

# intersystems

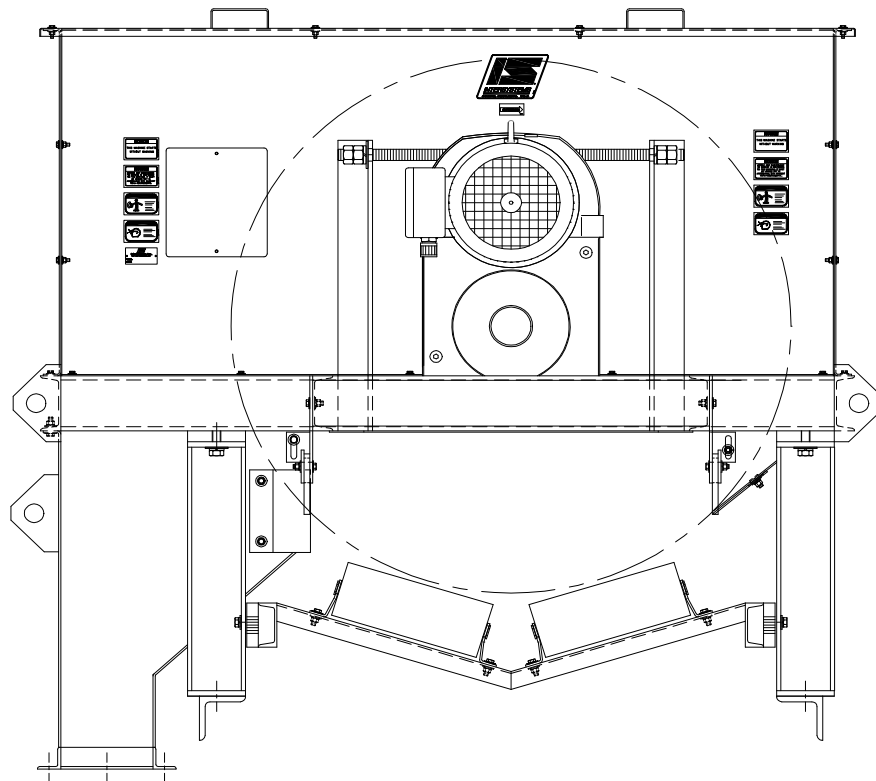
## Model RS Sampler Manual

**Safety**

**Installation**

**Operation**

**Maintenance**



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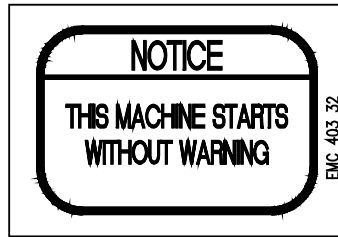
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# I. GENERAL SAFETY INFORMATION

**SAFETY FIRST!** The symbols shown identify examples of the safety labels and signs to be found on Intersystems equipment. They are affixed to the equipment to warn of danger to persons and of possible equipment damage. These signs must never be removed, tampered with, painted over or obscured in any way. (See Page 4 for label locations.) If labels are damaged or become unreadable, replacement labels are available from Intersystems. The user must institute a continuing program to instruct all personnel in safe operating and maintenance procedures, and to insure that all safety devices, guards, and covers are intact and operable, and that all safety signs are legible.



STARTS W/OUT WARNING  
EMC40332

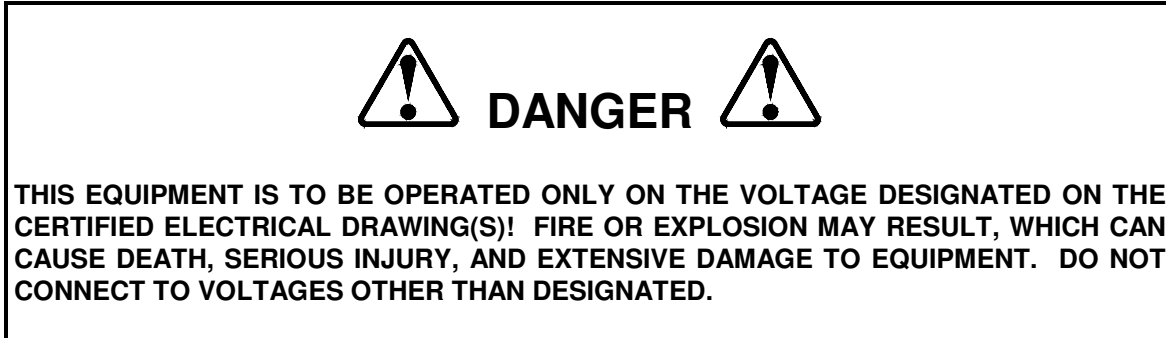


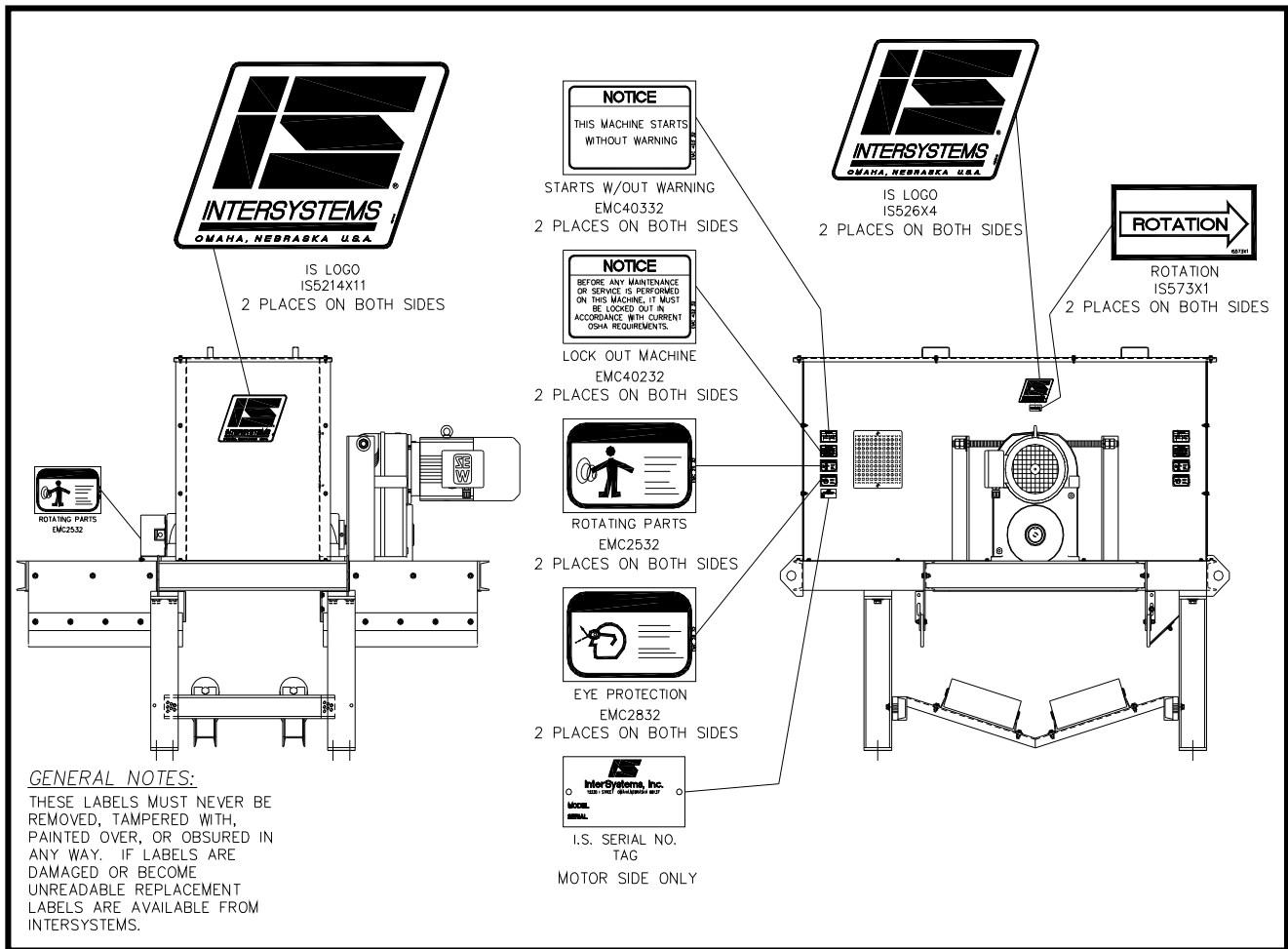
MOVING PART  
EMC3032

Consult Intersystems before making any changes to the sampler or its operating environment. Careless changes could result in death or serious injury to people, and reduce the performance and service life of the equipment.

Never perform any service on this equipment or any other powered equipment until all power has been shut off and locked out so that it cannot be restored without the consent and knowledge of the person who interrupted power. Power includes electrical, fluid, mechanical, or pneumatic energy.

Never perform any service on this equipment without utilizing the required PPE (personal protective equipment). Refer to the MSDS(s), material safety data sheet(s), on all the products to which this equipment is in contact with to determine what PPE is required.





**FIGURE 1-1, RS SAMPLER SAFETY LABEL LOCATIONS**

## II. GENERAL INFORMATION

### 2.1 System Description

The RS Sampler is designed to collect a representative sample of granular, flake, pellet, or other materials from a belt conveyor. Figure 2-1 illustrates a typical RS Sampler application.

Sample collection is initiated in response to either an operator's manual command or a signal automatically generated by controller logic, usually time-based but which could also be volume or quantity based. A sample cycle begins when an electric motor rotates the sample cutter through the product flow to collect a sample of the material. The sample flows into the sample cutter and is discharged as it swings off the edge of the conveying belt. The sample cutter, when at rest, is situated in the 12 o'clock position away from the material flow. The sample from the sample cutter falls down and out the discharge chute to the desired sample collection point, at which point an Intersystems SCS Sample Collection System (optional) may be installed.

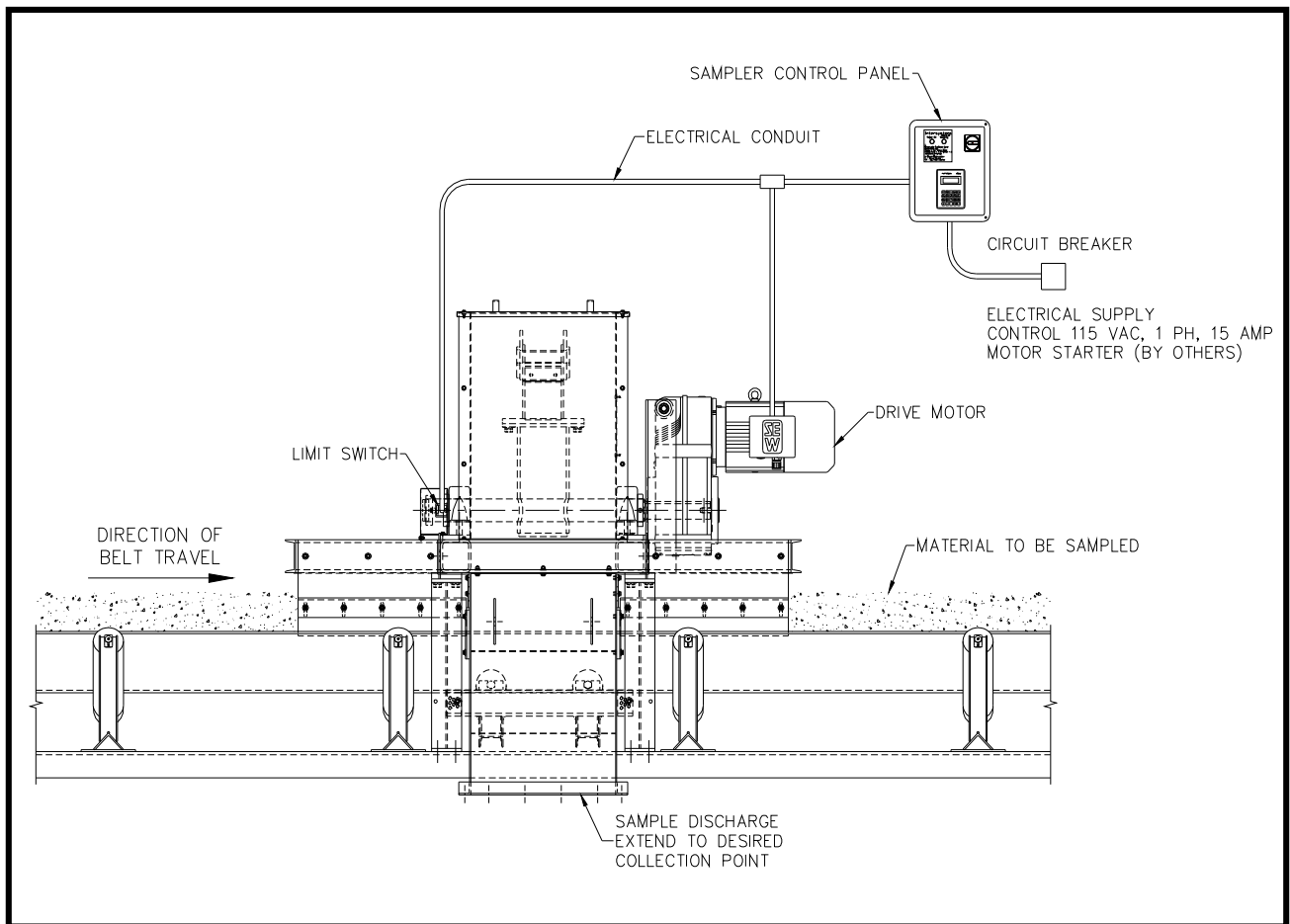


FIGURE 2-1, TYPICAL INSTALLATION, MODEL RS SAMPLING SYSTEM

## 2.2 Optional Features

The certified drawings indicate which, if any, optional features are included with a sampling system. Some of the more frequently specified optional features are briefly described in the following list.

- A. Controller arranged to initiate a sampling cycle based on quantity or volume of material passing through conveying line rather than upon elapsed time periods.
- B. Explosion-Proof Sampling System. There are several major differences in an explosion-proof sampler as compared to a standard sampling system. An explosion proof sampler will typically have the following features.
  - 1. An explosion-proof limit switch with the rating of:
    - Class 1, Groups C & D, Division 1 & 2
    - Class 2, Groups E, F & G, Division 1 & 2
  - 2. An explosion-proof motor with the rating of:
    - Class 1, Groups D, Division 1 & 2
    - Class 2, Groups E, F & G, Division 1 & 2

The explosion proof sampler control is available in two enclosure classifications.

- 1. The NEMA 9 control with the rating of:
    - Class 2, Groups E, F & G, Division 1 & 2
  - 2. The NEMA 7 control with the rating of:
    - Class 1, Groups C & D, Division 1 & 2
    - Class 2, Groups E, F & G, Division 1 & 2
- C. Components of special materials, such as 316 stainless steel, monel, inconel or nedox coatings.
  - D. Abrasion resistant linings of urethane, AR carbon steel plate, 304 stainless steel or ceramic tile.

## 2.3 Material Sampled

Most materials from light to heavy density granules, flakes and pellets.

## 2.4 Sampler Construction

Standard sampler construction is of painted carbon steel. Type 304 Stainless Steel other materials and/or finishes appropriate to the operating environment and the material or product being sampled may be used. Refer to the certified drawing(s) for any optional or special components installed on the sampler.

## **III. GENERAL INSTALLATION REQUIREMENTS**

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### **3.1 Receiving Inspection**

Carefully inspect the sampling system for damage as soon as it is received. Also, verify that the quantity of parts or packages actually received corresponds to the quantity shown on the packing slip. Report any damage or shortage to the delivering carrier as soon as possible. Intersystems' responsibility for the equipment ended with acceptance by the delivering carrier. Refer to the bill of lading.

### **3.2 Pre-Installation Preparation**

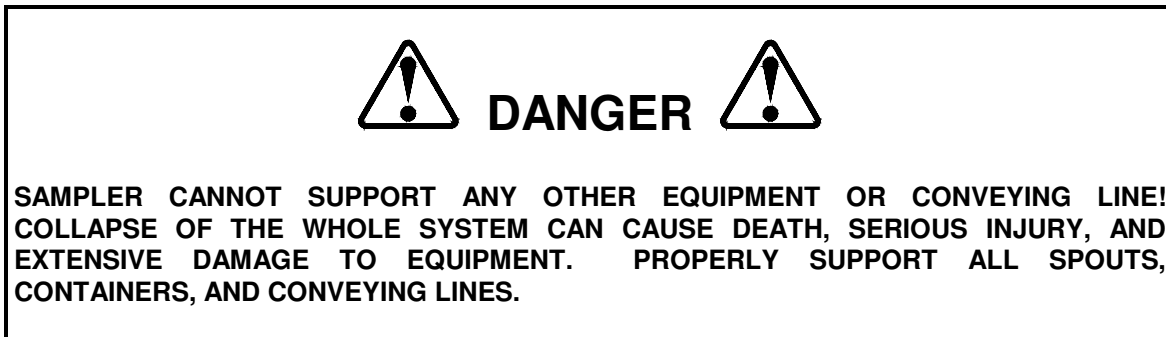
Note, before starting sampling system installation, study this manual, the certified drawing(s) furnished with the system, and other applicable documents (including, but not limited to OSHA Regulations; the National Electrical Code; and all other applicable federal, state, and local codes and regulations).

### **3.3 Location**

The RS sampler is mounted above belt conveyor carrying the product to be sampled as in Figure 2-1. The sampler axis is installed parallel to the centerline of the belt conveyor. The sampler and associated equipment should be located for ease of access and maintenance.

The sampler is to be installed only as shown on the certified drawing(s). If an alternate mounting arrangement is desired, contact Intersystems prior to installation for proper guidance. The sampler is of a general design with modifications specifically for your application. It may be necessary to rework the sampler in order for it to function properly if you alter the application.

### 3.4 General Mounting Guidelines



- A. Locate and mark the desired mounting location of the sampler on the conveyor frame where the support legs are to be bolted. Customer to ensure suitability of conveyor to support sampler. If conveyor can not support sampler additional bracing is required.
- B. Position sampler and fasten in place.
- C. Install idler rollers under the sampler so as to have rollers touch belt when no material is present.
- D. Adjust the rubber skirtboards to touch edge of belt.
- E. Jog sample cutter so cutter is bottom dead center on belt. Measure distance from cutter blade wipers to top of belt. NOTE: Pay attention to belt as cutter crosses. The idler rollers may need to be readjusted if cutter contacts belt only on the sides and not the bottom.
- F. Jog sampler back to top and adjust wipers accordingly. Repeat this procedure until cutter blade wipers firmly contact belt.
- G. Once sample cutter is adjusted attach discharge hopper. Note rubber belt seals on the hopper will need to be field cut to fit belt profile.

### 3.5 Material Sample Transport Lines

The discharge chute used to transport material samples must be compatible with the operating environment and the material sampled. The discharge chute should be routed to allow material to flow via gravity to a convenient collection point. At that point the discharge chute may be connected to a collection jar bracket or a Sample Collection System cabinet.

Make all connections airtight and make sure all interior surfaces of joints are smooth and flush. Any ragged or raised ends will collect dust and debris as well as retard material flow. Escaping sample material can contaminate surrounding atmosphere and equipment.

### 3.6 Controller Location

- A. Use vibration isolation pads when mounting the control enclosure or mount the controller in a vibration-free location.
- B. Unless ordered for severe duty, locate controller so it is protected from water and dust.
- C. Unless an explosion-proof rated controller was specifically ordered, DO NOT locate the controller in a hazardous area.

D. Most applications require that the sampler be in easy view of the controller.

## **3.7 System Wiring**

Refer to the certified electrical drawing(s) for specific wiring requirements. As explained in Paragraph 4.2.5, the 19-position barrier terminal strip on the circuit board mounted INSIDE the controller enclosure is the connection point for ALL external circuitry.

The controller was completely assembled and tested with the sampler before it left the factory. The electrical installation must comply with OSHA Regulations; the National Electrical Code; and all other applicable federal, state, and local codes and regulations.

If wiring between the controller and the sampler unit is run through rigid conduit, use a short length of flexible conduit to connect wiring to the sampler. This will isolate the rigid conduit from any vibration originating in the product conveying line and sampler.

### **3.7.1 Electrical Power Requirements, System**

110/120 VAC 50/60 Hz, Single Phase, 20 Amp Service.  
Optional - 220/240 VAC 50/60 Hz, Single Phase, 10 Amp Service.

Refer to the certified electrical drawing(s) for specific wiring requirements. InterSystems strongly recommends that electrical service to the sampling system be an isolated line. Voltage fluctuations and line noise can affect the controller's circuit board, thus causing the sampler to malfunction.



#### **3.7.1.1 Controller**

110/120 VAC, 50/60 Hz, Single Phase, 2 Amp Max. (does not include motor power requirements).  
Optional - 220/240 VAC, 50/60 Hz, Single Phase, 1 Amp Max. (does not include motor power requirements).

#### **3.7.1.2 Drive Motor**

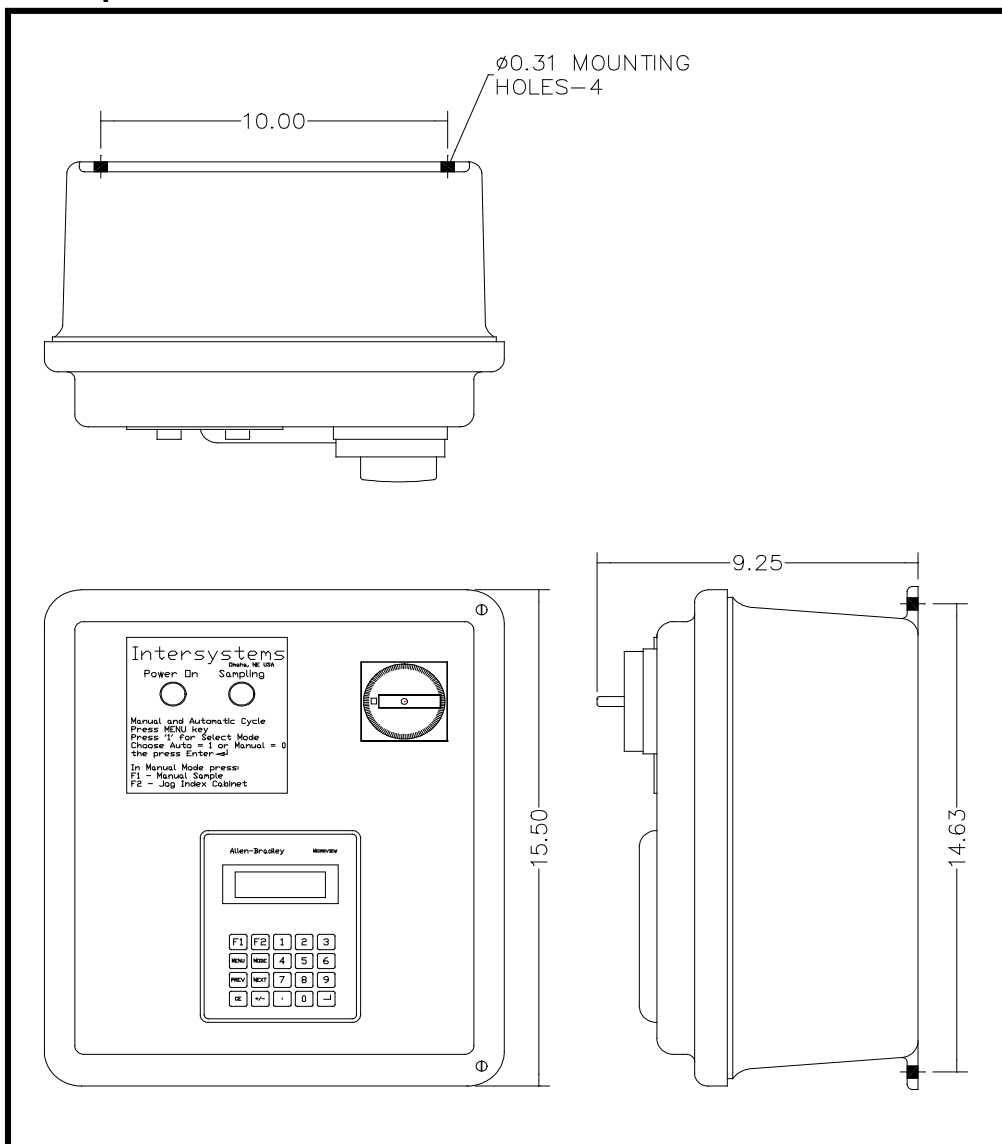
Refer to the certified drawing(s) of the RS sampler for motor size, horsepower, voltage, and current rating.

## IV. OPERATIONS AND ADJUSTMENTS

**DANGER**

**FAILURE TO OBSERVE ALL SAFETY RULES, WRITTEN AND IMPLIED, AND THOSE SUGGESTED BY COMMON SENSE, CAN RESULT IN DEATH, SERIOUS INJURY, AND /OR EQUIPMENT DAMAGE. LOCKOUT POWER BEFORE PERFORMING ANY MAINTENANCE.**

### 4.1 Control Components And Their Functions

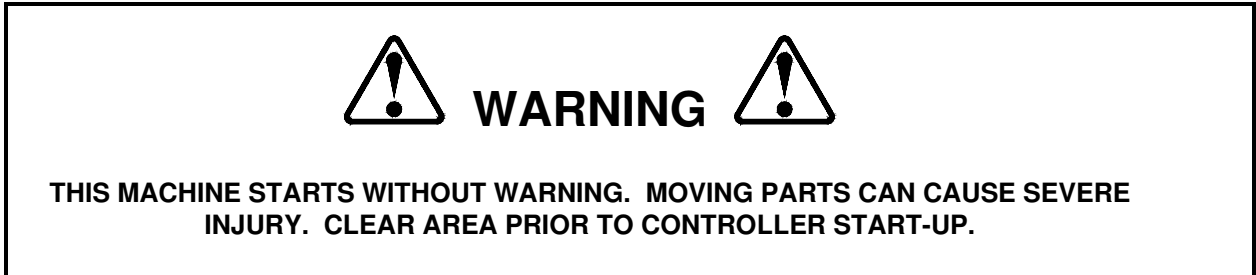


**FIGURE 4-1, STANDARD NEMA 4 CONTROL PANEL DETAIL**

Refer to the certified electrical drawing(s) for dimensions on control panels with optional features.

#### 4.1.1 POWER OFF/ON Switch S-1

The Power OFF/ON switch controls all electrical power to the controller. Sampler motor 3 phase power requires an additional disconnect switch by others..



#### 4.1.2 POWER Pilot Light

This light is illuminated as long as power is available to the controller and the POWER switch (S-1) is set to ON.

#### 4.1.3 SAMPLING Pilot Light

This light will illuminate when a sampling cycle has been initiated and will stay lit until CR-1 has been turned off for controller series 543917. The light will stay illuminated until the starter coil has been de-energized.

#### 4.1.4 Control Components And Their Functions

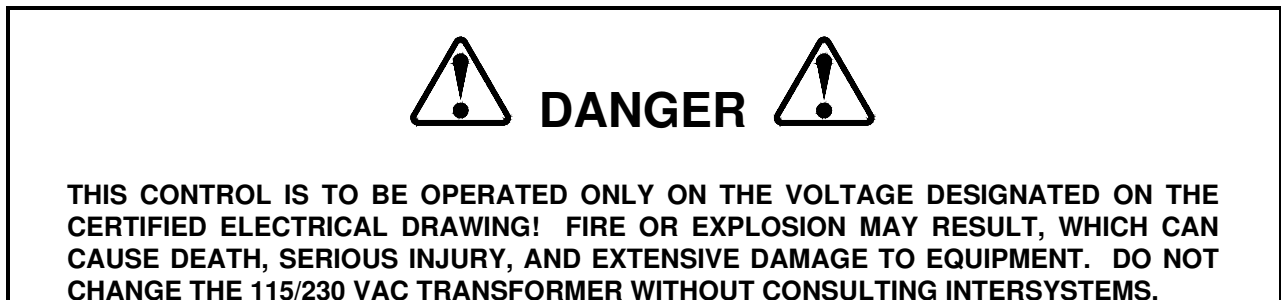
The operator keypad is the source of all input necessary to operate the control. The operator keypad is set-up using linked menus to step through the operation of the control. See manual 543916 for further information on the sampler controller.

#### 4.1.5 Terminal Strip

This 19-position barrier terminal strip is located inside along the bottom right corner of the control enclosure. It serves as the controller's interface and connection point for all external circuits and for the components mounted in the enclosure. Refer to the certified electrical drawing(s).

#### 4.1.6 Power Transformer

The control is equipped with a transformer which converts 120/240 volt incoming power to 24VDC for the operation of the PLC, Microview, display lights, input signals and operation of the control relays. Refer to the certified electrical drawing(s).





## 4.1.7 Control Relays

The control is equipped with four control relays, which are driven by the PLC output signals. Each relay has a mechanical flag indicator showing the relay is energized. The relay coil is operated using 24VDC while the relay contacts are wired for 120/240 volts. Refer to the certified electrical drawing(s).

## 4.1.8 Main Fuse F1

This fuse is located along the top edge of the control next to the base of the on/off switch. The fuse rating will change depending on the type of sampler being used. This fuse protects the controller and sampler components against overloads and short circuits.

For 120/240 VAC, 1PH operation use ONLY a Buss Type FNM, 250 Volt Slo-Blo fuse or equal.

### 4.1.8.1 Transformer and PLC Fuse F2

This fuse is located to the left of the main fuse, protects the power transformer and PLC against overloads and short circuits. Use ONLY a Buss Type AGC, 1 Amp, 250 Volt fast acting fuse or equal.

## 4.1.9 Micrologix PLC

The PLC for the control is a 10 point Allen Bradley Micrologix controller. The PLC operates on 24VDC and is prewired to the proper terminal strip inputs and outputs. The processor program is protected to prevent any alterations to the existing program. This control is design only to run Intersystems equipment.

## 4.2 Sampler Mounted Electrical Components

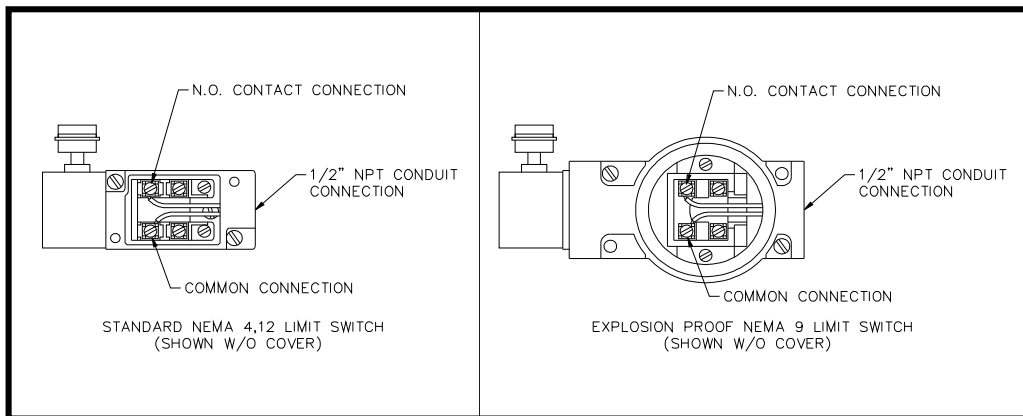


FIGURE 4-2, LIMIT SWITCH CONNECTIONS

### 4.2.1 Limit Switch, LS-1

This switch is actuated when the sample cutter is in its home position. Upon initiation of a sample cycle the sample cutter rotates the cam tripping the limit switch. The normally open contacts on the limit switch close and

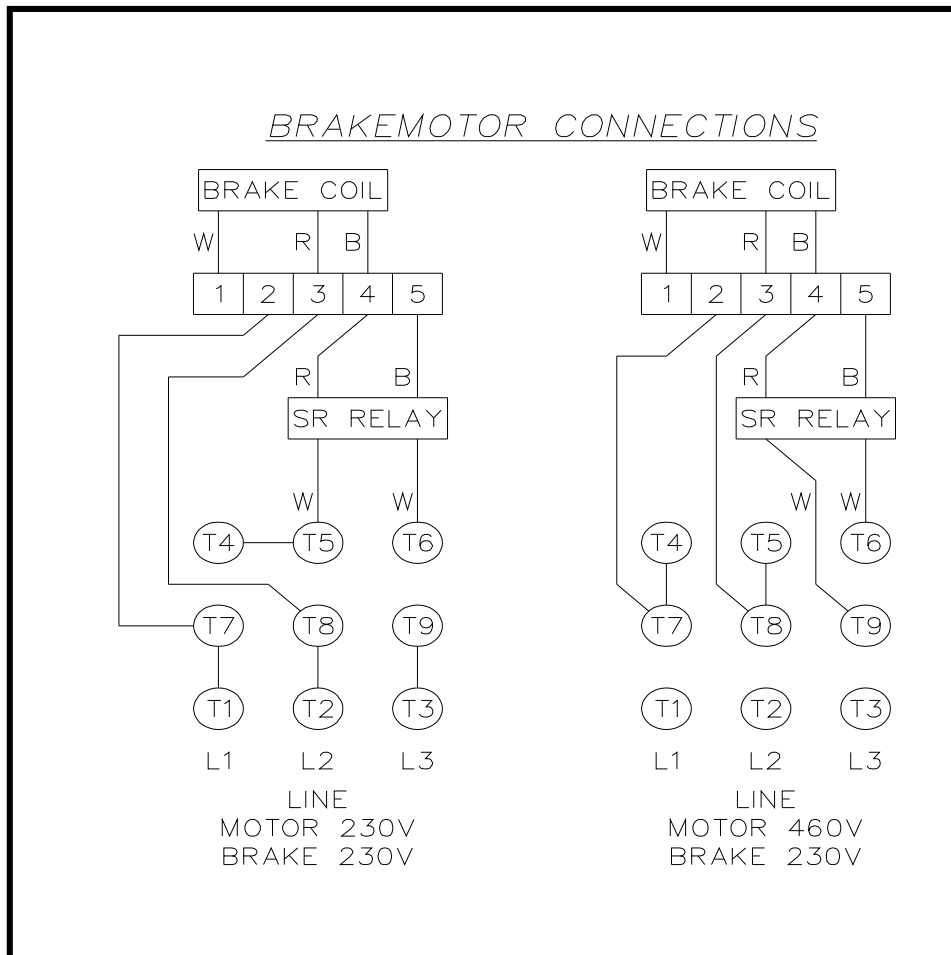
power is supplied directly to the drive motor starter. When the limit switch is actuated the opening of the normally open contacts removes power to the drive motor starter thus stopping the sample cutter rotation.

Correct wiring termination is essential to proper sampler operation. Refer to figure 4-3, it shows the limit switch utilized on the RS sampler and the physical orientation of the proper wiring connections.

### 4.2.2 Drive Motor

This motor drives the sample cutter rotation through an in-line gear reducer. A label is located on the motor designating the correct direction of rotation (reference Figure 1-1). Verify that the motor is turning the proper direction of rotation when wiring the system. On initial setup, jog the motor to insure proper rotation.

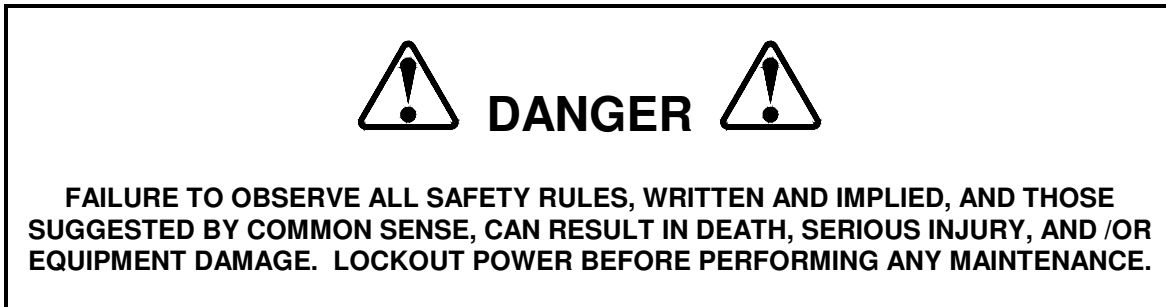
**NOTE: DO NOT RUN THE MOTOR THE WRONG DIRECTION. DAMAGE TO THE LIMIT SWITCH ARM MAY RESULT.**



**FIGURE 4-3, MOTOR BRAKE WIRING DIAGRAMS**

## V. MAINTENANCE AND REPAIR

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### 5.1 General Maintenance

A good maintenance program involves thorough general housekeeping, adequate periodic re-lubrication, and replacement of worn or damaged components.

### 5.2 Periodic Inspection

At regularly scheduled intervals, while observing all safety precautions, observe the sampler as it operates. Inspect for:

- A. Loose or missing hardware
- B. Noisy motor or motor/reducer bearings
- C. Overheated motor or reducer
- D. Adequate lubricant in gear reducer
- E. Structural damage
- F. Rust or corrosion
- G. Damaged wiring, including exposed conductors and connections

H. Make sure that all guards are in place and that all warning labels are in place and legible. Section I, GENERAL SAFETY INFORMATION, explains the purpose and intended location of the warning signs. Warning signs are an important part of any safety program; replace any missing signs IMMEDIATELY!

## 5.3 Lubrication

### 5.3.1 Pillow Block Bearing

The pillow block bearings have been greased at the factory. Re-greased once a year using a multi-purpose grease.

### 5.3.2 Gear Reducer

The gear reducer is shipped filled with oil. Check the oil level every six months and add oil if required. Under normal sampler operating conditions the oil should be changed once every two years.

Use a gear lubricant with an AGMA #5 rating for normal operating conditions. Use a synthetic gear lubricant such as "Mobil SHC 630" for extreme operating conditions.

### 5.3.3 Oil Capacities

SAMPLER SIZE	GEAR REDUCER OUTPUT RATIO	PRIMARY RDCR OIL CAPACITY OZS(QTS)	GEAR REDUCER STAGES
RS-18	27.4:1	96(3)	2 STAGE
RS-24	27.4:1	96(3)	2 STAGE
RS-30	28.75:1	192(6)	2 STAGE
RS-36	28.75:1	192(6)	2 STAGE
RS-42	30.39:1	640(20)	2 STAGE
RS-48	30.39:1	640(20)	2 STAGE
RS-54	33.79:1	832(26)	2 STAGE
RS-60	33.79:1	832(26)	2 STAGE



## 5.4 Limit Switch Adjustment

Loosen and adjust the limit switch arm if required. The limit switch trips on a tripper attached to the shaft of the sample pelican and signals the control to remove power from the motor. It should trip to stop the sample pelican at the upright (12 o'clock) position.

## VI. TROUBLESHOOTING

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### 6.1 General RS Sampler Troubleshooting


**DANGER**


**CARELESS OR ACCIDENTAL RESTORATION OF POWER CAN RESULT IN DEATH OR SERIOUS INJURY. MAKE CERTAIN AREA IS CLEAR BEFORE REMOVING LOCKOUTS.**

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
Sampler does not cycle in either auto or manual modes (Power light Off).	Power switch OFF.	Turn power switch ON.
	Circuit breaker is open.	Reset breaker.
	Main fuse is blown.	Replace. Refer to Section 4.1.8.1
	Faulty supply wiring.	Correct. Refer to certified electrical schematic.
	Defective power switch.	Replace switch.
Sampler does not cycle in either auto or manual modes	Faulty system wiring.	Correct. Refer to certified electrical schematic.
	Motor power off.	Turn on.
	Motor starter heaters tripped.	Reset.
	Motor burnt out.	Replace.
Sample size too small or large.	Sample interval timer or counter set too high or low.	Adjust sample interval timer refer to controller manual 543916.
Sampler cycles continuously.	Limit switch not activating.	Adjust limit switch. Refer to Section 5.4

## 6.2 PLC Troubleshooting

<b>SYMPTOM</b>	<b>POSSIBLE CAUSE</b>	<b>CORRECTIVE ACTION</b>
Power light on but no display on keypad.	Communication cable between PLC and keypad is loose.	Check both ends of cable are firmly seated in the PLC and keypad.
Sampler runs in Manual but does not run in Automatic.	Remote enable jumper missing.  Control has been selected with index cabinet or purge options. Index cabinet is not being used.	Install remote enable jumper between contact 1 & 2 on terminal strip. Refer to certified electrical schematic. Referring to controller manual 543916. Turn off index cabinet and purge options.
PLC displays output light for cycling Sampler, but sampler does not run.	Bad relay between sampler output and motor starter. Motor power off.	Replace relay. Refer to the certified electrical schematic. Turn on.

**NOTE: RS SAMPLERS REQUIRE THE PROGRAM MODE BE PROGRAMMED FOR MODE "3" (THREE). IF THE PROGRAM MODE IS NOT CORRECTLY SET SYSTEM DAMAGE MAY OCCUR.**

## VII. REPLACEMENT PARTS

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### 7.1 Scope

The certified drawings list the non-standard components that have been incorporated into the equipment. Intersystems normally stocks non-fabricated parts and non-custom OEM parts. Replacement parts for any other components, including fabricated parts and custom OEM components can be supplied upon request.

### 7.2 Ordering Parts

Direct parts orders or requests for technical assistance to your sales representative or to:

**Intersystems**  
**9575 N 109th Ave**  
**Omaha, NE 68142**  
**Phone 402.330.1500**  
**Fax 402.330.3350**

Please have available the MODEL NUMBER, SERIAL NUMBER and CUSTOMER ORDER NUMBER of the equipment in question as well as the location where the sampler is INSTALLED.

### 7.3 Replacement Parts

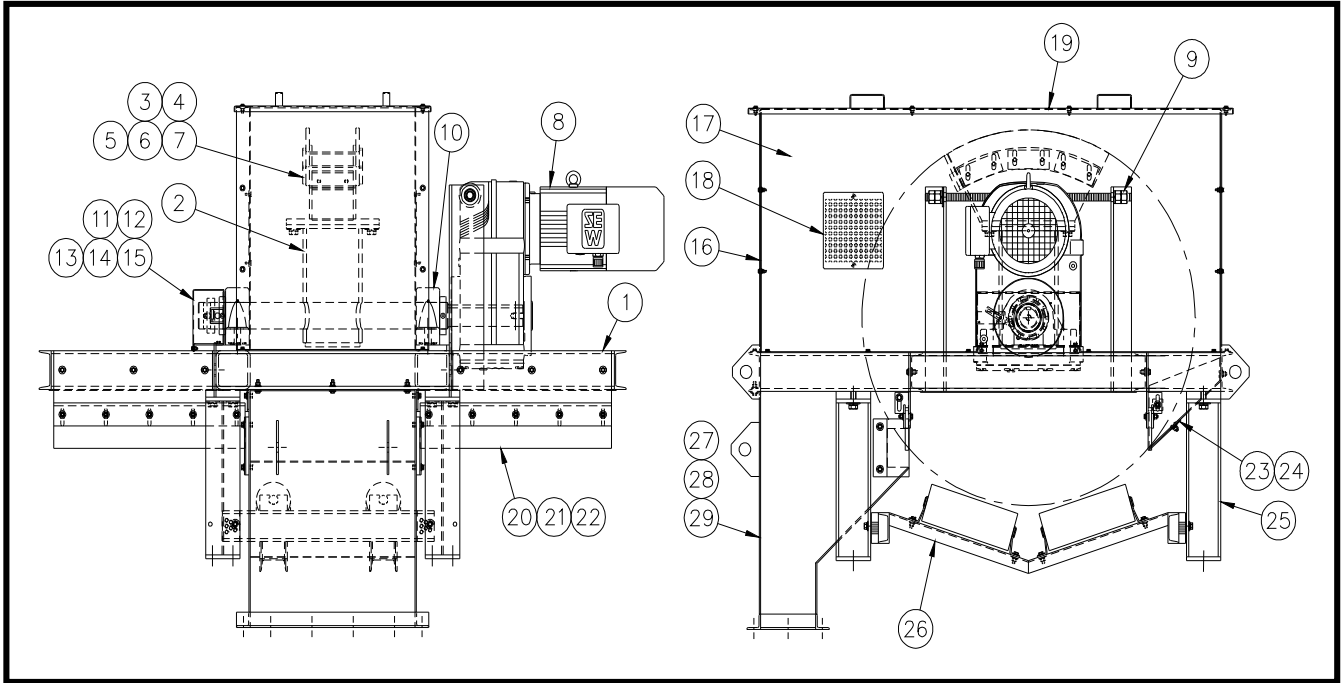
The Intersystems sampler is a quality built piece of machinery. As with any machine, parts do wear out and fail. It is Intersystems' recommendation that a small supply of spare parts be kept on hand to cover any minor breakdowns. A separate priced Spare Parts List will be sent identifying the suggested spare parts. It is also necessary to check the certified drawings, which will list any special or custom components utilized on this equipment.

### 7.4 Repair Kits

The Following chart lists repair kits and parts that are available from Intersystems. These kits are offered as a more economical solution by rebuilding the defective part rather than replacing it. However in some cases the part may be beyond repair and replacement will be necessary.

<b>Product Code</b>	<b>Description</b>
546497	Oil Synthetic Gear Lube SAE 90 Quart
35527	Limit Switch Contact Block 1 N.O. 1 N.C.

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**FIGURE 7-1, RS SAMPLER ELEVATION VIEWS**

### 7.4.1 Sampler Parts Listing RS (see Figure 7-1)

ITEM NO.	QTY	DESCRIPTION	MACHINE SIZE (CONVEYOR BELT WIDTH)			
			18	24	30	36
1	1	FRAME 35 IDLER	546633	546621	546594	546536
2	1	PELICAN & SHAFT 35 IDLER	546634	46620	546595	546537
3	1	CUTTER BLADE 35 IDLER	546612	546610	546519	546516
4	1	PELICAN WIPER REAR RS 6"	545778	545778	545778	545778
5	1	RS PELICAN WIPER RETAINER	545777	545777	545777	545777
6	1	PELICAN WIPERS SIDE 35 IDLER	546613	546611	546520	546517
7	6	PELICAN WIPER RETAINER	546614	546518	546518	546518
8	1	GEARMOTOR	545575	545575	545549	545549
9	1	TORQUE ARM KIT	541018	541018	545545	545545
10	2	BEARING PB NON EXP	300919	300919	300915	300915
11	1	LIMIT SWITCH CAM	545661	545661	546535	546535
12	1	LIMIT SWITCH NEMA 4	26402	26402	26402	26402
13	1	LIMIT SWITCH ROLLER ARM	35341	35341	35341	35341
14	1	LIMIT SWITCH BRACKET	546618	546618	546538	546538
15	1	LIMIT SWITCH GUARD	546619	546619	546539	546539
16	2	END PANEL 35 IDLER	546635	546615	546596	546580
17	1	SIDE PANELS	546636	546616	546597	546581
18	2	INSPECTION COVER	545745	545745	545745	545745
19	1	TOP COVER 35 IDLER	546637	546617	546598	546582
20	2	SKIRTBOARD BRACKET	546642	546622	564599	546583
21	4	SKIRTBOARD RUBBER	546638	546623	546600	546584
22	4	SKIRTBOARD RETAINER	546639	546624	546601	546585
23	1	BOTTOM COVER 35 IDLER	546640	546625	546602	546586
24	1	INSERT AR	546526	546526	546526	546526
25	1	LEG SET 35 IDLER	546643	546626	546606	546590
26	1	INTERMEDIATE ROLLER SET	546645	546628	546604	546588
27	1	DISCHARGE HOPPER	546648	546630	546607	546591
28	2	RUBBER BELT SEAL	N/A	546512	546512	546512
29	2	RUBBER BELT SEAL RETAINER	N/A	546513	546513	546513

#### 7.4.1 Sampler Parts Listing RS (see Figure 7-1)

ITEM NO.	QTY	DESCRIPTION	MACHINE SIZE (CONVEYOR BELT WIDTH)			
			42	48	54	60
1	1	FRAME 35 IDLER	546504	545748	546680	545748
2	1	PELICAN & SHAFT 35 IDLER	545771	545752	546660	546661
3	1	CUTTER BLADE 35 IDLER	545769	545753	546651	546653
4	1	PELICAN WIPER REAR RS 6"	545778	545778	545778	545778
5	1	RS PELICAN WIPER RETAINER	545777	545777	545777	545777
6	1	PELICAN WIPERS SIDE 35 IDLER	545770	545754	546652	546654
7	6	PELICAN WIPE RETAINER	545777	545777	546650	546650
8	1	GEARMOTOR	545548	545548	546655	546655
9	1	TORQUE ARM KIT	545572	545572	545572	545572
10	2	BEARING PB NON EXP	300891	300891	300901	300901
11	1	LIMIT SWITCH CAM	545761	545761	546657	546657
12	1	LIMIT SWITCH NEMA 4	26402	26402	26402	26402
13	1	LIMIT SWITCH ROLLER ARM	35341	35341	35341	35341
14	1	LIMIT SWITCH BRACKET	545759	545759	546658	546658
15	1	LIMIT SWITCH GUARD	545760	545760	546659	546659
16	2	END PANEL 35 IDLER	546500	545749	546662	546665
17	1	SIDE PANELS	546501	545750	546663	546666
18	2	INSPECTION COVER	545745	545745	545745	545745
19	1	TOP COVER 35 IDLER	546502	545751	546664	546667
20	2	SKIRTBOARD BRACKET	546503	545757	546668	546671
21	4	SKIRTBOARD RUBBER	545774	545774	546669	546669
22	4	SKIRTBOARD RETAINER	545773	545773	546670	546670
23	1	BOTTOM COVER 35 IDLER	546505	545758	546672	546673
24	1	INSERT AR	546526	546526	546526	546526
25	1	LEG SET 35 IDLER	546507	545763	546684	546687
26	1	INTERMEDIATE ROLLER SET	546509	545764	546682	546685
27	1	DISCHARGE HOPPER	546506	546533	546676	546678
28	2	RUBBER BELT SEAL	546512	546512	546512	546512
29	2	RUBBER BELT SEAL RETAINER	546513	546513	546513	546513

## **VIII. WARRANTY**

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Intersystems reserves the right to make changes in design or in construction of equipment and components without obligation to incorporate such changes in equipment and components previously ordered.

**WARRANTY, LIMITATION OF LIABILITY, DISCLAIMER OF IMPLIED WARRANTIES:** Intersystems manufactured equipment and components are guaranteed against defects in workmanship or materials for one year from date of shipment. The obligation of Intersystems with respect to any goods is limited to replacement or repair of defective parts and equipment provided those parts are returned, shipping costs prepaid, to Intersystems' factory and provided the product has not been subject to misuse, negligence, or accident, or repaired or altered outside of our factory, or other than by an Authorized Service Representative. This warranty does not cover the replacement of parts inoperative because of wear occasioned by use, the cost of replacing parts by a person other than an Intersystems employee or an Authorized Service Representative, or the adjustment of a product where the product was improperly adjusted by the purchaser. In addition, this warranty does not cover components manufactured by others such as motors, drives, clutches, cylinders, valves, blowers, and the like. On those components the standard Manufacturers' warranty applies. In any event, liability is limited to the purchase price paid, and Intersystems will, under no circumstances, be responsible for special or consequential damages, or for incidental damages.

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