



INSTALLATION / OPERATOR MANUAL

3078 SERIES
Universal / Pan Lifters



PROUDLY MADE IN DUBLIN, VIRGINIA USA



APPALACHIAN MACHINE INC | 5304 Laboratory Street | Dublin, VA 24084

Phone: (540) 674-1914 | info@appalachianmachine.com | www.appalachianmachine.com



FOREWORD

This manual has been prepared so that the owner, maintenance personnel and operator may readily have available information and instruction pertaining to the installation, maintenance, repair and safe operation of the System.

The extra care in design, quality and manufacture of the System warrants the attention of all concerned. The additional personal attention and cost to provide regular inspection and maintenance will be reimbursed many times over in long-term trouble-free operation.

Maintenance personnel are urged to study this manual, so that a complete understanding of the system's operating principles, trouble-shooting techniques and maintenance methods may be accomplished.

Since units vary, the installation instructions presented in this manual have been generalized. Some deviations from the instructions might be required to complete the unit installation.



CUSTOMER SERVICE POLICY

LIFTERS

INSTALLATION: Appalachian Machine Inc. can install the lift unit at your location. Please call for quote.

QUESTIONS: If you are installing the lift unit and have question, please call Customer Service.

PARTS: Appalachian Machine Inc. stocks parts at our plant in Dublin, VA. Parts are shipped one to two business days after order. Emergency part service ships by UPS Next Day if ordered before 2PM EST, Monday – Friday.

PRICES: Call Customer Service.

TERMS: Net 30 days.

ORDER REQUIREMENTS: Minimum \$35 per order.

WARRANTY: All warranties (parts & labor) and returns must have a Return Material Authorization number (RMA#). Call Customer Service for approval and RMA#.

Customer Service Center

Monday – Friday 7AM-3PM EST

(540) 674-1914

info@appalachianmachine.com



SAFETY INSTRUCTIONS

3078 SERIES LIFTERS

1. No one should operate the lifter without first reading the manual and receiving hands-on training on the unit.
2. The power unit is controlled by a key lock for added safety. Access keys should be controlled by the plant or building safety manager and limited to trained operators. **NEVER leave the key in the lock when not operating.**
3. No one should climb, sit or **RIDE** on the lifter.
4. All personnel must stand clear (10 feet away) during the complete lift cycle. The operator must have a clear view of the lifter throughout the lift cycle, up and down.
5. **NEVER** stand under the lift unit when it is operating or in the up position.
6. **NEVER** clean under the lift unit when it is in the up position.
7. **NEVER** leave the unit up in the dumped position.
8. The power unit is designed with safety in mind and is operated by key lock and hydraulic hand valve. No modifications should be made to these controls.
9. Dump only authorized Toter Carts that are in good repair. **DO NOT** dump other carts. **DO NOT** dump Toter Carts that are cracked, broken, have bent stop bars or missing parts.
10. **DO NOT** modify this lifter to handle other carts.
11. **DO NOT** dump a cart that is over-filled (above the lip of the cart) or overloaded (above the maximum weight printed on the cart or lid). MAXIMUM LOAD for this lifter is 2,500 LBS for double motor; 1,500 LBS for single motor.
12. **DO NOT** dump carts containing hazardous waste (per EPA listings), flammable liquids or explosive materials.
13. Wear eye protection when operating.
14. Keep hands clear of operating lift unit. Follow US OSHA lockout and tagout procedures prior to maintaining or repairing the unit.
15. Ensure that the lids of any carts that are latched, locked, or chained shut are fully opened before dumping.



DESCRIPTION

3078 SERIES LP-5000

Universal Low Profile Lifter

This hydraulic powered truck lifter is designed to safely and quickly dump trucks of up to 2 cubic yards. It uses double lifting forks that engage the double lifting pockets on the bottom of the truck's frame. It easily dumps Mobile Trucks, Utility Trucks, and Tilt Trucks loaded up to 2,300 LBS*, to a height of 30" above the floor.

An optional adaptor is available that will allow the unit to dump 32-96 gallon Two-wheel and Caster Carts with this unit.

* See information panel on each truck for maximum load rating of trucks



DESCRIPTION

3078 SERIES 00-6000

Universal / Pan Lifter

This hydraulic powered truck lifter is designed to safely and quickly dump trucks of up to 2 cubic yards. It uses double lifting forks that engage the double lifting pockets on the bottom of the truck's frame. It easily dumps Mobile Trucks, Utility Trucks, Cube Trucks and Tilt Trucks loaded up to 2,300 LBS*, to a height of 70" above the floor.

An optional adaptor is available that will allow the unit to dump 32-96 gallon Two-wheel and Caster Carts with this unit.

* See information panel on each truck for maximum load rating of trucks



DESCRIPTION

3078 SERIES BD-7000

Universal / Pan Lifter

This hydraulic powered lifter is designed to safely and quickly dump carts, mobile trucks, tilt trucks, Gaylord boxes and pallets into a hopper, compactor or conveyor.

The containers or boxes can be dumped from floor level a MINIMUM 36" to a MAXIMUM of 65" above the floor with a MINIMUM load rating of 2,500 LBS or MAXIMUM of 4,500 LBS per customer specifications.

The containers or boxes held in the pan by an adjustable spring loaded bar that can be moved inside the box or by stop angle inside the box.



OPERATION INSTRUCTIONS

3078 SERIES

Universal / Pan Lifter

1. Place container or box on pan.
2. If container does not have side angles on side of pan to hold in place when dumping, place stop bar at back of container as close as possible to the top of the container.
3. To operate stop bar, hold back on spring-loaded pin handle on one side of the bar. This will allow you to remove bar and raise or lower to correct set of holes for dumping containers.
4. It is important that you have stop bar as close to top of container as possible. If the bar is too high above container the bar could be damaged when dumping.
5. Some lifters have a swing bar that goes over the handle of two-wheel carts. If dumping two-wheel carts lock this bar over handle before dumping.
6. After container is secured on pan turn switch on the motor starter on the side of the lift unit.
7. Push (UP) button on motor starter and dump container.
8. When all of the materials have fallen out of the container and into the hopper, push (DOWN) button and lower container.
9. Turn off the On/Off switch of the motor starter.
10. Remove container from the pan.



OPERATION INSTRUCTIONS

3078 SERIES LP - 5000

Universal Low Profile

12 Bu, 16 Bu & 20 Bu Utility Trucks; 1 Yd, 1-1/2 Yd & 2 Yd Mobile Trucks

1. Push truck on lift forks until truck hits back of frame.
2. Be sure forks are in each pocket of the truck.
3. Turn on power unit.
4. Be sure no one is behind truck.
5. Pull up on handle of valve to dump cart.
6. During lift cycle, look at truck's dumping pockets to be sure forks are completely inserted in both pockets. If not, STOP and lower truck.
7. After lift cycle is complete, push down on hand valve handle and lower truck to floor.
8. Turn power unit off.

NOTE: If power unit is left on for a long period of time, it could damage power unit and will void all warranties of power unit.

9. Remove truck from lift unit.



OPERATION INSTRUCTIONS

3078 SERIES LP - 5000

Universal Low Profile

½ Yd, 1 Yd, & 1-1/2 Yd Tilt Trucks

1. Push truck on lift forks with handle end of truck toward lift unit. See warning label for tilt truck. If tilt truck is not placed properly on forks, truck could fall off forks during lift cycle.
2. Be sure forks are in each pocket of the truck.
3. Turn on power unit.
4. Be sure no one is behind truck.
5. Pull up on handle of valve to dump cart.
6. During lift cycle, look at truck's dumping pockets to be sure forks are completely inserted in both pockets. If not, STOP and lower truck.
7. After lift cycle is complete, push down on hand valve handle and lower truck to floor.
8. Turn power unit off.

NOTE: If power unit is left on for a long period of time, it could damage power unit and will void all warranties of power unit.

9. Remove truck from lift unit.



WARNING

BEFORE ANY INSTALLATION OF THE UNIT:

Voltage from the electrical disconnect to the motor starter has to be verified as the same stated on the voltage label on the motor starter control box.

FAILURE TO SUPPLY ANY VOLTAGE TO THE MOTOR STARTER THAT IS NOT THE SAME AS THE VOLTAGE STATED ON THE MOTOR STARTER WILL VOID ALL WARRANTIES.

GREASING IS REQUIRED FOR PROPER MAINTENANCE OF CERTAIN PARTS.



INSTALLATION INSTRUCTIONS

3078 SERIES

Universal / Pan Lifter

1. Center lifter in front of hopper or compactor that unit will dump into as close as possible.
2. Drill hole for $\frac{3}{4}$ " concrete anchors or bolts for the two front mounting holes of lifter.
3. Connect power supply from disconnect to motor starter of lifter.
4. For power units mounted to lifter remove shipping plug from power unit's oil fill and check oil level of power unit $\frac{1}{2}$ " below fill hole and replace plug with supplied breather cap.
5. For stand mounted power unit fill oil reservoir with a W46 hydraulic oil to full level on sight gauge of power unit.
6. Turn power unit on and check rotation of motor (SEE ARROW) on motor. Note: Unit will not lift if rotation is wrong. If wrong, change wiring to motor starter.
7. Raise pan up to dump position and check clearance of pan dumping into hopper or compactor. If correct, mount remaining anchors or bolts into mounting holes.
8. If unit is supplied with safety cage, mount in place.
9. Check all valves and hose fittings for leaks.
10. Dump all carts or containers that are to be used with lifter to be sure they are dumped correctly.
11. Instruct operators how to use lifter.



INSTALLATION INSTRUCTIONS

3078 SERIES LP - 5000

Universal Low Profile

- 1) Place unit on level floor, deck, or concrete pad in location unit is to reside.
 - 2) Center unit on hopper or receptacle opening.
 - 3) The distance from the receptacle (hopper, container, etc.) to the mounting position of the Universal Lifter is determined by:
 - a) Identifying the area into which the contents of the truck must be dumped.
 - b) Measuring back 8" from that area to the back of the Universal Lifter.
 - 4) To anchor unit in place:
 - a) Ten $\frac{3}{4}$ " anchor bolts are to be used with concrete pad installations.
 - b) Ten $\frac{3}{4}$ " grade 8 bolts using nuts with lock washers are to be used for steel deck applications.
 - c) See drawing 3078-001-S
- WARNING:**
- i) **Unit must be anchored to floor, pad or deck in all ten places shown on drawing 3078-001-S; FAILURE to do so will void all lift unit and truck warranties.**
 - ii) **Do not attempt to mount on asphalt or dirt.**
- 5) After lift unit is in place install safety rails on each side of unit 18" from outside of chute to center of rail. Center back post of rail on center of back mounting tube of lift unit.
 - 6) Position power unit outside of safety rails. The location in respect to the front or back of the safety rails is at the discretion of the end user. It is recommended that the power unit be as close to the lifter or hopper as possible without touching the safety rails or hopper. The operator must be able to see the lifter clearly throughout its cycle.
 - 7) Connect the two hydraulic hoses from power unit's hand valve to the two tee fitting that connects to the cylinders at back of lift unit. Tees are labeled to aid with installation.
 - 8) Anchor power unit to floor, pad or deck.
 - 9) Fill power unit with AW-46 hydraulic oil or equivalent.
- NOTE: Due to ICC regulations oil cannot be shipped in reservoir of power unit.**
- 10) Connect power from disconnect to power unit electric control panel. Be sure power supplied to the unit matches the electrical requirements of the motor. (See diagram on motor starter) if voltage to motor starter has to be changed, be sure and change wiring of

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motor to match voltage coming to it (See diagram on Motor). It is recommended that the electrical installation or repairs be done by a licensed electrician.

- 11) Turn pump on and check rotation of the motor (See arrow on outside of motor).

NOTE: Rotation must be correct or pump will not function.

- 12) Remove safety bolt from fork bracket and slide lifting forks on fork bracket. Slide fork on bracket until latch pin on fork lines up with slot on bracket and lock fork in place. After both forks have been positioned correctly, install safety bolt.

- 13) Turn power unit on and cycle lift unit a few times while checking for the following:

- a) Oil leaks on fittings of the power unit and lift unit
- b) Lifters dump in correct place
- c) Lifter chute does not strike hopper or conveyor
- d) Overhead clearance
- e) Security of anchor bolts

- 14) Raise arm up approximately $\frac{1}{4}$ way up and turn power unit off. Look behind each lifting fork arm and see two fork adjustment screws on the lifters stop bar (See drawing 3085-038-1).

- 15) Turn power unit on and lower forks until they are level with floor (approximately 4-1/2" from floor to top of fork). Turn power unit off and remove key from backside of unit. Turn out on each fork adjustment screw until they contact fork lifting arms and then lock screws in place with lock nuts.

- 16) After forks have been leveled, push truck over forks. Forks should go through the pockets of each model of truck to be used with lifter. If forks will not go into the truck's pockets re-adjust fork leveling screws.

NOTE: This will have to be done only one time for all standard Toter trucks as their pockets are a standard distance from the floor.

- 17) If for any reason the forks need to be lowered to the floor, this can be done by turning the stop bar handle that extends from the left side of the unit 180°.

- 18) Place warning label on front forks. To aid in locating fork position when loading trucks onto the lifter we advise taping or painting guidelines on the floor. These lines should be parallel to the forks and extend at least 6" past the end of the forks.

- 19) Your installation is now complete.

Operate lift with truck three or four times and recheck for:

- a) Oil leaks
- b) Kinking of lines
- c) Overhead clearance
- d) Unit not hitting the hopper or conveyor

- 20) Instruct operators how to use lifter.

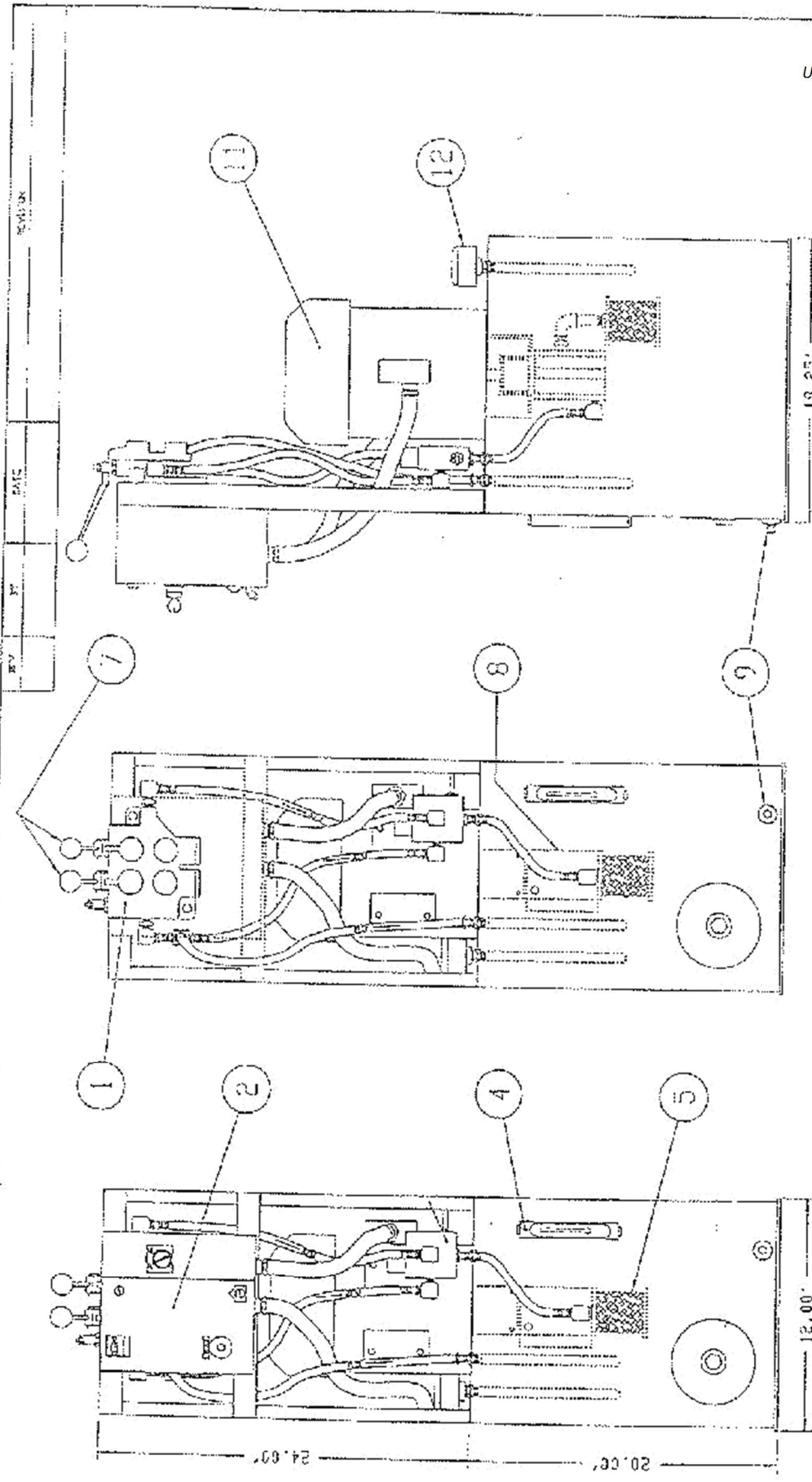


PARTS LIST

3075-00-6000 Power Unit for 3077 & 3078 Twin Post Lift Units

<u>ITEM</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1	5354-00-0420 5354-00-0430	Open Center Hand Valve Tandem Center Hand Valve
2	5354- MS-3008	Motor Starter
4	3075-00-6107	Sight Gauge
5	3075-00-6106	Suction Strainer
7	5354-00-0409	Replacement Hand Valve Handle
8	5354-00-6101	Pump
9	3075-00-6112	Tank Plug
11	3075-00-6102	Motor 5HP 208/230/460 Volt 3 Phase
12	3075-00-6109	Filter Breather
NOTE: The hand valve that operates the elevator up and down is the 5354-00-0420 open center valve. It is very important that an open center valve is used if the supplied valve has to be replaced. Failure to use the proper valve will not allow brake to operate properly.		

Updated: Fall 2015



DO NOT SCALE	06/06/95	1	1
ILLUSTRATION ORIGIN: PROJECT DATE: 06/06/95	Toter [®]	INCORPORATED	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.	STATESVILLE, N.C.		
NO SCALE	LLOYD COLE		
	DB1140		
	5 HORSE-POWER POWER UNIT		
	3075-00-6000		

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MOTOR STARTER PARTS LIST

5354-MS-3601 Pan Lifter

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
5354-MS-3230	208/240 Volt Starter
5354-MS-3480	480 Volt Starter
5354-MS-3020	Key Switch
5354-MS-3023	UP Push Button
5354-MS-3024	DOWN Push Button
5354-MS-3011	Transformer
5354-MS-3019	Key
5354-MS-3021	Contact Block
5354-MS-3212	240 Volt Heater Pack
5354-MS-3412	480 Volt Heater Pack



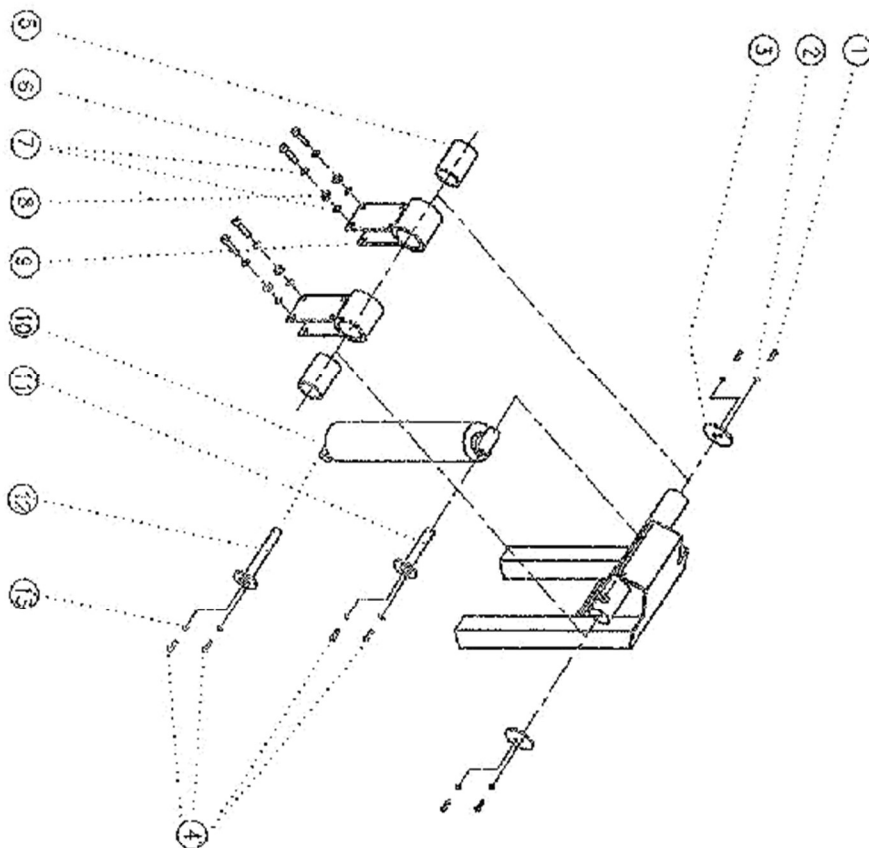
PARTS LIST

SWING UNIT PAN LIFTER

<u>ITEM</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1	5590-00-0301	S.H. Cap Screw
2	5440-00-0300	Lock Washer
3	3077-00-0492	Shaft Washer
4	5590-00-0125	S.H. Cap Screw
5	5032-00-3005	Bronze Bushing
6	5590-00-5079	S.H. Cap Screw
7	5440-00-0500	Lock Washer
8	5260-00-0500	Hex Nut
9	3077-00-0452	Bearing Block
10	3077-BD-1000	Cylinder
11	3077-00-0494	Top Cylinder Pin
12	3077-00-0432	Bottom Cylinder Pin
13	5440-00-0200	Lock Washer

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PARTS LIST:

DESCRIPTION:	SPECIFICATIONS:	QUANTITY:
LOCK WASHER	5/16"	4
HEX SOCK. BUTTON HD. SCREW	5/16"UNC-3/4"LG.	4
LOCK WASHER	1/2"	8
NUT	1/2"UNC	4
SHAFT WASHER		2
SHORT PIN		1
ELITE BUSHING	AA-3505	2
HEX SOCKET HEAD CAP SCREW	1/2"UNC-3.25LG.	4
BEARING HOUSING		2
HYDR. CYLINDER		1
LONG PIN	1/4"-20X 3/4"	1
HEX HEAD BOLTS	1/4"	4
LOCK WASHERS		4

AMERICAN MARKETING SALES CO. P.O. BOX 1619 DUBLIN VA. 24084			
PARTS DRAWING, BOX LIFTER			
DRAWN BY: KHN	SIZE: D	Selling Unit	
DATE:			
SHEET 1	OF 1	QUANTITY NEEDED:	

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PARTS LIST

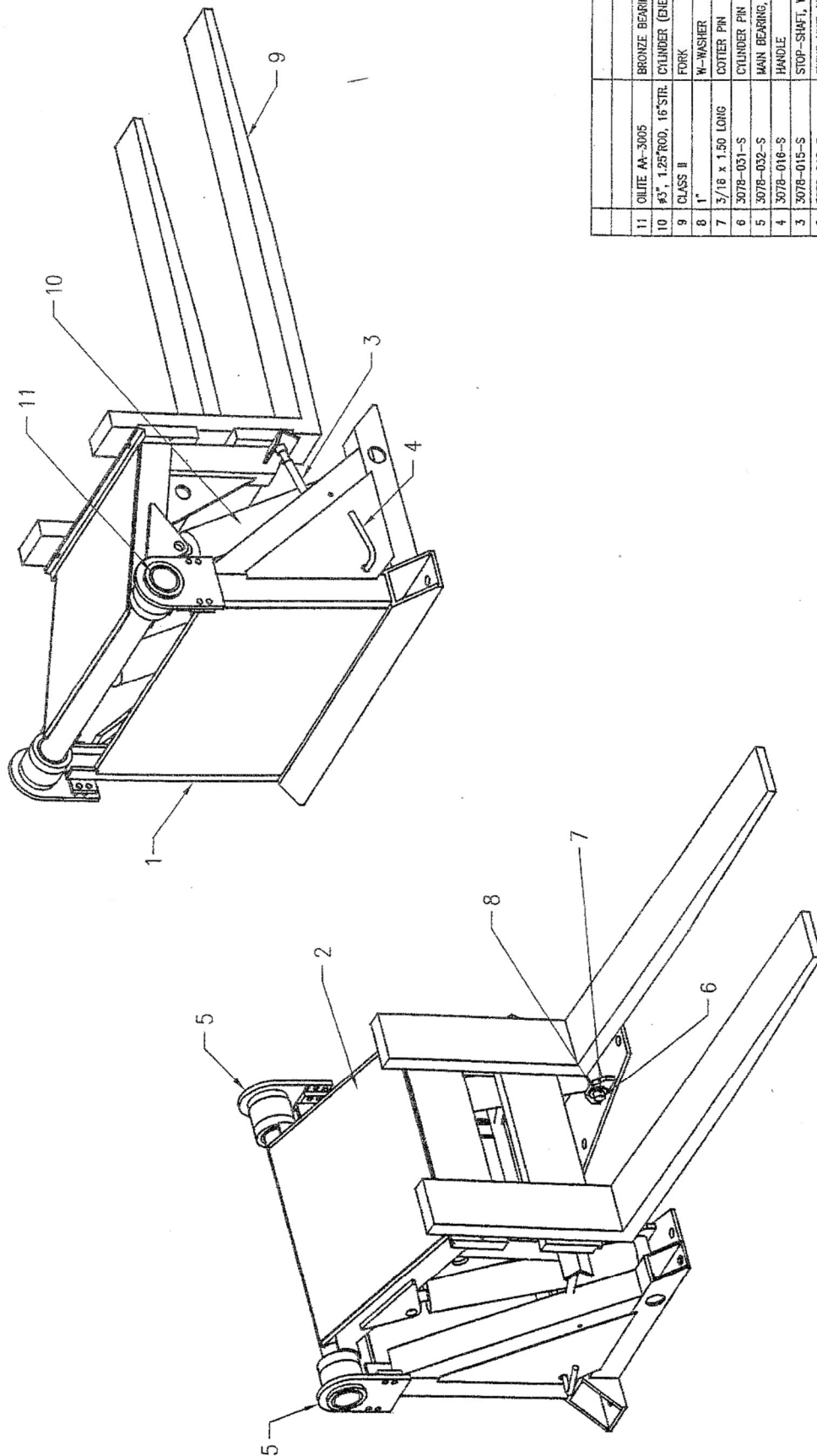
3078-LP-5000 LIFT UNIT

<u>ITEM</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1	3078-LP-0001	Mounting Frame
2	3078-LP-0018	Lift Assembly
3	3078-LP-0015	Stop Shaft
4	3078-LP-0016	Handle
5	3078-00-0032	Right Bearing Bracket
5	3078-00-0033	Left Bearing Bracket
6	3078-00-0031	Lower Cylinder Pin
7	5110-00-0030	Cotter Pin 3/16 x 1-1/2
8	5500-00-0910	Washer 1"
9	3078-00-3036	Forks 36"
9	3078-00-3042	Forks 42"
10	3078-LP-5005	Cylinder
11	3078-AA-3005	Bearing
12	3078-00-0036	Upper Cylinder Pin (NOT SHOWN)

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13		5590-00-0579	S.H. Cap Screw ½"-20 x 1-1/2"
14		5260-00-0500	½" Nut
15		5440-00-0500	½" Lock Washer
16		3075-00-6100	5HP Power Unit
17		3075-00-6101	Hydraulic Pump
18		3075-00-6102	5HP Motor
19		5354-MS-3480	Motor Starter
20		5354-00-2500	Prince Hand Valve
21			Hand Valve Handle
22			Handle C Hook
23			Spool Seal



ITEM	PART NO.	DESCRIPTION/MATERIAL	QTY.
11	OLLIE AA-3005	BRONZE BEARING	2
10	#3", 1.25" ROD, 16" STL	CYLINDER (ENERGY)	2
9	CLASS II	FORK	2
8	1"	W-WASHER	8
7	3/18 x 1.50 LONG	COTTER PIN	8
6	3078-031-S	CYLINDER PIN	4
5	3078-032-S	MAIN BEARING, WID.	2
4	3078-016-S	HANDLE	2
3	3078-015-S	STOP-SHAFT, WEST	1
2	3078-018-S	SWING UNIT, W.	1
1	3078-001-S	FRAME, WELDM.	1

DESIGNED BY: P.O. Box 5338	
MANUFACTURED BY: STALEVILLE, VA 22677	
DATE: 1-14-00	
SCALE: 1/4"	
MODEL: 3078-000-1000	
OVERVIEW (FRAME)	
LOW FORK-LIFTER	
SEE KEY NO. 1	
SIZE: 3078-052-S	
SHEET: 1 OF 1	
CURRENT REV:	

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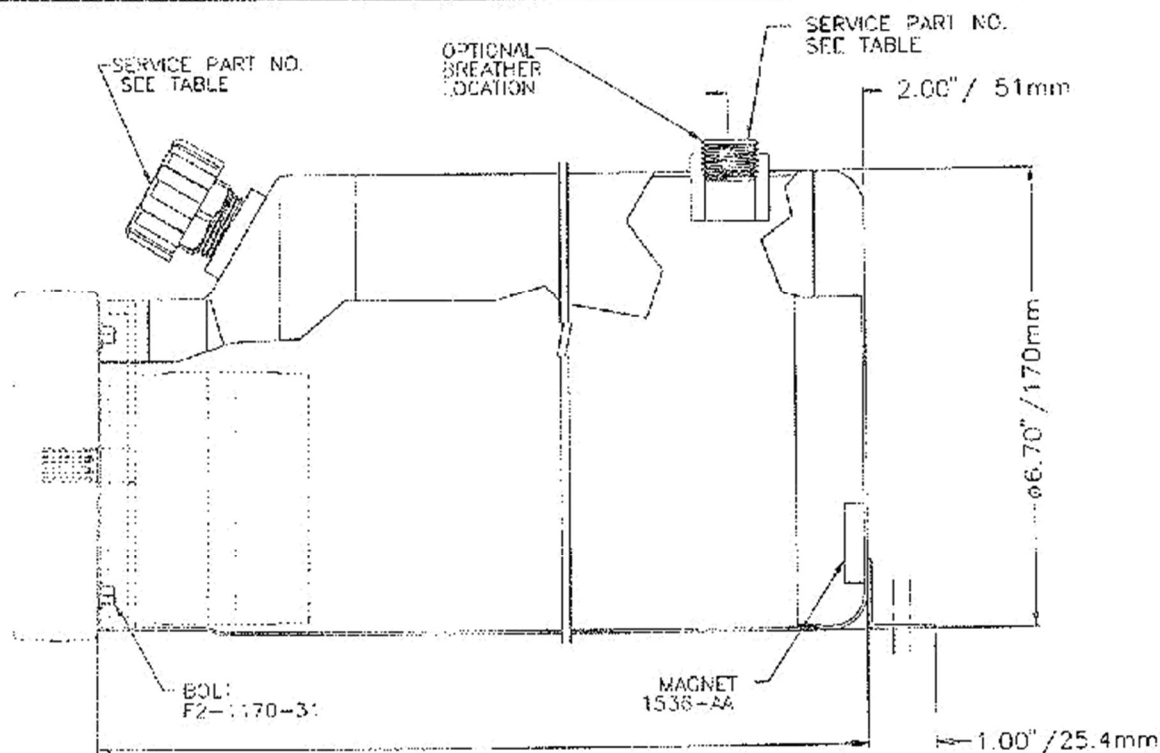
PARTS LIST

HYDRAULIC POWER UNIT

<u>ITEM</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1	5354-F3-3HP3	Fenner Power Unit
2	5354-FE-3M19	3HP Motor 230/460 3 Phase
3	5354-FE-3940	Pump
4	5354-FE-3R43	Reservoir
5	5354-FE-3023	Relief Valve Kit
6	5354-FE-3731	Coupling
7	5354-FE-3B11	Manifold Kit
8	5354-NA-SG01	Nachi Valve
9	5354-FE-3024	PLUMIHG Kit
10	5354-FE-3603	Filler Breather
11	5354-FE-COIJ	Solenoid Release Kit
	11 FOR UNITS WITH GRAVITY RETURN	
	Recommended Oil : AW-46 for normal use / AW-31 for cold weather applications	

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- FOOT INCLUDED ON 1.5 GAL. AND LARGER.
- SHIMMING MAY BE REQUIRED AT INSTALLATION.
- DO NOT USE KR40 WITH DUPLEX PUMP UNITS.

K.T. NO.	NOMINAL CAPACITY (GALS.)	TANK LENGTH (L)		USEABLE OIL CAPACITY				BREATH-ER SERVICE PART NO.	PLUG SERVICE PART NO.
				VERTICAL		HORIZONTAL			
		mm	IN.	LITRE	CUBIC IN.	LITRE	CUBIC IN.		
KR40	1.0	200	7.88	1.6	100	2.8	170	1214-AA	1456-AA
KR45	1.2	250	9.84	2.6	160	3.6	220	1214-AA	1456-AA
KR41	1.5	300	11.81	3.6	220	4.4	270	1683-AB	1896-AA
KR42	2.0	400	15.75	5.6	340	5.9	360	1683-AB	1896-AA
KR46	2.5	432	17.00	6.2	380	6.4	390	1683-AB	1896-AA
KR43	3.0	550	21.65	8.5	520	8.2	500	1683-AB	1896-AA
KR44	4.0	650	26.00	10.6	650	9.8	600	1683-AB	1896-AA

 CHANGE
 ADD DUPLEX NOTE.

 TITLE
 RESERVOIR
 170mm DIA.

 SCALE
 NONE

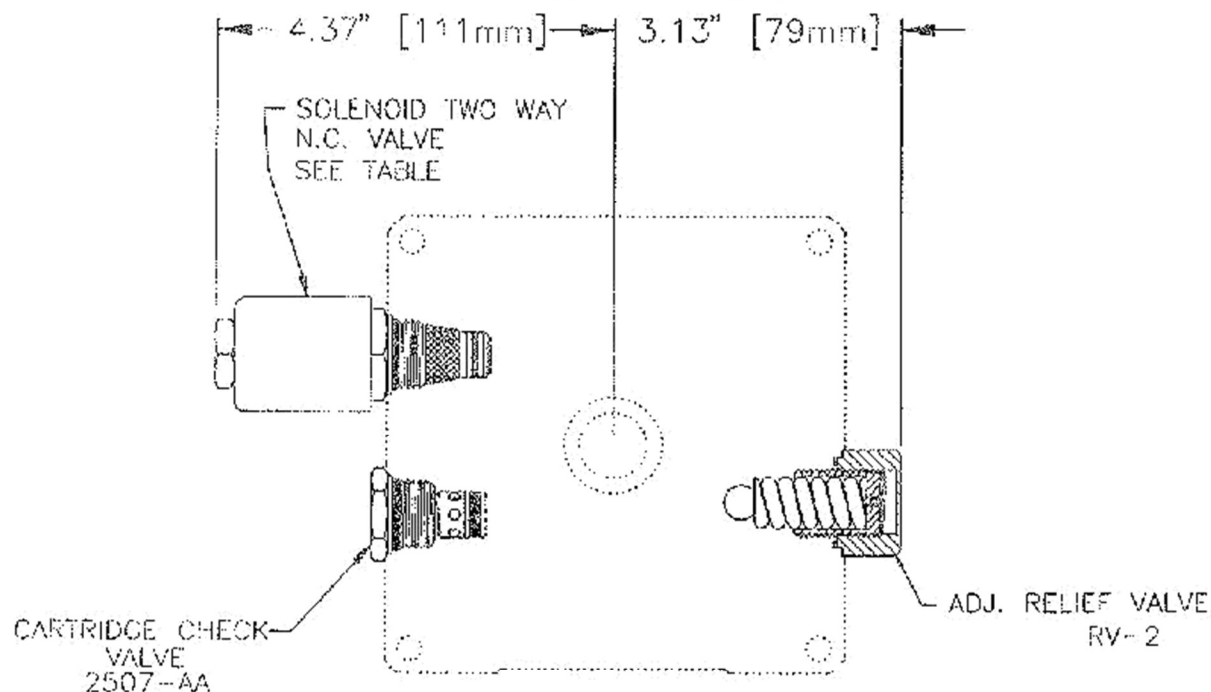
 REV
 B

DRAWN DATE CHECK DATE

GLC APPALACHIAN MACHINE INC 1234 Laboratory Street I Dublin, VA 24084

PART NO.

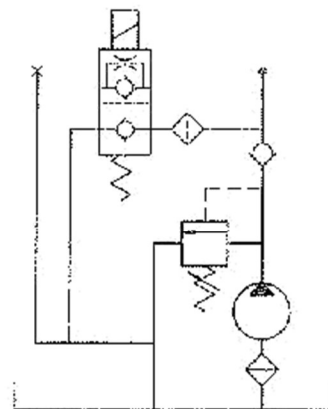
KR4_



- NC VALVE IS RATED TO RELEASE AT 3000 PSI (207 BAR).
- KIT INCLUDES 4 COLOR-CODED RELIEF SPRINGS AS FOLLOWS:
 BLUE (500-1000 PSI)[34.5-69 BAR], GREEN (1000-2000 PSI)[69-138 BAR],
 RED (2000-3000 PSI)[138-207 BAR], BLACK (3000-4000 PSI)[207-276 BAR].
- REMOTE CORD SET AVAILABLE, FOR STYLES *, ORDER K011.

• FOR MANUAL OVERRIDE OPTION ADD '-M' TO KIT NUMBER.

KIT NO.	COIL VOLTAGE	CONNECTION STYLE	HANDSETS
KC01A	12v DC	DIN/HIRSCHMANN	
KC01B	12v DC	DUAL 1/4" SPADE	
KC01C	12v DC	SINGLE #10 UNF STUD	*
KC01D	24v DC	DIN/HIRSCHMANN	
KC01E	24v DC	DUAL 1/4" SPADE	
KC01F	24v DC	SINGLE #10 UNF STUD	*
KC01G	24v AC	DIN/HIRSCHMANN	
KC01H	230v AC	DIN/HIRSCHMANN	
KC01J ✓	115v AC	DIN/HIRSCHMANN	



NOTE: FENNER USES A NETWORK OF QUALIFIED SUPPLIERS TO ENSURE AVAILABILITY THERE ARE MINOR DIMENSIONAL AND COSMETIC DIFFERENCES BETWEEN VENDOR'S PRODUCTS.

CHANGE

ADD METRIC DIMS.
 ADD MANUAL OVERRIDE

TITLE

RELIEF, CHECK
 SOLENOID RELEASE
 VALVE KIT

SCALE

NONE

REV.

C

DRAWN

GLC

DATE

24-JUL-95

CHECK

26-SEP-95

DATE

13-SEP-95

APPALACHIAN MACHINE INC

5304 Laboratory Street

Dublin, VA 24084

PART NO.

K001

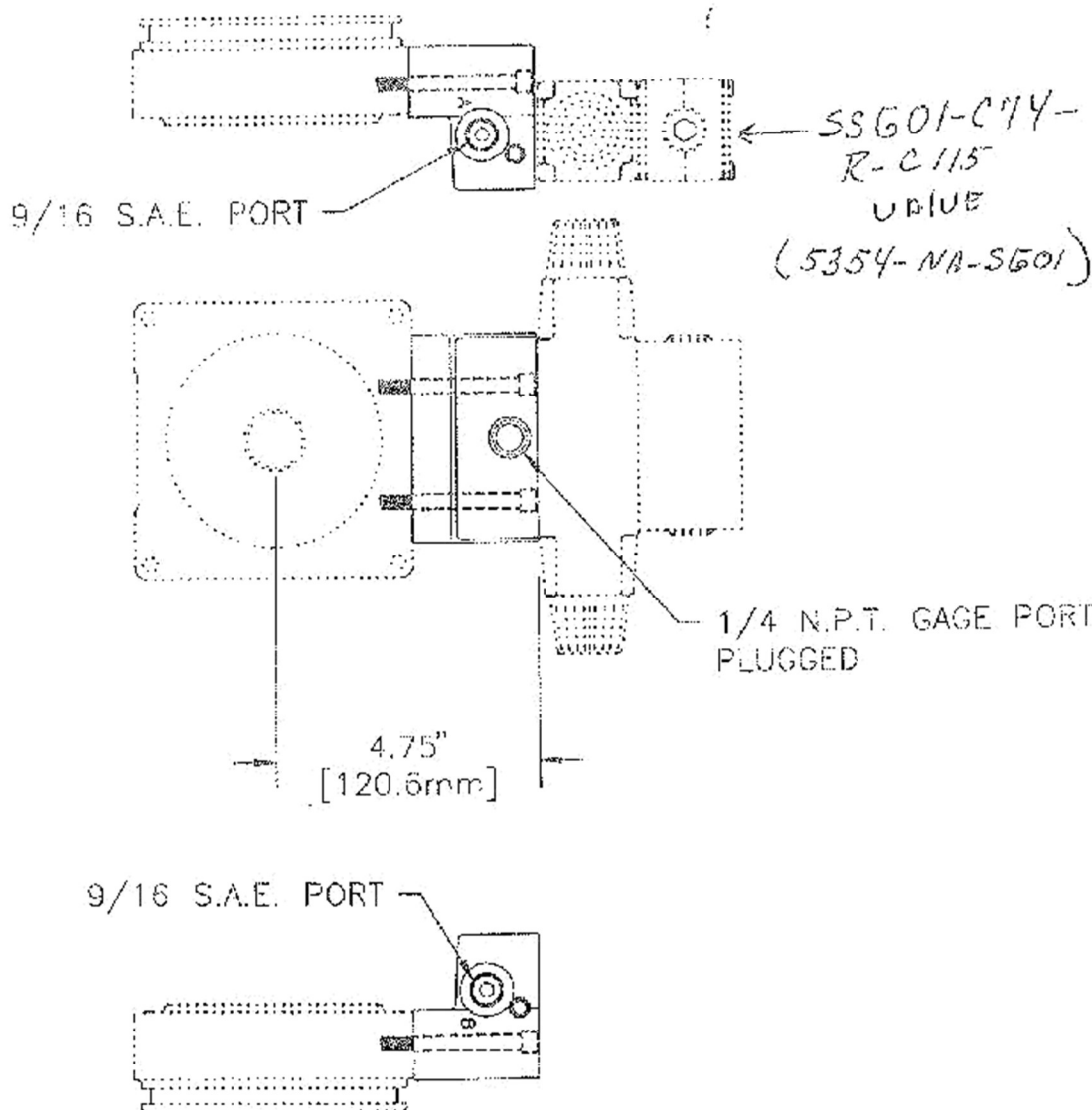
Fenner
Fluid Power

DISTRIBUTOR POWER UNIT PROGRAM

Updated: Fall 2015



- KIT INCLUDES ALL SEALS AND MOUNTING HARDWARE.
- CETOP VALVE NOT INCLUDED.



CHANGE
ADD METRIC DIMS.

TITLE
SINGLE MANIFOLD BLOCK
FOR CETOP 3-VALVE
S.A.E. PORTS

SCALE
NONE

REV.
B

DRAWN
GLC

DATE
24-JUL-95

APPALACHIAN MACHINE INC

DATE
13-JUL-95

5304

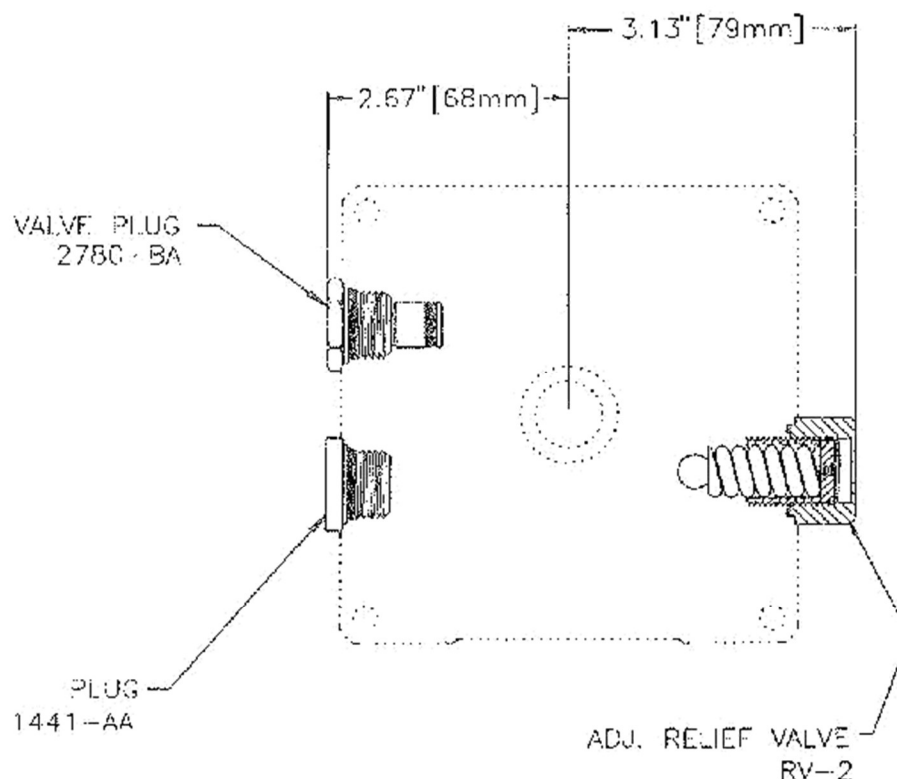
Laboratory Street | Dublin, VA 24084

PART NO.
KB11

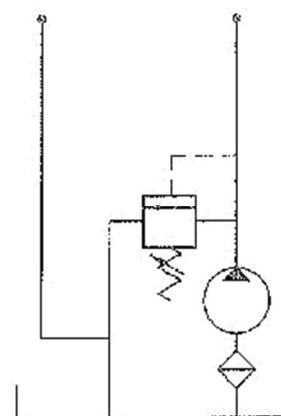
Phone: (540) 674-1914

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- * KIT INCLUDES 4 COLOR-CODED RELIEF SPRINGS AS FOLLOWS: BLUE (500-1000 PSI)[34.5-69 BAR], GREEN (1000-2000 PSI)[69-138 BAR], RED (2000-3000 PSI)[138-207 BAR], BLACK (3000-4000 PSI)[207-276 BAR].



CHANGE
ADD METRIC DIMS.

TITLE
RELIEF VALVE
KIT

SCALE
NONE

REV.
D

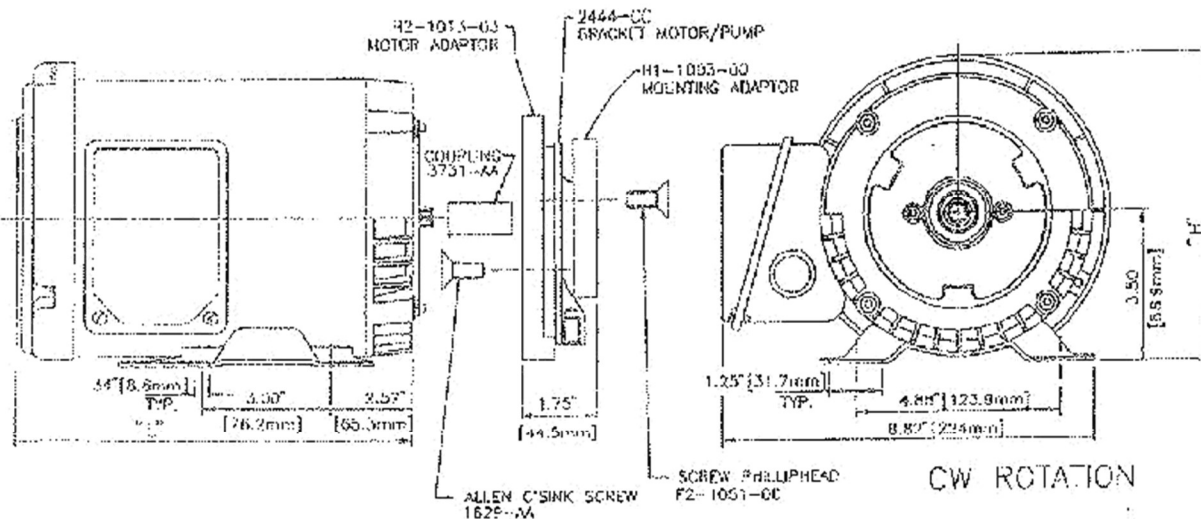
DRAWN
GLC

DATE
24-JUL-95

5304 Laboratory Street |

Dublin, VA 24084

PART NO.
KC08



MOTOR UNIT	MACHINE DIM.	
	"L"	"H"
MC18	11.19" [284.2mm]	7.18" [182.4mm]
MC19	12.50" [317.5mm]	7.18" [182.4mm]
MC20	13.53" [343.6mm]	7.44" [188.9mm]
MC22	11.19" [284.2mm]	7.18" [182.4mm]
MC24	11.19" [284.2mm]	7.18" [182.4mm]

FOR FLOWS OVER 3 GPM (11 LPM),
USE 1413-AA FILTER.

ALL MOTORS ARE TOTALLY ENCLOSED,
FAN-COOLED (TEFC).

MOTORS ARE CONTINUOUS DUTY BUT CAN NOT
BE USED ABOVE THEIR RATED HORSEPOWER,
REGARDLESS OF DUTY CYCLE, AND MUST HAVE
FULL VOLTAGE TO ACHIEVE RATED HORSEPOWER.

NOTE: FENNER USES A NETWORK OF QUALIFIED SUPPLIERS TO
ENSURE AVAILABILITY. THERE ARE MINOR DIMENSIONAL
AND COSMETIC DIFFERENCES BETWEEN VENDOR'S PRODUCTS.

PERFORMANCE AT 45 CST (200 SSU) AND 90% MECHANICAL EFFICIENCY.

PG-PUMP	PG10X0	PG10X1	PG10X2	PG10X3	PG10X4	PG10X5	PG10X6	PG10X7	PG10X8	PG10X9
MOTOR										
KMC18 2HP 3450 RPM, 3PH 230/460v 60Hz	.7 GPM 3450 PSI	.91 GPM 2850 PSI	1.3 GPM 2150 PSI	1.7 GPM 1700 PSI	2.2 GPM 1300 PSI	2.7 GPM 1000 PSI	3.5 GPM 750 PSI	4.4 GPM 500 PSI	NOT RECOMMENDED	
	2.7 LPM 240 BAR	3.5 LPM 200 BAR	5.1 LPM 150 BAR	6.6 LPM 115 BAR	8.4 LPM 80 BAR	10 LPM 70 BAR	14 LPM 50 BAR	17 LPM 35 BAR		
KMC19 3HP 3450 RPM, 3PH 230/450v 60Hz	.82 GPM 3000 PSI	.85 GPM 4300 PSI	1.2 GPM 3200 PSI	1.6 GPM 2550 PSI	2.1 GPM 2000 PSI	2.6 GPM 1600 PSI	3.4 GPM 1200 PSI	4.3 GPM 900 PSI		
	2.4 LPM 350 BAR	3.2 LPM 300 BAR	4.8 LPM 225 BAR	6.4 LPM 175 BAR	8.2 LPM 140 BAR	10 LPM 110 BAR	13 LPM 80 BAR	17 LPM 60 BAR		
KMC20 5HP 3450 RPM, 3PH 230/460v 60Hz	.62 GPM 5000 PSI	.79 GPM 5000 PSI	1.2 GPM 5000 PSI	1.5 GPM 4300 PSI	2.0 GPM 3400 PSI	2.5 GPM 2700 PSI	3.3 GPM 2050 PSI	4.2 GPM 1600 PSI	NOT RECOMMENDED	
	2.4 LPM 350 BAR	3.1 LPM 350 BAR	4.5 LPM 350 BAR	6.0 LPM 295 BAR	7.9 LPM 235 BAR	9.8 LPM 185 BAR	13 LPM 140 BAR	16 LPM 110 BAR		
KMC22 1/2HP 1725 RPM, 3PH 230/460v 60Hz	.35 GPM 1700 PSI	.46 GPM 1200 PSI	.65 GPM 1050 PSI	.84 GPM 850 PSI	1.1 GPM 650 PSI	1.3 GPM 500 PSI	1.7 GPM 400 PSI	2.2 GPM 300 PSI	2.8 GPM 200 PSI	3.5 GPM 100 PSI
	1.4 LPM 120 BAR	1.8 LPM 100 BAR	2.5 LPM 75 BAR	3.3 LPM 60 BAR	4.2 LPM 45 BAR	5.2 LPM 35 BAR	6.7 LPM 25 BAR	8.5 LPM 20 BAR	11 LPM 14 BAR	14 LPM 7 BAR
KMC24 1HP 1725 RPM, 3PH 230/450v 60Hz	.26 GPM 3450 PSI	.38 GPM 2850 PSI	.59 GPM 2150 PSI	.8 GPM 1700 PSI	1.0 GPM 1350 PSI	1.3 GPM 1100 PSI	1.7 GPM 800 PSI	2.2 GPM 650 PSI	2.7 GPM 450 PSI	3.5 GPM 300 PSI
	1.0 LPM 240 BAR	1.5 LPM 200 BAR	2.3 LPM 150 BAR	3.1 LPM 115 BAR	4.0 LPM 95 BAR	5.0 LPM 75 BAR	6.5 LPM 55 BAR	8.3 LPM 45 BAR	11 LPM 30 BAR	14 LPM 20 BAR

CHANGE

NEW DRAWING

TITLE

THREE PHASE
MOTOR/ PUMP
PERFORMANCE CHART

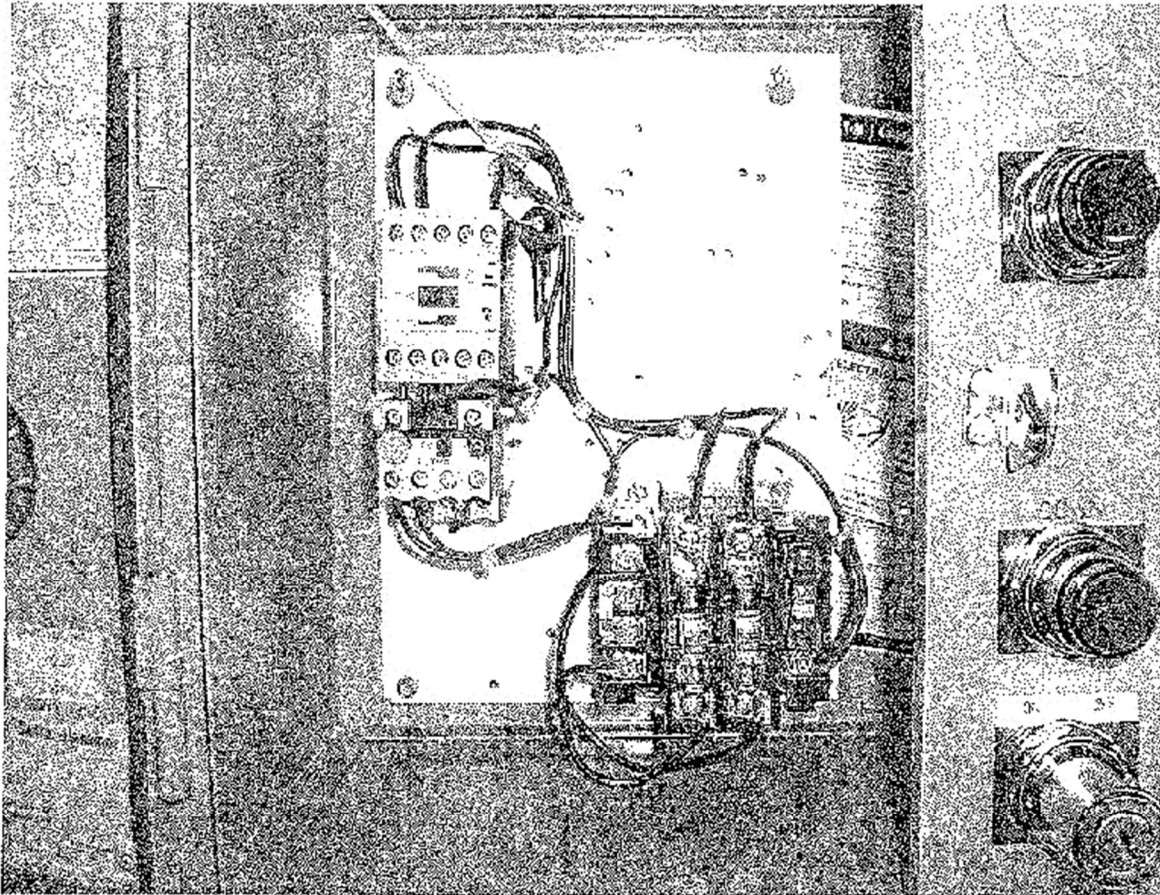
SCALE

NONE

REV.

A

DRAWN DATE CHECK DATE
CLC APPALACHIAN MACHINE, INC. 175304 Laboratory Street | Dublin, VA 24084



PART NUMBER

DESCRIPTION

5354-MS-3230

208/240 VOLT STARTER

5354-MS-3480

480 VOLT STARTER

5354-MS3020

KEY SWITCH

5354-MS-3023

UP PUSH BUTTON

5354-MS-3024

DOWN PUSH BUTTON

5354-MS-3011

TRANSFORMER

5354-MS-3019

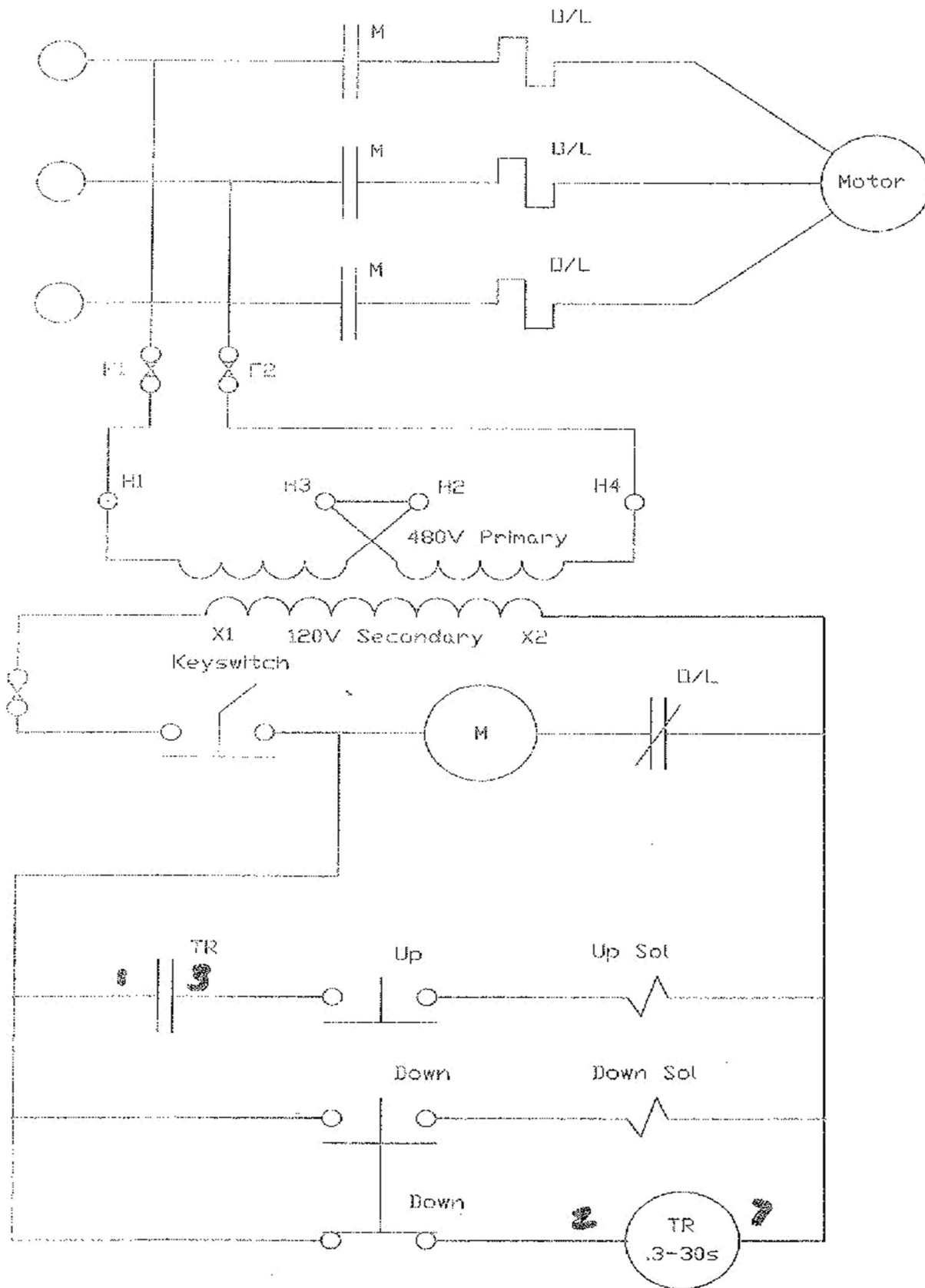
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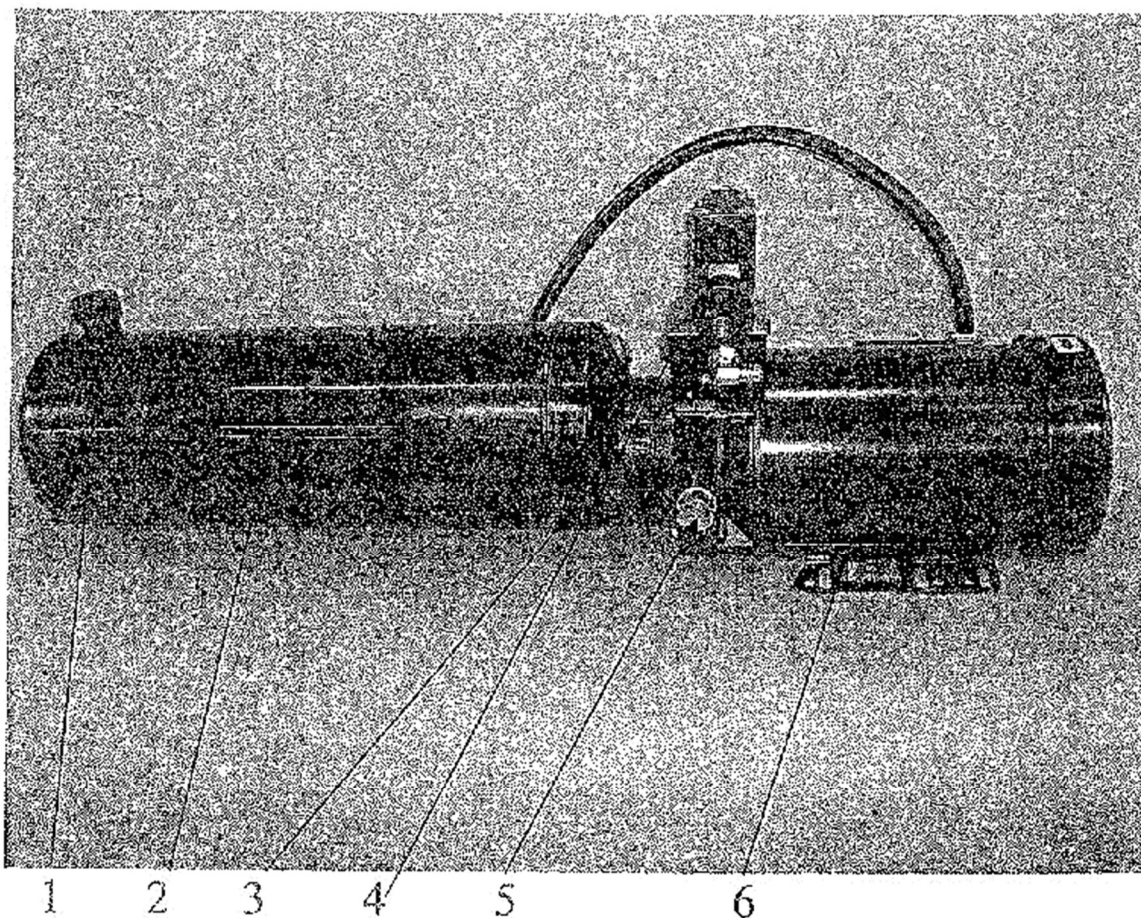
5354-MS-3021

CONTACT BLOCK
OVERLOAD RELAY

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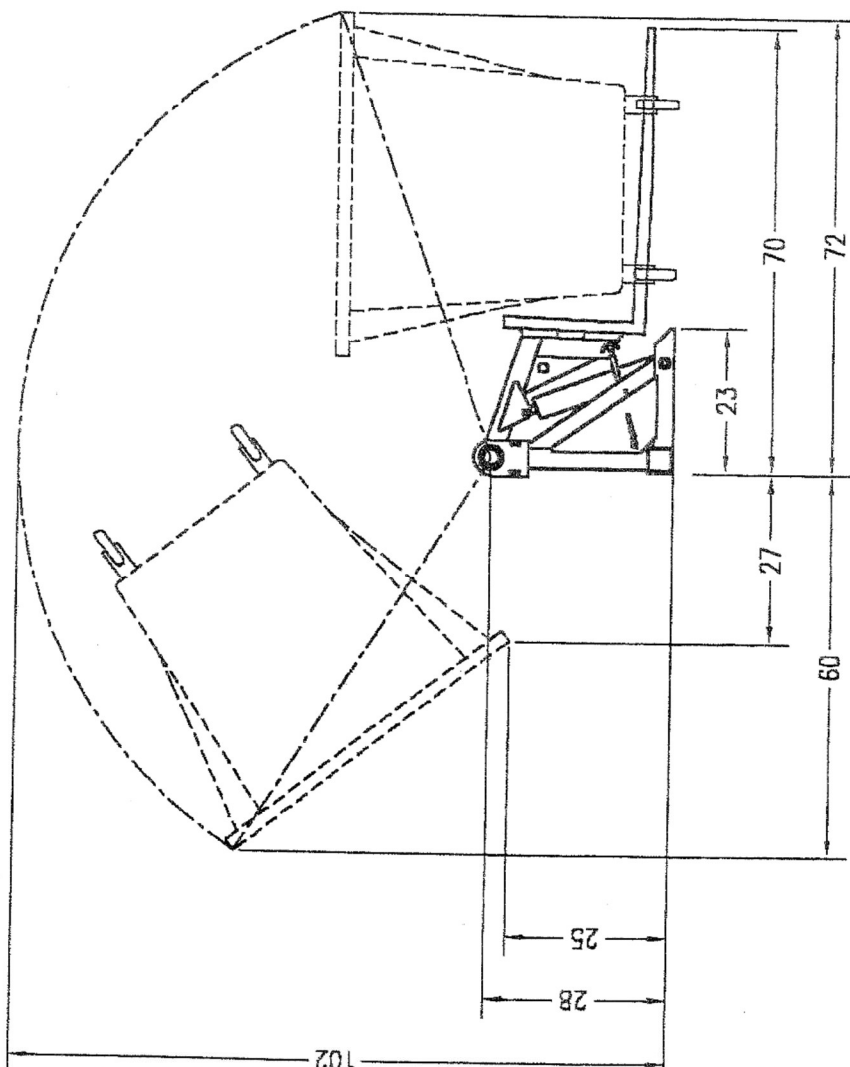


5354-F3-5003 3HP 3PH POWER UNIT

1. 5354-FB-3603 FILLER BREATHER
2. 5354-FE-3018 3 GAL. RESERVOIR
3. 5354-FE-3940 PUMP KP40
4. 3071-00-1509 NACHI VALVE
5. 5354-FE-3023 RELIEF VALVE
6. 5354-FE-3M19 3HP 3PHASE MOTOR

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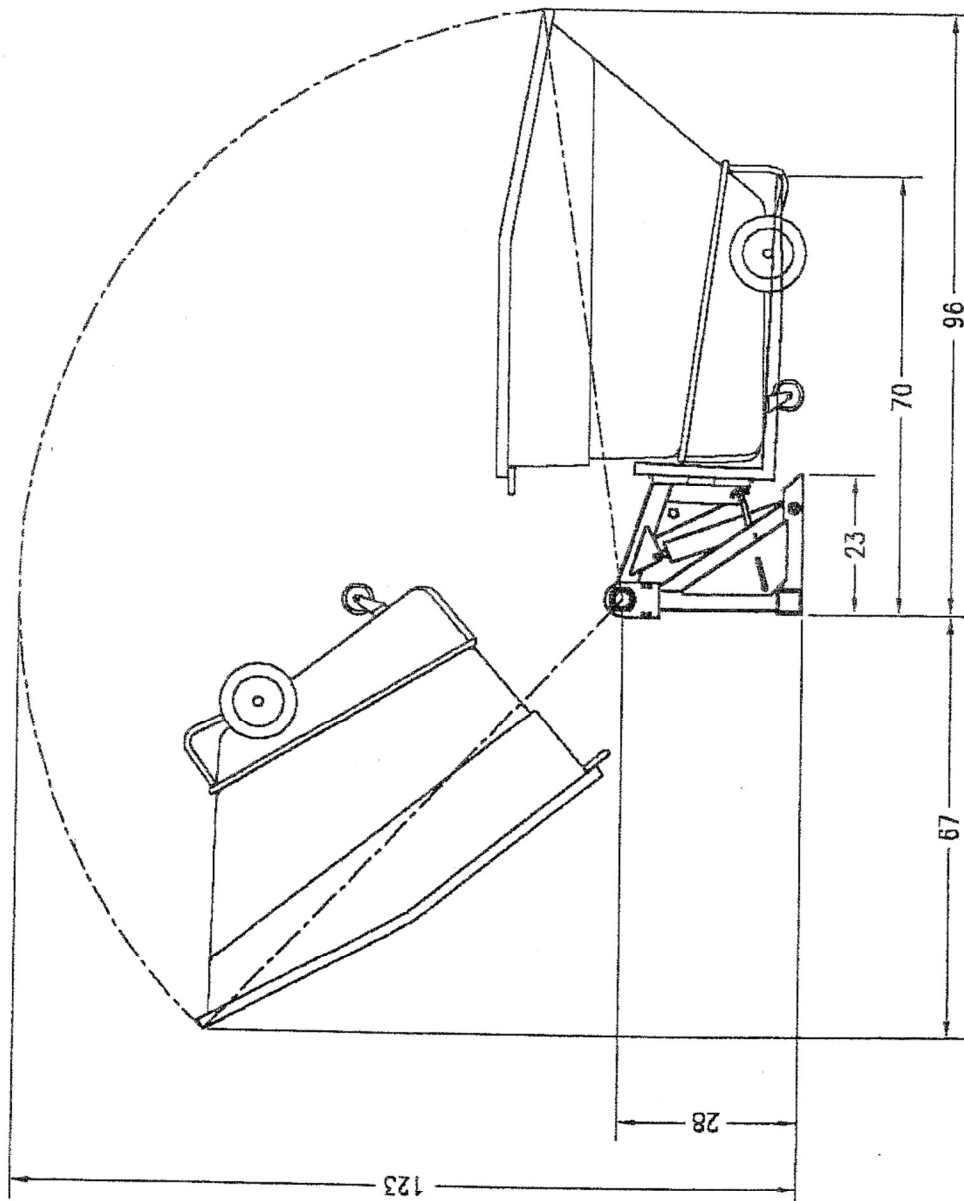
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DRAWN BY: KWN		APPROVED: ENCR2		Toter® P.O. Box 5338	
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SCALE: 1 : 12		MODEL: 3078-LF-5000		UNIVERSAL LIFTER	
				LIFTING SPACE (2 CU. MOBILE CART)	
				CODE IDENT NO	SIZE
				D	D
				3078-051-0	
				SHEET 1	OF 1
				CURRENT REV.:	

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DRAWN BY: APPROVED:

KWH

ENG'G:

MFG:

SCALE:

1 : 12

MODEL:

3078-LP-5000

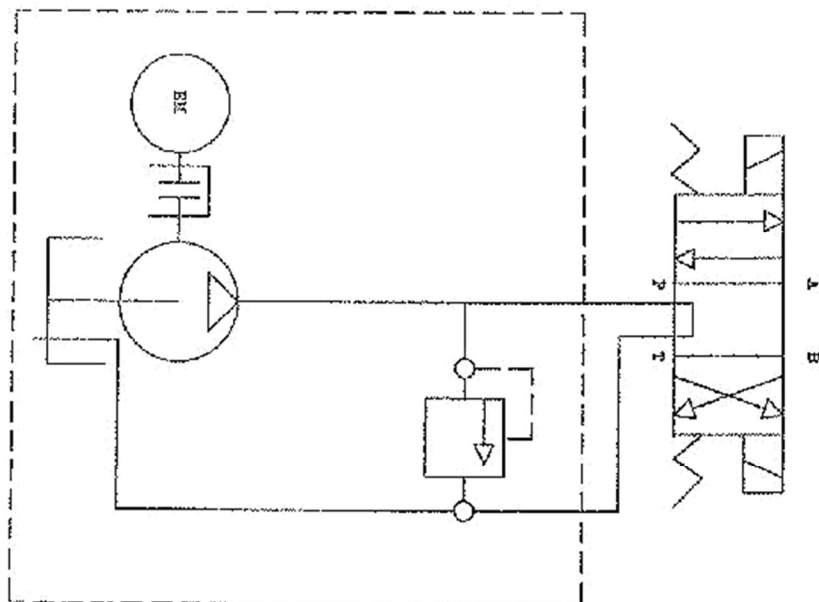
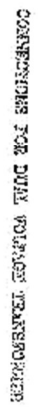
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INCORPORATED Statesville, NC 28677UNIVERSAL LIFTER
LIFTING SPACE (1.5 CU. TILT TRUCK.)CODE IDENT NO SIZE
D 3078-050-0

SHEET 1 OF 1 CURRENT REV:

APPALACHIAN MACHINE INC | 5304 Laboratory Street | Dublin, VA 24084

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Updated: Fall 2015



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