

CARLETON ISO 9001

Composite Pressure Vessels



Federal law requires that E-11194 carbon fiber CFFC cylinders manufactured or retested after July 1, 2001 must be retested every 5 years!

Locate the [retester facility](#) nearest you.

HYDROTESTING GENERAL: JULY 14, 1999

Anyone testing a PTD E-11194 carbon cylinder must have a copy of the exemption, and have a valid US-DOT retest identification number "RIN".

[Technical Bulletin, 06/25/01](#)

Bulletin requires [Acrobat Reader 4.0](#) for viewing.

E-11194 Carbon filament "CFFC" cylinders:

- Manufactured or tested after July 1, 2001 must be reinspected and hydrostatically retested at least once every 5 years. If the retest was done prior to July 1st, the next retest must be done within 36 months. All subsequent retests must then be done every 5 years.
- Have a maximum service life of 15 years from the month of manufacture. DOT may, in the future, extend the service life of these cylinders.
- Are tested at 5/3 times the marked service pressure and held at test pressure for a minimum of 60 seconds.
- Are rejected if the rejection elastic expansion "REE" that is marked on the label is exceeded.
- May only be retested two times (EQUIPMENT FAILURE CAUSE ONLY) at a maximum of 200 psi over the original test pressure, to avoid damage.
- Must have the test date marked by the label and epoxy covered.

CFFC CYLINDER LABEL INFORMATION

The diagram shows a rectangular label with the following fields and callouts:








- TRANSPORT CANADA REGISTRATION:** DOT-E11194
- DOT EXEMPTION NUMBER:** TC-SU 5303
- SERVICE PRESSURE (DO NOT Exceed this Pressure!):** 4500PSI and 310 BAR
- DOT MANUFACTURER CODE:** M4927
- MODEL & SERIAL NUMBER:** 6151-85778
- REJECTION ELASTIC EXPANSION (REE):** REE
- ORIGINAL INSPECTOR'S SYMBOL:** 08-**L**-02
- SERVICE PRESSURE (Metric Units):** 15.4cc
- YEAR OF MANUFACTURE:** 08
- MONTH OF MANUFACTURE:** 02
- Manufacturer:** CARLETON Pressure Technology Division, Westminster, MD
- WARNING:** Do not fill if cylinder has visual damage

**WARNING: Do not fill cylinder that shows damage, unraveling or charring of composite fiber. For more information, please visit www.cylindersafety.com.
RETEST EVERY 5 YEARS PER US DOT CFFC & E11194
RETEST EVERY 3 YEARS PER TC-SU 5303**

The Department of Transportation has recently granted Carleton PTD an extension on re-test for CFFC cylinders!

All Carleton carbon fiber composite (**CFFC**) cylinders may now be tested **every 5 years** from the date of manufacture per DOT exemption E-11194 (6th revision) **if they have been manufactured or retested after July 1st, 2001**. Cylinders included in this extension will have the words **US DOT CFFC** on the bottom of the label. This extension applies only to CFFC cylinders purchased and used in the US. The 3-year period still applies to Transport Canada regulated cylinders.

Cylinder Safety Bulletins and Updates:

-  [What should you do if your composite pressure vessel gets a scratch, ding, dent or other form of impact damage?](#)
-  [Carleton Technologies Inc, has been granted an extension to the 3-year retest requirement for carbon fiber full composite cylinders!](#)
-  Federal law requires that E-11194 carbon fiber CFFC cylinders manufactured or retested after July 1, 2001 must be retested every 5 years.
-  [Federal law requires that E-11005 fiberglass FRP cylinders must be retested every 3 years!](#)
-  [Paintball Cylinders - Excessive heat due to fast filling can damage a composite pressure vessel!](#)
-  [SCBA Cylinders - When trans-filling an SCBA cylinder, follow these rules...](#)
-  [When removing valves from composite pressure vessels use extreme care and be sure to protect the composite overwrap from harsh fixtures and tool handling!](#)