System Message Definitions

Contents

The first part of this manual contains a list of the system messages sorted alphabetically. The second part contains the same list of messages, but this time sorted numerically and accompanied by an explanation of why the message might appear and what action to take.

If a message appears and its meaning is not readily apparent, first locate the message using the alphabetic listing and note its (decimal) number. Then use the number to locate the message in the numerical listing.

It should be noted that system messages are used for a variety of reasons and do not necessarily point out an error or malfunction.

Message Number	***Message (Alphabetic Sort)***
256	(blank)
363	(blank)
365	(blank)
367	(blank)
368	(blank)
369	(blank)
371	(blank)
372	(blank)
373	(blank)
374	(blank)
375	(blank)
376	(blank)
377	(blank)
378	(blank)
379	(blank)
380	(blank)
381	(blank)
382	(blank)
383	(blank)
384	(blank)
401	(blank)
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415	(blank)
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421	(blank)
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424	(blank)
425	(blank)
426	(blank)
427	(blank)
428	(blank)
429	(blank)
430	(blank)
431	(blank)
432	(blank)
433	(blank)
434	(blank)
435	(blank)
436	(blank)
437	(blank)

Message Number	***Message (Alphabetic Sort)***
438	(blank)
439	(blank)
440	(blank)
441	(blank)
442	(blank)
443	(blank)
444	(blank)
445	(blank)
446	(blank)
447	(blank)
463	(blank)
464	(blank)
465	(blank)
466	(blank)
467	(blank)
468	(blank)
469	(blank)
470	(blank)
471	(blank)
472	(blank)
473	(blank)
474	(blank)
475	(blank)
476	(blank)
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478	(blank)
479	(blank)
480	(blank)
481	(blank)
482	(blank)
483	(blank)
484	(blank)
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487	(blank)
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489	(blank)
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491	(blank)
492	(blank)
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494	(blank)
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496	(blank)
503	(blank)
504	(blank)
505	(blank)
506	(blank)
507	(blank)
508	(blank)
509	(blank)
510	(blank)
511	(blank)
512	(blank)
551	(blank)

Message Number	***Message (Alphabetic Sort)***
568	(blank)
576	(blank)
619	(blank)
620	(blank)
621	(blank)
622	(blank)
633	(blank)
634	(blank)
635	(blank)
636	(blank)
638	(blank)
639	(blank)
640	(blank)
641	(blank)
632	%
637	%
566	2 CHANNEL ANALOG IN
571	2 CHANNEL ENCODER
574	32 INPUT/OUTPUT
573	8 INPUT
572	8 INPUT/OUTPUT
561	AC INPUT
562	AC OUTPUT
614	Analog Out1
615	Analog Out2
616	Analog Out3
617	Analog Out4
589	APRIL
514	ASB IN IDLE
513	ASB RUNNING
593	AUGUST
364	BALCO FAILURE
451	BALCO FAILURE
450	BOARD NOT CALIBRATED
452	BOARD WENT THROUGH RESET
362	BUSY WITH RTR
501	BYTE COUNT ERROR
502	BYTE TO BYTE TIMEOUT
418	CARTRIDGE NOT INSTALLED
497	CHECKSUM ERROR
610	Clamp Pos
607	Clamp PR
289	CMD ERROR
257	COM BUSY ERROR
259	COM BUSY TIMEOUT ERROR
285	COM DPR RAM FAILURE
287	COM FAULT ERROR
258	COM SEL TIMEOUT ERROR
370	COMM TIMEOUT
269	COMMAND 1 ERROR
276	COMMAND 2 ERROR
314	COMMAND TYPE #3 ERROR
300	CONFIGURATION NOT LOADED
263	CONTROL BUSY ERROR
265	CONTROL BUSY TIMEOUT ERROR

Message Number	*Message (Alphabetic Sort)*
353	CONTROL LIMITS CALCULATED
352	CONTROL LIMITS NOT CALCULATED
283	CONTROL RELAY READ ERROR
279	CONTROL RELAY WRITE ERROR
264	CONTROL SEL TIMEOUT ERROR
318	CR'S/SW'S NOT LOADED
668	Critical Error
453	CRITICAL SP FAULT
284	CTL DPR RAM FAILURE
286	CTL FAULT ERROR
556	DATA HANDLER
322	DATA HANDLER BUSY
460	DATA HANDLER INTERRUPT ERROR
282	DATA NOT READY
355	DATA POINT NOT REMOVED
356	DATA POINT REMOVED
602	DAYS
563	DC INPUT
564	DC OUTPUT
597	DECEMBER
340	DELETE NOT ALLOWED
328	DELETING RECIPE
344	DHTS ERROR
598	DISABLED
603	Disabled
320	DISPLAY HANDLER BUSY
271	EEPROM BUSY ERROR
270	EEPROM ERROR
611	Ejector Pos
448	EPROM CHECKSUM FAILURE
457	EXTERNAL RAM FAILURE
569	EZ-PRO
587	FEBRUARY
385	FILE CHECKSUM
397	FILE DATA HANDLER COMM ERROR
388	FILE EEPROM ERROR
396	FILE FLATPANEL COMM ERROR
392	FILE FUNCTION TYPE ERROR
395	FILE NOT FOUND ERROR
398	FILE PC COMM ERROR
387	FILE PORT ERROR
400	FILE PROTOCOL ERROR
390	FILE RLD ERROR
389	FILE SIZE ERROR
386	FILE SUB BLOCK ERROR
393	FILE TIMEOUT ERROR
394	FILE TIMESLOT RUNNING ERROR
337	FILE TRANSFER COMPLETE
399	FILE TRANSFER NOT ALLOWED
391	FILE TYPE ERROR
667	Forced Idle
582	FRIDAY
266	FUNCTION NOT FOUND
260	FUNCTION TYPE ERROR
456	HARDWARE SETUP CHANGED

Message Number	*Message (Alphabetic Sort)*
294	HARDWARE SETUP ERROR
518	HARDWARE SETUP SAVED
296	HEADER VERSION MISMATCH
666	Heartbeat Failure
601	HOURS
319	HW SETUP NOT LOADED
554	HYDRAULIC
628	in
629	in
630	in
462	INCOMPATIBLE RLD FILE
570	INJECTION IMPACT II
417	INSERT NEXT CARTRIDGE
661	Insta-set
347	INSTA-SET DOES NOT EXIST
334	INSTA-SET TRANSFER COMPLETE
335	INSTA-SET TRANSFER ERROR
348	INSTA-SET TRANSFER NOT ALLOWED
623	ips
627	ips
586	JANUARY
592	JULY
591	JUNE
307	LINE GRAPH FILE NOT LOADED
338	LOCAL ACCESS ERROR
350	LOW BATTERY
588	MARCH
308	MATH FUNCTION FILE NOT LOADED
590	MAY
291	MESSAGE REQUEST ERROR
600	MINUTES
302	MODFILE DATA NOT LOADED
262	MODULE CHECKSUM ERROR
281	MODULE MODE REJECTS SETPOINT
280	MODULE REJECTS SETPOINT
315	MODULE RLD ERROR
578	MONDAY
343	MTS ERROR
596	NOVEMBER
595	OCTOBER
346	OPTION NOT INSTALLED
565	PARISON
557	PC PORT
290	PCB ERROR
613	PID Output
293	PORT SETUP ERROR
288	POWER GOING DOWN
642	Printer
357	PRINTER BUSY
354	PRINTER NOT READY
558	PRINTER PORT
360	PRINTER READY
624	psi
625	psi
626	psi

Message Number	***Message (Alphabetic Sort)***
267	PTS ERROR
449	RAM CHECKSUM FAILURE
272	RAM FAILURE
609	Ram Pos
606	Ram PR
605	Ram PR SP
608	Ram Vel
604	Ram Vel SP
523	READING CONFIGURATION DATA
537	READING INSTA-SET FROM SYSTEM
541	READING LINE GRAPH FILE
543	READING MATH FUNCTION FILE
527	READING MODFILE FROM SYSTEM
545	READING PARISON FILE
535	READING RECIPE FROM SYSTEM
549	READING RESERVED FILE #1
547	READING RESERVED FILE #2
531	READING RLD FROM SYSTEM
519	READING SCREENS FROM SYSTEM
515	READING SETPOINTS
539	READING SPC LABEL FILE FROM
525	READING SYSTEM CONFIG DATA
533	READING SYSTEM MODFILE DATA
521	READING SYSTEM SCR FROM SYS
529	READING TIME SLOT DATA FROM SYS
649	Recipe
331	RECIPE ALLOCATION ERROR
332	RECIPE ALREADY EXISTS
329	RECIPE DELETE COMPLETE
330	RECIPE DELETE ERROR
333	RECIPE DOES NOT EXIST
325	RECIPE TRANSFER COMPLETE
326	RECIPE TRANSFER ERROR
327	RECIPE TRANSFER NOT ALLOWED
339	REMOTE ACCESS ERROR
654	Reserved 13
655	Reserved 14
657	Reserved 16
658	Reserved 17
659	Reserved 18
660	Reserved 19
643	Reserved 2
662	Reserved 21
663	Reserved 22
664	Reserved 23
665	Reserved 24
650	Reserved 9
313	RESERVED FILE #1 NOT LOADED
312	RESERVED FILE #2 NOT LOADED
311	RESERVED FILE #3 NOT LOADED
310	RESERVED FILE #4 NOT LOADED
309	RESERVED FILE #5 NOT LOADED
303	RESERVED MESSAGE
645	RLD
359	RLD ACCESS ERROR

Message Number	*Message (Alphabetic Sort)*
454	RLD CHECKSUM FAILURE
304	RLD NOT LOADED
455	RLD WRITE FAILURE
631	rpm
559	RS-232 PORT
567	RS-485 HOST
560	RS-485 SPI
277	RTC ERROR
361	RTR ERROR
583	SATURDAY
516	SAVING SETPOINTS
298	SCREEN FILE NOT LOADED
295	SCREEN MISMATCH
618	Screw Out
599	SECONDS
321	SECURITY ACCESS ERROR
594	SEPTEMBER
459	SEQ/HYDR CONNECT FAILURE
458	SEQ/HYDR DPR FAILURE
552	SEQUENCE
297	SEQUENCE RLD HEADER MISMATCH
500	SERIAL OVERRUN
278	SETPOINT LIMIT ERROR
349	SETPOINT LIMIT ON SCREEN
274	SETPOINT NOT FOUND
273	SETPOINT REJECTED ERROR
336	SETPOINTS RESTORED
517	SETPOINTS SAVED
499	SHARED RAM REPLY TIMEOUT
498	SHARED RAM TIMEOUT
306	SPC DATA FILE NOT LOADED
351	SPC DATA NOT LOADED
345	STDH ERROR
342	STM ERROR
268	STP ERROR
292	STRING REQUEST ERROR
461	SUB FUNCTION LOST
577	SUNDAY
656	System Config
301	SYSTEM CONFIGURATION NOT LOADED
644	System Modfile
305	SYSTEM MODFILE DATA NOT LOADED
366	SYSTEM POWERUP
646	System Screen
299	SYSTEM SCREEN FILE NOT LOADED
612	Tach RPM
553	TEMPERATURE
323	THERMOCOUPLE REVERSED
581	THURSDAY
652	Timeslot data
324	TOO MANY CONSEC TIMESLOT ERRORS
317	TOO MANY SYSTEM CONFIGURATIONS
316	TOO MANY USER CONFIGURATIONS
341	TRANSFER NOT ALLOWED
579	TUESDAY

Message Number	***Message (Alphabetic Sort)***
261	TYPE REQUEST ERROR
575	UNKNOWN
555	UNUSED SLOT
358	UPDATE SEQUENCE MODULE SOFTWARE
648	User Config
653	User Modfile
647	User Screen
651	User SPC Labels
275	VALUE NOT FOUND
580	WEDNESDAY
584	WEEKDAY
585	WEEKEND
524	WRITING CONFIGURATION DATA
669	WRITING CONFIGURATION TO CART
676	WRITING INSTA-SET TO CARTRIDGE
538	WRITING INSTA-SET TO SYSTEM
542	WRITING LINE GRAPH FILE
678	WRITING LINE GRAPH FILE TO CART
679	WRITING MATH FILE TO CARTRIDGE
544	WRITING MATH FUNCTION FILE
671	WRITING MODFILE DATA TO CART
528	WRITING MODFILE DATA TO SYSTEM
546	WRITING PARISON FILE
680	WRITING PARISON FILE TO CARTRIDG
675	WRITING RECIPE TO CARTRIDGE
536	WRITING RECIPE TO SYSTEM
550	WRITING RESERVED FILE #1
682	WRITING RESERVED FILE #1 TO CART
548	WRITING RESERVED FILE #2
681	WRITING RESERVED FILE #2 TO CART
673	WRITING RLD TO CARTRIDGE
532	WRITING RLD TO SYSTEM
520	WRITING SCREENS TO SYSTEM
540	WRITING SPC LABEL FILE TO
677	WRITING SPC LABEL FILE TO CART
526	WRITING SYSTEM CONFIG DATA
670	WRITING SYSTEM CONFIG TO CART
534	WRITING SYSTEM MODFILE DATA
674	WRITING SYSTEM MODFILE TO CART
522	WRITING SYSTEM SCR TO SYSTEM
672	WRITING TIME SLOT DATA TO CART
530	WRITING TIME SLOT DATA TO SYS

Message No.	*Message (Decimal Numeric Sort)*
256	(this is a blank message position)
257	**COM BUSY ERROR** The Data Handler was unable to access the COM bus dual port RAM because another module was accessing it at the time. **Action:** Use the system monitor screen and the module information screen to determine if there are any other errors being generated. This may help to determine which module is not responding or is causing the problem.
258	**COM SEL TIMEOUT ERROR** A board that was found on the communications bus during powerup is no longer responding to commands. This can happen if an RS-232 or RS-485 daughterboard is removed from the card cage or has failed. Check the system monitor screen to see if the board and error are listed there. **Action:** Check the module information screen to see if any of the boards in the system have stopped functioning. Look at the list of boards in the system. Perform a system reset. Look at the list of boards again to determine if the list has changed or if any of the boards located in the system are missing. Do NOT install or remove boards from the system with power on.
259	**COM BUSY TIMEOUT ERROR** The Data Handler timed out waiting for a communications module to process a message after control of the dual port RAM was passed to the other module. **Action:** Use the system monitor screen to determine which board is not communicating. Consult a local rep or the factory for possible repair of the board.
260	**FUNCTION TYPE ERROR** Could be caused by a setpoint being entered for a board which is not in the system. An example would be the entry of a printer type selection setpoint when no RS-232 card has been designated for printer operation. Could be caused by a module not supporting the parameter just sent to it. An example would be if setpoints for a new feature had been added to a screen but the module software has not been updated. Could be an incorrectly entered setpoint ID in the screen file that is used by the screen editor. The module initiating the error is shown on the system monitor screen under function type (FT). The setpoints are sent out on system powerup. There will be one message for each setpoint not supported. Cause of the error can be confirmed by performing a RESTORE SETPOINTS command. The error messages will be repeated on the system monitor screen. Another cause could be the transfer of a file into a system where the destination module does not exist or is addressed incorrectly. The error could mean that a board has failed and will not respond to data requests on powerup. Could also mean a board that was in the system has been removed or has vibrated loose.

Action:
Verify that ID's that have been programmed are correct. Check to see that the module software supports the ID's used. Verify that the destination module is working correctly. Check to see that all of the boards in the system are correctly seated in the card rack (always operate the system with the cover in place). Consult a local rep or the factory for possible repair of the non-functioning board.

261 **TYPE REQUEST ERROR**

The module or the Data Handler does not support this function. Could be due to a screen programming error. Could mean the module is not responding to any requests. This error will occassionally occur once after the Operator resets the system through the TSA on the System Control screen. Ignore the error for this condition.

Action:
Verify that ID's that have been programmed are correct. Check to see that module software supports ID's used.

262 **MODULE CHECKSUM ERROR**

A board in the system has detected a problem with its own software.

Action:
Consult a local rep or the factory for possible repair of the non-functioning board.

263 **CONTROL BUSY ERROR**

The Data Handler was unable to access the CTL bus dual port RAM because another module was accessing it at the time.

Action:
Use the system monitor screen and the module information screen to determine if there are any other errors being generated. This may help to determine which module is not responding or is causing the problem.

264 **CONTROL SEL TIMEOUT ERROR**

A board that was found on the communications bus during power up is no longer responding to commands. This can happen if an RS-232 or RS-485 daughterboard is removed from the card cage or has failed. Check the system monitor screen to see if the board and error are listed there. Could also occur if the sequence/ hydraulic board has failed or been removed from the system and the RLD file has subsequently been transferred to the system.

Action:
Check the module information screen to see if any of the boards in the system have stopped functioning. Look at the list of boards in the system. Perform a system reset. Look at the list of boards again to determine if the list has changed or if any of the boards located in the system are missing. Do NOT install or remove boards from the system with power on.

265 **CONTROL BUSY TIMEOUT ERROR**

The Data Handler timed out waiting for a board on the control bus to process a

message after control of the dual port RAM was passed to the other module. Sometimes occurs if an attempt was made to run Timeslot with the Temperature Board or Sequence Board not installed.

Action:
Use the system monitor screen to determine which board is not communicating. Consult a local rep or the factory for possible repair of the non-functioning board.

266 **FUNCTION NOT FOUND**

If there are setpoints in the configuration data for a function type that was not found on power up, this error will occur. One error will be logged for each module not present. Each module's function type (FT) and function member (FM) will be displayed on the system monitor screen. This error could mean a board has failed and has not responded to data requests on powerup. Could also mean a board that was installed in the system has been removed or has vibrated loose from the backplane. Could also be caused if a COM baud rate has been entered for a COM port that is not installed.

Action:
If module type is RS-232 card (FT #48) and it has been removed from the system, the message can be ignored. Check to see if all boards in the system are correctly seated in the card rack (always operate the system with the cover in place). Consult a local rep or the factory for possible repair of the non-functioning board.

267 **PTS ERROR**

Sequence module encountered an error while performing the PTS (Panel-to-Sequence) Mode. Most likely detected a problem with the number of bytes sent.

Action:
Consult a local rep or the factory for possible repair of the data handler or sequence board.

268 **STP ERROR**

The Data Handler encountered an error while trying to read the STP (Sequence-to-Panel) control relays from the Sequence Module. Could indicate missing or non-operating Sequence Module. Could mean an error code was received from the sequence module in place of the STP data.

Action:
Consult a local rep or the factory for possible repair of the data handler or sequence board.

269 **COMMAND 1 ERROR**

Indicates a module received a Command Type 1 which it does not support. Could mean old software does not support a new function added to screens.

Action:
Try to determine when the error occurs, at system powerup or when a TSA is activated from the screens. Consult the factory for software compatibility.

Message No.	*Message (Decimal Numeric Sort)*
270	**EEPROM ERROR** The system was unable to correctly program an EEPROM for the requested operation (either SAVE SETPOINTS or a file transfer operation). **Action:** Consult a local rep or the factory for possible repair of the non-functioning board.
271	**EEPROM BUSY ERROR** System was unable to perform a write to an EEPROM because it was already performing a write to the device. **Action:** Use the system monitor screen to determine which board is not communicating. Consult a local rep or the factory for possible repair of the non-functioning board.
272	**RAM FAILURE** A failure was detected with a board's RAM. The board that detected the error will be shown on the module information screen or the system monitor screen. If the error occurs at powerup or after a reset, it will stop timeslot from starting. **Action:** Consult a local rep or the factory for possible repair of the non-functioning board.
273	**SETPOINT REJECTED ERROR** A module did not allow the change of a setpoint for some reason. Use the powerup setpoint limits screen or the recipe transfer limits screen to determine which setpoint is causing the error. **Action:** Verify the ID of the setpoint programmed to the screen.
274	**SETPOINT NOT FOUND** The setpoint requested by the display was not found in the Data Handler configuration file. Could mean a mismatch between the screen file and the configuration file. The setpoint that is encountering the error will be missing from the screen. This can be determined by comparing the displayed screen with a printout of the screen from the screen editor. Could mean math or SPC is trying to access data in a secondary controller which for some reason is not connected. **Action:** Go to the system screen that lists the headers of the screens. Check if all of the user headers match and that all of the system headers match. If not, then download a valid set of screens. Verify that the setpoint encountering the error has been programmed correctly. Verify that all controllers are present.
275	**VALUE NOT FOUND** The value requested by the display was not found in the Data Handler configuration file. Could mean a mismatch between the screen file and the configuration file. The value that is encountering the error will be missing from the screen. This can be determined by comparing the displayed screen with a printout of the screen

from the screen editor. Could mean math or SPC is trying to access data in a secondary controller which for some reason is not connected. Verify that all controllers are present.

Action:
Go to the system screen that list the headers of the screens. Check if all of the user headers match and that all of the system headers match. If not, then download a valid set of screens. Verify that the value encountering the error has been programmed correctly.

276 **COMMAND 2 ERROR**

Indicates a module received a Command Type 2 which it does not support. Could mean old software does not support a new function added to screens. This error can sometimes occur at system reset because the RS-232 board does not support the command sent to inform it that a system reset is about to take place. Verify this by removing the RS-232 board from the system before performing a system reset. If this is the case, the error can be ignored.

Action:
Determine which command is causing the error to be generated. Consult a local rep or the factory for possible software upgrade of related modules.

277 **RTC ERROR**

The Data Handler is having a problem reading its real-time clock chip. Watch the time/date displayed at the lower left of the screen to see if it is changing.

Action:
Consult a local rep or the factory about possible repair of the data handler board.

278 **SETPOINT LIMIT ERROR**

A setpoint that was entered was either greater than the setpoint high limit or lower than the setpoint low limit. The operator panel is capable of displaying the setpoint limits for the selected setpoint.

Action:
Enter a setpoint that is within the limits. Edit the screen to change the setpoint limits.

279 **CONTROL RELAY WRITE ERROR**

The data handler was unable to perform the CR change command it received. Could be caused by an incorrectly programmed control relay ID.

Action:
Verify the ID of the control relay programmed to the screen.

280 **MODULE REJECTS SETPOINT**

A module did not allow the change of a setpoint for some reason. The setpoint is probably within its limits. The setpoint displayed on the screen will remain unchanged. As an example, this error would occur with the temperature module if an attempt was made to change the thermocouple type while timeslot was running.

Action:
Turn off timeslot, enter the setpoint, perform a save setpoints function and reset the system.

281 **MODULE MODE REJECTS SETPOINT**

An attempt was made to enter a setpoint setting that is not supported by the board's operation. An example of this would be to enter a setpoint of 8 -15 for a COMM setup setpoint for an RS-232 board (8 - 15 are meant to be used for RS-485 boards).

Action:
Make a valid entry.

282 **DATA NOT READY**

This message is used to pause the file transfers in the system so that the boards can properly handle the data being sent or received. Can be displayed if trying to access data from a secondary which for some reason is not connected or not functional.

Action:
Sit back and relax - you're going too fast (no action necessary). Verify that all controllers are present.

283 **CONTROL RELAY READ ERROR**

The command received to read or change a control relay was incorrect.

Action:
Determine which CR request message is generating the error. Verify the programming of the message on the screen.

284 **CTL DPR RAM FAILURE**

Failure of the Dual Port RAM of the Control Bus was seen on powerup of the Data Handler. Timeslot will not start.

Action:
Use the system monitor screen and the module information screen to determine which board detected the error. The error may be shown twice on the screen (once for the data handler and once for the other module). Consult a local rep or the factory about possible repair of the non-functioning board.

285 **COM DPR RAM FAILURE**

A failure of the dual port RAM of the Communication Bus was seen on powerup of the Data Handler. Timeslot will not start.

Action:
Use the system monitor screen and the module information screen to determine which board detected the error. The error may be shown twice on the screen (once for the data handler and once for the other module). Consult a local rep or the factory about possible repair of the non-functioning board.

Message No.	*Message (Decimal Numeric Sort)*

286 **CTL FAULT ERROR**

The control bus fault line was seen by the Data Handler. The fault line is tested every 10 milliseconds. Timeslot will be turned OFF. Keyboard operation can continue. The data handler will turn on its control fault LED, DS1. Sometimes caused by trying to start timeslot with no RLD downloaded to the system. Sometimes caused by downloading large RLD programs to the system (the sequence module does not have time to satisfy the hardware watchdogs of the I/O boards while writing to its EEPROM). Could also be caused if there is no functional sequence board plugged into the system. Could also be caused if sequence board is plugged into wrong slot. Could be caused if CR defining Digital I/O locations in 16-Slot systems is not energized. Could be bad Comm (RS-232) board.

Action:
The error can be ignored if it is encountered during an RLD download. Verify that the sequence/hydraulic board is in the correct slot of the rack. The expected slot number will be displayed on the module information screen. Look for LED's that are on for any boards of the system other than the data handler (one of those boards could be the source of the error). Go to the module information screen to see if any module error codes are set (the module with the error code set could be the source of the error). If there are no error codes set, then error might be due to an I/O card. In 16-Slot systems, check CRs 604-606 to make certain that Digital I/O board locations are properly defined (see controller model number).

287 **COM FAULT ERROR**

The communication bus fault line was seen by the Data Handler. The fault line is tested every 10 milliseconds. Keyboard operation can continue. Timeslot will be turned OFF.

Action:
Check the module information screen to see if any module error codes are set.

288 **POWER GOING DOWN**

The power failure line from the power supply was seen by the Data Handler. The fault line is tested every 10 milliseconds. Timeslot will continue to run. The Data Handler will lock its EEPROMs and save the contents of the hourmeters. Keyboard and System operation can continue. Power fault will be disabled for one minute.

Action:
Monitor the power lines if the condition persists.

289 **CMD ERROR**

Control Member Definition error. A module has detected an error in a transmission it has received. The data is invalid and will be rejected. The error could be generated if the command sent from the computer was incorrectly programmed. Could mean that math or SPC is trying to access data in a secondary which for some reason is not connected. Also displayed when attempting to download multi-rack screens or RLD to a single rack system.

Action:
Determine which command was not accepted and correct the ID. Could be caused by: secondary not connected; secondary not working; secondary not properly addressed; is really a single rack system.

Message No.	*Message (Decimal Numeric Sort)*

290 **PCB ERROR**

Primary Control Block error. A module has detected an error in a transmission it has received. The data is invalid and will be rejected. The error could be generated if the command sent from the computer was incorrectly programmed.

Action:
Determine which command was not accepted and correct the ID.

291 **MESSAGE REQUEST ERROR**

An invalid ID was seen by the Data Handler while decoding the module displayable message request command. The error could be generated if module displayable message commands that the software does not support have been placed on the screen. The location programmed on the screen will remain blank.

Action:
Verify the ID programmed on the screen. Consult a local rep or the factory to identify software compatibility with command used.

292 **STRING REQUEST ERROR**

An invalid ID was seen by the Data Handler while decoding the string request command. The error could be generated if ASCII string commands that the software does not support have been placed on the screen. The location programmed on the screen will remain blank.

Action:
Verify the ID programmed on the screen. Consult a local rep or the factory to identify software compatibility with command used.

293 **PORT SETUP ERROR**

An attempt was made to have two communications ports defined to perform the same function. One of the ports must be set to zero (unused) before the other can be set. The error could also occur if the RS-232 or RS-485 board is not responding to communications from the Data Handler.

Action:
Make a valid com port selection.

294 **HARDWARE SETUP ERROR**

On powerup, The Data Handler determines what functions are installed. Timeslot will not start if the number or type of boards is different than the last time the hardware was saved. The boards that could contribute to this error are temperature, parison, analog I/O, RS-485, sequence/hydraulic and digital I/O. The RS-232 COM boards are not included in this check. Could mean a board has failed and is not responding to data requests. Could mean that addresses of boards already installed have changed (2 boards of same function switched places). Could mean an additional board has been installed in the system since the last time the system was powered. Could mean a previously installed board was removed or has vibrated loose from the backplane. Could mean that a logic card has been moved to a previously empty slot.If the analog I/O board is not showing on the module information screen when it should, then look at the description for the sub-function lost error #461. Could mean the screen is looking for another controller or card not in the system.

Action:
Go to the module information screen. Check to see that the list of boards agrees with what is actually installed. If the error can be explained due to insertion or removal of boards, then go to the System Control screen and activate the Save Hardware Setup function. Check that all boards are properly seated. Always operate the system with the cover in place. Consult a local rep or the factory for possible repair of the board which is no longer responding.

295 **SCREEN MISMATCH**

The system headers found on powerup did not match. These headers are for the configuration data, the modfile data, SPC labels file, math function file, and line graph descriptor file (screen headers are not checked at this time).

This error will be encountered in multi-rack systems if the user and system screen headers in the primary controller do not match the headers in the secondary controllers. Timeslot in all controllers will go down.

This error will be encountered in multi-rack systems if a file has been loaded into a controller and that controller's address is subsequently changed (a test is performed to insure files have been loaded into the correct controller).

This error will occur if math functions, SPC configuration or line graph selections are edited and downloaded to the system without performing a "link." Always link after editing.

Action:
Go to the system header screen in the system screen set to see which headers do not match (the time and date are compared). Verify the multi-rack addresses. Download a complete set of screens to the system.

296 **HEADER VERSION MISMATCH**

The header of the RLD and timeslot contain a version number of the RLD editor. The Data Handler software may require certain levels for compatibility. Could be caused if an incompatable RLD editor was used. Could be caused by failure of Seq/Hydr board in that the Data Handler is unable to read back a header. Could be caused if an RLD or timeslot file has not been loaded into the system. The header from the Timeslot data file did not match the header read from the sequence module. Timeslot will NOT start.

Action:
Recompile the RLD with an appropriate RLD editor and download the new RLD to the system. Consult a local rep or the factory about RLD editor software version compatibility. Verify the multi-rack addresses. Download a complete set of RLD to the system.

297 **SEQUENCE RLD HEADER MISMATCH**

The header from the timeslot data file in the Data Handler did not match the header read from the sequence board. These headers must match exactly. Could be caused by swapping a Seq/Hydr card into a system. This could be caused by a failure of the Seq/Hydr board. Timeslot will NOT run.

This error will be encountered in multi-rack systems if the user and system RLD

headers in the primary controller do not match the headers in the secondary controllers. Timeslot in all controllers will be down.

This error will be encountered in multi-rack systems if a file has been loaded into a controller and that controller's address is subsequently changed (a test is performed to insure files have been loaded into the correct controller).

Action:
Insert the correct combination of Data Handler boards and Seq/Hydraulic boards into the system. Download RLD into the system again.

298 **SCREEN FILE NOT LOADED**

This message or "USER SCREEN HEADER INCORRECT" will be displayed if the user screen file can not be found by the operator panel. This error is typically generated after system screens have been downloaded to the system. User screens are usually destroyed when system screens are loaded. System screens are to be loaded first, followed by user screens. This error can also be generated if if there is not enough screen storage capacity in the operator station to include system and user screens.

Action:
Properly link and download screens to the system. If the error has been generated due to lack of storage space, either edit the screens to reduce the amount of memory used or consult a local rep or the factory about possible memory expansion for the operator station.

299 **SYSTEM SCREEN FILE NOT LOADED**

This message or "SYSTEM SCREEN HEADER INCORRECT" will be dispalyed if the system screens can not be found by the operator panel.

Action:
Properly link and download screens to the system.

300 **CONFIGURATION NOT LOADED**

The user configuration data file is checked by the Data Handler on system powerup. Either the file was not found or it was corrupted in some manner. This error will prevent Timeslot from starting.

Action:
Download screens into the system.

301 **SYSTEM CONFIGURATION NOT LOADED**

The system configuration data file is checked by the Data Handler on system powerup. If the file hasn't been downloaded, the check will not be performed. This error indicates the file has been somehow corrupted. This error will not prevent Timeslot from starting.

Action:
Download screens into the system.

Message No.	*Message (Decimal Numeric Sort)*
302	**MODFILE DATA NOT LOADED** The user modfile data file is checked by the Data Handler on system powerup. Either the file was never downloaded or it was corrupted in some manner. This error will prevent Timeslot from starting. **Action:** Use the correct Parser or Screen editor to regenerate the screens. Download screens into the system.
303	**RESERVED MESSAGE**
304	**RLD NOT LOADED** The RLD file header is read from the SEQ by the Data Handler on system powerup. Either the file was never downloaded to the SEQ or it has been corrupted in some manner. This error will prevent Timeslot from starting. **Action:** Download RLD to the system. Consult a local rep or the factory about possible repair of the sequence/hydraulic board.
305	**SYSTEM MODFILE DATA NOT LOADED** System modfile data file is checked by the Data Handler on system powerup. The file has been somehow corrupted. This error will prevent Timeslot from starting. **Action:** Download screens to the system.
306	**SPC DATA FILE NOT LOADED** The SPC file is checked by the Data Handler on system powerup. Either the file was never downloaded to the Data Handler or it has been corrupted in some manner. This error will prevent Timeslot from starting. **Action:** Download the SPC file to the system.
307	**LINE GRAPH FILE NOT LOADED** The Line Graph file is checked by the Data Handler on system powerup. Either the file was never downloaded to the Data Handler or it has been corrupted in some manner. This error will prevent Timeslot from starting. This error will be displayed if the “new” programmable line graph file is copied into the User screens and the file is not present in the system.

Action:
Download the Line Graph file. Check the useage of the line graph screen.

308 **MATH FUNCTION FILE NOT LOADED**

The Math Function file is checked by the Data Handler on system powerup. Either the file was never downloaded to the Data Handler or it has been corrupted. This error will prevent Timeslot from starting.

Action:
Download the Math Function file to the system.

309 **RESERVED FILE #5 NOT LOADED**
310 **RESERVED FILE #4 NOT LOADED**
311 **RESERVED FILE #3 NOT LOADED**
312 **RESERVED FILE #2 NOT LOADED**
313 **RESERVED FILE #1 NOT LOADED**

Action:
The reserved file messages would be used to show that a file has not been loaded into the system. If one of these reserved file messages appear, then the message file needs to be updated to show which file has not been loaded.

314 **COMMAND TYPE #3 ERROR**

Indicates a module received a Command Type 3 which it does not support. Could mean old software does not support a new function added to screens.

Action:
Consult a local rep or the factory about software version compatibility.

315 **MODULE RLD ERROR**

The Data Handler has determined that a module which is supposed to be in Timeslot is either not installed or is not responding to communications. This error will prevent Timeslot from starting. The system requires at least one Sequence board. The Data Handler performs some module software version tests on system powerup and reset. The Data Handler software may require a particular version of other module software for compatibility. This message will appear if the module version number was not equal to or greater than the version required. Consult the module information screen in the system screen set for the module software version installed in the system. The error will be caused if there are two boards in the system with the same address. There are address selection switches on both the Temperature board and the Parison board. Makecertain these are set correctly. The error could be caused if the boards are installed out of order. Temperature and Parison boards must be installed with addresses increasing from left to right (as you face the controller). The system monitor screen will denote which module in the system is the cause of the error with the FT and FM numbers.

Action:
Verify the boards installed in the system and their addresses on the module information screen. Verify that the correct cards are used in RLD. Verify that the correct RLD is loaded into the system. Consult a local rep or the factory about software version compatibility.

Message No.	*Message (Decimal Numeric Sort)*
316	**TOO MANY USER CONFIGURATIONS** There are more setpoints in the user configuration file than have been allocated in the Data Handler. Timeslot will not start. **Action:** Verify that the downloaded screens are correct. Remove some setpoints from the user screens and download to the system again. Consult a local rep or the factory about possibly upgrading to a system that would allow more setpoints.
317	**TOO MANY SYSTEM CONFIGURATIONS** There are more setpoints in the system configuration file than have been allocated in the Data Handler. Timeslot will not start. **Action:** Verify that the downloaded screens are correct. Remove some setpoints from the system screens and download to the system again. Consult a local rep or the factory about possibly upgrading to a system that would allow more setpoints.
318	**CR'S/SW'S NOT LOADED** The checksum of the saved CR's and switches was incorrect on system powerup. The CR's and switches will not load into the system. This error will prevent Timeslot from starting. This error will be encountered when replacing EEPROMs in the Data Handler or using a Data Handler that has never been set up before. **Action:** Perform a "Save Setpoints" function and reset the system.
319	**HW SETUP NOT LOADED** The checksum of the saved hardware setup was incorrect on system powerup. This error will prevent Timeslot from starting. This error will prevent Timeslot from starting. This error will be encountered when replacing EEPROMs in the Data Handler or using a Data Handler that has never been set up before. Could also be caused if the data in the EEPROM of the Data Handler is lost. **Action:** If the error occurred during setup of the data handler, perform a "Save Hardware Setup" function and reset the system. If the error occurred on a functional system, consult a local rep or the factory about possible repair of the data handler board.
320	**DISPLAY HANDLER BUSY** The Display Handler is currently processing a serial interrupt from the Operator Panel. The Data Handler will have to try to communicate at another time. **Action:** No action necessary.
321	**SECURITY ACCESS ERROR** The security level is less than required for the function to be performed.

Action:
Make an entry for a higher security level or edit the screen to lower the security level required.

322 **DATA HANDLER BUSY**

The Data Handler is busy processing a received command. Examples are Setpoint Save, Setpoint Restore, Recipe Transfer, and Insta-Set Transfers.

Action:
Wait until the operation is complete.

323 **THERMOCOUPLE REVERSED**

One or more of the thermocouples in the system is wired incorrectly.

Action:
Check the temperature process value screen - the reversed thermocouples will read 32°F (0°C). Correct the wiring.

324 **TOO MANY CONSECUTIVE TIMESLOT ERRORS**

Data Handler encountered an error in 15 consecutive passes of the 10 millisecond Timeslot routine. Timeslot will turn off IF CR 625 (Inhibit Timeslot Monitor) is OFF.

Action:
Use the timeslot monitor screen and the system monitor screen to determine which board is generating the errors.

325 **RECIPE TRANSFER COMPLETE**

The transfer of the recipe is complete (duh!)

Action:
No action necessary.

326 **RECIPE TRANSFER ERROR**

Occurs during a recipe transfer to the Active recipe if data saved in that recipe is incorrect (a problem was seen with the number or type of setpoints in the recipe).

Action:
Try reading the recipe into the system again. If the error persists, the recipe is not to be trusted and should be deleted.

327 **RECIPE TRANSFER NOT ALLOWED**

An attempt was made to transfer a recipe in a manner which is not yet implimented. The transfer did not occur. The error could occur if the recipe source and destination setpoints are not included in the data handler configuration file. Some systems have two sets of data handler modfiles, one for use in screen sets WITH the recipe transfer screen (the modfile is titled “Data Handler”) and one for use in screen sets WITHOUT the recipe transfer screen (the modfile is titled “Data Handler-NR”). Care must be taken to insure that the correct modfile is used when screens are linked.

Action:
Valid entries for the source and destination must be made. Consult the screen editor manual for an explanation of the modfiles required for the data handler for use with recipe transfer. Consult a local rep or the factory about a possible software upgrade to the data handler which corrects the need for two datahandler modfiles.

328 **DELETING RECIPE**

The delete recipe function is in process.

Action:
Wait for the delete to finish.

329 **RECIPE DELETE COMPLETE**

The delete is finished.

Action:
No action necessary.

330 **RECIPE DELETE ERROR**

A problem was encountered during the delete of a recipe. Could be caused if the recipe delete function is activated without making an entry for which recipe to delete. Could be caused if the recipe delete setpoint is not included in the data handler configuration file. Some systems have two sets of data handler modfiles, one for use in screen sets WITH the recipe transfer screen (the modfile is titled “Data Handler”) and one for use in screen sets WITHOUT the recipe transfer screen (the modfile is titled “Data Handler-NR”). Care must be taken to insure that the correct modfile is used when screens are linked.

Action:
A valid entry for the recipe delete must be made. Consult the screen editor manual for an explanation of the modfiles required for the data handler for use with recipe transfer. Consult a local rep or the factory about a possible software upgrade to the data handler which corrects the need for two data handler modfiles.

331 **RECIPE ALLOCATION ERROR**

There are not enough unused blocks remaining to save the new recipe or Insta-Set. The recipe transfer did NOT take place.

Action:
Delete some other recipes until there is enough room to save the present recipe. Copy some recipes from internal to cartridge in order to create room in the internal recipe area.

332 **RECIPE ALREADY EXISTS**

An attempt was made to copy a recipe to a destination where an existing recipe is already located. The transfer did not occur.

Action:
A recipe or Insta-Set cannot be copied over another. Delete the existing recipe, then copy to the destination or choose a different destination.

Message No.	*Message (Decimal Numeric Sort)*
333	**RECIPE DOES NOT EXIST** An attempt was made to transfer a recipe which is not present in the system. An attempt was made to delete a recipe which is not present in the system. The transfer or delete did not occur. **Action:** Check the recipe number and try again.
334	**INSTA-SET TRANSFER COMPLETE** The Insta-Set transfer is complete **Action:** No action necessary.
335	**INSTA-SET TRANSFER ERROR** Occurs during transfer to the Active recipe if data saved in that Insta-Set is incorrect (a problem was seen with the number or type of setpoints in the Insta-Set). **Action:** Trying reading the Insta-Set into the system again. If the error persists, the Insta-Set is not to be trusted and should be deleted.
336	**SETPOINTS RESTORED** Appears when the Restore Setpoints command is complete. **Action:** No action necessary.
337	**FILE TRANSFER COMPLETE** A file has been correctly received from a PC. **Action:** No action necessary.
338	**LOCAL ACCESS ERROR** A function which was locked out (by use of local/remote inhibits or enables) was attempted from Operator Panel. **Action:** Consult the RLD to see which CR's must be changed in order to allow the function to be performed.
339	**REMOTE ACCESS ERROR** A function which was locked out (by use of local/remote inhibits or enables) was attempted through communications (by way of the PC port). **Action:** Consult the RLD to see which CR's must be changed in order to allow the function to be performed.

Message No.	*Message (Decimal Numeric Sort)*
340	**DELETE NOT ALLOWED** An attempt was made to delete a recipe while the Data Handler EEPROM was busy with other file writes or reads. **Action:** Wait for the other operation to finish and try again.
341	**TRANSFER NOT ALLOWED** An attempt was made to transfer a recipe while the Data Handler EEPROM was busy with other file writes or reads. **Action:** Wait for the other operation to finish and try again.
342	**STM ERROR** The Sequence or the Temperature module encountered a problem while performing STM (Sequence-to-Module). May have detected a problem with the number of bytes sent. Use the timeslot data screen to determine the board causing the error. **Action:** If the error persists, consult a local rep or the factory about repair of the data handler board or the board which might be causing the error.
343	**MTS ERROR** The Sequence module or the Temperature module encountered a problem while performing MTS (Module-to-Sequence). May have detected a problem with the number of bytes sent. Use the timeslot data screen to determine which board is causing the error. **Action:** If the error persists, consult a local rep or the factory about repair of the data handler board or the board which might be causing the error.
344	**DHTS ERROR** Sequence module encountered an error while performing DHTS (Data Handler-to-Sequence). May have detected a problem with the number of bytes sent. Use the timeslot data screen to determine which board may be causing the error. **Action:** If the error persists, consult a local rep or the factory about repair of the data handler board or the board which might be causing the error.
345	**STDH ERROR** Sequence module encountered an error while performing STDH (Sequence-to-Data Handler). May have detected a problem with the number of bytes sent. Use the timeslot data screen to determine which board may be causing the error. **Action:** If the error persists, consult a local rep or the factory about repair of the data handler board or the board which might be causing the error.

Message No.	*Message (Decimal Numeric Sort)*

346 **OPTION NOT INSTALLED**

Occurs if a screen dump of the displayed screen is requested and the COM setpoint for printer operation has not been set to "2". This will happen if the RS-232 board is still set up for PC Host Communications and the screen dump button on the operator's panel is pressed (or one of the Print CR's is activated in RLD).

Action:
If the error occurs when a screen dump is requested, check the RS-232 COM setpoints. If the error occurs when paging to a line graph screen or SPC screen, consult a local rep or the factory about a possible system upgrade to the SPC and process control options. If the error does occur when paging to a line graph screen or SPC screen, the screen set could be edited to remove those screens.

347 **INSTA-SET DOES NOT EXIST**

An attempt was made to transfer an Insta-Set which is not present in the system. An attempt was made to delete an Insta-Set which is not present in the system. The transfer or delete did not occur.

Action:
Check the Insta-Set number and try again.

348 **INSTA-SET TRANSFER NOT ALLOWED**

An attempt was made to transfer an Insta-Set in a manner which is not yet implimented. The transfer did not occur. The error could occur if the Insta-Set source and destination setpoints are not included in the datahandler configuration file. Some systems have two sets of data handler modfiles, one for use in screen sets WITH the recipe/Insta-Set transfer screen (the modfile is titled "Data Handler") and one for use in screen sets WITHOUT the recipe/Insta-Set transfer screen (the modfile is titled "Data Handler-NR"). Care must be taken to insure that the correct modfile is used when screens are linked.

Action:
Valid entries for the source and destination must be made. Consult the screen editor manual for an explanation of the modfiles required for the data handler for use with recipe/Insta-Set transfer. Consult a local rep or the factory about a possible software upgrade to the data handler which corrects the need for two data handler modfiles.

349 **SETPOINT LIMIT ON SCREEN**

Occurs if one or more of the setpoints on the screen is not within limits.

Action:
1.) Locate the setpoint and make a valid entry. 2.) Page up/down onto the screen. Watch carefully as the screen writes itself on the display. The out of limit setpoint should be the last setpoint to appear on the screen (it will not appear in the normal left-right, top-bottom manner). 3.) If the setpoint is not visible, go to the display configuration screen (in the system screen set). Activate the "Enable Limit Display" ("Enable ID Display" will have to be deactivated). 4.) Return to the screen with the setpoint limit error. 5.) Scroll through each setpoint on the screen. Pause long enough for the high limit (HL) and low limit (LL) to be displayed. 6.) Compare each setpoint with the displayed limits. 7.) Make a valid entry for the setpoint or edit the screen to modify the setpoint limits. 8.) Return to the powerup setpoint limits screen

and make certain the setpoint is within limits. Once all the powerup setpoints are within limits, go to the System Functions screen (Figure 12) and energize “Save Setpoints.” Once the setpoints are saved, energize “Reset System”. Return to the powerup setpoint limits screen and make certain all setpoints are within limits.

350 **LOW BATTERY**

The voltage of the battery on the data handler board is getting low.

Action:
Consult a local rep or the factory about replacing the battery.

351 **SPC DATA NOT LOADED**

A powerup test of the sampled SPC data (stored in the data handler battery-backed RAM) has found that the data is corrupted. The data and the calculated control limits for that channel have been lost. The “lost” channel can be determined on the system monitor screen. On that screen, an “FM” of “0” relates to Channel #1, a “1” to Channel #2, and so on. The error could have been caused by failure of the battery on the data handler board. Could also be caused by a data handler board incorrectly set up.

Action:
Consult a local rep or the factory about replacing the battery or repairing the data handler board.

352 **CONTROL LIMITS NOT CALCULATED**

The SPC software was unable to calculate control limits for an SPC variable. Limits are automatically calculated after 25 sub-groups have been sampled or when “recalc limits” setpoints are entered. The message appears if there is not enough variance in the sampled data to calculate meaningful limits (R-Bar must be greater than “1”). The message will also appear if the operator is attempting to manually recalculate the controllimits over a portion of the chart. The limits will not be calculated until a valid entry is made for both “recalc low limit” and “recalc high limit” setpoints.

Action:
Check to see if there is enough variance in the sampled data.

353 **CONTROL LIMITS CALCULATED**

The SPC software was able to calculate control limits for an SPC variable. Limits are automatically calculated after 25 sub-groups have been sampled or when “recalc limits” setpoints are entered.

Action:
No action necessary.

354 **PRINTER NOT READY**

This message is generated when an RS-232 board that is set up for printer operation is unable to send datato the printer due to inactive status (“-”) of the DSR line. The DSR line is set to active (“*”) when the printer is ready to receive data. The message could appear on powerup if a printer is not connected to the RS-232

board. The message could appear on powerup if a printer is connected to the RS-232 board, but not turned on. (Note that the MACO sends a form feed to the printer on powerup and reset.)

Action:
Check the connections to the printer.

355 **DATA POINT NOT REMOVED**

An SPC data point from one of the charts was not removed as requested because the data point had not yet been sampled.

Action:
Check the data points and make a valid entry.

356 **DATA POINT REMOVED**

An SPC data point from one of the charts was removed as requested.

Action:
No action necessary.

357 **PRINTER BUSY**

The RS-232 printer card is not able to send data to the printer because the DSR line is not set to receive data. This message will be displayed several seconds after the printer is turned off or disconnected from the system.

Action:
Check the connections and wiring to the printer.

358 **UPDATE SEQUENCE MODULE SOFTWARE**

The data handler did a powerup test of the sequence board software and found it was not the current version. It is "recommending" that the software be updated. Old software could possibly run in the system, but the RLD will not scan as fast as it could (40 msec for old vs 20 msec for new).

Action:
Consult a local rep or the factory about a possible upgrade to sequence software.

359 **RLD ACCESS ERROR**

A command initiated through RLD has not been enabled with the remote access CR's. This is similar to message #338 and #339.

Action:
Check the RLD to see which CR's must be changed to allow the function to perform.

360 **PRINTER READY**

The DSR line of the printer is set and ready to receive data from the RS-232 printer card. This message will be displayed at powerup if the printer function is installed

and setup. It will be displayed several seconds after the printer is turned on or connected to a system when the printer function is setup.

Action:
No action necessary.

361 **RTR ERROR**

The Sequence module encountered a problem while performing RTR (Rack-to-Rack). May have detected a problem with the number of bytes sent. Use the timeslot data screen to determine which board might be causing the error.

Action:
If the error persists, consult a local rep or the factory about repair of the data handler board or the board which might be causing the error.

362 **BUSY WITH RTR**

The sequence module is performing Rack-to-Rack communications.

Action:
No action necessary.

363 **(blank)**

364 **BALCO FAILURE (see Msg # 451 also)**

The high density (12-Zone) temperature board was unable to get an acceptable reading from the balcos located on the board. Could be caused if the jumpers in the connector are not plugged into the Temp board. The Temp board with the failure can be determined from the module information screen or the system monitor screen. The failed board will show the process value as 8888 degrees (C or F). This is a “NON-critical” error.

Action:
Check the connection of the jumpers on the connector.

365 **(blank)**

366 **System Powerup**

The system is performing its powerup routine.

Action:
No action necessary.

367 **(blank)**
368 **(blank)**
369 **(blank)**

370 **COMM TIMEOUT ERROR**

This message appears when the operator panel is unable to communicate with the control system. The message will appear briefly on powerup or system reset. Could also appear if there is a wiring problem between the operator panel and the controller. Could also indicate a failure of the data handler board.

Action:
No action necessary if the message appears on powerup or system reset. Check the wiring.

371 **(blank)**
372 **(blank)**
373 **(blank)**
374 **(blank)**
375 **(blank)**
376 **(blank)**
377 **(blank)**
378 **(blank)**
379 **(blank)**
380 **(blank)**
381 **(blank)**
382 **(blank)**
383 **(blank)**
384 **(blank)**

Action:
Reserved and unused. If one appears, it is an indication that the message file needs to be updated. Use the screen editor to update and download the file.

385 **FILE CHECKSUM**

The file was downloaded to the system but a checksum error was detected. The header to the file has been destroyed so that the file cannot be used. This message could also be generated if the hydraulic card sees that the analog I/O card has gone through reset. This would be the case if the error is displayed on the module information screen for the analog I/O board. The system might also display “SUB FUNCTION LOST” (#461) error code at the same time.

Action:
If the error occurred during a download, try downloading again. If the error repeats several times, then the file may be “wrong”. Relink the files and try again. If the MACO is connected to a host PC, check the host computer’s driver software to see that it is correct. Early versions of analog I/O software may mistakenly cause this message to appear. The correct message should be “BOARD WENT THROUGH RESET”. This error was corrected in analog I/O software Version 2.0A. Consult a local rep or the factory about a possible update to the analog I/O software.

386 **FILE SUB BLOCK ERROR**

Data Handler has determined that the blocks or sub-blocks are not coming in sequential order.

Action:
Try downloading again.

Message No.	*Message (Decimal Numeric Sort)*
387	**FILE PORT ERROR** The data handler was unable to pass some data to or from the RS-232 board during a file transfer. Either the board would not respond to a request or it would not accept data passed to it. **Action:** Perform the "Reset RS-232" function on the communications setup screen. Check to see that the setpoints for the RS-232 boards are correctly set.
388	**FILE EEPROM ERROR** An EEPROM write failure was encountered while trying to write the received file into EEPROM. If the error is encountered during file transfer, the file with the problem may still be displayed at the bottom of the CRT. Occurs if downloading screens or RLD to any secondary controller when the primary controller has its address set to "0." Power down the system, change the address to "1" (Data Handler board) and download again. **Action:** Consult a local rep or the factory about possible repair of the board encountering the problem.
389	**FILE SIZE ERROR** A file being written to the Data Handler was larger than the space allocated for its storage. The file header has been destroyed so that the file cannot be used. Could also appear because of a screen dump. The RS-232 board checks the number of bytes received and printed against the file size listed at the beginning of the dump. **Action:** If the error occurred during a file transfer into the system, check the file size using the "dir" command on the PC. Compare the size shown on the PC to the maximum allowable size shown on the "System File Sizes Screen". If the PC file is too big, edit the file so as to reduce its size or contact a local rep or the factory about a possible upgrade to system software that would allow more room for the file. If the error occurred during a screen dump to the printer, clear the printer queue by activating the "Clear Print" command on the RS-232 Comm. screen and try again.
390	**FILE RLD ERROR** The Sequence module checks RLD after a download into the Sequence module is completed. The Sequence module may have detected an error in writing the data to its own EEPROM (after the transfer was complete). Sequence module may not have responded when told to transfer the sub-block of data. May have been an error during the sub-block write to the Sequence module. **Action:** Verify that there is a functioning sequence board in the system (check the module information screen).
391	**FILE TYPE ERROR** An attempt was made to send a file that is not supported to the system. Can occur if SPC label files, line graph descriptor files, or math function files are sent to a system that does not support them.

Action:
Consult a local rep or the factory about possible upgrade to system software that does support these functions.

392 **FILE FUNCTION TYPE ERROR**

An attempt was made to transfer a file from a PC or cartridge into a system where there is no board to receive that particular file. An example would be to transfer the RLD file from a PC to the system when the sequence board is missing or plugged into the wrong slot.

Action:
Make certain the board is in the correct slot and properly seated.

393 **FILE TIMEOUT ERROR**

The Data Handler timed out (2 seconds) during a file transfer or while attempting to start a file transfer. Could be caused when transferring screens from a computer to the operator panel and the operator panel is not connected to the controller. Could be caused when transferring from a computer to a cartridge and no cartridge is present. Could also be caused when screens are transferred from computer to cartridge and the operator station software does not support one of the files sent. An example would be SPC, line graph descriptor files, or math function files. The file being transferred will still be displayed at the bottom of the CRT. The message will appear on the computer if the operator panel does not have enough EEPROM storage space to contain both the system and user screens. The operator panel will stop requesting file transfers. The operator panel will remain on its file transfer screen. Error will occur if trying to download screens while the Line Graph screen, or Parison Profile screen, or one of the SPC graph screens is displayed on the operator station. If so, change to any other screen and try again.

Action:
Check the transfer selection and try again. Perform the “Reset RS-232” function and try again. Check for software incompatibilities with the operator panel. Compare the size of the system and user screen sets with the amount of screen memory installed in the operator station. Reduce the size of the screen files until they fit the available memory or contact a local rep or the fatory about expanding the operator station memory.

394 **FILE TIMESLOT RUNNING ERROR**

Most files cannot be downloaded into the system while Timeslot is running.

Action:
Screens or RLD cannot be transferred to the system with Timeslot running. Turn off Timeslot and try again.

395 **FILE NOT FOUND ERROR**

A request was received to read a file from the system, but the file is not in the system.

Action:
Check the file header screen to see if the file is loaded in the system. Check that the board which contains the file to be read is present and operational.

Message No.	*Message (Decimal Numeric Sort)*

396 **FILE FLATPANEL COMM ERROR**

The Flatpanel (Operator Panel) detected several errors in a row while trying to perform a screen transfer. Could be caused by the Flatpanel sending a File Transfer Error to the Data Handler. Could mean the Data Handler received an error during transmission of a sub-block to the Flatpanel.

Action:
Try performing the file transfer again. Power down/Power up the system and try performing the file transfer again.

397 **FILE DATA HANDLER COMM ERROR**

The RS-232 board encountered an error while trying to communicate with the Data Handler. The RS-232 board has a 4 second timeout while waiting for a reply from the Data Handler. This error could possibly mean the COM slice setpoint for that communication port has not been set up for PC operation. Could mean the Comm motherboard is plugged into the control rack where there is no connection to the data handler board. Could mean that one of the new COM/CTL motherboards is used in a system that does not support RS-232 communications through the CTL bus. Could mean that one of the older COM motherboards is plugged into a system that only supports communications through the CTL bus. Could be caused downloading large screen files into the system using a fast computer (early versions of RS-232 software had some difficulties if the computer got too far ahead of the control in the number of blocks sent). The data handler will only communicate with RS-232 boards that it finds on powerup. Check the module information screen to see that all RS-232 boards present appear there. The error could mean that a board has failed and will not respond to data requests at powerup. Could mean a board that was properly installed has now vibrated loose from the backplane.

Action:
Check the COM setpoints on the serial communications screen. Check to see that the RS-232 cable from the computer is properly connected to the RS-232 board used for file transfers. Check the location of the COM motherboard. Check that all boards in the system are properly seated. Always operate the system with the cover in place! If downloading large screen files using a fast computer, slow down the process by using 4800 baud or copy the screen files to a floppy disk and transfer from there. Consult a local rep or the factory about control rack to COM motherboard compatibilities or possible replacement of the non-responsive board.

398 **FILE PC COMM ERROR**

The data handler attempted to send a packet of information to the computer and the computer was not responding (there was no DTR signal present).

Action:
Verify the connection between the computer and the RS-232 board. If properly connected, check the operation of the computer's driver software.

399 **FILE TRANSFER NOT ALLOWED**

The sytem didn't allow the transfer of that file type. Check to see if the system software supports that file type. Some early versions of RS-232 software would display this error instead of #400 (below). Occurs if an attempt is made to read screens or cartridges saved with V03.02 or later firmware into an operator station which has V03.01 or earlier firmware installed. Transfer will not start. No files will be read into the system.

Action:
Update RS-232 software to Version 02.02 or later. Update operator station firmware or resave files on V03.01 operator station.

400 **FILE PROTOCOL ERROR**

The RS-232 board had a problem following the protocol with the file transfer or the host computer. The sequence of expected commands was not received correctly. The RS-232 board will go back to the slave ready inquiry mode. The DLE SOH DLE STX sequence must be run again. This error can occur if a file transfer of screens to the system is aborted during transmission of a file.

Action:
If performing a file transfer, let the transfer terminate normally. If the MACO is connected to a host computer, check the computer's driver software.

401 **(blank)**
402 **(blank)**
403 **(blank)**
404 **(blank)**
405 **(blank)**
406 **(blank)**
407 **(blank)**
408 **(blank)**
409 **(blank)**
410 **(blank)**
411 **(blank)**
412 **(blank)**
413 **(blank)**
414 **(blank)**
415 **(blank)**
416 **(blank)**

Action:
These messages are reserved and unused at present. If one appears, it is an indication that the message file needs to be updated.

417 **INSERT NEXT CARTRIDGE**

This message is displayed when files are being transferred from the system to a cartridge and there is more data than can be contained on the cartridge. Could also appear while files are being transferred from a cartridge to the system and all the data has been read from that particular cartridge.

Action:
Insert the next cartridge and activate the "continue" function.

418 **CARTRIDGE NOT INSTALLED**

This message might be displayed when transferring data to and from a cartridge and the cartridge has not been plugged into the operator panel.

Action:
Check that the cartridge is properly inserted and activate the "continue" function.

Message No.	*Message (Decimal Numeric Sort)*
419	**(blank)**
420	**(blank)**
421	**(blank)**
422	**(blank)**
423	**(blank)**
424	**(blank)**
425	**(blank)**
426	**(blank)**
427	**(blank)**
428	**(blank)**
429	**(blank)**
430	**(blank)**
431	**(blank)**
432	**(blank)**
433	**(blank)**
434	**(blank)**
435	**(blank)**
436	**(blank)**
437	**(blank)**
438	**(blank)**
439	**(blank)**
440	**(blank)**
441	**(blank)**
442	**(blank)**
443	**(blank)**
444	**(blank)**
445	**(blank)**
446	**(blank)**
447	**(blank)**

Action:
These messages are reserved and unused at present. If one appears, it is an indication that the message file needs to be updated.

448 **EPROM CHECKSUM FAILURE**

A failure was detected in one of the program memory chips of the system. The board with the failure can be determined from “FT” and “FM” on the system monitor screen. Can also be determined from the module information screen. This is a “critical” error - Timeslot will go down.

Action:
Contact a local rep or the factory about repair or replacement of the board.

449 **RAM CHECKSUM FAILURE**

Generated either by sequence or hydraulics when either detects that the content of their RAM has changed when it should not have. Could indicate a RAM failure on one of those boards. The board with the failure will appear on the module information screen. This error can be generated by the sequence board if there are no timer or counter setpoints used in the screens. This condition will cause the error to occur on powerup or system reset. Check the module information screen to see if the sequence board is generating the error. The error will repeat if a second sequence board is present. Could also be caused by a hardware failure of the sequence /hydraulic board. This is a “critical” error - Timeslot will go down.

Action:
If there are no timers or setpoints used, add some to the screens. Consult a local rep or the factory about repair orreplacement of the sequence/hydraulic board or about upgrading software on the sequence/hydraulic board.

450 **BOARD NOT CALIBRATED**

Temperature Board has not been calibrated. Verify which board is causing the error by checking the module information screen. This is a “critical” error - Timeslot will go down.

Action:
Contact a local rep or the factory about repairing or replacing the board.

451 **BALCO FAILURE (see Msg # 364 also)**

The standard density (6-Zone) temperature board was unable to get an acceptable reading from the balcos located on its connector block. Could be caused if the balcos are not properly connected or the connector is not plugged into the temperature board. Could be caused if an incorrect value of balco has been used. The Temp boardwith the failure can be determined from the module information screen or the system monitor screen. The failed board will show the process value as 8888 degrees (C or F). This is a “critical” error - Timeslot will go down.

Action:
Check balco connections. Refer to the controller manual for balco part numbers.

452 **BOARD WENT THROUGH RESET**

A board went through reset (and the data handler was not performing the system powerup procedure). The reset could be due to noise or could be caused by inserting a board into an operating system. This is a “critical” error - Timeslot will go down.

Action:
Do not remove or install boards while power is applied to the system.

453 **CRITICAL SP FAULT**

A setpoint required in order for Timeslot to run is incorrectly set. This is a “critical” error - Timeslot will go down.

Action:
Edit the screens to add the setpoint to a screen in the system and make a valid entry for the setpoint.

454 **RLD CHECKSUM FAILURE**

The Sequence Board has determined there is a problem with the RLD program in its EEPROM. This is a “critical” error - Timeslot will go down.

Action:
If the failure occurred after the machine was running, contact a local rep or the factory about repair or replacement of the sequence/hydraulic board. Download the RLD to the system again.

Message No.	*Message (Decimal Numeric Sort)*
455	**RLD WRITE FAILURE** The sequence board was unable to correctly write the RLD into its EEPROM. This is a “critical” error - Timeslot will go down. **Action:** Contact a local rep or the factory about repair or replacement of the sequence/ hydraulic board.
456	**HARDWARE SETUP CHANGED** During a periodic test, the sequence board has determined that an I/O board has been added or removed from the system. This is a “critical” error - Timeslot will go down. **Action:** Do not remove or install boards while power is applied to the system.
457	**EXTERNAL RAM FAILURE** A module has detected a failure of its RAM. Use the module information screen or system monitor screen to determine which board caused the error. This is a “critical” error - Timeslot will go down. **Action:** Contact a local rep or the factory about repair or replacement of the board that caused the error.
458	**SEQ/HYDR DPR FAILURE** A problem has been encountered in passing messages between the Sequence and Hydraulic functions. The board that detected the error will be shown on the module information screen or the system monitor screen. This is a “critical” error - Timeslot will go down. **Action:** Contact a local rep or the factory about repair or replacement of the sequence/ hydraulic board.
459	**SEQ/HYDR CONNECT FAILURE** This message is displayed if the hydraulic CPU is unable to access the dual port RAM it shares with the sequence CPU. The error could be generated during powerup verification of large RLD files in the sequence board (greater than 17K bytes). The hydraulic CPU would be unable to start up because the sequence CPU was busy. This is a “critical” error - Timeslot will go down. **Action:** If the error occurred during powerup, contact a local rep or the factory about a possible software update to the sequence/hydraulic board. If the error occurred after timeslot was started, contact a local rep or the factory about repair or replacement of the sequence/hydraulic board.

Message No.	*Message (Decimal Numeric Sort)*
460	**DATA HANDLER INTERRUPT ERROR** The Hydraulic module has detected too many communication interrrupts from the Data Handler. This is a “critical” error - Timeslot will go down. **Action:** Contact a local rep or the factory about repair or replacement of the sequence/ hydraulic board.
461	**SUB FUNCTION LOST** The hydraulics board is no longer able to communicate with the analog I/O board. Could be because there is no analog I/O in the system. Could be because the board is in the wrong slot. Could be because the board has been removed or has vibrated loose from the backplane. Could also be caused by a failure of the hydraulic board or analog I/O board. Could also occur if the analog I/O board lost its calibration data. This is a “critical” error - Timeslot will go down. **Action:** Verify that the hydraulics board and the analog I/O board are located in the proper slots by checking the module information screen. Check to see that all boards in the system are properly seated. Always operate the system with the cover in place!
462	**INCOMPATIBLE RLD FILE** An old version of the RLD compiler was used with new system software. The “V02” (4000/5050) RLD editor cannot be used with a “V03” (4500/5500/6500) system. Timeslot will go down. **Action:** Recompile using the new RLD compiler and download the RLD/Timeslot files. Contact a local rep or the factory about obtaining an updated RLD editor.
463	**(blank)**
464	**(blank)**
465	**(blank)**
466	**(blank)**
467	**(blank)**
468	**(blank)**
469	**(blank)**
470	**(blank)**
471	**(blank)**
472	**(blank)**
473	**(blank)**
474	**(blank)**
475	**(blank)**

Message No.	*Message (Decimal Numeric Sort)*
476	**(blank)**
477	**(blank)**
478	**(blank)**
479	**(blank)**
480	**(blank)**
481	**(blank)**
482	**(blank)**
483	**(blank)**
484	**(blank)**
485	**(blank)**
486	**(blank)**
487	**(blank)**
488	**(blank)**
489	**(blank)**
490	**(blank)**
491	**(blank)**
492	**(blank)**
493	**(blank)**
494	**(blank)**
495	**(blank)**
496	**(blank)**

Action:
These messages are reserved and unused at present. If one appears, it is an indication that the message file needs to be updated. Note that these positions are reserved for “critical” messages.

497 **CHECKSUM ERROR**

An invalid transmission was received from the operator station by the controller. One or more of the data bytes was corrupted. The file was loaded into the system, but a checksum error was detected. The file header has been destroyed so that the file cannot be used.

Action:
Check shielding and grounding of the operator panel and the controller (see Wiring & Grounding).

498 **SHARED RAM TIMEOUT**

A transmission was received from the data handler, but the data handler did not poll the display handler within a period of time.

Action:
Check shielding and grounding of the operator panel and the controller (see Wiring & Grounding). Check communications between operators panel and data handler. If the error occurs occasionally, it can be ignored. If it occurs frequently, contact a local rep or the factory about repair or replacement of the sequence board.

499 **SHARED RAM REPLY TIMEOUT**

A transmission was received from the operator panel and passed to the data handler, but the data handler did not reply within a period of time.

Message No.	*Message (Decimal Numeric Sort)*

Action:
Check shielding and grounding of the operator panel and the controller (see Wiring & Grounding). Check communications between operators panel and data handler. If the error occurs occasionally, it can be ignored. If it occurs frequently, contact a local rep or the factory about repair or replacement of the sequence board.

500 **SERIAL OVERRUN**

An invalid transmission from the operator panel was received by the controller. One or more of the transmitted data bytes has been lost.

Action:
Check shielding and grounding of the operator panel and the controller (see Wiring & Grounding).

501 **BYTE COUNT ERROR**

Invalid transmission was received from the operator station by the controller. One or more data bytes was lost.

Action:
Check shielding and grounding of the operator panel and the controller (see Wiring & Grounding).

502 **BYTE TO BYTE TIMEOUT**

Invalid transmission was received from the operator station by the controller. One or more data bytes was lost.

Action:
Check shielding and grounding of the operator panel and the controller (see Wiring & Grounding).

503 **(blank)**
504 **(blank)**
505 **(blank)**
506 **(blank)**
507 **(blank)**
508 **(blank)**
509 **(blank)**
510 **(blank)**
510 **(blank)**

Action:
These messages are reserved and unused at present. If one appears, it is an indication that the message file needs to be updated.

Action:
Do not remove or replace boards while power is applied to the system. Contact a local rep or the factory about possible repair or replacement of the sequence/ hydraulic board or the analog I/O board.

512 **(blank)**

Action:
No action necessary.

513 **ASB RUNNING**
Displayed if the system was able to start Timeslot on powerup.

Action:
No action necessary.

514 **ASB IN IDLE**
Displayed if the system was unable to start Timeslot on powerup or if an error was seen that caused Timeslot to go down. Also appears if the stop timeslot command is activated.

Action:
If the message occurred when it was not expected, go to the system monitor screen to check what error caused timeslot to not start or go down.

515 **READING SETPOINTS**
This message appears when the restore setpoints command is activated.

Action:
Wait until setpoint transfer is complete.

516 **SAVING SETPOINTS**
Displayed when "setpoint save" has been activated (but is not yet complete).

Action:
Wait until setpoint transfer is complete.

517 **SETPOINTS SAVED**
Displayed when the setpoint save function has been completed.

Action:
No action necessary.

518 **HARDWARE SETUP SAVED**
Displayed when the hardware setup save function has been completed.

Action:
No action necessary.

Message No.	*Message (Decimal Numeric Sort)*
519	**READING SCREENS FROM SYSTEM** This message is displayed during a PC to cartridge transfer of user screens (for the second, third, fourth.... cartridge) of a multiple cartridge screen set. **Action:** Wait until the transfer is complete.
520	**WRITING SCREENS TO SYSTEM** Displayed during file transfer. **Action:** No action necessary.
521	**READING SYSTEM SCREENS FROM SYSTEM** Displayed during file transfer. **Action:** No action necessary.
522	**WRITING SYSTEM SCREENS TO SYSTEM** Displayed during file transfer. **Action:** No action necessary.
523	**READING CONFIGURATION DATA** Displayed during file transfer. **Action:** No action necessary.
524	**WRITING CONFIGURATION DATA** Displayed during file transfer. **Action:** No action necessary.
525	**READING SYSTEM CONFIGURATION DATA** Displayed during file transfer. **Action:** No action necessary.
526	**WRITING SYSTEM CONFIGURATION DATA** Displayed during file transfer. **Action:** No action necessary.

Message No.	*Message (Decimal Numeric Sort)*
527	**READING MODFILE DATA FROM SYSTEM** Displayed during file transfer. **Action:** No action necessary.
528	**WRITING MODFILE DATA TO SYSTEM** Displayed during file transfer. **Action:** No action necessary.
529	**READING TIMESLOT DATA FROM SYSTEM** Displayed during file transfer. **Action:** No action necessary.
530	**WRITING TIMESLOT DATA TO SYSTEM** Displayed during file transfer. **Action:** No action necessary.
531	**READING RLD FROM SYSTEM** Displayed during file transfer. **Action:** No action necessary.
532	**WRITING RLD TO SYSTEM** Displayed during file transfer. **Action:** No action necessary.
533	**READING SYSTEM MODFILE DATA** Displayed during file transfer. **Action:** No action necessary.
534	**WRITING SYSTEM MODFILE DATA** Displayed during file transfer. **Action:** No action necessary.

Message No.	*Message (Decimal Numeric Sort)*
535	**READING RECIPE FROM SYSTEM** Displayed during file transfer. **Action:** No action necessary.
536	**WRITING RECIPE TO SYSTEM** Displayed during file transfer. **Action:** No action necessary.
537	**READING INSTA-SET FROM SYSTEM** Displayed during file transfer. **Action:** No action necessary.
538	**WRITING INSTA-SET TO SYSTEM** Displayed during file transfer. **Action:** No action necessary.
539	**READING SPC LABEL FILE FROM SYSTEM** Displayed during file transfer. **Action:** No action necessary.
540	**WRITING SPC LABEL FILE TO SYSTEM** Displayed during file transfer. **Action:** No action necessary.
541	**READING LINE GRAPH FILE** Displayed during file transfer. **Action:** No action necessary.
542	**WRITING LINE GRAPH FILE** Displayed during file transfer. **Action:** No action necessary.

Message No.	*Message (Decimal Numeric Sort)*
543	**READING MATH FUNCTION FILE** Displayed during file transfer. **Action:** No action necessary.
544	**WRITING MATH FUNCTION FILE** Displayed during file transfer. **Action:** No action necessary.
545	**READING PARISON FILE** Displayed during file transfer. **Action:** No action necessary.
546	**WRITING PARISON FILE** Displayed during file transfer. **Action:** No action necessary.
547	**READING RESERVED FILE #2** Displayed during file transfer. **Action:** If a reserved message is displayed the message file should be updated.
548	**WRITING RESERVED FILE #2** Displayed during file transfer. **Action:** If a reserved message is displayed the message file should be updated.
549	**READING RESERVED FILE #1** Displayed during file transfer. **Action:** If a reserved message is displayed the message file should be updated.
550	**WRITING RESERVED FILE #1** Displayed during file transfer. **Action:** If a reserved message is displayed the message file should be updated.

Message No.	*Message (Decimal Numeric Sort)*
551	**(blank)**
552	**SEQUENCE**
553	**TEMPERATURE**
554	**HYDRAULIC**
555	**UNUSED SLOT**
556	**DATA HANDLER**
557	**PC PORT**
558	**PRINTER PORT**
559	**RS-232 PORT**
560	**RS-485 SPI**
561	**AC INPUT**
562	**AC OUTPUT**
563	**DC INPUT**
564	**DC OUTPUT**
565	**PARISON**
566	**2 CHANNEL ANALOG IN**
567	**RS-485**
568	**(blank)**
569	**EZ-PRO**
570	**INJECTION IMPACT II**
571	**2 CHANNEL ENCODER**
572	**8 INPUT/OUTPUT**
573	**8 INPUT**
574	**32 INPUT/OUTPUT**
575	**UNKNOWN**

Action:
These messages are used on the module information screen (system screen set) and are used to identify which boards are plugged into the system. In the standard screen set, they are programmed as Data Handler Module Displayable Messages and are assigned to the “Module Type #X” Descriptors.

576	**(blank)**
577	**SUNDAY**
578	**MONDAY**
579	**TUESDAY**
580	**WEDNESDAY**
581	**THURSDAY**
582	**FRIDAY**
583	**SATURDAY**
584	**WEEKDAY**
585	**WEEKEND**

Action:
These messages are used on the Clock Setup Screen and the Time of day function. In the standard screen set they are programmed as Data Handler Module Displayable Messages assigned to the “Set RTC Weekday” Descriptor and to the “Time of day #X, day” Descriptor.

Message No.	*Message (Decimal Numeric Sort)*
586	**JANUARY**
587	**FEBRUARY**
588	**MARCH**
589	**APRIL**
590	**MAY**
591	**JUNE**
592	**JULY**
593	**AUGUST**
594	**SEPTEMBER**
595	**OCTOBER**
596	**NOVEMBER**
597	**DECEMBER**

Action:
These messages are used on the Clock Setup Screen. In the standard screen set they are programmed as Data Handler Module Displayable Messages assigned to the “Set RTC Month” Descriptor.

598	**DISABLED**
599	**SECONDS**
600	**MINUTES**
601	**HOURS**
602	**DAYS**

Action:
These messages are used on the Time of day function. In the standard screen set they are programmed asData Handler Module Displayable Messages assigned to the “ Time of day #X, unit” Descriptor.

603	**Disabled**
604	**Ram Vel SP**
605	**Ram PR SP**
606	**Ram PR**
607	**Clamp PR**
608	**Ram Vel**
609	**Ram Pos**
610	**Clamp Pos**
611	**Ejector Pos**
612	**Tach RPM**
613	**PID Output**
614	**Analog Out 1**
615	**Analog Out 2**
616	**Analog Out 3**
617	**Analog Out 4**
618	**Screw Out**
619	**(blank)**
620	**(blank)**
621	**(blank)**

Action:
These messages are used with line graphs to identify which parameters are being displayed. In the standard screen set they are programmed as Hydraulic Module Displayable Messages assigned to “Line Graph Channel Select X” Descriptors.

Message No.	*Message (Decimal Numeric Sort)*
622	**(blank)**
623	**ips**
624	**psi**
625	**psi**
626	**psi**
627	**ips**
628	**in**
629	**in**
630	**in**
631	**rpm**
632	**%**
633	**(blank)**
634	**(blank)**
635	**(blank)**
636	**(blank)**
637	**%**
638	**(blank)**
639	**(blank)**
640	**(blank)**

Action:
These messages are used with line graphs to identify the units being displayed. In the standard screens they are programmed as Hydraulic Module Displayable Messages assigned to “Line Graph Channel Select X” Descriptors.

641	**(blank)**
642	**Printer**
643	**Reserved 2**
644	**System Modfile**
645	**RLD**
646	**System Screen**
647	**User Screen**
648	**User Config**
649	**Recipe**
650	**Reserved 9**
651	**User SPC Labels**
652	**Timeslot Data**
653	**User Modfile**
654	**Reserved 13**
655	**Reserved 14**
656	**System Config**
657	**Reserved 16**
658	**Reserved 17**
659	**Reserved 18**
660	**Reserved 19**
661	**Insta-Set**
662	**Reserved 21**
663	**Reserved 22**
664	**Reserved 23**
665	**Reserved 24**

Action:
These messages are used on one of the cartridge transfer screens in the system screen set. They are used to identify the type of file saved on a cartridge. In the standard screens they are programmed as Display Processor Module Displayable messages assigned to the “Dir File Type, Line X” Descriptors.

Message No.	*Message (Decimal Numeric Sort)*
666	**HEARTBEAT FAILURE** Either the Data Hanlder Heartbeat or PLC Heartbeat has failed. **Action:** Read the (extensive) explanation of this function in the Data Handler Setup section (1660-IN-020-3-xx) of the manual. Refer specifically to the System_Health_Stpt (System Health Setpoint), ASB_Fault_Behavior setpoint, and the Heartbeat Monitor example.
667	**FORCED IDLE** The system has been forced into the idle mode. **Action:** This message should not appear (the "forced idle" function was added as an engineering diagnostic).
668	**CRITICAL ERROR** A Critical Error has occurred (and the system has been placed in Forced Idle). **Action:** This message should not appear (the "forced idle" function was added as an engineering diagnostic).
669	**WRITING CONFIGURATION TO CARTRIDGE** A file transfer is occurring. **Action:** Wait until the transfer is complete.
670	**WRITING SYSTEM CONFIGURATION TO CARTRIDGE** A file transfer is occurring. **Action:** Wait until the transfer is complete.
671	**WRITING MODFILE DATA TO CARTRIDGE** A file transfer is occurring. **Action:** Wait until the transfer is complete.
672	**WRITING TIMESLOT DATA TO CARTRIDGE** A file transfer is occurring. **Action:** Wait until the transfer is complete.

Message No.	*Message (Decimal Numeric Sort)*
673	**WRITING RLD TO CARTRIDGE** A file transfer is occurring. **Action:** Wait until the transfer is complete.
674	**WRITING SYSTEM MODFILE DATA TO CARTRIDGE** A file transfer is occurring. **Action:** Wait until the transfer is complete.
675	**WRITING RECIPE TO CARTRIDGE** A file transfer is occurring. **Action:** Wait until the transfer is complete.
676	**WRITING INSTA-SET TO CARTRIDGE** A file transfer is occurring. **Action:** Wait until the transfer is complete.
677	**WRITING SPC LABEL FILE TO CARTRIDGE** A file transfer is occurring. **Action:** Wait until the transfer is complete.
678	**WRITING LINE GRAPH FILE TO CARTRIDGE** A file transfer is occurring. **Action:** Wait until the transfer is complete.
679	**WRITING MATH FUNCTION FILE TO CARTRIDGE** A file transfer is occurring. **Action:**Wait until the transfer is complete.
680	**WRITING PARISON FILE TO CARTRIDGE** A file transfer is occurring. **Action:** Wait until the transfer is complete.

Message No.	*Message (Decimal Numeric Sort)*
681	**WRITING RESERVED FILE #2 TO CARTRIDGE** A file transfer is occurring. **Action:** Wait until the transfer is complete.
682	**WRITING RESERVED FILE #1 TO CARTRIDGE** A file transfer is occurring. **Action:** Wait until the transfer is complete.

If one of these errors is encountered during downloading of files to the system, it is probably due to problems generated by the screen editor and the linking process. If one of these errors occurs on a system which has been functioning and has NOT recently had files downloaded, it is probably due to a failure of one of the storage devices in the operator panel. Contact a local rep or the factory about possible repair of the operator panel.

File Transfer Not Allowed
Could be caused by attempting to transfer screens or RLD into a non-primary controller.

Action:
Check the address on the Data Handler card. If downloading to a multi-rack system, the primary control rack must be used.

USER SCREEN HEADER INCORRECT
Displayed if the operator panel is unable to find the user screen file. Typically generated after system screens have been loaded into the system (user screens are generally destroyed when system screens are loaded). System screens are to be loaded first and then followed by user screens.

This message can be generated if there is not enough screen storage capacity in the operator panel to include both system and user screens.

Action:
Properly link and download screens to the system. If the error is generated due to not having enough storage space, then edit the screens to reduce the amount of space required or contact a local rep or the factory for possible memory expansion of the operator panel.

USER SCREEN SET SIZE ERROR
Displayed if the operator panel determines that the user screen file loaded into it does not have the correct file length. The test for file length is performed after the test for the user header.

Action:
Properly link and download screens to the system. Note that the OptiGrafix screen editor may not run from a network at this time. The screens must be copied to a local disk and edited and linked there.

USER SCREEN SET CHECKSUM ERROR
Displayed if the operator panel determines that the user screen file loaded into it does not have the correct checksum. The test for the checksum is performed after the tests for the user header and user file size.

Action:
Properly link and download screens to the system. Note that the OptiGrafix screen editor may not run from a network at this time. The screens must be copied to a local disk and edited and linked there.

SYSTEM SCREEN HEADER INCORRECT
Displayed if the operator panel is unable to find the header that denotes the beginning of the system screen file.

Action:
Properly link and download screens to the system.

SYSTEM SCREEN SET SIZE ERROR
Displayed if the operator panel determines that the system screen file loaded into it does not have the correct file length. The test for file length is performed after the test for the system header.

Action:
Properly link and download screens to the system. Note that the OptiGrafix screen editor may not run from a network at this time. The screens must be copied to a local disk and edited and linked there.

SYSTEM SCREEN SET CHECKSUM ERROR
Displayed if the operator panel determines that the system screen file loaded into it does not have the correct checksum. The test for the checksum is performed after the tests for the system header and system file size.

Action:
Properly link and download screens to the system. Note that the OptiGrafix screen editor may not run from a network at this time. The screens must be copied to a local disk and edited and linked there.

SYSTEM MESSAGE NUMBER ERROR
Displayed if a system message file has not been loaded into the system (the system message file is contained in the system screen set). This message can be generated if screens have not been loaded into the operator panel and the controller generates an error to be displayed. Can also occur if a system message file was not included in the screen set when the screen set was linked. Could also occur if the screen set was lost.

Action:
The messages will have to be added to both the user screen set and the system screen set. Properly link and download screens to the system. Allow the screen transfer to complete normally. Do not abort the transfer while it is in process.

The PC encountered no errors in the serial communication.
No errors were detected during the transfer. This message should not appear. If it is displayed, then the file transfer program itself may be corrupted.

Action:
Try a different transfer program or contact a local rep or the factory about obtaining a new copy of the transfer program.

There is no ASYNC board present in the personal computer.
The transfer program has determined that there is no COM port set up in the PC.

Action:
Determine if the RS-232 port in the PC has been configured and is operating.

The Data Set Ready signal is not present on the ASYNC port.
The PC timed out waiting for a handshake from the system. The timeout delay may have been incorrectly set ot the MCPATH.DAT file may be incorrect. Make a valid selection for the timeout delay. The MACO system might not be connected to the PC. There might be a problem with the RS-232 cable.

Action:
Verify the connection between the PC and the MACO RS-232 board. Verify that the baud rate settingsfor the PC and the MACO are the same.

Time-out error in sending EOT.
The PC timed out waiting to receive an end of transmission byte from the MACO. This timeout occurred after data transmission started.

Action:
Do not change the RS-232 setpoints while a file transfer is in progress.

Time-out error in sending ENQ.
The PC was attempting to transfer a file to the MACO, but has timed out waiting for a reply to an ENQ. The MACO system might not be connected to the PC. There might be a problem with the RS-232 cable.

Action:
Verify the connection between the PC and the MACO RS-232 board. Verify that the baud rate settingsfor the PC and the MACO are the same.

Incorrect response from MACO to an ENQ request.
The PC timed out waiting for the initial response from the system or there was an invalid response from the system at the beginning of the transmission. The MACO system might not be connected to the PC or the PC might be running in Windows. There might be a problem with the RS-232 cable. Could be caused if the RS-232 cable is connected to the wrong COM port of the PC. Typically the cable would be connected to COM1. More recent versions of the transfer program allow selection of the COM port to be used. Could be caused if the COM port selection at the PC is not correct. Could be caused by the MACO RS-232 port being set up for printer operation (a setpoint of “2”) when it should be set up for file transfer (a setpoint of “1”). Could be caused if the baud rate of the MACO RS-232 port does not match the baud rate of the transfer program. Typically the baud rate is set to 9600, but more recent versions of the transfer program allow for selection of the baud rate.

Action:
Verify the connection between the PC and the MACO RS-232 board. Verify that the baud rate settings for the PC, the transfer program, and the MACO RS-232 board all match. Exit Windows and transfer from DOS. Contact a local rep or the factory about obtaining a more recent version of the transfer program.

Time-out error on data transmission.
The PC timed out waiting for a data byte to be transmitted. The timeout occurred after the transmission of data had started.

Action:
Do not change the RS-232 setpoints while a file transfer is in progress.

Unable to open timeslot file.
The timeslot data file was not found on the PC.

Action:
Set the default directory to the subdirectory which contains the files to be transferred. If transferring RLD and timeslot data from the RLD4000 RLD Editor, check that the “SETPATH” program was properly executed.

Unable to open rld file.
The sequence RLD file was not found on the PC.

Action:
Set the default directory to the subdirectory which contains the files to be transferred. If transferring RLD and timeslot data from the RLD4000 RLD Editor, check that the “SETPATH” program was properly executed.

Unable to open screen file.
The user or system screen file was not found on the PC.

Action:
Set the default directory to the subdirectory which contains the files to be transferred.

Unable to open configuration file.
The user or system configuration file was not found on the PC.

Action:
Set the default directory to the subdirectory which contains the files to be transferred.

Unable to open version number file.
The user or system modfile version file was not found on the PC.

Action:
Set the default directory to the subdirectory which contains the files to be transferred.

Unable to open SPC label file.
The SPC labels file was not found on the PC.

Action:
Set the default directory to the subdirectory which contains the files to be transferred.

Unable to open Math Function File
The math function file was not found by the PC.

Action:
Set the default directory to the subdirectory which contains the files to be transferred.

Unable to open Line Graph File
The line graph file was not found by the PC.

Action:
Set the default directory to the subdirectory which contains the files to be transferred.

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