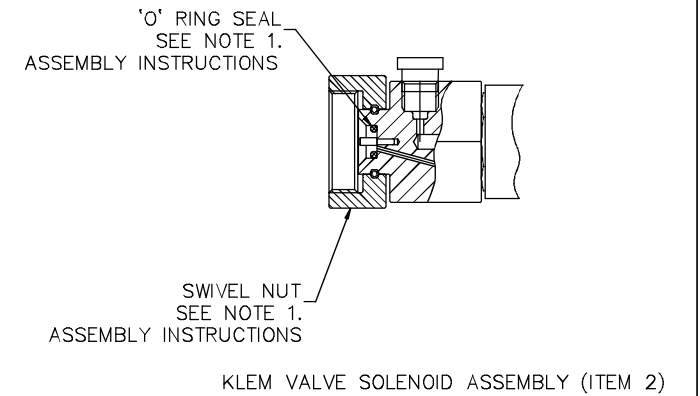
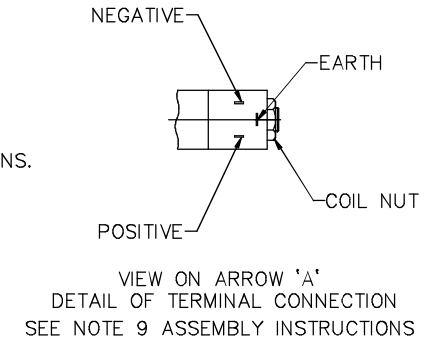
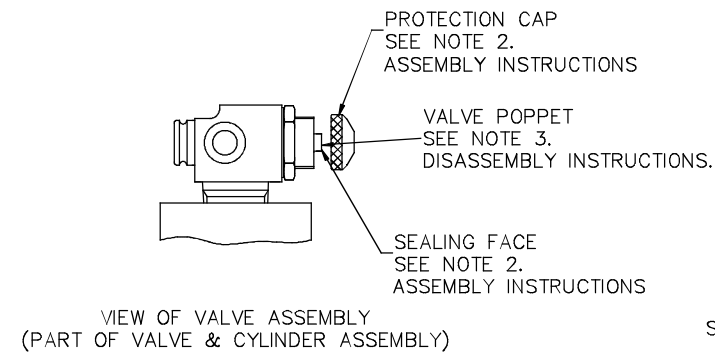
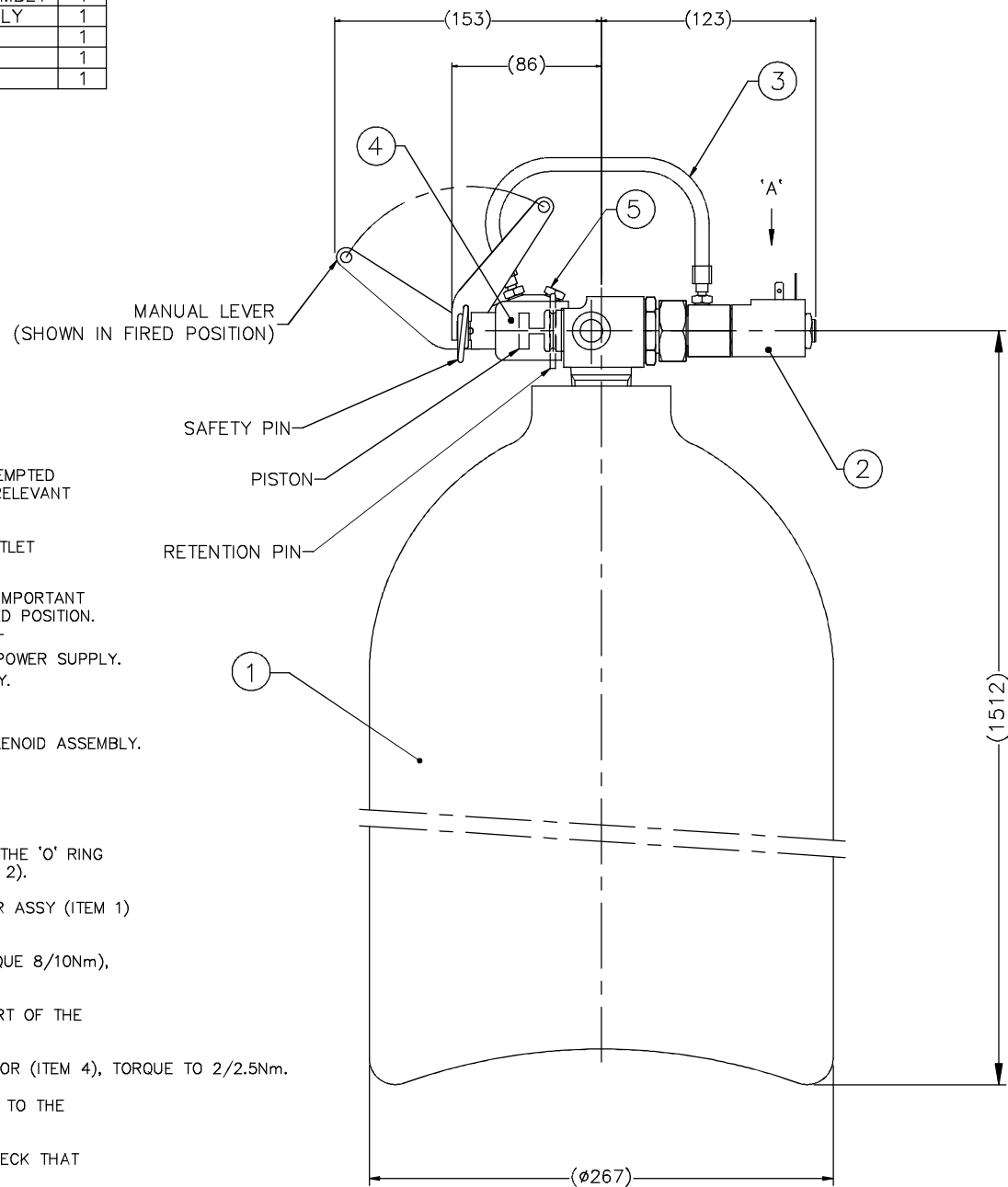


ITEM	PART No	DESCRIPTION	QTY
1	D7226-031	KLEM VALVE & CYLINDER ASSEMBLY	1
2	D8522-003	KLEM VALVE SOLENOID ASSEMBLY	1
3	K93433	BUNDY TUBE, FLEXIBLE LOOP	1
4	K62341	ACTUATOR, PRESSURE	1
5	D7564-001	BLEED ASSEMBLY	1



**IMPORTANT: -**

- BEFORE PROCEEDING, THE FOLLOWING SHOULD ONLY BE ATTEMPTED BY TRAINED PERSONNEL WHO ARE FAMILIAR WITH ALL THE RELEVANT HAZARDS ASSOCIATED WITH CO<sub>2</sub> SYSTEMS.
- ENSURE THAT THE RECOIL CAP IS FITTED TO THE VALVE OUTLET DURING THE ASSEMBLY OF THE DIRECT ACTING SOLENOID.
- BEFORE CARRYING OUT ANY ASSEMBLY INSTRUCTIONS IT IS IMPORTANT TO ENSURE THAT THE SOLENOID ASSEMBLY IS IN THE CLOSED POSITION. TO ACHIEVE THIS CARRYOUT THE FOLLOWING INSTRUCTIONS: -
  - ENSURE THAT THE COIL IS NOT CONNECTED TO ANY POWER SUPPLY.
  - REMOVE THE COIL NUT FROM THE SOLENOID ASSEMBLY.
  - REMOVE THE COIL FROM THE SOLENOID ASSEMBLY.
  - REASSEMBLE THE COIL TO THE SOLENOID ASSEMBLY.
  - REASSEMBLE THE COIL NUT, HAND TIGHT, TO THE SOLENOID ASSEMBLY.

**ASSEMBLY INSTRUCTIONS: -**

- ENSURE THAT THE SWIVEL NUT ROTATES FREELY AND THAT THE 'O' RING IS IN THE CORRECT POSITION ON SOLENOID ASSEMBLY (ITEM 2).
- REMOVE THE PROTECTION CAP FROM THE VALVE & CYLINDER ASSY (ITEM 1) CHECK THAT THE SEALING FACE IS UNDAMAGED.
- ASSEMBLE THE SOLENOID ASSEMBLY ONTO THE VALVE (TORQUE 8/10Nm), NOTE A SHORT BURST OF GAS MAY BE HEARD.
- ASSEMBLE THE FLEXIBLE HOSE (ITEM 3) TO THE OUTLET PORT OF THE SOLENOID ASSEMBLY, TORQUE TO 2/2.5Nm.
- ASSEMBLE BLEED ASSEMBLY (ITEM 5) TO PRESSURE ACTUATOR (ITEM 4), TORQUE TO 2/2.5Nm.
- SUPPORT THE PRESSURE ACTUATOR (ITEM 4) AND CONNECT TO THE FLEXIBLE HOSE, TORQUE TO 2/2.5Nm.
- DEPRESS THE PISTON OF THE PRESSURE ACTUATOR AND CHECK THAT PISTON REMAINS IN PLACE.
- ASSEMBLE THE PRESSURE ACTUATOR TO THE VALVE, ENSURING THAT THE RETENTION PIN IS IN PLACE AND THAT THE FLEXIBLE HOSE IS FREE OF KINKS.
- IT IS ESSENTIAL THAT THE MATING CONNECTOR (NOT SUPPLIED) TO THE SOLENOID ASSEMBLY IS CORRECTLY WIRED AS THIS ASSEMBLY IS POLARISED.

**TEST INSTRUCTIONS: -**

- REMOVE THE PRESSURE ACTUATOR FROM THE VALVE AND SUPPORT. (KEEP ATTACHED TO FLEXIBLE HOSE AND SOLENOID ASSEMBLY). IMPORTANT ENSURE PISTON IS FACING AWAY FROM ANY PERSONNEL.
- APPLY THE CORRECT POWER TO THE SOLENOID, CHECK THAT THE PISTON FULLY EXTENDS FORWARD AND ALL JOINTS (EXCEPT THE BLEED ASSEMBLY OUTLET) ARE LEAK TIGHT.
- TO RESET THE SOLENOID REVERSE THE POLARITY OF THE COIL FOR APPROXIMATELY ONE SECOND THEN DEPRESS THE BLEED BUTTON UNTIL ALL ESCAPING GAS HAS VENTED FROM THE BLEED ASSEMBLY.
- DEPRESS THE PRESSURE ACTUATOR PISTON AND CHECK THAT THE PISTON DOES NOT EXTEND FORWARD.
- REASSEMBLE THE PRESSURE ACTUATOR TO THE VALVE USING THE RETENTION PIN.

**DISASSEMBLY INSTRUCTIONS: -**

- REMOVAL OF SOLENOID FROM VALVE MAY RESULT IN DAMAGE TO THE 'O' RING SEAL. CAREFULLY CHECK THE SEAL BEFORE REUSING.
- SLOWLY UNSCREW THE SWIVEL NUT OF THE SOLENOID ASSY, AFTER APPROX. ONE/TWO REVOLUTIONS OF THE NUT, A SHORT DISCHARGE OF GAS WILL BE AUDIBLE.
- FULLY REMOVE THE SOLENOID ASSEMBLY, RETAIN THE 'O' RING SEAL, CHECK THAT THE VALVE POPPET HAS RESEALED BY APPLYING LEAK SEAKING FLUID TO THE POPPET ORIFICE.
- IF ANY LEAKAGE OCCURS THE POPPET SEAL MAY REQUIRE RESEATING AS FOLLOWS: REASSEMBLE THE SOLENOID ASSEMBLY (EXCLUDING THE 'O' RING SEAL AND FLEXIBLE HOSE) UNTIL ESCAPING GAS IS AUDIBLE. IMMEDIATELY UNSCREW AND REMOVE THE SOLENOID ASSEMBLY FROM THE VALVE.
- REPEAT STEP 3.
- TO PROTECT THE VALVE SEALING FACE IMMEDIATELY ASSEMBLE THE PROTECTION CAP TO THE VALVE. IMPORTANT : IF THE VALVE CONTINUES TO LEAK OUT OF THE POPPET CONTACT THE EQUIPMENT MANUFACTURE FOR FURTHER INFORMATION.

**SPECIFICATION: -**

ENVIRONMENTAL PROTECTION TO BS.EN60529 1991 IP65.

NOMINAL COIL RESISTANCE : 53.2 OHMS.  
 MINIMUM FIRING PULSE : 60ms.  
 MAXIMUM FIRING PULSE : UNLIMITED.  
 ELECTRICAL CONNECTION : DIN PLUG TYPE DIN 43650.  
 STORAGE TEMPERATURE RANGE : -30°C TO +55°C.  
 OPERATING TEMPERATURE RANGE : -20°C TO +55°C.  
 MAXIMUM WORKING PRESSURE : 152.5 BAR(G)

**POWER SUPPLY REQUIREMENTS:**

VOLTAGE RANGE : 18V DC TO 28V DC.  
 CURRENT AT 18V DC : 338mA.  
 CURRENT AT 28V DC : 526mA.

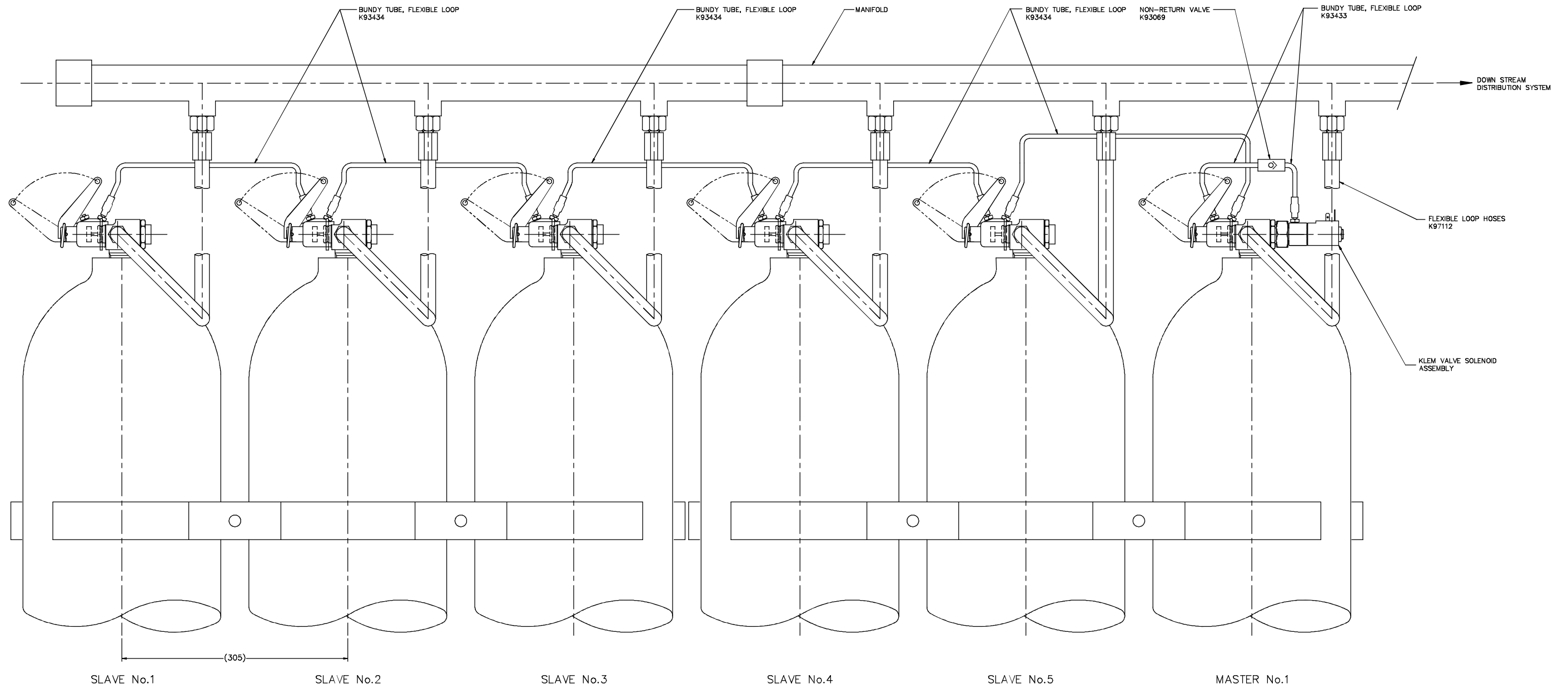
1		FIRST ISSUE	
ISS	D.C.N.	CHANGE DATE & SIGNATURES	
MATERIAL	MAT'L SPEC.	CODE IDENT.	
FINISH			
THREADS TO		ORIGINAL SCALE 1:2	
DIMENSIONS IN MILLIMETRES			
DRN	T.FOREMAN	DATE	19.11.12
CKD		DATE	
APP. DESIGN	APP. PRODUCTION	APP. D.O.	

ALL BURRS TO BE REMOVED.  
 GEOMETRIC SYMBOLS TO B.S.8888  
 ALL STANDARDS ARE TO LATEST ISSUE

GENERAL TOLERANCES		NP:
LINEAR	ANGULAR	
2 DEC. +/- 0.13	+/- 1 DEGREE	
1 DEC. +/- 0.35		

DESCRIPTION INSTALLATION DRAWING FOR SOLENOID ACTUATED VALVE & 68L CYLINDER (DIN)

DRG. No. Sheet 1 of 2  
 E7772-011-ID



INSTALLATION FOR A SIX BOTTLE BANK OF CO2 CYLINDERS

1	FIRST ISSUE	
ISS	D.C.N.	CHANGE DATE & SIGNATURES
MATERIAL	MAT'L SPEC.	CODE IDENT.
FINISH		
THREADS TO		ORIGINAL SCALE
DIMENSIONS IN MILLIMETRES		1:2
DRN	T.FOREMAN	DATE 19.11.12
CKD		DATE
APP. DESIGN	APP. PRODUCTION	APP. D.O.

GENERAL TOLERANCES		NP:
LINEAR	ANGULAR	
2 DEC. +/- 0.13	+/- 1 DEGREE	
1 DEC. +/- 0.35		

DESCRIPTION	INSTALLATION DRAWING FOR SOLENOID ACTUATED VALVE & 68L CYLINDER (DIN)	DRG. No.	Sheet 2 of 2 E7772-011-ID
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