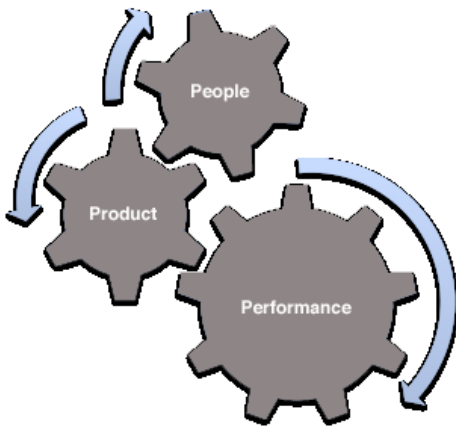




SERVICE MANUAL

Lint Slide Grid Moist Air Applicator



SAMUEL JACKSON

Warning



READ THIS CAREFULLY BEFORE OPERATING THIS SAMUEL JACKSON PRODUCT!

The Samuel Jackson product line consists of sophisticated technology capable of greatly enhancing a gin's productivity and efficiency. Improper use of these products could adversely affect those very same factors and potentially cause injury to gin personnel. For this reason, we include an extensive manual with every product. These manuals outline the proper and safe operating procedure for their respective product. **Do not operate any Samuel Jackson product without first reading the entire manual and all accompanying information.**

Sometimes there are updates added at the customer's discretion to products already in the field. We always refer customers to our website, www.samjackson.com for the latest product information. The latest manual can be downloaded or printed from the website free of charge. In addition to printed literature, the website includes training videos on several popular products. When available, these videos are highly recommended for viewing before operating a respective product. If you do not have internet access, give us a call and we will gladly send you the latest product information.

Please consult the gin safety administrator to help identify all hazards and become knowledgeable regarding all necessary personal protective equipment prior to any service work being performed on the machines. This is particularly important during the installation phase. Safe access must be available at all times before service is started.

DANGER: Please read and understand all the warnings below before operating or maintaining a Samuel Jackson product. If you do not understand, call Samuel Jackson at 806-795-5218 before proceeding. Failure to do so could result in injury or even death. (Si usted no entiende, llame a Samuel Jackson al +1-806-795-5218 antes de proceder. La falta de hacerlo podría causar lesión o muerte.)

Electrical.

Most Samuel Jackson products use supply voltage between 110 and 480 volts AC. These levels are considered high voltage and are extremely dangerous.

Access Doors.

Samuel Jackson products have access doors for added convenience of product maintenance. Access doors must not be opened while the equipment is in operation. Access doors should also remain closed while any connected equipment such as a fan or conveyor is in operation.

Moving Parts.

Many Samuel Jackson products have moving or rotating parts. These parts could form pinch points or grab loose clothing or jewelry. Do not reach across or into any product while in operation.

Do not work on any Samuel Jackson product without first following OSHA Lockout/Tagout procedures. Confirmation by a licensed electrician that there is no electricity present is highly recommended. We recommend using a Samuel Jackson Authorized Technician for all work Samuel Jackson products. Additional safety information is located throughout this manual and should be read carefully before operating this Samuel Jackson product. If you have any questions about how to properly operate a Samuel Jackson product, please call +1-806-795-5218 before proceeding.

14900A LINT FLUE SCANNER INSTALLATION, SETTINGS AND USE

Previous Version

Please take extra precaution and follow all safety rules when gin modifications and equipment installations are occurring.

APPLICATION

The 14900A control is used to determine when cotton is passing through a lint flue. It is used with the Samuel Jackson Humidaire Unit to operate its water pump only when cotton is being ginned.

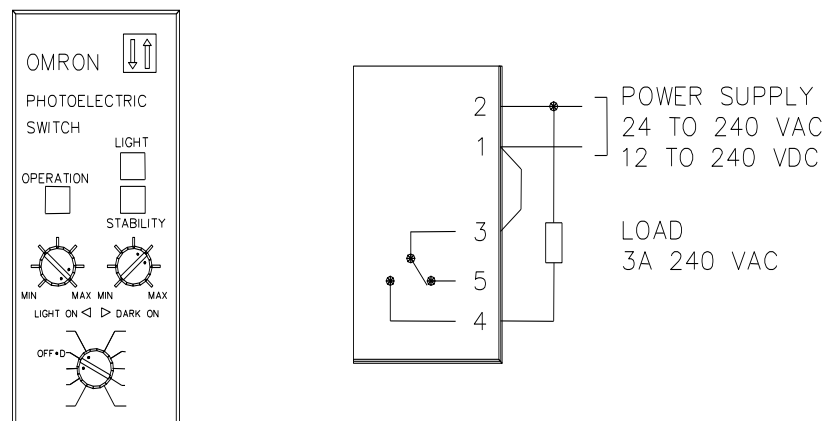
The 14900A control has a special mount which allows the 14953 photoelectric infrared scanner to look through a tiny window at the oncoming flow of air and lint. When cotton is detected, the control closes its circuit, and turns the water pump on. A built-in time delay keeps the circuit closed even if the presence of lint is interrupted for a few seconds.

MOUNTING THE CONTROL

The 14900A Lint Flue Scanner should be mounted in a flat area of the lint flue, usually in the riser to the battery condenser. Avoid locations where elbows and offsets might divert lint away from the control. The 14775 mount fits into a 3 x 4 inch (75 x 100 mm) rectangular hole in the wall of the flue. The stream of air and lint should blow against the small window.

ELECTRICAL WIRING

Be sure to follow the wiring diagram supplied with the Humidaire Unit. The 3 wires going to the 14900A control should be in a separate conduit from any power wires.



14953 PHOTOELECTRIC SWITCH 14-3569.4

The diagram above shows the normal setting and wiring of the 14953 Photoelectric Switch, which is part of the 14900A Lint Flue Scanner. The lower selector determines the operating mode for the scanner. The setting for the lint flue is **LIGHT ON** and **OFF DELAY**.

ADJUSTMENT

The 14900A Lint Flue Scanner has been adjusted at the factory, but may require further adjustment. If further adjustment is necessary:

1. Insure that 14900A has been wired into the system correctly. Apply power.
2. With the 14900A installed correctly in the lint flue and with cotton coming through the lint flue, the red "LIGHT" LED should be on. The yellow "OPERATION" LED should be on and remain on until cotton is no longer present and the time delay has timed out. If the "LIGHT" LED fails to turn on with cotton in the system, turn the sensitivity adjustment clockwise until "LIGHT" comes on. This adjustment is located on top of the 14900A.
3. When no cotton is present in the lint flue the "LIGHT" LED should be off. If the "LIGHT" LED fails to turn off, adjust sensitivity counterclockwise until it goes off.
4. Set the sensitivity pot midway between the two operating points determined in steps 3 and 4 for optimum operation. Make sure the green "STABILITY" light illuminates in both detecting and non-detecting. The off time delay is set to maximum (12 seconds) and should not need further adjustment. This prevents cycling the water pump.

TROUBLESHOOTING

If the control does not operate properly, follow the steps below (An AC voltmeter is the only test equipment needed).

1. Remove the scanner from its mount. Look through the window and see if cotton can be seen going past the window. If not, the scanner and mount must be moved to a better location.
2. Make certain that window glass and lenses of the control are clean and dry. An accumulation of dust or lint on the window glass next to the control can affect its operation.
3. Check power to 14900A, by removing switch from mount, then remove top cover. Connect a voltmeter across terminals 1 and 2. With the Humidaire Unit on and running, there should be 95 to 130 volts present.
4. With the scanner seeing cotton, the same voltage should appear across terminals 4 and 2. If no voltage can be found, then trouble lies elsewhere in the circuit, not in this control.
5. If control does not respond to cotton properly, see Adjustment steps 2 to 4 above.
6. If, when the switch is tested, the yellow "OPERATION" LED comes on and the water pump stays off, check the pump wiring and overload.

The maximum load for the relay contacts in the scanner is 3 amperes at 240 volts AC. The circuits of Humidaire Units and Lint Slide Sprayers are within this limit. If used for other applications with a load greater than this, interpose a contactor or relay between the scanner and the load. The voltage of the power supply for the load can be different from that supplied to the scanner on terminals 1 and 2.

14900B LINT FLUE SCANNER INSTALLATION, SETTINGS AND USE

Newer Version

Open transparent cover to make adjustments

Set to L/O — Light/Dark Switch

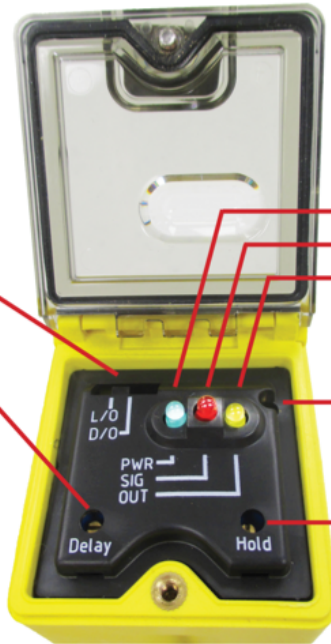
Does not affect LFS Applications — Timer Delay

Power ON Indicator
Signal Indicator
Output Indicator

Sensitivity Adjustment — Tighten to increase sensitivity

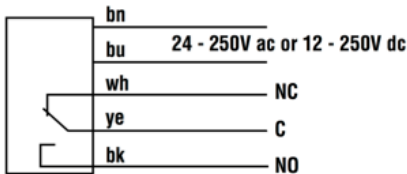
Timer Hold — Tighten to increase output hold time

*14900B replaces this 14900A model



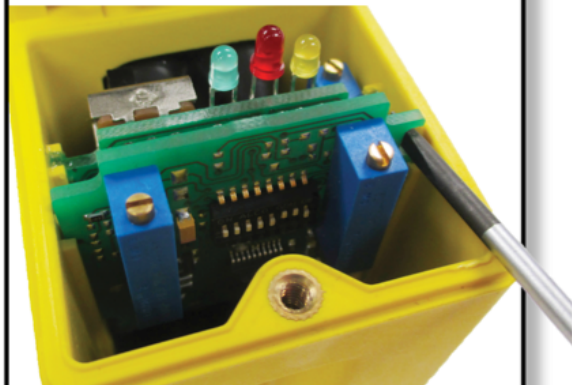
The Signal indicator blinks whenever it sees cotton. The better it sees cotton, the faster it blinks.

Wiring



14900A*	14900B	
1	bn	PWR
2	bu	PWR
3	ye	C
4	bk	NO
5	wh	NC

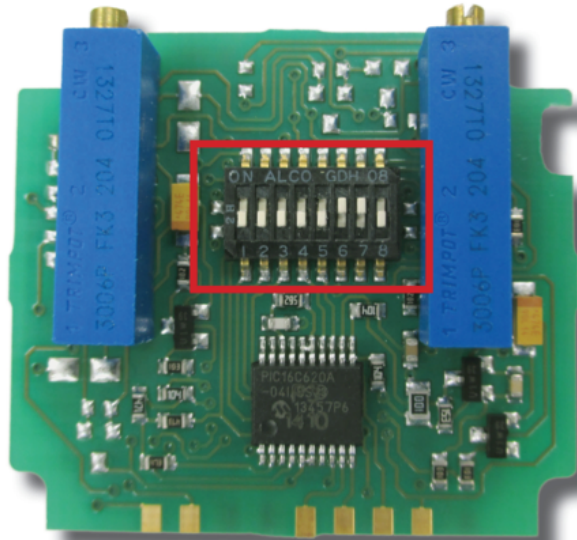
**To remove timer card:
Insert small screwdriver into side slot and lift out as shown.**



DIP Switch Settings for Lint Flue Scanner Applications

Switch	Position
1	OFF
2	OFF
3	OFF
4	OFF
5	OFF
6	ON
7	ON
8	OFF

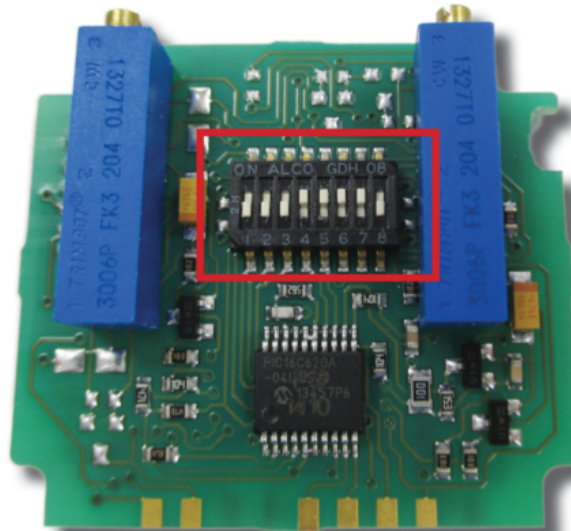
Slide switch up to turn on.

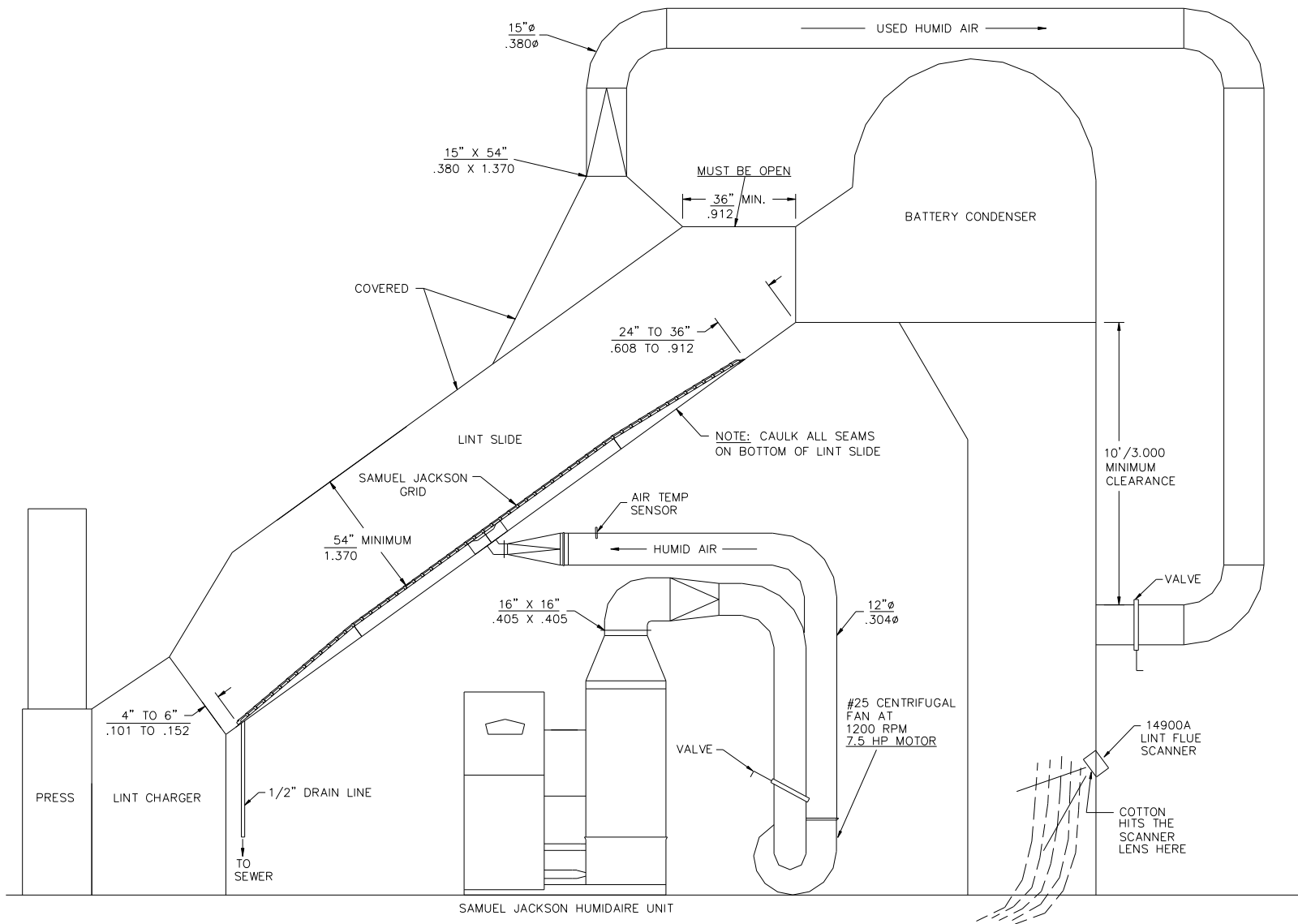


DIP Switch Settings for Flow Tools Applications

Switch	Position
1	OFF
2	OFF
3	OFF
4	ON
5	ON
6	ON
7	ON
8	OFF

Slide switch up to turn on.





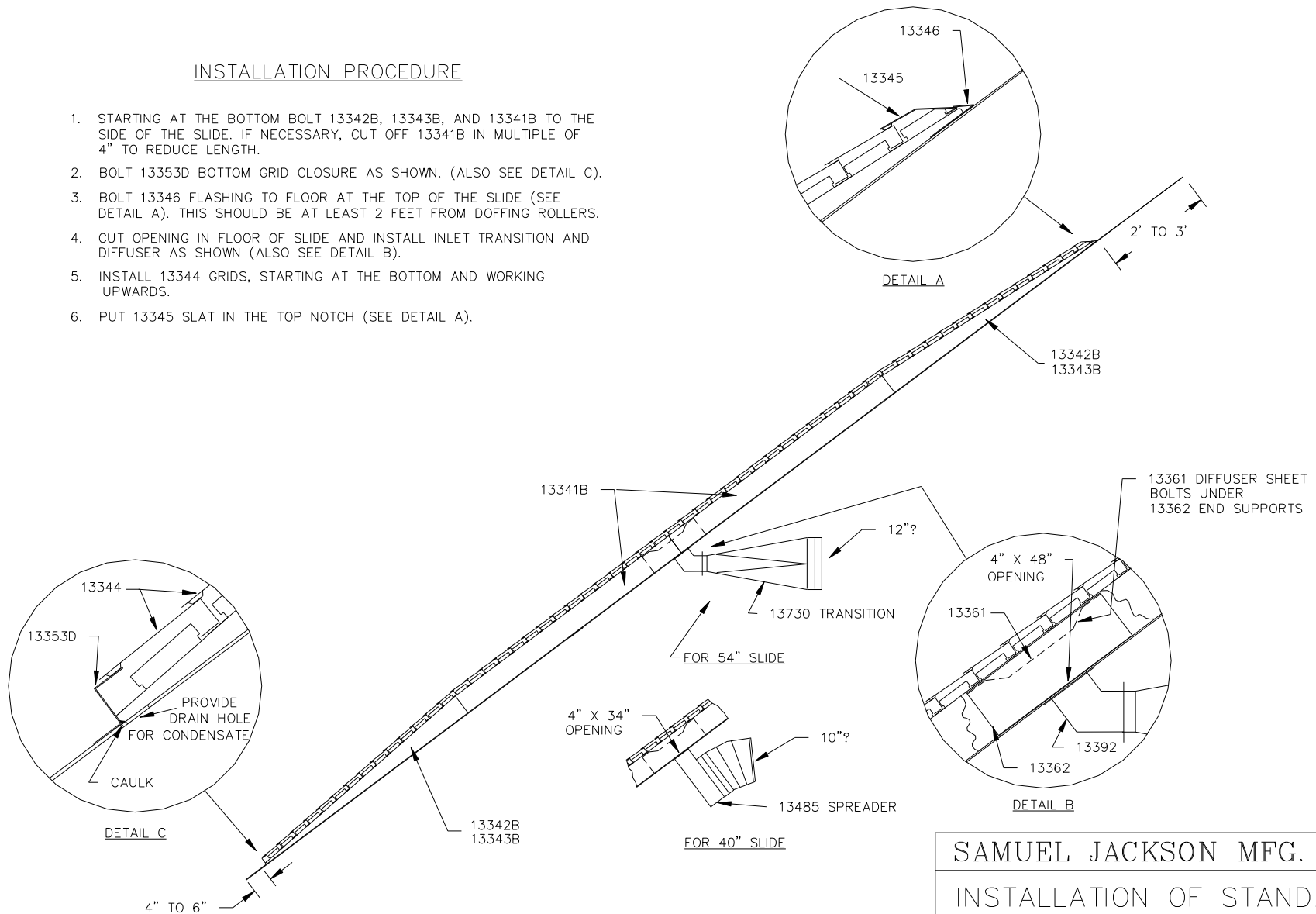
14-3230
11-93

STANDARD LINT SLIDE GRID INSTALLATION

SAMUEL JACKSON, INC.
LUBBOCK, TEXAS

INSTALLATION PROCEDURE

1. STARTING AT THE BOTTOM BOLT 13342B, 13343B, AND 13341B TO THE SIDE OF THE SLIDE. IF NECESSARY, CUT OFF 13341B IN MULTIPLE OF 4" TO REDUCE LENGTH.
2. BOLT 13353D BOTTOM GRID CLOSURE AS SHOWN. (ALSO SEE DETAIL C).
3. BOLT 13346 FLASHING TO FLOOR AT THE TOP OF THE SLIDE (SEE DETAIL A). THIS SHOULD BE AT LEAST 2 FEET FROM DOFFING ROLLERS.
4. CUT OPENING IN FLOOR OF SLIDE AND INSTALL INLET TRANSITION AND DIFFUSER AS SHOWN (ALSO SEE DETAIL B).
5. INSTALL 13344 GRIDS, STARTING AT THE BOTTOM AND WORKING UPWARDS.
6. PUT 13345 SLAT IN THE TOP NOTCH (SEE DETAIL A).



SAMUEL JACKSON MFG. CO.

INSTALLATION OF STANDARD
LINT SLIDE GRID ASSEMBLY

REF: LSG

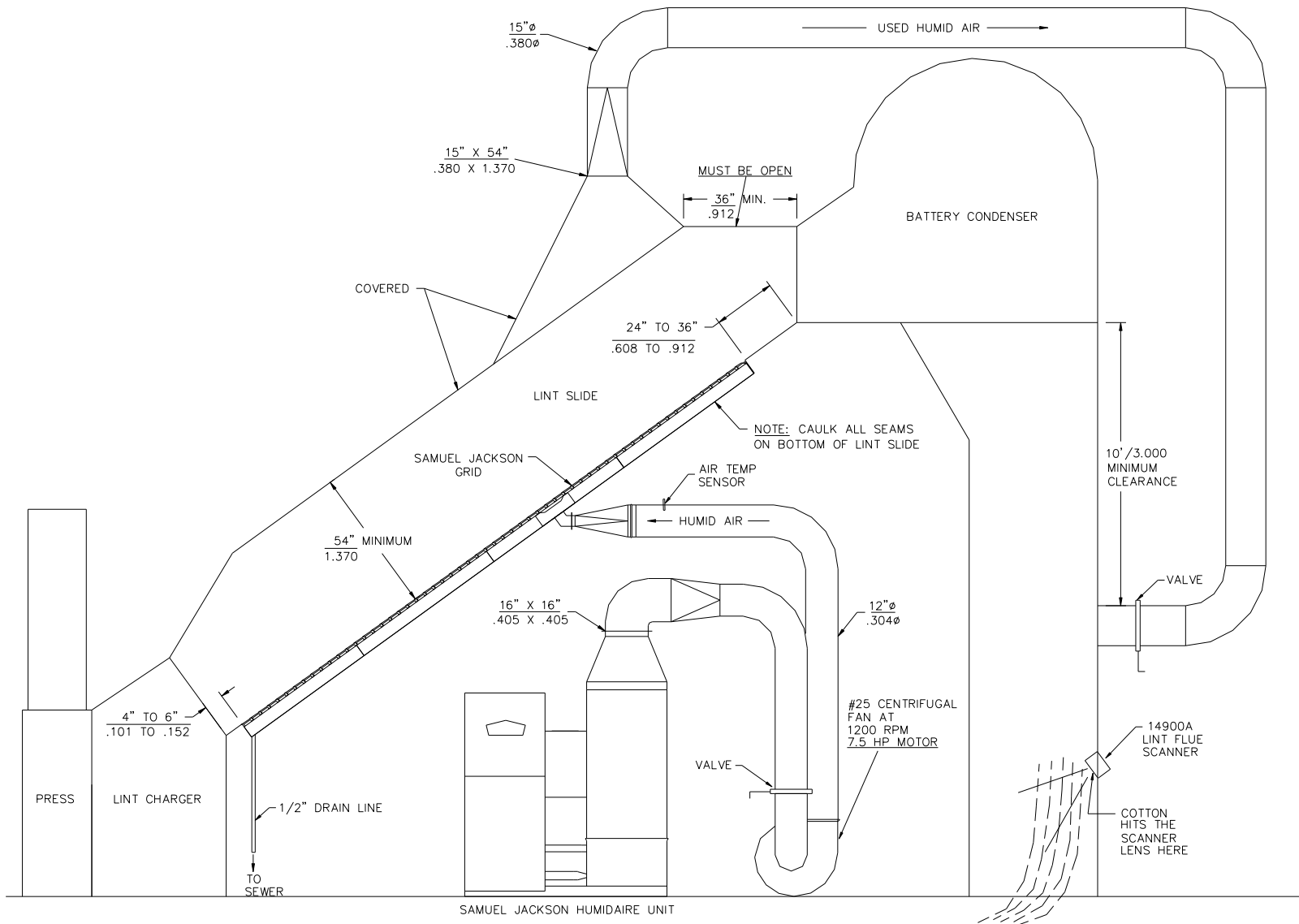
DWN. SK
BY

DRAWING NO.

DATE 6-29-89

14-2558

THE LINT SLIDE GRID IS COVERED BY U.S. PATENT 4,103,397



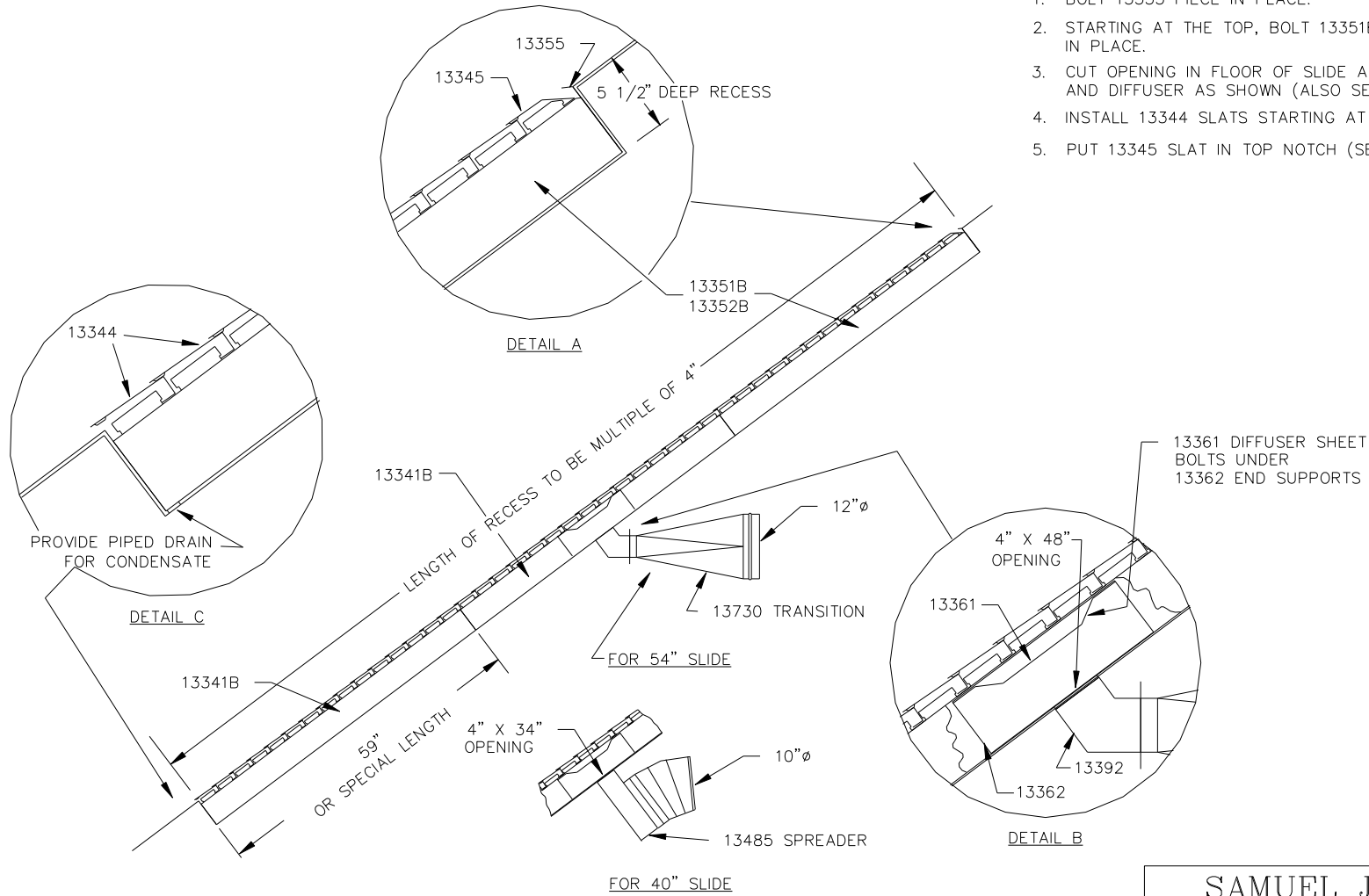
14-3232
11-93

RECESSED LINT SLIDE GRID INSTALLATION

SAMUEL JACKSON, INC.
LUBBOCK, TEXAS

INSTALLATION PROCEDURE

1. BOLT 13355 PIECE IN PLACE.
2. STARTING AT THE TOP, BOLT 13351B, 13352B, AND 13341B PIECES IN PLACE.
3. CUT OPENING IN FLOOR OF SLIDE AND INSTALL INLET TRANSITION AND DIFFUSER AS SHOWN (ALSO SEE DETAIL B).
4. INSTALL 13344 SLATS STARTING AT THE BOTTOM. (SEE DETAIL C)
5. PUT 13345 SLAT IN TOP NOTCH (SEE DETAIL A).



THE LINT SLIDE GRID IS COVERED BY U.S. PATENT 4,103,397

SAMUEL JACKSON, INC.

INSTALLATION OF RECESSED
LINT SLIDE GRID ASSEMBLY

REF: LSG

DWN. SK
BY

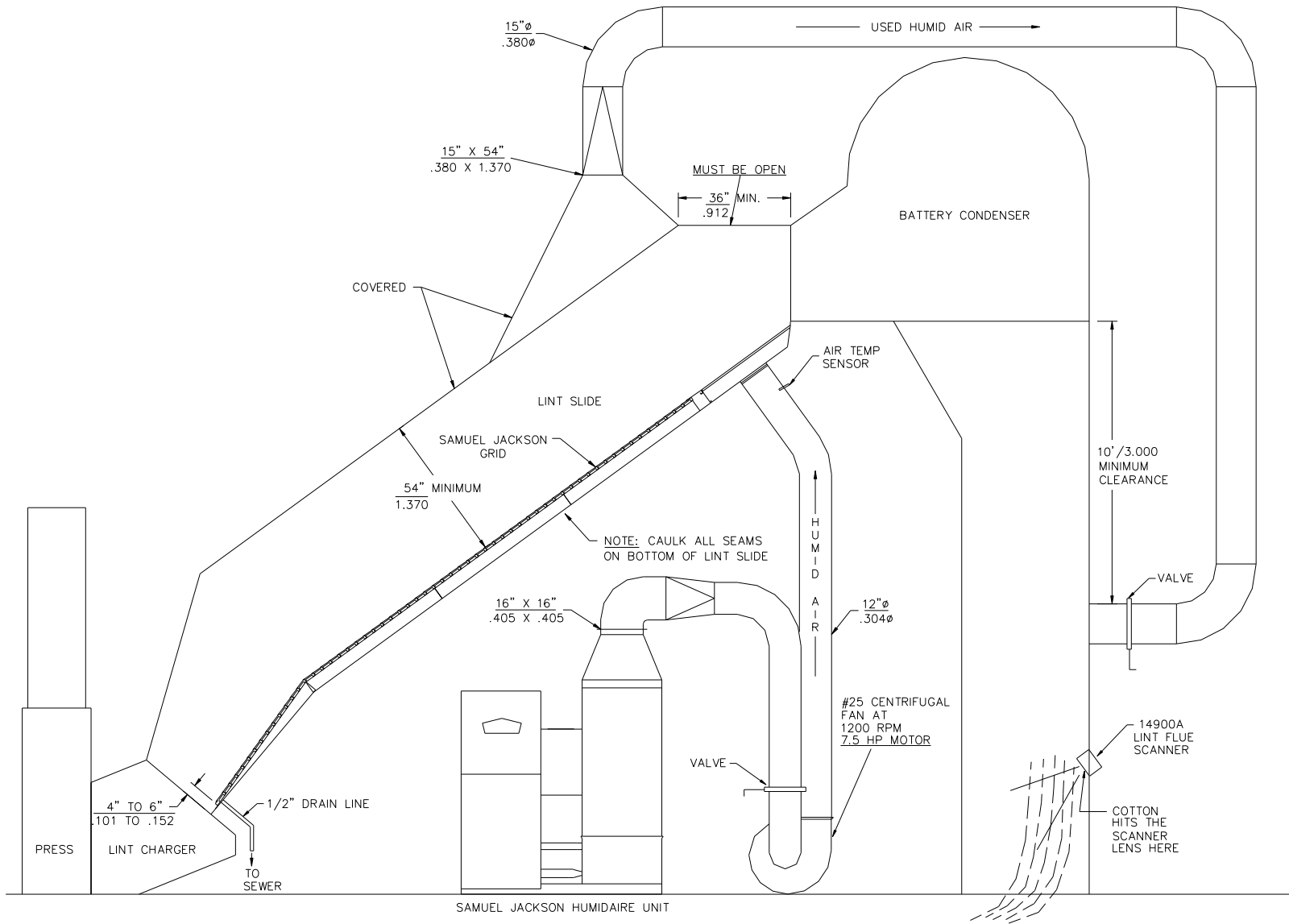
DRAWING NO.

DATE 9-18-98

14-2557A

FOR:

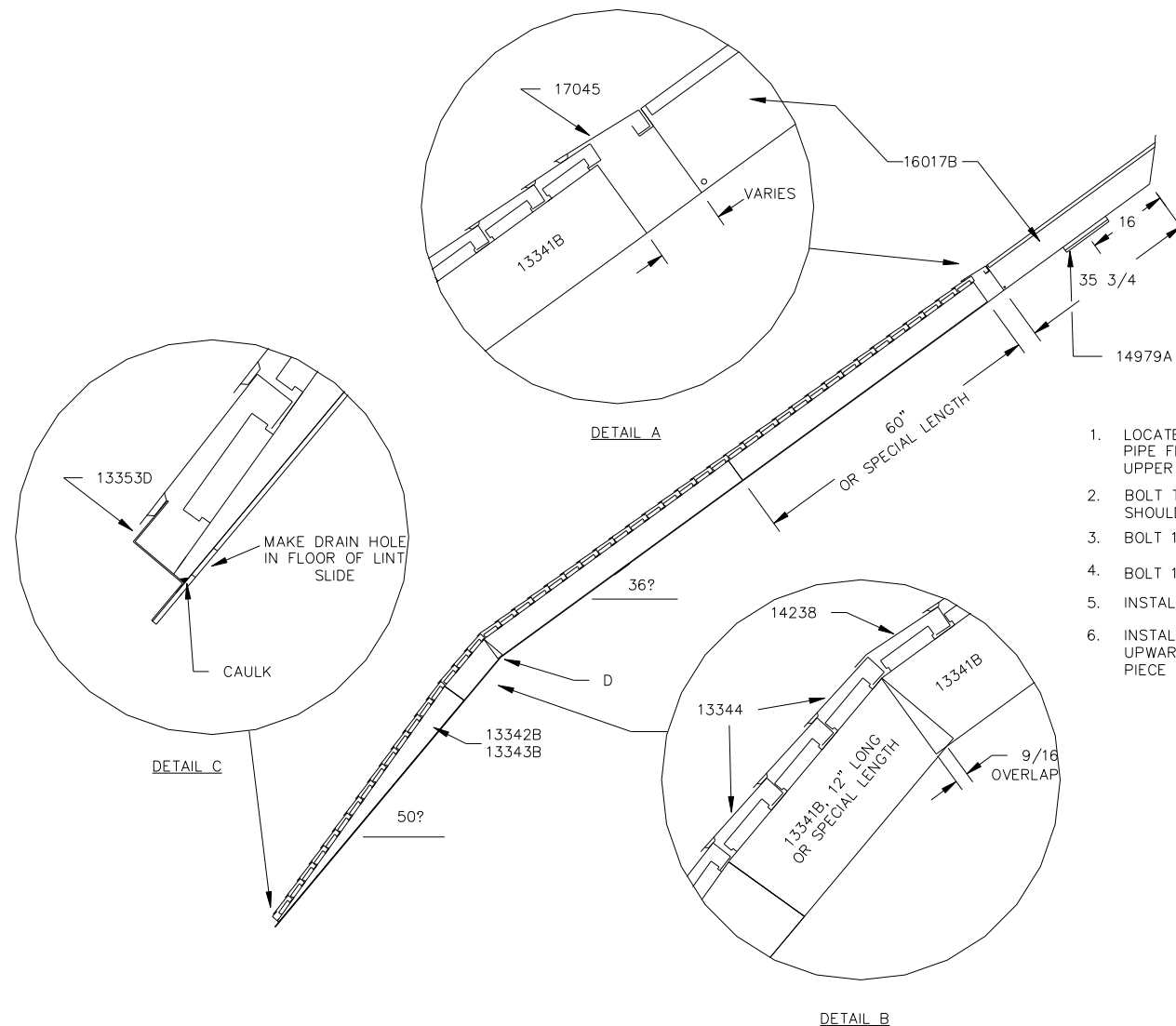
SCALE:



14-3231
11-93

LUMMUS LINT SLIDE GRID INSTALLATION

SAMUEL JACKSON, INC.
LUBBOCK, TEXAS



INSTALLATION PROCEDURE

1. LOCATE AND CUT HOLE IN LINT SLIDE FLOOR FOR 14979A 12" DIA PIPE FLANGE. THIS HOLE SHOULD BE CENTERED ON THE SLIDE AT THE UPPER END, AS SHOWN. INSTALL THE 12" FLANGE.
2. BOLT TOP DIFFUSER SHEET (PART NO. 16017B) IN PLACE. THIS SHEET SHOULD BE CAULKED AT THE TOP.
3. BOLT 13341B PIECES IN PLACE, STARTING AT POINT D. SEE DETAIL B.
4. BOLT 13342B AND 13343B PIECES IN PLACE.
5. INSTALL 13353D BOTTOM GRID CLOSURE. SEE DETAIL C.
6. INSTALL 13344 GRIDS, STARTING NEAR THE BOTTOM AND WORKING UPWARDS, USING 14238 AT THE HUMP AND FINISHING WITH 17045 PIECE (SEE DETAIL A).

SAMUEL JACKSON MFG. CO.

INSTALLATION OF LUMMUS
LINT SLIDE GRID ASSEMBLY

REF: LSG

DWN.
BY SK

DRAWING NO.

DATE 5-8-90

14-2453

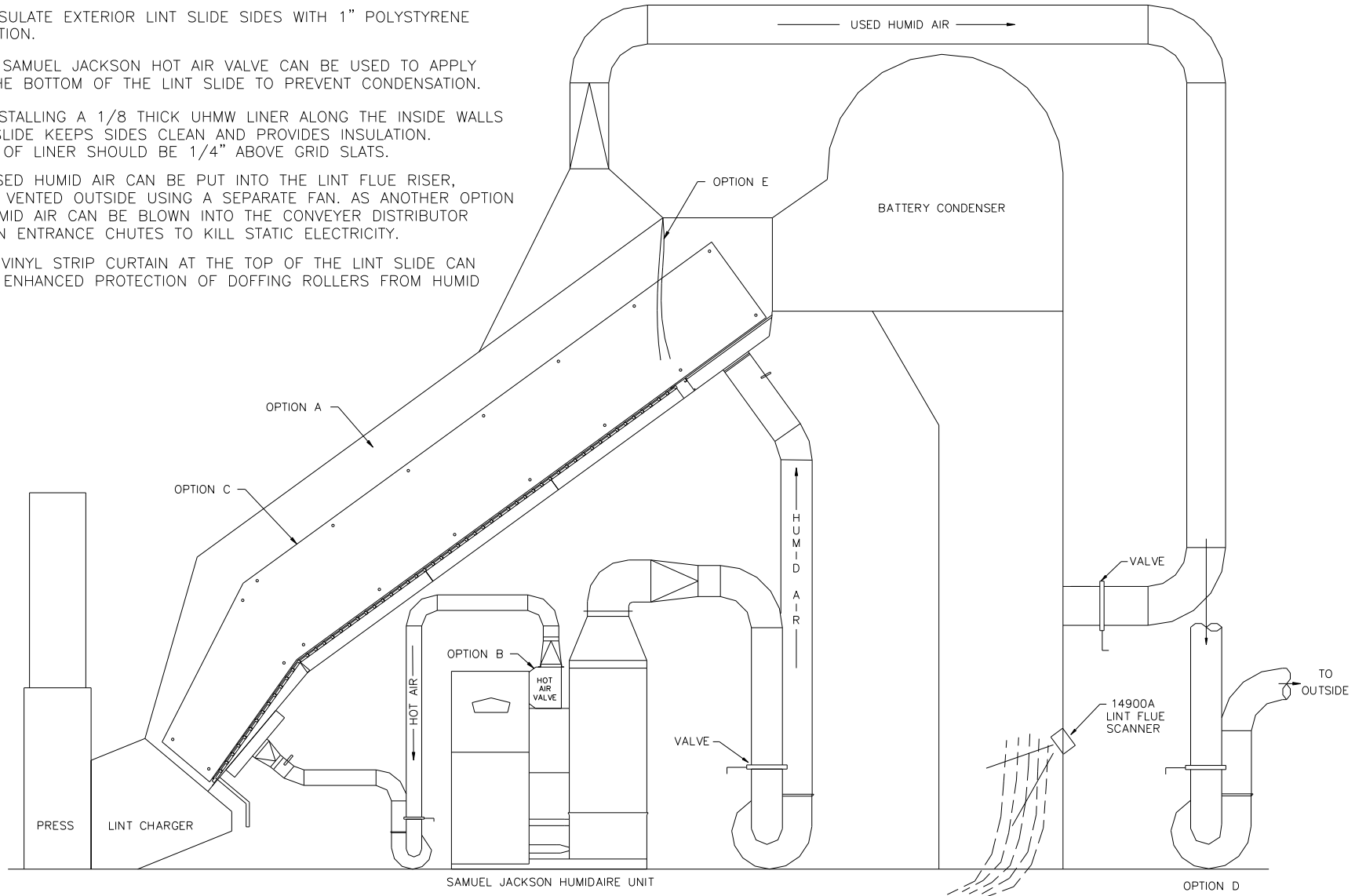
OPTION A. INSULATE EXTERIOR LINT SLIDE SIDES WITH 1" POLYSTYRENE BOARD INSULATION.

OPTION B. A SAMUEL JACKSON HOT AIR VALVE CAN BE USED TO APPLY HOT AIR TO THE BOTTOM OF THE LINT SLIDE TO PREVENT CONDENSATION.

OPTION C. INSTALLING A 1/8 THICK UHMW LINER ALONG THE INSIDE WALLS OF THE LINT SLIDE KEEPS SIDES CLEAN AND PROVIDES INSULATION. BOTTOM EDGE OF LINER SHOULD BE 1/4" ABOVE GRID SLATS.

OPTION D. USED HUMID AIR CAN BE PUT INTO THE LINT FLUE RISER, OR IT CAN BE VENTED OUTSIDE USING A SEPARATE FAN. AS ANOTHER OPTION THIS USED HUMID AIR CAN BE BLOWN INTO THE CONVEYER DISTRIBUTOR AT THE COTTON ENTRANCE CHUTES TO KILL STATIC ELECTRICITY.

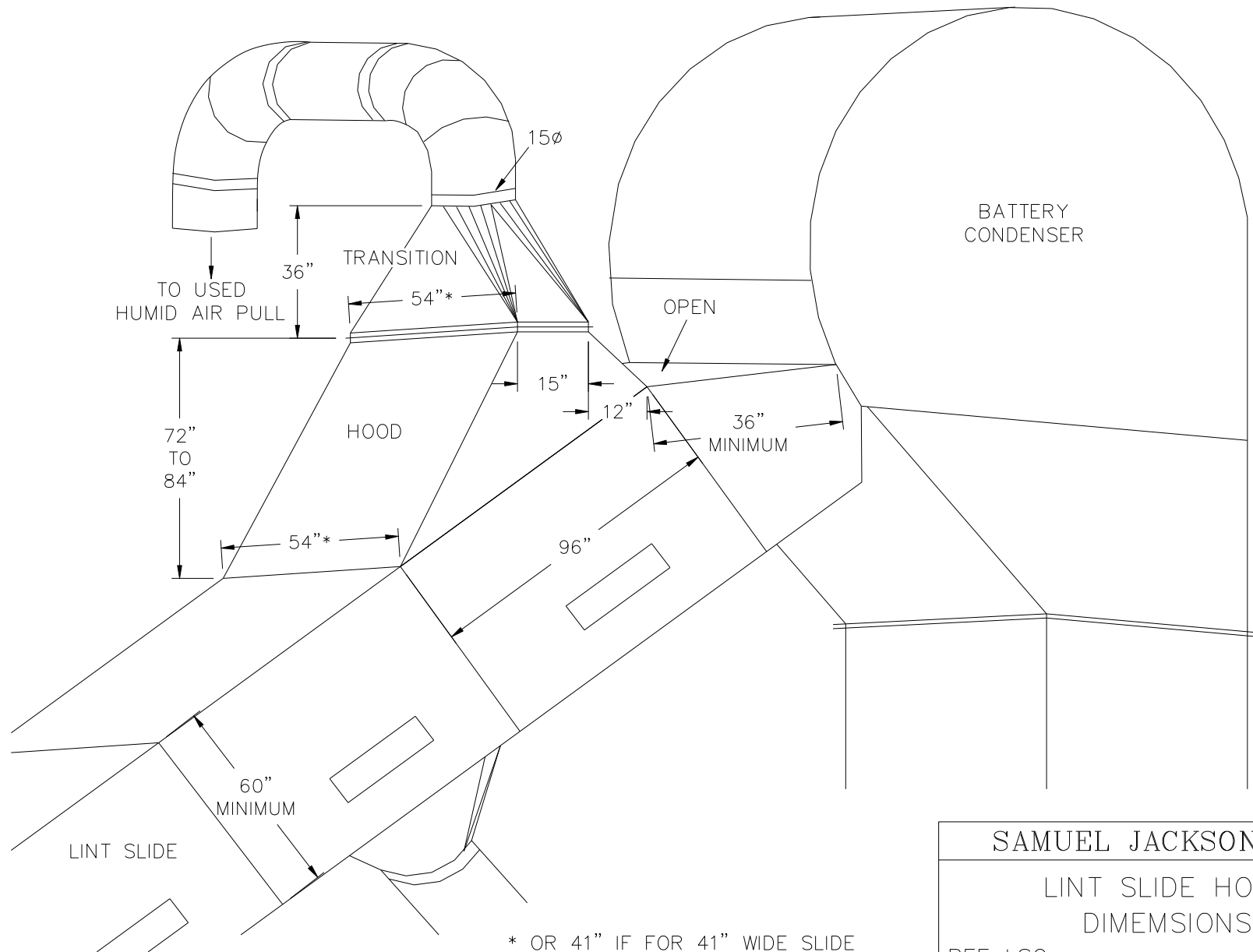
OPTION E. A VINYL STRIP CURTAIN AT THE TOP OF THE LINT SLIDE CAN BE USED FOR ENHANCED PROTECTION OF DOFFING ROLLERS FROM HUMID AIR.



14-3233
11-93

LINT SLIDE GRID OPTIONS AND ENHANCEMENTS

SAMUEL JACKSON, INC.
LUBBOCK, TEXAS

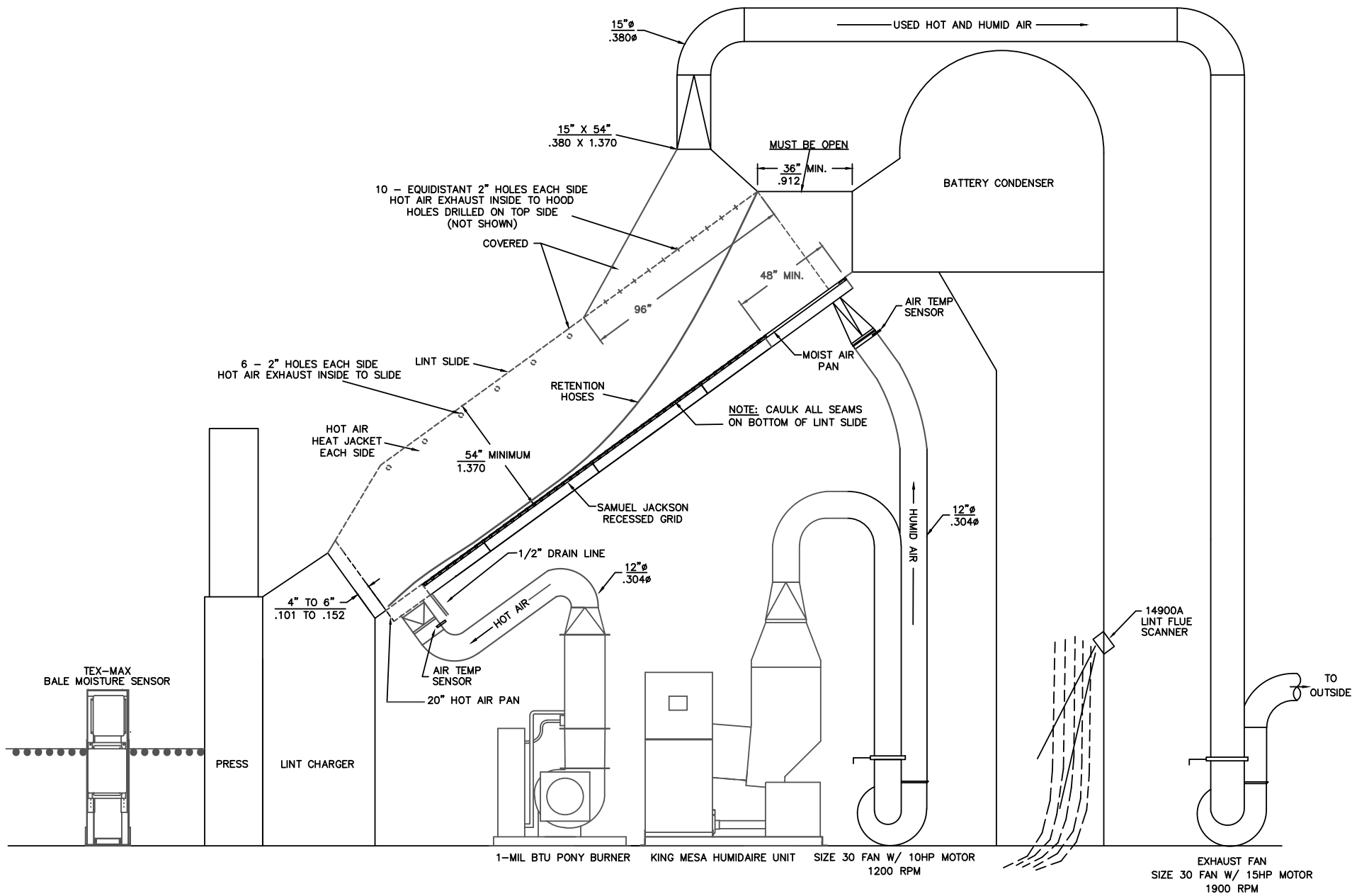


* OR 41" IF FOR 41" WIDE SLIDE
 ALL UNITS SHOWN IN INCHES

SAMUEL JACKSON, INC.	
LINT SLIDE HOOD DIMENSIONS	
REF: LSG	
DWN. BY SK	DRAWING NO.
DATE 7-8-97	14-3845

FOR: TYPICAL

SCALE: NTS



14-5390
03-14

RECOMMENDED LINT SLIDE GRID INSTALLATION
SUITABLE FOR BOTH HOT AND COLD WEATHER CONDITIONS

SAMUEL JACKSON, INC.
LUBBOCK, TEXAS

LIMITED WARRANTY

SAMUEL JACKSON, INCORPORATED

For Commercial and Industrial Customers of Samuel Jackson Moisture Control Products

SAMUEL JACKSON, INCORPORATED (“Sam Jackson”) warrants to its customers who purchase Sam Jackson products that its equipment is free from defects in material and workmanship under normal use and service for 12 months from the date of shipment from its Lubbock, Texas factory.

THIS WARRANTY DOES NOT EXTEND TO EQUIPMENT SUBJECTED TO MISUSE, NEGLIGENCE, OR ACCIDENT: NOR DOES THIS WARRANTY APPLY UNLESS THE PRODUCT COVERED BY IT IS PROPERLY INSTALLED BY A QUALIFIED, COMPETENT TECHNICIAN, WHO IS LICENSED WHERE STATE AND LOCAL CODES REQUIRE, AND WHO IS EXPERIENCED IN MAKING SUCH INSTALLATIONS.

Equipment, which is defective in material or workmanship and within the warranty period, will be repaired or replaced, at Sam Jackson’s option, in order to facilitate proper operation.

THIS WARRANTY IS LIMITED TO THE PRECISE TERMS SET FORTH ABOVE, AND PROVIDES EXCLUSIVE REMEDIES EXPRESSLY IN LIEU OF ALL OTHER REMEDIES, AND IN PARTICULAR THERE SHALL BE EXCLUDED THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL SAM JACKSON BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE OF ANY NATURE.

Sam Jackson neither assumes nor authorizes any person to assume for Sam Jackson any other liability or obligation in connection with the sale of this equipment, Sam Jackson’s liability and Customer’s exclusive remedy being limited to repair or replacement as set forth above.

SAMUEL JACKSON, INCORPORATED
3900 Upland Avenue Lubbock, Texas 79407

IMPORTANT!

The following notice affects your warranty.

Electrical Controls and Your Safety

Your new Sam Jackson product may be equipped with electrical controls, or designed to interact with controls on a related Sam Jackson product.

In the event that local, state, federal or other specified safety compliance is required, we will consider modifications to meet the particular requirements. Implementation of alternative safety devices may incur additional charges. No warranty of compliance with a particular standard is made in the absence of specific reference to it in our quotation.

If you modify, or permit others to modify, these controls without specific written permission from Sam Jackson, Inc. the warranty on your product will be void and there is a possibility of serious damage to machinery, damage to product, serious injury to personnel, or death. The modifier of the controls assumes all liability for these consequences.

Samuel Jackson, Incorporated
3900 Upland Avenue
Lubbock, Texas 79407
806-795-5218

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