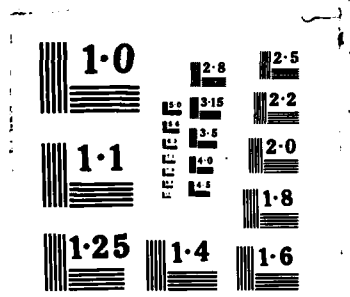


AD-A167 386

ADA (TRADE NAME) COMPILER VALIDATION SUMMARY REPORT 1/1  
ALSYS ALSYCOMP 004 UL (U) BUREAU D'ORIENTATION DE LAF  
NORMALISATION EN INFORMATIQUE ROCC.. 83 NOV 83 841 AL.  
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| Ada*Compiler Validation Summary Report: Alsays ✓<br>AlsycOMP 004, version 1.0<br>Apollo DOMAIN DN460, DN320 and DSP80A                                                                                                                         |                        | 3Nov 1985-3Nov 1986                                            |
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| Ada Programming Language Ada Compiler Validation Summary Report, Ada Compiler<br>Validation Capability, ACVC Validation Testing Ada Validation Office, AVO<br>Ada Validation Facility, AVF, ANSI/MIL-STD-1815A, Ada Joint Program Office, AJPO |                        |                                                                |
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## EXECUTIVE SUMMARY

This Validation Summary Report presents the results and conclusions of testing performed on the AlayCOMP\_004, version 1.0. Standardized tests serve as input to an Ada compiler, producing results which are evaluated by the validation team. This summary briefly states the highlights of the AlayCOMP\_004, version 1.0 validation.

On-site testing was performed 31 October 1985 through 3 November 1985 at Alays premises in La Celle Saint Cloud - France, under the auspices of the BNI (AVF), according to Ada Validation Office policies and procedures. The AlayCOMP\_004, version 1.0 is hosted on Apollo DOMAIN DN460 operating under AEGIS Version SR9. It is also hosted on DN320 and DSP88A with the same operating system. The suite of tests known as the Ada Compiler Validation Capability (ACVC), Version 1.6, was used. The ACVC is used to validate conformance of a compiler to ANSI/MIL-STD-1815A Ada. The purpose of testing is to ensure that a compiler properly implements legal language constructs and that it identifies and rejects illegal language constructs. The testing also identifies behavior that is implementation dependent but permitted by the Ada Standard. Six classes of tests are used. These tests are designed to perform checks at compile time, at link time, or during execution.

The results of validation are summarized in the following table.

| RESULT       | TEST CLASS |     |      |    |   |   | TOTAL |
|--------------|------------|-----|------|----|---|---|-------|
|              | A          | B   | C    | D  | E | F |       |
| Passed       | 60         | 777 | 981  | 14 | 8 | 1 | 1821  |
| Failed       | 0          | 0   | 0    | 0  | 0 | 0 | 0     |
| Inapplicable | 1          | 5   | 267  | 3  | 0 | 2 | 278   |
| Anomalous    | 0          | 0   | 0    | 0  | 0 | 0 | 0     |
| Withdrawn    | 0          | 18  | 45   | 0  | 0 | 0 | 63    |
| TOTAL        | 61         | 800 | 1273 | 17 | 8 | 3 | 2162  |

01/17/86

Validation Summary Report

Ada 85.2

Ada COMPILER VALIDATION SUMMARY REPORT:

ALSYS  
AlsyCOMP\_004, version 1.0  
Apollo DOMAIN DN460, DN320 and DSP80A

Completion of On-Site Validation:  
3 November 1985

Prepared By:  
BN1/AVF  
Domaine de Voluceau - Rocquencourt  
B.P.105 - 78153 LE CHESNAY CEDEX  
FRANCE

Prepared For:  
Ada Joint Program Office  
United States Department of Defense  
Washington, D.C.

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Validation Summary Report

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Validation Summary Report

Ada Compiler Validation Summary Report:

Compiler Name: AlayCOMP\_004, version 1.0

Host Computers  
Apollo DOMAIN DN460  
Apollo DOMAIN DN320  
Apollo DOMAIN DSP80A  
under  
AEGIS Version SR9

Target Computers  
Apollo DOMAIN DN460  
Apollo DOMAIN DN320  
Apollo DOMAIN DSP80A  
under  
AEGIS Version SR9

Testing Completed 3 November 1985 Using ACVC 1.6

This report has been reviewed and approved:

*2511*

Ada Validation Facility

BN1

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## EXECUTIVE SUMMARY

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The results of validation are summarized in the following table.

| RESULT       | TEST CLASS |     |      |    |   |   | TOTAL |
|--------------|------------|-----|------|----|---|---|-------|
|              | A          | B   | C    | D  | E | L |       |
| Passed       | 60         | 777 | 961  | 14 | 8 | 1 | 1821  |
| Failed       | 0          | 0   | 0    | 0  | 0 | 0 | 0     |
| Inapplicable | 1          | 5   | 267  | 3  | 0 | 2 | 278   |
| Anomalous    | 0          | 0   | 0    | 0  | 0 | 0 | 0     |
| Withdrawn    | 0          | 18  | 45   | 0  | 0 | 0 | 63    |
| TOTAL        | 61         | 800 | 1273 | 17 | 8 | 3 | 2162  |

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Tests found to contain errors were withdrawn from Version 1.6 of the Ada Compiler Validation Capability (ACVC). When validation was completed, the following tests had been withdrawn:

|            |                         |                        |
|------------|-------------------------|------------------------|
| B38105B-AB | C45521A..Y-B (25 tests) | C48005C-B              |
| C48006B-B  | C64103C-B               | C64103D-B              |
| C64105E-AB | C64105F-AB              | B66001A-B              |
| B67001A-B  | B67004A-B               | B74103F-B              |
| B74207A-B  | C93005B-B               | C93005C-B              |
| C93007B-B  | BC3220B-B               | CA2009E-B              |
| CA1003B-AB | CA1011A-B               | CA1108A-B              |
| CA1108B-B  | CA2009B-B               | CA2009F-B              |
| BC1013A-B  | BC3204A..D-B (4 tests)  | BC3205A..D-B (4 tests) |
| BC3405B-B  | BC3503A-B               | CE2107E-B              |
| CE3603A-B  | CE3604A-B               | CE3704M-B              |

Some tests demonstrate that language features are not supported by an implementation. For this implementation the tests determined the following.

. SHORT\_FLOAT is not supported:

B86001CP-AB.DEP C34001F-B.DEP C35702A-AB.DEP

. LONG\_FLOAT is not supported:

B86001CQ-AB.DEP C34001G-B.DEP C35702B-AB.DEP

. Representation specifications for noncontiguous enumeration representations are not allowed:

C55B16A-AB.DEP

. No other integer type other than INTEGER, SHORT\_INTEGER, AND LONG\_INTEGER is supported:

B86001DT-AB.DEP

. The package SYSTEM is used by package TEXT\_IO:

C86001F-B.ADA

. The 'SIZE clause is not supported:

C87B62A-B.DEP

. The 'STORAGE\_SIZE clause is not supported:

C87B62B-B.DEP

. The 'SMALL clause is not supported:

C87B62C-B.DEP

. Generic package bodies cannot be compiled in separate compilation files:

CA2009C\*-B.DEP

. Pragma INLINE is not supported for procedures:

LA3004A\*-AB.ADA

. Pragma INLINE is not supported for functions:

LA3004B\*-B.DEP

ACVC Version 1.6 was taken on-site via magnetic tape to Alslys premises in La Celle Saint Cloud - France. The tape was loaded, and all tests, except the withdrawn tests and any executable tests which make use of a floating point precision greater than SYSTEM.MAX\_DIGITS, were compiled on Apollo DOMAIN DN460. Class A, C, D, and E tests were executed on Apollo DOMAIN DN460.

On completion of testing, all results were analyzed for failed Class A, C, D, or E programs, and all Class B and L compilation results were individually analyzed.

The ACVC, Version 1.6, contains 2162 tests of which 1821 were applicable to AlsyCOMP\_004, version 1.0. 24 tests were processed although inapplicable. No anomalies were found in the testing of this compiler. Testing demonstrated that all applicable tests were passed by this compiler. The AVF concluded that the results show acceptable compliance to ANSI/MIL-STD-1815A Ada.

## 1- INTRODUCTION

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## CHAPTER 1

## INTRODUCTION

The Validation Summary Report describes how an Ada compiler conforms to the language standard. This report explains all technical terms used within and thoroughly reports the Ada Compiler Validation Capability (ACVC) test results. Ada compilers must be written according to the language specification as given in the ANSI/MIL-STD-1815A Ada. All implementation-defined features must be included for the compiler to conform to the Standard. Following the guidelines of the Standard ensures continuity between compilers. That is, the entire Standard must be implemented, and nothing can be implemented that is not in the Standard.

Even though all validated Ada compilers conform to the Standard, it must be understood that some differences do exist between implementations. ANSI/MIL-STD-1815A permits some implementation dependencies, e.g., the maximum length of identifiers, the maximum values of integer types, etc. These implementation-dependent features limit the portability of programs between compilers. Other differences between compilers are due to limitations imposed on a compiler by the operating system and by the hardware. A of these dependencies are given in the report.

Validation summary reports are written according to a standardized format. Compiler users can, therefore, more easily compare the reports from several compilers when selecting a compiler for a given task. The validation report can be completed mostly from the test results produced during validation testing. Additional testing information is given at the end of the report and states problems and details which are unique for a specific compiler. The format of the validation report limits variance between reports, enhances readability of the report, and accelerates report readiness.

## 1.1- Purpose of this Validation Summary Report

The Validation Summary Report documents the results of the testing performed on an Ada compiler. Testing was carried out for the following purposes:

- . To identify any language constructs supported by the translator that do not conform to the Ada Standard
- . To identify any unsupported language constructs required by the Ada Standard

To describe the implementation-dependent behavior allowed by the Ada Standard

Testing of this compiler was conducted by BNI according to policies and procedures established by the Ada Validation Office (AVO). Testing was conducted from 31 October 1985 through 3 November 1985 at Aley's premises in La Celle Saint Cloud - France.

#### 1.2- Use of this Validation Summary Report

Consistent with the national laws of the originating country, the Ada Validation Office may make full and free public disclosure of this report. In the United States, this is provided in accordance with the "Freedom of Information Act" (5 U.S.C. §552). The results of this validation apply only to the computers, operating systems, and compiler versions identified in this report.

The organizations represented on the signature page of this report do not represent or warrant that any statement or statements set forth in this report are accurate or complete, or that the subject compiler has no nonconformances to the Ada Standard other than those presented. This report is not intended for the purpose of publicizing the findings summarized herein.

Questions regarding this report or the validation tests should be directed to:

Ada Validation Office  
Institute for Defense Analyses  
1801 N. Beauregard  
Alexandria VA 22311

and to:

BNI  
Domaine de Voluceau - Rocquencourt  
B.P. 105 - 78153 LE CHESNAY CEDEX  
FRANCE

#### 1.3- References

Reference Manual for the Ada Programming Language,  
ANSI/MIL-STD-1815A, Feb 1983.

. Ada Validation Organization Policies and Procedures,  
T.H. Probert, MITRE Corporation, MTR-82W00103, June 1982.

. Ada Compiler Validation Capability Implementers' Guide,  
SofTech, Inc., Dec 1984.

#### 1.4- Definition of Terms

|                   |                                                                                                                                                                                                                                         |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Anomaly           | A test result that, given pre-validation analysis, is not expected during formal validation but is judged allowable under the circumstances.                                                                                            |
| ACVC              | The Ada Compiler Validation Capability. A set of programs that evaluates the conformance of a compiler to the Ada language specification, ANSI/MIL-STD-1815A.                                                                           |
| Ada Standard      | ANSI/MIL-STD-1815A, February 1983.                                                                                                                                                                                                      |
| Applicant         | The agency requesting validation.                                                                                                                                                                                                       |
| AVF               | The BNL. In the context of this report, the AVF is responsible for conducting compiler validations according to established policies and procedures.                                                                                    |
| AVO               | The Ada Validation Office. In the context of this report, the AVO is responsible for setting policies and procedures for compiler validations.                                                                                          |
| Compiler          | A processor for the Ada language. In the context of this report, a compiler is any language processor, including cross-compilers, translators, and interpreters.                                                                        |
| Failed test       | A test for which the compiler generates a result that demonstrates nonconformance to the Ada Standard.                                                                                                                                  |
| Host              | The computer on which the compiler resides.                                                                                                                                                                                             |
| Inapplicable test | A test that uses features of the language that a compiler is not required to support or may legitimately support in a way other than the one expected by the test.                                                                      |
| Passed test       | A test for which a compiler generates the expected result.                                                                                                                                                                              |
| Target            | The computer for which a compiler generates code.                                                                                                                                                                                       |
| Test              | A program that evaluates the conformance of a compiler to a language specification. In the context of this report, the term is used to designate a single ACVC test. The text of a program may be the text of one or more compilations. |

Withdrawn test

A test that has an invalid test objective, fails to meet its test objective, or contains illegal use of the language.

# 1.5- Configuration

The candidate compilation system for this validation was tested under the configuration:

Compiler: AlsyCOMP\_004 version 1.0

Test Suite: Ada Compiler Validation Capability, Version 1.6

## Host Computer:

|                   |                                |
|-------------------|--------------------------------|
| Machine(s):       | Apollo DOMAIN DN460            |
| Operating System: | AEGIS Version SR9              |
| Memory Size:      | 4 Megabytes                    |
| Disk System:      | Shared disks on the Apollo net |

## Target Computer:

|                   |                                |
|-------------------|--------------------------------|
| Machine(s):       | Apollo DOMAIN DN460            |
| Operating System: | AEGIS Version SR9              |
| Memory Size:      | 4 Megabytes                    |
| Disk System:      | Shared disks on the Apollo net |

Additional testing was successfully performed by BNI on two other machines of this family : DN320 and DSP80A, using a subset of the ACVC comprising the first 5 tests of each chapter.

DN320 machine with the following configuration :

Host Computer:

|                   |                                |
|-------------------|--------------------------------|
| Machine(s):       | Apollo DOMAIN DN320            |
| Operating System: | AEGIS Version SR9              |
| Memory Size:      | 1.5 Megabytes                  |
| Disk System:      | Shared disks on the Apollo net |

Target Computer:

|                   |                                |
|-------------------|--------------------------------|
| Machine(s):       | Apollo DOMAIN DN320            |
| Operating System: | AEGIS Version SR9              |
| Memory Size:      | 1.5 Megabytes                  |
| Disk System:      | Shared disks on the Apollo net |

DSP80A machine with the following configuration :

Host Computer:

|                   |                                |
|-------------------|--------------------------------|
| Machine(s):       | Apollo DOMAIN DSP80A           |
| Operating System: | AEGIS Version SR9              |
| Memory Size:      | 1 Megabytes                    |
| Disk System:      | Shared disks on the Apollo net |

Target Computer:

|                   |                                |
|-------------------|--------------------------------|
| Machine(s):       | Apollo DOMAIN DSP80A           |
| Operating System: | AEGIS Version SR9              |
| Memory Size:      | 1 Megabytes                    |
| Disk System:      | Shared disks on the Apollo net |

## CHAPTER 2

## TEST RESULTS

## 2.1- ACVC Test Classes

Conformance to ANSI/MIL-STD-1815A is measured using the Ada Compiler Validation Capability (ACVC). The ACVC contains both legal and illegal Ada programs structured into six test classes: A, B, C, D, E, and L. Legal programs are compiled and executed while illegal programs are just compiled. Support packages are used to report the results of the legal programs. A compiler must correctly process each of the tests in the suite and demonstrate conformance to the Ada Standard by either meeting the pass criteria given for the test or by showing that the test is inapplicable to the implementation. Tests that are found to contain errors are withdrawn from the ACVC. Detailed test results are listed in the Appendix D. The results of validation testing are summarized in the following table:

| RESULT       | TEST CLASS |     |      |    |   |   | TOTAL |
|--------------|------------|-----|------|----|---|---|-------|
|              | A          | B   | C    | D  | E | L |       |
| Passed       | 60         | 777 | 961  | 14 | 8 | 1 | 1821  |
| Failed       | 0          | 0   | 0    | 0  | 0 | 0 | 0     |
| Inapplicable | 1          | 5   | 267  | 3  | 0 | 2 | 278   |
| Anomalous    | 0          | 0   | 0    | 0  | 0 | 0 | 0     |
| Withdrawn    | 0          | 18  | 45   | 0  | 0 | 0 | 63    |
| TOTAL        | 61         | 800 | 1273 | 17 | 8 | 3 | 2162  |

A total of 1845 tests were processed during this validation attempt. The 63 withdrawn tests in Version 1.6 were not processed, nor were 254 Class C tests that were inapplicable because they use floating point types having digits that exceed the maximum value for the implementation. All other tests were processed.

Some conventions are followed in the ACVC to ensure that the tests are reasonably portable without modification. For example, the tests make use of only the basic 55 character set, contain lines with a maximum length of 72 characters, use small numeric values, and place features that may not be supported in separate tests. However, some tests contain values that require the test to be customized according to implementation-specific values. The values used for this validation are listed in Appendix B.

## 2.1.1- Class A Tests

Class A tests check that legal Ada programs can be successfully compiled and executed. However, no checks are performed during execution to see if the test objective has been met. For example, a Class A test checks that reserved words of another language (other than those already reserved in the Ada language) are not treated as reserved words by an Ada compiler. A Class A test is passed if no errors are detected at compile time and the program executes to produce a message indicating that it has passed. If a Class A test cannot be compiled and executed because of its size, then the test is split into a set of smaller subtests that can be processed. A split was required for 1 test:

AE2101A-B.ADA

The following table shows that all applicable Class A tests were passed:

| RESULT       | CHAPTER |   |   |   |   |    |    |   |    |    |    |    |  |  | TOTAL |
|--------------|---------|---|---|---|---|----|----|---|----|----|----|----|--|--|-------|
|              | 2       | 3 | 4 | 5 | 6 | 7  | 8  | 9 | 10 | 11 | 12 | 14 |  |  |       |
| Passed       | 13      | 6 | 0 | 5 | 2 | 12 | 13 | 2 | 0  | 0  | 0  | 7  |  |  | 60    |
| Failed       | 0       | 0 | 0 | 0 | 0 | 0  | 0  | 0 | 0  | 0  | 0  | 0  |  |  | 0     |
| Inapplicable | 0       | 0 | 0 | 0 | 0 | 0  | 0  | 1 | 0  | 0  | 0  | 0  |  |  | 1     |
| Anomalous    | 0       | 0 | 0 | 0 | 0 | 0  | 0  | 0 | 0  | 0  | 0  | 0  |  |  | 0     |
| Withdrawn    | 0       | 0 | 0 | 0 | 0 | 0  | 0  | 0 | 0  | 0  | 0  | 0  |  |  | 0     |
| TOTAL        | 13      | 6 | 0 | 5 | 2 | 12 | 13 | 3 | 0  | 0  | 0  | 7  |  |  | 61    |

## 2.1.2- Class B Tests

Class B tests check that a compiler detects illegal language usage. Class B tests are not executable. Each test in this class is compiled and the resulting compilation listing is examined manually to verify that every syntax or semantic error in the test is detected. A Class B test is passed if every illegal construct that it contains is detected by the compiler. If one or more errors are not detected, then a version of the test is created that contains only the undetected errors. The resulting "split" is compiled and examined. The splitting process continues until all errors are detected by the compiler. Splits were required for 15 tests:

B32202A-B.ADA B32202B-B.ADA B32202C-B.ADA  
 B33006A-B.ADA B37004A-B.ADA B43201D-B.ADA  
 B45102A-AB.ADA B61012A-B.ADA B62001B-AB.ADA  
 B62001C-AB.ADA B62001D-AB.ADA B91004A-B.ADA  
 BA2001E0M-AB.ADA BA2001E1-AB.ADA BA2001E2-AB.ADA

The following table shows that all applicable Class B tests were passed:

| RESULT       | CHAPTER |    |    |     |    |    |    |    |    |    |     |    |       |  |
|--------------|---------|----|----|-----|----|----|----|----|----|----|-----|----|-------|--|
|              | 2       | 3  | 4  | 5   | 6  | 7  | 8  | 9  | 10 | 11 | 12  | 14 | TOTAL |  |
| Passed       | 35      | 72 | 83 | 113 | 70 | 55 | 49 | 91 | 36 | 8  | 147 | 18 | 777   |  |
| Failed       | 0       | 0  | 0  | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0  | 0     |  |
| Inapplicable | 0       | 0  | 0  | 0   | 0  | 0  | 3  | 1  | 0  | 0  | 1   | 0  | 5     |  |
| Anomalous    | 0       | 0  | 0  | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0  | 0     |  |
| Withdrawn    | 0       | 1  | 0  | 0   | 3  | 2  | 0  | 0  | 0  | 0  | 12  | 0  | 18    |  |
| TOTAL        | 35      | 73 | 83 | 113 | 73 | 57 | 52 | 92 | 36 | 8  | 160 | 18 | 800   |  |

## 2.1.3- Class C Tests

Class C tests check that legal Ada programs can be correctly compiled and executed. Each Class C test is self-checking and produces a PASS/FAIL message indicating the result when it is executed. If a Class C test cannot be compiled because it exceeds the compiler's capacity, then the test is split into smaller subtests until all are compiled and executed. No splits were required.

The following table shows that all applicable Class C tests were passed:

| RESULT       | CHAPTER |     |     |     |    |    |    |     |    |    |    |     |       |  |
|--------------|---------|-----|-----|-----|----|----|----|-----|----|----|----|-----|-------|--|
|              | 2       | 3   | 4   | 5   | 6  | 7  | 8  | 9   | 10 | 11 | 12 | 14  | TOTAL |  |
| Passed       | 19      | 89  | 153 | 115 | 70 | 14 | 93 | 106 | 35 | 20 | 55 | 192 | 961   |  |
| Failed       | 0       | 0   | 0   | 0   | 0  | 0  | 0  | 0   | 0  | 0  | 0  | 0   | 0     |  |
| Inapplicable | 23      | 119 | 116 | 4   | 0  | 0  | 4  | 0   | 1  | 0  | 0  | 0   | 267   |  |
| Anomalous    | 0       | 0   | 0   | 0   | 0  | 0  | 0  | 0   | 0  | 0  | 0  | 0   | 0     |  |
| Withdrawn    | 0       | 0   | 27  | 0   | 4  | 0  | 0  | 3   | 7  | 0  | 0  | 4   | 45    |  |
| TOTAL        | 42      | 208 | 296 | 119 | 74 | 14 | 97 | 109 | 43 | 20 | 55 | 196 | 1273  |  |

#### 2.1.4- Class D Tests

Class D tests check the compilation and execution capacities of a compiler. Since there are no requirements placed on a compiler by the Ada Standard for the number of identifiers permitted in a compilation, the number of units in a library, the number of nested loops in a subprogram body, and so on, a compiler may refuse to compile a Class D test. Each Class D test is self-checking and produces a PASS/FAIL message indicating the result when it is executed. If a Class D test fails to compile because the capacity of the compiler is exceeded, then the test is classified as inapplicable.

The following table shows that all applicable Class D tests were passed:

| RESULT       | CHAPTER |   |   |   |   |   |   |   |    |    |    |    |   |   | TOTAL |
|--------------|---------|---|---|---|---|---|---|---|----|----|----|----|---|---|-------|
|              | 2       | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 14 |   |   |       |
| Passed       | 1       | 0 | 4 | 7 | 2 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0 | 0 | 14    |
| Failed       | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0 | 0 | 0     |
| Inapplicable | 0       | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0 | 0 | 3     |
| Anomalous    | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0 | 0 | 0     |
| Withdrawn    | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0 | 0 | 0     |
| TOTAL        | 1       | 0 | 4 | 9 | 3 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0 | 0 | 17    |

Capacities measured by the Class D tests are detailed in section 2.4, IMPLEMENTATION CHARACTERISTICS.

## 2.1.5- Class E Tests

Class E tests provide information about the compiler in those areas in which the Ada Standard permits implementations to differ. Each Class E test is executable and produces messages that indicate how the Ada Standard is interpreted. However, in some cases the Ada Standard permits a compiler to detect a condition either at compile time or at execution time, and thus a Class E test may correctly fail to execute. A Class E test is passed if it fails to compile and appropriate error messages are issued, or if it executes properly and produces a message that it has passed. If a Class E test cannot be compiled and executed because of its size, then the test is split into a set of smaller subtests that can be processed. No splits were required.

The following table shows that all applicable Class E tests were passed:

| RESULT       | CHAPTER |   |   |   |   |   |   |   |    |    |    |    | TOTAL |
|--------------|---------|---|---|---|---|---|---|---|----|----|----|----|-------|
|              | 2       | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 14 |       |
| Passed       | 1       | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 1  | 8     |
| Failed       | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0     |
| Inapplicable | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0     |
| Anomalous    | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0     |
| Withdrawn    | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0     |
| TOTAL        | 1       | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 1  | 8     |

Information obtained from the Class E tests is detailed in section 2.4, IMPLEMENTATION CHARACTERISTICS.

## 2.1.6- Class L Tests

Class L tests check that incomplete or illegal Ada programs involving multiple, separately compiled units are detected and not allowed to execute. Class L tests are compiled separately and execution is attempted. A Class L test passes if it is rejected at link time and the test does not execute.

The following table shows that all applicable Class L tests were passed:

| RESULT       | CHAPTER |   |   |   |   |   |   |   |    |    |    |    |       |  |
|--------------|---------|---|---|---|---|---|---|---|----|----|----|----|-------|--|
|              | 2       | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 14 | TOTAL |  |
| Passed       | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 0  | 0  | 0  | 1     |  |
| Failed       | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0     |  |
| Inapplicable | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 0  | 0  | 0  | 2     |  |
| Anomalous    | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0     |  |
| Withdrawn    | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0     |  |
| TOTAL        | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 0  | 0  | 0  | 3     |  |

## 2.1.7- Support Units

Three packages support the self-checking features of Class C tests: REPORT, CHECK\_FILE, and VAR\_STRINGS. The REPORT package provides the mechanism by which executable tests report results. It also provides a set of identity functions that are used to defeat some compiler optimization strategies to cause computations to be made by the target computer instead of the compiler on the host computer. The CHECK\_FILE package is used to check the contents of text files written by some of the Class C tests for Chapter 14 of the Ada Standard. The VAR\_STRINGS package defines types and subprograms for manipulating varying-length character strings. The operation of these three packages is checked by a set of executable tests. These tests produce messages that are examined manually to verify that the packages are operating correctly. If these packages are not operating correctly, then validation is not attempted.

An applicant is permitted to substitute the body of package REPORT with an equivalent one if for some reason the original version provided by the ACVC cannot be executed on the target computer. Package REPORT was not modified for this validation.

All support package specifications and bodies were compiled and were demonstrated to be operating correctly.

## 2.2- Withdrawn Tests

Some tests are withdrawn from the ACVC because they do not conform to the Ada Standard. When testing was performed, the following 63 tests had been withdrawn for the reasons indicated:

## B38105B-AB:

This test requires a specific interpretation of the Ada Standard regarding whether an incomplete type can have discriminant constraints before the full type declaration; this interpretation is not fully supported by the Ada Standard or Language Maintenance Committee (LMC).

## C45521A..Y-B (25 tests):

Cases C and I define the model interval for the result too narrowly.

## C48005C-B:

Lines 38 and 63 of this test should check that the value of the designated object is null.

## C48006B-B:

This test requires a specific interpretation of the Ada Standard regarding whether an incomplete type can have discriminant constraints before the full type declaration; this interpretation is not fully supported by the Ada Standard or Language Maintenance Committee.

## C64103C-B:

This test should raise CONSTRAINT\_ERROR during the conversion at line 179.

## C64103D-B:

This test involves a CONSTRAINT\_ERROR vs. NUMERIC\_ERROR issue that is to be resolved by the Language Maintenance Committee.

## C64105E-AB:

For case E, ensure that non-null dimensions of formal and actual parameters belong to both index subtypes (see AI-00313).

## C64105F-AB:

For case E, ensure that non-null dimensions of formal and actual parameters belong to both index subtypes (see AI-00313).

## B66001A-B:

This test checks (in section G) that a function without parameters, which is equivalent to an enumeration literal in the same declarative region, is a redeclaration and as such is forbidden. According to the Ada Standard 8.3(17), the explicit declaration of such a function is allowed if an enumeration literal is considered to be an implicitly declared predefined operation. The Ada Standard is not clear on this point. This issue has been referred to the Language Maintenance Committee for resolution. Since the issue cannot be resolved at this time, the test is withdrawn from Version 1.6.

## B67001A-B:

Line 414 is missing the "BEGIN NULL; END;" needed to complete the block beginning at line 389 (case H).

**B67004A-B:**

This default name for a formal generic equality function should not be allowed to be "/" unless an expanded name is used.

**B74103F-B:**

This test hinges on whether or not a generic formal type declaration declares a type. This matter will be debated by the Language Maintenance Committee in November.

**B74207A-B:**

This test requires a specific interpretation of the Ada Standard regarding whether an incomplete type can have discriminant constraints before the full type declaration; this interpretation is not fully supported by the Ada Standard or Language Maintenance Committee.

**C93005B-B, C93005C-B:**

These tests contain a declaration of an integer variable whose initialization is solely for the purpose of raising an exception. Some compilers will not raise this exception due to their optimization.

**C93007B-B:**

This test should check for PROGRAM\_ERROR rather than TASKING\_ERROR (SEE AI-000149).

**CA1003B-AB:**

A compilation that contains an illegal compilation unit may now be rejected as a whole (see AI-00255/05).

**CA1011A-B:**

The test objective should be reversed to be consistent with AI-00199.

**CA1108A-B:**

A pragma ELABORATE is needed for OTHER\_PKG at line 25.

**CA1108B-B:**

A pragma ELABORATE is needed for FIRST-PKG at line 39 and for LATER-PKG at line 49.

**CA2009B-B:**

The repetition of the main procedure after the subunit body makes the subunit body obsolete; therefore, an attempt to execute the main procedure will fail.

**CA2009E-B:**

The repetition of the main procedure after the subunit body makes the subunit body obsolete; therefore, an attempt to execute the main procedure will fail.

**CA2009F-B:**

The file CA2009F2-B is missing from this test suite.

**BC1013A-B:**

The declaration of equality in lines 86-87 is illegal because the parameter type T declared in line 11 is not a limited type (Ada Standard 6.7-4).

BC3204A..D-B (4 tests), BC3205A..D-B (4 tests), BC3405B-B:

Instantiations with types that have default discriminants are now legal (see AI-00037).

BC3220B-B:

This test assumes that the staticness of instantiated generic parameters follows from the staticness of the actual parameters of the instantiation. This compiler treats all such instantiated parameters as non-static. The matter is before the LMC for resolution.

BC3503A-B:

This test requires a specific interpretation of the Ada Standard regarding whether an incomplete type can have discriminant constraints before the full type declaration; this interpretation is not fully supported by the Ada Standard or Language Maintenance Committee.

CE2107E-B:

This test has a variable, TEMP\_HAS\_TRUE, that needs to be given an initial value of TRUE.

CE3603A-B:

The last case is inconsistent with AI-00050. If string argument is null, no attempt to read is made and END\_ERROR is not raised.

CE3604A-B:

Cases 5, 8, 9, and 11 are inconsistent with AI-00050. SKIP\_LINE is called only if the end of the output string has not been met.

CE3704M-B:

A superfluous SKIP\_LINE causes the input and output operations to be out of synchronization.

## 2.3- Inapplicable Tests

Some tests use features of the Ada language that the Ada Standard does not require a compiler to support; thus these tests may be inapplicable to a particular compiler. Others may depend on the result of another test that is either inapplicable or withdrawn. For this validation attempt, 278 tests were inapplicable for the reasons indicated:

A91002M-B.ADA:

This test is inapplicable because this implementation does not support certain pragmas such as CONTROLLED.

B86001DT-AB.TST:

This test is inapplicable because this implementation has no predefined type other than INTEGER, FLOAT, SHORT\_INTEGER, SHORT\_FLOAT, LONG\_INTEGER, LONG\_FLOAT. The macro name SNAME was set to NO\_SUCH\_TYPE and the declaration of a procedure name NO\_SUCH\_TYPE is then legal.

C24113C..Y-B.DEP

C35705C..Y-B.DEP

C35706C..Y-B.DEP

C35707C..Y-B.DEP

C35708C..Y-B.DEP

C35802C..Y-B.DEP

C45241C..Y-B.DEP

C45321C..Y-B.DEP

C45421C..Y-B.DEP

C45424C..Y-B.DEP

C45621C..Z-B.DEP ((10\*23)+24=254 tests):

These tests are inapplicable because this implementation limits digits to 6.

B86001CP-AB.DEP

C34001F-B.DEP

C35702A-AB.DEP:

These tests are inapplicable because this implementation does not support SHORT\_FLOAT.

B86001CQ-AB.DEP

C34001G-B.DEP

C35702B-AB.DEP:

These tests are inapplicable because this implementation does not support LONG\_FLOAT.

B91001G-B.ADA

BC1002A-B.ADA

C55B16A-AB.DEP

C87B62A..C-B.DEP ((1\*3)+3 = 6 tests):

These tests are inapplicable because this implementation does not support representation clauses.

C86001F-B.DEP:

This test is inapplicable because this implementation rejects the recompilation of SYSTEM at compilation-time.

CA2009C-B.DEP:

This test is inapplicable because this implementation does not support instantiating missing generic bodies.

D55A03G-AB.ADA

D55A03H-AB.ADA :

These tests are inapplicable because the capacities of the compiler on this machine were exceeded.

D64005G--B.ADA:

The last test of this family (D64005GQ-B.ADA) exceeds the capacity of this implementation, preventing the binding and execution of this family.

LA3004A--AB.DEP

LA3004B--B.DEP:

These tests are inapplicable because this implementation does not support pragma INLINE. These tests ignore the pragma and are processed correctly.

C52103X-B.ADA

C52104X-B.ADA

C52104Y-B.ADA:

These tests are inapplicable because this implementation does not support pragma PACK. These tests ignore the pragma and are processed correctly.

## 2.4- Implementation Characteristics

One of the purposes of validation is to determine the behavior of a compiler in those areas of the Ada Standard that permit implementations to differ. Class D and E tests specifically check for such implementation differences. However, inapplicable tests in other classes also characterize an implementation. This compiler is characterized by the following interpretations of the Ada Standard:

- Non-graphic characters.

Non-graphic characters are defined in the ASCII character set but are not permitted in Ada programs, even within character strings. The compiler correctly recognizes these characters as illegal in Ada compilations. The characters are not printed in the output listing.

- Capacities.

The compiler correctly processes compilations containing loop statements nested to 65 levels, block statements nested to 65 levels, procedures nested to 10 levels, and 723 variables.

- Universal integer calculations.

An implementation is allowed to reject universal integer calculations having values that exceed `SYSTEM.MAX_INT`. This implementation does not reject such calculations and processes them correctly.

- Universal real calculations.

An implementation is allowed to reject universal real calculations having values that exceed certain precisions. This implementation does not reject such calculations and processes them correctly.

No rounding in this compiler. The precision is arbitrarily high.

- Predefined types.

This implementation supports the predefined types `SHORT_INTEGER`, `LONG_INTEGER`, `INTEGER`, `FLOAT`, `DURATION`. It does not support any other predefined numeric types.

. Based literals.

An implementation is allowed to reject a based literal with value exceeding `SYSTEM.MAX_INT` during compilation or it may raise `NUMERIC_ERROR` during execution. This compiler raises `NUMERIC_ERROR` during execution.

. Array types.

An implementation is allowed to raise `NUMERIC_ERROR` for an array having a `LENGTH` that exceeds `STANDARD.INTEGER'LAST` and/or `SYSTEM.MAX_INT`. When an array type is declared with an index range exceeding `INTEGER` values and with a component that is a null `BOOLEAN` array, this compiler does not raise any exception.

When an array type is declared with an index range exceeding `SYSTEM.MAX_INT` values and with a component that is a null `BOOLEAN` array, this compiler raises `NUMERIC_ERROR`.

A packed `BOOLEAN` array of length `INTEGER'LAST+3` does not raise any exception. A packed two-dimensional `BOOLEAN` array with `INTEGER'LAST+3` components does not raise any exception.

A null array with one dimension of length exceeding `INTEGER'LAST` does not raise any exception.

In assigning one-dimensional array types, the entire expression is evaluated before `CONSTRAINT_ERROR` is raised when checking whether the expression's subtype is compatible with the target's subtype. In assigning two-dimensional array types, the entire expression is not evaluated before `CONSTRAINT_ERROR` is raised when checking whether the expression's subtype is compatible with the target's subtype. In assigning record types with discriminants, the entire expression is evaluated before `CONSTRAINT_ERROR` is raised when checking whether the expression's subtype is compatible with the target's subtype.

. Discriminated types.

An incompletely declared type with discriminants may be used in an access type definition and constrained either there or in later subtype indications.

. Aggregates.

When evaluating the choices of a multi-dimensional aggregate all choices are evaluated before checking against the index type.

When evaluating an aggregate containing subaggregates, all choices are not evaluated before being checked for identical bounds.

. Functions.

The declaration of a parameterless function with the same profile as an enumeration literal in the same immediate scope is rejected by the implementation.

. Representation clauses.

'SMALL length clauses are not supported.

Enumeration representation clauses are not supported.

. Tasks.

A task object's storage size is not allowed to change after the task is activated.

. Generics.

When given a separately compiled generic declaration, some illegal instantiations, and a body, the compiler rejects the body because of the instantiations.

. Package CALENDAR.

TIME\_OF and SPLIT are inverses when SECONDS is a non-model number.

. Pragmas.

Pragma INLINE is not supported for procedures. It is not supported for functions.

. Input/output.

Package SEQUENTIAL\_IO can be instantiated with unconstrained array types and record types with discriminants. Package DIRECT\_IO can be instantiated with unconstrained array types and record types with discriminants without defaults.

For SEQUENTIAL\_IO, DIRECT\_IO and TEXT\_IO more than one internal file can be associated with each external file for both reading and writing. An external file associated with more than one internal file can be deleted.

An existing text file can be opened in OUT\_FILE mode, can be created in OUT\_FILE mode, and can be created in IN\_FILE mode.

Dynamic creation and resetting of a sequential file is allowed.

Temporary sequential files are given a name. Temporary direct files are given a name. Temporary files given names are deleted when they are closed.

## CHAPTER 3

### COMPILER ANOMALIES AND NONCONFORMANCES

#### 3.1- Anomalies

An anomaly is a test result that, given the pre-validation analysis, was not expected during formal validation but which is judged allowable by the AVF and the AVO under the circumstances of the validation. No anomalies were detected in this validation attempt.

#### 3.2- Nonconformances

Any discrepancy between expected test results and actual test results is considered to be a nonconformance. No nonconformances were detected in this validation attempt.

## CHAPTER 4

## ADDITIONAL TESTING INFORMATION

## 4.1- Pre-Validation

Prior to validation, a set of test results for ACVC 1.6 produced by AlsyCOMP\_004, version 1.0 was submitted to BNI by the applicant for pre-validation review. Analysis of these results demonstrated that the compiler successfully passed all applicable tests, except for 2 disputed tests of which 1 was withdrawn from ACVC 1.6. Alsya subsequently claimed to be able to successfully process the disputed test that was not withdrawn.

## 4.2- Test Site

Tests were compiled and executed at Alsya premises in La Celle Saint Cloud - France.

## 4.3- Test Tape Information

A test tape containing ACVC Version 1.6 was taken on-site by the validation team. This tape contained all tests applicable to this validation as well as all tests inapplicable to this validation except for any Class C tests that require floating-point precision exceeding the maximum value supported by the implementation. Tests that were withdrawn from ACVC 1.6 were not written to the tape. Tests that make use of values that are specific to an implementation were customized before being written to the tape. Any split tests were also included on the test tape so that no editing of the test files was necessary when the validation team arrived on-site.

The test files were mounted on a VAX. They were transferred from the VAX by an ETHERNET local area network to the Apollo machine. Only one directory was used. The format of these test tape was the same as the ACVC distribution tapes.

#### 4.4- Testing Logistics

Once all tests had been loaded to disk, processing was begun using command scripts provided by ALSYS. The text of these scripts are given in Appendix C.

The compiler supports various options that control its operation. The compiler was tested with the following option settings.

For details about the options see appendix C.

The following options were used :

|                 |                                                              |
|-----------------|--------------------------------------------------------------|
| error_limit=999 | : extension of the implicit number of errors before abortion |
| line=120        | : line length                                                |
| short           | : no compilation listing                                     |
| long            | : compilation listing                                        |
| banner          | : banner for each test                                       |
| nosummary       | : no recapitulation of errors                                |

The B tests were compiled with the option OPTSB (error\_limit=999 line=120 long banner nosummary).

The other tests that do not execute were compiled with the option OPTSDEV (error\_limit=999 line=120 long banner nosummary).

The tests that do execute were compiled with the option OPTS (error\_limit=999 line=120 short banner nosummary).

The tests were run in the following order : A, B, C, D, E and L.

One Ada library was used per ACVC chapter.

All tests were processed one at a time in a single queue.

The results were stored in Unix files, one per test.

#### 4.5- Testing Duration

The ACVC has not been designed for use in measuring compiler performance. The information reported here thus merely described the duration of the on-site testing for conformity, and is not necessarily an indication of the subject system's performance.

The validation for DN460 started on Thursday 31 October at 15:32. It finished on Sunday 3 November at 8:29. The times for the validation were:

CPU (User and System on AEGIS) : 39:51

Elapsed : 64:56

No timing information was collected for the sample validations of Apollo DOMAIN DN320 and DSP80A

## CHAPTER 5

## SUMMARY AND CONCLUSIONS

The BNI identified 1845 of the 2162 tests in ACVC Version 1.6 to be processed during the validation of AlsyCOMP\_004, version 1.0. Excluded were 254 tests requiring too great a floating-point precision, and the 63 withdrawn tests. 24 tests were determined to be inapplicable after they were processed. The remaining 1821 processed tests were passed by the compiler.

The BNI concludes that these results demonstrate acceptable conformance to the Ada Standard.

## APPENDIX A

## COMPLIANCE STATEMENT

The only allowed implementation dependencies correspond to implementation-dependent pragmas and attributes, to certain machine-dependent conventions as mentioned in Chapter 13 of MIL-STD-1815A, and to certain allowed restrictions on representation classes. The implementation-dependent characteristics of the AIsyCOMP\_004, version 1.0 are described in the following sections which discuss topics one through eight as stated in Appendix F of the Ada Standard.

## (1) Implementation-Dependent Pragmas

None.

## (2) Implementation-Dependent Attributes

None.

## (3) Package SYSTEM

The specification for package SYSTEM is

```
package SYSTEM is

    type ADDRESS is private;
    type NAME is ( UNIX );

    SYSTEM_NAME : constant := UNIX;
    STORAGE_UNIT : constant := 8;
    MEMORY_SIZE : constant := 2*24 - 1;

    -- System-Dependent Named Numbers:

    MIN_INT      : constant := -(2**31);
    MAX_INT      : constant := 2**31-1;
    MAX_DIGITS   : constant := 6;
    MAX_MANTISSA : constant := 31;
    FINE_DELTA   : constant := 2#1.0#e-31;
    TICK         : constant := 1.0;

    -- Other System-Dependent Declarations

    subtype PRIORITY is INTEGER range 1..127;

end SYSTEM;
```

## (4) Representation Clause Restrictions

Representation clauses specify how the types of the language are to be mapped onto the underlying machine. The following are restrictions on representation clauses.

## Address Clause

Not accepted

## Length Clause

Not accepted

## Enumeration Representation Clause

Not accepted

## Record Representation Clause

Not accepted

(5) Conventions

No implementation-generated names.

(6) Address Clauses

Not accepted.

(7) Unchecked Conversions

The following are restrictions on unchecked conversions, including those depending on the respective sizes of objects of the source and target.

They should have the same size.

(8) Input-Output Packages

The following are implementation-dependent characteristics of the input-output packages.

SEQUENTIAL\_IO Package

Declare file type and applicable operations for files of this type.

There is no restriction in the use of sequential Input/Output.

DIRECT\_IO Package

type COUNT is range 0 .. 2\_147\_483\_647;

TEXT\_IO Package

type COUNT is range 0 .. 2\_147\_483\_647;

subtype FIELD is INTEGER range 0 .. 255;

(9) Package STANDARD

type INTEGER is range -32768 .. 32767;

type SHORT\_INTEGER is range -128 .. 127;

type LONG\_INTEGER is -2\_147\_483\_648.. 2\_147\_483\_647;

type FLOAT is digits 6 range

-2#1.111\_1111\_1111\_1111\_1111\_1111#E+127  
.. 2#1.111\_1111\_1111\_1111\_1111\_1111#E+127;

No other additional predefined floating point types

type DURATION is delta 0.002 range -86\_400.0 .. 86\_400.0;

No other predefined types

(10) File Names

File names make no use of conventions except those of the operating system.

## APPENDIX B

## TEST PARAMETERS

Certain tests in the ACVC make use of implementation-dependent values, such as the maximum length of an input line and invalid file names. A test that makes use of such values is identified by the extension .TST in its file name. Actual values to be substituted are identified by names that begin with a dollar sign. A value is substituted for each of these names before the test is run. The values used for this validation are given below.

| <u>Name and Meaning</u>                                                       | <u>Value</u>                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| \$MAX_IN_LEN<br>Maximum input line length<br>permitted by the implementation. | 255                                                                                                                                                                                                                                                         |
| \$BIG_ID1<br>Identifier of size MAX_IN_LEN<br>with varying last character.    | X2345678901234567890123456789012345<br>67890123456789012345AAAAAAAAAAAAA<br>AAAAAAAAAAAAAAAAAAAAAAAAAAAAA<br>AAAAAAAAAAAAAAAAAAAAAAAAAAAAA<br>AAAAAAAAAAAAAAAAAAAAAAAAAAAAA<br>AAAAAAAAAAAAAAAAAAAAAAAAAAAAA<br>AAAAAAAAAAAAAAAAAAAAAAAAAAAAA<br>AAAAAAAAA1 |
| \$BIG_ID2<br>Identifier of size MAX_IN_LEN<br>with varying last character.    | X2345678901234567890123456789012345<br>67890123456789012345AAAAAAAAAAAAA<br>AAAAAAAAAAAAAAAAAAAAAAAAAAAAA<br>AAAAAAAAAAAAAAAAAAAAAAAAAAAAA<br>AAAAAAAAAAAAAAAAAAAAAAAAAAAAA<br>AAAAAAAAAAAAAAAAAAAAAAAAAAAAA<br>AAAAAAAAAAAAAAAAAAAAAAAAAAAAA<br>AAAAAAAAA2 |



| Name and Meaning                                                                                                                                                                        | Value               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <p>\$NON_ASCII_CHAR_TYPE</p> <p>An enumerated type definition for a character type whose literals are the identifier NON_NULL and all non-ASCII characters with printable graphics.</p> | <p>(NON_NULL)</p>   |
| <p>\$BLANKS</p> <p>Blanks of length MAX_IN_LEN - 20</p>                                                                                                                                 |                     |
| <p>\$MAX_DIGITS</p> <p>Maximum digits supported for floating point types.</p>                                                                                                           | <p>6</p>            |
| <p>\$NAME</p> <p>A name of a predefined numeric type other than FLOAT, INTEGER, SHORT_FLOAT, SHORT_INTEGER, LONG_FLOAT, LONG_INTEGER, or DURATION.</p>                                  | <p>NO_SUCH_TYPE</p> |
| <p>\$INTEGER_FIRST</p> <p>The universal integer literal expression whose value is INTEGER'FIRST.</p>                                                                                    | <p>-32768</p>       |
| <p>\$INTEGER_LAST</p> <p>The universal integer literal expression whose value is INTEGER'LAST.</p>                                                                                      | <p>32767</p>        |
| <p>\$LESS_THAN_DURATION</p> <p>A universal real value that lies between DURATION'BASE'FIRST and DURATION'FIRST or any value in the range of DURATION.</p>                               | <p>-100_000.0</p>   |
| <p>\$GREATER_THAN_DURATION</p> <p>A universal real value that lies between DURATION'BASE'LAST and DURATION'LAST or any value in the range of DURATION.</p>                              | <p>100_000.0</p>    |

| <u>Name and Meaning</u>                                                                                                   | <u>Value</u>                             |
|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| \$LESS_THAN_DURATION_BASE_FIRST<br>The universal real value that is<br>less than DURATION'BASE'FIRST.                     | -100_000_000.0                           |
| \$GREATER_THAN_DURATION_BASE_LAST<br>The universal real value that is<br>greater than DURATION'BASE'LAST.                 | 100_000_000.0                            |
| \$COUNT_LAST<br>Value of COUNT'LAST in TEXT_10<br>package.                                                                | 2_147_483_647                            |
| \$FIELD_LAST<br>Value of FIELD'LAST in TEXT_10<br>package.                                                                | 255                                      |
| \$FILE_NAME_WITH_BAD_CHARS<br>An illegal external file name<br>that either contains invalid<br>characters or is too long. | /                                        |
| \$FILE_NAME_WITH_WILD_CARD_CHAR<br>An external file name that<br>either contains a wild card<br>character or is too long. | 123456789012345678901234567890123        |
| \$ILLEGAL_EXTERNAL_FILE_NAME1<br>Illegal external file name.                                                              | BAD_CHARACTER=+                          |
| \$ILLEGAL_EXTERNAL_FILE_NAME2<br>Illegal external file name.                                                              | MUCH_TOO_LONG_NAME_FOR_A_FILE-1234567890 |

APPENDIX C

COMMAND SCRIPTS

```

date
args "start of chapter A1 A2"
args "start of chapter A1 A2" > /v16_validation/log/A1A2.time
date >> /v16_validation/log/A1A2.time
pst -pa >> /v16_validation/log/A1A2.time
args " log file = /v16_validation/log/A1A2.log"
run_chapter A1 A2 >/v16_validation/log/A1A2.log >?/v16_validation/log/A1A2.log
args "end of chapter A1 A2" >> /v16_validation/log/A1A2.time
date >> /v16_validation/log/A1A2.time
pst -pa >> /v16_validation/log/A1A2.time
args "end of chapter A1A2"
date

```



```

AD16PKLIB := ((AWD + "/adalib"))
export ADA66KLIB
REFD      := ("/v16_validation/" + ACHAP + "results")
DIAREF    := ((ASD + "ria"))

#

# create the directories if they do not exist
CHECKDIR AWD
CHECKDIR ACD
CHECKDIR ALD
CHECKDIR AWW

# set up the ada library
# this is different for common
if ((ACHAP = 'common')) then
    if existf(AAW6KLIB) then; dlt AAW6KLIB; endif
    create ADA66KLIB
else
    if existf(AAW6KLIB) then; dlt AAW6KLIB; endif
    copy /v16_validation/commonwork/adalib ADA66KLIB --override
endif

# run the chapter file
FILE := ("/v16_validation/com/ACHAP" + AEXT)
wd AWD
AFILE
wd /v16_validation/com

# If not common delete the ada library
if ((ACHAP = 'common')) then
;
else
    if existf(AAW6KLIB) then; dlt AAW6KLIB; endif
endif

if existf(AWW) then; dlt AWW; endif

ards "end of chapter ACHAP"
date

```

```

# $$$$$$
# 12/9-August-1985
# $$$$$$
# Csh to compile one advc test.
#
# Parameters : $1 is the test name, without extension
#              $2 is the extension
# Logical names:
#              SD : directory where is the test file
#              LD : listing directory
#              DU : diagnostic directory
#              OPTS : compilation options
#              COMPILE : executable name
# $$$$$$
# Syntax :
#          compile_one b22001a advc
# $$$$$$
#
# Modifications :
# 4-9-85 INC change for apollo
# $$$$$$

```

```

SOURCE := ((ASD + "/"A1.A2))
LIST    := ((ALD + "/"A1.lis))
DIAG    := ((ADD + "/"A1.dia"))

```

```

ARCS "-----"
ARCS "+++Compiling b deviant ^SOURCE"
sh ada ^SOURCE -lis=^LIST ^OPTS
# if ($? == 0) then
#   echo "+++End compilation of " ^SD/^1.^2 " SUCCESS ??????"
# elif ($? == 1) then
#   echo "+++End compilation of " ^SD/^1.^2 " FATAL."
# elif ($? == 2) then
#   echo "+++End compilation of " ^SD/^1.^2 " ERRORS. "
# else
#   echo "+++End compilation of " ^SD/^1.^2 " the status is " $?
# fi

```



```

# ****
# 4/9-August-1975
# ****
# Csh to compile one advc test.
#
# Parameters : $1 is the test name, without extension
#              $2 is the extension
#              $3 is used to switch on -noinc option for 2 tests
# Logical names:
#              SSD : directory where is the test file
#              LD : listing directory
#              DD : diagnostic directory
#              OPTS : compilation options
#              COMPILE : executable name
# ****
# Syntax :
#          compile_one b22001a aua
# ****
#
# Modifications :
# 4-8-75 inc change for aua110
# ****

```

```

SOURCE := ((ASD + "/"$1.$2))
LIST    := ((LID + "/"$1.$2))
DLOG    := ((ADD + "/"$1.$2))

```

```

ARGS "-----"
ARGS "+++Compiling $SOURCE"
sh add $SOURCE -lis=$LIST $3 $OPTS
if ($? == 0) then
#   echo "+++end compilation of " $SOURCE " SUCCESS."
elif ($? == 6) then
#   echo "+++end compilation of " $SOURCE " FATAL."
elif ($? == 2) then
#   echo "+++end compilation of " $SOURCE " ERRORS. "
else
#   echo "+++end compilation of " $SOURCE " the status is " $?
fi

```







# APPENDIX D

## COMPLETE LIST OF TESTS AND RESULTS

This Appendix presents a complete list of the ACVC test files used in the validation attempt, presented in order by ACVC Implementers' Guide section and objective. Each test name indicates the class of the test and which test objective in the ACVC Implementers' Guide applies to the test.

Each test has a name that identifies the section of the Ada Standard addressed by the test objective. The name of a test is interpreted according to the table below, where the first column indicates the character position in the name and the second column, the meaning of that position:

| POS | MEANING                                                                                     |
|-----|---------------------------------------------------------------------------------------------|
| 1   | Test class: A, B, C, D, E, L.                                                               |
| 2   | Implementers' Guide chapter number (in hexadecimal).                                        |
| 3   | Implementers' Guide section number within a chapter (in Hexadecimal)                        |
| 4   | Implementers' Guide subsection number (in hexadecimal)                                      |
| 5-6 | Implementers' Guide Test Objective number (in decimal)                                      |
| 7   | Test sequence letter                                                                        |
| 8   | [Optional] Compilation sequence digit or letter                                             |
| 9   | [Optional] Main program designator in the case of a test having multiple compilation units. |

Characters 8 and 9 are only present for tests that consist of several separately compiled units. A series of separately compiled units is counted as one test for reporting purposes. The eighth character indicates

the order in which the units are to be compiled, with unit 0 being compiled first. The ninth character is only present for a file containing a main program for a test comprising multiple files and is always M.

The suffix -AB means the test was written prior to release of the ANSI Standard and is also valid for the version of Ada published in July 1980. The suffix -B means the test was written specifically for the ANSI Standard. Tests without a suffix have not yet had their names revised to -AB.

A file name ending with the extension .TST indicates that the test depends on one or more of the implementation-dependent parameters listed in Appendix B. A file name ending with .DEP indicates that the test is not necessarily applicable to all implementations because it depends upon the support of language features that a compiler may legally not implement.

The result for each file in ACVC Version 1.6 is given in the following pages, where:

- P indicates Passed.
- F indicates Failed.
- N/A indicates Not Applicable to this implementation.
- W indicates Withdrawn due to test errors.
- C indicates Compiled without error.
- A indicates Anomalous.

A test may comprise several separate compilation units contained in two or more files; the names of such files are indented under the name of the test. The letter 'M' indicates which of these files contains the main procedure.

Support Units

|   |                      |   |
|---|----------------------|---|
| 1 | CHECK_FILE-B.ADA     | P |
| 2 | REPORT_SPEC-AB.ADA   | P |
| 3 | REPORT_BODY-B.ADA    | P |
| 4 | VAR_STRINGS_SPEC.ADA | P |
| 5 | VAR_STRINGS_BODY.ADA | P |
|   |                      |   |
|   | CZ1101A-AB.ADA       | P |
|   | CZ1102A-AB.ADA       | P |
|   | CZ1103A-B.ADA        | P |
|   | CZ1201A-AB.ADA       | P |
|   | CZ1201B-AB.ADA       | P |
|   | CZ1201C-AB.ADA       | P |
|   | CZ1201D-AB.ADA       | P |

## Chapter 2

|                |   |                |   |                |     |
|----------------|---|----------------|---|----------------|-----|
| A21001A.ADA    | P | B23002A.ADA    | P | C24113C-B.DEP  | N/A |
| A22002A.ADA    | P | B23003D-AB.TST | P | C24113D-B.DEP  | N/A |
| A26004A.TST    | P | B23003E-AB.TST | P | C24113E-B.DEP  | N/A |
| A29002A-B.ADA  | P | B23003F-AB.TST | P | C24113F-B.DEP  | N/A |
| A29002B-B.ADA  | P | B23004A.ADA    | P | C24113G-B.DEP  | N/A |
| A29002C-B.ADA  | P | B23004B.ADA    | P | C24113H-B.DEP  | N/A |
| A29002D-B.ADA  | P | B24001A.ADA    | P | C24113I-B.DEP  | N/A |
| A29002E-B.ADA  | P | B24001B.ADA    | P | C24113J-B.DEP  | N/A |
| A29002F-B.ADA  | P | B24001C.ADA    | P | C24113K-B.DEP  | N/A |
| A29002G-B.ADA  | P | B24005A.ADA    | P | C24113L-B.DEP  | N/A |
| A29002H-B.ADA  | P | B24005B.ADA    | P | C24113M-B.DEP  | N/A |
| A29002I-B.ADA  | P | B24104A.ADA    | P | C24113N-B.DEP  | N/A |
| A29002J-B.ADA  | P | B24104B.ADA    | P | C24113O-B.DEP  | N/A |
| B22001A-AB.TST | P | B24104C.ADA    | P | C24113P-B.DEP  | N/A |
| B22001B-AB.TST | P | B26002A.ADA    | P | C24113Q-B.DEP  | N/A |
| B22001C-AB.TST | P | B26005A.ADA    | P | C24113R-B.DEP  | N/A |
| B22001D-AB.TST | P | B29001A-B.ADA  | P | C24113S-B.DEP  | N/A |
| B22001E-AB.TST | P | C23001A.ADA    | P | C24113T-B.DEP  | N/A |
| B22001F-AB.TST | P | C23003A.TST    | P | C24113U-B.DEP  | N/A |
| B22001G-AB.TST | P | C24002A.ADA    | P | C24113V-B.DEP  | N/A |
| B22001H-AB.ADA | P | C24002B.ADA    | P | C24113W-B.DEP  | N/A |
| B22001I-AB.TST | P | C24002C.ADA    | P | C24113X-B.DEP  | N/A |
| B22001J-AB.TST | P | C24003A.TST    | P | C24113Y-B.DEP  | N/A |
| B22001K-AB.TST | P | C24003B.TST    | P | C26002B.ADA    | P   |
| B22001L-AB.TST | P | C24003C.TST    | P | C26006A-AB.ADA | P   |
| B22001M-AB.TST | P | C24102A.ADA    | P | C26008A-AB.ADA | P   |
| B22001N-AB.TST | P | C24102B.ADA    | P | C27001A-AB.ADA | P   |
| B22003A.ADA    | P | C24102C.ADA    | P | C27002A-B.ADA  | P   |
| B22004A.ADA    | P | C24103A.ADA    | P | D29002K-B.ADA  | P   |
| B22004B.ADA    | P | C24113A-B.DEP  | P | E24101A-B.TST  | P   |
| B22004C.ADA    | P | C24113B-B.DEP  | P |                |     |

## Chapter 3

|                |   |                |     |                 |     |
|----------------|---|----------------|-----|-----------------|-----|
| A32203B-B.ADA  | P | B37202A.ADA    | P   | C35504A-AB.ADA* | P   |
| A32203C-B.ADA  | P | B37202B.ADA    | P   | C35504B-B.ADA   | P   |
| A32203D-B.ADA  | P | B37203A.ADA    | P   | C35505A.ADA     | P   |
| A34008B-B.ADA  | P | B37204A-AB.ADA | P   | C35505B.ADA     | P   |
| A38106D-B.ADA  | P | B37205A-AB.ADA | P   | C35508A-AB.ADA  | P   |
| A38106E-B.ADA  | P | B37301A.ADA    | P   | C35508B-B.ADA   | P   |
| B32103A-AB.ADA | P | B37301B.ADA    | P   | C35702A-AB.DEP  | N/A |
| B32106A-B.ADA  | P | B37302A-AB.ADA | P   | C35702B-AB.DEP  | N/A |
| B32201A-B.ADA  | P | B37303A.ADA    | P   | C35703A.ADA     | P   |
| B32202A-B.ADA  | P | B37307B-AB.ADA | P   | C35704A-AB.ADA  | P   |
| B32202B-B.ADA  | P | B37309B-AB.ADA | P   | C35704B-AB.ADA  | P   |
| B32202C-B.ADA  | P | B37310B-B.ADA  | P   | C35704C-AB.ADA  | P   |
| B33001A.ADA    | P | B37311A-AB.ADA | P   | C35704D-AB.ADA  | P   |
| B33002A.ADA    | P | B38001A.ADA    | P   | C35705A-B.DEP   | P   |
| B33003A.ADA    | P | B38003A-AB.ADA | P   | C35705B-B.DEP   | P   |
| B33003B-AB.ADA | P | B38008A-B.ADA  | P   | C35705C-B.DEP   | N/A |
| B33003C-AB.ADA | P | B38008B-AB.ADA | P   | C35705D-B.DEP   | N/A |
| B33004A.ADA    | P | B38101A-B.ADA  | P   | C35705E-B.DEP   | N/A |
| B33006A-B.ADA  | P | B38101B-AB.ADA | P   | C35705F-B.DEP   | N/A |
| B34001S-AB.ADA | P | B38103A-B.ADA  | P   | C35705G-B.DEP   | N/A |
| B34008A-B.ADA  | P | B38103B-B.ADA  | P   | C35705H-B.DEP   | N/A |
| B35101A.ADA    | P | B38103C-B.ADA  | P   | C35705I-B.DEP   | N/A |
| B35301A.ADA    | P | B38103C0       | C   | C35705J-B.DEP   | N/A |
| B35501A.ADA    | P | B38103C1       | C   | C35705K-B.DEP   | N/A |
| B35506A.ADA    | P | B38103C2       | C   | C35705L-B.DEP   | N/A |
| B35506B.ADA    | P | B38103C3M      | C   | C35705M-B.DEP   | N/A |
| B35701A.TST    | P | B38105A-AB.ADA | P   | C35705N-B.DEP   | N/A |
| B35709A.ADA    | P | B38105B-AB.ADA | W   | C35705O-B.DEP   | N/A |
| B35A03A-B.ADA  | P | B38106A-B.ADA  | P   | C35705P-B.DEP   | N/A |
| B36101A-AB.ADA | P | B38106B-B.ADA  | P   | C35705Q-B.DEP   | N/A |
| B36102A.ADA    | P | C32107B-B.ADA  | P   | C35705R-B.DEP   | N/A |
| B36103A.ADA    | P | C32203A-B.ADA  | P   | C35705S-B.DEP   | N/A |
| B36105A-B.ADA  | P | C34001A-B.ADA  | P   | C35705T-B.DEP   | N/A |
| B36171A-B.ADA  | P | C34001B-B.ADA  | P   | C35705U-B.DEP   | N/A |
| B36171B-B.ADA  | P | C34001C-B.ADA  | P   | C35705V-B.DEP   | N/A |
| B36171C-AB.ADA | P | C34001D-B.DEP  | P   | C35705W-B.DEP   | N/A |
| B36171D-AB.ADA | P | C34001E-B.DEP  | P   | C35705X-B.DEP   | N/A |
| B36171E-AB.ADA | P | C34001F-B.DEP  | N/A | C35705Y-B.DEP   | N/A |
| B36171F-AB.ADA | P | C34001G-B.DEP  | N/A | C35706A-B.DEP   | P   |
| B36171G-AB.ADA | P | C34001H-B.ADA  | P   | C35706B-B.DEP   | P   |
| B36171H-AB.ADA | P | C34001I-B.ADA  | P   | C35706C-B.DEP   | N/A |
| B36171J-AB.ADA | P | C34001K-B.ADA  | P   | C35706D-B.DEP   | N/A |
| B36201A-B.ADA  | P | C34001L-B.ADA  | P   | C35706E-B.DEP   | N/A |
| B37003A-AB.ADA | P | C34001M-B.ADA  | P   | C35706F-B.DEP   | N/A |
| B37004A-B.ADA  | P | C34001N-B.ADA  | P   | C35706G-B.DEP   | N/A |
| B37004B-B.ADA  | P | C34001O-B.ADA  | P   | C35706H-B.DEP   | N/A |
| B37004C-B.ADA  | P | C34001P-B.ADA  | P   | C35706I-B.DEP   | N/A |
| B37004D-B.ADA  | P | C34001Q-B.ADA  | P   | C35706J-B.DEP   | N/A |
| B37004E-B.ADA  | P | C34001R-B.ADA  | P   | C35706K-B.DEP   | N/A |
| B37004F-B.ADA  | P | C34001T-B.ADA  | P   | C35706L-B.DEP   | N/A |
| B37004G-B.ADA  | P | C34002A-B.ADA  | P   | C35706M-B.DEP   | N/A |
| B37101A.ADA    | P | C34002B-B.ADA  | P   | C35706N-B.DEP   | N/A |
| B37201A.ADA    | P | C35104A.ADA    | P   | C35706O-B.DEP   | N/A |

|               |     |               |     |                |   |
|---------------|-----|---------------|-----|----------------|---|
| C35706P-B.DEP | N/A | C35708K-B.DEP | N/A | C36205A.ADA    | P |
| C35706Q-B.DEP | N/A | C35708L-B.DEP | N/A | C36205B.ADA    | P |
| C35706R-B.DEP | N/A | C35708M-B.DEP | N/A | C36205C.ADA    | P |
| C35706S-B.DEP | N/A | C35708N-B.DEP | N/A | C36205D.ADA    | P |
| C35706T-B.DEP | N/A | C35708O-B.DEP | N/A | C36205E.ADA    | P |
| C35706U-B.DEP | N/A | C35708P-B.DEP | N/A | C36205F.ADA    | P |
| C35706V-B.DEP | N/A | C35708Q-B.DEP | N/A | C36205G.ADA    | P |
| C35706W-B.DEP | N/A | C35708R-B.DEP | N/A | C36205H.ADA    | P |
| C35706X-B.DEP | N/A | C35708S-B.DEP | N/A | C36205I.ADA    | P |
| C35706Y-B.DEP | N/A | C35708T-B.DEP | N/A | C36205J.ADA    | P |
| C35707A-B.DEP | P   | C35708U-B.DEP | N/A | C36205K.ADA    | P |
| C35707B-B.DEP | P   | C35708V-B.DEP | N/A | C36301A-B.ADA  | P |
| C35707C-B.DEP | N/A | C35708W-B.DEP | N/A | C36301B-AB.ADA | P |
| C35707D-B.DEP | N/A | C35708X-B.DEP | N/A | C36302A.ADA    | P |
| C35707E-B.DEP | N/A | C35708Y-B.DEP | N/A | C36303A.ADA    | P |
| C35707F-B.DEP | N/A | C35711A-B.ADA | P   | C36304A-B.ADA  | P |
| C35707G-B.DEP | N/A | C35802A-B.DEP | P   | C36305A-AB.ADA | P |
| C35707H-B.DEP | N/A | C35802B-B.DEP | P   | C37005A.ADA    | P |
| C35707I-B.DEP | N/A | C35802C-B.DEP | N/A | C37007A-AB.ADA | P |
| C35707J-B.DEP | N/A | C35802D-B.DEP | N/A | C37008A-B.ADA  | P |
| C35707K-B.DEP | N/A | C35802E-B.DEP | N/A | C37008B-B.ADA  | P |
| C35707L-B.DEP | N/A | C35802F-B.DEP | N/A | C37011A-B.ADA  | P |
| C35707M-B.DEP | N/A | C35802G-B.DEP | N/A | C37012A-AB.ADA | P |
| C35707N-B.DEP | N/A | C35802H-B.DEP | N/A | C37013A-AB.ADA | P |
| C35707O-B.DEP | N/A | C35802I-B.DEP | N/A | C37103A-AB.ADA | P |
| C35707P-B.DEP | N/A | C35802J-B.DEP | N/A | C37105A.ADA    | P |
| C35707Q-B.DEP | N/A | C35802K-B.DEP | N/A | C37208A-B.ADA  | P |
| C35707R-B.DEP | N/A | C35802L-B.DEP | N/A | C37208B-AB.ADA | P |
| C35707S-B.DEP | N/A | C35802M-B.DEP | N/A | C37209A.ADA    | P |
| C35707T-B.DEP | N/A | C35802N-B.DEP | N/A | C37304A-AB.ADA | P |
| C35707U-B.DEP | N/A | C35802O-B.DEP | N/A | C37305A.ADA    | P |
| C35707V-B.DEP | N/A | C35802P-B.DEP | N/A | C37306A.ADA    | P |
| C35707W-B.DEP | N/A | C35802Q-B.DEP | N/A | C37307A-AB.ADA | P |
| C35707X-B.DEP | N/A | C35802R-B.DEP | N/A | C37309A-AB.ADA | P |
| C35707Y-B.DEP | N/A | C35802S-B.DEP | N/A | C37310A-AB.ADA | P |
| C35708A-B.DEP | P   | C35802T-B.DEP | N/A | C38004A.ADA    | P |
| C35708B-B.DEP | P   | C35802U-B.DEP | N/A | C38005A-B.ADA  | P |
| C35708C-B.DEP | N/A | C35802V-B.DEP | N/A | C38006A-B.ADA  | P |
| C35708D-B.DEP | N/A | C35802W-B.DEP | N/A | C38007A-B.ADA  | P |
| C35708E-B.DEP | N/A | C35802X-B.DEP | N/A | C38102A-AB.ADA | P |
| C35708F-B.DEP | N/A | C35802Y-B.DEP | N/A | C38102B-B.ADA  | P |
| C35708G-B.DEP | N/A | C35904A-B.ADA | P   | C38102C-B.ADA  | P |
| C35708H-B.DEP | N/A | C36172A-B.ADA | P   | E36202A-B.ADA  | P |
| C35708I-B.DEP | N/A | C36174A-B.ADA | P   | E36202B-B.ADA  | P |
| C35708J-B.DEP | N/A | C36204A-B.ADA | P   | E38104A-B.ADA  | P |

## Chapter 4

|                 |   |                 |   |                 |   |
|-----------------|---|-----------------|---|-----------------|---|
| B41101A-B. ADA  | P | B45208G-AB. ADA | P | C41303N-B. ADA  | P |
| B41101C-AB. ADA | P | B45208H-B. ADA  | P | C41303O-B. ADA  | P |
| B41102A-AB. ADA | P | B45208I-B. ADA  | P | C41303Q-B. ADA  | P |
| B41102B-B. ADA  | P | B45208M-AB. ADA | P | C41303R-B. ADA  | P |
| B41102C-B. ADA  | P | B45208N-AB. ADA | P | C41303S-B. ADA  | P |
| B41201A-B. ADA  | P | B45208S-AB. ADA | P | C41303U-B. ADA  | P |
| B41201C. ADA    | P | B45208V-AB. ADA | P | C41303V-B. ADA  | P |
| B41202A-B. ADA  | P | B45261A-AB. ADA | P | C41303W-B. ADA  | P |
| B41202B-AB. ADA | P | B45261B-AB. ADA | P | C41304A-B. ADA  | P |
| B41202C-B. ADA  | P | B45261C-AB. ADA | P | C41306A-B. ADA  | P |
| B41202D-B. ADA  | P | B45261D-AB. ADA | P | C41306B-B. ADA  | P |
| B41302A-AB. ADA | P | B45402A. ADA    | P | C41306C-B. ADA  | P |
| B41302B-AB. ADA | P | B45522A. ADA    | P | C42005A-B. ADA  | P |
| B42004A-B. ADA  | P | B45533A-AB. ADA | P | C42006A-B. ADA  | P |
| B43101A-B. ADA  | P | B48001A-B. ADA  | P | C43103A-B. ADA  | P |
| B43201A-B. ADA  | P | B48001B-B. ADA  | P | C43103B-B. ADA  | P |
| B43201B-B. ADA  | P | B48002A-B. ADA  | P | C43107A-B. ADA  | P |
| B43201C-B. ADA  | P | B48002B-B. ADA  | P | C43205A-B. ADA  | P |
| B43201D-B. ADA  | P | B48002C-B. ADA  | P | C43205B-B. ADA  | P |
| B43202A-B. ADA  | P | B48002D-B. ADA  | P | C43205C-B. ADA  | P |
| B43202B-B. ADA  | P | B48002E-B. ADA  | P | C43205D-B. ADA  | P |
| B43202C-B. ADA  | P | B48002F-B. ADA  | P | C43205E-B. ADA  | P |
| B43203A-B. ADA  | P | B48002G-B. ADA  | P | C43205F-B. ADA  | P |
| B43203B-B. ADA  | P | B48003A-B. ADA  | P | C43205G-B. ADA  | P |
| B44001A-B. ADA  | P | B48003B-B. ADA  | P | C43205H-B. ADA  | P |
| B44002A-B. ADA  | P | B48003C-B. ADA  | P | C43205I-B. ADA  | P |
| B44002B-B. ADA  | P | B48003D-B. ADA  | P | C43205J-B. ADA  | P |
| B44002C. ADA    | P | B48003E-B. ADA  | P | C43205K-B. ADA  | P |
| B45102A-AB. ADA | P | B4A006A-B. ADA  | P | C43206A-B. ADA  | P |
| B45203A. ADA    | P | B4A016A. ADA    | P | C43207A-B. ADA  | P |
| B45203B-AB. ADA | P | C41101D-B. ADA  | P | C43207B-B. ADA  | P |
| B45205A-AB. ADA | P | C41103A-B. ADA  | P | C43207C-B. ADA  | P |
| B45206A-AB. ADA | P | C41103B-B. ADA  | P | C43207D-B. ADA  | P |
| B45206B-B. ADA  | P | C41105A-B. ADA  | P | C43208A-B. ADA  | P |
| B45207A-AB. ADA | P | C41106A-B. ADA  | P | C43208B-B. ADA  | P |
| B45207B-B. ADA  | P | C41107A-AB. ADA | P | C43210A-B. ADA  | P |
| B45207C-B. ADA  | P | C41201D-B. ADA  | P | C43211A-B. ADA  | P |
| B45207D-B. ADA  | P | C41203A-B. ADA  | P | C43212A-B. ADA  | P |
| B45207G-B. ADA  | P | C41203B-B. ADA  | P | C43212C-B. ADA  | P |
| B45207H-B. ADA  | P | C41204A. ADA    | P | C43213A-B. ADA  | P |
| B45207I-B. ADA  | P | C41205A-B. ADA  | P | C43214A-B. ADA  | P |
| B45207J-B. ADA  | P | C41206A. ADA    | P | C43214B-B. ADA  | P |
| B45207M-AB. ADA | P | C41301A-B. ADA  | P | C43214C-B. ADA  | P |
| B45207N-AB. ADA | P | C41303A-B. ADA  | P | C43214D-B. ADA  | P |
| B45207O-AB. ADA | P | C41303B-B. ADA  | P | C43214E-B. ADA  | P |
| B45207P-B. ADA  | P | C41303C-B. ADA  | P | C43214F-B. ADA  | P |
| B45207S-AB. ADA | P | C41303E-B. ADA  | P | C43215A-B. ADA  | P |
| B45207T-AB. ADA | P | C41303F-B. ADA  | P | C43215B-B. ADA  | P |
| B45207U-AB. ADA | P | C41303G-B. ADA  | P | C4*101A. ADA    | P |
| B45207V-B. ADA  | P | C41303I-B. ADA  | P | C45101B. ADA    | P |
| B45208A-AB. ADA | P | C41303J-B. ADA  | P | C45101C. ADA    | P |
| B45208B-B. ADA  | P | C41303K-B. ADA  | P | C45101E. ADA    | P |
| B45208C-B. ADA  | P | C41303M-B. ADA  | P | C45101G-AB. ADA | P |

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|                |   |                |   |                |   |
|----------------|---|----------------|---|----------------|---|
| B41101A-B.ADA  | P | B45208G-AB.ADA | P | C41303N-B.ADA  | P |
| B41101C-AB.ADA | P | B45208H-B.ADA  | P | C41303O-B.ADA  | P |
| B41102A-AB.ADA | P | B45208I-B.ADA  | P | C41303Q-B.ADA  | P |
| B41102B-B.ADA  | P | B45208M-AB.ADA | P | C41303R-B.ADA  | P |
| B41102C-B.ADA  | P | B45208N-AB.ADA | P | C41303S-B.ADA  | P |
| B41201A-B.ADA  | P | B45208S-AB.ADA | P | C41303U-B.ADA  | P |
| B41201C.ADA    | P | B45208T-AB.ADA | P | C41303V-B.ADA  | P |
| B41202A-B.ADA  | P | B45261A-AB.ADA | P | C41303W-B.ADA  | P |
| B41202B-AB.ADA | P | B45261B-AB.ADA | P | C41304A-B.ADA  | P |
| B41202C-B.ADA  | P | B45261C-AB.ADA | P | C41306A-B.ADA  | P |
| B41202D-B.ADA  | P | B45261D-AB.ADA | P | C41306B-B.ADA  | P |
| B41302A-AB.ADA | P | B45402A.ADA    | P | C41306C-B.ADA  | P |
| B41302B-AB.ADA | P | B45522A.ADA    | P | C42005A-B.ADA  | P |
| B42004A-B.ADA  | P | B45533A-AB.ADA | P | C42006A-B.ADA  | P |
| B43101A-B.ADA  | P | B48001A-B.ADA  | P | C43103A-B.ADA  | P |
| B43201A-B.ADA  | P | B48001B-B.ADA  | P | C43103B-B.ADA  | P |
| B43201B-B.ADA  | P | B48002A-B.ADA  | P | C43107A-B.ADA  | P |
| B43201C-B.ADA  | P | B48002B-B.ADA  | P | C43205A-B.ADA  | P |
| B43201D-B.ADA  | P | B48002C-B.ADA  | P | C43205B-B.ADA  | P |
| B43202A-B.ADA  | P | B48002D-B.ADA  | P | C43205C-B.ADA  | P |
| B43202B-B.ADA  | P | B48002E-B.ADA  | P | C43205D-B.ADA  | P |
| B43202C-B.ADA  | P | B48002F-B.ADA  | P | C43205E-B.ADA  | P |
| B43203A-B.ADA  | P | B48002G-B.ADA  | P | C43205F-B.ADA  | P |
| B43203B-B.ADA  | P | B48003A-B.ADA  | P | C43205G-B.ADA  | P |
| B44001A-B.ADA  | P | B48003B-B.ADA  | P | C43205H-B.ADA  | P |
| B44002A-B.ADA  | P | B48003C-B.ADA  | P | C43205I-B.ADA  | P |
| B44002B-B.ADA  | P | B48003D-B.ADA  | P | C43205J-B.ADA  | P |
| B44002C.ADA    | P | B48003E-B.ADA  | P | C43205K-B.ADA  | P |
| B45102A-AB.ADA | P | B4A006A-B.ADA  | P | C43206A-B.ADA  | P |
| B45203A.ADA    | P | B4A016A.ADA    | P | C43207A-B.ADA  | P |
| B45203B-AB.ADA | P | C41101D-B.ADA  | P | C43207B-B.ADA  | P |
| B45205A-AB.ADA | P | C41103A-B.ADA  | P | C43207C-B.ADA  | P |
| B45206A-AB.ADA | P | C41103B-B.ADA  | P | C43207D-B.ADA  | P |
| B45206B-B.ADA  | P | C41105A-B.ADA  | P | C43208A-B.ADA  | P |
| B45207A-AB.ADA | P | C41106A-B.ADA  | P | C43208B-B.ADA  | P |
| B45207B-B.ADA  | P | C41107A-AB.ADA | P | C43210A-B.ADA  | P |
| B45207C-B.ADA  | P | C41201D-B.ADA  | P | C43211A-B.ADA  | P |
| B45207D-B.ADA  | P | C41203A-B.ADA  | P | C43212A-B.ADA  | P |
| B45207G-B.ADA  | P | C41203B-B.ADA  | P | C43212C-B.ADA  | P |
| B45207H-B.ADA  | P | C41204A.ADA    | P | C43213A-B.ADA  | P |
| B45207I-B.ADA  | P | C41205A-B.ADA  | P | C43214A-B.ADA  | P |
| B45207J-B.ADA  | P | C41206A.ADA    | P | C43214B-B.ADA  | P |
| B45207M-AB.ADA | P | C41301A-B.ADA  | P | C43214C-B.ADA  | P |
| B45207N-AB.ADA | P | C41303A-B.ADA  | P | C43214D-B.ADA  | P |
| B45207O-AB.ADA | P | C41303B-B.ADA  | P | C43214E-B.ADA  | P |
| B45207P-B.ADA  | P | C41303C-B.ADA  | P | C43214F-B.ADA  | P |
| B45207S-AB.ADA | P | C41303E-B.ADA  | P | C43215A-B.ADA  | P |
| B45207T-AB.ADA | P | C41303F-B.ADA  | P | C43215B-B.ADA  | P |
| B45207U-AB.ADA | P | C41303G-B.ADA  | P | C45101A.ADA    | P |
| B45207V-B.ADA  | P | C41303I-B.ADA  | P | C45101B.ADA    | P |
| B45208A-AB.ADA | P | C41303J-B.ADA  | P | C45101C.ADA    | P |
| B45208B-B.ADA  | P | C41303K-B.ADA  | P | C45101E.ADA    | P |
| B45208C-B.ADA  | P | C41303M-B.ADA  | P | C45101G-AB.ADA | P |

|                |     |                |     |               |     |
|----------------|-----|----------------|-----|---------------|-----|
| C45101H-AB.ADA | P   | C45321K-B.DEP  | N/A | C45424J-B.DEP | N/A |
| C45101I.ADA    | P   | C45321L-B.DEP  | N/A | C45424K-B.DEP | N/A |
| C45103A-AB.ADA | P   | C45321M-B.DEP  | N/A | C45424L-B.DEP | N/A |
| C45103B-AB.ADA | P   | C45321N-B.DEP  | N/A | C45424M-B.DEP | N/A |
| C45103C-AB.ADA | P   | C45321O-B.DEP  | N/A | C45424N-B.DEP | N/A |
| C45104A.ADA    | P   | C45321P-B.DEP  | N/A | C45424O-B.DEP | N/A |
| C45105A-AB.ADA | P   | C45321Q-B.DEP  | N/A | C45424P-B.DEP | N/A |
| C45105B-B.ADA  | P   | C45321R-B.DEP  | N/A | C45424Q-B.DEP | N/A |
| C45106A.ADA    | P   | C45321S-B.DEP  | N/A | C45424R-B.DEP | N/A |
| C45201A.ADA    | P   | C45321T-B.DEP  | N/A | C45424S-B.DEP | N/A |
| C45201B.ADA    | P   | C45321U-B.DEP  | N/A | C45424T-B.DEP | N/A |
| C45202A-AB.ADA | P   | C45321V-B.DEP  | N/A | C45424U-B.DEP | N/A |
| C45210A.ADA    | P   | C45321W-B.DEP  | N/A | C45424V-B.DEP | N/A |
| C45220A.ADA    | P   | C45321X-B.DEP  | N/A | C45424W-B.DEP | N/A |
| C45220B.ADA    | P   | C45321Y-B.DEP  | N/A | C45424X-B.DEP | N/A |
| C45220C.ADA    | P   | C45342A-AB.ADA | P   | C45424Y-B.DEP | N/A |
| C45220D.ADA    | P   | C45343A-AB.ADA | P   | C45505A-B.ADA | P   |
| C45220E-B.ADA  | P   | C45345A-AB.ADA | P   | C45521A-B.DEP | W   |
| C45241A-B.DEP  | P   | C45345B-AB.ADA | P   | C45521B-B.DEP | W   |
| C45241B-B.DEP  | P   | C45345C-AB.ADA | P   | C45521C-B.DEP | W   |
| C45241C-B.DEP  | N/A | C45345D-AB.ADA | P   | C45521D-B.DEP | W   |
| C45241D-B.DEP  | N/A | C45401A.ADA    | P   | C45521E-B.DEP | W   |
| C45241E-B.DEP  | N/A | C45401B-AB.ADA | P   | C45521F-B.DEP | W   |
| C45241F-B.DEP  | N/A | C45413A-B.ADA  | P   | C45521G-B.DEP | W   |
| C45241G-B.DEP  | N/A | C45421A-B.DEP  | P   | C45521H-B.DEP | W   |
| C45241H-B.DEP  | N/A | C45421B-B.DEP  | P   | C45521I-B.DEP | W   |
| C45241J-B.DEP  | N/A | C45421C-B.DEP  | N/A | C45521J-B.DEP | W   |
| C45241K-B.DEP  | N/A | C45421D-B.DEP  | N/A | C45521K-B.DEP | W   |
| C45241L-B.DEP  | N/A | C45421E-B.DEP  | N/A | C45521L-B.DEP | W   |
| C45241M-B.DEP  | N/A | C45421F-B.DEP  | N/A | C45521M-B.DEP | W   |
| C45241N-B.DEP  | N/A | C45421G-B.DEP  | N/A | C45521N-B.DEP | W   |
| C45241O-B.DEP  | N/A | C45421H-B.DEP  | N/A | C45521O-B.DEP | W   |
| C45241P-B.DEP  | N/A | C45421I-B.DEP  | N/A | C45521P-B.DEP | W   |
| C45241Q-B.DEP  | N/A | C45421J-B.DEP  | N/A | C45521Q-B.DEP | W   |
| C45241R-B.DEP  | N/A | C45421K-B.DEP  | N/A | C45521R-B.DEP | W   |
| C45241S-B.DEP  | N/A | C45421L-B.DEP  | N/A | C45521S-B.DEP | W   |
| C45241T-B.DEP  | N/A | C45421M-B.DEP  | N/A | C45521T-B.DEP | W   |
| C45241U-B.DEP  | N/A | C45421N-B.DEP  | N/A | C45521U-B.DEP | W   |
| C45241V-B.DEP  | N/A | C45421O-B.DEP  | N/A | C45521V-B.DEP | W   |
| C45241W-B.DEP  | N/A | C45421P-B.DEP  | N/A | C45521W-B.DEP | W   |
| C45241X-B.DEP  | N/A | C45421Q-B.DEP  | N/A | C45521X-B.DEP | W   |
| C45241Y-B.DEP  | N/A | C45421R-B.DEP  | N/A | C45521Y-B.DEP | W   |
| C45264A-B.ADA  | P   | C45421S-B.DEP  | N/A | C45526A-B.ADA | P   |
| C45274A-AB.ADA | P   | C45421T-B.DEP  | N/A | C45621A.DEP   | P   |
| C45274B-AB.ADA | P   | C45421U-B.DEP  | N/A | C45621B.DEP   | P   |
| C45274C-AB.ADA | P   | C45421V-B.DEP  | N/A | C45621C.DEP   | N/A |
| C45303A-B.ADA  | P   | C45421W-B.DEP  | N/A | C45621D.DEP   | N/A |
| C45321A-B.DEP  | P   | C45421X-B.DEP  | N/A | C45621E.DEP   | N/A |
| C45321B-B.DEP  | P   | C45421Y-B.DEP  | N/A | C45621F.DEP   | N/A |
| C45321C-B.DEP  | N/A | C45424A-B.DEP  | P   | C45621G.DEP   | N/A |
| C45321D-B.DEP  | N/A | C45424B-B.DEP  | P   | C45621H.DEP   | N/A |
| C45321E-B.DEP  | N/A | C45424C-B.DEP  | N/A | C45621I.DEP   | N/A |
| C45321F-B.DEP  | N/A | C45424D-B.DEP  | N/A | C45621J.DEP   | N/A |
| C45321G-B.DEP  | N/A | C45424E-B.DEP  | N/A | C45621K.DEP   | N/A |
| C45321H-B.DEP  | N/A | C45424F-B.DEP  | N/A | C45621L.DEP   | N/A |
| C45321I-B.DEP  | N/A | C45424G-B.DEP  | N/A | C45621M.DEP   | N/A |
| C45321J-B.DEP  | N/A | C45424H-B.DEP  | N/A | C45621N.DEP   | N/A |
| C45321J-B.DEP  | N/A | C45424I-B.DEP  | N/A | C45621O.DEP   | N/A |

|               |     |               |   |                |   |
|---------------|-----|---------------|---|----------------|---|
| C45621P.DEP   | N/A | C48005B-B.ADA | P | C48009H-B.ADA  | P |
| C45621Q.DEP   | N/A | C48005C-B.ADA | W | C48009I-B.ADA  | P |
| C45621R.DEP   | N/A | C48006A-B.ADA | P | C48009J-B.ADA  | P |
| C45621S.DEP   | N/A | C48006B-B.ADA | W | C48010A-B.ADA  | P |
| C45621T.DEP   | N/A | C48007A-B.ADA | P | C48012A-B.ADA  | P |
| C45621U.DEP   | N/A | C48007B-B.ADA | P | C4A001A.ADA    | P |
| C45621V.DEP   | N/A | C48007C-B.ADA | P | C4A003A.ADA    | P |
| C45621W.DEP   | N/A | C48008A-B.ADA | P | C4A011A.ADA    | P |
| C45621X.DEP   | N/A | C48008B-B.ADA | P | C4A010A-B.ADA  | P |
| C45621Y.DEP   | N/A | C48008C-B.ADA | P | C4A013A.ADA    | P |
| C45621Z.DEP   | N/A | C48008D-B.ADA | P | D4A002A-AB.ADA | F |
| C48004A-B.ADA | P   | C48009A-B.ADA | P | D4A002B.ADA    | P |
| C48004B-B.ADA | P   | C48009B-B.ADA | P | D4A004A-AB.ADA | P |
| C48004C-B.ADA | P   | C48009C-B.ADA | P | D4A004B.ADA    | P |
| C48004D-B.ADA | P   | C48009D-B.ADA | P | E43211B-B.ADA  | P |
| C48004E-B.ADA | P   | C48009E-B.ADA | P | E43212B-B.ADA  | P |
| C48004F-B.ADA | P   | C48009F-B.ADA | P |                |   |
| C48005A-B.ADA | P   | C48009G-B.ADA | P |                |   |

## Chapter 5

|                 |   |                 |   |                 |     |
|-----------------|---|-----------------|---|-----------------|-----|
| A54B01A-B. ADA  | P | B54A27D-AB. ADA | P | B58002B-AB. ADA | P   |
| A54B02A-B. ADA  | P | B54B01B-B. TST  | P | B58002C-AB. ADA | P   |
| A55B12A-AB. ADA | P | B54B01C-B. ADA  | P | B58003A-B. ADA  | P   |
| A55B13A-AB. ADA | P | B54B02B-B. ADA  | P | B58003B-AB. ADA | P   |
| A55B14A-AB. ADA | P | B54B02C-B. ADA  | P | B59001A-AB. ADA | P   |
| B51001A-AB. ADA | P | B54B02D-B. ADA  | P | B59001C-AB. ADA | P   |
| B51003A-AB. ADA | P | B54B04A-AB. ADA | P | B59001D-AB. ADA | P   |
| B51004B-B. ADA  | P | B54B04B-AB. ADA | P | B59001E-AB. ADA | P   |
| B51004C-B. ADA  | P | B54B05A-AB. ADA | P | B59001F-AB. ADA | P   |
| B52002A-B. ADA  | P | B55A01A-AB. ADA | P | B59001G-AB. ADA | P   |
| B52002B-AB. ADA | P | B55A01B-AB. ADA | P | B59001H-AB. ADA | P   |
| B52002C-AB. ADA | P | B55A01C-AB. ADA | P | B59001I-AB. ADA | P   |
| B52002D-AB. ADA | P | B55A01D-AB. ADA | P | C51002A-AB. ADA | P   |
| B52002E-AB. ADA | P | B55A01E-AB. ADA | P | C51004A-B. ADA  | P   |
| B52002F-B. ADA  | P | B55A01F-AB. ADA | P | C52001A-B. ADA  | P   |
| B52002G-AB. ADA | P | B55A01G-AB. ADA | P | C52001B-AB. ADA | P   |
| B52003A-AB. ADA | P | B55A01H-AB. ADA | P | C52001C-AB. ADA | P   |
| B52003B-AB. ADA | P | B55A01I-AB. ADA | P | C52005A-AB. ADA | P   |
| B52003C-AB. ADA | P | B55A01J-AB. ADA | P | C52005B-AB. ADA | P   |
| B52004A-B. ADA  | P | B55A01K-AB. ADA | P | C52005C-AB. ADA | P   |
| B52004B-AB. ADA | P | B55A01L-AB. ADA | P | C52005D-AB. ADA | P   |
| B52004C-AB. ADA | P | B55A01M-AB. ADA | P | C52005E-AB. ADA | P   |
| B52004D-AB. DEP | P | B55A01N-AB. ADA | P | C52005F-AB. ADA | P   |
| B52004E-AB. DEP | P | B55A01O-AB. ADA | P | C52007A-B. ADA  | P   |
| B52006A-AB. ADA | P | B55A01P-AB. ADA | P | C52008A-AB. ADA | P   |
| B53001A-AB. ADA | P | B55A01Q-AB. ADA | P | C52008B-B. ADA  | P   |
| B53001B-AB. ADA | P | B55A01R-AB. ADA | P | C52009A-B. ADA  | P   |
| B53002A-AB. ADA | P | B55A01S-AB. ADA | P | C52009B-B. ADA  | P   |
| B53002B-AB. ADA | P | B55A01T-AB. ADA | P | C52010A-AB. ADA | P   |
| B53003A-AB. ADA | P | B55A01U-AB. ADA | P | C52011A-B. ADA  | P   |
| B53004A-AB. ADA | P | B55A01V-AB. ADA | P | C52011B-AB. ADA | P   |
| B53009A-AB. ADA | P | B55B01A-AB. ADA | P | C52012A-AB. ADA | P   |
| B53009B-AB. ADA | P | B55B01B-AB. ADA | P | C52012B-AB. ADA | P   |
| B53009C-AB. ADA | P | B55B09B-AB. ADA | P | C52013A-B. ADA  | P   |
| B54A01A-AB. ADA | P | B55B09C-AB. DEP | P | C52101A-AB. ADA | P   |
| B54A01B-AB. ADA | P | B55B09D-AB. DEP | P | C52102A-AB. ADA | P   |
| B54A01C-AB. ADA | P | B55B12B-B. ADA  | P | C52102B-AB. ADA | P   |
| B54A01D-AB. ADA | P | B55B12C-AB. ADA | P | C52102C-AB. ADA | P   |
| B54A01E-AB. ADA | P | B55B14B-B. ADA  | P | C52102D-AB. ADA | P   |
| B54A01F-AB. ADA | P | B55B18A-B. ADA  | P | C52103A-AB. ADA | P   |
| B54A01G-AB. ADA | P | B56001A-AB. ADA | P | C52103B-AB. ADA | P   |
| B54A01H-AB. ADA | P | B56001C-AB. ADA | P | C52103C-AB. ADA | P   |
| B54A01I-AB. ADA | P | B56001D-AB. ADA | P | C52103F-AB. ADA | P   |
| B54A01J-AB. ADA | P | B56001E-AB. ADA | P | C52103G-AB. ADA | P   |
| B54A01K-AB. ADA | P | B56001F-AB. ADA | P | C52103H-AB. ADA | P   |
| B54A01L-AB. ADA | P | B56001G-AB. ADA | P | C52103K-AB. ADA | P   |
| B54A05A. ADA    | P | B56001H-AB. ADA | P | C52103L-AB. ADA | P   |
| B54A05B. ADA    | P | B57001A-AB. ADA | P | C52103M-AB. ADA | P   |
| B54A08A-B. ADA  | P | B57001B-B. ADA  | P | C52103P-AB. ADA | P   |
| B54A20A. ADA    | P | B57001C-AB. ADA | P | C52103Q-AB. ADA | P   |
| B54A21A-B. ADA  | P | B57001D-AB. ADA | P | C52103R-AB. ADA | P   |
| B54A25A-B. ADA  | P | B58001A-AB. ADA | P | C52103S-B. ADA  | P   |
| B54A27B-AB. ADA | P | B58002A-B. ADA  | P | C52103X-B. ADA  | N/A |

|                |     |                |     |                |     |
|----------------|-----|----------------|-----|----------------|-----|
| C52104A-AB.ADA | P   | C54A27A-AB.ADA | P   | C57004B-AB.ADA | P   |
| C52104B-AB.ADA | P   | C54A41A.ADA    | P   | C57004C-AB.ADA | P   |
| C52104C-AB.ADA | P   | C54A42A.ADA    | P   | C57005A-B.ADA  | P   |
| C52104F-AB.ADA | P   | C54A42B.ADA    | P   | C58004A-AB.ADA | P   |
| C52104G-AB.ADA | P   | C54A42C.ADA    | P   | C58004B-AB.ADA | P   |
| C52104H-AB.ADA | P   | C54A42D.ADA    | P   | C58004C-AB.ADA | P   |
| C52104K-AB.ADA | P   | C54A42E.ADA    | P   | C58004D-B.ADA  | P   |
| C52104L-AB.ADA | P   | C54A42F.ADA    | P   | C58004F-AB.ADA | P   |
| C52104M-AB.ADA | P   | C54A42G.ADA    | P   | C58004G-AB.ADA | P   |
| C52104P-AB.ADA | P   | C55003A-AB.ADA | P   | C58005A-AB.ADA | P   |
| C52104Q-AB.ADA | P   | C55004A-AB.ADA | P   | C58005B-AB.ADA | P   |
| C52104R-AB.ADA | P   | C55005A-AB.ADA | P   | C58005H-AB.ADA | P   |
| C52104X-B.ADA  | N/A | C55006A-AB.ADA | P   | C58006A-AB.ADA | P   |
| C52104Y-B.ADA  | N/A | C55006B-AB.ADA | P   | C58006B-AB.ADA | P   |
| C53004B-B.ADA  | P   | C55007A-AB.DEP | P   | C59001B-AB.ADA | P   |
| C53005A-AB.ADA | P   | C55007B-AB.DEP | P   | C59002A-AB.ADA | P   |
| C53005B-AB.ADA | P   | C55008A-B.ADA  | P   | C59002B-AB.ADA | P   |
| C53006A-AB.ADA | P   | C55009A-AB.ADA | P   | C59002C-B.ADA  | P   |
| C53006B-AB.ADA | P   | C55B15A-B.ADA  | P   | D55A03A-AB.ADA | P   |
| C53007A-AB.ADA | P   | C55B16A-AB.DEP | N/A | D55A03B-AB.ADA | P   |
| C53008A-AB.ADA | P   | C55C01A-B.ADA  | P   | D55A03C-AB.ADA | P   |
| C54A03A.ADA    | P   | C55C02A-AB.ADA | P   | D55A03D-AB.ADA | P   |
| C54A04A-AB.ADA | P   | C55C02B-AB.ADA | P   | D55A03E-AB.ADA | P   |
| C54A06A-AB.ADA | P   | C55C03A-AB.ADA | P   | D55A03F-AB.ADA | P   |
| C54A07A-AB.ADA | P   | C55C03B-AB.ADA | P   | D55A03G-AB.ADA | N/A |
| C54A22A-AB.ADA | P   | C55D01A-AB.ADA | P   | D55A03H-AB.ADA | N/A |
| C54A23A-B.ADA  | P   | C56002A-AB.ADA | P   | D56001B-AB.ADA | P   |
| C54A24A-AB.ADA | P   | C57002A-AB.ADA | P   | E52103Y-B.ADA  | P   |
| C54A24B.ADA    | P   | C57003A-AB.ADA | P   |                |     |
| C54A26A.ADA    | P   | C57004A-AB.ADA | P   |                |     |

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|                 |   |                 |   |                 |   |
|-----------------|---|-----------------|---|-----------------|---|
| A62006D-B. ADA  | P | B64002A-B. ADA  | P | C64104B-AB. ADA | P |
| A63202A-AB. ADA | P | B64002C-B. ADA  | P | C64104C-AB. ADA | P |
| B61001A-AB. ADA | P | B64003A-B. ADA  | P | C64104D-AB. ADA | P |
| B61001B-AB. ADA | P | B64004A-B. ADA  | P | C64104E-AB. ADA | P |
| B61001C-AB. ADA | P | B64004B-B. ADA  | P | C64104F-AB. ADA | P |
| B61001D-AB. ADA | P | B64004C-B. ADA  | P | C64104G-AB. ADA | P |
| B61001E-AB. ADA | P | B64004D-B. ADA  | P | C64104H-AB. ADA | P |
| B61001F-AB. ADA | P | B64004E-B. ADA  | P | C64104I-AB. ADA | P |
| B61001G-AB. ADA | P | B64004F-B. ADA  | P | C64104J-AB. ADA | P |
| B61001H-AB. ADA | P | B64006A-B. ADA  | P | C64104K-AB. ADA | P |
| B61001I-AB. ADA | P | B64101A-B. ADA  | P | C64104L-AB. ADA | P |
| B61001J-AB. ADA | P | B64201A-B. ADA  | P | C64104M-AB. ADA | P |
| B61001K-AB. ADA | P | B65001A-B. ADA  | P | C64104N-B. ADA  | P |
| B61001L-AB. ADA | P | B65002A-AB. ADA | P | C64104O-B. ADA  | P |
| B61001M-AB. ADA | P | B65002B-AB. ADA | P | C64105A-AB. ADA | P |
| B61001N-AB. ADA | P | B66001A-B. ADA  | W | C64105B-AB. ADA | P |
| B61001O-AB. ADA | P | B66001B-B. ADA  | P | C64105C-AB. ADA | P |
| B61001P-AB. ADA | P | B66001C-B. ADA  | P | C64105D-AB. ADA | P |
| B61001Q-AB. ADA | P | B67001A-B. ADA  | W | C64105E-AB. ADA | W |
| B61001R-AB. ADA | P | B67001B-B. ADA  | P | C64105F-AB. ADA | W |
| B61001S-AB. ADA | P | B67001C-B. ADA  | P | C64106A-B. ADA  | P |
| B61001T-AB. ADA | P | B67001D-B. ADA  | P | C64106B-B. ADA  | P |
| B61001U-AB. ADA | P | B67001E-B. ADA  | P | C64106C-B. ADA  | P |
| B61001V-AB. ADA | P | B67001F-B. ADA  | P | C64106D-B. ADA  | P |
| B61001W-AB. ADA | P | B67001G-B. ADA  | P | C64107A-B. ADA  | P |
| B61003A-AB. ADA | P | B67004A-B. ADA  | W | C64108A-B. ADA  | P |
| B61006A-B. ADA  | P | C61003B-AB. ADA | P | C64201B-B. ADA  | P |
| B61011A-B. ADA  | P | C61008A-B. ADA  | P | C64201C-B. ADA  | P |
| B61012A-B. ADA  | P | C61009A-B. ADA  | P | C64202A-B. ADA  | P |
| B62001A-AB. ADA | P | C61010A-AB. ADA | P | C65003A-B. ADA  | P |
| B62001B-AB. ADA | P | C62002A-B. ADA  | P | C65003B-B. ADA  | P |
| B62001C-AB. ADA | P | C62003A-B. ADA  | P | C66002A-B. ADA  | P |
| B62001D-AB. ADA | P | C62003B-B. ADA  | P | C66002C-AB. ADA | P |
| B62006B-B. ADA  | P | C62004A-AB. ADA | P | C66002D-AB. ADA | P |
| B62006C-B. ADA  | P | C62006A-B. ADA  | P | C66002E-AB. ADA | P |
| B62006E-B. ADA  | P | C63004A-AB. ADA | P | C66002F-AB. ADA | P |
| B62006F-B. ADA  | P | C64002B-B. ADA  | P | C66002G-B. ADA  | P |
| B63001A-AB. ADA | P | C64004G-B. ADA  | P | C67002A-B. ADA  | P |
| B63001B-AB. ADA | P | C64005A-B. ADA  | P | C67002B-B. ADA  | P |
| B63005A-AB. ADA | P | C64005B-B. ADA  | P | C67002C-B. ADA  | P |
| B63005B-AB. ADA | P | C64005C-B. ADA  | P | C67002D-B. ADA  | P |
| B63005C-AB. ADA | P | C64005D-B. ADA  | P | C67002E-B. ADA  | P |
| B63009A-B. ADA  | P | C64005D0M       | C | C67003A-B. ADA  | P |
| B63009B-B. ADA  | P | C64005DA        | C | C67003B-B. ADA  | P |
| B63009C-B. ADA  | P | C64005DB        | C | C67003C-AB. ADA | P |
| B63009C0        | C | C64005DC        | C | C67003D-B. ADA  | P |
| B63009C1        | C | C64103A-B. ADA  | P | C67003E-AB. ADA | P |
| B63009C2        | C | C64103B-B. ADA  | P | C67005A-B. ADA  | P |
| B63009C3M       | C | C64103C-B. ADA  | W | C67005B-B. ADA  | P |
| B63010A-AB. ADA | P | C64103D-B. ADA  | W | C67005C-B. ADA  | P |
| B63102A-B. ADA  | P | C64103E-B. ADA  | P | C67005D-B. ADA  | P |
| B63103A-B. ADA  | P | C64103F-B. ADA  | P | D64005E-B. ADA  | P |
| B64001A-B. ADA  | P | C64104A-AB. ADA | P | D64005E0M       | C |

|                |   |                |     |          |   |
|----------------|---|----------------|-----|----------|---|
| D64005EA       | C | D64005FF       | C   | D64005GG | C |
| D64005EB       | C | D64005FG       | C   | D64005GH | C |
| D64005EC       | C | D64005FH       | C   | D64005GI | C |
| D64005ED       | C | D64005FI       | C   | D64005GJ | C |
| D64005EE       | C | D64005FJ       | C   | D64005GK | C |
| D64005EF       | C | D64005G-B. ADA | N/A | D64005GL | C |
| D64005F-B. ADA | P | D64005GOM      | C   | D64005GM | C |
| D64005FOM      | C | D64005GA       | C   | D64005GN | C |
| D64005FA       | C | D64005GB       | C   | D64005GO | C |
| D64005FB       | C | D64005GC       | C   | D64005GP | C |
| D64005FC       | C | D64005GD       | C   | D64005GQ | C |
| D64005FD       | C | D64005GE       | C   |          |   |
| D64005FE       | C | D64005GF       | C   |          |   |

## Chapter 7

|                |   |                |   |                |   |
|----------------|---|----------------|---|----------------|---|
| A71002A-AB.ADA | P | B71001Q-AB.ADA | P | B74105A-B.ADA  | P |
| A71004A-AB.ADA | P | B71001R-AB.ADA | P | B74105C-B.ADA  | P |
| A72001A-AB.ADA | P | B71001T-AB.ADA | P | B74201A-AB.ADA | P |
| A73001I-AB.ADA | P | B71001U-AB.ADA | P | B74205A-B.ADA  | P |
| A73001J-AB.ADA | P | B71001V-AB.ADA | P | B74205B-B.ADA  | P |
| A74006A-AB.ADA | P | B71001W-AB.ADA | P | B74207A-B.ADA  | W |
| A74105B-B.ADA  | P | B71002B-AB.ADA | P | B74301A-B.ADA  | P |
| A74106A-AB.ADA | P | B73001A-AB.ADA | P | B74304A-B.ADA  | P |
| A74106B-AB.ADA | P | B73001B-AB.ADA | P | B74304B-B.ADA  | P |
| A74106C-AB.ADA | P | B73001C-B.ADA  | P | B74304C-B.ADA  | P |
| A74205E-B.ADA  | P | B73001D-B.ADA  | P | B74401A-B.ADA  | P |
| A74205F-B.ADA  | P | B73001E-AB.ADA | P | B74401B-B.ADA  | P |
| B71001A-AB.ADA | P | B73001F-AB.ADA | P | B74409A-B.ADA  | P |
| B71001B-AB.ADA | P | B73001G-B.ADA  | P | C72001B-AB.ADA | P |
| B71001C-AB.ADA | P | B73001H-B.ADA  | P | C73002A-B.ADA  | P |
| B71001D-AB.ADA | P | B73006A-AB.ADA | P | C74206A-B.ADA  | P |
| B71001E-AB.ADA | P | B74001A-AB.ADA | P | C74207B-B.ADA  | P |
| B71001F-AB.ADA | P | B74001B-AB.ADA | P | C74209A-AB.ADA | P |
| B71001G-AB.ADA | P | B74003A-B.ADA  | P | C74210A-AB.ADA | P |
| B71001H-AB.ADA | P | B74101A-B.ADA  | P | C74211A-B.ADA  | P |
| B71001I-AB.ADA | P | B74103A-B.ADA  | P | C74211B-B.ADA  | P |
| B71001J-AB.ADA | P | B74103B-B.ADA  | P | C74302A-B.ADA  | P |
| B71001K-AB.ADA | P | B74103C-B.ADA  | P | C74305A-B.ADA  | P |
| B71001L-AB.ADA | P | B74103D-B.ADA  | P | C74305B-B.ADA  | P |
| B71001M-AB.ADA | P | B74103E-B.ADA  | P | C74402A-B.ADA  | P |
| B71001N-AB.ADA | P | B74103F-B.ADA  | W | C74402B-B.ADA  | P |
| B71001O-AB.ADA | P | B74103G-B.ADA  | P | C74409B-B.ADA  | P |
| B71001P-AB.ADA | P | B74104A-B.ADA  | P |                |   |

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|                |   |                  |     |               |   |
|----------------|---|------------------|-----|---------------|---|
| A83A02A.ADA    | P | B86001BO-B.ADA   | P   | C87A05A-B.ADA | P |
| A83A02B.ADA    | P | B86001BU-B.ADA   | P   | C87A05B-B.ADA | P |
| A83A06A-B.ADA  | P | B86001BV-B.ADA   | P   | C87B02A-B.ADA | P |
| A83C01C.ADA    | P | B86001BW-B.ADA   | P   | C87B02B-B.ADA | P |
| A83C01D.ADA    | P | B86001BX-B.ADA   | P   | C87B03A-B.ADA | P |
| A83C01E.ADA    | P | B86001C0M-AB.DEP | P   | C87B04A-B.ADA | P |
| A83C01F.ADA    | P | B86001CP-AB.DEP  | N/A | C87B04B-B.ADA | P |
| A83C01G.ADA    | P | B86001CQ-AB.DEP  | N/A | C87B04C-B.ADA | P |
| A83C01H.ADA    | P | B86001CR-AB.DEP  | P   | C87B05A-B.ADA | P |
| A83C01I.ADA    | P | B86001CS-AB.DEP  | P   | C87B06A-B.ADA | P |
| A83C01J.ADA    | P | B86001D0M-AB.TST | P   | C87B07A-B.ADA | P |
| A85007D-B.ADA  | P | B86001DT-AB.TST  | N/A | C87B07B-B.ADA | P |
| A85013B-B.ADA  | P | B87B23B-B.ADA    | P   | C87B07C-B.ADA | P |
| B83A01A-AB.ADA | P | B87B48C-B.ADA    | P   | C87B07D-B.ADA | P |
| B83A01B-B.ADA  | P | C83B02A.ADA      | P   | C87B07E-B.ADA | P |
| B83A01C.ADA    | P | C83B02B.ADA      | P   | C87B08A-B.ADA | P |
| B83A05A-AB.ADA | P | C83C01B.ADA      | P   | C87B09A-B.ADA | P |
| B83A06B-B.ADA  | P | C83E02A.ADA      | P   | C87B09B-B.ADA | P |
| B83A06H-B.ADA  | P | C83E02B.ADA      | P   | C87B09C-B.ADA | P |
| B83B01A-AB.ADA | P | C83E03A.ADA      | P   | C87B10A-B.ADA | P |
| B83B02C.ADA    | P | C83E04A.ADA      | P   | C87B11A-B.ADA | P |
| B83C01A-AB.ADA | P | C83F01A.ADA      | P   | C87B11B-B.ADA | P |
| B83C02A.ADA    | P | C83F01B.ADA      | P   | C87B13A-B.ADA | P |
| B83E02C-B.ADA  | P | C83F01C.ADA      | P   | C87B14A-B.ADA | P |
| B83F02A.ADA    | P | C83F01C0         | P   | C87B14B-B.ADA | P |
| B83F02B.ADA    | P | C83F01C1         | P   | C87B14C-B.ADA | P |
| B83F04A-AB.ADA | P | C83F01C2M        | P   | C87B14D-B.ADA | P |
| B84001A-AB.ADA | P | C83F01D.ADA      | P   | C87B15A-B.ADA | P |
| B84002B-B.ADA  | P | C83F01D0M        | P   | C87B16A-B.ADA | P |
| B84004A-B.ADA  | P | C83F01D1         | P   | C87B17A-B.ADA | P |
| B84006A-B.ADA  | P | C83F03A.ADA      | P   | C87B18A-B.ADA | P |
| B85007B-B.ADA  | P | C83F03B.ADA      | P   | C87B18B-B.ADA | P |
| B85007C-B.ADA  | P | C83F03C.ADA      | P   | C87B19A-B.ADA | P |
| B85012A-B.ADA  | P | C83F03C0         | P   | C87B23A-B.ADA | P |
| B85013C-B.ADA  | P | C83F03C1         | P   | C87B24A-B.ADA | P |
| B85015A-B.ADA  | P | C83F03C2M        | P   | C87B24B-B.ADA | P |
| B86001A-AB.ADA | P | C83F03D.ADA      | P   | C87B26B-B.ADA | P |
| B86001A0       | P | C83F03D0M        | P   | C87B27A-B.ADA | P |
| B86001A1M      | P | C83F03D1         | P   | C87B28A-B.ADA | P |
| B86001B0M      | P | C84002A-B.ADA    | P   | C87B29A-B.ADA | P |
| B86001BA-B.ADA | P | C85007A-B.ADA    | P   | C87B30A-B.ADA | P |
| B86001BB-B.ADA | P | C85007E-B.ADA    | P   | C87B31A-B.ADA | P |
| B86001BC-B.ADA | P | C85013A-B.ADA    | P   | C87B32A-B.ADA | P |
| B86001BD-B.ADA | P | C86001E-B.ADA    | P   | C87B33A-B.ADA | P |
| B86001BE-B.ADA | P | C86001F-B.DEP    | N/A | C87B34A-B.ADA | P |
| B86001BF-B.ADA | P | C86002A.ADA      | P   | C87B34B-B.ADA | P |
| B86001BG-B.ADA | P | C86002A0         | P   | C87B34C-B.ADA | P |
| B86001BH-B.ADA | P | C86002A1         | P   | C87B35A-B.ADA | P |
| B86001BI-B.ADA | P | C86002A2M        | P   | C87B35B-B.ADA | P |
| B86001BJ-B.ADA | P | C86002B.ADA      | P   | C87B35C-B.ADA | P |
| B86001BK-B.ADA | P | C86002B1         | P   | C87B37A-B.ADA | P |
| B86001BL-B.ADA | P | C86002B2M        | P   | C87B37B-B.ADA | P |
| B86001BM-B.ADA | P | C86003A-B.ADA    | P   | C87B37C-B.ADA | P |

|               |   |               |   |               |     |
|---------------|---|---------------|---|---------------|-----|
| C87B37D-B.ADA | P | C87B42A-B.ADA | P | C87B48B-B.ADA | P   |
| C87B37E-B.ADA | P | C87B43A-B.ADA | P | C87B54A-B.ADA | P   |
| C87B37F-B.ADA | P | C87B44A-B.ADA | P | C87B57A-B.ADA | P   |
| C87B38A-B.ADA | P | C87B45A-B.ADA | P | C87B62A-B.DEP | N/A |
| C87B39A-B.ADA | P | C87B45C-B.ADA | P | C87B62B-B.DEP | N/A |
| C87B40A-B.ADA | P | C87B47A-B.ADA | P | C87B62C-B.DEP | N/A |
| C87B41A-B.ADA | P | C87B48A-B.ADA | P |               |     |

## Chapter 9

|                |     |                |   |                |   |
|----------------|-----|----------------|---|----------------|---|
| A91002M-B.ADA  | N/A | B950AJA-B.ADA  | P | C9208AA-B.ADA  | P |
| A95005A.ADA    | P   | B9508AA-B.ADA  | P | C9208BA-B.ADA  | P |
| A97106A-AB.ADA | P   | B950DHA-B.ADA  | P | C92081A-B.ADA  | P |
| B91001A-AB.ADA | P   | B96002A-B.ADA  | P | C93001A-B.ADA  | P |
| B91001B-AB.ADA | P   | B96003A-B.ADA  | P | C93002A-B.ADA  | P |
| B91001C-AB.ADA | P   | B97101A-AB.ADA | P | C93003A-B.ADA  | P |
| B91001D-AB.ADA | P   | B97101B-AB.ADA | P | C93005A-B.ADA  | P |
| B91001E-AB.ADA | P   | B97101C-AB.ADA | P | C93005B-B.ADA  | W |
| B91001F-AB.ADA | P   | B97101D-AB.ADA | P | C93005C-B.ADA  | W |
| B91001G-B.ADA  | N/A | B97101E-AB.ADA | P | C93006A-AB.ADA | P |
| B91002A-B.ADA  | P   | B97102A-AB.ADA | P | C93007B-B.ADA  | W |
| B91002B-B.ADA  | P   | B97102B-AB.ADA | P | C93008A-B.ADA  | P |
| B91002C-B.ADA  | P   | B97102C-AB.ADA | P | C9300FA-B.ADA  | P |
| B91002D-B.ADA  | P   | B97102D-AB.ADA | P | C930AJA-B.ADA  | P |
| B91002E-B.ADA  | P   | B97102E-AB.ADA | P | C9308AA-B.ADA  | P |
| B91002F-B.ADA  | P   | B97102F-AB.ADA | P | C94001A-B.ADA  | P |
| B91002G-B.ADA  | P   | B97102G-AB.ADA | P | C94002A-B.ADA  | P |
| B91002H-B.ADA  | P   | B97102H-AB.ADA | P | C94002B-B.ADA  | P |
| B91002I-B.ADA  | P   | B97102I-AB.ADA | P | C94003A-B.ADA  | P |
| B91002J-B.ADA  | P   | B97103A-AB.ADA | P | C94004A-B.ADA  | P |
| B91002K-B.ADA  | P   | B97103B-AB.ADA | P | C94004B-B.ADA  | P |
| B91002L-B.ADA  | P   | B97103D-AB.ADA | P | C94004C-B.ADA  | P |
| B91003A-AB.ADA | P   | B97103E-AB.ADA | P | C94005A-B.ADA  | P |
| B91004A-B.ADA  | P   | B97104A-AB.ADA | P | C94005B-B.ADA  | P |
| B91004B-B.ADA  | P   | B97104B-AB.ADA | P | C94006A-B.ADA  | P |
| B91004C-B.ADA  | P   | B97104C-AB.ADA | P | C94007A-B.ADA  | P |
| B91004D-B.ADA  | P   | B97104D-AB.ADA | P | C94007B-B.ADA  | P |
| B91004E-B.ADA  | P   | B97104E-AB.ADA | P | C94020A-B.ADA  | P |
| B92004A-B.ADA  | P   | B97104F-AB.ADA | P | C94021A-B.ADA  | P |
| B92004B-B.ADA  | P   | B97104G-AB.ADA | P | C94008A-B.ADA  | P |
| B92004C-B.ADA  | P   | B97107A-AB.ADA | P | C94009A-B.ADA  | P |
| B95001A.ADA    | P   | B97108A-AB.ADA | P | C94009B.ADA    | P |
| B95001B-AB.ADA | P   | B97108B-AB.ADA | P | C95010A.ADA    | P |
| B95002A.ADA    | P   | B97109A-AB.ADA | P | C95011A.ADA    | P |
| B95004A-AB.ADA | P   | B97110A-AB.ADA | P | C95012A-B.ADA  | P |
| B95004B-AB.ADA | P   | B97110B-AB.ADA | P | C95013A-B.ADA  | P |
| B95006A.ADA    | P   | B97111A-AB.ADA | P | C95021A-B.ADA  | P |
| B95006B-AB.ADA | P   | B99001A-AB.ADA | P | C95022A-B.ADA  | P |
| B95006C-AB.ADA | P   | B99001B-B.ADA  | P | C95022B-B.ADA  | P |
| B95006D-AB.ADA | P   | B99002A-B.ADA  | P | C95040D-B.ADA  | P |
| B95007A-AB.ADA | P   | B99002B-B.ADA  | P | C950ACB-B.ADA  | P |
| B95007B-AB.ADA | P   | B99002C-B.ADA  | P | C950BGA-B.ADA  | P |
| B95020A-B.ADA  | P   | B99003A-AB.ADA | P | C950BHA-B.ADA  | P |
| B95020B-B.ADA  | P   | B9A001A-AB.ADA | P |                |   |
| B9502000       | C   | B9A001B-AB.ADA | P |                |   |
| B9502001       | C   | C900ACA-B.ADA  | P |                |   |
| B9502002M      | C   | C9100AA-B.ADA  | P |                |   |
| B95008A-B.ADA  | P   | C9100DA-B.ADA  | P |                |   |
| B95008B-B.ADA  | P   | C9100DB-B.ADA  | P |                |   |
| B95008C-B.ADA  | P   | C9100DC-B.ADA  | P |                |   |
| B95008D-B.ADA  | P   | C92002A.ADA    | P |                |   |
| B95008E-B.ADA  | P   | C92003A.ADA    | P |                |   |
| B95008F-B.ADA  | P   | C920AJA-B.ADA  | P |                |   |
| B95008G-B.ADA  | P   |                |   |                |   |
| B95008H-B.ADA  | P   |                |   |                |   |
| B95008I-B.ADA  | P   |                |   |                |   |
| B95008J-B.ADA  | P   |                |   |                |   |
| B95008K-B.ADA  | P   |                |   |                |   |
| B95008L-B.ADA  | P   |                |   |                |   |
| B95008M-B.ADA  | P   |                |   |                |   |
| B95008N-B.ADA  | P   |                |   |                |   |
| B95008O-B.ADA  | P   |                |   |                |   |
| B95008P-B.ADA  | P   |                |   |                |   |
| B95008Q-B.ADA  | P   |                |   |                |   |
| B95008R-B.ADA  | P   |                |   |                |   |
| B95008S-B.ADA  | P   |                |   |                |   |
| B95008T-B.ADA  | P   |                |   |                |   |
| B95008U-B.ADA  | P   |                |   |                |   |
| B95008V-B.ADA  | P   |                |   |                |   |
| B95008W-B.ADA  | P   |                |   |                |   |
| B95008X-B.ADA  | P   |                |   |                |   |
| B95008Y-B.ADA  | P   |                |   |                |   |
| B95008Z-B.ADA  | P   |                |   |                |   |

|               |   |                |   |                |   |
|---------------|---|----------------|---|----------------|---|
| C950BJA-B.ADA | P | C96007A-B.ADA  | P | C97303A-AB.ADA | P |
| C950CAA-B.ADA | P | C96008A-B.ADA  | P | C97303B-AB.ADA | P |
| C950CBA-B.ADA | P | C96008B-B.ADA  | P | C97304A-B.ADA  | P |
| C950CHA-B.ADA | P | C97113A-B.ADA  | P | C9A003A-B.ADA  | P |
| C950CHC-B.ADA | P | C97114A-B.ADA  | P | C9A004A-B.ADA  | P |
| C950DEA-B.ADA | P | C97115A-B.ADA  | P | C9A005A-B.ADA  | P |
| C950DEB-B.ADA | P | C97201A-AB.ADA | P | C9A006A-B.ADA  | P |
| C950DCA-B.ADA | P | C97201D-AB.ADA | P | C9A007A-B.ADA  | P |
| C96001A-B.ADA | P | C97201E-AB.ADA | P | C9A009A-B.ADA  | P |
| C96004A-B.ADA | P | C97201G-AB.ADA | P | C9A009B-B.ADA  | P |
| C96005A-B.ADA | P | C97201H-AB.ADA | P | C9A009C-B.ADA  | P |
| C96005B-B.TST | P | C97201X-AB.ADA | P | C9A009D-B.ADA  | P |
| C96005C-B.TST | P | C97202A-AB.ADA | P | C9A009E-B.ADA  | P |
| C96005D-B.ADA | P | C97203A-AB.ADA | P | C9A009F-B.ADA  | P |
| C96005E-B.ADA | P | C97203B-AB.ADA | P | C9A009G-B.ADA  | P |
| C96006A-B.ADA | P | C97204A-B.ADA  | P | C9A009H-B.ADA  | P |

|               |   |                |   |               |   |
|---------------|---|----------------|---|---------------|---|
| BA1011B-B.ADA | P | BA1101C0       | C | BA3001F0M     | C |
| BA1011B0M     | C | BA1101C1       | C | BA3001F1      | C |
| BA1011B1      | C | BA1101C2M      | C | BA3001F2      | C |
| BA1011B2      | C | BA1101C3       | C | BA3001F3      | C |
| BA1011B3      | C | BA1101C4       | C | BA3006A-B.ADA | P |
| BA1011B4      | C | BA1101C5       | C | BA3006A0      | C |
| BA1011B5      | C | BA101D-AB.ADA  | P | BA3006A1      | C |
| BA1011B6      | C | BA1101E-B.ADA  | P | BA3006A2      | C |
| BA1011B7      | C | BA1101F-B.ADA  | P | BA3006A3      | C |
| BA1011B8      | C | BA1101G-B.ADA  | P | BA3006A4      | C |
| BA1011C-B.ADA | P | BA1101H-B.ADA  | P | BA3006A5      | C |
| BA1011C0M     | C | BA1101H0       | C | BA3006A6M     | C |
| BA1011C1      | C | BA1101H1M      | C | BA3006B-B.ADA | P |
| BA1011C2      | C | BA2001A-AB.ADA | P | BA3006B0      | C |
| BA1011C3      | C | BA2001B-AB.ADA | P | BA3006B1      | C |
| BA1011C4      | C | BA2001C-AB.ADA | P | BA3006B2      | C |
| BA1011C5      | C | BA2001D-AB.ADA | P | BA3006B3      | C |
| BA1011C6      | C | BA2001E-AB.ADA | P | BA3006B4M     | C |
| BA1011C7      | C | BA2001F-AB.ADA | P | BA3007A-B.ADA | P |
| BA1011C8      | C | BA2001E1       | C | BA3007A0      | C |
| BA1020A-B.ADA | P | BA2001E2       | C | BA3007A1      | C |
| BA1020A0M     | C | BA2001F-AB.ADA | P | BA3007A2      | C |
| BA1020A1      | C | BA2001F0M      | C | BA3007A3      | C |
| BA1020A2      | C | BA2001F1       | C | BA3007A4      | C |
| BA1020A3      | C | BA2001F2       | C | BA3007A5M     | C |
| BA1020A4      | C | BA2001G-AB.ADA | P | BA3007B-B.ADA | P |
| BA1020A5      | C | BA2001G0M      | C | BA3007B0      | C |
| BA1020A6      | C | BA2001C1       | C | BA3007B1      | C |
| BA1020A7      | C | BA2003B-AB.ADA | P | BA3007B2      | C |
| BA1020A8      | C | BA2003B0M      | C | BA3007B3      | C |
| BA1020B-B.ADA | P | BA2003B1       | C | BA3007B4      | C |
| BA1020B0      | C | BA2013A-B.ADA  | P | BA3007B5      | C |
| BA1020B1      | C | BA2013B-B.ADA  | P | BA3007B6      | C |
| BA1020B2      | C | BA3001A-AB.ADA | P | BA3007B7      | C |
| BA1020B3      | C | BA3001A0M      | C | BA3007B8M     | C |
| BA1020B4      | C | BA3001A1       | C | BA3008A-B.ADA | P |
| BA1020B5      | C | BA3001A2       | C | BA3008A0      | C |
| BA1020B6M     | C | BA3001A3       | C | BA3008A1      | C |
| BA1020C-B.ADA | P | BA3001B.ADA    | P | BA3008A2      | C |
| BA1020C0M     | C | BA3001B0M      | C | BA3008A3      | C |
| BA1020C1      | C | BA3001B1       | C | BA3008A4      | C |
| BA1020C2      | C | BA3001C-AB.ADA | P | BA3008A5M     | C |
| BA1020C3      | C | BA3001C0M      | C | BA3008B-B.ADA | P |
| BA1020C4      | C | BA3001C1       | C | BA3008B0      | C |
| BA1020C5      | C | BA3001D-AB.ADA | P | BA3008B1      | C |
| BA1020C6      | C | BA3001D0M      | C | BA3008B2      | C |
| BA1020C7      | C | BA3001E-AB.ADA | P | BA3008B3      | C |
| BA1020C8      | C | BA3001E0M      | C | BA3008B4      | C |
| BA1020C9      | C | BA3001E1       | C | BA3008B5      | C |
| BA1020D       | C | BA3001F-AB.ADA | P | BA3001J       | C |
| BA1020D1      | C | BA3001F0M      | C | BA3001J2      | C |
| BA1020D2      | C | BA2001F-AB.ADA | P | BA3001J3      | C |
| BA1020D3      | C | BA2001F1       | C | BA3006A5      | C |
| BA1020D4      | C | BA2001F2       | C | BA3006A6      | C |
| BA1020D5      | C | BA2001F3       | C | BA3006A7      | C |
| BA1020D6      | C | BA2001F4       | C | BA3006A8      | C |
| BA1020D7      | C | BA2001F5       | C | BA3006A9      | C |
| BA1020D8      | C | BA2001F6       | C | BA3006A10     | C |
| BA1020D9      | C | BA2001F7       | C | BA3006A11     | C |
| BA1020E-B.ADA | P | BA2001F8       | C | BA3006A12     | C |
| BA1020E0      | C | BA2001F9       | C | BA3006A13     | C |
| BA1020E1      | C | BA2001F0M      | C | BA3006A14     | C |
| BA1020E2      | C | BA2001F1M      | C | BA3006A15     | C |
| BA1020E3      | C | BA2001F2M      | C | BA3006A16     | C |
| BA1020E4      | C | BA2001F3M      | C | BA3006A17     | C |
| BA1020E5      | C | BA2001F4M      | C | BA3006A18     | C |
| BA1020E6      | C | BA2001F5M      | C | BA3006A19     | C |
| BA1020E7      | C | BA2001F6M      | C | BA3006A20     | C |
| BA1020E8      | C | BA2001F7M      | C | BA3006A21     | C |
| BA1020E9      | C | BA2001F8M      | C | BA3006A22     | C |
| BA1020F-B.ADA | P | BA2001F9       | C | BA3006A23     | C |
| BA1020F0      | C | BA2001F0M      | C | BA3006A24     | C |
| BA1020F1      | C | BA2001F1M      | C | BA3006A25     | C |
| BA1020F2      | C | BA2001F2M      | C | BA3006A26     | C |
| BA1020F3      | C | BA2001F3M      | C | BA3006A27     | C |
| BA1020F4      | C | BA2001F4M      | C | BA3006A28     | C |
| BA1020F5      | C | BA2001F5M      | C | BA3006A29     | C |
| BA1020F6      | C | BA2001F6M      | C | BA3006A30     | C |
| BA1020F7      | C | BA2001F7M      | C | BA3006A31     | C |
| BA1020F8      | C | BA2001F8M      | C | BA3006A32     | C |
| BA1020F9      | C | BA2001F9M      | C | BA3006A33     | C |
| BA1020G-B.ADA | P | BA2001G-AB.ADA | P | BA3006A34     | C |
| BA1020G0      | C | BA2001G0M      | C | BA3006A35     | C |
| BA1020G1      | C | BA2001H-AB.ADA | P | BA3006A36     | C |
| BA1020G2      | C | BA2001H0M      | C | BA3006A37     | C |
| BA1020G3      | C | BA2001I-AB.ADA | P | BA3006A38     | C |
| BA1020G4      | C | BA2001I0M      | C | BA3006A39     | C |
| BA1020G5      | C | BA2001J-AB.ADA | P | BA3006A40     | C |
| BA1020G6      | C | BA2001J0M      | C | BA3006A41     | C |
| BA1020G7      | C | BA2001K-AB.ADA | P | BA3006A42     | C |
| BA1020G8      | C | BA2001K0M      | C | BA3006A43     | C |
| BA1020G9      | C | BA2001L-AB.ADA | P | BA3006A44     | C |
| BA1020H-B.ADA | P | BA2001L0M      | C | BA3006A45     | C |
| BA1020H0      | C | BA2001M-AB.ADA | P | BA3006A46     | C |
| BA1020H1      | C | BA2001M0M      | C | BA3006A47     | C |
| BA1020H2      | C | BA2001N-AB.ADA | P | BA3006A48     | C |
| BA1020H3      | C | BA2001N0M      | C | BA3006A49     | C |
| BA1020H4      | C | BA2001O-AB.ADA | P | BA3006A50     | C |
| BA1020H5      | C | BA2001O0M      | C | BA3006A51     | C |
| BA1020H6      | C | BA2001P-AB.ADA | P | BA3006A52     | C |
| BA1020H7      | C | BA2001P0M      | C | BA3006A53     | C |
| BA1020H8      | C | BA2001Q-AB.ADA | P | BA3006A54     | C |
| BA1020H9      | C | BA2001Q0M      | C | BA3006A55     | C |
| BA1020I-B.ADA | P | BA2001Q0M      | C | BA3006A56     | C |
| BA1020I0      | C | BA2001R-AB.ADA | P | BA3006A57     | C |
| BA1020I1      | C | BA2001R0M      | C | BA3006A58     | C |
| BA1020I2      | C | BA2001S-AB.ADA | P | BA3006A59     | C |
| BA1020I3      | C | BA2001S0M      | C | BA3006A60     | C |
| BA1020I4      | C | BA2001T-AB.ADA | P | BA3006A61     | C |
| BA1020I5      | C | BA2001T0M      | C | BA3006A62     | C |
| BA1020I6      | C | BA2001U-AB.ADA | P | BA3006A63     | C |
| BA1020I7      | C | BA2001U0M      | C | BA3006A64     | C |
| BA1020I8      | C | BA2001V-AB.ADA | P | BA3006A65     | C |
| BA1020I9      | C | BA2001V0M      | C | BA3006A66     | C |
| BA1020J-B.ADA | P | BA2001V0M      | C | BA3006A67     | C |
| BA1020J0      | C | BA2001W-AB.ADA | P | BA3006A68     | C |
| BA1020J1      | C | BA2001W0M      | C | BA3006A69     | C |
| BA1020J2      | C | BA2001X-AB.ADA | P | BA3006A70     | C |
| BA1020J3      | C | BA2001X0M      | C | BA3006A71     | C |
| BA1020J4      | C | BA2001Y-AB.ADA | P | BA3006A72     | C |
| BA1020J5      | C | BA2001Y0M      | C | BA3006A73     | C |
| BA1020J6      | C | BA2001Z-AB.ADA | P | BA3006A74     | C |
| BA1020J7      | C | BA2001Z0M      | C | BA3006A75     | C |
| BA1020J8      | C | BA2002A-AB.ADA | P | BA3006A76     | C |
| BA1020J9      | C | BA2002A0M      | C | BA3006A77     | C |
| BA1020K-B.ADA | P | BA2002A0M      | C | BA3006A78     | C |
| BA1020K0      | C | BA2002B-AB.ADA | P | BA3006A79     | C |
| BA1020K1      | C | BA2002B0M      | C | BA3006A80     | C |
| BA1020K2      | C | BA2002C-AB.ADA | P | BA3006A81     | C |
| BA1020K3      | C | BA2002C0M      | C | BA3006A82     | C |
| BA1020K4      | C | BA2002D-AB.ADA | P | BA3006A83     | C |
| BA1020K5      | C | BA2002D0M      | C | BA3006A84     | C |
| BA1020K6      | C | BA2002E-AB.ADA | P | BA3006A85     | C |
| BA1020K7      | C | BA2002E0M      | C | BA3006A86     | C |
| BA1020K8      | C | BA2002F-AB.ADA | P | BA3006A87     | C |
| BA1020K9      | C | BA2002F0M      | C | BA3006A88     | C |
| BA1020L-B.ADA | P | BA2002F0M      | C | BA3006A89     | C |
| BA1020L0      | C | BA2002G-AB.ADA | P | BA3006A90     | C |
| BA1020L1      | C | BA2002G0M      | C | BA3006A91     | C |
| BA1020L2      | C | BA2002H-AB.ADA | P | BA3006A92     | C |
| BA1020L3      | C | BA2002H0M      | C | BA3006A93     | C |
| BA1020L4      | C | BA2002I-AB.ADA | P | BA3006A94     | C |
| BA1020L5      | C | BA2002I0M      | C | BA3006A95     | C |
| BA1020L6      | C | BA2002J-AB.ADA | P | BA3006A96     | C |
| BA1020L7      | C | BA2002J0M      | C | BA3006A97     | C |
| BA1020L8      | C | BA2002K-AB.ADA | P | BA3006A98     | C |
| BA1020L9      | C | BA2002K0M      | C | BA3006A99     | C |
| BA1020M-B.ADA | P | BA2002K0M      | C | BA3006B00     | C |
| BA1020M0      | C | BA2002L-AB.ADA | P | BA3006B01     | C |
| BA1020M1      | C | BA2002L0M      | C | BA3006B02     | C |
| BA1020M2      | C | BA2002M-AB.ADA | P | BA3006B03     | C |
| BA1020M3      | C | BA2002M0M      | C | BA3006B04     | C |
| BA1020M4      | C | BA2002N-AB.ADA | P | BA3006B05     | C |
| BA1020M5      | C | BA2002N0M      | C | BA3006B06     | C |
| BA1020M6      | C | BA2002O-AB.ADA | P | BA3006B07     | C |
| BA1020M7      | C | BA2002O0M      | C | BA3006B08     | C |
| BA1020M8      | C | BA2002P-AB.ADA | P | BA3006B09     | C |
| BA1020M9      | C | BA2002P0M      | C | BA3006B10     | C |
| BA1020N-B.ADA | P | BA2002P0M      | C | BA3006B11     | C |
| BA1020N0      | C | BA2002Q-AB.ADA | P | BA3006B12     | C |
| BA1020N1      | C | BA2002Q0M      | C | BA3006B13     | C |
| BA1020N2      | C | BA2002R-AB.ADA | P | BA3006B14     | C |
| BA1020N3      | C | BA2002R0M      | C | BA3006B15     | C |
| BA1020N4      | C | BA2002S-AB.ADA | P | BA3006B16     | C |
| BA1020N5      | C | BA2002S0M      | C | BA3006B17     | C |
| BA1020N6      | C | BA2002T-AB.ADA | P | BA3006B18     | C |
| BA1020N7      | C | BA2002T0M      | C | BA3006B19     | C |
| BA1020N8      | C | BA2002U-AB.ADA | P | BA3006B20     | C |
| BA1020N9      | C | BA2002U0M      | C | BA3006B21     | C |
| BA1020O-B.ADA | P | BA2002U0M      | C | BA3006B22     | C |
| BA1020O0      | C | BA2002V-AB.ADA | P | BA3006B23     | C |
| BA1020O1      | C | BA2002V0M      | C | BA3006B24     | C |
| BA1020O2      | C | BA2002W-AB.ADA | P | BA3006B25     | C |
| BA1020O3      | C | BA2002W0M      | C | BA3006B26     | C |
| BA1020O4      | C | BA2002X-AB.ADA | P | BA3006B27     | C |
| BA1020O5      | C | BA2002X0M      | C | BA3006B28     | C |
| BA1020O6      | C | BA2002Y-AB.ADA | P | BA3006B29     | C |
| BA1020O7      | C | BA2002Y0M      | C | BA3006B30     | C |
| BA1020O8      | C | BA2002Z-AB.ADA | P | BA3006B31     | C |
| BA1020O9      | C | BA2002Z0M      | C | BA3006B32     | C |
| BA1020P-B.ADA | P | BA2002Z0M      | C | BA3006B33     | C |
| BA1020P0      | C | BA2003A-AB.ADA | P | BA3006B34     | C |
| BA1020P1      | C | BA2003A0M      | C | BA3006B35     | C |
| BA1020P2      | C | BA2003B-AB.ADA | P | BA3006B36     | C |
| BA1020P3      | C | BA2003B0M      | C | BA3006B37     | C |
| BA1020P4      | C | BA2003C-AB.ADA | P | BA3006B38     | C |
| BA1020P5      | C | BA2003C0M      | C | BA3006B39     | C |
| BA1020P6      | C | BA2003D-AB.ADA | P | BA3006B40     | C |
| BA1020P7      | C | BA2003D0M      | C | BA3006B41     | C |
| BA1020P8      | C | BA2003E-AB.ADA | P | BA3006B42     | C |
| BA1020P9      | C | BA2003E0M      | C | BA3006B43     | C |
| BA1020Q-B.ADA | P | BA2003E0M      | C | BA3006B44     | C |
| BA1020Q0      | C | BA2003F-AB.ADA | P | BA3006B45     | C |
| BA1020Q1      | C | BA2003F0M      | C | BA3006B46     | C |
| BA1020Q2      | C | BA2003G-AB.ADA | P | BA3006B47     | C |
| BA1020Q3      | C | BA2003G0M      | C | BA3006B48     | C |
| BA1020Q4      | C | BA2003H-AB.ADA | P | BA3006B49     | C |
| BA1020Q5      | C | BA2003H0M      | C | BA3006B50     | C |
| BA1020Q6      | C | BA2003I-AB.ADA | P | BA3006B51     | C |
| BA1020Q7      | C | BA2003I0M      | C | BA3006B52     | C |
| BA1020Q8      | C | BA2003J-AB.ADA | P | BA3006B53     | C |
| BA1020Q9      | C | BA2003J0M      | C | BA3006B54     | C |
| BA1020R-B.ADA | P | BA2003J0M      | C | BA3006B55     | C |
| BA1020R0      | C | BA2003K-AB.ADA | P | BA3006B56     | C |
| BA1020R1      | C | BA2003K0M      | C | BA3006B57     | C |
| BA1020R2      | C | BA2003L-AB.ADA | P | BA3006B58     | C |
| BA1020R3      | C | BA2003L0M      | C | BA3006B59     | C |
| BA1020R4      | C | BA2003M-AB.ADA | P | BA3006B60     | C |
| BA1020R5      | C | BA2003M0M      | C | BA3006B61     | C |
| BA1020R6      | C | BA2003N-AB.ADA | P | BA3006B62     | C |
| BA1020R7      | C | BA2003N0M      | C | BA3006B63     | C |
| BA1020R8      | C | BA2003O-AB.ADA | P | BA3006B64     | C |
| BA1020R9      | C | BA2003O0M      | C | BA3006B65     | C |
| BA1020S-B.ADA | P | BA2003O0M      | C | BA3006B66     | C |
| BA1020S0      | C | BA2003P-AB.ADA | P | BA3006B67     |   |

## Chapter 10

|                |   |                |   |               |   |
|----------------|---|----------------|---|---------------|---|
| BA1011B-B.ADA  | P | BA1101C0       | C | BA3001F0M     | C |
| BA1011B0M      | C | BA1101C1       | C | BA3001F1      | C |
| BA1011B1       | C | BA1101C2M      | C | BA3001F2      | C |
| BA1011B2       | C | BA1101C3       | C | BA3001F3      | C |
| BA1011B3       | C | BA1101C4       | C | BA3006A-B.ADA | P |
| BA1011B4       | C | BA1101C5       | C | BA3006A0      | C |
| BA1011B5       | C | BA1101D-AB.ADA | P | BA3006A1      | C |
| BA1011B6       | C | BA1101E-B.ADA  | P | BA3006A2      | C |
| BA1011B7       | C | BA1101F-B.ADA  | P | BA3006A3      | C |
| BA1011B8       | C | BA1101G-B.ADA  | P | BA3006A4      | C |
| BA1011C-B.ADA  | P | BA1101H-B.ADA  | P | BA3006A5      | C |
| BA1011C0M      | C | BA1101H0       | C | BA3006A6M     | C |
| BA1011C1       | C | BA1101H1M      | C | BA3006B-B.ADA | P |
| BA1011C2       | C | BA2001A-AB.ADA | P | BA3006B0      | C |
| BA1011C3       | C | BA2001B-AB.ADA | P | BA3006B1      | C |
| BA1011C4       | C | BA2001C-AB.ADA | P | BA3006B2      | C |
| BA1011C5       | C | BA2001D-AB.ADA | P | BA3006B3      | C |
| BA1011C6       | C | BA2001E-AB.ADA | P | BA3006B4M     | C |
| BA1011C7       | C | BA2001E0M      | C | BA3007A-B.ADA | P |
| BA1011C8       | C | BA2001E1       | C | BA3007A0      | C |
| BA1020A-B.ADA  | P | BA2001E2       | C | BA3007A1      | C |
| BA1020A0M      | C | BA2001F-AB.ADA | P | BA3007A2      | C |
| BA1020A1       | C | BA2001F0M      | C | BA3007A3      | C |
| BA1020A2       | C | BA2001F1       | C | BA3007A4      | C |
| BA1020A3       | C | BA2001F2       | C | BA3007A5M     | C |
| BA1020A4       | C | BA2001G-AB.ADA | P | BA3007B-B.ADA | P |
| BA1020A5       | C | BA2001G0M      | C | BA3007B0      | C |
| BA1020A6       | C | BA2001G1       | C | BA3007B1      | C |
| BA1020A7       | C | BA2003B-AB.ADA | P | BA3007B2      | C |
| BA1020A8       | C | BA2003B0M      | C | BA3007B3      | C |
| BA1020B-B.ADA  | P | BA2003B1       | C | BA3007B4      | C |
| BA1020B0       | C | BA2013A-B.ADA  | P | BA3007B5      | C |
| BA1020B1       | C | BA2013B-B.ADA  | P | BA3007B6      | C |
| BA1020B2       | C | BA3001A-AB.ADA | P | BA3007B7      | C |
| BA1020B3       | C | BA3001A0M      | C | BA3007B0M     | C |
| BA1020B4       | C | BA3001A1       | C | BA3008A-B.ADA | P |
| BA1020B5       | C | BA3001A2       | C | BA3008A0      | C |
| BA1020B6M      | C | BA3001A3       | C | BA3008A1      | C |
| BA1020C-B.ADA  | P | BA3001B.ADA    | P | BA3008A2      | C |
| BA1020C0M      | C | BA3001B0M      | C | BA3008A3      | C |
| BA1020C1       | C | BA3001B1       | C | BA3008A4      | C |
| BA1020C2       | C | BA3001C-AB.ADA | P | BA3008A5M     | C |
| BA1020C3       | C | BA3001C0M      | C | BA3008B-B.ADA | P |
| BA1020C4       | C | BA3001C1       | C | BA3008B0      | C |
| BA1020C5       | C | BA3001D-AB.ADA | P | BA3008B1      | C |
| BA1101A-AB.ADA | P | BA3001D0M      | C | BA3008B2      | C |
| BA1101B-B.ADA  | P | BA3001D1       | C | BA3008B3      | C |
| BA1101B0M      | C | BA3001E-AB.ADA | P | BA3008B4      | C |
| BA1101B1       | C | BA3001E0M      | C | BA3008B5      | C |
| BA1101B2       | C | BA3001E1       | C | BA3008B6M     | C |
| BA1101B3       | C | BA3001E2       | C | BA3013A-B.ADA | P |
| BA1101B4       | C | BA3001E3       | C | BA3013A0      | C |
| BA1101C-B.ADA  | P | BA3001F-AB.ADA | P | BA3013A1      | C |

|                |   |                |   |               |     |
|----------------|---|----------------|---|---------------|-----|
| BA3013A2       | C | CA1013A5       | C | CA2008A-B.ADA | P   |
| BA3013A3       | C | CA1013A6M      | C | CA2008A0M     | C   |
| BA3013A4       | C | CA1014A-AB.ADA | P | CA2008A1      | C   |
| BA3013A5       | C | CA1014A0M      | C | CA2008A2      | C   |
| BA3013A6       | C | CA1014A1       | C | CA2009A-B.DEP | P   |
| BA3013A7M      | C | CA1014A2       | C | CA2009B-B.DEP | W   |
| CA1002A-B.ADA  | P | CA1014A3       | C | CA2009C-B.DEP | N/A |
| CA1002A0       | C | CA1022A-B.ADA  | P | CA2009C0M     | C   |
| CA1002A1       | C | CA1022A0       | C | CA2009C1      | C   |
| CA1002A2       | C | CA1022A1       | C | CA2009D-B.DEP | P   |
| CA1002A3M      | C | CA1022A2       | C | CA2009E-B.DEP | W   |
| CA1002A4       | C | CA1022A3       | C | CA2009F-B.DEP | W   |
| CA1002A5       | C | CA1022A4       | C | CA2009F0M     | C   |
| CA1002A6       | C | CA1022A5       | C | CA2009F1      | C   |
| CA1002A7       | C | CA1022A6M      | C | CA3002A-B.ADA | P   |
| CA1002A8       | C | CA1102A-B.ADA  | P | CA3002A0      | C   |
| CA1002A9       | C | CA1102A0       | C | CA3002A1      | C   |
| CA1003A-AB.ADA | P | CA1102A1       | C | CA3002A2M     | C   |
| CA1003B-AB.ADA | W | CA1102A2M      | C | CA3002A3      | C   |
| CA1004A-AB.ADA | P | CA1105A-B.ADA  | P | CA3006C-B.ADA | P   |
| CA1005A-AB.ADA | P | CA1105A0       | C | CA3006C0      | C   |
| CA1006A-AB.ADA | P | CA1105A1M      | C | CA3006C1      | C   |
| CA1007A-AB.ADA | P | CA1105B-B.ADA  | P | CA3006C2      | C   |
| CA1007A0       | C | CA1105B0       | C | CA3006C3      | C   |
| CA1007A1M      | C | CA1105B1       | C | CA3006C4      | C   |
| CA1008A-AB.ADA | P | CA1105B2       | C | CA3006C5M     | C   |
| CA1008A0       | C | CA1105B3M      | C | CA3006D-B.ADA | P   |
| CA1008A1M      | C | CA1105B4       | C | CA3006D0      | C   |
| CA1009A-AB.ADA | P | CA1105B5       | C | CA3006D1      | C   |
| CA1009A0       | C | CA1107A.ADA    | P | CA3006D2      | C   |
| CA1009A1       | C | CA1107A0       | C | CA3006D3M     | C   |
| CA1009A2       | C | CA1107A1M      | C | CA3006E-B.ADA | P   |
| CA1009A3       | C | CA1107A2       | C | CA3006E0      | C   |
| CA1009A4M      | C | CA1108A-B.ADA  | W | CA3006E1      | C   |
| CA1011A-B.ADA  | W | CA1108B-B.ADA  | W | CA3006E2      | C   |
| CA1011A0       | W | CA2001H-B.ADA  | P | CA3006E3      | C   |
| CA1011A1       | W | CA2001H0       | C | CA3006E4      | C   |
| CA1011A2       | W | CA2001H1       | C | CA3006E5      | C   |
| CA1011A3       | W | CA2001H2       | C | CA3006E6M     | C   |
| CA1011A4       | W | CA2001H3M      | C | CA5002A-B.ADA | P   |
| CA1011A5       | W | CA2002A-B.ADA  | P | CA5002B-B.ADA | P   |
| CA1011A6M      | W | CA2002A0M      | C | CA5002B0      | C   |
| CA1012A-B.DEP  | P | CA2002A1       | C | CA5002B1      | C   |
| CA1012A0       | C | CA2002A2       | C | CA5002B2      | C   |
| CA1012A1       | C | CA2003A-AB.ADA | P | CA5002B3      | C   |
| CA1012A2       | C | CA2003A0M      | C | CA5002B4      | C   |
| CA1012A3       | C | CA2003A1       | C | CA5002B5      | C   |
| CA1012A4M      | C | CA2004A-AB.ADA | P | CA5002B6      | C   |
| CA1012B-B.ADA  | P | CA2004A0M      | C | CA5002B7M     | C   |
| CA1012B0       | C | CA2004A1       | C | CA5003A-B.ADA | P   |
| CA1012B2       | C | CA2004A2       | C | CA5003A0      | C   |
| CA1012B4M      | C | CA2004A3       | C | CA5003A1      | C   |
| CA1013A-B.ADA  | P | CA2004A4       | C | CA5003A2      | C   |
| CA1013A0       | C | CA2007A-AB.ADA | P | CA5003A3      | C   |
| CA1013A1       | C | CA2007A0M      | C | CA5003A4      | C   |
| CA1013A2       | C | CA2007A1       | C | CA5003A5      | C   |
| CA1013A3       | C | CA2007A2       | C | CA5003A6M     | C   |
| CA1013A4       | C | CA2007A3       | C | CA5003B-B.ADA | P   |

|                |     |               |     |               |   |
|----------------|-----|---------------|-----|---------------|---|
| CA500300       | C   | LA3004A2      | C   | LA3004B5      | C |
| CA500301       | C   | LA3004A3      | C   | LA3004B6M     | C |
| CA500302       | C   | LA3004A4      | C   | LA5001A-B.ADA | P |
| CA500303       | C   | LA3004A5      | C   | LA5001A0      | C |
| CA500304       | C   | LA3004A6M     | C   | LA5001A1      | C |
| CA500305M      | C   | LA3004B-B.ADA | N/A | LA5001A2      | C |
| CA5004A-B.ADA  | P   | LA3004B0      | C   | LA5001A3      | C |
| CA5004B-B.ADA  | P   | LA3004B1      | C   | LA5001A4      | C |
| LA3004A-AB.ADA | N/A | LA3004B2      | C   | LA5001A5      | C |
| LA3004A0       | C   | LA3004B3      | C   | LA5001A6      | C |
| LA3004A1       | C   | LA3004B4      | C   | LA5001A7M     | C |

## Chapter 11

|                |   |                |   |                |   |
|----------------|---|----------------|---|----------------|---|
| BB2001A-AB.ADA | P | CB1003A-AB.ADA | P | CB4003A-AB.ADA | P |
| BB2002A-AB.ADA | P | CB1004A-AB.ADA | P | CB4004A-B.ADA  | P |
| BB2003A-AB.ADA | P | CB2004A-B.ADA  | P | CB4005A-AB.ADA | P |
| BB2003B-AB.ADA | P | CB2005A-B.ADA  | P | CB4006A-B.ADA  | P |
| BB2003C-AB.ADA | P | CB2006A-AB.ADA | P | CB4008A-AB.ADA | P |
| BB3001A-B.ADA  | P | CB2007A-AB.ADA | P | CB4009A-AB.ADA | P |
| BB3002A-AB.ADA | P | CB3003A-B.ADA  | P | CB5001A-B.ADA  | P |
| BB3005A-AB.ADA | P | CB3004A-AB.ADA | P | CB5001B-B.ADA  | P |
| CB1001A-B.ADA  | P | CB4001A-AB.ADA | P |                |   |
| CB1002A-B.ADA  | P | CB4002A-AB.ADA | P |                |   |

## Chapter 12

|                 |     |                 |   |                 |   |
|-----------------|-----|-----------------|---|-----------------|---|
| BC1001A-B. ADA  | P   | BC3002A-AB. ADA | P | BC32ADA-B. ADA  | P |
| BC1002A-B. ADA  | N/A | BC3002B-AB. ADA | P | BC3301A-AB. ADA | P |
| BC1003A-AB. ADA | P   | BC3002C-AB. ADA | P | BC3301B-AB. ADA | P |
| BC1003B-AB. ADA | P   | BC3002D-AB. ADA | P | BC3302A-AB. ADA | P |
| BC1003C-AB. ADA | P   | BC3002E-AB. ADA | P | BC3302B-AB. ADA | P |
| BC1009A-AB. ADA | P   | BC3003A-AB. ADA | P | BC3303A-AB. ADA | P |
| BC1011A-AB. ADA | P   | BC3003B-AB. ADA | P | BC3304A-AB. ADA | P |
| BC1011B-AB. ADA | P   | BC3005A-AB. ADA | P | BC33ABA-B. ADA  | P |
| BC1012A-AB. ADA | P   | BC3006A-AB. ADA | P | BC33ACA-B. ADA  | P |
| BC1013A-B. ADA  | W   | BC3009A-B. ADA  | P | BC33ADA-B. ADA  | P |
| BC10ABA-B. ADA  | P   | BC3009B-B. ADA  | P | BC33AEA-B. ADA  | P |
| BC10ABB-B. ADA  | P   | BC3009C-B. ADA  | P | BC3401A-AB. ADA | P |
| BC10ACA-B. ADA  | P   | BC3011B-B. ADA  | P | BC3401B-AB. ADA | P |
| BC10ADA-B. ADA  | P   | BC3011C-AB. ADA | P | BC3402A-AB. ADA | P |
| BC10AEA-B. ADA  | P   | BC3013A-AB. ADA | P | BC3402B-AB. ADA | P |
| BC10AEB-B. ADA  | P   | BC3018A-B. ADA  | P | BC3403A-AB. ADA | P |
| BC10AEC-B. ADA  | P   | BC30ABA-B. ADA  | P | BC3403B-AB. ADA | P |
| BC10AED-B. ADA  | P   | BC30ACA-B. ADA  | P | BC3403C-AB. ADA | P |
| BC10AFA-B. ADA  | P   | BC3101A-B. ADA  | P | BC3404A-AB. ADA | P |
| BC10AGA-B. ADA  | P   | BC3101B-B. ADA  | P | BC3404B-B. ADA  | P |
| BC1101A-AB. ADA | P   | BC3102A-B. ADA  | P | BC3404C-AB. ADA | P |
| BC1102A-B. ADA  | P   | BC3102B-B. ADA  | P | BC3404D-AB. ADA | P |
| BC1103A-B. ADA  | P   | BC3103A-AB. ADA | P | BC3404E-AB. ADA | P |
| BC1104A-B. ADA  | P   | BC3103B-AB. ADA | P | BC3404F-AB. ADA | P |
| BC1104B-B. ADA  | P   | BC31ABA-B. ADA  | P | BC3405A-AB. ADA | P |
| BC1106A-AB. ADA | P   | BC31ACA-B. ADA  | P | BC3405B-B. ADA  | W |
| BC1107A-B. ADA  | P   | BC31ADA-B. ADA  | P | BC3405D-AB. ADA | P |
| BC11ABA-B. ADA  | P   | BC3201A-B. ADA  | P | BC3405E-AB. ADA | P |
| BC11ACA-B. ADA  | P   | BC3201B-AB. ADA | P | BC3405F-AB. ADA | P |
| BC1201A-AB. ADA | P   | BC3201C-B. ADA  | P | BC3501A-AB. ADA | P |
| BC1201B-AB. ADA | P   | BC3202A-B. ADA  | P | BC3501B-AB. ADA | P |
| BC1201C-AB. ADA | P   | BC3202B-B. ADA  | P | BC3501C-AB. ADA | P |
| BC1201D-AB. ADA | P   | BC3202C-B. ADA  | P | BC3501D-AB. ADA | P |
| BC1202A-AB. ADA | P   | BC3203B-B. ADA  | P | BC3501E-AB. ADA | P |
| BC1202B-AB. ADA | P   | BC3204A-B. ADA  | W | BC3501F-AB. ADA | P |
| BC1202C-AB. ADA | P   | BC3204B-B. ADA  | W | BC3501G-AB. ADA | P |
| BC1202D-AB. ADA | P   | BC3204C-B. ADA  | W | BC3501H-AB. ADA | P |
| BC1203A-AB. ADA | P   | BC3204C0        | W | BC3501I-AB. ADA | P |
| BC1207A-B. ADA  | P   | BC3204C1        | W | BC3501J-AB. ADA | P |
| BC1226A-B. ADA  | P   | BC3204C2        | W | BC3501K-AB. ADA | P |
| BC12ABA-B. ADA  | P   | BC3204D-B. ADA  | W | BC3502A-AB. ADA | P |
| BC12ACA-B. ADA  | P   | BC3204E-B. ADA  | P | BC3502B-AB. ADA | P |
| BC12ACB-B. ADA  | P   | BC3205A-B. ADA  | W | BC3502C-AB. ADA | P |
| BC1303A-AB. ADA | P   | BC3205B-B. ADA  | W | BC3502D-AB. ADA | P |
| BC1303B-AB. ADA | P   | BC3205C-B. ADA  | W | BC3502E-AB. ADA | P |
| BC1303C-AB. ADA | P   | BC3205D-B. ADA  | W | BC3502F-AB. ADA | P |
| BC1303D-AB. ADA | P   | BC3205D0        | W | BC3502G-AB. ADA | P |
| BC1303E-AB. ADA | P   | BC3205D1M       | W | BC3502H-AB. ADA | P |
| BC1306A-B. ADA  | P   | BC3205D2        | W | BC3502I-AB. ADA | P |
| BC13ABA-B. ADA  | P   | BC3205E-B. ADA  | P | BC3502J-AB. ADA | P |
| BC2001B-AB. ADA | P   | BC3205F-B. ADA  | P | BC3502K-AB. ADA | P |
| BC2001C-AB. ADA | P   | BC3220B-B. ADA  | W | BC3502L-AB. ADA | P |
| BC20ABA-B. ADA  | P   | BC32ABA-B. ADA  | P | BC3502M-AB. ADA | P |

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|----------------|---|----------------|---|----------------|---|
| BC3502N-AB.ADA | P | CC3007A-AB.ADA | P | CC3407D-AB.ADA | P |
| BC3502O-AB.ADA | P | CC3011A-B.ADA  | P | CC3407E-AB.ADA | P |
| BC3503A-B.ADA  | W | CC3011D-B.ADA  | P | CC3407F-AB.ADA | P |
| BC3503B-B.ADA  | P | CC3012A-AB.ADA | P | CC3408A-AB.ADA | P |
| BC3503C-B.ADA  | P | CC3120A-AB.ADA | P | CC3408B-AB.ADA | P |
| BC3503D-B.ADA  | P | CC3120B-B.ADA  | P | CC3408C-AB.ADA | P |
| BC3503F-B.ADA  | P | CC3125A-B.ADA  | P | CC3408D-B.ADA  | P |
| CC1004A-AB.ADA | P | CC3203A-B.ADA  | P | CC3504A-B.ADA  | P |
| CC1010A-AB.ADA | P | CC3208A-AB.ADA | P | CC3504B-B.ADA  | P |
| CC1010B-AB.ADA | P | CC3208B-AB.ADA | P | CC3504C-B.ADA  | P |
| CC1204A-B.ADA  | P | CC3305A-AB.ADA | P | CC3504D-B.ADA  | P |
| CC1220A-B.ADA  | P | CC3305B-AB.ADA | P | CC3504E-B.ADA  | P |
| CC1301A-B.ADA  | P | CC3305C-AB.ADA | P | CC3504F-B.ADA  | P |
| CC1302A-AB.ADA | P | CC3305D-AB.ADA | P | CC3504G-B.ADA  | P |
| CC1304A-AB.ADA | P | CC3406A-AB.ADA | P | CC3504H-B.ADA  | P |
| CC1305B-AB.ADA | P | CC3406B-AB.ADA | P | CC3504I-B.ADA  | P |
| CC1307A-AB.ADA | P | CC3406C-AB.ADA | P | CC3504J-B.ADA  | P |
| CC1308A-AB.ADA | P | CC3406D-B.ADA  | P | CC3504K-B.ADA  | P |
| CC1310A-AB.ADA | P | CC3407A-AB.ADA | P | CC3601C-AB.ADA | P |
| CC2002A-AB.ADA | P | CC3407B-AB.ADA | P | CC3602A-AB.ADA | P |
| CC3004A-B.ADA  | P | CC3407C-AB.ADA | P |                |   |

## Chapter 14

|                |   |                |   |                |   |
|----------------|---|----------------|---|----------------|---|
| AE2101A-B. ADA | P | CE2111D-B. ADA | P | CE3301A-B. ADA | P |
| AE2101B-B. ADA | P | CE2201A-B. ADA | P | CE3301B-B. ADA | P |
| AE2101C-B. DEP | P | CE2201B-B. ADA | P | CE3301C-B. ADA | P |
| AE2101D-B. ADA | P | CE2201C-B. ADA | P | CE3302A-B. ADA | P |
| AE3101A-B. ADA | P | CE2201D-B. DEP | P | CE3303A-B. ADA | P |
| AE3702A-B. ADA | P | CE2201E-B. DEP | P | CE3305A-B. ADA | P |
| AE3709A-B. ADA | P | CE2201F-B. ADA | P | CE3402A-B. ADA | P |
| BE2101E-B. ADA | P | CE2202A-B. ADA | P | CE3402B-B. ADA | P |
| BE2112A-B. ADA | P | CE2204A-B. ADA | P | CE3402C-B. ADA | P |
| BE2112B-B. ADA | P | CE2204B-B. ADA | P | CE3402D-B. ADA | P |
| BE2112C-B. ADA | P | CE2210A-B. ADA | P | CE3402E-B. ADA | P |
| BE2114A-B. ADA | P | CE2401A-B. ADA | P | CE3403A-B. ADA | P |
| BE2208A-B. ADA | P | CE2401B-B. ADA | P | CE3403B-B. ADA | P |
| BE3001A-B. ADA | P | CE2401C-B. ADA | P | CE3403C-B. ADA | P |
| BE3002A-B. ADA | P | CE2401D-B. DEP | P | CE3403D-B. ADA | P |
| BE3002E-B. ADA | P | CE2401E-B. ADA | P | CE3403E-B. ADA | P |
| BE3105A-B. ADA | P | CE2401F-B. ADA | P | CE3403F-B. ADA | P |
| BE3205A-B. ADA | P | CE2402A-B. ADA | P | CE3404A-B. ADA | P |
| BE3501A-B. ADA | P | CE2404A-B. ADA | P | CE3404B-B. ADA | P |
| BE3606C-B. ADA | P | CE2405B-B. ADA | P | CE3404C-B. ADA | P |
| BE3703A-B. ADA | P | CE2406A-B. ADA | P | CE3405A-B. ADA | P |
| BE3802A-B. ADA | P | CE2407A-B. ADA | P | CE3405B-B. ADA | P |
| BE3803A-B. ADA | P | CE2408A-B. ADA | P | CE3405C-B. ADA | P |
| BE3902A-B. ADA | P | CE2409A-B. ADA | P | CE3405D-B. ADA | P |
| BE3903A-B. ADA | P | CE2410A-B. ADA | P | CE3406A-B. ADA | P |
| CE2102A-B. ADA | P | CE3002B-B. TST | P | CE3406B-B. ADA | P |
| CE2102B-B. ADA | P | CE3002C-B. TST | P | CE3406C-B. ADA | P |
| CE2102C-B. TST | P | CE3002D-B. ADA | P | CE3406D-B. ADA | P |
| CE2102D-B. ADA | P | CE3002F-B. ADA | P | CE3407A-B. ADA | P |
| CE2102E-B. ADA | P | CE3102A-B. ADA | P | CE3407B-B. ADA | P |
| CE2102F-B. ADA | P | CE3102B-B. TST | P | CE3407C-B. ADA | P |
| CE2102G-B. ADA | P | CE3103A-B. ADA | P | CE3408A-B. ADA | P |
| CE2103A-B. TST | P | CE3104A-B. ADA | P | CE3408B-B. ADA | P |
| CE2103B-B. TST | P | CE3107A-B. TST | P | CE3408C-B. ADA | P |
| CE2104A-B. ADA | P | CE3108A-B. ADA | P | CE3409A-B. ADA | P |
| CE2104B-B. ADA | P | CE3108B-B. ADA | P | CE3409B-B. ADA | P |
| CE2105A-B. ADA | P | CE3109A-B. ADA | P | CE3409C-B. ADA | P |
| CE2106A-B. ADA | P | CE3110A-B. ADA | P | CE3409D-B. ADA | P |
| CE2107A-B. ADA | P | CE3111A-B. ADA | P | CE3409E-B. ADA | P |
| CE2107B-B. ADA | P | CE3111B-B. ADA | P | CE3409F-B. ADA | P |
| CE2107C-B. ADA | P | CE3111C-B. ADA | P | CE3410A-B. ADA | P |
| CE2107D-B. ADA | P | CE3111D-B. ADA | P | CE3410B-B. ADA | P |
| CE2107E-B. ADA | W | CE3111E-B. ADA | P | CE3410C-B. ADA | P |
| CE2108A-B. ADA | P | CE3112A-B. ADA | P | CE3410D-B. ADA | P |
| CE2108B-B. ADA | P | CE3112B-B. ADA | P | CE3410E-B. ADA | P |
| CE2108C-B. ADA | P | CE3114A-B. ADA | P | CE3410F-B. ADA | P |
| CE2108D-B. ADA | P | CE3114B-B. ADA | P | CE3411A-B. ADA | P |
| CE2109A-B. ADA | P | CE3115A-B. ADA | P | CE3411C-B. ADA | P |
| CE2110A-B. ADA | P | CE3201A-B. ADA | P | CE3412A-B. ADA | P |
| CE2110B-B. ADA | P | CE3202A-B. ADA | P | CE3412C-B. ADA | P |
| CE2111A-B. ADA | P | CE3203A-B. ADA | P | CE3413A-B. ADA | P |
| CE2111B-B. ADA | P | CE3206A-B. ADA | P | CE3413C-B. ADA | P |
| CE2111C-B. ADA | P | CE3208A-B. ADA | P | CE3801A-B. ADA | P |

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|---------------|---|---------------|---|---------------|---|
| CE3602A-B.ADA | P | CE3704N-B.ADA | P | CE3806A-B.ADA | P |
| CE3602B-B.ADA | P | CE3704O-B.ADA | P | CE3806C-B.ADA | P |
| CE3602C-B.ADA | P | CE3706C-B.ADA | P | CE3806D-B.ADA | P |
| CE3602D-B.ADA | P | CE3706D-B.ADA | P | CE3806E-B.ADA | P |
| CE3603A-B.ADA | W | CE3706F-B.ADA | P | CE3809A-B.ADA | P |
| CE3604A-B.ADA | W | CE3706G-B.ADA | P | CE3809B-B.ADA | P |
| CE3605A-B.ADA | P | CE3707A-B.ADA | P | CE3810A-B.ADA | P |
| CE3605B-B.ADA | P | CE3708A-B.ADA | P | CE3901A-B.ADA | P |
| CE3605C-B.ADA | P | CE3801A-B.ADA | P | CE3905A-B.ADA | P |
| CE3605D-B.ADA | P | CE3804A-B.ADA | P | CE3905B-B.ADA | P |
| CE3605E-B.ADA | P | CE3804B-B.ADA | P | CE3905C-B.ADA | P |
| CE3606A-B.ADA | P | CE3804C-B.ADA | P | CE3905L-B.ADA | P |
| CE3606B-B.ADA | P | CE3804D-B.ADA | P | CE3906A-B.ADA | P |
| CE3701A-B.ADA | P | CE3804E-B.ADA | P | CE3906B-B.ADA | P |
| CE3704A-B.ADA | P | CE3804F-B.ADA | P | CE3906C-B.ADA | P |
| CE3704B-B.ADA | P | CE3804G-B.ADA | P | CE3906D-B.ADA | P |
| CE3704C-B.ADA | P | CE3804I-B.ADA | P | CE3906E-B.ADA | P |
| CE3704D-B.ADA | P | CE3804K-B.ADA | P | CE3906F-B.ADA | P |
| CE3704E-B.ADA | P | CE3804M-B.ADA | P | CE3907A-B.ADA | P |
| CE3704F-B.ADA | P | CE3805A-B.ADA | P | CE3908A-B.ADA | P |
| CE3704M-B.ADA | W | CE3805B-B.ADA | P | EE3102C-B.ADA | P |

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