



INSTALLATION / OPERATOR MANUAL

3063B ST SERIES
Stationary 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

3069 & 3063 MT/ST 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 lip of the cart) or overloaded (above the maximum weight printed on the cart or lid). MAXIMUM LOAD for this lifter is 350LBS.
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.



OPERATION INSTRUCTIONS

3063-ST-4324 LIFT UNIT

1. PLACE CART ON LIFTING SADDLE OF THE LIFT UNIT.
2. CLOSE THE DOORS OF THE SAFETY CAGE
3. TURN POWER UNIT ON WITH KEY SWITCH.
4. PUSH UP BUTTON TO RAISE CART UP AND DUMP.
5. WHEN CARTS IS DUMPED OVER, LET IT STAY IN DUMPED POSITION FOR APPROX. 30 SEC. FOR MATERIALS TO FALL OUT OF THE CART.
6. PUSH DOWN BUTTON TO LOWER DUMPED CART.
7. OPEN DOORS OF THE SAFETY CAGE.
8. REMOVE THE CART FROM THE LIFTER.
9. TURN POWER UNIT OFF WITH KEY SWITCH.

CAUTION: BE SURE NO ONE IS BEHIND OR INSIDE THE CAGED AREA WHEN LIFTER IS IN OPERATION. OBSERVE CART AT ALL TIMES FROM THE BEGINNING OF DUMP CYCLE TO END OF DUMP CYCLE.



Maintenance and Service Schedule

3069 & 3063 SERIES ST Lifters

DAILY

1. Ensure AC cord is fully plugged in and no damage to umbilical.

WEEKLY

1. Check unit dump speed.
2. Check oil level of power unit.
3. Check for oil leaks.
4. Check tightness of foot pads (units with auto lock).
5. Check for loose bolts and bearings.
6. Check bearing for wear.
7. Check lifting saddle for damage (see Toter troubleshooting guide).
8. Check faceplate for damage (remove any sharp edges).
9. Check actuator, hand valve, fittings, hoses and flow or diverter valves for leaks.
10. Check hoses for wear.

MONTHLY

1. Grease all fittings.
2. Check color of oil – if 'milky' color, REPLACE.

TWICE YEARLY

1. Change packer's hydraulic filter, if it does not have a filter, it is recommended that a filter be installed.
2. Check cylinder for lifting power.



WARNING

BEFORE ANY INSTALLATION ANY STATIONARY (ST) 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

3069 & 3063 SERIES ST Lifters

1. Center lifter in front of hopper or compactor that carts will dump into as close as possible.
2. Manually raise the lift unit up to be sure carts are going to be dumped into the hopper or on the conveyor properly. To manually raise lift, unit hold up on the hydraulic hand valve and have someone lift up on the bottom of the unit's faceplate and rotate the faceplate to the full dump position.

NOTE: If carts are to dump through a wall you will need to check lifter positions with cart on unit BEFORE bolting to floor. You can do this manually which will require two people to lift unit up or you can connect power to unit and slowly raise unit with empty cart before bolting to floor.

3. When unit is positioned properly, properly anchor unit to floor with ½" concrete anchor bolts or ½" grade 8 bolts if mounted to a steel deck. There are four bolt holes on the front channel and four bolt holes on the back leg braces (8 total).

WARNING: FAILURE TO BOLT UNIT TO FLOOR PROPERLY COULD CAUSE OPERATOR INJURY OR EQUIPMENT DAMAGE. FAILURE TO ANCHOR UNIT PROPERLY WILL ALSO VOID ALL WARRANTIES.

4. Connect power cord from electric disconnect to motor starter of power unit.

CAUTION: BE SURE MOTOR IS WIRED FOR THE SAME VOLTAGE AS VOLTAGE FROM DISCONNECT. Unit is shipped with a tag stating voltage of the motor, but if it has been removed before installation check voltage with diagram on motor specification plate. If the voltage is not correct change motor wiring per the diagram.

5. Fill power unit's oil reservoir with ISO AW-46 hydraulic oil to the full mark on the sight gauge.

6. Turn power on and check rotation of motor (see arrow on top of motor). Unit will not pump oil if rotation is wrong. If wrong change two of the hot wires to the motor starter.
7. Check operation of the lift unit with a cart a couple of times to be sure unit dumps cart properly. Check all hose connections and fittings for oil leaks.
8. Instruct operators how to operate lift unit.

WARNING:

- i. **Unit must be anchored to floor, pad or deck in all places FAILURE to do so will void all lift unit and truck warranties.**
- ii. **Do not attempt to mount on asphalt or dirt.**



PARTS LIST

3063-TL-4018-4032

	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1	3063-00-4421	Mounting Frame
2	5440-00-0500	Lock Washer
3	5590-00-0524	Socket Head Cap Screw
4	5000-00-5060	Helac Actuator
5	5035-00-0730	Spherical Bearing
6	5435-00-0500	Grease Fitting
7	5354-00-0500	Lock Nut
8	5570-00-0675	Shoulder Bolt
9	5570-00-0620	Shoulder Bolt
10	3063-00-4218	Main Link – 18" Arm Lift
10	3063-00-4220	Main Link – 20" Arm Lift
10	3063-00-4222	Main Link – 22" Arm Lift
10	3063-00-4224	Main Link – 24" Arm Lift
10	3063-00-4226	Main Link – 26" Arm Lift
10	3063-00-4228	Main Link – 28" Arm Lift
10	3063-00-4232	Main Link – 32" Arm Lift
11	3063-RA-4118	Right Arm –18" Lift Unit
11	3063-LA-4118	Left Arm –18" Lift Unit
11	3063-RA-4120	Right Arm –20" Lift Unit
11	3063-LA-4120	Left Arm –20" Lift Unit
11	3063-RA-4122	Right Arm –22" Lift Unit
11	3063-LA-4122	Left Arm –22" Lift Unit
11	3063-RA-4124	Right Arm –24" Lift Unit
11	3063-LA-4124	Left Arm –24" Lift Unit
11	3063-RA-4126	Right Arm –26" Lift Unit
11	3063-LA-4126	Left Arm –26" Lift Unit
11	3063-RA-4128	Right Arm –28" Lift Unit
11	3063-LA-4128	Left Arm –28" Lift Unit
11	3063-RA-4132	Right Arm –32" Lift Unit
11	3063-LA-4132	Left Arm –32" Lift Unit
12	3063-00-4439	Connector Block

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13	5035-00-0760	Spherical Bearing
14	3063-00-4415	Arm Washer
15	5440-00-0400	Lock Washer
16	5590-00-0416	SH Cap Screw
17	5590-00-0520	SH Cap Screw
18	3063-00-4436	Hook Operator Plate
19	3063-00-4418	Hook Cam Pin
20	5590-00-0230	SH Cap Screw
21	5590-00-0415	SH Cap Screw
22	3063-00-4427	Faceplate
23	3057-00-3900	Saddle
24	5260-00-0400	Hex Nut
25	3063-00-4433	Hook Pivot Block
26	5031-00-0510	Oilite Bronze Bushing
27	3063-00-4442	Faceplate Hook Block
28	5500-00-0500	Washer
29	3063-00-4417	Hook Pin
30	3063-00-4435	Hook
31	5590-00-0428	SH Cap Screw
32	5110-00-0016	Cotter Pin

Refer to Drawing # 3063-00-4401



MOTOR STARTER PARTS LIST

Cutler-Hammer Single Phase

	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1	5354-MS-1120	120 Volt Motor Starter
2	5354-MS-1220	220 Volt Motor Starter
3	5354-MS-1121	Replacement Starter 120 Volt
4	5354-MS-1222	Replacement Starter 220 Volt
5	5354-MS-3020	Key Switch
6	5354-MS-3021	Contact Block
7	5354-MS-3012	Heater

NOTE: WHEN ORDERING REPLACEMENT HEATERS PLEASE SUPPLY MOTOR HORSEPOWER AND VOLTAGE INFORMATION



PARTS LIST

5354-F3-3003 & F1-3001 POWER UNIT

ITEM	PART NUMBER	DESCRIPTION
1	5354-FE-3010	Reservoir O-Ring
2	5354-FE-3011	Pump
3	5354-FE-3012	Bolt
4	5354-FE-3013	Seal Kit
5	5354-F1-3002 5354-F3-3004	Motor Single Phase 2 HP Motor Three Phase 2 HP
6	5354-FE-3014	Bolt
7	5354-FE-3015	Motor Adaptor
8	5354-FE-3016	Coupling
9	5354-FE-3017	Reservoir
10	5354-FE-3018	Breather
11	5354-FE-3019	Plug
12	5354-FE-3020	Bolt
13	5354-FE-3021	Valve Plug
14	5354-FE-3022	Plug
15	5354-FE-3023	Relief Valve Kit
16	5354-FE-3024	Horizontal Pumping Kit
17	5354-FE-3025	Filter
18		Motor Starter

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PARTS LIST

Lift Unit Hydraulic Valves

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
5354-00-0614	1" Flow Regulator Valve (Diverter Valve)
5354-00-2500	Prince Hand Valve
5355-BK-0420	Break-a-way Kit
5354-00-0675	Break-a-way Kit Valve
5354-00-0676	

Special Applications Hydraulic Valves

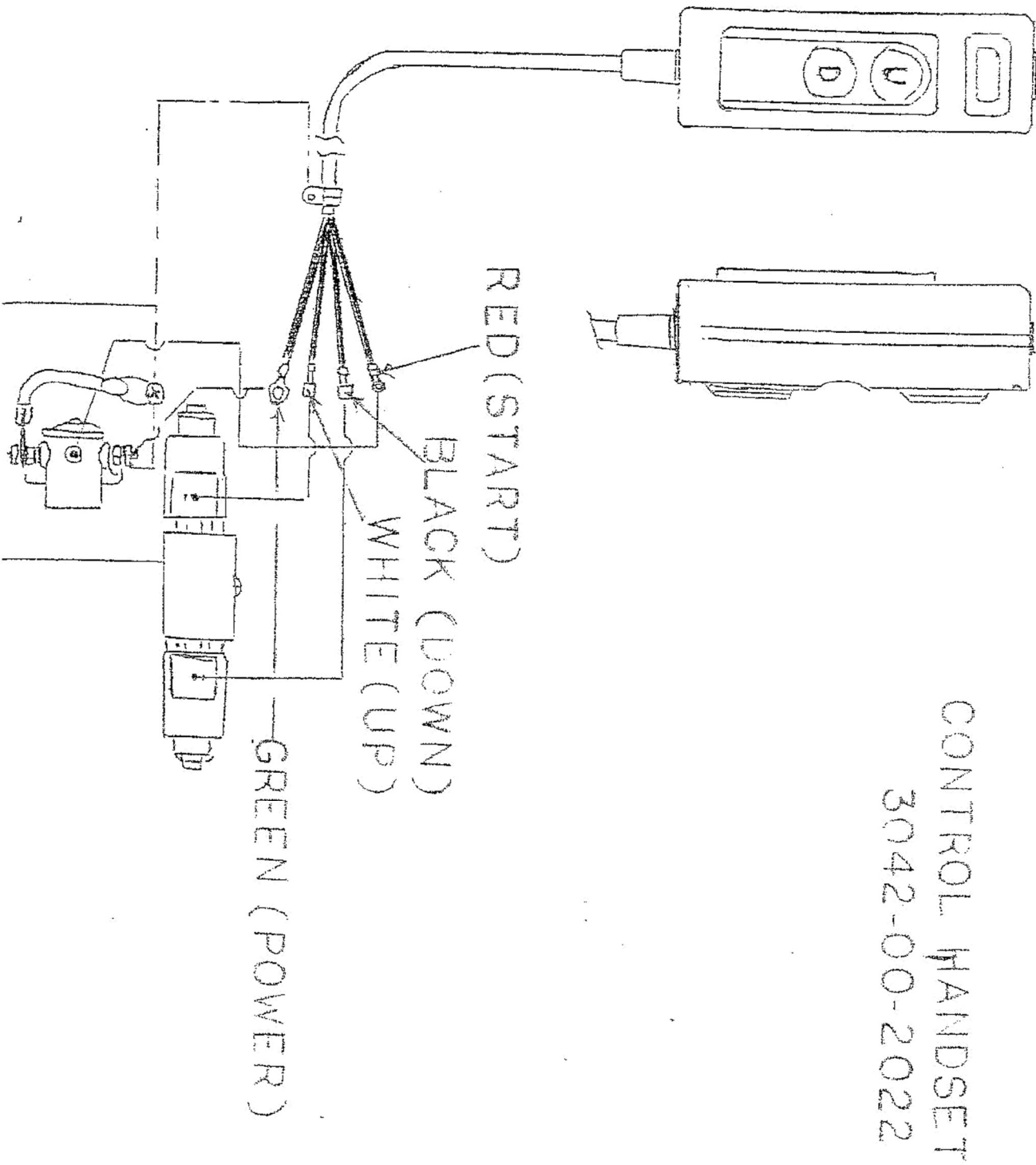
<u>PART NUMBER</u>	<u>DESCRIPTION</u>
5354-00-0612	¾" Flow Regulator Valve
5354-00-0620	3/8" Adjustable Control Valve
5354-00-0641	50/50 Flow Divider



PARTS LIST

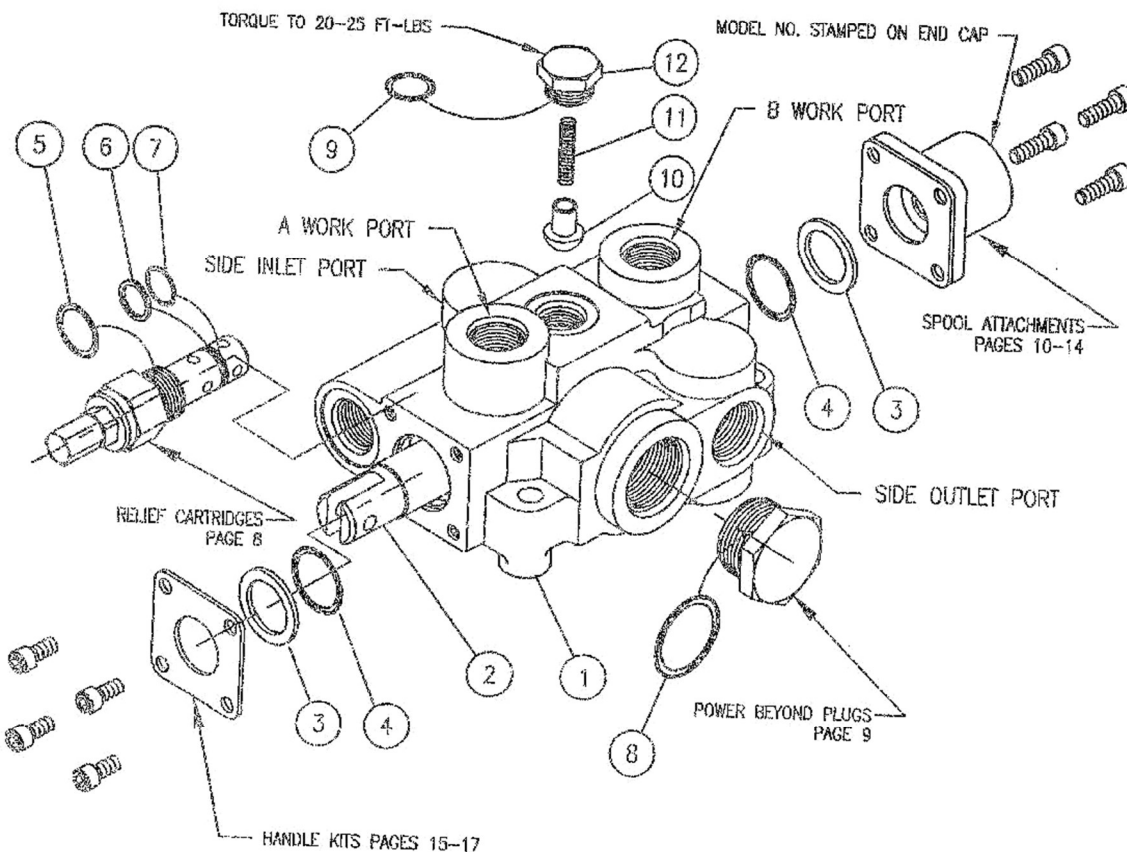
Hand Valve

<u>ITEM</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1	5354-00-0430	Gresen Hand Valve
2	5354-00-0405	Centering Spring
3	5354-00-0407	Spool Seal (2)
4	5354-00-0408	Handle
5	5354-00-0418	Handle Bracket



CONTROL HANDSET
3042-00-2022

RD5100



RD5100 1 SPOOL MONO-BLOCK VALVE

RD5100 1 SPOOL MONO-BLOCK VALVE

ITEM	QTY	PART NO.	DESCRIPTION
1	1		1 SPOOL VALVE BODY
2	1	SEE NOTE 1	SPOOL
3	2	670500010	SPOOL SEAL BACK-UP
4	2	240000213	213 O-RING
5	1	240000116	116 O-RING
6	1	240019015	015 BACK-UP
7	1	240000015	015 O-RING
8	1	240000916	916 O-RING
9	1	240000908	908 O-RING
10	1	670100001	LOAD CHECK POPPET
11	1	670300007	LOAD CHECK SPRING
12	1	671600001	LOAD CHECK PLUG

These are matched parts and are not sold separately.

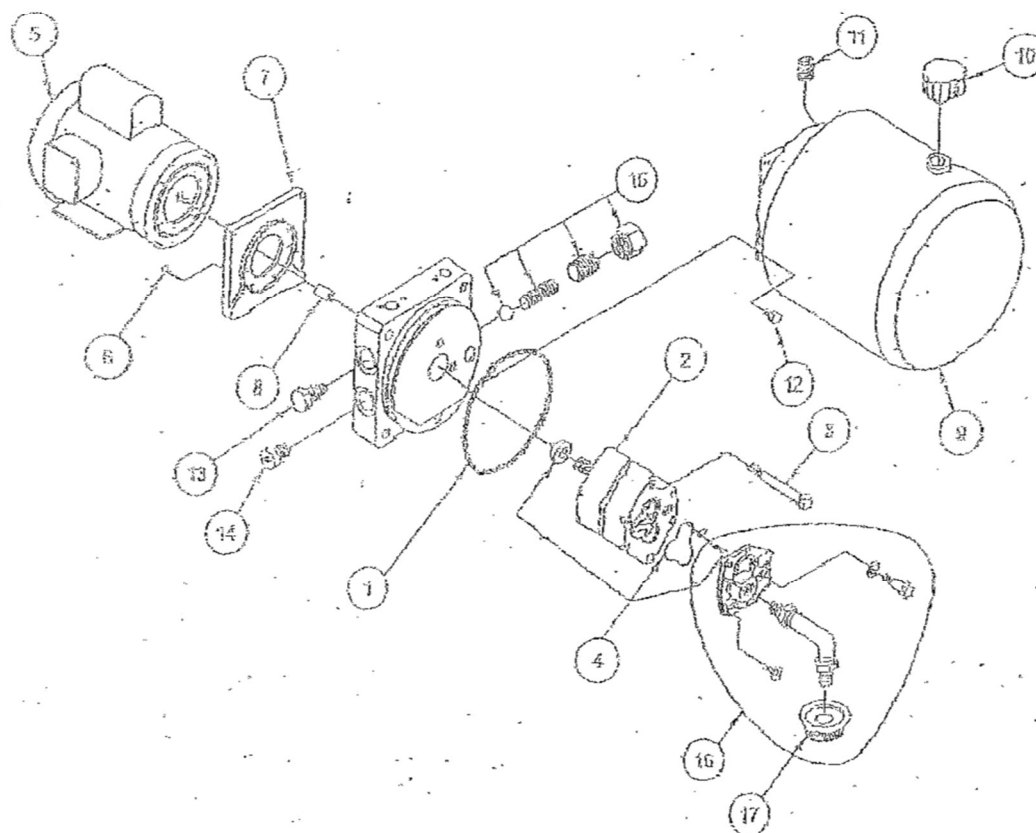
SEAL KIT 660551001 (PLUS OTHERS)

LOAD CHECK KIT, NO. 660150015

NOTES:

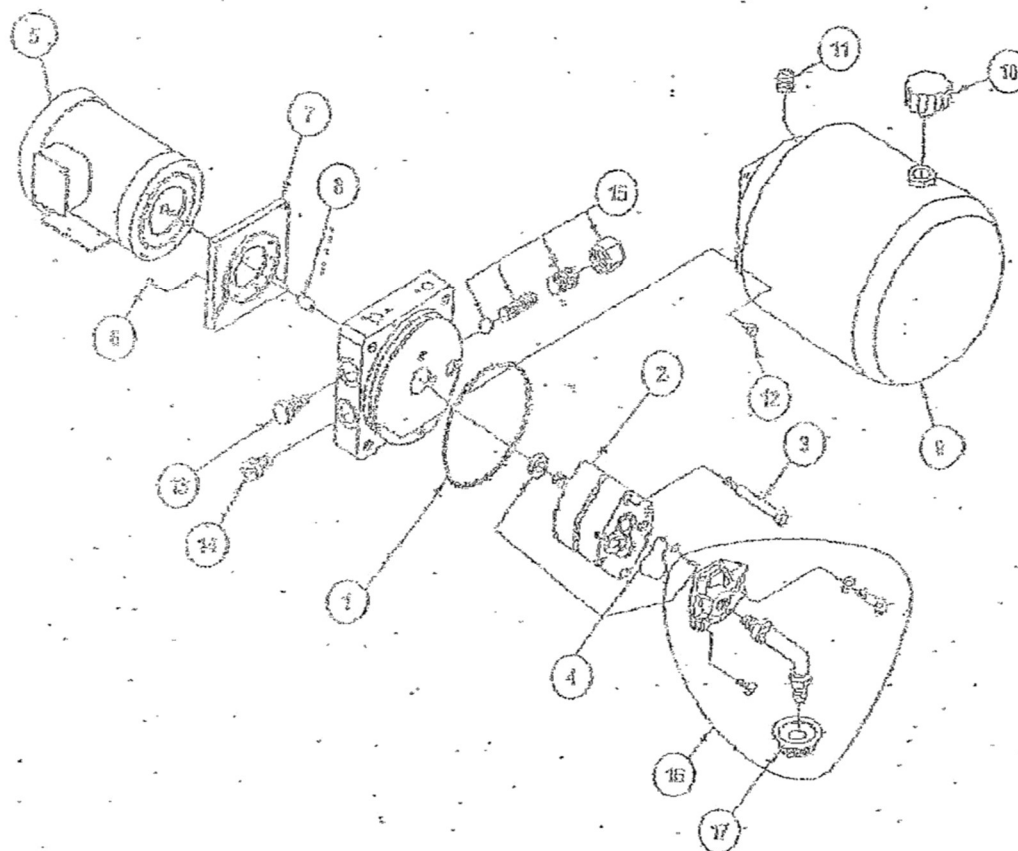
1. SEE SPOOL IDENTIFICATION CHART ON PAGE 7
2. VALVES WITH 3 WAY SPOOLS HAVE 'A' WORK PORT PLUGGED.

PARTS DRAWING 5354-F1-3001 POWER UNIT



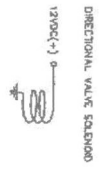
1	Reservoir O-Ring	10	Breather
2	Pump	11	Plug
3	Bolt	12	Bolt
4	Seal Kit	13	Valve Plug 2-way
5	Single Phase AC Motor	14	Plug
6	Bolt	15	Dist. Relief Valve Kit
7	Motor Adaptor	16	Horizontal Plumbing Kit
8	Coupling	17	Filter
9	Reservoir		

PARTS DRAWING 5354-53-3000 POWER UNIT



1	Reservoir O-Ring	10	Breather
2	Pump	11	Plug
3	Bolt	12	Bolt
4	Seal Kit	13	Valve Plug 2-way
5	Three Phase AC Motor	14	Plug
6	Bolt	15	Dist. Relief Valve Kit
7	Motor Adaptor	16	Horizontal Plumbing Kit
8	Coupling	17	Filter
9	Reservoir		

THIRD ANGLE PROJECTED		DRAWING UNITS (MM)		DATE 8/9/08		FOR PART NO 0976	
THE PREPARATION CONTAINED THIS DRAWING IS THE SOLE PROPERTY OF THE COMPANY AND IS TO BE KEPT IN FACTORY AND NOT WITHDRAWN FOR ANY OTHER PURPOSE		ANALYST: 1 1. PLACE 2 2. PLACE 3 3. PLACE 4 4. PLACE 5 5. PLACE 6 6. PLACE 7 7. PLACE 8 8. PLACE 9 9. PLACE 10 10. PLACE 11 11. PLACE 12 12. PLACE 13 13. PLACE 14 14. PLACE 15 15. PLACE 16 16. PLACE 17 17. PLACE 18 18. PLACE 19 19. PLACE 20 20. PLACE 21 21. PLACE 22 22. PLACE 23 23. PLACE 24 24. PLACE 25 25. PLACE 26 26. PLACE 27 27. PLACE 28 28. PLACE 29 29. PLACE 30 30. PLACE 31 31. PLACE 32 32. PLACE 33 33. PLACE 34 34. PLACE 35 35. PLACE 36 36. PLACE 37 37. PLACE 38 38. PLACE 39 39. PLACE 40 40. PLACE 41 41. PLACE 42 42. PLACE 43 43. PLACE 44 44. PLACE 45 45. PLACE 46 46. PLACE 47 47. PLACE 48 48. PLACE 49 49. PLACE 50 50. PLACE 51 51. PLACE 52 52. PLACE 53 53. PLACE 54 54. PLACE 55 55. PLACE 56 56. PLACE 57 57. PLACE 58 58. PLACE 59 59. PLACE 60 60. PLACE 61 61. PLACE 62 62. PLACE 63 63. PLACE 64 64. PLACE 65 65. PLACE 66 66. 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Technical drawings of the 1391-18 SAE Pressure/Return Valve, showing side, end, and cross-sectional views with detailed component labels.

Side View Labels:

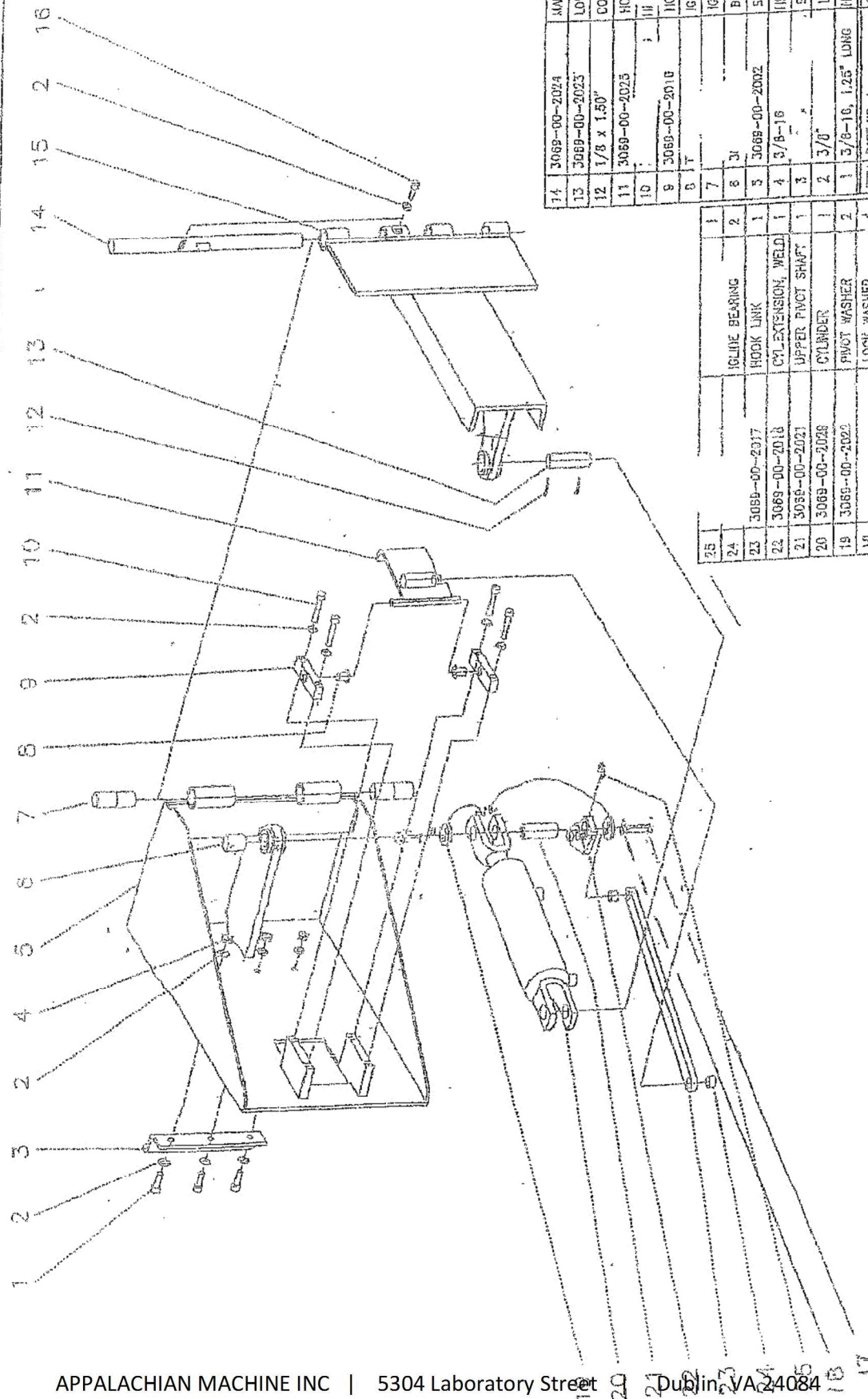
- 1391-AA (9/16-18 SAE PRESSURE/RETURN PORT "A")
- 2950-AC (PLACE IN UNIT CARTON)
- CUSTOMER TO MOUNT STRAP TO MOTOR USING SCREW 1885-AA
- 1967-AB
- 4795-AA (2)
- 1882-AA (2)
- 1885-AA
- 1536-AA
- 1205-AA
- P2-2.0
- G1-1073-AB
- 2130-AC
- 1611-AA
- TF-1311
- 8.07
- 14.95

End View Labels:

- 2141-AA (2)
- 1261-BA (2)
- F1-1053-00 (2)
- 1261-BA
- 2520-AA
- 7.10
- 9.13
- 1.625
- 1.625
- 2.50

Cross-Sectional View Labels:

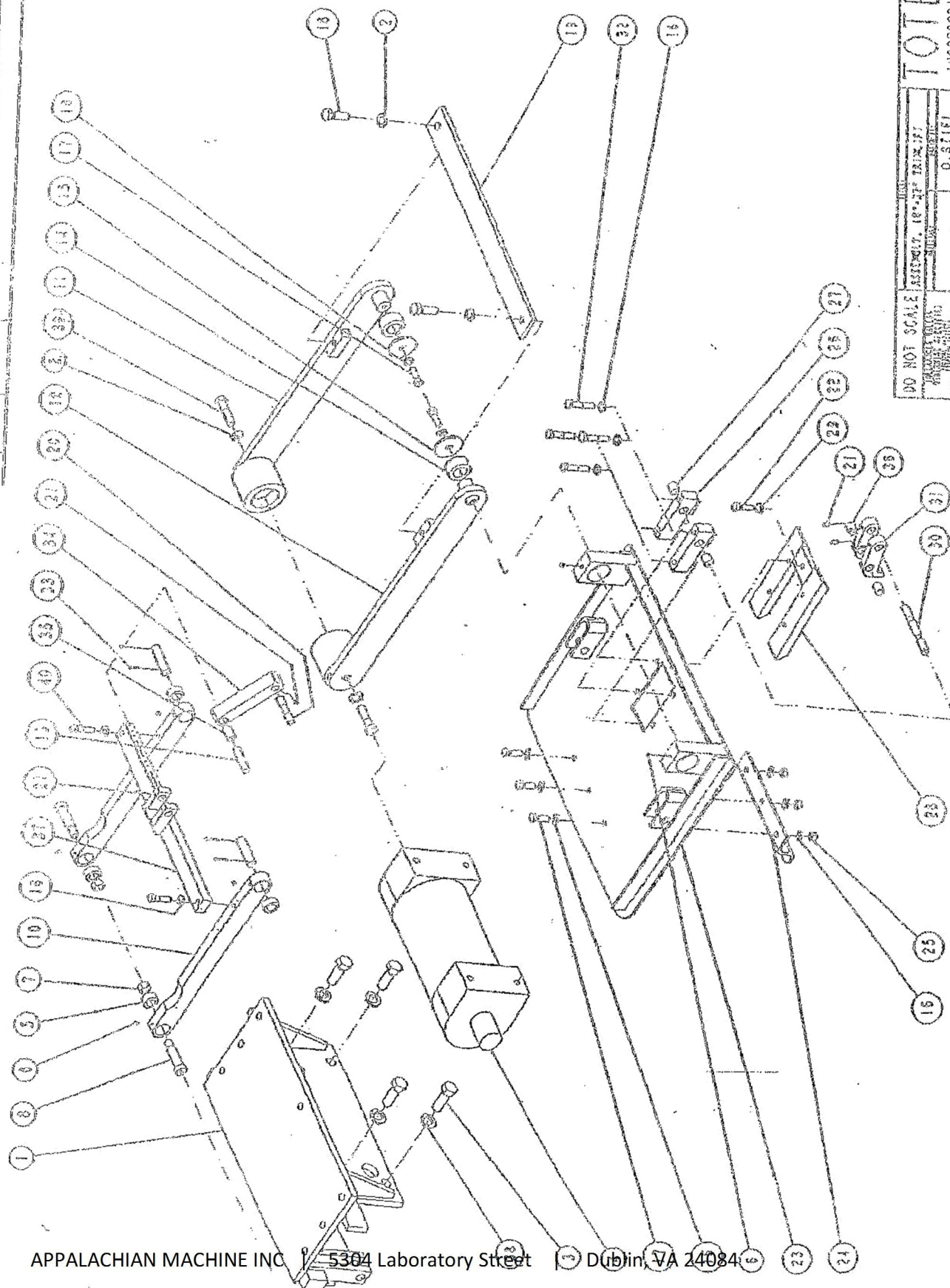
- 1391-AA (9/16-18 SAE PRESSURE/RETURN PORT "A")
- X2-1048-04
- 1391-AA (9/16-18 SAE PRESSURE/RETURN PORT "B")
- S3-1018-07
- S1-1005-01
- S3-1005-00 (PILOT OPERATED CHECK VALVE)
- 1118-AA
- 1172-AA
- C1-1009-01
- W5-1020-95
- S3-1015-07 (ADJ. RELIEF SET AT 2500 PSI)
- T1-1019-01
- N1-0022-20AL
- 5137-AA (B)
- VF-4028
- EF-1084 (2) (12 VOLT DC 3P4W CLOSED CENTER VALVE)
- S1
- S2
- 200 B44



14	3069-00-2024	AWH SHAFT
13	3069-00-2023	LOWER PIVOT SHAFT
12	1/8 x 1.50"	COTTER PIN
11	3069-00-2023	HOOK WELDMENT
10		III
9	3069-00-2010	HOOK MOUNT
8		GLIDE BEARING
7		GLIDE BEARING
6		BEARING MODIFIC.
5	3069-00-2002	SWING UNIT, WELD.
4	3/8-18	HEX. NUT
3		SADDLE
2	3/8"	LOCK WASHER
1	3/8-16, 1.25" LONG	HEX.SOC.HD.CAP SC
ITEM	PART NO.	DESCRIPTION/MATERIAL
1	3069-00-2017	GLIDE BEARING
2	3069-00-2017	HOOK LINK
3	3069-00-2018	CYL. EXTENSION, WELD
4	3069-00-2021	UPPER PIVOT SHAFT
5	3069-00-2028	CYLINDER
6	3069-00-2029	PIVOT WASHER
7	3/8-15, 1.00" LONG	HEX.SOC.HD.CAP SCR
8	3069-00-2019	FRAME, WELDMENT
9		DESCRIPTION/MATERIAL
10		QTY.

ITEM	PART NO.	DESCRIPTION/MATERIAL	QTY.
1	3069-00-2024	AWH SHAFT	1
2	3069-00-2023	LOWER PIVOT SHAFT	1
3	1/8 x 1.50"	COTTER PIN	1
4	3069-00-2023	HOOK WELDMENT	1
5		III	1
6	3069-00-2010	HOOK MOUNT	1
7		GLIDE BEARING	1
8		GLIDE BEARING	1
9		BEARING MODIFIC.	1
10	3069-00-2002	SWING UNIT, WELD.	1
11	3/8-18	HEX. NUT	1
12		SADDLE	1
13	3/8"	LOCK WASHER	1
14	3/8-16, 1.25" LONG	HEX.SOC.HD.CAP SC	1
15		ITEM	
16		PART NO.	
17		DESCRIPTION/MATERIAL	
18		QTY.	

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



DO NOT SCALE	DATE	TIME	TOTAL
APPROXIMATE WEIGHT OF CARGO IN TONS			
WEIGHT OF CARGO IN POUNDS		O STIEL	
	11:50	02 JUN-62	

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