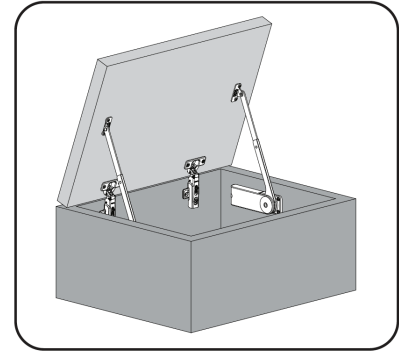


**Dear Customer:**

HDS-20 stay was designed and manufactured with Sugatsune's utmost care in order to give you a high performance and smooth operation on a long-term basis. We ask you to follow these instructions for best possible results and carefree use throughout lifetime.

**Safety recommendations:**

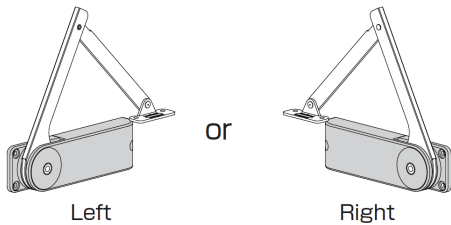
- Sugatsune recommends for the installation to be made by a professional carpenter or installer.
- This product should be used in pairs.
- Do not disassemble the arm or body of the stay.
- Please use this stay only within the specifications shown in this manual.
- Standard temperature of use is 0 to 40°C.



**! Warranty**

- HDS-20 was produced with a particular attention to its quality. Should you however experience any difficulty, please refer to your local supplier or Sugatsune Export Department (export@sugatsune.co.jp).
- The liability of Sugatsune is limited to the replacement of the stay itself.
- Sugatsune cannot accept any liability for damage incurred while using this stay.
- Standard guaranty is for one-year period from the date of shipment.

**Parts list**



■ Body : 1 piece



■ Installation screws(3.5×15)  
: 6 pieces

**Specifications**

■ Range applicable for a pair of HDS-20

| Model    | Torque Moment                  |
|----------|--------------------------------|
| HDS-20-K | 13.7~19.5 N·m (140~199 kgf·cm) |
| HDS-20-M | 19.6~24.4 N·m (200~249 kgf·cm) |
| HDS-20-H | 24.5~29.4 N·m (250~300 kgf·cm) |

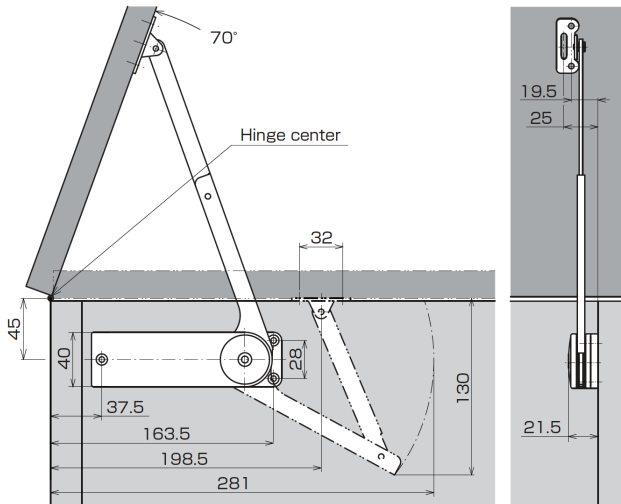
■ Torque Moment Calculation

$$\text{Torque Moment(N·m)} = \text{Door weight(kg)} \times 9.8 \times \frac{\text{Door height(m)}}{2}$$

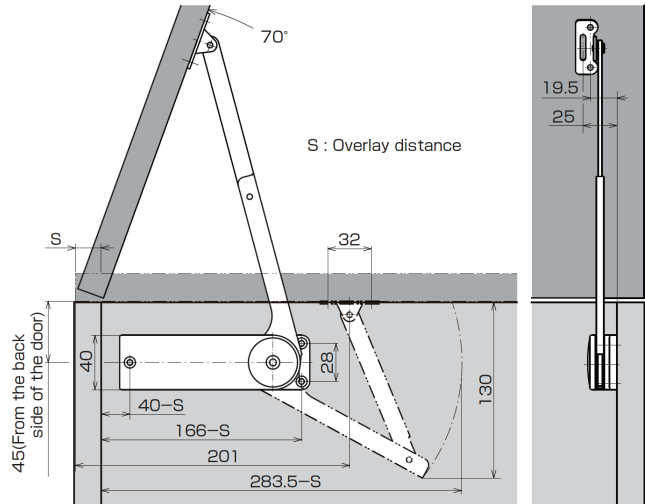
- ※ Select the torque moment range applicable in the list above.
- ※ Weight of the door should include the handle.
- ※ Check with the actual product if the torque moment is around upper/lower limit.

**Installation drawing**

※ Dimensions and procedures indicate the Right hand use. For the Left, a mirror image.



With Piano/Butt Hinge



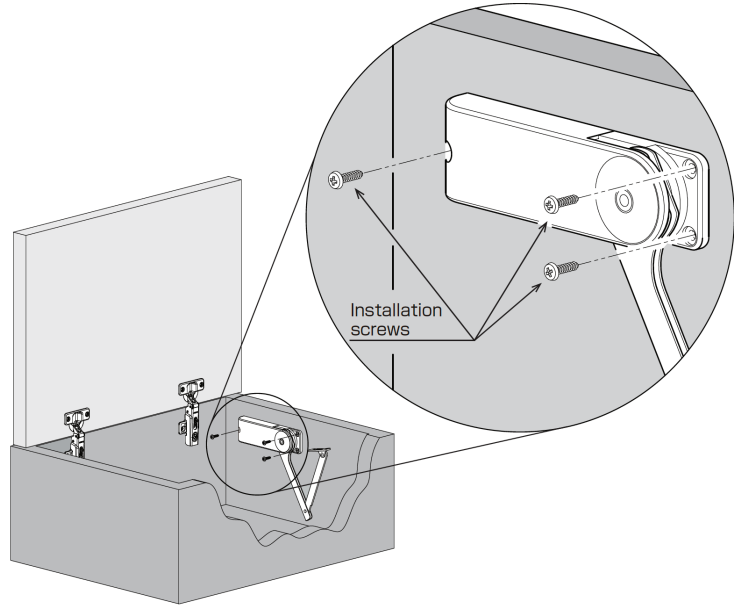
With Slide Hinge (230-26/19T)

# Installation

⚠ Check if the hinges are installed properly and the door moves smoothly before installing the stay.

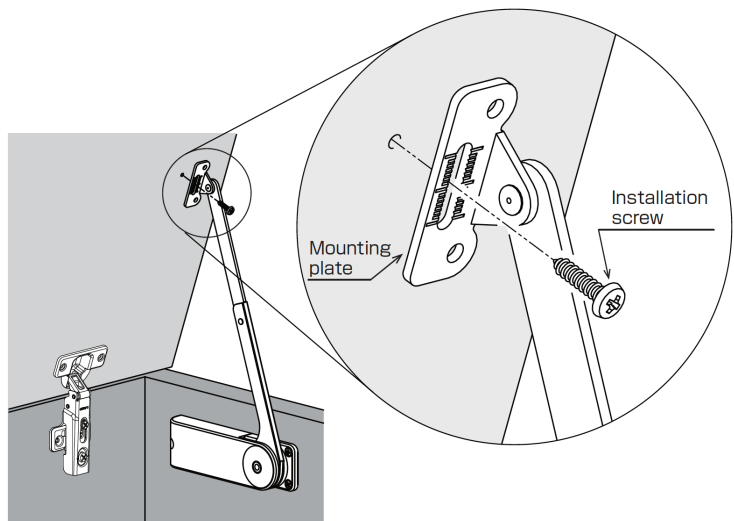
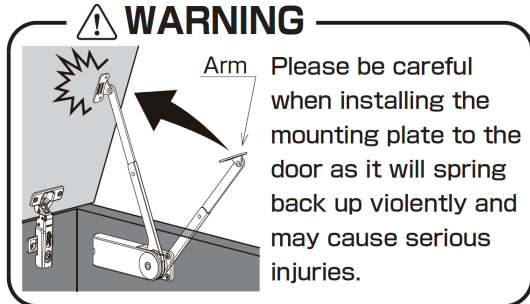
## 1 Body installation

Firmly fix the body with the installation screws according to the installation drawing.



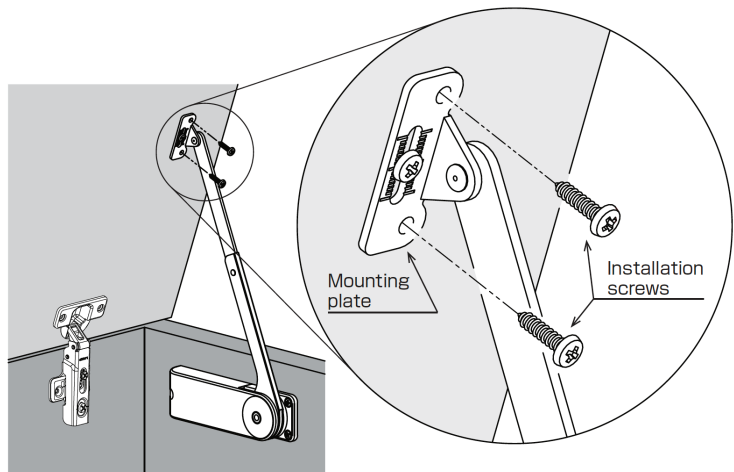
## 2 Mounting plate adjustment

Temporary fix the mounting plate with the installation screw using the elongate hole. Open/close the door and adjust the position of the mounting plate until the door moves smoothly.



## 3 Mounting plate installation

Fix the mounting plate firmly using the installation screws.



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