

STRUTSLAYR™ Strut Shear Head Instructions

⚠ WARNING



Read and understand these instructions, the Press Tool operator's manual, and the warnings and instructions for all equipment and material being used before operating. Failure to follow all warnings and instructions may result in property damage or serious injury.

SAVE THESE INSTRUCTIONS!

- **Large forces are generated during product use that can break or throw parts and cause injury.** Stand clear during use and wear appropriate protective equipment, including eye protection.
- **Keep your fingers and hands away from the strut shear head during the press tool cycle.** Your fingers or hands can be crushed, fractured, or amputated if they are caught in the strut shear head or bet ween the strut shear head, press tool, strut and surroundings.
- **Only use appropriate Press Tools with the strut shear head (see Specifications).** Use of other tools with the shear head may damage the shear head or result in serious personal injury.
- **Never repair or modify a damaged strut shear head.** A strut shear head that has been welded, ground, drilled or modified in any manner can break during use. Never replace individual components other than the shearing dies. Discard damaged s shear head to reduce the risk of injury.
- **Only use the strut shear head to cut material for which the head/dies are designed.** Cutting improper material may damage the shear head or result in serious personal injury.
- **Properly support strut and strut shear/press tool during use.** Failure to properly support the material and equipment can cause tipping, falling material and equipment and serious injury. Keep others out of the work area while cutting.

Description

RIDGID® STRUTSLAYR™ Strut Shear Head is designed to shear up to 12ga (2.5 mm) mild steel strut channel per the Specifications. The Strut Shear Head is an interchangeable attachment for some RIDGID® Standard 32kN Press Tools. Cuts are made in a single cycle of the press tool. Cuts are burr-free (with dedicated dies), square, and completed in under 5 seconds. The strut shear head is not designed for cutting installed strut in place.

Specifications

Cutting Capability.....Up to 12ga 1⁵/₈" x 1⁵/₈" (41mm x 41mm x 2.5mm) or 1⁵/₈" x 1³/₁₆" (41mm x 21mm x 2.5mm) strut channel to the MFMA-4 Standard. **Not for use with Stainless Steel strut.**

Weight of Head12 lbs. (5.4 kg) (including dies, not including press tool)

Press Tool

CompatibilityRIDGID® Standard Series 32kN Press Tools (Such as the RP340 and RP330). **Not for use with RIDGID 320-E and CT-400 Press Tools.**

Cut

Squareness +/- 2° (Strut must extend past strut support)

Shearing Dies..... 1⁵/₈" x 1³/₁₆" (41mm x 21mm) Dedicated Die (Cat. No. 64033)

1⁵/₈" x 1⁵/₈" (41mm x 41mm) Dedicated Die (Cat. No. 64038)

1⁵/₈" x 1³/₁₆" (41mm x 21mm) and 1⁵/₈" x 1⁵/₈" (41mm x 41mm) Combo Die (Cat. No. 64043)

See RIDGID.com for a complete listing.

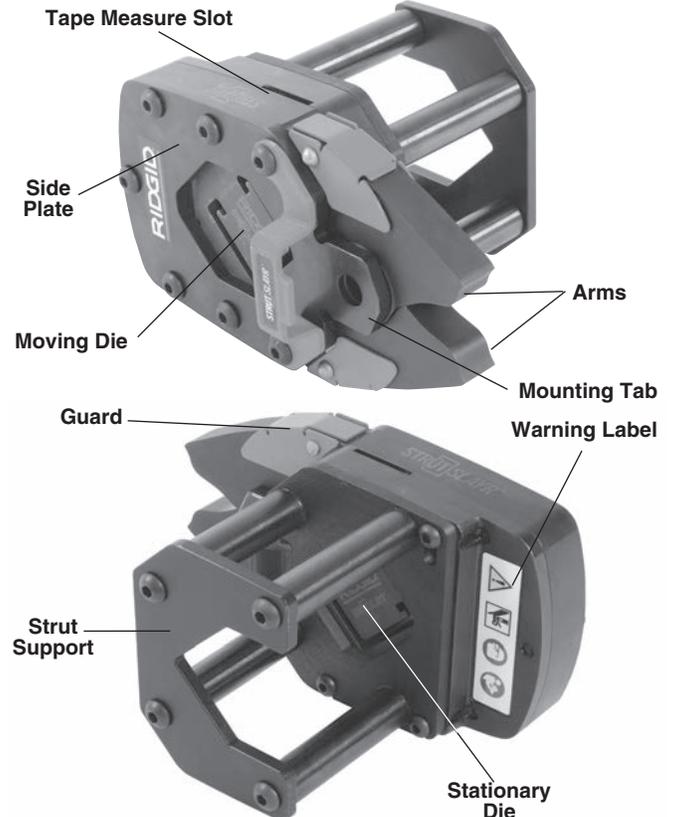


Figure 1 – STRUTSLAYR Shear Head

Inspection/Maintenance

Before each use, inspect the strut shear head for issues that could affect safe use.

1. Remove the strut shear head from the press tool.
 2. Clean any oil, grease or dirt from the tool and head, including handles and controls. This aids in inspection and helps prevent the machine from slipping from your grip.
 3. Inspect head for:
 - Proper assembly and completeness (See Figure 1).
 - Broken, cracked, bent, missing, loose, or binding parts or other damage to the head and dies.
 - Chipping or cracking of the dies (See Figure 2A).
 - Damage to mounting tabs or to arm hinge area (See Figure 2B).
 - Presence and readability of Warning Decal (As shown in Figure 1).
 - Any other condition which may prevent safe and normal operation.
- If any issues are found, do not use the Strut Shear Head until corrected.

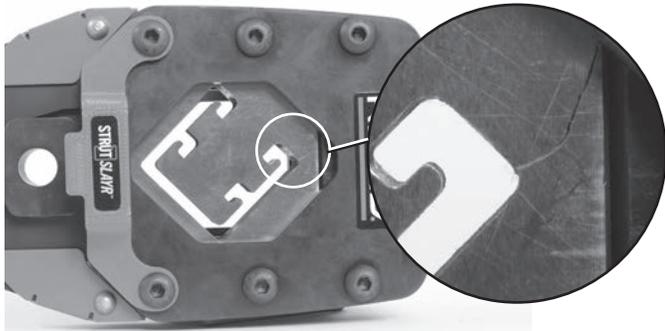


Figure 2A – Example of Die Cracking

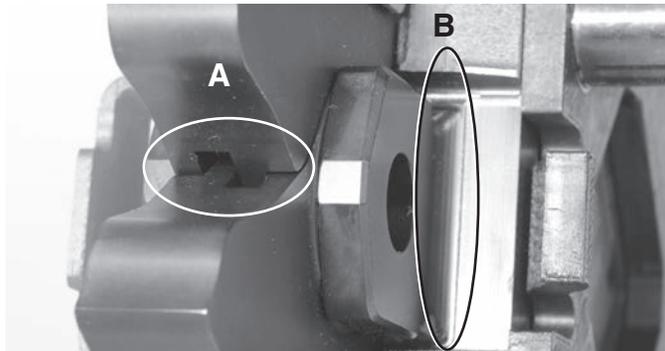


Figure 2B – Areas to inspect for damage to Arms (A) or Mounting Tab (B)

Removing/Changing Dies

1. Remove the strut shear head from the press tool.
2. Using a 5/32" hex wrench, loosen the strut support screws ("S") two turns. (Figure 3A). Slide the strut support to disengage from two of the screws (Figure 3B). Rotate the Strut Support to allow access to the dies (Figure 3C). If strut is stuck in dies, strut support may need to be removed.

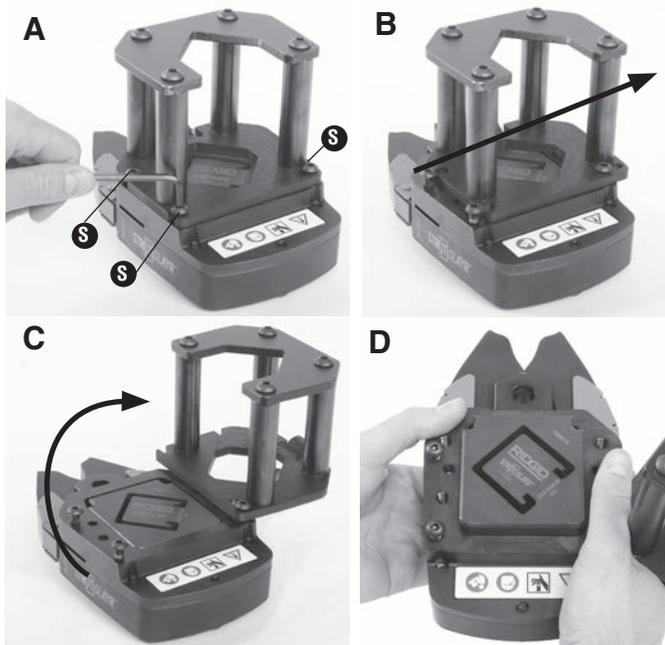


Figure 3 – Changing Dies (A, B, C, D)

3. Push dies from the opposite side of the head to remove (Figure 3D). If needed, use a soft face hammer or a block of wood to tap the dies out. Do not pound on the dies, this can damage the tool.

4. Lubricate the dies and head as described in the *Lubrication section*.
5. Reassemble by reversing the steps. Make sure the arms are centered to allow the moving die to be inserted. Confirm that die shearing profiles align to allow strut insertion.
6. Securely tighten the three Strut Support screws.

Lubrication

Always lubricate strut shear before die installation. If the strut shear dies do not fully retract, closely inspect the head for cracked or broken parts. If no issues are found, the dies most likely need to be cleaned and lubricated.

1. Remove dies.
2. Clean dies and die recess with soft, clean cloth. Remove all grease and debris.
3. Apply a thin coat of general-purpose grease to all sides of the moving die. Liberally apply grease to the arm cams. (Figure 4)

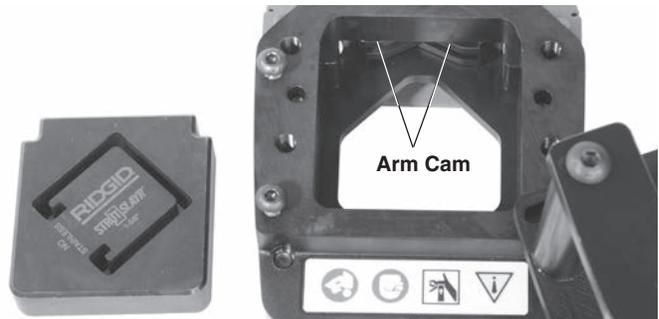


Figure 4 – Lubricating the Strut Shear Head

4. Reinstall the dies and wipe any excess grease from head.

Set-Up/Operation

1. The strut shear head can be used as a bench top unit or on the ground. Additionally, the strut shear head can be mounted in many RIDGID chain vises*. See Figure 5 for a chain vise mounting configuration. Regardless of use, make sure the strut shear head is secure and stable.

* RIDGID BC610 and BC810 Chain Vises interfere with strut being fed into the head and cannot be used.



Figure 5 – Strut Shear Head Mounted in Chain Vise

2. Install the press tool on the strut shear head per the press tool operator's manual.

Cutting Strut with the Strut Shear Head Attachment

1. Confirm that the strut can be cut per the specification. Inspect the ends of the strut – if deformed they may not fit into the dies.
2. Feed strut through the dies. Properly support strut to prevent tipping and falling of the material and equipment, both before and after shearing.
3. Measure strut length to be cut. There are two methods:

- a. Use the Tape Measure Slot (located on the shear plane) (Figure 6A).
- b. Add 1" (25 mm) to sideplate – strut end measurement (Figure 6B).

Channel slots are generally repeated every 2" (5 cm). If so, the strut support plate can be used to align cuts to the slot – See Figure 7.

Shear Plane

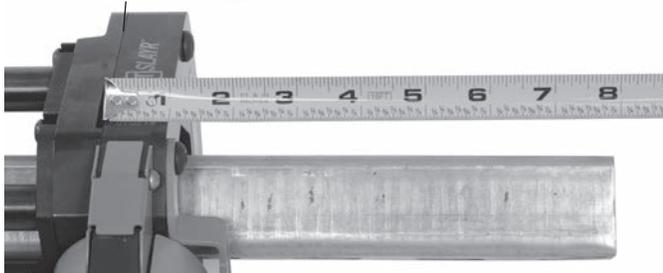


Figure 6A – Measuring Strut Length

Shear Plane

← 1" (2.5 cm)

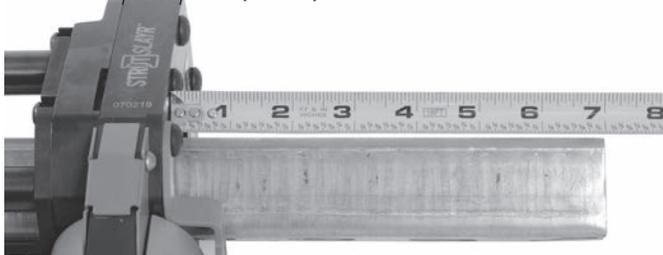


Figure 6B– Measuring Strut Length

Shear Plane

4" (10 cm)

2" (5 cm)

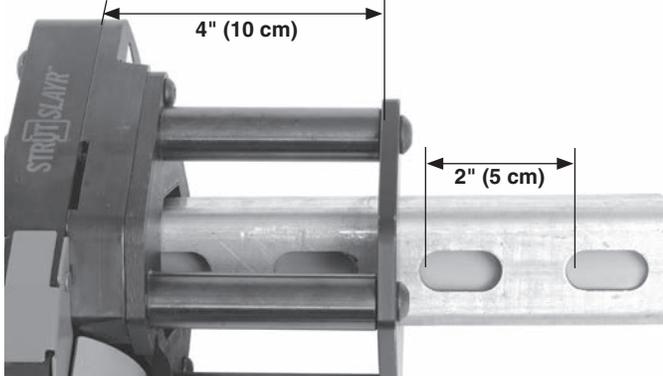


Figure 7 – Aligning Cut with Channel Slots

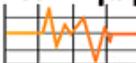
Strut must extend past the strut support for proper operation. If the strut does not engage the strut support, the cut angle could be +/- 5° or greater.

4. To shear the strut, with hands clear of the strut head and material, depress the press tool switch. Operate per press tool instructions. (Figure 8).
5. Differences in press tools result in slight differences in operation.
 - RIDGID RP 340 and RP 330 press tools may not retract after the strut is sheared. If so, depress the Tool Pressure Release Button (see *press tool operators manual*). Alternatively, the press tool switch can be cycled a second time to retract the press tool ram.
 - Some press tools will complete a full cycle and retract with no other action required.
 - 320-E and CT-400 Press tools can NOT be used with the strut shear.



Figure 8 – Shear In Use

6. Remove strut. When the strut is sheared, the ends may be sharp – handle with care.
 7. If the strut is not cut, remove the press tool from the strut shear head and inspect the material and equipment.
 - If out of specification material has been used (stainless steel strut, etc.), the strut shear dies may need to be removed to allow the material to be removed.
 - Closely inspect the strut shear head for any damage, such as cracked or broken parts. See the *Inspection/Maintenance section*.
- Do not continue to use the strut shear head if it does not cut the material.

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