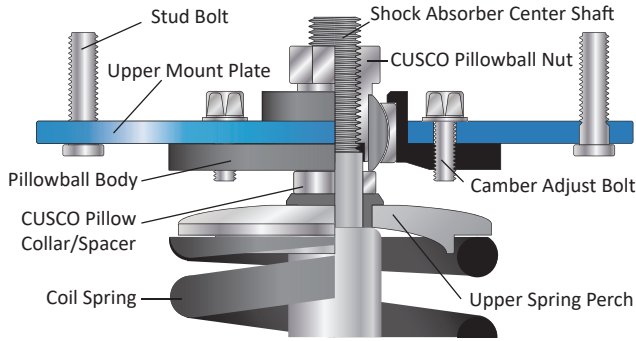


How to select Pillowball Nut and Pillowball Collar



To select the right size of Nut and Collar is very important key for your safety and functioning properly.

This is basic procedure how to select the right size of Nut and Collar.

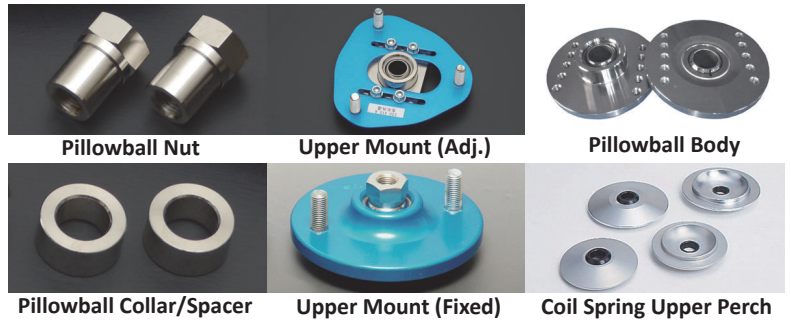


Fig.1 Image of Assembly of Strut-type CUSCO Upper Mount

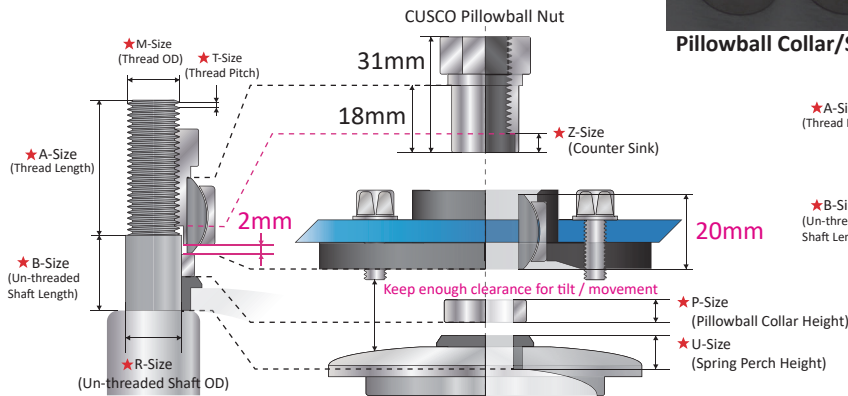


Fig.2 Size/Location of CUSCO Upper Mount Components

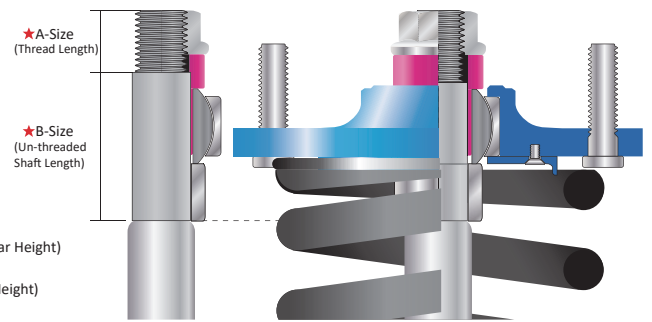


Fig.3 Require both Upper & Lower Collars in case of B-Size area was wide.

[Basic Procedure - How to select right size of Nut and Collar]

	Position	Key Note	Basic Procedure of Nut / Collar Selection	Memo (mm)
A	Threaded Length - Possible to tighten the Nut			A=
B	Un-threaded Length			B=
M	Thread Size	Pillowball Nut Thread OD (mm)	Check M10 / 12 / 14 (mm)	M= <Upper Collar ID
T	Thread Pitch	Pillowball Nut Thread Pitch (mm)	Check P1.0 / P1.2 / P1.5 (mm)	P=
R	Shaft OD - Un-threaded	Pillow Collar ID (mm)	Select larger ID than R (Ex. 10.5mm if R=10.0mm)	Lower Collar ID >
U	Spring Perch Height	Collar Height / Nut Countersink	Measure at Center of Spring Perch (Depth)	U=
P	Collar Height - Min. 5mm	Determine B / U / Z size	No Countersink: P=B-U / Countersink: P≥B-U-Z	P= > 5mm
Z	Countersink	Determine B / U / P size	Z≥B-U-P	Z≥

★ How to select Lower Pillow Collar

- **ID (Inside Diameter):** Select larger Collar ID than un-threaded Shaft OD (R)
- **Top Shape:** Select more than 20mm OD Flat Collar - Pillowball ID=18mm
- **Bottom Shape:** This surface sits on Upper Spring Perch and carefully select the OD to cover the area enough on Upper Spring Perch or OE Upper Mount. If the upper mount is Non-Camber Adjustable type and the spring sits on Upper Mount Plate directly (Fig.3), please select the collar and shape enough to cover B (Un-threaded area) to fill the gap if needed. If the gap is not filled enough, it may cause to making noise and damage the shock absorber.
- **Height / Thickness (P):** This is important to select the right height / thickness for "Camber Adjustable Type" Upper Mount. When the suspension moves up/down or adjusted the camber angle, the strut will make the angle. It requires to maintain minimum 5mm clearance between Upper Mount and Upper Spring Perch at maximum tilt angle. (Not apply to Fig.3 type) So, please select the collar height carefully to have enough clearance. Nut with Countersink type is for the strut shaft which does not have enough threaded area and have the minimum collar height.

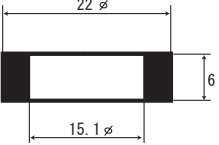
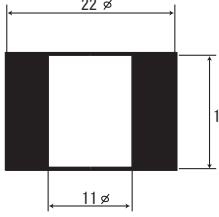
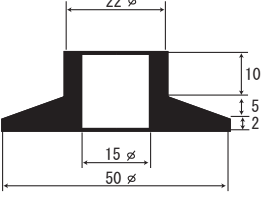
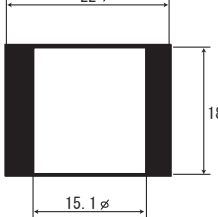
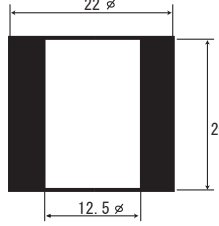
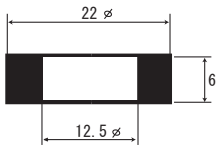
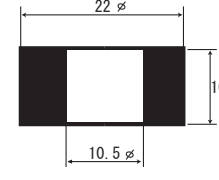
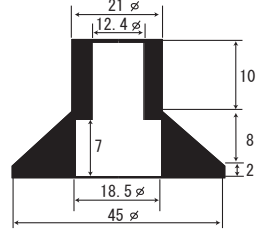
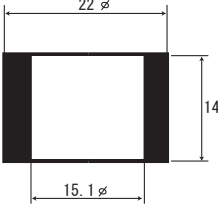
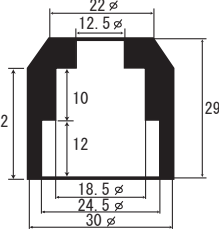
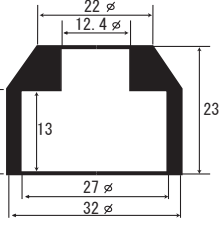
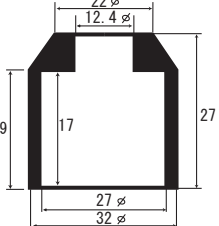
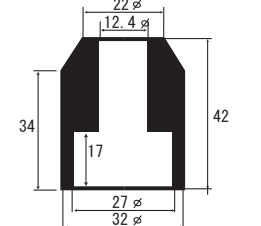
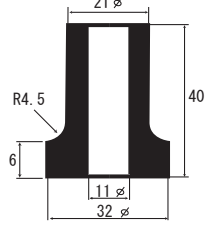
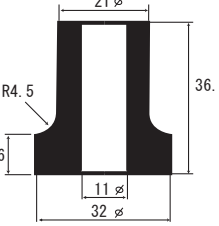
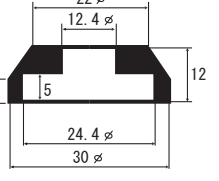
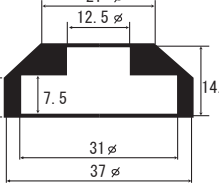
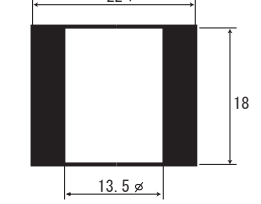
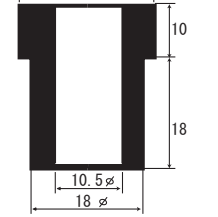
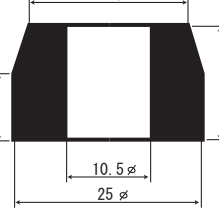
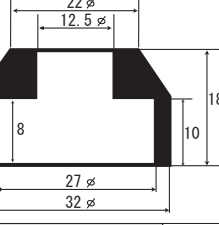
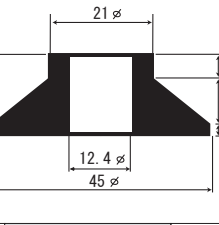
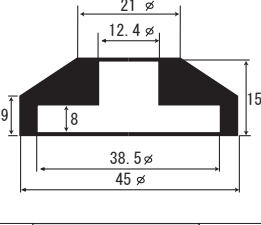
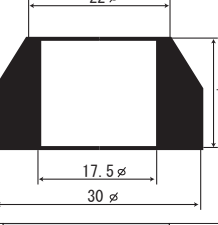
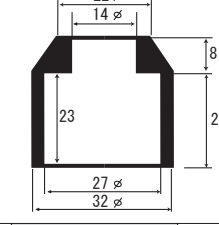
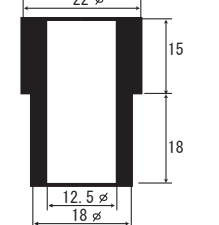
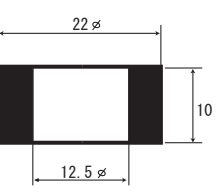
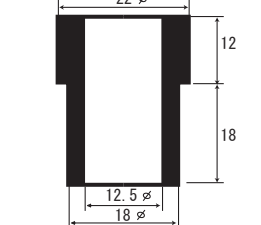
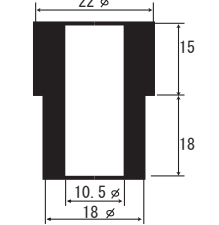
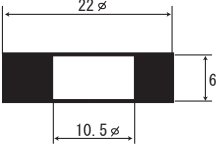
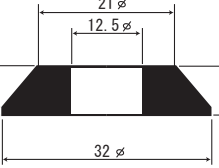
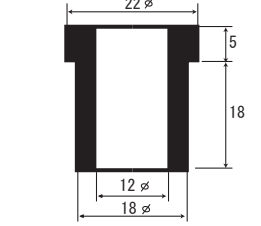
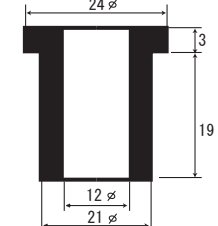
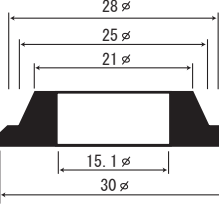
★ How to select Upper Pillowball Collar (If Pillow Nut cannot be used - Fig.3 Type)

If Un-threaded area (B) is wide and Threaded is short as showing Fig.3, Pillowball Nut cannot be used with Upper Mount. In this case, use both lower and upper collars and tighten with Flange Nut from top. Please measure the height of collars to have enough threads.

- **ID (Inside Diameter):** Select ID of collar slightly larger than Shaft OD.
- **Top Shape:** Use Flat shape of collar to tighten from Top with Flange Nut as showing Fig.3. (Flange Nuts are NOT included in the kit) Ex.) If thread is M14(mm), select larger ID of collar than 14.0mm
- **Bottom Shape:** Select the right shape (T-Shape - Red area in Fig.3) to fill the gap between Shaft OD and Pillowball ID (18mm).

★ How to select Pillowball Nut

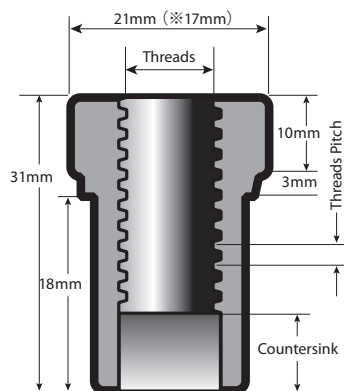
- Check thread OD (M10 / M12 / M14) and Pitch (1.0mm / 1.25mm / 1.5mm) of shock absorber first.
- How to calculate Countersink (Z): Z=B-U-P (Fig.2) - This can help to have enough thread area of strut shaft on top.

Code #	Description	Price	Code #	Description	Price	Code #	Description	Price	Code #	Description	Price			
01	TRD	\$ 7.00	02	EP REAR	\$ 7.00	03	AE92 REAR	\$20.00	04	TA	\$ 7.00	05	GZ20-F	\$ 7.00
														
06	GZ20-R	\$ 7.00	07	EP91-R	\$ 7.00	08	GX81-R	\$ 20.00	09	TA SHORT	\$ 7.00	10	NISSAN	\$ 7.00
														
11	R30 SHORT	\$ 20.00	12	R30	\$ 20.00	13	R31	\$ 20.00	14	R32-R	\$ 20.00	15	R32-F	\$ 20.00
														
16	S110	\$ 20.00	17	N14-F	\$ 20.00	18	S13-F-STD	\$ 7.00	19	R30-R UPPER	\$ 20.00	20	R30-R LOWER	\$ 20.00
														
21	R30 SHORT	\$ 20.00	22	U12	\$ 20.00	23	Y30	\$ 20.00	24	Y31	\$ 20.00	25	Z31	\$ 20.00
														
26	PP1 UPPER	\$ 20.00	27	PP1 LOWER	\$ 7.00	28	AT UPPER	\$ 20.00	30	EF UPPER	\$ 20.00			
														
31	EF LOWER	\$ 7.00	32	DAPF FESTIVA	\$ 20.00	33	FC3S-R UPPER	\$ 20.00	34	FC3S-R LOWER	\$ 20.00	35	SA22C	\$ 20.00
														

Code #	Description	Price	Code #	Description	Price	Code #	Description	Price	Code #	Description	Price	Code #	Description	Price
36	H21	\$ 20.00	37	CD5A-R UPPER	\$ 20.00	38	Y33	\$ 20.00	39	VR4	\$ 7.00	40	VR4-R UPPER	\$ 20.00
41	VR-4 LOWER	\$ 7.00	42	BG8Z	\$ 20.00	43	FC3S	\$ 20.00	44	Z16A	\$ 20.00	45	EA11R-R	\$ 20.00
46	KK4-R UPPER	\$ 20.00	47	GC8-R	\$ 20.00	48	S13 STRAIGHT	\$ 7.00	49	K11-F	\$ 20.00	50	R32 UPPER (STROKE UP)	\$ 20.00
51	R32 LOWER (STROKE UP)	\$ 20.00	52	ALTO	\$ 20.00	53	CBAEP	\$ 20.00	54	S13-R STRAIGHT	\$ 7.00	55	IPSUM FRONT	\$ 20.00
56	LEGNUM FRONT	\$ 20.00	57	WAGON R/CT21S	\$ 20.00	58	PAJERO Jr./MINI	\$ 20.00	59	KK4-F	\$ 20.00	60	B11 FRONT	\$ 20.00
61	VITZ/YARIS	\$ 7.00	62	ARISTO/GS300	\$ 20.00	63	WAGON R/MC21S	\$ 20.00	64	NISSAN CUBE	\$ 20.00	65	GTO REAR UPPER	\$ 20.00
66	GTO REAR LOWER	\$ 7.00	67	ALTEZZA/IS300	\$ 7.00	68	TOYOTA ST20#	\$ 20.00	69	LIFE/Z	\$ 20.00	70	MIATA (NB8) UPPER	\$ 20.00

Pillow Ball Nut for CUSCO Pillow Upper Mount

MSRP US\$23.00 EA.



Part Number	Description	Countersink (mm)
00B 450 A	M14 x 1.5	5
00B 450 AHA	※ For TOYOTA AE86 HA	5
00B 450 B	M14 x 1.5	—
00B 450 BG5	M14 x 1.5 SUBARU LEGACY BG5	10
00B 450 BHA	※ For MAZDA RX-7 FC3S HA	—
00B 450 C	M12 x 1.5	5
00B 450 D	M12 x 1.5	—
00B 450 E	M14 x 1.25	5
00B 450 F	M14 x 1.25	—
00B 450 FD1	※ M10 x 1.0 MAZDA RX-7 FD3S	12
00B 450 FD2	※ M10 x 1.25 MAZDA RX-7 FD3S	12
00B 450 FD3	※ M10 x 1.5 MAZDA RX-7 FD3S	12
00B 450 G	M14 x 1.0	—
00B 450 H	M12 x 1.25	5
00B 450 HS	M12 x 1.25	12
00B 450 H1	For HONDA CITY GA2 FA/J	30

Part Number	Description	Countersink (mm)
00B 450 H2	For HONDA CITY GA2FR/G	23
00B 450 H3	For SUZUKI CAPPUCCINO REAR	14
00B 450 H4	M12 x 1.25 SUBARU BG5	10
00B 450 H6	For LEXUS GS300/400	18
00B 450 I	M12 x 1.25	—
00B 450 IHA	※ For NISSAN 240SX S13 HA	—
00B 450 J	M10 x 1.25	—
00B 450 K	M10 x 1.5	—
00B 450 L	M10 x 1.0	10
00B 450 M	M10 x 1.25	10
00B 450 M1	TOYOTA STARLET EP82 REAR	17
00B 450 M2	For HONDA CITY GA2 REAR	30
00B 450 N	M10 x 1.5	10
00B 450 O	M10 x 1.0	—
00B 450 Q	M12 x 1.25 EVO 7/8/9 CT9A	7