

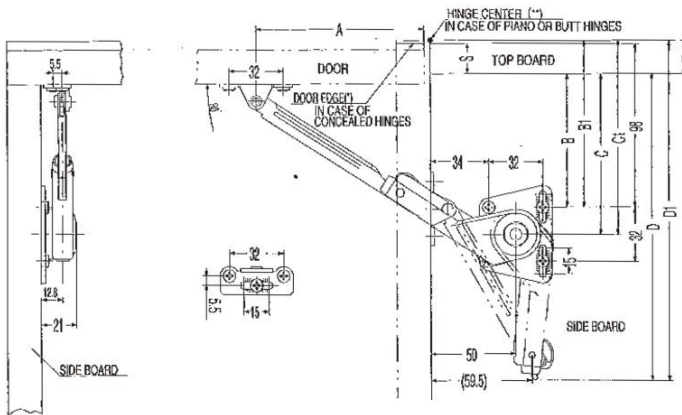
# LAMP<sup>®</sup> SOFT DOWN STAY NSD-35 L/R INSTALLATION INSTRUCTION PAT

- Ⓢ Please read this instruction sheet carefully for proper installation and operation. Incorrect installation or use of this product may damage the unit or cause injury.
- Ⓢ This stay is designed for furniture or lightweight door and is equipped with a damping function.
- Ⓢ Sugatsune guarantees the quality of this product as for all its parts. It cannot however guarantee the final assembly as a whole.
- Ⓢ This product was manufactured and delivered with our utmost care. Should you however find any defect, please contact your dealer immediately.
- Ⓢ Sugatsune warrants that this product is free from defect for a period of one (1) year from the date of delivery.
- Ⓢ Sugatsune liability is limited to the replacement of this product by a similar one free of defect. In no case does this extend to the replacement of the installation or the cabinet as a whole.
- Ⓢ Please keep these instructions at hand for future use.
- Ⓢ Sugatsune cannot be held liable for any damage or injury caused by improper use or one different than the one this product was designed for.

## ⚠ CAUTIONS Any failure to observe the following precautions may result in personal injury or damage to the cabinet

- Ⓢ Make sure that installation position and specifications are followed. Unsuitable installation position may damage the mechanism when in case two stays are used together.
- Ⓢ Make sure that the arm of the stay is parallel with the side panel of the cabinet.
- Ⓢ Please avoid forced opening beyond the opening angle, and using excessive force while closing the door.
- Ⓢ This product is designed to operate at room temperatures between 0°C to 40°C (32F-104F).
- Ⓢ This product has a spring at the elbow section. Please be careful not to get your fingers caught in elbow section while you are handling the unit.
- Ⓢ Performance of hardware will be affected by unique factors in each application. Hardware must be tested in intended application to confirm the function.
- Ⓢ It is necessary to periodically check the fixing screws for loosening. Tighten the loosened screws as required.
- Ⓢ Do not force the door to close faster. It can cause damage to the product or hinge(s).

## LOCATION TO BE MOUNTED (80°, 90° OR 100° OPENING)



Depending on the type of the hinges used, the position of the mounting plate and arm fixing plate should be fixed as indicated below. The distance for A, B(B1), C(C1) is measured from "door edge (\*)" and "underside of top board" in case European concealed hinges are used, and from "hinge center (\*\*)" and "topside of top board" in case Piano or Butt Hinges are used.

### FOR 90° ANGLE OPEN

	A	B	C	D	B1	C1	D1
CONCEALED HINGE	99	98-S	114-S	200.5-S	-	-	-
BUTT HINGE OR PIANO HINGE	93	-	-	-	92	108	194.5

S = OVERLAY COVERAGE BY CONCEALED HINGES (MM)

When 80° or 100° opening is desired, move the mounting plate and arm fixing plate by sliding them in the oblong slots (7.5mm) as shown in the below drawings.

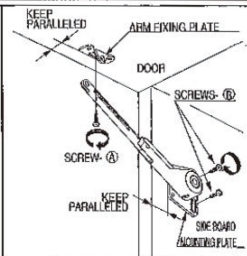
OPENING ANGLE	80°		90°		100°	
	DOWN		MIDDLE		UP	
POSITION OF PLATES	MOUNTING PLATE	ARM FIXING PLATE	MOUNTING PLATE	ARM FIXING PLATE	MOUNTING PLATE	ARM FIXING PLATE
FOR HINGE CENTER (UP) ↓ (DOWN)						

\* The above and right drawings show for NSD-35L (left-hand side mounting) and NSD-35R comes symmetrically.

## INSTALLATION PROCEDURE & SPEED ADJUSTMENT

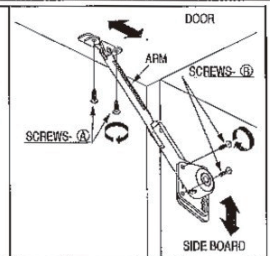
### Step-1

Mount the arm fixing plate on the back of the door at the correct position with screw - (A). Place the mounting plate on the side board by putting the screws - (B) into the slots and fasten them temporarily. The oblong slotted side must be placed towards back of cabinet.



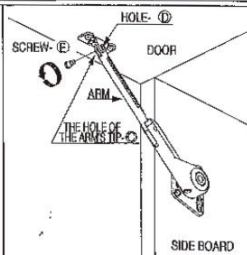
### Step-2

Deciding the opening angle of door, loosen the screws in the slots, and adjust the position of the plates as shown in the above drawing in each case of opening angle. Then, fix them with the screws - (A) & (B) in the round holes of both plates.



### Step-3

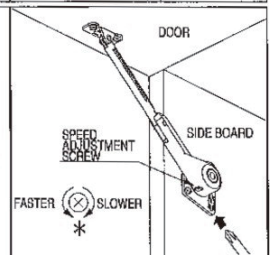
Upon completing Step-2, rotate the body so that the hole of the arm's tip - (C) comes on to the position of the hole - (D) of the arm fixing plate. Then, fasten the arm and arm fixing plate with screw - (E).



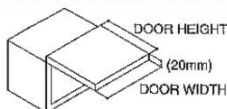
### Speed adjustment

Upon completion of installation, make sure the door opens and closes properly. To adjust the closing speed of the door, turn the speed adjustment screw. In case 2 units (left & right) are used, the speed adjustment screws must be turned evenly.

\* Do not try to turn the speed adjustment screws exceeding their limitation.



## DOOR WEIGHT AND SIZE



This product must be applied to a door with specific weight and size. Lined section of the graph indicates applicable door weight range based on 1 unit per door.

**Note-1:** In case of 2 units (right & left) per door

Door width can be twice as large, if the door height remains unchanged.

**Note-2:** In case of different door thickness or specific gravity, door weight range must fit the following formula.

\*1 unit per door: MIN. ~ MAX.

$$1/2 \text{ door height [m]} \times \text{door weight [kg]} \times 9.8 = 1.57 \sim 6.86 \text{ [N} \cdot \text{m]} \text{ (16} \sim 70 \text{ [kg} \cdot \text{cm])}$$

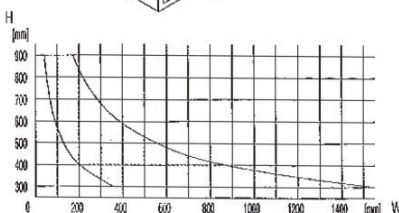
$$(1/2 \text{ door height [inch]} \times \text{door weight [lb]} = 12 \sim 60 \text{ [lb} \cdot \text{inch])}$$

\*2 unit (right & left) per door: MIN. ~ MAX.

$$1/2 \text{ door height [m]} \times \text{door weight [kg]} \times 9.8 = 3.14 \sim 13.72 \text{ [N} \cdot \text{m]} \text{ (32} \sim 140 \text{ [kg} \cdot \text{cm])}$$

$$(1/2 \text{ door height [inch]} \times \text{door weight [lb]} = 24 \sim 120 \text{ [lb} \cdot \text{inch])}$$

**Note-3:** European MDF door is heavier and of specific gravity 0.75 approx. by which the stay can cover about 30 percent less width in the lefthand graph.



● In case of a usual wooden flap of 20mm thickness (specific gravity approx. 0.5)

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