

+ Control Valve Adjustment

Part Name	Function	Description	Adjustment
Adjustment #1 Green	By Pass	The specified valve will be shipped after the specification of elevator is decided and discharge rate is calculated. → The car does not move even though motor is running if coil A is un-magnetized.	The car stops 1 ~ 2 seconds and starts moving after pump runs and coil A and coil B are magnetized. Adjustment #1 adjusts above described stopping time. Clockwise: shortening the delay time Counter-clockwise: extended delay
	Pressure Relief Valve S	Adjust until get the specified value after close the shut-off valve. Then fixed with 'headless bolt'.	
Adjustment #2 Green	Up Acceleration	The car can be accelerated by adjusting adjustment #2 when pump runs and magnetic generates. → Do not adjust if satisfy with acceleration by adjustment #2 . Adjustment #2 affects to adjustment #3 and adjustment #4 .	Rotate clockwise: Soft acceleration Rotate counter-clockwise: rapid acceleration
Adjustment #3 Green	Up Deceleration	Adjust adjustment #3 until get satisfied deceleration. Then fixed safety switch. Energizing coil to get 3 ~ 5 cm adjustment distance of creep. Travel speed (<i>m/sec</i>) is same as the distance between safety switch and leveling switch. When $V = 0.5 \text{ m/sec}$, Distance is 0.5 m	The car is decelerating by adjusting adjustment #3 when coil B is un-magnetized during coil A is magnetized. Rotate clockwise: Soft deceleration Rotate counter-clockwise: rapid deceleration
Adjustment #4 Green	Up Leveling	Adjust speed of creep. $V = 5 \sim 7 \text{ cm/sec}$	Leveling speed may be adjusted by adjustment #4 when coil A is magnetized and coil B is un-magnetized. Rotate clockwise: slow leveling Rotate counter-clockwise: quick leveling
Adjustment #5 Green	Up Stop	Coil A will be un-magnetized when coil B is magnetized at stopping floor. → By adjusting adjustment #5 , the car will stop smoother when running pump 0.5 seconds more through time relay. → The discharge rate of pump decides speed adjustment, not by adjustment.	To soft stop, adjusting adjustment #5 . Clockwise: soft stop Counter-clockwise: sudden stop
Adjustment #6 Green	Down Acceleration	When coil C and coil D is magnetized, it will perform down acceleration by adjusting adjustment #6 .	Clockwise: soft down acceleration Counter-clockwise: rapid down acceleration → Adjustment #8 affects to Adjustment #6 If necessary, re-adjust adjustment #6
Adjustment #7 Red	Down Full Speed	The car's down full speed is decided by adjustment #7 when coil C and coil D are magnetized.	Clockwise: soft down traveling Counter-clockwise: rapid down traveling
Adjustment #8 Red	Down Deceleration	Soft stop test: The car gradually stops softly within 20 cm when coil C and coil D are un-magnetized at maximum down speed.	The car decelerates by adjusting adjustment #8 when coil C is un-magnetized while coil D is magnetized. Clockwise: soft deceleration Counter-clockwise: rapid deceleration → If satisfy with deceleration, stop adjust adjustment #8 . There may be re-adjust adjustment #6 .
Adjustment #9 Red	Down Leveling Speed	Down leveling speed is adjusted by adjusting adjustment #9 when coil C is un-magnetized and coil D is magnetized. → Not necessary to adjust when coil C is un-magnetized because The car stops by adjusting adjustment #8 .	Clockwise: soft leveling Counter-clockwise: sudden leveling

Now you are the expert of control valve about adjustment.