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Eddie-Bolt 2: Part Number, Hole by Fit, Grip and Inspection

Pin and nut numbers · hole by fit and oversize · grip · installation · inspection · removal

Recommended hole by fit, with the drill inside the range

Dash (nominal)	Clearance fit	Close ream	Transition fit	Interference fit
-5 (5/32)	0.164–0.167 · #19 (0.1660)	0.1635–0.1645 · no standard drill inside: ream	0.161–0.164 · #20 (0.1610)	0.1595–0.1615 · #20 (0.1610)
-6 (3/16)	0.190–0.193 · #11 (0.1910)	0.1895–0.1905 · no standard drill inside: ream	0.187–0.190 · #12 (0.1890)	0.1855–0.1875 · 12/64 (0.1875)
-8 (1/4)	0.250–0.253 · 16/64 (0.2500)	0.2495–0.2505 · 16/64 (0.2500)	0.247–0.250 · 16/64 (0.2500)	0.2455–0.2475 · D (0.2460)
-10 (5/16)	0.312–0.315 · 20/64 (0.3125)	0.312–0.313 · 20/64 (0.3125)	0.309–0.313 · 20/64 (0.3125)	0.308–0.310 · no standard drill inside: ream
-12 (3/8)	0.375–0.378 · V (0.3770)	0.3745–0.3755 · 24/64 (0.3750)	0.371–0.375 · 24/64 (0.3750)	0.3705–0.3725 · no standard drill inside: ream
First oversize, 1/64 in				
-6 (13/64)	0.203–0.206 · #6 (0.2040)	0.2026–0.2036 · 13/64 (0.2031)	0.200–0.203 · #7 (0.2010)	0.1986–0.2006 · #8 (0.1990)
-8 (17/64)	0.266–0.269 · H (0.2660)	0.2651–0.2661 · 17/64 (0.2656)	0.263–0.266 · 17/64 (0.2656)	0.2611–0.2631 · no standard drill inside: ream
-10 (21/64)	0.328–0.331 · 21/64 (0.3281)	0.3276–0.3286 · 21/64 (0.3281)	0.325–0.328 · no standard drill inside: ream	0.3236–0.3256 · no standard drill inside: ream
-12 (25/64)	0.391–0.394 · no standard drill inside: ream	0.3901–0.3911 · 25/64 (0.3906)	0.388–0.391 · 25/64 (0.3906)	0.3861–0.3881 · no standard drill inside: ream
Second oversize, 1/32 in				
-6 (7/32)	0.219–0.222 · #2 (0.2210)	0.2182–0.2192 · 14/64 (0.2188)	0.216–0.219 · 14/64 (0.2188)	0.2142–0.2162 · no standard drill inside: ream
-8 (9/32)	0.281–0.284 · 18/64 (0.2812)	0.2807–0.2817 · 18/64 (0.2812)	0.278–0.281 · K (0.2810)	0.2767–0.2787 · J (0.2770)
-10 (11/32)	0.344–0.347 · no standard drill inside: ream	0.3432–0.3442 · 22/64 (0.3438)	0.341–0.344 · 22/64 (0.3438)	0.3392–0.3412 · no standard drill inside: ream
-12 (13/32)	0.406–0.409 · 26/64 (0.4062)	0.4057–0.4067 · 26/64 (0.4062)	0.403–0.406 · Y (0.4040)	0.4017–0.4037 · no standard drill inside: ream

Recommended grip ranges

Grip dash	Grip range, in
3	0.126–0.188
4	0.189–0.250
5	0.251–0.312
6	0.313–0.375
7	0.376–0.438
8	0.439–0.500
9	0.501–0.562
10	0.563–0.625
11	0.626–0.688
12	0.689–0.750

Key points

- **Five flutes in the pin thread;** the nut lobes are swaged into them at torque.
- **Dash = diameter in 1/32 in;** last number = maximum grip in 1/16 in.
- **Oversize letter at the end:** X = 1/64 in, Y = 1/32 in.
- **Four hole fits:** clearance, close ream, transition, interference.
- **A nut that is not fully swaged is not re-swaged:** replace pin and nut.
- **Conventional hex nuts cannot be used** on Eddie-Pins.

Step by step

1. Drill and ream to the fit the drawing calls for.
2. Gauge the grip; if the sheet line falls between values, round up.
3. Hand-start the nut at least 3/4 turn and run it down to the structure.
4. Drive with the three-sided driver and the key engaged in the pin recess.
5. The driver turns free when the lobes are swaged into the flutes.

SOURCES · Eddie-Bolt Process Manual · FAA-H-8083-31B, Aviation Maintenance Technician Handbook, Airframe

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Educational reference only, not approved data. Always consult the applicable SRM, AMM, or AC 43.13-1B and your certifying authority.

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