HYDRAULIC POWER UNIT
RETROFIT KIT
FOR ELECTRIC DRIVE
DRIVE-OVER CONVEYOR

ASSEMBLY & OPERATING
INSTRUCTIONS

Effective December 28, 2010
Publication No. 1037417

THESE INSTRUCTIONS ARE FOR CONVEYORS WITH SERIAL NUMBERS OF 937637 OR HIGHER.

These instructions are to be used in conjunction
with Drive-Over Conveyor Manual No. 1027791

Hutchinson/Mayrath
A Division of GLOBAL Industries, Inc.

P.O. Box 629 • 514 W. Crawford • Clay Center, KS 67432
Phone 785-632-2161 • 1-800-523-6993 • FAX 785-632-5964
**PRICES:** Prices in effect at time of shipment will apply. Prices are subject to change without notice. All prices are F.O.B. Clay Center, Kansas. Orders shipped from locations other than Clay Center, Kansas will be subject to additional charges, such as back freight and/or additional freight.

**SERVICE CHARGE:** A service charge will be assessed on all past due balances as permitted by state law not to exceed 1-1/2% per month.

**MINIMUM ORDER:** Processing and handling costs necessitate a minimum charge of $15.00 net on all orders.

**BACK ORDERS:** Back orders will be shipped as they become available. Contact Hutchinson/Mayrath Customer Service for alternative shipping options or if cancellation is desired.

**DAMAGED GOODS:** It is the consignee’s responsibility to check all shipments thoroughly upon receipt of goods. If any damage is discovered, it must be noted on the freight bill of lading before signing. The consignee must make necessary claims against the respective freight line. All damage claims must be submitted within 30 days of delivery receipt.

**SHORTAGES:** All shortages must be noted at time of delivery receipt. Shortages must be noted on the freight bill of lading before signing. Hutchinson/Mayrath must be advised of all concealed shortages upon discovery. Once notified of concealed shortages Hutchinson/Mayrath will advise corrective action to be taken.

**RETURN OF GOODS:** All returns must be approved by Hutchinson/Mayrath prior to shipment. All return requests will be issued a return authorization number. NO RETURNS WILL BE ACCEPTED WITHOUT A RETURN AUTHORIZATION NUMBER AND PRIOR AUTHORIZATION FROM THE FACTORY. All returns must be shipped prepaid. A 15% restocking charge will be applied to all returned merchandise. Custom products may not be returned for credit. Only current products in new and saleable condition may be returned. No safety devices may be returned for credit.

**MODIFICATIONS:** It is the policy of Hutchinson/Mayrath to improve its product whenever possible and practical to do so. We reserve the right to make changes, improvements and modifications at any time without incurring the obligation to make such changes, improvements and modifications on any equipment sold previously.

**LIMITED WARRANTY:**

(a) For a period of (1) year after receipt of goods by the original consumer buyer, Hutchinson/Mayrath will supply free of charge replacement parts for parts that prove defective in workmanship or material. Defective parts must be returned freight prepaid to a specified Hutchinson/Mayrath location. Only Hutchinson/Mayrath original repair parts may be used for warranty repairs.

(b) This limited warranty does not extend to parts designed to wear in normal operation and be replaced periodically, or to damage caused by negligence, accident, abuse or improper installation or operation.

(c) GOODS NOT MANUFACTURED BY HUTCHINSON/MAYRATH CARRY ONLY THE MANUFACTURER’S WARRANTY.

(d) THIS UNDERTAKING IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

**FAILURE TO FOLLOW THE INSTRUCTIONS CONTAINED IN THE OWNER’S & OPERATOR’S MANUALS AND THE ITEMS LISTED BELOW WILL RESULT IN THE VOIDING OF THIS LIMITED WARRANTY.**

1. Improper assembly, including failure to properly install all safety equipment.
2. Improper installation (power & wiring included)
3. Unauthorized alterations of goods.
5. Use of unauthorized repair parts.
6. Irresponsible operation.
7. Used to handle materials other than free flowing, non-abrasive and dry materials, as intended.
8. Damaged through abusive use or accident.

**LIMITATION OF LIABILITY:** BUYER AGREES THAT IN NO EVENT SHALL HUTCHINSON/MAYRATH HAVE LIABILITY FOR DIRECT DAMAGES IN EXCESS OF THE CONTRACT PRICE OF THE GOODS IN RESPECT TO WHICH CLAIM IS MADE. BUYER FURTHER AGREES THAT IN NO EVENT SHALL HUTCHINSON/MAYRATH ON ANY CLAIM OF ANY KIND HAVE LIABILITY FOR LOSS OF USE, LOSS OF PROFITS, OR FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.
ASSEMBLY AND OPERATING INSTRUCTIONS

FOR DRIVE OVER HYDRAULIC POWER UNIT

RETROFIT KIT (Catalog No. PP0209)

ASSEMBLY INSTRUCTIONS

1. Drill a 13/32" (11mm) hole in each of the motor mount support bars Part No. 1027462. Locate in the center of each bar and 4-3/8" (111mm) from the end. Note: The motor mount bars are already part of the electric drive mount on the conveyor and are not included with this kit.

2. Fasten the power unit mount plate Part No. 1037003 to the two motor mount support bars with two 3/8” x 1” bolts and nylon lock nuts.

3. Bolt the hydraulic power unit Part No. 1036940 to the power unit mount plate. Also attach the directional control valve mount plate Part No. 1037026 at the same time. The power unit mounts on top the power unit mount plate and the directional valve mount plate mounts underneath the power unit mount plate. Use four 5/16” x 1” bolts, flat washers, lock washers and non-lock nuts.

4. Fasten the directional control valve Part No. 1022806 to the directional valve mount plate with three 5/16” x 1-3/4” bolts, lock washers and non-lock nuts.

5. Switch the cylinder pivot arm Part No. 1030770 provided with this kit with the Part No. 1030769 pivot plate on the existing drive-over belt conveyor. Re-use the existing mounting bolt and nut. Reference Page P-9 in the 1027791 owner’s manual provided with the original conveyor.
6. Replace the hopper lift cable that is currently attached to the winch with the new 3/16" x 3'-6" long (1.07 m) cable provided with this kit. Use a cable clamp from the conveyor winch cable just removed and one from this kit. The new cable connects to the end hole in the cylinder pivot arm just installed. Reference Page P-17 in the owner's manual provided with the conveyor. The cable length should be adjusted so that when the lifting cylinder is fully retracted that the hopper panels are in the completely raised position (i.e. against stop pins at the end of the hopper panels).
7. Connect plumbing fittings and hoses per the hydraulic power unit drawing and parts list included in these instructions. Note: The fittings that thread into the directional control valve need thread sealant applied to them. All the other fittings do not need sealant applied.

**DRIVE-OVER BELT CONVEYOR**

**HYDRAULIC POWER UNIT**

**PLUMBING ASSEMBLY**

<table>
<thead>
<tr>
<th>REF</th>
<th>PART</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1</td>
<td>1036940</td>
<td>Hydraulic Power Pack 1.3 GPM, 230/460V 3 PH, 60 Hz, 2 HP</td>
<td>1</td>
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<tr>
<td>2</td>
<td>1022806</td>
<td>Hydraulic Directional Valve 4 way</td>
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<tr>
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<td>1034023</td>
<td>Valve Handle for item 2</td>
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<td>REF.</td>
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<td>1030816</td>
<td>Hose Hydraulic 3/8&quot; x 36&quot; 3000 PSI</td>
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<td>5</td>
<td>1022809</td>
<td>Bushing 3/4 MNPT to 1/2&quot; FNPT</td>
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<td>6</td>
<td>1037254</td>
<td>Hyd. Fitting Flared Tube Elbow</td>
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<td>7</td>
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<td>9</td>
<td>1022922</td>
<td>Hyd. Restrictor Fitting, .06&quot; Orifice</td>
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HYDRAULIC SCHEMATIC
DRIVE-OVER BELT CONVEYOR
HYDRAULIC POWER UNIT

P/N 1030723
HYDRAULIC CYLINDER

P/N 1022806
DIRECTIONAL VALVE

P/N 1036940
AUTO HOIST 2 HP, 1.3 GAL/MIN
230/460V 3PH 60HZ
8. Install the Part No. 1037412 **DANGER Decal** to the axle support frame on the directional control valve side of the conveyor. It is very important that this decal be visible and understood by anyone who will be operating the directional control valve. The operator should always be aware of other personnel in the area of the conveyor when operating the valve.

9. Fill the reservoir of the hydraulic power unit with approximately 2 gallons (7.6 L) of a good brand of 10W oil.

10. Provide the appropriate electrical power supply to the 2 HP electric motor of the power unit. Refer to name plate information on side of motor. Controls shall be installed by a qualified electrician and must meet the standards set by the National Electrical Code and all local and state codes.
OPERATING INSTRUCTIONS

When the directional valve handle is pushed toward the conveyor, the cylinder retracts which lifts the hopper panels. When the hopper panels are up, the cylinder should be completely retracted, providing the lift cable lengths are adjusted properly. When the cylinder is fully retracted you will hear a slight squeal. The valve handle should be released when this is heard.

When the directional valve handle is pulled away from the conveyor, the cylinder extends. This will let the hopper panels down onto the ramp surfaces. If the valve handle is continued to be pulled, the cylinder pivot arm presses against the stop of the axle frame pivot plates and lowers the transport wheels to pick the conveyor off the ground.

If it is necessary to lift the transport wheels completely off the ground, (such as in the case of the optional side pull kit) a bolt can be installed through the axle frame pivot plates and the cylinder pivot plate, so that they are linked together. By retracting the cylinder in this condition, the wheels can be raised off the ground.
REFERENCE PHOTOS
REFERENCE PHOTOS

Part No. 1030770
Cylinder Pivot Arm
(Replaces 1030769 Arm)

3/16" x 3'-6" Cable and Cable Clamp
(Replaces Winch Cable)

Axle Frame Pivot Plates

Part No. 1022806
Directional Valve

Part No. 1037026
Directional Valve Mount Plate

Part No. 1037003
Power Unit Mount Plate