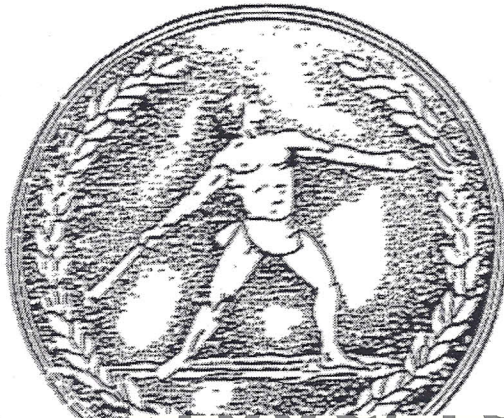


# LITTLE DAVID

*CARTRIDGE MANUAL*



THE LOVESHAW CORPORATION  
P. O. BOX 83, RT. 296  
SOUTH CANAAN, PA 18459

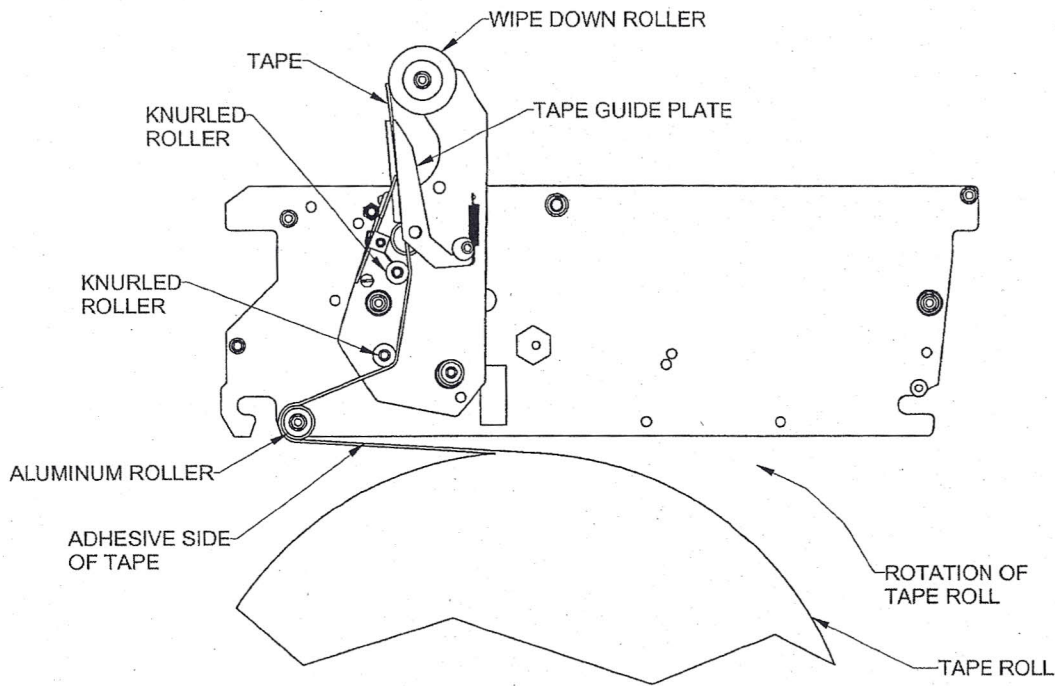
LOVESHAW - EUROPE  
UNIT 9, BRUNEL GATE  
W. PORTWAY INDUSTRIAL ESTATE

## CAC100C/16A1

TEL: (570) 937-4921  
FAX: (570) 937-4370

ANDOVER, HAMPSHIRE SP103SL  
ENGLAND  
44-264-3575-11

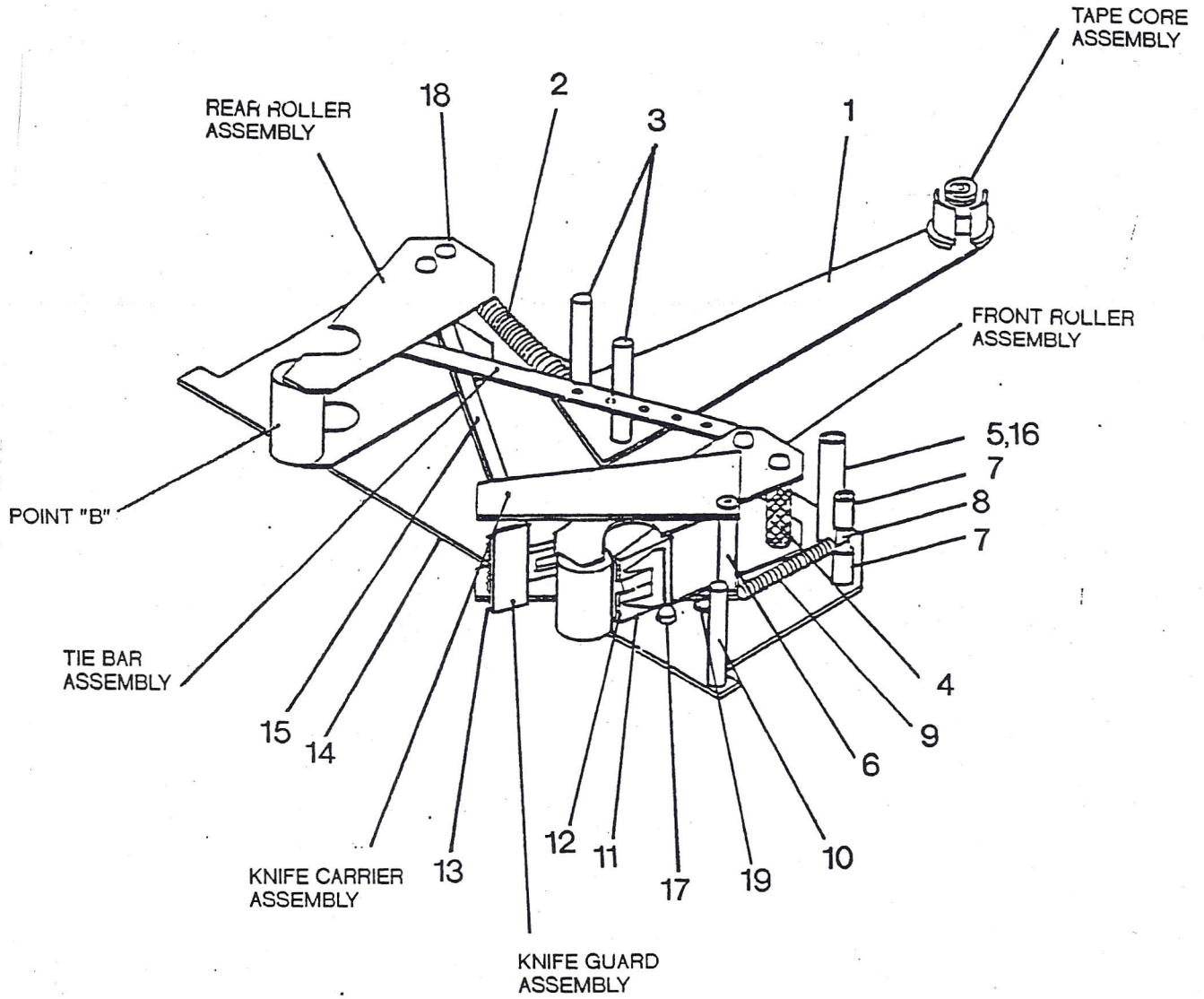
REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	RELEASED	2/17/2006	DW



W/PL	PART #	CAPFILE MAIN ASSEMBLY	TAPE THREADED	APPROVED	ANOVESHAW
ST. ST.	STD	PLAT DATE	CH. REVISIONS INC. TIED:	an ITW Company RT. 296, SOUTH CANAAN, PA	
		DRWING DATE 2/17/2006	3" PERS. RCH XX=1216 ANOLES 1:50 XXX=2.00	TITLE TAPE THREADING DIAGRAM CAC16A1	
DIMENSIONS AND FINISH		DO NOT SCALE PRINT	3" ± 0.00mm	DRWG NO. SL-0023	SCALE
THIS DRAWING AND ALL DIMENSIONS ARE TO BE TAKEN FROM THE ORIGINAL DRAWING OR FROM THE ORIGINAL PART UNLESS OTHERWISE SPECIFIED. DIMENSIONS ARE TO BE TAKEN FROM THE ORIGINAL DRAWING OR FROM THE ORIGINAL PART UNLESS OTHERWISE SPECIFIED. DIMENSIONS ARE TO BE TAKEN FROM THE ORIGINAL DRAWING OR FROM THE ORIGINAL PART UNLESS OTHERWISE SPECIFIED.			METRIC XX ± 0.00mm	MACH. FINISH	CHECKED
			FRACTIONS ± 1/64	MATERIAL	APPROVED
				DRWING	dw/aw

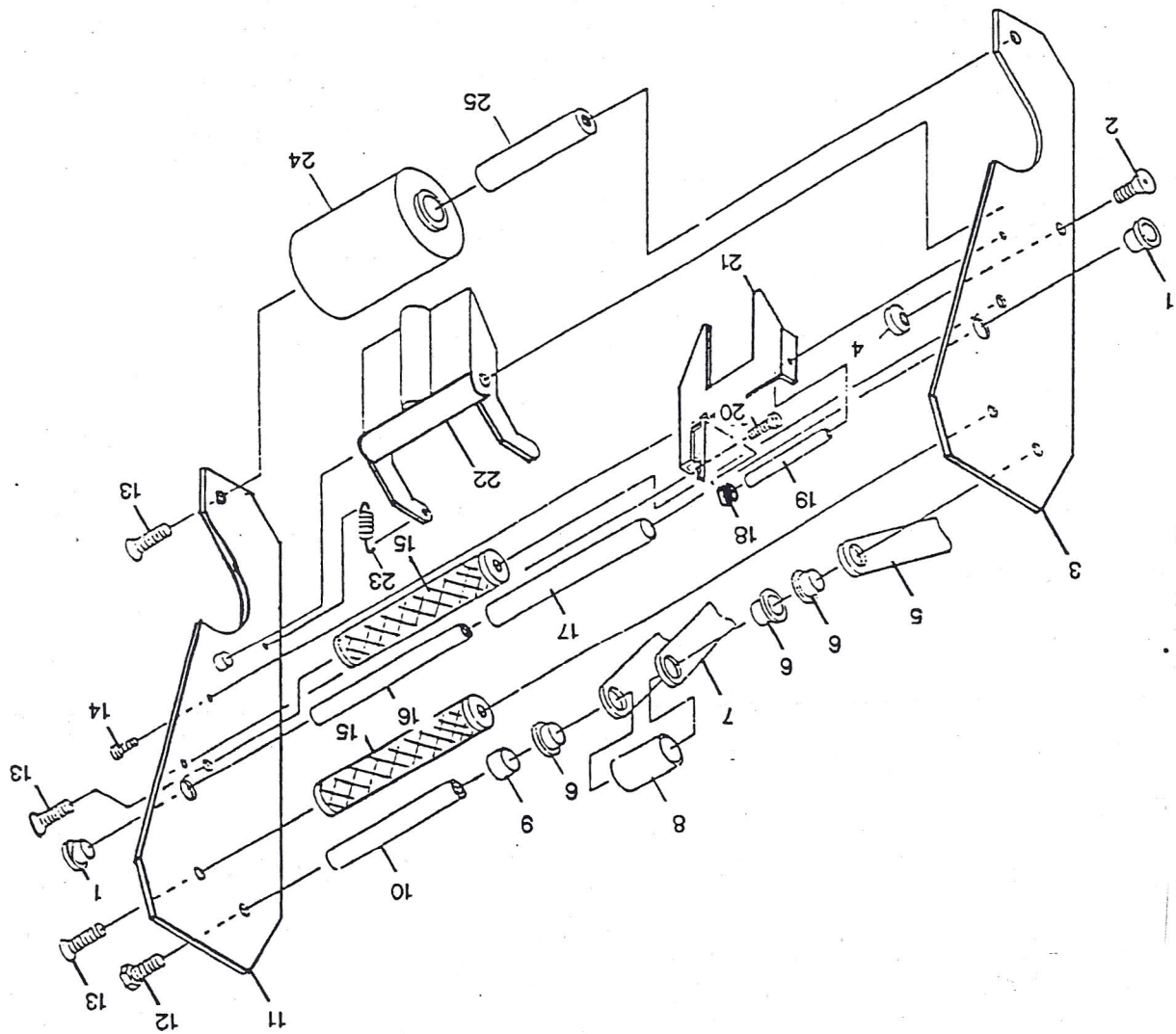
# CARTRIDGE OVERVIEW

ASSEMBLY NO. - .CAC100C/16A1



## CARTRIDGE OVERVIEW

KEY	PART NUMBER	DESCRIPTION	QTY
1	LP06B-045-4	MILL STAND	1
2	PSC20-4	MAIN SPRING	1
3	PSC25-4	MILL STAND TIE BAR	2
4	.KNRA200	KNURLED ROLLER ASSY.	2
5	PSC49-4	ALUMINUM ROLLER ASSY.	1
6	PSC6B-4	TEFLON TUBE	1
7	PSC626	SPACER	2
8	PSC301325-3	SHAFT	1
9	PSC639A	KNIFE ARM SPRING	3
10	PSC6D-4	SUPPORT SHAFT	2
11	PSC134-4	FINGER PLATE	1
12	PSC14-5	TAPE GUIDE PLATE	1
13	PSC11B-4	KNIFE	1
14	PSC1L-6	CARTRIDGE FRAME LEFT	1
--	PSC1R-6	CARTRIDGE FRAME RIGHT	1
15	PSC301103-4	CONNECTING ARM	1
16	PSC6A-4	PIVOT SHAFT	1
17	MN3-3	HEX STOP	1
18	MS3M5-12	BUTTON HEAD M5 X 12	16
19	PSC140-3	KNIFE ARM STOP	2
20	MS3M5-16	BUTTON HEAD M5 X 16	2



FRONT ROLLER ARM ASSEMBLY

## FRONT ROLLER ARM ASSEMBLY

KEY	PART NUMBER	DESCRIPTION	QTY
1	PSC21-4	NYLON BUSHING	2
2	MS2M5-10	FLAT HEAD M5 X 10	6
3	PSC3R-5	ROLLER ARM RIGHT	1
4	PSC139-3	TAPE GUIDE PLATE STOP	1
5	PSC301102-4	P/O CONNECTING ARM	1
6	PSC598	NYLON BUSHING	3
7	PSC301104-4	P/O KNIFE GUARD	1
8	PSC301110-3	SPACER	1
9	PSC301111-3	SPACER	1
10	PSC164-3	PIVOT SHAFT	1
11	PSC3L-5	ROLLER ARM LEFT	1
12	MS6M5-10	HEX HEAD M5 X 10	2
13	MS2M5-10	FLAT HEAD M3 X 8	6
14	MS2M3-8	FLAT HEAD M3 X 8	2
15	.KNRA200	KNURLED ROLLER ASSY.	2
16	PSC6A-4	PIVOT SHAFT	1
17	PSC6B-4	TEFLON TUBE	1
18	PSC133-4	FINGER PLATE SPRING	1
19	PSC135-4	FINGER PLATE SHAFT	1
20	MS7M4-12	PHIL. HEAD M4 X 12	1
21	PSC134-4	FINGER PLATE	1
22	PSC14-5	GUIDE PLATE	1
23	PSC26-3	GUIDE PLATE SPRING	1
24	PSCA12-4	ROLLER ASSEMBLY	1
25	PSC13-4	ROLLER SHAFT	1

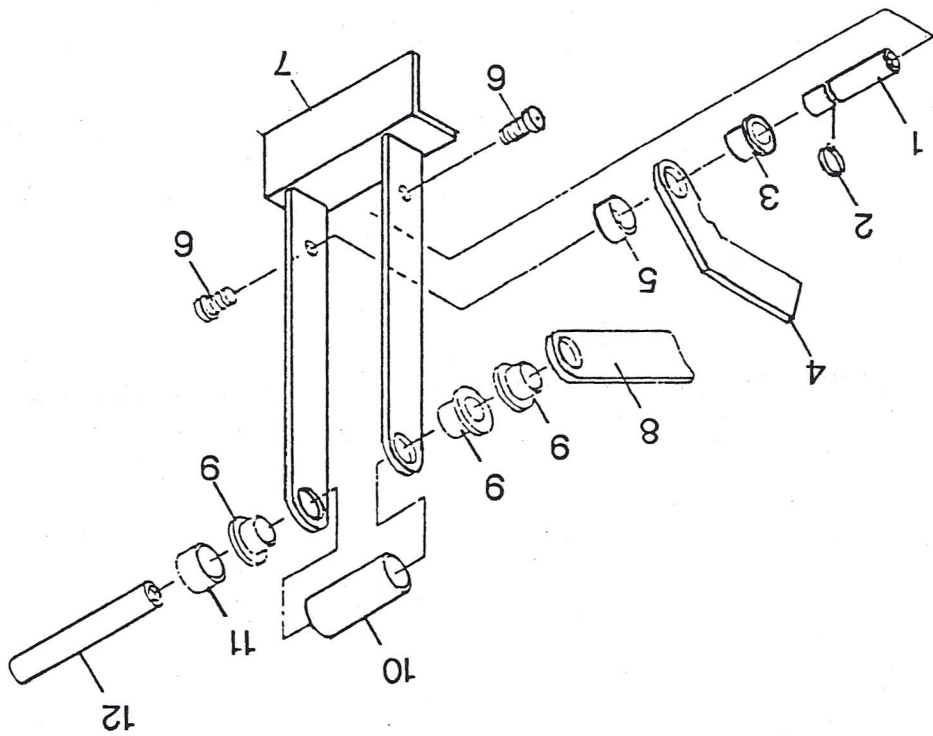


## REAR ROLLER ARM ASSEMBLY

KEY	PART NUMBER	DESCRIPTION	QTY
1	MS6M5-10	HEX HEAD M5 X 10	4
2	PSC301114-5	ROLLER ARM	1
3	PSC8-4	SPRING HOLDING SHAFT	1
4	PSC4L-5	ROLLER ARM LEFT	1
5	PSC301109-3	SPACER (REAR ROLL. ARM)	2
6	PSC510	NYLON BUSHING	3
7	PSC301107	SPACER	1
8	PSC301102-4	P/O CONNECTING ARM	1
9	PSC301106	SPACER	1
10	PSC6A-4	PIVOT SHAFT	1
11	PSC301101-4	P/O LINK BAR	1
12	MW1-3	FLAT WASHER M5	1
13	MN1-3	HEX NUT M5	1
14	PSC13-4	ROLLER SHAFT	1
15	PSCA12-4	ROLLER ASSEMBLY	1
16	PSC20-4	MAIN SPRING	1
17	MS6M5-20	HEX HEAD M5 X 20	1

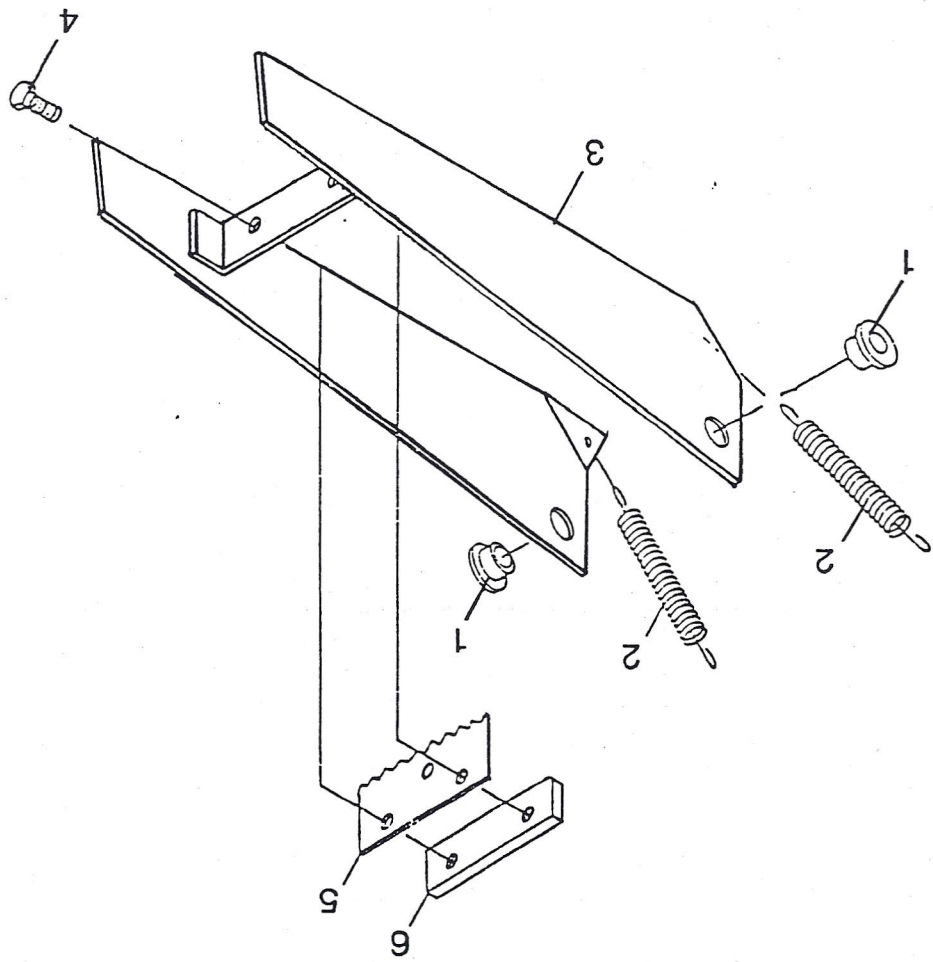


**KNIFE GUARD ASSEMBLY**



## KNIFE GUARD ASSEMBLY

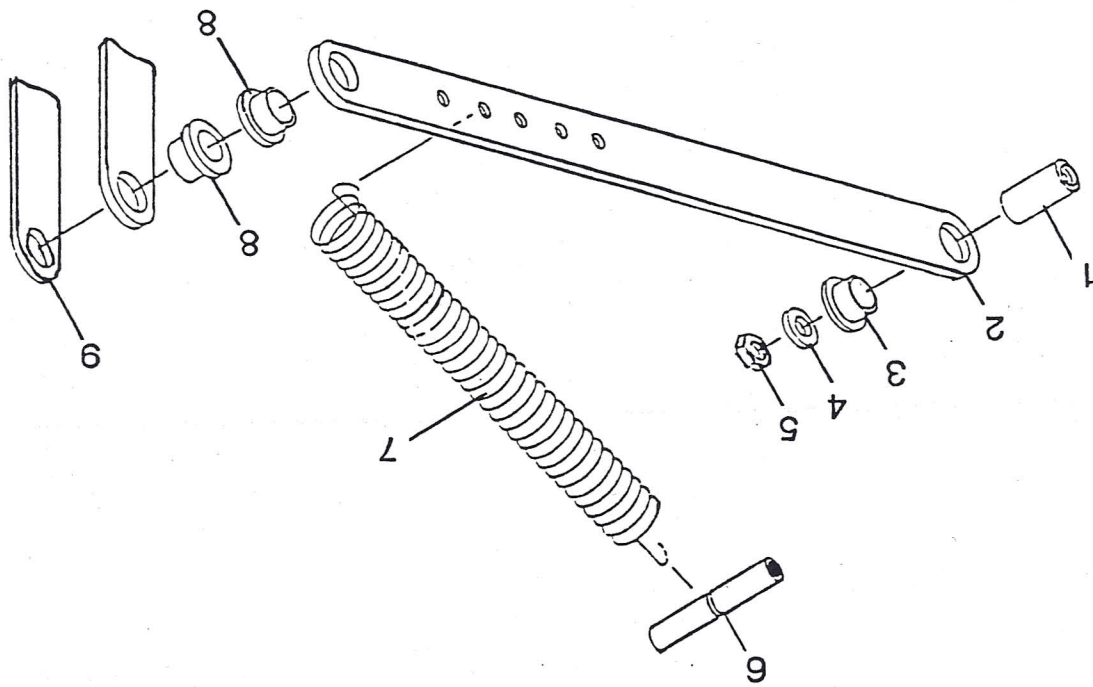
KEY	PART NUMBER	DESCRIPTION	QTY
1	PSC301105-3	SHAFT - KNIFE GUARD	1
2	PSC597	RETAINING RING	1
3	PSC599	NYLON BUSHING	1
4	PSC301103-4	P/O LINK BAR	1
5	PSC301111-3	SPACER	1
6	MS3M5-12	BUTTON HEAD M5 X 12	2
7	PSC301104-4	KNIFE GUARD	1
8	PSC301102-4	P/O CONNECTING ARM	1
9	PSC598	NYLON BUSHING	3
10	PSC301110-3	SPACER	1
11	PSC301111-3	SPACER	1
12	PSC164-3	PIVOT SHAFT	1



KNIFE ARM ASSEMBLY

## KNIFE ARM ASSEMBLY

KEY	PART NUMBER	DESCRIPTION	QTY
1	PSC21-4	NYLON BUSHING	2
2	PSC639A	KNIFE ARM SPRING	2
3	PSC5-6	KNIFE ARM WELDMENT	1
4	MS6M5-6	HEX HEAD M5 X 6	2
5	PSC11B-4	KNIFE	1
6	PSC9-4	KNIFE PLATE	1

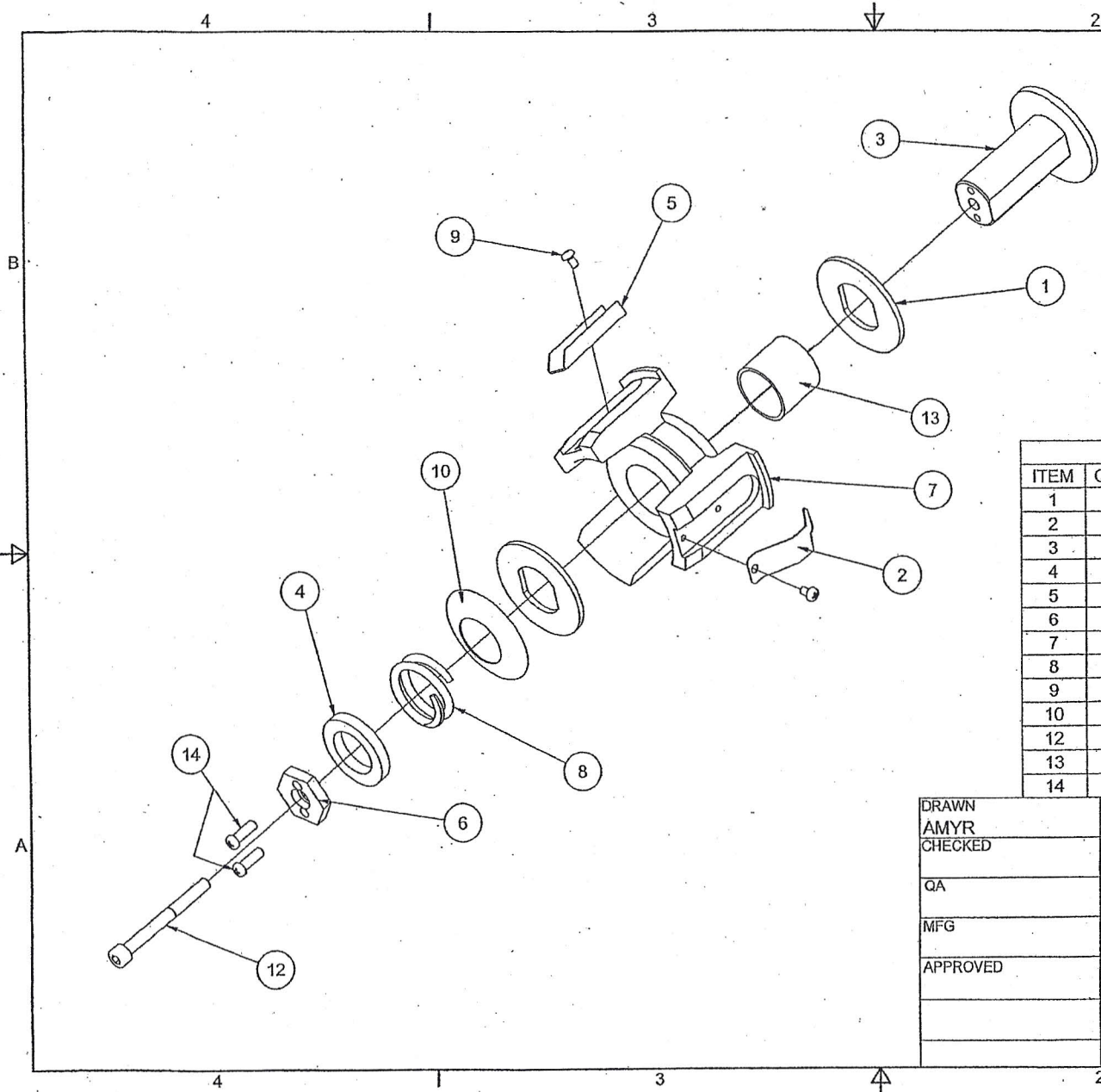


CONNECTING ARM ASSEMBLY

## CONNECTING ARM ASSEMBLY

KEY	PART NUMBER	DESCRIPTION	QTY
1	PSC141-3	CONNECTING ARM SLEEVE	1
2	PSC301102-3	CONNECTING ARM	1
3	PSC510	NYLON BUSHING	1
4	MW1-3	FLAT WASHER M5	1
5	MN1-3	HEX NUT M5	1
6	PSC8-4	SPRING HOLDING SHAFT	1
7	PSC20-4	MAIN SPRING	1
8	PSC598	NYLON BUSHING	2
9	PSC301104-3	P/O KNIFE GUARD	1

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	RELEASED	7/3/2003	AMYR



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	PSC28-3	BRAKE WASHER
2	1	PSC88-3	TAPE CORE SPRING
3	1	CAC50-096-4	TAPE CORE SHAFT (THREADED)
4	1	PSC142-3	TAPE CORE NUT
5	1	PSC144-3	TAPE HOLDER
6	1	CAC50-095-3	HEX LOCK NUT
7	1	PSC30A-5	TAPE CORE CASTING
8	1	PSC33B-3	COMPRESSION SPRING
9	2	MS7M3-5	PAN HEAD SCREW M3 X 5
10	1	PSC33	SPRING DISC
12	1	SPH-1030	SOC. HEAD CAP SCREW M5 X 50
13	1	PSC625	BUSHING
14	2	SPH-1221	M4-.7 x 12 mm LG. PAN HD BOLT (FULL THREAD)

DRAWN AMYR	7/3/2003	TITLE	
CHECKED		TAPE CORE ASSEMBLY	
QA		SIZE	DWG NO
MFG		B	.TCA301
APPROVED		SCALE	REV A
		SHEET 1 OF 1	

# Tape Core Assembly Adjustment Procedures

( .TCA201 3" TAPE CORE & .TCA301 2" TAPE CORE )

## STEP 1: Unlocking the tape core for adjustment

There is a locking bolt used to maintain the height adjustment of the tape core. This must be loosened to change the height of the tape core. This will allow you to adjust the height of the tape ( tracking ) through the cartridge. Using a 3 mm hex key wrench turn in a counter clock wise direction to loosen the socket head cap screw (SPH-1030). Then turn the tape core nut (LP06B-039-3(3") or PSC142-3 (2") in a counter clock wise direction to remove drag from the disc spring (PSC33). Be sure to loosen enough to allow the tape core internal assembly to spin freely and adjust up and down.

## STEP 2: Adjusting the tape core height

The internal assembly is threaded on a stud mounted on the cartridge mill stand. By holding the external part of the tape core assembly and rotating the hex lock nut (CAC50-101-3 (3") or CAC50-095-3 (2") the internal assembly will rotate changing the height of the tape core assembly. Turn in a clock wise direction to decrease the height and in a counter clock wise direction to increase the height.

**DO NOT OVER TIGHTEN THE INTERNAL ASSEMBLY.** This may cause damage to the tape core assy. Run the tape through the cartridge and check for proper tape position. Repeat adjustment as required to center tape.

## STEP 3: Adjusting tape roll back lash or free spin

There is a disc spring (PSC33) and a set of brake washers (PSC28-3) used to slow the free spinning of the tape roll caused when the tape is pulled through the cartridge. By rotating the tape core nut (LP06B-039-3(3") or PSC142-3 (2") in a clock wise direction this will increase the drag from the disc spring (PSC33) restricting the amount of free spin. This should be set with just enough drag to stop the free spinning. Too much or too little will affect the cartridge taping performance. Run the tape through the cartridge and check for tape roll free spin. Repeat adjustment as required to set tape roll free spin.

## STEP 4: Locking the tape core

After the tape is centered and the tape roll free spin is properly adjusted the tape core should be locked into position. Using a 3 mm hex key wrench turn in a clock wise direction to tighten the socket head cap screw (SPH-1030). This will insure that the height adjustment is maintained during operation