



Patent Number

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MODEL NUMBER

EGDF

SERIAL NUMBER

MOTOR MODEL NUMBER

MOTOR SERIAL NUMBER



12/3/2019

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LIMITED WARRANTY

Pax Products Inc. (the "Company") warrants to the original purchaser of each Pax Conveyor that the conveyor will be free from defects in material and workmanship, under normal and proper installation, use and maintenance in accordance with the Company's instructions, for a period of 1 year after the date of shipment from the Company's plant.

Purchaser's exclusive remedy and the Company's sole liability under the above warranty or in connection with any other claim relating to the Pax Conveyor shall be limited to repair, or at the Company's option, the replacement or refund of the purchase price, of any Conveyor or part or component thereof which is returned to the Company freight prepaid and which is defective in material or workmanship. Defective Conveyors or parts or components thereof which the Company replaces become the property of the company. All Conveyors or parts or components thereof which are returned to the purchaser will be returned freight collect.

EXCEPT AS EXPRESSLY STATED ABOVE, THE COMPANY MAKES NO WARRANTY, EXPRESSED OR IMPLIED, WHETHER OF MERCANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR USE OR OTHERWISE ON ANY CONVEYOR OR ANY PARTS OR LABOR FURNISHED DURING THE SALE, DELIVERY, OR SERVICING OF ANY CONVEYOR.

IN NO EVENT SHALL THE COMPANY BE LIABLE TO ANY PURCHASER OR PERSON CLAIMING THROUGH ANY PURCHASER FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR AS A RESULT OF THE SALE, DELIVERY, NONDELIVERY, SERVICING, USE, OR LOSS OF USE OF ANY PAX CONVEYOR OR PART THEREOF OR FOR ANY CHARGES OR EXPENSES OF ANY NATURE INCURRED WITHOUT THE COMPANY'S WRITTEN CONSENT EVEN THOUGH THE COMPANY HAS BEEN NEGLIGENT. IN NO EVENT SHALL THE COMPANY'S LIABILITY UNDER ANY CLAIM MADE BY ANY PURCHASER OR PERSON CLAIMING THROUGH ANY PURCHASER EXCEED THE PURCHASE PRICE OF THE PAX CONVEYOR OR PART OF COMPONENT THEREOF IN RESPECT OF WHICH DAMAGES ARE CLAIMED.

Purchaser shall promptly inspect each conveyor upon receipt. Claims under the above warranty shall be made by contacting the Company at P.O. Box 257, 5097 Monroe Rd. Celina, OH 45822. Attn: Service Department (1-800-733-6930) or (419) 586-6948. No claim under the above warranty will be allowed unless made 10 days after the date of the warranty period on which the defect is or should have been discovered by the purchaser.



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DESIGN CHANGES

Consistent with sound engineering principals and recognized practices, Pax Products Inc. reserves the right to discontinue or change specifications, designs, and materials at any time without notice.

Design differences or changes that exist between the conveyor received and the conveyor illustrated in the manual are the result of design improvements or special arrangements contracted for at the time of purchase. Every effort is made to keep the manual consistent with the majority of the systems supplied.



SAFETY

UNDER NO CIRCUMSTANCES SHOULD THE PAX CONVEYOR OR ANY COMPONENT BE PLACED IN SUCH A MANNER THAT COULD CAUSE POSSIBLE PERSONAL INJURY OR DAMAGE TO ANY EQUIPMENT.

DO NOT OPERATE CONVEYOR WITHOUT ALL COVERS IN PLACE.

CONVEYOR MUST BE INSTALLED AND OPERATED WITHOUT OBSTRUCTIONS TO THE MOVEMENT. SPECIFICALLY, THE OPERATOR MUST BE AWARE AND AVOID THE PINCH POINTS ASSOCIATED WITH THE NORMAL OPERATION OF THE CONVEYOR.

WHEN CONNECTING AND DISCONNECTING POWER TO THE UNIT, THE UNIT SHOULD BE TURNED OFF PRIOR TO UNPLUGGING/PLUGGING THE UNIT INTO THE SPECIFIED POWER SOURCE.

KEEP HANDS, LOOSE CLOTHING, JEWELRY ETC., AWAY FROM DISCHARGE END OF CONVEYOR AT ALL TIMES.

DUE TO POSSIBLE REMOTE PAX CONVEYOR CONTROLS, CONVEYOR MAY START OR STOP WITHOUT WARNING.

MAKE SURE POWER IS DISCONNECTED BEFORE SERVICING, TROUBLESHOOTING OR MOVING ANY PAX CONVEYOR.

CONVEYORS SHOULD BE PLACED SO THAT NO COMPONENT OR COMBINATION OF COMPONENTS INTERFERE WITH THE NORMAL OPERATION OF ANY MACHINE.

VERIFY ALL CONNECTIONS AND BOLTS ARE SECURED. TIGHTEN ANY FASTENERS THAT MAY BE LOOSE BEFORE OPERATING

INSPECT FOR LOOSE FASTENERS. ANCHORED OR A MOUNTING ARRANGEMENT ARE NECESSARY FOR SAFE OPERATION.

TRAYS SHOULD BE IN GOOD WORKING CONDITION. ANY DAMAGE OR DEFECTS SHOULD BE REPAIRED BEFORE RESUME OPERATION. THE GEARBOX ASSEMBLY AND LINKAGE SHOULD BE INSPECTED FOR FREE ROTATION.



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EGD CONVEYOR INSTALLATION

SECTION 1: PHYSICAL PLACEMENT

The Pax Elliptical Gear Drive Floor unit, EGDF, Conveyor was designed for transporting material from various scrap sources. These include, but not limited to:

- Below stamping presses
- Collection from various conveyors and trays to bring to central removal location
- Below laser cutting machines

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SECTION 2: ELECTRICAL REQUIREMENTS

Each Pax EGDF Conveyor comes standard equipped with a Variable Frequency Drive, VFD. The VFD converts the incoming power frequency to the range required by your unit. Please verify the required frequency based on your electrical diagram before operating. Use of a power source other than that listed may cause damage to the conveyor motor and will void the warranty.

The conveyor unit can be tied to the press/equipment control so that the equipment operation dictates whether the conveyor is on/off allowing reduced energy consumption and un-necessary wear on the conveyor drive when the press is not in operation. This is done by connecting to the VFD remote start command via a dry-contact. Pax Products strongly recommends the use of a time delayed relay contact to avoid excessive starts and stops when using the press controls to turn the conveyor unit on/off.



CONVEYOR OPERATION

SECTION 1: CONVEYOR OPERATION

The primary function of the Pax EGDF Conveyor is to move material along a horizontal path. The rugged construction will tolerate the abuse commonly found in press rooms.

The Pax EGD Conveyor product line uses a patented design to attain the unique motion presented in these machines. A set of elliptical gears are used to transfer constant rotary motion from the gearmotor into a smooth, constantly varying output speed. This unique output motion enhances the natural behavior of the slider-crank mechanism found in the EGD Conveyors.

Setting the VFD at the required frequency output (refer to your electrical diagram for correct speed), the conveyor operates at approximately 90 cycles per minute with part conveyance speeds up to 25 feet per minute, depending on the type of part being conveyed and the type and cleanliness of the tray.

The elliptical gears transmit power from the gearmotor to the gearbox output crank. The output crank from the gearbox acts as a slider crank mechanisms

All Pax EGDF Conveyors have a capacity rating based on the tray weight. Alterations to your tray should be done with the consultation of Pax. Your unit may be extended or shortened to accommodate alternate applications. Questions on your particular application and setup can be directed to a Pax sales representative or call the factory direct and ask for technical assistance at 1-800-733-6930 or (419) 586-6948.



MAINTENANCE

SECTION 1: BEARINGS

Pax EGD Conveyors utilize a combination of sealed and open bearings in their design. In the EGDF model, sealed bearings are used on the linkage arm. Open bearings are used inside the gearbox to support the output shaft and are lubricated, along with the elliptical gears, by a fixed-fill volume of gear oil. The gearbox is sealed on the output shaft using a shaft seal.

The oil in the EGDF drive unit protects and prolongs the life of your system. A unit operating within the stated capacity and in a clean environment should replace the oil every 5 years. Continuous operation, cleanliness and heavy loading conditions require more frequent oil change, approximately every 2 years. The fixed-fill gear oil located in the gearbox assembly may be filled through the 1/8" NPT Plug located on the top of the gearbox assembly. It is recommended to use *Shell OMALA – Advanced Synthetic Industrial Gear Oil S4 GX 220* or equivalent. Remove the magnetic pipe plug from the gearbox and install a 1/8" pipe fitting attached to a small hose. The magnetic plug is accessible from underneath the unit and does not require removing the gearbox assembly from the base plate. Remove the plug on the top of the gearbox assembly to begin draining. Replace the magnetic plug into the base plate and add 600 mL, 20.3 oz, of gear oil. Replace the 1/8" NPT plug.



SECTION 2: TRAY, WEAR PAD, AND TRAY CONNECTION ASSEMBLY

The tray wear pads and connection brackets should be free of cracks or dents. The bolts holding the wear pad in place should be below the wear surface. If the top of the fasteners are at the same level as the wear surface, the opposing surface will experience metal-to-metal contact. Additional wear pads may be ordered through Pax.

The connection assembly should be free of cracks or dents. Fasteners should be checked for tightness. In the event of loose fasteners, reapply thread locking adhesive and torque to specifications.

Inspect the trays for dents or damage that may impede performance of the conveyor. If necessary, replace the tray to insure proper performance. Replacement and new trays may be ordered through Pax.

SECTION 3: GENERAL

The Pax EGDF Conveyors should routinely be cleaned and inspected for wear or damage. A good time to do this may be during die changes. A routine inspection should cover the following:

- 1 Make sure the power cord has no exposed wires or visible signs of damage to the cord. Inspect the plug and where the plug connects to the VFD for damage and dirt. Inspect the cord going from the VFD to the unit for damage as well and verify the cord is securely fastened prior to use. Replace or clean as needed. **NOTE: The EGD unit must be switched off prior to unplugging the unit. Failure to do so may damage VFD and/or motor.**
- 2 Make sure all the fasteners are tight. Since conveyors are used in high vibration environments, a fastener may vibrate loose. Use caution not to over-tighten bolts that are threaded into aluminum.

Ensure the top cover and end covers are in good working order and securely fastened in place. These protective covers must remain in place at all times during operation.



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PARTS LIST:

ORDER REPAIR AND REPLACEMENT PARTS FROM:

PAX PRODUCTS INC.
P.O. BOX 257
5097 MONROE RD.
CELINA, OH 45822
1-800-733-6930 PHONE
(419) 586-6948 PHONE
(419) 586-6932 FAX

PLEASE PROVIDE THE MODEL NUMBER AND SERIAL NUMBER WHEN ORDERING

**NOTE: SUBSTITUTING PARTS NOT AUTHORIZED BY PAX PRODUCTS INC.
MAY CAUSE A DETERIORATED PERFORMANCE OF THE EGD
CONVEYOR AND WILL VOID WARRANTY.**