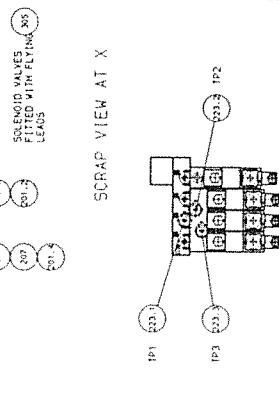
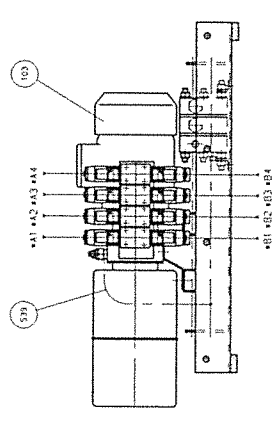
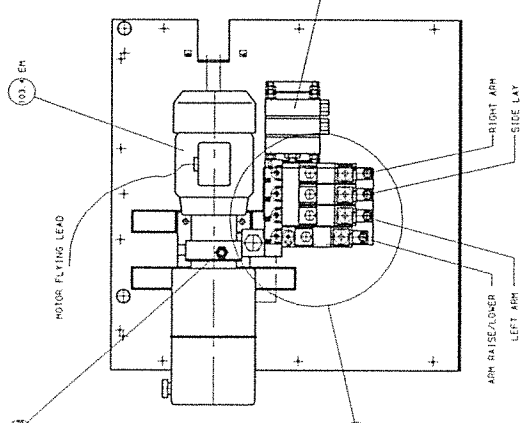
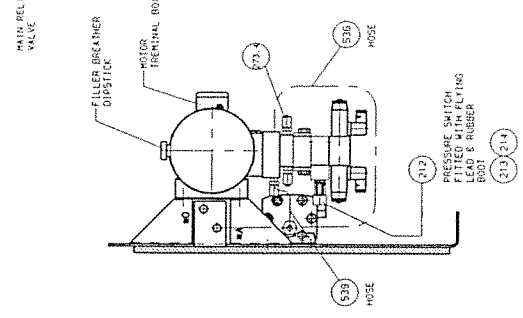
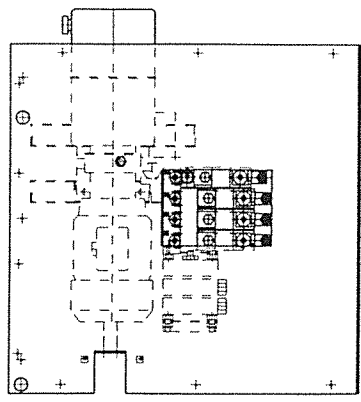


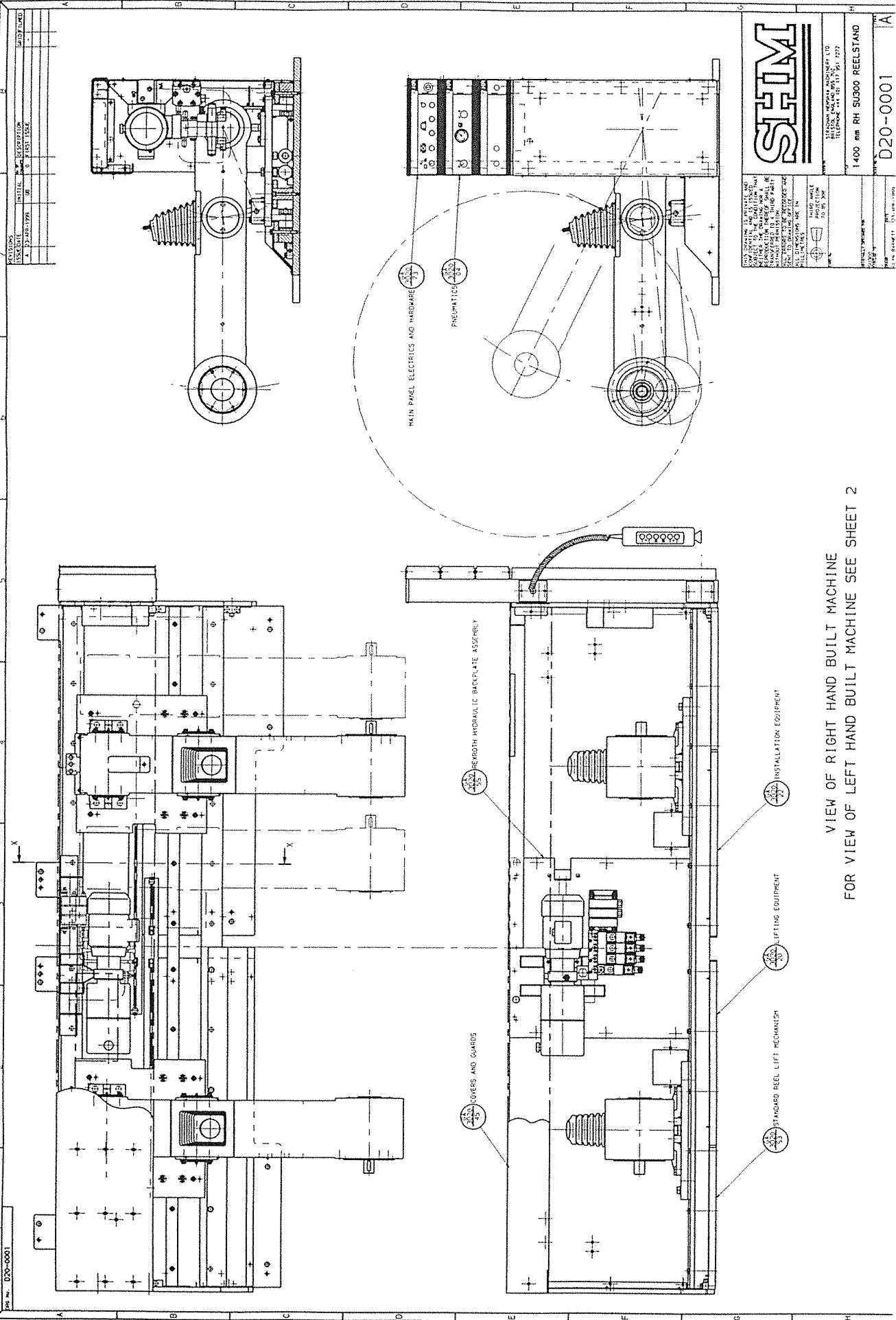
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<td>2000000000000000000000000000000000.000 to 5000000</td></tr></table>		Dimension	Material	Finish	0.001 to 0.005	Steel	0.0005	0.005 to 0.010	Steel	0.001	0.010 to 0.020	Steel	0.0015	0.020 to 0.050	Steel	0.002	0.050 to 0.100	Steel	0.003	0.100 to 0.200	Steel	0.004	0.200 to 0.500	Steel	0.005	0.500 to 1.000	Steel	0.007	1.000 to 2.000	Steel	0.010	2.000 to 5.000	Steel	0.015	5.000 to 10.000	Steel	0.020	10.000 to 20.000	Steel	0.030	20.000 to 50.000	Steel	0.040	50.000 to 100.000	Steel	0.050	100.000 to 200.000	Steel	0.070	200.000 to 500.000	Steel	0.100	500.000 to 1000.000	Steel	0.150	1000.000 to 2000.000	Steel	0.200	2000.000 to 5000.000	Steel	0.300	5000.000 to 10000.000	Steel	0.500	10000.000 to 20000.000	Steel	0.700	20000.000 to 50000.000	Steel	1.000	50000.000 to 100000.000	Steel	1.500	100000.000 to 200000.000	Steel	2.000	200000.000 to 500000.000	Steel	3.000	500000.000 to 1000000.000	Steel	4.000	1000000.000 to 2000000.000	Steel	5.000	2000000.000 to 5000000.000	Steel	7.000	5000000.000 to 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REV. NO.	DESCRIPTION	DATE
1	INITIAL	0
2	1ST ISSUE	0

SHM

SHM ENGINEERING LTD
 1400 mm RH SUG300 REELSTAND
 TEL: 01223 810000 FAX: 01223 810001

THIS DRAWING IS THE PROPERTY OF SHM ENGINEERING LTD. IT IS TO BE USED ONLY FOR THE PROJECT AND NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. ALL RIGHTS RESERVED. MADE IN GREAT BRITAIN.

DATE: 01/03/00

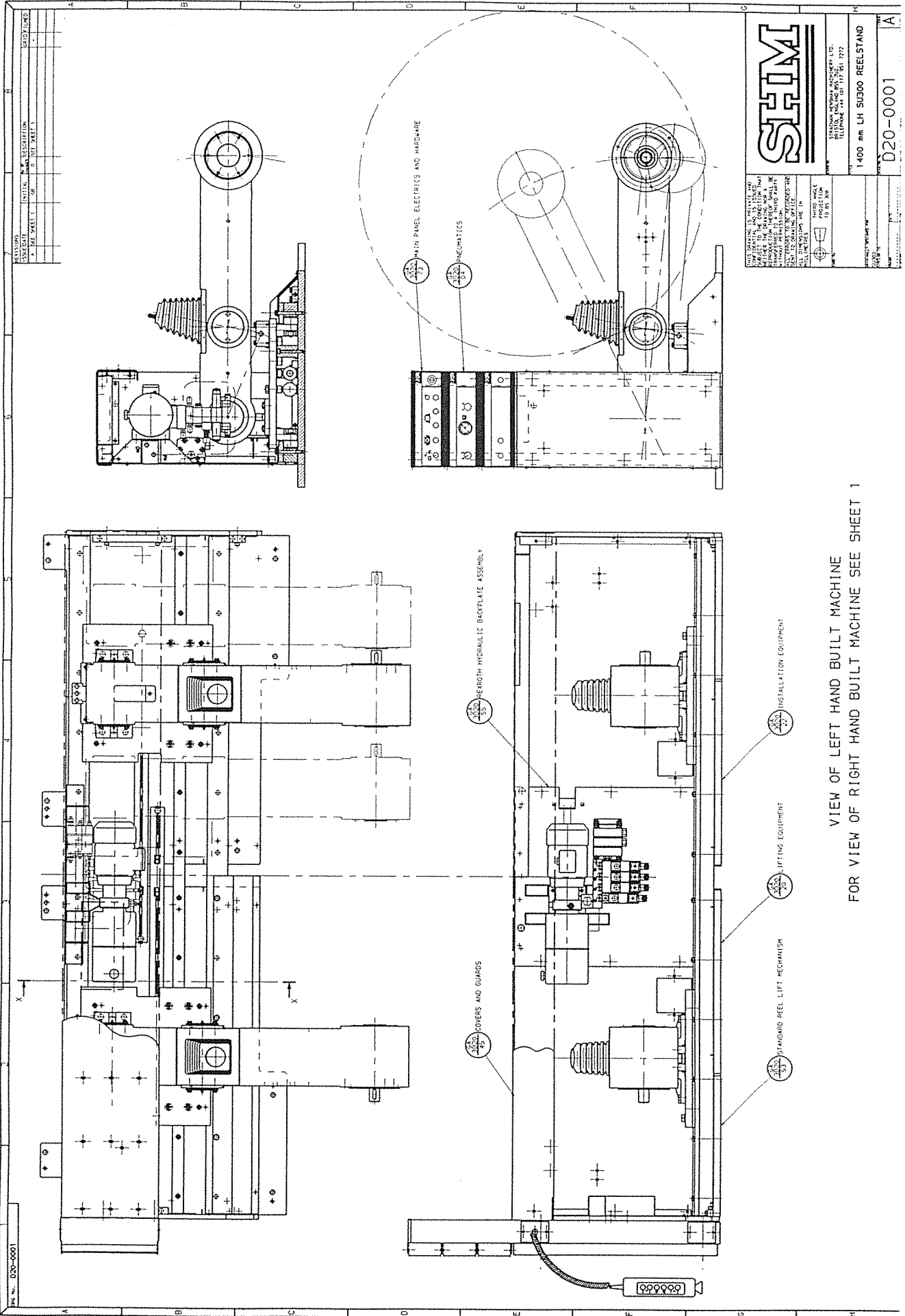
PROJECT: SUG300

SCALE: 1:1

FILE NO: D20-0001

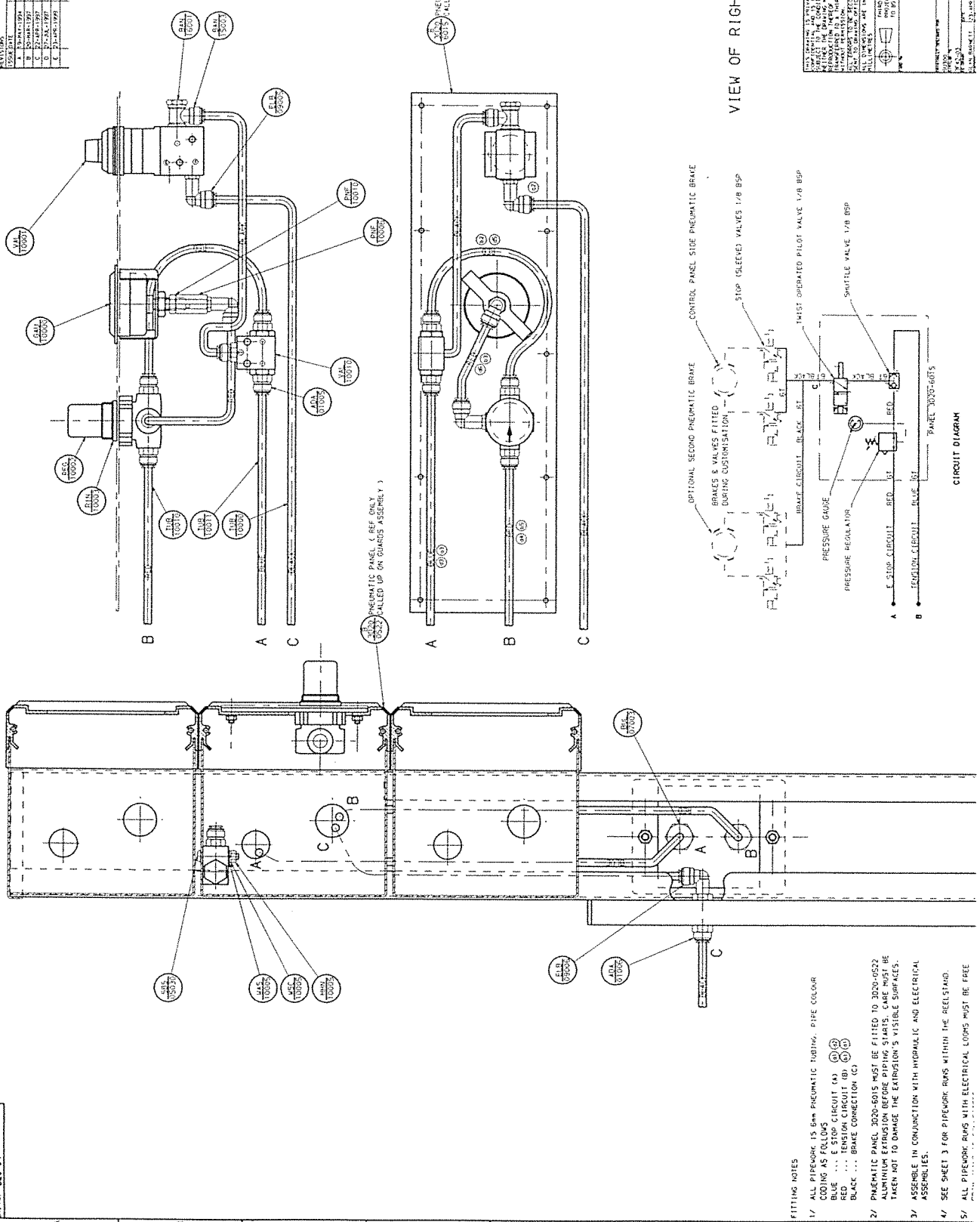
REV: A

VIEW OF RIGHT HAND BUILT MACHINE
 FOR VIEW OF LEFT HAND BUILT MACHINE SEE SHEET 2



VIEW OF LEFT HAND BUILT MACHINE
FOR VIEW OF RIGHT HAND BUILT MACHINE SEE SHEET 1

REV.	DATE	DESCRIPTION	BY	CHKD.
1	10/15/59	INITIAL	115	3
2	10/15/59	REVISED	115	3
3	10/15/59	REVISED	115	3
4	10/15/59	REVISED	115	3
5	10/15/59	REVISED	115	3
6	10/15/59	REVISED	115	3
7	10/15/59	REVISED	115	3
8	10/15/59	REVISED	115	3
9	10/15/59	REVISED	115	3
10	10/15/59	REVISED	115	3



VIEW OF RIGHT HAND BUILT MACHINE

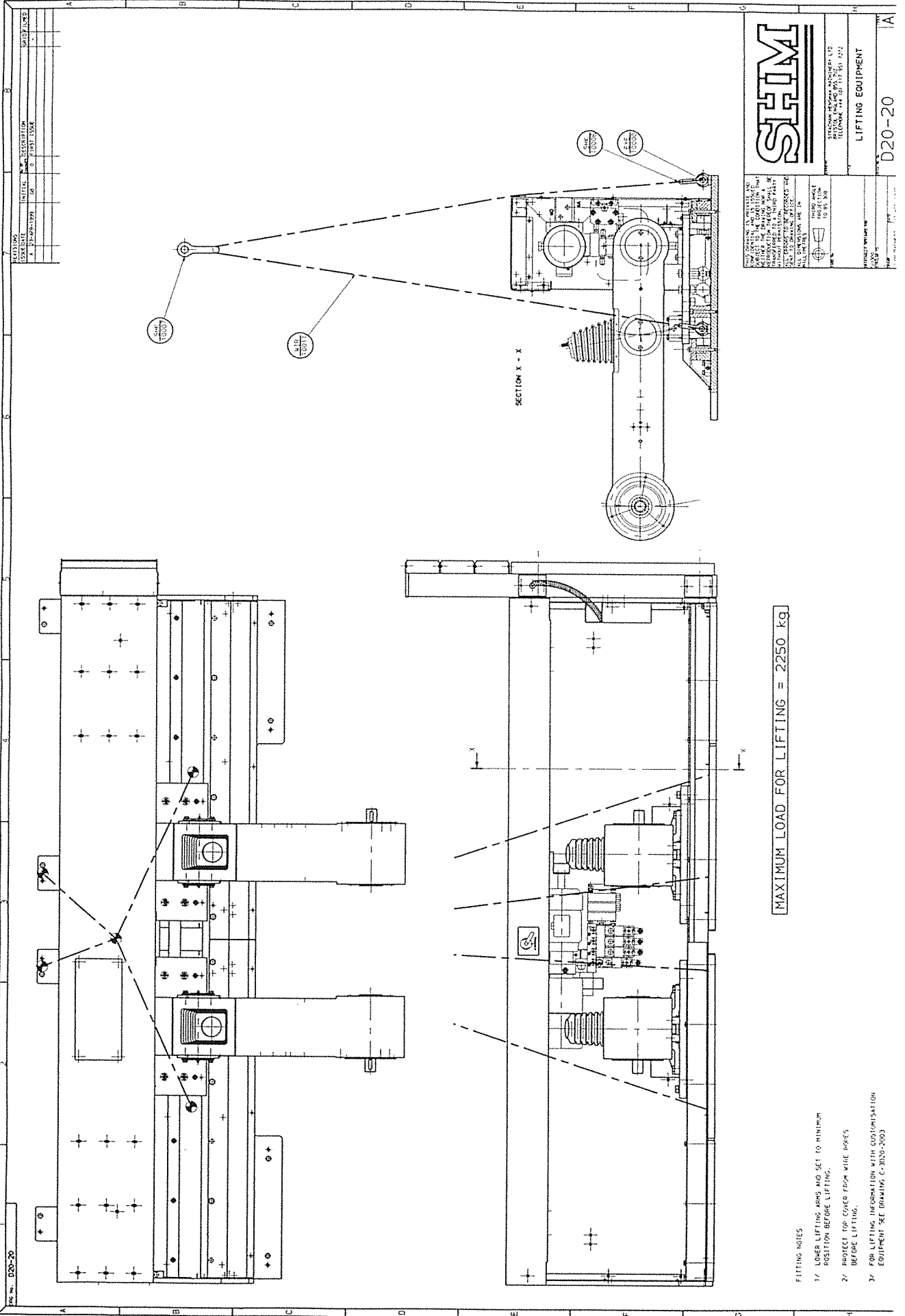
SEIM

SEIM PNEUMATIC & ELECTRICAL EQUIPMENT CO.
 1000 W. 10TH ST. ST. LOUIS, MO. 63104
 TELEPHONE 431-1500

RH SU300 REELSTAND PNEUMATICS

D20-04

- FITTING NOTES**
- 1/ ALL PIPING IS FOR PNEUMATIC LUBING. PIPE COLOUR CODING AS FOLLOWS:
 BLUE ... TENSION CIRCUIT (A)
 RED ... STOP CIRCUIT (B)
 BLACK ... BRAKE CONNECTION (C)
 - 2/ PNEUMATIC PANEL 3020-6015 MUST BE FITTED TO 3020-0522 PNEUMATIC PANEL 3020-6015 MUST BE TAKEN HOT TO DAMAGE THE EXPANDED & VISIBLE SURFACES.
 - 3/ ASSEMBLE IN CONJUNCTION WITH HYDRAULIC AND ELECTRICAL ASSEMBLIES.
 - 4/ SEE SHEET 3 FOR PIPEWORK RIMS WITHIN THE REELSTAND.
 - 5/ ALL PIPEWORK RIMS WITH ELECTRICAL LOOPS MUST BE FREE



PROJECT	DESCRIPTION	DATE
SEM	SEM	1981
DESIGNER	UNIT	SCALE

SEM

SHANGHAI SEM MACHINERY CO. LTD.
 100001 SHANGHAI, CHINA
 TEL: 86 21 5101 1111 FAX: 86 21 5101 1112

ALL DIMENSIONS ARE IN MILLIMETERS

PROJECTION
 1:1
 100%
 100%

SEMI-CONDUCTOR EQUIPMENT
 LIFTING EQUIPMENT

D20-20

MAXIMUM LOAD FOR LIFTING = 2250 kg

- FITTING NOTES
- 1/ LOWER LIFTING ARMS AND SET TO MINIMUM POSITION BEFORE LIFTING.
 - 2/ PROTECT THE COVER FROM WIRE ROSES BEFORE LIFTING.
 - 3/ FOR LIFTING INFORMATION WITH CUSTOMISATION EQUIPMENT SEE DRAWING C-3020-2003

DATE	INITIAL	DESCRIPTION	APPROVED
21-08-1977	GP	380-100-22	

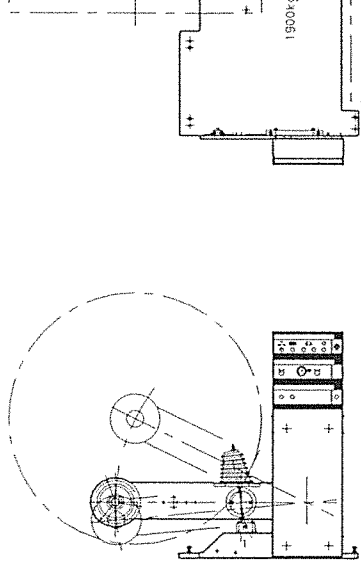
Machine weights are static. For dynamic loads multiply by 1.5

TECHNICAL CHARACTERISTICS:-

- Electrical supply = 380 - 415V, 3 phase, 50/60Hz.
- Maximum reel diameter = 1500mm (59").
- Maximum reel weight = 2000kg (2500kg Optional)
- Minimum reel diameter for pick up from floor = 400mm (16").
- Maximum reel width using standard chucks = 1500mm (59") including 25mm (1") clearance on each side.
- Minimum reel width using standard chucks = 500mm (20")
- Standard core size = 76mm (3") or 150mm.
- Tracking range on maximum width reel = ±50mm (2").
- Maximum web speed = 400m/min (1300ft/min)
- Maximum web spread = 0.35m/m of web width (2.0 lb/ft. of web width)
- Maximum web tension (single brake) = 0.7m/m of web width (4.0 lb/ft. of web width)
- Maximum web tension (double brake) = 5.5 Bar (80 lb/ft/m²)
- Maximum brake air pressure

MACHINE INSTALLATION:-

- General information. The machine package includes sufficient under machine packing and floor anchor bolts to enable the mechanical installation to be completed. Normally the reel is to the left, as seen from the operating position, but the opposite can be supplied. This permits back to back layouts for multiple reel installations.
- The reel-stand is supplied as a self-contained fully assembled unit. SHM drawing 3020-22 shows how it should be stung for lifting and placing in position.
- It will be the customer's responsibility to run the necessary pneumatic service line (air line 12mm ID pipe) to the immediate vicinity of the machine. It will also be the customer's responsibility to run the required electrical supply to the machine. Attention is drawn to the need to ensure the correct section in the electrical conduit concerning supply line impedance.
- Before the machine is positioned on the floor the concrete should be brushed clean and the surface sealed with a proprietary floor-sealing compound. This will reduce the possibility of abrasive dust contaminating the machine and causing accelerated wear.
- Mark a centre line along the floor for the full length of the machine.
- Using the machine centre line and a reference on the cutting head as a datum, mark out the air-line channels and the reel stand position. Note that the holding down bolt positions are not symmetrical.
- Prepare the air-line channels. The air-line channels should be 50mm (2") deep by 50mm (2") wide with the edges reinforced with steel angle. The steel angle should be drilled and tapped at about 300mm (12") intervals to accommodate the air-line. The closing plate fasteners should be counter-sunk. The angle should be set down to the top of each closing plate is flush with the floor surface.
- Place the reel-stand in position and fully raise the reel lift arms to the running position. A temporary power connection will be required.
- Survey the floor for level and determine the packing requirements at each of the holding down points.
- Use the locking screws in the base plates to level the arm carriage roller tracks and insert the appropriate amount of packing under the base plates adjacent to the holding down hole. Twisting the base assembly must be avoided. As a check, confirm that the tops of the reel chucks remain level on the fully raised reel lift arms are moved in and out. Adjust the packing as required until the machine is level.
- Ensure the reel-stand is parallel to the shearer by measuring from the reel chucks to the lead rail, into the shearer.
- Drill through the holding down holes in the base plates of the supporting structures to a depth of 75mm using a 20mm diameter drill. Remove drill dust with a vacuum cleaner.
- Re-check levelling and position and drop the expanding nut assemblies into the top holes. With the bottom and side support structures in place, supply 1000psi units to the floor. Use High Bolt USA 403 - 170 or 30 SHM Part No. BRL10001 with a vacuum cleaner.
- Drill out round the edges of each base plate. Allow the grout to set before using the stand.
- Note the necessary air-line and electrical connections.



ITEM	DESCRIPTION	QTY	UNIT
1	1800kg Reel	2	EA
2	Reel Stand	1	EA
3	Cutting Head	1	EA
4	Base Plate	4	EA
5	Locking Screw	4	EA
6	Drill Bit	4	EA
7	Grout	4	LITRES

SEHM

SHAWNEE EQUIPMENT LTD.
 111, DUNDAS ST. W. TORONTO, ONT. M5G 1R7
 TEL: (416) 593-1234

INSTALLATION EQUIPMENT

D20-22

ITEM	DESCRIPTION	QTY	UNIT
1	1800kg Reel	2	EA
2	Reel Stand	1	EA
3	Cutting Head	1	EA
4	Base Plate	4	EA
5	Locking Screw	4	EA
6	Drill Bit	4	EA
7	Grout	4	LITRES

PACKING DETAILS

FIG. 1A D20-45

NO.	DESCRIPTION	QTY.	UNIT
1	COVER PLATE	1	PC
2	COVER PLATE	1	PC
3	COVER PLATE	1	PC
4	COVER PLATE	1	PC
5	COVER PLATE	1	PC
6	COVER PLATE	1	PC
7	COVER PLATE	1	PC
8	COVER PLATE	1	PC
9	COVER PLATE	1	PC
10	COVER PLATE	1	PC
11	COVER PLATE	1	PC
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20	COVER PLATE	1	PC
21	COVER PLATE	1	PC
22	COVER PLATE	1	PC
23	COVER PLATE	1	PC
24	COVER PLATE	1	PC
25	COVER PLATE	1	PC
26	COVER PLATE	1	PC
27	COVER PLATE	1	PC
28	COVER PLATE	1	PC
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90	COVER PLATE	1	PC
91	COVER PLATE	1	PC
92	COVER PLATE	1	PC
93	COVER PLATE	1	PC
94	COVER PLATE	1	PC
95	COVER PLATE	1	PC
96	COVER PLATE	1	PC
97	COVER PLATE	1	PC
98	COVER PLATE	1	PC
99	COVER PLATE	1	PC
100	COVER PLATE	1	PC

REVISIONS

DATE

BY

CHKD BY

APP'D BY

DATE

BY

CHKD BY

APP'D BY

DATE

BY

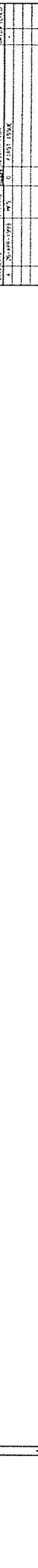
CHKD BY

APP'D BY

DATE

BY

CHKD BY



COMBINED SCALES (METRIC)
(SEE FITTING NOTES)

COMBINED SCALES (IMPERIAL)

WITH DIMENSIONS

MAIN PANEL ELECTRICS ASSEMBLY

COVERS AND GUARDS ASSEMBLY

CROSS MEMBER

TRIMMING ASSEMBLY HIDDEN BENEATH CROSS MEMBER

COVER PLATE

HOLES TO MOUNT SLACK EDGE ROLL OPTIONS

FIG. 1A D20-45

REVISIONS

DATE

BY

CHKD BY

APP'D BY

DATE

BY

CHKD BY

APP'D BY

DATE

BY

CHKD BY

APP'D BY

DATE

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CHKD BY

APP'D BY

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APP'D BY

DATE

BY

CHKD BY

APP'D BY

DATE

BY

CHKD BY

APP'D BY

DATE

BY

SEMI

SEMI-TECHNICAL SERVICES, INC.
10000 W. 10TH AVE., SUITE 100
DENVER, CO 80202
TELEPHONE 773-1111 FAX 773-1112

THIRD ANGLE
PROJECTING
AS SHOWN

DATE: 08/11/98
DRAWN BY: J. H. HARRIS
CHECKED BY: J. H. HARRIS
APP'D BY: J. H. HARRIS

FIG. 1A D20-45

PLAN VIEW

FITTING NOTE

- 1) VIEW IS DRAWN SHOWING A RIGHT HAND BUILT MACHINE.
LEFT HAND BUILT MACHINE FIT CONTROL STATION
SHOWN ON 3000-4500 ON OPPOSITE SIDE.
- 2) SELECT SCALE REQUIRED EITHER 03000-0528 OR 03000-4543.

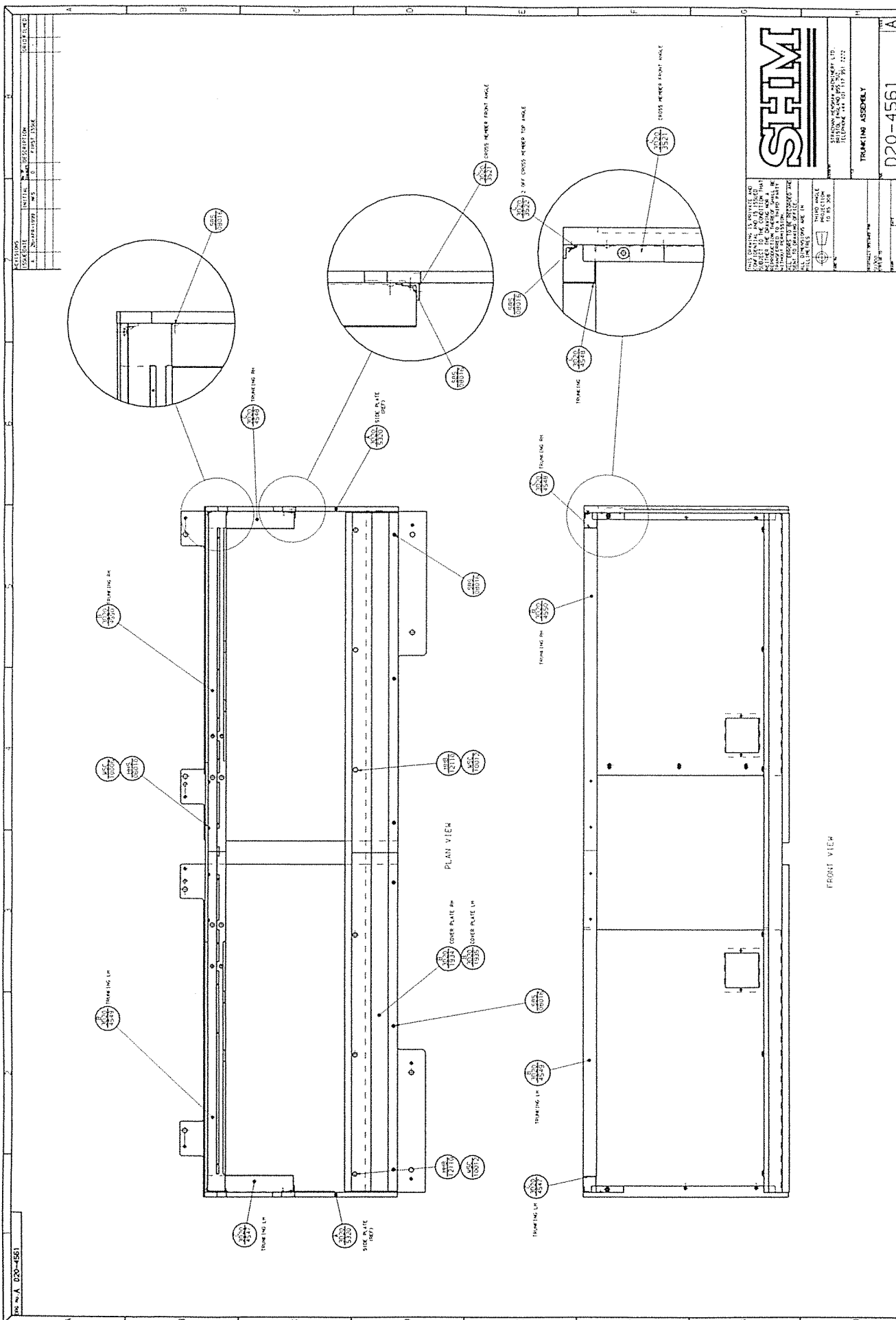


FIG. NO. A. D20-4561

REV. NO.	DESCRIPTION	DATE
1	INITIAL DESIGN	11/15/58
2	REVISED	11/15/58
3	REVISED	11/15/58
4	REVISED	11/15/58
5	REVISED	11/15/58
6	REVISED	11/15/58
7	REVISED	11/15/58
8	REVISED	11/15/58
9	REVISED	11/15/58
10	REVISED	11/15/58

SFIM

STANDARD FORMING INDUSTRIES, INC.
 1500 W. 150th St., Dept. 110
 Tulsa, Oklahoma 74115
 PHONE: 405-751-3121

TRUNKING ASSEMBLY

D20-4561

DATE: 11/15/58

BY: [Signature]

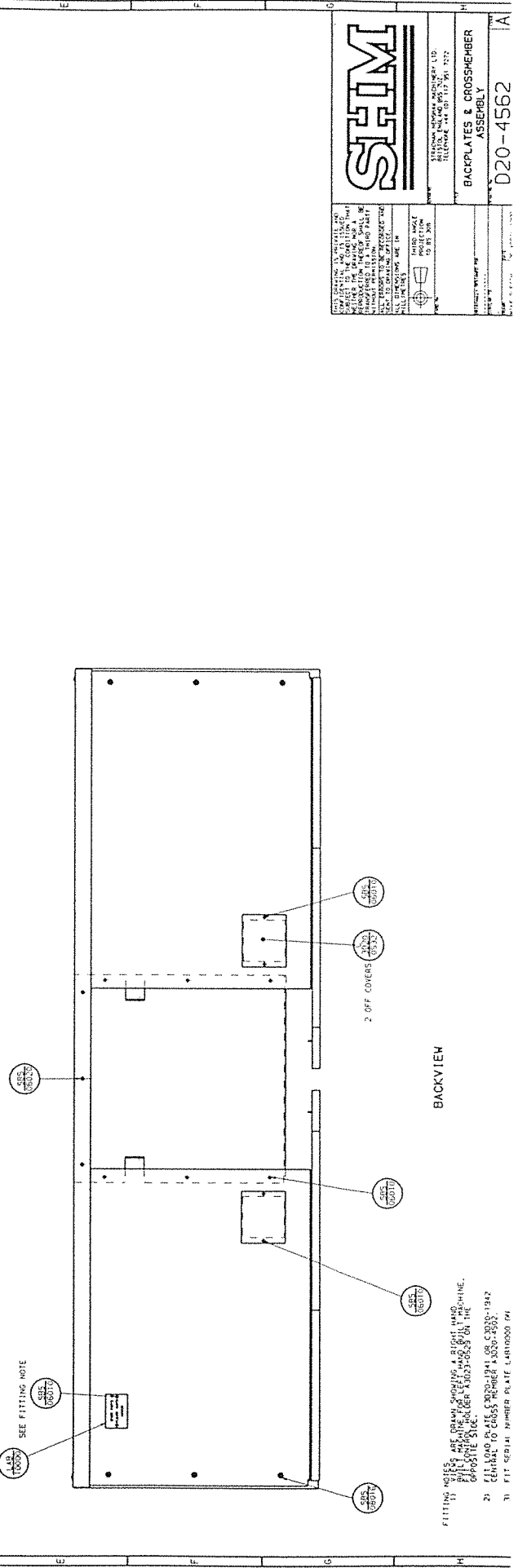
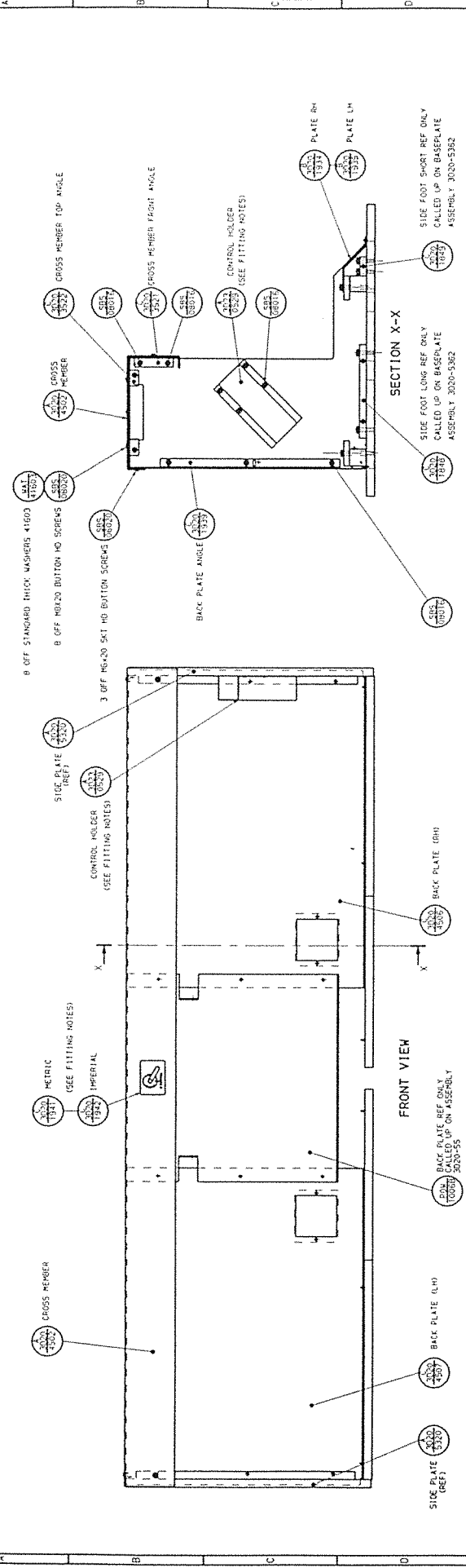
CHECKED: [Signature]

APPROVED: [Signature]

FRONT VIEW

FIG. NO. A D20-4562

REV.	DATE	DESCRIPTION	BY	CHKD.
1	05-08-1977	REV. PART 1924		



SHM

SHM ENGINEERING, INC. 1000 W. 10TH ST. SUITE 100
 DENVER, COLORADO 80202-1000
 PHONE 303-733-1947 FAX 303-733-1948

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DATE: 05-08-1977

BY: [Signature]

CHKD: [Signature]

SCALE: AS SHOWN

PROJECT: [Blank]

DESCRIPTION: BACKPLATES & CROSSMEMBER ASSEMBLY

D20-4562

1A

FITTING NOTES: ARE DRAWN SHOWING A RIGHT HAND FITTING POSITION UNLESS OTHERWISE SPECIFIED. SEE FITTING NOTE FOR OPPOSITE SIDE.

2) CALL OUT TO CROSS MEMBER ASSEMBLY 3030-5362

3) FIT SERIAL NUMBER PLATE L4810000 (M)

CLASSIFICATION	DATE	DESCRIPTION
1	1977	1
2	1978	2
3	1979	3
4	1980	4
5	1981	5
6	1982	6
7	1983	7
8	1984	8
9	1985	9
10	1986	10
11	1987	11
12	1988	12
13	1989	13
14	1990	14
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16	1992	16
17	1993	17
18	1994	18
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24	2000	24
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94	2070	94
95	2071	95
96	2072	96
97	2073	97
98	2074	98
99	2075	99
100	2076	100

DATE: 1977
 DRAWING NO: 3020-531
 TITLE: STD REEL LIFT MECHANISM

SCALE: 1:1
 SHEET NO: 1 OF 1

DESIGNED BY: [Name]
 CHECKED BY: [Name]
 APPROVED BY: [Name]

DATE: 1977

PROJECT NO: 3020-53

REV: 1

REV: 2

REV: 3

REV: 4

REV: 5

REV: 6

REV: 7

REV: 8

REV: 9

REV: 10

REV: 11

REV: 12

REV: 13

REV: 14

REV: 15

REV: 16

REV: 17

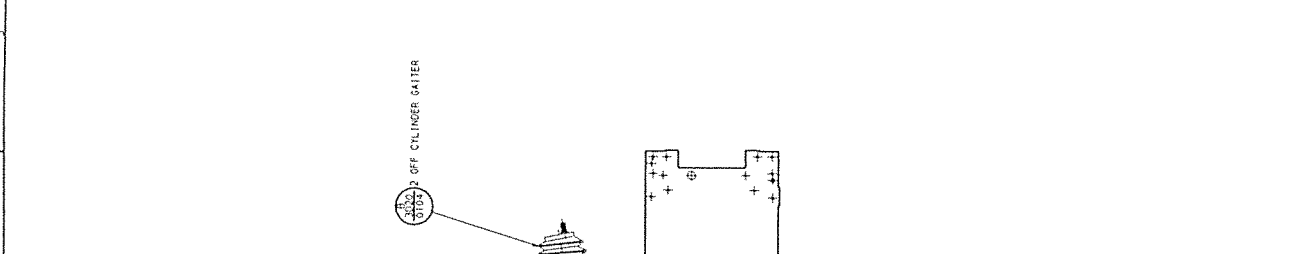
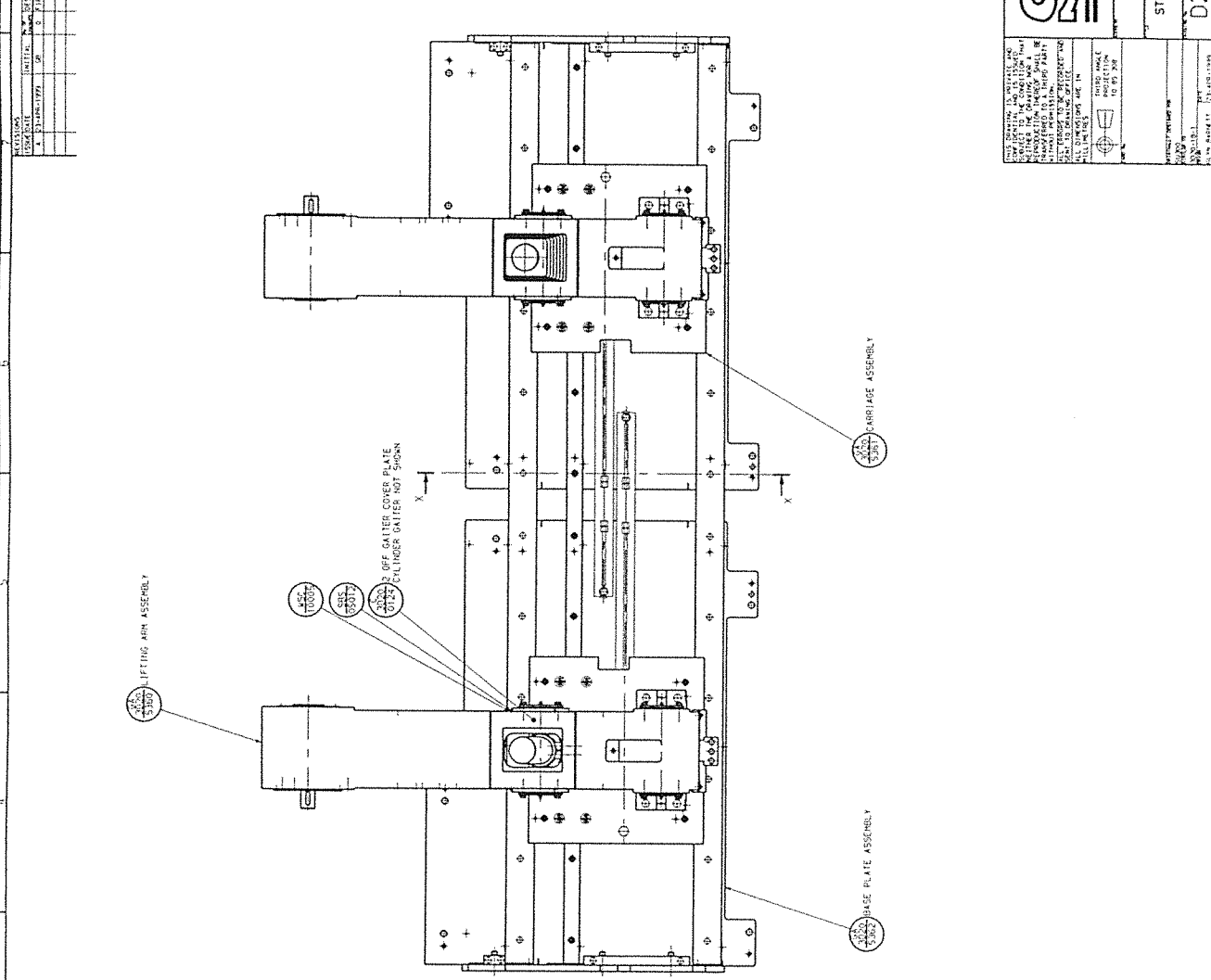
REV: 18

REV: 19

REV: 20

REV: 21

REV: 22



- FITTING NOTES**
- 1/ USE SHIPPACK 3020-1543 TO SET MINIMUM CLEARANCE OVER CAM FOLLOWERS WHEN ASSEMBLED WITH CARRIAGE ASSEMBLIES 3020-5361. USE ONLY IF REQUIRED. SEE ASSEMBLY DRAWING 3020-5362 FOR CLARIFICATION.
 - 2/ USE SHIPS 3020-1545 AND 3020-1546 UNDER CLEVIS MOUNTING BLOCKS 3020-0135 TO LEVEL LIFT ARM ASSEMBLIES 3020-5360. SEE ASSEMBLY DRAWING 3020-5361 FOR CLARIFICATION. BOTH LIFT ARMS TO BE LEVEL WITH EACH OTHER.
 - 3/ TIGHTEN PIVOT BRACKET 3020-1056 SECURING SCREWS HAS16040 TO 190 Nm WHEN ARMS ARE SET LEVEL. SEE ASSEMBLY DRAWING 3020-5361 FOR CLARIFICATION.
 - 4/ ASSEMBLE LIFT MECHANISM IN CONJUNCTION WITH DRAWING 3020-5360 FOR MECHANICAL AND ELECTRICAL ASSEMBLIES. SEE FIT PAPER AND FITTINGS AT THIS STAGE.
 - 5/ FOR PAINTING DETAILS SEE DRAWINGS: 3020-1831 BASE PAINT SCHEME 3020-1832 PAINT SCHEME

SHIM

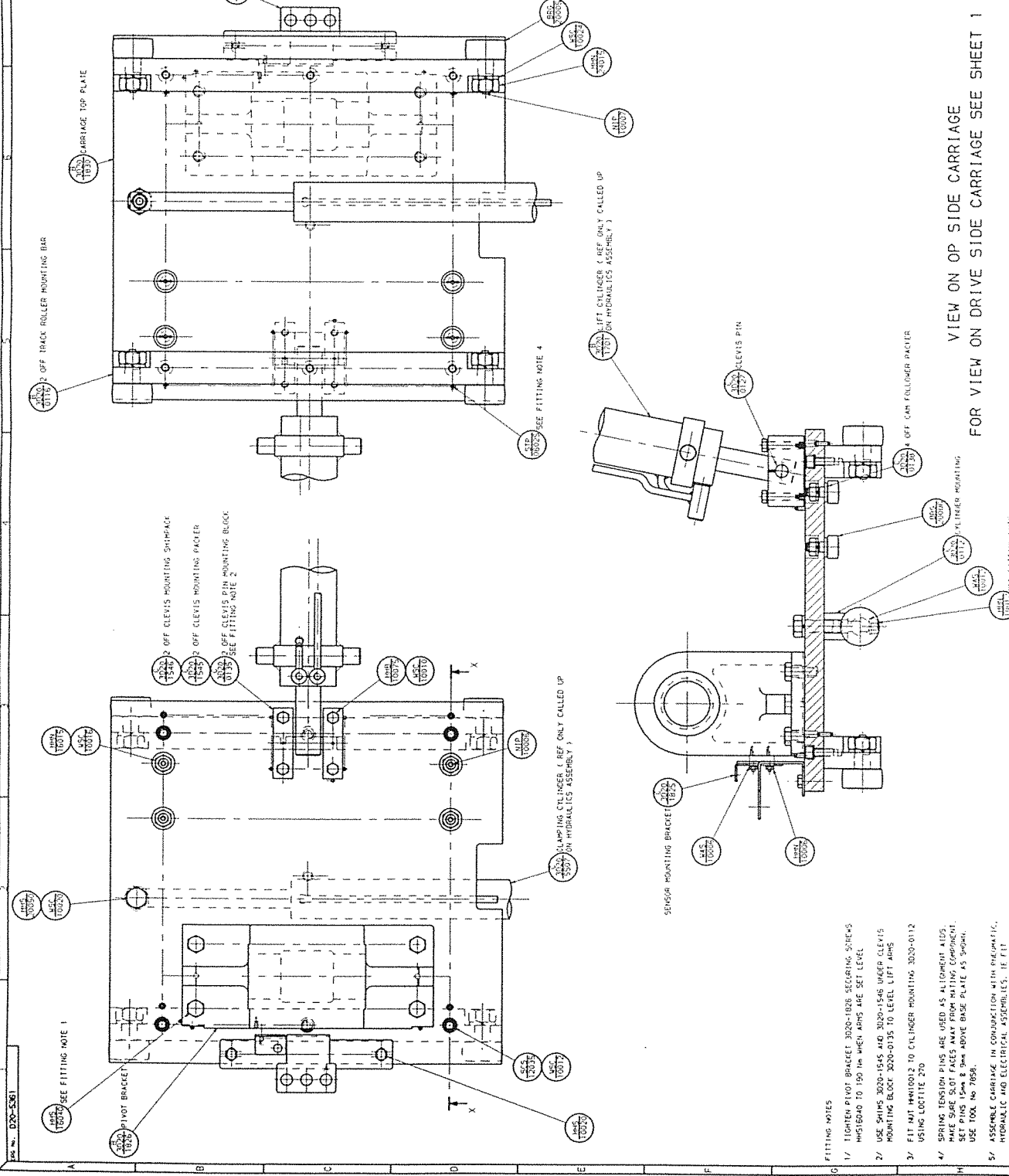
SHIM MANUFACTURING LTD.
 100, WINDY HILL ROAD, WINDY HILL, NSW 2150
 AUSTRALIA
 TELEPHONE: 61 (0) 151 861 7222

STD REEL LIFT MECHANISM

D20-53

REV: 22

REV	NO	DESCRIPTION	DATE
1	1	ISSUE	11-11-54
2	2	REVISED	11-11-54
3	3	REVISED	11-11-54
4	4	REVISED	11-11-54
5	5	REVISED	11-11-54
6	6	REVISED	11-11-54
7	7	REVISED	11-11-54
8	8	REVISED	11-11-54
9	9	REVISED	11-11-54
10	10	REVISED	11-11-54



- FITTING NOTES
- 1/ TIGHTEN PIVOT BRACKET 3020-1028 SECURING SCREWS MMS1640 TO 150 IN WHEN ARMS ARE SET LEVEL
 - 2/ USE SHIMS 3020-1545 AND 3020-1548 UNDER CLEVIS MOUNTING BLOCK 3020-0136 TO LEVEL LIFT ARMS
 - 3/ FIT NUT MMS10012 TO CYLINDER MOUNTING 3020-0112 USING LOCKWIE 270
 - 4/ SPRING TENSION PINS ARE USED AS ALIGNMENT AIDS. MAKE SURE SLOT FACES AWAY FROM MOUNTING CARRIER. SET PINS 15mm & 9mm ABOVE BASE PLATE AS SHOWN. USE TOOL NO 7858.
 - 5/ ASSEMBLE CARRIAGE IN CONJUNCTION WITH HYDRAULIC, HYDRAULIC AND ELECTRICAL ASSEMBLIES. IE. FIT

VIEW ON OP SIDE CARRIAGE SEE SHEET 1
FOR VIEW ON DRIVE SIDE CARRIAGE SEE SHEET 1

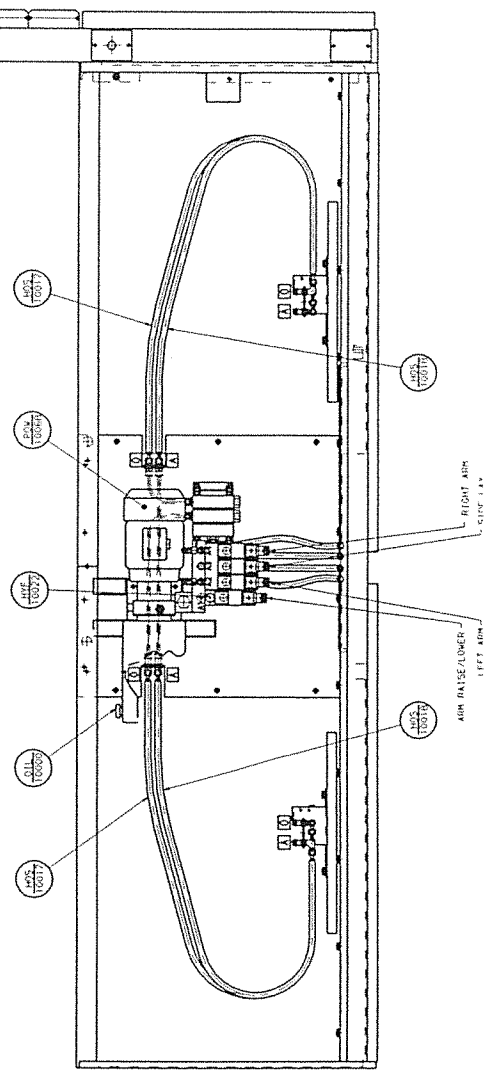
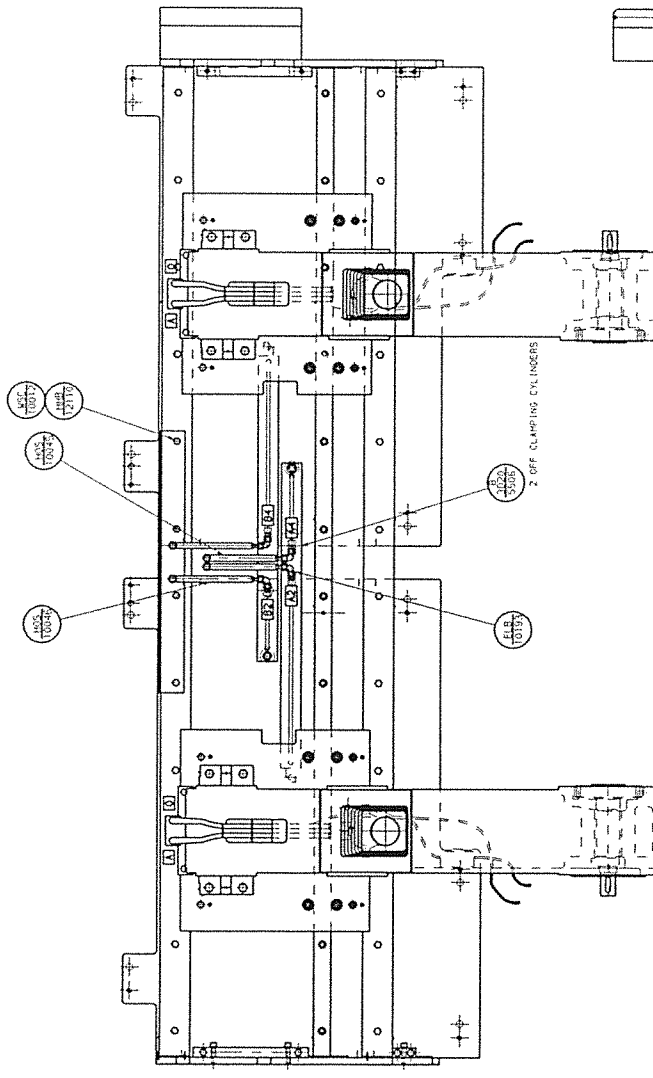
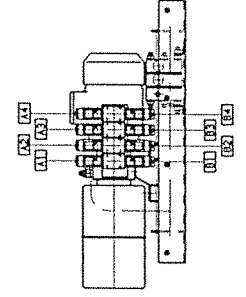
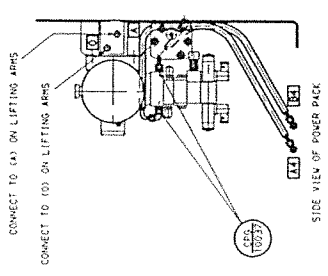
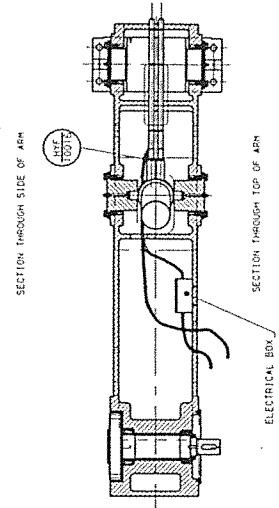
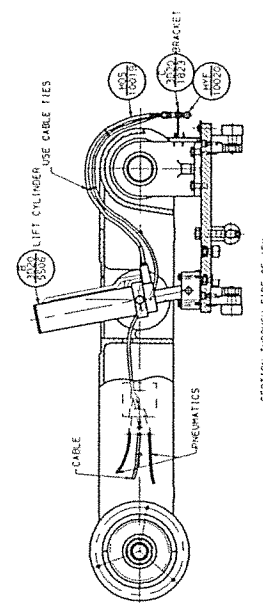
STFM

STATION AIRWAY EQUIPMENT LTD.
TELEPHONE 444 100 110 961 1022

CARRIAGE ASSEMBLY

D20-5361

REV	DESCRIPTION	DATE
1	INITIAL	1975
2	REVISED	1975
3	REVISED	1975
4	REVISED	1975
5	REVISED	1975



SEM

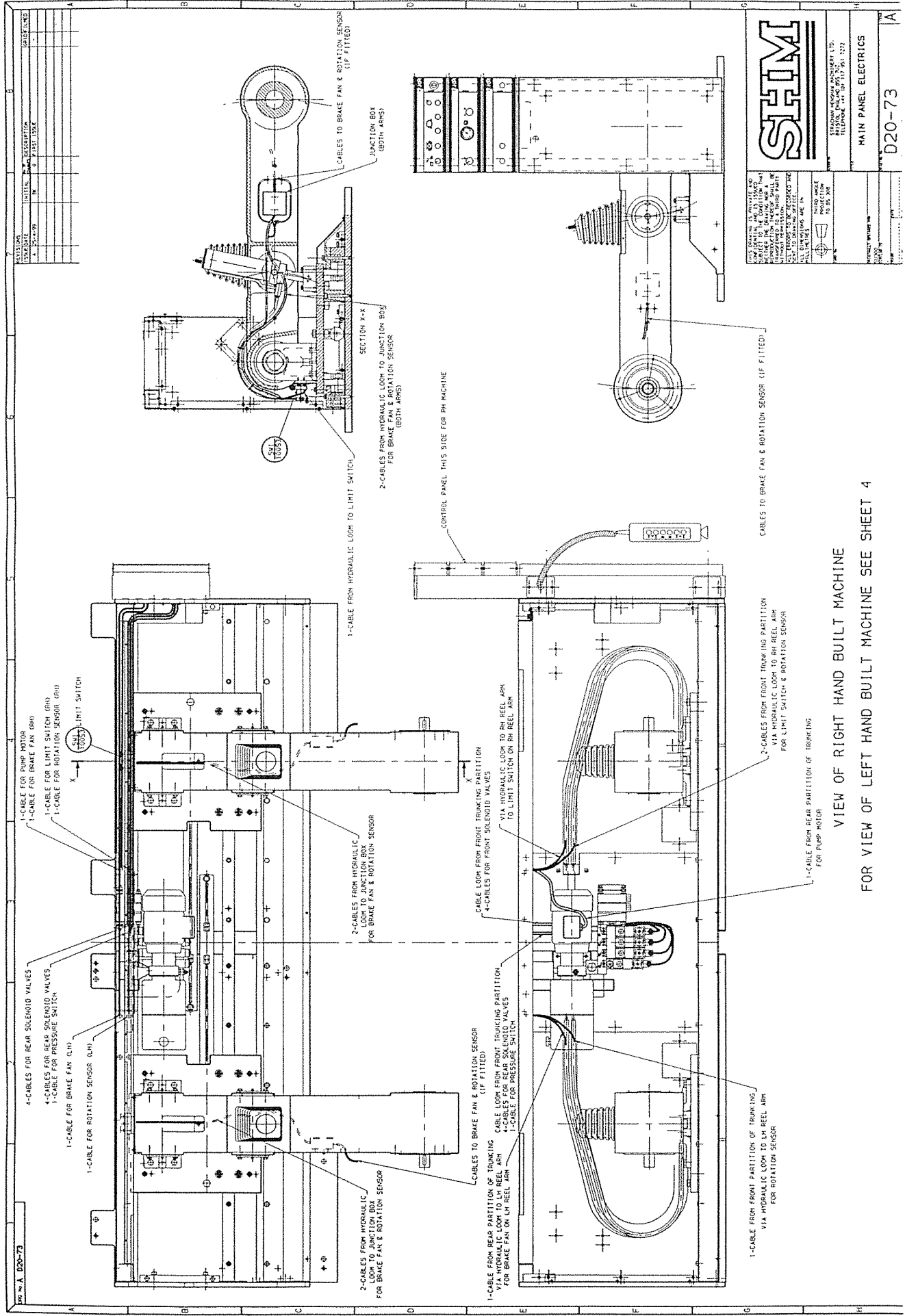
SEMI-CONDUCTOR MANUFACTURING COMPANY
 10000 SEMIWAY DRIVE
 DALLAS, TEXAS 75243
 TELEPHONE (214) 351-7272

PRODUCTION
 10000 SEMIWAY DRIVE
 DALLAS, TEXAS 75243
 TELEPHONE (214) 351-7272

HYDRAULIC LAYOUT

D20-55

FOR FULL CIRCUIT DIAGRAM SEE 3000-5503



REV.	DATE	BY	CHKD.	DESCRIPTION
1	11-11-70	W. J. B. / J. B. S.		ISSUED FOR CONSTRUCTION
2	1-13-71	W. J. B. / J. B. S.		REVISED TO SHOW REVISIONS

SEEM

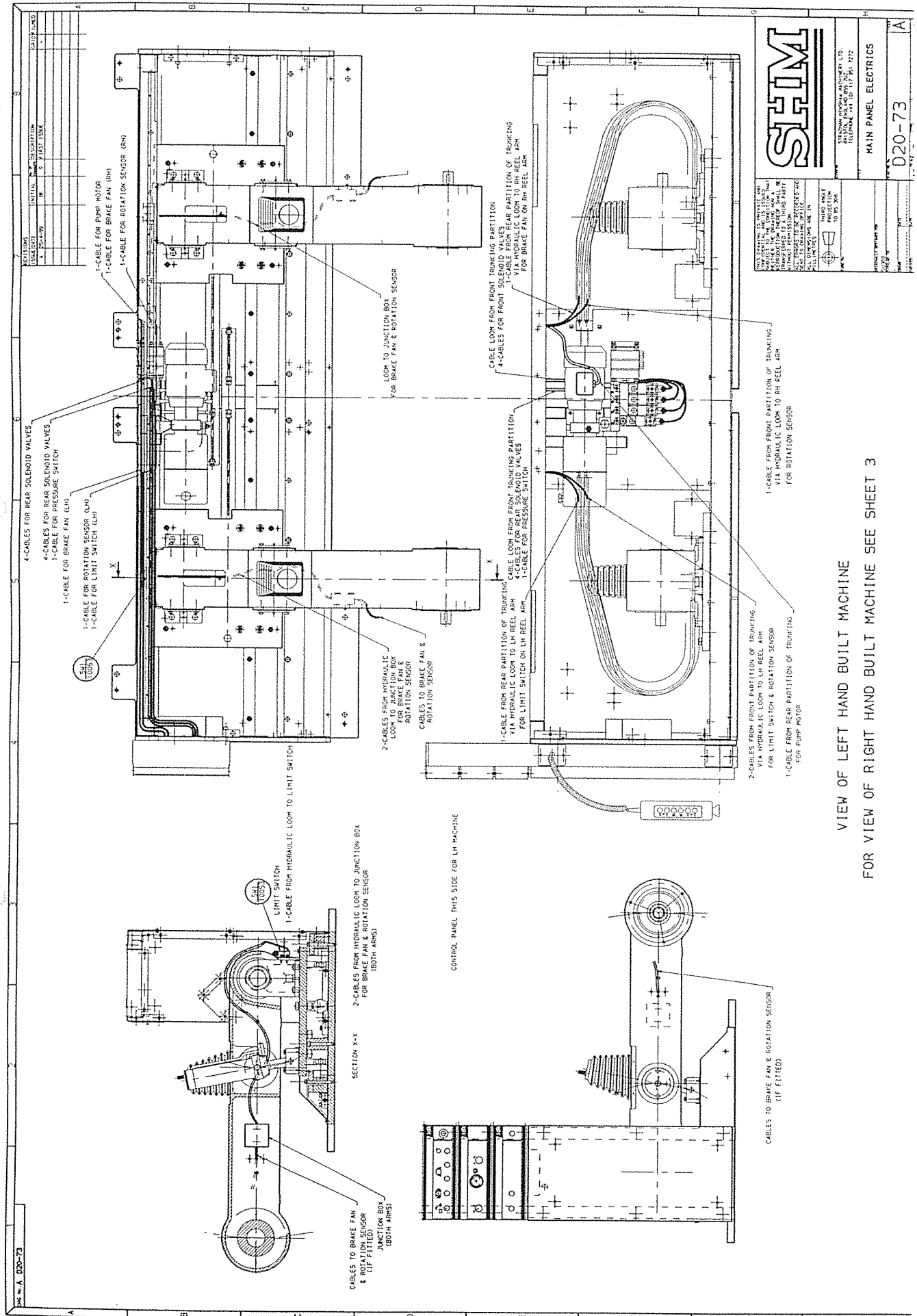
SEEM ELECTRIC CO.
 1800 W. 10TH AVENUE
 DENVER, COLORADO 80202

MAIN PANEL ELECTRICS

D20-73

DATE: 11-11-70
 DRAWN BY: W. J. B.
 CHECKED BY: J. B. S.
 PROJECT NO.: 18-88-308
 SHEET NO.: 18-88-308-1

VIEW OF RIGHT HAND BUILT MACHINE
 FOR VIEW OF LEFT HAND BUILT MACHINE SEE SHEET 4



SECTION A D20-73

SECTION H D20-73

NO.	DESCRIPTION	QTY
1	1-CABLE FOR PUMP MOTOR	1
2	1-CABLE FOR BRAKE FAN (RH)	1
3	1-CABLE FOR ROTATION SENSOR (RH)	1
4	4-CABLES FOR REAR SOLENOID VALVES	4
5	1-CABLE FOR PRESSURE SWITCH	1
6	1-CABLE FOR ROTATION SENSORS (LH)	1
7	1-CABLE FOR LIMIT SWITCH (LH)	1
8	1-CABLE FROM HYDRAULIC LOOM TO LIMIT SWITCH	1
9	2-CABLES FROM HYDRAULIC LOOM TO JUNCTION BOX FOR BRAKE FAN & ROTATION SENSOR (BOTH ARMS)	2
10	1-CABLE FROM FRONT TRACKING PARTITION VIA HYDRAULIC LOOM TO LH REEL ARM FOR LIMIT SWITCH & ROTATION SENSOR	1
11	1-CABLE FROM REAR PARTITION OF TRACKING VIA HYDRAULIC LOOM TO LH REEL ARM FOR LIMIT SWITCH ON LH REEL ARM	1
12	1-CABLE FOR PRESSURE SWITCH	1
13	4-CABLES FOR FRONT TRACKING PARTITION	4
14	1-CABLE FROM REAR PARTITION OF TRACKING VIA HYDRAULIC LOOM TO RH REEL ARM FOR BRAKE FAN ON RH REEL ARM	1
15	2-CABLES FROM FRONT PARTITION OF TRACKING VIA HYDRAULIC LOOM TO LH REEL ARM FOR LIMIT SWITCH & ROTATION SENSOR	2
16	1-CABLE FROM REAR PARTITION OF TRACKING VIA HYDRAULIC LOOM TO RH REEL ARM FOR ROTATION SENSOR	1
17	1-CABLE FROM FRONT PARTITION OF TRACKING VIA HYDRAULIC LOOM TO RH REEL ARM FOR ROTATION SENSOR	1

SFM

SHIMON FRODO MACHINES LTD.
 100, WINDMILL LANE, WINDMILL FARM, BURNLEY, LANCASHIRE, ENGLAND, BB10 3JG, UK
 TEL: 01773 506100 FAX: 01773 506101
 WWW.SFM.CO.UK

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ISSUED DATE: 10/05/05
 DRAWN BY: J. H. H. (JHH)
 CHECKED BY: J. H. H. (JHH)
 APPROVED BY: J. H. H. (JHH)

PROJECT: MAIN PANEL ELECTRICS

D20-73

A

VIEW OF LEFT HAND BUILT MACHINE
 FOR VIEW OF RIGHT HAND BUILT MACHINE SEE SHEET 3