

## INSTALLATION INSTRUCTIONS FOR FLANGED QUICK CONNECT ADAPTERS

The following procedure is a guide for replacement of a standard threaded tank car bottom outlet downleg and cap. Because of the differences in existing arrangements, some of these procedures may not be necessary and conversely, there may be additional steps that may be needed to perform the retrofit.

1. Using an appropriate wrench, remove the existing outlet nozzle cap and leave the cap hanging on the attachment chain.
2. Cut the outlet nozzle cap attachment chain as close to the car body as possible leaving one link attached to the car body. This link will be used later to attach the SALCO Flanged Quick Connect Adapter unit. Discard the used cap and all the attached appurtenances.
3. Remove the existing downleg from the bottom outlet valve.
4. Clean the valve flange using a wire brush or stiff bristled brush. It is very important that the sealing surface of the valve flange be free from dirt, rust or scale and that it does not have any nicks, cuts, burrs, gouges, etc. Any damage to the sealing surface may not allow the gasket to seat properly. If there are nicks or cuts on the valve flange sealing surface, they must be repaired before proceeding.
5. Remove the assembled SALCO Flanged Quick Connect Adapter unit from the packaging. Inspect the gasket inside the unit as well as the flange gasket. Make sure the gaskets are clean and there are no foreign materials in the adapter unit.
6. Bolt the unit onto the tank car outlet valve and tighten using the appropriate wrench, making sure the flange gasket is applied properly.
7. Using the S-hook provided with the unit, attach the adapter chain to the link that remained on the tank car as described in Step #2. Squeeze the S-hook closed to ensure the chain does not unhook itself.
8. Using the S-hook provided with the adapter cap, attach the cap chain to the link that remained on the tank car in Step #2. If the cap hangs 12" or less from the top of the rail, the chain should be shortened. Squeeze the S-hook closed to ensure the chain does not unhook itself.