

Conceal[®]

Conceal Swingarm Alignment Tool

Instructions for kit 758295.

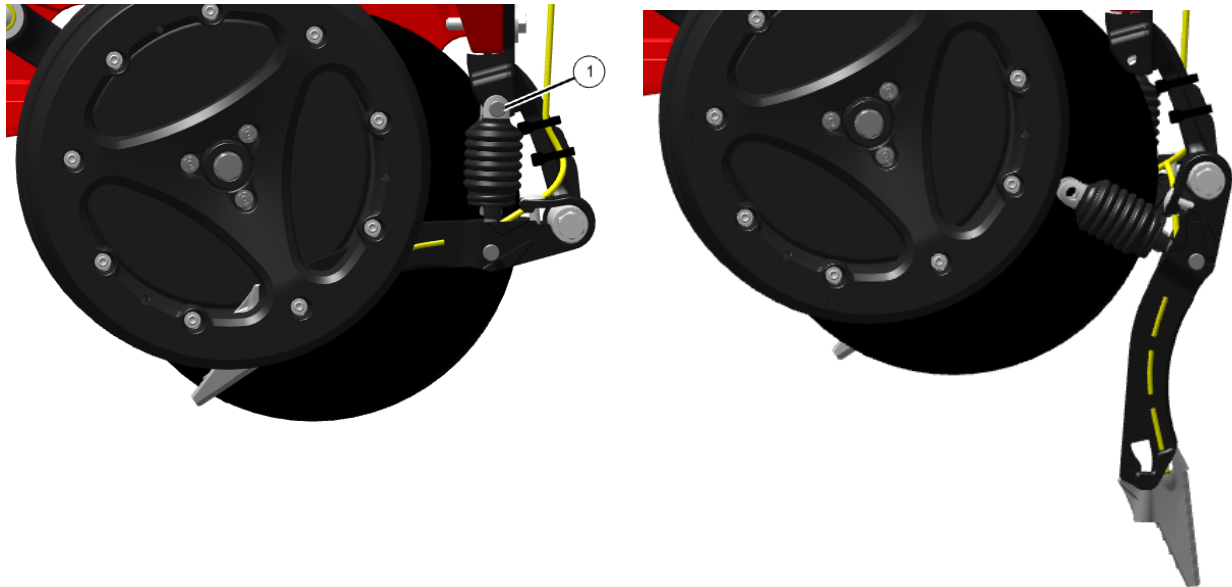
This kit can be used for a new or existing Conceal installation to properly align the Conceal swingarm and knife in the Conceal gauge wheel.

Step 1:

Use a strap (or similar device) to hold both gauge wheels at planting depth. Each gauge wheel arm should be touching the depth adjustment.

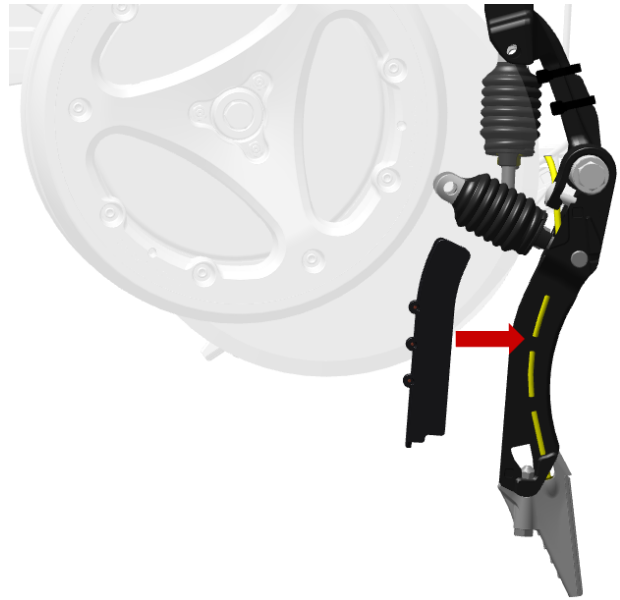
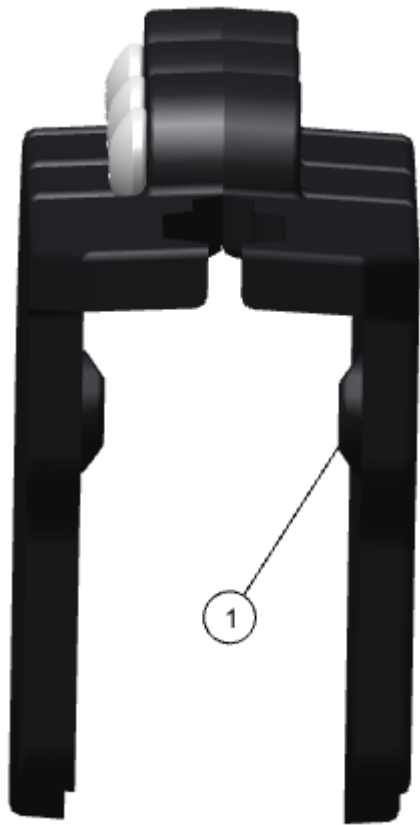
Step 2:

If the swingarm is already installed, remove the pin (1) that connects the swingarm spring to the mounting bracket. Rotate the swingarm out of the gauge wheel as shown.



Step 3:

Locate and orient the alignment tool so the inner tabs (1) are installed on the knife end of the swingarm. The tabs are designed to keep the tool in-place. Install the alignment tool onto the top of the swingarm.

**Step 4:**

Rotate the swingarm back into the gauge wheel and re-install the spring pin into the mounting bracket.

Step 5:

With both gauge wheels at planting position, inspect the alignment tool and ensure it is centered between the inner and outer gauge wheel. Refer to the images below for proper vs. improper alignment.

Proper Alignment

Note the equal gap between the alignment tool and the inner and outer gauge wheel.

Improper Alignment

Note the improper alignment, as the alignment tool is contacting the inner gauge wheel.

The steps outlined below explain how to adjust the angle of the swingarm if it is improperly aligned in the gauge wheel or if more clearance is needed between the inner and outer gauge wheels.

Note: It is important to follow the steps to properly install the Conceal mounting bracket (available in the Conceal Installation Manual) before adjusting the swingarm. The following sections will not resolve alignment issues if the mounting bracket is not level and aligned with the respective row unit. The following components can be used to further align the swingarm/knife in the gauge wheel if proper alignment can't be achieved by adjustment of the swingarm on the pivot bushing.

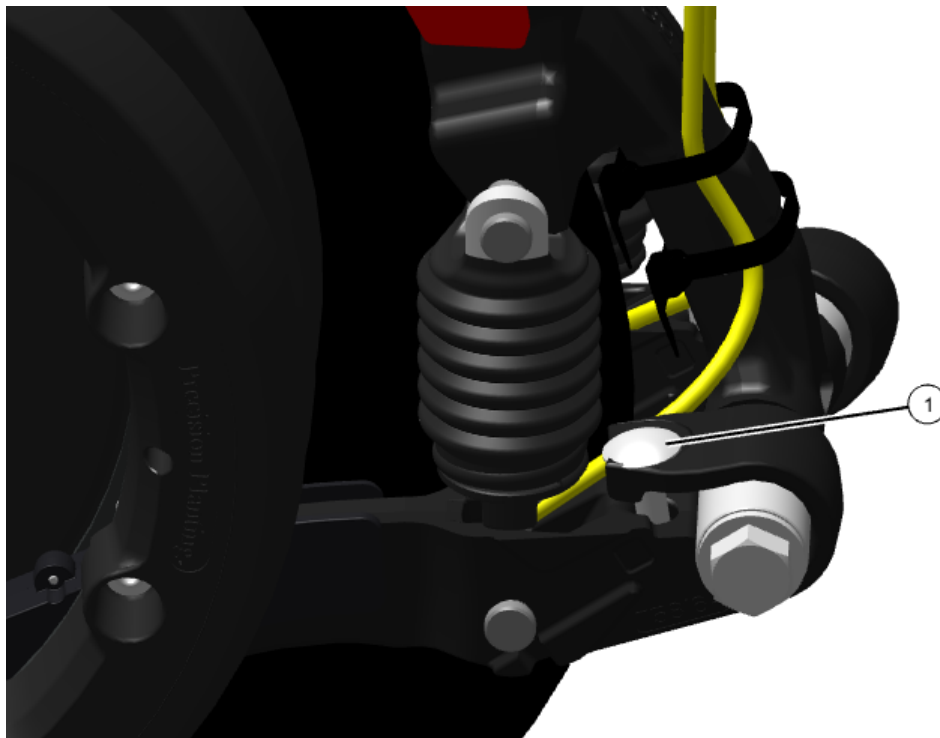
Wedge Shim Install

Step 1:

Inspect the improperly aligned swingarm and determine if the knife is angled toward the inner gauge wheel or toward the outer gauge wheel.

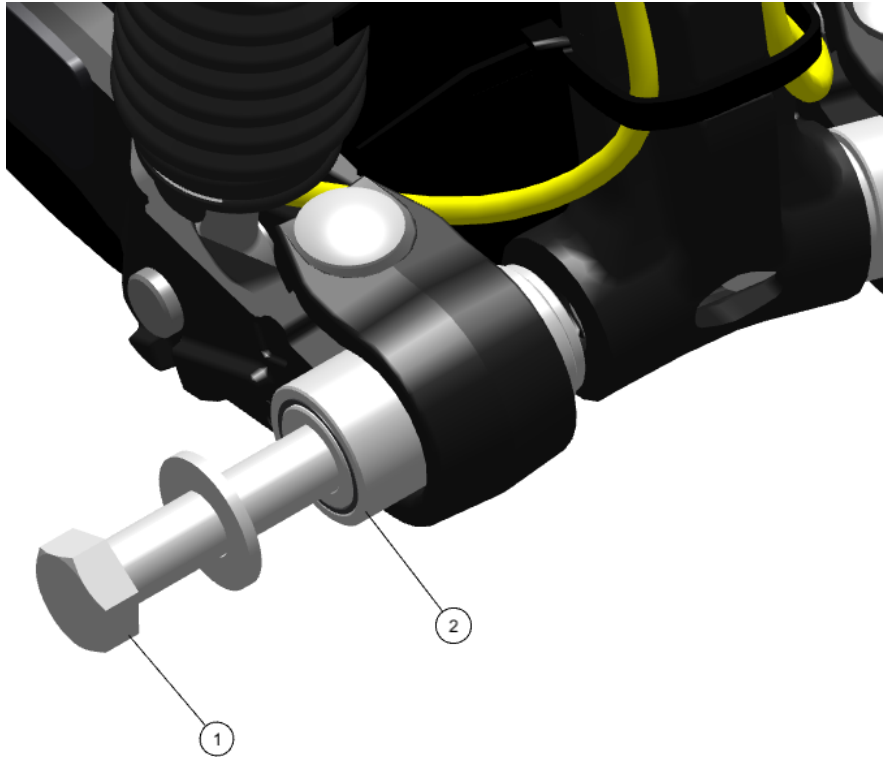
Step 2:

Loosen the M10 swingarm clamping bolt (1).

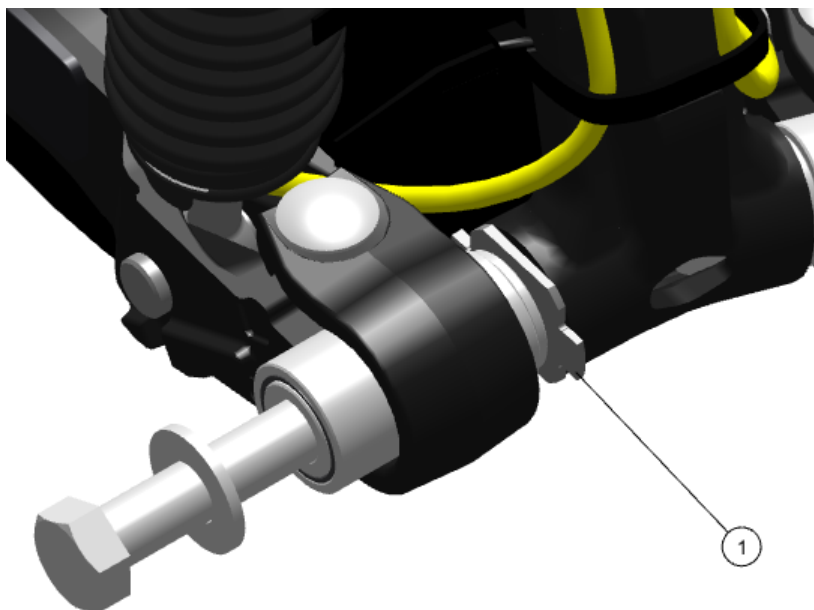


Step 3:

Remove the pivot bushing bolt (1) and slide the pivot bushing assembly/swingarm (2) away from the mounting bracket.

**Step 4:**

Place the wedge shim (1) between the Conceal mounting bracket and the pivot bushing as shown and re-install the bolt. Hand tighten the bolt.



Note: The wedge shim will change the angle of the swingarm by 1.5 degrees in either direction. The orientation of the tabs (narrow (1), wide (2)) will determine the direction of adjustment.



If the knife/alignment tool is touching the inner gauge wheel refer to step 5.

If the knife/alignment tool is touching the outer gauge wheel, refer to step 6.

Step 5:

If the alignment tool is touching the inner gauge wheel, orient the wedge so the narrow tab is pointing toward the front of the row unit.

This will move the swingarm and knife away from the row unit and toward the center of the gauge wheel slot.

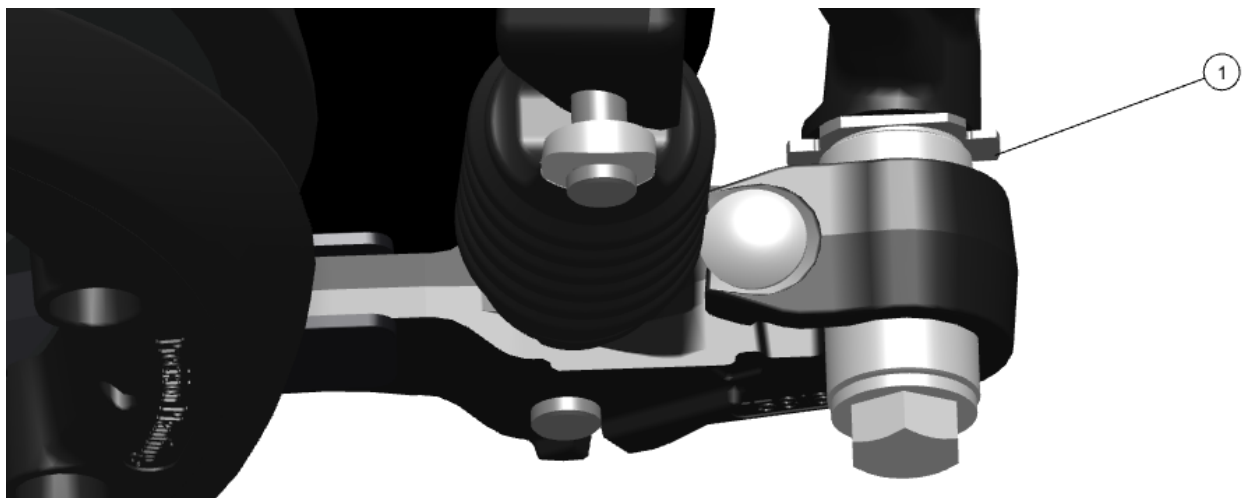
Step 6:

If the alignment tool is touching the outer gauge wheel, orient the wedge so the wide tab is pointed toward the front of the row unit.

This will move the swingarm away from the outer gauge wheel and toward the center of the gauge wheel slot.

Step 7:

With the wedge shim (1) oriented correctly, hold the shim in place and tighten the pivot bushing bolt and nut.



Step 8:

Re-tighten the swingarm to the pivot bushing. **Torque the M10 clamping bolt and nut to 20 ft-lbs for AGCO, Harvest International, John Deere, Kinze, and Precision Planting row units and 40 ft-lbs for CASE IH row units.**

Step 9:

Confirm proper alignment of the swingarm in the gauge wheel.

Step 10:

If the alignment tool is centered in the gauge wheel, unpin the spring pin, rotate the swingarm down and remove the alignment tool.

Rotate the swingarm back up into the gauge wheel and re-install the spring pin to the Conceal mounting bracket.

Note: If the swingarm is angled correctly in the gauge wheel after installing the wedge shim, but the alignment tool still contacts either the inner or outer gauge wheel, a gauge wheel spacer(s) will need to be installed. Follow the steps below.

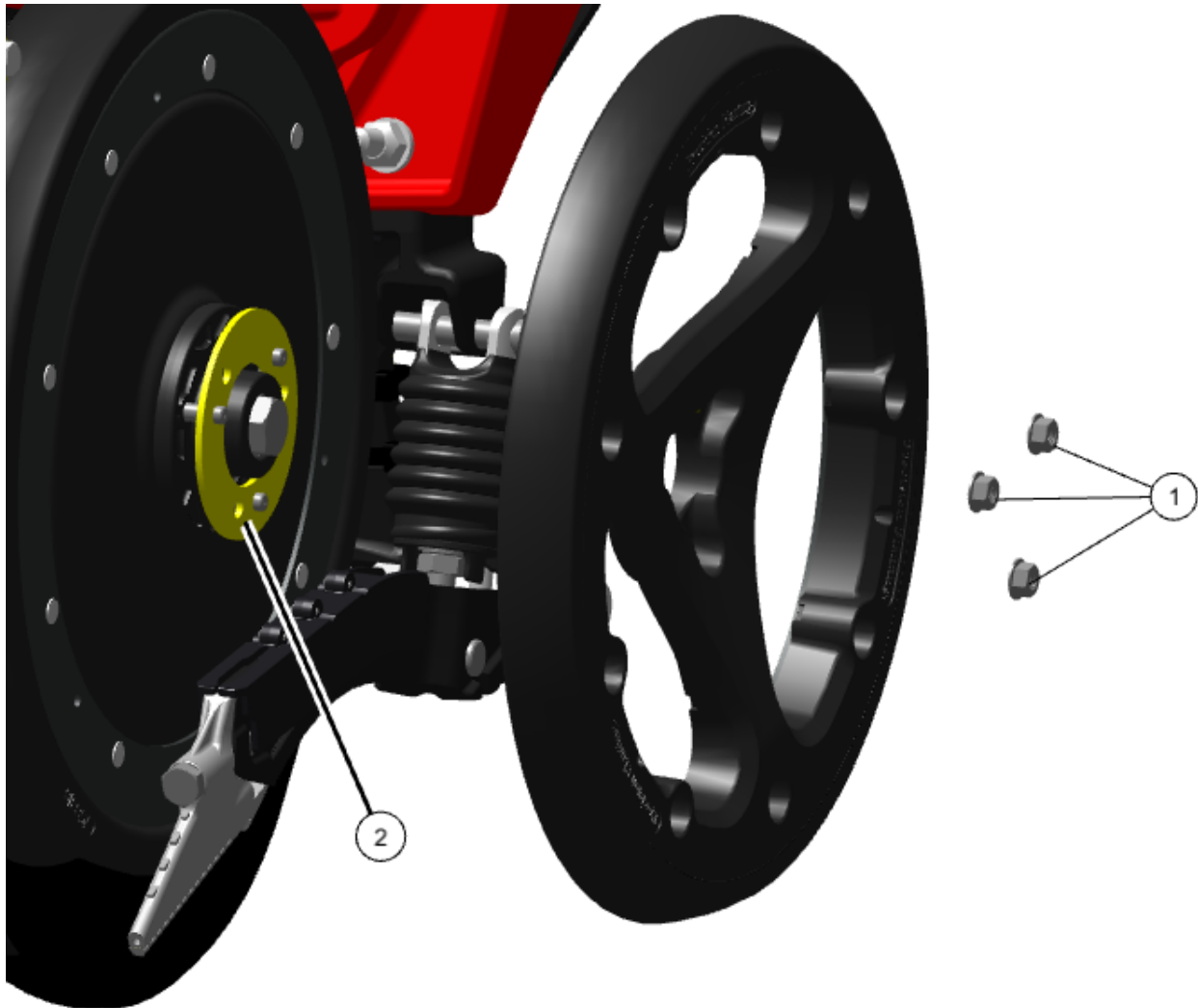
Gauge Wheel Spacer Install**Step 1:**

Remove the three nuts (1) from the hub of the outer gauge wheel assembly and remove the outer gauge wheel.

Note: The swingarm can remain stalled during this process.

Step 2:

Install either 1 or 2 spacers (2) (as needed) on the hub as shown. **Each spacer will increase the distance between the inner and outer gauge wheel by 1/8”.**



If the alignment tool is touching the inner gauge wheel, loosen the swingarm clamping bolt and slide the swingarm away from the inner gauge wheel. **Torque the M10 clamping bolt and nut to 20 ft-lbs for AGCO, Harvest International, John Deere, Kinze, and Precision Planting row units and 40 ft-lbs for CASE IH row units.**

Step 3:

Place the outer gauge wheel on the hub and re-install the three nuts to secure the wheel. **Torque each nut to 22 ft-lbs.**

Step 4:

If the alignment tool is centered in the gauge wheel as shown, unpin the spring pin, rotate the swingarm down and remove the alignment tool.



Rotate the swingarm back up into the gauge wheel and re-install the spring pin to the Conceal mounting bracket.