

OWNER'S MANUAL

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Line Shaft Conveyors

Model 738LS • 738LSC • 796LS • 796LSC

DO NOT OPERATE BEFORE READING THIS HANDBOOK KEEP IN A SAFE PLACE - DO NOT DISCARD

TECH HANDBOOK FOR LINE SHAFT CONVEYORS **TABLE OF CONTENTS**

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CAUTION LABELS



ABOVE: Label attached to all protective guards (drives, spool guards, etc.)



- 1. DO NOT walk, ride, climb or touch moving parts on a conveyor in operation.
- 2. DO NOT wear loose clothing or uncovered hair around conveyor in operation.
- 3. DO NOT operate a conveyor with chain or other protective guards removed.

 4. DO NOT work near a conveyor without knowing how & where to shut power "OFF".

 5. DO NOT remove jammed product with conveyor running.
- 6. DO NOT replace parts or perform maintenance on conveyor, or moving conveyor parts, without first shutting "OFF" power to conveyor.
 7. DO NOT connect gravity to powered conveyor without gravity connector brackets.
- 8. TO PREVENT electrical shock, conveyor must be grounded and have proper electrical connections in accordance with federal, state and local codes.
- 9. SAFETY pop-out rollers must be retained when elevation is 7'-0" or above, but free to pop out at lower elevations.



INTRODUCTION

This manual was prepared as a "how-to-guide" for installers, end-users and maintenance personnel. It is also intended to educate both owner (purchaser) and all individuals working around the unit, of potential hazards.

With proper installation and maintenance, conveyors are essential for achieving a variety of functions essential in today's industrial marketplace. By following a simple, periodic maintenance schedule, the life of a typical conveyor (or, most any type of machinery--including our automobiles!) will increase when compared to a similar

unit in an application receiving little or no maintenance. You may find that a conveyor can become your best workplace friend by following simple safety guidelines. Failure to follow even the most basic safety suggestions can result in serious personal injury.

Conveyors contain many moving parts-pulleys, belting, chains, sprockets, shafts, rollers, etc. Therefore, it is imperative to become familiar with basic unit operation and know all points of potential hazards. Remember, when working around or near conveyors (and **any** industrial machinery) it is **your** responsibility to become familiar with the unit, to know potential hazards (many are noted with caution labels) and to operate unit in strict accordance with the safety guidelines in this manual.

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Keep this manual in a safe place for future reference. It should be placed where appropriate personnel may maintain proper maintenance and records.

This manual must be read by all new users before operating or working near this unit.

AWARNING

DO NOT OPERATE BEFORE READING THIS MANUAL! KEEP IN SAFE PLACE--DO NOT DISCARD!

CAUTIONS, WARNINGS AND HAZARDS

AWARNING



NEVER connect belt conveyors directly to gravity conveyors, machinery or fixtures without using connector brackets & pop out roller.



ALWAYS anchor permanent supports to floor (or mounting surface). Use $3/8" \times 2-1/2"$ (or longer) wedge anchors for permanent installation in concrete flooring.

It is the responsibility of the customer and installation personnel to supply and install net or mesh guarding on overhead mounted conveyors to prevent product and/or debris from falling to floor in areas where required.

If belt conveyor pulleys are adjusted during installation or maintenance, nip point guard (at drive end on end drive unit) must be readjusted. Nip point guard (take-up end) is automatically adjusted when take-up pulley is adjusted. Nip point guards at both ends of conveyor (center drive) must be readjusted. Center drive guards MUST be replaced after installation or maintenance.



Before unit is ready for operation, snub roller guard (cover) must be adjusted to ensure safe unit operation.



Belt lacing must be kept in good condition for safe work environment.

A

To check drive sprocket alignment, shut "OFF" and lock out power source before attempting any adjustments.



To check drive sprocket tension, shut "OFF" and lock out power source before any adjustments are attempted.

Electrical controls must be designed by a qualified electrical engineer to ensure that appropriate safety features (emergency stops, pull cords, switches, etc.) are installed on unit for safe operation. Before conveyor start-up, all operators and other personnel coming in contact with unit must be properly trained and must have read accompanying Tech Handbook.

Upon start-up, if belt tracks to one side, turn unit "OFF", lock out power source and confirm that conveyor is square and that all prime tracking components are square with bed. Belt tracking adjustments should be performed by trained personnel ONLY. Read section on "Belt Tracking" completely before attempting belt tracking adjustments.

Only trained personnel shall perform maintenance functions.

Before maintenance operations are performed, shut conveyor

"OFF" and lock out power source to prevent unauthorized start-up. When
maintenance is completed, only authorized personnel shall be permitted to
start conveyor following maintenance or other emergency shut-off.

WARNING

WARNING: All personnel coming in contact with this conveyor should be aware of the following safety guidelines BEFORE USING OR WORKING AROUND CONVEYOR. NOTE: ALWAYS notify Roach Manufacturing® whenever any conveyor is used in an application or condition other than was originally intended. Failure to notify Roach® may allow conveyor to be operated in a hazardous operating condition. Injuries resulting from negligence or violation of safety instructions hereby removes responsibility of product liability claims from Roach®.

Do not operate conveyor with protective guards removed. This includes chain guards, belt guards, snub roller guards, center drive guards and any other safety guard.

Do not walk, ride, climb, or touch moving parts on a conveyor in operation.

Do not wear loose clothing or uncovered hair around conveyor.

Do not work near conveyor without knowing how & where to shut power "OFF" and lock out power source.

Do not remove jammed product with conveyor running.

Do not replace parts or perform maintenance on conveyor, or moving conveyor parts, without first shutting "OFF" power to conveyor and locking out power source.

Do not connect gravity to powered conveyor without safety gravity connector brackets.

To prevent electrical shock, conveyor must be grounded, and have proper electrical connections in accordance with federal, state, and local codes.

Safety pop out rollers in conveyors installed above 7'-0" elevation must be retained by guard rail, clips, etc. Safety pop out rollers must be allowed to pop out when conveyors are installed at or below 7'-0" elevation.

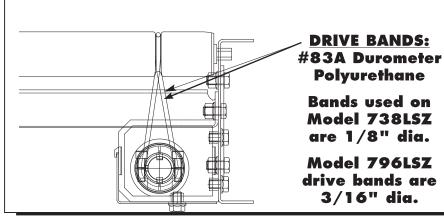
It is the responsibility of conveyor

end-user to comply with all safety standards including OSHA and other federal, state, and local codes or regulations. Install protective guarding and other related safety precautionary equipment to eliminate hazardous operating conditions which

hazardous operating conditions which may exist when two or more vendors supply machinery for related use.

Any violation of above safety instructions hereby removes all product liability claims from Roach Manufacturing Corporation®.

ABOUT LINE SHAFT CONVEYOR



Note: Extra drive banks are installed on the unit at the factory on drive shaft between baring locations allowing future use with minimal installation effort.

Roach line shaft conveyor, when appropriately applied, is one of the most economical and efficient types of powered conveyor to incorporate into your overall material handling system. Numerous accessories and several intermediate sections may be driven with a single drive which eliminates costs from the actual drives and from motor drive component electrical costs.

Extra drive bands are installed on the unit at the factory on drive shaft between bearing locations allowing future use with minimal installation effort.

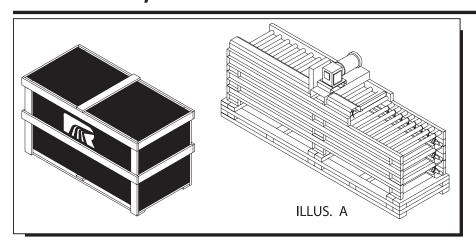
DO NOT USE LINE SHAFT CONVEYORS:

-When rollers must be skewed (for product positioning) greater than 5 degrees. If line shaft MUST be used, limit skewing to short unit sections and use low friction award rail. -When excessive speeds are necessary--15 FPM or less OR faster than 120 FPM.

-In oily or wet conditions which impair the frictional driving forces required.

- -In corrosive or abrasive applications.
- -When the drive bands are exposed to direct ultraviolet rays.

RECEIVING AND INSPECTION SHORTAGES, DAMAGES AND RETURN AUTHORIZATIONS



NOTE: Do not return goods to factory without prior, written return authorization. Unauthorized returns are subject to refusal at factory.

Before uncrating, check the quantity of items received against bill of lading to confirm that all material has been received. Examine the condition of the equipment to determine if any damage has occurred.

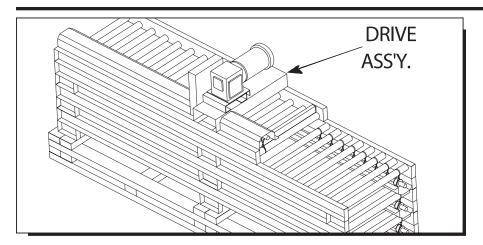
Also, it is possible that some items may become separated from the original shipment. Therefore, when receiving goods, it is imperative that the bill of lading (or, accompanying freight documentation) be checked to ensure receipt of ALL units ordered including ALL accessories.

Damage and/or shortage in shipment should be reported immediately to both vendor and carrier. Obtain a signed damage report from carrier agent and send copy to vendor. Do not repair any damage before obtaining this report.

For damaged shipments, consult factory to determine if entire shipment must be returned to factory for repair **or** if an immediate order should enter production to produce a new, replacement shipment.

In illustration A above, model SZ796LSZ is shown palletized, prepared for shipment.

UNCRATING



NOTE: Carefully examine shipment during uncrating to ensure that essential components are not discarded. This includes guard rail and other necessary hardware.

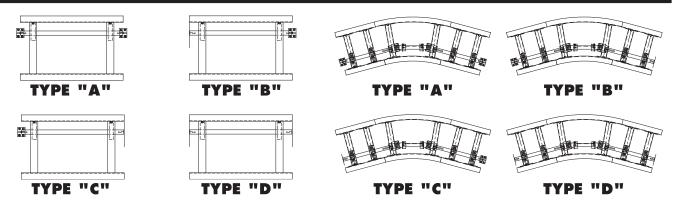
After receipt and initial inspection is completed, carefully remove crating and look for essential components and specific accessories that may have been boxed and attached (or 'banded') to crating material. Guard rails and hardware are often pack-

aged and shipped in this manner. Save all hardware for subsequent use by installation personnel.

The drive section will be shipped mounted to its actual operating bed section (see illustration above).

Some items (electric motors, gearbox, etc.) may be shipped direct from their manufacturer to final destination. Thus, the conveyor may consist of two or more separate shipments.

GENERAL INSTALLATION INFORMATION COUPLING/SHAFT END COVER ALLOCATION



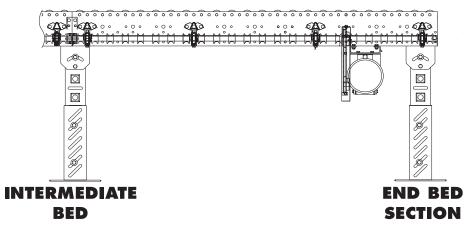
It is only necessary to place a shaft coupling on the end of the drive shaft where it is to connect to another bed section or line shaft unit accessory. Allocation of line shaft Coupling for LS conveyors is illustrated in diagram above. Model LS ships from the factory in one of four configurations above and each unit is marked on its corresponding packing list as either type "A", "B", "C" or "D". This marking procedure

applies to the end drive shaft coupling only at both ends. Therefore, on units with motor drive, this applies to the coupling arrangement at each end of the overall unit--not at intermediate bed sections. For units ordered as intermediate bed sections only (without drive), illustration applies to each bed section. On Curved sections, model LSC, four coupling configurations are possible with units marked

type "A", "B", "C", or "D". This marking procedure applies to the end drive shaft coupling at both ends of each curved section.

Fully tighten and maintain proper shaft alignment if coupling assembly is added or adjusted in the field.

PREPARING FOR SETUP



NOTE: When preparing to install conveyor, first locate all component sections in the actual installation area. After uncrating, place bed sections conveying side up.

Conveyors are set up at the factory, unit is test run and receives rigorous quality assurance inspection. At this time unit becomes field-ready.

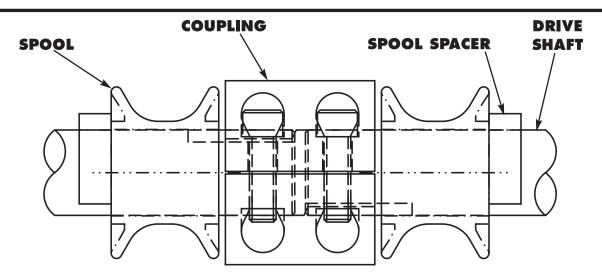
When preparing to install conveyor, first locate all component sections in the actual installation area. After uncrating, place unit bed sections conveying side up. Refer to bed section drawing (supplied with

shipment and packing list) for location of supports and assemble as shown.

Create a reference base line on floor by marking a chalk line along the centerline of conveyor. Follow base line when installing unit. Conveyor must be level and square or packages will run off to one side. Check level across width of unit. Then confirm that unit is square. A diagonal

measurement can determine bed section squareness. Conveyor must be square and level or packages will run off to one side. Use mechanical hoist (fork truck or other available means) to raise bed sections to approximate installed elevation.

Drive shaft and bed sections are now ready to be attached (and adjusted if necessary) as explained in following section.



PROPER ALIGNMENT

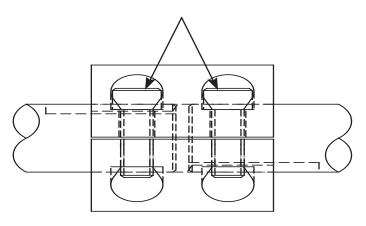
The following procedure is recommended when installing intermediate line shaft bed sections.

- Raise the first bed section to the approximate installed elevation and place floor support under each end as shown on page 6.
- Move the next adjoining bed into position and place on support.

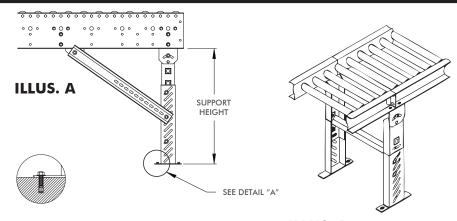
NOTE: Each floor support commonly supports 2 intermediate beds.

- 3. Next, loosen coupling screws and insert into coupling at end of first bed section.
- 4. Align coupling assembly and tighten coupling screws.
- 5. Then attach beds together by connecting splice plates.
- Securely tighten bolts in splice plates and in floor support top cap assembly.

NOTE: Insert coupling screws from



NOTE: Properly seat keys before ... tightening coupling screws.



Detail "A"

Permanent supports may be installed on conveyors at various locations. However, it is most common to use single tier permanent floor supports at each end of a powered section (see illustration A above) and where intermediate bed sections are adjoined (see illustration B above). Notice intermediate supports have two lag bolts in a diagonal pattern while end (terminal) supports have four lag bolts, one in each of

ILLUS. B

the four foot plate mounting holes.

When two (or more) powered conveyors are placed end-to-end, a single tier permanent support may be used at the end junction commonly supporting both units. Check load rating of support before using this method of installation.

Adjust elevation to top of conveyor by loosening bolts in support uprights, raising

AWARNING

Always anchor permanent supports to floor (or mounting surface). Use $3/8'' \times 2-1/2''$ (or longer) wedge anchors for permanent installation in concrete flooring.

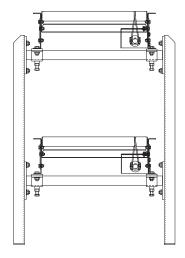
| *MINIMUM/MAXIMUM SUPPORT HEIGHT | | | | |
|---------------------------------|-----------------|-------|------------------|--|
| SM-1 | 7-1/4"—10-1/4" | SM-7 | 34-1/4"—46-1/4" | |
| SM-2 | 10-1/4"—13-1/4" | SM-8 | 46-1/4"—58-1/4" | |
| SM-3 | 13-1/4"—16-1/4" | SM-9 | 58-1/4"—70-1/4" | |
| SM-4 | 16-1/4"—22-1/4" | SM-10 | 70-1/4"—82-1/4" | |
| SM-5 | 20-1/4"—26-1/4" | SM-11 | 80-1/4"—92-1/4" | |
| SM-6 | 24-1/4"—36-1/4" | SM-12 | 92-1/4"—104-1/4" | |

or lowering conveyor and fully tightening bolts at desired elevation. Tighten all bolts in supports **before** unit operation. Complete support installation by lagging support attachment plates to floor. Confirm that unit is level across width of conveyor before completing final support height adj.

*Supports are normally shipped at minimum support height. See chart above.

INSTALLATION OF POLYTIER SUPPORTS

MIN. ELEVATION = 11'' ELEV. (3-1/2'' + FRAME)



bracket with coupling plate to connect cross pipe to conveyor flange. Do not tighten fully at this time.

Standard elevation style attachment brackets offer unit elevation of 3-1/2" + frame and includes bracket welded to cross pipe

NOTE: To install, raise conveyor to desired elevation, place cross pipe underneath frame, attach cross pipe to upright legs and use U-shaped retainer ("hat") bracket to connect cross pipe to lower conveyor flange.

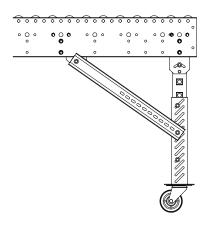
| POLYTIER SUPPORT CHANNEL HEIGHT | | | | | |
|---------------------------------|-----|--------|-----|--------|------|
| PSM-1 | 23″ | PSM-6 | 53" | PSM-11 | 83" |
| PSM-2 | 29" | PSM-7 | 59" | PSM-12 | 89" |
| PSM-3 | 35″ | PSM-8 | 65" | PSM-13 | 95″ |
| PSM-4 | 41" | PSM-9 | 71″ | PSM-14 | 101" |
| PSM-5 | 47" | PSM-10 | 77" | PSM-15 | 107" |

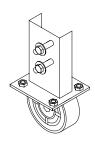
which is bolted to upright legs during installation.

When unit is at operating elevation and unit has been checked across width for level, tighten locking bolts in U-shaped bracket. Add knee braces for unit rigidity.

Polytier supports provide convenient installation method for two or more tiers of conveyor. To install, raise conveyor to desired elevation (approximate). Place 1" inside diameter cross pipe underneath lower conveyor flange. Attach cross pipe to upright legs. Use U-shaped retainer ("hat")

GENERAL INSTALLATION INFORMATION INSTALLING KNEE BRACES AND CASTERS





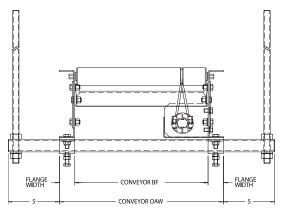
NOTE: Install knee brace (when supplied) after final permanent support installation and elevation adjustment.

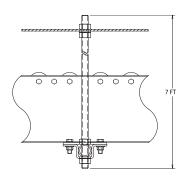
Knee braces add strength to permanent supports and stability to units in portable applications. Install knee brace (when supplied) after final permanent support installation and elevation adjustment. Its pivot bracket is bolted to underneath side of lower conveyor flange and slotted end is attached to outer side of support.

Casters (when supplied) are generally installed at the factory. However, when receiving casters direct from their supplier, final attachment to support is necessary. A special slotted pre-punched caster attachment plate is supplied on supports designed for casters.

A standard support is not designed for attachment to casters. Field modification or replacement of outside support assemblies is required.

INSTALLATION OF CEILING HANGERS





WARNING

It is the responsibility of the customer and installation personnel to supply and install net or mesh guarding on conveyors mounted overhead to prevent product and/or debris from falling to floor in areas where required.

Ceiling hangers are frequently used in high-elevation applications for suspension from ceiling. The 5/8" diameter (#11 UNC) all threaded rod is supplied to allow infinite vertical adjustment along the length of the suspension rod (see illustration above).

Attach and firmly tighten U-shaped retainer ("hat") bracket with coupling plate to

underneath side of frame with hardware provided to hold cross pipe (1" inside diameter) against underneath side of conveyor.

Do not tighten cross pipe locking bolts (these attach in the bottom of the U-shaped retainer bracket) until threaded suspension rods have been firmly secured to ceiling structure.

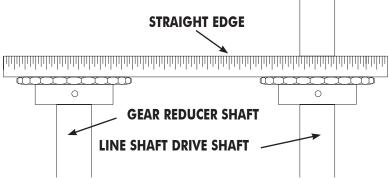
To adjust conveyor elevation, tighten or loosen lower nut and jam nut on threaded suspension rods to desired elevation. A lock washer must be used on suspension rods to maintain unit at desired elevation.

When unit is at operating elevation and unit has been levelled across bed width, tighten locking bolts in U-shaped bracket to secure position of cross pipe.

CHAIN GUARD REMOVED FOR CLARITY

WARNING: DO NOT OPERATE CONVEYOR

WITH CHAIN GUARD REMOVED



Set up and maintenance of drive sprocket and drive chain alignment is critical. A periodic visual inspection is recommended to confirm alignment of drive components (which includes both drive sprockets and drive chain). Should set screws become loose, drive sprockets are subject to excessive wear and ultimately, to untimely replacement.

To check drive sprocket alignment, it is imperative that conveyor is shut "OFF" and power source is locked out before any adjustments are attempted. Remove chain guard cover and place straight-edge (see illustration above) across face of both drive sprockets. If re-alignment is necessary, loosen set screws and adjust drive

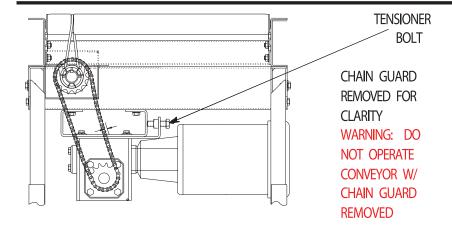
AWARNING

To check drive sprocket alignment, it is imperative that conveyor is shut "OFF" and power source is locked any out before any adjustments are attempted.

sprockets as required. Remember to securely tighten set screws when alignment is complete.

Before replacing chain guard cover, check drive chain tension as described in following section, "Drive Chain and Sprocket Tension."

DRIVE CHAIN AND SPROCKET TENSION



Maintaining proper chain tension is especially important. Again, a periodic visual inspection is recommended to ensure chain tension within a pre-determined operating range.

Remember, before any adjustments are attempted, conveyor must be shut "OFF" and power source locked out.

Before replacing chain guard cover, check

AWARNING

To check drive sprocket tension, shut "OFF" and lock out power source before any adjustments are attempted.

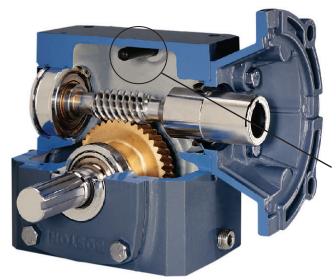
To adjust drive chain tension:

- Step 1 Loosen the (4) bolts that hold the gear reducer to the motor baseplate
- Step 2 Tension bolt located on reducer push plate should be tightened (rotate clockwise) if chain is too loose and loosen (rotate counter clockwise) if chain is too tight. Tighten until proper operation range is achieved.
- Step 3 Tighten the (4) bolts that hold the gear reducer to the motor base plate.
- Step 4 Replace all guards that were removed.

WARNING: Do not operate unit until chain guard cover is replaced. Serious operator or other personal injury could result if protective guarding is not replaced.

START-UP PROCEDURES GEAR REDUCER WITH POSIVENT ®





NOTE

The gear reducer is supplied with a "PosiVent®". No vent plugs are required.

PosiVent Unique design incorporates a single seam construction. Factory filled with synthetic lubrication for universal mounting. Lubed for life, no oil changes are required.

To expedite the installation and start-up process, all gear reducers are shipped filled with oil. The reducers are sealed and lubed for life and require no oil changes.

PREPARING FOR INITIAL START-UP



Before conveyor start-up, all operators and other personnel coming in contact with unit must be properly trained and must have read accompanying Tech Handbook.

Provisions must be in order to instruct all personnel coming in contact with conveyor on the location of emergency stops, pull cords, etc.

A routine maintenance program should be implemented before unit is placed into operation so that fundamental unit components are attended to. This maintenance program should include an inspection to ensure that any dangerous or hazardous operating conditions are noted and IMMEDIATELY corrected, as well as including electrical and mechanical unit inspections and corrections.

▲ DANGER

WARN ALL PERSONNEL TO KEEP CLEAR OF CONVEYOR DURING UNIT START-UP

Electrical controls must be designed by a qualified electrical engineer to ensure that appropriate safety features (emergency stops, pull cords, switches, etc.) are installed on unit for safe operation. Before conveyor start-up, all operators and other personnel coming in contact with unit must be properly trained and must have read accompanying Tech Handbook.

Finally, when conveyor is initially started, an immediate visual inspection should include motor, gear reducer, belt tracking (discussed in following section under "Belt Tracking") and related adjustments noted in handbook for unit/component corrections.

MAINTENANCE SAFETY PRECAUTIONS BEFORE PERFORMING MAINTENANCE

WARNING

Only trained personnel shall perform maintenance functions. Before maintenance operations are performed, conveyor must be shut "OFF" and disconnects locked in the "OFF" position to prevent unit from unauthorized start-up.

One of the most important guidelines for maximizing conveyor operation and personnel safety is to implement a regular maintenance schedule and train personnel on the appropriate needs of the specific unit.

Only trained personnel shall perform maintenance functions. Before maintenance operations are performed, conveyor must be shut "OFF" and disconnects locked in the "OFF" position to prevent unit from unauthorized start-up during maintenance. All personnel should be informed of the safety procedures associated with unit maintenance and performance.

Do not perform any work on conveyors or conveyor system while in operation unless it is impossible to otherwise conduct adjustment, lubrication or other maintenance function. Only experienced, trained personnel possessing advanced hazards-training should attempt such critical operations.

MAINTENANCE AND FOLLOW-UP DETAILS

AWARNING

Only trained personnel shall perform maintenance functions. When maintenance is completed, only authorized personnel shall be permitted to start conveyor following maintenance or other emergency shut-off.

While performing maintenance do not wear loose clothing. Immediately report any hazardous conditions--sharp edges, pinch (or nip) points or other conditions that may result when several manufacturers supply machinery which may create operating hazards.

When using mechanical aids such as hoists, cables, or cranes exercise extreme caution to prevent damage to conveyors or other integrated machinery which may create a working hazard when maintenance is completed and units are in operation.

Clean up any spilled lubricants or other materials used in the maintenance process or those which may be deposited during unit operation. Eliminating poor housekeeping practices increases unit efficiency while creating safer personnel working conditions.

After maintenance, conduct visual inspection to ensure that all safety devices and guards have been replaced. Confirm that all units are clear of tools, debris or other items. Before starting conveyor, check condition of unit caution labels (see "CAUTION LABELS" at front of handbook). If labels have been destroyed or are not clearly legible, call 870.483.7631 to receive replacement labels. Placement of caution labels is critical to avoid unauthorized unit operation which may result in hazardous working conditions for all related personnel coming in contact with conveyor.

Warn personnel that conveyor is being prepared for start-up and to stay clear of unit. Do not start conveyor until all personnel are clear. When maintenance is completed, only authorized personnel shall be permitted to start conveyor following maintenance or other emergency shut-off.

| MO | DEL | NO. | |
|----|-----|-----|--|
| | | | |

| WEEKLY RECOMMENDED MAINTENANCE SCHEDULE* | | | |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--|--|
| COMPONENT DETAIL OF MAINTENANCE | | | |
| Bearings | Lubricate in dirty, dusty, or moist/wet conditions. | | |
| Unit Safety Check | Confirm placement of all guards, pop-out rollers, warning labels & check for loose bolts, nip points & other hazards. | | |

| MONTHLY RECOMMENDED MAINTENANCE SCHEDULE* | | | |
|-------------------------------------------|----------------------------------------------------------------|--|--|
| COMPONENT | DETAIL OF MAINTENANCE | | |
| Gear Reducer | Check for leaks. | | |
| V-Belt Drive Belt | Check for proper operating tension & overall wear. | | |
| Drive Sheaves | Check & re-tighten set screws & check for overall wear. | | |
| Pillow Block / Flange Bearings | Lubricate (normal conditions). | | |
| Drive Chain | Check for proper operating tension & overall wear & lubricate. | | |
| Drive Sprockets | Check for overall wear & re-tighten set screws. | | |

| PERIODIC RECOMMENDED MAINTENANCE SCHEDULE* | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------|------------------|--|--|
| COMPONENT DETAIL OF MAINTENANCE | | | |
| Gear Reducer | Check for leaks. | | |
| Drive Chain Clean (brush in solvent) & re-lubricate by applying lubricant to inside chain with brush or spout can at 2000 hour intervals. | | | |
| Motor Check & clear motor ventilation openings at 500 hour intervals Check miscellaneous operating conditions (normal heat & noise) | | | |

^{*}All charts are for guidelines in normal operating or 'as noted' conditions. Severe applications may warrant additional maintenance.

MAINTENANCE AND LUBRICATION RECOMMENDED LUBRICANTS

| MISC. LUBRICANTS | | | | |
|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|--|--|--|
| LUBRICANT | BRAND/DESCRIPTION | | | |
| General Purpose Grease (For -30°F to 300° operation)* | Shell Dolium R (Shell Oil Co.) (or Suitable equivalent) | | | |
| For extreme Temperature Operation (-90°F to 350°F operation)* | Mobiltemp SHC-32 (Mobil Oil Corp.) (or suitable equivalent) | | | |
| Washdown Application* (-30°F to 225°F operation) (May require special consideration consult factory) | Shell Alvania No. 3 (Shell Oil Co.) (or suitable equivalent) | | | |
| General Purpose Oil | SAE 10; SAE 20 or SAE 30 | | | |

^{*}NOTE: Temperatures listed indicate the nominal operational temperature for the specific **lubricant** listed. This does not imply that the bearing housing, seals or any other conveyor unit component is rated to operate in this specific temperature range or environment. 250°F is the maximum operating temperature for standard bearing lubricants and bearing components. Although various lubricants may enhance bearing operation, special-order bearings may be required to achieve optimal bearing performance. For additional information, consult factory.

REPORT ON MISCELLANEOUS MAINTENANCE PERFORMED

| REPORT ON MAINTENANCE | | | | |
|-----------------------|----------------|--------------------|--------------------------------------------------------------------------------|--|
| CONVEYOR MARK NO. | REPAIRED BY | INSPECTION DATE | DETAIL OF MAINTENANCE COMPLETED (OR INSPECTION) LIST PARTS REPLACED OR REPAIRS | |
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TROUBLE SHOOTING AND REPLACEMENT PARTS TROUBLE SHOOTING / SERIAL PLATE

| TROUBLE SHOOTING | | | | |
|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| TROUBLE | PROBABLE CAUSE | REMEDY | | |
| Motor & gear reducer running excessively hot, or hard to start | A. Lack of lubricant B. Frozen sprocket C. Overload D. Electrical | A. Check for leaks. B. Check and inspect all sprockets and bearings. Replace sprockets failing to rotate or that are difficult to rotate. C. Reduce cause and/or increase motor horsepower. D. Check wiring and circuits, take ampere reading, replace motor if necessary. | | |
| Motor & gear reduc- er makes excessive noise | A. Lack of lubrication B. Damaged Gears C. Faulty Bearing | A. Check for leaks. B. Replace unit. C. Replace bearing. | | |
| Drive chain, conveying chain or sprockets experience excessive wear | A. Excessive chain tension B. Sprockets misaligned C. Chain not lubricated D. Damaged sprocket or chain E. Misalignment of chain guard F. Dirty chain | A. Reduce chain tension. B. Realign with straight edge across sprocket faces. C. Lubricated chain with approved lubricant, wipe away excess lubricant. D. Replace Damaged Component. E. Adjust chain guard assembly as necessary. F. Clean thoroughly and lubricate with approved lubricant. | | |
| Drive chain, conveying chain or sprockets make excessive noise | A. Insufficient chain tension B. Chain not adequately lubricated C. Sprockets misaligned | A. Adjust chain tension. B. Lubricate chain with approved lubricant, wipe away excess lubricant. C. Realign sprockets with straight edge across sprocket faces. | | |
| Pulsating chain | A. Insufficient chain tension B. Misalignment of chain guard C. Overload | A. Adjust chain tension. B. Adjust chain guard assembly as necessary. C. Inspect for obstruction to or drag on conveyor. | | |
| Broken chain | A. Frozen bearing or sprocket shaft B. Worn or damaged chain C. Obstructed or jam | A. Inspect for damaged bearings, replace if necessary. Re place links as required. B. Replace chain as required. C. Remove obstruction to clear jam. | | |
| Tread roller(s) stalls or does not turn when loaded | A. Product overload B. Drive band broken C. Oil conditions D. Frozen roller bearing | A. Alter product loading to specified load rating. Consult factory. B. Replace drive band. C. Remove oil with recommended cleaner. D. Replace roller. | | |
| Sprocket loose on shaft | A. Loose set screws B. Worn or damaged key | A. Realign sprockets with straight edge and tighten set screws. B. Replace with new key. | | |
| Excessive slack in chain | A. Normal wear | A. Expect rapid chain growth in first two weeks of operation. B. Adjust chain tension as specified in the manual. | | |

ORDERING REPLACEMENT PARTS

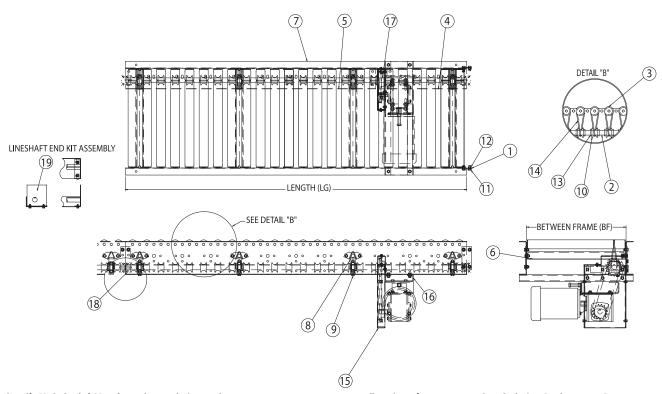


To order any replacement parts or when calling for assistance with any powered conveyor, **ALWAYS** provide the unit serial number. Shown at actual size, this is placed on the conveyor frame near the location of the drive assembly.

To order replacement parts or add-on components, contact the Roach distributor who originally furnished the unit

if possible. If this is not possible, contact the National Sales Office at 870-483-7631 for the name of the authorized Roach distributor in your area. Have unit model number and serial number **BEFORE** calling. Refer to unit drawings (in rear section of handbook) for part numbers if ordering replacement parts.

| ITEM # | DESCRIPTION | ITEM # | DESCRIPTION |
|-----------|----------------------------------------------|-----------|-------------------------------------------------|
| 1 | LS Splice Plate | | Chain Guard Top Cover |
| 2 | Mainline Drive Spool Shaft (24"-120" LG) | | Chain Guard Filler Chain Guard Cover |
| 3 | 196 Grooved Roller Assembly (A37089-BF) | | Reducer Push Plate |
| 4 | Front Drive Spool Guard 3", 4", 6" RC | | Motorbase Plate Motorbase Stiffener Assembly |
| 5 | Drive Spool Guard 3", 6" RC (24"-120" LG) | 16 | Reducer Spacer Channel |
| | 4" RC (24"-120" LG) | 17 | 1/4" SQ x 7/8" LG Keystock |
| 6 | 796LS Frame Crossbrace | 18 | Coupling Assembly (A38222) |
| 7 | Side Channel 3", 4", 6" RC | | Lineshaft End Kit Assembly |
| 8 | Lineshaft Pillow Block Bearing (BRW04125) | 19 | End Cover Guard 1/4" X 1/2" Whiz Lock Bolt |
| 9 | 3/8" x 1/2" LG Hex WHFB | | 1/4" Steel Spring Nut |
| 10 | Lineshaft Spool (BRW04602) | 20 | Motor |
| 11 | 3/8" x 3/4" LG HHCS | 21 | Reducer |
| 12 | 3/8" Flange Nut | 22 | Drive Sprocket (SPW50172) |
| 13 | Spool Spacer (MCW06447) | 23 | Reducer Sprocket |
| 14 | 3/16" DIA. x 13" Drive Band (VBW71364) | | Drive Chain (SPW00500) |
| 15 | 796 Lineshaft Drive Kit | 24 | Connection Link (SPW10500) |
| | Chain Guard Top Cap | | |



Specify <u>Unit Serial Number</u> when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 15).

Recommended Spare Parts are shown in red. Charted are item no. and part description

When ordering use example below.

Example: Need a replacement Motor for 796LS with underneath

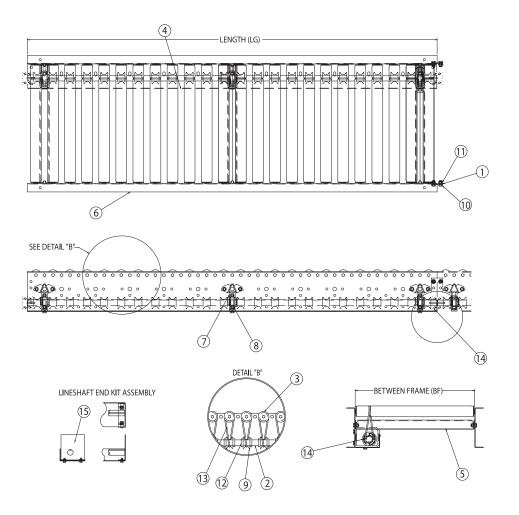
mounted drive

Part No: SN 123456 - 20 - Motor



PARTS LIST FOR LINE SHAFT CONVEYORS INTERMEDIATE 796LSI BED SECTION

| ITEM # | DESCRIPTION | ITEM # | DESCRIPTION |
|-----------|----------------------------------------------------------------------|-----------|-----------------------------------------------|
| 1 | LS Splice Plate | 8 | 3/8" x 1/2" LG Hex WHFB |
| 2 | Mainline Intermediate | 9 | Lineshaft Spool (BRW04602) |
| 2 | Spool Shaft (12"-120") | 10 | 3/8" x 3/4" LG HHCS |
| 3 | 196 Grooved Roller Assembly (A37089-BF) | 11 | 3/8" Flange Nut |
| | Intermediate Spool Guard 3", 6" RC (12"-120") 4" RC (24"-120") | 12 | Spool Spacer (MCW06447) |
| 4 | | 13 | 3/16" DIA. x 13" Drive Band (VBW71364) |
| | | 14 | Coupling Assembly (A38222) |
| 5 | 796LS Frame Crossbrace | | Lineshaft End Kit Assembly |
| 6 | Side Channel 3", 4", 6" RC | 15 | End Cover Guard 1/4" x 1/2" Whiz Lock Bolt |
| 7 | Lineshaft Pillow Block Bearing (BRW04125) | | 1/4" Steel Spring Nut |



Specify <u>Unit Serial Number</u> when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 15).

Recommended Spare Parts are shown in red. Charted are item no. and part description

When ordering use example below.

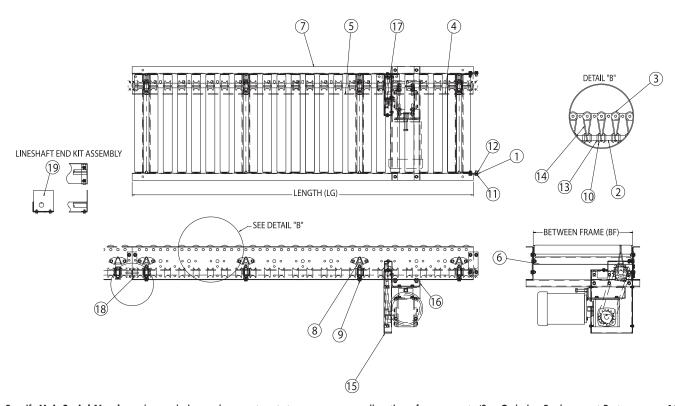
Example: Need a replacement 196 Grooved Roller Assembly

(A37089-BF) for Intermediate 796LSI Bed Section

Part No: SN 123456 - 3 - 196 Grooved Roller Assembly



| ITEM # | DESCRIPTION | ITEM # | DESCRIPTION |
|-----------|---------------------------------------------|-----------|-------------------------------------------------|
| 1 | LS Splice Plate | | Chain Guard Top Cover |
| 2 | Mainline Drive Spool Shaft (24"-120" LG) | | Chain Guard Filler Chain Guard Cover |
| 3 | 138 Grooved Roller Assembly (138G-BF-D-G1A) | | Reducer Push Plate |
| 4 | Front Drive Spool Guard 1.5", 3" RC | | Motorbase Plate Motorbase Stiffener Assembly |
| 5 | Drive Spool Guard | 16 | Reducer Spacer Channel |
| | 1.5", 3" RC (24"-120" LG) | 17 | 1/4" SQ x 7/8" LG Keystock |
| 6 | 796LS Frame Crossbrace | 18 | Coupling Assembly (A38222) |
| 7 | Side Channel 1.5", 3", RC | | Lineshaft End Kit Assembly |
| 8 | Lineshaft Pillow Block Bearing (BRW04125) | 19 | End Cover Guard 1/4" X 1/2" Whiz Lock Bolt |
| 9 | 3/8" x 1/2" LG Hex WHFB | | 1/4" X 1/2 Will Lock Boll 1/4" Steel Spring Nut |
| 10 | Lineshaft Spool (BRW04602) | 20 | Motor |
| 11 | 3/8" x 3/4" LG HHCS | 21 | Reducer |
| 12 | 3/8" Flange Nut | 22 | Drive Sprocket (SPW50172) |
| 13 | Spool Spacer (MCW06447) | 23 | Reducer Sprocket |
| 14 | 1/8" DIA. x 12-3/4" Drive Band (VBW71382) | | Drive Chain (SPW00500) |
| 15 | 738 Lineshaft Drive Kit | 24 | Connection Link (SPW10500) |
| | Chain Guard Top Cap | | |



Specify <u>Unit Serial Number</u> when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 15).

Recommended Spare Parts are shown in red. Charted are item no. and part description

When ordering use example below.

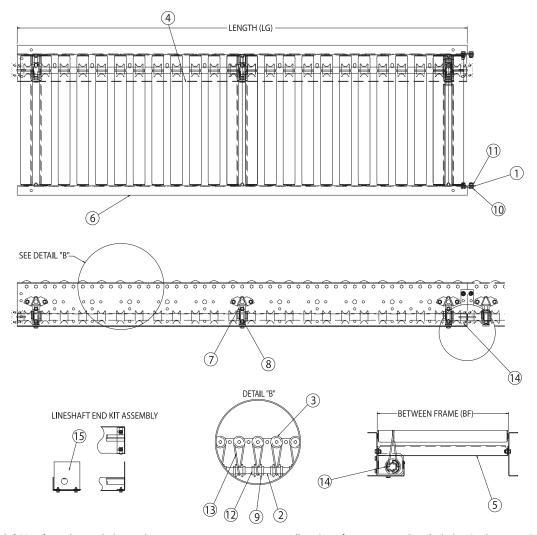
Example: Need a replacement motor for 738LS With Underneath

Mounted Drive

Part No: SN 123456 - 20 - Motor



| ITEM # | DESCRIPTION | ITEM # | DESCRIPTION |
|-----------|----------------------------------------------------|-----------|-----------------------------------------------|
| 1 | LS Splice Plate | 8 | 3/8" x 1/2" LG Hex WHFB |
| 2 | Mainline Intermediate | 9 | Lineshaft Spool (BRW04602) |
| 2 | Spool Shaft (12"-120") | 10 | 3/8" x 3/4" LG HHCS |
| 3 | 138 Grooved Roller Assembly (138G-BF-D-G1A) | 11 | 3/8" Flange Nut |
| | Intermediate Spool Guard 1.5", 3" RC (12"-120") | 12 | Spool SPacer (MCW06447) |
| 4 | | 13 | 1/8" DIA. x 12-3/4" Drive Band (VBW71382) |
| | | 14 | Coupling Assembly (A38222) |
| 5 | 796LS Frame Crossbrace | | Lineshaft End Kit Assembly |
| 6 | Side Channel 1.5", 3" RC | 15 | End Cover Guard 1/4" x 1/2" Whiz Lock Bolt |
| 7 | Lineshaft Pillow Block Bearing (BRW04125) | | 1/4" Steel Spring Nut |



Specify <u>Unit Serial Number</u> when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 15.

Recommended Spare Parts are shown in red. Charted are item no. and part description

When ordering use example below.

Example: Need a replacement 138 Grooved Roller Assembly

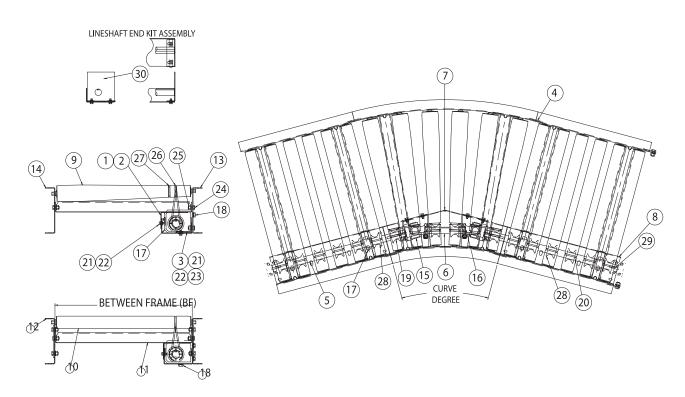
(138G-BF-D-G1A)

Part No: SN 123456 - 3 - 138 Grooved Roller Assembly

(138G-BF-D-G1A)



| ITEM # | DESCRIPTION | ITEM # | DESCRIPTION |
|-----------|----------------------------------------------------------|-----------|-------------------------------------------------------|
| 1 | U-Joint Cover R.H. | 17 | LS Bearing PYLSB-9A 1" Bore (BRW04125) |
| 2 | U-Joint Cover L.H. | 18 | 3/8"-16 x 1/2" LG. HWHFB |
| 3 | Spool Guard Mounting Angle | 19 | Line shaft Keyed Spool (BRW04604) |
| 4 | LS Splice Plate | 20 | Spool Spacer (MCW06447) |
| 5 | End Shaft (Left/Right Hand Side) | 21 | 1/4"-20 x 1/2" Whiz Lock Screw |
| , | Center Shaft (6-1/4" LG.) Center Shaft (7-5/8" LG.) | 22 | 1/4" Steel Spring Nut |
| 6 | | 23 | 1/4" Flat Washer |
| 7 | Curve Spool Guard | 24 | 3/8" x 3/4" LG. HHCS |
| 8 | Interm. Spool Guard (Left/Right Hand Side) | 25 | 3/8" Flanged Nylon Insert Nut |
| 9 | Double Grooved Tapered Roller (A27057-BF) | 26 | 3/16" Dia. x 13" LG Belt, Clear (VBW71364) |
| 10 | 196S Single Grooved Roller (A37089-BF) | 27 | 3/16" Dia. x 9-1/4" LG Belt, Blue (VBW71366) |
| 11 | LS Frame Crossbrace | 28 | Line Shaft Spool (BRW04602) |
| 12 | Tangent Side Channel (Left/Right Hand Side) | 29 | Coupling Assembly (A38222) |
| 13 | 30° Inside Channel 13″-27″ 30° Inside Channel 31″-39″ | | Lineshaft End Kit Assembly End Cover Guard |
| 14 | 30° Outside Channel 13″-39″ | 30 | 1/4"-20 x 1/2" Whiz Lock Nut 1/4" Steel Spring Nut |
| 15 | Universal Joint (MCW06671) | | 1/4 Steel Spring Hor |
| 16 | 1/4" SQ. x 7/8" LG. Keystock | | |



Specify <u>Unit Serial Number</u> when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 15).

Recommended Spare Parts are shown in red. Charted are item no. and part description

When ordering use example below.

Example: Need a replacement End Shaft Left Side for a 796LSC 30°

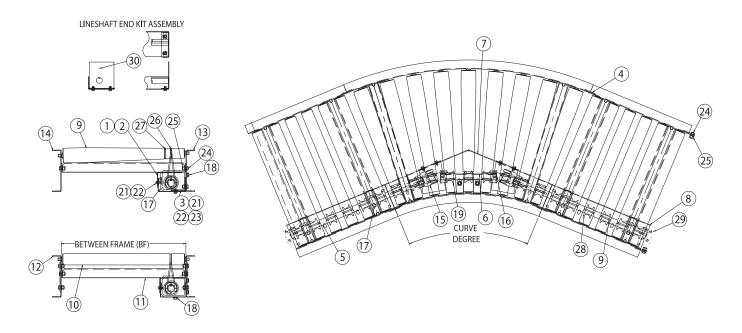
Curve Model

Part No: SN 123456 - 5 - End Shaft Left Side



PARTS LIST FOR LINE SHAFT CONVEYORS 796LSC 45° CURVE MODULE

| ITEM # | DESCRIPTION | ITEM # | DESCRIPTION |
|-----------|---------------------------------------------------------|-----------|-------------------------------------------------|
| 1 | U-Joint Cover R.H. | 17 | LS Bearing PYLSB-9A 1" Bore (BRW04125) |
| 2 | U-Joint Cover L.H. | 18 | 3/8"-16 x 1/2" LG. HWHFB |
| 3 | Spool Guard Mounting Angle | 19 | Line shaft Keyed Spool (BRW04604) |
| 4 | LS Splice Plate | 20 | Spool Spacer (MCW06447) |
| 5 | End Shaft (Left/Right Hand Side) | 21 | 1/4"-20 x 1/2" Whiz Lock Screw |
| , | Center Shaft (9-1/2" LG.) Center Shaft (18-3/4" LG.) | 22 | 1/4" Steel Spring Nut |
| 6 | | 23 | 1/4" Flat Washer |
| 7 | Curve Spool Guard | 24 | 3/8" x 3/4" LG. HHCS |
| 8 | Interm. Spool Guard (Left/Right Hand Side) | 25 | 3/8" Flanged Nylon Insert Nut |
| 9 | Double Grooved Tapered Roller (A27057-BF) | 26 | 3/16" Dia. x 13" LG Belt, Clear (VBW71364) |
| 10 | 196S Single Grooved Roller (A37089-BF) | 27 | 3/16" Dia. x 9-1/4" LG Belt, Blue (VBW71366) |
| 11 | LS Frame Crossbrace | 28 | Line Shaft Spool (BRW04602) |
| 12 | Tangent Side Channel (Left/Right Hand Side) | 29 | Coupling Assembly (A38222) |
| 13 | 45° Inside Channel 13″-27″ | | Lineshaft End Kit Assembly |
| | 45° Inside Channel 31″-39″ | | End Cover Guard 1/4"-20 x 1/2" Whiz Lock Nut |
| 14 | 45° Outside Channel 13″-39″ | 30 | 1/4" Steel Spring Nut |
| 15 | Universal Joint (MCW06672) | | |
| 16 | 1/4" SQ. x 7/8" LG. Keystock | | |



Specify <u>Unit Serial Number</u> when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 15).

Recommended Spare Parts are shown in red. Charted are item no. and part description

When ordering use example below.

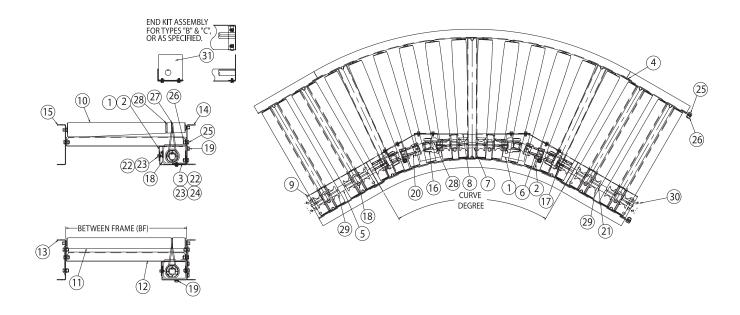
Example: Need a replacement End Shaft Right Hand for 796LSC 45°

Curve Model

Part No: SN 123456 - 5 - End Shaft Right Hand



| ITEM # | DESCRIPTION | ITEM # | DESCRIPTION |
|-----------|----------------------------------------------------------|-----------|-------------------------------------------------------|
| 1 | U-Joint Cover R.H. | 16 | Universal Joint (2 MCW06672) |
| 2 | U-Joint Cover L.H. | 17 | 1/4" SQ. x 7/8" LG. Keystock |
| 3 | Spool Guard Mounting Angle | 18 | LS Bearing PYLSB-9A 1" Bore (BRW04125) |
| 4 | LS Splice Plate | 19 | 3/8"-16 x 1/2" LG. HWHFB |
| 5 | End Shaft (Left/Right Hand Side) | 20 | Line shaft Keyed Spool (4 BRW04604) |
| , | Mid Shaft (3-38" LG.) | 21 | Spool Spacer (MCW06447) |
| 6 | Center Shaft (7-1/8" LG.) | 22 | 1/4"-20 x 1/2" Whiz Lock Screw |
| 7 | Center Shaft (12-1/2" LG.) Center Shaft (14-1/2" LG.) | 23 | 1/4" Steel Spring Nut |
| | | 24 | 1/4" Flat Washer |
| 8 | Curve Spool Guard | 25 | 3/8" x 3/4" LG. HHCS |
| 9 | Interm. Spool Guard (Left/Right Hand Side) | 26 | 3/8" Flanged Nylon Insert Nut |
| 10 | Double Grooved Tapered Roller (A27057-BF) | 27 | 3/16" dia. x 13" LG Belt, Clear (VBW71364) |
| 11 | 196S Single Grooved Roller (A37089-BF) | 28 | 3/16" dia. x 9-1/4" LG Belt, Blue (VBW71366) |
| 12 | LS Frame Crossbrace | 29 | Line Shaft Spool (BRW04602 |
| 13 | Tangent Side Channel (Left/Right Hand Side) | 30 | Coupling Assembly (A38222) |
| 14 | 60° Inside Channel 13″-27″ 60° Inside Channel 31″-39″ | 31 | Lineshaft End Kit Assembly End Cover Guard |
| 15 | 60° Outside Channel 13″-39″ | 31 | 1/4"-20 x 1/2" Whiz Lock Nut 1/4" Steel Spring Nut |



Specify <u>Unit Serial Number</u> when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 15).

Recommended Spare Parts are shown in red. Charted are item no. and part description

When ordering use example below.

Example: Need a replacement End Shaft Right Hand for $796LSC~60^{\circ}$

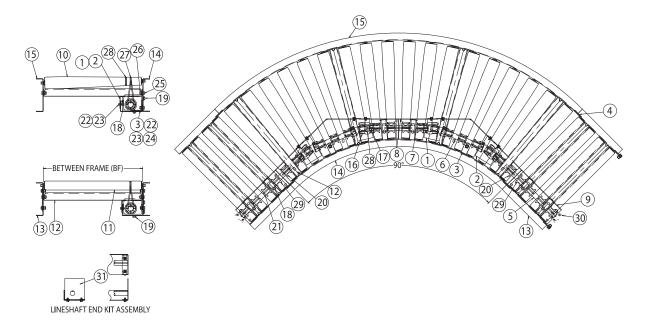
Curve Model

Part No: SN 123456 - 5 - End Shaft Right Hand



PARTS LIST FOR LINE SHAFT CONVEYORS 796LSC 90° CURVE MODULE

| ITEM # | DESCRIPTION | ITEM # | DESCRIPTION |
|-----------|------------------------------------------------------------|-----------|-------------------------------------------------------|
| 1 | U-Joint Cover R.H. | 16 | Universal Joint (2 MCW06672) |
| 2 | U-Joint Cover L.H. | 17 | 1/4" SQ. x 7/8" LG. Keystock |
| 3 | Spool Guard Mounting Angle | 18 | LS Bearing PYLSB-8A 1" Bore (BRW04125) |
| 4 | LS Splice Plate | 19 | 3/8"-16 x 1/2" LG. HWHFB |
| 5 | End Shaft (Left/Right Hand Side) | 20 | Line shaft Keyed Spool (4 BRW04604) |
| , | Mid Shaft (9-1/2" LG.) | 21 | Spool Spacer (7 MCW06447) |
| 6 | Center Shaft (16-7/8" LG.) | 22 | 1/4"-20 x 1/2" Whiz Lock Screw |
| 7 | Center Shaft (12-1/2" LG.) Center Shaft (18-7/8" LG.) | 23 | 1/4" Steel Spring Nut |
| | | 24 | 1/4" Flat Washer |
| 8 | Curve Spool Guard | 25 | 3/8" x 3/4" LG. HHCS |
| 9 | Interm. Spool Guard (Left/Right Hand Side) | 26 | 3/8" Flanged Nylon Insert Nut |
| 10 | Double Grooved Tapered Roller (A27057-BF) | 27 | 3/16" Dia. x 13" LG Belt, Clear (VBW71364) |
| 11 | 196S Single Grooved Roller (A37089-BF) | 28 | 3/16" Dia. x 9-1/4" LG Belt, Blue (VBW71366) |
| 12 | LS Frame Crossbrace | 29 | Line Shaft Spool (VBW71366) |
| 13 | Tangent Side Channel (Left/Right Hand Side) | 30 | Coupling Assembly (A38222) |
| 14 | 90° Inside Channel 13″-27″ 45° Inside Channel 31″-39″ | 21 | Lineshaft End Kit Assembly End Cover Guard |
| 15 | 90° Outside Channel 13″-27″ 45° Outside Channel 13″-39″ | 31 | 1/4"-20 x 1/2" Whiz Lock Nut 1/4" Steel Spring Nut |



Specify <u>Unit Serial Number</u> when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 15).

Recommended Spare Parts are shown in red. Charted are item no. and part description

When ordering use example below.

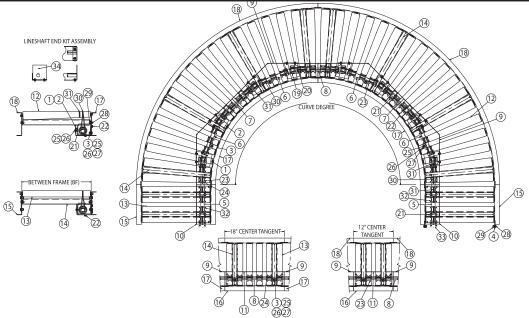
Example: Need a replacement End Shaft Left Hand for 796LSC 90°

Curve Model

Part No: SN 123456 - 5 - End Shaft Left Hand



| ITEM # | DESCRIPTION | ITEM # | DESCRIPTION |
|-----------|----------------------------------------------------------------------------------------|-----------|-------------------------------------------------|
| 1 | U-Joint Cover R.H. | 19 | Universal Joint (MCW06672) |
| 2 | U-Joint Cover L.H. | 20 | 1/4" SQ. x 7/8" LG. Keystock |
| 3 | Spool Guard Mounting Angle | 21 | LS Bearing PYLSB-8A 1" Bore |
| 4 | LS Splice Plate | 22 | 3/8"-16 x 1/2" LG. HWHFB |
| 5 | End Shaft (18-1/4" LG.) | 23 | Line shaft Keyed Spool (BRW04604) |
| 6 | Mid shaft (99-1/2" LG.) | 24 | Spool Spacer (MCW06447) |
| 7 | Mid Shaft of 90° (12-1/2" LG.) | 25 | 1/4"-20 x 1/2" Whiz Lock Screw |
| 8 | Center Shaft (12-3/4" LG.) Center Shaft (24-3/4" LG.) Center Shaft (30-3/4" LG.) | 26 | 1/4" Steel Spring Nut |
| | | 27 | 1/4" Flat Washer |
| 9 | Curve Spool Guard | 28 | 3/8" x 3/4" LG. HHCS |
| 10 | Interm. Spool Guard 12" | 29 | 3/8" Flanged Nylon Insert Nut |
| 11 | Ctr. Intermediate Spool Guard 12" Ctr. Intermediate Spool Guard 18" | 30 | 3/16" Dia. x 13" LG Belt, Clear (VBW71364) |
| 12 | Double Grooved Tapered Roller (A27057-BF) | 31 | 3/16" Dia. x 9-1/4" LG Belt, Blue (VBW71366) |
| 13 | 196S Single Grooved Roller (A37089-BF) | 32 | Line Shaft Spool (BRW04602) |
| 14 | LS Frame Crossbrace | 33 | Coupling Assembly (A38222) |
| 15 | Tangent Side Channel 12" LG | | Lineshaft End Kit Assembly |
| 16 | Ctr. Tangent Side Channel 12" LG. & 18" LG. | | End Cover Guard 1/4"-20 x 1/2" Whiz Lock Nut |
| 17 | 90° Inside Channel 13″-27″ | 34 | 1/4" Steel Spring Nut |
| 18 | 90° Outside Channel 13″-27″ | | |



Specify <u>Unit Serial Number</u> when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 15).

Recommended Spare Parts are shown in red. Charted are item no. and part description

When ordering use example below.

Example: Need a replacement End Shaft for 796LSC 180°

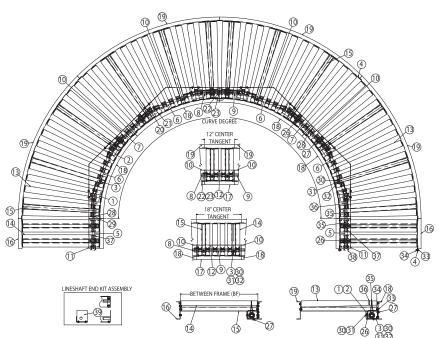
Curve Model 13-27 BF

Part No: SN 123456 - 5 - End Shaft



PARTS LIST FOR LINE SHAFT CONVEYORS 796LSC 180° CURVE MODULE 31-39 BF

| ITEM # | DESCRIPTION | ITEM # | DESCRIPTION |
|-----------|----------------------------------------------------------------------|-----------|--------------------------------------------------------------------------------------------------------|
| 1 | U-Joint Cover R.H. | 19 | 45° Outside Channel 31"-39" |
| 2 | U-Joint Cover L.H. | 20 | Universal Joint (2 MCW06672) |
| 3 | Spool Guard Mounting Angle | 21 | 1/4" SQ. x 7/8" LG. Keystock |
| 4 | LS Splice Plate | 22 | 1/4" SQ. x 1-1/2" LG. Keystock |
| 5 | End Shaft (20" LG.) | 23 | Modified Shaft Coupling (\$12763) |
| 6 | Mid shaft 16-7/8" LG. | 24 | Shipping Angle |
| 7 | Mid Shaft of 90° (18-7/8″ LG.) | 25 | Shipping Angle |
| 8 | Center Shaft (8" LG.) Right Side | 26 | LS Bearing PYLSB-8A 1" Bore (BRW04125) |
| | | 27 | 3/8"-16 x 1/2" LG. HWHFB |
| 9 | Center Shaft (8" LG.) Left Side | 28 | Line shaft Keyed Spool (4 BRW04604) |
| | Center Shaft (20" LG.) Left Side Center Shaft (26" LG.) Left Side | 29 | Spool Spacer (7 MCW06447) |
| | | 30 | 1/4"-20 x 1/2" Whiz Lock Screw |
| 10 | Curve Spool Guard | 31 | 1/4" Steel Spring Nut |
| 11 | Intermediate Spool Guard 12" | 32 | 1/4" Flat Washer |
| 12 | Ctr. Intermediate Spool Guard 12" | 33 | 3/8" x 3/4" LG. HHC\$ |
| | Ctr. Intermediate Spool Guard 18" | 34 | 3/8" Flanged Nylon Insert Nut |
| 13 | Double Grooved Tapered Roller (A27057-BF) | 35 | 3/16" Dia. x 13" LG Belt, Clear (VBW71364) |
| 14 | 196S Single Grooved Roller (A37089-BF) | 36 | 3/16" Dia. x 9-1/4" LG Belt, Blue (VBW71366) |
| 15 | LS Frame Crossbrace | 37 | Line Shaft Spool (2 BRW04602) |
| 16 | Tangent Side Channel 12" LG | 38 | Coupling Assembly (A38222) |
| 17 | Ctr. Tangent Side Channel 12" LG. & 18" LG. | 39 | Lineshaft End Kit Assembly End Cover Guard 1/4"-20 x 1/2" Whiz Lock Nut 1/4" Steel Spring Nut |
| 18 | 45° Inside Channel 31″-39″ | | |



Specify <u>Unit Serial Number</u> when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 15).

Recommended Spare Parts are shown in red. Charted are item no. and part description.

When ordering use example below.

Example: Need a replacement End Shaft for

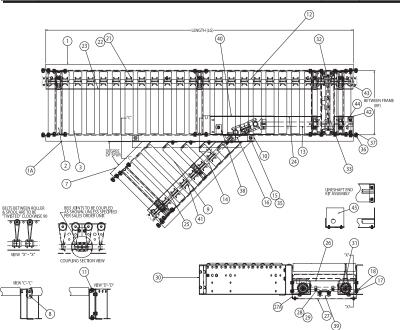
796LSC 180° Curve Model 31-39 BF

Part No: SN 123456 - 5 - End Shaft



PARTS LIST FOR LINE SHAFT CONVEYORS 796LSS LINE SHAFT SPUR MODULE

| ITEM # | DESCRIPTION | ITEM # | DESCRIPTION |
|-----------|-------------------------------------------------------------------------|-----------|------------------------------------------------------------------------------------------------------|
| 1 | Side Channel | 22 | Spool Spacer (MCW06447) |
| 1A | Spur side Channel w/Cutout | 23 | Mainline Spool Guard |
| 2 | Crossbrace | 24 | U-Joint Bottom Guard |
| 3 | 196S Grooved Roller (A37089-BF) | 25 | 30° Spur Spool Guard |
| 4 | 30° Spur Frame Weld Assembly | | 45° spur Spool Guard |
| 5 | 30° Roller Retainer Bracket | 26 | Top Crossover Chain Guard |
| 5A | 5/16"-18 x 3/4" Carriage Bolt | 27 | Bottom Crossover Chain Guard |
| 5B | 5/16"-18 Flange Hex Nut | 27A | Bottom End Plate |
| 6 | 30° 196S Shortened Spur Rollers (contact Factory) | 28 | 1/4"-20 x 1/2" Whiz Lock Screw |
| | 196S Pinned Roller (Contact Factory) | 29 | 1/4" Spring nut |
| | 1/8" x 1" Cotter Pin (FSW09957-01) | 30 | LS Splice Plate |
| 7 | 45° Spur Frame Weld Assembly | 31 | 3/16" DIA. x 13" Drive Band (VBW71364) |
| 8 | 45° Roller Retainer Bracket | 32 | H40B-16 Crossover Sprocket (SPW21616-01) |
| 8A | 5/16"-18 x 3/4" Carriage Bolt | 33 | #40 Roller Chain (SPW00400) |
| 7B | 5/16"-18 Flange Hex Nut | 34 | 1/4" square x 7/8" Keystock |
| 9 | 45° 196S shortened Spur Rollers (contact Factory) | 35 | 1/4" square x 2-1/8" Keystock |
| | 196S Pinned Roller (Contact Factory) 1/8" x 1" Cotter Pin (FSW09957-01) | 36 | 3/8"-16 x 3/4" HHCS |
| | , | 37 | 3/8"-16 Flange Nut |
| 10 | Spur Mounting Bracket | 38 | Spool Guard Mounting Angle |
| 11 | 3/8"-16 x 3/4" Carriage Screw | | Wearstrip Mounting Angle |
| 12 | Mainline Shaft (72, 96, 120 OAL) | | Chain Wearstrip 1/4"-2 0 x 3/4" FHSMS |
| 13 | 30° Spur Drive Shaft 45° Spur Drive Shaft | 39 | 1/4" Flange Nut 5/16"-18 x 3/4" Carriage Bolt 5/16"-18 Flange Hex Nut |
| 14 | 30° Spur Shaft 45° Spur Shaft | | 3/10 - 10 Hunge Hex Not |
| 15 | Stub Shaft | 40 | U-Joint Top guard LSS |
| 16 | Single Universal Joint (MCW06672) | 41 | Lineshaft Keyed Spool (BRW04604) |
| 17 | PYLSB-8A 1" Bore (BRW04125) | 42 | Crossover Spool Guard |
| 18 | 3/8" x 1/2" LG Hex WHFB | 43 | Coupling Assembly (A38222) |
| 21 | Lineshaft Spool (BRW04602) | 44 | Lineshaft end Kit Assembly End Cover Guard 1/4" x 1/2" Whiz Lock Bolt 1/4" steel Spring Nut |



Specify <u>Unit Serial Number</u> when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 15).

Recommended Spare Parts are shown in red. Charted are item no. and part description When ordering use example below.

Example: Need a replacement Side Channel for

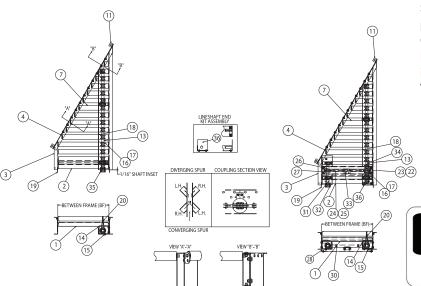
796LSS Line Shaft Spur Module

Part No: SN 123456 - 1 - Side Channel



796LSSOX LINE SHAFT SPUR ONLY WITH CROSS-OVER

| ITEM # | DESCRIPTION | ITEM # | DESCRIPTION |
|-----------|-------------------------------------------------------------------------|-----------|------------------------------------------------------------------------------------------------|
| 1 | 796LS Crossbrace | 20 | 3/16" dia. x 13" LG Belt, Clear (VBW71364) |
| 2 | 196S Grooved Roller (A37089-BF) | 21 | 1" I.D. Locking Collar |
| 3 | 30° Spur Frame Weld Assembly | 22 | 1/4" Square x 7/8" Keystock |
| 4 | 30° Roller Retainer Bracket | 23 | H40B-16 Sprocket w/1" Bore |
| 5 | 5/16"-18 x 3/4" Carriage Bolt | 24 | #40 Roller Chain (SPW00400) |
| 6 | 5/16"-18 Flange Hex Nut | 25 | #40 Roller Chain Connecting Link (SPW10400) |
| | 30° 196S Shortened Spur Rollers (Contact Factory) | 26 | Top Crossover Chain Guard |
| 7 | 196S Pinned Roller (Contact Factory) | 27 | Bottom Crossover Chain Guard |
| | 1/8" x 1" Cotter Pin (FSW09957-01) | 28 | Bottom End Plate |
| 8 | 45° Spur Frame Weld Assembly | 29 | 1/4"-20 x 1/2" Whiz Lock Screw |
| 9 | 45° Roller Retainer Bracket | 30 | 1/4" Spring Nut |
| 10 | 45° 196S Shortened Spur Rollers (Contact Factory) | 31 | Crossover Spool Shaft |
| | 196S Pinned Roller (Contact Factory) 1/8" x 1" Cotter Pin (FSW09957-01) | 32 | Crossover Spool Guard |
| 11 12 | Spur Mounting Bracket 3/8"-16 x 3/4" Carriage Screw | 33 | Wearstrip Mounting Angle Chain Wearstrip 1/4"-20 x 3/4" FHSMS 5/16"-18 Flange Hex Nut |
| 13 | 30° Spur Shaft 40° Spur Shaft PYLSA-8A 1" Bore LS Brg (BRW04125) | 34 | Spool Guard Mounting Angle 1/4" Flat Washer |
| 15 | 3/8-16 x 1/2" LG HWH Serr Bolt | 35 | Coupling Assembly (A38222) |
| 16 | Lineshaft Keyed Spool | | Lineshaft End Kit Assembly |
| 17 | Spool Spacer (MCW06447) | 7 | End Cover Guard |
| 18 | 30° Spur Spool Guard 45° Spur Spool Guard | 36 | 1/4" x 1/2" Whiz Lock Bolt 1/4" Steel Spring Nut |
| 19 | Splice Plates | | |



Specify <u>Unit Serial Number</u> when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 15).

Recommended Spare Parts are shown in red. Charted are item no. and part description

When ordering use example below.

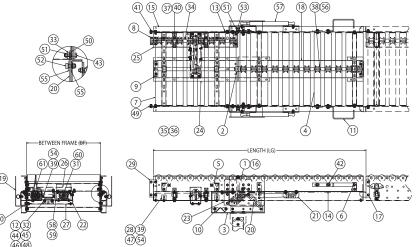
Example: Need a replacement 196S Grooved

Roller for 796LSSO Line Shaft Spur Only

Part No: SN 123456 - 2 - 196S Grooved Roller



| ITEM # | DESCRIPTION | ITEM # | DESCRIPTION |
|--------|-------------------------------------------------------|--------|-------------------------------------------------------|
| 1 | Outside Hinge Weld Assembly | 31 | 1/4" Square x 7/8" Long Keystock |
| 2 | Lineshaft Gate Clutch Shaft Assembly (Specify Length) | 32 | Chain Tension Wearstrip |
| 3 | Gas Spring Support Channel Weld Assembly | 33 | Stop Strap Bushing |
| 4 | 196S Center Grooved Roller Assembly (A36947-BF) | 34 | Stationary Spool Shaft |
| 5 | Crossbrace Weld Assembly | 35 | PB-1 Bearing Insert (BRW04111-01) |
| 6 | Gate Crossbrace Weld Assembly | 36 | PB-1 Housing |
| 7 | 196S Single Grooved Roller Assembly (A37089-BF) | 37 | LS Bearing PYLSB-8A 1" Bore (BRW04125) |
| 8 | Lineshaft Coupling Assembly (A38222) | 38 | Line Shaft Spool (BRW04602) |
| 9 | Lineshaft End Kit Assembly (A38223) | 39 | 1/4"-20 x 1/2" Whiz Lock Bolt |
| 10 | Frame Crossbrace | 40 | 3/8"-16 x 1/2" HWHFB |
| 11 | Handle | 41 | 3/8"-16 x 3/4" HHCS |
| 12 | Chain Tension Wearstrip Mounting Angle | 42 | 3/8"-16 x 1" HHCS |
| 13 | Inside Hinge | 43 | 3/8"-16 x 1-1/2" HHCS |
| 14 | Gate Side Channel (Specify length) | 44 | 1/4"-20 x 3/4" FHSMS |
| 15 | Stationary Side Channel | 45 | 5/16"-18 x3/4" Carriage Bolt |
| 16 | Hinge Spacer | 46 | 1/4"-20 Flange Nut |
| 17 | Support Angle | 47 | 1/4" Flat Washer |
| 18 | Gate Spool Guard (Specify Length) | 48 | 5/16"-18 Flange Nut |
| 19 | Hinge Guard | 49 | 3/8"-16 Nylon Insert Flanged Nut |
| 20 | Stop Strap | 50 | 3/8" Flat Washer |
| 21 | Gas Spring Mounting Angle | 51 | 3/8"-16 Jam Nut w/Nylon Insert |
| 22 | Short Bottom End Plate | 52 | 1/2" x 1/2" x 3/8"-16 Shoulder Bolt |
| 23 | Gas Spring Mounting Bracket | 53 | 1/2" x 3/4" x 3/8"-16 Shoulder Bolt |
| 24 | Center Shaft Guard | 54 | 1/4" Spring Nut |
| 25 | Stationary Spool Guard | 55 | 1/2" Flat Washer |
| 26 | Top Crossover Chain Guard | 56 | Spool Spacer (MCW06447) |
| 27 | Bottom Crossover Chain Guard | 57 | IGS #14-8-21.66-MBI-MBI- Gas Spring (Contact Factory) |
| 28 | Spool Guard Mounting Angle | 58 | #40 Chain (Crossover) |
| 29 | LS Splice Plate | 59 | #40 Connecting Link |
| 30 | Bottom End Plate | 60 | H40B16 Sprocket (Crossover) |
| | | 61 | 3/16" Dia. x 13" Long Clear Belt (VBW71364) |



Specify <u>Unit Serial Number</u> when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 15).

Recommended Spare Parts are shown in red. Charted are item no. and part description

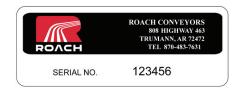
When ordering use example below.

Example: Need a replacement Spool Spacer

(MCW06447) for a 796LSG Line Shaft Gate

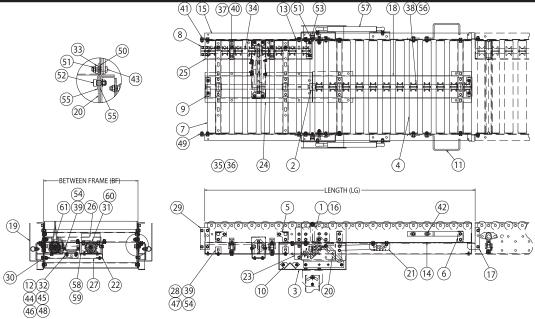
, Module

Part No: SN 123456 - 56 - Spool SPacer



PARTS LIST FOR LINE SHAFT CONVEYORS 796LSX LINE SHAFT CROSS-OVER MODULE

| ITEM # | DESCRIPTION | ITEM # | DESCRIPTION |
|-----------|------------------------------------------------------------------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | LS Splice Plate | 22 | Wearstrip Mounting Angle |
| 2 | Lineshaft Pillow Block Bearing (BRW04125) | 23 | Chain Wearstrip 1/4"-20 x 3/4" FHSMS 1/4"-20 Flanged Nut 5/16"-18 x 3/4" Carriage Bolt 5/16"-18 Flanged Nut |
| 3 | 3/16" Dia. x 13" Drive Band (VBW71364) | | |
| 4 | Side Channel 3", 4", 6" RC | | |
| 5 | 796LS Frame Crossbrace | | |
| 6 | Mainline Drive w/Crossover Shaft | | |
| 7 | Crossover Spool Shaft 3" 4", 6" RC | 24 | 3/8"-16 x 1/2" Hex WHFB |
| 8 | Lineshaft Spool | 25 | 796 Lineshaft Drive Kit Chain Guard Top Cap Chain Guard Top Cover Chain Guard Filler Chain Guard Cover Reducer Push Plate Motor Base Plate Motor Base Stiffener Assembly |
| 9 | Spool Spacer (MCW06447) | | |
| 10 | 196 Grooved Roller Assembly (A37089-BF) | | |
| 11 | Crossover Spool Guard 3", 4", 6" RC | | |
| 12 | Top Crossover Chain Guard | | |
| 13 | Bottom Crossover Chain Guard | | |
| 14 | Bottom End Plate | | |
| 15 | Drive Spool Guard 3", 6" RC 24" OAl SAect 120" Sect. Drive Spool Guard 4" RC | 26 | Reducer Spacer Channel |
| | | 27 | Crossover Motorbase Spool Guard 3", 4", 6" RC |
| 16 | 3/8" x 3/4" HHCS | 28 | 1/4" SQ x 7/8" LG. Keystock |
| 17 | 3/8" Flange Nut | 29 | Coupling Assembly (A38222) |
| 18 | 1/4" x 1/2" Whiz Lock Bolt | 30 | Lineshaft End Kit Assembly End Cover Guard 1/4" x 1/2" Whiz Lock Bolt 1/4" Steel Spring Nut |
| 19 | 1/4" Spring Nut | | |
| 20 | H40B16 Crossover Sprocket (616-01) | | |
| 21 | #40 Chain (Crossover) (SPW00400) | | |
| | | (12)(51) | (2) (57) (19) (29)(6) |



Specify <u>Unit Serial Number</u> when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 15).

Recommended Spare Parts are shown in red. Charted are item no. and part description

When ordering use example below.

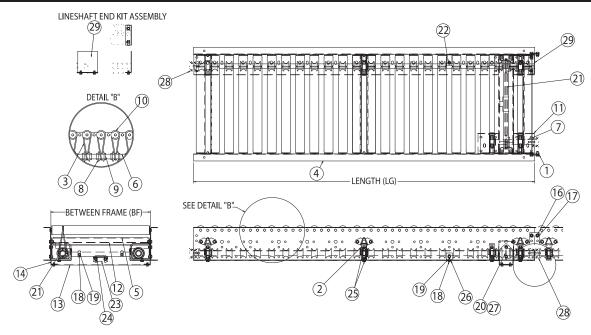
Example: Need a replacement Coupling Assembly (A38222) for a 796LSX Line Shaft

Cross-Over Module

Part No: SN 123456 - 29 - Coupling Assembly



| ITEM # | DESCRIPTION | ITEM # | DESCRIPTION |
|-----------|----------------------------------------------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------|
| 1 | LS Splice Plate | 18 | 1/4" x 1/2" Whiz Lock Bolt |
| 2 | Lineshaft Pillow Block Bearing (BRW04125) | 19 | 1/4" Spring Nut |
| 3 | 3/16" Dia. X 13" Drive Bank (VBW71364) | 20 | H40B16 Crossover Sprocket (SPW21616-01) |
| 4 | Side Channel 3", 4", 6" RC | 21 | #40 Chain (Crossover) |
| 5 | 796LS Frame Crossbrace | 22 | Spool Guard Mounting Angle |
| 6 | Mainline Intermediate Spool Shaft w/Crossover (12"-120" LG) | 23 | Wearstrip Mounting Angle |
| | | 24 | Chain Wearstrip 1/4"-20 x 3/4" FHSMS 1/4"-20 Flanged nut 5/16"-18 x 3/4" Carriage Bolt 5/16"-18 Flanged Nut |
| 7 | Crossover Spool Shaft 3", 4", 6" RC | | |
| 8 | Lineshaft Spool (BRW04602) | | |
| 9 | Spool SPacer (MCW06447) | | |
| 10 | 196 Grooved Roller Assembly (A37089-BF) | 25 | 3/8"-16 x 1/2" Hex WHFB |
| 11 | Crossover Spool Guard 3", 4", 6" RC | 26 | 1/4" Flat Washer |
| 12 | Top Crossover Chain Guard | 27 | 1/4" SQ. X 7/8" Lg. Keystock |
| 13 | Bottom Crossover Chain Guard | 28 | Coupling Assembly (A38222) |
| 14 | Bottom End Plate | 29 | Lineshaft End Kit Assembly |
| 15 | 796LSXI Spool Guard 3", 4" 6" RC | | End Cover Guard |
| 16 | 3/8" X 3/4" HHCS | | 1/4" x 1/2" Whiz Lock Bolt |
| 17 | 3/8" Flange Nut | | 1/4" Steel Spring Nut |



Specify <u>Unit Serial Number</u> when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 15).

Recommended Spare Parts are shown in red. Charted are item no. and part description

When ordering use example below.

Example: Need a replacement LS Splice Plate for 796LSXI Line Shaft Cross-Over

Intermediate Module

Part No: SN 123456 - 1 - LS Splice Plate





WARRANTY

- Materials used by Roach are of good quality.
- Any part proving to be defective in materials or workmanship upon Roach inspection, will be replaced at NO cost, FOB, Trumann, Arkansas, for one year.
 Installation expense will be paid by others.
- Roach liability includes furnishing said part or parts; Roach is not liable for consequential damages, such as loss of profit, delays or expenses incurred by failure of said part or parts.
- Failure due to abuse, incorrect adjustments, exposure to corrosive or abrasive environment or operation under damp conditions does not constitute failure due to defects in workmanship or materials.
- Component parts not manufactured by Roach (motors, gear reducers, etc.)
 will be repaired or replaced at the option of their manufacturer. Contact
 nearest authorized service center for all warranty claims.

NOTE: Motors or gear reducers tampered with before inspection shall be considered free of ALL Warranty Claims.

-All specifications are subject to change without notice--Drawings are intended for illustration ONLY and are not to scale-

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