



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

1200 New Jersey Ave., SE  
Washington, D.C. 20590

February 9, 2011

In Reply Refer To:  
HSST/LS-70

Mr. Robert Sik  
Akron Foundry Company  
P.O. Box 27028  
Akron, Ohio 44314

Dear Mr. Sik:

This is in response to your letter of June 26, 2010, requesting the Federal Highway Administration's (FHWA) acceptance of modifications to a number of your cast aluminum transformer bases. You wish to standardize the base bottom castings stocking only parts having ground mounting bolt-circle ranges of 13 thru 15 inches, or 10 thru 12 inches, as appropriate. We concur that these modifications, as described below, are acceptable for use on the National Highway System.

Your Cast Aluminum Breakaway Transformer Bases are manufactured as a two piece weldment.

The TB1 series bottom casting is used for the following bases:

Akron Foundry's TB1 – 20, TB1 – 17, TB5 – 9,  
Pole-Lite F – 1302  
Feralux CS – 370.

You wish to standardize these base bottom castings, stocking only parts having a ground mounting bolt-circle range of 13 inches thru 15 inches.

The TB2 series bottom casting is used for the following bases:

Akron Foundry's TB2 – 20, TB2 – 17, TB6 – 9  
Pole-Lite F – 1300  
Feralux CS – 300.

You wish to standardize these bottom castings, stocking only parts having a ground bolt-circle range of 10 inches thru 12 inches.

Also, you asked FHWA to state that the bases TB5 – 9, Pole-Lite F – 1302, and Feralux CS – 370 are acceptable for use on ground mounting bolt circles ranging from 13 inches thru 15 inches with mounting ears cut-off at 5.12 inches, typical (10.25 inches overall).

In addition, bases TB6 – 9, Pole-Lite F – 1300 & Feralux CS – 300 are acceptable for use on ground mounting bolt circles ranging from 10 inches thru 12 inches with mounting ears cut-off @ 3.62 inches, typical. (7.25 inches overall).



FHWA:HSSI:NArtimovichr:ms:x61331:2/7/11  
File: s://directory folder/HSST/Artimovich/LS70\_Akron.dotx  
cc: HSSI (NArtimovich; JDewar)

The Akron Foundry Breakaway T-base information sheet (enclosed for reference) summarizes your company's breakaway transformer bases. In letters dated June 10, 2010, addressed to both Pole-lite & Feralux Inc., your provided sketches outlining your TB 1 Series bottom casting and your TB 2 Series bottom casting. We will keep these on file for reference.

Your breakaway bases have been found acceptable in the Federal Highway Administration Acceptance letters shown in the table below.

LS-14	May 30, 1990	Valmont Industries	Cast Al transformer base No. 0283093 15 inch bolt circle	Transformer Base
LS-17	August 6, 1990	Akron Foundry	CS-300 and CS-370 Al Transformer Bases (tests of Feralux bases)	Transformer Base
LS-18	August 6, 1990	Akron Foundry	F-1300 and F-1302 Al Transformer Bases (tests of Pole Lite bases)	Transformer Base
LS-19	August 6, 1990	Akron Foundry	TB-3-17, TB-5-9, TB-6-9 Transformer Bases, 11.5 to 15.5" BC	Transformer Base
LS-22	September 19, 1990	Akron Foundry	Chart summarizing approval letters LS-2, LS-4, LS-9, LS-15, LS-19	Transformer Base
LS-58	February 8, 2005	Akron Foundry	Addition of Stack Pack washers to TB1-17	Transformer Base
LS-61	December 15, 2006	Akron Foundry	Revised bolt circle on Akron Foundry TB-6-9	Transformer Base
LS-62	December 15, 2006	Akron Foundry	Revised bolt circle on Feralux CS-300	Transformer Base
LS-63	December 15, 2006	Akron Foundry	Revised bolt circle on Pole-lite F-1300	Transformer Base

Enclosed for reference please find a set of drawings representing this condition which would be true for your complete line of bases. All previous conditions contained in the acceptance letters remain in effect.

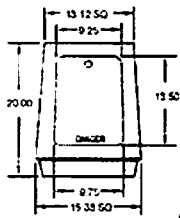
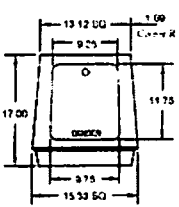
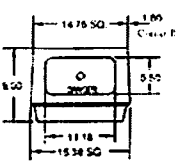
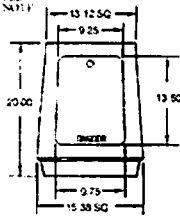
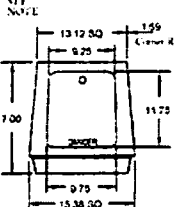
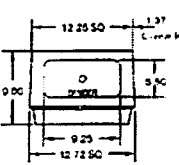
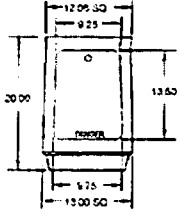
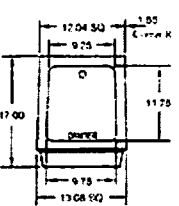
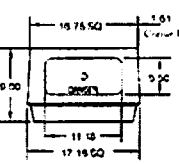
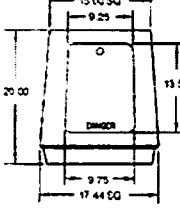
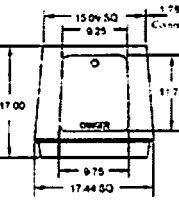
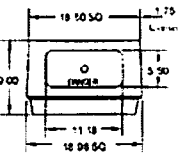
Sincerely,

A handwritten signature in blue ink that reads "Michael S. Griffith". The signature is written in a cursive style with a large initial 'M' and 'G'.

Michael S. Griffith  
Director, Office of Safety Technologies  
Office of Safety

Enclosures

# BREAKAWAY TRANSFORMER BASES

1975 AASHTO APPROVED	1985 AASHTO APPROVED	1985 AASHTO APPROVED										
<p><b>TB1-20</b></p>  <p>This base features 11" to 13" top bolt circle and 13" to 15" bottom bolt circle. Stands 20" in height. Base can be ordered with hinged door option or with plastic access door.</p> <p>1975 AASHTO APPROVED</p>	<p><b>TB1-17</b></p>  <p>This base features 10 1/2" to 13 1/2" top bolt circle and 13" to 15" bottom bolt circle. Stands 17" in height. Base can be ordered with hinged door option or with plastic access door.</p> <p>1985 AASHTO APPROVED</p>	<p><b>TB5-9</b></p>  <p>This base features 14 1/2" to 15" top bolt circle and 13" to 15" bottom bolt circle. Stands 9" in height.</p> <p>1985 AASHTO APPROVED</p>										
<p>★ <b>TB1-20 MODIFIED</b></p>  <p>This base features 11" to 13" top bolt circle and 10 1/2" to 12 1/2" bottom bolt circle. Stands 20" in height. Base can be ordered with hinged door option or with plastic access door.</p> <p>1975 AASHTO APPROVED</p>	<p>★ <b>TB1-17 MODIFIED</b></p>  <p>This base features 10 1/2" to 13 1/2" top bolt circle and 10 1/2" to 12 1/2" bottom bolt circle. Stands 17" in height. Base can be ordered with hinged door option or with plastic access door.</p> <p>1985 AASHTO APPROVED</p>	<p><b>TB6-9</b></p>  <p>This base features 10 1/2" to 12" top bolt circle and 10" to 12" bottom bolt circle. Stands 9" in height.</p> <p>1985 AASHTO APPROVED</p>										
<p><b>TB2-20</b></p>  <p>This base features 10" to 12" top bolt circle and 10" to 12" bottom bolt circle. Stands 20" in height. Base can be ordered with hinged door option or with plastic access door.</p> <p>1975 AASHTO APPROVED</p>	<p><b>TB2-17</b></p>  <p>This base features 10" to 12" top bolt circle and 10" to 12" bottom bolt circle. Stands 17" in height. Base can be ordered with hinged door option or with plastic access door.</p> <p>1985 AASHTO APPROVED</p>	<p><b>TB7-9</b></p>  <p>This base features 16" top bolt circle and 15" to 17" bottom bolt circle. Stands 9" in height.</p> <p>NOT AASHTO APPROVED</p>										
<p><b>TB3-20</b></p>  <p>This base features 13" to 15 1/8" top bolt circle and 15" to 17 1/8" bottom bolt circle. Stands 20" in height. Base can be ordered with hinged door option or with plastic access door.</p> <p>1975 AASHTO APPROVED</p>	<p><b>TB3-17</b></p>  <p>This base features 13" to 15 1/8" top bolt circle and 15" to 17 1/8" bottom bolt circle. Stands 17" in height. Base can be ordered with hinged door option or with plastic access door.</p> <p>1985 AASHTO APPROVED</p>	<p><b>TB8-9</b></p>  <p>This base features 16" to 18" top bolt circle and 16" to 21" bottom bolt circle. Stands 9" in height.</p> <p>NOT AASHTO APPROVED</p>										
<p style="text-align: center;"><b>ALL REQUIRED WASHERS ARE AVAILABLE</b></p> <table border="0"> <thead> <tr> <th>Part No.</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>AF-W3</td> <td>2 1/2" DIA. O.D. X 1 1/4" I.D. X 1/4" THICK</td> </tr> <tr> <td>AF-W1</td> <td>2 3/4" DIA. O.D. X 1 1/2" I.D. X 1/2" THICK</td> </tr> <tr> <td>AF-W2</td> <td>2 7/8" DIA. O.D. X 1 3/4" I.D. X 3/4" THICK</td> </tr> <tr> <td>AF-W4</td> <td>2 7/8" X 4 1/4" X 3/4" THICK RECTANGULAR (FOR 1 1/2" OR 1 3/4" I.D.)</td> </tr> </tbody> </table> <p>★ <b>NOTE:</b> SPECIAL STACK PACK WASHERS ARE REQUIRED</p> <p>FOR FHWA "ACCEPTANCE LETTERS" GO TO <a href="http://safety.fhwa.dot.gov/roadway_dept/road_hardware/listing.cfm?code=lumin">http://safety.fhwa.dot.gov/roadway_dept/road_hardware/listing.cfm?code=lumin</a></p>			Part No.	Size	AF-W3	2 1/2" DIA. O.D. X 1 1/4" I.D. X 1/4" THICK	AF-W1	2 3/4" DIA. O.D. X 1 1/2" I.D. X 1/2" THICK	AF-W2	2 7/8" DIA. O.D. X 1 3/4" I.D. X 3/4" THICK	AF-W4	2 7/8" X 4 1/4" X 3/4" THICK RECTANGULAR (FOR 1 1/2" OR 1 3/4" I.D.)
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**AKRON FOUNDRY COMPANY**  
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FAX: 330-745-7999

CAUTION: BEFORE INSTALLATION, USER SHOULD CONSULT WITH AUTHORIZED DISTRIBUTOR REGARDING USER'S PROPOSED APPLICATION, LOAD REQUIREMENTS AND INSTALLATION METHODS. FAILURES CAN RESULT FROM USER'S MISAPPLICATION OR IMPROPER INSTALLATION.  
**MADE IN THE U.S.A.**