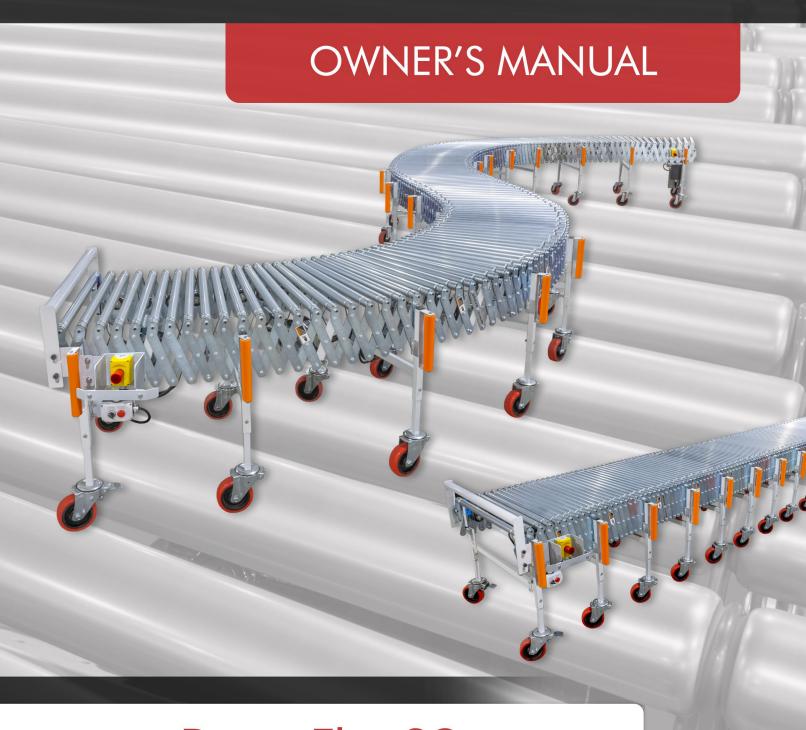


American Made Conveyor Solutions



PowerFlex SC

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

WARNING LABELS



ABOVE: Label is placed onconveyor between each set of floor supports on both sides of each flexible conveyor.

DO NOT OPERATE ANY FLEXIBLE CONVEYOR WITHOUT THIS WARNING LABEL PLACED BETWEEN EVERY SET OF LEGS ON BOTH SIDES OF EVERY FLEXIBLE CONVEYOR USED.

SERIOUS OPERATOR INJURY MAY OCCUR IF WARNING LABELS ARE NOT CLEARLY DISPLAYED ON EVERY FLEXIBLE CONVEYOR.



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 com-

pared 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.

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

Before conveyor is placed into operation, all operators and other personnel coming in contact with conveyor must be properly trained and must have read accompanying Tech Handbook.

Never move MCP conveyor by holding ANY part of conveyor other than handles. Handles are provided at both ends and both sides of MCP conveyors.

DO NOT wear loose clothing or unprotected long hair around MCP conveyors, powered conveyors or machinery with moving parts.

When MCP conveyor is being moved, set up or when conveyor is being adjusted by expanding or contracting overall unit length, keep hands, clothing, long hair or other objects clear of scissor grid framework on conveyor to avoid serious injury. Turn off power when moving the conveyor. Keep feet clear of casters when rolling. Only handles should be used when moving the conveyor.

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

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.

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.





IMPORTANT SAFETY GUIDELINES

AWARNING

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 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 hazard-ous operating condition. Injuries resulting from negligence or violation of safety instructions hereby removes responsibility of product liability claims from Roach.

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 replace parts or perform maintenance on conveyor, or moving conveyor parts, without first shutting "OFF" power to conveyor and locking out power source.

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

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 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

A

Keep hands, hair, clothing, etc. clear of drive bands.

SHORTAGES, DAMAGES, RETURNS AND UNCRATING



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

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

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.

Carefully remove crating and look for essential components and specific

accessories that may have been boxed and attached (or 'banded') to crating material. Save all hardware for subsequent use by installation personnel.

It is possible that some items may become separated from original shipment. Check bill of lading (or, accompanying freight documentation) to ensure receipt of ALL units ordered including ALL accessories.



SET-UP / CONNECTION OF INTERMEDIATE SECTIONS

Once initial inspection and uncrating are completed, unlock casters and move conveyor into actual operational area. Use ONLY handles on each side of conveyor (located at each support of the conveyor) to move extendible conveyor to open or "expand" conveyor.



While moving, be sure to keep hands, clothing, hair and other objects clear of side frame grid on conveyor to avoid serious injury. Once relocated, lock casters to secure extendible conveyor. If two or more sections require connection, see coupling hooks illustration below to connect.







COUPLING HOOKS

A DO NOT CONNECT MORE THAN 3 UNITS TO A SINGLE OUTLET!











Intermediate sections may be connected by using coupling hooks as shown above. Move adjoining sections into position then rotate coupling hook from section 1 over the rod on section 2. Next, rotate coupling hook from section 2 over the rod on section 1.

FLOOR SUPPORTS



WARNING: While moving, keep hands, clothing, hair and other objects clear of conveyor side bars to avoid serious injury.

Extendible conveyors are supported by fixed elevation supports with 6" dia. casters. Every 3rd caster is supplied with a brake to curtail conveyor movement when placed into operation (see image at top right of page).

Keep feet clear of casters when rolling.







BEFORE PERFORMING MAINTENANCE

AWARNING

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" (if applicable) 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 hazardstraining 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 flexible conveyor warning labels (see "WARNING LABELS" at front of handbook). If labels have been destroyed or are not clearly legible, contact Roach Corporation® to receive replacement labels. Placement of warning labels is critical to avoid unauthorized unit operation which may result in hazardous working conditions for all related personnel coming in contact with conveyor.



MAINTENANCE SCHEDULES

MODEL NO) .
----------	------------

RECOMMENDED MAINTENANCE SCHEDULE*		
FREQUENCY	DETAIL OF MAINTENANCE	
Daily	Check for damage to conveyor and for worn parts and replace immediately; Inspect floor supports and adjust as required to maintain proper product flow; Remove dirt, grease, and other contaminates which reduces product life	
Monthly	Confirm that hardware is adjusted as intended (i.e. bolts and nuts may have become loose during operation or adjustment). Adjust as necessary. However, do not over tighten since over tightening will not allow unit to be closed or adjusted properly.	

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

PREVENTING UNNECESSARY REPAIRS

Your flexible conveyor is one of the most durable flexible models manufactured in the world today. However, even the most durable conveyors may be damaged when abused or neglected. Impact or "shock" loading will surely damage models not designed for such loading conditions.

When flexible models are moved across uneven surfaces, floors, mezzanines, etc., even the best designed models are subject to additional maintenance. Floor supports must be monitored daily when used in such terrain to ensure that they are properly adjusted and that damaged component parts are immediately replaced to promote safe work environment.

Heavy fork truck traffic creates another notable hazard in locations where flexible conveyors are used. Monitor all flexible conveyors located near fork truck traffic and locate pylons or pillars to prevent damage to flexibles.

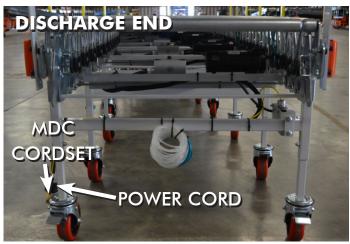
Remember that conveying the product is NOT what causes the most damage to your flexible conveyor. Hazards, neglect and operator mis-use are responsible for the vast majority of replacement parts required to maintain your flexible conveyor.

	report on maintenance					
CONVEYOR MARK NO.	REPAIRED BY	INSPECTION DATE	DETAIL OF MAINTENANCE COMPLETED (OR INSPECTION) LIST PARTS REPLACED OR REPAIRS			



SEQUENCE OF OPERATION





The power cord for the unit is at the infeed end of the conveyor. This input is a twist lock connector (see twist lock connector at bottom of the page) and should only be connected by authorized personnel. The power cord should be connected to a dedicated 120v power source.

If multiple units are hooked together the power supply and the Yellow MDC

Cordset for each unit must be connected. The individual units have male twist lock connectors and female MDC cordset connectors at the infeed end. The discharge end has a female twist lock connector and male MDC cordset connectors. Connect these 2 sets of cable to provide power to the subsequent conveyor and interface all of the Start/Stop switches.

The MDC Cordset cables should be connected by aligning the tabs and screwing the two connector barrels together.





A DO NOT CONNECT MORE THAN 3 UNITS TO A SINGLE OUTLET!

TWIST LOCK CONNECTOR W/ SHROUD



1) Align the connector blades with the plug inlets.



2) Insert blades into inlets



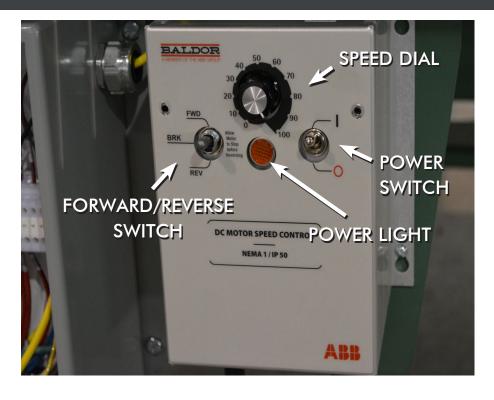
3) Twist connectors to lock in place



SEQUENCE OF OPERATION

Once the power cord is connected the unit is ready to power on. The controls are at the infeed end of the unit at the enclosure mount. The power switch is OFF in the down position and ON in the up position. Turning the switch ON the amber power light should illuminate, indicating the unit has been activated and is ready to run.

The conveyor speed can be adjusted by rotating the SPEED DIAL left to right from 0 - 100. 0 being the slowest speed and 100 the maximum. Speed should only be adjusted by trained personnel.



START / STOP SWITCH



A START/STOP switch is located on the right side of the conveyor at the infeed end and a second switch on the left side at the discharge end allowing operators to control the conveyor from either side. All switches need to be in the START position to run. The conveyor will not run if any of the switches are in the STOP position.

POWER ON BUTTON



Finally, the infeed end Power On button must also be pressed and illuminated for the converyor to run.



Be aware of potential for falling packages. Product guards are available for this conveyor.

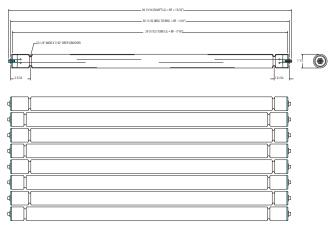


ROLLERS

The rollers for the powered flexible are 156G double grooved rollers 30"BF. These rollers have 1/4" wide grooves at both ends. The grooves are located 2-5/32" from one end of the

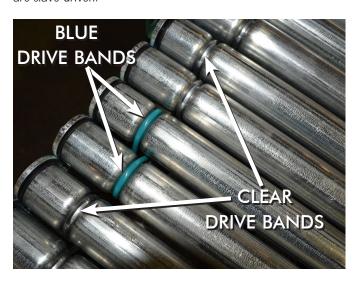


roller and 1-21/32" from the other end. This is so the rollers can be stagered in the conveyor frame.



DRIVE BANDS

There are 2 types of drive bands for the powered flexible conveyor. The first is a blue band for the rollers driven by the motor. The second is a clear band which is for the rollers that are slave driven.



Should one of these drive bands break, extra bands have been included with each conveyor. These bands are zip tied to the frame at the infeed end of the conveyor.





GEAR REDUCER ADJUSTMENTS

DC MAGNET MOTORS BRUSH MAINTENANCE

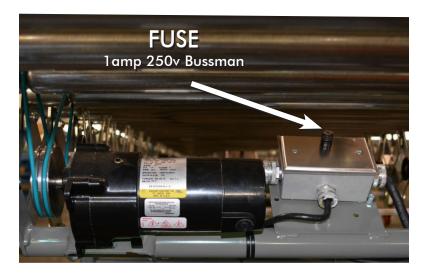
- Remove cap (shown at right) from both sides of motor to access the brushes.
- With cap removed, brush may be removed by pulling on the spring.
- Visually inspect brushes for chips or grooves.
- The shunt wire should not have any frays.
- Reinsert with the brass tabs facing the front and rear of the motor.



A 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 Owners Manual.



A fuse has been included at each motor for protection. The fuse is a 1amp 250v Bussman fuse. If a fuse is blown a qualified technician should determine the cause of the serge before replacing the fuse.





TROUBLESHOOTING

TROUBLESHOOTING			
TROUBLE	PROBABLE CAUSE	REMEDY	
Product stops on conveyor or will not flow smoothly	A. Floor supports out of adjustmentB. Wheels are lockedC. Conveyor damaged	 A. Adjust supports as previously outlined in the Owners Manual. B. Remove debris from wheels and/or re place wheels as necessary. C. Visual inspection required to identify worn or damaged parts. Replace worn or damaged parts as necessary. 	
Conveyor will not open or roll smoothly	A. Casters are lockedB. Casters are frozen due to debris or dirty environmentC. Bolts and nuts are over tightenedD. Conveyor is damaged	 A. Unlock casters before moving conveyor. B. Clear debris from casters until casters are readily mobile. Replace damaged or worn casters as necessary C. Loosen bolts and nuts that may have been over tightened during maintenance procedures. D. Replace ALL components damaged to return unit tp proper operating condition. NOTE: All damaged parts should be replaced immediately to promote safe work environment 	

ORDERING REPLACEMENT PARTS



ROACH CONVEYORS 808 HIGHWAY 463 TRUMANN, AR 72472 TEL 870-483-7631

SERIAL NO.

123456

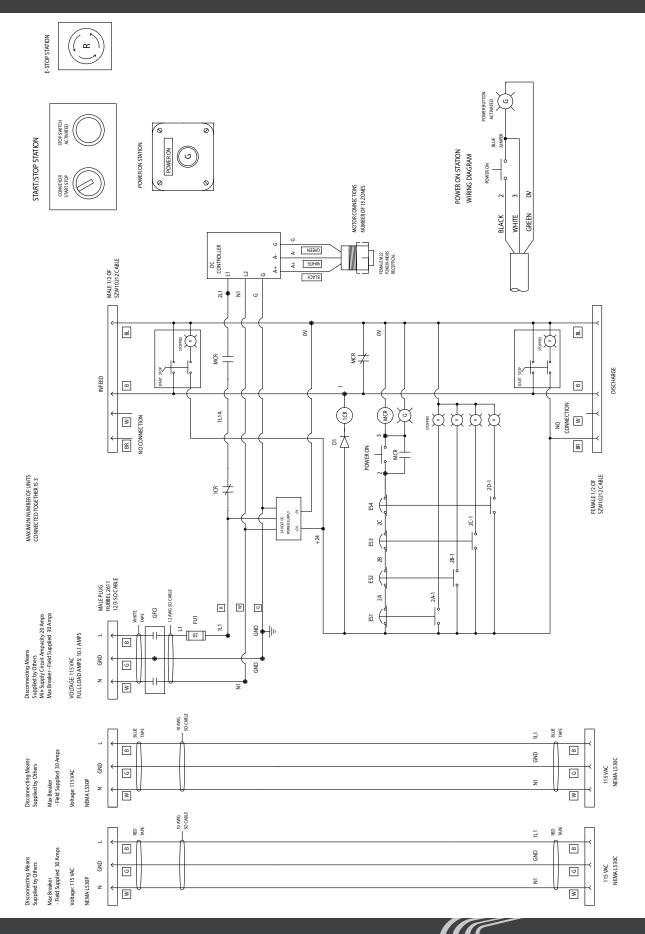


To order any replacement parts or when calling for assistance with any powered conveyor, ALWAYS provide the unit serial number. Shown at actual size, this aluminum plate is placed on enclosure mount at the infeed end of the conveyor.

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.

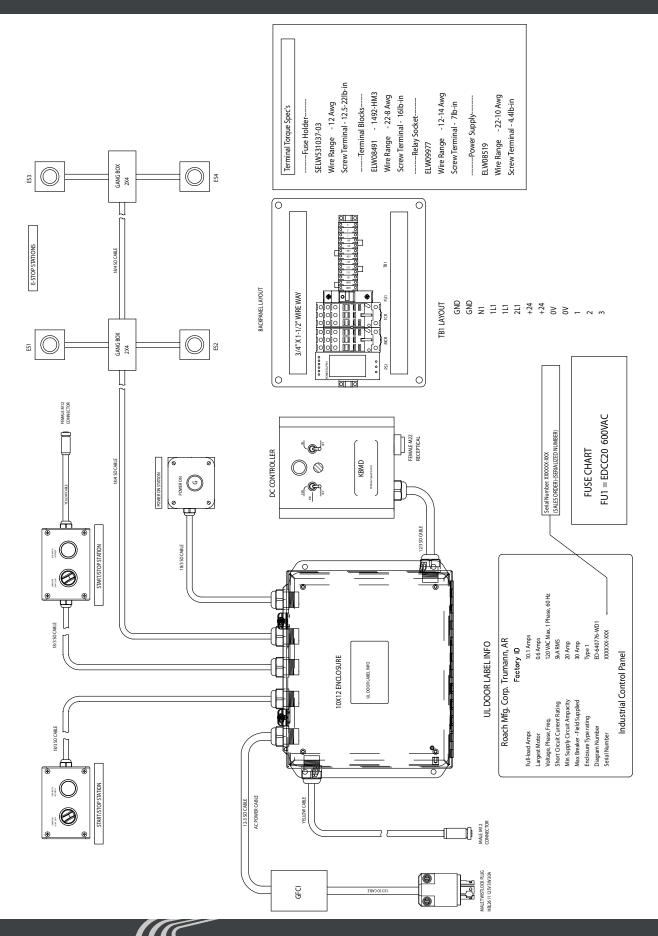


40' CONVEYOR CONTROL SYSTEM WIRING WITH E-STOPS



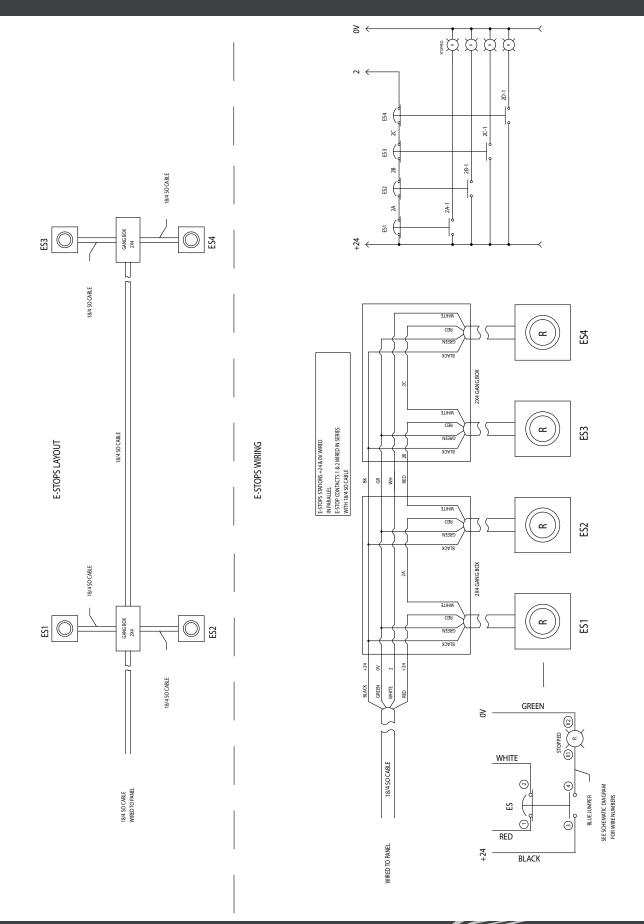


40' SC CONTROL SYSTEM PANEL LAYOUT WITH E-STOPS



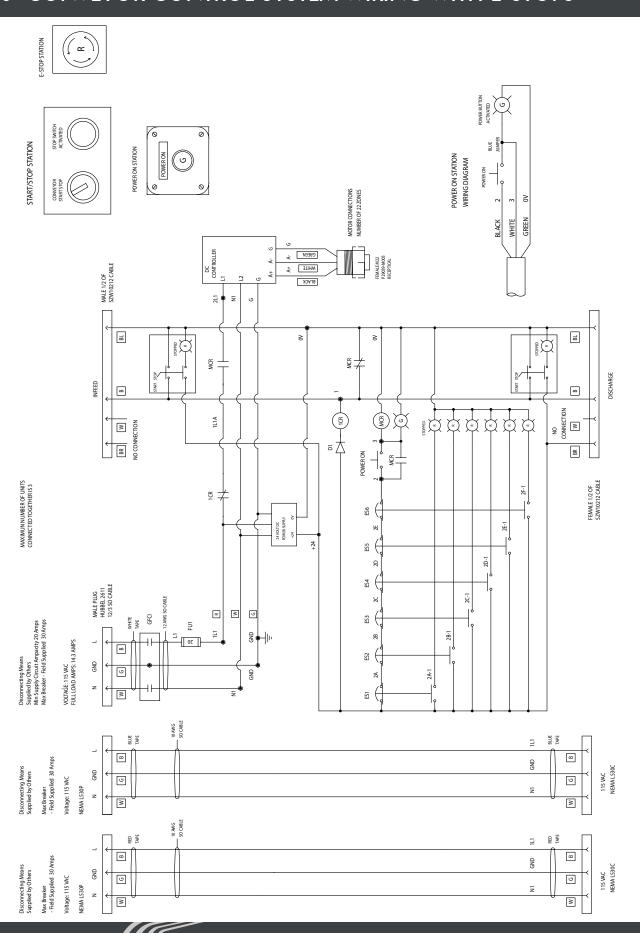


40' SC CONTROL SYSTEM E-STOP WIRING



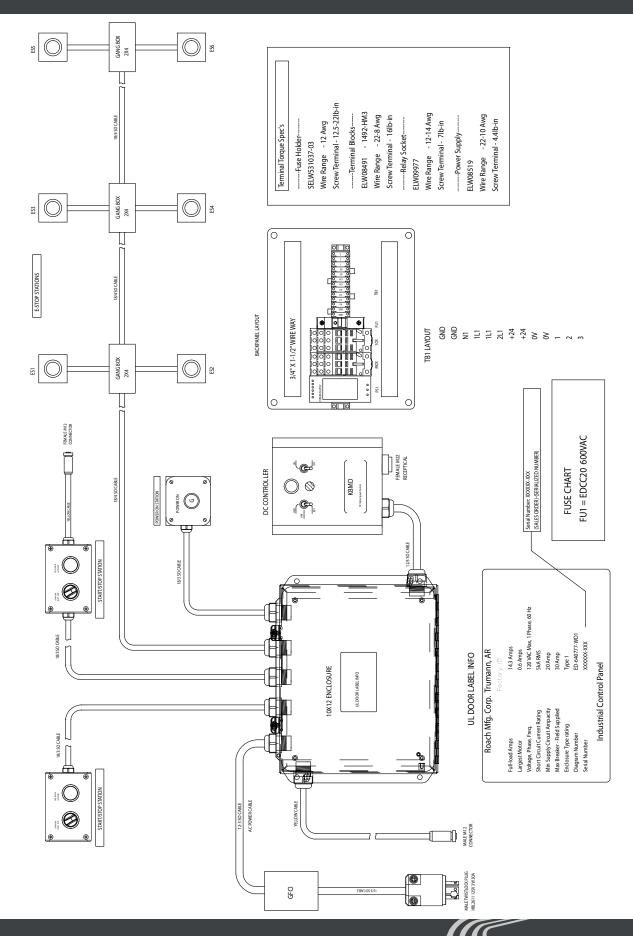


60' CONVEYOR CONTROL SYSTEM WIRING WITH E-STOPS



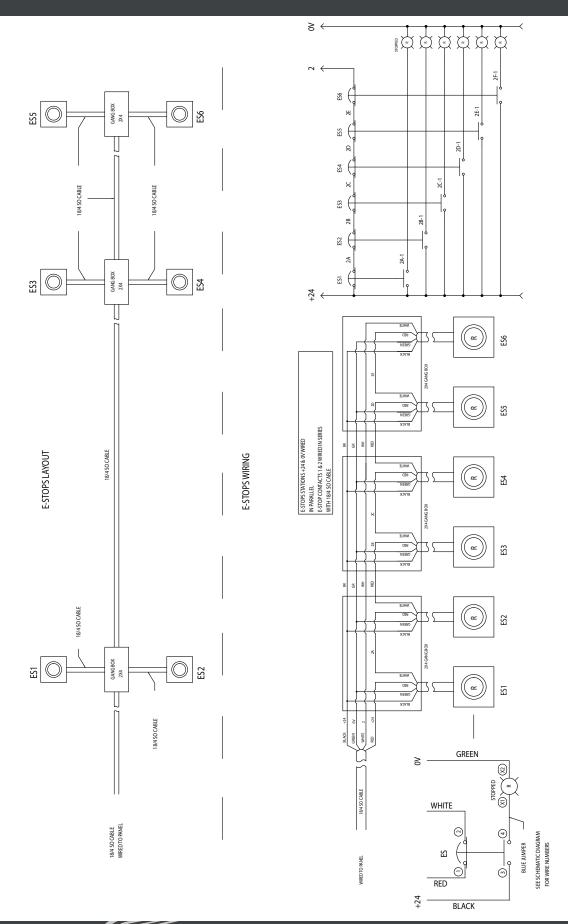


60' SC CONTROL SYSTEM PANEL LAYOUT WITH E-STOPS





60' SC CONTROL SYSTEM E-STOP WIRING





40' POWERED FLEXIBLE CONVEYOR W/ E-STOPS

ITEM	QTY	DESCRIPTION	PART NO.
1	1	30" INFEED MODULE W/ DRIVE @ 16 1/2"	551536-30IFMD16.5
2	13	30" INTERMEDIATE MODULE W/ DRIVE @ 16 1/2"	551536-30IMD16.5
3	1	30" DISCHARGE MOUDLE W/ DRIVE @ 16 1/2"	566912-30DMD16.5
4	8	CASTER SUPPORT ASSEMBLY	566912-S
5	5	CASTER SUPPORT WITH BRAKE ASSEMBLY	566912-BS
6	3	CASTER SUPPORT WITH HANDLE	566912-HS
7	1	POWER FLEXIBLE ENCLOSURE MOUNT	535013-7
8	2	START/STOP MOUNTING BRACKET (2-HOLE)	535013-6
9	1	START/STOP MOUNTING BRACKET (1-HOLE)	535013-2
10	1	RETRACTABLE HANDLE ASSEMBLY	566912-FPRCRH-30
11	1	DC CONTROLLER MOUNT AND COVER ASSEMBLY	568976-13
12	5	CLAMP PLATE	413224-5
	10	5/16" X 2" CARRIAGE BOLT	SFSW423549-01
	10	5/16"-18 FLANGED NUT	FSW09204
13	4	E-STOP MOUNTING BRACKET	531037-29
14	4	E-STOP GUARD	531037-28
15	4	E-STOP GUARD DEFLECTOR	531037-30
	8	5/16"-18 X 3/4" CARRIAGE BOLT	FSW04259
	8	5/16"-18 FLANGED NUT	FSW09204
16	2	GANG BOX MOUNTING PLATE	640776-2
		100 March 100 Ma	
		EEG G October 27: MANN	

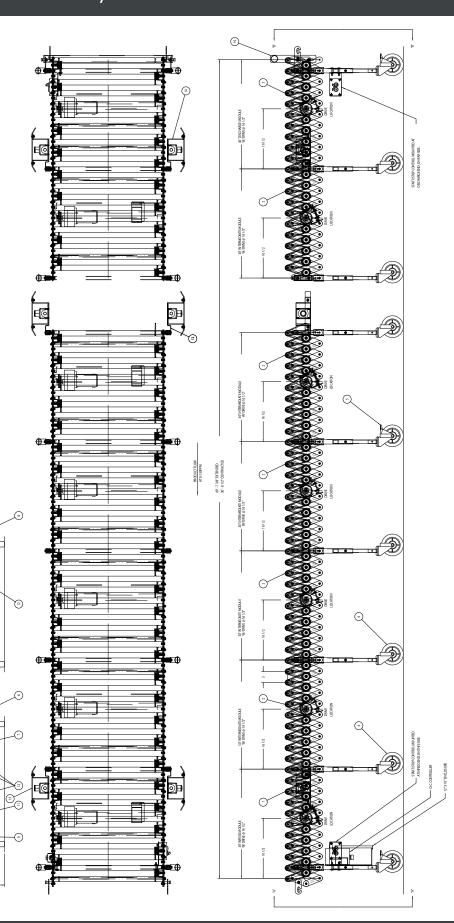


60' POWERED FLEXIBLE CONVEYOR W/ E-STOPS

ITEM	QTY	DESCRIPTION	PART NO.
1	1	30" INFEED MODULE W/ DRIVE @ 16 1/2"	551536-30IFMD16.5
2	20	30" INTERMEDIATE MODULE W/ DRIVE @ 16 1/2"	551536-30IMD16.5
3	1	30" DISCHARGE MOUDLE W/ DRIVE @ 16 1/2"	566912-30DMD16.5
4	10	CASTER SUPPORT ASSEMBLY	566912-S
5	7	CASTER SUPPORT WITH BRAKE ASSEMBLY	566912-BS
6	6	CASTER SUPPORT WITH HANDLE	566912-HS
7	1	POWER FLEXIBLE ENCLOSURE MOUNT	535013-7
8	2	START/STOP MOUNTING BRACKET (2-HOLE)	535013-6
9	1	START/STOP MOUNTING BRACKET (1-HOLE)	535013-2
10	1	RETRACTABLE HANDLE ASSEMBLY	566912-FPRCRH-30
11	1	DC CONTROLLER MOUNT AND COVER ASSEMBLY	568976-13
12	5	CLAMP PLATE	413224-5
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14	6	E-STOP GUARD	531037-28
15	6	E-STOP GUARD DEFLECTOR	531037-30
	12	5/16"-18 X 3/4" CARRIAGE BOLT	FSW04259
	12	5/16"-18 FLANGED NUT	FSW09204
16	3	GANG BOX MOUNTING PLATE	640776-2

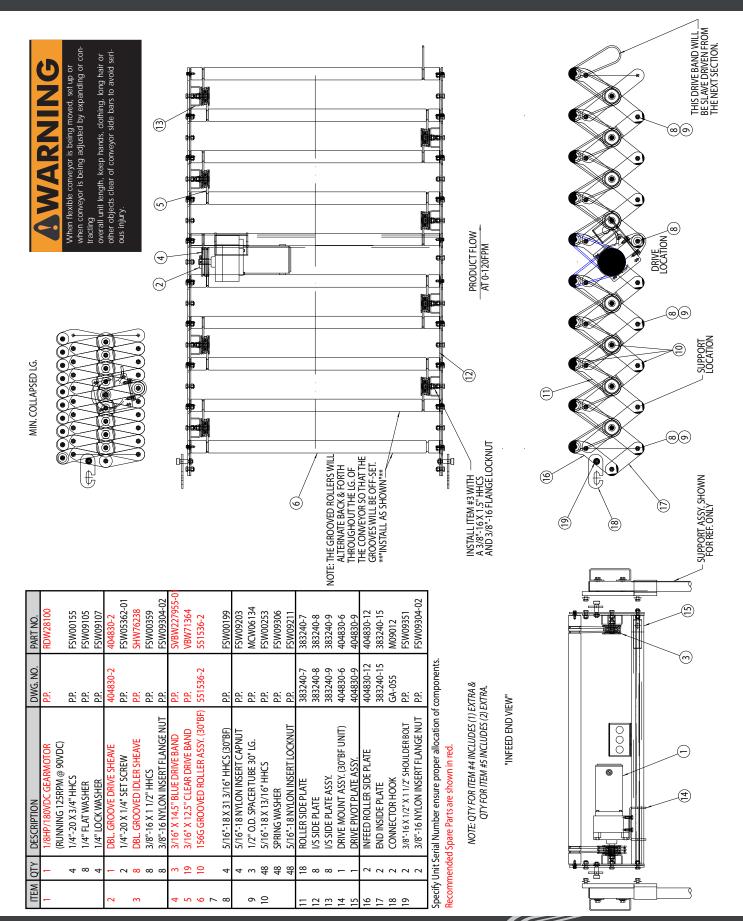
VIEW TB - 18* DISCHARGE BND — 30 13/32

WEW X* - X*



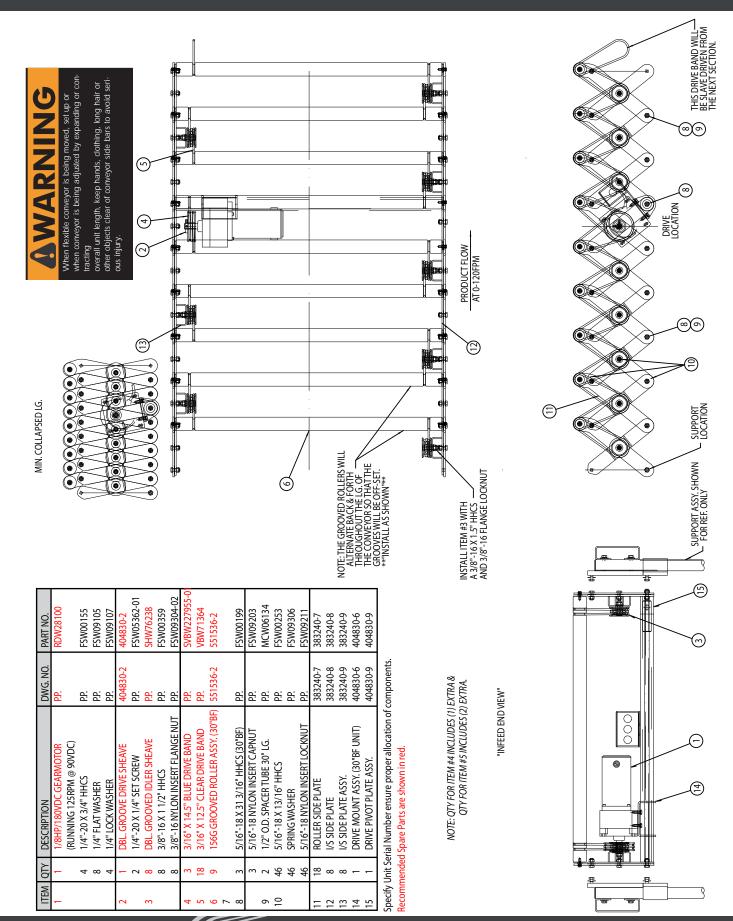


45" INFEED MODULE WITH DRIVE AT 22-1/2"



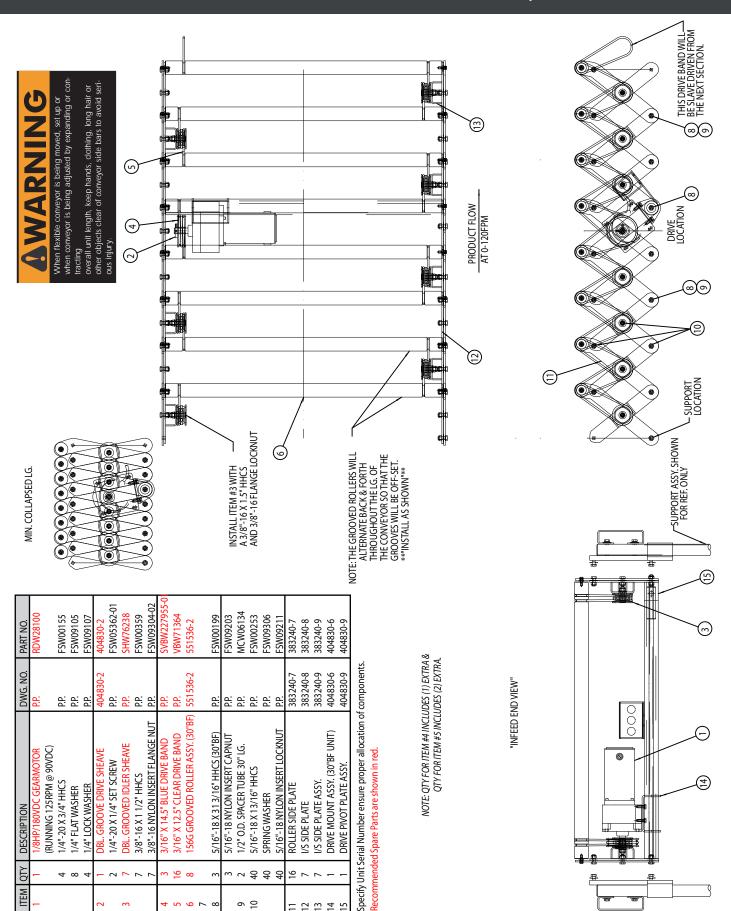


45" INTERMEDIATE MODULE WITH DRIVE AT 27-1/2"



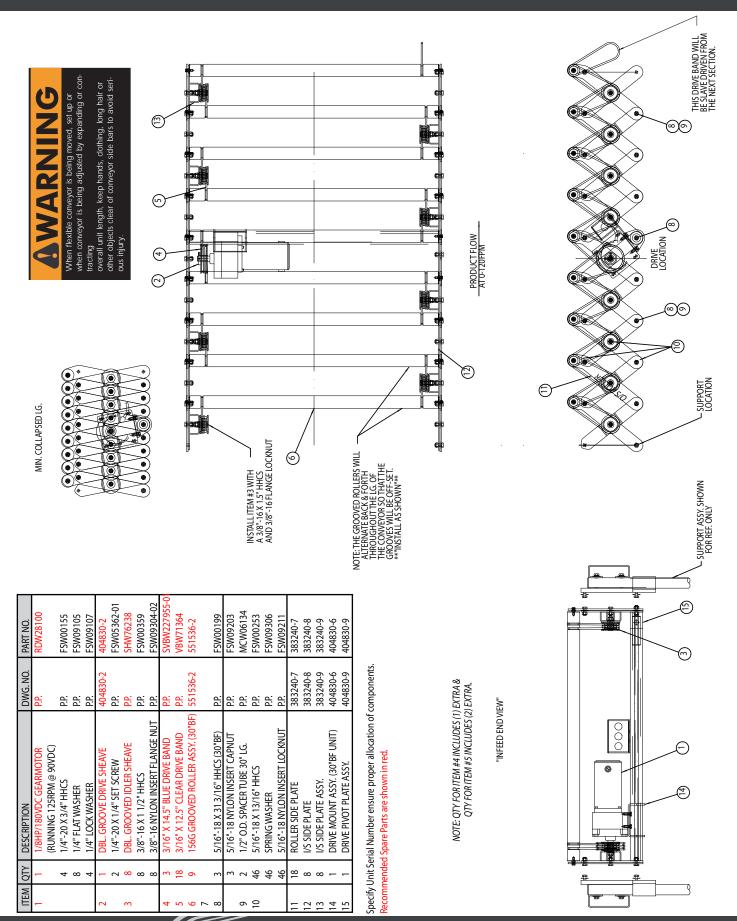


40" INTERMEDIATE MODULE WITH DRIVE AT 22-1/2"



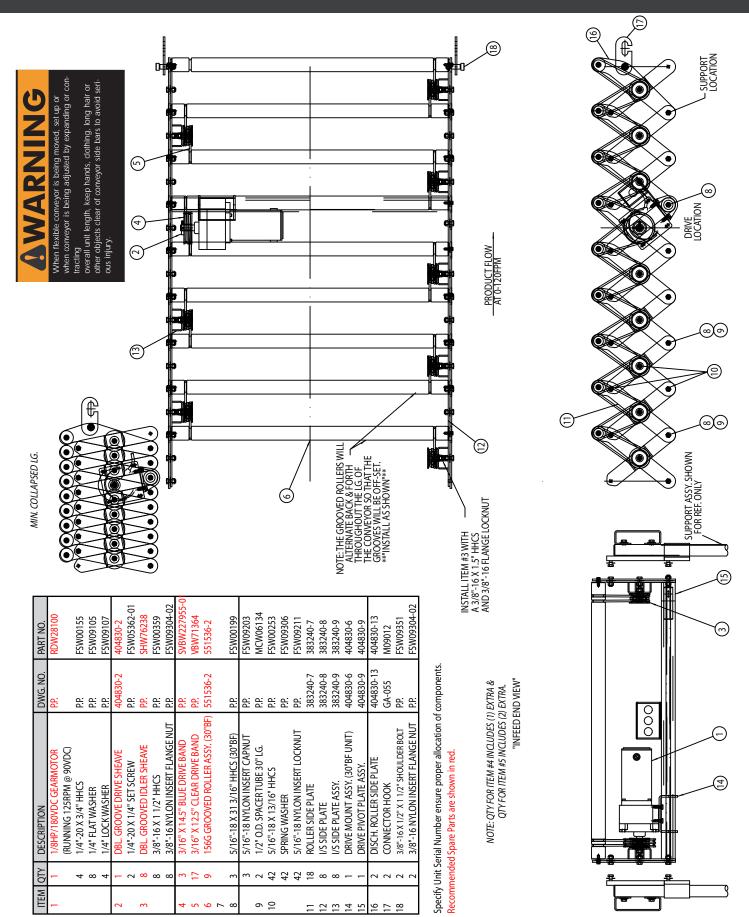


45" INTERMEDIATE MODULE WITH DRIVE AT 22-1/2"





40" DISCHARGE MODULE WITH DRIVE AT 27-1/2"



NOTES

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NOTES



ROACH CONVEYORS WARRANTY

- Materials used by Roach Conveyors 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--

Roach Conveyors 808 Highway 463 North Trumann, AR 72472-1310