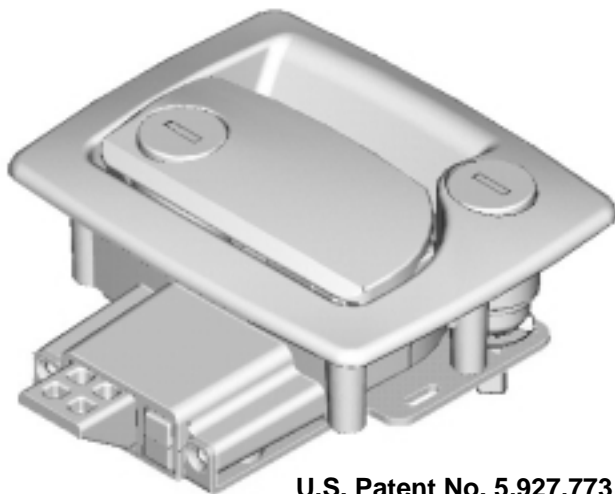


# **60-250 Travel Trailer Latch With Dead Bolt**

## **60-251 Trailer Latch With Dead Bolt**

### **Service Manual**

(Installation and Troubleshooting)



U.S. Patent No. 5,927,773

 **TriMark®**

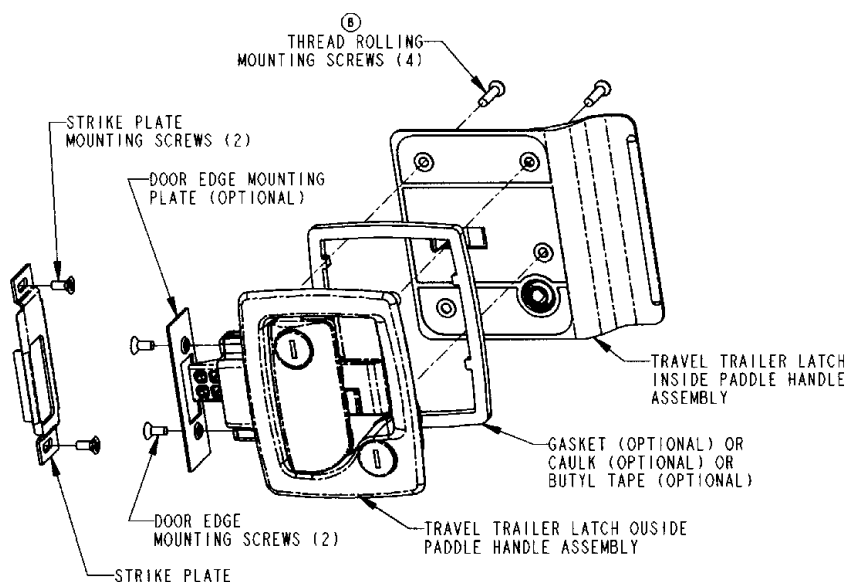
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## 1. BASIC COMPONENTS

For installing the 60-251 Travel Trailer Latch, the following will be needed (Fig. 1):

- Travel trailer latch outside paddle handle assembly
  - Travel trailer latch inside paddle handle assembly
  - Door edge cover plate (optional) (Part #11704-15)
  - Strike plate (Part #11705-15)
  - Gasket (optional)(Part #14824-01)
  - Caulk or butyl tape (optional)
  - Strike plate mounting screws
  - Door edge mounting screws (Part #15554-01)
  - Thread rolling mounting screws.
- See Table 1 for part numbers



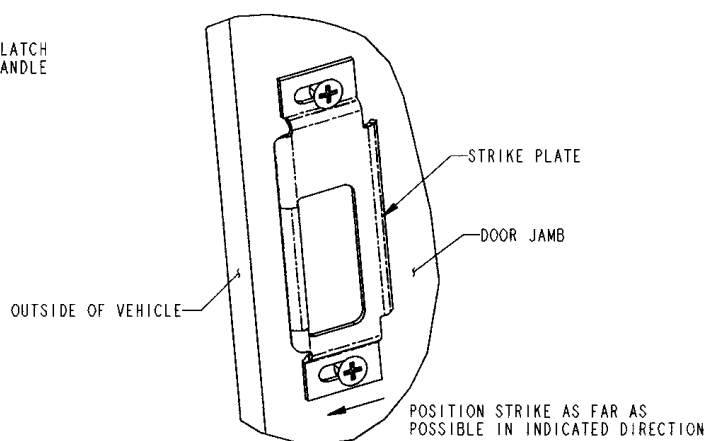
**Fig. 1 - Basic Components**

Mounting Screws Required		
Total Door Thickness	Screw Length	TriMark Part #
1.25 /1.375	.625	15553-01
1.325/1.5	.75	15555-01
1.625/1.875	1.125	--

**Table 1**

## 2. INSTALLATION OF STRIKE PLATE

Install strike plate to door jamb (Fig. 2) Make sure lip of strike plate is in the position shown. As you tighten the screws pull the strike plate out as far toward the outside of the vehicle as possible. It is not necessary to tighten the screws fully tight at this time. Tighten enough so that strike plate won't be able to slide along the door jamb from a few closings of the door. The final adjustment and tightening of the strike plate will occur after installation of the latch.



**Fig. 2 - Strike Plate Installation**

### 3. INSTALLATION OF LATCH

#### INSERTING OUTSIDE PADDLE

#### ASSEMBLY INTO DOOR (Figs. 3 thru 8)

1. Sealing around the flange of the outside paddle assembly is suggested. To seal around the flange of the outside paddle assembly, proceed with one of these two methods, otherwise proceed to step 2.

A. Gasket. Remove adhesive liner from gasket (Fig. 3). Apply gasket with adhesive side against flange of outside paddle assembly by pressing gasket around the underside of the flange (Fig. 4). A recess is provided around three edges of the flange and partially on the other edge of the flange for the gasket to fit in. Take care not to let the outside edge of the gasket extend outside the flange.

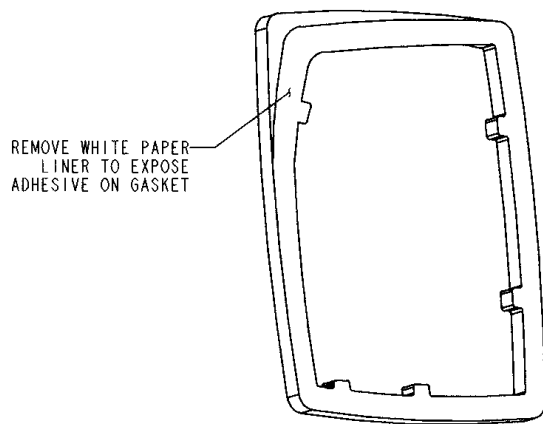


Fig. 3

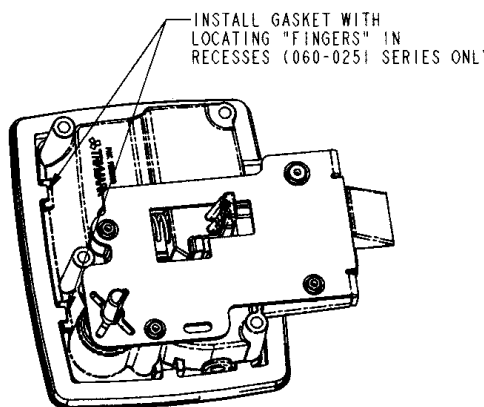


Fig. 4

B. Caulk or butyl tape. Apply caulk or butyl tape to the underside of the flange all the way around (Fig. 5). A recess is provided around three edges of the flange and partially on the other edge of the flange for caulk or butyl tape to be put in.

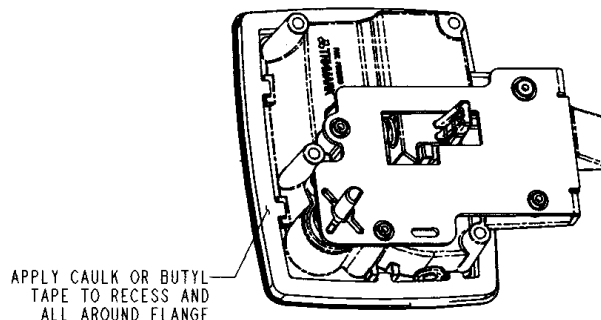


Fig. 5

2. Make sure the deadbolt is retracted (Fig. 6). Insert the plunger end of the outside paddle assembly into the cutout in the door in a "shoehorn" fashion (Fig. 7).

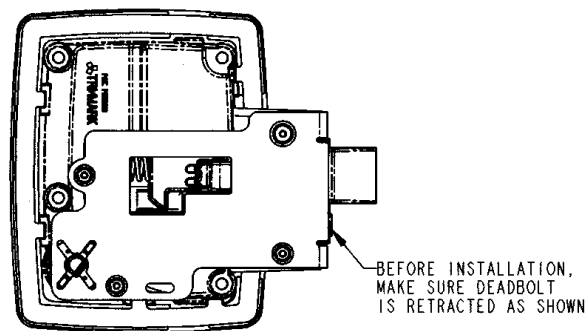


Fig. 6

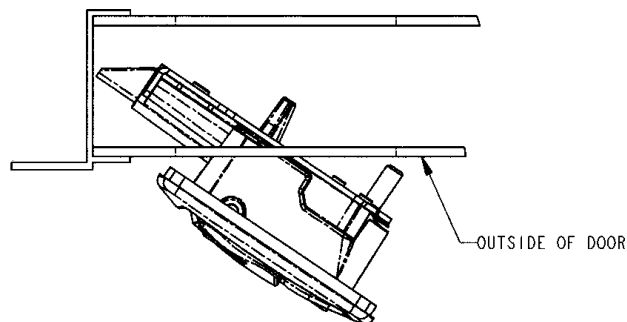


Fig. 7

3. Finish inserting the outside paddle assembly into the cutout as shown (Fig. 8).

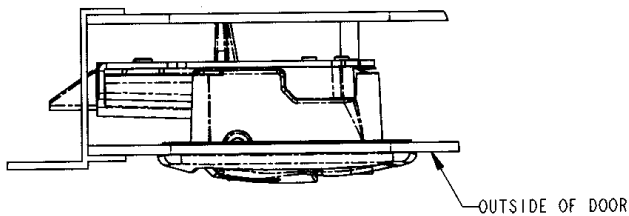


Fig. 8

### **SECURING THE INSIDE PADDLE ASSEMBLY TO THE OUTSIDE PADDLE ASSEMBLY (FIG. 9)**

Make sure the inside paddle is pushed in as far as possible. Align the leg of the paddle into the opening shown while installing, and rotate the inside knob to align correctly with the shaft on the outside paddle assembly (Fig. 9). Secure with mounting screws shown in Table 1. Do not tighten screws at this time.

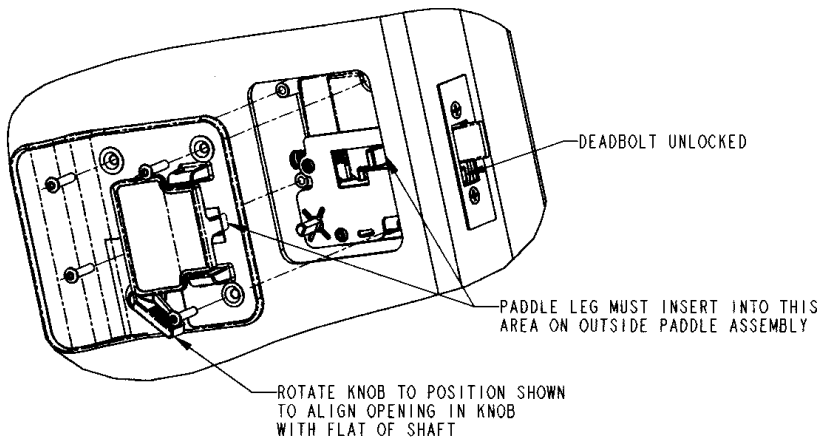


Fig. 9

POSITION LATCH AS FAR AS POSSIBLE IN THE INDICATED DIRECTION

### **SECURING LATCH TO DOOR EDGE (FIG. 10)**

Secure the latch to the door edge with the door edge mounting screws and door edge plate (if used). **Before tightening the door edge screws, push latch up or down in direction shown (Fig. 10) as far as possible in cutout.** Tighten the door edge mounting screws and the mounting screws used on the inside plate enough to prevent slipping of the latch in the cutout. **Do not tighten excessively as this may cause stripping of the threads and/or bending of the inside plate (recommended torque is 40-50 in•lbs.).** Remove any excess caulk or butyl tape that may have been forced out from under the flange of the outside paddle assembly onto the door.

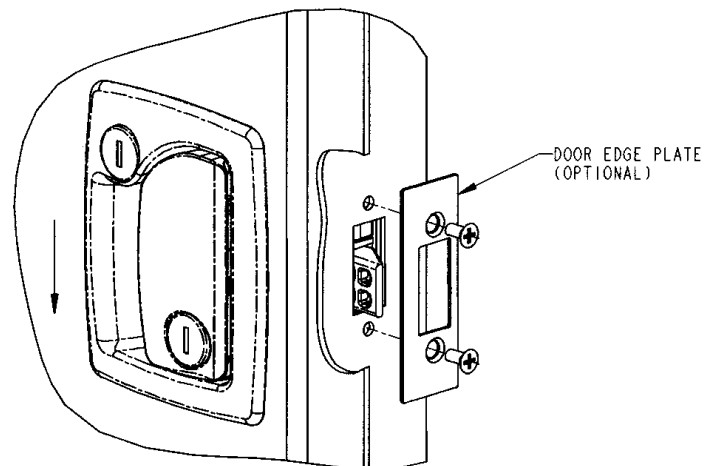


Fig. 10

## 4. STRIKE ADJUSTMENT

Carefully close door. Door should easily latch shut. If door does not shut tightly enough for desired sealing, adjust strike as follows:

1. Use a pencil to mark the existing position of the strike plate on the door jamb.
2. Loosen the strike plate mounting screws so that strike plate can slide on door jamb.
3. Slide strike plate inward no more than 1/16".
4. Tighten strike plate mounting screws so that closing of door and vibration will not move strike plate. **Do not tighten excessively as stripping of the threads may result.**
5. Carefully close door and check for proper sealing, door closing effort, and latch operating efforts. **The strike should not be adjusted in so far that excessive force (25 pounds maximum) is required to push the door shut to latch. The door should be able to be pushed shut by hand without slamming.** If adequate sealing is still not achieved go back to step 1.

## 5. BASIC OPERATION

### ***LATCHING/UNLATCHING:***

The latch uses a single latching position that is achieved by the engagement of the plunger in the opening of the strike plate. The deadbolt engages into this same opening and if extended, will prevent closing and opening of the door.

### ***USE OF A MASTER KEY:***

If the lock cylinder in the paddle has a letter stamped on its face, it can be unlocked and locked with a master key. For example, if it has a "1R" stamped on its face, a "1R" series master key will lock and unlock the paddle. The master key will not lock or unlock the deadbolt. If there is not a letter stamped on the face of the paddle lock cylinder, it cannot be operated with a master key.

### ***OPERATION OF THE PADDLE LOCK:***

The paddle can be locked by rotating the lock cylinder in the paddle clockwise 1/4 turn and can be unlocked by rotating the lock cylinder counterclockwise 1/4 turn. When locked, the outside paddle will not be able to be pulled. When locked, the inside paddle will still be able to be pulled and open the door. If the latch is locked with the door open, it can be shut and will stay locked. The paddle lock can not be locked or unlocked from the inside.

### ***OPERATION OF THE DEADBOLT FROM THE OUTSIDE:***

From the outside the deadbolt can be locked and unlocked only with the keys provided for the customer. It can't be locked and unlocked with the master key. To lock (extend) the deadbolt, rotate the key a little more than 1/4 turn clockwise. A light click should be felt and heard. The lock cylinder will have to be returned back to center to remove the key. To unlock (retract) the deadbolt, rotate the key a little more than 1/4 turn counterclockwise. A slight click should be felt and heard. The lock cylinder will have to be returned back to center to remove the key. The deadbolt must be operated while the door is shut. If the deadbolt is locked (extended) while the door is open, it will not shut.

### ***OPERATION OF THE DEADBOLT FROM THE INSIDE:***

The deadbolt can be locked and unlocked from the inside by rotation of a red knob near the paddle. This knob can be rotated a little more than 1/4 turn clockwise to lock and a little more than 1/4 turn counterclockwise to unlock. A designation is provided on the inside plate to show the direction to lock and unlock.

## 6. TROUBLESHOOTING

SYMPTOM	PROBLEM	POSSIBLE REMEDY
Door won't latch shut	Deadbolt is extended (locked)	Unlock deadbolt
	Strike plate is adjusted too far inward	Adjust strike plate outward
	Strike plate is installed with lip towards inside instead of outside of door	Remove and re-install strike plate correctly
	Inside paddle assembly was not installed to outside paddle assembly with the inside paddle leg in the correct position	Remove and re-install inside plate correctly
	Foreign object in latch assembly preventing plunger retraction	Remove foreign object
Paddle lock won't lock	Not using correct key	Use correct key
	Plunger not fully engaged in strike and outside paddle not retracted fully	Firmly shut door to allow plunger to fully engage and retract outside paddle
Deadbolt won't lock	Not using correct key	Use correct key
	Door not fully shut preventing deadbolt from entering opening in strike plate	Firmly shut door to allow plunger to fully engage. Adjust strike plate if necessary to allow door to shut fully
	Latch assembly not located properly in door cutout	Loosen mounting screws and locate latch assembly in door cutout to allow deadbolt to extend into strike plate opening
	Strike plate mounting holes not located properly in door cutout	Correct location of strike plate mounting holes
Inside knob to operate deadbolt comes off when installing latch	Deadbolt lock knob not rotated to align with shaft of outside paddle assembly	Replace inside paddle assembly and align deadbolt lock knob with shaft of outside paddle assembly when installing
Inside plate bent	Mounting screws tightened too tight	Replace inside paddle assembly and properly tighten mounting screws



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