

PROVINCE OF BRITISH COLUMBIA
REGULATION OF THE MINISTER OF EDUCATION

M 075 Motor Vehicle Act

I, Joy MacPhail, Minister of Education, order that, effective May 1, 2001, the Weld Repair of Aluminum Alloy Wheels Regulation, B.C. Reg. 5/97, is amended as set out in the attached Appendix.

FEB 28 2001

Date



Minister of Education

(This part is for administrative purposes only and is not part of the Order.)

Authority under which Order is made:

Act and section:- Motor Vehicle Act, R.S.B.C. 1996, c. 318, s. 217 (2)

Other (specify):- OIC 1019/94

February 1, 2001

163/2001/37/ca

APPENDIX

- 1 ***Section 1 of the Weld Repair of Aluminum Alloy Wheels Regulation, B.C. Reg. 5/97, is amended***
 - (a) *in paragraph (a) of the definition of “certifier” by striking out “an inspector employed by” and substituting “a designated representative of”,*
 - (b) *in the definitions of “GMAW” and “GTAW” by striking out “the Canadian Welding Bureau standard W47.2-M1987,” and substituting “the Canadian Standards Association W47.2-M1987 standard,”.*
- 2 ***Section 6 is amended***
 - (a) *in subsection (3) by adding “all weld repairs including” after “responsible for”, and*
 - (b) *by adding the following subsections:*
 - (5) If it is decided under section 9 to discard a damaged wheel, the weld repair supervisor must ensure that
 - (a) the wheel is stamped as required by section 9 (3), and
 - (b) a log book is maintained in which each discard decision is recorded indicating
 - (i) the name of the owner of the wheel,
 - (ii) the date of the discard decision, and
 - (iii) the name of the weld repair supervisor who made the discard decision.
 - (6) The log book entries required by subsections (4) (b) and (5) (b) may be made in the same log book.
- 3 ***Section 9 is amended by adding the following subsection:***
 - (3) If the weld repair supervisor decides that the damaged wheel cannot be safely repaired, the wheel must be discarded and permanently stamped with the word “UNSAFE”, using characters not less than 5 mm in height, on the inside of the wheel rim adjacent to the valve stem hole.
- 4 ***Section 11 (4) and (5) (a) and (b) is amended by striking out “CSA standard W59.2-M1991,” and substituting “CSA W59.2-M1991 standard,”.***
- 5 ***Section 12 is repealed and the following substituted***

Other permitted repairs

 - 12 (1) Cold straightening of wheels is allowed if the depth of deformation on the wheel is less than the flange material thickness and under 10 cm (4 inches) in length in any one location along the wheel bead circumference.
 - (2) Heat straightening of wheels is allowed if
 - (a) the heat is restricted to not more than 204°C (400°F),

- (b) the depth of the wheel deformation considered repairable by heat straightening is not more than 10% of the wheel diameter on the front (outside) or rear (inside) bead, and
- (c) the length of the wheel deformation considered repairable by heat straightening is not more than 10% of the wheel bead circumference on the front (outside) bead or 20% of the wheel bead circumference on the rear (inside) bead.

6 ***Schedule 1 is repealed and the following substituted:***

SCHEDULE 1

TEST METHODS AND ACCEPTANCE CRITERIA FOR WELDING PERFORMANCE

- 1 Refer to the procedures outlined in Canadian Standards Association W47.2-M1987 standard or the GTAW or GMAW process for welding in a "flat position" of weld bead overlay, weld buildup and full penetration groove weld.
- 2 Refer to Canadian Standards Association W47.2-M1987 standard for a description of test methods and acceptance criteria. The welding test must be performed using one of 5083, 5086 or 6061 aluminum flat plate with an 8 mm (5/16 inch) material thickness and full penetration weld.
- 3 A welder must meet all of the following test standards:

Pass/Fail Test Standard

Table 1:

| Type of Test | Qty | Acceptance/Rejection Criteria |
|---------------------|------------|--|
| Face bend | 2 | After bending, a flaw exceeding 3 mm (1/8 inch) in length is a failure. |
| Root bend | 2 | After bending, a flaw exceeding 3 mm (1/8 inch) in length is a failure. |
| Macro etch test | 2 | Incomplete penetration achieved through thickness of material welded is a failure. |
| Tensile test | 2 | A reduction of the ultimate tensile strength of aluminum alloy is a failure. |
| Fracture test | 2 | Incomplete penetration achieved through thickness of material welded is a failure. |

Note: A tensile test is required for the initial performance test only and, once passed, it is not required for a subsequent re-test.