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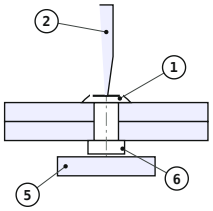
Removing a Rivet Without Spoiling the Hole

Manufactured head · head only · hole check

REFERENCE DRAWING — NOT APPROVED DATA · THE SRM ALWAYS GOVERNS

1 · FILE AND PUNCH

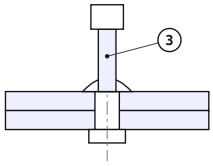
MANUFACTURED HEAD



Flat on the factory head, then centre punch it.

2 · DRILL THE HEAD

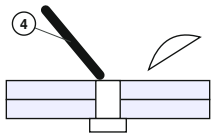
ONE SIZE UNDER THE SHANK



Drill the head only, to the depth of the head.

3 · BREAK IT OFF

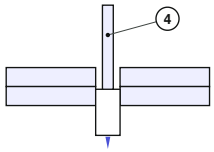
DRIFT PUNCH, A SLIGHT TWIST



Head lifts off the drill or comes off with a punch.

4 · DRIVE OUT

SUPPORT THE FAR SIDE



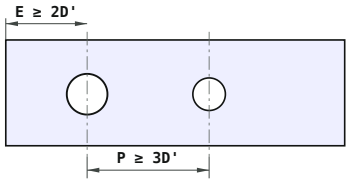
Shank tight? Drill 2/3 through, then drive out the rest.

TOOLS AND CAUTIONS

#	ITEM	NOTE
1	Manufactured head	Work on it: more symmetric than the shop head
2	Centre punch	Back up thin metal on the upset head
3	Drill, 90 deg to the work	A size under the shank; csk about 0.003 in under
4	Drift punch	A little smaller than the shank
5	Bucking bar or block	Under thin or unsupported skin
6	Shop head	Stays until the shank is out

DETAIL B

PLAN · TEST THE NEW SIZE



D' = D + 1/32 in (1/8 to 5/32). If E or P fail, it is a repair design, not a rivet.

NEXT SIZE UP WHEN

FINDING	REASON
Shank joggled	Partial shear failure
Hole elongated	Same size rivet would not carry its share
Head slips in countersink	Bearing or shear failure: remove, inspect
Tear-outs, cracks between rivets	Joint may need a size up all along

NOTES

1. Dimensions in inches. Do not scale: the SRM sets the values.
2. For reference. The applicable manual always governs.
3. Based on FAA-H-8083-31A p. 4-45.

REVISIONS

REV	DESCRIPTION	DATE
A	First issue	2026-10-30

The Aviation Point.	Structural repair reference		
TITLE: Rivet replacement			
DRAWING NO.: TAP-DWG-004	REV: A	SCALE: NTS	SHEET: 1 OF 1
APPLIES TO: Solid rivets			
DO NOT SCALE DRAWING			

After FAA-H-8083-31B pp. 4-44, 4-45 (Fig. 4-98). Same drawing as the rivet replacement guide.

Key points

- **Head only.** Deeper and the shank turns with the bit.
- **Back up thin sheet** when punching.

Step by step

1. File and punch.
2. Drill the head at 90°.
3. Twist it off, drive out the shank.
4. Check the hole.

SOURCES · FAA-H-8083-31B, Aviation Maintenance Technician Handbook: Airframe, Chapter 4 · FAA AC 43.13-1B CHG 1, Acceptable Methods, Techniques and Practices

SCAN · OPEN THIS GUIDE
theaviationpoint.com/standard-practices/removing-a-rivet/

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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