

Note Book &
Cellular Phone

LCD TV/PDP

LCD Monitor

Refrigerator

Damper &
Shower Booth

P.K TECH SYSTEM

Technology Introduction



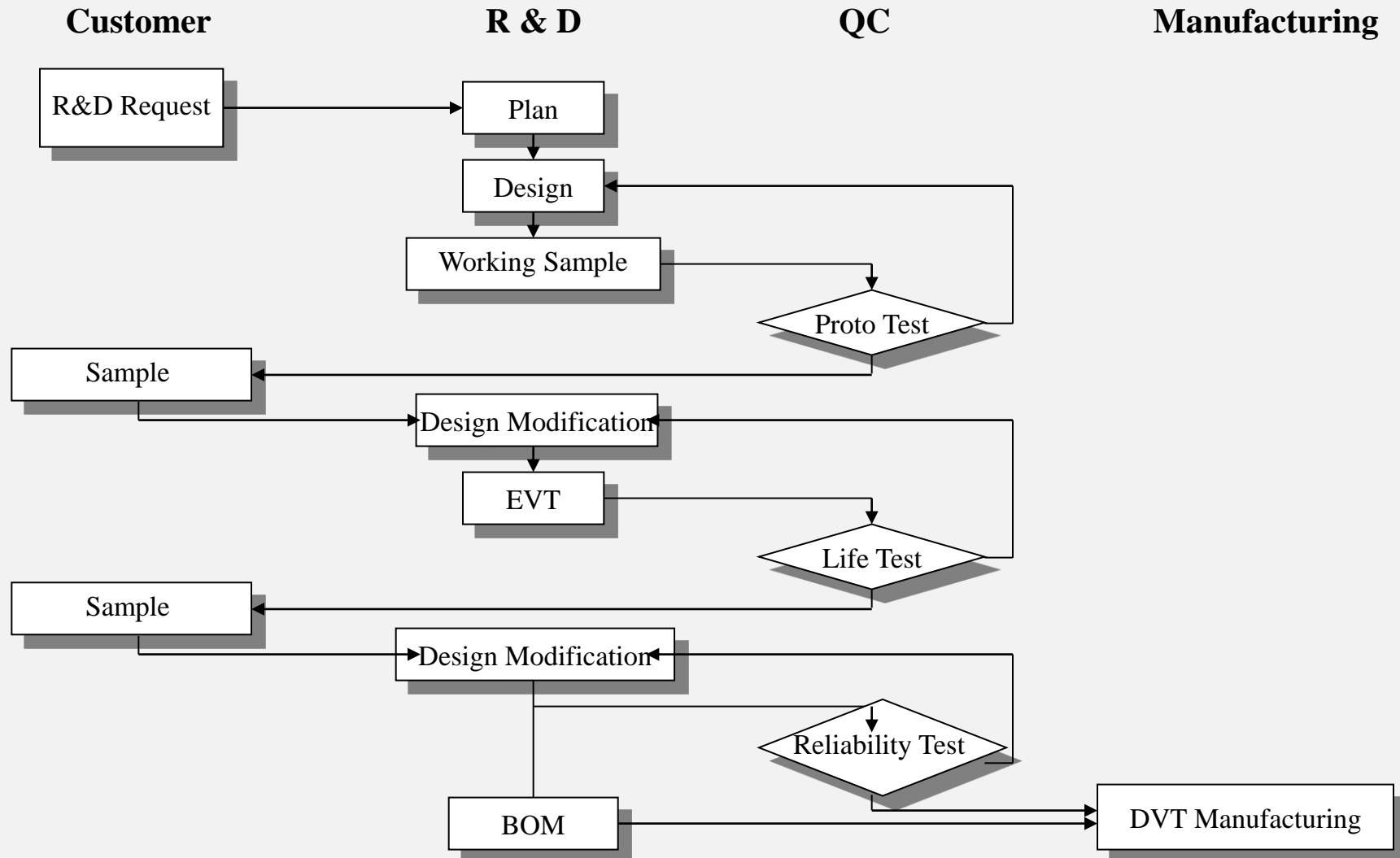
The best Quality & Satisfaction

Contents

1. PK TECH – R&D Process
2. Hinge Function
 - Tilt, Pivot, Swivel, and Height
3. Refrigerator - Oil Lid Damper & Latch
4. Refrigerator - Hinge & Roller
5. Kimchi Refrigerator – Damping Hinge (Spirng)
6. Washing Machine - Oil Lid Damper & Hinge
7. Global Supplying Location
 - South Korea, Mexico, China, Thailand, Poland, Malaysia, and Indonesia

R&D Process

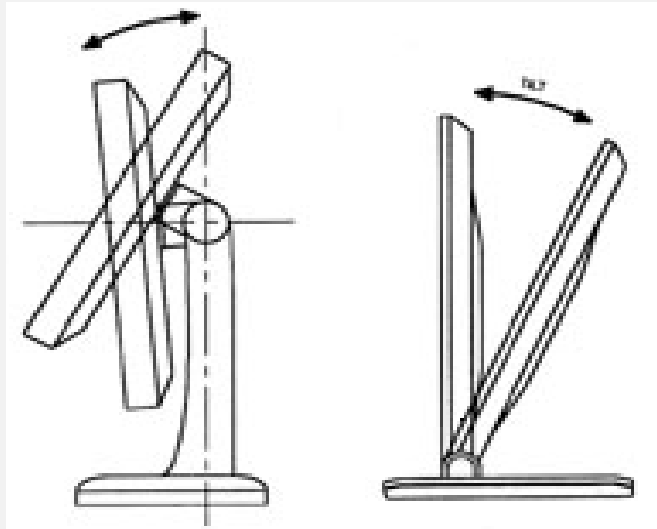
We Promise the best Quality and Satisfaction



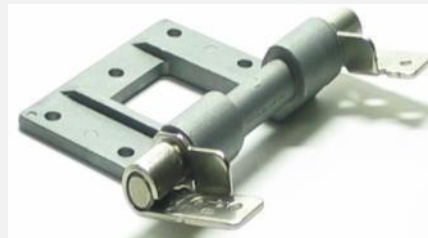
Functional Type

* Tilt Type

We Promise the best Quality and Satisfaction



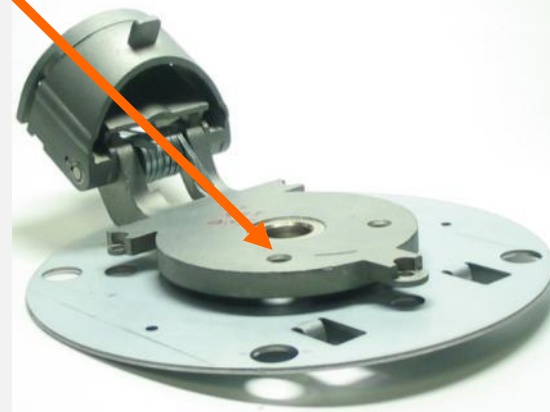
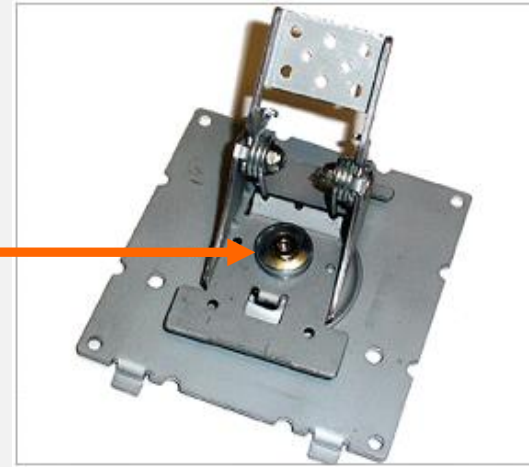
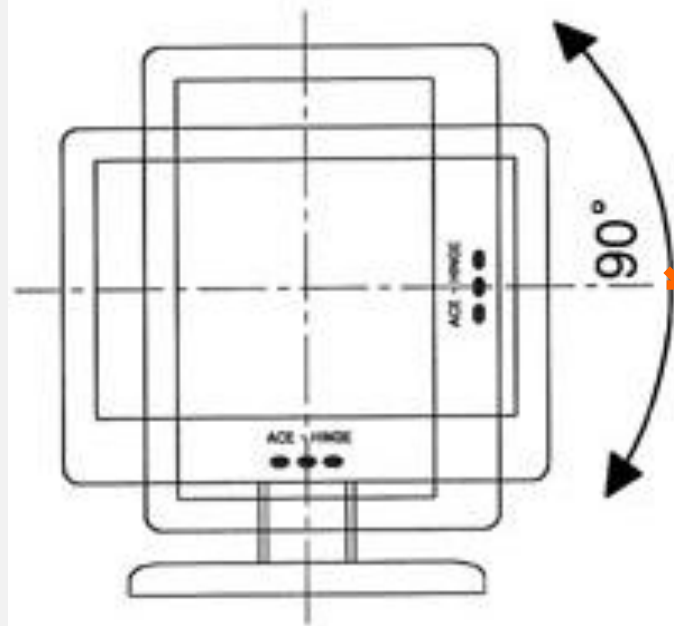
**Control the Angle by
move the Monitor & TV on front
and rear.**



Functional Type

* Pivot Type

We Promise the best Quality and Satisfaction

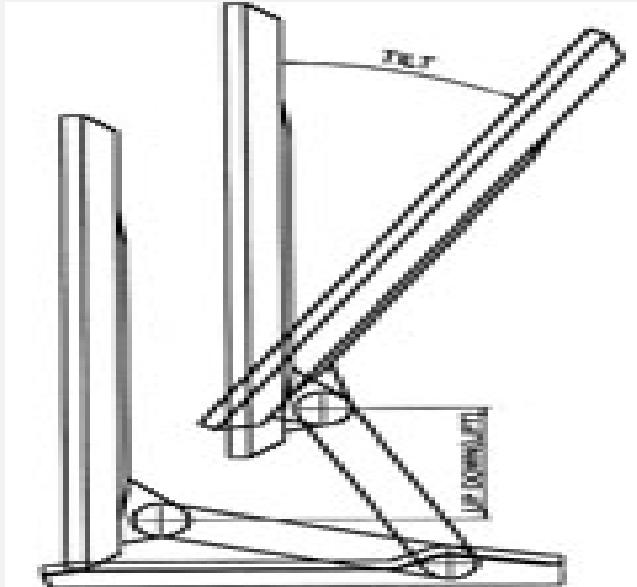


**Control the Angle by
move the Monitor and TV on
Clock way and Counter CW**

Functional Type

* Two Point Type

We Promise the best Quality and Satisfaction



Control the Height and Fold by moving Monitor and TV on front and rear, up and down.



Functional Type

* Multi Type

We Promise the best Quality and Satisfaction

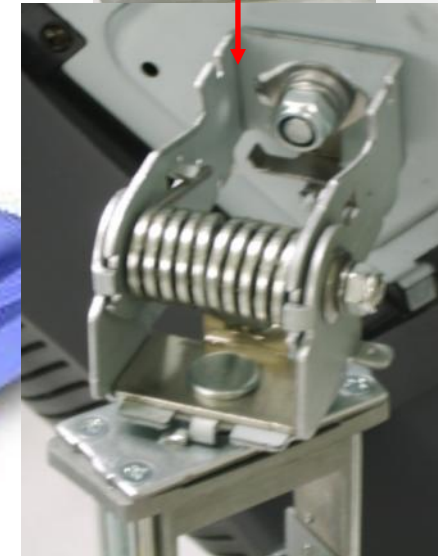
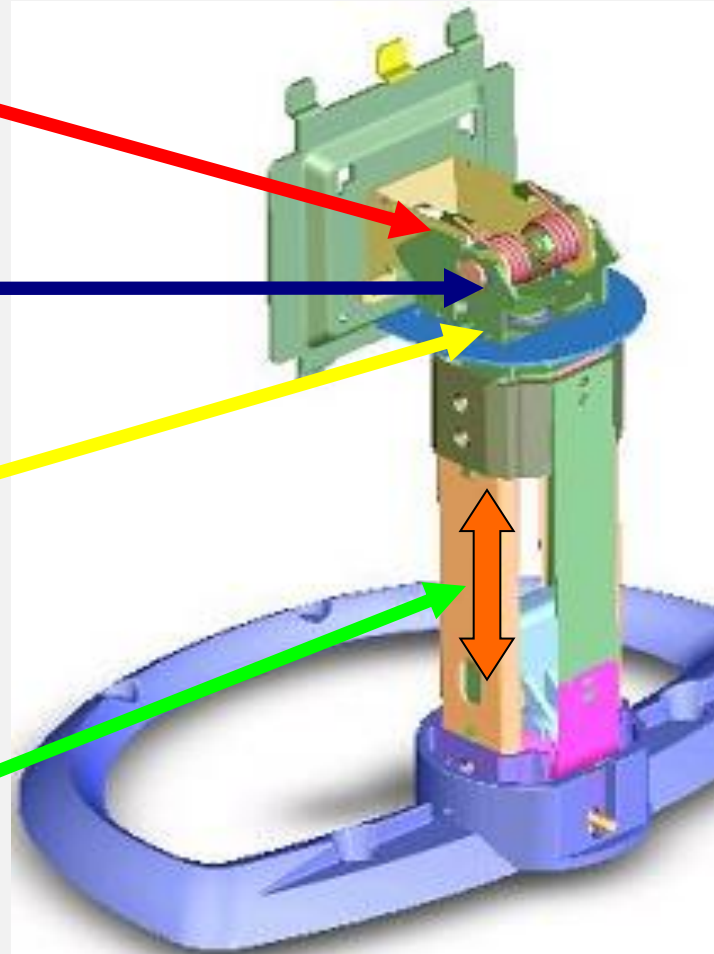
PIVOT

TILT

SWIVEL

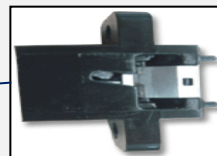
HEIGHT

Control the height by
moving Monitor
Mechanism up and down.



Refrigerator – Oil Damper and Latch

We Promise the best Quality and Satisfaction

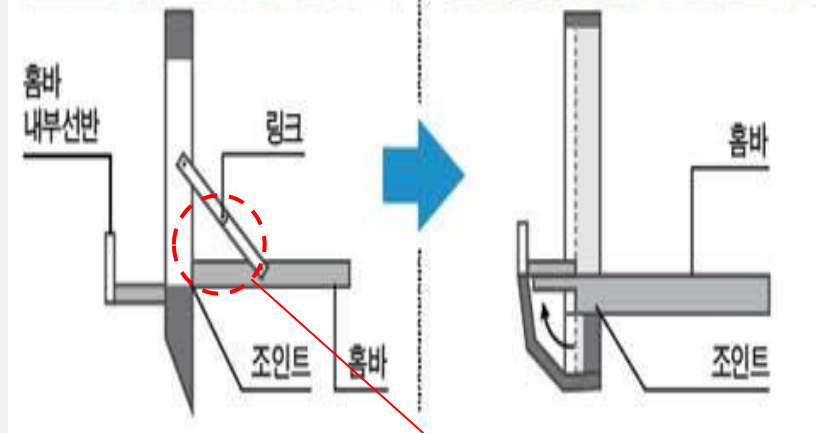


Latch



Homebar Damping Hinge

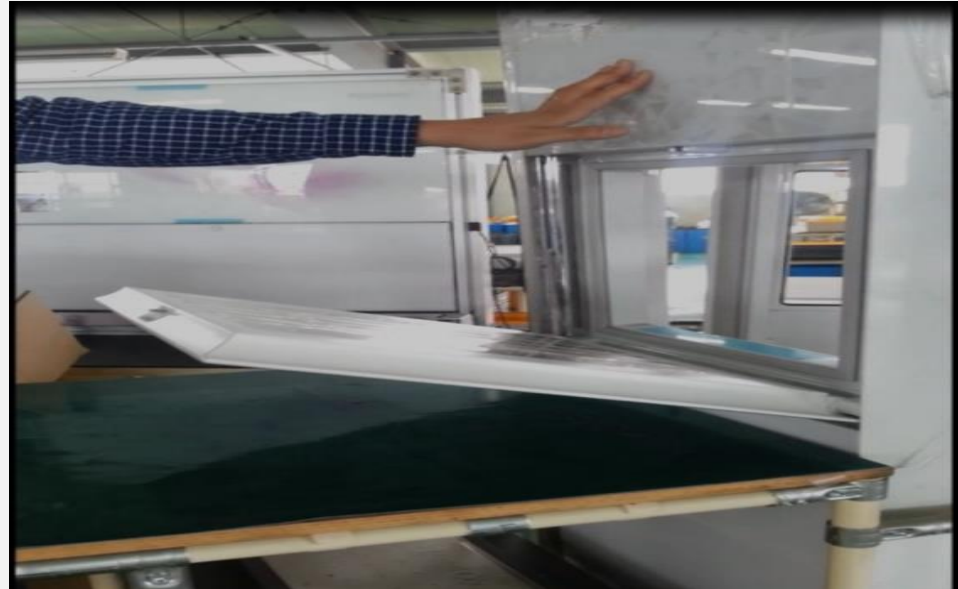
냉장고 홈바의 문제를 해결한 트리즈



Removing the links

Video – Oil Damper and Latch

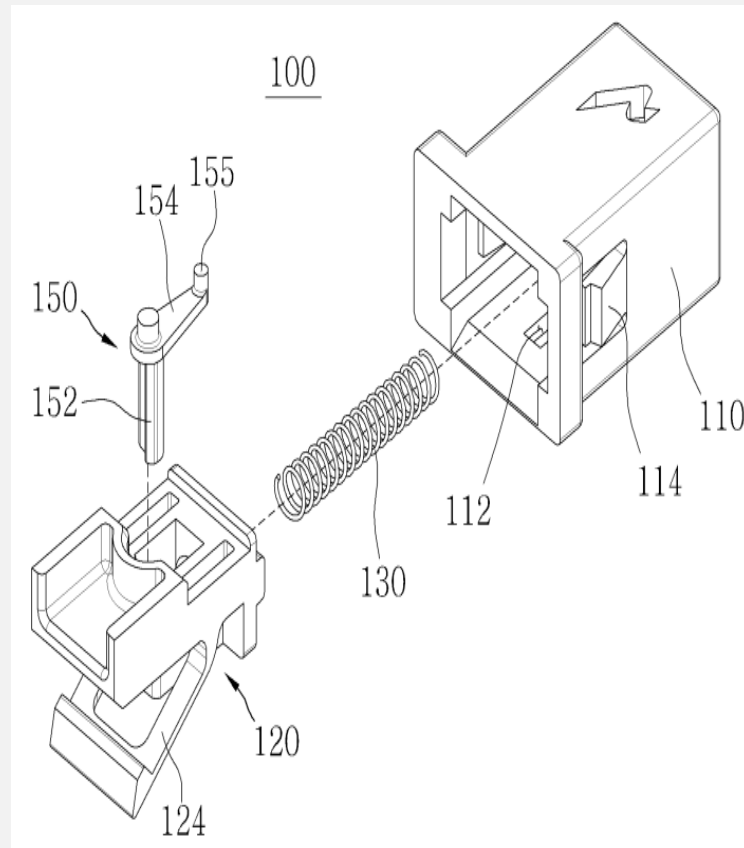
We Promise the best Quality and Satisfaction



Homebar Damping Hinge.wmv

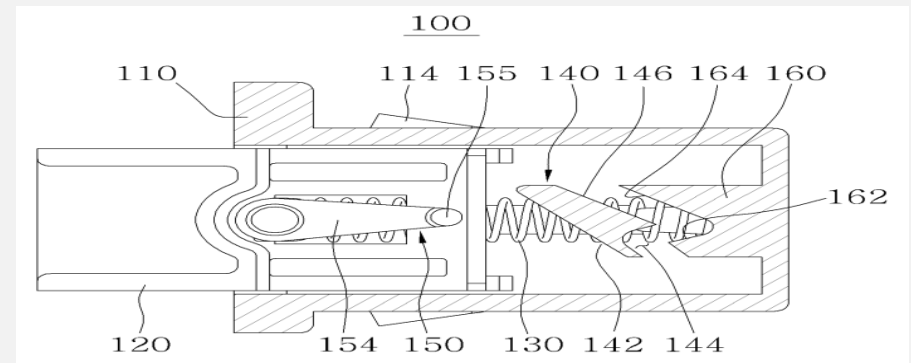
Latch

We Promise the best Quality and Satisfaction



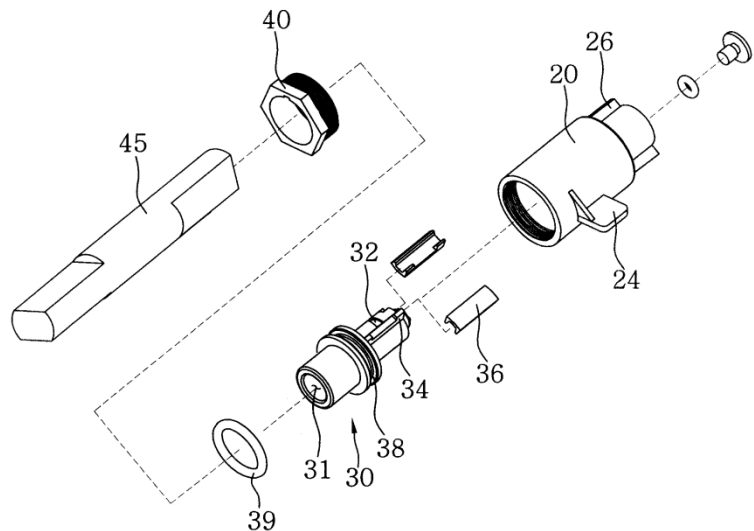
Functional Description

- *Push-up type locking device for washing machine or refrigerator's door
- *It moves along the guide part without a pressure.



Oil Lid Damper (Torque Control-Type)

We Promise the best Quality and Satisfaction



1) Functional Description

When the homebar door opens, the hinge controls the door to be gradually opened In order to improve the ease of being in use.

2) Feature

*After the homebar door opens, oil resistance controls the down time of hinge.

3) Advantage

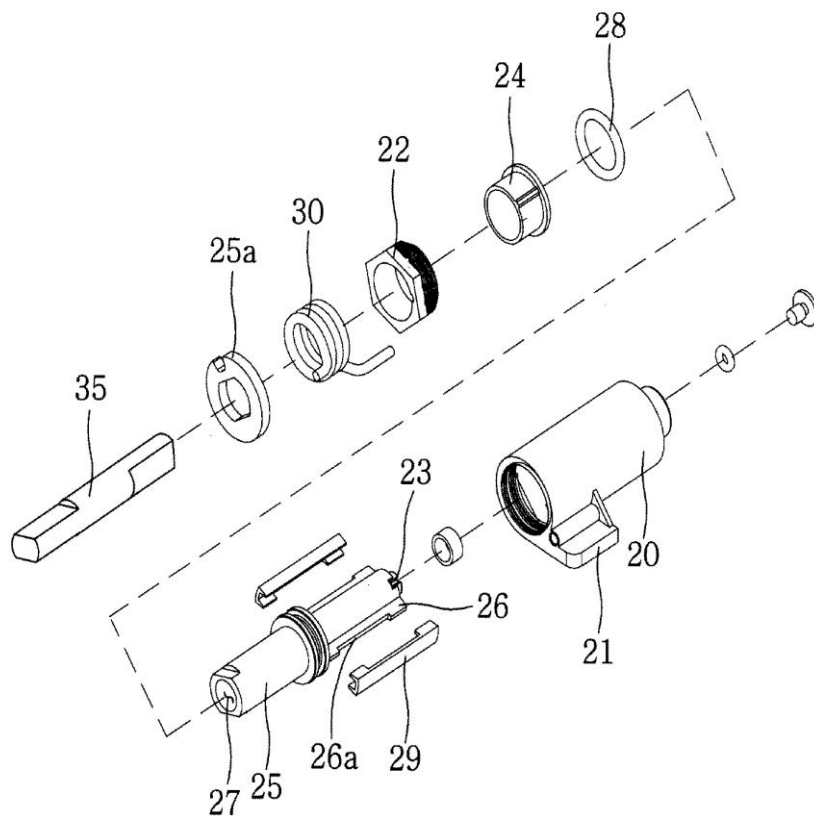
- *Simple manufacturing processes,
- *Torque adjustment can control the micro motion.
- *Simple structure provides easy production
- *Several different refrigerators can be applied.

4) Disadvantage

*The manufacturing processes can be added due to the control of torque.

Oil Lid Damper (Open Reinforced-type)

We Promise the best Quality and Satisfaction



1) Functional Description

It relates to an opening and closing device of homebar door. When homebar door opens, it controls itself to gradually falls at the predetermined angle. It significantly decreases the impact on the door in order to minimize the damage on the hinge and increases the reliability concurrently.

2) Feature

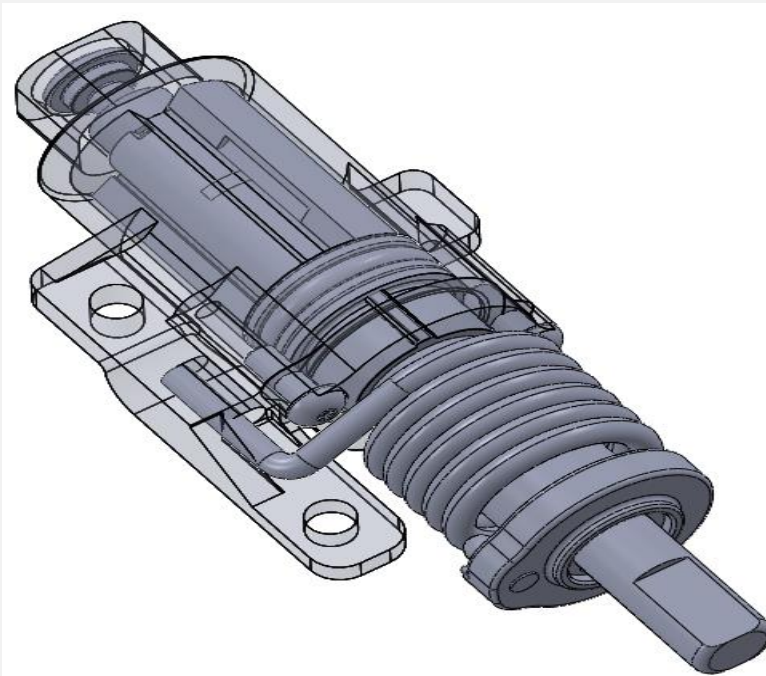
- *The conglomeration of damper and torsion spring provides user to open the homebar door from the top angle.

3) Advantage

- *The repulsive force of torsion spring strengthens the open force of homebar door.
- * Low cost: One hinge can be able to implement to be functioned as two hinges (damper + torsion spring)

Oil Lid Damper (Easy Close Type)

We Promise the best Quality and Satisfaction



1) Functional Description

It relates to an opening and closing device of homebar door. When homebar door opens, it controls itself to gradually falls at the predetermined angle. It significantly decreases the impact on the hinge and increases the reliability concurrently.

2) Feature

- *The conglomeration of damper and torsion spring provides user to open the homebar door from the top angle.

3) Advantage

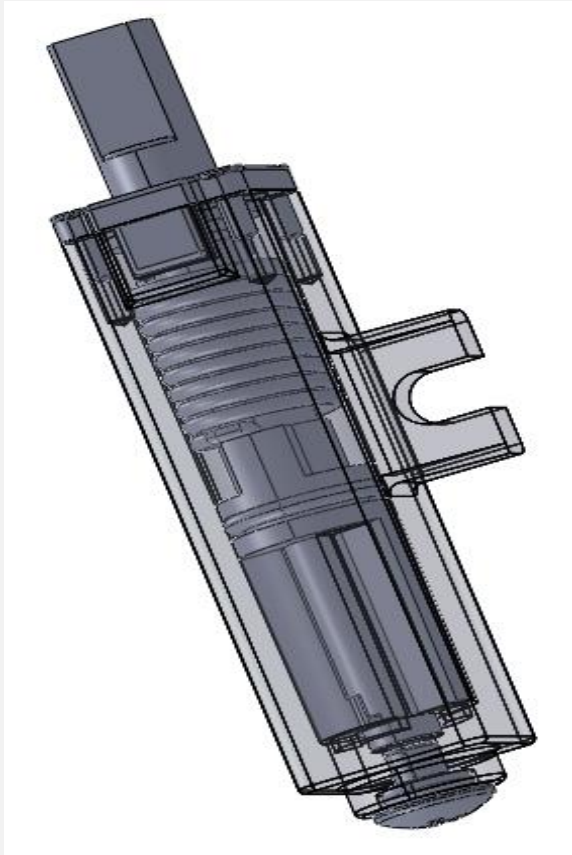
- *It applies to relatively heavy homebar door.
- *It has more durability in comparing to general damper.
- *The force of closing of homebar door is minimized due to torsion spring.

4) Disadvantage

- *It requires a mounting space since it has relative bigger size.

Damping Hinge (Vertical Open Type)

We Promise the best Quality and Satisfaction



1) Functional Description

It relates to an opening and closing device of homebar door.

When homebar door opens, it controls itself to gradually falls at the predetermined angle. It significantly decreases the impact on the door in order to minimize the damage on the hinge and increases the reliability concurrently.

2) Feature

- *It feasibly applies to vertical homebar.
- *The inner structure of case damper includes damper and spring.

3) Advantage

- *After the function of latch, the homebar door automatically opens
- *The damping motion occurs between 70 – 100 degree.
- *High durability and reliability.

4) Disadvantage

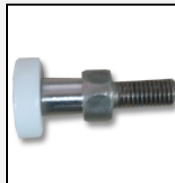
- *It has an intricate structure due to the small parts.

Refrigerator – Hinge & Roller

We Promise the best Quality and Satisfaction



Shelf Folding Hinge



Roller for vegetable drawer



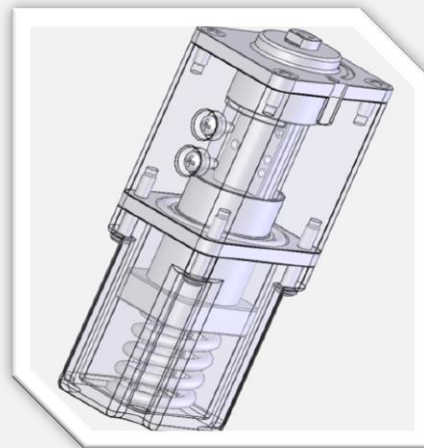
Auto Hinge (L & R)



Vegetable drawer

Video – Auto Close Hinge

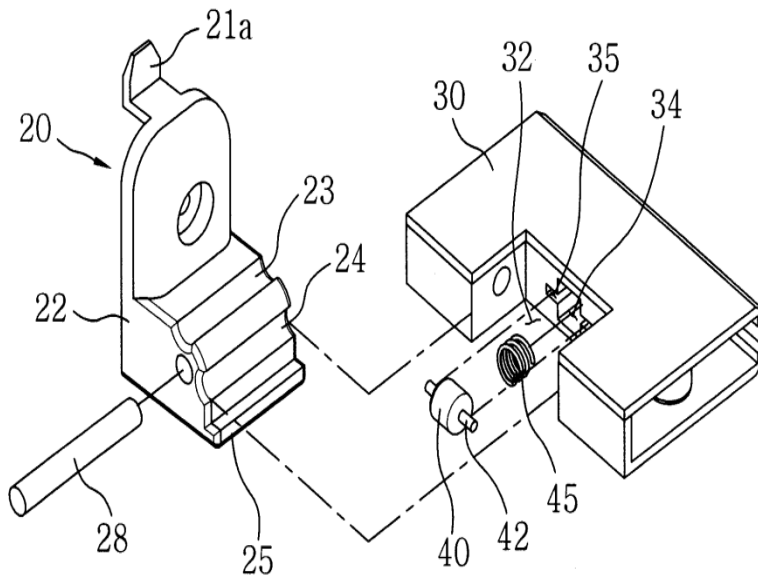
We Promise the best Quality and Satisfaction



Refrigerator Damping Hinge.wmv

Shelf Folding Hinge

We Promise the best Quality and Satisfaction



1) Functional Description

- * It simply rotates in a state in which the goods having a higher interlayer spacing than the size of a refrigerator's shelf to place on the bottom shelf without removing the refrigerator's top shelf in the store room.

2) Feature

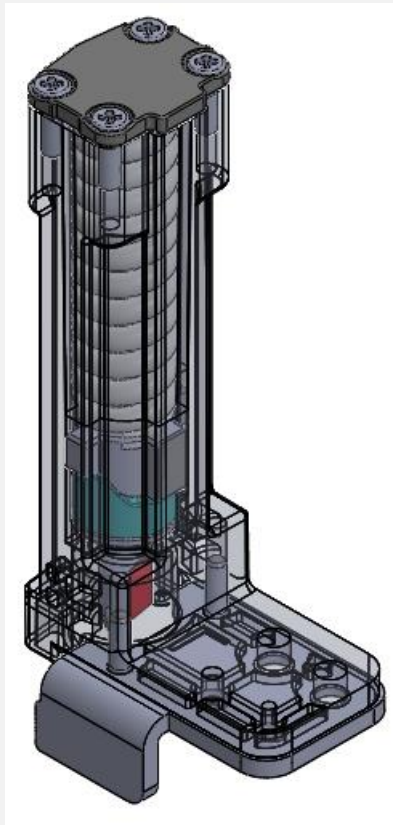
- * It can simply move the shelf without moving its position in the refrigerator.
- * It can adjust and control the storage space in the refrigerator.
- * Movement Degree : 0 – 90 degree (Applying stopper)

3) Advantage

- * It can maximize the limited narrow space of the refrigerator.
- * Maximize the value of the refrigerator at a lower cost.

Auto Close Hinge

We Promise the best Quality and Satisfaction



1) Functional Description

*The fixed cam and the slide cam, which are responsible for the rotation of the refrigerator door, can be able to open and close the refrigerator's door by the only the force of the spring without the full weight of the refrigerator door and drastically minimize the damage of the fixed cam and the slide cam.

2) Feature

- *Open 135 degree
- *Free stop 135 ~ 35 degree
- *Auto close 35 ~ -7 degree

3) Advantage

- *Increasing the sealing force of the refrigerator's door.
- *The motion of refrigerator door with simple parts and structure
- *The excellent reliability for opening and closing movement of the refrigerator's door.

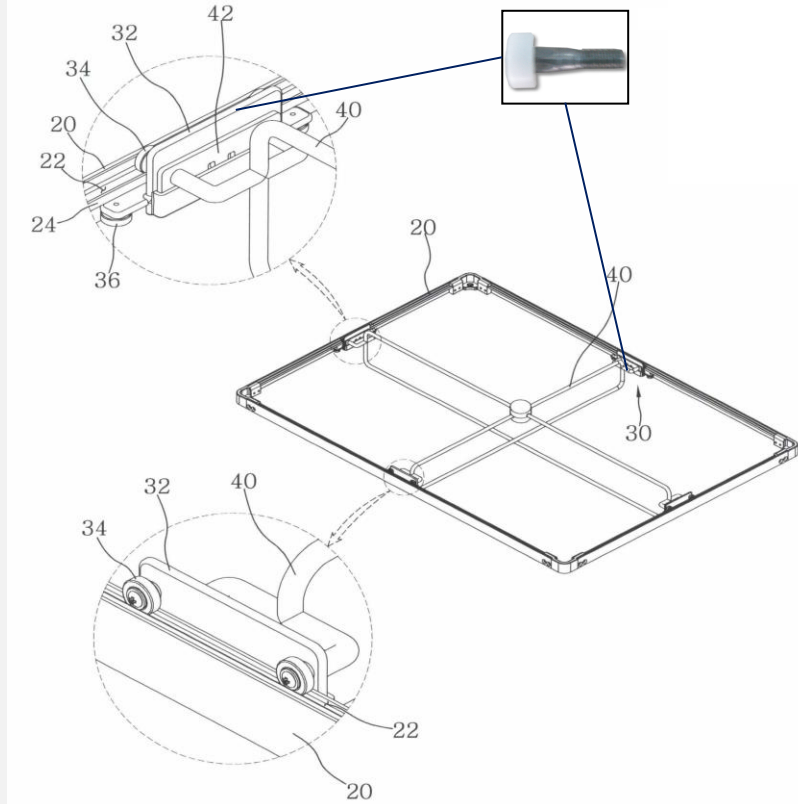
4) Disadvantage

- *The occurrence of noise due to the CAM structure.

Vegetable Basket Divider

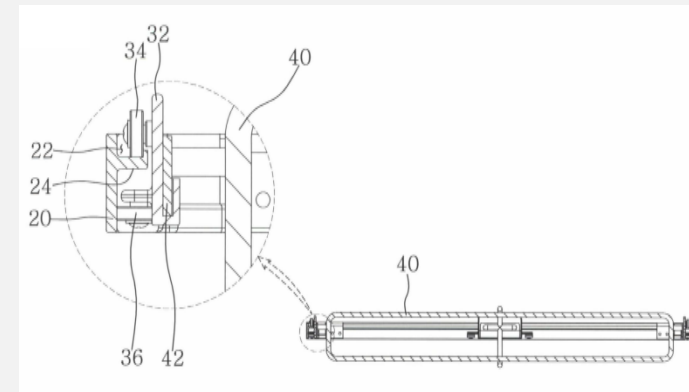
We Promise the best Quality and Satisfaction

Roller for vegetable drawer



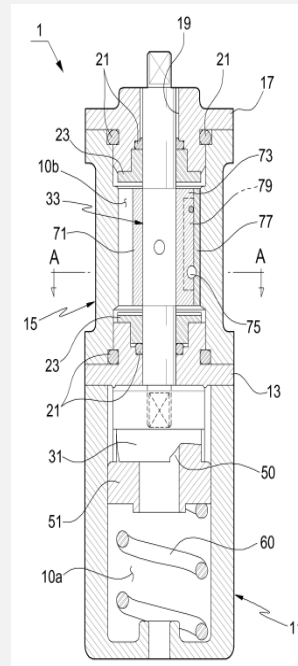
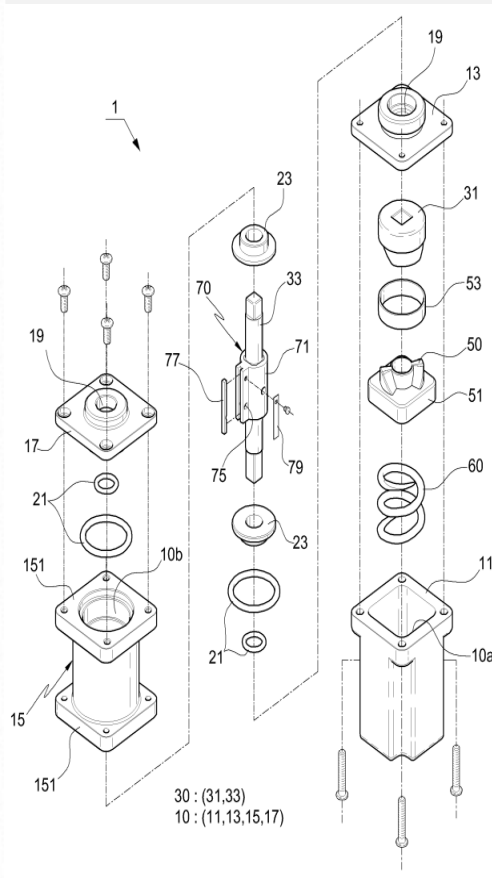
1) Functional Description

- *It divides vegetable and fruits for the end-users
- *It increases the efficiency of the refrigerator's space.
- *The rotational divider enables to divide the space without consideration of size of the vegetables or fruits.



Step Hinge

We Promise the best Quality and Satisfaction



1) Functional Description

- *The rotational motion of the refrigerator's door becomes more smooth by the cam and spring.
- *For the movement of fluid, the damping wing is involved when the door is rotated in order to increase smoother movement.
- * When the refrigerator's door is rapidly rotated to be closed, it stopped the movement temporarily and is closed slowly.
- * It is equipped with a braking function in order to prevent noise and occurrence of damage.

2) Feature

- *Auto Closing and damping function for the refrigerator's door.
- *Auto Close: 40 – 0 degree.

3) Advantage

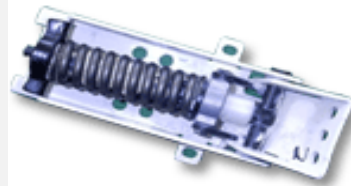
- *Preventing the Product Liability
- *Preventing noise when the refrigerator's door is closed.
- *Increasing the value of refrigerator with damping structure.

4) Disadvantage

- *Manufacturing process is complicated.
- *Price rises due to the incase of the parts

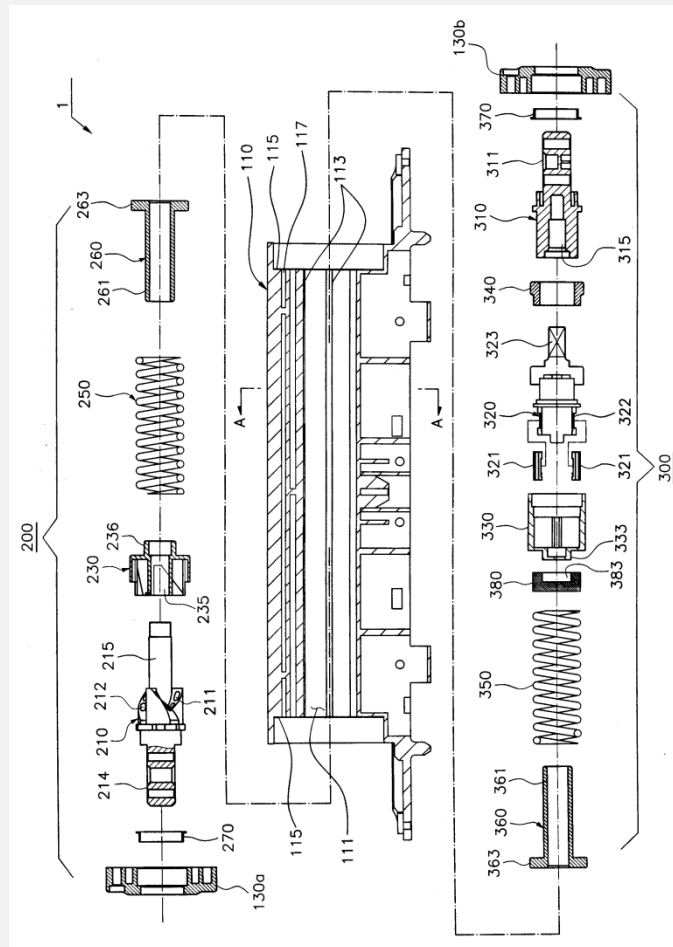
KIMCHI Refrigerator – Damping Hinge (Spring)

We Promise the best Quality and Satisfaction



KIMCHI Refrigerator Damping Hinge

We Promise the best Quality and Satisfaction



1) Functional Description

- *It provides functions of free stop and slow down.
- *The slow down motion occurs in the areas outside of the free stop zone.
- *It blocks the free fall of the refrigerator's door to improve the feeling of safety and quality characteristics of the one-dimensional hinge device.

2) Feature

- *The combination of CAM and Damper.

3) Advantage

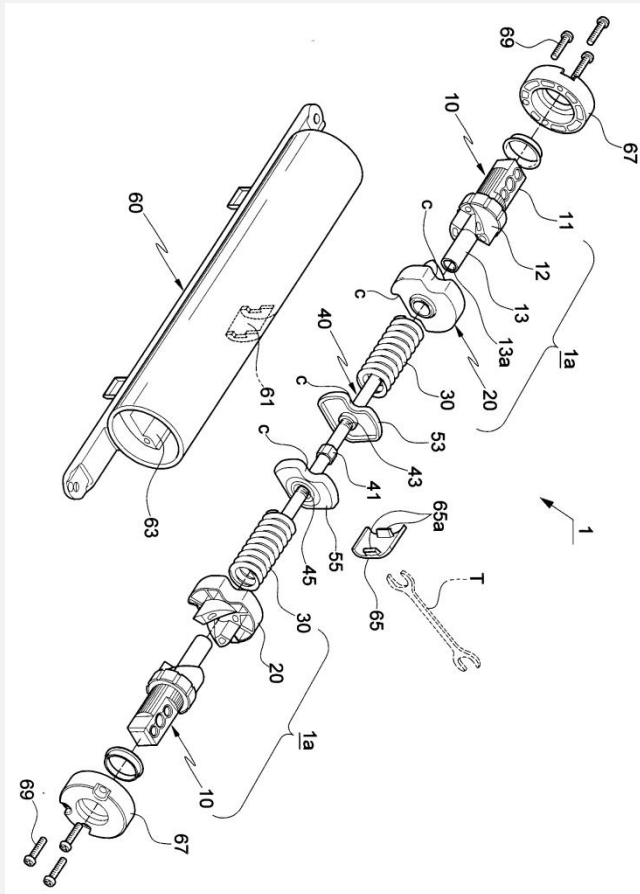
- * Preventing the Product Liability
- * Soft down removes the noise when the refrigerator's door is closed.

4) Disadvantage

- *Manufacturing process is complicated.
- *Price rises due to the incase of the parts

KIMCHI Refrigerator Torque Control Hinge

We Promise the best Quality and Satisfaction



1) Functional Description

*While mounting on the refrigerator, it can adjust repulsion of the spring.

*Without replacement of its spring, it is available to be used as a common by widening the weight coverage.

2) Feature

*The controlling the shaft variable at the center makes the weight of LR and RF spring variable.

3) Advantage

- *The change of torque enables to control the micro motion.
- *It can adjust to other models.
- *It has high quality responsive.

4) Disadvantage

* The manufacturing processes can be added due to the control of torque.

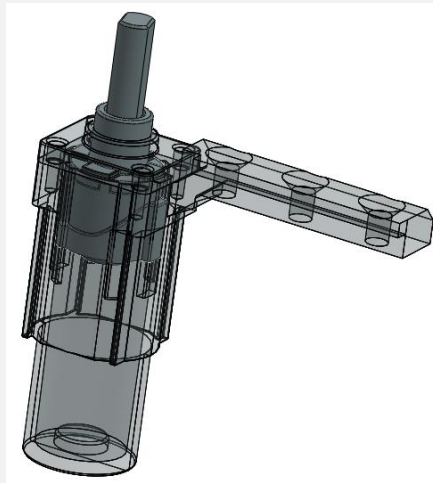
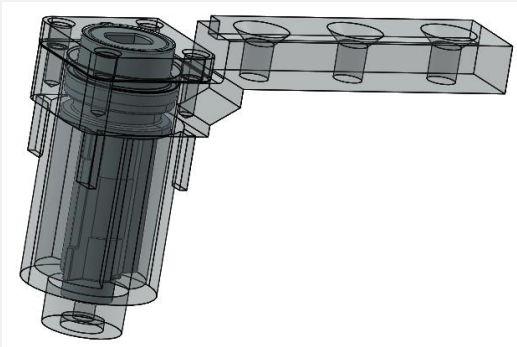
Washing Machine – Hinge & Oil Lid Damper

We Promise the best Quality and Satisfaction



Washing Machine CAM, Damping Hinge

We Promise the best Quality and Satisfaction



1) Functional Description

- *It controls the washing machine's door to gradually fall from a certain angle after it is opened.
- *It significantly minimize the damage generated when the washing machine's door falls.
- * It improves the reliability.

2) Feature

- *Damper and Cam Hinge Door are the roles of rotation axis.
- *The combination of cam and damper

3) Advantage

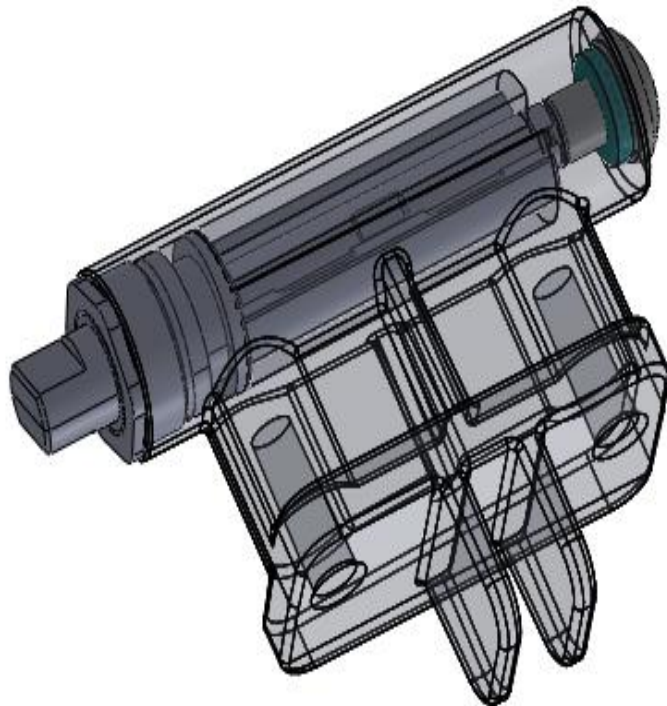
- *Torque adjustment is feasible
- *It can adjust and mount on the relative bigger size of the washing machine's door.

4) Disadvantage

- *It requires a combination of damper and cam due to two types of hinge structure.

Slim Oil Lid Damper

We Promise the best Quality and Satisfaction



1) Functional Description

☐ *It controls the washing machine's door to gradually fall from a certain angle after it is opened.

*It significantly minimize the damage generated when the washing machine's door falls.

* It improves the reliability.

2) Feature

*After the washing machine's door opens, oil resistance controls the down time of hinge.

3) Advantage

*Simple manufacturing processes,

*Torque adjustment can control the micro motion.

*Simple structure provides easy production

*Several different refrigerators can be applied.

4) Disadvantage

**The manufacturing processes can be added due to the control of torque.

Washing Machine Built-in-Hinge

We Promise the best Quality and Satisfaction



1) Functional Description

- * It improves the complex mounting structure of hinge.
- * The main axis and the minor axis rotate at the certain degree when the washing machine's door is opened.

2) Feature

- *Two axis hinge structure enables to be embedded on the body of the washing machine.
- *It often applies to drum washing machine.

3) Advantage






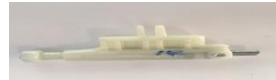



- *It is feasible to secure mounting space due to the hinge embedding structure.
- *It applies to complex door structure such as circle or curve.

4) Disadvantage

- *It is difficult to apply to shaking or heavy door due to the 2 axis by size.
- *Complex structure reduces the manufacturing capability.
- *The number of post-process manufacturing increases due to the structure of molds.








Global Supplying Location

We Promise the best Quality and Satisfaction

Country	Product	Picture
SOUTH KOREA	ASSY DAMPER HOMEBAR	
SOUTH KOREA	ASSY DAMPER HOMEBAR	
SOUTH KOREA	ASSY DAMPER HOMEBAR	
SOUTH KOREA	ASSY DAMPER HOMEBAR	
SOUTH KOREA	ASSY DAMPER HOMEBAR	
SOUTH KOREA	ASSY HINGE DAMPER	
SOUTH KOREA	ASSY DAMPER HOMEBAR	
SOUTH KOREA	ASSY DAMPER HOMEBAR	
SOUTH KOREA	ASSY DAMPER HOMEBAR	







Global Supplying Location

We Promise the best Quality and Satisfaction

COUNTRY	PRDUCT	PICTURE
MEXICO	HINGE MID LEFT	
MEXICO	ASSY HINGE MID RIGHT	
MEXICO	HINGE MID LEFT	
MEXICO	ASSY HINGE MID RIGHT	
MEXICO	BRAKET DIVIDER	
MEXICO	CAP-CONV DECO	
MEXICO	CAP-CONV MID	








Global Supplying Location

We Promise the best Quality and Satisfaction

Country	Product	Picture
MEXICO	ROLLER DIVIDER	
MEXICO	SHAFT-HINGE SHELF	
MEXICO	ROLLER-HINGE SHELF	
MEXICO	SPRING-HINGE SHELF	
MEXICO	ASSY ROLLER A	
MEXICO	ASSY ROLLER B	


Global Supplying Location

We Promise the best Quality and Satisfaction

Country	Product	Picture
MALAYSIA	ASSY DAMPER TORTION	
MALAYSIA	ASSY DAMPER	
POLAND	ASSY LATCH	
POLAND	ASSY LATCH	
POLAND	ASSY LATCH	
CHINA	LOCKER-HOME BAR	
CHINA	ASSY COVER SENSOR	

Global Supplying Location

We Promise the best Quality and Satisfaction

Country	Product	Picture
CHINA	ASSY COVER SENSOR	
INDONESIA	SUPPORT IC	
INDONESIA	SUPPORT PCB	
THAILAND	ASSY HINGE DAMPER	
CHINA	ASSY DAMPER HOME BAR	
CHINA	ASSY DAMPER HOME BAR	