



GSS Doors

(406) 212-2334

(406) 897-2121

rg@gssdoors.com

www.gssdoors.com

# Trident<sup>TM</sup>

## Multi-Point Deadbolt Exit Lock

### Installation Instructions

### Model # TEL-100 / 200

### Manual Locking or Self Locking



**PLEASE REVIEW PARTS & INSTRUCTIONS BEFORE INSTALLING**

## TEL-100 / 200 PARTS LIST

GSS Doors

(406) 212-2334

(406) 897-2121

rg@gssdoors.com

www.gssdoors.com

### Anti-Pry Plate & Lock Thru-Bolts



- (1) 13" Anti Pry Plate  
Part# TEL-A-APP-1

\* If installing exterior entry elements, see note below

### Anti-Pry Plate Fasteners

#### Bag "A"



- (4) 1/4"-20 "K" lock nuts
- (4) 1/4"-20 acorn cap nuts
- (2) 1/4"-20 x 2-1/2" carriage bolts (Back)
- (2) 1/4"-20 x 2-3/4" carriage bolts (Front)
- (2) 1/4" Flat washers (Back)
- (2) 1/4"-20 Hex head T-nuts

### Top & Bottom Module Thru-Bolt Plates

#### Bag "B"



- (2) Thru Bolt Plates (Upper & Lower)
- (2) 1/4"-20 x 2" Carriage Bolts
- (2) 1/4"-20 x 3-1/4" Carriage Bolts
- (2) 1/4"-20 K Lock Nuts
- (2) 1/4"-20 5mm Hex head T-nuts
- (2) #14 x1-1/2 Hex head washer self-drilling screws for positioning modules

**Bag "C" HAS BEEN DISCONTINUED**

### Strike Plate

#### Bag "D"



- (1) Strike plate-
- (2) #14 x1-1/2 Hex head washer self drilling screws -
- (2) Self drilling sheet metal screws for positioning-

**For Double Door Installations, see DDA Parts and INS**

### Paddle

#### Bag "E"



- (1) Exit Paddle
- (2) 12-24x7/8" Carriage Bolts
- (2) 12-24 Hex Nuts

### Pull Handle

#### Bag "F"



- TEL- 100 Models ONLY
- (1) Aluminum Pull Handle- EA11-PHCD
- (2) 1/2" Pan Phillips Sheet Metal screws- 08PPSM5

### Hinge Side Bolt

#### Bag "G"



- (1) Hinge Side Bolt
- (2) 1/4"-20 "K" lock nuts
- (2) 1/4"-20 acorn cap nuts
- (2) 1/4"-20 x 2-1/2" carriage bolts
- (1) Thru-bolt Plate

**PLEASE CHECK TO MAKE SURE YOU HAVE ALL PARTS BEFORE STARTING THE INSTALLATION**

### Tools Required:

- |                  |                           |
|------------------|---------------------------|
| Hammer           | 1/8" Drill bit            |
| Drill            | 1/4" Drill bit            |
| Center Punch     | 3/4" Drill bit            |
| 7/16" Nut Driver | 3/8" Drill bit            |
| 5mm Hex key      | Masonry 3/4" Drill bit    |
|                  | Philips head screw driver |

### Template



- (1) Aluminum Door Template (LH & RH)
- (1) Self drilling screw (taped to label)

### Lock Mechanism & Modules



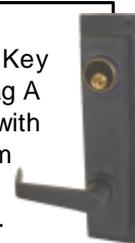
- Assembled Main Lock Body Top & Bottom Modules (with cables)
- (Manual or Self-Locking Lock Body)

### Module Covers & Channels



- (2) Aluminum Channels w/feet
- (1) RH Module cover
- (1) LH Module cover

\* If installing Exterior Key Control, item A & Bag A have been replaced with items on Exterior Trim sheet. Please follow instructions provided.



Illustrations in instructions may vary from actual parts supplied.

## TEL-100 / 200 Installation Instructions

GSS DOORS (406) 212-2334 (406) 897-2121 rg@gssdoors.com www.gssdoors.com

### BEFORE YOU BEGIN:

Make sure the door swings free and smooth. Remove all old locks, exit devices, any slide bolts or other hardware and brackets. Make sure any exposed holes left from previous hardware are completely covered after installation. Insert material into the mortise opening to prevent collapsing or squeezing.

**\*\* REMOVE ANY WEATHER-STRIPPING ON THE DOOR OR FRAME NOW.\*\***

**TEL-200 series Self-locking Tridents require a door closer to be installed.**

**STOP If Installing On Double Door , Refer to TEL-IAL/IAT INSTRUCTIONS NOW**

### 1. Door Marking & Drilling

Fig.1

1. Stand inside & close the door; mark a **vertical line A** along the frame stop along the entire length of door.
2. Draw a **horizontal line B** at a height of 45-1/2" from the **bottom edge** of the of door.  
*If installing a double door model, draw the line at least 4" across to the inactive leaf.*

**NOTE: The height of the line can be adjusted to cover any cylinder holes or exit device holes. The Trident should always be installed at a height that meets applicable code.**

Fig.2

3. Place the **top corner C** of the metal marking template at the intersection where the **horizontal line** and **vertical line** meet. Make sure template is level.
4. Mark hole **D** . Remove template and center punch **D** . Fasten template to door with #8 self-drilling sheet metal screw through hole in metal template and into the door.
5. Align the **top edge** of the template with the **horizontal line** then mark 6 holes **H** on lock edge. Mark hole **M**

Fig.3

6. Swing template **down** vertically and mark **bottom 2 holes E** then swing template **up** vertically and mark **top 2 holes F**

**Make sure template is always aligned with vertical reference line when marking top & bottom holes.**

Fig.4

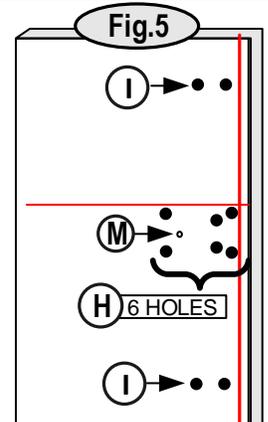
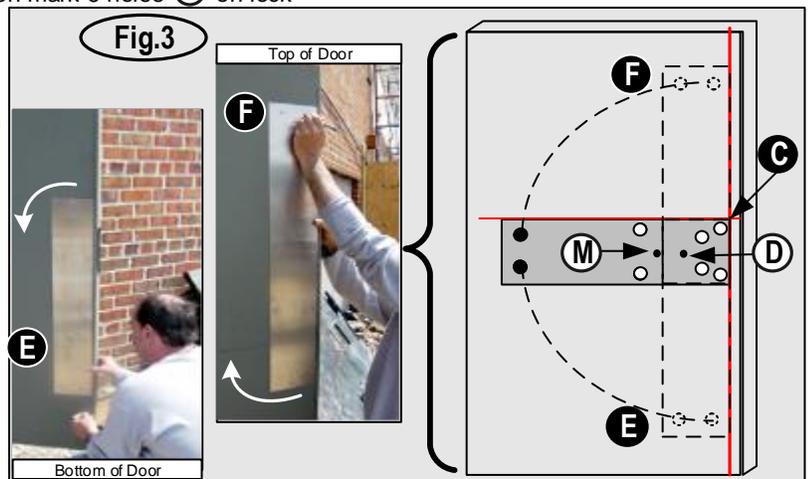
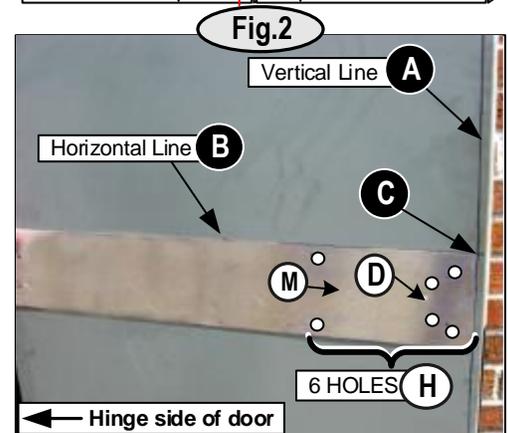
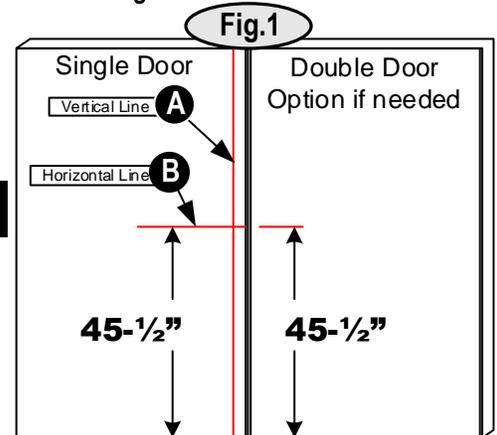
7. Remove the template. Punch the center point for all marked holes. Drill all 1/8" dia. pilot holes **G**

**STOP MAKE SURE YOUR DRILL IS LEVEL WHEN YOU ARE DRILLING HOLES.**

Fig.5

8. Drill ten holes 3/8" dia. through the door **H** and **I**
9. Drill up to 1-5/16" diameter hole through the door at **M** now for exterior lever trim spindle or for future use even if not installing lever trim at this time.

See separate Exterior Key Control Instructions and parts list.



## TEL-100 / 200 Installation Instructions

GSS DOORS

(406) 212-2334

(406) 897-2121

rg@gssdoors.com

www.gssdoors.com

### 2. Lock Body: Bag "A"

- A** Fasten the anti-pry plate with two 5mm Hex-head T-nut cap screws. Do not tighten completely.

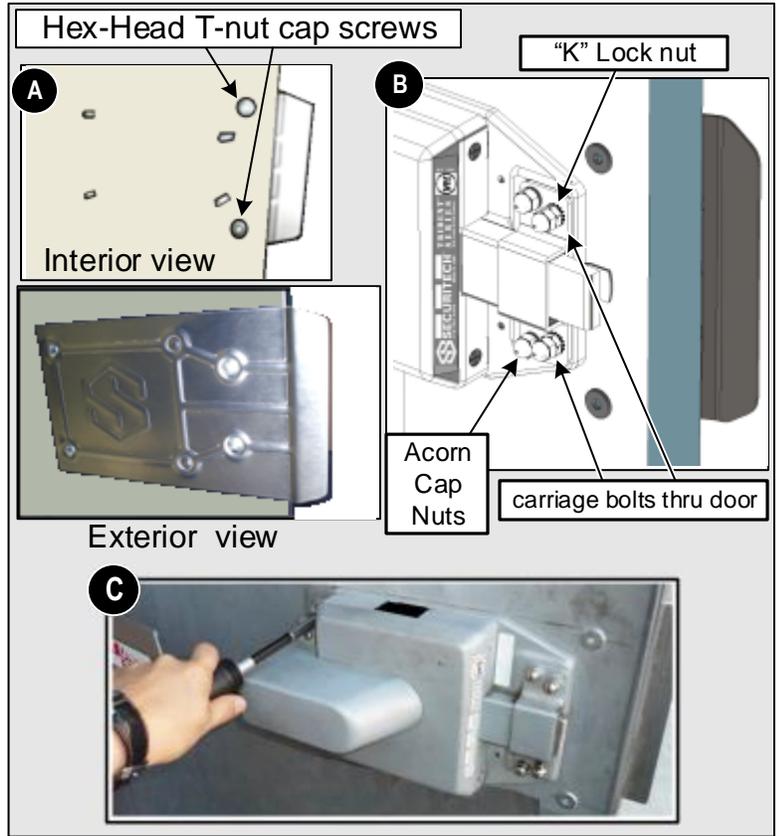
Align the lock body with the top of the horizontal reference line, using a level to ensure the mechanism is level, then fasten as follows:

- B Front Holes:** 2-3/4" long carriage bolts, k-lock nuts & acorn caps

- C Rear Holes:** 2-1/2" long carriage bolts, flat washers, k-lock nuts & acorn nuts

Tighten allen-head T-nut cap screws completely.

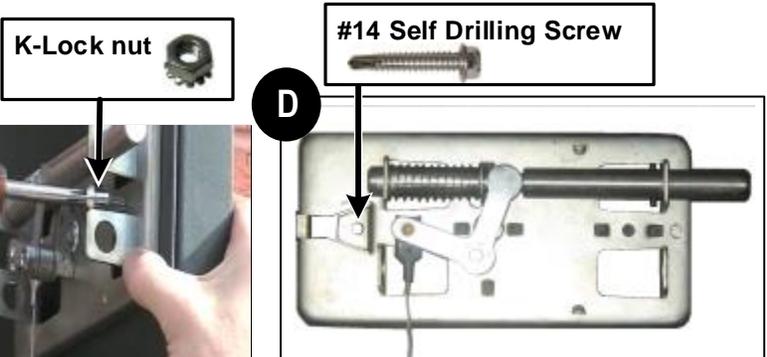
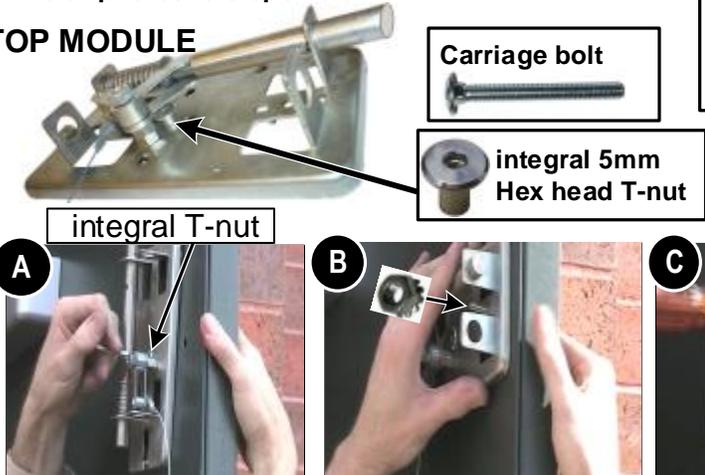
**Do not compress door.**



### 3. Top & Bottom Bolt Modules: Bag "B"

Extend main bolt by pulling paddle or pressing trigger. Refer photos to steps below.

#### TOP MODULE



- A** Fasten **integral 5mm Hex head T-nut** with the **2" carriage bolt** through the thru-bolt plate. Fasten loosely.
- B** Secure **k-locknut** to **3-1/4" carriage bolt** on lock edge opening and fasten loosely.
- A** Tighten the **integral 5mm Hex head T-nut** securely using a 5mm Hex key. Use a level before tightening.
- C** Tighten **K-locknut** securely to **3-1/4" carriage bolt**.      **D** Once level, secure #14 self drilling screw.

#### BOTTOM MODULE

Repeat steps for bottom module.



Check for smooth operation

**Manual Locking Models:**  
Push and pull paddle arm

**Self-Locking Models:**  
Press trigger & push paddle arm.  
Make sure bolts extend past vertical reference line.



## TEL-100 / 200 Installation Instructions

GSS DOORS

(406) 212-2334

(406) 897-2121

rg@gssdoors.com

www.gssdoors.com

### 4. Main Strike Plate:

Bag "D"

Retract the bolt by pressing the paddle. Close the door.

- A** Hold the strike plate against the frame with roller facing towards the **outside**.

Extend bolt and center in strike box. Top of bolt should be approx. 1/8" from top of strike opening.

Trace the outline of strike box on frame.

Open door, align strike in outline.

**Make sure strike is level.**

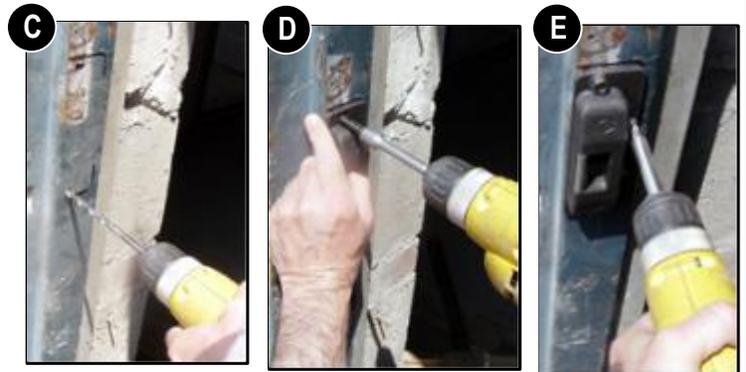
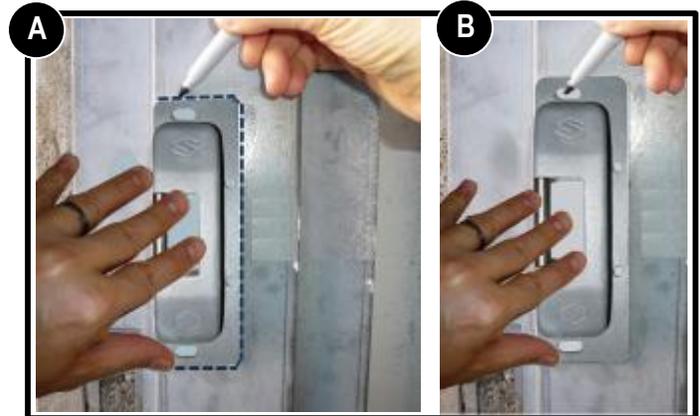
- B** Mark top and bottom strike plate oval mounting holes.

Remove the strike plate and mark the center of each oval. Center punch the mark.

- C** Drill 1/8" diameter pilot holes.

- D** Fasten strike to door with the self-drilling #14x1-1/2' screws.

- E** Install 2 rear self-drilling screws.



### 5. Marking & Drilling Frame For Top & Bottom Bolts

Pull the door closed and extend the bolts as much as possible.

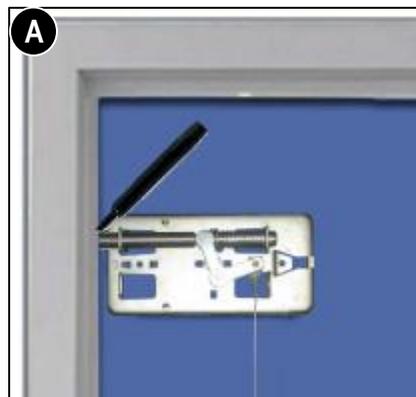
- A** Keeping the door pulled against the door stop, trace the outline of the top and bottom bolts.

- B** Open the door and mark the centers of the holes.

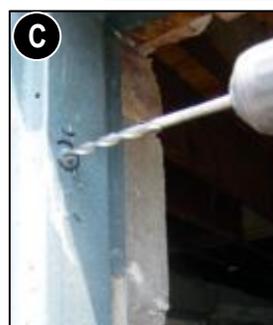
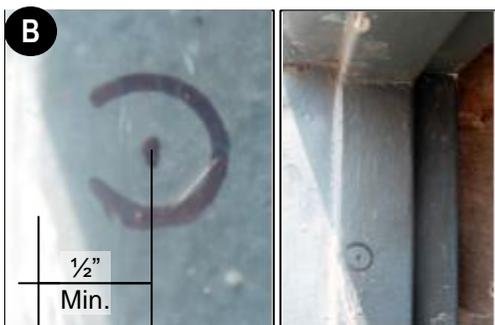
Center punch the point to be drilled.

- C** Drill a 1/8" pilot hole.

- D** Enlarge to 3/4" and remove all burrs.



The deadbolt diameter is 5/8" A 3/4" hole, if drilled on center, should be sufficient. If you feel any rubbing, check to see which part of the bolt is rubbing on the hole and grind or enlarge that side of the hole.



## TEL-100 / 200 Installation Instructions

GSS DOORS

(406) 212-2334

(406) 897-2121

rg@gssdoors.com

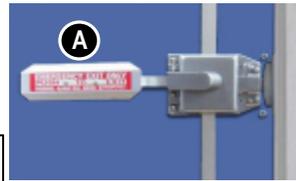
www.gssdoors.com

### 6. Paddle, Channels, Module Covers & Pull Handle

#### A Paddle: Bag "E"

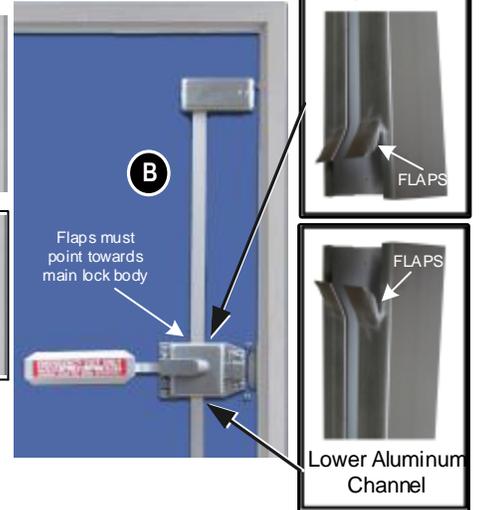
Fasten the paddle to the paddle arm with small carriage bolts and nuts.

**\*\*TEL-EP4 (18") or TEL-EP1 (24")-** Rubber protector should be mounted 5" from the edge of the paddle on the surface of the door.



#### B Channels:

Slide upper channel into lock body, center on cable. The two Flaps at the end of each channel should be near the main mounting plate.



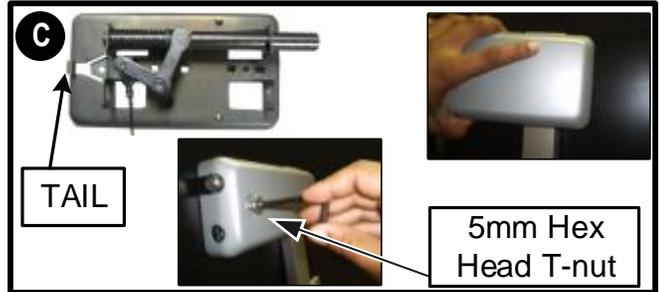
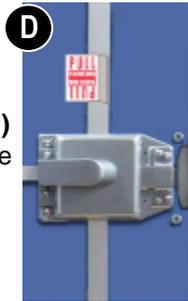
#### C Modules: Bag "B" : 5mm Hex Head T-nut

Place cover over module and channel. Fit tail into cover slot and work into position. Insert hex head T-nut and fasten until secure.

Repeat for lower module.

#### D Pull Handle: Bag "F" (TEL-100 models only)

Install pull handle on top channel approx. 8" above mounting plate using 2 self-drilling screws.



### 7. Hinge Side Bolt: Bag "G"

With door closed, mark vertical line approx. 4" long at the point where the stop overlaps onto the door. Height should be approx. 50" from floor (height can vary).

With door open, place the Hinge-Side Bolt on door and recess 1/8" from the vertical line. Mark centers of thru-bolt holes.

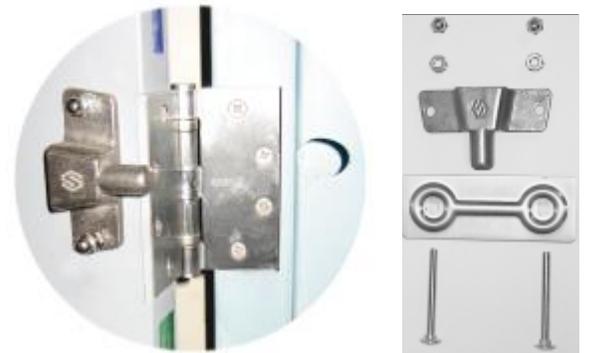
Center punch holes. Drill 1/8" pilot hole. Enlarge to 1/4". Remove all burrs.

Fasten Hinge-Side Bolt to door with Thru-bolt plate, 2-1/2" carriage bolts lock washers and cap nuts.

Mark bolt location on frame. Drill up to 3/4" hole.

It is usual for this hole to be "Egg shaped" towards the outer edge of the door stop.

Remove all burrs and check for smooth operation.



### 8. Optional Alarm

Complete alarm installation  
instructions furnished with alarm

All TRIDENT alarms are installed after the lock has been installed. Use a flat head screwdriver to pop-off the jack cover.

Mount the alarm or keyswitch to the wall at approx. 48" from floor.

Run the armored cable on the wall, make a loop and run across the door, fastening with the mounting clips provided.

