

# Conger Forklift Repair Study Methods

## How Our System Works

At Conger, we use a specialized software system to log and track all the work we do.

Here's how it works:

When a customer calls in for service, a work order is manually created in this system.

A road technician is then notified of the complaint and dispatched to the customer's location.

The technician records the initial complaint and truck information on a paper copy of the work order. And then, they list the steps they took to correct the problem.

When the work is complete, the paperwork order is turned in. Then, it's transcribed into the system. And the final result is a digital record of all work done.

## Methodology

### Extracted

The first step we took was to gather a sample of work orders from inside our system.

To do this, we filtered all the work orders to include only those from January 1, 2019, to December 31, 2019. This gave us a little over 6,000 work orders to work with.

Then, we took that raw data and exported it to an Excel spreadsheet.

### Sifted & Sorted

In Excel, we manually searched through each work order's service description field.

This is where the initial complaint is entered when a customer calls in for service. As we looked through this list, we noted the mostly commonly-reoccurring terms and descriptions.

Then, based on which complaints occurred the most frequently, we tallied up each term. These became the main category groupings we ended up using:

- Leaks

- Travel & Lift Problems
- Accessories: Horn, Lights & Travel Alarms
- Dead/No Start
- Battery Problems
- Running Rough
- Error Codes & Check Engine Lights
- Electrical Problems: Buttons, Switches & Controls
- Seats & Seat Belts
- Cooling System Problems

## Sampled

Once we had the main categories narrowed down, we took a sample of approximately 10% of the total work order count for each category.

And when we had our sample pool put together, we dug in.

Specifically, we were looking for the repair actions that were most often taken to fix the problem.

So, we looked at the work orders one by one. And when a repair came up over and over, we put a tally next to it.

We repeated this process until we had counts for each of the most commonly reoccurring fixes for each complaint.

Then, when we had all our findings together, we put everything into a spreadsheet. And finally, we calculated our metrics, including occurrence percentages and average repair costs.

## Confirmed

Because we were using data from a range of samples, we wanted to double-check that our final counts matched up with reality.

So we sat down with our Service Supervisor, who is also an experienced traveling technician.

And he reviewed our findings, confirmed the data, and then provided background information. Plus, he gave us valuable tips on how to prevent the most common problems.

Lastly, we compiled all of our findings into the post above.

We hope that you find our results not only interesting, but also helpful with respect to your own forklift fleet.