

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. BVS 100/100

DATE

TITLE: VICEROY 200VS. BENCH LATHE - HEADSTOCK No. 13.6.78.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
100	101	HEADSTOCK.	C.I.	1	CASTING.
"	102	MAIN SPINDLE.	EN8	1	
"	103	H/STOCK LAYSHAFT.	"	1	1 1/8" DIA. x 13 1/2"
"	104	BACKGEAR PINION.	"	1	4 1/4" DIA x 3"
"	105	GEAR ON LAYSHAFT.	TECHNYL A90	1	170 x 80 x 1 1/8"
"	106	PLUG.	ENIA.	1	2" DIA. x 5/8"
"	107	FIXED SPINDLE PINION.	C.I.	1	CASTING.
"	108	GEAR ON SPINDLE.	TECHNYL A90	1	175 x 80 x 7/8"
"	109	LOOSE SPINDLE PINION.	EN8	1	3" DIA. x 3 1/2"
"	110	BEARING CAP.	ENIA.	1	3 1/2" DIA x 3 1/2"
"	111	SPACER.	"	1	2" DIA x 2 1/2"
"	112	SHIFTER.	C.I.	1	CASTING
"	113	" GEAR.	ENIA.	1	2" DIA x 3/4"
"	114	" SHAFT.	"	1	1 1/2" SQ x 7 1/8"
"	115	RACK.	"	1	STD. 1/2" RACK
"	116	SHIFTER GEAR SHAFT.	"	1	3/4" DIA. x 2 1/2"
"	117	PUSH FOR SHIFTER SHAFT	"	1	1 1/2" DIA x 3/4"
"	118	SPACER.	"	1	1 3/4" DIA. x 1/2"
"	119	SEALING PLATE	M.S.	1	4" x 2" x 1/8"
"	120	BEARING PLATE	M.S.	1	4" x 2" x 1/16"
"	121	HEADSTOCK WAF PLATE	C.I.	1	
"	122	HEADSTOCK COVER.	C.I.	1	CASTING.
"	123	CAMLOCK KEY	EN9	1	16 DIA. x 155
"	124	CAM	EN8	3	
"	125	DETENT FLUNGER.	M.S.	3	3/8" DIA. x 5/8"
"	126	BEARING CAP.	C.I.	1	CASTING.
"	127	TRANSDUCER GEAR.	ENIA.	1	4 1/8" DIA x 1/2"
"	128	LOCKNUT.	"	1	2 3/8" DIA. x 1/2"
"	129	SPINDLE SPACER.	"	1	2 1/2" DIA x 1"
"	130	REAR CAP.	C.I.	1	CASTING.
"	131	CHUCK GUARD WINDOW.	PERSPEX	1	6 MM THK
"	132	" " ROD.	B.D.B.	1	5/8" DIA x 9"
"	133	REAR BEARING CAP.	ENIA.	1	4 1/8" DIA x 1"

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

2

ASSY. DRG. No. BVS100/100

DATE

13.6.78

TITLE: HEADSTOCK ARRANGEMENT.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
MVS100	152	FRONT BEARING SPACER.	ENIA.	1	3 1/2" DIA x 1/2"
"	153	PROXIMITY SWITCH SUPPORT	"	1	1/4" DIA. x 1"
MVS105	144	42T. SPINDLE GEAR.	ENIA.	1	2 3/8" DIA x 1 1/4"
ML100	112	GEAR SHIFTER DOG BUSH.	ENIA.	1	
SP169		TOMMY BAR.	ENIA	1	
SP181		SOFT CENTRE (N°4)	EN.8	1	
H235		H/STOCK LEVER PLATE.	B.O.	1	B.O.
CH236		SPINDLE CAPACITY CHART	"	1	"
<u>B.O. PARTS REQUIRED.</u>					
		CONE REF:-18790	—	2	TIMKEN.
		CUP " :-18720	—	2	"
		LJ 1 3/8" 2RS.	—	1	FAG.
		6204-2RS.	—	3	"
<u>OILITE BUSHES.</u>					
		FGM 24 x 35mm LONG	—	2	OILITE
		FGH 2 x 1" "	—	2	"
<u>CIRCLIPS.</u>					
		1300/47M	—	1	ANDERTON.
		1300/3"	—	1	"
		1400/20M	—	1	"
<u>GREASE NIPPLE.</u>					
		H4154 ANGLE 1/4" DRIVE FIT	—	1	KINGFISHER

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

3

ASSY. DRG. No. BVS100/100

DATE

14.6.78.

TITLE: B.O. PARTS REQUIRED.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>SKT. HD. CAP SCREWS.</u>			
		M6 x 20MM LONG	—	2	MVS100/150
		M10 x 45MM LONG.	—	4	BVS100/101
		M6 x 45MM "	—	3	MVS100/124
		" x 20 " "	—	4	" / 102
		" x 12 " "	—	3	" / 130A
		M5 x 20 " "	—	2	BVS100/116
		" x 16 " "	—	3	" / 110
		M6 x 16 " "	—	6	" / 108
		<u>SKT. HD. C'SK SCREWS.</u>			
		M5 x 10MM LONG.	—	2	ML100/112
		<u>RD. HD. M/C SCREWS.</u>			
		4BA. x 5/8" LONG.	—	1	
		<u>SKT. HD. SET SCREWS.</u>			
		M4 x 16MM KND. CUP	—	2	MVS100/128
		M6 x 8MM KND. CUP.	—	2	BVS100/107
		" x 6MM	—	3	" / 106
		M5 x 6MM	—	4	
		2BA. x 1/2" LONG	—	1	" / 114
		M6 x 12MM LONG	—	3	" / 109.
		<u>C'SK. M/C. HD. SCREWS.</u>			
		4BA. x 3/8" LONG.	—	3	
		<u>PINS.</u>			
		3/16" DIA x 7/8" "	—	6	108/105
		3MM DIA x 45MM LONG.	—	1	
		1/8" DIA x 1" "	—	2	117/118
		3/16" DIA x 1/2" " SEL-LOC	—	1	BVS100/114
		<u>SPRING.</u>			
		3/16" O.D. x 3/8" FL. 20 SWG.			
		9 C.P.I. COMP. SPRING	—	4	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

4

ASSY. DRG. No. BVS100/100

DATE

14.6.78

TITLE: BO. PARTS REQUIRED.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>STEEL BALL</u>			
		3/16" DIA.	—	1	
		<u>KEYS.</u>			
		5/16" SQ. x 1 1/2" LONG	—	1	BVS100/107
		1/4" SQ. x 1" "	—	1	TIMING BELT
		1/4" SQ x 5/8" "	—	1	MVS105/144
		M6 SQ x 1 1/2" "	—	1	BVS100/103
		3/16" SQ x 2 1/2" "	—	1	" /114
		<u>GREASE NIPPLE.</u>			
		1/8" B.S.P. REF:- HP2/45	—	1	LUMATIC.
		<u>'SIMPLATROLL' SIMPLABELT SYSTEM.</u>			
		PULLEY 11 113 16 910 19 BORE	—	1	
		" 11 113 16 920 "	—	1	
		BELT SIZE 10 800MM LONG.			
		<u>TIMING BELT SYSTEM</u>			
		PULLEY 20 L100F	—	1	BRB. SERVICES
		" 36 L100	—	1	" "
		BELT 187 L100	—	1	" "
		<u>PROXIMITY SENSOR.</u>			
		NJ2 - 120 KN.	—	1	
		<u>WASHERS.</u>			
		M12 (WELDED TO MVS100/153)	—	1	
		<u>MICRO-SWITCH</u>			
		DS3 - 521	—	1	BURGESS

TITLE: B.O. PARTS REQUIRED.

SHEET No.

5

DATE _____

5. 12. 78

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>NYLON GLAND.</u>			
		REF:- A2 251	—	1	
		<u>PLASTIC HOLE PLUG.</u>			
		REF: 207 - 160351 - 00 (NATURAL)	—	4	HARMSWORTH
		REF: 207 - GDO244 - 00 "	—	3	"
		<u>STD. NUTS.</u>			
		4 BA.	—	1	
		<u>OIL FILLER PLUG.</u>			
		REF:- T.C.O. 1/4" BSP. ELES.A.	—	1	CLAYTON INST. CO.
		<u>CONTROL LEVER.</u>			
		REF:- LBR 45/110/A12	—	1	ELES.A.

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No.

MVS.100/150

DATE _____

11-10-78

TITLE: METAL LATHE CHUCK GUARD

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
MUS 100	148	CHUCK GUARD	SHEET STEEL	1	B.O
..	149	CHUCK GUARD WINDOW	PERSPEX	1	B.O
..	150	CHUCK GUARD ROD	M.S.	1	B.O
<u>BOUGHT OUT PARTS</u>					
<u>SKT HD CAP SCREWS.</u>					
1/4" B.S.W. x 1/2" LONG.				1	
MG x 20 mm LONG.				2	
2 B.A x 3/4" LONG. }				2	
* }					
<u>SKT HD C/SUNK SCREWS.</u>					
4 BA x 3/8" LONG.				4	
<u>HEX NUTS</u>					
STD 4 B.A.				4	
<u>WASHERS</u>					
STD 4 BA.				4	
* MG FOR MUS & BUS LATHES.					
2 BA FOR 5" LATHES.					

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. BVS.100/200

DATE

31.1.79

TITLE: 280 VS BENCH LATHE - CABINET ARRANGEMENT

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
BVS.100	201	CABINET (STD OR LONG)		1	
"	202	DOOR		1	
"	203	DRAWER		3	
"	204	SUMP COVER		1	
"	205	DRAIN PLUG		1	
"	206	RETURN PLUG		1	
"	207	DOOR HINGE		2	
"	208	COOLANT PUMP COVER PLATE		1	
"	209	SPLASH GUARD (STD OR LONG)		1	
"	211	DOOR CATCH (LONG CABINET)		1	
3P106		HINGE BUSH		2	
CH.234	A	'VICEROY' NAMEPLATE.		1	B.O.
		<u>B.O. PARTS REQUIRED</u>			
		<u>HANDLES.</u>			
		5" REF:102 SATIN FINISH.		4	HEMO
		<u>NYLON GLAND.</u>			
		REF: A2 251.		4	
		<u>FOOT KNOCK OFF & MICRO-SWITCH.</u>			
		COMPLETE.		1	HERGA.
		<u>DRIVE FAST RIVETS.</u>			
		REF: 239-ED 868.		12	HARMSWORTH.
		<u>RIVETS</u>			
		REF: 201-080551-00 (BLACK)		10	HARMSWORTH
		<u>DOOR LOCK</u>			
		CAM LOCK. TYPE: SB44		1	LOWE & FEATHER
		WITH FIXING NUT			

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

2

ASSY. DRG. No. BVS. 100/200

DATE

31-1-79

TITLE: 280 VS BENCH LATHE - CABINET ARRANGEMENT

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>HEX SET SCREW</u>			
		M6 x 16 LONG		2	
		<u>C/SUNK SKT HD.</u>			
		M5 x 6 LONG		4	
		M6 NUT STD.		2	
		M6 WASHER		2	
		3/8" WASHER		2	
		3/8 B.S.W ROD x 3/4 LONG.		2	
		<u>CONDUIT ENTRY</u>			
		END BOX 16MM.		1	EGATURE.
		<u>RUBBER MATS</u>			
		5 1/2" x 21 1/2" (BLACK)		1	
		4 7/8" x 12" "		1	
		<u>WOODEN SHELVES</u>			
		5" x 13 1/2" x 3/4" (BLACK)		1	
		6 1/2" x 13 1/2" x 3/4" "		2	
		<u>KNOBS.</u>			
		REF:- VTR 40 BMB.		2	ELESA.
		<u>SCREWED ROD.</u>			
		M8 x 25 LONG.	—	2	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. BVS 100/200A.

DATE

21. 3. 79.

TITLE: 280VS. BENCH LATHE:- COOLANT SYSTEM.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
BVS100	226	COOLANT PIPE BRACKET.	M.S.	1	
ML100	208A	COOLANT PIPE.	TUBE.	1	
"	219A	CABINET DRAIN FILTER.	M.S.	1	
SP164		TAILPIECE ADAPTOR.	M.S.	2	
SP180		STUD.	"	1	
<u>B.O. PARTS REQUIRED.</u>					
<u>COOLANT PUMP.</u>					
REF:- EMU 50/a 150MM.				1	
OR. EMU 60/a 150MM.				1	
<u>COOLANT TAP.</u>					
REF:- 25/4440/00.				1	DROWNALL.
REDUCING BUSH 1/4" - 3/8" B.S.P.				1	
<u>DRAINAGE PLUG.</u>					
REF:- NP 50. G.				1	ADAMS.
<u>SKT. HD. CAP SCREW.</u>					
M5 x 16 LONG.				2	
<u>HEX. HD. SCREWS.</u>					
M6 x 16 LONG.				2	
M6 NUT.				2	
M6 WASHER.				4	
<u>KNOB.</u>					
REF:- VTR 40 B M B.				1	ELESA.

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. BVS100/500

DATE

7.7.78

TITLE: SADDLE ARRANGEMENT (BENCH LATHE).

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
BVS100	501	ENGLISH CROSS - SLIDE L/SCREW (ENG & MET)		1	
"	502	SADDLE LEAD SCREW BUSH (ENG & MET)		1	
"	503	1/2 INCH/METRIC DIAL.		2	
"	504	" " " INDICATOR.		2	B.O.
"	505	" " DIAL COLLAR.		2	
"	506	TOP SLIDE LEADSCREW (ENG & MET)		1	
"	507	" " " BUSH " "		1	
BVS115	975A	SADDLE CLAMP SCREW.		1	
BVS100	506	CROSS SLIDE.		1	
"	507	SWIVEL SLIDE.		1	
"	508	TOP SLIDE.		1	
"	513	REAR GIB STRIP.		1	
ML100	504	SADDLE.		1	
ML100	504	LOCKING PAD.		1	
"	507	SWIVEL SLIDE LOCKING PIN.		3	
"	508A	TOP SLIDE GIB STRIP		1	
"	508B	CROSS " " "		1	
"	511B	TOP SLIDE FEED NUT		1	
"	512D	CROSS SLIDE " "		1	
"	515	BEARING COLLAR.		2	
"	521	CROSS SLIDE SPIGOT INSERT.		1	
"	525	SLUG.		1	
"	525A	SLUG		1	SEE B.O.
ML100	504	CROSS SLIDE GRADUATION RING.		1	
SP135		TAILSTOCK CLAMP PAD.		1	
CH245		MET. & ENG. DIAL DIVISION CHART.		2	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

ASSY. DRG. No. BVS 100/500.

TITLE: SADDLE ARRT. (B.O. PARTS REQUIRED).

SHEET No.

2

DATE _____

7.7.78.

DRG. No.		DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>BEARINGS.</u>			
		REF: N.T.A. G13.		3	TORRINGTON
		REF: T.R.A. G13.		6	"
		<u>SKT. HD. CAP SCREW.</u>			
		5/16" WHIT. x 1" LONG.		2	
		5/16" " x 1 1/4" "		2	
		<u>SQ. HD. COLLAR SCREW.</u>			
					SEE
		5/16" WHIT. x 2 3/8" LONG →		1	BYS. 115/975 A
		<u>SKT. HD. SET SCREWS.</u>			
		M10 x 10MM LONG DOG PT.		3	
		5/16" B.S.F. x 3/8" " CONE PT.		2	
		1/4" WHIT. x 1/4" " " "		1	
		M4 x 5MM LONG. " "		1	
		2BA. x 7/8" LONG " "		6	
		<u>GROOVE PINS.</u>			
		3/16" DIA. x 1 1/2" LONG.		1	
		1/8" DIA x 3/4" "		2	
		3MM DIA. x 30MM LONG.		2	
		<u>SEL-LOK PINS.</u>			
		1/8" DIA. x 5/8" LONG.		2	
		<u>STD. WASHERS.</u>			
		5/16" DIA.		2	
		3/8" "		2	
		<u>OILERS.</u>			
		REF: 804		3	ADAMS.

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. BVS 100/700.

DATE

TITLE: VICEROY 280 VS. BENCH LATHE - TAIL STOCK APP. 14.3.79.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
BVS100	706	TAIL STOCK SCREW.	M.S.	1	25 DIA. x 215
MVS100	701	TAIL STOCK BODY.		1	
"	702	" SHOE.		1	
"	703	END CAP.		1	
"	705	BARREL E (ENGLISH) M (METRIC).		1	
"	707	NUT.		1	
"	710	A & B BARREL CLAMPS.		1	OFF EACH.
"	711	EJECTOR PIN.		1	
"	712	CLAMP HANDLE STOP.		1	
SP135		CLAMP PAD.		1	
SP147	A	CLAMP ECCENTRIC.		1	
SP148	A	" PIN.		1	
SP171	A	LOCKING STUD.		1	
SP172		TEE KEY.		1	
<u>B.O. PARTS REQUIRED.</u>					
<u>HANDWHEEL.</u>					
		REF:- VDO 125 FP + 1.		1	ELESA.
<u>CONTROL LEVER.</u>					
		REF:- LBR 37/BS/A10.		1	"
<u>LEVER ARM.</u>					
		REF:- BL 366/10 x 155		1	"
<u>SKT. HD. SET SCREWS.</u>					
		M8 x 45 LONG 1/2 PT.		2	
		M6 x 6 " DOG PT.		1	
		M6 x 6 " KND CUP.		1	
		M5 x 6 " " "		3	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1.

ASSY. DRG. No. BVS100/800.

DATE

13. 12. 78.

TITLE: 280 BVS. LATHE. - TOOLPOST ARR.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
* BVS100	801	TOOL POST BASE.	MALL. IRON	1	CASTING.
ML100	802	TOOL POST TENON.	M.S.	1	$1\frac{1}{4} \times 1\frac{1}{16} \times \frac{3}{8}$
"	803A.	" " STUD.	"	1	$\frac{1}{2}$ DIA $\times 3\frac{9}{16}$
"	805	" " HANDLE - CAP.	"	1	$1\frac{1}{4}$ DIA. $\times 1\frac{3}{4}$
SP142		HANDLE.	"	1	$\frac{7}{16}$ DIA. $\times 3\frac{1}{2}$
<u>B.O. PARTS REQUIRED.</u>					
<u>HANDLE REF:-</u>					
		$\frac{5}{16}$ WHIT. $\times 1\frac{1}{8}$ DIA. - 1032.	—	1	RENCOL
<u>SQ. HD. SCREWS.</u>					
		M8 $\times$ 30MM LONG.	—	3	
* FOR TWO WAY TOOL POST USE ML100/801B.					
* " FOUR " " " " ML119/1B					

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. BVS. 103/100

DATE

6.12.78

TITLE: 280VS LATHE :- VARI-SPEED DRIVE ASSEMBLY

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
BVS103	101	MOTOR MOUNTING PLATE	C.I.	1	CASTING
"	102	ACTUATOR	C.I.	1	CASTING
"	103	ACTUATOR ROD	M.S.	1	
"	104	ROLLERS	M.S.	2	
"	105	STUDS	M.S.	2	
"	106	ADJUSTING SCREW LEVER	M.S.	1	
"	107	ADJUSTING NUT	M.S.	1	
"	108	ADJUSTING SCREW	M.S.	1	
"	115	MOTOR PLATE SPACER	M.S.	4	
"	116	MICRO-SWITCH TRIP BUSH	M.S.	2	
"	117	MICRO-SWITCH PLATE	SH. STEEL	1	
"	118	DRIVE MOTOR KEY	KEY STEEL	1	
<u>B.O. PARTS REQUIRED</u>					
<u>MOTORS</u>					
REF :- VMX5848-126. 1100 WATTS					
1425 R.P.M. 3 PHASE = 380/440V.					
2.6 AMPS.					
1 PHASE = 220/250 V. 4.5 AMPS					
50 HZ. RATING = C.R.					
OR (220V/ 3 PHASE/60 HZ)					
REF :- AG. CH-4132. TYPE 711.27.2.3.1					
1300 R.P.M. 214 - 450V.					
.22 - .13 AMPS - 50 HZ.					
OR (220V/ 3 PHASE/60 HZ)					
<u>THRUST BEARING</u>					
REF :- AX 10 22					
PLATE :- CP 10 22					
				1	NADELLA
				2	— — —

ASSY. DRG. No. BVS.103/100

DATE

TITLE: 280JS LATHE :- VARI-SPEED DRIVE ASSEMBLY

6.12.78

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>PULLEY</u>			
		REF :- 11.113.16.910		1	SIMPRATROLL
		<u>MICRO-SWITCH</u>			
		REF :- G.V.9.		2	BURGESS
		<u>SKT HD CAP SCREWS</u>			
		M8 x 45 MM LONG		4	BVS.103/101
		2 B.A x 3/4" LONG		2	KEMO-MOTOR
		2 B.A x 1/2" LONG.		2	BVS.103/117
		<u>HEX SET SCREWS</u>			
		M8 x 16 MM LONG		4	MAIN MOTOR
		<u>RD. HD. SCREWS</u>			
		2 B.A x 1/4" LONG		2	BVS.103/116
		6 B.A x 1 1/2" LONG.		2	MICRO-SWITCH
		<u>SKT. HD. SET SCREWS</u>			
		M5 x 6 MM LONG		2	BVS.103/102
		2 B.A x 1/4" LONG		2	BVS.103/116
		<u>PINS</u>			
		3/16" x 1" LONG.		3	BVS.103/103
		1/8" x 5/8" LONG		1	BVS.103/108
		<u>HEX NUTS</u>			
		6 B.A. STD.		2	MICRO-SWITCH
		<u>WASHERS</u>			
		M8		4	MAIN MOTOR

SHEET No.

1

DATE _____

25-4-79

W.Y.D.O.S.

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. BVS 110/300.

DATE

22.3.79.

TITLE: PCS. APRON MK II.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
BVS110	307	HANDWHEEL PINION.	M.S.	1	
"	326	SCREWCUTTING LEVER BOSS.	"	1	
"	348	FEED BOSS.	"	1	
ML110	301	C. APRON BODY.	C.I.	1	
"	302	" DRIVING GEAR.	M.S.	1	
"	303	" PINION.	"	1	
"	304	CROSS SLIDE DRIVING GEAR.	"	1	
"	305	" " GEAR PINION.	"	1	
"	306	" " " SHAFT.	"	1	
"	308	WORM.	"	1	
"	309	" GEAR.	C.I.	1	
"	310	CHIMNEY GEAR.	M.S.	1	
"	311	WORM GEAR SHAFT.	"	1	
"	312	" DRIVING GEAR.	"	1	
"	313	FEEDSHAFT GEAR.	"	1	
"	315	WORM SHAFT.	"	1	
"	318	" CARRIER LIFTER.	"	1	
"	319	APRON DRIVING GEAR SHAFT.	"	1	
"	320	CHANGE GEAR.	"	1	
"	321	WORM CARRIER.	C.I.	1	
"	325	LOCKING PIN.	SILVER STEEL.	1	
ML100	117	RETAINING PLATE.	M.S.	1	
ML105	301	HALF NUTS (ENG.) (A = METRIC).	C.I.	1 PAIR	
"	302	A. HALF NUT STUDS.	M.S.	2	
"	306	SCREWCUTTING LEVER CATCH.	"	2	
MVS110	345	APRON SHIFTER.	M.S.	1	
"	346	SELECTOR KNOB.	"	1	
"	347	OIL SIGHT EXTENSION.	"	1	OBSOLETE.
"	349	SELECTOR SHAFT.	"	1	
"	355	APRON COVER PLATE.	SH. STEEL.	1	
"	356	SELECTOR SHAFT BUSH.	M.S.	1	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

2

DATE _____

23.3.79

ASSY. DRG. No. BVS 110/300.

TITLE: PES. APRON MK II.

[illegible]

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

ASSY. DRG. No. BVS 110/300.

THREE

TITLE: P.C.S. APRON MK II

DATE

16.3.78

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>9/16" SUNK SKT. HD. SCREWS</u>			
		1/4" B.S.W x 1/2"		1	
		4 B.A x 1/4"		5	
		<u>SLOTTED 9/16" SUNK SCREW.</u>			
		4 B.A x 1/4"		1	
		<u>GRUB SCREWS</u>			
		5/16" B.S.W x 3/8" DOG PT.		2	
		" x " KNURLED CUP		2	
		1/4" B.S.W. x 3/8" KNURLED CUP		4	
		" x 1/4" DOG PT.		1	
		2 B.A x 5/16" CONE PT.		1	
		2 B.A x 1/4" KNURLED CUP		1	
		2 B.A x 3/16" CONE PT.		4	
		<u>GROOVE PINS</u>			
		1/8" DIA x 1 1/2" L.		2	
		1/8" DIA x 1" L.		2	
		3 DIA. x 45MM LONG.		1	
		<u>SEL-LOK PINS</u>			
		1/8" DIA x 1 1/2" L.		2	
		<u>GROUND DOWELS</u>			
		5/16" DIA x 3/4" L.		2	
		<u>CIRCLIPS</u>			
		REF: 1500-396.E.		1	Anderton
		REF: 1400-518		1	"

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

ASSY. DRG. No. BVS 110/300.FourTITLE: P.C.S. APRON MKII

DATE

16.3.78.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>OIL FILLER</u>			
		REF: 50 G		1	ADAMS.
		<u>OIL WINDOW</u>			
		REF: B.W. 4040.		1	ADAMS.
		<u>OILER</u>			
		REF: B 04		3	ADAMS.
		<u>SPRINGS.</u>			
		$\frac{1}{8}$ " O/D - 22 SWG - $\frac{1}{4}$ " F.L. - 10.C.P.I		1	
		$\frac{3}{16}$ " O/D - 20 SWG - $\frac{7}{16}$ " F.L. - 10.C.P.I.		2	
		<u>STEEL BALL</u>			
		$\frac{9}{164}$ " DIA.		1	
		<u>KEYS.</u>			
		$\frac{3}{16}$ " SQ X $1\frac{3}{8}$ " L		1	
		$\frac{1}{8}$ " SQ X $1\frac{3}{8}$ " L		1	
		<u>RIVETS.</u>			
		NATURAL REF:- 201-ED 306-00		1	HARMSWORTH.
		<u>WASHERS.</u>			
		$\frac{1}{2}$ " STD		2	
		<u>HANDWHEEL.</u>			
		REF:- VDO 125 FP+1	—	1	ELESA.
		<u>CONTROL LEVER.</u>			
		REF:- LBR 37/85 A 10	—	2	ELESA.

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. BVS 110/400.

DATE

29. 11. 78.

TITLE: 280 VS. BENCH LATHE - BED ARRANGEMENT.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
BVS 110	403A	FEED SHAFT.	M.S.	1	
ML 100	402	BED.	C.I.	1	CASTING.
"	403A	RACK (STD).	M.S.	1	
"	404	BED TENON.	"	2	
"	405	HEAD STOCK STRIP.	"	1	
"	406	BED END STOP.	"	1	
ML 110	405	LEADSCREW COLLAR.	"	1	
"	409	COLLAR.	"	1	
ML 100	407	BED SPACER	"	4	
BVS 110	401	LEADSCREW & FEED SHAFT BRACKET.	C.I.	1	CASTING.
"	404M.	METRIC LEADSCREW (STD).	ENIA.	1	
"	404E.	ENGLISH "	"	1	
SP 180		STUD.	M.S.	4	
CH 101		LUBRICATION CHART.		1	B.O.
		<u>B.O. PARTS.</u>			
		<u>SKT. HD. CAP SCREWS.</u>			
		M8 x 35mm LONG.		1	
		M6 x 20 " "		2	
		2BA. x 1/2" LONG.		5	
		<u>GRUB SCREW</u>			
		M6 x 6mm LONG DOG PT.		1	
		<u>NUT.</u>			
		M8 NYLOC.		4	
		<u>WASHERS.</u>			
		M8 - "A" FORM.		4	
		5/16" DIA. DOWTY "SPAT" WASHERS.		4	

SHEET No.

ASSY. DRG. No. BVS. 110/400

DATE _____

4-7-78

TITLE: 280VS BENCH LATHE - BED ARRANGEMENT

W.Y.D.O.S.

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. BVS 115/100A.

DATE

2.1.79

TITLE: 280VS. BENCH LATHE - END DRIVE ARR^T

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
BVS 115	903	QUADRANT		1	
"	970	END DRIVE GUARD		1	
"	971	MOTOR COVER GUARD		1	
"	972	GUARD SUPPORT BLOCK		2	
"	973	GUARD RETAINING BLOCK		1	
"	974	GUARD CATCH		1	
"	975	5/16" B.S.W. COLLAR SCREW		1	
ML 115	908 A	64T QUAD GEAR		1	
"	909 A	66T " "		1	
"	943 A	64T & 22T QUAD GEAR SHAFT		1	
"	944 A	22T QUAD GEAR		1	
"	945 A	24T " "		1	
"	946 A	66T & 24T QUAD GEAR SHAFT		1	
"	995	QUAD RETAINING SPRING		2	
"	996 A	SHEAR BUSH		1	
"	997	66T GEAR (WITH BOSS)		1	
"	998	66T GEAR		1	
"	999	RETAINING PLATE		1	
"	1004	SHEAR KEY		1	
				1	
ML 100	117	RETAINING PLATE		2	
CH. 107		QUAD, SLIDING GEAR CHART		1	B.O.
CH. 236		SPINDLE CAPACITY CHART		1	"
CH. 242		END DRIVE GUARD		1	"
		<u>B.O. PARTS REQUIRED.</u>			
		<u>HINGES.</u>			
		REF: 8383A BUTT. 2 1/2" PLAIN STEEL		2	
		<u>OILITE BUSHES.</u>			
		REF: CT174 x 3/4" LONG		4	OILITE.
		<u>HANDLE.</u>			
		REF: 1/27772. SMALL TEE HANDLE.		1	LOWE & FLECHER

SHEET No.

2

DATE _____

30.6.78.

W.Y.D.O.S.

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. BVS 115/100B.

DATE

21. 3. 79.

TITLE: 280 VS. LATHE. REVERSING BRACKET ARR.T.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
BVS115	993	LOCATING PIN PLUNGER.	ENIA.	1	
MVS105	101	REVERSING BRACKET.	C.I.	1	
"	107	32T. REVERSING GEAR.	ENIA.	2	
"	108	42T. STUD GEAR.	"	1	
"	109	IDLER STUD.	"	2	
"					
ML105	104	REVERSING BRACKET STOP.	"	1	
"					
ML115	948	24T. STUD GEAR.	"	1	
"	949	INTERMEDIATE STUD.	"	1	
"	950	STUD GEAR SPACER.	"	1	
		<u>B.O. PARTS REQUIRED.</u>			
		<u>NUTS.</u>			
		STD. $\frac{7}{16}$ " WHIT.		1	
		STD. $\frac{5}{16}$ " " LOCKNUT.		2	
		<u>KEY.</u>			
		$\frac{1}{8}$ " SQ. x $1\frac{3}{8}$ " LONG.		1	
		<u>OILER.</u>			
		REF:- B.O. 4.		1	LUMATIC.
		<u>SPRING.</u>			
		$\frac{7}{16}$ " OD. $\frac{11}{16}$ " FL. 6CPI. 17S.W.G. GROUND ENDS.		1	
		<u>SKT. HD. CAP SCREW.</u>			
		2 BA. x $\frac{5}{8}$ " LONG.		1	
		<u>BEARINGS.</u>			
		REF:- 6200 2RS.		2	FAG.
		<u>CIRCLIPS.</u>			
		REF:- 1300/30M.		2	ANDERTON.

W.Y.D.O.S.

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

2

ASSY. DRG. No. **846**. 115/900. (METRIC)

DATE

9-2-77.

TITLE: GEAR BOX

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
ML115	987	FOOL PROOF PIN.	SILVER ST.	1	1/4" DIA x 2 1/8"
"	989	" " SPRING.	-	1	See B.O.
"	990	TUMBLER DRIVING SHAFT BUSH	C.I.	1	2" DIA x 1 3/4"
"	991 A.	GEAR TRAIN SHAFT BUSH	C.I.	1	1 3/4" DIA x 2"
"	991 B.	" " " "	C.I.	1	1 3/4" DIA x 1 1/8"
"	992 A.	SLIDING DOG " "	C.I.	1	1 3/4" DIA x 1"
"	992 B.	" " " "	C.I.	1	1 3/4" DIA x 1 3/8"
"	994	CARRIER MOVING GEAR	EN. 1A	1	1 1/2" DIA x 1 3/4"
"	996 A.	SHEAR BUSH	EN. 1A	1	1 3/8" DIA x 1 3/8"
"	999	RETAINING PLATE	EN. 1A	1	1 3/8" DIA x 7/16"
"	1000	GEARBOX SPINDLE BUSH	C.I.	1	1 5/8" DIA x 2"
"	1001	SPACER SPINDLE BUSH	EN. 1A	1	1 1/2" DIA x 3/8"
"	1005	COLLAR	M.S.	1	1" DIA x 1/2"
"	1006 & 7.	COLLARS			
ML110	101	SLIDING GEAR	EN. 1A	1	2" DIA x 1 1/16"
"	102	LEADSCREW GEAR	EN. 1A	1	1 1/2" DIA x 1 1/16"
"	107	KICKER PIN	EN. 1A	2	3/8" x 1"
"	103 A.	FEEDSHAFT	EN. 1A	1	5" DIA x 42"
"	107	" DOG DRIVE	EN. 1A	1	1 3/8" DIA x 1 1/8"
"	108	DRIVEN DOG GEAR	EN. 1A	1	1 1/2" DIA x 1 3/16"
MVS	110	M. LEADSCREW.	EN. 1A	1	3/4" DIA x 38 1/16"
ML	115	GEAR BOX COVER PLATE	C.I.	1	CASTING
"	113	QUADRANT BRACKET	C.I.	1	CASTING.
"	112 A	TUMBLER GEAR DRIVING SHAFT	EN. 1A	1	
"	970	END & DRIVE GUARD	14 SUG	1	
"	971	END GUARD HANDLE	MILD STEEL	1	1" x 1/4" x 3"
CH	209	G/BOX NAMEPLATE		1	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

3

ASSY. DRG. No. BVS 115/900 (METRIC).

DATE _____

19. 3. 79.

TITLE: GEAR BOX.

[illegible]

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

4

ASSY. DRG. No. BVS. 115/900

(METRIC)

DATE

28-3-77.

TITLE: GEARBOX

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>BOUGHT OUT PARTS</u>			
		<u>THRUST BRG'S</u>			
		'TORRINGTON' NTA 815		1	
		" TRA 815		2	
		<u>'O' RINGS</u>			
		REF: 2050		1	
		REF: 2075		1	
		<u>OILITE BUSH</u>			
		REF:- CT 529 x .75"		1	
		<u>CIRCLIPS</u>			
		700/75		1	
		1400/3/4"		1	
		1500-396E		2	
		5144-56		1	SALTERPIY.
		<u>COMPRESSION SPRINGS.</u>			
		9/32" O/D - 1 1/2" FL. - 20 SWG - 12 C.P.I.	"	1	
		1/2" O/D - 1 1/8" FL. - 17 SWG - 6 C.P.I.	"	1	
		1/2" I/D - 1" FL. - 14 SWG - 6 C.P.I.	"	1	
		<u>WINDOW UNIT</u>			
		'TECALEMIT' - IC 4610		1	
		<u>SEL-LOK PINS</u>			
		1/8" DIA x 7/8" L		1	
		1/8" DIA x 1 1/2" L		2	
		<u>TAPER PIN</u>			
		3/16" DIA x 1" L		1	
		3/16" DIA. x 1 3/8" L		1	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

5

ASSY. DRG. No. B.V.S. 115/900

(METRIC)

DATE

28.3.77

TITLE: GEARBOX

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>BOUGHT OUT PARTS</u>			
		<u>SKT HD CAP SCREWS</u>			
		2 B.A. x 1" L		1	
		2 B.A. x 5/8" L		3	
		2 B.A. x 1/2" L		2	
		<u>9/SUNK SKT SCREWS</u>			
		1/4" WHIT x 1/2" L		1	
		2 B.A. x 1/2" L		10	
		2 B.A. x 1/4" L		4	
		4 B.A. x 1/2" L		4	
		<u>SKT' BUTTON HD SCREW.</u>			
		2 B.A. x 3/8"		1	
		<u>SET SCREW.</u>			
		1/2 B.S.F. x 1/2" L		2	
		1/4" WHIT x 1/2" L		1	
		<u>GRUB SCREWS</u>			
		2 B.A. x 1/4" L KNURED CUP		4	
		4 B.A. x 3/8" L " "		2	
		<u>HEX NUTS</u>			
		5/16 STD.		1	
		2 B.A.		1	
		<u>WASHERS</u>			
		9/16"		1	
		5/16"		1	
		1/4"		1	
		1/2 B.S.F ALUMINIUM.		2	
		1/4" SPRING WASHER		1	

SHEET No.

(METRIC)

6

DATE _____

28-3-77

TITLE: GEARBOX

WYDOS

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. BVS 115/900E (ENGLISH).

DATE

22.7.78.

TITLE: GEARBOX ARRANGEMENT.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
ML115	901	GEARBOX BODY.		1	
"	902	GEARBOX COVER PLATE.		1	
"	903	GEAR CHANGE HANDLE.		1	
"	904	TUMBLER CARRIER BODY.		1	
"	910A.	" " END - PLAIN.		1	
"	910B.	" " " - GEAR.		1	
"	911	" GEAR.		1	
"					
"	919	SLIDING GEAR SHAFT.		1	
"	920	" DOG "		1	
"	921A.	DRIVING GEAR & DOG INSERT.		1	
"	922	SLIDING SHAFT DRIVING GEAR.		1	
"	923A.	SHAFT DRIVING GEAR & COLLAR.		1	
"	924	SLIDING DOG & GEAR.		1	
"	930	FIXED DOG & GEAR.		1	
"	931	GEAR TRAIN SHAFT.		1	
"	932	" " 32T GEAR.		1	
"	933	" " 28T "		1	
"	934	" " 26T "		1	
"	935	" " 24T "		1	
"	936	" " 23T "		1	
"	937	" " 22T "		1	
"	938	" " 20T "		1	
"	939	" " 18T "		1	
"	940	" " 16T "		1	
"	941	" " SPACING COLLAR.		2	
"	942	" " LOCKING NUT.		1	
"	947	QUADRANT LEAF SPRING.		1	
"	950	RACK MOVING GEAR.		1	
"	951	RACK SHAFT.		1	
"	952	TUMBLER TRIP LEVER.		1	
"	953	RACK.		1	
"	954	TUMBLER SHAFT.		1	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

2

ASSY. DRG. No. BVS115/900E (ENGLISH).

DATE

22.7.78.

TITLE: GEARBOX ARRANGEMENT.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
"	984	FOOL PROOF PIN STOP - HOUSING.		1	
"	985	" " " " "		1	
"	987	FOOL PROOF PIN.		1	
"	989	" " SPRING.		1	SEE B.O.
"	990	TUMBLER DRIVING SHAFT BUSH.		1	
"	991A.	GEAR TRAIN SHAFT BUSH.		1	
"	991B.	" " " "		1	
"	992A.	SLIDING DOG " "		1	
"	992B.	" " " "		1	
"	994	CARRIER MOVING GEAR.		1	
"	1000	GEARBOX SPINDLE BUSH.		1	
"	1001	SPACER SPINDLE BUSH.		1	
"	1005	COLLAR		1	
ML100	117	RETAINING PLATE.		1	
ML110	101	SLIDING GEAR.		1	
"	103	LEADSCREW GEAR.		1	
"	107	KICKER PIN.		2	
"	407	FEED SHAFT DOG DRIVE.		1	
"	408	DRIVEN DOG GEAR.		1	
MVS115	905	QUADRANT BRACKET.		1	
"	912A.	TUMBLER GEAR DRIVING SHAFT.		1	
ML115	1006	COLLAR		1	
"	1007	"		1	
CH217		GEARBOX NAMEPLATE.		1	B.O.
CH106		CHANGE LEVER CHART.		1	"

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

4

ASSY. DRG. No. BVS 115/800E. (ENGLISH).

DATE

22.7.78.

TITLE: GEARBOX B.O. PARTS REQUIRED.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>THRUST BEARINGS.</u>			
		REF :- NTA 815		1	TORRINGTON
		" :- TRA 815		2	"
		<u>'O' RINGS.</u>			
		REF :- 2050		1	ANGUS.
		" :- 2075		1	"
		<u>OILITE BUSH</u>			
		REF :- CT 529 x 3/4" LONG		1	MANGANESE BRONZE LTD
		<u>CIRCLIPS.</u>			
		700/75		1	ANDERTON
		1400/3/4"		1	"
		1500.396E		2	"
		1500.468E		3	"
		<u>COMPRESSION SPRING.</u>			
			GROUND ENDS		
		9/32" O.D. - 1 1/2" FL. - 20 S.W.G. - 12 CPI.	"	1	
		1/2" O.D. - 1 1/8" FL. - 17 S.W.G. - 6 CPI.	"	1	
		1/2" O.D. - 1" FL. - 14 S.W.G. - 6 CPI.	"	1	
		<u>WINDOW UNIT.</u>			
		REF :- IC 4610	—	1	TECALEMIT
		<u>SEL-LOK PINS.</u>			
		1/8" DIA x 7/8" LONG.		1	
		1/8" DIA x 1 1/2" "		2	
		<u>TAPER PIN.</u>			
		3/16" DIA. x 1 3/8" LONG.		1	
		<u>SKT. HD. BUTTON SCREW.</u>			
		2BA. x 3/8" LONG.		1	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

5

ASSY. DRG. No. BVS115/900E (ENGLISH).

DATE

22.7.78.

TITLE: G/B. B.O. PARTS REQUIRED.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>SKT. HD. CAP SCREWS.</u>			
		2 BA. x $\frac{5}{8}$ " LONG.		4	ML115/902D.
		2 BA. x $\frac{1}{2}$ " "		2	" / 984
		$\frac{1}{4}$ " WHIT. x $1\frac{1}{4}$ " LONG.		3	MVS 115/905.
		$\frac{1}{4}$ " " x 3" "		3	ML115/901
		<u>$\frac{9}{16}$ SK. SKT. HD. SCREWS.</u>			
		$\frac{1}{4}$ " WHIT. x $\frac{1}{2}$ " LONG.		1	ML100/117
		<u>$\frac{9}{16}$ SK. MACHINE HD. SCREWS.</u>			
		2 BA. x $\frac{1}{2}$ " LONG.		14	
		4 BA. x $\frac{1}{4}$ " "		4	ML115/916.
		<u>HEX. HD. SET SCREWS.</u>			
		$\frac{1}{4}$ " BS.W. x $\frac{1}{2}$ " LONG		1	ML115/994
		$\frac{1}{2}$ " B.S.F. x $\frac{1}{2}$ " "		2	" / 901
		<u>SKT. HD. BUTTON SCREW.</u>			
		2 BA. x $3\frac{1}{8}$ " LONG.		1	ML115/929.
		<u>GRUB SCREWS.</u>			
		2 BA. x $\frac{1}{4}$ " LONG KND CUP PT.		6	
		4 BA. x $\frac{3}{8}$ " " " " "		2	ML115/957.
		<u>HEX NUTS.</u>			
		STD. $\frac{5}{16}$ "		1	
		" 2 BA.		1	
		<u>WASHERS.</u>			
		$\frac{9}{16}$ "		1	
		$\frac{5}{16}$ "		1	
		$\frac{1}{4}$ "		1	
		$\frac{1}{2}$ " BSF. ALUMINIUM.		2	
		$\frac{1}{4}$ " SPRING WASHER.		1	

SHEET No.

6

DATE _____

24. 7. 78.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>STEEL BALLS.</u>			
		5/32" DIA.		1	
		<u>RIVETS.</u>			
		3/16" LONG TYPE "U" HDN. BRASS.		9	
		<u>PARALLEL KEYS.</u>			
		3/16" SQ. x 3 5/8" LONG.		1	
		" x 3 1/4" "		1	
		" x 2 3/8" "		1	
		" x 1 3/4" "		1	
		" x 1/2" "		1	
		" x 3/8" "		1	
		1/8" SQ. x 3/8" "		1	
		" x 1/4" "		2	
		<u>CONTROL LEVER.</u>			
		REF:- LBR 37/85/A10.		2	ELESA.
		<u>KNOBS.</u>			
		REF:- VTR 40B MB.		1	"
		REF:- VCI 92/50 A 8 + IN.		1	"

19-3-79

W.Y.D.O.S.

SHEET No.

1

DATE _____

12. 1. 79.

[illegible]

1

DATE _____

TITLE: AMERICAN TYPE TOOLPOST.

W.Y.D.O.S.

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

ASSY. DRG. No. BVS 114A.

1

DATE

TITLE: METRIC TRANSPOSING SET UP.

19.7.78.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
BVS114	1A	ENGLISH TO METRIC QUAD.		1	
"	2	48T GEAR (USE CAST ^G . ML105/127).		1	
"	3	" " SPACING BUSH.		1	
"	4	SPACER.		1	
"	5	LOCATING PIN PLUNGER		1	
ML114	3	INTERMEDIATE STUD.		2	
"	4A	64T. SCREW GEAR.		1	
"	6	64T. STUD GEAR.		1	
"	7	66T " "		1	
ML105	113	SPACING BUSH.		1	
"	117	WASHER.		1	
"	119	16T. CHANGE WHEEL.		1	
"	121	24T. " "		1	
"	127	48T. " "		1	
"	130	56T. " "		1	
"	131	60T. " "		1	
"	136	26T. " "		1	
"	147	127T/120T GEAR.		1	
CH238		METRIC TRANSPOSING GEAR CHART		1	BRIG. ENGR.
		<u>B.O. PARTS REQUIRED.</u>			
		<u>SET SCREW.</u>			
		$\frac{7}{16}$ " WHIT. x $2\frac{1}{4}$ " LONG		1	
		<u>NUTS & WASHERS.</u>			
		STD $\frac{7}{16}$ " WHIT NUTS (HON)		2	
		STD. $\frac{7}{16}$ " WASHERS		3	
		HON. BRASS RIVERS TYPE "U" x $\frac{3}{16}$ " LG.		4	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

ONE

ASSY. DRG. No. MVS 100/100A.

DATE

19.4.77

TITLE: HEADSTOCK (THREE BEARING SPINDLE)

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
MVS 100	101 E	HEADSTOCK	CAST IRON	1	CASTING
"	102	HEADSTOCK COVER	CAST IRON	1	CASTING
"	103 A	MAIN SPINDLE	EN8	1	
"	104 A	HEADSTOCK PULLEY (LOW RANGE)	CAST IRON	1	
"	105 A	HEADSTOCK PULLEY (HIGH RANGE)	EN1A	1	
"	106	SLIDING DOG	EN1A	1	
"	108	COLLAR	EN1A	1	
"	113	HEADSTOCK LEVER	CAST IRON	1	
"	115	DOG SHIFTER SHAFT	EN1A	1	
"	116	DOG SHIFTER BODY	EN1A	1	
"	119	CAMLOCK KEY	EN9	1	
"	120	CAMLOCK CAM	EN8	3	
"	121				
"	122	DETENT PLUNGER	SILVER STEEL	3	
"	124	BEARING CAP	CAST IRON	1	
"	126	TRANSDUCER GEAR	EN1A	1	
"	127	LOCKNUT	EN1A	1	
"	128	SPINDLE SPACER	EN1A	1	
"	129	SPACER	EN1A	1	
"	130 A	REAR CAP	C.I.	1	CASTING
"	131	SHIFTER ARM	MS	1	
"					
"					
ML 100	109 E	GEAR SHIFTER DOG INSERT	EN1A	1	
"	112	" " BUSH	EN1A	1	
"	114	ECCENTRIC	EN1A	1	
"					
CH	200	H'STOCK LEVER PLATE	ALUM	1	22 SWG
"					
"					
SP	169	TOMMY BAR	EN1A	1	
"					
"					
"					
"					

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

TWO

DATE

ASSY. DRG. No. MVS 100/100A.

TITLE: HEADSTOCK (THREE BEARING SPINDLE)

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		BOUGHT OUT ITEMS.			
		'TIMKEN' BEARINGS.			
		TS 18790-18720 CLASS O		2	
		'INA' COMBINED DOUBLE THRUST			
		NEEDLE BALL BEARING NK185907		1	
		LJ 1 ³ / ₈ " 2RS		1	
		40mm XLJ SEALED. 60082RS		1	
		MERCER NILOS RING			
		AV 18790-18720		1	
		3/16" DIA. STEEL BALL		1	
		SPRINGS			
		3/16" O/D X 5/8" FL. 20SWG. 9 C.P.I. GR. ENDS		1	
		3/16" O/D X 3/8" FL. 20SWG. 9 C.P.I. GR. ENDS		3	
		KEYS (ROUND END)			
		5/16" SQUARE X 1/2" LONG		1	
		1/4" SQUARE X 5/8" LONG		1	
		GREASE NIPPLES			
		REF. H4154 ANGLE 1/4" DRIVE FIT		2	
		PINS			
		1/4" DIA X 1/2" LONG (SILVER ST)		1	
		MILLS PIN 1/8" DIA X 2" LONG			
		NADELLA CAM FOLLOWER GC EE 16		1	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

THREE

ASSY. DRG. No. MVS 100/100A.

DATE

TITLE: HEADSTOCK (THREE BEARING SPINDLE)

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		BOUGHT OUT ITEMS			
		SOCKET HEAD CAP SC'S			
		M10 x 45 LONG		4	
		M6 x 20 LONG		7	
		M6 x 15 LONG		3	
		SOCKET C/SUNK SCREWS			
		M5 x 15 LONG		3	
		SOCKET SET SC. (GRUBS)			
		M10 x 10 LONG KNURL PT		1	
		M6 x 6 LONG CONE PT.		2	
		M6 x 6 LONG DOG PT		2	
		M5 x 5 LONG CONE PT		3	
		M5 x 5 LONG DOG PT		2	
		M4 x 4 LONG CONE PT		1	
		M8 x 8 LONG CONE PT		3	
		M10 SPRING WASHER		4	
		ROUND A			
		HEAVY DUTY			
		3/4" CONDUIT SADDLE		1	
		3/4" CONDUIT x 12" LONG		1	
		TRANSDUCER PICKUP			
		INA CIRCLIP BR 55		1	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. MVS 100 / 100B

DATE

1.3.78.

TITLE: HEADSTOCK (3 BEARING SPINDLE).

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
MVS 100	101	HEADSTOCK	C.I.	1	CASTING.
"	102	" COVER.	"	1	"
"	103	MAIN SPINDLE.	ENB	1	
"	104	HEADSTOCK PULLEY. (LOW RANGE).	C.I.	1	
"	105	" " (HIGH ")	ENIA.	1	
"	106	SLIDING DOG.	"	1	
"	107	COLLAR.	"	1	
"	113	HEADSTOCK LEVER.	C.I.	1	
"	115	DOG SHIFTER SHAFT.	ENIA.	1	
"	116	" " BODY.	"	1	
"	119	CAMLOCK KEY.	EN 9	1	
"	120	" CAM.	ENB	3	
"	122	DETENT PLUNGER.	SL. STEEL	3	
"	123	BEARING CAP.	C.I.	1	
"	124	TRANSDUCER GEAR.	ENIA.	1	
"	127	LOCKNUT.	"	1	
"	128	SPINDLE SPACER.	"	1	
"	129	SPACER.	"	1	
"	130	REAR CAP.	C.I.	1	
"	131	SHIFTER ARM.	ENIA	1	
"	132	REAR BEARING CAP.	"	1	
"	133	FRONT BEARING SPACER.	"	1	
"	134				
ML 100	110	GEAR SHIFTER DOG INSERT.	ENIA	1	
"	112	" " " BUSH.	"	1	
"	114	ECCENTRIC	"	1	
CH 200		H'STOCK LEVER PLATE	ALUM.	1	22 SWG.
CH 200		SPINDLE CAPACITY CHART	"	1	"
SP 100		TOMMY BAR.	ENIA	1	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

2

ASSY. DRG. No. MVS100/100B.

DATE

1. 3. 78.

TITLE: B.O. PARTS REQUIRED.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>TIMKEN BEARINGS.</u>			
		(CONE) 18790 - 18720 (CUP).	—	2	TIMKEN
		COMBINED DOUBLE THRUST NEEDLE BALL BRG. NK1B5907	—	1	INA.
		LJ BRG. REF:- 6008 2RS	—	2	FAG.
		LJ 1 3/8" 2RS.	—	1	"
		3/16" DIA. STEEL BALL	—	1	
		<u>SPRINGS</u>			
		3/16" O.D. x 5/8" FL. 20 SWG. 9CPI. GROUND ENDS	—	1	
		" x 3/8" FL. 20 SWG. 9CPI. " "	—	3	
		<u>KEYS (ROUND END)</u>			
		5/16" SQ x 1 1/2" LONG	—	1	
		1/4" SQ x 5/8" "	—	1	
		<u>GREASE NIPPLE.</u>			
		REF: H4154 ANGLE 1/4" DRIVE FIT	—	2	
		<u>PINS.</u>			
		1/4" DIA. x 1/2" LONG (SILVER ST.)	—	1	
		1/8" DIA x 2" " (MILLS PIN).	—	1	
		<u>NADELLA CAM FOLLOWER</u>			
		REF:- G.C. EE 16	—	1	NADELLA

SHEET No.

3

DATE _____

1. 3. 78.

TITLE: B.O. PARTS ~~REQUIRED~~

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>SKT. HD. CAP SCREWS.</u>			
		M10 x 45 mm LONG	—	4	MVS100/101E
		M6 x 45 " "	—	3	" /124
		M6 x 20 " "	—	4	" /102
		M6 x 12 " "	—	3	" /130A
		<u>SKT HD. 9/SK. SCREWS.</u>			
		M5 x 15 mm LONG	—	2	ML100/112
		<u>SKT. SET SCRS (GRUB)</u>			
		M10 x 10 mm LONG, (KN. PT)	—	1	
		M8 x 8 " " (CONE PT)	—	3	
		M5 x 6 " " (KN. PT)	—	2	
		M4 x 5 " " (CONE PT)	—	2	
		3/4" CONDUIT SADDLE	—	1	
		3/4" " x 12" LONG	—	1	
		TRANSDUCER PICK UP			
		INA. CIRCLIP BR55	—	1	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. MVS.100/200

DATE

15-3-77

TITLE: DRIVE ASSEMBLY.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
MVS 100	202	COUNTER SHAFT PULLEY (LOW RANGE)	CI.	1	
"	203	" " MAIN DRIVE PULLEY	CI	1	
"	204	" " PULLEY (HIGH RANGE)	CI.	1	
"	206	SPEED CONTROL CAM	EN. 1A	1	
"	207	A. MOUNTING - UPRIGHT.		2	SEE ASSEMBLY MVS.100/200B INCLUDING MVS.100/222.
"	"	B. MOUNTING - CROSS MEMBER.		2	
"	208	A. DRIVE FRAME - UPRIGHT.		2	
"	208	B. " " - UPRIGHT.		2	
"	208	C. " " - CENTRE BEAM.		2	
"	208	D. " " - TOP PLATE		2	
"	209	A. BASE PLATE (LONG)		2	
"	209	B. BASE PLATE (SHORT)		4	
"	210	10MM COLLAR.		3	
"	211	LOCATING PEG.		4	
"	212				
"	213				
"	214	IDLER SHAFT.		1	
"	215	A COUNTERSHAFT.		1	
"	216	SPEED CONTROL BASE		1	
"	217	" " UPRIGHT.		1	
"	218	" " TOP		1	
"	219	" " SCREW.		1	
"	220	" " NUT		1	
"	221	CAM PIVOT.		1	
"	222	ADJUSTMENT BLOCK		2	
"					
"	202	A COUNTERSHAFT PULLEY		1	
"	230	VERTICAL ADJUSTMENT BLOCK		2	
ML100	117	RETAINING PLATE		1	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

2

ASSY. DRG. No. MVS.100/200

DATE

15.3.77.

TITLE: DRIVE ASSEMBLY.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>BOUGHT OUT PARTS</u>			
		<u>MOTOR: CROMPTON PARKINSON</u>			
		1.5 HP - 1425 R.P.M. - 3 PHASE, 50 c/y.			
		A77. 2-V.		1	
		<u>BEARINGS</u>			
		'SEL-LUBE' PILLOW BLOCK UNITS			
		SL SERIES, TYPE SL, .750" BORE.			
		STD INSERT.		4	
		<u>VARI-SPEED PULLEYS</u>			
		SIMPLABELT.			
		REF: SEM 16/113/19 J7		1 SET	SIMPRATROLL
		BELT REF: 10/650		1	"
		<u>POLY-V BELTS</u>			
		J' SECTION, N° OF RIBS. 10.			
		NOMINAL WIDTH 1 5/16"			
		PITCH LENGTH - 24.0"		1	
		PITCH LENGTH - 61.0"		2	
		<u>FLEXIBLE CABLE</u>			
		REF: QR4-76-47-9 x 19 1/2" LONG		1	SS WHITE
		<u>NADELLA' NEEDLE THRUST BRGS</u>			
		AX 10 22		2	
		<u>NADELLA' THRUST PLATE</u>			
		CP 10 22		2	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

3

ASSY. DRG. No. MVS 100/200

DATE

15.3.77.

TITLE: DRIVE ASSEMBLY.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>BOUGHT OUT PARTS.</u>			
		<u>HEX SET SCREWS.</u>			
		M10 x 45		4	
		M10 x 30		2	
		M8 x 40		4	
		M8 x 35		4	
		M6 x 60		2	
		<u>CAP HD SCREWS.</u>			
		M8 x 30		2	
		M6 x 30		2	
		M6 x 16		2	
		<u>CAP HD C/SUNK SCREWS.</u>			
		M5 x 15		1	
		<u>GRUB SCREWS.</u>			
		M8 x 8 DOG PT.		4	
		M8 x 8 KNURL CUP.		4	
		M5 x 6 KNURL CUP.		4	
		<u>HEX NUTS.</u>			
		M10		4	
		M8		8	
		M6 LOCKNUT		2	
		<u>STD WASHERS.</u>			
		M10		10	
		M8		18	
		<u>SEL-LOK PIN.</u>			
		3mm DIA x 20 L.		1	
		<u>KEY : 6mm SQ x 64^{1"} - 2^{1"} ± 2"^L</u>		1	EACH.

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. MVS.100/200A

DATE

24.3.77.

TITLE: CABINET ASSEMBLY.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
MVS 100	201	S CABINET STD. (MVS.100/201L = LONG.)		1	
"	201	A. CABINET DOORS		1	EACH
"	205	S. SPLASH GUARD STD. (L=)		1	
"	223	COOLANT TANK.		1	
"	224	SPEED CONTROL PLATE		1	
"	225	" " LOCKING ARM		1	
"	226	COOLANT PIPE BRACKET		1	
"	227	CONTROL PANEL BACKING PLATE		1	
SP	164	TAILPIECE ADAPTOR		4	
SP	173	SPEED CONTROL BUSH		1	
SP	174	" " BARREL		1	
SP	175	" " H/WHEEL SHAFT		1	
MVS 100	228	ELECTRICAL PLATE		1	
"	229	PANEL LIGHT BRACKET		1	
CH	205	SPEED CONTROL PANEL		1	B.O.
<u>BOUGHT OUT PARTS.</u>					
<u>COOLANT PUMP</u>					
0.08 HP. REF: 50/A. 220/440					
3 PHASE 50.				1	
<u>LOCK</u>					
LEEMAN & FOSTER REF: 60002				3	
<u>HANDWHEEL</u>					
RENCOL. REF: 325 - 1/2" BORE				1	
<u>TENSION SPRING.</u>					
O/A = 15/16", O/D = 3/16", 25 SWG.					
SINGLE LOOP ENDS/CENTRAL				1	
<u>TUBING</u>					
GRIFLEX CLEAR BRAIDED.					
1/4" BORE X 26" LONG.				2	
1/4" BORE X 15" LONG.				1	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

2

ASSY. DRG. No. MVS.100/200 A

DATE

24.3.77.

TITLE: CABINET ASSEMBLY.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>BOUGHT OUT PARTS.</u>			
		1/4 B.S.P. ELBOW FEMALE -90°		2	
		1/4 B.S.P. STRAIGHT CONNECTOR.			
		FEMALE		1	
		<u>SKT HD CAP SCREWS.</u>			
		M5 x 20L		2	COOLANT
		M4 x 10L.		1	
		<u>SET SCREWS</u>			
		M12 x 40L		2	
		M6 x 16L		2	
		<u>9/SUNK SKT HD SCREWS.</u>			
		M3 x 6L		3	
		<u>GRUB SCREWS.</u>			
		M5 x 6 KNURL CUP		2	
		M5 x 6 CONE PT		2	
		M6 x 6 KNURL CUP		3	
		<u>RD HD SKT SCREWS.</u>			
		2 B.A x 1/2" L		4	
		4 B.A x 3/4" L		6	
		<u>NUTS.</u> STD			
		M6		2	
		M4		1	
		2.BA		3	
		4 BA		3	
		<u>WASHERS.</u>			
		M10		2	
		M6		2	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. BVS. 115/900. (METRIC)

DATE

9-2-77

TITLE: GEAR GEAR

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
ML.115	901	GEAR BOX BODY	C.I.	1	CASTING
"	901B	GEAR CHANGE HANDLE	C.I.	1	CASTING
"	906	TUMBLER CARRIER BODY	EN. 1A	1	1 1/2 DIA x 5 3/16
"	910A	" " END - RAIN	C.I.	1	CASTING
"	910B	" " " - GEAR	C.I.	1	CASTING
"	911	" GEAR	EN. 1A	1	2 1/8 DIA x 7/8
"	919	SLIDING GEAR SHAFT	EN. 1A	1	9/16 DIA x 6 7/8
"	923	" DOG "	EN. 1A	1	3/4 DIA x 7
"	924A	DRIVING GEAR & DOG INSERT	EN. 1A	1	2 1/2 DIA x 9/16
"	926	SLIDING SHAFT DRIVEN GEAR	EN. 1A	1	1 1/2 DIA x 9/16
"	927A	SHAFT DRIVING GEAR & COLLAR	EN. 1A	1	2 DIA x 15/16
"	929	SLIDING DOG & GEAR	EN. 1A	1	1 1/8 DIA x 1 1/8
"	930	FIXED DOG & GEAR	EN. 1A	1	1 3/8 DIA x 1 3/8
"	931	GEAR TRAIN SHAFT	EN. 1A	1	3/4 DIA x 7
"	932	" " - 32T GEAR	EN. 1A	1	2 1/2 DIA x 9/16
"	933	" " - 28T "	EN. 1A	1	2 1/4 DIA x 9/16
"	935	" " - 24T "	EN. 1A	1	1 7/8 DIA x 9/16
"	938	" " - 20T "	EN. 1A	1	1 5/8 DIA x 9/16
"	940	" " - 16T "	EN. 1A	1	1 3/8 DIA x 9/16
"	941	" " SPACING COLLAR	EN. 1A	1	1 1/4 DIA x 3/4
"	941B	" " " "	EN. 1A	1	1 1/4 DIA x 1/2
"	941D	" " " "	EN. 1A	1	1 1/4 DIA x 1 3/8
"	942	" " LOCKING NUT.	EN. 1A	1	8 BSF. LOCK NUT
"	947	QUADRANT LEAF SPRING		1	10 SWG.
"	953	RACK MOVING GEAR	EN. 1A	1	1 3/8 DIA x 5/8
"	954	RACK SHAFT	EN. 1A	1	1/2 DIA x 7/8
"	957	TUMBLER TRIP LEVER	M.S. RATE	1	3/16 x 1 1/4 x 2 5/16
"	958	RACK	EN. 1A	1	1" SQ x 3/8
"	959	TUMBLER SHAFT	SILVER ST.	1	1/2 DIA x 5 1/16
"	965	GEAR TRAIN - 25T GEAR	EN. 1A	1	2" DIA x 9/16
"	967	POOL PROOF PIN STOP-HOUSING	C.I.	1	CASTING
"	985	" " " "	EN. 1A	1	1/2 SQ x 3

SHEET No.

ONE

DATE _____

8.3.78

TITLE: SADDLE

W.Y.D.O.S.

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

Two

ASSY. DRG. No. MVS. 100/500

DATE

17.3.78.

TITLE: SADDLE

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>BEARINGS</u>			
		REF: N.T.A. 613		3	TORRINGTON.
		REF: T.R.A. 613		6	"
		<u>SKT. HD. CAP SCREW</u>			
		5/16" WHIT x 1" LONG		1	
		<u>SQ. HD. COLLAR SCREW</u>			
		5/16" WHIT x 2 3/8" L		1	
		<u>GRUB SCREWS</u>			
		M10 x 10MM L. DOG PT.		3	
		5/16" B.S.F. x 3/8" L. CONE PT.		1	
		1/4" WHIT x 1/4" L. CONE PT.		1	
		M4 x 5MM L. CONE PT.		1	
		2BA x 7/8" L. CONE PT.		6	
		<u>GROOVE PINS</u>			
		3/16" DIA x 1 1/2"		1	
		1/8" DIA x 1 1/2"		2	
		1/8" DIA x 3/4"		2	
		<u>PRE-LOAD WAVED WASHER</u>			
		REF: PLW.9.		2	EMO
		<u>SPRING WASHER</u>			
		5/16"		1	
		<u>STD. WASHER</u>			
		5/16"		1	
		3/8"		2	
		<u>OILERS</u>			
		REF: B04		3	ADAM'S.

SHEET No.

THREE

DATE _____

20.3.78

[illegible]

SHEET No.

1

DATE _____

16.3.77

W.Y.D.O.S.

16.3.77

W.Y.D.O.S.

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. MVS.105/100. C.

DATE

8.2.77

TITLE: REVERSING BRACKET.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
MVS 105	101	REVERSING BRACKET	CAST IRON	1	CASTING.
"	107	32T REVERSING GEAR	EN.1A	2	
"	108	42T STUD GEAR	EN.1A	1	
"	144	42T SPINDLE GEAR	EN.1A	1	
"	109	IDLER STUD.	EN.1A	2	3/4" DIA. x 1 1/8"
ML 105	102	INTERMEDIATE STUD	EN.1A	1	1" DIA x 3 15/16" L
"	104	REVERSING BRACKET STOP	EN.1A	1	" x 3/4" L
"	105	LOCATING PIN PLUNGER	EN.1A	1	1/2" DIA x 2 3/4" L
"	117	BRIGHT WASHER	EN.1A	1	STD. 7/16" WASHER
"	119	16 T CHANGE WHEEL *	EN.1A	1	1 1/8" DIA x 5/8" L
* FOR LIST OF OTHER STD STUD GEARS SEE CH. 112.					
<u>BOUGHT OUT ITEMS</u>					
<u>NUTS</u>					
		STD 7/16" WHIT		1	
		STD 5/16" " LOCKNUT		2	
<u>KEY</u>					
		1/8" SQ x 1 5/16" LONG.		1	
<u>KNOB.</u>					
		1" DIA x 5/16" WHIT.		1	
<u>OILER</u>					
		L.D. 1/4"		1	KINGFISHER.
<u>1" SPRING.</u>					
		16 O/D, 1/16" FL, 6 C.P.I, 17 SWG, GROUND ENDS		1	
<u>SKT. HD. CAP SCREW</u>					
		2 B.A x 5/8" LONG.		1	

SHEET No.

2

DATE _____

24.2.78.

[illegible]

SHEET No.

1

DATE

25.4.70.

[illegible]

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

2.

ASSY. DRG. No. MVS 110/400

DATE

25.4.78.

TITLE: B.O. PARTS REQUIRED.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>SKT. HD. CAP SCREWS.</u>			
		M8 x 25MM LONG.	—	1	
		2 BA. x 1/2" "	—	5	
		1/4" WHIT. x 1" "	—	3	
		<u>BEARINGS.</u>			
		THRUST BRG. REF:- NTA-815	—	2	TORRINGTON
		" RACE " :- TRA-815	—	4	"
		<u>OILERS.</u>			
		REF:- LD 1/4"	—	2	KINGFISHER
		<u>PINS.</u>			
		3/16" DIA. x 1" LONG (MILLS)	—	2	
		<u>CHART.</u>			
		CH101. 2 3/4" x 1 3/4" x 24 SWG.	ALUM.	1	BRIG. ENGR
		<u>RIVETS.</u>			
		HDN. BRASS TYPE "U" x 3/16" LONG	—	4	
		<u>SPRING WASHER.</u>			
		STD 1/4"	—	3	

SHEET No.

ONE

DATE
5-5-77.

W.Y.D.O.S.

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

ASSY. DRG. No.

TWO.

MVS.110/400.B.

DATE

TITLE:

5.5.77

TWO SPEED FEEDBOX

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>BOUGHT OUT ITEMS.</u>			
		<u>SKT HD CAP SCREWS.</u>			
		1/4" WHIT x 1 1/2" LONG		2	
		<u>C/SUNK SKT HD SCREWS</u>			
		1/4" WHIT x 1/2" LONG		1	
		<u>GRUB SCREWS.</u>			
		1/4" WHIT x 1/4" LONG DOG PT		2	
		" x " CONE PT		1	
		2 B.A x " KN CUP PT		4	
		<u>KEYS</u>			
		1/8" SQ x 1 1/16" LONG		1	
		1/8" SQ x 1 1/2" "		2	
		3/16" SQ x 7/16" "		1	
		3/16" SQ x 3/4" "		1	
		<u>SPRINGS</u>			
		1/2" I.D - 1" F.L. - 6 C.P.I - 14 SWG - GROUND ENDS		1	
		3/16" I.D - 5/8" F.L. - 9 C.P.I - 20 SWG - " "		2	
		<u>CIRCLIPS</u>			
		REF: 700/75		1	
		" 1400/3/4"		1	
		" 1400/9/16"		1	
		" 1500/468E		4	
		<u>PINS</u>			
		1/16" DIA x 3/8" LONG		1	
		5/32" DIA TAPER x 1 3/8" LONG		1	
		1/8" DIA SHEAR PIN x 1" REF: G.P.3.		1	
		SEL-LOK PIN 1/8" DIA x 1 1/2" LONG		2	

SHEET No.

ASSY. DRG. No. MVS. 110/400B.

THREE

TITLE: TWO SPEED FEEDBOX

DATE _____

5-5-77

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
		<u>OILERS</u>			
		ELBOW REF: 1/8 B.S.P.		1	
		REF: L.D. 1/4"		1	
		<u>BEARINGS.</u>			
		THRUST RACE REF: T.R.A. 815		2	TORRINGTON.
		" BRG REF: N.T.A. 815		1	"
		<u>NUTS</u>			
		STD 7/16 WHIT. (CYANIDE HARDEN)		1	
		<u>WASHERS</u>			
		STD 9/16"		1	
		STD 7/16"		1	
		<u>STEEL BALLS</u>			
		3/16" DIA.		2	
		<u>RIVETS</u>			
		HDN. BRASS, TYPE 'U' - 3/16" L		8.	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

ASSY. DRG. No. MVS. 115/100.A. (280 vs)

ONE

DATE

TITLE: END DRIVE ASSEMBLY

4.4.78

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
ML115	903	QUADRANT	C.I.	1	CASTING.
"	908 A	64T QUADRANT GEAR	C.I.	1	CASTING.
"	909 A	66T QUADRANT GEAR	C.I.	1	CASTING.
"	943 A	64T & 22T QUAD GEAR SHAFT		1	
"	944 A	22T QUADRANT GEAR		1	
"	945 A	24T QUADRANT GEAR		1	
"	946 A	66T & 24T QUADRANT GEAR SHAFT		1	
"	995	QUADRANT RETAINING SPRING		1	B.O.
"	997	66T GEAR (WITH BOSS)	C.I.	1	CASTING
"	998	66T GEAR	C.I.	1	CASTING
"	1001	SHEAR KEY.			
MVS 115	970	END DRIVE GUARD		1	
"	971	END GUARD HANDLE		1	
ML100	117	RETAINING PLATE		2	
CH	107	QUAD SLIDING GEAR CHART		1	B.O.
CH	208	SPINDLE CAPACITY CHART		1	B.O.
<u>BOUGHT OUT PARTS</u>					
<u>HINGES</u>					
		Nº 8383A, BUTT. 2 1/2". PLAIN STEEL		2	
<u>DOOR CATCH.</u>					
		NAT NYLON PEGALINE			GREENMAN
		REF: GB-1166		1	BERGER
<u>RUBBER GRUMMIT.</u>					
		1 1/4" DIA - BLACK		1	
<u>KEY.</u>					
		1/8" SQ x 2 5/32" LONG.		1	
<u>OILITE BUSHES.</u>					
		REF-CT174 x 3/4" LONG.		4	MANG. RR.

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. MVS. 115/900 (ENGLISH)

DATE

8-2-77.

TITLE: GEAR BOX.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
ML.115	901	GEAR BOX BODY	C.I.	1	CASTING
"	902	B. GEAR CHANGE HANDLE	C.I.	1	CASTING.
"	906	TUMBLER CARRIER BODY	EN. 1A	1	1 1/2" DIA X 5 3/16"
"	910	A. " " END-PLAIN.	C.I.	1	CASTING.
"	"	B. " " " - GEAR	C.I.	1	"
"	911	" GEAR	EN. 1A	1	2 1/8" DIA X 7/8"
"	913	DOG GEAR TRIP LEVER	C.I.	1	CASTING.
"	915	" " CHANGE LEVER	EN. 1A	2	1 1/2" DIA X 1 1/2"
"	916	" " " BUSH	EN. 1A	2	1 1/4" DIA X 5/8"
"	919	SLIDING GEAR SHAFT	EN. 1A	1	9 1/16" DIA X 6 7/8"
"	923	" DOG "	EN. 1A	1	3 1/4" DIA X 7"
"	924	A. DRIVING GEAR & DOG INSERT	EN. 1A	1	2 1/2" DIA X 1 1/2"
"	926	SLIDING SHAFT DRIVING GEAR	EN. 1A	1	1 1/2" DIA X 9 1/16"
"	927	A. SHAFT DRIVING GEAR & COLLAR	EN. 1A	1	2" DIA X 1 5/16"
"	929	SLIDING DOG & GEAR	EN. 1A	1	1 7/8" DIA X 1 1/16"
"	930	FIXED DOG & GEAR	EN. 1A	1	1 3/8" DIA X 1 1/8"
"	931	GEAR TRAIN SHAFT	EN. 1A	1	3 1/4" DIA X 7"
"	932	" " - 32T GEAR	EN. 1A	1	2 1/2" DIA X 9 1/16"
"	933	" " - 28T "	"	1	2 1/4" DIA X "
"	934	" " - 26T "	"	1	2 1/8" DIA X "
"	935	" " - 24T "	"	1	1 7/8" DIA X "
"	936	" " - 23T "	"	1	" X "
"	937	" " - 22T "	"	1	1 3/4" DIA X "
"	938	" " - 20T "	"	1	1 5/8" DIA X "
"	939	" " - 18T "	"	1	1 1/2" DIA X "
"	940	" " - 16T "	"	1	1 3/8" DIA X "
"	941	" " SPACING COLLAR	EN. 1A	2	1 1/4" DIA X 3/4"
"	942	" " LOCKING NUT	EN. 1A	1	5/8" BS. F. LOCK NUT.
"	947	QUADRANT LEAF SPRING.		1	18 SWG.
"	959	RACK MOVING GEAR	EN. 1A	1	1 3/8" DIA X 5/8"
"	960	RACK SHAFT	EN. 1A	1	1 1/2" DIA X 7 1/2"
"	961	TUMBLER TRIP LEVER	EN. 1A PLATE	1	1/16" X 1 1/4" X 2 5/8"
"	962	RACK.	EN. 1A	1	1" SQ X 3 1/2"
"	963	TUMBLER SHAFT.	SILVER ST.	1	1 1/2" DIA X 5 5/16"
"	964	SLIDING GEAR TRIP LEVER	C.I.	1	CASTING.
"	965	FOOL PROOF AN STOP-HOUSING	C.I.	1	CASTING.

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

2

ASSY. DRG. No. MVS. 115/900 (ENGLISH)

DATE

8.2.77

TITLE: GEAR BOX

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
ML.115	985	FOOL PROOF PIN STOP	EN. 1A	1	1/2" SQ x 3"
"	986	BACK COVER PLATE.	M.S. RATE	1	3/8" x 5 1/16" x 1 5/8"
"	987	FOOL PROOF PIN	SILVER ST.	1	1/4" DIA x 2 7/8"
"	988	FOOL PROOF SPRING	—	1	SEE B.O.
"	990	TUMBLER DRIVING SHAFT BUSH	C.I.	1	2" DIA x 1 3/4"
"	991	A. GEAR TRAIN SHAFT BUSH	C.I.	1	1 3/4" DIA x 2"
"	991	B. " " " "	C.I.	1	" x 1 1/8"
"	992	A. SLIDING DOG " "	C.I.	1	" x 1"
"	992	B. " " " "	C.I.	1	" x 1 3/8"
"	993	GEAR CHANGE LEVER PLUNGER	SILVER ST.	1	9/16" DIA x 2 3/4"
"	994	CARRIER MOVING GEAR	EN. 1A	1	1 1/2" DIA x 1 3/4"
"	996	A SHEAR BUSH	EN. 1A	1	1 3/8" DIA x 1 3/8"
"	999	RETAINING RATE	EN. 1A	1	" x 7 1/16"
"	1000	GEARBOX SPINDLE BUSH.	C.I.	1	1 5/8" x 2"
"	1001	SPACER SPINDLE BUSH.	EN. 1A.	1	1 1/2" x 3 1/2"
ML.110	101	SLIDING GEAR	EN. 1A	1	1/2" DIA x 1 9/16"
"	103	LEADSCREW GEAR	EN. 1A	1	" x 1 5/16"
"	107	KICKER PIN	EN. 1A	2	3/8" SQ x 1"
"	403	A. FEEDSHAFT.	EN. 1A	1	5/8" DIA x 42"
"	407	" DOG DRIVE	EN. 1A	1	1 3/8" DIA x 1 1/8"
"	408	DRIVEN DOG GEAR	EN. 1A	1	1 1/2" DIA x 1 3/16"
MVS	110	E LEADSCREW.	EN. 1A	1	3/4" DIA x 38 1/16"
ML	MVS 115	GEAR BOX COVER PLATE	C.I.	1	CASTING.
	MVS 115	QUADRANT BRACKET	C.I.	1	CASTING.
"		TUMBLER GEAR DRIVING SHAFT	EN. 1A.	1	
"		SELECTOR DIAL SHAFT	EN. 1A	1	
"		GEAR SELECTION LEVER	C.I.	1	CASTING.
"		GEAR BOX TRIP LEVER	C.I.	1	CASTING
"		END DRIVE GUARD.	14 SWG	1	
"	1002				

TITLE: GEAR BOX

SHEET No.

22

DATE _____

8.2.77

[illegible]

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. MVS100/700

DATE

20.7.78.

TITLE: VICEROY 280VS. BENCH LATHE - TAILSTOCK.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
MVS 100	701	TAILSTOCK BODY.		1	
"	702	" SHOE.		1	
"	703	END CAP.		1	
"	705	BARREL. E (ENGLISH) M. (METRIC).		1	
"	707	NUT.		1	
"	710	A & B BARREL CLAMPS.		1	EACH
"	711	EJECTOR PIN.		1	
"	712	CLAMP HANDLE STOP.		1	
MVS 115	915	B. TAILSTOCK LEVER HANDLE.		1	
SP135		CLAMP PAD.		1	
SP147	A	CLAMP ECCENTRIC.		1	
SP148	A	CLAMP PIN.		1	
SP170		HANDWHEEL.		1	
SP171		LOCKING STUD.		1	
SP172		TEE KEY		1	
SP176		HANDWHEEL HANDLE.		2	
SK592		STEEL INSERT FOR HANDLES.		1	

SHEET No.

2

DATE
20. 7. 78

WYROS

SHEET No.

2

DATE _____

24.2.78

W.Y.D.O.S.

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. MVS. 115/100.B.

DATE

8.2.77.

TITLE: REVERSING BRACKET (GEAR BOX LATHE)

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
103	101	REVERSING BRACKET	CAST IRON	1	CASTING.
"	107	32T REVERSING GEAR	EN. 1A	2	
"	108	42T STUD GEAR	EN. 1A	1	
"	114	42T SPINDLE GEAR	EN. 1A	1	
"	109	IDLER STUD.	EN. 1A.	2	3/4" DIA. x 1 7/8"
"	105	LOCATING PIN PLUNGER			
ML 105	104	REVERSING BRACKET STOP	EN. 1A	1	" x 3/4" L
"	105	LOCATING PIN PLUNGER	EN. 1A	1	1/2" DIA x 2 3/4" L
ML 115	948	24T STUD GEAR	EN. 1A	1	1 3/4" DIA x 5/8" L
"	949	INTERMEDIATE STUD	EN. 1A	1	1" DIA x 4 15/16" L
"	950	STUD GEAR SPACER	EN. 1A	1	" x 1 1/8" L
<u>BOUGHT OUT ITEMS.</u>					
<u>NUTS</u>					
		STD 7/16" WHIT		1	
		STD 5/16" WHIT LOCKNUT		2	
<u>KEY</u>					
		1/8" SQ x 1 3/8" LONG		1	
<u>KNOB</u>					
		1" DIA x 5/16" WHIT		1	
<u>OILER</u>					
		L.D. 1/4"		1	KINGFISHER.
<u>7" SPRING.</u>					
		16 OP. 1/16 F.L. 6 C.P.I. 17 SWG, GROUND ENDS.		1	
<u>SKT. HD. CAP SCREW.</u>					
		2 B.A. x 5/8" LONG		1	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

ASSY. DRG. No. B.V.S 100/200A.

1

TITLE: 200 VS BENCH LATHE - COOLANT SYSTEM

DATE

29.6.78

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
M.S.	100	A. COOLANT PIPE	TUBE.	1	
"	101	CABINET DRAIN FILTER	M.S.	1	
M.S. 100	102	COOLANT PIPE BRACKET	M.S.	1	
SP.	16A	TAIL PIECE ADAPTOR	MS.	4	
		<u>B.O. PARTS REQUIRED</u>			
		<u>COOLANT PUMP</u>			
		REF: EMU 50/a 150MM		1	
		OR. EMU 60/a 150MM.			
		<u>COOLANT TAP.</u>			
		REF: DROWNALL, 25/4440/00		1	
		REDUCING BUSH - 1/4-3/8 B.S.P.		1	
		<u>DRAINAGE PLUG.</u>			
		ADAM-REF: NP. 50. G.		1	
		<u>HANDLE</u>			
		RENCOL REF: 1040-3/8 Whit.		1	
		<u>SKT. HD. CAP SCREW.</u>			
		M5 - 16 LONG		2	
		<u>HEX SET SCREW</u>			
		M6 - 16 LONG		2	
		M6 NUT		2	
		M6 WASHER		4	

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

1

ASSY. DRG. No. ~~BVS~~ 104/100.

DATE

19.4.78.

TITLE: ~~100~~ VS. BENCH LATHE - PENDANT CONTR.

DRG.	No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
100	101	PENDANT BOX.	SH. STEEL	1	16 S.W.G.
"	102	BACKPLATE. OBS	"	1	10 S.W.G.
"	103	ARM. OBS	ST. TUBE	1	2" O.D. x 1 1/2" I.D. x 5/8"
"	104	BRACKET. OBS	ENIA.	1	3" SQ x 1 1/4"
"	105	FLANGE. OBS	"	1	3" DIA x 1/2"
CH233	A	PENDANT PLATE.	ALUMINIUM	1	16 S.W.G.
		<u>BO. PARTS REQUIRED.</u>			
		<u>PUSH BUTTONS.</u>			
		MUSHROOM HD. STOP. REF: WDRRA	—	1	N.E.
		GREEN START REF: WDT4	—	1	"
		2 POSITION SWITCH REF:- WRS 4J27 245.	—	2	"
		JOYSTICK REF:- J423 112	—	1	BURGESS.
		TACHOMETER (DIGITOL)	—	1	FAIRBANK HARDING
		<u>SKT. HD. CAP SCREWS.</u>			
		M6 x 10 MM LONG	—	3	BVS104/105
		M6 x 70 MM LONG.	—	2	BVS104/104
		<u>C'SK. SKT. HD. CAP SCREWS.</u>			
		4 BA. x 1/4" LONG.	—	6	CH233A.
		<u>SKT. HD. SET SCREWS.</u>			
		M6 x 12 MM LONG	—	1	BVS104/104

DENFORD MACHINE TOOLS. BRIGHOUSE, YORKSHIRE.

SHEET No.

ONE

ASSY. DRG. No. ML.110/300.B.

DATE

16.3.78

TITLE: P.C.S. APRON MK II

DRG. No.	DESCRIPTION	MATL.	No. OFF	CUT OFF SIZE
ML.110 300	APRON BODY.	C.I.	1	CASTING.
" 301	APRON DRIVING GEAR	M.S.	1	
" 302	APRON PINION	"	1	
" 303	CROSS SLIDE DRIVING GEAR	"	1	
" 304	CROSS SLIDE GEAR PINION	"	1	
" 305	CROSS SLIDE GEAR SHAFT	"	1	
" 306	HANDWHEEL PINION OUT.	"	1	
" 307	WORM	"	1	
" 308	WORM GEAR	C.I.	1	BAR.
" 309	CHIMNEY GEAR	M.S.	1	
" 310	WORM GEAR SHAFT	"	1	
" 311	WORM DRIVING GEAR	"	1	
" 312	FEEDSHAFT GEAR	"	1	
" 313	WORM SHAFT	"	1	
" 314	WORM CARRIER LIFTER	"	1	
" 315	APRON DRIVING GEAR SHAFT	"	1	
" 316	CHANGE GEAR	"	1	
" 317	WORM CARRIER	C.I.	1	CASTING.
" 318	LOCKING PIN	Silversteel	1	
" 319	SCUTTING LEVER BOSS OUT	M.S.	1	
" 320	SCUTTING LEVER BOSS	M.S.	1	
MVS 110 321	APRON SHIFTER	M.S.	1	
" 322	SELECTOR KNOB.	"	1	
" 323	OIL SIGHT EXTENSION	"	1	
" 324	FEED BOSS OUT.	"	1	
" 325	SELECTOR SHAFT	"	1	
" 326	APRON COVER PLATE	SHEET STEEL	1	
" 327	SELECTOR SHAFT BUSH	M.S.	1	
MVS 115 328	TRIP LEVER	ALUM	2	CASTING.
ML.100 117	RETAINING PLATE.	MS	1	
ML.105 301	HALF NUTS (ENG) [A= METRIC]	C.I.	1	CASTING.
" 302	HALF NUT STUDS	MS.	2	
" 303	SCUTTING LEVER CATCH	"	2	