

SERVICE TIPS

Troubleshooting | Crop Lifters

Situation: The user is having difficulty finding the right amount of washers to shim up the QD™ nut.

Suggestion: The washers are not used for angle adjustment, rather to ensure the spring steel rail of the lifter is sliding in level (without binding) in the slot in the nut. If it is difficult to install and uninstall the lifter with ease, there is likely an incorrect amount of washers being used. Consult the instruction manual to find approximately how many washers are recommended for the particular guard.

Situation: The washers will not fit overtop the rear portion of the Schumacher (SCH) guard.

Suggestion: Due to the unique profile of the Schumacher guard, the larger type USS washers will not fit properly. Therefore, use 3-4 of the smaller SAE washers instead.

Situation: The nylon fingers will not fit into the provided receptors.

Suggestion: Place the lifter in a vise with the rail spring pointing towards the ceiling. Tighten the gold-colored receptor – it is only loosely attached at the factory. Do not overtighten because it will require adjustment once all the fingers are in place. Slide the nylon finger tail-first into the receptor. Match up the flat section at the top of the gold-colored receptor with the flat section on the finger's receptor section. The fit is very snug. If it is difficult to push the finger into the receptor, spray receptor piece of the finger with a multi-purpose lubricant (such as WD-40). Insert the finger into the receptor and use a rubber mallet or a hammer to tap it into place. Once the finger has bottomed, rotate it 90 degrees with pliers to lock it into place. Ensure that the fingers have been installed with the right side down.

Situation: The provided bolts are too long, preventing the QD™ nut from threading tight on the guard.

Suggestion: Try adding a few washers, which will remove visible threads, and allow the nut to be tightened to the guard. If the lifter can still be easily installed and uninstalled from the header, you have fixed the problem. If not, call our office to make certain you have the right length of bolt for your particular guard.

Situation: The user is having difficulty adjusting the correct angle of the nylon finger.

Suggestion: Like most harvesting tools, there is often no one universal means of adjustment. Longtime Flexifinger® users however have developed a short, simple procedure to ensure the optimal performance of the lifters. Please keep in mind that this method is designed for reasonably dry conditions and may need alteration for use in damp circumstances or particularly tough soil.

- Take your combine into the field you intend on harvesting.
- Remove the lifters from the header.
- Combine a few hundred yards into the field, making the appropriate adjustments (header angle, reel speed/height, header height) so that you are doing the best possible job without the lifters on.
- Now reinstall the lifters and drop your header to the height at which you were just cutting.
- Lift the reel, secure it, and turn the combine off.
- Adjust three or four lifters on each end of the header so that the forward lifting point is approximately a thumb's width off the ground. Do the same for three or four lifters in the middle of the header, leaving all those in between unadjusted at this time.
- Using the three previous adjustments (each end of your header and the middle), take the high average of the forward lifting points. This will set a standard angle at both ends and in the middle. This averaging method is used, because, as we all know, not

all ground is perfectly level, so finding an average angle is critical to ensuring consistent results.

- Adjust all the remaining lifters so that the forward lifting points are dead level with those which are averaged out.
- The lower your crop, the more you are going to have to make a judgment call as to just how much material you are prepared to leave behind in the field as compared to picking up more dirt or stones.
- Start combining, slowly moving ahead on what you have already cut. You should be able to see if the fingers need to be adjusted either up or down. If you feel that you would like to try them a little closer to the ground, try adjusting six or eight in a location that you can watch from the cab.
 - The inventor, Dave Dietrich prefers watching the lifting from the left of center because he is able to see the lifters as material feeds in the table as well as behind the header. This way he is able to see if lifter tracks are being left in the ground.
- Fine tune that lifting point so you are getting all the plant material you need without digging the nylon portion of the lifter into the ground. Even $1/8$ "/3mm can make a big difference whether you are getting under the plant material or conversely hitting the ground. When you have those six or eight working as good as can be expected, you can re-adjust the balance of the lifters to this "sweet spot" for your field.
- The lifters should be making contact with the ground, at very most, 20% to 25% of the time (less is preferable).

Situation: Breaking or bending a lot of nylon fingers.

Suggestion: Set screws or bolts should never be used with the black-colored N-series lifters or the FlexiFloat™ or Triple S™ Series Lifters. Use extreme caution when utilizing a bolt and/or set screw in the hole at the top of the Pulse Crop or Heavy Duty J lifter rail to create a snug fit on the guard. The lifter must remain free to move and free float about $1/4$ " – $1/2$ " (6mm – 13mm) up, down and side-to-side. This movement allows for greater flexibility in following any variations in ground conditions.

Situation: Dislodging more rocks than desired.

Suggestion: To begin, it is necessary to understand that you will dislodge more rocks with a lifter than without. With that being said, there are steps that can be taken to minimize this. Check whether or not the set screw is tight with the top of the guard. If it is, loosen the set screw so that there is between $1/8$ " – $1/4$ " (3mm – 6mm) of play between the bottom of that screw and the top of the guard. The simplest way to explain why is as follows: if the set screw is tight to the guard and the lifter makes contact with a stone, one of two things must give - either the rock or the lifter. By allowing the lifter to float up and down, and from side to side, the lifter can skip over rocks or dislodge them with lessened force, reducing the number of stones that kick up towards the cutter bar, and taking the stress off the nylon finger.

Situation: Plant material seems to be bunching up on the lifters, preventing it from feeding freely into the header.

Suggestion: There are two primary reasons why the lifter may be hindering the flow of plant material. First, follow our recommended steps for setting the proper angle of the nylon finger. If the finger is pointed too steeply downward, it will act like a comb and prevent plant material from smoothly feeding through the header. If this process does not immediately alleviate the problem, check to ensure the set screw is not tight to the guard. There should be between $1/8$ " – $1/4$ " (3mm – 6mm) of play between the bottom of that screw and the top of the guard. The movement in the lifter minimizes the friction created from plant material rubbing against the tail of the nylon finger, and assists in constant feeding. If both these suggestions fail, remove the lifters from the header, as all lifters have a tendency to plug up in tough or damp conditions. Some users have found taking every second lifter off has helped as well.