

PROCESSOR TYPE PDP-8 and 11 Families, PDP-15

RK05-B0036 CODE: F

APR-73 - PROBLEM 1: A cartridge which has been used extensively may have a flap that has been bent to such an extent that, upon insertion into the RK05, the cartridge door opener slips underneath the flap and traps the cartridge inside the drive.

CORRECTION 1: Change cartridge receiver so that it will hold the door opener in a higher position so that it cannot slip underneath the flap. Disposition code: 02.

CORRECTION 2: Retrofit all RK05's in Westfield and Westminster with a piece of rubber sleeve. Disposition code: 03.

NOTE: FCO RK05-B0041 is a correction supplement to this fco; the end result of the two FCO's is that two sleeves will be added to the cartridge receiver. This FCO orders one, FCO RK05-B0041 orders the second; the parts kit for FCO RK05-B0041 will include two sleeves so that implementation of FCO RK05-B0041 will effectively implement this FCO also. FCO's RK05-B0036, RK05-A0037, RK05-C0039 and RK05-B0041 are closely related and require identical disassembly of the RK05; it is therefore recommended that these FCO's be implemented in one operation.

In-plant effectivity -02/03 -See text

Field effectivity -Retrofit all RK05's on next scheduled PM
(Time To Install And Test .5 Hour.) (Kit Contents -FCO/Prints And Parts)

RK05-A0037 CODE: F

MAY-73 - PROBLEM 1: The plastic cartridge shells are now produced from several different molds. This requires some changes to the RK05 to assure proper operation with the various cartridges.

CORRECTION 1: Duckbill tool is to be modified. As soon as new pieces are available, approximately four weeks, retrofit all RK05's that are in-plant at that point in time. Disposition Code 03.

CORRECTION 2: Rework all cartridge support posts presently in stock. New parts to be used at the assembly line no later than May 14, 1973. Retrofitting machines that have been assembled before the new parts are available is not necessary. Disposition Code 02.

CORRECTION 3: With the phase-in of the shorter cartridge support post it is to be assured that the finger on the airduct does not exceed the tolerances of revision "B" (2.36 plus or minus 0.020 . A change to the #93-05703 airduct, at the assembly line in Westfield, is necessary.

NOTE 1: The cartridge that causes the problem is recognizable by its light grey-greenish color with a contrasting white access door latch. The problem of not being able to insert the cartridge and/or rubbing of the disk inside the shell is not present in all RK05's. It is dependent upon the way the cartridge receiver is built and set up. If a customer receives one of these cartridges and has a problem with it, this FCO should be implemented.

NOTE 2: The parts kit for field retrofitting of this FCO consists of one #12-10744 Duckbill and two #74-09134 Cartridge Support Posts. The FCO form is in error in that it includes additionally the in-plant phase-in components, a #12-10681 Air Duct and a #74-09254 Air Duct Gasket.

NOTE 3: FCO's RK05-B0036, RK05-A0037, RK05-C0039, and RK05-B0041 are closely related and require identical disassembly of the RK05; it is therefore recommended that these FCO's be implemented in one operation.

In-plant effectivity -Correction 1 is 03-REWORK immediately and Correction 2 and 3 are 02 phase-in.

Field effectivity -Retrofit all RK05's

(Time To Install And Test 1.0 Hour.) (Kit Contents -FCO/Prints And Parts)

RK05-00038 CODE: M DD: M

MAY-73 - CORRECTION: Solenoid #12-10806 and Arm Solenoid #74-08140 can be combined into one part.

In-plant effectivity -02 phase-in

RK05-C0039 CODE: F DD: N

MAY-73 - PROBLEM: Cartridge door opener spring, #12-10844, is not strong enough to keep the access door open on certain cartridges.

CORRECTION: Use two stronger springs, #12-11384-00, right hand, and #12-11384-01, left hand, in place of #12-10844.

NOTE: FCO's RK05-B0036, RK05-A0037, RK05-C0039, and RK05-B0041 are closely related and require identical disassembly of the RK05; it is therefore recommended that these FCO's be implemented in one operation.

In-plant effectivity -03 * retrofit as soon as new springs are available.

Field effectivity -This FCO should be installed immediately in conjunction with FCO RK05-A0037 on all RK05's when symptoms are present. All other RK05's should be updated on the next service or PM call.

(Time To Install And Test .5 Hour.) (Kit Contents -FCO/Prints And Parts)

RK05-00040 CODE: D DD: P

MAY-73 - PROBLEM: New Item #12, Drive Identification Numbers, being added to the Accessory List.

CORRECTION: Modify the front panel to include the dimple for the Identification Number.

In-plant effectivity -02 phase-in

RK05-B0041 CODE: F DD: R

JUL-73 - CORRECTION: This is a modification to FCO RK05-B0036. On the earlier FCO, one rubber sleeve was added to the cartridge receiver as a temporary solution. The final solution was to have been a change to the cartridge receiver. Since the proposed change to the cartridge receiver is not practical, this FCO makes the additional rubber sleeves a permanent solution; two sleeves are to be used. The change on cartridge receiver E-PS-1210679-0-0 of FCO RK05-B0036 will be reversed to the previous state. That is, revision "F" is same as revision "D", revision "E" is not to be implemented. There are no cartridge receivers at revision "E" and no tooling change was made.

NOTE 1: An extra sleeve is included in the FCO parts kit for use in the event that FCO RK05-B0036 has not been implemented.

NOTE 2: FCO's RK05-B0036, RK05-A0037, RK05-C0039, and RK05-C0041 are closely related and require identical disassembly of the RK05; it is therefore recommended that these FCO's be implemented in one operation.

In-plant effectivity -03 * -Add two rubber sleeves to cartridge receivers in Westfield and Westminster immediately. The introduction of the two stiff torsion springs FCO RK05-C0039 makes it necessary to have a sleeve on both sides of the cartridge receiver. When retrofitting drive to FCO RK05-C0039, add the second sleeve to the cartridge receiver.

Field effectivity -Retrofit all RK05's at next scheduled PM

(Time To Install And Test .5 Hour.) (Kit Contents -FCO/Prints And Parts)

RK05-00042 CODE: D DD: S

AUG-73 - PROBLEM: Threaded quarter turn receptacles are difficult to adjust; this results in noninterchangeable plenum covers.

CORRECTION: Use spring loaded and pressed in receptacles and a longer quarter turn stud.

In-plant effectivity -02 -Phase-in by September 17, 1973

RK05-00043 CODE: D

SEP-73 - CORRECTION: The configuration drawing, D-OC-RK05-0-15, must be changed to indicate use of the 861 Power Control.

In-plant effectivity -Documentation/design change

RK05-00044 CODE: D

SEP-73 - PROBLEM: The tolerance spread of read signal amplitude, specified in Section J, Basic Read/write Test, is too tight for the realistic combination of disk surface, head amplitude, and amplifier tolerance.

CORRECTION: Increase tolerance spread as specified in Engineering Specification A-SP-RK05-0-16.

In-plant effectivity -Documentation/design change

PROCESSOR TYPE PDP-8 and 11 Families, PDP-15

RK05-C0045 CODE: F DD: T

SEP-73 - PROBLEM: After a momentary power failure, an RK05 can recover to a ready state but SEEK INCOMPLETE may be set, which prevents programs from running unless a RESTORE command is issued. The slightly lowered +5V allows the SEEK INCOMPLETE counter to fill, setting the ERROR flip-flop. A logic race condition removes the flip-flop clear before the set is removed.

CORRECTION: Delay the removal of READY H by approximately 100 nsec with the addition of a 1000 pfd capacitor to the wirewrap block between A02C1 and A01T1. This will allow R/W/S READY L, M7700, to remove the SEEK INCOMPLETE flip-flop set before READY H, the flip-flop clear, is removed, as sent from the M7701. The rework instructions are as follows: Install the capacitor with terminal pushed tight to wirewrap and wire tabs toward positioner. Bend capacitor toward positioner so as not to touch any wire wrap pins, and down into space between wirewrap block and sheet metal.

Quick Check: A 1000 pfd capacitor from A02C1 to A01T1.

In-plant effectivity -Retrofit in systems area as necessary if problem is present; in manufacturing area, must add after October 31, 1973.

Field effectivity -Retrofit all RK05's

(Time To Install And Test .5 Hour.) (Kit Contents -PF1038 -FCO/Prints And Parts)

RK05-00046 CODE: D DD: U

OCT-73 - CORRECTION: New light caps #12-11334-00 and #12-11334-01 are to be introduced into the assembly in place of the original light caps, #12-10798-01 and #12-10798-02.

In-plant effectivity -Use original light caps until stock is depleted. Do not intermix new and old light caps in the same machine. Use RK05's with the same style light caps in the same system.

RK05-00047 CODE: P

OCT-73 - CORRECTION 1: Important steps in the procedure are to be made to stand out to readers to emphasize their importance.

PROBLEM 2: When used with RK8-E and RK11-D controllers, the lower head cannot be selected off-line unless the interface cable is disconnected.

CORRECTION 2: Modification to the procedure for operation off-line.

CORRECTION 3: Correction of two instances of test point number error.

In-plant effectivity -Documentation change only

RK05-00048 CODE: D DD: V

OCT-73 - PROBLEM: The unslotted ends of the wirewrap block can be broken or cracked accidentally unless care is taken to remove or insert modules "in-line" with the block.

CORRECTION: Use the slotted end wirewrap block so that modules may be inserted or removed with a rocking motion.

In-plant effectivity -In wirewrap build area, phase-in no later than February 1, 1974. Other areas may use present stock until new is available.

RK05-00049 CODE: D

OCT-73 - PROBLEM: Margin testing of several drives has shown that the closed loop data window potentiometer setting could be more appropriately placed at 440 nsec instead of 420 nsec. This setting would allow the drive to be more tolerant to varying circumstances, ie, heat, peak shift, and component tolerances.

CORRECTION: Change the setting as described in the RK05 Production Checkout Procedure, A-SP-RK05-0-16.

In-plant effectivity -Document/design change

RK05-00050 CODE: P DD: W

NOV-73 - PROBLEM: The following are included in Accessory List A-AL-RK05-0-17 and should not be included in Parts List A-PL-RK05-0-0: Item 107, 74-09691-1-0 Shipping Bracket, Right Hand, and Item 140, 74-09691-2-0 Shipping Bracket, Left Hand. According to the Accessory List, these brackets are only to be included if the RK05 is shipped in a rack; they are not to be included with every RK05. Material is to be ordered according to the Accessory List.

CORRECTION: Remove these items from the Parts List.

In-plant effectivity -Stop shipping these items with every RK05 leaving Westfield; add in Westminster as necessary according to system configuration.