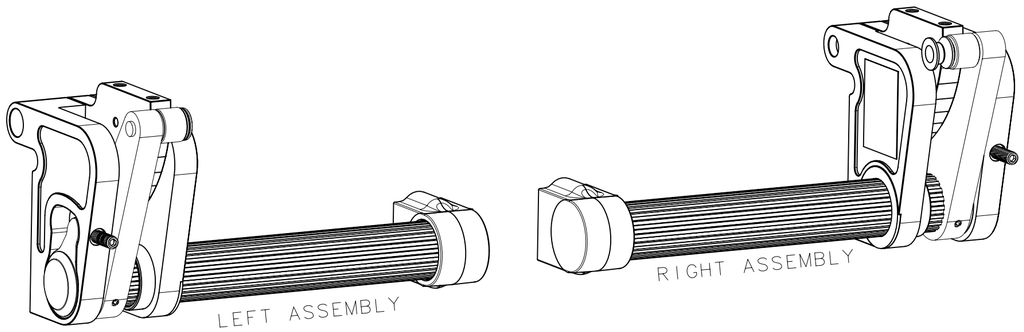
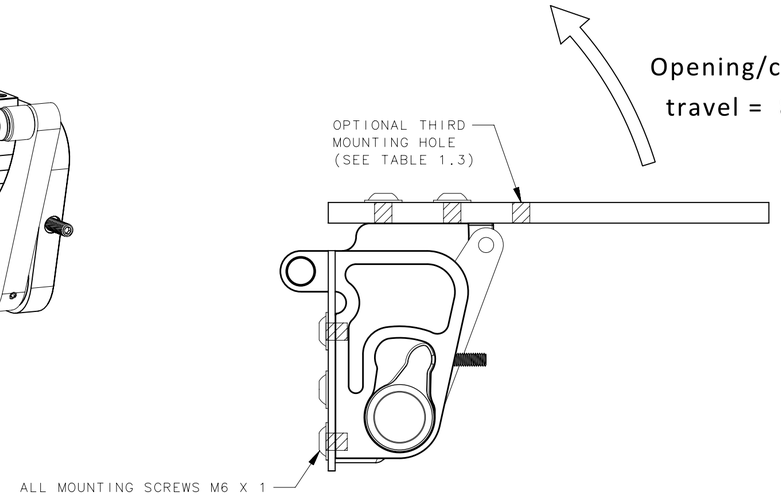
REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
E	12AUG2024	SAK/DMS	PRN:P2024-1333

COUNTERBALANCE SPRING HINGE ASSEMBLIES





TECHNICAL DATA APPLIES TO ASSEMBLY PART NUMBERS IN TABLE 1.1.

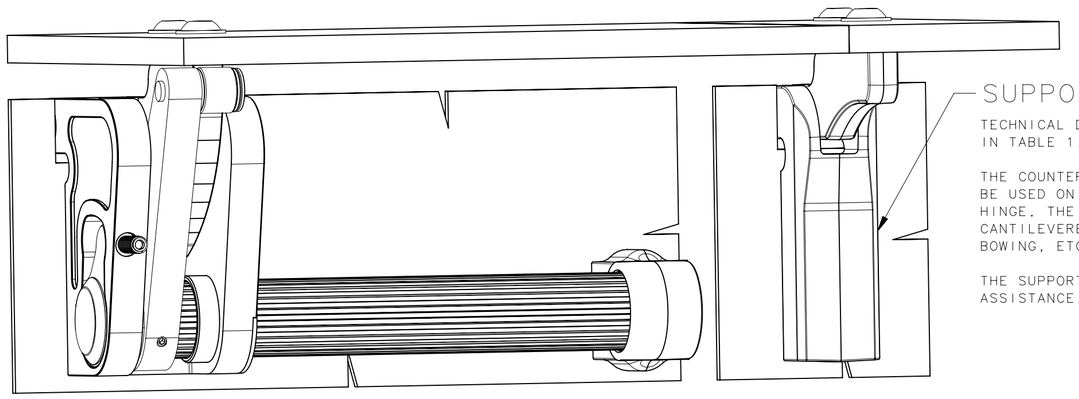
IF THE APPLICATION MAKES USE OF A SINGLE COUNTERBALANCE UNIT FOR BALANCING THE MOVING PANEL, THE COUNTERBALANCE SUPPORT HINGE (BELOW) MUST BE USED TO ADD A SECOND HINGE POINT AND RIGIDITY TO THE CANTILEVERED PANEL.

SCREW LENGTH CALCULATION

THREAD LENGTH = PANEL THICKNESS + 9.5 [.375] MINIMUM
PANEL THICKNESS + 12.7 [.500] MAXIMUM
MAXIMUM INSTALLATION TORQUE 6.8 N-M [60LB-IN]

TABLE 1.1
ASSEMBLY PART NUMBER
CB-1X-101-00-10
CB-1X-102-00-10
CB-1X-103-00-10
CB-1X-104-00-10
CB-2X-101-00-10
CB-2X-102-00-10
CB-2X-103-00-10
CB-2X-104-00-10
CB-2X-105-00-10

COUNTERBALANCE SUPPORT HINGE

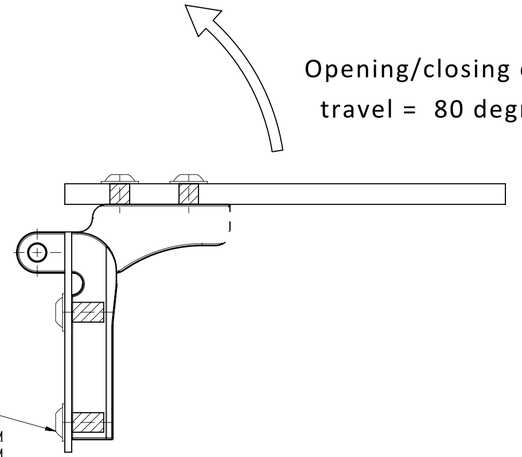


SUPPORT HINGE ASSEMBLY

TECHNICAL DATA APPLIES TO ASSEMBLY PART NUMBERS IN TABLE 1.2.

THE COUNTERBALANCE SUPPORT HINGE IS DESIGNED TO BE USED ON PANELS UTILIZING A SINGLE COUNTERBALANCE HINGE. THE SUPPORT HINGE PROVIDES RIGIDITY TO THE CANTILEVERED END OF THE PANEL TO RESIST TWISTING, BOWING, ETC.

THE SUPPORT HINGE DOES NOT PROVIDE ANY SPRING ASSISTANCE.



SCREW LENGTH CALCULATION:

THREAD LENGTH = PANEL THICKNESS + 9.5 [.375] MINIMUM
PANEL THICKNESS + 12.7 [.500] MAXIMUM
MAXIMUM INSTALLATION TORQUE 6.8 N-M [60LB-IN]

NOTES:

1. PRODUCT TESTED TO INSURE CYCLE LIFE OF 30,000 CYCLES.
2. ONE CYCLE IS DEFINED AS MOTION FROM 0°(CLOSED, HORIZONTAL) POSITION TO 80°OPEN POSITION AND BACK TO 0°.
3. TEST DATA FROM THE FOLLOWING SOUTHCO TEST REPORTS:
   - trCB-36580
   - trCB-40205
   - trCB-40206
   - trCB-42528
4. CYCLE TESTING AT A RATE OF 5 CYCLES/MINUTE OR LESS
5. TESTING OF THE COUNTERBALANCE SUPPORT HINGE CB-10-100-10 PERFORMED WITH ONE HINGE PAIRED WITH A CB-21-105-00-10 COUNTERBALANCE HINGE AS SHOWN IN THE VIEW ABOVE.
6. IMPORTANT SAFETY NOTICE:DO NOT DISASSEMBLE UNIT.DISASSEMBLING UNIT MAY CAUSE SERIOUS INJURY. NO USER SERVICEABLE PARTS.

TABLE 1.2
ASSEMBLY PART NUMBER
CB-10-100-10

CPB NUMBER 2017-0015	THIRD ANGLE PROJECTION	southco® CONNECT·CREATE·INNOVATE
	MILLIMETERS [IN]	
	TOLERANCES UNLESS OTHERWISE NOTED	DESCRIPTION COUNTERBALANCE CB-XX-XXX-XX-XX
PROPRIETARY ITEM EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.		SIZE A2 · SYSTEM NX · DWG NO. TD-CB-1
PER ASME Y14.5M-2009	DRAWN BY GSF · DATE 04JUN2020 · SCALE 1:1 · SHEET 1 OF 1	