

# TRC Is Driving A Culture Of Built In Quality



TRC's emphasis on quality has always used the most effective elements of Lean Manufacturing. 5S, Kaizen events and Kanban are just a few examples. Our most recent addition to our Lean tool box has been the addition of **Built In Quality—BIQ** for short

**BIQ** drives home best in class quality by being proactive rather than reactive. The basic principle of **BIQ** is to stop the flow of defects as close to their source as possible; with no defects leaving the production environment. This is accomplished via use of “gates” and visually driven checklists at critical areas of the remanufacturing processes. Resources are then deployed to eliminate the cause of the defect using proven lean technologies. Early benefits to the roll out of **BIQ** in our remanufacturing facilities has been a reduction in warranty claims, improved efficiency as a result of reduced rework and improved working conditions for our technicians.

## BIQ In 8 Steps

1. Stop the defect
2. Get a detailed description of the defect
3. Pareto the defects to target the most problematic
4. Share defect detail with the offender
5. Conduct RCCA (Root Cause Corrective Action)
6. Drive feedback to all technicians
7. Drive RCCA into standard work documents
8. Repeat the process

## The BIQ Process

### BIQ Checklists

- Details of key components require a Pass or Fail
- “Fails” are returned to the offender for immediate correction

#### Differential Case

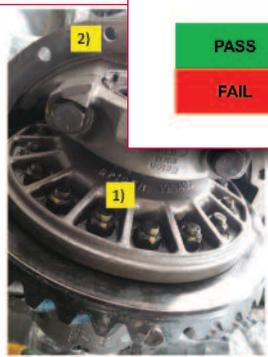
- 1) Ensure all external fasteners are cross checked
- 2) Check for (1) quality control mark



**PASS**  
**FAIL**

#### Gear Set

- 1) Ensure casting and ring gear are paint free
- 2) Ensure gasket surface is paint free



**PASS**  
**FAIL**

#### Metal Tag

- 1) Check for proper metal tag placement and adherence
- 2) Verify serial and model numbers on metal tag match the serial number and model number on the production order

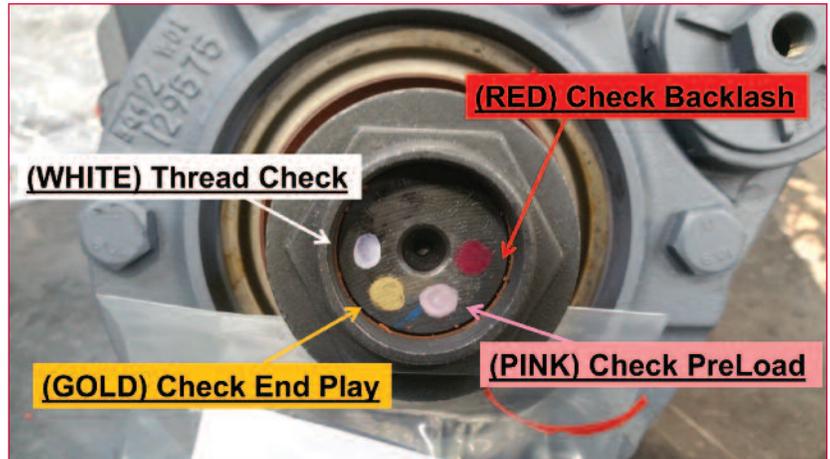


**PASS**  
**FAIL**



## Process relies on IPV (In Process Validation)

- A technician's "thumbs up" to indicate the processes were completed accurately



M,F,N	OFFENDING AREA	JOB #	MODEL #	PROBLEM DESCRIPTION	REWORK TIME	DATE
F	SHIPPING	73777	RTLO18913APH	UNIT MISSING TRANSFER ORDER PAPERWORK	10	2-28
M	CINNAMON	74237	FR016210CP	UNIT NOT SHRINKWRAPPED PROPERLY	15	2-28
N	SHIPPING	79999	DS404	DIFFERENTIAL HAS NO CLEAR COAT APPLIED	10	3-01

## Whiteboard Documentation

- "Live Feed" concept
- Open communication
- Guarantees documentation to improve standard work

# Stopping The Flow Of Defects Guarantees Customer Satisfaction

## For More Information

Visit our website at [trcreman.com](http://trcreman.com)  
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