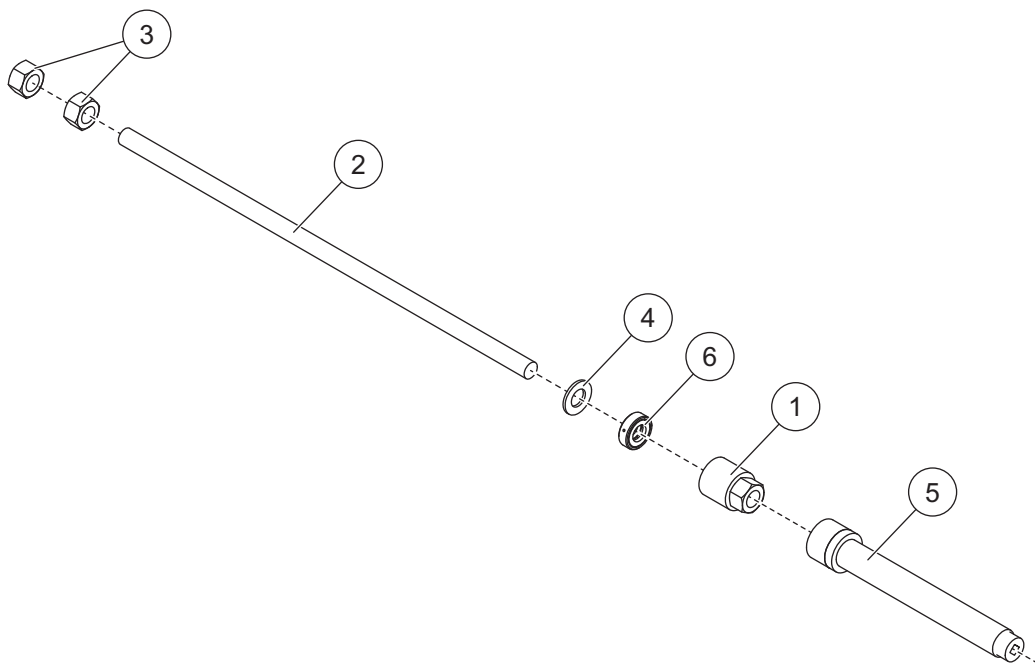


Wing Spring Removal Tool

PARTS LIST



69780 Wing Spring Removal Tool Kit							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	69775	1	Bearing Nut	4	90325	1	3/4 Washer
2	69779	1	Threaded Rod	5	B21033	1	Socket
3	69777	2	3/4-8 Hex Nut	6	B21030	1	Thrust Bearing

⚠ WARNING

Do not exceed GVWR or GAWR, including blade and ballast. The rating label is found on the driver-side vehicle door cornerpost.

⚠ CAUTION

Use standard methods and practices when attaching snowplow and installing accessories, including proper personal protective safety equipment.

⚠ CAUTION

Read this document before using the wing spring removal tool.

INSTALLATION INSTRUCTIONS

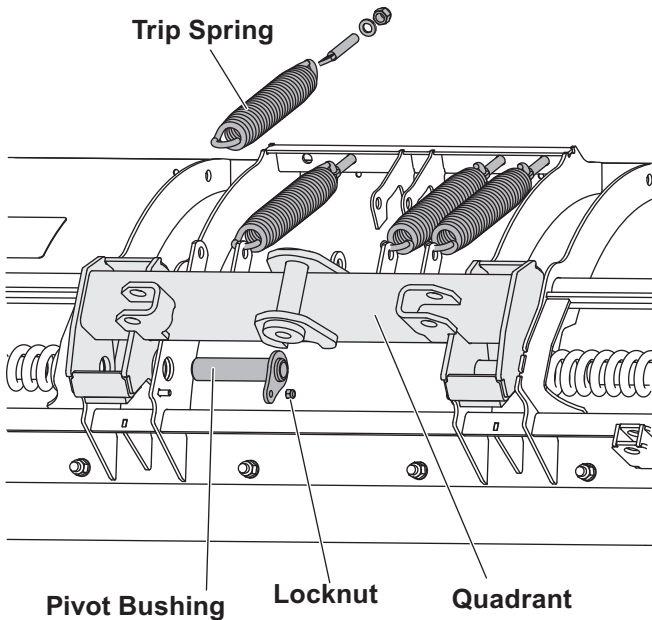
⚠ WARNING

This tool must be used by qualified personnel to remove preloaded spring. Read and follow all instructions. Disconnect snowplow from vehicle before doing this repair.

1. Park the vehicle on a smooth, level, hard surface, such as concrete. Position the blade straight ahead. Lower the blade to the ground, and turn the control OFF.

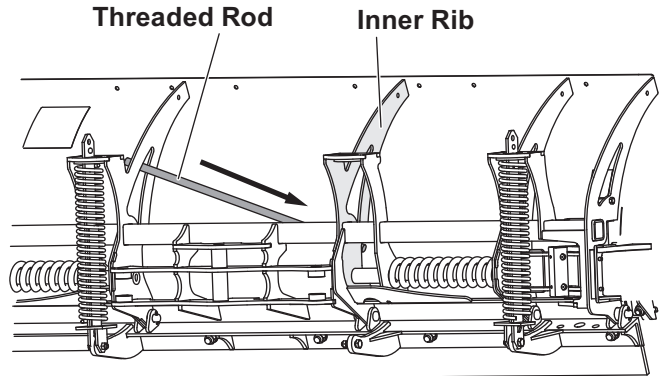
Spring Removal

2. Remove the cable assemblies.
3. For trip blade snowplows, remove the trip springs and remove the blade from the quadrant. Position the blade assembly face down and support the main blade so that the wings do not touch the ground.



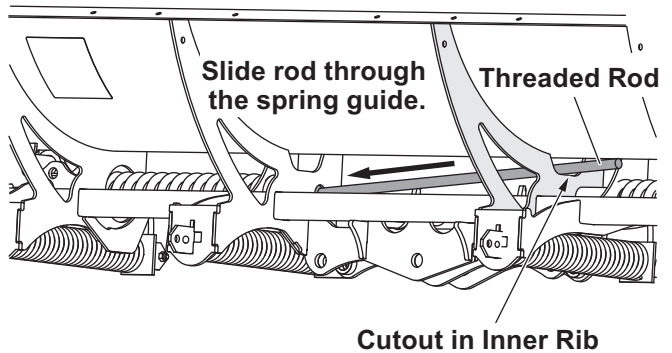
For FISHER® blades only:

Pass the threaded rod through the openings in the inner rib, as shown below.



Pass threaded rod through inner rib opening.

Rotate the rod to align the end with the cutout in the inner rib, and slide the rod through the wing spring guide.

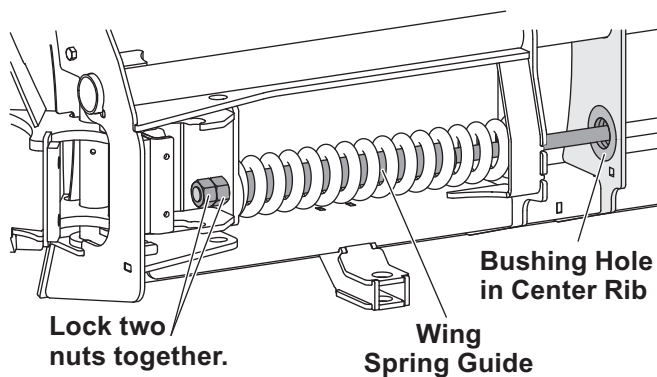


4. Insert the threaded rod through the moldboard bushing hole in the center rib, and through the spring and wing spring guide.

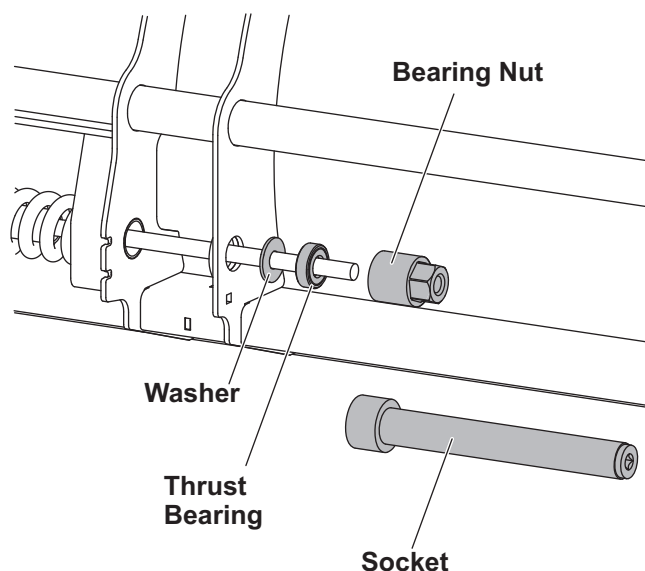
⚠ WARNING

The two nuts must be locked together to prevent the threaded rod from becoming disengaged from the nuts when the tool is in use. Failure to lock the nuts may result in the sudden release of stored energy in the spring, resulting in personal injury and damage to the snowplow.

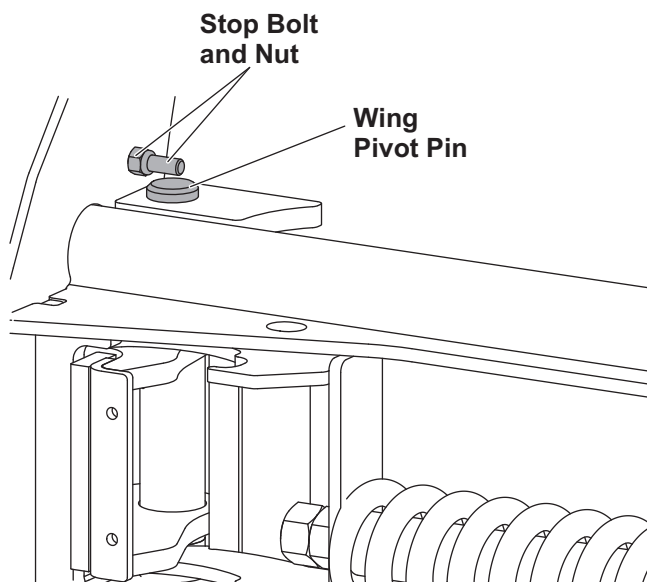
- Secure the rod with two 3/4" nuts on the outer end of the threaded rod. Position the nuts flush with the end of the threaded rod and lock the nuts together. This tool may be used with an air impact gun on the socket to compress the spring.



- Assemble the washer, thrust bearing (inserted into bearing nut), and bearing nut onto the threaded rod.
- Attach the socket to the bearing nut and tighten to compress the spring until the load is removed from the wing pivot pin.



- Remove the stop bolt and nut from the outer rib. Then remove the wing pivot pin. For BLIZZARD® snowplows, see additional information on page 4.



- Using the socket, loosen the bearing nut to release the tension on the spring while manipulating the wing past the end moldboard rib.
- Fully release the spring tension and remove the tool. Remove the wing, spring guide, and spring.

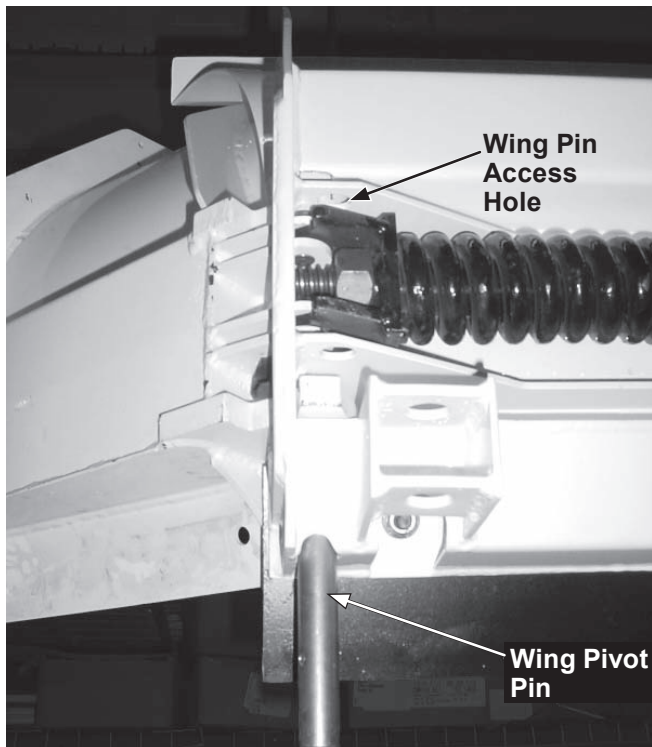
Spring Installation

- Slide the spring over the wing spring guide.
- Insert the wing, spring guide, and spring assembly through the opening in the outer blade rib.
- Assemble the wing spring tool as described in Steps 4–7.
- Tighten the bearing nut gradually to compress the spring while guiding the spring guide and wing through the opening in the outer blade rib.
- Manipulate the wing to align the pivot hole in the wing with the hole in the blade, and insert the wing pivot pin.
- Install the stop bolt and nut.
- Remove the wing spring tool.

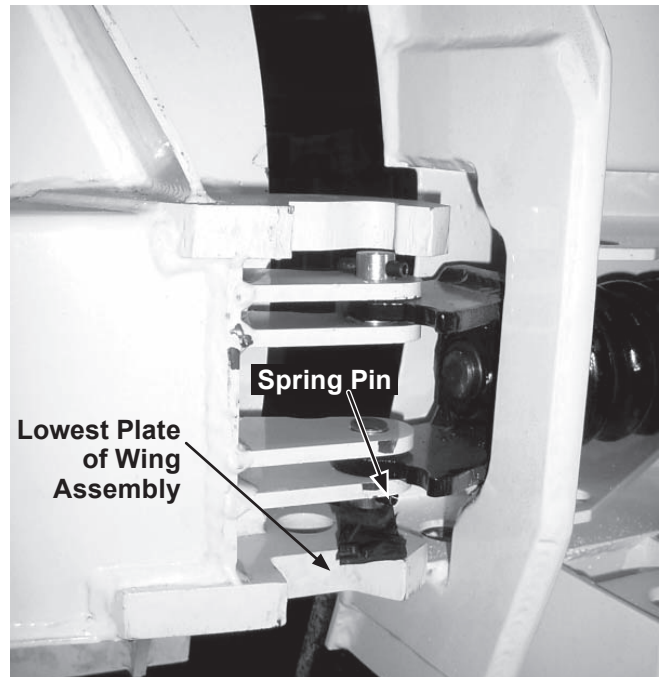
BLIZZARD® Snowplows Only:

If the wing pivot pin head is up, the wing pivot pin can be extracted from the top. Remove the stop bolt and pull the pin out from the top.

If the wing pivot head is down, the pin will be extracted from below. Remove the spring pin from the end of the wing pivot pin. Remove the wing pivot pin access cover from the top of the moldboard and tap the pin out of the bottom.

**BLIZZARD Snowplow Installation Note:**

The spring pin in the wing pin should be aligned above the lowest plate of the wing assembly.



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