

SUBJECT: BAGGAGE DOOR, INSIDE LATCH MODIFICATION

MODEL/S/N  
EFFECTIVITY M20J: 24-0084, 24-0378 THRU 24-1650  
24-3000 THRU 24-3059  
M20K: 25-0001 THRU 25-1165  
M20L: 26-0001 THRU 26-0019

TIME OF  
COMPLIANCE: AT OWNERS DISCRETION

INTRODUCTION: IT HAS BEEN DETERMINED THAT IMPROPER SECURING OF THE  
INSIDE BAGGAGE DOOR LATCH MECHANISM, AFTER OPERATION,  
HAS BEEN THE REASON FOR BAGGAGE DOORS COMING OPEN DURING  
TAKEOFF OR IN FLIGHT.

INSTRUCTIONS:

1. Open baggage door from outside aircraft.
2. Remove Royalite cover from inside baggage door which covers the inside handle mechanism.
3. Pull white knob out to release Red handle from its secured position.
4. If S.I. M20-63, dated 4-12-83, has been incorporated, remove the spring connected between clevis pin on Red handle and clip on door frame.
5. Remove two (2), cotter pins, AN380-2-2, from two (2) clevis pins, AN393-33(modified) and AN393-35 that secure the Red handle to latch and rod assembly mechanism.
6. Remove Red Handle; remove White Knob assembly from hole in Red handle.
7. Modify large hole in Red handle to a slotted hole per Figure M20-82-1 below.
8. Remove existing clip, P/N 350191-003 or -005, from door frame by drilling out two (2) rivets (SEE FIG M20-82-2).
9. Install 350191-9007 clip/pin assembly, locating pin relative to slot in handle as illustrated in figure M20-82-2. Drill two (# 30 drill) holes into baggage door using pilot holes in clip/pin assy. as a guide. Install with two CR3213-4-2 rivets.
10. Install lanyard, P/N 90312A21, on RED handle per Figure M20-82-2. Use CR3213-4-3 rivet and two AN960-4 washers (one on each side of lanyard fitting).
11. Insert Hitch Pin, P/N 98335A044, on to lanyard loop.
12. Reinstall modified Red Handle onto latch mechanism using original clevis pins and two (2) new cotter pins, P/N AN380-2-2.
13. Re-attach spring between Red Handle clevis pin and 350191-9007 clip/pin assembly. Incorporate that portion of SI M20-63 that adds the spring, if not already done.
14. Check inside door latch mechanism operation to insure that spring pulls cam into cam slots of outside handle when Red Handle is in the closed position. This automatic engagement should occur every time the Red Handle is opened and then closed.
15. Observe movement of latching rod arms as inside Red Handle is opened and closed; be sure rod arm link has been reattached to Red Handle with the clevis pin.

- 16. Place Red Handle to closed position and insert Hitch Pin through hole in pin, P/N AN393-7. This will secure Red Handle in closed position until the need to open from the inside is necessary.
- 17. Replace inside Royalite cover over the Red Handle and latching mechanism.
- 18. Remove existing decal on baggage door royalite panel and install the 150080-834 decal included in this kit.
- 19. Close baggage door from outside in normal manner.

**NOTE:**  
**It is recommended that the baggage door be locked, before flight.**

20. The various POH/AFM's, applicable to the aircraft being modified per this S.I., must incorporate the Supplemental data pages included in this S.I. Kit. This Supplemental Data should be placed in SECTION IX of the POH/AFM applicable to the A/C Model and S/N of the aircraft being modified. It is the responsibility of the pilot to be aware of all Operating Procedures of the POH/AFM prior to flying the aircraft. This includes ALL Supplemental Data in SECTION IX of POH/AFM.

**REFER TO SUPPLEMENTAL DATA PAGES FOLLOWING FIGURES OF THIS SI.**

21. Enter compliance note in aircraft logbook and return aircraft to service.

**REFERENCE DATA:**

MOONEY SERVICE INSTRUCTION M20-63, DATED 4-12-83.

**WARRANTY:**

Mooney Aircraft Corporation will allow 1.0 hours labor on aircraft in Warranty to accomplish this S.I. This allowable time DOES NOT apply to incorporation of any portion of S.I.M20-63.

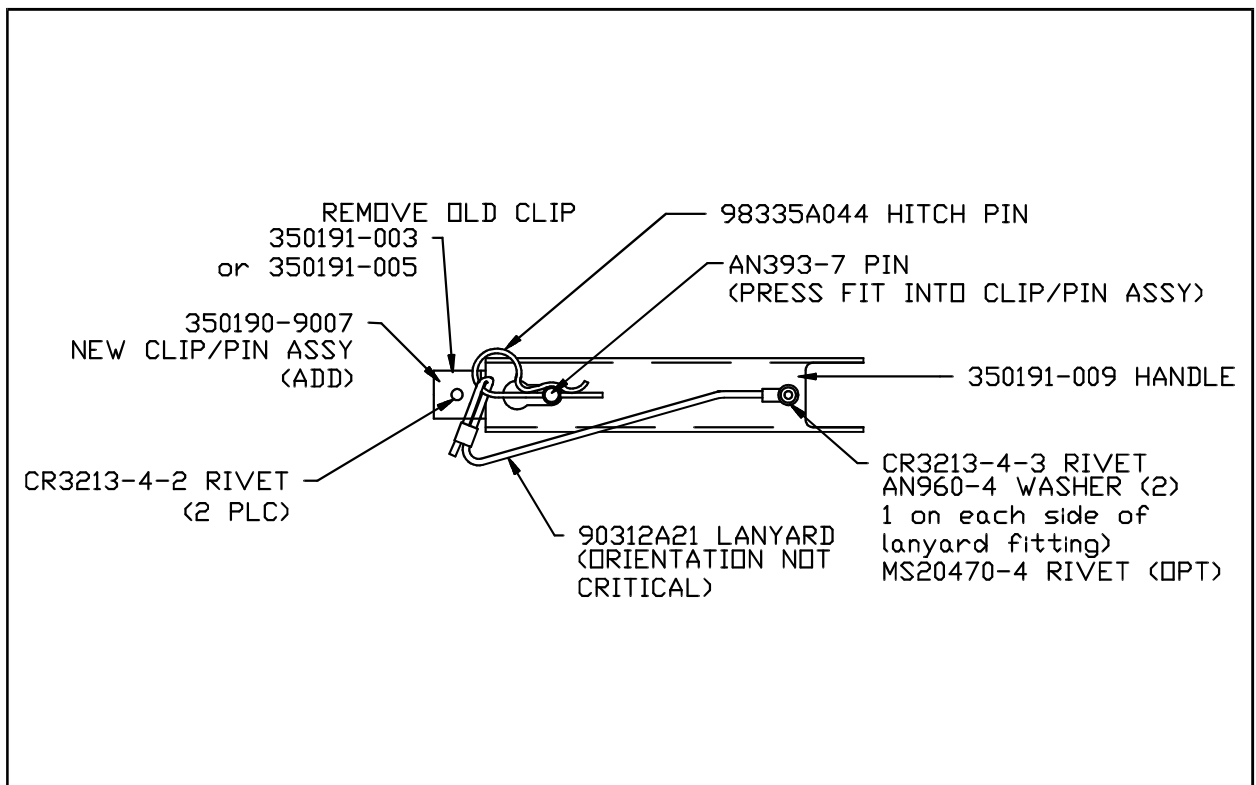
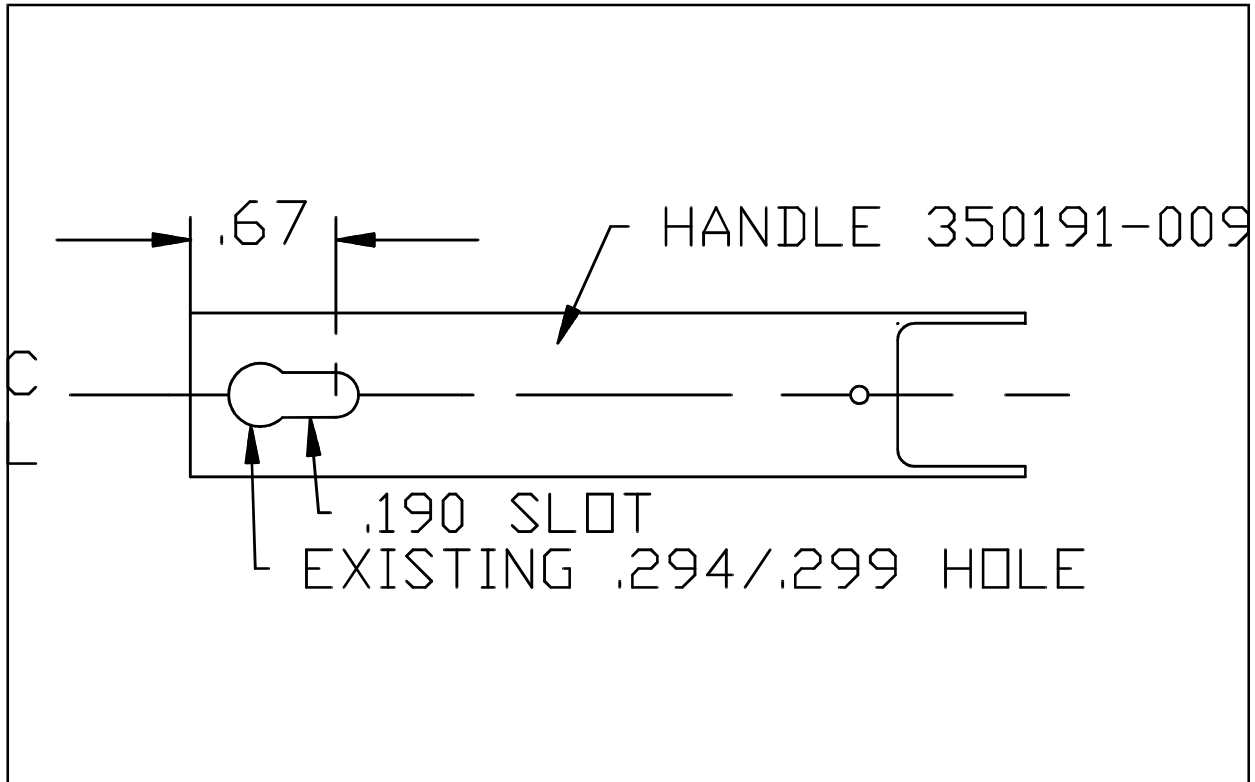
**PARTS LIST:**

KIT PART NUMBER - M20-82-1

| ITEM | P/N         | DESCRIPTION              | QTY |
|------|-------------|--------------------------|-----|
| 1.   | 350191-9007 | CLIP/PIN ASSY            | 1   |
| 2.   | 90312A21    | LANYARD ASSY             | 1   |
| 3.   | 98335A044.  | HITCH PIN (ALT. AN415-4) | 1   |
| 4.   | CR3213-4-2  | RIVET, CHERRY            | 2   |
| 5.   | CR3213-4-3  | RIVET, CHERRY            | 1   |
| 6.   | AN960-4     | WASHER                   | 2   |
| 7.   | 150080-834  | DECAL                    | 1   |
| 8.   | N/A         | POH/AFM REVISION PAGES   | 1   |

**FIGURE/ TABLES:**

SEE NEXT PAGE



FAA APPROVED  
AIRPLANE FLIGHT MANUAL SUPPLEMENT  
FOR  
MOONEY MODEL M20J OR M20K  
WITH INCORPORATION OF  
MOONEY SERVICE INSTRUCTION M20-82  
BAGGAGE DOOR INSIDE LATCH MODIFICATION

**REG. NO.** \_\_\_\_\_

**SERIAL NO.** \_\_\_\_\_

This Supplement must be attached to the applicable FAA Approved Airplane Flight Manual when the aircraft is modified per Mooney Service Instruction M20-82. The information contained herein supersedes the basic manual only in those areas listed. For limitations, procedures and performance information not contained in this Supplement, consult the basic Airplane Flight Manual.

FAA APPROVED: \_\_Original signed by ASW-150 FAA \_\_\_\_\_

L. B. Andriesen, Manager  
Aircraft Certification Division  
FEDERAL AVIATION ADMINISTRATION  
Southwest Region  
Fort Worth, Tx. 76101

Date 3-17-88

The following POH/AFM's have a portion of the listed pages affected by data contained in this Supplement and are superseded by the data shown within the Section Numbers of the basic POH/AFM.

LOG OF REVISIONS

| Revision Number | Revision Pages | Description of Revisions  | FAA Approved * | Date |
|-----------------|----------------|---|----------------|------|
| A               | 4              | Added para. on what to expect if baggage door comes open in flight. |                |      |
|                 |                |   |                |      |
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The revised portions of affected page are indicated by vertical black lines in the margin.

\* L.B. Andriesen, Manager, Aircraft Certification Division

THE FOLLOWING POH/AFM'S ARE AFFECTED FOR M20J AND M20K AIRCRAFT THAT MAY BE MODIFIED PER THIS SERVICE INSTRUCTION. THE POH/AFM NUMBER(AND REVISION IF APPLICABLE) ARE SHOWN ALONG WITH THE PAGES OF THE VARIOUS SECTIONS OF THE MANUAL THAT A PORTION OF WILL BE MADE OBSOLETE IF S.I. M20-82 IS INCORPORATED INTO AN AIRCRAFT THAT USES THE MANUAL:

| POH/AFM NO | SECTION II<br>PAGE | SECTION III<br>PAGE | SECTION VII<br>PAGE |
|------------|--------------------|---------------------|---------------------|
| 1221 D     | 2-12               | N/A                 | 7-32                |
| 1223 F     | 2-12               | N/A                 | 7-35/7-36BLANK      |
| 1225 D     | 2-12               | N/A                 | 7-33/7-34BLANK      |
| 1227 C     | 2-12               | 3-11                | 7-34                |
| 1229 A     | 2-12               | 3-11                | 7-24                |
| 1231 A     | 2-15               | 3-15                | 7-31                |
| 1233 A     | 2-13               | 3-19                | 7-29                |
| 1233 B     | 2-12               | 3-15                | 7-21                |

- THE UPPER GROUP OF POH/AFM'S ARE FOR M20J AIRCRAFT -

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|        |      |      |      |
|--------|------|------|------|
| 1224 F | 2-12 | N/A  | 7-26 |
| 1226 E | 2-12 | N/A  | 7-26 |
| 1228 D | 2-12 | 3-18 | 7-27 |
| 1230 B | 2-12 | 3-17 | 7-27 |
| 1232   | 2-16 | 3-19 | 7-30 |
| 1234 C | 2-13 | 3-24 | 7-32 |
| 1236   | 2-13 | 3-27 | 7-32 |
| 1236 A | 2-12 | 3-22 | 7-25 |

- THE LOWER GROUP OF POH/AFM'S ARE FOR M20K AIRCRAFT -

SECTION I - GENERAL

NO CHANGE

SECTION II - LIMITATIONS

New placard required: 150080-834

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| <p><b>AUXILIARY EXIT</b><br/>DO NOT OPEN IN FLIGHT<br/>TO OPEN</p> <ol style="list-style-type: none"> <li>1. PULL OFF COVER</li> <li>2. PULL CABLE EXTRACTING LOCK PIN</li> <li>3. ACTUATE HANDLE</li> </ol> <p style="text-align: center;">TO CLOSE</p> <ol style="list-style-type: none"> <li>1. STORE HANDLE</li> <li>2. INSERT LOCK PIN</li> <li>3. INSTALL COVER</li> <li>4. CLOSE AND LATCH DOOR USING<br/>OUTSIDE HANDLE</li> <li>5. LOCK DOOR</li> </ol> |
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LOCATED:  
ABOVE INSIDE BAGGAGE DOOR HANDLE

SECTION III - EMERGENCY PROCEDURES

UNLATCHED DOORS IN FLIGHT

BAGGAGE DOOR

If the baggage door is not properly closed, it may come unlatched in flight. This may occur during or after take-off. The door will open to its full open position and then take an intermediate position depending upon speed of the aircraft. THERE ARE NO ADVERSE FLIGHT CHARACTERISTICS WITH THE DOOR OPEN. There will be considerable wind noise and any loose, light objects may exit the aircraft if in the vicinity of the open door. There is no way to shut and latch the door from the inside; LAND AS SOON AS POSSIBLE and secure the baggage door.

Baggage Door latching Mechanism. . . . . VERIFY PROPERLY ENGAGED  
. . . . . (inside mechanism) then shut from the outside.

EMERGENCY EXIT OF AIRCRAFT

CABIN DOOR

PULL latch handle AFT . . . . . OPEN door and exit aircraft.

BAGGAGE DOOR

Fold rear seat backs forward(if applicable) . . . . . CLIMB OVER.  
PULL off plastic cover . . . . . PULL latch Pin.  
LIFT Red handle UP. . . . . OPEN door and exit aircraft.

TO VERIFY RE-ENGAGEMENT OF BAGGAGE DOOR LATCH MECHANISM:

OPEN outside handle fully. CLOSE inside Red handle to engage pin into cam slide of latch mechanism.  
PLACE latch Pin in hole to hold Red handle down.  
REPLACE cover.  
CHECK and operate outside handle in normal manner.

SECTION IV THRU VI

NO CHANGE

SECTION VII

EMERGENCY EXITS

The cabin door is the primary emergency exit from the cabin. If a situation exists where a probable emergency landing will occur, the door should be unlatched to prevent jamming of the door during the emergency.

The baggage compartment access door can be used as a means of auxiliary exit. The door can be opened from the inside even though locked. To open, pull off small ABS cover, PULL out the latch pin and lift UP Red handle.

To verify re-engagement of latching mechanism: insert latching pin into hole to hold Red handle down. Replace ABS cover. Operate outside handle in normal manner.

SECTION VIII THRU X

NO CHANGE