APPENDIX J
V*ISTA* BLOOD BANK USER MANUAL
ALERTS AND WARNING MESSAGES

Table of Contents

Alerts and Warning Messages

As with the file structure and documentation, the functional requirements in section IX and the software requirements specifications earlier in section X (pages X-28 through X-58), the listing of alerts and warning messages has been divided into the same groupings, i.e. donor, inventory and patient. This listing provides a description of the design safeguard and a detailed trace to the routine, or the field in the data dictionary, which controls the functionality.

This table elaborates more specifically as to the exact nature of the functionality, including the specific triggers to warning and alert messages. There are seven columns in this table. From left to right their functions are:

- **WM #:** Number assigned to the specific warning message described. This number will be used to link the warning message to a specific validation test plan case.
- **Design Safeguard:** Extract from a Design Safeguard as documented in Section IX.
- **Option(s):** VISTA option, which executes the warning message when certain conditions are met.
- **Controlling field or routine:** Actual field or line(s) of code, which control if the Alert or Warning message will be displayed to the user.
- **Algorithm**: Actual logic, which triggers the Alert or Warning message.
- **Alert or Warning message**: Screen capture of the actual display of the Alert or Warning message. Data displayed during option execution not directly related to the Alert or Warning message has been omitted for brevity and readability of this report.
- Trace: List of the Intended Use (IU) #'s, Safety Critical Requirement (SCR) #'s, Software Requirement Specification (SRS) #'s associated with the Alert/Warning Message, as well as the Test case detailed in Section XII.

Note: Not all control functions are associated with alert or warning messages. Several methods of control are utilized in the programming, i.e., control of the data type at the field level by the data dictionary, use of cross references (listing based on specific parameters), system security, etc.

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMD1	Creates a unique cumulative donor record for each individual donor/patient, which includes a variety of identification and demographic information.	Donor registration [LRBLDLG] Donor collection/ processing [LRBLDC]	DNR^LRBLDLG I^LRBLDC VA Filemanager call MIX^DIC1	Query made to the BLOOD DONOR File (# 65.5) using VA Filemanager for existing entries. If no entries exist, then the user is prompted by Filemanager to confirm if a new record should be created.	Select BLOOD DONOR NAME: BBDONOR,ONE **Are you adding BBDONOR,ONE' as a new BLOOD DONOR (the 73RD)? No//**	IU # D1 SRS # D10 SCR # D1 TC # D44 D50
WMD2	During registration, checks existing entries in the BLOOD DONOR file (#65.5) for duplicate donors, based on comparison of the name and/or a combination of the first letter of the last name and the date of birth.	Donor Registration [LRBLDLG]	DNR^LRBLDLG VA Filemanager call MIX^DIC1	A search made to the BLOOD DONOR File (#65.5) cross-references for any possible matches. "B" (Donor name) "C" (Previous Unit ID) "D" (1st letter last name, Month/Day DOB) "G4" (1st letter last name, last 4 # of SSN) All valid choices displayed for selection.	Example # 1: Select BLOOD DONOR NAME: D0706 1 D0706 BBDONOR,ONE M 07-06-47 DALLAS 2 D0706 BBDONOR,ONE M 07-06-47 DALLAS 3 D0706 BBDONER,ONE M 07-06-47 DALLAS **CHOOSE 1-3:** Example # 2: Select BLOOD DONOR NAME: BBDONOR,TWO **Are you adding 'BBDONOR,TWO' as a new BLOOD DONOR (the 75TH)? No//** Y (Yes) Donors with same last name, first name initial and sex as your entry: BBDONOR,ONE DOB: 07/06/47 Your entry: BBDONOR,TWO DOB: 07/06/47 Want to delete your entry? **NO//** Y (YES) Ok, BBDONOR,TWO deleted.	IU # D9 SRS # D20 SCR # D1 TC # D17 D26 D51

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMD3	Locks donor record during data entry to prevent access by another terminal/user	Donor demographics [LRBLDD] Donor collection/ processing [LRBLDC]	Routine LRBLDED which calls up CK^LRU	Routine LRBLDED calls CK^LRU which attempts to lock the record. If lock is not established after one second, it is because the record is locked by another user. If this is the case, the routine returns the message ANOTHER TERMINAL IS EDITING THIS ENTRY!	2nd tech attempting Donor demographics: Select Donor Option: DD Donor demographics Select BLOOD DONOR NAME: BBDONOR,ONE M 07-06-47 DALLAS **ANOTHER TERMINAL IS EDITING THIS ENTRY!** 2nd tech attempting Donor collection/processing Select Donor Option: dc Donor collection/processing Select BLOOD DONOR NAME: BBDONOR,ONE M 07-06-47 DALLAS **ANOTHER TERMINAL IS EDITING THIS ENTRY!**	IU # D10 SRS # D13 SCR # D4 TC # D15
WMD4	Prevents assignment of "duplicate" unit ID's based on a search of the existing entries in the BLOOD DONOR file (#65.5)	Donor registration [LRBLDLG] Donor collection/ processing [LRBLDC]	Field 65.54 UNIT ID Input transform triggers routine LRBLU	Routine LRBLU checks both the BLOOD INVENTORY file (#65) and the BLOOD DONOR file (#65.5) for possible duplicate UNIT ID. Alerts user of duplicate deletes entry and prompts user for new entry.	UNIT ID: DON001 **DON001 assigned to BBDONOR,ONE??** **Enter ID that component(s) prepared from donation will be labeled.** **Not less than 6 or more than 11 characters** UNIT ID:	IU # D14 SRS # D21 SCR # D3 TC # D22 D55 D63

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMD5	Calculates age of donor. Displays warning if donor is less than or=17 yrs old.	Donor registration [LRBLDLG]	OK^LRBLDG Fileman utility %DTC	Calculates the number of days from the donor's DOB and the day of donation. AGE=# days/365.25. If AGE<18 user is displayed warning message and asked to confirm to continue.	Select BLOOD DONOR NAME: BBDONOR,THREE F 12-31-80 AUGUSTA ??? **Is this the Donor ? YES//** (YES) **Age:17 Does donor have permission to donate ? YES//**	IU # D16 SRS # D22 SCR # D11 TC # D36 D37
WMD6	Calculates age of donor. Displays warning if donor is greater than 65 yrs old.	Donor registration [LRBLDLG]	OK^LRBLDG VA Fileman %DTC	Calculates the number of days from the donor's DOB and the day of donation. AGE=# days/365.25. If AGE>64 user is displayed warning message and asked to confirm to continue.	Select BLOOD DONOR NAME: BBDONOR,FOUR M 04-10-30 DALLAS **Is this the Donor ? YES//** (YES) **Age: 67 Does donor have physician permission to donate ? YES//**	IU # D16 SRS # D22 SCR # D12 TC # D32
WMD7	Donors cannot donate homologous whole blood more often than every 8 weeks.	Donor registration [LRBLDLG]	A+4^LRBLDC VA Fileman utility %DTC	If donation type =homologous determines the date 55 days previous to the current donation date. Checks donation records that are after the date determined above. For each donation, checks the DONATION/ DEFERRAL CODE entry. If W (whole blood) AND the donation is within the above date range, user is displayed the most recent WHOLE BLOOD donation and warning message and is exited from the record.	ARRIVAL/APPT TIME: NOW// T@0600 (MAR 02, 1998@06:00) DONATION/DEFERRAL CODE: WHOLE BLOOD// WHOLE BLOOD DONATION TYPE: HOMOLOGOUS// HOMOLOGOUS **LAST WHOLE BLOOD DONATION Feb 27, 1998** **SORRY NOT 8 WEEKS SINCE LAST DONATION OF WHOLE BLOOD COME BACK ON OR AFTER Apr 24, 1998** Select BLOOD DONOR NAME:	IU # D15 SRS # D23 SCR # D10 TC # D19

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMD8	Prevents registration of a homologous donor if that donor is permanently deferred.	Donor registration [LRBLDLG]	OK+4^ LRBLDLG	Software checks for the presence of a YES entry in field 65.5,.1 PERMANENT DEFERRAL. If yes, the user is prompted to allow autologous donation. If autologous donation not selected, the user is exited from the option.	DR Donor registration [LRBLDLG] Select BLOOD DONOR NAME: BBDONOR,FIVE F 04-10-60 DALLAS **Is this the Donor ? YES//** (YES) **IDENTIFICATION NUMBER: 5 NAME: BBDONOR,FIVE** **SEX: FEMALE** **PERMANENT DEFERRAL: YES** DATE REGISTERED/EDITED: OCT 22, 1992 DEFERRAL ENTER/EDIT BY: BBPROVIDER,ONE SSN: 000-00-0005 PERMANENT DEFERRAL DATE CHANGE: MAR 20, 1997@09:42 **BBDONOR,FIVE permanently deferred except for autologous or therapeutic donation. If any questions see physician in charge.** **Do you want autologous/therapeutic donation ? NO//** (NO)	IU # D20 D22 SRS # D27 SCR # D14 TC # D27
WMD9	Prevents entry of collection data on a homologous donor who is permanently deferred	Donor collection/ Processing [LRBLDC]	Input transform of field 65.5,5,1.1	The input transform of field 65.5,5,1.1 DONATION TYPE checks the Donor record for presence of a YES in field 65.5,.1 PERMANENT DEFERRAL. If the field is yes, then only allows entry of Autologous or Therapeutic for a DONATION TYPE.	DC Donor collection/Processing [LRBLDC] Select BLOOD DONOR NAME: BBDONOR,FIVE F 04-10-60 DALLAS NAME: BBDONOR,FIVE// Select DONATION OR DEFERRAL DATE: OCT 22,1992// T APR 07, 1998 DONATION/DEFERRAL CODE: WHOLE BLOOD// WHOLE BLOOD DONATION TYPE: HOMOLOGOUS// HOMOLOGOUS **Permanent deferral, only autologous or therapeutic donation allowed.??** **Choose from:** **H HOMOLOGOUS** **A AUTOLOGOUS**	IU # D20 D22 SRS # D27 SCR # D14 TC # D27

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
					T THERAPEUTIC **D DIRECTED** **DONATION TYPE: HOMOLOGOUS//** **HOMOLOGOUS** Permanent deferral, only autologous or therapeutic donation allowed.?? Choose from: **H HOMOLOGOUS** **A AUTOLOGOUS** **T THERAPEUTIC** **D DIRECTED** **DONATION TYPE: HOMOLOGOUS// ^**	
WMD10	Provides link between autologous donor/patient. Limits entry of patient restrictions for autologous units to patients in the PATIENT file (#2).	Donor registration [LRBLDLG] Donor collection/ processing [LRBLDC]	A^LRBLDLG Input template to the BLOOD DONOR file (#65.5) [LRBLDCP] Input transform of field 65.5,1.2 RESTRICTED FOR. ^LRUG	If the DONATION TYPE= Autologous or Directed, user prompted for the field RESTRICTED FOR (#65.5,5,1.2). The input transform of this field compares the patient name to valid entries in PATIENT file and compares the DOB of that patient against the DOB of the Donor as entered in the BLOOD DONOR file (#65.5). All must match or else the RESTRICTED FOR entry is deleted.	Log-in donor visits Select BLOOD DONOR NAME: BBDONOR,THREE 12-31-80 AUGUSTA DONATION TYPE: HOMOLOGOUS// A AUTOLOGOUS RESTRICTED FOR: BBDONOR,THREE// **Donor: BBDONOR,THREE** **DOB:12-31-80 SSN:000000003** **BBDONOR,THREE not entered in PATIENT FILE??** **If autologous donation donor must be the same as the patient** PATIENT: Select PATIENT NAME: BBDONOR,THREE Select PATIENT NAME: RESTRICTED FOR: **Autologous donation and RESTRICTED FOR: field not entered.** **Delete all data from this donation ? NO//** Y (YES)	IU # D25 **??** SRS # D34 SCR # D9 TC # D58 D59

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMD11	For Autologous units, compares birth date of donor to birth date of the patient being selected for entry in the RESTRICTED FOR field (#65.5,5,1.2).	Donor registration [LRBLDLG] Donor collection/ processing [LRBLDC]	Input transform of field 65.5,1.2 RESTRICTED FOR. ^LRUG	Once an entry has been made in the RESTRICTED FOR field (#65.5,5,1.2), routine LRUG compares the DOB of the PATIENT file (#2) entry against the DOB field (#65.5/.03) of the Donor file entry. They must match exactly or the entry is deleted.	Select BLOOD DONOR NAME: BBDONOR,SIX M 04-09-30 DALLAS Is this the Donor ? YES// (YES) DONATION/DEFERRAL CODE: WHOLE BLOOD// WHOLE BLOOD DONATION TYPE: HOMOLOGOUS// A AUTOLOGOUS **RESTRICTED FOR: BBDONOR,SIX//** **Donor:BBDONOR,SIX DOB:04-09-30 SSN:000000006** **AGE: 67 DATE OF BIRTH: APR 10,1930** **BBDONOR,SIX** Dates of birth are different?? If autologous donation donor must be the same as the patient **PATIENT:** Select PATIENT NAME:<CR> RESTRICTED FOR:<CR> Autologous donation and RESTRICTED FOR: field not entered. Delete all data from this donation ? NO// Y (YES)	IU # D9 SRS # D35 SCR# D9 TC # D60 D62
WMD12	Prevents entry of future donation date/time.	Donor registration [LRBLDLG]	LRBLDLG+4 Sets %DT(0)="-N" which prevents future date/time entry.	Fileman call %DT used for DONATION DATE: data input and validation. Input variable %DT(0)="-N" prevents entry of a future date/time. %DT responds with "**??**" when invalid data is entered.	Select Donor Option: Donor registration Log-in donor visits Enter DONATION DATE: TODAY// T+1 (APR 09, 1998) **??** Enter DONATION DATE: TODAY// T@1700 **??**	IU # D31 SRS # D38 SCR # D4 TC # D20

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMD13	Prevents entry of future donation date/time.	Donor collection/ Processing [LRBLDC]	Input transform for field 65.5,5,.01 DONATION OR DEFERRAL DATE uses %DT to validate data input.	Input transform sets input variable %DT(0)="-T" which prevents entry of a future date/time. %DT responds with "**??**" when invalid data is entered.	Select Donor Option: DC Donor collection/ processing Select BLOOD DONOR NAME: BBDONOR,SEVEN F 07-01-80 NAME: BBDONOR,SEVEN// Select DONATION OR DEFERRAL DATE: APR 8,1998// T+1 APR 09, 1998 **??** Select DONATION OR DEFERRAL DATE: APR 8,1998// T@1800 **??**	IU # D31 SRS # D38 SCR # D4 TC # NONE
WMD14	Prevents entry of a collection completion date/time before the collection start date/time.	Donor registration [LRBLDLG] Donor collection/ Processing [LRBLDC]	Input template to the BLOOD DONOR file (#65.5) [LRBLDCPN] for option Donor registration [LRBLDLG]. Or Input template to the BLOOD DONOR file (#65.5) [LRBLDCP] for option Donor collection/ processing [LRBLDC].	During execution of input templates [LRBLDCPN] and [LRBLDCP] the entry for the field DATE/ TIME COLLECTION STARTED (#65.5,5.4.2) is stored. This is compared with the entry of the DATE/ TIME COLLECTION COMPLETED field (#65.5,5,4.3). If the DATE/ TIME COLLECTION COMPLETED is earlier than the DATE TIME COLLECTION STARTED, the user is displayed a warning message and prompted again for data entry.	Select BLOOD DONOR NAME: BBDONOR,EIGHT F 08-20-54 ANYWHERE DATE/TIME COLLECTION STARTED: T@0915 (APR 08, 1998@09:15) DATE/TIME COLLECTION COMPLETED: T@0850 (APR 08, 1998@08:50) **Collection completed time must be later than started time** DATE/TIME COLLECTION COMPLETED: APR 8,1998@08:50// T@0914 (APR 08, 1998@09:14) **Collection completed time must be later than started time** DATE/TIME COLLECTION COMPLETED: APR 8,1998@09:14// T@0920 (APR 08, 1998@09:20)	IU # D32 SRS # D39 SCR # D4 TC # D42

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMD15	Prevents data entry when the maximum allowable component preparation time has been exceeded based on entry in the BLOOD PRODUCT file (#66) field COLLECTION/ PREP HOURS (#66,.13).	Collection disposition/ Component preparation [LRBLDCP]	Input transform of field 65.6,66,.03 DATE/TIME STORED executes routine LRUT.	Routine LRUT: 1. Determines the component being prepared. 2. Determines the maximum COLLECTION/PREP HOURS allowed from field 66,.13 for the product being prepared. 3. Determines the DATE/ TIME COLLECTION COMPLETED from field 65.5,5,4.3. 4. Determines the DATE/ TIME STORED from current entry in field 65.5,66,.03. 5. Determines the amount of time elapsed between the DATE/TIME COLLECTION COMPLETED and the DATE/TIME STORED and compares to the MAXIMUM COLLECTION PREP HOURS allowed. 6. If MAXIMUM COLLECTION PREP HOURS is exceeded for the component being prepared, the user is given a warning message and re-prompted for data entry.	Select Donor Option: Collection disposition/ component preparation Select BLOOD DONOR: BBDONOR,NINE M 01-20-44 DALLAS Donation date/time: Apr 08, 1998 09:15 Unit ID: STALL01 COLLECTION DISPOSITION: PREPARE COMPONENT(S)// <CR> DATE/TIM E PROCESSED: APR 8,1998@10:00// <CR> Select BLOOD COMPONENT: PLATELETS,20-24 C, 5 DAY EXP DATE/TIME STORED: 04/08/98@10:00// N (APR 08, 1998@13:50) **Time between collection and storage too long !! ??** **Must enter DATE and TIME** **Time stored must not be earlier than time processed** **Future date/time not allowed.** DATE/TIME STORED: 04/08/98@10:00// T@1330 (APR 08, 1998@13:30) **Time between collection and storage too long !! ??** **Must enter DATE and TIME** **Time stored must not be earlier than time processed** **Future date/time not allowed.** DATE/TIME STORED: 04/08/98@10:00// T@1100 (APR 08, 1998@11:00) EXPIRATION DATE: Apr 13, 1998// (APR 13, 1998)	IU # D42 SRS # D43 SCR # D19 TC # D70

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMD16	Donor record is locked during access to prevent simultaneous data entry for the same donor via a different terminal /user	Collection disposition/ Component preparation [LRBLDCP]	REST+8^ LRBLDC calls up the common utility subroutine CK^LRU	Software attempts to lock the BLOOD DONOR file (#65) record for the donation. If the record is already locked by another user the user is given a warning message and is then exited from the option.	CP Collection disposition /component preparation Select BLOOD DONOR: BBDONOR,NINE M 01-20-44 DALLAS Donor: BBDONOR,NINE ABO: O Rh: POS Donation date/time: Apr 08, 1998 09:15 Unit ID: STALL01 **ANOTHER TERMINAL IS EDITING THIS ENTRY!**	IU # D10 SRS # D13 SCR # D4 TC # D68
WMD17	Evaluates the number of components being prepared against the bag type and prevents entry of more than the maximum that could be logically allowed.	Collection disposition/ Component preparation [LRBLDCP]	C+2^LRBLDC	Routine evaluates the total number of components prepared against the entry for the donation in the field 65.5,5,2,4.1 PRIMARY BAG. If total number of components prepared, is NOT less than the PRIMARY BAG entry, no more components are allowed.	Collection disposition/component preparation Select BLOOD DONOR: BBDONOR,TEN M 10-10-40 DALLAS COLLECTION DISPOSITION: PREPARE COMPONENT(S)// DATE/TIME PROCESSED: APR 10,1998@11:57// CPDA-1 RED BLOOD CELLS FRESH FROZEN PLASMA, CPDA-1 Select BLOOD COMPONENT: PLATELETS **??**	IU # D37 SRS # D45 SCR # D4 TC # D79
WMD18	Ensures that no more than ONE component containing RBCs is prepared from a donation.	Collection disposition/ Component preparation [LRBLDCP]	C+1^LRBLDC through C+3^LRBLDC	Evaluates current products prepared for RBC product type by looking for a YES in the Pointed to product field CONTAINS RED CELLS (#66,.19). If a new product to be created also has a YES in the Pointed to product field 66,.19, then a warning message is given and the new product is immediately DELETED.	CP Collection disposition/component preparation Select BLOOD DONOR: BBDONOR1,ONE F 04-09-40 DALLAS COLLECTION DISPOSITION: PREPARE COMPONENT(S)//<CR> DATE/TIME PROCESSED: APR 13,1998@09:40// <CR> CPDA-1 RED BLOOD CELLS Select BLOOD COMPONENT: AS-1 RED BLOOD CELLS 04211 AS-1 1 **Cannot select more than one red blood cell product.** **Selection AS-1 RED BLOOD CELLS canceled !**	IU # D38 SRS # D46 SCR # D4 TC # D67

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMD19	Excludes preparation of components which are not collected in the proper anticoagulant	Collection disposition/ Component preparation [LRBLDC]	File 65.5 input template [LRBLDC] works with the SCREEN on field 65.5,5,66, .01 BLOOD COMPONENT.	The SCREEN on field 65.5,5,66,.01 compares the anticoagulant of the product the user is attempting to prepare with the anticoagulant of the actual collection as recorded in field 65.5,5,2,4.11. If they do not match, VA FileMan responds with "**??**" and does not allow the component to be processed.	Collection disposition/component preparation Select BLOOD DONOR: BBDONOR1,ONE F 04-09-40 DALLAS COLLECTION DISPOSITION: PREPARE COMPONENT(S)//<CR> DATE/TIME PROCESSED: APR 13,1998@09:40//<CR> CPDA-1 RED BLOOD CELLS Select BLOOD COMPONENT: FFP **??**	IU # D39 SRS # D47 SCR # D4 TC # D71
WMD20	Prevents access for entry of collection information on donors entered through 'Old records'	Collection disposition/ Component preparation [LRBLDCP]	Rest+2 ^LRBLDC	If there is a YES in the field 65.5,5,.14, the software returns the warning message that the option cannot be used to enter data on this donor.	Collection disposition/component preparation Select BLOOD DONOR: BBDONOR1,TWO M 08-20-54 **Not allowed, data entered via old blood donor records option.**	IU # D13 SRS # D37 SCR # D4 TC # NONE
WMD21	Locks donor record during data entry to prevent simultaneous access for the same donor via a different terminal/user for specified options.	Lab tests (not ABO/Rh) on donor units [LRBLDT]	DNR+4^LRBLD T	Software attempts to lock the BLOOD DONOR file (#65) record for the donation. If the record is already locked by another user, a warning message id displayed and the user is prompted for a new record to enter.	LA Lab tests(not ABO/Rh) on donor units Select DONOR ID: DON011 **Someone else is editing this record.** Select DONOR ID:	IU # D10 SRS # D13 SCR # D4 TC # NONE

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMD22	Locks donor record during data entry to prevent simultaneous access for the same donor via a different terminal/user for specified options.	Test review/ component labeling/ release [LRBLDRR]	P+3^LRBLDRR	Software attempts to lock the BLOOD DONOR file (#65) record for the donation. If already locked by another user a warning message is displayed and the user is then prompted for a different record.	LR Test review/Component labeling/release Select UNIT FOR LABEL/RELEASE: DON011 **Someone else is editing this entry!** Select UNIT FOR LABEL/RELEASE:	IU # D10 SRS # D13 SCR # D1 TC # NONE
WMD23	Checks current ABO/Rh results for the specific donor unit against the donor's historical record.	ABO/Rh testing of donor units [LRBLDAT]	BLOOD DONOR file(#65.5) input template [LRBLDABRH]	Input template has embedded code, which compares the current field entry against the historical record. If the two do not match, the user is given a warning message and prompted to accept the current entry or not.	DT ABO/Rh testing of donor units Select DONOR ID: DON009 ABO: O Rh: POS ABO INTERPRETATION: B B **B not the ABO group on record** **Is present testing OK ? YES//** N (NO) ABO INTERPRETATION: B// O O RH INTERPRETATION: NEG NEGATIVE **NEG not the Rh type on record** **Is present testing OK ? YES//** N (NO) RH INTERPRETATION: NEGATIVE// P POSITIVE	IU # D44 SRS # D13 SCR # D1 TC # D101 D103
WMD24	Compares ABO/Rh recheck information to original processing results.	Donor unit ABO/Rh recheck [LRBLDUC]	BLOOD DONOR file (#65.5) input template LRBLDUC	Input template has embedded code, which compares the current ABO/Rh recheck entry against the original processing results. If they do not match, the user is given a warning message.	Donor unit ABO/Rh recheck Select DONOR ID: DON009 ABO INTERPRETATION RECHECK: AB AB **Recheck not equal to original interpretation** RH INTERPRETATION RECHECK: NE NEGATIVE **Recheck not equal to original interpretation**	IU # D45 SRS # D51 SCR # D21 TC # D96 D106

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMD25	Prevents same tech from entering both original & recheck results for ABO/Rh.	Donor unit ABO/Rh recheck [LRBLDUC]	BLOOD DONOR file (#65.5) input template LRBLDUC	Compares the current user to the user who entered the original ABO/Rh results. If they match, the user is given a warning message and is exited from the record.	Donor ABO/Rh Recheck Select DONOR ID: DON009 **Tech entering recheck results cannot be the same tech entering the original interpretation**.	IU # D46 SRS # D52 SCR # D21 TC # D104
WMD26	If results of TDD marker testing are anything other than "negative" or "non reactive" for units which have already been released to inventory on an emergency basis, a bulletin is automatically generated detailing the test result and sent to all users of the LRBLSUPER key.	Lab tests (not ABO/Rh) on donor units [LRBLDT]	REST+5 ^LRBLDC MSG^LRBLDT	If field 65.5,5,66,.08 COMPONENT DISPOSITION for current record is RELEASED, variable LRR is set = 1. Then each TDD result is evaluated for a nonnegative entry. If a nonnegative entry exists, a message is created which includes the actual test performed and the result. This message is sent via Mailman to all users with the LRBLSUPER security key. The current user is also displayed a warning message.	LA Lab tests(not ABO/Rh) on donor units Select DONOR ID: DON001 HIV ANTIBODY: NEGATIVE// R REACTIVE HTLV -I ANTIBODY: NEGATIVE// R REACTIVE HIV ANTIGEN: NEGATIVE// R REACTIVE **Component(s) released with one or more positive test results!....** Select DONOR ID: Following message sent to all users with the LRBLSUPER key: **Blood donor unit ID: DON001** **Component(s) released with one or more positive test results!** **DONATION TYPE: HOMOLOGOUS** **HIV ANTIBODY:REACTIVE** **HTLV-I ANTIBODY:REACTIVE** **HIV ANTIGEN:REACTIVE**	IU # D50 SRS # D57 SCR # D24 TC # D118 D130 D153 D155 D158 D161 D164 D167

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMD27	Prevents editing of results after components are released unless the user has a higher level of security access.	Lab tests (not ABO/Rh) on donor units [LRBLDT]	CKRL^LRBLDT REST+7 ^LRBLDC	If field 65.5,5,66,.08 COMPONENT DISPOSITION for the current record is RELEASED, variable LRR is set = 1. Later, if the component has been released the software checks the security keys of the current user. If the LRBLSUPER key is not assigned to the user, the user is prompted with a message, denied access to edit any results, and exited from record.	User without the LRBLSUPER security key. Lab tests(not ABO/Rh) on donor units Select DONOR ID: DON002 UNIT#:DON002 ABO:A Rh:POS Donation date:Jun 10, 1996 **One or more components were released. You may not edit existing test results.**	IU # D7 SRS # D58 SCR # D4 D6 TC # D129
WMD28	Prevents entry of the same antigen as 'present' and 'absent'	Donor phenotyping [LRBLDPH]	BLOOD DONOR file (#65.5) input template LRBLPAG.	Since entries to the fields RBC ANTIGEN PRESENT (#65.56) and RBC ANTIGEN ABSENT (#65.57) are pointers to the same file, the input template contains code which examines the corresponding RBC/HLA ANTIGEN PRESENT/ ABSENT field within the BLOOD DONOR file (#65.5). If the identical pointer entry is entered, the user is given an alert message and does not allow the data to be entered.	Donor phenotyping Select BLOOD DONOR NAME: BBDONOR1,SEVEN M Select RBC ANTIGEN PRESENT: E Select RBC ANTIGEN PRESENT: Select RBC ANTIGEN ABSENT: E **E antigen cannot be absent & present ??** Select RBC ANTIGEN ABSENT: Select HLA ANTIGEN PRESENT: HLA-A10 ANTIGEN Select HLA ANTIGEN PRESENT: Select HLA ANTIGEN ABSENT: HLA-A10 ANTIGEN 44650 HLA-A10 ANTIGEN **HLA-A10 ANTIGEN antigen cannot be present & absent ??** Select HLA ANTIGEN ABSENT:	IU # D54 SRS # D61 SCR # D4 TC # D123

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMD30	Locks donor record during data entry to prevent simultaneous access to the same donor via a different terminal/user	Donor henotyping [LRBLDPH]	REST^LRBLDP H CK^LRU	Software attempts to lock the BLOOD DONOR file (#65) record for the donation. If the record is already locked the user is given a warning message and is then prompted for a new record.	DP Donor phenotyping Select BLOOD DONOR NAME: BBDONOR1,THREE **ANOTHER TERMINAL IS EDITING THIS ENTRY!** Select BLOOD DONOR NAME:	IU # D10 SRS # D13 SCR # D4 TC # NONE
WMD31	Checks current ABO/Rh results for a specific donor unit against the donor's historical record. If ABO/Rh recheck data is to be transferred to the INVENTORY file when the unit is released prevents release if a discrepancy exists.	Test review/ component labeling/ release [LRBLDRR]	REST^LRBLDR R	Current unit ABO/Rh is compared with Donor historical ABO/Rh. If a discrepancy, user is given a warning message and unable to proceed.	Review-label-release components Select UNIT FOR LABEL/RELEASE: DON010 **Donor ABO (B) is different from unit ABO (O). Resolve discrepancy.** **Donor Rh (POS) is different from unit Rh (NEG). Resolve discrepancy.** Select UNIT FOR LABEL/RELEASE:	IU # D58 SRS # D65 SCR # D21 TC # D139 D151
WMD32	Checks current ABO/Rh results against donor's historical record. If ABO/Rh recheck, data is NOT to be transferred to the BLOOD INVENTORY file (#65) when the unit is released (according to site parameter in file 69.9), displays a warning message and releases the unit. Requires a higher security access and generates a bulletin.	Test review/ component labeling/ release [LRBLDRR].	REST^LRBLDR R	Current unit ABO/Rh is compared with Donor historical ABO/Rh. If a discrepancy, user is given a warning message. If user has LRBLSUPER key then user can proceed after being notified that notification will be sent to users with the Blood Bank Supervisor's key (LRBLSUPER).	LR Test review/Component labeling/release Select UNIT FOR LABEL/RELEASE: DON010 **Donor ABO (B) is different from unit ABO (O). Resolve discrepancy.** **Donor Rh (POS) is different from unit Rh (NEG). Resolve discrepancy.** **If you continue with label/release of DON010 a message will be sent to all users holding the blood bank supervisor's key.** **Do you want to continue with label/release of DON010? NO//** (NO) Select UNIT FOR LABEL/RELEASE:	IU # D56 SRS # D66 SCR # D21 TC # D152

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMD33	Checks current ABO/Rh results for the specific donor unit. Prevents release of units to inventory if no current ABO/Rh results exist.	Test review/ component labeling/ release [LRBLDRR].	REST^LRBLDR R	Software checks for presence of a result in fields 65.5.5,10 ABO Interpretation and 65.5,5,11 RH Interpretation. If both results not entered, user is prompted with warning message and unable to proceed.	LR Test review/Component labeling/release Select UNIT FOR LABEL/RELEASE: DON015 **Must perform ABO/Rh testing !!** Select UNIT FOR LABEL/RELEASE:	IU # D56 SRS # D63 SCR # D25 TC # D109
WMD34	Prevents release of homologous, directed donor and therapeutic phlebotomy units with positive disease marker testing.	Test review/ component labeling/ release [LRBLDRR].	A^LRBLDRR1	All TDD testing results evaluated during execution of option. Software determines the Donation Type of each donation. If donation type is NOT Autologous and ANY of the TDD testing is POSITIVE, unit is quarantined.	LR Test review/Component labeling/release Select UNIT FOR LABEL/RELEASE: DON999 Unit: DON999 Unit testing: Tech HBsAg : REACTIVE CM 1. CPDA-1 RED BLOOD CELL Jul 17, 1998 13:34 Aug 21, 1998 2. FRESH FROZEN PLASMA, Jul 17, 1998 10:00 Jul 17, 1999 Select COMPONENT by number (2 choices): 1 CPDA-1 RED BLOOD CELL OK to label component ? YES// (YES) **Component should not be released- Unit quarantined.** **COMPONENT DISPOSITION:** DISCARD COMPONENT DISP DATE/TIME: NOW// (JUL 17, 1998@13:49)	IU # D61 SRS # D68 SCR # D26 TC # D146

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMD35	Prevents same tech from labeling and releasing unit if process done manually (no bar coded labels)	Test review/ component labeling/ release [LRBLDRR].	A+14^LRBLD RR 1	Software determines if barcode scanner being used. If scanner not used then the current user is compared to the user who labeled the component. If the same user, warning message given and user is exited from the record.	LR Test review/Component labeling/release To use BAR CODE READER Pass reader wand over a GROUP-TYPE (ABO/Rh) label => <CR> Select UNIT FOR LABEL/RELEASE: DON888 1. CPDA-1 RED BLOOD CELL Jul 22, 1998 08:33 Aug 26, 1998 2. FRESH FROZEN PLASMA, Jul 22, 1998 08:33 Jul 22, 1999 Select COMPONENT by number (2 choices): 1 CPDA-1 RED BLOOD CELL **OK to label component ?** YES// (YES) Select UNIT FOR LABEL/RELEASE: DON888 1. CPDA-1 RED BLOOD CELL labeled Jul 22, 1998 08:33 Aug 26, 1998 2. FRESH FROZEN PLASMA, Jul 22, 1998 08:33 Jul 22, 1999 Select COMPONENT by number (2 choices): 1 CPDA-1 RED BLOOD CELL **Since you labeled component someone else must release to inventory**	IU # D63 SCR # D27 SRS # D73 TC # D133
WMD36	Verifies accuracy of labeling of ABO/Rh label by comparing labeling to ABO/Rh results for unit ID.	Test review/ component labeling/ release [LRBLDRR].	X^LRBLDRR1	ABO/Rh results of either the scanned donor ABO/Rh label or manually input ABO/Rh on label is compared against the ABO/Rh of the unit as entered by the typing tech. If they do not agree, a warning message is given and the user is prompted again for data entry.	Select UNIT FOR LABEL/RELEASE: DON888 1. CPDA-1 RED BLOOD CELL labeled Jul 22, 1998 08:33 Aug 26, 1998 2. FRESH FROZEN PLASMA, Jul 22, 1998 08:33 Jul 22, 1999 Select COMPONENT by number (2 choices): 2 FRESH FROZEN PLASMA, ABO/Rh LABEL: B NEG **ABO/Rh label does NOT match ABO/Rh of unit** ABO/Rh LABEL:	IU # D64 SCR # D28 SRS # D72 TC # NONE

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMD37	During data entry via old records, checks unit ID's already in the BLOOD INVENTORY File (#65) to identify potential duplicates and/or inappropriate entries.	Old blood donor records [LRBLDO]	LRBLU+3	Routine queries both the BLOOD DONOR file (#65.5) and BLOOD INVENTORY file (#65) for matches with the DONOR UNIT ID as entered by user. If a match is found, a warning message is given and the user is prompted for a new DONOR UNIT ID:	DO Old blood donor records Select BLOOD DONOR NAME: BBDONOR1,EIGHT **Are you adding 'BBDONOR1,EIGHT' as a new BLOOD DONOR (the 79TH)? No//** Y (Yes) Select DONATION OR DEFERRAL DATE: 5-3-95 MAY 03, 1995 DONOR UNIT ID: DON001 **DON001 assigned to BBDONOR,ONE** **Enter ID that component(s) prepared from donation will be labeled. Not less than 6 or more than 11 characters** DONOR UNIT ID:	IU # D12 SCR # D4 SRS # D18 TC # D6
WMD38	Prevents access to existing donor records via the Old blood donor records option [LRBLDO]	Old blood donor records [LRBLDO]	G^LRBLDED	The BLOOD DONOR file (#65.5) is queried for the presence of an entry with the same BLOOD DONOR NAME as entered. If there is a match, a warning message is given and the user is exited from the option.	DO Old blood donor records Select BLOOD DONOR NAME: BBDONOR1,FOUR F 08/20/1954 **DONOR PREVIOUSLY ENTERED.** **THIS OPTION IS FOR ENTERING OLD DATA ON DONORS NOT PREVIOUSLY ENTERED !**	IU # D13 SCR # D4 SRS # D19 TC # D5

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI1	Prevents data entry of duplicate Unit ID into the BLOOD INVENTORY file (#65).	Log-in regular (invoices) [LRBLILR]	E+9^LRBLJLG	The BLOOD INVENTORY File (# 65) is searched for possible duplicate Unit ID. If Unit ID already exists, the original record is searched to identify the product type. If the new product type is the same as the previous, then the previous record searched for Disposition. If no disposition or disposition is NOT equal to Return to Supplier or Send elsewhere, a warning message is given and the user is prompted for a new unit ID.	LR Log-in regular (invoices) Select BLOOD COMPONENT: CPDA-1 RED BLOOD CELLS UNIT ID: DON999 B POS CPDA-1 RED BLOOD CELLS **CPDA-1 RED BLOOD CELLS already in inventory with same Unit ID !** **Institution: REGION 7 ISC,TX (CHL)** UNIT ID:	IU # I14 SCR # I1 SRS # I18 TC # IP10 IP11
WMI2	Limits re-entry of units to those with dispositions of 'S' (send elsewhere) or 'R' (returned to supplier).	Log-in regular (invoices) [LRBLILR]	EN1+1^ LRBLJLG1	The BLOOD INVENTORY File (# 65) is searched for possible duplicate Unit ID. If Unit ID already exists, the original record searched to identify the product type. If the new product type is the same as the previous, then the previous record searched for Disposition. If no disposition or disposition is equal to Return to Supplier or Send elsewhere, a warning message is given and the user is prompted to re-enter Unit ID.	LR Log-in regular (invoices) Select BLOOD COMPONENT: CPDA-1 RED BLOOD CELLS UNIT ID: DON777 **O POS CPDA-1 RED BLOOD CELLS** **CPDA-1 RED BLOOD CELLS already in inventory with same Unit ID !** *Institution: REGION 7 ISC,TX (CHL)* **DISPOSITION: RETURNED TO SENDER.** **Re-enter unit in inventory ? NO//** Y (YES) UNIT ID:	IU # I18 SCR # I1 SRS # I22 TC # IP42

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI3	For autologous and directed units entered, requires the entry of a patient name in the RESTRICTED FOR field. (#65,8).	Log-in regular (invoices) [LRBLILR]	ED+16 ^LRBLJLG	The BLOOD PRODUCT (File # 66) field AUTOLOGOUS/DIRECTED COMPONENT (#66,.25) is evaluated for each Unit ID entered. If this field contains either 1 for Autologous or 2 for Directed, then the BLOOD INVENTORY File (#65) field RESTRICTED FOR (#65,8) is prompted. If no valid entry is made in this field, the user is given a warning message and the record is deleted.	LR Log-in regular (invoices) Select BLOOD COMPONENT: AUTOLOGOUS RED BLOOD CELLS UNIT ID: DON666 ABO/Rh: O POS EXPIRATION DATE/TIME: T+35 (AUG 25, 1998) RESTRICTED FOR: <CR> *Answer prompt. To quit enter '^' and unit will be deleted.* RESTRICTED FOR: BBPATIENT,ONE PATIENT: <CR> Select PATIENT NAME: <CR> **??** PATIENT: <CR> RESTRICTED FOR: *Answer prompt. To quit enter '^' and unit will be deleted.* RESTRICTED FOR: BBPATIENT,TWO **PATIENT: DY 05-02-55 000-00-0102** **NO NSC VETERAN** **BBPATIENT,TWO** (patient accepted) POS/INCOMPLETE SCREENING TESTS: N NO	IU # I16 SCR # I18 SRS # I19 TC # IP19
WMI4	Locks unit record during data entry to prevent simultaneous access via a different terminal/user.	Disposition-not transfused [LRBLIDN]	REST^LRBLJD CK^LRU	Routine LRBLJD calls CK^LRU which attempts to lock the record. If lock is not established after one second, it is because the record is locked by another user. If this is the case, the routine returns the message ANOTHER TERMINAL IS EDITING THIS ENTRY!	Disposition -not transfused Select UNIT ID FOR DISPOSITION: DON555 OPOS CPDA-1 RED BLOOD CELLS A**NOTHER TERMINAL IS EDITING THIS ENTRY!** Select UNIT ID FOR DISPOSITION:	IU # I5 SCR # I3 SRS # I11 TC # IP230

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI5	Locks unit record during data entry to prevent simultaneous access via a different terminal/user.	Edit unit log-in [LRBLSEL]	LRBLJED CK^LRU	Routine LRBLJED calls CK^LRU which attempts to lock the record. If lock is not established after one second, it is because the record is locked by another user. If this is the case, the routine returns the message ANOTHER TERMINAL IS EDITING THIS ENTRY!	LI Edit unit log-in Select BLOOD INVENTORY UNIT ID: DON555 OPOS CPDA-1 RED BLOOD CELLS **ANOTHER TERMINAL IS EDITING THIS ENTRY!** Select BLOOD INVENTORY UNIT ID:	IU # I5 SCR # I3 SRS # I11 TC # NONE
WMI6	Locks unit record during data entry to prevent simultaneous access via a different terminal/user.	Edit unit-patient fields [LRBLSEC]	LRBLJED CK^LRU	Routine LRBLJED calls CK^LRU which attempts to lock the record. If lock is not established after one second, it is because the record is locked by another user. If this is the case, the routine returns the message ANOTHER TERMINAL IS EDITING THIS ENTRY!	PI Edit unit - patient fields Select BLOOD INVENTORY UNIT ID: DON555 OPOS CPDA-1 RED BLOOD CELLS **ANOTHER TERMINAL IS EDITING THIS ENTRY!** Select BLOOD INVENTORY UNIT ID:	IU # I5 SCR # I3 SRS # I11 TC # 253
WMI7	Locks unit record during data entry to prevent simultaneous access via a different terminal/user.	Edit unit disposition fields [LRBLSED]	LRBLJED CK^LRU	Routine LRBLJED calls CK^LRU which attempts to lock the record. If lock is not established after one second, it is because the record is locked by another user. If this is the case, the routine returns the message ANOTHER TERMINAL IS EDITING THIS ENTRY!	DI Edit unit disposition fields Select BLOOD INVENTORY UNIT ID: DON555 OPOS CPDA-1 RED BLOOD CELLS **ANOTHER TERMINAL IS EDITING THIS ENTRY!** Select BLOOD INVENTORY UNIT ID:	IU # I5 SCR # I3 SRS # I11 TC # 255

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI8	Restricts selection of blood components to those in the BLOOD PRODUCT File (#66) with entries in the SUPPLIER field (#66.01).	Log-in regular (invoices) [LRBLILR]	C+3^LRBLJLG	For each component type entered, the BLOOD PRODUCT file (#66) is searched for the presence of a valid SUPPLIER. If there are no suppliers entered in the field SUPPLIER (#66.01) a warning message is given and the user is prompted again to enter a valid supplier.	LR Log-in regular (invoices) Select BLOOD COMPONENT: ACD-A RED BLOOD CELLS **Must have at least one supplier for this component** **Please have appropriate person enter supplier(s) in BLOOD PRODUCT FILE (#66)** Invoice number: XXX Select BLOOD COMPONENT:	IU # I24 SCR # I3 SRS # I28 TC # IP3
WMI9	Evaluates validity of expiration date based on the entry in the MAXIMUM STORAGE DAYS field (#66,.135) for that blood Component.	Log-in regular (invoices) [LRBLILR]	ED+2 ^LRBLJLG	For the product being entered, the field MAXIMUM STORAGE DAYS (#66,.135) is evaluated. From this, the maximum date for product outdate is calculated. This calculated date is then compared with the input expiration date/time. If the input date/time exceeds the calculated date/time, the user is given a warning message and is prompted again to enter an expiration date/time.	**Log-in regular (invoices)** Select BLOOD COMPONENT: CPDA-1 RED BLOOD CELLS UNIT ID: DON444 ABO/Rh: O POS EXPIRATION DATE/TIME: T+36 (AUG 29, 1998) *Expiration date exceeds allowable limit !* EXPIRATION DATE/TIME: T+35 (AUG 28, 1998) UNIT ID:	IU # I25 SCR # I3 SRS # I30 TC # IP5
WMI10	When editing data on a pooled product, limits access to units for which the component is defined as a pooled product based on the entry in the POOLED PRODUCT field in the BLOOD PRODUCT file (#66).	Edit pooled product [LRBLJM]	REST^LRBLJM	For the product type of the Unit ID being edited, a check is made to the field POOLED PRODUCT (#66,.27). If this field is not set to YES, then FileMan does not allow the edit and responds with "??".	PP Edit pooled blood product Select POOLED UNIT: DON555 **??** Select POOLED UNIT:	IU # I25 SCR # I3 SRS # I30 TC # NONE

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI11	Limits access to those units assigned to the same division as the user.	Enter blood inventory typing charges [LRBLILS]	SET^LRBLJA	Software compares the division of the current user with the division of unit being edited based on the entry in the DIVISION field (#65,.16). If they do not match, the user is not allowed to edit this record.	Enter blood inventory typing charges **BBDONOR INSTITUTION** Select BLOOD INVENTORY UNIT ID: DON001? Select BLOOD INVENTORY UNIT ID: ENTER BLOod inventory typing charges **REGION 7 ISC,TX (CHL)** Select BLOOD INVENTORY UNIT ID: DON001 APOS CPDA-1 RED BLOOD CELLS TYPING CHARGE: 12.00//	IU # I9 SCR # I3 SRS # I13 TC # NONE
WMI12	Limits access to those units assigned to the same division as the user.	Edit unit log-in [LRBLSEL]	G+3^LRBLJED	Software compares the division of the current user with the division of unit being edited based on the entry in the DIVISION field (#65,.16). If they do not match, the user is not allowed to edit this record.	Edit unit log-in **You are logged in to BBDONOR INSTITUTION** Select BLOOD INVENTORY UNIT ID: DON001 **??** Select BLOOD INVENTORY UNIT ID: Edit unit log-in **You are logged in to REGION 7 ISC,TX (CHL)** Select BLOOD INVENTORY UNIT ID: DON001 APOS CPDA-1 RED BLOOD CELLS DON001//	IU # I9 SCR # I3 SRS # I13 TC # NONE

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI13	Limits access to those units in the BLOOD INVENTORY File (#65) assigned to the same division as the user.	Edit Unit-patient fields [LRBLSEC]	G+3^LRBLJED	Software searches the BLOOD INVENTORY File (#65) and compares the division of the current user with the division of unit being edited based on the entry in the DIVISION field (#65,.16). If they do not match, the user is not allowed to edit this record.	Edit unit - patient fields **You are logged in to BBDONOR INSTITUTION** Select BLOOD INVENTORY UNIT ID: DON001 **??** Select BLOOD INVENTORY UNIT ID: Edit unit - patient fields **You are logged in to REGION 7 ISC,TX (CHL)** Select BLOOD INVENTORY UNIT ID: DON001 APOS CPDA-1 RED BLOOD CELLS Select PATIENT XMATCHED/ASSIGNED:	IU # I9 SCR # I3 SRS # I13 TC # IP67
WMI14	Limits access to those units in the BLOOD INVENTORY File (#65) assigned to the same division as the user.	Edit unit disposition fields [LRBLSED]	G+3^LRBLJED	Software searches the BLOOD INVENTORY File (#65) and compares the division of the current user with the division of unit being edited based on the entry in the DIVISION field (#65,.16). If they do not match, the user is not allowed to edit this record.	Edit unit disposition fields Yo**u are logged in to BBDONOR INSTITUTION** Select BLOOD INVENTORY UNIT ID: DON001 **??** Select BLOOD INVENTORY UNIT ID: Edit unit disposition fields **You are logged in to REGION 7 ISC,TX (CHL)** Select BLOOD INVENTORY UNIT ID: DON001 APOS CPDA-1 RED BLOOD CELLS DISPOSITION: TRANSFUSE//	IU # I9 SCR # I3 SRS # I13 TC # NONE

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI15	Prevents entry of future disposition dates.	Disposition not transfused [LRBLIDN] Edit unit disposition fields [LRBLSED]	Input transform of the DISPOSITION DATE field (# 65,4.2)	Input transform of the DISPOSITION DATE field (# 65,4.2) is defined to prevent entry of a future date/time.	DN Disposition -not transfused Select UNIT ID FOR DISPOSITION: DON333 DISPOSITION: DISCARD DISPOSITION DATE: NOW// T+1 (JUL 28, 1998)**??** **Examples of Valid Dates:** **JAN 20 1957 or 20 JAN 57 or 1/20/57 or 012057** **T (for TODAY), T+1 (for TOMORROW), T+2, T+7, etc.** **T-1 (for YESTERDAY), T-3W (for 3 WEEKS AGO), etc.** **If the year is omitted, the computer uses CURRENT YEAR. Two-digit year assumes no more than 20 years in the future, or 80 years in the past. If only the time is entered, the current date is assumed. Follow the date with a time, such as JAN 20@10, T@10AM, 10:30, etc. You may enter a time, such as NOON, MIDNIGHT or NOW.** **Enter only past or present Date/time** DISPOSITION DATE: NOW//	IU # I31 SCR # I3 SRS # I31 TC # IP34 IP39
WMI16	Requires both a date and a time to log in an Invoice from an outside supplier.	Log-in regular (invoices) [LRBLILR]	D^LRBLJLG	At the prompt "DATE/TIME RECEIVED: NOW// ", software evaluates the format of the input. If the input does not contain a time element, then the user is given a warning message and prompted again for entry of the data.	Log-in regular (invoices) Enter INVOICE (or order) NUMBER: TIMING DATE/TIME RECEIVED: NOW// T (AUG 25, 1998) **Must enter a TIME. Future DATE/TIME not allowed.** DATE/TIME RECEIVED: NOW// T-1 (AUG 24, 1998) **Must enter a TIME. Future DATE/TIME not allowed.** DATE/TIME RECEIVED: NOW//	IU # I13 SRS # G7 G8 I17 SCR # I6 TC # IP1

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI17	Compares confirmatory ABO/Rh recheck test results to unit log in information.	Unit ABO/Rh confirmation [LRBLIUC]	Input template for the BLOOD PRODUCT file (#65) LRBLIABRH.	When a unit is logged into the BLOOD INVENTORY file the fields ABO GROUP (#65,.07) and RH TYPE (#65,.08) are set. During the option Unit ABO/Rh confirmation [LRBLIUC] the input template compares the entries made in the fields ABO INTERPRETATION (#65,10) and RH INTERPRETATION (#65,11) with the respective ABO GROUP or RH TYPE. If they do not match, the user is given a warning message and asked to confirm.	UC Unit ABO/Rh confirmation UNIT ID: DON222 ABO: O Rh: POS ABO INTERPRETATION: B *B* **B not the ABO group on record** **Present testing OK ? YES//** N (NO) ABO INTERPRETATION: O O RH INTERPRETATION: NEG **NEG not the Rh type on record** **Present testing OK ? YES//** N (NO) RH INTERPRETATION: POSITIVE	IU # I37 SCR # I13 SRS # I41 TC # IP28 IP30
WMI18	Limits access to those units assigned to the same division as the user if data entry is done by unit (not if done by batch)	Unit ABO/Rh confirmation [LRBLIUC]	E+3^LRBLJCK	Software compares the division of the current user with the division of unit being edited based on the entry in the DIVISION field (#65,.16). If they do not match, the user is not allowed to edit this record.	Unit ABO/Rh confirmation **Division: BBDONOR INSTITUTION** UNIT ID: DON100 **(NOT IN INVENTORY FILE)**	IU # I38 SCR # I3 SRS # I42 TC # IP24

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI19	Prevents modification of autologous components to non-autologous component if the entry in the field POS/INCOMPL SCREENING TESTS (#65,8.1) =YES.	Disposition - not transfused [LRBLIDN]	REST+9^ LRBLJD	For the unit being modified, a check is made for an entry in the BLOOD INVENTORY file (#65) field POS/INCOMPLETE SCREENING TESTS (#65,8.1). Another check made to the target BLOOD PRODUCT file (#66) field AUTOLOGOUS/DIRECTED COMPONENT (#66,.25). If the POS/INCOMPLETE SCREENING TESTS (#65,8.1)= YES then the AUTOLOGOUS/DIRECTED COMPONENT (#66,.25) MUST be Autologous or a warning message is given and the user is prevented from modifying the unit.	Disposition -not transfused Select UNIT ID FOR DISPOSITION: DON101 DISPOSITION: MODIFY DISPOSITION DATE: NOW// <CR> Select MODIFY TO: LIQUID PLASMA, CPDA-1 **Unit has positive screening tests and component selected is not autologous.** Select MODIFY TO:	IU # I49 SCR # I16 SRS # I51 TC # IP49 IP51 IP270 IP271
WMI20	Alerts user of short dated units	Log-in regular (invoices) [LRBLILR]	Input Transform of field EXPIRATION DATE/TIME (#65,.06)	The date entered at this prompt is compared with the current date. If the dates are the same or the input date is previous to the current date, the user is given a warning message that the unit expires today.	Log-in regular (invoices) DATE/TIME RECEIVED: NOW// (AUG 25, 1998@06:58) Invoice number: PLATELETS Select BLOOD COMPONENT: PLATELETS,20-24 C, 5 DAY Select SUPPLIER: SELF// UNIT ID: DON102 ABO/Rh: O POS EXPIRATION DATE/TIME: T@1600 (AUG 25, 1998@16:00) **Unit expired or expires today.** UNIT ID:	IU # I20 SCR # I10 SRS # I24 TC # IP16

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI21	Restricts selection of component choices to those defined in the MODIFY TO field (66.03) for the specific component of the unit being modified.	Disposition - not transfused [LRBLIDN]	REST+6 ^LRBLJD VA FileMan	The BLOOD PRODUCT file (#66) field MODIFY TO (#66.03) is a "Pointer field". The option uses the VA FileMan call ^DIC to restrict choices to those entries in the MODIFY TO field (#66.03) for the product being modified.	Disposition -not transfused Select UNIT ID FOR DISPOSITION: DON222 OPOS CPDA-1 RED BLOOD CELLS DISPOSITION: MODIFY DISPOSITION DATE: NOW// (JUL 27, 1998@12:53) Select MODIFY TO: PLAT **??** Select MODIFY TO: ? **Answer with MODIFY TO, or NUMBER** **Choose from:** 47 CPDA-1 RED BLOOD CELLS, DIVIDED UNIT 53 RED BLOOD CELLS, WASHED Select MODIFY TO:	IU # I51 SCR # I3 SRS # I54 TC # IP44 IP199
WMI22	Restricts selection of component choices to those defined in the PEDIATRIC PRODUCT field (66,.22) for the specific component of the unit being modified.	Pediatric unit preparation [LRBLPED]	P+3^LRBLPED	For the product type selected for modification, a check is made for an entry in the field PEDIATRIC PRODUCT (#66,.22). If no entry in this field, a warning message is displayed to the user.	PEDiatric unit preparation Blood component for pediatric prep: CPDA-1 RED BLOOD CELLS 04060 **PEDIATRIC PRODUCT must be entered for this component and pediatric product selection must be an entry in the Blood Product file.** Blood component for pediatric prep:	IU # I51 SCR # I3 SRS # I54 TC # IP283
WMI23	Prevents multiple modifications to the same unit by excluding selection of units which already have a disposition entered.	Disposition - not transfused [LRBLIDN]	REST^LRBLJD	Routine checks for the presence of an entry in the field DISPOSITION (#65,4.1) for the unit being modified. If a disposition is present, the user is not allowed to edit the record using this option.	Disposition -not transfused Select UNIT ID FOR DISPOSITION: DONOR01 **??** Select UNIT ID FOR DISPOSITION:	IU # I53 SCR # I3 RS # I56 TC # IP48

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI24	Requires entry of a new unit ID for units being created, deleting the entire new entry in the BLOOD INVENTORY File (#65) if new unit ID is NOT entered.	Disposition - not transfused [LRBLIDN]	ID^LRBLJD1	Prompts for new unit ID for a pooled product. If none entered, the new-pooled unit is deleted along with the associated unit's disposition data.	Disposition –not transfused Select UNIT ID FOR DISPOSITION: DON103 DISPOSITION: MODIFY Select MODIFY TO: POOLED PLATELETS 12091 PP 1 Selection 1 (unit ID to pool): DON103 O POS Selection 2 (Unit ID to pool): DON104 OPOS Selection 3 (Unit ID to pool): DON105 OPOS Selection 4 (Unit ID to pool): DON106 OPOS Selection 5 (Unit ID to pool): Select UNIT ID number for POOL: <CR> **UNITS selected were NOT pooled !** Select UNIT ID FOR DISPOSITION:	IU # I54 SCR # I3 SRS # I57 TC # IP60
WMI25	If a unit is divided/split into other components, evaluates the sum of the new unit volumes to make sure the sum does not exceed the volume of the original unit.	Disposition - not transfused [LRBLIDN]	C^LRBLJDM	For each component selected at the MODIFY TO: prompt, the volume as entered in the VOLUME (ml) field (66,.1) is used to calculate the total volume of all of the components combined. This value is compared to the entry in the VOLUME (ml) field (66,.1) for the original component being modified. If greater, a warning message is given, the modifications are deleted, and the user is prompted again for data entry.	Disposition –not transfused Select UNIT ID FOR DISPOSITION: DON107 OPOS CPDA-1 WHOLE BLOOD DISPOSITION: MODIFY VOLUME (ml): 450// Select MODIFY TO: CPDA-1 RED BLOOD CELLS 04060 Select MODIFY TO: FFP FRESH FROZEN PLASMA, CPDA-1 Select MODIFY TO: CRYOPRECIPITATE, CPDA-1 10100 CA1 1 Select MODIFY TO: <CR> **You have selected the following component(s):** **CRYOPRECIPITATE, CPDA-1 vol(ml): 25** **CPDA-1 RED BLOOD CELLS vol(ml): 250** **FRESH FROZEN PLASMA, CPDA-1 vol(ml): 225** **Total vol(ml): 500** **Total volume of components greater than unit.** **SELECTIONS DELETED TRY AGAIN !** Select MODIFY TO:	IU # I55 SCR # I3 SRS # I59 TC # NONE

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI26	Evaluates the calculated expiration date of new unit created against the expiration date of unit being modified. Displays alert message if calculated expiration date of new unit exceeds the original expiration date, or in the case of a pooled product, exceed any of the units in the pool.	Disposition - not transfused [LRBLIDN]	LRBLJDA+6	Routine calculates a tentative calculation date based on the field DAYS LEFT (#66,.11) for the new product being created. Then this new expiration date is compared with the expiration date of the original product. If the new is later than the original, a warning message is given and the user is asked to confirm.	Disposition -not transfused Select UNIT ID FOR DISPOSITION: DON100 OPOS CPDA-1 RED BLOOD CELLS DISPOSITION: MODIFY DISPOSITION DATE: NOW//<CR> (JUL 28, 1998@07:16) Select MODIFY TO: FROZEN RBCS RED BLOOD CELLS **New ID #: DON100 RED BLOOD CELLS, FROZEN** DATE/TIME RECEIVED: NOW// (JUL 28, 1998@07:17) EXPIRATION DATE/TIME: Jul 28, 2005// (JUL 28, 2005) **Expiration date exceeds original unit expiration date** **Aug 31, 1998 OK ? NO//** Y (YES)	IU # I57 SCR # I3 SRS # I61 TC # IP47 IP212
WMI27	Prevents entry of future disposition dates.	Disposition not transfused [LRBLIDN]	Input transform for field DISPOSITION DATE (#65,4.2) VA FileMan Utility %DT	Input parameter S %DT(0)="-N" prevents the utility %DT from selecting a future date.	Disposition -not transfused Select UNIT ID FOR DISPOSITION: DON107 DISPOSITION: MODIFY DISPOSITION DATE: NOW// T+1 (JUL 29, 1998)**??** **Examples of Valid Dates:** **JAN 20 1957 or 20 JAN 57 or 1/20/57 or 012057** **T (for TODAY), T+1 (for TOMORROW), T+2, T+7, etc.** **T-1 (for YESTERDAY), T-3W (for 3 WEEKS AGO), etc.** **If the year is omitted, the computer uses CURRENT YEAR. Two-digit year assumes no more than 20 years in the future, or 80 years in the past.** **If only the time is entered, the current date is assumed.** **Follow the date with a time, such as JAN 20@10, T@10AM, 10:30, etc.** **You may enter a time, such as NOON, MIDNIGHT or NOW.**	IU # I58 SCR # I3 SRS # I62 TC # IP45

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED) **Enter only past or present Date/time** DISPOSITION DATE: NOW// T@1000 (JUL 28, 1998@10:00)**??** **Examples of Valid Dates:** **(Same examples as in previous page)** DISPOSITION DATE: NOW// <CR> (JUL 28, 1998@07:38)	Trace
WMI28	If pediatric component is being created, restricts unit selection to those of appropriate age based on the entry in the MAX AGE FOR PEDIATRIC USE field (#66,.21) field for the component of the unit being modified.	Pediatric unit preparation [LRBLPED]	OK+2^LRBLPED	The maximum outdate allowed for a Pediatric Unit is calculated based on the entry in the field MAX AGE FOR PEDIATRIC USE (#66,.21) for the product being used. Once the actual Unit ID is entered, the outdate of that unit is compared to the maximum outdate allowed. If the Unit ID has a longer outdate than allowed, the user is prompted for a new Unit ID.	PEDiatric unit preparation Blood component for pediatric prep: CPDA-1 RED BLOOD CELLS Select UNIT: DON108 DON108 ***(user exited and prompted for new UNIT:)*** Select UNIT: DON444 DON444 DON444 O POS 08/28/98 5 DAYS OLD 250 ml DON444 O POS 08/28/98 Vol(ml): 250 Wt(gm): 270 VOL ('W' to edit weight, 'V' to edit volume): 250ml//	IU # I59 SCR # I3 SRS # I63 TC # IP283
WMI29	Displays alert message for any patients selected who have autologous and/or directed components in inventory.	Disposition - relocation [LRBLIDR]	EN^LRBLPUS	Once the patient name is selected, the BLOOD INVENTORY file (#65) is searched for any entries which have that patient name entered in the RESTRICTED FOR field (#65,8).	Disposition -relocation Select Patient Name: BBPATIENT,THREE 05-05-55 000000103 **Units restricted for BBPATIENT,THREE** **DON101 FRESH FROZEN PLASMA, CPDA-1**	IU # I65 SCR # I8 SRS # I69 TC # IP264 IP272 IP275

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI30	Displays warning message if unit selected is double cross matched and still assigned to another patient at the time the unit is being issued for transfusion.	Disposition - relocation [LRBLIDR]	W+1^LRBLJL1	All units with a status of "assigned" are stored in the ^LRD(65,"AP",PATIENT,UNIT IEN) cross-reference. When a unit is displayed as being assigned for a patient, if the same unit is also assigned to a different patient a warning message is displayed.	Disposition –relocation Select Patient Name: BBPATIENT,FOUR 01-01-50 000000104 Unit assigned/xmatched: Exp date Location 1) FDA0001 CPDA-1 RED BLOOD CE O POS 08/28/1998 Blood Bank ***** Also assigned/xmatched to BBPATIENT,FIVE 000000105** DATE/TIME UNIT RELOCATION: NOW//	IU # I66 SCR # I18 SRS # I70 TC # IP190
WMI31	Displays alert message for any patients selected who have an entry in either the ANTIBODIES IDENTIFIED field (#63.075) or BLOOD BANK COMMENTS field (#63.076)	Disposition - relocation [LRBLIDR]	LRDPA+6	During patient lookup for a Blood Bank accession area, software searches for entries in the ANTIBODIES IDENTIFIED field (#63.075). All entries in this multiple field are displayed.	Disposition –relocation Select Patient Name: BBPATIENT,TWO 05-02-55 000-00-0102 NO N PATIENT LOCATION: ???// 3E 3 EAST **Antibody present: ANTI E** TRANSFUSION REACTIONS WITHOUT UNIT IDENTIFIED: Jan 15, 1997 ALERGIC Units restricted for BBPATIENT,TWO SELF10 AUTOLOGOUS RED BLOOD CELLS	IU # I67 SCR # I19 SRS # I71 TC # IP173
WMI32	For patients with an entry in the ANTIBODIES IDENTIFIED field (#63.075) prevents issue of units not appropriately phenotyped.	Disposition - relocation [LRBLIDR]	C^LRBLJL	During relocation episode for each unit, when the patient has an entry in the ANTIBODIES IDENTIFIED field (#63.075) a check is made in the RBC ANTIGEN ABSENT field (65.05) for presence of the corresponding antigen phenotyping. If the corresponding antigen is not entered in this field, a warning message is given and the relocation episode is not allowed.	Disposition –relocation Select Patient Name: BBPATIENT,TWO 05-02-55 Antibody present: ANTI E Unit assigned/xmatched: Exp date Location 1) DON109 CPDA-1 RED BLOOD CE O POS 08/08/1998 2) DON108 CPDA-1 RED BLOOD CE O POS 08/13/1998 Select (1-2): 1 1) DON109 CPDA-1 RED BLOOD CE O POS 08/08/1998 **E.....RBC ANTIGEN** **Above antigen(s) not entered in RBC ANTIGEN ABSENT field for DON109** ***** UNIT NOT RELOCATED ***** Select Patient Name:	IU # I69 SCR # I19 SRS # I73 TC # IP73

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI33	Prevents issue if no ABO recheck results are entered for components with the entry in the CONTAINS RED CELLS field (#66,.19)	Disposition - relocation [LRBLIDR]	D+1^LRBLJL	For the product type being relocated, a check is made to the entry in the field CONTAINS RED CELLS (#66,.19). If yes, then the Unit record in the BLOOD INVENTORY file (#65) field ABO INTERPRETATION (#65,10) is checked for an entry. If there is no entry, the user is given a warning message and the relocation episode is not allowed.	Disposition -relocation Select Patient Name: BBPATIENT,TWO 05-02-55 000000102 Unit assigned/xmatched: Exp date Location 1) DON109 CPDA-1 RED BLOOD CE O POS 08/08/1998 2) DON108 CPDA-1 RED BLOOD CE O POS 08/13/1998 3) DON110 CPDA-1 RED BLOOD CE O POS 09/03/1998 Select (1-3): 3 3) DON110 CPDA-1 RED BLOOD CE O POS 09/03/1998 **ABO not rechecked for DON110 *** UNIT NOT RELOCATED *** Select Patient Name:	IU # I71 SCR # I20 SRS # I75 TC # IP174
WMI34	Prevents issue if no Rh recheck results are entered for Rh negative components with the entry in the CONTAINS RED CELLS field (#66,.19)	Disposition - relocation [LRBLIDR]	D+2^LRBLJL	For the product type being relocated, a check is made to the entry in the field CONTAINS RED CELLS (#66,.19). If yes, and the Unit record in the BLOOD INVENTORY file (#65) RH Type field (#65,.08) = "NEG", then the field RH INTERPRETATION (#65,11) is checked for an entry. If there is no entry, the user is given a warning message and the relocation episode is not allowed.	Disposition -relocation Select Patient Name: BBPATIENT,FIVE 05-02-33 000000105 YES SC Unit assigned/xmatched: Exp date Location 1) DON444 CPDA-1 RED BLOOD CE O POS 08/28/1998 2) DON111 CPDA-1 RED BLOOD CE O NEG 09/03/1998 Select (1-2): 2 2) DON111 CPDA-1 RED BLOOD CE O NEG 09/03/1998 **Rh NEG unit not rechecked for NEG001 *** UNIT NOT RELOCATED *** Select Patient Name:	IU # I71 SCR # I20 SRS # I75 TC # IP174

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI35	Prevents issue of unit if the inspection is entered as Unsatisfactory for that specific relocation.	Disposition - relocation [LRBLIDR]	T+4-6^LRBLJL	If UNSATISFACTORY is entered at the INSPECTION: prompt during data input, the user is prompted to confirm. If the UNSATISFACTORY input is confirmed, the user is displayed a warning message and the relocation episode is not allowed.	Disposition -relocation Select Patient Name: BBPATIENT,TWO 05-02-55 000-00-0102 DATE/TIME UNIT RELOCATION: NOW// (JUL 30, 1998@08:46) INSPECTION: U UNSATISFACTORY **Are you sure ? NO//** Y (YES) **No units with incomplete answers or units to be sent from the blood bank with unsatisfactory inspections can be relocated. Relocation entry <DELETED>**	IU # I72 SCR # I21 SRS # I76 TC # IP244
WMI36	Prevents issue of unit if the inspection from any previous relocation of that unit is unsatisfactory.	Disposition - relocation [LRBLIDR]	L+5-6 ^LRBLJL1 T+7^LRBLJL	For the unit being relocated, all previous relocation episodes are checked for the presence of an UNSATISFACTORY entry to the INSPECTION field (#65.03,.02). If present, the user is given a warning message and the unit cannot be relocated.	Disposition –relocation Select Patient Name: BBPATIENT,FIVE 05-02-33 Unit assigned/xmatched: Exp date Location 1) #DON109 CPDA-1 RED BLOOD CE O POS 08/08/1998 2) #DON444 CPDA-1 RED BLOOD CE O POS 08/28/1998 *** Also assigned/xmatched to BBPATIENT,FOUR 000000104 3) DON111 CPDA-1 RED BLOOD CE O NEG 09/03/1998 **(# unsatisfactory unit)** Select (1-3): 1 1) #FDA0003 CPDA-1 RED BLOOD CE O POS 08/08/1998 **Unit unsatisfactory cannot release.** Select Patient Name:	IU # I72 SCR # I21 SRS # I77 TC # IP194

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI37	Evaluates the expiration date of unit and displays warning message if unit is expired when ompared to the current time.	Disposition - relocation [LRBLIDR]	L+9^LRBLJL1	For each unit assigned to a patient, the EXPIRATION DATE/TIME field (#65,.06) is evaluated against the current time. If less, the unit is marked with an "*". If any of the units are deemed outdated by the above algorithm, a warning message explaining the "*" is displayed.	Disposition -relocation Select Patient Name: BBPATIENT,FIVE 05-02-33 000000105 YES SC Unit assigned/xmatched: Exp date Location 1) DON111 CPDA-1 RED BLOOD CE O NEG 07/29/1998** **(*Expired unit)** DATE/TIME UNIT RELOCATION: NOW//	IU # I73 SCR # I22 SRS # I78 TC # IP205
WMI38	Prevents issue of unit if the component definition in the BLOOD PRODUCT file (#66) has A "YES" in the field MODIFIED BEFORE RELEASE (#66,.14)	Disposition - relocation [LRBLIDR]	L+10^LRBLJL1	For the product type being relocated, a check is made to the BLOOD PRODUCT File (#66) entry for the field MODIFIED BEFORE RELEASE (#66,.14). If the field is YES, then a warning message is given and the user cannot relocate that unit.	Disposition –relocation Select Patient Name: BBPATIENT,SIX 05-02-75 Units restricted BBPATIENT,SIX **DON112 FRESH FROZEN PLASMA O POS 11/17/1998 Blood Bank** **This unit needs to be modified before release !**	IU # I74 SCR # I23 SRS # I7 TC # NONE
WMI39	Prevents entry of a relocation date/time, which is prior to the date/time the unit was assigned to the patient.	Disposition - relocation [LRBLIDR]	T+2^LRBLJL	The date/time entered at the prompt DATE/TIME UNIT RELOCATION: NOW// is compared with the entry in the field DATE/TIME UNIT ASSIGNED (#65.01,.02) for the unit. If the relocation time is earlier than the assigned time, a warning message is given and the user is exited from the record.	Disposition -relocation Select Patient Name: BBPATIENT,SIX 05-02-75 Unit assigned/xmatched: Exp date Location 1) DON013 FRESH FROZEN PLASMA B NEG 08/19/1998@07:18 Blood Bank DATE/TIME UNIT RELOCATION: NOW// T@0600 (AUG 18, 1998@06:00) **Relocation time must be after DATE/TIME unit assigned (08/18/98 07:17)** Select Patient Name:	IU # I75 SCR # I3 SRS # I80 TC # IP186

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI40	Restricts relocation of units to standard locations within the same associated division, UNLESS user enters a nonstandard location and overrides the check.	Disposition - relocation [LRBLIDR]	Input transform to field LOCATION (#65.03,.04) calls routine LRUC.	Routine LRUC searches the HOSPITAL LOCATION File (#44) for a match for the input value. If one does not exist, the user is given a chance to accept a non-standard location and is prompted for override.	Disposition -relocation Select Patient Name: BBPATIENT,SIX 05-02-75 Unit assigned/xmatched: Exp date Location 1) DON013 FRESH FROZEN PLASMA B NEG 08/19/1998@07:18 Blood Bank DATE/TIME UNIT RELOCATION: NOW// (AUG 18, 1998@07:25) INSPECTION: S SATISFACTORY LOCATION: 8 E **NON-STANDARD LOCATION ! OK ? NO//** Y (YES) ISSUED TO/REC'D FROM: DON013 relocated Select Patient Name:	IU # I77 SCR # I3 SRS # I82 TC # IP188
WMI41	Locks unit record during data entry to prevent simultaneous access via a different terminal/user.	Unit phenotyping [LRBLIUP]	A^LRBLJA calls up CK^LRU	Routine LRBLJA calls CK^LRU which attempts to lock the record. If lock is not established after one second, it is because the record is locked by another user. If this is the case, the routine returns the message ANOTHER TERMINAL IS EDITING THIS ENTRY!	Unit phenotyping Select BLOOD INVENTORY UNIT ID: DON013 B NEG CPDA-1 RED BLOOD CELLS **ANOTHER TERMINAL IS EDITING THIS ENTRY!** Select BLOOD INVENTORY UNIT ID:	IU # I5 SCR # I3 SRS # I11 TC # IP223

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMI42	Prevents entry of the same antigen in the RBC ANTIGEN PRESENT field (#65.04) and the RBC ANTIGEN ABSENT field (#65.05) for the unit being phenotyped.	Unit phenotyping [LRBLIUP]	Input template LRBLIAG evaluates each RBC ANTIGEN PRESENT and RBC ANTIGEN ABSENT fields for conflicts.	During data entry for the field RBC ANTIGEN PRESENT, a check is made to the corresponding field RBC ANTIGEN ABSENT. The same entry cannot be in both fields. Again, during data entry for the field RBC ANTIGEN ABSENT, the same check is made to the corresponding field RBC ANTIGEN PRESENT. If a conflict, a warning message is given.	Unit phenotyping Select BLOOD INVENTORY UNIT ID: DON013 B NEG CPDA-1 RED BLOOD CELLS Select RBC ANTIGEN PRESENT: e// E **E antigen cannot be present & absent ??** Select RBC ANTIGEN PRESENT:	IU # I83 SCR # I3 SRS # I87 TC # IP182
WMI45	Prevents release of autologous or directed donor units for allogeneic use for units with a "YES" in the POS/INCOMP. SCREENING TESTS field (#65,8.1).	Free autologous/directed donor units [LRBLSEE]	A+2^LRBLJED	A check is made to the field POS/INCOMPLETE SCREENING TESTS (#65,8.1). If YES, a warning message is given and the unit cannot be freed from the autologous donor.	FREE autologous/directed donor units Select BLOOD INVENTORY UNIT ID: DON014 O POS AUTOLOGOUS RED BLOOD CELLS **One or more screening tests from donation are positive.** **DELETION NOT ALLOWED !** Select BLOOD INVENTORY UNIT ID:	IU # I85 SCR # I26 SRS # I89 TC # IP273
WMI46	Prevents release of units from locations other than BLOOD BANK.	Units release to stock (cancel) by patient [LRBLIUR]	REL+1^LRBLJR	A check is made to the current location of the unit to be released from the patient. If the location does not contain the words "BLOOD BANK", a warning message is given and the user is exited from the record.	Units release to stock (cancel) by patient Select Patient Name: BBPATIENT,SIX 05-02-75 # Unit ID ABO/Rh Component Exp date Xmatch date Location 1) DON013 B NEG FRESH FROZEN PLASMA, 08/19 07:18 08/18 07:17 8 E Date/time work completed: NOW// (AUG 18, 1998@08:48) **DON013 not returned to BLOOD BANK. Cannot release.** Select Patient Name:	IU # I86 SCR # I3 SRS # I90 TC # NONE

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMP1	Prevents entry of historical unit information if unit is already in the BLOOD INVENTORY file (#65).	Previous records [LRBLPER]	Input transform for field COMPONENT ID (#63.017,.03) calls EN^LRBLU	When this option is used, the input transform of the field COMPONENT ID calls routine EN^LRBLU to search the existing entries in the BLOOD INVENTORY File (#65) for any possible matches. If the same product exists and the same unit ID, the user is given a warning message and exited from the record.	Previous records Select Patient Name: BBPATIENT,SIX 05-02-75 Select TRANSFUSION RECORD TRANSFUSION DATE/TIME: T-10@0800 AUG 08, 1998@08:00 TRANSFUSION RECORD COMPONENT: CPDA-1 RED BLOOD CELLS TRANSFUSION RECORD COMPONENT ID: DON113 *UNIT IN INVENTORY - EDIT TRANSFUSION DATA THERE !?? ANSWER MUST BE 2-12 CHARACTERS IN LENGTH* TRANSFUSION RECORD COMPONENT ID:	IU # P28 SCR # P3 SRS # P28 TC # IP65
WMP2	Checks for previous specimens within 72 hrs, regardless of division. Based on a search of the DATE/TIME SPECIMEN TAKEN field (#63.01,.01) for specimens = BLOOD.	Specimen log-in [LRBLPLOGIN] Blood component requests [LRBLPCS]	VA FileMan date/time utility %DTC EN2^LRBLU	The software calculates the date/time for 72 hrs previous to 'NOW'. The LAB DATA File (#63) entry for the patient is then searched for any/all blood bank specimens which have an entry in the DATE/TIME SPECIMEN TAKEN field (#63.01,.01) after the date/time calculated above. All valid specimens are then displayed to the user.	Specimen log-in Select Patient Name: BBPATIENT,SIX 05-02-75 You have just selected the following tests for BBPATIENT,SIX 000-00-0106 entry no. Test Sample 1 TRANSFUSION REQUEST BLOOD All satisfactory? Yes// <CR> (Yes) LAB Order number: 544 **~For Test: TRANSFUSION REQUEST BLOOD** **Specimen(s) received within past 72 hrs:** **08/19/98 06:28 BB 0819 1**	IU # P33 P36 SCR # P16 P25 SRS # P35 P36 P37 TC # IP71 IP89

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMP3	Evaluates pre-operative component requests against audit criteria as defined in the OPERATIONS (MSBOS) File (#66.5)	Specimen log-in [LRBLPLOGIN] Blood component requests [LRBLPCS]	EN^LRBLPCSS	If "YES" is entered at the prompt 'Is patient Pre-op ?', and a Surgery is requested via the Surgery package, the following are checked: The OPERATION (MSBOS) file (#66.5) is checked for an entry matching the CPT code of the Surgery Requested for the patient. If an entry exists, the entry in field NUMBER OF UNITS (#66.51,.02) for the specific component compared is compared with current request. If the current request exceeds the NUMBER OF UNITS field entry, a warning message with override is displayed to the user.	Specimen log-in Select Patient Name: BBPATIENT,SEVEN 05-02-55 000000107 You have just selected the following tests for BBPATIENT,SEVEN 000-00-0107 entry no. Test Sample 1. TRANSFUSION REQUEST BLOOD All satisfactory? Yes// (Yes) Is patient Pre-op ? Y (YES) **Operation scheduled: Aug 20, 1998** **19140** **CPT file number: 19140** **MASTECTOMY FOR GYNECOMASTIA** Select BLOOD COMPONENT REQUEST: POOLED PLATELETS// AS-1 RED BLOOD CELLS REQUESTING PERSON: ME REQUEST DATE/TIME: N (AUG 19, 1998@06:48) NUMBER OF UNITS: 5 **Number exceeds maximum surgical blood order number (1) for this component for this procedure. Request still OK ? NO//** (NO)	IU # P38 P39 SCR # P17 SRS # P38 P39 TC # IP82 IP83

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMP4	Evaluates request against facility defined audit criteria. Flags requests which may be potential inappropriate and allows input of justification	Blood component requests [LRBLPCS] Specimen log-in [LRBLPLOGIN]	EN3^LRBLPCS	For each component type requested, the BLOOD PRODUCT File (#66) is searched for entries in the fields TESTS TO CHECK (#66.04) or PRE-OP TESTS TO CHECK (#66.08), depending on the user's answer to the prompt 'Is patient Pre-op ?'. For each entry in the above appropriate multiple field, the patient's record in the LAB DATA File (#63) is searched for the most recent result. If the result is outside of the criteria defined in the above fields, the user is flagged with an alert message and override. If the order is accepted via override, the input template is also modified to prompt for additional fields for QA data entry.	Select Patient Name: BBPATIENT,EIGHT 05-02-55 Select BLOOD COMPONENT REQUEST: FRESH FROZEN PLASMA, CPDA-1// <CR> **No PT results** **No PTT results** **Request still OK ? NO//** Y (YES) REQUESTING PERSON: ME REQUEST DATE/TIME: N (AUG 19, 1998@08:57) NUMBER OF UNITS: 3 DATE/TIME UNITS WANTED: N (AUG 19, 1998@08:57) **COMPONENT REQUEST REASON:** TESTING (TESTING) **APPROVED BY:** THE MEDICAL DIRECTOR TREATING SPECIALITY: MEDICAL ICU Select BLOOD COMPONENT REQUEST:	IU # P40 P41 SCR # P17 SRS # P40 P41 TC # IP75 IP76
WMP5	Displays alert message for patients who have autologous and/or directed units in inventory, regardless of division.	Blood component requests [LRBLPCS] Specimen log-in [LRBLPLOGIN] Select units for patient [LRBLPIC]	EN^LRBLPUS	Autologous/Directed units MUST be associated with a valid patient upon entry into the system. These are then stored in the ^LRD(65,"AU",PATIENT, UNIT ID) global. For each patient accessed, this global is searched for possible entries. All entries for the patient are then displayed.	Select Patient Name: BBPATIENT,THREE 05-05-55 BBPATIENT,THREE 1111 A POS **Units restricted for BBPATIENT,THREE** **DON101 FRESH FROZEN PLASMA, CPDA-1**	IU # P22 SCR # P18 SRS # P22 TC # IP84 IP257 IP260 IP267

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMP6	Limits component selection to those for which the CAN BE REQUESTED field in the BLOOD PRODUCT File (#66)=YES and which are assigned to the appropriate division.	Blood component requests [LRBLPCS] Specimen log-in [LRBLPLOGIN]	Input transform for the field BLOOD COMPONENT REQUEST (#63.084, .01)	The input transform screens all entries for this field and only allows entries for which the BLOOD PRODUCT File (#66) entries for the fields CAN BE REQUESTED (#66,.15) = YES and the ASSOCIATED DIVISION multiple (#66.1) contains an entry equal to the division of the user.	Select Patient Name: BBPATIENT,NINE Select BLOOD COMPONENT REQUEST: CPDA-1 RED BLOOD CELLS// CPD RED **??**	IU # P23 SCR # P19 SRS # P23 TC # IP77
WMP7	Prevents deletion of accession if there is verified data entered for that accession.	Remove an accession [LRDELOG]	DUOUT+6^ LRTSTJAN	Before an accession can be removed, a check is made to the field DATE REPORT COMPLETED (#63._AREA_,.03)	REMOVE AN accession Select Accession or UID: BLOOD BANK Accession Date: TODAY//T-1 (AUG 19, 1998) Number part of Accession: 7 BBPATIENT,NINE 000-00-0109 BLOOD TRANSFUSION REQUEST ROUTINE Test Complete 08/20/1998@08:26 BB 0819 7 For accession BB 0819 7 Is this the one? NO// YES For this specimen, remove all associated accessions? NO// YES **CAN'T DO IT. The data has been verified for that log number.**	IU # P43 SCR # P3 SRS # P43 TC # NONE

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMP8	Compares current ABO/Rh interpretations to patient history and displays a warning message if a discrepancy exists.	Enter Test Data [LRBLPET]	Input template to the LAB DATA File (#63) LRBLSCREEN	The historical record for ABO and Rh testing is stored separately from the current record/accession. When the current specimen record is having the ABO and Rh testing entered, immediately after data entry a check is made to the historical record for the corresponding ABO or Rh. If the two do not match, a warning message is given with a chance to override. The historical record is not updated until someone with the LRBLSUPER key uses a different option to change the historical record.	Enter test data Select Accession Number: 8 for Aug 19, 1998 BBPATIENT,NINE ID: 000-00-00109 ABO: O Rh: POS Specimen: BLOOD Patient record ABO: O Rh: POS ABO INTERPRETATION: B B **B not the ABO group on record** **Is present testing OK ? NO//** (NO) ABO INTERPRETATION: O O RH INTERPRETATION: NEG NEG **NEG not the Rh type on record** **Is present testing OK ? NO//** (NO) RH INTERPRETATION: POS POS ANTIBODY SCREEN INTERPRETATION: NEG NEG	IU # P46 SCR # P1 SRS # P46 TC # IP103 IP106 IP234
WMP9	Displays warning message for patients who have no previous ABO/Rh history.	Enter Test Data [LRBLPET]	Input template to the LAB DATA File (#63) LRBLSCREEN	The historical record for ABO and Rh testing is stored separately from the current record/accession. When the current specimen record is having the ABO and Rh testing entered, immediately after data entry a check is made to the historical record for the corresponding ABO or Rh. If there is no historical record, a warning message is given with a chance to override.	Enter test data Select Accession Number: 1 for Aug 20, 1998 BBPATIENT,TWENTY ID: 000-00-0020 ABO: Rh: Patient record ABO: Rh: **ABO &/or Rh not on file** **CAUTION !! No checking can be done.** ABO INTERPRETATION: O O **Are you sure ? NO//** Y (YES) RH INTERPRETATION: POS POS **Are you sure ? NO//** Y (YES) ANTIBODY SCREEN INTERPRETATION: NEG NEG	IU # P47 SCR # P1 SRS # P47 TC # IP101 IP114 IP117

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMP10	Compares current ABO/Rh interpretations to current specimen results if previously entered and displays a warning message if a discrepancy exists.	Enter Test Data [LRBLPET]	Input template to the LAB DATA File (#63) LRBLSCREEN	During data entry, if a change is made to an ABO or Rh entry from a previous data entry session, the user is prompted with a warning message and request to confirm the new result.	Enter test data Select Accession Number: 2 for Aug 25, 1998 BBPATIENT1,ONE ID: 000-00-0111 ABO: O Rh:NEG Patient record ABO: O Rh: NEG ABO INTERPRETATION: O// B B not the ABO group on record Is present testing OK ? NO// Y (YES) **B not the ABO group of present specimen** **Is present testing OK ? NO//** (NO) ABO INTERPRETATION: O// RH INTERPRETATION: NEG// P POS POS not the Rh type on record Is present testing OK ? NO// Y (YES) *POS not the Rh type on present specimen* **Is present testing OK ? NO//** (NO)	IU # P51 SCR # P4 SRS # P17 TC # IP104 IP107
WMP11	Displays alert message for any patients with a previous antibody history based on the entry in the ANTIBODIES IDENTIFIED field (#63.075).	Specimen log-in [LRBLPLOGIN] Blood component requests [LRBLPCS] Select units for patients [LRBLPIC] Enter Test Data [LRBLPET]	LRDPA2+6	When a patient's record is accessed, the LAB DATA field ANTIBODIES IDENTIFIED (#63.075) for that patient is searched. Any entries to this field are displayed to the user.	Select Patient Name: BBPATIENT,TWO 05-02-55 000-00-0102 Antibody present: ANTI E TRANSFUSION REACTIONS WITHOUT UNIT IDENTIFIED: Jan 15, 1997 ALERGIC	IU # P20 SCR # P14 P29 SRS # P20 TC # IP112 IP148 IP224

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMP12	Locks the patient record during data entry to prevent simultaneous access via a different terminal/user.	Enter Test Data [LRBLPET]	TEST+3 ^LRBLPE	Routine LRBLPE attempts to lock the record. If lock is not established after one second, it is because the record is locked by another user. If this is the case, the routine returns the message ANOTHER TERMINAL IS EDITING THIS ENTRY!	Enter test data Select Accession Number: 2 for Aug 20, 1998 BBPATIENT,TWO ID: 00-00-0102 Test: TRANSFUSION REQUEST *ANOTHER TERMINAL IS EDITING THIS ENTRY!* Select Accession Number:	IU # P10 SCR # P3 SRS # P10 TC # IP105 IP251
WMP13	Compares unit ABO/Rh to patient history & prevents unit selection if there is no entry.	Select units for patient [LRBLPIC]	LRBLPA+4	For the patient being accessed by the option, a check is made for entries in the current specimen for ABO/Rh typing results. If none are present, the user is given a warning message and is exited from the record.	Select units for patients Select Patient Name: BBPATIENT1,TWO 01-01-60 000-00-0112 ABO group: Rh type: AGE: 38 DATE OF BIRTH: JAN 1,1960 PATIENT LOCATION: 3E// 3 EAST **No Patient ABO &/or Rh !** Select Patient Name:	IU # P65 SCR # P20 P23 P24 SRS # P69 TC# IP207

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMP14	Checks for valid patient specimen based on entry in PATIENT SPECIMEN AGE ALLOWED field (# 66,.16) of the BLOOD PRODUCT file (#66) for the specific component requested and which division the specimen is accessioned.	Select units for patient [LRBLPIC]	^LRBLPCS1 +10	For the blood product being requested, if the PATIENT/PRODUCT REQUIREMENT field (#66,.09) is set for crossmatch, the field PATIENT SPECIMEN AGE ALLOWED is searched for an entry. If no entry, then the entry is assumed to be 72 hrs. The date/time assigned to the PATIENT SPECIMEN AGE ALLOWED field previous to the current time is calculated using VA FileMan utility %DTC. Then, the patient record in the LAB DATA File (#63) the BLOOD BANK subscript field DATE/TIME SPECIMEN TAKEN (#63.01,.01) is searched for any date/time entries after the time determined above. If there are no valid specimens, the user is given a warning message and not allowed to proceed.	Select units for patients Select Patient Name: BBPATIENT1,THREE 04-10-30 000-00-0113 Blood component for unit selection: CPDA-1 RED BLOOD CELLS 04060 **No patient blood sample within required time** **Obtain a new sample from the patient for compatibility testing** Blood component for unit selection:	IU # P36 SCR # P16 P25 SRS # P36 P37 TC # NONE
WMP15	Checks for appropriate confirmatory unit testing. Displays warning message if testing not complete.	Enter crossmatch results [LRBLPX]	EN^LRBLPX1	For each unit selected for crossmatch, the BLOOD INVENTORY File entries for entries in the ABO INTERPRETATION field (#65,10) and RH INTERPRETATION field (#65,11) if the entry for RH TYPE (#65,.08) is NEGATIVE. If either or both of the results are not complete, a warning message is given.	Enter crossmatch results Select Patient Name: BBPATIENT1,FOUR 10-25-62 000000114 Unit for XMATCHING Exp date Loc 1) DON115 AS-1 RED BLOOD CELLS O NEG 09/25/98 Blood Bank **ABO not rechecked** **Rh NEG unit not rechecked**	IU # P64 SCR # P25 P22 SRS # P66 TC # IP167

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMP16	For allogeneic units, checks for appropriate confirmatory unit testing. Displays warning message if testing not complete.	Enter crossmatch results [LRBLPX]	C^LRBLPX1	If the patient has any entry(ies) in the LAB DATA File (#63) field ANTIBODIES IDENTIFIED (#63.075), a check is made for the unit being crossmatched in the BLOOD INVENTORY File (#65) field RBC ANTIGEN ABSENT Field (#65.05) for presence of the corresponding antigen. If not entered, a warning message is given.	Enter crossmatch results Select PATIENT NAME: BBPATIENT1,FOUR 10-25-62 000000114 Unit for XMATCHING Exp date Loc 1) DON115 AS-1 RED BLOOD CELLS O NEG 09/25/98 Blood Bank **E.....RBC ANTIGEN Above antigen(s) not entered in RBC ANTIGEN ABSENT field**	IU # P64 P72 SCR # P25 P22 P31 SRS # P66 P74 TC # IP166
WMP17	Displays warning message if current volume is less than the average volume for the component.	Select units for patient [LRBLPIC]	I+7 ^LRBLPUS1	For the product type selected, the value of the VOLUME (ml) field (#66,.1) is evaluated against the BLOOD INVENTORY field VOLUME (ml) (#65,.11). If the individual unit volume is less than the product average volume, then this volume is displayed to the user.	Select units for patients Select Patient Name: BBPATIENT,TEN 01-01-99 000000110 Blood component for unit selection: CPDA-1 RED BLOOD CELLS Select UNIT: DON222 DON222 DON222 O POS 08/28/98 **(125ml)** TIME001 EXPIRES IN 7 DAYS UNIT OK for BBPATIENT,TEN 000-00-0110 ? YES// (YES)	IU # P61 SCR # P25 SRS # P63 TC # NONE

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMP18	For allogeneic units, evaluates unit phenotyping against clinically significant patient antibodies. Prevents selection if corresponding antigen is present in the unit.	Select units for patient [LRBLPIC]	CK+2 ^LRBLPUS1 ALL+3 ^LRBLPUS1	The patient's record in the LAB DATA File (#63) field ANTIBODIES IDENTIFIED (#63.075) is checked for any entries. Entries are checked for corresponding antigens based on the field CORRESPONDING ANTIGEN/ANTIBODY (# 61.3,.04). If there is an entry in this field, and this entry is in the BLOOD INVENTORY File entry for the unit being selected (#65.04), the unit id is only echoed back to the user and cannot be selected.	Select units for patients Select Patient Name: BBPATIENT1,FOUR 10-25-62 Component Units Request date Date wanted Requestor Blood component for unit selection: AS-1 RED BLOOD CELLS Select UNIT: DON115 **DON115** Select UNIT:	IU # P71 SCR # P31 SRS # P6 P73 TC # IP225
WMP19	Prevents entry of crossmatch interpretation if no ABO/RH results entered on the current specimen.	Enter crossmatch results [LRBLPX]	EN+10 ^LRBLPX1 E+2^LRBLPX	For the current patient specimen, a check is made for a valid entry in the fields ABO INTERPRETATION (#63.01,10) and RH INTERPRETATION (#63.01,11). If there are no entries in these fields, the user is given a warning message and is exited from the record.	Enter crossmatch results Select Patient Name: BBPATIENT1,FIVE 05-02-22 000000115 Unit for XMATCHING Exp date Loc 1) DON116 CPDA-1 RED BLOOD CELLS O POS 08/31/98 Blood Bank *No patient ABO &/or Rh results* **No antibody screen results (spec date:08/24/98 07:08 acc#:1)** **Sorry, must have ABO/Rh results to enter XMATCH results** Select Patient Name:	IU # P68 SCR # P20 P23 P24 SRS # P70 TC # IP238

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMP20	Displays warning message if no results entered for the antibody screening on the current specimen.	Enter crossmatch results [LRBLPX]	EN+11 ^LRBLPX1 E+3^LRBLPX	For the current patient specimen, a check is made for a valid entry in the field ANTIBODY SCREEN INTERPRETATION (#63.01,6). If no entry, the user is given a warning message and opportunity for override.	Enter crossmatch results Select Patient Name: BBPATIENT1,FIVE 05-02-22 000000115 Unit for XMATCHING Exp date Loc 1) DON116 CPDA-1 RED BLOOD CELLS O POS 08/31/98 Blood Bank **No antibody screen results (spec date:08/24/98 07:08 acc#:1)** **Antibody screen results not entered. OK to continue ? NO//** (NO) Select Patient Name:	IU # P69 SCR # P26 SRS # P71 TC # IP243
WMP21	Prevents entry of future transfusion dates.	Blood transfusion results [LRBLPT]	Input transform to field TRANSFUSION DATE/TIME (#63.017,.01) prevents the entry of a future date in this field. Uses VA FileMan %DT to enforce.	VA FileMan input variable %DT(0)= "-N". When this occurs, a future date cannot be entered at this prompt.	Blood transfusion results Select Patient Name: BBPATIENT1,FIVE 05-02-22 000000115 Unit assigned/xmatched: Exp date Loc 1) DON116 CPDA-1 RED BLOOD CELLS O POS 08/31/98 3 EAST DON116 CPDA-1 RED BLOOD CELLS O POS 08/31/98 3 EAST Is this the unit ? YES// (YES) DATE/TIME TRANSFUSION COMPLETED: T@1500 (AUG 24, 1998@15:00) **??** DATE/TIME TRANSFUSION COMPLETED: N (AUG 24, 1998@07:50) DATE/TIME TRANSFUSION COMPLETED: Aug 24, 1998 07:50 ? YES// (YES) Select Patient Name:	IU # P82 SCR # P3 SRS # P84 TC # IP215

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMP22	Displays warning message when accessioning specimens on patients with no previous ABO/Rh results on file	Specimen log-in [LRBLPLOGIN] Blood component requests [LRBLPCS]	LRBLPA+4	The LAB DATA File (#63) records are searched for the patient for Historical ABO/Rh using the fields ABO GROUP (#63,.05) and RH TYPE (#63,.06). If no entries in these fields, a warning message is given.	Select Patient Name: BBPATIENT1,ONE 06-29-38 000000111 *ABO group: Rh type:* AGE: 60 DATE OF BIRTH: JUN 29,1938 You have just selected the following tests for BBPATIENT1,ONE. 000000111 entry no. Test Sample 1 TRANSFUSION REQUEST BLOOD All satisfactory? Yes// (Yes) LAB Order number: 185242 ~For Test: TRANSFUSION REQUEST BLOOD **No Patient ABO &/or Rh !**	IU # P19 SCR # P10 SRS # P19 P30 TC # IP69
WMP23	Prevents deletion of historical ABO/Rh on patient with a current record.	Patient ABO/Rh edit [LRBLEDIT]	F^LRBLP	Software checks for any previous Blood Bank specimen results and/or presence of current or previous component requests. If any are present, the user is given a warning message and instructions. User cannot delete unless instructions are followed.	PATIENT ABO/Rh edit Select Patient Name: BBPATIENT,THREE 05-05-55 000-00-0103 ABO GROUP: A// @ **Any component requests, unit's assigned/ crossmatched, transfusion records, RBC antigens present or absent, antibodies identified or blood bank comments must be removed before deletion allowed.** ABO GROUP: A// RH TYPE: POS// @ **Any component requests, units assigned/ crossmatched, transfusion records, RBC antigens present or absent, antibodies identified or blood bank comments must be removed before deletion allowed.** RH TYPE: POS//	IU # P66 SCR # P4 SRS # P16 TC # IP131

WM #	Design Safeguard	Option(s)	Controlling field or routine	Algorithm	Alert or Warning message (User input is Underlined. Computer generated messages are BOLDED)	Trace
WMP24	Prevents selection of units when ABO/Rh of current specimen does not agree with ABO/Rh of historical record.	Select units for patients [LRBLPIC]	R^LRBLPUS	The current specimen entry for field ABO INTERPRETATION (#63.01,10) and ABO INTERPRETATION (#63.01,11) are compared to the patient's historical record fields ABO GROUP (#63,.05) and RH TYPE (#63,.06). If there is a discrepancy, the user is given a warning message and is exited from the record.	Selection of units for a patient Select Patient Name: BBPATIENT1,ONE 06-29-38 000000111 Blood component for unit selection: CPDA-1 RED BLOOD CELLS 04060 **Results on BB 0825 2 do not match the Patient's previous ABO/Rh history** **Resolve the discrepancy before proceeding** Blood component for unit selection:	IU # P67 SCR # P29 SRS # TC # IP235