Onity
'innovative thinking'
TESA entry Systems

Installation Manual

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Onity
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Electronic Locks

Hotel HT
Commercial CT

Hotel HT Installation Manual

Pre Site Procedure

Upon receipt of schedule and Work Authorization:

Contact customer 48hrs prior to install date

Ascertain the following:

- Has material arrived?
- Front desk training scheduled prior to start of install?
- Guest rooms reserved for install crew?

If new construction, also ascertain:

- All doors hanging?
- Has all pre installation work been performed?
  - Weather stripping/smoke seal installed?
  - 1” clearance behind strikes?
  - Carpet installed around frames?

Upon arrival on site:

- Meet with Point of Contact
- Walk property
- Inventory materials
- Contact Project Coordinator if required
- Fill out Field Change Order if required

Starting the Day

- Inform front desk of room numbers to be worked on, update at noon and at end of day.
- Load lock data from front desk equipment into Portable Programmer (P.P.).
- Pick up new locksets from storage room.
- Lay out new locks next to room doors.
- Lay out lock cases and place on top of lock boxes next to room doors.
- Remember to lay out the correct lock case for that door, Left Hand (L.H.) or Right Hand (R.H.).
- Make sure dead latch is in the lock case correctly.
- Keep all carts and boxes on sides of hallway.
- Place drop cloth at each door on top of lock box and lock case, not required on premachined doors or construction sites.
- Start from one end of hallway.
- Knock on door and say "Engineering".
- Wait 10 seconds.
- Repeat last two steps.
- Open door and again say "Engineering".
- Do not knock on doors with "Do Not Disturb" signs.
- Spread out drop cloth.
- Remove old lock and strike.
- Place in hallway next to new lock box.

Premachined Doors

- When prep is wrong, call Project Coordinator and fill out a Change Order.
- Drill the proper size holes using a mortiser with Accubore, Accujig, or paper template supplied.
- **Never** use a die grinder to cut face prep in door.
- 1” clearance in frame must be present before install, call Project Coordinator and fill out a Change Order for **US** to remedy the situation.
- Before removing the center bar from the strike, notify customer to adjust doors or frames, write down room numbers on Installation Acceptance Form.
- If weather stripping, smoke seal, or door silencers are not installed prior to lock install, note this on Installation Acceptance Form. Notify customer that if existing door and frame conditions are not corrected the warranty may be void.
- **Remedy as many conditions as possible before leaving site.**

Premachined Wood Doors

1. Unpack Onity lock on cart.
2. Attach longer outside handle with longer T-10 screw provided.
3. Test lock with construction key card, green light.
4. Adjust bevel of lock case to match bevel of door.
5. Hand tighten upper and lower bevel screws. **These must be very tight.**
6. Lock cases manufactured before 1996 and all Corbin lock cases require mortise pocket be filed for anti-friction latch clearance.
7. Set lock case in mortise pocket with dead bolt on top.
8. Hold lock case up in mortise pocket.
9. Use a Vix Bit to pre drill screw holes:
   #9 Vix Bit in soft wood 9/64" drill bit
   #12 Vix Bit in hard wood 11/64" drill bit
10. Falcon lock case use #12 x 1-1/4” Phillips sheet metal screws. *Not supplied*.
11. Corbin lock case use #10 x 1-1/4” Phillips sheet metal screws. *Not supplied.*
12. Tighten to 25-in. lbs.. Use longer screws if necessary.
13. Install strike of proper handing R.H. or L.H.. Dead bolt hole on top.
14. In wood frames use #12 Phillips sheet metal screws with a minimum of 1/2” of screw into stud behind frame. *Not supplied.*
15. In metal frames use #12-24 combination screws provided.
16. Tighten strike screws to 25-in. lbs.
17. Minimum of 1" clearance required for latch and dead bolt in frame.
18. Make sure privacy wire is plugged in securely and rubber grommet is in place.
19. Install outside escutcheon feeding privacy wire through cylinder hole.
20. Outside escutcheon should have 1/8" of sideways play.
21. File door with a round rasp if no sideways play is present.
22. Hold backing plate by inside handle mount and feed privacy wire through hole above micro switch.
23. Do not pull to hard on privacy wire.

24. Install backing plate on door.
25. Make sure no tension is present on return spring of dead bolt cam.
26. Coil excess privacy wire around shaft of T-10 driver.
27. Plug in privacy wire to micro switch connector.
28. All construction key cards have dead bolt override making it impossible to check privacy function.

DOUBLE CHECK PRIVACY WIRE CONNECTIONS!

29. Start four (4) escutcheon screws. Do not cross thread.
30. Measure from edge of door to outside escutcheon at top and bottom.
31. Measurement must be the same.
32. Measure from edge of door to backing plate at top and bottom. Measurement must be the same.
33. Tighten escutcheon screws to 11-in. lbs.
34. Install lower backing plate screws and tighten to 11-in. lbs.
35. Falcon lock cases check dead latch installation.
36. Install face plate with two (2) screws and tighten to 11-in. lbs.

37. Face plate must be flush with edge of door.
38. Hold coiled privacy wire up away from dead bolt cam.
39. Snap on inside escutcheon.
40. Install thumb turn and extend dead bolt
41. Install inside handle.
42. Install shorter two (2) T-10 screws in handle and thumb turn from edge of door.
43. Test all operations of lock:
    - Outside handle retracts dead bolt easily.
    - Inside handle retracts dead bolt easily.
    - Latch extends fully when handle is slowly released both down and up.
    - Latch retracts fully when handle is turned down and up.
    - Lock opens with key card down and up.
44. Close door and test lock:
    - Inside handle retracts latch and dead bolt easily.
    - Lock opens with key card down and up.
    - Latch extends fully into strike.
    - Dead bolt extends fully and cleanly into strike.
    - Dead latch not in latch hole.
    - Minimum clearance of 1/16" above and below both latch and dead bolt.
    - File strike if necessary using a power file.
    - Square corners with a hand file.
45. Wipe off lock, door, strike, and frame.
46. Remove all packing materials and dispose of properly.

Premachined Metal Doors

1. Unpack Onity lock on cart.
2. Attach longer outside handle with longer T-10 screw provided.
3. Test lock with construction key card, green light.
4. Adjust bevel of lock case to match bevel of door.
5. Hand tighten upper and lower bevel screws. These must be very tight.
6. Set lock case in mortise pocket with dead bolt on top.
7. Install with two (2) #12-24 combination screws supplied.
8. Tighten to 25 in. lbs.
9. Install strike of proper handing R.H. or L.H. Dead bolt hole on top.
10. In wood frames use #12 Phillips sheet metal screws with a minimum of 1/2" of screw into stud behind frame. *Not supplied.*
11. In metal frames use #12-24 combination screws provided.
12. Tighten strike screws to 25-in. lbs.
13. Minimum of 1" clearance required for latch and dead bolt in frame.
14. Make sure privacy wire is plugged in securely and rubber grommet is in place.
15. Install outside escutcheon feeding privacy wire through cylinder hole.
16. Outside escutcheon should have 1/8" of sideways play.
17. File door with a round rasp if no sideways play is present.
18. Hold backing plate by inside handle mount and feed privacy wire through hole above micro switch.
19. Do not pull to hard on privacy wire
20. Install backing plate on door.
21. Make sure no tension is present on return spring of dead bolt cam.
22. Coil excess privacy wire around shaft of T-10 driver.
23. Plug in privacy wire to micro switch connector.
24. All construction key cards have dead bolt override making it impossible to check privacy function.

    DOUBLE CHECK PRIVACY WIRE CONNECTIONS!
25. Start four (4) escutcheon screws. Do not cross thread.
26. Measure from edge of door to outside escutcheon at top and bottom. Measurement must be the same.
27. Measure from edge of door to backing plate at top and bottom. Measurement must be the same.
28. Tighten escutcheon screws to 11-in. lbs.
29. Install lower backing plate screws and tighten to 11-in. lbs. Self-drilling sheet metal screws may be used. *Not supplied.*
30. Falcon lock cases check dead latch installation.
31. Install face plate with two (2) screws and tighten to 11 in. lbs.
32. Face plate must be flush with edge of door.
33. Hold coiled privacy wire up away from dead bolt cam.
34. Snap on inside escutcheon.
35. Install thumb turn and extend dead bolt.
36. Install inside handle.
37. Install shorter two (2) T-10 screws in handle and thumb turn from edge of door.

38. Test all operations of lock:
    - Outside handle retracts dead bolt easily.
    - Inside handle retracts dead bolt easily.
    - Latch extends fully when handle is slowly released both down and up.
    - Latch retracts fully when handle is turned down and up.
    - Lock opens with key card down and up.
39. Close door and test lock:
    - Inside handle retracts latch and dead bolt easily.
    - Lock opens with key card down and up.
    - Latch extends fully into strike.
    - Dead bolt extends fully and cleanly into strike.
    - Dead latch not in latch hole.
    - Minimum clearance of 1/16" above and below both latch and dead bolt.
    - File strike if necessary using a power file.
    - Square corners with a hand file.
40. Wipe off lock, door, strike, and frame.
41. Remove all packing materials and dispose of properly.

Wood Door Existing Vingcard (WDEV)

Prep

1. Use paper template supplied or Accujig to mark holes on door. This is only required on the first door to obtain measurement for placement of mortiser and Accubore.
    - Place paper template on door UPSIDE DOWN.
    - "FACE PLATE TOP REFERENCE MARK" should now be on the bottom of face plate router cut.
    - Mark the center of 2-1/8" hole on the door.
    - Remove template and turn RIGHT SIDE UP.
    - Align marks on the door with center of 2-1/8" hole.
    - Mark top two (2) 1/2" escutcheon holes.
    - Place Accubore over two (2) 1/2" escutcheon holes.
    - Mark top of mortiser. This is now the new mortiser locator mark.
2. Drill two (2) 1/2" holes on top of Accubore. **NOTE:** Do NOT drill all the way through.
3. Drill one side, then the other.
4. Lock cases manufactured before 1996 and all Corbin require mortise pocket to be filed for anti-friction latch clearance.
5. Drill the lower 2-1/8” hole on inside of door only.
6. Vacuum debris off mortiser and Accubore.
7. Remove mortiser and position on next door.
8. Lock cases manufactured before 1996 and all Corbin require the mortise pocket filed for anti-friction latch clearance.
9. Vacuum mortise pocket and remove all debris.
10. Wipe off door.
11. Roll up drop cloth.

Installation

1. Unpack Onity lock on cart.
2. Attach longer outside handle with longer T-10 screw provided.
3. Initialize lock to proper room number.
4. Test lock with master key card, green light.
5. Put old lock in new lock box removing outside handle with 3/4” 12 point box wrench.
6. Write room number on box.
7. For right hand, R.H., doors you MUST use left hand, L.H., lock case and strike.
8. For left hand, L.H., doors you MUST use right hand, R.H., lock case and strike.
9. Adjust bevel of lock case to match bevel of door.
10. Hand tighten upper and lower bevel screws. **These must be very tight.**
11. Set lock case in mortise pocket with dead bolt on BOTTOM.
12. Falcon lock cases use two (2) #12 x 1-1/4" Phillips sheet metal screws. *Not supplied*.
13. Corbin lock cases use two (2) #10 x 1-1/4“ Phillips sheet metal screws. Not supplied.

14. Tighten to 25-in. lbs. Use longer screws if necessary.
15. Install strike of opposite handing.
16. In wood frames use #12 Phillips sheet metal screws with a minimum of 1/2“ of screw into stud behind frame. *Not supplied*.
17. In metal frames use #12–24 combination screws provided.
18. Tighten strike screws to 25-in. lbs.
19. Be sure privacy wire is plugged in securely and rubber grommet is in place.
20. Install outside escutcheon with cover plate, when needed, feeding privacy wire through rectangular cutout.
21. Outside escutcheon should have 1/8" of sideways play.
22. File door with round rasp if no sideways play is present.
23. Hold backing plate by inside handle mount with micro switch at bottom.
24. Feed privacy wire through hole of backing plate at opposite end from switch.
25. Install backing plate on door.
26. Make sure no tension is present on return spring of dead bolt cam.
27. Route privacy wire down backing plate to micro switch and plug in.
28. Extend dead bolt.
29. Test lock using key card WITHOUT privacy override, alternating green and red light. Solid green light indicates wire not plugged in correctly.
30. Retract dead bolt.
31. Start four (4) escutcheon screws. Do not cross thread.
32. Measure from edge of door to outside escutcheon at top and bottom. Measurement must be the same.
33. Cover plate must be centered around outside escutcheon.
34. Measure from edge of door to backing plate at top and bottom. Measurement must be the same.
35. Tighten escutcheon screws to 11-in. lbs.
36. Install lower backing plate screws and tighten.
37. Falcon lock cases check dead latch installation.
38. Install face plate with two (2) screws and tighten to 11 in. lbs.
39. Face plate must be flush with door.
40. Hold privacy wire away from moving parts.
41. Snap on inside escutcheon.
42. Install thumb turn and extend dead bolt.
43. Install inside handle.
44. Test all operations of lock:
    - Outside handle retracts dead bolt easily.
    - Inside handle retracts dead bolt easily.
    - Latch extends fully when handle is slowly released both down and up.
    - Latch retracts fully when handle is turned down and up.
    - Lock opens with key card down and up.
45. Close door and test lock:
    - Inside handle retracts latch and dead bolt easily.
    - Latch extends fully into strike.
    - Dead bolt extends fully and cleanly into strike.
    - Dead latch not in latch hole.

- Minimum clearance of 1/16" above and below both latch and dead bolt.
- File strike if necessary using a power file.
- Square corners with a hand file.

46. Wipe off lock, door, strike, and frame
47. Vacuum floor of room and hallway.
48. Put "Do Not Disturb" sign on inside handle.
49. Turn off lights.
50. Secure door.

Metal Door Existing Vingcard (MDEV)

Prep

1. Use paper template supplied or Accujig to mark holes on door. This is only required on the first door to obtain measurement for placement of mortiser and Accubore.
    - Place paper template on door UPSIDE DOWN.
    - "FACE PLATE TOP REFERENCE MARK" should now be on the bottom of face plate router cut.
    - Mark the center of 2-1/8" hole on the door.
    - Remove template and turn RIGHT SIDE UP.
    - Align marks on the door with center of 2-1/8" hole.
    - Mark top two (2) 1/2" escutcheon holes.
    - Place Accubore over two (2) 1/2" escutcheon holes.
    - Mark top of mortiser. This is now the new mortiser locator mark.
2. Drill two (2) 1/2" holes on top of Accubore. **NOTE:** Do NOT drill all the way through.
3. Drill one side, then the other.
4. Drill the lower 2-1/8” hole on inside of door only.
5. Vacuum debris off mortiser and Accubore.
6. Remove mortiser and position on next door.
7. Lock cases manufactured before 1996 and all Corbin require the mortise pocket filed for anti- friction latch clearance.
8. Vacuum mortise pocket and remove all debris.
9. Wipe off door.
10. Roll up drop cloth.

Installation

1. Unpack Onity lock on cart.
2. Attach longer outside handle with longer T-10 screw provided.
3. Initialize lock to proper room number.
4. Test lock with master key card, green light.
5. Put old lock in new lock box removing outside handle with 3/4” 12 point box wrench.
6. Write room number on box.
7. For right hand, R.H., doors you MUST use left hand, L.H., lock case and strike.
8. For left hand, L.H., doors you MUST use right hand, R.H., lock case and strike.
9. Adjust bevel of lock case to match bevel of door.
10. Hand tighten upper and lower bevel screws. These must be very tight.
11. Set lock case in mortise pocket with dead bolt on BOTTOM.
12. Install lock case with two (2) #12-24 combination screws supplied.
13. Tighten to 25-in. lbs.
14. Install strike of opposite handing.
15. In wood frames use #12 Phillips sheet metal screws with a minimum of 1/2“ of screw into stud behind frame. *Not supplied*.
16. In metal frames use #12–24 combination screws provided.
17. Tighten strike screws to 25-in. lbs.

18. Be sure privacy wire is plugged in securely and rubber grommet is in place.
19. Install outside escutcheon with cover plate, when needed, feeding privacy wire through rectangular cutout.
20. Outside escutcheon should have 1/8" of sideways play.
21. File door with round rasp if no sideways play is present.
22. Hold backing plate by inside handle mount with micro switch at bottom.
23. Feed privacy wire through hole of backing plate at opposite end from switch.
24. Install backing plate on door.
25. Make sure no tension is present on return spring of dead bolt cam.
26. Route privacy wire down backing plate to micro switch and plug in.
23. Extend dead bolt.
24. Test lock using key card WITHOUT privacy override, alternating green and red light. Solid green light indicates wire not plugged in correctly.
25. Retract dead bolt.
26. Start four (4) escutcheon screws. Do not cross thread.
27. Measure from edge of door to outside escutcheon at top and bottom. Measurement must be the same.
28. Cover plate must be centered around outside escutcheon.
29. Measure from edge of door to backing plate at top and bottom. Measurement must be the same.
30. Tighten escutcheon screws to 11-in. lbs.
31. Install lower backing plate screws and tighten. Self-drilling sheet Metal screws may be used. *Not supplied.*
32. Falcon lock cases check dead latch installation.
33. Install face plate with two (2) screws and tighten to 11 in. lbs.
34. Face plate must be flush with door.
35. Hold privacy wire away from moving parts.
36. Snap on inside escutcheon.
37. Install thumb turn and extend dead bolt.
38. Install inside handle.
39. Install shorter two (2) T-10 screws in handle and thumb turn from edge of door.
40. Test all operations of lock:
    - Outside handle retracts dead bolt easily.
    - Inside handle retracts dead bolt easily.
    - Latch extends fully when handle is slowly released both down and up.
    - Latch retracts fully when handle is turned down and up.
    - Lock opens with key card down and up.
41. Close door and test lock:
    - Inside handle retracts latch and dead bolt easily.
    - Latch extends fully into strike.
    - Dead bolt extends fully and cleanly into strike.
    - Dead latch not in latch hole.
    - Minimum clearance of 1/16" above and below both latch and dead bolt.
    - File strike if necessary using a power file.
    - Square corners with a hand file.
42. Wipe off lock, door, strike, and frame.

43. Vacuum floor of room and hallway.
44. Put "Do Not Disturb" sign on inside handle.
45. Turn off lights.
46. Secure door.

HT24-V UPGRADE Wood Metal Doors (WD24V & MD24V).

1. Remove old inside escutcheon and panic assembly.
2. Save all parts from inside of door.
3. Remove old face plate.
4. Loosen cylinder set screw and remove cylinder.
5. Remove old outside escutcheon.
6. Insure lock case is stable in door. Bevel screws are tight and lock case screws tighten to 25-in. lbs.
7. Install old face plate; tighten to 11 in. lbs**. MAKE SURE ANTI-FRICTION LATCH EXTENDS OVER FACE PLATE.**
8. Unpack Onity lock on cart.
9. Install outside handle with long T-10 screw provided.
10. Initialize lock to proper room number.
11. Test lock with master key card, green light.
12. Put old outside escutcheon and cylinder in new lock box removing handle with 3/4“ 12 point box wrench.
13. Write room number on box.
14. Install outside escutcheon and cover plate. Make sure dead bolt spindle is in correct position.
15. Outside escutcheon should have 1/8” of sideways play.
16. File door with round rasp if no sideways play is present.
17. Install old panic assembly and guard with spring towards edge of door.
18. Install old inside escutcheon. Thumb turn in vertical position.
19. Extend dead bolt. Test lock using key card without dead bolt override.
20. Alternating green and red lights.
21. Retract dead bolt.
22. Start four (4) escutcheon screws. Do not cross thread.
23. Measure from edge of door to outside escutcheon at top and bottom. Measurements must be the same.
24. Cover plate must be centered around outside escutcheon.
25. Measure from edge of door to inside escutcheon at top and bottom. Measurements must be the same.
26. Tighten escutcheon screws in an "X" pattern to 11-in. lb.
27. Secure code block cover on inside escutcheon.
28. Test all operations of lock:
    - Outside handle retracts dead bolt easily.
    - Inside handle retracts dead bolt easily.
    - Latch extends fully when handle is slowly released.
    - Anti-friction latch extends over face plate.
    - Latch retracts fully.
    - Lock opens with key card.
29. Close door and test lock:
    - Inside handle retracts latch and dead bolt easily.
    - Latch extends fully into strike.
    - Dead bolt extends fully and cleanly into strike.

- Dead latch not in latch hole.
- Minimum clearance of 1/16” above and below both latch and dead bolt.
- File strike if necessary using a power file.
- Square corners with a hand file.

30. Wipe off lock, door, strike, and frame
31. Vacuum floor of room and hallway.
32. Put "Do Not Disturb" sign on inside handle.
33. Turn off lights.
34. Secure door.

HT24 – H – Lock Upgrade Wood Metal

- Distance between Center Line, C/L, of dead bolt and Center Line, C/L, of latch must be four (4) inches.
- Two different length backsets, 2-3/8” and 2-3/4”.
- **MAKE SURE YOU HAVE CORRECT LENGTH**.

Prep

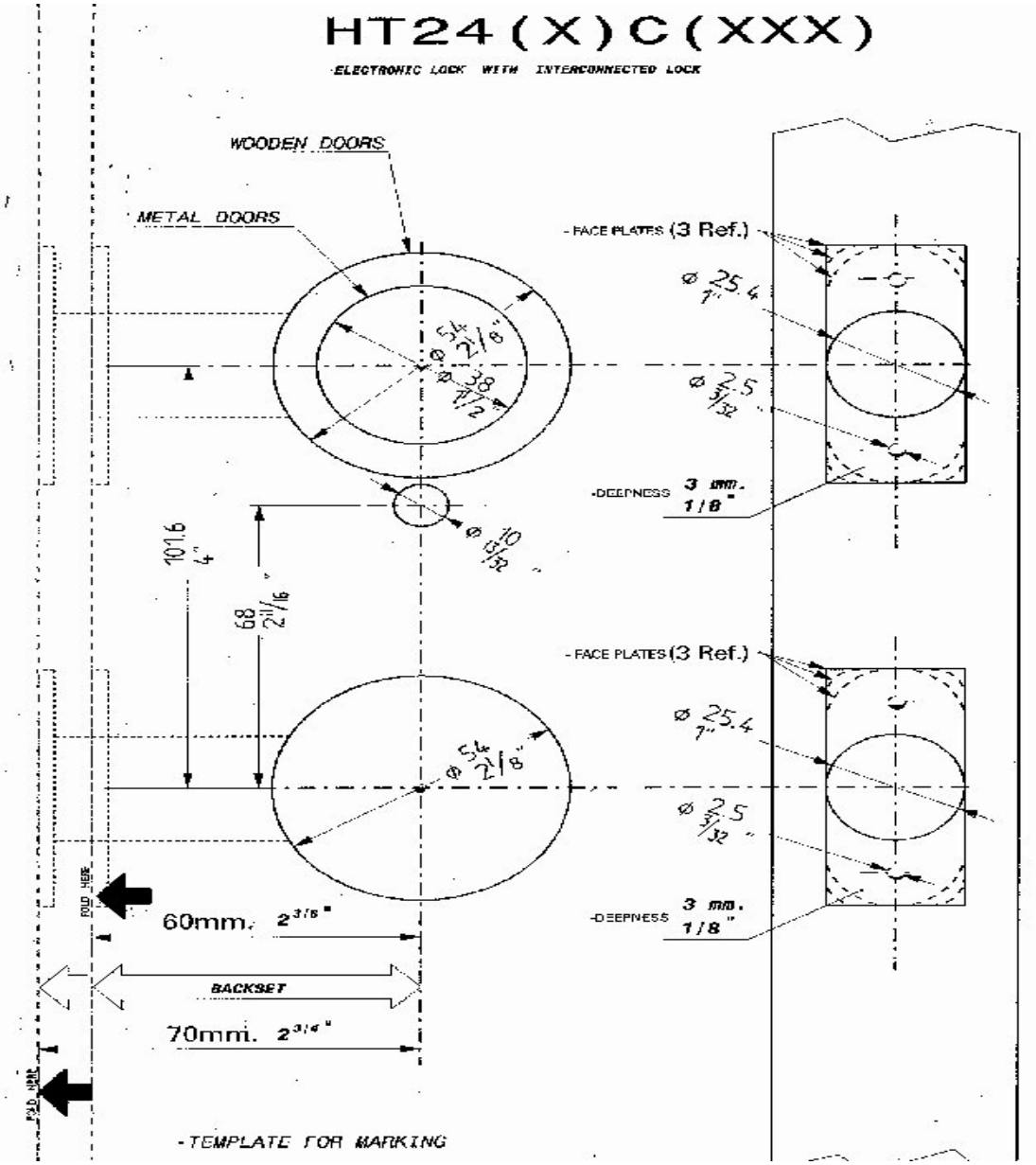
1. Align paper template with existing 2-1/8” holes.
2. Mark privacy wire hole on both sides of door.
3. Center punch for holes.
4. Drill hole using a 5/8” drill bit. **NOTE:** Do NOT drill all the way through.
5. Drill one side, then the other.
6. Wipe off door.
7. Roll up drop cloth.

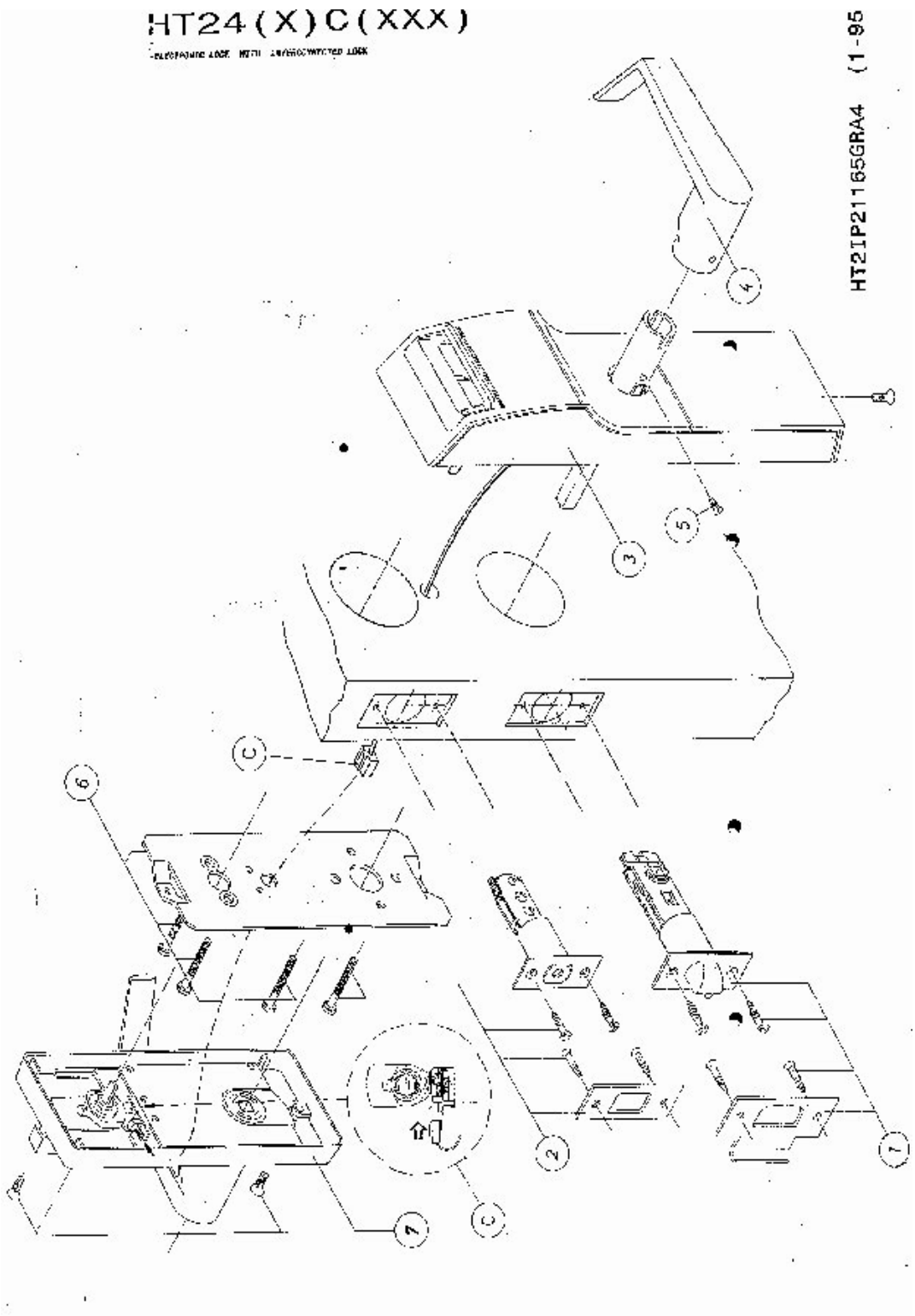
Installation

1. Unpack Onity lock on cart.
2. Attach longer outside handle with long T-10 screw provided.
3. Put old lock in box and write room number on it.
4. Initialize lock to proper room number.
5. Test lock with master key card, green light.
6. Install strikes for latch and dead bolt.
7. Tighten to 11-in. lbs. Use longer screws if necessary.
8. Install dead bolt in top hole, top side up.
9. Install latch. **MAKE SURE LATCH IS INSTALLED CORRECTLY**.
10. Tighten both latch and dead bolt screws to 11-in. lbs. Use longer screws if necessary.
11. Make sure privacy wire is plugged in securely and rubber grommet is in place.
12. Install outside escutcheon feeding privacy wire through hole in door.
13. Outside escutcheon should have 1/8” sideways play.
14. Install backing plate feeding privacy wire through hole.
15. Start four (4) escutcheon screws. Do not cross thread.
16. Measure from outside escutcheon to edge of door at top and bottom. Measurement must be the same.
17. Measure from backing plate to edge of door at top and bottom. Measurement must be the same.
18. Tighten four (4) escutcheon screws to 11-in. lbs.
19. Coil excess privacy wire around shaft of T-10 driver.
20. Hold inside escutcheon close to door and plug in privacy wire.
21. Install inside escutcheon feeding excess wire back in to door.
22. Thumb turn must be in vertical position.
23. Extend dead bolt.
24. Test lock using key card without dead bolt override.
25. Alternating green and red lights.

26. Solid green means privacy wire not plugged in properly.
27. Retract dead bolt.
28. Install two (2) inside escutcheon screws.
29. Install inside handle.
30. Test all operations of lock.
    - Outside handle retracts dead bolt easily.
    - Inside handle retracts dead bolt easily.
    - Latch extends fully when handle is slowly released both down and up.
    - Latch retracts fully when handle is turned down and up.
    - Lock opens with key card down and up.
31. Close door and test lock:
    - Inside handle retracts latch and dead bolt easily.
    - Latch extends fully into strike.
    - Dead bolt extends fully and cleanly into strike.
    - Dead latch not in latch hole.
    - Minimum clearance of 1/16” above and below both latch and dead bolt.
    - File strike if necessary using a power file.
    - Clean corners of strikes with hand file.
32. Wipe off lock, door, strike, and frame
33. Vacuum floor of room and hallway.
34. Put "Do Not Disturb" sign on inside handle.
35. Turn off lights.
36. Secure door.

(template not to scale)




HT24(X)C(XXX)
HT2IP21165GRA4 (1-95

Wood Door Existing Cylindrical Lockset (WDEC)

Existing 4-7/8" ASA Strike - ANY FRAME

- Place paper template supplied on door and close door.
- Slide template up or down until it aligns strike lip on template with strike lip opening on frame.
- Hold template in place and open door.
- Mark face plate top reference.
- Draw a horizontal mark approximately 4-11/16" above face plate mark. This is your mortiser locator mark and face plate template locator mark.
- Use a sharp pencil to mark door. If pencil marks are too light use a Sharpie fine point marker instead. Make short marks and erase them when finished.

Existing 2-1/4" Strike.

- Ascertain that you will be able to cover all previous prep on door and frame.
- Determine that you have solid material for strike screws and lock case screws.
  Use paper template supplied to accomplish this determination.
- Mark center line, C/L, of strike on frame.
- Place paper template on door, close door, and align mark on frame with C/L
  of strike on template.
- Open door and mark face plate top reference.
- Draw a horizontal mark approximately 4-11/16" above face plate mark. This is your mortise locator mark and face plate template mark.
- Use a sharp pencil to mark door. If pencil marks are too light use a Sharpie fine point marker instead. Make short marks and erase them when finished.

Aluminum Frame (Using Router)

1. Determine center line, C/L, of strike in relation to lock set by using paper template supplied.
2. Fasten strike template to frame using self-drilling screws. These should be in the exact location of the #10-24 tab screws.
3. Rout no deeper than the thickness of the aluminum.
4. Remove strike template.
5. Square corners using double cut bastard file.
6. Test fit strike.
7. Enlarge tab screw holes with 13/64" bit and remove burrs from inside of aluminum.
8. Counter sink tab screw holes so #10-24 screw head is flush.
9. Attach 784-B tabs with #10-24 screws supplied.
10. Attach strike with #12-24 combination screws supplied.
11. Re-tighten ALL screws to 25-in. lbs.
12. Be extremely careful when working on aluminum frames that contain electrical wires.
13. Strike MUST be flush with metal of frame. Shim with washers if needed.

Aluminum/Steel Frame (Using Die Grinder)

1. Determine center line, C/L, of strike in relation to lock set by using paper template supplied.
2. Outline strike with sharp pencil.
3. Use 3" cut off wheel for vertical cuts.
4. Use 1-1/2" cut off wheel for horizontal cuts.
5. Cut inside the lines drawn with pencil.
6. Test fit strike.
7. File to fit with double cut bastard file. **NOTE:** Maximum 1/32" gap around strike.
8. Mark holes for #10-24 tab screws.
9. Center punch marks for holes.
10. Drill tab screw holes with 13/64" bit and remove burrs from inside of frame.
11. Counter sink tab screw holes so #10-24 screw head is flush.
12. Attach 784-B tabs with #10-24 screws supplied.
13. Attach strike with #12-24 combination screws supplied.
14. Re-tighten ALL screws to 25-in. lbs.
15. Be extremely careful when working on frames that contain electrical wires.
16. Strike MUST be flush with metal of frame. Shim with washers if needed.
17. Do NOT cut or mark any other portion of frame with cut off wheels.

Grout Filled Metal Frame (MUST Use Die Grinder)

1. Determine center line, C/L, of strike in relation to lock set by using paper template supplied.
2. Outline strike with sharp pencil - when possible.
3. Use 3" cut off wheel for vertical cuts.
4. Use 1-1/2" cut off wheel for horizontal cuts.
5. Cut inside the lines drawn with pencil.
6. Remove concrete using masonry bit and hammer drill to a minimum depth of 1".
7. Test fit strike.
8. File to fit with double cut bastard file. **NOTE:** Maximum 1/32" gap around strike.
9. Mark holes for #10-24 tab screws.
10. Center punch marks for holes.
11. Drill tab screw holes with 13/64" bit and remove burrs from inside of frame.
12. Counter sink tab screw holes so #10-24 screw head is flush.
13. Attach 784-B tabs with #10-24 screws supplied.
14. Attach strike with #12-24 combination screws supplied.
15. Re-tighten ALL screws to 25-in. lbs.
16. Strike MUST be flush with metal of frame. Shim with washers if needed.
17. Do NOT cut or mark any other portion of frame with cut off wheels.

Wood Frames

1. Determine center line, C/L, of strike in relation to lock set by using paper template supplied.
2. Fasten strike template to frame.
3. Rout out 3/32" of material.
4. Remove template.
5. Square corners using corner chisel and hammer.
6. Place strike into router cut.
7. Mark latch, dead bolt, and screw holes with pencil.
8. Remove strike.
9. Use 1" self-feed wood bit to remove material to a depth of 1". **NOTE:** Be careful NOT to remove material too close to screw holes.
10. Use wood chisel and/or power file to "clean up" the 1" x 2-13/16" rectangular hole.
11. Vacuum debris from opening.
12. Place strike into router cut.
13. Use Vix bit to pre drill screw holes:

    #9 Vix bit in soft wood 9/64" drill bit
    #12 Vix bit in hard wood 11/64" drill bit
14. Make sure all material is removed from behind latch hole and dead bolt hole.
15. Install using #12 Phillips sheet metal screws with a minimum of 1/2“ of screw into stud behind frame. *Not supplied*.
16. Tighten to 25 in. lbs.

Wood Door Existing Cylindrical “H” Lockset (WDECH)

Oversize Strikes

NOTE: Determine center line, C/L, of special strike according to location of latch and dead bolt holes.

- Ascertain that you will be able to cover all previous prep on door and frame.
- Determine that you have solid material for strike screws and lock case screws. Use paper template supplied to accomplish this.
- Mark center line, C/L, of strike on frame.
- Place paper template on door, close door, align C/L of strike on paper template with mark on frame
- Mark face plate top reference.
- Draw a horizontal mark approximately 4-11/16" above face plate mark. This is your mortise locator mark and face plate template mark.
- Use a sharp pencil to mark the door. If pencil marks are too light use a Sharpie fine point marker instead. Make short marks and erase them when finished.

Aluminum frame (Using Router)

NOTE: A special template is required for each situation. Construct by using 1" x 6" piece of hard wood.

1. Determine center line of strike in relation to lock set by using paper template supplied.
2. Fasten strike template to frame using self drilling screws. These should be in the exact location as the #10-24 tab screws.
3. Rout no deeper than the thickness of the aluminum.
4. Remove strike template.
5. Square corners using double cut bastard file.
6. Test fit strike.
7. Enlarge tab screw holes with 13/64” bit and remove burrs from inside of aluminum.
8. Counter sink tab screw holes so #10-24 screw head is flush.
9. Attach 784-B tabs with #10-24 screws supplied.
10. Attach strike with #12-24 combination screws supplied.
11. Re-tighten ALL screws to 25 in. lbs..
12. Be extremely careful when working on aluminum frames that contain electrical wires.
13. Strike MUST be flush with metal of frame. Shim with washers if needed.

Aluminum/Steel Frame (Using Die Grinder)

1. Determine center line of strike in relation to lock set by using paper template supplied.
2. Outline strike with sharp pencil - when possible.
3. Use 3" cut off wheel for vertical cuts.
4. Use 1-1/2" cut off wheel for horizontal cuts.
5. Cut inside lines drawn with pencil.
6. Test fit strike.
7. File to fit with double cut bastard file. **NOTE:** Maximum 1/32" gap around strike.
8. Mark holes for #10-24 tab screws.
9. Center punch marks for holes.
10. Drill tab screw holes with 13/64" bit and remove burrs from inside of frame.
11. Counter sink tab screw holes so #10-24 screw head is flush.
12. Attach 784-B tabs with #10-24 screws supplied.
13. Attach strike with #12-24 combination screws supplied.
14. Re-tighten ALL screws to 25 in. lbs.
15. Be extremely careful when working on frames that contain electrical wires.
16. Strike MUST be flush with metal of frame. Shim with washers if needed.
17. Do NOT cut or mark any other portion of frame with cut off wheels.

Grout Filled Metal Frame (MUST Use Die Grinder)

1. Determine center line of strike in relation to lock set by using paper template supplied.
2. Outline strike with sharp pencil - when possible.
3. Use 3" cut off wheel for vertical cuts.
4. Use 1-1/2" cut off wheel for horizontal cuts.
5. Cut inside the lines drawn with pencil.
6. Remove grout using 1" masonry bit and hammer drill to a minimum depth of 1".
7. Test fit strike.
8. File to fit with double cut bastard file. **NOTE:** Maximum 1/32" gap around strike.
9. Mark holes for #10-24 tab screws.
10. Center punch marks for holes.
11. Drill tab screw holes with 13/64" bit and remove burrs from inside of frame.
12. Counter sink tab screw holes so #10-24 screw head is flush.
13. Attach 784-B tabs with #10-24 screws supplied.
14. Attach strike with #12-24 combination screws supplied.
15. Re-tighten ALL screws to 25 in. lbs.
16. Strike MUST be flush with metal of frame. Shim with washers if needed.
17. Do NOT cut or mark any other portion of frame with cut off wheels.

Wood frames

NOTE: A special template is required for each situation. Construct by using 1" x 6" piece of hard wood.

1. Determine center line of strike in relation to lock set by using paper template supplied.
2. Fasten strike template to frame.
3. Rout out 3/32" of material.
4. Remove template.
5. Square corners using corner chisel and hammer.
6. Place strike into router cut.
7. Mark latch, dead bolt, and screw holes with pencil.
8. Remove strike.
9. Use 1" self-feed wood bit to remove material to a depth of 1".

   NOTE: Be careful NOT to Remove material too close to screw holes.
10. Use wood chisel and/or power file to "clean up" the 1" x 2-13/16" rectangular hole.
11. Vacuum debris from opening.
12. Place strike into router cut.
13. Use Vix bit to pre-drill screw holes:

    # 9 Vix bit in soft wood 9/64"
    # 12 Vix bit in hard wood 11/64"
14. Make sure all material is removed from behind latch hole and dead bolt hole.
15. Install using #12 Phillips sheet metal screws with a minimum of 1/2 " of screw into stud behind frame. *Not supplied.*
16. Tighten to 25 in. lbs.

Wood Door - Prep

1. Position mortiser with Accubore and vacuum attachment or Accujig on door.
2. For proper position of mortiser see " Strike "or Accujig sections.
3. Watch clearance between 1" mortise bit and brushes on vacuum attachment.
4. Place magnetic sign material over holes on Accubore for both sides.
5. Plug in extension cord from your cart into guest room outlet.
6. Plug in mortiser and attach vacuum hose.
7. Power on shop vac on bottom of cart.
8. Power on and mortise door.
9. Mortise pocket should be 6-1/2" long and 4-3/8" deep.
10. Power off mortiser and vacuum.
11. Unplug mortiser and remove vacuum hose.
12. Remove magnetic sign material.
13. Drill two (2) 1/2" holes on top. **NOTE:** Do NOT drill all the way through.
14. Drill one side, then the other.
15. Drill the 1-1/2" hole (2-1/8" hole if using new Accubore). **NOTE:** Do NOT drill all the way through.
16. Drill one side, then the other.
17. Drill the 2-1/ 8" hole. **NOTE:** Do NOT drill all the through.
18. Drill one side, then the other.
19. Vacuum debris off mortiser and Accubore.
20. Position magnetic sign material over holes of Accubore.
21. Remove mortiser and position on next door.
22. Position lock face template on door using the same mark.
23. Rout to a depth of 15/64".
24. Remove template.
25. Square the four (4) corners with corner chisel.
26. Power file notch in mortise pocket for anti-friction latch 5/8" wide x 1" long x 1/8" deep.
    NOTE: Only required when installing lock cases manufactured before 1996 and all Corbin.
27. Vacuum mortise pocket and remove all debris.
28. Wipe off door.
29. Roll up drop cloth.

Wood Door Existing Mortise Lockset (WDEM)

4-7/8" Strike - 1-1/4" x 8" Standard Front

1. Position mortiser with Accubore and vacuum attachment or Accujig on door.
2. For proper position of mortiser, measure up 4-11/32" from top of face plate.
3. Plug in extension cord from your cart into guest room outlet.
4. Existing mortise pocket must be 6-1/2" long and 4-3/8" deep.
5. Drill two (2) 1/2" holes on top. **NOTE:** Do NOT drill all the way through.
6. Drill one side, then the other.
7. Drill the 1-1/2" hole (2-1/8" hole if using new Accubore). **NOTE:** Do NOT drill all the way through.
8. Drill one side, then the other.
9. Drill the 2-1/ 8” hole. **NOTE:** Do NOT drill all the through.
10. Drill one side, then the other.
11. Vacuum debris off mortiser and Accubore.
12. Remove mortiser and position on next door.
13. Face plate pocket must be a depth of 15/64".
14. Power file notch in mortise pocket for anti-friction latch 5/8" wide x 1" long x 1/8" deep.
    NOTE: Only required when installing lock cases manufactured before 1996 and all Corbin.
15. Vacuum mortise pocket and remove all debris.
16. Wipe off door.
17. Roll up drop cloth.

4-7/8" Strike - 1" x 7-3/4" Narrow Front

1. Position mortiser with Accubore and vacuum attachment or Accujig on door.
2. For proper position of mortiser, measure up 4-7/32" from top of face plate.
3. Plug in extension cord from your cart into guest room outlet.
4. Existing mortise pocket must be 6-1/2" long and 4-3/8" deep.
5. Drill two (2) 1/2" holes on the top. **NOTE:** Do NOT drill all the way through.
6. Drill one side, then the other.
7. Drill the 1-1/2" hole (2-1/8" hole if using new Accubore). **NOTE:** Do NOT drill all the way through.
8. Drill one side, then the other.
9. Drill the 2-1/8 hole. **NOTE:** Do NOT drill all the way through.
10. Drill one side then the other.
11. Vacuum debris off mortiser and Accubore.
12. Remove mortiser and position on next door.
13. Face plate pocket MUST be a depth of 15/64".P
14. Power file notch in mortise pocket for anti-friction latch 5/8" wide x 1" long x 1/8" deep. **NOTE:** Only required when installing lock cases manufactured before 1996 and all Corbin.
15. Vacuum mortise pocket and remove all debris.
16. Wipe off door.
17. Roll up drop cloth.

Wood Door – Installation

1. Unpack Onity lock on cart.
2. Attach longer outside handle with longer T-10 screw provided.
3. Initialize lock to proper room number.
4. Test lock with master key card, green light.
5. Adjust bevel of lock case to match bevel of door.
6. Hand tighten upper and lower bevel screws. *These must be very tight*.
7. Lock cases manufactured before 1996 and all Corbin lock cases require mortise pocket be filed for anti-friction latch clearance.
8. Set lock case in mortise pocket with dead bolt on top.
9. Hold lock case up in mortise pocket.
10. Use a Vix Bit to pre drill screw holes:
    #9 Vix Bit in soft wood 9/64" drill bit
    #12 Vix Bit in hard wood 11/64" drill bit
11. Falcon lock cases use #12 x 1-1/4” Phillips sheet metal screws. *Not supplied*.
12. Corbin lock cases use #10 x 1-1/4” Phillips sheet metal screws. *Not supplied.*
13. Tighten to 25 in. lbs. Use longer screws if necessary.
14. Install strike of proper handing R.H. or L.H.. Dead bolt hole on top.
15. In wood frames use #12 Phillips sheet metal screws with a minimum of 1/2” of screw into stud behind frame. *Not supplied.*
16. In metal frames use #12-24 combination screws provided.
17. Tighten strike screws to 25 in. lbs.
18. Minimum of 1" clearance required for latch and dead bolt in frame.
19. Make sure privacy wire is plugged in securely and rubber grommet is in place.
20. Install outside escutcheon feeding privacy wire through cylinder hole.
21. Outside escutcheon should have 1/8" of sideways play.
22. File door with a round rasp if no sideways play is present.
23. Hold backing plate by inside handle mount and feed privacy wire through hole above micro switch.
24. Do not pull to hard on privacy wire.
25. Install backing plate on door.
26. Make sure no tension is present on return spring of dead bolt cam.
27. Coil excess privacy wire around shaft of T-10 driver.
28. Plug in privacy wire to micro switch connector.
29. Loosen T-10 micro switch screw.
30. Push micro switch to the right.
31. Tighten T-10 micro switch screw. *Must be fairly tight.*
32. Extend dead bolt.
33. Test lock using key card without dead bolt override.
34. Alternating green and red lights.
35. Solid green indicates wire improperly plugged in.
36. Start four (4) escutcheon screws. Do not cross thread.
37. Measure from edge of door to outside escutcheon at top and bottom. Measurement must be the same.

38. Measure from edge of door to backing plate at top and bottom. Measurement must be the same.
39. Tighten escutcheon screws to 11 in. lbs..
40. Install lower backing plate screws and tighten to 11 in. lbs.
41. Falcon lock cases check dead latch installation.
42. Install face plate with two (2) screws and tighten to 11 in. lbs.
43. Face plate must be flush with edge of door.
45. Hold coiled privacy wire up away from dead bolt cam.
46. Snap on inside escutcheon.
47. Install thumb turn and extend dead bolt.
48. Install inside handle.
49. Install shorter two (2) T-10 screws in handle and thumb turn from edge of door.

50. Test all operations of lock:
    - Outside handle retracts dead bolt easily.
    - Inside handle retracts dead bolt easily.
    - Latch extends fully when handle is slowly released both down and up.
    - Latch retracts fully when handle is turned down and up.
    - Lock opens with key card down and up.
51. Close door and test lock:
    - Inside handle retracts latch and dead bolt easily.
    - Lock opens with key card down and up.
    - Latch extends fully into strike.
    - Dead bolt extends fully and cleanly into strike.
    - Dead latch not in latch hole.
    - Minimum clearance of 1/16" above and below both latch and dead bolt.
    - File strike if necessary using a power file.
    - Square corners with a hand file.
52. Wipe off lock, door, strike, and frame.
53. Vacuum floor of room and hallway.
54. Put “ Do Not Disturb “ sign on inside handle.
55. Turn off lights.
55. Secure door.

Metal Door Existing Cylindrical Lockset (MDEC)

Existing 4-7/8" ASA Strike - ANY FRAME

- Place paper template supplied on door and close door or use Accujig.
- Slide template up or down until it aligns strike lip on template with strike lip opening on frame.
- Hold template in place and open door.
- Mark face plate top reference.
- Draw a horizontal mark approximately 4-11/16" above face plate mark. This is your mortiser locator mark and face plate template locator mark.
- Use a sharp pencil to mark door. If pencil marks are too light use a Sharpie fine point marker instead. Make short marks and erase them when finished.

Existing 2-1/4" Strike.

- Ascertain that you will be able to cover all previous prep on door and frame.
- Determine that you have solid material for strike screws and lock case screws. Use paper template supplied to accomplish this determination.
- Mark center line, C/L, of strike on frame.

Place paper template on door, close door, align mark on frame with C/L of strike on template. Open door and mark face plate top reference. Draw a horizontal mark approximately 4-11/16" above faceplate mark. This is your mortise locator mark and face plate template mark.

- Use a sharp pencil to mark door. If pencil marks are too light use a Sharpie fine point marker instead. Make short marks and erase them when finished.

Aluminum Frame (Using Router)

1. Determine center line, C/L, of strike in relation to lock set by using paper template supplied.
2. Fasten strike template to frame using self-drilling screws. These should be in the exact location of the #10-24 tab screws.
3. Rout no deeper than the thickness of the aluminum.
4. Remove strike template.
5. Square corners using double cut bastard file.
6. Test fit strike.
7. Enlarge tab screw holes with 13/64" bit and remove burrs from inside of aluminum.
8. Counter sink tab screw holes so #10-24 screw head is flush.
9. Attach 784-B tabs with #10-24 screws supplied.
10. Attach strike with #12-24 combination screws supplied.
11. Re-tighten ALL screws to 25 in. lbs.
12. Be extremely careful when working on aluminum frame that contain electrical wires.
13. Strike MUST be flush with metal of frame. Shim with washers if needed.

Aluminum/Steel Frame (Using Die Grinder)

1. Determine centerline, C/L, of strike in relation to lock set by using paper template supplied.
2. Outline strike with sharp pencil.
3. Use 3" cut off wheel for vertical cuts.
4. Use 1-1/2" cut off wheel for horizontal cuts.
5. Cut inside the lines drawn with pencil.
6. Test fit strike.
7. File to fit with double cut bastard file. **NOTE:** Maximum 1/32" gap around strike.
8. Mark holes for #10-24 tab screws.
9. Center punch marks for holes.
10. Drill tab screw holes with 13/64" bit and remove burrs from inside of frame.
11. Counter sink tab screw holes so #10-24 screw head is flush.
12. Attach 784-B tabs with #10-24 screws supplied.
13. Attach strike with #12-24 combination screws supplied.
14. Re-tighten ALL screws to 25 in. lbs.
15. Be extremely careful when working on frames that contain electrical wires.
16. Strike MUST be flush with metal of frame. Shim with washers if needed.
17. Do NOT cut or mark any other portion of frame with cut off wheels.

Grout-Filled Metal Frame (MUST Use Die Grinder).

1. Determine centerline, C/L, of strike in relation to lock set by using paper template supplied.
2. Outline strike with sharp pencil - when possible.
3. Use 3" cut off wheel for vertical cuts.
4. Use 1-1/2" cut off wheel for horizontal cuts.
5. Cut inside the lines drawn with pencil.
6. Remove concrete using masonry bit and hammer drill to a minimum depth of 1".
7. Test fit strike.
8. File to fit with double cut bastard file. **NOTE:** Maximum 1/32" gap around strike.
9. Mark holes for #10-24 tab screws.
10. Center punch marks for holes.
11. Drill tab screw holes with 13/64" bit and remove burrs from inside of frame.
12. Counter sink tab screw holes so #10-24 screw head is flush.
13. Attach 784-B tabs with #10-24 screws supplied.
14. Attach strike with #12-24 combination screws supplied.
15. Re-tighten ALL screws to 25 in. lbs.
16. Strike MUST be flush with metal of frame. Shim with washers if needed.
17. Do NOT cut or mark any other portion of frame with cut off wheels.

Wood Frames

1. Determine center line, C/L, of strike in relation to lock set by using paper template supplied.
2. Fasten strike template to frame.
3. Rout out 3/32" of material.
4. Remove template.
5. Square corners using corner chisel and hammer.
6. Place strike into router cut.
7. Mark latch, dead bolt, and screw holes with pencil.
8. Remove strike.
9. Use 1" self-feed wood bit to remove material to a depth of 1". **NOTE:** Be careful NOT to remove material too close to screw holes.
10. Use wood chisel and/or power file to "clean up" the 1" x 2-13/16" rectangular hole.
11. Vacuum debris from opening.
12. Place strike into router cut.
13. Use Vix bit to pre drill screw holes:
    #9 Vix bit in soft wood 9/64" drill bit
    #12 Vix bit in hard wood 11/64" drill bit
14. Be sure all material is removed from behind latch hole and dead bolt hole.
15. Install using #12 Phillips sheet metal screws with a minimum of 1/2“ of screw into stud behind frame. *Not supplied*.
16. Tighten to 25 in. lbs.

Metal Door Existing Cylindrical “H” Lockset (MDECH)

Oversize Strikes

NOTE: Determine centerline, C/L, of special strike according to latch and dead bolt holes of strike.

- Ascertain that you will be able to cover all previous prep on door and frame.
- Determine that you have solid material for strike screws and lock case screws.
- Use paper template supplied to accomplish this determination.
- Mark center line, C/L, of strike on frame.
- Place paper template on door, close door, align C/L of strike on paper template with mark on frame
- Mark face plate top reference.
- Draw a horizontal mark approximately 4-11/16" above face plate mark. This is your mortise locator mark and face plate template mark.
- Use a sharp pencil to mark the door. If pencil marks are too light use a Sharpie fine point marker instead.
- Make short marks and erase them when finished.

Aluminum Frame (Using Router)

NOTE: A special template is required for each situation. Construct by using 1" x 6" piece of hard wood.

1. Determine center line of strike in relation to lock set by using paper template supplied.
2. Fasten strike template to frame using self drilling screws. These should be in the exact location as the #10-24 tab screws.
3. Rout no deeper than the thickness of the aluminum.
4. Remove strike template.
5. Square corners using double cut bastard file.
6. Test fit strike.
7. Enlarge tab screw holes with 13/64” bit and remove burrs from inside of aluminum.
8. Counter sink tab screw holes so #10-24 screw head is flush.
9. Attach 784-B tabs with #10-24 screws supplied.
10. Attach strike with #12-24 combination screws supplied.
11. Re-tighten ALL screws to 25 in. lbs..
12. Be extremely careful when working on aluminum frame that contain electrical wires.
13. Strike MUST be flush with metal of frame. Shim with washers if needed.

Aluminum/Steel Frame (Using Die Grinder)

1. Determine centerline of strike in relation to lock set by using paper template supplied.
2. Outline strike with sharp pencil when possible.
3. Use 3" cut off wheel for vertical cuts.
4. Use 1-1/2" cut off wheel for horizontal cuts.
5. Cut inside the lines drawn with pencil.
6. Test fit strike.
7. File to fit with double cut bastard file. **NOTE:** Maximum 1/32" gap around strike.
8. Mark holes for #10-24 tab screws.
9. Center punch marks for holes.
10. Drill tab screw holes with 13/64" bit and remove burrs from inside of frame.
11. Counter sink tab screw holes so #10-24 screw head is flush.
12. Attach 784-B tabs with #10-24 screws supplied.
13. Attach strike with #12-24 combination screws supplied.
14. Re-tighten ALL screws to 25 in. lbs..
15. Be extremely careful when working on frames that contain electrical wires.
16. Strike MUST be flush with metal of frame. Shim with washers if needed.
17. Do NOT cut or mark any other portion of frame with cut off wheels.

Grout Filled Metal Frame (MUST Use Die Grinder)

1. Determine centerline of strike in relation to lock set by using paper template supplied.
2. Outline strike with sharp pencil when possible.
3. Use 3" cut off wheel for vertical cuts.
4. Use 1-1/2" cut off wheel for horizontal cuts.
5. Cut inside the lines drawn with pencil.
6. Remove concrete using masonry bit and hammer drill to a minimum depth of 1".
7. Test fit strike.
8. File to fit with double cut bastard file. **NOTE:** Maximum 1/32" gap around strike.
9. Mark holes for #10-24 tab screws.
10. Center punch marks for holes.
11. Drill tab screw holes with 13/64" bit and remove burrs from inside of frame.
12. Counter sink tab screw holes so #10-24 screw head is flush.
13. Attach 784-B tabs with #10-24 screws supplied.
14. Attach strike with #12-24 combination screws supplied.
15. Re-tighten ALL screws to 25 in. lbs..
16. Strike MUST be flush with metal of frame. Shim with washers if needed.
17. Do NOT cut or mark any other portion of frame with cut off wheels.

Wood frames

NOTE: A special template is required for each situation. Construct by using 1” x 6” piece of hard wood.

1. Determine center line of strike in relation to lock set by using paper template supplied.
2. Fasten strike template to frame.
3. Rout out 3/32” of material.
4. Remove template.
5. Square corners using corner chisel and hammer.
6. Place strike into router cut.
7. Mark latch, dead bolt, and screw holes with pencil.
8. Remove strike.
9. Use 1” self-feed wood bit to remove material to a depth of 1”. **NOTE:** Be careful NOT to remove material too close to screw holes.
10. Use wood chisel and/or power file to “clean up” the 1” x 2-13/16” rectangular hole.
11. Vacuum debris from opening.
12. Place strike into router cut.
13. Use Vix bit to pre-drill screw holes:
    # 9 Vix bit in soft wood 9/64”
    # 12 Vix bit in hard wood 11/64”
14. Be sure all wood material is removed from behind latch hole and dead bolt hole.
15. Install using #12 Phillips sheet metal screws with a minimum of 1/2“ of screw into stud behind frame. *Not supplied.*
16. Tighten to 25 in. lbs..

Metal Door - Prep

1. Remove existing cage.
2. Trace the face plate using the face plate top reference mark.
3. Thin metal doors use a router and lock face template. Square corners with a flat file.
4. Thicker metal doors use a jig saw or die grinder.
5. Use hand file to final fit face plate and to remove burrs.
6. **NOTE:** Maximum 1/32” gap around face plate.
7. Position mortiser with Accubore or **Accujig** on door.
8. Drill two (2) 1/2” holes on top. **NOTE:** Do NOT drill all the way through.
9. Drill one side, then the other.
10. Drill the 1-1/2” hole (2-1/8” hole when using new Accubore). **NOTE:** Do NOT drill all the way through.
11. Drill one side, then the other.
12. Drill the 2-1/ 8” hole. **NOTE:** Do NOT drill all the through.
13. Drill one side, then the other.
14. Remove the mortiser and position on next door.
15. Remove debris from mortise pocket.
16. Determine which tabs to use:
    #3437 - thin metal
    #3436 - thick metal
17. Attach tabs to lock case using #12-24 combination screws supplied.
18. Position lock case on outside of door and mark the eight (8) rivet holes.
19. Center punch and drill eight (8) holes with 9/64” bit and remove burrs from inside door.
20. Rivet lock case and tabs inside opening with long steel rivets supplied.
21. All 1-3/8” wide hollow metal doors require lock case stabilizers.
22. NEVER use #784 tabs and screws in doors.
23. Roll up drop cloth.

4-7/8" Strike - 1-1/4" x 8" Standard Front

1. Position mortiser with Accubore and vacuum attachment or **Accujig** on door.
2. For proper position of mortiser, measure UP 4-11/32" from top of face plate.
3. Plug in extension cord from your cart into the guest room outlet.
4. Existing mortise pocket MUST be 6-1/2" long and 4-3/8" deep. **NOTE:** Remove cage if needed.
5. Drill two (2) 1/2" holes on the top. **NOTE:** Do NOT drill all the way through.
6. Drill one side, then the other.
7. Drill the 1-1/2" hole (2-1/8" hole if using new Accubore). **NOTE:** Do NOT drill all the way through.
8. Drill one side then the other.
9. Drill the 2-1/ 8” hole. **NOTE:** Do NOT drill all the through.
10. Drill one side, then the other.
11. Vacuum debris off mortiser and Accubore.
12. Remove mortiser and position on next door.
13. For Falcon lock cases drill existing tabs with 11/64” drill bit and tap to #12-24.
14. Remove all debris from inside of door.
15. Wipe off door.
16. Roll up drop cloth.

4 7/8" Strike - 1" x 7-3/4" Narrow Front

1. Position mortiser with Accubore and vacuum attachment or Accujig on door.
2. For proper position of mortiser, measure up 4-7/32" from top of face plate.
3. Plug in extension cord from your cart into the guest room outlet.
4. Existing mortise pocket MUST be 6-1/2" long and 4-3/8" deep. **NOTE:** Remove cage if needed.
5. Drill two (2) 1/2" holes on the top. **NOTE:** Do NOT drill all the way through.
6. Drill one side, then the other.
7. Drill the 1-1/2" hole (2-1/8" hole if using new Accubore). **NOTE:** Do NOT drill all the way through.
8. Drill one side then the other.
9. Drill the 2-1/ 8” hole. **NOTE:** Do NOT drill all the through.
10. Drill one side, then the other.
11. Vacuum debris off mortiser and Accubore.
12. Remove mortiser and position on next door.
13. For Falcon lock cases drill existing tabs with 11/64” drill bit and tap to #12-24. **NOTE:** Remove tab connector on exterior side of door. Only required when installing lock cases manufactured before 1996 and all Corbin.
14. Remove all debris from inside of door.
15. Wipe off door.
16. Roll up drop cloth.

Metal Door - Installation

1. Unpack Onity lock on cart.
2. Install longer outside handle with long T-10 screw to outside escutcheon.
3. Initialize lock to proper room number.
4. Test with Master key card, green light.
5. Adjust bevel of lock case to match bevel of door.
6. Hand tighten upper and lower screws, these must be very tight.
7. Set lock case in mortise pocket, dead bolt on top. NOTE: Lock case stabilizer required for 1-3/8” wide doors only.
8. Install with #12-24 combination screws supplied.
9. Tighten to 25 in. lbs..
10. Install strike of proper handing R.H. or L.H.
11. In wood frames use #12 Phillips sheet metal screws with a minimum of 1/2” of screw into stud behind frame. *Not supplied*.
12. In metal frames use #12-24 combination screws supplied.
13. Minimum of 1" clearance behind strike is required for latch and dead bolt in frame.
14. Make sure privacy wire is plugged in securely and rubber grommet is in place.
15. Install outside escutcheon feeding privacy wire through cylinder hole.
16. Outside escutcheon should have 1/8" of sideways play.
17. File door with a round rasp if no sideways play is present.
18. Hold backing plate by inside handle mount and feed privacy wire through the hole above micro switch.
19. Do not pull to hard on wire.
20. Make sure no tension is present on return spring of dead bolt cam.
21. Coil excess privacy wire around shaft of T-10 driver.
22. Plug in privacy wire to micro switch connector.
23. Loosen T-10 micro switch screw.
24. Push micro switch to the right.
25. Tighten T-10 micro switch screw. *Must be fairly tight.*
26. Extend dead bolt.
27. Test lock using key card without dead bolt override.
28. Alternating green and red lights.
29. Solid green light means wire is not plugged in properly.
30. Retract dead bolt.
31. Start four (4) escutcheon screws. Do not cross thread
32. Measure from edge of door to outside escutcheon at top and bottom.
33. Measurement must be the same.
34. Measure from edge of door to backing plate at top and bottom. Measurement must be the same.
35. Tighten four (4) escutcheon screws to 11in. lbs..
36. Install lower backing plate screws and tighten to 11 in. lbs.. Selfdrilling sheet metal screws may be used. *Not supplied*.
37. Falcon lock case check dead latch installation.
38. Install face plate with two (2) screws and tighten to 11 in. lbs..
39. Face plate must be flush with edge of door.
40. Hold coiled privacy wire up away from dead bolt cam.

41. Snap on inside escutcheon.
42. Install thumb turn and extend dead bolt.
43. Install inside handle.
44. Install short two (2) T-10 screws in handle and thumb turn from edge of door.
45. Test all operations of lock:
    - Inside handle retracts dead bolt easily .
    - Latch extends fully when handle is slowly released down and up.
    - Latch retracts fully when handle is turned down and up.
    - Lock opens with key card down and up.
46. Close door and test lock:
    - Inside handle retracts latch and dead bolt easily.
    - Latch extends fully into strike.
    - Dead bolt extends fully and cleanly into strike.
    - Dead latch is not in latch hole.
    - Minimum clearance of at least 1/16" above and below both latch and dead bolt.
    - File strike if necessary using a power file.
    - Square corners with a hand file.
47. Wipe off lock, door, strike, and frame.
48. Vacuum floor of room and hallway.
49. Put "Do Not Disturb" sign on inside handle.
50. Turn off lights.
51. Secure door.

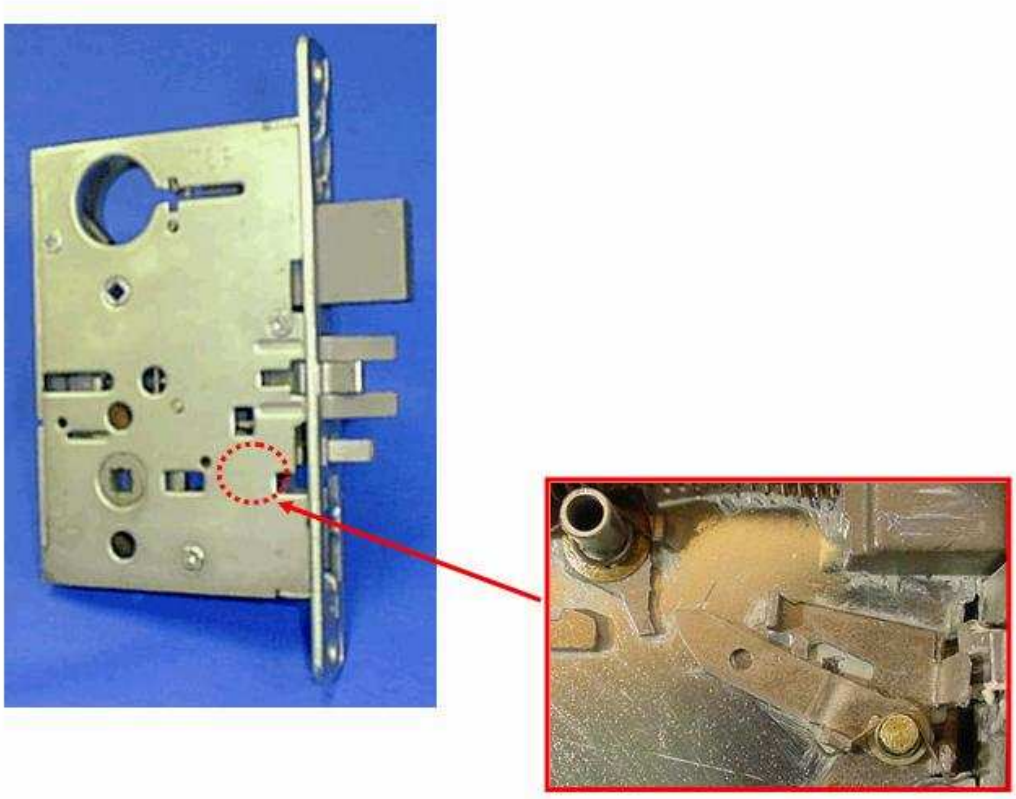
Auto Dead Bolt One Time Trigger Version 3 Lock Case

The OTT ADB is suppose to solve the inadvertent DB activation problem by allowing the DB to only extend once as long as the trigger or anti pick remains depressed. The OTT ADB can be identified by looking inside the LC just under the anti pick. The OTT ADB has an extra part with a post and spring that is clearly visible through the opening.

The OTT ADB is extremely sensitive to the gap between the door and frame. No more then 1/4" or no less then 1/8" is needed. To achieve these tolerance's we are going to have to shim the strike, where needed, with 1/4" flat washers. Where even this will not achieve the proper gap the installer must notify the property to shim out the hinges to achieve proper gap and note door numbers on the sign off sheet.

The OTT ADB is also very sensitive to strike pressure. When extended the DB must not touch any portion of the strike. File DB hole in strike and square corners with hand file where needed. The OTT ADB is approved for inverted installation.

The testing procedure for the OTT ADB is also different.



One Time Trigger (OTT) Automatic Deadbolt lock. Inset shows the one time trigger mechanism.

Purpose

Provides for the automatic projection of a 1" deadbolt any time the door is closed. When a guest enters the room and closes the door behind him the deadbolt projects. For privacy, the guest operates the t-turn. When a guest exits the room the deadbolt projects when the door is closed thus offering greater protection against forced entry. Since the t-turn is not rotated, there is no privacy indication and the staff can enter.

The One Time Trigger (OTT) function is designed to eliminate the false projections that sometime occur with regular Autobolt locks. False projections occur when the handle is released just after the door starts to move but before the trigger has cleared the strike plate.

Application

Hotel guestroom doors and back of house doors where the security of a 1" deadbolt is desired. For use with locks with lever handles only, not for use with knob locks. Approved for Ving retrofits, for HT series locks and doors ranging from 1 3/8" to 1 3/4". Door and frame must be in good condition.
For proper OTT operation door gap must not be less than 1/8" or greater than 1/4".

Door Gap Chart

Zero to 1/8"	The lock case will work like a standard mortise lock. The deadbolt will not automatically project but can be projected via the t-turn.
1/8" to 1/4"	Will operate as a OTT Autobolt. The bolt will project upon door closure.
1/4" and above	The lock case will work like a standard mortise lock. The deadbolt will not automatically project but can be projected via the t-turn. In this instance the strike plate can be shimmed to close the door gap, or the hinges can be shimmed. In extreme cases we provide a strike plate with a bump projection in the area of the trigger.

Testing

Close the door and observe the deadbolt. If the deadbolt projects, operate the lever handle to withdraw the bolt . **DO NOT MOVE THE DOOR.**

Let go of the handle and observe the bolt. It should stay retained inside the mortise lock even though the trigger is depressed. Open the door and close it again. The bolt should project.

If the bolt does not trigger and the door gap is less than 1/8" attempt to recess the strike plate for more clearance.

If the bolt does not trigger and the gap is more than 1/4", shim the strike plate or install our special "bump" strike.

Device Specifications:
Operates with the existing Onity HT/CT series electronic lock with no modifications required to the Onity product.

Requires the heavy-duty steel clutch for the HT/CT series locks. (To be a standard after October 1999.)

Requires that the handle stop screws be removed in the HT/CT series locks. (standard for cylindrical.)

Requires the Onity strike (no substitutes). This strike has a larger than normal deadbolt hole.

Installs using the existing Onity installation template. Retrofits existing installations with no door modifications required. Onity lock must be modified as per 2, 3 & 4 above.

Requires the "operation sticker" to be applied to the inside escutcheon. (DOOR DEADBOLTS AUTOMATICALLY Turn lever for privacy). Part number YZ300120.

Case size is consistent with standard ANSI mortise locks.

UL & ULC listed and approved for installation on fire doors up to 3 hour rated. Includes an internal fusible link.

Hand is field reversible.

Deadbolt extends under spring pressure when the door is closed and the deadlatch is moved far enough to release the trigger mechanism.

The trigger mechanism will fire the deadbolt one time only. The door must be completely opened to reset the mechanism to enable the deadbolt to fire again.

Deadlatch mechanism also performs as a latch deadlatch thus providing some security if the deadbolt fails to engage the strike plate.
From inside the guest must operate the thumbturn to indicate a desire for privacy. The thumbturn mechanism has a detent to provide tactile feedback to the guest.

From inside the thumbturn will project the deadbolt if it fails to project due to spring failure or improper door gap.
May be installed inverted for Ving replacements.

Warning:
If strike plates require field adjustment, care must be taken to preserve the offset at the working edge between the dimension of the deadbolt opening and the latch opening. The deadbolt opening must always be larger than the latch opening. When closed, latched, and the deadbolt extended, the deadbolt shall not contact the strike plate on any surface. File strike where needed.

Ordering Information

GA100241	LOCKCASE, HT, AUTO DEADBOLT OTT, LH 1 1/4"

GA100261	LOCKCASE, HT, AUTO DEADBOLT OTT, RH 1 1/4"
GA100281	LOCKCASE, HT, AUTO DEADBOLT OTT, LH 1 "
GA100301	LOCKCASE, HT, AUTO DEADBOLT OTT, RH 1 "

Revised: 06/04/2003

HT24-C Cylindrical Wood Metal 1 3/8” or 1 3/4” Backset

Installation

1. Remove old lock set.
2. Align paper template supplied with existing 2-1/8’ hole or use Accujig.
3. Mark top two (2) escutcheon holes on both sides of door.
4. Center punch for holes.
5. Drill holes using a 3/8” drill bit. **NOTE:** Do NOT drill all the way through.
6. Drill one side, then the other.
7. Wipe off door.
8. Unpack Onity lock on cart.
9. Attach longer outside handle with longer T-10 screw provided.
10. Put old lock in box and write room number on box.
11. Initialize lock to proper room number.
12. Test lock with master key card. **NOTE:** Watch for green light.
13. Install latch and strike. MAKE SURE LATCH IS INSTALLED CORRECTLY.
14. Tighten to 11 in. lbs.. Use longer screws if necessary.
15. Install outside escutcheon.
16. Outside escutcheon should have 1/8” of sideways play.
17. File door with round rasp if no sideways play is present.
18. Install backing plate.
19. Start four (4) escutcheon screws. Do not cross thread.
20. Measure from edge of door to outside escutcheon at top and bottom. Measurements must be the same.
21. Measure from edge of door to backing plate at top and bottom. Measurement must be the same.
22. Tighten escutcheon screws to 11 in lbs..
23. Install lower backing plate screws and tighten to 11 in. lbs..
24. Snap on inside escutcheon.
25. Install inside handle with short T-10 screw.
26. Test all functions of lock.
27. Make sure inside handle returns to the neutral position when slowly released.

HT-24 Latch Only Mortise

- Remove privacy wire and cover hole with electrical tape.
- When using standard backing plate remove micro switch, DB spindle, return spring, and thumb turn mount.
- Plug hole in standard inside escutcheon with 3/8” plastic electrical box plug.

HT Panic Interface – Wood or Metal

- The backset will be different for all doors depending on the strike and frame.
- The height will be determined by existing hardware.
- Make sure panic bar is wide enough for door.
- Try to cover all existing holes and fabricate cover plates if needed.
- All locks must have weather gasket.
- All locks must have lithium batteries due to heavy lock use.
- Make sure handing of panic device is correct.

1. Remove all old hardware.
2. Unpack Onity lock on cart.
3. Install outside handle using T-10 screw supplied.
4. Remove Privacy Wire if needed and cover hole with electrical tape.
   Note: Make sure all holes in back of outside escutcheon are covered.
5. Remove all paper from weather gasket and install sticky side down.
6. Determine vertical C/L using paper template supplied.
7. Determine backset C/L using strike and type of frame.
   Note: Make sure the panic device will clear the strike by a min. 1/16”.
8. Mark door for holes to be drilled using paper template supplied.
9. Cut push bar to correct length if needed.
10. Mark hole for hinge side of door using device and torpedo level.
    Note: Make sure the panic bar is level.
11. Center punch all holes to be drilled.
    Note: The four- 4, 1/4” holes are drilled on the inside side only.
12. Drill the four-4, 1/2” holes. Do not drill all the way through.
13. Drill one side then the other.
14. Drill the 1” hole. Do not drill all the way through.
15. Drill one side then the other.
16. Drill the four-4, 1/4“ holes. **Inside of door only.** Do not drill all the way through.
17. Drill the 9/32 “ hole on hinge side of door.
18. Drill outside hole with 3/8 “ bit. Do not drill all the way through.
19. Install outside escutcheon and backing plate using four-4 machine screws supplied.
    Note: Make sure counter sunk holes of backing plate face away from door.
    Start all four-4 screws but do not tighten.
20. Make sure the spindle is in center of 1” hole.
21. Make sure four-4 outer 1/4 “ screws have clearance through inside of door.
22. Make sure at least 1/8“ of sideways play is present.
23. File holes with round rasp if no sideways play is present.
24. Measure from edge of door to top and bottom of escutcheon. Measurement must be the same.
25. Measure from edge of door to top and bottom of inside backing plate. Measurement must be the same.
26. Tighten escutcheon screws to 11 in lb. in a **X** pattern.
27. Make sure handing of panic device is correct.

28. Install panic device making sure spindle is in correct position.
29. Support panic bar while starting four-4 device screws.
30. Install sex bolt in end of panic bar.
31. Using torpedo level, make sure panic bar is level.
32. Tighten sex bolt to 25 in lb.
33. Tighten four-4 device screws to 25 in lb.
34. Install end cap in bar using screws supplied.
35. Install device cover using screws supplied.
36. Close door and position strike.
37. Mark and drill mounting holes for strike.
38. Tap mounting holes.
39. Install strike.
40. Test Lock
    - Handle retracts latch fully when pushed down.
    - Handle retracts latch fully when pulled up.
    - Latch extends fully.
    - Latch retracts fully when bar is pushed.
    - Latch extends fully when bar is released.
41. Open door and allow to close.
    - Door latches completely.
    - A little play is present when door is latched.
      Note: Adjust strike to achieve correct amount of play.

HT Panic Interface Instruction Sheet

18 SERIES RIM PANIC & FIRE EXIT DEVICES WITH ONITY TRIM (INTEGRA OR HT SERIES)

MONARCH.

(F-)18-R x ONITY
SP890051-3
Date: 9-12-02

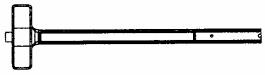
INSTALLATION INSTRUCTIONS

1 PARTS CHECK

1) MAKE SURE THE CORRECT DEVICE IS BEING USED, AND IS THE CORRECT HANDING (SEE PAGE #8 FOR REVERSING INSTRUCTIONS.)
2) MAKE SURE ALL NEEDED PARTS ARE ON HAND.
3) MAKE SURE ONITY INTEGRA OR HT SERIES TRIM HAS BEEN PROVIDED.

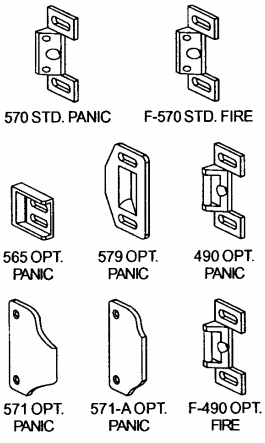
NOTE: LIST DOES NOT REFLECT ALL POSSIBLE APPLICATIONS.

1) (F-)18-R DEVICE

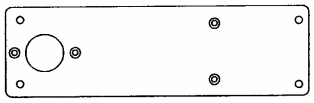


NOTE: SEE PAGE 8 REGARDING HANDING

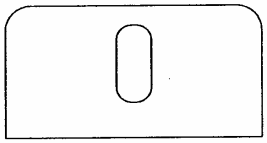
2) STRIKE



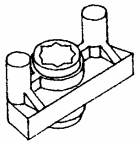
3) DEVICE MOUNTING PLATE



4) ENDCAP MOUNTING PLATE



5) KNOB HUB
P/N EX9497
(INSIDE DEVICE HEAD)



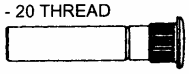
6) ONITY MOUNTING SCREWS
M4 x 30mm FPHMS (4 QTY.)

4) SCREW PACK FOR EXIT DEVICE

MOUNTING BRACKET (1 QTY.)

DOGGING KEY (1 QTY.) (PANIC ONLY)

SEX BOLT – 1/4" - 20 THREAD (1 QTY.)



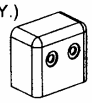
1/4" - 20 X 3/4" TPHMS (1 QTY.)

#10-24 x 1" PPHMS (4 QTY.)

#10 - 24 X 3/4" FPHMS (FIRE RATED DEVICES) (3 QTY.)

#10x1-1/4" FPHSMS (PANIC DEVICES) (3 QTY.)

CHANNEL END CAP (1 QTY.)



#10-24 X 3/8" PPHMS w/NYLON PATCH (2 QTY)

PAGE 1

IR Security & Safety®

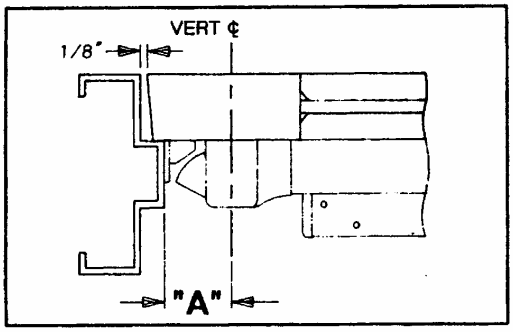
2 DOOR LAYOUT

(NOTE: FOR FACTORY PREPARED DOORS, VERIFY LAYOUT.)

1) DOOR MUST BE FITTED AND HUNG PROPERLY BEFORE PROCEEDING.
2) MULLION, IF BEING USED, SHOULD BE INSTALLED.
3) MARK VERTICAL ℄ AND DEVICE REF.℄ ON DOOR AND FRAME. (SEE FIGURES & CHARTS BELOW)

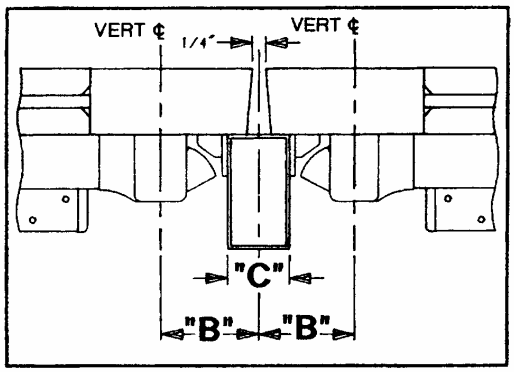
A) VERTICAL ℄: SINGLE DOOR APPLICATION

STRIKE	INSTALLED	MINIMUM STILE	"A" BACKSET
570	SURFACE	4"	2-1/4"
565	SURFACE	3-3/4"	2"
565	RECESSED	3-1/4"	1-1/2"
579	SURFACE	3-1/2"	1-5/8"
490	SURFACE	4"	2-1/4"
F-570	SURFACE	4"	2-1/4"
F-490	SURFACE	4"	2-1/4"

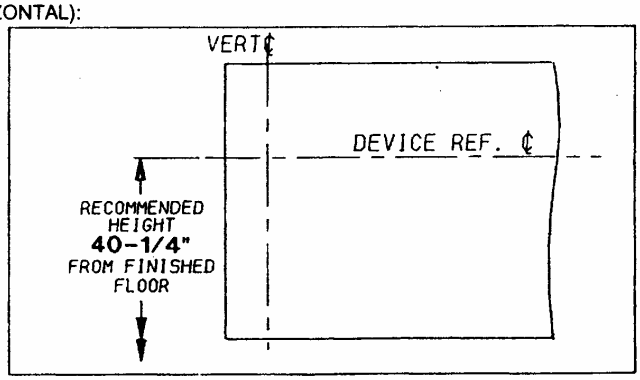


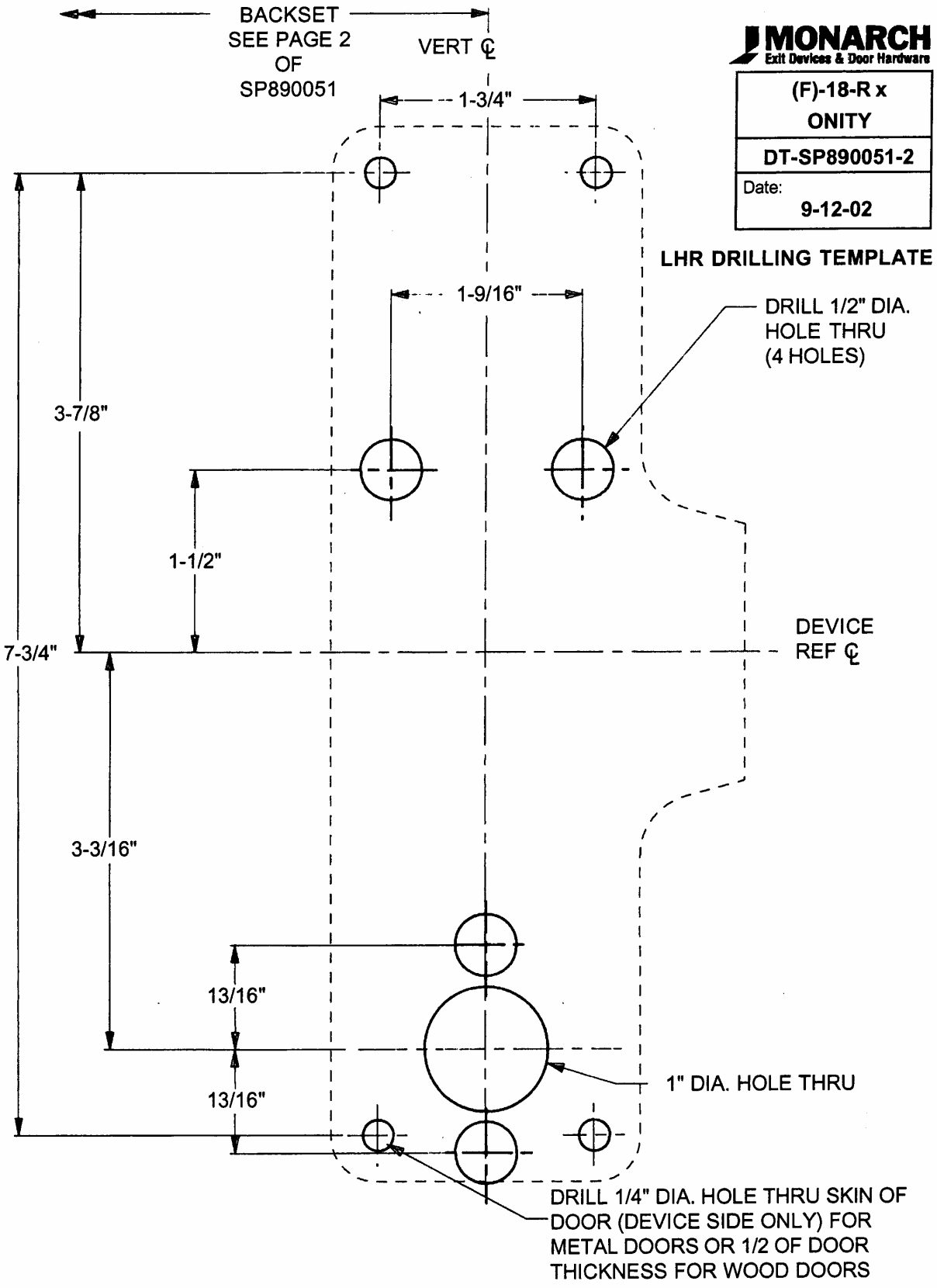
B) VERTICAL℄ : DOUBLE DOOR APPLICATION WITH MULLION

STRIKE	INSTALLED WITH	MINIMUM STILE	"B" BACKSET	"C" WIDTH
570	2923 MULLION	4"	3"	1-1/2"
570	4023 MULLION	4-1/4"	3-1/4"	2"
565	2923 MULLION	3-3/4"	2-3/4"	1-1/2"
565	4023 MULLION	4"	3"	2"
579	2923 MULLION	3-3/8"	2-3/8"	1-1/2"
579	4023 MULLION	3-5/8"	2-5/8"	2"
490	2923 MULLION	4"	3"	1-1/2"
490	4023 MULLION	4-1/4"	3-1/4"	2"
F-570	F-4023 MULLION	4-1/4"	3-1/4"	2"
F-490	F-4023 MULLION	4-1/4"	3-1/4"	2"



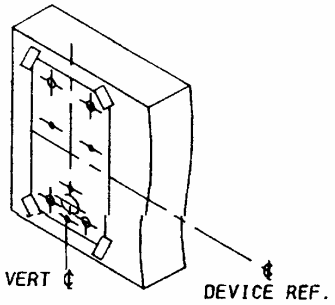
B) DEVICE REF. ℄ (HORIZONTAL):




BACKSET
SEE PAGE 2
OF
SP890051
VERT ℄
1-3/4"
1-9/16"
3-7/8"
1-1/2"
7-3/4"
3-3/16"
13/16"
13/16"
DEVICE
REF ℄
DRILL 1/2" DIA.
HOLE THRU
(4 HOLES)
1" DIA. HOLE THRU
DRILL 1/4" DIA. HOLE THRU SKIN OF
DOOR (DEVICE SIDE ONLY) FOR
METAL DOORS OR 1/2 OF DOOR
THICKNESS FOR WOOD DOORS
MONARCH
Exit Devices & Door Hardware
(F)-18-R x
ONITY
DT-SP890051-2
Date:
9-12-02
LHR DRILLING TEMPLATE

3 DOOR & HARDWARE PREPARATION

1) CHOOSE CORRECT DRILLING TEMPLATE DT-SP890051.
2) TAPE DRILLING TEMPLATE ON DOOR USING VERTICAL ℄ AND DEVICE REF. ℄ (REFER TO 2). CENTERPUNCH AND DRILL HOLES FOR DEVICE AND ONITY TRIM MOUNTING. AFTER DRILLING HOLES, REMOVE DRILLING TEMPLATE.



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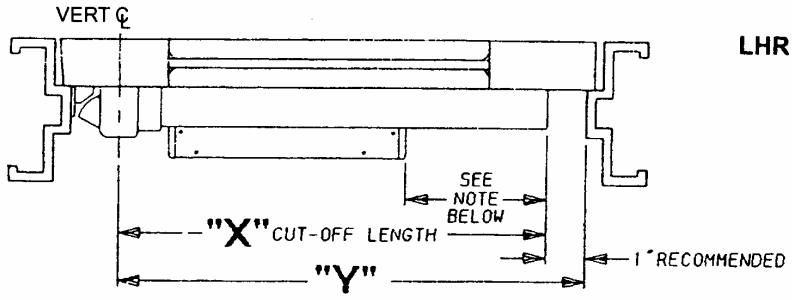
3) DETERMINE DEVICE LENGTH.
   A. LOCATE VERTICAL C ON DOOR.
   B. MEASURE DISTANCE "Y" FROM VERT. ℄ TO STOP SURFACE ON HINGE SIDE.
   C. SUBTRACT 1" FROM RECOMMENDED CLEARANCE.
   D. LENGTH OF DEVICE FROM VERT. ℄ TO CUT-OFF LENGTH.



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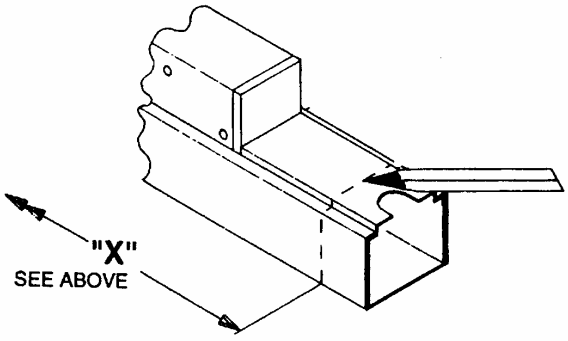
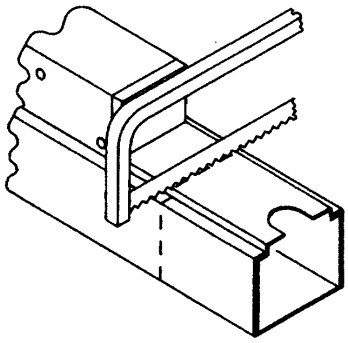
NOTE: FOR STANDARD DOGGING: 3" MIN.
FOR CYLINDER DOGGING: 5" MIN.
FOR EXIT ALARM: 7-1/2" MIN.

4) IF DEVICE IS LONGER THAN "X", CUT THE DEVICE.
   A) MARK DEVICE CHANNEL AND COVER TO LENGTH "X".



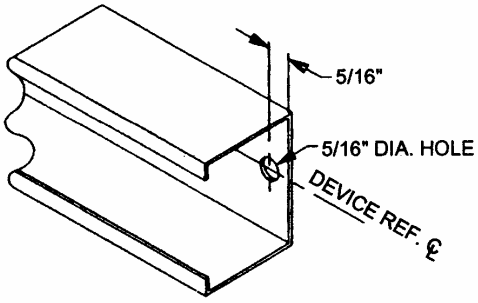
NOTE: BE SURE CHANNEL COVER IS PUSHED SNUG TO TOUCHBAR PRIOR TO MARKING OR CUTTING TO SIZE.

B) CUT BOTH CHANNEL AND CHANNEL COVER TO MARKED DIMENSION AND REMOVE BURRS.

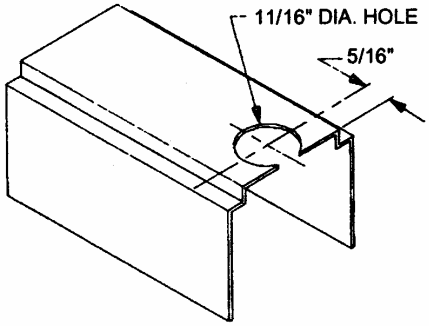


NOTE: FACTORY RECOMMENDS SAWING RATHER THAN GRIND CUT TO SIZE. GRINDING CAN DAMAGE THE FINISH OF THE DEVICE AND SAWING RESULTS IN LESS DAMAGE TO THE DEVICES'S FINISH.

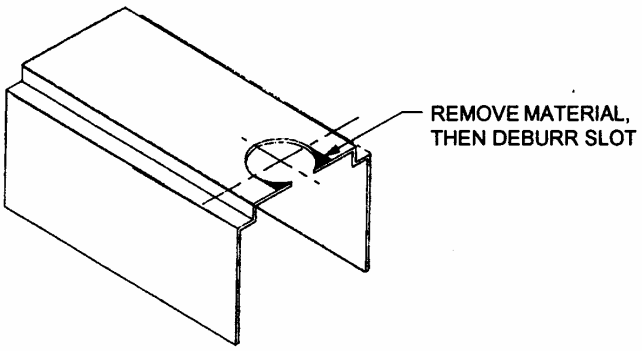
5) DRILL MOUNTING HOLE.
REMOVE CHANNEL COVER AND DRILL 5/16" DIA. HOLE ON DEVICE REF. ℄ 5/16" FROM END OF CHANNEL.



6) CUT ACCESS SLOT IN CHANNEL COVER.
A) DRILL AN 11/16" DIA. HOLE 5/16" FROM THE CUT END OF CHANNEL COVER.

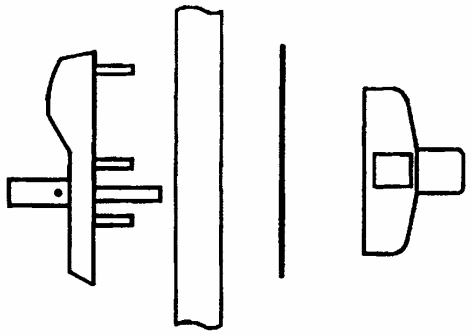


B) USING A SAW OR FILE, REMOVE REMAINING MATERIAL TO COMPLETE SLOT.



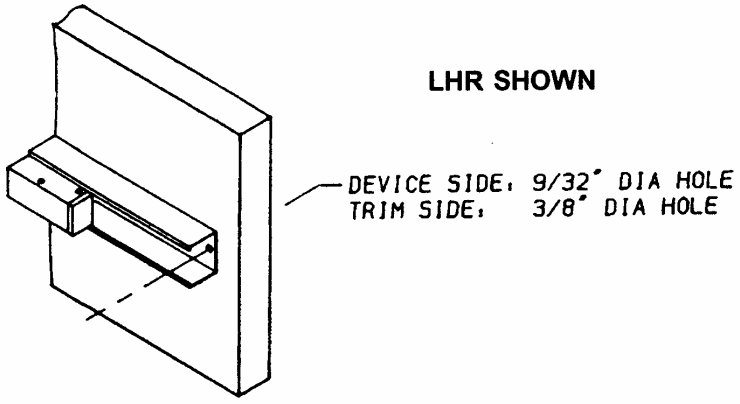
4 HARDWARE INSTALLATION

1) MOUNT ONITY TRIM ONTO DOOR USING FOUR M4 x 30mm FPHMS AND DEVICE MOUNTING PLATE
NOTE: COUNTERSINK ON MOUNTING PLATES SHOULD FACE TOWARD DEVICE.
2) APPLY DEVICE ONTO DEVICE MOUNTING PLATE USING FOUR #10-24x3/4" FPHMS.

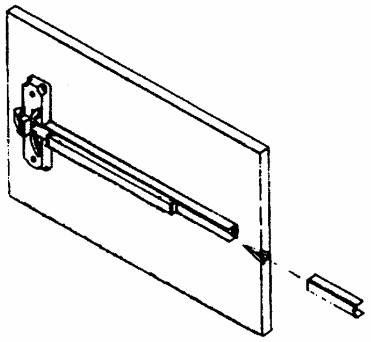


ONITY TRIM **DOOR** **MOUNTING PLATE** **DEVICE**

3) LOCATE, MARK AND DRILL END CAP MOUNTING HOLE:
A) LEVEL DEVICE.
B) MARK CENTER OF 5/16" DIA. HOLE AT END OF CHANNEL.
C) DRILL 9/32" DIA. HOLE THRU DOOR.
D) DRILL 3/8" DIA. HOLE ON TRIM SIDE OF DOOR USING 9/32" DIA. HOLE AS GUIDE.



4) INSERT CHANNEL COVER.



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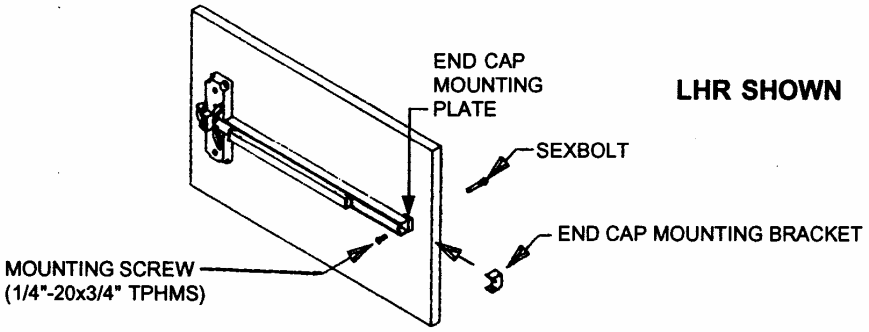
5) INSTALL END CAP MOUNTING BRACKET AND END CAP MOUNTING PLATE USING SEXBOLT AND MOUNTING SCREW.



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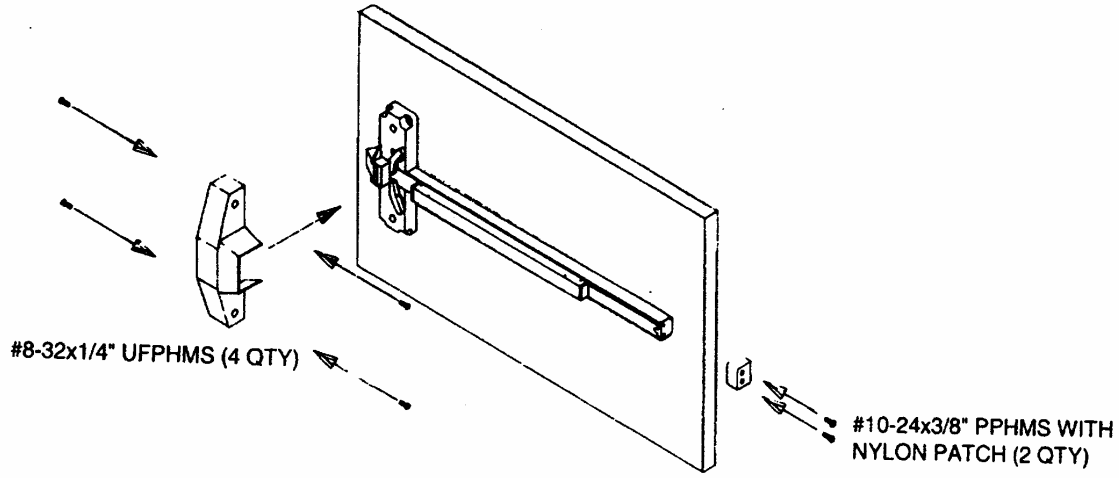
6) TIGHTEN ALL MOUNTING SCREWS AND CHECK FOR SMOOTH OPERATION.
7) ATTACH COVER TO CHASSIS AND CHANNEL END CAP TO END CAP MOUNTING BRACKET.



8) CHECK DOGGING OPERATION: (PANIC APPLICATION ONLY)
   A) DEPRESS TOUCHBAR, INSERT AND TURN DOGGING KEY CLOCKWISE TO DOG DEVICE.

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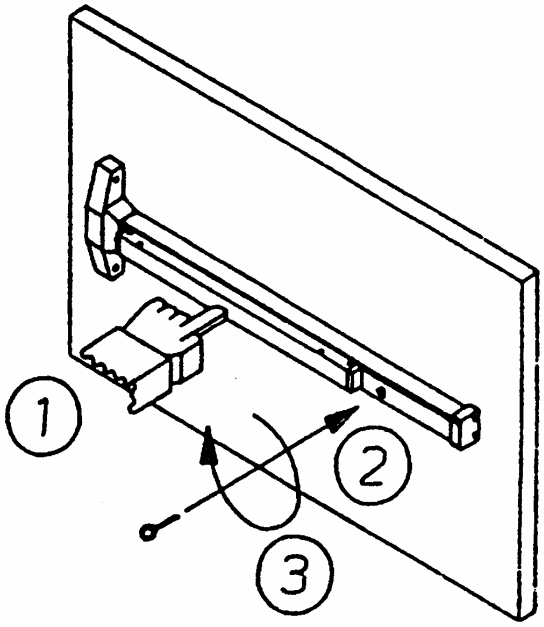
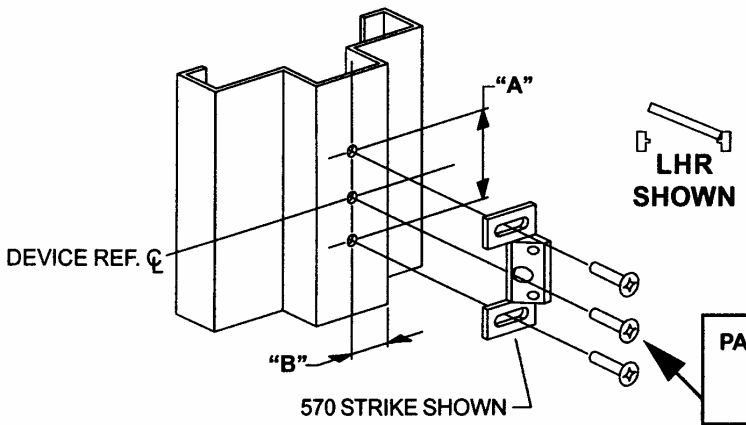


   B) REMOVE DOGGING KEY; TOUCHBAR WILL REMAIN DEPRESSED.
   C) REINSERT DOGGING KEY AND TURN IT IN OPPOSITE DIRECTION (COUNTER-CLOCKWISE) PUSH ON TOUCHBAR AND IT WILL "POP OUT."
   D) FOR CYLINDER DOGGING, REFER TO INSTALLATION INSTRUCTION D-4080.

9) STRIKE PREPARATION:
   A) TRANSFER DEVICE REF. ℄ TO DOOR STOP.
   B) CENTER STRIKE ON DOOR STOP ACROSS DEVICE REF. ℄ AND FLUSH TO DOOR SURFACE.
   C) MARK SCREW LOCATIONS, THEN CENTERPUNCH AND DRILL (AND TAP IF REQUIRED) FOR MOUNTING SCREWS.
   D) APPLY STRIKE TO DOOR STOP.



STRIKE	'A'	'B'
570*	2"	3/4"
565	1"	1-11/32"
490*	2"	3/4"
579	2-3/8"	15/16"
F-570*	2"	3/4"
F-490*	2"	3/4"

* - FOR THIRD SCREW ON (F-)570 AND (F-)490 DRILL AND TAP FRAME OR MULLION AFTER ADJUSTING STRIKE.

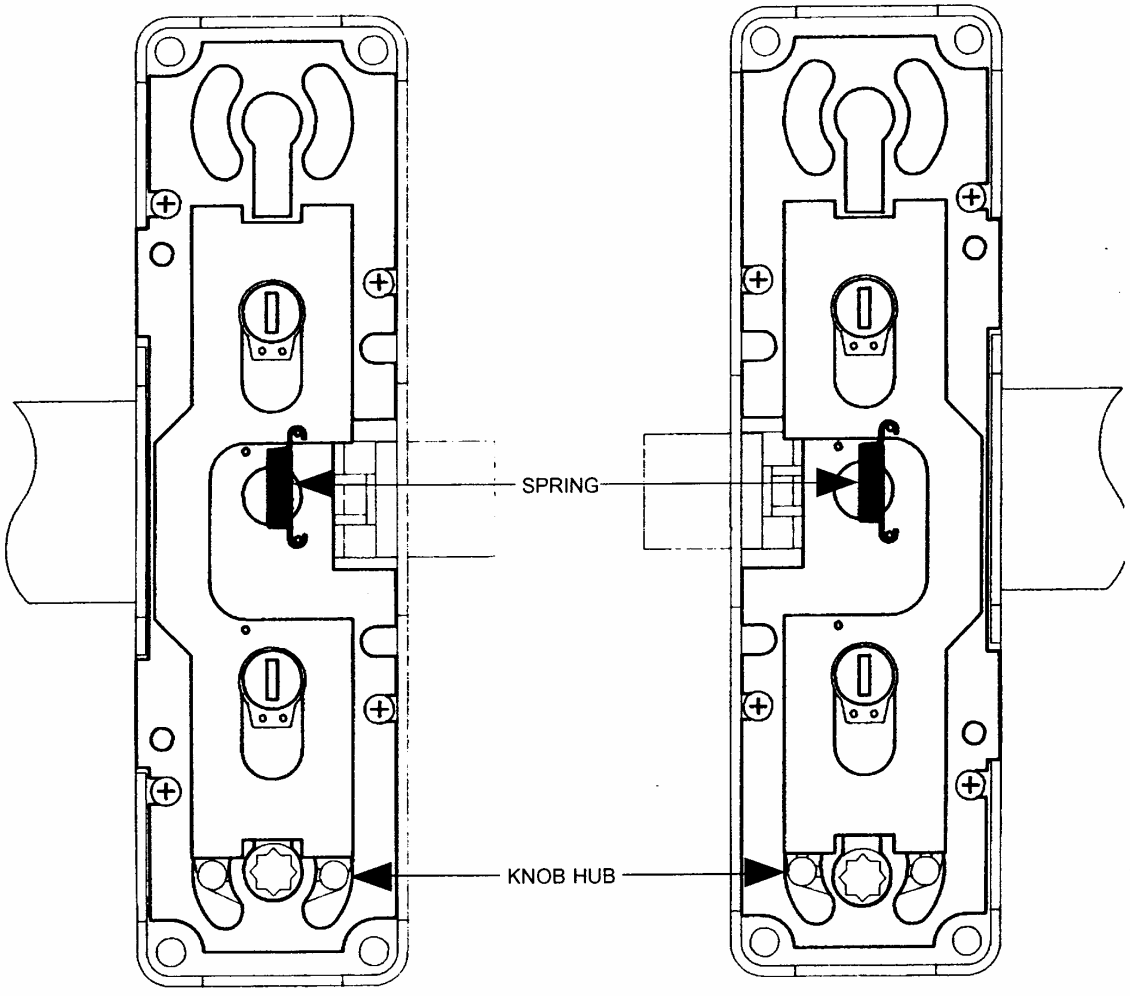
PANIC:	#10 X 1-1/4" FPHSMS 3 QTY. FOR 570/490 STRIKES 2 QTY. FOR OTHER STRIKES
FIRE:	#10-24 X 3/4" FPHMS 3 QTY.

10) CHECK FOR SMOOTH OPERATION AND SECURE LATCH BOLT ENGAGEMENT. ADJUST STRIKE IF REQUIRED.

5 REVERSING INSTRUCTIONS

TO REVERSE THE HANDING OF A MONARCH (F)18-R x ONITY TRIM:

1) REMOVE BACKPLATE SUB-ASSEMBLY (4 SCREWS) FROM CHASSIS.
2) MOVE KNOB HUB (P/N EX9497) TO LOCATION SHOWN FOR CORRECT HANDING.
3) REINSTALL BACKPLATE SUB-ASSEMBLY (4 SCREWS) INTO CHASSIS.
4) MOVE SPRING TO LOCATION SHOWN FOR CORRECT HANDING.



Weather Gaskets

1. All exterior and/or high moisture area locks **MUST** have weather gaskets.
   NOTE: Replace old gasket while performing reworks.
2. Remove extra material from bottom of gasket.
   NOTE: Should be nice and straight, NO nubs.
3. Peel off ALL the paper.
4. Place extra material over two (2) holes in backing plate for the reader cover screws.
5. Put gasket on backside of outside escutcheon.
   NOTE: Should stick to escutcheon.
6. For HT24-C and HT24-V remove gasket material for the screw posts.
7. Put two (2) pieces of the gasket material in the upper holes that were pre-punched in gasket.

Installation of Lithium Batteries or Replacing Batteries

1. All exterior locks in cold weather and/or high traffic areas **MUST** have lithium batteries.
2. Locks MUST be UPDATED with portable programmer after installation of batteries.
   NOTE: This insures correct time setting.

Ending the Day

1. Be certain that hallways are clean. There should be NO evidence that you were ever there other than the presence of the new locks.
2. Remove old locks to area designated by property.
3. Bring PP to front desk.
4. Notify property of rooms completed and rooms to be installed the next day.
5. Put notices in rooms to be installed the next day.

Important Things to Do

1. Use longer screws if necessary. Strikes and lock case screws MUST tighten to 25 in. lbs..
2. Latch and dead bolt MUST have 1” depth into the frame.
3. Latch and dead bolt MUST extend completely into strike.
4. File the strike if latch and dead bolt do NOT retract smoothly and easily.
5. After power filing a strike, be certain that you use a hand file to square ALL the corners.
6. Work during normal business hours.
7. Keep hallway clean and neat.
8. Cover guests’ possessions with drop cloth.
9. Act in a professional manner at ALL times while on the property.
10. Leave an equal number of right and left hand spare locksets.

Important Things Not to Do

1. File the latch hole without filing the dead bolt hole.
2. Surface mount a strike.
3. Rivet tabs in frame to hold a strike.
4. Strip the screw heads and leave them.
5. Screw tabs in metal door to hold lock case.
6. Place anything on beds, tables, dressers, or floors.
7. Run extension cords in hallways.
8. Pinch privacy wire.
9. Leave rooms unattended.
10. Leave a lock which is not functioning properly on a door.
11. Feed excess privacy wire back into lock case, as it could be pinched by moving parts.
12. Install lockset on exterior door without weather gasket.
13. Use incorrect size or slotted head screws.

Accujig 2001 Instructions

NOTE: Strike must be installed before starting door prep

Existing Cylindrical and Slab Doors

1. Select correct Strike Index Spacer for size strike installed:
   4-7/8” Strike Spacer is 9-3/16” long
   8” Strike Spacer is 7-15/16” long
   10” Strike Spacer is 6-7/8” long Hold the Strike Spacer on top of the Clamp Block and move up or down until they come in contact with the lower edge of strike lip.
2. Tighten the Clamp Block and remove Strike Spacer
   NOTE: The Clamp Block will now be used to position both mortiser and Accujig.
3. Position mortiser with wood side boards on top of Clamp Block.
4. Attach vacuum to Dust Control on mortiser.
5. Mortise pocket to 6-1/2” long and 4-3/8” deep.
6. Disconnect vacuum hose.
7. Remove mortiser.
8. Position Accujig on top of Clamp Block.
   NOTE: Push on Router Template making sure it is tight to bevel of door.
9. Insert Vacuum Crevice tool into side of Router Template and connect hose.
10. Rout the edge of door.
11. Drill only the lower two (2) 1/2" holes. **NOTE:** Do NOT drill all the way through. Drill one side, then the other.
12. Drill the two (2) 2-1/ 8” holes. **NOTE:** Do NOT drill all the through. Drill one side, then the other.
13. Remove Accujig.
14. Square four (4) corners with corner chisel.
15. Vacuum mortise pocket and remove all debris.
16. Wipe off door.

Existing Mortise and Existing Ving

1. Attach Mortise Pocket Locator to Router Template.
2. Position Accujig on edge of door by moving up or down until the Mortise Pocket Locator drops into existing mortise prep.
   NOTE: Push on Router Template making sure it is tight to bevel of door.
3. Drill only the lower two (2) 1/2" holes for standard installation and drill only the top two (2) holes for inverted Ving.
4. Do NOT drill all the way through. Drill one side, then the other.
5. Drill the two (2) 2-1/ 8” holes.
6. Do NOT drill all the through. Drill one side, then the other.
7. Remove Accujig.
8. Vacuum mortise pocket and remove all debris.
9. Wipe off door.

Existing Cylindrical – Cylindrical Install

1. Position Accujig on edge of door centering the upper 2-1/8” bushing with the existing 2-1/8” hole in door.
2. Drill the two (2) 3/8” holes.
3. Do NOT drill all the way through. Drill one side, then the other.

MORE THEN AN ACCUBORE, THIS IS A TOOL SYSTEM FOR MACHINING DOORS FOR ONITY LOCKS WITH INCREASED ACCURACY, PRODUCTIVITY, AND DECRESASED FATIGUE.

HOW?

BY COMBINING THE FACE BORING PLATES WITH AN EDGE ROUTER TEMPLATE INTO ONE PRECISION TOOL. AND BY USING AN INDEXED CLAMP SUPPORT TO REST AND ACCURATELY POSITION THE ACCUJIG AND MORTISER WITH PERFECT VIRTICAL ALLIGNMENT TO THE STRIKE.

Features:

1. THE LATEST TEMPLATE LAYOUT FOR ONITY HT AND CT LOCKS
2. HARDENED 2 1/8 DRILL GUIDES ARE TAPPERED FOR EASIER INSERTION OF THE HOLE SAW
3. HARDENED ½” DRILL GUIDES FOR MORTISE, CYLINDRICAL AND VING
4. STAINLESS STEEL EDGE ROUTER TEMPLATE
5. PIVOTING ROUTER ASSMEBLY ADJUSTS TO THE DOOR BEVEL AND KEEPS THE CUTOUT CENTERED
6. THE ROUTER ASSEMBLY BOX CONTAINS MOST OF THE DUST, AND HAS A OPENING FOR A VACUUM ATTACHMENT
7. INCLUDES A MORTISE LOCATOR TO EASILY POSITIONS THE ACCUJIG ON AN EXISTING MORTISE EDGE PREP
8. FITS ON ANY DOOR WITH MOLDINGS THAT A LOCK CAN FIT ON
9. ALL COMPONENTS ARE PRECISION MACHINED AND MADE TO LAST

Prices:

1.	ACCUJIG T-2001 SYSTEM, INCLUDING BORING JIG PLATES CLAMP ASSEMBLY INTEGRATED EDGE ROUTER TEMPLATE EXISTING MORTISE LOCATOR SUPPORT CLAMP STRIKE INDEX SPACERS TOOL CASE	$ 1500
2.	BORING PLATES ONLY	$ 800
3.	BORING PLATES WITH CLAMP ASSEMBLY ONLY	$ 1150
4.	MORTISER DUST CONTROL ATTACHMENT	$ 175
5.	STRIKE TEMPLATE BASE WITH DUST CONTROL	$ 100
6.	STRIKE TEMPLATES FOR 4 7/8, 8, 10 INCH STRIKES	$ 25
7.	1” CARBIDE MORTISER BITS	$ 21

+TAX, SHIPPING AND HANDLING

Prices in affect 01-2003

QUESTIONS, SERVICE, ORDERS, OR SUGGESTIONS

Milo Weaver: 714-633-9011 or 714-936-9584
Weaver Enterprises; 1079 N Batavia; Orange, CA 92867
E mail: MCWEAVER46@aol.com

Tool Requirements

Tool/Item		Quantity Required
Door Mortiser	*** Model 513	1 per cre

1” Mortiser Bit	***43704	6 per crew
Lock Face Template	***Model 517	1 per crew
Onity Accujig Door Boring System		1 per crew
Onity Vacuum Attachment for Accujig		1 per crew
Plunge Router	*3621	1 per crew
Template Guide Adapter	*321492-3	2 per crew
Template Guide	***42045	2 per crew
1/2” x 2 3/8” Router Bit	***43318	6 per crew
Corner Chisel	***42234	1 per installer
Shop Vacuum		1 per crew
Upright Vacuum		1 per crew
Electric Die Grinder	**5194	2 per crew
Arbors for Cutting Wheels		4 per crew
1 1/2” Cutting Wheels		100 per crew
3” Cutting Wheels		100 per crew
1/2” Electric Drill	**0234-6	4 per crew
1/2” Electric Hammer Drill	**5366-21	1 per crew
1/2” Drill Bits		6 per crew
9/64” Drill Bits		6 per crew
13/64” Drill Bits		6 per crew
1/2” Counter Sink		2 per crew
2 1/8” Hole Saws		6 per crew
1” Self Feed Drill Bit	**48-25-1001	2 per crew
5/8” Masonry Bit	**48-20-7601	2 per crew
1” Wood Chisel		1 per man
Jig Saw	**6266-21	1 per crew
Jig Saw Blades for Wood	**48-42-2300	25 per crew
Jig Saw Blades for Metal	**48-42-2160	25 per crew
Channel Lock Pliers		1 per man
Vise Grips Locking Pliers		1 per man
Heavy Duty Rivet Gun		1 per crew
Drop Cloths		24 per crew
Rubbermaid Service Cart #4500		1 per man
110v Outlet Strip		1 per man
12’ extension cord		1 per man
Onity Work Shirts		5 per man
12v Battery Drill	**0501-23	2 per installer
2.4v Battery Drill	**6546-6	1 per installer
Magnetic Bit Holders	*784801-1	4 per installer

#3 Phillips Bits		6 per installer
#2 Phillips Bits		6 per installer
T-10 Security Bits		6 per installer
T-20 Security Bits		6 per installer
1/2” wide Belt Sander/Power File	**6106-6	1 per installer
Power File Belts 60 Grit	**49-92-8115	100 per crew
#9 Self Centering Drill Bit	*784827-A	1 per installer
#12 Self Centering Drill Bit		1 per installer
Round Rasp file		1 per installer
Double Cut Flat file		1 per installer
#3 Phillips Screw Driver		1 per man
#2 Phillips Screw Driver		1 per man
1/4” Slotted Screw Driver		1 per man
3/8” Slotted Screw Driver		1 per man
Wonder Bars		2 per man
Claw Hammer		1 per man
25’ Tape Measure		1 per man
6” Metal Ruler		1 per man
Razor Knife		1 per man
Duct Tape		2 rolls per crew

*Makita Part Number **Milwaukee Part Number *** Porter Cable Part Number

Product Updates

Standard 4 7/8" Strikes 1-22-2003

We are in the process of returning to satin chrome plated brass strikes. Stainless steel 4 7/8" strikes will be discontinued for the following reasons:

1. The installer cannot file this strike properly.
2. Filing the strike with the power file uses 3 belts per strike plate, burns the finish of the strike, and takes considerable time.
3. A hand File cannot be used effectively to square the corners which is required for the filing to be effective.
4. We require 1/8 clearance on the DB hole for ADB, this is not possible with Stainless strikes due to the difficulty in filing them.
5. The Stainless Strike wears a groove in the latch over time in such a way that a guest could be locked in.
6. Customer installs, (new construction) are another issue, the customer won't have any tools that could be used to adjust this strike. In rare cases the strike plate has actually been removed. While we would not be liable, it does reflect badly on us.

ADB – OTT 1-22-2003

The thumb turn must return to the 12:00 position for the One Time Trigger function to operate. This usually happens when the escutcheon screw above the handle is over tightened bending the backing plate in. This causes the thumb turn to rub on the inside escutcheon and not return to the 12:00 position when the DB is retracted using the handle.

Accurate Face Plates 1-28-2003

A customer install in Florida was reported as having defective lock cases. Guests are stuck in the room. Installers on site state that 97 out of 150 rooms show problems.

Inspection reveals these are shallow backset lock cases manufactured for us by Accurate Lock in NJ.

The installers noted that the WRONG FACE PLATES were installed. This is the cause of the problem on this job. The wrong face plate causes drag on the deadbolt. This drag damages the lock over time.

Accurate Locks require their OWN face plate. A visual inspection and comparison of our face plate next to an Accurate face plate will lead you to believe they are interchangeable when in fact they are NOT. Further, it is a violation of UL rules and procedures to supply our face plate for the Accurate lock. In the past the proper face plate was packed in the box by Accurate. An inspection of our current inventory reveals that this is no longer the case. An Accurate face plate is stamped with just the UL listing number. If the face plate is stamped TESA or Onity it should not be installed on an Accurate lock case.

HT Privacy Switch Update 2-10-2003

The privacy micro switch is moving after installation of locks. The mounting screw is not tight enough from the factory. After installation of locks the switch is moving away from the thumb turn cam causing false privacy indications.

Install Procedure
After installing the backing plate and coiling the excess wire, loosen the T–10 mounting screw.
Move the switch all the way to the right against the thumb turn cam.
Tighten the T-10 mounting screw.
Plug in privacy wire and turn thumb turn
Test privacy function, red and green alternating lights. N/A on new construction.
Retract dead bolt and test, green light.

Roll Pin Procedure 4-9-2003

As of today it is no longer necessary to punch the roll pin in the HT Series lock. We would like to Thank You very much for taking the time in the past to perform this procedure. In the future we ask you to keep an eye on the roll pins to make sure they are manufactured correctly in our factory and to contact either Jeff Metcalf, in Canada, or myself if you find anything amiss regarding the roll pin.

Auto Dead Bolt Sticker Update 6-14-2003

The ADB stickers shipped with locks are part of the installation and must be installed when the locks are installed. The stickers are to be applied to the inside escutcheon above the thumb turn. Apply them in the middle of the escutcheon and make sure they are level. If the customer requests the stickers applied in another location or does not want them installed at all this must be noted on the sign off and signed by the customer. Failure to install the stickers will result in a return trip at no charge to the customer and no pay for the installer.

HT-28 Privacy Wire Connector 10-15-2003

The new HT-28 locks and HT24F, Flash, locks have a circuit board with a connector that the 2-wire Privacy Wire can be installed in 3 different positions. The wire must be connected to the center 3 pins for the Privacy function to work properly. If installed wrong it kills the lock when the DB is turned. NO way to open electronically in event of emergency.

Knob Locks 10-24-2003

When installing locks with knobs instead of lever handles a special inside backing plate must be used. Since knobs do not have the weight of levers and knobs are harder to turn, the return springs in the backing plate are not as strong as used in standard backing plates.

Power File Parts 10-30-2003

Parts and belts for power files can be found on the following website:
www.dynabrade.com

Integra Install Note 12-17-2003

The following is directly from the R & D Dept.:

The proper installation method for the battery wire is that any slack should be removed from under the backplate (gently pull the wire slightly while holding the grommet in place to take the slack out), route the wire through the hole in the lock case and then through the hole in the mounting plate, then route the wire through the rectangular cut in the inside sub-assembly. The slack should be stored on the inside sub-assembly, in the slot to the left of the battery pack, with the unshielded portion of the wire inserted into the slot first and the shielded portion inserted on top of them (this will hold all the wires in the slot).

Vacuums + Dust Control 10-27-2004

All lock installation crews must have vacuums and a vacuum attachment for the mortiser. Borrowing vacuums from the property's Housekeeping Dept. is for emergency's only. If the crews vacuum breaks down during the day it is acceptable to ask the property to borrow one. The crew will repair the vacuum that night or purchase a new one. All crews will use a vacuum attachment whenever mortising wood doors. People with multiple crews will make sure all their crews comply with the above. Onity's sales people use the fact that we clean up after ourselves as a strong selling point. It is also one of the many things that distinguish us from the competition.

BOH Exterior Locks 2-17-2005

A lot of installers are removing the Privacy Wire and/or grommet and not plugging the whole in exterior applications. We have to make sure the back of the outside escutcheon is sealed from air and moisture. That is the reason for using weather gaskets and covering the extra holes with gasket material. When installing a latch only mortise lock leave the wire and grommet intact and push the coiled extra wire back into the lock case. There is no dead bolt so it is ok to push the wire back into the LC. On a cylindrical install pull out the wire and grommet and cover the hole with gasket material or electrical tape. Leaving the grommet without wire leaves a hole in the middle of the grommet and moisture will enter the escutcheon. Failure to seal the outside escutcheon properly will result in a QA Failure and a return trip for the installer.

Commercial CT Installation Manual

Also Called Integra

Commercial CT Cylindrical Wood Metal Doors

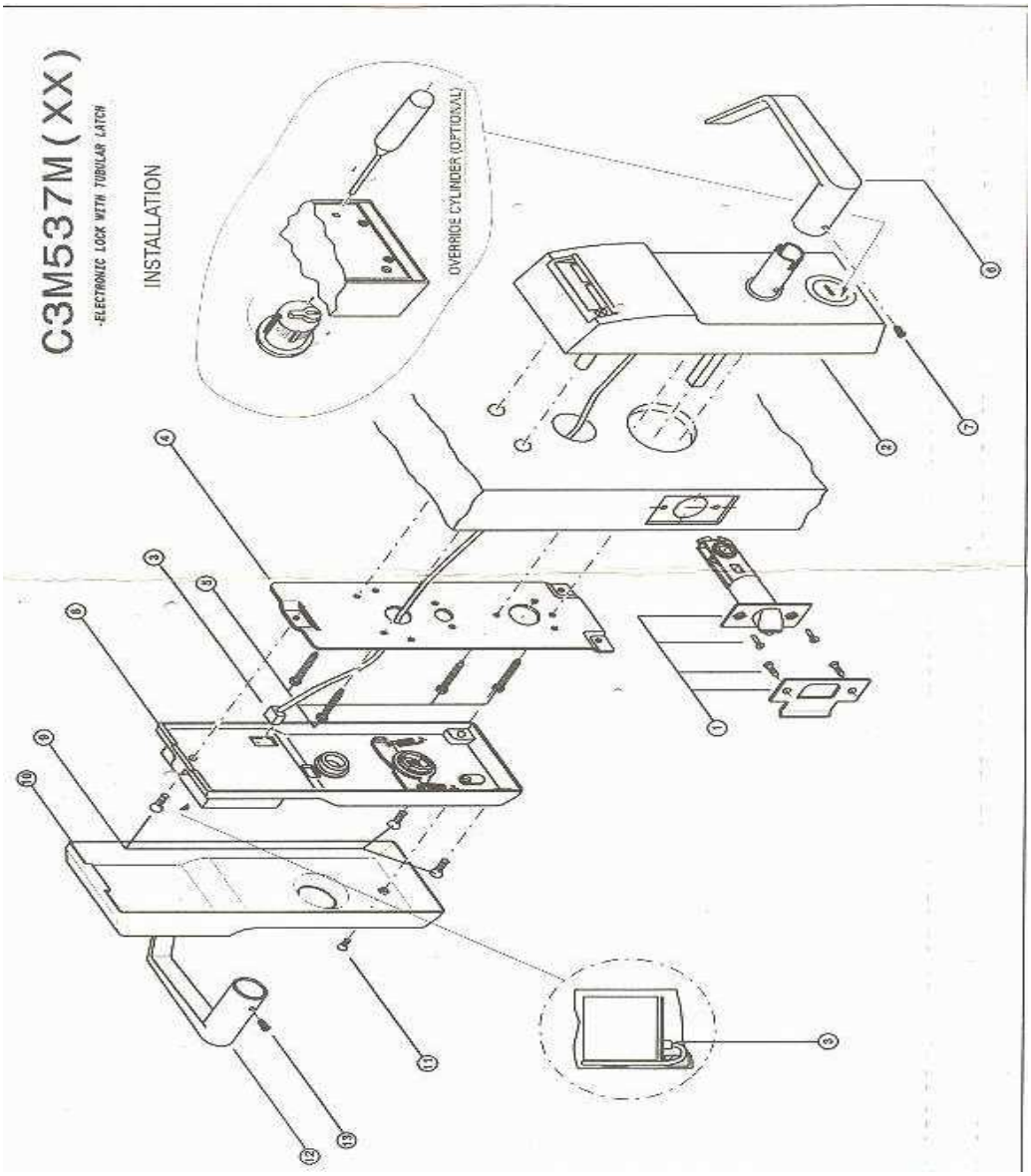
1-3/8" and 1-3/4" Backset

Installation

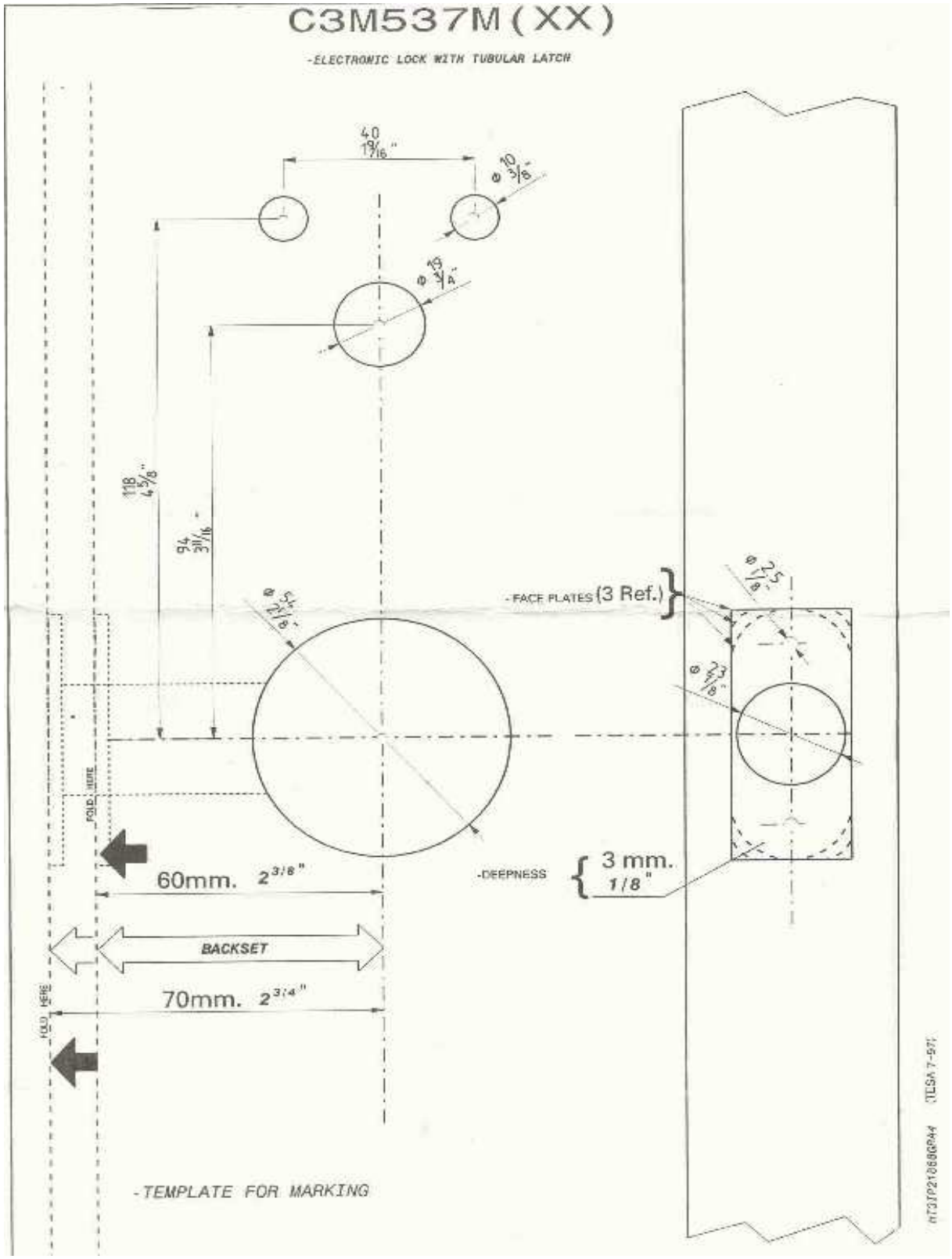
1. Remove old lock set.
2. Align paper template supplied with existing 2-1/8" hole or use **Accujig**.
3. Mark top two (2) escutcheon holes and battery wire hole on both sides of door.
4. Center punch for holes.
5. Drill escutcheon holes using a 3/8" drill bit. **NOTE:** Do NOT drill all the way through.
6. Drill one side, then the other.
7. Drill battery wire hole using a 3/4" drill bit. . **NOTE:** Do NOT drill all the way through.
8. Drill one side then the other.
9. Wipe off door.
10. Unpack Onity CT lock.
11. Put old lock in box and write room number on box.
12. Install longer outside handle with long T-10 screw to outside escutcheon, parts #6, #7, and #2 on template.
13. Install latch and strike, parts #1 on template. MAKE SURE LATCH IS INSTALLED CORRECTLY.
14. Tighten to 11 in. lbs.. Use longer screws if necessary.
15. Install outside escutcheon feeding battery wire through door, parts #2 and #3 on template.
16. Outside escutcheon should have 1/8" of sideways play.
17. File door with round rasp if no sideways play is present.
18. Feed battery wire through backing plate and start the four (4) escutcheon screws, parts #4 and #5 on template. Do not cross thread.
19. Measure from edge of door to outside escutcheon at top and bottom. Measurements must be the same.
20. Measure from edge of door to backing plate at top and bottom. Measurements must be the same.
21. Tighten escutcheon screws to 11 in. lbs..
22. Feed battery wire through inside subassembly and install on spindle, part #8 on template.
23. Install three (3) self-tapping screws in inside subassembly and tighten to 25-in. lbs., part #9 on template.
24. Plug battery wire in to connector and route excess wire in channel next to battery box per diagram #3 on template.

25. Initialize lock to proper room number or leave in construction mode and use key card supplied.
26. Test lock using key card.
27. Install inside escutcheon and T-10 screw, parts #10 and #11 on template.
28. Install inside handle and T-10 screw, parts #12 and #13 on template.
29. Test all functions of lock.
30. Make sure inside handle returns to neutral position when slowly released.

CT Cylindrical Installation Diagram



CT Cylindrical Template - <u>Not To Scale</u>



CT Cylindrical Bored Lock Adapter

Purpose
Converts the Onity CT30 series lock to a UL Listed heavy-duty cylindrical lock.

Application
For any door with a cylindrical lock door preparation.

Fits 1 3/8" thick and 1 3/4" thick doors. 1 3/4" doors require a spacer (provided) to be installed over spindle to prevent lock body from shifting in the door and disconnecting the latch. Use additional spacers for thicker doors. One additional spacer for each 3/8" oversize.
Example: 2" door requires 2 spacers.

Requires a special backplate on the Onity lock consisting of 1/4-inch diameter mounting posts in the 12 and 6 o'clock positions relative to the square shaft.

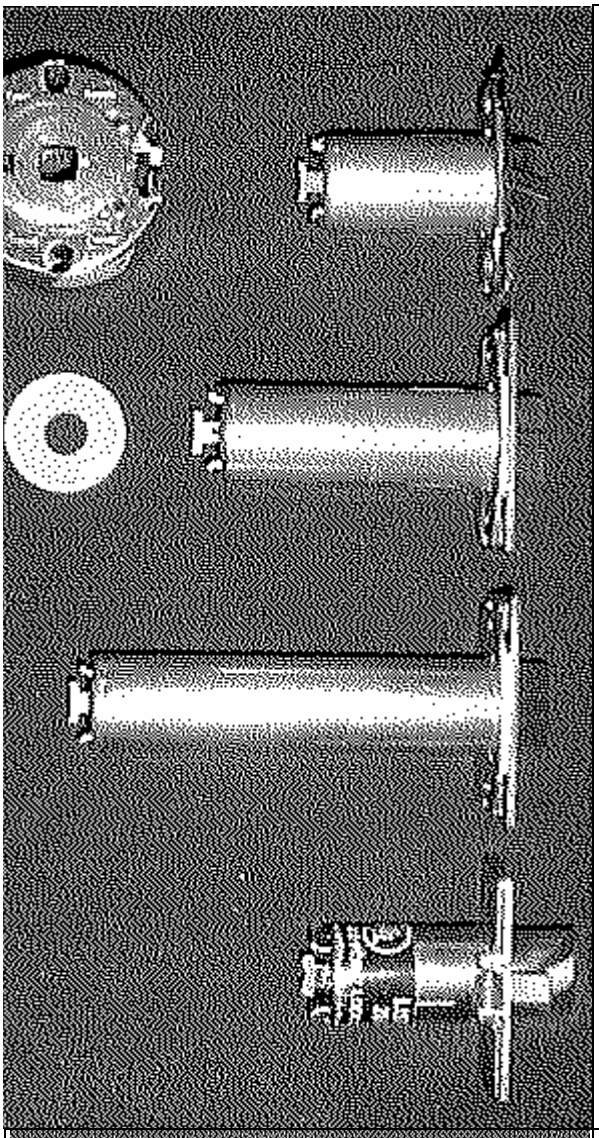
Device Specifications
UL approved for installation on fire doors rated 3 hours or less.

Ordering Information
Bored Lock Adapter = QF100460
5mm Spacer = QF100840

Corbin Deadlocking Latch Part Numbers:

Backset & Latch Front Description	Corbin Part Number	Onity #	Notes
2 3/4" Backset, 1/2 throw			626 Finish
Square corner front 2 1/4 x 1 1/8	586F17	QF100740	
Rounded Corner front 2 1/4 x 1 1/8	596F17	QF100420	U.S. Navy
3 3/4" Backset, 1/2 throw			626 Finish
Square Corner Front 2 1/4 x 1 1/8	586F81	QF100700	
Rounded Corner Front 2 1/4 x 1 1/8	586F87	QF100720	
5" Backset, 1/2 throw			626 Finish
Square Corner Front 2 1/4 x 1 1/8	598F21	QF100640	
Rounded Corner Front 2 1/4 x 1 1/8	601F25	QF100660	
2 3/4 Backset 3/4 throw (special)	601F69	Special Order	605 finish supplied for 605 finish
Square corner front 2 1/4 x 1 1/8		(QF100440)	606 finish supplied for 606, 611, 612, & 613 finishes
Rounded Corner special order	NONE	Special Order	626 finish supplied to match 626 & 625

BLA Parts

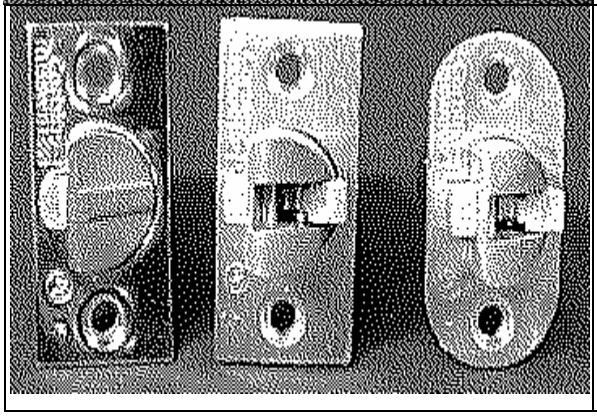


2 3/4" Backset, 1/2 throw
(shown next to Bored Lock Adapter)

3 3/4" Backset, 1/2 throw
(shown next to spacer(s) required for 1 3/4" thick doors and above)

5" Backset, 1/2 throw

2 3/4 Backset 3/4 throw
(special order - very expensive)



Left - Square corner 2 3/4 BS Latch, 1/2" throw (standard item)

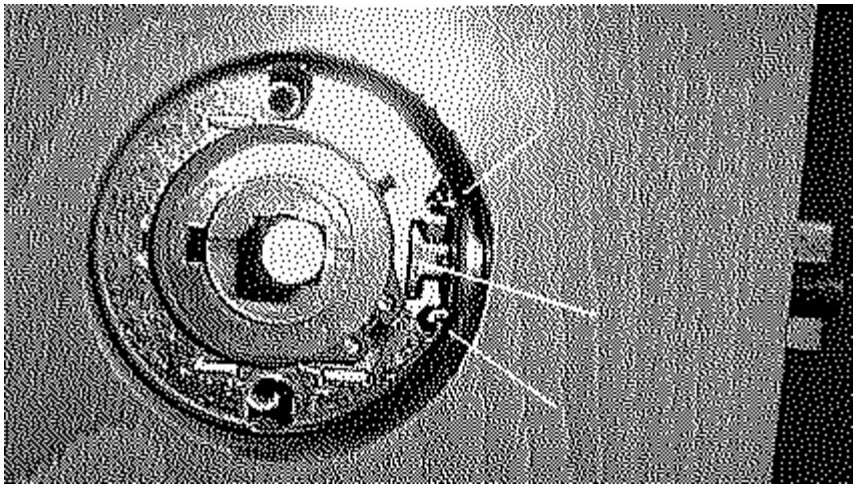
Center - Square corner 2 3/4 BS Latch, 3/4" throw (special order)

Right - Rounded Corner Front 2 3/4 BS latch, 3/4" throw, (special order)

Parts Orientation

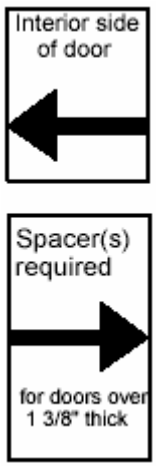
Installation

1. Install latch in door.
2. Install spacer on Integra/CT lock chassis.
3. Install BLA onto Integra/CT/ chassis.
4. Insert entire assembly into the door prep taking CARE to properly engage the latch at the 3 points indicated. Be sure the latch flanges interlock with the BLA body.
When installed, the square hole in the BLA must face the inside of the door.
5. If it won't engage the latch you installed the BLA onto the Integra/CT chassis upside down.

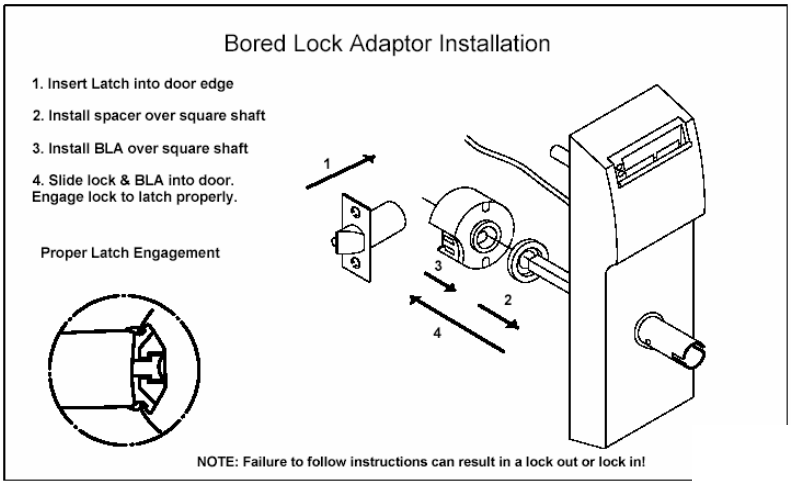


Correct installation. The lines indicate the critical areas to observe when interconnecting the latch flange to the lock body.

Stickers for BLA



Assembly Sheet for BLA



Revised: 03/07/2003

The purpose of this document is to transmit accurate technical information about this product internally within Onity. Publication of this document implies that the Product Application Department approves the product described herein for release.

CT Mortise Premachined Doors

Wood Doors

1. Unpack Onity CT lock.
2. Install longer outside handle with long T-10 screw to outside escutcheon.
3. Adjust bevel of lock case to match bevel of door. **MAKE SURE IT IS A COMMERCIAL LOCK CASE - HUB IS NOT SQUARE**.
4. Hand tighten upper and lower bevel screws, these must be very tight.
5. Set lock case in mortise pocket with dead bolt on top.
6. Hold lock case up in pocket.
7. Use Vix Bit to pre drill screw holes
   #9 Vix Bit in soft wood 9/64" drill bit
   #12 Vix Bit in hard wood 11/64” drill bit
8. Install with #10 x 1-1/4 ” Phillips head sheet metal screws. *Not supplied*.
9. Tighten to 25-in. lbs.
10. Install strike of proper handing, R.H. or L.H.. Dead bolt hole on top.
11. In wood frames use #12 Phillips sheet metal screws with a minimum of 1/2” of screw into stud behind frame. *Not Supplied*.
12. In metal frames use #12-24 combination screws supplied.
13. Tighten strike screws to 25-in. lbs..
14. Minimum of 1" clearance behind strike is required for latch and dead bolt in frame.
15. Make sure battery wire is plugged in securely and rubber grommet is in place.
16. Install outside escutcheon feeding battery wire through cylinder hole.
17. Outside escutcheon should have 1/8" of sideways play.
18. File door with a round rasp if no sideways play is present.
19. Feed battery wire through backing plate and start four (4) escutcheon screws. Do not cross thread.
20. Measure from edge of door to outside escutcheon at top and bottom. Measurements must be the same.
21. Measure from edge of door to backing plate at top and bottom. Measurements must be the same.
22. Tighten escutcheon screws to 11-in. lbs..
23. Install face plate with two (2) screws and tighten to 11-in. lbs..
24. Faceplate must be flush with edge of door.
25. Push switch and hold privacy actuator arm of inside subassembly towards hinge side of door. Switch on early models only.
26. Feed battery wire through inside subassembly and install aligning both handle and dead bolt spindles.
27. Install three (3) self-tapping screws in inside subassembly and tighten to 25-in. lbs..
28. Plug battery wire in to connector and route excess wire in channel next to battery box per diagram on template.
29. Initialize lock to proper room number or leave in construction mode and use key card supplied.
30. Test lock using key card.
31. Install inside escutcheon and T-10 screw.

32. Install inside handle and T-10 screw.
33. Test all functions of lock:
    - Inside handle extends dead bolt when turned up.
    - Inside handle retracts dead bolt easily.
    - Latch extends fully when handle is slowly released.
    - Latch retracts fully when handle is turned down.
    - Lock extends dead bolt with key card, outside handle up.
    - Lock retracts dead bolt and latch with key card, outside handle down.
34. Close door and test lock:
    - Inside handle retracts latch and dead bolt easily.
    - Latch extends fully into strike.
    - Dead bolt extends fully and cleanly into strike.
    - Dead latch is not in latch hole.
    - Minimum clearance of 1/16" above and below both latch and dead bolt.
    - File strike if necessary using power file.
    - Square corners with hand file.
35. Wipe off lock, door, strike, and frame.
36. Remove all packing materials and dispose of properly.

Metal Doors

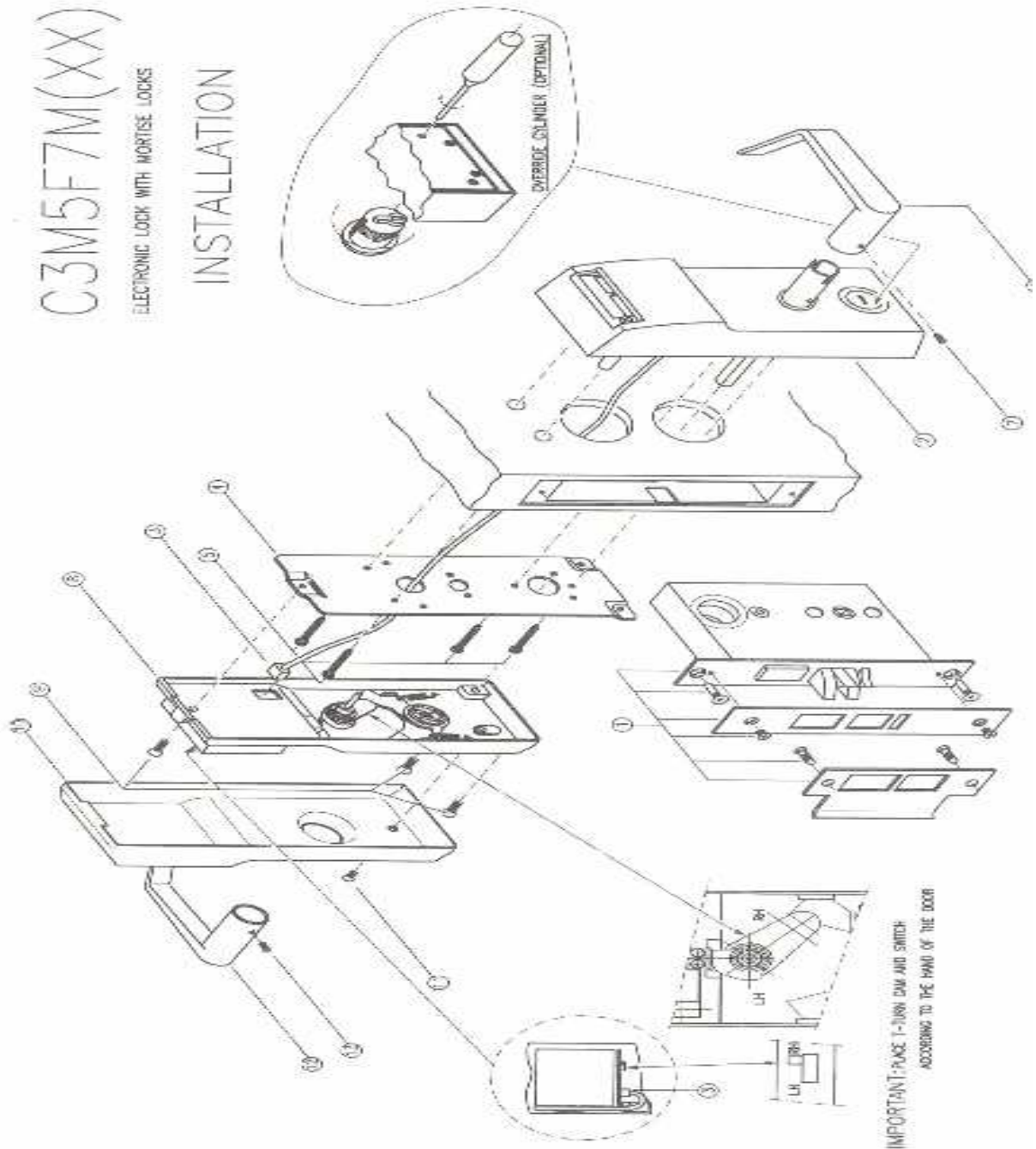
1. Unpack Onity CT lock.
2. Install longer outside handle with long T-10 screw to outside escutcheon.
3. Adjust bevel of lock case to match bevel of door. **MAKE SURE IT IS A COMMERCIAL LOCK CASE - HUB IS NOT SQUARE**.
4. Hand tighten upper and lower bevel screws, these must be very tight.
5. Set lock case in mortise pocket with dead bolt on top.
6. Install lock case with two (2) #12-24 combination screws supplied
7. Tighten to 25-in. lbs..
8. Install strike of proper handing R.H. or L.H. Dead bolt hole on top.
9. In wood frames use #12 Phillips sheet metal screws with a minimum of 1/2“ of screw into stud behind frame. *Not supplied.*
10. In metal frames use #12-24 combination screws supplied.
11. Tighten strike screws to 25 in. lbs..
12. Minimum of 1" clearance behind strike is required for latch and dead bolt in frame.
13. Make sure battery wire is plugged in securely and rubber grommet is in place.
14. Install outside escutcheon feeding battery wire through cylinder hole.
15. Outside escutcheon should have 1/8" of sideways play.
16. File door with a round rasp if no sideways play is present.
17. Feed battery wire through backing plate and start four (4) escutcheon screws. Do not cross thread.
18. Measure from edge of door to outside escutcheon at top and bottom. Measurements must be the same.
19. Measure from edge of door to backing plate at top and bottom. Measurements must be the same.
20. Tighten escutcheon screws to 11 in. lbs..
21. Install face plate with two (2) screws and tighten to 11 in. lbs..
22. Face plate must be flush with edge of door.
23. Push switch and hold privacy actuator arm of inside subassembly towards hinge side of door.
24. Feed battery wire through inside subassembly and install aligning both handle and dead bolt spindles.
25. Install three (3) self-tapping screws in inside subassembly and tighten to 25 in. lbs..
26. Plug battery wire in to connector and route excess wire in channel next to battery box per diagram on template.
27. Initialize lock to proper room number or leave in construction mode and use key card supplied.
28. Test lock using key card.
29. Install inside escutcheon and T-10 screw.
30. Install inside handle and T-10 screw.
31. Test all functions of lock:
    - Inside handle extends dead bolt when turned up.
    - Inside handle retracts dead bolt easily.
    - Latch extends fully when handle is slowly released.
    - Latch retracts fully when handle is turned down.

- Lock extends dead bolt with key card, outside handle up.
- Lock retracts dead bolt and latch with key card, outside handle down.

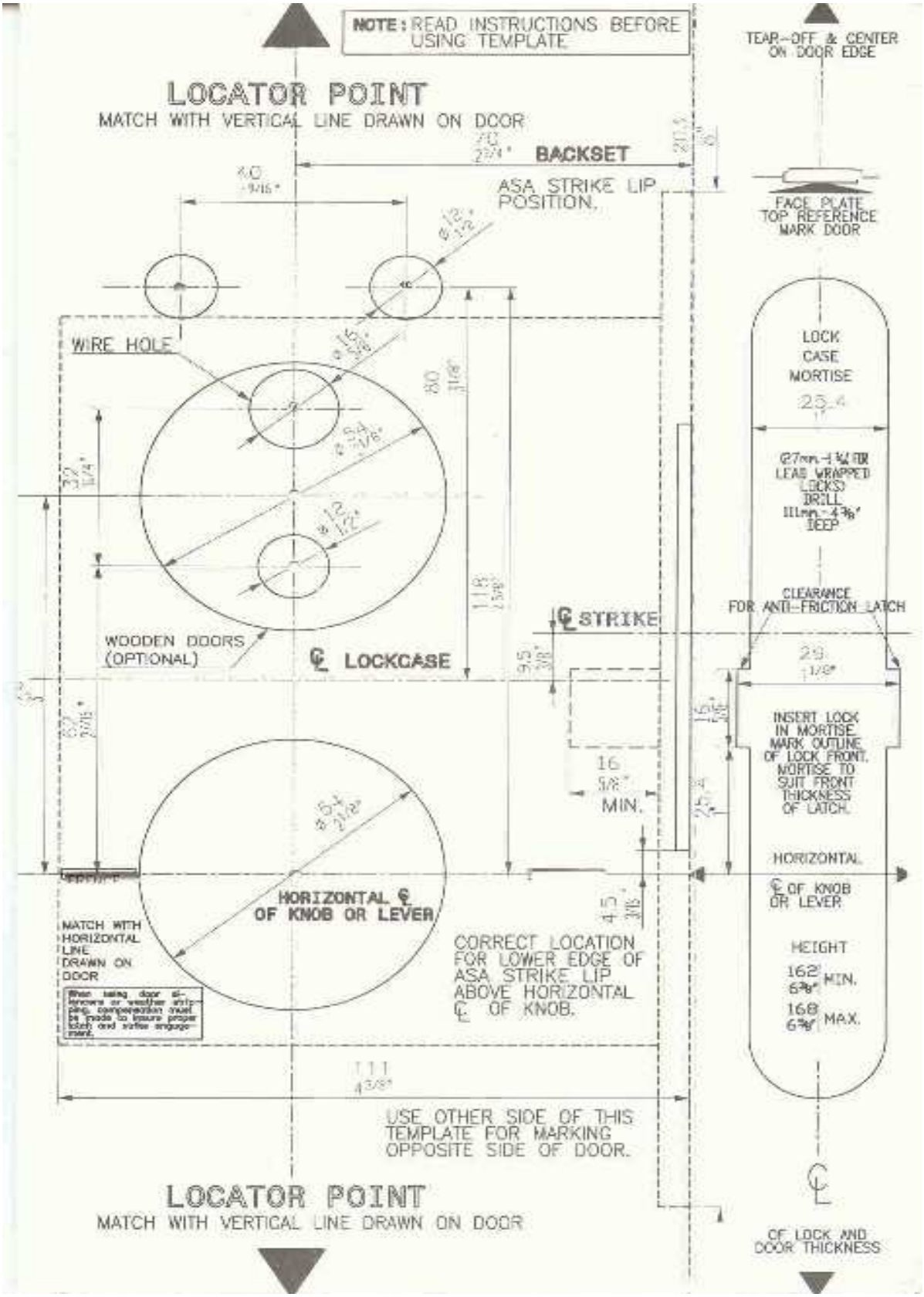
32. Close door and test lock:
    - Inside handle retracts latch and dead bolt easily.
    - Latch extends fully into strike.
    - Dead bolt extends fully and cleanly into strike.
    - Dead latch is not in latch hole.
    - Minimum clearance of 1/16" above and below both latch and dead bolt.
    - File strike if necessary using power file.
    - Square corners with hand file.

33. Wipe off lock, door, strike, and frame.
34. Remove all packing materials and dispose of properly.

CT Mortise Installation Diagram



CT Mortise Template – <u>Not To Scale</u>



CT Mortise Wood Door Existing Cylindrical (WDEC)

Existing 4-7/8" ASA Strike - ANY FRAME

- Place paper template supplied on door and close door or use **Accujig**.
- Slide template up or down until it aligns strike lip on template with strike lip opening on frame.
- Hold template in place and open door.
- Mark face plate top reference.
- Draw a horizontal mark approximately 4-11/16" above face plate mark. This is your mortiser locator mark and face plate template locator mark.
- Use a sharp pencil to mark door. If pencil marks are too light, use a Sharpie fine point marker instead. Make short marks and erase them when finished.

Existing 2-1/4" Strike.

- Ascertain that you will be able to cover all previous prep on door and frame.
- Determine that you have solid material for strike screws and lock case screws. Use paper
- template supplied to accomplish this determination.
- Mark centerline, C/L, of strike on frame.
- Place paper template on door, close door, align mark on frame with C/L of strike on template or use **Accujig**.
- Open door and mark face plate top reference.
- Draw a horizontal mark approximately 4-11/16" above face plate mark. This is your mortise locator mark and face plate template mark.
- Use a sharp pencil to mark door. If pencil marks are too light, use a Sharpie fine point marker instead. Make short marks and erase them when finished.

Aluminum Frame (Using Router)

1. Determine centerline, C/L, of strike in relation to lock set by using paper template supplied.
2. Fasten strike template to frame using self-drilling screws. These should be in the exact location of the #10-24 tab screws.
3. Rout no deeper than the thickness of the aluminum.
4. Remove strike template.
5. Square corners using double cut bastard file.
6. Test fit strike.
7. Enlarge tab screw holes with 13/64" bit and remove burrs from inside of aluminum.
8. Counter sink tab screw holes so #10-24 screw head is flush.
9. Attach 784-B tabs with #10-24 screws supplied.
10. Attach strike with #12-24 combination screws.
11. Re-tighten ALL screws to 25 in. lbs..
12. Be extremely careful when working on aluminum frames that contain electrical wires.
    Strike MUST be flush with metal of frame. Shim with washers if needed.

Aluminum/Steel Frame (Using Die Grinder)

1. Determine centerline, C/L, of strike in relation to lock set by using paper template supplied.
2. Outline strike with sharp pencil.
3. Use 3" cut off wheel for vertical cuts.
4. Use 1-1/2" cut off wheel for horizontal cuts.
5. Cut inside the lines drawn with pencil.
6. Test fit strike.
7. File to fit with double cut bastard file. **NOTE:** Maximum 1/32" gap around strike.
8. Mark holes for #10-24 tab screws.
9. Center punch marks for holes.
10. Drill tab screw holes with 13/64" bit and remove burrs from inside of frame.
11. Counter sink tab screw holes so #10-24 screw head is flush.
12. Attach 784-B tabs with #10-24 screws.
13. Attach strike with #12-24 combination screws supplied.
14. Re-tighten ALL screws to 25 in. lbs..
15. Be extremely careful when working on frames that contain electrical wires.
16. Strike MUST be flush with metal of frame. Shim with washers if needed.

Grout-Filled Metal Frame (MUST Use Die Grinder)

1. Determine centerline, C/L, of strike in relation to lock set by using paper template supplied.
2. Outline strike with sharp pencil - when possible.
3. Use 3" cut off wheel for vertical cuts.
4. Use 1-1/2" cut off wheel for horizontal cuts.
5. Cut inside the lines drawn with pencil.
6. Remove concrete using 1" masonry bit and hammer drill to a minimum depth of 1".
7. Test fit strike.
8. File to fit with double cut bastard file. **NOTE:** Maximum 1/32" gap around strike.
9. Mark holes for #10-24 tab screws.
10. Center punch marks for holes.
11. Drill tab screw holes with 13/64" bit and remove burrs from inside of frame.
12. Counter sink tab screw holes so #10-24 screw head is flush.
13. Attach 784-B tabs with #10-24 screws.
14. Attach strike with #12-24 combination screws supplied.
15. Re-tighten ALL screws to 25 in. lbs..
16. Strike MUST be flush with metal of frame. Shim with washers if needed.

Wood Frames

1. Determine centerline, C/L, of strike in relation to lock set by using paper template supplied.
2. Fasten strike template to frame.
3. Rout out 3/32" of material.
4. Remove template.
5. Square corners using corner chisel and hammer.
6. Place strike into router cut.
7. Mark latch, dead bolt, and screw holes with pencil.
8. Remove strike.
9. Use 1" self-feed wood bit to remove material to a depth of 1". **NOTE:** Be careful NOT to remove material too close to screw holes.
10. Use wood chisel and/or power file to "clean up" the 1" x 2-13/16" rectangular hole.
11. Vacuum debris from opening.
12. Place strike into router cut.
13. Use Vix bit to pre drill screw holes:
    #9 Vix bit in soft wood 9/64" drill bit
    #12 Vix bit in hard wood 11/64" drill bit
14. Install using #12 Phillips sheet metal screws with a minimum of 1/2“ of screw into stud behind frame. Not supplied.
15. Tighten to 25-in. lbs..

CT Mortise Wood Door Existing Cylindrical "H" Lockset (WDECH)

Special Strikes

NOTE: Determine centerline of special strike according to the latch and dead bolt holes of strike.

- Ascertain that you will be able to cover all previous prep on door and frame.
- Determine that you have solid material for strike screws and lock case screws. Use paper template supplied to accomplish this determination.
- Mark centerline of strike on frame.
- Place paper template on door, close door, align C/L of strike on paper template with mark on frame or use **Accujig**
- Mark face plate top reference.
- Draw a horizontal mark approximately 4-11/16" above face plate mark. This is your mortise locator mark and face plate template mark.
- Use a sharp pencil to mark the door. If pencil marks are too light, use a Sharpie fine point marker instead. Make short marks and erase them when finished.

Aluminum Frame (Using Router)

NOTE: A special template is required for each situation. Construct by using 1" x 6" piece of hard wood.

1. Determine centerline of strike in relation to lock set by using paper template supplied.
2. Fasten strike template to frame using self drilling screws. These should be in the exact location as the #10-24 tab screws.
3. Rout no deeper than the thickness of the aluminum.
4. Remove strike template.
5. Square corners using double cut bastard file.
6. Test fit strike.
7. Enlarge tab screw holes with 13/64" bit and remove burrs from inside of aluminum.
8. Counter sink tab screw holes so #10-24 screw head is flush.
9. Attach 784-B tabs with #10-24 screws.
10. Attach strike with #12-24 combination screws supplied.
11. Re-tighten ALL screws to 25 in. lbs..
12. Be extremely careful when working on aluminum frames that contain electrical wires.
13. Strike MUST be flush with metal of frame. Shim with washers if needed.

Aluminum/Steel Frame (Using Die Grinder)

1. Determine centerline of strike in relation to lock set by using paper template supplied.
2. Outline strike with sharp pencil – when possible.
3. Use 3” cut off wheel for vertical cuts.
4. Use 1-1/2” cut off wheel for horizontal cuts.
5. Cut inside the lines drawn with pencil.
6. Test fit strike.
7. File to fit with double cut bastard file. **NOTE:** Maximum 1/32” gap around strike.
8. Mark holes for #10-24 tab screws.
9. Center punch marks for holes.
10. Drill tab screw holes with 13/64” bit and remove burrs from inside of frame.
11. Counter sink tab screw holes so #10-24 screw head is flush.
12. Attach 784-B tabs with #10-24 screws.
13. Attach strike with #12-24 combination screws supplied.
14. Re-tighten ALL screws to 25 in. lbs..
15. Be extremely careful when working on frames that contain electrical wires.
16. Strike MUST be flush with metal of frame. Shim with washers if needed.

Grout-Filled Metal Frame (MUST Use Die Grinder)

1. Determine centerline of strike in relation to lock set by using paper template supplied.
2. Outline strike with sharp pencil – when possible.
3. Use 3” cut off wheel for vertical cuts.
4. Use 1-1/2” cut off wheel for horizontal cuts.
5. Cut inside the lines drawn with pencil.
6. Remove concrete using 1” masonry bit and hammer drill to a minimum depth of 1”.
7. Test fit strike.
8. File to fit with double cut bastard file. **NOTE:** Maximum 1/32” gap around strike.
9. Mark holes for #10-24 tab screws.
10. Center punch marks for holes.
11. Drill tab screw holes with 13/64” bit and remove burrs from inside of frame.
12. Counter sink tab screw holes so #10-24 screw head is flush.
13. Attach 784-B tabs with #10-24 screws.
14. Attach strike with #12-24 combination screws supplied.
15. Re-tighten ALL screws to 25 in. lbs..
16. Strike MUST be flush with metal of frame. Shim with washers if needed.

Wood Frames

NOTE: A special template is required for each situation. Construct by using 1” x 6” piece of hard wood.

1. Determine centerline of strike in relation to lock set by using paper template supplied.
2. Fasten strike template to frame.
3. Rout out 3/32" of material.
4. Remove template.
5. Square corners using corner chisel and hammer.
6. Place strike into router cut.
7. Mark latch, dead bolt, and screw holes with pencil.
8. Remove strike.
9. Use 1" self-feed wood bit to remove material to a depth of 1". **NOTE:** Be careful NOT to remove material too close to screw holes.
10. Use wood chisel and/or power file to "clean up" the 1" x 2-13/16" rectangular hole.
11. Vacuum debris from opening.
12. Place strike into router cut.
13. Use Vix bit to pre-drill screw holes:
    # 9 Vix bit in soft wood 9/64"
    # 12 Vix bit in hard wood 11/64"
14. Install using #12 Phillips sheet metal screws with a minimum of 1/2 “ of screw into stud behind frame. *Not supplied.*
15. Tighten to 25-in. lbs.

CT Mortise Lockset

Wood Door Prep

1. Position mortiser with vacuum attachment or **Accujig** on door.
2. For proper position of mortiser see "Location of New Lockset" section.
3. Watch clearance between 1" mortise bit and brushes on vacuum attachment.
4. Place magnetic sign material over holes on Accubore for both sides.
5. Plug in extension cord from your cart into room outlet.
6. Plug in mortiser and attach vacuum hose.
7. Power on shop vac on bottom of cart.
8. Power on mortiser.
9. Mortise pocket should be 6-1/2" long and 4-3/8" deep.
10. Power off mortiser and vacuum.
11. Unplug mortiser and remove vacuum hose.
12. Remove magnetic sign material.
13. Drill two (2) 1/2" holes on the top. **NOTE:** Do NOT drill all the way through.
14. Drill one side, then the other.
15. Drill two (2) 2-1/8" holes. **NOTE:** Do NOT drill all the way through.
16. Drill one side, then the other.
17. Vacuum debris off mortiser and Accubore.
18. Position magnetic sign material over holes of Accubore.
19. Remove mortiser and position on next door.
20. Position lock face template on door using same mark.
21. Rout to a depth of 15/64".
22. Remove template.
23. Square four (4) corners with corner chisel.
24. Vacuum mortise pocket and remove all debris.
25. Wipe off door.
26. Roll up drop cloth.

CT Mortise Lockset Wood Door Existing Mortise (WDEM)

4-7/8" Strike - 1-1/4" x 8" Standard Front

1. Position mortiser with Accubore or **Accujig** and vacuum attachment on door.
2. For proper position of mortiser, measure up approximately 4-11/32" from top of face plate.
3. Plug in extension cord from your cart into room outlet.
4. Existing mortise pocket MUST be 6-1/2" long x 4-3/8" deep.
5. Drill two (2) 1/2" holes on the top. **NOTE:** Do NOT drill all the way through.
6. Drill one side, then the other.
7. Drill the two (2) 2-1/ 8” holes. **NOTE:** Do NOT drill all the through.
8. Drill one side, then the other.
9. Vacuum debris off mortiser and Accubore.
10. Remove mortiser and position on next door.
11. Face plate pocket MUST be a depth of 15/64".
12. Vacuum mortise pocket and remove all debris.
13. Wipe off door.
14. Roll up drop cloth.

Wood Door Installation

1. Unpack Onity CT lock.
2. Install longer outside handle with long T-10 screw to outside escutcheon.
3. Adjust bevel of lock case to match bevel of door. **MAKE SURE IT IS A COMMERCIAL LOCK CASE - HUB IS NOT SQUARE**.
4. Hand tighten upper and lower bevel screws, these must be very tight.
5. Set lock case in mortise pocket with dead bolt on top.
6. Hold lock case up in pocket.
7. Use Vix Bit to pre drill screw holes
   #9 Vix Bit in soft wood 9/64” drill bit
   #12 Vix Bit in hard wood 11/64” drill bit
8. Install with #10 x 1-1/4 ” Phillips head sheet metal screws. Not supplied.
9. Tighten to 25 in. lbs..
10. Install strike of proper handing, R.H. or L.H.. Dead bolt hole on top.
11. In wood frames use #12 Phillips sheet metal screws with a minimum of 1/2” of screw into stud behind frame. *Not Supplied.*
12. In metal frames use #12-24 combination screws provided.
13. Tighten strike screws to 25 in. lbs..
14. Minimum of 1" clearance behind strike is required for latch and dead bolt in frame.
15. Make sure battery wire is plugged in securely and rubber grommet is in place.
16. Install outside escutcheon feeding battery wire through cylinder hole.
17. Outside escutcheon should have 1/8" of sideways play.
18. File door with a round rasp if no sideways play is present.
19. Feed battery wire through backing plate and start four (4) escutcheon screws.

20. Measure from edge of door to outside escutcheon at top and bottom. Measurements must be the same.
21. Measure from edge of door to backing plate at top and bottom. Measurements must be the same.
22. Tighten escutcheon screws to 11 in. lbs..
23. Install face plate with two (2) screws and tighten to 11 in. lbs..
24. Face plate must be flush with edge of door.
25. Push switch and hold privacy actuator arm of inside subassembly towards hinge side of door.
26. Feed battery wire through inside subassembly and install aligning both handle and dead bolt spindles.
27. Install three (3) self-tapping screws in inside subassembly and tighten to 25 in. lbs..
28. Plug battery wire in to connector and route excess wire in channel next to battery box per diagram on template.
29. Initialize lock to proper room number or leave in construction mode and use key card supplied.
30. Test lock using key card.
31. Install inside escutcheon and T-10 screw.
32. Install inside handle and T-10 screw.
33. Test all functions of lock:
    - Inside handle extends dead bolt when turned up.
    - Inside handle retracts dead bolt easily.
    - Latch extends fully when handle is slowly released.
    - Latch retracts fully when handle is turned down.
    - Lock extends dead bolt with key card, outside handle up.
    - Lock retracts dead bolt and latch with key card, outside handle down.
34. Close door and test lock:
    - Inside handle retracts latch and dead bolt easily.
    - Latch extends fully into strike.
    - Dead bolt extends fully and cleanly into strike.
    - Dead latch is not in latch hole.
    - Minimum clearance of 1/16" above and below both latch and dead bolt.
    - File strike if necessary using power file.
    - Square corners with hand file.
35. Wipe off lock, door, strike, and frame.

CT Mortise Metal Door Existing Cylindrical Lockset (MDEC)

Existing 4-7/8" ASA Strike - ANY FRAME

1. Place paper template supplied on door and close door or use **Accujig**.
2. Slide template up or down until it aligns strike lip on template with strike lip opening on frame.
3. Hold template in place and open door.
4. Mark face plate top reference.
5. Draw a horizontal mark approximately 4-11/16" above face plate mark. This is your mortiser locator mark and face plate template locator mark.
6. Use a sharp pencil to mark door. If pencil marks are too light, use a Sharpie fine point marker instead. Make short marks and erase them when finished.

Existing 2-1/4" Strike.

- Ascertain that you will be able to cover all previous prep on door and frame.
- Determine that you have solid material for strike screws and lock case screws. Use paper template supplied to accomplish this determination.
- Mark centerline, C/L, of strike on frame.
- Place paper template on door, close door, align mark on frame with C/L of strike on template.
- Open door and mark face plate top reference.Draw a horizontal mark approximately 4-11/16" above face plate mark.
- This is your mortise locator mark and face plate template mark.
- Use a sharp pencil to mark door. If pencil marks are too light, use a Sharpie fine point marker instead. Make short marks and erase them when finished.

Aluminum Frame (Using Router)

1. Determine centerline, C/L, of strike in relation to lock set by using paper template supplied.
2. Fasten strike template to frame using self-drilling screws. These should be in the exact location of the #10-24 tab screws.
3. Rout no deeper than the thickness of the aluminum.
4. Remove strike template.
5. Square corners using double cut bastard file.
6. Test fit strike.
7. Enlarge tab screw holes with 13/64" bit and remove burrs from inside of aluminum.
8. Counter sink tab screw holes so #10-24 screw head is flush.
9. Attach 784-B tabs with #10-24 screws.
10. Attach strike with #12-24 combination screws supplied.
11. Re-tighten ALL screws to 25 in. lbs..
12. Be extremely careful when working on aluminum frames that contain electrical wires.
13. Strike MUST be flush with metal of frame. Shim with washers if needed.

Aluminum/Steel Frame (Using Die Grinder)

1. Determine centerline, C/L, of strike in relation to lock set by using paper template supplied.
2. Outline strike with sharp pencil.
3. Use 3" cut off wheel for vertical cuts.
4. Use 1-1/2" cut off wheel for horizontal cuts.
5. Cut inside the lines drawn with pencil.
6. Test fit strike.
7. File to fit with double cut bastard file. **NOTE:** Maximum 1/32" gap around strike.
8. Mark holes for #10-24 tab screws.
9. Center punch marks for holes.
10. Drill tab screw holes with 13/64" bit and remove burrs from inside of frame.
11. Counter sink tab screw holes so #10-24 screw head is flush.
12. Attach 784-B tabs with #10-24 screws.
13. Attach strike with #12-24 combination screws supplied.
14. Re-tighten ALL screws to 25-in. lbs..
15. Be extremely careful when working on aluminum frames that contain electrical wires.
16. Strike MUST be flush with metal of frame. Shim with washers if needed.

Grout-Filled Metal Frame (MUST Use Die Grinder)

1. Determine centerline of strike in relation to lock set by using paper template supplied.
2. Outline strike with sharp pencil – when possible.
3. Use 3” cut off wheel for vertical cuts.
4. Use 1-1/2” cut off wheel for horizontal cuts.
5. Cut inside the lines drawn with pencil.
6. Remove concrete using 1” masonry bit and hammer drill to a minimum depth of 1”.
7. Test fit strike.
8. File to fit with double cut bastard file. **NOTE:** Maximum 1/32” gap around strike.
9. Mark holes for #10-24 tab screws.
10. Center punch marks for holes.
11. Drill tab screw holes with 13/64” bit and remove burrs from inside of frame.
12. Counter sink tab screw holes so #10-24 screw head is flush.
13. Attach 784-B tabs with #10-24 screws.
14. Attach strike with #12-24 combination screws supplied.
15. Re-tighten ALL screws to 25 in. lbs..
16. Strike MUST be flush with metal of frame. Shim with washers if needed.

Wood Frames

1. Determine centerline, C/L, of strike in relation to lock set by using paper template supplied.
2. Fasten strike template to frame.
3. Rout out 3/32" of material.
4. Remove template.
5. Square corners using corner chisel and hammer.
6. Place strike into router cut.
7. Mark latch, dead bolt, and screw holes with pencil.
8. Remove strike.
9. Use 1" self-feed wood bit to remove material to a depth of 1". **NOTE:** Be careful NOT to remove material too close to screw holes.
10. Use wood chisel and/or power file to "clean up" the 1" x 2-13/16" rectangular hole.
11. Vacuum debris from opening.
12. Place strike into router cut.
13. Use Vix bit to pre drill screw holes:
14. #9 Vix bit in soft wood 9/64" drill bit
15. #12 Vix bit in hard wood 11/64" drill bit
16. Install using #12 Phillips sheet metal screws with a minimum of 1/2“ of screw into stud behind frame. *Not supplied*.
17. Tighten to 25 in. lbs..

CT Metal Door Existing Cylindrical “H” Lockset (MDECH)

Special Strikes

NOTE: Determine centerline, C/L, of special strike according to latch and dead bolt holes of strike.

- Ascertain that you will be able to cover all previous prep on door and frame.
- Determine that you have solid material for strike screws and lock case screws. Use paper template supplied to accomplish this determination.
- Mark centerline, C/L, of strike on frame.
- Place paper template on door, close door, align C/L of strike on paper template with mark on frame.
- Mark face plate top reference.
- Draw a horizontal mark approximately 4-11/16" above face plate mark. This is your mortise locator mark and face plate template mark.
- Use a sharp pencil to mark the door. If pencil marks are too light use a Sharpie fine point marker instead. Make short marks and erase them when finished.

Aluminum Frame (Using Router)

NOTE: A special template is required for each situation. Construct by using 1" x 6" piece of hard wood.

1. Determine centerline of strike in relation to lock set by using paper template supplied.
2. Fasten strike template to frame using self drilling screws. These should be in the exact location as the #10-24 tab screws.
3. Rout no deeper than the thickness of the aluminum.
4. Remove strike template.
5. Square corners using double cut bastard file.
6. Test fit strike.
7. Enlarge tab screw holes with 13/64” bit and remove burrs from inside of aluminum.
8. Counter sink tab screw holes so #10-24 screw head is flush.
9. Attach 784-B tabs with #10-24 screws.
10. Attach strike with #12-24 combination screws supplied.
11. Re-tighten ALL screws to 25 in. lbs..
12. Be extremely careful when working on aluminum frame that contain electrical wires.
13. Strike MUST be flush with metal of frame. Shim with washers if needed.

Aluminum/Steel Frame (Using Die Grinder)

1. Determine centerline of strike in relation to lock set by using paper template supplied.
2. Outline strike with sharp pencil when possible.
3. Use 3" cut off wheel for vertical cuts.
4. Use 1-1/2" cut off wheel for horizontal cuts.
5. Cut inside the lines drawn with pencil.
6. Test fit strike.
7. File to fit with double cut bastard file. **NOTE:** Maximum 1/32" gap around strike.
8. Mark holes for #10-24 tab screws.
9. Center punch marks for holes.
10. Drill tab screw holes with 13/64" bit and remove burrs from inside of frame.
11. Counter sink tab screw holes so #10-24 screw head is flush.
12. Attach 784-B tabs with #10-24 screws.
13. Attach strike with #12-24 combination screws supplied.
14. Re-tighten ALL screws to 25 in. lbs..
15. Be extremely careful when working on frames that contain electrical wires.
16. Strike MUST be flush with metal of frame. Shim with washers if needed.
17. Do NOT cut or mark any other portion of frame with cut off wheels.

Grout-Filled Metal Frame (Must Use Die Grinder)

1. Determine centerline of strike in relation to lock set by using paper template supplied.
2. Outline strike with sharp pencil - when possible.
3. Use 3" cut off wheel for vertical cuts.
4. Use 1-1/2" cut off wheel for horizontal cuts.
5. Cut inside the lines drawn with pencil.
6. Remove concrete using 1" masonry bit and hammer drill to a minimum depth of 1".
7. Test fit strike.
8. File to fit with double cut bastard file. **NOTE:** Maximum 1/32" gap around strike.
9. Mark holes for #10-24 tab screws.
10. Center punch marks for holes.
11. Drill tab screw holes with 13/64" bit and remove burrs from inside of frame.
12. Counter sink tab screw holes so #10-24 screw head is flush.
13. Attach 784-B tabs with #10-24 screws.
14. Attach strike with #12-24 combination screws supplied.
15. Re-tighten ALL screws to 25 in. lbs..
16. Strike MUST be flush with metal of frame. Shim with washers if needed.

Wood Frames

NOTE: A special template is required for each situation. Construct by using 1” x 6” piece of hard wood.

1. Determine centerline, C/L, of strike in relation to lock set by using paper template supplied.
2. Fasten strike template to frame.
3. Rout out 3/32” of material.
4. Remove template.
5. Square corners using corner chisel and hammer.
6. Place strike into router cut.
7. Mark latch, dead bolt, and screw holes with pencil.
8. Remove strike.
9. Use 1” self-feed wood bit to remove material to a depth of 1”. **NOTE:** Be careful NOT to remove material too close to screw holes.
10. Use wood chisel and/or power file to “clean up” the 1” x 2-13/16” rectangular hole.
11. Vacuum debris from opening.
12. Place strike into router cut.
13. Use Vix bit to pre-drill screw holes:
    # 9 Vix bit in soft wood 9/64”
    # 12 Vix bit in hard wood 11/64”
14. Install using #12 Phillips sheet metal screws with a minimum of 1/2“ of screw into stud behind frame. *Not supplied.*
15. Tighten to 25 in. lbs..

CT Mortise Lockset

Metal Door Prep

1. Remove existing cage.
2. Trace the face plate using the face plate top reference mark.
3. Thin metal doors use a router and lock face template. Square corners with a flat file.
4. Thicker metal doors use a jig saw or die grinder.
5. Use hand file to final fit face plate and to remove burrs. **NOTE:** Maximum 1/32” clearance.
6. Position mortiser with Accubore or **Accujig** on door.
7. Drill two (2) 1/2” holes on top. **NOTE:** Do NOT drill all the way through.
8. Drill one side, then the other.
9. Drill the 2-1/ 8” holes. **NOTE:** Do NOT drill all the through.
10. Drill one side, then the other.
11. Remove the mortiser and position on next door.
12. Remove debris from mortise pocket.
13. Determine which tabs to use:
14. #3437 – thin metal
15. #3436 – thick metal
16. Drill 9/64” rivet hole halfway down each leg of tab.
17. Attach tabs to lock case using #12-24 combination screws supplied.
18. Position lock case on outside of door and mark the four (4) rivet holes.
19. Center punch and drill four (4) holes with 9/64” bit and remove burrs from inside door.
20. Rivet lock case and tabs with long steel rivets supplied.
21. All 1-3/8” wide hollow metal doors require lock case stabilizers.
22. NEVER use #784 tabs and screws in doors.
23. Roll up drop cloth.

Metal Door Existing Mortise (MDEM)

4-7/8" Strike - 1-1/4" x 8" Standard Front

1. Position mortiser with Accubore and vacuum attachment or **Accujig** on door.
2. For proper position of mortiser, measure up approximately 4-11/32" from top of face plate.
3. Plug in extension cord from your cart into room outlet.
4. Existing mortise pocket MUST be 6-1/2" long and 4-3/8" deep. **NOTE:** Remove cage if needed.
5. Drill two (2) 1/2" holes on the top. **NOTE:** Do NOT drill all the way through.
6. Drill one side, then the other.
7. Drill the 2-1/ 8” holes. **NOTE:** Do NOT drill all the through.
8. Drill one side, then the other.
9. Vacuum debris off mortiser and Accubore.
10. Remove mortiser and position on next door.
11. Drill Existing tabs with 11/64” drill bit and tap to #12-24.
12. Remove all debris from inside of door.
13. Wipe off door.
14. Roll up drop cloth.

Metal Door Installation

1. Unpack Onity CT lock.
2. Install longer outside handle with long T-10 screw to outside escutcheon
3. Adjust bevel of lock case to match bevel of door. **MAKE SURE IT IS A COMMERCIAL LOCK CASE - HUB IS NOT SQUARE** .
4. Hand tighten upper and lower bevel screws, these must be very tight.
5. Set lock case in mortise pocket with dead bolt on top.
6. Install lock case with two (2) #12-24 combination screws supplied
7. Tighten to 25 in. lbs..
8. Install strike of proper handing R.H. or L.H. Dead bolt hole on top.
9. In wood frames use #12 Phillips sheet metal screws with a minimum of 1/2“ of screw in to stud behind frame. *Not supplied*.
10. In metal frames use #12-24 combination screws supplied.
11. Tighten strike screws to 25 in. lbs..
12. Minimum of 1" clearance behind strike is required for latch and dead bolt in frame.
13. Make sure battery wire is plugged in securely and rubber grommet is in place.
14. Install outside escutcheon feeding battery wire through cylinder hole.
15. Outside escutcheon should have 1/8" of sideways play.
16. File door with a round rasp if no sideways play is present.

17. Feed battery wire through backing plate and start four (4) escutcheon screws. Do not cross thread.
18. Measure from edge of door to outside escutcheon at top and bottom. Measurements must be the same.
19. Measure from edge of door to backing plate at top and bottom. Measurements must be the same.
20. Tighten escutcheon screws to 11 in. lbs..
21. Install face plate with two (2) screws and tighten to 11 in. lbs..
22. Face plate must be flush with edge of door.
23. Push switch and hold privacy actuator arm of inside subassembly towards hinge side of door.
24. Feed battery wire through inside subassembly and install aligning both handle and dead bolt spindles.
25. Install three (3) self-tapping screws in inside subassembly and tighten to 25 in. lbs..
26. Plug battery wire in to connector and route excess wire in channel next to battery box per diagram on template.
27. Initialize lock to proper room number or leave in construction mode and use key card supplied.
28. Test lock using key card.
29. Install inside escutcheon and T-10 screw.
30. Install inside handle and T-10 screw.
31. Test all functions of lock:
    - Inside handle extends dead bolt when turned up.
    - Inside handle retracts dead bolt easily.
    - Latch extends fully when handle is slowly released.

- Latch retracts fully when handle is turned down.
- Lock extends dead bolt with key card, outside handle up.
- Lock retracts dead bolt and latch with key card, outside handle down.

32. Close door and test lock:
    - Inside handle retracts latch and dead bolt easily.
    - Latch extends fully into strike.
    - Dead bolt extends fully and cleanly into strike.
    - Dead latch is not in latch hole.
    - Minimum clearance of 1/16" above and below both latch and dead bolt.
    - File strike if necessary using power file.
    - Square corners with hand file.
33. Wipe off lock, door, strike, and frame.
34. Remove all packing materials and dispose of properly.

CT Panic Interface – Wood or Metal

- The backset will be different for all doors depending on the strike and frame.
- The height will be determined by existing hardware.
- Make sure panic bar is wide enough for door.
- Door must have a mortise pocket for battery pack.
- Try to cover all existing holes and fabricate cover plates if needed.
- All locks must have weather gasket.
- All locks must have lithium batteries due to heavy lock use.
- Make sure handing of panic device is correct.

1. Remove all old hardware.
2. Unpack Onity lock on cart.
3. Install outside handle using T-10 screw supplied.
4. Make sure escutcheon has weather gasket.
   Note: Make sure all holes in back of outside escutcheon are covered.
5. Determine vertical C/L using paper template supplied.
6. Determine backset C/L using strike and type of frame.
   Note: Make sure the panic device will clear the strike by a min. 1/16”.
7. Mark door for holes to be drilled using paper template supplied.
8. Cut push bar to correct length if needed.
9. Mark hole for hinge side of door using device and torpedo level.
   Note: Make sure the panic bar is level.
10. Center punch all holes to be drilled.
    Note: The four- 4, 1/4” holes are drilled on the inside side only.
11. Drill the four-4, 1/2” holes. Do not drill all the way through.
12. Drill one side then the other.
13. Drill the two-2, 1” holes. Do not drill all the way through.
14. Drill one side then the other.
    Note: The upper 1” hole must only be drilled on the outside of the door. This is the power wire hole.
15. Drill the four-4, 1/4“ holes. **Inside of door only.** Do not drill all the way through.
16. Drill the 9/32 “ hole on hinge side of door for the sex bolt.
17. Drill outside hole with 3/8 “ bit for the sex bolt. Do not drill all the way through.
18. Install outside escutcheon and backing plate using four-4 machine screws supplied feeding power wire out the mortise pocket.
19. Measure from edge of door to top and bottom of escutcheon. Measurement must be the same.
20. Measure from edge of door to top and bottom of inside backing plate. Measurement must be the same.
21. Tighten escutcheon screws to 11 in lb. in a **X** pattern.
22. Feed power wire through battery box.
23. Plug wire into battery pack.
24. Install battery box, battery pack, and batter cover with screws supplied.
    Note: Excess wire should be in battery box not inside door.
25. Make sure handing of panic device is correct.

26. Install panic device making sure spindle is in correct position.
27. Support panic bar while starting four-4 device screws.
28. Install sex bolt in end of panic bar.
29. Using torpedo level, make sure panic bar is level.
30. Tighten sex bolt to 25 in lb.
31. Tighten four-4 device screws to 25 in lb.
32. Install end cap in bar using screws supplied.
33. Install device cover using screws supplied.
34. Close door and position strike.
35. Mark and drill mounting holes for strike.
36. Tap mounting holes.
37. Install strike.
38. Test Lock
    - Handle retracts latch fully when pushed down.
    - Handle retracts latch fully when pulled up.
    - Latch extends fully.
    - Latch retracts fully when bar is pushed.
    - Latch extends fully when bar is released.
42. Open door and allow to close.
    - Door latches completely.
    - A little play is present when door is latched.

    Note: Adjust strike to achieve correct amount of play.

CT Panic Interface Instruction Sheet

18 SERIES RIM PANIC & FIRE EXIT DEVICES WITH ONITY TRIM (INTEGRA OR HT SERIES)

MONARCH.

(F-)18-R x ONITY
SP890051-3
Date: 9-12-02

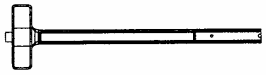
INSTALLATION INSTRUCTIONS

1 PARTS CHECK

1) MAKE SURE THE CORRECT DEVICE IS BEING USED, AND IS THE CORRECT HANDING (SEE PAGE #8 FOR REVERSING INSTRUCTIONS.)
2) MAKE SURE ALL NEEDED PARTS ARE ON HAND.
3) MAKE SURE ONITY INTEGRA OR HT SERIES TRIM HAS BEEN PROVIDED.

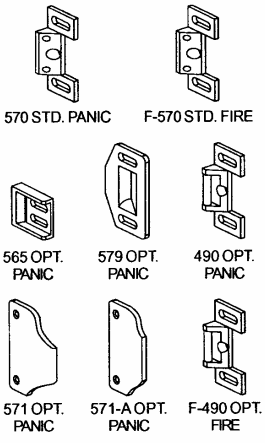
NOTE: LIST DOES NOT REFLECT ALL POSSIBLE APPLICATIONS.

1) (F-)18-R DEVICE

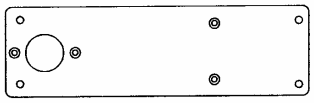


NOTE: SEE PAGE 8 REGARDING HANDING

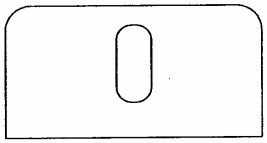
2) STRIKE



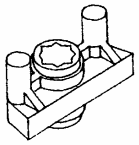
3) DEVICE MOUNTING PLATE



4) ENDCAP MOUNTING PLATE



5) KNOB HUB
P/N EX9497
(INSIDE DEVICE HEAD)



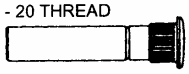
6) ONITY MOUNTING SCREWS
M4 x 30mm FPHMS (4 QTY.)

4) SCREW PACK FOR EXIT DEVICE

MOUNTING BRACKET (1 QTY.)

DOGGING KEY (1 QTY.) (PANIC ONLY)

SEX BOLT – 1/4" - 20 THREAD (1 QTY.)



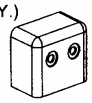
1/4" - 20 X 3/4" TPHMS (1 QTY.)

#10-24 x 1" PPHMS (4 QTY.)

#10 - 24 X 3/4" FPHMS (FIRE RATED DEVICES) (3 QTY.)

#10x1-1/4" FPHSMS (PANIC DEVICES) (3 QTY.)

CHANNEL END CAP (1 QTY.)



#10-24 X 3/8" PPHMS w/NYLON PATCH (2 QTY)

PAGE 1

IR Security & Safety®

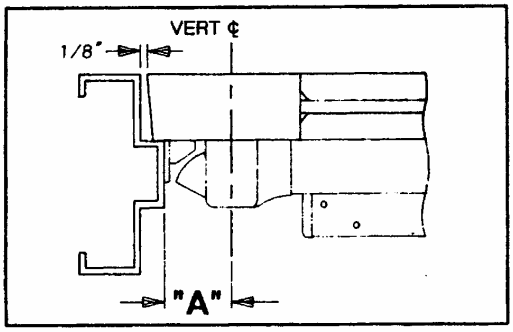
2 DOOR LAYOUT

(NOTE: FOR FACTORY PREPARED DOORS, VERIFY LAYOUT.)

1) DOOR MUST BE FITTED AND HUNG PROPERLY BEFORE PROCEEDING.
2) MULLION, IF BEING USED, SHOULD BE INSTALLED.
3) MARK VERTICAL ℄ AND DEVICE REF.℄ ON DOOR AND FRAME. (SEE FIGURES & CHARTS BELOW)

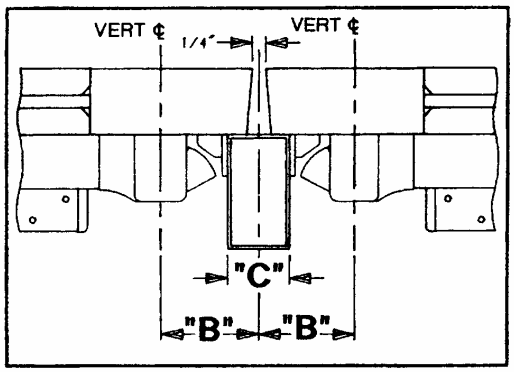
A) VERTICAL ℄: SINGLE DOOR APPLICATION

STRIKE	INSTALLED	MINIMUM STILE	"A" BACKSET
570	SURFACE	4"	2-1/4"
565	SURFACE	3-3/4"	2"
565	RECESSED	3-1/4"	1-1/2"
579	SURFACE	3-1/2"	1-5/8"
490	SURFACE	4"	2-1/4"
F-570	SURFACE	4"	2-1/4"
F-490	SURFACE	4"	2-1/4"

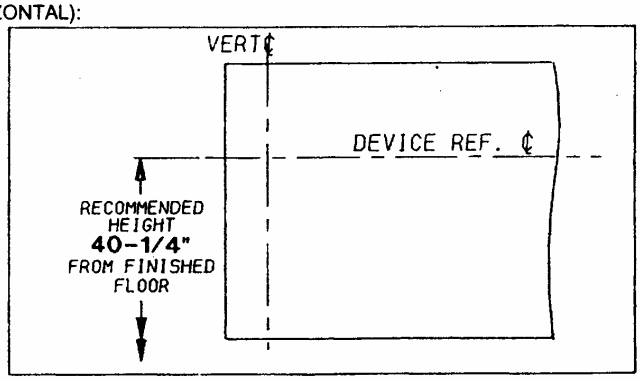


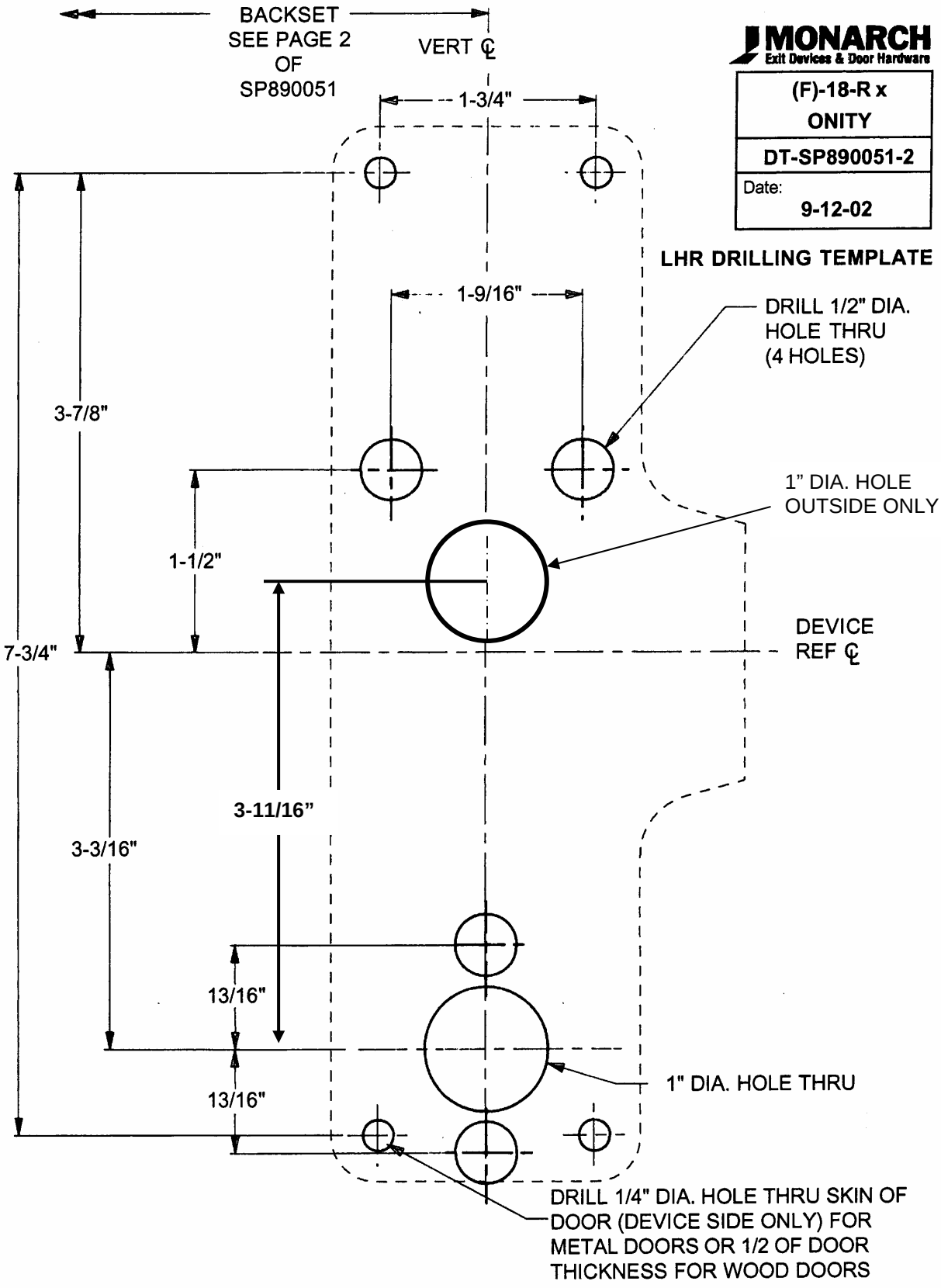
B) VERTICAL℄ : DOUBLE DOOR APPLICATION WITH MULLION

STRIKE	INSTALLED WITH	MINIMUM STILE	"B" BACKSET	"C" WIDTH
570	2923 MULLION	4"	3"	1-1/2"
570	4023 MULLION	4-1/4"	3-1/4"	2"
565	2923 MULLION	3-3/4"	2-3/4"	1-1/2"
565	4023 MULLION	4"	3"	2"
579	2923 MULLION	3-3/8"	2-3/8"	1-1/2"
579	4023 MULLION	3-5/8"	2-5/8"	2"
490	2923 MULLION	4"	3"	1-1/2"
490	4023 MULLION	4-1/4"	3-1/4"	2"
F-570	F-4023 MULLION	4-1/4"	3-1/4"	2"
F-490	F-4023 MULLION	4-1/4"	3-1/4"	2"



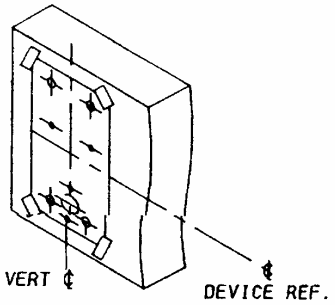
B) DEVICE REF. ℄ (HORIZONTAL):




BACKSET
SEE PAGE 2
OF
SP890051
VERT ℄
1-3/4"
1-9/16"
3-7/8"
1-1/2"
7-3/4"
3-11/16"
3-3/16"
13/16"
13/16"
DRILL 1/2" DIA.
HOLE THRU
(4 HOLES)
1" DIA. HOLE
OUTSIDE ONLY
DEVICE
REF ℄
1" DIA. HOLE THRU
DRILL 1/4" DIA. HOLE THRU SKIN OF
DOOR (DEVICE SIDE ONLY) FOR
METAL DOORS OR 1/2 OF DOOR
THICKNESS FOR WOOD DOORS
MONARCH
Exit Devices & Door Hardware
(F)-18-R x
ONITY
DT-SP890051-2
Date:
9-12-02
LHR DRILLING TEMPLATE

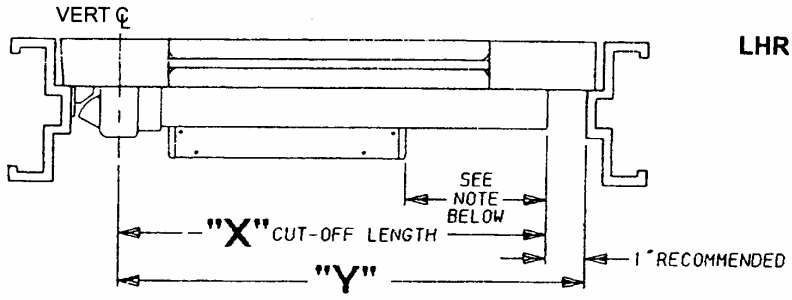
3 DOOR & HARDWARE PREPARATION

1) CHOOSE CORRECT DRILLING TEMPLATE DT-SP890051.
2) TAPE DRILLING TEMPLATE ON DOOR USING VERTICAL ℄ AND DEVICE REF. ℄ (REFER TO 2). CENTERPUNCH AND DRILL HOLES FOR DEVICE AND ONITY TRIM MOUNTING. AFTER DRILLING HOLES, REMOVE DRILLING TEMPLATE.



LHR SHOWN

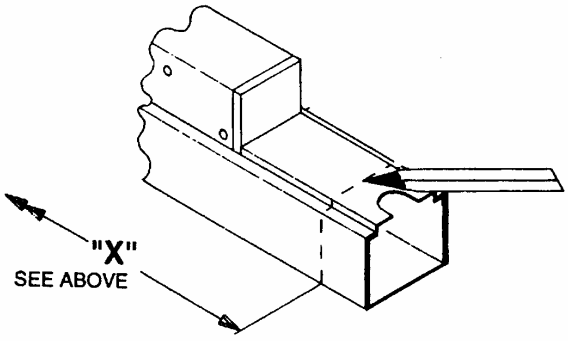
3) DETERMINE DEVICE LENGTH.
   A. LOCATE VERTICAL C ON DOOR.
   B. MEASURE DISTANCE "Y" FROM VERT. ℄ TO STOP SURFACE ON HINGE SIDE.
   C. SUBTRACT 1" FROM RECOMMENDED CLEARANCE.
   D. LENGTH OF DEVICE FROM VERT. ℄ TO CUT-OFF LENGTH.



LHR SHOWN

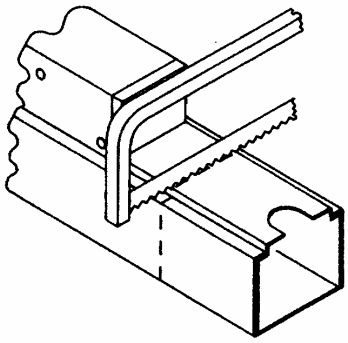
NOTE: FOR STANDARD DOGGING: 3" MIN.
FOR CYLINDER DOGGING: 5" MIN.
FOR EXIT ALARM: 7-1/2" MIN.

4) IF DEVICE IS LONGER THAN "X", CUT THE DEVICE.
   A) MARK DEVICE CHANNEL AND COVER TO LENGTH "X".



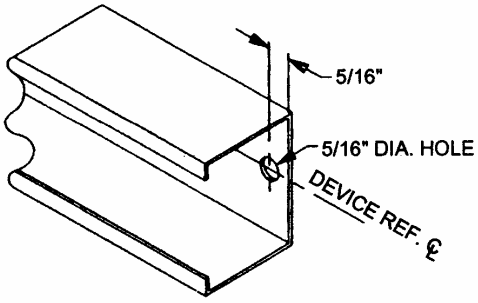
NOTE: BE SURE CHANNEL COVER IS PUSHED SNUG TO TOUCHBAR PRIOR TO MARKING OR CUTTING TO SIZE.

B) CUT BOTH CHANNEL AND CHANNEL COVER TO MARKED DIMENSION AND REMOVE BURRS.

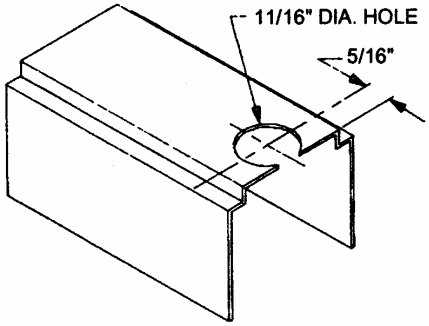


NOTE: FACTORY RECOMMENDS SAWING RATHER THAN GRIND CUT TO SIZE. GRINDING CAN DAMAGE THE FINISH OF THE DEVICE AND SAWING RESULTS IN LESS DAMAGE TO THE DEVICES'S FINISH.

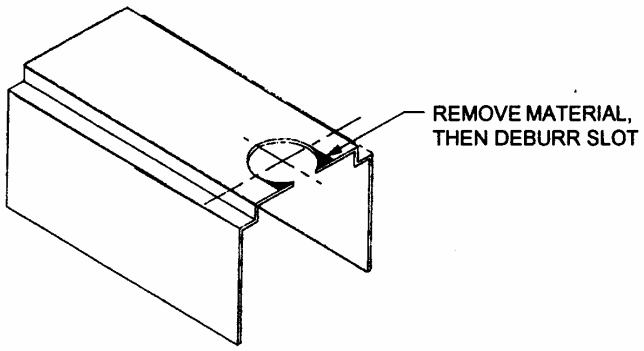
5) DRILL MOUNTING HOLE.
REMOVE CHANNEL COVER AND DRILL 5/16" DIA. HOLE ON DEVICE REF. ℄ 5/16" FROM END OF CHANNEL.



6) CUT ACCESS SLOT IN CHANNEL COVER.
A) DRILL AN 11/16" DIA. HOLE 5/16" FROM THE CUT END OF CHANNEL COVER.

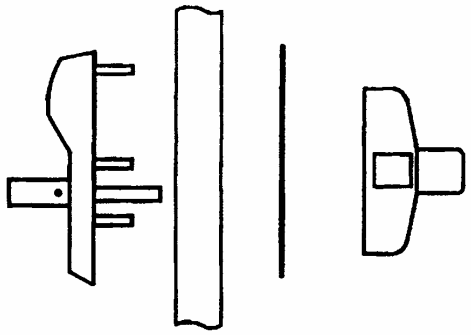


B) USING A SAW OR FILE, REMOVE REMAINING MATERIAL TO COMPLETE SLOT.



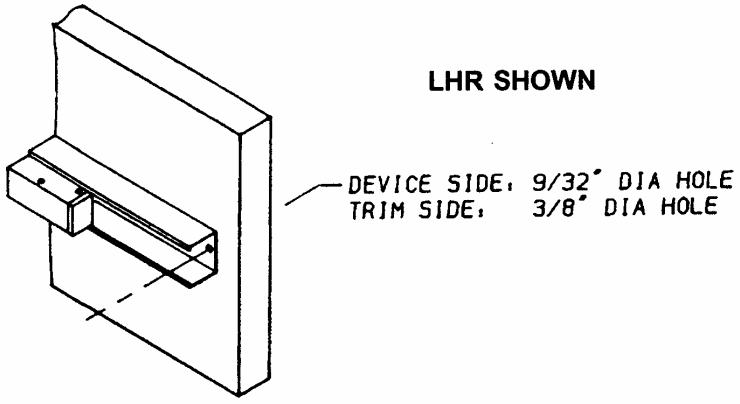
4 HARDWARE INSTALLATION

1) MOUNT ONITY TRIM ONTO DOOR USING FOUR M4 x 30mm FPHMS AND DEVICE MOUNTING PLATE
NOTE: COUNTERSINK ON MOUNTING PLATES SHOULD FACE TOWARD DEVICE.
2) APPLY DEVICE ONTO DEVICE MOUNTING PLATE USING FOUR #10-24x3/4" FPHMS.

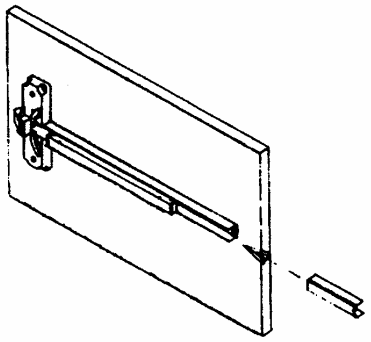


ONITY TRIM **DOOR** **MOUNTING PLATE** **DEVICE**

3) LOCATE, MARK AND DRILL END CAP MOUNTING HOLE:
A) LEVEL DEVICE.
B) MARK CENTER OF 5/16" DIA. HOLE AT END OF CHANNEL.
C) DRILL 9/32" DIA. HOLE THRU DOOR.
D) DRILL 3/8" DIA. HOLE ON TRIM SIDE OF DOOR USING 9/32" DIA. HOLE AS GUIDE.



4) INSERT CHANNEL COVER.



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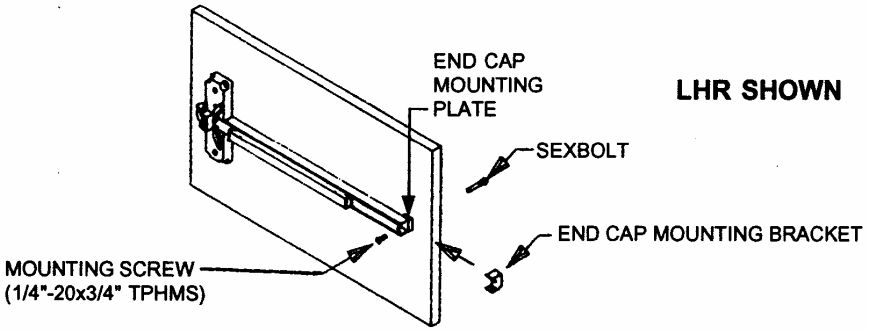
5) INSTALL END CAP MOUNTING BRACKET AND END CAP MOUNTING PLATE USING SEXBOLT AND MOUNTING SCREW.



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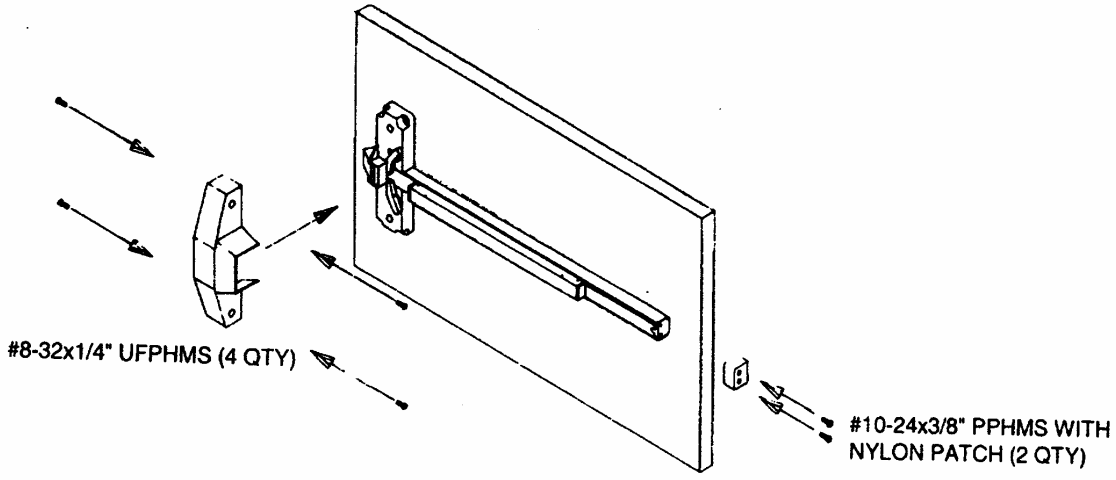
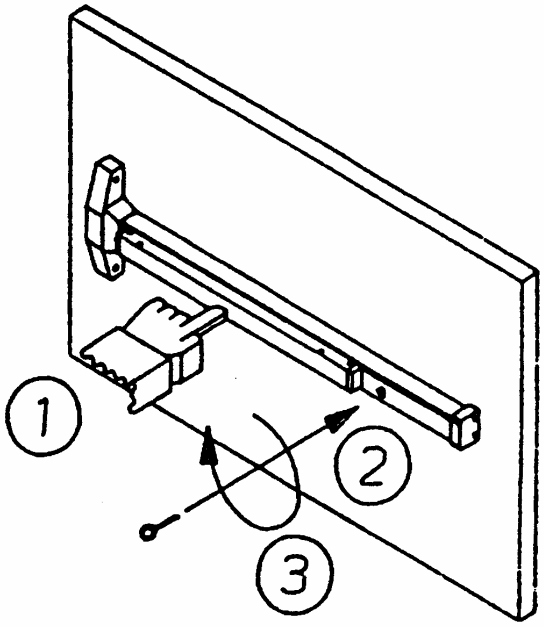
6) TIGHTEN ALL MOUNTING SCREWS AND CHECK FOR SMOOTH OPERATION.
7) ATTACH COVER TO CHASSIS AND CHANNEL END CAP TO END CAP MOUNTING BRACKET.



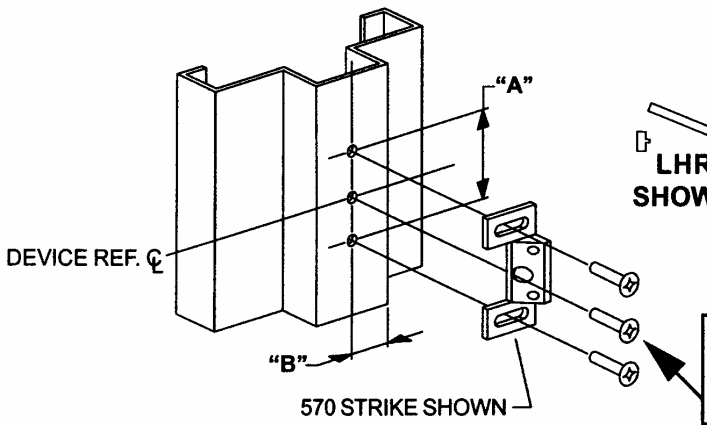
8) CHECK DOGGING OPERATION: (PANIC APPLICATION ONLY)
   A) DEPRESS TOUCHBAR, INSERT AND TURN DOGGING KEY CLOCKWISE TO DOG DEVICE.

LHR SHOWN



   B) REMOVE DOGGING KEY; TOUCHBAR WILL REMAIN DEPRESSED.
   C) REINSERT DOGGING KEY AND TURN IT IN OPPOSITE DIRECTION (COUNTER-CLOCKWISE) PUSH ON TOUCHBAR AND IT WILL "POP OUT."
   D) FOR CYLINDER DOGGING, REFER TO INSTALLATION INSTRUCTION D-4080.

9) STRIKE PREPARATION:
   A) TRANSFER DEVICE REF. ℄ TO DOOR STOP.
   B) CENTER STRIKE ON DOOR STOP ACROSS DEVICE REF. ℄ AND FLUSH TO DOOR SURFACE.
   C) MARK SCREW LOCATIONS, THEN CENTERPUNCH AND DRILL (AND TAP IF REQUIRED) FOR MOUNTING SCREWS.
   D) APPLY STRIKE TO DOOR STOP.



STRIKE	'A'	'B'
570*	2"	3/4"
565	1"	1-11/32"
490*	2"	3/4"
579	2-3/8"	15/16"
F-570*	2"	3/4"
F-490*	2"	3/4"

* - FOR THIRD SCREW ON (F-)570 AND (F-)490 DRILL AND TAP FRAME OR MULLION AFTER ADJUSTING STRIKE.

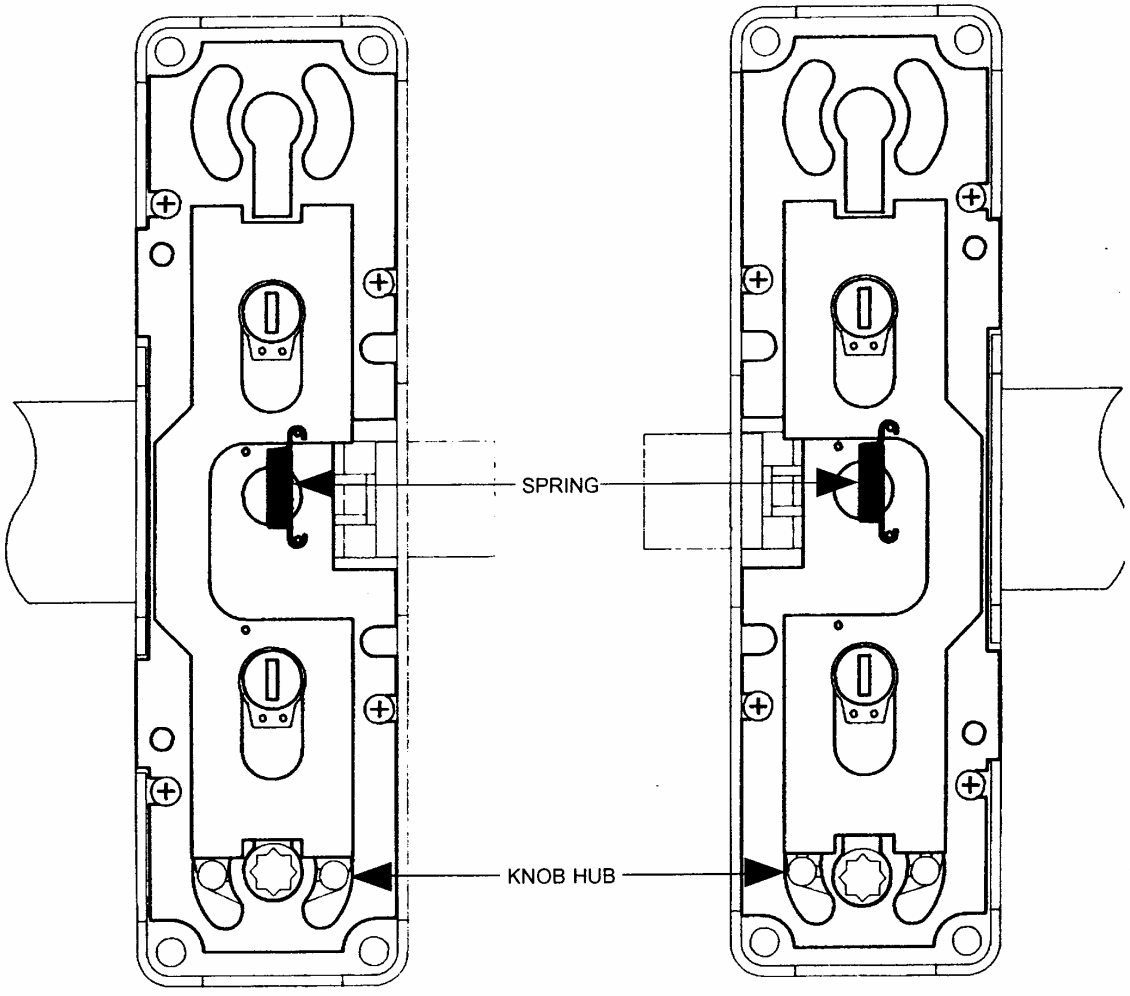
PANIC:	#10 X 1-1/4" FPHSMS 3 QTY. FOR 570/490 STRIKES 2 QTY. FOR OTHER STRIKES
FIRE:	#10-24 X 3/4" FPHMS 3 QTY.

10) CHECK FOR SMOOTH OPERATION AND SECURE LATCH BOLT ENGAGEMENT. ADJUST STRIKE IF REQUIRED.

5 REVERSING INSTRUCTIONS

TO REVERSE THE HANDING OF A MONARCH (F)18-R x ONITY TRIM:

1) REMOVE BACKPLATE SUB-ASSEMBLY (4 SCREWS) FROM CHASSIS.
2) MOVE KNOB HUB (P/N EX9497) TO LOCATION SHOWN FOR CORRECT HANDING.
3) REINSTALL BACKPLATE SUB-ASSEMBLY (4 SCREWS) INTO CHASSIS.
4) MOVE SPRING TO LOCATION SHOWN FOR CORRECT HANDING.



Accujig 2001 Instructions

NOTE: Strike must be installed before starting door prep

Existing Cylindrical and Slab Doors

1. Select correct Strike Index Spacer for size strike installed:
   4-7/8” Strike Spacer is 9-3/16” long
   8” Strike Spacer is 7-15/16” long
   10” Strike Spacer is 6-7/8” long
2. Hold the Strike Spacer on top of the Clamp Block and move up or down until they come in contact with the lower edge of strike lip.
3. Tighten the Clamp Block and remove Strike Spacer
   NOTE: The Clamp Block will now be used to position both mortiser and Accujig.
4. Position mortiser with wood side boards on top of Clamp Block.
5. Attach vacuum to Dust Control on mortiser.
6. Mortise pocket to 6-1/2” long and 4-3/8” deep.
7. Disconnect vacuum hose.
8. Remove mortiser.
9. Position Accujig on top of Clamp Block.
   NOTE: Push on Router Template making sure it is tight to bevel of door.
10. Insert Vacuum Crevice tool into side of Router Template and connect hose.
11. Rout the edge of door.
12. Drill only the lower two (2) 1/2" holes. **NOTE:** Do NOT drill all the way through. Drill one side, then the other.
13. Drill the two (2) 2-1/ 8” holes. **NOTE:** Do NOT drill all the through. Drill one side, then the other.
14. Remove Accujig.
15. Square four (4) corners with corner chisel.
16. Vacuum mortise pocket and remove all debris.
17. Wipe off door.

Existing Mortise and Existing Ving

1. Attach Mortise Pocket Locator to Router Template.
2. Position Accujig on edge of door by moving up or down until the Mortise Pocket Locator drops into existing mortise prep.
   NOTE: Push on Router Template making sure it is tight to bevel of door.
3. Drill only the lower two (2) 1/2" holes for standard installation and drill only the top two (2) holes for inverted Ving.
4. Do NOT drill all the way through. Drill one side, then the other.
5. Drill the two (2) 2-1/ 8” holes.
6. Do NOT drill all the through. Drill one side, then the other.
7. Remove Accujig.
8. Vacuum mortise pocket and remove all debris.
9. Wipe off door.

Existing Cylindrical – Cylindrical Install

1. Position Accujig on edge of door centering the upper 2-1/8” bushing with the existing 2-1/8” hole in door.
2. Drill the two (2) 3/8” holes. Do NOT drill all the way through. Drill one side, then the other.

Accujig 2002

MORE THEN AN ACCUBORE, THIS IS A TOOL SYSTEM FOR MACHINING DOORS FOR ONITY LOCKS WITH INCREASED ACCURACY, PRODUCTIVITY, AND DECRESASED FATIGUE.

HOW?

BY COMBINING THE FACE BORING PLATES WITH AN EDGE ROUTER TEMPLATE INTO ONE PRECISION TOOL. AND BY USING AN INDEXED CLAMP SUPPORT TO REST AND ACCURATELY POSITION THE ACCUJIG AND MORTISER WITH PERFECT VIRTICAL ALLIGNMENT TO THE STRIKE.

Features:

1. THE LATEST TEMPLATE LAYOUT FOR ONITY HT AND CT LOCKS
2. HARDENED 2 1/8 DRIL GUIDES ARE TAPPERED FOR EASIER INSERTION OF THE HOLE SAW
3. HARDENED ½” DRILL GUIDES FOR MORTISE, CYLINDRICAL AND VING
4. STAINLESS STEEL EDGE ROUTER TEMPLATE
5. PIVOTING ROUTER ASSMEBLY ADJUSTS TO THE DOOR BEVEL AND KEEPS THE CUTOUT CENTERED
6. THE ROUTER ASSEMBLY BOX CONTAINS MOST OF THE DUST, AND HAS A OPENING FOR A VACUUME ATTACHMENT
7. INCLUDES A MORTISE LOCATOR TO EASILY POSITIONS THE ACCUJIG ON AN EXISTING MORTISE EDGE PREP
8. FITS ON ANY DOOR WITH MOLDINGS THAT A LOCK CAN FIT ON
9. ALL COMPONENTS ARE PRECISION MACHINED AND MADE TO LAST

Prices:

1. ACCUJIG T-2001 SYSTEM, INCLUDING BORING JIG PLATES CLAMP ASSEMBLY INTEGRATED EDGE ROUTER TEMPLATE EXISTING MORTISE LOCATOR SUPPORT CLAMP STIKE INDEX SPACERS TOOL CASE	$1500
2. BORING PLATES ONLY.	$ 800
3. BORING PLATES WITH CLAMP ASSEMBLY ONLY	$ 150
4. MORTISER DUST CONTROL ATTACHMENT	$ 175
5. STRIKE TEMPLATE BASE WITH DUST CONTROL	$ 100
6. STRIKE TEMPLATES FOR 4 7/8, 8, 10 INCH STRIKES	$ 25
7. 1” CARBIDE MORTISER BITS	$ 21

+TAX, SHIPPING AND HANDLING

Prices in affect 01-2003

QUESTIONS, SERVICE, ORDERS, OR SUGGESTIONS

Milo Weaver: 714-633-9011 or 714-936-9584
Weaver Enterprises; 1079 N Batavia; Orange, CA 92867
E mail: MCWEAVER46@aol.com

Tool Requirements

Tool/Item		Quantity Required
Door Mortiser	*** Model 513	1 per crew
1” Mortiser Bit	***43704	6 per crew
Lock Face Template	***Model 517	1 per crew
Onity Accujig Door Boring System		1 per crew
Onity Vacuum Attachment for Accujig		1 per crew
Plunge Router	*3621	1 per crew
Template Guide Adapter	*321492-3	2 per crew
Template Guide	***42045	2 per crew
1/2” x 2 3/8” Router Bit	***43318	6 per crew
Corner Chisel	***42234	1 per installer
Shop Vacuum		1 per crew
Upright Vacuum		1 per crew
Electric Die Grinder	**5194	2 per crew
Arbors for Cutting Wheels		4 per crew
1 1/2” Cutting Wheels		100 per crew
3” Cutting Wheels		100 per crew
1/2” Electric Drill	**0234-6	4 per crew
1/2” Electric Hammer Drill	**5366-21	1 per crew
1/2” Drill Bits		6 per crew
9/64” Drill Bits		6 per crew
13/64” Drill Bits		6 per crew
1/2” Counter Sink		2 per crew
2 1/8” Hole Saws		6 per crew
1” Self Feed Drill Bit	**48-25-1001	2 per crew
5/8” Masonry Bit	**48-20-7601	2 per crew
1” Wood Chisel		1 per man
Jig Saw	**6266-21	1 per crew
Jig Saw Blades for Wood	**48-42-2300	25 per crew
Jig Saw Blades for Metal	**48-42-2160	25 per crew
Channel Lock Pliers		1 per man
Vise Grips Locking Pliers		1 per man
Heavy Duty Rivet Gun		1 per crew
Drop Cloths		24 per crew
Rubbermaid Service Cart #4500		1 per man
110v Outlet Strip		1 per man
12’ extension cord		1 per man
Onity Work Shirts		5 per man
12v Battery Drill	**0501-23	2 per installer
2.4v Battery Drill	**6546-6	1 per installer
Magnetic Bit Holders	*784801-1	4 per installer
#3 Phillips Bits		6 per installer
#2 Phillips Bits		6 per installer

T-10 Security Bits		6 per installer
T-20 Security Bits		6 per installer
1/2” wide Belt Sander/Power File	**6106-6	1 per installer
Power File Belts 60 Grit	**49-92-8115	100 per crew
#9 Self Centering Drill Bit	*784827-A	1 per installer
#12 Self Centering Drill Bit		1 per installer
Round Rasp file		1 per installer
Double Cut Flat file		1 per installer
#3 Phillips Screw Driver		1 per man
#2 Phillips Screw Driver		1 per man
1/4” Slotted Screw Driver		1 per man
3/8” Slotted Screw Driver		1 per man
Wonder Bars		2 per man
Claw Hammer		1 per man
25’ Tape Measure		1 per man
6” Metal Ruler		1 per man
Razor Knife		1 per man
Duct Tape		2 rolls per crew

*Makita Part Number **Milwaukee Part Number *** Porter Cable Part Number

Product Updates

CT 30 Batteries 1-22-2003

CT-30 locksets will be shipped with the batteries not installed but in a plastic bag in the box. We have been experiencing battery corrosion and are continuing to investigate the cause. Batteries will be installed in the field at time of installation. No additional fee will be awarded for battery installation.

Standard 4 7/8" Strikes 1-22-2003

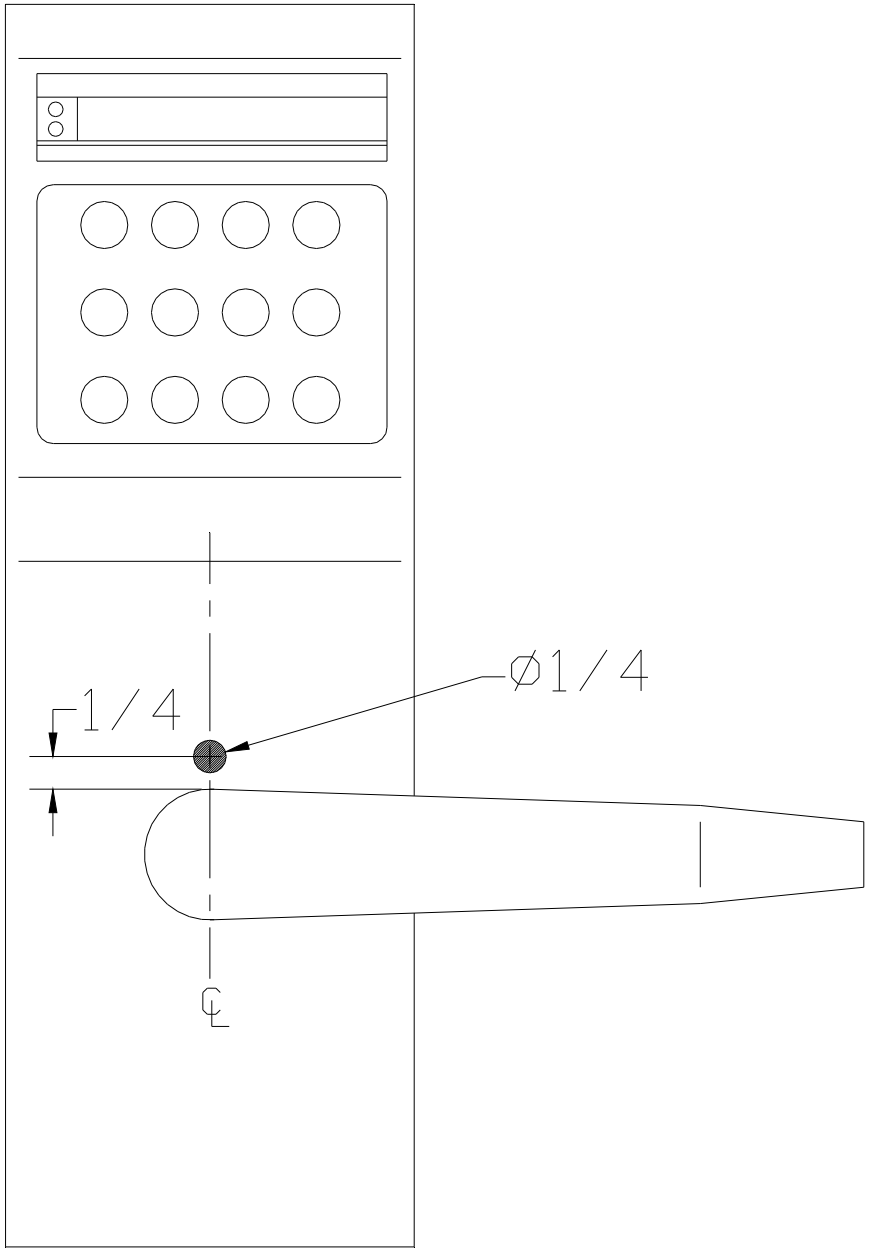
We are in the process of returning to satin chrome plated brass strikes. Stainless steel 4 7/8" strikes will be discontinued for the following reasons:

1. The installer cannot file this strike properly.
2. Filing the strike with the power file uses 3 belts per strike plate, burns the finish of the strike, and takes considerable time.
3. A hand File cannot be used effectively to square the corners which is required for the filing to be effective.
4. We require 1/8 clearance on the DB hole for ADB, this is not possible with Stainless strikes due to the difficulty in filing them.
5. The Stainless Strike wears a groove in the latch over time in such a way that a guest could be locked in.
6. Customer installs, (new construction) are another issue, the customer won't have any tools that could be used to adjust this strike. In rare cases the strike plate has actually been removed. While we would not be liable, it does reflect badly on us.

CT Technical Bulletin 4-2-2003

ID: TIP-98059
Description: CT Integra3 Drill Point
Problem:
An CT Integra3 lock won't open to all other service procedures and needs to be drilled.
Discussion:
Please only drill a Onity lock with permission of the tech support department. Failure to secure permission before drilling may result in a charge to repair the lock. Be sure to get the FULL name of the person who gives permission to drill the lock.
Solution:
Prepare a 1/4 inch diameter drill bit by marking it with a band of tape 5/8" from the tip of the drill bit.
Lever handles do not need to be removed. Knob handles do need to be removed by removing the TORX screw.
Carefully measure and mark the drill point as per the diagram. (1/4" up from the top of the handle and directly in the center of the lock body).
Drill into the lock body until the tape line meets the lock body. Stop as soon as the drill breaks through or the tape lines up. You must be delicate or you will make your job harder. Remove the drill and operate the lever handle to open the door.

This procedure shears a plastic part which keeps the clutch disengaged. When it is sheared the spring loaded clutch pin will connect the handle shaft to the square spindle allowing the latch to be retracted.



Drill 5/8" deep.

Technical Bulletin 5-1-2003

ID: TIP-03012
Description: Handle screws are stripped

Problem: The handle screw is stripped out / loose in the mounting hole.

Discussion: Investigation into the design and tolerances of the Integra lock has shown a possible disparity between the size of the hole in the Integra handle shafts and the size of the screw used to fasten the handles on the shaft. This disparity can cause the handle screw threads to strip with a minimum amount of applied torque. Once the threads are stripped, the screw can back out, possibly causing damage to the handle, and eventually resulting in the screw dropping completely out and the handle becoming unfastened.

Solution: There are two paths to the solution for this problem.

1. New production - New production locksets will have a handle hole with decreased diameter to properly accept the current production screw. This change requires a modification to the tool used to produce this part. This change is to be put in place as soon as possible, with a targeted deployment to new production of 07/14/2003.

2. Field retrofit - Existing locksets which exhibit this symptom may utilize a newly designed larger screw. This screw is an M4.3 x 8 T10. Please reference the following part numbers in North America:

Finish	Part Number
626	XS600435
605	XS600440

These parts should be shipped for reworks of any locks produced before 07/14/2003.

Also, as handle damage from loose screws is possible, the handles should be inspected for cracks in the area of the screw fastening hole, and any cracked handles should be replaced.

Standard 4 7/8" Strikes 1-22-2003

We are in the process of returning to satin chrome plated brass strikes. Stainless steel 4 7/8" strikes will be discontinued for the following reasons:

1. The installer cannot file this strike properly.
2. Filing the strike with the power file uses 3 belts per strike plate, burns the finish of the strike, and takes considerable time.
3. A hand File cannot be used effectively to square the corners which is required for the filing to be effective.
4. We require 1/8 clearance on the DB hole for ADB, this is not possible with Stainless strikes due to the difficulty in filing them.
5. The Stainless Strike wears a groove in the latch over time in such a way that a guest could be locked in.
6. Customer installs, (new construction) are another issue, the customer won't have any tools that could be used to adjust this strike. In rare cases the strike plate has actually been removed. While we would not be liable, it does reflect badly on us.

Accurate Face Plates 1-28-2003

A customer install in Florida was reported as having defective lock cases. Guests are stuck in the room. Installers on site state that 97 out of 150 rooms show problems.

Inspection reveals these are shallow backset lock cases manufactured for us by Accurate Lock in NJ.

The installers noted that the WRONG FACE PLATES were installed. This is the cause of the problem on this job. The wrong face plate causes drag on the deadbolt. This drag damages the lock over time.

Accurate Locks require their OWN face plate. A visual inspection and comparison of our face plate next to an Accurate face plate will lead you to believe they are interchangeable when in fact they are NOT. Further, it is a violation of UL rules and procedures to supply our face plate for the Accurate lock. In the past the proper face plate was packed in the box by Accurate. An inspection of our current inventory reveals that this is no longer the case. An Accurate face plate is stamped with just the UL listing number. If the face plate is stamped TESA or Onity it should not be installed on an Accurate lock case.

Power File Parts 10-30-2003

Parts and belts for power files can be found on the following website:
www.dynabrade.com

Integra Install Note **12-17-2003**

The following is directly from the R & D Dept.:

The proper installation method for the battery wire is that any slack should be removed from under the backplate (gently pull the wire slightly while holding the grommet in place to take the slack out), route the wire through the hole in the lock case and then through the hole in the mounting plate, then route the wire through the rectangular cut in the inside sub-assembly. The slack should be stored on the inside sub-assembly, in the slot to the left of the battery pack, with the unshielded portion of the wire inserted into the slot first and the shielded portion inserted on top of them (this will hold all the wires in the slot).

Vacuums + Dust Control **10-27-2004**

All lock installation crews must have vacuums and a vacuum attachment for the mortiser. Borrowing vacuums from the property's Housekeeping Dept. is for emergency's only. If the crews vacuum breaks down during the day it is acceptable to ask the property to borrow one. The crew will repair the vacuum that night or purchase a new one. All crews will use a vacuum attachment whenever mortising wood doors. People with multiple crews will make sure all their crews comply with the above. Onity's sales people use the fact that we clean up after ourselves as a strong selling point. It is also one of the many things that distinguish us from the competition.

Onity
innovative thinking
TESA Entry Systems

Electronic Safes

Safe Installation Guidelines

Starting the Day

1. Obtain Portable Programmer (XPP for OS300, Mini PP for OS150) from property.
2. Encode a Safe Master key card (if Combo or Card Only).
3. Obtain a Master Room key from Management.
4. Pick up safes from storage room.
5. Set safes next to room doors.
6. Unpack safe and dispose of packing material properly.
7. Knock on door and say “Engineering “.
8. Wait 10 seconds.
9. Repeat step 7.
10. Open door and again say “Engineering “.
    Note*:* Manager must be present while installing the first safe to insure the correct location of safe.
11. Carefully move or cover any of the guest’s possessions that are in the way or might get soiled during installation.
    Note*:* After installation is complete, the possessions that were moved must be carefully put back to their original location.

Wall Mounting Small Safe Only

Solid Concrete
Use Concrete Wall Kit.

Concrete Block
Use Concrete Wall Kit

Hollow Wood Frame
Use Wood Kit into stud

Hollow Metal Frame
Not Recommended

1. Open safe and remove carpet and instruction card.
2. Position safe on wall and mark the holes in the back of the safe on wall. Make sure the door of the safe opens completely and safe is level.
3. Mark the 4 mounting holes to be drilled.
4. Drill the four holes with the correct size drill bit and to the proper depth depending on fasteners. Use the manufacturers recommendations.
5. Vacuum the holes, wall, safe, and floor.
6. Install safe and tighten the fasteners in a **X** pattern.
   Note: Make sure the safe is level.
7. All four fasteners must be tight and extremely secure.
8. Remove backing from all double-sided tape and smooth out the felt liner inside safe.
9. Place instruction card inside safe.
10. Initialize and test safe.

Pedestal Mounting

Use four carriage bolts with nuts and washers

1. Open safe and remove carpet and instruction card.
2. Align pedestal with holes in floor of safe and insert carriage bolts through floor and into pedestal.
3. Install one lock washer and one nut on each bolt.
4. Tighten nuts in a **X** pattern.
5. All four fasteners must be tight and extremely secure.
6. Complete safe and pedestal install according to type of floor and wall.

Floor Mounting

1. Position safe on floor and mark the 4 holes in the bottom of pedestal or safe and at least 1 hole in wall.
2. Make sure the door of the safe opens completely.
   Note: It is good to leave at least a 3” gap between the side of the safe and a wall. This makes it easier to retrieve any items that fall or the property might decide to place an ironing board in the gap.3.
   Note*:* On carpeted floors you must remove the carpet and pad from under the safe or pedestal. Position the safe and use it as a guide to cut the carpet and pad with a razor knife.
3. Mark the 5 mounting holes to be drilled.
4. Drill the 5 holes with the correct size drill bit and to the proper depth depending on fasteners. Use the manufacturers recommendations.
5. Vacuum the holes and floor.
6. Assemble the fasteners to be used.
7. Tighten the fasteners in a **X** pattern.
8. All 5 fasteners must be tight and extremely secure.
   Note*:* On ceramic tile floors you may need to shim the safe to make it stable. Use flat washers placed under corners of safe. The washers should not be visible.
9. Remove backing from all double-sided tape and smooth out the felt liner inside safe.
10. Place instruction card inside safe.
11. Initialize and test safe.

Initialize and Testing

1. Using the XPP (OS300) or Mini PP (OS150), initialize the safe to the correct room.

   Note: For each room there should be an entry in the XPP
   Example: 101 is for the safe in room 101. System build will have entered the safe ID into the XPP.

   Make sure you initialize the safe to the correct room.
2. While the XPP or Mini PP is connected with door open, test the safe by locking and opening with a code.
3. Insert and remove Safe Master key card locking the safe, (for Combo or Card safe).
4. Test the safe using the XPP (applies only to OS300).
   - Correct room number.
   - Correct date and time.
   - Card reader is functional (Combo and Card).
   - Cycle the safe 10 times using the Safe Master key card (Combo or Card only).
   - When the locking bolts are extended they should turn easily.
   - With the door closed and the safe locked there should be a minimum of 1/16” play in the door. Carefully bend the inside lip of the safe by the locking bolts to gain the proper clearance.
   - Check battery power by pressing and holding the clear button on the safe. The readout should be “F” (OS150) or “F-----“ (OS300). If an “E” appears or there is only one “bar” after the “F”, make a note and replace the batteries.
   - Make sure the sides of the door don’t come in contact with the body of the safe. To adjust the door remove the two T-10 security screws and the inside cover. Loosen the two locking nuts on the hinge side, adjust door, and tighten the locking nuts. Install the inside cover and T-10 security screws.
5. Test the safe using the Mini PP (OS150).
   - Remove the ONITY faceplate.
   - Plug the Mini PP cord into the socket.
   - Check the Power on the Mini PP. Lights should be green.
6. Leave the door of safe unlocked.
7. Fill out the Safe Installation Checklist for every safe installed.
8. Make sure the room is in the same condition that it was prior to installing the safe.

OS150 User Manual

Features

Safe

- **Four AA Alkaline Batteries.** Batteries will provide approximately 5000 cycles. Press the ‘clear’ key to display battery status.
- **One Digit Display.**
- **Fluoropad® Keypad.** The keypad is a heavy duty air depression membrane keypad which will glow in the dark for a few minutes when a key is pressed. The ‘5’ button is dimpled to assist sight disabled users.
- **Audible Feedback.** Different tones indicate valid or invalid code inputs, openings, and closings.
- **Safe on Hold Mode.** To prevent unauthorized access, the safe can be programmed to be put on hold for a number of minutes after a number of invalid attempts.

Mini PP

- **Provide Master Code Override.** If a guest forgets the code, or if a guest leaves the safe closed upon departure, the Mini PP can be used to open the safe.
- **External Battery Power.** In the event of a loss of battery power, the Mini PP can be used to power the safe.

Factory Mode

When the safes are shipped from the factory, they are set in **Factory Mode**. They are shipped locked to prevent the door from being damaged during the shipping. To unlock a safe in factory mode, press **lock, 7, lock** on the safe keypad. To lock, press **lock, 0, lock** on the safe keypad.

When a safe is initialized, it is taken out of factory mode.

Guest Mode

Arrival

When a guest arrives, the safe door should be open. To operate the safe, the guest should follow these simple instructions:

1. Place items to be secured into the safe. Do not overfill the safe, but make sure the door shuts easily.
2. Close the door and hold it shut.
3. Enter any 4 digit code and press ‘lock’.

The safe will display ‘C’ as the motor is locking the door. When the bolts are fully extended, a confirmation tune will sound.

If the safe cannot fully extend the bolts, the message ‘O’ will be displayed and the bolts will retract. This is typically caused by the contents of the safe obstructing the path of the bolts. Adjust the contents of the safe so that the door can close completely and try again.

Note: If the safe is locked when the guest arrives, it must be opened using theMiniPP.

During Stay

Whatever code is used to close the safe must be used to open the safe.

During the stay, the guest can open and close the safe freely at any time. A code must be entered to lock the safe as well as to unlock the safe. If the guest wishes, a different code can be used each time the safe is locked.

Note: Simply pressing the ‘lock’ button will not secure the safe, you must enter a code to lock the safe.

Departure

When the guest departs, all that is necessary is to open the safe with the code and remove the contents.

Note: The safe should be left unlocked for the next arriving guest.

Safe Features

Battery Check

The battery level of the safe can be easily tested at the safe without the use of any devices. Simply press the **clear** button on the safe keypad to display the battery level. When the batteries are full, ‘F’ will be displayed. When the display shows ‘E’, the batteries need to be replaced.

Note: The safe will not close if the battery level is extremely low.

Safe on Hold Mode

If an incorrect code is entered a certain number of times, typically 3, the safe will enter a shutdown, or hold, status for a period of time, typically 30 minutes. This feature is used to prevent unauthorized access to the safe.

Override

The Safe on Hold mode can be overridden by entering the correct code twice in succession, or by using the Mini PP to open the safe.

Safe Maintenance

Use only high quality alkaline batteries such as Duracell, Energizer, or Panasonic.

To replace the batteries you will need a T-10 Security Torx screwdriver and 4 AA Alkaline batteries. Open the safe door then remove the battery compartment door. Remove the batteries from the holder and insert the new batteries. Be sure to observe the correct orientation for each battery.

Hand Held Unit – Mini PP

The Mini PP is a small hand held device that is used to initialize, open or provide external battery power to a safe. These are the only functions that the Mini PP will perform.

Initialize a Safe

To Initialize an OS150 safe with the Mini PP:

1. Make sure the safe is unlocked.
2. Plug the Mini PP cable into the jack on the front of the safe.
3. Press the **TX** button on the Mini PP.

Open a Safe

To open a safe with the Mini PP:

1. Plug the Mini PP cable into the jack on the front of the safe.
2. Press the **Open** button on the Mini PP.

Power the Safe

If the batteries in the safe are dead, the Mini PP can be used to provide external power to the safe. To perform this function:

1. Plug the Mini PP cable into the jack on the front of the safe.
2. Press and hold the **Power** button on the Mini PP.
3. Enter the open code on the keypad of the safe.

Low Battery Indication

When the 9V battery of the Mini PP is low, the **Error** light will flash when the unit is turned on. When this happens, replace the 9V battery.

What if the Mini PP is Lost or Stolen

The Mini PP has a sequential code assigned to it. If a Mini PP is lost, a new one can be loaded with the code advanced. Contact Onity or your distributor for a replacement Mini PP.

Once the new Mini PP is received, it must visit each safe in order to lock out the previous Mini PP. Simply insert the cable into each safe and press the **TX** button.

Glossary of Terms

Initialize : The initial programming of a safe. This function sets the name of the safe, the system code, the operating parameters, and the date and time of the safe.
Master Code Override : If the open code for the safe is unknown, the MiniPP can be used to open the safe.
Mini PP : A small hand held device used with the OS150. It can be used to open a safe or to power a safe with low or dead batteries.
Override : A safe on hold may be opened by the Mini PP, or by entering the correct code twice.
Safe on Hold : The safe can be programmed to shutdown, or go on hold, for a number of minutes after a number of invalid code entries. This feature helps to prevent unauthorized access to the safe.
System Code : The system code is a unique code assigned to each facility that is programmed into the Onity devices to prevent unauthorized access to the devices.
Variable Code : A different code can be used each time the safe is locked. Whatever code is used to lock the safe must be used to unlock the safe.

OS300 User Manual

Features

Safe

- **Four AA Alkaline Batteries.** Batteries will provide approximately 5000 cycles. Press the ‘clear’ key to display battery status.
- **Six Digit Display.**
- **Fluoropad® Keypad.** The keypad is a heavy duty air depression membrane keypad which will glow in the dark for a few minutes when a key is pressed. The ‘5’ button is dimpled to assist sight disabled users.
- **Audible Feedback.** Different tones indicate valid or invalid code inputs, openings, and closings.
- **Audit Trail.** The last 960 events are recorded in the auditor of the safe. This information is retrieved by use of the XPP.
- **Safe on Hold Mode.** To prevent unauthorized access, the safe can be programmed to be put on hold for a number of minutes after a number of invalid attempts.

XPP

- **Maintenance and Security Functions.** The XPP is used for various maintenance and security functions such as testing the components of the safe, retrieving the audit trail of the safe, and programming the safe.
- **Provide Master Code Override.** If a guest forgets the code, or if a guest leaves the safe closed upon departure, the XPP can be used to open the safe.
- **External Battery Power.** In the event of a loss of battery power, the XPP can be used to power the safe.

Factory Mode

When the safes are shipped from the factory, they are set in **Factory Mode**. They are shipped locked to prevent the door from being damaged during the shipping. To unlock a safe in factory mode, press **lock, 7, lock** on the safe keypad. To lock, press **lock, 0, lock** on the safe keypad.

When a safe is initialized, it is taken out of factory mode.

Guest Use

Arrival

When a guest arrives, the safe door should be open. To operate the safe, the guest should follow these simple instructions:

1. Place items to be secured into the safe. Do not overfill the safe, but make sure the door shuts easily.
2. Close the door and hold it shut.
3. Enter any 4 digit code and press ‘lock’.

Note: Your safes may be configured to operate with a 6 digit code.

The safe will display ‘closing’ as the motor is locking the door. When the bolts are fully extended, the safe will display ‘closed’ and a confirmation tune will sound. If the safe cannot fully extend the bolts, the message ‘obstacle’ will be displayed and the bolts will retract. This is typically caused by the contents of the safe obstructing the path of the bolts. Adjust the contents of the safe so that the door can close completely and try again.

Note: If the safe is locked when the guest arrives, it must be opened using the XPP.

During Stay

Whatever code is used to close the safe must be used to open the safe.

During the stay, the guest can open and close the safe freely at any time. A code must be entered to lock the safe as well as to unlock the safe. If the guest wishes, a different code can be used each time the safe is locked.

Note: Simply pressing the ‘lock’ button will not secure the safe, you must enter a code to lock the safe.

Departure

When the guest departs, all that is necessary is to open the safe with the code and remove the contents.

Note: The safe should be left unlocked for the next arriving guest.

Safe Features

Battery Check

The battery level of the safe can be easily tested at the safe without the use of any devices. Simply press the **clear** button on the safe keypad to display the battery level. When the batteries are full, the letter **b** followed by 5 dashes (**b - - - - -)** will be displayed. As the battery power gets lower, fewer dashes will be displayed. When the display shows only 1 dash, the batteries need to be replaced. The battery level is also recorded in the auditor of the XPP when the test function is used on the OS300 safe.

Note: The safe will not close if the battery level is extremely low.

Safe on Hold Mode

If an incorrect code is entered a certain number of times, typically 3, the safe will enter a shutdown, or hold, status for a period of time, typically 30 minutes. This feature is used to prevent unauthorized access to the safe.

Override

The Safe on Hold mode can be overridden by entering the correct code **twice in succession, or by using the XPP to open the safe.**

Safe Maintenance

Use only high quality alkaline batteries such as Duracell, Energizer, or Panasonic.

To replace the batteries you will need a T-10 Security Torx screwdriver and 4 AA Alkaline batteries. Open the safe door then remove the battery compartment door. Remove the batteries from the holder and insert the new batteries. Be sure to observe the correct orientation for each battery.

Hand Held Unit – XPP

The XPP is the 'link' to the safe and is a completely stand alone system. This section describes the use features of the XPP.

XPP Keypad

The XPP keypad consists of number keys, left, right, up, and down arrow keys, an **ENTER key, an EXIT key, and 4 'soft keys'.**

The XPP's number keys can also be used to enter characters other than numbers, such as alphabetic characters.

Soft Keys

The four keys at the top of the XPP keypad are called **Soft Keys**. The functionality of these soft keys changes based on the menu or option that is currently selected. On the screen above these soft keys, the current function is displayed. For example, when on the main menu of the XPP, the soft key functions are **ON, OFF,** and **EXIT**.

Entering Non Numeric Characters

It is sometimes necessary to enter letters and special characters instead of just numbers. For example, when entering operators, you may wish to enter the name of the operator instead of just a number.

To do this, the number keys also have letters and characters assigned to them similar to those of a telephone. The following lists the characters available to each number key: These are also indicated on the keypad itself.

- **1** – 1, (space), +, -
- **2** – 2, A, B, C
- **3** – 3, D, E, F
- **4** – 4, G, H, I
- **5** – 5, J, K, L
- **6** – 6, M, N, O, Ñ
- **7** – 7, P, Q, R, S
- **8** – 8, T, U, V
- **9** – 9, W, X, Y, Z
- **0** – 0, $, &, %

To enter the letter or character, repeatedly press the corresponding number key until the character appears. After a short delay, the cursor will then move to the next character to be entered.

Note: To temporarily disable the letters, press the far right soft key once when 'NUM' is displayed above it.

Log In

When the XPP is powered on, it will perform some internal testing and then display the log on screen. To log on, simply enter your password using the XPP keypad. Once an operator has logged into the XPP, there are up to 11 functions that can be performed:

1. Open Safe
2. Update Safe
3. Initialize Safe
4. Read Openings
5. Show Openings
6. Test Safe
7. Power the Safe
8. Show XPP Auditor

Three additional options appear in the hidden menu:

9. Edit the Date & Time
10. Enter Daylight Savings Time
11. Edit XPP Operator

Open Safe

At times, it will be necessary to use the XPP to open a locked safe, such as when a guest forgets the open code or leaves a safe locked upon check out. For security purposes, the OS300 safe does not have a resident master code that can be used to open any safe. For this reason, the XPP may be used to open a locked safe.

To open a safe:

1. Plug the XPP cable into the jack on the front of the safe and log on with your password. Using the arrow keys, highlight the option Open Safe and press the ENTER key.
2. The safe will open.

Note: The XPP will open a safe even if the batteries are dead.

Update Safe

The update function is used to make the information in the safe match the information in the XPP. The update function can only be used on a safe that has already been initialized (initially programmed). Reasons to use update include the following:

1. To change the time on the safe.
2. To load the table of Daylight Savings Time changes.
3. When any changes are made to the operating parameters or configuration of the safe.

The procedure for updating the safe is as follows:

1. Plug the XPP cable into the jack on the front of the safe. Turn on the XPP and enter your Operator Password to log on. Using the arrow keys, highlight the option **Update Safe** and press the **ENTER** key.
2. At the list of Safe names screen, simply press the **ENTER** key to update the safe. It is not necessary to choose the correct safe name from this list as the XPP will select the correct safe name for you and update the safe. The XPP will now write the data to the safe. When finished, unplug the XPP cable from the safe.

Initialize Safe

The initialize function is used to program a safe for the first time, or to change the name of a safe. This procedure sets the operating parameters, configuration, and date and time of the safe, as well as setting the safes name and the site code of the safe. The site code is a unique code assigned to a facility using the safes. This prevents unauthorized access to the safes by someone from a different facility that uses the same system.
Before a safe can be initialized, it must be unlocked.

The procedure is as follows:

1. Plug the XPP cable into the jack on the front of the safe. Turn on the XPP and enter your Operator Password to log on. Using the arrow keys, highlight the option **Initialize Safe** and press the **ENTER** key.
2. At the list of Safe names screen, select the name of the safe you are programming and press the **ENTER** key. The XPP will now write the data to the safe. When finished, unplug the XPP cable from the safe.

Read Openings / Show Openings

The OS300 safe keeps an audit of the last 960 events. The Read Openings function reads the audit from the safe so they can be viewed by the XPP, or printed on many standard parallel printers that accept generic text. It is with the Show Openings function that these transactions may be viewed on the screen of the XPP.

To read the auditor of the safe:

1. Plug the XPP cable into the jack on the front of the safe and log on using your password. Using the arrow keys, highlight the option **Read Openings** and press the **ENTER** key. The XPP will now read the auditor of the safe.
2. To see the auditor, select **Show Openings** on the XPP and press the **ENTER** key. Using the arrow keys, select the openings report you wish to see and press **ENTER.** If there are multiple openings reports that have been collected in the XPP, pressing the right arrow key will move to the last and most recent audit report in the list.
3. The screen will show the name of the safe, the date and time the safe was read, and the date and time of the safe at the time of reading. Press a key and you will be able to filter the auditor by date or number of transactions if desired, or press **ENTER** to see all the transactions.
4. Use the arrow keys to scroll through the events contained in the audit report. When finished, press the **EXIT** button to return to the menu.
5. To print the report, press the soft key below the caption **IMP**. You will be able to filter the report to show only those transactions that occur within a date range, show only a certain number of the most recent transactions, or show all transactions. Connect the XPP to the printer using the 15 – 25 pin adapter supplied with the XPP and a parallel printer cable.

If you are using the Citizen CMP-10 portable printer, connect this printer using the serial cable connected to the serial port of the XPP.

See Appendix A for an explanation of the auditor events.

Test Safe

Certain diagnostic tests can be performed on the OS300 safe to ensure that the safe is operating properly. The test function tests batteries, switches such as those for key override and open and closed status, keypad functionality, as well as displaying the name of the safe, the version number, and the date and time of the safe.

To perform the tests, do the following:

1. Plug the XPP cable into the jack on the front of the safe. Using the arrow keys, highlight the option **Test Safe** and press the **ENTER** key.
2. Press the **ENTER** key again and the XPP will show the type of safe, the version number, and the name of the safe.
3. Press any key on the XPP and the XPP will display the **battery status**, and the date and time of the safe.
4. Press any key on the XPP and **Switches Test** will display. Just below this line you will see either **Safe Opened** or **Safe Closed**. To properly test these switches, the test function should be performed once with the safe opened and once with the safe closed.
5. Press any key on the XPP and **Keyboard Test** will be displayed. Press each key on the safes keypad to test its functionality.
6. Press any key on the XPP and the **manufacture date** of the circuit board is displayed.
7. Press any key again to return to the menu.

Power the Safe

The XPP is designed to provide power to the safe when the batteries are dead and the safe is closed.

To use the XPP to power a safe:

1. Plug the XPP cable into the jack on the front of the safe. Using the arrow keys, highlight the option **Power the Safe** and press the **ENTER** key.
2. Using the safe keypad, enter the opening code for the safe to open the safe.
3. Press **EXIT** on the XPP when finished to return to the menu.
   Note: If you do not know the opening code of the safe, you must use the Open function of the XPP to unlock the safe.

XPP Auditor

The XPP keeps a record of the last 6,550 transactions performed using the XPP. To see these transactions, simply select the **XPP Auditor** function from the XPP menu and use the arrow keys to scroll through the list. To quickly move to the last transaction in the list, press the right arrow key. Use the left arrow key to move to the first transaction in the list.

This auditor can be printed by pressing the soft key below **IMP** and following the instructions on the screen.
See Appendix B for an explanation of each event recorded in the XPP auditor

Exit

The **Exit** function is used to log out of the XPP. If an operator forgets to log out of the system, the XPP will automatically log off after one minute.

Hidden Menu

The XPP has some options that are available via the hidden menu. To get to the
menu, press and hold the **EXIT** button for 3 seconds. Depending on which operator
is logged in, more options may be available from this menu and are covered below.
The following options are always available, regardless of the functions available to
the operator.

- **Contrast** – Used to adjust the contrast of the screen.
- **Language** – Used to choose the language of the XPP. Available languages are Spanish, English, and French. Not all of these languages may be loaded on an individual XPP.
- **RS232 Baud Rate** – Sets the Baud rate for serial communications.
- **Sleep Setting** – Sets the time, in minutes, until an idle XPP will shut off.
- **Battery Check** – Shows the status of the external power supply, the rechargeable batteries, and the internal supply. Refer to **Checking the Battery Level of the XPP.**
- **Program Version** – Displays the version information of the XPP.
- **XPP Identity** – Displays the ID and manufacture date of the XPP.
- **Program Selection** – This is a password protected area. In the case that the PP is being used for more than just the safes, the type of system the XPP is to be used for can be changed with this selection.

Additional Hidden Menu Functions

As noted above, there are three hidden menu functions are only available to operators who have been given these functions. The use of these functions is described here.

Set DST

To set the daylight savings time changes, first log into the XPP with a password that
allows access to this function. Then press and hold the **EXIT** button for 3 seconds
and the hidden menu will appear.

Select **Set DST** and press **ENTER**.

Notice that you can set the next two time changes. At the bottom of the screen the
functionality of the 'soft keys' is shown. The options are **DD** to select the day, **MM**
to select the month, **YYYY** to select the year, and either **DstF** or **DstB,** to select the
change to set (Forward or Backward).

When first entering the Set DST function, DST Backward is selected by default. To
set the Day for the time to be set back 1 hour, press the soft key below **DD**, then use
the keypad to enter the correct day and press **Enter.** Next press the soft key below
MM, then use the keypad to enter the correct month, (which is always **10** for the
DST Backward setting) and press **Enter**. Next press the soft key below **YYYY**, then
use the keypad to enter the correct year and press **Enter**.

Now press the soft key under **DstF** and follow the same steps to set the date for the
time to be set forward.

Press **EXIT** to return to the menu.

Note: The OS300 Safe only keeps the next Daylight Savings Time Change in its memory; therefore, you must visit the safe with the XPP at least once during the 6 month period since the last time change in order for the next automatic change to work.

Set Date & Time

To set the Date and Time of the XPP, first log into the XPP with a password that allows access to this function. Then press and hold the **EXIT** button for 3 seconds and the hidden menu will appear.

Select **Set Date & Time** and press **ENTER**.

To set the date, select the soft key below the **DD, MM,** and **YYYY** displays, then enter the appropriate day, month, or year and press **ENTER**.

To set the time, first select the soft key below the **Time** display. Notice the soft keys functionality has changed to allow the time to be entered. Select the appropriate soft key below the **HH, MM,** and **SS** displays and enter the appropriate hour, minute, or second and press **ENTER**.

Press **EXIT** to return to the menu.

Edit XPP Operator

To Add, Edit, or Delete operators from the XPP, first log into the XPP with a password that allows access to this function. Then press and hold the **EXIT** button for 3 seconds and the hidden menu will appear.

Select **Edit XPP Operator** and press **ENTER**.

From this screen there are 4 options, **New**, **CLR**, **RCV** and **EDIT**.

Select the soft key under **New** to add an operator to the system. Enter the operator name using the number keys on the keypad. These keys will allow you to enter both letters and numbers. Refer to **Entering Non Numeric Characters** on page **9** for information on entering letters with the keypad. When the name has been keyed in, press **ENTER**, then enter the password for this operator. The password is alphanumeric and can contain up to 8 characters. Press **ENTER** after the password is keyed in.

Now select the functions that will be available to this operator by highlighting the function using the arrow keys and then pressing the **ENTER** key. A selected function will have a check mark displayed next to it. To deselect a function, press the **ENTER** key again when the desired function to be deleted is highlighted. The available functions are as follows:

- **Initialize** – Selecting this option will allow the operator to initialize safes.

- **Open Safe –** Selecting this option will allow the operator to use the XPP to open a safe.
- **Update Safe –** Selecting this option will allow the operator to update a safe.
- **Read Openings –** Selecting this option will allow the operator to retrieve the auditor of a safe.
- **Open All Safes –** If using groups, selecting this option will allow the operator to open all safes on property regardless of the group to which

the operator belongs.

- **Edit Operators –** Selecting this option will allow the operator to set up new operators, or edit existing operators.
- **Show XPP Auditor –** Selecting this option will allow the operator to view the auditor of the XPP.
- **Show Openings –** Selecting this option will allow the operator to view the auditor of a safe that has been retrieved by the XPP.
- **Edit DATE/DST –** Selecting this option will allow the operator to edit the date and time of the XPP, as well as set the dates for Daylight Savings Time changes.

When you have selected the desired functions for this operator, press the soft key below **SAVE** to save this operator to the list.

To Delete an operator, select the soft key under **CLR**. This will bring up a list of operators. Use the arrow keys to select the appropriate operator and press **ENTER**.

The operator will be removed from the system.

To recover a previously deleted operator, select the soft key under **RCV**. This will bring up a list of deleted operators that can be reinstated. Simply select the desired operator and press **ENTER** to recover that operator.

To Edit an operator, select the soft key under **EDIT,** select the appropriate operator and press **ENTER**. At this point, you have the same options as if adding a new operator. You can modify the name, password, and operator functionality. Press **ENTER** to accept changes.

Checking the Battery Level of the XPP

To check the battery level of the XPP, turn the unit on, then press and hold the **EXIT** button for about 3 seconds until the hidden menu appears. Use the arrow keys to highlight the option **Batteries Check** and press **ENTER**. You will see three checks that are done:

- **External Supply** – Shows the status of the external 12VDC transformer that is used to charge the XPP. This will display BAD if the transformer is not plugged in.

Battery Supply – Shows the status of the 4 AA batteries used to power the unit.

- **Internal Supply** – Shows the status of the internal Lithium battery. This battery simply maintains the clock and protects selected portions of the XPP memory in the event of a power loss. Much of the XPP memory is Non Volatile RAM (NVRAM) and is not affected by power loss.

What if the XPP is Lost or Stolen

The XPP has a sequential code assigned to it. If an XPP is lost, a new one can be loaded with the code advanced. Contact Onity or your distributor for a replacement XPP Once the new XPP is received, it must visit each safe in order to lock out the previous XPP. Simply insert the cable into the safe use the **Update** function.

Appendix A

Audit Events of the OS300

- **Close by PIN –** A digital code was used to lock the safe.
- **Opening by PIN –** The safe was opened by the correct code.
- **Key Detection –** The mechanical key override was used.
- **Opening by Operator 'x' –** The XPP was used to open the safe. The operator is noted on the report. This format of the audit is used when the XPP is set up to use operators.
- **Open by XPP–** The XPP was used to open the safe. This format is used when the XPP is not set up to use operators.
- **Safe Blocked –** An incorrect code was entered a number of times, causing the safe to shutdown for a period of time.
- **Code Error –** An incorrect code was used to try to open the safe.
- **Initialization by XPP –** The XPP was used to initialize the safe.
- **Update by XPP –** The XPP was used to update the safe.
- **Test of batteries with keypad –** The CLEAR button of the safe was pressed to indicate the status of the batteries.
- **Test with XPP –** The XPP was used to test the operation of the safe.
- **Read openings by XPP –** The XPP was used to retrieve the audit of the safe.

Appendix B

Audit Events of the XPP

- **XPP Switch On –** The XPP was powered on.
- **XPP Switch Off –** The XPP was powered off.
- **Log In –** An operator has logged onto the XPP. The operator name is listed. **Note:** This event will only display on XPP's that are set up to use operators.
- **Log Out –** An operator has logged out of the XPP. The operator name is listed. **Note:** This event will only display on XPP's that are set up to use operators.
- **XPP Loaded –** The XPP has been loaded with data from the computer.
- **XPP Data Sent –** The Audit events of the XPP and Safes that are present in the XPP have been uploaded to the computer.
- **Auto Switch Off –** The XPP automatically turned off after a period of non use.
- **Initialize Safe –** The XPP was used to initialize a safe. The operator name is listed.
- **Open Safe –** The XPP was used to open a safe. The operator name is listed.
- **Power Safe –** The XPP was used to supply external battery power to the safe. The operator name is listed.
- **Test batteries OK/Bad –** The XPP was used to test a safe. The battery
  status is listed as is the operator name.
- **Read Audit Safe –** The XPP was used to retrieve the auditor of a safe. The operator name is listed.
- **XPP batteries low –** This event is recorded if the batteries in the XPP are low. The batteries are tested when the unit is switched on.

Glossary of Terms

Audit Trail
A record of the transactions that have occurred on the safe and on the XPP.

Initialize
The initial programming of a safe. This function sets the name of the safe, the system code, the operating parameters, and the date and time of the safe.

Master Code Override
If the open code for the safe is unknown, the XPP can be used to open the safe.

Operator
One with access to log in to the XPP

Override
A safe on hold may be opened by the XPP, or by entering the correct code twice.

Safe on Hold
The safe can be programmed to shutdown, or go on hold, for a number of minutes
after a number of invalid code entries. This feature helps to prevent unauthorized access to the safe.

System Code
The system code is a unique code assigned to each facility that is programmed into
the Onity devices to prevent unauthorized access to the devices.

Update Safe
Can only be used on a previously initialized safe. This function sets the operating parameters as well as the setting the date and time.

Variable Code
A different code can be used each time the safe is locked. Whatever code is used to
lock the safe must be used to unlock the safe

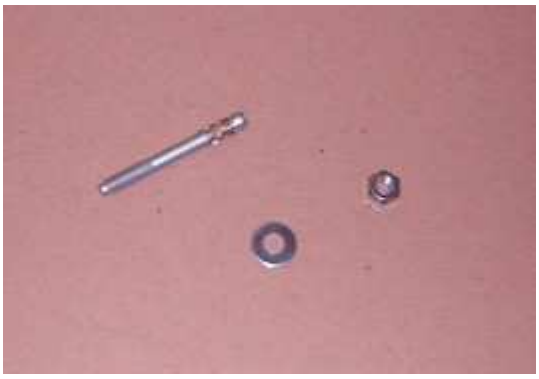
XPP
The Hand Held Programmer used to communicate with the safe.

OS Series Safe

Product Identification Pictures

Concrete Wall Kit
Hilti HUD-1 1.25” x 1 3/16” Anchor
#10 Phillips Screw
¼” Zinc Flat Washer

Drywall Kit
#8 Zip-It Anchor
#8 x 1.25” Phillips
¼” Lock Washer



Concrete Floor Kit
Power-Stud kit (bolt, nut, washer)

Wood Kit
#12 x 1 1/2” Panhead Phillips Wood Screw
¼” Lock Washer

Pedestal Kit
¼” x 20 x 1” Zinc Carriage Bolt
¼” x 20 Hex Nut
¼” Zinc Lock Washer

OS Safe Door Installation & Replacement

Onity provides replacement doors to customers in cases of damage. The replacement of the door is a straightforward process that should not require an undue amount of time and effort.

The only tools required for this job will be a Torx T-10 driver and a 13mm ratchet.

Please note that the door of the Onity Safe is very heavy. Use caution while handling the door to prevent damage and possible injury.

Onity Safe (OS150 Shown)

Step 1: Removing the Internal Cover

In order to remove the internal cover of the safe, you must first open the safe. There are two Torx T-10 screws that must be removed. Please note the two circled T-10 screws in Figure 1:

Figure 1: T-10 Torx screws to be removed

After removing these screws, slide the internal cover forward from back to front over the retracted bolts to remove.

Figure 2: Safe with Internal Cover Removed

Step 2: Removing the door:

The next step in replacing the door is to disconnect the door from the hinge by removing the two (2) 13mm nuts from the door. Be very careful when removing these nuts to ensure that the door does not fall from the safe. The two nuts are circled in Figure 3 below:

Figure 3: 13mm Nuts on Hinge

After these nuts are removed, very carefully partially close the door, and separate the hinge from the door. This will allow the door to slide completely out of the slot between the hinge and the safe body. Figure 4 shows the door removed from the safe. Again,

BE VERY CAREFUL NOT TO DROP THE DOOR. THE DOOR IS VERY HEAVY !!!!

Figure 4: Door Removed from Safe

Step 3: Installing the Replacement Door:

To install the new door onto the safe, first insert the door into the slot between the hinge and the safe and rotate the hinge to allow for the bolts to slip through the holes. Keep a tight grip on the door to prevent it from dropping. When the bolts are in place, re-install the two (2) 13mm nuts. DO NOT TIGHTEN COMPLETELY! Ensure that the door will swing closed and re-open easily. Figure 5 shows a proper alignment of the safe door. Note the close and even tolerances between the door and the safe.

Figure 5: Properly Aligned Safe Door

If there is a problem opening the safe because the spring is not in place, gently insert a thin screwdriver into the door gap to open the safe. A small piece of wire may be wrapped around the internal corner of the safe to allow for easier opening. Be careful not to damage the finish of the safe in this process.

When the door will open and close without obstruction, insert the internal cover into position and check the alignment of the T-10 screws. Make sure that the rear screw is aligned properly as shown in Figure 6. Note how the screw receiver can be seen through the internal cover:

Figure 6: Proper alignment of T-10 Screw

When the T-10 screw has been properly aligned and the door can open and close freely, remove the internal cover and completely tighten the 13mm nuts on the hinge. After the 13mm nuts are tightened, insert the T-10 screws into their original location at the back of the door near the hinge and the front of the edge of the door. Do not tighten these screws completely at this point. While the door is open and the bolts retracted, follow the safe initialization process according to Owners Manual.

While the door is open, check the safe bolt clearance by extending and retracting the bolts using a PIN number (just like a guest would). If the bolts do not extend properly, adjust the internal door cover accordingly. Often, proper extending and retracting can be obtained by twisting the safe bolts in position while extended. (Note: the safe bolts are designed to be freely rotating to prevent unauthorized access)

Figure 7: Safe Door with Properly Extended Bolts

Cycle the bolts open and closed (while the door is still open) at least 3 times to make sure they are able to retract and extend properly. When this test is complete, retract the bolts, tighten the two T-10 screws completely, close the door and lock the safe using a PIN number. The bolts should extend into the lip of the safe easily.

Open the safe using the PIN number to ensure proper operation. When the safe has been tested and the door and bolts can open and close easily, leave the safe open for the guest.

Former Safe Models

TS200 Series Safe HHU Manual

Safe Programming with the Hand Held Unit

For the TS200 safe from Onity to work properly, the safe electronics requires programming with the TS200 Hand Held Unit (HHU).

The HHU has received property information (name of facility, number of rooms, and HHU Serial Number) from the RGA department at Onity. As part of the installation process, information programmed into the HHU must be downloaded to the safe so the HHU and the safe can communicate. This is called associating the safe with the HHU.

Here is a picture of the HHU and it's charging unit.

The HHU is designed to allow for approximately 225 download operations with (1) eight-hour battery charge. After you have completed your set-up for the day and have a fully charged HHU, you must set the day, date and time on the HHU. This is so the property will be able to audit the safes and have accurate dates and times that transactions took place.

To set the date and time on the HHU, complete the following:

1. Turn on the HHU. Listen for the tone and the cursor is blinking next to the word MASTER. (Make sure that the property has not changed the Password.)
2. Enter 00. The cursor is now blinking next to the PASSWORD.
3. Enter 999999. You will here a tone and see the Main Menu—1RPT 2TOOL
4. Type 2Tool. The tool menu appears.
5. Type 2 for Utilities. The safe tool menu appears.

6. Press 2 for Time. The cursor will blink next to the word YEAR.
7. Type 2003. Month will appear on the LED.
8. Type the current month. (For January, type 01). The screen will clear and Day will appear.
9. Type the day of the month. (For the 4th day of the month type 04). Hour will appear.
10. Type the hour using military time. (9AM is 09 and 1pm is 13.)
    The screen will clear and minutes will appear.
11. Type the minutes. (3 minutes after the hour is 03 and 22 minutes is 22).
    The HHU will return to the Main Menu.

As you complete the physical installation procedures, the steps to complete the association (or programming) of the safe is as follows:

Connect the mini-DIN plug to the safe. This connection is located on the right hand side of the safe keypad. (The flat end of the mini-DIN plug should be flush against the safe.)
The safe will come to life. You will see Onity v.17 flash across the LED and the safe will beep.

1. Turn on your HHU. Listen for the tone and the cursor is blinking next to the word MASTER.
2. Enter 00. The cursor is now blinking next to the PASSWORD.
3. Enter 999999. You will here a tone and see the Main Menu—1RPT 2TOOL
4. Type 2Tool. The tool menu appears. 1PWD (Passwords) 2UTIL (Utilities)
5. Type 2 for Utilities. The safe tool menu appears. 1OPEN 2TIME 3TTS (Time to Safe). There is also a hidden option 4ASSOCIATE.
6. Press 4ASSOCIATE. You are prompted 1Adding 2Deleting.
7. Type 1Adding. You will hear a tone and you are prompted for a room number. (You must enter the room number that this safe has been installed in.)
8. Type the room number on the HHU keypad and press the asterisk * key. The * key functions as the enter key. You will hear a tone, see OK! On the HHU LED and then the HHU will return you to the Main Menu.

Before you unplug the HHU from the safe, you must also transfer the date and time from the HHU to the safe. To do that, complete the following:

1. You should be at the Main Menu—1RPT 2TOOL
2. Type 2Tool. The tool menu appears.
3. Type 2 for Utilities. The safe tool menu appears.
4. Type 3TTS for Time to Safe. There will be a short pause and then the HHU will indicate the completion of the transfer with a safe tone and OK! Will appear in the HHU LED. You will then be returned to the Main Menu.
5. Unplug the mini-DIN plug from the safe and turn off the HHU.

To test the safe, close the safe door, type a 4-digit code on the safe keyboard and press the lock key (asterisk key). The safe will lock and the LED will report the closing action. Once closed, key in the same code and the safe will open.

To test the HHU, lock the safe using the same process as outlined above. Connect the HHU to the safe and follow these steps:

1. Turn on your HHU. Listen for the tone and the cursor is blinking next to the word MASTER.Enter 00. The cursor is now blinking next to the PASSWORD.
2. Enter 999999. You will here a tone and see the Main Menu—1RPT 2TOOL
3. Type 2Tool. The tool menu appears.
4. Type 2UTIL for Utilities. The safe tool menu appears.
5. Type 1OPEN. NoUSER appears on the LED. The HHU is asking for the user number of the person who will open the safe. In this case it will be you, user 00.
6. Type 00. The cursor now blinks next to the word PASSWORD, the HHU wants the password of the user who will open the safe.
7. Type 999999, your Password. You will hear an HHU tone and the HHU will request the room number of the safe to be opened.
8. Type the room number of the safe and press the asterisk * key. You will hear an HHU tone and receive a message on the HHU's LED of OK! The safe will unlock and the HHU will turn off. (This is so the HHU cannot be used to open another safe.)

Unplug the mini-DIN plug from the safe. Make sure that the safe is left unlocked upon exiting the guestroom.

TS200 Owners Manual

System Features

The Onity TS200 Electronic safe provides a means of securing the personal belongings of your guests.

Highlights of the features are listed below.

- Electronic Locking Mechanism
  The safe locks and unlocks with a quiet, smooth, motor operated mechanism.
- 10 Key ADA Keypad
  The keypad is used to enter guest and master codes to open and maintain the safe. It features a telephone style keypad and the number 5 (five) button is dimpled to assist sight disabled users. In addition, each time a button is pressed the safe beeps and plays “good” or “bad” tones when an operations succeeds or fails.
- Large Display
  The display shows the code entered and displays diagnostic messages.
- Audible Feedback
  The safe produces different sounds indicating valid and invalid keypad entries, openings, and closings.
- Audit Trail
  The last 960 operations of the safe are recorded in detail to provide you with the most accurate and useful information possible.
- Shutdown Mode
  This prevents unauthorized keypad opening by blocking safe operation after 3 (three) invalid attempts. This value is programmable by Onity.

Hand Held Unit (HHU)

The Hand Held Unit (HHU) is your link to the safe. The primary uses and features of the HHU are listed below.

- Maintenance and Security Access
  For added guest security, maintenance and security personnel can only enter a safe with the use of the HHU.
- Rental Management
  To allow revenue generation and tracking, the HHU and the safes can operate in rental mode. In rental mode, safes must be activated with a special code before standard guest usage.
- Audit Reports Print Outs
  The HHU can print the audit trail of any safe, as well as the audit trail of the HHU itself if it was used to open a safe.
- External Battery Power
  The HHU can power the safe in the event of battery failure.

Guest Use
Standard Mode
Arrival
When a new guest arrives, the safe door should be open. To operate the safe, the guest should follow these simple instructions:

1. Place any personal items into the safe. Do not fill the safe in such a way that the door will not close easily.
2. Gently close the door and hold it shut.
3. Enter a 4 digit code and press *LOCK.

NOTE: Your safes may be programmed with a 6-digit code.

The safe will display “CLOSING DOOR” while the motor is locking the door. When the door is properly locked the safe will display “Closed”, play a descending scale, and display the code that was used for 3 seconds.

If the safe cannot lock the door properly the safe will beep and display “OPEN”. This is usually a result of the contents of the safe obstructing the door. Adjust the contents of the safe so that the door can close completely and try again.
During Stay

REMEMBER: The same code used to close the safe must be used to open the safe.

During the stay, the guest can open and close the safe freely at any time. A code must be entered each time the guest wishes to lock the safe. If the guest wishes, a different code can be used each time the safe is locked.

Note: Simply pressing the *LOCK button will not secure the safe, you must enter a code.

Departure
When the guest is ready to depart, all that is necessary is to open the safe with the code used to lock it and remove the contents.

Note: The safe door should be left open for the next arriving guest.

Rental Mode

Arrival

To use the safe in Rental Mode, the guest must first obtain an access code from the front desk. The access code will be three stars and an eight-digit number. For example; ***91804210 The rental code tells the safe the number of days for which the guest has paid. After this time, the safe will not re-lock. For details on how to issue rental access codes, see the RENT section. When the guest arrives in the room, the safe door should be open. To operate the safe, the guest should follow these simple instructions:

1. Place any personal items into the safe. Do not fill the safe in such a way that the door will not close easily.
2. Gently close the door and hold it shut.
3. Enter the Rental Access code. (Example; ***12345678)
4. If the Rental Access Code was valid, the safe will display the message “Onity SAFE V 1x ENABLE”
5. Enter a 4 digit code and press *LOCK.

NOTE: Your safes may be programmed with a 6-digit code.

The safe will display “CLOSING DOOR” while the motor is locking the door. When the door is properly locked the safe will display “CLOSED”, play a descending scale, and display the code that was used for 3 seconds.

If the safe cannot lock the door properly the safe will beep and display “OPEN”. This is usually a result of the contents of the safe obstructing door. Adjust the contents of the safe so that the door can close completely and try again.

During Stay

REMEMBER: The same code used to close the safe must be used to open the safe.

During the stay, the guest can open and close the safe freely at any time. A code must be entered each time the guest wishes to lock the safe. If the guest wishes, a different code can be used each time the safe is locked.

Note: Simply pressing the *LOCK button will not secure the safe, you must enter a code.

Departure

When the guest is ready to depart, all that is necessary is to open the safe with the code used to lock it, and remove the contents.

Note: The safe door should be left open for the next arriving guest.

Hand Held Unit (HHU)
General Usage
Description
Your Onity safe was designed to operate with the Hand Held Unit (HHU) which is a small computer. This computer performs many functions including:

- Programs the safe's operating mode and variable feature options.
- Associates or disassociates a HHU to a safe.
- Provides activation codes for rental mode.
- Provides rental activity reports on paper tape.
- Interrogates individual safes and prints an audit trail of up to the last 960 openings.
- Provides master code override of locked safes
- Provides emergency power in the case of dead batteries in the safe.

HHU KEYPAD
The HHU computer has 16 buttons for user data entry. They are:

- Numbers 0 through 9.
- The enter button. It is used to complete an entry. For example; to enter room 101 you would press 101*.
  Some entries will complete themselves without the * button. For example; if you enter a 4 digit room number, * is not required to complete the entry.
- # The return button. It is used to return to the previous menu screen.
- **ON**: activates power to the HHU. It must be held down until the HHU plays the ascending scale.
- **OFF**: turns OFF the HHU. The battery will still charge when the HHU is in the base.
- **DEL**: deletes a wrong entry
- **FP**: feeds the printer paper.

HHU Connections

The HHU sits in the base unit when it is not being used at a safe. The base unit keeps the internal battery charged and provides a data connection to a PC or a PMS system. The HHU has the following connections and features;

- The HHU has a short cord with a Mini-DIN plug for connecting to any safe.
- An Epson 40 character dot matrix printer using an ECR-09 ribbon cartridge.
- 2 ¼" (57mm) wide paper roll.
- 16 Character, 2 line LCD Display.
- 6 gold colored contacts on the underside that link the HHU to the base.

The HHU BASE UNIT has the following connections and features;

- RED power indicator light
- Power supply cord
- 9 pin female RS232 connection.

Operation

Power On

Press and hold the green ON button until you hear the HHU tones. The paper will feed a few lines and the display will show Onity T9999 V 16. After two seconds, the display will change to MASTER. At this point enter your 2-digit user number and then your 6-digit password. Only users with Master User Codes can access the main menu. Lower level users can only access functions after a master user has logged in; however, their actions will be attributed to the master user except when opening a safe.

Main Menu

Once a correct password has been entered the display will show;
MAIN MENU
1RPT 2TOOL 3RENT

NOTE: 3RENT will not display if your facility is not using the rental mode.

Each menu choice and possible submenu is described in detail below.

Throughout this document we will use shorthand notation to represent the keystrokes required to access a particular menu. For example, if we want you to go to the OPEN menu we will say (2/2/1) which means you press 2 twice and then 1.
See the appendix for a diagram of the menu structure.

1 RPT (Reports)

1. Safe (safe audit trail report)
   This function prints an audit trail report of any safe while the HHU is connected to the safe. Follow these steps to print the audit trail;
   - Connect the Mini-DIN cable to the safe using the connector on the left side of the safe keypad directly under the Onity logo. The flat portion of the cord goes towards the safe door.
   - Turn on the HHU and enter a user number and password. Upon connection the display will scroll “Onity Safe V16” and the safe will start to chirp every second or so.
   - Select Safe Report. (1/1)
   - Enter the room number followed by * (Example 102*)
   - The HHU will display “From”. Enter 1* to print the report from the last record. To print the last 50 transactions you must do so in 2 batches. For the last or most recent 25 records enter 1 for the FROM value, and 25 for the NUMBER value. This will print records 1 – 25. When the print job is finished enter 26 for the FROM value and 25 for the NUMBER value. This will print records 26 – 50.
   - The HHU will display “Number”. Enter the number of records desired. (Example 10) The maximum you can enter is 25.

The HHU will print the report followed by a signature panel that can be used to obtain signatures from the witnesses to the report.

The following messages may be displayed on the printout;

- **Digital Closing** – the guest used a combination to lock the safe.
- **Digital Opening** – the guest used a combination to open the safe.
- **Hour Change** – the HHU was used to change the clock in the safe.
- **HHU Opening** – the HHU was used to open the safe. To see WHO opened the safe run the HHU report while connected to the safe. Find the transaction that has the same date and time and note the User Number (US 00 or US 01). From your manual list of users you can determine who opened the safe.
- **Reset** – the electronic module of the safe has been reset using the HHU or the reset button.
- **Block** – the bolts were blocked by an obstruction when an attempt was made to lock the safe.
- **Validate** – The rental code was used.

2. HHU

   This function will print a report of the users who have used the HHU to open a particular safe.

   - Connect the HHU to the safe.
   - Turn on the HHU and enter a user number and password.
   - Select the HHU report. (1/2)
   - Enter the room number of the safe (Example 101*)
   - The HHU will display “From”. Enter 1* to print the report from the last record. To print the last 50 transactions you must do so in 2 batches. For the last or most recent 25 records enter 1 for the FROM value, and 25 for the NUMBER value. This will print records 1 – 25. When the print job is finished enter 26 for the FROM value and 25 for the NUMBER value. This will print records 26 – 50.
   - The HHU will display “Number”. Enter the number of records desired. (Example 10) The maximum you can enter is 25.
   - Examine the printout to locate the date and time that matches the HHU Opening transaction on the safe report. The number next to the ‘US” is the number of the HHU user who opened the safe.

2. TOOL

1. PWD (add delete or change HHU user passwords)

This function allows you to add, delete or change codes and passwords for users of the HHU. User codes are to restrict access to the HHU and to leave an audit trail with user identification each time the HHU is used to open a safe.

The user codes are arranged in a hierarchy based upon 3 (three) levels of users. There is one grand master user (00), 9 master users (10 – 90), and 90 (01 – 99) users. See the appendix for a chart of this configuration.

Only the Grand Master user (00) and the Master Users (10 –90) can turn the HHU on and use any of the main menu choices.

Users (01 – 99) have only 1 menu choice that requires their user code and password – the OPEN function (2/2/1). However, this function is ONLY available after a master user has turned on the unit.

Every new user code added has a default password of 999999 until it is changed.

1NEW (add user)

To add your first Master Users follow these steps;

- Turn on the HHU and enter the grand master user number (00) and password (999999).
- Select 2/1.
- Enter your user number at the NoUSER prompt and then your password.
- Select 1NEW
- Enter a 2-digit code for the first new master user (10 – 90). The unit will display OK! and go back to the main menu. Now turn the HHU off.
- Turn on the HHU and enter the new master code. Use 999999 as the password.
- Select 2/1 and enter the new user code at the NoUSER prompt and the current password (999999).
- Select 3CHG and enter the current password.
- At the “New Password” prompt, enter your new password.
- At the “Again Password” enter the password a 2nd time for confirmation. If the 2 entries don’t match you will be prompted to start over again.

Only the Grand Master User (00) can enter Master Users. Only Master Users can enter Regular Users but ONLY those that begin with the same first digit. For example, Master User 10 can add, delete or change Users 11-19. Master User 20 can only modify Users 21-29, etc.

To <u>add</u> a Regular User and <u>change</u> the password from the default 999999 to a new password perform the following steps. This example uses Master User 10 and Regular User 11. The new password for user 11 will be 111111.

- Turn on the HHU and enter User 10 and the password for User 10.

- Press 2/1 and enter your user number at the NoUSER prompt, 10 in this case, and then your password.
- Press 1NEW and enter 11 for the new user code. The HHU will display “OK!” The user 11 is now entered but has a password of 999999.
- Press 2/1 and enter 11 at the NoUSER prompt.
- Enter the default password of 999999
- At the CHANGE PASSWORD prompt enter the CURRENT password of 999999.
- At the NEW PASSWORD prompt enter the new password of 111111
- At the “AGAIN PASSWORD” prompt re-enter the password of 111111. The HHU will display “OK!” and return to the main menu.

The password menu [1NEW 2DEL 3 CHG] will only be displayed if you enter a MASTER USER CODE at the NoUSER prompt. If you enter a USER code at the NoUSER prompt, you can only change the password for that user so no menu is displayed.

2DEL (delete user)

This function is used to delete a user or master user. It can only be used from the level above the one to be deleted. For example, Grand Master User 00 can delete master users 10 – 90. Master user 10 can only delete users 11-19. <u>If Grand Master User 00 deletes a master user, all users under that master will also be deleted.</u>

To delete a user, follow these steps;

- Turn on the HHU and enter your user number and password.
- Select 2/1 and re-enter your user number and password.
- Select 2DEL and enter the user number to delete. The HHU will display OK!

3CHG (change password)

This function is used to change the password of a master user. It can only be used to change the password of the user that is currently logged in. To change the password of a regular user see the next paragraph.

- Turn on the HHU and enter your user number and password.
- Select 2/1 and re-enter your user number and password.
- Select 3CHG.
- At the CHANGE PASSWORD prompt, enter the CURRENT PASSWORD.
- At the NEW PASSWORD prompt, enter the NEW PASSWORD.
- At the AGAIN PASSWORD prompt, enter the same new password again.
- If you entered the same password the HHU will display OK! If you made a mistake you will be prompted to try again.

NOTE: If the password for a master user is not known it cannot be changed. In this situation the Grand Master User (00) can delete that user and re-enter them. See “Del” and “New” for the procedures to follow.

Changing the password of a Regular User

You can only change the password of a user that is subordinate to the master user currently logged in. For example, the password of user 11 can only be changed if master user 10 is logged in.

To change the password of a regular user follow these steps.

- Turn on the HHU and enter your user number and password.
- Select 2/1
- At the NoUSER prompt enter the user number (ex, 11, 12, 13. . .)
- Enter the current password for that user
- At the CHANGE PASSWORD prompt, enter the CURRENT PASSWORD.
- At the NEW PASSWORD prompt, enter the NEW PASSWORD.
- At the AGAIN PASSWORD prompt, enter the same new password again.

If you entered the same password the HHU will display OK! If you made a mistake you will be prompted to try again.

2. Util (utility menu)

This menu choice is used to access the OPEN, TIME and TIME TO SAFE (TTS) functions.
The OPEN function is used to unlock a safe if the combination is forgotten or the batteries are low.
The TIME function is used to set the clock in the HHU. This is important so that you have an accurate and timely audit trail of both the HHU and the safes.
The TTS function (time to safe) is used to set the clock in the safe. This function should only be used when you are sure the time in the HHU is correct.

1 Open

Follow these steps to open a safe.

1. Turn on the HHU and enter a user number and password.
2. Select Tool/Utility/Open (2/2/1)
3. Enter the user number of the person who will be opening the safe. Note that it does not have to be the master user who is logged in but the user number must begin with the same first digit (example 10, 11, 12 ,13 . . .)
4. Enter the password for that user.
5. Connect the Mini-DIN cable to the safe using the connector on the left side of the safe keypad directly under the Onity logo. The flat portion of the cord goes towards the safe door. Upon connection the display will scroll “Onity Safe ” and the safe will start to chirp every second or so.
6. Enter the room number followed by * (Example 102*)
7. The safe will unlock and the HHU will turn off so that it cannot be used to open another safe without first entering a master password.

2 Time

This function is used to set the clock in the HHU to the current date and time. This is important so that you have an accurate and timely audit trail of both the HHU and the safes.
To set the time in the HHU follow these steps.

- Turn on the HHU and enter a user number and password.
- Select Tool/Util/Time (2/2/2)
- At the YEAR prompt enter the year as 4 digits.
- At the MONTH prompt enter the month in 2-digit format. (ex, 08, 11, etc.)
- At the DAY prompt enter the day in 2-digit format.
- At the HOUR prompt enter the hour in military or 24-hour format.
- At the MINUTE prompt enter the minutes in 2-digit format.

- The HHU will automatically return to the main menu.

3 TTS (time to safe)

The TTS function (time to safe) is used to set the clock in the safe. This function should only be used when you are sure the time in the HHU is correct.

- Connect the Mini-DIN cable to the safe using the connector on the left side of the safe keypad directly under the Onity logo. The flat portion of the cord goes towards the safe door.
- Turn on the HHU and enter a user number and password. Upon connection the display will scroll “Onity Safe V16” and the safe will start to chirp every second or so.
- Select Tool/Utility/TTS (2/2/3)
- The HHU will communicate with the safe, set the time, display “OK!”, play an ascending scale, and return to the main menu.
- Unplug the HHU from the safe.

4 Associate (hidden)

This menu choice is only used when the safes are initially purchased, or when a safe is replaced. It is used to associate a safe with the database in the HHU. The HHU must be associated with a safe before it can be used to communicate with the safe. This insures that only the HHU assigned to your facility can be used to communicate with your safes.

Only use this menu choice on the advice of a Onity Technician.

1 Add

To associate a safe to your HHU perform these steps:

- Connect the HHU to the safe
- Turn on the HHU and enter your user number and password.
- Press Tool/Util/4 (2/2/4).
- Press 1 (Adding)
- At the ROOM prompt enter the room number (and * if required)
- The HHU will display “OK” if the operation succeeded.
- The HHU will return to the Main Menu.

2 Delete

If the association between a safe and the HHU is deleted the HHU will not be able to communicate with the safe to print audit reports, unlock the safe, or to set the clock.

To delete the association of a safe to the HHU, perform these steps:

- Connect the HHU to the safe
- Turn on the HHU and enter your user code and password.
- Press 2/2/4/2
- The HHU will display “OK” if the operation succeeded and it will return to the main menu.

3. RENT

The RENT menu choice will not appear on your HHU if you are not renting or charging for safe usage.

1. Guest

This function is used to calculate the rental code for a safe. See the section " Guest Use, Rental Mode" for instructions on operating the safe in rental mode.

To calculate a rental code follow these steps.

- Turn on the HHU and enter your user code and password.
- Select Rent/Guest (3/1).
- At the ROOM prompt, enter the room number followed by * (example 101*).
- At the DAYS prompt enter the number of days the guest will use the safe followed by *.
- At the PRICE prompt enter the room rate. The * key is used to enter a decimal point. (to enter 2.50 press 2*50).
- The HHU will print a ticket for the guest which displays the date, time, room number, rental charge, number of days, the total charge, and the rental code.
- Tear off the printout and present it to the guest.

2. Accounting

This function is used to print revenue reports for the safe rental. You can print a report for any month, a report for the year (last 12 months), or a report for the current month to date.

To print a report, follow these steps.

- From the main menu press Rent/Acct (3/2).
- Enter your master user code and password.
- Select the report you want.

1. Month – prints the report for any month. If the month you entered is in the past the report will be for the current year. If the month you enter is in the future, then the report will be for that month of last year. (for example, if the current month is August and you enter 9)
2. Year – prints a report for the last 12 months.
3. MTD – Month to Date – prints a report for the current month from the first day to the current day.

Messages
Safe

- Battery level message. To test the batteries, press #. The safe will display “b / / / / / / / “ (the letter “b” and eight bars). The number of bars that appear correspond to the level of battery power remaining. If the batteries are too low to lock the safe the guest will not see any numbers in the display when the buttons are pressed.
- **Closing Door** – as the bolts are moving.
- **Closed** – when the bolts have stopped moving.
- **Opening Door** – when the bolts are moving.
- **Open** – when the bolts have stopped moving.
- **Bloc** – the safe locking bolt was blocked and could not lock the safe.
- **Code Error** – the wrong code was entered.
- **Hold 30’** – the wrong code was entered too many times. The safe is now blocked and will not open for 30 minutes even if the correct code is entered. (Hint – enter the correct code 2 times successively and then wait 10 seconds to open the safe).

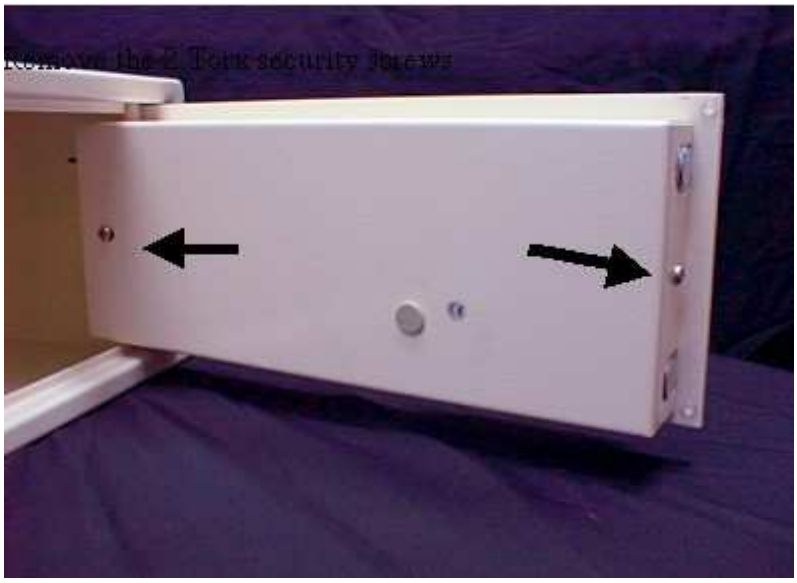
HHU

- **Assigned error** – a safe was associated but a room number was not given, delete the association and do it again.
- **No link** – the HHU cannot communicate with the safe. The HHU cannot communicate if it is in the base unit. Otherwise, check the cable to see if it is connected, or try repeating the command.
- **Only Master US&S** – only a master user can use this function, log in with a master code such as 00, 10, 20, etc.
- **Not Permitted** – the current logged in user is not allowed to perform that function.

Service & Repairs

Battery Replacement

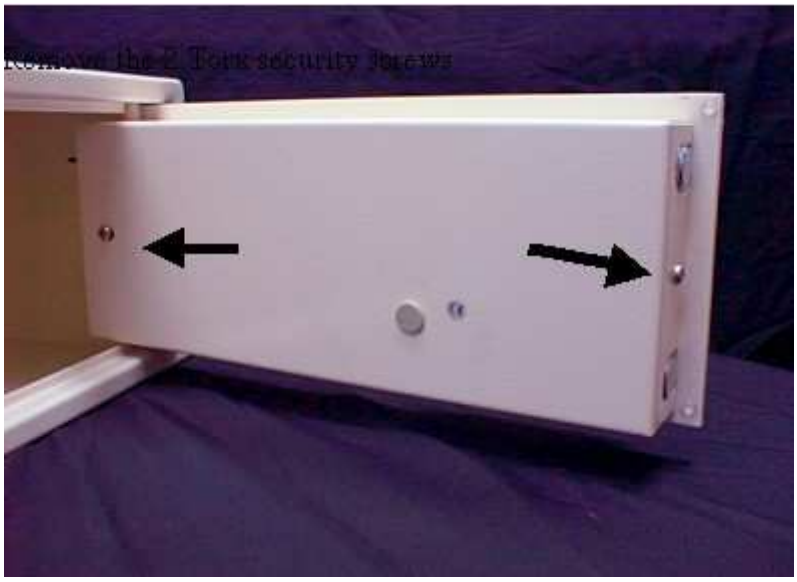
Using a T20 Security Torx screwdriver, remove the 2 bolts which fasten the door cover. The safe must be open to perform this task.



Remove the 2 security screws.

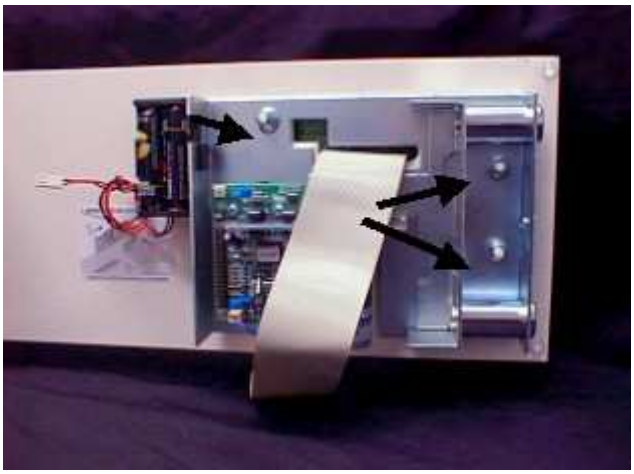
With the cover removed locate the battery holder. If this is the first time the batteries have been replaced you will need to cut the plastic strap which is holding the batteries in place. You need to replace this strap or use electrical tape to secure batteries.
Depress the tab and slide the battery holder up to remove it. The location of the tab is indicated by the drawing on the label inside the safe. It is fastened to the inside of the door near the battery holder.
Remove the 4 AA batteries and replace them with fresh batteries. Use only high quality alkaline batteries such as Eveready or Duracell. Be sure to observe the correct orientation of each battery. Using the HHU set the day and time after battery replacement.

Bolt Mechanism Replacement
The electronic circuit board, motor, and bolt mechanism are replaced as a single unit. To replace the bolt mechanism, follow these steps. See the diagrams for assistance.
Remove the 2 T20 Security Torx screws.
Remove the cover.
Unplug the wide ribbon cable
Remove the 3 10mm locknuts
Remove the bolt works.
If the keypad needs to be replaced, remove the 4 screws
Replace with new parts in reverse order.

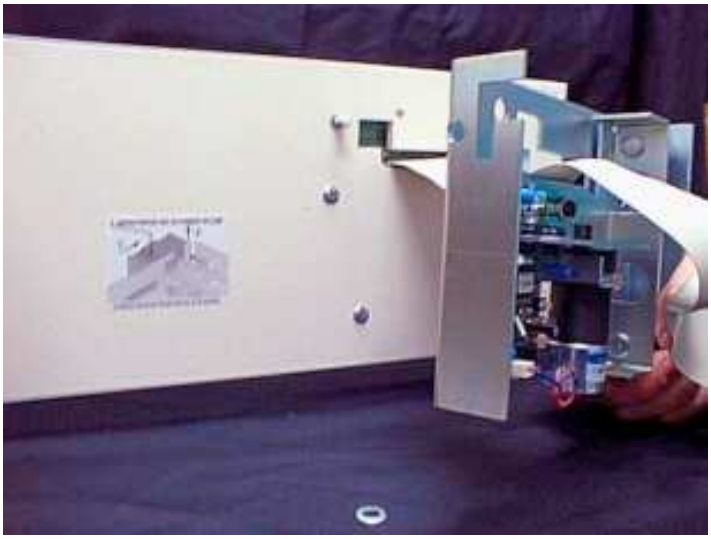


Remove the 2 security screws.

Unplug the ribbon cable. When replacing, the RED wire faces down.



Remove the three 10mm locknuts.



Remove bolt works.

Drilling a Safe

A malfunctioning safe should never be forced open without the permission of the Onity technical support department. For this reason, and for security reasons, the drilling procedure is not published in this manual. If all other attempts to open the safe have failed, contact Onity technical support for the proper procedure and location required to drill a safe.

In preparation for such an event, your maintenance department should be equipped with a good quality ½ inch electric drill and the following sizes of drill bits.

3 mm or 1/8 or .125
5 mm or 13/64 or .203
7 mm or 9/32 or .281
10 mm or 25/64 or .393
11 mm or 7/16 or .437

The sizes of the drill bits can vary according to what you have available EXCEPT for the last (largest) drill bit.

The exact location to drill and the procedure to follow will be provided when you call technical support.

HHU Menu Structure

Each item followed by a line indicates that the user must enter data. (Example: Password_____)

Onity SAFE No
USER_____PASSWORD_____

1 RPT
1 SAFE LAST
OPER FROM_____ TO
NUMBER_____ **2 HHU**
LAST INTER FROM_____
TO NUMBER_____

2 TOOL
1 PWD USER #_____
PASSWORD_____
1 NEW No
USER_____ **2 DEL**
No USER_____
3 CHG
No USER_____
2 UTIL
1 OPEN No
USER_____ PASSWORD_____
ROOM_____ **2**
TIME YEAR_____ (YYYY)
MONTH_____ (MM)
DAY_____ (DD)
HOUR_____ (HH)
MINUTE_____ (MM) **3**
TTS
4 ASSOCIATE (Hidden menu)
1 ADDING
2 DELETING

3 MAIN (Hidden menu)
SERVICE CODE_____

1 OPT

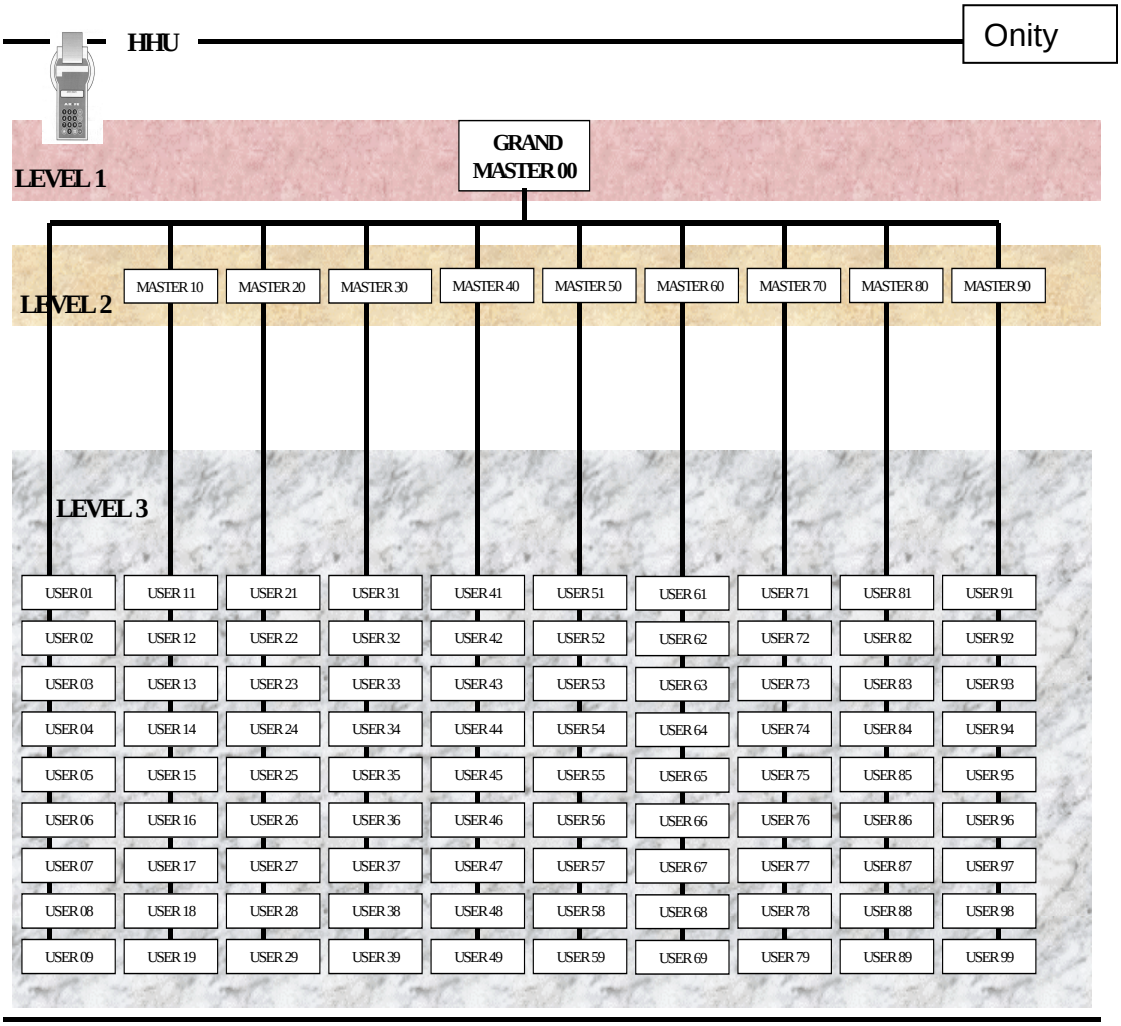
1 DO
2 READ
3 WRITE

2 CODE

1 OPTC
No USER_____
PASSWORD_____
OPT CODE_____
NEW_____
AGAIN_____
2 MC
No USER_____
PASSWORD_____
MASTER CODE_____
NEW_____
AGAIN_____
3 RES
SERVICE CODE_____

3 REN (Rental – optional mode)
1 GUEST
ROOM_____
DAYS_____
PRICE_____
CODE_____ **2 ACCT**
1 MONTH
MONTH_____
2 YEAR
3 MTD

HHU User Code Diagram


HHU
Onity
LEVEL 1
GRAND MASTER 00
LEVEL 2
MASTER 10
MASTER 20
MASTER 30
MASTER 40
MASTER 50
MASTER 60
MASTER 70
MASTER 80
MASTER 90
LEVEL 3
USER 01
USER 11
USER 21
USER 31
USER 41
USER 51
USER 61
USER 71
USER 81
USER 91
USER 02
USER 12
USER 22
USER 32
USER 42
USER 52
USER 62
USER 72
USER 82
USER 92
USER 03
USER 13
USER 23
USER 33
USER 43
USER 53
USER 63
USER 73
USER 83
USER 93
USER 04
USER 14
USER 24
USER 34
USER 44
USER 54
USER 64
USER 74
USER 84
USER 94
USER 05
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USER 46
USER 56
USER 66
USER 76
USER 86
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USER 07
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USER 57
USER 67
USER 77
USER 87
USER 97
USER 08
USER 18
USER 28
USER 38
USER 48
USER 58
USER 68
USER 78
USER 88
USER 98
USER 09
USER 19
USER 29
USER 39
USER 49
USER 59
USER 69
USER 79
USER 89
USER 99