

Eaton Quick Disconnect Couplings

Cleaning and Lubrication Process for Gaseous Oxygen Service

PROCEDURE

Please note that Eaton part numbers cleaned for oxygen service will be denoted with an "OC" suffix

This cleaning process applies to new and unused brass or stainless steel parts for 3000 psig (207 bar) max gaseous oxygen service or aluminum parts for 150 psig (10 bar) max gaseous oxygen service. It is based upon the recommended practices in ASTM G93 and CGA G-4.1 for cleaning, drying, inspection and packaging of materials and equipment intended for service in oxygen-enriched environments.

Pre-cleaning of parts should be performed before final cleaning for oxygen service to remove any gross contamination such as large quantities of oils, greases, and inorganic particulates. Before cleaning, parts not directly in the flow path may be assembled, but those parts directly in the path of oxygen service should not be assembled until after cleaning.

All cleaning, assembly and packaging must be done on a properly cleaned work surface as far away from sources of contamination as possible. All assembly tools and assembly surfaces should be cleaned with 99% Isopropyl alcohol prior to use. Care should be taken not to touch part surfaces that will be in direct oxygen service except with clean, powder-free, nitrile gloves.

All components are to be cleaned with a dilute solution of citric based cleaner mixed specifically for this application. Mixed cleaner may be retained for a maximum of one week. This cleaner shall be mixed and the parts cleaned in the following manner:

1. The cleaning solution shall consist of BroCo 402-RP citrus base solute reduced with lukewarm water to a 1% cleaning solution. (This is approximately 1 ¼ oz. or 2 ½ tablespoons of concentrate to 1 gallon of water.)
2. Using a metal basket, fully immerse parts in the cleaning solution to wet all internal surfaces. Agitate the parts for 30 seconds to promote a cleaning action. Do not soak parts.
3. Remove basket with parts from cleaning solution and thoroughly rinse with lukewarm clean running tap water. Agitate or stir parts by hand until all traces of cleaner are gone. The parts must not be allowed to dry between the cleaning and rinsing phase.
4. Parts needing to be transported from one work area to another must be placed in a clean dry Zip Lock style bag to prevent airborne particulates from contaminating the parts.
5. Dry parts completely by purging with clean, dry, oil-free air or nitrogen.
6. Visually inspect parts for the presence of contaminants under strong white light and for the absence of accumulations of lint fibers. Any visual contaminant is cause for re-cleaning.

After drying, all parts should be assembled as soon as possible using clean, dry, powder-free nitrile gloves and clean assembly tools. If lubrication is requested, O-rings will be lightly coated with Fluorolube GR-362, an oxygen compatible lubricant.

Immediately after assembly and before packaging, all assembled parts should undergo a final purge with clean, dry, oil-free air or nitrogen. Valves should be actuated as necessary to ensure full flow of purging medium through the part.

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Assembled parts should then be heat-sealed in a clean bag labeled with the following marking:

WARNING

DO NOT OPEN THIS PACKAGE AND INSTALL THIS ITEM UNLESS YOU HAVE READ AND AGREED TO EATON HYDRAULICS GROUP'S CLEANING PROCEDURE FOR OXYGEN SERVICE AND ASSURE THAT YOUR SYSTEM REQUIREMENTS HAVE BEEN SATISFIED. A COPY OF THE CLEANING PROCEDURE IS AVAILABLE AT:

www.eaton.com/Eaton/ProductsServices/ProductsbyCategory/Hydraulics/Connectors/PCT_256260

THIS PART HAS BEEN CLEANED BY EATON FOR OXYGEN SERVICE IN ACCORDANCE WITH EATON PROCEDURE ES10-14-69 WHICH IS BASED UPON THE STANDARD PRACTICES CONTAINED IN BOTH ASTM G93 AND CGA G-4. DO NOT OPEN PACKAGE UNTIL READY FOR INSTALLATION USE CARE WHEN HANDLING AND/OR INSTALLING THIS PART TO PREVENT COMBUSTIBLE CONTAMINANTS FROM ENTERING THE ASSEMBLY.

Note: Warning tag is Eaton part number 10275H.

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