

Brake Circuit Performance

There are three main electrical circuits in a Power Climber hoist as taught in the Electrical Troubleshooting Course for Power Climber hoist technicians; Motor, Brake and Control circuits. The brake circuit is one of the easiest to diagnose and troubleshoot because it has very few components.

The basic components to a Power Climber brake circuit are the contacts that directly affect the brake circuit, the rectifier, the varistor, and the electromagnetic brake itself. Troubleshooting any of these components is very simple.

The first step in troubleshooting any of the individual components is to first diagnose that the hoist has a brake circuit problem. This is quite easy to do and should only take about a minute.

When a hoist is powered with a brake problem, it exhibits certain symptoms. The first and most likely symptom is that the hoist will attempt to run, but may only hum in either direction. With a brake circuit that is not functioning normally the electromagnetic brake will not release properly or many times not at all.

In order to diagnose this symptom as a brake circuit problem you must first eliminate the brake circuit from the hoist. This is as easy as manually releasing the brake by pulling up on the manual release handle. If you pull up on the manual release handle and the problem or symptom disappears, then you have just proved that the hoist has a brake circuit problem. If the symptoms go away when performing this task, it is because you have eliminated the brake circuit from the hoist. By eliminating the brake circuit in this manner you have also diagnosed the problem.

Now that you know that the hoist has a brake circuit problem, all that is left to do is to diagnose and troubleshoot the individual components within the brake circuit.

Did You Know?

• In Canada, Mobil Oil products can be purchased through Husky Mobil. Throughout Canada call (800) 592-8838 for the order desk.

Tips and Tricks

• After cleaning an Astro 85 Series Hoist chain, you can let it soak overnight in gearbox oil to lubricate it. Before installing it into the hoist, hang the chain above the oil and let it drain for at least 4 hours.

For questions or comments, contact Customer Service at 1-800-560-CLIMB (2546) or customerservice@safeworks.com.

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