



Commercial
Airplane
Group

757

Service Bulletin

SPECIAL ATTENTION

Number: 757-30-0019
Date: July 19, 2006
Revision 2: April 19, 2010
ATA System: 3041 5611

SUBJECT: ICE AND RAIN PROTECTION - Flight Compartment Window Anti-Icing - Windshield Inspection and Replacement

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Original Issue: July 19, 2006

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Revision Transmittal Sheet

SUBJECT: ICE AND RAIN PROTECTION - Flight Compartment Window Anti-Icing - Windshield Inspection and Replacement

This Revision includes all pages of the service bulletin.

COMPLIANCE INFORMATION RELATED TO THIS REVISION

More work is necessary on airplanes changed as shown in the original issue and Revision 1 of this service bulletin.

Operators that have not done the terminating action in the compliance of this service bulletin will now need to also inspect the J1 and J4 windshield lugs and terminals.

REASON FOR REVISION

This revision is sent to tell operators that have not done the terminating action in the compliance of this service bulletin will now need to also inspect the J1 and J4 windshield lugs and terminals.

These sections were changed:

1. Summary Background, Planning Information 1.D., Reason and 1.J.1., Existing Data, Service Related Problem (SRP) 757-SRP-30-0031 has been added.
2. Summary Action and Planning Information 1.D., Description, have been changed to add the inspection of the J1 and J4 lugs and terminals.
3. In Planning Information 1.E., Compliance, the compliance table has been changed to add the inspection of windshield J1 and J4 lugs and terminals.
4. In Planning Information 1.G., Manpower, manpower tables have been changed to add time for inspections of the J1 and J4 lugs and terminals.
5. In Planning Information 1.J.1., Existing Data, Standard Wiring Practices Manual (SWPM) reference 20-64-16 and Illustrated Parts Catalog (IPC) reference 30-41-52 have been added.
6. In Planning Information 1.K.2., Publications Affected, Damage Tolerance Based Structural Inspection evaluation statement has been added.

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7. In Material Information 2.C.1., Kits/Parts, the kit table has been changed to show that the 280N3355-1 wire kit contains the -101 kit and 280N3355-2 wire kit contains the -102 kit.
8. In the Work Instructions 3.B., step 3 of Work Packages 1 and 2 has been changed to add new compliance time thresholds for windshield inspections.
9. In Figure 1 and Figure 2 the illustration has been changed to add the inspection of the J1 and J4 lugs and terminals.
10. In Figure 1 and Figure 2 new illustrations have been added to show the installation of the lug and the correct alignment of the lug on the terminal.
11. In Figure 1 and Figure 2, step 2, the step table note has changed to show another cause of a loose terminal. The Standard Overhaul Practices Manual (SOPM) reference 20-43-03 has been changed to Standard Wiring Practices Manual (SWPM) reference 20-64-16 and Illustrated Parts Catalog (IPC) reference 30-41-52 has been added. New steps have been added to give instructions to inspect the screw if it cannot be tightened in step 3.
12. Figure 6, in the illustration, circle note 2 has been moved to point to an area near the bulb seal. This is the area where the part mark can be applied.

Paragraph 1.A., Effectivity, shows changes of airplane operators. Each operator should examine the Effectivity paragraph for changes.

Vertical lines are put on the left edge of each page, except in Paragraph 1.A., Effectivity, to show the location of important changes.

Pages with no vertical lines have no important changes.

REVISION HISTORY

Original Issue:	July 19, 2006
Revision 1:	December 19, 2007
Revision 2:	April 19, 2010



SPECIAL ATTENTION

Number: 757-30-0019
Original Issue: July 19, 2006
Revision 2: April 19, 2010
ATA System: 3041 5611

Summary

SUBJECT: ICE AND RAIN PROTECTION - Flight Compartment Window Anti-Icing - Windshield Inspection and Replacement

BOEING RECOMMENDS THAT EACH OPERATOR EXAMINE THIS SERVICE BULLETIN IMMEDIATELY.

CONCURRENT REQUIREMENTS

None

BACKGROUND

This service bulletin gives instructions to do an inspection of the electrical connections on the left and the right windshields. Instructions are also given to replace the windshields and make changes to their related wire bundles. A new windshield design is available that uses a different electrical connection.

Boeing received nine reports from eight operators of electrical arcs at the terminal blocks of the flight compartment windows. More than one of these reports included data to show that the results of the arcs were open flame incidents. One operator found an indication of damage at a terminal and tightened a loose connection. The terminal had internal damage that could not be seen. Less than six months after the connection was tightened there was a report from the operator of an open flame incident on the same windshield.

The electrical connections on the windows are made with lugs that are attached with screws. The windshield is the number 1 window in the flight compartment. All of the windows in the flight compartment are electrically heated. The windshield gets a much larger electrical load.

An investigation found that the cause of the electrical arcs is loose terminal connections. A loose connection increases the heat at the terminal which can cause damage to the internal solder joint. Damaged solder joints are the primary cause for the electrical arcs. The primary causes of loose connections are the incorrect torque of the screw or an incorrectly installed screw.

The inspection given in this service bulletin is to look for damage or a loose electrical connection on the windshield. If there are indications of electrical arcs or damage to the electrical connection, the windshield is replaced. If there is a loose electrical connection, the correct torque is applied to tighten it. If a connection cannot be tightened to the correct torque, the windshield is replaced. When a windshield with an electrical connection that uses pins and sockets is installed, the related wire bundle on the airplane is changed.

When the changes given in this bulletin are done, the windshields will have better electrical connections. The new connections are made with pins and sockets. The pin and socket connections will prevent the risk of electrical arcs as a result of loose connections.

Boeing Service Related Problems (SRP) 757-SRP-30-0031 and 757-SRP-56-0015 are related to this service bulletin.

As a part of a service bulletin validation program, this change was completed on airplane NB141 by Service Bulletin 757-30-0019 Validation Copy 1 before the initial release of this service bulletin. The change completed on airplane NB141 by Service Bulletin 757-30-0019 Validation Copy 1 is equivalent to the initial release of this service bulletin. Airplane NB141 has the configuration of a Group 1 airplane.

ACTION (PRR 54530-265S)

In the flight compartment, do an inspection of the J1, J4 and J5 terminals on the left and the right windshields. Replace windshields that use screws and lugs for the electrical connections with a windshield that uses pins and sockets for the electrical connections. Cut the bulb seal to give clearance for terminals on the new windshield. Change the related wire bundle.

EFFECTIVITY

All 757-200, -200CB, and -200PF Airplanes except NA001. Refer to Paragraph 1.A.1., Airplanes for the list of affected airplanes.

COMPLIANCE

The Federal Aviation Administration (FAA) will possibly release an Airworthiness Directive related to this service bulletin. The Airworthiness Directive will make the compliance tasks and times given in this service bulletin mandatory.

See Service Bulletin Paragraph 1.E. for compliance information.

INDUSTRY SUPPORT INFORMATION

Boeing warranty remedies are not available for the configuration changes given in this service bulletin.

MANPOWER

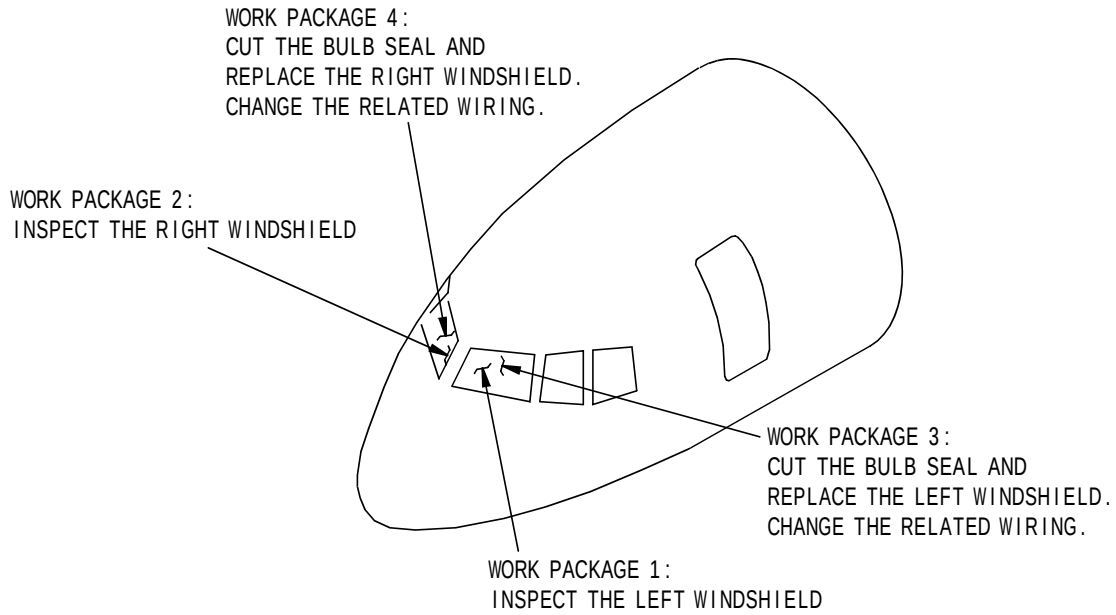
Work Package	Total Task Hours	Elapsed Hours
Work Package 1 - Inspection of the Left Windshield	1.5	1.5
Work Package 2 - Inspection of the Right Windshield	1.5	1.5
Work Package 3 - Left Windshield Replacement and Wiring Change	8.5	4.75
Work Package 4 - Right Windshield Replacement and Wiring Change	8.5	4.75

MATERIAL INFORMATION

Boeing Supplied Kits/Parts

Refer to Paragraph 2.A., Material - Price and Availability.

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BOEING RECOMMENDS THAT EACH OPERATOR EXAMINE THIS SERVICE BULLETIN IMMEDIATELY.

1. PLANNING INFORMATION

A. Effectivity

1. Airplanes

Refer to Service Bulletin Index Document D624N001 Part 3 for Airplane Variable Number, Line Number, and Serial Number data.

This service bulletin is for the airplanes shown below. An equivalent change is on subsequent production airplanes. Refer to PRR 54530-265S for data about this change.

GROUP	CONFIGURATION	DESCRIPTION
1	-	Airplanes with windshields that use screw and lug electrical connections. The location of the circuit breaker for window heat is in a different location than for Group 2.
2	-	Airplanes with windshields that use screw and lug electrical connections. The location of the circuit breaker for window heat is in a different location than for Group 1.

Airplane models:

757-200 757-200CB 757-200PF

IDENTIFICATION BY CUSTOMER, CUSTOMER CODE, GROUP AND VARIABLE NUMBER

AIR ASTANA (AKZ)

1 NB561

NT231

NT411–NT412

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AIR CHINA SOUTHWEST BRANCH (XIN)

1 NB291–NB295 NB297–NB299 NB301–NB302 NB327
NT201–NT202

AIR FINLAND (FNL)

1 NB221 NB239 NB454

AIR GREENLAND AS (GRL)

1 NA350

AIR ITALY (RIT)

1 NC057 NE162–NE164

AIR ITALY POLSKA (IPL)

1 NE301

AIRBALTIC CORPORATION (BCB)

1 NT905 NT907

ALADIA AIRLINES (TPT)

1 NA194 NC066

AMERICA WEST AIRLINES (AMW)

1 NB039

AMERICAN AIRLINES (AAL)

1 ND011–ND044 ND046–ND059 ND111–ND113 ND161–ND166
ND168–ND199 NT352 NT731–NT750 NT971–NT985

ARROW AIR (ARW)

1 NA025

ASTRAEUS, LTD. (AUA)

1 NB134 NB142 NB204 NB225
ND401

ATLASJET AIRLINES (ABE)

1 NT375 NT910–NT911

AURELA (URE)

1 NT285

AVIANCA (AVI)

1 NA341 NA347 NA351 NA406
NB070 NB324 NB326

AVIATION CAPITAL GROUP (CGP)

1 NA348

AWAS (AWW)

1 NB133 NB135

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AZERBAIJAN AIRLINES (AHY)

1 ND248 NT437–NT438

BABCOCK & BROWN A/C MANAGEMENT (BBB)

1 NC062 NT281 NT283

BELAIR AIRLINES (BLB)

1 NT426–NT427

BLUE CITY HOLDING (BCY)

1 NB141

BLUE PANORAMA AIRLINES (BPA)

1 NC094 NT351

BOEING CAPITAL CORPORATION (ZMF)

1 NE302

BRITISH AIRWAYS (BAB)

1 NA237–NA239 NA303–NA305 NA398 NB581–NB583
NT401–NT403

CAM (CGM)

1 NA520

CARGOJET AIRWAYS LTD. (WNT)

1 NA343

CEBU PACIFIC AIR (CEB)

1 NA301–NA302

CHINA SOUTHERN AIRLINES (GUN)

1 NA349 NB065–NB066 NB261–NB267 NB296

CHINA XINJIANG AIRLINES (XIJ)

1 NB325 NB328 NT381–NT386 NT408–NT409

CONTINENTAL AIRLINES (CAL)

1 ND301–ND322 NT751–NT769

CORPORACION YGNUS AIR (REI)

1 NA395 ND241

DELTA AIR LINES (DAL)

1 NA501–NA519 NA521–NA586 NB001–NB004 NC076–NC084
NC091 NC093 NE008 NT353–NT354
NT360 NT371–NT373 NT701–NT730

DHL INTERNATIONAL (DHI)

1 NA201–NA204 NA206–NA213 NA215–NA236

EAGLE AVIATION (EAE)

1 NC052 NC067

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EL AL ISRAEL AIRLINES (ELA)

1 ND002 ND004–ND007

ESTADO NACIONAL ARGENTINO ENA (ESA)

1 NB144

ETHIOPIAN AIRLINES (ETH)

1 NC092 NE201–NE204 NT248 NT282
NT356
2 NC951

EUROATLANTIC AIRWAYS (MAE)

1 NA196–NA197

EUROPEAN AIR TRANSPORT (EPT)

1 NC059
2 NC974

EVERGREEN A/C SALES & LEASING (EVG)

1 NA006 NA008

FAR EASTERN AIR TRANSPORT (FAT)

1 NT881–NT885
2 NC973

FEDEX (FED)

1 NA346 NA394 NA444 NB064
NB073 NB131–NB132 NB140 NB167
NB424 NB501 NB503 NB508

FINNAIR (FIN)

1 NT341–NT347

FLYGLOBESPAN.COM (FGS)

1 NB224

FUNAIR (FUN)

1 NT909

GENERIC CUSTOMER/SUPPLIER (XXX)

1 NC023

HOLA AIRLINES (HLB)

1 NA399

HONEYWELL AEROSPACE (SGC)

1 NA005

IBERIA AIRLINES (IBE)

1 NT906 NT908

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ICELANDAIR (ICE)

1	NA028	NB079	NB138–NB139	NB421
	ND201–ND203	ND244–ND247	NN001–NN002	NT861–NT862
	NT913	NT915–NT916		
2	NC971			

ILFC (ILF)

1	NC056	NC072–NC073		
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JET2.COM LTD (CEX)

1	NA344	NA396–NA397	NB061–NB063	NB071–NB072
	NB145			

JETWORKS LEASING (JTW)

1	NA442			
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KRASAIR (ZXD)

1	NT901–NT904			
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L-3 C.I.S. (CIJ)

1	NB146–NB148	NC051	NC070	NC075
	NT436			

LEGATUM (LGM)

1	NC060			
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LITHUANIAN AIRLINES (LIJ)

1	NB434			
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L'AVION (EYS)

1	NE003	NE166		
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MACQUARIE AIR FINANCE (ZGT)

1	NA026	NC058		
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MEXICANA (CMA)

1	NT376–NT378			
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MEXICO'S PRESIDENTIAL AIRCRAFT (MXG)

1	NA027			
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MID EAST JET (SKL)

1	NC161			
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MONARCH AIRLINES (MON)

1	NA401–NA405	NA407–NA408		
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NASA (NAS)

1	NA002			
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NORTH AMERICAN AIRLINES (NNA)

1	NB236	NT239–NT240	NT242	NT247
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NORTHWEST AIRLINES (NWA)

1 NC001–NC022 NC024–NC033 NE311–NE325 NU031–NU038

OCEANAIR AIRLINES (OAL)

1 NB453

OMNI AIR INTERNATIONAL (OAE)

1 NA446 NB137

ORIENT THAI AIRLINES (OTH)

1 NA193

PACE AIRLINES (PIE)

1 ND242

PARADIGM AIR (PGD)

1 NA205

PRIMARIS AIRLINES INC. (PIM)

1 NA199 NB067 NE161

PRIVATAIR (PTS)

1 NB136

PRIVILEGE STYLE (PVG)

1 ND243

RAK AIRWAYS (RKW)

1 NT914

ROLLS-ROYCE NORTH AMERICA (RRN)

1 ND001 ND003

ROYAL AIR MAROC (RAM)

1 NC041–NC042

ROYAL BRUNEI AIRLINES (RBA)

1 NB052

ROYAL NEPAL AIRLINES (RNA)

1 ND891 ND895

ROYAL NEW ZEALAND AIR FORCE (RNZ)

1 NB451–NB452

RYAN INTERNATIONAL AIRLINES (RYN)

1 NA195 NA198 NA342

SANTA BARBARA AIRLINES C.A. (YDJ)

1 NA392–NA393 NB068

SAUDI ROYAL FLIGHT (SRF)

1 NB168

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SHANGHAI AIRLINES (SHA)

1 NE004-NE007 NJ551-NJ555 NT358

SHANGHAI AIRLINES CARGO (CIX)

1 NE001-NE002

SKYSERVICE AIRLINES (SKB)

1 NA345

STATE AIR COMPANY "BERKUT" (ORE)

1 NB053

SUNEXPRESS (SNS)

1 NC068-NC069 NC071

TACV-CABO VERDE AIRLINES (TCV)

1 NC074 NT379

THE YUCAIPA COMPANIES (YUC)

1 NB312

THOMAS COOK AIRLINES UK (JMA)

1	NA445	NB201	NB222-NB223	NB226-NB228
	NB230	NB330-NB331	NB446	NB571
	NT232-NT234	NT237-NT238		

THOMSONFLY (BRI)

1	NA352	NA443	NB322	NB329
	NB422-NB423	NB426-NB427	NB429-NB430	NB432-NB433
	NB435-NB438	NB506-NB507	NJ001-NJ004	NT245-NT246
	NT404-NT407	NT431-NT432		

TITAN AIRWAYS (TIU)

1 NB323 NT912

TUIFLY NORDIC (TNS)

1 NB428 NB431

TURKMENISTAN AIRLINES (TUE)

1 NB143 NB161-NB162 NT446

UNITED AIR LINES (UAL)

1 NE011-NE088 NE092-NE094 NE141-NE150 NT791-NT796

UPS (UPS)

1 NT001-NT009
2 NC901-NC950 NS601-NS616

US AIR FORCE (USF)

1 NP901-NP904

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US AIRWAYS (USA)

1	NA003–NA004	NA007	NA009–NA010	NA012–NA016
	NA018–NA020	NB021–NB023	NB036–NB038	NB040–NB041
	NB502	NB504–NB505	NB509–NB523	NT286
	NT288–NT289			

UZBEKISTAN AIRWAYS (UZB)

1	NC151	NT355	NT357	NT359
	NT441–NT442			

VARIG LOGISTICA S.A. (VRG)

1	NA021–NA023	NA441	NA447	
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VIM AVIA (VIM)

1	NE165	NE167–NE177	NT284	NT287
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VULCAN INC. (VUL)

1	NB311			
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VX CAPITAL PARTNERS (VXC)

1	NC061			
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XIAMEN AIRLINES (XIA)

1	ND221–ND225	NJ031–NJ032	NN051–NN052	
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XL AIRWAYS (SBE)

1	NA024	NB321		
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ZOOM AIRLINES (YFM)

1	NB202–NB203			
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IDENTIFICATION BY VARIABLE NUMBER

Variable	Group
NA002–NA028	1
NA191–NA199	1
NA201–NA239	1
NA301–NA305	1
NA341–NA352	1
NA391–NA399	1
NA401–NA408	1
NA441–NA447	1
NA501–NA586	1
NB001–NB004	1
NB021–NB023	1
NB036–NB041	1
NB051–NB053	1
NB061–NB073	1

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Variable	Group
NB079	1
NB131–NB148	1
NB161–NB162	1
NB166–NB168	1
NB201–NB204	1
NB221–NB228	1
NB230	1
NB236	1
NB239	1
NB261–NB267	1
NB291–NB299	1
NB301–NB302	1
NB311–NB312	1
NB321–NB331	1
NB421–NB438	1
NB446	1
NB451–NB454	1
NB501–NB523	1
NB561	1
NB571	1
NB581–NB583	1
NC001–NC033	1
NC041–NC042	1
NC051–NC052	1
NC056–NC062	1
NC066–NC084	1
NC091–NC094	1
NC151	1
NC161	1
NC901–NC951	2
NC971–NC974	2
ND001–ND007	1
ND011–ND059	1
ND111–ND113	1
ND161–ND199	1
ND201–ND203	1
ND221–ND225	1
ND241–ND248	1
ND301–ND322	1

Variable	Group
ND401	1
ND891	1
ND895	1
NE001–NE008	1
NE011–NE088	1
NE091–NE094	1
NE141–NE150	1
NE161–NE177	1
NE201–NE204	1
NE301–NE302	1
NE311–NE325	1
NJ001–NJ004	1
NJ031–NJ032	1
NJ551–NJ555	1
NN001–NN002	1
NN051–NN052	1
NP901–NP904	1
NS601–NS616	2
NT001–NT009	1
NT201–NT202	1
NT231–NT234	1
NT237–NT240	1
NT242	1
NT245–NT248	1
NT281–NT289	1
NT341–NT347	1
NT351–NT360	1
NT371–NT373	1
NT375–NT379	1
NT381–NT386	1
NT401–NT409	1
NT411–NT412	1
NT426–NT427	1
NT431–NT432	1
NT436–NT438	1
NT441–NT442	1
NT446	1
NT701–NT769	1
NT791–NT796	1

Variable	Group
NT861–NT862	1
NT881–NT885	1
NT901–NT916	1
NT971–NT985	1
NU031–NU038	1

2. Spares Affected

Examine your spares supply for the parts or components identified in Paragraph 2.C., Parts Necessary for Each Airplane. If any parts or components are found, refer to Paragraph 2.C. for the recommended use.

B. Concurrent Requirements

None

C. Reason

This service bulletin gives instructions to do an inspection of the electrical connections on the left and the right windshields. Instructions are also given to replace the windshields and make changes to their related wire bundles. A new windshield design is available that uses a different electrical connection.

Boeing received nine reports from eight operators of electrical arcs at the terminal blocks of the flight compartment windows. More than one of these reports included data to show that the results of the arcs were open flame incidents. One operator found an indication of damage at a terminal and tightened a loose connection. The terminal had internal damage that could not be seen. Less than six months after the connection was tightened there was a report from the operator of an open flame incident on the same windshield.

The electrical connections on the windows are made with lugs that are attached with screws. The windshield is the number 1 window in the flight compartment. All of the windows in the flight compartment are electrically heated. The windshield gets a much larger electrical load.

An investigation found that the cause of the electrical arcs is loose terminal connections. A loose connection increases the heat at the terminal which can cause damage to the internal solder joint. Damaged solder joints are the primary cause for the electrical arcs. The primary causes of loose connections are the incorrect torque of the screw or an incorrectly installed screw.

The inspection given in this service bulletin is to look for damage or a loose electrical connection on the windshield. If there are indications of electrical arcs or damage to the electrical connection, the windshield is replaced. If there is a loose electrical connection, the correct torque is applied to tighten it. If a connection cannot be tightened to the correct torque, the windshield is replaced. When a windshield with an electrical connection that uses pins and sockets is installed, the related wire bundle on the airplane is changed.

When the changes given in this bulletin are done, the windshields will have better electrical connections. The new connections are made with pins and sockets. The pin and socket connections will prevent the risk of electrical arcs as a result of loose connections.

Boeing Service Related Problems (SRP) 757-SRP-30-0031 and 757-SRP-56-0015 are related to this service bulletin.

As a part of a service bulletin validation program, this change was completed on airplane NB141 by Service Bulletin 757-30-0019 Validation Copy 1 before the initial release of this service bulletin. The change completed on airplane NB141 by Service Bulletin 757-30-0019 Validation Copy 1 is equivalent to the initial release of this service bulletin. Airplane NB141 has the configuration of a Group 1 airplane.

Revision 1 was sent to change the No.1 Windshield Assembly part numbers supplied in the Top Kits.

Revision 2 is sent to tell operators that have not done the terminating action in the compliance of this service bulletin will now need to also inspect the J1 and J4 windshield lugs and terminals.

D. Description

In the flight compartment, do an inspection of the J1, J4 and J5 lugs and terminals on the left and the right windshields. Replace windshields that use screws and lugs for the electrical connections with a windshield that uses pins and sockets for the electrical connections. Cut the bulb seal to give clearance for terminals on the new windshield. Change the related wire bundle.

The changes in this service bulletin will not change the Engine Indication and Crew Alerting System (EICAS).

Revision 1 - No more work is necessary on airplanes changed as shown in the original issue of this service bulletin.

Revision 2 - More work is necessary on airplanes changed as shown in the original issue and Revision 1 of this service bulletin.

E. Compliance

The Federal Aviation Administration (FAA) will possibly release an Airworthiness Directive related to this service bulletin. The Airworthiness Directive will make the compliance tasks and times given in this service bulletin mandatory.

Compliance Table:

Condition	Action	Compliance Time (Whichever Occurs First)	Repeat Interval (Whichever Occurs Later)
Windshield that uses screws and lugs for window heat power connection.	Replace with windshield that uses pins and sockets for window heat power connection in accordance with Accomplishment Instructions Work Packages 3 and 4.	----	Terminating action for this bulletin.

Compliance Table:

Condition	Action	Compliance Time (Whichever Occurs First)	Repeat Interval (Whichever Occurs Later)
PPG Windshield that uses screws and lugs for window heat power connection.	Do the actions that follow for J1, J4 and J5 window heat power connections: 1. Inspect the shipside wiring and terminal lug (including cap) look for signs of melted or discolored insulation. 2. Inspect the window terminal blocks, look for signs of melting or distortion. 3. Inspect the window heat power connection for evidence of cross threading by making sure the terminal lug is parallel with the window terminal block. 4. Inspect the terminal lug for looseness. 5. Address the inspection findings as described in Inspection Conditions 1 thru 4.	Within 500 flight hours or 150 days, whichever occurs earlier, after the date of Revision 2 to the service bulletin.	Every 6000 flight hours or 24 months until windshield is replaced with windshield that used pins and sockets for the window heat power connection in accordance with Accomplishment Instructions Work Packages 3 and 4.

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Compliance Table:

Condition	Action	Compliance Time (Whichever Occurs First)	Repeat Interval (Whichever Occurs Later)
GKN Windshield that uses screws and lugs for window heat power connection.	Do the actions that follow for J1, J4 and J5 window heat power connections: 1. Inspect the shipside wiring and terminal lug (including cap) look for signs of melted or discolored insulation. 2. Inspect the window terminal blocks, look for signs of melting or distortion. 3. Inspect the window heat power connection for evidence of cross threading by making sure the terminal lug is parallel with the window terminal block. 4. Inspect the terminal lug for looseness. 5. Address the inspection findings as described in Inspection Conditions 1 thru 4.	Within 500 flight hours or 150 days, whichever occurs earlier, after the date of Revision 2 to the service bulletin.	Every 12,000 flight hours or 48 months until windshield is replaced with windshield that used pins and sockets for window heat power connection in accordance with Accomplishment Instructions Work Packages 3 and 4.
Inspection Condition 1 - If the inspection reveals one or more signs of the following: 1. Melted shipside wire insulation. 2. Discolored shipside wire insulation. 3. Melted terminal lug. 4. Melted cap.	1. Repair or replace shipside wiring as necessary. Refer to Standard Wiring Practices Manual SWPM 20-10-13 as an accepted procedure. 2. If the terminal lug has melted, replace the shipside terminal lug and windshield in accordance with Work Package 1, step 3. and Work Package 2, step 3.	Before further flight.	----

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Compliance Table:

Condition	Action	Compliance Time (Whichever Occurs First)	Repeat Interval (Whichever Occurs Later)
Inspection Condition 2 - If the inspection reveals one or more signs of the following: 1. Melted window terminal block. 2. Distorted or cracked window terminal block.	1. Replace windshield in accordance with Work Package 1, step 3. and Work Package 2, step 3.	Before further flight.	----
Inspection Condition 3 - If the inspection reveals evidence the window heat power connection is cross threaded.	1. Inspect the terminal for looseness. If the cross threaded terminal is loose: torque the terminal screw to 25-30 in-lb. 2. Re-inspect terminal lug for looseness. 3. If terminal lug is still loose replace windshield in accordance with Work Package 1, step 3. and Work Package 2, step 3.	Before further flight.	----
	4. If terminal lug is tight, replace windshield in accordance with Work Package 1, step 3. and Work Package 2, step 3.	Within 150 days or 500 flight hours, whichever occurs earlier, after the inspection.	----
Inspection Condition 4 - If the inspection reveals the terminal lug is loose.	1. Torque the terminal screw to 25-30 in-lb. 2. Re-inspect terminal lug for looseness. 3. If terminal lug is still loose then disassemble, inspect and reassemble the electrical connection.	Before further flight.	----

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Compliance Table:

Condition	Action	Compliance Time (Whichever Occurs First)	Repeat Interval (Whichever Occurs Later)
If the windshield is replaced with same type windshield that uses screws and lugs for window heat power connection. OR Window heat power connection is reassembled (on windshields that uses screws and lugs for window heat power connection).	Do a detailed inspection in accordance with Accomplishment Instructions Work Package 1, step 2. and Work Package 2, step 2.	Within 150 days or 500 flight hours, whichever occurs earlier, after installation of same windshield type (a).	----
(a) The initial inspection after installing a new window or a new terminal screw is to verify that the window heat power connection is correctly made. An improperly installed screw (under torqued or cross threaded) can be identified regardless of the time since installation. If a screw is properly installed and torqued, there is no evidence that it will loosen over time. The inspection steps outlined in this service bulletin should be followed. Refer to either condition "Window heat power connection is reassembled" or "windshield is replaced with same type windshield" in the Compliance Table for inspection requirements.			

F. Approval

This service bulletin was examined by the Federal Aviation Administration (FAA). The changes specified in this service bulletin comply with the applicable regulations and are FAA approved, as well as European Aviation Safety Agency (EASA)/Joint Aviation Authorities (JAA) approved for all EASA/JAA approved airplanes listed in the service bulletin effectivity. This service bulletin and its approval were based on the airplane in its original Boeing delivery configuration or as modified by other approved Boeing changes.

If an airplane has a non-Boeing modification or repair that affects a component or system also affected by this service bulletin, the operator is responsible for obtaining appropriate regulatory agency approval before incorporating this service bulletin.

G. Manpower

The table below shows an estimate of the task-hours necessary to do this inspection or change one window for each airplane. This estimate is for direct labor only, done by an experienced crew. Adjust the estimate with operator task-hour data if necessary. The estimate does not include lost time.

These are some examples of lost time:

- Time to adjust to the workplace
- Time to schedule the work
- Time to examine the work
- Time to cure the materials
- Time to make the parts

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— Time to find the tools.

Work Package 1 - Inspection of the Left Windshield

Task	Number of Persons	Task-Hours	Elapsed Hours
Figure 1	1	1.50	1.50
Total per Windshield		1.50	1.50

Work Package 2 - Inspection of the Right Windshield

Task	Number of Persons	Task-Hours	Elapsed Hours
Figure 2	1	1.50	1.50
Total per Windshield		1.50	1.50

Work Package 3 - Replacement of the Left Windshield and Changes to the Related Wiring

Task	Number of Persons	Task-Hours	Elapsed Hours
Access	2	1.0	0.50
Remove the Left Windshield	2	2.5	1.25
Figure 3 - Cut the Bulb Seal	1	0.25	0.25
Figures 4 and 5 - Change the Wiring	1	0.50	0.50
Install the Left Windshield	2	3.0	1.5
Tests	1	0.25	0.25
Close	2	1.0	0.50
Total per Windshield		8.5	4.75

Work Package 4 - Replacement of the Right Windshield and Changes to the Related Wiring

Task	Number of Persons	Task-Hours	Elapsed Hours
Access	2	1.0	0.50
Remove the Right Windshield	2	2.5	1.25
Figure 6 - Cut the Bulb Seal	1	0.25	0.25
Figures 7 and 8 - Change the Wiring	1	0.50	0.50
Install the Right Windshield	2	3.0	1.5
Tests	1	0.25	0.25
Close	2	1.0	0.50
Total per Windshield		8.5	4.75

H. Weight and Balance Changes

None

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I. Electrical Load Data

Not changed

J. References

1. Existing Data:

- a. Engineering Change Memo PRR 54530-265S
- b. Boeing Service Related Problem (SRP) 757-SRP-30-0031, 757-SRP-56-0015
- c. 757 Aircraft Maintenance Manual (AMM) 30-41-00, 56-11-01
- d. Wiring Diagram 30-41-11, 30-41-12
- e. Standard Wiring Practices Manual (SWPM) 20-10-11, 20-10-12, 20-10-13, 20-10-18, 20-10-19, 20-20-00, 20-30-11, 20-63-19, 20-64-16
- f. 757 Illustrated Parts Catalog (IPC) 30-41-52
- g. Standard Overhaul Practices Manual (SOPM) 20-41-02, 20-43-03, 20-50-10
- h. Boeing Service Bulletin 767-56-0012

2. Data supplied with this Service Bulletin:

None

3. Installation Drawings Used in the Preparation of this Service Bulletin:

None

K. Publications Affected

1. Publications

Publication	Chapter-Section
757 Maintenance Manual	30-41, 56-11
757 Wiring Diagram Manual	30-41
757 Illustrated Parts Catalog	56-11

2. Damage Tolerance Based Structural Inspections:

Boeing has evaluated the repairs and/or changes in this service bulletin for effects on Fatigue Critical Structure (FCS) and for changes to Damage Tolerance Inspections (DTI) required in the Maintenance Program. This service bulletin does not affect FCS, therefore DTIs are not necessary.

L. Interchangeability and Intermixability of Parts

Refer to Paragraph 2.C., Parts Necessary For Each Airplane, for interchangeability and intermixability information.

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2. MATERIAL INFORMATION**A. Material - Price and Availability**

Boeing can supply the kit shown in Paragraph 2.C., Parts Necessary For Each Airplane as shown below. Kit availability is shown in the Reorder Lead Time (ROLT). ROLT is calculated from the date Boeing gets the purchase order.

Kit Number	Name	ROLT (Weeks)	Unit Price thru Dec 31/07
012N8926-7	Top Kit - Left Windshield - PPG with hydrophobic coating	19	\$16,480.00
012N8926-8	Top Kit - Right Windshield - PPG with hydrophobic coating	19	\$16,480.00

The kits are subject to the terms and conditions of the Boeing standard purchase order acknowledgment. After the Unit Price date, new price and ROLT data is applicable. Prices are in United States dollars. Terms: Net 30 days.

Reference this service bulletin and submit your purchase order by one of the methods that follow:

1. Order on-line via ATA Spec 2000 or Boeing Part Page
2. Fax to (206) 662-7145
3. Spares Customer Support - MC 36-65
Boeing Spares Department
P.O. Box 3707
Seattle, Washington 98124-2207 USA

B. Industry Support Information

Boeing warranty remedies are not available for the configuration changes given in this service bulletin.

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C. Parts Necessary For Each Airplane

1. Kits/Parts:

To get the kits/parts shown below, refer to Paragraph 2.A., Material - Price and Availability.

NOTE: Two top kits (one for the left side and one for the right side) and the items shown in Paragraph 2.C.2., Parts and Materials Supplied by the Operator, are necessary for each airplane.

Kit 012N8926				
New Part Number	QTY		Name	Notes
	-8	-7		
012N8926-7	.	-	Top Kit - Left Windshield, PPG with Hydrophobic coating	
012N8926-8	-	.	Top Kit - Right Windshield, PPG with Hydrophobic coating	
141W7400-43	.	1	PPG Left Windshield Assembly with Hydrophobic coating	(a) (b) (c) (d) (f) (h) (j)
141W7400-44	1	.	PPG Right Windshield Assembly with Hydrophobic coating	(a) (b) (c) (e) (g) (i) (j)
280N3355-1	.	1	Wire Kit - Flight Deck Window Heat	
280N3355-2	1	.	Wire Kit - Flight Deck Window Heat	
(a) Keep the existing part if there are other uses for it.				
(b) This part is not used in production.				
(c) You cannot use the existing part to replace the new or changed part.				
(d) As an option operators can install Left Windshield part number 141T4801-59 with serial numbers 04001Hxxxx through 05365Hxxxx.				
(e) As an option operators can install Right Windshield part number 141T4801-60 with serial numbers 04001Hxxxx through 05365Hxxxx.				
(f) As an option operators can install Left Windshield part number 141W7400-31 or 141W7400-33 with serial numbers 04001Hxxxx through 05365Hxxxx.				
(g) As an option operators can install Right Windshield part number 141W7400-32 or 141W7400-34 with serial numbers 04001Hxxxx through 05365Hxxxx.				
(h) As an option operators can install Left Windshield part number 141W7400-35 or 141W7400-41.				
(i) As an option operators can install Right Windshield part number 141W7400-36 or 141W7400-42.				
(j) PPG Aerospace - Transparencies Div Glass (V53117) P.O. Box 2200 1719 U.S. Highway 72 East Huntsville, AL 35811-9660				

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Kit 280N3355						
New Part Number	QTY				Name	Notes
	-102	-101	-2	-1		
280N3355-1	.	.	.	-	Wire Kit - Flight Deck Window Heat	
280N3355-2	.	.	-	.	Wire Kit - Flight Deck Window Heat	
280N3355-101	.	-	.	1	Kit, Wire Bundle W2304	
280N3355-102	-	.	1	.	Kit, Wire Bundle W2314	
280N3355-10103	.	1	.	.	BMS 13-52 Expandable Sleeve	
280N3355-10203	1	.	.	.	BMS 13-52 Expandable Sleeve	
-	.	1	.	.	Wire Identified W2304-0001-12	(a)
-	.	1	.	.	Wire Identified W2304-0002-12	(b)
-	1	.	.	.	Wire Identified W2314-0001-12	(a)
-	1	.	.	.	Wire Identified W2314-0002-12	(b)
BACT12AC-12	3	3	.	.	Terminal Lug	(c)
M39029/57-359	3	3	.	.	Socket Contact	(c)
(a) BMS 13-60, Type 1, Class 1, AWG 12, length 66 inches						
(b) BMS 13-60, Type 1, Class 1, AWG 12, length 33 inches						
(c) There are more parts than are necessary.						

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2. Parts and Materials Supplied by the Operator:

Part Number / Specification	QTY	Name	Notes
BMS 13-54	10 feet	Lacing Tape, Red	(a) (b) (c)
BMS 13-54	10 feet	Lacing Tape, Green	(a) (b) (d)
(a) Type 3, Class 1			
(b) Gudebrod Incorporated (V82110) Griffith Towers PO Box 357 Pottstown, PA 19464			
(c) BACS38K5C, red Tie Strap is optional. See the Qualified Products List at the end of the Boeing Material Specification (BMS) for the supplier data.			
(d) BACS38K5F, green Tie Strap is optional. See the Qualified Products List at the end of the Boeing Material Specification (BMS) for the supplier data.			

3. Parts Modified and Reidentified:

The parts shown below are changed as shown in this service bulletin. The quantity (QTY) is the number of parts changed on each airplane.

Existing Part Number	QTY	Name	New Part Number	Notes
233N8300-()	1	Glareshield	-	(a) (b)
(a) Make the change given in this service bulletin.				
(b) There is no equivalent Boeing part number for the changed part. Identify on the part that the change given in this service bulletin was made.				

4. Parts Removed and Not Replaced:

None

D. Parts Necessary to Change Spares

None

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E. Special Tooling - Price and Availability

Boeing can supply the tools shown in Paragraph 2.F., Special Tooling Necessary to do this Service Bulletin. Send a Purchase Order to the Director of Spares. Give this service bulletin number and the date the tools will be used.

Purchase Data:

Tool Kit Number	Name	Unit Price thru Dec 31/07
A56001-2 (part of Sling Set A56001-15)	Windshield Handling Sling	\$625.00

The kits are subject to the terms and conditions of the Boeing standard purchase order acknowledgement. After the Price date, new price data is applicable. Prices are in United States dollars. Terms: Net 30 days.

Reference this service bulletin number and submit purchase order by one of the methods that follow:

1. Order on-line via ATA Spec 2000 or Boeing Part Page
2. Fax to (206) 662-7145
3. Spares Customer Support - MC 36-65
Boeing Spares Department
P.O. Box 3707
Seattle, Washington 98124-2207 USA
(Service Bulletin 757-30-0019)

F. Special Tooling Necessary to do this Service Bulletin

To get the tools shown below, refer to Paragraph 2.E., Special Tooling - Price and Availability. Maintenance and overhaul tools in the manuals shown in Paragraph 1.J., References, can also be necessary. Examine operator tool supply to make sure all necessary tools are available.

Tool Kit Number	Name
A56001-2 (part of Sling Set A56001-15)	Windshield Handling Sling

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3. ACCOMPLISHMENT INSTRUCTIONS

A. GENERAL INFORMATION

CAUTION: KEEP THE WORK AREA, WIRES AND ELECTRICAL BUNDLES CLEAN OF METAL PARTICLES OR CONTAMINATION WHEN YOU USE TOOLS. UNWANTED MATERIAL, METAL PARTICLES OR CONTAMINATION CAUGHT IN WIRE BUNDLES CAN CAUSE DAMAGE TO THE BUNDLES. DAMAGED WIRE BUNDLES CAN CAUSE SPARKS OR OTHER ELECTRICAL DAMAGE.

NOTE:

1. Manual titles are referred to by acronyms. Refer to Paragraph 1.J., References, for definition of the acronyms.
2. Obey all of the warnings and cautions given in the specified manual sections.
3. The work instructions are divided into work packages. Task-Hours and Elapsed-Hours for each package are given in Paragraph 1.G., Manpower. You can do each work package independently.
4. Unless shown differently, these dimensions and tolerances are used:
 - Linear dimensions are in inches
 - Torque limits to tighten nuts and bolts are given in 757 Structural Repair Manual, Chapter 51.
5. Refer to the SWPM 20-10-11 and SWPM 20-10-12 for the wire installation procedures.
6. A Detailed Inspection is defined as: An intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirrors magnifying lenses, etc. may be necessary. Surface cleaning and elaborate procedures may be required.
7. These work instructions refer to procedures included on other Boeing documents. When the words "refer to" are used and the operator has an accepted alternative procedure, the accepted alternative procedure can be used. When the words "in accordance with" are included in the instruction, the procedure in the Boeing document must be used.

B. WORK INSTRUCTIONS

WORK PACKAGE 1 - INSPECTION OF THE LEFT WINDSHIELD

WARNING: BEFORE YOU DO MAINTENANCE ON THE WINDSHIELD HEAT SYSTEM, OPEN THE CIRCUIT BREAKER GIVEN IN THE STEP THAT FOLLOWS. IF THIS CIRCUIT BREAKER IS NOT OPEN, YOU CAN GET AN ELECTRICAL SHOCK WHEN YOU

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TOUCH THE TERMINAL.

1. Open the circuit breaker shown below and attach a DO-NOT-CLOSE tag to it:

Airplane Group	Location Panel / Position	Name	Circuit Breaker
1	P70 / C13	WINDOW HEATER 1L	C391
2	P31 / A05	WINDOW HEATER 1L	C391

2. Do an inspection of the left windshield as given in Figure 1.
3. If the left windshield is not in a serviceable condition, replace the windshield before the subsequent revenue flight. Refer to 757 AMM 56-11-01 as an accepted procedure.
4. Remove the DO-NOT-CLOSE tag and close the circuit breaker shown below:

Airplane Group	Location Panel / Position	Name	Circuit Breaker
1	P70 / C13	WINDOW HEATER 1L	C391
2	P31 / A05	WINDOW HEATER 1L	C391

WORK PACKAGE 2 - INSPECTION OF THE RIGHT WINDSHIELD

WARNING: BEFORE YOU DO MAINTENANCE ON THE WINDSHIELD HEAT SYSTEM, OPEN THE CIRCUIT BREAKER GIVEN IN THE STEP THAT FOLLOWS. IF THIS CIRCUIT BREAKER IS NOT OPEN, YOU CAN GET AN ELECTRICAL SHOCK WHEN YOU TOUCH THE TERMINAL.

1. Open the applicable circuit breaker shown below and attach a DO-NOT-CLOSE tag to it:

Location Panel / Position	Name	Circuit Breaker
P37 / J2	WINDOW HEATER 1R	C392

2. Do an inspection of the right windshield as given in Figure 2.
3. If the right windshield is not in a serviceable condition, replace the windshield before the subsequent revenue flight. Refer to 757 AMM 56-11-01 as an accepted procedure.
4. Remove the DO-NOT-CLOSE tag and close the circuit breaker shown below:

Location Panel / Position	Name	Circuit Breaker
P37 / J2	WINDOW HEATER 1R	C392

WORK PACKAGE 3 - REPLACEMENT OF THE LEFT WINDSHIELD AND CHANGES TO THE RELATED WIRE BUNDLE

WARNING: THE WINDOW HEAT SYSTEM MUST BE DISARMED WHEN YOU REMOVE THE WINDOWS. IF THE WINDOW POWER IS ON, YOU CAN GET AN ELECTRICAL

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SHOCK WHEN YOU TOUCH THE WINDOW. THE SHOCK CAN CAUSE INJURY TO PERSONS.

1. Open this circuit breaker and attach a DO-NOT-CLOSE tag to it:

Airplane Group	Location Panel / Position	Name	Circuit Breaker
1	P70 / C13	WINDOW HEATER 1L	C391
2	P31 / A05	WINDOW HEATER 1L	C391

2. Remove the left windshield. Use the windshield handling sling, A56001-2. Refer to 757 AMM 56-11-01 as an accepted procedure.
3. Cut the bulb seal for the left windshield as given in Figure 3.
4. Change the wiring for the window heat on the left windshield as given in Figure 4 and Figure 5.
5. Install the left windshield. Use the windshield handling sling, A56001-2. Refer to 757 AMM 56-11-01 as an accepted procedure. At the operator's choice, use one of the windshields shown below:

Description	Part Number	Part of Top Kit
PPG with Hydrophobic Coating	141W7400-43	012N8926-7

6. Remove the DO-NOT-CLOSE tag and close this circuit breaker:

Airplane Group	Location Panel / Position	Name	Circuit Breaker
1	P70 / C13	WINDOW HEATER 1L	C391
2	P31 / A05	WINDOW HEATER 1L	C391

7. Do the test "Operational Test - Flight Compartment Window Anti-Icing System" as given in 757 AMM 30-41-00 as an accepted procedure.
8. Put the airplane in a serviceable condition.

WORK PACKAGE 4 - REPLACEMENT OF THE RIGHT WINDSHIELD AND CHANGES TO THE RELATED WIRE BUNDLE

WARNING: THE WINDOW HEAT SYSTEM MUST BE DISARMED WHEN YOU REMOVE THE WINDOWS. IF THE WINDOW POWER IS ON, YOU CAN GET AN ELECTRICAL SHOCK WHEN YOU TOUCH THE WINDOW. THE SHOCK CAN CAUSE INJURY TO PERSONS.

1. Open this circuit breaker and attach a DO-NOT-CLOSE tag to it:

Location Panel / Position	Name	Circuit Breaker
P37 / J2	WINDOW HEATER 1R	C392

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2. Remove the right windshield. Use the windshield handling sling, A56001-2. Refer to 757 AMM 56-11-01 as an accepted procedure.
3. Cut the bulb seal for the right windshield as given in Figure 6.
4. Change the window heat wiring for the right windshield as given in Figures 7 and Figure 8.
5. Install the right windshield. Use the windshield handling sling, A56001-2. Refer to 757 AMM 56-11-01 as an accepted procedure. At the operator's choice, use one of the windshields shown below:

Description	Part Number	Part of Top Kit
PPG with Hydrophobic Coating	141W7400-44	012N8926-8

6. Remove the DO-NOT-CLOSE tag and close this circuit breaker:

Location Panel / Position	Name	Circuit Breaker
P37 / J2	WINDOW HEATER 1R	C392

7. Do the test "Operational Test - Flight Compartment Window Anti-Icing System". Refer to 757 AMM 30-41-00 as an accepted procedure.
8. Put the airplane in a serviceable condition.

FIGURE 1: INSPECTION OF THE LEFT WINDSHIELD

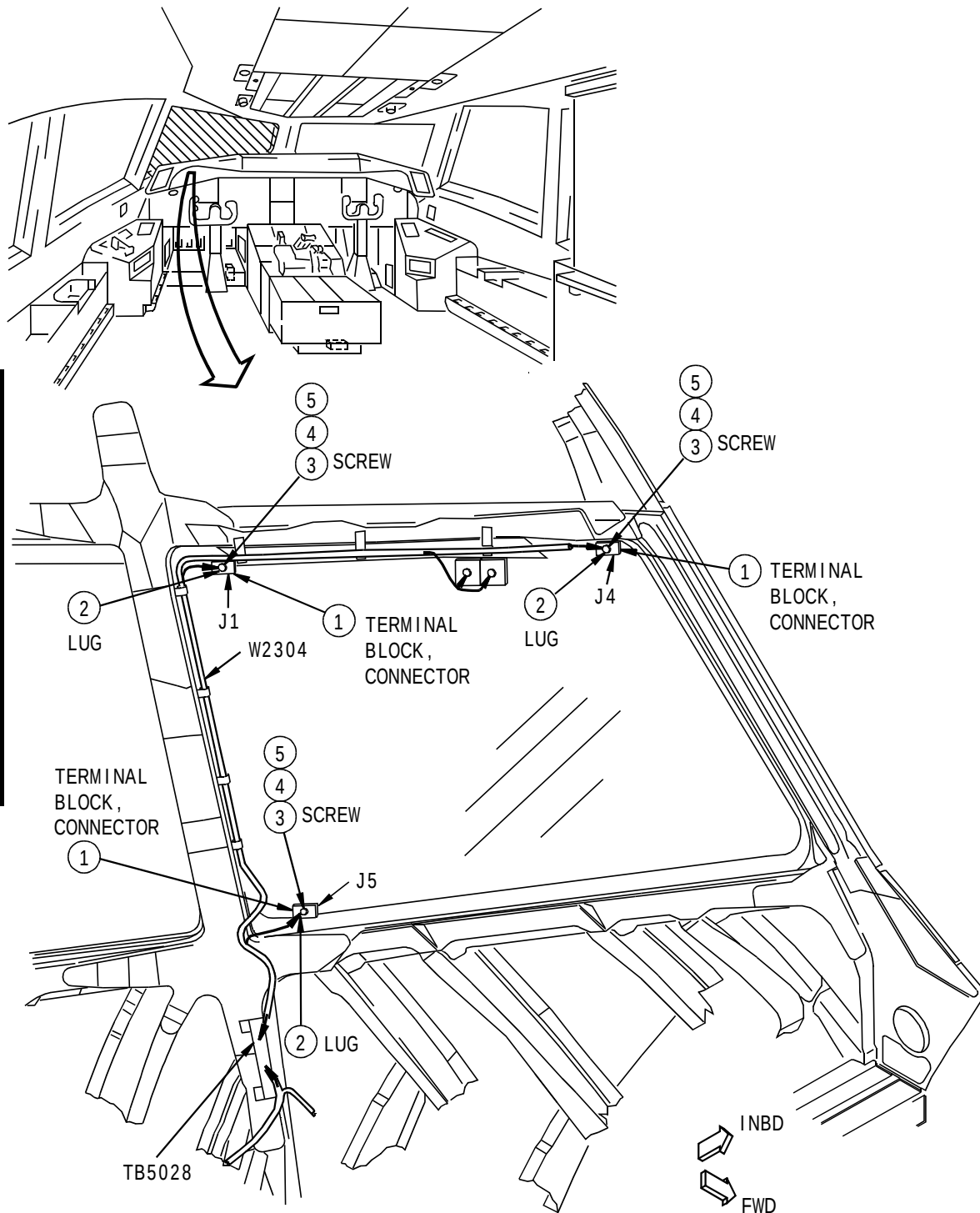


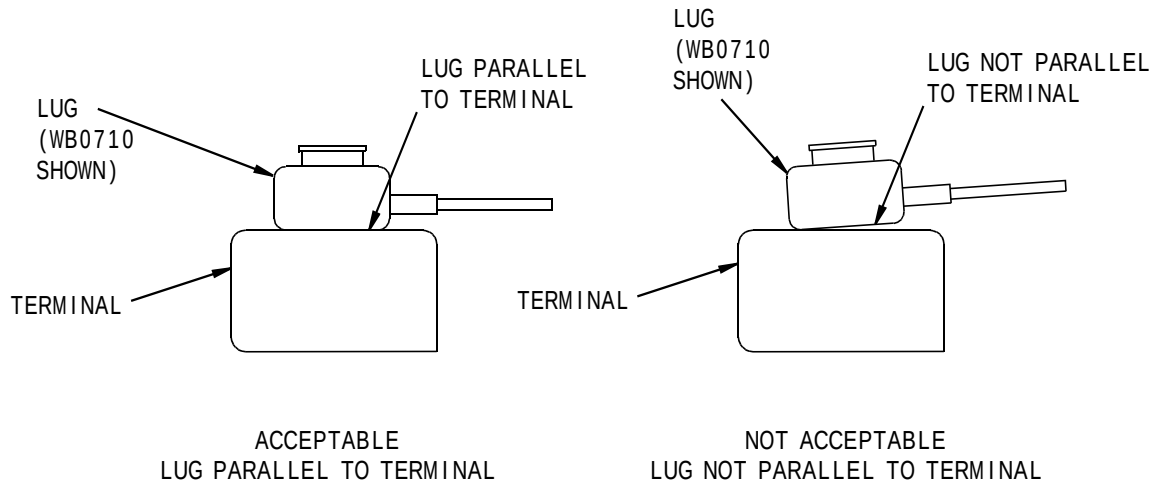
FIGURE 1: INSPECTION OF THE LEFT WINDSHIELD
(SHEET 1 OF 5)

Original Issue: July 19, 2006
Revision 2: April 19, 2010

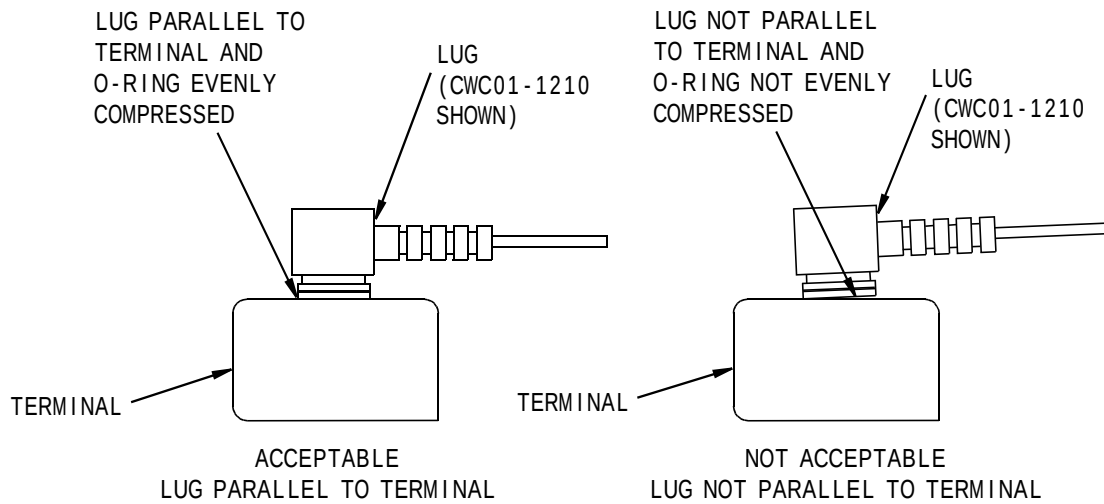
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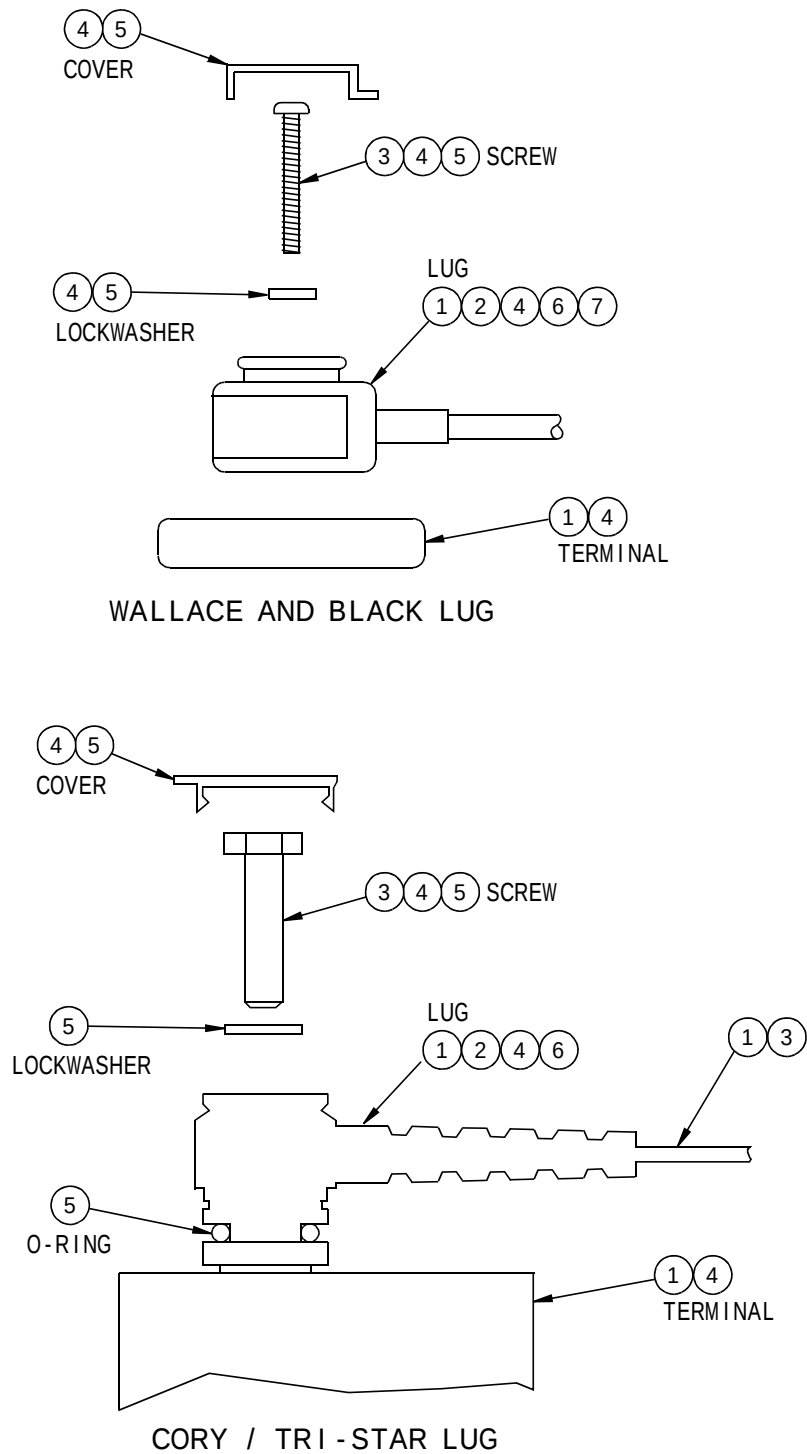
WALLACE AND BLACK LUG



CORY / TRI - STAR LUG

1650853

FIGURE 1: INSPECTION OF THE LEFT WINDSHIELD
(SHEET 2 OF 5)



**FIGURE 1: INSPECTION OF THE LEFT WINDSHIELD
(SHEET 3 OF 5)**

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The step numbers shown below agree with the numbers shown in the circle symbols in the figure.

STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA
1	Inspect	Terminal Block	J1, J4, J5	3	At the J1, J4 and J5 connections
		Lug	-	3	
		Wiring	Wire bundle W2304	3	
	NOTE: If the terminal lug or cap has melted, replace the shipside terminal lug and windshield.				
	NOTE: If the terminal block has melted, distorted or cracked, replace the windshield.				
NOTE: If the shipside wire insulation is melted or discolored, then repair or replace shipside wiring as necessary. Refer to Standard Wiring Practices Manual SWPM 20-10-13 as an accepted procedure.					
2	Inspect	Lug	-	3	To make sure it is a tight connection and not cross threaded.
	NOTE: If the terminal lug moves while applying light manual pressure to the strain-relief on the lug, then the screw that attaches it must be tightened. There are four causes for a loose terminal. 1-The screw is not tightened to the correct torque. 2-The terminal is damaged. 3-The incorrect screw is installed. The correct screw part number is given in SWPM 20-64-16 and Illustrated Parts Catalog 757 IPC 30-41-52. 4-The screw is cross threaded.				
	NOTE: If the lug is not parallel with the terminal, then the screw is cross threaded. Check for lug alignment, the lug and terminal must be viewed from the side. It may be necessary to view the lug and terminal from the exterior side of the window.				
	NOTE: If the lug shows signs of arcing, blueing, overheating or melting, replace the lug and windshield.				
	CAUTION: DO NOT OVER TIGHTEN. THE TERMINAL CAN BE DAMAGED BY TOO MUCH FORCE. A DAMAGED TERMINAL WILL REQUIRE THE REPLACEMENT OF THE WINDOW.				
3	Torque	Screw	-	3	To 25 to 30 inch pounds of torque. Refer to SWPM 20-64-16 as an accepted procedure.
	Inspect	Lug	-	3	To make sure the connection is tight.
	NOTE: The screw is only tightened if the lug is loose. If it is the correct screw and it cannot be tightened to 25 to 30 inch pounds, do steps 4 and 5.				
NOTE: If the cross threaded screw can not be tightened, replace the window.					

FIGURE 1: INSPECTION OF THE LEFT WINDSHIELD
(SHEET 4 OF 5)

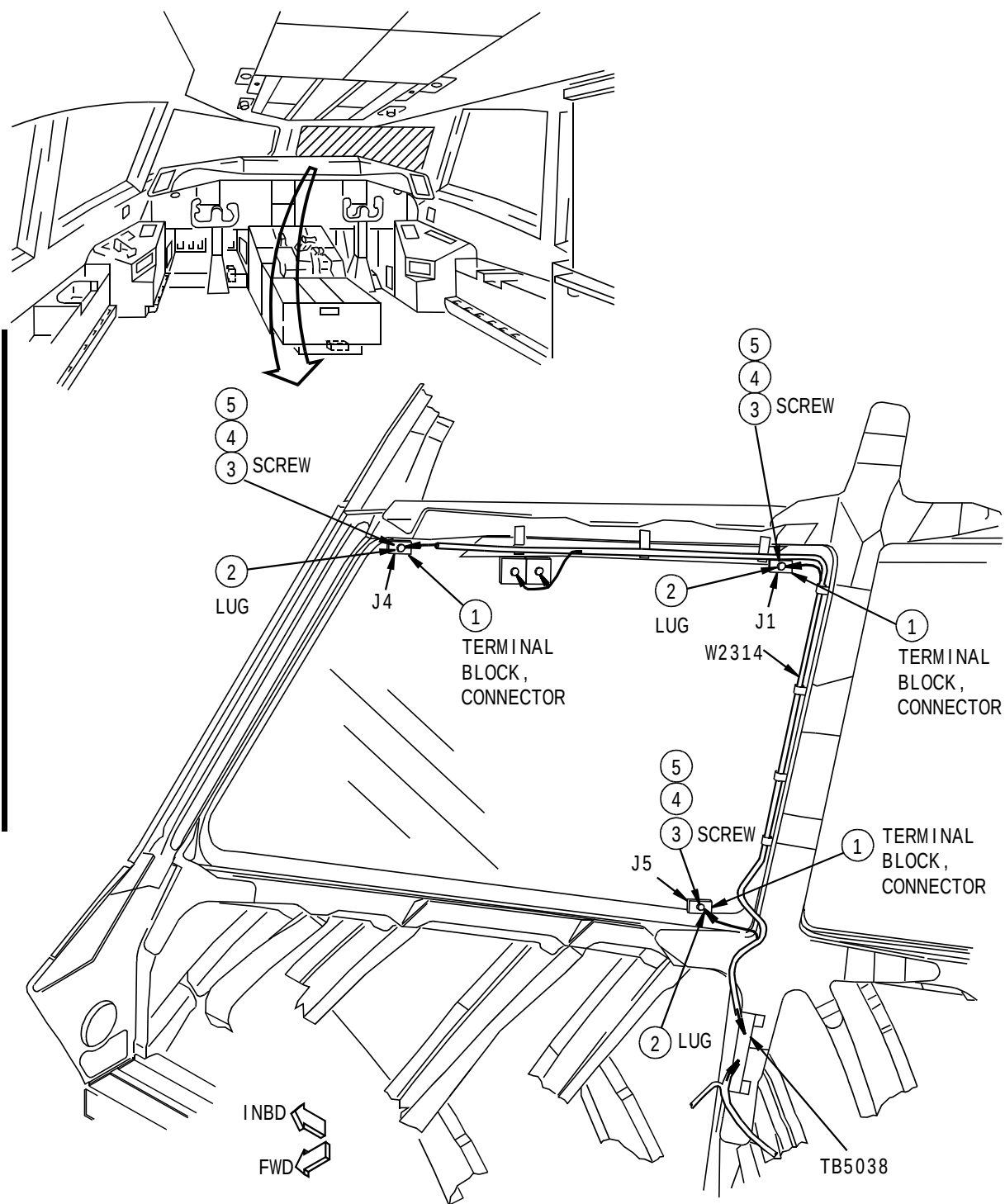
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STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA
4	Remove/Keep	Cover	-	3	
	Remove	Screw	-	3	To make sure the correct screw is installed and there is no damage to terminal, lug or screw.
		Washer	-	3	
	Inspect	Terminal	J1, J4, J5	3	To make sure the terminal or lug is not damaged.
		Lug	-	3	
	NOTE: If the terminal block mating surface has contamination, clean surface. Refer to SWPM 20-20-00 Cleaning Method 5 as an accepted procedure. If the terminal shows signs of arcing, blueing or overheating, the window must be replaced.				
	NOTE: If the mating surface on the terminal lug has contamination, clean surface. Refer to SWPM 20-20-00 Cleaning Method 5 as an accepted procedure. If the lug cannot be cleaned or shows signs of arcing, blueing or overheating, the lug must be replaced.				
	CAUTION: DO NOT OVER TIGHTEN. THE TERMINAL CAN BE DAMAGED BY TOO MUCH FORCE. A DAMAGED TERMINAL WILL REQUIRE THE REPLACEMENT OF THE WINDOW.				
5	Install (New)	Screw	-	3	To make sure lug is assembled to terminal with new, undamaged and correct hardware.
		Washer	-	3	
		O-ring	-	3	
	NOTE: Reassemble the lug to the terminal with a new screw, lock washer and o-ring. Make sure the o-ring is installed prior to assemble of the lug to the terminal. A new o-ring is only available for the CWC01-1210 lug. Refer to SWPM 20-64-16 and 757 IPC 30-41-52 for the correct screw, washer and o-ring.				
	NOTE: Make sure the screw has been aligned correctly.				
	Torque	Screw	-	3	To 25 to 30 inch pounds of torque. Refer to SWPM 20-64-16 as an accepted procedure.
	Install/Kept	Cover	-	3	
NOTE: Do step 2 to make sure the screw has been installed correctly and is a tight connection.					
6	Inspect	Lug	-	3	Apply light manual pressure to strain-relief on lug.
	NOTE: If the lug moves with light manual pressure, replace the windshield.				

FIGURE 1: INSPECTION OF THE LEFT WINDSHIELD
(SHEET 5 OF 5)

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FIGURE 2: INSPECTION OF THE RIGHT WINDSHIELD



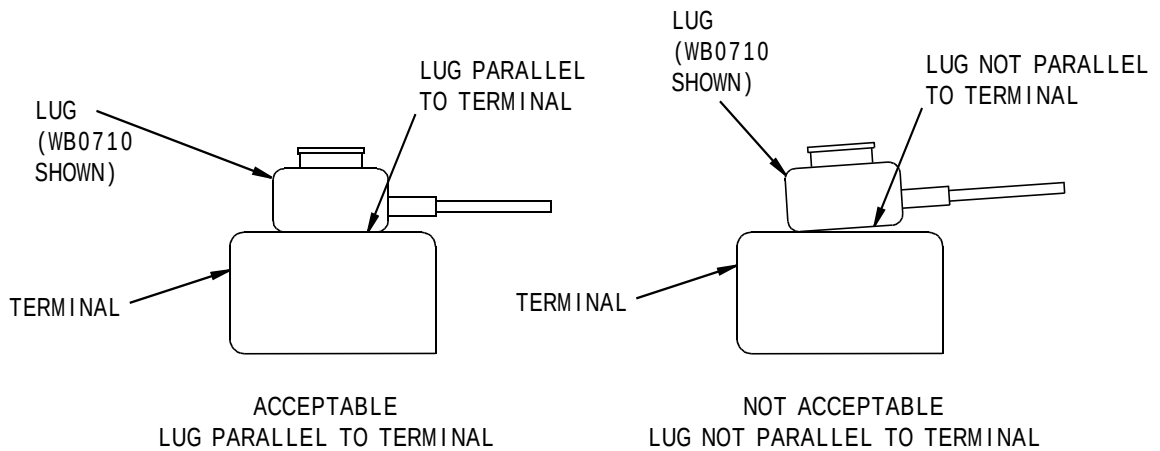
482071

FIGURE 2: INSPECTION OF THE RIGHT WINDSHIELD
(SHEET 1 OF 5)

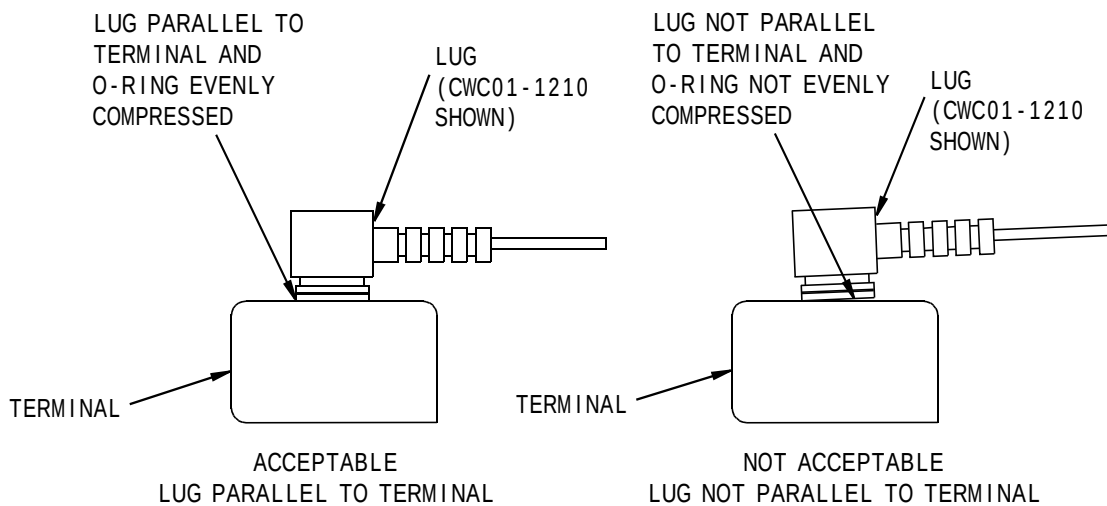
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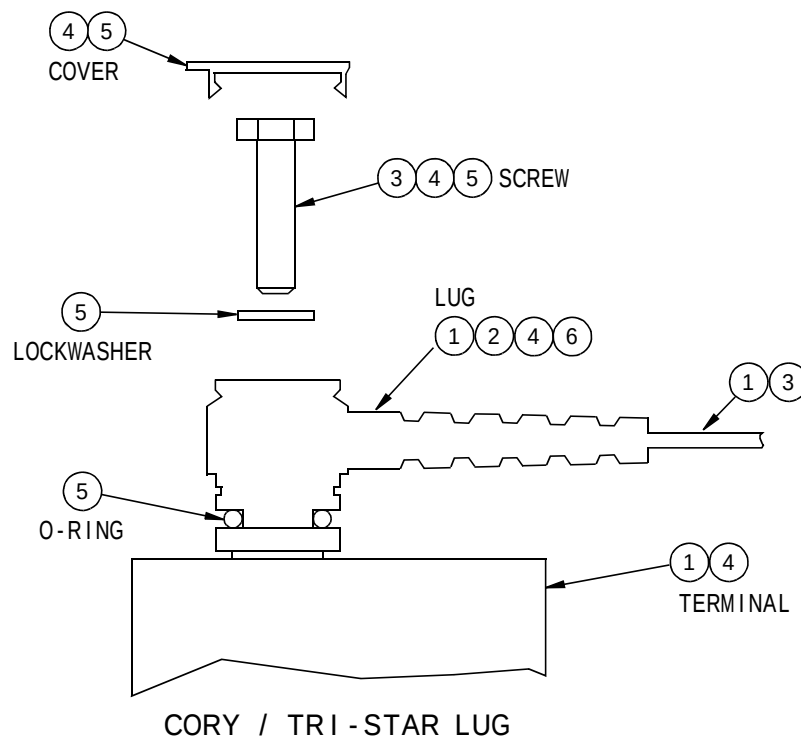
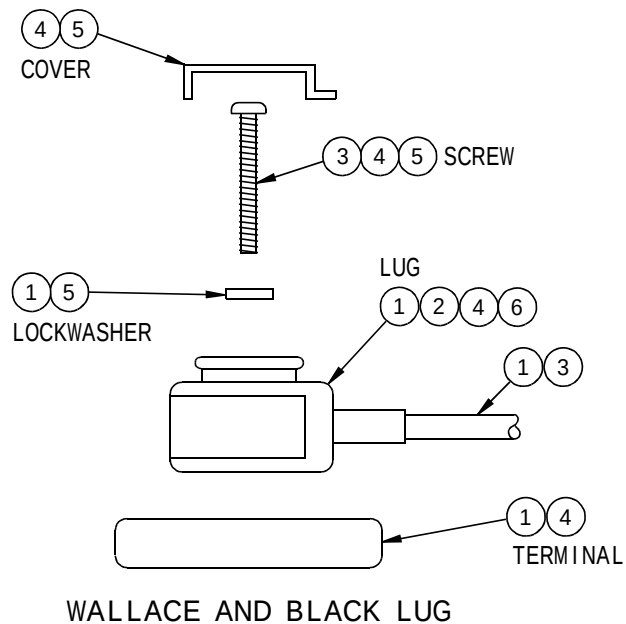


WALLACE AND BLACK LUG



CORY / TRI - STAR LUG

FIGURE 2: INSPECTION OF THE RIGHT WINDSHIELD
(SHEET 2 OF 5)



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**FIGURE 2: INSPECTION OF THE RIGHT WINDSHIELD
(SHEET 3 OF 5)**

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The step numbers shown below agree with the numbers shown in the circle symbols in the figure.

STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA
1	Inspect	Terminal Block	J1, J4, J5	3	At the J1, J4 and J5 connections
		Lug	-	3	
		Wiring	Wire bundle W2304	3	
	NOTE: If the terminal lug or cap has melted, replace the shipside terminal lug and windshield.				
NOTE: If the terminal block has melted, distorted or cracked, replace the windshield.					
NOTE: If the shipside wire insulation is melted or discolored, then repair or replace shipside wiring as necessary. Refer to Standard Wiring Practices Manual SWPM 20-10-13 as an accepted procedure.					
2	Inspect	Lug	-	3	To make sure it is a tight connection and not cross threaded.
	NOTE: If the terminal lug moves while applying light manual pressure to the strain-relief on the lug, then the screw that attaches it must be tightened. There are four causes for a loose terminal. 1-The screw is not tightened to the correct torque. 2-The terminal is damaged. 3-The incorrect screw is installed. The correct screw part number is given in SWPM 20-64-16 and Illustrated Parts Catalog 757 IPC 30-41-52. 4-The screw is cross threaded.				
	NOTE: If the lug is not parallel with the terminal, then the screw is cross threaded. Check for lug alignment, the lug and terminal must be viewed from the side. It may be necessary to view the lug and terminal from the exterior side of the window.				
	NOTE: If the lug shows signs of arcing, blueing, overheating or melting, replace the lug and windshield.				
CAUTION: DO NOT OVER TIGHTEN. THE TERMINAL CAN BE DAMAGED BY TOO MUCH FORCE. A DAMAGED TERMINAL WILL REQUIRE THE REPLACEMENT OF THE WINDOW.					
3	Torque	Screw	-	3	To 25 to 30 inch pounds of torque. Refer to SWPM 20-64-16 as an accepted procedure.
	Inspect	Lug	-	3	To make sure the connection is tight.
	NOTE: The screw is only tightened if the lug is loose. If it is the correct screw and it cannot be tightened to 25 to 30 inch pounds, do steps 4 and 5.				
NOTE: If the cross threaded screw can not be tightened, replace the window.					

FIGURE 2: INSPECTION OF THE RIGHT WINDSHIELD
(SHEET 4 OF 5)

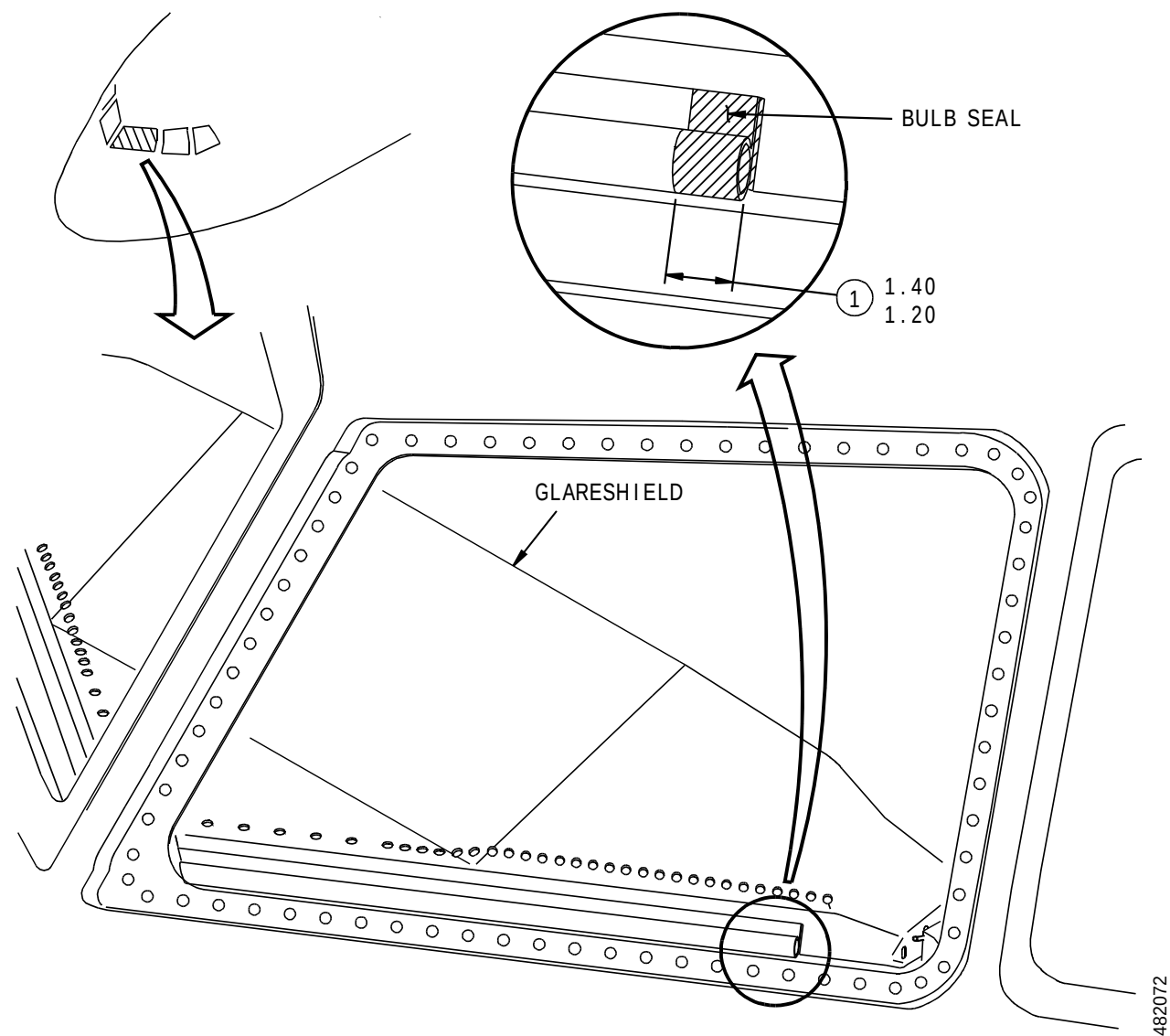
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STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA
4	Remove/Keep	Cover	-	3	
	Remove	Screw	-	3	To make sure the correct screw is installed and there is no damage to terminal, lug or screw.
		Washer	-	3	
	Inspect	Terminal	J1, J4, J5	3	To make sure the terminal or lug is not damaged.
		Lug	-	3	
	NOTE: If the terminal block mating surface has contamination, clean surface. Refer to SWPM 20-20-00 Cleaning Method 5 as an accepted procedure. If the terminal shows signs of arcing, blueing or overheating, the window must be replaced.				
	NOTE: If the mating surface on the terminal lug has contamination, clean surface. Refer to SWPM 20-20-00 Cleaning Method 5 as an accepted procedure. If the lug cannot be cleaned or shows signs of arcing, blueing or overheating, the lug must be replaced.				
CAUTION: DO NOT OVER TIGHTEN. THE TERMINAL CAN BE DAMAGED BY TOO MUCH FORCE. A DAMAGED TERMINAL WILL REQUIRE THE REPLACEMENT OF THE WINDOW.					
5	Install (New)	Screw	-	3	To make sure lug is assembled to terminal with new, undamaged and correct hardware.
		Washer	-	3	
		O-ring	-	3	
	NOTE: Reassemble the lug to the terminal with a new screw, lock washer and o-ring. Make sure the o-ring is installed prior to assemble of the lug to the terminal. A new o-ring is only available for the CWC01-1210 lug. Refer to SWPM 20-64-16 and 757 IPC 30-41-52 for the correct screw, washer and o-ring.				
	NOTE: Make sure the screw has been aligned correctly.				
	Torque	Screw	-	3	To 25 to 30 inch pounds of torque. Refer to SWPM 20-64-16 as an accepted procedure.
	Install/Kept	Cover	-	3	
NOTE: Do step 2 to make sure the screw has been installed correctly and is a tight connection.					
6	Inspect	Lug	-	3	Apply light manual pressure to strain-relief on lug.
	NOTE: If the lug moves with light manual pressure, replace the windshield.				

FIGURE 2: INSPECTION OF THE RIGHT WINDSHIELD
(SHEET 5 OF 5)

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FIGURE 3: CUT THE BULB SEAL FOR THE LEFT WINDSHIELD

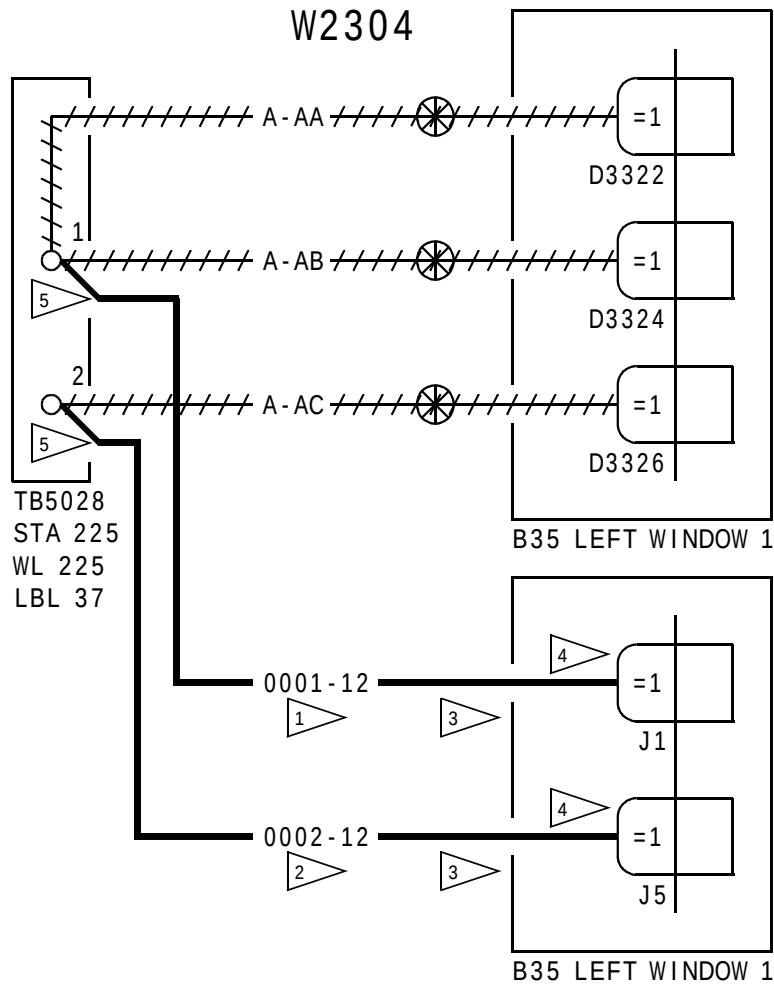


The flag note numbers shown below agree with the numbers shown in the flag symbols in the figure.

STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA
CAUTION: DO NOT CUT THE STRUCTURE BELOW THE BULB SEAL. THE WINDOW SILL IS A HIGH MOISTURE AREA AND MOISTURE CAN CAUSE CORROSION IF THE FINISH IS DAMAGED. DAMAGE TO THE FINISH MUST BE REPAIRED.					
1	Cut	Bulb Seal	233T8300-7	-	to clear the new terminal.
	NOTE: If the finish below the bulb seal is damaged, it will need to be sealed with chemical treatment and primer. Refer to Standard Overhaul Practices Manual SOPM 20-41-02 and SOPM 20-43-03 as accepted procedures.				

FIGURE 3: CUT THE BULB SEAL FOR THE LEFT WINDSHIELD
(SHEET 1 OF 1)

FIGURE 4: CHANGES TO THE WIRING FOR THE WINDOW HEAT ON THE LEFT WINDSHIELD



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FIGURE 4: CHANGES TO THE WIRING FOR THE WINDOW HEAT ON THE LEFT WINDSHIELD

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The flag note numbers shown below agree with the numbers shown in the flag symbols in the figure.

FLAG NOTE	NAME	IDENTIFICATION	QTY	MORE DATA
1	Wire	BMS 13-60, Type 1, Class 1, AWG 12	1	
2	Wire	BMS 13-60, Type 1, Class 1, AWG 12	1	
	Lacing Tape	BMS 13-54, Type 3, Class 1, Red	-	or optional BACS38K5C Tie Strap. Red is for left channel separation. Refer to Standard Wiring Practices Manual SWPM 20-10-19 as an accepted procedure.
3	Sleeve	280N3355-10103	2	Refer to SWPM 20-10-18 as an accepted procedure.
4	Socket Contact	M39029/57-359	2	Refer to SWPM 20-63-19 as an accepted procedure.
	NOTE: Isopropyl alcohol is applied to the installation tool and on the contact before installation of the contact. Isopropyl alcohol is a lubricant that helps with installation of the contact in the connector.			
5	Terminal Lug	BACT12AC-12	2	Refer to SWPM 20-30-11 as an accepted procedure.

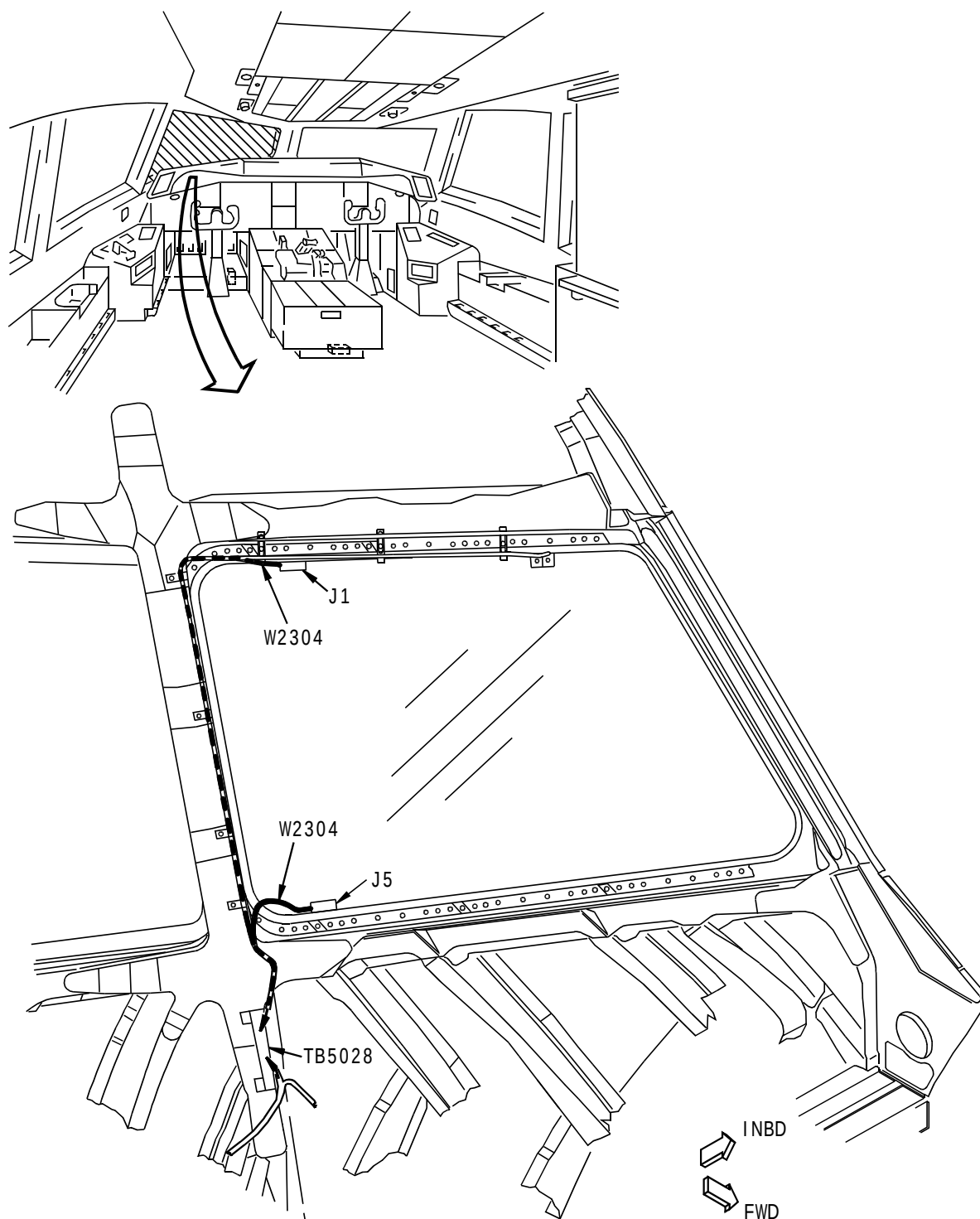
FIGURE 4: CHANGES TO THE WIRING FOR THE WINDOW HEAT ON THE LEFT WINDSHIELD

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FIGURE 5: WIRE ROUTING FOR THE WINDOW HEAT ON THE LEFT WINDSHIELD



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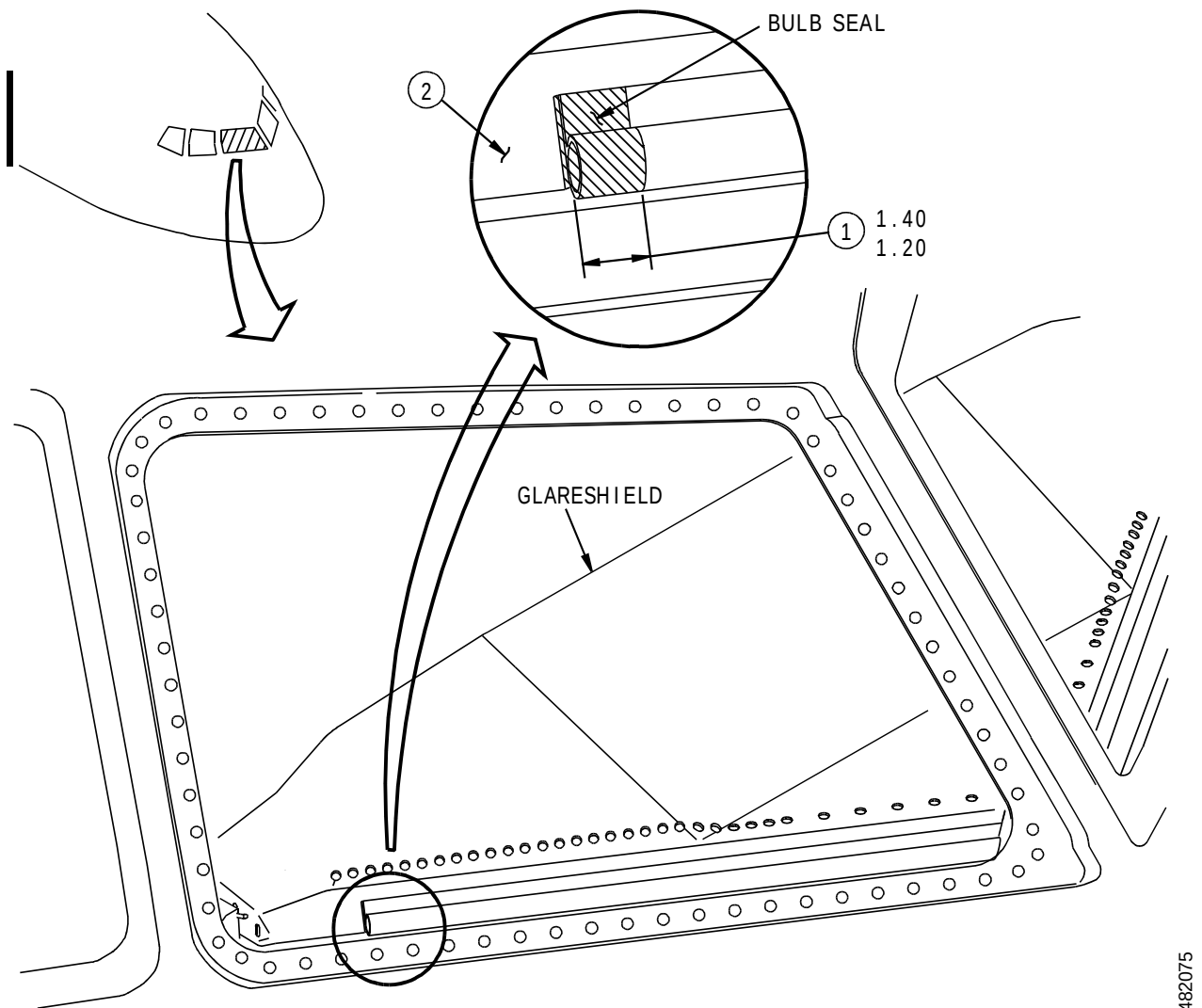
FIGURE 5: WIRE ROUTING FOR THE WINDOW HEAT ON THE LEFT WINDSHIELD
(SHEET 1 OF 1)

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FIGURE 6: CUT THE BULB SEAL FOR THE RIGHT WINDSHIELD

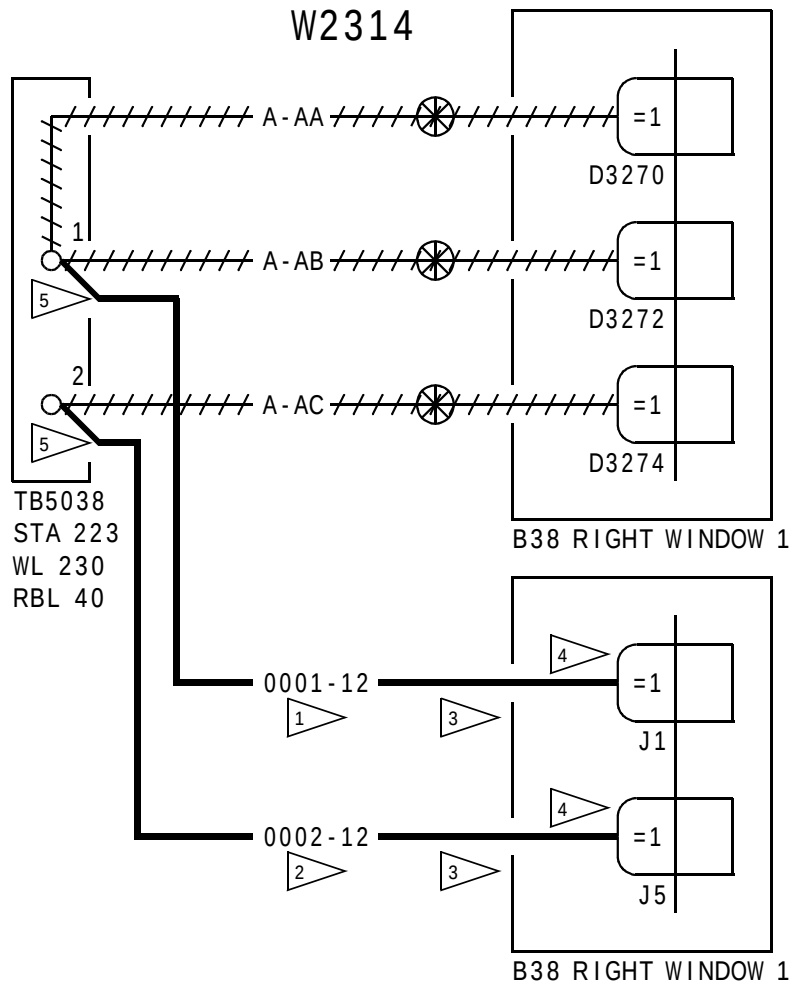


The step numbers shown below agree with the numbers shown in the circle symbols in the figure.

STEP	TASK	NAME	IDENTIFICATION	QTY	MORE DATA
CAUTION: DO NOT CUT THE STRUCTURE BELOW THE BULB SEAL. THE WINDOW SILL IS A HIGH MOISTURE AREA AND MOISTURE CAN CAUSE CORROSION IF THE FINISH IS DAMAGED. DAMAGE TO THE FINISH MUST BE REPAIRED.					
1	Cut	Bulb Seal	233T8300-8	-	to clear the new terminal.
	NOTE: If the finish below the bulb seal is damaged, it will need to be sealed with chemical treatment and primer. Refer to Standard Overhaul Practices Manual SOPM 20-41-02 and 20-43-03 as accepted procedures.				
2	Identify	Glareshield		-	(a)
(a) Part Mark with service bulletin number before new windshield is installed. Refer to SOPM 20-50-10 as an accepted procedure.					

FIGURE 6: CUT THE BULB SEAL FOR THE RIGHT WINDSHIELD
(SHEET 1 OF 1)

FIGURE 7: CHANGES TO THE WIRING FOR THE WINDOW HEAT ON THE RIGHT WINDSHIELD



REFERENCE: WIRING DIAGRAM 30-41-12

— ADDED WIRE OR NEW ROUTING

/// DELETED WIRE OR FORMER ROUTING

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FIGURE 7: CHANGES TO THE WIRING FOR THE WINDOW HEAT ON THE RIGHT WINDSHIELD

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The flag note numbers shown below agree with the numbers shown in the flag symbols in the figure.

FLAG NOTE	NAME	IDENTIFICATION	QTY	MORE DATA
1	Wire	BMS 13-60, Type 1, Class 1, AWG 12	1	
2	Wire	BMS 13-60, Type 1, Class 1, AWG 12	1	
	Lacing Tape	BMS 13-54, Type 3, Class 1, Green	-	or optional BACS38K5F Tie Strap. Green is for right channel separation. Refer to Standard Wiring Practices Manual SWPM 20-10-19 as an accepted procedure.
3	Sleeve	280N3355-10203	2	Refer to SWPM 20-10-18 as an accepted procedure.
4	Socket Contact	M39029/57-359	2	Refer to SWPM 20-63-19 as an accepted procedure.
	NOTE: Isopropyl alcohol is applied to the installation tool and on the contact before installation of the contact. Isopropyl alcohol is a lubricant that helps with installation of the contact in the connector.			
5	Terminal Lug	BACT12AC-12	2	Refer to SWPM 20-30-11 as an accepted procedure.

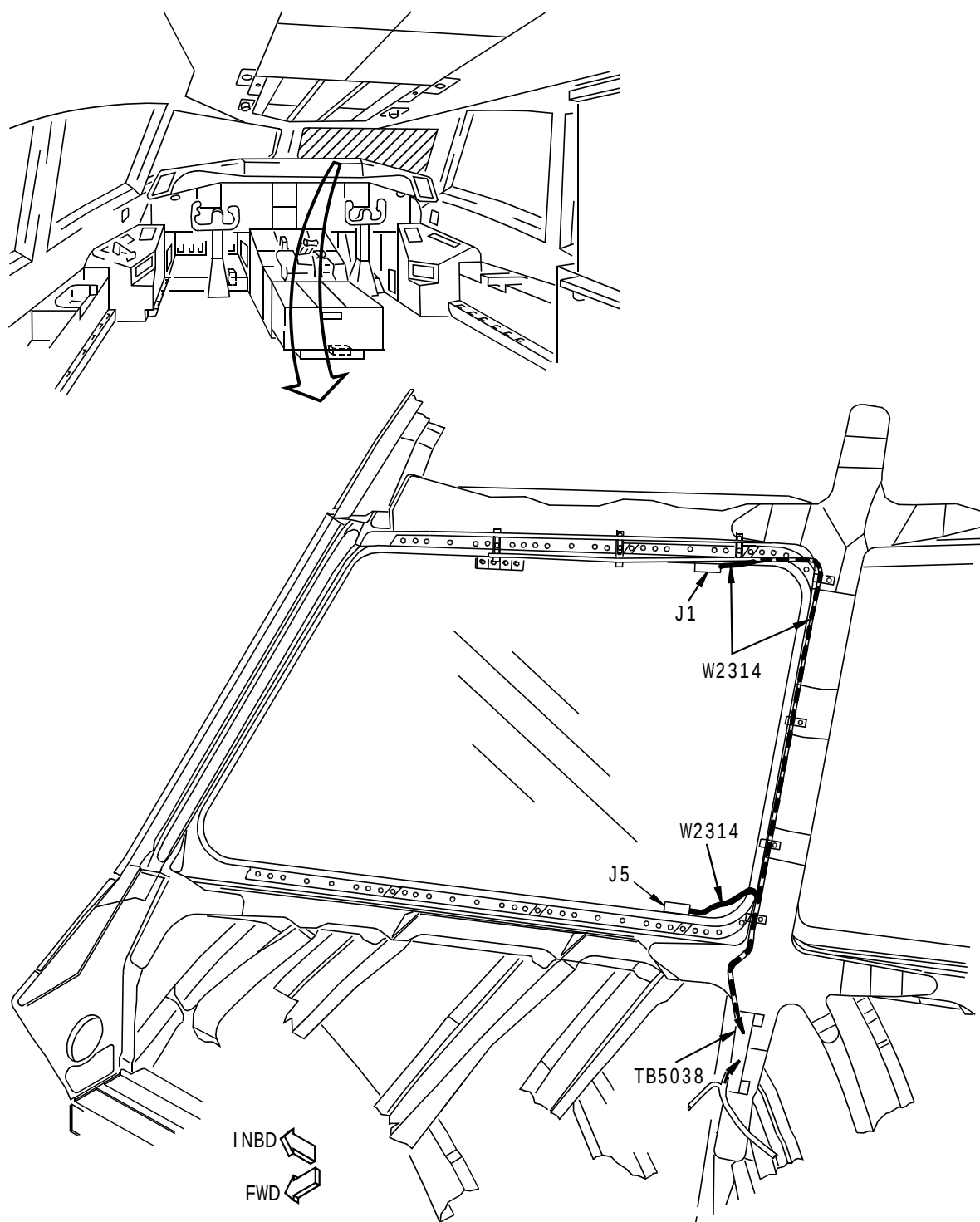
FIGURE 7: CHANGES TO THE WIRING FOR THE WINDOW HEAT ON THE RIGHT WINDSHIELD

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FIGURE 8: WIRE ROUTING FOR THE WINDOW HEAT ON THE RIGHT WINDSHIELD



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FIGURE 8: WIRE ROUTING FOR THE WINDOW HEAT ON THE RIGHT WINDSHIELD
(SHEET 1 OF 1)

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