



### **INSTALLATION / OPERATOR MANUAL**

3064 SERIES Vertical Lifters

PROUDLY MADE IN DUBLIN, VIRGINIA USA





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



#### **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



## <u>DESCRIPTION</u> 3064 SERIES Vertical Lifter Recycling Dumper

This dumper is designed to increase the productivity of your recycling operation by making it possible to collect rollout carts. It also makes your operation safer by reducing manual lifting and loading.

This dumper has been manufactured to fit your specific make and model of Recycling Truck. In the case of a Roll Off Box, the dumper has been manufactured to fit your specific make and model Roll Off Box and the Roll Off Truck.

Do not install this dumper on any other make and model of equipment as it may not fit or operate properly. If you need to change equipment in the dumper, please consult your local dealer to check compatibility of the dumper you ordered.

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## SAFETY INSTRUCTIONS 3064 SERIES Vertical Lifters

- 1. No one should operate the lifter without first reading the manual and receiving handson training on the unit.
- 2. Keep hands clear of the dumper faceplate, chain and drive sprockets when 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. **DO NOT** operate the dumper unless the carriage handle is securely locked into one of the drilled holes in the horizontal rail.
- 9. **DO NOT** drive the vehicle without locking the carriage handle into one of the holes in the Slide Bar.
- 10. When dumping the truck body to the rear, first slide the dumper to the rear-most position on the Slide Bar and lock the handle in place.
- 11. **DO NOT** dump the truck body with the dumper in any other position.
- 12. Dump only authorized carts that are in good repair. **<u>DO NOT</u>** dump other carts. **<u>DO NOT</u>** dump Toter Carts that are cracked, broken, have bent stop bars or missing parts.
- 13. **DO NOT** modify this lifter to handle other carts.
- 14. **<u>DO NOT</u>** operate the system if there any mechanical or hydraulic problems with the dumper or the truck's hydraulic system.
- 15. **<u>DO NOT</u>** 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).
- 16. Dump only approved plastic rollout carts on the dumper. The carts must be of the U.S. semi-automated design with the top pick-up point approximately 33" above ground level and the top of the lower bar 15" below the upper pick-up point.
- 17. **DO NOT** attempt to dump drums, barrels, or any other unauthorized containers.
- 18. **<u>DO NOT</u>** dump carts containing hazardous waste (per EPA listings), flammable liquids or explosive materials.
- 19. Wear eye protection when operating.

- 20. Keep hands clear of operating lift unit. Follow US OSHA lockout and tagout procedures prior to maintaining or repairing the unit.
- 21. Ensure that the lids of any carts that are latched, locked, or chained shut are fully opened before dumping.
- 22. **DO NOT** operate the vehicle in areas with overhead obstructions (wires, signs, bridges, etc.) that are lower than the Vertical Bar.
- 23. **DO NOT** operate the dumper in close proximity to overhead electrical wires.
- 24. Perform regular checks as listed under Maintenance and Service Schedule.



# OPERATION INSTRUCTIONS 3064 SERIES Dump Unit Mounted on a Roll Off Box

#### TO REMOVE BOX FROM TRUCK

- 1. Raise dumper up to dump position.
- 2. Move dump unit to front hopper and lock in place.
- 3. Turn truck engine off.
- 4. With a wrench, remove the chain form the back of the lift bar (see drawing DE-1041, #s 4, 18, 19, & 20)

NOTE: Be sure you put nuts washer and spring back on screw when you remove the chain.

- 5. With a hammer and a punch, remove pin from 1" x 2" backing bar of lift bar.
- 6. Pull down on bottom of lift bar then raise up to an angle of 90° or more.
- 7. Hook chain in slot above lock handle on slide carriage. This will hold the bottom of the lift bar in place when box is placed on the ground.
- 8. Put pin back in holes on the lift bar.
- 9. Disconnect hydraulic hoses from box to truck.
- 10. Connect hose ends together on truck and box.
  - NOTE: Hose ends have to be connected together on truck before starting engine. Failure to connect hose could cause pump damage. Connecting hoses together on box will keep ends clean and eliminate any oil drainage.
- 11. Start engine and remove box from truck.



# OPERATION INSTRUCTIONS 3064 SERIES Dump Unit Mounted on a Roll Off Box

#### TO PLACE ROLL OFF BOX ON TRUCK

- 1. Place roll off box on truck and turn engine off.
- 2. Remove chain from slot on the slide carriage and lower bottom of lift bar.
- 3. Remove pin from lift bar backing bars.
- 4. Raise up on the lift bar, line pin holes up, and install pin.
- 5. Remove nuts from chain screw and connect chain to lift bar.
- 6. Connect hydraulic hoses from truck to box.
- 7. Start truck engine, engage PTO, and run dump unit.

NOTE: It is recommended that when truck is traveling long distances, the dump unit should be in the dump position. When the dump unit is in the down position, the truck may be over legal width. NEVER drive the truck with the lift bar folded out (as with the box is to be set off onto the ground).



## MAINTENANCE INSTRUCTIONS 3064 SERIES Dump Units

#### Daily

- 1. Check all cam followers; all should turn freely.
- 2. Check for oil leaks.
- 3. Check operation of locking handle.
- 4. Run dump unit before starting route, and check for any damaged parts, loose bolts, or chain damage.

#### Weekly

- 1. Grease all cam followers.
- 2. Spray chain with WD-40 or equivalent.
- 3. Check hoses for wear.
- 4. Check chain sprockets for wear.

#### **Monthly**

1. Check welds that secure slide rail to truck or box.



## OPERATION INSTRUCTIONS 3064 SERIES Dump Units

- 1. Tilt can and engage saddle with lifting saddle of unit.
- 2. Open lid of can.
- 3. Check area around can to be sure can will not come in contact with persons or things during dump cycle.
- 4. Pull up on hand valve to raise can.
- 5. **DO NOT** stop unit until it has completed cycle.
- 6. Push down on handle of hand valve to lower can.
- 7. **DO NOT** stop dump unit until it has completed down cycle.
- 8. To move carriage along slide rail, pull out on locking handle with one hand. With other hand, pull or push carriage with handle above locking handle.

CAUTION: Be sure locking handle is locked to slide bar before operating dump unit or moving truck.



#### **WARNING**

BEFORE ANY INSTALLATION OF THIS UNIT THE VOLTAGE FROM THE ELECTRICAL DISCONNECT TO THE MOTOR STARTER HAS TO BE VERIFIED AS THE SAME AS 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.

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## 3064 SERIES Vertical Lift

#### **Aluminum Body Rear Dump Recycling Truck**

- 1. Park empty truck on level pad.
- 2. Measure up from ground 55-1/2" and make a mark on the front most door slide rail. This mark will be on the top of the EXTERNAL MOUNTING PLATE #3059-00-2715 of the dumper.
- 3. Measure up from the ground 55-1/2" and make a mark on the rear most door slide rail.
- 4. Place chalk string on the front and rear door slide rail marks and mark the remaining rails.
- 5. On one side rail at a time, hold the top of the EXTERNAL MOUNTING PLATE #3059-00-2715 flush with line from Step 4, and center it on the rail. Using a transfer punch or scribe, mark each of the six holes.

NOTE: The plate is mounted with the four offset holes towards the top.

- 6. Pilot drill MOUNTING PLATE holes ¼" diameter. Finish drill 13/32" through the outer wall tubing only. Repeat for all side rails.
- 7. Starting with the front and rear side rails, insert the INTERNAL SLIDE BAR MOUNTING PLATE #3059-00-2714 **inside** the slide rail. Because the tops of these slide rails are partially obstructed, lower a light gauge wire through the top until it comes out the bottom of the rail. Insert the wire through one of the top tapped holes in the #3059-00-2714 plate (**REMEMBER**, the four offset holes go toward the top) and secure with one light twist this wire will have to be pulled out later so do not twist the wire tight.

Carefully insert the plate into the bottom of the slide rail and gently pull it up with the wire. Any safety light on the rails must be temporarily removed.

Line up the plate through the holes drilled in the slide rail and install four #5590-00-0424 SOCKET HEAD CAP SCREWS in top and bottom holes. Install two #5520-00-0424 HEX HEAD BOLTS in middle holes. Remove wire and tighten all bolts.

The INTERNAL MOUNTING PLATES for the other rails should be inserted <u>from the top</u> of the slide rail, lined up, and bolted to the EXTERNAL MOUNTING PLATES.

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- 8. Measure down 6" from the top of the EXTERNAL SLIDE BAR MOUNTING PLATE #3059-00-2715 on the front and rear slide rails and make a mark. With a chalk line, mark all other external plates. The top of the 1" x 2" backing on the SLIDE BAR #3059-00-2702 will mount flush with this line.
- 9. Place the SLIDE BAR #3059-00-2702 beside the truck body with the sawed and drilled end to the rear of the truck. Using a forklift or a boomlift, carefully lift the SLIDE BAR up so that it is flush with the front of the truck bed.

NOTE: The rear of the SLIDE BAR will probably NOT be flush with the rear of the truck bed; the key is the front.

- 10. Line the top of the 1" x 2" BACKING PLATE up with the mark on the front slide rail. Tack weld in place. Line the top of the 1" x 2" BACKING PLATE up with the mark on the rear slide rail tack weld. After the front and rear of the SLIDE BAR have been tacked in place, line and tack weld the remaining EXTERNAL MOUNTING PLATES to the SLIDE BAR.
- 11. **STOP!** Carefully check the height of the top of the SLIDE BAR from the ground it should measure approximately 50-1/2". The bar should run straight from end to end without bowing vertically and should be level with the ground.
- 12. Weld the 1" x 2" backing 100% to each slide rail; top, bottom and both sides. These welds must be solid; they hold the dumper to the truck when it is lifting carts up to 400 LBS.
- 13. Carefully lift the complete CARRIAGE FRAME #3059-00-2700 up and slide the CARRIAGE BEARINGS onto the rear of the SLIDE BAR. The bottom two CARRIAGE BEARINGS are adjustable. Field adjustment of these bearings most likely will not need adjusting, because the rail is matched to the carriage. If adjustment is necessary, use a hex head wrench to loosen the hex head set screws in the CARRIAGE BEARINGS. Once on the slide rail, the bottom CARRIAGE BEARINGS must be adjusted to a 0.005" clearance between the bottom bearings and the slide rail. A 0.005" feeler gauge is required to make this adjustment.
- 14. The SLIDE BAR is not pre-drilled with positioning holes for each compartment. Remove the LOCKING HANDLE #3059-00-2710, slide the carriage to the center of each compartment, and one at a time punch a hole center THROUGH the 9/16" drill bushing provided in the carriage. Pilot drill a 11/64" hole then drill a 9/16" hole through the CARRIAGE PIN BUSHING. Move the carriage and drill the hole oversize at 19/32". The hole must penetrate through the SLIDE BAR. Countersink each hole using a 1", 41° bit.
  - Replace the LOCKING HANDLE and check the hole's fit. The carriage must always be locked in place prior to dumping or moving truck.
- 15. Lift VERTICAL LIFT ASSEMBLY #3064-00-1200 and bolt to carriage frame. Check clearance of end of LIFT ASSEMBLY above top of truck body. This should be approximately 6" from one end of the truck to the other. This will allow a canvas to cover top of hoppers when traveling long distances.
- 16. After completion of Step 15, it is necessary to **weld solid mounting bars** of VERTICAL LIFT ASSEMBLY. Unit's mounting bars are shipped tack welded in case field height adjustments are required.

- 17. Install top ANGLE GUIDE #3064-00-1028. Measure down from top of front door slide rail ½"; make a mark. Measure down from top of back door slide rail ½"; make a mark. Mark remaining door slide rails with chalk line.
  - Line up top of ANGLE GUIDE external bracket on mark. Mark and drill holes for ANGLE GUIDE BRACKET. **NOTE: These brackets may vary due to different body manufacturer designs.** No internal brackets are required for these brackets.
- 18. After Step 17 is completed, place ANGLE GUIDE on ANGLE GUIDE BRACKET on front slide door rail flush with front edge of truck body. Tack weld in place. Measure form top of ANGLE GUIDE to top of 1" x 2" backing plate on slide rail and tack weld ANGLE GUIDE in place on back slide door rail. Level guide rail horizontally and vertically, and weld to each slide door rail bracket.
- 19. Using Drawing #DE-1041, assemble ANGLE GUIDE PLATE #13 to CAM FOLLOWER ADJUSTMENT PLATE #14 with BOLTS #12. Install CAM FOLLOWER #11 to plate. DO NOT tighten bolts.
- 20. After completing Step 19 slide CAM FOLLOWERS between ANGLE GUIDE. Place edge of ANGLE GUIDE PLATE to inside edge of the two 1" x 2" VERTICAL BAR BACKING PLATES and tack weld in place.
- 21. Slide dump unit on slide rail from front to back, checking alignment of CAM FOLLOWERS along ANGLE GUIDE. If alignment is good front to back, weld ANGLE GUIDE PLATE solid to the 1" x 2" bars and tighten bolts and CAM FOLLOWER nuts.
- 22. Install HYDRAULIC HAND VALVE to carriage frame.
- 23. Connect hoses supplied to A & B ports on hand valve to hose ports marked #21 on Drawing #1041
- 24. With dump unit positioned in front of the front hopper, attach fixed point of the hose guard chain with hoses installed to support the tray under slide rail.
  - Attach the driver end of the hose guard chain to the hose guard chain bracket on the slide carriage.
- 25. Connect hose ends of the driver end of hose guard chain to pressure and tank ports of hand valve.
- 26. Install 5354-00-0614 FLOW VALVE.
  - 1. Locate pressure line from pump to body lift.
  - 2. Disconnect pressure line from body lift.
  - 3. Connect port marked **INLET** on flow valve to pressure line from pump.
  - 4. Connect port marked **BYPASS** to pressure port of body lift.
  - 5. Install pressure and return hoses from hose end on fixed point of hose guard chain to flow valve.

NOTE: Mark ends of pressure hoses with tape from pressure port of hand valve. This will help eliminate the problem of connecting hoses to wrong ports.

<u>26 – 5. Continued</u> - Install hoses with dump body up and be sure hoses cannot be crimped APPALACHIAN MACHINE INC | 5304 Laboratory Street | Dublin, VA 24084

between body and chassis.

- 6. Connect pressure hose from hand valve to REG. port on flow valve.
- 7. Connect return hose from hand valve to port on side of flow valve connected to bypass port.
- 27. If unit is an Eager Beaver truck or a truck that has a small hydraulic oil tank (less than 10 gallons), a 26-gallon oil tank available from your dealer should be installed.
- 28. Start truck and engage PTO and check for oil leaks. Raise body up and down to be sure hoses are not crimped between body and chassis.
- 29. Test dump unit. Run dump unit up and down, check for any alignment problems. Test dump unit with a load in cart. Unit should dump cart with maximum load rating marked on cart.

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## INSTALLATION INSTRUCTIONS 3064 SERIES Vertical Lift

#### **Roll-Off Box Mounted on Truck**

- 1. Park empty truck on level ground with roll-off box on truck.
- 2. Measure up from the bottom of the box on the front of the box 7" and make a mark on the front rib.
- 3. Measure up from the ground to the mark in Step 2.
- 4. Using the measurement from Step 3, make a mark on the back rib of the box.
- 5. Place a chalk string on the marks on the front and back ribs of the box and make a mark on each rib of the side of the box.
- 6. Place the SLIDE BAR # 3059-00-2702 beside the truck body with the sawed and drilled end to the rear of the truck. Using a forklift or a boomlift, carefully lift the SLIDE BAR up so that it is flush with the front of the box.

### NOTE: The rear of the SLIDE BAR will probably not be flush with the rear of the box; the key is the front.

7. Line the top of the 1" x 2" BACKING PLATE of the SLIDE BAR with the front mark on the side of the box. Tack weld the SLIDE BAR in place. Line the top of the 1" x 2" BACKING PLATE up with the rear mark. Tack weld the rear of the SLIDE BAR in place. Tack weld the bar to each of the remaining ribs.

#### NOTE: The SLIDE BAR should be level with the ground with the box on the truck.

- 8. Weld the 1" x 2" BACKING PLATE 100% to each rib, top, bottom and both sides. These welds must be solid; they hold the dumper to the truck when it is lifting carts up to 400 LBS.
- 9. Carefully lift the complete CARRIAGE FRAME #3059-00-2700 up and slide the CARRIAGE BEARINGS onto the rear of the SLIDE BAR. The bottom two CARRIAGE BEARINGS are adjustable. Field adjustment of these bearings most likely will not need adjusting, because the rail is matched to the carriage. If adjustment is necessary, use a hex head wrench to loosen the hex head set screws in the CARRIAGE BEARINGS. Once on the SLIDE BAR, the bottom CARRIAGE BEARINGS must be adjusted to a 0.005" clearance between the bottom bearings and the SLIDE BAR. A 0.005" feeler gauge is required to make this adjustment.
- 10. The SLIDE BAR is not pre-drilled with positioning holes for each compartment. Remove the LOCKING HANDLE #3059-00-2710, slide the CARRIAGE FRAME to the center of each compartment, and one at a time, punch a hole center through the 9/16" drill bushing provided in the carriage. Pilot drill a 11/16" hole, then drill a 9/16" hole through the

CARRIAGE PIN BUSHING. Then move the carriage and drill the hole oversize to 19/32". The hole must be through the SLIDE BAR. Countersink each hole using a 1", 41° bit.

Replace the LOCKING HANDLE and check the hole's fit. The carriage must always be locked in place prior to dumping or moving truck.

- 11. Lift VERTICAL LIFT ASSEMBLY #3064-00-1200 and bolt to CARRIAGE FRAME. Check clearance of end of LIFT ASSEMBLY above top of box. This should be approximately 6" from one end of box to other. This will allow a canvas to cover top of box when traveling long distances.
- 12. After completion of Step 11, it is necessary to weld solid the MOUNTING BARS of the LIFT ASSEMBLY. The MOUNTING BARS are shipped tack welded in case field height adjustments are required.
- 13. Install top ANGLE GUIDE #3064-00-1028. Measure down from top of box on front rib ½"; make a mark. Measure from mark down to top of 1" x 2" backing plate on SLIDE RAIL. Using measurement from front rib as a reference, measure from top of 1" x 2" backing plate and mark back rib.

NOTE: ANGLE GUIDE must be level with SLIDE BAR.

Line ANGLE GUIDE flush with front of box and tack weld in place on mark on front rib. Tack weld ANGLE GUIDE in place on mark on back rib.

Be sure ANGLE GUIDE is straight with side of box level horizontally and vertically and weld to each rib.

- 14. Using drawing # DE-1041, assemble ANGLE PLATE GUIDE #13 to CAM FOLLOWER ADJUSTMENT PLATE #14 with BOLTS #12. Install CAM FOLLOWER #11 to plate. **DO NOT** tighten bolts.
- 15. After completing Step 14, slide CAM FOLLOWERS between ANGLE GUIDE. Place edge of ANGLE GUIDE PLATE to inside edge of the two 1" x 2" VERTICAL BAR BACKING PLATES and tack weld in place.
- 16. Slide dump unit on SLIDE RAIL from front to back, checking alignment of CAM FOLLOWERS along ANGLE GUIDE. If alignment is good front to back, weld ANGLE GUIDE PLATE solid to the 1" x 2" bars and tighten bolts and CAM FOLLOWER nuts.
- 17. Install HYDRAULIC HAND VALVE to frame.
- 18. Connect hoses supplied to A & B ports on hand valve to hose ports marked #21 on Drawing #1041.
- 19. With dump unit positioned in front of the front hopper, attach the fixed point of HOSE GUARD CHAIN with hoses to the support tray above the SLIDE RAIL. Attach the driver end of HOSE GUARD CHAIN to the hose guard chain bracket on the slide carriage.
- 20. Connect hose ends of driver end of the hose guard chain to pressure and tank ports of hand valve.

- 21. Install 5354-00-0614 FLOW VALVE.
  - 1. Locate pressure line from pump to roll-off box lift.
  - 2. Disconnect pressure line from pump to box lift.
  - 3. Connect port marked **INLET** on flow valve to pressure line from pump.
  - 4. Connect port marked **BYPASS** to pressure port of box lift.
  - 5. Install pressure and return hoses from hose ends on fixed point of hose guard chain.
    - A- Install pressure and return hose from fixed point along bottom of box to the pivot point of the box lift of the truck.
    - B- Install Q-Connectors to the hose ends.
      - 1- Male end of Q-Connector to pressure hose coming from fixed point.
      - 2- Female end of Q-Connector to return hose coming from fixed point.
        NOTE: THIS IS VERY IMPORTANT, because hose ends coming from flow valve will have to be connected together when box with dump unit is not on truck.
      - 3- Install hoses with matching ends of Q-Connectors along chassis of truck to flow valve.
      - 4- Connect pressure hose from hand valve to REG. port on flow valve.
      - 5- Connect return hose from hand valve to PORT on side of flow valve connected to bypass port.
- 22. With all hoses connected, start truck and engage PTO and check for leaks. Raise box up and down to be sure hoses are not crimped between box and chassis.
- 23. Test dump unit. Run dump unit up and down; check for any alignment problems. Test dump unit with a load in cart. Unit should dump cart with maximum load rating marked on cart.



## PARTS LIST 3064-00-1000 Lift Plate

	PART NUMBER	DESCRIPTION	<u>OTY</u>
1	3064-00-1329	Faceplate	1
2	3064-00-1322	Motor Sprocket	2
	2054 00 4222		2
3	3064-00-1323	Chain Sprocket	2
4	3064-00-1324	Chain Sprocket Washer	2
_	3004 00 1324	Chain Sprocket Washer	
5	3064-00-1325	Face Plate Pivot Bar	2
6	3064-00-1326	Hook Operator Bar	1
7	3064-00-1327	Motor Mount Plate	1
8	3064-00-1328	Motor Mount	1
٥	3004-00-1328	Motor Mount	1
9	3064-00-1317	Motor Cam Bracket	1
10	3064-00-1318	Pivot Block	2
11	3064-00-1319	Lock Hook	1
12	3064-00-1320	Lower Cam Block	2
13	3064-00-1321	Upper Cam Block	2
13	3004 00-1321	Opper cum block	
14	3064-00-1305	Plate Pivot Block	1
15	3064-00-1308	HYD Motor Cap	1
16	3057-00-3900	Lifting Saddle	1

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17	3064-00-6001	Hydraulic Motor	1
18	3064-00-1366	Cam Follower	12
19	3064-00-1367	Cam Follower	1
19	3004-00-1307	Calli Follower	1
20	3064-00-1368	Chain Sprocket Bearing	4
21	5031-00-0510	Pivot Block Bearing	6
22	5031-00-0518	Hook Operating Bearing	2
23	5589-00-0300	Button Head Screw	3
23	3383-00-0300	Button flead Screw	3
24	5590-00	Socket Head Screw	2
25	5590-00	Socket Head Screw	4
2.6			
26	5590-00	Socket Head Screw	14
27	5590-00	HYD Motor Screw	1
		The Motor Garen	
28	5590-00	Motor Mount Screw	4
29	5590-00	Set Screw	2
20	FF70.00	Chaulden Delt	2
30	5570-00	Shoulder Bolt	2
31	5570-00	Shoulder Bolt	2
32	5570-00	Shoulder Bolt	2
33	5430-00	Cam Follower Nut	1
34	5430-00	Motor Cam Nut	1
34	J430-00	INIOTOT CAITI NUL	1
35	5440-00	Lock Washer	1
36	5430-00	Lock Nut	5
37	5440-00	Lock Washer	13

38	5440-00	Lock Washer	23
39	5500-00	Flat Washer	2
40	5500-00	Flat Washer	2
41	5435-00	Press Fit Grease Fitting	13
42	5313-00	Hydraulic Fitting	2



## MAINTENANCE INSTRUCTIONS 3064-00-2000

- 1. Chain must be lubricated with CRC, LPS or SprayOn chain and wire rope lubricant every 120 hours of use.
- 2. The three bearing blocks must be greased every 120 hours of use.
- 3. Weekly check for any loose bolts, oil leaks and check chain tension.
- 4. Weekly check cam followers for wear.
- 5. Weekly check speed of unit, UP speed should not be less than 8 seconds UP and 8 seconds down.

#### IF UNIT IS STAND MOUNTED AND HAS A POWER UNIT

- 6. Monthly check oil level of power unit.
- 7. Monthly check color of oil. If oil has milky color replace oil.
- 8. Weekly check hand valve spool for leaks.



### PARTS LIST 3064-00-1000 Lift Plate

	PART NUMBER	DESCRIPTION	<u>OTY</u>
1	3063 or 3064	Dump Unit	1
2	3059-00-2700	Carriage Frame	1
3	3059-00-2702	Slide Bar	1
4	3059-00-2701	Upper Carriage Bearing	2
5	3059-00-2717	Lower Carriage Bearing	2
6	3059-00-2715	External Mounting Plate	
7	3059-00-2714	Internal Mounting Plate	
8	5590-00-0424	Socket Head Cap Screw	
9	5290-00-0424	Hex Bolt	
10	5590-00-0524	Socket Head Cap Screw	1
11	5600-00-0140	Carriage Spring	1
12	5239-00-0010	Handle Pin	1
13	5239-00-0022	Locking Handle Pin Guide	1
14	5239-00-0020	Lock Pin	1
15	3059-00-2710	Locking Handle	1

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16	5239-00-0015	Cotter Pin	1
17	5440-00-0700	Lock Washer	2
18	5260-00-0700	Hex Nut	2
19	5460-00-0200	Flat Washer	2
20	5260-00-0775	Hex Nut	2
NO.	T SHOWN		
	5320-00-100	Hose Guard Chain	
	5320-00-1005	Left Fixed Point Connector	
	5320-00-1006	Left Driven Connector	
	5320-00-1010	Right Fixed Point Connector	
	5320-00-1011	Right Driven Connector	
	5320-00-1003	Hose Guard Tray 10' Section	

For safety replacement, Upper Carriage Bearings have to be replaced with 3059-00-2701 Upper Carriage Bearings. Lower Carriage Bearings cannot be used for Upper Carriage Bearings.

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## PARTS LIST 3064 Vertical Lift Bar

	PART NUMBER	DESCRIPTION	<u>OTY</u>
*1	3064-00-1019	Vertical Bar	1
*2	3064-00-1020	Chain – Various Lengths	
	2054 20 4004		
3	3064-00-1021	Stop Block	
4	3064-00-1022	Chain Adjuster	1
4	3004-00-1022	Chain Adjuster	1
5	3064-00-1028	Angle Guide	1
	3001001020	7 mgic Guide	_
6	3064-00-1034	Cam Follower	2
7	5590-00-0420	Socket Head Cap Screw	2
8	3064-00-1029	Angle Guide Plate	1
9	3064-00-1030	Cam Follower	
		Adit of social Blobs	
		Adjustment Plate	
10	5262-00-0476	Cam Follower Nut	1
10	3202 00 0470	Carri Grower Nut	1
11	5590-00-0524	Socket Head Cap Screw	4
12	5440-00-0400	Lock Washer	2
13	3064-00-1031	Chain Adjuster Spring	1
14	3064-00-1032	Chain Washer	1
15	5430-00-0500	Lock Nut	2

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5340-FS-4075	Hose Assembly	1
5340-FS-4100	Hose Assembly	1
5340-FS-4075	Hose Assembly	1
5340-FS-4001	Hose Assembly	1
5340-FS-4002	Hose Assembly	1
5314-00-0031	Mounting Nuts	2
5320-00-0441	10' Hose Assembly	1
5320-00-0442	12' Hose Assembly	1
5320-00-1002	Hose Chain (measure in feet)	
5320-00-1003	Hose End Bracket (pair)	1
5314-00-0006	3/8" Bulkhead 90°	1
5314-00-0005	3/8" Bulkhead Nut	1
	5340-FS-4100  5340-FS-4075  5340-FS-4001  5340-FS-4002  5314-00-0031  5320-00-0441  5320-00-1002  5320-00-1003  5314-00-0006	5340-FS-4100 Hose Assembly  5340-FS-4075 Hose Assembly  5340-FS-4001 Hose Assembly  5340-FS-4002 Hose Assembly  5314-00-0031 Mounting Nuts  5320-00-0441 10' Hose Assembly  5320-00-0442 12' Hose Assembly  5320-00-1002 Hose Chain (measure in feet)  5320-00-1003 Hose End Bracket (pair)  5314-00-0006 3/8" Bulkhead 90°

<sup>\*</sup>Vertical bar, chain and hose length can vary due to vertical bar length. Please state length of these items when ordering.



### <u>PARTS LIST</u> 3064 Hydraulic Valves and Accessories

PART NUMBER	DESCRIPTION	
FART NOWIDER	<u>DESCRIPTION</u>	
5354-00-0612	¾" Flow Regulator	
5354-00-0614	1" Flow Regulator	
5354-00-0620	3/8" Adjustable Flow Control Valve	
5354-00-0618	3/8" Flow Regulator Valve	
5354-00-0641	50/50 Flow Divider	
Hand Valves / D	ukes	
5354-00-0900	Hand Valve Tandem Center	
5354-00-0902	Hand Valve Closed Center	
See drawing DA1276 & DA1277 for Hand Valve parts		

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### PARTS LIST 3064-ST-2000 Stand Mount

	PART NUMBER	DESCRIPTION
1	3064-00-2000	Lift Assembly
2	5354-F1-3001	Power Unit Single Phase
2	5354-F3-3003	Power Unit Three Phase
3	5354-MS-3208	208 Volt / Three Phase Motor Starter
3	5354-MS-3230	230 Volt / Three Phase Motor Starter
3	5354-MS-3460	460 Volt / Three Phase Motor Starter
3	5354-MS-1120	120 Volt / Single Phase Motor Starter
3	5354-MS-1220	220 Volt / Single Phase Motor Starter
4	5354-00-2500	Prince Hand Valve
5	3064-00-0000	Stand

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### PARTS LIST 3064-00-2000 Lift Unit

	PART NUMBER	DESCRIPTION
1	3064-00-6022	Flared Cam Follower
2	3064-00-6001	Lift Assembly
3	3064-00-6023	5/16" Key
4	3064-00-6002	Cam Spacer
_	300+ 00 0002	editi spacei
5	3064-00-6003	Carriage Chain Connector
6	3064-00-6004	Chain Take Up Bar
0	3004-00-0004	Chair Take Op Bai
7	3064-00-6005	Chain
8	3064-00-4442	Faceplate Block
0	3004-00-4442	racepiate block
9	3064-00-6006	Faceplate Spacer
10	2064.00.6007	2 Polt Pooring
10	3064-00-6007	3 Bolt Bearing
11	5440-00-0500	½" Lock Washer
12	5440-00-0400	3/8" Lock Washer
13	5440-00-0300	5/16" Lock Washer
14	5440-00-0800	7/8" Lock Washer
15	5260-00-0400	3/8" Hex Nut
16	5260-00-0300	5/16" Hex Nut

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17	5260-00-0900	7/8" Hex Nut
18	5251-00-0525	HCS ½-13 x 1-3/4"
19	5250-00-0420	HCS 3/8-16 x 1-1/4"
20	5250-00-0428	HCS 3/8-16 x 2"
21	5250-00-0460	HCS 3/8-16 x 2-1/4"
22	5250-00-0410	HCS 3/8-16 x 3/4"
23	5250-00-0412	HCS 3/8-16 x 7/8"
24	5270-00-0420	Shoulder Screw .375 x 2
25	5590-00-0297	Set Screw Cone 3/8-16 x 1"
26		No item #26
27	3064-00-0297	Hook Pivot Pin
28	3064-00-6009	Hook Spacer
29	3064-00-6010	Hook Bearing Block
30	3064-00-6011	Hook Pivot Pin
31	3064-00-5100	Hydraulic Motor
32	3064-00-6012	Idler Shaft
33	3064-00-6013	Lock Hook
34	3064-00-6014	Lock Hook
35	3064-00-6015	Faceplate
36	3064-00-6016	Motor Drive Shaft
37	5030-00-0726	Bushing 1" OD x 3/4" ID x 1/2"
38	5030-00-0527	Bushing ¾" OD x ½" ID x ¾"

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39	5031-00-0512	Bushing 5/8" OD x ½" ID x 1/2"
40	5031-00-0513	Bushing 5/8" OD x ½" ID x 7/16"
41	5110-00-0020	Cotter Pin
42	3057-00-3900	Saddle
43	3064-00-6017	Side Plate Carriage
44	3064-00-6018	Spacer Faceplate Bottom
45	3064-00-6019	Spacer Faceplate Top
46	3064-00-6020	Chain Sprocket
47	3064-00-6021	Take-up Adapter
48	5500-00-0500	½" Washer
49	5500-00-0400	3/8" Washer

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#### **MOTOR STARTER PARTS LIST**

### Cutler-Hammer Three-Phase Magnetic

Item #	PART NUMBER	DESCRIPTION
1	5354-MS-3208	208 Volt Starter Assembly
1	5354-MS-3230	230 Volt Starter Assembly
1	5354-MS-3460	460 Volt Starter Assembly
2	5354-MS-3020	Key Switch (CH10250ED824)
3	5354-MS-3021	Contact Block (CH10250T53)
	F2F4 N4C F200	200 Valt Barda same at Starter (CH ANA CDNOS)
4	5354-MS-5208	208 Volt Replacement Starter (CH AN16DNOE)
4	5354-MS-5230	230 Volt Replacement Starter (CH AN16DNOB)
	3334 1013 3230	250 Voit Replacement Starter (CIT AN 10DNOD)
4	5354-MS-5460	460 Volt Replacement Starter (CH AN16DNOC)
		(community
5	5354-MS-4208	208/60 Coil (CH 9-2703-9)
5	5354-MS-4230	230/60 Coil (CH 9-2703-2)
5	5354-MS-4460	460/60 Coil (CH 9-2703-3)
6	5354-MS-3L15	Heater Pack 208/240 Volt 5HP (CH H2012B-3)
6	5354-MS-3H15	Heater Pack 460 Volt 5HP (CH H2010B-3)

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

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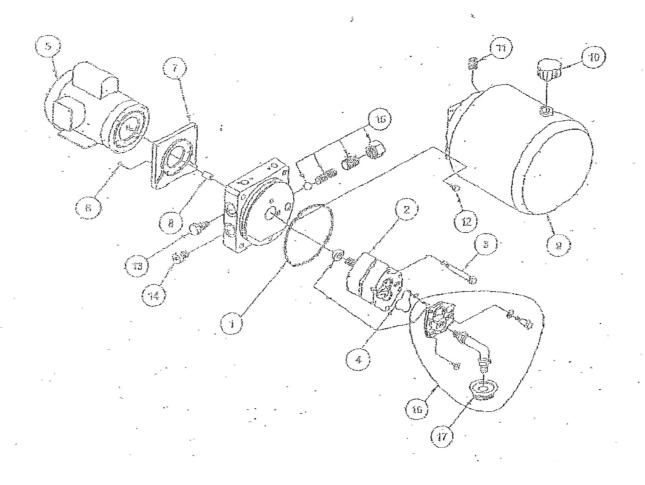


### <u>PARTS LIST</u> 5354-F3-3003 & F1-3001 POWER UNIT

ITEM	PART NUMBER	DESCRIPTION
1	5354-FE-3010	Reservoir O-Ring
2	5354-FE-3011	Pump
3	5354-FE-3012	Bolt
	5054 55 0040	0.149
4	5354-FE-3013	Seal Kit
5	5354-F1-3002	Motor Single Phase 2 HP
3	5354-F3-3004	Motor Three Phase 2 HP
	3334 13 3004	Wiotof Till CC Flid SC 2 Fil
6	5354-FE-3014	Bolt
7	5354-FE-3015	Motor Adaptor
8	5354-FE-3016	Coupling
9	5354-FE-3017	Reservoir
10	5354 55 3040	
10	5354-FE-3018	Breather
11	5354-FE-3019	Dlug
11	3534-FE-3019	Plug
12	5354-FE-3020	Bolt
12	333412 3020	
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
47	F354 55 3635	Eth.
17	5354-FE-3025	Filter
18		Motor Starter
10		IVIOLOI SLAILEI

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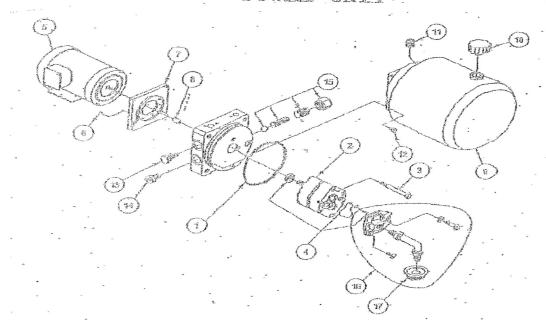
### PASS DEARING 5354-F1-3011 Updated: Fall 2015 PORER UNIT



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		

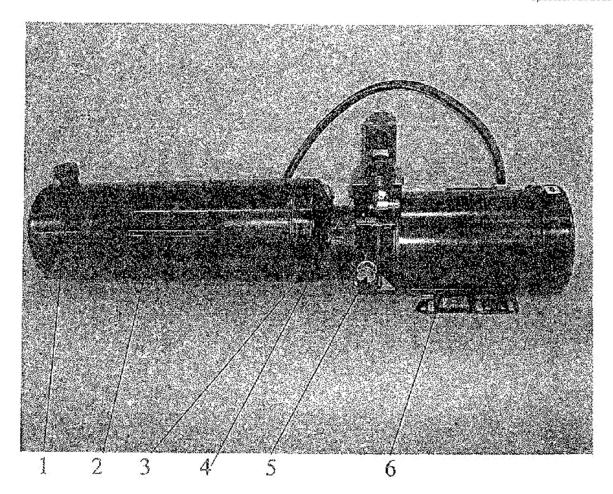
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### PARTS TRAVING 5354-F3-3003



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		

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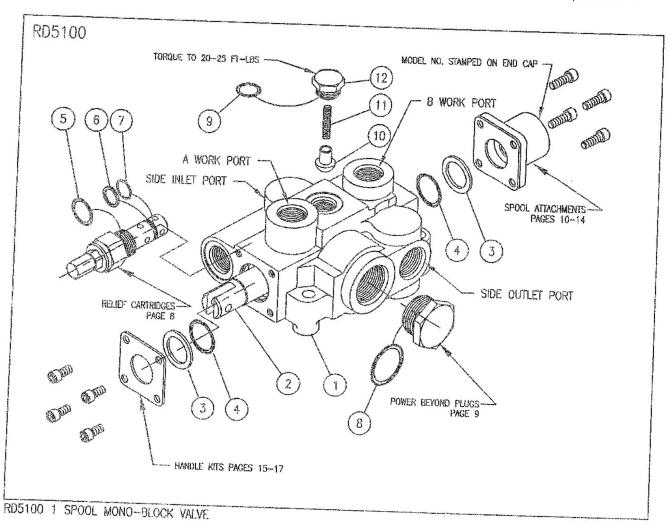


5354-F3-5003 3HP 3PH POWER UNIT

- 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

#### PART#5354-00-2500

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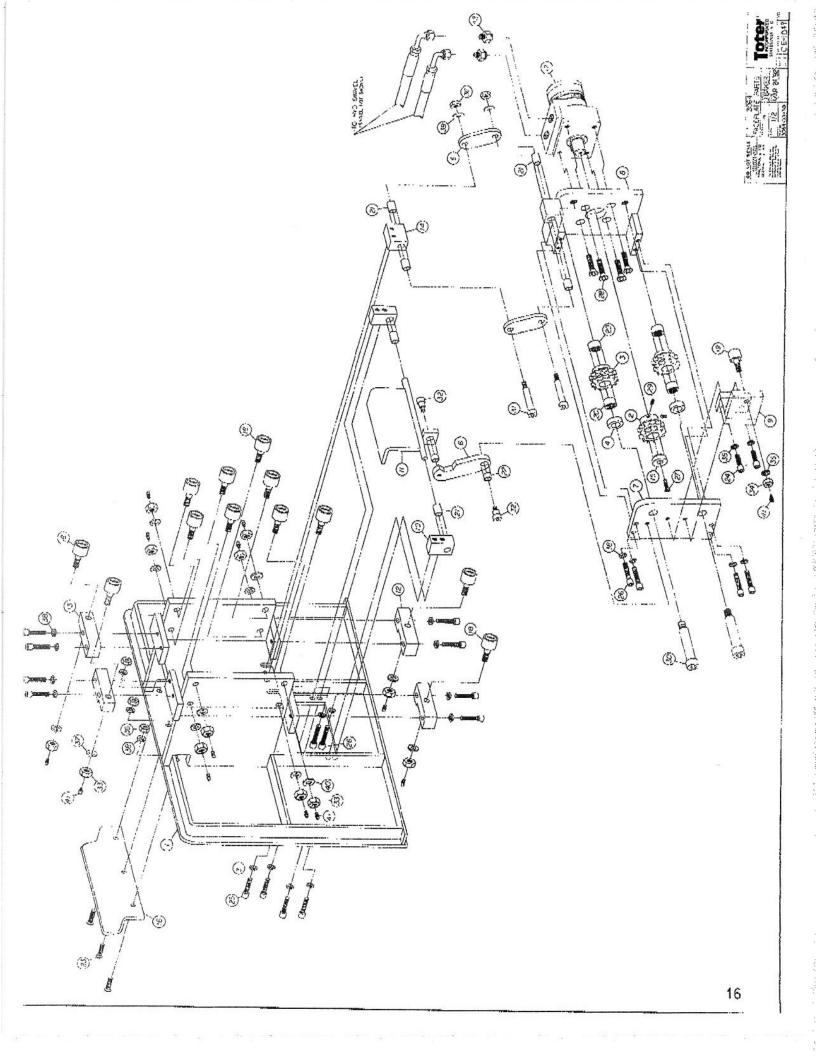
ROSION I SPONI MONO-RINCK

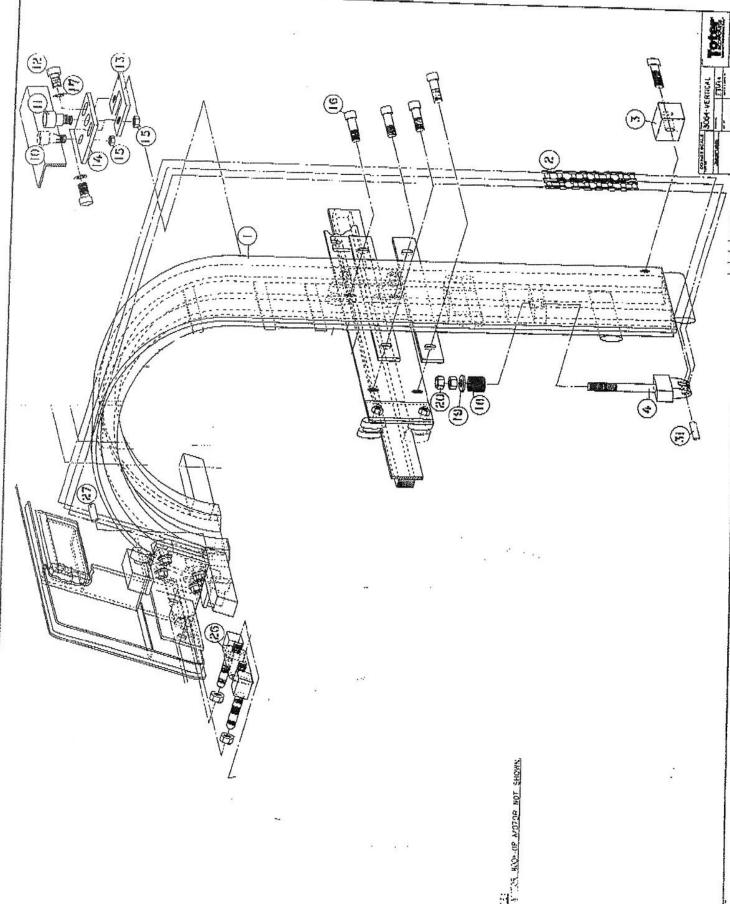
ITEM	QTY	PART NO.	DESCRIPTION T SPOOL MONO-BLOCK VALVE
123456789012	1 1 2 2 1 1 1 1 1 1 1 1 1	SEE NOTE 1 670500010 240000213 240000116 240019015 240000015 240000916 240000908 670100001 670300007 671600001	1 SPOOL VALVE BODY SPOOL SPOOL SPOOL SEAL BACK-UP 213 O-RING 116 O-RING 015 BACK-UP 015 O-RING 916 O-RING 916 O-RING 908 O-RING LOAD CHECK POPPET LOAD CHECK SPRING LOAD CHECK PLUG

#### NOTES:

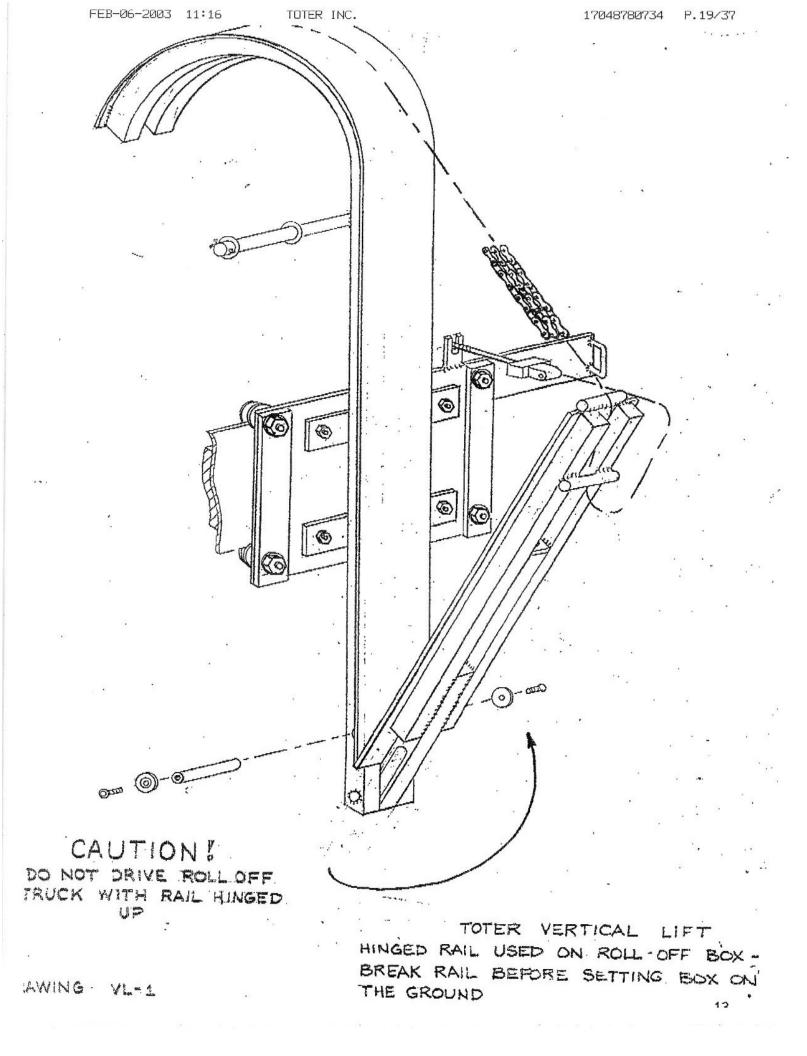
1. SEE SPOOL IDENTIFICATION CHART ON PAGE 7 2. VALVES WITH 3 WAY SPOOLS HAVE 'A' WORK PORT PLUGGED.

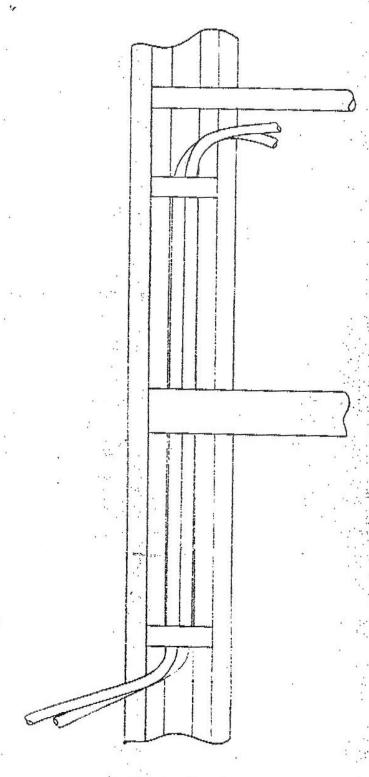
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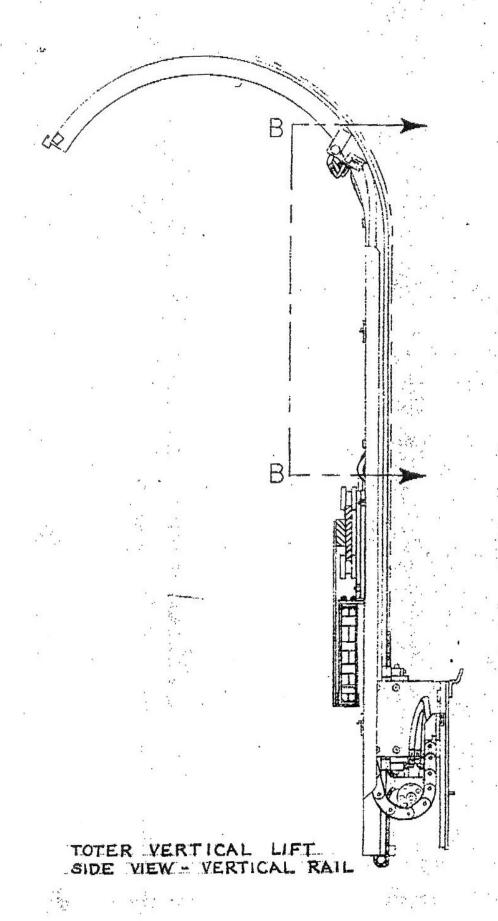
15



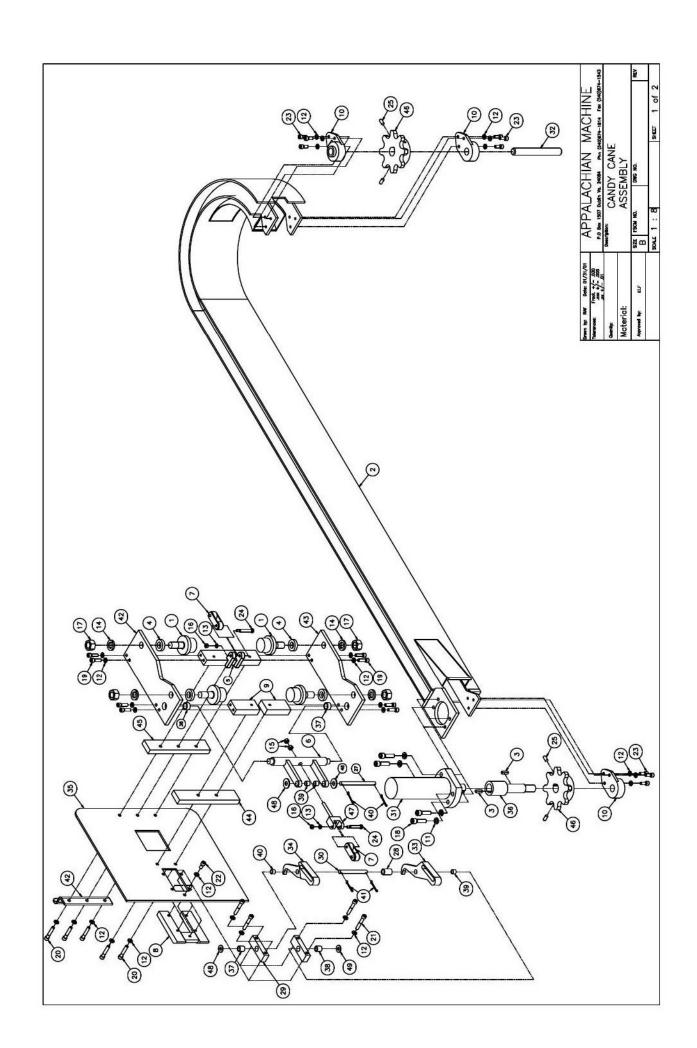


DRAWING VL-2 (SHEET 2. OF 2) VIEW B-B SCALE 1:4

TOTER VERTICAL LIFT HOSE ROUTING IN RAIL



DRAWING VL-2 (SHEET 1 OF 2)

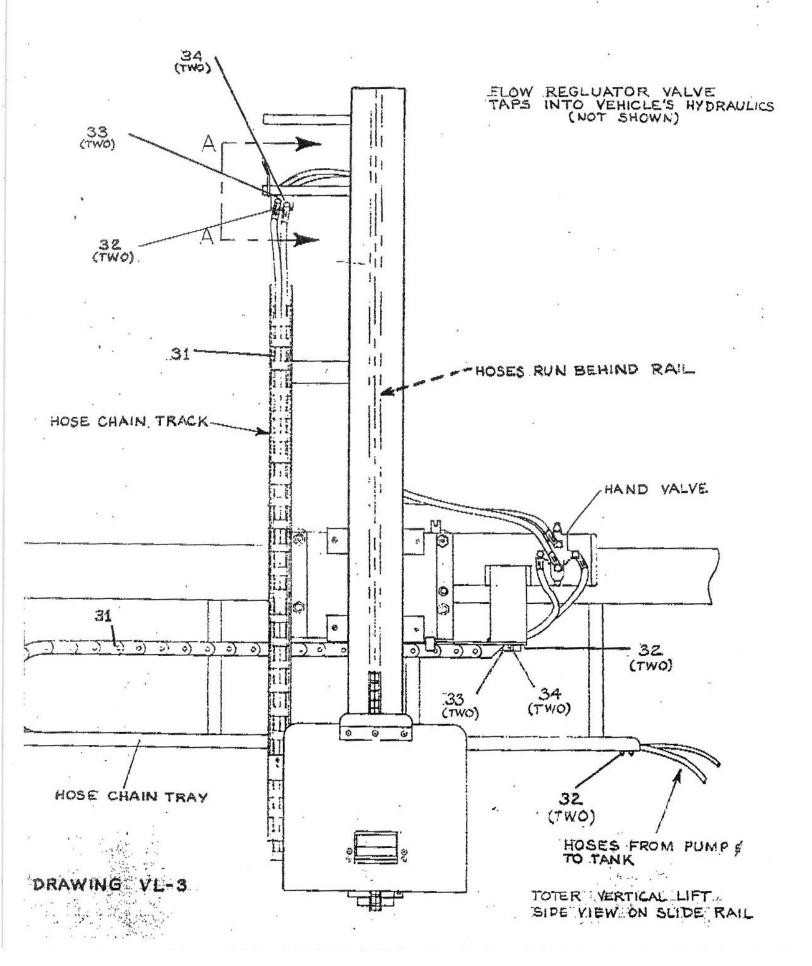


SPACER FACE PLATE, TOP   2064-00-6020			PARTS LIST		
SPROCKET FACE PLATE, TOP   3064-00-6020		PART NO.			Mari
SPROCRET FACE PLATE, TOP   3064-00-6020		3064-00-6022		4	-
SPACCER FACE PLATE, TOP   3064-00-6020		3064-00-6001	1 LIFT ASSEMBLY	_	N
SPACCER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SOB-00-6020  SPACER FACE PLATE, BOTTOM  SOB-00-6019  SPACER FACE PLATE, BOTTOM  SOB-00-6019  SPACER FACE PLATE, BOTTOM  SOB-00-6019  SO		3064-00-6023		2	W
SPACCER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SPACER FACE PLATE, BOTTOM  SPACER FACE PLATE, BOTTOM  SOBE-OD-6019  SPACER FACE PLATE, BOTTOM  SOBE-OD-6019  SPACER FACE PLATE, BOTTOM  SOBE PLATE FOR CARRIAGE  SOBE PLATE  SOBE PLATE FOR CARRIAGE  SOBE PLATE  SOBE PLAT		3064-00-6002		4	4
SPACCER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SPACER FACE PLATE, BOTTOM  SDE PLATE FOR CARRIAGE  SADDLE  SADDLE FOR CARRIAGE  SDE PLATE FOR CARRIAGE  SDE PLATE FOR CARRIAGE  SOBO DATE BUSHING 5/8" O.D. x 1/2" I.D. x 7/16" LONG  OILITE BUSHING 5/8" O.D. x 1/2" I.D. x 7/16" LONG  OILITE BUSHING 3/4" O.D. x 1/2" I.D. x 3/4" LONG  OILITE BUSHING 3/4" O.D. x 1/2" I.D. x 3/4" LONG  OILITE BUSHING 3/4" O.D. x 1/2" I.D. x 3/4" LONG  OILITE BUSHING 3/4" O.D. x 1/2" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE BUSHING 3/4" O.D. x 3/4" I.D. x 1/2" LONG  OILITE SUSHING 3/4" O.D. x 3/4" I.D. x 1/4" LONG  OILITE SUSHING 3/4" O.D. x 3/4" LONG  OILITE SUSHING 3/4" O.D. x 3/4" LONG  OILITE SUSHING 3/4" LONG  OILITE		3064-00-6003	1 CARRIAGE CHAIN CONNECTOR	_	ហ
SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SPACER FACE PLATE, BOTTOM  SOBA-00-6019  SPACER FACE PLATE, BOTTOM  SOBA-00-6019  SADDLE FOR CARRIAGE  SADDLE FOR CARRIAGE  SADDLE FOR CARRIAGE  SADDLE BUSHING 5/8" O.D. x 1/2" I.D. x 7/16" LONG  OILITE BUSHING 1,4" O.D. x 1/2" I.D. x 1/2" LONG  OILITE BUSHING 1,0" O.D. x 3/4" I.D. x 1/2" I.D. x 3,064-00-6011  OILITE BUSHING 1,0" O.D. x 3/4" I.D. x 1/2" I.D. x 3,064-00-6011  OILITE BUSHING 1,0" O.D. x 3/4" I.D. x 1/2" I.D. x 3,064-00-6011  OILITE BUSHING 1,0" O.D. x 3/4" I.D. x 1/2" I.D. x 1/2" I.D. x 3,064-00-6016  HOOK ACTIVATION FOR 1 O.D. x 3,0" I.D. x 1/2" I.D.		3064-00-6044	CHAIN TAKE UP	_	6
SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SPACER FACE PLATE, BOTTOM  SDE PLATE FOR CARRIAGE  SADDLE  SADDLE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 3/4" I.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 3/4" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" LONG  OILITE BUSHING 5/8" O.D. X	_	3064-00-6005	1 CHAIN	_	7
SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SPACER FACE PLATE, BOTTOM  SPACER FACE PLATE, BOTTOM  SADDLE  SADDL		3064-00-4442	1 FACE BLOCK WELDMENT	_	œ
SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SPACER FACE PLATE, BOTTOM  SPACER FACE PLATE, BOTTOM  SADDLE  SADDLE FOR CARRIAGE  SADDLE FOR CARRIAGE  SADDLE FOR CARRIAGE  SADDLE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 3/4" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 3/4" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 3/4" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OOK HOOK ROOTTO  INDER 5/44" O.D. X 1/2" LONG  OOK HOOK ROOTTO  INDER 5/44" I.D. X 1/2" LONG  OOK BEARING BLOCK  HOOK ACTUATOR PIVOT PIN  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1" LONG  OOK ACTUATOR FIVOT PIN  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG  EXEMPTION SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG  EXEMPTION SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG  EXEMPTION SOCKET HEAD CAP SCREW 3/8-16UNC X 1" LONG  OOK WASHER, 1/8"  EXEMPTION SOCKET HEAD CAP SCREW 3/8-16UNC X 1" LONG  OOK WASHER, 1/8"  INDER 5/40-00-0500  INDER 5/40-00-0500  EXEMPTION SOCKET HEAD CAP SCREW 3/8-16UNC X 1" LONG  OOK WASHER, 1/8"  OOK WASHER,	1	3064-00-6006		2	9
SPROCKET SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SPACER FACE PLATE, BOTTOM  SPACER FACE PLATE, BOTTOM  3064-00-6020  3064-00-6018  3064-00-6018  3064-00-6018  3064-00-6018  3064-00-6018  3064-00-6018  3064-00-6018  3064-00-6018  3064-00-6018  3064-00-6018  3064-00-6018  3064-00-6017  3064-00-6017  3064-00-6017  3064-00-6017  3064-00-6017  3064-00-6018  3064-00-6018  3064-00-6018  3064-00-6016  3064-00-6016  3064-00-6016  3064-00-6016  3064-00-6016  3064-00-6016  3064-00-6016  3064-00-6016  3064-00-6016  3064-00-6016  3064-00-6016  3064-00-6016  3064-00-6016  3064-00-6016  3064-00-6017  400K HOOK LEFT  3064-00-6017  400K ASSEMBLY SPACER  400K ACTUATOR PIVOT PIN  400K ACTUATOR PIN  400	-	3064-00-6007		G	10
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG OILITE BUSHING 1" O.D. X 1/2" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  MOTOR DRIVE SHAFT  MODIFIED FACE PLATE  LOCK HOOK RIGHT  LOCK HOOK RIGHT  LOCK HOOK RIGHT  LOCK HOOK LEFT  IDLER SHAFT  HYDRAULIC MOTOR  HOOK PIVOT PIN  HOOK BEARING BLOCK  HOOK PIVOT PIN  HOOK ASSEMBLY SPACER  HOOK ACTUATOR PIVOT PIN  HOOK ASSEMBLY SPACER  HOOK ACTUATOR PIVOT PIN  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 7/8" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16	1	5440-00-0500	LOCK WASHER.	4	=
SPROCKET SPACER FACE PLATE, TOP SPACER FACE PLATE, BOTTOM SPACER FACE PLATE, BOTTOM SIDE PLATE FOR CARRIAGE SADDLE SADDLE COTTER PIN OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG OILITE BUSHING 1" O.D. X 1/2" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG MOTOR DRIVE SHAFT MODIFIED FACE PLATE LOCK HOOK RIGHT LOCK HOOK RIGHT LOCK HOOK RIGHT LOCK HOOK SEABLY SPACER HOOK ASSEMBLY SPACER HOOK HOOK HOOK BUSHING HOOK BUSHING HOOK BUSH HOOK BUSH HOOK BUSH HOOK HOOK		5440-00-0400	LOCK WASHER,	27	12
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 3/4" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  MOTOR DRIVE SHAFT  MODIFIED FACE PLATE  LOCK HOOK RIGHT  LOCK HOOK RIGHT  LOCK HOOK LEFT  IDLER SHAFT  HYDRAULIC MOTOR  HOOK ASSEMBLY SPACER  HOOK ASSEMBLY SPACER  HOOK ASSEMBLY SPACER  HOOK ASSEMBLY SPACER  HOOK ACTUATOR PIVOT PIN  HEXAGON SOCKET HEAD SHOULDER SCREW - 0.375 X 2 ANSI B18.3  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 7/8" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON		5440-00-0300	LOCK WASHER,	2	13
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 3/4" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  MOTOR DRIVE SHAFT  MODIFIED FACE PLATE  LOCK HOOK RIGHT  LOCK HOOK RIGHT  LOCK HOOK RIGHT  LOCK HOOK SEENBLY SPACER  HOOK ASSEMBLY SPACER  HOOK SOCKET HEAD SHOULDER SCREW - 0.375 X 2 ANSI B18.3  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 7/8" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 1/2-13UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 1/2-13UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 1/2-13UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 1/2-13UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 1/2-13UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 1/2-13UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 1/2-13UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP		5440-00-0800	LOCK WASHER,	4	14
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 1" O.D. X 1/2" I.D. X 3/4" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 1/2" LONG  MOTOR DRIVE SHAFT  MODIFIED FACE PLATE  LOCK HOOK RIGHT  LOCK HOOK RIGHT  LOCK HOOK PIVOT PIN  HOOK ASSEMBLY SPACER  HOOK PIVOT PIN  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 7/8" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP S		5260-00-0400		2	15
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 3/4" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 1/2" LONG  MOTOR DRIVE SHAFT  MODIFIED FACE PLATE  LOCK HOOK RIGHT  LOCK HOOK RIGHT  LOCK HOOK RIGHT  LOCK HOOK ASSEMBLY SPACER  HOOK ACTUATOR PIVOT PIN  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 7/8" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 1/2-13UNC X 1 3/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 1/2-13UNC X 1 3/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 1/2-13UNC X 1 3/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 1/2-13UNC X 1 3/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 1/2-13UNC X 1 3/4" LONG  HOOK PLANTED TO THE PLANTED TO		5260-00-0300		2	16
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  MOTOR DRIVE SHAFT  MODIFIED FACE PLATE LOCK HOOK RIGHT LOCK HOOK RIGHT LOCK HOOK LEFT IDLER SHAFT  HYDRAULIC MOTOR HOOK BEARING BLOCK HOOK ASSEMBLY SPACER HOOK ACTUATOR PIVOT PIN  HOOK ACTUATOR PIVOT PIN  HEXAGON SOCKET HEAD SHOULDER SCREW — 0.375 X 2 ANSI B18.3  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 7/8" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 2" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 1 1/4" LONG HEXAGO		5260-00-0900	HEX NUT	4	17
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  MOTOR DRIVE SHAFT  MODIFIED FACE PLATE LOCK HOOK RIGHT LOCK HOOK RIGHT LOCK HOOK LEFT IDLER SHAFT  HYDRAULIC MOTOR HOOK BEARING BLOCK HOOK ASSEMBLY SPACER HOOK ACTUATOR PIVOT PIN HOOK ACTUATOR PIVOT PIN HOOK ACTUATOR PIVOT PIN HEXAGON SOCKET HEAD SHOULDER SCREW — 0.375 X 2 ANSI B18.3 HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 7/8" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 3/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2 1/4" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2" LONG HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 1" 1/4" LONG		5250-00-0525	SOCKET HEAD CAP SCREW 1/2-13UNC X 1 3/4"	1	18
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG OILITE BUSHING 3/4" O.D. X 3/4" L.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  MOTOR DRIVE SHAFT  MODIFIED FACE PLATE LOCK HOOK RIGHT  LOCK HOOK RIGHT  LOCK HOOK LEFT IDLER SHAFT  HYDRAULIC MOTOR  HOOK BEARING BLOCK HOOK ASSEMBLY SPACER  HOOK ASSEMBLY SPACER  HOOK ACTUATOR PIVOT PIN  HEXAGON SOCKET HEAD SHOULDER SCREW — 0.375 X 2 ANSI B18.3  HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 7/8" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2" LONG		5250-00-0420	SCREW 3/8-16UNC X 1 1/4"	_	19
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG OILITE BUSHING 3/4" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  MOTOR DRIVE SHAFT  MODIFIED FACE PLATE LOCK HOOK RIGHT  LOCK HOOK LEFT IDLER SHAFT  HYDRAULIC MOTOR  HOOK BEARING BLOCK HOOK ASSEMBLY SPACER HOOK ASSEMBLY SPACER HOOK ACTUATOR PIVOT PIN  HEXAGON SOCKET HEAD SHOULDER SCREW — 0.375 X 2 ANSI B18.3  HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 7/8" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 3/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2 1/4" LONG  HEXAGON SOCKET HEAD CAP SCREW 3/8—16UNC X 2 1/4" LONG		5250-00-0428	× 2"	_	20
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  MOTOR DRIVE SHAFT  MODIFIED FACE PLATE LOCK HOOK RIGHT  LOCK HOOK RIGHT  LOCK HOOK LEFT IDLER SHAFT  HYDRAULIC MOTOR  HOOK BEARING BLOCK HOOK ASSEMBLY SPACER  HOOK ASSEMBLY SPACE		5250-00-0460	HEAD CAP SCREW 3/8-16UNC X 2	_	21
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  MOTOR DRIVE SHAFT  MODIFIED FACE PLATE LOCK HOOK RIGHT  LOCK HOOK RIGHT  LOCK HOOK LEFT IDLER SHAFT  HYDRAULIC MOTOR  HOOK BEARING BLOCK  HOOK ASSEMBLY SPACER  HOOK ASSEMBLY SPACER  HOOK ACTUATOR PIVOT PIN  HEXAGON SOCKET HEAD SHOULDER SCREW — 0.375 X 2 ANSI B18.3  HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X 7/8" LONG		5250-00-0410	HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X	_	22
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILLTE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG OILLTE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG OILLTE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILLTE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILLTE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILLTE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILLTE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  MOTOR DRIVE SHAFT  MODIFIED FACE PLATE  LOCK HOOK RIGHT  LOCK HOOK RIGHT  LOCK HOOK LEFT  IDLER SHAFT  HYDRAULIC MOTOR  HOOK BEARING BLOCK  HOOK ASSEMBLY SPACER  HOOK ASSEMBLY SPACER  HOOK ACTUATOR PIVOT PIN  HEXAGON SOCKET SET SCREW — CONE POINT 3/8—16UNC X 1" LONG  HEXAGON SOCKET HEAD SHOULDER SCREW — 0.375 X 2 ANSI B18.3		5250-00-0412	HEXAGON SOCKET HEAD CAP SCREW 3/8-16UNC X	_	23
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  MOTOR DRIVE SHAFT  MODIFIED FACE PLATE LOCK HOOK RIGHT  LOCK HOOK RIGHT  LOCK HOOK LEFT IDLER SHAFT  HYDRAULIC MOTOR  HOOK BEARING BLOCK  HOOK ASSEMBLY SPACER  HOOK ASSEMBLY SPACER  HOOK ACTUATOR PIVOT PIN  HEXAGON SOCKET SET SCREW — CONE POINT 3/8—16UNC X 1" LONG		5570-00-0420	HEXAGON SOCKET HEAD SHOULDS	2	24
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. × 1/2" I.D. × 7/16" LONG OILITE BUSHING 3/4" O.D. × 1/2" I.D. × 1/2" LONG OILITE BUSHING 1" O.D. × 1/2" I.D. × 3/4" LONG OILITE BUSHING 1" O.D. × 3/4" LONG  IDICK HOOK RIGHT  LOCK HOOK RIGHT  LOCK HOOK LEFT IDLER SHAFT  HYDRAULIC MOTOR  HOOK BEARING BLOCK  HOOK ASSEMBLY SPACER  HOOK ACTUATOR PIVOT PIN		5590-00-0297	HEXAGON SOCKET SET SCREW -	4	25
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  HOOK HOOK RIGHT  LOCK HOOK RIGHT  LOCK HOOK RIGHT  HOOK BEARING BLOCK  HOOK ASSEMBLY SPACER		3064-00-6008		1	26
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 1/2" LONG  OILITE BU		3064-00-6009		_	27
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 1/2" LONG		3064-00-6010		2	28
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 1/2" I.D. X 3/4" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 5/8" O.D. X 1/2" LONG		3064-00-6011			29
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 3/4" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG		3077-00-2155		1	30
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 3/4" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG		3064-00-6012	1 IDLER SHAFT	1	31
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 3/4" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  MOTOR DRIVE SHAFT  MODIFIED FACE PLATE  LOCK HOOK RIGHT		3064-00-6013		_	32
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 1/2" LONG  OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 3/4" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG  MOTOR DRIVE SHAFT  MODIFIED FACE PLATE		3064-00-6014	1 LOCK HOOK RIGHT	_	33
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 3/4" LONG  OILITE BUSHING 3/4" O.D. X 3/4" I.D. X 3/4" LONG  OILITE BUSHING 1" O.D. X 3/4" I.D. X 1/2" LONG		3064-00-6015	1 MODIFIED FACE PLATE	_	34
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 3/4" LONG  OILITE BUSHING 3/4" O.D. X 3/4" I.D. X 3/4" LONG		3064-00-6016		_	35
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 3/4" O.D. X 1/2" I.D. X 3/4" LONG		5030-00-0726	OILITE BUSHING 1" O.D. X 3/4" I.D. X	2	36
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 1/2" LONG		5030-00-0527	OILITE BUSHING $3/4$ " O.D. $\times$ $1/2$ " I.D.	2	37
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN  OILITE BUSHING 5/8" O.D. X 1/2" I.D. X 7/16" LONG		5031-00-0512	OILITE BUSHING 5/8" O.D. X 1/2" I.D.	2	38
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE  COTTER PIN		5031-00-0513	OILITE BUSHING 5/8" O.D. X 1/2" I.D. X	2	39
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE  SADDLE		5110-00-0200		4	6
SPROCKET  SPACER FACE PLATE, TOP  SPACER FACE PLATE, BOTTOM  SIDE PLATE FOR CARRIAGE		3057-00-3900		_	41
SPROCKET SPACER FACE PLATE, TOP SPACER FACE PLATE, BOTTOM		3064-00-6017	SIDE PLATE	2	42
SPROCKET SPACER FACE PLATE, TOP		3064-00-6018	SPACER FACE PLATE,	_	43
SPROCKET		3064-00-6019		_	44
		3064-00-6020		2	45

	Material:	Quartly:	Telegrancom: Freet. +/013 .xxx +/003 .xx +/003	Drawn byo RMF Date: 01/31/01	PARTS LIST	NAME	TAKE-UP ADAPTER	1/2" WASHER	3/8" WASHER
SIZE FSON NO. DWG NO.	ASSEMBLY	CANDY CANE		APPAI ACHIAN MACHINE		PART NO.	3064-00-6021	5500-00-0500	5500-00-0400
A38			£				_	_	_

PARTS LIST	NAME PART NO.	JP ADAPTER 3064-00-6021	ASHER 5500-00-0500	ASHER   3300-00-04-00
	RT NO.	-00-6021	-00-0500	-00+0-0

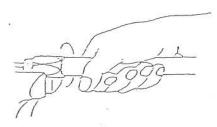
	Approved by: ELF	Material:	Quarety:	Tolerencos: Freet. +/030	טייים שני ישר טייים יאיז יאין טייין טיין טיין טיין טיין טיין טיי
SCALE	B Sage		Daecription		
sout 1 : 4	B FSQU NO.	ASS		P.O Bas: 1507 Dublin Vo. 24084 Phm (540)874-1914 Fat: (540)874-1543	ATTA ACTAN MACTINE
	DWG NO.	ASSEMBLY	CANDY CANE	Wn. 2+08+	
	ò	<u>'</u> ~	CANE	Pm (54	2
seer 2 of 2				0)874-1914	SAC
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	NG.			1543	





# Assembling Reusable Type Hose Couplings

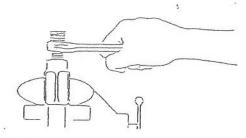
Non-Skived Hose without a Mandrel



Place socket in vise. Lightly oil and thread bose counterclockwise into socket until hose bottoms. Back off 1/2 turn.

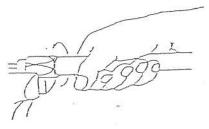


Oil nipple threads and inside of hose with light oil.

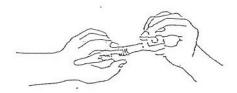


Thread nipple ciocivisa into social until nipple has shoulders against social.

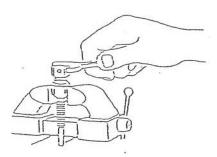
Non-Skived Hose with a Mandre!



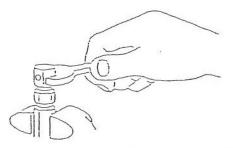
Place socket in vise, Lightly oil and thread hose counterdockwise into socket until hose bottoms. Back off the turn,



When assembling male pipe ends, slide nipple onto mandrel.



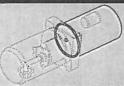
When assembling swivel ends, some threaded mandrel all the way into interior threads of swivel, whench sight

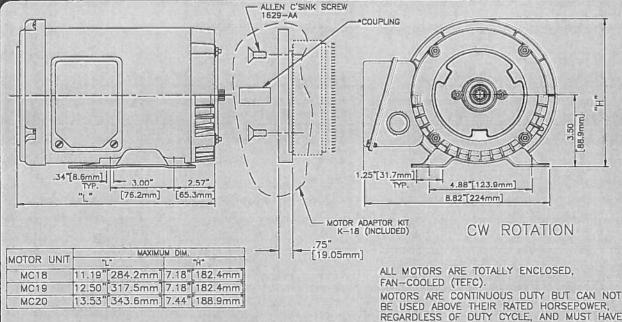


Oil nipple threads and inside of hose with light oil. Push nipple into socket. Male Ends: thread nipple in until it bottoms against socket. Swivel Ends: apply wrench to hex of assembly mandrel. Thread nipple ciochese into socket until dearence between nut and socket is approximately to allow nut to swivel. Fremove mandrel.

Fluid Power

## DISTRIBUTOR POWER UNIT PROGRAM





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

12-AUG-97

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: FOR CONTINUOUS APPLICATIONS FENNER RECOMMENDS COUPLING CHANGED EVERY 5,000 HOURS OF USE.

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

	PUMP	KP08	KP10	KP12	KP16	KP20	KP25	KP31	KP40	KP50	KP63	KP80
ľ	KMC18 2HP	.58 GPM 4300 PSI	185-45-0198h	.91 GPM 2850 PSI	12/04/64/09/05/44/05 (COM/OS	400004-MITTERSON-MERRORAL		PHISTOREST AND LOCATION 19		4.4 GPM 500 PSI		
	ZJU/ TOUV OUIZ	ACADEMIC SECTION OF SECURITY	THE RESERVE OF THE PARTY OF THE	3.5 LPM 200 BAR	nematical company of Stanfall	resemble confidence of the dutility		NAME OF TAXABLE PARTY.		17 LPM 35 BAR		S
				.83 GPM 4300 PSI							TO	OMME
	230/460v 60Hz			3.2 LPM 300 BAR						17 LPM 60 BAR	_	CON
	KMC20 5HP	A STATE OF THE PARTY OF THE PAR	ACCORDANGE OF THE PARTY OF THE PARTY OF	.79 GPM 5000 PSI	Transport Continue Continue Con	11253mar(109scarc000ssc)		ANNERSON STREET, WILLIAMS	1990/85860700x109078666	Children Hill De F2C (Colon)		RE
				3.1 LPM 350 BAR					Carried Comment Committee	16 LPM 110 BAR		

PERFORMANCE AT 45 CST (200 SSU) AND 90% MECHANICAL EFFICIENCY. GPM'S ARE U.S. VALUES.

FAN BLADE (KMC 18) SCALE CHANGE ADDED INCLUDED TO K-18 CONTINUOUS DUTY 3 PH AC MOTORS (REF: ECO# 970718B) DATE CHECK DRAWN DATE

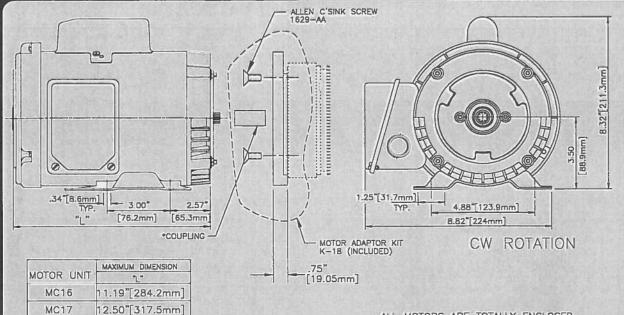
1-15-97 PAGE 3 OF 4

REV. NONE PART NO. KMC

13.6 AMPS 230V 460 V 6.8 AMPS

## DISTRIBUTOR POWER UNIT PROGRAM





KMC17 coupling (14) 1118-AA 3731-AA (12") \*NOTE: FOR CO

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: FOR CONTINUOUS APPLICATIONS FENNER RECOMMENDS COUPLING CHANGED EVERY 5,000 HOURS OF USE.

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

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

PUMP	KP08	KP10	KP12	KP16	KP20	KP25	KP31	KP40	KP50	KP63	KP80
KMC16 1HP 3450 RPM, 1PH	.65 GPM 2150 PSI	.8 GPM 1700 PSI					2.7 GPM 450 PSI	3.5 GPM 300 PSI	4.4 GPM 200 PSI		2
115/230v 60Hz	2.5 LPM 150 BAR	3.1 LPM 120 BAR				8.5 LPM 45 BAR	11 LPM 30 BAR	14 LPM 20 BAR	17 LPM 14 BAR	5	MEN
KMC17 2HP 3450 RPM, 1PH	.58 GPM 4300 PSI	.7 GPM 3450 PSI	.91 GPM 2850 PSI	1.3 GPM 2150 PSI	1.7 GPM 1700 PSI	2.1 GPM 1300 PSI	2.6 GPM 1000 PSI	3.5 GPM 750 PSI	4.4 GPM 500 PSI		
115/230v 60Hz		444 PH (444 PH) (444 PH)	3.5 LPM 200 BAR	HAVE BEEN AND THE PARTY OF THE	THE WAS VEHICLE OF THE OWN	40/405000000000000000000000000000000000	Sales Allege Price	Telepolitic continues (III)	16 LPM 35 BAR	PEC	

PERFORMANCE AT 45 CST (200 SSU) AND 90% MECHANICAL EFFICIENCY. GPM'S ARE U.S. VALUES.

DATE

10-15-97

ILL APPROVED (U9A)

CSA APPROVED (CANADA)

CHANGE ADDED NOTE INCLUDED TO K-18. (REF: ECO# 970718B)

DATE CHECK DRAWN 12-AUG-97

CONTINUOUS DUTY 1 PH AC MOTORS

PAGE 1 OF 4

SCALE REV. NONE G PART NO. KMC

## **NOTES**

## **NOTES**

## **NOTES**