

APPENDIX F

CHECK DIGIT CALCULATION FOR TRANSACTION NUMBERS

A transaction number consists of three elements:

- (a) the account security number;
- (b) the importer/broker assigned sequential number; and
- (c) the check digit.

The check digit is calculated by applying the “Modulo 10” formula to the combined account security and sequential number.

To apply the formula, the account security number must have five digits and the sequential number must have eight digits (with leading zeros inserted if necessary).

The Modulo 10 calculation is as follows:

- (a) link together the account security and sequential number into one 13-digit number;

Note: If the assigned sequential number is not known, determine the number of shipments imported into Canada to date, starting from January 1, 1988. (This number must be unique within seven years plus three current months from this date.)

For example, if the shipment is the first shipment imported into Canada since January 1, 1988, use 1 and zero fill the seven digits before the 1 (00000001).

- (b) starting with the high-order digit (the most left hand), multiply each digit in an odd-numbered position by 1, and multiply each digit in an even-numbered position by 2;
- (c) for each result of the multiplication above, if the result is greater than or equal to 10, add the two digits together to give a single digit result (e.g., a digit of 9 multiplied by 2 gives a result of 18. 18 is greater than 10, so add the digits 1 and 8 together to give a result of 9);
- (d) sum all of the results calculated above;
- (e) divide the sum by 10, giving a quotient and a remainder;
- (f) the remainder becomes the check digit and the 14th digit of the transaction number.

ILLUSTRATION

Given an account security number of 12345 and a sequential number of 6789, calculate the appropriate check digit for the transaction number.

	ACCOUNT SECURITY NUMBER					SEQUENTIAL NUMBER								CHECK DIGIT												
A	1	2	3	4	5	0	0	0	0	6	7	8	9	7												
B	×1	×2	×1	×2	×1	×2	×1	×2	×1	×2	×1	×2	×1													
C	1	4	3	8	5	0	0	0	0	1	2	7	1	6	9											
D	1	+	4	+	3	+	8	+	5	+	0	+	0	+	0	+	0	+	3	+	7	+	7	+	9	

E The sum of row D =

F The sum of row D divided by 10 =