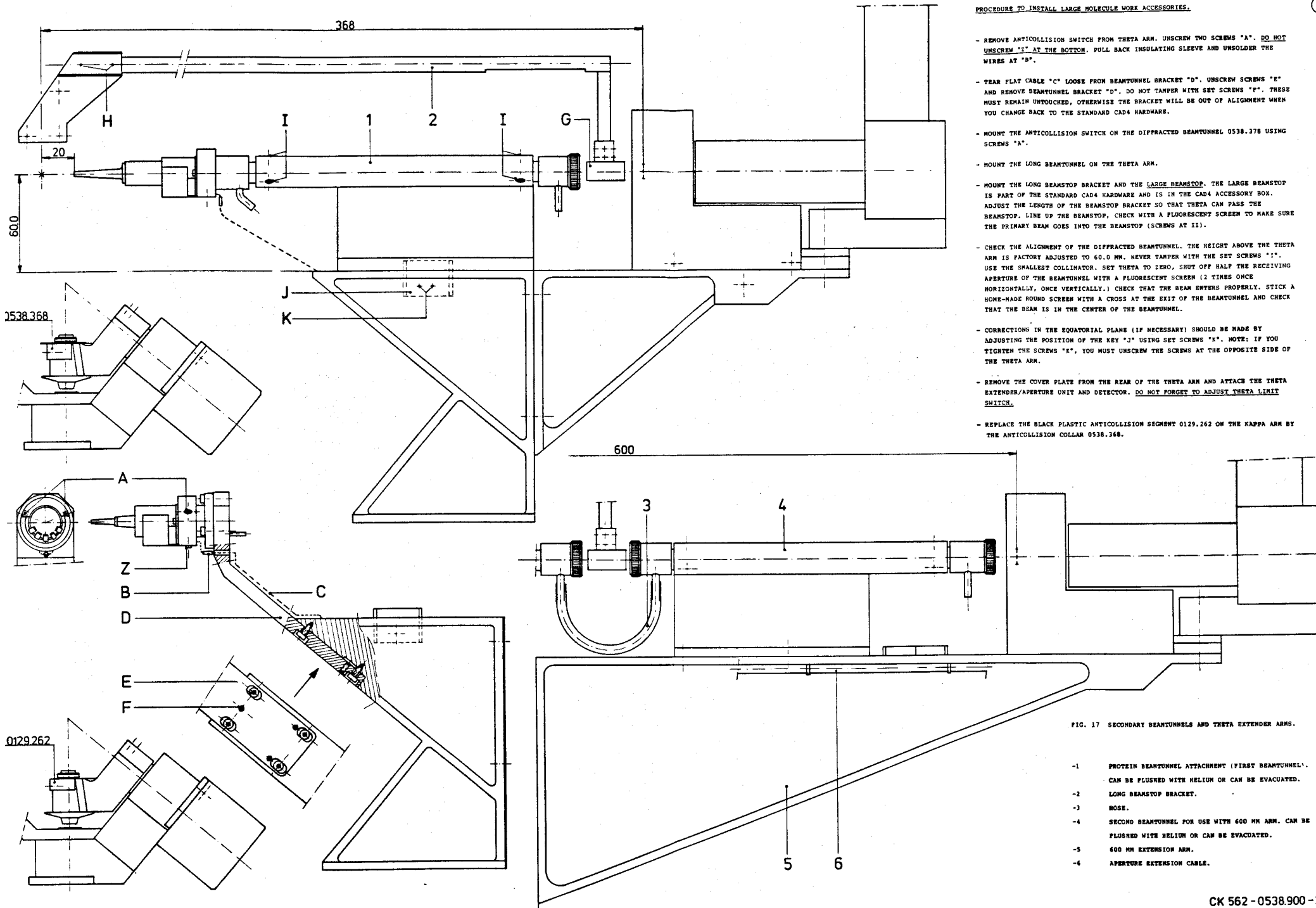


PROCEDURE TO INSTALL LARGE MOLECULE WORK ACCESSORIES.



- REMOVE ANTICOLLISION SWITCH FROM THETA ARM. UNSCREW TWO SCREWS "A". **DO NOT UNSCREW "I" AT THE BOTTOM.** PULL BACK INSULATING SLEEVE AND UNSOLDER THE WIRES AT "B".
- TEAR FLAT CABLE "C" LOOSE FROM BEAMTUNNEL BRACKET "D". UNSCREW SCREWS "E" AND REMOVE BEAMTUNNEL BRACKET "D". DO NOT TAMPER WITH SET SCREWS "F". THESE MUST REMAIN UNTOUCHED, OTHERWISE THE BRACKET WILL BE OUT OF ALIGNMENT WHEN YOU CHANGE BACK TO THE STANDARD CAD4 HARDWARE.
- MOUNT THE ANTICOLLISION SWITCH ON THE DIFFRACTED BEAMTUNNEL 0538.378 USING SCREWS "A".
- MOUNT THE LONG BEAMTUNNEL ON THE THETA ARM.
- MOUNT THE LONG BEAMSTOP BRACKET AND THE **LARGE BEAMSTOP.** THE LARGE BEAMSTOP IS PART OF THE STANDARD CAD4 HARDWARE AND IS IN THE CAD4 ACCESSORY BOX. ADJUST THE LENGTH OF THE BEAMSTOP BRACKET SO THAT THETA CAN PASS THE BEAMSTOP. LINE UP THE BEAMSTOP, CHECK WITH A FLUORESCENT SCREEN TO MAKE SURE THE PRIMARY BEAM GOES INTO THE BEAMSTOP (SCREWS AT III).
- CHECK THE ALIGNMENT OF THE DIFFRACTED BEAMTUNNEL. THE HEIGHT ABOVE THE THETA ARM IS FACTORY ADJUSTED TO 60.0 MM. NEVER TAMPER WITH THE SET SCREWS "I". USE THE SMALLEST COLLIMATOR. SET THETA TO ZERO, SHUT OFF HALF THE RECEIVING APERTURE OF THE BEAMTUNNEL WITH A FLUORESCENT SCREEN (2 TIMES ONCE HORIZONTALLY, ONCE VERTICALLY.) CHECK THAT THE BEAM ENTERS PROPERLY. STICK A HOME-MADE ROUND SCREEN WITH A CROSS AT THE EXIT OF THE BEAMTUNNEL AND CHECK THAT THE BEAM IS IN THE CENTER OF THE BEAMTUNNEL.
- CORRECTIONS IN THE EQUATORIAL PLANE (IF NECESSARY) SHOULD BE MADE BY ADJUSTING THE POSITION OF THE KEY "J" USING SET SCREWS "K". NOTE: IF YOU TIGHTEN THE SCREWS "K", YOU MUST UNSCREW THE SCREWS AT THE OPPOSITE SIDE OF THE THETA ARM.
- REMOVE THE COVER PLATE FROM THE REAR OF THE THETA ARM AND ATTACH THE THETA EXTENDER/APERTURE UNIT AND DETECTOR. DO NOT FORGET TO ADJUST THETA LIMIT SWITCH.
- REPLACE THE BLACK PLASTIC ANTICOLLISION SEGMENT 0129.262 ON THE KAPPA ARM BY THE ANTICOLLISION COLLAR 0538.368.

FIG. 17 SECONDARY BEAMTUNNELS AND THETA EXTENDER ARMS.

- 1 PROTEIN BEAMTUNNEL ATTACHMENT (FIRST BEAMTUNNEL). CAN BE FLUSHED WITH HELIUM OR CAN BE EVACUATED.
- 2 LONG BEAMSTOP BRACKET.
- 3 NOSE.
- 4 SECOND BEAMTUNNEL FOR USE WITH 600 MM ARM. CAN BE FLUSHED WITH HELIUM OR CAN BE EVACUATED.
- 5 600 MM EXTENSION ARM.
- 6 APERTURE EXTENSION CABLE.