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# APOLLO

## GUIDANCE AND NAVIGATION

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(NASA-CR-154567) DISSIMILAR METALS:  
COMPILED ON CONTACTING INTERFACES BETWEEN  
G AND N PARTS, G AND N AIRBORNE EQUIPMENTS  
(BLOCK 1) (Massachusetts Inst. of Tech.)  
46 p

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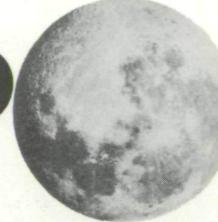
**MIT** INSTRUMENTATION  
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CAMBRIDGE 39, MASSACHUSETTS

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MASSACHUSETTS INSTITUTE OF TECHNOLOGY

# APOLLO



## GUIDANCE AND NAVIGATION

Approved: *Milton B. Trageser* Date: 10/16/64  
MILTON B. TRAGESER, DIRECTOR  
APOLLO GUIDANCE AND NAVIGATION PROGRAM

Approved: *Roger B. Woodbury* Date: 10/15/64  
ROGER B. WOODBURY, DEPUTY DIRECTOR  
INSTRUMENTATION LABORATORY

R-462

Dissimilar Metals; Compilation of  
Contacting Interfaces Between G&N Parts,  
G&N Airborne Equipments (Block I)

by

E. T. Ogrodnik

September 1964

AVAILABLE TO NASA HEADQUARTERS ONLY

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R-462

DISSIMILAR METALS; COMPILED OF  
CONTRACTING INTERFACES BETWEEN G&N PARTS,  
G&N AIRBORNE EQUIPMENTS (BLOCK I)

ABSTRACT

This document describes existing materials interfaces within G&N airborne Block I equipments obtained from a detailed review of MIT/IL assembly drawing releases. Except for mounting hardware, the contacting interfaces within vendor supplied parts, such as motors, transformers, etc., are excluded from this report. This document will, however, provide NASA, associate and participating contractors, and MIT/IL with sufficient information and reference on the compatibility of parts interfaces and finishes usage to qualitatively assess adequacy of protection of equipments against physical degradation within Apollo environments, which could result in the deterioration of electrical, thermal, mechanical, structural or optical properties.

Information on fastening/joining of assemblies has been included.

by E. T. Ogrodnik  
September 1964

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## SECTION 1

### DISSIMILAR METALS; COMPIRATION OF CONTACTING INTERFACES BETWEEN G&N PARTS, G&N AIRBORNE EQUIPMENTS (BLOCK I)

#### 1.1 Objectives

It is the purpose of this document to define existing contacting interfaces between parts within Apollo Guidance and Navigation airborne equipments (Block I). This document serves primarily to provide NASA and other project personnel with information of dissimilar metals coupled in MIT designed equipments, and protective measures taken to assure against equipment degradation by galvanic or electrolytic corrosion. The MIT Testing Group is analyzing the cataloged data for purposes of

- a) uncovering potential problem areas in dissimilar metals couplings;
- b) initiating redesign effort if a corrosion problem area is recognized, or, if a potential improvement was overlooked;
- c) initiating further investigation on what constitutes a dissimilar couple within Apollo environments;

In addition this document may serve to:

- a) act as a reference for assessing scope or magnitude of a corrosion problem in G&N equipment;
- b) emphasize the importance of recognizing the severity of Apollo environments on equipment degradation; and
- c) emphasize the need to direct attention to less obvious but significant potential problem areas.

#### 1.2 Scope

This document lists known parts interfaces that were available from a review of all MIT/IL drawing releases for G&N airborne equipments (Block I) with a revision effective date of January 1964. Except for mounting hardware, contacting interfaces within vendor supplied parts, such as motors, transformers, etc., are excluded since the information is not generally available. All such parts and components will be tested and qualified on a

systems or subsystems level under simulated service and environmental conditions. Results may indicate the desirability of further detailed study.

Information on fastening/joining of assemblies, requested by NAA, have been included in Section 2. Interfaces information is tabulated in Section 3.

### 1.3 General Remarks

All materials for parts listed in the contacting interfaces column in the tables, interface with one another since any one part may contact several other parts. Nonmetallic, as well as metallic, interfaces are listed since the nonmetallics may have a pronounced effect in accelerating corrosion in an adjacent metal. Similarly, plastics or elastomers physically in contact with a material containing plasticizers may experience rapid physical degradation due to migration of plasticizer mutually incompatible to both materials. Hence, inorganic materials have been accounted for as well.

Generally, there is interest primarily in those faying surfaces which interface with the C/M environments. However, parts not interfacing with the C/M environments were also included since the information was readily available and eliminates any conjecture on environmental interfaces by virtue of omission.

The key to headings in Section 3 is as follows:

EQC - Equipment Code

TYP DWG - Typical Drawing

GRPS - Groups (Dissimilar Metals Grouping as defined in MS 33586)

E - Environmental Interface; 0 indicates the couples are not exposed to the C/M environments; 1 indicates the couples are exposed to the C/M environments.

NO - Number; a sequence of numbers corresponding to a specific interface.

The Equipment Code column makes it possible to sort out specific information for any one subequipment. All existing couples combinations within a subequipment are tabulated, so that it is possible for the particular materials couple to be repeated in other subequipments.

The typical drawing column has been included for reference purposes only, to verify the data shown. Other drawings within the subequipments will likely contain similar materials interfaces. The purpose of the report

is to define all contacting interfaces and not necessarily to relate these combinations to every drawing. If it is established that a particular materials couple is objectionable, the materials forming the couple can be sorted from AGARI, and the referenced drawings examined for the existence of the undesirable couple.

The Couples Protection column lists surface treatments or coatings used, the finish or coating being arranged in the column in a manner such that it corresponds with the material in the contacting interfaces column.

The Dissimilar Metals Groups column (GRPS) groups the metal in accordance with MS 33586. The number in the column is not intended to correspond with the material in the Contacting Interfaces column.

To illustrate the practical use of the data in Section 3, suppose the design group requests that a study be made on the compatibility of unfinished beryllium coupled with other materials in the Navigation Base assembly. Referring to the Equipment Code section, it is found that the Navigation Base is in 500 series. Turning to listed interfaces data, the 500 series numbers are first located in the Equipment Code column (EQC). Referring to the Materials Code section it is found that the material codes for beryllium are 679, 678. Turning to the listed data 500 series numbers under the Contacting Interfaces column, the number 679 does not appear and hence is not so referenced on the drawings. The number 678 appears in the five different interfaces combinations within the 500 series subequipments. If the first beryllium interfaces combination is selected, the couple as shown is 678, 649, 649, meaning that all these materials interface with one another. The Materials Code identifies the materials as follows:

678 Beryllium  
649 Corrosion Resisting Steel

In the Couples Protection column only one finish code is shown. Referring to the Materials Finishes Code section, it is found that 60 is a passivation treatment. Since it appears only once, the data says that the 678, 649, 649 materials are finished as follows.

678 - no finish  
649 - no finish  
649 - passivated

The Groups column shows that group 4 (CRES) and group 2 (Be) metals are in intimate contact. Since no special surface treatment or coating has been applied to the beryllium and it is in contact with an unpassivated CRES, this is considered an undesirable couple. The 1 in the E column shows that the couple is exposed to C/M atmospheres. These data were obtained from drawing ND 1899955 (Typical Drawing Column) having an effective revision date of 1 January 1964 (01014 in the date column).

As noted above, if it has been established that a particular materials couple is objectionable, the materials forming the couple can be sorted from AGARI, the referenced drawings examined for the existence of the undesirable couple, and corrective action taken.

## SECTION 2

### FASTENING/JOINING OF ASSEMBLIES, (BLOCK I) EQUIPMENT

#### 2.1 Introduction

Methods and controlling process specifications in 2.2 highlight joining practices within G&N (Block I) equipments. No attempt was made to go into any details on fastening/joining procedures of parts, nor is any information presented on the wide spectrum of usage of nuts and inserts, with and without locking elements, screws, washers, rivets, pins, cable clamps, lacing cord, types of electrical connector connections, etc. If there is interest in a specific area, it can be made the subject of further investigation.

#### 2.2 Standards or Control Specifications

The following documents are used as standards or controlling specifications for the fastening/joining of parts in G&N equipments, from initial design stages through final assembly. Government specifications are used whenever possible. New documents are initiated as the need arises to assure standardization of practices and for maintaining the determined levels of quality and reliability

##### ND Specification

- 1002003 - Wiring Standards and Design Criteria for Apollo Welded Assemblies.
- 1002004 - Process Specification Epoxy Bonding of Metallic and Nonmetallic Materials.
- 1002005 - Apollo Requirements for Process Control and Fabrication of Resistance-welded Electronic Circuits Modules and Assemblies.
- 1002009 - Process for Staking and/or Embedding Electronic Components or Assemblies with Silicone Rubber, Various Methods.
- 1002020 - Process Specification Brazing of the Apollo Navigation Base.
- 1002031 - Descriptions and Requirements for Process for Solderless Wrapped Connections Process.

### ND Specifications (Cont'd)

- 1002071 - Process Specification Soldering of Electrical Connections.
- 1002073 - Process Specification Brazing of Aluminum and Aluminum Alloys.
- 1002121 - Description and Requirements for Process for Installation of Inserts, Threaded, Self Locking.
- 1002136 - Specification for the Assembly of Electrical Wrapost Contacts and Insulators.
- 1002151 - Process Specification - Bonding of Silicon Rubber
- 1002178 - Process Specification Epoxy Bonding of Honeycomb Panels.
- 1002187 - Process Specification Adhesive Bonding of Non-Rubber Parts.
- 1002211 - Process Specification for Preparation of Material Surfaces Prior to and the Application of Anaerobic Single Component Sealing Compound.

### Military

- MIL-W-6858 - Welding, Resistance, Aluminum, Magnesium, and Hardening Steels or Alloys, Nickel Alloys, Heat-Resisting Alloys, and Titanium Alloys, Spot and Seams.
- MIL-S-6872 - Soldering Process, General Specifications For
- MIL-B-7883 - Brazing of Steels, Copper, Copper Alloys, and Nickel Alloys.
- MIL-W-8605 - Welding of Aluminum Alloys, Process for
- MIL-W-8611 - Welding, Metal Arc and Gas, Steels, and Corrosion and Heat Resistant Alloys, Process for
- MIL-F-23362 - Brazing of Aluminum and Aluminum Alloys
- MIL-S-40083 - Sealing and Retaining Compounds, Thread, Single Compound.

### Miscellaneous

- BU-STD-H38 - Screw - Thread Standards for Federal Services.
- OS-11120 - Description and Requirements for Solderless Wrapped, Connections Process.
- MSFC-PROC- 158 - Soldering of Electrical Connections (High Reliability), Procedure for

EQUIPMENT CODE

MATERIALS INTERFACES - SECTION 3

000 TO 099 APOLLO GUIDANCE COMPUTER

    000 LOGIC TRAY A

    010 TO 019 MEMORY TRAY B

        010 TRAY ASSEMBLY

        011 OSCILLATOR MODULE ASSEMBLY DRAWING 1003527

        012 POWER SUPPLY MODULES-ASSEMBLY DRAWINGS 1003113,1003150

        013 ROPE MEMORY MODULE ASSEMBLY

        014 MODULES-ASSEMBLY DRAWINGS 1003069,-132,-152,-154,-165,-167,-178,-184

    020 GUIDANCE AND NAVIGATION HARNESS TRAY ASSEMBLY

    030 COMPUTER END CONNECTOR ASSEMBLY

    040 MAIN PANEL KEYBOARD AND DISPLAY AND NAV DSKY ASSEMBLIES

100 TO 199 COUPLING DISPLAY UNIT

    100 WEDGE LIGHTING ASSEMBLY

    110 GENERAL ASSEMBLY

200 TO 299 DISPLAY AND CONTROLS

    200 CONTROL ASSEMBLY

    210 ELECTRONICS ASSEMBLY

    220 IMU CONTROL PANEL ASSEMBLY AND G+N INDICATOR CONTROL PANEL ASSEMBLY

    230 OPTICS SHROUD AND COVER ASSEMBLIES

    240 SEXTANT HAND CONTROLLER ASSEMBLY

300 TO 399 INERTIAL MEASUREMENT UNIT

    300 INERTIAL MEASUREMENT UNIT

400 TO 499 MAP AND DATA VIEWER

    400 AMPLIFIER AND SWITCH ASSEMBLY

    410 GENERAL ASSEMBLY

500 TO 599 NAVIGATION BASE

    500 NAVIGATION BASE

600 TO 699 OPTICS SUB-SYSTEM

600 TO 609 SCANNING TELESCOPE

600 EYEPIECE AND HOUSING ASSEMBLY  
601 OPTICS BASE MOUNT ASSEMBLY  
602 RESOLVER AND LAMP ASSEMBLY  
603 BASE HARNESS ASSEMBLY  
604 DRIVE GEAR CLUSTER, TRUNNION DRIVE GB, AND SHAFT AXIS DRIVE GB ASSEMBLIES  
605 OUTER TELESCOPE TUBE ASSEMBLY  
606 INNER TELESCOPE TUBE ASSEMBLY  
607 HOUSING AND LAMP ASSEMBLY  
608 TELESCOPE TRUNNION AXIS ASSEMBLY

610 TO 619 SEXTANT

610 EYEPIECE AND HOUSING ASSEMBLY  
611 SHAFT AXIS ASSEMBLY  
612 OPTICAL UNIT SUB-ASSEMBLY

700 TO 799 POWER SERVO ASSEMBLY

700 FRAME ASSEMBLIES

710 TO 719 MODULE ASSEMBLIES

710 MODULE ASSEMBLIES (ALL MODULES)  
711 MODULE ASSEMBLIES (INTERFACES ONLY IN ASSEMBLIES 1007047 AND 1007048)  
712 MODULE ASSEMBLIES (SOLDER AND WELDING JOINTS IN ALL MODULES)

720 PSA END CONNECTOR AND AGE HARNESS

## MATERIALS FINISHES CODE

### 80 TO 99 ENAMEL FINISHES

99 ENAMEL TT-E-527  
98 CHEM. FILM MIL-C-5541,ZINC CHROMATE PRIMER MIL-P-6808,ENAMEL TT-E-527  
97 CHEM. FILM MIL-C-5541,ZINC CHROMATE PRIMER MIL-P-8585,ENAMEL TT-E-527  
96 ZINC CHROMATE PRIMER MIL-P-6808,ENAMEL TT-E-527  
95 ANOD.,ZINC CHROMATE PRIMER MIL-P-8585,SEMI-GLOSS ENAMEL TT-E-529  
94 VINYL WASH MIL-C-15328,ZINC CHROMATE PRIMER MIL-P-8585,ENAMEL TT-E-529  
93 ENAMEL MIL-E-7729,TYPE 1  
92 CHROMATE PRIMER MIL-C-5541,2 COATS ENAMEL MIL-E-15090,TYPE 3,CLASS 2  
91 CHROMATE PRIMER,2 COATS ENAMEL  
90 ANOD.,ZINC CHROMATE PRIMER PRETREATMENT,2 COATS LUSTERLESS ALKYD ENAMEL  
89 ANOD.,EPOXY RESIN ENAMEL SCD 1010729-2  
88 EPOXY RESIN ENAMEL SCD 1010729-2  
87 ZINC CHROMATE PRIMER MIL-P-8585,EPOXY RESIN ENAMEL SCD 1010729-2  
86 ANOD.,ZINC CHROMATE PRIMER MIL-P-8585,ENAMEL FED-STD-595  
85 ENAMEL FED-STD-595

### 70 TO 79 ZINC CHROMATE PRIMER FINISHES

79 ANOD.,ZINC CHROMATE PRIMER MIL-P-8585  
78 CHEM. FILM MIL-C-5541,ZINC CHROMATE PRIMER MIL-P-6808  
77 PASSIVATE,ZINC CHROMATE PRIMER MIL-P-8585  
76 ZINC CHROMATE PRIMER MIL-P-8585

### 60 TO 69 CHEMICAL FINISHES

69 ANODIZE  
68 ANODIZE,CHEMICAL FILM MIL-C-5541  
67 ANODIZE,NICKEL ACETATE SEALER  
66 BLACK OXIDE  
65 BLACK OXIDE MIL-C-13924  
64 BLACKEN MIL-F-495B  
63 BLACKEN MIL-F-495,TYPE 3  
62 BLACKEN MIL-C-13924,CLASS 3  
61 CHEMICAL FILM MIL-C-5541  
60 PASSIVATE

### 50 TO 59 TEFLON COATINGS

59 TEFLON COAT ND 1002067 (.003 TO .005 THICK)  
58 TEFLON COAT (.002 TO .004 THICK)  
57 TEFLON COAT  
56 ANODIZE,TEFLON COAT ND 1002067 (.003 TO .005 THICK)

### 40 TO 49 MISCELLANEOUS COATINGS AND FINISHES

49 CHROMIUM PLATE QQ-C-320,CLASS 2,TYPE 2  
48 COATING WITH REFLECTION REDUCING FILM  
47 COATING  
46 CORROSION PREVENTIVE COMPOUND MIL-C-16173  
45 PROTECTIVE VARNISH MIL-V-173  
44 WAX BASE OIL SOLUBLE DYE

### 30 TO 39 OPTIONAL FINISHES

39 ANODIZE OR BLACK ENAMEL

067 WELD, ND1002003  
066 WELD, ND1002005  
065 UNKNOWN SOLDER MATERIAL  
064 BRAZE ND 1002073

000 TO 059 UNKNOWN MATERIALS

059 MIL-T-27  
058 MIL-S-3950  
057 MIL-S-8805  
056 MIL-C-15305, TYPE L14K  
055 MIL-C-22857  
054 MIL-C-26482  
053 MS 17803-16,-20  
052 MS 20693 (INSERT MATERIAL)  
051 MS 21C44 (INSERT MATERIAL)  
050 MS 33550 (CANCELLED SPECIFICATION)  
049 MS 35457 (CANCELLED SPECIFICATION)  
048 ASTM D1305, TYPE 4  
047 SE14XC01  
046 V16-614046-21X  
045 SCD 1000012  
044 SCD 1000118  
043 SCD 1000126  
042 SCD 1000135  
041 SCD 1000160  
040 SCD 1000179  
039 SCD 1000247  
038 SCD 1001458  
037 SCD 1006736  
036 SCD 1006820  
035 SCD 1010268  
034 SCD 1010269  
033 SCD 1010429  
032 SCD 1010611  
031 SCD 1010624  
030 SCD 1010625  
029 SCD 1011374  
028 SCD 1011375  
027 SCD 1011442  
026 SCD 1011452  
025 SCD 1011562  
024 SCD 1011544  
023 SCD 1011585  
022 SCD 1014651  
021 SCD 1015836  
020 (ELECTRICAL COMPONENT HOUSING)  
019 UNKNOWN

38 ANODIZE OR CHEMICAL FILM MIL-C-5541  
37 NC FINISH OR CORROSION PREVENTIVE COMPOUND MIL-C-16173, GRADE 2 OR 3  
36 NYLON CR VARNISH  
35 WAX BASE OIL SOLUBLE DYE OR IRIDITE WITH CADMIUM UNDERCOAT  
34 PENDING SURFACE TREATMENT

ABBREVIATED DATA HEADINGS

EQC - EQUIPMENT CODE  
GRPS - DISSIMILAR METALS GROUPING PER MS33586, BERYLLIUM IS CLASSIFIED  
AS A GROUP II METAL.  
E - ENVIRONMENTAL INTERFACE

MATERIALS CODE

900 TO 999 ADHESIVES

990 TO 999 EPOXYS

999 MIL-A-9067  
998 ND 1002004  
997 ND 1002151  
996 ND 1002187  
995 SCD 1010657  
994 SCD 1011541  
993 MITCHEL-RAND RANDAC R-406 OX  
992 UNKNOWN

960 TO 979 MISCELLANEOUS

979 MIL-A-1154  
978 MIL-A-3920  
977 MIL-A-5092  
976 MIL-A-13883 (GOODYEAR CPA-923A)  
975 MIL-P-19834  
974 MIL-A-25463  
973 ND 1002150  
972 ND 1002152  
971 SILVER CEMENT OR SOLDER  
970 THERMOSETTING ADHESIVE  
969 UNKNOWN  
968 MIL-A-25457

800 TO 899 ELASTOMERS

890 TO 899 NEOPRENES

899 MIL-R-6825  
898 MIL-R-6855  
897 UNKNOWN NEOPRENE  
896 MIL-R-16855 (CANCELLED SPECIFICATION)

880 TO 889 SILICONES

889 MIL-R-5847  
888 AMS 3303

870 TO 879 MISCELLANEOUS ELASTOMERS

879 MIL-STD-417, TYPE S  
878 MIL-R-3065  
877 MIL-E-18648  
876 MIL-R-21248  
875 MIL-G-22050  
874 MIL-G-22050, PARKER B-318-7  
873 MIL-R-25897  
872 COMP. 77-545  
871 UNKNOWN

700 TO 799 GREASES AND LUBRICANTS

790 TO 799 DRY LUBRICANTS

799 MIL-L-8937  
798 MIL-L-25504  
797 UNKNOWN

780 TO 789 SILICONES

789 ND 1002077  
788 ND 1002077 OR G.E. F-50 SILICONE OIL OR EQUIVALENT  
787 G.E. F-50 SILICONE OIL OR EQUIVALENT  
786 CORNING 7052

770 TO 779 MISCELLANEOUS

779 MIL-G-3278  
778 MIL-L-4343 (D-C 55)  
777 MIL-L-6085  
776 MIL-N-25027  
775 MIL-G-25760  
774 ND 1002090  
773 ND 1002104  
772 UNKNOWN

600 TO 699 METALS

680 TO 699 ALUMINUMS

699 212 AL  
698 220 AL  
697 356 AL  
696 1100 AL  
695 2024 AL  
694 2117 AL  
693 3003 AL  
692 5052 AL  
691 6061 AL  
690 7075 AL  
689 QQ-A-359  
688 QQ-A-411  
687 QQ-A-596  
686 QQ-A-601  
685 MIL-W-7986, COMP. A17S  
684 AMS 4122, DIE CASTING  
683 UNKNOWN ALUMINUM ALLOY

670 TO 679 BERYLLIUM, COPPER, BE-CU ALLOYS

679 BE ND 1002125  
678 BE  
677 BE-CU  
676 BE-CU QQ-C-530  
675 BE-CU QQ-C-533

674 BERYLCO-25  
673 CU QQ-C-504-2  
672 CU QQ-C-576  
671 CU :IL-T-7927  
670 UNKNOWN COPPER ALLOY

660 TO 669 BRASS

669 QQ-B-626,ASTM B16  
668 MIL-B-5697,LAM.SHEET (.002 THICK)  
667 BRASS (UNKNOWN)

650 TC 659 BRONZE

659 QQ-P-330,COMP.A (PHOSPHOR)  
658 QQ-B-750,COMP.A (PHOSPHOR)  
657 MIL-B-5687,SINTERED BRONZE + 4 PER CENT MOLYBDENUM DISULFIDE  
656 ASTM B139,GRADE B-1

640 TO 649 STEELS

649 CORROSION RESISTANT STEELS(ALL)  
648 FED-STD-66  
647 QQ-S-633  
646 MIL-S-8690,8620 STEEL  
645 MIL-S-17919 SPRING STEEL  
644 FS 8630  
643 AMS 5132  
642 SCD 1011177 TOOL STEEL  
641 UNKNOWN CARBON OR ALLOY STEEL

600 TO 639 MISCELLANEOUS METALS

639 CADMIUM PLATE  
638 DUMET  
637 FERRITE CORE,SCD 1006786  
636 GOLD PLATE  
635 GOLD PLATE,24 KARAT  
634 GOLD FLASH (.000030 THK) OVER SILVER PLATE (.0003 THK) OVER BRASS  
633 INDIUM FOIL,ND 1002128  
632 IRON-NICKEL-COBALT ALLOY  
631 KOVAR  
630 MAGNESIUM ALLOY ZK-60A  
629 METALLIC(BRIGHT)FINISH  
628 MO-PERM  
627 MUMETAL  
626 MUSIC WIRE,QQ-W-423  
625 MUSIC WIRE OR CORROSION RESISTANT STEEL  
624 NICKEL PLATE,QQ-N-290  
623 NICKEL PLATE MIL-N-26074  
622 NICKEL PLATE ND 1002198  
621 NICKEL  
620 NICKEL,OPTIONAL GOLD PLATE  
619 NICKEL ALLOY NUMBER 42  
618 NUMBER 52 ALLOY  
617 PLATE,SCD 1010478  
616 SILVER PLATE (ELECTROLESS) ND 1002131  
615 SILVER PLATE(.0003 THICK)OVER BRASS  
614 SILVER PLATE OR GOLD PLATE  
613 SILVER PLATE

612 SOLDER DIP,HOT  
611 SOLDER FINISH,MIL-F-14072,TYPE M222  
610 SQUARE ORTHONOL OR EQUIVALENT.(50 PER CENT NI-FE)  
609 SQUARE PERMALLOY 80 (79 PER CENT NI-FE)  
608 TIN PLATE QQ-B-575  
607 TIN PLATE MIL-T-10727 (ELECTRO-SN PLATE) .0001 +.0001 -.0000 THICK  
606 TIN PLATE OR NICKEL  
605 TIN DIP,HOT (40-70 SN)  
604 TIN PLATE  
603 TUNGSTEN MIL-T-21014,TYPE 2  
602 ZINC PLATE  
601 UNKNOWN WIRE OR METAL  
600 CORROSION RESISTANT STEEL OR UNKNOWN ALUMINUM ALLOY

500 TO 599 OPTICAL MATERIALS

590 TO 599 OPTICAL COATINGS

599 INK TT-I-528  
598 MAGNESIUM FLUORIDE JAN-F-675  
597 JAN-F-675  
596 ALUMINIZED NICKEL(MIL-M-13508 WITH SILICON MONOXIDE OVERCOAT  
595 ALUMINIZE MIL-M-13508 EXCEPT MAGNESIUM FLUORIDE NOT REQUIRED  
594 LUXORB ND 1002091  
593 SILVERED OVERCOAT/INCONEL 300 A THICK OVERCOAT/ENAMEL MIL-E-5557  
592 SILICON MONOXIDE MIL-M-13508  
591 KANIGAN COAT ND 1002109

580 TO 589 OPTICAL GLASSES

589 JAN-G-174  
588 BOROSILICATE CROWN BSC-2  
587 BARIUM CROWN LBC-2  
586 UNKNOWN GLASS

400 TO 499 PLASTICS AND MOLDING MATERIALS

490 TO 499 ACRYLICS

499 MIL-P-80  
498 L-P-391, GRADE 1  
497 L-P-391, TYPE 3, FIN.A PLASTIC METHACRYLATE, SUPERIOR GLAZING  
496 MIL-P-5425, FIN.B  
495 MIL-P-5425, FIN.B OR MIL-P-8184, FIN.B  
494 MIL-P-8184  
493 SCD 1011376 ACRYLATE COATED ACRYLIC SHEET  
492 PLASTIC METHACRYLATE

480 TO 489 PLASTIC LAMINATES

489 MIL-P-997, SILICONE/GLASS, TYPE G7  
488 MIL-P-997, SILICONE/GLASS, TYPE GSG, CLASS H  
487 MIL-P-13949, EPOXY/GLASS, FL-GE 031C  
486 MIL-P-15035, PHENOLIC/COTTON  
485 MIL-P-18177  
484 ND 1002135, EPOXY/GLASS

483 EPOXY/GLASS  
482 XXXP PLASTIC PHENOLIC/PAPER  
481 PHENOLIC/LINEN  
480 FIBERGLASS CLOTH

470 TO 479 POLYAMIDES

479 NYLON MIL-P-17091  
478 MIL-M-20693  
477 NYLON, DUPONT FM10001 OR ZYTEL 101  
476 NYLOCK E9CR0090E OR EQUIVALENT  
475 MIL-F-18240, POLYCAP NYLON  
474 NYLON OR EQUIVALENT  
473 NYLON

460 TO 469 POLYCARBONATES

469 L-P-393  
468 ND 1002134, G.E. LEXAN (WATER CLEAR)  
467 POLYCARBONATE

450 TO 459 POLYVINYLS

459 MIL-F-10400 (CANCELLED SPECIFICATION) PVC MARKER  
458 POLYVINYL CHLORIDE

440 TO 449 FILMS

449 L-F-340

430 TO 439 FLUOROCARBONS

439 TEFLON MIL-P-19468  
438 MONOCHLOROTRIFLUOROETHYLENE  
437 MONOCHLOROTRIFLUOROETHYLENE OR TEFLON  
436 TEFLON  
435 MIL-P-22242, TYPE 1, TEFLON  
434 DUPONT TEFLON FEP, TYPE A OR EQUIVALENT ASTM D2116-62T

410 TO 429 MISCELLANEOUS PLASTICS

429 MIL-M-14F, DIALLYL PHTHALATE/GLASS, NUMBER 52-01  
428 MIL-M-19834, DIALLYL PHTHALATE  
427 L-P-349, CELLULOSE, ACETATE, BUTYRATE  
424 MIL-P-5516, CLASS B  
421 PLASTIC BUSHING  
420 DELRIN (ACETAL RESIN) OR EQUIVALENT  
419 PHENOLIC SLEEVE  
418 POLYESTER WASHER  
417 UNKNOWN PLASTIC

300 TO 399 POTTING AND SEALING MATERIALS

380 TO 399 EPOXYS

399 ND 1002035 (EPOXY SPRAY COAT)  
398 ND 1002036  
397 ND 1002106

396 ND 1002126(STYCAST 2651MM)  
395 ND1002177 (PUTTY)  
394 ND1002183  
393 ND 1002I86  
392 SCD 1010295(MODIFIED EPOXY SPRAY COAT)  
391 SCD 1010633  
390 SCD 1010657  
389 SCD 1010687-1(EPOXY IMPREGNANT)  
388 50 PER CENT INERT FILLED EPOXY  
387 UNKNOWN EPOXY  
386 ND 1002117

370 TO 379 POLYURETHANES

379 MIL-P-26514,TYPE 1  
378 ND 1002002  
377 SCD 1006729

360 TO 369 SILICONES

369 ND 1002009(RTV 882)  
368 ND 1002009(RTV 11)  
367 ND 1002009  
366 ND 1002036 (RTV 60)  
365 SCD 1002068  
364 SCD 1006720  
363 SCD 1006879  
362 SCD 1010700  
361 LTV-602  
360 CORNING 1107

350 TO 359 MISCELLANEOUS POTTING AND SEALING MATERIALS

359 ND 1002166 (DIP COAT)  
358 SCD 1006714  
357 SCD 1006762  
356 SCD 1006800  
355 SCD 1010655 (BLUE GLYPTAL)  
354 UNKNOWN DIP COAT  
353 UNKNOWN STAKING MATERIAL  
352 POLYESTER DIP

340 TO 349 SEALANTS

349 MIL-F-18240 (UNKNOWN)  
348 MIL-S-22473

200 TO 299 TAPES

299 MIL-T-713 POLYESTER FIBER,FIN-SYN.RUBBER,FUNGUS RESISTANT  
298 MIL-T-713,TYPE P,CLASS 2  
297 MIL-T-11291 (ADHESIVE BACKED ALUMINUM)  
296 MIL-I-15126 (INSULATION TAPE)  
295 MIL-I-19166 (INSULATION TAPE)  
294 SCD 1006806 MYLAR TAPE,INSUL.POLYESTER FILM ADHESUVE  
293 SCD 1006826 MYLAR TAPE WITH ADHESIVE COAT  
292 SCD 1006849 CLOTH BASED TAPE WITH THERMOSETTING ADHESIVE  
291 WAXED NYLON

100 TO 199 INSULATION AND SLEEVING

199 QQ-W-343,TYPE S  
198 MIL-I-631, TYPE F (POLYVINYL CHLORIDE)  
197 MIL-I-631,TYPE G (MYLAR)  
196 MIL-I-631,TYPE G,TS,CLASS 1  
195 MIL-W-16878  
194 MIL-I-23053  
193 SCD 1004603  
192 SCD 1006732  
191 IRRADIATED POLYOLEFIN  
190 MODIFIED POLYOLEFIN  
189 IRRADIATED POLYETHYLENE  
188 POLYVINYL CHLORIDE  
187 POLYURETHANE  
186 NYLON JACKET  
185 TEFLON  
184 UNKNOWN INSULATION  
183 SCD 1004605,MYLAR INSULATION

000 TO 099 MISCELLANEOUS

080 TO 099 MISCELLANEOUS MATERIALS

099 BERYLLIUM OXIDE (BEO-99.5 PER CENT)  
098 CERAMIC,MIL-I-10  
097 COIL IMPREGNANT  
096 DECAL (MIL-P-6906)  
095 FISH PAPER,MIL-I-695,TYPE F  
094 GLASS SUBSTRATE  
093 GLASS TUBING  
092 IMPREGNANT FOR SILICONE RUBBER  
091 LENS PAPER,ND 1015404  
090 MICA,HH-I-536  
089 MICA,TYPE NMGS  
088 MOLYBDENUM DISULFIDE,MIL-M-7866  
087 NON-FUNGUS NUTRIENT  
086 PROTECTIVE COAT-1 OZ. STEARIC ACID IN 1 GAL. XYLOL,MIL-S-3950  
085 SILICON DIE  
084 SILVER BRAZED ALUMINA CERAMIC

060 TO 079 SOLDERING,WELDING,AND BRAZING MATERIALS

079 SOLDER-SN10  
078 SOLDER-SN 50  
077 SOLDER-SN60  
076 SOLDER-SN63  
075 SOLDER MSFC-PROC-158  
074 SOLDER MIL-S-6872  
073 SOLDER ND 1002075  
072 FLUX MIL-F-14256,TYPE A  
071 SILVER BRAZE QQ-S-561  
070 SILVER-LITHIUM BRAZE ND 1002021  
069 WELD,MIL-W-8604  
068 WELD,MIL-STD-22A

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I NO
000	1003110	636	479	378			4	0	01014	0001
000	1003110	620	479	378	69			1 0	01014	0002
000	1003110	630	378	293	69			1 0	01014	0003
000	1003110	630	378	020	69			1 0	01014	0004
000	1003110	636	621	378 066			4	0	01014	0005
000	1003174	630	394	378	69			1 0	01014	0006
000	1003110	630	378	185	69			1 0	01014	0007
000	1003110	621	378	185			4	0	01014	0008
000	1003110	630	293	185	69			1 0	01014	0009
000	1003081	621	378	293			4	0	01014	0010
000	1003110	621	293	185			4	0	01014	0011
000	1003081	631	449	378				0	01014	0012
000	1003081	631	621	378			4	0	01014	0013
000	1003081	636	378	020			4	0	01014	0014
000	1003081	636	621	378 066			4	0	01014	0015
000	1003081	496	378	293				0	01014	0016
000	1003081	998	496	378 020				0	01014	0017
000	1003081	621	449	378			4	0	01014	0018
000	1003129	636	479				4	0	01014	0019
000	1003129	630	479					1 0	01014	0020
000	1003115	636	449	378			4	0	01014	0021
000	1003115	449	378	367 020				0	01014	0022
000	1003115	378	183	020				0	01014	0023
000	1003200	298	192					0	01014	0024
000	1003163	675	636	613 364 077			43	0	01014	0025
000	1003163	636	364	199 077			43	0	01014	0026
000	1003163	996	675	485 364			4	0	01014	0027
000	1003163	636	485	364			4	0	01014	0028
000	1003163	613	364	184			4	0	01014	0029
000	1003163	364	199	185			4	0	01014	0030
000	1003136	691	649	649 630 363	76 60	77 69	4	21 1	01014	0031
000	1003126	691	649	621 363	76 60		4	21 1	01014	0032
000	1003187	649	649		60 77		4	1	01014	0033
000	1003136	636	479				4	1	01014	0034
000	1003126	691	479		87		4	1	01014	0035
000	1003187	691	649	649 639	87 60	77	4	21 1	01014	0036
000	1003187	691	649	649 363	76 60		4	21 1	01014	0037
010	1003127	691	691	649 639	79 88	60	4	21 1	01014	0038
010	1003145	691	479		69			21 1	01014	0039
010	1003145	636	479				4	1	01014	0040
010	1003145	691	649		69 60		4	21 0	01014	0041
010	1003177	691	479	364				21 0	01014	0042
010	1003177	636	479	364			4	0	01014	0043
010	1003177	636	364	199 077			43	0	01014	0044
010	1003177	600	364	184			4	0	01014	0045
010	1003177	600	364	185			4	0	01014	0046
010	1003184	691	649		79 60		4	21 1	01014	0047
010	1003177	691	649	621 363	89 60		4	21 1	01014	0048
010	1003177	691	649	649	69 60		4	21 1	01014	0049
010	1003145	697	691	649		69 77	4	21 1	01014	0050
010	1003145	695	691	649	69 69		4	21 1	01014	0051
010	1003145	691	649	630	69 77	69	4	21 1	01014	0052
010	1003177	636	600	364			4	0	01014	0053
010	1003176	636	613	364			4	0	01014	0054
010	1003176	613	364	192			4	0	01014	0055
011	1003528	621	369	185			4	0	01014	0056
011	1003528	636	621	369			4	0	01014	0057
011	1003528	636	479	369			4	0	01014	0058

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I NO		
011	1003528	691	479	369	69		2	0	01014	0059		
011	1003527	691	369	368	69		2	0	01014	0060		
011	1003528	649	485	368	60		4	0	01014	0061		
011	1003528	649	639	485	60		4	2	0	01014	0062	
011	1003528	639	485	368			2	0	01014	0063		
011	1003528	649	639	368	60		4	2	0	01014	0064	
011	1003528	621	368	185			4	0	01014	0065		
011	1003527	998	695	692 377	69	69	21	0	01014	0066		
011	1003527	692	485	377	69		21	0	01014	0067		
011	1003527	695	621	424	69		4	2	0	01014	0068	
011	1003527	692	649	368	69	60	4	21	0	01014	0069	
011	1003527	695	692	649	79	69	4	21	0	01014	0070	
011	1003526	675	368	297			4	0	01014	0071		
011	1003526	998	368	367 020			0		01014	0072		
011	1003526	621	613	368 076			43	0	01014	0073		
011	1003526	485	479	368			0		01014	0074		
011	1003526	636	358	056			4	0	01014	0075		
011	1003526	636	387	368			4	0	01014	0076		
011	1003526	621	368	358			4	0	01014	0077		
011	1003526	621	368	020		45	4	0	01014	0078		
011	1003527	695	649		79	60	4	2	1	01014	0079	
011	1003527	695	649		69	60	4	2	1	01014	0080	
011	1003527	621	424				4	1		01014	0081	
011	1003527	695	424		69		2	1		01014	0082	
011		621	368	067			4	0		01014	0083	
011		621	368	066			4	0		01014	0084	
011		636	621	368 067			4	0		01014	0085	
011		636	621	368 066			4	0		01014	0086	
011		638	621	368 067			4	0		01014	0087	
011		638	621	368 066			4	0		01014	0088	
011		636	601	368 067			4	0		01014	0089	
011		636	601	368 066			4	0		01014	0090	
012	1003124	630	479		69		1	0		01014	0091	
012	1003124	636	479				4	0		01014	0092	
012	1003113	639	636	020 019			4	2	0	01014	0093	
012	1003113	630	363	098 090			4	0		01014	0094	
012	1003113	636	363	090 020			4	0		01014	0095	
012	1003113	621	363	090 020			4	0		01014	0096	
012	1006827	621	421	090			4	0		01014	0097	
012	1003113	449	378	020			0			01014	0098	
012	1003113	630	449	378		69		1	0		01014	0099
012	1003113	649	636	613		60	4	0		01014	0100	
012	1003113	636	630	621 363		69	4	1	0		01014	0101
012	1006791	636	621	084			4	0		01014	0102	
012	1003113	630	621	378 363		69	4	1	0		01014	0103
012	1006791	621	378	084			4	0		01014	0104	
012	1006791	636	378	084			4	0		01014	0105	
012	1003113	630	378	363 090		69		1	0		01014	0106
012	1006827	621	378	363 090			4	0		01014	0107	
012	1006827	421	378	090			0			01014	0108	
012	1003113	601	449	378 185			4	0		01014	0109	
012	1003113	613	378	185			4	0		01014	0110	
012	1003113	479	185				0			01014	0111	
012	1003113	636	378	194			4	0		01014	0112	
012	1003113	636	604	194			43	0		01014	0113	
012	1003113	649	630			60	69	4	1	1	01014	0114
012	1003113	636	378	185			4	0		01014	0115	
012	1003113	630	449	378 367 356		69		1	0		01014	0116

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I	NO		
012	1003113	449	378	367 020		45		0	01014	0117			
012		636	378	077			43	0	01014	0118			
012		636	378	066			4	0	01014	0119			
012		636	601	378 077			43	0	01014	0120			
012		636	601	378 066			4	0	01014	0121			
012		638	636	378 077			43	0	01014	0122			
012		638	636	378 066			4	0	01014	0123			
012		638	601	378 077			43	0	01014	0124			
012		638	601	378 066			4	0	01014	0125			
012		636	631	378 077			43	0	01014	0126			
012		636	631	378 066			4	0	01014	0127			
012		631	601	378 077			43	0	01014	0128			
012		631	601	378 066			4	0	01014	0129			
012		636	604	378 077			43	0	01014	0130			
012		636	604	378 066			4	0	01014	0131			
012		604	601	378 077			43	0	01014	0132			
012		604	601	378 066			4	0	01014	0133			
013	1003135	697	479	378	69			2	0	01014	0134		
013	1003135	636	479	378			4	0	01014	0135			
013	1003133	636	621	378 077			43	0	01014	0136			
013	1003134	998	449	378				0	01014	0137			
013	1003134	636	449	378			4	0	01014	0138			
013	1003133	998	697	449	69			2	0	01014	0139		
013	1006773	649	628				4	0	01014	0140			
013	1006773	628	419				4	0	01014	0141			
013	1003133	998	697	419	69			2	0	01014	0142		
013	1003133	697	378	193				2	0	01014	0143		
013	1003133	998	495	449				0	01014	0144			
013	1003133	697	394	378	69			2	0	01014	0145		
013	1003133	998	495	449 020				0	01014	0146			
013	1003133	670	187				4	0	01014	0147			
013	1003133	187	186					0	01014	0148			
013	1003133	670	636	378 077			43	0	01014	0149			
013	1003133	670	449	378			4	0	01014	0150			
013	1003133	621	449	378			4	0	01014	0151			
013	1003133	697	649		69			4	2	1	01014	0152	
013	1003133	697	692	639 602	69	69		4	21	1	01014	0153	
013	1003133	697	479		69			2	0	01014	0154		
013	1003133	636	479				4	0	01014	0155			
013	1003133	697	649	602	69			4	2	0	01014	0156	
013	1003133	697	602	479				2	0	01014	0157		
014	1003130	621	378	294			4	0	01014	0158			
014	1003131	495	449	367 020				0	01014	0159			
014	1003131	621	378	185				0	01014	0160			
014	1003131	636	378	185			4	0	01014	0161			
014	1003131	495	378	020				0	01014	0162			
014	1003132	630	449	294	69			1	0	01014	0163		
014	1003132	495	449	378 292				0	01014	0164			
014	1003132	630	363		69			1	1	01014	0165		
014	1003132	630	378	363	69			1	1	01014	0166		
014	1003132	649	630		60	69		4	1	0	01014	0167	
014	1003132	630	602		69			21	1	01014	0168		
014	1003132	630	602	292				21	1	01014	0169		
014	1003128	630	479		69			1	0	01014	0170		
014	1003128	636	479				4	0	01014	0171			
014	1003132	630	394	378	69			1	0	01014	0172		
014	1003132	630	378		69			1	1	01014	0173		
014	1003167	998	630	494 378	69			1	0	01014	0174		

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I NO		
014	1003178	63C	387	378 363	69		1	0	01014	0175		
014	1003147	378	367	357 020			0		01014	0176		
014	1003152	630	429	396 367	69		1	0	01014	0177		
014	1004107	636	429	396			4	0	01014	0178		
014	1004108	636	396	186			4	0	01014	0179		
014	1006773	649	628				4	0	01014	0180		
014	1006773	628	419				4	0	01014	0181		
014	1003084	419	396	186			0		01014	0182		
014	1003084	429	419	396			0		01014	0183		
014	1003101	798	649	630 602	60		4	21	0	01014	0184	
014	1003068	630	602	485	79		21	0	01014	0185		
014	1003068	670	637	378			43	0	01014	0186		
014	1003070	620	494	378			4	0	01014	0187		
014	1003069	494	485	378 294			0		01014	0188		
014	1003140	630	387	378 367	69		1	0	01014	0189		
014		621	378	066			4	0	01014	0190		
014		636	621	378 066			4	0	01014	0191		
014		638	621	378 066			4	0	01014	0192		
014		631	621	378 066			4	0	01014	0193		
020	1003197	691	649	649	79	60	77	4	21	1	01014	0194
020	1003155	692	649		69	60		4	21	1	01014	0195
020	1010641	690	621	428	69			4	2	1	01014	0196
020	1010641	798	649	621 428		60		4	1		01014	0197
020	1010641	876	649	621			4	1		01014	0198	
020	1003196	636	473				4	1		01014	0199	
020	1003196	691	473		69			21	1		01014	0200
020	1003197	692	691	649 649	69	89	60 77	4	21	1	01014	0201
020	1003197	692	649	639	69	60		4	21	1	01014	0202
020	1003197	692	691	649 639	69	89	77	4	21	1	01014	0203
020	1003199	636	428				4	1		01014	0204	
020	1003197	776	691	649 649 428 051	69	60		4	21	1	01014	0205
020	1003197	691	649	477	69	60		4	21	1	01014	0206
020	1003197	649	479	476	60			4	1		01014	0207
020	1003197	776	649	649 479 051	60			4	1		01014	0208
020	1003199	477	198					1			01014	0209
020	1003199	608	198	191				1			01014	0210
020	1002105	604	191					1			01014	0211
020	1003199	639	608	198 191	35			4	2	0	01014	0212
020	1003199	608	198	191 190 076 072			43	0			01014	0213
020	1003199	298	198					1			01014	0214
020	1003199	636	604	191 076 072			43	1			01014	0215
020	1003199	969	459	198				1			01014	0216
030	1003186	649	046		60			4	1		01014	0217
030	1003186	691	649	046	49	60		4	21	1	01014	0218
030	1003186	691	649	021	69			4	21	1	01014	0219
030	1003181	636	479					21	1		01014	0220
030	1003181	691	479		69			21	1		01014	0221
030	1003189	998	691	485 378	69			21	0		01014	0222
030	1003189	636	485	378			4	0			01014	0223
030	1003189	636	601	378			4	0			01014	0224
040	1003540	697	692	649	69	69	60	4	21	1	01014	0225
040	1003540	691	649	639	79	60		4	21	1	01014	0226
040	1003540	697	621	037	69			4	21	1	01014	0227
040	1003540	636	601	075				43	1		01014	0228
040	1003540	697	036		69			2	1		01014	0229
040	1006820	683	058					2	1		01014	0230
040	1006820	604	086					3	1		01014	0231
040	1003540	604	601	075				43	1		01014	0232

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I NO	
040	1003540	601	198				4	1	01014	0233	
040	1003543	973	898	691	69		21	1	01014	0234	
040	1003540	998	898	449			1		01014	0235	
040	1006814	482	094				1		01014	0236	
040	1006814	604	482				3	1	01014	0237	
040	1003543	998	898	691 683	69		21	1	01014	0238	
040	1003540	697	691	649	69	69	4	21	1	01014	0239
040	1003540	613	604	086 075	60		43	1	01014	0240	
040	1004600	649	469		60		4	1	01014	0241	
040	1003549	649	057		60		4	1	01014	0242	
040	1003549	692	057		69		21	1	01014	0243	
040	1003549	636	621	398 066			4	0	01014	0244	
040	1003549	636	398	057			4	0	01014	0245	
040	1003549	692	185		69		21	1	01014	0246	
040	1006784	636	185				4	1	01014	0247	
040	1003549	613	398	185			4	0	01014	0248	
040	1003549	636	613	398 075			43	0	01014	0249	
040	1003549	636	613	075			43	1	01014	0250	
040	1003549	621	398	185			4	0	01014	0251	
040	1003549	636	495	398 020			4	0	01014	0252	
040	1003549	621	495	398 020			4	0	01014	0253	
040	1003536	630	479		69		1	1	01014	0254	
040	1003536	636	479				4	1	01014	0255	
040	1003530	649	630	363	60	69	4	1	01014	0256	
040	1003530	621	378	294			0		01014	0257	
040	1003530	495	378	294			0		01014	0258	
040	1003530	998	449	378 020			0		01014	0259	
040	1003530	621	378	185			0		01014	0260	
040	1003530	636	449	378			4	0	01014	0261	
040	1003530	621	449	378			4	0	01014	0262	
040	1003530	636	621	378 067			4	0	01014	0263	
040	1003530	630	449	378	69		1	1	01014	0264	
040	1004577	697	643				4	2	1	01014	0265
040	1003541	691	479		69		21	1	01014	0266	
040	1003450	998	691	485		69	21	0	01014	0267	
040	1003450	378	185	601			4	0	01014	0268	
040	1003450	636	601	378 066			4	0	01014	0269	
040	1003541	691	479	378	69		21	0	01014	0270	
040	1003450	636	485	378			4	0	01014	0271	
040	1003532	697	601	449 378 185			4	2	0	01014	0272
040	1003532	649	625		60		4	1	01014	0273	
040	1003532	697	649	378 020	60		4	2	0	01014	0274
040	1003532	621	378	020			4	0	01014	0275	
040	1003532	621	601	378 066			4	0	01014	0276	
040	1003532	636	601	378 066			4	0	01014	0277	
040	1003532	636	378	020			4	0	01014	0278	
040	1003532	697	691	649		69	21	1	01014	0279	
040	1003532	998	697	378 020			2	0	01014	0280	
040	1003532	697	185	090			2	0	01014	0281	
040	1003532	185	090	020			0		01014	0282	
040	1003532	649	090	020	60		4	0	01014	0283	
040	1003532	649	639	020	60		4	2	0	01014	0284
040	1003532	649	639	378	60		4	2	0	01014	0285
040	1003532	649	378	090	60		4	0	01014	0286	
040	1003532	697	378	090			2	0	01014	0287	
040	1003532	639	378	020			2	0	01014	0288	
040	1003532	636	601	378 075			43	0	01014	0289	
040	1004569	697	697	643	69		4	2	1	01014	0290

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I NO	
040	1004569	697	697	649	649	69	60	4	2	1	01014 0291
040	1003098	697	691	049		69		2	1		01014 0292
040	1003098	691	639	049				21	1		01014 0293
040	1003542	998	973	899	691 683		69	21	1		01014 0294
040	1003542	613	604	075				43	1		01014 0295
040	1006737	613	185					4	1		01014 0296
040	1003547	636	621	055				4	1		01014 0297
040	1004585	697	479	378				2	0		01014 0298
040	1003546	697	378	185				2	1		01014 0299
040	1004585	697	479					2	1		01014 0300
040	1003546	458	436					1			01014 0301
040	1003546	604	436			35		4	1		01014 0302
040	1003540	478	458					.	1		01014 0303
040	1010347	636	621	428				4	1		01014 0304
040	1010347	798	690	649	621 428		69 60	4	2	1	01014 0305
040	1003533	690	649	621	428 378		69 60	4	2	1	01014 0306
040	1003534	973	899	697			69	2	1		01014 0307
040	1003098	495	399	378				0			01014 0308
040	1003098	697	399					2	0		01014 0309
040	1003098	691	399			69		21	0		01014 0310
040	1003098	495	436	399 378				0			01014 0311
040	1003098	378	294	293				0			01014 0312
040	1003098	613	438	378				4	0		01014 0313
040	1003098	449	438	378				0			01014 0314
040	1003098	636	613	378 075				43	0		01014 0315
040	1003098	636	621	378 075				43	0		01014 0316
040	1006825	649	055			60		4	1		01014 0317
040	1003524	697	697	649 630		69	79 60	4	21	1	01014 0318
040	1003524	973	899	697 649			69 60	4	2	1	01014 0319
040	1003524	692	649	621 020		69	60	4	21	1	01014 0320
040	1004547	692	399			69		21	1		01014 0321
100	1015666	889	678	599 598	588 387			2	1		01014 0322
100	1015666	992	649	599 598	588 387	60		4	1		01014 0323
100	1015666	387	361	019				0			01014 0324
100	1015666	601	387	189				4	1		01014 0325
100	1015666	387	189	185				1			01014 0326
100	1015666	636	601	077				43	1		01014 0327
100	1015666	636	621					4	1		01014 0328
100	1015500	889	678	649 348			60	4	2	1	01014 0329
110	1015500	691	649	348		69	60	4	21	1	01014 0330
110	1015500	683	624					4	2	1	01014 0331
110	1015500	787	678	649				1			01014 0332
110	1010347	690	648			69		32	1		01014 0333
110	1010347	624	428					4	1		01014 0334
110	1010347	636	428					4	1		01014 0335
110	1016897	636	601	077 072				43	1		01014 0336
110	1016897	291	195					1			01014 0337
110	1015559	636	607	601 077				43	1		01014 0338
110	1015559	992	647	189				3	1		01014 0339
110	1015559	992	647	486 387				3	1		01014 0340
110	1015559	992	607	486				3	1		01014 0341
110	1015559	992	647	387 097 091 048				3	0		01014 0342
110	1010464	636	623					4	1		01014 0343
110	1015500	691	678	649		69	60	4	21	1	01014 0344
110	1015500	649	480	092				4	1		01014 0345
110	1015500	649	480	092		60		4	1		01014 0346
110	1015500	678	480	092				2	1		01014 0347
110	1015500	975	692	683		69		21	1		01014 0348

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I NO		
110	1010435	649	387		60		4	1	01014	0349		
110	1010435	604	387				3	1	01014	0350		
110	1016895	998	485	020				1	01014	0351		
110	1010360	601	020				4	1	01014	0352		
110	1010360	620	020				4	1	01014	0353		
110	1015500	695	649	485	61	60	4	21	1	01014	0354	
110	1015500	695	678	649	61	60	4	21	1	01014	0355	
110	1015500	695	678	649	56	60	4	21	1	01014	0356	
110	1015500	689	649	479	38	60	4	2	1	01014	0357	
110	1015500	649	479	485	392		4	1	01014	0358		
110	1016894	634	485	392			4	1	01014	0359		
110	1016894	620	392	185			4	1	01014	0360		
110	1016894	638	392	185			4	1	01014	0361		
110	1016894	636	392	185			4	1	01014	0362		
110	1016894	634	620	392	079	072	43	1	01014	0363		
110	1016894	638	634	392	079	072	43	1	01014	0364		
110	1016894	636	634	392	079	072	43	1	01014	0365		
110	1015500	691	678	649	61	60	4	21	1	01014	0366	
110	1017537	688	649		60		4	2	1	01014	0367	
110	1015682	676	649	473	60		4	2	1	01014	0368	
110	1015665	678	649		96	60	4	2	1	01014	0369	
110	1017537	692	688	678	98	96	4	21	1	01014	0370	
110	1016885	683	649				4	2	1	01014	0371	
200	1007115	636	428	391	362		4	0	01014	0372		
200	1007115	636	601	391	362	066	4	0	01014	0373		
200	1007115	391	362	195	185		4	0	01014	0374		
200	1015003	695	692	649	61	61	60	4	21	1	01014	0375
200	1015003	692	649		61		4	21	1	01014	0376	
200	1014626	690	428		69		2	1	01014	0377		
200	1014626	670	636	077	072		43	1	01014	0378		
200	1014626	670	191				4	1	01014	0379		
200	1014626	299	191				1		01014	0380		
200	1014626	612	191				3	1	01014	0381		
200	1015003	692	649	428	61	60	4	21	1	01014	0382	
200	1015003	649	621	479	60		4	1	01014	0383		
200	1015003	695	649	479	61	60	4	2	1	01014	0384	
200	1015003	479	191				1		01014	0385		
200	1015003	695	649	606	61	60	432	1	01014	0386		
200	1015003	695	649	473	059		4	2	1	01014	0387	
200	1015003	695	695	649	61	69	60	4	2	1	01014	0388
200	1007115	695	649	391	362		4	2	0	01014	0389	
200	1007115	998	485	391	362	019	69		0	01014	0390	
200	1007115	621	391	362	020		4	0	0	01014	0391	
200	1007115	998	695	391	362	020	69		2	0	01014	0392
200	1007115	636	391	362	020		4	0	0	01014	0393	
200	1007115	621	391	362	185		4	0	0	01014	0394	
200	1007115	636	621	391	362	066	4	0	0	01014	0395	
200	1007115	636	485	391	362		4	0	0	01014	0396	
200	1007115	621	485	391	362		4	0	0	01014	0397	
200	1007115	695	428		69		2	1	0	01014	0398	
200	1007115	695	428	391	362		69		2	0	01014	0399
200	1010676	606	428					43	1	0	01014	0400
200	1010676	695	649		61	60	4	2	1	0	01014	0401
210	1007065	695	649		79	60	4	2	1	0	01014	0402
210	1007065	636	428				4	0	0	0	01014	0403
210	1007065	695	649	428	79	60	4	2	0	0	01014	0404
210	1007065	695	428		69		2	0	0	0	01014	0405
210	1007065	613	601	378	077		43	0	0	0	01014	0406

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I NO			
210	1007065	998	695	378 185	69		2	0	01014	0407			
210	1007065	613	378	185			4	0	01014	0408			
210	1007065	601	378	185			4	0	C1014	0409			
210	1007065	636	428	378			4	0	01014	0410			
210	1007065	690	428	378	69		2	0	01014	0411			
210	1007065	690	428		69		2	0	01014	0412			
210	1007065	695	428		69		2	0	01014	0413			
210	1007065	695	378	059	69		2	0	01014	0414			
210	1007065	695	378	185	69		2	0	01014	0415			
210	1007065	611	378	185			3	0	01014	0416			
210	1007065	695	185				2	0	01014	0417			
210	1007065	611	185				3	0	01014	0418			
210	1007065	613	611	378 077			43	0	01014	0419			
210	1007065	671	649	378	60		4	0	01014	0420			
210	1007065	613	378	077 059			43	0	01014	0421			
210	1007034	798	695	649 649	69	60	77	4	2	1	01014	0422	
210	1007034	998	484	468 391	362				0		01014	0423	
210	1007034	998	484	391 362	020				0		01014	0424	
210	1007034	998	468	428					0		01014	0425	
210	1007034	695	649	468	67	60		4	2	0	01014	0426	
210	1007034	621	391	362 185			4		0		01014	0427	
210	1007034	636	391	362 185			4		0		01014	0428	
210	1007034	636	621	391 362	066		4		0		01014	0429	
210	1007035	636	621	066			4		0		01014	0430	
210	1007033	638	636	391 362			4		0		01014	0431	
210	1007033	638	621	391 362			4		0		01014	0432	
210	1007036	798	695	687 649	69	69	60	77	4	2	1	01014	0433
210	1007036	998	687	485 391	362	69			2	0		01014	0434
210	1007036	998	687	428 391	362	69			2	0		01014	0435
210	1007036	687	428		69				2	0		01014	0436
220	1014581	974	695	692 386		98	98		21	1		01014	0437
220	1010435	649	612	387	60			4	1		01014	0438	
220	1014591	692	649	032	69	60		4	21	1	01014	0439	
220	1014591	692	649	649	69	60		4	21	1	01014	0440	
220	1014578	798	695	692 649		78	69	60	4	21	1	01014	0441
220	1014578	649	621	479	60			4	1		01014	0442	
220	1014578	692	649	479	69	60		4	21	1	01014	0443	
220	1014578	695	032		69			2	1		01014	0444	
220	1014643	695	649	649	69	60		4	2	1	01014	0445	
220	1014643	995	649		60			4	1		01014	0446	
220	1014643	695	649	348	69	60		4	2	1	01014	0447	
220	1014643	695	656	649	69	60		4	2	1	01014	0448	
220	1014578	695	649	479	78	60		4	2	1	01014	0449	
220	1014578	695	420		97			2	1		01014	0450	
220	1014578	695	031	022	98	93		2	1		01014	0451	
220	1014586	798	695	691 649		98	98		4	2	1	01014	0452
220	1014586	649	428		60			4	1		01014	0453	
220	1010347	636	428					4	1		01014	0454	
220	1010347	649	428		60			43	1		01014	0455	
220	1010347	798	690	649 621	428	69	60		4	2	1	01014	0456
220	1014580	617	604	077 072				43	1		01014	0457	
220	1014580	605	604	077 072				3	1		01014	0458	
220	1014580	191	076	072				3	1		01014	0459	
220	1010464	636	621					4	1		01014	0460	
220	1014580	604	191					3	1		01014	0461	
220	1014580	298	189						1		01014	0462	
220	1014580	479	189						1		01014	0463	
220	1014578	695	649	059	78	60		4	2	1	01014	0464	

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I NO		
220	1010478	649	601		60		4	1	01014	0465		
220	1010478	683	649		69	60	4	2	1	01014	0466	
220	1010478	667	649	480		60	4	1	01014	0467		
220	1010478	677	649			60	4	1	01014	0468		
220	1010489	683	649				4	2	1	01014	0469	
220	1014578	695	649		61		4	2	1	01014	0470	
220	1014578	798	695	649 059		61	60	4	2	1	01014	0471
220	1010627	649	019				4	1	01014	0472		
220	1010627	605	019				3	1	01014	0473		
220	1010417	695	621	600	78		4	2	1	01014	0474	
220	1010494	695	019		78		2	1	01014	0475		
220	1014585	695	649		69	60	4	2	1	01014	0476	
220	1010494	695	019		69		2	1	01014	0477		
220	1014578	889	695	692 499		97	97	21	1	01014	0478	
220	1014578	695	695	499	61	98		2	1	01014	0479	
220	1014578	798	695	695 649		61	98	4	2	1	01014	0480
220	1010625	683	649	019	69	60	4	2	1	01014	0481	
220	1010625	427	019				1		01014	0482		
220	1010625	604	019				4	1	01014	0483		
220	1010625	485	019				1		01014	0484		
220	1014578	692	030		61		21	1	01014	0485		
220	1014578	035	030				1		01014	0486		
220	1014578	975	695		78		2	1	01014	0487		
220	1014578	798	695	683 649		78	98	4	2	1	01014	0488
220	1014527	695	683	649 050	98	85	60	4	2	1	01014	0489
230	1014504	997	974	692 692 395		98	98	21	1	01014	0490	
230	1014504	997	889	692		98		21	1	01014	0491	
230	1014504	692	068		98		21	1	01014	0492		
230	1011631	889	678				2	1	01014	0493		
230	1014504	692	692		98	78	21	1	01014	0494		
230	1014504	692	649		98	60	4	21	1	01014	0495	
230	1014504	695	692		98	98	21	1	01014	0496		
230	1014502	975	692		98		21	1	01014	0497		
240	1014559	695	649		68	60	4	2	1	01014	0498	
240	1014558	695	657		68		4	2	1	01014	0499	
240	1014558	689	649	348 033		38	60	4	2	1	01014	0500
240	1014558	695	649	348		69	60	4	2	1	01014	0501
240	1014509	649	088			60		4	1	01014	0502	
240	1014562	695	649			69		4	2	1	01014	0503
240	1014558	657	649	621		60		4	1	01014	0504	
240	1014558	601	355	185			4	1	01014	0505		
240	1014564	485	353	047			1		01014	0506		
240	1014558	649	485		68	60	4	2	1	01014	0507	
240	1014558	604	079	072 047			3	1	01014	0508		
240	1014558	968	889	695		69		2	1	01014	0509	
240	1014558	968	889	649		60		4	1	01014	0510	
240	1010676	606	428				43	1	01014	0511		
240	1010676	601	428				4	1	01014	0512		
240	1014514	649	606	485	60		43	1	01014	0513		
240	1010435	649	612	387			4	1	01014	0514		
240	1014558	695	649	480	61	60	4	2	1	01014	0515	
240	1014558	999	485	020			1		01014	0516		
240	1014559	649	621	479	60		4	1	01014	0517		
240	1014558	695	649	479	68	60	4	2	1	01014	0518	
240	1014558	479	185				1		01014	0519		
240	1014558	191	189	185			1		01014	0520		
240	1014558	604	077	C72 047			3	1	01014	0521		
240	1014558	621	604	077 072			43	1	01014	0522		

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I NO
240	1014558	604	601	077 072			43	1	01014	0523
240	1014558	298	185	020				1	01014	0524
240	1014558	695	691	649	69	98 60	4	21 1	01014	0525
300	1000074	691	649		60		4	21 0	01014	0526
300	1000074	691	649				4	21 0	01014	0527
300	1000074	798	691	602				21 0	01014	0528
300	1000074	691	612					2 0	01014	0529
300	1000074	696	691					21 0	01014	0530
300	1007022	636	665					0	01014	0531
300	1007022	998	483					0	01014	0532
300	1007022	695	649	67 60			4	2 0	01014	0533
300	1007022	695	359	67				0	01014	0534
300	1000085	691	649	641	60	37	4321	1	01014	0535
300	1000085	691	649		60		4	21 1	01014	0536
300	1000085	691	649		69	60	4	21 1	01014	0537
300	1000085	798	691	649	69	60	4	21 1	01014	0538
300	1000085	691	649	602			4	21 1	01014	0539
300	1000205	636	436	428			4	0	01014	0540
300	1000205	649	636	428			4	0	01014	0541
300	1000205	678	602	019				2 0	01014	0542
300	1000205	632	467				3	0	01014	0543
300	1000205	636	621				4	0	01014	0544
300	1000205	636	467				4	0	01014	0545
300	1000205	777	649	087	60		4	0	01014	0546
300	1000205	693	602		69			0	01014	0547
300	1000205	678	639		66			2 0	01014	0548
300	1000205	678	602	473				2 0	01014	0549
300	1000205	693	691	602	69	38		21 0	01014	0550
300	1000205	691	678	602 473	69			2 0	01014	0551
300	1000205	678	649	473		60	4	2 0	01014	0552
300	1000205	693	691		69	69		21 0	01014	0553
300	1000205	693	678	473				2 0	01014	0554
300	1000205	693	602	473				2 0	01014	0555
300	1000205	693	602	473				2 0	01014	0556
300	1000205	641	602	473				2 0	01014	0557
300	1000205	691	602	473	69			21 0	01014	0558
300	1000205	693	473	436	69			2 0	01014	0559
300	1007004	693	467		69			2 0	01014	0560
300	1007004	678	649			60	4	2 0	01014	0561
300	1007004	691	467		69			21 0	01014	0562
300	1007004	691	602	473	69			21 0	01014	0563
300	1007004	691	678		69			21 0	01014	0564
300	1007004	649	467		69		4	0	01014	0565
300	1007004	467	397					0	01014	0566
300	1000161	777	678	649 087		60	4	2 0	01014	0567
300	1000161	691	602	473	69			21 0	01014	0568
300	1000161	678	473					2 0	01014	0569
300	1000161	691	602		69			21 0	01014	0570
300	1000161	678	649			60	4	2 0	01014	0571
300	1000161	678	667		57		4	2 0	01014	0572
300	1000161	667	607		57		43	0	01014	0573
300	1000161	976	678	649		60	4	2 0	01014	0574
300	1000161	621	436				4	0	01014	0575
300	1007005	483	467					0	01014	0576
300	1000156	693	649		69		4	2 0	01014	0577
300	1000156	977	879	693		69		2 0	01014	0578
300	1007013	636	483				4	0	01014	0579
300	1007013	692	098					21 0	01014	0580

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I	NO	
300	1007013	649	393		60		4	0	01014	0581		
300	1007013	649	393	090	60		4	0	01014	0582		
300	1007013	692	393	090	69			21	0	01014	0583	
300	1007013	998	692	485		69			21	0	01014	0584
300	1007013	692	387	354	69				21	0	01014	0585
300	1000288	613	483	354 295			4	0	01014	0586		
300	1000288	691	649	295	60		4	21	0	01014	0587	
300	1000288	691	483		60			21	0	01014	0588	
300	1000103	798	683	649	69	60	4	2	0	01014	0589	
300	1000103	683	602					2	0	01014	0590	
300	1000288	601	195				4	0	01014	0591		
300	1000288	613	601	354 079			43	0	01014	0592		
300	1000288	691	649	483	69	60	4	2	0	01014	0593	
300	1000288	613	354	093			4	0	01014	0594		
300	1000288	683	398		69			2	0	01014	0595	
300	1000288	649	398		60		4	0	01014	0596		
300	1000288	613	398				4	0	01014	0597		
300	1000202	692	602	397	69			21	0	01014	0598	
300	1000202	691	602	475	69			21	0	01014	0599	
300	1000201	879	871	684 604			4	2	1	01014	0600	
300	1000201	897	604					1		01014	0601	
300	1000103	683	649		69	60	4	2	0	01014	0602	
300	1000103	683	649		69		4	2	0	01014	0603	
300	1000103	683	667	604		57	4	2	0	01014	0604	
300	1000202	683	649	485	69	60	4	2	0	01014	0605	
300	1000202	691	683	602		39		21	0	01014	0606	
300	1000202	691	683		69	39		21	0	01014	0607	
300	1000202	691	649		69	60	4	21	0	01014	0608	
300	1000202	691	602		69			21	0	01014	0609	
300	1000202	649	473		69		4	0		01014	0610	
300	1000202	691	649	473	69	60	4	21	0	01014	0611	
300	1000288	691	649	601	69	60		0		01014	0612	
300	1000288	636	601	473			4	0		01014	0613	
300	1000288	636	601	077			43	0		01014	0614	
300	1000288	691	436	428				21	0	01014	0615	
300	1000288	604	601	586			3	0		01014	0616	
300	1000288	604	601				43	0		01014	0617	
300	1000288	649	601		69		4	0		01014	0618	
300	1000006	969	185	019				0		01014	0619	
300	1000006	678	601	019			2	0		01014	0620	
300	1000006	976	678				2	0		01014	0621	
300	1000006	976	649		69		4	0		01014	0622	
300	1000006	775	678	649 087		69	4	2	0	01014	0623	
300	1000205	670	185				4	0		01014	0624	
300	1000142	798	686	649	69	60	4	2	1	01014	0625	
300	1000142	798	649	602	60		4	2	1	01014	0626	
300	1000142	797	686	649			4	2	1	01014	0627	
300	1000142	683	602				2	1		01014	0628	
300	1000142	797	649	602			4	2	1	01014	0629	
300	1000082	691	602					2	1	01014	0630	
300	1000099	797	683	649			4	2	1	01014	0631	
300	1000099	683	602					2	1	01014	0632	
300	1000201	683	649	639	60		4	2	1	01014	0633	
300	1000201	691	649	602	69	60	4	21	1	01014	0634	
300	1000201	871	778	678 649		69	4	2	1	01014	0635	
300	1000201	691	678	602				21	1	01014	0636	
300	1000201	691	649	602	69		4	21	1	01014	0637	
300	1000201	871	649				4	1		01014	0638	

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I NO
300	1000201	874	778	691 649	69	60	4	21 1	01014	0639
300	1000201	797	691	649 473	60		4	21 1	01014	0640
300	1000201	699	691	064			21	1	01014	0641
300	1000201	871	428	436			1		01014	0642
300	1000201	691	428				21	1	01014	0643
300	1000201	649	428		60		4	1	01014	0644
300	1000201	699	649		60		4	2 1	01014	0645
300	1000201	649	038		60		4	1	01014	0646
300	1000201	874	778	686 601 019			2	1	01014	0647
300	1000201	871	695	601	69		2	1	01014	0648
300	1000201	695	667	649	69	36	4	2 1	01014	0649
300	1000234	649	625		69		4	1	01014	0650
300	1000032	678	602				2	0	01014	0651
300	1000032	695	602	473	69		21	0	01014	0652
300	1000032	695	678		69		21	0	01014	0653
300	1000032	976	602				2	0	01014	0654
300	1000032	976	695	473	69		21	0	01014	0655
300	1000030	678	649		60		4	2 0	01014	0656
300	1000010	693	693	602	38	57	2	0	01014	0657
300	1000010	693	678	602	57		2	0	01014	0658
300	1000010	678	602	473			2	0	01014	0659
300	1000010	772	678	649			4	2 0	01014	0660
300	1000010	976	678	649	60		4	2 0	01014	0661
300	1000010	678	649	602	60		4	2 0	01014	0662
300	1000010	678	649		60		4	2 0	01014	0663
300	1000006	667	601	079	38		43	0	01014	0664
300	1000006	678	602	473			2	0	01014	0665
300	1000006	636	601	077			43	0	01014	0666
300	1000006	693	602	601			2	0	01014	0667
300	1000006	678	602	601			2	0	01014	0668
300	1000006	473	185	019			0		01014	0669
300	1000006	667	607	601			43	0	01014	0670
300	1000006	689	678	602 473			2	0	01014	0671
300	1000006	649	087				4	0	01014	0672
300	1000006	678	087				2	0	01014	0673
300	1000006	976	691	602 473	69		21	0	01014	0674
300	1000006	691	678	602	69		21	0	01014	0675
300	1000006	614	601				4	0	01014	0676
300	1000006	678	649				4	2 0	01014	0677
300	1000006	436	428				0		01014	0678
300	1000006	693	636	602	57		4	2 0	01014	0679
300	1000206	483	428				0		01014	0680
300	1000206	693	693	641	57	38	32	0	01014	0681
300	1000206	693	483		57		2	0	01014	0682
300	1000008	483	428				0		01014	0683
300	1000008	649	636	428	60		4	0	01014	0684
300	1000008	678	483	473			2	0	01014	0685
300	1000008	602	483	473			2	0	01014	0686
300	1000208	677	602	483			4	2 0	01014	0687
300	1000208	678	483	473			2	0	01014	0688
300	1000008	678	649				4	2 0	01014	0689
300	1000008	649	483				4	0	01014	0690
300	1000211	649	483	436			4	0	01014	0691
300	1000211	677	602	483			4	2 0	01014	0692
300	1000211	677	649	483			4	2 0	01014	0693
300	1000211	677	436				4	0	01014	0694
300	1000211	677	613	077			43	0	01014	0695
300	1000074	691	649		60		4	21 0	01014	0696

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I NO	
300	1000074	691	649				4	21	0	01014	0697
300	1007015	998	468	436				0		01014	0698
300	1007015	636	436	397	365		4	0		01014	0699
300	1007015	678	649	468		60	4	2	0	01014	0700
300	1007015	678	649			60	4	2	0	01014	0701
300	1007031	678	649	468		60	4	2	0	01014	0702
300	1007025	649	467				4	0		01014	0703
300	1007025	678	467					2	0	01014	0704
300	1007025	636	621				4	0		01014	0705
300	1007025	483	467					0		01014	0706
300	1007025	636	467				4	0		01014	0707
300	1000126	649	019		60		4	0		01014	0708
300	1000126	649	436	366		60	4	0		01014	0709
300	1000126	604	436	366			3	0		01014	0710
300	1000126	649	366					0		01014	0711
300	1000126	649	019		60			0		01014	0712
300	1000126	604	366				3	0		01014	0713
300	1007012	772	692	090		69		21	0	01014	0714
300	1007012	772	649			60	4	0		01014	0715
300	1007012	998	692	483		69		21	0	01014	0716
300	1007012	692	365	353		69		21	0	01014	0717
300	1007012	692	678	602		69		21	0	01014	0718
300	1007012	678	602					2	0	01014	0719
300	1007012	772	649	090		60	4	0		01014	0720
300	1007012	692	397			69		21	0	01014	0721
300	1007012	636	483				4	0		01014	0722
300	1007024	636	468				4	0		01014	0723
300	1007023	483	467					0		01014	0724
300	1007023	636	483				4	0		01014	0725
300	1000253	604	387					0		01014	0726
300	1000013	678	604					32	0	01014	0727
300	1000013	678	691	649		69	4	21	0	01014	0728
300	1000013	691	649	040		60	4	2	0	01014	0729
300	1000013	604	077					3	0	01014	0730
300	1000013	604	019					3	0	01014	0731
300	1000013	612	604					3	0	01014	0732
300	1000013	649	604			60		3	0	01014	0733
300	1000013	691	604			69		21	0	01014	0734
300	1000013	636	612	077			43	0		01014	0735
300	1000013	612	604	077				3	0	01014	0736
300	1000005	678	602	473				2	0	01014	0737
300	1000005	691	473			69		21	0	01014	0738
300	1000005	691	387			69		21	0	01014	0739
300	1000005	691	602			69		21	0	01014	0740
300	1000005	691	678	473		69		21	0	01014	0741
300	1000005	641	618					3	0	01014	0742
300	1000005	678	649	639		60	4	2	0	01014	0743
300	1000005	678	040					2	0	01014	0744
300	1000005	678	045					2	0	01014	0745
300	1000005	678	043					2	0	01014	0746
300	1000005	649	483	045		60	4	0		01014	0747
300	1000005	649	468			60	4	0		01014	0748
300	1000005	678	604					32	0	01014	0749
300	1000005	678	468	397				2	0	01014	0750
300	1000005	678	649	602		60	4	2	0	01014	0751
300	1000005	691	602	039		69		21	0	01014	0752
300	1000005	649	483			60	4	0		01014	0753
400	1011484	692	649			69	4	21	1	01014	0754

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I	NO	
400	1011483	692	436	378	69		21	0	01014	C	755	
400	1011483	607	436	378			3	0	01014	0	756	
400	1011486	692	691	399 391	69 69		21	0	01014	0	757	
400	1011483	691	391	378	69		21	0	01014	0	758	
400	1011483	692	399	391 378	69		21	0	01014	0	759	
400	1011486	691	449	399 391	69		21	0	01014	0	760	
400	1011486	691	485	399 391	69		21	0	01014	0	761	
400	1011486	449	399	391 196			0		01014	0	762	
400	1011483	399	391	196 020			0		01014	0	763	
400	1011486	621	614	399 391 066			4	0	01014	0	764	
400	1011486	636	473	399 391			4	0	01014	0	765	
400	1011486	485	399	391 020			85	0	01014	0	766	
400	1011486	621	436	399 391			4	0	01014	0	767	
400	1011486	428	399	391 020			0		01014	0	768	
400	1011486	485	428	399 391			0		01014	0	769	
400	1011486	636	473	485 399 391			4	0	01014	0	770	
400	1011479	692	449	428	69 60		4	21	1	01014	0	771
400	1011479	636	428	053			4	1	01014	0	772	
400	1011479	683	639	428			2	1	01014	0	773	
400	1011479	636	607	428 378			43	0	01014	0	774	
400	1011479	604	601	378 077			3	0	01014	0	775	
400	1011479	607	604	378 077			3	0	01014	0	776	
400	1011479	604	378	191			3	0	01014	0	777	
400	1011479	378	191	185			0		01014	0	778	
400	1011479	378	299	185			0		01014	0	779	
400	1011479	636	621	378 066			4	0	01014	0	780	
400	1011479	636	604	378 185 066			43	0	01014	0	781	
400	1011479	649	378	185	60		4	0	01014	0	782	
400	1011479	436	099	034			0		01014	0	783	
400	1011479	692	436	099	69		21	0	01014	0	784	
400	1011479	639	099	034			2	0	01014	0	785	
400	1011479	639	378	099			2	0	01014	0	786	
410	1011430	677	649		60		4	1	01014	0	787	
410	1011430	668	649		60		4	1	01014	0	788	
410	1011374	695	019		69		21	1	01014	0	789	
410	1011420	774	695	649 481	69 60		4	21	1	01014	0	790
410	1011430	695	676	649	69 60		4	2	1	01014	0	791
410	1011470	679	649	019	60		4	2	1	01014	0	792
410	1011468	679	649	596			4	2	1	01014	0	793
410	1011468	679	649	621	60		4	2	1	01014	0	794
410	1011394	697	649	353	69 60		4	2	1	01014	0	795
410	1011420	789	697	649	69 60		4	2	1	01014	0	796
410	1011420	697	675	649	69 58 60		4	2	1	01014	0	797
410	1011420	649	439		60		4	1	01014	0	798	
410	1011420	697	692	649	69 69 60		4	21	1	01014	0	799
410	1011559	675	649	019	60		4	1	01014	0	800	
410	1011559	679	675	649			4	2	1	01014	0	801
410	1011473	695	679	589	61		2	1	01014	0	802	
410	1011473	695	679	589	69		2	1	01014	0	803	
410	1011473	695	679	649	69 60		4	2	1	01014	0	804
410	1011537	994	679	679 649	96 60		4	2	1	01014	0	805
410	1011559	678	649	493	60		4	2	1	01014	0	806
410	1011559	649	649	493	60		4	1	01014	0	807	
410	1011459	695	649	024	69 60		4	2	1	01014	0	808
410	1011430	695	649		69 60		4	2	1	01014	0	809
410	1011430	695	629		69		2	1	01014	0	810	
410	1011410	649	428		60		4	1	01014	0	811	
410	1011410	636	428				4	1	01014	0	812	

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I NO		
410	1011471	636	601				4	1	01014	0813		
410	1011471	601	185				4	1	01014	0814		
410	1011471	299	185					1	01014	0815		
410	1011443	789	649	026	60		4	1	01014	0816		
410	1011443	789	695	649	69	60	4	2	1	01014	0817	
410	1011443	649	644	026	60		43	1	01014	0818		
410	1011430	649	473	019	60		4	1	01014	0819		
410	1011559	691	028		85			21	1	01014	0820	
410	1011559	691	679	649	85	60	4	21	1	01014	0821	
410	1011538	695	691	649	69	60	4	21	1	01014	0822	
410	1011538	776	679	649	60		4	2	1	01014	0823	
410	1011487	649	428	028	60		4	1		01014	0824	
410	1011487	690	621	428	69		4	2	1	01014	0825	
410	1011487	776	649	428	60		4	1		01014	0826	
410	1011501	683	649	428	69	60	4	2	1	01014	0827	
410	1011487	636	428	055			4	1		01014	0828	
410	1011487	636	604	077			43	1		01014	0829	
410	1011368	604	388	019			3	1		01014	0830	
410	1011368	480	019					1		01014	0831	
410	1011368	649	480	019	60		4	1		01014	0832	
410	1011487	671	604	077			43	1		01014	0833	
410	1011487	621	604	077			43	1		01014	0834	
410	1011481	621	489				4	1		01014	0835	
410	1011481	621	601	077			43	1		01014	0836	
410	1011487	604	601	077			43	1		01014	0837	
410	1011481	649	621		60		4	1		01014	0838	
410	1011473	695	691	589	69	61		21	1	01014	0839	
410	1011473	679	649	488	60		4	2	1	01014	0840	
410	1011473	649	602	479	60		4	2	1	01014	0841	
410	1011473	679	649	479	60		4	2	1	01014	0842	
410	1011473	679	649	478	60		4	2	1	01014	0843	
410	1011559	678	027					2	1	01014	0844	
410	1011559	679	649	348		60	4	2	1	01014	0845	
410	1011559	692	649	621	69	60	4	21	1	01014	0846	
410	1011559	692	069		69		4	2	1	01014	0847	
410	1011559	692	679	649	69	60	4	21	1	01014	0848	
410	1011487	299	191					1		01014	0849	
410	1011487	191	185					1		01014	0850	
410	1011487	198	191					1		01014	0851	
410	1011559	649	621	479			4	1		01014	0852	
410	1011559	479	185					1		01014	0853	
500	1899969	871	698		61		2	1		01014	0854	
500	1899969	871	871	649	60		4	1		01014	0855	
500	1899955	678	649	649	60		4	2	1	01014	0856	
500	1899955	678	649	070			4	2	1	01014	0857	
500	1899969	871	649					1		01014	0858	
500	1899975	697	649		61	60	4	2	1	01014	0859	
500	1899950	872	678	649	60		4	2	1	01014	0860	
500	1899950	871	698	697	61	61		2	1	01014	0861	
500	1899950	649	639				4	2	1	01014	0862	
500	1899950	798	678	649	639		4	2	1	01014	0863	
500	1899950	798	649	616	60		4	1		01014	0864	
500	1899950	698	649	639	61	60	4	2	1	01014	0865	
500	1899950	698	678	639	61			2	1	01014	0866	
600	1011784	798	649		60		4	1		01014	0867	
600	1011784	695	678	649	69	60	4	2	1	01014	0868	
600	1011784	695	678	649	69	60	4	2	1	01014	0869	
600	1011784	875	678	649	586		65	4	2	1	01014	0870

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	CRPS	E	DATE	I	NO	
600	1011784	889	678	586			2	1	01014	0871		
600	1011784	875	678	649		60	4	2	1	01014	0872	
600	1011784	693	678	649	69		4	2	1	01014	0873	
600	1011784	875	691	678 586	69		21	1	01014	0874		
600	1011784	691	586		90		21	1	01014	0875		
600	1011784	693	691	649	69	60	4	21	1	01014	0876	
600	1011784	691	678	649	69	60	4	21	1	01014	0877	
600	1011734	697	678	649	69	60	4	2	1	01014	0878	
600	1011734	697	692	649	69	69	4	21	1	01014	0879	
600	1011734	697	692	675 586	69	69	4	21	1	01014	0880	
600	1011737	697	691	649	69	69 60	4	21	1	01014	0881	
600	1011732	978	678	649	599	597 586	60	4	2	1	01014	0882
600	1011732	978	695	678	599	597 586	69		2	1	01014	0883
600	1011737	978	697	695	599	597 586	69	69	2	1	01014	0884
600	1011737	979	877	691		69	21	1	01014	0885		
600	1011737	697	691	479	69	69	21	1	01014	0886		
600	1011737	697	649		69	60	4	2	1	01014	0887	
600	1011737	697	649	641	69	60	432	1	01014	0888		
600	1011737	697	649	478	69	60	4	2	1	01014	0889	
600	1011737	697	649		69	60	4	2	1	01014	0890	
601	1011631	678	649			60	4	2	1	01014	0891	
601	1011631	797	678	639			2	1	01014	0892		
601	1011631	797	678	649		60	4	2	1	01014	0893	
601	1011631	678	649			60	4	2	1	01014	0894	
601	1011631	678	390				2	1	01014	0895		
601	1011631	649	390			60		2	1	01014	0896	
601	1011631	678	649				4	2	1	01014	0897	
601	1011631	692	678	649	34	60	4	21	0	01014	0898	
601	1011739	799	798	678 649		60	4	2	0	01014	0899	
602	1011913	691	636	428	69		4	21	0	01014	0900	
602	1011913	691	649	428	69	60	4	21	0	01014	0901	
602	1011913	649	613	075	60		43	0	01014	0902		
602	1011913	613	185				4	0	01014	0903		
602	1011913	299	185				0		01014	0904		
602	1011900	649	485	197		60		0		01014	0905	
602	1011909	693	649	197		60	4	2	0	01014	0906	
602	1011909	693	678	649		60	4	2	0	01014	0907	
602	1011909	485	436	197			0		01014	0908		
602	1011909	693	436	197			2	0	01014	0909		
602	1011909	693	678	436			2	0	01014	0910		
603	1011713	636	076	019			43	1	01014	0911		
603	1011713	670	604	191			43	0	01014	0912		
603	1011713	636	189	077			43	0	01014	0913		
603	1011713	691	636	428	69		4	21	0	01014	0914	
603	1011713	691	649	428	69	60	4	21	0	01014	0915	
603	1011713	191	189	185			0		01014	0916		
603	1011713	299	185				0		01014	0917		
603	1011891	898	691	678		61		21	0	01014	0918	
603	1011891	898	691	636		61	4	21	0	01014	0919	
603	1011891	691	649	636		61	60	4	21	0	01014	0920
603	1011891	691	678	649		61	60	4	21	0	01014	0921
603	1011891	649	474	428			4	0		01014	0922	
603	1011891	649	624	479	60		4	0		01014	0923	
604	1011702	678	675	649		60		4	2	0	01014	0924
604	1011702	774	678	649 481		60		4	2	0	01014	0925
604	1011702	774	675	649 481		60		4	0		01014	0926
604	1011702	697	678	676	69		4	2	0	01014	0927	
604	1011702	697	649	481	69	60	4	2	0	01014	0928	

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I	NO
604	1011702	691	649	474	69	60	4	21	0		01014 0929
604	1011702	691	678	649	69	60	4	21	0		01014 0930
604	1011702	692	678	676	69		4	21	0		01014 0931
604	1011702	692	691	649	69	69	4	21	0		01014 0932
604	1011702	678	649	428		60	4	2	0		01014 0933
604	1011702	678	649	479		60	4	2	0		01014 0934
604	1011702	479		189				0			01014 0935
604	1011936	788	649		60		4	0			01014 0936
604	1011281	773	649	476	60		4	0			01014 0937
604	1011303	678	643				32	0			01014 0938
604	1011723	649	649		60		4	0			01014 0939
605	1011722	691	678	599 597 589	69			21	0		01014 0940
605	1011722	874	678	599 597 589				2	0		01014 0941
605	1011722	874	678	649		65	4	2	0		01014 0942
605	1011722	649	599	589	65		4	0			01014 0943
605	1011722	978	678	597 589				2	0		01014 0944
605	1011722	774	649	481	60		4	0			01014 0945
605	1011722	691	678	481	69			21	0		01014 0946
605	1011722	691	678	649	69	60	4	21	0		01014 0947
605	1011722	678	649	497		60	4	2	0		01014 0948
605	1011722	691	588		69			21	0		01014 0949
605	1011722	675	588		64		4	0			01014 0950
605	1011722	678	675		64		4	2	0		01014 0951
605	1011760	978	588					0			01014 0952
606	1011724	678	675	633 597 589			4	2	0		01014 0953
606	1011724	678	649		60		4	2	0		01014 0954
606	1011724	678	633	593 589			4	2	0		01014 0955
606	1011724	874	678	678		69		2	0		01014 0956
606	1011792	691	678	599 597 589	69	69		21	0		01014 0957
606	1011792	691	649	599 597 589	69	65	4	21	0		01014 0958
606	1011890	683	678	649 019		60	4	2	0		01014 0959
607	1011890	875	691	678	69			21	0		01014 0960
607	1011731	691	678		86			21	0		01014 0961
607	1011731	678	649			60	4	2	0		01014 0962
607	1011731	998	691	185 020		69		21	0		01014 0963
607	1011731	613	189	185			4	0			01014 0964
607	1011731	636	613	189 077			43	0			01014 0965
607	1011731	636	428				4	0			01014 0966
607	1011731	299	185					0			01014 0967
608	1011215	678	675	649		60	4	2	0		01014 0968
608	1011215	678	649	348	60		4	2	0		01014 0969
608	1011215	649	646		60		43	0			01014 0970
608	1011215	774	646	481			3	0			01014 0971
608	1011215	774	678	649 481		60	4	2	0		01014 0972
608	1011185	678	649	349		60	4	2	0		01014 0973
608	1011153	978	599	595 594 587				0			01014 0974
608	1011197	678	649	642		60	432	0			01014 0975
608	1011197	649	633	599 597 587	60		4	0			01014 0976
608	1011197	678	599	597 594 587				2	0		01014 0977
610	1011711	875	678	599 586				2	1		01014 0978
610	1011711	678	649	599 586		65	4	2	1		01014 0979
610	1011711	691	678	649	69	60	4	21	1		01014 0980
610	1011786	978	691	599 597 586		69		21	1		01014 0981
610	1011786	691	685		69			21	1		01014 0982
610	1011786	692	691	649	69	60	4	21	1		01014 0983
610	1011786	691	674	586	69		4	21	1		01014 0984
610	1011786	692	691	674	69	69	4	21	1		01014 0985
610	1011789	979	877	691		69		21	1		01014 0986

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I NO
610	1011790	691	674	635	69		4	21 1	01014	0987
610	1011790	691	674	427	69		4	21 1	01014	0988
611	1011704	678	479		69		2	0	01014	0989
611	1011704	678	649	479	60		4	2 0	01014	0990
611	1011704	678	678	479	69		2	0	01014	0991
611	1011704	659	649	589	60		4	0	01014	0992
611	1011704	678	659	648			432	0	01014	0993
611	1011704	678	649	498	60		4	2 0	01014	0994
611	1011704	589	498				0		01014	0995
611	1011704	636	428				4	0	01014	0996
611	1011704	649	428		60		4	0	01014	0997
611	1011704	678	299	041			2	0	01014	0998
611	1011704	479	041				0		01014	0999
611	1011893	998	678	649	60		4	2 0	01014	1000
611	1011796	678	479	023	69		2	0	01014	1001
611	1011796	678	649		69	60	4	2 0	01014	1002
611	1011796	678	649		69	65	4	2 0	01014	1003
611	1011796	649	649	023	60	65	4	0	01014	1004
612	1011893	649	189		60		4	0	01014	1005
612	1011705	692	649		69	60	4	21 0	01014	1006
612	1011911	669	645		64		43	0	01014	1007
612	1011705	677	669		63		4	0	01014	1008
612	1011705	774	649	481	60		4	0	01014	1009
612	1011907	672	434	368			4	0	01014	1010
612	1011890	691	434				21	0	01014	1011
612	1011890	695	434				2	0	01014	1012
612	1011294	993	678	649 020	60		4	2 0	01014	1013
612	1011294	695	675	649	69	60	4	2 0	01014	1014
612	1011294	695	675	435	69		4	2 0	01014	1015
612	1011294	678	675	435			4	2 0	01014	1016
612	1011294	695	649	473	69	60	4	2 0	01014	1017
612	1011700	695	678	473	69		21	0	01014	1018
612	1011700	678	185				2	0	01014	1019
612	1011700	649	185		60		4	0	01014	1020
612	1011725	678	643				32	0	01014	1021
612	1011705	774	678	649	60		4	2 0	01014	1022
612	1011706	774	695	678 649	69	69	4	2 0	01014	1023
612	1011712	678	649	603	60		4	2 0	01014	1024
612	1011712	678	592	591			4	2 0	01014	1025
612	1011940	675	669				4	0	01014	1026
612	1011701	669	649		60		4	0	01014	1027
612	1011896	636	428				4	0	01014	1028
612	1011896	691	649	428	69	60	4	21 0	01014	1029
612	1011896	691	678	649	69	60	4	21 0	01014	1030
612	1011906	695	678	649	69	60	4	2 0	01014	1031
612	1011906	695	649		95	69	4	2 0	01014	1032
612	1011563	695	672	669	69	63	4	2 0	01014	1033
612	1011563	998	695	436	69		2	0	01014	1034
612	1011563	613	436				4	0	01014	1035
612	1011563	672	436	434			4	0	01014	1036
612	1011563	613	075				43	0	01014	1037
612	1011890	678	649		60		4	2 0	01014	1038
612	1011714	675	649		60		4	0	01014	1039
612	1011705	678	649	479	60		4	2 0	01014	1040
612	1011705	678	676	649		60	4	2 0	01014	1041
612	1011000	678	649		92	60	4	2 0	01014	1042
612	1011000	889	678			92	2	0	01014	1043
612	1011891	691	649	636	61	60	4	21 0	01014	1044

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I	NO	
612	1011891	898	678	636			4	2	0	01014	1045	
612	1011896	636	076	019			43	0	0	01014	1046	
612	1011896	604	076	019			3	0	0	01014	1047	
612	1011896	604	191				3	0	0	01014	1048	
612	1011896	299	191					0	0	01014	1049	
612	1011896	191	189					0	0	01014	1050	
612	1011896	671	191				4	0	0	01014	1051	
612	1011896	636	604	077			43	0	0	01014	1052	
612	1011701	695	678	675			4	2	0	01014	1053	
612	1011701	695	633	417	69	47	4	2	0	01014	1054	
612	1011701	695	633	586	69		4	2	0	01014	1055	
612	1011701	695	678	586	69	48		2	0	01014	1056	
612	1011701	649	602	479	60		4	2	0	01014	1057	
612	1011701	479	185					0	0	01014	1058	
612	1011738	799	649		60		4	0	0	01014	1059	
612	1011738	798	678	649		60	4	2	0	01014	1060	
612	1011700	692	678	649	34	60	4	21	0	01014	1061	
612	1011891	896	690	042				2	0	01014	1062	
612	1011891	896	690	678				2	0	01014	1063	
612	1001494	896	871	695	042		69		0	01014	1064	
612	1001494	896	695	678			69		0	01014	1065	
612	1001494	695	667	649	69	66	36	4	2	0	01014	1066
612	1011631	798	678	649		60	4	2	0	01014	1067	
700	1007141	998	622	189			4	1	0	01014	1068	
700	1007141	649	649	22	77	65	76	4	1	0	01014	1069
700	1007141	658	649			60	4	1	0	01014	1070	
700	1007141	658	622				4	1	0	01014	1071	
700	1007141	627	479	378			4	0	0	01014	1072	
700	1007141	622	479	378			4	0	0	01014	1073	
700	1007141	636	479				4	0	0	01014	1074	
700	1007141	622	479				4	0	0	01014	1075	
700	1007141	649	624	428	378		4	0	0	01014	1076	
700	1007141	622	390	188			4	0	0	01014	1077	
700	1007141	636	621				4	0	0	01014	1078	
700	1007141	670	638	378	077		43	0	0	01014	1079	
700	1007141	621	378	188			4	0	0	01014	1080	
700	1007141	670	378	188			4	0	0	01014	1081	
700	1007141	604	189				3	0	0	01014	1082	
700	1010622	690	648		69		32	1	0	01014	1083	
700	1010622	690	428		69		2	1	0	01014	1084	
700	1010622	649	428			60	4	1	0	01014	1085	
700	1007141	622	378				4	1	0	01014	1086	
700	1007098	998	622	484			4	1	0	01014	1087	
700	1007098	998	636	484			4	1	0	01014	1088	
700	1007091	621	185				4	0	0	01014	1089	
700	1007091	479	398	367	020			0	0	01014	1090	
700	1007091	622	479	390	378		4	0	0	01014	1091	
700	1007091	636	621	398			4	0	0	01014	1092	
710	1010269	639	386	090	019			2	0	0	01014	1093
710	1010269	386	185	090	019			0	0	0	01014	1094
710	1010269	639	386	185	019			2	0	0	01014	1095
710	1010271	621	386	185	019		4	0	0	01014	1096	
710	1010271	641	386	185	019		3	0	0	01014	1097	
710	1010271	641	621	386	019		43	0	0	01014	1098	
710	1010271	641	386	090	019		3	0	0	01014	1099	
710	1010271	621	386	090	019		4	0	0	01014	1100	
710	1007045	636	386	090			4	0	0	01014	1101	
710	1007045	636	613	386			4	0	0	01014	1102	

ESC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I NO
710	1007045	692	602	378	69		4	21 0	01014	1103
710	1007045	692	630	378	69	69		21 0	01014	1104
710	1007044	630	602	378	69			21 0	01014	1105
710	1007040	630	367	185	69			1 1	01014	1106
710	1007040	630	449	185	69			1 0	01014	1107
710	1007040	621	449	185			4	0	01014	1108
710	1C07040	473	386	020				0	01014	1109
710	1007040	449	378	020				0	01014	1110
710	1007040	630	449	386	69			1 0	01014	1111
710	1007040	386	098	020				0	01014	1112
710	1007040	636	630	449 367	69		4	1 1	01014	1113
710	1007040	636	613	386 019			4	0	01014	1114
710	1007040	630	386	098 090	69			1 0	01014	1115
710	1007040	636	386	090 019			4	0	01014	1116
710	1007040	630	378		69			1 1	01014	1117
710	1007040	649	630	378		79	4	1 0	01014	1118
710	1007040	630	449		69			1 1	01014	1119
710	1007040	630	473		69			1 1	01014	1120
710	1007042	971	C85	020			43	0	01014	1121
710	1007042	692	649	378	69	60	4	21 0	01014	1122
710	1007042	692	649	020	69	60	4	21 0	01014	1123
710	1007041	692	649	449 378	69	60	4	21 0	01014	1124
710	1007041	692	630	019	69	60		21 0	01014	1125
710	1007041	649	604	378		60	43	0	01014	1126
710	1007041	649	604	019		60	43	0	01014	1127
710	1007041	604	378	019			3	0	01014	1128
710	1010273	473	386	090 019				0	01014	1129
710	1010273	621	473	386 019			4	0	01014	1130
710	1007021	386	185	020				0	01014	1131
710	1007021	386	378	185				0	01014	1132
710	1007017	630	386	367 020	69			1 0	01014	1133
710	1007017	630	386	367 098	69			0	01014	1134
710	1007046	971	386	020			43	0	01014	1135
710	1007050	972	630	378	69			1 0	01014	1136
710	1007050	972	378	020				0	01014	1137
710	1007052	636	449	398			4	0	01014	1138
710	1007052	613	449	398			4	0	01014	1139
710	1007052	621	613	398 077			43	0	01014	1140
710	1007052	636	621	398 077			43	0	01014	1141
710	1007052	630	449	398	69			1 0	01014	1142
710	1007052	398	020					0	01014	1143
710	1007052	398	378					0	01014	1144
710	1007027	649	386	348 020	60		4	0	01014	1145
710	1007027	630	449	378 367	69			1 0	01014	1146
710	1007009	386	378	020				0	01014	1147
710	1007009	630	386	378	69			1 0	01014	1148
710	1007007	649	630	020	77	69	4	1 0	01014	1149
710	1007007	649	378	C20	77		4	0	01014	1150
710	10070C7	636	621	604 378 074			43	0	01014	1151
710	1007016	636	621	378 066			4	0	01014	1152
710	1007027	621	378	073			43	0	01014	1153
710	1007054	378	367	098				0	01014	1154
710	1007054	630	367	098	69			1 0	01014	1155
710	1007060	639	378	020				2 0	01014	1156
710	1C07060	639	630	020	69			21 0	01014	1157
710	1007060	639	630	378	69			21 0	01014	1158
710	1007056	604	378	020				3 0	01014	1159
710	1007056	649	604	378	60		43	0	01014	1160

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I	NO	
710	1007056	649	604	020	60		43	0	01014	1161		
710	1007056	630	020		69		1	1	01014	1162		
710	1007081	636	621	378 073			43	0	01014	1163		
710	1007081	621	604	378 073			43	0	01014	1164		
710	1007086	636	621	398 073			43	0	01014	1165		
710	1007086	636	604	398 066			43	0	01014	1166		
710	1007086	484	398	C20			0		01014	1167		
710	1007086	636	484	398			4	0	01014	1168		
710	1007086	621	484	398			4	0	01014	1169		
710	1007086	604	484	398			3	0	01014	1170		
710	1007086	484	398	185			0		01014	1171		
710	1007061	636	479	398			4	0	01014	1172		
710	1007061	630	479	398	69		1	0	01014	1173		
710	1007058	998	630	484		69		1	0	01014	1174	
710	1007058	998	630	398		69		1	0	01014	1175	
710	1007085	484	479	398			0		01014	1176		
710	1007085	998	484	398 020			0		01014	1177		
710	1001543	970	683	604		94 94 94	4	2	0	01014	1178	
710	1001543	683	096		94		2	0	01014	1179		
710	1010690	786	360				0		01014	1180		
710	1001608	636	360				4	0	01014	1181		
710	1001608	636	604	078		94 94 94	43	0	01014	1182		
710	1001607	649	604	071		60	43	0	01014	1183		
710	1001614	604	078				3	0	01014	1184		
710	1001614	095	020				0		01014	1185		
710	1001614	604	095				3	0	01014	1186		
710	1001614	487	398	020			0		01014	1187		
710	1001614	487	095				0		01014	1188		
710	1001614	670	187				4	0	01014	1189		
710	1001614	187	186				0		01014	1190		
710	1001601	389	186	095			0		01014	1191		
710	1001601	296	186				0		01014	1192		
710	1001603	418	186				0		01014	1193		
710	1001603	649	610				43	0	01014	1194		
710	1001603	610	352	186			3	0	01014	1195		
710	1001603	649	609				43	0	01014	1196		
710	1001604	609	352	186			43	0	01014	1197		
710	1007114	636	604	449	94 94		43	0	01014	1198		
710	1007114	428	396	188			0		01014	1199		
710	1007114	604	428	396			3	0	01014	1200		
710	1007114	649	621	396	60		4	0	01014	1201		
710	1007081	630	378	184	69		1	0	01014	1202		
710	1007081	378	184	020			0		01014	1203		
710	1015154	649	630	485		77 69	4	1	1	01014	1204	
710	1015154	649	485	378	69		4	0	01014	1205		
710	1015154	998	485	020			0		01014	1206		
710	1015154	998	378	020			0		01014	1207		
710	1015154	998	485	378			0		01014	1208		
710	1015154	485	378	185			0		01014	1209		
710	1015104	649	485	479	77		4	0	01014	1210		
710	1015104	998	627	019			0		01014	1211		
710	1015113	675	485				4	0	01014	1212		
710	1015121	998	485	020			0		01014	1213		
710	1007090	673	636	378 077		85	43	0	01014	1214		
710	1007087	889	020				0		01014	1215		
710	1007087	998	889	484			0		01014	1216		
711	1007047	636	378	186			4	0	01014	1217		
711	1007047	691	386	090	69		21	0	01014	1218		

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I	NO
711	1007047	691	098	090	69		21	0	01014	1219	
711	1007047	691	296	020			21	0	01014	1220	
711	1007047	691	186		69		21	1	01014	1221	
711	1007047	691	185		69		21	1	01014	1222	
711	1007047	691	602	378	79		21	0	01014	1223	
711	1007047	691	386	378	69		21	0	01014	1224	
711	1007047	691	278	020	69		21	0	01014	1225	
712		636	613	378 073		43	0		01014	1226	
712		638	636	378 073		43	0		01014	1227	
712		636	621	378 073		43	0		01014	1228	
712		636	619	378 073		43	0		01014	1229	
712		636	618	378 073		43	0		01014	1230	
712		636	604	378 073		43	0		01014	1231	
712		636	601	378 073		43	0		01014	1232	
712		636	613	398 073		43	0		01014	1233	
712		638	636	398 073		43	0		01014	1234	
712		636	621	398 073		43	0		01014	1235	
712		636	619	398 073		43	0		01014	1236	
712		636	618	398 073		43	0		01014	1237	
712		636	604	398 073		43	0		01014	1238	
712		636	601	398 073		43	0		01014	1239	
712		636	613	398 077		43	0		01014	1240	
712		638	636	398 077		43	0		01014	1241	
712		636	621	398 077		43	0		01014	1242	
712		636	619	398 077		43	0		01014	1243	
712		636	618	398 077		43	0		01014	1244	
712		636	604	398 077		43	0		01014	1245	
712		636	601	398 077		43	0		01014	1246	
712		636	613	378 077		43	0		01014	1247	
712		638	636	378 077		43	0		01014	1248	
712		636	621	378 077		43	0		01014	1249	
712		636	619	378 077		43	0		01014	1250	
712		636	618	378 077		43	0		01014	1251	
712		636	604	378 077		43	0		01014	1252	
712		636	601	378 077		43	0		01014	1253	
712		636	613	378 074		43	0		01014	1254	
712		638	636	378 074		43	0		01014	1255	
712		636	621	378 074		43	0		01014	1256	
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712		636	601	398 066		43	0		01014	1274	
712		636	613	378 066		43	0		01014	1275	
712		638	636	378 066		43	0		01014	1276	

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I	NO
712		636	621	378 066			43	0	01014	1277	
712		636	619	378 066			43	0	01014	1278	
712		636	618	378 066			43	0	01014	1279	
712		636	604	378 066			43	0	01014	1280	
712		636	601	378 066			43	0	01014	1281	
712		670	613	378 066			43	0	01014	1282	
712		670	636	378 066			43	0	01014	1283	
712		670	638	378 066			43	0	01014	1284	
712		670	621	378 066			43	0	01014	1285	
712		670	619	378 066			43	0	01014	1286	
712		670	618	378 066			43	0	01014	1287	
712		670	604	378 066			43	0	01014	1288	
712		670	601	378 066			43	0	01014	1289	
712		670	613	398 066			43	0	01014	1290	
712		670	636	398 066			43	0	01014	1291	
712		670	638	398 066			43	0	01014	1292	
712		670	621	398 066			43	0	01014	1293	
712		670	619	398 066			43	0	01014	1294	
712		670	618	398 066			43	0	01014	1295	
712		670	604	398 066			43	0	01014	1296	
712		670	601	398 066			43	0	01014	1297	
712		670	613	398 074			43	0	01014	1298	
712		670	636	398 074			43	0	01014	1299	
712		670	638	398 074			43	0	01014	1300	
712		670	621	398 074			43	0	01014	1301	
712		670	619	398 074			43	0	01014	1302	
712		670	618	398 074			43	0	01014	1303	
712		670	604	398 074			43	0	01014	1304	
712		670	601	398 074			43	0	01014	1305	
712		670	613	378 074			43	0	01014	1306	
712		670	636	378 074			43	0	01014	1307	
712		670	638	378 074			43	0	01014	1308	
712		670	621	378 074			43	0	01014	1309	
712		670	619	378 074			43	0	01014	1310	
712		670	618	378 074			43	0	01014	1311	
712		670	604	378 074			43	0	01014	1312	
712		670	601	378 074			43	0	01014	1313	
712		670	613	378 077			43	0	01014	1314	
712		670	636	378 077			43	0	01014	1315	
712		670	638	378 077			43	0	01014	1316	
712		670	621	378 077			43	0	01014	1317	
712		670	619	378 077			43	0	01014	1318	
712		670	618	378 077			43	0	01014	1319	
712		670	604	378 077			43	0	01014	1320	
712		670	601	378 077			43	0	01014	1321	
712		670	613	398 077			43	0	01014	1322	
712		670	636	398 077			43	0	01014	1323	
712		670	638	398 077			43	0	01014	1324	
712		670	621	398 077			43	0	01014	1325	
712		670	619	398 077			43	0	01014	1326	
712		670	618	398 077			43	0	01014	1327	
712		670	604	398 077			43	0	01014	1328	
712		670	601	398 077			43	0	01014	1329	
712		670	613	398 073			43	0	01014	1330	
712		670	636	398 073			43	0	01014	1331	
712		670	638	398 073			43	0	01014	1332	
712		670	621	398 073			43	0	01014	1333	
712		670	619	398 073			43	0	01014	1334	

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I	NO
712		670	618	398 073			43	0	01014	1335	
712		670	604	398 073			43	0	01014	1336	
712		670	601	398 073			43	0	01014	1337	
712		670	613	378 073			43	0	01014	1338	
712		670	636	378 073			43	0	01014	1339	
712		670	638	378 073			43	0	01014	1340	
712		670	621	378 073			43	0	01014	1341	
712		670	619	378 073			43	0	01014	1342	
712		670	618	378 073			43	0	01014	1343	
712		670	604	378 073			43	0	01014	1344	
712		670	601	378 073			43	0	01014	1345	
712		621	613	378 073			43	0	01014	1346	
712		636	621	378 073			43	0	01014	1347	
712		638	621	378 073			43	0	01014	1348	
712		621	619	378 073			43	0	01014	1349	
712		621	618	378 073			43	0	01014	1350	
712		621	604	378 073			43	0	01014	1351	
712		621	601	378 073			43	0	01014	1352	
712		621	613	398 073			43	0	01014	1353	
712		636	621	398 073			43	0	01014	1354	
712		638	621	398 073			43	0	01014	1355	
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712		621	601	398 073			43	0	01014	1359	
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712		638	621	398 077			43	0	01014	1362	
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712		621	613	378 077			43	0	01014	1367	
712		636	621	378 077			43	0	01014	1368	
712		638	621	378 077			43	0	01014	1369	
712		621	619	378 077			43	0	01014	1370	
712		621	618	378 077			43	0	01014	1371	
712		621	604	378 077			43	0	01014	1372	
712		621	601	378 077			43	0	01014	1373	
712		621	613	378 074			43	0	01014	1374	
712		636	621	378 074			43	0	01014	1375	
712		638	621	378 074			43	0	01014	1376	
712		621	619	378 074			43	0	01014	1377	
712		621	618	378 074			43	0	01014	1378	
712		621	604	378 074			43	0	01014	1379	
712		621	601	378 074			43	0	01014	1380	
712		621	613	398 074			43	0	01014	1381	
712		636	621	398 074			43	0	01014	1382	
712		638	621	398 074			43	0	01014	1383	
712		621	619	398 074			43	0	01014	1384	
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712		621	613	398 066			43	0	01014	1388	
712		636	621	398 066			43	0	01014	1389	
712		638	621	398 066			43	0	01014	1390	
712		621	619	398 066			43	0	01014	1391	
712		621	618	398 066			43	0	01014	1392	

EQC	TYP	DWG	CONTACTING	INTERFACES	COUPLES	PROT.	GRPS	E	DATE	I NO
712		621	604	398 066			43	0	01014	1393
712		621	601	398 066			43	0	01014	1394
712		621	613	378 066			43	0	01014	1395
712		636	621	378 066			43	0	01014	1396
712		638	621	378 066			43	0	01014	1397
712		621	619	378 066			43	0	01014	1398
712		621	618	378 066			43	0	01014	1399
712		621	604	378 066			43	0	01014	1400
712		621	601	378 066			43	0	01014	1401
720	1008151	798	649		60		4	0	01014	1402
720	1008151	694	691	649 378	69		4	21 0	01014	1403
720	1008151	691	613		69			21 1	01014	1404
720	1008151	649	622	378	60		4	0	01014	1405
720	1007151	691	621		69		4	21 1	01014	1406
720	1007161	691	479		69			21 1	01014	1407
720	1007161	636	479				4	1	01014	1408
720	1014606	691	622		69		4	21 1	01014	1409
720	1007161	691	622	378	69		4	21 0	01014	1410
720	1008151	649	622		60		4	1	01014	1411
720	1014606	691	649	367	69	60	4	21 1	01014	1412
720	1010411	690	428		69			2 1	01014	1413
720	1010411	636	428				4	1	01014	1414
720	1010607	649	428		60		4	1	01014	1415
720	1010642	690	621	428	69			2 1	01014	1416
720	1010642	621	019				4	1	01014	1417
720	1000221	692	649	428	69	60	4	21 1	01014	1418
720	1007161	691	649	649	69	60	4	21 1	01014	1419
720	1014609	688	683		69	69		2 1	01014	1420
720	1014609	683	649		69	60	4	2 1	01014	1421
720	1014606	604	604	190	44			3 1	01014	1422
720	1010402	191	190	076			3	1	01014	1423
720	1014606	428	191					1	01014	1424
720	1014606	888	191					1	01014	1425
720	1010347	798	690	649		69	60	4 2 1	01014	1426
720	1010671	639	044	019				2 1	01014	1427
720	1010671	878	779	639 044				2 1	01014	1428
720	1010348	636	054				4	1	01014	1429
720	1014605	299	191					1	01014	1430
720	1014605	613	185				4	1	01014	1431
720	1010708	636	613				43	1	01014	1432
720	1010708	604	437					3 1	01014	1433
720	1010642	648	621		46		43	1	01014	1434
720	1014606	691	378		69			21 1	01014	1435
720	1014605	186	185					1	01014	1436
720	1014606	196	191					1	01014	1437
720	1014606	691	379		69			21 1	01014	1438
720	1014606	998	379	191				1	01014	1439
720		670	636	077 072			43	1	01014	1440
720		670	636	076 072			43	1	01014	1441
720		636	613	077 072			43	1	01014	1442
720		636	613	076 072			43	1	01014	1443

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LCR:	National Aeronautics and Space Administration (2) Langley Research Center Langley AFB, Virginia Attn: Mr. A.T. Mattson

GSFC:	National Aeronautics and Space Administration Goddard Space Flight Center Greenbelt, Maryland Attn: Manned Flight Support Office Code 512	(2)
MSFC:	National Aeronautics and Space Administration George C. Marshall Space Flight Center Huntsville, Alabama Attn: R-SA	(2)
GAEC:	Grumman Aircraft Engineering Corporation Bethpage, Long Island, New York Attn: Mr. A. Whitaker	(1)
NAA:	North American Aviation, Inc. Space and Information Systems Division 12214 Lakewood Boulevard Downey, California Attn: Mr. R. Berry	(1)
GAEC RASPO:	National Aeronautics and Space Administration Resident Apollo Spacecraft Program Officer Grumman Aircraft Engineering Corporation Bethpage, L.I., New York	(1)
ACSP RASPO:	National Aeronautics and Space Administration Resident Apollo Spacecraft Program Officer Dept. 32-31 AC Spark Plug Division of General Motors Milwaukee, Wisconsin Attn: Mr. W. Swingle	(1)
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