

FASTENERS



SOME OF MANY FASTENING DEVICES AND ACCESSORIES MANUFACTURED BY NORSE, INC.



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The enclosed literature is presented to acquaint you with Norse Fasteners, which are used in a wide variety of applications. These include military, aviation, OEM products, exhibit booths, store fixtures, furniture, etc., as outlined on this CD. We trust you will find this material helpful.

The Norse Fastener System is the most versatile available, solving many joining problems. Additional latch/receiver combinations are continually being developed, as are new fastener concepts.

Norse, Inc. manufactures all of the latches, receivers, cover plates and buttons and other components on our premises. Shipments are "same day" or next day, world wide. Engineering assistance is readily provided.

Our catalog and samples will be sent at your request. We look forward to hearing from you.

Sincerely,

Christopher Langer, V.P.

Order Norse Latches or send RFQs right from our website!



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100 South Road Torrington, CT 06790 USA

HIGHLY VERSATILE LATCHING SYSTEMS

QUALIFIED & PROVEN IN AEROSPACE, MILITARY, OEM, COMMERCIAL and CONSUMER APPLICATIONS

- · Proprietary spring loaded latch mechanism.
- · High clamping forces; 200 or 450 lbs.
- Unexcelled application versatility due to the numerous latch/receiver combinations.
- Compensates for shrinkage, swelling, wear, and fabrication tolerances.
- · Vibration proof. Always a tight joint.
- · Sealed units available.
- · Self storing nothing "hangs out."

- · For wood and metal fabrication.
- Simpler and more advantageous panel preparation and installation.
- Surface mounting externally or internally, or mortised in-place.
- May be ganged and operated remotely at 90°.
- · Plated steel materials, SS/special.
- · Keys and handles stocked.
- · Call for design assistance.





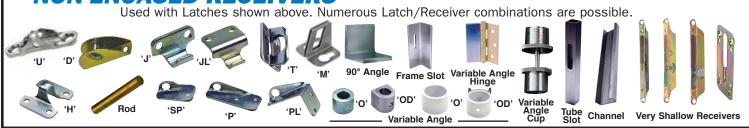














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LATCHES for • Aircraft • Electronic Cabinets • Exhibits • Pre-Fab Structures

Panel joining, thick & thin, for trade booths, office landscaping, stage scenery, displays, etc. Surface mounted when feasible with no panel preparation, or concealed by mortising in place. Plant floor offices, tool rooms, QC areas, machine & furnace enclosures, shelving, military electronic shelters, partitioning, KD institutional furniture, kiosks, saunas, dressing rooms, elevator cabs, refrigerator rooms.



1. Panel Assembly - Thick or Thin Butt, 'T' and Corner Joints. Type 2 or Type 3 Latches (see **TDSs** <u>61</u>, <u>81</u>, <u>106</u> & <u>108</u>)



2. Butt, 'T' & 4-way Joints in Tubing. Type 2 Latch (see TDSs 76 & 96).



3. 4-way Joints - Wooden Post. Type 2 or Type 3 Latches (see TDSs 66, 91, 93, 114 & 116).



4. 4-way Joints – Wooden Post. Type 2 or Type 3 Latch & Receiver (see TDSs 66, 91, 93, 114 & 116).



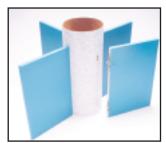
5. Polygonal Kiosks Can be Fabricated with Type 1, Type 2 or Type 3 Latches (see TDS 16-2A, 36-2A & 106).



6. Polygonal Structures, Three or More Panels, With/Without Tube Corners. Type 1 or Type 2 Latches & Slot Receiver (see TDSs 28, 43, 62, 72, 89 & 92).



7. Polygonal Structures, Three or More Panels. Type 1, Type 2 or Type 3 Latches (see TDSs 18, 43, 62, 72, 89, 92



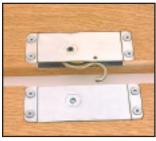
8. Panel Mounting To Thin Wall Tube. Type 2 or Type 3 Latches (see TDSs 66, 93 & 115)



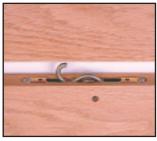
9. Panel Joint - Surface Mounting. Type 1 Latch & Receiver (see TDSs 16 & 36)



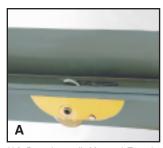
10. Below Counters & Decks - Surface Mount. Type 1 Latch & Receiver (see TDSs <u>16</u>, <u>24</u>, <u>36</u> & <u>44</u>).



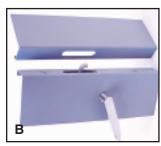
11. Below Counters & Decks -Recessed. **Type 1** Latch & Receiver (see **TDSs** <u>16</u>, <u>24</u>, <u>36</u>, & <u>44</u>).



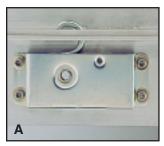
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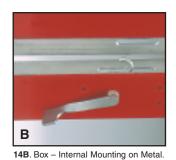
13A. Box - Internally Mounted. Type 2 Latch & Slot Receiver (see TDSs 63 69 & 72)



13B. Box - Internal Mounting on Metal. Type 2 Latch & Slot Receiver (see TDSs 63. 69 & 72).



14A. Box - Internal Mounting on Metal. Inner Face, Tamperproof. Type 1 Latch (see TDSs 18, 25, 38 & 45).



Type 1 Latch. See Fig-14A. (See **TDSs** 18, 25, 38 & 45.)



15. Door - Surface Mount, 90° Attachment. **Type 1** Latch & 'U' Receiver (see **TDSs** 17, 18, 37, 38 & 149).



16. Door - Surface Mount Same Plane Attachment. **Type 1** Latch & "J" Receiver (see **TDSs** 17, 18, 37, 38 & 149).



17. Door - Surface Mount Same Plane Attachment. Type 1 Latch & Type 1 Receiver (see TDSs 17, 18, 37,



18. Type 1 Latch Surface Mounted - 90° Attachment to Flush-Mortised Type 2 RSL Receiver (see TDSs 16-1B & 2B, 18,

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1. Type 3 Latch & Type 2 Receiver. Cover Button & Cover Plates are Also Shown (see TDSs 127 & 128).



2. Thin Panels – Butt, "T" and Corner Joints. **Type 2** Latches (see **TDSs** <u>62</u>, 66, 82, 89, 91 & 93)



3. Variable Angle Joints, Free Standing or To Wall. Type 2 or Type 3 Latch and "O", "OD" & Cup Receivers (see TDSs 62, 66, 82, 89, 91 & 93).



4. Variable Angle Joint To Wall. **Type 2** or **Type 3** Latch & Hinge (see **TDSs** <u>75</u>, 86 & 113).



5. "T" Joint to Surface-Mounted Receiver. Type 2 or Type 3 Latch & "U" Receiver (see TDSs $\underline{70-2}$, $\underline{85}$, & $\underline{112}$).



6. Conference Tables, Counters & Decks. Type 1 or Type 2 Latch & Receiver (see TDSs 24, 36, & 44).



7. Tables and Wall Sections. Type 2 Latch Mortised in Place (see TDSs 62, 82 & 89).



8. Church Pew Section, Type 1 Latches & Type 2 Flush Receivers –Floor Unobstructed (see TDS 22, 29, 42, & 49).



9. "Jiffy" Rooms or Partitions, No Panel Preparation, Surface Mount. Type 1 Latch (see TDSs 20 & 40).



10. Panel Joint – Metal/Wood. Type 1 Latch & "PL" Receiver (see TDSs 20 & 40).



11. Box Sealed – Internal Mounting. Type 1 Latch & Type1 Receiver (see TDSs 25 & 45).



12. Product Appearance, Sealing & Latch Protection By Internal Mounting (see **TDSs** 25 & 45).



13. Box - Surface Mount - Metal/Wood.

Type 1 Latch & 'J' Receiver (see TDSs
19 & 39)



14. Box – Surface Mount – Metal/Wood. Type 1 Latch & 'JL' Receiver (see TDSs 19 & 39)



15. Box – Surface Mount – Metal/Wood, No Key Required. Type SX Latch & 'J' Receiver (see TDS 167).



16. Type 1R Latch & "**ITR**" Receiver Force Access Panel Inward To Seal (see **TDSs** 21 & 41).



17. Door – Recessed Mount – In-Line Attachment. Type 2 Latch, Frame Slot Receiver (see TDSs 63, 83 & 149).



18. Door – Surface Mount – 90° Attachment. Type1 Latch & Slot Receiver (see TDSs 17, 18, 37, 38 & 149).



19. Door, Recessed Mount – In-Line Attachment. **Type 2** Latch & "**U**" Receiver (see **TDS** <u>64</u>).



20. Door, Recessed Mount – In-Line Attachment. Type 2 Latch (see TDSs 63, 83 & 149).

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LATCHES for • Aircraft • Sealed Cases • Shields • Clamping Devices • Electronics • Stair Rails

Norse single Latches and Multilatches® are used on electronic enclosures, radar screen positioning, quick release machine guards, acoustical barriers, weld area shields, sealed containers, lighting enclosures, shipping crates, display & instrument cases, pickup truck tool boxes, coffins, emergency exit ramp releases, interior partitions, compartment Latches, access panels, nonprogressive stair rail joints, couplings to newel posts and to walls.



1. A Hurricane Shutter is Mounted on the window frame face with "SX" Latches & big "T" Receivers (see TDS 169).



2. Mounting Hurricane Panels Flush Inside a Window Frame is Done Quickly with "SX" Latches & "T" Receivers (see TDS 168).



3. The SHUTTERUP® Hurricane Panel Clamp Can Mount Shutters on Frame Face, Flush Inside or at Edge (see TDS 206).



4. The SHUTTERUP® Hurricane Fastener System w/ Norse Type 1 Latches Joins Panels/Big Windows/Storefronts (**TDS** 206-6).



5. Hood - Internal Mount Ganged, Type 1, Type 2 or Type 3 Latch and "U" Receiver (see TDSs 26, 46, 68, 88 & 155)



6. Type 2 Latches (shown) & Type 1 & Type 3 Also, Can Be "Ganged (see TDSs 26, 46, 68, 88 & 118).



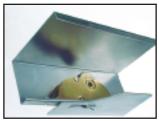
7. Aircraft Emergency Door Ramp Release. Special Type 1 Latch (see **TDS** 226)



8. Box - Internal Mounting In Wood by Surface Mount, Recessing or Mortising (see TDSs 18, 22, 38 & 42).



9. Type 2 Latch Using a Slot Receiver Shown Here Holding a Tool Box Onto a Pickup Truck Tray (see TDS 72 & 92).



10. Hood Attachment, Internal Mount, Type 2 Latch & Slot Receiver (see TDSs 23, 25, 43, 45 & 72).



Shroud Attachment – Bottom Lever Operated. Type 2R Latch & "J" Receiver (see TDSs 67 & 90).



12. Self Standing Shields, Snap On/Off. Type 1 Latch & 'U' Receiver (see TDSs 20 & 40).



13. Shelf/Desk - Attach to Wall.

Type 1 Latch & 'U' Receiver (see TDS 18 & 38)



14. Wall Mtd. Equip. Module - Type 1 Latches & 'U' Rec. is Mtd. Outside or Inside (See TDS 17, 18, 37 & 38)



15. Type 1R Latches & "U" Receivers Quickly Attach Generator Cover, Store Flat (see TDS 38).



16. Stair Rail Joints - Non Progressive Gear Head Screw & Wood Insert (see **TDS** 221)



17. A Type 3 Latch and a "Mushroom" Receiver Internally Mounted Axially Join Two Tubes (see **TDS** 121).



18. Variable Angle Joining of Panels to a Large "O" Receiver – Free-Standing or Attached to a Wall (see TDS 95).



19. Variable Angle Attachment of Panels Using an "O" Receiver (see



20. Variable Angle Attachment of Panels to a Wall Using an "OD" Receiver (see TDS 95)



21. Acoustical Barrier Wall-Quickly Erected or Moved. Type 1, Type 2 or Type 3 Latch (see TDSs 36, 81 & 106).



22. Machine Guard - Quick Attch. and Release. Type 1 Latch & Tube Slot (see TDSs 18 & 38)



23. Channel or Angle Joint. Type 2 or Type 3 Latch (see TDSs 72, 92 & 117).



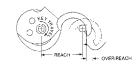
24. Metal Panel Joints. Type 1 or Type 2 & Slot Receiver (see TDSs 23 and 43).

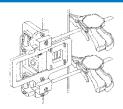


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TDSs 1 thru 15

ENGINEERING AND ASSEMBLY INSTRUCTIONS, DRILLING AND ROUTING FIXTURES







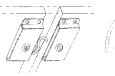


TDSs 16 thru 60

TYPE 1 LATCHES:

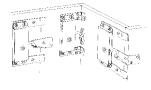
TYPE 1 SMALL / TDSs 16-35

TYPE 1 LARGE / TDSs 36-60









TDSs 61 thru 105

TYPE 2 LATCHES:

TYPE 2 SMALL / TDSs 61-80

TYPE 2 LARGE / TDSs 81-105











TDSs 106 thru 125

TYPE 3 LATCHES









TDSs <u>126</u> thru <u>145</u>

NONENCASED RECEIVERS, COVER BUTTONS, COVER PLATES, BRACES, SPRING FINGERS, EDGE BRACES





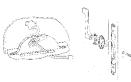




TDSs <u>146</u> thru <u>165</u>

OPERATING KEYS, HANDLES, ESCUTCHEONS, COLLARS, COUPLINGS











TDSs 166 thru 185

SX LATCHES



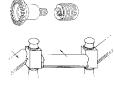




TDSs <u>186</u> thru <u>225</u>

GEAR HEAD SCREW, HURRICANE SHUTTER LATCHES, BED RAIL HOOKS













- COCK IT BEFORE YOU LOCK IT -

THE SPRING HOOK MECHANISM (HERE SHOWN NON-ENCASED) IS DESIGNED TO REACH OUT BEYOND THE RECEIVER AND THEN DRAW BACK TO LOCK, OVER CENTER.

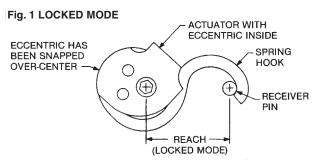


Fig. 2 INITIAL UNLOCKING ACTION

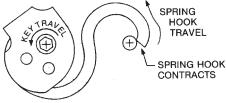
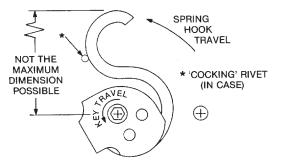


Fig. 3A SPRING HOOK RETRACTED TO POINT OF CONTACT

ONLY WITH COCKING RIVET (BUT NOT YET COCKED)



These illustrations are shown to acquaint the user with the operation of the 'S' Series Latches, and also to emphasize the importance of 'cocking' the Latch.

COCKING THE LATCH AFTER UNLOCKING (OR BEFORE LOCKING) IS VERY IMPORTANT TO ASSURE PROPER FUNCTIONING. IT IS DONE BY ROTATING THE LATCH AWAY FROM THE RECEIVER AND AGAINST THE COCKING RIVET (OR THE BACK OF THE CASE/TYPE 1), UNTIL IT CANNOT BE ROTATED FURTHER (FIG. 4); FORCING IS UNNECESSARY. NOW THE HOOK OF THE SPRING IS AT THE MAXIMUM DISTANCE FROM THE HEX HOLE. THIS ENABLES THE HOOK TO 'OVER-REACH' THE RECEIVER PIN WHEN LOCKING (FIGS. 5 & 6).

Fig. 3B MALFUNTION! DO NOT DO THIS! SHOWN IS ATTEMPTING TO LOCK WITHOUT COCKING FIRST.

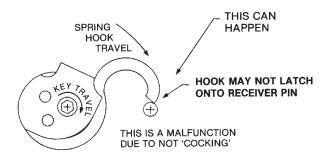


Fig. 4 'COCKING' – CONTINUED ROTATION OF KEY AFTER CONTACTING 'COCKING' RIVET EXECUTES THE 'COCKING' ACTION – NO FORCE IS NECESSARY

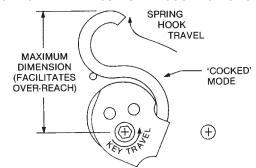
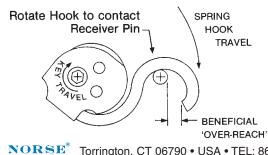


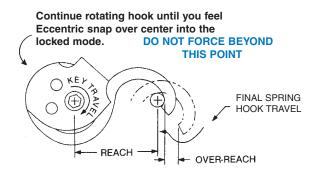
Fig. 5 OPERATING TO LOCK



THIS 'COCKING' ACTION FACILITATES THE 'OVER-REACH' CONDITION (FIG. 5) WHEN OPERATING TO LOCK, THEREBY ASSURING PROPER POSITIONING OF THE SPRING HOOK & RECEIVER PIN ELEMENTS IN THE LOCKED MODE (FIG. 6).

– COCK IT BEFORE YOU LOCK IT –

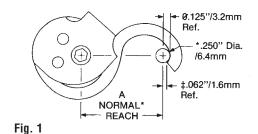
Fig. 6 LOCKED MODE (RE-LOCKED)

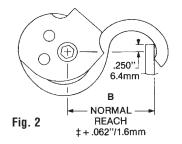


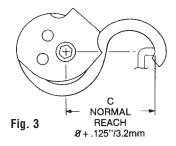
TDS 2-1 V2-1106

OF THE NUMEROUS HIGHLY ADVANTAGEOUS FEATURES OF THESE LATCHES, WE SHOW HERE A FEW THAT MAY NOT BE APPARENT AS OTHERS, WHICH CAN BE HELPFUL TO YOU

THE NORSE LATCHES ARE DESIGNED TO OPERATE WITH A VARIETY OF RECEIVER CONFIGURATIONS







ROUND RECEIVER

FLAT RECEIVER

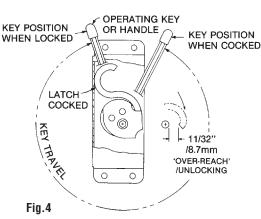
'J' SHAPED RECEIVER

*Normal 'Reach' is Based on a .250"/6.4mm Dia Receiver Pin – A Non Encased Latch is Shown – **DESIGN CRITERIA - LATCH/RECEIVER TYPE RELATIONSHIP**

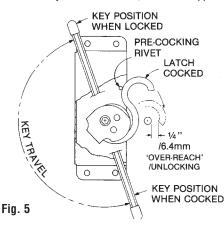
	.250" Dia. Receiver	Flat Receiver	"J' Shaped Receiver
Spring Size	A = Normal Reach	B = Normal Reach + .062"	C = Normal Reach + .125"
S1125 S1250 S1500	1.125"/28.6mm 1.250"/31.8mm 1.500"/38.1mm	1.187"/30.2mm 1.312"/33.3mm 1.562"/39.7mm	1.250"/31.8mm 1.375"/34.9mm 1.625"/41.3mm

REDUCING ROTATION NEEDED TO OPERATE

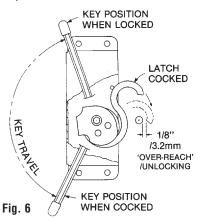
A Standard Feature of All 'S' Series Latches Allows The Amount Of Rotation Of The Operating Key Or Handle To Be Reduced Considerably From The Normal, Where The Application Requires It.



APPROX. 315° TRAVEL TO **UNLOCK & LOCK** - LATCH RETRACTED -



APPROX. 180° TRAVEL TO **UNLOCK & LOCK** - LATCH PROTRUDES -



APPROX. 135° TRAVEL TO **UNLOCK & LOCK** LATCH PROTRUDES -

By Installing The Pre-Cocking Rivet As Shown, The Required Rotation Can Be Reduced To As Little As 135°, This Does Reduce The 'Over Reach', and leaves the Spring Hook Protruding, Radial Orientation Of The Key (Or Handle), Is Optional, as Application Requires – A Type 1 Latch Is Shown –

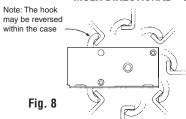
NORSE LATCHES CAN BE 'GANGED' AND OR REMOTELY OPERATED



and /or operated in various ways; remotely, by hex. Keys, Wrenches, via gear boxes, or by a variety of handles which are available.

Two or more Norse Latches can be 'Ganged',

LATCH/RECEIVER POSITIONING CAN BE MULTI-DIRECTIONAL = DESIGNER FREEDOM



The Norse Latch locks upon itself after contacting The Receiver. independent of the Latch Case orientation relative to the Receiver, as shown in Fig. 8. This capability is true of Latch Types 1, 2, & 3.



THE TYPE 1 LATCHES ARE AVAILABLE IN TWO SIZES: SMALL AND LARGE BOTH SIZES ARE AVAILABLE EITHER LEFT OR RIGHT HAND OPERATING (TO LOCK)

TYPE 1 SMALL

LEFT HAND





S1125-1R-562

Α

P

C

T I 0 N S **RIGHT HAND**



S1125-1L-562

Receiver

R400-1L-562





Materials: Steel/Zinc Plated - Clear Chromate Clamping Force: 200#/90.7kg (See TDS 16 Thru 35)

(See TDS 36 Thru 60)

Type 1 Latches have matching encased Receivers as shown above, and can also be used in combination with Type 2 and Type 3 Receivers plus any of the Nonencased Receivers

• WHERE THEY ARE USED •

Applications for Type 1 Latches include aircraft emergency ramp releases; Prefab structures; exhibits; sliding and hinged doors and panels; vehicle hoods; sectional flooring, tables and counters; store fixtures; shields; cages; lighting housing; display and show cases; shipping containers; modular assemblies; canopies; institutional furniture; medical equipment shrouds; signs; valances; scenery; 'Jiffy' rooms; kiosks; saunas; photo labs; KD generator shelter;

child proof doors, drawers & cabinets; tamperproof gun cabinets; hidden cabinets; etc.



Fig. 11 Type 1R Door Latch with handle using a slot Receiver in frame for a tight 90° joint; easily installed (See TDS 17 & 23)



Fig. 12 Type 1R Door Latch with handle using a 'U' Receiver for 90° closure; all surface mounted. (See TDS 17 & 18)



Fig. 13 Type 1R Latch with handle and a 'J' Receiver surface mounted for a 'same plane' closure application. (See TDS 17 &19)



Fig. 17 Type 1R Latch with handle and Receiver easily mounted on a 'same plane' door application. (See TDS 16 & 17)



Fig. 18 Type 1R Latch w/handle and a 'RSL' Receiver for a 90° attachment to metal/wood on a door application. (See TDS 17 & 22)



Fig. 19A &19B Type 1L Latch using a slot for the Receiver on a typical box cover. (See TDS 23)



Fig. 5 Internally mounted Type 1 (R & L) Latches and 'U' Receivers assure quick access for repair. (See TDS 18)



Fig. 6 Externally mounted Type 1 Latches are easily attached providing tight, tamperproof closures, and have no loose parts 'hanging out' when opened. (See TDS 16)

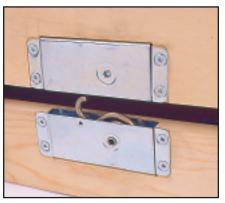


Fig. 7 Type 1L Latch and Receiver recessed flush for applications such as cases shipping containers, decks under counters, etc. (See TDS $\underline{24}$)



Fig. 8 Type 1L Latch and 'J' Receiver mounted internally for display cases and containers. (See TDS 19)

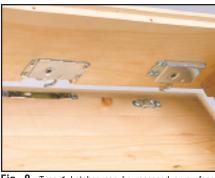


Fig. 9 Type 1 Latches can be recessed or surface mounted internally using flush mounted 'RSL' or surface mounted 'U' Receivers. (See TDS 18 & 29)



Fig. 10 The aesthetics of internally mounted Type 1 Latches (See Figs. 8 & 9) can clearly be seen at center above, as compared to the externally mounted Latches at



Fig. 14 Type 1R Latch and a 'J' Receiver surface mounted for a tightly closed box cover. (See TDS 19)



Fig. 15 Type 1R Latch and a 'JL' Receiver 'over the top' box closure application. (See TDS 19)



Fig. 16 Type 1R Latch and a 'OTR' Receiver which imparts an Inward force on the access panel. (See TDS 21)



Fig. 20 Type 1L O-ring sealed latch internally mounted. (See TDS 25)



Fig. 21A, 21B Type 1L Latch and 'U' Receiver for a pick-up truck tool box cover. (See TDS 18)

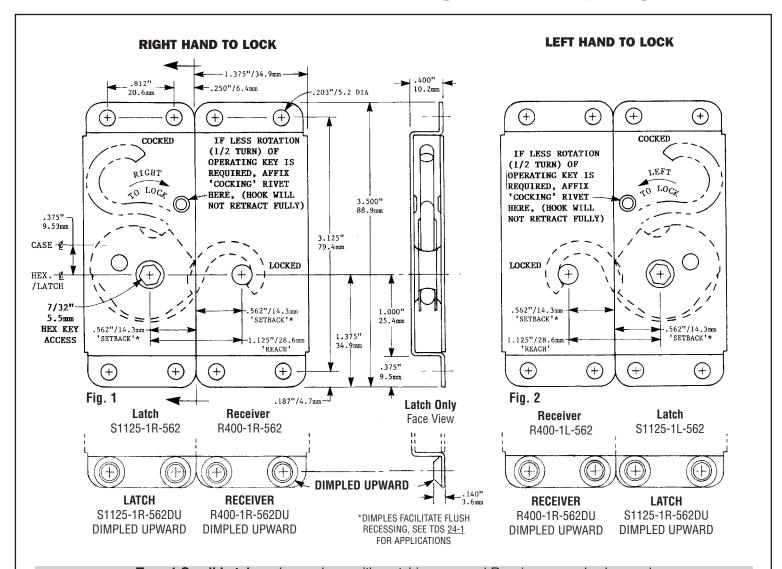




Fig. 21C Type 2 Latch for tool box security hold down onto a pick-up truck tray. (See TDS <u>81-2B</u>, Fig 8 & TDS <u>92</u>)



Latches and Receivers Available Either Right or Left Hand Operating



Type 1 Small Latches shown above with matching encased Receivers can also be used in combination with Type 2 and Type 3 Receivers as well as any of the Nonencased Receivers. Some of these Latch/Receiver combinations are shown in the following applications.

APPLICATIONS





Fig. 9A & 9B Type 1R & 1L Latches and slot Receivers to fabricate polygonal structures, kiosks, etc of 3 or more panels. (See TDS 17 & 28)





Fig. 10A & 10B Type 1R Latches with handles and 'U' Receivers for fabricating polygonal structures, kiosks, etc. of 3 or more panels. (See TDS 17 & 18)

6B



Fig. 3 Type 1R & 1L (Opp. Side) Latches and 'U' Receivers for equipment quick attachment and release. (See TDS 17 & 18)

P LICATIO



Fig. 4 Type 1R Latch and 'U' Receiver for shelf or desk attachment to wall. (See TDS 18)



Fig. 5 Type 1R (or 1L) Latch and 'U' Receiver for shroud attachment; lever operated from beneath; usually in tandem. (See TDS 27)



Fig. 6A & 6B Type 1L Latch with handle and slot Receiver for vehicle hoods, metal case enclosures, etc. (See TDS 17 & 23)





Fig. 7A & 7B Type 1R & 1L Latches and 'U' Receivers 'ganged', operated in tandem or separately, to attach panels, signs, etc. (See TDS 26)



Fig. 8 Type 1L Latch internally mounted and a 'RSL' Receiver flush mounted; functional panel attachment. No protrusions for free access to luggage compartment, etc. (See TDS 22)





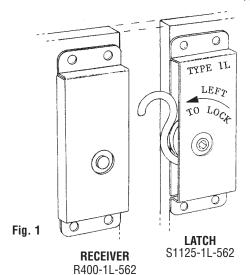
Fig. 11A & 11B Type 1R & 1L Latches and slot Receivers to quickly attach and remove machine guards, etc. Key operated for safety. (See TDS 23)



Type 1 Latches with handles and 'U' Receivers ganged for quick attachment & release of cover. (See TDS 17, 18, & 26)

TYPE 1 SMALL LATCHES ARE USED FOR SLIDING & HINGED DOORS & PANELS, VEHICLE HOODS & ACCESS PANELS, SIGNS, EXHIBITS, STAGE SCENERY, SHIELDS, CAGES, LIGHTING HOUSINGS, DISPLAYS & SHOW CASES, VALANCES, ETC.

TYPE 1 LATCHES CAN BE USED WITH TYPE 2 & TYPE 3 RECIEVERS
AND ALSO WITH NONENCASED RECIEVERS



EXTERNAL MOUNTING

MOUNT CASES SO AS TO TOUCH WHEN LOCKED

"COCK IT" BEFORE YOU LOCK IT

When locking Latch, first rotate it away from the receiver, against the back of teh case until it stops; this extends the spring hook, providing 'Over-Reach' for locking.

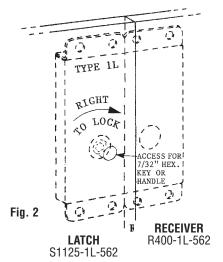
Locking/Unlocking Latch takes 3/4 turns* of the operating key (hook will retract fully into case). Latch may be operated from either side.

SEE <u>TDS 1</u> (THE YELLOW SHEET) FOR OPERATING INSTRUCTIONS

CLAMPING FORCE 200#/90.7kg

CHOICE OF MATERIALS

STEEL-ZINK PLATED STEEL-BRIGHT PLATED STAINLESS STEEL



INTERNAL MOUNTING

When mounted internaly and operated thru an access hole, obviously the latch is hidden and your product's aesthetics is improved; also, latch damage from abuse and tampering is greatly reduced.

Sealed Latches: see TDS 25-1 & TDS 25-2

Usually surface mounted outside or inside a panel, they can be recessed flush.
(See TDS 24)

For 'Ganged' Latches (See TDS 26)

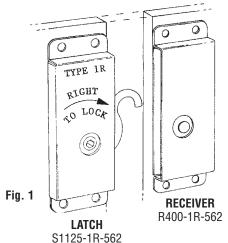
This is a Small Type 1L latch (Left Hand) For Small Type 1R Latches (Right Hand) (See TDS 16-4)

Large Type 1 Latches are also available (See TDS 36)

1.375" .203"/5.2mm DIA. 34.9mm .812" 20.6mm 400" .250"/6.4mm 10.2mm (+)(+)COCKED IF LESS ROTATION (1/2 TURN) OF LEFT OPERATING KEY IS REQUIRED, AFFIX 'COCKING' RIVET LOCA HERE, (HOOK WILL .375" NOT RETRACT FULLY) 9.5mm 3.125" 79.4mm CASE 3.500" 88.9mm LOCKED € HEX. /LATCH 7/32" .562"/14.3mm 1.000 5.5mm HEX KEY 'SETBACK'* 25.4mm 1.375" .562"/14.3mm ACCESS 1.125"/28.6mm-'REACH .375" (\pm) 9.5mm 187"/4.8mm LATCH **RECEIVER**

*Dimples facilitate flush recessing, see TDS <u>24-1</u> for applications TYPE 1 SMALL LATCHES ARE USED FOR SLIDING & HINGED DOORS & PANELS, VEHICLE HOODS & ACCESS PANELS, SIGNS, EXHIBITS, STAGE SCENERY, SHIELDS, CAGES, LIGHTING HOUSINGS, DISPLAYS & SHOW CASES, VALANCES, ETC.

TYPE 1 LATCHES CAN BE USED WITH TYPE 2 & TYPE 3 RECEIVERS
AND ALSO WITH NONENCASED RECEIVERS



"COCK IT" BEFORE YOU LOCK IT

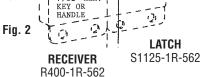
When locking Latch, first rotate it away from the receiver, against the back of the case until it stops; this extends the spring hook, providing 'Over-Reach' for locking.

Locking/Unlocking Latch takes 3/4 turns*of the operating key (hook will retract fully into case). Latch may be operated from either side.

SEE <u>TDS 1</u> (THE YELLOW SHEET) FOR OPERATING INSTRUCTIONS

CLAMPING FORCE 200#/90.7kg

Fi



ACCESS FOR

7/32" HEX. 1

TYPE 1R

LEFT

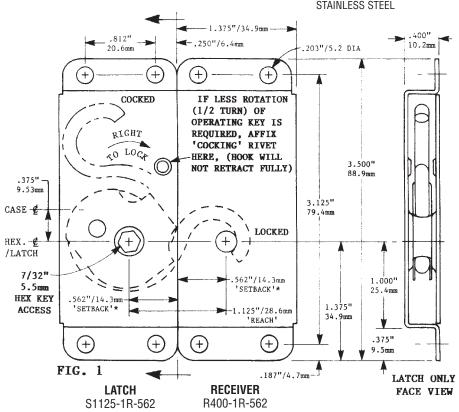
LOCA

EXTERNAL MOUNTING

MOUNT CASES SO AS TO TOUCH WHEN LOCKED

CHOICE OF MATERIALS

STEEL-ZINK PLATED STEEL-BRIGHT PLATED STAINLESS STEEL



INTERNAL MOUNTING

When mounted internaly and operated thru an access hole, obviously the latch is hidden and your product's aesthetics is improved; also, latch damage from abuse and tampering is greatly reduced.

Sealed Latches: see TDS 25-1 & TDS 25-2

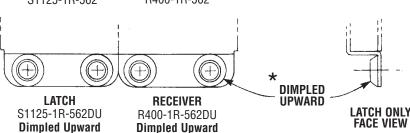
Usually surface mounted outside or inside a panel, they can be recessed flush.

(See TDS <u>24</u>)

For 'Ganged' Latches (See TDS 26)

This is a Small Type 1R Latch (Right Hand) For Small Type 1L Latches (Left Hand) (See TDS <u>16-3</u>)

Large Type 1 Latches are also available (See TDS 36)

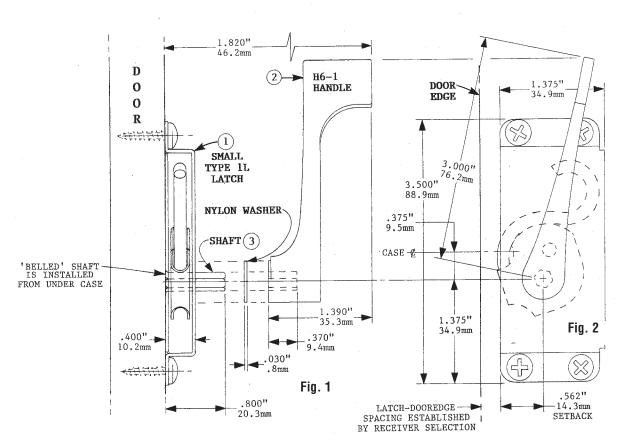


*DIMPLES FACILITATE FLUSH RECESSING, SEE TDS <u>24-1</u> FOR APPLICATIONS

SHOWN HERE IS A SINGLE HANDLE MOUNTING (OPERABLE FROM ONE SIDE ONLY) WITH A SMALL TYPE 1L LATCH SURFACE MOUNTED ONTO THE DOOR

These illustrations show components and mounting dimensions

For Dual Handles See TDS 17-10B



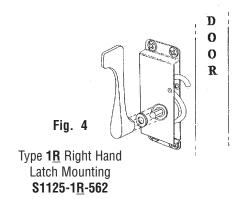
Shown above is a Small TYPE 1L LEFT HAND LATCH (S1125-1L-562) A RIGHT HAND LATCH (S1125-1R-562)

can be mounted on the opposite side. (See Fig. 4)

D 0 HANDLE ORIENTATION BY **CUSTOMER CHOICE X 60°** 0 R Fig. 3 Type 1L Left Hand Latch Mounting S11251L-562

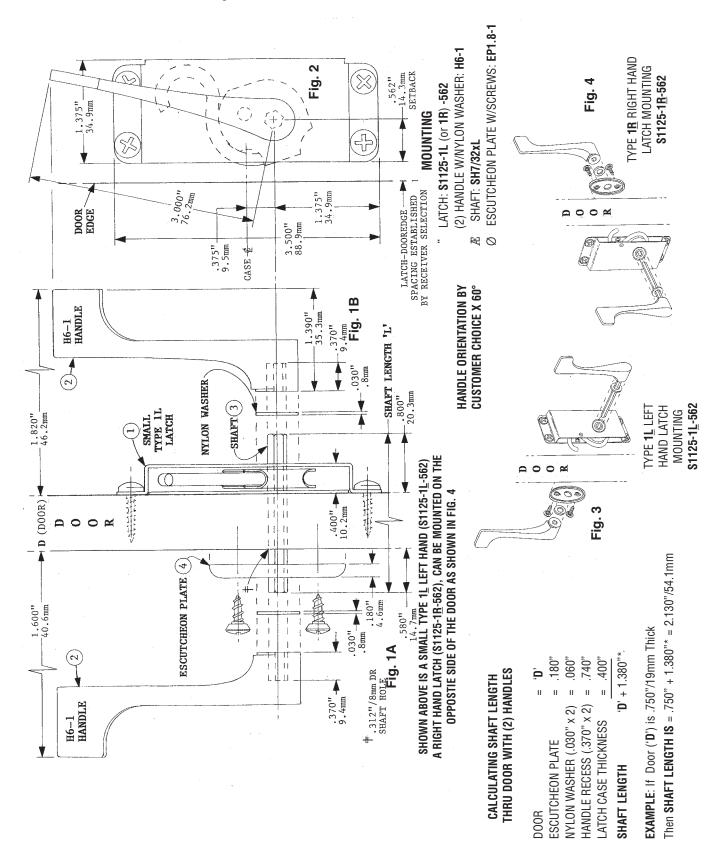
MOUNTING

" LATCH: **\$1125-1L** (or **1R**) **-562** HANDLE W/NYLON WASHER: H6-1 SHAFT (BELLED): SH7/32x.8B



FOR DOOR APPLICATIONS WITH HANDLES ON BOTH SIDES. THESE ILLUSTRATIONS SHOW COMPONENTS AND MOUNTING DIMENSIONS

For Single Handle Assemblies See TDS 17-10A





TYPE 1R SMALL LATCH AND "U" RECEIVER

THIS LATCH/RECEIVER COMBINATION IS USED FOR **JOINING COMPONENTS AT 90°**

The Latch and Receiver are usually mounted on the surface. Both external and internal mountings are shown. A Type 1R (Right Hand) Small Latch is shown: S1125-1R-562. Type 1L (Left Hand) Small Latches **\$1125-1L-562** are also available. A 'U' Receiver **UR500-500** is used here for 90° joining.

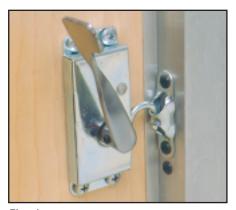
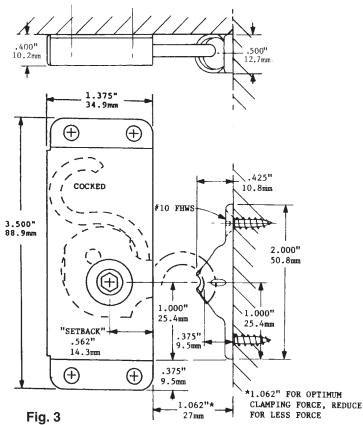
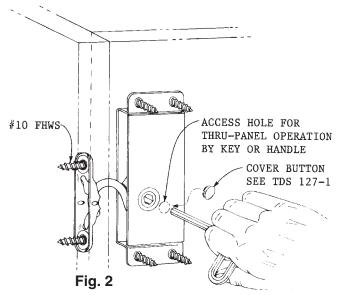


Fig. 1 Type 1R door Latch with handle using 'U' Receiver for 90° closure; both are surface mounted. Handle can be on opposite side. See TDS 17.





Applications Frequently Require Internal Mounting and Thru-Panel Operation By Key or Handle

Clamping Force: 200#/90.7kg Latch Case Material: Steel/Zinc Plate

> Or: Steel/Brite Finish Or: Stainless Steel

'U' Receiver Material: Stainless Steel

MOUNTING DIMENSIONS

Type 1R Small Latch: **\$1125-1R-562** 'U' Receiver: UR500-500

THIS LATCH/RECEIVER COMBINATION IS USED FOR JOINING COMPONENTS AT 90°

The Latch and Receiver are usually mounted on the surface.

Both external and internal mountings are shown.

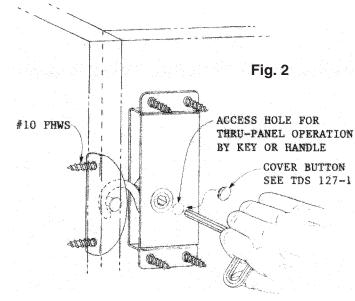
A Type 1R (Right Hand) Small Latch is shown: **\$1125-1R-562**.

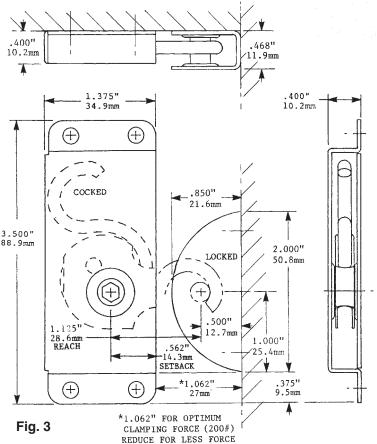
Type 1L (Left Hand) Small Latches **\$1125-1L-562** are also available.

A 'U' Receiver **DR468-500** is used here for 90° joining.



Fig. 1 Type 1 door Latch with handle using 'D' Receiver for 90° closure; both are surface mounted. Handle can be on opposite side. See TDS <u>17</u>.





Applications Frequently Require Internal Mounting and Thru-Panel Operation By Key or Handle

Clamping Force: 200#/90.7kg
Latch Case Material: Steel/Zinc Plate

Or: Steel/Brite FinishOr: Stainless Steel

'U' Receiver Material: Stainless Steel

MOUNTING DIMENSIONS

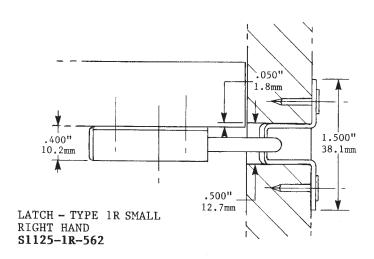
Type 1R Small Latch: **\$1125-1R-562** 'D' Receiver: **DR468-500**



TYPE 1R SMALL LATCH **AND "H" RECEIVER**

THIS LATCH/RECEIVER COMBINATION IS USED FOR **JOINING COMPONENTS AT 90°**

The Latch and RECEIVER are usually mounted on the surface A Type 1R (Right Hand) Small Latch is shown: S1125-1R-562 Type 1L (Left Hand), Small Latches **\$1125-1L-562** are also available A 'H' Receiver HR468-562 is used here for 90° joining



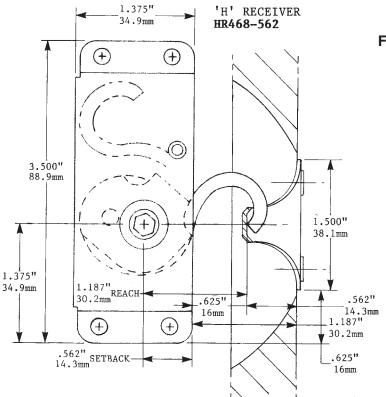
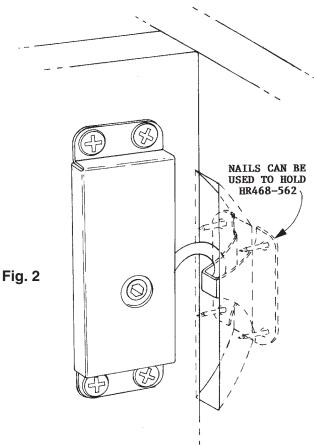


Fig. 1

MOUNTING DIMENSIONS Type 1R Small Latch: S1125-1R-562 'H' Receiver: HR468-562



The Surface mounted S1125-1R-562 Latch Attaches to the HR 468-562 Reciever which is mounted onto and recessed into the second panel

Clamping Force: 200#/90.7kg Latch Case Material: Steel/Zinc Plate

Or: Steel/Brite Finish Or: Stainless Steel

'H' Receiver Material: Steel/Zinc Plate

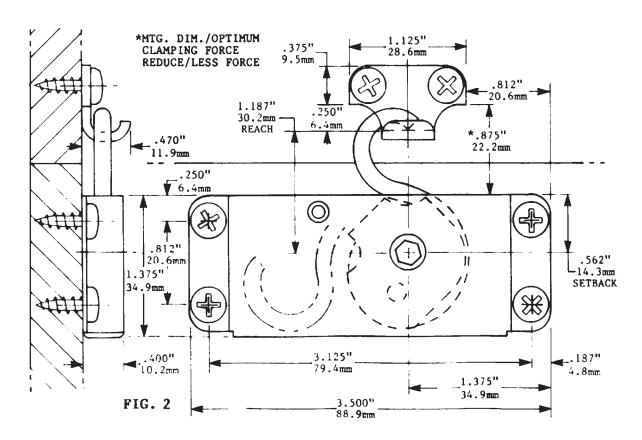


LATCH: S1125-1R-562 • RECEIVER: JR250



Fig.1 Type 1 Latch & 'J' Receiver Box - Surface Mount, Metal/Wood

The Type 1R Latch Right Hand shown, and the Type 1L Latch Left Hand (also available), are normally surface mounted; no mortising required. They may be mounted externally or internally. This Latch/ Receiver combination can be used for sliding and hinged door closures, display case covers, equipment attachment, vehicle hoods, etc. See TDS 25



MOUNTING DIMENSIONS

Latch: S1125-1R-562 Receiver: JR250

For Type 1 Large Latches and 'J' & 'JL' Receivers See TDS-39

This Latch/ Receiver combination can also be interally mounted and operated thru an access hole. For internally mounted and sealed assembly, see TDS-25.

The Norse Left Hand Small Latch is Part No.: S1125-1L-562



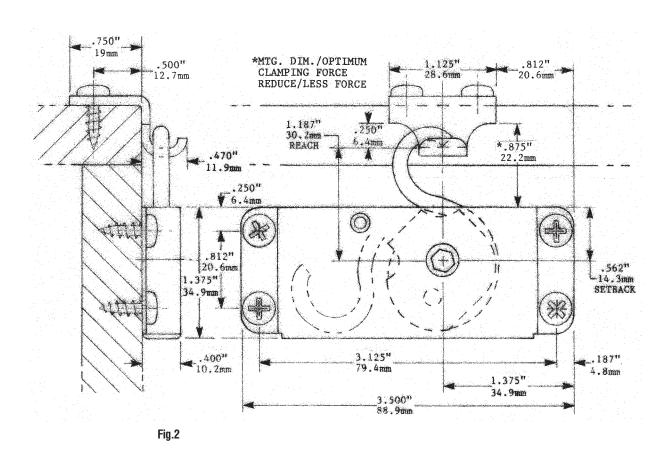


LATCH: S1125-1R-562 • RECEIVER: JLR250



Type 1 Latch & "JL" Receiver Box - Surface Mount, Metal/Wood

This Latch/ Receiver combination can be used for sliding and hinged door closures, display case covers, equipment attachment, vehicle hoods, etc.

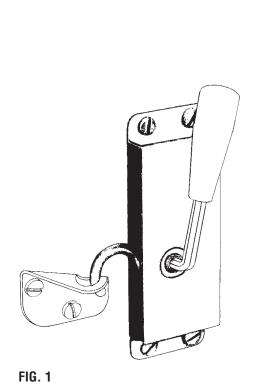


MOUNTING DIMENSIONS Latch: \$1125-1R-562 Receiver: JLR250

For Type 1 Large Latches and 'J' & 'JL' Receivers See TDS 39

THIS LATCH/RECIEVER COMBINATION IS PARTICULARLY USEFUL FOR DOORS, WINDOWS, BOXES, FURNITURE, CASE CLOSURES, **ACCESS PANELS ON MACHINERY, HOODS, ETC.**

The Type 1L Small Latch Left Hand and the Short 'P' Receiver SPR250L are normally surface mounted in the same plane - no mortising required. They can be mounted externally or internally.



Type 1L Small Latch S1125-1L-562 w/ Handle & Short 'P' Reciever SPR250L

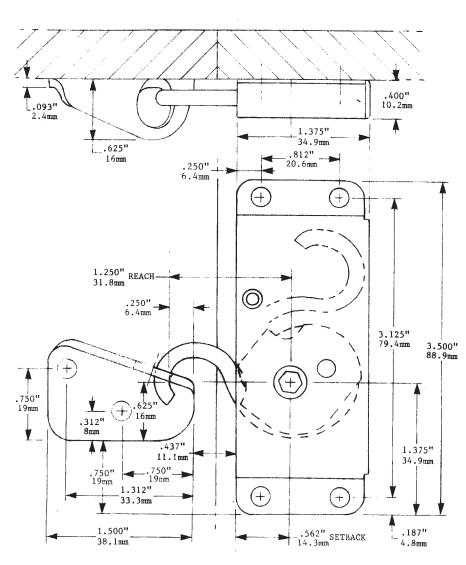


FIG. 2

MOUNTING DIMENSIONS

Type 1R Small Left Hand Latch: \$1125-1L-562 Short 'P' Receiver: SPR250L

When internally mounted, the latch is operated through a key access hole. For sealed units see TDS 25-1.



THIS LATCH/RECEIVER COMBINATION IS PARTICULARY USEFUL FOR DOORS, WINDOWS, BOXES, FURNITURE, CASE CLOSURES, ACCESS PANELS ON **MACHINERY, HOODS ETC.**

The Type 1R Small Latch Left Hand and the Short 'P' Receiver SPR250R are normally surface mounted in the same plane - no mortising required. They can be mounted externally or internally.

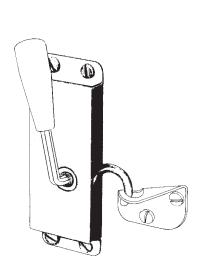
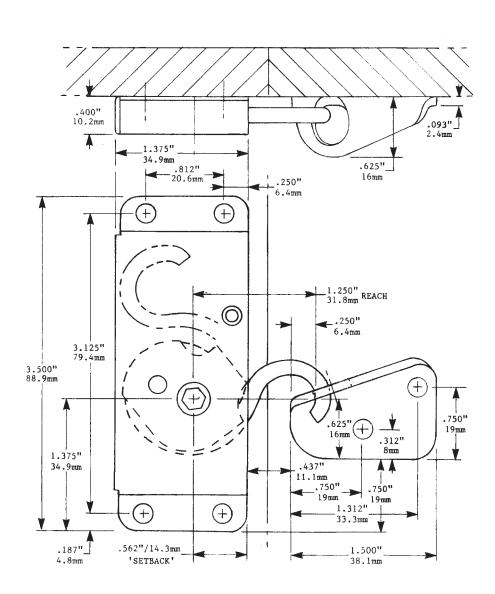


Fig. 1 **TYPE 1R SMALL LATCH S1125-1R-562 WITH HANDLE** & SHORT 'P' RECEIVER SPR250R



MOUNTING DIMENSIONS

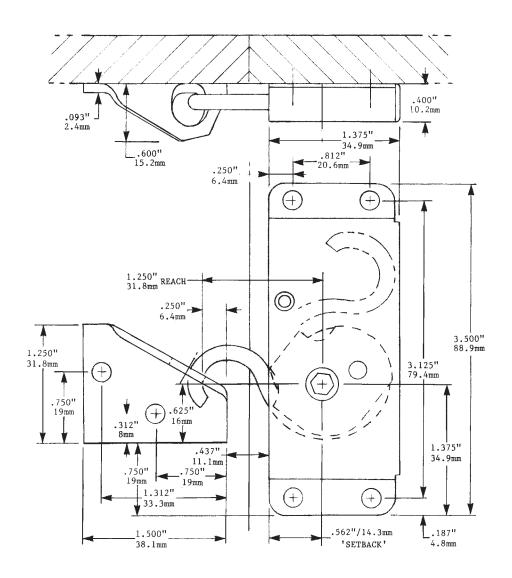
Type 1R Small Right Hand Latch: \$1125-1R-562 Short 'P' Receiver: SPR250R

When internally mounted, the latch is operated through a key access hole. For sealed units see TDS 25-1.



THIS LATCH/ RECEIVER COMBINATION IS PARTICULARY USEFUL FOR DOORS, WINDOWS, BOXES, FURNITURE, CASE CLOSURES, **ACCESS PANELS ON MACHINERY, HOODS, ETC.**

The Type 1L Small Latch Left Hand and the Short 'P' Receiver SPR250L-1 are normally surface mounted in the same plane – no mortising required. They can be mounted externally or internally.



MOUNTING DIMENSIONS

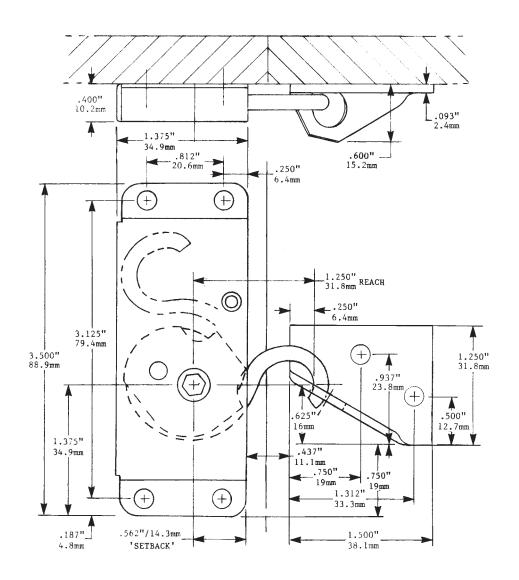
Type 1L Small Left Hand Latch: \$1125-1L-562 Short 'P' Receiver: SPR250L-1

When internally mounted, the latch is operated through a key access hole. For sealed units see TDS 25-1. This Short 'P' Receiver is being replaced by the newer SPR250(L&R) - See TDS 19-3A and 19-3B.



THIS LATCH/RECEIVER COMBINATION IS PARTICULARY USEFUL FOR DOORS, WINDOWS, BOXES, FURNITURE, CASE CLOSURES, ACCESS PANELS ON MACHINERY, HOODS, ETC.

The Type 1R Small Latch Right Hand and the Short 'P' Receiver SPR250L-1 are normally surface mounted in the same plane - no mortising required. They can be mounted externally or internally.



MOUNTING DIMENSIONS

Type 1R Small Right Hand Latch: \$1125-1R-562 Short 'P' Receiver: SPR250L-1

When internally mounted, the latch is operated through a key access hole. For sealed units see TDS 25-1. This Short 'P' Receiver is being replaced by the newer SPR250(L&R) - See TDS 19-3A and 19-3B.

TYPE 1 SMALL LATCH AND THE 'OT' RECEIVER

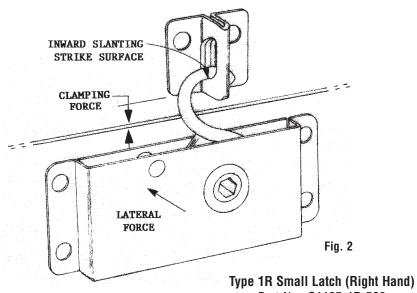
1/24/08; 2/21/08 **TDS 21-1A V3-1107**

REVISED 11/27/07

THE 'OT' RECEIVER HAS A SLANTED SURFACE UPON WHICH THE LATCH HOOK SLIDES WHEN LOCKING, IMPARTING A LATERAL FORCE, THEREBY COMPRESSING THE DOOR PANEL AGAINST THE CASE. THIS IS ESPECIALLY BENEFICIAL WHEN GASKETING IS INVOLVED. BOTH THE 'OT' AND 'IT' RECEIVERS CAN BE USED EITHER INSIDE OR OUTSIDE A CASE. SEE TDS 21-2A FOR THE 'IT' RECEIVER.

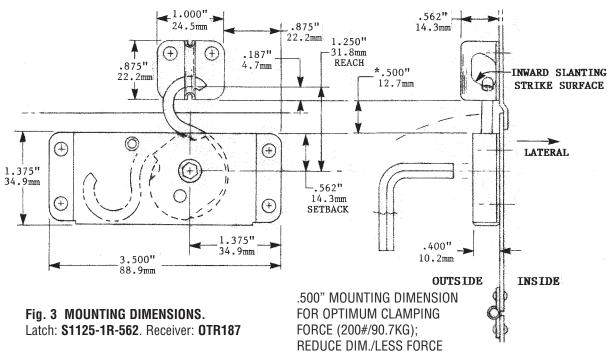


Fig. 1 In this view the 'OT' Receiver is mounted on the outside of the case and the Type 1 Latch is on the door, with the hinge below. The Latch hook pulling downward on the slanted surface of the Receiver forces the door inward against the case.



Part No.: **\$1125-1R-562** Shown with 'OT' Receiver Part No: OTR187 Left Hand Latch Available

See TDS 21-2A for internally mounted 'IT' Receiver.



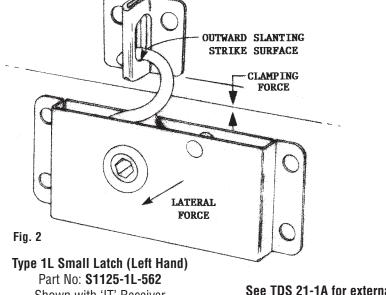
TYPE 1 SMALL LATCH AND THE 'IT' RECEIVER

TDS 21-2A V2-1106

THE 'IT' RECEIVER HAS A SLANTED SURFACE UPON WHICH THE LATCH HOOK SLIDES WHEN LOCKING, IMPARTING A LATERAL FORCE, THEREBY COMPRESSING THE DOOR PANEL AGAINST THE CASE. THIS IS ESPECIALLY BENEFICIAL WHEN GASKETING IS INVOLVED. BOTH THE 'IT' AND 'OT' RECEIVERS CAN BE USED EITHER INSIDE OR OUTSIDE A CASE. SEE TDS 21-1A FOR THE 'OT' RECEIVER.

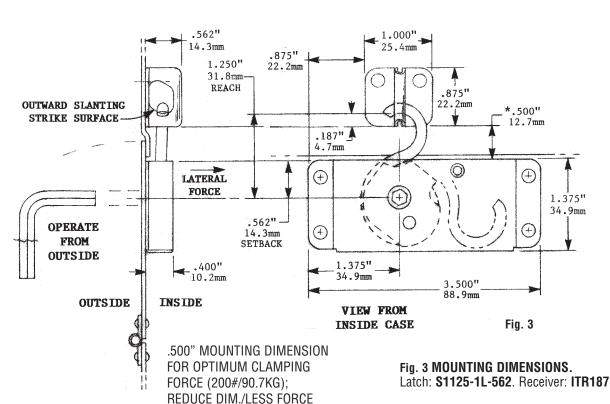


Fig. 1 This is a view of an 'IT' Receiver mounted internally in a case. The door is hinged outside from below. The Latch hook pulling against the slanted surface of the Receiver forces the door inward against the case. The Latch can be operated thru the door and sealed if required.



Shown with 'IT' Receiver Part No: ITR187 Right Hand Latch Available

See TDS 21-1A for externally mounted 'OT' Receiver. See TDS 25 for sealed latches.



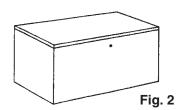
FOR USE WHERE THE RECEIVER IS MOUNTED FLUSH IN THIN MATERIAL BLIND MORTISE FOR THE RECEIVER IS ONLY .375"/9.5mm DEEP



Typical Right Hand External Mounting LATCH: S1125-1R-562 RECEIVER: RSL375-2S-125

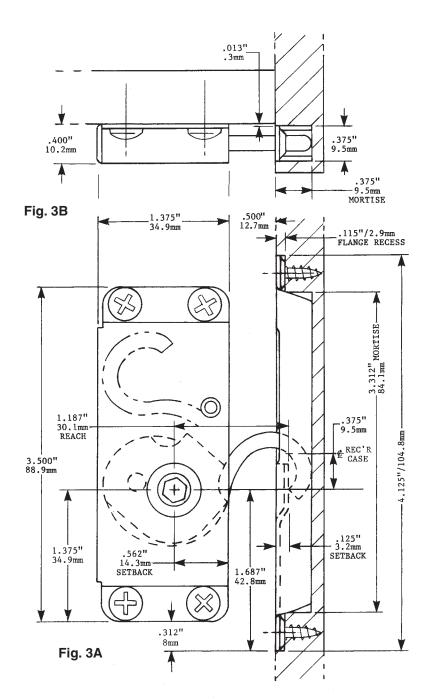
For internal mounting use Left Hand Latch LATCH: S1125-1L-562

RECEIVER: RSL375-2S-125



CASE CLOSURES INTERNAL MOUNTING - SECURE & AESTHETIC -

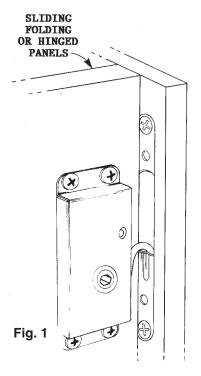
USE LEFT HAND LATCH LATCH: S1125-1L-562 RECEIVER: RSL375-2S-125



MOUNTING DIMENSIONS TYPE 1R SMALL LATCH & TYPE 2S RSL SMALL RECEIVER LATCH: S1125-1R-562 — RECEIVER: RSL375-2S-125 LEFT HAND LATCH: S1125-1L-562



FOR USE WHERE THE RECEIVER IS MOUNTED FLUSH IN THIN MATERIAL BLIND MORTISE FOR THE RECEIVER IS ONLY .437"/11.1mm DEEP

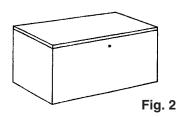


Typical Right Hand External Mounting Latch: S1125-1R-562

Receiver: RSL500-2-187

FOR INTERNAL MOUNTING **USE LEFT HAND LATCH**

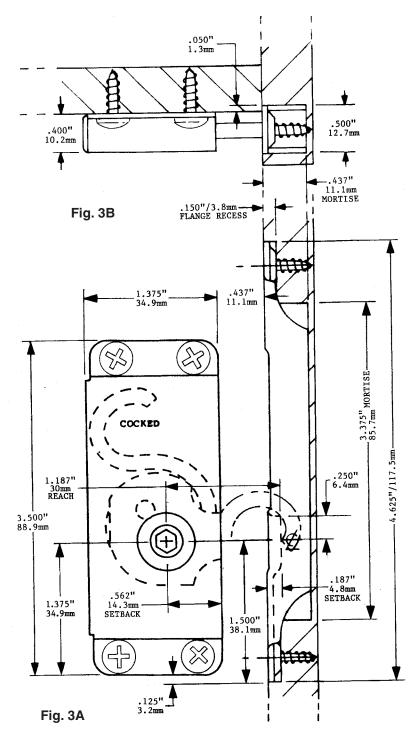
Latch: S1125-1L-562 Receiver: RSLS500-2-187



CASE CLOSURES INTERNAL MOUNTING - SECURE & AESTHETIC -

USE LEFT HAND LATCH

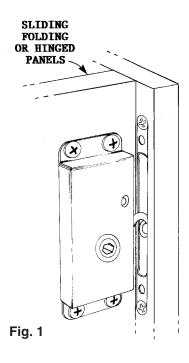
Latch: S1125-1L-562 Receiver: RSL500-2S-187



MOUNTING DIMENSIONS TYPE 1R SMALL LATCH & TYPE 2 RSLS SMALL RECEIVER

Latch: S1125-1R-562 — Receiver: RSLS500-2-187 LEFT HAND LATCH: S1125-1L-562

FOR USE WHERE THE RECEIVER IS MOUNTED FLUSH IN THIN MATERIAL BLIND MORTISE FOR THE RECEIVER IS ONLY .625"/16mm DEEP

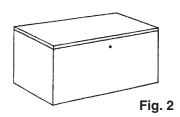


Typical Right Hand External Mounting

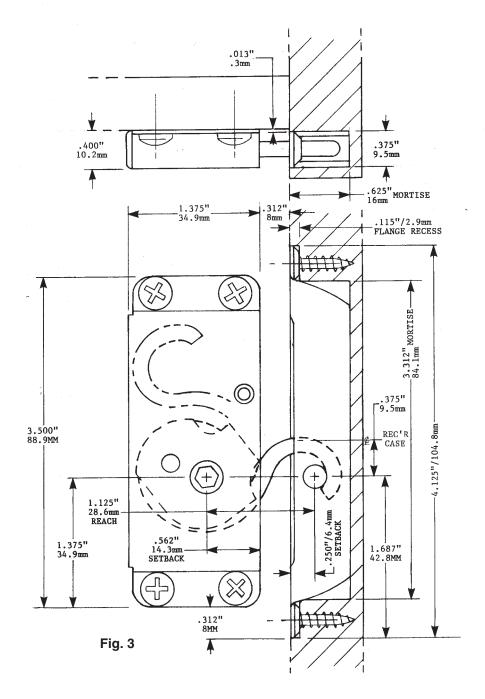
Latch: S1125-1R-562 Receiver: R/S375-2s-250

FOR INTERNAL MOUNTING **USE LEFT HAND LATCH**

Latch: S1125-1L-562 RECEIVER: R/S375-2s-250



CASE CLOSURES INTERNAL MOUNTING - SECURE & AESTHETIC -USE LEFT HAND LATCH LATCH: S1125-1L-562 RECEIVER: R/S375-2S-250



MOUNTING DIMENSIONS TYPE 1R SMALL LATCH & TYPE 2S R/S SMALL RECEIVER LATCH: S1125-1R-562 — RECEIVER: R/S375-2S-250 LEFT HAND LATCH IS S1125-1L-562

FOR KNOCKDOWN (KD) FURNITURE, STORE FIXTURES AND OTHER APPLICATIONS REQUIRING 90°

MOUNTING THE LATCH AT 15° ALLOWS UNOBSTRUCTED MOVEMENT OF PANEL 'B' WHEN THE LATCH IS COCKED

ATTACHMENT, WHERE ONE PANEL MUST SLIDE FREELY WHEN RELEASED

Type 1R Small Latch and Type 2 RSLS Shallow Receiver

TYPE 1R SMALL LATCH AND **2 RSLS SHALLOW RECEIVER**

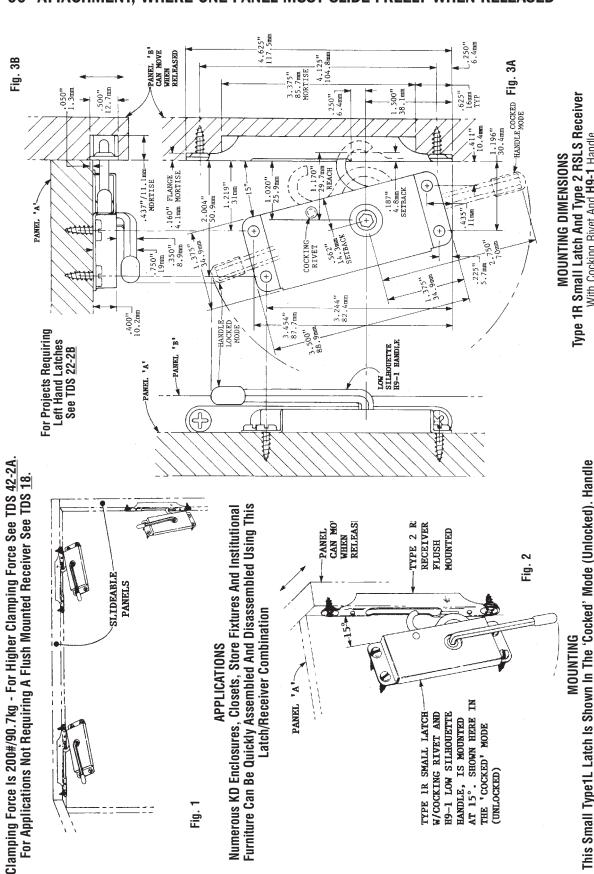
Latch: S1125-1R-562 W/Cocking Rivet & H9-1 Handle Receiver: RSLS500-2-187

Travel Is 180°. Mounting The Latch At 15° Facilitates Unobstructed Sliding

Movement Of Panel 'B' - Sometimes A Requisite In 'KD' Installations

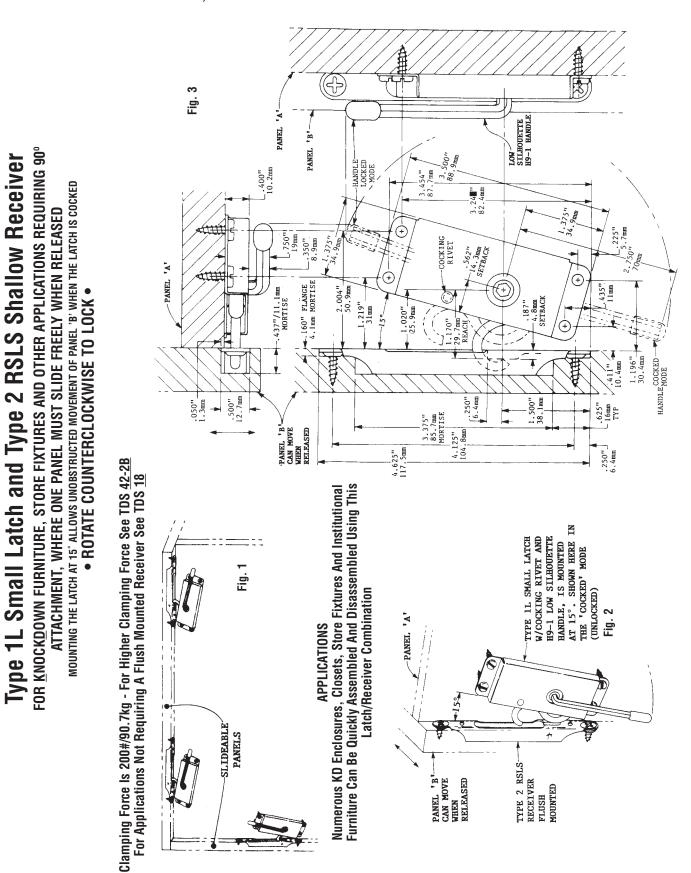
With Cocking Rivet And H9-1 Handle





TYPE 1L SMALL LATCH AND TYPE 2 RSLS SHALLOW RECEIVER

FOR KNOCKDOWN FURNITURE, STORE FIXTURES AND OTHER APPLICATIONS REQUIRING 90° ATTACHMENT, WHERE ONE PANEL MUST SLIDE FREELY WHEN RELEASED



INTERNALLY MOUNTED FOR WATERPROOF ENCLOSURES SEALED INSRUMENT CASES, DOORS, ACCESS PANELS, ETC. **CONCEALED • AESTHETICALLY UNEQUALED • PROTECTED**

- APPLICATIONS -



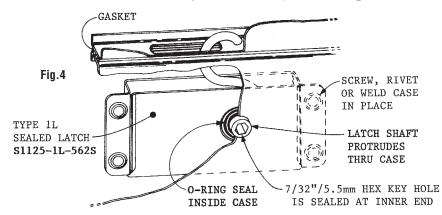




Fig.1

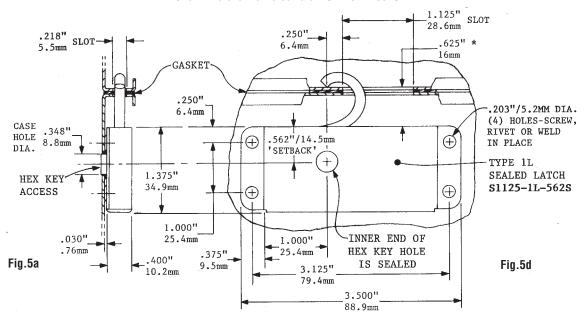
Fig. 3

Cases Using Type 1 Sealed Latches as shown above have only the access hole exposed on the outside. Rivets, Screws or Spot Welding can be used for attachment.



MOUNTING - EXTERNAL VIEW

The O-Ring Sealed Latch is Mounted Internally, Completely Concealed and Protected; The Latch Shaft Protrudes Thru the Enclosure Shown Here is the Norse Latch: \$1125-1L-562\$



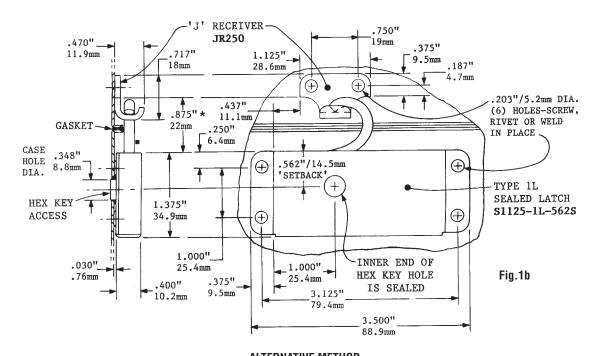
*Dimensions Shown Are For Optimum Load For Less Load Reduce This Dimension

MOUNTING DIMENSIONS - INTERNAL VIEW Using A Slot in Case Flanges as a Receiver Latch: **\$1125-1L-562\$**

Right Hand Latches (\$1125-1R-562\$) Are Available



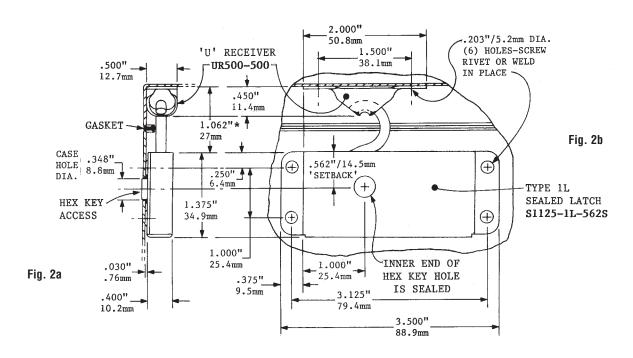
INTERNALLY MOUNTED FOR WATERPROOF ENCLOSURES SEALED INSTRUMENT CASES, DOORS, ACCESS PANELS, ETC. **CONCEALED • AESTHETICALLY UNEQUALED • PROTECTED**



- ALTERNATIVE METHOD -

MOUNTING DIMENSIONS – INTERNAL VIEW

Type 1L Latch & 'J' Reciever Latch: \$1125-1L-562\$ • Reciever: JR250



*Dimensions Shown Are For Optimum Load For Less Load Reduce This Dimension

 Alternative Method – **Mounting Dimensions – Internal View** TYPE 1L Latch & "U" Reciever

Latch: S1125-1L-562S • Reciever: UR500-500

Right Hand Latches (\$1125-1R-562\$) Are Available



The Type 1 Latches are Available in Two sizes: Small and Large Both sizes Are Available either Left or Right Hand Operating (To Lock)

Type 1 Large

Right Hand

Left Hand



Fig. 1



Fig. 2

Type 1 Latches have matched encased Receivers as shown, and can also be used in combination with Type 2 and Type 3 Receivers, plus any of the Nonencased Receivers. Some of these Latch/Receiver combinations are shown in the following applications.

Latch S1500-1R-750

Α P P

I C A T ı

0

N S

Receiver R500-R-750

Receiver R500-1L-750

Latch S1500-1L-750

Material: Steel/Zinc Plated - Clear Chromated Clamping Force: 450#/204kg

WHERE THEY ARE USED

Applications for Type 1 Latches include aircraft emergency ramp releases; prefab structures; exhibits; sliding and hinged doors and panels; vehicle hoods; sectional flooring; tables and counters; store fixtures; shields; cages; lighting housing; display and show cases; shipping containers; modular assemblies; canopies; institutional furniture; medical equipment shrouds; signs; valances; scenery; 'Jiffy' rooms; kiosks; saunas; photo labs; etc.

Type 1 Small Latches Are Shown On TDS 16-35



Fig. 8A Type 1R Latches and 'P', 'U' & 'PL' Receivers used to make 'Jiffy' walls for offices, displays, scenery, etc. (See TDS 40)



Fig. 8B Type 1R Latch with spring fingers and 'P' Receiver for keeping inline butt joints straight and tight. (See TDS 40)



Fig. 8C Type 1R Latch with braces and 'U' Receiver for holding inside corners tight and at 90°. (See TDS 40)



Fig. 11 Type 1R door Latch with handle and receiver for mounting in a 'same plane' application. Strong pull-up and tight closing. (See TDS 36 & 37)



Fig. 12 Type 1R Latch with handle and a 'J' Receiver for a 'same plane' surface mounted application. (See TDS 37 & 39)



Fig. 13 Type 1R Latch with handle using a slot Receiver in a 90° door frame attachment. (See TDS 37 & 43)

7B



Fig. 3 Type 1R Latch and Receiver used beneath table tops, counters, decks, etc. For tight shakeproof joinery. (See TDS 44-1)

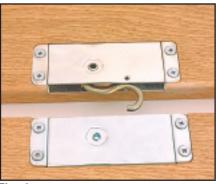


Fig. 4 Type 1L Latch and Receiver mounted flush beneath deck; operated from above thru deck. Flange mounting holes are dimpled. Used for dance floors, etc. (See TDS 44-2)



Fig. 5 Type 1L Latch and 'U' Receiver attaching shelves or desks to walls at industrial /educational work stations. (See TDS 38)



Fig. 6 Type 1R & 1L Latches and 'U' Receivers used to quickly attach a generator shelter or other KD units which can be stored flat. (See TDS 38)

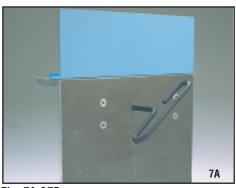


Fig. 7A &7B Type 1L Latch and slot Receiver coupling metal hood to frame or modular units. Can be sealed. (See TDS 43 & 45)



Fig. 8D Type 1R Latch with spring fingers and 'PL' Receiver for holding outside corners tight and at 90°. (See TDS 40)



Fig. 9 Type 1, 2 or 3 Latches can be utilized to fabricate acoustical barriers, shields, etc. which can be quickly disassembled for



Fig.10A & 10B Type 1 Latch with handle using slot Receiver to couple framing units, doors, covers, hoods, etc. (See TDS $\underline{43})$

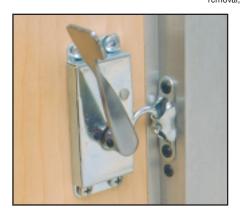


Fig. 14 Type 1R Latch with handle and a 'U' Receiver all surface mounted in a 90° door application. (See TDS 37 & 38)

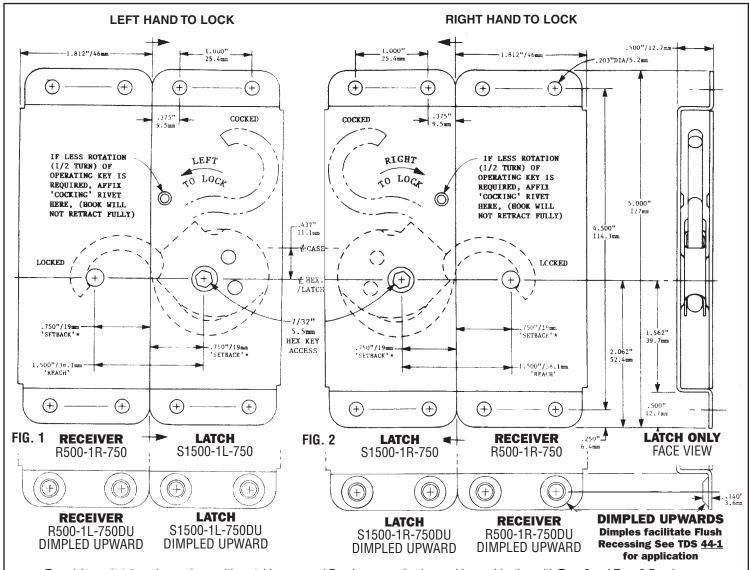


Fig. 15 Type 1R Latch with handle and a 'RSL' Receiver at 90° in metal or wood door closure. (See TDS 37 & 42)



Fig. 16 Type 1L Latch with handle and a 'P' Receiver for metal or wood joints and covers. Same plane mounting. (See TDS 37 & 40)

Latches And Receivers Are Available Either Right or Left Hand Operating



Type 1 Large Latches shown above with matching encased Receivers can also be used in combination with Type 2 and Type 3 Receivers as well as any of the Nonencased Receivers. Some of these Latch/Receiver combinations are shown in the following illustrations.



A P

CATION

S

Fig.~8 Type 1R & 1L Latches can be 'ganged' as shown, spaced as required. (See TDS $\underline{46})$



Fig. 9 Type 1R & 1L Latches with handle using slot Receivers in tubing to fabricate polygonal structures, kiosks, etc. of 3 or more panels. (See TDS <u>37</u> & <u>43</u>)



Fig. 10 Type 1R Latches with handles and 'U' Receivers used to make kiosks and other polygonal structures with angular corner joints. (See TDS <u>37</u> & <u>38</u>)



Fig. 11 Type 1R Latches and 'P' Receivers joining angular corners of accent panels, kiosks and other polygonal structures. (See TDS 40)

APPLICATIONS



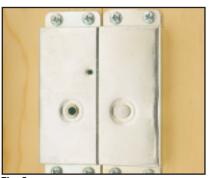


Fig. 3 Type 1R Latch and Receiver surface mounted as a case closure on metal or wood. (See TDS 36 & 44)



Fig. 5 Type 1R Latch and 'JL' Receiver used for an 'over the top' box cover application. (See TDS 39)



Fig. 7A Type 1 Latches can be surface or recess mounted internally using flush mounted 'RSL' or surface mounted 'U' Receivers. (See TDS 38 & 49)

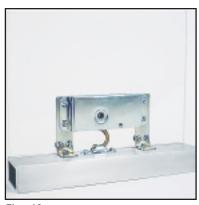


Fig. 12 Type 1R Latch with braces and 'U' Receiver used for a self standing machine guard, etc. Quick attachment & removal. (See TDS 40)



Fig. 13 Type 1L (or 1R) Latch with handle and 'J' Receiver operated from beneath in a shroud application. (See TDS 47)



Fig. 4 Type 1L Latch and Receiver recessed flush in a wooden case closure. (See TDS 36 & 44)



Fig. 6 Type 1R Latch and 'PL' Receiver mounted 'over the top' on a box cover. (See TDS <u>40</u>)



Fig. 7B The aesthetics of internally mounted Type 1 Latches (See Fig. 7A), can clearly be seen at center above, as compared to the externally mounted latches at each side.

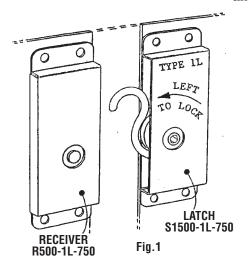




Fig. 14A & 14B Surface mounted Type 1R Latches and flush mounted 'R/S' Receivers used on church pews, quick attachment and removal for maintenance or recreational use of the floor area. (See TDS 42)

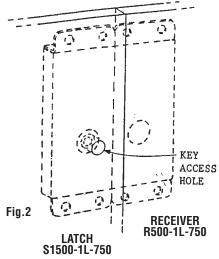
Type 1 Large Latches are used for 'Jiffy' walls, vehicle hoods & access panels, signs, exhibits, stage scenery, headers, sliding & hinged doors & panels, shields, cages, valances, modular equipment, lighting housings, displays, instrument & show cases, etc.

Type 1 Latches can be used with Type 2 and Type 3 Receivers and also with Non-Encased Receivers



COCK IT BEFORE YOU LOCK IT

When locking the latch, first rotate it away from the receiver, against the back of the case until it stops; this extends the spring hook, providing 'Over-Reach' for locking.



INTERNAL MOUNTING

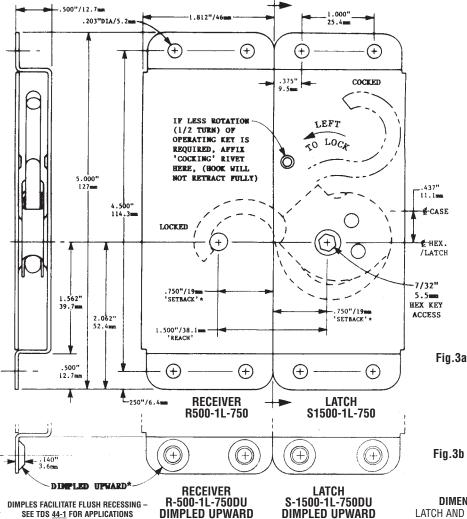
When mounted internally and operated thru an access hole, obviously the latch is hidden and your product's aesthetics are improved; also, latch damage from abuse and tampering is greatly reduced.

Locking/unlocking latch takes 3/4 turns* of the operating key (hook will retract fully into case). Latch may be operated from either side.

Usually surface mounted outside or inside a panel, they can be recessed flush – see TDS 44; for "ganged" latches see TDS 46.

THIS IS A LARGE TYPE 1L LATCH (LEFT HAND)

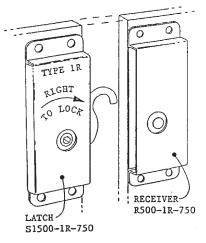
For Large Type 1R Latches (Right Hand), see TDS <u>36-4</u>; Small Type 1L Latches are also available: see TDS <u>16</u>



DIMENSIONS WHEN MOUNTED AND LOCKED LATCH AND RECEIVER COME TOGETHER WHEN LOCKED

Type 1 Large Latches are used for sliding/hinged door & panels, 'Jiffy' rooms, signs, exhibits, store fixtures, vehicle hoods & access panels, stage settings, cages, lighting housings, display cases, valances, gates, instrument cases, etc.

TYPE 1 LATCHES CAN BE USED WITH TYPE 2 & TYPE 3 RECEIVERS AND ALSO WITH NONENCED RECEIVERS



COCK IT BEFORE YOU LOCK IT

WHEN LOCKING LATCH, FIRST ROTATE IT AWAY FROM THE RECIEVER, AGAINST THE BACK OF THE CASE UNTILL IT STOPS; THIS EXTENDS THE SPRING HOOK, PROVIDING 'OVERREACH' FOR LOCKING

SEE TDS 1 FOR OPERATING INSTRUCTIONS

CLAMPING FORCE 450#/204kg

FIG 1 CHOICE OF MATERIALS
STEEL - ZINK PLATED

STEEL - ZINK PLATED STEEL - BRIGHT PLATED STAINLESS STEEL

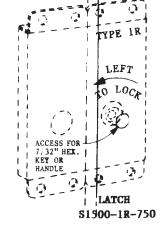
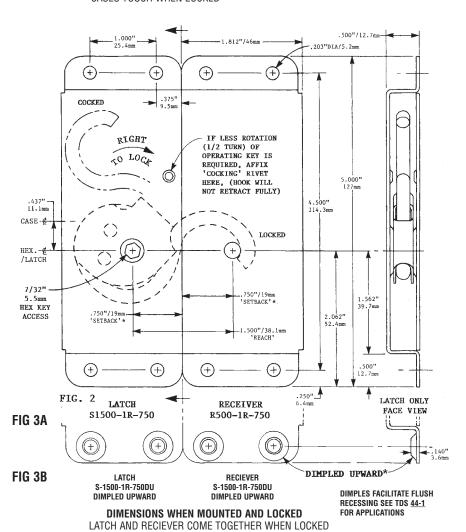


FIG 2

EXTERNAL MOUNTING CASES TOUCH WHEN LOCKED



INTERNAL MOUNTING

When mounted internally and operated through an access hole, the latch is hidden and the aesthetics of your product is improved.

Also, latch damage from abuse and tampering is minimized. For sealed latches see TDS 25.

Locking/unlocking Latch takes 3/4 turn* of the operating key (hook will retract fully into case). Latch may be operated from either side.

Usually surface mounted outside or inside a panel, they can be recessed flush – see TDS <u>44</u>.

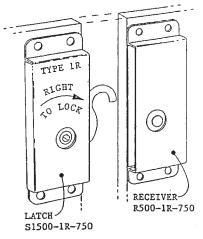
For 'ganged' Latches see TDS 46.

THIS IS A LARGE TYPE 1R LATCH (RIGHT HAND)

For large Type 1L Latches (left hand), see TDS 36-3. Small Type 1L Latches are also available: see TDS 36.

Type 1 Large Latches are used for sliding/hinged door & panels, 'Jiffy' rooms, signs, exhibits, store fixtures, vehicle hoods & access panels, stage settings, cages, lighting housings, display cases, valances, gates, instrument cases, etc.

TYPE 1 LATCHES CAN BE USED WITH TYPE 2 AND TYPE 3 RECEIVERS AND ALSO WITH NON-ENCASED RECEIVERS



COCK IT BEFORE YOU LOCK IT

WHEN LOCKING LATCH, FIRST ROTATE IT AWAY FROM THE RECEIVER, AGAINST THE BACK OF THE CASE UNTIL IT STOPS: THIS EXTENDS THE SPRING HOOK, PROVIDING 'OVERREACH' FOR LOCKING.

SEE TDS 1 FOR OPERATING INSTRUCTIONS

CLAMPING FORCE: 450#/204kg

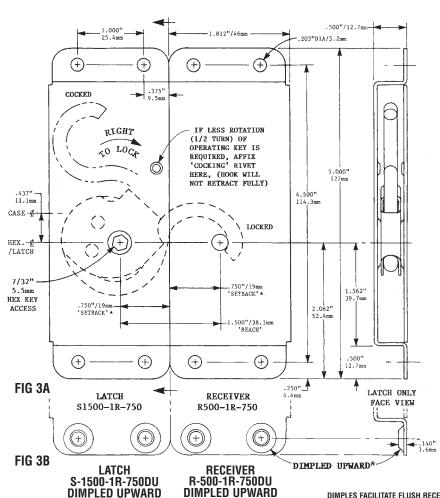
CHOICE OF MATERIALS STEEL - ZINC PLATED FIG 1

STEEL- BRIGHT PLATED STAINLESS STEEL

YPE IR ACCESS FOR 1 KEY OR HANDLE 9 S1500-1R-750

FIG 2

EXTERNAL MOUNTING CASES TOUCH WHEN LOCKED



INTERNAL MOUNTING

When mounted internally and operated thru an access hole, obviously the latch is hidden and your product's aesthetics are improved; also, latch damage from abuse and tampering is greatly reduced. For sealed latches see TDS 25.

Locking/unlocking latch takes 3/4 turns* of the operating key (hook will retract fully into case). Latch may be operated from either side.

Usually surface mounted outside or inside a panel, they can be recessed flush - see TDS 44; for "ganged" latches see TDS 46.

THIS IS A LARGE TYPE 1R LATCH (RIGHT HAND)

For Large Type 1L Latches (Left Hand), see TDS 36-3; Small Type 1L Latches are also available: see TDS 16

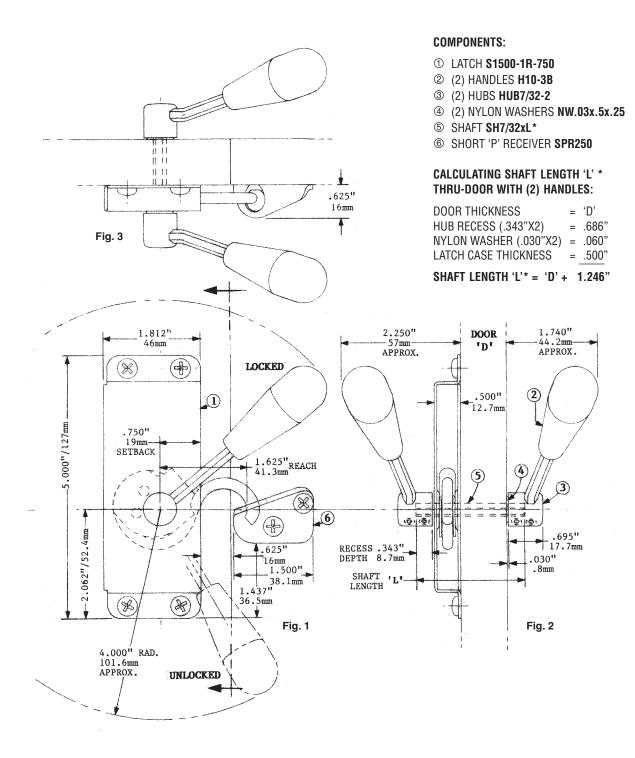
DIMENSIONS WHEN MOUNTED AND LOCKED LATCH AND RECEIVER COME TOGETHER WHEN LOCKED DIMPLES FACILITATE FLUSH RECESSING -SEE TOS 44-1 FOR APPLICATIONS



TYPE 1 LARGE LATCH WITH TWO HUB-TYPE HANDLES

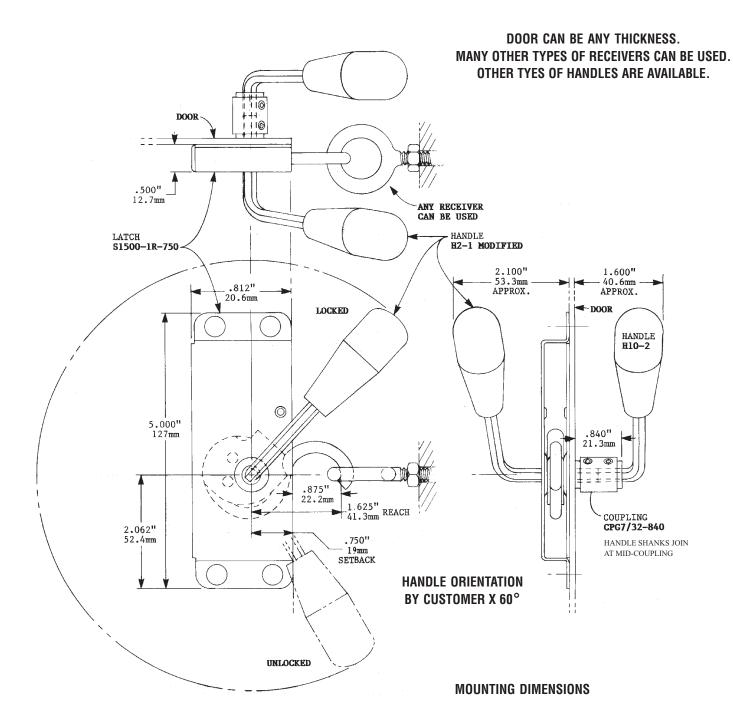
FOR DOOR APPLICATIONS WITH HANDLES ON BOTH SIDES. THESE ILLUSTRATIONS SHOW COMPONENTS AND MOUNTING DIMENSIONS.

THERE ARE MANY DIFFERENT RECEIVERS THAT CAN BE USED. TYPE 1 LATCH LEFT HAND CAN ALSO BE USED (\$1500-1L-750)



TYPE 1 LATCH WITH TWO HANDLES

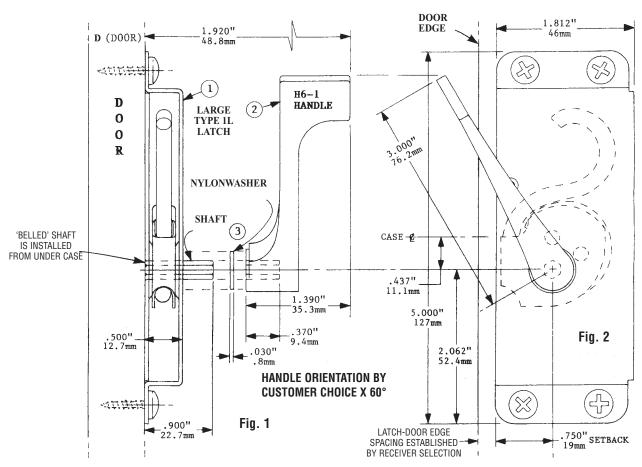
For door applications with handles on both sides. These illustrations show components and mounting dimensions.



SHOWN HERE IS A SINGLE HANDLE MOUNTING (OPERABLE FROM ONE SIDE ONLY) WITH A LARGE TYPE 1L LATCH SURFACE MOUNTED ONTO THE DOOR

• These illustrations show components and mounting dimensions •

For Dual Handles See TDS 37-10B

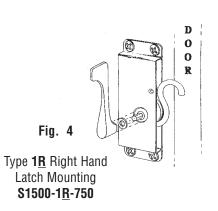


SHOWN ABOVE IS A LARGE TYPE 1L LEFT HAND LATCH (\$1500-1<u>L</u>-750), A RIGHT HAND LATCH (\$1500-1<u>R</u>-750) CAN BE MOUNTED ON THE OPPOSITE SIDE. See Fig. 4.

MOUNTING

- ① LATCH: \$1500-1L (or 1R) -750
- 2 HANDLE W/NYLON WASHER: H6-1
- 3 SHAFT (BELLED): SH7/32x.9B

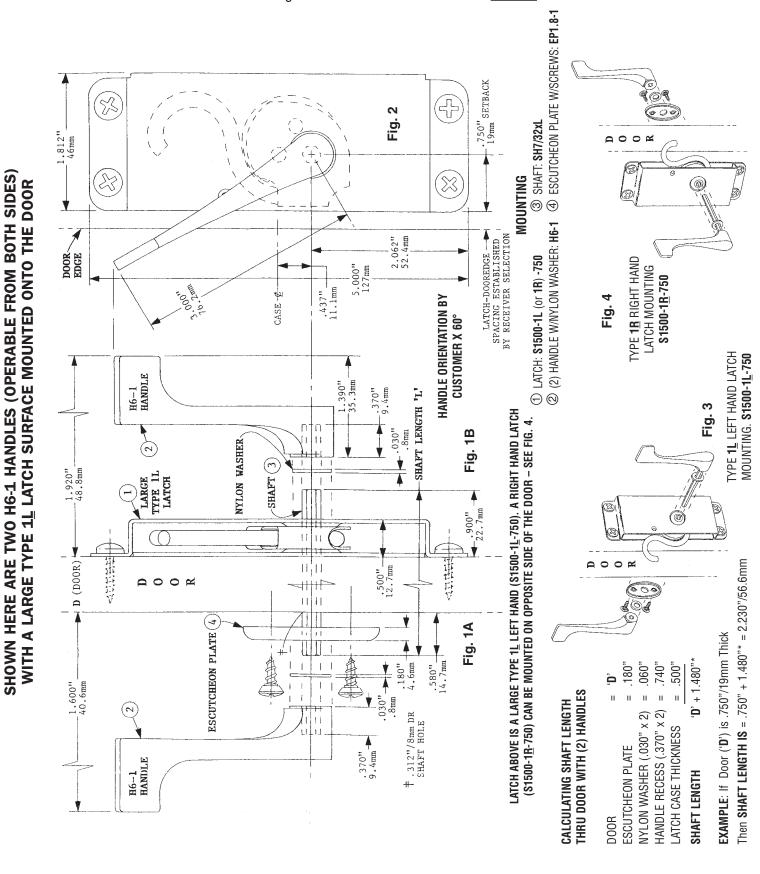




TDS <u>37-10B</u> V3-0308

FOR DOOR APPLICATIONS WITH HANDLES ON BOTH SIDES. THESE ILLUSTRATIONS SHOW COMPONENTS AND MOUNTING DIMENSIONS

For Single Handle Assemblies See TDS 37-10A





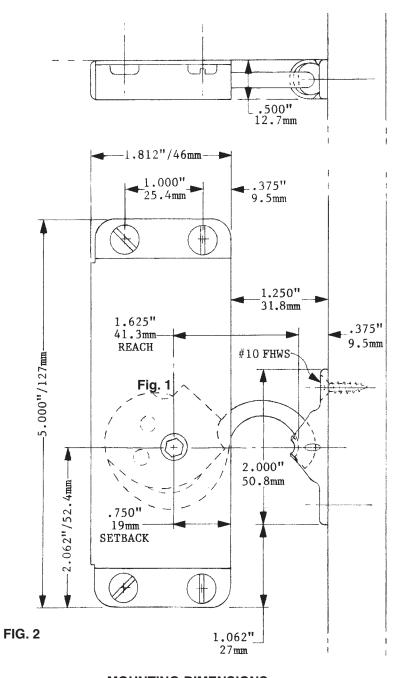
FOR JOINING MEMBERS AT 90° "T" OR CORNER JOINTS

THE NORSE TYPE 1R RIGHT HAND LATCH SHOWN, AND THE TYPE 1L LEFT HAND (ALSO AVAILABLE), ARE NORMALLY SURFACE MOUNTED. NO PANEL PREPARATION IS REQUIRED. THIS LATCH/ RECEIVER COMBINATION IS USED FOR RAPIDLY ERECTED ROOMS, ENCLOSURES, SHIELDS, THEATRICAL SCENERY, DISPLAYS, COUNTERS, SHELF SUPPORT, VALANCES, INSTITUTIONAL FURNITURE, SIGNS, SLIDING AND HINGED DOORS, ETC.



Type 1R Latch and Type 'U' Receiver Latch: S1500-1R-750 Receiver: UR500-500

For a typical 90-degree, surface-mounted joint where bracing is required see TDS-40.



MOUNTING DIMENSIONS Latch: S1500-1R-750 Receiver: UR500



FOR JOINING MEMBERS AT 90° 'T' OR CORNER JOINTS

THE NORSE TYPE 1R RIGHT HAND LATCH SHOWN, AND THE TYPE 1L LEFT HAND (ALSO AVAILABLE), ARE NORMALLY SURFACE MOUNTED. NO PANEL PREPARATION IS REQUIRED. THIS LATCH/ RECEIVER COMBINATION IS USED FOR RAPIDLY ERECTED ROOMS, ENCLOSURES, SHIELDS, THEATRICAL SCENERY, DISPLAYS, COUNTERS, SHELF SUPPORT, VALANCES, INSTITUTIONAL FURNITURE, SIGNS, SLIDING AND HINGED DOORS, ETC.



Type 1R Latch and Type 'U' Receiver Latch: S1500-1R-750 Receiver: DR468-500

For a typical 90-degree, surface-mounted joint where bracing is required see TDS-40.

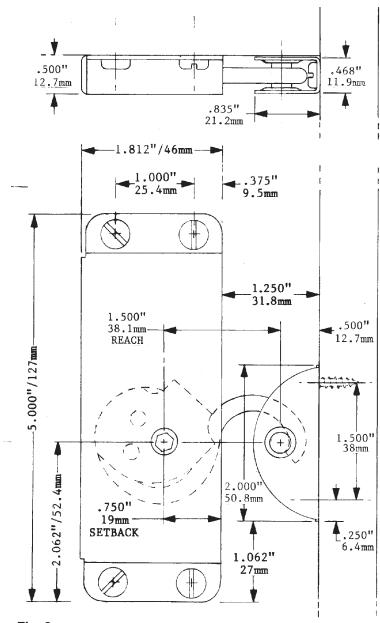


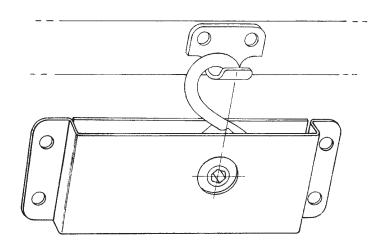
Fig. 2

MOUNTING DIMENSIONS Latch: S1500-1R-750 Receiver: DR468-500

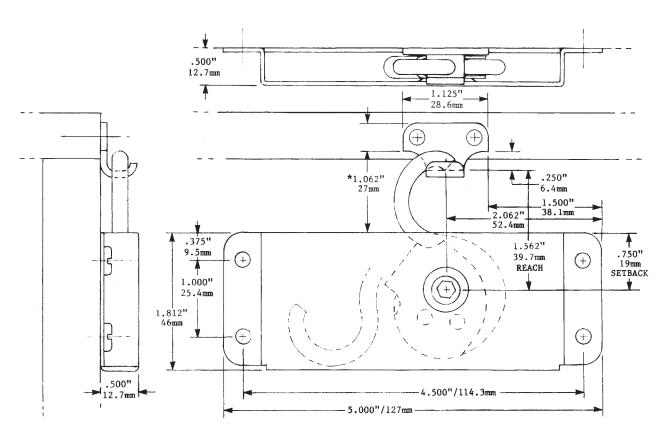


A LATCHING MEANS FOR SLIDING AND HINGED DOORS, CASES, HOODS, ETC.

The Type 1R Latch Right Hand shown, and the Type 1L Latch Left Hand (also available), are normally surface mounted; no mortising required. They may be mounted externally or internally.



This Latch/ Receiver combination can be used for sliding and hinged door closures, display case covers, equipment attachment, vehicle hoods, etc.

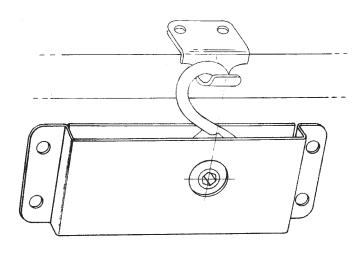


MOUNTING DIMENSIONS LATCH: S1500-1R-750 **RECEIVER: JR250**

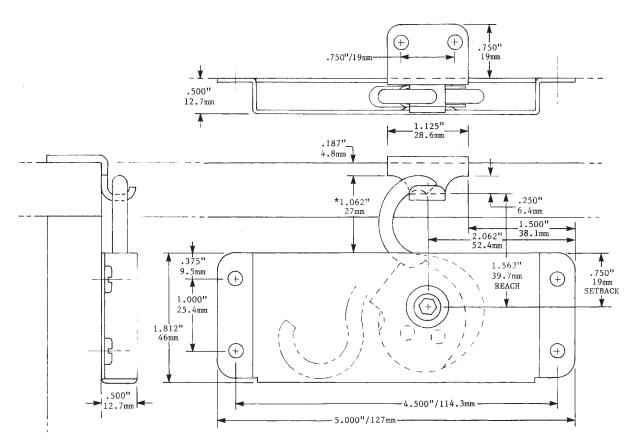


A LATCHING MEANS FOR SLIDING AND HINGED DOORS, SHIPPING CONTAINERS, CASES, HOODS, ETC.

The Type 1R Latch Right Hand shown, and the Type 1L Latch Left Hand (also available), are normally surface mounted; no mortising required. They may be mounted externally or internally.



TYPE 1R LATCH- LARGE & TYPE 'JL' RECEIVER S1500-1R-750 **RECEIVER: JLR250**

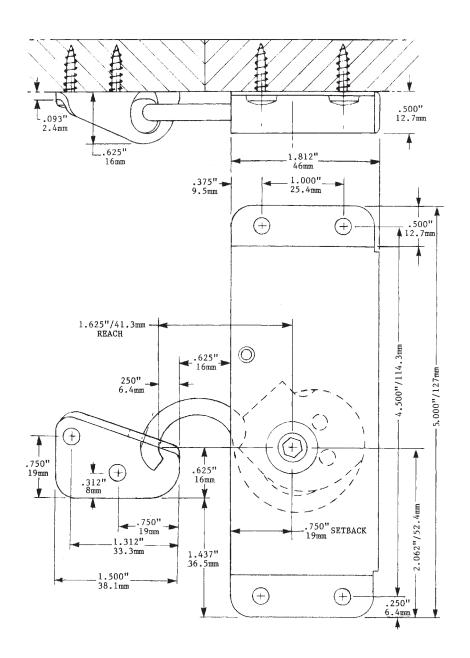


MOUNTING DIMENSIONS LATCH: \$1500-1R-750 **RECEIVER: JLR250**



THIS LATCH/RECEIVER COMBINATION IS PARTICULARY USEFUL FOR DOORS, WINDOWS, BOXES, FURNITURE, CASE CLOSURES, ACCESS PANELS ON MACHINERY, HOODS

The Type 1L Large Latch Left Hand and the Short 'P' Receiver SPR250L are normally surface mounted in the same plane - no mortising required. They can be mounted externally or internally.



MOUNTING DIMENSIONS

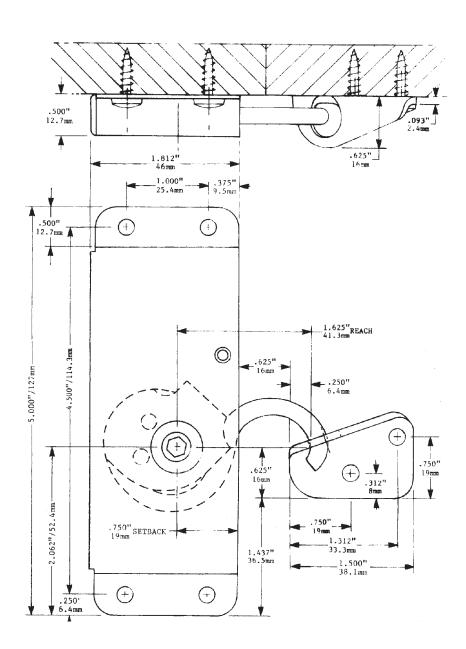
The Type 1 Large Latch Left Hand Latch: **\$1500-1L-750** Short 'P' Receiver: SPR250L

When internally mounted, the Latch is operated through a key access hole. For sealed units see TDS 25-1



THIS LATCH/RECEIVER COMBINATION IS PARTICULARY USEFUL FOR DOORS, WINDOWS, BOXES, FURNITURE, CASE CLOSURES, ACCESS PANELS ON MACHINERY, HOODS

The Type 1R Large Latch Right Hand and the Short 'P' Receiver SPR250R are normally surface mounted in the same plane - no mortising required. They can be mounted externally or internally.



MOUNTING DIMENSIONS

The Type 1 Large Latch Right Hand Latch: **\$1500-1R-750**

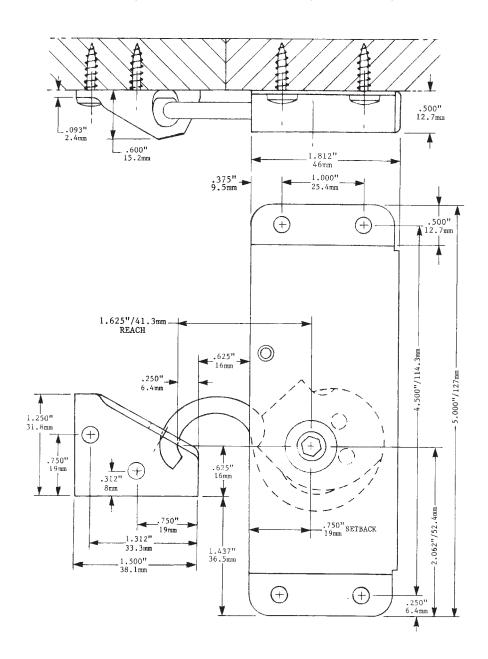
Short 'P' Receiver: SPR250R

When internally mounted, the Latch is operated through a key access hole.

For sealed units see TDS 25-1

THIS LATCH/RECEIVER COMBINATION IS PARTICULARY USEFUL FOR DOORS, WINDOWS, BOXES, FURNITURE, CASE CLOSURES, ACCESS PANELS ON MACHINERY, HOODS

The Type 1R Large Latch Left Hand and the Short 'P' Receiver SPR250RL-1 are normally surface mounted in the same plane - no mortising required. They can be mounted externally or internally.



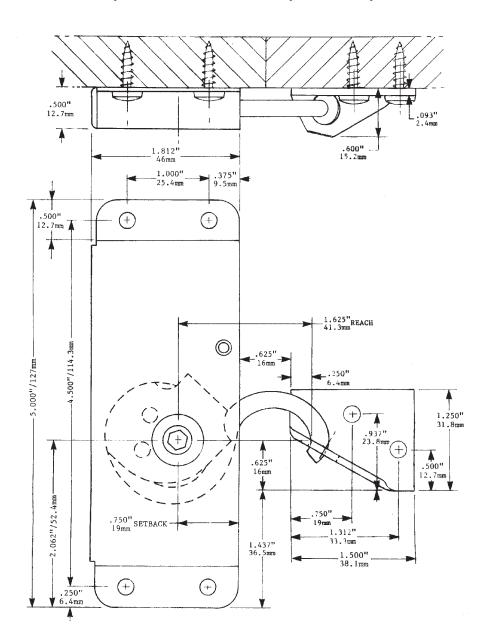
MOUNTING DIMENSIONS

The Type 1 Large Latch Left Hand Latch: **\$1500-1L-750** Short 'P' Receiver: SPR250L-1

When internally mounted, the Latch is operated through a key access hole. For sealed units see TDS 25-1 This Short 'P' Receiver is being replaced by the newer SPR250 (L&R) - See TDS 39-3A & 39-3B

THIS LATCH/RECEIVER COMBINATION IS PARTICULARY USEFUL FOR DOORS, WINDOWS, BOXES, FURNITURE, CASE CLOSURES, ACCESS PANELS ON MACHINERY, HOODS

The Type 1R Large Latch Right Hand and the Short 'P' Receiver SPR250RL-1 are normally surface mounted in the same plane - no mortising required. They can be mounted externally or internally.



MOUNTING DIMENSIONS

The Type 1 Large Latch Right Hand Latch: **\$1500-1R-750**

Short 'P' Receiver: SPR250R-1

When internally mounted, the Latch is operated through a key access hole. For sealed units see TDS 25-1 This Short 'P' Receiver is being replaced by the newer SPR250 (L&R) - See TDS 39-3A & 39-3B

FOR 'JIFFY' ROOMS AND WALLS IN-LINE BUTT JOINTS AND INSIDE & OUTSIDE CORNER JOINTS - NO PANEL PREPARATION -



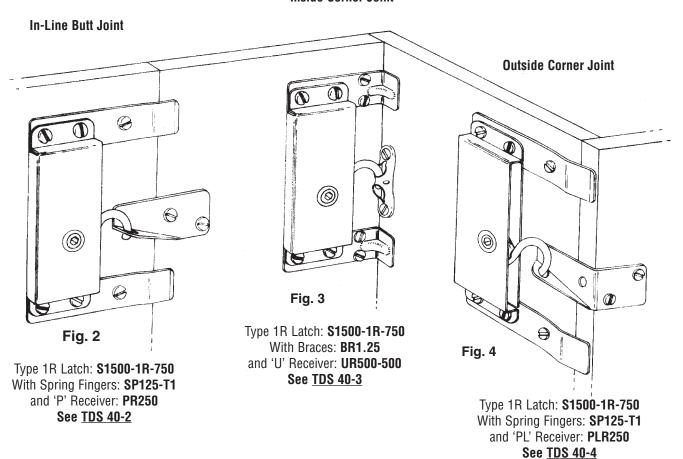
Fig. 1 Type 1R Latches and 'P', 'U' and 'PL' Receivers are used to make 'Jiffy' walls for offices, displays, scenery, etc.

This Norse Type 1 Latch system is surface mounted; no panel preparation is required. It is ideal for rapidly erecting rooms ('Jiffy rooms'), partitions, furnace & machinery enclosures, store fixtures, student carrels, museum and art displays, sign attachment, etc.

In-line butt joints and inside & outside corner joints are rigidly held in the positions shown by the use of tempered steel spring fingers and braces in conjunction with the 'P', 'U' and 'PL' Receivers.

Clamping force: 450#/204kg

Inside Corner Joint



The Latches can be mounted inside or outside a wall and operated through a hole. For mounting dimensions see the following TDS sheets Clamping Force: 450#/204kg

Note: Type 1R Latches (\$1500-1R-750) shown here are right hand operating (to lock). Left hand operating Latches (\$1500-1L-750) are also available.



TYPE 1R LATCH AND 'P' RECEIVER WITH SPRING FINGERS

FOR 'JIFFY' ROOMS AND WALLS IN-LINE BUTT JOINT - NO PANEL PREPARATION -

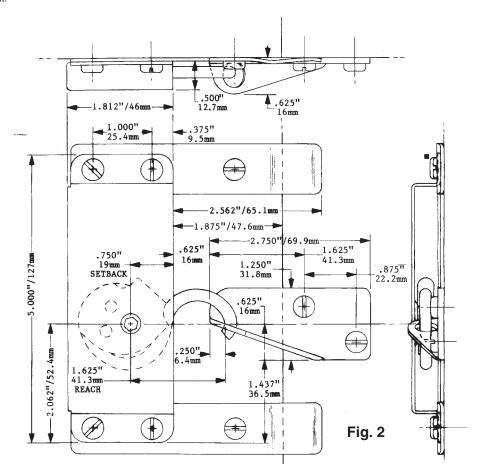


Fig. 1 Type 1R Latche with spring fingers and a 'P' Receiver are used for keeping in-line butt joints straight and tight.

This Norse Type 1 Latch 'Jiffy' wall system is surface mounted; no panel preparation is required. It is ideal for rapidly erecting rooms ('Jiffy rooms'), partitions, furnace & machinery enclosures, store fixtures, student carrels, museum and art displays, sign attachment, etc.

In-line butt joints shown here is held in a straight line by the tempered steel spring fingers and braces in conjunction with the Type 1 Latch and the 'P' Receiver. See TDS <u>40-1</u> for the total 'Jiffy' wall system.

Clamping force: 450#/204kg



MOUNTING DIMENSIONS

LATCH: S1500-1R-750 • SPRING FINGERS: SP125-T1 • RECEIVER: PR250

The Latches can be mounted inside or outside a wall and operated through a hole.

Note: Type 1R Latches (S1500-1R-750) shown here are right hand operating (to lock). Left hand operating Latches (S1500-1L-750) are also available.

FOR 'JIFFY' ROOMS AND WALLS **INSIDE CORNER JOINT** - NO PANEL PREPARATION -



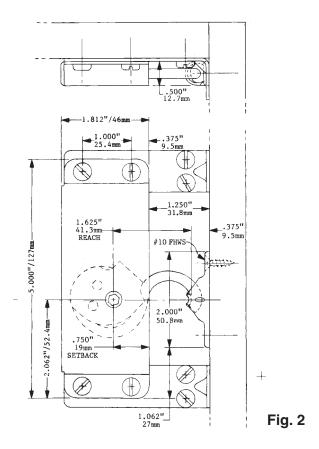
Fig. 1 Type 1R Latch with braces and a 'U' Receiver hold inside corner joints tight and at 90°.

This Norse Type 1 Latch 'Jiffy' wall system is surface mounted; no panel preparation is required. It is ideal for rapidly erecting rooms ('Jiffy Rooms'), partitions, furnace & machinery enclosures, store fixtures, student carrels, museum and art displays, sign attachment, etc.

Inside corner joint shown here is held at 90° by the tempered steel braces in conjunction with the Type 1 Latch and the 'U' Receiver.

See TDS 40-1 for the total 'Jiffy' wall system.

Clamping force: 450#/204kg



MOUNTING DIMENSIONS

LATCH: \$1500-1R-750 • BRACES: BR1.25 • RECEIVER: UR500-500

The Latches can be mounted inside or outside a wall and operated through a hole.

Note: Type 1R Latches (\$1500-1R-750) shown here are right hand operating (to lock). Left hand operating Latches (\$1500-1L-750) are also available.

V2-1106



TYPE 1R LATCH AND 'PL' RECEIVER WITH SPRING FINGERS

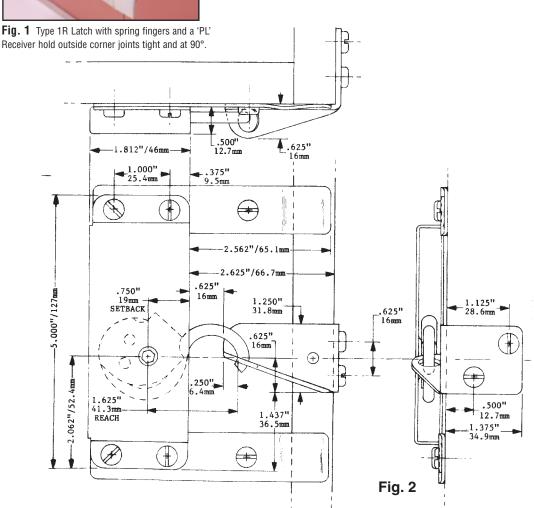
FOR 'JIFFY' ROOMS AND WALLS OUTSIDE CORNER JOINT - NO PANEL PREPARATION -



This Norse Type 1 Latch 'Jiffy' wall system is surface mounted; no panel preparation is required. It is ideal for rapidly erecting rooms ('Jiffy rooms'), partitions, furnace & machinery enclosures, store fixtures, student carrels, museum and art displays, sign attachment, etc.

Outside corner joint shown here is held at 90° by the tempered steel fingers in conjunction with the Type 1 Latch and the 'LP' Receiver. See TDS <u>40-1</u> for the total 'Jiffy' wall system.

Clamping force: 450#/204kg



MOUNTING DIMENSIONS

LATCH: S1500-1R-750 • SPRING FINGERS: SP125-T1 • RECEIVER: PLR250

The Latches can be mounted inside or outside a wall and operated through a hole.

Note: Type 1R Latches (\$1500-1R-750) shown here are right hand operating (to lock). Left hand operating Latches (\$1500-1L-750) are also available.

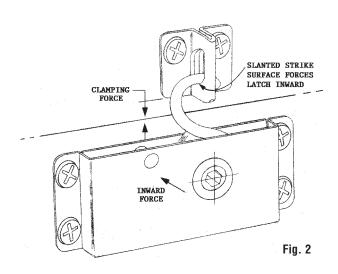


THE 'OT' RECEIVER HAS A SLANTED SURFACE UPON WHICH THE LATCH HOOK SLIDES WHEN LOCKING, IMPARTING AN INWARD FORCE, THEREBY COMPRESSING THE DOOR PANEL AGAINST THE CASE. THIS IS ESPECIALLY BENEFICIAL WHEN GASKETING IS INVOLVED. BOTH THE 'OT' AND 'IT' RECEIVERS CAN BE USED EITHER INSIDE OR OUTSIDE A CASE.

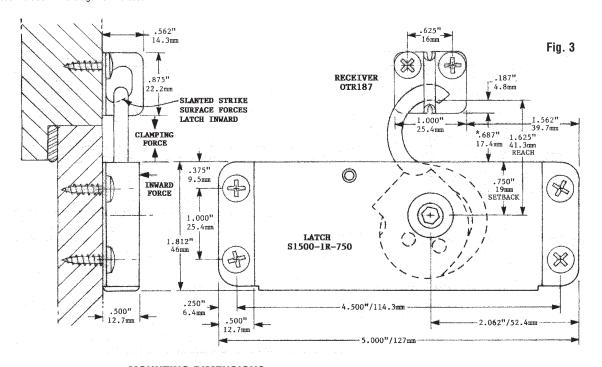
SEE TDS 41-2A FOR THE 'IT' RECEIVER. SEE TDS 41-3A FOR THE BIG 'BOT' RECEIVER.



Fig. 1 In this view, the 'OT' Receiver is mounted on the outside of the case and the Type 1 Latch is on the door, with the hinge below. The latch hook pulling downward on the slanted surface of the Receiver forces the door inward against the case.



Type 1R Large Latch (Right Hand): Part No. S1500-1R-750
Shown with 'OT' Receiver: Part No. OTR187
Left Hand Latch Available



MOUNTING DIMENSIONS
Latch: S1500-1R-750 Receiver: OTR187

* .687" mounting dimension for optimal clamping force (450#/204kg). Reduce dimension for less force.



TYPE 1R LARGE LATCH AND TYPE 2 R/S SHALLOW RECEIVER

USED TYPICALLY FOR ATTACHMENT TO A FLOOR OR WALL, ETC.

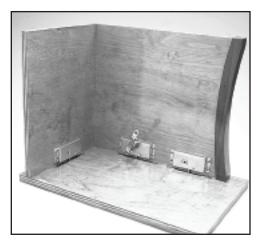


Fig. 1 A church pew section is shown here with surface mounted Type 1R Latches and flush mounted Type 2 RSL Receivers. These quick operating Latches facilitate attachment and removal of the seats for maintenance or recreational use of the floor area.

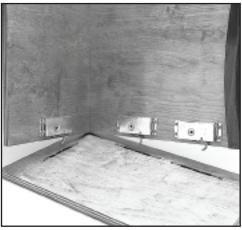
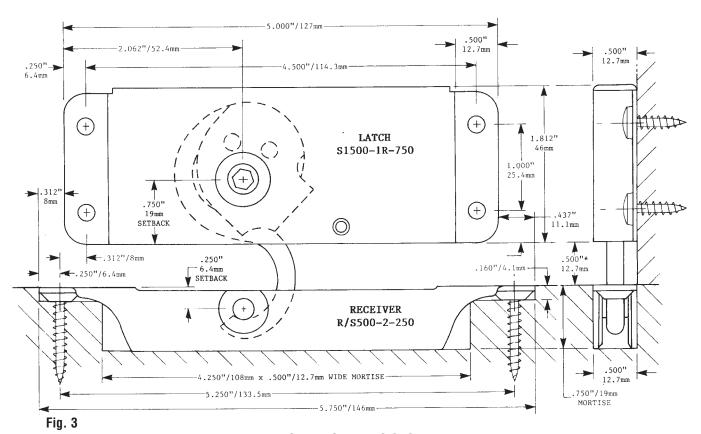


Fig. 2 The church pew section is shown being removed, leaving the floor unobstructed.



MOUNTING DIMENSIONS

Receiver is flush mounted.

Latch: S1500-1R-750 - **Receiver:** R/S500-2-250

^{*}This mounting dimension (.500"/12.7mm), is used where ideal conditions permit, and will result in optimum clamping force. Where uneven flooring or other conditions prevail, this dimension should be reduced.

SURFACE MOUNTED TYPE 1 LATCH - 90° ATTACHMENT TO A FLUSH MOUNTED TYPE 2 RSL RECEIVER

For Sliding, Folding or Hinged Doors. Also Panels Attached at 90° to a Floor or Wall



Fig. 1 Type 1R Latch Surface Mounted at 90° to a Flush Mounted Type 2 **RSL** Receiver

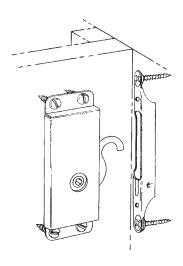
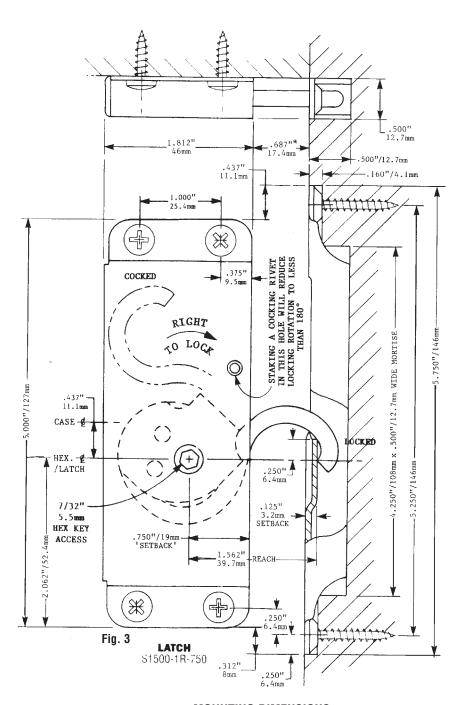


Fig. 2 Typical Mounting/Doors: Sliding, Folding or Hinged Handles Available See TDS 37-10A & 37-10B



MOUNTING DIMENSIONS

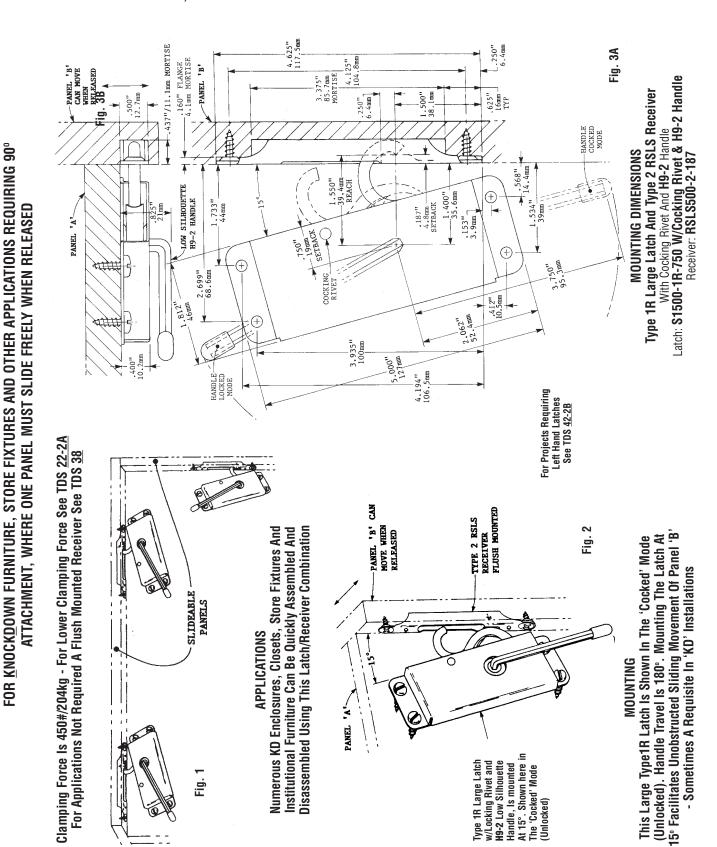
Receiver is flush mounted. Latch: S1500-1R-750 - Receiver: RSL500-2-125

^{*}This mounting dimension (.687"/17.4mm), will result in optimal clamping force; if less claping force is desired, reduce this dimension. Type 1L (Left Hand) can also be used. Small Type 1 Latches are also available

Type 1R Large Latch and Type 2 RSLS Shallow Receiver

TYPE 1R LARGE LATCH AND TYPE 2 RSLS SHALLOW RECEIVER

FOR KNOCKDOWN FURNITURE, STORE FIXTURES AND OTHER APPLICATIONS REQUIRING 90° ATTACHMENT, WHERE ONE PANEL MUST SLIDE FREELY WHEN RELEASED



FOR KNOCKDOWN FURNITURE, STORE FIXTURES AND OTHER APPLICATIONS REQUIRING 90°

MOUNTING THE LATCH AT 15° ALLOWS UNOBSTRUCTED MOVEMENT OF PANEL 'B' WHEN THE LATCH IS COCKED

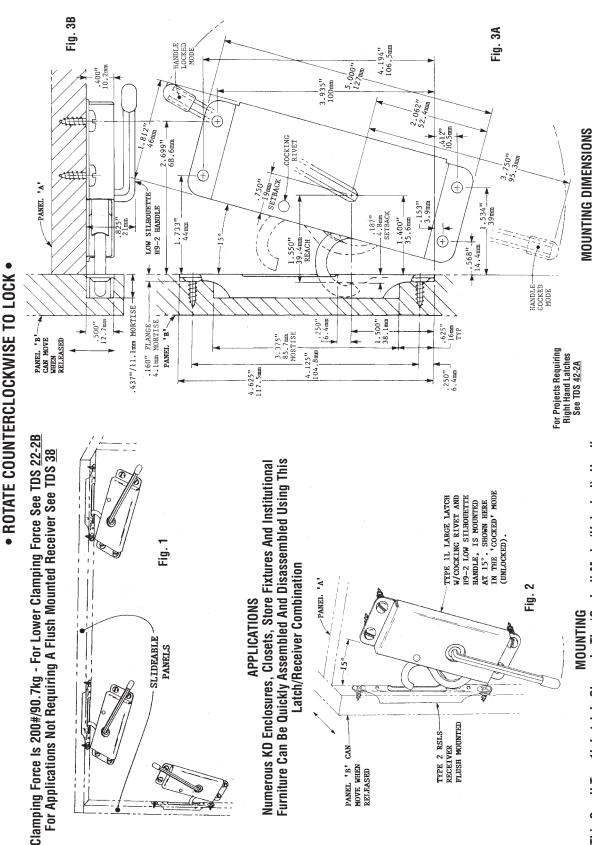
ATTACHMENT, WHERE ONE PANEL MUST SLIDE FREELY WHEN RELEASED

Type 1R Large Latch and Type 2 RSLS Shallow Receiver

With Cocking Rivet And H9-2 Handle Latch: S1125-1L-562 W/Cocking Rivet & H9-2 Handle Receiver: RSLS500-2-187

Type 1R Large Latch And Type 2 RSLS Receiver

FOR KNOCKDOWN FURNITURE, STORE FIXTURES AND OTHER APPLICATIONS REQUIRING 90° ATTACHMENT, WHERE ONE PANEL MUST SLIDE FREELY WHEN RELEASED



This Small Type1L Latch Is Shown In The 'Cocked' Mode (Unlocked). Handle Travel Is 180°. Mounting The Latch At 15° Facilitates Unobstructed Sliding Movement Of Panel 'B' - Sometimes A Requisite In 'KD' Installations

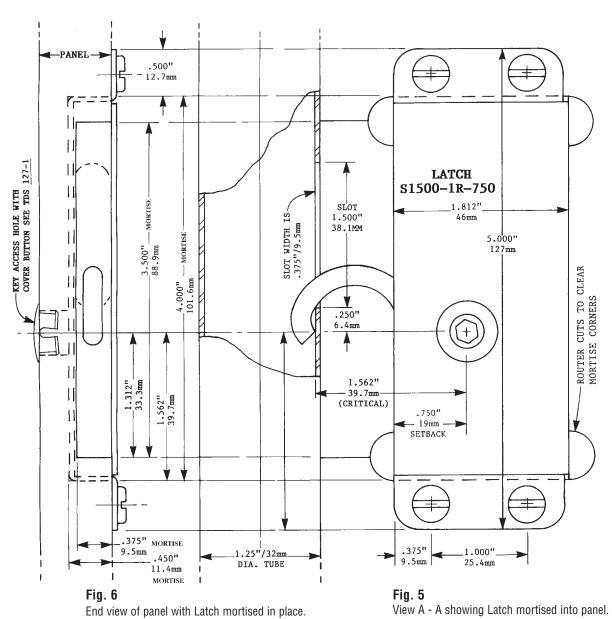
Illustrated on these two pages is one of several methods of fabricating a triangular kiosk, accent column or other structure using Norse Type 1 Latches (left & right hand), and slots cut into metal tubes as Receivers. Obviously, rectangular, pentagonal and other shapes can also be formed.



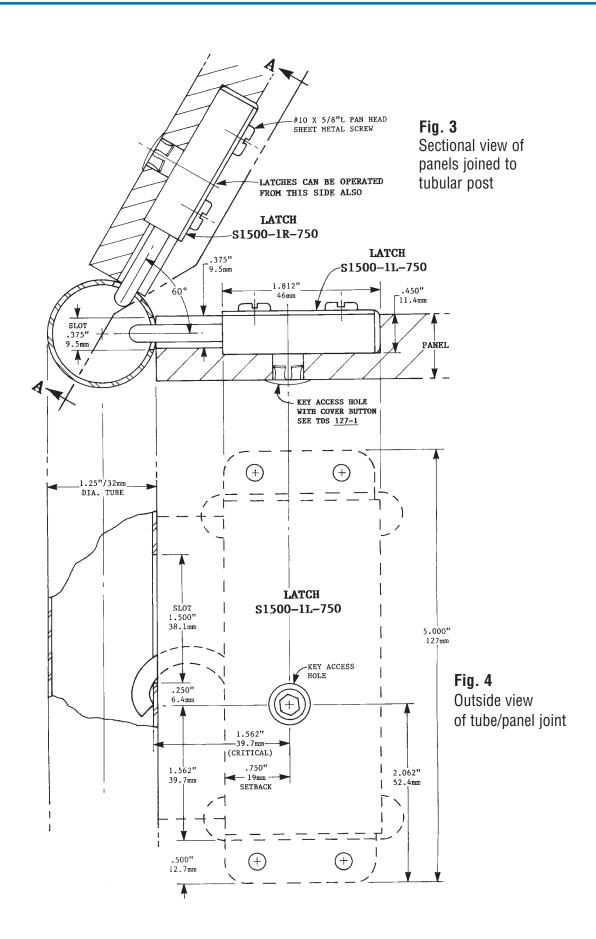
Fig. 1 Triangular structure of panels and metal tubes using Type 1 Latches and tubing slots as Receivers.



Fig. 2 Type 1 Latch and tube joint enlarged.







TYPE 1 AND TYPE 2 LARGE LATCHES

TDS 44-1 **V2-1106**

Norse Type 1 and Type 2 Latches are shown here as they are used for sectional flooring, platforms, counters, tables etc. These Norse latches can be operated from both sides, facilitating access through deck panels.

- Permanent handles are available if required.
- Permanent joint tightness is assured by the powerful spring hook.
 - A catalog and Technical data Sheets are available.

TYPE 1 LATCHES ARE SHOWN MOUNTED BENEATH DECK, TABLE OR COUNTER PANELS



Fig. 1 The Type 1 Latch & Receiver reversed dimples, mortised flush beneath panels. See TDS 44-2

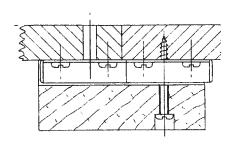


Fig. 2 Type 1 Latch & Receiver mounted beneath decking with mortised framing attached to one panel. See TDS 44-3



Fig. 3 Type 1 Latch & Receiver surface mounted beneath counter panels **See TDS 36-4**

TYPE 2 LATCHES ARE SHOWN MORTISED IN PLACE, MOUNTED IN METAL FRAMEWORK, AND JOINING SHEET METAL COMPONENTS

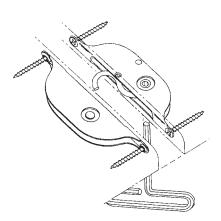


Fig. 4 Type 2 Latch & Receiver mortised into wooden panels See TDS 89



Fig. 5 Type 2 Latches are used with a variety of metal framed panels. See TDS 96-1



Fig. 6 Type 2 Latches are readily mounted in sheet metal components. See TDS 92-1

SHOWN HERE RECESSED FLUSH BENEATH SECTIONAL FLOORING LATCHES ARE OPERATED WITH A HEX KEY THRU THE FLOOR

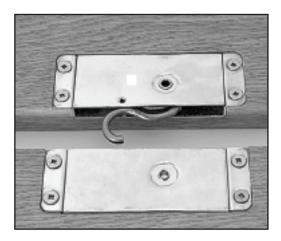


Fig.1 The Type 1R Latch and Receiver are shown in the unlocked condition, flush mounted underneath the flooring.

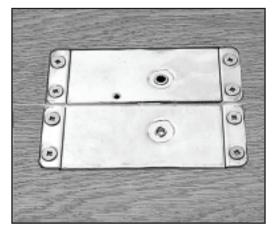
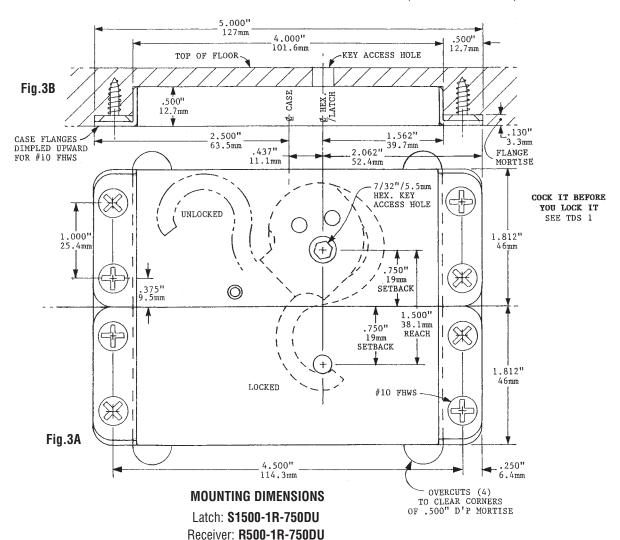
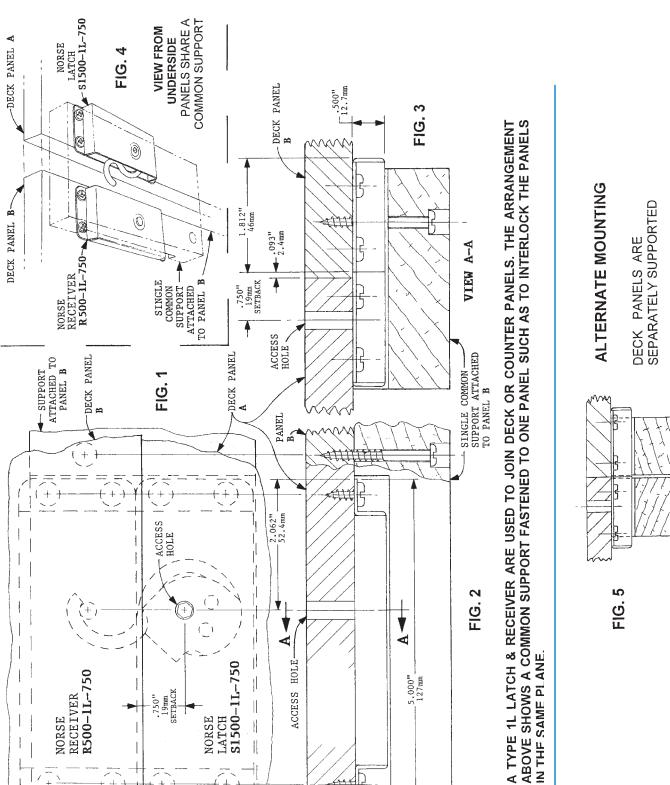


Fig. 2 The Type 1R Latch and Receiver are shown in the locked mode. The operating key access is down thru the floor.

LATCH AND RECEIVER CASE FLANGES ARE DIMPLED UPWARD TO ACCEPT #10 FHWS THE 'DU' IN THE PART NUMBER DENOTES 'DIMPLED UPWARD' (i.e.: \$1500-1R-750DU)



NORSE TYPE 1 LATCHES ARE SHOWN HERE AS THEY ARE USED FOR SECTIONAL FLOORING, PLATFORMS, COUNTERS, ETC. THESE NORSE LATCHES CAN BE OPERATED FROM BOTH SIDES, FACILITATING ACCESS THROUGH DECK PANELS. PERMANENT JOINT TIGHTNESS IS ASSURED BY THE POWERFUL SPRING HOOK. TECHNICAL DATA SHEETS ARE AVAILABLE.

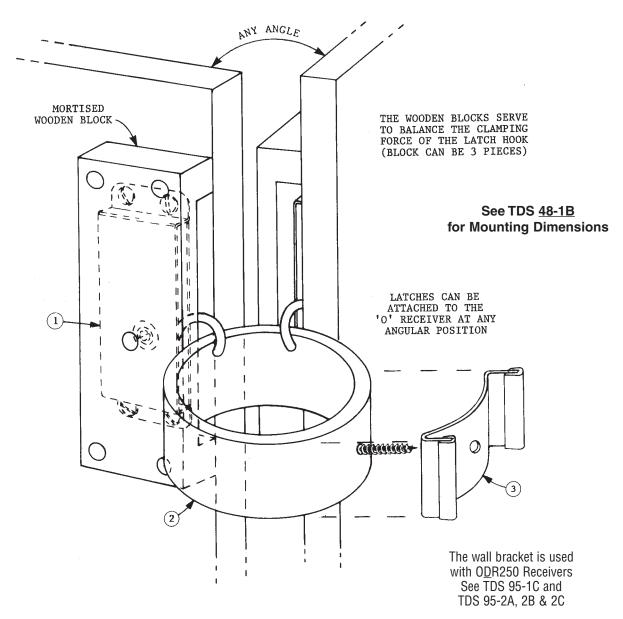


TYPE 1 LATCH AND THE LARGE 'O' RECEIVER

TDS 48-1A V2-1106

JOINING SEVERAL PANELS, FREE STANDING, OR TO A WALL AT VARIABLE ANGLES IS EASILY ACCOMPLISHED BY USING NORSE SURFACE MOUNTED TYPE 1 LATCHES NO PANEL MORTISING IS NECESSARY

> Type 1R (right hand-shown), or Type 1L (left hand), can be used Type 2 or Type 3 Latches can also be used – See TDS 95 Used for Exhibits, Store Fixtures, Museum dispalys, sheilds, Etc.



PART NUMBERS

" I ATCH: **\$1500-1R-750** (RIGHT HAND)

S1500-1L-750 CAN ALSO BE USED

RECEIVER: **0DR250-4.5** (SHOWN), OR OR250-4.5

ANY OR250 RECEIVER CAN BE USED

Æ BRACKET: BRLOR-1 FOR WALL ATTACHMENT - SEE TDS 48-2 FOR MOUNTING DIMENSIONS -

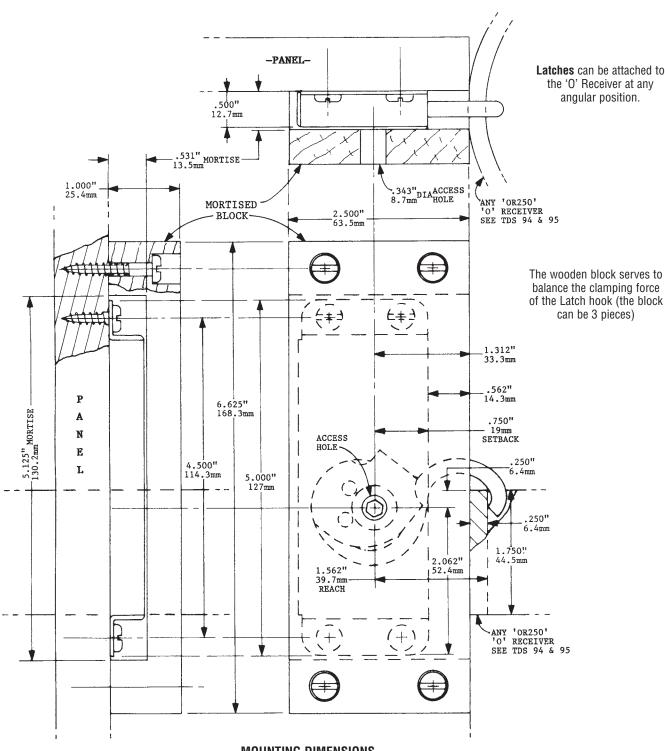
TYPE 1 LATCH SURFACE MOUNTING DETAILS WHEN USED WITH 'O' RECEIVERS

TDS 48-1B2 V3-0308

SHOWN HERE IS A TYPE 1 RIGHT-HAND LATCH SURFACE MOUNTED TO A PANEL, WHICH IS ATTACHED AT ANY VARIABLE ANGLE WITH OTHER PANELS (NOT SHOWN), TO AN 'O' RECEIVER. FABRICATION IS SIMPLE AND EASILY ACCOMPLISHED.

• NO PANEL MORTISING IS NECESSARY •

Type 2 or Type 3 Latches can also be used – see TDS 95.



MOUNTING DIMENSIONS LATCH: **\$1500-1R-750**

\$1500-1L-750 CAN ALSO BE USED RECEIVER: ANY OR250- OR ODR250-



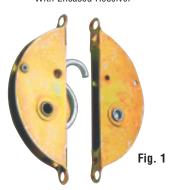
The Thin One

The Type 2 Latches Are Available in Two Sizes, Small and Large

Type 2S Small Latches

The Very Thin One

Flange-to-Flange With Encased Receiver



Latch Receiver S1125-2S-562 R375-2S-562 Variable 'Setbacks'* Stocked (See TDS 61 & 62)

Flange-to-Flange With Short 'R/S' Receiver



Latch Receiver S1125-2S-875 R/S375-2S-250 Receiver Case Shortened (See TDS 65)

Flange-to-Flange With Short 'RSL' Receiver



Latch Receiver S1125-2S-1.062 RSL375-2S-125 Very Short Slot Receiver (See TDS 66)

Reverse Flange With Encased Receiver Fig. 4

Latch Receiver S1125-2SR-687 R375-2S-687 Reverse Mounted Spring Hook (See TDS 64)

Flange-to-Flange With Encased Receiver



Latch Receiver R500-2-750 S1500-2-750 Variable 'Setbacks'* Stocked (See TDS 81 & 89)

Flange-to-Flange With Short 'R/S' Receiver



Latch Receiver S1250-2-1.000 R/S500-2-250 Receiver Case Shortened (See TDS 81 & 91)

Flange-to-Flange With Short 'RSL' Receiver



Latch Receiver RSL500-2-187 S1250-2-1.125 Very Short Slot Receiver (See TDS 81 & 93)

Fig. 7

Reverse Flange With Encased Receiver



Latch Receiver S1500-2R-625 R500-2-875 Reverse Mounted Spring Hook (See TDS 81 & 84)

Material: Steel/Zinc Plated/Yellow Chromated Clamping Force: 450#/204kg For further details and applications of the Type 2 Large Latches See TDS 81 Thru 105

Fig. 6

Important Features of The Type 2 Latches

- 2 Sizes of Type 2 Latches Are Available.
- Variable 'Setbacks'* are Stocked to Accommodate a Wide Range of Applications.
- The 'D' Shaped Case Facilitates Shaper Mortising.
- Type 2 Latches Are Spring Loaded to Hold Components Tight, Resist Vibration and Compensate For Fabrication Tolerances.
- Short Receiver Cases Are Available To Fabricate Corner and 'T' Joints in Very Thin Material.
- Numerous Special Receivers Mate With Type 2 Latches.
- 2 Spring Sizes Can Be Used In Large Type 2 Latches.
- · Latch/Receiver Combinations Facilitate Inverting Adjoining Panels.

^{*} The 'Setback' is the location of the key access hole from the mounting flange face of the Latch case, or of the Receiver pin from the mounting flange face of the Receiver Case.



Fig. 9 The 'Taco' shape of the Type 2 Latches is designed to fit a straight-in/straight-out shaper cut for mortising expediency as seen in the cut away photos above. (See TDS 62)



Fig. 10 Type 2 Small Latches can be mortised in place to join table and counter tops and other panels as seen above. (See TDS 62)





Fig. 11A, 11B Thin panels are shown here connected at butt and corner joints using Type 2 Latches and Receivers and the very shallow 'RSL' Receivers. Mortise does not break through the panel ('blind' mortise). (See TDS 62 & 66)





Fig. 12A, 12B The Type 2S Latch is shown here in a door with handles and escutcheon plates using a slot in the frame as a Receiver. (See TDS 69 & 63)



Fig. 13 This cut-away view clearly illustrates the Type 2S Small Latch mounted on a metal style and how it attaches to a slot in the frame. (See TDS 69)





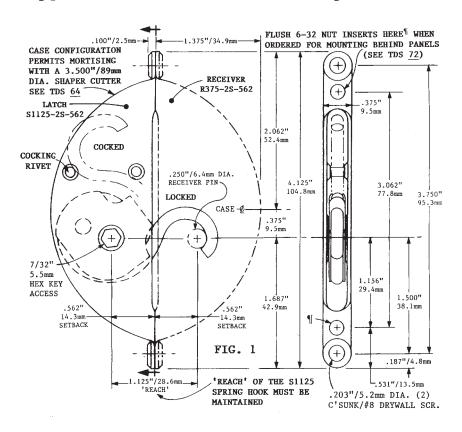
Fig. 14A, 14B Here the Type 2S Small Latch w/handle and escutcheon plate is mounted in a wooden door member using a 'R/S' Receiver flush mounted in adjacent member. (See TDS 65 & 63)



Fig. 15 This cut-away view shows a Type 2S Small mounted on a frame member. (See TDS 70)



Type 2S Small Latch - The Very Thin Ones



Typical Example of a Matched Type 2S Small Latch and Receiver

Latch: S1125-2S-562 **Receiver**: R375-2S-562

Note that the 'Setback'* dimensions of the Latch and Receiver add up to the 'reach' of the Latch Hook.

(.562"/14.3mm + .562"/14.3mm = 1.125"/28.6mm)

(See TDS 62-9)

* The 'Setback' is the location of the key access hole from the mounting flange of the Latch case, or of the Receiver pin from the mounting flange face of the Receiver case.

The Full Array of Latch and Receiver Cases Displaying All of the 'Setbacks'* are Shown on the Following TDS 61-4.

• The Variable 'Setbacks'*, Thin Cases, and Numerous Compatible Receivers Impart Great Versatility To The Type 2S Small Latches.





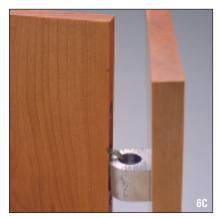


Fig. 6A, 6B, 6C For infinitely variable angled assemblies Type 2S Small Latches mounted in thin panels are joined here to 'O' and 'OD' Receivers in free standing and wall couplings. two, three, or more elements can be so connected. (See TDS 74)

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Fig. 4 The Type 2SR (Reverse Flange) is mounted on a metal member and uses a 'U' Receiver for attachment. (See

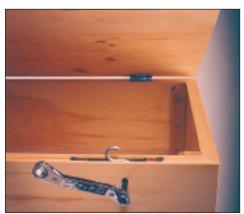


Fig. 5A A Type 2S Small Latch is mortised in place on a box face using a flush mounted Type 2S 'RSL' Receiver; a Norse ratchet wrench is used here to operate the latch. All fastener elements retract completely. (See TDS 66)



Fig. 5B This view of the closed box (Fig 5A) illustrates the excellent aesthetics effected with the Norse Fasteners. Tamper resistance and fastener protection is also accomplished.

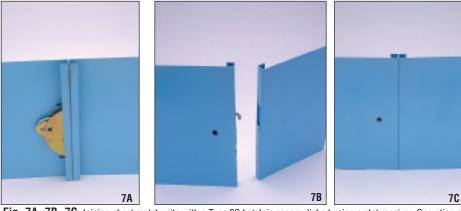


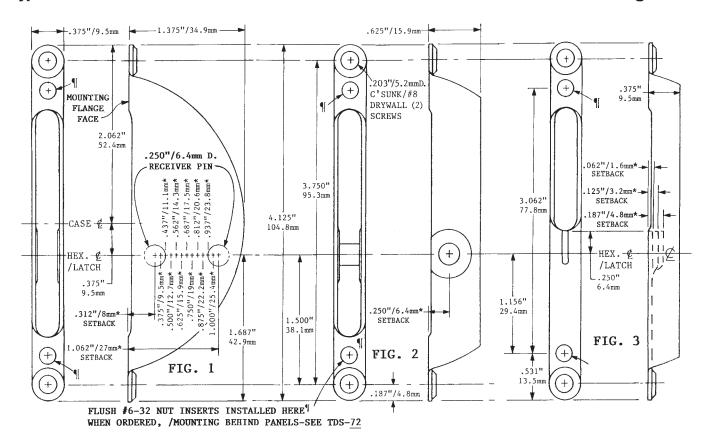
Fig. 7A, 7B, 7C Joining sheet metal units with a Type 2S Latch is accomplished using a slot receiver. Operation of the Latch can be done via an access hole as shown, or from the rear. (See TDS 72)



Fig. 8 Here is shown a flush mounted Type 2S 'RSL' Receiver for attachment of a small Type 1 Latch to illustrate the versatility thru the complementary interchangeability of the Norse Latches and Receivers. (See TDS 22)



Type 2S Small Receivers are shown here with the 'Setback'* Variations and different case configurations



TYPE 2 SMALL RECEIVERS Showing Variable 'Setbacks'

Receivers: R375-2S-312 Thru R375-2S-1.062 'Setbacks'* (Receiver Pin Locations) are stocked from .312"/8mm to 1.062"/27mm in .062"/1.6mm Increments (See Fig. 2E-Q on TDSs <u>61-4A</u> & <u>4B</u>)

TYPE 2 SMALL RECEIVERS - Short -

Receiver: R/S375-2S-250
This Receiver has a short case
.625"/15.9mm and one 'Setback'* .250"/6.4mm
(See Fig. 2D on TDSs 61-4A & 4B)

TYPE 2 SMALL RSL RECEIVERS

Receivers: RSL375-2S-062 and RSL375-2S-125 and RSL375-2S-187 RSL units use the slot edge to receive the spring hook (See Figs. 2A, B & C on TDS <u>61-4A</u>)

THE FULL ARRAY OF LATCH AND RECEIVER CASES DISPLAYING ALL OF THE 'SETBACKS' IS SHOWN ON FOLLOWING TDS 61-4

* The Setback is the location of the key access hole from the mounting flange face of the Latch case, or of the Receiver pin from the mounting flange face of the Receiver case.







Fig. 9A, 9B, 9C In this metal box closure application the Type 2S Small Latch with handle is used with a slot Receiver. The excellent aesthetics and function are obvious. (See TDSs 63 & 72)



Fig. 10 A Type 2S Small Latch and a 'J' Receiver are used here to hold down a shroud on medical or other equipment. Lever operated from underneath; usually two Latches are used. (See TDS 67)





Fig. 5 Colorable cover buttons and cover plates conceal and decorate key access holes and unused Type 2S Small Latches and Receivers. (See TDS 66, 127, & 128)





Fig. 6A, 6B Joining tubular framed thin paneling at butt, 'T', corner and 4-way posts is easily accomplished. (See TDS 76)

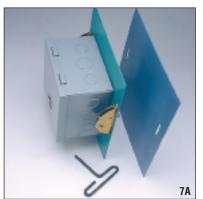




Fig. 7A, 7B The Type 2S Small Latches are used here with slot Receivers illustrating a quick attachment/release application for electrical or other equipment. (See TDS 69)



Fig. 8 The Type 2S Small Latches can be 'ganged' on a common operating shaft (length as required). (See TDS 68)



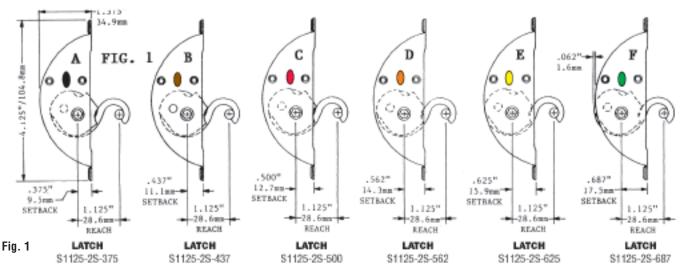




 $\textbf{Fig. 11A, 11B, 11C} \ \ \textbf{The Type 2S Small Latch with handle is used here to attach a hood to a chassis frame using a slot as a Receiver. (See TDS <math>\underline{72}$)}

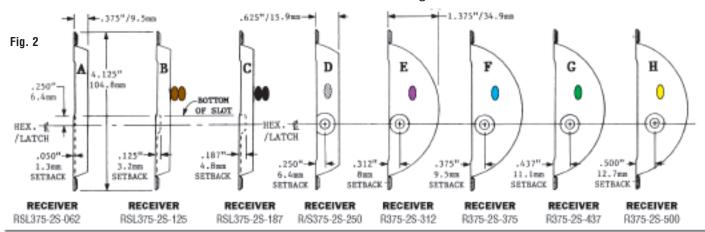


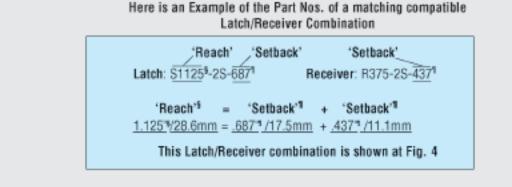
The Type 2S Small Latches are Shown Here With 12 Setback Variations The Type 2S Small Receivers are Shown With the Variations of 'Setback' Locations and Case Configurations



The 'Setback' Can Vary, The 'Reach' Must be Maintained

• These Are Color Correlated With The Matching Latches Shown Above •





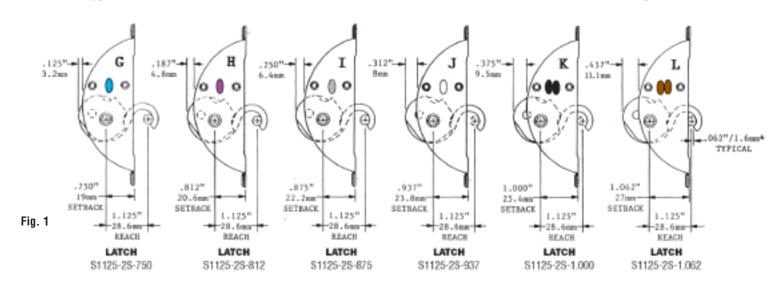
To Further Assist You in Selecting Compatible Latch/Receiver Combinations, We Have Color Coded the Latches and Correlated Them By Color With Dimensionally Mated Receivers When Used Flange-To-Flange.

8

^{*}The 'Setback' is the Location of the Key Access Hole From the Mounting Flange Face of the Latch Case, or of the Receiver Pin from the Mounting Flange of the Receiver Case.

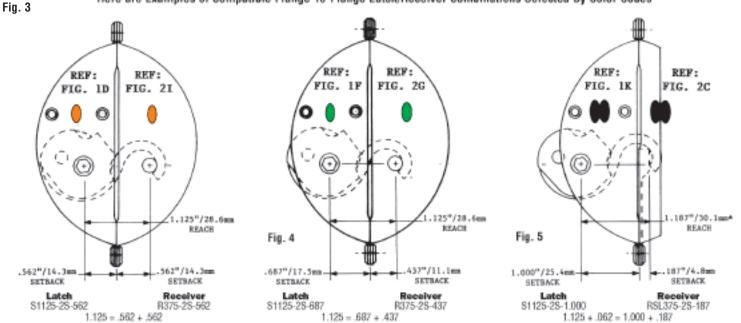


The Type 2S Small Latches are Shown Here With 12 Setback Variations The Type 2S Small Receivers are Shown With the Variations of 'Setback' Locations and Case Configurations



The 'Setback' Can Vary, The 'Reach' Must be Maintained Fig. 2 • These Are Color Correlated With The Matching Latches Shown Above • M N P Q 0 J Ι ĸ L (1) 1 0 0 0 625" 6871 812 937 1.000 .062 .562 19mm SETBACK 23.8mm 25.4mm 27mm 15.9mm 17.5mm 20.6mm 22.2mm 14.3mm SETBACK 1 SETBACK B SETBACK SETBACK SETBACK SETBACK: SETBACK RECEIVER RECEIVER RECEIVER RECEIVER RECEIVER RECEIVER RECEIVER RECEIVER R375-2S-562 R375-2S-625 R375-2S-687 R375-2S-750 R375-2S-812 R375-2S-875 R375-2S-937 R375-2S-1.000 R375-2S-1.062

Here are Examples of Compatible Flange-To-Flange Latch/Receiver Combinations Selected By Color Codes





TYPE 2S SMALL LATCH AND TYPE 2S SMALL RECEIVER

THE VERY THIN ONE - .375"/9.5mm

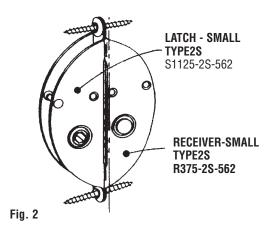
FOR PARTITIONS, EXHIBITS, WINDOWS, HINGED AND SLIDING DOORS SCREENS, DISPLAYS, CASES, MODULAR ASSEMBLIES, SCENERY, ETC.

Fig. 1

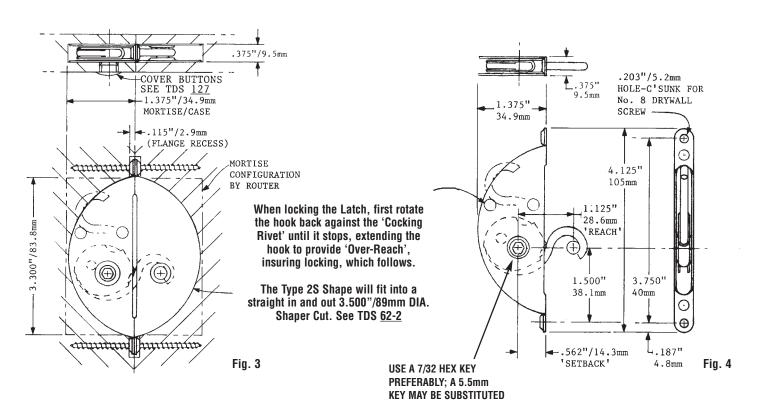


TYPICAL APPLICATION **JOINING VERY THIN PANELS**

Various Panels, Doors, Screens, Framing, etc. Can Be Joined With The Type 2S Small Latch



MOUNTING Mortised in Place



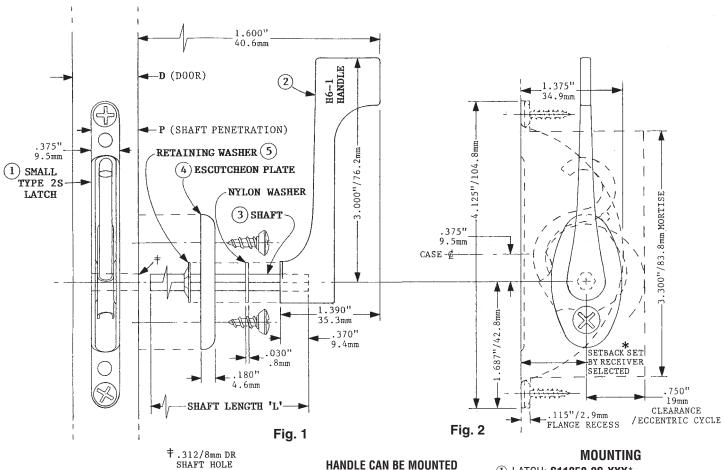
MOUNTING AND RECESS DIMENSIONS Type 2S Small Latch & Receiver \$1125-2\$-562 & R375-2\$-562

SMALL TYPE 2S LATCH DIMENSIONS Type 2S Latch: \$1125-2\$-562 **Receiver Case Dimensions are identical**

SHOWN HERE IS A SINGLE HANDLE MOUNTING (OPERABLE FROM ONE SIDE ONLY) WITH A SMALL TYPE 2S LATCH MORTISED INTO THE DOOR

These illustrations show components and mounting dimensions

For Dual Handles See: TDS 63-10B



ON OPPOSITE SIDE

CALCULATING SHAFT LENGTH - SINGLE HANDLE ASSUMING LATCH IS CENTERED IN DOOR

$${}^{'}\mathbf{P'} = {}^{'}\underline{\mathbf{D'}} (D00R) + .375"$$
 (OR MEASURE ${}^{'}\mathbf{P'}$)
$$\frac{2}{2}$$
PENETRATION = ${}^{'}\mathbf{P'}$
ESCUTCHEON PLATE = .180"
NYLON WASHER = .030"
HANDLE RECESS = $\underline{.370"}$
SHAFT LENGTH = ${}^{'}\mathbf{P'}$ + $\underline{-.580"}$ */14/7mm

EXAMPLE: If Door ('**D**') is 1.250"/31.8mm Thick Then '**P**' = $(1.250" + .375") \div 2 = .812" + .580"*$

SHAFT LENGTH IS = 1.392"/35.4mm

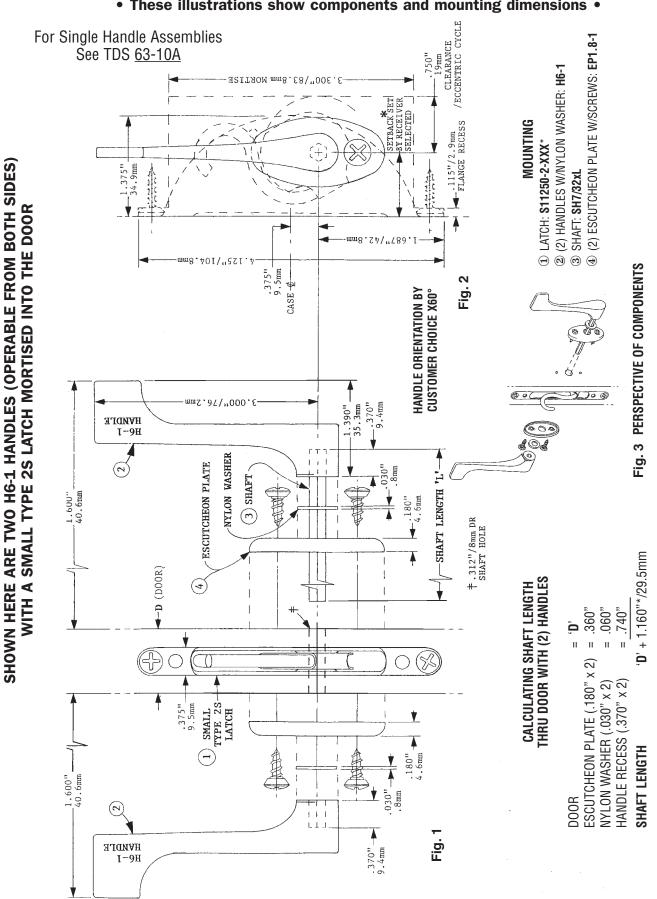
- ① LATCH: **\$11250-2\$-XXX***
- 2 HANDLE W/NYLON WASHER: H6-1
- ③ SHAFT: SH7/32xL
- **4** ESCUTCHEON PLATE W/SCREWS: **EP1.8-1**
- 5 RETAINING WASHER: RW7/32-1



Fig. 3 PERSPECTIVE OF COMPONENTS

FOR DOOR APPLICATIONS WITH HANDLES ON BOTH SIDES

These illustrations show components and mounting dimensions



Then **SHAFT LENGTH IS** = 1.500" + 1.160"* = 2.660"/67.6mm **EXAMPLE**: If Door ('D') is 1.500"/38.1mm Thick

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TYPE 2S SMALL LATCH S1125-2S-875 **& TYPE 2 S SHORT RECEIVER** R/S375-2S-250

TDS 65-1 V2-1106

VERY THIN LATCHES AND RECEIVERS (3.75'/9.5MM) FOR THIN PANELED EXHIBITS, STORE FIXTURES AND DOORS THE SHORT R/S RECEIVER REQUIRES A MORTISE DEPTH OF ONLY .625'/16MM)

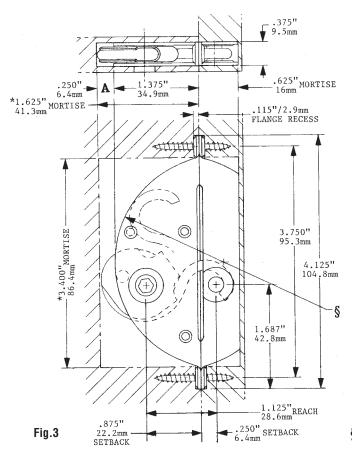


USED ON: EXHIBITS STORE FIXTURES, OFFICE PANELS, DOORS, HOODS, CLOSETS, BOXES. **INSTRUMENT CASES,** STUDENT CARRELS, CHANGING ROOMS, COUNTERS, ETC.



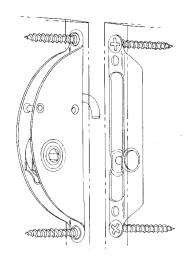
Fig. 2 For Applicatinos Requiring Handles See TDS 63

Fig. 1 Type Type 2S Small Latch and Short Receiver can be used for In-Line Butt Joints and also for Blind Mortised Corner and 'T' Joints in Thin Panels



MOUNTING DIMENSIONS LATCH: **\$1125-2\$-875**

RECEIVER: R/S375-2S-250



MOUNTING Fig. 4 LATCH: **\$1125-2\$-875** RECEIVER: R/S375-2S-250

The variable 'Setback' feature of the Norse Type 2 Latches and Receivers provides Latch/Receiver combinations to facilitate installations where Flange-to-Flange Mounting is not possible, such as in metal framing and other unique applications Latches and Receivers are stocked with 'Stebacks' from .062"/1.6mm to 1.062"/27mm in increments of .062"

The Type 2S Latch Case will fit into a straight-in straight-out 3.500"/89mm DIA. Shaper Cut in shallow depth framing. (This does not provide clearance needed at 'A' in panels with solid deep framing)

* Router Cut Mortise Dimensions

THIS SHALLOW RECEIVER CAN BE MOUNTED FLUSH AND BLIND IN **VERY THIN PANELS. RECEIVER DEPTH IS ONLY 3/8"(9.5mm)**



Fig. 1 Here is a typical assembly of thin panels comprising both butt and corner joints. Note that the corner joint is made 'blind' (without penetration.)

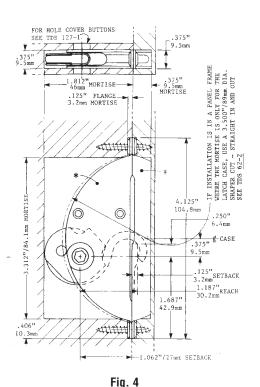


Fig. 2 The mounting of the Type 2S Small Latches and Type 2S RSL shallow Receivers is shown here as they are in the thin panels of Fig. 1.



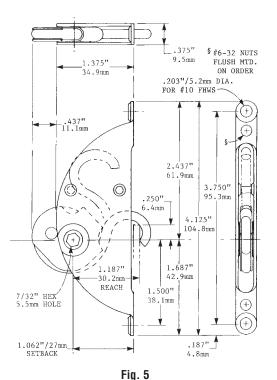
Fig. 3 Illustrated above is a 4-way post assembly again using the Type 2S Latches and the very shallow Type 2S RSL Receivers.

Type 2S Small Latches are 3/8"/9.5mm wide (thick), for fabrications using thin panels. The Type 2S RSL Receivers shown here facilitate 'T' and corner joints in these thin panels.

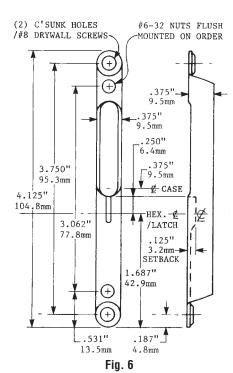


PANEL MOUNTING DIMENSIONS

Type 2S Latch & Type 2 RSL Receiver * S1125-2S-1.062 & RSL375-2S-125



TYPE 2S SMALL LATCH DIMENSIONS S1125-2S-1.062



TYPE 2S RSL RECEIVER DIMENSIONS

RSL375-2S-125

THIS SHALLOW RECEIVER CAN BE MOUNTED FLUSH AND BLIND IN THIN PANELS. RECEIVER DEPTH IS ONLY 7/16" (11.1mm)



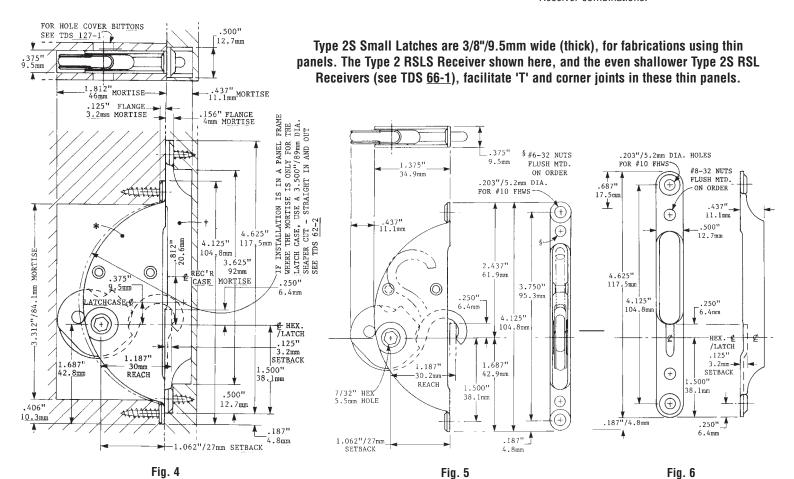
Fig. 1 Type 2S Latches and Type 2 RSLS Receivers are shown here mounted in thin panels at in-line butt joints and corner connections.



Fig. 2 Here, a Type 2S Small Latch is mortised into a box face and a Type 2 RSLS Receiver is flush mounted in the box cover.



Fig. 3 A 'T' joint is fabricated here, using a flush mounted Type 2 RSLS Receiver and a Small Type 1R Latch, illustrating the compatibility of the different Norse Latch/Receiver combinations.



PANEL MOUNTING DIMENSIONS
Type 2S Latch & Type 2 RSLS Receiver
* S1125-2S-1.062 & RSLS500-2-125

TYPE 2S SMALL LATCH DIMENSIONS S1125-2S-1.062

TYPE 2 RSLS RECEIVER DIMENSIONS RSLS500-2-125



ILLUSTRATING HOW THE LATCH/RECEIVER SEPARATION FOR GASKETING OR OTHER MATERIAL IS ACCOMMODATED BY CHOOSING THE PROPER 'SETBACKS'



Fig. 1 Typical installation in a box. Gasketing is not shown.

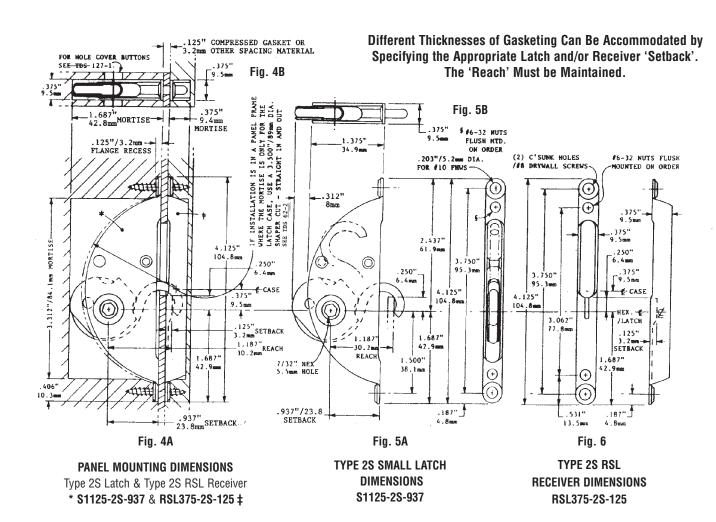


Fig. 2 Here, gasketing has been installed. The Latch operates through a slit.



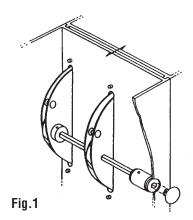
Fig. 3 The closed box shows only a hole for access to the Latch.

CONCEALED • AESTHETIC • TAMPERPROOF • PROTECTED The Spring Hook Assures A Tight Joint



SOME APPLICATIONS REQUIRE WIDESPREAD, TWO-POINT, SIMULTANEOUSLY OPERATED ATTACHMENT OF PANELING OR ELECTRICAL ENCLOSURES, ETC.

With the Norse Fastener System This is Quite Feasible and Several Methods are Available to Accomplish it.



Any Norse Latch/Receiver Combination Can Be 'Ganged'

For Shafts, Bearings, Couplings, Etc. See TDS 154 which follows.

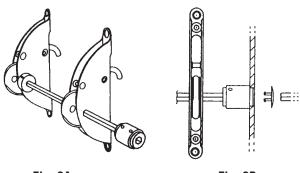


Fig. 2A

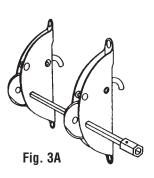
Fig. 2B

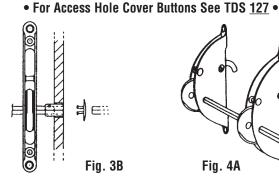
Ganged Latches-Shown Mounted & Assembled Within a Typical Wall Panel Frame

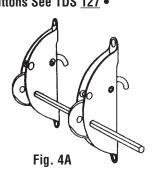
Mounted Apart and Operated Simultaneously from the Distant Access Hole, This Two-Point System Joins Wall Panels, Fastens Equipment, and Closes Electrical Cases. Key or Handle Operated. See TDS 68-2

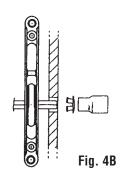
Ganged Latches-Where Access to the **Panel Interior Permits Assembly**

When the Shaft, Collars and Coupling can be Assembled Within the Enclosure, this is a Preferred Method. Key or Handle Operated. See TDS 68-2







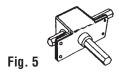


Ganged Latches-Assembled Where There is No Access to the Panel Interior

This Shaft is Inserted Thru the Access Hole After the Latches are Mounted. Key or Handle Operated. See TDS 68-3

Ganged Latches-Assembled Where There is no Access to the Panel Interior This Bare Shaft is Inserted Thru the Access Hole After the

Latches are Mounted, and Allows Close Proximity of the Latch to the Panel. Socket Operated. See TDS 68-4



A Norse Gear Box Can Be **Designed Into Your Project for** Latch Operation From a Remote 90° Position









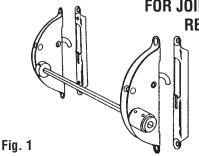




A Variety of Keys, Handles and Wrenches are Available for Latch Operation. See TDS <u>146-165</u> (Section 5)

We Have Shown on the Following Page Components That Can Be Used to Fabricate 'Ganged' and/or Remotely Operated Latch Assemblies

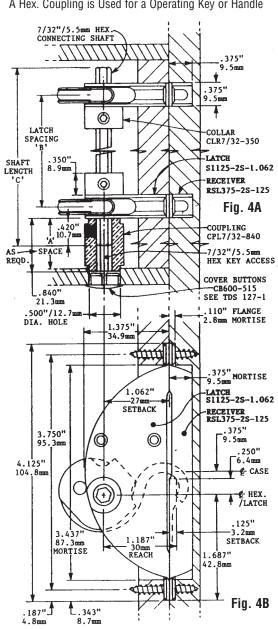
NORSE LATCHES CAN BE 'GANGED' AND REMOTELY OPERATED SIMULTANEOUSLY FOR JOINING VERY THICK PANELS, OR ON OTHER APPLICATIONS REQUIRING SPACED-APART TWO-POINT ATTACHMENT



Any Norse Latch/Receiver Combination can be 'Ganged'

'Ganged' Norse Type 2S Small Latches & RSL Receivers

Widely Spaced Latches Can Be Remotely Operated*. A Hex. Coupling is Used for a Operating Key or Handle

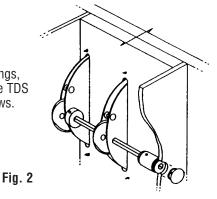


MOUNTING DIMENSIONS

Type 2S Small Latches & RSL Receivers \$1125-2\$-1.062 & R\$L375-2\$-125

the Shallow RSL Rec'rs. are Mounted in 'Blind' Mortises in a Thin Wall Panel

For Shafts, Bearings, Couplings, Etc. See TDS 154 which follows.



Panel Fabrication Utilizing 'Ganged' Latches

Latches, Collars, Coupling and Shaft are Assembled, Having Full Access to the Panel Interior

When Applications Require Ganged Latches to be Inserted and Assembled in a Enclosure Without Having Access to the Interior, See TDS 68-3 & 4

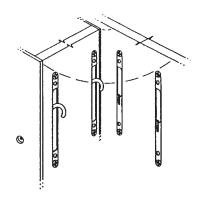


Fig. 3

Mounting 'Ganged' Latches and Receivers

Type 2S Small Ganged Latches and RSL Shallow Receivers are Face Mounted-Panel Shown Opened

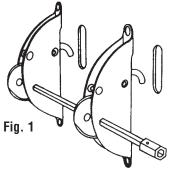
* Referring to Fig. 4A, Space 'A' Can Be Quite Extensive if Necessary. See TDS 68-1 for Alternative Coupling Methods; Some Eliminate this Coupling.

7/32"/5.5mm Hex. Connecting Shaft Lengths 'C' are Customer Specified to Accommodate their Particular Latch Separation Requirements

Additional Dimensions and Configuration Variations of Type 2S Small Latches and Receivers can be seen on TDS 61-1 Thru 4

> Channel Mounted Multilatches® are Shown in Section 7

NORSE LATCHES CAN BE GANGED AND REMOTELY OPERATED, PROVIDING WIDESPREAD ATTACHMENT OF PANELING OR ELECTRICAL AND EQUIPMENT ENCLOSURES



Any Norse Latch/Receiver Combination can be 'Ganged'

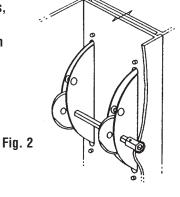
Shown Here and on TDS 68-4 are Methods of Inserting, Mounting and Assembling Ganged Latches Within an Enclosure, Without Having Access to the Interior

'Ganged' Type 2S Small Latches Using Slot Receivers Latches are Connected by a Common Shaft & Operated



See TDS 154 which follows.

For Shafts, Bearings, Couplings, Etc.

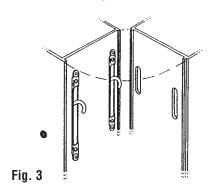


Panel Fabrication Utilizing 'Ganged' Latches

Without Having Access to the Panel Interior, the Latches are Inserted Thru Their Respective Slots. The Shaft With its Sleeve is Inserted Thru the Access Hole

PROCEDURE

The Latches are Inserted into Their Respective Slots and Fastened With 'Pop' Rivets or Screws. Prior To Finally Tightening the Latches in Place, the Shaft is Inserted Thru the Access Hole and Thru Both Latches, Making Certain the Latches are 'In Sync'

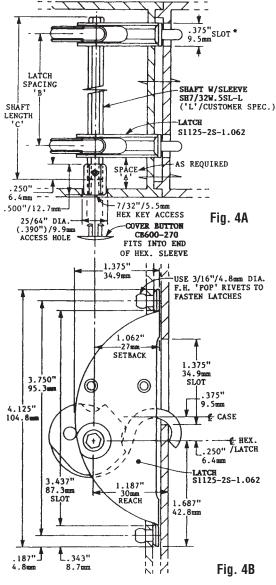


Mounting Ganged Latches

Type 2S Small Latches are Face Mounted to the Frame and Fastened with 'Pop' Rivets After the Shaft is Inserted Thru Them. Panel is Shown Opened.

When Preferred, Latches Can Be Completely Inserted Thru Their Respective Slots and Mounted Behind the Panel Framing Face. See TDS 64

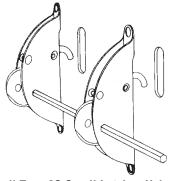
Channel Mounted Multilatches® are Shown In Section 7



MOUNTING DIMENSIONS Type2S Small Latches and Slot Receivers Latch: \$1125-2\$-1.062

Slots in the Attached Component are Used as Receivers

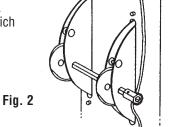
NORSE LATCHES CAN BE GANGED AND REMOTELY OPERATED, PROVIDING WIDESPREAD ATTACHMENT OF PANELING OR ELECTRICAL AND EQUIPMENT ENCLOSURES



Any Norse Latch/Receiver Combination can be 'Ganged'

Shown Here and on TDS 68-3 are Methods of Inserting, Mounting and Assembling Ganged Latches Within an Enclosure, Without Having Access to the Interior

For Shafts, Bearings, Couplings, Etc. See TDS 154 which follows.

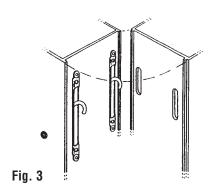


Panel Fabrication Utilizing 'Ganged' Latches

Without Having Access to the Panel Interior, the Latches are Inserted Thru Their Respective Slots. The Shaft With its Sleeve is Inserted Thru the Access Hole

PROCEDURE

The Latches are Inserted into Their Respective Slots and Fastened With 'Pop' Rivets or Screws. Prior To Finally Tightening the Latches in Place, the Shaft is Inserted Thru the Access Hole and Thru Both Latches, Making Certain the Latches are 'In Sync'



Mounting Ganged Latches

Type 2S Small Latches are Face Mounted to the Frame and Fastened with 'Pop' Rivets After the Shaft is Inserted Thru Them. Panel is Shown Opened.

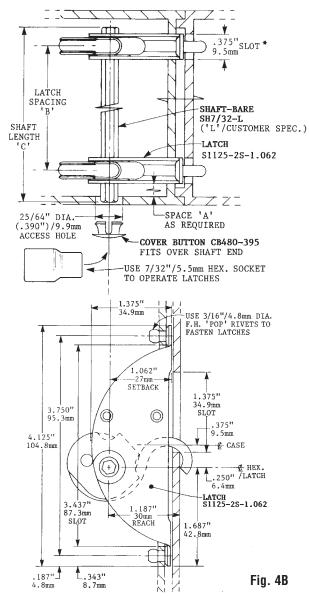
When Preferred, Latches Can Be Completely Inserted Thru Their Respective Slots and Mounted Behind the Panel Framing Face.

See TDS 64

Channel Mounted Multilatches® are Shown In Section 7

'Ganged' Type 2S Small Latches Using Slot Receivers

Latches are Connected by a Common Shaft & Operated Simultaneously by a7/32"/5.5mm Hex. Socket on the shaft end



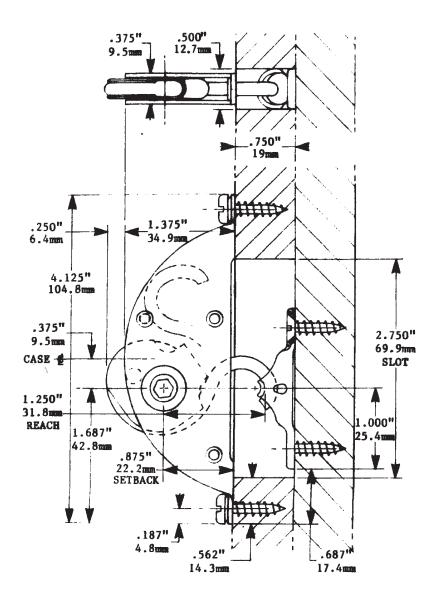
MOUNTING DIMENSIONS Type2S Small Latches and Slot Receivers Latch: \$1125-2\$-1.062

Slots in the Attached Component are Used as Receivers



TYPE 2S SMALL LATCH & 'U' RECEIVER SURFACE MOUNTED

FOR APPLICATIONS REQUIRING ONE PANEL TO BE JOINED TO ANOTHER WHERE BOTH ARE TO BE SURFACE MOUNTED



If the Latch Panel thickness varies from .750", choose a "setback" Latch dimension so as to maintain the "reach" (1.250") shown. Latches are available with setbacks from .375" to 1.062" in increments of .062". (See TDS 61-4A.)

MOUNTING DIMENSIONS

LATCH: S1125-2S-875 RECEIVER: UR500-500

AS SHOWN JOINING METAL COMPONENTS



Fig. 1 Latch mounting & slot Receiver



Fig. 2 Case closed, handle optional



Fig. 3 Internal view of mounting

Above, a Type 2S Small Latch in a metal case mounting uses a Slot Receiver.

• Aesthetics – Excellent • No Protrusions • Tamper Resistant • Sealed if Required •

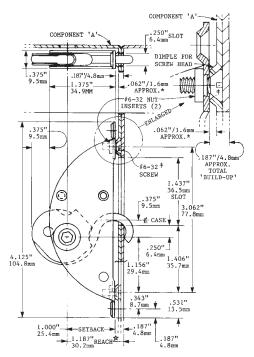
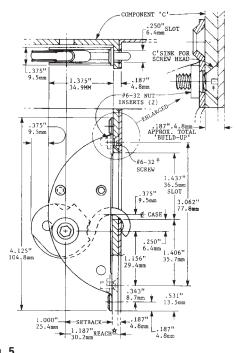


Fig. 4 MOUNTING DIMENSIONS LATCH: S1125-2S-1.000/6-32

MOUNTING DIMENSIONS THIN METAL CASE Latch: S1125-2S-1.000/6-32

The above illustrates how dimpling the hole in component 'A' to flush mount the screw head adds to the 'build-up', in this case .187"; therefore, the proper 'Setback' is 1.000".



Fia. 5

MOUNTING DIMENSIONS THICK METAL CASE Latch: \$1125-2\$-1.000/6-32

The thickness of component 'C' allows counter sinking to recess the screw head. This 'build-up' also is approx. .187"; again, a proper 'Setback' is 1.000".

When using a slot as a Receiver, the 'Reach'* of the S1125 Latch hook is 1.187"/30.2mm. Where the 'build-up' of the components being joined is approximately .187"/4.8mm as is shown in these applications, this dimension is subtracted from the 'Reach' to determine the 'Setback' of the Latch; i.e.: 1.187" - .187" = 1.000", which is the 'Setback.' This results in a Latch part no.: S1125-2S-1.000.

To order factory installed nut inserts, add '/6-32' to the part no.; i.e.: S1125-2S-1.000/6-32. Other applications using Slot Receivers having different 'build-ups' necessitate selecting appropriate 'Setbacks' to maintain the Spring Hook 'Reach'.

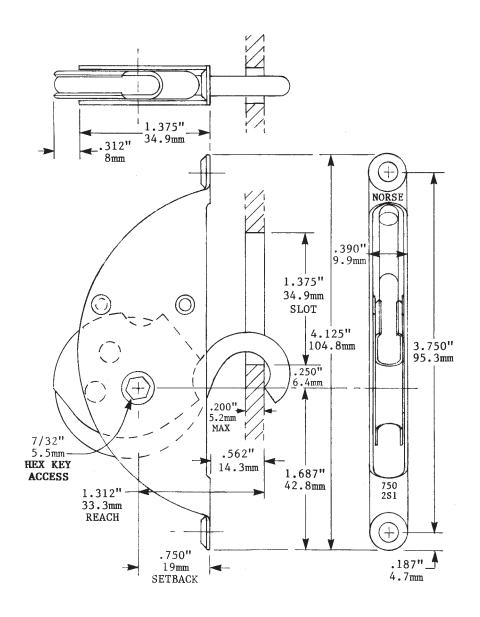
For additional information and dimensions on the Type 2S Small Latches see TDS 61-3A & 4A.



FOR APPLICATIONS REQUIRING HIGHER CLAMPING FORCE THAN THE S1125 SPRING HOOK ASSEMBLY THE S1250 SPRING HOOK HAS BEEN ASSEMBLED INTO A MODIFIED TYPE 2S SMALL CASE.

This Latch (the S1250-2S-1-750) shown here is slightly thicker (.390"/9.9mm), than the standard Type 2S Latch Case (.375"/9.952mm).

'SETBACKS' OTHER THAN THE 750" SHOWN HERE CAN BE SUPPLIED AS REQUIRED



MOUNTING DIMENSIONS USING A SLOT RECIEVER

LATCH: S1250-2S1-750



BASIC COMBINATIONS OF TYPE 2 LATCHES AND RECEIVERS

FLANGE-TO-FLANGE WITH ENCASED RECEIVER



Fig. 1 LATCH **RECEIVER** S1500-2-750 R500-2-750 VARIABLE 'SETBACKS'* STOCKED (See TDS 81-2, -3, & -4 & 89)

FLANGE-TO-FLANGE WITH SHORT 'R/S' RECEIVER



Fig. 2 LATCH RECEIVER S1250-2-1.000 R/S500-2-250 RECEIVER CASE SHORTENED (See TDS 81-4 & 91)

FLANGE-TO-FLANGE WITH SHORT 'RSL' RECEIVER



LATCH RECEIVER S1250-2-1.125 RSL500-2-187 VERY SHORT SLOT RECEIVER

(See TDS 81-4, 89 & 93)

REVERSE FLANGE WITH ENCASED RECEIVER



S1500-2R-750 R500-2-750 REVERSE MOUNTED SPRING HOOK (See TDS 81-2 & 84)

ABOVE ARE ONLY A FEW OF THE MANY TYPE 2 LATCH/RECEIVER COMBINATIONS AVAILABLE

- IMPORTANT FEATURES OF THE TYPE 2 LATCHES -• TYPE 2 LATCHES ARE STRONG, RELIABLE, AND TREMENDOUSLY VERSATILE •

- The Slim Case (1/2"/12.7mm) Fits Thin Panels.
- Variable 'Setbacks'* Accommodate A Wide Range Of Applications.
- . The 'D' Shape Fits A Shaper Mortise.
- · Easily Installed Easily Removed.
- 2 Spring Hook Sizes Can Be Used In Large Type 2 Cases.
- · Latch/Receiver Combinations Facilitate Inverting Adjacent Panels.
- Very Shallow Receivers Are Stocked For Blind Joints In Thin Material.
- · Numerous Special Receivers Available Compatible With The Type 2 Latches.
- Type 2 Latches Are Spring Loaded To Hold Components Tight.
- Handles And Escutcheons Available

Type 2 Small Latches Are Shown On TDS 61-80





Fig 6A, 6B Type 2 Latches join these thin panels at butt, 'T' and corner joints. Blind attachment to panels of only 5/8"/16mm is routine. (See TDS 91 & 93)



Fig. 7 4-way post panel assemblies are easily fabricated with Type 2 Latches and the very shallow Type 2 RSL Receivers. (See TDS 93)



Fig. 8 Colored cover buttons & cover plates conceal and decorate key access holes and unused Type 2 Latches and Receivers. (See TDS 93, 127 & 128)



APPLICATIONS



Fig. 5 This striking exhibit was fabricated by General Exhibits and Displays of Chicago, Illinois, illustrating the caliber and diversity of design attainable using Norse Fasteners throughout.



Fig. 9 Joining tubular framing with Type 2 Latches at butt, 'T', and corner joints and 4-way posts is easily accomplished. (See TDS 96)





Fig 10A, 10B Recessed Type 2 Latches in metal or wooden framed doors with escutcheon plates and handles using slot receivers as shown or a variety of other receivers available makes an attractive assembly. (See TDS 83, 91 & 92)



Either the S1500 or the S1250 Spring Hook can be used in the Large Type 2 Latches -.160"/4.1mm .203"/5.2mm DIA C'SUNK/#10 (2) FLUSH #8-32 NUT INSERTS INSTALLED HERE WHEN CASE CONFIGURATION PERMITS MORTISING WITH ORDERED FOR MTG. BEHIND 1.500"/38.1mm .5001 A 4.750"/120.7mm DIA PANELS (SEE TDS/T2 92) 12.7mm SHAPER CUTTER \oplus \oplus_{\P} (SEE TDS/T2 81-5) COCKED COCKING COCKING RIVET -RIVET 5.750" 146mm 0 \bigcirc 5.250" 133.4mm 4.000 101.6mm CASE -€ .500" LOCKED LOCKED (+ 250" .250" 6.4mm DIA REC'R PIN 6.4mm DIA REC'R PIN 1.500 38.1mm 2.375" 60.3mm 2.125" 54mm .875"/22.2mm .750"/19mm 750"/19mm \oplus_{\P} SETBACK 1.500"/38.1mm REACH REACH OF THE \$1250 REACH OF THE S1500 FIG. 1 FIG. 2 **(** SPRING HOOK MUST BE SPRING HOOK MUST BE .250 MAINTAINED MATNTAINED LATCH ONLY LATCH RECEIVER LATCH RECETVER LATCH ONLY S1500-2-750 R500-2-750 FACE VIEW S1250-2-875 R500-2-375 FACE VIEW TYPE 2 LATCH WITH S1500 SPRING HOOK TYPE 2 LATCH WITH S1250 SPRING HOOK **LATCH ONLY LATCH LATCH ONLY LATCH RECEIVER RECEIVER**

Type 2 Latch with \$1500 Spring Hook

R500-2-750

Type 2 Latch with \$1250 Spring Hook

R500-2-375

S1250-2-875

Examples of Type 2 Latches and Receivers with different 'Setbacks'* using \$1500 & \$1250 Spring Hooks Variable 'Setbacks'*, thin cases, and many compatible Receivers make the Type 2 Large Latches highly versatile.



S1500-2-750

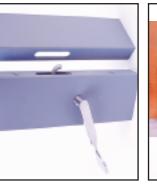


Fig. 4A & 4B The unique 'Taco' shape of the Type 2 Latches was designed to fit a straight-in/straight-out shaper cut for mortising expediency as seen in the cut away photos above. (See TDS 82)



FACE VIEW

Fig. 5A & 5B Type 2 Latch with handle using a slot Receiver joining a hood Fig. 6 Type 2 Latch with handle and 'J' to frame, or metal elements together. (See TDS 83 & 92)

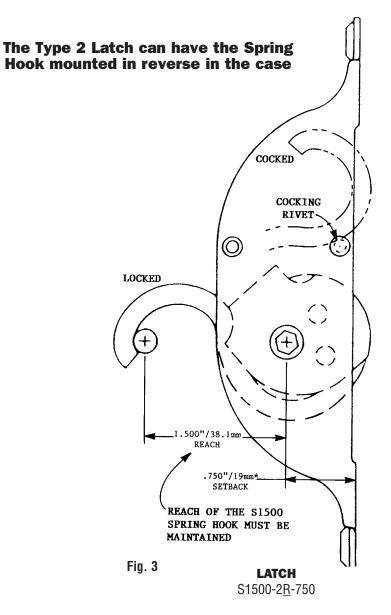




FACE VIEW

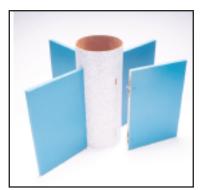
Receiver used as a shroud latch operated from beneath. (See TDS 90)





Type 2 Latch with \$1500 Spring Hook Reverse Mounted

To specify reverse mounted Latches add 'R' to the Part No. (i.e., S1500-2R-750) All variable 'Setbacks' available



coupling thin panels to a thin-wall paper tube for accent panels etc. (See TDS 93-2)



Fig. 7 Type 2 Latches and 'RSL' Receivers Fig. 8A & 8B Type 2 Latch using a slot Receiver shown here holding a tool

box onto a pick-up truck tray. (See TDS 92)

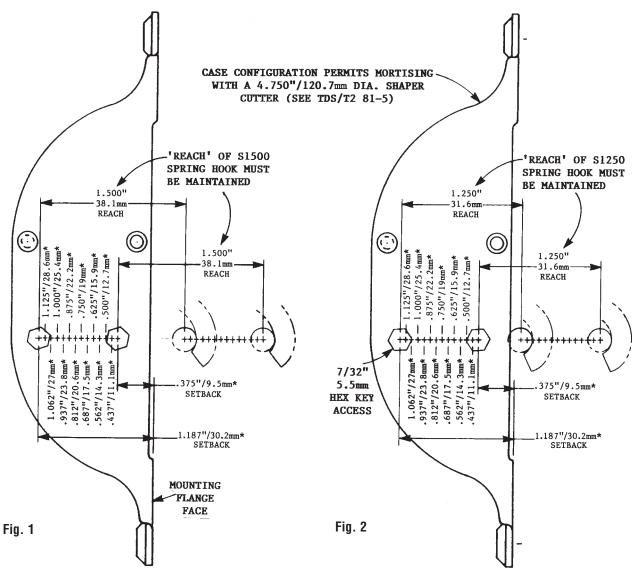




Fig. 9A & 9B Type 2 Latches using slot Receivers in tubing to make kiosks & other polygonal structures of 3 or more panels. (See TDS 94-7)



The variable 'Setbacks'* And Choices of Spring Hooks The S1500 or S1250 Spring Hook Can Be Used In the Type 2 Latches



Type 2 Large Latch With \$1500 Spring Hook Showing Variable 'Setbacks'*

Latches: S1500-2-375 Thru S1500-2-1.187

Type 2 Large Latch With \$1250 Spring Hook Showing Variable 'Setbacks'*

Latches: S1250-2-375 Thru S1250-2-1.187

The 'Setback'* Can Vary, The 'Reach' Must Be Maintained

'Setbacks' For Latches And Receivers Are Stocked From .375"/9.5mm To 1.187"/30.2mm, In .062"/1.6mm Increments

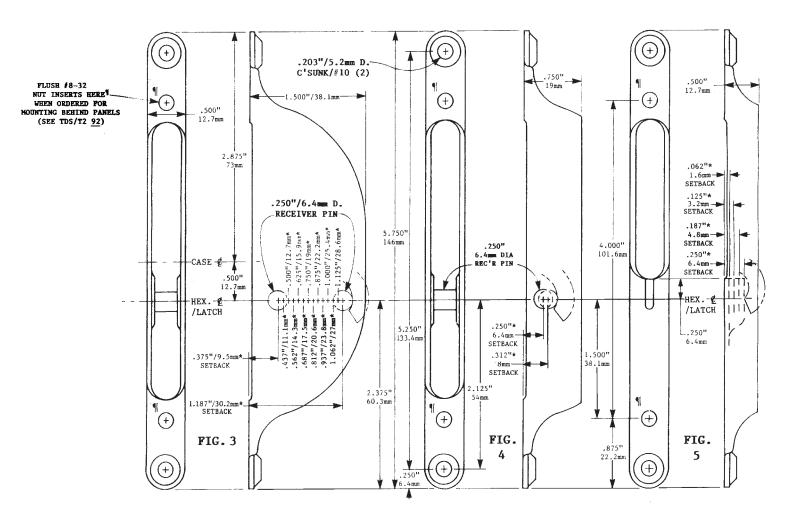
* The 'Setback' Is The Location Of The Key Access Hole From The Mounting Flange Face of the Latch Case, Or Of The Receiver Pin From The Mounting Flange Face Of The Receiver Case

The Full Array Of Latch And Receiver Cases Displaying All Of The 'Setbacks'* Is Shown On The Following TDS 81-4

The Variable 'Setback' Of The Type 2 And Type 3 Latches Coupled With Their Ability To Incorporate Either The S1500, Or The S1250 Spring Hooks Are Tremendously Important Features Which Facilitate Their Usefulness Without Modification In Many More Applications Than Otherwise Possible



The Variable 'Setbacks'* And Short & Slotted Case Configurations



Type 2 Large Receivers Showing Variable 'Setbacks'*

Receivers: R500-2-375 Thru R500 -2-1.187

Type 2 Large Receivers With Short Case Receivers: R/S500-2-250 & R/S500-2-312

> This Receiver Has A Short Case (.750"/19mm) and Two 'Setbacks'* (.250"/6.4mm &.312"/8mm) See Figs. 3D & E/TDS <u>81-4A</u> & TDS <u>91</u>

Type 2 Large Receivers
With Short Slotted Case
Receivers:
RSL500-2-062, RSL500-2-125
RSL500-2-187 & RSL500-2-250

RSL Units Use The Slot Edge To Receive The Spring Hook See Figs. 3A, B, C & D/TDS 81-4A and TDS 93

The 'Setback'* Can Vary, The 'Reach' Must Be Maintained

'Setbacks' For Latches And Receivers Are Stocked From .375"/9.5mm To 1.187"/30.2mm, In .062"/1.6mm Increments

* The 'Setback' Is The Location Of The Key Access Hole From The Mounting Flange Face of the Latch Case, Or Of The Receiver Pin From The Mounting Flange Face Of The Receiver Case

The Full Array Of Latch And Receiver Cases Displaying All Of The 'Setbacks'*
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The Variable 'Setback' Of The Type 2 And Type 3 Latches Coupled With Their Ability To Incorporate Either The S1500, Or The S1250 Spring Hooks Are Tremendously Important Features Which Facilitate Their Usefulness Without Modification In Many More Applications Than Otherwise Possible



APPLICATIONS





Fig. 6A & B Master's Studio Ltd. of Denver, Colorado used Type 2 Latches and Receivers to fabricate this beautiful conference table. The guick assembly and disassembly necessary during manufacture is facilitated with the Norse Latches. (See TDS 89)



Fig. 7 Type 2 Latches and Receivers are also used for flooring applications especially where quick joining and disassembly are needed. (See TDS 89)

The Type 2 Latch/Receiver Combination (S1500-2-750 & R500-2-750) Shown Installed In Figs. 6, 7 & 8 Has Proven To Be The Most Useful For Exhibits, Wall Panels, Conference Tables, Flooring, Etc. (See TDS 89)



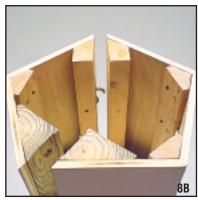


Fig. 8A & 8B Type 2 Latches and Receivers can be used to fabricate polygonal structures as shown here operated by a Norse ratchet wrench. The mortised-in-place Latches are used in many angular coupling situations. (See TDS 89)



Fig. 9 A Type 2 Latch with a 'U' Receiver is shown above in a typical door or other style-to-frame joint. (See TDS <u>85</u>)



Fig. 10 Type 2 Latches can be 'ganged' as shown; connector shaft length as required. (See TDS 88)



Fig. 11 Here the Type 2 Latch is used with a slot Receiver attaching a hood to a chassis member. (See TDS 92)

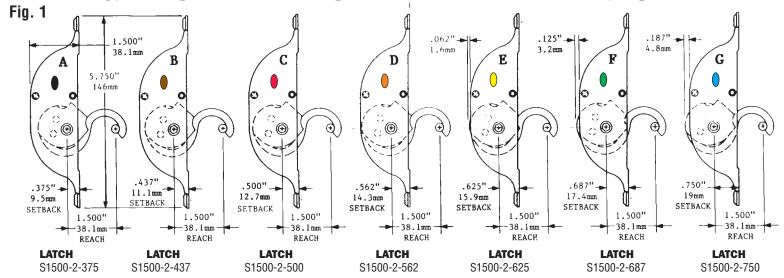


Fig. 12 Type 2 Latch and the very shallow 'RSL' Receiver results in a 'blind' attachment in thin panels. (See TDS 93)

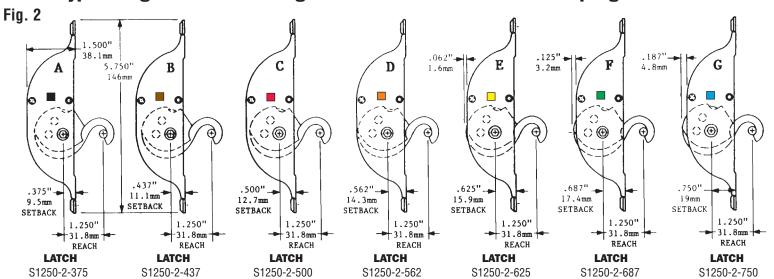


TYPE 2 LARGE LATCHES & RECEIVERS

The Variable 'Setbacks'* And Choice Of Spring Hooks Type 2 Large Latches - Showing Variable 'Setbacks' With S1500 Spring Hook

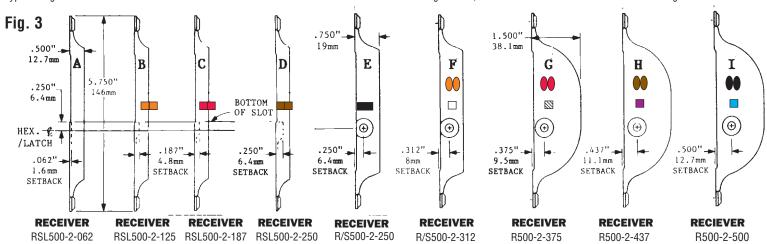


Type 2 Large Latches - Showing Variable 'Setbacks'* With S1250 Spring Hook



'Setbacks'* Can Vary, The 'Reach' Must Be Maintained

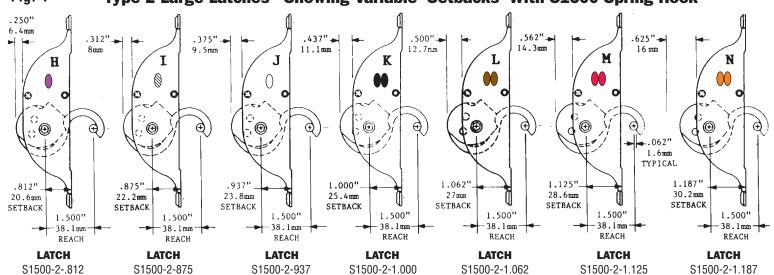
Type 2 Large Receivers Are Shown Here With The Variations of 'Setback'* Locations and Case Configurations; These Are Color Correlated With The Matching Latches Above



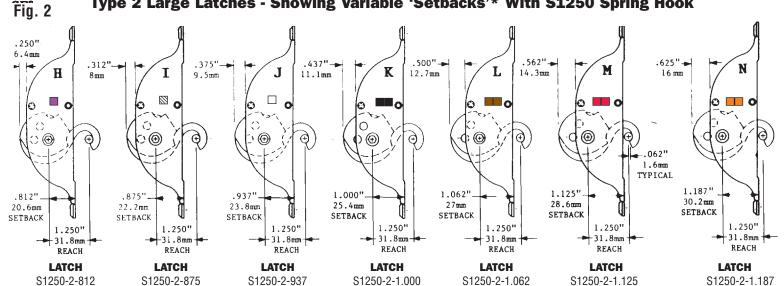


TYPE 2 LARGE LATCHES & RECEIVERS

The Variable 'Setbacks'* And Choice Of Spring Hooks Fig. 1 Type 2 Large Latches - Showing Variable 'Setbacks' With S1500 Spring Hook

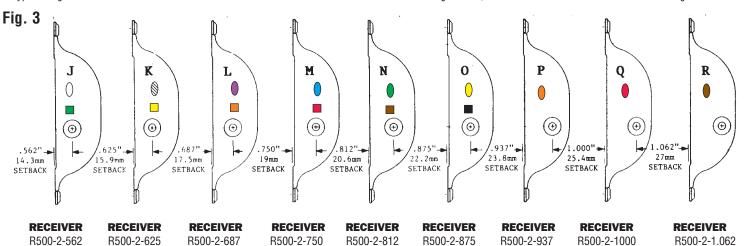


Type 2 Large Latches - Showing Variable 'Setbacks'* With S1250 Spring Hook



'Setbacks'* Can Vary, The 'Reach' Must Be Maintained

Type 2 Large Receivers Are Shown Here With The Variations of 'Setback'* Locations and Case Configurations; These Are Color Correlated With The Matching Latches Above





TYPE 2 LARGE LATCHES & RECEIVERS







Fig. 6A, 6B, & 6C Type 2 Latches in thin panels and 'O' and 'OD' Receivers, as shown, facilitate infinitely variable angle free standing panel connections and variable angle joints to walls. (See TDS 95)



Fig. 7 Type 2 Latch used with a hinge fastened to a second panel or wall make a variable angle connection. (See TDS 86)







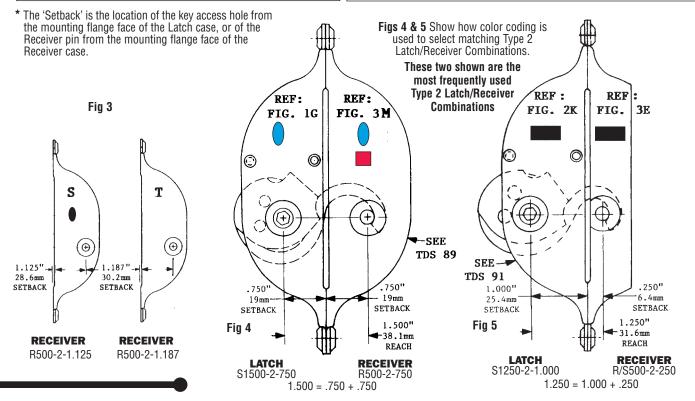
Fig. 9 A metal angle can be used with Type 2 Latches to make right angle connections. (See TDS 86)

Fig. 8A, 8B, & 8C Type 2 Latches with 'CR' (Cup) Receivers and with 'T' brackets are used for infinitely variable angle free standing panel connections and also for variable angle connections to walls. (See TDS 94)





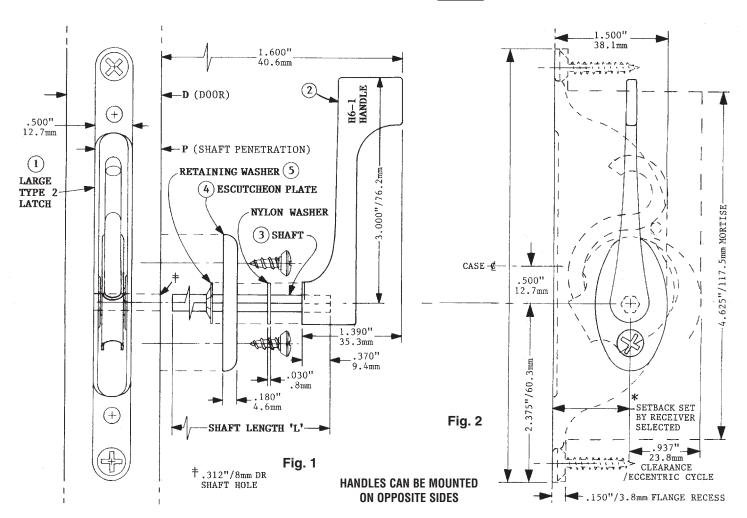
To further assist you in selecting compatible Latch/Receiver combinations, we have color coded the Latches and correlated them by color with dimensionally mated Receivers when used flange-to-flange as illustrated in Figs. 4 & 5.



SHOWN HERE IS A SINGLE HANDLE MOUNTING (OPERABLE FROM BOTH SIDES) WITH A LARGE TYPE 2 LATCH MORTISED INTO THE DOOR

These illustrations show components and mounting directions

For Dual Handles See TDS 83-10B



CALCULATING SHAFT LENGTH - SINGLE HANDLE ASSUMING LATCH IS CENTERED IN DOOR

'P' = '
$$\frac{D' (D00R) + .500''}{2}$$
 (OR MEASURE 'P')

PENETRATION ESCUTCHEON PLATE = .180" NYLON WASHER = .030" HANDLE RECESS = .370" SHAFT LENGTH = '**P**' + $= \overline{.580}$ "*/14/7mm

EXAMPLE: If Door ('D') is 1.250"/31.8mm Thick Then ' \mathbf{P} ' = (1.250" + .500") \div 2 = .875"

> + .580"* SHAFT LENGTH IS = 1.455"/37mm

MOUNTING

- LATCH: \$1250-2-XXX*
- 2 HANDLE W/NYLON WASHER: H6-1
- ③ SHAFT: SH7/32xL
- **4** ESCUTCHEON PLATE W/SCREWS: **EP1.8-1**
- ⑤ RETAINING WASHER: RW7/32-1

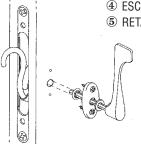
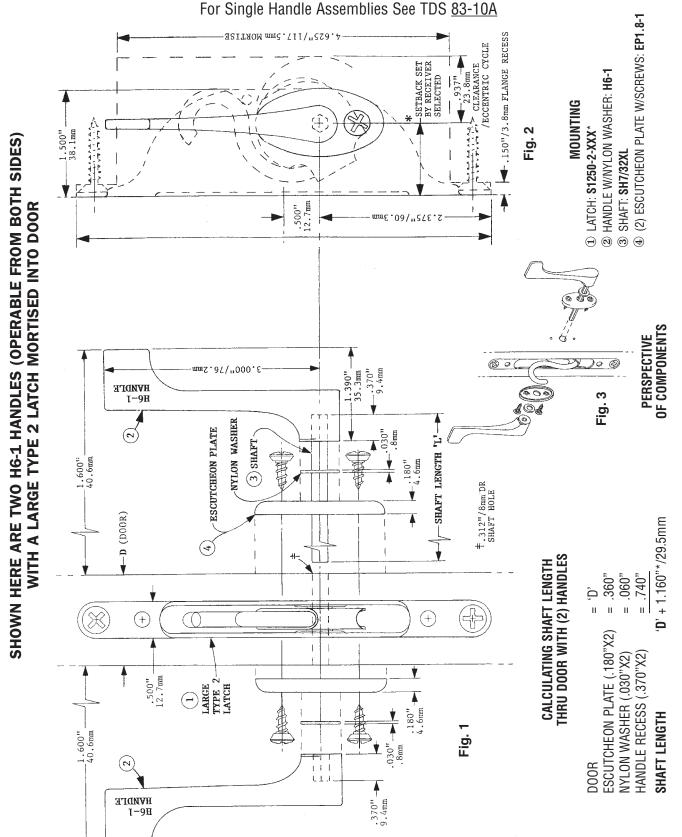


Fig. 3

PERSPECTIVE OF COMPONENTS

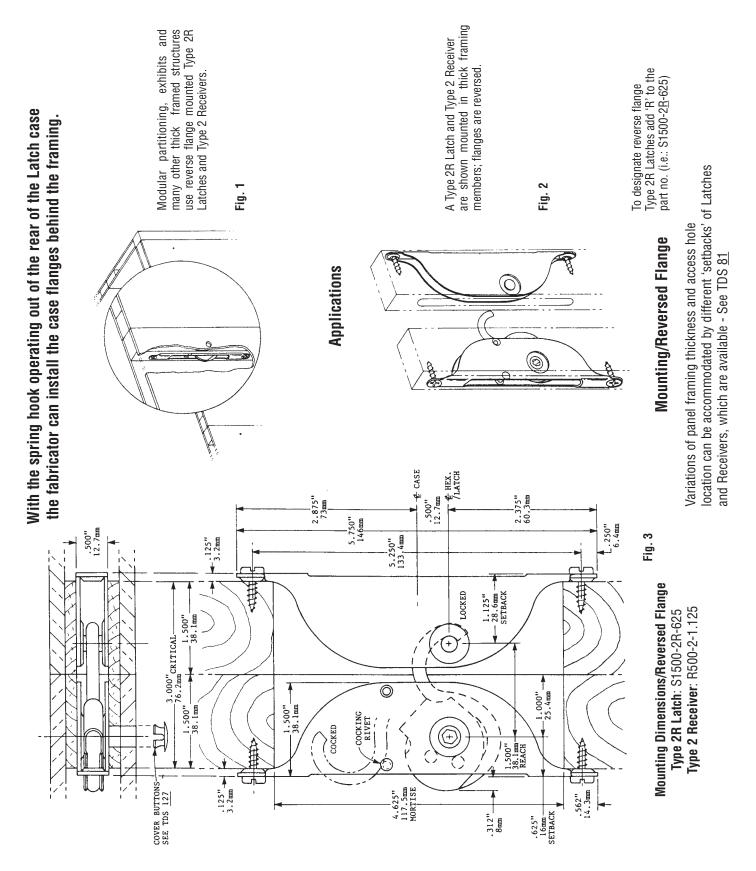
FOR DOOR APPLICATIONS WITH HANDLES ON BOTH SIDES.

These illustrations show components and mounting directions



EXAMPLE: If Door ('D') is 1.500"/38.1mm Thick Then **SHAFT LENGTH IS** = 1.500" + 1.160" = 2.660"/67mm

A TYPE 2R LATCH AND TYPE 2 RECEIVER ARE MOUNTED IN THICK FRAMING WITH FLANGES REVERSED

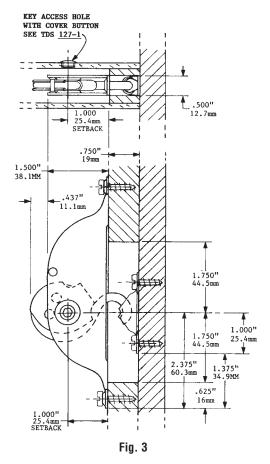




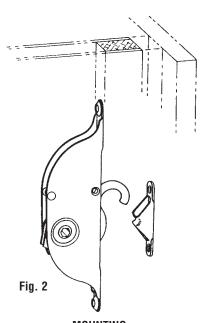
ATTACHING THIN PANELS AT 'T' AND CORNER JOINTS LATCH IS MOUNTED BEHIND FRAMING; 'U' RECEIVER IS SURFACE MOUNTED WITH THIS LATCH/RECEIVER COMBINATION, EITHER PANEL CAN BE INVERTED



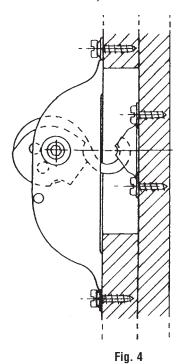
Fig. 1 Type 2 Latches and surface mounted 'U' Receivers can be used to join thin panels at 'T' and corner joints.



MOUNTING DIMENSIONS Type 2 Latch: \$1250-2-1.000 'U' Receiver: UR500-500



MOUNTING
Type 2 Latch: \$1250-2-1.000
'U' Type Receiver: UR500-500
Mounted to form a 'T' joint in Thin Panels



LATCH PANEL INVERTED Here, this Latch/Receiver combination is shown with the latch panel inverted.

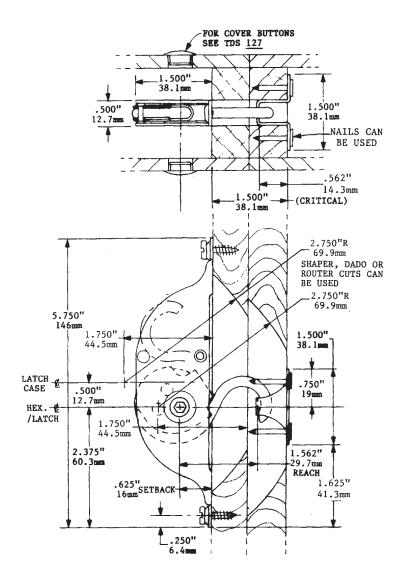
IF OTHER PANEL FRAMING THICKNESSES ARE USED, OTHER LATCH 'SETBACKS' ARE AVAILABLE TO COMPENSATE

For additional dimensions of this Type 2 Latch and 'U' Receiver, See TDS 81-2&3 and 126-4

USED ON EXHIBITS, STORE FIXTURES, OFFICE PANELS, PREFAB STRUCTURES, ETC.

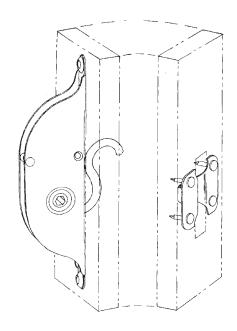
THIS TYPE 3 LATCH AND 'H' RECEIVER ARE MOUNTED BEHIND THE PANEL FRAMING

LESS PANEL PREPARATION • NO LATCH FLANGE RECESS REQUIRED • CAN BE NAILED IN PLACE



* If your framing material thicknesses are different from this dimension, the Latch 'Setback' selected should compensate for the difference. Assitance with your application is always available.

WHEN LOCKING: First rotate the Latch *away from* the Receiver until it stops. This extends the 'Reach' of the spring hook for locking.



MOUNTING Latch: **S1500-2-625** Receiver: **HR468-562**

MOUNTING DIMENSIONS

TYPE 2 LATCH AND 'H' RECEIVER Latch: \$1500-2-625 Receiver: HR468-562

COCK IT
BEFORE YOU
LOCK IT.
SEE TDS 1.



THE THIN LATCH FOR JOINING THIN PANELS ON SECTIONAL FURNITURE, EXHIBITS, STORE FIXTURES, COUNTERS AND BARS, FLOORING, ETC.



Fig.1 Sectional table joined with Type 2 Latches



Fig.2 Type 2 Latch mortised in place



Fig.3 Typical installation of Type 2 Latches in a table



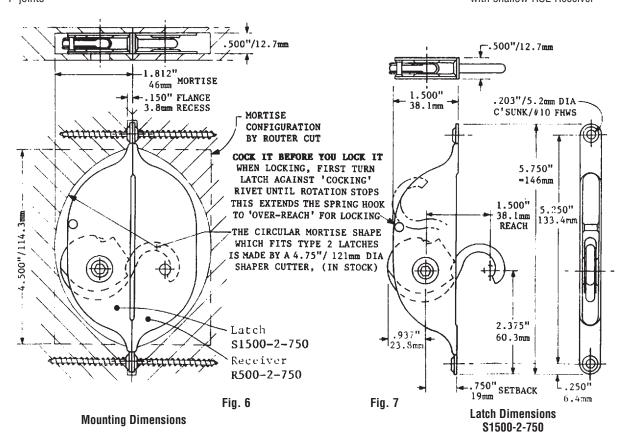
Fig.4 Twin panels with butt, corner and 'T' joints

Used with metal framing, on doors, containers, office partitions, landscaping, etc.

Clamping Force: 450#/204kg For corner and 'T' joints see TDS <u>91-1</u>.



Fig.5 Type 2 Latch in a 'T' joint with shallow RSL Receiver





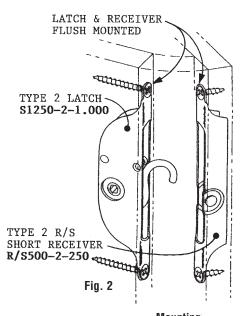
TYPE 2 LATCH & TYPE 2 R/S SHORT RECEIVER

USED IN THIN WALL PARTITIONS FOR IN-LINE BUTT JOINTS AND 'BLIND' MORTISES AT 'T' & CORNER JOINTS

For Prefab construction of Exhibits, Store Fixtures, Office Panels, Etc. This Latch/Receiver Combination is a Unique and Frequently Used Method



Short Type 2 R/S Receivers require Fig. 1 only a shallow (3/4"/19mm deep) 'blind' mortise, facilitating fabrication of thin partitioning. This Latch/Receiver combination is used for in-line butt joints and for 'T' and corner joints.

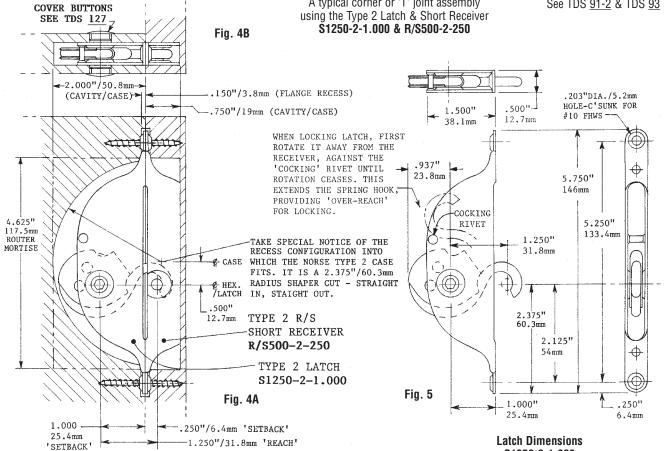


Mounting A typical corner or 'T' joint assembly \$1250-2-1.000 & R/\$500-2-250



4-Way Post Mounting The shallow depth of this Type 2 R/S Receiver enables the designer to fabricate 4-way joints as above See TDS 91-2 & TDS 93

Fig. 3



Latch Dimensions Type 2 Latch: **\$1250-2-1.000** Type 2 R/S Latch: **R/S500-2-250**

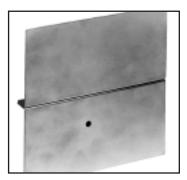
\$1250-2-1.000 Type 2 R/S Receiver Case Dimensions are Identical, Except Shortened To .750"

USED AS A CASE LATCH FOR EQUIPMENT ATTACHMENT, EQUIPMENT CASES, MODUAL UNIT COUPLING, COFFIN SEALING, PICKUP TRUCK CAMPER TIEDOWN TRACTOR HOODS AND WALL PANELING, ETC., THE TYPE 2 LATCH IS UNEXCELLED

The Type 2 Latch is shown here in a typical application joining thin metal elements where a slot in the meta is used as a receiver



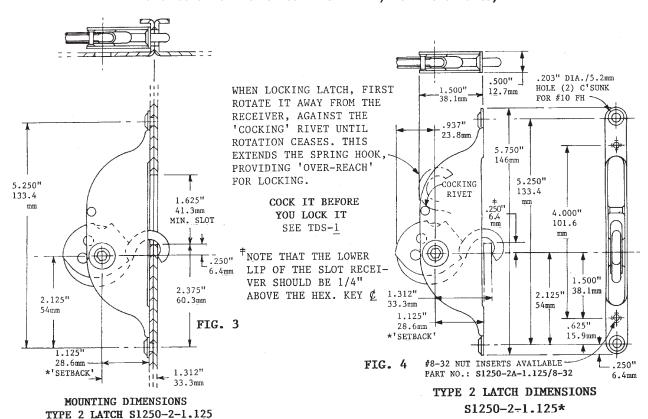
MOUNTING: INTERNAL VIEW A typical installation for thin metal joining such as on a tractor hood



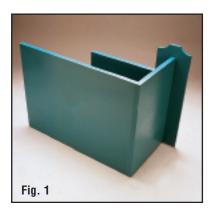
EXTERNAL VEIW OF ENCOLSURE When opened externally, as a case or hood latch, the asthetics of the norse latches are unsurpassed.

The Norse Type 2 Latches are stocked with different "Setback"* dimensions to accommodate a wide range of other material thicknesses than is hown here. The powerful spring hook compensates for tolerence buildup, gasket yield, vibration, and material movement due to temperature variations.

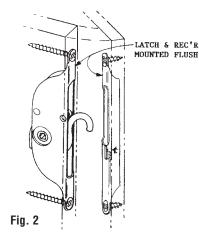
When thicker material or gasketed elements are to be joined, a type 2 latch with an appropriate 'Setback' dimension can be selected from our stock. (Setbacks are availbale from .375" to 1.187" in 1/16" increments).



THIS SHALLOW RECEIVER CAN BE MOUNTED FLUSH AND BLIND **IN VERY THIN PANELS** RECEIVER DEPTH IS ONLY 1/2" (12.7mm)



Application: Thin panel partitions where in-line butt joints, corner and 'T' joints occur.



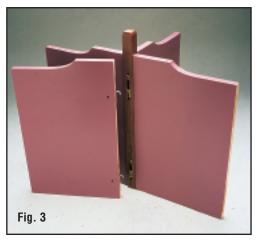
Mounting: Here a typical corner or 'T' joint is shown using a Type 2 Latch and RSL Receiver. S1250-2-1.125 & RSL500-2-187.

USED ON:

- Exhibits Counters
- Store Fixtures Doors

USED ON:

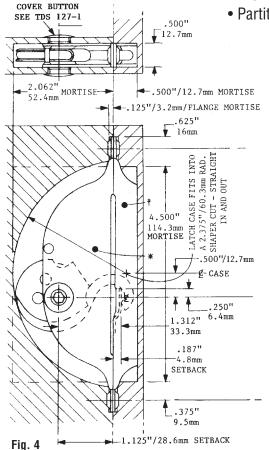
- Pre-fab structures
 Office panels
- Partitions
- Cases



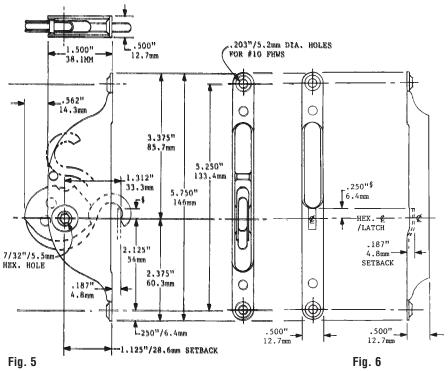
4-way post mountings using slim line paneling are feasible using Type 2 Latches and the RSL Receivers.

USED ON:

- Safety shieldsSaunas
- Student carrels
 Enclosures



PANEL MOUNTING DIMENSIONS Type 2 Latch & Type 2 RSL Receiver S1250-2-1.125 & RSL500-2-187

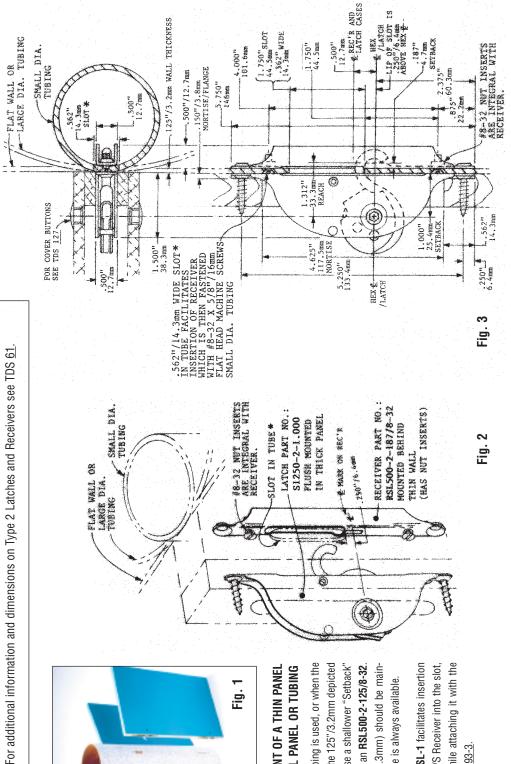


TYPE 2 LATCH DIMENSIONS S1250-2-1.125

TYPE 2 RSL RECEIVER DIMENSIONS RSL500-2-187

FOR JOINING THIN PANELS TO THINNER WALL PANELS OR TUBING





SMALL DIA. TUBING 18-32 NUT INSERTS KRE INTEGRAL WITH KECEIVER. RECEIVER PART NO .. RSL500-2-187/8-32 MOUNTED BEHIND (HAS NUT INSERTS) LATCH PART NO. \$1250-2-1.000 FLUSH MOUNTED IN THICK PANE SLOT IN TUBE * F MARK ON REC'R 250" 16.400 THIN WALL FLAT WALL OR LARGE DIA. TUBING 0

10 A THINNER WALL PANEL OR TUBING TYPICAL ATTACHMENT OF A THIN PANEL

Fig. 1

When small diameter tubing is used, or when the wall thickness exceeds the 125"/3.2mm depicted here, it is advisable to use a shallower "Setback" on the Receiver, such as an RSL500-2-125/8-32. The "Reach" (1.312"/33.3mm) should be maintained. Design assistance is always available. Installation tool no. ITRSL-1 facilitates insertion and holds it in place while attaching it with the of the shallow RSL or R/S Receiver into the slot #8-32 screws. See TDS <u>93-3</u>.

Fig. 2

MOUNTING DIMENSIONS

Latch: \$1250-2-1.000 / Receiver: R\$L500-2-187/8-32 Type 2 Latch and Type 2 RSL Short Slotted Receiver

(Suffix "8-32" specifies a factory-installed #8-32 nut)

Latch: S1250-2-1.000 / Receiver: RSL500-2-187/8-32 Type 2 Latch and Type 2 RSL Short Slotted Receiver

PANEL MOUNTING

(Suffix "8-32" specifies a factory-installed #8-32 nut)

NORSE *

using a Type 2 Latch and a Type 2 Short Slotted Receiver inserted thru a slot in the thin wall and fastened in place. The Receiver has integral, factory-installed

nut inserts for attachment as specified by the part no. RSL500-2-187/8-32.

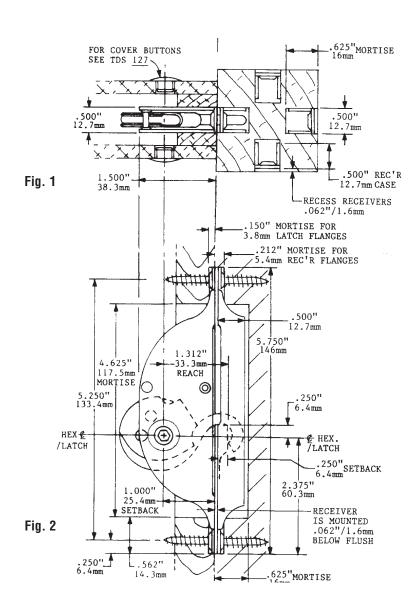
Attaching a thick panel to a thin wall or to tubing can be accomplished readily

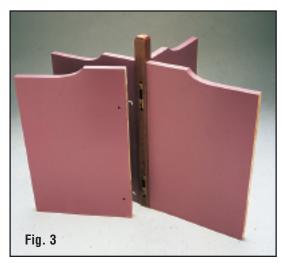


TYPE 2 LATCH AND TYPE 2 RSL SLOTTED RECEIVER

THIS SHALLOW RSL RECEIVER IS MOUNTED BELOW FLUSH IN A BLIND MORTISE IN A VERY THIN PANEL **SO THAT A \$1250-2-1.000 LATCH CAN BE USED**

By simply recessing the Type 2 RSL Receiver Mounting .062"/1.6mm the fabricator can maintain the use of a \$1250-2-1.000 Latch in his panel as shown here.





4-way post panel assemblies are easily fabricated with Type 2 Latches and the very shallow Type 2 RSL Receivers.

MOUNTING DIMENSIONS TYPE 2 LATCH AND TYPE 2 RSL SHORT SLOTTED RECEIVER LATCH: \$1250-2-1.000 RECEIVER: RSL500-2-250 RECEIVER IS RECESSED .062"/1.5mm



CHANGING THE ANGLE BETWEEN PANELS JOINED TO A TUBE IS FACILITATED BY WIDENING THE RECEIVER SLOTS IN THE TUBE AS SHOWN HERE

In the Typical Example Shown Here, Panels of 1.750"/44.5mm Thickness Are Being Joined At An Initial Angle Of 60°, With Some Angular Variation Required. A Tube Diameter Of 3.500"/88.9mm and a Slot Width Of 1.040"/26.4mm Accommodates the Panels and Allows Angular Displacement Of Each Panel Of ±10°.

Other Tube Diameters and Slot Widths Can Be Used.

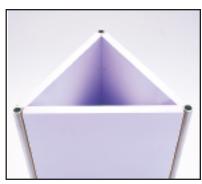
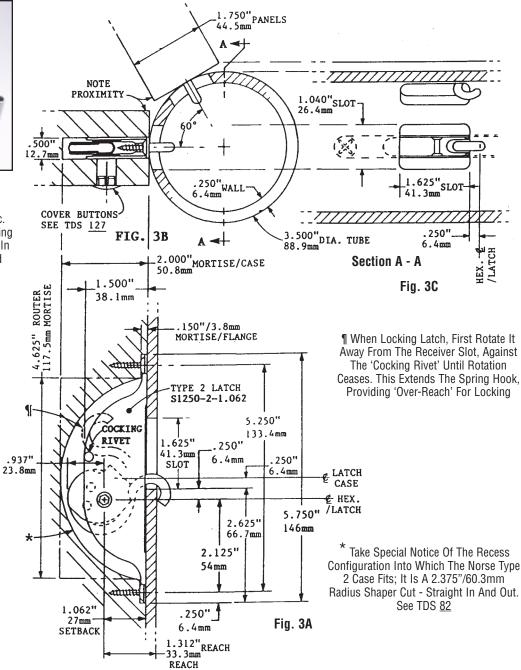
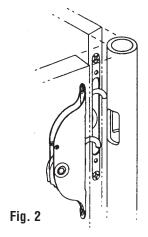


Fig.1 APPLICATIONS

Office Landscaping, Store Fixtures, Etc. Can Be Fabricated With Panels And Tubing In A Manner Accommodating Changes In The Angle Between The Panels Joined





MOUNTING

Widened Slot Receivers In The Tube Allow The Angle Between The Panels To Be Varied, Commensurate With The Width Of The Slot Cut In The Tube

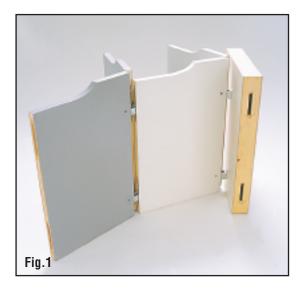
MOUNTING DIMENSIONS Type 2 Latches And Wide Slot Receivers

In This Illustration A Panel Thickness Of 1.750"/44.5mm And An Initial Angle Of 60° Between Panels Is Shown. Any Panel Thickness, Included Angle Or Required Angle Variations Can Be Used. Obviously, These Factors Affect The Tubing Size Required. Latch: **\$1250-2-1.062**



JOINING PANELS - FREE STANDING, OR TO A WALL, AT VARIABLE ANGLES USING NORSE LATCHES AND 'O' & 'OD' RECEIVERS

For: Exhibits • Office Landscaping • Store fixtures • Enclosures Museum • Theatrical & Window Displays • Safety Shields • Etc.



Type 1 & Type 3 Latches can also be used with 'O' and 'OD' Receivers for the Type 1 Latches and 'O' Receivers See TDS 48

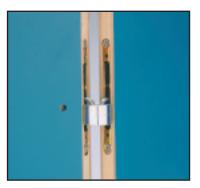
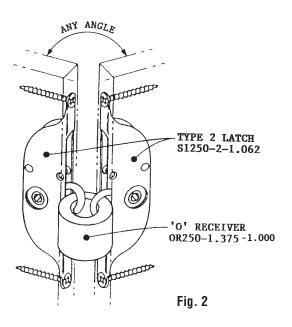


Fig. 4 Two panels are joined here at any required angle using Type 2 Latches and a 'O' Receiver.

APPLICATIONS

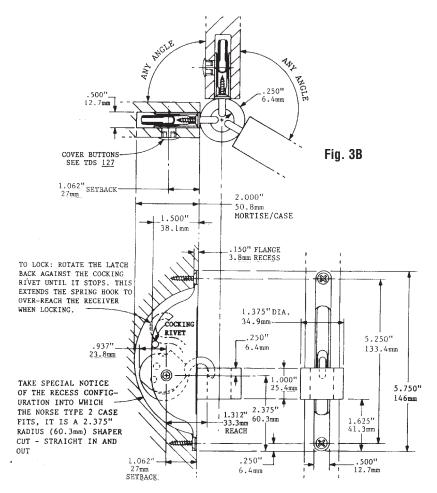
Panels joined at variable angles, both free standing and attached to a wall are shown here using Type 2 Latches and 'O' & 'OD' Receivers



Mounting

Variable Angle - Free Standing Panels are joined at variable angles using Type 2 Latches and a 'O' Receiver

Latch: \$1250-2-1.062 Receiver: 0R250-1.375-1.000



For 'OD' Receiver Details See TDS <u>95-1B</u>

Fig. 3A

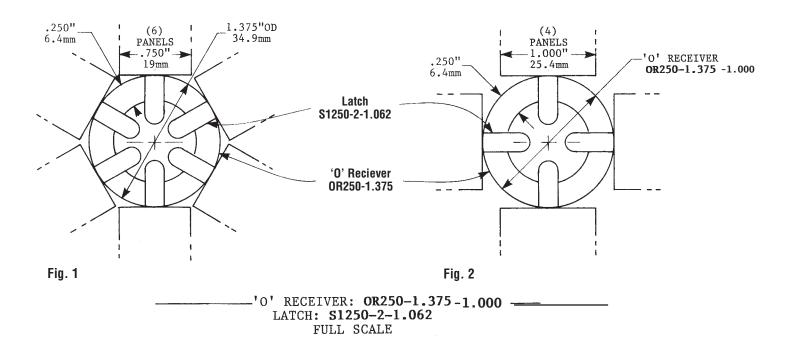
MOUNTING DIMENSIONS

Variable Angle - Free Standing Type 2 Latches and a 'O' Receiver

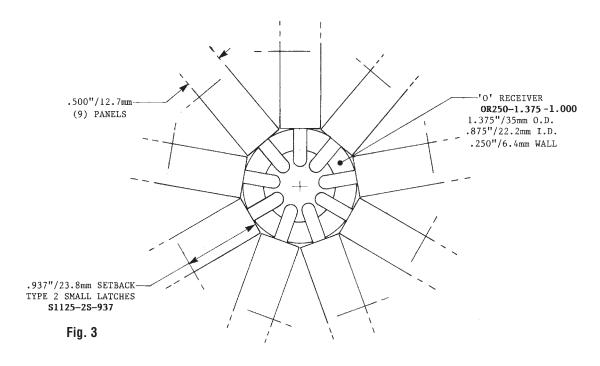
Latch: \$1250-2-1.062 • Receiver: 0R250-1.375-1.000

JOINING MULTIPLE FREE STANDING PANELS AT VARIABLE ANGLES

For: Exhibits • Office Landscaping • Store Fixtures • Stage Settings Museum & Art Displays • Safety Sheilds • Window Displays • Etc.



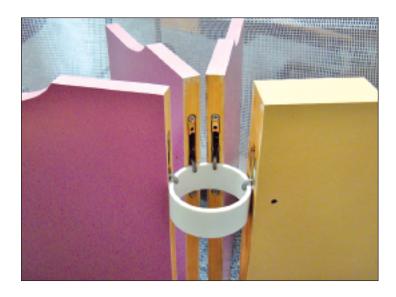
Joining Multiple Free Standing Panels at Variable Angles using Norse Type 2 Small Latches and the OR250-1.375-1.000 Receiver



It can be seen that many panel arrangements can be accommodated about the 'O' Receiver and that the thinner the panel, the greater the number that can be attached.

THE LARGE 'O' AND 'OD' RECEIVERS CAN BE USED FOR EXHIBITS, STORE FIXTURES, MUSEUM AND ART DISPLAYS, OR FOR NUMEROUS PARTITIONING FUNCTIONS.

'O' and 'OD' Receivers can be used with Type 2 and Type 3 Latches as shown here and on the following pages. They can also be used with Type 1 Latches: see TDS 48.



Variable Angle Joining, **Free-Standing**

Fig. 1 A large 'O' Receiver is used here to join panels at variable angles. Type 2 and Type 3 Latches are used.



Variable Angle Joining, Attached to a Wall

Fig. 2 A large 'OD' Receiver is used here with a bracket to attach panels at variable angles to a wall.

Type 2 Latches: **\$1250-2-1.062** LArge 'OD' Receiver: ODR250-4.5

Bracket: BRLOR-1

JOINING PANELS - FREE STANDING, OR TO A WALL, AT VARIABLE ANGLES USING NORSE LATCHES AND 'O' & 'OD' RECEIVERS

For: Exhibits • Office Landscaping • Store fixtures • Enclosures Museum • Theatrical & Window Displays • Safety Shields • Etc. For 'O' Regivers See TDS 95-1A1

> Type 1 & Type 3 Latches can also be used with 'O' and 'OD' Receivers for the Type 1 Latches and 'O' Receivers See TDS 48

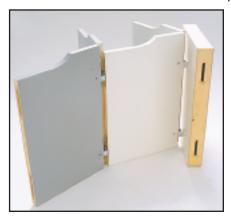
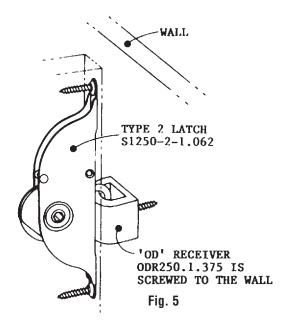


Fig. 4B Panels joined at variable angles, both free standing and attached to a wall are shown here using Type 2 Latches and '0' & 'OD' Receivers.



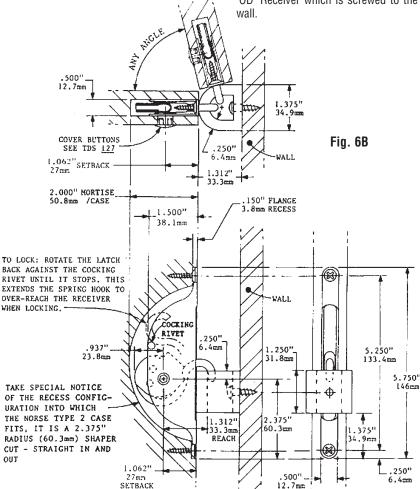
Fig. 4C This panel is attached to a wall at any angle using a Type 2 Latch and a 'OD' Receiver which is screwed to the



Mounting

Variable Angle - Wall Attachment attaching This Panel To A Wall At Any Angle Uses a Type 2 Latch

> Latch: \$1250-2-1.062 Receiver: ODR250-1.375-1.250



MOUNTING DIMENSIONS

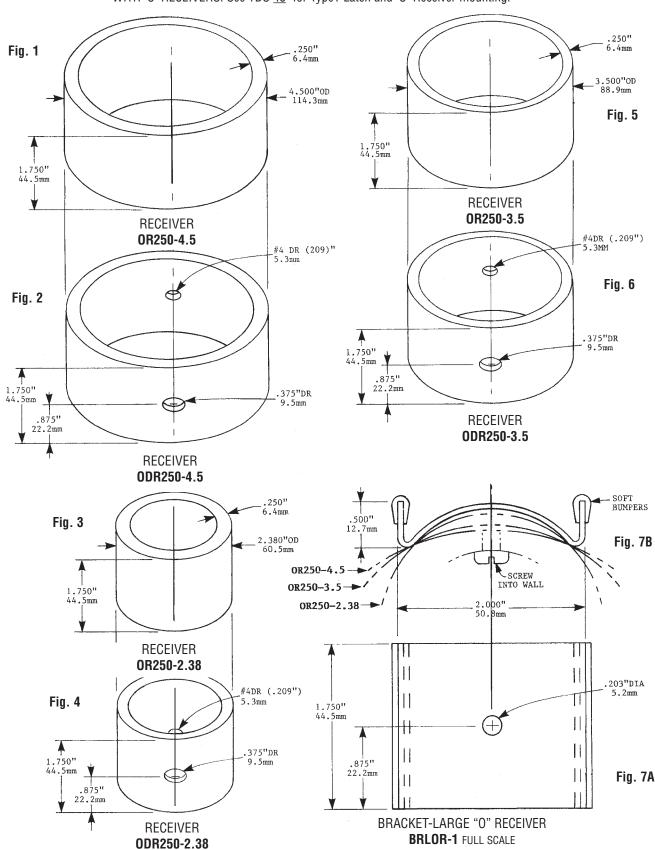
Fig. 6A

Variable Angle - Wall Attachment Type 2 Latches and a 'OD' Receiver Variable Angle Attachment to a Wall

Latch: \$1250-2-1.062 - Receiver: ODR250-1.375-1.250 For 'O' Receiver Details See TDS 95-1A1

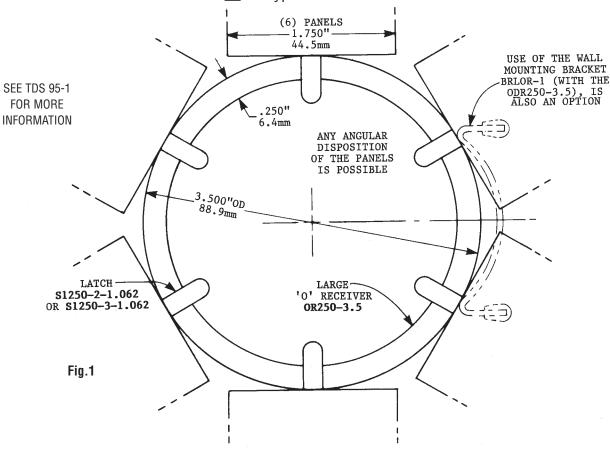
SHOWN HERE ARE THREE SIZES OF 'O' RECEIVERS WHICH WILL ACCOMMODATE NUMEROUS PANELS AT ANY ANGLE. ALSO SEE OVERLEAF

TYPE 1 AND TYPE 3 LATCHES CAN ALSO BE USED WITH 'O' RECEIVERS. See TDS 48 for Type1 Latch and 'O' Receiver mounting.

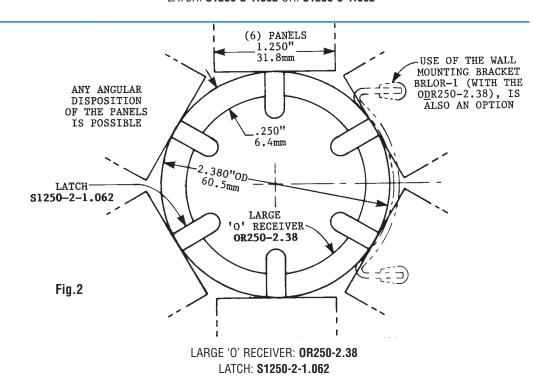


Shown below are two of many possible panel arrangements using Type 2 Latches with the OR250-3.5 and the OR250-2.38 'O' Receivers. Type 1 and Type 3 Latches can also be used.

See TDS 48 for Type 1 Latches and 'O' Receivers



LARGE 'O' RECEIVER: 0R250-3.5 LATCH: \$1250-2-1.062 OR: \$1250-3-1.062





Shown below is another of many possible panel arrangements using Type 2 Latches with the OR250-3.5 'O' Receiver. Type 1 and Type 3 Latches can also be used. See TDS 48 for Type 1 Latches and 'O' Receivers.

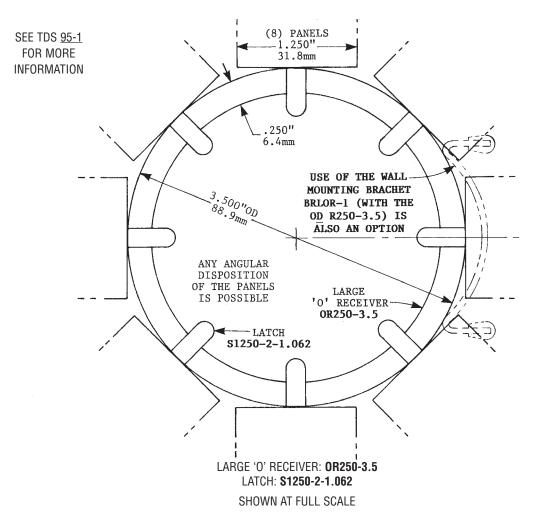


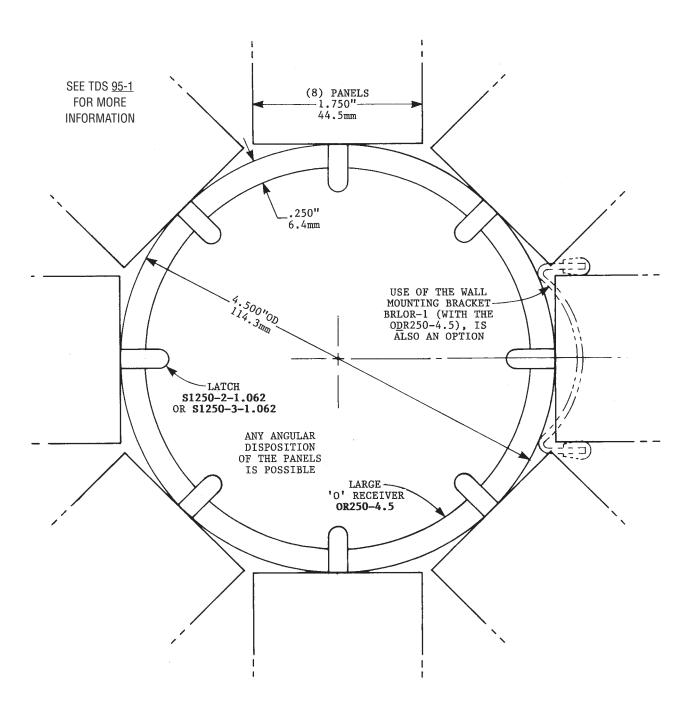


Fig. 2 Large "O" Receivers accommodate many combinations of angled panels, either free-standing or attached to a wall



The full scale illustrations on these sheets show the capacity of the several sizes of 'O' Receivers to accommodate panels of different thicknesses and arrangements. Type 1 and Type 3 Latches can also be used. See TDS 48 for Type 1 Latches and 'O' Receivers

> Shown below is one of many possible panel arrangements using Type 2 Latches and the OR250-4.5 Receiver.

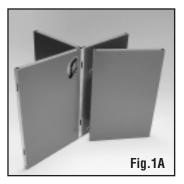


LARGE 'O' RECEIVER: OR250-4.5 LATCH: \$1250-2-1.062 OR: \$1250-3-1.062

SHOWN AT FULL SCALE

FOR EXHIBITS, STORE FIXTURES, OFFICE PANELING, MODULAR EQUIPMENT, ETC.

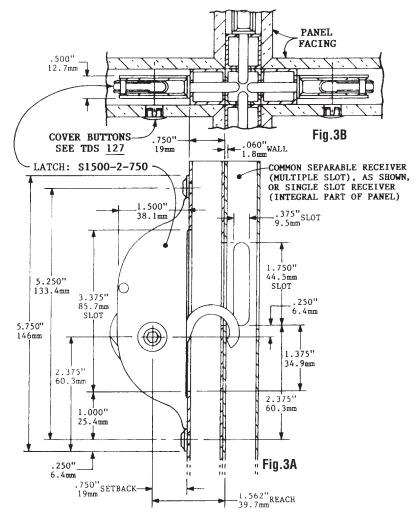
Type 2 Latches can be used on tubular framed paneling to make in-line butt joints, 'T' & corner joints, and also 4-way posts utilizing a slot in the attached tubular framing as a Receiver.





APPLICATIONS

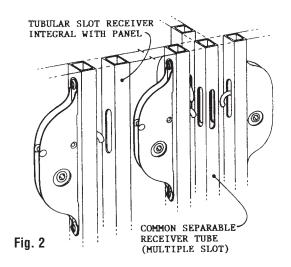
The Type 2 Latches and Slot Receiver combinations facilitate panel fabrication which utilizes thin wall tubular framing.



MOUNTING DIMENSIONS

Using 3/4"/19mm thin wall framing, we show above, the appropriate Latch selection and mounting dimensions for this fabrication.

Latch: \$1500-2-750

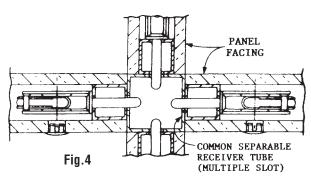


MOUNTING

Type 2 Latches with frame tubing Slot Receivers. Latch: \$1500-2-750

Tube sizes and wall thickness, and facing material thickness are factors determining the appropriate Latch selection. There are forty four (44) Norse Type 2 Latches available to meet your requirements.

• Engineering Assistance is Always Available •

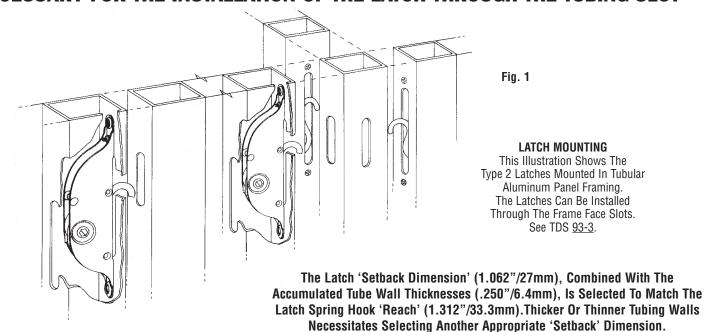


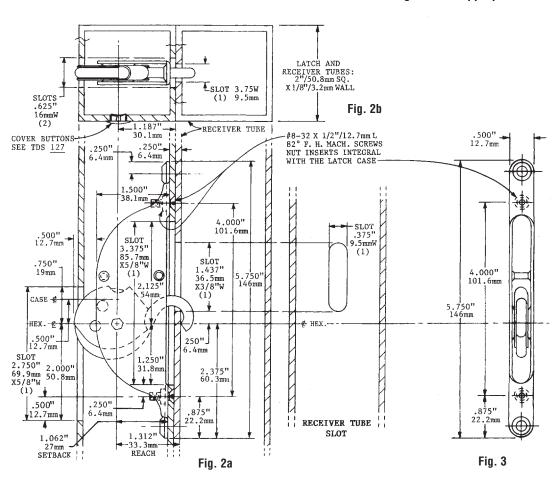
ALTERNATE FABRICATION TYPE 2 LATCHES with SLOT RECEIVERS

A larger common Receiver tube is selected to accommodate the panel facing material thickness as shown above particularly for corner joints and 4-way posts.

Latch \$1500-2-750 is used again.

THIS APPLICATION SHOWS THE MOUNTING METHOD AND SLOTTING NECESSARY FOR THE INSTALLATION OF THE LATCH THROUGH THE TUBING SLOT

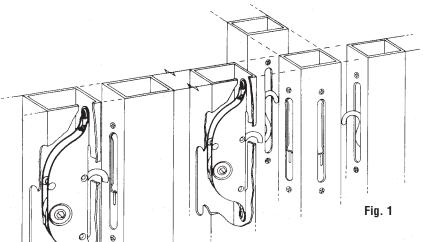




MOUNTING DIMENSIONS AND SLOTTING REQUIRED

(2) 5/8"/16mm Slots Facilitate Latch Installation Thru The Slotted Face Of The Tube - See TDS 93-3 Latch: **\$1250-2-1.062/8-32** LATCH FACE DIMENSIONS Latch: \$1250-2-1.062/8-32

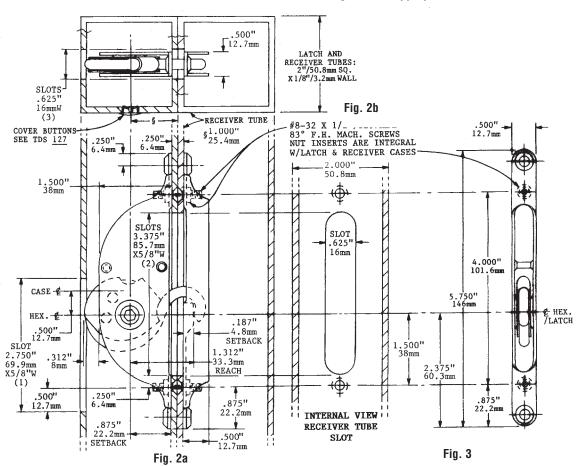
THIS APPLICATION SHOWS THE MOUNTING METHOD AND SLOTTING NECESSARY FOR THE INSTALLATION OF THE LATCHES & RECEIVERS THROUGH THE TUBING SLOTS



LATCH MOUNTING

This Illustration Shows The
Type 2 Latches And RSL Receivers Mounted
In Tubular Aluminum Framing.
These Components Can Be Installed
Through The Frame Face Slots.
See TDS 93-3.

The 'Setback Dimensions' (.875"/22.2mm & .187"/4.8mm), Of The Latch And Receiver, Combined With The Accumulated Tube Thicknesses (.250"/6.4mm), Are Selected To Match The Latch Spring Hook 'Reach' (1.312"/33.3mm). Thicker Or Thinner Tubing Walls Necessitates Selecting Another Appropriate 'Setback' Dimension.

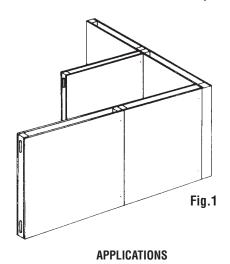


MOUNTING DIMENSIONS AND SLOTTING REQUIRED

The 5/8"/16mm Slots Facilitate Latch And Receiver Installation Into The Tubes - See TDS <u>93-3</u> Latch: **\$1250-2-875/8-32** Receiver: **R\$L500-2-187/8-32**

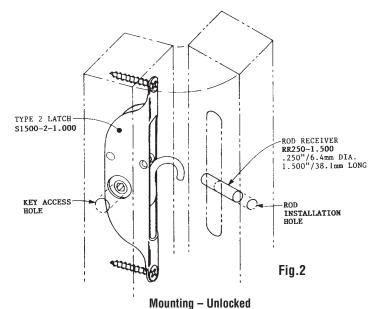
FACE DIMENSIONS Latch: \$1250-2-875/8-32

THE ROD RECEIVER CAN BE USED AT ALMOST ANY 'SETBACK' WITH ANY LATCH, PLUS PROVIDING OTHER ADVANTAGES



The Type 2 Latches/Rod Receiver combination can be used for Exhibit Booths, Store Fixtures, Kiosks, Museums Displays, Etc.

If required, the Receiver Setback dimension can be changed (reduced or increased), by equally changing the Latch Setback. The Latch Reach must be maintained.



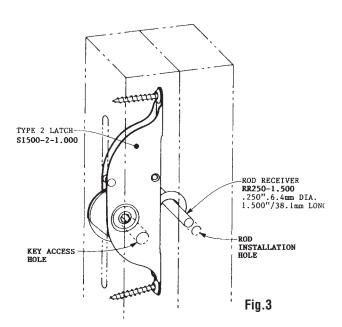
Type 2 Latch and Rod Receiver

Latch: \$1500-2-1.000 Rod Receiver: RR250-1.500

See TDS 126-3 For Rod Lengths Stocked

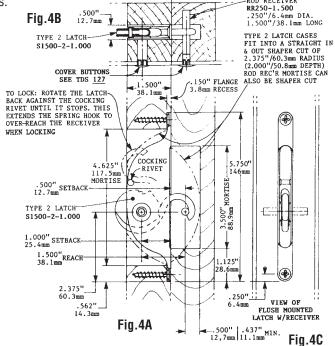
HERE ARE SEVERAL OF THE ADVANTAGES OF USING THE ROD RECEIVER

- The insertion hole for the Rod Receiver can be drilled at any setback dimension from the panel edge as required; therefore different Latch Setbacks can be used.
- Receiver mortising for spring hook travel is reduced to a in/out shaper cut.
- No attaching screws are needed for the Rod Receiver.
- Installation of the Rod Receiver takes less time than for other Receivers.
- The Rod Receiver is less expensive than other Receivers.



MOUNTING – LOCKED
TYPE 2 LATCHES and ROD RECEIVERS

Latch: S1500-2-1.000 Rod Receiver: RR250-1.500



MOUNTING - DIMENSIONS
TYPE 2 LATCH and ROD RECEIVER

Latch: \$1500-2-1.000 Rod Receiver: RR250-1.500



USED EXTENSIVELY IN FRAMED CONSTRUCTION FOR EXHIBITS, DISPLAYS, OFFICE PANELS, PREFAB STRUCTURES, STORE FIXTURES, ACOUSTICAL & SAFETY SHIELDING, ELECTRONIC SHELTERS, THEATRICAL SCENERY, ETC.

HERE ARE A FEW OF MANY LATCH/RECEIVER COMBINATIONS AVAILABLE

Flange-To-Flange With Encased Receiver



LATCH S1500-3-.750

RECEIVER R500-3-.750

Variable 'Setbacks'* Stocked

FIG. 1

(See TDS 106-3 & 4; & 108)

Reverse Flange With Encased Receiver



LATCH S1500-3R-875

RECEIVER R500-3-875

Reverse Mounted **Spring Hook**

FIG. 2

(See TDS 106-3 & 4; & 110)

Flange-To-Flange With 'RSL' Slotted Receiver



LATCH S1250-3-1.000

FIG. 3 **RECEIVER** RSL500-3-312

Flat Slotted Receiver (See TDS 106-4; & 116)

Materials: Steel/Zinc Plated - Yellow Chromated Clamping Force: 450#/204kg

Important Features of the Type 3 Latches

• Type 3 Latches are Strong, Reliable, and Tremendously Versatile •

- Variable 'Setbacks'* accommodate a wide range of applications
- 2 Spring Hook Sizes can be used in Type 3 Latch Cases
- Very shallow Receivers are stocked for blind joints in thin material
- Latch/Receiver combinations facilitate inverting adjacent panels
- Numerous special Receivers available, compatible with Type 3 Latches
- Type 3 Latches are spring loaded to hold components tight.
- Spring hook compensates for material movement and fabrication tolerances

The side flange load distribution permits the use of light framing, typically 3/4"/19mm pine; this, coupled with the selection of 'Setbacks'* available, facilitates fabrication without 'blocking-up' or 'padding'.

- Latch installation or removal is simply and quickly accomplished -* The 'Setback' is the location of the key access hole from the mounting flange face of the Latch case, or of the Receiver pin from the mounting flange face of the Receiver case.

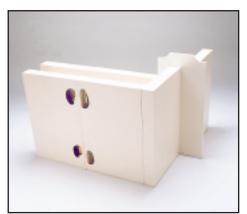


Fig. 5 Typical thick and thin panel fabrication using various Type 3 Latches and Receivers for in-line butt joints, corners and 'T' joints.



Fig. 6 (Re: Fig: 5) Unlocked in-line butt joint using a Type 3 Latch and Receiver flange-to-flange in this cutaway view This is the most frequently used Norse Latch/Receiver combination for exhibit fabrication. (See TDS 108)



Fig. 7 (Re: Fig. 5) This cut-away view shows a Type 3 Latch and a 'H' Receiver mounted behind framing; operated by a Norse ratchet wrench. (See TDS 109)



APPLICATIONS



Fig.4 The outstanding exhibit above by Color and Design Exhibits, now Exhibitgroup/Giltspur of Beaverton, Oregon, is an example of the limitless fabrication possibilities thru the use of Norse Fasteners.

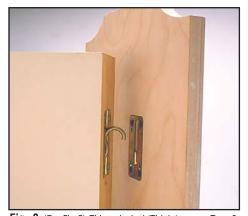


Fig. 8 (Re: Fig 5) This unlocked 'T' joint uses a Type 3 Latch and a shallow Type 3 'RSL' Receiver mounted flush and blind in a thin panel. (See TDS 116)

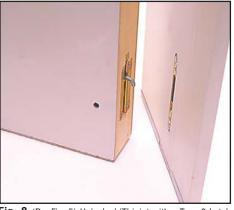


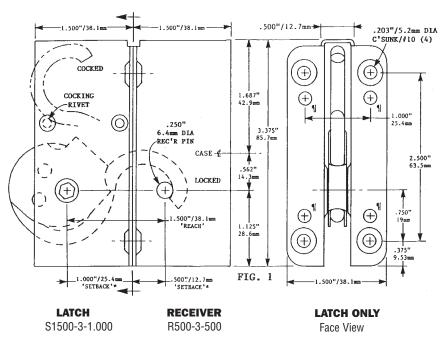
Fig. 9 (Re: Fig. 5) Unlocked 'T' joint with a Type 3 Latch and a flush mounted Type 2 'RSL' Receiver. (See TDS 115)



Fig. 10 (Re: Fig. 5) This unlocked 'T' joint uses a Type 3 Latch and a surface mounted 'U' Receiver on a thin panel. (See TDS 112)



Either the \$1500 or the \$1250 Spring Hook can be Utilized in the Type 3 Latches



Type 3 LATCH with S1500 Spring Hook

Spring Hooks can be Reverse-Mounted in Type 3 Cases

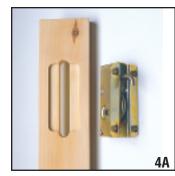


Fig. 4A The mortise required for a Type 3 Latch

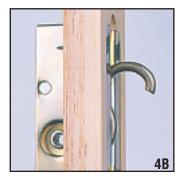
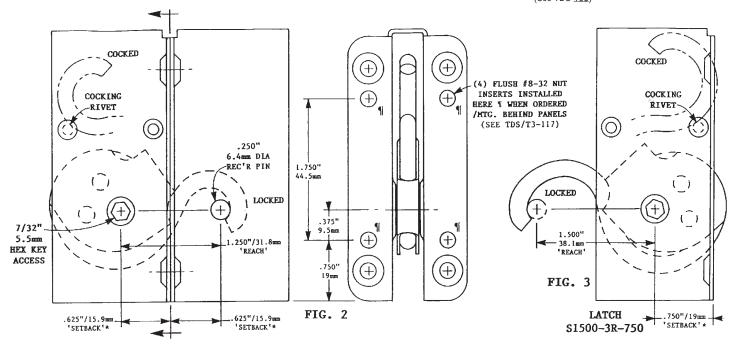


Fig. 4B A Type 3 Latch installed. (See TDS 108)



LATCH ONLY

Face View

Type 3 LATCH with S1250 Spring Hook

RECEIVER

R500-3-625

The Difference Between the 'Reaches' of the S1500 and S1250 Spring Hooks **Enables the Fabricator to Solve Numerous Application Requirements.**

To specify Reverse Mounted attaches, add 'R' to the part number. (i.e.: S1500-3R-750) All Variable "Setbacks" available.

Type 3 LATCH with

\$1500 Spring Hook Reverse

Mounted

* The 'Setback' is the location of the key access hole from the mounting flange face of the Latch case, or of the Receiver pin from the mounting Flange face of the Receiver case.



LATCH

S1250-3-625



APPLICATIONS



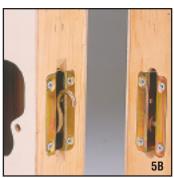


Fig. 5A & 5B The Type 3 Latch S1500-3-1.000 and the Receiver R500-3-500 are shown in this cut away view of a flange-to-flange mounting in 3/4"/19mm thick framing. This places the access hole behind the frame. This is the most frequently used Norse Latch/Receiver combination for exhibit fabrication (See TDS 108)



Fig. 6 In this unlocked assembly a Type 3 Latch is mounted behind the framing and a 'U' Receiver is surface mounted on a thin panel. (See TDS 112)



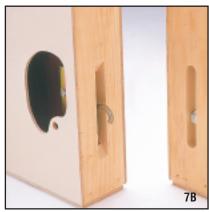
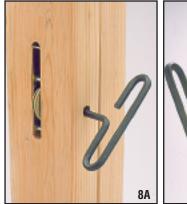


Fig. 7A & 7B These cut-away panel views and the unlocked sample show another Type 3 Latch and a 'H' Receiver which are mounted behind the panel framing. No recess is required for the flanges in this assembly. (See TDS 109)





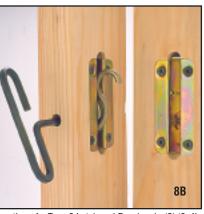


Fig. 8A & 8B This flange-to-flange mounting of a Type 3 Latch and Receiver in (2) '2x4's is typical of the heavier framing applications. (See TDS 107)

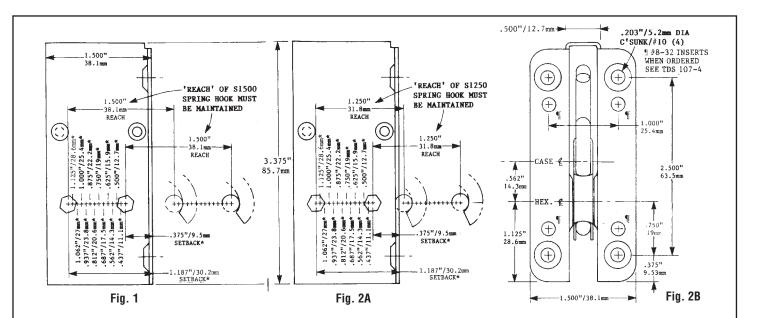


Fig. 9A & 9B Here (2) '2x4's are joined by Type 3 Latches with reversed flanges - no flange recesses are required. (See TDS 110)



NORSE TORRINGTON, CT USA

The Variable 'Setbacks'* and Choice of Spring Hooks The S1500 or S1250 Spring Hook Can Be Used In The Type 3 Latches



Type 3 Latch

With S1500 Spring Hook Showing variable 'Setbacks'* Latches: S1500-3-375 Thru S1500-3-1.187

Α P P

C A T ı 0 N S

Type 3 Latch

With S1250 Spring Hook Showing variable 'Setbacks'* Latches: S1250-3-375 Thru S1250-3-1.187

'Setbacks'* for Latches and Receivers are stocked from .375"/9.5mm to 1.187"/30.2mm , in .062"/1.6mm increments. *The 'Setback' is the location of the key access hole from the mounting flange of the Latch case, or of the Receiver pin from the mounting flange face of the Receiver case.

The Setback can vary , the 'Reach' must be maintained.

The full array of Latch and Receiver cases displaying all of the 'Setbacks'* is shown on the following TDS 106-4

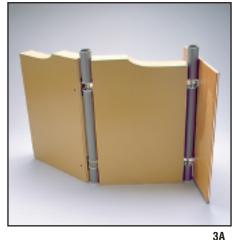


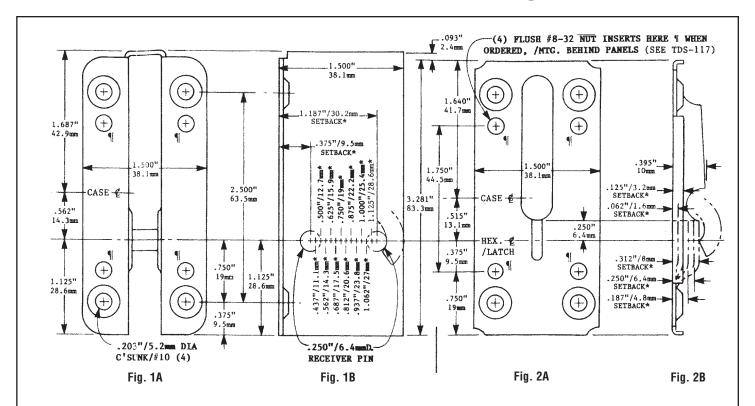




Fig.3A, 3B, 3C - Type 3 Latches and 'CR' (Cup) Receivers are used to join panels at infinitely variable angles, free standing, or with a 'T' Bracket to a wall. (See TDS 119)



The Variable 'Setbacks'* and Slotted Case Configuration



Type 3 Receivers

With slotted case Receivers: RSL500-3-062 Thru RSL500-3-312

Type 3 Receivers

Showing variable 'Setbacks'* Receivers: R500-3-375 Thru R500-3-1.187

'Setbacks'* for Latches and Receivers are stocked from .375"/9.5mm to 1.187"/30.2mm , in .062"/1.6mm increments.
*The 'Setback' is the location of the key access hole from the mounting flange of the Latch case, or of the Receiver pin from the mounting flange face of the Receiver case.

The Setback can vary, the 'Reach' must be maintained.

The full array of Latch and Receiver cases displaying all of the 'Setbacks'* is shown on the following TDS 106-4







Fig. 3A, 3B, 3C Type 3 Latches with '0' and 'OD' Receivers used to join panels at infinitely variable angles, free standing, or to a wall. (See TDS 120)



APPLICATIONS





Fig. 1A & 1B Type 3 Latches are used here with Type 2 'R/S' Receivers in 4-way post application. These Latches are compatible with all of the encased Receivers and nearly all of the special Receivers, making feasible countless combinations to satisfy any fabrication problems that arise. (See TDS 114)

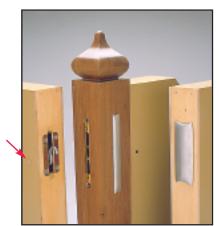


Fig. 2 Decorative cover buttons (for access hole), and Latch and Receiver cover plates are available. (See TDS 127 &128) Also Note: A Type 3 Latch is shown as used with a Type 2 R/S RECR (See TDS 114-1)

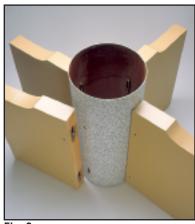


Fig. 3 (4) Panels with Type 3 Latches attached to RSL Receivers mounted inside thin wall fiber tubing. Many tubular assemblies are possible with the proper Latch/Receiver combination. (See TDS 115-5)



Fig. 4 Type 3 Latches are used with slot receivers in metal framing applications, and for sheet metal modular assemblies. (See TDS 117)



Fig. 5 Type 3 Latches used with a hinge fastened to a second panel or to a wall make a variable angle connection. (See TDS <u>113</u>)



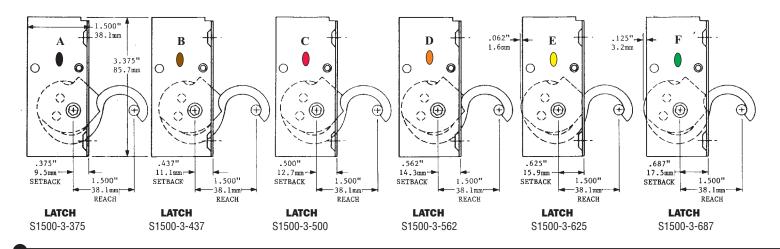
Fig. 6 A metal angle used with Type 3 Latches makes a right angle connection. (See TDS 114)



Fig. 7 Type 3 Latches can be 'ganged' as shown, connector shaft length as required. (See TDS 118)



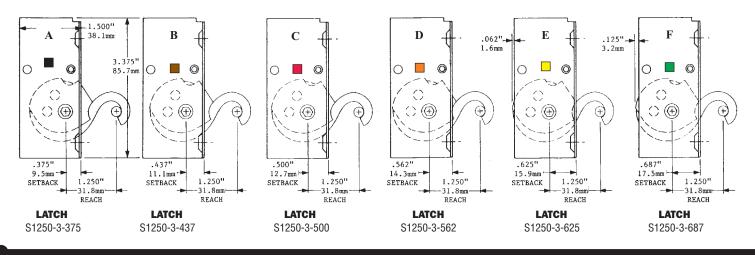
The Variable 'Setbacks'* and Choice of Spring Hooks • Type 3 Latches - Showing Variable 'Setbacks' With S1500 Spring Hooks •



• Type 3 Latches - Showing Variable 'Setbacks'* With S1250 Spring Hooks •

FIG. 2

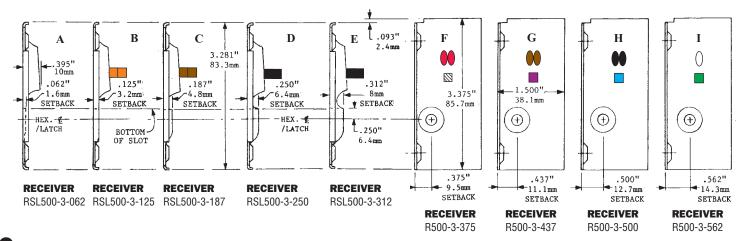
FIG. 1



• The 'Setback'* Can Vary, The 'Reach' Must Be Maintained •

Type 3 Receivers Are Shown Here With The Variations of 'Setback'* Locations and Case Configurations;
These Are Color Correlated With The Matching Latches Above

FIG. 3

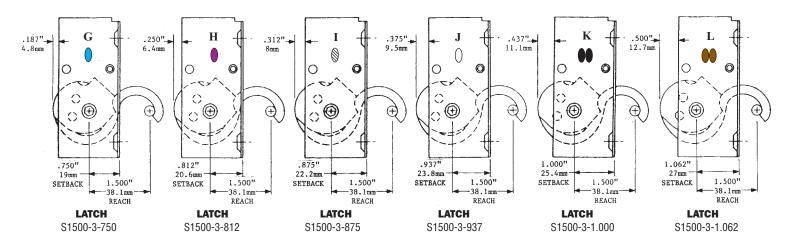




TYPE 3 LATCHES & RECEIVERS

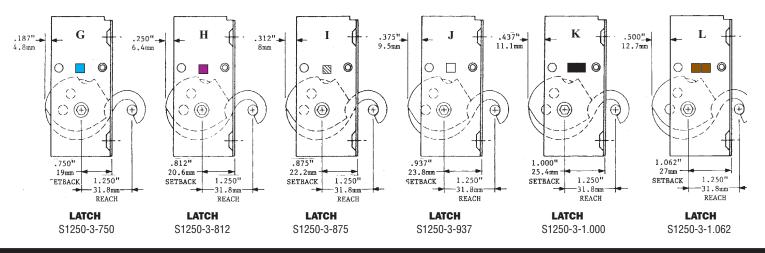
The Variable 'Setbacks'* and Choice of Spring Hooks
• Type 3 Latches - Showing Variable 'Setbacks' With S1500 Spring Hooks •

FIG: 1



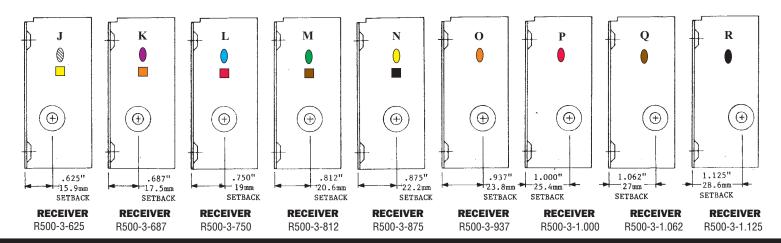
Type 3 Latches - Showing Variable 'Setbacks'* With S1250 Spring Hooks

FIG. 2



• The 'Setback'* Can Vary, The 'Reach' Must Be Maintained •

Type 3 Recievers Are Shown Here With The Variations of 'Setback'* Locations and Case Configurations; FIG. 3 These are Color Correlated With Matching Latches Above





TYPE 3 LATCHES & RECEIVERS

FIG. 1

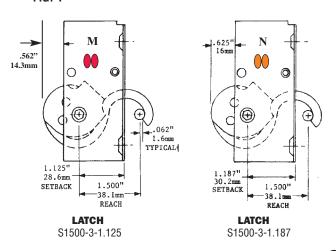


FIG. 2

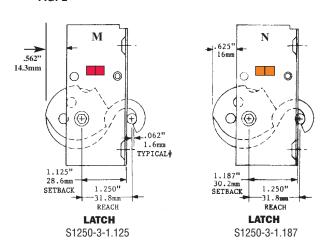




FIG. 7 Typical wall assembly. Thick and thin panels with Type 3 Latches and various Receivers.

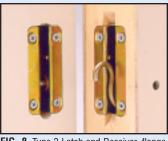


FIG. 8 Type 3 Latch and Receiver, flangeto-flange. (See TDS 108.)



FIG. 9 Type 3 Latch and surface-mounted 'U' Receiver. (See TDS 112.)



FIG. 10 Type 3 Latch and Type 2 'R/S' Receiver. (See TDS 114.)

ONE PROJECT CAN REQUIRE SEVERAL LATCH/RECEIVER COMBINATIONS, SOME WITH MATCHED CASES, SOME WITH SPECIAL RECEIVERS. OUR ENGINEERS WILL HELP YOU SELECT THE RIGHT COMBINATION FOR YOUR JOB.

EXAMPLE: Part Nos. of a Matching Compatible Latch/Receiver Combination

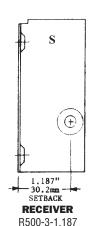
-'Reach' /- Setback' 'Setback' -Latch: S1500§-3-1.000¹ Receiver: R500-3-500¹ 'Setback'[¶] 'Reach'§ + 'Setback'1 $1.500^{\circ}/38.1$ mm = $1.000^{\circ}/25.4$ mm + $.500^{\circ}/12.7$ mm This Latch/Receiver Combination is Illustrated in Fig. 4

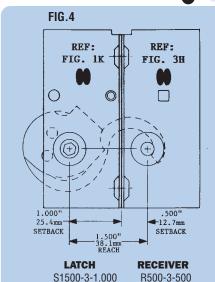


To further assist you in selecting compatible Latch/Receiver combinations, we have color coded the Latches and correlated them by color with dimensionally mated Receivers when used flange-to-flange as illustrated in Figs. 4, 5, 6.

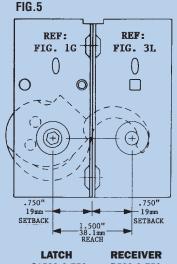
FIG.6

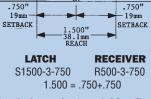
FIG.3

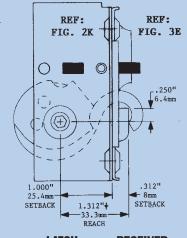




1.500 = 1.000 + .500





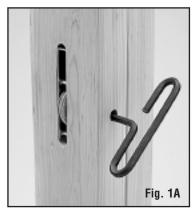


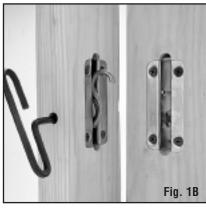
LATCH RECEIVER S1250-3-1.000 RSL500-3-312 1.250 + .062 = 1.000 + .312

Figs. 4, 5 and 6 show how color coding helps select matching Type 3 Latch/Receiver combinations. Fig. 4 shows the most frequently used Latch/Receiver combinations for thick panel fabrications.

FOR EXHIBITS, STORE FIXTURES, OFFICE PANELS, PREFAB STRUCTURES, ETC.

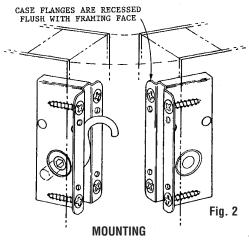
Shown here in Figs. 1, 2, & 3, as mounted in '2x3' framing. (1.500"/38.1mm x 2.500"/63.5mm), this Latch/Receiver combination is also frequently used in thinner framing (See Figs. 4A & 4B)



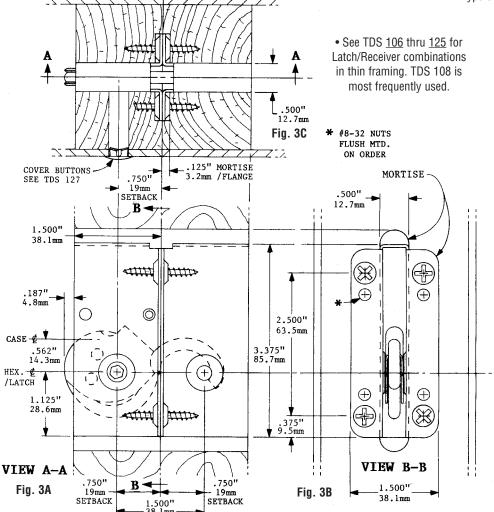


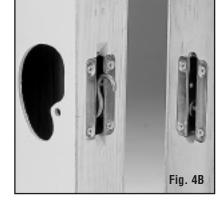
APPLICATIONS

This Flange-to-Flange mounting of the Type 3 Latch S1500-3-750 and the Receiver R500-3-750 in two '2x3's is typical of heavier framing applications.



Type 3 Latch: **\$1500-3-750** Type 3 Receiver: **R500-3-750**







The two illustrations above show a Type 3 Latch/Receiver combination used in thinner framing (See TDS 108-1)

MOUNTING DIMENSIONS Type 3 Latch: **\$1500-3-750** Type 3 Receiver: **R500-3-750**

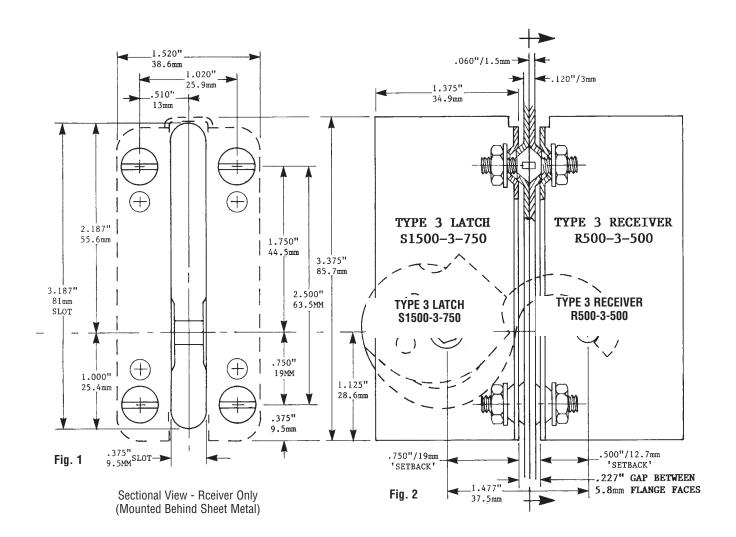


TYPE 3 LATCH & RECEIVER

JOINING SHEET METAL COMPONENTS

When Sheet Metal Components are joined and they are to be touching, it is necessary to dimple the material to flush mount the attaching screws. Being that the flanges of the latch and receiver cases are also dimpled, a build up of the simple 'stack' occurs as shown below.

Obviously this adds to the gap between the case flange faces and must be factored into the 'Setbacks' chosen to maintain approximately the proper 'Reach' of the latch book. The S1500-3-750 latch chosen in this assembly has a 'reach' of 1.500", which satisfactorily matches the 1.477"/37.5mm span between the latch hex, and the receiver pin.



Typical Sheet Metal Latch Mounting Showing 'Sandwich' Build-Up due to Dimpling for Flat Head Screws"

FOR EXHIBITS, STORE FIXTURES, OFFICE PANELS, PREFAB STRUCTURES, ETC.

THIS IS THE MOST FREQUENTLY USED TYPE 3 LATCH RECEIVER COMBINATION FOR THICK PANEL FABRICATION

Fig 1: Typical thick and thin panel fabrication using Type 3 Latches and Receivers for In-Line Butt joints, corners and 'T' joints.

APPLICATIONS





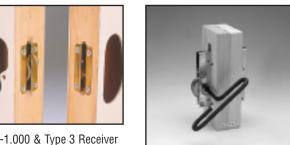
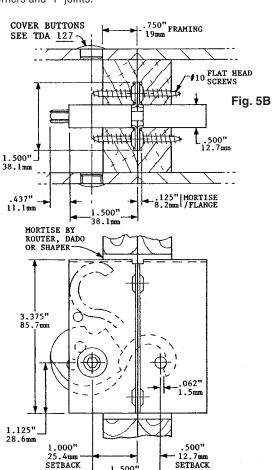


Fig 3: This photo of two 3/4"/19mm framing sections joined by this Type 3 Latch/Receiver combination shows clearly that the key access is well behind the frame.



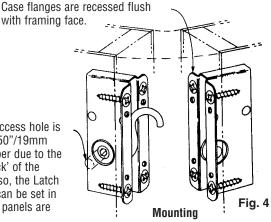
Mounting Dimensions

38.1mm

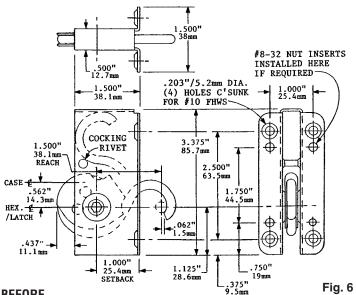
Fig. 5A

Type 3 Latch: **\$1500-3-1.000** Type 3 Receiver: **R500-3-500**

When locking: First rotate the Latch away from the Receiver until it stops, this extends the 'Reach' of the spring hook for locking. The Hex Key access hole is clear of the .750"/19mm framing member due to the 1.000" 'Setback' of the Latch case. Also, the Latch and Receiver can be set in place after the panels are complete.



Type 3 Latch: **\$1500-3-1.000** Type 3 Receiver: **R500-3-500**



YOU LOCK IT See TD\$ 1-1.

Latch Dimensions
Type 3 Latch: \$1500-3-1.000
Receiver Case Dimensions Identical

USED ON EXHIBITS, STORE FIXTURES, OFFICE PANELS, PREFAB STRUCTURES, ETC. THIS TYPE 3 LATCH AND 'H' RECEIVER ARE MOUNTED BEHIND THE PANEL FRAMING.

LESS PANEL PREPARATION • NO LATCH FLANGE RECESS REQUIRED • CAN BE NAILED IN PLACE



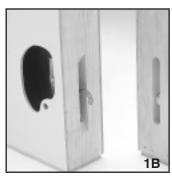
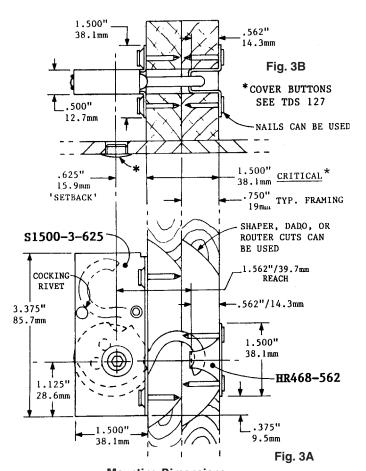


Fig 1A & 1B The cut-away panel view and unlocked sample show the Type 3 Latch and a 'H' Receiver which are mounted behind the panel framing. No recess is required for the flanges in this assembly.

MOUNTING

Fig. 3

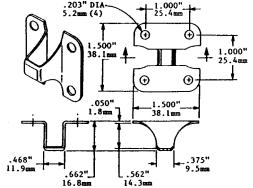
Type 3 Latch: **\$1500-3-625** Receiver: **HR468-562**



Mounting Dimensions Type 3 Latch: **\$1500-3-625** Receiver: HR468-562

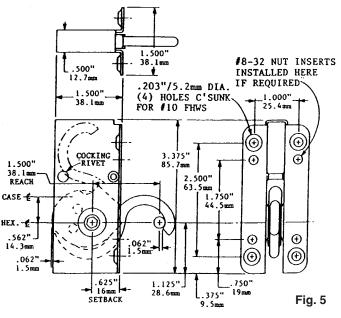
* If your framing material thicknesses are different from this dimension, the Latch 'Setback' selected should compensate for the difference. Assistance with your application is always available.

When locking: First rotate the Latch away from the Receiver until it stops, this extends the 'Reach' of the spring hook for locking.



'H' Receiver Dimensions Receiver: HR468-562

Fig. 4



COCK IT BEFORE YOU LOCK IT See **TDS** 1-1.

Latch Dimensions Type 3 Latch: **\$1500-3-625**

A TYPE 3R LATCH AND TYPE 3 RECEIVER ARE MOUNTED IN THICK FRAMING WITH FLANGES REVERSED

With the Spring Hook operating out of the rear of the Latch case the fabricator can install the case flanges behind the framing.

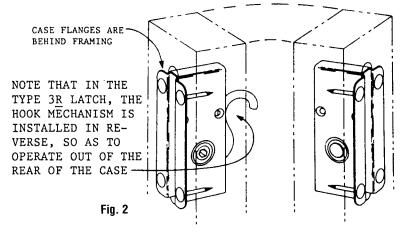


Fig. 1A

Fig. 1B

APPLICATIONS

Modular partitioning, exhibits and many other thick framed structures use Reverse Flange Mounted Type 3R Latches and Type 3 Receivers



MOUNTING

A typical thick framing joint is shown using the Type 3R Latch S1500-3R-875 and the Type 3 Receiver R500-3-875 - Reversed Flange Mounted -

To Designate Reverse Flange Type 3R

Latches add 'R' to the Part No.

500" 1.500 NATIS CAN BE USED 3.000"CRITICAL COVER BUTTONS SEE TDS 127 .500" . 500" 38.1mm . 687" 42.9mm 85 .562" 3.875" 98.4mm MORTISE 2.500" 63.5mm # CASE -∉ HEX. /LATCH 1.125" .375" 9.5mm 22.2mm 22.2mm 1.500"/38.1mm REACH -CRITICAL Fig. 3

(i.e.: S1500-3R-875)

Variations of panel frame thickness and access hole location can be accommodated by different 'Setbacks' of Latches and Receivers, which are available - See TDS 106

MOUNTING DIMENSIONS/REVERSED FLANGE

Type 3R Latch: S1500-3R-875 Type 3 Receiver: R500-3-875



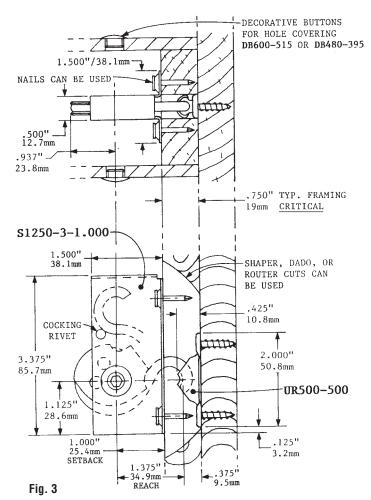


FOR 'T' & CORNER JOINTS TO AN EXISTING WALL

FREQUENTLY USED FOR EXHIBITS. PARTITIONS, SCENERY, ETC

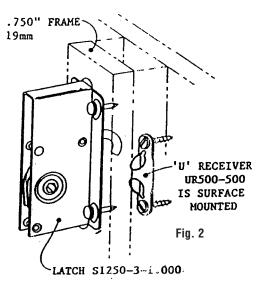


Fig. 1 The Norse Type 3 Latch and 'U' Receiver are used on exhibits and other panel, scenery or sign systems, where a 'T' or Corner Joint is to be made to an existing wall where surface mounting the Receiver is required.



MOUNTING DIMENSIONS:

Type 3 Latch & Type 'U' Receiver \$1250-3-1.000 UR500-500



MOUNTING

The Type 3 Latch S1250-3-1.000 is used here to attach a .750"/19mm thick Panel Frame Member to an existing Wall Face, using a Surface Mounted 'U' Receiver UR500-500

If it is desirable to use a Type 3 Latch \$1500-3-1.000, (Due to its use elsewhere in the Panel System)

See TDS 112-2

• • •

When locking Latch, first rotate it away from the Receiver, against the 'Cocking' Rivet until rotation ceases. This extends the spring hook, providing 'Over Reach' for locking.

COCK IT BEFORE YOU LOCK IT See TDS-1-1



TYPE 3 LATCH & TYPE 'U' RECEIVER

FOR 'T' & CORNER JOINTS TO AN EXISTING WALL

SHOWING HERE THE USE OF AN S1500-3-1.00 LATCH WHICH IS USED ELSEWHERE THROUGHOUT A PANEL SYSTEM FREQUENTLY USED FOR EXHIBITS. PARTITIONS, SCENERY, ETC

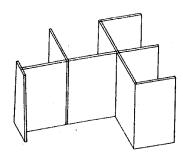
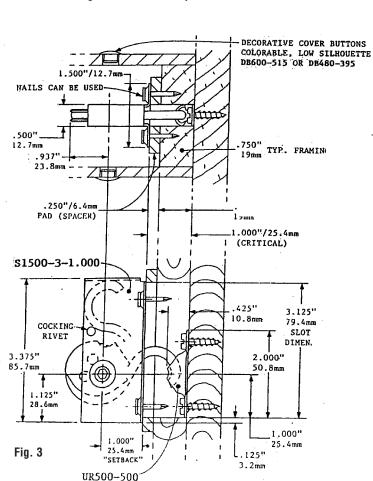
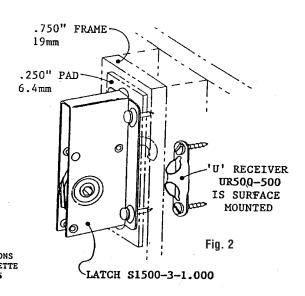


Fig. 1 The Norse Type 3 Latch and 'U' Receiver are used on exhibits and other panel, scenery or sign systems, where a 'T' or Corner Joint is to be made to an existing wall where surface mounting the Receiver is required.



MOUNTING DIMENSIONS TYPE 3 LATCH & TYPE 'U' RECEIVER \$1500-3-1.000 UR500-500



MOUNTING

Shown here us a mounting method whereby a Type 3 Latch S1250-3-1.000 can be utilized tto attach a .750"/19mm thick panel frame member (by adding a .250"/6.4mm PAD), to an exitsing wall face using a surface mounted 'U' Receiver UR500-500

The assembly shown hereon is used when the \$1500-3-1.000 Latch is used elsewhere in the wall system, and introducing another very similar(but dimensionally different) Latch (\$1250-3-1.000), could result in a mispalced latch, and a consequential malfunction. If however, the use of the .250"/6.4mm PAD is undesirable, see TDS 112-1 as an alternative method.

• • •

When locking Latch, first rotate it away from the Receiver, against the 'Cocking' Rivet until rotation ceases. This extends the spring hook, providing 'Over Reach' for locking.

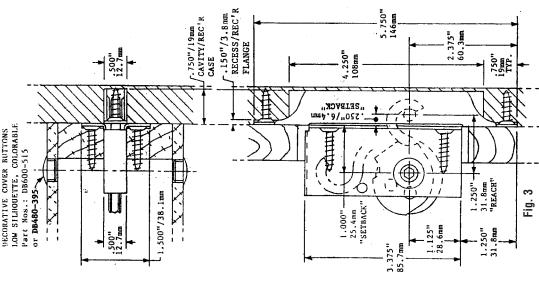
> COCK IT BEFORE YOU LOCK IT See TDS-1-1

NORSE

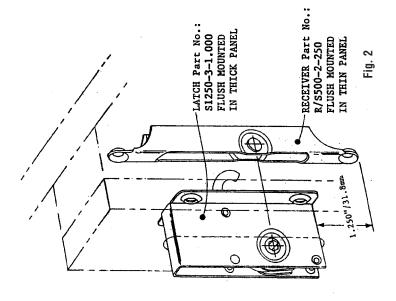
TYPE 3 LATCH TYPE 2 R/S SHORT RECEIVER

FOR JOINING THICKER PANELS TO THIN PANELS AT 'T'S AND CORNERS These illustrations show how a Type 3 Latch (\$1250-3-1.000) Installed in panel by using a Type 2R/S Short Receiver (R/S500-2-250) a relatively thick panel can be joined to a much thinner

Please Refer to TDS 115 Showing an Alternate method of accomplishing this **Type of joint to an even thinner panel**



MOUNTING DIMENSIONS TYPE 3 LATCH & TYPE 2 R/S SHORT RECEIVER \$1250-3-1.000 R/S500-2-250



\$1250-3-1.000 & R/S500-2-250 Joining a Thick Panel to a thin panel in A 'T' or Corner Joint TYPE 3 LATCH & TYPE 2 R/S SHORT RECEIVER MOUNTING

Fig. 1 TYPICAL OFFICE OR EXHIBIT PANELLING WHEREIN THICKER MEMBERS ARE JOINED TO THIN RECEIVERS AT 'T' S & CORNERS

WHEN JOINING THIN PANELS SEE TDS 91 AND TDS 93



5.750" 146mm

4.250"

1.000" ---25.4mm "SETBACK"

250"/6.4mm 250"/6.4mm 2.375" 60.3mm

.750" 19mm TYP.

"REACH"

1.250"

..500.

.150"/3.8mm 'RECESS/REC'R FLANGE

> .250"/6.4mm-FLANGE FACE RECESS/LATCH

TOTAL RECESS /LATCH FLANGE

.350"/8.9MM -

L1.500"/38.1mm

CAVITY/REC'

CASE

750"/19mm

CASE

\$00°" 12.7mm

> .500" 12.7mm

TYPE 3 LATCH & TYPE 2 R/S SHORT RECEIVER

\$1500-3-1.000 R/\$500-2-250

MOUNTING DIMENSIONS



DECORATIVE COVER BUTTONS
LOW SILHOUETTE, COLORABLE
Parc Nos.: DB600-515

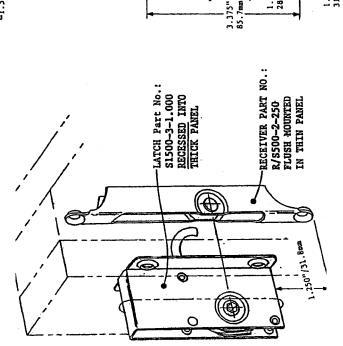
or DB460-390

TYPE 3 LATCH S1500-3-1.000 & TYPE 2 R/S SHORT RECEIVER

FOR JOINING THICKER PANELS TO THIN PANELS AT 'T'S AND CORNERS



REFER TO TDS-<u>114-1</u> OR TDS <u>115</u>, WHICH ARE ALTERNATE METHODS OF ACCOMPLISHING THIS TYPE OF JOINT



MOUNTING
TYPE 3 LATCH & TYPE 2S SHORT RECEIVER
S1500-3-1.000 & R/S500-2-250
JOINING A THICK PANEL TO A THIN PANEL IN A 'T' OR
CORNER JOINT

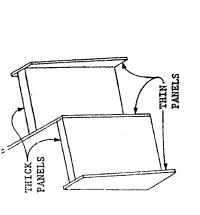


Fig. 1 TYPICAL OFFICE OR EXHIBIT PANELLING Wherein Thicker Members are Joined to Thin Receivers at 'T' s & corners

WHEN JOINING THIN PANELS TO A THIN PANELS SEE TDS $\overline{91}$ AND TDS $\overline{93}$

Type 3 Latch S1250-3-1.125 and Type 2 RSL Short Slotted Receiver

For Joining Thick Panels to Thin Panels at 'T' and Corner Joints

Type 3 Latch and Type 2 RSL Short Slotted Receiver

Mounting Dimensions

Receiver: RSL500-2-187

Latch: S1250-3-1.125

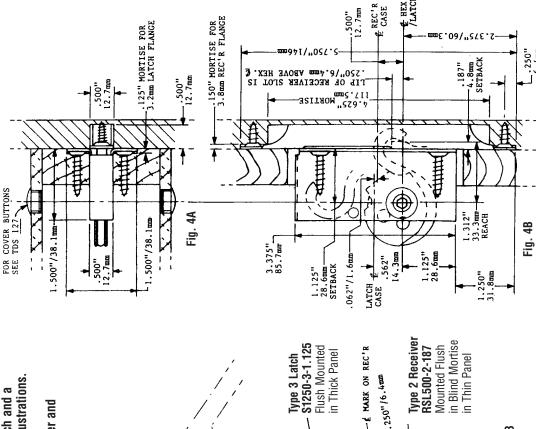
FOR JOINING THICK PANELS TO THIN PANELS AT 'T' AND CORNER JOINTS



Attaching a Thick Panel to a Thin Panel in a 'T' or Corner Joint Without Penetrating

the Thin Member Can Be Readily Accomplished Using a Type 3 Latch and a

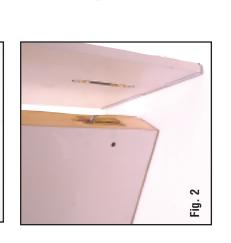




Type 2 RSL Short Slotted Receiver S1250-3-1.125 & RSL500-2-187 **Type 3 Latch and** Panel Mounting

Fig. 3

1.250" 31.8mm



.250"/6.4mm

HEX.

Wherein a Thick Member is Joined to a Thin Member at a 'T' Joint Shown or at a Corner Joint Typical Office or Exhibit Paneling **APPLICATIONS**

Type 2 RSL Short Slotted Receiver S1500-3-625 & RSL500-2-187

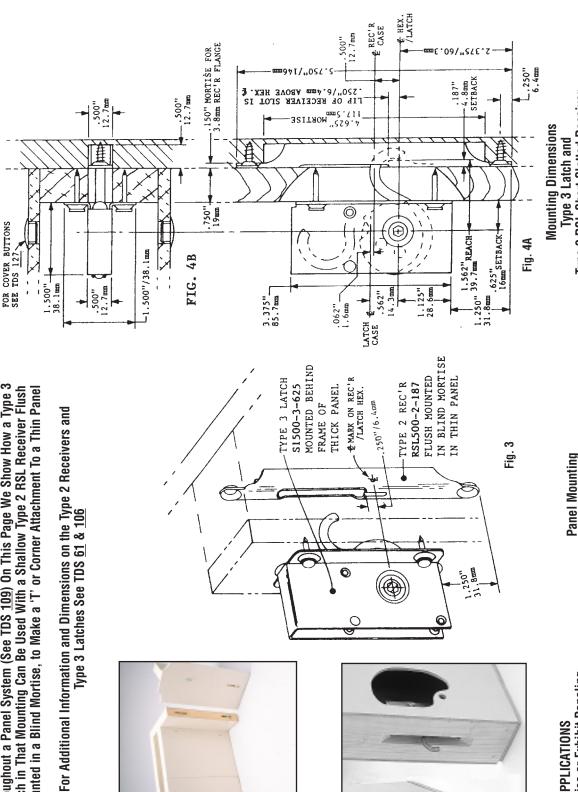
FOR JOINING THICK PANELS TO THIN PANELS AT 'T' AND CORNER JOINTS,

WITH TYPE 3 LATCH MOUNTED BEHIND FRAMING



For Joining Thick Panels To Thin Panels at 'T' and Corner Joints With Type 3 Latch Mounted Behind Framing

Type 3 Latch S1500-3-625 and Type 2 RSL Short Slotted Receiver



Wherein Thicker Members are Joined To Typical Office or Exhibit Paneling Thin Members at 'T's & Corners **APPLICATIONS**

Fig.

Type 3 Latch and Type 2 RSL Short

S1500-3-625 & RSL500-2-187

Slotted Receiver

Type 2 RSLS Receiver: RSLS500-2-187

Type 2 RSLS Short Slotted Receiver Fype 3 Latch: **\$1250-3-1.125**

ype 3 Latch and

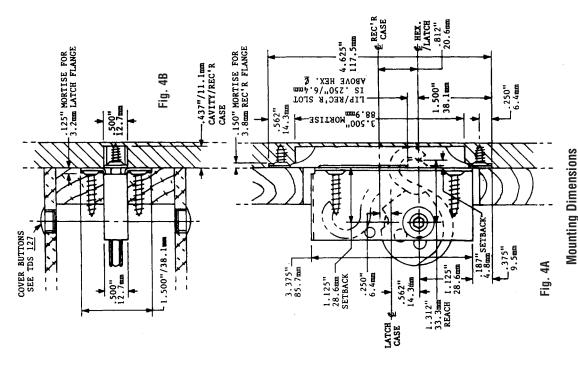
FOR JOINING THICK PANELS TO THIN PANELS AT "T' AND CORNER JOINTS

For Joining Thick Panels To Thin Panels at 'T' and Corner Joints Than the Standard Type 2 Short Receiver Which is (.500"/12.7mm X 5.750"/146mm)

Type 3 Latch S1250-3-1.125 and Type 2 RSLS Short Slotted Receiver

• The Type 2 RSLS Receiver is Shallower and Shorter in Length (.437"/11.1mm X 4.625"/117.5mm) •



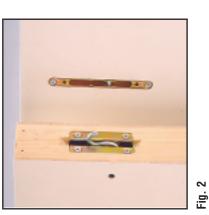


IN BLIND MORTISE IN THIN PANEL TYPE 2 RECEIVER IN THICK PANEL FLUSH MOUNTED S1250-3-1.125 FLUSH MOUNTED RSLS500-2-187 TYPE 3 LATCH -É MARK ON REC'R .250"/6.4mm Fig. ..375"19.5mm

Type 2 RSLS Receiver: RSLS500-2-187 Type 2 RSLS Short Slotted Receiver Type 3 Latch: **\$1250-3-1.125** Mounting



Joint (Shown) or at a Corner Joint Joined to a Thin Member at a 'T' **Sypical Office or Exhibit Paneling** Wherein a Thick Member is **APPLICATIONS**



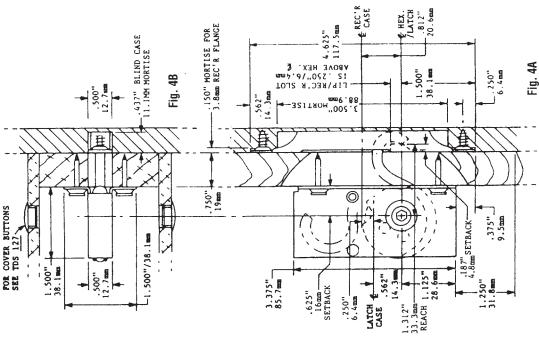
0

FOR JOINING THICK PANELS TO THIN PANELS AT 'T' AND CORNER JOINTS, WITH THE TYPE 3 LATCH MOUNTED BEHIND FRAMING

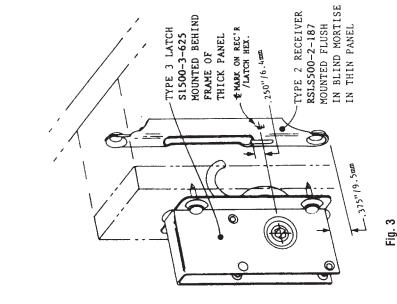
For Joining Thick Panels To Thin Panels at 'T' and Corner Joints, With the Type 3 Latch Mounted Behind Framing The Type 2 RSLS Receiver is Shallower and Shorter in Length (.437"/11.1mm X 4.625"/117.5mm) Than the Standard Type 2 Short Receiver Which is (.500"/12.7mm X 5.750"/146mm)

Type 3 Latch S1500-3-625 and Type 2 RSLS Short Slotted Receiver

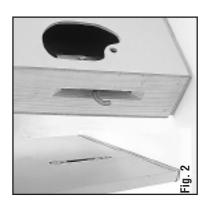




Type 3 Latch: **\$1500-3-625** Type 2 RSLS Receiver: **R\$L\$500-2-187** Type 2 RSLS Short Slotted Receiver **Mounting Dimensions** Type 3 Latch and



Type 2 RSLS Receiver: RSLS500-2-187 Type 2 RSLS Short Slotted Receiver Type 3 Latch: **\$1500-3-625** Type 3 Latch and Mounting



Vypical Office or Exhibit Paneling loined to a Thin Member. The Latch is Mounted Behind the Wherein a Thick Member is Panel Frame

(Suffix '8-32' Specifies Factory Installed #8-32 Nuts)

Receiver: RSL500-2-187/8-32

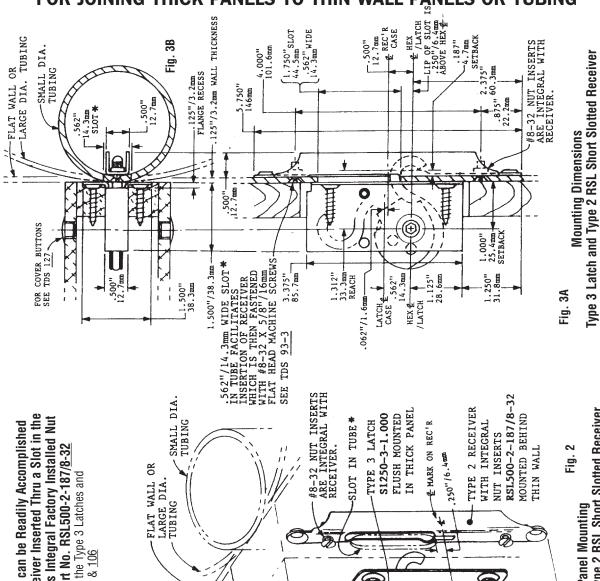
Latch: **\$1250-3-1.000**

FOR JOINING THICK PANELS TO THIN WALL PANELS OR TUBING



Type 3 Latch S1250-3-1.000 and Type 2 RSL Short Slotted Receiver

For Joining Thick Panels To Thin Wall Panels or Tubing



Panel Mounting 1.250" 0 25"/3.2mm Depicted Here, it is Advisable When Small Diameter Tubing is Used, or Receiver, such as an RSL500-2-125/8-32. The 'Reach' (1.312"/33.3mm) Should be Maintained. Design Assistance is Always When the Wall Thickness Exceeds the to use a Shallower 'Setback' On the

Installation Tool No.: ITRSL-1

R/S Receiver Into the Slot, and Holds it in Facilitates Insertion of the Shallow RSL or Place While Attaching it With the #8-32 Screws. See TDS 93-3

Available

Type 3 Latch andType 2 RSL Short Slotted Receiver Latch: **\$1250-3-1.000**

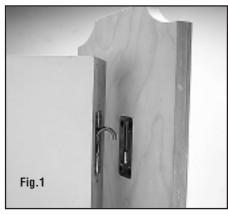
(Suffix '8-32' Specifies Factory Installed #8-32 Nuts) Receiver: RSL500-2-187/8-32

Sypical Attachment of a Thick Panel

Fig.

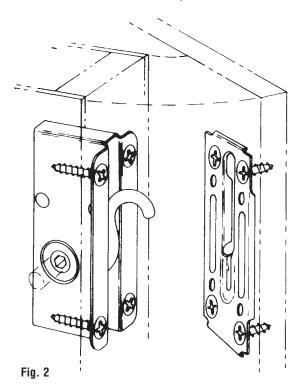
to a Thin Wall Tube

JOINING THICK PANELS TO THIN PANELS AT 'T' & CORNER JOINTS WITHOUT MORTISING THRU THE THIN MEMBER, IS READILY ACCOMPLISHED WITH A TYPE 3 LATCH AND THE VERY SHALLOW TYPE 3 RSL RECEIVER IN A BLIND MORTISE, AS SHOWN IN THESE ILLUSTRATIONS



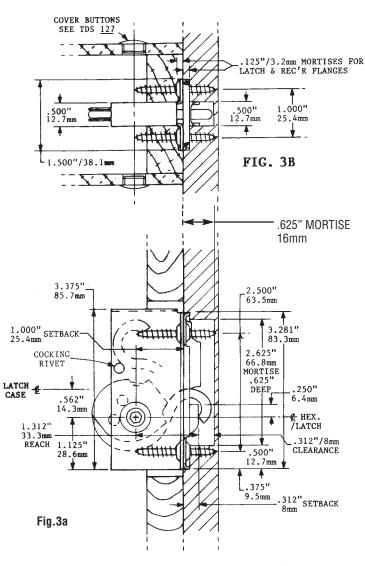
APPLICATIONS

Shown here in the unlocked mode is a Type 3 Latch and a shallow Type 3 RSL Receiver mounted flush in a 'blind' mortised thin panel



PANEL MOUNTING

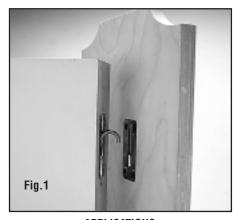
Type 3 RSL Short Slotted Receiver Latch: S1250-3-1.000 Receiver: RSL500-3-312



PANEL MOUNTING

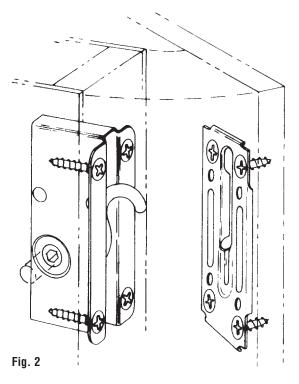
Type 3 RSL Short Slotted Receiver Latch: S1250-3-1.000 Receiver: RSL500-3-312

JOINING THICK PANELS TO THIN PANELS AT 'T' & CORNER JOINTS WITHOUT MORTISING THRU THE THIN MEMBER, IS READILY ACCOMPLISHED WITH A TYPE 3 LATCH AND THE VERY SHALLOW TYPE 3 RSL RECEIVER IN A BLIND MORTISE, AS SHOWN IN THESE ILLUSTRATIONS



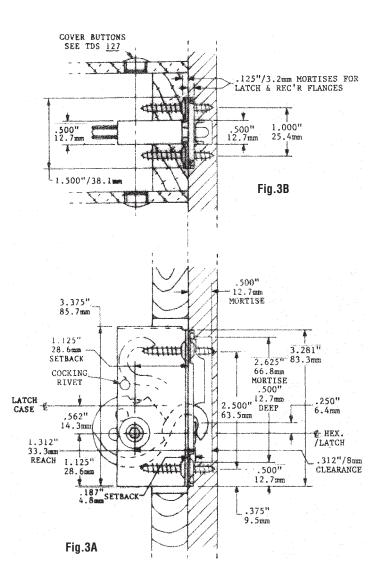
APPLICATIONS

Shown here in the unlocked mode is a Type 3 Latch and a shallow Type 3 RSL Receiver mounted flush in a 'blind' mortised thin panel



PANEL MOUNTING

Type 3 RSL Short Slotted Receiver Latch: S1250-3-1.125 Receiver: RSL500-3-187



PANEL MOUNTING

Type 3 RSL Short Slotted Receiver Latch: S1250-3-1.125 Receiver: RSL500-3-187



USED FOR JOINING STRUCTURAL PANELS, EQUIPMENT ATTACHMENT, CASE CLOSURES, ETC., WHERE MULTI-POINT SIMULTANEOUS LATCHING IS REQUIRED. MANY DIFFERENT RECEIVERS CAN BE USED.

"GANGING" NORSE LATCHES (TYPE 1, TYPE 2 AND TYPE 3) SPACED APART USES A COMMON SHAFT THRU TWO OR MORE LATCHES THAT CAN BE OPERATED FROM EITHER END OF THE SHAFT.

INSERTION OF THE SHAFT CAN BE DONE THRU THE ACCESS HOLE AFTER PANEL FABRICATION (SEE FIGS. 2 & 3), OR, IF THE PANEL INTERIOR IS ACCESSIBLE, ASSEMBLE THOSE ELEMENTS BEFORE PANEL CLOSURE (SEE FIGS. 1 & 4).

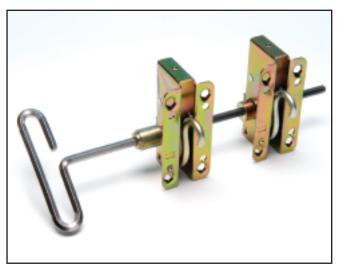


Fig. 1 "Ganged" Latches (two or more) on a single shaft, operated by a hex key or handle. See TDS 118-4.

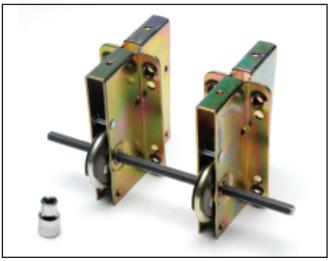


Fig. 2 "Ganged" Latches (two or more) using a bare shaft inserted thru the access hole after the panel is fabricated. Operation is by a socket wrench. See TDS 118-2.



Fig. 3 "Ganged" Latches (two or more) using a shaft with an integral hex sleeve inserted thru the access hole after the panel is fabricated. Operation is by a hex key. See TDS 118-3.

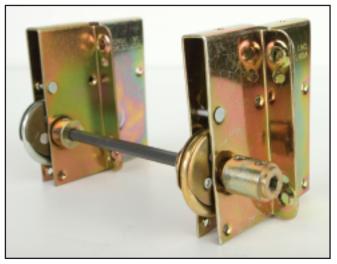


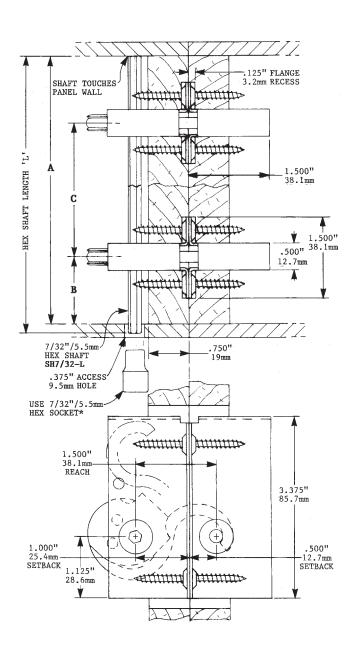
Fig. 4 "Ganged Latches (two or more) using a shaft, coupling and collars, assembled within the accessible panel interior before closure. Operated by a hex key or handle. See TDS 118-4.

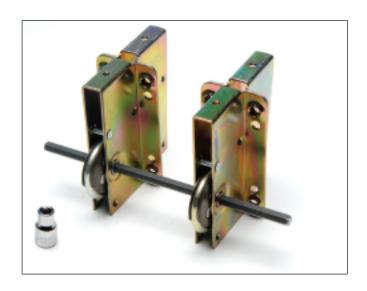


USED FOR WIDE STRUCTURAL PANELS, EQUIPMENT ATTACHMENT, CASE CLOSURES, ETC., WHERE MULTI-POINT SIMULTANEOUS LATCHING IS REQUIRED. MANY DIFFERENT RECEIVERS CAN BE USED.

"GANGING" NORSE LATCHES (TYPE 1, TYPE 2 AND TYPE 3) SPACED APART USES A COMMON SHAFT THRU TWO OR MORE LATCHES THAT CAN BE OPERATED FROM EITHER END OF THE SHAFT.

INSERTION OF THE SHAFT CAN BE DONE THRU THE ACCESS HOLE AFTER PANEL FABRICATION.





SHAFT INSERTION IS THRU THE KEY ACCESS HOLE, WITH NO OTHER ACCESS TO THE PANEL INTERIOR. MAKE SURE THE LATCHES ARE "IN SYNC" ON THE SHAFT.

MANY MORE NORSE LATCH/RECEIVER COMBINATIONS CAN BE "GANGED."

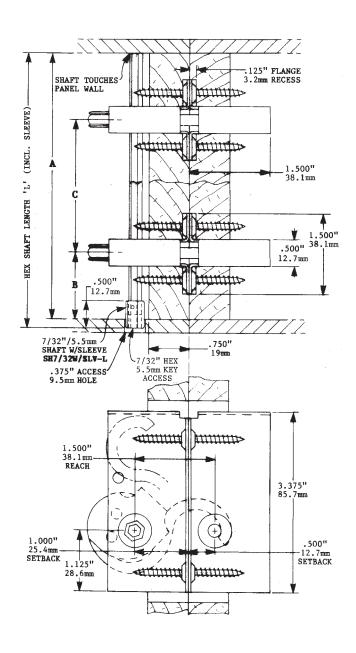
FOR ACCESS HOLE COVER BUTTONS SEE TDS 127-1.



USED FOR WIDE STRUCTURAL PANELS, EQUIPMENT ATTACHMENT, CASE CLOSURES, ETC., WHERE MULTI-POINT SIMULTANEOUS LATCHING IS REQUIRED. MANY DIFFERENT RECEIVERS CAN BE USED.

"GANGING" NORSE LATCHES (TYPE 1, TYPE 2 AND TYPE 3) SPACED APART USES A COMMON SHAFT THRU TWO OR MORE LATCHES THAT CAN BE OPERATED FROM EITHER END OF THE SHAFT.

INSERTION OF THE SHAFT/SLEEVE CAN BE DONE THRU THE ACCESS HOLE AFTER PANEL FABRICATION.





SHAFT/SLEEVE INSERTION IS THRU THE HEX KEY ACCESS HOLE, WITH NO OTHER ACCESS TO THE PANEL INTERIOR. MAKE SURE THE LATCHES ARE "IN SYNC" ON THE SHAFT.

MANY MORE NORSE LATCH/RECEIVER COMBINATIONS CAN BE "GANGED."

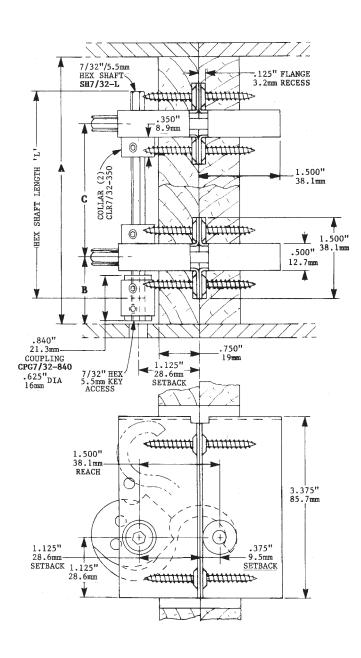
FOR ACCESS HOLE COVER BUTTONS SEE TDS 127-1.

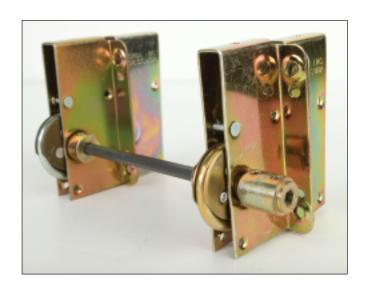


USED FOR WIDE STRUCTURAL PANELS, EQUIPMENT ATTACHMENT, CASE CLOSURES, ETC., WHERE MULTI-POINT SIMULTANEOUS LATCHING IS REQUIRED. MANY DIFFERENT RECEIVERS CAN BE USED.

"GANGING" NORSE LATCHES (TYPE 1, TYPE 2 AND TYPE 3) SPACED APART USES A COMMON SHAFT THRU TWO OR MORE LATCHES THAT CAN BE OPERATED FROM EITHER END OF THE SHAFT.

INSERTION OF THE SHAFT, COUPLING AND COLLARS NECESSITATES HAVING ACCESS TO THE PANEL INTERIOR BEFORE CLOSURE.



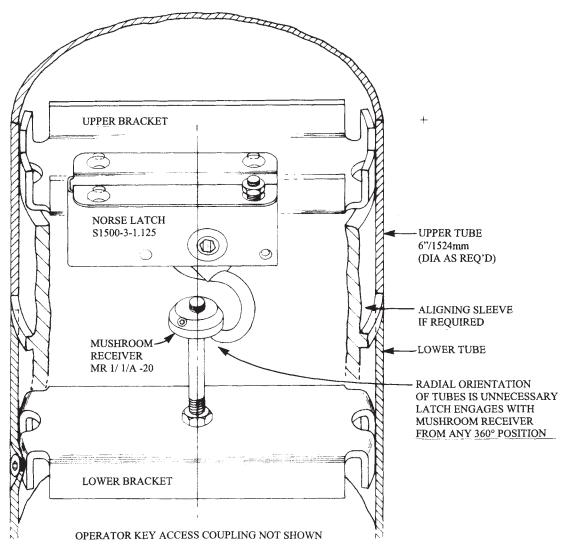


THIS SHAFT INSTALLATION REQUIRES ACCESS TO THE PANEL INTERIOR FOR ASSEMBLY WITH THE COUPLING AND COLLARS. MAKE SURE THE LATCHES ARE "IN SYNC" ON THE SHAFT.

MANY MORE NORSE LATCH/RECEIVER COMBINATIONS CAN BE "GANGED."

FOR ACCESS HOLE COVER BUTTONS SEE TDS 127-1.

THIS LATCH/RECEIVER COMBINATION IS USED TO AXIALLY CLAMP TOGETHER TWO TUBES. NO RADIAL ORIENTATION IS NECESSARY. OPERATION IS BY A HEX KEY THRU A HOLE IN THE TUBE. FOR SMALLER TUBING SEE TDS 121-2



TWO TUBES CONNECTED AXIALLY USING A TYPE 3 LATCH AND A 'MUSHROOM' RECEIVER



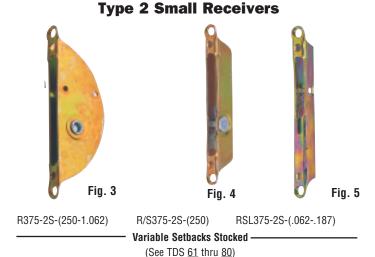
The versatility of the Norse Latch System is to a large extent contingent upon the variety of Receivers shown on these pages, which allow the Latches to be used in so many different applications. With a few exceptions, any of these Receivers can be used with any Latch, whether the Receiver be an encased type or nonencased. Illustrations of many 'Mixed' combinations are shown in the 'Applications' of Sections 1, 2 and 3, in this catalog, and some also on the following pages.

ENCASED RECEIVERS

Type 1, Type 2, and Type 3 Encased Receivers and modifications thereof matching and interchangeable with Latches Type 1, Type 2 & Type 3. (i.e.: A TYPE 1 LATCH CAN BE USED WITH A TYPE 2 OR TYPE 3 RECEIVERS, ETC.)

Type 1 Small Receivers

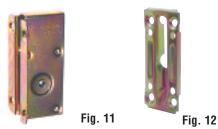




Type 1 Large Receivers

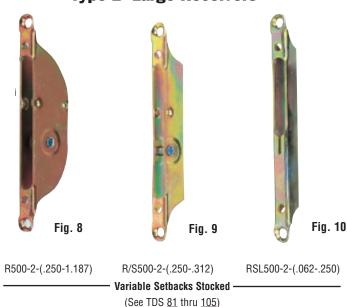


Type 3 Receivers



RSL500-3-(.062-.312) R500-3-(.375-1.187) Variable Setbacks Stocked (See TDS 106 thru 125)

Type 2 Large Receivers



Each of these non-encased Receivers has been designed for the numerous projects where the configuration of the elements to be joined or closed will not be accommodated otherwise.

THESE RECEIVERS GREATLY ENHANCE THE UTILITY OF THE NORSE LATCHES



'H' Receiver HR468-562 See TDS 126-3 & 109



Fig. 2 **Rod Receiver** RR250-(.750 thru 2.0) See TDS 126-3 & TDS 71, 97 & 107



Fig. 3 'U' Receiver UR500-500 See TDS 126-4 & TDS 18, 38, 85, & 112



Fig. 4 'D' Receiver DR468-500 See TDS 126-4 & TDS 18, 38, 85, & 112



Fig. 5 'J' Receiver JR250 See TDS 126-5 & TDS 19, 39, 67, & 90



Fig. 6 'JL' Receiver **JLR250** See TDS 126-5 & TDS 19 & 39



Fig. 7 'Mushroom' Receiver MR-1/4-20 See TDS 126-6 & 121-1



Fig. 8 Short 'P' Receiver **SPR250** See TDS 126-6 & 19-3 & 39-3



Fia. 9 'P' Receiver PR250 See TDS 126-7 & TDS 20-1 & 40-1



Fig. 10 'PL' Receiver **PLR250** See TDS 126-8 & 40-1



Fig. 11 'IT' Receiver **ITR187** See TDS 126-9 & TDS 21-2 & 41-2



Fig. 12 'OT' Receiver OTR187 See TDS 126-9 & TDS 21-1 & 41-1

THESE RECEIVERS (FIGS. 13-22) ARE FOR JOINING PANELS AT VARIABLE ANGLES, FREE STANDING, OR ATTACHED TO A WALL



Fig. 13 O' Receiver OR250-1.375-1.0 See TDS 126-10 & 95 & 120



Fig. 14 'OD' Receiver ODR250-1.375-1.25 See TDS 126-10 & 95 & 120



Fig. 15 'O' Receiver OR250-2.38



Fig. 16 'OD' Receiver ODR250-2.38 W/BR BRLOR-1



Fig. 17 '0' Receiver OR250-3.5



Fig. 18 'OD' Receiver ODR250-3.5 W/BR BRLOR-1



Fig. 19 'O' Receiver OR250-4.5



Fig. 20 'OD' Receiver ODR250-4.5 W/BR BRLOR-1

See TDS 126-11 & 95-1C1, 95-2A, 95-2B & 95-2C



Fig. 21 **Cup Receiver** CR250-1900 See TDS 126-12 & TDS 74, 94 & 119





Fig. 22 **Cup Receiver** CR250-1900 W/TBR250-1900 See TDS 126-12 & TDS 74, 94 & 119



Fig. 23 Hinge Receiver HNGR375-1.48 See TDS 126-13 & TDS 86-1 & 113-1



Fig. 24 **Angle Receiver** ANGR375-2.0 See TDS 126-14 & TDS 86-2 & 113-2

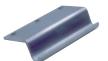


Fig. 25 'JLW' Wide Receiver **MULTILATCH®** See TDS 126-15 & 191



Fig. 26 **Channel Receiver MULTILATCH®** See TDS 126-16 & TDS 186

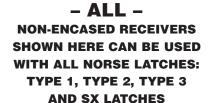




Fig. 27 Slot Receiver in Tubular Framed **Panels**



Fig. 28 Slot Receiver in Metal Equipment or Vehicular Framing



Fig. 29 Metal Angle Receiver



Fig. 30 Pipe End



Fig. 31 Eye Bolt



Fig. 32 **Shoulder Bolt** Receiver



Fig. 33 'U' Bolt Receiver

TYPICAL CUSTOMER-PROVIDED RECEIVERS (FIGS. 27-33)

Usually they are a part of the equipment to be joined, closed or clamped. They validate the assertion that Norse Latches will fasten onto almost anything.



'H' RECEIVER & ROD RECEIVER

'H' RECEIVER

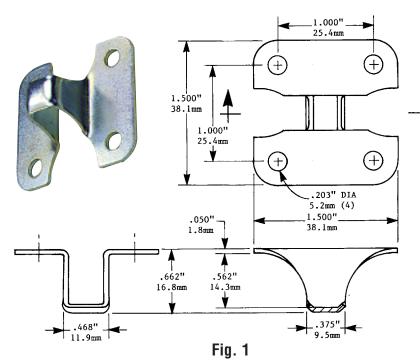




Fig. 2 Type 3 Latch & 'H' Receiver in a 3/4" (19mm) frame. Refer also to Fig. 7 on TDS 106-1A

'H' Receiver: HR468-562

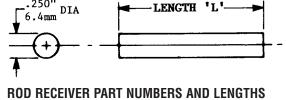
Material: Steel, Zinc Plate, Clear Chromate

The 'H' Receivers were designed to be mounted behind the panel frame material, usually 3/4"/19mm wood. No flange recess is required • LESS PANEL PREPARATION •

'H' Receivers are usually used with a Type 2 or Type 3 Latch as shown here. See TDS 109-1

ROD RECEIVER





ROD RECEIVER PART NO.: RR250-				
DASH NO.	-17	-22	-24	-25.4
L/in	.687	.875	.937	1.00
L/mm	17	22	24	25.4

Fia. 3 Rod Receiver: RR250-(17, 22, 24 & 25.4) Material: Steel, Zinc Plate, Yellow Chromate

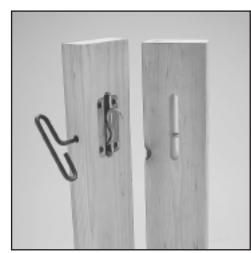


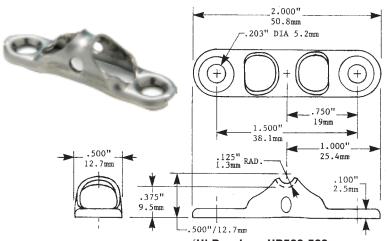
Fig. 4 Type 3 Latch & Rod Receiver in 2x4 framing

Rod Receivers (as shown here typically mounted in a wood 2x4 frame) have several advantages. The 'setback' dimension is determined by the drill hole location, and is therefore infinitely variable, compensating for different Latch setbacks. 'Press-In' installation is very simple. Various lengths are available. Cost is minimal. See TDS 107-3



'U' RECEIVER & 'D' RECEIVER

'U' RECEIVER



'U' Receiver: UR500-500 Material: Stainless Seel



Fig. 2 A 'U' Receiver & Type 1 Latch on a sliding door 90° application.



Fig. 3 Type 3 Latch & surface mounted 'U' Receiver are used to make a 'T' joint to a thin panel.

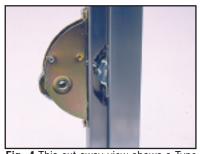


Fig. 1

Fig. 4 This cut-away view shows a Type 2 Latch and a 'U' Receiver joining a door/panel member to a frame.



Fig. 5 A Type 1 Latch with braces and a 'U' Receiver hold wall panels tight in a 90° corner joint.

'U' Receivers are used in many applications; they facilitate latching at 90°. Used with any Norse Latch, the aesthetic appearance of this Receiver makes it suitable for doors and other high profile applications. See TDSs 18-1, 29, 38-1, 40, 70, 85 & 112

'D' RECEIVER

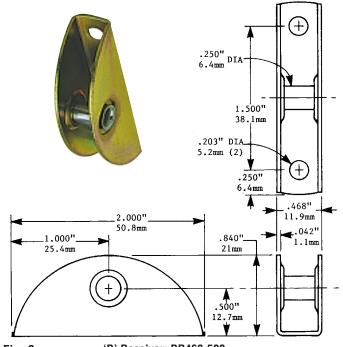


Fig. 6 'D' Receiver: DR468-500
Material: Steel, Zinc Plate, Yellow Chromate

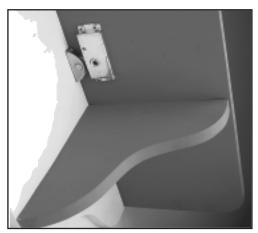


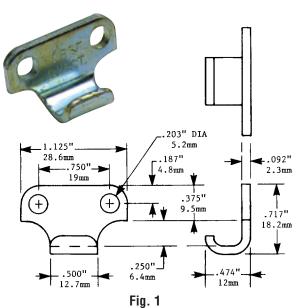
Fig. 7 This 'D' Receiver used with a Type 1 Latch holds and supports a shelf.

The 'D' Receiver is a predecessor to the 'U' Receiver and can be used in its place. It has the advantage of providing more of a support, particularly when used as a shelf or desk top attachment as shown here. See TDSs 18-2, & 38-2



'J' RECEIVER & 'JL' RECEIVER

'J' RECEIVER



Sliding and hinged doors utilize 'J' Receivers; shown here with a Type 1 Latch. See TDS <u>19</u> for details



Fig. 3 This application shows a Type 2 Latch (bottom lever operated), and a 'J' Receiver, both mounted internally to hold down a shroud on a medical device. See TDS 90



Fig. 4 Here a 'J' Receiver and a Type 1 Latch are mounted internally in a case goods application. See TDS 19

'J' Receiver: JR250

Material: Steel, Zinc Plate, Clear Chromate

The 'J' Receiver expands the utility of the Norse Latches considerably. Its versatility is shown here in these applications. See TDS 19, 39, 67 & 90

'JL' RECEIVER

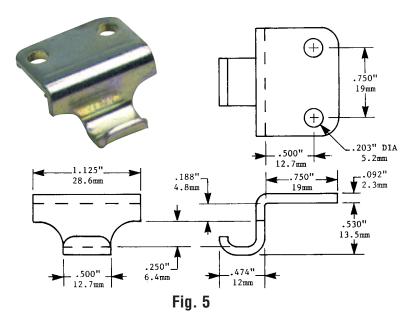




Fig. 6 Above is a Type 1 Latch and a 'JL' Receiver used on an 'over-the-top' case closure. See TDS 19

'JL' Receiver: JLR250

Material: Steel, Zinc Plate, Clear Chromate

'JL' Receivers facilitate container lid tie-down and around-the-corner closures in addition to many other applications. See TDS 19



MUSHROOM RECEIVERS

THE 'MUSHROOM' RECEIVER AXIALLY JOINS TUBULAR MEMBERS SO THAT RANDOM RADIAL ORIENTATION IS ACCOMMODATED. THE TUBES CAN BE ROTATED AS REQUIRED.



Fig. 1 MUSHROOM RECEIVER MRI-1/4-20 (See TDS 121-1)

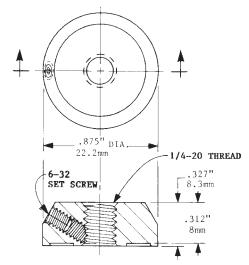


Fig. 2 MUSHROOM RECEIVER DIMENSIONS

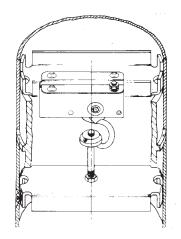


Fig. 3 TYPE 3 LATCH AND A MUSHROOM RECEIVER JOINING TWO TUBES AXIALLY WITH APPROXIMATELY 450# FORCE. TUBES CAN BE ROTATED AS NEEDED, AND THEN LATCHED IN ANY 360° POSITION. SEE TDS 121-1. VARIOUS TUBING SIZES CAN BE USED.

SHORT 'P' RECEIVERS

THE SHORT 'P' RECEIVER CAN BE USED WITH ANY NORSE LATCH. THESE RECEIVERS ARE PARTICULARLY USEFUL FOR DOORS, WINDOWS, BOXES, CASE CLOSURES, PANEL JOINTS, COUPLINGS, ETC.

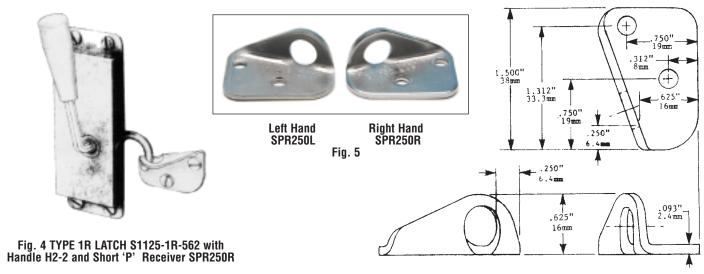
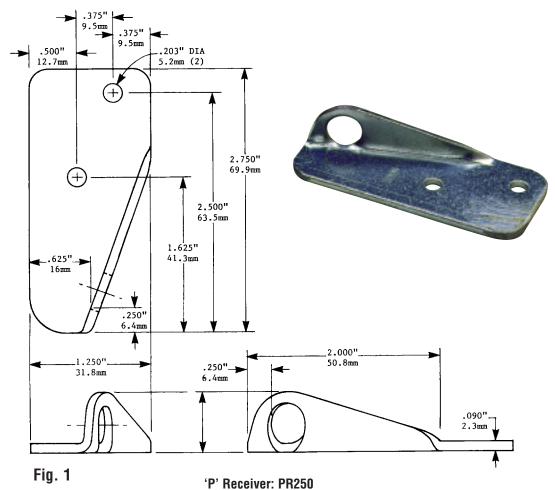


Fig 6. SHORT 'P' RECEIVER - RIGHT HAND. MAT: Stainless Steel. PN: SPR250R.

The Short 'P' Receiver (left or right) can be used interchangeably in either the left or right hand position. See TDSs 19-3A and 19-3B.





Material: Steel, Zinc, Clear Chromate

'P' Receivers are commonly used with Type 1 Latches on door, case and wall panel applications. When used in conjunction with the 'Spring Fingers' (see Fig. 3), they assist in keeping wall panels and counter & table tops tight and in-line. See TDS 40.

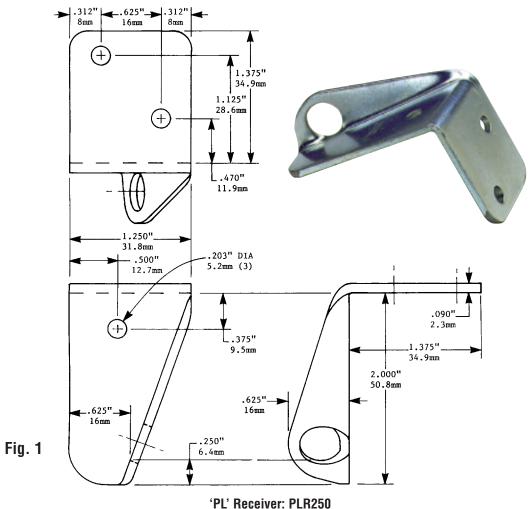


Fig. 2 Shown here with a Type 1 Latch the 'P' Receiver is used to hold a door closed.



Fig. 3 Used with 'Spring Fingers' and a Type 1 Latch, a 'P' Receiver helps to hold the panels tight and in-line.





Material: Steel, Zinc Plate, Clear Chromate

'PL' Receivers are most often used with Type 1 Latches on case goods, doors, wall panel corner joints, etc. When used with Spring Fingers (see Fig. 3), they assist in holding corner panel joints at 90°. See TDS 40



Fig. 2 A 'PL' Receiver and Type 1 Latch are used to close case goods and doors.



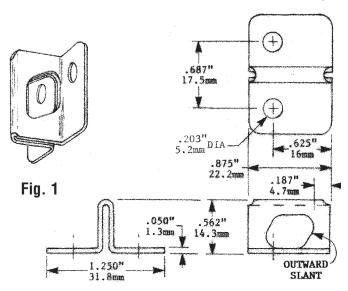
Fig. 3 The combination of the 'PL' Receiver and the Type 1 Latch with 'Spring Fingers' holds panels tight and at 90°.





The 'IT' and 'OT' Receivers each have a slanted surface upon which the Latch hook slides when locking, imparting a lateral force when compressing the door panel against the case. This is especially beneficial when gasketing is involved. Both the 'IT' and 'OT' Receivers can be used either inside or outside a case. See TDSs 21-1 and 21-2, and 41-1 and 41-2.

'IT' RECEIVER

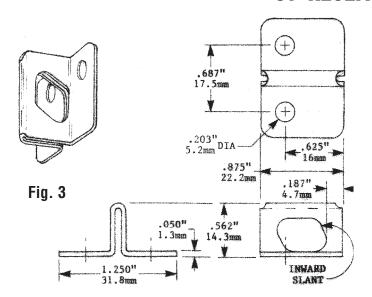


'IT' Receiver: ITR187 Material: Steel, Zinc Plate, Clear Chromate



Fig. 2 This is a view of an 'IT' Receiver mounted internally on a case. The door panel is hinged outside from below. The Type 1 Latch is mounted internally on the door. The Latch hook pulling against the slanted surface of the Receiver forces the door inward against the case.

'OT' RECEIVER



'OT' Receiver: OTR187 Material: Steel, Zinc Plate, Clear Chromate



Fig. 4 In this view the 'OT' Receiver is mounted on the outside of the case and the Type 1 Latch is on the door panel, with the hinge below. The Latch hook pulling downward on the slanted surface of the Receiver forces the panel inward against the case.

The 'IT' and 'OT' Receivers each have a slanted surface upon which the Latch hook slides when locking, imparting a lateral force when compressing the door panel against the case. This is especially beneficial when gasketing is involved. Both the 'IT' and 'OT' Receivers can be used either inside or outside a case.

See TDSs 21-1 and 21-2, and 41-1 and 41-2.

Of particular interest are the ITR187-2 and OTR187-2 which have keyhole-shaped screw holes for the easy removal of these Receivers when used, for example, as window hardware for hurricane shutters. See TDS 207-2A1.

OUTWARD

SLANT

'IT' RECEIVER 10.2mm DIA .687" 17.5mm . 230" 5.8mm DIA 625* 16mm .875" 22.2mm Fig. 1 .187" 4.7mm .050" 562" 1.3mm 14. 3mm

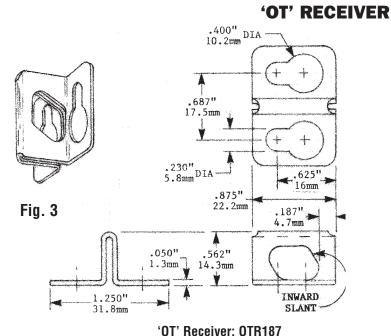
'IT' Receiver: ITR187 Material: Steel, Zinc Plate, Clear Chromate

1.250"

31.8mm



Fig. 2 This is a view of an 'IT' Receiver mounted internally on a case. The door panel is hinged outside from below. The Type 1 Latch is mounted internally on the door. The Latch hook pulling against the slanted surface of the Receiver forces the door inward against the case.

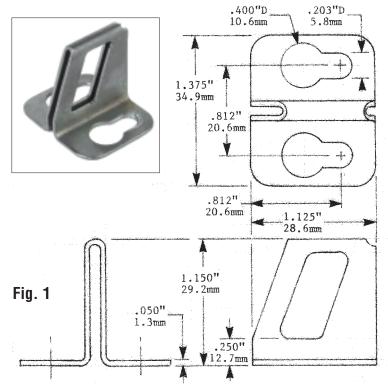


Material: Steel, Zinc Plate, Clear Chromate



Fig. 4 In this view the 'OT' Receiver is mounted on the outside of the case and the Type 1 Latch is on the door panel, with the hinge below. The Latch hook pulling downward on the slanted surface of the Receiver forces the panel inward against the case.





Big 'OT' Receiver: BOTR-1 Material: Steel, Zinc Plate, Clear Chromate

The Big 'OT' Receiver has a slanted strike surface upon which the Latch Hook slides when locking, imparting a downward force on the latch. This is especially beneficial in such applications as clamping a hurricane panel inward against a window frame, so as to withstand the strong winds of a hurricane.

THE BIG 'OT' RECEIVER ACCOMMODATES PANELS 1/4" THRU 3/4" THICK

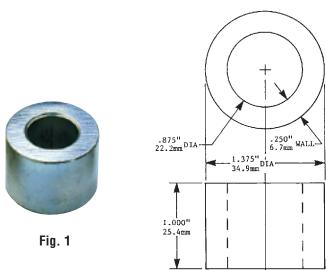
This downward force is also beneficial when used to secure a door or a case closure, particularly when a gasket is used.



Fig. 2 The Big 'OT' Receiver is mounted to the face of a window frame, and is engaged by the spring hook of a large Type 1 Latch mounted on a thick hurricane panel. The slanted Receiver strike forces the Latch (and plywood) firmly against the window frame face, securing the panel against hurricane-force winds. This Big 'OT' Receiver will accommodate panel thicknesses from 1/4" to 3/4".



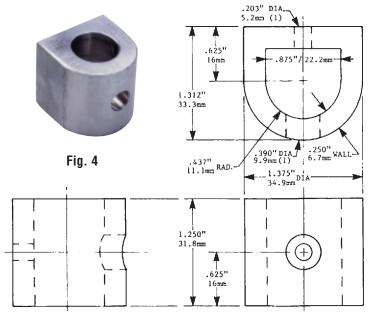
'0' RECEIVER



'0' Receiver: 0R250-1.375-1.000 Material: Plastic

'O' and 'OD' Receivers facilitate multiple panel joining at infinitely variable angles, both free standing or to a wall as shown in Fig 3. See TDS 95 & 120

'OD' RECEIVER



'OD' Receiver: ODR250-1.375-1.250 Material: Plastic



Fig. 2 Type 2 Latches join free standing panels to an 'O' Receiver at varying angles.

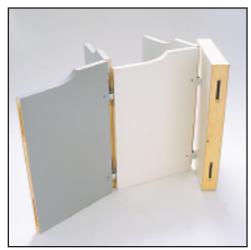


Fig. 3 Three panels, free standing, and attached to a wall, all at variable angles using 'O' and 'OD' Receivers.



Fig. 5 A panel with Type 2 Latches attaches at any angle to an 'OD' Receiver screwed to a wall.

SHOWN HERE ARE THREE SIZES OF 'O' RECEIVERS WHICH WILL ACCOMMODATE NUMEROUS PANELS AT ANY ANGLE. ALSO SEE OVERLEAF TYPE 1 AND TYPE 3 LATCHES CAN ALSO BE USED WITH 'O' RECEIVERS SEE TDS 48 FOR TYPE 1 LATCH AND '0' RECEIVER MOUNTING

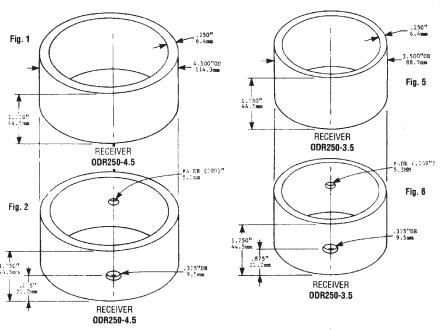




Fig. 8 Panels are Latched to the 'O' Receiver at any angle. See TDS 95

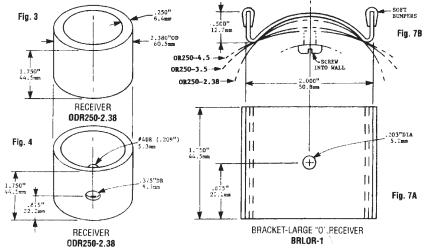


Fig 9. Using 'O' & 'OD' Receivers Numerous Panels can be mounted free standing or to a wall at any angle

TYPE 1, TYPE 2 AND TYPE 3 LATCHES CAN BE USED WITH 'O' & 'OD' RECEIVERS SEE TDS 48 FOR TYPE 1 AND TDS 95 FOR **TYPE 2 ATTACHMENTS**

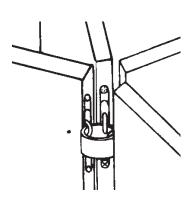


Fig. 11 A 'O' Receiver joins several panels at variable angles

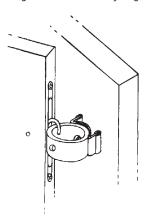


Fig. 10 A 'OD' Receiver & Wall Bracket BRLOR attach panels to walls at variable angles



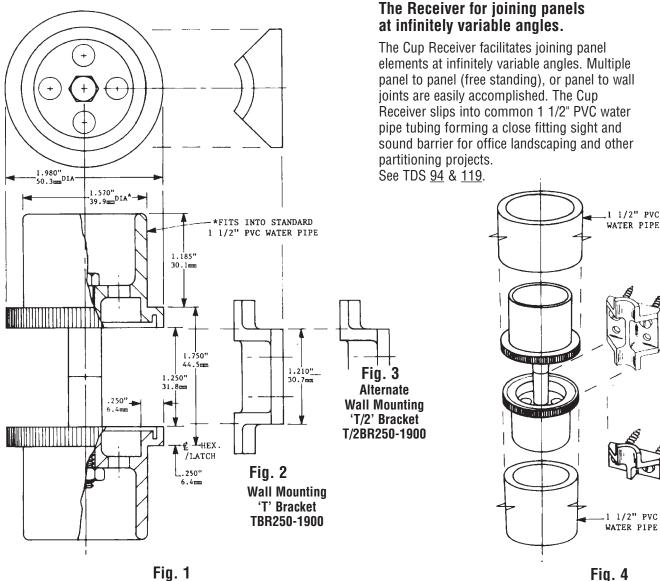


Fig. 1 Cup Receiver: CR250-1900



Fig. 5 Thin panels with Type 2 Latches are joined to Cup Receivers in a free standing group, which is also coupled to a wall.



Fig. 6 This close up shows the Norse Latches hooked into the Cup Receiver at any desired angle. Two or more panels can be joined.



Fig. 7 This view shows panels joined at variable angles to a Cup Receiver which is attached to a wall panel.



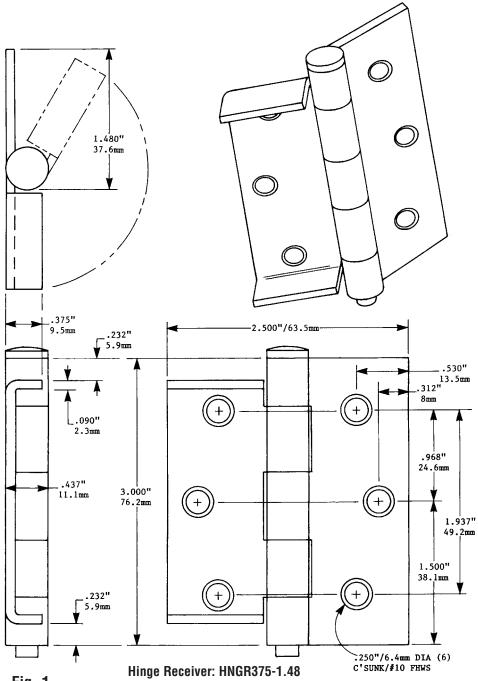


Fig. 1 Material: Steel, Zinc Plate, Clear Chromate

The Hinged Receiver can be used to join one panel to another, or to a wall, thereby producing a variable angle connection. See TDS 86 & 113

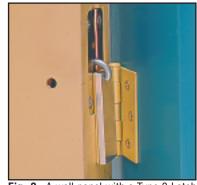
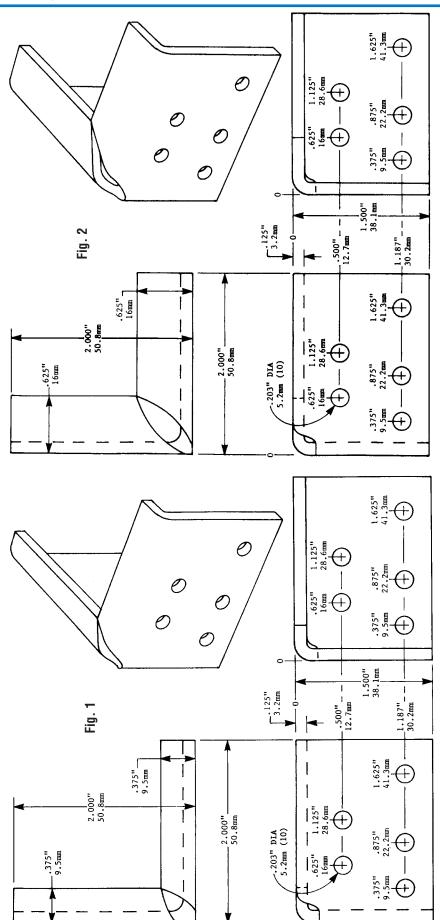


Fig. 2 A wall panel with a Type 3 Latch is joined to a Hinge Receiver which is screwed to a wall resulting in a variable angle joint.





Material: Steel, Zinc Plate, Clear Chromate Angle Receiver: ANGR625-2.0

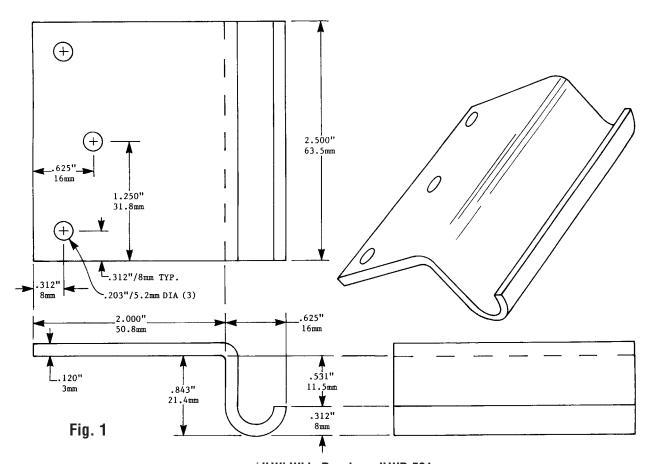
Fig. 3 An Angle Receiver used here with Type 3 Latches provides an inexpensive and simple means of joining panels



The Angle Receivers provide a convenient method of forming right angle joints, usually where only one face of the panels is exposed. See TDS 86 & 113

Material: Steel, Zinc Plate, Clear Chromate

Angle Receiver: ANGR375-2.0



'JLW' Wide Receiver: JLWR-531 Material: Steel, Zinc Plate, Clear Chromate

'JLW' Wide Receivers were designed for use with Norse Heavy Duty Multilatches® which have two shock hooks in addition to the Latch Spring Hook, at each of the multiple Latch stations. These are used as simultaneous-locking panel corner connections. The extra width Receivers compensate for tolerance build up over an 8'/2.4m (or more) span. See TDS 191

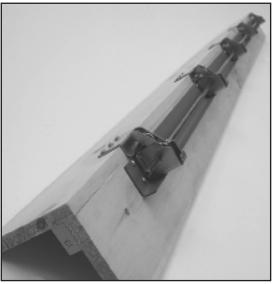
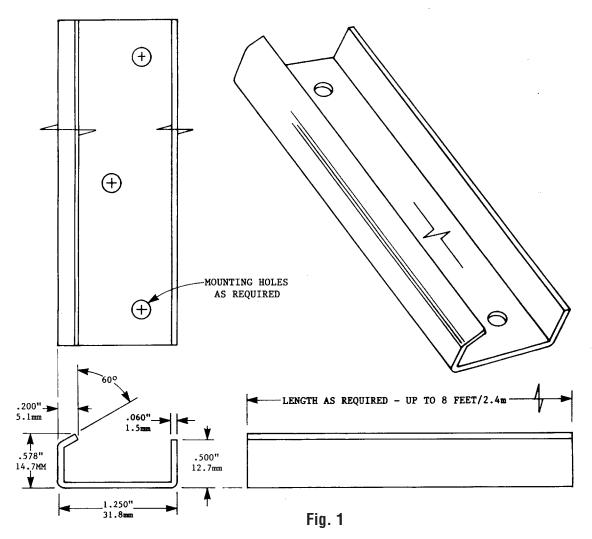


Fig. 2 The 'JLW' Receivers are shown above on a typical cab corner Multilatch® connection.



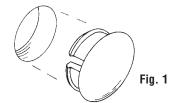
A Channel Receiver is part of an engineered Norse Multilatch® assembly Channel Receivers have been designed for use with Norse Multilatches which usually consist of two to four Latches operating simultaneously and mounted on a common channel or angle member. This Channel Receiver serves as a strike for all the Latches. In one usage it may be attached to an elevator cab wall, or on the emergency exit door itself, to which it serves also as a stiffener. It is also frequently used on RF shielded electronic cabinets. See TDS 186 & 190



This photo shows Multilatch® Fig. 2 hooks gripping a channel Receiver.



FOR CONCEALING LATCH OPERATING KEY ACCESS HOLES



This is a decorative Hole Cover Button one of the three sizes available as shown below

These Cover Buttons have been designed especially for exhibitors and office panels

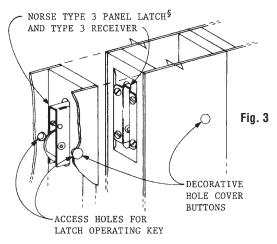
ADVANTAGES OF THE NORSE HOLE COVER BUTTONS

- Translucent plastic material conceals the key access hole and assimilates the panel color background
- · Easy to install and remove by hand
- Very low silhouette



Fig 2 Typical Prefab Panel Application Where Hole Cover Buttons Are Used (See Arrow) (For information on Large Type 2 Cover Plate Shown, See TDS 128)

- Colorable paint or dye
- Matte finish no shine
- Reusable



Panel Application Cut-Away View

§ There are many Norse Latch and Receiver combinations that are used in panels and numerous other applications

• THE THREE SIZES OF HOLE COVER BUTTONS AVAILABLE ARE SHOWN BELOW • Part No. Part No. Part No. CB600-515 CB480-395 CB600-270 .200"/5.1mm .180"/4.6mm .200"/5.1mm .045"/1.1mm .040"/1mm 045"/1.1mm .600"/15.2mm DIA .600"/15.2mm DIA. .480"/12.2mm DIA. KEY ACCESS HOLE DIA. 9-KEY ACCESS HOLE DIA. 1-Fig. 5 Fig. 6 KEY ACCESS HOLE DIA. Fig. 4 **Drill Diameter Drill Diameter Drill Diameter** ¶ (Hole Size Range) ¶ (Hole Size Range) ¶ (Hole Size Range) *.265"/6.7mm MAX: MAX: .500"/12.7mm MAX: *.375"/9.5mm *.468"/11.9mm *.250"/6.4mm *.343"/8.7mm MIN: .218"/5.5mm MIN: .437"/11.1mm MIN: .312"/8mm See TDS 127-2 For Color Painting Racks Recommended Hole Size



At times it is desirable to cover unused Latches, Receivers or Mortise cuts on wall panels or table edges, etc. For this purpose we have designed these plastic Cover Plates



Fig 1 Here a CP2S-1 Cover Plate is shown concealing a Type 2 Small Receiver. The arrow points to a cover button. (See TDS $\underline{127}$)

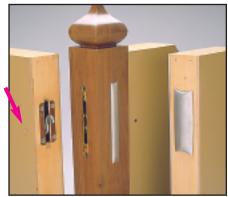


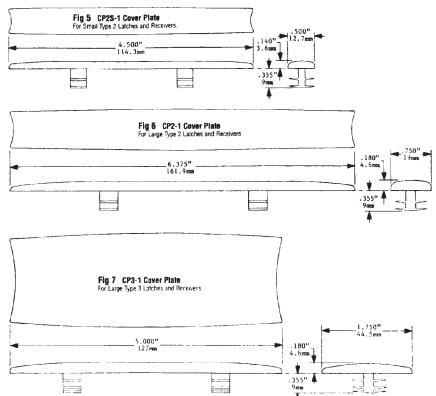
Fig 2 CP2-1 and CP3-1 Cover Plates conceal a Type 2 Large Receiver and a Type 3 Latch. The arrow points to a cover button. (See TDS <u>127</u>)





Fig 3 & Fig 4 Cover Plates are designed to be snapped into the empty mortise or into the Norse Latch and Receiver cases.

Cover Plates for Type 2 Small, Type 2 Large and Type 3 Latches and Receivers

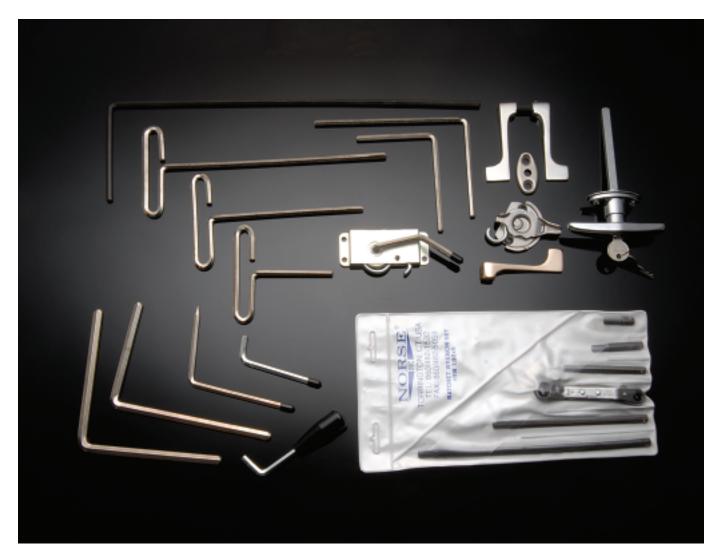


These Snap-In Plates cover the mortised-in latches and receivers or the unoccupied mortise itself

These cover plates are reuseable and paintable

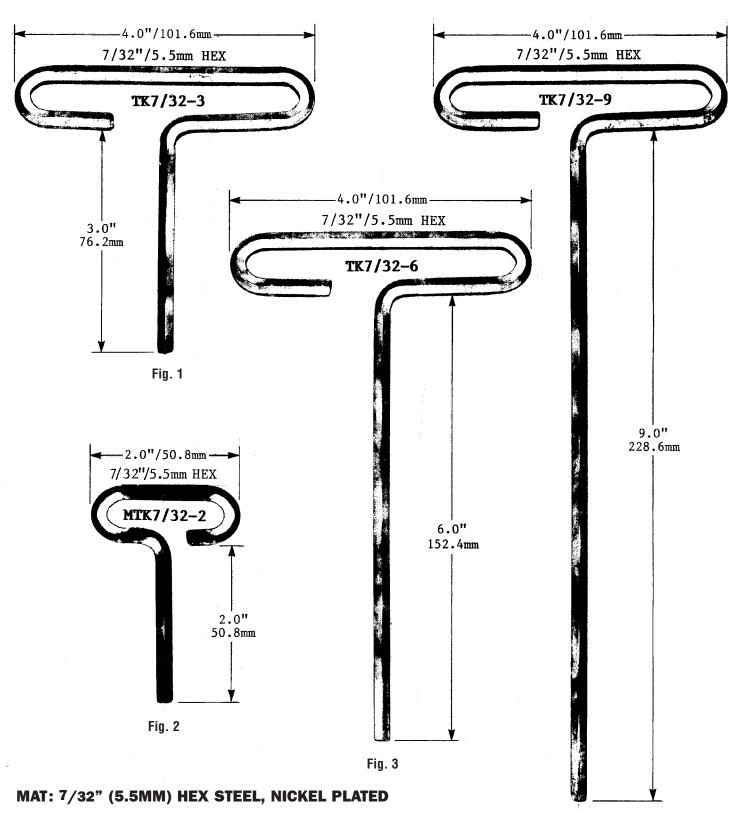


THIS SECTION IS DEVOTED TO THE TOOLS, HANDLES AND OTHER ITEMS USED TO OPERATE THE NORSE LATCHES DIRECTLY OR REMOTELY, AND AT 90°



SHOWN HERE ARE SEVERAL OF THE KEYS, HANDLES, ETC. **DESCRIBED ON THE FOLLOWING TECHNICAL DATA SHEETS**

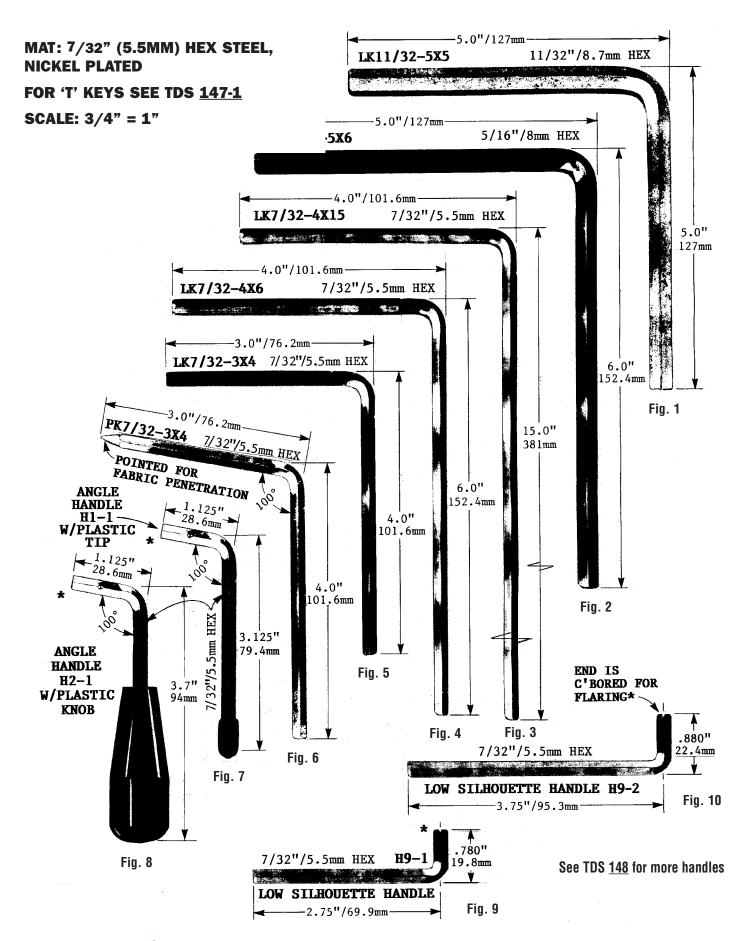




FOR 'L' AND 'P' KEYS SEE TDS 147-2

SCALE: 3/4" = 1"

'L' & 'P' HEX KEYS AND ANGLE HANDLE



This Set Consists of a Double-Ended Offset Ratchet Wrench and Five (5) Various Length 7/32"/5.5mm Hex Bits in a Plastic Case



Fig. 1 Ratchet Wrench Set RW7/32x5

7/32"/5.5mm Hex Bit Lengths (§)

- 1.181"/30mm
- 1.968"/50mm
- 3.150"/80mm
- 5.906"/150mm
- 8.858"/225mm

Unbeatable

For Working

In Tight

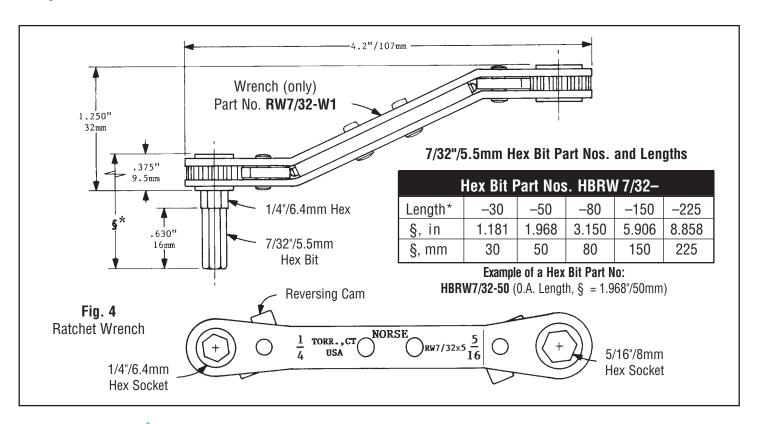
Corners!



Fig. 2 The Norse Wrench ready to work in a pentagonal KD enclosure.

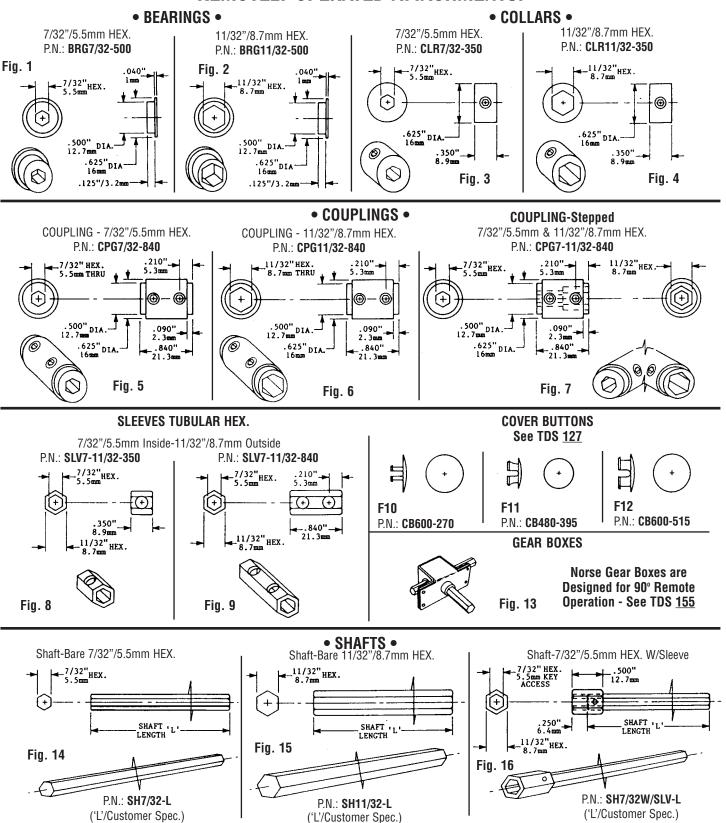


Fig. 3 The Ratchet Wrench working in a 60° corner of a KD kiosk.





SHOWN HERE ARE BEARING, COLLARS, COUPLINGS, SLEEVES, SHAFTS, GEAR BOXES AND COVER BUTTONS USED IN THE ASSEMBLING OF GANGED AND/OR REMOTELY OPERATED ATTACHMENTS.



Components Shown Here are Available in Whatever Combination Your Application Requires. Shaft Lengths are Customer Specified.

Engineering Assistance is Always Available. Channel Mounted Multilatches® are Shown in Section 7.

The Stainless Steel, Hand-Operated SXR Latch is Surface Mounted. Shown Here With A JR250 Receiver, The SXR Latch Can Also Be Used With Many Other Receivers (See TDS 126).

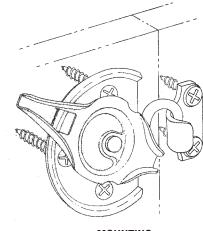


Fig. 1 A SXR Latch and a 'J' Receiver are used here to hold down a box lid.

This is a Right-Hand-Operating Latch.

-IDEAL FOR-

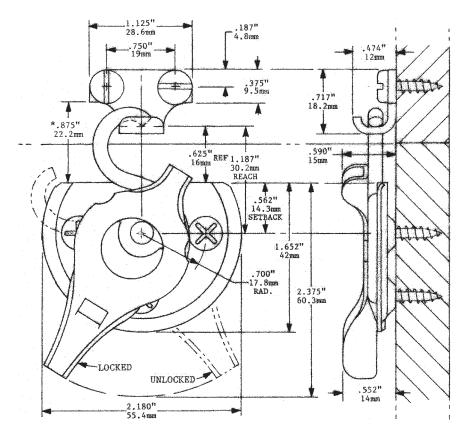
Metal/Wooden Boxes, Sliding Panels and Doors, Windows, Cabinets, Machine Safety Shields, Enclosures, Exhibits, Museum Displays and Stage Settings, Modular Equipment, Sectional Tables, Store Fixtures, and Many More Applications



MOUNTING

Fig. 2 The SXR Latch and 'J' Receiver combination as used for panel joining, windows, doors, etc.

Easy to Install and Operate • Trouble Free • No Parts 'Hanging Out' Holds Parts Together With a Powerful, Spring-Loaded Force.



Additional SX Latch/Receiver Combinations Are Shown in TDS 167 Series Illustrations

Fig. 3A

MOUNTING DIMENSIONS Latch: \$1125-\$XR-562

cn: **31125-3XK-56** Receiver: **JR250** Fig. 3B

* This mounting dimension (.875"/22.2mm) is for optimal clamping force (200#/90.7kg). For less clamping force, reduce this dimension.

The Stainless Steel, Hand-Operated SXR Latch is Surface Mounted. Shown Here With A JR250 Receiver, The SXR Latch Can Also Be Used With Many Other Receivers (See TDS 126).



Fig. 1 A SXL Latch and a 'J' Receiver are used here to hold down a box lid.

This is a Left-Hand-Operating Latch.

- IDEAL FOR -

Metal/Wooden Boxes, Sliding Panels and Doors, Windows, Cabinets, Machine Safety Shields, Enclosures, Exhibits, Museum Displays and Stage Settings, Modular Equipment, Sectional Tables, Store Fixtures, and Many More Applications

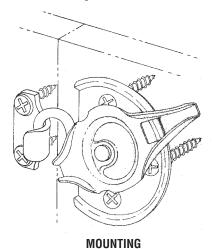
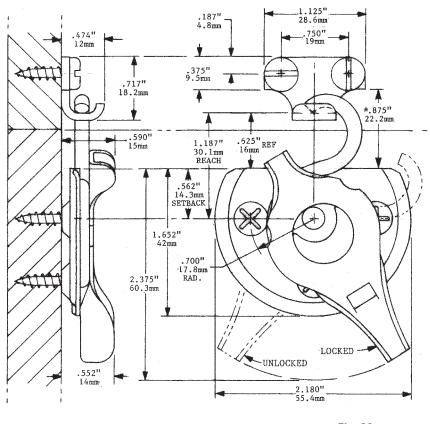


Fig. 2 The SXR Latch and 'J' Receiver combination as used for panel joining, windows, doors, etc.

Easy to Install and Operate • Trouble Free • No Parts 'Hanging Out' Holds Parts Together With a Powerful, Spring-Loaded Force.



Additional SX Latch/Receiver **Combinations Are Shown in TDS 167 Series Illustrations**

Fig. 3B

MOUNTING DIMENSIONS Latch: **\$1125-\$XL-562** Receiver: JR250

Fig. 3A

^{*} This mounting dimension (.875"/22.2mm), is for optimum clamping force (200#/90.7kg). For less clamping force, reduce this dimension.

The Stainless Steel, Hand-Operated SXR Latch is Surface Mounted. Shown Here With A UR500-500 Receiver, The SXR Latch Can Also Be **Used With Many Other Receivers (See TDS 126).**

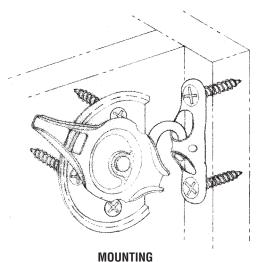


Fig. 1 An SXR Latch and a 'U' Receiver are used here to close a sliding door.

This is a Right-Hand-Operating Latch.

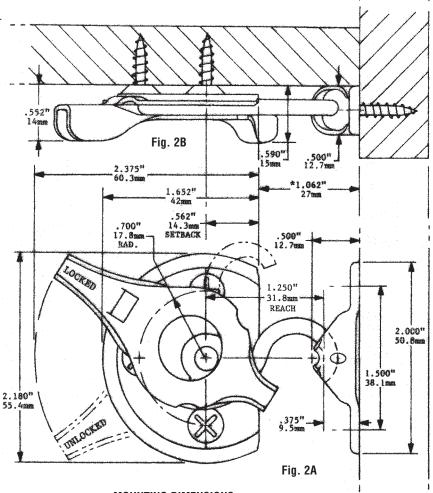
- IDEAL FOR -

Doors, Windows, Cabinets, Enclosures Metal/Wooden Boxes, Sliding Panels Exhibits, Museum Displays, Sectional Tables and Counters, Store Fixtures, Modular Equipment, Safety Shields and Many More Applications.

Easy to Install and Operate • Trouble Free • No Parts 'Hanging Out' **Holds Parts Together With a Powerful Spring-Loaded Force**

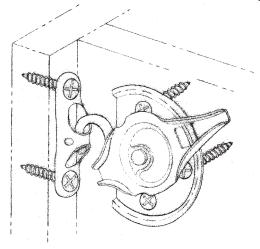
Additional SX Latch/Receiver **Combinations Are Shown in TDS 167 Series Illustrations**

* This Mounting Dimension (1.062"/27mm) is for optimal clamping force (200#/90.7kg). For less clamping force, reduce this dimension.



MOUNTING DIMENSIONS Latch: **\$1125-\$XR-562** Receiver: UR500-500

The Stainless Steel, Hand-Operated SXR Latch is Surface Mounted. Shown Here With A UR500-500 Receiver, The SXR Latch Can Also Be **Used With Many Other Receivers (See TDS 126).**



MOUNTING

Fig. 1 A SXL Latch and a 'U' Receiver combination used for a door closure application.

This is a Left-Hand-Operating Latch.

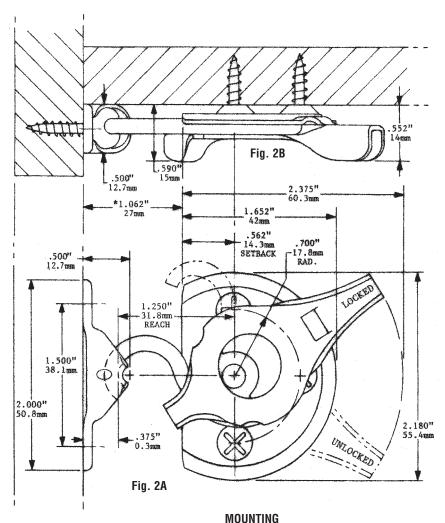
Additional SX Latch/Receiver **Combinations Are Shown in TDS 167 Series Illustrations**

* This Mounting Dimension (1.062"/27mm) is for optimal clamping force (200#/90.7kg). For less clamping force, reduce this dimension.

IDEAL FOR —

Doors, Windows, Cabinets, Enclosures Metal/Wooden Boxes, Sliding Panels Exhibits, Museum Displays, Sectional Tables and Counters, Store Fixtures, Modular Equipment, Safety Shields and Many More Applications.

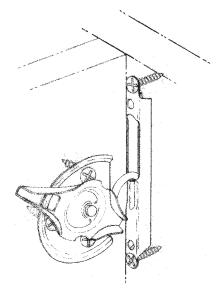
Easy to Install and Operate • Trouble Free • No Parts 'Hanging Out' **Holds Parts Together With a Powerful Spring-Loaded Force**



Latch: **\$1125-\$XL-562** Receiver: UR500-500



The Stainless Steel, Hand-Operated SXR Latch is Surface Mounted. Shown Here With An RSL375-2S-125 Receiver, The SXR Latch Can Also Be Used With Many Other Receivers (See TDS 126).



MOUNTING

Fig. 1 An SXR Latch and a 'RSL' Receiver are used here to close a sliding door.

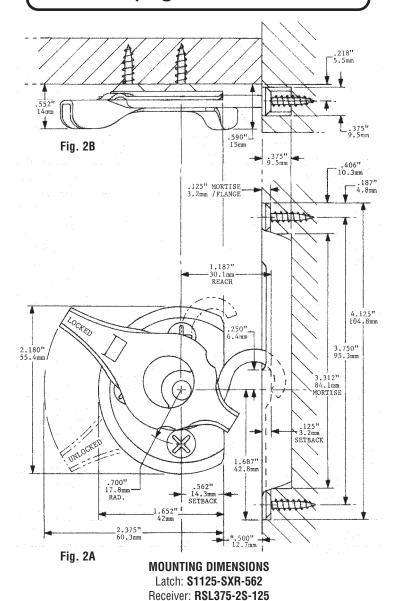
This is a Right Hand Operating Latch.

Additional SX Latch/Receiver Combinations Are Shown in TDS 167 Series Illustrations

- IDEAL FOR -

Doors, Windows, Cabinets, Enclosures
Metal/Wooden Boxes, Sliding Panels
Exhibits, Museum Displays, Sectional Tables
and Counters, Store Fixtures, Modular Equipment,
Safety Shields and Many More Applications.

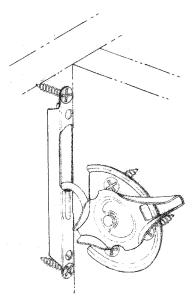
Easy to Install and Operate
• Trouble Free • No Parts 'Hanging Out'
Holds Parts Together With a Powerful
Spring-Loaded Force



^{*} This Mounting Dimension (.500"/12.7mm) is for optimal clamping force (200#/90.7kg). For less clamping force, reduce this dimension.



The Stainless Steel, Hand-Operated SXL Latch is Surface Mounted. Shown Here With An RSL375-2S-125 Receiver, The SXR Latch Can Also Be Used With Many Other Receivers (See TDS 126).



MOUNTING

Fig. 1 An SXL Latch and a 'RSL' Receiver are used on a door application.

This is a Left-Hand-Operating Latch.

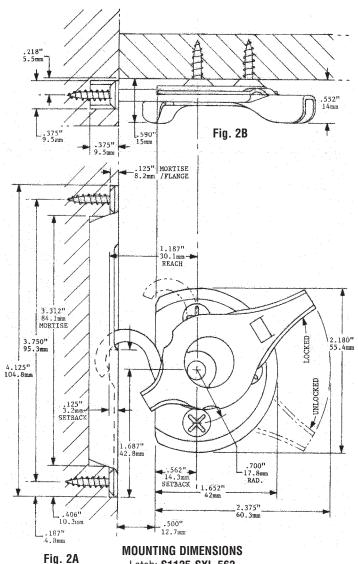
Additional SX Latch/Receiver **Combinations Are Shown in TDS 167 Series Illustrations**

* This Mounting Dimension (.500"/12.7mm) is for optimal clamping force (200#/90.7kg). For less clamping force, reduce this dimension.

- IDEAL FOR -

Doors, Windows, Cabinets, Enclosures Metal/Wooden Boxes, Sliding Panels Exhibits, Museum Displays, Sectional Tables and Counters, Store Fixtures, Modular Equipment, Safety Shields and Many More Applications.

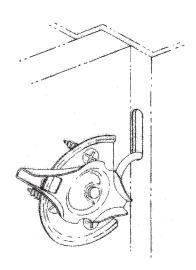
Easy to Install and Operate • Trouble Free • No Parts 'Hanging Out' **Holds Parts Together With a Powerful Spring-Loaded Force**



Receiver: R\$L375-2\$-125



The Stainless Steel, Hand-Operated SXR Latch is Surface Mounted. Shown Here Using a Slot in a Metal Frame as a Receiver, The SXR Latch Can Also Be Used With Many Other Receivers (See TDS 126).



MOUNTING

Fig. 1 An SXR Latch and a 'Slot' Receiver are used on a door application.

This is a Right-Hand-Operating Latch.

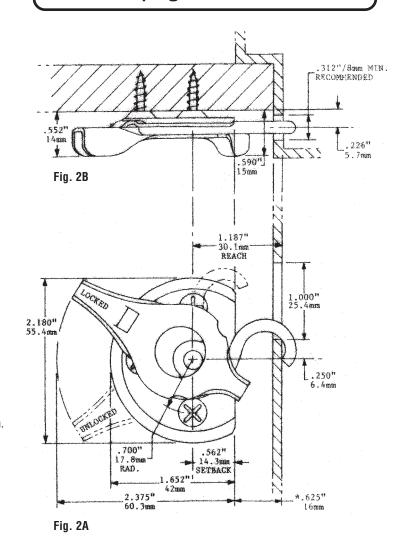
Additional SX Latch/Receiver **Combinations Are Shown in TDS 167 Series Illustrations**

> * This Mounting Dimension (.625"/16mm) is for optimal clamping force (200#/90.7kg). For less clamping force, reduce this dimension.

- IDEAL FOR -

Doors, Windows, Cabinets, Enclosures Metal/Wooden Boxes, Sliding Panels Exhibits, Museum Displays, Sectional Tables and Counters, Store Fixtures, Modular Equipment, Safety Shields and Many More Applications.

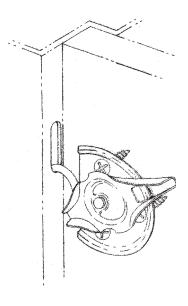
Easy to Install and Operate • Trouble Free • No Parts 'Hanging Out' **Holds Parts Together With a Powerful Spring-Loaded Force**



MOUNTING DIMENSIONS Latch: **\$1125-\$XR-562** Receiver: SLOT/CUSTOMER



The Stainless Steel, Hand-Operated SXL Latch is Surface Mounted. Shown Here Using a Slot in a Metal Frame as a Receiver, The SXR Latch Can Also Be Used With Many Other Receivers (See TDS 126).



MOUNTING Fig. 1 A SXL Latch and a 'Slot' Receiver are used on a door application.

This is a Left-Hand-Operating Latch.

Additional SX Latch/Receiver **Combinations Are Shown in TDS 167 Series Illustrations**

> * This Mounting Dimension (.625"/16mm) is for optimal clamping force (200#/90.7kg). For less clamping force, reduce this dimension.

- IDEAL FOR -

Doors, Windows, Cabinets, Enclosures Metal/Wooden Boxes, Sliding Panels Exhibits, Museum Displays, Sectional Tables and Counters, Store Fixtures, Modular Equipment, Safety Shields and Many More Applications.

Easy to Install and Operate • Trouble Free • No Parts 'Hanging Out' **Holds Parts Together With a Powerful Spring-Loaded Force**

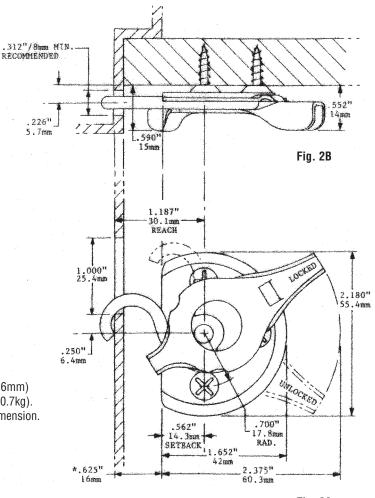
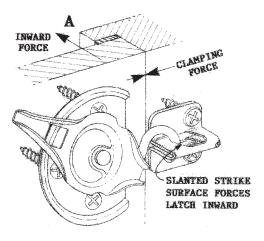


Fig. 2A

MOUNTING DIMENSIONS Latch: S1125-SXL-562 Receiver: SLOT/CUSTOMER



The Stainless Steel, Hand-Operated SXR Latch is Surface Mounted. Shown Here With An 'OTR' Receiver, The SXR Latch Can Also Be Used With Many Other Receivers (See TDS 126).



MOUNTING

Fig. 1 A SXR Latch and a 'OTR' Receiver combination as used for access panels and other enclosures.

This is a Right-Hand-Operating Latch.

The 'T' Receiver's Slanted Strike surface acting on the Latch's clamping force results in a transverse force 'A', which pushes the door inward. This unique feature can be used to compress a gasket or for other purposes

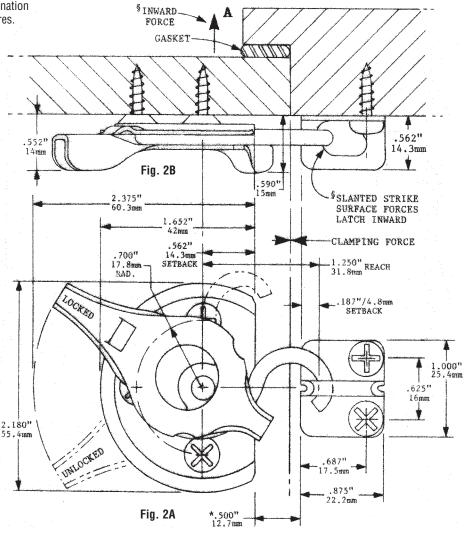
Additional SX Latch/Receiver **Combinations Are Shown in TDS** 167 Series Illustrations

* This Mounting Dimension (.500"/12.7mm) is for optimal clamping force (200#/90.7kg). For less clamping force, reduce this dimension.

- IDEAL FOR -

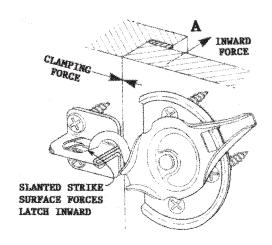
Doors, Windows, Cabinets, Enclosures Metal/Wooden Boxes, Sliding Panels Exhibits, Museum Displays, Sectional Tables and Counters, Store Fixtures, Modular Equipment, Safety Shields and Many More Applications.

Easy to Install and Operate Trouble Free • No Parts 'Hanging Out' **Holds Parts Together With a Powerful Spring-Loaded Force**



MOUNTING DIMENSIONS Latch: S1125-SXR-562 Receiver: 0TR187

The Stainless Steel, Hand-Operated SXL Latch is Surface Mounted. Shown Here Using An 'OTR' Receiver, The SXR Latch Can Also Be Used With Many Other Receivers (See TDS 126).



MOUNTING

Fig. 1 An SXL Latch and a 'OTR' Receiver combination as used for access panels and other enclosures.

This is a Left-Hand-Operating Latch.

The 'T' Receiver's Slanted Strike surface acting on the Latch's clamping force results in a transverse force 'A', which pushes the door inward. This unique feature can be used to compress a gasket or for other purposes

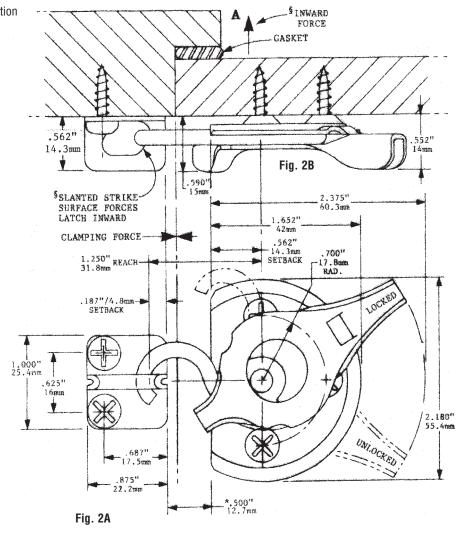
Additional SX Latch/Receiver **Combinations Are Shown in TDS** 167 Series Illustrations

> * This Mounting Dimension (.500"/12.7mm) is for optimal clamping force (200#/90.7kg). For less clamping force, reduce this dimension.

- IDEAL FOR -

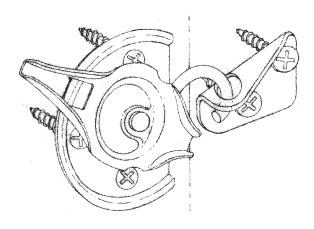
Doors, Windows, Cabinets, Enclosures Metal/Wooden Boxes, Sliding Panels Exhibits, Museum Displays, Sectional Tables and Counters, Store Fixtures, Modular Equipment, Safety Shields and Many More Applications.

Easy to Install and Operate • Trouble Free • No Parts 'Hanging Out' **Holds Parts Together With a Powerful Spring-Loaded Force**



MOUNTING DIMENSIONS Latch: **\$1125-\$XL-562** Receiver: OTR187

The Stainless Steel, Hand-Operated SXR Latch is Surface Mounted. Shown Here With An SPR250R Receiver, The SXR Latch Can Also Be Used With Many Other Receivers (See TDS 126).



MOUNTING

Fig. 1 An SXR Latch and an 'SP' Receiver combination are used here to close a sliding door.

This is a Right-Hand-Operating Latch.

Additional SX Latch/Receiver **Combinations Are Shown in TDS** 167 Series Illustrations

> * This Mounting Dimension (.437"/11.1mm) is for optimal clamping force (200#/90.7kg). For less clamping force, reduce this dimension.

- IDEAL FOR -

Doors, Windows, Cabinets, Enclosures Metal/Wooden Boxes, Sliding Panels Exhibits, Museum Displays, Sectional Tables and Counters, Store Fixtures, Modular Equipment, Safety Shields and Many More Applications.

Easy to Install and Operate • Trouble Free • No Parts 'Hanging Out' **Holds Parts Together With a Powerful Spring-Loaded Force**

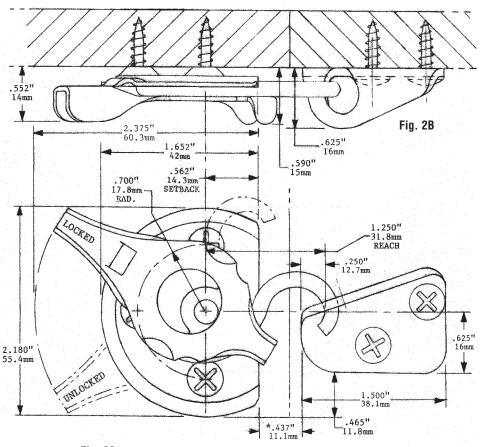
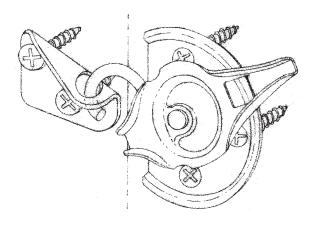


Fig. 2A

MOUNTING DIMENSIONS Latch: **\$1125-\$XR-562** Receiver: SPR250R

The Stainless Steel, Hand-Operated SXL Latch is Surface Mounted. Shown Here With An SPR250L Receiver, The SXL Latch Can Also Be Used With Many Other Receivers (See TDS 126).



MOUNTING

Fig. 1 An SXL Latch and an 'SP' Receiver combination are used here to close a sliding door.

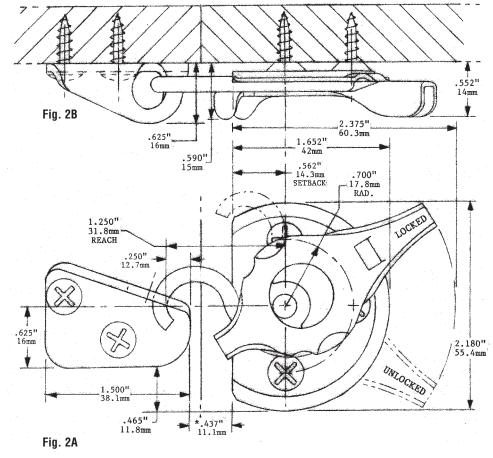
This is a Left-Hand-Operating Latch.

- IDEAL FOR -

Doors, Windows, Cabinets, Enclosures Metal/Wooden Boxes, Sliding Panels Exhibits, Museum Displays, Sectional Tables and Counters, Store Fixtures, Modular Equipment, Safety Shields and Many More Applications.

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Additional SX Latch/Receiver **Combinations Are Shown in TDS** 167 Series Illustrations



* This Mounting Dimension (.437"/11.1mm) is for optimal clamping force (200#/90.7kg). For less clamping force, reduce this dimension.

> **MOUNTING DIMENSIONS** Latch: **\$1125-\$XL-562** Receiver: SPR250L

IT'S STRONG • IT'S SIMPLE • IT'S FAST

ERECTING PLYWOOD HURRICANE SHUTTER PANELS WITH THE SHUTTERUP® SYSTEM IS OUICKLY ACCOMPLISHED DUE TO THE SIMPLE ASSEMBLY OF THE COMPONENTS



Fig. 1 PLYWOOD IS CLAMPED DOWN AGAINST WINDOW FRAME FACE. HARDWARE MOUNTS ON THE FRAME FACE. A PERMANENT "KEEPER" IS USED. SEE TDS 2A.



Fig. 2 PLYWOOD IS CLAMPED DOWN INSIDE WINDOW FRAME, A PERMANENT "KEEPER" IS USED, SEE TDS 206-2B

SEVERAL WAYS SHUTTERUP FASTENER SYSTEMS CAN SECURE PLYWOOD SHUTTERS ARE ILLUSTRATED HERE

FEATURES:

Shutters are quickly and firmly clamped against the window frame face, or down inside the frame.

The Shutterup's cam and wedge action imparts a powerful clamping force that presses the plywood in place against the window frame.

No power tools are used at when putting plywood shutters up – just a hammer.

No hardware is attached to the plywood shutter. Simply cut the plywood to size – that's all! No holes, no screws, nothing!

Permanent hardware (very low silhouette) is attached to the window frame with two screws at each fastener location, prior to a storm.

Any thickness of plywood from 1/4" to 3/4" may be used. The Shutterup cam automatically adjusts to those thicknesses.

Large or multi-panel shutters are easily and tightly joined using Shutterups to clamp the panels to a common batten.

Choose from four different Shutterup fastener sets shown here to suit your requirements (Sets 101-1, 102-1, 103-1 and 104-1).



Fig. 3 PLYWOOD IS CLAMPED DOWN AGAINST WINDOW FRAME FACE. NO "KEEPER" IS USED. PERMANENT HARDWARE IS 2 SCREWS. SEE TDS 206-3A.



Fig. 5 PLYWOOD IS CLAMPED DOWN AGAINST FRAME FACE. HARDWARE IS ON OUTSIDE WINDOW FRAME. PERMANENT HARDWARE IS 2 SCREWS. SEE TDS 206-4A.



Fig. 7 PLYWOOD IS CLAMPED AT WINDOW SILL AĞAINST BRACE. VERY USEFUL FOR LARGE & MULTI-PANEL WINDOWS PERMANENT HARDWARE IS 4 SCREWS. SEE TDS 206-5A.



Fig. 4 PLYWOOD IS CLAMPED DOWN INSIDE WINDOW FRAME. HARDWARE IS ON FRAME FACE. NO "KEEP-ER" USED. PERMANENT HARDWARE IS 2 SCREWS. SEE TDS 206-3B.



Fig. 6 PLYWOOD IS CLAMPED DOWN INSIDE WINDOW FRAME. HARDWARE IS ON INSIDE OF WINDOW FRAME. PERMANENT HARDWARE IS 2 SCREWS. SEE TDS 206-4B.

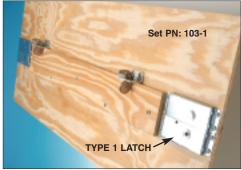


Fig. 8 MULTIPLE PANEL EDGES ARE CLAMPED TO A **BATTEN USING SHUTTERUPS AND TYPE 1 LATCHES** TO TIGHTEN AND STIFFEN THE JOINT. SEE TDS 206-6A.

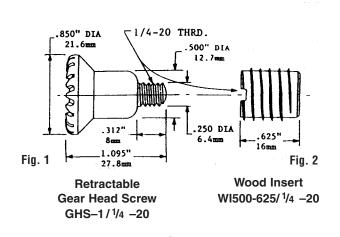


NORSE RETRACTABLE GEAR HEAD SCREW & WOOD INSERT

• FOR STRONG, RAPID, RELIABLE, NONPROGRESSIVE RAIL JOINERY •

Typical assembly in a stair rail

• A strong tight joint is made •



S WOOD INSERT ACCESS GEAR HEAD SCREW WI500x625/1/4-20 HOLE GHS-1/1/4-20 Fia. 3

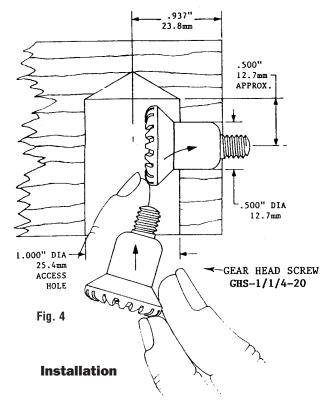
STRONG COMPRESSIVE FORCE

Material: Steel, Zinc Plated The Components

Installed and Tightened

A strong threaded connection between the two members joined is assured.

Rail Preparation and Installation of the Gear Head Screw



Installation of the retractable Gear Head Screw is done simply, as is shown. It slides without difficulty all the way into the hole. Using very light pressure with one finger. The screw will tip into its final position. The gear head screw can always be retracted when required for nonprogressive assembling.

Installation of the Wood Insert is shown on TDS/GHS-221-4.

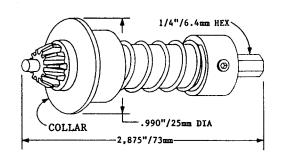
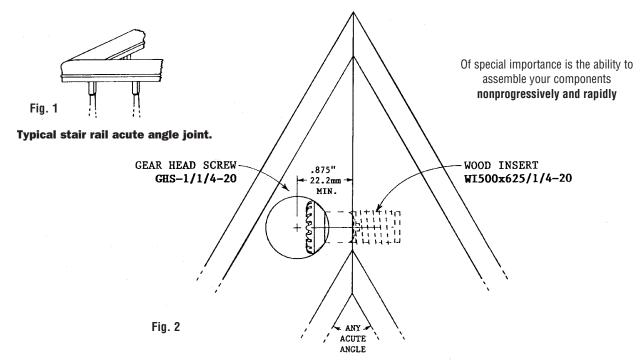


Fig. 5

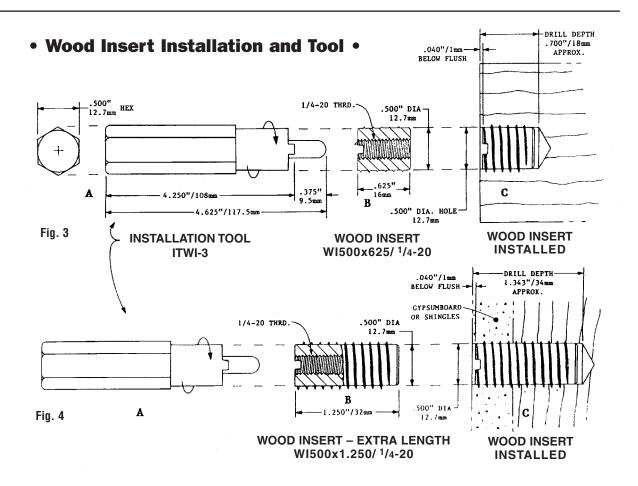
Installation Tool For Gear Head Screw ITGHS-3



Acute Angle Rail Assemblies – Nonprogressive

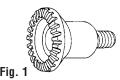


Above is a bottom view of two hand rails joined at an acute angle, illustrating how you can use the Norse **Gear Head Screw** in very cramped quarters.



• FOR STRONG, RAPID, RELIABLE, NONPROGRESSIVE RAIL JOINERY •

Gear Head Screw GHS-1/ 1/4-20





Wood Insert WI500x625/ 1/4-20

Fig. 2

Used on: stair rails, KD furniture, store fixtures, and special assemblies.

These Gear Head Screws are operated from 90°, replacing hanger bolts, ball nuts, etc.

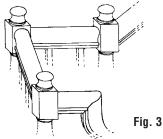
They are easier to install, easier and quicker to operate and tighten, and perhaps most importantly, they permit **nonprogressive assembly.**

ADVANTAGES

- Gear Head Screws can be retracted flush for nonprogressive assembling/disassembling.
- Strong, tight joints are made.
- Preparation of joined members is simple.
- Easy installation.
- Operated from 90°.
- Quick, uninterrupted operation is accomplished when turning the G.H. Screw.
- Close quarter joints can be made.

- Economical due to time saving.
- Easier to use than hanger bolts, etc..
- Geared tool & G.H. screw tooth engagement is positive.
- A ratchet wrench or 'spin-tight' can be used to tighten the Gear Head Screw.
- Facilitates angular component assemblies previously not feasible.
- Easily removed if required.

Typical Assemblies



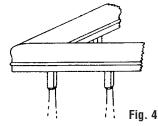


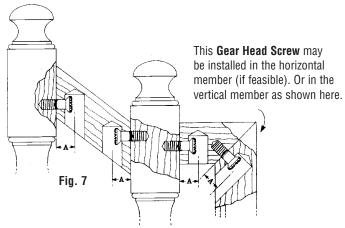
Fig. 5

Sections being added as above are slid into place

Fig. 3 in their own length - nonprogressively - because the Gear Head Screw is retractable. (See TDS/GHS-221- 2 & 3)

Stair rail joints are an ideal application for the gear head screw.

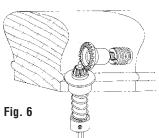
Stair rail joints are an ideal application for the gear head screw Many configurations can be assembled **nonprogressively**.



Shown here are installation methods for typical stair rail joints.

A = .937"/23.8mm for Gear Head Screw Part No: **GHS-1/ 1/4-20** For further installation details see **TDS/GHS 221-2 & 3**.

- Patented -



Here the **Gear Head Screw** and wood insert are being tightened with the installation tool.

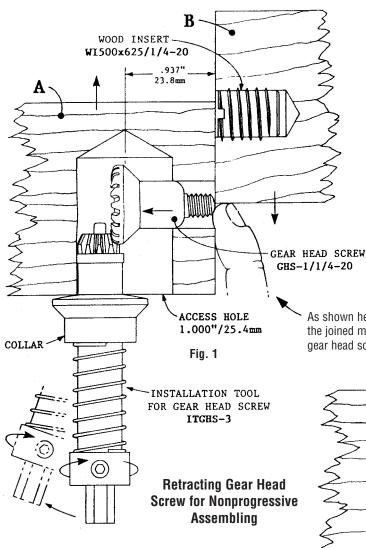
Tool engagement and tightening is uninterrupted, therefore, rail joining is accomplished rapidly. A ratchet wrench can be used for tightening.

The special design of the wood insert achieves a strong positive hold - **even in end grain**.

These 90° operated gear head screws are easy to install, easy to tighten, and you can put your stair rail sections in place nonprogressively (in their own length), in either straight butt joints or angular joints, because the G.H. Screws can be retracted flush when assembling.

(See TDS/GHS-221-3).

NONPROGRESSIVE ASSEMBLY OF RAIL JOINTS •



Assembly Procedure

With the Gear Head Screw and Wood Insert in place in members 'A' & 'B' respectively, the GHS can be retracted as shown in Figure 1 to allow the two members to be slid into their final position nonprogressivly (within their own lengths).

Initial 'running in' (threading), of the GHS into the Wood insert can usually be done using only a finger to turn it, without the use of the installation tool.

As shown here, nonprogressive assembly of the joined members is done by retracting the gear head screw

When the tool is used, it can be canted in the hole to engage it with the GHS, and to follow it as it is threaded into the wood insert in member 'B'. At first engagement the tool collar is usually best left outside the access hole.

Final tightening of the Gear Head Screw into the Wood. Insert is accomplished by allowing the collar to enter the hole, thereby maintaining firm engagement of the gears as shown in Fig. 2.

Tightening can be facilitated thru the use of either a common 'spin-tight' tool, or a ratchet wrench with a 1/4" socket.

