, 5-PIN	1
1.5.1	99-033-029	CORD, STRAIGHT, 18/5, 30", BLUNT CUT BOTH ENDS	1
1.5.2	99-534-009	MOLDED CONNECTOR, FEMALE RECEPTACLE, 5-PIN	1
1.5.2.1	99-034-126	MOLDED BODY, FLANGED, 5 PIN, W/STRAIN RELIEF, 7/8" DIA	1
1.5.2.2	99-034-120	PIN, RECEPTACLE, .093	5
2	01-516-012	WELDMENT, BRACKET, MOTOR MOUNT	1
2.1	01-016-123	BRACKET, MOTOR MOUNT	1
2.2	01-016-031	BRACKET, MOTOR/PUMP MOUNT	1
<b>**3</b>	<b>**99-160-123</b>	<b>**POWER UNIT SUB-ASSEMBLY, 12V DC, 1 PH, 2.15 HP, 1800 RPM, 0.073 DISP., 1.5 GPM FLOW CONTROL, L-H-L</b>	1
3.1	99-137-029	MOTOR/PUMP, 12V DC, 1 PH, 2.15 HP, 1800 RPM, 0.073 DISP	1
3.1.1	99-135-011	MOTOR, DC, 12V - 1600 WATT W/ ZINC PLATED COVER	1
3.1.2	01-143-906-002	PUMP, HYDRAULIC GEAR, TANG SHAFT, MANIFOLD MOUNT, .073 Disp, 1.3 cc/r	1
3.1.3	23305	SHCS, UTILITY GRADE, 3/8 - 16 x 1 LG.	2
3.1.4	33688	LOCK WASHER, HIGH COLLAR, 3/8	2
3.1.5	96056	WASHER, FLAT, 3/8" NOMINAL, .406" I.D., YELLOW ZINC SAE	2
3.2	01-627-019	SUB-ASSEMBLY, MANIFOLD, 12V COIL, LIFT-HOLD-LOWER, 1.5 GPM	1
3.2.1	01-127-010	MANIFOLD, L-H-L	1
3.2.2	99-034-006	ACCESSORIES, 12V DC COIL W/ DIN CONNECTOR	1
3.2.3	99-144-008	O-RING, MANIFOLD, 1/2" OD	1
3.2.4	99-144-009	O-RING, MANIFOLD, 3/4" OD	1
3.2.5	99-153-006	VALVE, PRESSURE RELIEF, 210 BAR	1
3.2.6	99-153-011	CHECK VALVE, SIZE 08, NOSE-IN/SIDE-OUT	1
3.2.7	99-153-015	VALVE SOLENOID, STANDARD	1
3.2.7.1	99-153-015	VALVE, CHECK, STANDARD	1
3.2.7.2	99-153-058-A	NUT	1
3.2.8	99-153-039-001	FLOW CONTROL, PRES. COMP., 1.5 GAL.	1
3.3	23255	5/16-18 X 1 SOCKET HEAD CAP SCREW	4
3.4	33687	LOCK WASHER, HI COLLAR, 5/16"	4
4	99-034-028	ACCESSORIES, MOTOR CONTACTOR, 12V COIL	1
5	50-034-004	ACCESSORIES, ELECTRICAL, BATTERY BOX, SERIES 16	2
6	21-139-002	BATTERY, 12V DC, SEALED LEAD ACID (AGM)	2
7	99-522-035	ASSEMBLY, HAND CONTROL (2-BUTTON), CORD, COILED, 18/3, 18"-90", 48" TAIL, 3-PIN MOLDED MALE PLUG	1
7.1	99-522-023	ASSEMBLY, HAND CONTROL PENDANT (2-BUTTON)	1
7.2	99-533-051	ASSEMBLY, CORD, COILED, 18/3, 18"-90", 3-PIN MOLDED MALE PLUG	1
7.2.1	99-033-047	CORD, COILED, 18/3, 18"-90", 48" TAIL	1
7.2.2	99-534-012	MOLDED CONNECTOR, MALE PLUG, 3-PIN, W/NUT	1
7.2.2.1	99-034-127	MOLDED BODY, 3 PIN, W/O NUT, W/STRAIN RELIEF, 7/8" DIA	1
7.2.2.2	99-034-118	NUT, PLASTIC, CONTROL PLUG RETAINER	1
7.2.2.3	99-034-119	PIN, .093 DIAMETER, CRIMP	3
7.2.3	99-034-138	MOLDED BODY CONTROLLER FLEXIBLE STRAIN RELIEF	1

**\*\*POWER UNIT SUBASSEMBLY (99-160-123 Rev. A)**



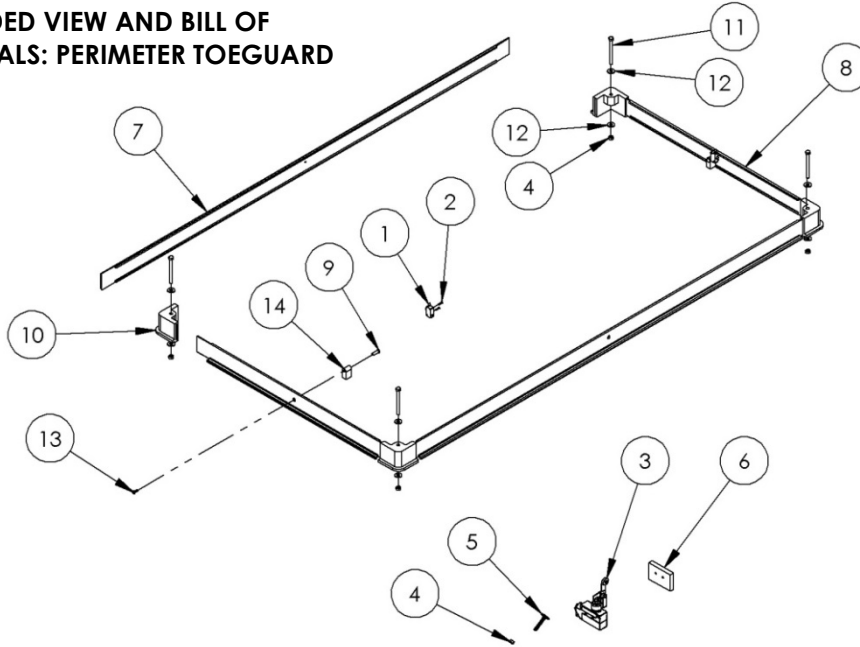
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	99-137-029	MOTOR/PUMP, 12V DC, 1 PH, 2.15 HP, 1800 RPM, 0.073 DISP	1
***2	***01-627-019	***SUB-ASSEMBLY, MANIFOLD, 12V COIL, LIFT-HOLD-LOWER, 1.5 GPM	1
3	23255	5/16-18 X 1 SOCKET HEAD CAP SCREW	4
4	33687	LOCK WASHER, HI COLLAR, 5/16"	4

**\*\*\*MANIFOLD SUBASSEMBLY (01-627-019 Rev. B)**



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	01-127-010	MANIFOLD, L-H-L	1
2	99-034-006	ACCESSORIES, 12V DC COIL W/ DIN CONNECTOR	1
3	99-144-008	O-RING, MANIFOLD, 1/2" OD	1
4	99-144-009	O-RING, MANIFOLD, 3/4" OD	1
5	99-153-006	VALVE, PRESSURE RELIEF, 210 BAR	1
6	99-153-011	CHECK VALVE, SIZE 08, NOSE-IN/SIDE-OUT	1
7	99-153-015	VALVE SOLENOID, STANDARD	1
8	99-153-039-001	FLOW CONTROL, PRES. COMP., 1.5 GAL.	1

**EXPLODED VIEW AND BILL OF MATERIALS: PERIMETER TOEGUARD**



LOCATION: C:\PDM Vault\Archive\01\

FILE: 01-515-011.SLDDRW

2/21/2020

**Perimeter Toe Guard Assembly Bill of Materials**

ITEM	PART NUMBER	DESCRIPTION	QTY.
1*	01-022-022	SWITCH, LIMIT (N. C. MICRO)	2
2*	24008	4-40 X 1/2 BHCS	4
3†	01-022-001	LIMIT SWITCH W/ROLLER ARM	1
4†	37018	NYLON LOCK NUT, GRADE 2, ZINC FINISH, 1/4"-20	5
5†	22805	ELEVATOR BOLT, LIMIT SWITCH	1
6†	24-016-002	BRACKET, EHLT SWITCH MOUNT	1
7 & 8	01-015-016	TOE GUARD EXTRUSION FOR 24" SIDES	2 + 2
	01-015-014	TOE GUARD EXTRUSION FOR 30" SIDES	
	01-015-020	TOE GUARD EXTRUSION FOR 40" SIDES	
	01-015-013	TOE GUARD EXTRUSION FOR 48" SIDES	
	01-015-015	TOE GUARD EXTRUSION FOR 60" SIDES	
	01-015-023	TOE GUARD EXTRUSION FOR 72" SIDES	
<i>CONSULT FACTORY FOR OTHER SIDE LENGTHS</i>			
9	01-145-010	SPECIALTY HARDWARE, TOE GUARD	2
10	01-015-009	TOE GUARD SUPPORT, CAST RUBBER HOUSING	4
11	11015	HEX BOLT, GRADE A, ZINC PLATED, 1/4"-20 X 3"	4
12	33004	FLAT WASHER, USS, ZINC PLATED, Ø1/4"	8
13	24189	#8-32 FHSCS	2
14	01-015-017	TOE GUARD, LIMIT SWITCH ACTUATOR	2

\* Item attaches separately to platform.

† Item attaches to base.

**SPECIFICATIONS**

Documents that provide specifications for EHLTP series portable scissor lift tables are available online to anyone who visits Vestil's website. Specifications include dimensions, net weight, and capacity information. To access the appropriate specifications document, navigate to the EHLTP webpage at <https://www.vestil.com/product.php?FID=1441>. Scroll the page to the entry for the specific model you purchased. Click the button in the "PDF" column that looks like a pencil inside a blue-bordered box. A PDF file will open. This file is the specifications document. Print a copy of the document and keep it with your copy of this manual. If your model is not included on the [EHLTP webpage](#), or if you cannot access and/or print the specifications document, contact the [TECHNICAL SERVICE DEPT.](#) Contact information for the department is provided on the cover page of this manual.

## RECORD OF SATISFACTORY CONDITION

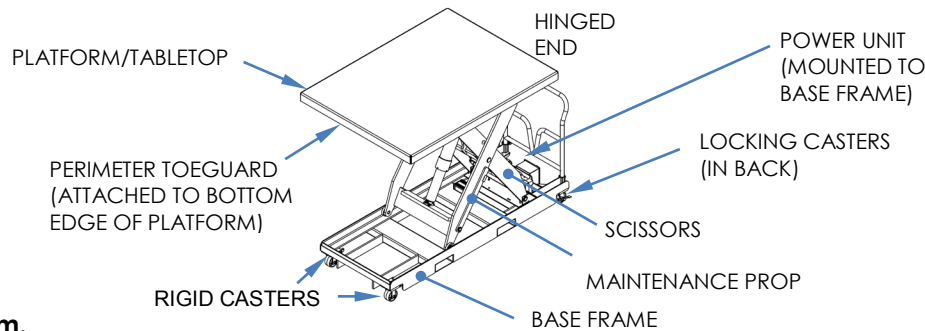
Before putting the portable lift table into service, make a record describing its appearance. Thoroughly photograph the lift table from multiple angles. Include photos of all welds, all pivot points, the points of attachment of both ends of the hydraulic cylinder, the rollers at both ends of each scissor leg, and all labeling applied to it. Describe where each label is located. Take close range photographs of the components of the electric-hydraulic power unit. Collect all photographs and writings into a file. Mark the file appropriately to identify it. This record documents satisfactory condition. Compare the results of future inspections to this record to determine if the lift table is in satisfactory condition. Do not use the lift table unless it is in satisfactory condition. Purely cosmetic changes, like damaged paint or powder coat, do not constitute changes from satisfactory condition. However, touchup paint should be applied to all affected areas as soon as damage occurs.

## OPERATION INSTRUCTIONS

*NOTE: This product utilizes a battery powered (DC) electric-hydraulic power unit to raise and lower the tabletop. Acquire a copy of the most recent revision of ANSI standard MH29.1. Pay particular attention to Section 12, which provides owner/user responsibilities for the operation, care, and maintenance of this device. Safe operation of this device is the **operator's** responsibility. Operators must be knowledgeable about, and observe, the safety rules and practices provided in this section.*

Standard models are suitable for indoor use in most non-classified industrial locations as well as many commercial locations. Only lift stable, evenly-distributed, nonhazardous loads having a size or footprint approximately the same size as, or smaller than, the platform.

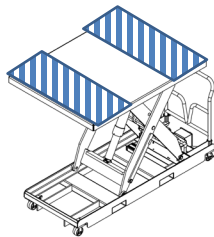
The following diagram identifies major components of your portable scissor lift table.



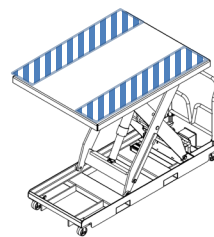
### Loading the platform.

The load rating (in pounds and kilograms) is provided on the machine data plate or label 1153 (see [LABELING DIAGRAM](#) on [p. 25](#)) located on the hinged end of the platform. This indicates the net capacity of the scissor lift table for a static load, centered and evenly distributed on the platform. For off-center loads, the lift table's maximum capacity is 75% of the rated capacity for end loading (either end), and 50% for side loading (either side) (see diagrams).

End loading:  
Capacity  
reduced to 75%



Side loading:  
Capacity  
reduced to 50%



**DO NOT** exceed the load ratings. Personal injuries or permanent damage to the unit might result if the capacity of your unit is exceeded. Note: Take into account the weight of any equipment added to the platform by third parties when determining the maximum working load to be placed on the platform.



The platform rollers are not captured. **DO NOT** overhang any load over the side of the platform. A cantilevered or overhanging load at the hinged end can cause the platform to tilt and dump the load. For applications involving side or end edge loading, contact [TECHNICAL SERVICE](#).

**WARNING**

*This table is not approved for lifting personnel. Only use the table as a material handling device.*

**Operation.**

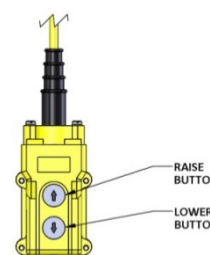
At the beginning of every shift, inspect the perimeter toe guard for correct operation. First raise the platform. Push and hold a section of the perimeter toe guard up against the platform. The platform should not move when the "LOWER" button is pressed. Perform this check on all 4 sides of the platform.

Check the condition of the guards, controls, scissor mechanism, hydraulic lines, and limit switches. If any item is in need of repair or otherwise contributes to an unsafe condition, remove the lift table from service until it is restored to **SATISFACTORY CONDITION**. See **RECORD OF SATISFACTORY CONDITION**.

Carefully push the table to the desired location. Only travel over even, level, improved surfaces capable of supporting the weight of the table plus a full capacity load. Apply both caster brakes whenever the table is stationary. Both brakes must be applied whenever the tabletop is raised or lowered.

Each standard EHLTP portable scissor lift table includes an electric-hydraulic power unit and a handheld pushbutton controller.

- Press the "RAISE" pushbutton to energize the power unit and raise the platform. The platform rises only while the pushbutton is pressed. When the pushbutton is released, the platform will stop and hold its position. At the platform's maximum height, a limit switch prevents the platform from further raising.
- Press the "LOWER" pushbutton to open the hydraulic valve and lower the platform. The platform descends by gravity, i.e. the pump motor does not run. Release the pushbutton to stop the descent. The platform will maintain position until either pushbutton (RAISE or LOWER) is pressed. If the perimeter toe guard encounters an object, the valve will close and prevent further descent of the platform.
- Hydraulic overload protection prevents the power unit from attempting to raise a load that exceeds the capacity of your table.
- Lowering speed is preset at the factory and cannot exceed 30 fpm. In the event of a hydraulic system failure, e.g. ruptured hose, a velocity fuse activates and prevents the platform from lowering. The fuse is integrated into the lifting cylinder.

**CAUTION**

*Always watch the area around the platform as well as the load on the platform when the table is operating.*

**CAUTION**

*Never use the lift table if any damage or unusual noise is observed, if it is in need of repair, or if any other malfunction is observed. Immediately remove it from service and notify your supervisor or maintenance personnel about the issue(s) you observed.*

**WARNING**

*Keep all personnel clear of the machine when it is in operation. Before operating the lift table, make certain no part of any person or object is under the platform.*

**WARNING**

*Guards shall be in place before operating the lift table.*

**WARNING**

*Guards cannot protect against every possible condition and should not be considered a substitute for good judgment and care in use, loading, handling, storage, etc. of the lift table.*

**INSPECTIONS AND MAINTENANCE**

Regular maintenance is essential for maximizing the service life of this product. Compare all inspection results to the **RECORD OF SATISFACTORY CONDITION**. The table should only be used if it is in satisfactory condition. If an inspection reveals any changes from satisfactory condition, repair it before returning it to service. Only use manufacturer-approved replacement parts. **DON'T GUESS!** Contact **TECHNICAL SERVICE** if you have questions that are not addressed in these instructions or if you are uncertain how to address an issue discovered during an inspection. Technical Service can be contacted by calling (260) 665-7586 and asking for the Service and Parts Department or by submitting your questions through Vestil's online parts and service portal at <https://www.vestil.com/page-parts-request.php>.

**⚠ WARNING**

Identify all potential hazards and apply relevant safety procedures before beginning work.

**⚠ WARNING**

Remove any load and install the maintenance props before beginning any inspection or service on the lift table.

Only qualified individuals trained to understand mechanical devices, electrical and hydraulic circuits, and the hazards associated with them, should attempt troubleshooting and repair of this equipment.

Before inspecting or performing maintenance on this lift table:

- Remove the load from the platform. Do not attempt to service a loaded lift table.
- Fully lower the platform, OR use both maintenance props to support the weight of the platform. To use the maintenance props, raise the platform to its maximum height. Rotate both props forward so that their free ends drop into the base frame. Lower the platform until the maintenance props slide up against the end of the frame.
- Disconnect power and follow established lockout/tagout policies as required.

**Initial inspection.**

Prior to use, any new, altered, modified, or repaired scissor lift table must be inspected by a qualified person. Perform complete daily and monthly inspections before returning the lift table to regular use. All inspected items must be in satisfactory condition.

**Daily inspection.**

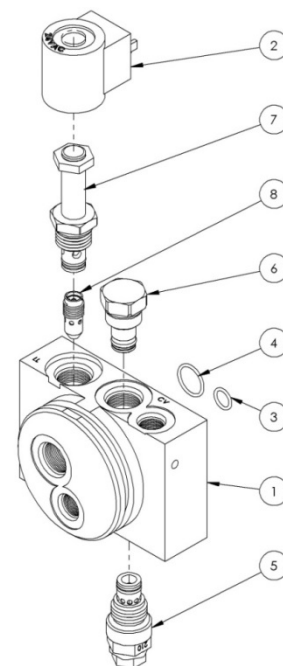
At the beginning of every shift, a designated person shall complete these inspections. Remove the lift table from service and repair or replace any damaged parts if any of the following is found.

1. Look for:
  - a. Frayed wires.
  - b. Oil leaks.
  - c. Pinched, chafed, worn, or cracking hydraulic hoses.
  - d. Damage, deformation, or cracks in any structural member or any weld. Give special attention to the hydraulic cylinder mounting brackets.
  - e. Loose or missing fasteners.
  - f. Unusual noise or evidence of binding.
  - g. Wobbly casters, significantly worn casters, casters that do not rotate freely, or caster brakes that do not work.
2. Test the function of the upper travel limit switch and the perimeter toe guard.

**MANIFOLD ASSEMBLY****Monthly inspection.**

A qualified person must inspect the table for:

1. Adequate oil level. The oil should be 1" to 1-½" below the reservoir fill hole with the platform in the fully lowered position. See the Annual Inspection section for the hydraulic oil specification.
2. Worn or damaged hydraulic hoses or electrical wires.
3. Wear in the pivot points on the legs.
4. Looseness or wear in the rollers.
5. Integrity of the retaining hardware on all rollers and all pivot point pins.
6. Proper functioning of any hand- or foot-operated controls/mechanisms.
7. Unusual noises or movement during operation.
8. Condition of all information, safety, and warning labels. Labels should be undamaged, clean, and clearly legible.
9. Dirt and debris. Clean, sweep, or wipe down as needed.

**Annual inspection.**

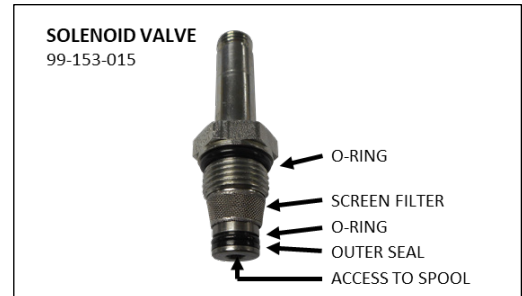
Check the condition of the oil. Change the oil if it darkens, becomes gritty, or turns a milky color (indicating the presence of water). Replace with an anti-wear hydraulic oil with a viscosity grade of 150 SUS at 100°F (ISO 32 cSt @ 40°C), such as AW 32, HO 150 or Dexron non-synthetic transmission fluid. You may use

a synthetic transmission fluid if you flush the system with the synthetic fluid before filling the reservoir. 150 SUS at 100°F (ISO 32 cSt @ 40°C) or Dexron transmission fluid.

**Solenoid valve maintenance.** [Refer to [MANIFOLD SUBASSEMBLY](#) on p. 18]

In the event that the platform creeps down slowly after releasing the “DOWN” control, it will be necessary to remove the lowering cartridge valve for inspection and cleaning.

1. Remove all loads from the platform.
2. Raise the platform. Lower the maintenance props into the base frame. Lower the platform until it is entirely supported by the props.
3. The power unit is attached to the base frame in front of the handle. Located the manifold assembly which is attached to the end of the power unit.
4. Remove the nut holding the solenoid coil (part no. 99-153-015) on the solenoid valve stem. Remove the coil; then unscrew the valve from the manifold.
5. Inspect the valve for contaminants. Inspect O-rings & back-up washers for cuts, tears, or other damage.
6. With the valve immersed in mineral spirits or kerosene, insert a thin tool such as a small screwdriver or a small hex wrench in the hole at the bottom of the valve (see illustration below). Push the spool in and out several times. A properly functioning spool should move freely, with about 1/16" of travel. Use mineral spirits to flush the valve.
7. If the spool still sticks, the stem could be bent. If the stem is bent, the valve must be replaced.
8. Dry the valve with compressed air while continuing to push the spool in and out.
9. Inspect the bottom of the valve cavity (in the manifold) for contaminants.
10. Make sure both O-rings and outer seal (flat) are seated on the valve body. Make sure the screen filter is in place and seated at the bottom of the threads on the valve body (see illustration below).
11. Reinstall the solenoid valve. Tighten to 20 ft-lb of torque. Reattach the solenoid coil & retaining nut.

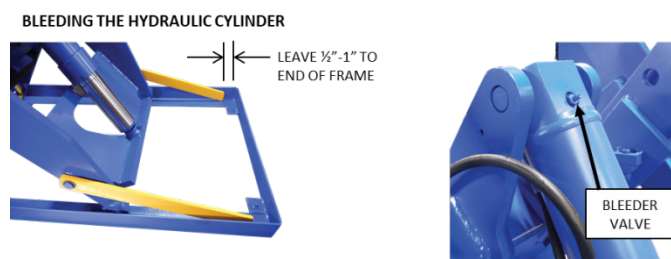


## BLEEDING AIR FROM THE HYDRAULIC CYLINDER

Air can enter the hydraulic system at any time its components are opened for service. Symptoms of air in the system include erratic or bouncing motion of the platform, sponginess in holding position, unusual noises, or foaming in the hydraulic fluid. Trapped air can also trigger the cylinder's velocity fuse, slowing or preventing the cylinder from lowering.

Cycling the platform up and down without a load can expel much of the trapped air through the hydraulic reservoir. If it becomes necessary to bleed air from the system:

1. Unload the platform.
2. Raise the platform. Lower the maintenance props into the side frame. Lower the platform until the props are ½"-1" away from the end of the frame. Some motion is necessary to expel air from the system.
3. Hold a rag over the cylinder's bleeder valve to capture expelled oil. The valve is located at the top of the cylinder (see illustration). Use a ¼" wrench to open the valve about a half-turn.
4. Oil and air will sputter from the valve. Once no more air comes out, close the valve.
5. For tables with more than 1 cylinder, it will be necessary to open the bleeder valves on all cylinders simultaneously in order to bleed the valves.



## TROUBLESHOOTING GUIDE



### WARNING

Identify all potential hazards and comply with applicable safety procedures before beginning work.



### WARNING

Remove all loads from the platform and install the maintenance props before beginning any inspection or service on the lift table.

Only qualified individuals trained to understand mechanical devices, electrical and hydraulic circuits, and the hazards associated with them, should troubleshoot or repair this equipment.

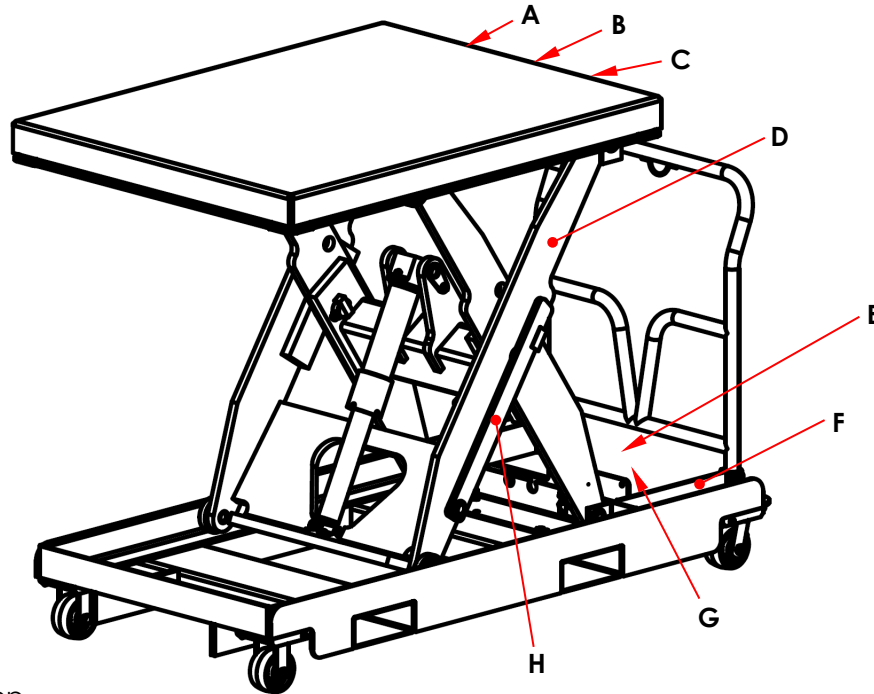
Contact [TECHNICAL SERVICE](#) for any problems not addressed in this manual. ALWAYS have the product serial number or model number on hand when calling the factory.

PROBLEM	POSSIBLE CAUSES	ACTION
Power unit doesn't run when "UP" button is pressed.	Transformer fuse is blown.	Test with meter. Replace if bad.
	No supply voltage.	Test with meter. Check fuses, breakers, and overloads to determine the cause
	Upper-travel limit switch is engaged or bad.	Inspect and test switch. Replace if bad.
	Bad control transformer.	Check for 24 VAC at secondary. Replace if bad.
	Bad motor relay coil.	Test with meter. Replace if bad.
	Bad solenoid start switch (DC units).	The green LED on motor relay will be off, or will turn off when the UP pushbutton is pressed.
	Battery voltage low (DC units).	Test with meter. Charge battery if low (is the motor relay LED on?)
Motor runs but platform doesn't move. Power unit not noisy.	Motor rotation is wrong (AC-powered units only).	Verify the motor runs CW, opposite the shaft end.
	Pump is failing to produce pressure.	Consult factory.
Motor hums or pump squeals, but the platform does not move, or the platform moves only slowly.	Pump is failing to produce pressure.	Consult factory.
	Excess voltage drop to motor, due to power wire size too small, wire run too long, or incoming voltage too low.	Check the power installation for adequacy. Check the incoming voltage <i>while the motor is running</i> . Correct any problems found.
	Motor is "single-phasing".	Determine and correct cause of voltage loss on phase.
	Pressure relief opening at full pressure.	Check for structural damage or binding of the scissor legs, etc. Check for platform overload condition.
	Contamination holding open the lowering valve or the check valve.	Remove and inspect valves. Clean per instructions in the "Inspection and Maintenance" section.
Platform raises, then drifts down.	Contamination holding open the lowering valve or the check valve.	Remove and inspect valves. Clean per instructions in "Inspection and Maintenance" section.
Spongy or jerky platform movement.	Excessive air in the hydraulic cylinders.	Bleed air per procedure described in the "Inspection and Maintenance" section.
Platform won't lower.	Perimeter toe guard actuated.	Check for a toe guard extrusion or rubber corner that is stuck. Adjust if necessary.
	Perimeter toe guard switch or wire broken.	Inspect visually; check with multimeter. Repair as needed.
	Solenoid coil is bad.	Check with multimeter using the diode-check function. (Reading for ohms will not provide an accurate test of the coil). Replace if bad.
	Physical blockage of the mechanism.	Inspect for foreign material or objects blocking the scissors or the rollers.
	Solenoid valve, flow control, or suction hose screen plugged.	Remove and inspect valves. Clean per instructions in "Inspection and Maintenance" section.
Platform lowers too slowly.	Solenoid valve, flow control, or suction hose screen plugged.	Remove and inspect valves. Clean per instructions in "Inspection and Maintenance" section.
	Velocity fuse locking (indicated by platform only slowly creeping down).	Check for air in hydraulic system. Bleed air as needed.
	Flow control valve spool sticking.	Remove and inspect valves. Clean per instructions in "Inspection and Maintenance" section.
Platform lowers too quickly.	Flow control valve spool sticking.	Remove and inspect valves. Clean per instructions in "Inspection and Maintenance" section.



# LABELING DIAGRAM

The unit should be labeled as shown in the diagram. However, label content and location are subject to change so your product might not be labeled exactly as shown. Thoroughly photograph the unit when you first receive it as discussed in the [RECORD OF SATISFACTORY CONDITION](#) section of this manual. Make sure that your Record includes a photograph of each label. Modify this diagram, if necessary, to indicate labeling actually applied. Replace all labels that are, damaged, missing, or not easily readable (e.g. faded). Contact the [TECHNICAL SERVICE/REPLACEMENT PARTS DEPARTMENT](#) online at <https://www.vestil.com/page-parts-request.php>. You may also call (260) 665-7586 and ask the operator to connect you to the [TECHNICAL SERVICE/REPLACEMENT PARTS DEPARTMENT](#).



**A:** Label 824 on tabletop

<b>⚠ DANGER</b>		<b>⚠ PELIGRO</b>
To avoid bodily injury, stand clear while in motion.		Para evitar daños, manténgase alejado cuando en movimiento

**B:** Label 269 on tabletop

<b>⚠ WARNING</b>	<b>⚠ ADVERTENCIA</b>
INSTALL ALL SUPPLIED MAINTENANCE STOPS before any maintenance is performed on unit. DO NOT perform maintenance with load on unit.	INSTALE TODAS LAS PARADAS DE MANTENIMIENTO SUMINISTRADAS antes de hacer cualquier reparación en la unidad. NO haga ninguna reparación con la unidad cargada.

**C:** Label 1153 on tabletop

MODEL / MODÉLO / MODÈLE _____
WEIGHT / PESO / MASS _____
CAPACITY / CAPACIDAD / CAPACITÉ _____
SERIAL / SERIE / SÉRIE _____
UNITS: 2.2 lb. = 1kg      1" (or 1in.) = 2.54cm      1153

**D:** Label 208 on scissor leg near pivot point

<b>⚠ WARNING</b>	<b>⚠ ADVERTENCIA</b>	<b>⚠ AVERTISSEMENT</b>
KEEP CLEAR OF PINCH POINT	MANTÉNGASE ALEJADO DEL PUNTO DE CORTE	SE TENIR À DISTANCE DU POINT DE PINCEMENT

**E:** Label 295 on power unit (not shown)

<b>⚠ WARNING</b>
Enclosed battery contains hazardous chemicals. DO NOT handle enclosed battery UNLESS wearing eye protection and other appropriate personal protective equipment. DO NOT directly contact skin with battery. DO NOT expose to sparks or extreme heat; battery contains explosive gases.
<b>⚠ ADVERTENCIA</b>
La batería incluida contiene materiales peligrosos. NO use la batería incluida A NO SER que lleve protección de ojos y otros equipos de protección apropiados para el personal. NO tenga contacto directo en la piel con la batería. NO exponga a destellos o a calor excesivo, la batería contiene gases explosivos.

**F:** Label 212 on frame near rear casters

<b>⚠ WARNING</b>	<b>⚠ ADVERTENCIA</b>	<b>⚠ AVERTISSEMENT</b>
Immobilize by applying all caster brakes and/or floor locks when in use, loading, and unloading.	Inmovilice aplicando todos los frenos de las ruedas y / o bloqueos del piso cuando esté en uso, cargando y descargando.	Immobiliser en appliquant tous les freins des roulettes et / ou les verrous de plancher lors de l'utilisation, du chargement et du déchargement.

**G:** Label 206 (on oil tank; not shown in diagram)

<b>ISO 32 / 150 SUS</b>
HYDRAULIC OIL OR NON-SYNTHETIC TRANSMISSION FLUID ACEITE HIDRAULICO O LIQUIDOS DE TRANSMISION NO SINTETICOS HUILE OU LIQUIDE HYDRAULIQUE NON-SYNTHEIQUE

**H:** Label 223 on maintenance prop

<b>MAINTENANCE STOP</b>	<b>PARADA DE MANTENIMIENTO</b>	<b>BLOE D'ENTRETIEN</b>
223 rev 0305		

## 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 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.

### Definition of "original part"?

An original part is a part used to make the product as shipped to the Warrantee.

### What is a "proper request"?

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

<u>US Mail</u>	<u>Fax</u>	<u>Email</u>
Vestil Manufacturing Corporation 2999 North Wayne Street, PO Box 507 Angola, IN 46703	(260) 665-1339 <u>Phone</u> (260) 665-7586	<a href="mailto:info@vestil.com">info@vestil.com</a> Enter "Warranty service request" in subject field

In the written request, list the parts believed to be defective and include the address where replacements should be delivered. 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 will require you to send the entire product, or just the defective part (or parts), to its facility in Angola, IN.

### What is covered under the warranty?

The warranty covers defects in the following original, dynamic parts: motors, hydraulic pumps, motor controllers, and cylinders. It also covers defects in original parts that wear under normal usage conditions ("wearing parts"), such as bearings, hoses, wheels, seals, brushes, and batteries.

### How long is the warranty period?

The warranty period for original dynamic components is 1 year. For wearing parts, the warranty period is 90 days. Both warranty periods begin on the date Vestil ships the product to the Warrantee. If the product was purchased from an authorized distributor, the periods begin when the distributor ships the product. Vestil may, at its sole discretion, extend a 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?

The Warrantee (you) are responsible for paying labor costs and freight costs to return the product to Vestil for warranty service.

### Events that automatically void this Limited Warranty.

- Misuse;
- Negligent assembly, installation, operation or repair;
- Installation/use in corrosive environments;
- Inadequate or improper maintenance;
- Damage sustained during shipping;
- Collisions or other accidents that damage the product;
- Unapproved modifications: Do not modify the product IN ANY WAY without first receiving written authorization from Vestil.

### 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. Vestil makes no warranty or representation that this product complies with any state or local design, performance, or safety code or standard. Noncompliance with any such code or standard is not a defect in material or workmanship.