

The Value Behind In-Process Quality Control

One of my favorite things to do when I visit a shop is enter the paint area, pull a damage appraisal off the dash and start checking over the vehicle. What I find reminds me that there is tremendous value behind In-Process Quality Control (QC) checks. I have discovered repairs on damage appraisals not accomplished, repairs accomplished that were not on the damage appraisal and missed refinishing operations, all of which spell out the need. Repairs not accomplished that are on the damage appraisal opens a liability door in regard to vehicle safety, and repairs accomplished originally not on the appraisal results in lost shop revenue.

Each repair phase should have an In-Process QC check to validate that all the repairs identified on the damage appraisal are accomplished prior to moving to the next phase. These should be designated fixed stops with everyone in the process understanding that the repair cannot move forward until each check is accomplished. Some think they can bring the same value by using an end-of-repair quality check, but I disagree. I do not believe you can validate that a repair is accomplished as identified on the damage appraisal unless you perform the check while the repair is in process.

For example, you cannot validate corrosion protection was applied correctly, or even at all, without looking at the repair prior to any reassembly. Nor can you inspect weld points or panel seams after the vehicle has been reassembled. The person performing the In-Process QC check validates that the repair is ready to move to the next customer. Each In-Process QC check should be as thorough as the repair is complex. There are several forms available to accomplish this, many of which are available on select estimating software programs as digital versions (there is also a great sample on [I-CAR's](#) website). Regardless of which version you prefer to use, always make sure it properly documents the check.

As the check is performed, OEM procedures should be validated, structural measurements reviewed, repair-generated calibrations verified and workmanship inspected. The QC check validates what the next technician is “buying,” meaning the technician should be able to sell the repair accomplished in their phase to the technician, or “customer,” handling the next phase. One of the goals of the In-Process QC check is to prevent the need for a repair to return to a preceding phase due to a defect being found during a subsequent repair process. This is because any time a repair goes backwards, production on multiple repairs is jeopardized. Such an unfortunate scenario makes catching a discrepancy during the process an absolute must for this type of prevention.

As we see systems on vehicles becoming more and more complex, the need for In-Process Quality Control checks becomes even more important. Advanced Driver Assistance Systems (ADAS) require specific calibrations, some of which need to be performed during the repair process as well as when the vehicle is completed. Additionally, restraint systems require testing during repair inspections and in-process scan procedures. The only way to verify these procedures are indeed accomplished is through In-Process Quality Control checks.

Now that I have convinced you that In-Process Quality Control checks are necessary, you may be asking who should perform them. The answer to this can vary depending on the staffing of your

shop. I have seen the production manager perform the checks prior to taking the repair paperwork to the next repair phase. I have also seen the person receiving the repair perform the check. In other shops, it was the person that wrote the damage appraisal while others require the manager to carry the responsibility. It could be several people; you must pick the person or persons that have the skillset necessary to best validate the repair completed in that particular phase. The only person that should never be chosen is the technician that performed the repair. If you allow him or her to accomplish these checks, it usually becomes a box-checking exercise with nothing else accomplished.

In summary, I'll use this quote from Niklaus Wirth to drive this topic home: *"But quality of work can be expected only through personal satisfaction, dedication and enjoyment. In our profession, precision and perfection are not a dispensible luxury, but a simple necessity."* With the continuously growing complexity of today's vehicles, we have the utmost responsibility of guaranteeing precision and perfection in the repairs we perform which can only be validated through In-Process Quality Control. By implementing this system in your shop, you can remain successful and customer-focused in the rapidly evolving collision repair industry.