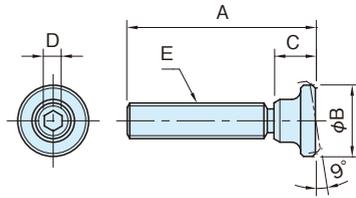


# BJ746

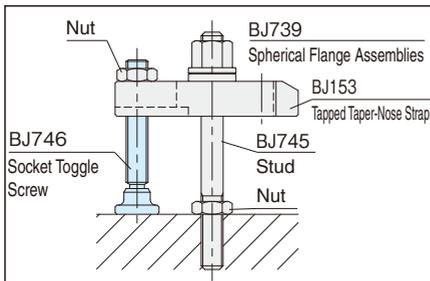
# SOCKET TOGGLE SCREWS



Type	Body	Foot
BJ746	Steel (SCM435) Quenched and tempered Black oxide finish	Steel (S45C) Quenched and tempered Black oxide finish
BJ746-SUS	Stainless Steel (SUS304)	

Steel	Stainless Steel	A	B	C	D	E	weight (g)
Part Number	Part Number						
BJ746-06001	BJ746-06001-SUS	27	12	7	3	M 6×1	9
BJ746-06002	BJ746-06002-SUS	42					13
BJ746-08001	BJ746-08001-SUS	43	16	9	4	M 8×1.25	28
BJ746-08002	BJ746-08002-SUS	63					37
BJ746-08003	BJ746-08003-SUS	83					46
BJ746-10001	BJ746-10001-SUS	64	20	11	5	M10×1.5	50
BJ746-10002	BJ746-10002-SUS	84					60
BJ746-10003	BJ746-10003-SUS	104					70
BJ746-12001	BJ746-12001-SUS	65	25	13	6	M12×1.75	75
BJ746-12002	BJ746-12002-SUS	85					95
BJ746-12003	BJ746-12003-SUS	105					110
BJ746-12004	-	130					130
BJ746-16001	-	85	32	15	8	M16×2	170
BJ746-16002	-	105					190
BJ746-16003	-	130					230
BJ746-16004	-	155					265
BJ746-20001	-	105	40	16	10	M20×2.5	310
BJ746-20002	-	130					360
BJ746-20003	-	155					410

## Application Example



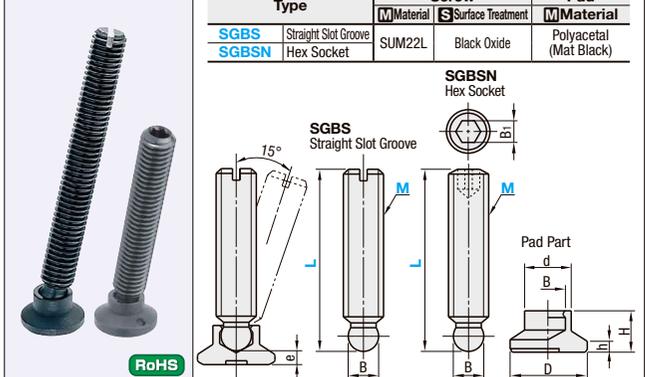
# Grub Screw Sets

## Ball Point, Thrust Point, Stainless Steel

# Grub Screw Sets / Clamp Plates / Shims for Clamp Plates

## Rubber Pads, Flanged

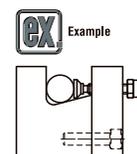
### Ball Point



**RoHS**

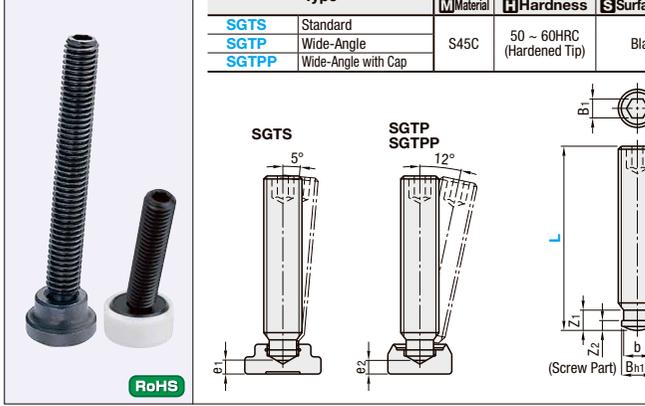
Type	Screw	Pad
	M Material   H Hardness   S Surface Treatment	M Material   S Surface Treatment   M Material
SGBS	Straight Slot Groove	Polyacetal
SGBSN	Hex Socket	(Mat Black)

Part Number Table:  
 Type M (Coarse) | L | e | D | h | H | d | B | B1 | Mass (g) | Unit Price  
 8 | 40 | 2.5 | 15 | 2.5 | 7.6 | 8.6 | 6.1 | 4 | 12 |  
 10 | 50 | 3.4 | 18 | 2.5 | 9.2 | 11 | 7.8 | 5 | 15 |  
 12 | 80 | 3.4 | 21 | 3 | 10 | 13 | 9.4 | 6 | 19 |  
 100 | 22 | 29 | 37 | 41 | 53 | 68

Example: 

**Features:**  
 • Useable to tighten or position the workpiece or as a stopper.  
 • Clamping Screws can be made easily by assembling with a lever or a knob.  
 • Pad is made of plastic and doesn't hurt workpieces. It is effective when the workpiece's surface is uneven or tilted.

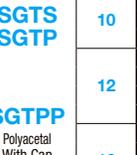
### Thrust Point



**RoHS**

Type	Screw	Pad	Cap
	M Material   H Hardness   S Surface Treatment	M Material   H Hardness   S Surface Treatment	M Material
SGTS	Standard		-
SGTP	Wide-Angle		-
SGTPP	Wide-Angle with Cap		Polyacetal

Part Number Table:  
 Type M (Coarse) | L | Mass (g) | Unit Price  
 6 | 30 | 9 | - |  
 8 | 40 | 21 | 25 | 26 |  
 10 | 50 | 24 | 28 | 29 |  
 12 | 60 | 26 | 30 | 31 |  
 16 | 70 | 42 | 48 | 50 |  
 100 | 49 | 55 | 57 |  
 70 | 54 | 60 | 62 |  
 60 | 72 | 76 | 79 |  
 80 | 88 | 92 | 95 |  
 100 | 98 | 102 | 105 |  
 150 | 154 | 158 | 161 |  
 70 | 144 | 160 | 162 |  
 80 | 159 | 175 | 177 |  
 100 | 259 | 275 | 277 |  
 125 | 300 | 316 | 318

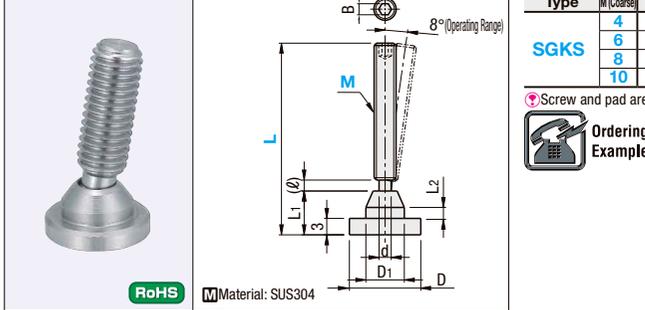
Example: 

**How to Assemble Screw Parts and Pad Parts**  
 1. Insert a tilted grub screw to the open side of the retaining ring set in the thrust pad as shown in Fig.1.  
 2. Pull the grub screw up to fit into the pad as shown in Fig.2.  
 \*If extra force is applied to the retaining ring, or if the grub screw is inserted into it without being tilted against its open side, the retaining ring may be damaged.

M (Coarse)	B	b	Z1	Z2	D	h1	H1	t	d	C	e1	h2	H2	e2	D1
6	4.5	4	5.4	2.5	3	12	2.5	7	4	10	4.6	2.2	-	-	-
8	6	5.4	6.8	3	4	16	4	9	5	12	6.1	3	7	8	2.2
10	8	7.2	8.2	4.5	5	20	5	11	6	15	3.6	8.5	10	2.6	23
12	10	9	9.6	5	6	25	6	13	7	18	4.5	8	11	2.9	28
16	12	11	10.6	5	8	32	7	15	7.5	22	12.1	5.3	10	4.5	35
20	15.5	14.4	12.4	5.5	10	40	9	16	8	28	15.6	5.6	-	-	-

Part Number	Type	M (Coarse)	L	Mass (g)	Unit Price				
				SGTS	SGTP	SGTPP	SGTS	SGTP	SGTPP
6	6	30	9	-	-	-	-	-	-
8	8	40	21	25	26	-	-	-	-
10	10	50	24	28	29	-	-	-	-
12	12	60	26	30	31	-	-	-	-
16	16	70	42	48	50	-	-	-	-
20	20	80	49	55	57	-	-	-	-
100	100	54	60	62	-	-	-	-	-
150	150	72	76	79	-	-	-	-	-
100	100	88	92	95	-	-	-	-	-
150	150	98	102	105	-	-	-	-	-
100	100	154	158	161	-	-	-	-	-
150	150	144	160	162	-	-	-	-	-
100	100	159	175	177	-	-	-	-	-
150	150	259	275	277	-	-	-	-	-
125	125	300	316	318	-	-	-	-	-

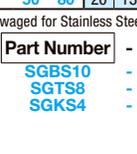
### Stainless Steel



**RoHS**

Material: SUS304

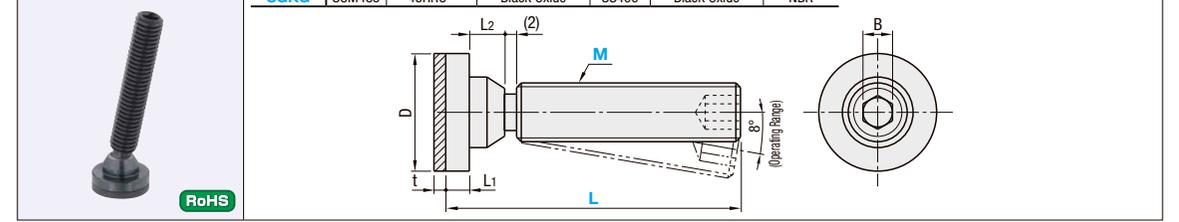
Part Number Table:  
 Type M (Coarse) | L Selection | D | D1 | d | L1 | L2 | (l) | B | L30 | L50 | L80 | Unit Price  
 4 | 30 | 13 | 7 | 2.2 | 8 | 2 | 2 | 2 | - | - | - |  
 6 | 30 50 | 13 | 9 | 3.2 | 8 | 2 | 3 | 3 | - | - | - |  
 8 | 30 50 80 | 16 | 11 | 5.2 | 9 | 3 | 4 | 4 | - | - | - |  
 10 | 50 80 | 20 | 13 | 6.2 | 9 | 3 | 5 | 5 | - | - | - |

Example: 

**Features:**  
 • Screw and pad are swaged for Stainless Steel Type. (Screw and pad cannot be separated.)

**Features:** The rubber-baked pad prevents the clamped workpieces from being damaged.

### Grub Screw Sets - Rubber Pads



**RoHS**

Type	Screw	Pad	Pad End Face
	M Material   H Hardness   S Surface Treatment	M Material   S Surface Treatment	M Material
SGKG	SCM435   45HRC~   Black Oxide	SS400   Black Oxide	NBR

Part Number Table:  
 Type M (Coarse) | L Selection | D | t | L1 | L2 | B | Unit Price  
 4 | 30 | 12 | 2 | 3 | 5 | 2 | - |  
 6 | 30 40 50 | 12 | 2 | 3 | 5 | 3 | - |  
 8 | 40 50 60 | 16 | 2 | 3 | 5 | 4 | - |  
 10 | 50 80 | 20 | 2 | 3 | 5 | 5 | - |  
 12 | 80 | 24 | 2 | 3 | 5 | 6 | - |  
 16 | 125 | 30 | 2 | 3 | 5 | 8 | - |

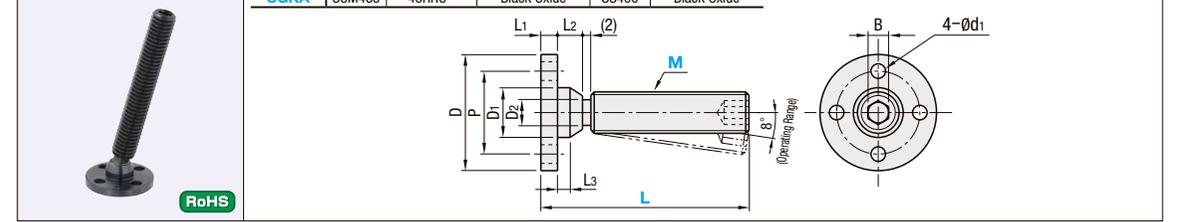
Example: 

**Features:**  
 • The coatings peeled off at swaging are retouched with repair sprays.

Part Number	Type	M (Coarse)	L Selection	D	t	L1	L2	B	Unit Price
									L=30, 40   L=50, 60   L=80~
SGKG	4	30	12	2	3	5	2	-	-
SGKG	6	30 40 50	12	2	3	5	3	-	-
SGKG	8	40 50 60	16	2	3	5	4	-	-
SGKG	10	50 80	20	2	3	5	5	-	-
SGKG	12	80	24	2	3	5	6	-	-
SGKG	16	125	30	2	3	5	8	-	-

**Features:** Optional attachments can be mounted using through holes on the pad.

### Grub Screw Sets - Flanged Type



**RoHS**

Type	Screw	Pad
	M Material   H Hardness   S Surface Treatment	M Material   S Surface Treatment
SGKA	SCM435   45HRC~   Black Oxide	SS400   Black Oxide

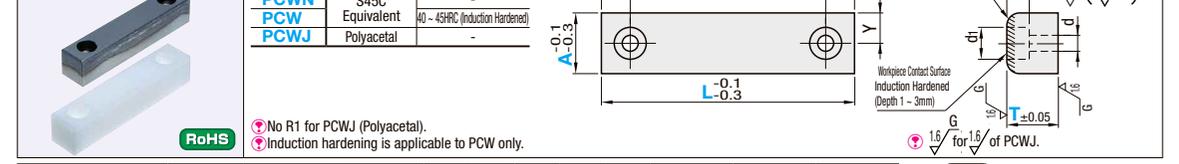
Part Number Table:  
 Type M (Coarse) | L Selection | D | P | D1 | D2 | L1 | L2 | L3 | d1 | B | Unit Price  
 4 | 30 | 20 | 14 | 7 | 2.2 | 3 | 5 | 2 | 3.5 | 2 | - |  
 6 | 30 40 50 | 20 | 14 | 7 | 3.2 | 3 | 5 | 2 | 3.5 | 3 | - |  
 8 | 40 50 60 | 22 | 16 | 9 | 5.2 | 3 | 5 | 2 | 3.5 | 4 | - |  
 10 | 50 80 | 28 | 20 | 12 | 6.2 | 4 | 6 | 3 | 4.5 | 5 | - |  
 12 | 80 | 30 | 22 | 14 | 8.1 | 4 | 8 | 5 | 6 | 6 | - |  
 16 | 125 | 37 | 28 | 18 | 11.0 | 11 | 7 | 5.5 | 8 | 8 | - |

Example: 

**Features:**  
 • The coatings peeled off at swaging are retouched with repair sprays.

Part Number	Type	M (Coarse)	L Selection	D	P	D1	D2	L1	L2	L3	d1	B	Unit Price
													L=30, 40   L=50, 60   L=80~
SGKA	4	30	20	14	7	2.2	3	5	2	3.5	2	-	-
SGKA	6	30 40 50	20	14	7	3.2	3	5	2	3.5	3	-	-
SGKA	8	40 50 60	22	16	9	5.2	3	5	2	3.5	4	-	-
SGKA	10	50 80	28	20	12	6.2	4	6	3	4.5	5	-	-
SGKA	12	80	30	22	14	8.1	4	8	5	6	6	-	-
SGKA	16	125	37	28	18	11.0	11	7	5.5	8	8	-	-

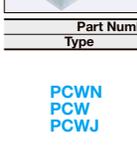
### Clamp Plates



**RoHS**

Type	M Material	H Hardness
PCWN	S45C	-
PCW	Equivalent	40 ~ 45HRC (Induction Hardened)
PCWJ	Polyacetal	-

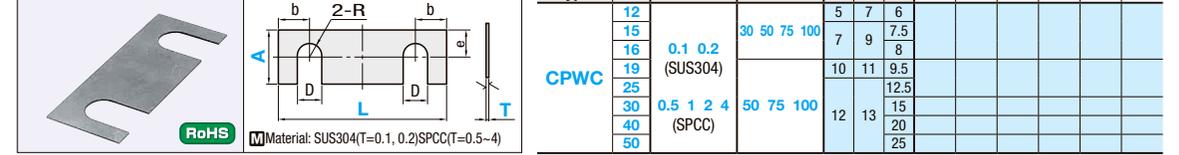
Part Number Table:  
 Type | A | T Selection | L Selection | X | Y | d | d1 | h | Unit Price  
 12 | 15 | 16 | 19 | 25 | 30 | 30 | 50 | 7 | 6 | 4.5 | 8 | 5 | PCWN | PCW | PCWJ  
 15 | 16 | 19 | 25 | 30 | 30 | 50 | 9 | 7.5 | 6.6 | 11 | 7 | - | - | -  
 16 | 19 | 25 | 30 | 30 | 50 | 11 | 9.5 | 9 | 14 | 9 | - | - | -  
 19 | 25 | 30 | 30 | 50 | 13 | 15 | 11 | 18 | 11 | - | - | -  
 25 | 30 | 30 | 50 | 13 | 15 | 11 | 18 | 11 | - | - | -  
 30 | 30 | 50 | 13 | 15 | 11 | 18 | 11 | - | - | -  
 40 | 30 | 50 | 13 | 15 | 11 | 18 | 11 | - | - | -  
 50 | 30 | 50 | 13 | 15 | 11 | 18 | 11 | - | - | -

Example: 

**Features:**  
 • No R1 for PCWJ (Polyacetal).  
 • Induction hardening is applicable to PCW only.

Part Number	Type	A	T Selection	L Selection	X	Y	d	d1	h	Unit Price						
PCWN	12	15	16	19	25	30	30	50	7	6	4.5	8	5	PCWN	PCW	PCWJ
PCWN	15	16	19	25	30	30	9	7.5	6.6	11	7	-	-	-	-	-
PCWN	16	19	25	30	30	50	11	9.5	9	14	9	-	-	-	-	-
PCWN	19	25	30	30	50	13	15	11	18	11	-	-	-	-	-	-
PCWN	25	30	30	50	13	15	11	18	11	-	-	-	-	-	-	-
PCWN	30	30	50	13	15	11	18	11	-	-	-	-	-	-	-	-
PCWN	40	30	50	13	15	11	18	11	-	-	-	-	-	-	-	-
PCWN	50	30	50	13	15	11	18	11	-	-	-	-	-	-	-	-

### Shims for Clamp Plates



**RoHS**

Part Number	Type	A	T Selection	L Selection	D	b	e	Unit Price							
								T0.1   T0.2   T0.5   T1   T2   T4							
CPWC	12	15	16	19	25	30	50	7	6	-	-	-	-	-	-
CPWC	15	16	19	25	30	50	7	9	7.5	-	-	-	-	-	-
CPWC	16	19	25	30	50	7	9	8	-	-	-	-	-	-	-
CPWC	19	25	30	50	7	9	8	9.5	-	-	-	-	-	-	-
CPWC	25	30	50	7	9	8	9.5	12.5	-	-	-	-	-	-	-
CPWC	30	50	7	9	8	9.5	12.5	15	-	-	-	-	-	-	-
CPWC	40	50	7	9	8	9.5	12.5	20	-	-	-	-	-	-	-
CPWC	50	50	7	9	8	9.5	12.5	25	-	-	-	-	-	-	-

Example: 

**Material:** SUS304(T=0.1, 0.2)SPCC(T=0.5~4)

Ordering Example	Part Number	T	L
PCWN50	-	20	100
CPWC50	-	2	75