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### **CHLOREP Informational Bulletin:**

## **KIT C Application to the NGRTC (Next Generation Rail Tank Car) fittings package**

Twenty-five rail cars equipped with chlorine valves under AAR Service Trial 422 are currently in service. These cars are equipped with valve assemblies significantly different than those currently in chlorine service. The liquid and vapor valves are designed to actuate spring loaded check valves that are positioned under the fittings flange. This is very similar to the configuration used in some other services but is a significant deviation from what is typical for chlorine service. This new configuration is intended to reduce the likelihood of any product loss in an accident situation.



**Figure 1: NGRTC Valve Arrangement**

The procedure for application of the C Kit must be modified for rail cars with this valve assembly. On standard chlorine tank car and truck fittings the #6 can is used for vapor or liquid valve capping. **In the assembly under trial, because of modified vapor/liquid valve dimensions, the #24 can normally used for the pressure relief device must be used when capping the liquid or vapor valves.**

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Figure 2: Emergency Kit C Part # 24A Hood Assembly

It is anticipated that the frequency of capping applications will be reduced even below that of the current design with this new configuration. However, it is important that all who might be called upon to respond to a car with this configuration are alert to the differences and the need to treat the application differently.

Rail cars that are part of this service trial will be marked with a service trial stencil ST-422. A decal in the fittings housing will also alert responders to the unique fittings. As mentioned above, the new vapor/liquid valves are quite different from existing valves. A unique feature of the new angle valves are their operation. The new vapor and liquid valves have a descending stem, which is necessary to activate and open the spring loaded check valve. **This means that in the closed position, the angle valve will be at its highest point.** The operation of the valve is the same as current valves, left (counter clockwise) to open and right (clockwise) to close.

The procedure for application of the C-kit will need to be modified for rail cars with this fittings package. On tank cars and trucks with standard chlorine fittings, the # 6 can is used for vapor and/or liquid valve capping and the # 24 can is used for the PRV (Pressure Relief valve). For the fittings assembly on trial, because of modified vapor/liquid dimensions, the # 24 can, normally used on the PRVs, must be used when capping the vapor/liquid valves.

Before attempting to cap a leaking Midland liquid or vapor valve on the NGRTC fittings package for chlorine, the inlet/outlet flange on the leaking valve must be removed in order for the # 24 can to fit. This is done by removing the 3 bolts that are securing the flange to the valve body (a  $\frac{3}{4}$ " deep socket is recommended). To remove the flange from the valve, it is recommended that a 1" x 18" stabber pipe is threaded into the flange to assist in separating it from the

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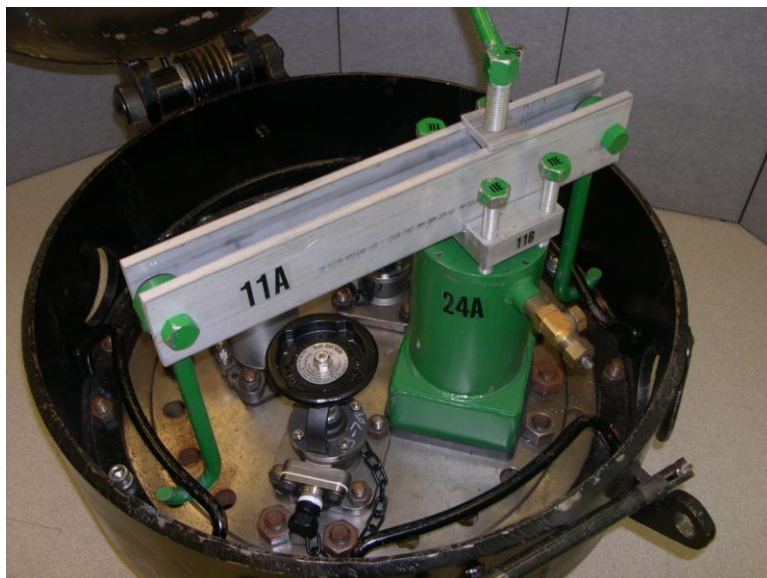
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body. The pipe plug does not have to be removed; it can be placed on top of the handle.



**Figure 3: Midland Valve with Flange Removed**

To proceed with installing the can, standard procedures should be followed.



**Figure 4: NGRTC Fittings with Emergency Kit C Applied**