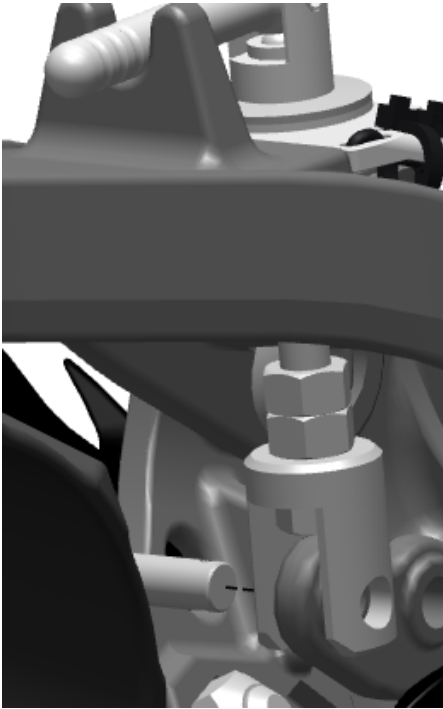
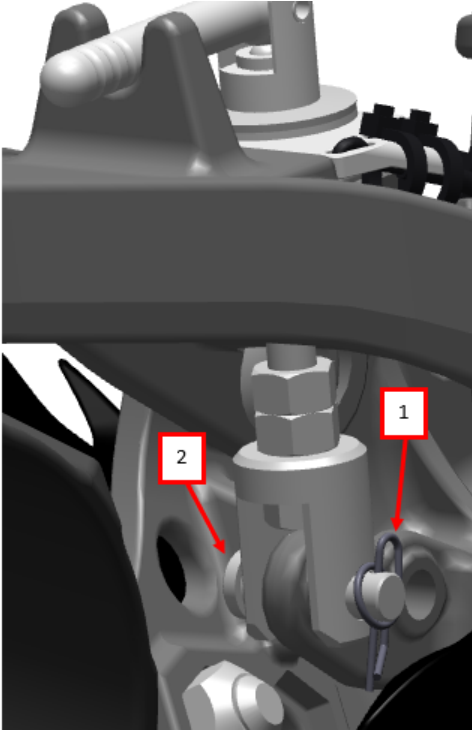
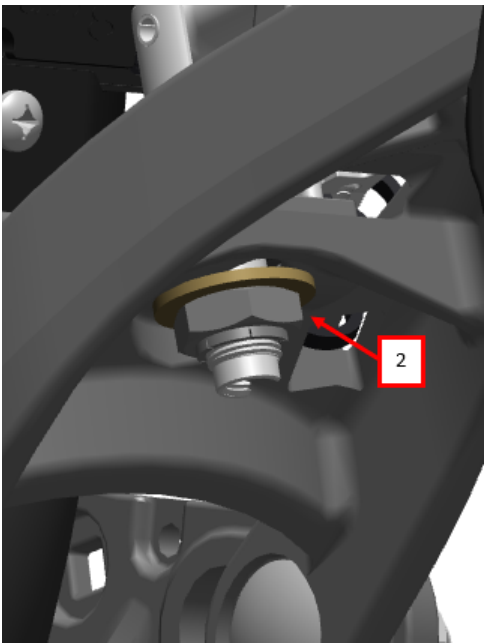
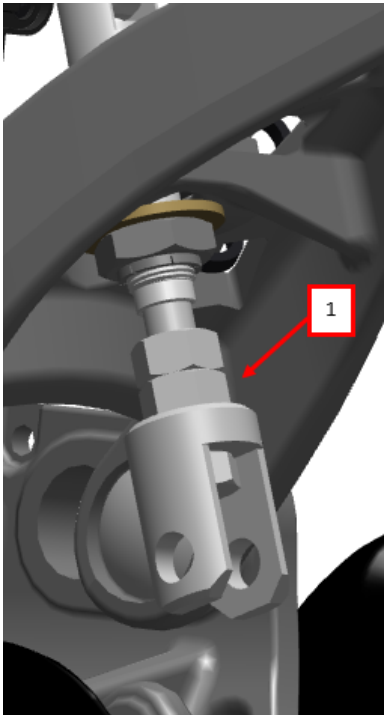


Tech Bulletin: FurrowForce Belleville Washer Replacement

Remove the locking cotter pin (1) from the clevis pin (2), then remove the clevis pin to free the depth link yoke assembly from the casting. This is located on the underneath side of the FurrowForce tail frame.



Rotate the tail frame up and unthread the depth yoke assembly (1) from the depth handle assembly. Use a socket to remove the locknut (2).



Lift the depth adjustment handle and remove it from the casting. Remove the old belleville washers.



Install the new belleville washers on top of the FurrowForce load sensor.

Note: Belleville washers are cupped and it is critical that they are installed in the correct orientation. The washers should be oriented as shown in the cross section below, with contact around the outer diameter and a gap between the center of the washers.

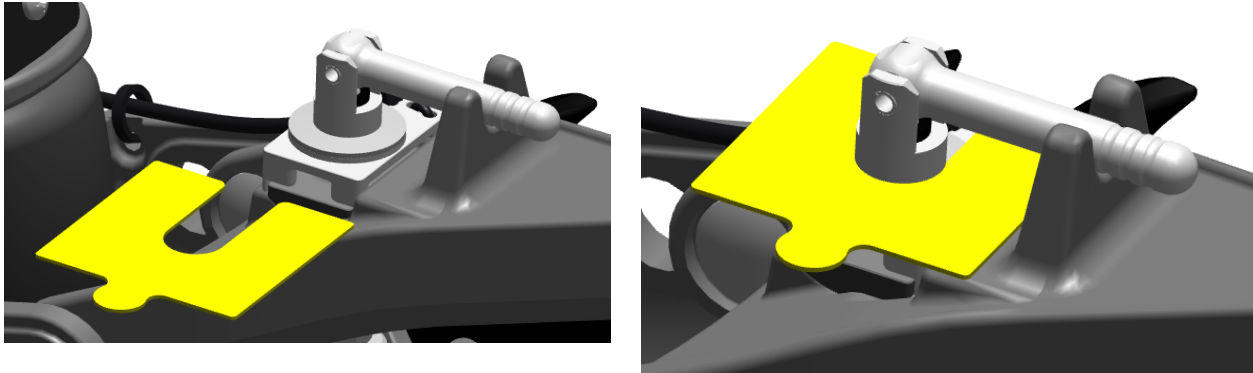


Re-install the depth adjustment handle through the belleville washers, FurrowForce load sensor, and pad assembly. Re-install the large washer and locknut on the depth adjustment handle.



Note: The following step is CRITICAL to insure proper final installation and thus operation of the FurrowForce load sensor. Incorrect washer to sensor clearance will result in incorrect readings from the sensor.

Locate the provided shim gauge and place it between the top belleville washer and the shoulder on the depth sleeve. Tighten the lock nut until the washers and depth sleeve are tight to the shim, then remove the shim. If the shim can't be removed by hand the lock nut is too tight. The sensor should have some free play on the sensor pad, but not so much that it could be lifted and rotated off the pad. If the sensor does not have any free play or is so loose it can rotate off the pad, the clearance should be re-checked with the shim gauge.



If the provided shim gauge is not available, any object with the appropriate thickness (0.050–0.060”) can be used in the same fashion to check the clearance between the washers and the depth handle shoulder.

Thread the depth yoke assembly back into the handle assembly. Re-install the yoke to the casting with the clevis pin and secure with the locking cotter pin.

