

**How To Install A Ceiling Fixture (with Bar Strap)**

What happens when the screw holes in the new ceiling fixture you want to install do not match up with the old ones? Easy. Introducing the bar strap! The procedure for making this installation is virtually identical with the preceding recipe. It will just take a few minutes longer to install the bar strap.

**Utensils**

Medium flat blade screwdriver  
Adjustable pliers  
Drill  
Bits  
Soldering iron  
Long-nosed pliers  
Wire stripper

**Ingredients**

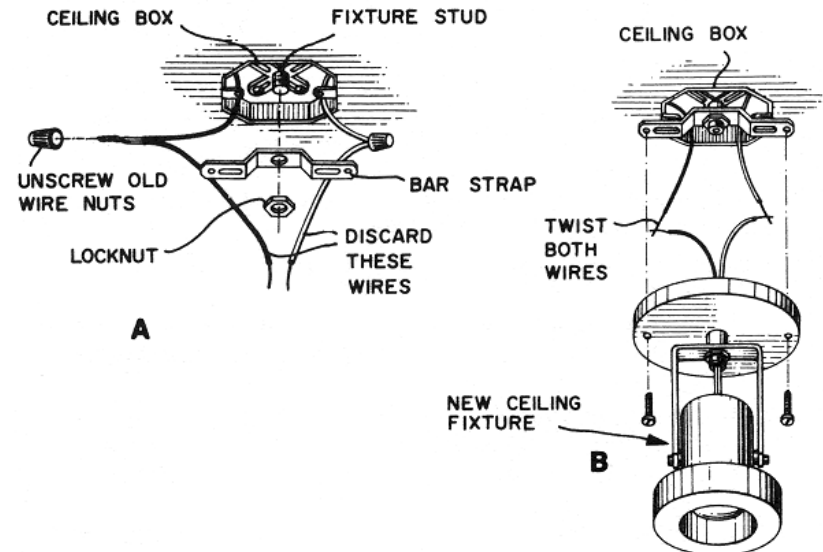
Ceiling fixture  
Fixture stud, if none exists in ceiling box  
Assortment of sheet metal screws  
One to two extension nipples  
Bar strap to match holes in new fixture  
Lock nut to match stud or nipples  
Coil of solder, resin core  
Soldering flux (non-acid)  
Two #8 wire nuts  
Two 8/32" inch machine screws, 1", 1" 1/2, or 2" inches long, as necessary

**Approximate Time: 30 To 45 Minutes, Depending On Size And Weight Of New Fixture**

1. **Turn off current** by disengaging appropriate fuse or circuit-breaker.
2. Remove old fixture by unscrewing screws in counterclockwise direction. Pull fixture away gently so as not to break plaster. Disconnect wires.
3. Examine ceiling box. If there is no stud, install one (as shown in Fig. 66A) by drilling into ceiling box and securing stud with sheet metal screws. Four holes and four screws will be necessary.
4. Place center hole of bar strap over stud. If it does not reach, it will be necessary to install 1 or 2 nipples to the stud.



5. With stud (or nipple) protruding through center hole of bar strap, install lock nut as shown in Figure 65A. Tighten with pliers in clockwise direction, but do not over tighten.
6. If wires from ceiling box have been soldered or taped together, cut those sections away.
7. Strip back 1/2" inch of insulation from the ends of wires from ceiling box and from fixture, with wire stripper, exposing the inner strands.
8. Twist strands together in clockwise direction.
9. Solder each wire end and let cool.
10. Connect wires from ceiling box to wires from fixture: black to black and white to white. If both wires from the ceiling box are white, then they may be connected arbitrarily to the wires from the fixture (Fig. 65B).
11. Place wire nuts over exposed ends.
12. Stuff wires into ceiling box.
13. Screw fixture into bar strap using machine screws.
14. Insert bulb.
15. Turn on current and energize fixture.



**Figure 65.**  
Installing A Ceiling Fixture  
With Bar Strap