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## 1994 Technical Bulletins

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### **TECHNOLOGY IMPROVEMENTS IN TRUCK MOUNTS FINALLY EXTEND BEYOND NEW COMPONENTS**

Steven Covey, in his highly proclaimed book, *The Seven Habits of Highly Effective People*, talks a great deal about the need for effective people to be prepared to undergo a complete shift into a new and different level of thinking in order to be effective as we enter the 21st century. At Steam Way, we noticed many manufacturers of truck mounts seemed to be concentrating on putting a new engine or heat exchanger on a truck mount and calling it innovative. Maybe they introduced a better component, but the philosophy behind the operation of the machine had not changed much. Our industry was in need of a truly new and revolutionary shift in how truck mounts operated. A paradigm shift, if you will.

For many professionals, it was time to wipe the slate clean in truck mount development. Approach the design and engineering of a new truck mount with no preconceived notions, an open mind and consider what the industry had learned from over 15 years of truck mount usage. The industry did not need another version of a small, medium, or large truck mount. It needed to apply new technology to make the existing truck mount components work better and easier.

We felt that the industry didn't need another "me-too" machine. Existing technology was meeting the needs of many professional cleaners, restorers and contractors. We at Steam Way knew, however, that many professionals were looking for a machine that could be easily and effectively operated by anyone in their company, and still have the very best in carpet cleaning performance. We knew that many professionals were tired of hearing about CFM, RPM, BTU's, and P.S.I.'s. They simply wanted efficient economical carpet cleaning, without accepting cleaning performance compromise.

The question was asked, "How about applying a new synergistic approach to engineering a truck mount?" The answer was to develop a complimentary structure that allows the machine components to operate more effectively. The result is technology that allows a slide-in truck mount to operate totally enclosed within the van. It provides for all the power and performance of a slide-in truck mount with the security and quietness of a power take-off unit.

The best way to explain this revolutionary technology is simply by examining the way the systems operate. First, use the cabinet of the machine for more than aesthetics. The shape of the machine can control the flow of air and exhaust. A new kind of insulation can be used within the cabinet to suppress noise. Second, look at how the cleaning solution is heated. Capture both the internal and the radiant heat being caused by most machine components to heat your cleaning solution. But don't just capture the heat like conventional heat exchangers, pull the hot air away from the components to keep them cooler and operating more efficiently. In addition, today's modern cleaning technician needs to have easy, effective control over the cleaning solution temperatures that he/she produces. Develop a patent pending Exhaust Control Diverter Valve allowing the accumulated heat to by-pass the heating system and be discharged when the thermostatically controlled solution temperature is attained. This provides the same kind of temperature control available only previously with fuel powered burners and coils without the need to continuously dump or by-pass water into a recovery tank. Third, make sure the design of the machine provides for maximum directional control over exhaust emissions, by removing them from the operation area of the cleaning technician. Fourth, if the machine is operated totally self enclosed within the van, this will allow for operation in quiet areas and at night. Fifth, make sure the design also keeps the interior of the van cooler and more comfortable for the operator while driving between jobs and while the machine is running.

Sixth, instead of using new, untested components or brands to make machines look like a new idea, rethink how to use the power production systems that have always served our industry so well. Seventh, in designing vacuum recovery systems, minimize drying time and maximize extraction by developing a system which optimizes air flow and vacuum lift to uniformly and effectively extract moisture from the carpet for faster drying times and better soil and moisture recovery. Augment the vacuum recovery system to allow for better airflow throughout the operational system.

Part of the challenge in this re-engineering of truck mounts lies squarely in answering this point: If simplicity sacrifices performance and cost effectiveness, you haven't accomplished much. However, technology can be used to make things simpler without sacrificing performance. Part of this simplification process lies in making things friendlier for the technician who is using the machine. Make the machine friendlier to operate, and friendlier to maintain. Use advanced solid state electronic LED monitoring devices. Control solution temperature production with state-of-the-art electronics and new heat diversion technology. Allow for optical blower and pump oil level indicators that give the technician the opportunity to check the oil level with simply a glance. Easy access blower and engine oil drains should be located right on the front panel, to make changing the oil easier. Simply start the engine and flip on two switches. Provide for easier access to all componentry. Make operation simple!

Not everyone will need this new technology. There is still a need for truck mounts that provide the professional cleaner, restorer, or contractor with the most absolute versatility, power, and solution temperature maintenance. Some companies will still need an economical alternative that provides what they need in cleaning without this level of simplification. However, if a carpet cleaning company can use a simple machine that cleans better, operates quietly, provides total lock-up security, produces less exhaust emissions, provides low cost, flame-free solution temperature production, is easier to operate and maintain, and will provide them with years of simple and efficient operation, then this new technology may be just what they have been looking for. Where we really see this new technology fitting in is with companies who have previously owned power-take-off truck mounts, companies who are looking for single fuel operations systems, companies who have been disappointed by the performance of heat exchange units, and large companies and building service contractors who want a truck mount that can be operated effectively and easily by any number of technicians without a great deal of training and maintenance know-how.

We encourage you to take a closer look at your business, at your cleaning requirements, and at your companies future. The time to apply technology rather than substitute new components is upon us. They may very well make an important contribution to the growth of your business.

#### About the author:

Gregory S. Bloss is the President of Steam Way International, Inc. in Denver, Colorado. Mr. Bloss has been with the company since 1982, having started in truck mount production, and moving through the company's research and development division prior to his present responsibilities. For more information on the truck mounted technology described herein, you can reach Greg by calling 1-800-447-8326.