



Elevating and Amusement Devices Safety Division	Ref. No.: 61/88	Rev. No.: 1st Amendment (Rev13)
DIRECTOR'S RULING	Date: May 1, 1988	Date: July 28, 1999

**Subject: RETROFITTING OF ELEVATOR SINGLE SLIDE DOORS WITH SAFETY RETAINERS
DESIGNS OF RETROFITTING KITS FILED AFTER NOVEMBER 1, 1993**

Sent to: ELEVATOR CONTRACTORS IN SCOPE A, B, F, P, S

* Note: Do not discard the original Ruling #61/88 dated May 1, 1988, and the Consolidated Edition dated November 1, 1993 that were previously mailed to you.

1. INTRODUCTION

- 1.1 Original Director's Ruling #61/88 was issued on May 1, 1988 to introduce a program of testing and filing designs of safety retainers to be used for retrofitting of single slide elevator doors.
- 1.2 Consolidated Edition of Ruling #61/88 was issued on November 1, 1993, incorporating a full list ("Guide for Selection") of all designs of retrofitting kits filed with MCCR as of that date, with all design and installation details in the attachments.
- 1.3 Since then, an additional design for the retrofit safety retainers has been filed with TSSA. It is shown in attachments #61-79.12 and 61-79.13 enclosed with this Bulletin.
- 1.4 Also, "Guide for selection" (attachments 61-01, 61-02 and 61-03) has been revised. Additions introduced with this 1st Amendment are marked by ®.
- 1.5 For details on design and installation instruction of all previously filed retrofitting kits refer to the attachments to Director's Ruling #61/88, Consolidated Edition of November 1, 1993.
- 1.6 Requirements for the design and installation as well as the procedure for filing of any new design with TSSA (formerly MCCR) are in the original (May 1, 1988) edition of Director's Ruling No 61/88.

2. ORDER TO CONTRACTORS

- 2.1 Until further notice through a new edition or amendment of this Bulletin, only retrofitting kits listed in the attachments 61-01, 61-02 & 61-03 to this Bulletin are acceptable as conforming to the requirements set out in the Director's Ruling 61/88 of May 1, 1988.

3. INSTRUCTIONS

- 3.1 In order to update your records on all retrofit retainer designs, filed until this date, combine all attachments from the Consolidated Edition with two new attachments #61-79.12 and 61-79.13 enclosed with this Bulletin.
- 3.2 "Guide for selection" – in attachments No 61-01, 61-02 and 61-03 enclosed with this Bulletin, supersede the same pages from the Consolidated Edition.

C. Ernest Vlahovic, Chief Engineer

NOTES:

This page is not part of the original ruling.
 Director's Ruling 61 was comprised of 13 separate mail outs.
 This sheet is a record of the revision history.

**This revision Titled
 ED-061-88-r13
 is a complete collection of all submitted retainer drawings
 & Includes the original text of DR #61/88 (first issue).**

Issue	RULING #	DATE OF ISSUE	RETAINER DWGS INCLUDED			
1	61/88	May 1, 1988	61-11 61-21 61-22 61-23 61-24	61-31 61-32 61-33 61-34 61-35	61-41 61-42 61-43 61-44 61-51	61-52 61-53 61-54 61-61 61-62
2	61/88 Edition 2	October 12, 1988	61-71			
3	61/88 Edition 3	February 24, 1989	61-36 61-37	61-71 61-72	61-73	61-81 61-82
4	61/88 Edition 4	September 26, 1989	61-63 61-64	61-65 61-66	61-74 61-75	61-83
5	61/88 Edition 5	January 22, 1990	61-38	61-39	61-71	
6	61/88 Edition 6	April 30, 1990	61-51	61-61	61-62	61-76
7	61/88 Edition 7	October 20, 1990	61-45 61-46	61-67 61-91	61-92 61-93	61-94 61-95
8	61/88 Edition 8	April 12, 1991	61-77	61-78.1 61-78.2	61-78.3	61-78.4
9	61/88 Edition 9	January 10, 1992	61-25 61-47	61-48 61-68	61-69	61-101 61-102
10	61/88 Edition 10	June 1, 1992	61-79.1	61-79.2		
11	61/88 Edition 11	October 18, 1993	61-79.3 61-79.4	61-79.5 61-79.6	61-79.7 61-79.8	61-79.9 61-79.10 61-79.11
12	61/88 Consolidated Edition	November 11, 1993	No additional drawings added Issue was for consolidation purposes only			
13	61/88 Consolidated Edition 1 st Amendment	July 28, 1999	61-79.12	61-79.13		



Elevating and Amusement Devices Safety Division	Ref. No.: 61/88	Rev. No.: Original ruling
DIRECTOR'S RULING	Date: May 1, 1988	Date:

Subject: RETROFITTING OF ELEVATOR SINGLE SLIDE DOORS WITH SAFETY RETAINERS

Sent to: ELEVATOR CONTRACTORS IN SCOPE A, B, F, P, S

1. ORDER TO RETROFIT

Commencing May 15, 1988, inspectors will order elevators equipped with single slide landing doors, to be retrofitted with door SAFETY RETAINERS.

NOTE: The elevators, however, may be retrofitted before the inspector's order is issued. That, indeed, is strongly recommended, considering that the cycle of our inspections may be extended up to 36 months.

2. ORDER TO CONTRACTORS

2.1 Contractors retrofitting elevator doors in accordance with this order must use retainers which conform to the following:

- a) A professional engineer has issued a certificate stating that the retainers of the specified make and model:
 - i) are designed in accordance with Clause 2.11.10.5 and type tested for the strength as specified in Clause 2.11.10.5. of the 1985 edition of CSA-B44 Safety Code for Elevators and the following amendment:

“The retainers shall also withstand, without detachment or permanent deformation, a force of 1000N applied upward at any point along the width of the door panel and, while this force is maintained, an additional force of 1000N applied perpendicular to the door at its centre over an area of 300 x 300mm”.
 - ii) When installed on a specified door assembly, following instructions supplied with retainers, will meet the requirement referred to in “i”, assuming that the door assembly will be able to withstand forces specified.
- b) The engineer's certificate along with design drawings have been filed and registered with this Branch and the make and model is listed in attachment to this Ruling #61-01 / Edition1 or any future edition;
- c) Each retainer (kit) must be accompanied by manufacturer's detailed instructions containing installation, adjustment and inspection criteria, to be used by installing contractors;
- d) Each retainer supplied must be permanently identified with manufacturer's name or logo and also with a unique model number or symbol if the manufacturer supplies more than one retainer model. (Also see 2.2(b)(i) below).

2.2 Each safety retainer, when installed:

- a) Must restrict vertical movement of the door panel to 3.2mm (1/8 inch) unless otherwise specified in instructions referred to in 2.1(c) above;
- b) Must be readily identifiable from inside the hoistway without dismantling any door component and for that purpose:

- i) must be marked with YELLOW colour and so installed that the markings required in 2.1(d) are readily visible from inside the hoistway; or
- ii) a notice plate, containing data specified in 2.1(d) above, must be attached to the door component that covers a safety retainer must be readily visible, from inside the hoistway.

2.3 Contractor retrofitting safety retainers in accordance with this order must:

- a) Before installation of the retainers assure that the door assembly has not deteriorated to the point of significantly losing its original strength;*

*NOTE: This implies that when a significant loss in a door's original strength is identified, the contractor will carry out necessary repairs (e.g. broken welds or loose anchors) or in extreme cases, replace door assemblies (if deteriorated beyond repair e.g. due to corrosion) before safety retainers are retrofitted.

- b) Ensure that proper retainers are selected for the doors being retrofitted, and
- c) Install, adjust and inspect retainers following instructions referred to in 2.1.(c) above.

2.4 Where a contractor identifies an elevator with a landing door type for which retrofitting kits are not listed in the attached document #61-01, the contractor must either:

- a) Design new retainers for that door type, but before installation, the retainers must be certified, filed, registered** and marked in accordance with procedure set in 2.1 above: or
- b) Submit full information on make and model of the door, hangers and gibs and also the location, manufacturer, model and year of manufacture of the elevator to the Elevating Devices Branch, which will, on the basis of available information, advise on acceptable design and procedure or will order the owner that provisions in (a) must be fulfilled through a registered contractor.

**NOTE: With the consent of the contractor or manufacturer who has successfully registered with this Branch a new design of safety retainers, the retainer design as well as the source of retrofitting kits will be listed in a new addition of document #61-01 for information to all other registered contractors.

3. **BACKGROUND**

Following a series of accidents that were attributed to the inadequate landing door strength, the CAN3-B44 Elevator Safety Code for Elevators has been advised to require safety retainers on all new elevator doors. Considering the history of accidents in the province of Ontario, and in accordance with subsection 10(8) of the Elevating Devices Act, I have decided to make the requirements retroactive to existing passenger elevators, at this stage to those equipped with single slide landing doors. Since most of the accidents were recorded in residential buildings, where the majority of elevators were equipped with single slide doors, I expect that in 2 to 3 years, when inspectors' orders (as in 1 above) are completed, the overall safety of elevators will be significantly improved.

Later on, after the elevator industry has gained more experience on new elevators, we must consider ordering retrofitting of elevators equipped with other than single slide doors.

Retrofitting kits listed in the attached document #61-01 have been designed, tested, certified and made available to all registered contractors by the original door manufacturers at the initiative of a government-industry task force. We are, however, aware that a few makes and models of existing single slide doors are not listed in that document. We invite all interested contractors and elevator parts manufacturers to design retrofitting kits for door models not covered. As indicated above, this Branch will notify all elevator contractors on the source of certified retrofitting kits.

GUIDE FOR SELECTION OF RETROFITTING KITS FOR
SAFETY RETAINERS ON SINGLE SLIDE DOORS
Supersedes all previous editions

EDB DIRECTOR'S RULING

#61/88

Consolidated Edition - 1st Amendment

61-01

SINGLE SLIDE LANDING DOOR MADE BY	EQUIPPED HANGERS MAKE AND TYPE	WITH BTM GIBS & MAKE AND MODEL	RETAINERS CAN BE OBTAINED FROM	BY ORDERING	THE KIT WILL CONTAIN COLOURED YELLOW HEADER RETAINERS MARKED	Q T Y	Q T Y	SILL RETAINERS MARKED	FOR DETAILS SEE NUMBERS
DAHLSTROM	GAL- Cast Type GAL-Formed Steel Type	& any make & any type	ADCO	Kit #AD-1 Kit #AD-2	AD-1 AD-2	2 2	& 1	AD-B	61-91 61-95 61-92 61-93 61-94 61-95
BECKETT	BECKETT integral	& any make any type	BECKETT	Kit #200477-G01	B E-SR	2	& 1	Beckett-SR	61-11
BECKETT	GAL-Formed Steel Type	& any make any type	CEE	Kit #CEE-1	see note below	2	& 1	Beckett-SR	61-101 61-102
DAHLSTROM	MAC (economy) integral GAL (economy) integral OTIS (economy) integral MAC	any make any type	DAHLSTROM	Kit #R8 Kit #R9 Kit #R10 Kit #DCL-NR1-A	DCL-R8 DCL-R8R9R10 pw74032 DCL-R8R9R10 pw74027 DCL-R9 DCL-R8R9R10 pw74032 DCL-R8R9R10 pw74027 DCL-R8R9R10 pw74032 DCL-R8R9R10 pw74027 DCL-NR1	1 1 2 2 2 1	& 1	DCL 74005	61-21 61-22 61-21 61-23 61-21 61-24 61-25
DOVER or TURNBULL	DOVER-TURNBULL integral DOVER-TURNBULL individual Individual with track: 38mm high radlused top bolted to UNISTRAT	any make any type any DOVER make and type	DOVER	Kit #462597 Kit #462598 Kit #463589	DOVER 462597 DOVER 462598 DOVER 261964	2 2 2	& 1	DOVER	61-31 61-32 61-35 61-33 61-34 61-35 61-36 61-37
DOVER U.S. HYDRAULICS installed between 1971 - 1978									
NORTHERN Dahlstrom type 1/4" max door to sill clearance			NORTHERN	B-807-8120		1	& 1		61-41 61-42 61-43 61-44
NORTHERN Dahlstrom type 1/4" - 3/8" door to sill clearance	MAC or GAL integral Type N	any type any make	NORTHERN	B-807-8120-B B-80-A1043	N N21	1 2	& 1	N	61-41 61-45 61-43 61-46 61-47 61-48

IV. See attachment #61-41 for quantity of sill retainers - part #B-807-8122

V. Door manufactured prior to CSA-B444-1985 enforcement.

I. Top retainers are part of GAL supplied hanger assemblies.
II. A limited number may be w/out markings and yellow colouring.
III. Kit #463589 superseded Kit #463485.

SINGLE SLIDE LANDING DOOR MADE BY	EQUIPPED HANGERS MAKE AND TYPE	WITH BTM GIBS & MAKE AND MODEL	RETAINERS CAN BE OBTAINED FROM	THE KIT WILL CONTAIN COLOURED YELLOW			FOR DETAILS SEE ATTACHMENTS NUMBERS
				Q T Y	Q T Y	Q T Y	
OTIS	OTIS Type B	& any make	OTIS	2	OTIS OB TOP	1	61-51 61-52
	OTIS Integral	& any type	OTIS	2	OTIS OI TOP	1	61-53
	OTIS type 7060	& any type	OTIS	2	OTIS O7 TOP	1	61-51 61-52 61-53
SCHINDLER or ARMOR or HORN	HORN or ARMOR Type 4C with any pickup roller	& any type aluminum sill	S C H I N D L E R	1	A	1	61-61
	GAL Integral	& any type BLUM BR or NS sill		2	F	1	61-61 61-62
	GAL	& any type aluminum sill BLUM BRNS sill 2-1/A GR BLUM BRNS sill 2-7/B GR		2	H	1	61-63
OTIS	OTIS Integral	& any type	S C H I N D L E R	2	S-01	1	61-64
	OTIS Type B	& any type		2	S-OB	1	61-65
	OTIS Type 7060	& any type aluminum sill		2	S-07	1	61-66
ARMOR	USA "J" Track XE-100 Pack	& any type aluminum sill	S C H I N D L E R	2	X (pair)	1	61-67
	WESTINGHOUSE Integral	& any type		2	S-WI	1	61-68 61-69
ARMOR or HORN or OTIS	ARMOR or HORN type 4C	& any type aluminum sill	THERMODYNE	1	T	1	61-81
	OTIS type B	& any make any type		2	T1-T	1	61-82 61-83

(V)

Vi. Schindler header retainer marked with a logo.

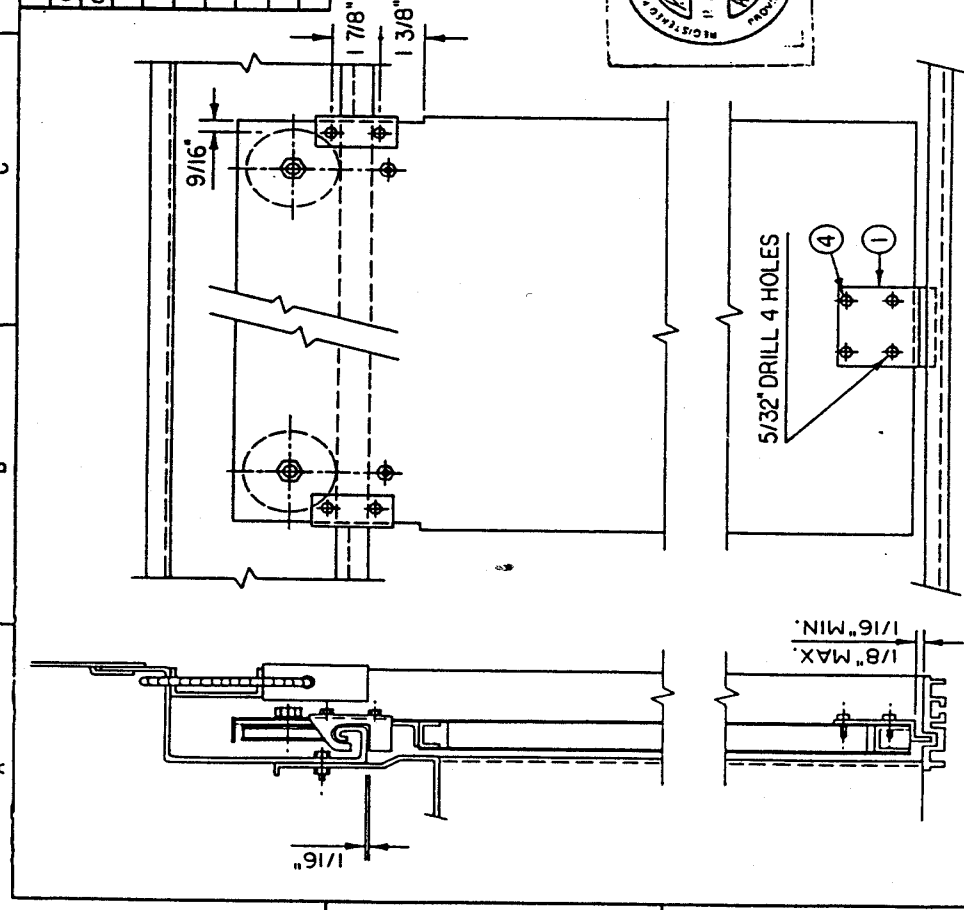
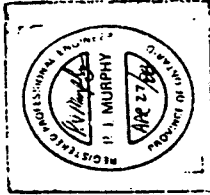
SINGLE SLIDE LANDING DOOR MADE BY	EQUIPPED HANGERS MAKE AND TYPE	WITH BTM GIBS MAKE AND MODEL	RETAINERS CAN BE OBTAINED BY ORDERING		THE KIT WILL CONTAIN COLOURED YELLOW			FOR DETAILS SEE ATTACHMENTS NUMBERS
			FROM	BY ORDERING	Q	T	Y	
OTIS	OTIS Integral	& any type aluminum sill	VER-T-C-O	Kit # VER-01	2	VER-T-01	&	61-78.1
OTIS	OTIS type 7060	& any type any make		Kit # VER-02	2	VER-T-02	&	61-78.2 61-75
DAHLSTROM or DILLON 1" thick door	HORN or GAL #61-71 per dwg	& Two (2) gibs any make any type		Kit # VER-03	2	VER-T	&	61-78.3 61-73
TYLER or COR-O-FOAM 1-1/4" thick door	MAC #61-71 per dwg	& One (1) gib any make any type		Kit # VER-04	2	VER-T-M	&	61-78.4 61-75
TYLER 1-1/4" thick door	HORN or GAL #61-71 per dwg	& One (1) gib any make any type		Kit # VER-05	2	VERT	&	61-71
4C ARMOR 1-1/4" thick door	MAC per dwg #61-71	& One (1) Tyler gib		Kit # VER-06	2	VERT-M	&	61-72
DOVER or TURNBULL	Westinghouse 4C Armor	& any make any type		Kit # VER-07	2	VERT-W	&	61-73
ROELEFSON	INTEGRAL Dover Turnbull	& any make any type		Kit # VER-08	1	VERT-C	&	61-74
ARMOR	ROELEFSON	& any type		Kit # VER-09	2	VER-T-D	&	61-75
DILLON	ARMOR or G.A.L.	& any type		Kit # VER-10	2	VER-T-R	&	61-76 61-73
TURNBULL	CUSTOM MADE	& any type		Kit # VER-11	2	VER-T-A	&	61-77
DAHLSTROM	INDIVIDUAL	& any type		Kit # VER-12	2	VER-T-12	&	61-73
	MAC INTEGRAL	& any type		Kit # VER-13	2	VER-T-13	&	61-79.1
				VER-R8	1	V R8	&	61-79.2
					1	V R10	&	61-79.3 & 4
					2	V R7	&	61-75

VII. Refer to 61-73 for VER-B-M and to 61-75 for VER-B-W.
 VIII. See attachment #61-71 for quantity of sill retainers.
 IX. For selection criteria of bottom retainer refer to 61-79.1.

THIS DWG. NO.		G [] - [] REQ'D.		DESCRIPTION OR NAME OF PART		IDENTIFICATION NUMBER	
QUAN.	PER UNIT	ITEM NO.					
G03	G02	G01					
		01			TOP DOOR RETAINER - R.H.		200475 - P01
		02			TOP DOOR RETAINER - L.H.		200475 - P02
		03			BOTTOM DOOR RETAINER		100400 - P01
		04			NO. 10-24 X 5/8" LG. HEX. HD. WASHER FACE TEXS SCREW		
		05			1/4" - 20 X 1/2" LG. HEX. HD. SCREW		
		06			1/4" LOCKWASHER		
		07			PRINT OF THIS DRAWING		

INSTALLATION INSTRUCTIONS

1. MARK THE LOCATION OF THE HOLES FOR THE TOP RETAINERS WITH A CENTRE PUNCH, AND DRILL THE FOUR HOLES USING A NO. 7 DRILL BIT (.201 DIAMETER).
2. TAP THE FOUR HOLES, JUST DRILLED, USING A 1/4" - 20 TAP.
3. INSTALL THE TOP RETAINERS USING HARDWARE SUPPLIED. TIGHTEN BOLTS TO 50 - 60 INCH POUNDS TORQUE. CHECK FOR PROPER CLEARANCE.
4. WITH THE DOOR CLOSED, MARK THE LOCATION OF THE HOLES FOR THE BOTTOM RETAINER USING THE RETAINER AS A TEMPLATE. DRILL THE HOLES USING A 5/32" DRILL BIT.
5. INSTALL BOTTOM RETAINER USING HARDWARE SUPPLIED. TIGHTEN SCREWS TO 50 - 60 INCH POUNDS TORQUE. CHECK THAT THE RETAINER WILL NOT SCRAPE THE SILL WHEN THE DOOR IS OPENING OR CLOSING.
6. NOTE: THE TOP RETAINERS ARE MARKED WITH "BΔ"
 THE BOTTOM RETAINER IS MARKED WITH "ΔE-SR".



TOOLS REQUIRED

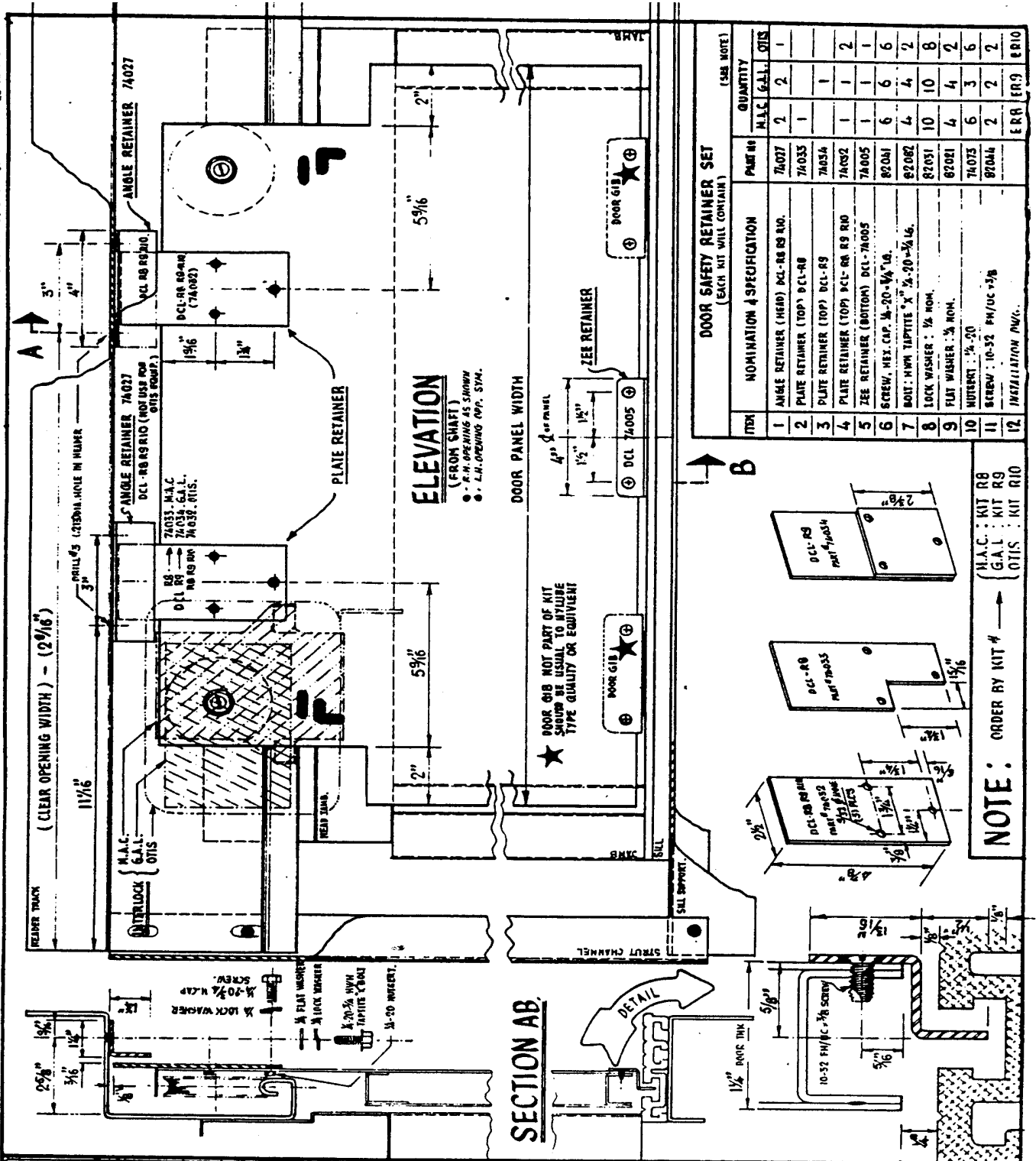
- DRILL
- 3/8" WRENCH
- NO. 7 DRILL BIT (.201)
- 1/4"-20 TAP
- NO. 10 HEX SOCKET
- TORQUE WRENCH
- 5/32" DRILL BIT

BECKETT ELEVATOR LIMITED CERTIFIES THAT THE RETAINERS WILL CONFORM TO M.C.C.A. DRAFT RULING DATED DECEMBER 29, 1986 OR TO THE ORIGINAL DESIGN STRENGTH OF THE DOOR WHICHEVER IS LESS, ONLY IF INSTALLED ACCORDING TO THIS DRAWING.

GROUP IDENTIFICATION			
THIS DRAWING IS THE PROPERTY OF BECKETT ELEVATOR LTD. AND IS LOANED UNDER THE EXPRESS CONDITION THAT IT IS NOT TO BE COPIED OR USED WITHOUT PERMISSION AND IS TO BE RETURNED ON DEMAND.			
NAME OF JOB	PROTECTIVE FINISH	FORM	DATE
80-1748	APR. 27/88	RG	27/88
REV. NO.	ECN. NO.	DATE	TOOLS
1			
SCALE: NTS			DRG. NO. 200477
TITLE: DOOR SAFETY RETAINER KIT FOR FIELD MTG. TO SINGLE SLIDE LANDING DOOR			REF.

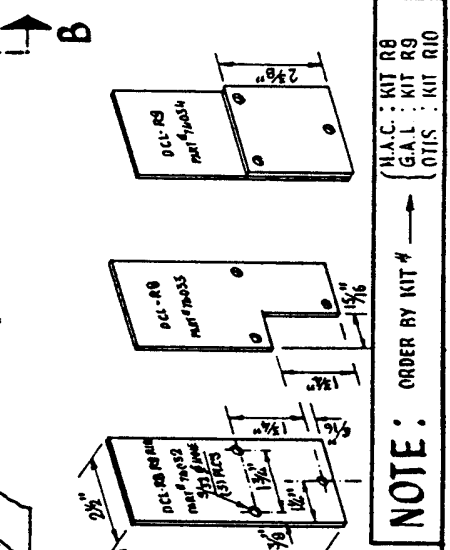
24-MAR-88
 25-MAR-87

CGO 785729 - 04-SEP-87



DOOR SAFETY RETAINER SET
 (EACH KIT WILL CONTAIN)

ITEM	NOMINATION & SPECIFICATION	PART NO.	QUANTITY	
			M.A.C.	G.A.L. OTIS
1	ANGLE RETAINER (HEAR) DCL-R8 R9 R10.	74027	2	1
2	PLATE RETAINER (TOP) DCL-R8	74033	1	1
3	PLATE RETAINER (TOP) DCL-R9	74034	1	2
4	PLATE RETAINER (TOP) DCL-R8 R9 R10	74032	1	1
5	ZEE RETAINER (BOTTOM) DCL-74005	74005	1	1
6	SCREW, HEX. CAP. 3/8-20-1/2\"/>			
7	SCREW, HEX. CAP. 3/8-20-1/2\"/>			
8	LOCK WASHER : 1/2\"/>			
9	FLAT WASHER : 1/2\"/>			
10	NUTSERT : 1/2-20	74075	4	2
11	SCREW : 10-32 PH/UC-3/8	87044	6	2
12	INSTALLATION INVC.	ERR ER9 ER10	2	2

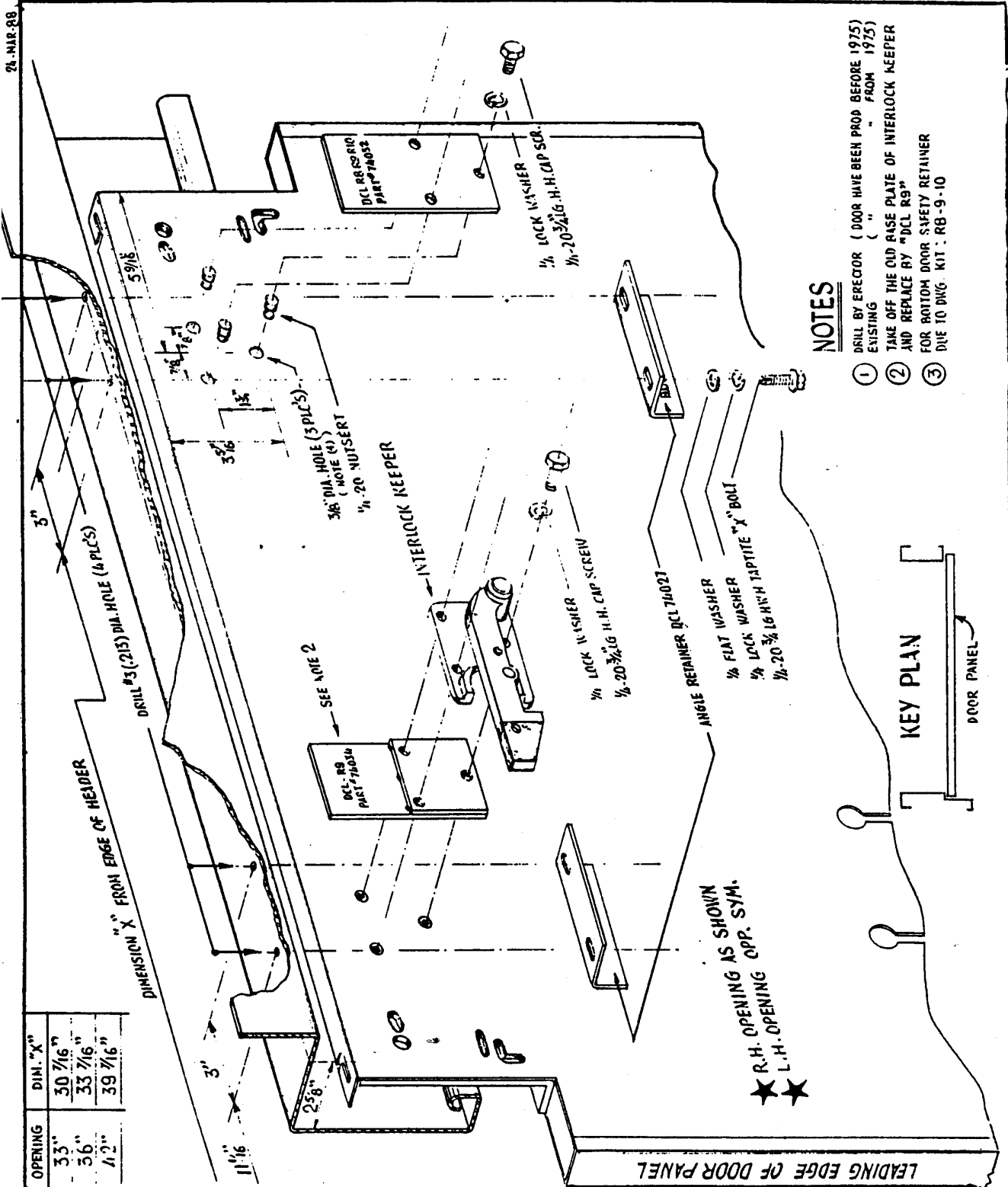


NOTE: ORDER BY KIT # →
 (M.A.C.: KIT R8
 G.A.L.: KIT R9
 OTIS : KIT R10)

Dahlstrom
 OF CANADA LIMITED
 7 COPELAND STREET, TORONTO, ONT

TITLE ELEVATOR ENTRANCE S/SPD ECONOMY TYPE
DOOR PANEL SAFETY RETAINER
 (RETROFIT)
 SUITABLE FOR M.A.C.-G.A.L.-OTIS. EQUIP.

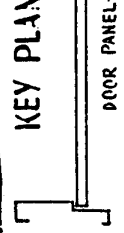
NO.	DATE	REVISION	REV.	SHT. 1 OF 1
DR. BY			DOANH VU	
DATE			21-OCT-1986	
PUR. NO.			KIT R8-9-10	



NOTES

- ① DRILL BY ERECTOR (DOOR HAVE BEEN PROD BEFORE 1975) EXISTING (" FROM 1975)
- ② TAKE OFF THE OLD RAISE PLATE OF INTERLOCK KEEPER AND REPLACE BY "DCL RB"
- ③ FOR BOTTOM DOOR SAFETY RETAINER DUE TO DWG. KIT : RB-9-10

KEY PLAN



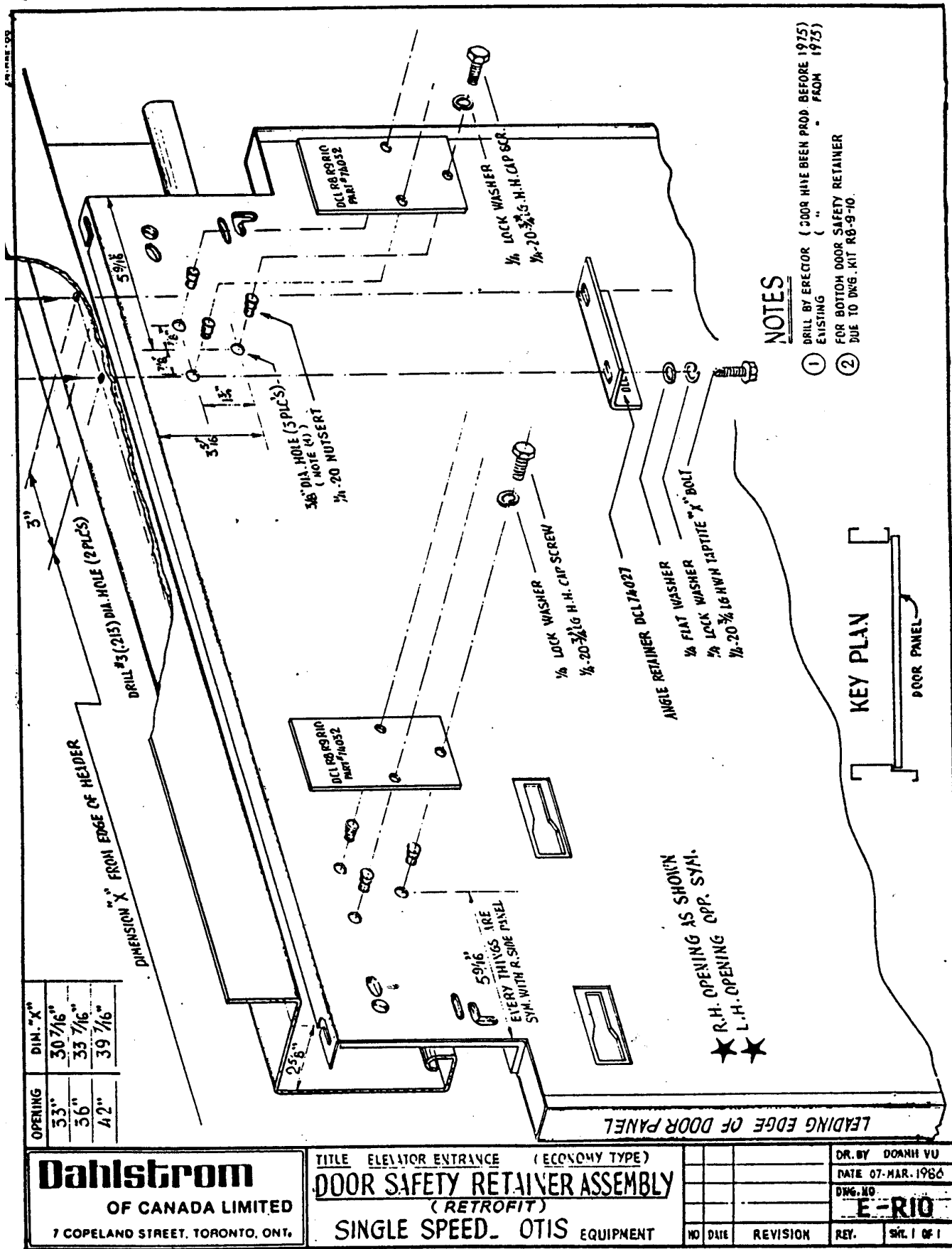
OPENING	DIM. "X"
33"	30 7/16"
56"	33 7/16"
71 2"	39 7/16"

Dahlstrom
 OF CANADA LIMITED
 7 COPELAND STREET, TORONTO, ONT.

TITLE ELEVATOR ENTRANCE (ECONOMY TYPE)
DOOR SAFETY RETAINER ASSEMBLY
 (RETROFIT)
 SINGLE-SPEED - G.A.L. EQUIPMENT

NO	DATE	REVISION	REV.	SHEET OF 1

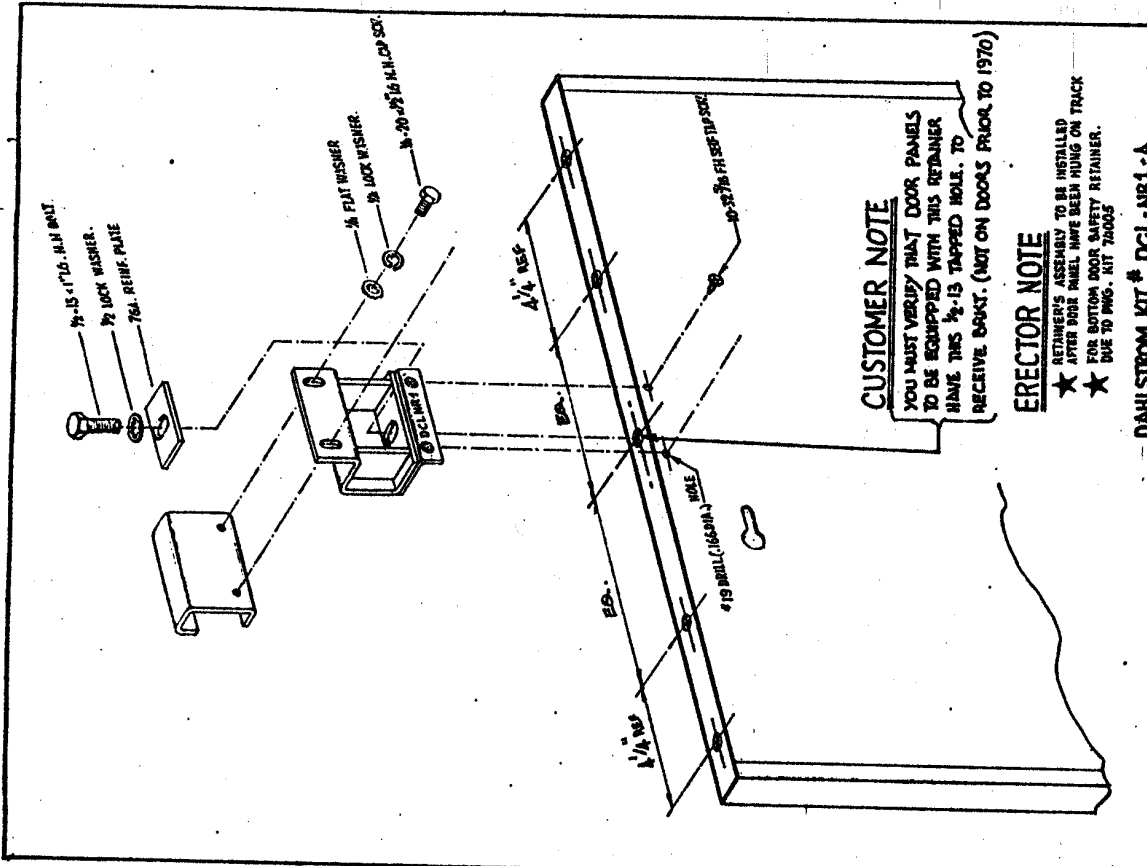
DR. BY DOANH VU
 DATE 07-MAR-1986
 DWG. NO. F-1000



Dahlstrom
OF CANADA LIMITED
7 COPELAND STREET, TORONTO, ONT.

TITLE ELEVATOR ENTRANCE (ECONOMY TYPE)
DOOR SAFETY RETAINER ASSEMBLY
(RETROFIT)
SINGLE SPEED OTIS EQUIPMENT

DR. BY DOANH VU	
DATE 07-MAR-1986	
DNG. NO.	
E-RIO	
NO.	DATE
REVISION	REV.
SHT. 1	OF 1



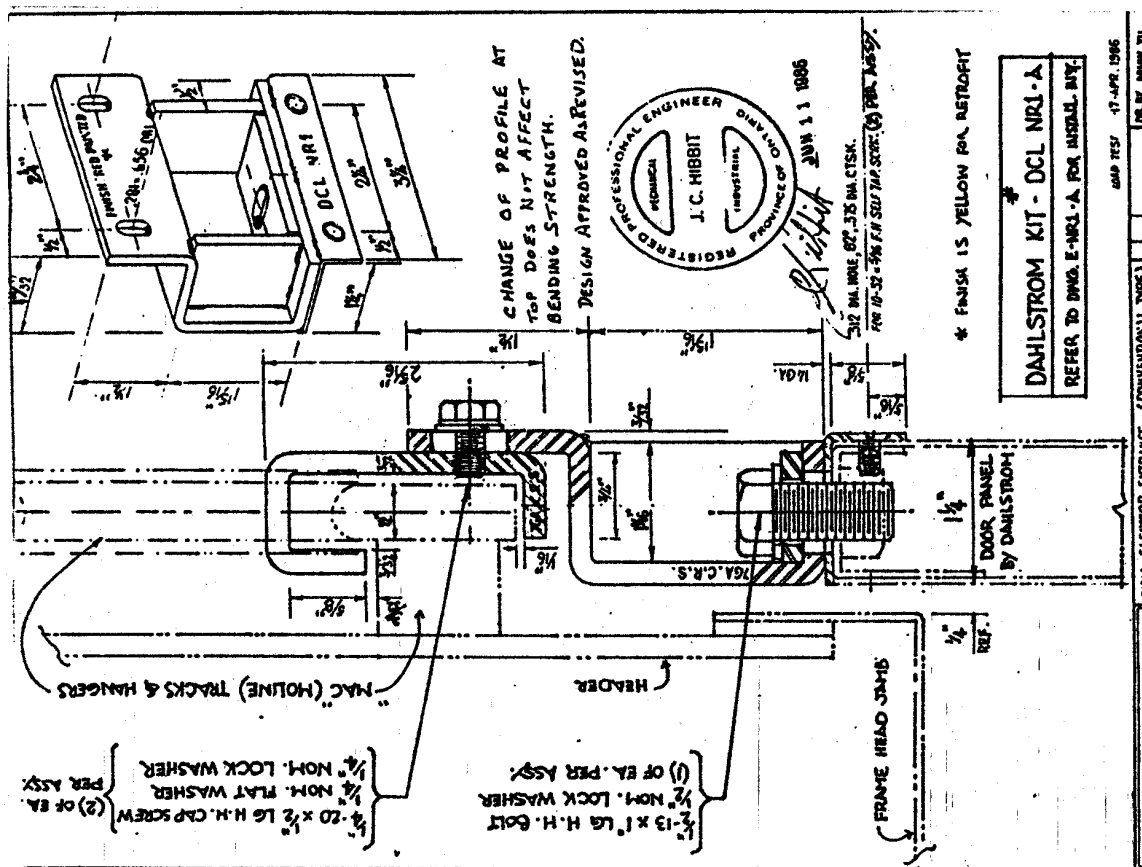
CUSTOMER NOTE
 YOU MUST VERIFY THAT DOOR PANELS TO BE EQUIPPED WITH THIS RETAINER HAVE THIS 1/2-13 TAPPED HOLE. TO RECEIVE DOORST. (NOT ON DOORST PRIOR TO 1970)

ERECTOR NOTE
 ★ RETAINER'S ASSEMBLY TO BE INSTALLED AFTER YOUR PANEL HAS BEEN HUNG ON TRACK
 ★ FOR BOTTOM DOOR SAFETY RETAINER.

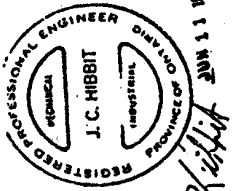
DAHLSTROM KIT # DCL-NR1-A

TITLE	ELEVATOR ENTRANCE (CONVENTIONAL TYPE)	DATE BY	DATE TO
NO.		NO.	
REV.		REV.	
DOOR SAFETY RETAINER ASSEMBLY		E-NR1-A	
M.A.C. EQUIP.		REV. 1 (SCL 1) 1	

Dahlstrom
 OF CANADA LIMITED
 7 COPELAND STREET, TORONTO, ONT. M5S 1A7



CHANGE OF PROFILE AT TOP DOES NOT AFFECT BENDING STRENGTH.
 DESIGN APPROVED AS REVISED.



* FINISH IS YELLOW PA. RETROFIT

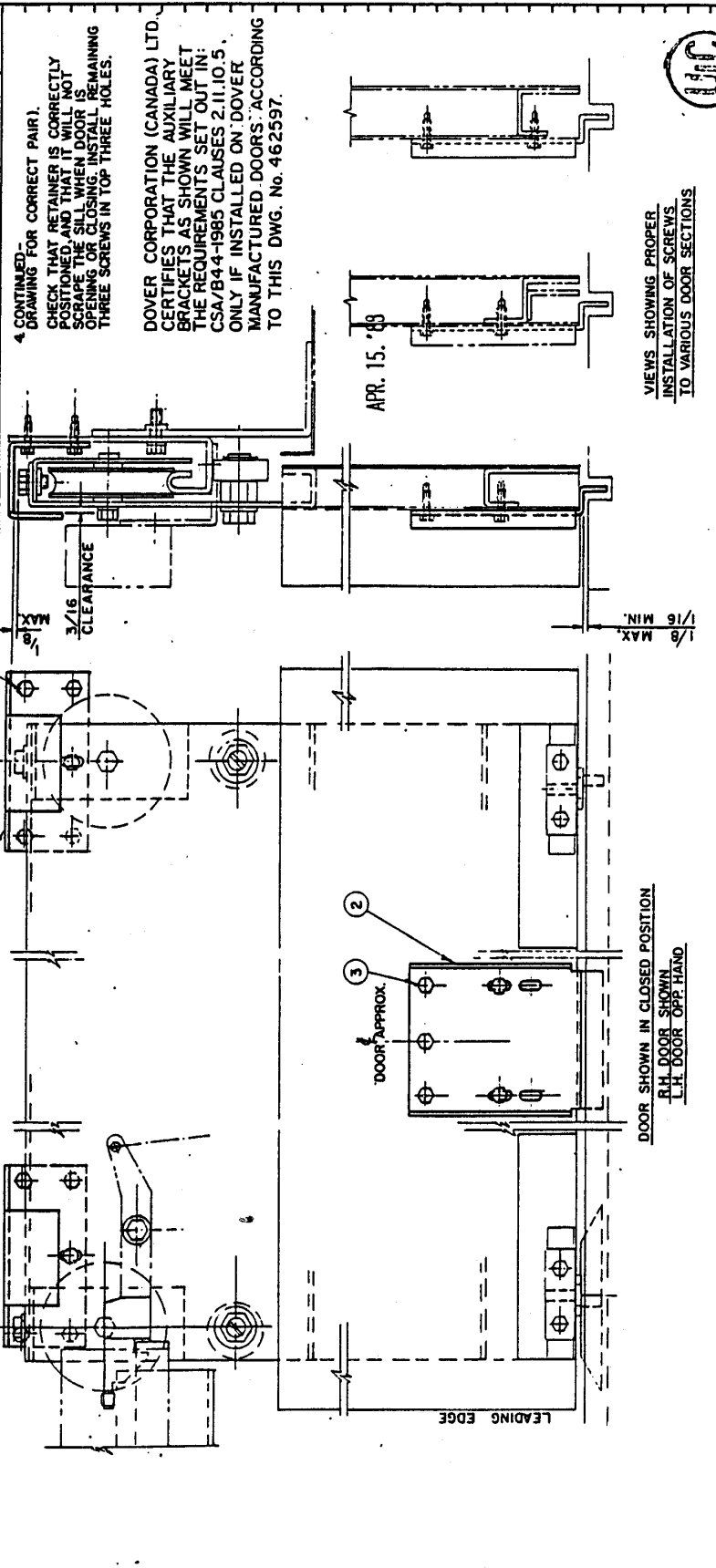
DAHLSTROM KIT - DCL NR1-A
 REFER TO DWG. E-NR1-A FOR DETAILS, ETC.

TITLE	ELEVATOR ENTRANCE (CONVENTIONAL TYPE)	DATE BY	DATE TO
NO.		NO.	
REV.		REV.	
TOP DOOR RETAINER		NR1-A	
RETROFIT TO DAHLSTROM DOORS		REV. 2 (SCL 1) 1	
S/SPD TYPE, EQUIPPED WITH MFC HANGERS		REV. 1 (SCL 1) 1	

Dahlstrom
 OF CANADA LIMITED
 7 COPELAND STREET, TORONTO, ONT. M5S 1A7

PART NO.		ISSUED BY	DATE ISSUED	QUANTITY	JOB NO.
CLASS	DEPT.	DATE	DESCRIPTION		
GROUP INFO.	M.I.E. INFO.	DATE	DESCRIPTION		
NO.	QTY	DATE	DESCRIPTION		
1	1	261621	TOP BRACKET		
2	1	261622	BOTTOM BRACKET		
3	1	261682	BAG OF SCREWS (5/16" X 1 1/2")		
4	1	462597	PRINT OF THIS DWG. 8 1/2" X 11"		
5	1	703044	BAG 7 X 12 1/2"		

INS INSTALLATION	
1	WITH DOOR CLOSED, POSITION LEADING EDGE TOP RETAINER ACCORDING TO DIMENSIONS ON DRAWING AND MARK HOLES. REPEAT FOR TRAILING EDGE RETAINER.
2	OPEN DOOR FULLY & JAMB IN OPEN POSITION, INSTALL LEADING EDGE RETAINER USING ONE SCREW IN THE SLOTTED HOLE. REPEAT FOR TRAILING EDGE RETAINER.
3	CLOSE DOOR AND CHECK THAT RETAINERS ARE POSITIONED WITHIN TOLERANCES SPECIFIED. ADJUST MARKINGS TO OPEN DOOR AND INSTALL REMAINING SCREWS.
4	WITH DOOR CLOSED, POSITION BOTTOM RETAINER ACCORDING TO DIMENSIONS ON DRAWING. INSTALL RETAINER USING TWO SCREWS IN SLOTTED HOLES. ONLY ONE PAIR OF SLOTS REQUIRED - CHECK



4 CONTINUED - DRAWING FOR CORRECT PAIR)
 CHECK THAT RETAINER IS CORRECTLY POSITIONED. DOOR MUST NOT SCRAPE THE SILL WHEN DOOR IS OPENING OR CLOSING. INSTALL REMAINING THREE SCREWS IN TOP THREE HOLES.

DOVER CORPORATION (CANADA) LTD. CERTIFIES THAT THE AUXILIARY BRACKETS AS SHOWN WILL MEET THE REQUIREMENTS SET OUT IN: CSA/B44-1985 CLAUSES 2.11.10.5, ONLY IF INSTALLED ON DOVER MANUFACTURED DOORS ACCORDING TO THIS DWG. No. 462597.

APR. 15 '88

UIC

VIEWS SHOWING PROPER INSTALLATION OF SCREWS TO VARIOUS DOOR SECTIONS

DOOR SHOWN IN CLOSED POSITION
 R.H. DOOR SHOWN
 L.H. DOOR OFF-HAND

TOOLS REQUIRED:
 - ELECTRIC SCREWDRIVER WITH CLUTCH DRIVEN (CLUTCH SET AT 30-50 INCH-POUNDS TORQUE).
 - 5/16 WRENCH FOR ADJUSTMENT.

GROUP IDENTIFICATION

DO NOT SCALE THIS DRAWING

DOVER CORPORATION (CANADA) LIMITED
 TURNBULL ELEVATOR DIVISION

PREPARED BY: J.S. DATE: JULY 15/85
 CHECKED BY: DATE: 462596

TOOLS: DATE: 462597

THIS DOOR SAFETY RETAINER KIT FOR FIELD INSTALLATION IS SUBJECT TO THE FOLLOWING CONDITIONS:

UIC APPROVAL DWG. 462596

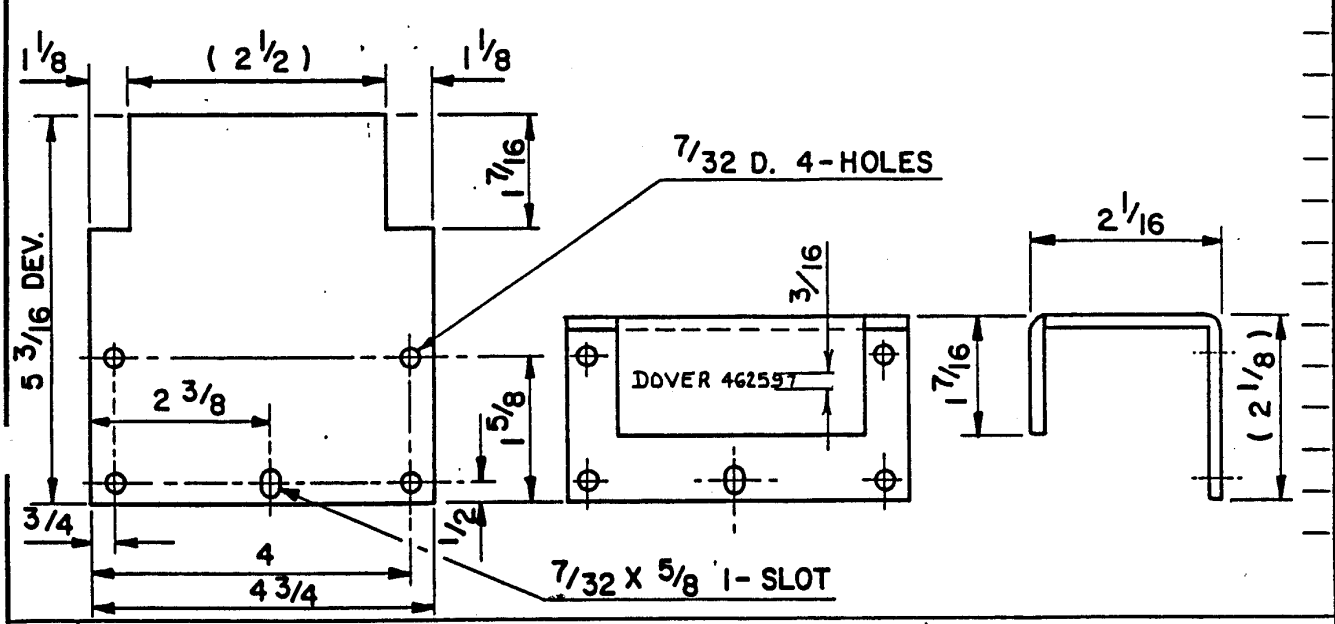
DIR - 11289
 PCO-09020
 1 JULY 15 1985

REVISION AND ISSUE	1 APR. 22/85 P.C.O. 08799 D.I.R. 11289	2 NOV. 25, 1985 MAT'L WAS 10 GA. H.R.P. S-1834-21 CODE No. 185900 & CAD. PL. DELETED P.C.O. 09300 Q. D.I.R. 11334	3 OCT. 20/86. CLASS YELLOW ADDED, 462597 ADDED TO DOVER. P.C.O. 09721 D.I.R. 1190. RR. HRP WAS S.C. MOUNT		DWG. NO. 261621
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USED ON	SUB ASSY.	FINAL ASSY.	(462596)	462597					
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PART NO.	ISSUED BY	DATE ISSUED	QUANTITY	JOB REQ'D.	JOB CODE
CLASS	DEPT.	DLVR.	DESCRIPTION	CODE	BRCH. ORDER NO. S SS SSS W

SHOP INFO.		M.I.S. INFO.		PAGE 15 OF 88						
TOTAL UNITS	G	G	ITEM NO.	LINE NO.	CODE NO.	TOTAL MAT'L	UNIT MEAS.	IDENTIFICATION NO.	DESCRIPTION	LOCATION
			1		185900			S-1834-21	4 3/4 X 5 3/16 OF 10 GA. HRP	△



GROUP IDENTIFICATION

THIS DRAWING IN DESIGN AND DETAIL IS THE PROPERTY OF THE DOVER CORPORATION (CANADA) LTD., TURNBULL ELEVATOR DIVISION, AND IS LOANED SUBJECT TO RETURN UPON DEMAND, UNDER THE EXPRESS CONDITIONS THAT IT MUST NOT BE COPIED OR USED EXCEPT BY PERMISSION.	DO NOT SCALE THIS DRAWING	DOVER CORPORATION (CANADA) LIMITED TURNBULL ELEVATOR DIVISION
--	---------------------------	--

NAME OF JOB	PROTECTIVE FINISH	DRAWN BY	DATE	REF. NO.
		<i>[Signature]</i>	AUG. 15/85	
TOOLS	CLASS.	CHECKED BY	DATE	REVISION NO.
T-11052	YELLOW			123
TITLE			MAT'L LIST	DWG. NO.
SAFETY RETAINER BRKT. - HALL DOOR - (TOP)			711	261621

REVISION AND ISSUE	<p>1 APR. 8 / 85 P.C.O. 08799 D.I.R. 11289</p> <p>2 NOV. 25, 1985 MAT'L WAS 10 GA. HRP. CODE No. 185900, S-1834-21 & CAD. PL. DELETED P.C.O. 09300 D. D.I.R. 11334</p> <p>3 OCT. 20/86. CLASS YELLOW ADD'D 462598 ADDED TO DOVER. P.C.O. 09721 D.I.R. 1140: RAR HRP WAS S.C. MANUAL</p>	DWG. NO. 261620
--------------------	---	---------------------------

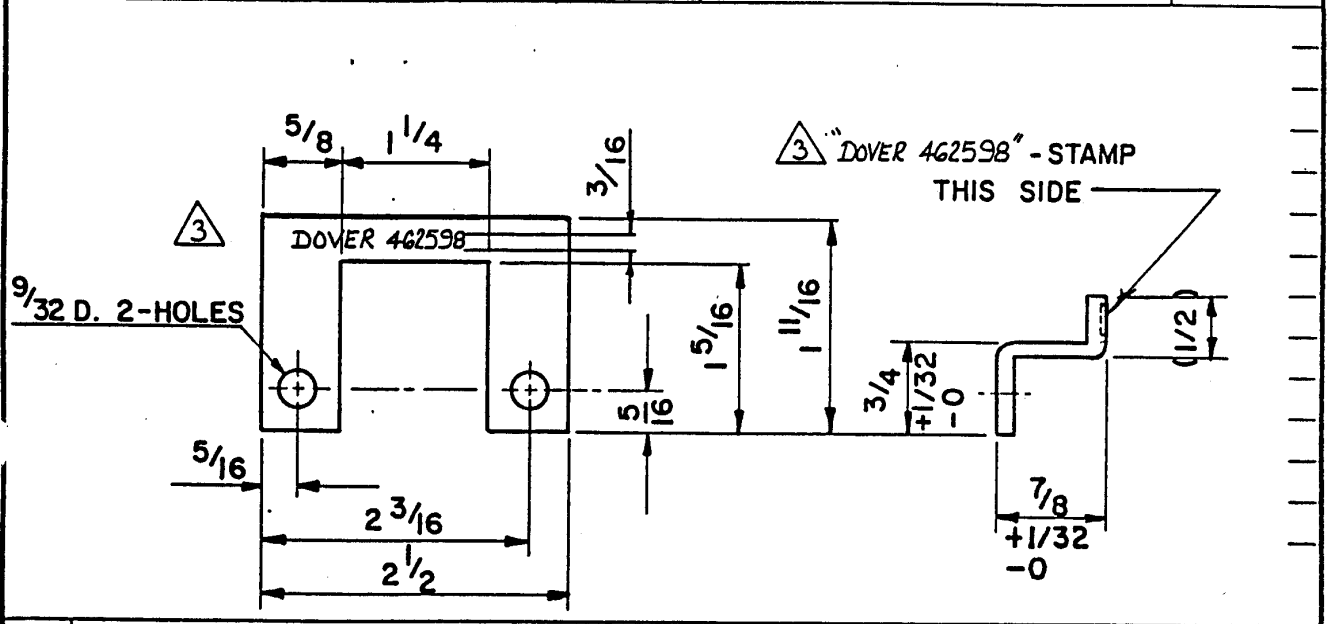
USED ON	SUB ASSY.	FINAL ASSY.	462598				
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PART NO.	ISSUED BY	DATE ISSUED	QUANTITY	JOB REQ'D.	JOB CODE
----------	-----------	-------------	----------	------------	----------

CLASS	DEPT.	DLVR.	DESCRIPTION	CODE	BRCH.	ORDER NO.	S	SS	SSS	W
-------	-------	-------	-------------	------	-------	-----------	---	----	-----	---

SHOP INFO.	M.I.S. INFO.	PAGE	OF
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TOTAL UNITS	G	G	ITEM NO.	LINE NO.	CODE NO.	TOTAL MAT'L	UNIT MEAS.	IDENTIFICATION NO.	DESCRIPTION	LOCATION
			1		185900			S-1834-21	2 1/2 X 1 11/16 OF 10 GA. HRP	



GO1

GROUP IDENTIFICATION		
THIS DRAWING IN DESIGN AND DETAIL IS THE PROPERTY OF THE DOVER CORPORATION (CANADA) LTD., TURNBULL ELEVATOR DIVISION, AND IS LOANED SUBJECT TO RETURN UPON DEMAND, UNDER THE EXPRESS CONDITIONS THAT IT MUST NOT BE COPIED OR USED EXCEPT BY PERMISSION.	DO NOT SCALE THIS DRAWING	DOVER CORPORATION (CANADA) LIMITED TURNBULL ELEVATOR DIVISION

NAME OF JOB	PROTECTIVE FINISH	DRAWN BY <i>NA</i>	DATE <i>AUG. 15/85</i>	REF. NO.
TOOLS T-11051	CLASS. <i>YELLOW</i>	CHECKED BY	DATE	
		SCALE	REVISION NO. <i>123</i>	

TITLE SAFETY RETAINER - HALL DOOR HANGER	MAT'L LIST 711	DWG. NO. 261620
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REVISION AND ISSUE												DWG. NO.							
1	APR. 18/85											261622							
	P.C.O. 08799																		
	D.I.R. 11289																		
2	NOV. 25, 1985																		
	MAT'L WAS 10 GA.																		
	H.R.P. S-1834-41																		
	CODE No. 185884																		
	CAD. PL. DELETED																		
	P.C.O. 09300																		
	D.I.R. 11334																		
3	Oct. 20/86.																		
	CLASS YELLOW																		
	ADDED																		
	P.C.O. 09721																		
	D.I.R. 1146																		
	HRP WAS S.C. MOVING																		
USED ON																			
SUB ASSY.																			
FINAL ASSY.		(462596) 462597-8																	
PART NO.		ISSUED BY		DATE ISSUED		QUANTITY		JOB REQ'D.		JOB CODE									
CLASS		DEPT.		DLVR.		DESCRIPTION				CODE BRCH. ORDER NO. S SS SSS W									
SHOP INFO.		M.I.S. INFO.				PAGE		OF											
TOTAL UNITS		G		ITEM NO.		LINE NO.		CODE NO.		TOTAL MAT'L		UNIT MEAS.		IDENTIFICATION NO.		DESCRIPTION		LOCATION	
				1				185885				S-1834-41		4 $\frac{11}{16}$ X 6 OF 12 GA. HRP					
GROUP IDENTIFICATION																			
THIS DRAWING IN DESIGN AND DETAIL IS THE PROPERTY OF THE DOVER CORPORATION (CANADA) LTD., TURNBULL ELEVATOR DIVISION, AND IS LOANED SUBJECT TO RETURN UPON DEMAND, UNDER THE EXPRESS CONDITIONS THAT IT MUST NOT BE COPIED OR USED EXCEPT BY PERMISSION.										DO NOT SCALE THIS DRAWING					DOVER CORPORATION (CANADA) LIMITED TURNBULL ELEVATOR DIVISION				
NAME OF JOB					PROTECTIVE FINISH		DRAWN BY		DATE		REF. NO.								
							[Signature]		AUG. 15/85										
TOOLS					CLASS.		CHECKED BY		DATE		REVISION NO.								
T-11053					YELLOW						123								
TITLE										MAT'L LIST		DWG. NO.							
SAFETY RETAINER BRKT. - HALL DOOR (BTM.)										711		261622							

CLASS	DEPT. DIV.	DESCRIPTION	QUANTITY	DATE ORDERED	ISSUED BY	JOB CODE
21		261910				
12		261911				
23		363089				
214		208029				
15		463485				
16		703044				
17		261912				

INSTALLATION

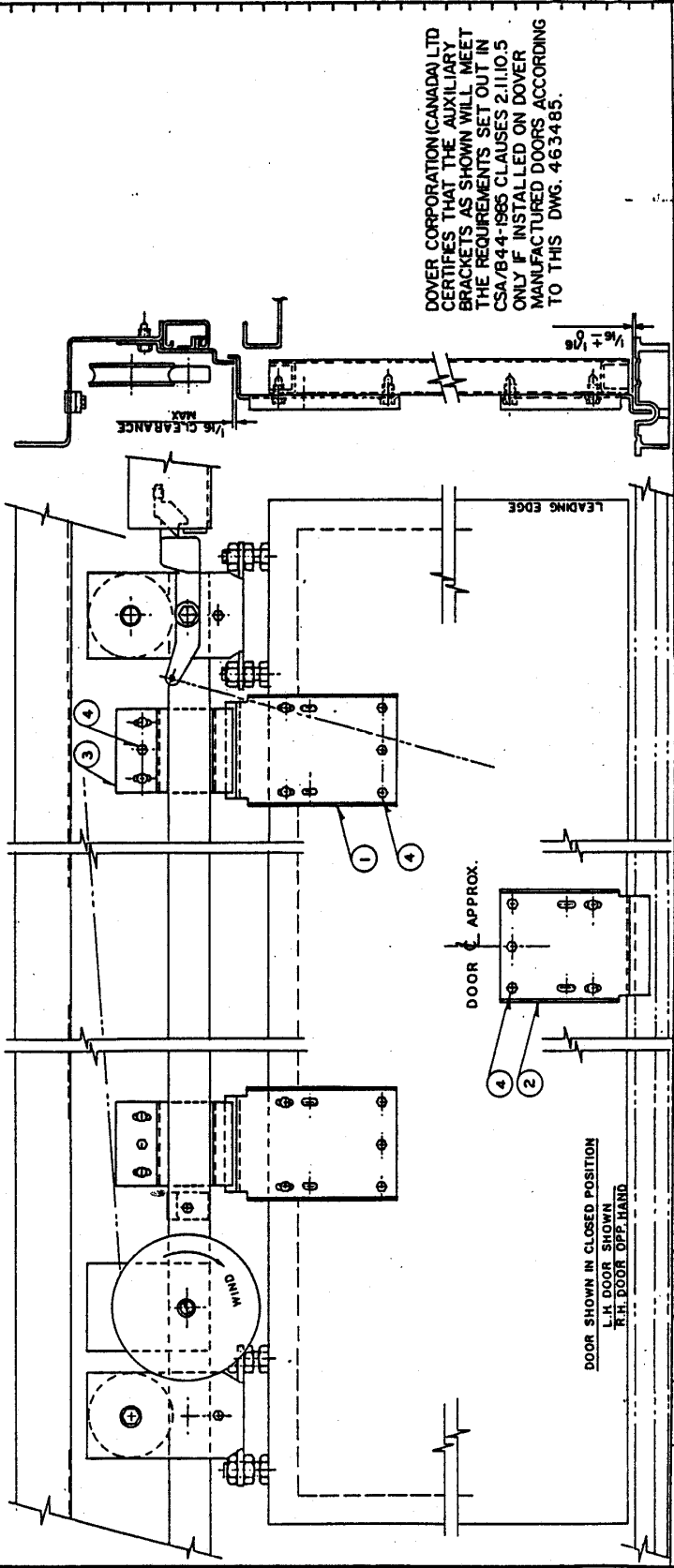
4. CHECK THAT RETAINER IS CORRECTLY POSITIONED, AND THAT IT WILL NOT SCRAPE THE SILL WHEN DOOR IS OPENING OR CLOSING. INSTALL REMAINING THREE SCREWS IN TOP THREE HOLES.

1. WITH DOOR CLOSED, POSITION LEADING EDGE TOP RETAINER AS FAR FORWARD AS POSSIBLE. REPEAT FOR TRAILING EDGE RETAINER.

2. OPEN DOOR AND CHECK THAT RETAINERS ARE POSITIONED WITHIN TOLERANCES SPECIFIED. ADJUST IF NECESSARY. REOPEN DOOR AND INSTALL REMAINING SCREWS IN HOLES.

3. WITH DOOR CLOSED, POSITION BOTTOM RETAINER, ACCORDING TO DIM S. ON DWG. INSTALL RETAINER USING TWO SCREWS IN SCOTTED HOLES. (ONLY ONE PAIR OF SLOTS REQUIRED).

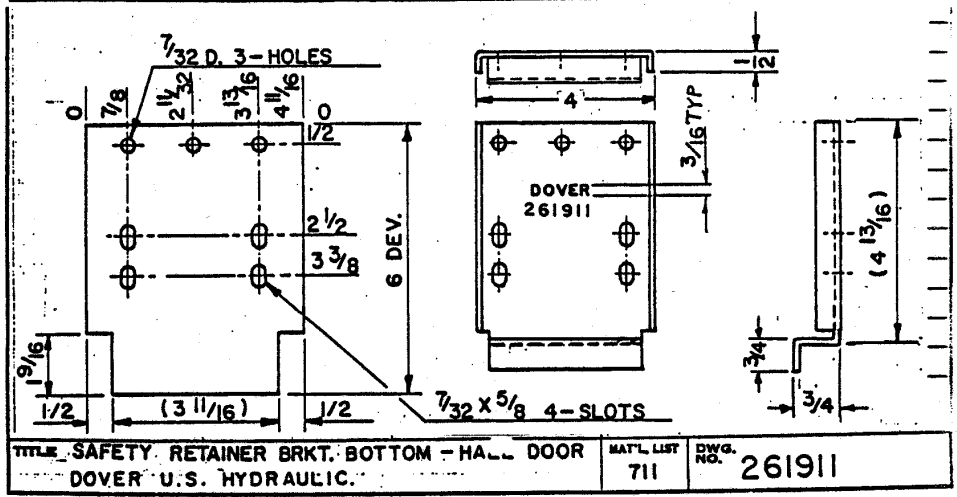
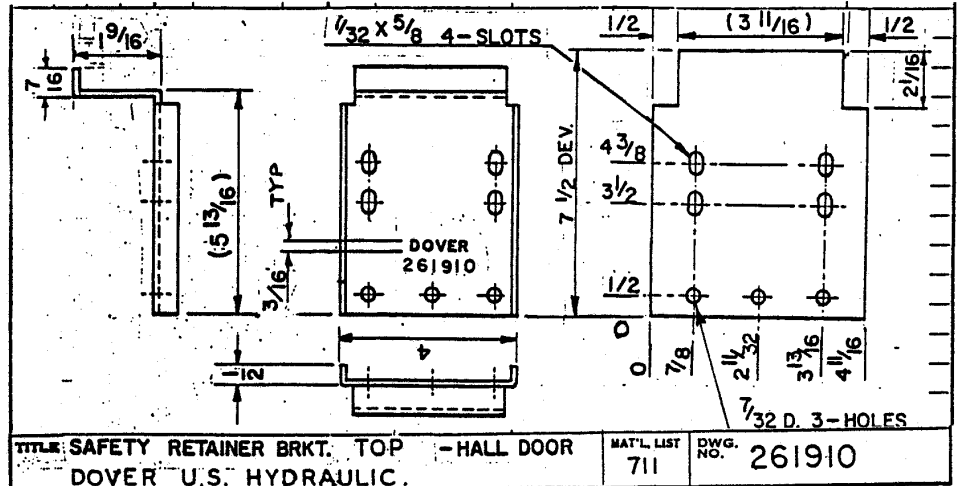
TOOLS REQUIRED:
 - ELECTRIC SCREWDRIVER WITH CLUTCH DRIVEN
 - 5/16 HEX SOCKET CLUTCH SET AT 30-50 INCH-POUNDS TORQUE
 - 5/16 WRENCH FOR ADJUSTMENT



DOVER CORPORATION (CANADA) LTD CERTIFIES THAT THE AUXILIARY BRACKETS AS SHOWN WILL MEET THE REQUIREMENTS SET OUT IN CSA/B44-1985 CLAUSES 2.11.10.5 ONLY IF INSTALLED ON DOVER MANUFACTURED DOORS ACCORDING TO THIS DWG. 463485.

GROUP IDENTIFICATION	
DO NOT SCALE THIS DRAWING	DO NOT SCALE THIS DRAWING
DATE: JAN 21/88	DATE: JAN 21/88
SCALE: 1/4\"/>	
DATE: FEB 1/1988	DATE: FEB 1/1988
PCB: 10256	PCB: 10256
DTR: 11506	DTR: 11506
REVISION AND ISSUE	REVISION AND ISSUE

463485
 DOOR SAFETY RETAINER KIT FOR FIELD MTG. 71
 DOVER U.S. HYDRAULIC ENTRANCES



PART NO.		ISSUED BY	DATE ISSUED	QUANTITY	JOB REF.	JOB CODE				
CLASS	DEPT.	OLVR.	DESCRIPTION	CODE	BRCH	ORDER NO.	S	SR	SSB	W
SHOP INFO.		M.I.E. INFO.		PAGE		OF				
LINE	QTY	REV	DATE	CODE	NO.	IDENTIFICATION NO.	DESCRIPTION	LOCATION		
1	1			185868		5-1835-11	3X 4 31/32 OF 16 GA.	6		
2	1			185868		5-1835-11	3X 1 1/32 OF 16 GA.	5		

SUB ASBY.	463485	001	GROUP IDENTIFICATION		
THIS DRAWING IN DESIGN AND DETAIL IS THE PROPERTY OF THE ABOVE COMPANY. IT IS TO BE KEPT IN CONFIDENCE AND IS LOANED SUBJECT TO THE TERMS AND CONDITIONS OF THE ORDER. IT IS NOT TO BE REPRODUCED OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF THE ABOVE COMPANY.			DO NOT SCALE THIS DRAWING		
TURNBULL CORPORATION (CANADA) LIMITED TURNBULL ELEVATOR DIVISION					
NAME OF JOB		PROTECTIVE FINISH	DRAWN BY	DATE	REV.
		CLASS.	DATE		
TOOLS		SCALE	REVISION		
TITLE SAFETY RETAINER BRKT. HDR. - HALL DOOR DOVER U.S. HYDRAULIC.		MAT'L LIST	DWG. NO.		
		711	363089		

INSTALLATION

1. REPLACE HANGER BAR SPACERS ONE AT A TIME, BY REMOVING THE HEX SOCKET CAP SCREW AND PULLING ON THE HANGER BAR TO ALLOW ENOUGH ROOM TO REMOVE THE EXISTING SPACER. PUT THE REPLACEMENT IN THE UNISTRUT USING THE SAME METHOD.
2. WITH DOOR CLOSED, MARK LOCATIONS OF HOLES FOR TOP RETAINER ACCORDING TO DIM'S ON DWG. OR WITH OPTIONAL TEMPLATE (261966). CENTRE PUNCH SHOULD BE USED SINCE HOLE LOCATION IS QUITE CRITICAL. DRILL HOLES.
3. INSTALL TOP RETAINERS USING HARDWARE SUPPLIED. GUNNER BOLTS TO GO TO CLEARANCE AND THAT UPRIGHT ROLLER IS FREE TO ROLL.
4. WITH DOOR CLOSED, POSITION BOTTOM RETAINER ACCORDING TO DIM'S ON DWG. INSTALL RETAINER USING TWO SCREWS IN SLOTTED HOLES. (ONLY ONE PAIR OF SLOTS REQUIRED. CHECK DWG. FOR CORRECT PAIR. CHECK THAT RETAINER IS CORRECTLY POSITIONED, AND IT WILL NOT SCAPE THE SILL WHEN DOOR IS OPENING OR CLOSING. INSTALL REMAINING THREE SCREWS IN TOP THREE HOLES.

TOOLS REQUIRED:

- DRILL WITH 9/32 DRILL BIT.
- ELECTRIC SCREWDRIVER WITH CLUTCH DRIVEN 5/8" HEX. SOCKET/CLUTCH SET AT 30-50 INCH POUNDS TORQUE.
- 5/8" WRENCH OR SOCKET
- 7/16" WRENCH OR SOCKET
- 7/16" ALLEN KEY
- DRILLING TEMPLATE FOR ITEM 1, PART No. 261966 (OPTIONAL)

SECTION A-A

DOVER CORPORATION (CANADA)
 LTD. CERTIFIES THAT THE
 AUXILIARY BRACKETS AS
 SHOWN WILL MEET THE
 REQUIREMENTS SET OUT IN
 CSA/B44-1985 CLAUSE
 2.11.10.5 ONLY IF INSTALLED
 ON DOVER MANUFACTURED
 DOORS ACCORDING TO THIS
 DWG. No. 463589.

CLASS	DEPT.	DATE ISSUED	QUANTITY	ISSUED BY	DESCRIPTION	JOB CODE

SHOP INFO.	M.P.R. INFO.	DESCRIPTION	LOCATION
2 1	261964	TOP BRACKET	
1 2	261911	BOTTOM BRACKET	
5 3	206029	FSTN, SCREW SOST 10-24 x 3/4	
4 4	200840	WASHER 1/4-20 x 3/4	
4 5	204898	WASHER LWS 1/4	
2 6	261965	SPACER	
1 7	463589	PRINT OF THIS DWG 8 1/2 x 11	
1 8	703044	BAG	

GROUP IDENTIFICATION

DO NOT SCALE THIS DRAWING

DOVER CORPORATION (CANADA) LIMITED
 TECHNICAL ELEVATOR DIVISION

DATE: 14 SEP 1989
 SUPERSEDES: 463485

NAME OF: DOVER U.S. HYDRAULIC ENTRANCES
 TITLE: DOOR SAFETY RETAINER KIT FOR FIELD MTG.
 DWG. NO.: 463589

1 SEPT. 13, 1989 P.C.O. 10441 DIR. 11534-φ		261964	
SUB ASSY. 463589 FINAL ASSY.		SUB ASSY. 261967 FINAL ASSY. 463589	
PART NO. ISSUED BY DATE ISSUED QUANTITY JOB RECD. JOB CODE		PART NO. ISSUED BY DATE ISSUED QUANTITY JOB RECD. JOB CODE	
CLASS DEPT. DLVR. DESCRIPTION CODE BRCH ORDER NO. S S1 S55 W		CLASS DEPT. DLVR. DESCRIPTION CODE BRCH ORDER NO. S S1 S55 W	
SHOP INFO. M.I.S. INFO. PAGE OF		SHOP INFO. M.I.S. INFO. PAGE OF	
TOTAL QUANTITY 1	LINE NO. 1	CODE NO. 189900	IDENTIFICATION NO. S-1834-21
TOTAL QUANTITY 2	LINE NO. 2	CODE NO. 204735	IDENTIFICATION NO. S-2701-1
DESCRIPTION 3 x 1 1/16 OF 10 GA. HRP			
DESCRIPTION 1/4 - 20 WELD NUT			
GROUP IDENTIFICATION THIS DRAWING IN WHOLE AND DETAIL IS THE PROPERTY OF THE DOVER CORPORATION (CANADA) LIMITED TURNBULL ELEVATOR DIVISION. IT IS LOANED SUBJECT TO RETURN UPON DEMAND. UNDER NO CIRCUMSTANCES SHALL IT BE REPRODUCED OR USED EXCEPT BY PERMISSION.			
NAME OF JOB: SAFETY RETAINER - HALL DOOR HANGER - U.S.			
DATE: SEPT. 13, 1989			
CLASS: YELLOW			
MATERIAL: 501			
REV. NO.: 261964			

1 SEPT. 13, 89 P.C.O. 10441 DIR. 11534		261966	
SUB ASSY. 463589 FINAL ASSY.		SUB ASSY. 261967 FINAL ASSY. 463589	
PART NO. ISSUED BY DATE ISSUED QUANTITY JOB RECD. JOB CODE		PART NO. ISSUED BY DATE ISSUED QUANTITY JOB RECD. JOB CODE	
CLASS DEPT. DLVR. DESCRIPTION CODE BRCH ORDER NO. S S1 S55 W		CLASS DEPT. DLVR. DESCRIPTION CODE BRCH ORDER NO. S S1 S55 W	
SHOP INFO. M.I.S. INFO. PAGE OF		SHOP INFO. M.I.S. INFO. PAGE OF	
TOTAL QUANTITY 1	LINE NO. 1	CODE NO. 185918	IDENTIFICATION NO. S-1834-11
TOTAL QUANTITY 2	LINE NO. 2	CODE NO. 203075	IDENTIFICATION NO. FSTN., SCREW WSPS 1/4 - 20 x 1
DESCRIPTION 3 1/16 x 1 3/4 OF 7 GA. HRP			
DESCRIPTION FSTN., SCREW WSPS 1/4 - 20 x 1			
SHOP NOTE 1: DEBURR ALL EDGES BY FILING OR TUMBLING.			
GROUP IDENTIFICATION THIS DRAWING IN WHOLE AND DETAIL IS THE PROPERTY OF THE DOVER CORPORATION (CANADA) LIMITED TURNBULL ELEVATOR DIVISION. IT IS LOANED SUBJECT TO RETURN UPON DEMAND. UNDER NO CIRCUMSTANCES SHALL IT BE REPRODUCED OR USED EXCEPT BY PERMISSION.			
NAME OF JOB: DRILLING TEMPLATE FOR TOP SAFETY RETAINER BRACKET ON LANDING DOOR INDIVIDUAL HANGER - U.S.			
DATE: SEPT. 13, 1989			
CLASS: 7			
MATERIAL: 711			
REV. NO.: 261966			

N	NORTHERN ELEVATOR LIMITED TORONTO	
	subject: RETRO-FIT ENTRANCE DOOR SAFETY RETAINERS	page

PROPOSAL

INSTALLATION OF NORTHERN SAFETY RETAINERS

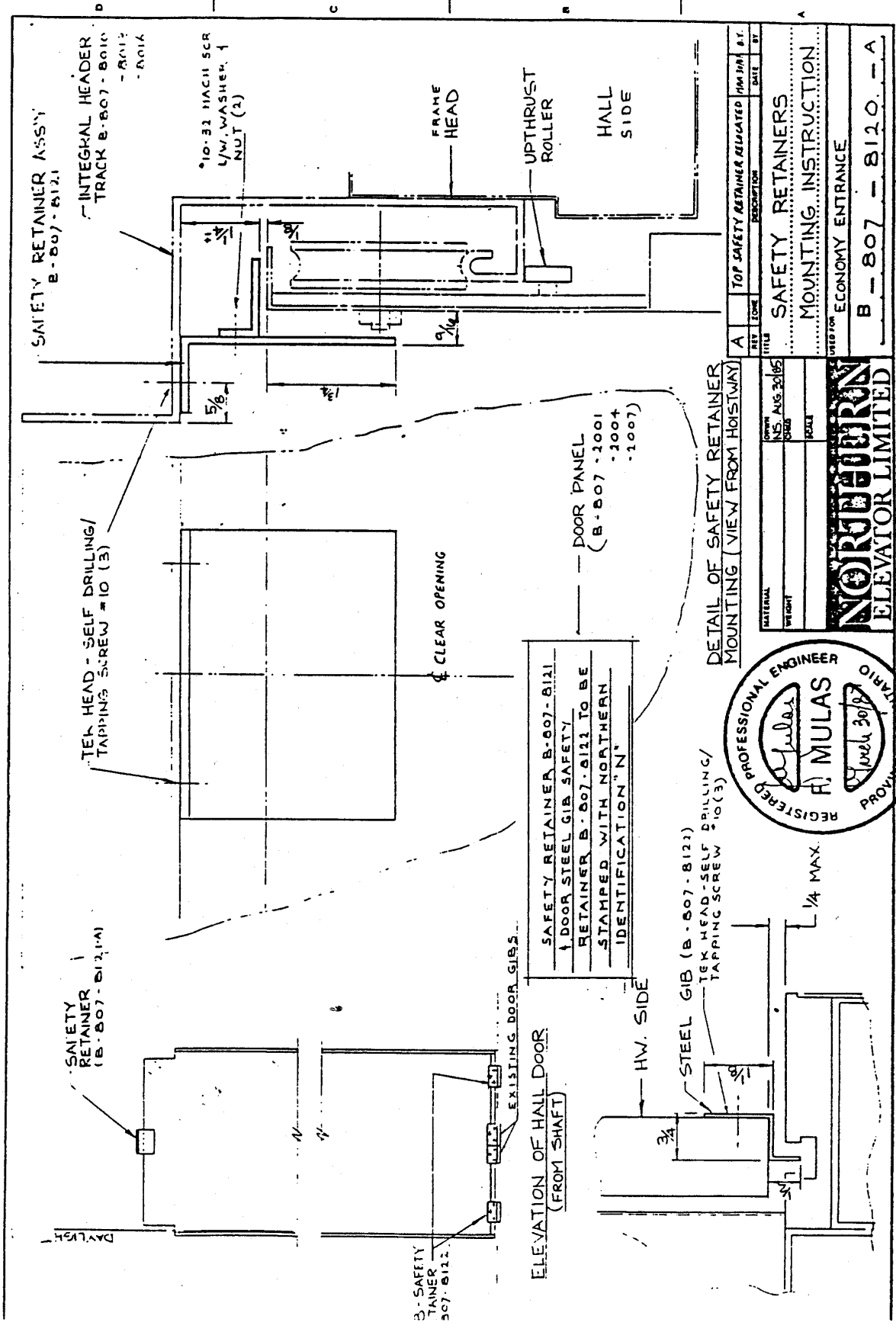
PART #B-807-8121A AND #B-807-8122A

THE TOP OF DOOR SAFETY RETAINER PART #B-807-8121 WHICH IS A TWO-PIECE ANGLE ASSEMBLY IS TO BE MOUNTED TO THE UNDERSIDE OF THE INTEGRAL HEADER TRACK WITH (3) #10 TEK HEAD SELF DRILLING/TAPPING SCREWS AT THE MIDDLE OF DOOR. (ASSEMBLY DRAWING #B-807-8120)

DEPENDENT ON EXISTING DOOR GIB LOCATION EITHER (1) OR (2) SAFETY GIB RETAINERS PART #B-807-8122 ARE REQUIRED. SAFETY GIB RETAINER IS MOUNTED TO SHAFT SIDE OF DOOR WITH (3) #10 TEK HEAD SELF DRILLING/TAPPING SCREWS. (ASSEMBLY DRAWING #B-807-8120)

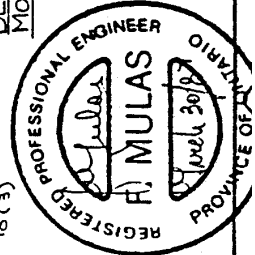
- * IF ONLY (1) EXISTING DOOR GIB IS LOCATED AT CENTRE OF DOOR THEN INSTALL (2) SAFETY GIB RETAINERS (1) AT LEADING EDGE AND (1) AT TRAILING EDGE.
- * IF (2) EXISTING DOOR GIBS ARE LOCATED (1) AT LEADING EDGE AND (1) AT TRAILING EDGE THEN INSTALL (1) SAFETY GIB RETAINER AT CENTRE OF DOOR.

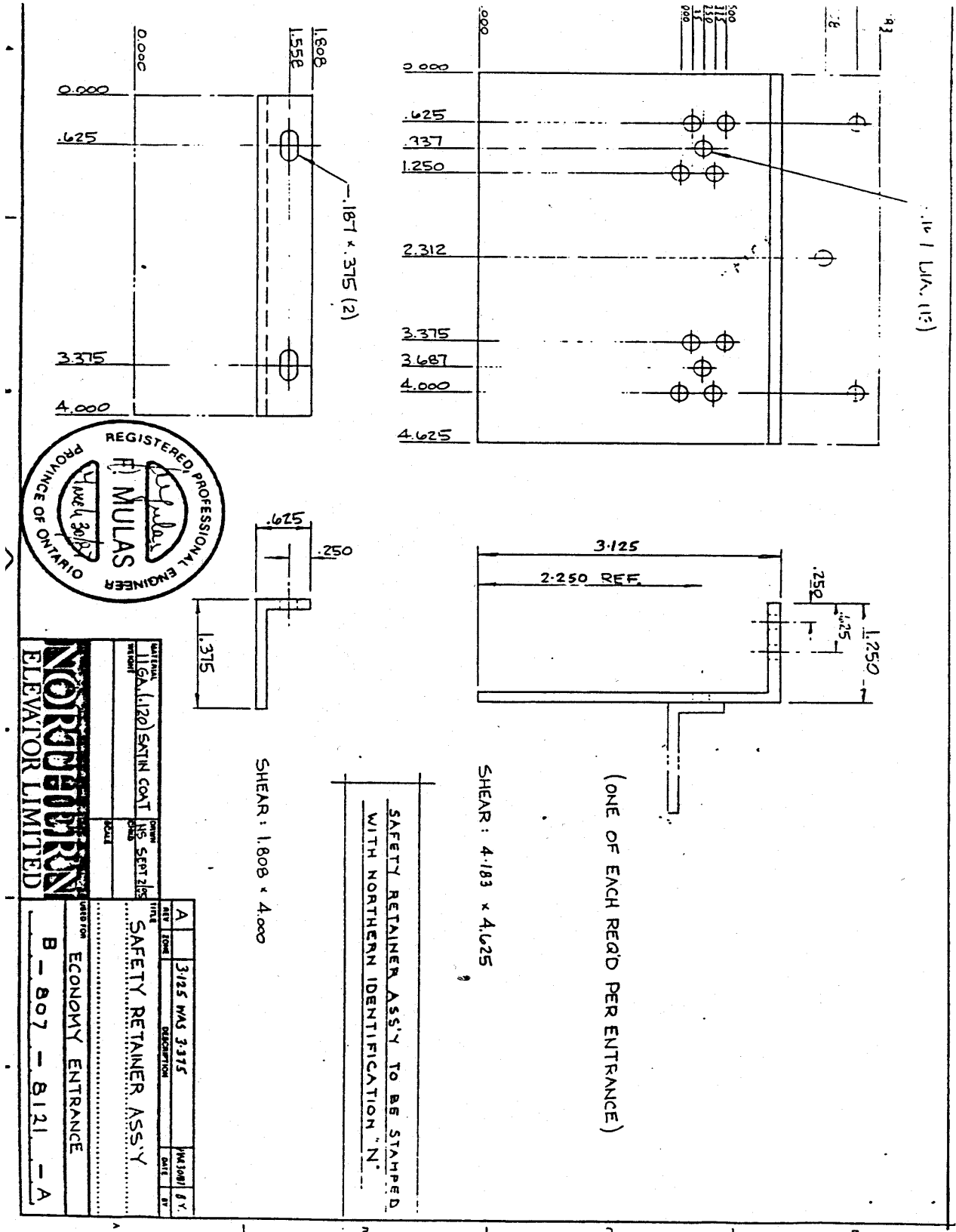


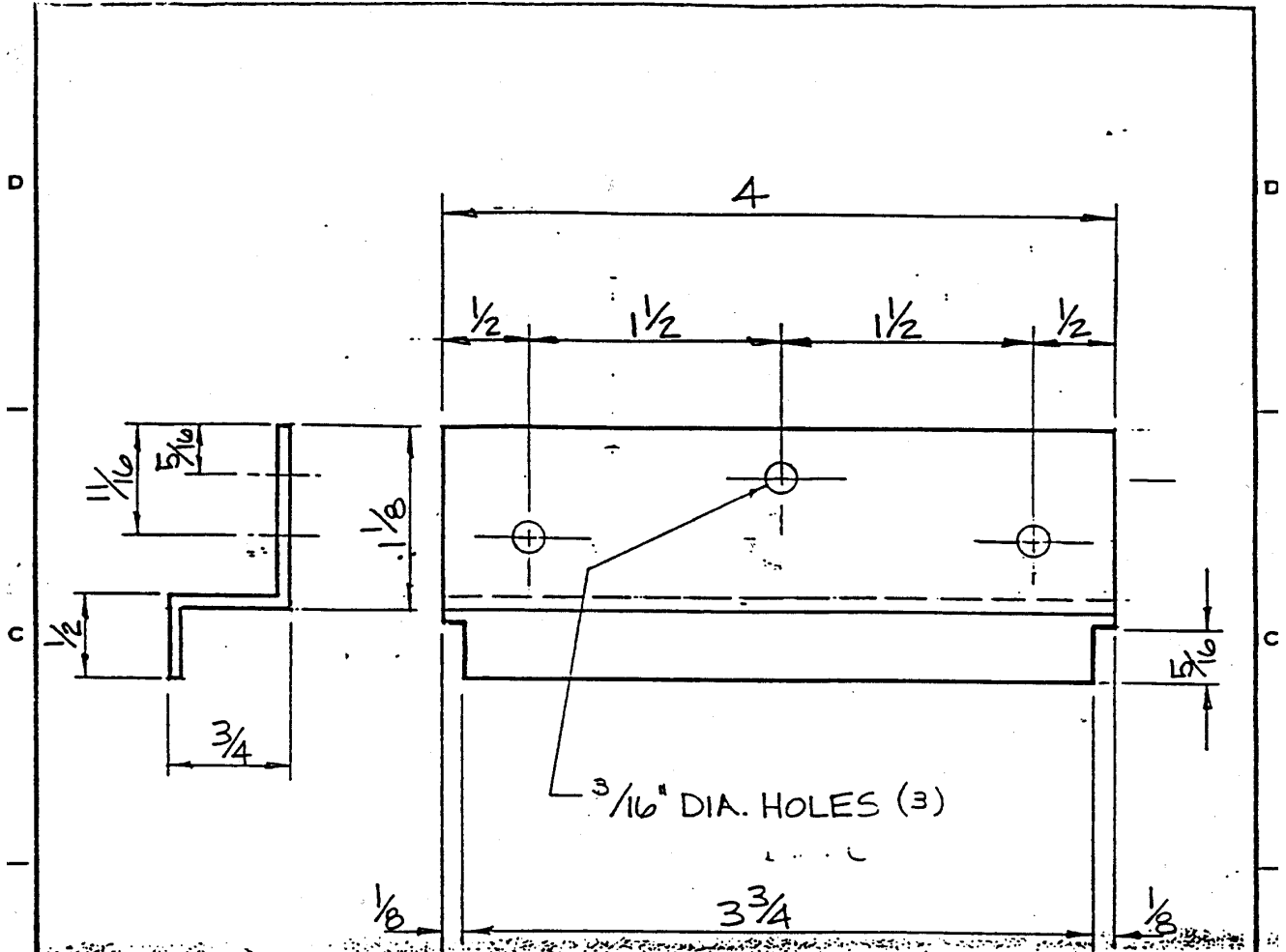


REV	DATE	DESCRIPTION
A		TOP SAFETY RETAINER RELIGATED FROM H/W S.T.

MATERIAL		DATE
WEIGHT		NO. AUG 30 1985
TITLE		SCALE
DESCRIPTION		
SAFETY RETAINERS		
MOUNTING INSTRUCTION		
UNITED FOR ECONOMY ENTRANCE		
B-807-8120-A		







GIB - SAFETY RETAINER
 TO BE STAMPED WITH
 NORTHERN IDENTIFICATION "N"



MATERIAL 14 GA (.075) SATIN COAT	DRWN NS. AUG. 30/85
WEIGHT	CHKD
	SCALE

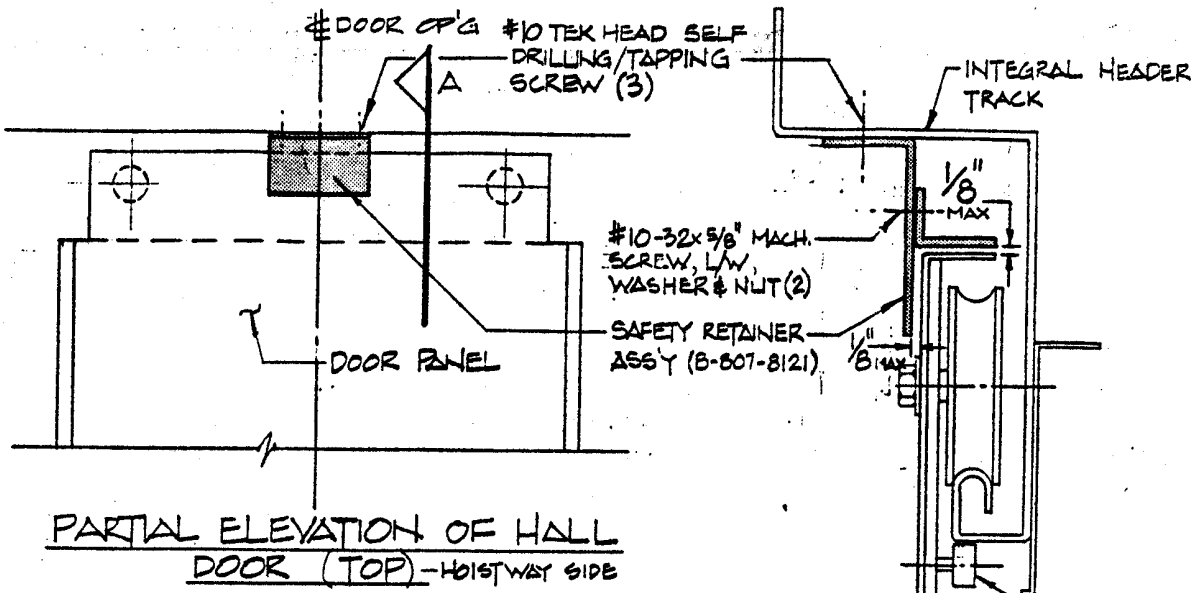
REV	ZONE	DESCRIPTION	DATE	BY
TITLE GIB - SAFETY RETAINER				
USED FOR				

NORTHERN IDENTIFICATION

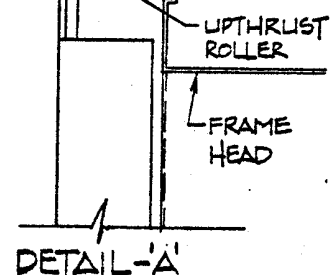
NORTHERN ELEVATOR LIMITED

TORONTO

subject: **RETROFIT ENTRANCE DOOR SAFETY RETAINERS**
 PER E.D.B. RULE 61/88 - DAHLSTROM TYPE ECONOMY ENTRANCE



PARTIAL ELEVATION OF HALL DOOR (TOP) - HOISTWAY SIDE



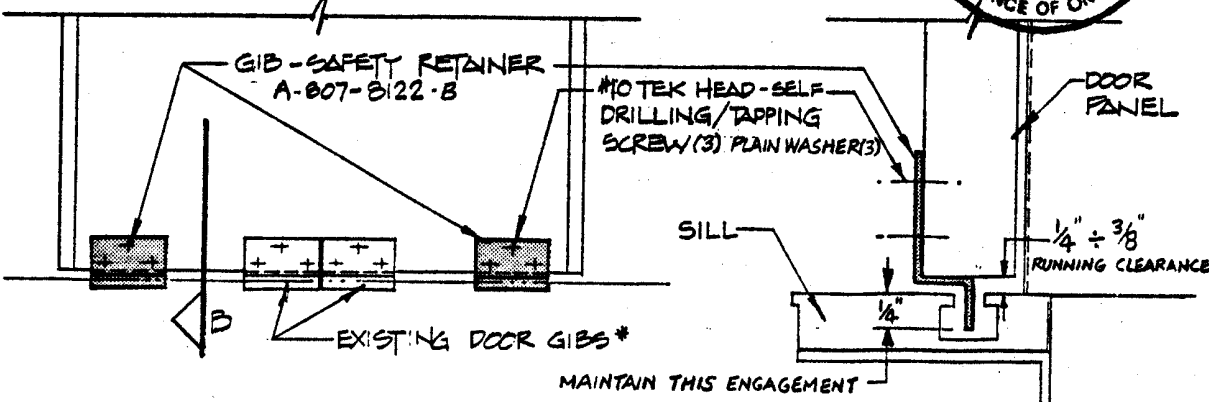
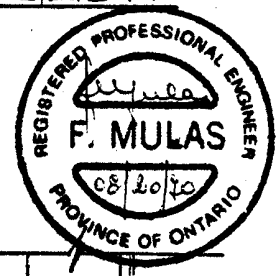
DETAIL - 'A'

INSTALLATION OF NORTHERN SAFETY RETAINERS
 PART #B-807-8121A AND #B-807-8122B

THE TOP OF DOOR SAFETY RETAINER PART #B-807-8121 WHICH IS A TWO-PIECE ANGLE ASSEMBLY IS TO BE MOUNTED TO THE UNDERSIDE OF THE INTEGRAL HEADER TRACK WITH (3) #10 TEK HEAD SELF DRILLING/TAPPING SCREWS AT THE MIDDLE OF DOOR.

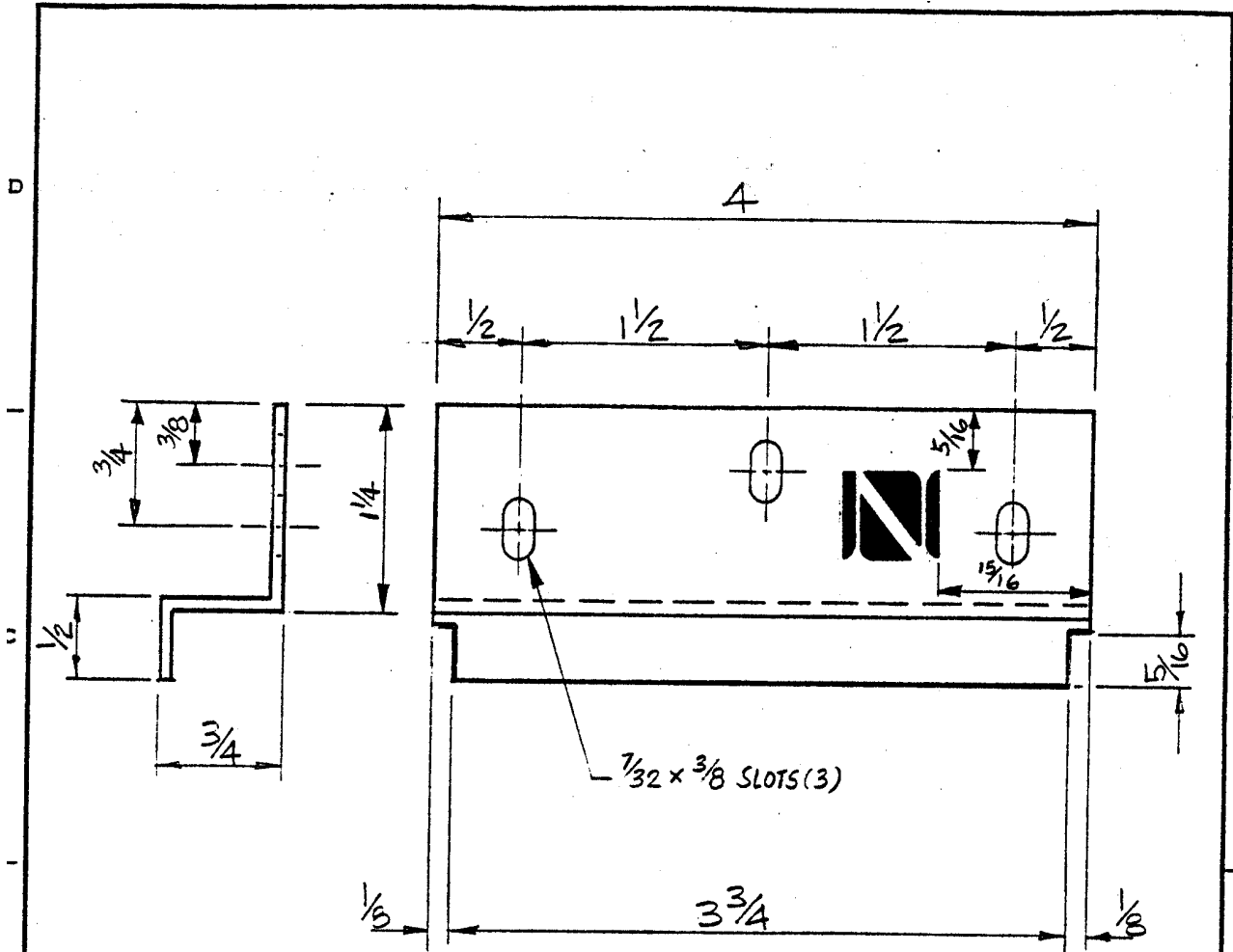
DEPENDENT ON EXISTING DOOR GIB LOCATION EITHER (1) OR (2) SAFETY GIB RETAINERS PART #B-807-8122 ARE REQUIRED. SAFETY GIB RETAINER IS MOUNTED TO SHAFT SIDE OF DOOR WITH (3) #10 TEK HEAD SELF DRILLING/TAPPING SCREWS AND PLAIN WASHERS

- IF ONLY (1) EXISTING DOOR GIB IS LOCATED AT CENTRE OF DOOR THEN INSTALL (2) SAFETY GIB RETAINERS (1) AT LEADING EDGE AND (1) AT TRAILING EDGE.
- IF (2) EXISTING DOOR GIBS ARE LOCATED (1) AT LEADING EDGE AND (1) AT TRAILING EDGE THEN INSTALL (1) SAFETY GIB RETAINER AT CENTRE OF DOOR.



PARTIAL ELEVATION OF HALL DOOR (BOTTOM) - HOISTWAY SIDE

DETAIL - 'B'



GIB - SAFETY RETAINER
 TO BE STAMPED WITH
 NORTHERN IDENTIFICATION "N"



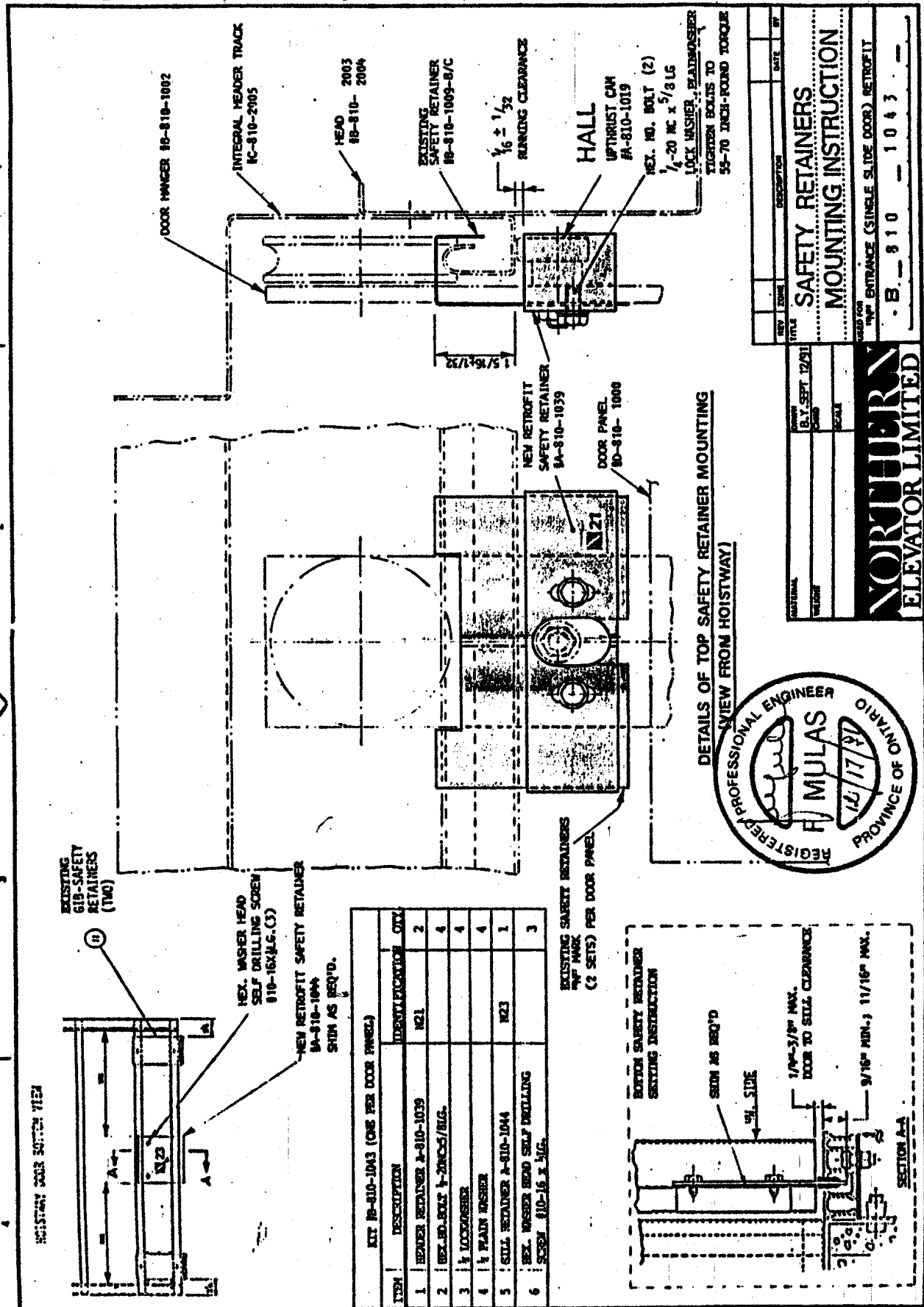
REV	ZONE	DESCRIPTION	DATE	BY
B		MATERIAL WAS #14 GA. SATIN COAT. 1/4 BENDING WAS 1/8, 1/32 x 3/8 SLOTS WERE 7/32 DIA.	JULY 12 1990	E.Y.
A		HOLE DIA. INCREASED TO 7/32"	JUNE 8 1988	NS

MATERIAL 14 GA. (.075) CRS ASTM A366	DRWN NS. AUG. 30 1985
FINISH YELLOW ENAMEL	CHKD
BREAK 2 1/4 x 4	SCALE 1:1

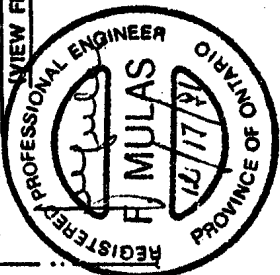
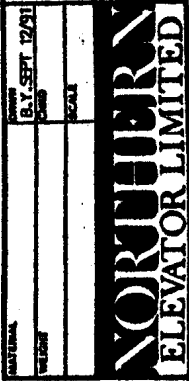
TITLE
GIB - SAFETY RETAINER

USED FOR
A - 807 - 8122 - B

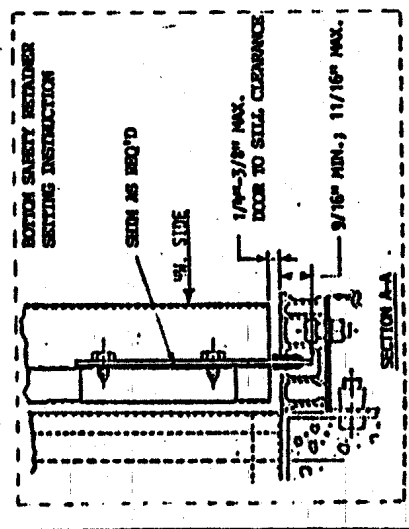
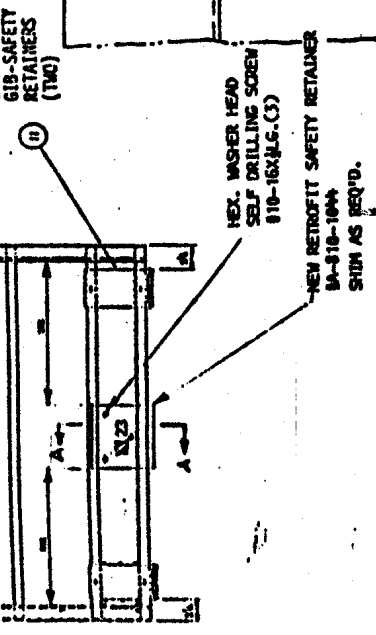


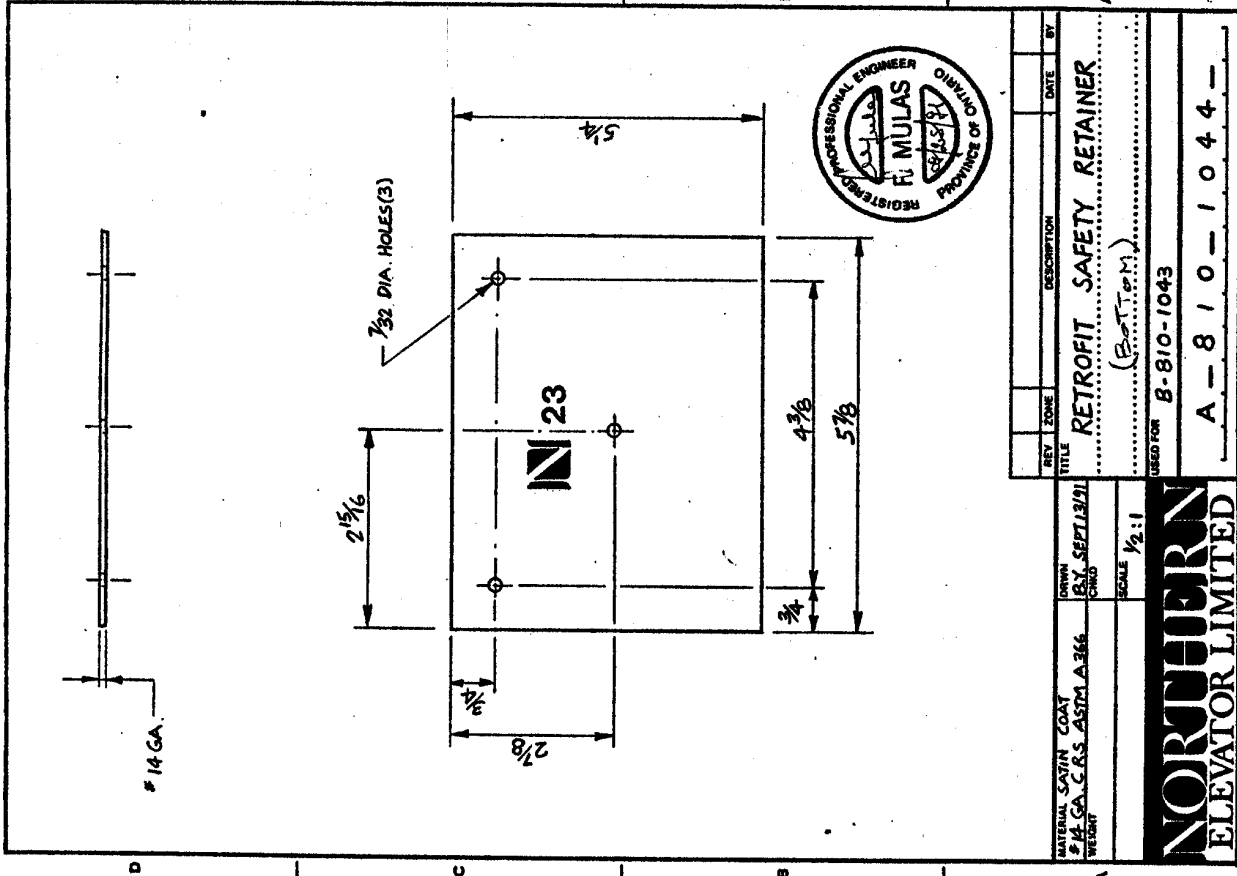


REV. NO. DATE BY
 TITLE: SAFETY RETAINERS MOUNTING INSTRUCTION
 USED FOR: 1" HOISTWAY ENTRANCE (SINGLE SLIDE DOOR) RETROFIT
 - B - 810 - 1043



ITEM	DESCRIPTION	IDENTIFICATION	QTY
1	HEADER RETAINER 1A-810-1039	N21	2
2	HEL. HD. BOLT 1/2-20NC5/8 LG.		4
3	1 LOCKWASHER		4
4	1 PLAIN WASHER		4
5	GILL RETAINER 1A-810-1044	N23	1
6	HEL. WASHER HEAD SELF DRILLING SCREW 1/4-20 x 3/16		3

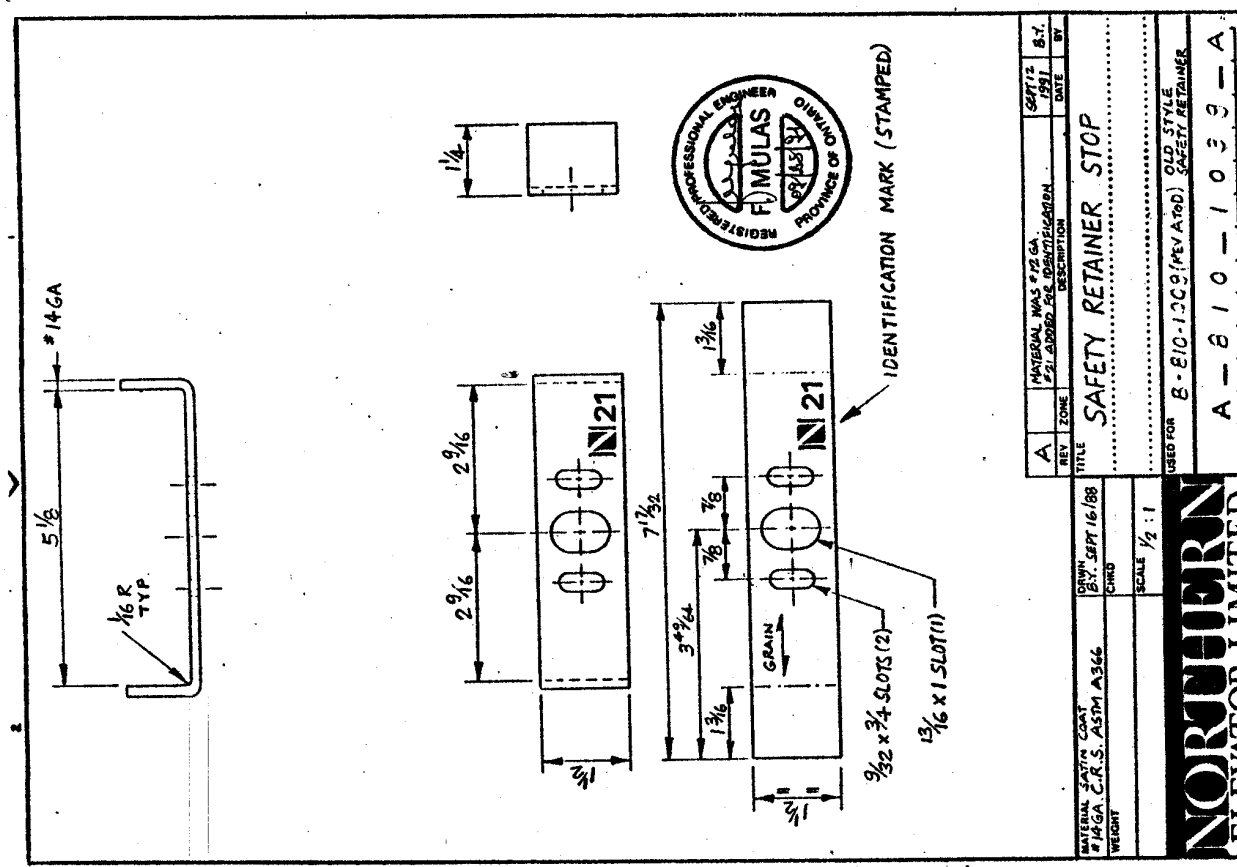




REV	ZONE	DESCRIPTION	DATE	BY
		RETROFIT SAFETY RETAINER		
(Bottom)				
USED FOR B-810-1043				
A-810-1044-				

MATERIAL	SAFIN COAT	DATE	BY
#14 GA	C.R.S. ASTM A366	SEPT 13/91	CHD
WEIGHT			
SCALE		1/2:1	

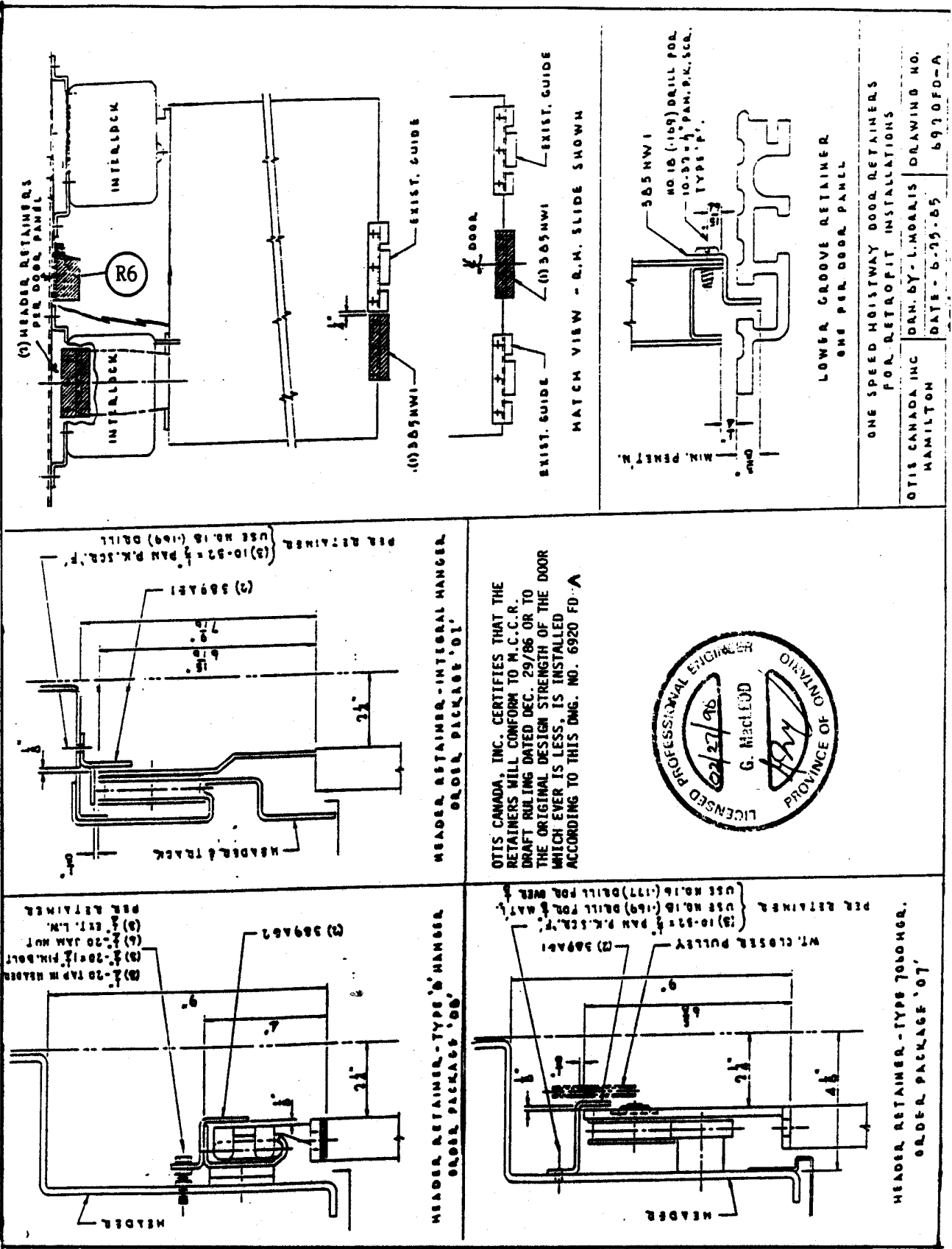
NORTHERN
ELEVATOR LIMITED



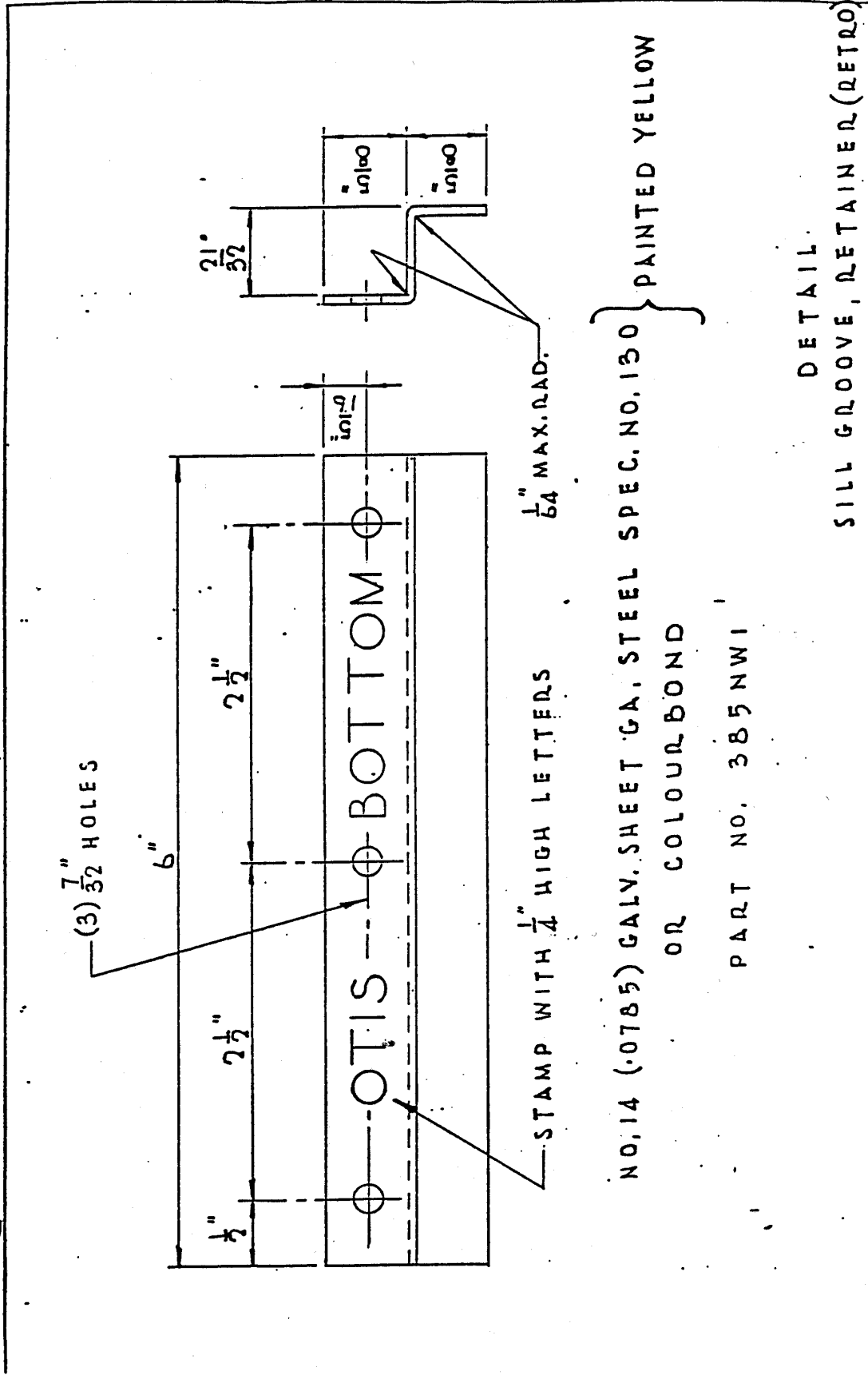
REV	ZONE	DESCRIPTION	DATE	BY
		SAFETY RETAINER STOP		
USED FOR B-810-1009 (REV A100) OLD STYLE				
A-810-1039-A				

MATERIAL	WAS #14 GA	DATE	BY
#14 GA	C.R.S. ASTM A366	SEPT 16/88	CHD
WEIGHT			
SCALE		1/2:1	

NORTHERN
ELEVATOR LIMITED



R6 BRACKET WAS RELOCATED



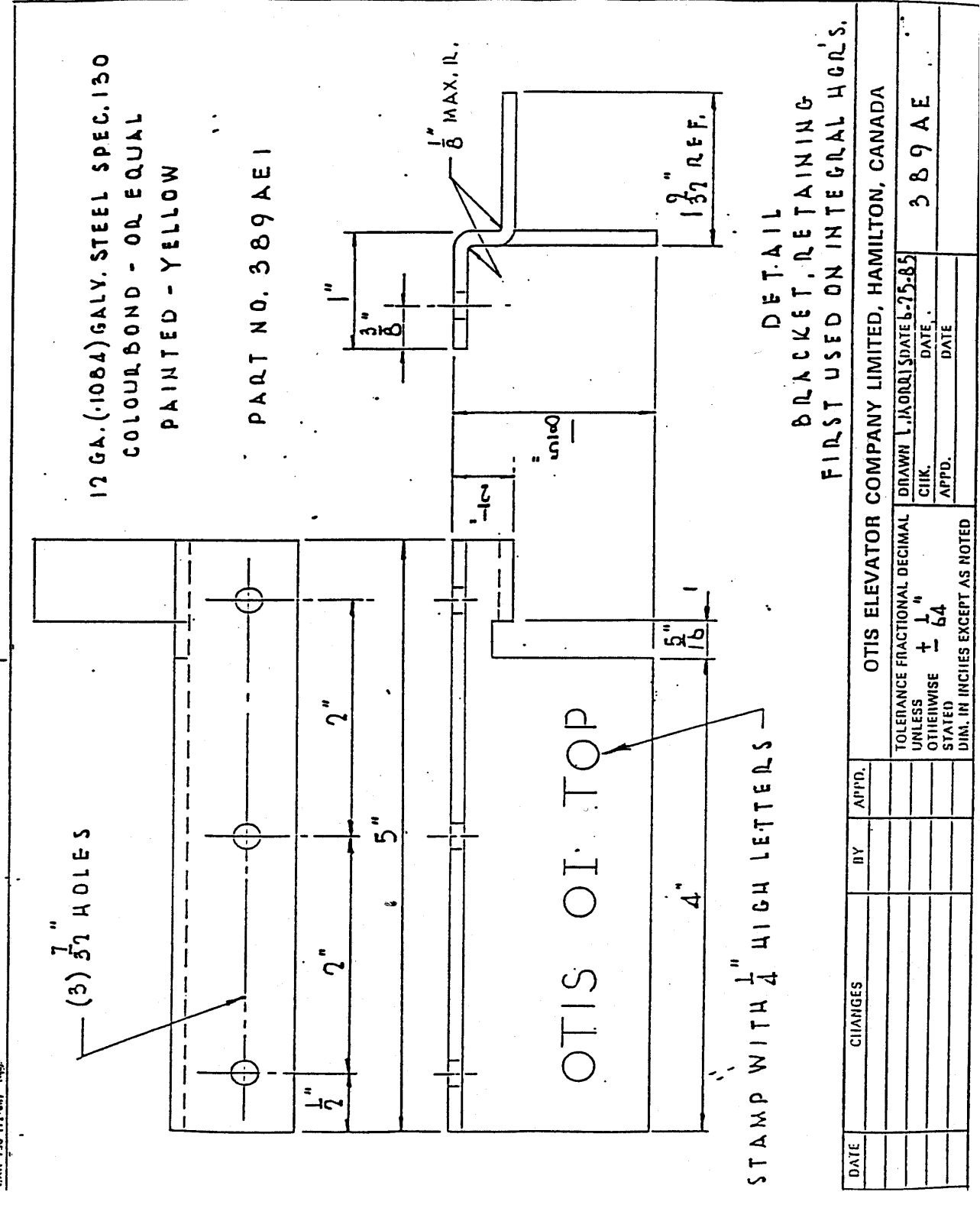
STAMP WITH 1/4" HIGH LETTERS

1/64" MAX. RAD.

NO. 14 (.0785) GALV. SHEET GA. STEEL SPEC. NO. 130 } PAINTED YELLOW
 OR COLOUR BOND
 PART NO. 385 NW1

DETAIL
 SILL GROOVE, RETAINED (RETRO)

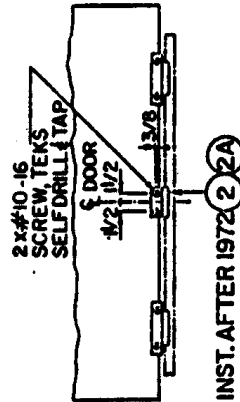
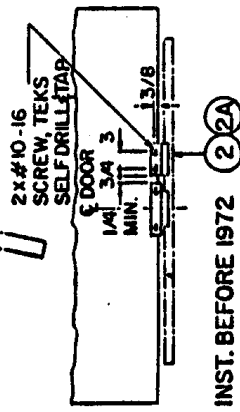
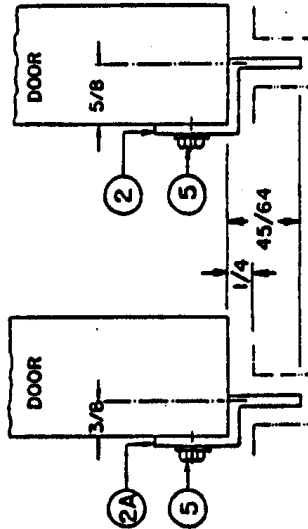
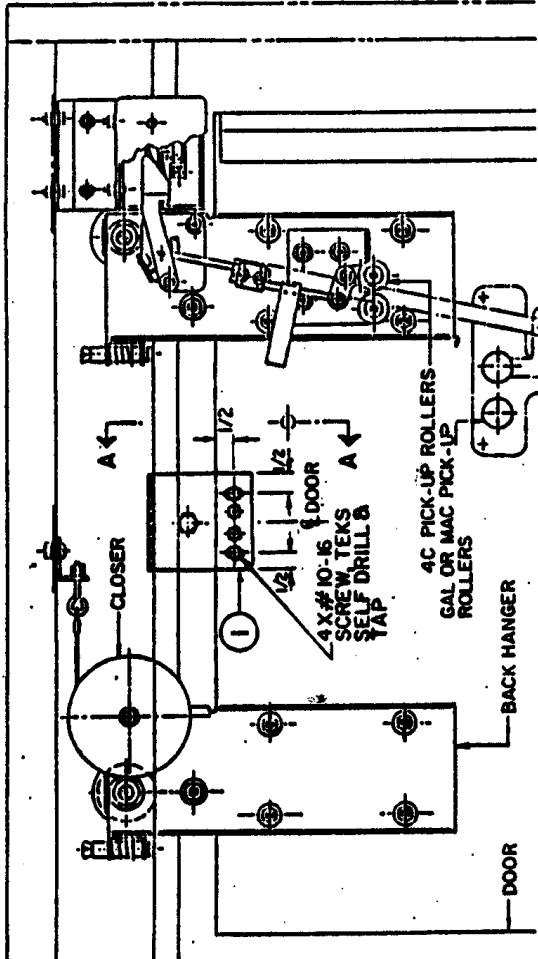
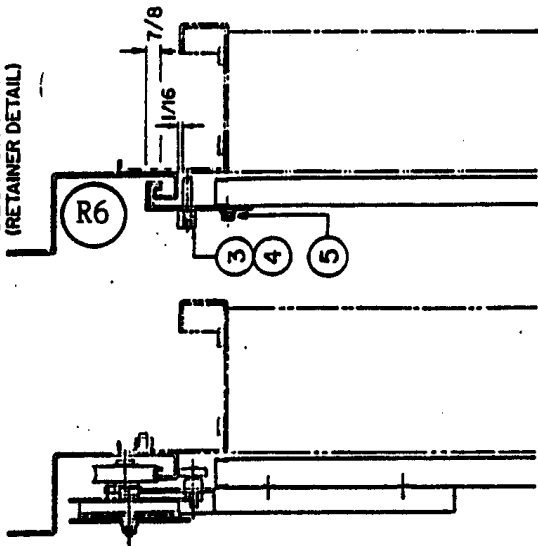
DATE	CHANGES	BY	APPD.	UNITED TECHNOLOGIES OTIS CANADA	TOLERANCE FRACTIONAL DECIMAL UNLESS OTHERWISE STATED DIM. IN INCHES EXCEPT AS NOTED	DRAWN L. MORROW DATE 6-25-85	CHK. DATE	APPD. DATE	385 NW



A-517 9173 01 05 INSTRUCTIONS-SAFETY RETAINERS FOR 4C TYPE SINGLE SLIDE ENTRANCE

DRAWING NO. SUBJECT PAGE

SECTION A-A
 (RETAINER DETAIL)



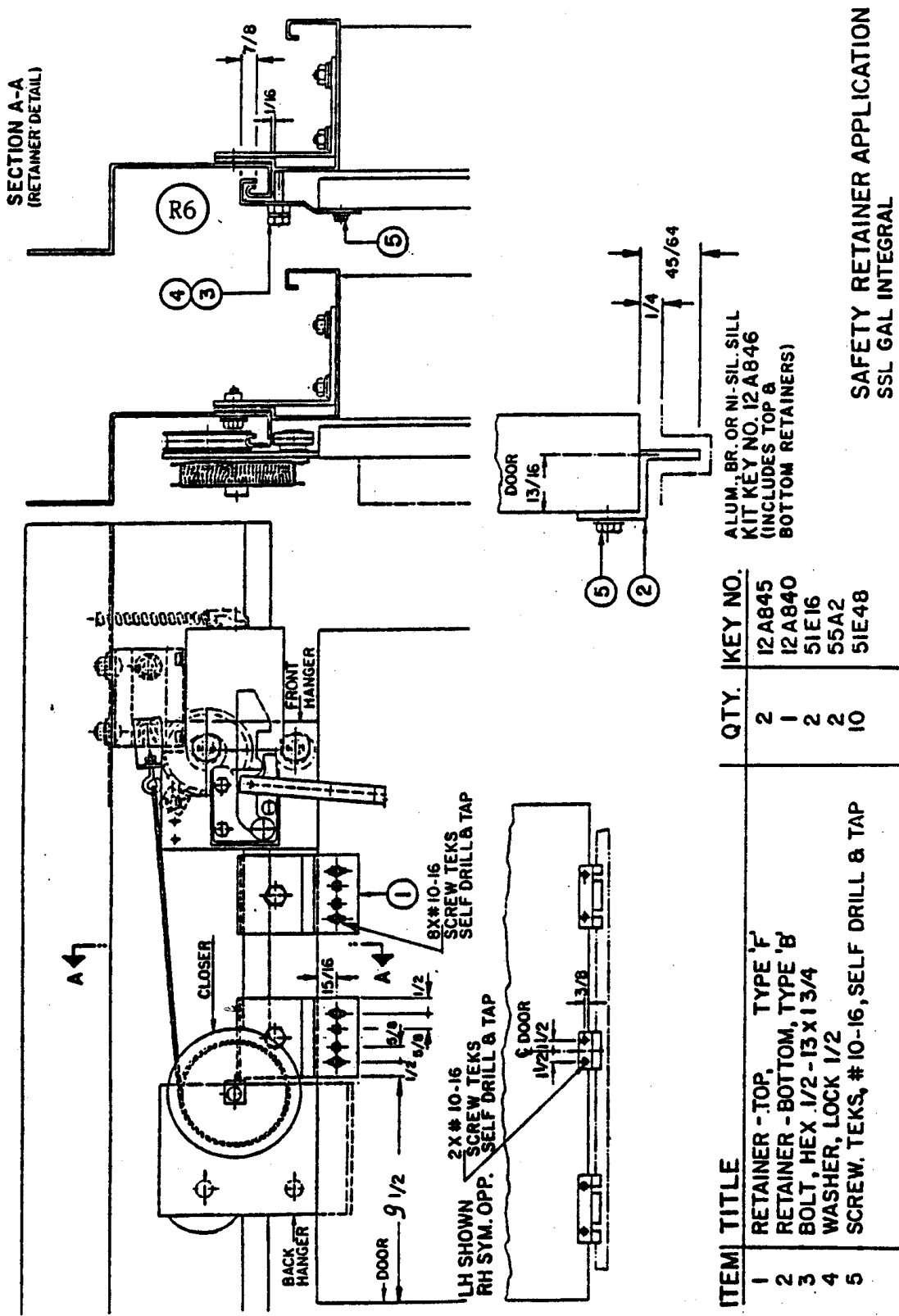
ALUMINUM SILL
 KIT KEY NO. 12 AB49-1
 (INCLUDES TOP &
 BOTTOM RETAINERS)

BLUM BR OR NI-SIL SILL
 KIT KEY NO. 12 AB49-2
 (INCLUDES TOP &
 BOTTOM RETAINERS)

SAFETY RETAINER APPLICATION
 SSL 4C TYPE HANGERS WITH ANY PICK-UP ROLLERS
 FOR HORN, ARMOR & SCHINDLER DOORS

ITEM	TITLE	QTY.	KEY NO.
1	RETAINER - TOP, TYPE 'A'	1	12 AB50
2	RETAINER - BOTTOM, TYPE 'C', ALUMINUM SILL	1	12 AB51
2A	RETAINER - BOTTOM, TYPE 'G', BLUM BR. & NI-SIL SILL	1	12 AB52
3	BOLT, HEX 1/2 - 13 X 2"	1	51 E15
4	WASHER, LOCK 1/2"	1	55 A2
5	SCREW, TEKS #10-16 X 5/8, SELF DRILL & TAP	6	51 E48

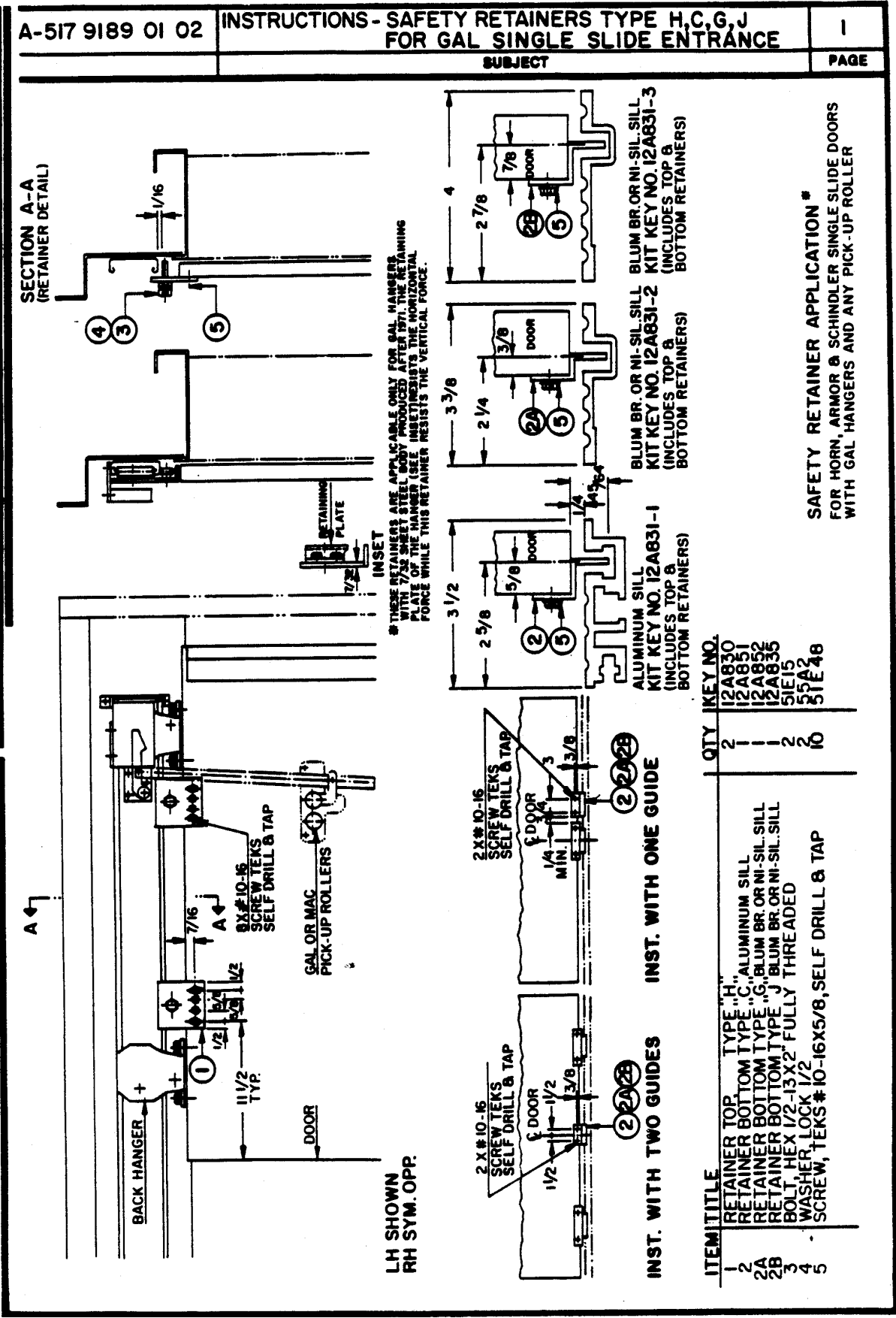
A-517 9175 01 04	INSTRUCTIONS-SAFETY RETAINERS FOR GAL INTEGR. SINGLE SLIDE ENTRANCE	1
DRAWING NO.	SUBJECT	PAGE



ITEM	TITLE	QTY.	KEY NO.
1	RETAINER - TOP, TYPE 'F'	2	12A845
2	RETAINER - BOTTOM, TYPE 'B'	1	12A840
3	BOLT, HEX 1/2 - 13 X 13/4	2	51E16
4	WASHER, LOCK 1/2	2	55A2
5	SCREW, TEKS, # 10-16, SELF DRILL & TAP	10	51E48

ALUM. BR. OR NI-SIL. SILL
 KIT KEY NO. 12A846
 (INCLUDES TOP &
 BOTTOM RETAINERS)

SAFETY RETAINER APPLICATION
 SSL GAL INTEGRAL



A-517 9189 01 02

INSTRUCTIONS - SAFETY RETAINERS TYPE H,C,G,J FOR GAL SINGLE SLIDE ENTRANCE

SUBJECT

1
PAGE

SECTION A-A (RETAINER DETAIL)

* THESE RETAINERS ARE APPLICABLE ONLY FOR GAL HANGERS WITH 7/32 SHEET STEEL BODY PRODUCED AFTER 1971. THE RETAINING PLATE OF THE HANGER (SEE INSET) MUST RESIST THE HORIZONTAL FORCE WHILE THIS RETAINER RESISTS THE VERTICAL FORCE.

BLUM BR. OR NI-SIL SILL
 KIT KEY NO. 12A831-3
 (INCLUDES TOP & BOTTOM RETAINERS)

BLUM BR. OR NI-SIL SILL
 KIT KEY NO. 12A831-2
 (INCLUDES TOP & BOTTOM RETAINERS)

ALUMINUM SILL
 KIT KEY NO. 12A831-1
 (INCLUDES TOP & BOTTOM RETAINERS)

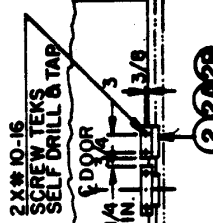
SAFETY RETAINER APPLICATION #
 FOR HORN, ARMOR & SCHINDLER SINGLE SLIDE DOORS WITH GAL HANGERS AND ANY PICK-UP ROLLER

ITEM	KEY NO.	QTY
1	12A830	2
2	12A851	1
2A	12A852	1
2B	12A835	2
3	51E15	2
4	55E42	10
5	55E48	

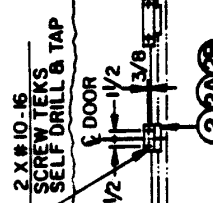
A ←

BACK HANGER +
 1 1/2
 1 1/2
 1/2
 1/2
 7/16
 1/16
 8 X #10-16
 SCREW TEKS
 SELF DRILL & TAP
 GAL OR MAC
 PICK-UP ROLLERS
 INSET
 RETAINING
 PLATE
 1/2

LH SHOWN
 RH SYM. OPP.



INST. WITH ONE GUIDE



INST. WITH TWO GUIDES

ITEM	TITLE
1	RETAINER TOP TYPE "H"
2	RETAINER BOTTOM TYPE "C" ALUMINUM SILL
2A	RETAINER BOTTOM TYPE "G" BLUM BR. OR NI-SIL SILL
2B	RETAINER BOTTOM TYPE "J" BLUM BR. OR NI-SIL SILL
3	BOLT, HEX 1/2-13X2" FULLY THREADED
4	WASHER, LOCK 1/2"
5	SCREW, TEKS #10-16X5/8, SELF DRILL & TAP

INSTRUCTIONS

- INSTALL TWO TOP RETAINERS (WITH THE CLEARANCES SHOWN) ONE NEAR THE INTERLOCK AND THE SECOND NEAR THE END OF DOOR. FIRST INSTALL 1 PC OF TERS SCREW #10 THROUGH THE CENTRE SLOT. OPEN AND CLOSE THE DOOR FULLY A FEW TIMES TO ENSURE THAT NOTHING IS SCRAPING THE DOOR HANGER. READJUST IF NECESSARY THEN INSTALL THE REMAINING 2 TERS SCREWS THROUGH THE HOLES.
- HOLD BOTTOM RETAINER AGAINST THE DOOR 1/4 AWAY FROM DOOR GUIDE ON THE DAYLIGHT SIDE AND INSTALL 3 PCS OF TERS SCREW #10. CHECK THAT THE RETAINER WILL NOT SCRAPE THE SILL OR DOOR FRAME POST.

TOOLS REQ'D:

- ELECTRIC SCREWDRIVER WITH CLUTCH DRIVEN 5/16 HEX SOCKET (CLUTCH SET AT 30-40 INCH-POUND TORQUE)
- 5/16 WRENCH FOR ADJUSTMENT

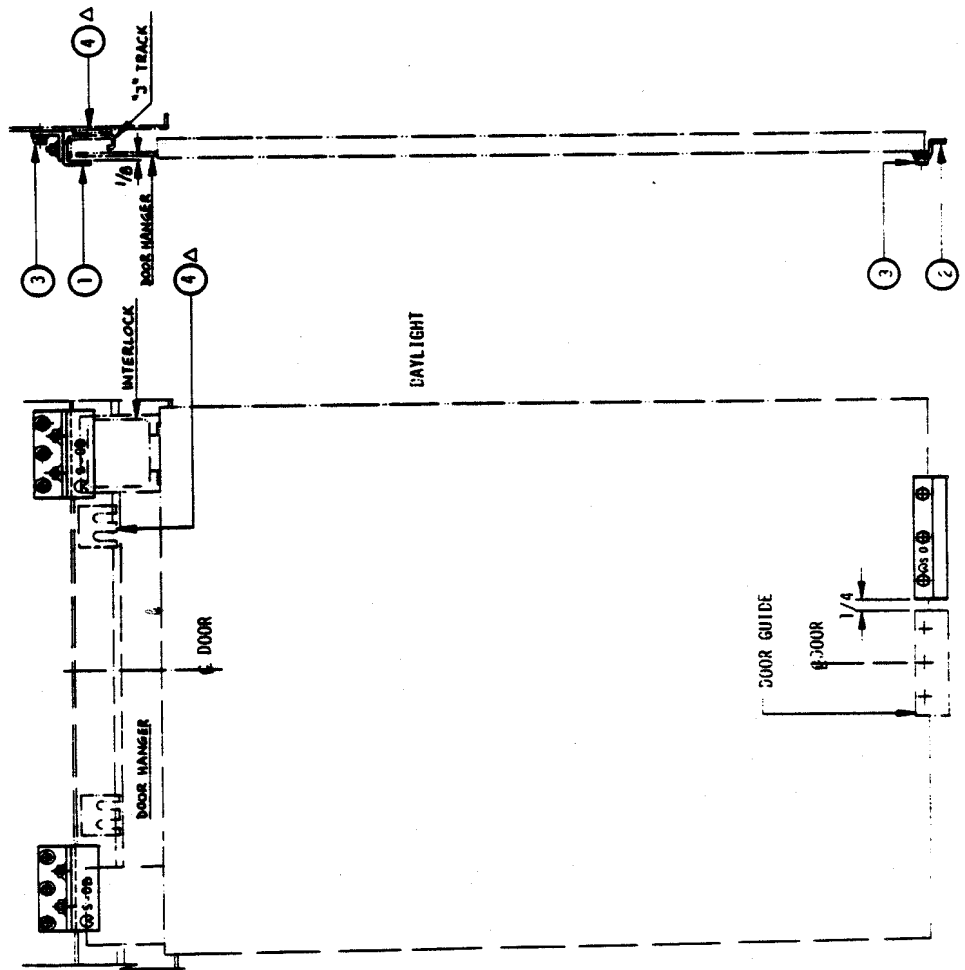
*SPRAY YELLOW MARK

KEY NO. 12A820

REV	DESCRIPTION	KEY NO.	PART NO.
01	RETAINER, TOP S-01	12A820-1	A 736 0186 01
02	RETAINER, BOTTOM S-0	12A820-2	A 736 0187 01
03	TERS SCREW #10-16x5/8	51E48	A 765 0215 80
04	COPY OF THIS Dwg		
05	PLASTIC BAG FOR ABOVE		

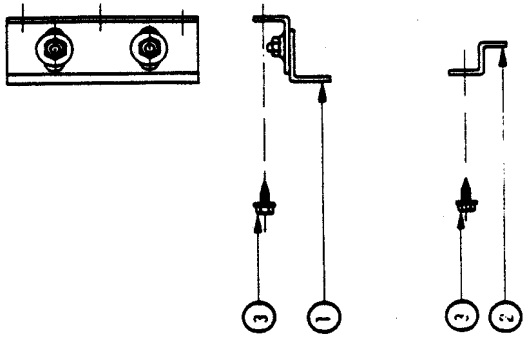
SCALE	NTS	SIZE	CLASS	SERIAL	GROUP	REV.	SHEET
SCALE	NTS	B	545	8165	01	01	1 of 1
KIT RETAINER, SAFETY FOR OTIS INTEGRAL WALKER							
DRAWING NUMBER	12A820						
APPD	88 12 06						
CHKD	88 12 06						
DRAWN	88 12 06						
Schindler							

INSTRUCTIONS
 1) INSTALL TWO TOP RETAINERS EACH AT THE DOOR HANGER AREA WHEN DOOR IS CLOSED. INTERLOCK HAS TO BE REMOVED TO INSTALL FRONT RETAINER. REST BOTTOM BRACKET OF THE RETAINER ON TOP OF J-TRACK, SLIDE THE TOP BRACKET ALL THE WAY AGAINST THE HEADER AND FASTEN WITH 3 TEKS SCREWS THROUGH THE HOLES. ADJUST BOTTOM BRACKET WITH 1/8" CLEARANCE BETWEEN THE BRACKET AND DOOR HANGER. RE-INSTALL INTERLOCK, OPEN AND CLOSE THE DOOR FULLY A FEW TIMES TO ENSURE THAT NOTHING IS SCRAPING THE DOOR HANGER. RE-ADJUST IF NECESSARY.
 2) HOLD BOTTOM RETAINER AGAINST THE DOOR 1/4" AWAY FROM DOOR GUIDE ON THE DAYLIGHT SIDE, IF ONE DOOR GUIDE USED. IF 2 GUIDES USED, HOLD BOTTOM RETAINER AGAINST THE DOOR IN THE CENTRE. INSTALL 3 PCS OF TEKS SCREW #10. CHECK THAT THE RETAINER WILL NOT SCRAPE THE SILL OR DOOR FRAME POST.
TOOLS REQ'D: 1) ELECTRIC SHREWDRIVER WITH CLUTCH DRIVEN 5/16 HEX SOCKET (CLUTCH SET AT 30-40 INCH-POUNDS TORQUE)
 2) 5/16 AND 1/2 WRENCHES FOR ADJUSTMENT



QTY	Q1	PART DESCRIPTION	KEY NO	PART NO
2		RETAINER, TOP S-0B	12A822-1 A	736-8150-01
2		RETAINER, BOTTOM S-0	12A820-2 A	736-0187-01
10		SCREW, TEKS #10-16x5/8	51E48	765-0215-80
2		SHIM Δ	12A823-1 A	780-0182-01
2		SHIM Δ	12A823-2 A	780-0182-02
		COPY OF THIS DMG.		
		PLASTIC BAG FOR ABOVE		

* SPRAY YELLOW MARK
 Δ ON SOME JOBS THE EXISTING SHIMS MAY INTERFERE WITH THE RETAINER. IN THAT CASE REPLACE THEM WITH SHIMS SUPPLIED, WHICH ARE MADE SMALLER AND DO NOT PROTRUDE ABOVE THE TRACK.



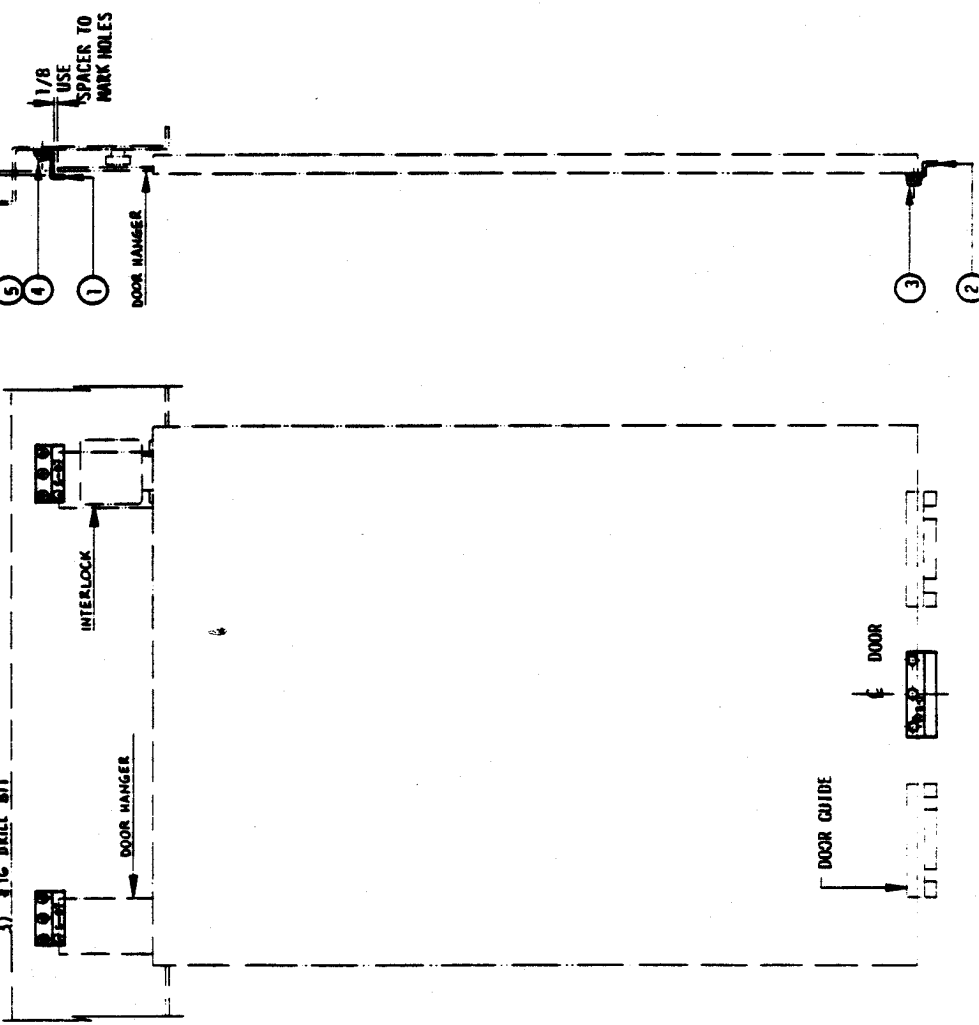
SCALE	NTS	KIT		
DRWN	L89-02-22	RETAINER, SAFETY		
CHKD	89-02-23	FOR OTIS TYPE B HANGER		
APPD	89-02-24	SIZE	CLASS	B
DRAWING NUMBER	Schneider	BRENAL	GROUP	01
		REV.	REV.	01
		SHEET		1 of 1

INSTRUCTIONS

- 1) INSTALL TWO TOP RETAINERS EACH AT THE DOOR HANGER AREA WHEN DOOR CLOSED. INTERLOCK HAS TO BE REMOVED TO INSTALL FRONT RETAINER. PLACE 1/8 SPACER ON TOP OF HANGER. SET RETAINER ON TOP OF IT. MARK C. OF HOLES. DRILL HOLES Ø 0.177 (Ø16) THROUGH HEADER. FASTEN TOP RETAINERS WITH #10-32 SELF TAPPING SCREWS AND LOCK WASHERS (3 PCS EACH). MAINTAIN THE CLEARANCES WHICH ARE SHOWN ON THE DRAWING. RE-INSTALL INTERLOCK, OPEN AND CLOSE THE DOOR FULLY A FEW TIMES TO ENSURE THAT NOTHING IS SCRAPING THE DOOR HANGER. RE-ADJUST IF NECESSARY.
- 2) HOLD BOTTOM RETAINER AGAINST THE DOOR 1/4" AWAY FROM DOOR GUIDE ON DAYLIGHT SIDE IF ONE DOOR GUIDE USED. IF TWO DOOR GUIDES USED, HOLD BOTTOM RETAINER AGAINST THE DOOR IN THE CENTRE. INSTALL 3 PCS. OF TEXS SCREWS #10. CHECK THAT THE RETAINER WILL NOT SCRAPE THE STILL OR DOOR FRAME POST.

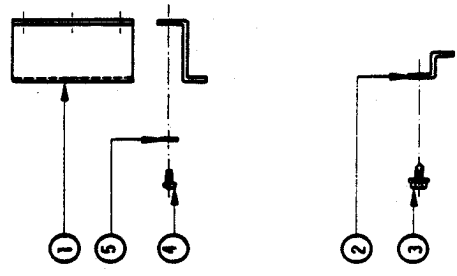
TOOLS REQ'D:

- 1) ELECTRIC SCREWDRIVER WITH CLUTCH DRIVEN 5/16 HEX SOCKET (CLUTCH SET AT 30-40 INCH-POUNDS TORQUE)
- 2) ROBERTSON SCREWDRIVER (1/8 SQ.)
- 3) #16 DRILL BIT



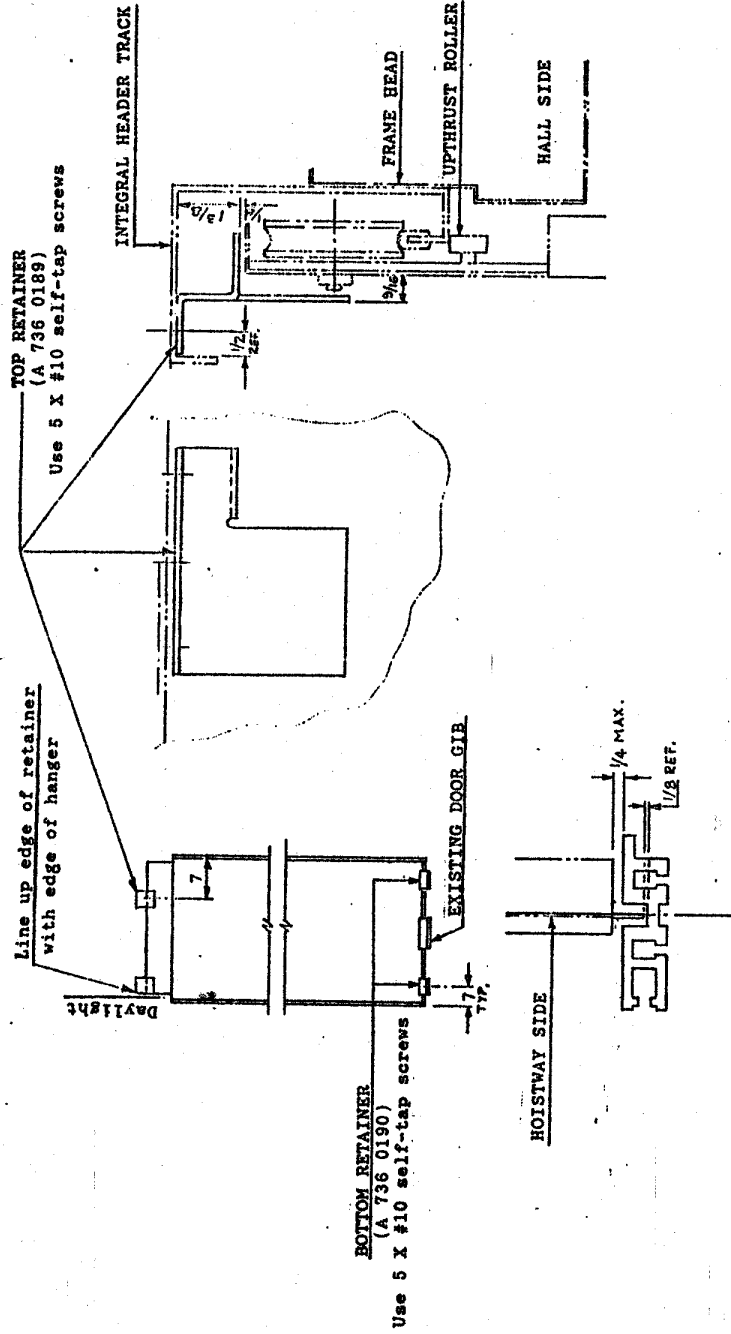
REV	DESCRIPTION	KEY NO	QTY	PART NO
02	01			
02	02			
	2	12A821-1	A	736 0188 01 01
	1	12A820-2	A	736 0187 01 02
	4	SCREW, TEXS #10-16x5/8	A	765 0215 80 03
	7	SCREW, PHA HD, SELF TAP, #10-32x1/2	A	765 0057 02 04
	7	WASHER, EXT. TEETH #10	A	961 0016 89 05
	1	COPY OF THIS DWG.		
	1	PLASTIC BAG FOR ABOVE		


*SPRAY YELLOW MARK



12A821

SCALE	NTS	KIT		
DRAWN	LB9 02 21	RETAINER, SAFETY		
CHKD	89 02 22	FOR OVIS TYPE TOGG HANGER		
APPD	89 02 23	SIZE	CLASS	B
DRAWING NUMBER	Schindler	SERIAL	GROUP	01
		REV.	SHEET	01
				1 of 1



NOTE: Top and bottom retainers are stamped with identification mark  S-WI

SCALE	SAFETY RETAINER, TYPE S-WI			
DRWN.L.S. 9/1/82	For Westinghouse Single Slide			
CHKD	Integral Doors			
APPD	SIZE	CLASS	SERIAL	GROUP
DRAWING NUMBER	B	736	8151	01
Schindler	REV.	SHEET		
	01	1 of 1		

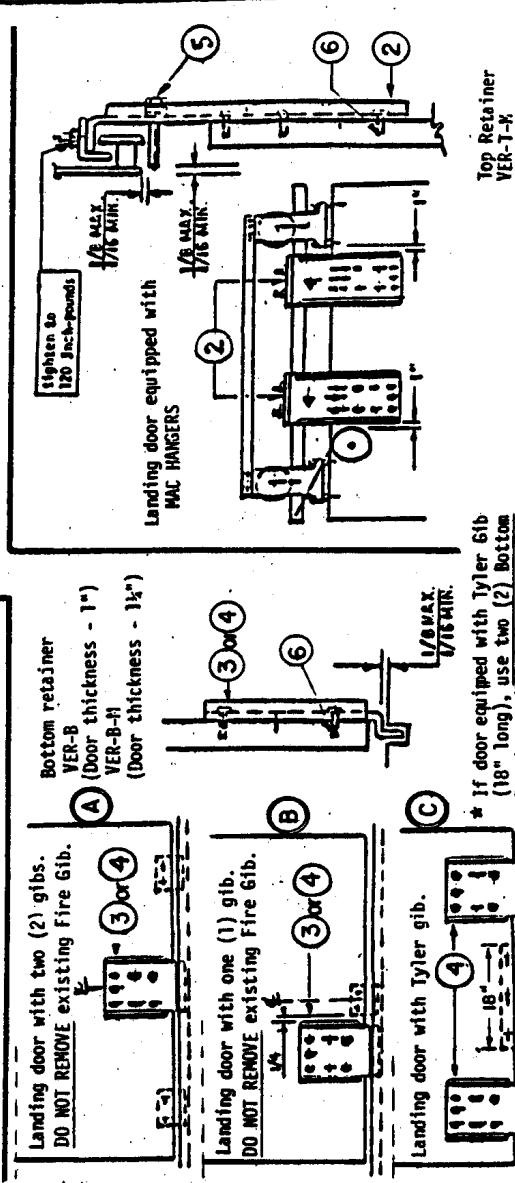
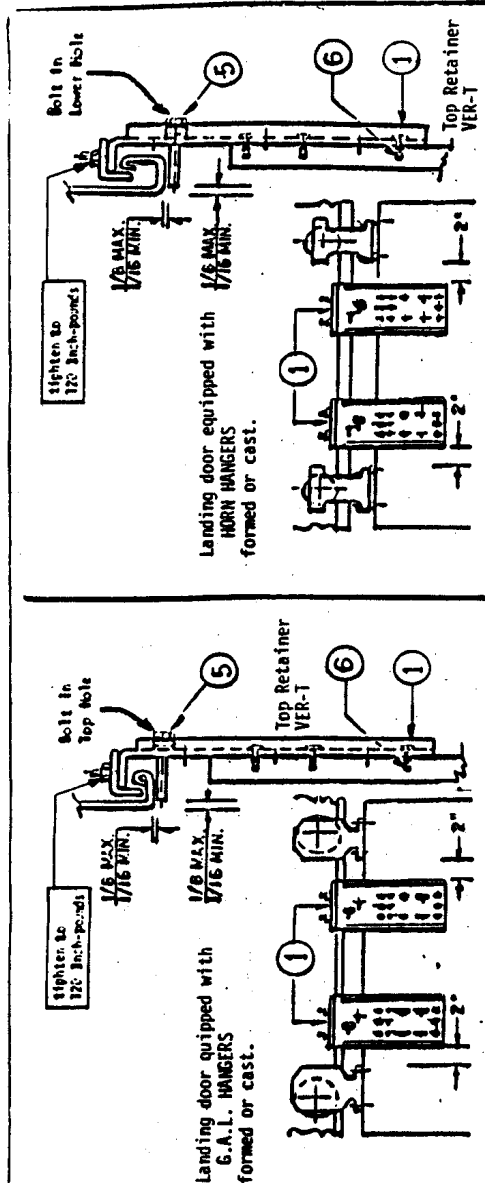
ITEM	PART NUMBER	DESCRIPTION	KIT #	QTY REQ'D	VER-06	VER-05	VER-04	VER-03
1	VER-1	TOP RETAINER ASSEMBLY		2	2	2	2	2
2	VER-1-K	TOP RETAINER ASSEMBLY		2	2	2	2	2
3	VER-6	BOTTOM RETAINER		1	1	1	1	1
4	VER-6-K	BOTTOM RETAINER		2	2	2	2	2
5	VER-EDT	UPTHRUST BOLT		2	2	2	2	2
6	TERS-2	SCREWS 10-24 x 3/4" TYS 2 or EQUIV. HEX. W/SHRP HD, SPLIT TOP, SPLIT DRILL.		21	21	21	21	21
					26	26	26	26

INSTALLATION:

TOOLS REQUIRED:
 Electric screwdriver with clutch driver
 5/16 hex. socket (clutch set at 30 - 40 inch-pounds torque).
 5/16, 1/2, 9/16 wrench for adjustment, torque wrench.



- Determine type of door track and hangers.
- With door closed, position top retainers (Item 1 or 2) according to dimension of drawing and mark holes.
- Open door fully & jamb in "open" position. Install retainers using two screws in the slotted holes.
- Install upthrust bolt (Item 5) in proper position adjust & secure with lock nut.
- Close door and check that retainers are correctly positioned, and that it will not scrape the door track when door is opening or closing. Adjust if necessary. Re-open door and install remaining screws. (6).
- With door closed, position bottom retainer (Item 3 or 4) in the centre of door if (2) two door gibs used (Diagram A)
 - 1/2 away from gib if (1) one door gib used (Diagram B).
 - one near the leading edge, second near the end of door if Tyler gib (18" long) used (Diagram C).
- Install retainer using two screws in slotted holes. (only one pair of slots required)
- Check that retainer will not scrape the sill when door is opening or closing. Install remaining screws in top three holes.



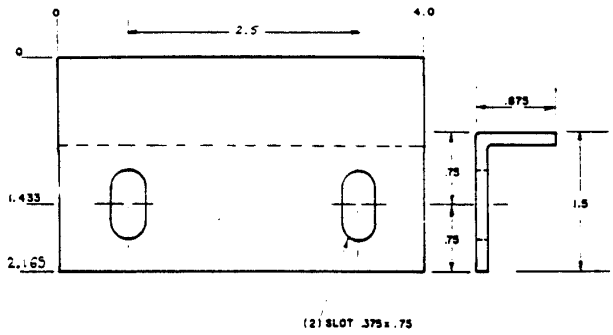
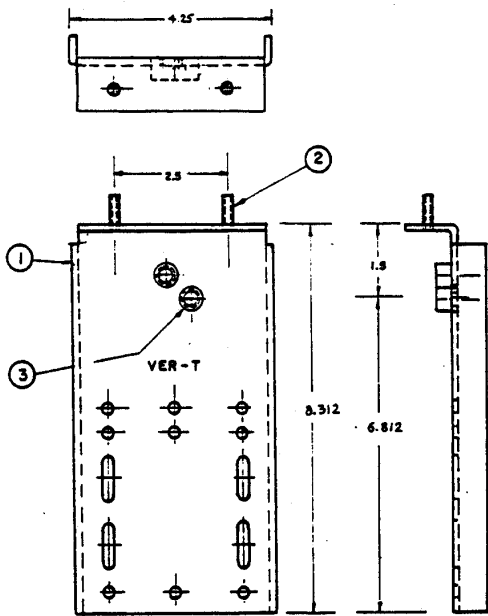
SAFETY RETAINERS can be obtained from

DAHLSTROM DILLON	1" HORN, GAL WAC	any make any type	VER-03	2	VER-T	1	VER-B
TYLER DAHLSTROM COR-D-FDAR	1 1/2" HORN, GAL WAC	any make any type	VER-04	2	VER-T-X	2	VER-B-H
			VER-05	2	VER-T	2	VER-B-H
			VER-06	2	VER-T-X	2	VER-B-H

VERTCO

DOOR SAFETY RETAINER KIT FOR FIELD MOUNTING TO SINGLE SLIDE LANDING DOOR.

6 736 9155 04 03

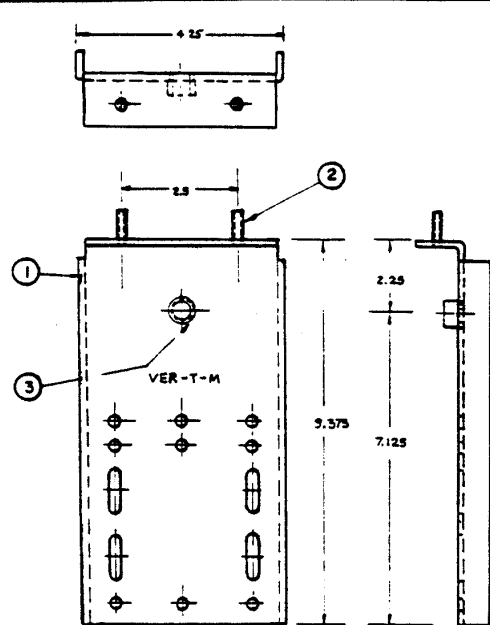
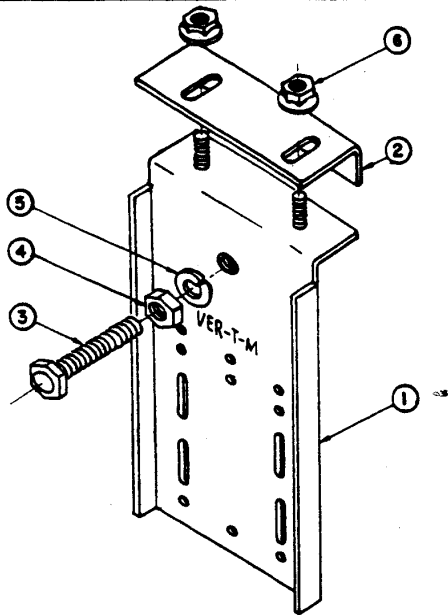


3	A 425 0150 01	SELF-CLINCHING NUT/WASHER (S-0816)	2
2	A 814 0181 80	STUD 3/16 - 18 x .75 - SELF CLINCHING	2
1	A 038 0162 01	BASE PLATE	1
ITEM	DWG. NO.	DESCRIPTION	QTY

STOCK NO.	VER-T	SCALE	1:1	ANGLE FORMED	
MATERIAL	11 GA. SATIN COAT	DRWN BY	SS	TOP RETAINER	
FINISH	CHKD				
SHEAR	APPD				

UNLESS OTHERWISE NOTED BREAK EDGES .005/.010 FINISH SURFACE .125 ✓ DEC. 2 010, PRAC. 2 004, AMLR 1/2"	VERTCO	DRAWING NUMBER	SIZE	CLASS	SERIAL	SP	REV	SHEET
		A 038	0161	01	03	1	01	1 of 1

UNLESS OTHERWISE NOTED BREAK EDGES .005/.010 FINISH SURFACE .125 ✓ DEC. 2 010, PRAC. 2 004, AMLR 1/2"	VERTCO	DRAWING NUMBER	SIZE	CLASS	SERIAL	SP	REV	SHEET
		A 009	0159	01	02	1	01	1 of 1

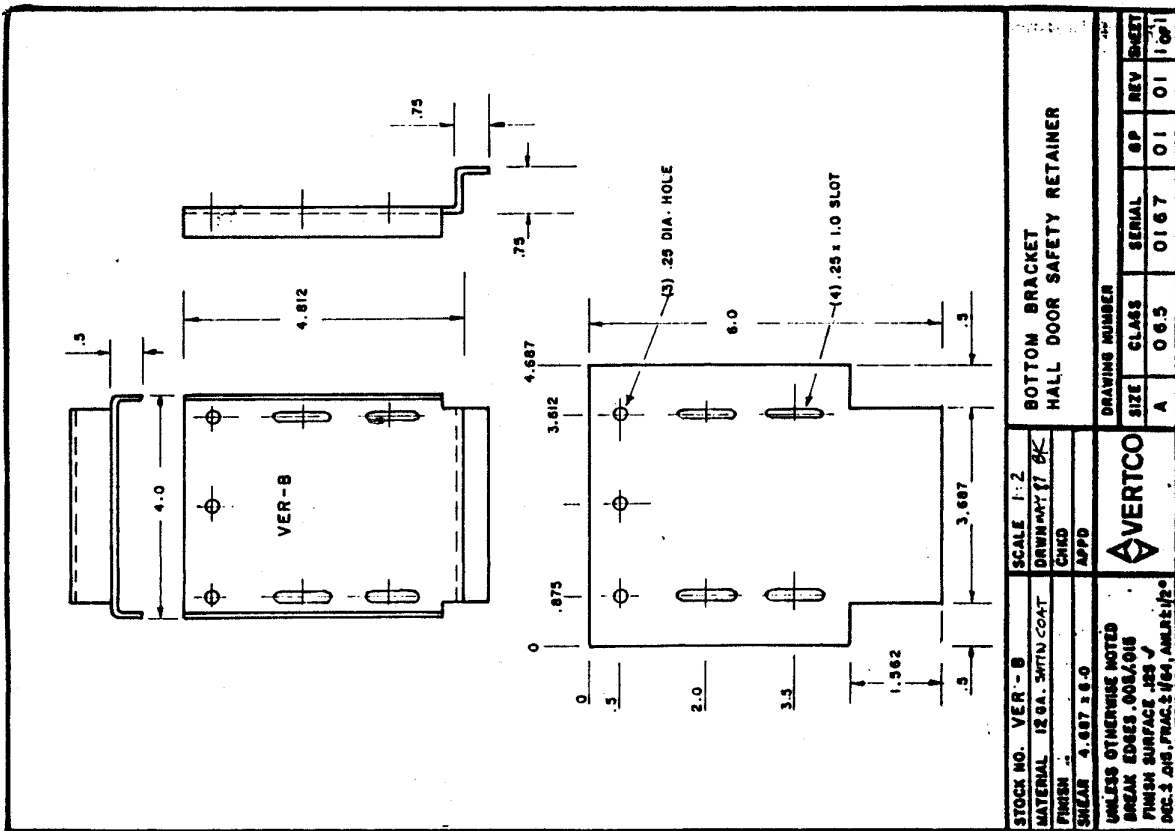
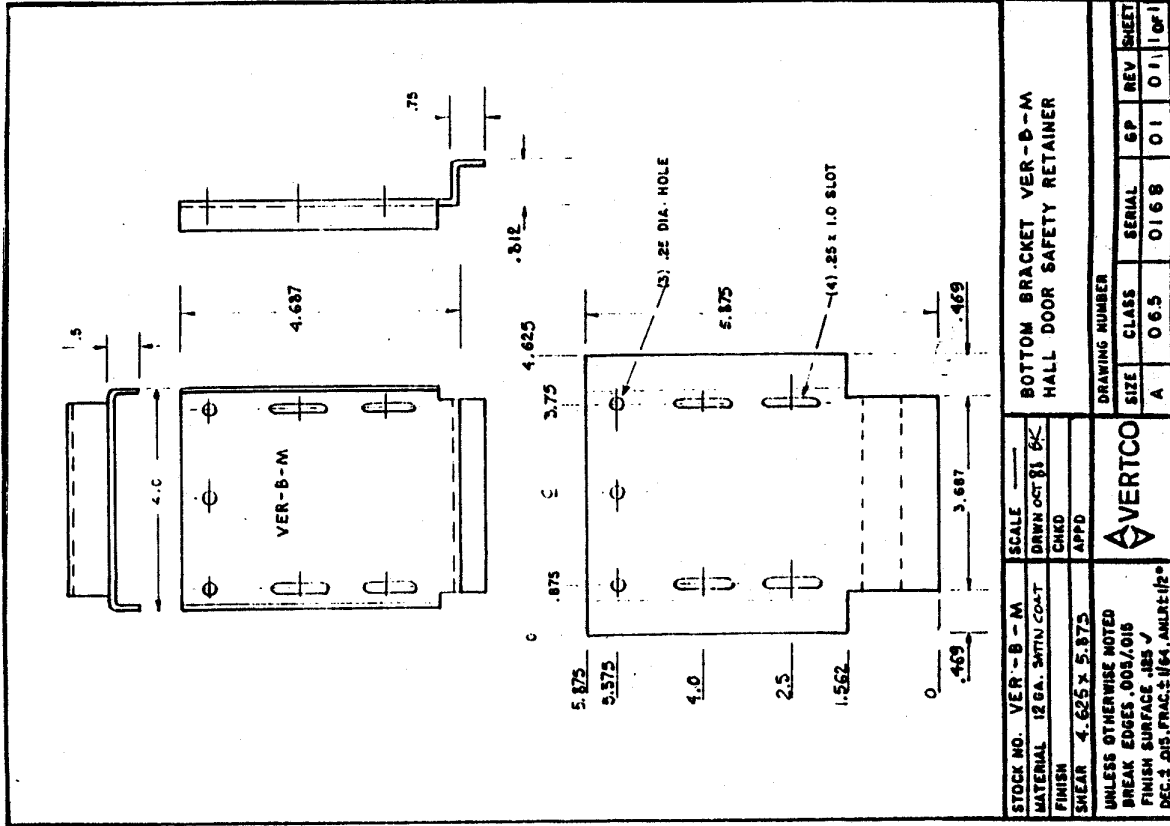


7								
6	FLANGE LOCKNUT 3/16 - 18		A 817 0183 80					2
5	LOCKWASHER, SPRING (SPLIT) 3/8							1
4	NUT HEX. 3/8 - 18							1
3	SCREW, HEX. CAP 3/8 - 18 x 1.5 LONG (FULLY THREADED)							1
2	ANGLE FORMED		A 009 0159 01					1
1	BASE PLATE		A 038 0162 01					1
ITEM	DESCRIPTION	DWG. NO.	TOTAL					

3	A 425 0150 01	SELF-CLINCHING NUT/WASHER (S-0816)	1
2	A 814 0181 80	STUD 3/16 - 18 x .75 - SELF CLINCHING	2
1	A 038 0162 01	BASE PLATE	1
ITEM	DWG. NO.	DESCRIPTION	QTY

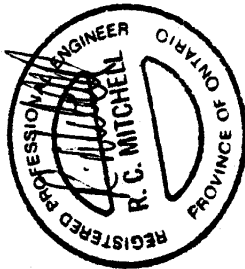
STOCK NO.	VER-T-M	SCALE	1:1	TOP RETAINER ASS'Y				
MATERIAL	DRWN BY SS	CHKD		VER-T-M				
FINISH	CHKD							
SHEAR	APPD							
UNLESS OTHERWISE NOTED BREAK EDGES .005/.010 FINISH SURFACE .125 ✓ DEC. 2 010, PRAC. 2 004, AMLR 1/2"	VERTCO	DRAWING NUMBER	SIZE	CLASS	SERIAL	SP	REV	SHEET
		A 736	0162	01	01	1	01	1 of 1

UNLESS OTHERWISE NOTED BREAK EDGES .005/.010 FINISH SURFACE .125 ✓ DEC. 2 010, PRAC. 2 004, AMLR 1/2"	VERTCO	DRAWING NUMBER	SIZE	CLASS	SERIAL	SP	REV	SHEET
		A 038	0162	01	01	1	01	1 of 1



ITEM	PART NUMBER	DESCRIPTION	QTY REQ'D
1	VER-T-W	Top Retainer Assembly	2
2	VER-B-W	Bottom Retainer	2
3	VER-ROT	Upthrust Bolt	2
4	TEKS-2	Screws 10-24 x 3/4" Tekes 2 or Equiv. Hex Washer HD. self drill.	26

KIT # VER - 07



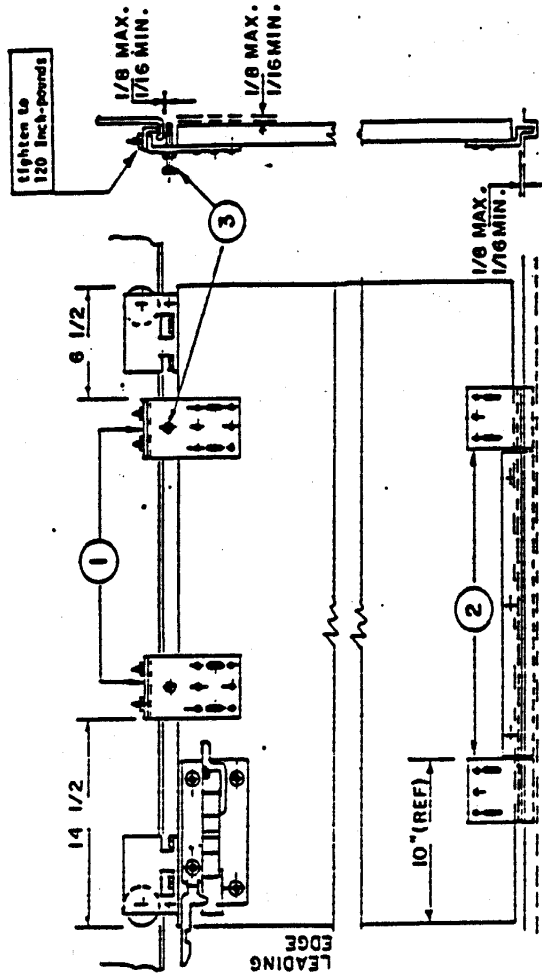
INSTALLATION

TOOLS REQUIRED:

- Electric screwdriver with clutch driven
- 5/16 hex. socket (clutch set at 30 - 40 inch-pounds torque).
- 5/16, 1/2, 9/16 wrench for adjustment, torque wrench.

1. With door closed, position top retainers (Item 1) according to dimension of drawing and mark holes.
2. Open door fully & jamb in "open" position. Install retainers using two screws in the slotted holes.
3. Install upthrust bolt (Item 3) in proper position, adjust & secure with lock nut.
4. Close door and check that retainers are correctly positioned, and that it will not scrape the door track when door is opening or closing. Adjust if necessary. Re-open door and install remaining screws (6).
5. With door closed, position bottom retainers (Item 2), according to dimension on drawing. Install retainers using two screws in slotted holes.
6. Check that retainers will not scrape the sill when door is opening or closing. Install remaining screws in top three holes.

Landing Door equipped with "WESTINGHOUSE" hangers & (1) gib in centre. (Tyler)



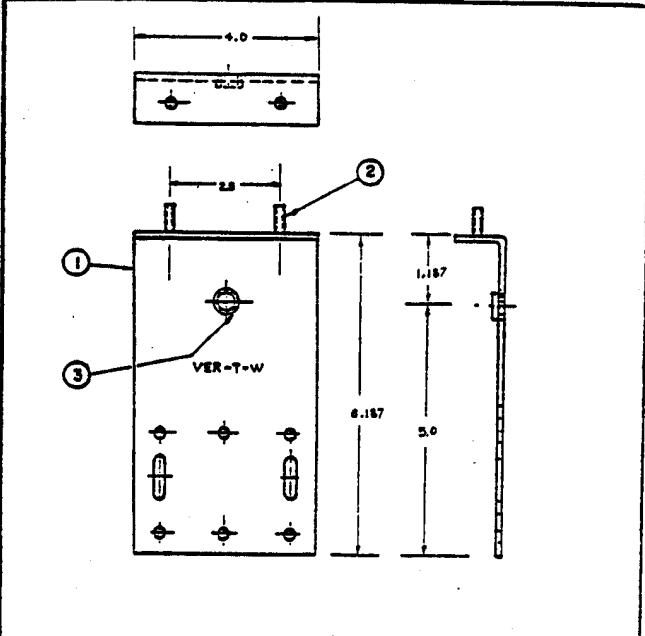
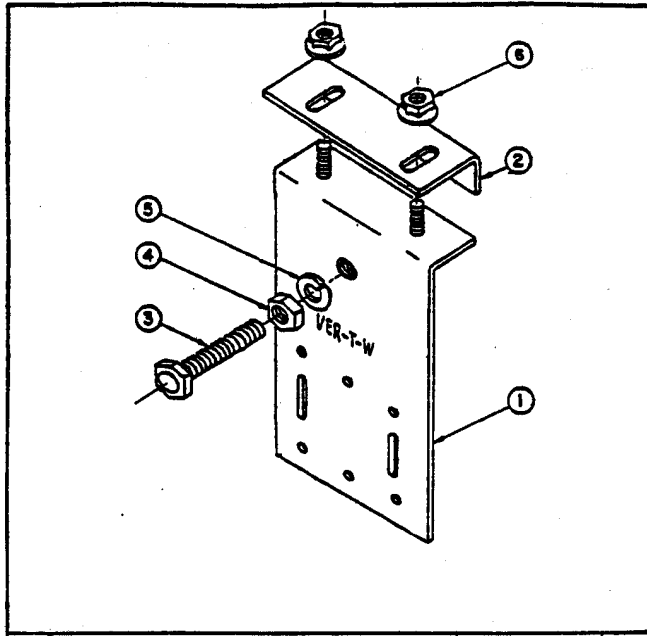
VERTICO
A 736 9150 01 01

DOOR SAFETY RETAINER KIT FOR FIELD MOUNTING TO SINGLE SLIDE LANDING DOOR.

TYLER 11/4 WESTINGHOUSE (1) TYLER GIB VERTICO VER-07 VER-T-W VER-B-W

Equipped with HANGERS make & type BOTTOM GIBS make & type SAFETY RETAINERS can be obtained from by ordering KIT #

The kit will contain - colored YELLOW SILL RETAINERS & marked

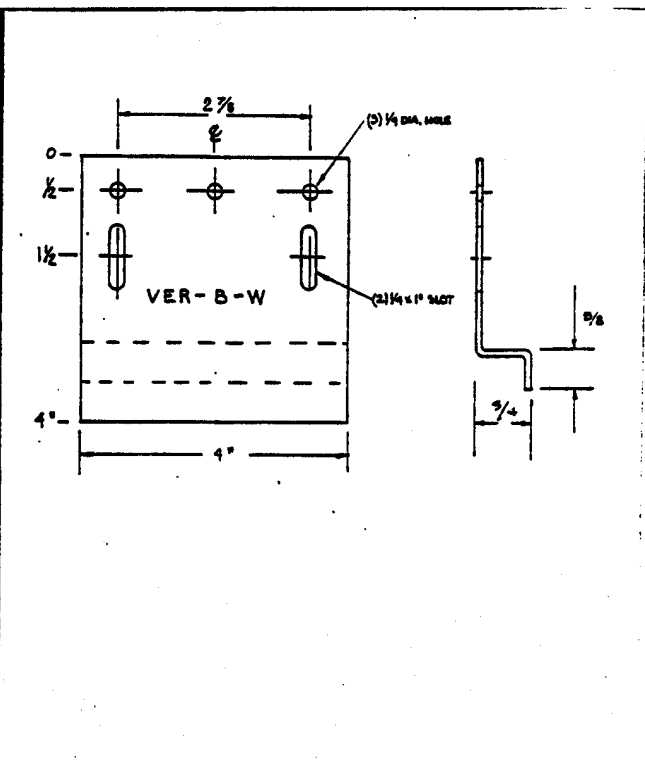
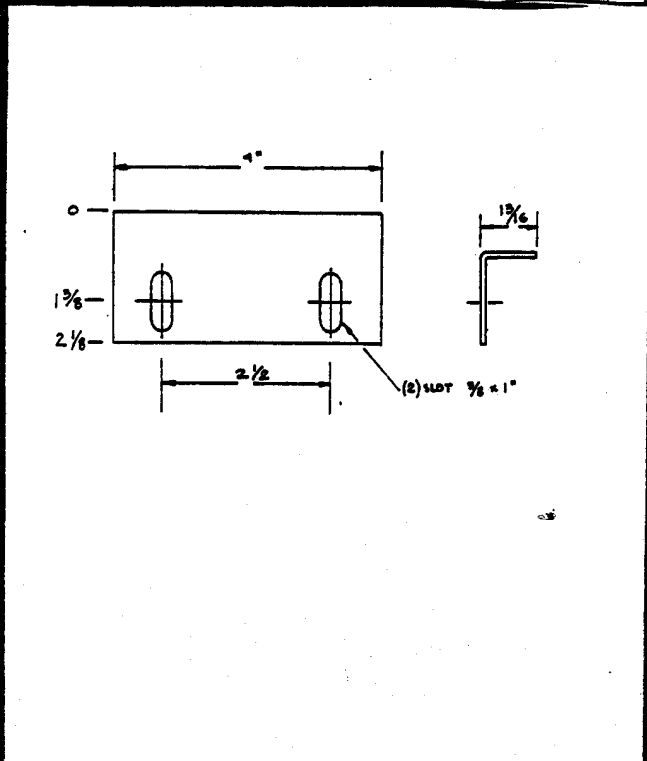


7			
4	FLANGE LOCKNUT 5/16-18	A 617 0183 80	2
3	LOCKWASHER, SPRING (SPLIT) 3/8		1
2	NUT HEL 3/8-18		1
5	SCREW, HEX. CAP 3/8-18 x 1.5 LONG (FULLY THREADED)		1
1	ANGLE FORMED	A 009 0165 01	1
1	BASE PLATE	A 038 6165 01	1

3	A 123 #190 01	SELF-CLINCHING PAPERBACK, 5-0616	1
2	A 614 0191 80	STUD 5/16-18 x .75 - SELF CLINCHING	2
7	A 038 0164 01	BASE PLATE	1
ITEM	DWG. NO.	DESCRIPTION	QTY

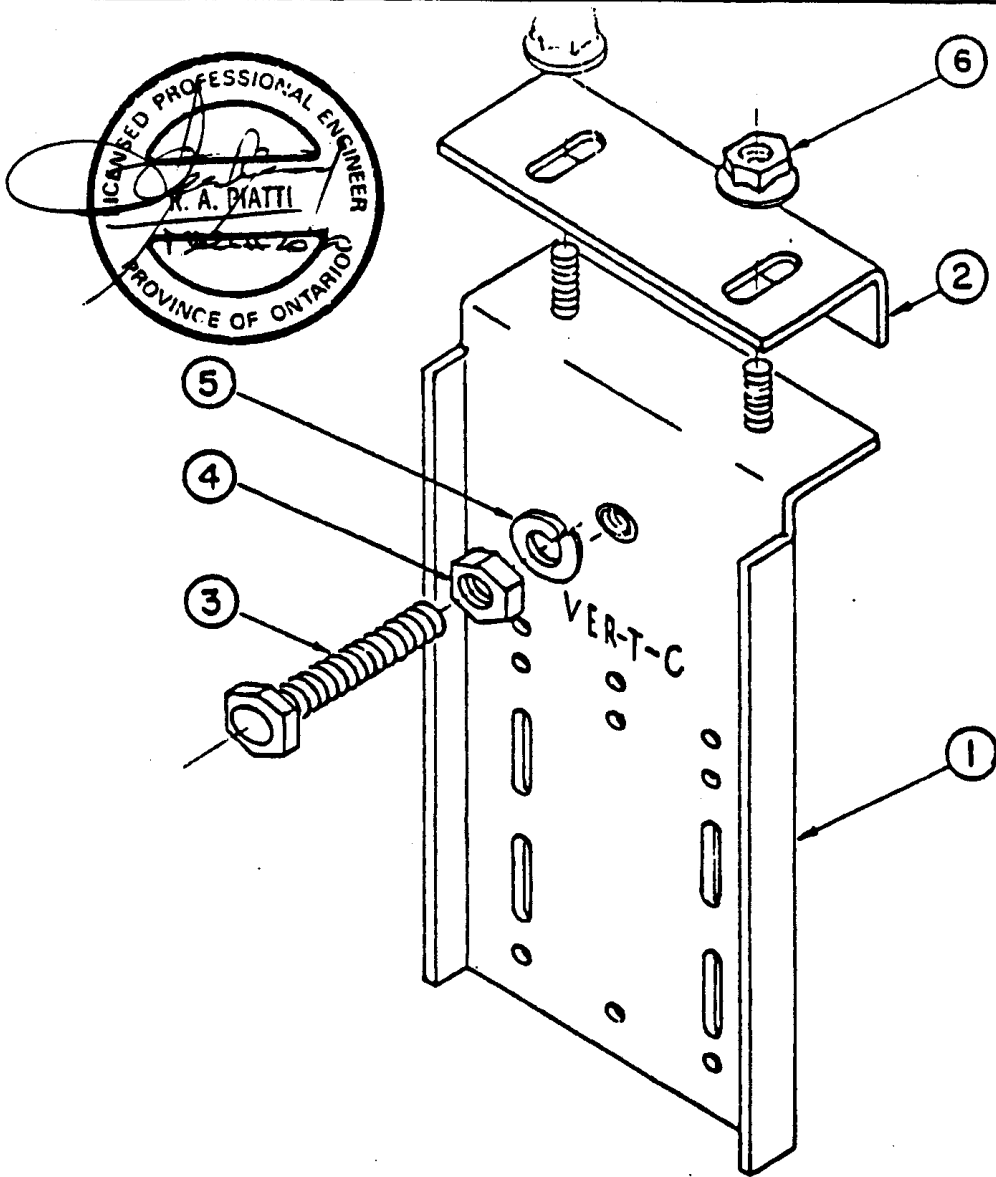
ITEM	DESCRIPTION	DWG. NO.	TOTAL
STOCK NO.	VER-T-W		
MATERIAL	DRWN TOLK 24 BK		
FINISH	CHKD		
SHEAR	APPD		
UNLESS OTHERWISE NOTED BREAK EDGES .005/.015 FINISH SURFACE .125 ✓ DEC. 2 .015, FRAC. 2/164, AMLR 2/12"	VERTCO	DRAWING NUMBER	
		SIZE CLASS SERIAL GP REV SHEET	
		A 736 0156 01 1 of 1	

STOCK NO.	SCALE	BASE PLATE ASSEMBLY TOP RETAINER VER-T-W
MATERIAL	DRWN TOLK 24 BK	
FINISH	CHKD	
SHEAR	APPD	
UNLESS OTHERWISE NOTED BREAK EDGES .005/.015 FINISH SURFACE .125 ✓ DEC. 2 .015, FRAC. 2/164, AMLR 2/12"	VERTCO	DRAWING NUMBER
		SIZE CLASS SERIAL GP REV SHEET
		A 038 6165 01 01 1 of 1



STOCK NO.	SCALE	ANGLE FORMED TOP RETAINER
MATERIAL	DRWN TOLK 24 BK	
FINISH	CHKD	
SHEAR	APPD	
UNLESS OTHERWISE NOTED BREAK EDGES .005/.015 FINISH SURFACE .125 ✓ DEC. 2 .015, FRAC. 2/164, AMLR 2/12"	VERTCO	DRAWING NUMBER
		SIZE CLASS SERIAL GP REV SHEET
		A 009 0163 01 1 of 1

STOCK NO.	SCALE	BOTTOM RETAINER DOOR SAFETY RETAINER
MATERIAL	DRWN TOLK 24 BK	
FINISH	CHKD	
SHEAR	APPD	
UNLESS OTHERWISE NOTED BREAK EDGES .005/.015 FINISH SURFACE .125 ✓ DEC. 2 .015, FRAC. 2/164, AMLR 2/12"	VERTCO	DRAWING NUMBER
		SIZE CLASS SERIAL GP REV SHEET
		A 736 0155 01 1 of 1



7			
6	FLANGE LOCKNUT 5/16 - 18	A 617 0153 80	2
5	LOCKWASHER, SPRING (SPLIT) 3/8		1
4	NUT HEX. 3/8 - 18		1
3	SCREW, HEX. CAP 3/8 - 18 x 2" LONG (FULLY THREADED)		1
2	ANGLE FORMED	A 009 0159 01	1
1	BASE PLATE ASSEMBLY	A 038 6162 01	1
ITEM	DESCRIPTION	DWG. NO.	TOTAL

STOCK NO. VER - T - C	SCALE
MATERIAL	DRWN MAR 90 PK
FINISH	CHKD
SHEAR	APPD
UNLESS OTHERWISE NOTED BREAK EDGES .003/.015 FINISH SURFACE .125 ✓ DEC. 1 .015, FRAC. 1/64, ANLR ± 1/2°	VERTCO

TOP RETAINER ASS'Y VER - T - C					
DRAWING NUMBER					
SIZE	CLASS	SERIAL	GP	REV	SHEET
A	736	9160	01	03	1 of 1

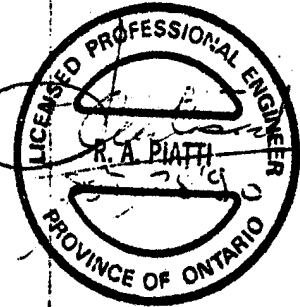
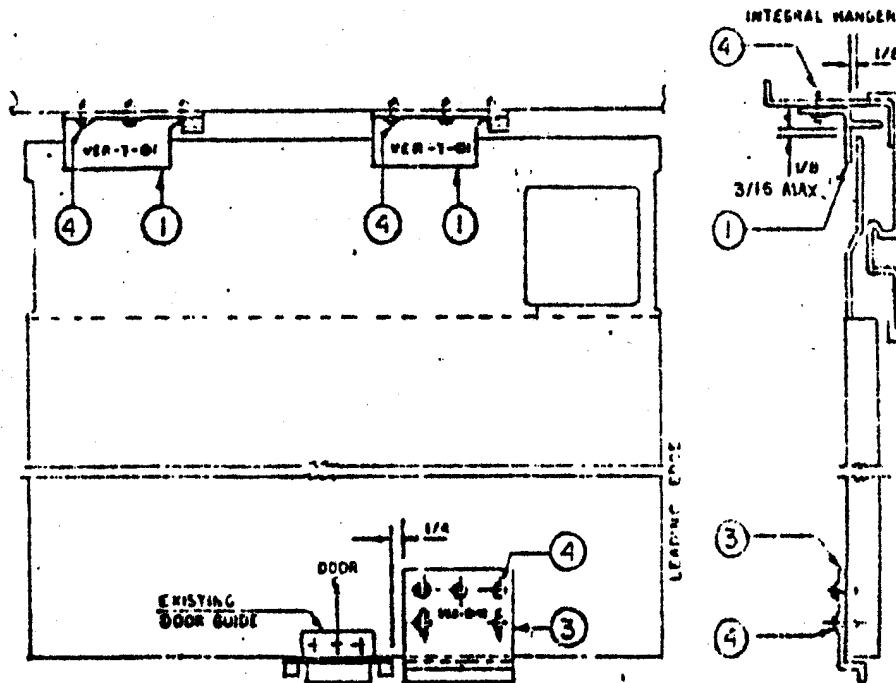
KIT # VER 01
 for Otis Landing Door
 with Integral Hanger

ITEM	PART NUMBER	DESCRIPTION	QTY REQ'D
1	VER-T-01	Top Retainer	2
3	VER-B-01	Bottom Retainer	1
4	TEKS-2	Screws 10-24 x 3/4" Teks 2 or Equiv. Hex Washer HD. self tap. self drill.	12

Tools Req'd: Electric screwdriver with clutch driven 5/16 hex. socket.
 (Clutch set at 30-40 inch-pounds torque.
 5/16 & 1/2 wrench for adjustment.)

Installation:
 With door closed, position two top retainers (Item 1) according to the dwg., one near the interlock, second near the end of door. Install retainers with clearance shown using one screw in slotted hole. Check that retainers will not scrape the door hanger when door is opening or closing. Readjust if necessary and install remaining 2 screws.

With door closed, position bottom retainer (Item 3) as shown on dwg., install retainer using two screws in slotted holes. Check that retainer will not scrape the sill when door is opening or closing. Readjust if necessary. Install remaining 3 screws.



VERTCO DOOR SAFETY RETAINER KIT FOR FIELD MOUNTING TO SINGLE SLIDE LANDING DOOR.

A736 9161 01

For SINGLE SLIDE landing door made by: OTIS, OTIS INTEGRAL

Equipped with HANGERS make & type: ANY MAKE ANY TYPE

BOTTOM LBS make & type: VERTCO

SAFETY RETAINERS can be obtained from: VERTCO

by ordering KIT # VER-01

The kit will contain - coloured YELLOW

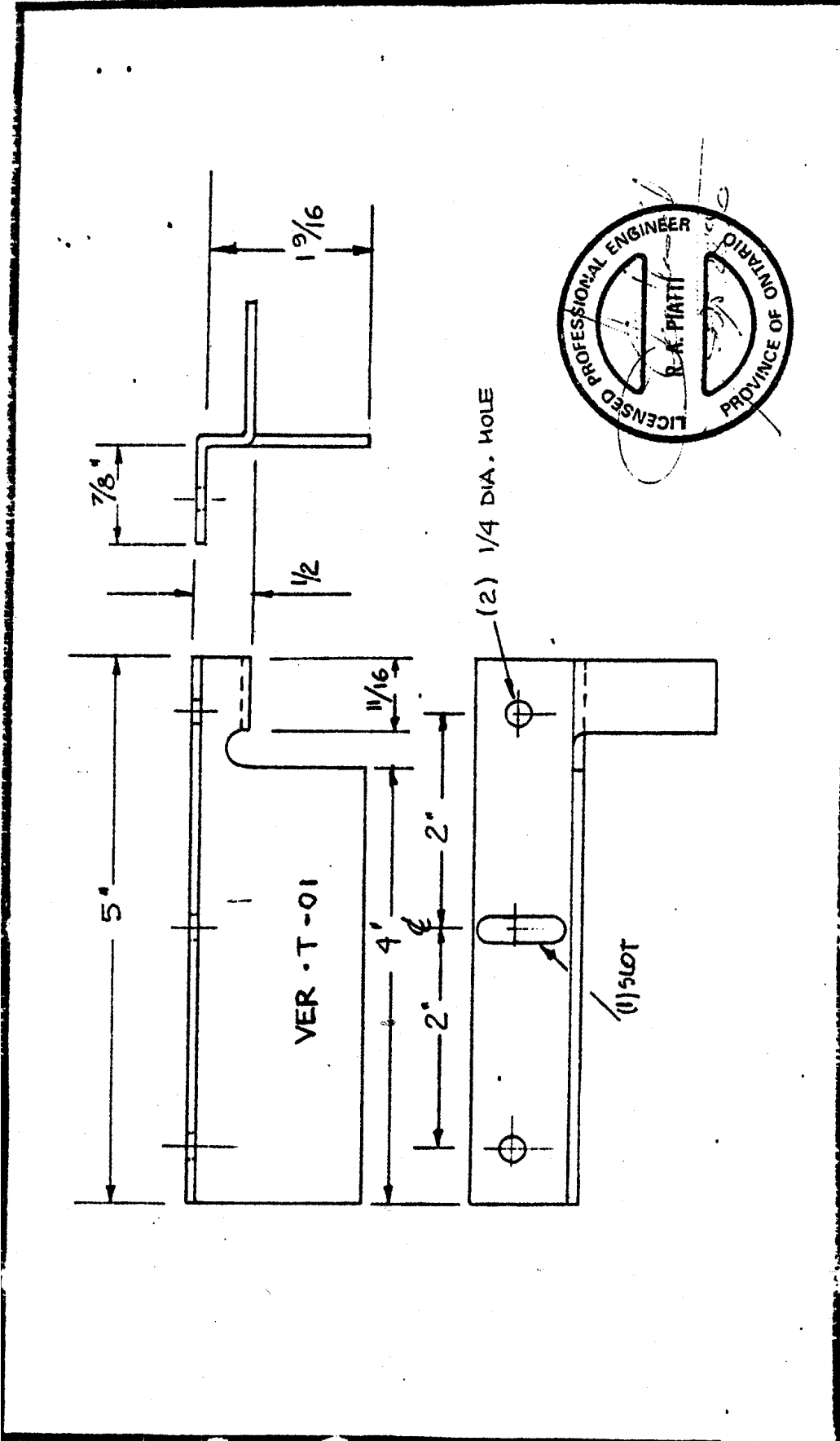
2 VER-T-01

1 VER-B-01

4 VER-B-01

4 VER-B-01

4 VER-B-01



STOCK NO. VER-T-01 MATERIAL 10 GA. SATIN COAT FINISH SHEAR 2 1/2 x 5"		SCALE DRWN OCT 89 BK CHKD APPD		TOP RETAINER OTTS INTEGRAL HANGER	
UNLESS OTHERWISE NOTED. BREAK EDG'S .005/.015 FINISH SURFACE .125 ✓ DEC. 3, 015, FRAC 3/164, ARK 11/120				DRAWING NUMBER SIZE CLASS SERIAL GP REV SHEET 4 736 0159 01 1 OF 1	
VERTCO					

REVISIONS:

KIT # VER 02
 for Otis Landing Door
 with Type 7060 Hanger

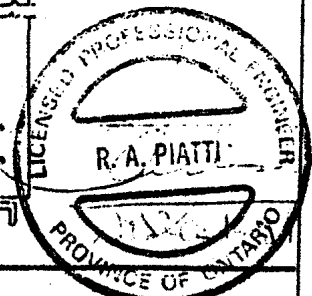
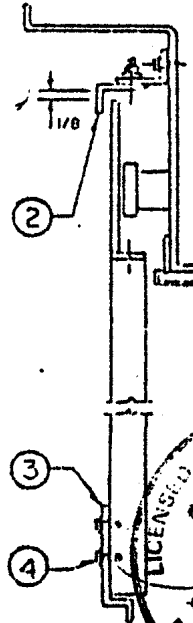
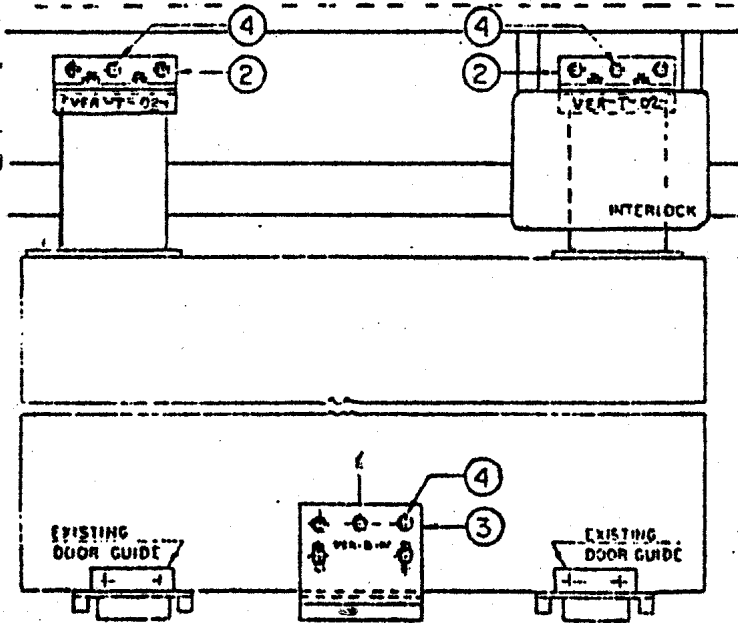
ITEM	PART NUMBER	DESCRIPTION	QTY RFG'D
2	VER-T-02	Top Retainer Assembly	2
3	or VER-B-W VER-B-M	Bottom Retainer	1
4	TKS-2	Screws 10-24 x 3/4" Teks 2 or Equiv. Hex Washer 1ID. self tap. self drill.	12

Tools Req'd: Electric screwdriver with clutch driven 5/16 hex. socket.
 (Clutch set at 30-40 inch-pounds torque.
 5/16 & 1/2 wrench for adjustment.)

Installation:

Position two top retainers (Item 2) at the door hanger area according to dimensions on the drawing. Fasten retainers (with clearances shown) using 3 screws. Check that retainers will not scrape door hanger when door is opening or closing. Readjust if necessary.

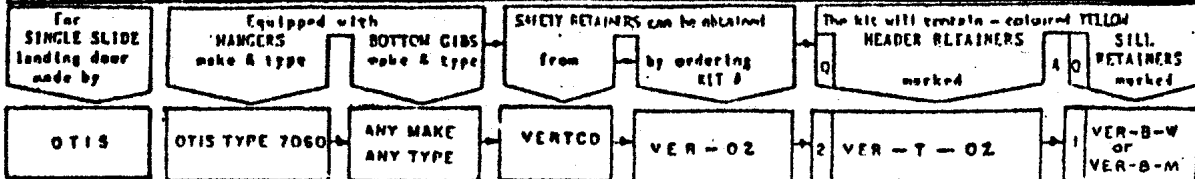
With door closed, position bottom retainer (Item 3) as shown on dwg., install retainer using two screws in slotted holes. Check that retainer will not scrape the sill when door is opening or closing. Readjust if necessary. Install remaining 3 screws.

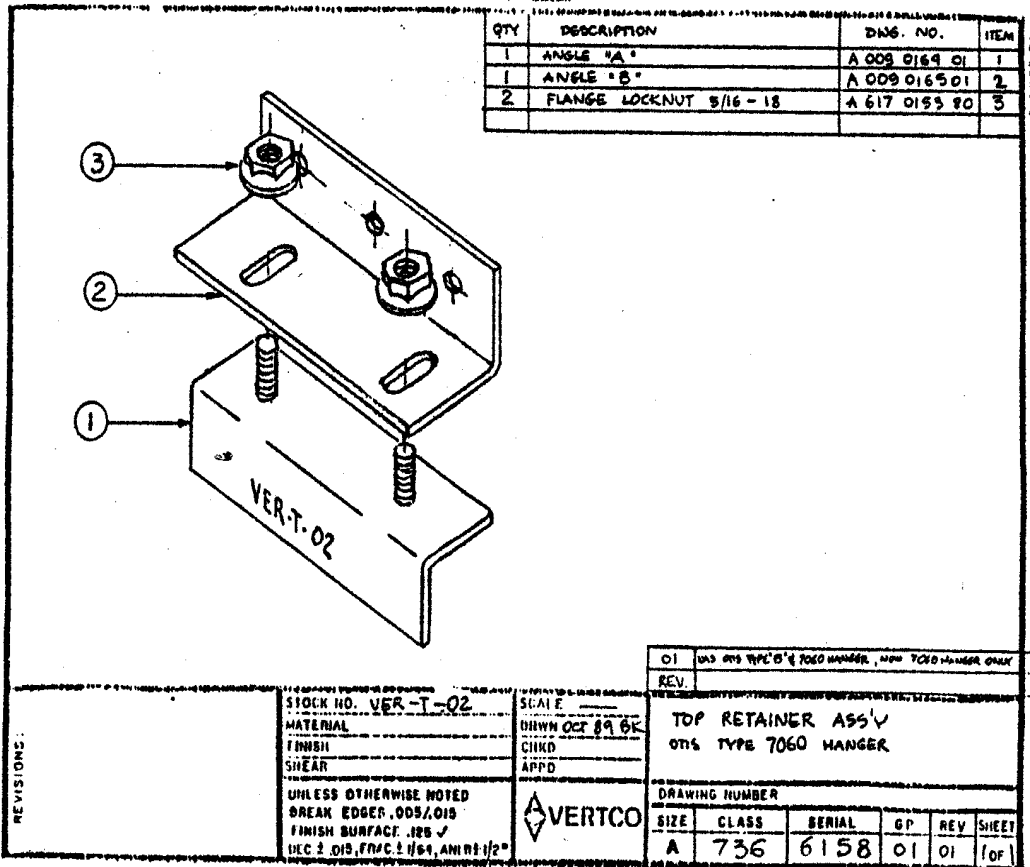
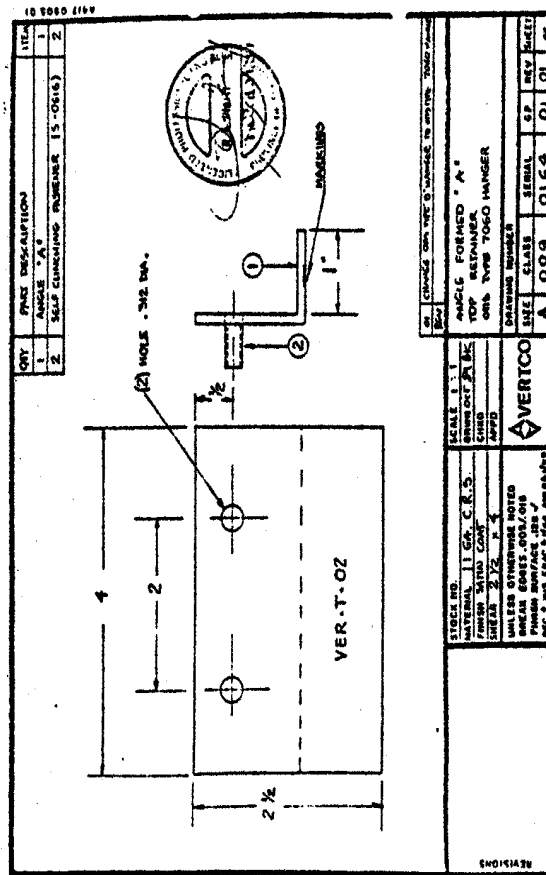
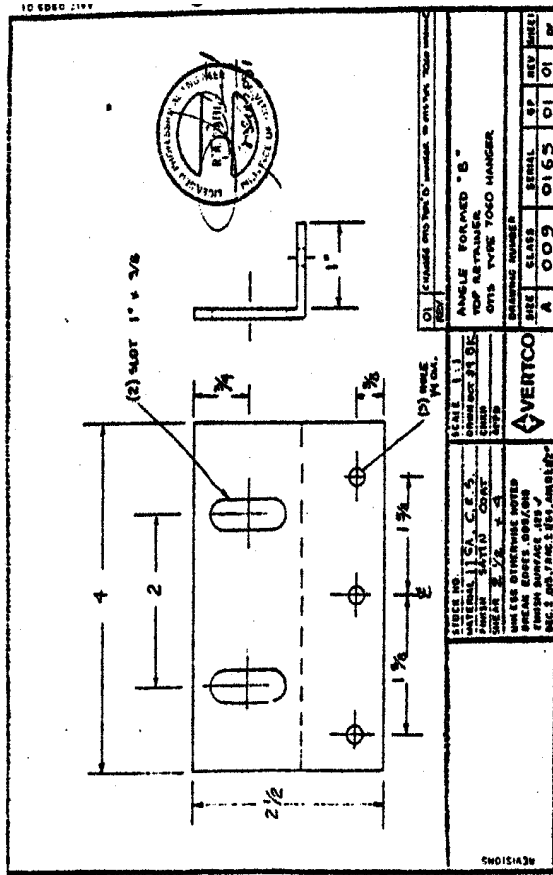


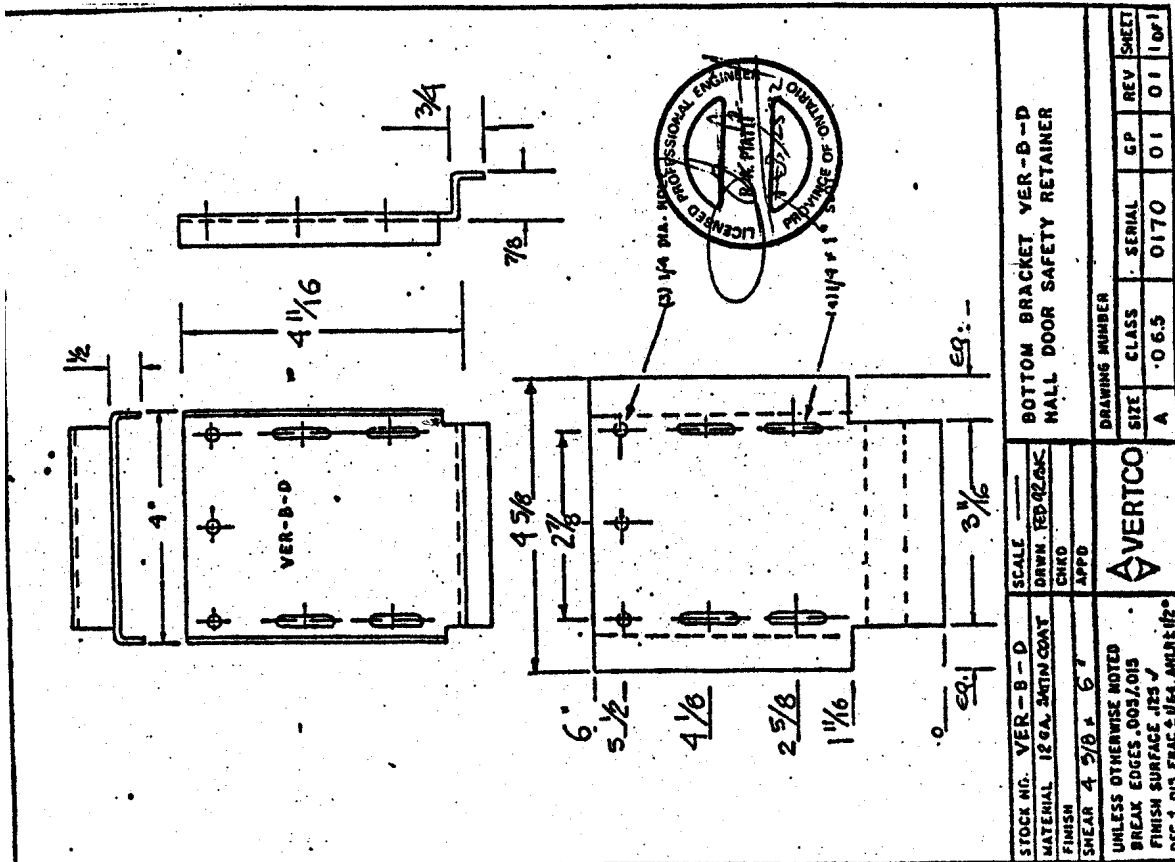
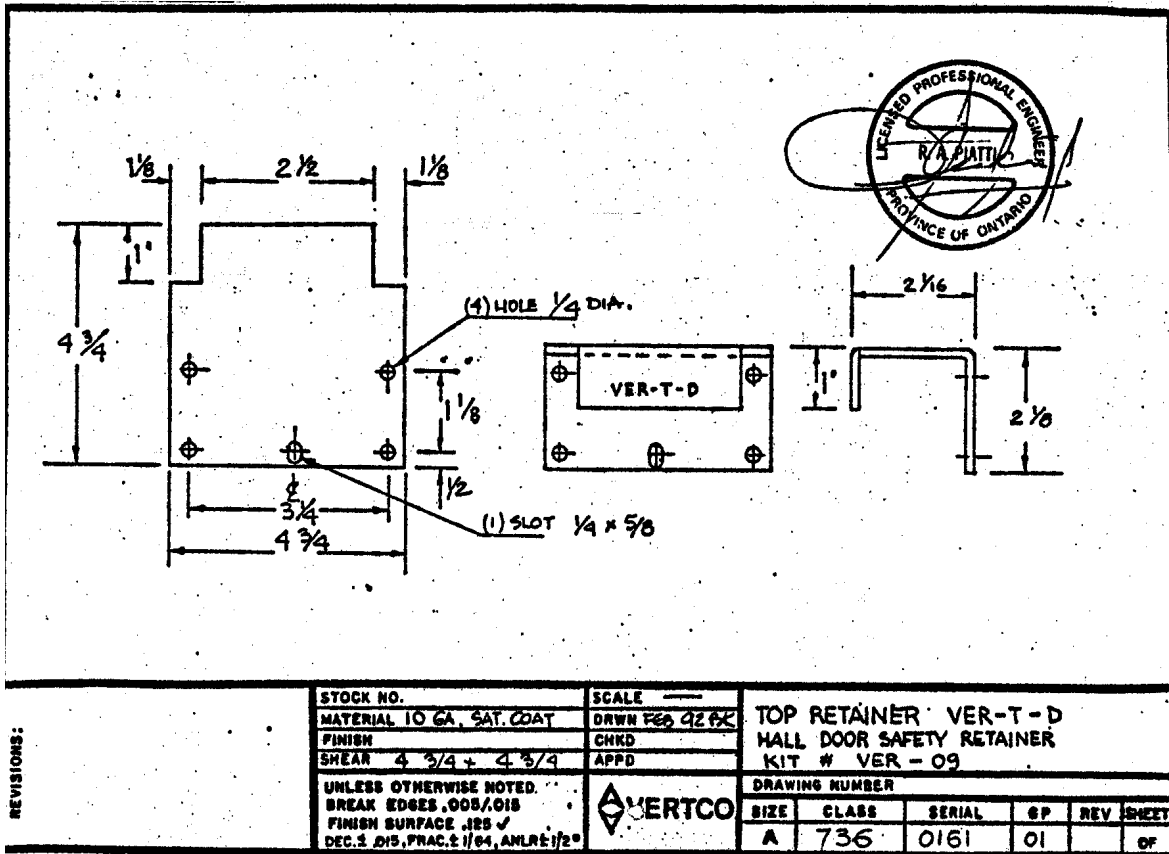
**DOOR SAFETY RETAINER KIT
 FOR FIELD MOUNTING TO
 SINGLE SLIDE LANDING DOOR.**

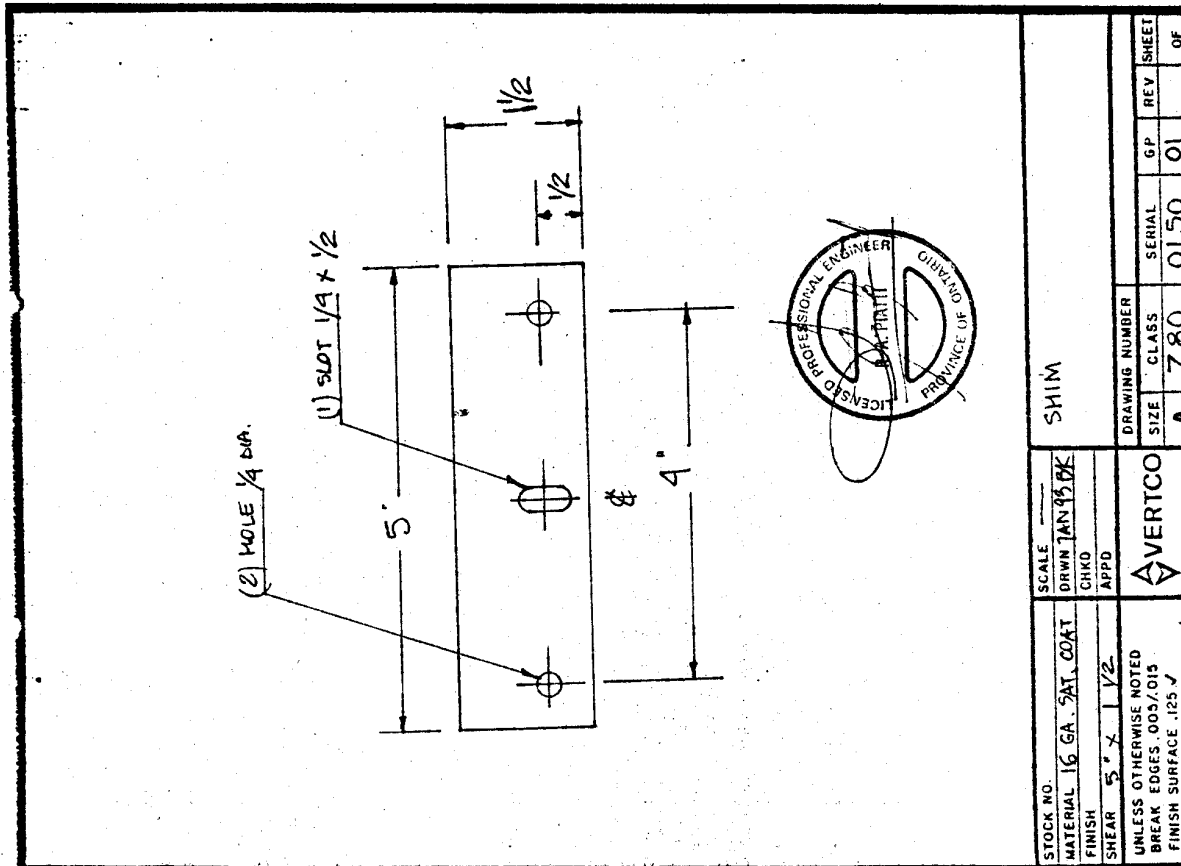
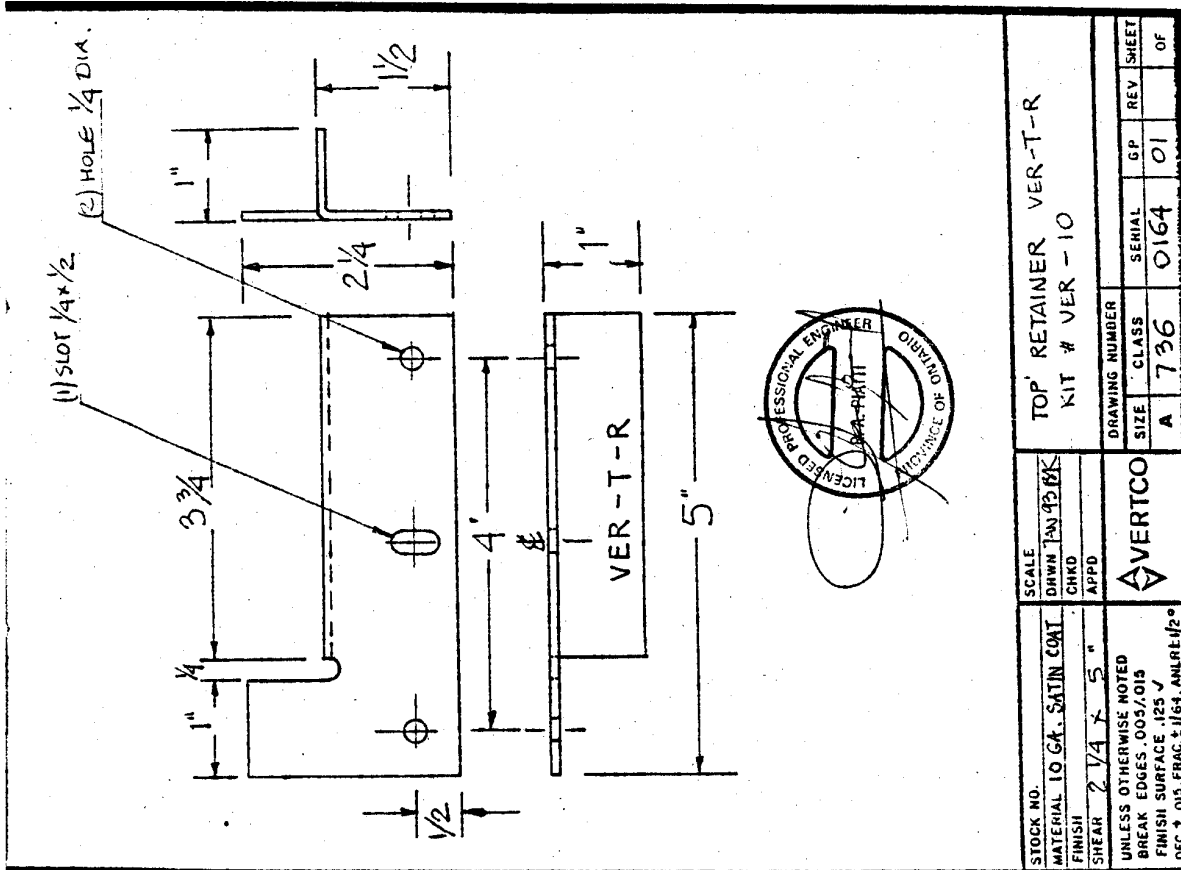
B 736 9162 01/01

REVISIONS



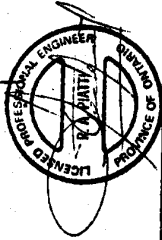
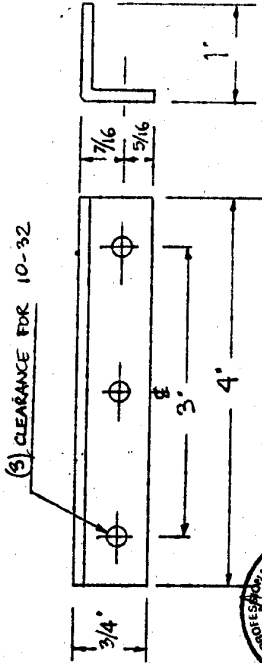






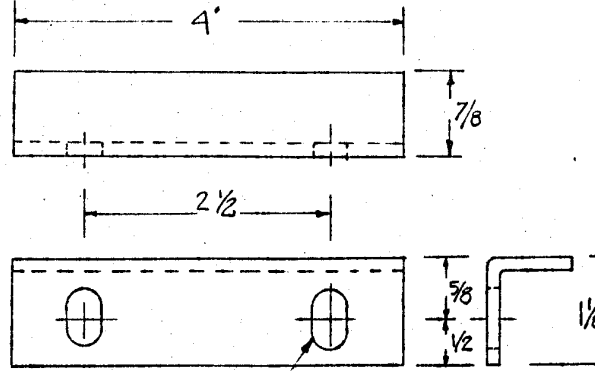
STOCK NO.	SCALE	DRAWING NUMBER	REV	SHEET
MATERIAL 10 GA. SATIN COAT	DRWN JAN 1988	TOP' RETAINER VER-T-R		
FINISH	CHKD	KIT # VER - 10		
SHEAR 2 1/4 x 5"	APPD	DRAWING NUMBER	SIZE	CLASS
UNLESS OTHERWISE NOTED		A	736	0164
BREAK EDGES .003/.015				01
FINISH SURFACE .125 ✓				
DEC. 3 .015 FRAC. 3/164, ANLRE 1/2°				

STOCK NO.	SCALE	DRAWING NUMBER	REV	SHEET
MATERIAL 16 GA. SAT. COAT	DRWN JAN 1988	SHIM		
FINISH	CHKD			
SHEAR 5" x 1 1/2"	APPD	DRAWING NUMBER	SIZE	CLASS
UNLESS OTHERWISE NOTED		A	780	0150
BREAK EDGES .003/.015				01
FINISH SURFACE .125 ✓				
DEC. 3 .015 FRAC. 3/164, ANLRE 1/2°				



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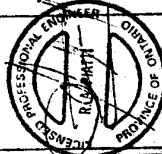
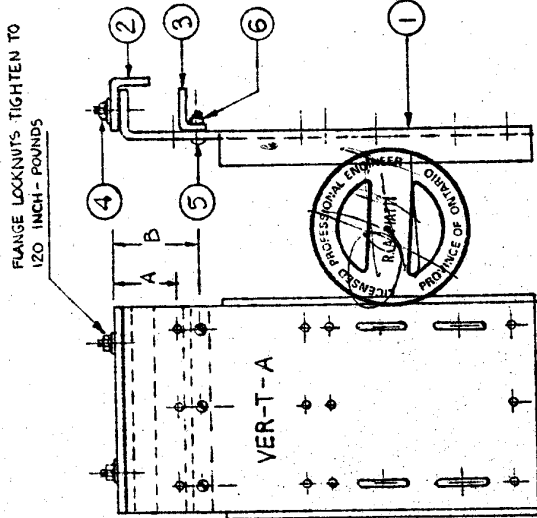
STOCK NO.	SCALE	DRW. NO.	TOP RETAINER VER-T-A
MATERIAL 12 GA. SAT. COAT	DRWN AFR 93 BK	CHKD	
FINISH	APPD		
SHEAR			
UNLESS OTHERWISE NOTED BREAK EDGES .003/.015 FINISH SURFACE .125 ✓ DEC. 3 .015, FRAC. ± 1/64, ANLR ± 1/2°			
VERTCO		DRAWING NUMBER	SIZE CLASS SERIAL GP REV SHEET
		A 810	0151 01 0 0



(2) SLOT 3/8 x 5/8



STOCK NO.	SCALE	DRW. NO.	ANGLE FORMED
MATERIAL 12 GA. SAT. COAT	DRWN AFR 93 BK	CHKD	TOP RETAINER VER-T-A
FINISH	APPD		
SHEAR			
UNLESS OTHERWISE NOTED BREAK EDGES .003/.015 FINISH SURFACE .125 ✓ DEC. 3 .015, FRAC. ± 1/64, ANLR ± 1/2°			
VERTCO		DRAWING NUMBER	SIZE CLASS SERIAL GP REV
		A 009	0160 01 0 0



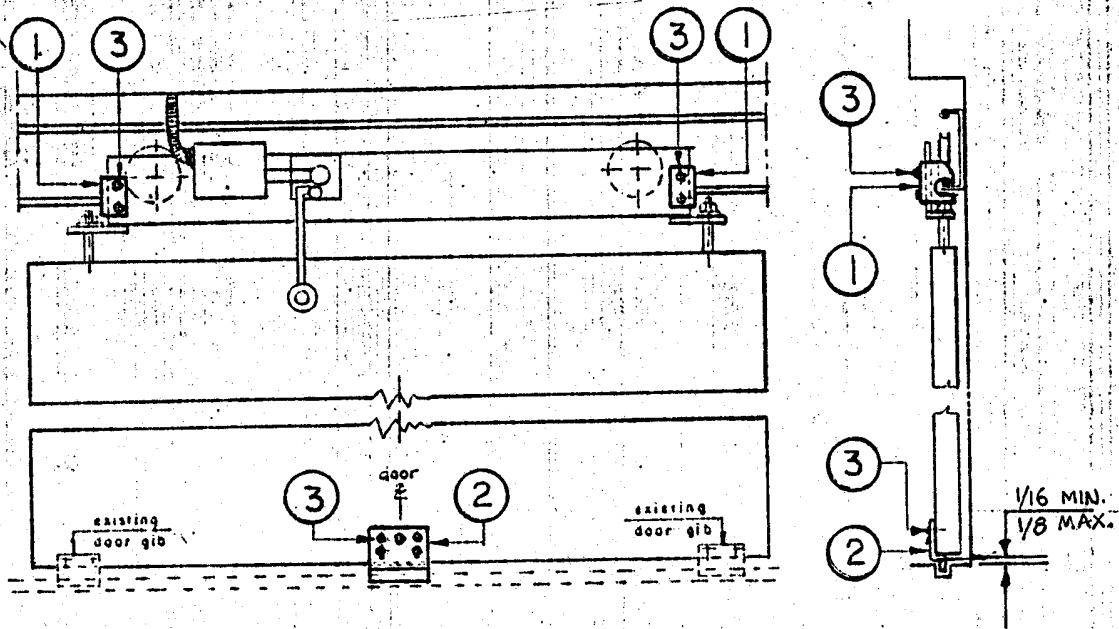
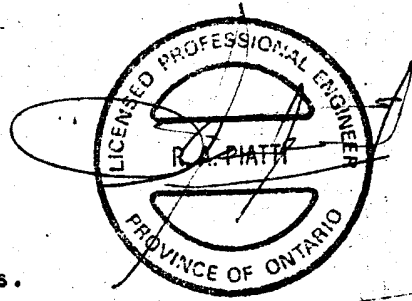
02	STOP BRACKET (ITEM 3) IN POSITION 'B' FOR ARMOR DOOR HANGER	3
01	STOP BRACKET (ITEM 3) IN POSITION 'A' FOR G.A.L. DOOR HANGER	3
GP		
6	NYLON INSERT LOCKNUT 10-32	3
5	SCREW 10-32 x 3/4L	3
4	A 617 015380 FLANGE LOCKNUT 5/16 - 18	2
3	A 810 0151010 STOP BRACKET	1
2	A 009 0160010 ANGLE FORMED	1
1	A 038 6166010 BASE PLATE ASSEMBLY	1
ITEM	DWG. NO.	QTY.
TOP RETAINER ASSEMBLY		
STOCK NO.	SCALE	DRW. NO.
MATERIAL	DRWN AFR 93 BK	CHKD
FINISH	APPD	
SHEAR		
UNLESS OTHERWISE NOTED BREAK EDGES .003/.015 FINISH SURFACE .125 ✓ DEC. 3 .015, FRAC. ± 1/64, ANLR ± 1/2°		
VERTCO		DRAWING NUMBER
		SIZE CLASS SERIAL GP REV SHEET
		A 038 9165 0210 0 0

KIT # VER-12
 Dillon landing door
 with custom made
 door hangers

ITEM	PART NO.	DESCRIPTION	Q'TY
1	VER-T-12	Top retainer R. H.	1
	VER-T-12	Top retainer L. H.	1
2	VER-B-12	Bottom retainer	1
3	TEKS-2	Screws 10-24 x 3/4 Teks-2 or equiv. Hex. washer hd., self tap., self drill.	9

INSTALLATION

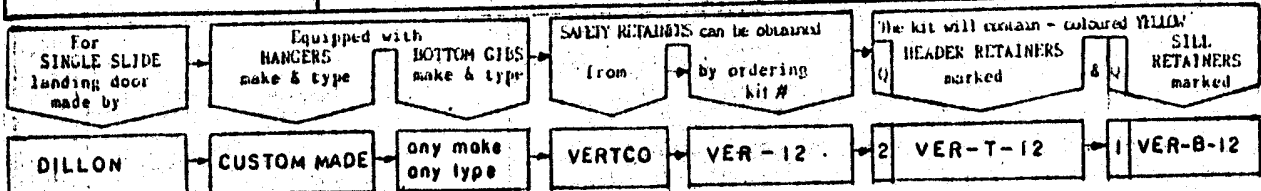
With door closed position top retainers (Item 1) by sliding each one over the end of door track. Install retainers using supplied hardware, check that retainers will not scrape the door track when door is opening and closing.
 With door closed position bottom retainer (Item 2) as shown on the dwg. Install retainer using two screws in the slotted holes, check that retainer will not scrape the sill when door is opening or closing. Readjust if necessary, install remaining screws.

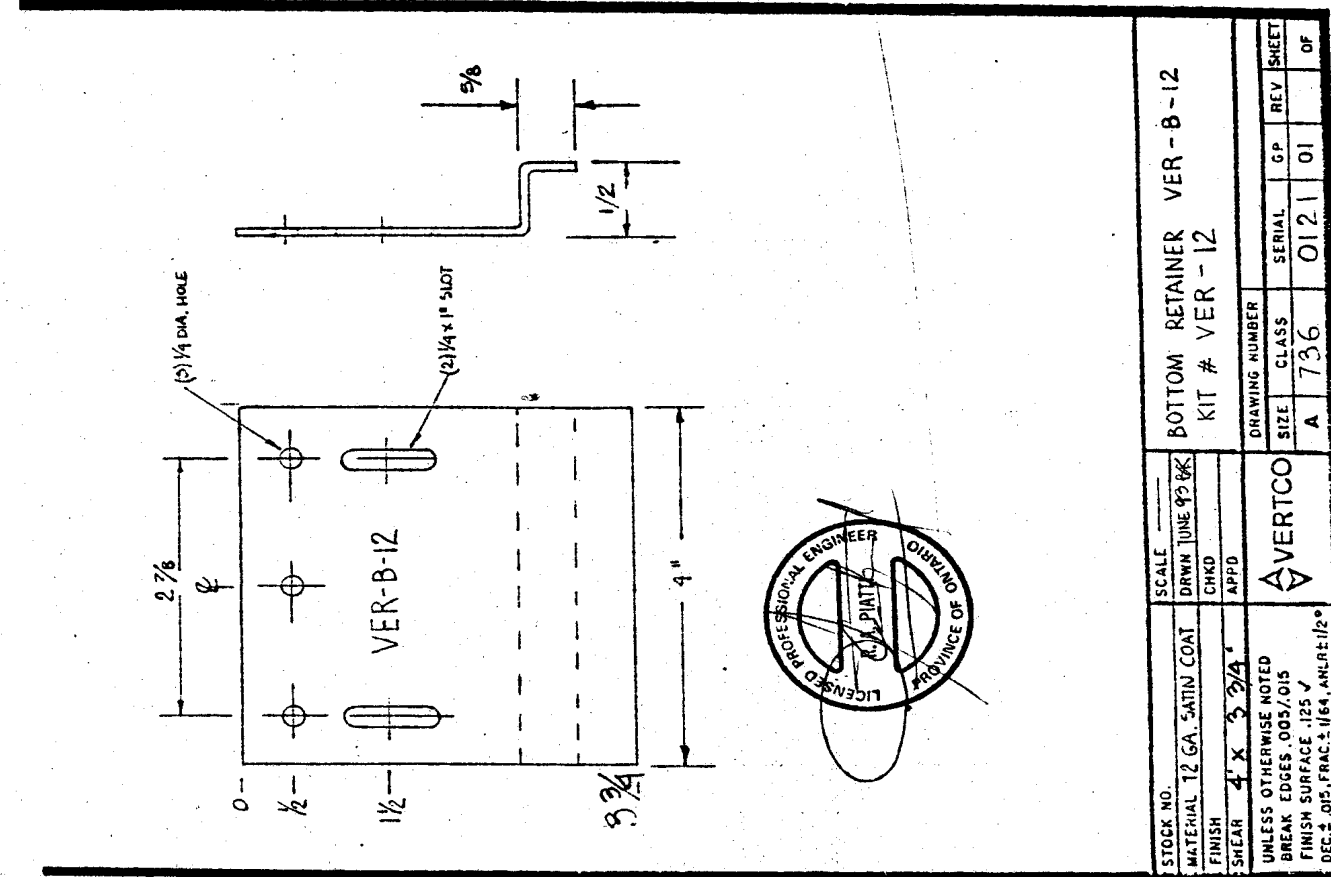
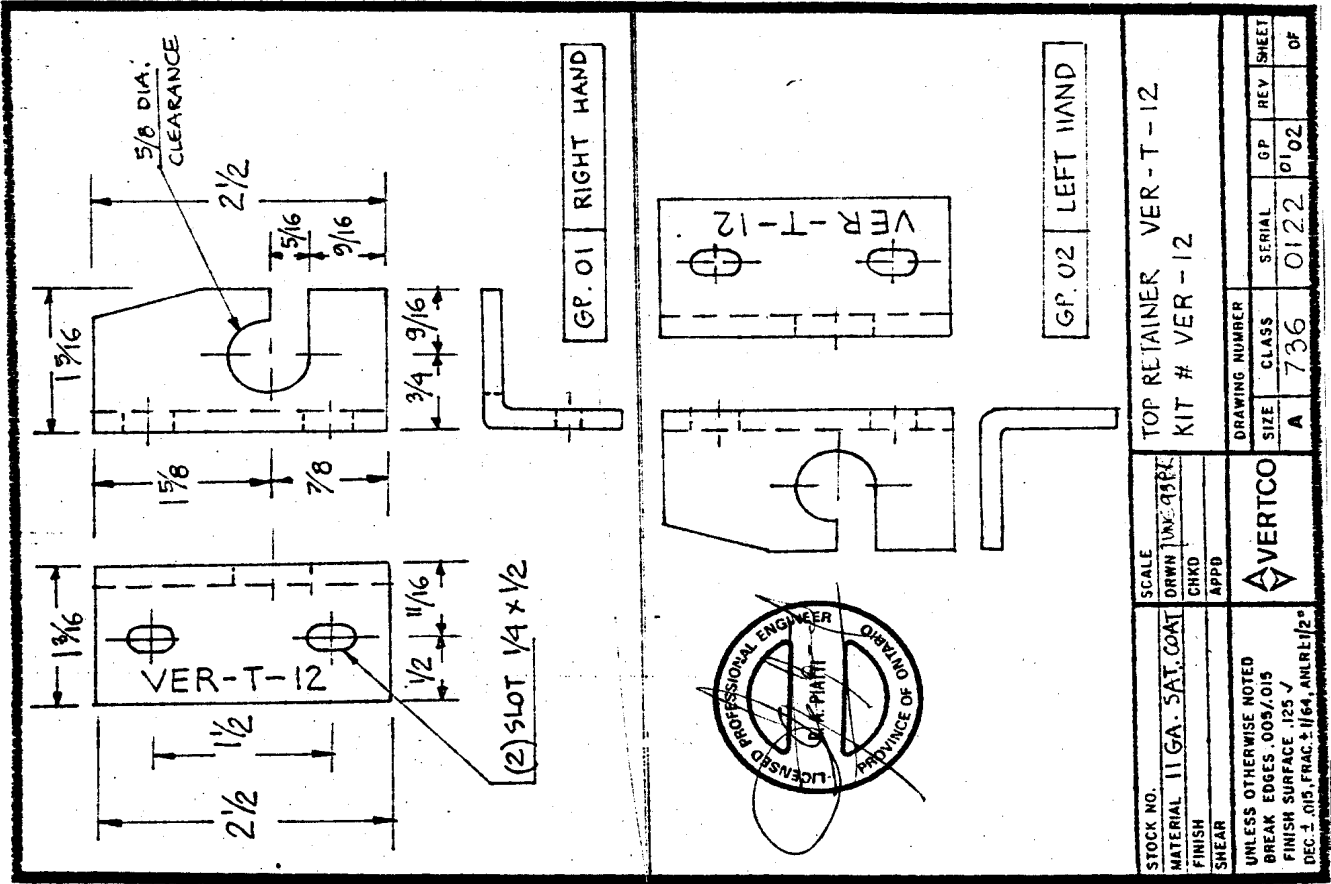


DOOR SAFETY RETAINER KIT
 FOR FIELD MOUNTING TO
 SINGLE SLIDE LANDING DOOR.

REVISIONS
 01. FINAL REV.
 Oct. 93

A 736 9168 01 01





STOCK NO.	SCALE	TOP RETAINER VER-T-12	DRAWING NUMBER	REV	SHEET
MATERIAL 11 GA. SAT. COAT	DRWN JUNE 93 BK	KIT # VER-12	SIZE	CLASS	GP
FINISH	CHKD		A	736	0122
SHEAR	APPD				0102
AVERTCO					OF

STOCK NO.	SCALE	BOTTOM RETAINER VER-B-12	DRAWING NUMBER	REV	SHEET
MATERIAL 12 GA. SATIN COAT	DRWN JUNE 93 BK	KIT # VER-12	SIZE	CLASS	GP
FINISH	CHKD		A	736	0121
SHEAR 4 X 3 3/4	APPD				01
AVERTCO					OF

KIT # VER-13
 Turnbull landing door
 with individual hangers

ITEM	PART NO.	DESCRIPTION	Q'ty
1	VER-T-13	Top retainer assembly see dwg. A038 9167 01	2
2	VER-B-13	Bottom retainer	1
3	TEKS - 2	Screws 10-24 x 3/4 Teks 2 or equiv. Hex. washer hd., self tap., self drill.	19
4		Spacer	4

INSTALLATION

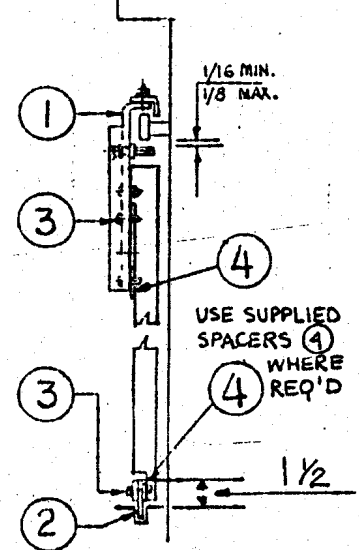
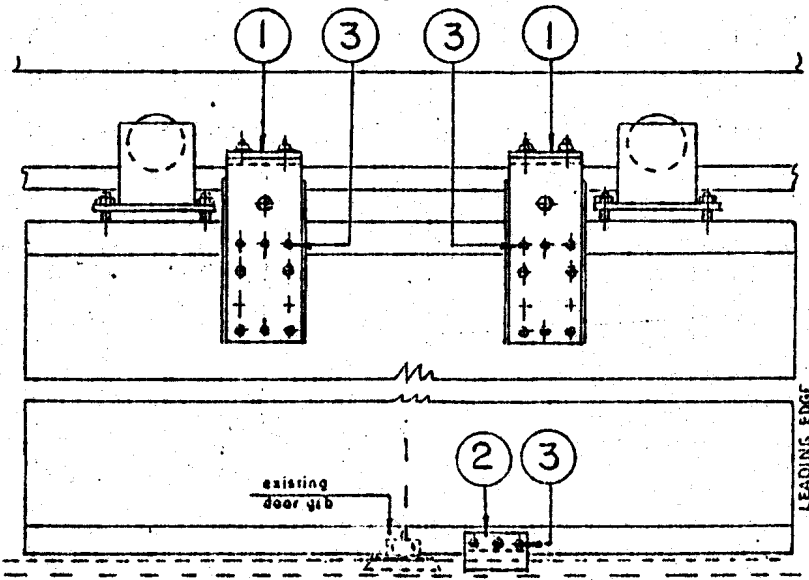
With door closed position top retainers (Item 1) according to dimensions on dwg.

Install retainers using supplied hardware, check that retainers will not scrape the door hanger when door is opening and closing.

With door closed position bottom retainer (Item 2) as shown on the dwg:

Install retainer using one screws in the sloped holes, check that retainer will not scrape the sill when door is opening or closing.

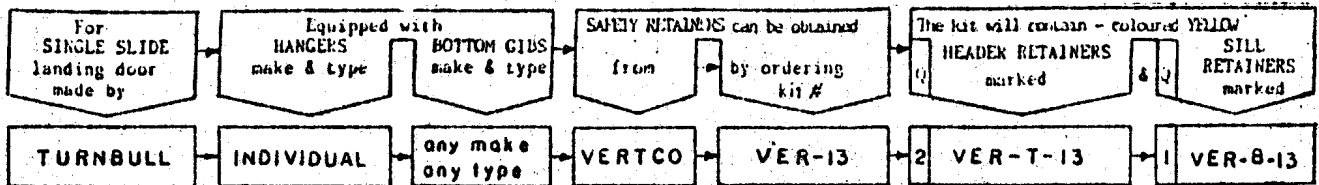
Readjust if necessary, install remaining screws.

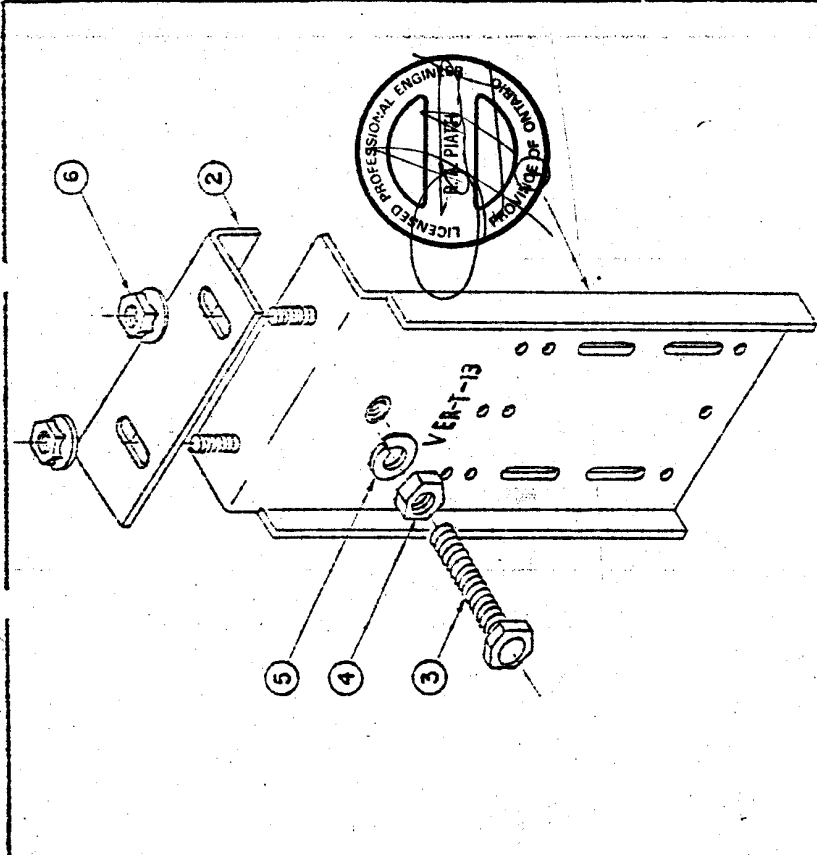


DOOR SAFETY RETAINER KIT
 FOR FIELD MOUNTING TO
 SINGLE SLIDE LANDING DOOR.

A 736 91 01 01

REVISIONS:



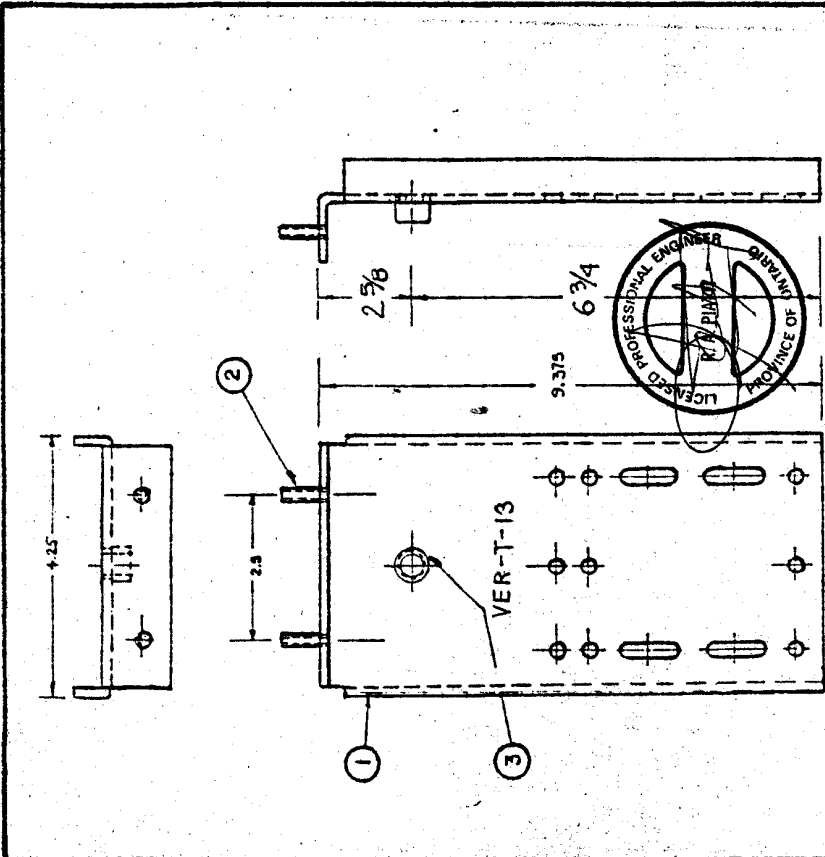


ITEM	STOCK NO.	DESCRIPTION	SCALE	QTY
7	A 617 0153 80	FLANGE LOCKNUT 5/16 -- 18		2
6	A 617 0153 80	LOCKWASHER, SPRING (SPLIT) 3/8		1
5	A 009 0159 01	NUT, HEX. 3/4 - 16		1
4	A 038 6167 01	SCREW, HEX. CAP 3/8 - 16 A 2 LONG (FULLY THREAD'D)		1
3	A 038 6167 01	ANGLE FORMED		1
2		BASE PLATE ASSEMBLY		1
1				1

STOCK NO.	VER - T - 13	SCALE	
MATERIAL		DRWN	JUNE 93 BK
FINISH		CHKD	
SILVER		APPD	

TOP RETAINER ASS'Y			
VER - T - 13			
KIT # VER - 13			
DRAWING NUMBER	SIZE	CLASS	GP
A	A	736	9167
REV	REV	REV	REV
0	0	0	0

UNLESS OTHERWISE NOTED
 BREAK EDGES .003/.015
 FINISH SURFACE .125 ✓
 DEC. 3 015, PHAC. 5/164, AMLR1/2.

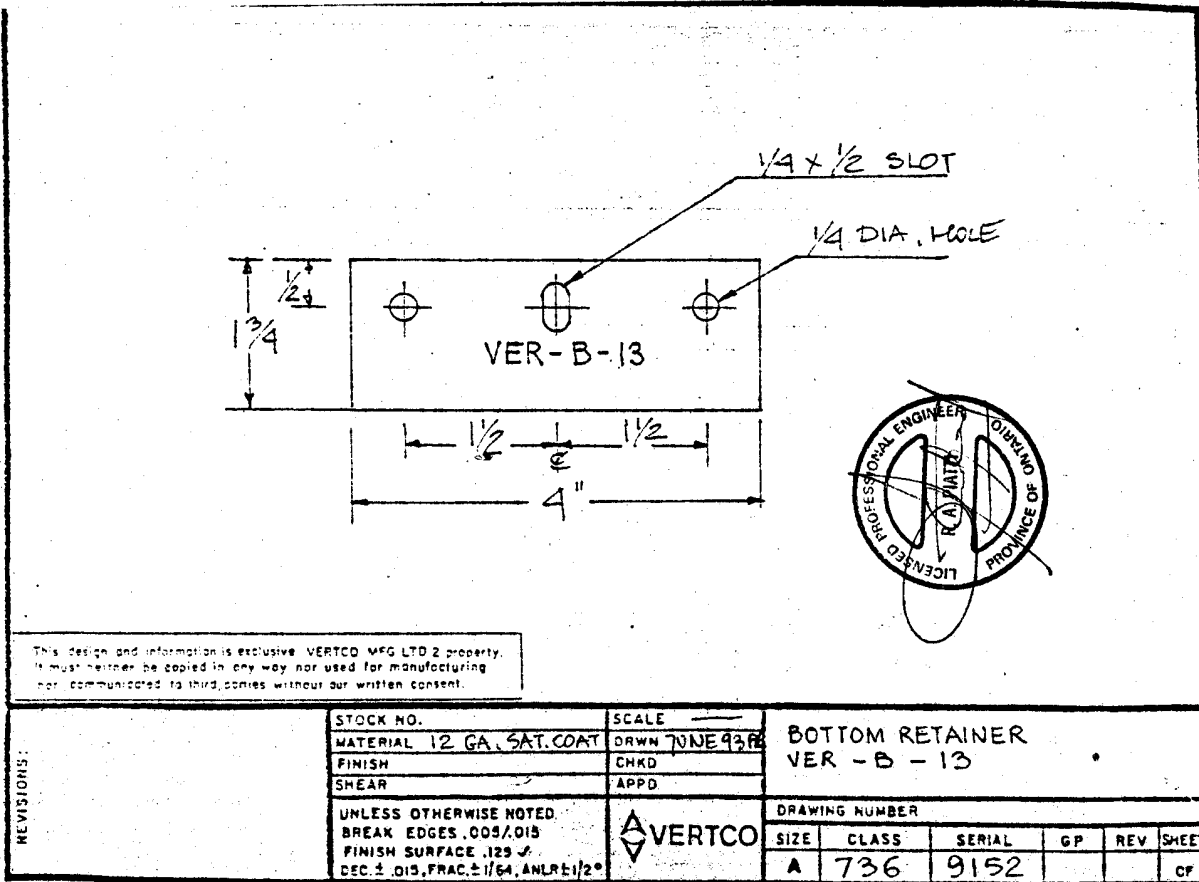
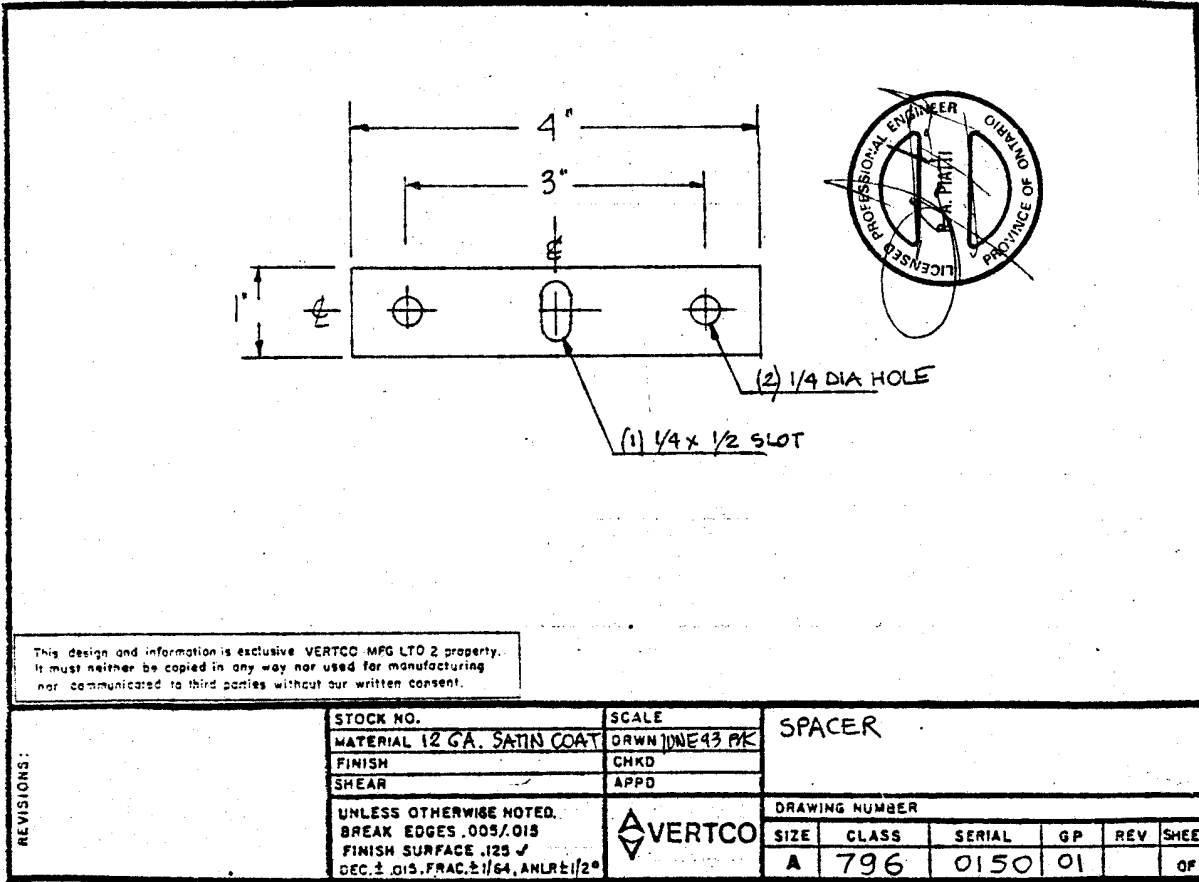


ITEM	STOCK NO.	DESCRIPTION	SCALE	QTY
3	A 125 9150 01	SELF-CLINCHING FASTENER (S-0616)		1
2	A 814 0151 80	STUD 3/16 - 18 x .75 - SELF CLINCHING		2
1	A 038 0167 01	BASE PLATE		1

STOCK NO.	VER - T - 13	SCALE	
MATERIAL		DRWN	JUNE 93 BK
FINISH		CHKD	
SILVER		APPD	

BASE PLATE ASSEMBLY			
TOP RETAINER VER - T - 13			
DRAWING NUMBER	SIZE	CLASS	GP
A	A	038	6167
REV	REV	REV	REV
0	0	0	0

UNLESS OTHERWISE NOTED
 BREAK EDGES .003/.015
 FINISH SURFACE .125 ✓
 DEC. 3 015, PHAC. 5/164, AMLR1/2.





DOOR SAFETY RETAINER KIT FOR FIELD MOUNTING TO SINGLE SLIDE LANDING DOOR

DWG NO. A 736 3146 01 0

KIT # VER R8

Tools required :

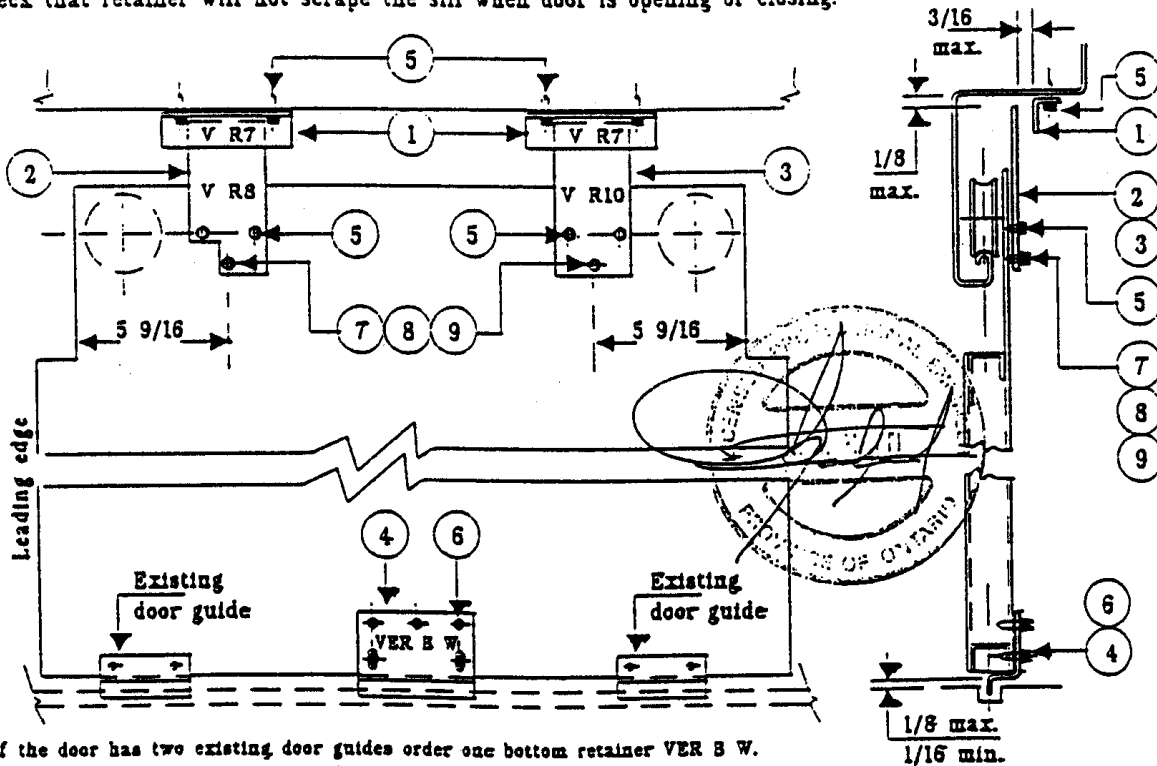
- Drill with 9/32 & 1/4-20 tap
- Electric screwdriver w/clutch driven 5/16 & 3/8 hex. socket (clutch set at 30-50 inch-pounds torque)

INSTALLATION

With door closed, position top retainers (Item 2 & 3) according to dimensions on drawing and mark holes. Fasten retainers using supplied hardware. For (2) top holes use 1/4-20 x 3/4 TEKS 2 screws. For lower hole use 1/4-20 x 1/2 screw w/lock and flat washer (check to be sure door runs free). Position angle retainers (Item 1) as shown, mark holes, drill and fasten using 1/4-20 x 3/4 TEKS 2 screws. Check that retainers are correctly positioned, adjust if necessary.

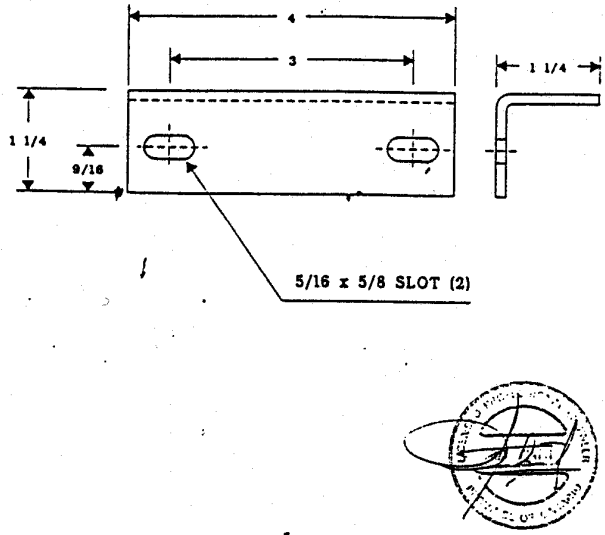
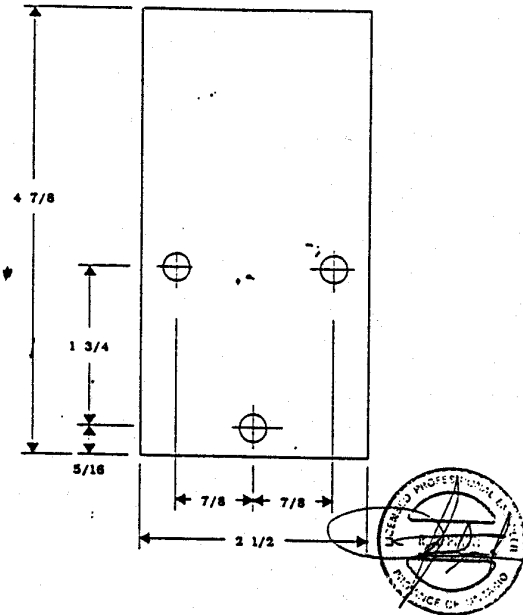
With door closed position bottom retainer (Item 4) according to dimension on drawing. Mark holes, drill and install retainer using TEKS 2 screws. Check that retainer will not scrape the sill when door is opening or closing.

Item	Part number	Description	Qty
1	V R7	ANGLE RETAINER	1
2	V R8	TOP RETAINER	1
3	V R10	TOP RETAINER	2
4	VER B W	BOTTOM RETAINER	1 or 2
5	TEKS 2	SCREW 1/4-20 x 3/4" - " TEKS 2" or EQUIV.. HEXAGON WASHER HD.. SELF TAP.. SELF DRIL.	8
6	TEKS 2	SCREW 10-24 x 3/4" - " TEKS 2" or EQUIV.. HEXAGON WASHER HD.. SELF TAP.. SELF DRIL.	5 or 10
7		SCREW 1/4-20 x 1/2 HEXAGON HD.	2
8		1/4 LOCK WASHER	2
9		1/4 FLAT WASHER	2



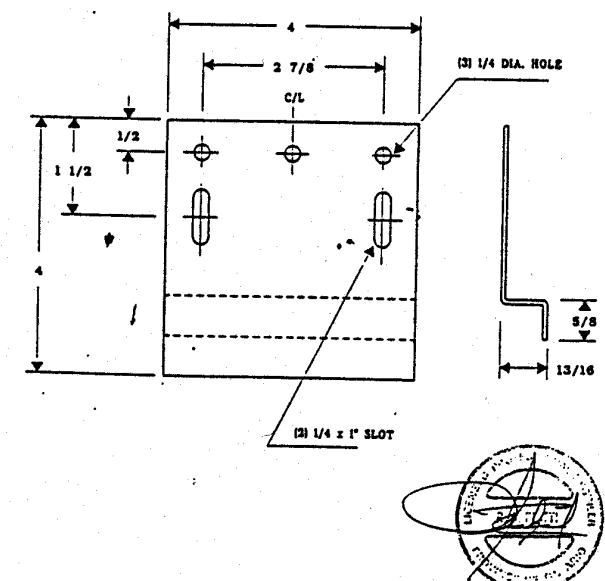
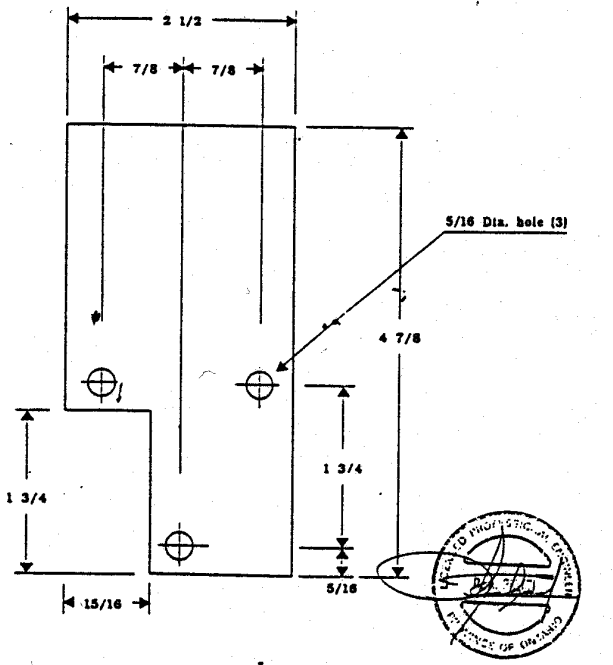
- * If the door has two existing door guides order one bottom retainer VER B W.
- * If the door has only one existing door guide order two bottom retainers VER B W.

For SINGLE SLIDE landing door made by	Equipped with HANGERS make & type	BOTTOM GIBS make & type	SAFETY RETAINERS can be obtained from	by ordering KIT #	The kit contain - colored YELLOW HEADER RETAINERS marked	SILL RETAINER marked
DAHLSTROM	MAC INTEGRAL	any make any type	VERTCO	VER - R8	1 V R8 1 V R10 2 V R7	1 or 2 VER B W



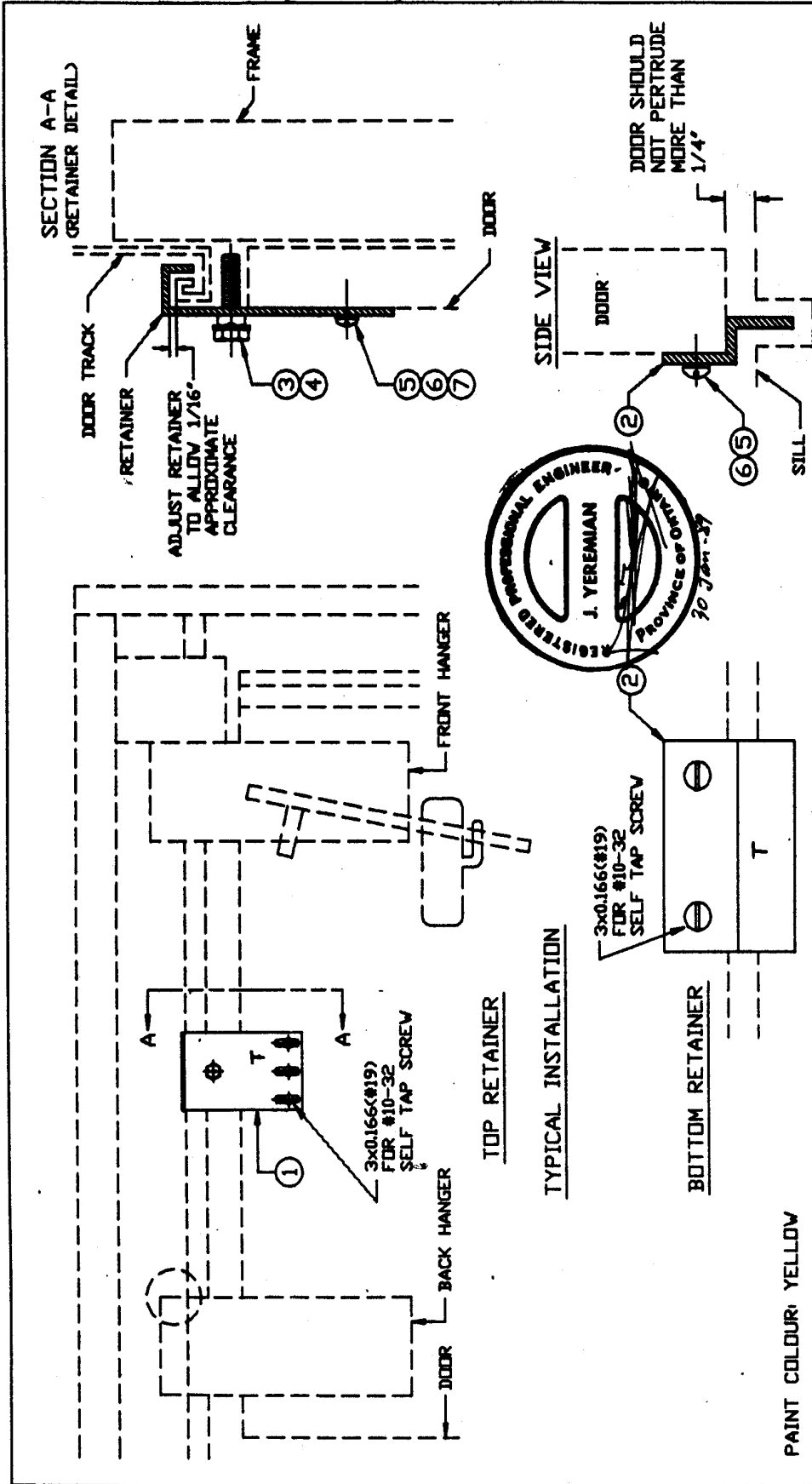
REF. NO.		PART NUMBER	V R 10
MATERIAL	11 GA. C. R. S.	DRWN	S. E.
FINISH		CHEK	
SWEAR		DATE	JUNE 96
VERTCO		SIZE	CLASS SERIAL GP REV SHEET
		A	736 0180 010 1 of 1

REF. NO.		PART NUMBER	V R 7
MATERIAL	11 GA. C. R. S.	DRWN	S. E.
FINISH		CHEK	
SWEAR		DATE	
VERTCO		SIZE	CLASS SERIAL GP REV SHEET
		A	736 0178 010 1 of 1



REF. NO.		PART NUMBER	V R 8
MATERIAL	11 GA. C. R. S.	DRWN	S. E.
FINISH		CHEK	
SWEAR		DATE	JUNE 96
VERTCO		SIZE	CLASS SERIAL GP REV SHEET
		A	736 0179 010 1 of 1

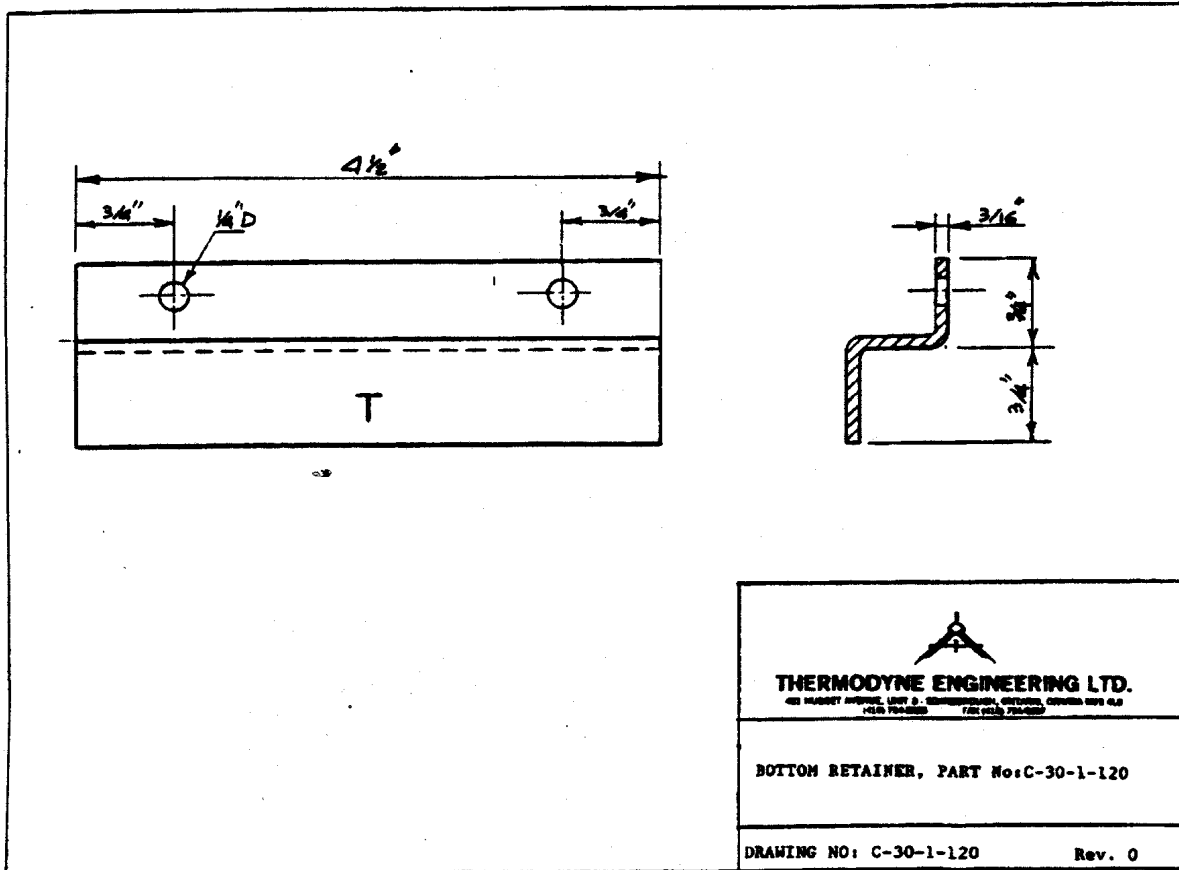
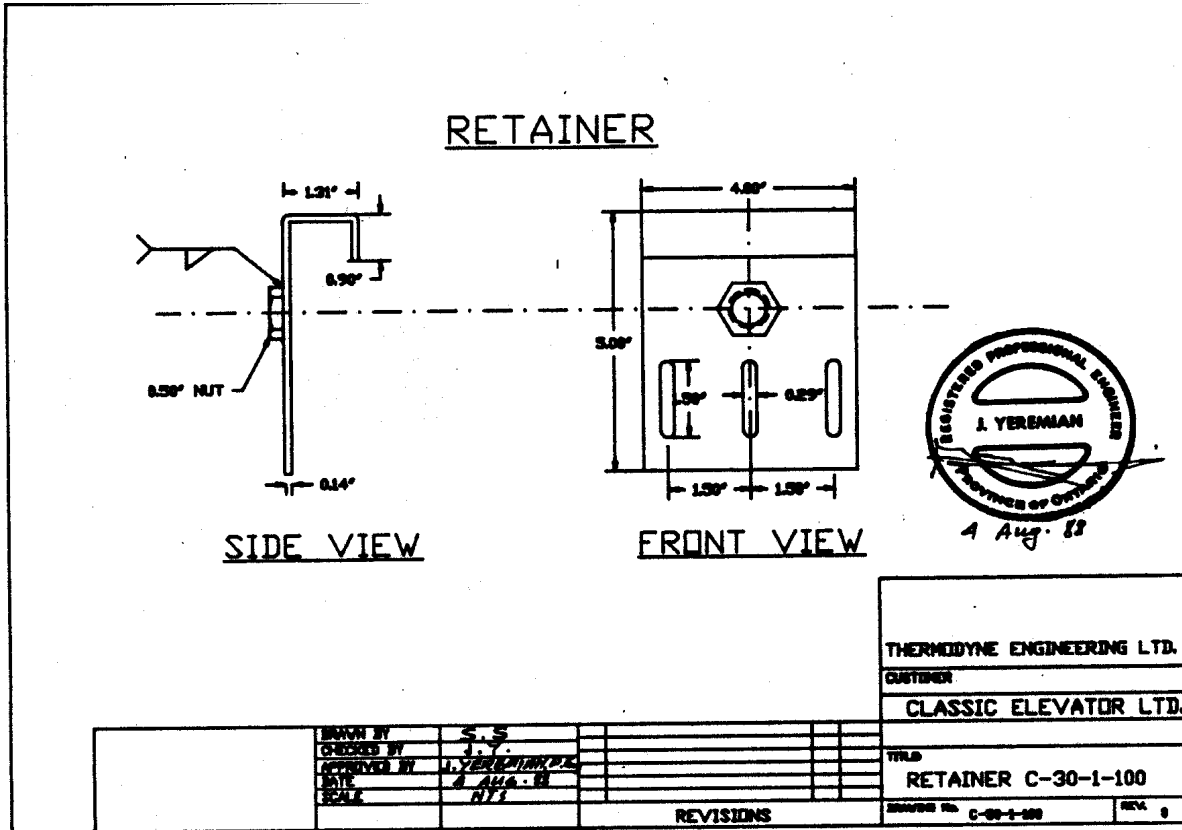
REF. NO.		PART NUMBER	V R B W
MATERIAL	12 GA. SAT. COAT	DRWN	S. E.
FINISH		CHEK	
SWEAR	4" x 4"	DATE	JUNE 96
VERTCO		SIZE	CLASS SERIAL GP REV SHEET
		A	736 0155 010 1 of 1



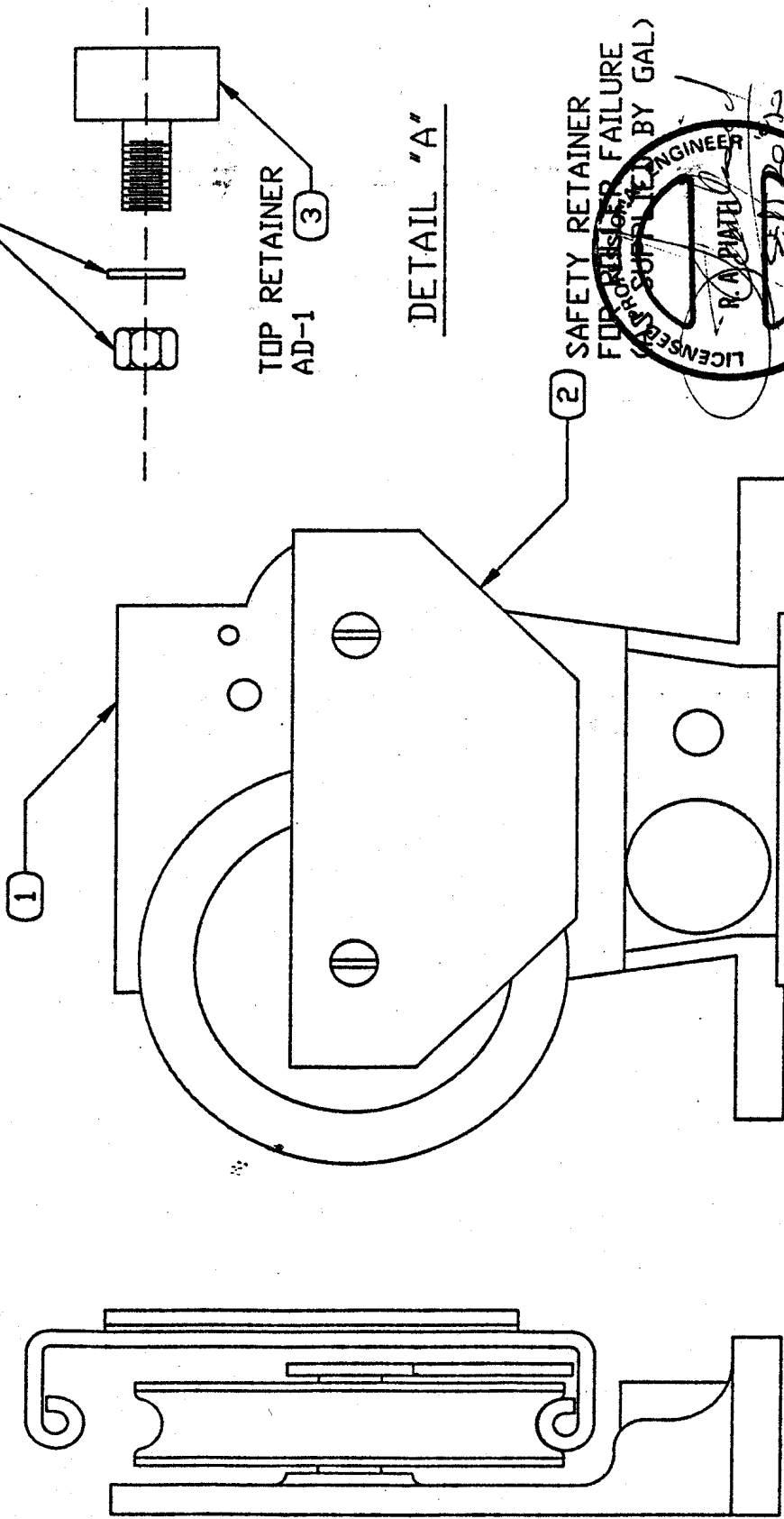
THERMOBYNE ENGINEERING LTD.	
CLIENT:	CLASSIC ELEVATOR LTD.
TITLE:	SAFETY RETAINERS - TYPE T
SCALE:	N.T.S.
DRAWING NO.:	C-30-1-110
DATE:	JAN 30, 1989
REV.:	1

DRAWN BY: B.J.A.	
CHECKED BY: J.Y.	
APPROVED BY: JOSEPH YEREMIAN, P.ENG.	

BILL OF MATERIALS		
ITEM	TITLE	QTY.
1	RETAINER - TOP	1
2	RETAINER - BOTTOM	1
3	BOLT, HEX 1/2-13x2"	1
4	WASHER, LOCK 1/2"	1
5	SCREW, SELF TAP #10-32x1/2"	5
6	WASHER, EXT. TEETH #10	5
7	WASHER, FLAT #10	3



GAL CAST SHEAVE ASSEMBLY

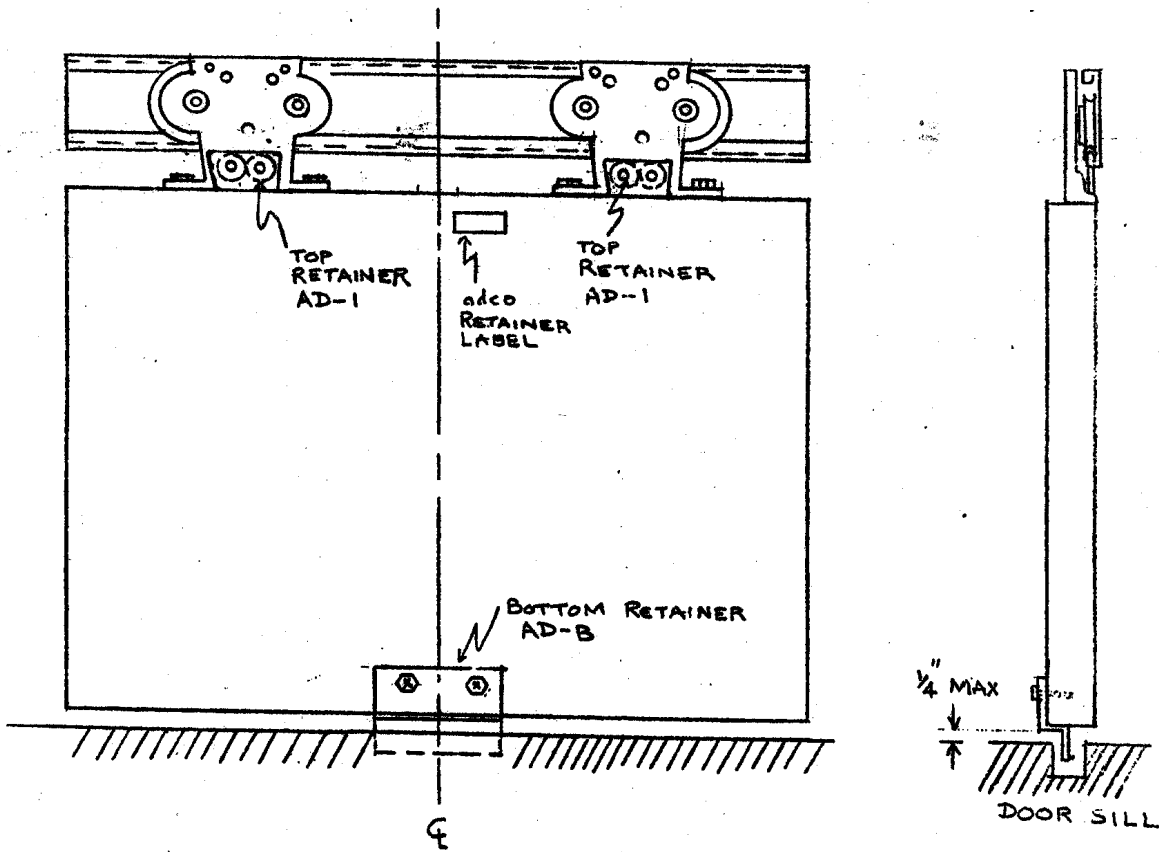


DETAIL "A"

ITEM	DESCRIPTION
1	GAL SHEAVE ASSEMBLY
2	SAFETY RETAINER
3	TOP RETAINER AD-1
4	3/8-16 NUT AND LOCKING WASHER FOR AD-1

adco ELEVATOR SERVICE LTD.	
DOOR RETAINER	
DWG. NO.	SCALE
90-01	N.T.S.
DATE	90/07/31

GAL. CAST SHEAVE ASSEMBLY WITH AD-1 RETAINERS

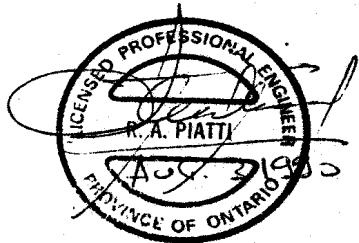


TOOLS REQUIRED:

ELECTRIC SCREWDRIVER WITH CLUTCH DRIVEN 3/16" SOCKET
(CLUTCH SET AT 30-40 INCH POUNDS TORQUE)
3/8" WRENCH

INSTALLATION:

1. PLACE THE TOP RETAINER INTO ONE OF THE HOLES (DEPENDING ON LEFT OR RIGHT HAND HANGER).
2. SCREW-IN THE 3/8"-16 NUT WITH LOCKING WASHER (SUPPLIED) FROM THE BACKSIDE OF THE HANGER.
3. MOUNT THE BOTTOM RETAINER AS SHOWN ABOVE.
4. AFFIX THE LABEL CLOSE TO THE TOP OF DOOR (BETWEEN THE HANGERS).



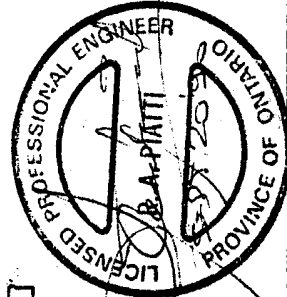
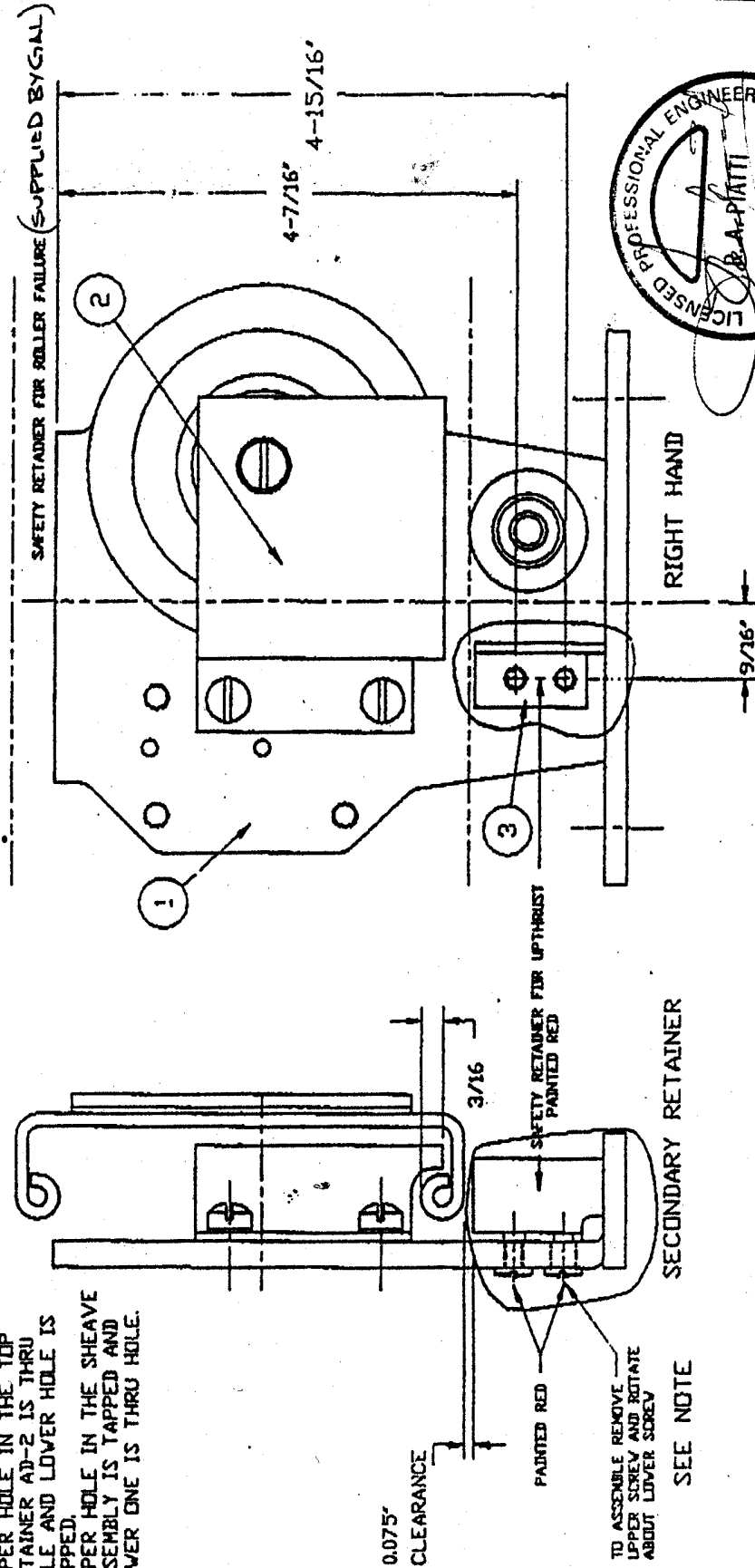
ORDER KIT AD-1
(SEE DWG. NO. 90-03 FOR
DETAILS)

adco ELEVATOR SERVICE LTD		
DOOR RETAINERS		
DWG. NO.	SCALE	DATE
90-01A	NONE	90-07-31

GAL FORMED STEEL SHEAVE ASSEMBLY

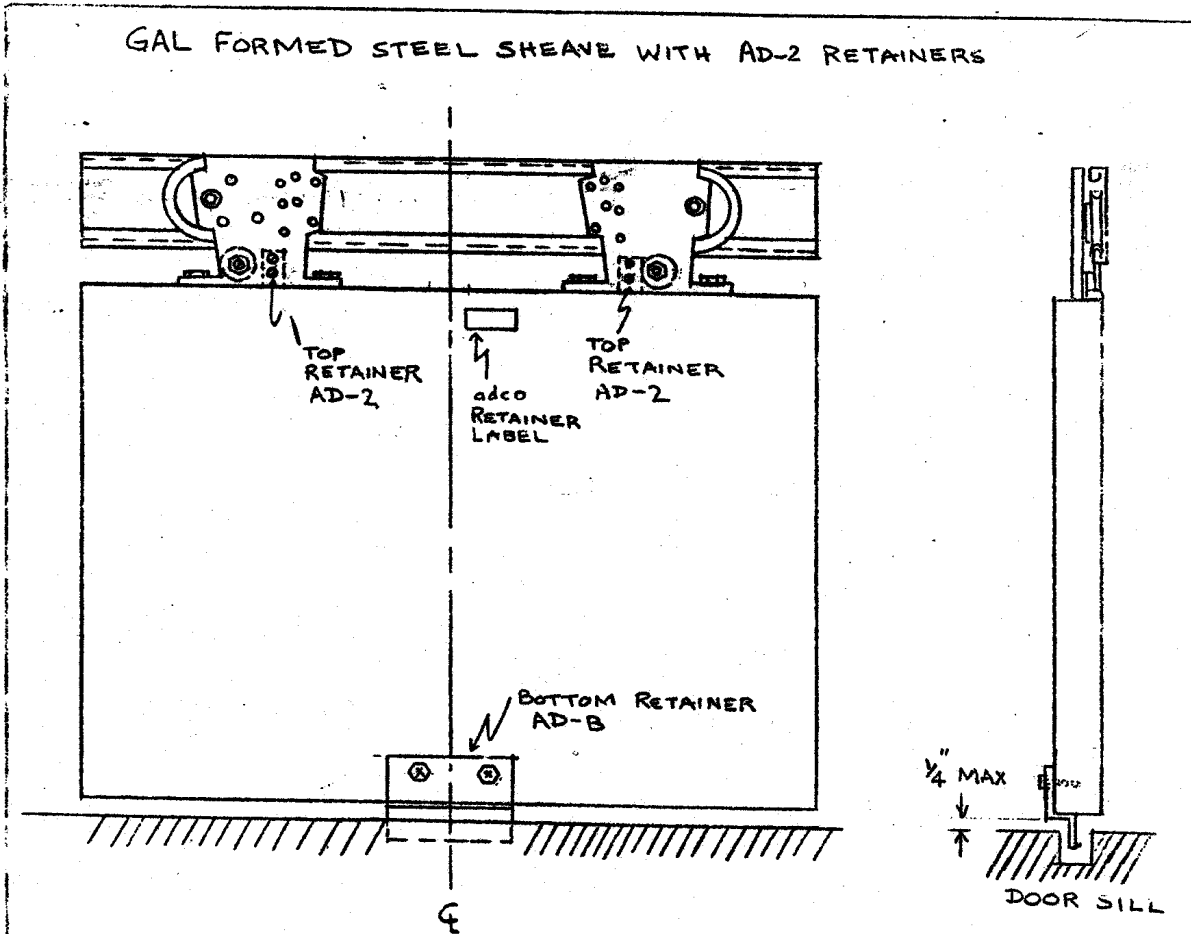
NOTE:

UPPER HOLE IN THE TOP
 RETAINER AD-2 IS THRU
 HOLE AND LOWER HOLE IS
 TAPPED.
 UPPER HOLE IN THE SHEAVE
 ASSEMBLY IS TAPPED AND
 LOWER ONE IS THRU HOLE.



adco ELEVATOR SERVICE LTD.	
DOOR RETAINER	
DWG. NO.	SCALE
90-02	N.T.S.
DATE	90/09/14

ITEM	DESCRIPTION
1	GAL SHEAVE ASSEMBLY
2	SAFETY RETAINER BY GAL
3	TOP RETAINER AD-2
4	TWO 8-32 x 3/8 SCREWS FOR MOUNTING AD-2

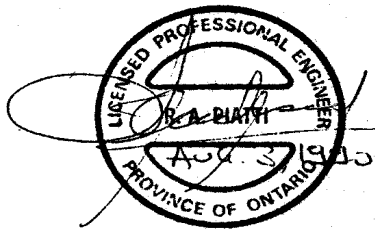


TOOLS REQUIRED:

ELECTRIC SCREWDRIVER WITH CLUTCH DRIVEN 3/16" SOCKET
(CLUTCH SET AT 30-40 INCH POUNDS TORQUE)
DRILL AND TAP FOR 8-32 SCREW, DRILL MACHINE
FLATHEAD SCREW DRIVER, 9/16" WRENCH.

INSTALLATION:

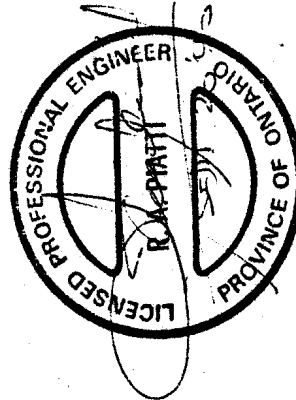
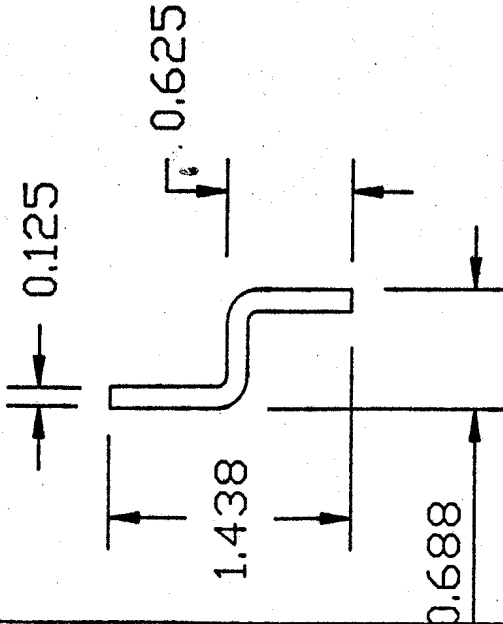
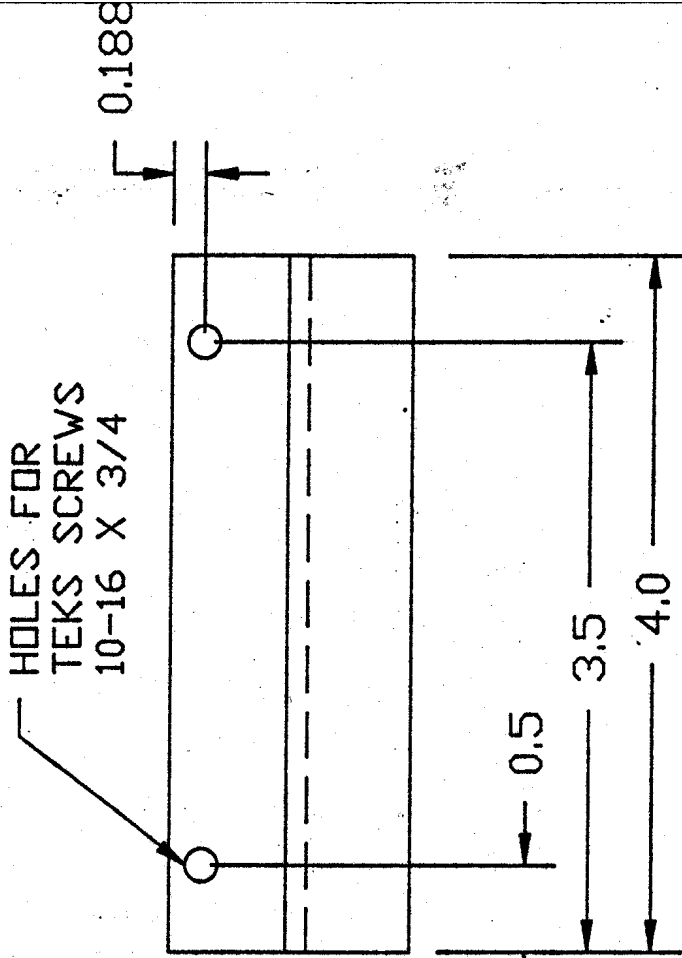
1. DRILL AND TAP THE HOLES IN THE HANGER AS PER DWG. #90-02
2. SCREW THE TOP RETAINER BY INSERTING THE SCREWS (SUPPLIED) FROM THE BACKSIDE OF THE HANGER.
3. MOUNT THE BOTTOM RETAINER AS SHOWN ABOVE.
4. AFFIX THE LABEL CLOSE TO THE TOP OF DOOR (BETWEEN THE HANGERS).



ORDER KIT AD-2
(SEE DWG. NO. 90-03)
FOR DETAILS

adco ELEVATOR SERVICE LTD
DOOR RETAINERS
DWG. NO. SCALE DATE

BOTTOM RETAINER AD-B



adco ELEVATOR SERVICE LTD.

DOOR RETAINER

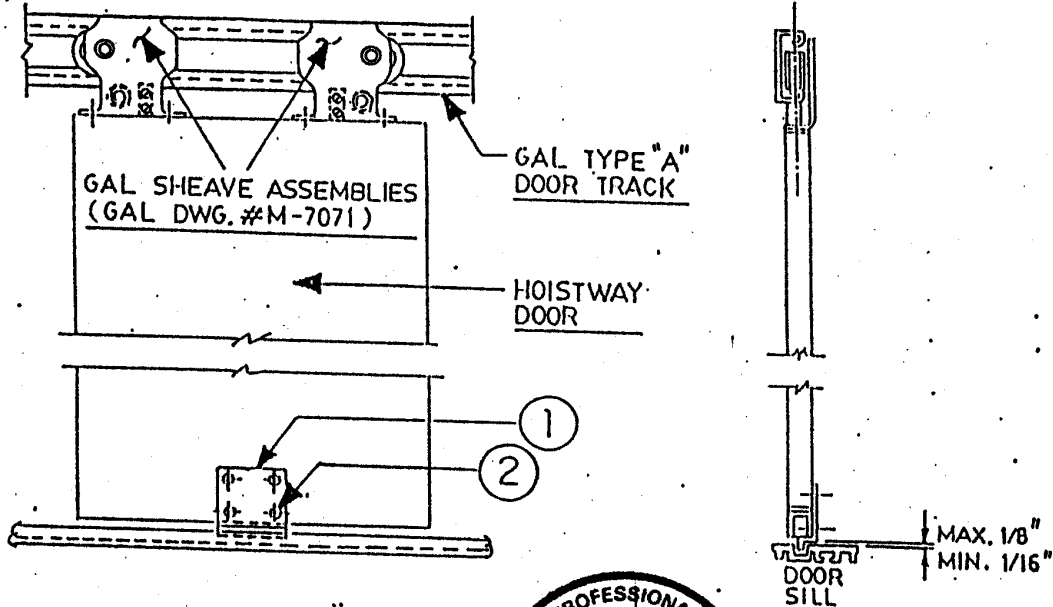
DWG. NO. SCALE DATE

90-03 N.T.S. 90/07/31

For SINGLE SLIDE landing door made by	Equipped with HANGERS make & type	BOTTOM GIDS make & type	SAFETY RETAINERS can be obtained from	by ordering	This kit will contain - coloured YELLOW HEADER RETAINERS marked	SILL RETAINERS marked	For details see attachments Number
BECKETT	GAL formed Steel type	any make and type	CEE	Kit# CEE-1	N/A See note below	BECKETT-SR	

Note :

Top retainers are integral part of GAL supplied sheave assemblies.



Tools required

- Drill;
- 3/8" wrench;
- No.10 hex socket;
- Torque wrench;
- 5/32" drill bit.

Installation instructions

1. With the door closed, mark the location of the holes for the bottom retainer using the retainer as a template. Drill the holes using a 5/32" drill bit.
2. Install bottom retainer using hardware supplied. Tighten screws to 50-80 inch pounds torque. Check that the retainer will not scrape the sill when the door is opening or closing.



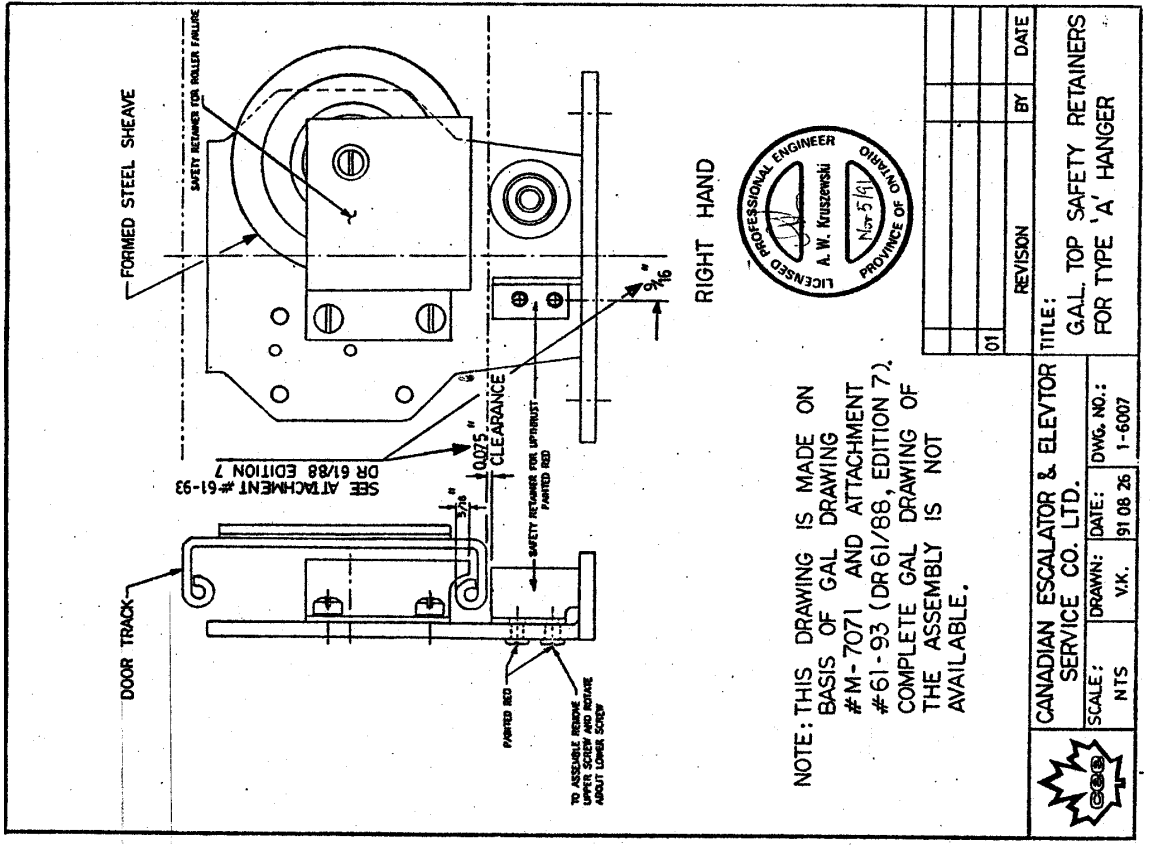
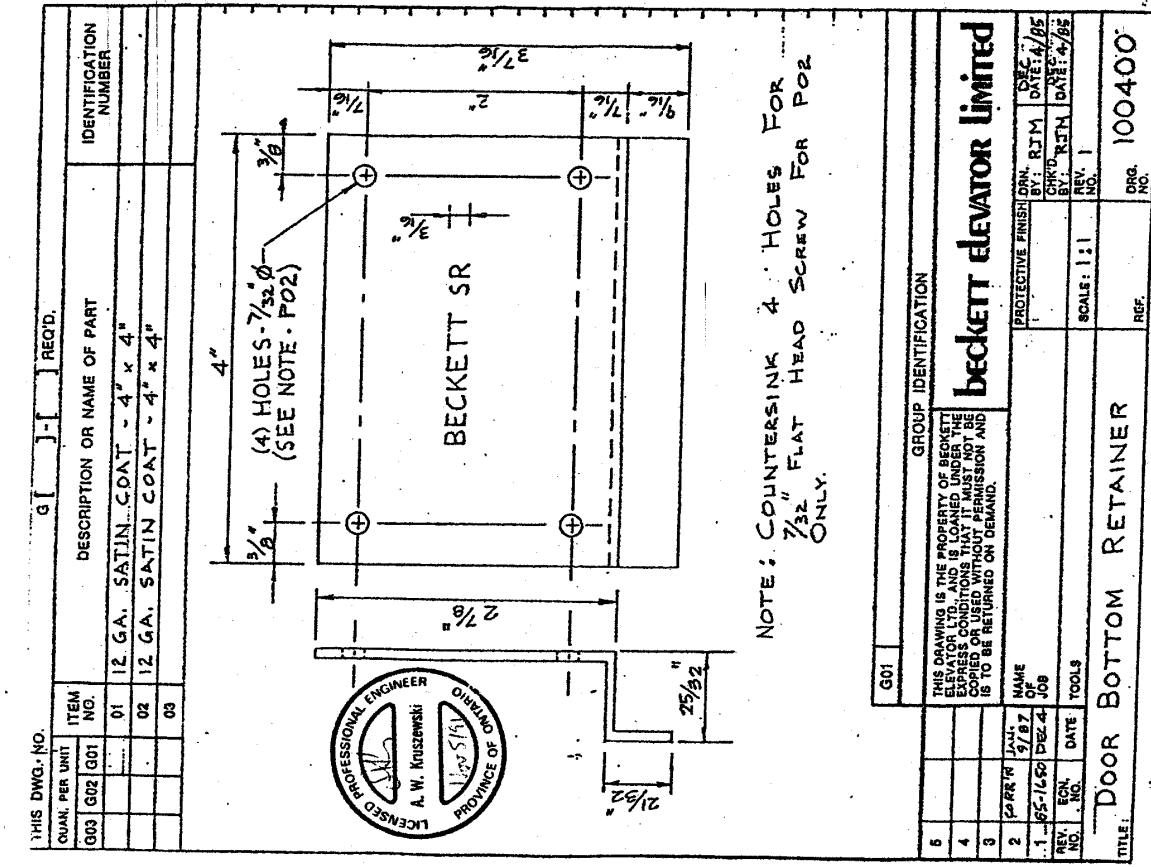
3	PRINT OF THIS DRAWING
2	#10-24 x 5/8" LG. HEX. HD WASHER FACE TEKS SCREWS
1	BOTTOM RETAINER "BECKETT-SR" (#100400 - ITEM 01)
ITEM	DESCRIPTION



CANADIAN ESCALATOR & ELEVATOR SERVICE CO. LTD.

SCALE :	DRAWN :	DATE :	DWG NO. :
NTS	V.K.	91 08 26	1-6006

TITLE :
DOOR SAFETY RETAINER KIT#CEE-1
(FIELD MOUNTED TO SINGLE SLIDE LANDING DOOR)



THIS DWG. NO. [] - [] RECD.

QUAN. PER UNIT	ITEM NO.	DESCRIPTION OR NAME OF PART	IDENTIFICATION NUMBER
003	G01		
	01	12 GA. SATIN COAT - 4" x 4"	
	02	12 GA. SATIN COAT - 4" x 4"	
	03		

GROUP IDENTIFICATION		PROTECTIVE FINISH DON.	
G01		BY: RJM	DATE: 4/85
		CHKD. BY: RFTM	DATE: 4/85
		REV. NO. 1	
		SCALE: 1:1	
		DRG. NO. 100400	

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NO.	DATE	NAME	TOOLS
1	DEC 4 1985	DEZ 4	
2	FEB 19 1987	DEZ 4	

TITLE: DOOR BOTTOM RETAINER

REVISION	BY	DATE
01		

TITLE: GAL. TOP SAFETY RETAINERS FOR TYPE 'A' HANGER

SCALE: NTS	DRAWN: V.K.	DATE: 91 08 26	DWG. NO.: 1-6007
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