

The Tough Repairs

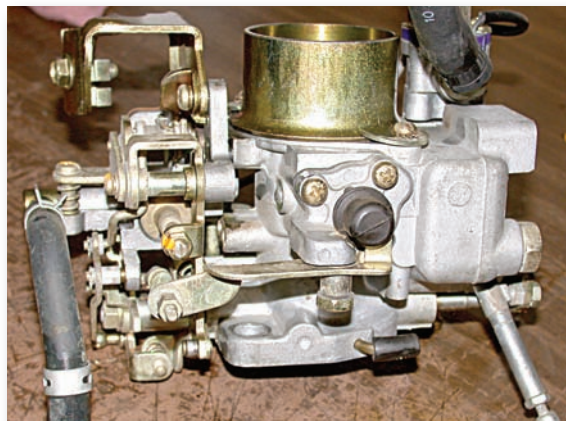
We have all been faced with those repairs that baffle the mind and leave us cursing the sadistic engineer that put us in this position. I have seen this type of frustration more times than I can tell you and have had it happen to me more than I care to admit. I can tell you there is no silver bullet to get you out of these frustrating situations, but there are a few things that I have found to help.

The number one thing is to get all of the information you can about the problem. My shop technicians typically struggle when the description of the problem is just not telling them enough. The person that gave us the equipment tells us that the reels won't go up, the reels won't go down, the unit dies or the like, but unless the reason for the malfunction is right in front of you, many times this explanation does not help. When this is the case, we need to talk to the operator and ask leading questions that get us closer to discovering the cause of the problem. I use questions like:

- Does it happen all of the time or is it intermittent?
- Does it happen more when the unit is hot or cold?
- When did the problem start?

These are just a few of the questions I ask, but you get the point. Any more information can speed the repair and cut your time in half.

The second most helpful item I have found is a good copier. I know it sounds strange, how can a copier help me? Well, when the problem is electrical or hydraulic, I make copies of the schematics for the systems and also the logic chart. I begin by highlighting the circuit that can make this failure happen and start testing at the end of the circuit. For every component I test, I put a mark on that component with a pen telling me if the component tested OK. This way, I do not revisit it and waste my time.



The third tip I have is to help you speed the decision on which system is causing the problem. Most of the hard problems come when we have multiple possible systems to examine. The most common frustrating repairs come with the possibility of the problem being either hydraulic or electrical. The best thing that you can do here is to start at the end of the circuit and test there first. This will tell you if you are on the right track or if you need to test a different system. I prefer to test electrical first. This is because hydraulic testing is usually messy and takes a long time, while electrical is usually easy to test and diagnose.

When you have determined that you have located the correct system, the last tip I have may save you time. If you start at the end of the system and determine that the problem is before this point, use the schematic you copied earlier to cut the system in half and test again. By cutting the system in half a few times, you will find the problem faster than if you start at one end and test component by component forward or in reverse.

The bad news is that there will always be those tough repairs that frustrate us consume more time than we want. I hope these simple tips will allow more time to do the things that make your golf course the greatest show on turf.

Jerry Kienast is the Service Manager for Reinders. **-OC**