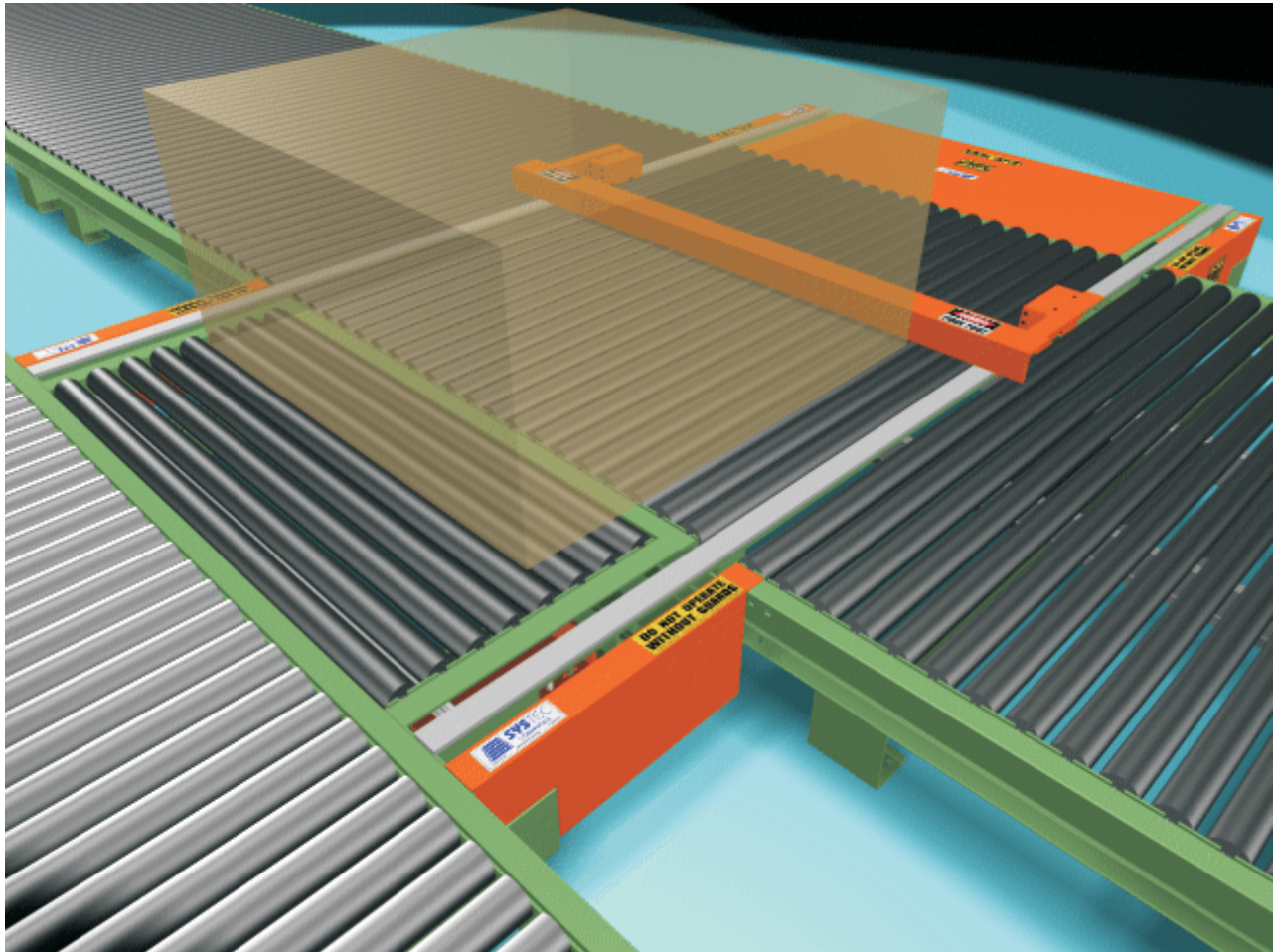


# **PUSHER TRANSFER DEVICE**



# **SERVICE AND MAINTENANCE MANUAL**



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When ordering parts, please call, fax or e-mail Systec at the address and/or the numbers shown below.

**SYSTEC** Conveyors Parts Department  
10010 Conveyor Drive  
Indianapolis, IN 46235

Tel 317.890.9230  
1.800.578.1755  
Fax 317.890.9232

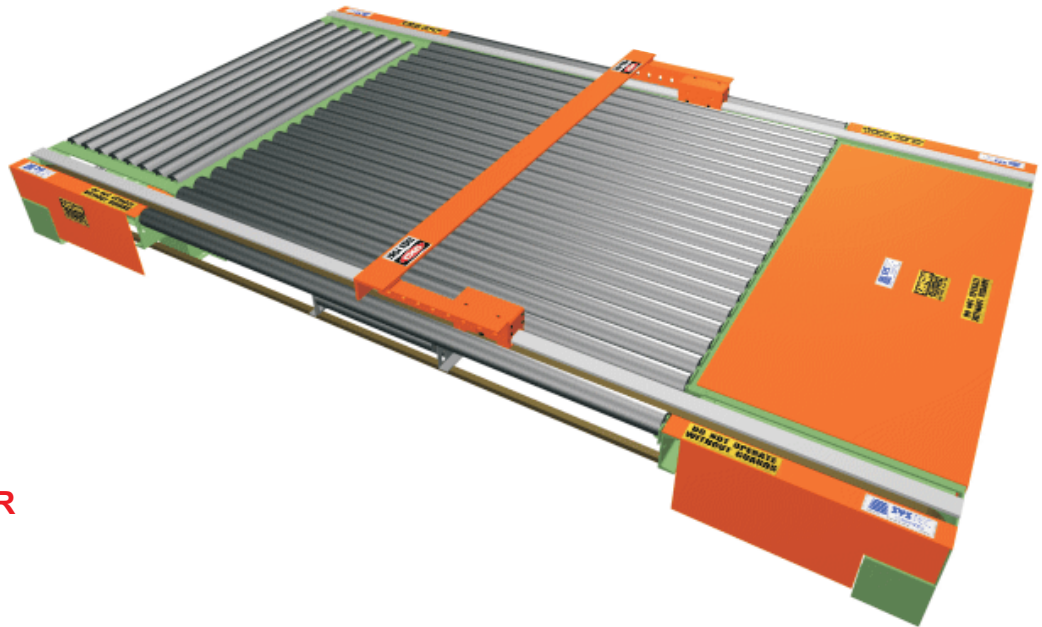
On The Net @ <http://www.systecconveyors.com/>  
e-mail: [info@systecconveyors.com](mailto:info@systecconveyors.com)

## PUSHER TRANSFER DEVICE

The information within this manual covers SYSTEC's standard Pusher Transfer Device. Within this manual the device will be referred to as a PTD.

The PTD is designed so that it can be used for 90° transfer of loads onto a perpendicular line, or to transfer a load to a parallel line, as shown on the cover of this manual. The PTD is designed to accommodate a conveyor drive section, takeup section, or midsection. Therefore, it can be used at the beginning, end, or any location inside a line of powered conveyor, or gravity roller conveyor.

The device can be electrically controlled to operate either manually, or automatically, depending on control options purchased.



## PUSHER TRANSFER DEVICE

ILLUSTRATION A

## CONVEYOR SAFETY

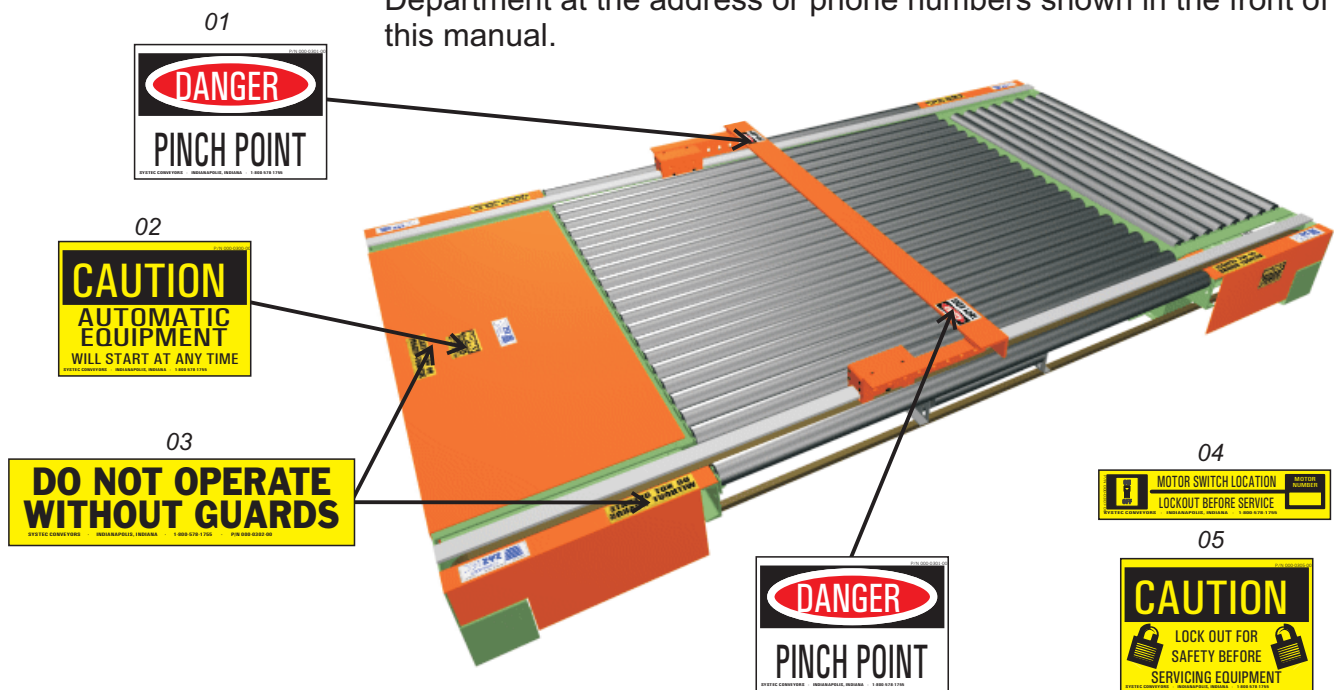
Where safety is concerned, conveyor and its devices are no different from any machinery or processing equipment. In many cases, the conveyor and devices can start running without notice.

**SYSTEC** designs all its equipment to be as safe as possible by installing guarding, or providing safety labels on all conveyor and devices. These labels are in place to warn personnel working on or around the conveyor system of the inherent dangers that exist with any conveyor or machinery.

**SYSTEC** Conveyors also believes that a conveyor safety session should be incorporated into your existing safety training program to educate all personnel that work on or around conveyor systems of these potential safety concerns.

Below is Illustration B, showing the safety labels provided with **SYSTEC's** PTD. These labels should be installed to alert personnel of the potential hazards caused by improper use of the conveyor equipment. Where foot traffic exists, personnel should be discouraged from walking on a conveyor line.

Should you need additional labels, please contact **SYSTEC's** Parts Department at the address or phone numbers shown in the front of this manual.



### ILLUSTRATION B

Notes:

*Exact location of Motor Switch labels are determined by the mounting location at the time of installation.*

## CONVEYOR SAFETY (continued)

Lockout is a very important part of your Maintenance and Service Department procedures. **SYSTEC** provides a Lockout Switch, as shown in illustration C, for each drive motor.

### LOCKOUT SWITCH FOR SAFETY



*ILLUSTRATION C*

Note: Only authorized personnel should perform service and maintenance on any conveyor equipment and controls.

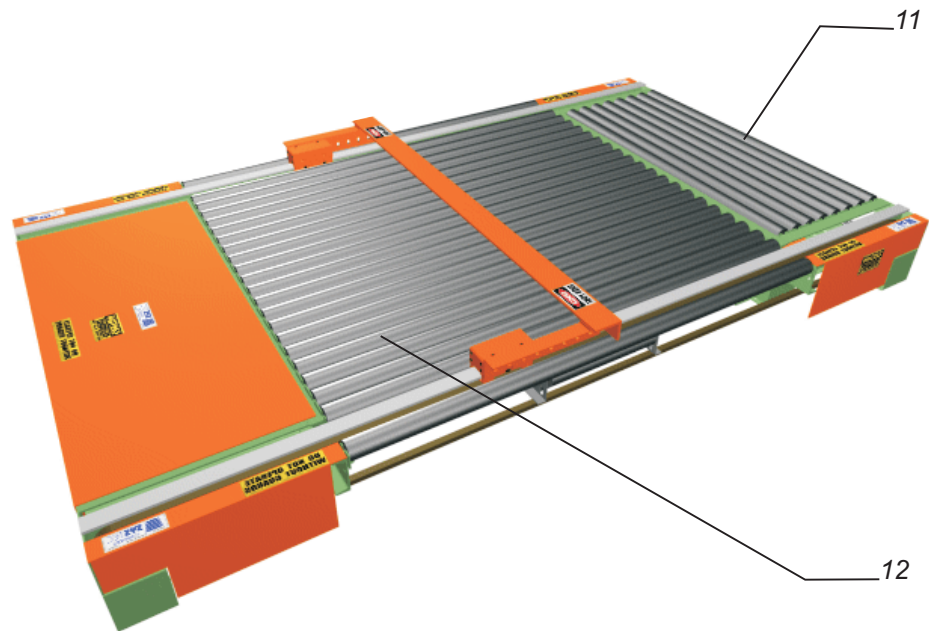
## PTD SERVICE AND PARTS

The drawings within this section are designed to help you understand how components of the PTD are assembled and disassembled. The exploded views also allow you to quickly and easily identify the parts that may need to be serviced and/or repaired.

The parts identification page(s) provide the corresponding part numbers to the drawings, and indicates recommended quantities you should stock for each PTD, along with the parts descriptions, part numbers, and order quantities. This is a faxable form, for your convenience, to order parts for stock or needed replacement parts. Simply fill in the order quantity, the necessary purchase order number and shipping information, then fax the form to **SYSTEC** Conveyor's at the number shown on the form. An Order Acknowledgement will be faxed back with the estimated ship date and pricing information.

The drawing below shows the PTD and the load carrying rollers, which may not match the infeeding and outfeeding conveyor sections. Be sure, when ordering, to specify the exact size of rollers needed and identify for Systec's Parts Department the device type for which the rollers are needed.

### PTD LOAD CARRYING ROLLERS



#### ASSEMBLY DRAWING 1

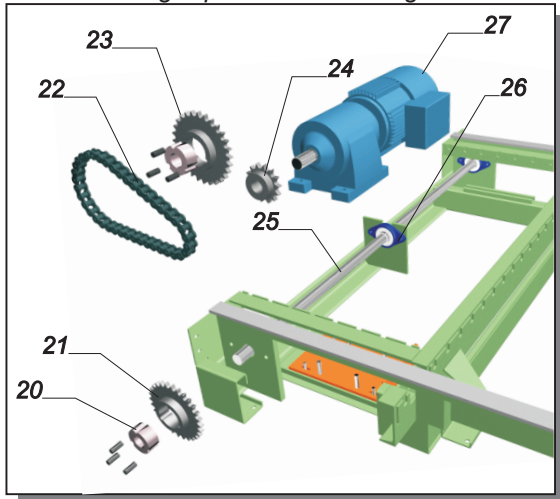
Notes:

*Lockout switch location is determined at time of installation.*

## PTD SERVICE AND PARTS (continued)

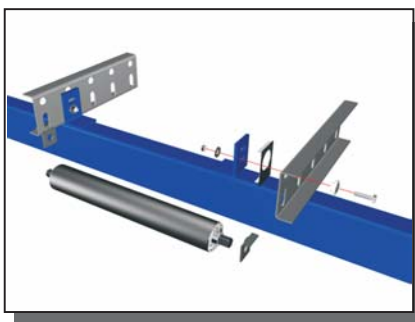
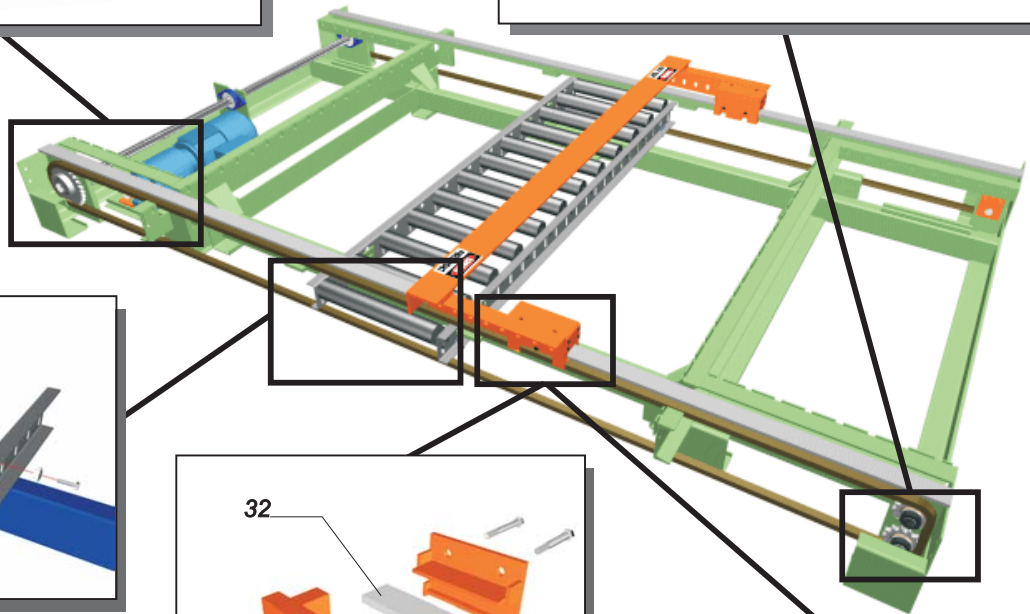
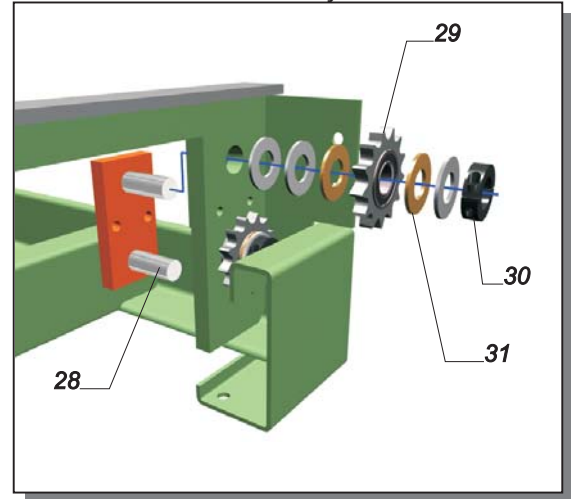
### ASSEMBLY DRAWING 2

Notes:  
Provide all gearmotor Data Plate information when ordering replacement/stock gearmotors



### ASSEMBLY DRAWING 3

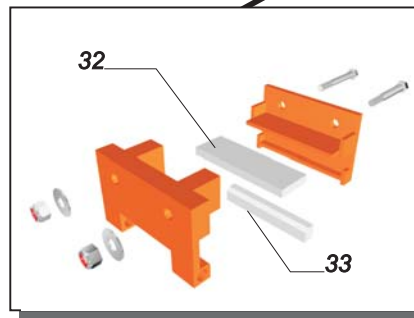
Notes:  
Idler sprockets are identical on both the top and bottom of the assembly



### ASSEMBLY DRAWING 4

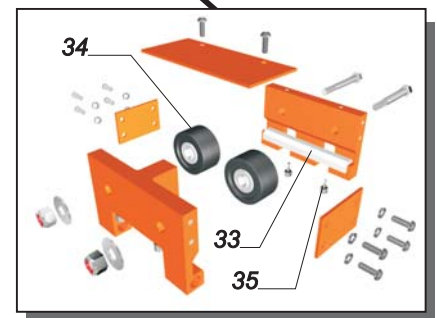
Notes:  
Pressure roller mounting hardware is the same as that used in standard conveyor midsections. Refer to the Powered Conveyor Manual for all pressure roller parts and mounting hardware.

**THIS DEVICE CAN CONTAIN A DRIVE, TAKEUP, OR MIDSECTION CONVEYOR SECTION. REFER TO THE POWERED CONVEYOR MANUAL FOR COMPONENT INFORMATION.**



### ASSEMBLY DRAWING 5

Notes:  
The pusher trolley assembly shown is applicable to PTD's manufactured before 1996. Be sure to notify Systec's Parts Department of the style of trolley on your pusher. The trolley shown in Assembly Drawing 6 can be retro fitted to this style of trolley.



### ASSEMBLY DRAWING 6

Notes:  
Current style of PTD trolley assembly will have the wheels as shown. Be sure to specify exact replacement parts.



Some items on this parts list require "fill-in" or additional information to receive the needed part. Please be sure to provide all information requested on this list, or within this manual to assure that you do infact get exact replacement parts. **SYSTEC's** Parts Department will assist you in obtaining the proper part information, or answering any questions by calling 1-800-578-1755.

Item	Qty.	Rec. Spare	Description	Part Number	Gr.	Order Qty.
1	4		Safety Label - Pinch Point	000-0301	-00	
2	5		Safety Label - Automatic Equipment	000-0300	-00	
3	5		Safety Label - Do Not Operate Without Guards	000-0303	-00	
4	1		Safety Label - Motor Switch Location	000-0307	-00	
5	1		Safety Label - Lockout For Safety	000-0305	-00	
10	1	1	Lockout Switch	000-0118	-95	
11			30" Roller, 2-1/2" Dia., 11/16" HEX, 11 GA, L.O.	10D0020	08	
			42" Roller, 2-1/2" Dia., 11/16" HEX, 11 GA, L.O.	10D0020	10	
			54" Roller, 2-1/2" Dia., 11/16" HEX, 11 GA, L.O.	10D0020	12	
			66" Roller, 2-1/2" Dia., 11/16" HEX, 11 GA, L.O.	10D0020	14	
			78" Roller, 2-1/2" Dia., 11/16" HEX, 11 GA, L.O.	10D0020	16	
			__" Roller, 2-1/2" Dia., 11/16" HEX, 11 GA, L.O.	10D0020	**	
12			48" Roller, 2-1/2" Dia., 11/16" HEX, 11 GA, L.O.	10D0020	11	
			60" Roller, 2-1/2" Dia., 11/16" HEX, 11 GA, L.O.	10D0020	13	
			72" Roller, 2-1/2" Dia., 11/16" HEX, 11 GA, L.O.	10D0020	15	
			84" Roller, 2-1/2" Dia., 11/16" HEX, 11 GA, L.O.	10D0020	17	
			96" Roller, 2-1/2" Dia., 11/16" HEX, 11 GA, L.O.	10D0019	00	
			__" Roller, 2-1/2" Dia., 11/16" HEX, 11 GA, L.O.	10D0020	**	
20	3	1	Taper Lock Bushing, 1-3/8" I.D. W/ 5/16" Keyway #2012	560-0100	-00	
21	2	1	Sprocket, 60TL28 Taper Lock	550-1200	-00	
22			Chain #60	540-0300	-00	
23	1	1	Sprocket, 60TL27 Taper Lock	550-1100	-00	
24	1	1	Sprocket, 60BS14 1-1/4" Bore W/ Keyway	550-0800	-00	
25	1		Pusher Drive Shaft X __" L.	21D0036	**	
26	3	1	Flange Bearing, 2-Bolt 1-3/8" Bore W/ Set	580-2030	-00	
27	1	1	Gearmotor, Pusher Transfer Device	500-1400	-00	
28	4		Pusher Idler Sprocket Shaft X 3-1/2" L.	21A0002	00	
29	4	1	Sprocket, Idler 60A13 1" Bore W/ BB	550-0560	-00	
30	4	1	Locking Collar, 2-Piece 1" I.D.	580-9020	-00	
31	20	2	Washer, Oilite, 2" O.D., 1" I.D. X 1/8"	560-2030	-00	
32	2	1	Pusher Trolley Top Wear Block	21B0029	00	
33	2	1	Pusher Trolley Bottom Wear Block X 6-1/2" L.	21B0031	00	
34	4	2	Wheel, 2-1/2" Dia. X 1-1/4" Face X 1/2" Bore	985-1175	-00	
35	8	4	Cam Follower, 1/2" O.D. W Socket Head & Stud	985-9150	-00	

\* Please specify Quantity and/or Length for any bill-of-material items with an asterisks.

For gearmotor information refer to Page 8, as indicated in this material list, to identify the motor and gearbox data plate information needed to order exact replacement parts.

This Maintenance Schedule is intended to cover all basic types of conveyor and the related devices and components. Although your system may not have all the parts listed below this schedule should help in identifying those components or parts that may require service or inspection that may otherwise be neglected. Should you need assistance in identifying the location of some of these components, contact **SYSTEC's** Customer Service Department at **1-800-578-1755**.

ITEM	INSPECTION OR SERVICE REQUIRED	HOURS IN SERVICE				
		500	1,000	2,500	5,000	10,000
<b>Gearmotor</b>	Clean, Check for Noise, Leaks, and Mounting	X				
	Check Oil Level			X		
	Change Oil					X
<b>Bearings</b>	Check Roller Bearings for Noise				X	
	Check Pillow Block (PB) and Flange Block (FB) bearings for Noise, Mounting, and *Lubrication	X				
<b>Belt</b>	Check for Belt Wear, Tracking and Tension		X			
<b>Chains</b>	Check Tension, Wear, Lube and Adjustment	X				
<b>Wire Cables</b>	Check Tension, Wear, and Adjustment	X				
<b>Springs</b>	Check Tension, Wear, and Adjustment	X				
<b>Sprockets</b>	Check Alignment, Wear and Mounting	X				
<b>Pulleys</b>	Check Alignment, Wear and Mounting	X				
<b>UHMW Blocks and Pads</b>	Check for Wear and Fit			X		
<b>Cams and Rollers</b>	Check for Wear and Alignment	X				
<b>Transfer Rails</b>	Clean with Degreaser	X				
<b>Photoeyes</b>	Clean with Soft Cloth or Dry High Pressure Air	X				
<b>Limitswitches</b>	Clean debris and Check Arm for Free Movement	X				
<b>Proximity Switch</b>	Clean Debris and Check for Proper Operation	X				
<b>Pendant Switch</b>	Check for Proper Operation			X		
<b>Lockout Switch</b>	Check for Proper Operation and Safety Labels			X		
<b>Foot Switch</b>	Check for Proper Operation			X		
<b>Foot Valve</b>	Check for Proper Operation			X		
<b>Strobe Light</b>	Check for Proper Operation			X		
<b>Sound Alert</b>	Check for Proper Operation			X		
<b>Motion Detector</b>	Check for Proper Operation			X		
<b>Load Measuring Device</b>	Check for Proper Operation			X		
<b>Air Filter/Regulator</b>	Check and Clean Trap and Adjust Pressure	X				
<b>Solenoid Valve</b>	Check for Air Leaks			X		
<b>Air Mount (air bag)</b>	Check for Air Leaks	X				
<b>Air Supply Line</b>	Check for Air Leaks	X				

\* Check bearing type for regreasable (zerk) fitting. Some bearings may be "sealed-for-life" and do not require regreasing.