

# LITTLE DAVID

*TAPE CARTRIDGE MANUAL*

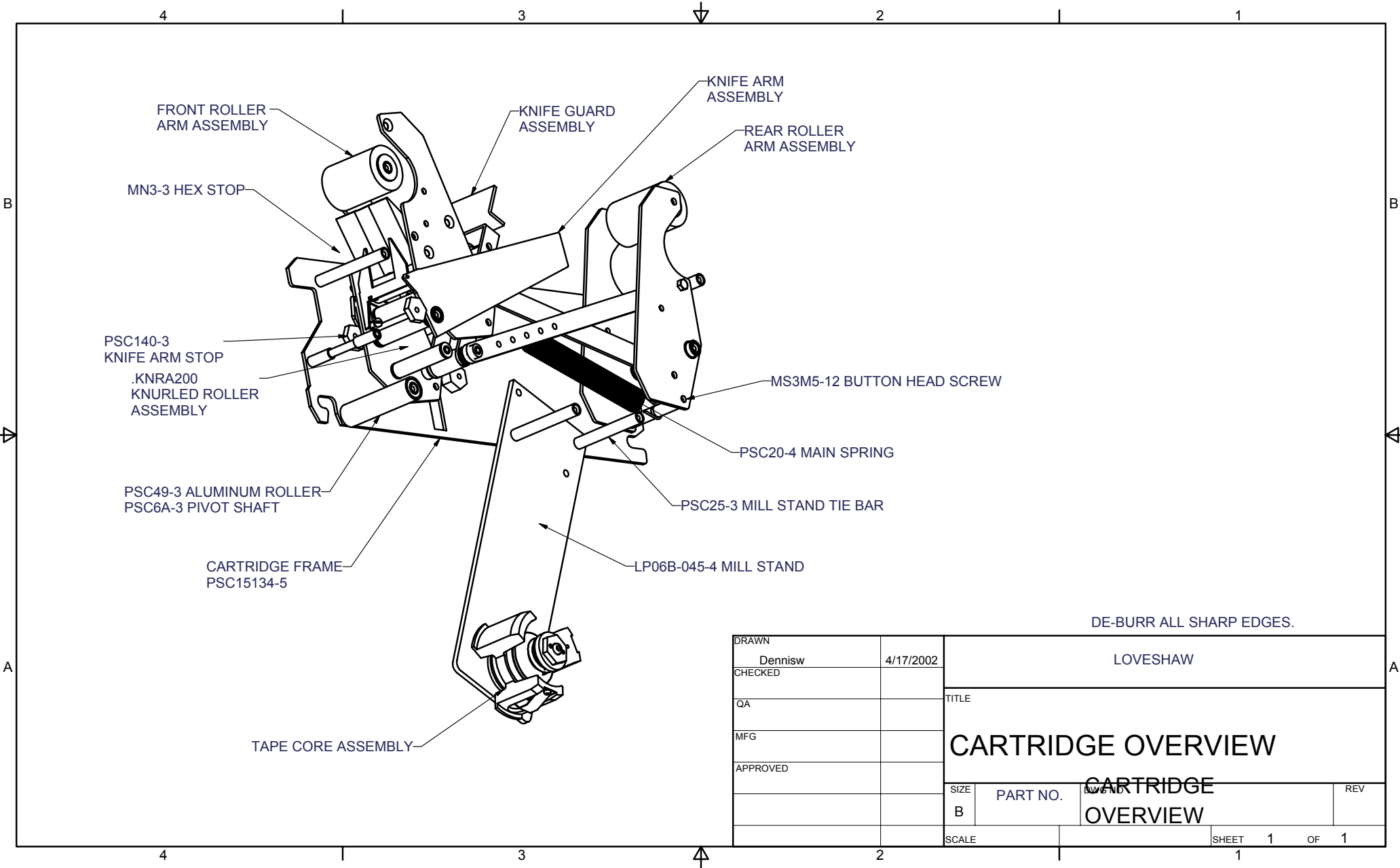


# .CAC16A1

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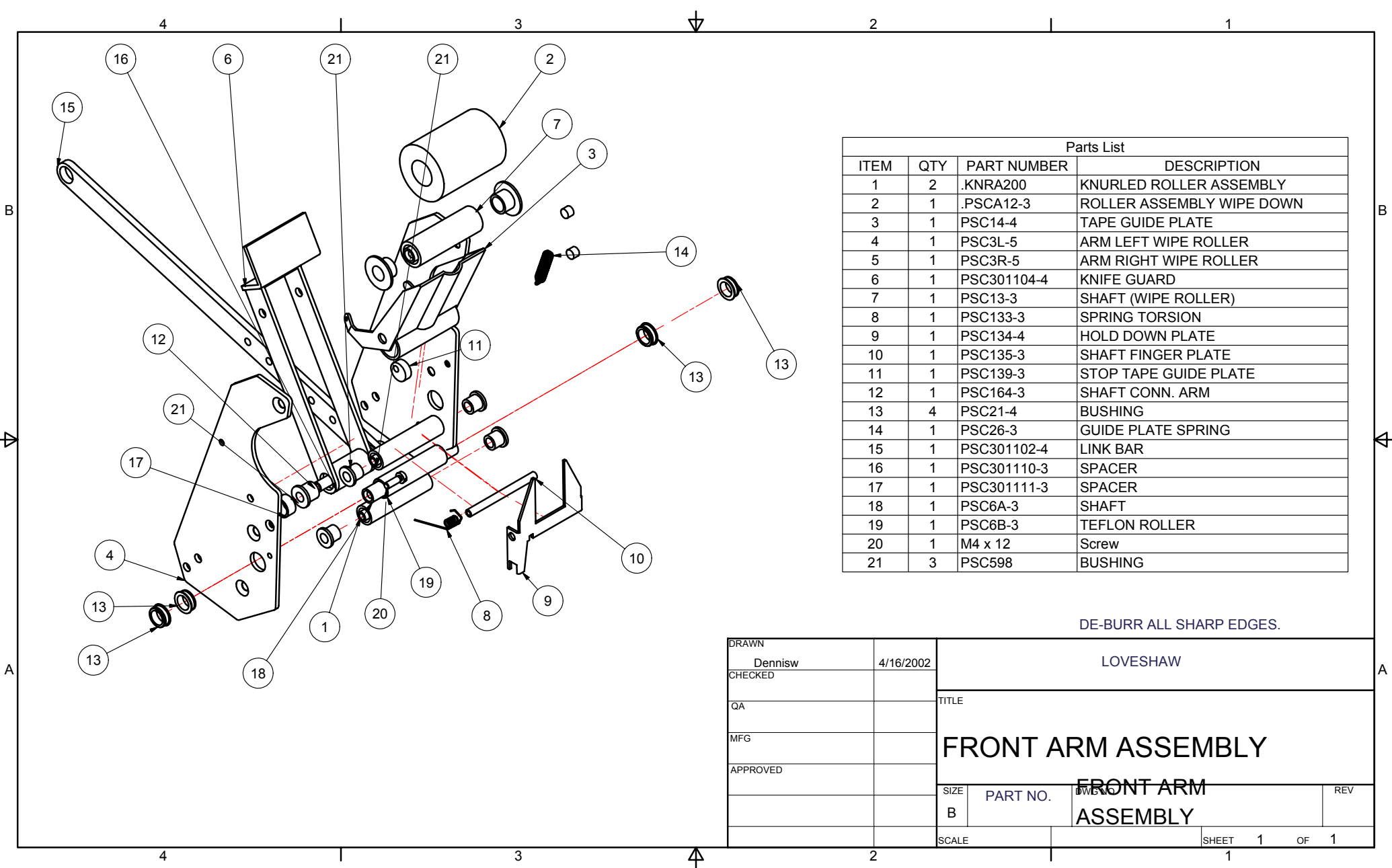
LOVESHAW - EUROPE  
UNIT 9, BRUNEL GATE  
W. PORTWAY INDUSTRIAL ESTATE  
ANDOVER, HAMPSHIRE SP103SL  
ENGLAND  
44-264-3575-11



DE-BURR ALL SHARP EDGES.

DRAWN Dennisw	4/17/2002	LOVESHAW	
CHECKED		TITLE	
QA		<b>CARTRIDGE OVERVIEW</b>	
MFG			
APPROVED		SIZE B	PART NO. 10710
		SHEET 1 OF 1	

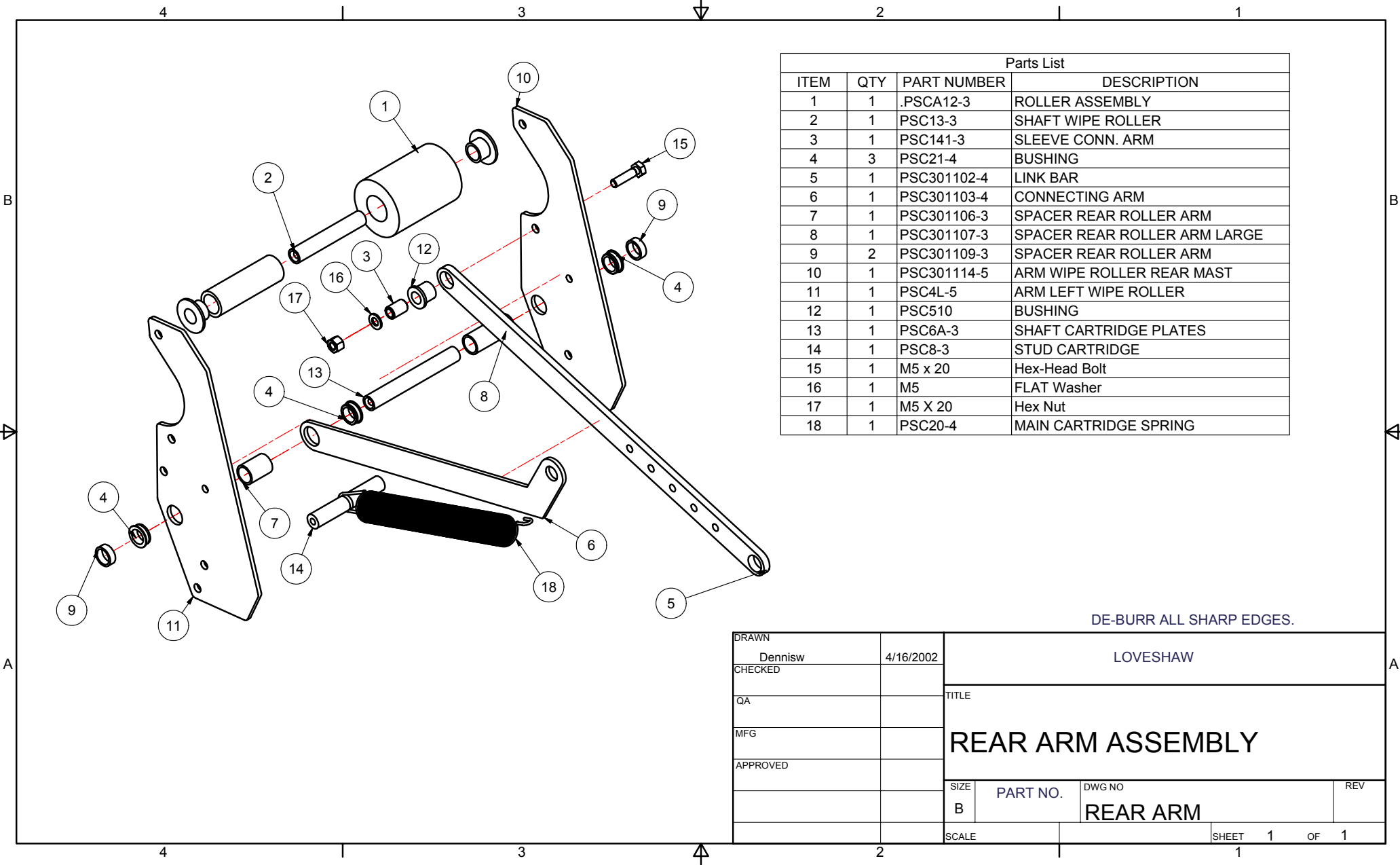
**CARTRIDGE OVERVIEW**



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	.KNRA200	KNURLED ROLLER ASSEMBLY
2	1	.PSCA12-3	ROLLER ASSEMBLY WIPE DOWN
3	1	PSC14-4	TAPE GUIDE PLATE
4	1	PSC3L-5	ARM LEFT WIPE ROLLER
5	1	PSC3R-5	ARM RIGHT WIPE ROLLER
6	1	PSC301104-4	KNIFE GUARD
7	1	PSC13-3	SHAFT (WIPE ROLLER)
8	1	PSC133-3	SPRING TORSION
9	1	PSC134-4	HOLD DOWN PLATE
10	1	PSC135-3	SHAFT FINGER PLATE
11	1	PSC139-3	STOP TAPE GUIDE PLATE
12	1	PSC164-3	SHAFT CONN. ARM
13	4	PSC21-4	BUSHING
14	1	PSC26-3	GUIDE PLATE SPRING
15	1	PSC301102-4	LINK BAR
16	1	PSC301110-3	SPACER
17	1	PSC301111-3	SPACER
18	1	PSC6A-3	SHAFT
19	1	PSC6B-3	TEFLON ROLLER
20	1	M4 x 12	Screw
21	3	PSC598	BUSHING

DE-BURR ALL SHARP EDGES.

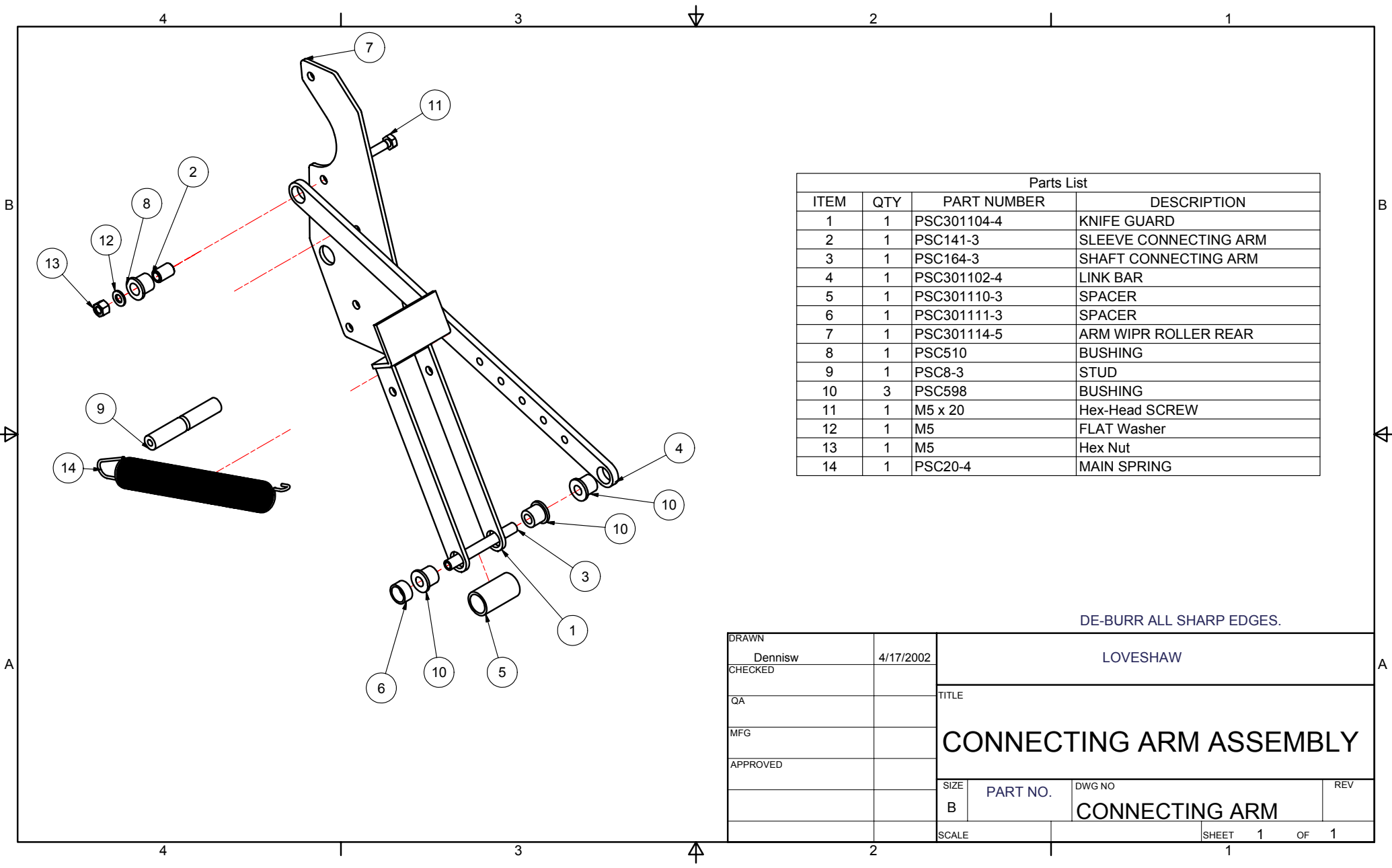
DRAWN Dennisw	4/16/2002	LOVESHAW	
CHECKED		TITLE	
QA		<b>FRONT ARM ASSEMBLY</b>	
MFG			
APPROVED		SIZE B	PART NO. DWG NO. <b>FRONT ARM ASSEMBLY</b>
SCALE		SHEET 1 OF 1	



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	.PSCA12-3	ROLLER ASSEMBLY
2	1	PSC13-3	SHAFT WIPE ROLLER
3	1	PSC141-3	SLEEVE CONN. ARM
4	3	PSC21-4	BUSHING
5	1	PSC301102-4	LINK BAR
6	1	PSC301103-4	CONNECTING ARM
7	1	PSC301106-3	SPACER REAR ROLLER ARM
8	1	PSC301107-3	SPACER REAR ROLLER ARM LARGE
9	2	PSC301109-3	SPACER REAR ROLLER ARM
10	1	PSC301114-5	ARM WIPE ROLLER REAR MAST
11	1	PSC4L-5	ARM LEFT WIPE ROLLER
12	1	PSC510	BUSHING
13	1	PSC6A-3	SHAFT CARTRIDGE PLATES
14	1	PSC8-3	STUD CARTRIDGE
15	1	M5 x 20	Hex-Head Bolt
16	1	M5	FLAT Washer
17	1	M5 X 20	Hex Nut
18	1	PSC20-4	MAIN CARTRIDGE SPRING

DE-BURR ALL SHARP EDGES.

DRAWN Dennisw	4/16/2002	LOVESHAW	
CHECKED		TITLE	
QA		<b>REAR ARM ASSEMBLY</b>	
MFG			
APPROVED		SIZE B	PART NO. REAR ARM
		DWG NO.	REV
SCALE		SHEET 1 OF 1	



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PSC301104-4	KNIFE GUARD
2	1	PSC141-3	SLEEVE CONNECTING ARM
3	1	PSC164-3	SHAFT CONNECTING ARM
4	1	PSC301102-4	LINK BAR
5	1	PSC301110-3	SPACER
6	1	PSC301111-3	SPACER
7	1	PSC301114-5	ARM WIPR ROLLER REAR
8	1	PSC510	BUSHING
9	1	PSC8-3	STUD
10	3	PSC598	BUSHING
11	1	M5 x 20	Hex-Head SCREW
12	1	M5	FLAT Washer
13	1	M5	Hex Nut
14	1	PSC20-4	MAIN SPRING

DE-BURR ALL SHARP EDGES.

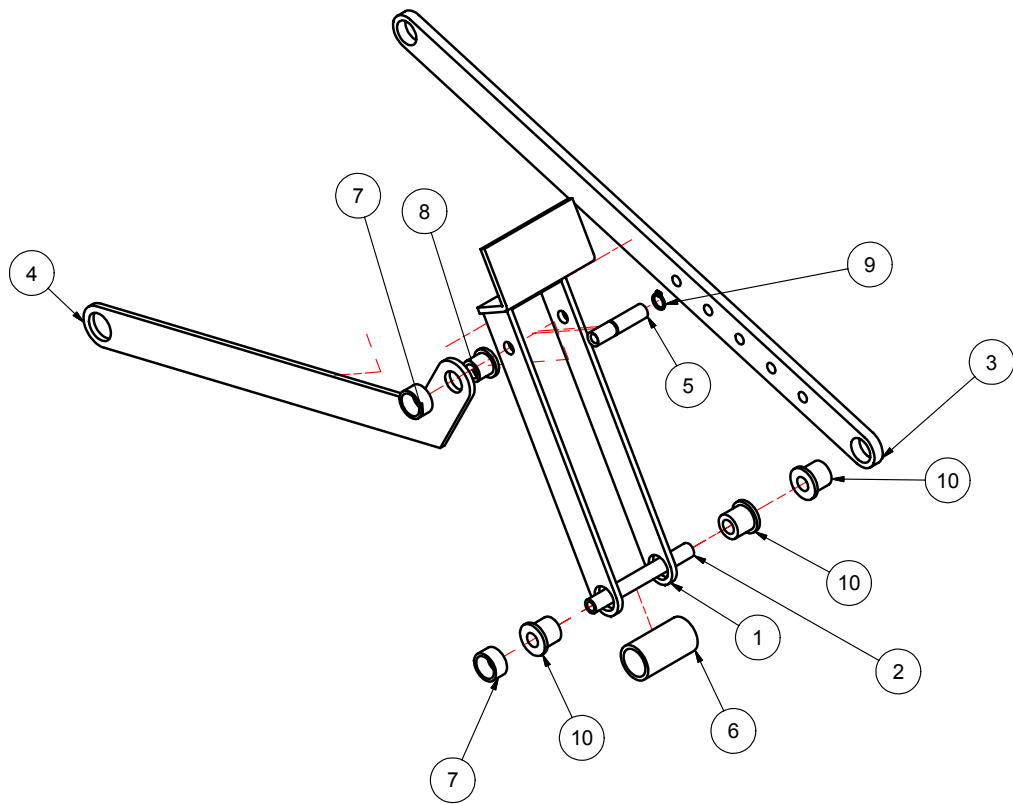
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CHECKED		TITLE			
QA		<b>CONNECTING ARM ASSEMBLY</b>			
MFG					
APPROVED		SIZE B	PART NO.	DWG NO. <b>CONNECTING ARM</b>	REV
SCALE		SHEET 1 OF 1			

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Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PSC301104-4	KNIFE GUARD
2	1	PSC164-3	SHAFT CONNECTING ARM
3	1	PSC301102-4	LINK BAR
4	1	PSC301103-4	CONNECTING ARM
5	1	PSC301105-3	SHAFT KNIFE COVER
6	1	PSC301110-3	SPACER
7	2	PSC301111-3	SPACER
8	1	PSC599	NYLON BUSHING
9	1	PSC597	RETAINING RING
10	3	PSC598	BUSHING

DE-BURR ALL SHARP EDGES.

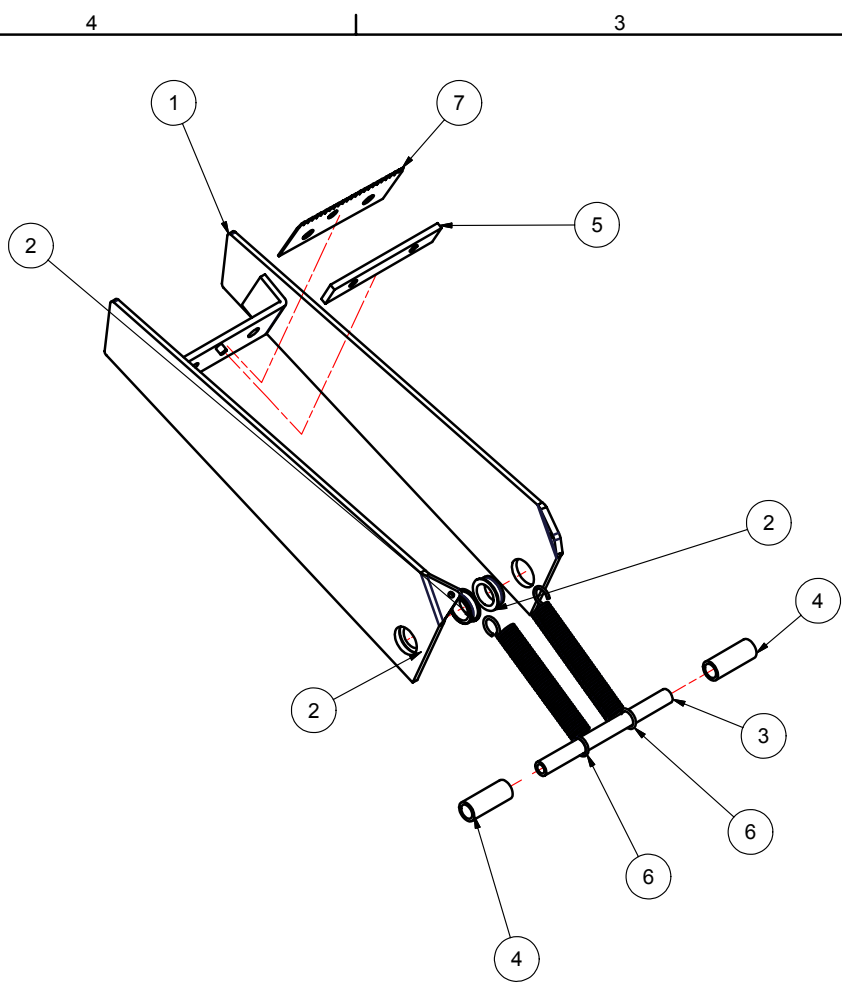
DRAWN Dennisw	4/17/2002	LOVESHAW		
CHECKED		TITLE		
QA		KNIFE GUARD		
MFG		SIZE	PART NO.	DWG NO
APPROVED		B	KNIFE GUARD	REV
SCALE		SHEET 1 OF 1		1

4

3

2

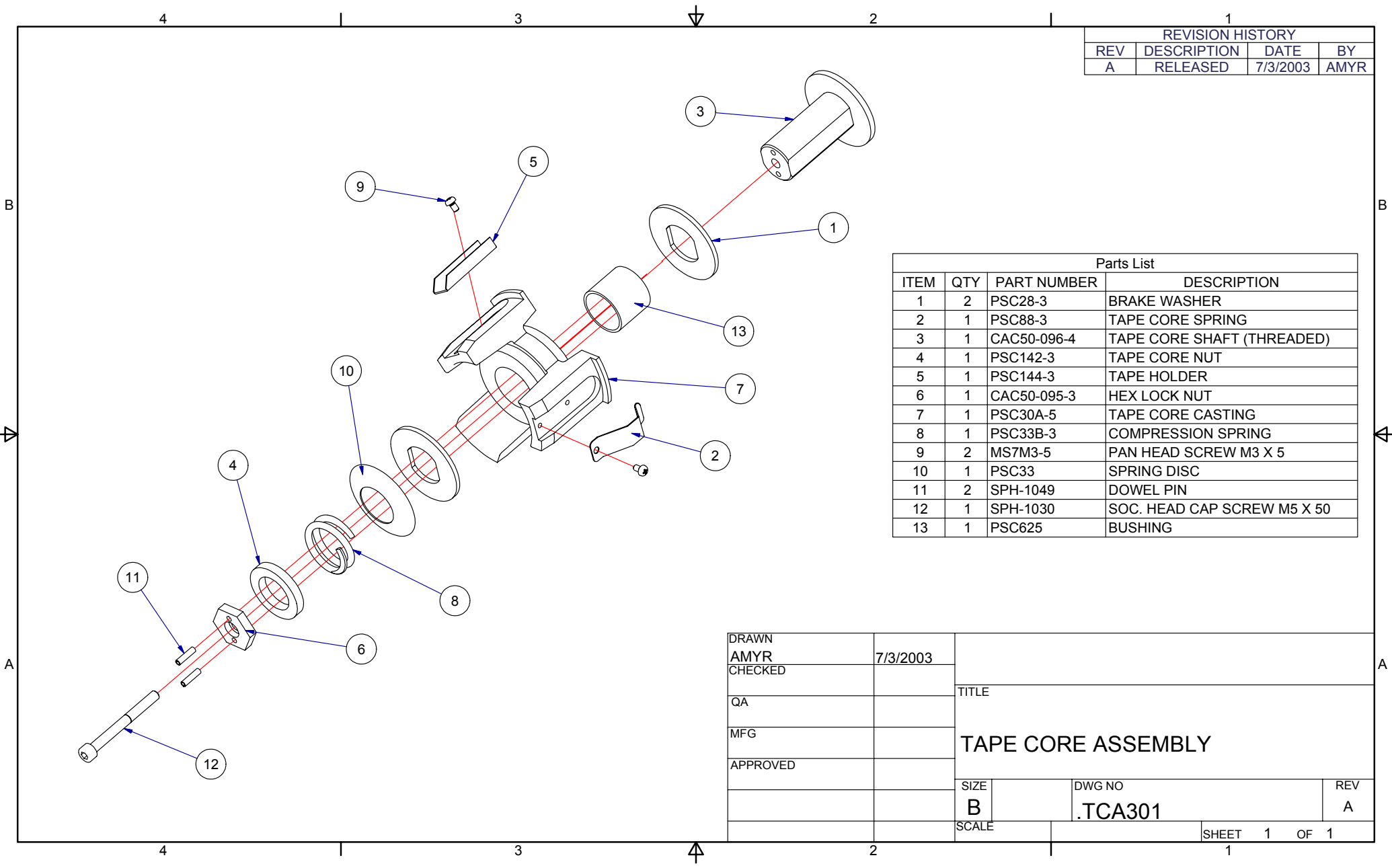
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Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PSC5-4	KNIFE FRAME
2	3	PSC21-4	NYLON BUSHING
3	1	PSC301325-3	SHAFT
4	2	PSC626-3	SPRING SPACER
5	1	PSC9-3	KNIFE PLATE
6	2	PSC639A	SPRING
7	1	PSC11B-4	KNIFE

DE-BURR ALL SHARP EDGES.

DRAWN Dennisw	4/17/2002	LOVESHAW			
CHECKED		TITLE			
QA		<b>KNIFE ARM</b>			
MFG					
APPROVED		SIZE B	PART NO. KNIFE ARM	DWG NO.	REV
SCALE		SHEET 1 OF 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
11	2	SPH-1049	DOWEL PIN
12	1	SPH-1030	SOC. HEAD CAP SCREW M5 X 50
13	1	PSC625	BUSHING

DRAWN AMYR	7/3/2003	TITLE		
CHECKED				
QA		TAPE CORE ASSEMBLY		
MFG				
APPROVED				
		SIZE B	DWG NO .TCA301	REV A
		SCALE	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 HEIGHT ADJUSTMENT OF THE TAPE CORE. THIS MUST BE LOCKED 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 COUNTERCLOCKWISE 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 COUNTERCLOCKWISE DIRECTION TO REMOVE DRAG FROM THE DISC SPRING (PSC33). BE SURE TO LOOSEN ENOUGH TO ALLOW THE TAPE CORE INTERNAL ASSEMBLY TO SPRING 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 CLOCKWISE DIRECTION TO DECREASE THE HEIGHT AND IN A COUNTERCLOCKWISE DIRECTION TO INCREASE THE HEIGHT. DO NOT OVER TIGHTEN THE INTERNAL ASSEMBLY. THIS MAY CAUSE DAMAGE TO THE TAPE CORE ASSEMBLY. 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 CLOCKWISE 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 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 TAPE IS CENTERED AND THE TAPE ROLL FREE SPIN IS PROPERLY ADJUSTED THE TAPE CORE SHOULD BE LOCKED INTO POSITION. USING A 3mm HEX KEY WRENCH TURN IN A CLOCKWISE DIRECTION TO TIGHTEN THE SOCKET HEAD CAP SCREW (SPH-1030). THIS WILL INSURE THAT THE HEIGHT ADJUSTMENT IS MAINTAINED DURING OPERATION.