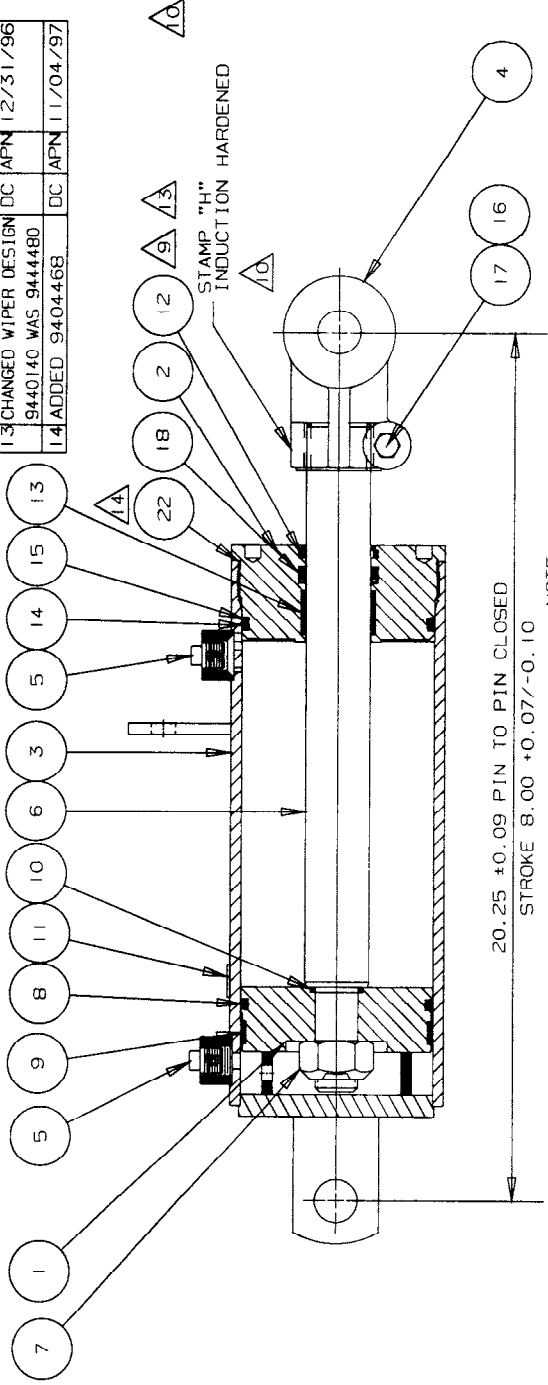


DO NOT SCALE DRAWING

NO.	REVISION	BY	APP.	DATE
15	9804436 WAS 9804444			
	9857574 WAS 9856634			
	DELETED 9853375	SW	APN	04/05/00
16	1.50 WAS 2.50	SW	DC	11/04/02

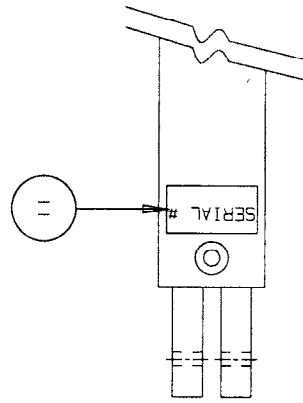
NO.	REVISION	BY	APP.	DATE
8	9400003 WAS 9235235	AR	APN	08/19/94
9	9444480 WAS 9440140	CH	APN	12/07/94
10	9702663 WAS 9709023	DB	APN	12/05/95

NO.	REVISION	BY	APP.	DATE
11	DECAL DETAIL ADDED	DB	APN	03/19/96
12	ADDED NOTE 4.	DC	APN	09/06/96
13	CHANGED WIPER DESIGN	DC	APN	12/31/96
	9440140 WAS 9444480			
14	ADDED 9404468	DC	APN	11/04/97



20.25 ±0.09 PIN TO PIN CLOSED
STROKE 8.00 +0.07/-0.10

- NOTE:
1. SETTLE BACK IS +0.31 TO -0.03
 2. AT 500 PSI PRESSURE DROP, RE-PHASE FLOW IS 1.50 TO 3.00 GAL. U.S./MIN.
 3. TORQUE SPEC: HEAD 200 FT.-LB. PISTON NUT 200 FT.-LB. CLEVIS 67 FT.-LB.
 4. WORKING PRESSURE 3000 PSI



DETAIL FOR DECAL INSTALLATION
NOTE: NTS

NO.	REVISION	BY	APP.	DATE
6	REDRAWN	AR	SA	08/30/93
7	DECAL MOVED FROM FRONT PORT TO REAR PORT	AR	APN	01/11/94

NO.	REVISION	BY	APP.	DATE
12	WIPER SNAP 1.50 X 1.88 X .187			940140
11	DECAL - SERIAL SHUR-LIFT			916107
10	O RING BN 1.25 X 1.00			940210
9	W RING 4.50 X 1.25 X .50			927125
8	O RING "P" 4.50 X 4.125			940925
7	NUT LOCK UNIT TORO 1-14UNS			9857655
6	SHAFT 4508 BOURGAULT			939617
5	PORT PLUG PLASTIC THD ORB#8			9442700
4	CLEVIS ROD 1.50 X 1.00 DIA (HARDENED)			9702663
3	TUBE 4508 BOURGAULT			9396100
2	HEAD THD 4.50 X 1.50 W-RING			9209867
1	PISTON 4.50 X 1.00 C-BOPE			9209362
DET.	DESCRIPTION			ITEM No. QTY.

UNLESS OTHERWISE SPECIFIED, TOLERANCES FOR NONLIMITED DIMENSIONS
X ± .060
XX ± .030
XXX ± .010
ANGULAR 1

DR'N	AR	DATE
		08/30/93

CHK'D	SA	DATE
		08/30/93

APP'D	APN	DATE
		08/30/93

shur-lift

INDUSTRIES LTD.
481 PANE T ROAD
WINNIPEG, CANADA
PH. (204) 667-4630
FAX (204) 668-4530
R2C 2Z1

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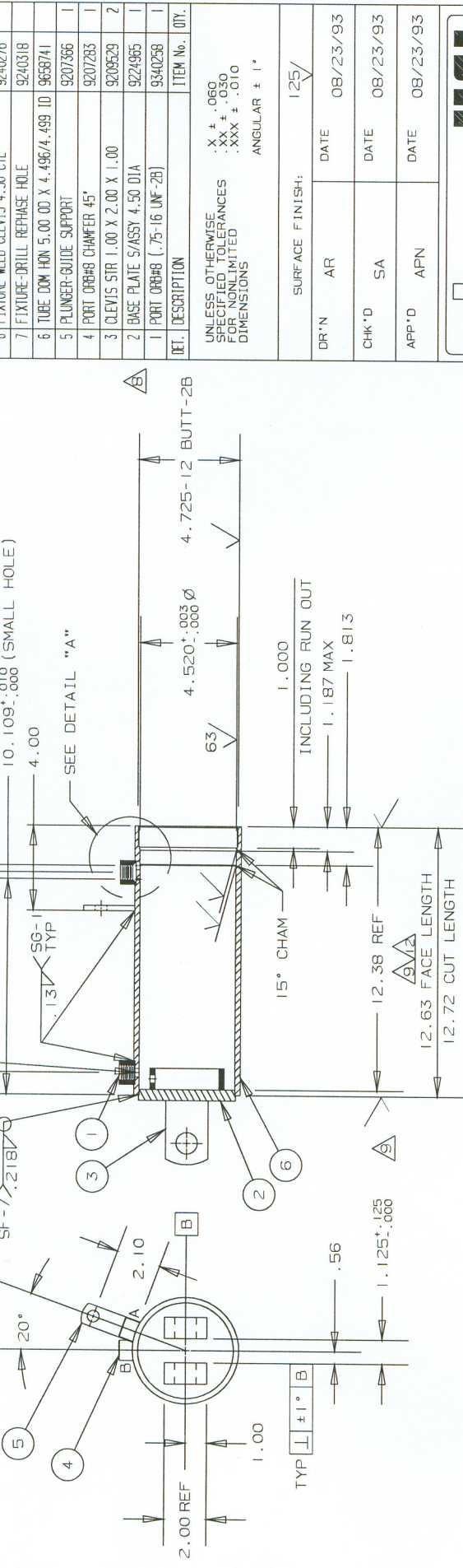
END PRODUCT DESCRIPTION	
CYL 4508 BOURGAULT IND BOURGAULT # 64612	
SCALE 1:3	ITEM NO. 9996406M
DWG SIZE B.	SHEET CONT. ON 15

NO.	REVISION	BY	APP.	DATE	ITEM No.	QTY.
20	O RING BN 4.688 X 4.500				940468	1
21	O RING BN .812 X .687				940077	1
20	SEAL KIT 4.50 X 1.50 X 1.00				934658H	1
19	PAINT BOURGAULT RED				913510	1
18	U CUP ROD 1.875 X 1.50 X .375				9419102	1
17	BOLT HEX .500-13 UNC X 2.50 LG				9804436	1
16	NUT LOCK UNIT TORO .50-13 UNC				9857574	1
15	BU WASHER 4.50 X 4.125				9425745	1
14	O RING BN 4.50 X 4.125				9403460	1
13	W RING 1.75 X 1.25 X 1.00				9400003	1
DET.	DESCRIPTION				ITEM No.	QTY.

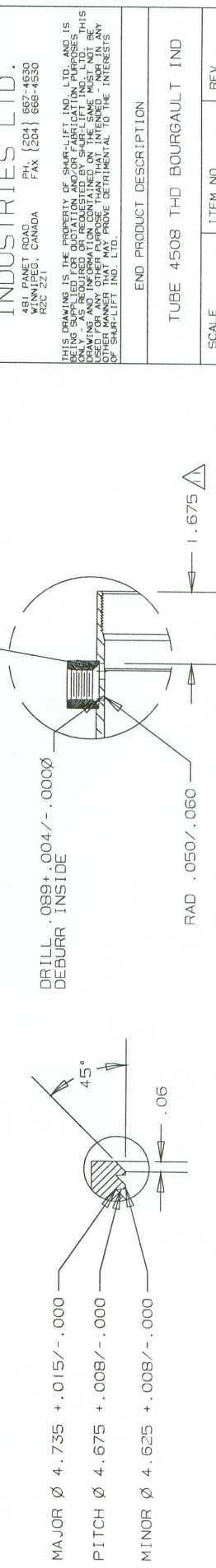
P SK O W

DO NOT SCALE DRAWING				
NO.	REVISION	BY	APP.	DATE
12	12.72 WAS 12.69 REF WAS +.030/- .000	SW	DC	02/16/01
9	12.63 FACE LENGTH WAS ADDED	SW	DC	08/07/98
10	MACHINING WAS ADDED	SW	DC	01/11/01
11	HOLES DIM. FROM OTHER END	SW	DC	02/07/01
11	ADDED 1.675	SW	DC	02/07/01

NOTE: -
 1) BREAK SHARP CORNERS.
 2) DEBURR FRONT PORT HOLES AFTER MACHINING.



BEFORE WELDING CHECK
 1.000 X 45° CHAMFER
 MACHINED SURFACE
 FACING INSIDE THE TUBE



M	FW	FW	FW	FD	FD

NO.	REVISION	BY	APP.	DATE
10	FIXTURE-DRILL PORT HOLE			9240326
9	FIXTURE-WELD PLUNGER GUIDE SUPPORT			9240284
8	FIXTURE-WELD CLEVIS 4.50 CYL			9240276
7	FIXTURE-DRILL REPHASE HOLE			9240318
6	TUBE DOM HON 5.00 X 4.496/4.499 ID			9658741
5	PLUNGER-GUIDE SUPPORT			9207566
4	PORT ORF#8 CHAMFER 45°			9207283
3	CLEVIS STR 1.00 X 2.00 X 1.00			9209529
2	BASE PLATE S/ASSY 4.50 DIA			9224965
1	PORT ORF#8 (1.75-16 UNF-2B)			9340258
1	ITEM No. 001.			

UNLESS OTHERWISE SPECIFIED TOLERANCES FOR NON-LIMITED DIMENSIONS
 X + .060
 XX ± .030
 .XXX ± .010
 ANGULAR ± 1°

DR*N	AR	DATE
		08/23/93

CHK'D	SA	DATE
		08/23/93

APP'D	APN	DATE
		08/23/93

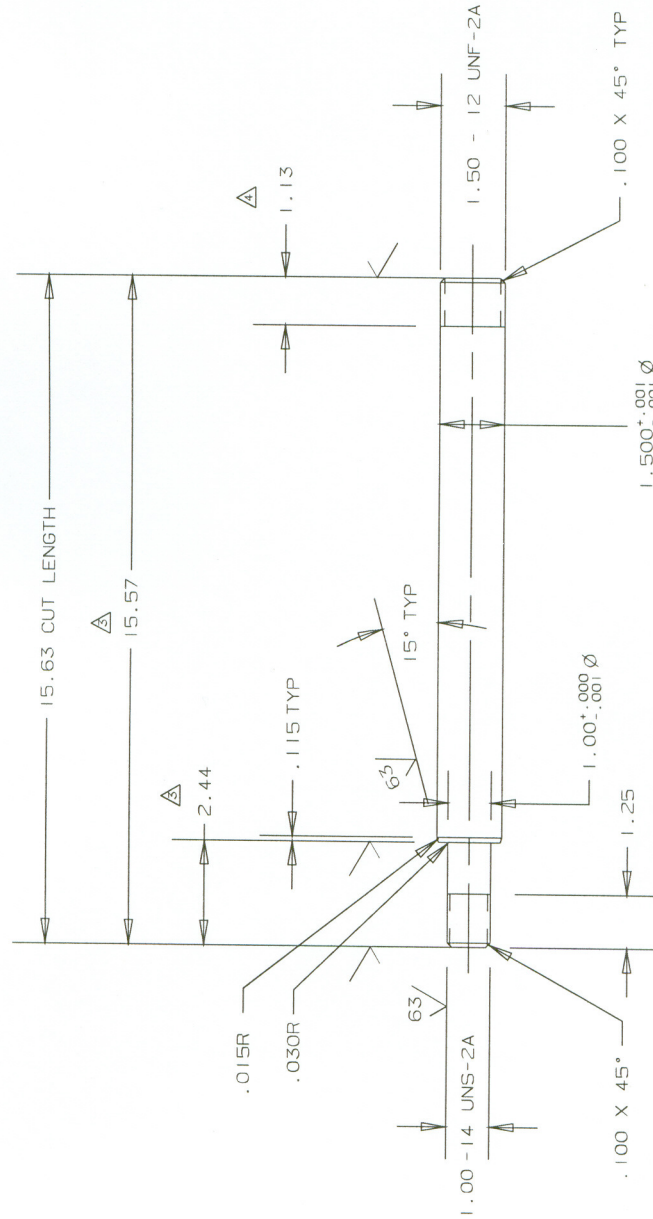
SURFACE FINISH: 125/
 INDUSTRIES LTD.
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 WINNIPEG, CANADA
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 FAC: (204) 666-4530

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END PRODUCT DESCRIPTION	
TUBE 4508 THD BOURGAULT IND	

SCALE	ITEM NO.	REV
1:5	9386400	
DWG SIZE	SHEET CONT.	ON
B-		12

DO NOT SCALE DRAWING

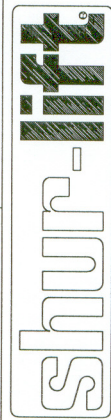


NO.	REVISION	BY	APP.	DATE
2	REDRAWN	AR	SA	08/23/93
3	15.57 WAS 15.63	DC	APN	10/15/96
	2.44 WAS 2.50			
4	1.13 WAS 1.125	BP	APN	03/10/98

QTY.	DESCRIPTION	ITEM No.	QTY.
1	BAR RD PG C-1045 CHROME 1.50	9686114	

UNLESS OTHERWISE SPECIFIED TOLERANCES FOR NONLIMITED DIMENSIONS
 .X ± .060
 .XX ± .030
 .XXX ± .010
 ANGULAR ± 1°

SURFACE FINISH: 125/			
DR'N	AR	DATE	08/23/93
CHK'D	SA	DATE	08/23/93
APP'D	APN	DATE	08/23/93



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END PRODUCT DESCRIPTION	
SFT 4508 BOURGALT IND	

SCALE	ITEM NO.	REV
1:3	9396417	
DWG SIZE	SHEET CONT. ON	
B-	4	

NOTE: BREAK SHARP CORNERS

M