

MRP Pegging System

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Reschedule Significance Quotient in Action/Reschedule report

In addition to be able to select reschedule messages by leeway days, a new option to select reschedule messages by significance quotient has been added. The significance quotient is a decimal value between 0.01 and 0.99. The higher the number represents the significance of the date change. The significance quotient is calculated by using the "difference of days" in the reschedule message as the numerator and the "days from today" as the denominator. For example, an order that is rescheduled one week, and the order is scheduled 4 weeks from today has a significance factor of 0.25. An order that is being rescheduled 2 weeks, and is scheduled 6 weeks from today has a significance factor of The significance factor is designed to allow the 0.33. user to carve out imporotant reschedule messages by giving weight to those with the most movement in the near future.

New Features of Release 3.0

Project Support in Action/Reschedule report

If you are a Manman/Projects user <u>or</u> simply assign project numbers to work orders, the Action/Reschedule report RE,895 has new features you may want to take advantage of. The project number field has been added as one of the seven selection criteria available, allowing you to view action and/or reschedule messages for a specific project(s). In addition, the project number has been added is one of 13 different sort options available.

New Features of Release 2.5

New Ending Action date in Action/Reschedule report

The Action/Reschedule report RE,895 has a new 'ending action date?' prompt. This new option will allow you to exclude

MRP suggestions that are planned way out in the future.

New MRP Volatility Selection Option

The List MRP Volatility Command LI,897 has a new 'selected abc code?' prompt. This new option will allow you to include or exclude MRP suggestions for the abc code you desire.

Visibility of PO line in Action/Reschedule report

The Action/Reschedule report RE,895 will now list the purchase order line number next to the purchase order number for the purchase order reschedule messages.

New Features of Release 2.0

New MRP Volatility Time Frame

The List MRP Volatility Command LI,897 has a new 'ending action date?' prompt. This new option will allow you to exclude MRP suggestions that are planned way out in the future and allow you to produce measurements based on actions that need to be enacted within the horizon you define.

New Leeway days In and Out options

The List MRP Volatility Command LI,897 and the RE,895 Order Action/Reschedule Report have changed the traditional 'number of leeway days?' prompt into a 'number of leeways days for reschedule in?' and 'number of leeway days reschedule out?'. Several users expressed a need to have far less leeway with reschedule in messages and far more leeway with reschedule out messages.

New Net Change MRP Report option

The RE,895 Order Action/Reschedule Report now has an option to report only "new" MRP messages that have not appeared on any previous MRP runs. This enhancement provides a 'net change' MRP, listing only what has changed since the prior MRP Run. This option should allow users who would like to run MRP more often or react more rapidly, the ability to view new messages only instead of having to start over with a complete set of full regeneration reports that list every message.

Component Pegging (LI,896) Overview

The MRP Pegging system contains several features to enhance your MRP reporting. One of those features is that a new command, LI,896, is offered to allow you to "peg-up" to find out the source of where a components demands are coming from. The purpose of this overview is to explain the pegging process, provide some suggestions, and set your expectations accordingly.

The Manman system traditionally was not designed with any pegging capability. There are no data files on the system which directly tie the demand MRP is placing on a component with a higher level requirement from a subassembly or What you are provided with is the "where required" assembly. record in the MRP message. The where required field is the only link to where the requirement may have came from. Often very common or very active components have several demands being placed on them from several different assemblies. In these cases, the where required information becomes more ambiguous. Thus, it is fair to say that the more active the component is, the less likely the pegging up process will be sucessful.

Order Bucketing

You have at least one option in Manman to assist you with the pegging process. Comin Variable number 30 is the order bucketing option and controls how you group requirement information for planned order creation. Comin Variable 30 will allow you to select: no bucketing, daily bucketing, weekly bucketing, and monthly bucketing. The no bucketing option will force MRP to look at demand and planned orders on a one by one basis. If you select daily bucketing, you group all of the demand that is due that day, net against available supply, and create one planned order. Weekly bucketing will perform the same process and create one planned order for the week. The Manman Planning guide has the following entry regarding bucketing:

"When you use bucketing, MRP dependent demand from higher levels cannot be identified on a discrete demand basis since they were grouped together. Bucketing, therefore, impacts the pegging information that is displayed on the MRP reports. If you have a need for detailed pegging information, you do not want to use bucketing."

We recommend you use, or at least test, setting comin variable number 30 to 1 to use no bucketing, if you are not already doing so. The obvious downside to doing this is that you will be creating more planned order suggestions. Regardless, there should be a balance between pegging detail and number of planned orders created that is best for your manufacturing environment.

Mechanics of the Pegging Process

We have already explained that there are no data files in Manman that directly tie the demand MRP is placing on a component with a higher level requirement from an assembly. Thus, to perform pegging, we must intuitively look at a number of pieces of information:

- The where required field does it contain an assembly part number? If not, this demand was not blown down from a higher level assembly and we do not try to peg up.
- 2. The quantity per assembly relationship between the component and the assembly part number Since the quantity required was exploded, we must use this number to back into what quantity is being blown down to the component.
- 3. The lead time of the component the date MRP plans the component will be the date of requirement from the higher level assembly less the component lead time. For example, if the component has a requirement dated June 1 and has a 30 day lead time, the demand being blown down from the assembly will be dated July 1.

Your users perform a similar process in their mind when they look at an RE,906 screen for the component. If the MRP message contains an assembly part number, they perform an RE,906 on the assembly part number, perform some math on the quantity per assembly and lead time, and hopefully a demand sticks out that will tell them where the original component requirement came from. If you begin dealing with a few levels in your bill of material it becomes more time consuming and difficult to figure out the source of the requirement.

The LI,896 command attempts to automate the process and present the chain of requirements in a 'where-used' type of view. If the program finds a MRP message with an assembly part number, the demands of the assembly are sifted through looking for a match of the calculated quantity per assembly and calculated due date. If a match is found, the requirement is indented and listed on the screen. Should the assembly's MRP message also reference an assembly part number, the process is repeated until the program can not peg-up any further. If an exact match is not found, the next logical demand on assembly the assembly part number will be listed, and the program will cease to peg-up any further for the requirement listed.

Since the quantity per assembly and lead time are essential elements in these calculations, changing either of them after your MRP run will effect your ability to find a match and limit accuracy of pegging up in the product structure that was changed.

Please refer to the document under command number LI,896 for information on the options available.

LI,896 List Component Pegging

We recommend you read the 'Component Pegging Overview' in the front of this manual before using this command.

The LI,896 command is designed to allow you to "peg-up" to find out where the source of the demand for your MRP messages are coming from for a selected component. The LI,896 command lists each of the MRP messages generated for the component. If a message was a result of a demand on an assembly this component is tied to, the command begins sifting through the demands of this assembly, to attempt to find the demand that was blown down to the component. If it successfully finds the assembly's demand, the process is repeated to see if it was also derived from another higher level assembly. If the program was unable to find an exact match of a demand that was blown down, the program will list the next demand for the assembly and stop trying to peg-up any further. Also appearing in the listing are any planned orders for the component. These usually appear immediately after an unsatisfied requirement for the same quantity.

It is recommended that when you first get started using this command, you begin using it on your <u>less</u> common components rather than your more common components. This is for two reasons. This command displays a great deal of information, and fewer demands will result in an initial listing that is easy to read and understand. The second reason is that pegging-up on a very common component can often result in thousands of lookups to find the exact source of the For these reasons, start with less common requirement. components until you adjust being able to read and understand the pegging messages, then move toward more complicated and common components. This screen is also available in both 80 column and 132 column formats. Si nce much more information is displayed in the 132 column format, you may wish to start working with the wider screen/report as you get acquainted with the program.

Prompts

OPTION(3)? The output options for the screen are displayed.

The date of your last MRP run is displayed, followed by the date the information was copied to the pegging data base (UT, 896). This information is displayed so that you can insure the most recent MRP data was copied to the pegging data base.

ENDING REQUIREMENT DATE (C/R = 99/99/99)? The ending requirement date is the last date you want to see MRP requirements for this component and attempt to peg-up. This prompt is similar to your 'ending action date' prompt in MRP. This prompt supports the Manman date offset function, so if you want to view requirements out until the next 90 days, you can enter +90.

LISTING OPTION: 1. INDENTED 2. LEVEL BY LEVEL 3. SUMMARY OPTION(1)?

The List Component Pegging command allows you to list the information in three different formats. The first, "indented", is the default format. The components and assemblies are listed in a format that is similar to a bill of material where-used. Each subassembly is indented depending on what level in the bill of material it appears on. The second for The second format This format will list all of is the "level-by-level" format. the mrp requirements and planned orders for the component the user entered. The screen will then indent one level, and any blown down requirements from sub-assemblies the next level up will be listed. This process repeats itself level by level until all levels are displayed. The final format is the "summary" listing. The summary will list one line for the component and all of the associated sub-assemblies and assemblies. The column headings for the summary format are completely different from the detailed formats. Requirements, planned orders, and supply orders are grouped in buckets and displayed on the screen.

DISPLAY OPTION: 1. VIEW ONLY BLOWN DOWN UPPER LEVEL REQUIREMENTS 2. VIEW ALL UPPER LEVEL REQUIREMENTS OPTION(1)?

This option turns on and off the logic in the program to sift through an assembly's requirements and find the most logical source of the component requirement. Option 1 is the default which performs this logic. Option number 2 will indent one level and list every demand for the assembly. We recommend that you only use option 2 if option 1 is totally failing to give you correct answer.

Files Accessed

SRFIL	Sorted Requirement file
IM	ltem Master file
OWOF	Work Order file

PSF Product Structure file S0EFIL Sales Order Heading file (if using Omar)

Report Format

Detail line one

Part number Unit of Measure Source code Demand Type - Defined as one of the following depending on the demand type code or group code WO SHORT Work order shortage -1 WO FIRMPL -2 Firm planned work order -3 MULTI PLE A planned order from an upper level assembly -4 WO SCHED A scheduled work order ASMB SAFTY -5 Safety stock replenishment on an assembly BLD SCHED Build schedule -6 MPS PLAN -7 MPS Planned Order -99 SAFETY STK Safety stock replenishment User defined User defined demand types (UT, 600) 1-8 9 SERV MAN Serviceman requirements 11 FORECAST Forecast 13 INTERPLANT Interplant sales order SALES ORDER Any other value (demand types 14-32767) Demand Where used - The work order number the part is required upon, the assembly part number that is the source of the requirement, or the sales order number that is the requirement Required/Due Date - The date the parts are required based on the current schedule. Action/Need date - For a requirement, this is the date MRP says For a replenishment, this is the date the parts are needed. MRP says action is required for this replenishment (usually requirement date less lead time). Quantity per Assembly - This is the quantity per assembly of the component that is required on the assembly listed. Thi s value is listed to assist you in determining the source of the quantity required. Quantity Required Supply type - If a replenishment is listed for an upper level assembly, this will list what type of supply order it is: 10 PURCHREQ purchase order requisition (rel 10) BLD SCHD MPS PLAN build schedule 4 3 MPS planned order 2 WO FIRMP Firm planned work order 1 WO KITTD Kitted work order WO SCHED Scheduled work order WO WIP In process 0 P0 Purchase Order PO BLNKT Blanket Purchase Order -1 PO INTPL -2 Interplant Purchase Order

I NVENTRY -3 Inventory MRP Planned Order PLANNED Balance - This is a running balance of the quantity on hand less current requirements. Second Line Part Description Buyer Code Fixed Lead time Where required - If a work order number was listed in the where required column on the first line, the assembly part number of the work order is listed. If a sales order number was referenced, the customer name of the sales order is listed Supply order - The order number of the supply order is listed Summary Report Part Number Unit of Measure Source Code Order Demand - Independent demand or sales orders Wo Short - shortages on existing work orders Safety Stock - safety stock requirements Firm/Bld - Quantity required on firm planned work orders or build schedules Schedul ed work orders Forecast- Quantity Forecasted Other Requirements Total Requirements - sum of the above Quantity per assembly - the quantity of the component required on the assembly Planned orders - the sum of all MRP planned orders Supply orders - the sum of supply orders blowing down requirements Quantity on hand Part description Buyer code Fixed Lead time

LI,897 List MRP Volatility

The purpose of the LI,897 command is to allow the user to monitor the number of new MRP messages that were created, the number of MRP messages that have not been addressed, and the number of MRP messages processed (dropped off) since the last MRP run. The screen provides you the option of sorting and selecting by buyer code, source code or class code. You may wish to use this screen to monitor the work load being generated and processed for each buyer or planner.

If you are just beginning to use the MRP Pegging system, be aware that you must have run UT,896 more than one time (2 or more MRP runs) to have any statistics on what has been processed.

Prompts

OPTION(3)? The output options for the screen are displayed.

The date of your last MRP run is displayed, followed by the date the information was copied to the pegging data base (UT, 896). This information is displayed so that you can insure the most recent MRP data was copied to the pegging data base.

SELECTED BUYER CODE (C/R = ALL)? You may enter up to 10 buyer codes to select. If you would like information on all buyers, press return. When you have finished entering buyer codes, press return or enter 'E'.

SELECTED SOURCE CODE (C/R = ALL)? You may enter up to 10 source codes to select. If you would like all source codes, press return. When you have finished entering source codes, press return or enter 'E'.

SELECTED ABC CODE (C/R = ALL)? You may enter up to 3 abc codes to select. If you would like all source codes, press return. When you have finished entering abc codes, press return or enter 'E'.

LISTING OPTION:

1. LIST PLANNED ORDER DETAIL

2. LIST PLANNED ORDER AND RESCHEDULE DETAIL

3. SUMMARY LISTING OF PLANNED ORDERS

4. SUMMARY LISTING OF PLANNED ORDERS AND RESCHEDULES OPTION(1)?

The user may view this screen in either a detail format (options 1 and 2) or a summary format (options 3 and 4). The detail format lists the number of MRP messages by type; scheduled work orders, work order shortages, sales orders, safety stock replenishments, etc. The summary option lists one line for each buyer code, source code, or class code. If you want to include reschedule messaes in the statistics listed, choose options 2 or 4.

If you selected options 2 or 4 to include reschedule messages: NUMBER OF LEEWAY DAYS TO QUALIFY AS A RESCHEDULE? If you are including reschedule messages, the number of leeway days will skip this reschedule message if it asks you to move the date in or out within this number of days.

SORT OPTION: 1. BY BUYER CODE 2. BY SOURCE CODE 3. BY CLASS CODE OPTION(1)? Enter the sort option to sort and subtotal the information.

Files Accessed

SRFILSorted Requirement fileOLDSRFILProcessed requirement fileRSFILReschedule message fileOLDRSFILProcessed reschedule fileIMItem Master File

Percent that were processed

Report Format

Buyer code, source code, or class code Demand type (if displaying detail report) Number of new exceptions - The number of new MRP messages generated for this MRP run Exceptions not processed from the previous MRP run. This is a group of 5 buckets counting MRP messages that appeared on previous MRP runs: 2nd MRP, 3rd MRP, 4th MRP, 5th MRP, Over 5 MRP runs Total exceptions on file - this is the total number of messages generated by the MRP run, new and previously listed. Performance Data - This section lists the number of MRP messages that were: Not processed on the last MRP run (no longer appear)

RE,895 MRP Action / Reschedule Report

The RE,895 is a combination of the MRP Action and Reschedule reports RE,902/903/904/905 rolled into one. It allows the user the option of viewing the make/buy messages and reschedule messages together. In addition, the date the MRP suggestion was originally created and the number of MRP runs the message has appeared on is listed on the report. The 'age' of the MRP message is available as a sort selection. By knowing the age of the MRP suggestion, the user may be able to run MRP more frequently without having to 'start-over' with a new set of MRP reports.

Prompts

OPTION(1)? The output options for the screen are displayed.

The date of your last MRP run is displayed, followed by the date the information was copied to the pegging data base (UT, 896). This information is displayed so that you can insure the most recent MRP data was copied to the pegging data base.

REPORT OPTION:

ACTION MESSAGES AND RESCHEDULE MESSAGES
 ACTION MESSAGES ONLY
 RESCHEDULE MESSAGES ONLY
 OPTION(1)?
 This option allows the user to select action messages only, reschedule messages only, or both on the report.

If the user selected option 1 or 3

SELECT RESCHEDULE MESSAGES BASED ON: 1. LEEWAY DAYS 2. SIGNIFICANCE QUOTIENT OPTION(1)?

If you select option 1 to use leeway days, the following prompts appear:

NUMBER OF LEEWAY DAYS TO QUALIFY AS A RESCHEDULE IN? NUMBER OF LEEWAY DAYS TO QUALIFY AS A RESCHEDULE OUT? If you are including reschedule messages, the number of leeway days will skip any reschedule messages that MRP wants you to move the date in or out within the number you enter. The Manman system traditionally allows a single leeways days option for reschedule in or out. The RE, 895 allows you to select a different leeway days tolerance for viewing orders to reschedule in and orders to reschedule out. If you select option 2 to use the significance quotient, the following prompts appear:

ENTER THE SIGNIFICANCE QUOTIENT AS A

DECIMAL VALUE BETWEEN ZERO AND 1 (0.25)?

Enter a value between 0.01 and 0.99. The default is 0.25. The higher the number represents the significance of the date The significance quotient is calculated by using change. the "difference of days" in the reschedule message as the numerator and the days from today" as the denominator. For example, an order that is rescheduled one week, and the order is scheduled 4 weeks from today has a significance factor An order that is being rescheduled 2 weeks, and of 0.25. is scheduled 6 weeks from today has a significance factor of 0.33. The significance factor is designed to allow the 0.33. user to carve out important reschedule messages by giving weight to those with the most movement in the near future.

If the user selected Report options 1 or 2 for action messages: ENDING ACTION DATE? Enter the ending horizon of the action messages you would like to see on the report. For example, if you only wish to view action messages for the next sixty days, enter +60 to the ending action date.

SELECTION OPTIONS:

- ENTER SELECTED BUYER CODE(S) 1.
- ENTER SELECTED SOURCE CODE(S) 2.
- ENTER SELECTED CLASS CODES(S) ENTER SELECTED PART NUMBER(S) 3.
- 4.
- ENTER SELECTED VENDOR CODE(S) 5.
- SELECT NEW MRP MESSAGES ONLY 6.
- 7. ENTER SELECTED PROJECT NUMBER(S)
- OPTION (C/R TO CONTINUE)?

This prompt allows the user to enter any combination of selected buyer codes, source codes, class codes, part numbers, projects or vendor codes. Enter up to 10 of each Option number 6 allows the user to select mrp suggestions code. from the most recent MRP run. This will essentially generate a 'net change' MRP report listing only what has changed between this run and the last. If you select option 6, the following prompt appears:

MRP RUN NUMBER (1)?

Pressing return or entering a '1' will list only the new MRP messages. If you wanted to view outstanding requirements from previous MRP runs, enter the number of how many runs ago to select.

PRIMARY SORT SEQUENCE:

- 1. BUYER CODE
- 2. SOURCE CODE
- 3. CLASS CODE (1, 2, 3 OR 4)
- 4. PART NUMBER
- 5. VENDOR CODE
- 6. VENDOR NAME

- 7. REQUIREMENT AGE
- 8. ACTION DATE
- 9. MRP REQUIRED DATE
- 10. PO ORIGINAL/WO START DATE
- 11. PO LATEST / WO DUE DATE
- 12. PART_DESCRIPTION
- 13. PROJECT NUMBER

OPTION (C/R TO CONTINUE)?

This report has the ability to have user defined sorts based on any of the criteria entered above. You receive this prompt three times; the first for the primary sort sequence, followed by the secondary sort sequence, followed by the third sort sequence. For example, if you wanted to sort on buyer code, vendor name, action date, you would respond 1 to the first sort prompt, 6 to the second prompt, and 8 for the third sort prompt. The sort selection you build is listed on the top of your report.

Files Accessed

SRFIL	Sorted Requirement file
RSFIL	Reschedule message file
IM	ltem Master File
OWOF	Work Order File
POFIL	Purchase Order Detail file
POMAS	Purchase Order Master file
VNDMAS	Vendor Master file

Report Format

Part Number Line Part Number Part Description Vendor code (VCODE-IM) if this is purchased part Vendor name - if this is a purchased part Project number - if the user selected a selection or sort by project number.

<u>Detail Line</u> Buyer code Source code Class code Fixed lead time Purchase unit of measure Stocking unit of measure Revision Economic order quantity Shrinkage factor Order policy code Age - date the MRP suggestion originally appeared MRP number - the number of MRP runs this suggestion has appeared on Quantity Due - The quantity required for an action message, or the quantity still due or on order for a reschedule. Purchase Order quantity in inspection or work order completed quantity - for information only on reschedule messages. Action Date - MRP action date MRP requested date - Date MRP calculates you need this part Purchase order original date or work order start date - for information only on reschedule messages. Purchase order latest date or work order due date Where Required - the assembly part number or order number where this component is needed Demand Type - Defined as one of the following depending on the demand type code or group code -1 WO SHORT Work order shortage -2 WO FIRMPL Firm planned work order -3 MULTI PLE A planned order from an upper level assembly -4 WO SCHED A scheduled work order -5 ASMB SAFTY Safety stock replenishment on an assembly -6 BLD SCHED Build schedule MPS PLAN MPS Planned Order -7

- -99 SAFETY STK Safety stock replenishment
- 1-8 User defined User defined demand types (UT, 600)
- 9 SERV MAN Serviceman requirements
- 11 FORECAST Forecast
- 13 INTERPLANT Interplant sales order
- SALES ORDER Any other value (demand types 14-32767)
- Message for reschedule messages, the message will be
- MOVE IN to reschedule the order backward
- MOVE OUT to reschedule the order forward
- CANCEL MRP does not need this order

UT,896 Download MRP Files to the Pegging Data Base

The first step in using in the MRP Pegging system is to transfer the data within the Manman system from your last MRP run to the pegging data base. The purpose of this is the following:

- 1. The data from your MRP run is contained in several very cumbersome files. The UT,896 transfers and sorts all of the demand, supply, planned order, and reschedule information into an image data base to improve the ease and speed of retrieval.
- 2. The UT,896 command looks at all of the planned order and reschedule information from the previous MRP run and compares it to the information from the current MRP run. If identical planned order or reschedule messages appear, the utility retains the date the MRP message originally appeared and the number of MRP runs this message has appeared upon.
- 3. To allow any users who may wish to access the MRP data for their own ad-hoc reporting requirements to do so. The MRP data that resided in the COND, WOPO, and RQxx files was difficult at best to retreive. The information is now available from the pegging data base with the quiz schema included with this product or with your favorite report writer.

It is recommended that UT,896 is run after your MRP run (RE,900), however, you can run the utility at anytime without concern. None of the programs in the MRP Pegging system update the Manman system whatsoever.

Prompts

The date and time this utility was last run is displayed.

THIS UTILITY COPIES THE DATA FROM YOUR LAST MRP RUN TO THE PEGGING DATA BASE. CONTINUE (Y)?

The utility provides you with a warning message before continuing.

The utility now goes through the following processes:

- 1. Erases the pegging data base data files
- 2. Copies information from the COND file
- 3. Copies information from each of the ROxx files
- 4. Copies information from the WOPO file
- 5. Copies information for planned orders (MRPPLAN)
- 6. Dates the planned orders
- 7. Gathers work order reschedule messages
- 8. Gathers purchase order reschedul e messages
- 9. Dates the reschedule messages

The utility returns to the Command prompt when complete.

Files Accessed

	Condition Master file - updated
WOPOFIL	MRP open work order/purchase order file - updated
RQFIL	MRP requirement detail file - updated
SRFIL	Sorted Requirement file - updated
RSFIL	Reschedule message detail file - updated
OLDRSFI L	Processed reschedule message file - updated
	Processed requirements file - updated
COND	MRP Condition file
OWOF	Work Order file
POFIL	Purchase Order Detail File
POMAS	Dunchasa Andan Mastan Fila
	Purchase Order Master File
RQxx	MRP Requirement files

MRP Pegging Data Base Guide

The following will assist you in creating your own MRP reports using the data we copy from the RQxx files, WOPO file, COND file, MRP and MPS planned orders, and reschedule messages for work orders and purchase orders. If you are a quiz user, we have included a schema QPEGSCH and a compiled schema QPEGSCHC. You would use these with a dictionary statement in quiz 'SET DICTIONARY QPEGSCHC. PUB. MMVxxx'.

CONDMAS - MRP Condition File

The dataset condmas is an image representation of the flat file COND Its purpose is to store a record of all parts that were referenced in the MRP run.

CONDPART CONDBUYR	U18 U2	Part Number Buyer Code
		Condition Code: 1 = negative on hand
		2 = order cancellation 3 = planned order
		4 = rescheduled 0 = no action
		The following four variables: 0=false 1=true
CONDNEG	11	Condition code 1 – negative on hand
CONDCANC	i 1	Condition code 2 - order cancellation
CONDPLAN	11	Condition code 3 - planned order
CONDRES	11	Condition code 4 - rescheduled
CONDQOH	R2	Quantity on hand at time of MRP run

WOPOFIL - Open work order and purchase order file

The dataset wopofil is an image representation of the flat WOPO file The wopo file is used as a snapshot of the supply records (open work orders and purchase orders) as of the time the MRP was run.

WPPART	U18	Part Number
WPNUM	U10	Work Order or Purchase order number
WPDUEDAT	11	Po or Wo due date
WPQTY	R2	Supply quantity less shrinkage
WPTYP	11	wo'or po type 4 = Build schedule
		3 = MPS planned order
		2 = unallocated firm plan wo
		1 = work order
		0 = regular po
		-1 = blanket po
		-2 = interplant po
		-3 = expired tracked inventory
		10 = po requisition
WPACTDAT	11	MRP scheduled date (action date) wopo
WPWOSTG	11	Work order status (wopo wstg)
		-1 = kitted 0 = scheduled
		> 0 = wip -99 = firm planned

Database guide

WPOQTY R2 Supply quantity including shrinkage (wopo)

RQFIL - Requirement File

The dataset RQFIL is an image representation of all of the flat files name RQOO thru RQ25. This file stores all of the MRP calculated requirements for a part.

RQPART RQREQDAT RQQTYREQ RQACTDAT RQMODQTY RQDEMTYP	U18 I 1 R2 I 1 R2 I 1	Part Number Required Date Quantity Required action date Order quantity (qty requird * order modifiers Demand type -1 = work order shortage (kit) -2 = unalloc firm plan wo -3 = multiple (planned order) from upper level
		<pre>(sched wo) -4 = work order allocation -5 = safety stock -6 = build schedule -7 = mps planned order demand -99 = safety stock -11 = production forecast 1 to 8 = user defined demand table 9 = serviceman 10 = user defined 'sales order' 11 = forecast 12 = omar sales order 13 = interplant transfer >= 14 = user defined 'sales order'</pre>
RQWUPART	U18	Where used field ZERO REQUIREMENT These are not written to db BELOW SAFETY STOCK -99 I.P.O. (po number in positions (9:18)) 13 S.O. (number in positions (7:16)) 10,12,14 S.W.O. (wo in positions (9:18)) -1 Assembly part number of scheduled wo -4 Assembly part number of firm planned wo -2 Assembly part number of last requirement -3 Assembly part number of build schedule -6

SRFIL - Sorted Requirement File

The dataset srfil contains the combined information from the wopofil, rqfil, and mrpplan records. This file is used by the component pegging program to quickly find all of the requirements, supply records, and planned orders for a part. The data set is sorted by SRSORT which is the due date.

SRFI LTYP	U4	File name WOPO, RQFL or MRPL
SRPART	U18	Part number
SRWUPART	U18	Where used field

SRWPNUM	U10	Wopo wo or po number
SRDUEDAT	11	Due date
SRACTDAT	11	Action date
SRQTY	R2	Requirement quantity
SRMODQTY	R2	Order modified quantity
SRTYP	11	Demand/Supply type code
SRWOSTG	11	wopo work order stage
SRSORT	11	sort date (req for components need for ass)
SRADDDAT	11	date requirement initially was generated
SRMRPNO	11	number of MRP runs this requirement was on

OLDSRFIL - Old Sorted Requirements File

This dataset contains requirements that existed on the last MRP run but did not exist on the most recent MRP run. The system uses this file to determine the number of requirements processed between the last MRP run and the most recent MRP run.

OSFILTYP OSPART	U4 U18	File name WOPO, RQFL or MRPL Part number
OSWUPART	U18	Where used field
OSDUEDAT	11	Due date
OSACTDAT	11	Action date
OSQTY	R2	Requirement quantity
OSTYP	11	Demand/Supply type code
OSADDDAT	11	date requirement initially was generated
OSMRPNO	11	number of MRP runs this requirement was on

RSFIL - Reschedule file

The dataset rsfil stores the current reschedule messages from the purchase order detail file (pofil) or the open work order file (owof).

RSDOCKEY	U16	concatenated wo/po number + po intentno
RSPART	U18	part number to be rescheduled
RSORGDAT	11	Current date the item is to arrive
RSSCHDAT	11	Date system wishes to reschedule to
RSADDDAT	11	Date reschedule message was orig. added
RSMRPNO	11	Number of MRP runs this message appeared on
RSFUTI 1	11	Reserved for future use

OLDRSFIL - Old Reschedule file

The oldrsfil data set stores the reschedule messages that were on the last MRP run but did not exist on the most recent MRP run. The system uses this file to determine the number of reschedule messages processed between the last MRP run and the most recent MRP run.

ORDOCKEYU16concatenated wo/po number + po intentnoORPARTU18Part number to be rescheduled

ORORGDAT	11	Current date the item is to arrive
ORSCHDAT	11	Date system wishes to reschedule to
ORADDDAT	11	Date reschedule message was orig. added
ORMRPNO	11	Number of MRP runs this message appeared on
ORFUTI 1	11	Reserved for future use

CNTRLMAS - Control Master File

The cntrlmas dataset is used to keep track of the date the MRP data was copied to the pegging data base (most recent MRP run) and the date the MRP data was copied previously (last MRP run).

CMASKEY	11	Control file Key (always a 1)
CMASDAT	11	MRP run date
CMASTI ME	12	Time MRP files were copied
CMASLDAT	11	MRP last run date
CMFUTI 1	11	Future
CMFUTI 2	11	Future

Example of the prompts and 132 column format for a detailed indented Component Pegging of a selected part number (a 80 column view is also available). In this example we were able to 'peg up' 5 levels to find that the requirement for 1600 units of the galvanized ring was needed because of a sales order from Alliance * COMMAND (TEST, MG, 60)? LI.896 List Component Pegging (v1.0) ENTER DESIRED OUTPUT OPTION: 0. LINE PRINTER 1. TERMINAL, 132 COLUMNS 2. ENTER LOGICAL DEVICE/DISC FILE, 132 COLUMNS 3. TERMINAL OPTION (3)? 1 DATE OF THE LAST MRP RUN WAS: TUE, JUL 2, 1997 MRP DATA COPIED TO THE PEGGING DATA BASE ON: 7/2/97 1:06 PM ENDING REQUIREMENT DATE (C/R = 99/99/99)? 8/1/97 * LISTING OPTION: 1. INDENTED 2. LEVEL BY LEVEL 3. SUMMARY OPTION(1)? 1 DISPLAY OPTION: 1. VIEW ONLY BLOWN DOWN UPPER LEVEL REQUIREMENTS 2. VIEW ALL UPPER LEVEL REQUIREMENTS OPTION(1)? 1 PART NUMBER? 15340 * PROCESSING 19 RECORDS, LEVEL 0 PROCESSI NG 15 RECORDS, LEVEL 1 PROCESSI NG 9 RECORDS, LEVEL 2 PROCESSI NG 9 RECORDS, LEVEL 3 PROCESSI NG 8 RECORDS, LEVEL 4

THU, JUL 10, 1997, 2:53 PM

PART: 15340 SC: P DESCR: SUPPORTING RING- GALVZD BUYER: 04 REV: ABC: A UOM: EA CLASS: 6 6215 5340 32000	MI NQT SAFET SHRI N NODAN	TY: 0 IK: .00	ULTIME: .00 V DTSTCK: 0 U	LOCATION: 648101 VENDOR : 01216 JNITCOST: .109 EXTDCOST: 1739.64	QTYONHANE GROSS REC OPEN ORD BALANCE	2: 6663.00 : .00	
PART NUMBER/ DESCRIPTION	UM SC BC LT	DEMAND TYPE	DEMAND WHERE REQUI RED	REORD/DUE ACT/NEED DATE DATE		QUANTY SUPPLA REQUIRD TYPE/0	
*15340 SUPPORTING RING- GALVZD	EA P 04 28	WO SHORT	WO 4321 851034	06/01/97 99/99/99	1.000	100	15860
*15340 SUPPORTING RING- GALVZD	EA P	WO SHORT	W0 2446 851034	06/13/97 99/99/99	1.000	2800	13060
*15340	04 28 EA P	WO SCHED	851034 854766	06/19/97 99/99/99	1.000	500	12560
SUPPORTING RING- GALVZD * 854766 GROMMIT TO SUPPORT RING	04 28 EA M 03 0			06/20/97 07/01/97	1.000	500 WO SCHE 2573	ED
*15340 SUPPORTING RING- GALVZD	EA P 04 28	SALES ORD	854766	07/01/97 06/29/97	1.000	221	12339
* 854766 GROMMIT TO SUPPORT RING	EA M 03 0			07/01/97 07/01/97	1.000	221 PLANNEE)
*15340 SUPPORTING RING- GALVZD	EA P 04 28	SALES ORD	851034	07/23/97 06/29/97	1.000	621	11718
* 851034 ASTROTURN LOUVER BROWN	EA M 04 40			06/25/97 05/01/97	1.000	2800 WO KITT 2446	ΓD
*15340 SUPPORTING RING- GALVZD	EA P 04 28	SALES ORD	854766	09/01/97 06/29/97	1.000	1600	10118
* 854766 GROMMIT TO SUPPORT RING	EA M 03 0	SALES ORD	854772	09/01/97 09/01/97	1.000	1600	
* 854772 BRKTS TO SUPPORT RING	EA M 03 0	SALES ORD	850746	09/01/97 09/01/97	1.000	1600	
* 850746 RIVET 3 IN COLLAR BLACK	EA M 03 0	SALES ORD	850680	09/01/97 09/01/97	1.000	1600	
* 850680 COLLAR TO FINS BLACK	EA M 03 0	SALES ORD	851036	09/01/97 09/01/97	1.000	1600	
851036 ASTROTURN LOUVER BLACK	EA M2 04 0	SALES ORD	SO 49209 ALLIANCE INDUSTR	09/01/97 09/01/97		1600	
*15340 SUPPORTING RING- GALVZD	EA P 04 28	MULTI PLE	854766	07/11/97 06/29/97	1.000	17	10101
* 854766	EA M	MULTI PLE	854772	07/11/97 07/11/97	1.000	17	
GROMMIT TO SUPPORT RING * 854772 BRKTS TO SUPPORT RING	03 0 EA M 03 0	MULTI PLE	854826	07/11/97 07/11/97	1.000	17	
* 854826 RIVET 3" COLLAR BRN	03 0 EA M 03 0			07/11/97 07/11/97	1.000	17 PLANNED)

THU, JUL 10, 1997, 3:47 PM

MULTI-LEVEL COMPONENT PEGGING SUMMARY SUPPLY/DEMAND AS 0F: 08/01/97

PAGE: 1

PART : 15340 SC: P MINQTY: 1 FLTIME: 28 LOCATION: 648101 OTYONHAND: 15960.00 DESCR: SUPPORTING RING- GALVZD SAFETY: 0 ULTIME: . 00 VENDOR : 01216 GROSS REQ: 6663.00 UOM: EA UNI TCOST: . 109 OPEN ORD : BUYER: 04 REV: ABC: A SHRINK: . 00 DTSTCK: 0 . 00 BALANCE : 6215 5340 PANSI Z: EXTDCOST: 1739.64 9297.00 CLASS: 6 32000 NODAYS: 30 1 UM SC SCHED FORE OTHER TOTAL SUPPLY PART NUMBER/ ORDER WO SAFTY FIRM QTY PER PLANNED QTY ON DESCRIPTION BC LT DEMAND SHORT STOCK /BLD WO CAST REQ REQUI RED ASSEMBLY ORDERS ORDERS HAND _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ --EA P 15340 2442 3225 0 121 828 30 17 1.000 0 0 15960 6663 SUPPORTING RING- GALVZD 04 28 851034 EA M 4500 0 0 0 0 0 0 4500 1.000 611 3697 182 ASTROTURN LOUVER BROWN 04 40 854766 EA M 2321 125 0 20 123 30 17 2636 1.000 2136 500 0 GROMMIT TO SUPPORT RING 03 0 EA M 854772 3100 5406 0 20 2923 30 17 11496 1.000 2636 0 8860 BRKTS TO SUPPORT RING 03 0 850746 EA M 3100 1185 0 0 10 30 0 4325 1.000 3371 500 454 RIVET 3 IN COLLAR BLACK 03 0 EA M 213 203 854826 621 3261 0 20 0 4318 1.000 275 2800 1243 RIVET 3" COLLAR BRN 03 0 EA M 934 850680 3351 1139 0 0 10 30 0 4530 1.000 3391 205 COLLAR TO FINS BLACK 03 0 854790 EA M 621 3391 0 101 205 0 0 4318 1.000 1149 3169 -48 COLLAR TO FINS BRN 03 20 EA M2 4500 0 0 0 0 30 0 4530 1.000 3381 1149 0 851036 ASTROTURN LOUVER BLACKO4 0 1 Example of the List MRP Volatility Screen. In this * example, we are able to find out the number of new * mrp messages generated by buyer code, how many of the messages appeared on previous mrp runs and how many messages were processed since the last mrp run. COMMAND (ICI, MG, 0)? L, 897 * List MRP Volatility (v1.0) ENTER DESIRED OUTPUT OPTION: O. LINE PRINTER 1. TERMINAL, 132 COLUMNS 2. ENTER LOGICAL DEVICE/DISC FILE, 132 COLUMNS 3. TERMINAL OPTION (3)? 3 DATE OF THE LAST MRP RUN WAS: FRI, JUL 11, 1997 MRP DATA COPIED TO PEGGING DATA BASE ON: 07/11/97 8:30 AM * SELECTED BUYER CODE (C/R = ALL)? SELECTED SOURCE CODE (C/R = ALL)? * SELECTED ABC CODE (C/R = ALL)? * LISTING OPTION: 1. LIST PLANNED ORDER DETAIL 2. LIST PLANNED ORDER AND RESCHEDULE DETAIL SUMMARY LISTING OF PLANNED ORDERS 3. SUMMARY LISTING OF PLANNED ORDERS AND RESCHEDULES 4 OPTION(1)? 2 NUMBER OF LEEWAY DAYS TO QUALIFY AS A RESCHEDULE? 2 SORT OPTION:

1. BY BUYER CODE

2. BY SOURCE CODE 3. BY CLASS CODE OPTION(1)? 1

FRI, JUL 11, 199	7	MRP VOLATILITY SUMMARY PAGE:									
	NO OF NEW EXCEP			VI OUS 4TH		ESSED RUN OVER 5MRP	TOTAL EXCEP ON FILE	RMANCE TO 07 WAS PROCSD	/11/ PER	97	
BUYER CODE: 11 RESCHEDULE IN RESCHEDULE OUT CANCEL WO SCHEDULED MULTIPLE WO SHORTAGE SALES ORDER SALES ORDER BUYER TOTAL: 11 1	110 27 85 2 35 3 0 11 473	0 0 0 31 0 22 53	0 0 2 0 5 1 61 69	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	110 27 85 4 66 8 1 94 0	0 0 2 31 5 1 83 122	0 0 1 34 1 0 23 59	. 0 . 0 . 0 33. 3 52. 3 16. 7 . 0 21. 7 32. 6	% % % % %

COMMAND (TEST, MG	, 60)? RE	, 895									
MRP Action/Resch	edule Re	port	(v3.	0)							
O. LINE PRINTE 1. TERMINAL, 13	ENTER DESIRED OUTPUT OPTION: 0. LINE PRINTER 1. TERMINAL, 132 COLUMNS 2. ENTER LOGICAL DEVICE/DISC FILE, 132 COLUMNS OPTION (0)2 1										
DATE OF THE LAST MRP DATA COPIED							2:19 PM				
2. ACTION MESSA	REPORT OPTION: 1. ACTION MESSAGES AND RESCHEDULE MESSAGES 2. ACTION MESSAGES ONLY 3. RESCHEDULE MESSAGES ONLY										
NUMBER OF LEEWAY	DAYS TO	QUAL	IFY A	SAR	ESCHE	DULE?	2				
SELECTION OPTIONS 1. ENTER SELECTED BUYER CODE(S) 2. ENTER SELECTED SOURCE CODE(S) 3. ENTER SELECTED CLASS CODE(S) 4. ENTER SELECTED PART NUMBER(S) 5. ENTER SELECTED VENDOR CODE(S) 6. SELECT NEW MRP MESSAGES ONLY 7. ENTER SELECTED PROJECT NUMBER(S) OPTION (C/R TO CONTINUE)? 1											
SELECTED BUYER CO	ODE (C/R	e al	L)? 0	2*							
SELECTED BUYER CO	ODE (C/R	то с	ONTIN	IUE)?	03*						
SELECTED BUYER CO	ODE (C/R	то с	ONTIN	IUE)?	*						
SELECTION OPTIONS	S										

 ENTER SELECTED BUYER CODE (S) ENTER SELECTED SOURCE CODE (S) ENTER SELECTED CLASS CODE (S) ENTER SELECTED PART NUMBER(S) ENTER SELECTED VENDOR CODE (S) SELECT NEW MRP MESSAGES ONLY ENTER SELECTED PROJECT NUMBER(S) OPTI ON (C/R TO CONTINUE)? 					
2. SOURCE CODE8. ACTION3. CLASS CODE (1, 2, 3 OR 4)9. MRP RE4. PART NUMBER10. PO ORI5. VENDOR CODE11. PO LAT6. VENDOR NAME12. PART I	EMENT AGE DATE QUIRED DATE GINAL/WO STAI EST/WO DUE D/ ESCRIPTION CT NUMBER				
2. SOURCE CODE 8. ACTION 3. CLASS CODE (1, 2, 3 OR 4) 9. MRP RE 4. PART NUMBER 10. PO ORI 5. VENDOR CODE 11. PO LAT	QUIRED DATE GINAL/WO STAI EST/WO DUE D/ ESCRIPTION				
1 * Example of the RE, 895 Action/Reschedul * (age) the requirement originally appea * on. This example lists two reschedul * planned order requirements. The prima * purchased part at the bottom of the pa	red and how r messages and ry vendor nur	many mrp runs it ha d one cancellation	s appeared * with the *		
THU, JUL 10, 1997, 2:08 PM LEEWAY DAYS: 2		TI ON/RESCHEDULE REF		SOURCE CODE	PAGE: 4 PART NUMBER
	MRP QU/ GE NO DI	ANTY PO INSP/ ACTI JE WO COMPL DA ⁻			DEMAND TYPE/
			L DAIL DAIL		REQUIRED MESSAGE
07/0 07/0	8/97 3	146 05/22, 1600 06/15, 30 07/02,	97 06/22/97 97 07/15/97 97 08/02/97 97 08/02/97 97 08/30/97		
03 M 6 30 EA EA 1 0 3 06/2 07/0 07/0 07/0 850704 STEEL COLLAR BLANK BL/ 03 M 6 30 EA EA 1 0 3 06/2 07/0 7/0 7/0 07/0	8/97 3 2/97 2 8/97 1 8/97 1 CK 8/97 3	146 05/22, 1600 06/15, 30 07/02, 10 07/30, 248 05/07, 1600 06/15, 30 07/02,	 97 06/22/97 97 07/15/97 97 08/02/97	DATE WHERE S. W. O. 850674 850674	REQUIRED MESSAGE 2406 MULTIPLE SALES ORD FORECAST

850716 STEEL COLLAR ROLL BLACK

03 M	6	30 EA	EA		1	03	06/28/97 06/28/97 07/02/97 07/02/97 07/08/97 07/08/97	3 2 2 1	248 512 1500 1600 30 10		05/26/97 06/01/97 06/15/97 07/02/97	06/07/97 06/26/97 07/01/97 07/15/97 08/02/97 08/30/97			850722 S.W.O. 850722 850722 850722 850722 850722	2411	WO SHORT WO SHORT SALES ORD SALES ORD FORECAST WO SCHED
850722			RIT	COLLA	R4.	5 B	LACK										
03 M	6	30 EA				03		3 2 2 1	248 512 1500 1600 30 10	1138	06/01/97 06/15/97 07/02/97	06/07/97 06/07/97 07/01/97 07/15/97 08/02/97 08/30/97	06/26/97	06/30/97	S.W.O. 2411 851036 851036 851036 851036	2405	WO SHORT MOVE IN SALES ORD SALES ORD FORECAST WO SCHED
850746			RIT	3 I N (COL I	AR	BLACK										
03 M	6	30 EA				0 3		2 3 2 1	231 500 1500 1600 30 10	1200	06/01/97 06/15/97 07/02/97	06/22/97 06/22/97 07/01/97 07/15/97 08/02/97 08/30/97	06/27/97	06/30/97	S.W.O. 2415 850680 850680 850680 850680	2407	WO SHORT MOVE IN SALES ORD SALES ORD FORECAST WO SCHED
853724 03 P	6	30 EA		FRONT		EL 03	07/08/97	1	SUM631 100	0	SUMMIT E	LECTRI CAL 99/99/99	SUPPLY 04/15/97	04/16/97	RMS5432		CANCEL

*

*

COMMAND (ICI, MG, 0)? U, 896

Pegging data base update utility (v1.0)

MRP RUN DATA LAST COPIED: 07/10/97 10:08 AM

THIS UTILITY COPIES THE DATA FROM YOUR LAST MRP RUN TO THE PEGGING DATA BASE. CONTINUE(Y)? *

DELETING EXISTING PEGGING DATA BASE RECORDS 1:18 PM COPYING MRP RECORDS TO PEGGING DATA BASE 1:20 PM 1:20 PM COND FILE PROCESSING COMPLETE... PROCESSING ROOO 1:20 PM PROCESSING ROO1 1:20 PM PROCESSING RQ02 1:20 PM PROCESSING RQ03 1:20 PM PROCESSING ROO4 1:20 FM PROCESSING ROO4 1:21 PM PROCESSING ROO5 1:21 PM PROCESSING ROO6 1:21 PM PROCESSING ROO7 1:21 PM DATING THE PLANNED ORDER REQUIREMENTS 1:21 PM PROCESSING WORK ORDER RESCHEDULE MESSAGES 1:21 PM PROCESSING DUBCHASE OPDER PESCHEDULE MESSAGES 1:21 PM PROCESSING PURCHASE ORDER RESCHEDULE MESSAGES 1:21 PM DATING THE RESCHEDULE MESSAGES 1:22 PM COPY OF FILES TO PEGGING DATA BASE COMPLETE 1:22 PM

COMMAND (ICI, MG, 0)? E