

Drill Fixture Light Base Repair Kits

FAA L-867B / L-868B



Our repair kits allow you to easily remove and replace broken and stripped out bolts in the top flange of runway light bases. The drill bushing aligns with the existing bolt holes, providing a secure guide to drill out or chase/clean threads in the light base. This saves time and money by cutting down on the guesswork of manually drilling out bolts.

Applications

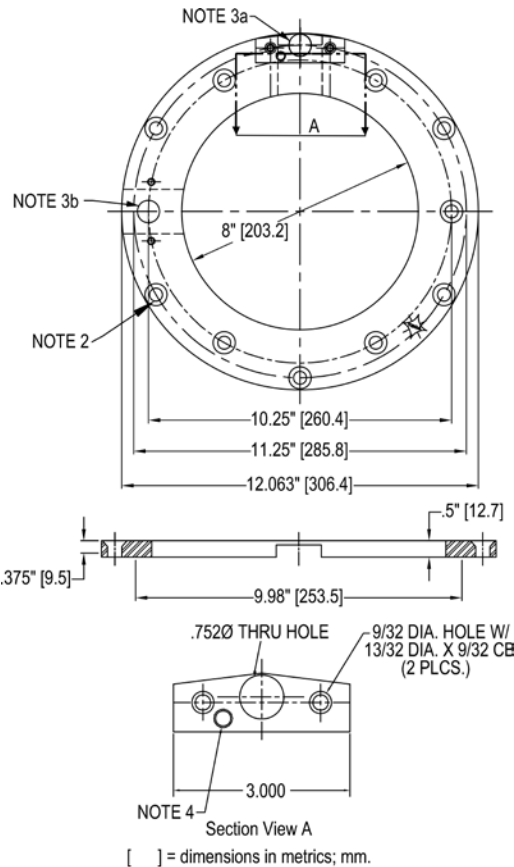
- Drill out broken bolts.
- Chase/clean threads in light base.

Features

- Bolts directly into fixture, assures proper alignment with existing bolt pattern.
- Centers drill bit in broken stud.
- Keeps drill bit from "walking".
- Aligns tap to chase the threads.

AW7012 Repair Kit

1. Drill Plates are zinc plated with O.D. wash
2. (11) 7/16" Ø equally spaced, thru holes with 82° counter sink
- 3a. 11.25" BC, (1) 3/4" Ø hole for Drill & Tap Bushings
- 3b. 10.25" BC, (1) 3/4" Ø hole for Drill & Tap Bushings
4. (1) Bushing Lock Screw (10671000)
5. Fixtures are shipped as a kit with:
 - (1) 5/16" Drill Bushing (10901001)
 - (1) 5/16" H.D. Drill (10901004)
 - (1) 5/32" Drill Bushing (10901002)
 - (1) 5/32" H.D. Drill (10901003)
 - (1) #3 Screw Extractor (10671001)
 - (1) "Z" Drill Bushing (10901000)
 - (1) 3/8"-16 x 6" Extension Tap (10900055)
 - (6) 3/8"-16 x 1" Flat Allen Head Screws (10640059)
 - (1) Poly Case (10907012)



AW7012G Repair Kit

This kit has all the features of the AW7012 Kit, plus the ability to install self-tapping stainless steel inserts.



M10 metric thread available.

AW1076 Upgrade Kit

This kit upgrades your AW7012 Kit to an AW7012G. It has everything you need to install self-tapping stainless steel inserts.



M10 metric thread available.

AW7012– Drill Fixture

Repair Instructions for: Chasing Threads in Top Flange

STEP 1



Determine if base is L867B or L868B.
Cut energy to fixture if applicable.

Unbolt and remove light fixture
or cover from light base to be repaired.

Be sure that you have adequate amount
of tapping fluid prior to starting
process.



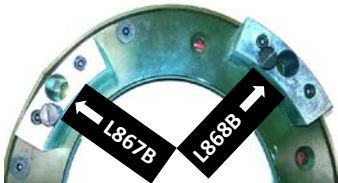
Position drill bushing over broken bolt and
attach to light base using provided flat
head bolts.

Note: (if applicable)

Longer Bolts have been provided to
accommodate spacer ring thicknesses.

Bushing Locations:

Most outer positioned bushing block is for
L868B (11.25" bolt circle),
inner positioned bushing block is for
L867B (10.25" bolt circle).



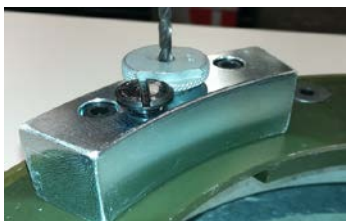
STEP 2



Insert 5/32" bushing into bushing block.



Use liberal amount of tapping fluid.

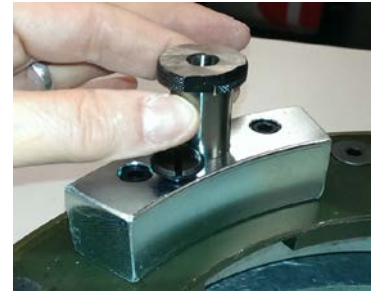


Use 5/32" drill to core out center of bolt
(slow to medium drill speed preferred).



Remove 5/32" bushing, using reverse
drill speed, attempt to remove bolt
with extractor. If unable to remove
bolt, go to step #3.

STEP 3



Insert 5/16" bushing into bushing block.



Use liberal amount of tapping fluid.



Use 5/16" drill and drill out remainder
of broken bolt, being sure to drill
all the way through top flange to be
sure bolt is completely removed
(slow to medium drill speed preferred).



Reapply liberal amount of tapping fluid
using slow drill speed or manual ratchet,
use 3/8"-16 tap and slowly chase
threads in base top flange.
Remove drill fixture and wipe off
top flange to remove all
material and remaining tapping fluid.
*Note: If you are unable to repair threads,
use stainless steel inserts as
shown starting on step #4.*
Threaded Insert Capabilities Required

Due to many variables, no guaranteed result is implied as a result of using the AW7012 Drill Fixture Thread Repair Kit.

AW7012G– Drill Fixture Repair Instructions for Installing S.S Threaded Insert

Note: Must have AW7012G kit or upgraded AW7012 with Part AW1076

AW1076 Upgrade Kit



Steps #4 through #7 provide instruction on insertion of a stainless steel threaded insert.

This process will replace your damaged threads in the top flange of your base or extension / top section. Please review instructions carefully prior to starting the steps.



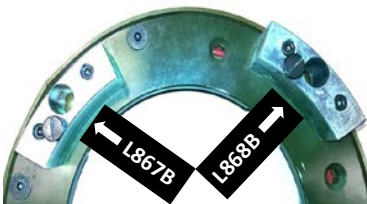
Position drill bushing over broken bolt and attach to light base using provided flat head bolts.

Note: (If applicable)

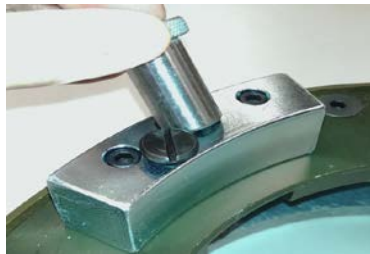
Longer bolts have been provided to accommodate spacer ring thicknesses.

Bushing Locations:

Most outer positioned bushing block is for L868B (11.25" bolt circle), inner positioned bushing block is for L867B(10.25" bolt circle).



STEP 4



Insert 15/32" bushing into bushing block. Apply liberal amount of tapping fluid.



Use 15/32" drill bit, drill hole in top flange. Drill through spacer rings if applicable. If you do not have any spacer rings and/or flange rings, go to step #6.

STEP 5



If you have spacer rings and/or flange ring, insert 1/2" bushing and use reamer to enlarge through holes in spacer rings and/or flange ring-ONLY. Use depth gauge to avoid reaming top flange hole- **DO NOT REAM OUT** top flange of base and/or top flange of extension or top section.

STEP 6



Assemble long installation tool using 3/8" -16 x 5 1/2" bolt.

Assembly sequence should consist of 5 1/2" bolt

- 1- 3/8" SAE flat washer
- 1- 1/2"-13 hex nut
- 2- 3/8" SAE flat washers
- installation sleeve
- 3/8" S.S threaded insert

Assure that cutting holes on insert are at the end the of assembly.

The installation sleeve has a slightly larger diameter than the insert. This will assure that the insert is installed flush to the top of the flange.



Insert 1/2" bushing into bushing block. Liberally apply tapping fluid to insert and drilled hole. Attach wrench on the cap screw and turn in the threaded insert until the installation sleeve bottoms out on top of flange. Insert should now be installed flush to top of flange.

To release installation tool:

Place another wrench on 1/2" nut and loosen cap screw.

Threaded Insert is now installed.

Take tube brush and remove any metal chips that may remain inside insert.

Repair is now complete!



400 Series Stainless Steel Insert
Will not back out / will not wear out

Due to many variables, no guaranteed result is implied as a result of using the AW7012G Drill Fixture Threaded Insert Kit.