Before 1989 double diaphragm spring brake actuators were manufactured using two clamp bands; one to seal the service side and one to seal the spring parking side. At one time both sides of these units were considered “serviceable”, meaning that if either side failed the clamp band could be removed, the diaphragm or other components could be replaced, and the unit continued in service as repaired.

While removing the clamp band on the service side of a double diaphragm spring brake actuator carries little or no risk, experience showed that all too often technicians did not follow the required safety procedures when removing the clamp band on the spring parking side, resulting in a potential for severe personal injury. If the powerful spring in the spring parking side is not properly “caged” before the clamp band is removed the spring can propel components of the assembly with great force, potentially causing severe personal injury.

In response to this safety problem MGM Brakes pioneered the development in 1987 of the “Tamper Resistant” double diaphragm spring brake actuator with the first “non-serviceable” spring parking side. By the early 1990’s the entire domestic industry recognized the enhancement to safety offered by the “Tamper Resistant” design. Today every responsible spring brake manufacturer based in the United States offers only spring brakes utilizing a “Tamper Resistant” technology. As a result of the universal adoption of a “Tamper Resistant” design for the spring parking side of double diaphragm spring brake actuators, instances of injury to workers from improper repair procedures or accidents have steadily declined until today they are virtually nonexistent.

Unfortunately, a disturbing trend is emerging within the aftermarket portion of the heavy truck industry - the use of double clamp banded spring brake actuators as replacements for damaged or failed “Tamper Resistant” units. This “reintroduction” of double clamp banded spring brakes into the North American market seriously threatens worker safety in the heavy truck industry. Especially at risk are those workers least experienced in the industry. Well over a decade has passed since MGM Brake’s introduction of “Tamper Resistant” spring parking brakes and many in the service and maintenance end of the industry have not seen, let alone serviced, a double clamp banded spring brake. Younger workers are not likely to have been trained in the special safety procedures required to cage the spring before servicing the spring parking side of double clamp banded units.

Therefore, MGM Brakes believes the industry needs to be reminded of the dangers associated with servicing double clamp banded spring brakes.

BE SURE TO PROPERLY “CAGE” THE SPRING IN THE SPRING PARKING SIDE ON ALL DOUBLE DIAPHRAGM SPRING BRAKE ACTUATORS - EVEN “TAMPER RESISTANT” MODELS - BEFORE ATTEMPTING ANY SERVICE ON THEM.

DO NOT ATTEMPT TO REMOVE OR LOOSEN THE SPRING PARKING SIDE CLAMP BAND ON A DOUBLE CLAMP BANDED SPRING BRAKE ACTUATOR UNDER ANY CIRCUMSTANCE.

IMPROPER SERVICING OF A DOUBLE CLAMP BANDED SPRING BRAKE ACTUATOR MAY RESULT IN SEVERE PERSONAL INJURY DUE TO AN UNINTENTIONAL SEPARATION OF THE HEAD FROM THE BASE OF THE UNIT.
INDUSTRY SAFETY REMINDER

SUBJECT: Double Clamp Banded Spring Brakes

DOUBLE CLAMP BANDED SPRING BRAKE

“TAMPER RESISTANT” SPRING BRAKE

SERVICE SIDE CLAMP BAND

SPRING SIDE CLAMP BAND

SPRING SIDE NO CLAMP BAND

SERVICE SIDE CLAMP BAND