

43 Nameplate and Identification

43.1 Products shall be marked with the manufacturer's name, trade name, trademark or other descriptive marking which may identify the organization responsible for the product, part number or model number, and electrical ratings in volts dc and Ah or Wh.

43.2 Products shall be marked with the date of manufacture, which may be in the form of a code that does not repeat within 10 years.

43.3 Products that are provided with a battery pack that has its battery management system residing in components or circuits outside the battery pack shall be marked with the charger that is specified for use. An example of such markings would be the following or equivalent "Use Only Charger (____)." The blank would be filled in with identifying information for the charger.

43.4 All external terminals and connections intended to be made in the field, including the battery terminals if the battery pack is not keyed, shall be provided with identification and if applicable, polarity markings.

43.5 If a manufacturer produces or assembles eBike systems at more than one factory location, the equipment shall have a distinctive marking – which may be in code – to identify it as the product of a particular factory.

44 Cautionary Markings

44.1 The words, "CAUTION", "WARNING", OR "DANGER" in a cautionary marking shall be in letters not less than 3.2 mm (1/8 inch) high. The remaining letters in a cautionary marking shall not be less than 1.6 mm (1/16 inch) high. The words, "WARNING" or "DANGER" are alternatives for the word, "CAUTION".

44.2 A cautionary marking shall be located on a part that is not removable; or if removable, on a part that impairs the operation of the unit when removed. The marking shall also be visible and legible to the operator during normal operation of the unit.

44.3 There shall be a replacement marking adjacent to a fuse or fuseholder if the fuse is used to reduce the risk of fire and electric shock and the fuse is user replaceable. The marking shall be located where it will be readily visible during replacement of the fuse, and shall consist of the word, "WARNING" and the following or equivalent: "Risk of Fire and Electric Shock – Replace Only With Same Type and Ratings of Fuse."

INSTRUCTIONS

45 General

45.1 A product shall be provided with legible installation instructions, operation instructions, and instructions pertaining to a risk of fire, electric shock, or injury to persons associated with the use of the product. Also, user maintenance instructions and moving and storage instructions associated with the use of the product by the end user shall be included.

45.2 The instructions mentioned in [45.1](#) shall be in separate manuals or shall be combined in one or more manuals when the instructions pertaining to a risk of fire, electrical shock, or injury to persons are separated in format and emphasized to distinguish them from the rest of the text.

45.3 An illustration is allowed with a required instruction to clarify the intent but shall not replace the written instruction.

45.4 The following items shall be entirely in upper case letters or shall be emphasized to distinguish them from the rest of the text:

- a) The headings for the installation, operation, user maintenance, and moving and storage instructions;
- b) The heading for the instructions pertaining to a risk of fire, electric shock, or injury to persons; and
- c) The opening and closing statements of the instructions specified in [48.3](#) – “IMPORTANT SAFETY INSTRUCTIONS” and “SAVE THESE INSTRUCTIONS”, or the equivalent.

45.5 Unless otherwise indicated, the text of all instructions shall be in the words specified or words that are equivalent, clear, and understandable. Substitution of the signal word "DANGER" for "WARNING" is allowed, when the risk associated with the eBike is such that a situation exists which, if not avoided, will result in death or serious injury. For other than the signal words "DANGER" and "WARNING," if a specific conflict exists in the application of such wording to an eBike, modified wording is allowed.

46 Instructions Pertaining to a Risk of Fire or Electric Shock

46.1 Instructions pertaining to a risk of fire or electric shock shall warn the user of reasonably foreseeable risks and state the precautions to be taken to reduce such risks. Such instructions shall be preceded by the heading, “INSTRUCTIONS PERTAINING TO RISK OF FIRE or ELECTRIC SHOCK” or the equivalent.

46.2 Numbering of the items in the list in [46.3](#) and including other instructions pertaining to a risk of fire, electric shock, or injury to persons that the manufacturer determines to be necessary and that do not conflict with the intent of the instructions are acceptable.

46.3 The instructions pertaining to a risk of fire, electric shock, or injury to persons shall include those items in the following list that are applicable to the product. The statement “IMPORTANT SAFETY INSTRUCTIONS” or the equivalent shall precede the list, and the statement “SAVE THESE INSTRUCTIONS” or the equivalent shall either precede or follow the list. The word “WARNING” shall be entirely in upper case letters or shall be emphasized to distinguish it from the rest of the text.

IMPORTANT SAFETY INSTRUCTIONS

WARNING – When using this product, basic precautions should always be followed, including the following:

- a) Read all the instructions before using the product.
- b) To reduce the risk of injury, close supervision is necessary when the product is used near children.
- c) Do not put fingers or hands into the product.
- d) Do not use this product if the flexible power cord or output cable is frayed, has broken insulation, or any other signs of damage.
- e) For an off board charger provided with a field wiring terminal or leads, the installation instructions shall state that the installation is intended to use copper wires only.
- f) For an off board charger, when a pressure terminal connector, or the fastening hardware, are not provided on the unit as shipped. The instruction manual shall indicate which pressure terminal or component terminal assemblies are for use with the unit.

g) With reference to (f), the terminal assembly packages and the instruction manual shall include information identifying the wire size and the manufacturer's name, trade name, or other descriptive marking by which the organization responsible for the product is identified.

h) When a pressure terminal connector provided on an off board charger, for a field installed conductor requires the use of other than an ordinary tool for securing the conductor, identification of the tool and any required instructions for using the tool shall be included in the installation instructions.

i) The instruction manual for a unit where the abnormal test is terminated by operation of the intended branch circuit over current protective device, shall include the word "CAUTION" and the following or equivalent: "To reduce the risk of fire, connect only to a circuit provided with _____ amperes maximum branch circuit overcurrent protection in accordance with the National Electrical Code, ANSI/NFPA 70." The blank space is to be filled in with the applicable ampere rating of branch circuit overcurrent protection.

j) For all equipment, the instructions shall indicate "This equipment is not intended to be used at ambient temperatures less than _____°C (____°F) or above ambient temperatures of _____°C (____°F)." The blanks are to be filled in with the manufacturer's specified ambient temperature ratings.

k) For all equipment, the instructions shall indicate "The battery is intended to be charged when the ambient temperature is between _____°C (____°F) and _____°C (____°F). Never charge the battery when ambient temperatures are outside this range." The blanks are to be filled in with the manufacturer's specified ambient temperature range for charging.

SAVE THESE INSTRUCTIONS

46.4 The instructions pertaining to a risk of fire, electric shock, or injury to persons, or the installation instructions shall include the following items if applicable. If the following instructions are included in the installation instructions, a reference to these instructions shall be included in the list mentioned in [46.3](#) as a separate item. The headings and the word "WARNING" shall be entirely in upper case letters or shall be emphasized to distinguish it from the rest of the text.

GROUNDING INSTRUCTIONS

This product must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment grounding conductor and a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes ordinances.

WARNING – Improper connection of the equipment grounding conductor is able to result in a risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product – if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

47 Installation Instructions

47.1 Installation instructions shall contain all the information needed to install the product for use as intended, and shall be preceded by the heading, "INSTALLATION INSTRUCTIONS" or the equivalent.

48 Operating Instructions

48.1 Operating instructions shall contain all the information needed to operate the product as intended, and shall be preceded by the heading "OPERATING INSTRUCTIONS" or the equivalent.

48.2 Instructions in relation to operating that appear in the instructions pertaining to a risk of fire, electric shock, or injury to persons, are not required to be repeated here; but a reference to those instructions shall be included here.

48.3 The instruction manual shall contain the following information:

- a) Instructions regarding battery charging, temperature limits for equipment use and storage, battery use and storage, and the recommended temperature range for charging.
- b) A warning shall be provided against modifying or attempting to repair the eBike system except as indicated in the instructions for use and care.

48.4 Instructions shall indicate that charging of the eBike shall only be performed with the manufacturer's recommended charger.

49 User Maintenance Instructions

49.1 Instructions for user maintenance shall include explicit instructions for all cleaning and servicing that are intended to be performed by the user, and shall be preceded by the heading, "USER MAINTENANCE INSTRUCTIONS" or the equivalent.

49.2 For units with user replaceable fuses, the user maintenance instructions shall contain statements concerning fuse replacement instructions and reference to the correct fuse ratings that are to be used.

50 Moving and Storage Instructions

50.1 If moving or storage of the product is able to result in damage to the product that could result in a risk of fire, electric shock, or injury to persons during subsequent use, the instructions shall describe the proper moving and storage procedure, and shall be preceded by the heading, "MOVING AND STORAGE INSTRUCTIONS" or the equivalent.

Annex A – French Translations (Normative for Canada, Informative for US)

A1 French Translations

Clause	English	French
43.3	Use Only Charger (_____)	Utiliser uniquement le chargeur (_____)
44.3	WARNING – Risk of Fire and Electric Shock – Replace Only With Same Type and Ratings of Fuse.	AVERTISSEMENT – Risque d'incendie et de décharge électrique – Remplacer uniquement avec un fusible de même type et de même valeur nominale.
45.4(c) 46.3	IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS	INSTRUCTIONS DE SÉCURITÉ IMPORTANTES CONSERVEZ CES INSTRUCTIONS
45.5	Unless otherwise indicated, the text of all instructions shall be in the words specified or words that are equivalent, clear, and understandable. Substitution of the signal word "DANGER" for "WARNING" is allowed, when the risk associated with the eBike is such that a situation exists which, if not avoided, will result in death or serious injury. For other than the signal words "DANGER" and "WARNING," if a specific conflict exists in the application of such wording to an eBike, modified wording is allowed.	Sauf indication contraire, le texte de toutes les instructions doit être écrit dans les mots précisés ou équivalents, clairs et compréhensibles. Le remplacement du mot « DANGER » par « AVERTISSEMENT » est autorisé lorsque le risque associé au vélo électrique est tel qu'il existe une situation qui, si elle n'est pas évitée, peut entraîner la mort ou des blessures graves. En dehors des mentions « DANGER » et « AVERTISSEMENT », si un conflit particulier existe dans l'application d'un tel libellé à un vélo électrique, un libellé modifié est autorisé.
46.1	"INSTRUCTIONS PERTAINING TO RISK OF FIRE" or "ELECTRIC SHOCK"	« INSTRUCTIONS POUR RISQUE D'INCENDIE ou DE DÉCHARGE ÉLECTRIQUE »
46.3	<p>WARNING – When using this product, basic precautions should always be followed, including the following:</p> <p>a) Read all the instructions before using the product.</p> <p>b) To reduce the risk of injury, close supervision is necessary when the product is used near children.</p> <p>c) Do not put fingers or hands into the product.</p> <p>d) Do not use this product if the flexible power cord or output cable is frayed, has broken insulation, or any other signs of damage.</p> <p>e) For an off board charger provided with a field wiring terminal or leads, the installation instructions shall state that the installation is intended to use copper wires only.</p> <p>f) For an off board charger, when a pressure terminal connector, or the fastening hardware, are not provided on the unit as shipped. The instruction manual shall indicate which pressure terminal or component terminal assemblies are for use with the unit.</p> <p>g) With reference to (f), the terminal assembly packages and the instruction manual shall include information identifying the wire size and the manufacturer's name, trade name, or other descriptive marking by which the organization responsible for the product is identified.</p> <p>h) When a pressure terminal connector provided on an off board charger, for a field installed conductor requires the use of other than an ordinary tool for securing the conductor, identification of the tool and any required instructions for using the tool shall be included in the installation instructions.</p> <p>i) The instruction manual for a unit where the abnormal test is terminated by operation of the intended branch circuit over current protective device, shall include the word "CAUTION" and the following or equivalent: "To reduce the risk of fire, connect only to a circuit provided with _____ amperes maximum branch circuit overcurrent protection in accordance with the National Electrical Code, ANSI/NFPA 70." The blank space is to be filled in with the applicable ampere rating of branch circuit overcurrent protection.</p> <p>j) For all equipment, the instructions shall indicate "This equipment is not intended to be used at ambient temperatures less than _____°C (_____°F) or above ambient temperatures of _____°C (_____°F)." The blanks are to be filled in with the manufacturer's specified ambient temperature ratings.</p>	<p>AVERTISSEMENT – Lors de l'utilisation de ce produit, les précautions de base doivent toujours être suivies, notamment :</p> <p>a) Lisez toutes les instructions avant d'utiliser le produit.</p> <p>b) Pour réduire le risque de blessure, une surveillance étroite est nécessaire lorsque le produit est utilisé à proximité d'enfants.</p> <p>c) Ne placez pas vos doigts ou vos mains dans le produit.</p> <p>d) N'utilisez pas ce produit si le cordon d'alimentation flexible ou le câble de sortie est effiloché, si l'isolation est cassée ou si d'autres signes de détérioration sont présents.</p> <p>e) Pour un chargeur externe fourni avec une ou plusieurs bornes de câblage d'excitation, les instructions d'installation doivent indiquer que l'installation est destinée à utiliser uniquement des fils de cuivre.</p> <p>f) Pour un chargeur externe, lorsqu'un connecteur de borne de pression ou le matériel de fixation n'est pas fourni sur l'unité. Le manuel d'instructions doit indiquer la borne de pression ou les ensembles de bornes des composants à utiliser avec l'unité.</p> <p>g) En se référant à (f), les ensembles de bornes et le manuel d'instructions doivent inclure des informations identifiant la taille du fil et le nom du fabricant, le nom commercial ou tout autre marquage descriptif permettant d'identifier l'organisation responsable du produit.</p> <p>h) Lorsqu'un connecteur de borne de pression fourni sur un chargeur externe, pour un conducteur installé sur le terrain, nécessite l'utilisation d'un outil autre qu'un outil ordinaire pour fixer le conducteur, l'identification de l'outil et toutes les instructions nécessaires à son utilisation doivent être incluses dans les instructions d'installation.</p> <p>i) : « Afin de limiter le risque d'incendie, raccorder uniquement à un circuit équipé d'un dispositif de protection contre les surintensités du circuit de dérivation avec une charge d'intensité maximale, conformément au Code national de l'électricité ANSI/NFPA 70. » La charge d'intensité de la protection du circuit de dérivation contre les surintensités doit être insérée dans l'espace laissé en blanc. Le manuel d'utilisation d'une unité dont l'essai anormal est terminé</p>

Clause	English	French
	<p>k) For all equipment, the instructions shall indicate "The battery is intended to be charged when the ambient temperature is between _____°C (_____°F) and _____°C (_____°F). Never charge the battery when ambient temperatures are outside this range." The blanks are to be filled in with the manufacturer's specified ambient temperature range for charging.</p>	<p>par l'utilisation du circuit de dérivation prévu sur le dispositif de protection contre les surintensités doit comprendre le mot « ATTENTION » et les éléments suivants ou équivalents : « Pour réduire le risque d'incendie, branchez-vous uniquement à un circuit doté d'une protection maximale contre les surintensités du circuit de dérivation _____ ampères conformément au code électrique national ANSI/NFPA 70. » L'espace vide doit être rempli avec l'intensité nominale applicable de la protection contre les surintensités du circuit de dérivation.</p> <p>j) Pour tous les équipements, les instructions doivent indiquer « Cet équipement n'est pas destiné à être utilisé à des températures ambiantes inférieures à _____°C (_____°F) ou supérieures à des températures ambiantes de _____°C (_____°F) ». Les espaces vides doivent être remplis avec les valeurs de température ambiante précisées par le fabricant.</p> <p>k) Pour tous les équipements, les instructions doivent indiquer « La pile doit être chargée lorsque la température ambiante est comprise entre _____°C (_____°F) et _____°C (_____°F). Ne jamais charger la pile lorsque la température ambiante est en dehors de cette plage. » Les espaces vides doivent être remplis avec la plage de température ambiante précisée par le fabricant pour la charge.</p>
46.4	<p>GROUNDING INSTRUCTIONS This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment grounding conductor and a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes ordinances. WARNING – Improper connection of the equipment-grounding conductor is able to result in a risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product – if it will not fit the outlet, have a proper outlet installed by a qualified electrician.</p>	<p>INSTRUCTIONS DE MISE À LA TERRE Ce produit doit être mis à la terre. En cas de dysfonctionnement ou de panne, la mise à la terre fournit un chemin de moindre résistance pour le courant électrique afin de réduire le risque de décharge électrique. Ce produit est équipé d'un cordon doté d'un conducteur de mise à la terre et d'une fiche de mise à la terre. La fiche doit être branchée sur une prise correctement installée et mise à la terre conformément à toutes les réglementations locales en vigueur. AVERTISSEMENT– Un mauvais branchement du conducteur de mise à la terre de l'équipement peut entraîner un risque de décharge électrique. En cas de doute sur la mise à la terre correcte du produit, consulter un électricien qualifié. Ne pas modifier la fiche fournie avec le produit. Si elle ne s'adapte pas à la prise, faire installer une prise appropriée par un électricien qualifié.</p>
47.1	INSTALLATION INSTRUCTIONS	INSTRUCTIONS D'INSTALLATION
48.1	OPERATING INSTRUCTIONS	INSTRUCTIONS D'UTILISATION
49.1	USER MAINTENANCE INSTRUCTIONS	INSTRUCTIONS DE MAINTENANCE DE L'UTILISATEUR
50.1	MOVING AND STORAGE INSTRUCTIONS	INSTRUCTIONS DE DÉPLACEMENT ET DE STOCKAGE



333 Pfingsten Road
Northbrook, Illinois 60062–2096
847.272.8800

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