

# Operator's Manual



## Manual Portable Beveler **MPB 32 Pro**



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## Specifications

### 1. Portable Easy Pipe Beveler - MPB32 Pro

Specifications	MPB32 Pro	With Attachment SM-PB-MP1020
Work scope (Diameter)	10" ~ 32"	More than 32"
Thickness of pipes	Less than 20mm	5~40mm (different as per the diameter)
Chamfering width (max) (B)*	21 mm	
Chamfering thickness (45°) (max) (A)*	15 mm	
Adjustable operation angle	0° ~ 45°	
Weight (Bracket+Auto carrier+Beveler)	8.2+7.3+9.7Kg	13.5+7.3+9.7Kg
Requiring Projected length of pipe	Minimum length 200mm	
Requiring Work space	Minimum circumference space 450mm	

# Components

## 1. MPB32-Pro

\* MPB32-Pro is composed of SM-PB-MP1020-AD, SM-PB-MP1020-SD and SM-CP2100.




Components of MPB32-Pro	SM-PB-MP1020-AD		Pipe Attachment Device with Easy Spinning Handle
	SM-PB-AP1020-SD		Pipe Attachment Device (10" ~ 32")
	SM-PB-CP2100		Chamfer-Pro 2100 ( Max. bevel width: 21mm )

## 2. MPB32-Pro

With Optional attachment SM-PB-MP1020AD, SM-PB-MP1020-00 and SM-CP2100.

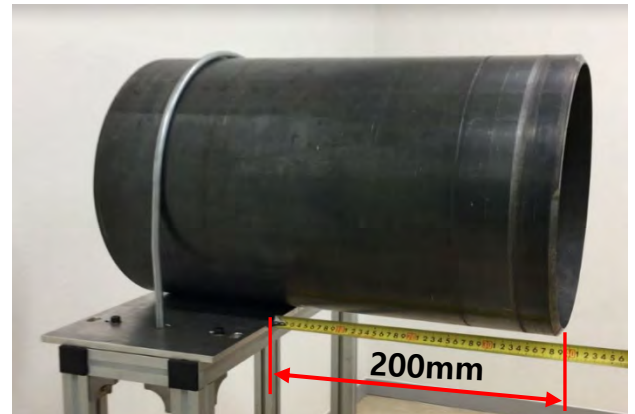
Components of MPB32-Pro with Attachment	SM-PB-MP1020-AD		Pipe Attachment Device with Easy Spinning Handle
	SM-PB-AP1020-LD		Pipe and Plate Attachment Device (more than 32" pipes) (5 ~ 40t plates)
	SM-PB-CP2100		Chamfer-Pro 2100 ( Max. bevel width: 21mm )

## Safety Cautions

1. This machine is not waterproof. Work in damp condition may cause injuries or damages to machines. Electrical safety cautions should be kept at all times.
2. When connecting the power cord, be sure to set the switch at "OFF" position.
3. When the machine is at operation, do not leave the work area and pay attention to the machine.
4. When the machine is at operation, do not stand or walk underneath the machine.
5. Be sure to wear safety goggles and other protection kits at work.   
6. Do not operate the machine nearby inflammable materials since hot particles scattering may cause fire.
7. Connect the electric source in accordance with local electricity regulations.
8. When you install SM-PB-CP2100 to Pipe or Plate Attachment , the level of chamfering depth should always be set at below zero (0) level.
9. When you start the machine after installation, turn on the switch of the motor of SM-PB-CP2100 and set the beveling value first. After that, move the machine with spinning handle. (When you would like to stop the machine, do it the other way round. Stop moving the carrier first and then turn off the switch of the motor of SM-PB-CP2100.)
10. If the machine becomes hot due to accumulated heat caused by hot chips during the continuous operation, it is efficient to connect the air valve to the frame parts and cool it down through air injection.
11. When you would like to use this machine, be sure to read the User's Manual of SM-PB-CP2100, and understand it fully before you use this machine.
12. Before you start the chamfering work with this machine, be sure to confirm whether enough work space for the chamfering work is secured first.
13. This machine should be used under the work scope suggested by the specifications.
14. This machine should be used only by workers who have read this User's Manual and understand these safety cautions.
15. Safety cautions should be kept at all times during daily works. When needed, the employer should be responsible for controlling all the work procedures.

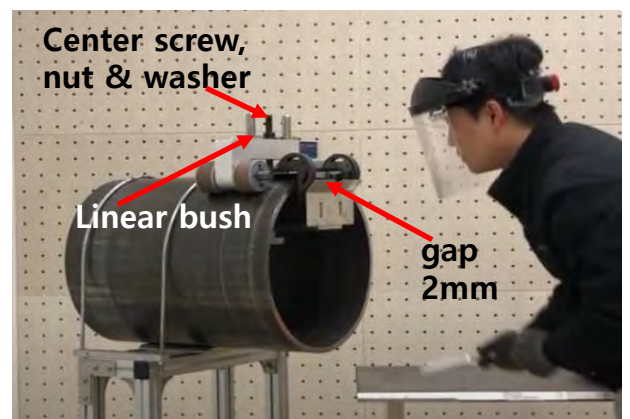
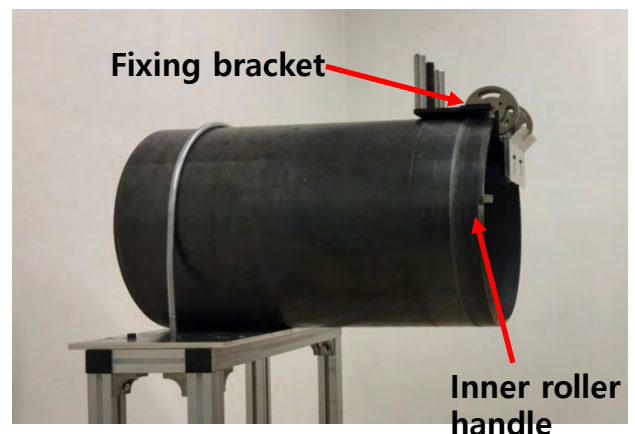
## Order and Procedure of Installation to Pipes MPB32-Pro

1. Before the installation of the Manual Pipe Beveling Machine MPB32-Pro, confirm whether minimum pipe length projected is more than 200mm and the work space is secured as more than 350mm first so that the machine could rotate along the pipe without a disturbance.
2. Attach the fixing bracket to the upper side of the pipe, and turn the inner roller adjustment handle (List No.17) clockwise and tighten it with your hand. (Refer to parts no. guide on the bottom)



(Before installing the bracket, appropriately loosen the inner roller handle to secure enough gap so that the bracket could be inserted into the pipe.)

3. Put on the main carrier (SM-PB-MP-AD) by combining the linear bush of the main carrier with the guide shafts of the fixing bracket and assemble center washer and nut with Center Screw .
4. Tighten the Nut using 24mm socket wrench provided. At this time, tighten strongly by reaching 180 degrees, tighten 4-5 times. (The number of tightening could be different as per the tightness of the adjustment handle explained in the item 2 above.)



5. After tightening strongly, be sure to check whether the gap between the surface of the workpiece and the bottom side of X-Plate is around 2mm apart. In case the gap is not wide enough, adjust the gap by tightening the nut a little bit more.

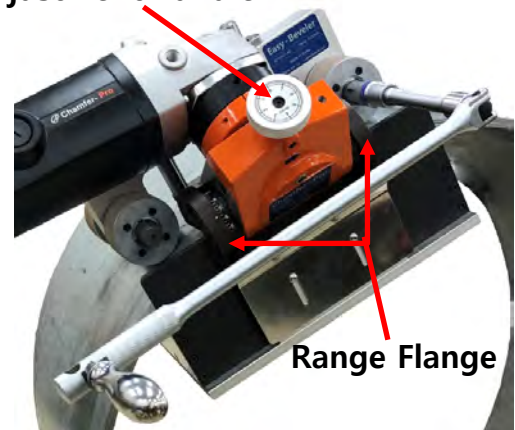
**\*\* Parts No. Indication Examples**

**1.SD-17** : Parts List No.17 in the APB32 Pro-SD Parts drawing (Page.12).

**2.AD-1-1** : Parts List No.1-1 in the MPB32 Pro-AD Parts drawing (Page.11).

- Turn the beveling value adjustment handle and set the beveling value to be below zero(0) level. After that, install the machine between the Range Flange (SD-11) on both sides. Then, match the angle with angle gradations and tighten 4 units of screws (SD-11-1).

**Beveling value adjustment handle**

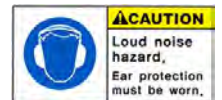


(※At start, if the beveling value is not set at under zero (0) level, it may cause damages on the machine and installation may not be possible.)

- Prepare for operation by combining the spinning handle with the hexagonal axis of the transfer unit roller.(The spinning handle can be fitted to the hexagon axis of each front and rear wheel. The front wheel is basically recommended, but it can be changed accordingly depending on the working situation.)

- Before the operation, you must wear the protective kit.

Then, turn on the switch of the motor of the beveling machine first and adjust the intended beveling value by turning the beveling value adjustment handle.



- Adjust the feed rate of MPB32 pro appropriately with the spinning handle. (The handle rotates clockwise, and the feed rate needs to be adjusted according to the working conditions, such as beveling value, working material, insert tip's condition, and etc.)



※ Do not accelerate when the machine goes down sharply. It rotates almost by itself by its load.

- After the beveling work is finished, stop moving the carrier first and then turn off the switch of the motor.

- Separation is the inverse order of the installation.

For the next operation and safety, remove the chips(particles) inside the equipment by air-blowing or brushing, and set the beveling value to be below zero(0) level.

- ※ For the larger pipes(more than 32"), you need to apply the larger bracket, SM-PB-AP1020-LD The order of installation and the operation are same as above. (Please refer to the explanation above and the following page.)

**Application of SM-PB-AP1020-LD**

1. SM-PB-AP1020-LD (Large Attachment Device) is applicable to pipes with diameters more than 32 inches, and also applicable to plates.
2. To use SM-PB-AP1020-LD, you should select either one of the Inner Roller Screws with different lengths(LD-16) according to the diameter of the pipe and thickness of the plate. The scope of applications are specified in the below table.

Classification	Length of List No. 16, Inner Roller Screw	
	Short One	Long One
Pipe	32" ~ 59" (800A ~ 1500A)	Over 47" (Over 1200A)
Plate	Applicable to thicknesses of 15 ~ 40mm	Applicable to thicknesses of 5 ~ 30mm

3. In case the diameter of the pipe is very big and the height of the upper portion of the pipe is very high, it could be difficult to install the fixing bracket on the top. In this case, it is possible to install the fixing bracket on the side of the pipe at the workable height.
4. At this time, the machine should be installed on the left-hand side, not on the right-hand side of the pipe. When you install the fixing bracket and the carrier, the gap between the bottom side of the X-Plate and the pipe should be around 2mm. (The less roundness, the more gap (space) you need.)
5. When you change the inner roller screws with different lengths, the roller block should be positioned as you can see the white point marked side.

**Application of Plate Beveling and Outside Diameters Beveling of Short Pipes**

1. If you purchase MPB32 Pro or APB32 Pro models, all the parts of List No. 26-30(V-block) of SM-PB-CP2100 model are included as standard items and you can do the plate beveling manually either.
2. If you follow the instructions explained in "How to chamfer Outside Diameters of Pipes" in the User's Manual of Chamfer-Pro, you can do the pipe beveling of outside diameters of short standing pipes(more than 6 inches) manually.



## Differences of beveling value as per the way of installation

The actual chamfering value could be different according to the changes of the gap (1-2 mm) between the surface of the workpiece and the bottom side of X-Plate as explained in item 6 of "Order and Procedure of Installation to the Pipe".

That is to say, even if you set the beveling value to be the same, the result of actual beveling value will be different by the difference of the gap.

Moreover, even in cases of the gaps to be the same, the beveling value will be different according to the beveling angle. (Please refer to item 2 of "Chamfering Depth Adjustment" of the User's Manual of SM-PB-CP2100.

Therefore, it is desirable to make the constant gap under the bottom side of the X-Plate at the time of installation.

## Troubleshooting

Troubles	Causes	Solutions
Even if the beveling is usual, the wearing rate of inserts are faster than normal.	The feeding speed is slow compared with the beveling quantity.	Increase the feeding speed with spinning handle.
	The motor RPM is too high compared with the beveling quantity.	Adjust the RPM with speed controller of the motor.
Actual result of beveling quantity is less than intended beveling value set on the machine.	Less beveling quantity caused by the wearing of insert tips.	Replace the worn insert tips.
	The feeding speed is too fast compared with the beveling quantity.	Decrease the feeding speed with spinning handle.

## Tools and Parts Provided

- |                                    |      |
|------------------------------------|------|
| 1. 24mm × ½" Long Hand Socket(12P) | 1 EA |
| 2. Ratchet Handle ½"               | 1 EA |
| 3. Hexagonal Screw(M8 × 30)        | 4 EA |

**7. WARRANTY CARD****WARRANTY CARD No.....**

..... in the name of Manufacturer warrants

1. The manufacturer provides a one (1) year warranty of the products from the date of purchase. (To be proved by invoice or delivery note)
2. Even within the 1 year warranty period, consumable (wearable) parts, overload, improper use, damages caused by excessive power and unauthorized modifications will be excluded from the warranty.
3. This warranty is applicable to the users only who used the products in accordance with the instructions and intended usages presented in this User's Manual.
4. In case it is proven that the defects are caused by defective materials or poor workmanship of the manufacturing, repair or replacement of defective parts will be provided free of charge by this warranty.

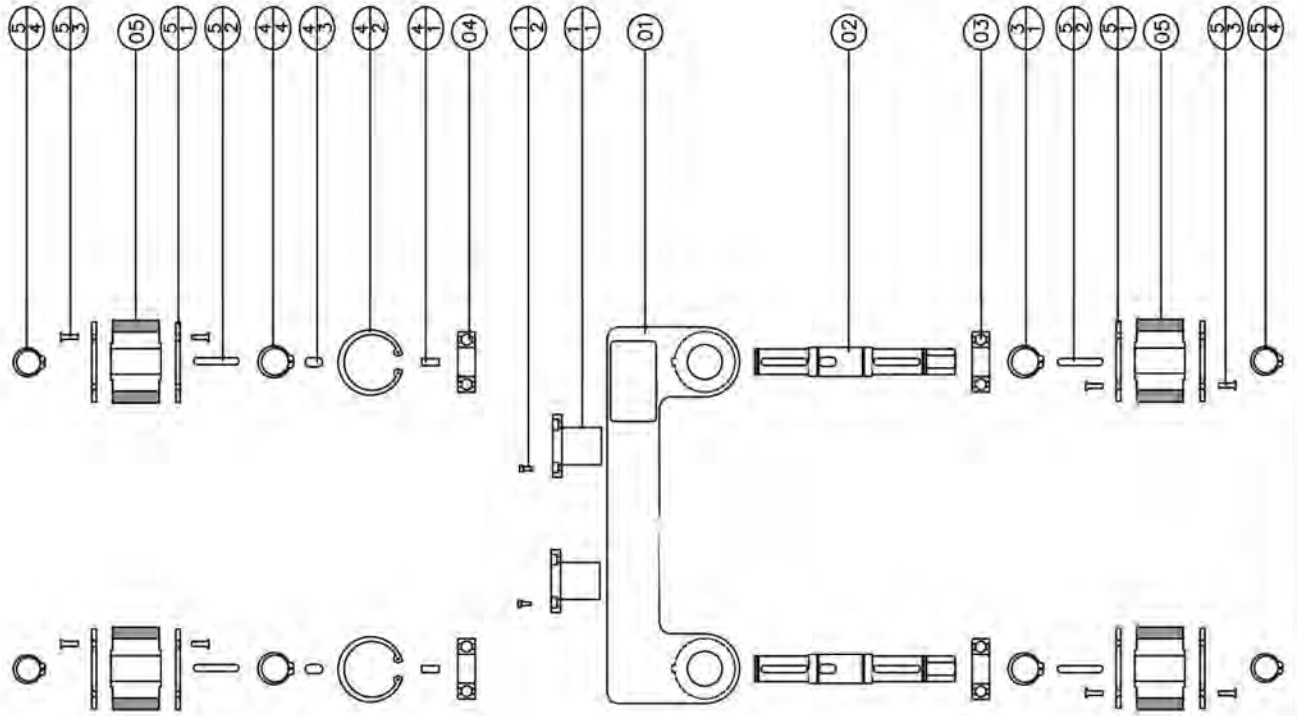
Serial number.....

Date of sale .....

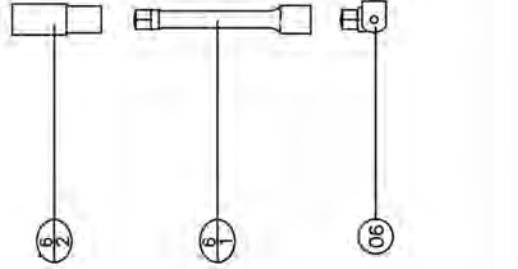
Signature of seller .....

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# MPB32 Pro Parts List

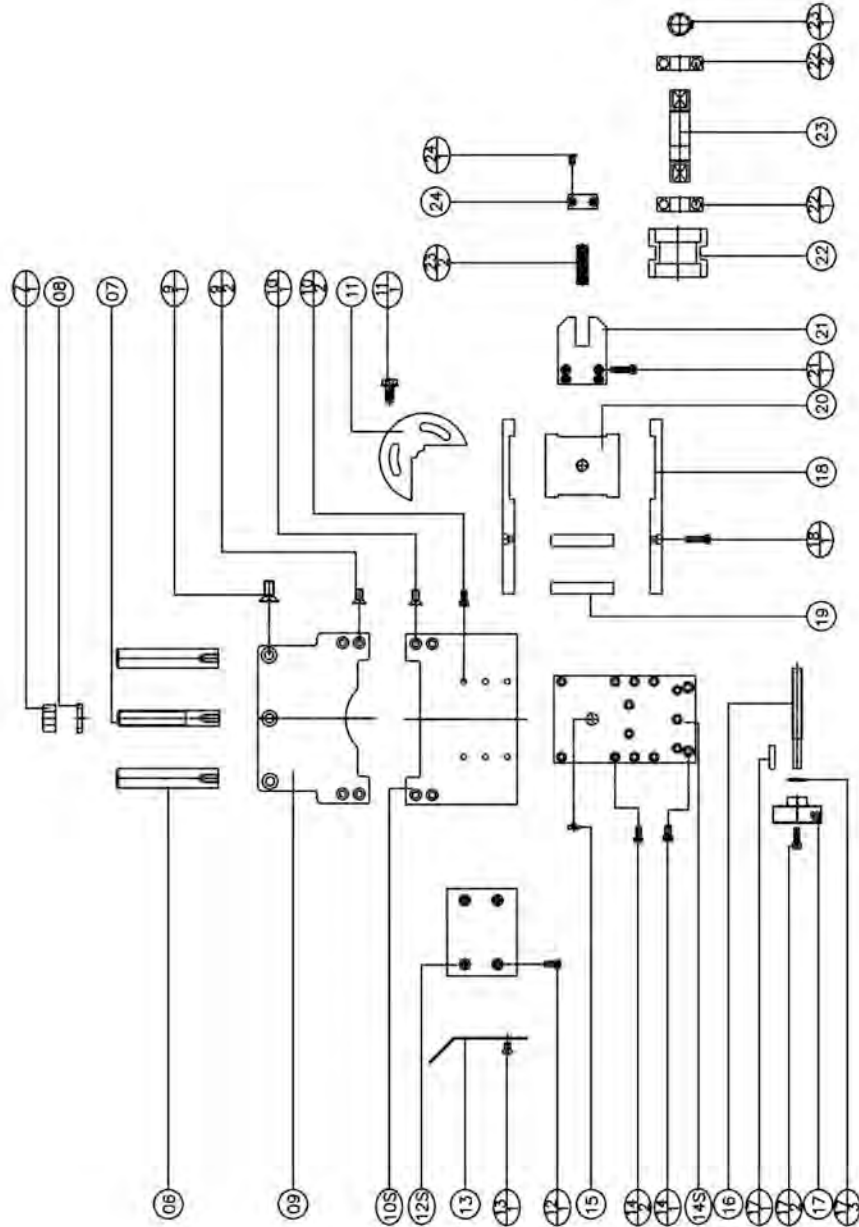


6-2	SOCKET WRENCH	1	19mm-1/2"
6-1	EXTENSION BAR	1	6"-1/2"
06	SPINNING HANDLE	1	
5-4	SNAP RING	4	S22
5-3	SCREW	32	M4 x 15
5-2	KEY	4	6x6x40 2R
5-1	ROLLER SIDE RING	8	
05	ROLLER	4	
4-4	SNAP RING	2	S25
4-3	KEY	2	8x5x15 2R
4-2	SNAP RING	2	R52
4-1	KEY	2	6x4x15
04	CLUTCH BEARING	2	#BB25-2K
3-1	SNAP RING	2	S25
03	BALL BEARING	2	#6205DD
02	SHAFT	2	
1-2	SCREW	8	M5 x 12
1-1	LINEAR BUSH	2	LMH20
01	U-BLOCK	1	
NO	Description	Q'ty	Spec

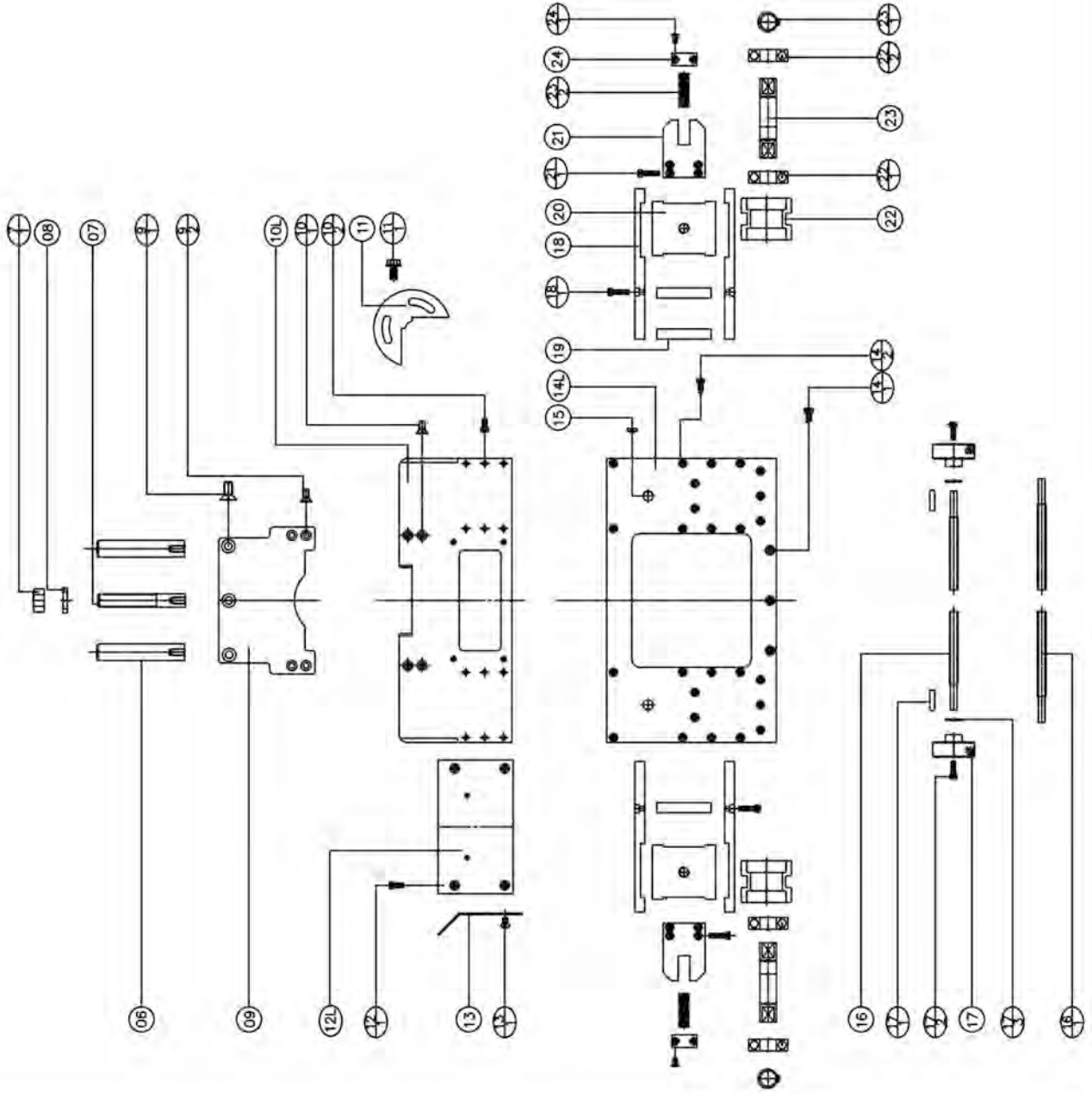


# APB32 Pro Parts List

24-1	BOLT	4	M4 x 10
24	SPRING FIX PLATE	2	
23-2	SPRING	2	TB12x25
23-1	SNAP RING	2	S20
23	ROLLER SHAFT	1	
22-2	CLUTCH BEARING	1	BB20
22-1	BALL BEARING	1	#6204
22	INNER ROLLER	1	
21-1	SCREW	8	M5 x 20
21	ROLLER BLOCK	2	
20	PLATE	1	
19	SUPPORT PLATE	2	
18-1	SCREW	8	M5 x 15
18	SUPPORT BLOCK	2	
17-3	WASHER	1	M8
17-2	SCREW	1	M4 x 15
17-1	KEY	1	3x3x12
17	HANDEL	1	
16	INNER ROLLER SCREW(SHORT)	1	
15	BUSH	1	
14-2	SCREW	13	M5x15
14-1	SCREW	2	M6x15
14S	PLATE	1	
13-1	S-HEXA BOLT	2	M5x10
13	COVER	1	
12-1	SCREW	4	M6x15
12S	COVER ADAPTER	1	
11-1	SCREW & FLAT WASHER	4	M6x30
11	RANGE FLANGE	2	
10-2	SCREW	6	M5x15
10-1	SCREW	4	M6x12
10S	Y-PLATE	1	
9-2	SCREW	4	M6x12
9-1	SCREW	3	M8x20
09	X-PALTE	1	
08	CENTER WASHER	1	
7-1	NUT	1	M16
07	CENTER SCREW	1	
06	GUIDE SHAFT	2	
NO	Description	Q'ty	Spec



# APB32 Pro with Large Attachment Device



24-1	SCREW	8	M4 x 10
24	SPRING FIX PLATE	4	
23-2	SPRING	4	TB 12x25
23-1	SNAP RING	4	S20
23	ROLLER SHAFT	2	
22-2	CLUTCH BEARING	2	BB20
22-1	BALL BEARING	2	#6204
22	INNER ROLLER	2	
21-1	SCREW	16	M5 x 20
21	ROLLER BLOCK	4	
20	PLATE	2	
19	SUPPORT PLATE	4	
18-1	SCREW	16	M5 x 15
18	SUPPORT BLOCK	4	
17-3	WASHER	2	M8
17-2	SCREW	2	M4 x 15
17-1	KEY	2	3x3x12
17	HANDEL	2	
16-1	INNER ROLLER SCREW(LONG)	2	
16	INNER ROLLER SCREW(SHORT)	2	
15	BUSH	2	
14-2	SCREW	26	M5x15
14-1	SCREW	3	M6x15
14L	PLATE	1	
13-1	SCREW	2	M5x10
13	COVER	1	
12-1	SCREW	4	M6x15
12L	COVER ADAPTER	1	
11-1	SCREW & FLAT WASHER	4	M8x30
11	RANGE FLANGE	2	
10-2	SCREW	12	M5x15
10-1	SCREW	4	M6x12
10L	Y-PALTE	1	
9-2	SCREW	4	M6x12
9-1	SCREW	3	M8x20
09	X-PALTE	1	
08	CENTER WASHER	1	
7-1	NUT	1	M16
07	CENTER SCREW	1	
06	GUIDE SHAFT	2	
NO	Description	Q'ty	Spec