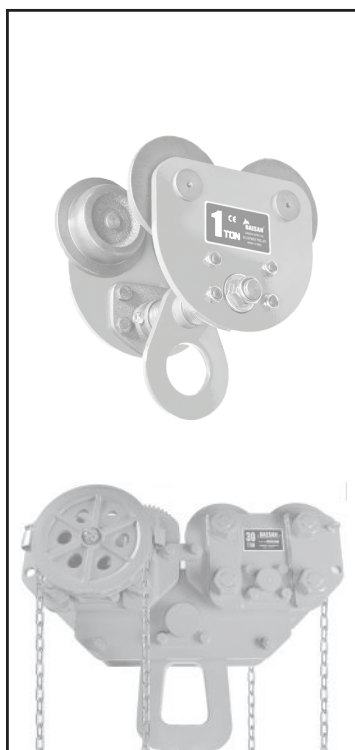




DAESAN[®]

Plain trolley & Geared trolley



NOTICE

It is the responsibility of the owner/user to install, inspect, test, maintain, and operate these trolleys in accordance with any applicable national and local codes and standards.

These general instructions deal with the normal installation, operation and maintenance situations encountered with the trolleys described herein. The instructions should not be interpreted to anticipate every possible contingency or to anticipate the final system or configuration that uses these trolleys. Read and observe the instructions stated in the manual furnished with equipment to be used with these trolleys.

These instructions include information for a variety of trolleys. Therefore, all instructions and information may not apply to one specific trolley. Disregard those portions of the instructions that do not apply.

If the trolley owner/user requires additional information, or if any information in these instructions is not clear, contact DAESAN INOTEC INC. KOREA or the distributor of the trolley. Do not install, inspect, test, maintain, or operate this trolley unless this information is fully understood.

⚠ WARNING

This trolley should not be installed, operated, or maintained by any person who has not read all the contents of these instructions. Failure to read and comply with these instructions or any of the warnings or limitations noted herein can result in serious bodily injury or death, and/or property damage.

Only trained and qualified personnel shall operate and maintain this equipment.

Equipment described herein is not designed for, and should not be used for lifting, supporting, or transporting humans.

User should not use this trolley in conjunction with other equipment unless necessary and/or required safety devices applicable to the system are installed by the user.

Modifications to upgrade, rerate or otherwise alter these trolleys shall be authorized only by the original equipment manufacturer or qualified professional engineer.

Plain trolleys and gear trolleys are devices installed on I-beams or H-beams and can be moved along rails by pushing or pulling with the user's own force. They are used with manual or electric hoists.

Please check the contents of the manual and use it with caution to ensure safe installation.

PRIOR TO INSTALLATION

1. Check for damage during shipment. Place claim with carrier if any damage is discovered. DO NOT install or use a damaged trolley.
2. Check runway beam that trolley will be installed upon.
 - a. Be sure runway beam is level, clean, straight, and free of foreign objects.
 - b. Be sure that trolley stops have been installed on both ends of runway beam to prevent trolley from running off end of beam.
DO NOT install or operate trolley on a runway beam that does not have trolley end stops.
3. This product can be used in environments between -30degrees Celsius and +50 degrees Celsius.

INSTALLATION

Trolley is packaged disassembled as follows:

Two (2) side plate assemblies;

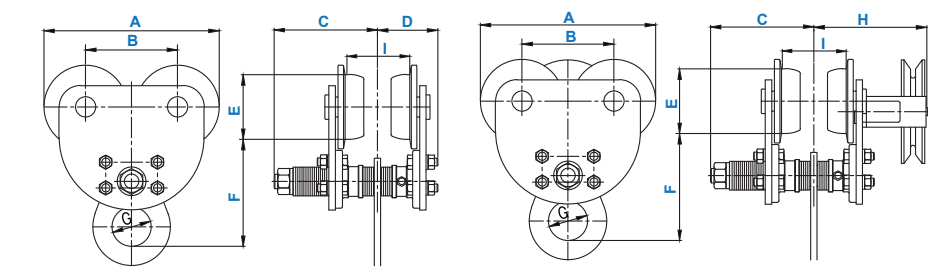
One (1) center suspension plate; and

One (1) trolley pin that includes one (1) fixing bolt, adjusting washers, two (2) rings, one (1) side washer, and one
(1) locknut.

1. Assemble the trolley pin (020) to the bracket (019) on one of the trolley side plate assemblies. Fasten the trolley to the bracket using fixing bolt (018).
2. Position adjusting washers (025), rings (021), and center plate (022) on trolley pin for beam flange width as shown in Table 1. Based on trolley capacity and beam flange width, position adjusting washers as per figures A through I.
3. Position other side plate assembly on trolley pin. Position any remaining adjusting washers (025) and side washer (002) on trolley pin. Tighten locknut (029) against side washer (002) on trolley pin.

Center suspension plate (022) must be positioned in center of side plate assemblies and directly under the center of the beam. Recommended clearance between toe of beam and wheel flange is 1.52mm. Maximum clearance should not exceed 3.3mm.

SPECIFICATION TABLED



DP,DG TYPE

MODEL NO :	DP(Plain trolley)	DP05	DP1	DP2	DP3	DP5	DP10	N/A	N/A	N/A	N/A
	DG(Geard trolley)	N/A	DG1	DG2	DG3	DG5	DG10	DG15	DG20	DG30	DG40
Capacity	(ton)	0.5	1	2	3	5	10	15	20	30	40
Hand chain operation length	(m)	N/A	2.5	3	3	3	3.5	3.5	3.5	3.5	3.5
Min curve radius	(mm)	1000	1300	1500	2000	2500	2600	3000	N/A	N/A	N/A
A (Dimension)	(mm)	174	233	271	312	352	352	505	1131	1312	1312
B		90	122	142	163	183	183	255	712	776	776
C		142.5	142.5	160	168.5	184.5	249	211	291.5	302	302
D		76	76	93	100.5	115	126	N/A	N/A	N/A	N/A
E		55	80	100	113	125	125	254	150	154	154
F		1295	128	165	190	230	253.5	337.5	434	457.5	457.5
G		45	45	60	67	77	70	80	122	122	122
H		N/A	164	176	183	198.5	199.5	283	291.5	302	302
I		75-125	75-125	100-150	100-150	125-175	125-200	175-200	175-200	175-200	175-200
Net weight DP TYPE (Standard)	(kg)	6	10	19	30	45	68	N/A	N/A	N/A	N/A
Net weight DG TYPE (Standard)	(kg)	N/A	14	23	35	51	78	210	320	450	500

*(I : applied I-beam width)
 *C,D,H figures are for minimum beam width. Figures will be changed accordingly when applied beam width increases.

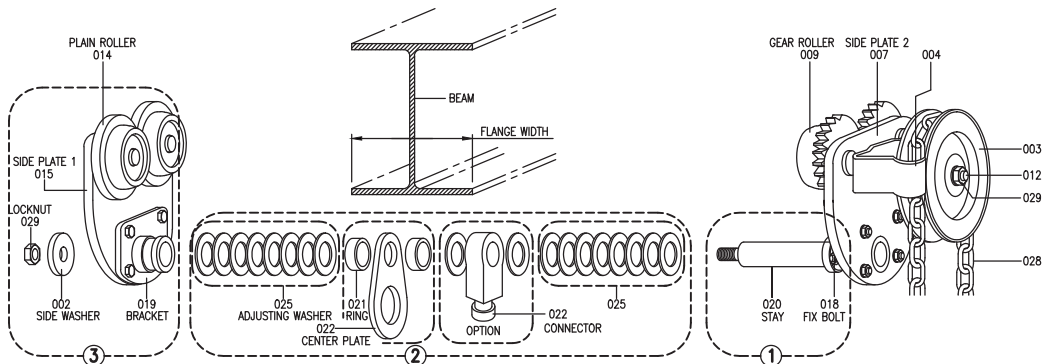


TABLE 1 DISTRIBUTION OF ADJUSTING WASHERS PER BEAM FLANGE WIDTH AND TROLLEY CAPACITY TONS.

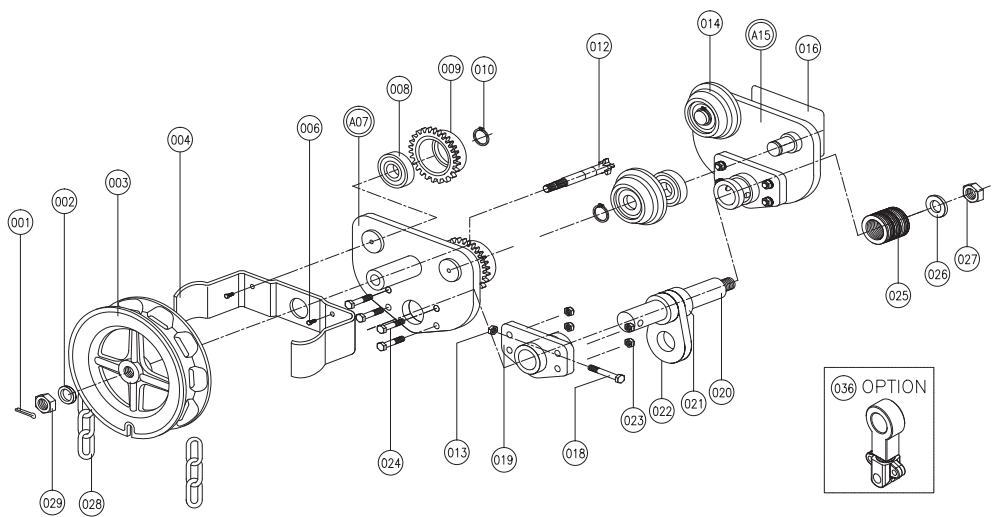
TOLLEY CAPACITY TONS	FIG. A	FIG. B	FIG. C	FIG. D	FIG. E	FIG. F	FIG. G	FIG. H	FIG. I	T	FIG.I MAX(mm)
0.5	75	100	125	75	100	125	-	-	-	38	100
1	75	100	125	75	100	125	-	-	-	25	125
2	100	125	150	100	125	150	-	-	-	29	150
3	100	125	150	-	-	-	100	125	150	35	175
5	125	150	175	-	-	-	125	150	175	39	175
10	125	150	175	200	-	-	-	-	-	33	175

TABLE 2 BEAM FLANGE WIDTH AND TROLLEY CAPACITY TONS.

TROLLEY CAPACITY TONS	BEAM WIDTH(MIN)	BEAM WIDTH(MAX)
20	175	200
30	175	200
40	175	200

1-5 TON	1-5TON (CENTER PLATE)			1-2TON (CONNECTOR)			3-5TON (CONNECTOR)		
	A	B	C	D	E	F	G	H	I
	16	8 4 4	8 8	16 3 3	8 7 7	11 11	16 1 1	8 5 5	9 9
10 TON	10 TON (CENTER PLATE& CONNECTOR)								
	A	B	C	D					
	24	16 4 4	8 8 8	12 12					

GEAR TROLLEY EXPLODE VIEW



1/2~5TON GEAR TROLLEY

OPERATION

- 1. DO NOT overload trolley.
- 2. DO NOT move loads over people.
- 3. DO NOT operate with excessive wheel-to-beam flange clearance.
- 4. AVOID side-pulling or side-loading. Trolley must remain seated and equalized with all wheels on beam flange surface.
- 5. KEEP runway beam flange surface free of foreign objects.
- 6. AVOID collisions with other trolleys and end stops.
- 7. MINIMIZE impact at trolley end stops by approaching end stop slowly.
- 8. DO NOT operate on runway beam if end stops are not present.
- 9. DO NOT use trolley to transport humans.
- 10. PLACE stops on runway to prevent trolley movement or travel prior to performing maintenance on trolley or hoist suspended from trolley.

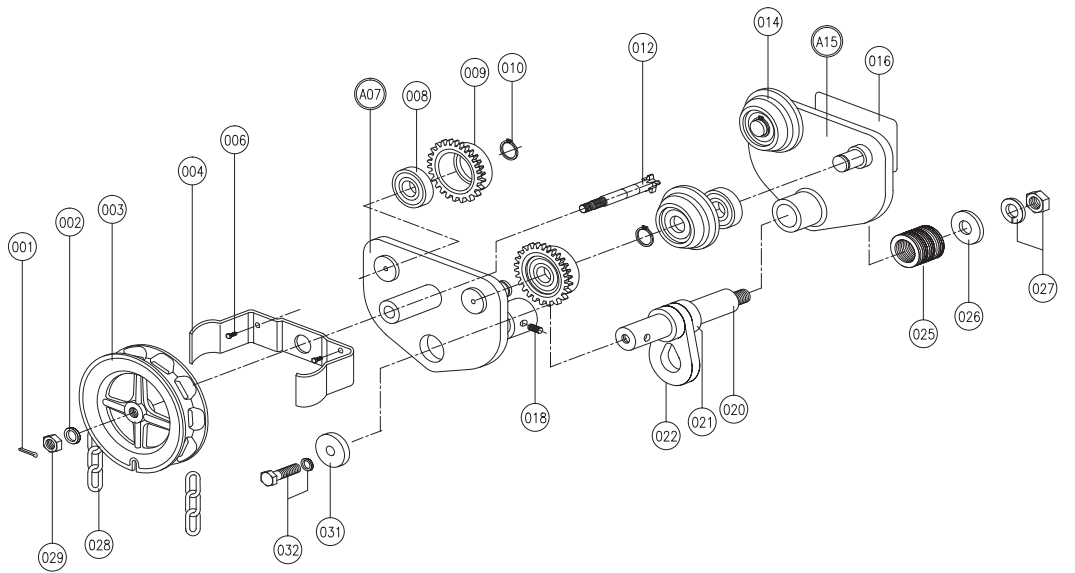
INSPECTION

- 1. Check locknut for tightness.
- 2. Check wheels for distortion, corrosion, cracks, and wear.
- 3. Check wheel bearings for excessive wear by rotating and rocking wheels.
- 4. Replace parts or entire trolley as required.

NOTICE

TO ORDER PARTS : Provide product name, trolley capacity, part number part description, and quantity required.

GEAR TROLLEY EXPLODE VIEW



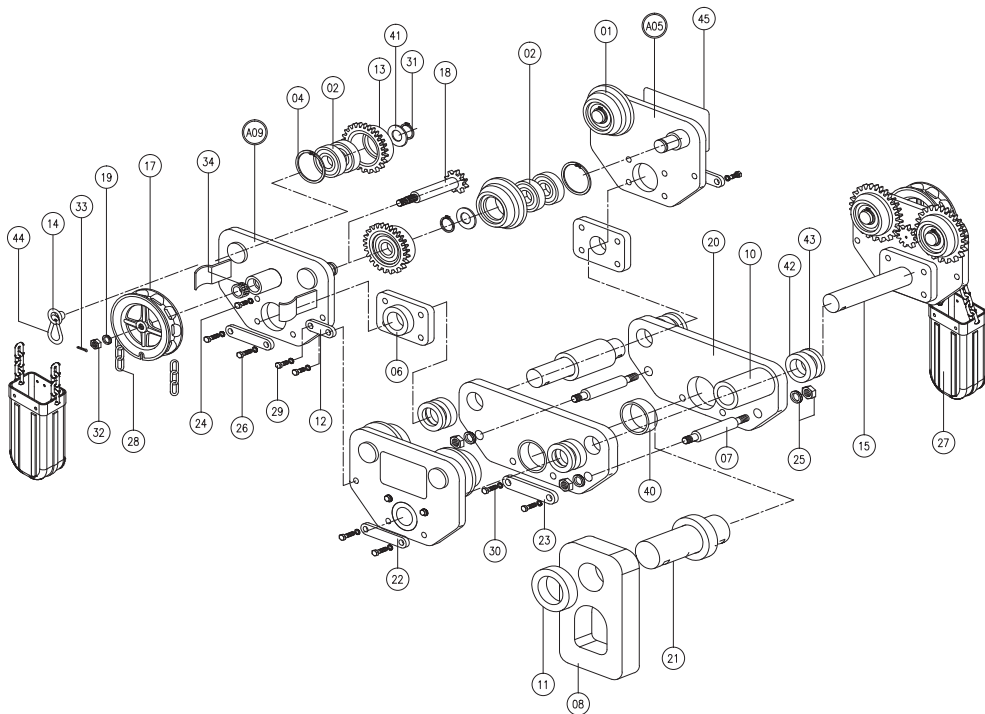
10TON GEAR TROLLEY

Item	Description	Quantity					Remark
		1T	2T	3T	5T	10T	
001	COTTER PIN			1			
002	PLAIN WASHER			1			
003	HAND WHEEL			1			
004	GUIDE PLATE			1			
006	WRENCH BOLT			2			
A07	GEAR SIDE PLATE ASS'Y			1			
008	BALL BEARING			4			
009	GEAR ROLLER			2			
010	SNAP RING			4			
012	PINION SHAFT			1			
013	U-NUT		1			N/A	
014	PLAIN ROLLER			2			
A15	PLAIN SIDE PLATE ASS'Y			1			
016	NAME PLATE			1			
018	FIX BOLT			1			

Item	Description	Quantity					Remark
		1T	2T	3T	5T	10T	
019	BRACKET		2			N/A	
020	STAY		1				
	STAY(+50mm)		1			N/A	
021	RING		2				
022	CENTER PLATE		1				
023	HEX NUT S/W	4		8		N/A	
024	HEX BOLT	4		8		N/A	
025	ADJUST WASHER		16				
026	SIDE WASHER		1				
027	U-NUT		1				
029	PINION NUT		1				
031	SIDE WASHER B		N/A			1	
032	HEX BOLT S/W		N/A			1	
036	CONNECTOR ASS'Y		1			N/A	

GEAR TROLLEY EXPLODE VIEW

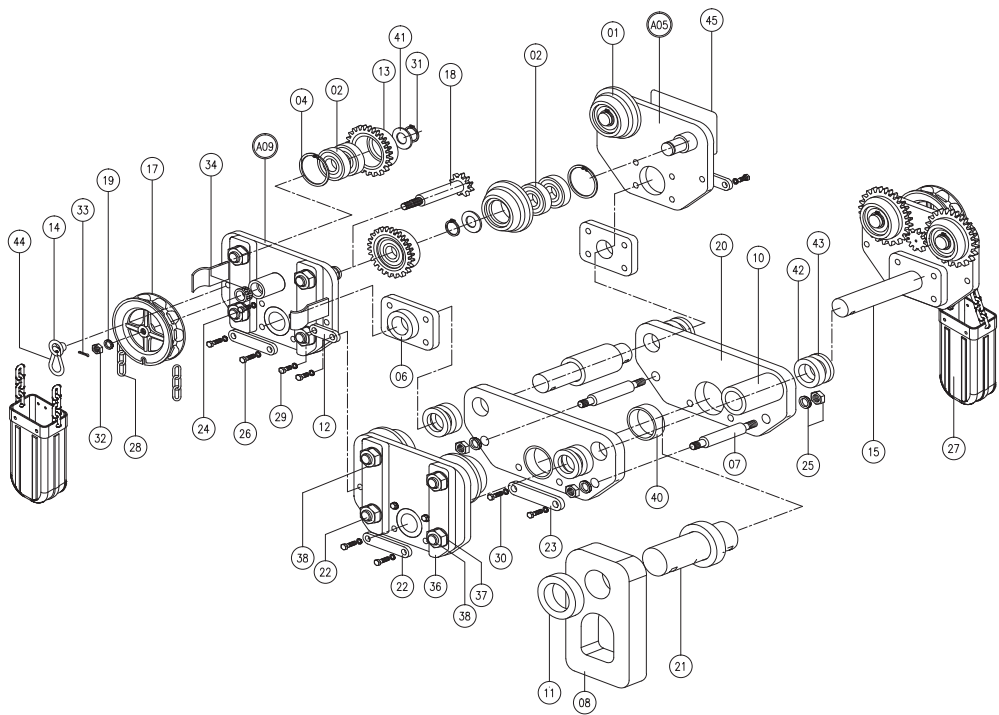
NO	DESCRIPTION	Q'TY	REMARKS								
001	PLAIN ROLLER	4		015	G/T SHAFT	2		028	HAND CHAIN	2	
002	BALL BEARING	16	6308DD	016	GUIDE PLATE	4		029	HEX BOLT S/W	4	M18x40
004	SNAP RING	8	R-90	017	HAND WHEEL	2		030	HEX BOLT S/W	4	M20x65
A05	PLAIN SIDE PLATE ASS'Y	2		018	PINION GEAR	2		031	SNAP RING	8	S-40
006	BRACKET	4		019	PLAIN WASHER	2	M24	032	PINION NUT	2	M24
007	STAY BOLT	2		020	CONNECTION PLATE	2		033	COTTER PIN	2	ø6x83
008	CONNECTOR	1		021	CONNECTION SHAFT	1		034	BUSHING A	4	
A09	GEAR SIDE PLATE ASS'Y	2		022	KEY PLATE A	4		040	BUSHING B	2	
010	COLLAR	2		023	KEY PLATE B	2		041	PLAIN WASHER	8	
011	CONNECTION COLLAR	2		024	HEX BOLT S/W	8	M16x40	042	ADJUSTING COLLAR A	4	
012	CONNECTION PLATE	2		025	HEX NUT S/W	4	M22	043	ADJUSTING COLLAR B	4	
013	GEAR ROLLER	4		026	HEX BOLT S/W	8	M16x55	044	CLIP	2	
014	EYE NUT	2	M12	027	CHAIN BOX	2		045	NAME PLATE	2	



20TON GEAR TROLLEY

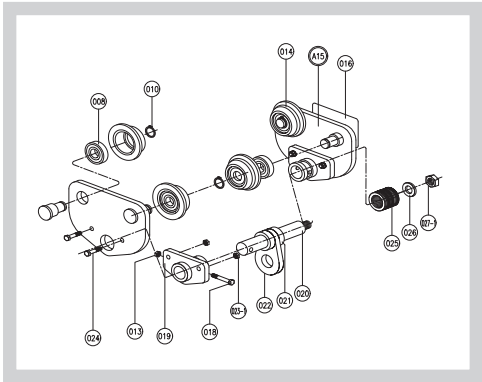
GEAR TROLLEY EXPLODE VIEW

NO	DESCRIPTION	QTY	REMARKS								
001	PLAIN ROLLER	4		017	HAND WHEEL	2		031	SNAP RING	8	S-45
002	BALL BEARING	16	6309ZZ	018	PINION GEAR	2		032	PINION NUT	2	M24
004	SNAP RING	8	R-100	019	PLAIN WASHER	2	M24	033	COTTER PIN	2	Ø6x83
A05	PLAIN SIDE PLATE ASS'Y	2		020	CONNECTION PLATE	2		034	BUSHING	4	
006	BRACKET	4		021	CONNECTION SHAFT	1		035	FIX PIN	8	
007	STAY BOLT	2		022	KEY PLATE A	4		036	FACE PLATE	8	
008	CONNECTOR	1		023	KEY PLATE B	2		037	PLAIN WASHER	16	M48
A09	GEAR SIDE PLATE ASS'Y	2		024	HEX BOLT S/W	8	M20x70	038	HEX NUT	16	M48
010	COLLAR	2		025	HEX NUT S/W	4	M24	040	BUSHING	2	
011	CONNECTION COLLAR	2		026	HEX BOLT S/W	8	M20x45	041	PLAIN WASHER	8	
012	CONNECTION PLATE	2		027	CHAIN BOX	2		042	ADJUSTING COLLAR A	4	
013	GEAR ROLLER	4		028	HAND CHAIN	2		043	ADJUSTING COLLAR B	4	
014	EYE NUT	2	M12	029	HEX BOLT S/W	4	M20x45	044	CLIP	2	
015	G/T SHAFT	2		030	HEX BOLT S/W	4	M20x55	045	NAME PLATE	2	

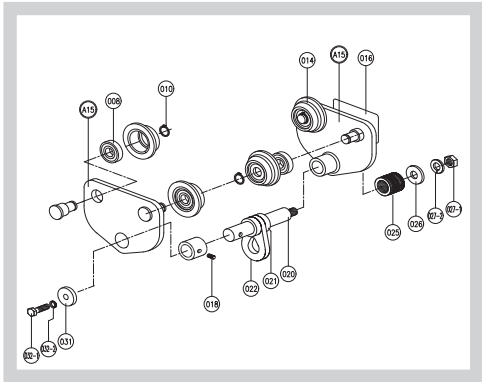


30TON GEAR TROLLEY

PLAIN TROLLEY EXPLODE VIEW



0.5T~5T



10T

NO.	Description	Quantity						Remark
		0.5T	1T	2T	3T	5T	10T	
008	BALL BEARING	4						
010	SNAP RING	4						
013	U-NUT	1					-	
014	PLAIN ROLLER	4						
016	NAME PLATE	1						
018	FIX BOLT	1					-	
	SET SCREW	-					1	
019	BRACKET	2					-	
020	STAY	1						
021	RING	2						
022	CENTER PLATE	1						
023-1	U-NUT	4	8			-		
	HEX NUT	-			8		-	
023-2	SPRING WASHER	-			8		-	
024	HEX BOLT	4	8			-		
025	ADJUST WASHER	16						
026	SIDE WASHER	1						
027-1	U-NUT	1					-	
	HEX NUT	-					1	
027-2	SPRING WASHER	-					1	
031	SIDE WASHER B	-					1	
032-1	HEX BOLT	-					1	
032-2	SPRING WASHER	-					1	
A15	PLAIN SIDE PLATE ASSY	2						



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