

Québec, August 1988

Gentlemen:

Your Manufacturer is very pleased to offer you the Instruction Handbook for your pinsetters Model 501E.

You are invited to read it very carefully, particularly the section dealing with the maintenance of the machines.

In referring to the Instructions Handbook, you will find that it is highly recommended to use Pneumatic Oil Z-400 and original parts exclusively, so as to insure a trouble free operation.

Yours very truly,

MENDES INC.



Lucien Rochefort
Product Manager

LR/mct

INSTRUCTION HANDBOOK
MENDES PNEUMATIC PINSETTER
FIVEPIN
MODEL 501E

Manufactured under licence from Jacob J. Leidl:

Canadian patent: no 963929

U.S. patent : no 3778057

August 1988

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Bulletin referring to the
functioning and maintenance of the

"MENDES"

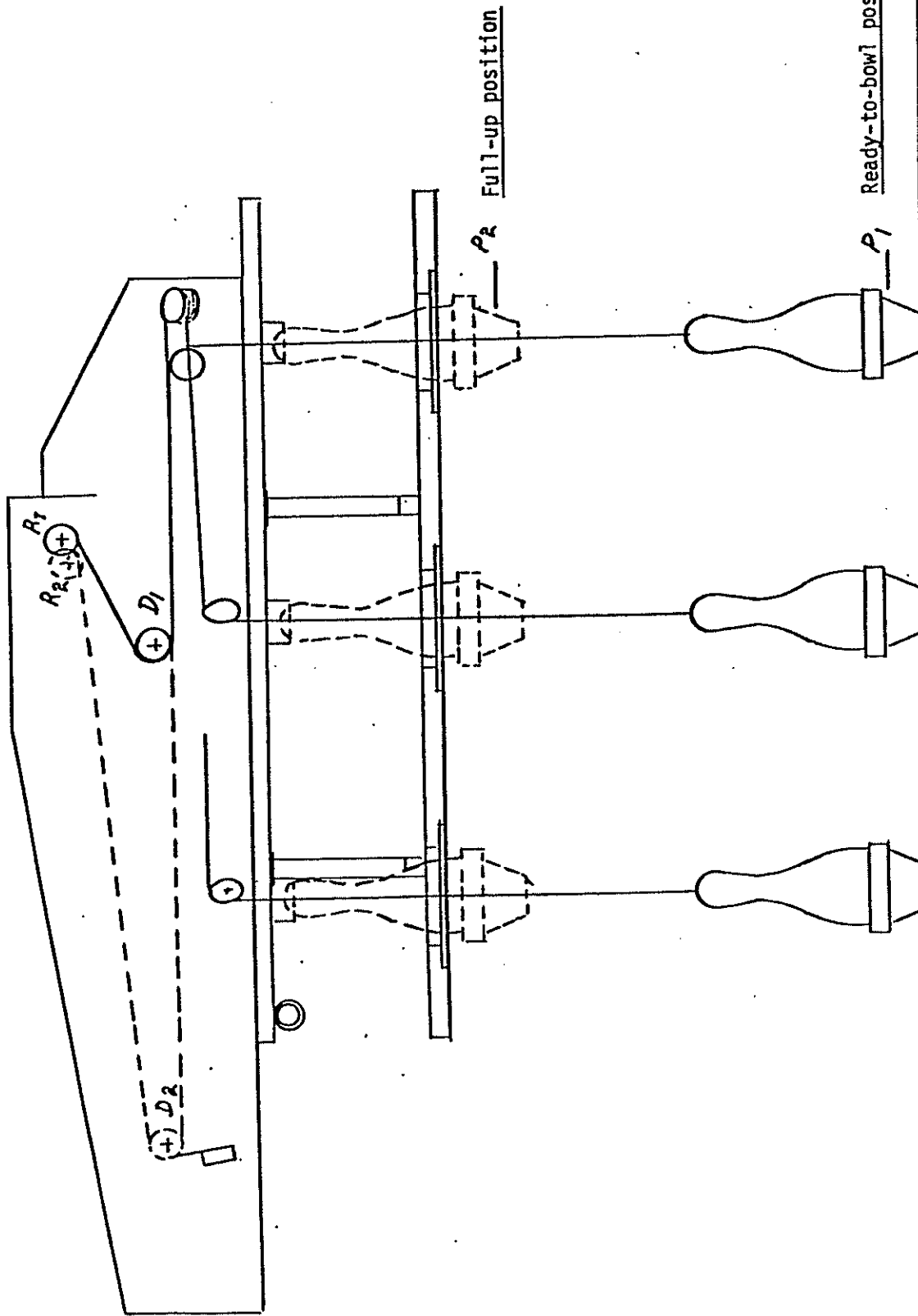
PINSETTER

It is understood that machines of any kind require a minimum of care and should operate according to standards.

You are cordially invited to read this instruction program and apply it carefully so that you may get the best out of your investment.

We also recommend you instruct your bowling lane superintendent on the functioning of the machines.

The simplicity of this pinsetter being its main characteristic, it is very easy for anyone to understand its concept.



 Québec Canada	DESCRIPTION : BASIC FUNCTIONING		SPÉCIFICATIONS MODEL 501E		PAR :	ÉCHELLE :
	VÉR. :	APPR. : <i>L. R.</i>	DATE : 06/88	PARTIE No.		

1- BASIC FUNCTIONING:

The preceeding page shows a simplified diagram of the 5-pinsetter. Solid lines show all main parts in the "ready-to-bowl" position, with pins on the deck. When a pin is bowled, the sensor is actuated, which causes cylinders to pull sheaves on the drawbar from D-1 position to D-2 position. The drawbar continues after the pins are fully lifted, extending spring loaded cord reels to move from R-1 position to R-2 position, to ensure the pins are securely seated in their respective rubber bumpers. When the reels reach R-2 position, the drawbar gives contact to L.S. switch a reversing valve, causing cylinders to move drawbar sheaves back to D-1 position lowering pins to deck again.

The sensor-brake assembly contains a unit which is actuated by the string movement of a bowled pin. This unit trips and releases the brake unit to "hold" position. At the end of the "up" movement (D-2 position), another trip unit releases the brake to lock on "tensed" strings. In this manner, bowled pins are held in "up" position while the remaining pins are returned to the deck. When all the pins are bowled or when the solenoid valve button is pressed, a full set of pins is automatically set on the deck.

2- **BASICS OF OPERATION:**

A- MECHANICAL:

- Mounting frame:

The machine is mounted on a simple iron pipe frame.

- Cord system:

Here is the concept of the system. Whether the pinsetter is used for the games of Fivepin, Duckpin or Tenpin, an equal number of cords of fourteen feet (14'), approximately four feet (4') as spare cord wound on each reel, are attached to the top of the pins. These black nylon cords of the highest quality whiten slightly when wearing. The whitening is therefore, an inherent characteristic of the cord as the nylon is basically a white resin braided into cord and then dyed black. The only point of wear on the cord is immediately above the top of the pin. When the cord wears, it may be merely pulled through the pin, the worn out part cut, and the cord refastened.

In the head of the pin is a plastic insert which allows the pin to spin and roll without twisting the cord. This greatly extends cord life and ensures more accurate spotting of pins.

- Sensor system:

The sensor unit is a four component mechanical unit, consisting of petro-chemical material of the highest quality, which are:

- finger P-003
- link P-005
- hook P-009
- arm P-010

The first three are essentially interlinked with the hook engaging the forward end of the brake arm (P-010).

- Braking system:

The braking system has three main parts, a lower adjustable bar M-012, a moveable upper rubber wheel and a moveable steel quadrant. Normally the moveable bar is held in an upper position with the cord passing freely between the wheels. When the brake is actuated the upper wheel falls onto the lower bar with the cord between.

- Ball lift system:

The ball lift system is simply a conveyor belt which takes the ball and places it on a return track. It is a totally automatic operation which is activated as soon as the machine is turned on.

B- AIR SYSTEM:

- Air supply system:

An adequate compressor supplies the air into the system with a minimum pressure never lower than 100 P.S.I. in main lines. The compressor is equipped with an air dryer to eliminate water going through the air components.

- Air dryer and filter:

An air dryer, eliminates condensation and prevents in many instances water from reaching air valves.

- Main cylinder SB-5003:

The pins are raised and lowered by a pair of 1 1/8" bore, 37" stroke, double acting pneumatic cylinders. The power is transferred to the drawbar by the cylinders.

- Function control system:

Components used for the control of all the different functions of the machine are:

A- Solenoid valve P.S.	A-014-9982
B- Retarder valve	A-151
C- Solenoid valve F.S.	A-014-4450
D- Electronic sensor F.S.	SB-ECL1-325-FS
E- Electronic sensor P.S.	SB-ECL1-325-PS
F- Electronic sensor E.S.	SB-ECL1-325-LS
G- Relatch cylinder	A-012E
H- Needle valve	A-023
I- Filter regulator	A-170

FUNCTION OF EACH COMPONENT:

A- Solenoid valve P.S. (A-014-9982)

It is an electrically operated valve at 24 V.A.C. Its function is to actuate the two (2) main cylinders, SB-5003, back and forth.

B- Retarder valve (A-151)

Its function is to close temporarily the exhaust. This has for effect to slow the speed of the pins when sitting on the pindeck.

C- Solenoid valve F.S. (A-014-4450)

It is an electrical operator valve at 24 V.A.C. Its function is to actuate the relatch cylinder A-012E.

D- Electronic sensor F.S. (SB-ECL1-325-FS)

It is actuated only when a full set of pins is bowled - it sends a positive signal directly to the electronic control.

E- Electronic sensor P.S. (SB-ECL1-325-PS)

It is actuated when one or more pins are bowled. It sends a positive signal directly to the electronic control.

F- Electronic sensor L.S. (SB-ECL1-325-LS)

It is actuated when the pins reach the full up position P1. Its function is to send a positive signal to the electronic control.

G- Relatch cylinder (A-012-E)

Its function is to relatch all the P-10 and allow a full set of pins to be reset on the deck.

H- Needle valve (A-023)

Its function is to slow down the falling of the pins on the pindeck.

I- Filter regulator (A-170)

Its function are: to control air pressure, filter the air and remove condensation partially.



Québec
Canada

DESCRIPTION :

AIR COMPONENTS

SPÉCIFICATIONS

MODEL 501E

PAR :

ÉCHELLE :

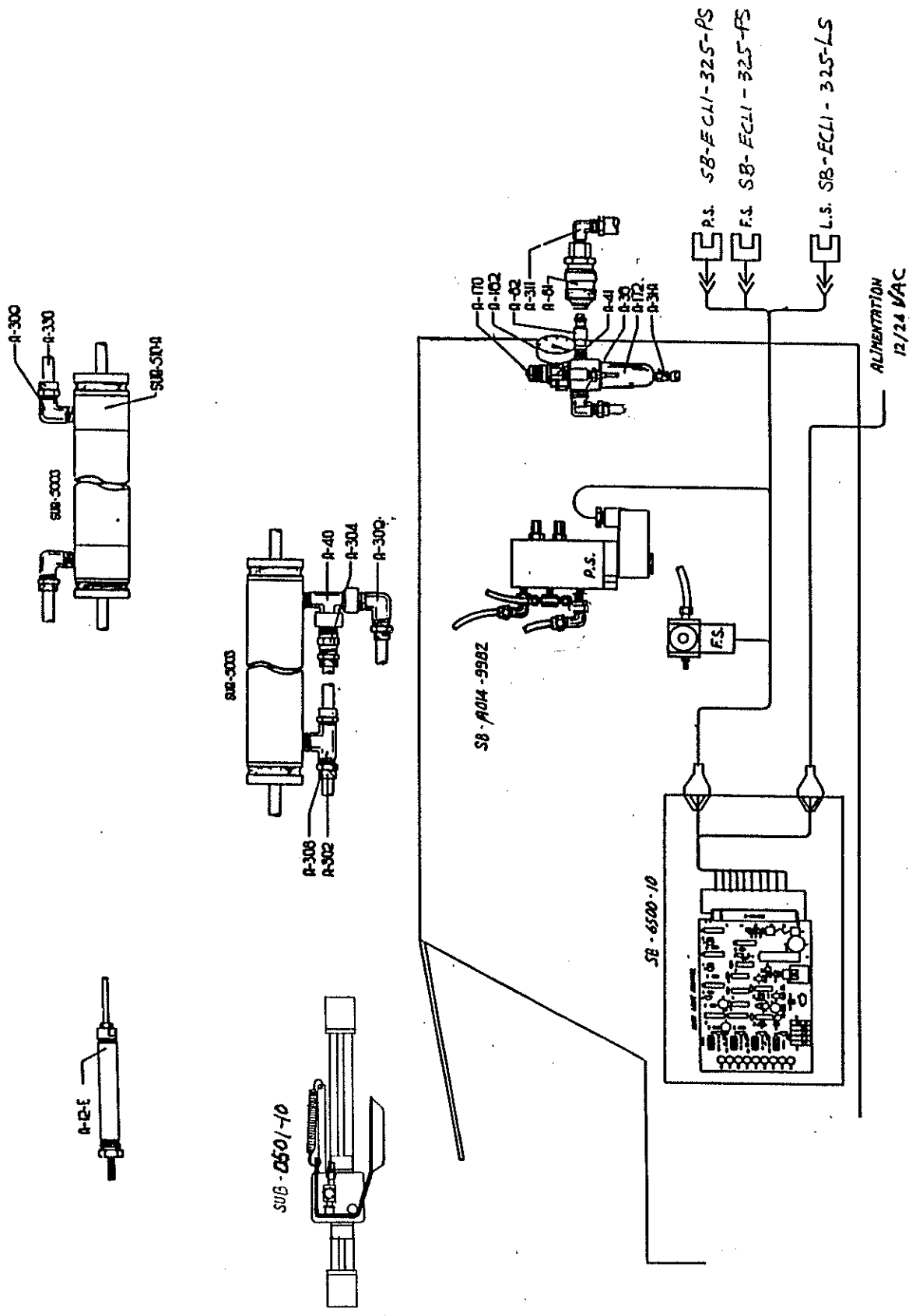
PARTIE No.

VÉR. :

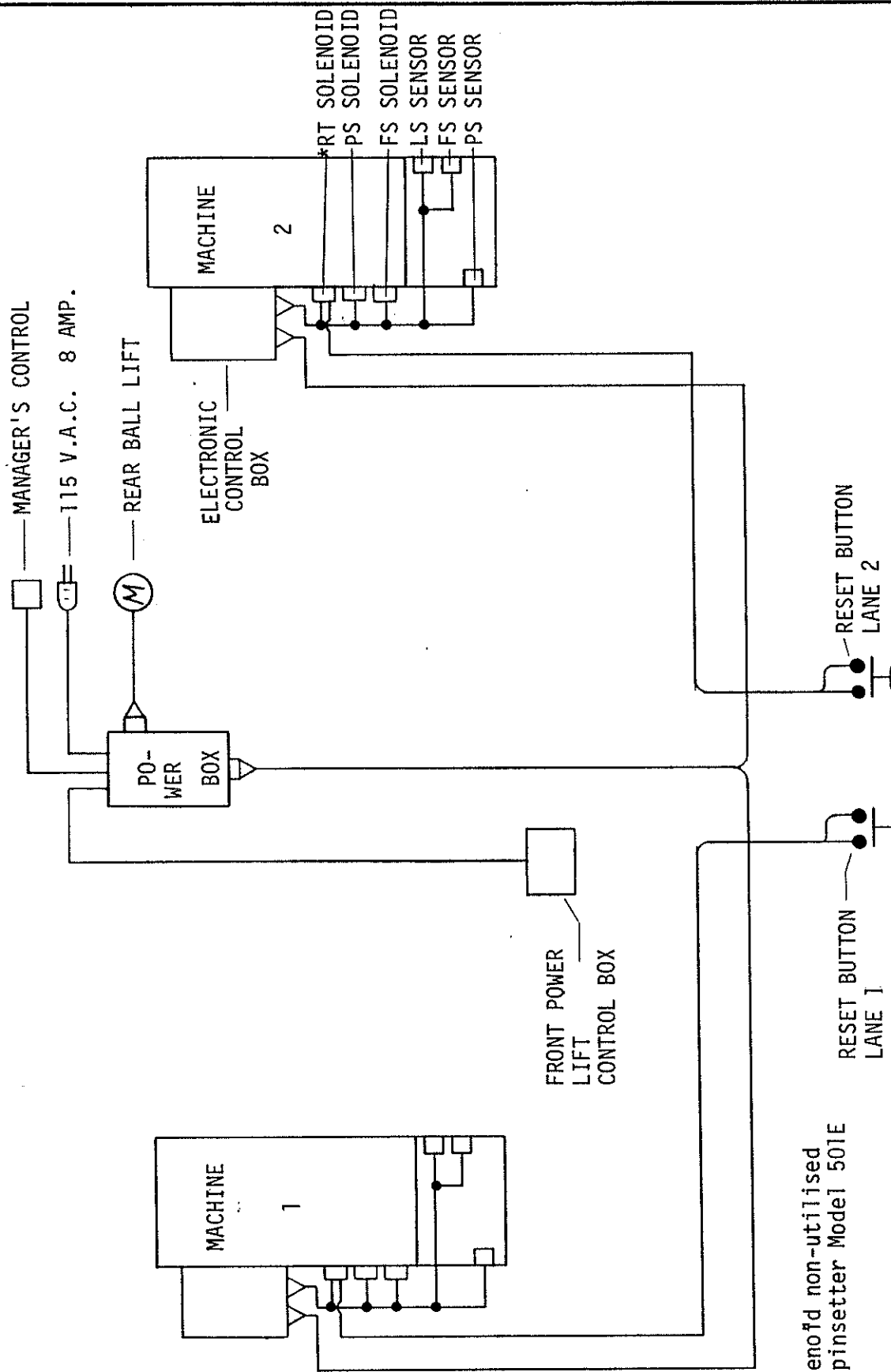
APPR. :

DATE :

6-88



P.S. SB-ECL1-325-PS
F.S. SB-ECL1-325-FS
L.S. SB-ECL1-325-LS



* RT: Solenoid non-utilised
on pinsetter Model 501E

Québec Canada MENDES	DESCRIPTION: GENERAL SCHEMATIC DIAGRAM		SPÉCIFICATIONS MODEL 501E	PAR :	ÉCHELLE :
	VER. :	APPR. : <i>[Signature]</i>	DATE : 6-88	PARTIE No.	EL-501-02

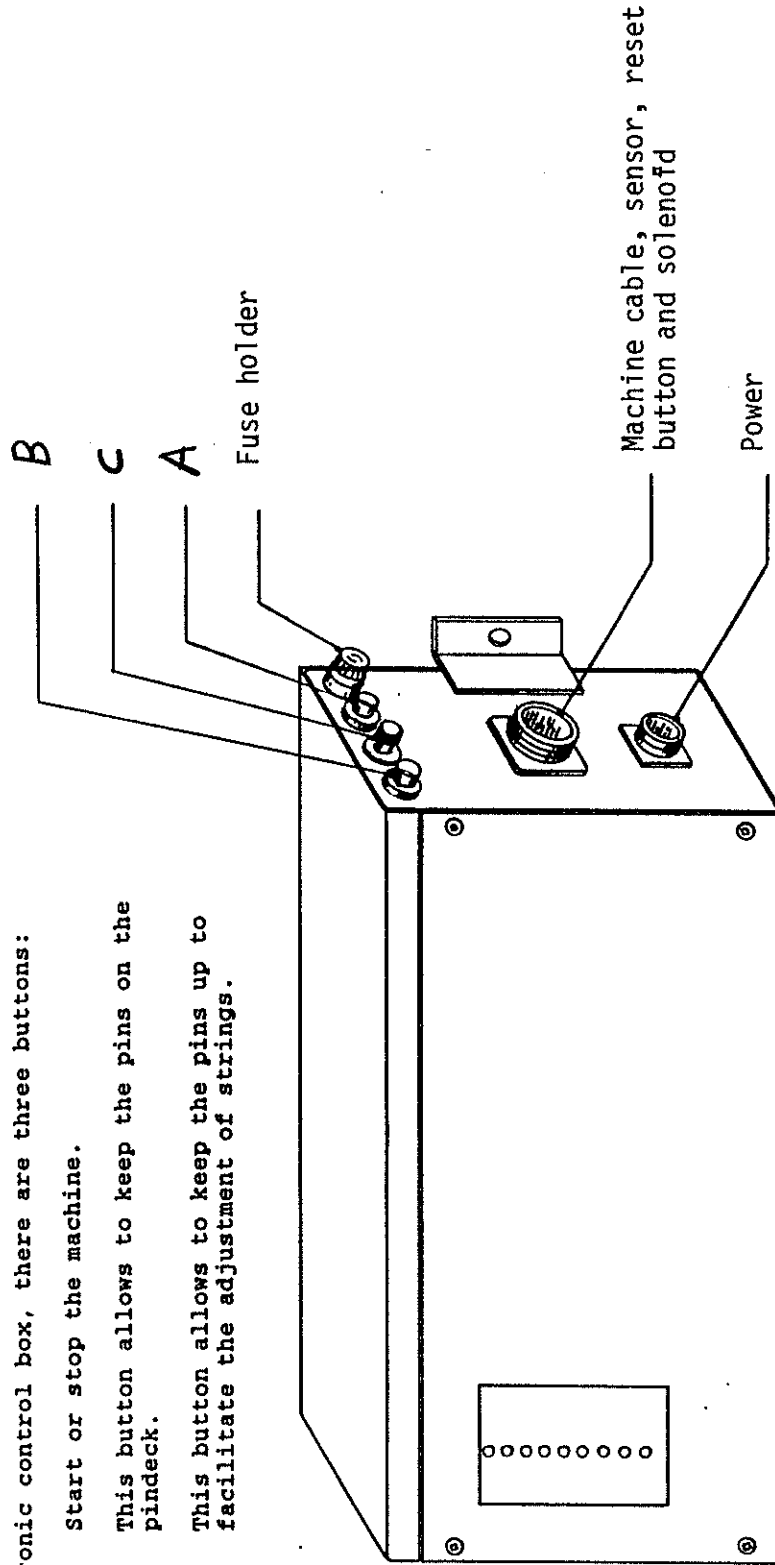
ELECTRONIC CONTROL

MINI-CONTROL BOX: SB-6500-10

All the logical functions of the pinsetter are grouped on the mini-control. One electronic board controls all the functions. Each input and output signals are coupled on a LED which gives ON or OFF lighted signal. This allows to follow the cycle of the machine.

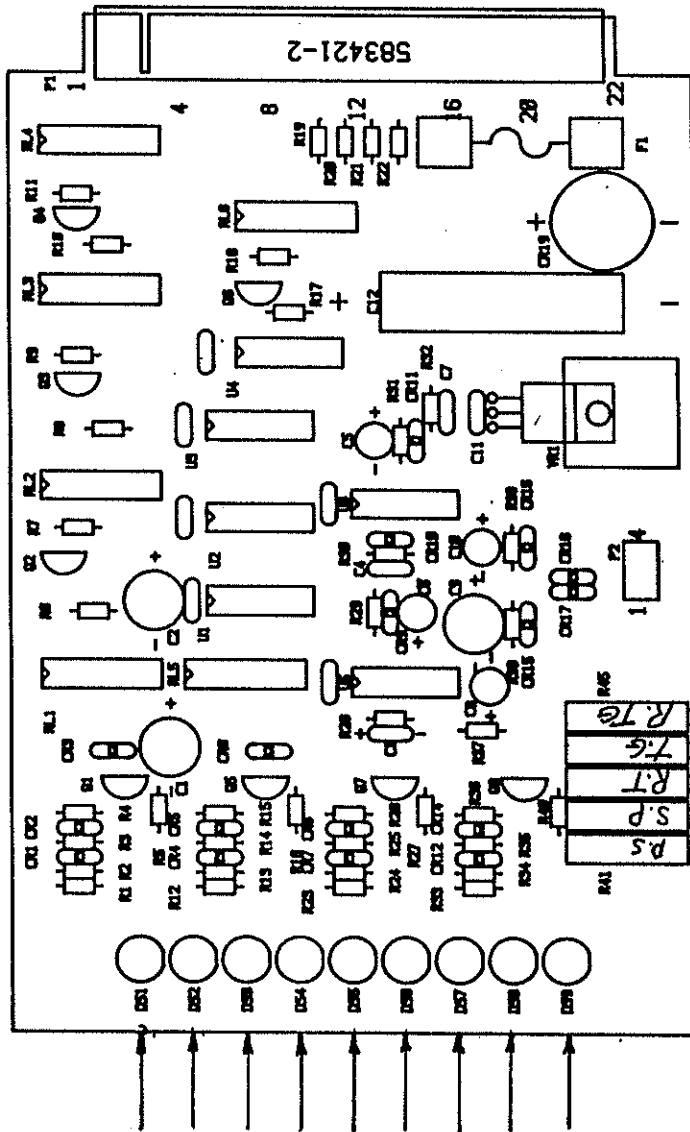
On the electronic control box, there are three buttons:

- A) ON/OFF : Start or stop the machine.
- B) SERVICE: This button allows to keep the pins on the pindeck.
- C) PIN UP : This button allows to keep the pins up to facilitate the adjustment of strings.



	DESCRIPTION :		SPÉCIFICATIONS		PAR :	ÉCHELLE :
	ELECTRONIC CONTROL BOX		MODEL 501E			
VÉR. :		APPR. : <i>LM</i>	DATE : 6-88		PARTIE No. SB-6500-10	

POWER ON
IN F.S.
IN P.S.
OUT F.S.
OUT P.S.
OUT R.T.
OUT N.S.
IN L.S.
IN N.S.



TIMING ADJUSTMENT:

- P.S. - PART SET DELAY 3 sec.
- S.P. - STABILIZER PAUSE 1.5 sec.
- R.T. - RETARDER 2 sec.
- T.G. - P.S. ACTUATING TIME 6 sec.
- R.T.G. - P.S. RELATCH TIME 1.3 sec.

	DESCRIPTION: ELECTRONIC CONTROL DELAY ADJUSTMENT		SPÉCIFICATIONS MODEL 501E		PAR :	ÉCHELLE :
	VÉR. :	APPR. :	DATE : 6-88	PARTIE No. E-MD3-52		

C- ELECTRICAL SYSTEM:

- Compressor:

A proper source of energy is necessary to operate the compressor and the air dryer. The compressor operates on 220 V, single phase or on three phases 208/550 V. The air dryer operates on 115 V.A.C.

- Power box:

Refer to drawing EL-501-08 on page:

A source of energy is required to feed two machines. This system operates at 115 V.A.C. - 60 Hz. The electrical system is designed to serve two machines and the energy required is 8 amperes at 115 V.A.C.

The electrical input of the system is protected by an overload of 5 amperes. A reset protects the ball lift motor.

- Electronic control: (SB-6500-10)

All the logical functions of the machine are controlled by an electronic system composed of interchangeable boards.

LEDs indicate the input signals received from the electronic sensors. The output signals of the solenoids are also coupled to the LEDs to facilitate comprehension of the system.

- Reset button:

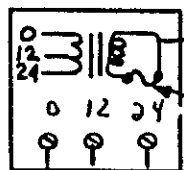
A reset button is installed on the ball rack or the score stand. Its function is to command a new set of pins when needed.

- Manager's control:

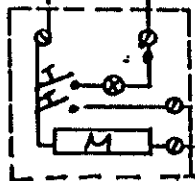
This unit allows the control of the pinsetters at distance.

Each pinsetter has an ON/OFF switch, a pilot-light indicating that the machine is in function and a cycle counter with reset to zero.

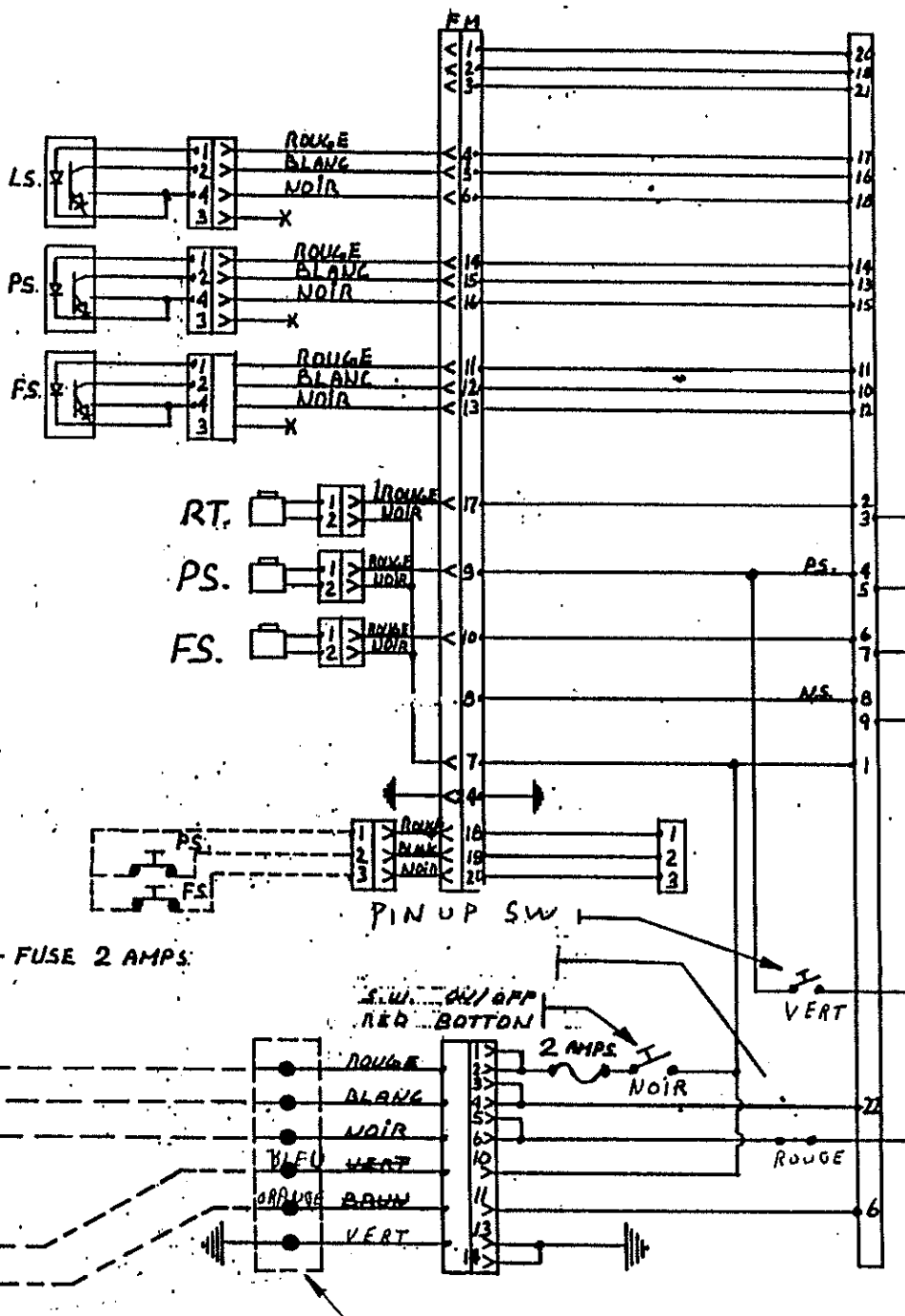
ALIMENTATION
SB-6643-12



FUSE 2 AMPS



MANAGER'S CONTROL
JUNCTION BOX



ÉCHELLE :

PAR :

SPECIFICATIONS

MODEL 501E

PINSETTER WARING DIAGRAM

Québec
Canada



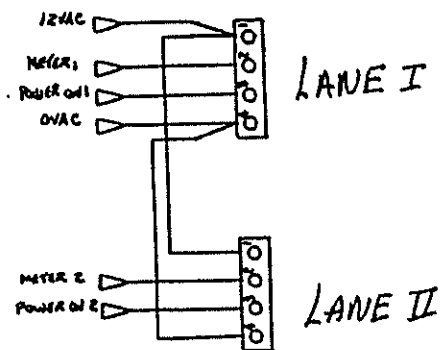
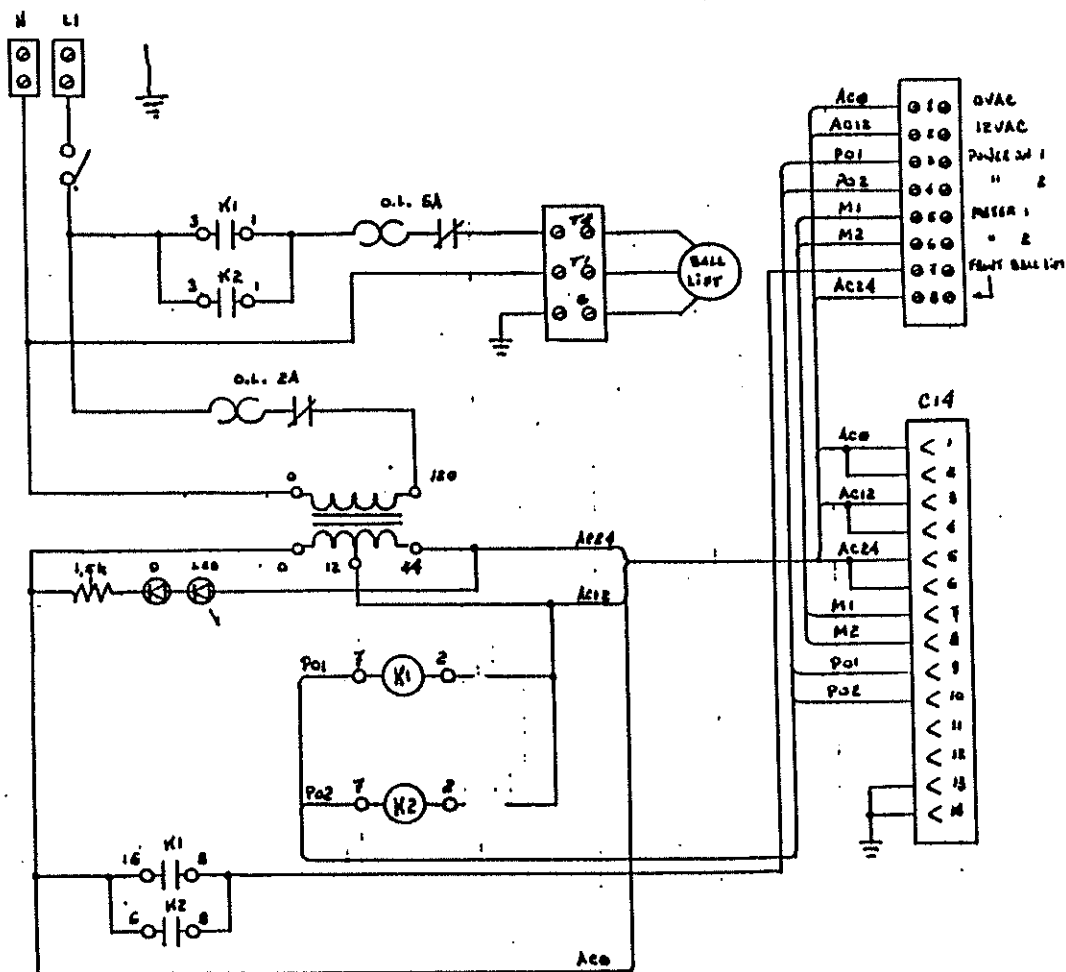
VER. : APPR. : *W.R.* DATE : 06/08

PARTIE No.

EL-501-02-06

ELECTRICAL DIAGRAM SECTION

- 1- General schematic diagram EL-501-02
- 2- Pinsetter wiring diagram EL-501-02-06
- 3- Power box schematic diagram EL-500-02-8
- 4- Cabling of the power box to machines EL-065-32
- 5- Manager's control



MANAGER'S
CONTROL

ÉCHELLE :

PAR :

SPÉCIFICATIONS

MODEL 501E

POWER BOX SCHEMATIC DIAGRAM

Québec
Canada



F-501-02-B

PARTIE No.

DATE: 06/88

APPR: [Signature]

VER. :



DESCRIPTION:

POWER BOX TO MACHINES 1 AND 2

VER. :

APPR. : *AM*

DATE : 06/88

SPECIFICATIONS

MODEL 501E

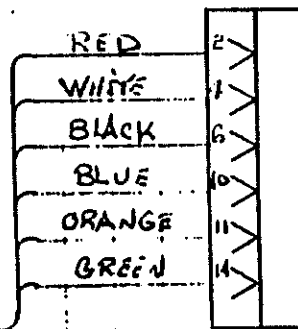
ÉCHELLE :

PAR :

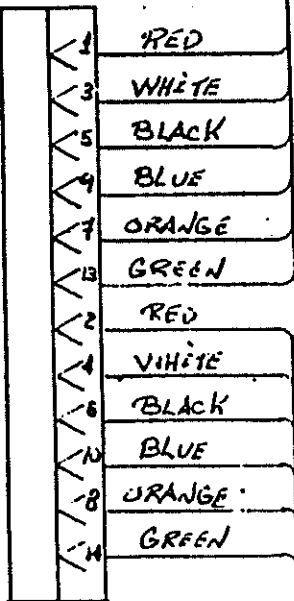
PARTIE NO.

EC-065-32

Plug Machine I → C14

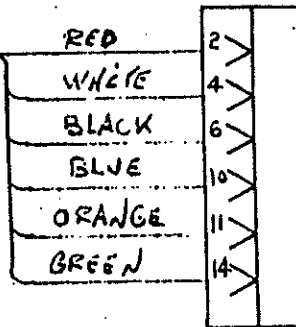


Plug Power Box



7 FEET

Plug Machine II → C14



9 FEET



Québec
Canada

DESCRIPTION :

MANAGER'S CONTROL

VÉR. :

APPR. : *M*

DATE : 05/88

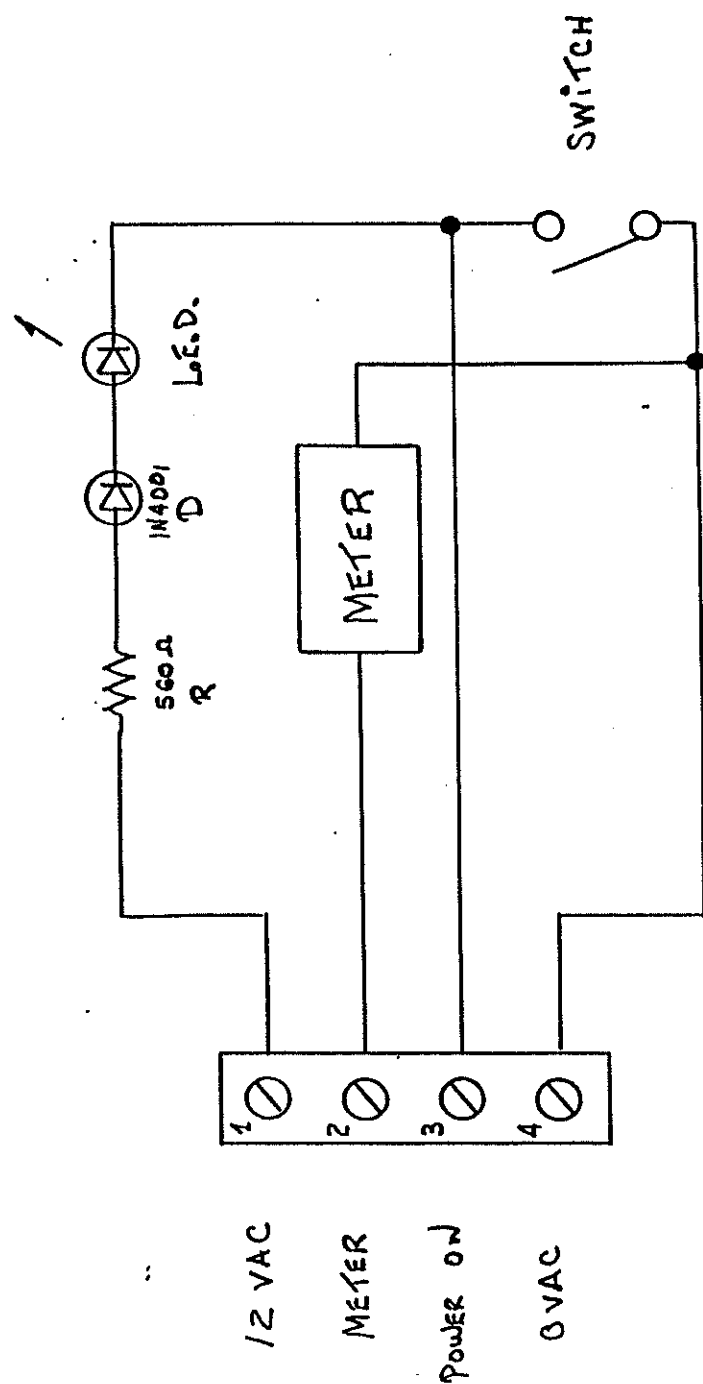
SPÉCIFICATIONS

MODEL 501E

PAR :

ÉCHELLE :

PARTIE No.



12 VAC

METER

POWER ON

0 VAC

3- ADJUSTMENTS: (Pinsetter)

A- PRELIMINARIES:

Before proceeding with any adjustments, please make sure that:

- 1) Manager's Control is ON. (Option).
- 2) Proper pressure feeds the machine at least 100 P.S.I. for the Fivepin and 125 P.S.I. for the Duckpin. The standard gauge on the compressor will tell you.
- 3) LEDs on the mini-control are lighted up.
- 4) Compressed air pressure is adjusted at 85 P.S.I. when coming into each and every machine.
- 5) Proper power feeds the ball lifts.

B- FUNDAMENTALS:

Never forget your pinsetter is a string machine. Its good operation is related to the proper length of the string. All the mechanism of the machine is being adjusted according to the right length of the string. Any variation in the length of the cord caused by humidity or stretching is sufficient to trouble the system.

The Quality Control Department of the manufacturer took very good care to ship you a machine that was:

- a) completely adjusted
- b) field tested
- c) checked before shipment (ref. sheet control)

C- BASIC ADJUSTMENTS:

Before beginning the adjustments, make a pin fall down that the machine will make a complete cycle.

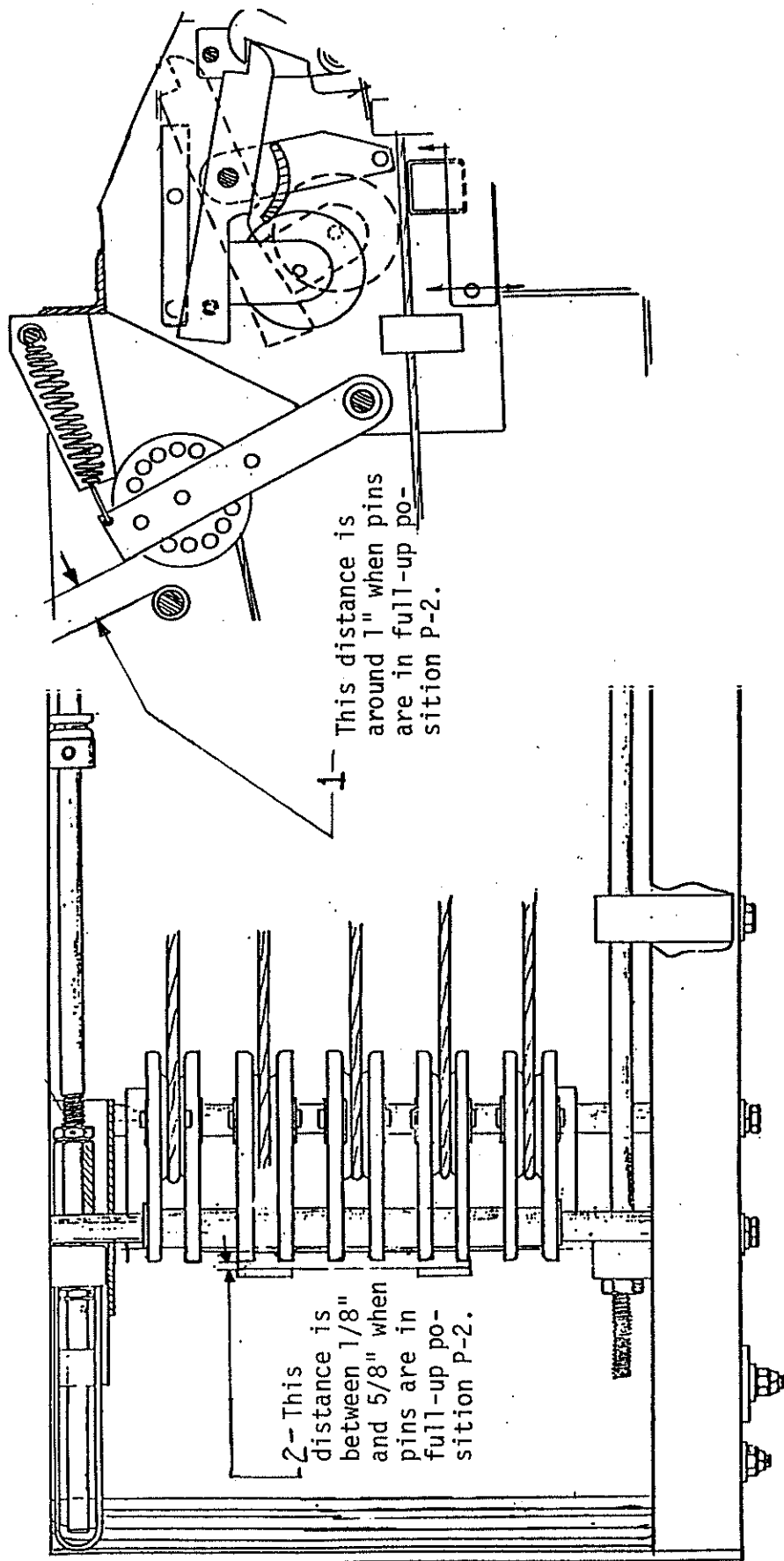
- check once more if the pressure is normal;
- check if the strings have all passed at the right place.

If the drawbar cannot reach the D-2 position, proceed to the adjustment of the strings.

Before proceeding to the mechanical adjustments, be sure that the electronic control is well adjusted and the electronics sensors are at the good position as shown on diagram MEA-35-07.

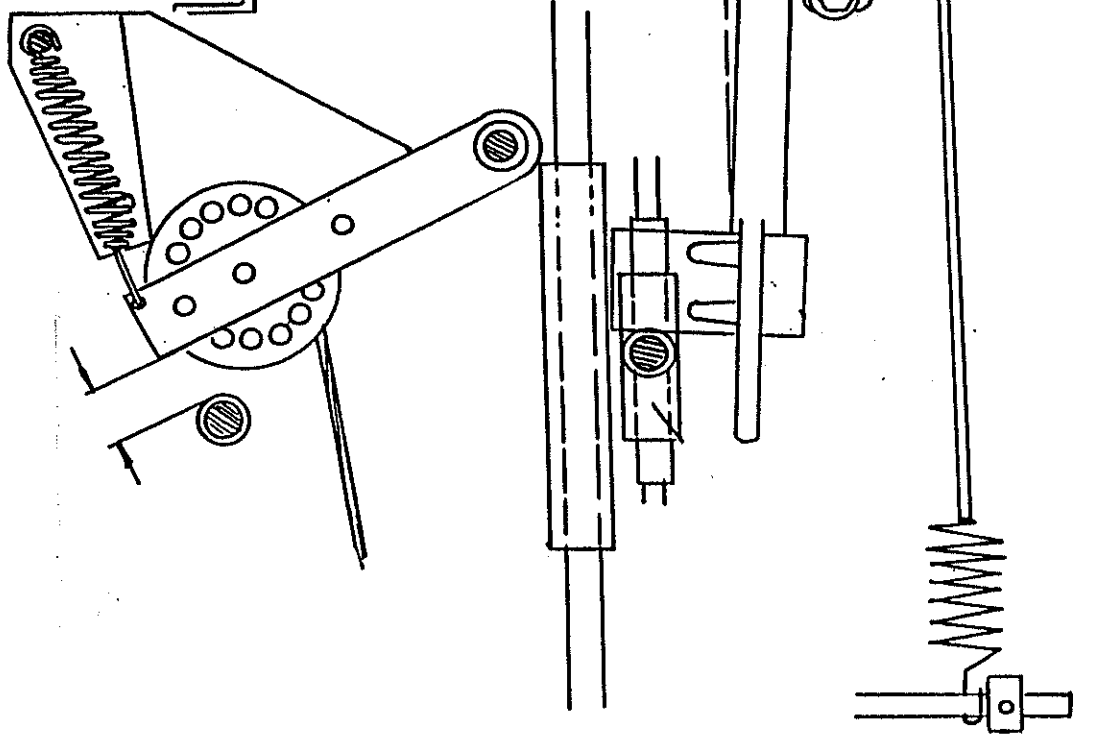
NOTICE: Before beginning the mechanical adjustments, you have to make sure of the following points:

- 1) That the manometer indicates the right pressure;
 - 2) That the pindeck is in P-1 position, ready to bowl position;
-
- A) Adjustment no 1: String adjustment
Refer to diagram # MEA-35-01
 - B) Adjustment no 2: CAMS adjustment
Refer to diagram # MEA-35-02
 - C) Adjustment no 3: Full set bar adjustment
Refer to diagrams # MEA-35-03A
MEA-35-03B
 - D) Adjustment no 4: Release bar adjustment
Refer to diagram # MEA-35-04
 - E) Adjustment no 5: Fingers' adjustment
Refer to diagrams # MEA-35-05A
MEA-35-05B
 - F) Adjustment no 6: Brakes' adjustment
Refer to diagram # MEA-35-06
 - G) Adjustment no 7: Sensors' adjustment
Refer to diagram # MEA-35-02
 - H) Adjustment no 8: Adjustment for placing pins on the pindeck
Refer to diagram # MEA-40-10



Adjust strings with the reel "A" to obtain drawbar position as shown on # 2 and the reel "A" position as shown on # 1.

	DESCRIPTION : STRINGS ADJUSTMENT		SPÉCIFICATIONS MODEL 501E		PAR :	ÉCHELLE :
	VÉR. :	APPR. : <i>LM</i>	DATE : <i>06/08</i>	PARTIE No. <i>MEA-35-01</i>		



1. Cam "A" is positioned this way when drawbar "B" is positioned at D-1 - Ready to Bowl position.
Loosen hexagonal screws - move part "C" so the cam be oblique with the reference point.

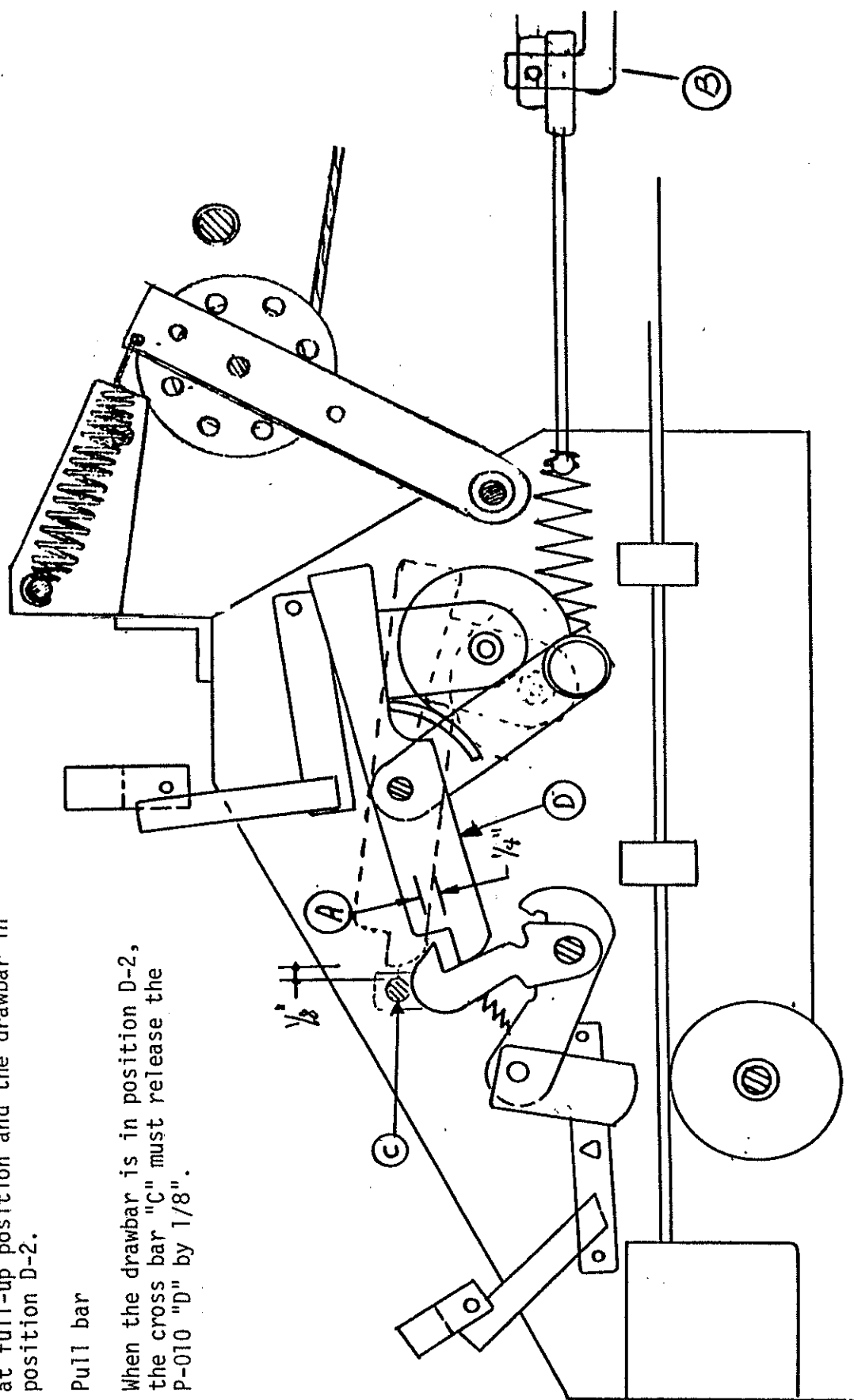
NOTE: This adjustment must be done when the machine is in the Ready to Bowl position.

 Qu�bec Canada	DESCRIPTION : CAM ADJUSTMENT		SP�CIFICATIONS MODEL 501E		PAR : �CHELLE :
	V�R. :	APPR. : <i>Labr</i>	DATE : <i>06-88</i>	PARTIE No. <i>MEA-35-Q2</i>	

A. The distance is 1/4" (7mm) when pins are at full-up position and the drawbar in position D-2.

B. Pull bar

C. When the drawbar is in position D-2, the cross bar "C" must release the P-010 "D" by 1/8".



Québec
Canada

DESCRIPTION :

FULL SET ADJUSTMENT

SPÉCIFICATIONS

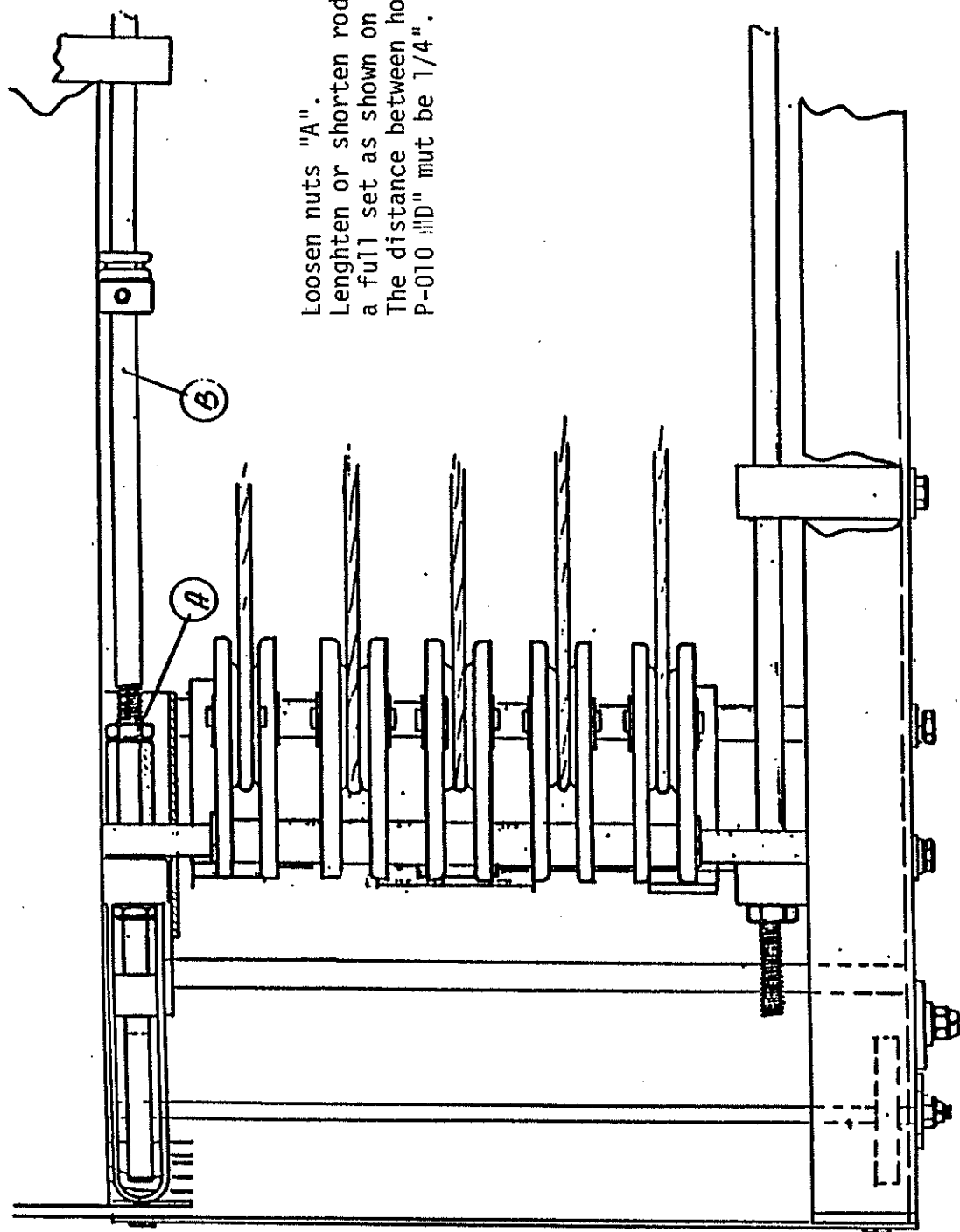
MODEL 501E

PAR : ÉCHELLE :

PARTIE No.

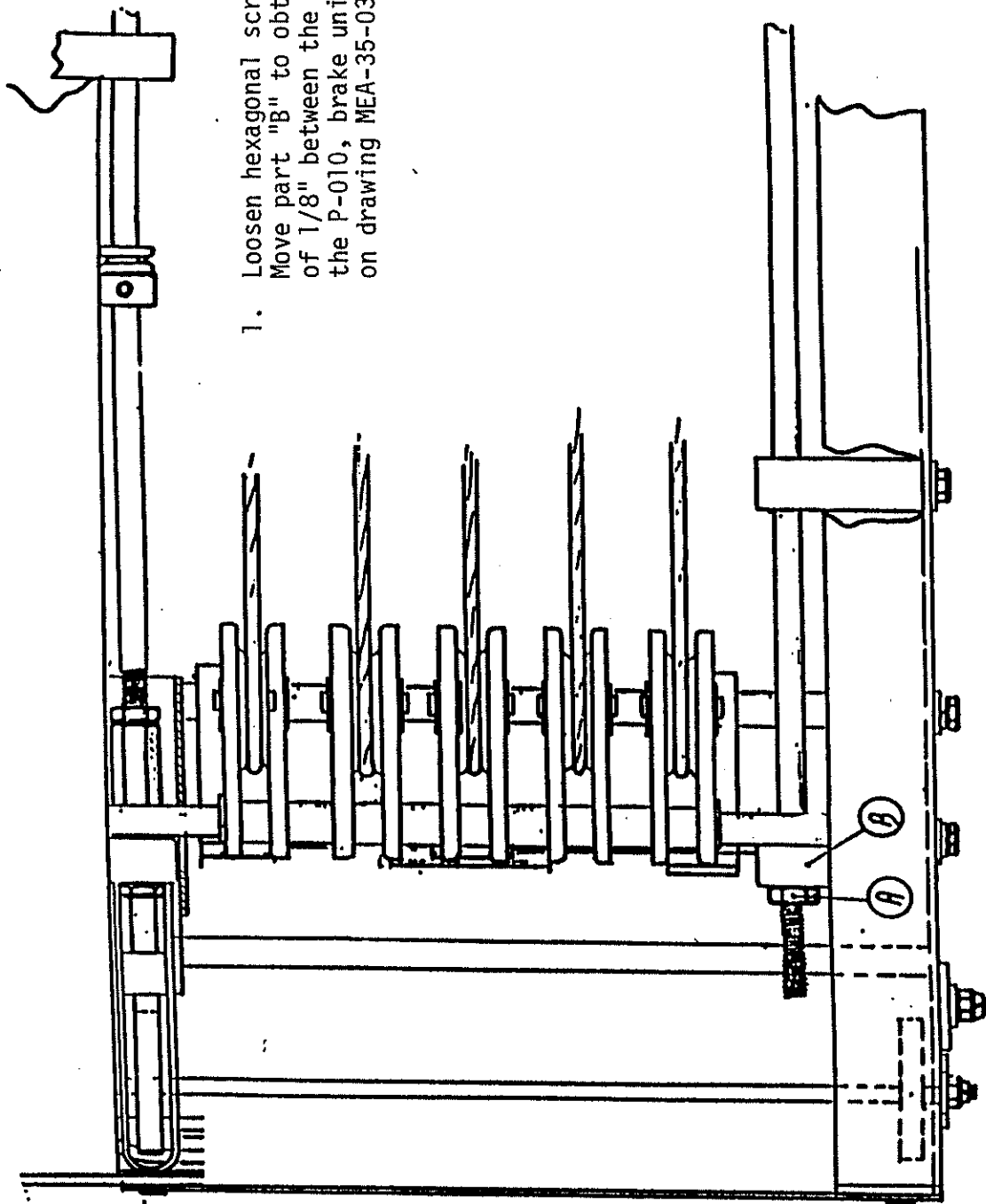
MEA-35-03A

VÉR. : APPR. : *LAL* DATE : *26-88*



Loosen nuts "A".
 Lengthen or shorten rod "B" to obtain
 a full set as shown on diagram MEA-35-03A.
 The distance between hook and finger
 P-010 "D" must be 1/4".

 Québec Canada	DESCRIPTION : ADJUSTMENT - FULL SET BAR VÉR. : APPR. : <i>Me</i> DATE : 06-88	SPÉCIFICATIONS MODEL 501E	PAR :	ÉCHELLE :
			PARTIE No. MEA-35-03B	

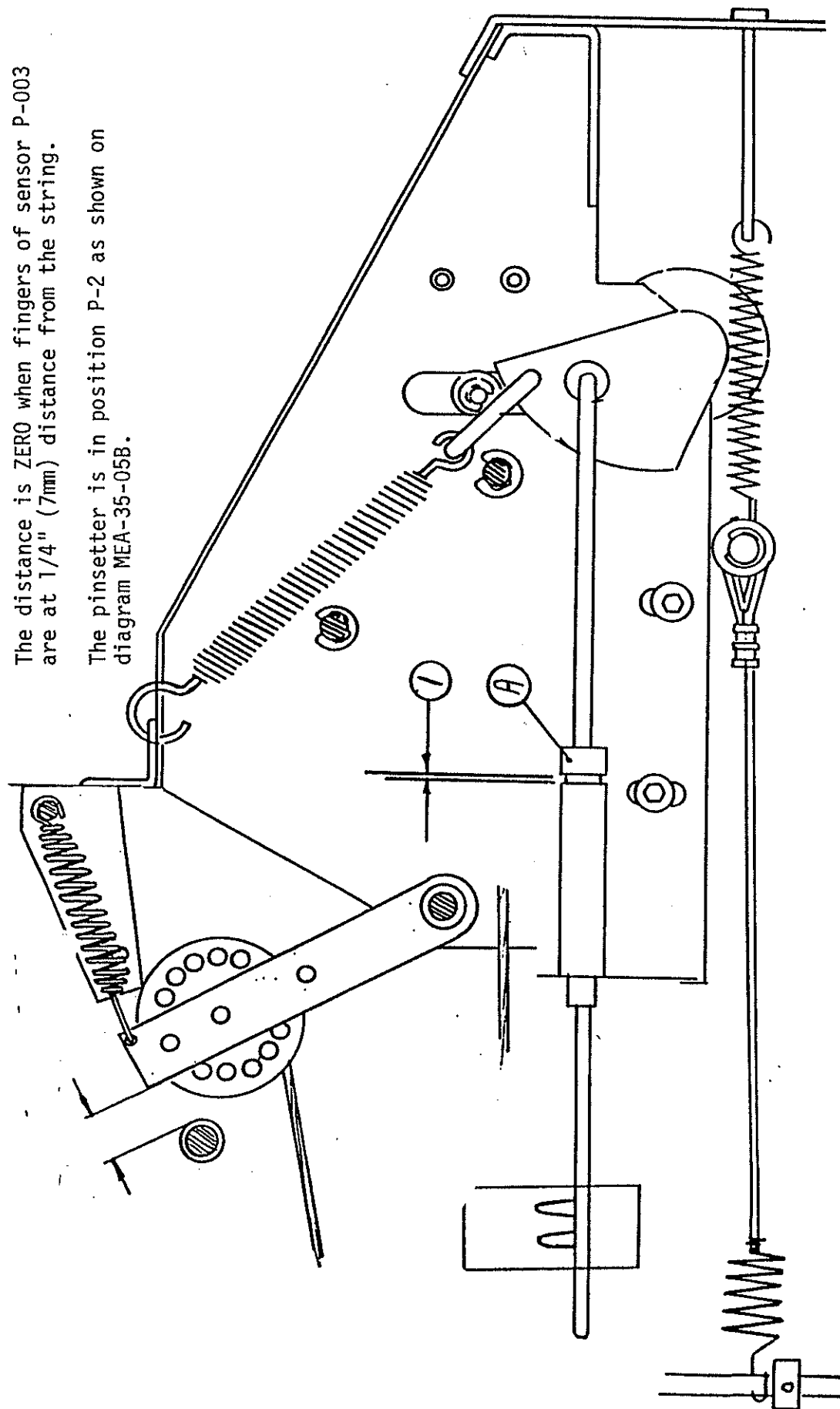


1. Loosen hexagonal screw "A".
Move part "B" to obtain a clearance of 1/8" between the cross bar and the P-010, brake unit "D" as shown on drawing MEA-35-03A.

 Québec Canada MENDES	DESCRIPTION: ADJUSTMENT - RELEASE BAR	SPÉCIFICATIONS MODEL 501E	PAR :	ÉCHELLE :
	VÉR. :	APPR. : <i>[Signature]</i>	PARTIE No. MEA-35-04	

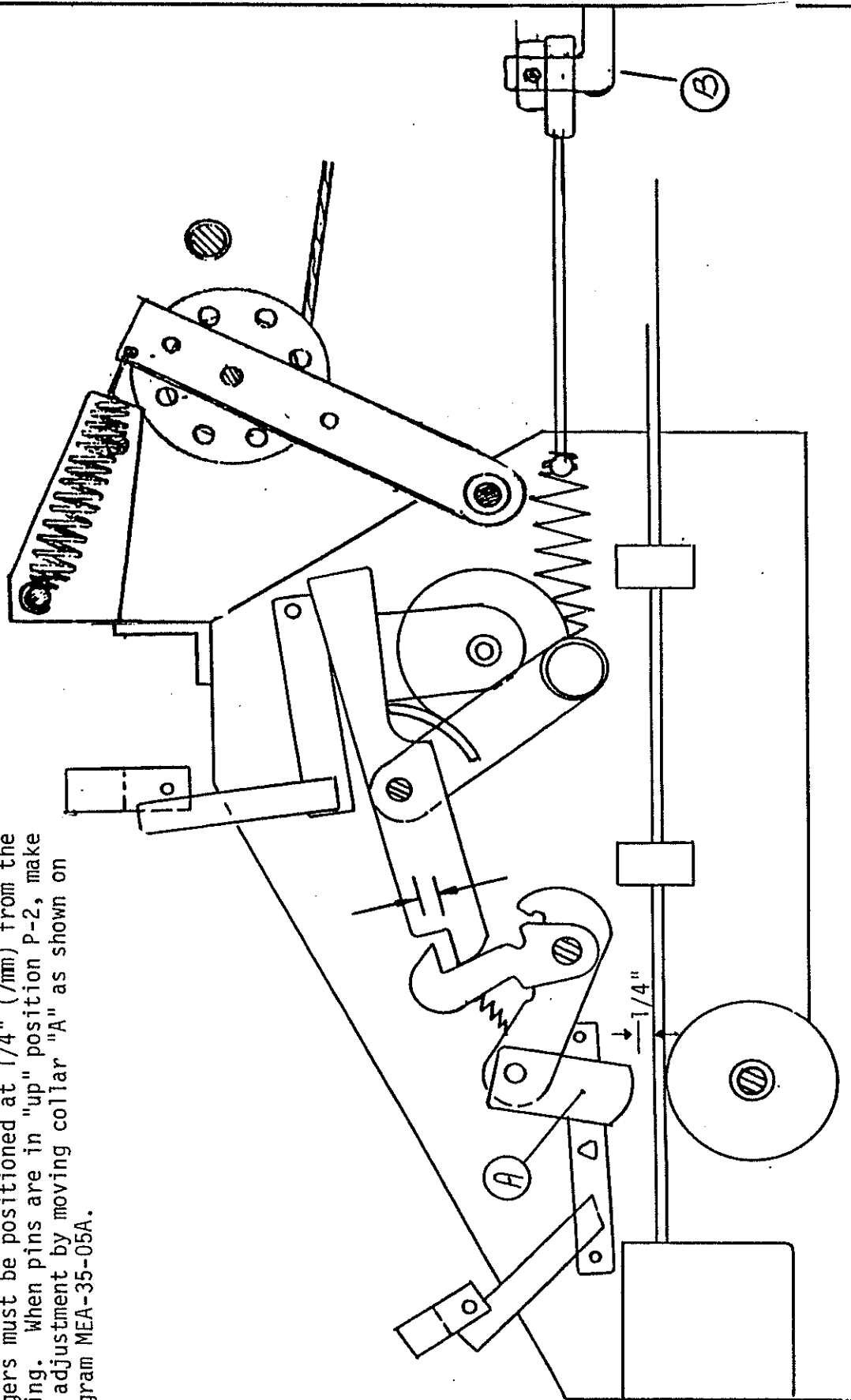
The distance is ZERO when fingers of sensor P-003 are at 1/4" (7mm) distance from the string.

The pinsetter is in position P-2 as shown on diagram MEA-35-05B.



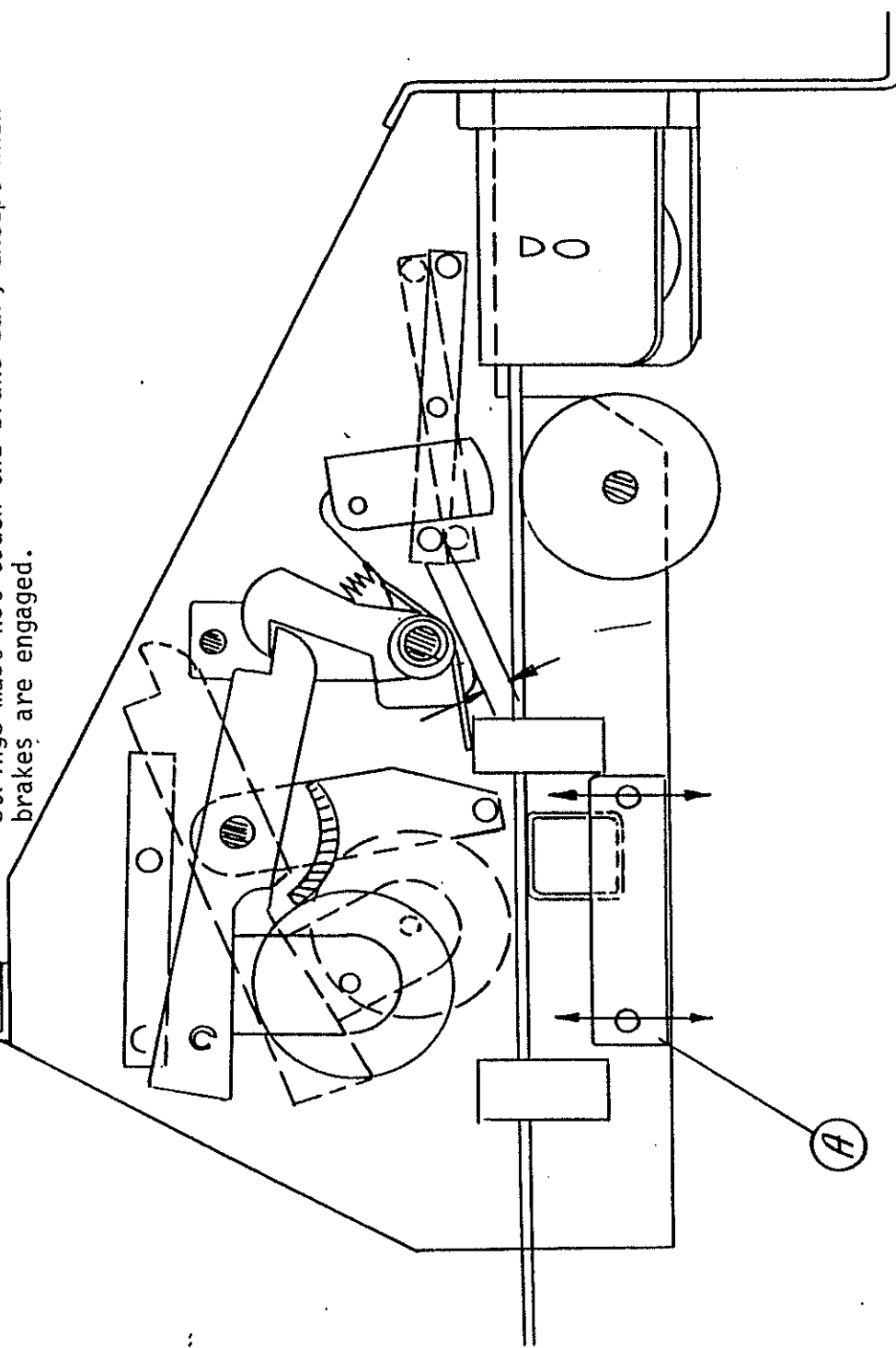
 Québec Canada	DESCRIPTION : ADJUSTMENT - FINGERS P-003 VÉR. : APPR. : <i>Loise</i> DATE : <i>06-88</i>	SPÉCIFICATIONS MODEL 501E	PAR :	ÉCHELLE :
			PARTIE No. MEA-35-05A	

Fingers must be positioned at 1/4" (7mm) from the string. When pins are in "up" position P-2, make the adjustment by moving collar "A" as shown on diagram MEA-35-05A.

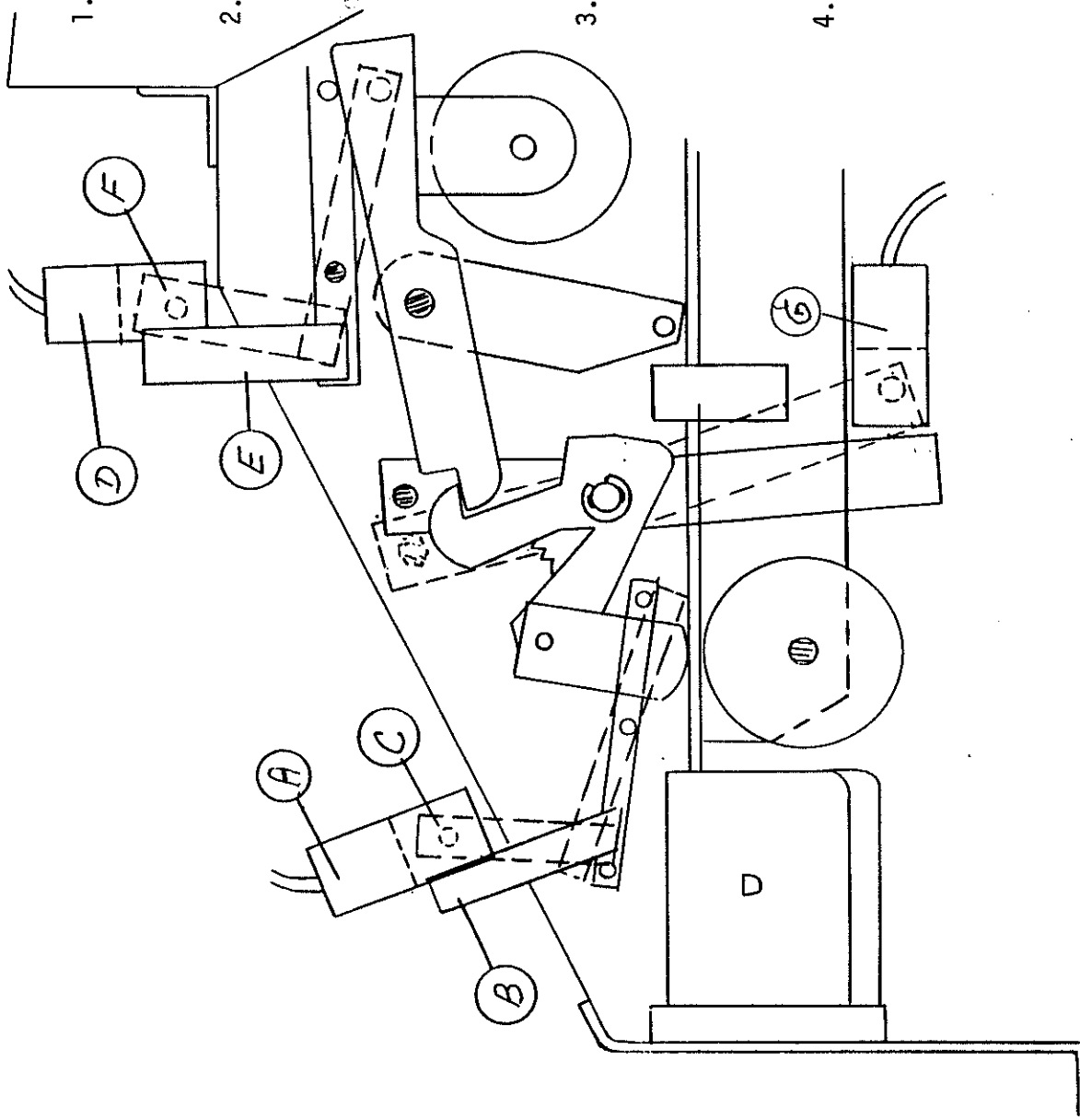


 Qu�bec Canada MENDES	DESCRIPTION : ADJUSTMENT - FINGERS P-003	SP�CIFICATIONS MODEL 501E	PAR : PARTIE No.	�CHELLE : MEA-35-05B
	V�R. : APPR. : <i>W</i> DATE : 26-88			

To adjust brakes, move brake bar "A" upward or downward, till you reach at a good brakeage action. Strings must not touch the brake bar, except when brakes are engaged.



	DESCRIPTION: BRAKE ADJUSTMENT		SPÉCIFICATIONS MODEL 501E		PAR :	ÉCHELLE :
	VÉR. :	APPR. : <i>[Signature]</i>	DATE : 6-88	PARTIE No. MEA-35-06		



1. When the pinsetter is in P-1-Ready to Bowl position - windows of the 3 electrical sensors "A", "D" and "G" are not obstructed.
2. PART SET SWITCH:
When a pin is falling, lever "B" is moving to "C" position. The lever obstructs the electronic sensor "A". To adjust, move sensor "A" so it is obstructed before the end of the lever run. An electronic control LED lights on when the window of the sensor is obstructed by the lever.
3. FULL SET:
When all the pins are fallen, lever "E" is moving to function "F". The lever obstructs the window of the electronic sensor "D". The adjustment is made the same way as # 2.
4. END OF RUN:
When the drawbar is in position D-2, it impedes the pull bar run, which, at the end of the run, actuates the "Electronic Sensor G". For adjustment, follow same procedure as # 2.

	DESCRIPTION: ADJUSTMENT OF SENSORS FS-PS-LS	SPÉCIFICATIONS MODEL 501E	PAR :	ÉCHELLE :
			PARTIE No.	MEA-35-07
VÉR. :	APPR. :	DATE : 06-08		

4- ADJUSTMENTS: (Ball lift)

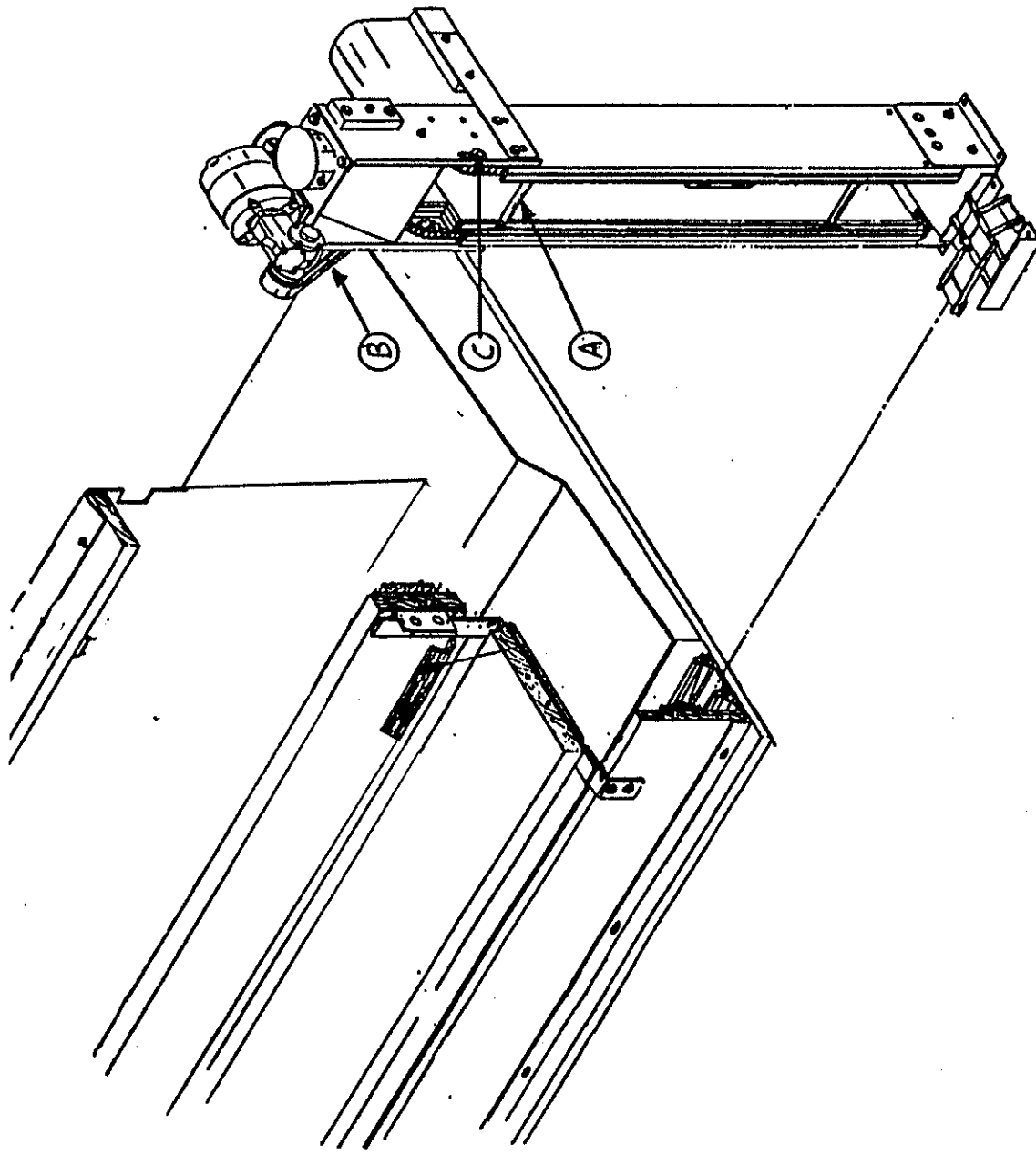
The ball lift is a simple system based on a conveyor principle. It works with a reducer motor 1/20, 115V. Chains are guided by plastic slides sturdy to wearing.

BALL LIFT AND EZ-LUSTER BALL POLISHER INTEGRATED:

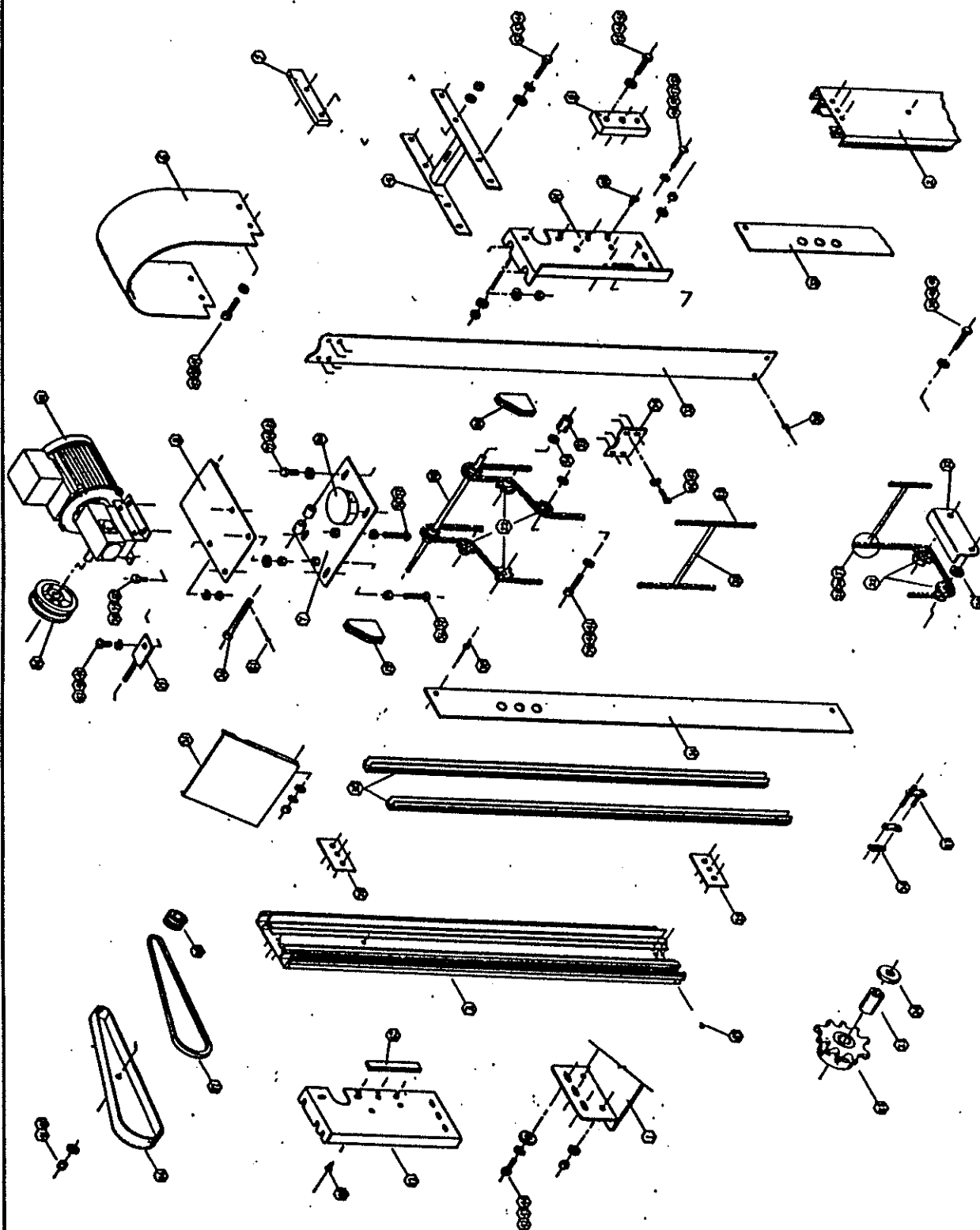
The ball lift is identical except that the motor is also actuating the ball polisher. Moreover, a mechanism allows each ball to remain longer than six (6) seconds in the polisher.

The belt tension must be adjusted so that "A" bars, which lift up the balls, reach 10 lbs (4.6kg) of pulling.

To adjust, settle tension with bolt "B".



 Québec Canada MENDES	DESCRIPTION: BALL LIFT ADJUSTMENT	SPÉCIFICATIONS MODEL 501E	PAR :	ÉCHELLE :
			PARTIE No.	MEA- 31-01
VÉR. :	APPR. : <i>[Signature]</i>	DATE : 6-88		



SPÉCIFICATIONS

MODELES: HD-35
HF-45
501E

ÉCHELLE:

PAR:

PARTIE No.

31-850404-20

DESCRIPTION:

REAR BALL LIFT

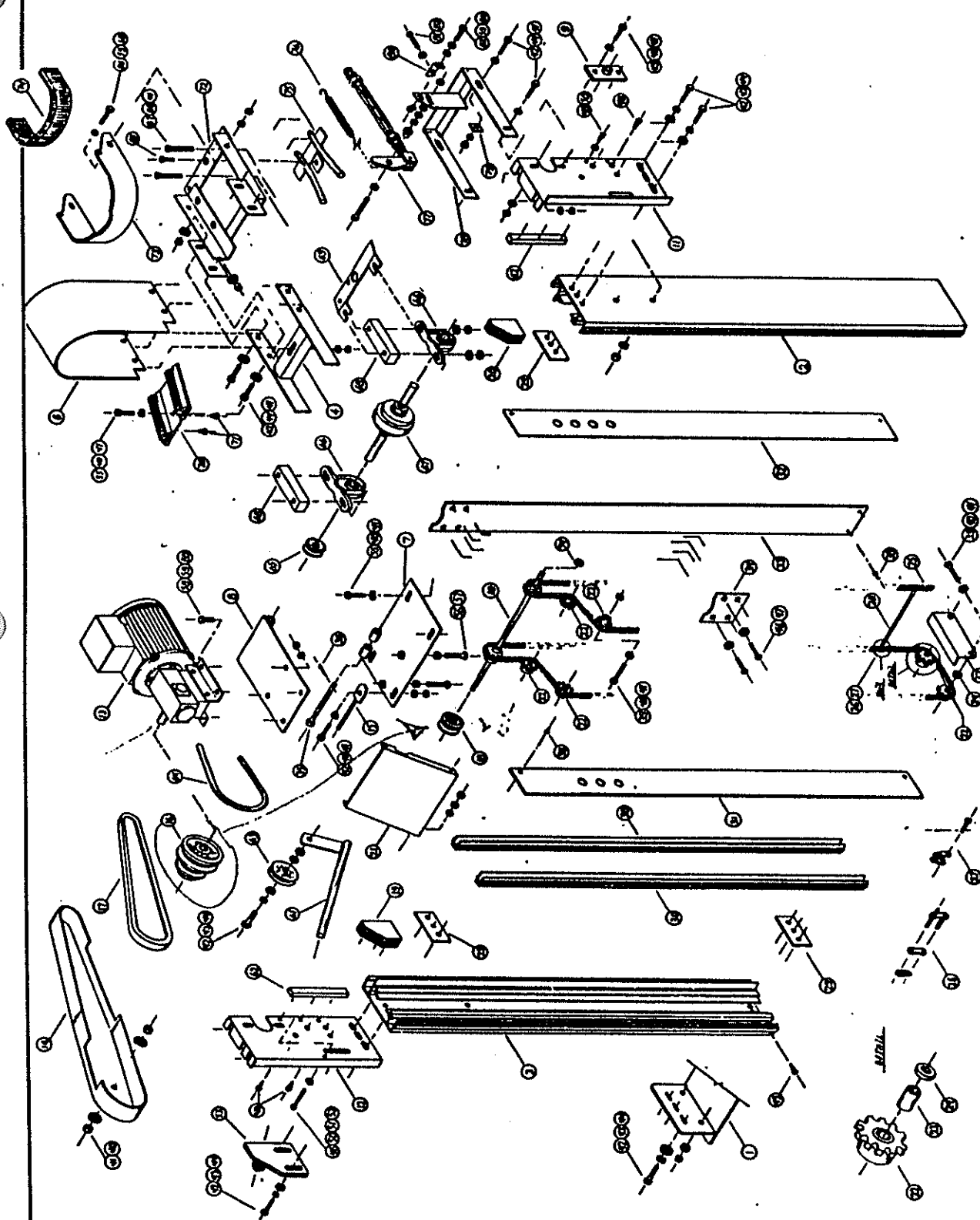
Québec
Canada



DATE: 2-8-88

APPR: *M*

VÉR.:



 Québec Canada MENDES	DESCRIPTION: REAR BALL LIFT		PAR:		ÉCHELLE:
	VÉR.:	APPR.: <i>Feb</i>	DATE: 2-8-88	MODÈLES: HD-35 HF-45 200E 501E	
			PARTIE No.		31-850404-30

MATERIAL LIST

CONVENTIONAL BALL LIFT DUCK AND FIVE PIN

31-850404-20

<u>CODE NO</u>	<u>INDEX</u>	<u>DESCRIPTION</u>
M-0700-11	1	BALL LIFT BASE
M-0700-02-04	2	MAIN SIDE PLATE RIGHT
M-0700-02-07	3	MAIN SIDE PLATE LEFT
M-0700-05	4	BALL LIFT BRIDGE
50W-0700-10	5	BRIDGE SPACER
P-700-13	6	OUTSIDE BALL GUARD
M-0700-08	7	TOP HEAD PLATE
M-0700-09	8	MOTOR DRIVE PLATE
M-0700-67	9	STEEL BEARING BLOC
M-0700-07	10	DRIVE SHAFT ASSY.
M-0700-04-04	11	HEAD SIDE PLATE RIGHT
M-0700-04-07	12	HEAD SIDE PLATE LEFT
E-0670-02	13	REDUCER LEROY SOMMEUR
E-550	13A	JUNCTION BOX
P-700-14	14	PULLEY GUARD
M-0680-24	15	IDLER TENSIONER
M-0700-21	16	50X 1/2" M.A. PULLEY
R-0700-01	17	280 V 4 L BELT
M-0700-22	18	2 3/4X1/2" M.A. PULLEY
50W-0700-07	19	TOP SPROCKET GUARD LEFT
50W-0700-04	20	TOP SPROCKET GUARD RIGHT
M-0700-06	21	HAND GUARD
M-0700-10	22	40B10 IDLER SPROCKET
M-0700-10-01	23	1/2X.753X3/4" OILITE
M-0700-10-02	24	STEEL BEARING
M-0700-13	25	#40X30 1/2" MAIN CHAIN
M-0700-14	26	#40 LINK EXTENDED PIN
M-0700-15	27	#40 HALF LINK
M-0700-27	28	CROSS CHAIN TRAVEL SHAFT
M-0700-12	29	MOUNT.PLATE FOR HEAD&BASE
P-700-15	30	CHAIN GUIDE
P-700-11-07	31	LEFT SIDE PROTECTOR
P-700-11-04	32	RIGHT SIDE PROTECTOR
P-700-12	33	INSIDE REAR PROTECTOR
P-700-10	34	TOP REAR GUIDE
M-0700-18	35	INSIDE RAILING
M-0700-16	36	PIVOT PIN
M-0700-17	37	SPROCKET GUARD
H-033B	38	1/8"X1/2 POP RIVET
H-039	39	5/16"18X1 3/4"H.H.BOLT
H-022	40	5/16" I.D.FLAT WASH.
H-080	41	5/16-18 HEX.NYLOCK NUT
H-042B	42	5/16"-18X1 H.H. BOLT
H-096	43	5/16"LOCK WASH
M-0166	44	5/16"SPEC.FLAT WASH.
H-072-16	45	3/8"#6 R.H.WOOD SCW
H-052R	46	10-32X3/4R.H.SOCK.SCW
H-024B	47	3/4"O.D.X3/16"I.D.WASH.

MATERIAL LIST

CONVENTIONAL BALL LIFT DUCK AND FIVE PIN

31-850404-20

<u>CODE NO</u>	<u>INDEX</u>	<u>DESCRIPTION</u>
H-072-19	48	#8X1/2 R.H.SOCK.TRUSS SCW
H-040	49	5/16"-18X1/2"H.H.BOLT
H-024	50	3/16"I.D.FLAT WASH.
H-085	52	10/32"HEX. NUT.
H-026	54	1/2"I.D.FLAT WASH.
H-042	55	5/16"-18X3/4"H.H.BOLT
H-052-36	56	5/16"-18X2"R.H.MACH.SCW
H-085-5	57	5/16"-18 HEX.KEP NUT
H-046	58	1/4"-20X1"H.H.BOLT
H-023	59	1/4"I.D.FLAT WASH.
H-044	60	1/4"-20 HEX.NYLOCK NUT
H-035F	61	3/32" CUTTER PIN
P-700-16	62	PLASTIC GUIDE

MATERIAL LIST

CONVENTIONAL BALL LIFT DUCK AND FIVE PIN

31-850404-30

<u>CODE NO</u>	<u>INDEX</u>	<u>DESCRIPTION</u>
M-0700-11	1	BALL LIFT BASE
M-0700-02-04	2	MAIN SIDE PLATE RIGHT
M-0700-02-07	3	MAIN SIDE PLATE LEFT
M-0700-05	4	BALL LIFT BRIDGE
P-700-13	6	OUTSIDE BALL GUARD
M-0700-08	7	TOP HEAD PLATE
M-0700-09	8	DRIVE PLATE
M-0700-67	9	STEEL BEARING BLOC
M-0700-07	10	DRIVE SHAFT ASSY.
M-0700-04-04	11	HEAD SIDE PLATE RIGHT
M-0700-04-07	12	HEAD SIDE PLATE LEFT
E-0670-02	13	DRIVE MOTOR 110V.-60HZ
P-700-63	14	PULLEY GUARD
M-0680-24	15	IDLER TENSIONER
M-0700-21	16	50X 1/2" M.A. PULLEY
R-700-01	17	V 2280 BELT
M-0700-24	18	DOUBLE PULLEY 2MB33L
50W-0700-07	19	TOP SPOCKET GUARD LEFT
50W-0700-04	20	TOP SPOCKET GUARD RIGHT
M-0700-06	21	HAND GUARD
M-0700-10	22	40B10 IDLER SPOCKET
M-0700-10-01	23	1/2"X.753X3/4" BUSHING
M-0700-10-02	24	STEEL BEARING
M-0700-13	25	#40X30 1/2" MAIN CHAIN
M-0700-14	26	340 LINK EXTENDED PIN
M-0700-15	27	#40 HALF LINK
M-0700-27	28	CROSS CHAIN TRAVEL SHAFT
M-0700-12	29	MOUNT.PLATE FOR HEAD&BASE
P-700-15	30	CHAIN GUIDE
P-700-11-07	31	LEFT SIDE PROTECTOR
P-700-11-04	32	RIGHT SIDE PROTECTOR
P-700-12	33	INSIDE REAR PROTECTOR
P-700-10	34	TOP REAR GUIDE
M-0700-16	35	PIVOT PIN
H-035F	36	3/32" CUTTER PIN 1"LONG
M-0700-17	37	SPOCKET GUARD
H-039	39	5/16"18X1 3/4"H.H.BOLT
H-022	40	5/16" I.D.FLAT WASHER
H-080	41	5/16"-18 HEX.NYLOCK NUT
H-042B	42	5/16"-18X 1" H.H. BOLT
H-096	43	5/16" LOCK WASHER
M-0166	44	5/16"SPECIAL FLAT WASHER
H-072-16	45	#6 X3/8" RH WOOD SCREW
H-052R	46	10-32X3/4" RH SOCK SREW
H-024B	47	3/4"O.D.X3/16" I.D. WASHER
H-072-19	48	#8X1/2"RH SOCK.TRUSS SCW

MATERIAL LIST

CONVENTIONAL BALL LIFT DUCK AND FIVE PIN

31-850404-30

<u>CODE NO</u>	<u>INDEX</u>	<u>DESCRIPTION</u>
H-040	49	5/16"-18X1/2"H.H.BOLT
H-024	50	3/16"I.D. FLAT WASHER
H-097	51	3/16" LOCK WASHER
H-085	52	10-32" HEX. NUT PLATED
M-0700-32	53	BASE PLATE TENSIONNER
H-026	54	1/2"I.D. FLAT WASHER
H-042	55	5/16"-18X3/4"H.H.BOLT
H-052-36	56	5/16"-18X2"R.H.MACH. SREW
H-085-5	57	5/16"-18 HEX.KEEP NUT
H-046A	58	1/4"-20X1"H.H. CAP SCREW
H-023	59	1/4"I.D. FLAT WASHER
H-044	60	1/4"-20 HEX.NYLOCK NUT
M-0700-33	61	TENSIONNER
P-700-16	62	PLASTIC GUIDE
M-0700-70	63	TENSIONNER PULLEY 2016V
R-700-03	64	"0" BELTING 3/8" X 44 3/8
M-0700-72	65	PULLEY M.A. 1 1/2"X5/8"
EZP-050	66	PILLOW BLOCK
EZP-SB026	67	SHAFT AND PULLEY ASSY
EZP-027	68	SPACER BLOCK
M-0700-38	69	SUPPORT PUSHER
M-0700-39	70	BALL TRACK
H-050-10	71	10-32X1/4"R.H. SOCK M.SCW
M-0700-35	72	BALL POLISHER BASE FRAME
EZP-010	73	PAD RETAINER
EZP-053	74	BUFFING PAD
EZP-011	75	RAIL BALL EXIT
S-071	76	REEL ARM SPRING
SB-0700-01	77	PUSHER
M-0700-36	78	BASE FRAME PUSHER
M-0700-34	79	STOPPER
M-0700-37	80	BRACKET D'AJUSTEMENT
H-050-5	81	1/4"-20X1 3/4"FH S.M.S.
H-082-5	82	1/4"-20 HEX KEP NUT
H-046	83	1/4"-20X3/4" H.H.CAP SCW
H-086-3	84	8-32WELD NUT SP-NR #242
H-050-6	85	1/4"-20X3/4" FH S.M.S.
H-050-4	86	1/4"-20X1" FH MASH. SCREW
H-052-26	87	5/16"-18X2 1/2"FH S.M SCW
M-0700-23	89	BALL LEVEL ROD

5- PREVENTIVE MAINTENANCE:

Maintenance of this machine may be grouped into three classifications:

- Mechanical maintenance;
- Proper lubrication;
- Cleanliness and good housekeeping.

A- MECHANICAL MAINTENANCE

Pin string: With any normally busy house, pin strings should be inspected daily and if showing evidence of wearing off, should be shortened and refastened and the string tension readjusted to compensate for the shortened string. If a proper program of string maintenance and inspection is set up, never will a string break during normal play. Put very simply, there is no excuse for strings in play other than careless string maintenance.

Vibro insulators and base plate spacer bolts

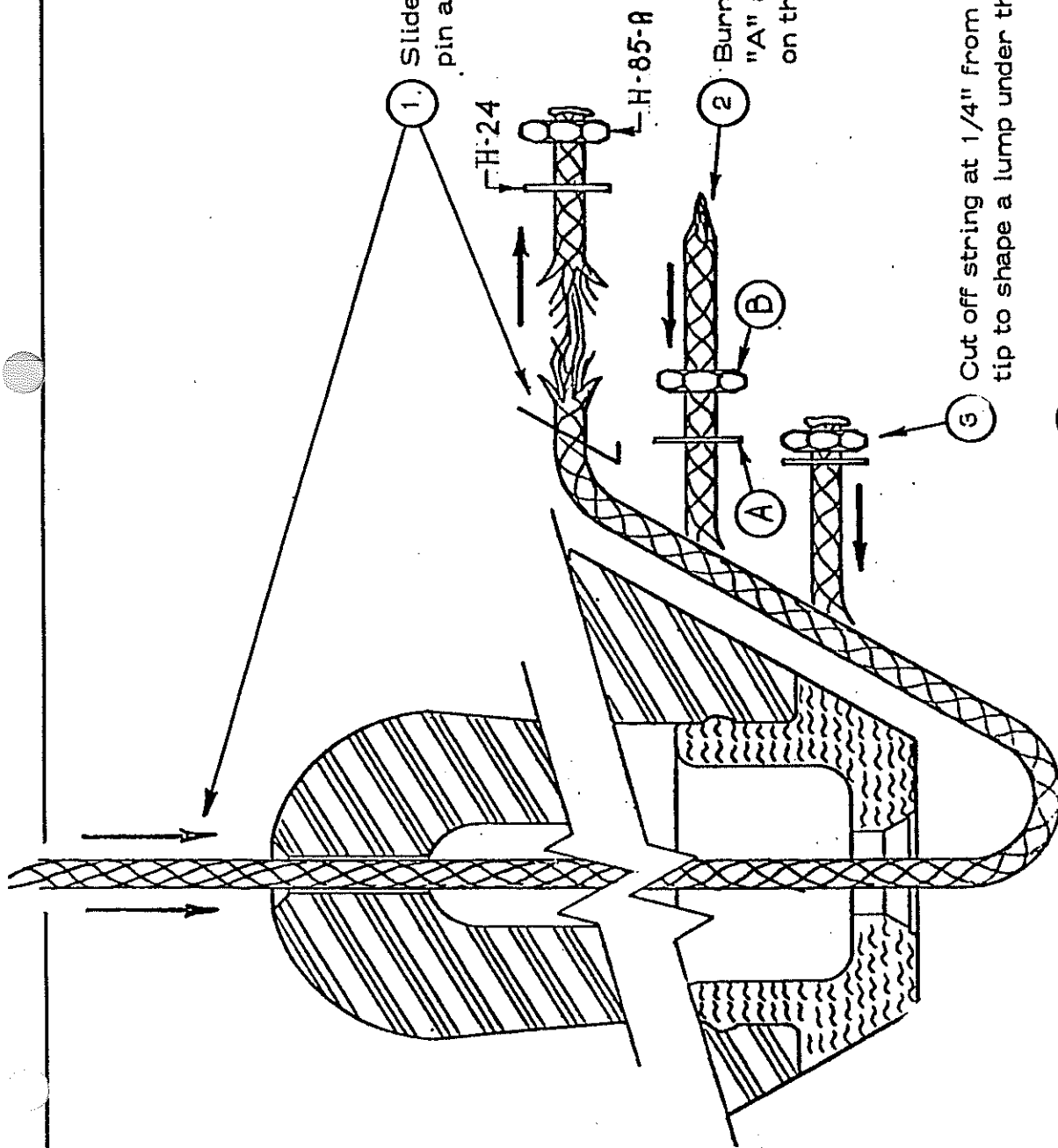
These are subject to continual violent shock and vibration. They should be checked frequently for tightness.

Moisture drains

Amount of play and atmospheric conditions dictate the amount of moisture entering into the system.

Your machine is equipped with Air Dryer which eliminates automatically all moisture. All filter bowls and drain legs should be checked weekly. At no time should water be allowed to reach bottom of filter element of machine filter bowls.

It is also very important to drain daily the moisture from the compressor. Always prevent water from entering into the machine.



1. Slide the string down through the pin and cut the worn out section.

2. Burn the string tip - Replace washer "A" and swage firmly a new nut "B" on the string.

3. Cut off string at 1/4" from swaged nut. Burn the string tip to shape a lump under the nut.

4. Slide the pin along the string and check if it turns freely.

 Qu��bec Canada	DESCRIPTION : CORD MAINTENANCE		SP��CIFICATIONS MODEL 501E		PAR :	��CHELLE :
	V��R :	APPR :	DATE :	PARTIE No.	MEI-351	

LUBRICATION

Proper lubrication is essential to a smooth running trouble free machine and also for preventing its wearing out. Here again, the quantity of play dictates how often and how much lubricant should be used.

CAUTION

Use only recommended pneumatic oil No. Z-400. Many modern lubricating oils, except pneumatic oil, contain additives which can affect the rubber parts of the pneumatic components and cause serious problems.

MAIN CYLINDERS INTERNAL LUBRICATION

Use only oil Z-400 to lubricate your main cylinders.

MAIN CYLINDER CABLE

Once a week, wipe off any dirt from cylinder cables and oil entire length of both ends lightly with pneumatic oil Z-400.

MECHANICAL LUBRICATION

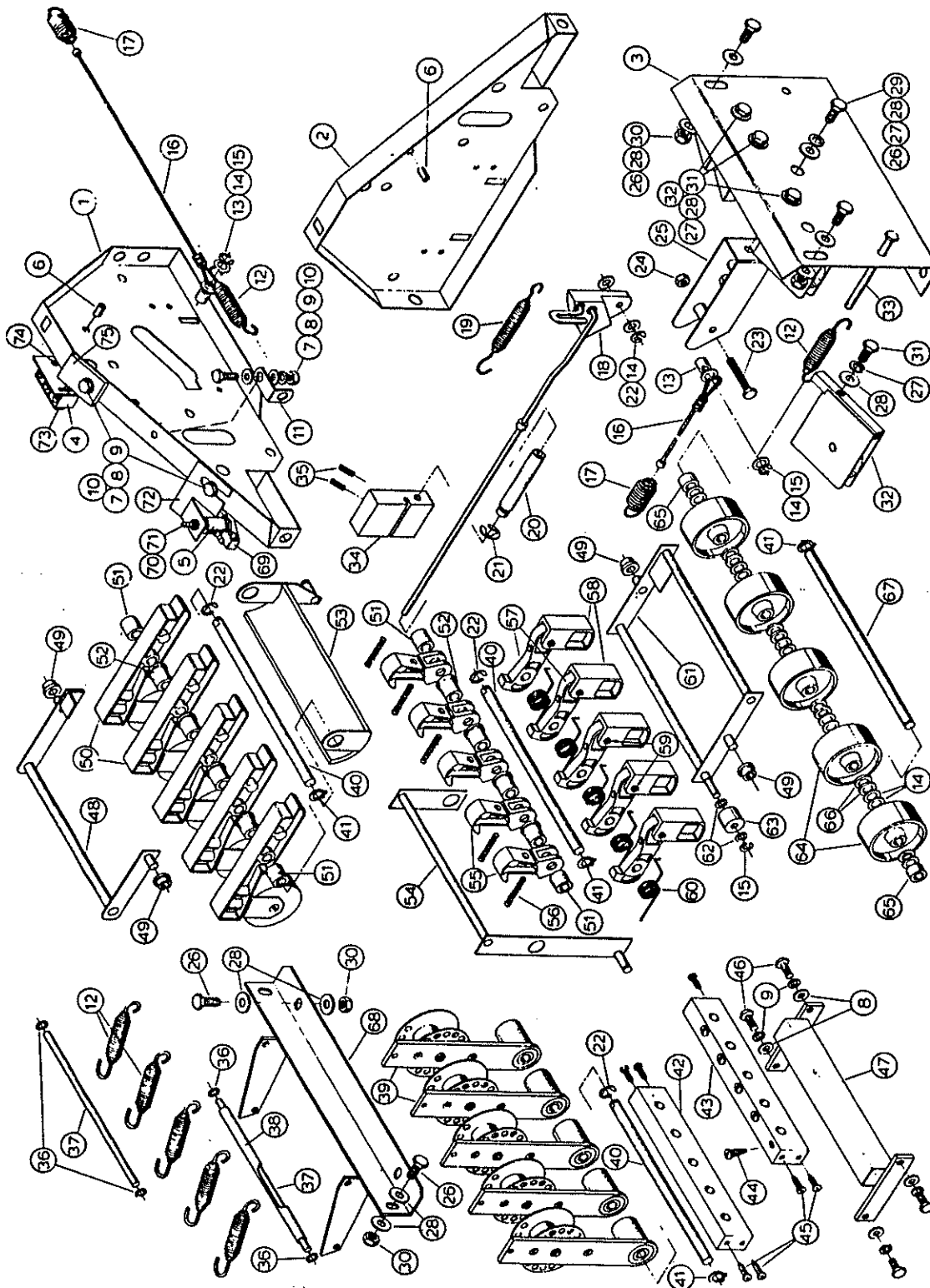
Every moving part should be properly lubricated with Z-400 pneumatic oil only.

FILTER ELEMENTS

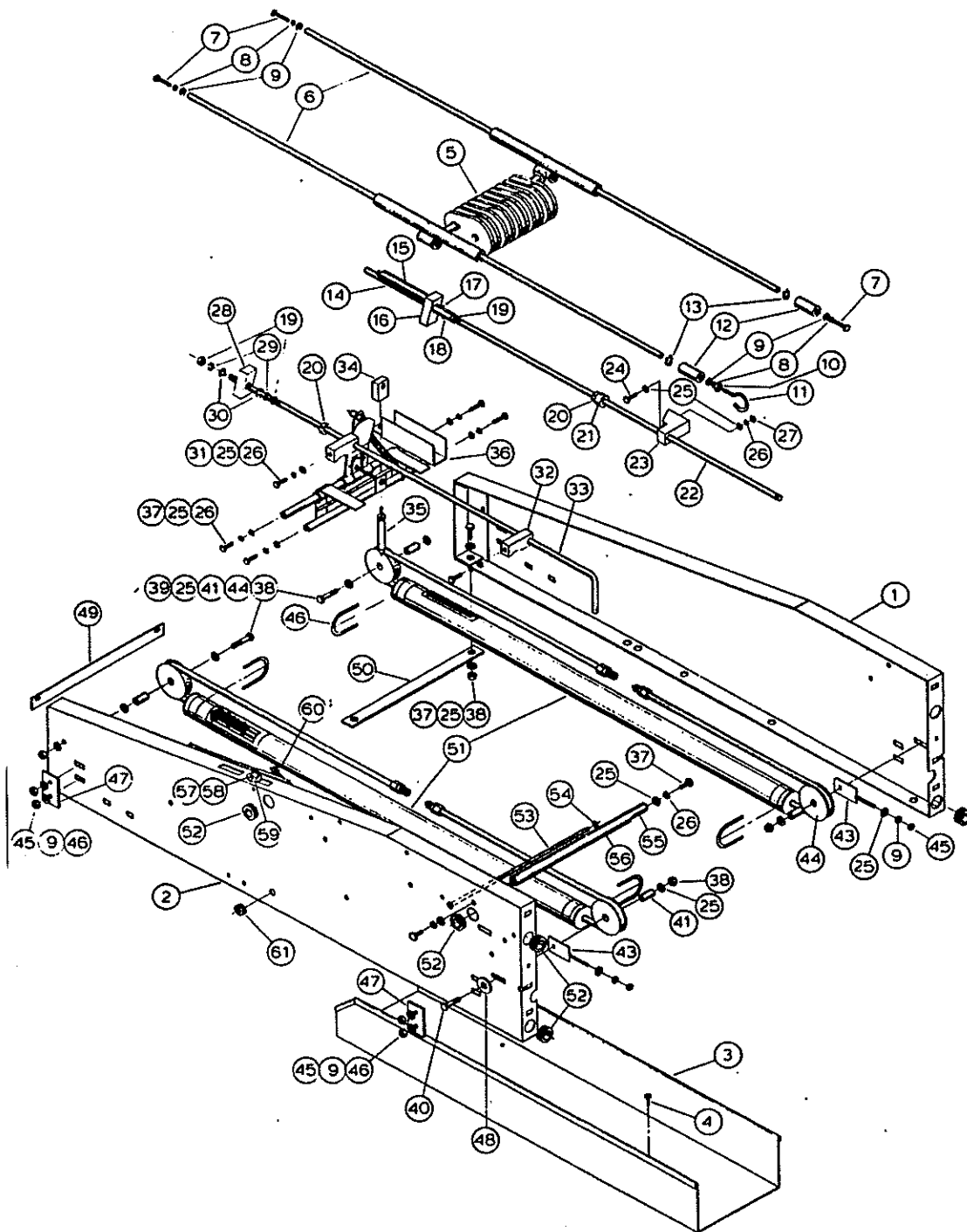
Filter element on pressure regulator and main air line filter can be cleaned by washing in a solvent such as "Varsol". We recommend that they be replaced when solvent cleaning is no longer effective.

CLEANLINESS AND GOOD HOUSEKEEPING

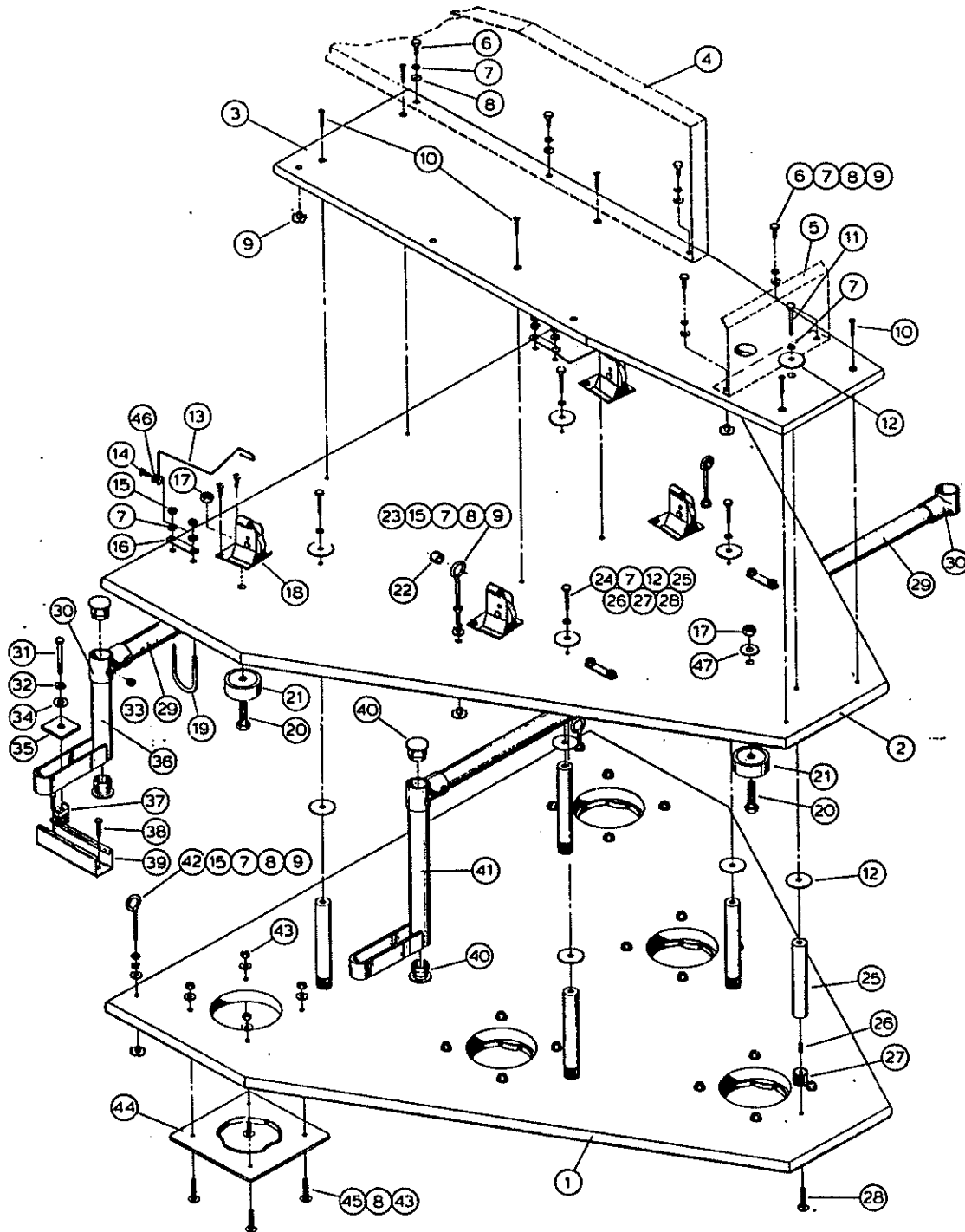
Machines must be kept free of dirt, dust and excess of oil. A clean machine is a well cared for machine, and will give good service, and trouble free operation.



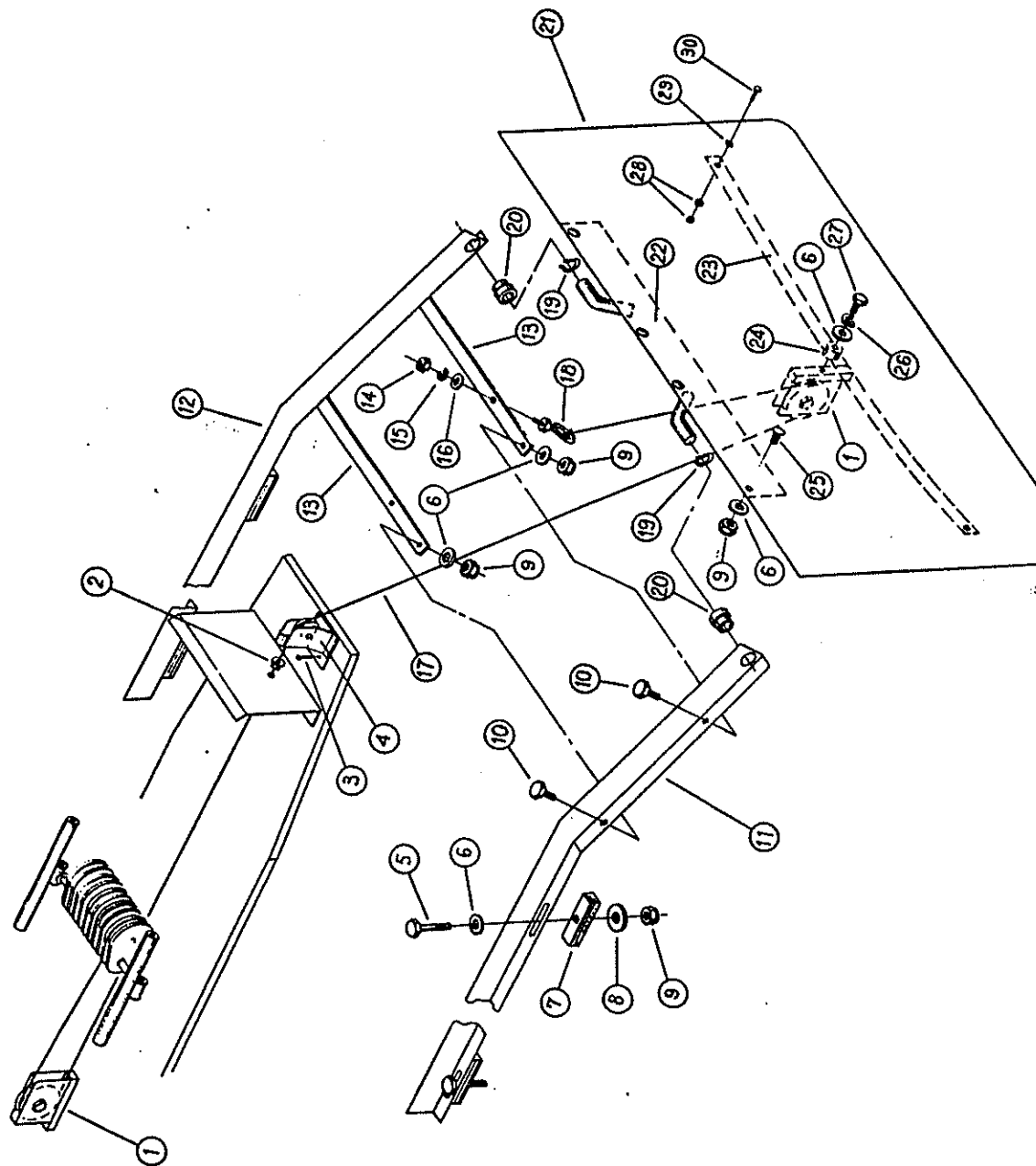
 Québec Canada	DESCRIPTION : SENSOR PARTS		SPÉCIFICATIONS MODEL 501E		PAR : 	ÉCHELLE :
	VÉR. :	APPR. : <i>JM</i>	DATE : 6-88	PARTIE No. <i>P-35-1</i>		



 Québec Canada	DESCRIPTION : MACHINE PARTS		PAR : 	ÉCHELLE :
	VÉR. : 	APPR. : <i>[Signature]</i> 	DATE : 6-88 	PARTIE No. P-35-2



 Québec Canada	DESCRIPTION : MACHINE BASE PLATE PARTS		PAR : ÉCHELLE :	
	VÉR. : APPR. : <i>Ché</i>	DATE : 6-88	PARTIE No. P-35-3	



 Québec Canada	DESCRIPTION : STANDARD SHIELD PARTS		SPÉCIFICATIONS MODEL 501E		PAR :	ÉCHELLE :
	VÉR. :	APPR. : <i>[Signature]</i>	DATE : 4-88	PARTIE No. <i>P-35-4</i>		

PARTS LIST FOR P-35-1

MODEL 501E

<u>ITEM</u>	<u>CODE</u>	<u>DESCRIPTION</u>
1	M-01	sensor side plate - right
2	M-02	sensor side plate - left
3	M-5	sensor front plate
4	E-810	micro switch
5	A-19	valve 1/8" p. 3 way miniature
6	H-32-E	1/2" X 1/4" roll pin - spring pin
7	H-46	1/4" - 20 X 3/4" hex. head cap screw
8	H-23	1/4" clear I.D.
9	H-95	1/4" lock washer
10	H-82	1/4" - 20 hex. nut plated
11	M-55	relatch spring bracket
12	S-71	reel arm spring
13	M-100-C	second latch and relatch sheave spring
14	H-27	3/8" I.D. spacer washer
15	H-11	1/4" "E" ring
16	SUB-5007	pull cable assembly
17	S-76	buffer spring - pull rod cable
18	SUB-7000	cam assembly
19	S-80	sensor lift cam spring
20	P-17	sensor cam push rod bushing
21	H-10-A	1/2" O.D. "E" ring
22	H-6	3/8" "E" ring
23	H-45	1/4" - 20 X 1 3/4" hex. head cap screw
24	H-44	1/4" - 20 hex. cap nylock nut
25	M-16	headpin string guide - front
26	H-42	5/16" - 18 X 3/4" hex. head cap screw
27	H-96	5/16" lock washer
28	H-22	5/16" clear I.D.

PARTS LIST FOR P-35-1

MODEL 501E

<u>ITEM</u>	<u>CODE</u>	<u>DESCRIPTION</u>
29	H-80-A	5/16" - 18 hex. nut
30	H-80	5/16" - 18 hex. nylock nut
31	H-43	5/16" - 18 X 1/2" hex. head cap screw
32	SUB-5009	sensor sheave assembly large black wheel
33	M-267	second latch return spring pin
34	PT-226	sensor cam push rod block
35	H-63-D	1/4" - 20 X 1/2" long cup set screw
36	H-8	1/4" self locking push on
37	M-27-B	reel spring and buffer shaft
38	P-233	reel arm - buffer tube
39	SUB-5011	reel arm assembly
40	M-80	sensor cross shaft
41	H-14-A	3/8" I.D. "C" ring heavy duty
42	P-6	sensor internal string guide - front
43	P-6-A	sensor internal string guide - rear
44	H-100	9-32 X 1/2" metal socket screw
45	H-72-A	# 8 X 3/4" R.H. metal screw
46	H-50	1/4" - 20 X 1/2" hex. head cap screw
47	M-12	metal brake plate
48	M-33-A	trip arm - full set switch
49	P-32	bearing - full set and reset trip arm
50	SUB-5015	brake arm assembly
51	P-22	sensor and brake arm - end spacer
52	P-20	sensor hook and brake - center spacer
53	M-35	top brake wheel sector
54	M-32	second latch
55	P-9	sensor hook
56	S-77	sensor attitude spring
57	P-5	sensor link
58	P-3	sensor finger
59	H-32	3/16" X 7/8" rool pin - spring pin
60	S-72	sensor finger seating spring
61	M-31	sensor trip and lift arm
62	H-29	1/4" I.D. spacer washer

PARTS LIST FOR P-35-1

MODEL 501E

<u>ITEM</u>	<u>CODE</u>	<u>DESCRIPTION</u>
63	P-31	sensor cam roller
64	P-28	nylon wheel
65	P-23	nylon wheel - end spacer
66	H-27-B	3/8" flat washer special
67	M-81	nylon wheel and cam shaft
68	M-2700	reel arm buffer
69	A-132	model 34 c. cam operator
70	A-56-B	buna gasket
71	A-118	10/32" X 1/16" hose fitting
72	M-6	part set valve bracket
73	M-28-B	micro switch support plate
74	H-52-C	1/8" X 1" self tapin
75	M-28-C	full set micro switch bracket

PARTS LIST FOR P-35-2

MODEL 501E

<u>ITEM</u>	<u>CODE</u>	<u>DESCRIPTION</u>
1	M-001	main frame side plate - right
2	M-002	main frame side plate - left
3	M-286-B	string trough
4	H-72-A	# 8 X 3/4" R.H. metal screw
5	SUB-2120	drawbar assembly
6	M-213	drawbar stabilizer shaft
7	H-46	1/4" - 20 X 3/4" hex. head cap screw
8	H-95	1/4" lock washer
9	H-23	1/4" clear I.D.
10	H-82	1/4" - 20 hex. nut plated
11	H-58-F	1/4" - 20 X 2" eye bolt
12	P-26-A	drawbar stabilizer - end spacer
13	H-14-B	3/8" O.D. "C" ring
14	M-4-B	relatch pull bar adj. rod
15	MT-265	drawbar guard brake sector trip block
16	P-15-A	trip block - brake sector pull bar
17	H-35-F	3/32" cutter pin 1" long
18	H-83-B	coupling 3/8" N.C.
19	H-77-A	3/8" - 16 hex. cad plated
20	M-191	pull bar stop collar
21	RB-39-A	rubber grommet
22	M-4-A	relatch pull bar
23	P-34-B	pull rod support
24	H-40	5/16" - 18 X 1 1/2" hex. head cap screw
25	H-22	5/16" clear I.D.
26	H-96	5/16" lock washer
27	H-80-A	5/16" - 18 hex. nut
28	P-11-A	second latch pull bar

PARTS LIST FOR P-35-2

MODEL 501E

<u>ITEM</u>	<u>CODE</u>	<u>DESCRIPTION</u>
29	H-99	3/8" lock washer
30	H-27	3/8" I.D. spacer washer
31	H-41	5/16" - 18 X 1 1/4" hex. head cap screw
32	P-34	pull rod support
33	M-29-A	second latch pull bar
34	P-4	relatch cylinder loop
35	A-12-E	cylinder 1/2" bore X 1" stroke
36	SUB-2300	limit valve assembly
37	H-42	5/16" - 18 X 3/4" hex. head cap screw
38	H-80	5/16" - 18 hex. nylock nut
39	H-39	5/16" - 18 X 1 3/4" hex. head cap screw
40	H-39-A	5/16" - 18 X 2" hex. head cap screw
41	M-102	hoist cylinder pulley sleeve
43	M-7	main cylinder cable tensioner
44	P-8	hoisting cylinder pulley
45	H-44	1/4" - 20 hex. cap nylock nut
46	H-59-C	1/4" X 1" "U" bolt
47	M-20	cylinder "U" bolt plate
48	M-168	cable tensioner external washer 1 5/8"
49	M-203	top cross tie - main frame rear
50	M-8	main frame rear spacer - bottom
51	SUB-5003	main cylinder assembly
52	R-15	rubber grommet
53	M-99	sensor finger stop bar
54	H-8	1/4" self locking push on
55	M-92	main frame cross rod
56	P-232	reel arm back stop tube
57	H-42-A	5/16" - 3/4" X 24 hex. head cap screw
58	M-504	locking plate 5/16" - 18 T.N.
59	M-166	cable tensioner external washer 1 1/8"
60	SUB-0501	retarder valve assembly
61	RB-39	rubber grommet

PARTS LIST FOR P-35-3

MODEL 501E

<u>ITEM</u>	<u>CODE</u>	<u>DESCRIPTION</u>
1	5W-10	bottom base plate peinture
2	5W-11	top base plate peinture
3	5W-12	machine plate peinture
4	M-001	main frame side plate - right
5	M-5	sensor front plate
6	H-42	5/16" - 18 X 3/4" hex. head cap screw
7	H-96	5/16" lock washer
8	H-22	5/16" clear I.D.
9	H-81	5/16" - 18 tee nut
10	H-70-A	# 12 X 1 1/2" F.H. wood screw
11	H-39-A	5/16" - 18 X 2" hex. head cap screw
12	M-168	cable tensioner external washer 1 5/8"
13	M-47	rear pin string guide
14	H-72-A	# 8 X 3/4" R.H. metal screw
15	H-80-A	5/16" - 18 hex. nut
16		"U" bolt plate 3 1/4"
17	H-78	1/2" X 20 hex. nut cad plated
18	SUB-5012	pin bumper sheave assembly large wheel
19	H-59-A	5/16" - 3 1/4" "U" bolt
20	M-41	pin bumper bolt
21	R-10	pin bumper
22	P-33	string guide bushing
23	H-58	5/16" - 18 X 6" eye bolt
24	H-39	5/16" - 18 X 1 3/4" hex. head cap screw
25	M-78	base plate spacer bar - main frame post
26	H-61	5/16" - 18 X 3/4" long cup set screw
27	R-14	vibro insulator
28	H-53	5/16" - 18 X 1 1/2" carriage bolt

PARTS LIST FOR P-35-3

MODEL 501E

<u>ITEM</u>	<u>CODE</u>	<u>DESCRIPTION</u>
29	I-34	main cross supporting pipe
30	I-11	10-7 - 1/4" tee kee klamp single
31	H-37-H	3/8" - 16 x 2 3/4" hex. head cap screw
32	H-99	3/8" lock washer
33	I-24	97-7 set screw
34	H-21	3/8" clear I.D.
35	M-400	mounting washer
36	M-370	short mount foot
37	H-89	3/8" - 18 unistrut spring nut
38	H-68	5/16" x 1 1/2" lag screw
39	M-450	unistrut bar
40	I-16-B	77-7 plastic knob
41	M-360	long mount foot
42	H-58-B	5/16" - 18 x 2" eye bolt
43	H-80	5/16" - 18 hex. nylock nut
44	P-13	pin centering ring
45	H-54	5/16" - 18 x 1 3/4" carriage bolt
46	H-24	3/16" clear I.D.
47	H-20	1/2" clear I.D. flat washer

PARTS LIST FOR P-35-4

MODEL 501E

<u>ITEM</u>	<u>CODE</u>	<u>DESCRIPTION</u>
1	SUB-5017	sensor sheave assembly white wheel
2	P-32	bearing - full set and reset trip arm
3	H-72-A	# 8 X 3/4" R.H. metal screw
4	SUB-5008	pin bumper sheave assembly small black wheel
5	H-38-B	5/16" - 18 X 2 1/2" hex. head cap screw
6	H-22	5/16" clear I.D.
7	5W-100	block for shield
8	M-168	cable tensioner external washer 1 5/8"
9	H-80	5/16" - 18 hex. nylock nut
10	H-42	5/16" - 18 X 3/4" hex. head cap screw
11	M-132-L	shield arm left
12	M-132-R	shield arm right
13	M-135	shield arm cross bar
14	H-82	1/4" - 20 hex. nut plated
15	H-95	1/4" lock washer
16	H-23	1/4" clear I.D.
17	I-22-A	pin string 14 ft lenght
18	H-58-F	1/4" - 20 X 2" eye bolt
19	H-2	1/2" grip ring
20	P-29	ball lift cylinder hinge - ball gate hinge
21	P-52	front shield
22	M-137	shield support plate
23	M-133	shield tensioner
24	P-22	sensor and brake arm - end spacer
25	H-55	5/16" - 18 X 3/4" carriage bolt
26	H-96	5/16" lock washer
27	H-40	5/16" - 18 X 1 1/2" hex. head cap screw
28	H-85	# 10-32 hex. cad plated

PARTS LIST FOR P-35-4

MODEL 501E

<u>ITEM</u>	<u>CODE</u>	<u>DESCRIPTION</u>
29	H-24-B	washer 3/4" O.D. 3/16" I.D.
30	H-51-B	10/32" X 3/4" R.H. steel machine screw
31	H-90-A	"S" hook large # 10

PARTS LIST FOR FOLLOWING PAGES

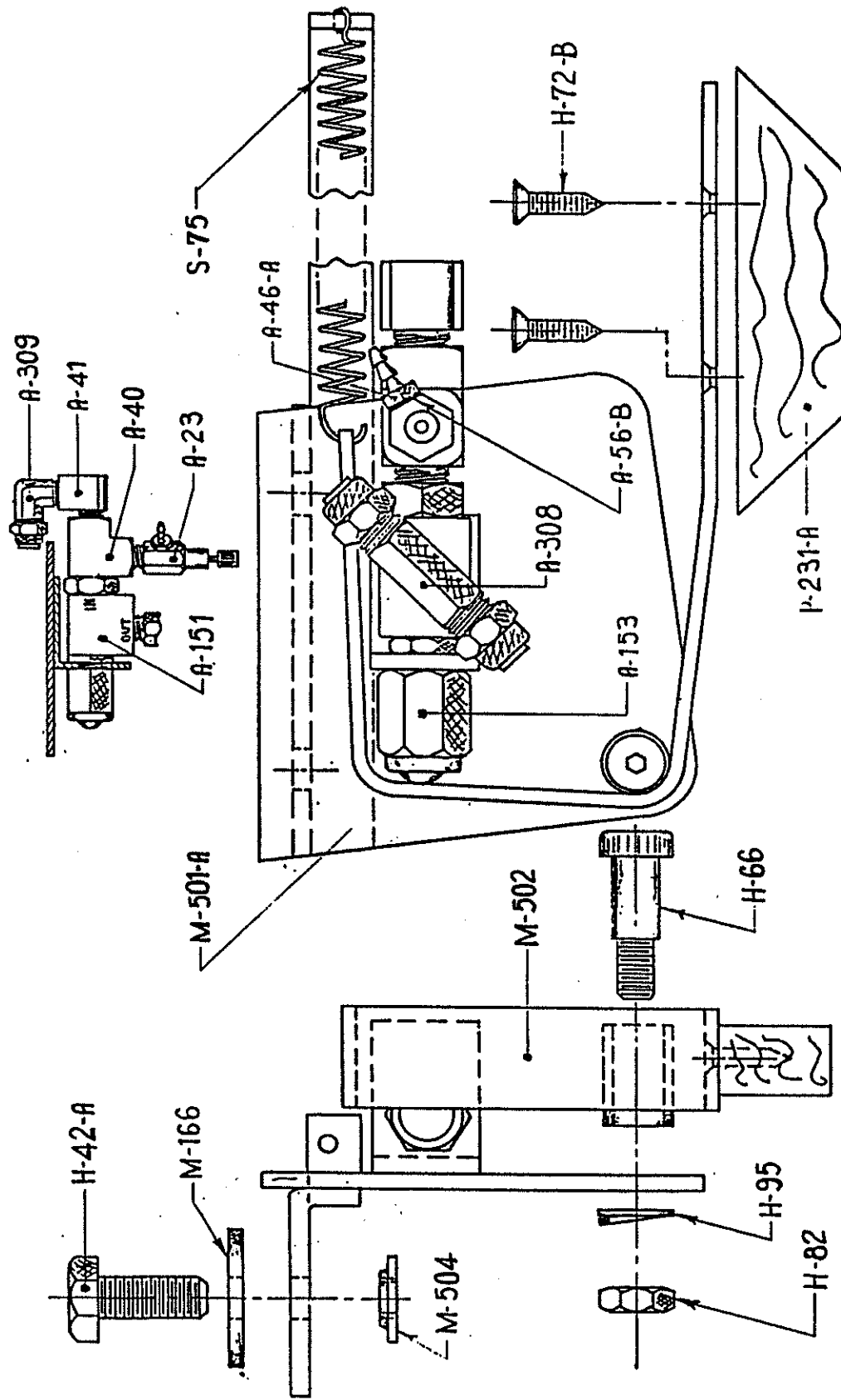
<u>CODE</u>	<u>DESCRIPTION</u>
MEI-35-1	CORD MAINTENANCE
SUB-0501	RETARDER VALVE ASSEMBLY
SUB-2120	DRAWBAR ASSEMBLY
SUB-5008	PIN BUMPER SHEAVE ASSEMBLY SMALL BLACK WHEEL
SUB-5009	SENSOR SHEAVE ASSEMBLY LARGE BLACK WHEEL
SUB-5011	RELL ARM ASSEMBLY
SUB-5012	PIN BUMPER SHEAVE ASSEMBLY LARGE WHEEL
SUB-5015	BRAKE ARM ASSEMBLY
SUB-5017	SENSOR SHEAVE ASSEMBLY WHITE WHEEL
SUB-7000	CAM ASSEMBLY
BT-3	HOW TO INSTALL CYLINDERS - MODEL "C"
BT-4	HOW TO REPAIR SUB-5003 - TYPE "C"
BT-13	REGULATOR REPLACE PARTS
A-10	CYLINDER 1 1/8" X 37" STROKE CABLE
A-10-C	LIP SEAL FOR PISTON
A-10-G	"O" RING FOR PISTON 1/8" X 7/8"
A-10-H	CYLINDER PISTON 2.650"
A-23	1/8" P. FLOW CONTROL - 2 WAY KNOB ADJUST
A-30-C	DIAPHRAGME WATTS
A-31-A	DRAIN 1/8" M.P.T. (PLASTIC KNOB)
A-41	1/8" - STREET ELBOW
A-46-A	10-32 BARB 1/8" HOSE
A-54-B	PLUG HEX. HEAD 1/8" M.P.T.
A-57	1/8" I.D. AIR HOSE
A-58	1/4" M.P.T. 3/8" HOSE
A-74	UNION 1/4" M.P.T. 1/4" F.P.T.
A-151	POPPET VALVE 2 WAY 1/8" PT
A-153	BALL ACTUATOR
A-162	STANDARD GAUGE
A-170	FILTER REGULATOR
A-171	MOUNTING BRACKET
A-172	METAL BOWL FOR A-170
A-172-A	HEAD FOR A-170
A-172-B	FILTER FOR A-170
A-301	POLYETHYLENE SLEEVE 3/8"
A-303	NUT SLEEVE ASSEMBLY 3/8"
A-305	MALE CONNECTOR 3/8" X 1/8" PT
A-306	MALE CONNECTOR 3/8" X 1/4" PT
A-308	MALE BRANCH TEE 1/4" X 1/8" PT
A-309	MALE ELBOW 1/4" X 1/8" PT
A-340	POLY FLO TUBING 3/8" O.D. (BLUE)
E-31	HOSE CLIPS
H-2	1/2" GRIP RING
H-6	3/8" "E" RING
H-7	EXTERNAL "C" RING

CODEDESCRIPTION

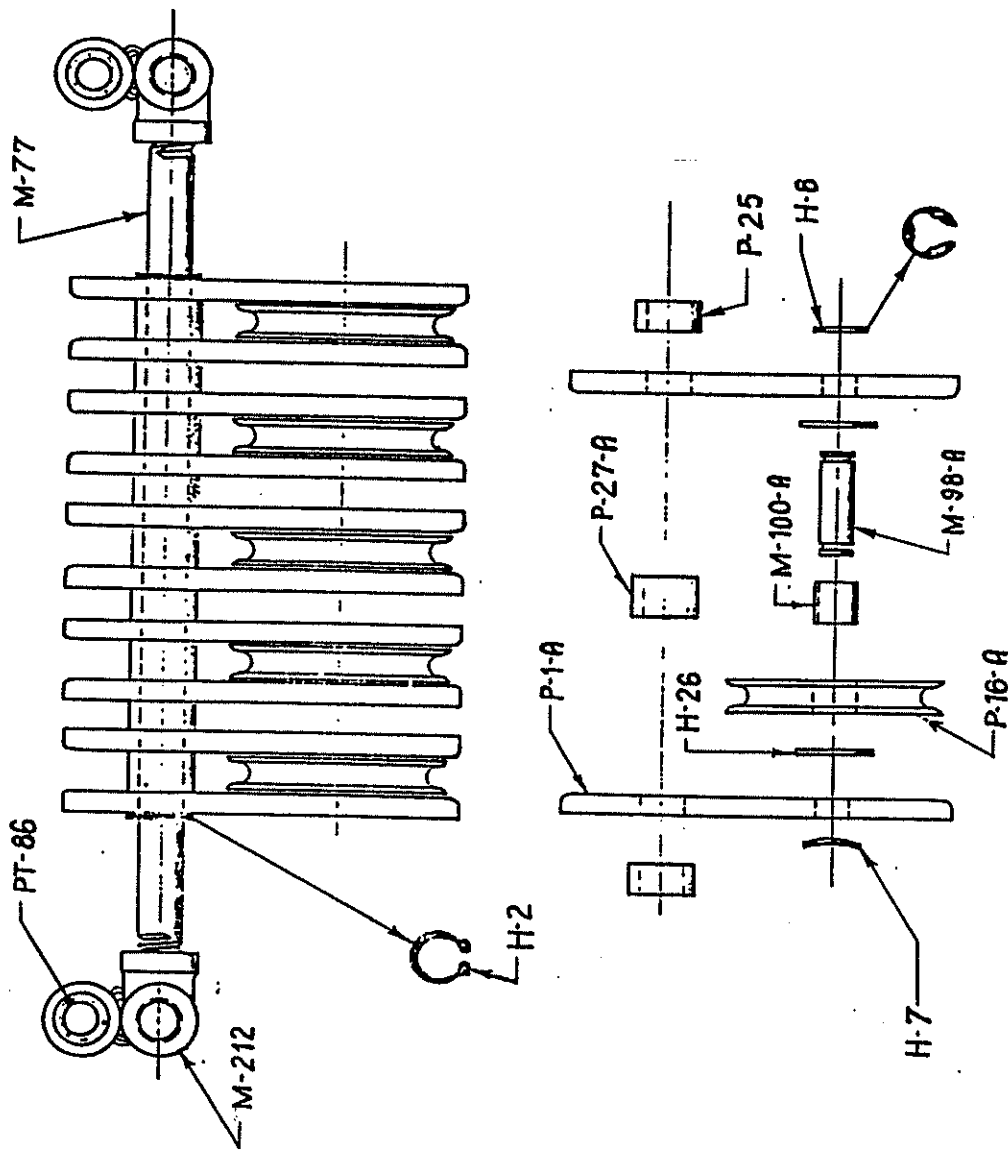
H-10	3/16" SELF LOCKING PUSH ON
H-11	1/4" "E" RING
H-13	3/16" "E" RING
H-14-B	3/8" O.D. "C" RING
H-14-C	1/4" I.D. "C" RING HEAVY DUTY
H-21	3/8" CLEAR I.D.
H-24	3/16" CLEAR I.D.
H-26	1/2" I.D. SPACER WASHER
H-29	1/4" I.D. SPACER WASHER
H-30-A	3/16" I.D. WASHER FOR POP RIVET
H-31-A	3/16" X 1 1/4" SPRING PIN
H-32-C	3/16" X 3/8" ROLL PIN - SPRING PIN
H-35-C	1/8" X 5/8" RIVET
H-42-A	5/16" - 3/4" X 24 HEX. HEAD CAP SCREW
H-44	1/4" - 20 HEX. CAP NYLOCK NUT
H-46-A	1/4" X 20" X 1"
H-50-B	1/4" X 5/8" SOCKET CAP SCREW
H-66	5/16" X 3/4" LONG SHOULDER SCREW
H-72-B	3/4" X 8" F.H. WOOD SCREW
H-80	5/16" - 18 HEX. NYLOCK NUT
H-82	1/4" - 20 HEX. NUT PLATED
H-85-A	10-24 HEX. NUT CAD PLATED
H-95	1/4" LOCK WASHER
M-11	STORAGE REEL AXLE PIN
MT-14	SENSOR CAM PUSH BAR
M-15	SHIELD CORD SHEAVE
M-15-A	PULL - 1 SHEAVE - LARGE
M-19	TOP BRAKE WHEEL BRACKET
M-22	RELL ARM
M-42	SPRING STORAGE REEL
M-43	PIN BUMPER SHEAVE
MT-43	PIN BUMPER SHEAVE
M-76-A	TOP BRAKE WHEEL AXLE PIN (SLOTTED)
M-77	DRAWBAR
M-98-A	DRAWBAR SHEAVE PIN
M-100	FRONT AND BUMPER SHEAVE AXLE
M-100-A	DRAWBAR SHEAVE AXLE
M-100-B	PIN BUMPER SHEAVE AXLE
M-101	FRONT BUMPER SHEAVE
M-166	CABLE TENSIONER EXTERNAL WASHER 1 1/8"
M-192	SENSOR CAM PUSH BAR STOP COLLAR
MT-204	SENSOR LIFT CAM PULL SPRING LINK
M-212	DRAWBAR STABILIZER
M-213	DRAWBAR STABILIZER SHAFT
M-501-A	SOFT SET DELAY FRAME
M-502	SOFT SET TRIP ARM

CODEDESCRIPTION

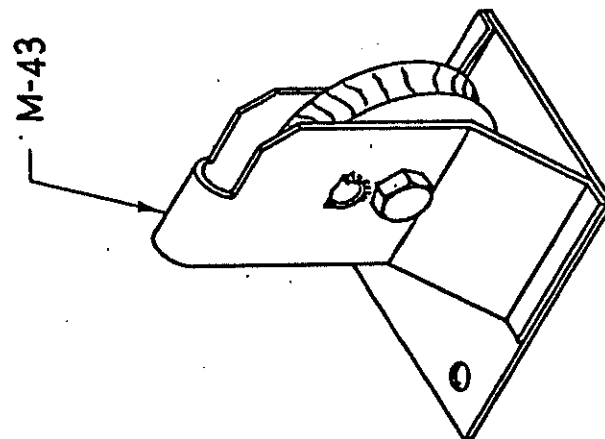
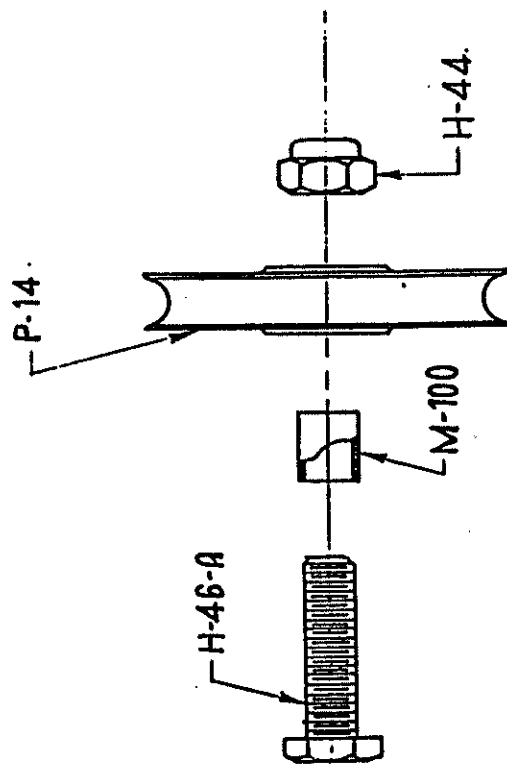
M-504	LOCKING PLATE 5/16" - 18 T.N.
P-1-A	DRAWBAR SHEAVE PLATE
PT-7-R	SENSOR LIFT CAM
P-10	BRAKE WHEEL ARM
P-14	SHEAVE PULLEY BIN BUMPER
P-16	SHEAVE PULLEY SECTOR
P-16-A	SHEAVE PULLEY DRAWBAR (INJECTED)
P-25	INSIDE BUSHING - DRAWBAR SHEAVE
P-26	STORAGE REEL ARM BUSHING
P-26-A	DRAWBAR STABILIZER - END SPACER
P-27-A	SPACER BUSHING DRAWBAR SHEAVE
PT-86	DRAWBAR STABILIZER - GUIDE BUSHING
P-231-A	SOFT SET SHOE LONG
R-11-A	UPPER BRAKE WHEEL
S-71	REEL ARM SPRING
S-74	STORAGE REEL SPRING
S-75	LIMIT VALVE SECOND LATCH QUADRANT SPRING
SUB-510-A	CYLINDER HEAD CABLE ASSEMBLY
SUB-7071	REPAIR CABLE ASSEMBLY
Z-399	SILICONE GREASE TUBE - 8 OZ.
Z-400	PNEUMATIC OIL



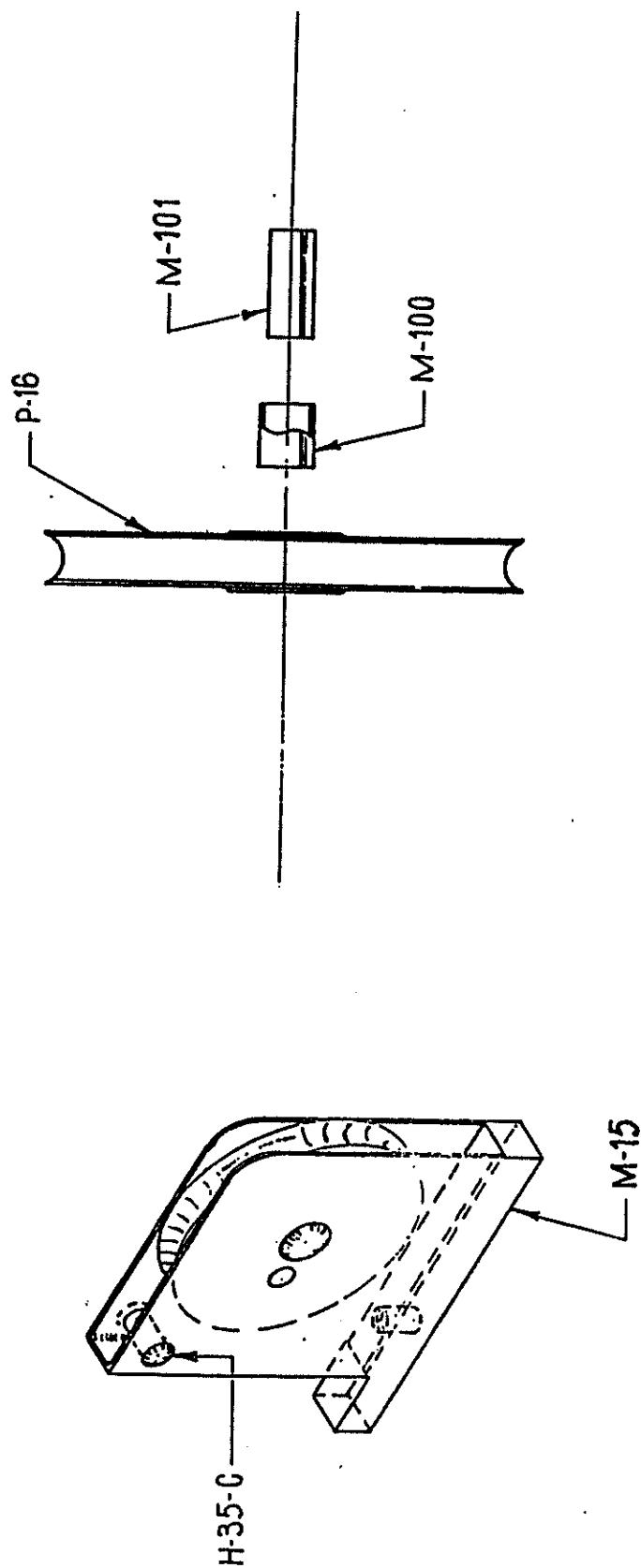
Québec Canada 	DESCRIPTION : RETARDER VALVE ASSEMBLY		SPÉCIFICATIONS MODEL 501E	PAR :	ÉCHELLE :
	VÉR. :	APPR. : <i>MA</i>	DATE : 6-88	PARTIE No. SB-0501	



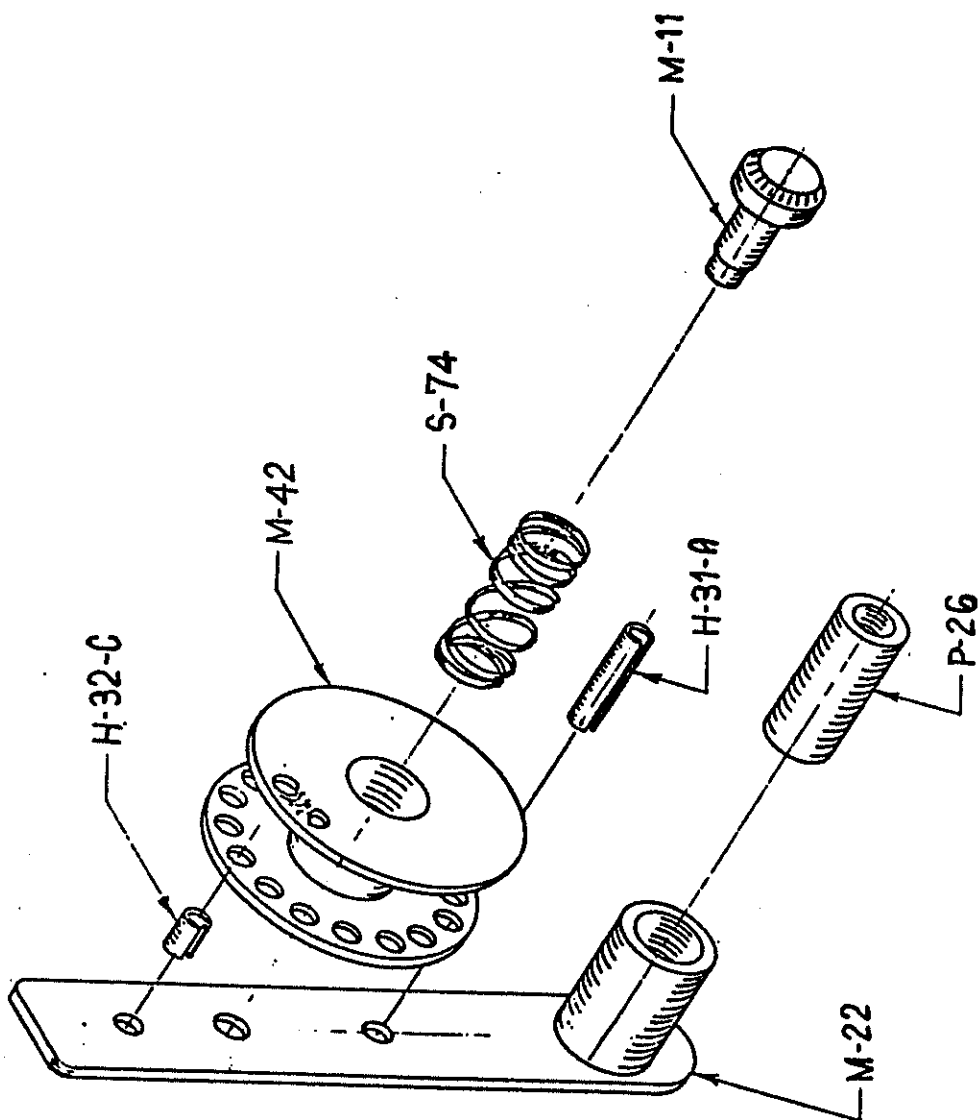
 Québec Canada	DESCRIPTION: DRAWBAR ASSEMBLY		SPÉCIFICATIONS MODEL 501E		PAR :	ÉCHELLE :
	VÉR. :	APPR. : <i>[Signature]</i>	DATE : 6-88	PARTIE No. SB-2120		



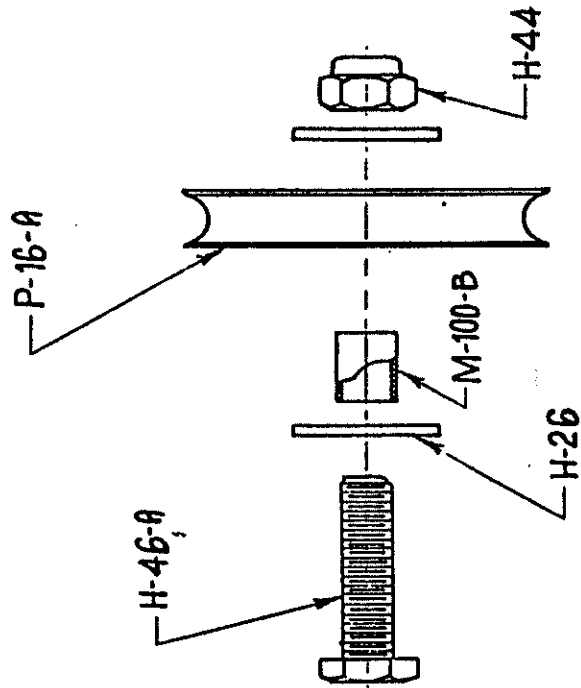
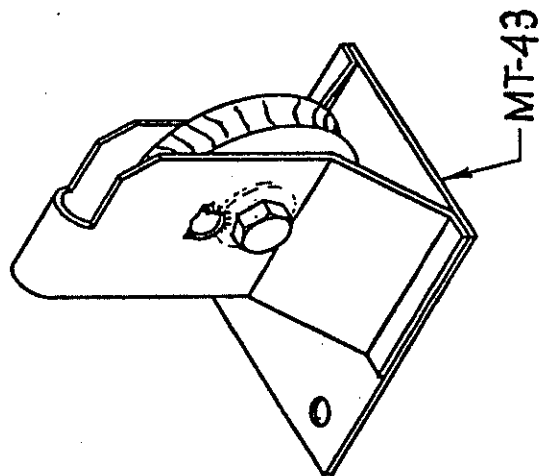
 Qu�bec Canada	DESCRIPTION : BUMPER SHEAVE ASSEMBLY B.W.		SP�CIFICATIONS MODEL 501E		PAR :	�CHELLE :
	V�R. :	APPR. : <i>MM</i>	DATE : <i>6-88</i>	PARTIE No. <i>SB-5008</i>		



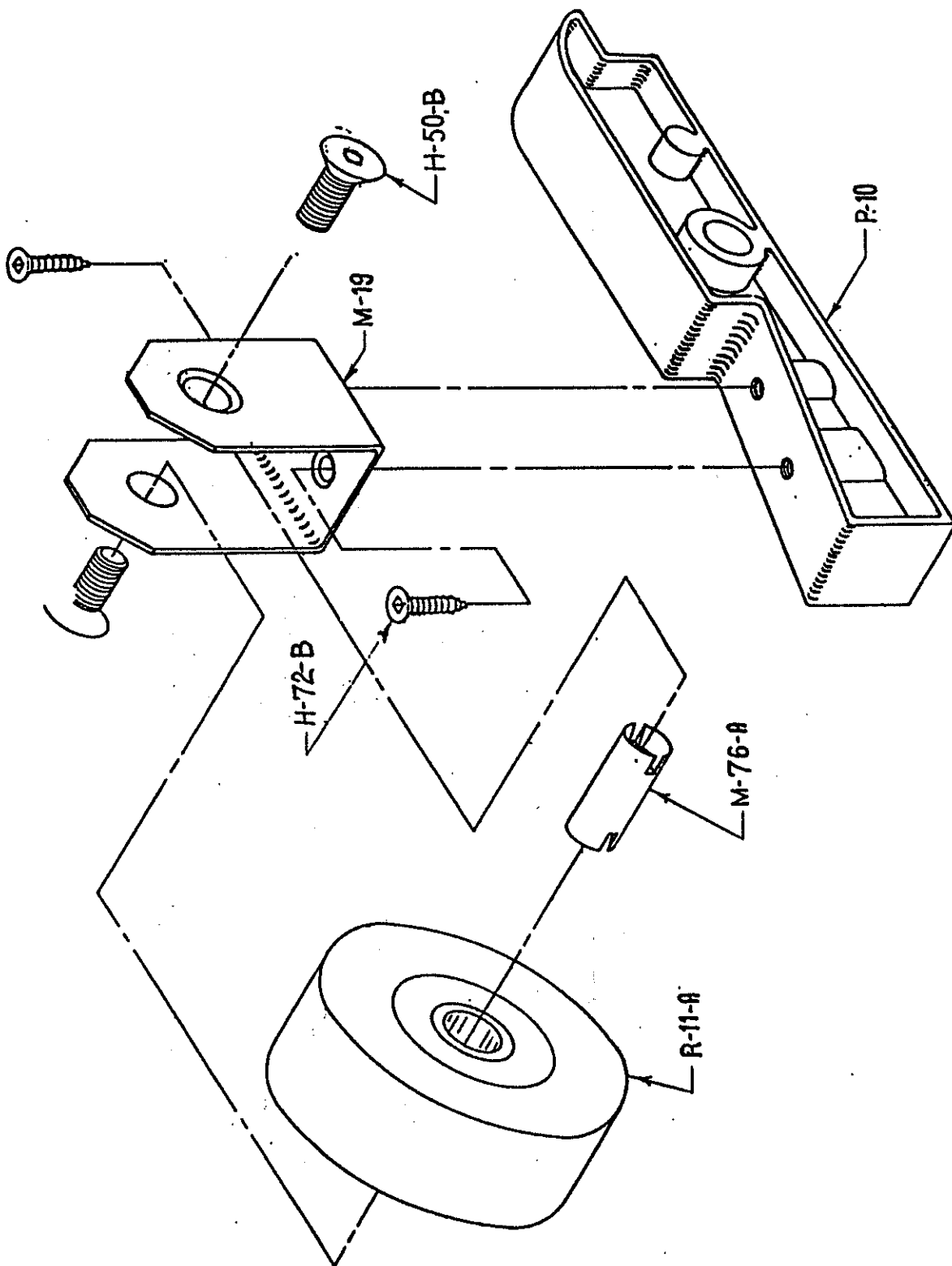
 Québec Canada	DESCRIPTION : SENSOR SHEAVE ASSEMBLY B.W.		SPÉCIFICATIONS MODEL 501E		PAR :	ÉCHELLE :
	VÉR. :	APPR. :	DATE : 6-88	PARTIE No. SB-5009		



 Québec Canada	DESCRIPTION: REEL ARM ASSEMBLY		SPÉCIFICATIONS MODEL 501E		PAR :	ÉCHELLE :
	VÉR. :	APPR. : <i>[Signature]</i>	DATE : 6-88	PARTIE No. 58-5011		



	DESCRIPTION : BUMPER SHEAVE ASSEMBLY L.W.W.		SPÉCIFICATIONS MODEL 501E		PAR :	ÉCHELLE :
	VÉR. :	APPR. : <i>Jde</i>	DATE : 6-88	PARTIE No. SB-5012		



Québec Canada 	DESCRIPTION: BRAKE ARM ASSEMBLY		SPÉCIFICATIONS MODEL 501E		PAR :	ÉCHELLE :
	VÉR. :	APPR. :	DATE : 6-88	PARTIE No. SB-5015		



Québec
Canada

DESCRIPTION :

SENSOR SHEAVE ASSEMBLY W.W.

SPÉCIFICATIONS

MODEL 501E

PAR :

ÉCHELLE :

PARTIE No.

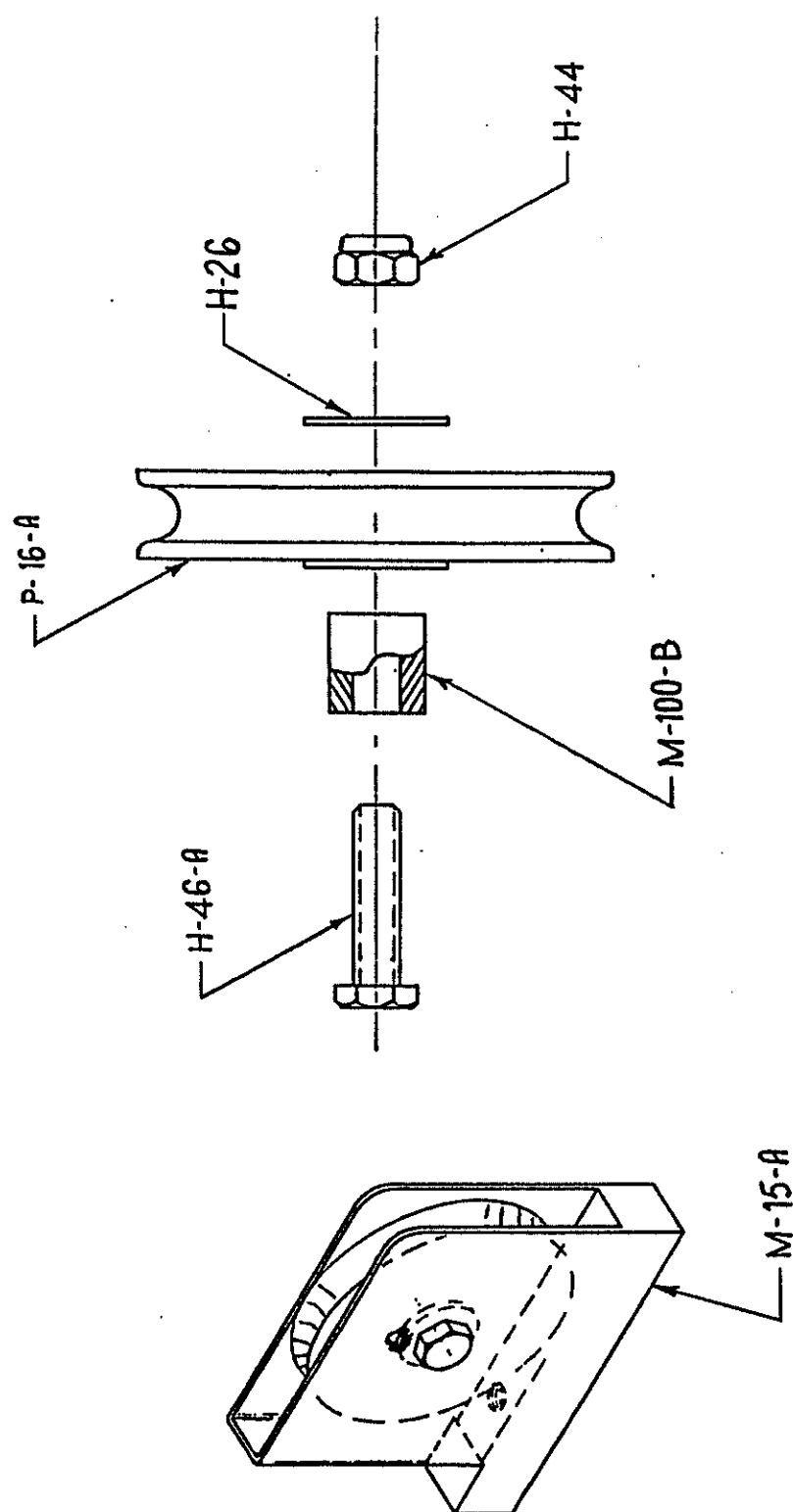
SB-5017

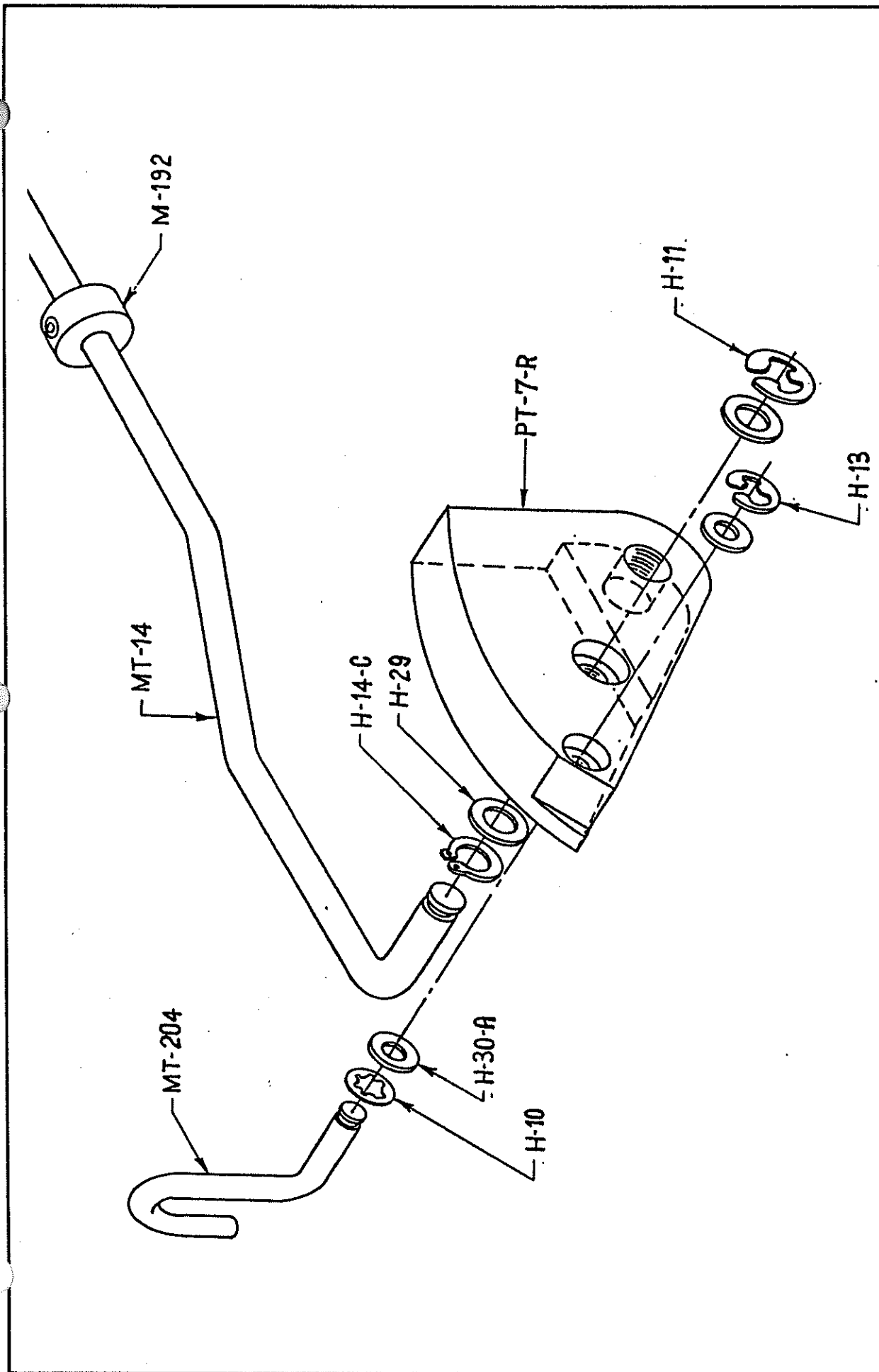
VÉR. :

APPR. :

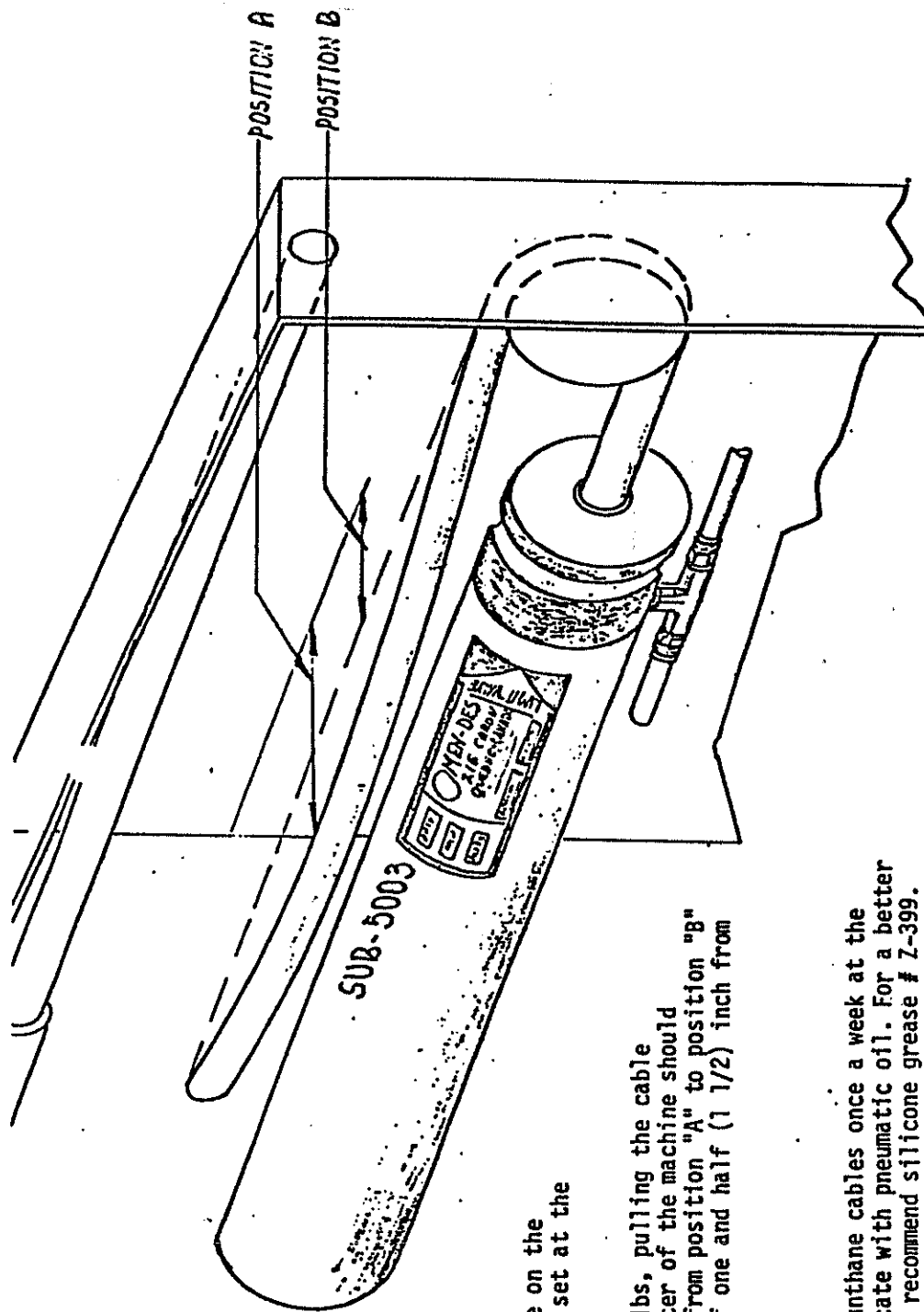
DATE :

6-88





 Québec Canada	DESCRIPTION :		SPÉCIFICATIONS		PAR :	ÉCHELLE :
	CAM ASSEMBLY		MODEL 501E			
VÉR. :		APPR. : <i>SA</i>	DATE : 6-88	PARTIE No. <i>SB-7000</i>		



INSTRUCTIONS:

- 1.) The air pressure on the machine must be set at the proper level
- 2.) A tension of 3 lbs, pulling the cable towards the center of the machine should move the cable from position "A" to position "B" for a maximum of one and half (1 1/2) inch from the side plate.

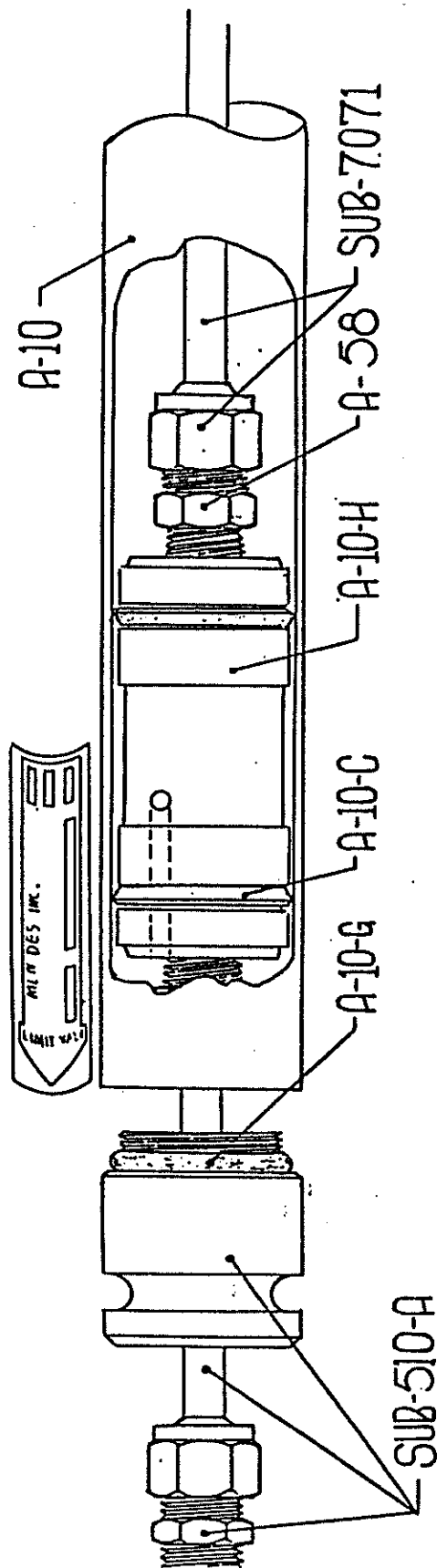
IMPORTANT:

Please clean rounthane cables once a week at the least and lubricate with pneumatic oil. For a better result we highly recommend silicone grease # Z-399.

VERY IMPORTANT:

Adjust the cylinder to make sure that the cable and the cylinder are parallel to one another.

	DESCRIPTION: ADJUSTING TENSION ON THE CYLINDER CABLE		SPÉCIFICATIONS MODEL 501E	PAR : ÉCHELLE :
	VÉR. :	APPR. : <i>MA</i>	DATE : 6-88	PARTIE No. <i>BT-02</i>



A SUB-510-A INCLUDES THE HEAD, THE CABLE AND THE COUPLINGS A-58 AT EACH END.

A SUB-7071 INCLUDE THE CABLE AND THE COUPLING A-58 AT ONE END.

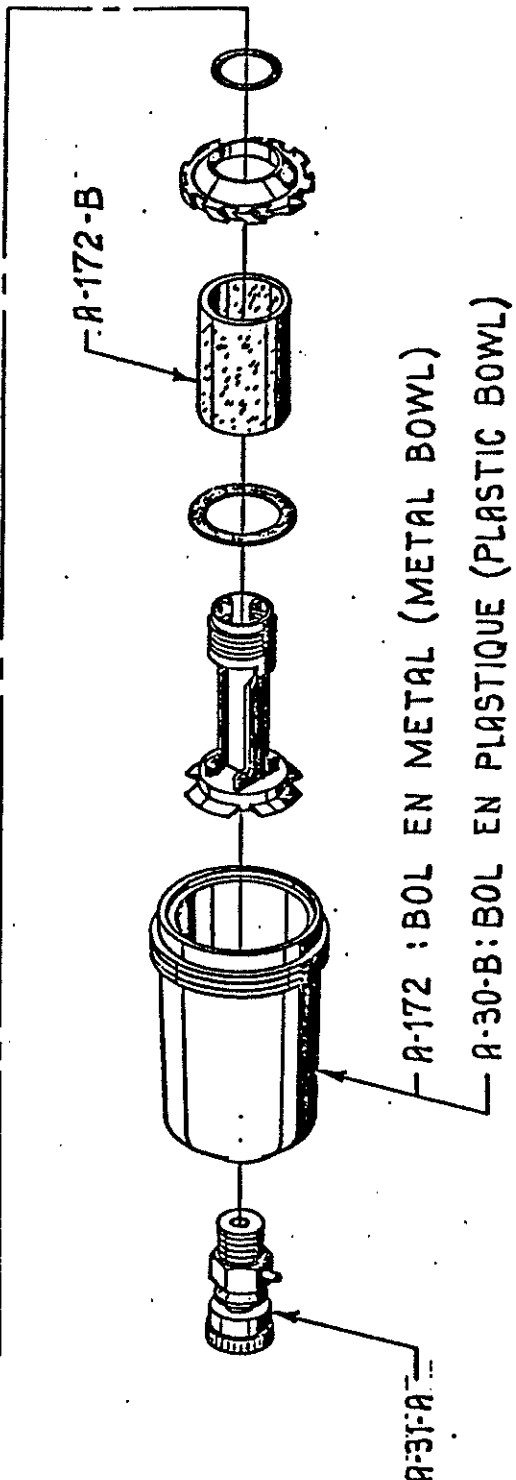
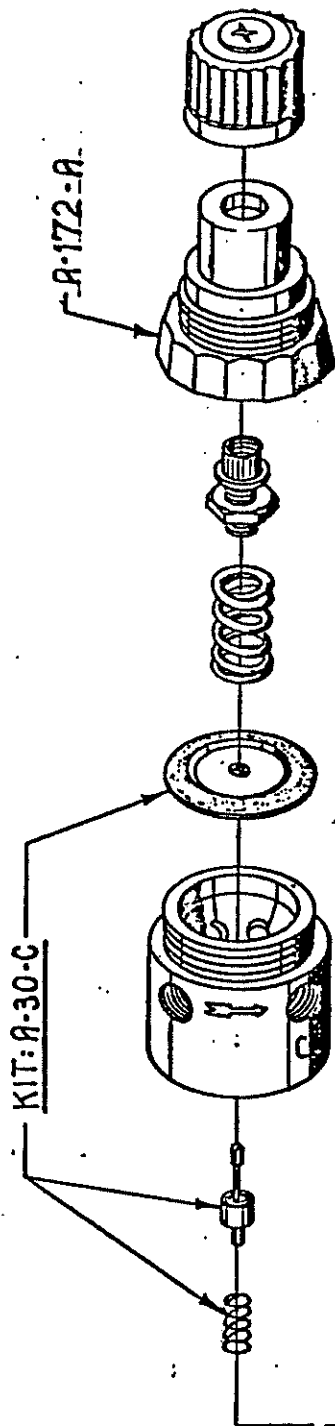
HOW TO DISMANTLE THE CYLINDER:

- Unscrew the defective head from the barrel;
- Take out the piston from the barrel;
- Hold the piston firmly and unscrew the coupling A-58.

HOW TO RE-ASSEMBLE THE CYLINDER:

- Fix the new head by screwing the coupling A-58 into the piston;
- When this work is completed, make sure the diameter of the piston does not exceed 1.115";
- Lubricate properly the piston with oil Z-400;
- Replace, with special care, the piston inside the barrel and make sure not to damage or reverse the seals. This is most important.
- Screw the head SUB-510-A on the barrel.

 Québec Canada	DESCRIPTION: HOW TO REPAIR SUB-5003 - TYPE "C"	SPÉCIFICATIONS MODEL 501E	PAR :	ÉCHELLE :
			PARTIE No.	BT-04
VÉR. :	APPR. : <i>CA</i>	DATE : 6-88		



 Québec Canada MENDES	DESCRIPTION: REGULATOR REPLACE PARTS		SPÉCIFICATIONS MODEL 501E		PAR :	ÉCHELLE :
	VÉR. :	APPR. : <i>MM</i>	DATE : <i>6-88</i>	PARTIE No. <i>BT-13</i>		



Québec
Canada

DESCRIPTION :

FIVE PIN MAIN VALVE

VÉR. :

APPR. : *M/C*

DATE : 6-88

SPÉCIFICATIONS

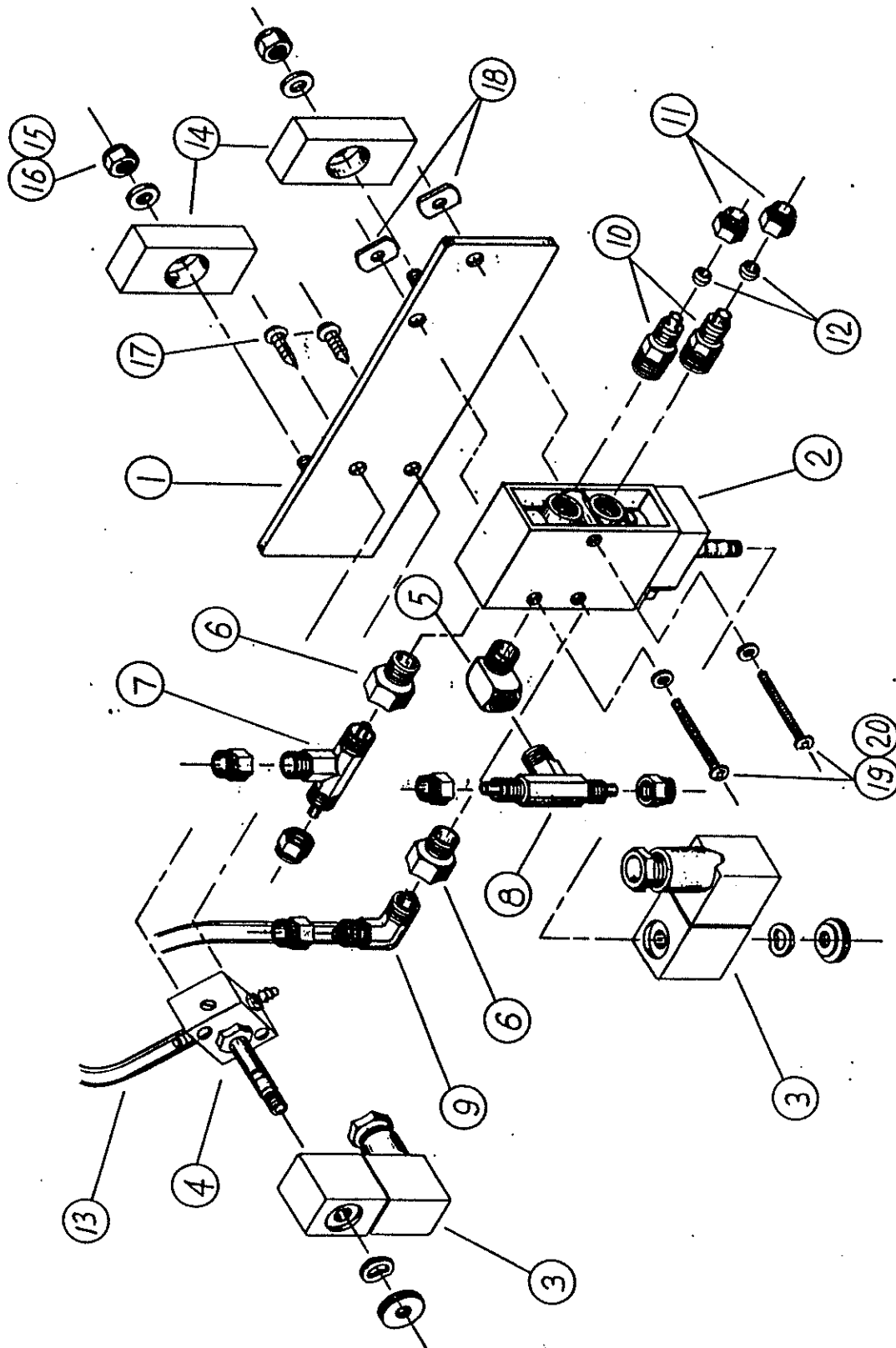
MODEL 501E

PAR :

ÉCHELLE :

PARTIE No.

SB-A014-9982-5



MATERIAL LIST
FIVE PIN MAIN VALVE ASSEMBLY
SB-A014-9982-5

<u>CODE NO</u>	<u>INDEX</u>	<u>DESCRIPTION</u>
M-014-9982-5	1	MOUNTING PLATE MAIN VALVE
A-014-9982	2	VALVE MFH 5 1/8" FESTO
A-014-6718	3	MSFW 24AC SOLENOID FESTO
A-014-4450	4	VALVE MFH-3 10/32" FESTO
A-041	5	STREET ELBOW 1/8"
A-073	6	ADAPTOR 1/8" M.S. 1/8" F.
A-313	7	MALE R/TEE 1/4" OD 1/8" MPT
A-308	8	MALE BRA. TEE 1/4" X 1/8" PT
A-309	9	MALE ELBOW 1/4" X 1/8" PT
A-304	10	MALE CONNECT 1/4" X 1/8" PT
A-302	11	NUT SLEEVE ASS. 1/4"
A-300	12	POLY. SLEEVE 1/4"
A-330	13	POLY. FLO TUBING 1/4" BLUE
P-014-9982	14	SPACER BLOCK MOUNT. PLATE
H-023	15	1/4" I.D. FLAT WASHER
H-044	16	1/4"-20 HEX NYLOCK NUT
H-072A	17	#8 X 3/4" RH SOCK WOOD SCW
H-086-2	18	6/32 WELD NUT SP-NR # 241
H-052D	19	6/32 X 1" RH SOCK MACH SCW
H-024	20	3/16" I.D. FLAT WASHER

Quebec, August 1988

Dear customer:

Your manufacturer is pleased to enclose herewith an "OILING AND CHECKING CHART".

Its presentation is quite simple and no doubt it will be helpful to your operator in the maintenance of your pinsetters.

We invite you to follow these instructions most carefully. You will be the first to benefit from rewarding savings realized by eliminating unnecessary service calls, undue mechanism wear, etc.

Our co-operation is yours! Any ideas you may have in mind will benefit both parties.

Yours very truly,

MENDES INC.



Lucien Rochefort
Product Manager

LR/mct

OILING AND CHECKING CHART

PNEUMATIC PINSETTERS

	DAILY	WEEKLY	MONTHLY	EVERY 2 MONTHS	YEARLY
1.- Oiling of main cylinder SUB-5003	X				
2.- Checking and adjusting of the strings	X				
3.- Cleaning and oiling of main cylinder cables (SUB-5003)		X			
4.- Oiling of ball lift					
5.- Bleeding of the compressor reservoir and checking of oil level in the compressor		X			
6.- Oiling of the sensor sheave assembly Oiling of the pin bumper assembly		X			
7.- Cleaning of the air dryer					
8.- Cleaning of the filter of the air dryer			X		
9.- Oiling of shaft of all moving parts and axle of the pulleys P-8			X		
10.- Checking of the cables tension on the main cylinders (see BT-2)			X		
11.- Tightening of all screws and checking of the vibro insulators			X		
12.- Changing of the oil in the compressor				X	
13.- Cleaning or changing of the filter					X
14.- Changing of the filter of the air compressor					X
15.- Checking of the compressor by a specialized firm in this field					X

N.B. OILING OF THE MAIN CYLINDERS IS AUTOMATIC ON MODELS 201 - 501 - 901

 McNDes Inc. QUEBEC - CANADA	DESCRIPTION: OILING AND CHECKING CHART		SPECIFICATIONS PNEUMATIC PINSETTERS	PAR: DATE: OCTOBER 1979	ECHELON PARTIE NO: BT-5
	VER: 05 1979 APPLIC: 5.1				



Québec
Canada

DESCRIPTION :

FRONT BALL LIFT

SPÉCIFICATIONS

PAR :

PARTIE No.

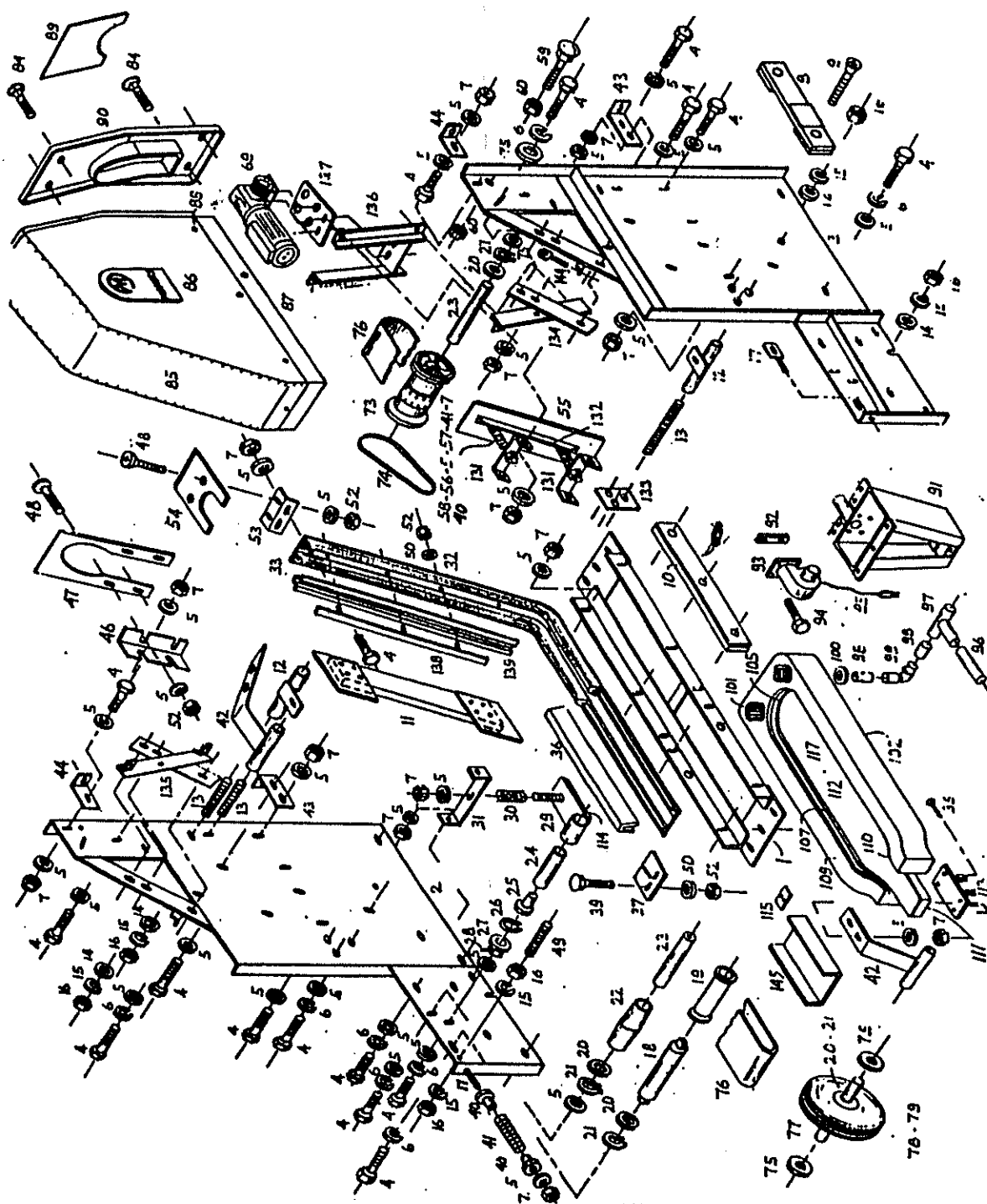
Q 85-1080

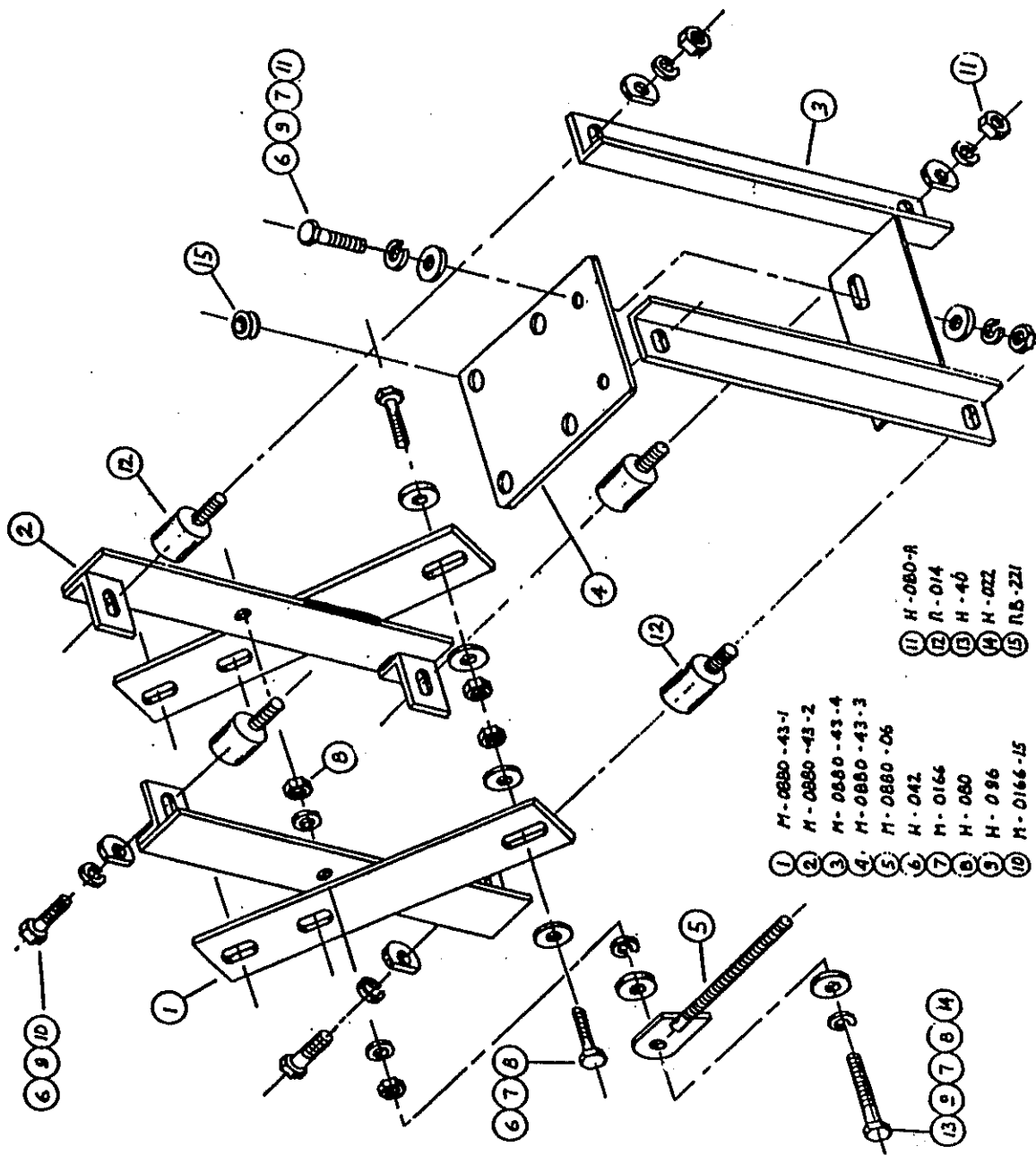
VÉR. :

APPR. :

DATE :

6-88





- | | | | |
|----|-------------|----|---------|
| 1 | M-0880-43-1 | 11 | H-080-R |
| 2 | M-0880-43-2 | 12 | R-014 |
| 3 | M-0880-43-4 | 13 | H-40 |
| 4 | M-0880-43-3 | 14 | H-022 |
| 5 | M-0880-06 | 15 | RS-221 |
| 6 | H-042 | | |
| 7 | M-0166 | | |
| 8 | H-080 | | |
| 9 | H-096 | | |
| 10 | M-0166-15 | | |

 Québec Canada	DESCRIPTION: MOTOR BALL LIFT SUPPORT ASSEMBLY		SPÉCIFICATIONS	PAR :	ÉCHELLE :
	VÉR. : APPR. : <i>[Signature]</i> DATE : 6-88		PARTIE No. SB-0880-43		

MATERIAL LIST

BALL LIFT S. T. DUCK & FIVE

Q88-0880

<u>CODE NO</u>	<u>INDEX</u>	<u>DESCRIPTION</u>
M-0880-50		HOSE COLLAR 1 1/4"
R-0880-07		DRIVE WHEEL RUBBER GRIP
M-0880-51		SUBWAY GUIDE HOOD
M-0880-01	1	BALL LIFT BASE
M-0880-02	2	LEFT SIDE PLATE
M-0880-03	3	RIGHT SIDE PLATE
H-042B	4	CAP SCREW H.H.5/16-18X1"
M-0166	5	CABLE TENSIONER WAS.1 1/8
H-096	6	LOCK WASHER 5/16"
H-080	7	HEX.NYLOCK 5/16 - 18
30W-0880-01	8	SIDE BLOCK
30W-0880-02	10	BOTTOM BALL GUIDE
30W-0880-03	11	BALL & STRAP GUIDE
M-0880-04	12	RETAIN. SHAFT BALL TRACK
M-0880-05	13	CROSS BAR 1/2-13X9 3/4
H-020	14	FLAT WASHER 1/2"
H-098	15	LOCK WASHER 1/2"
H-077B	16	3/8-16 HEX.LOCK NUT
M-0880-06	17	TENSION RETAINING SHAFT
M-0880-07	18	TENSION SHAFT
P-0880-01	19	PLASTIC WHEEL
H-025-10	20	SPACER WASHER 13/16"
H-002-1	21	"C" RING 11/16"
P-0880-02	22	TENSION PLASTIC WHEEL
M-0880-08	23	TENSION SHAFT
M-0880-09	24	TENSION BREAK SHAFT
P-029	25	BALL LIFT CYL.BALL GATE
H-002	26	"C" RING 1/2"
P-0880-03	27	PLASTIC GUIDE BELT
H-063C	28	1/4"-20X3/4" SET SCW.
M-0880-10	29	TENSION BREAK
S-0690-06	30	COMPRESSION SPRING
M-0880-11	31	TENSION BREAK SUPPORT
M-0880-12	32	BALL TRACK
P-0880-04	33	VINYL TRACK
P-0880-24	36	PLASTIC BALL GUIDE
M-0880-13	37	ATTACHMENT PLATE RAIL
H-048	39	MACH.SCW F.H.1/4-20X1 1/2
P-0880-05	40	BUSHING
S-0670-12	41	BALL ELEVATOR SPRING
M-0880-14	42	ANGLE SUPPORT BALL TRACK
M-0880-15	43	BOTTOM SUPPORT ANGLE
M-0880-16	44	TOP SUPPORT ANGLE
M-0880-17	46	ANGLE TOP DROP SWEEP
P-0880-07	47	PLASTIC TOP DROP SWEEP
H-045-20	48	JOINT CONN.BOLT 1/4-20X2"

MATERIAL LIST

BALL LIFT S. T. DUCK & FIVE

Q88-0880

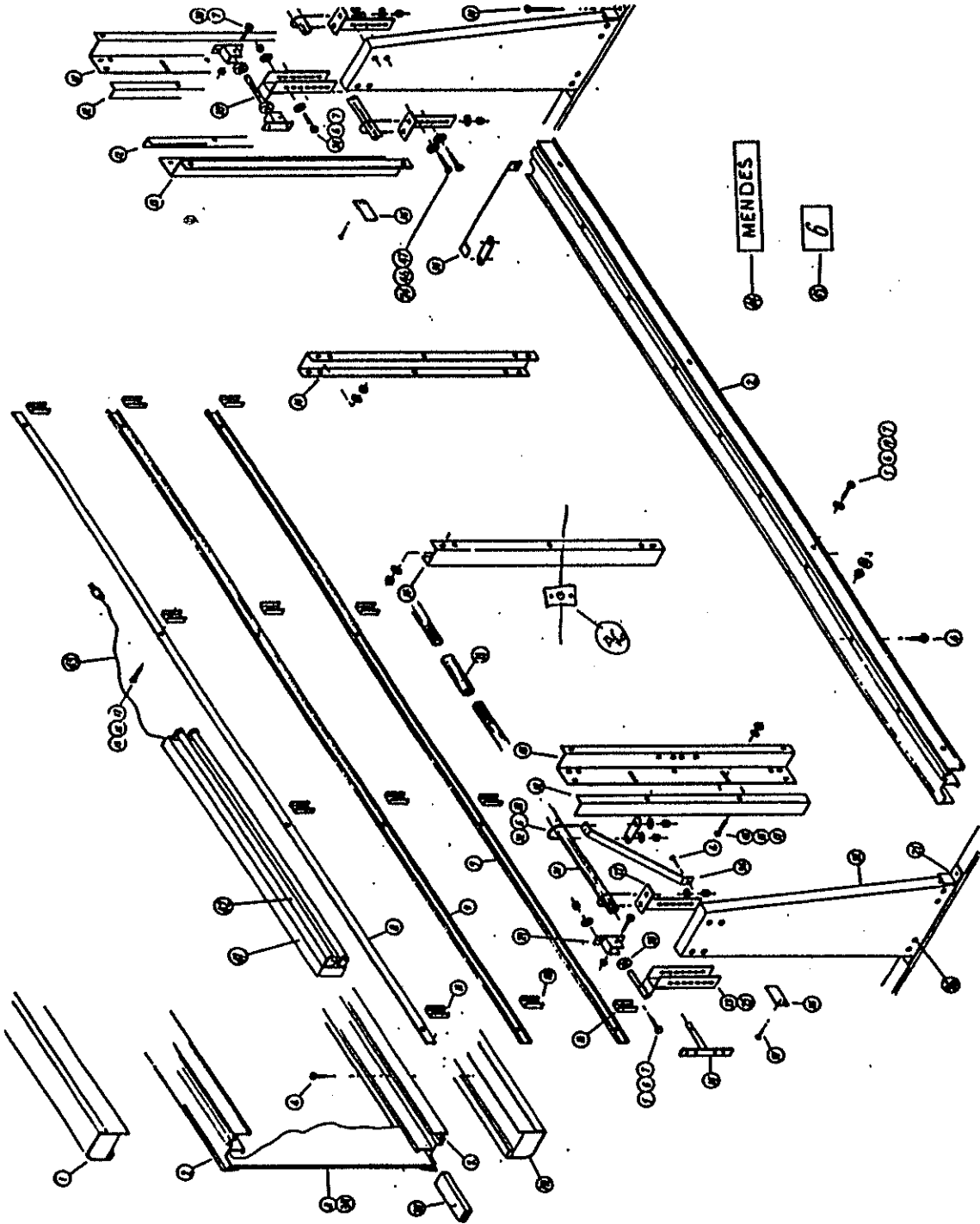
<u>CODE NO</u>	<u>INDEX</u>	<u>DESCRIPTION</u>
M-0880-26	49	CROSS BAR 3/8-16 X9 3/4
H-023	50	FLAT WASHER 1/4"
H-082	51	HEX. NUT 1/4"-20
H-044	52	HEX. NYLOCK 1/4 - 20
M-0880-18	53	ANGLE DROP SWEEP
P-0880-08	54	PLASTIC DROP SWEEP
P-0880-27	55	TENSION SUPPORT PLATE
H-052-35	56	MACH.SCW F.H. 5/16-18X4"
M-0880-19	57	SLEEVE 1/2" X 3/4"
M-0880-20	58	SPECIAL CAUPLING 5/16"
H-057	59	CARRIAGE BOLT 1/4-20X3"
H-080-5	60	HEX. KEEP NUT 5/16 - 18
E-0670-01	69	REDUCER MOTOR
M-0880-21	71	DRIVE PULLEY M.A. 50X1/2"
P-0880-10	73	PLASTIC DRIVE WHEEL
R-0880-03	74	V-BELT
M-0167	75	SPECIAL FLAT WASHER 5/16"
R-0880-04	76	FLAT BELT 4" X 112"
M-0880-25	77	SHAFT HOLDER
R-0880-05	78	RUBBER WHEEL
R-0880-06	79	RUBBER TUBE-INCLUS #78
H-052V	84	MACH.SCW F.H. 5/16-18X1"
P-0880-201	85	HOOD COVER
M-0880-30	86	NAME PLATE
M-0880-31	87	BASE OF COVER
H-035C10	88	POP RIVET 3/16 X 5/8
P-0880-202	89	PLASTIC TOP DROP SWEEP
P-0880-203	90	HOOD DOOR
M-0880-32	91	FEDESTAL ASSY.
M-0690-10	92	VALVE RETAINER PLACE
E-0880-01	93	AIR ORNER
H-046	94	CAP SCW H.H. 1/4-20X3/4"
E-562	95	CORD 6'
P-0880-20	96	PLASTIC HOSE 2" X 14 1/7"
P-0880-21	97	PLASTIC "T" 2"
P-0880-22	98	PLASTIC HOSE 2" X 3"
P-0880-23	99	PLASTIC ELBOW 2"
P-0880-204	100	BOTTOM PLASTIC RING
P-0880-205	101	VENT
P-0880-206	102	RACK CLAUSTER DUCK
M-0880-37	105	ALUMINUM TRACK CURVED
M-0880-38	107	STRAIGHT ALU.TRACK
M-0880-39	109	LEFT ANGLE ALUMINUM TRACK
P-0880-14	110	RIGHT ANGLE ALU. TRACK
MBC-1000-01	111	"P" MOLDING
P-0880-17	112	BALL TRCK BOTTOM
M-0880-40	113	BALL TRACK ATTACHEMENT
P-0880-16	114	TENSION BREAK PLASTIC

MATERIAL LIST

BALL LIFT S. T. DUCK & FIVE

Q88-0880

<u>CODE NO</u>	<u>INDEX</u>	<u>DESCRIPTION</u>
P-0880-15	115	BALL TRAC SPACER
30W-0880-04	117	PLYWOOD BOTTOM
M-0880-41	131	COMP.BRACE SUPPORT
M-0880-27	132	ANGLE SUPPORT
M-0880-02-5	133	PLATE
M-0880-43-2	134	MOTOR RIGHT X SUPPORT
M-0880-43-1	135	MOTOR LEFT X SUPPORT
M-0880-43-4	136	MOTOR BALL LIFT SUPPORT
M-0880-43-3	137	DRIVE PLATE MOTOR
M-0880-44	138	BALL TRACK GRIP METAL
R-0880-44	139	BALL TRACK GRIP RUBBER
M-0880-42	144	TENSION SHAFT STRAP
M-0880-45	145	ADAPTOR
R-014	146	VIBRO INSULATOR

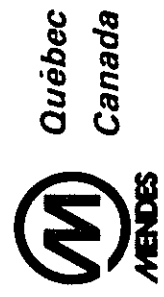


PAR :
ÉCHELLE :
PARTIE No. **Q88-2000**

SPÉCIFICATIONS

DESCRIPTION :
MENDES FUTURA MASKING UNIT

VÉR. : APPR. *Me* DATE : **6-88**



MATERIAL LIST

STANDARD SCREEN

Q88-2000

<u>CODE NO</u>	<u>INDEX</u>	<u>DESCRIPTION</u>
P-2000-01	1A	BOTTOM MOLDING
P-2000-02	1	TOP WOLDING
M-2000-01	2	MASK ALL WOLDING
P-2000-04	3	GRAPHICS PANEL BAND
P-2000-05	3A	GRAPHICS PANEL PIN UP
P-2000-06	3B	GRAPHICH PANEL DUCK DOWN
P-2000-07	3C	GRAPHICS PANEL TEN UP
P-2000-08	3D	GRAPHICS PANEL TEN DOWN
H-072E	4	#8X1"SOCK WOOD SCW RH
H-042B	5	5/16-18X1"CAP SCW HH
H-022	6	5/16"I.D. FLAT WASHER
H-080	7	5/16-18 HEX NYLOCK NUT
M-2000-02	8	WEIGHT BAR 133"
M-2000-03	9	"U"BAR 133"
M-2000-05	10	"U" SPACER (CENTER)
IC-43	10	1' ' BAGUE NOIR
M-2000-06	12	SIDE GUIDE
M-2000-07	13	SIDE VERTICAL FRAM
M-2000-08	14	CENTER VERTICAL FRAM
H-051C-10	15	10-32X1 1/2" MACH. SCW FH
H-024	16	3/16"I.D. FLAT WASHER
H-085	17	10-32 HEX NUT PLATED
H-051A	18	10-32X1 1/2"SOCK M. SCW R.H
M-0166	19	5/16" FLAT WASHER
10W-2000-01	20	SPACER
M-2000-09	21	BOTTOM SUPORT BRACKET
Q88-2000-02	22	MASH SUPORT M.F.
M-2000-10	23	PIVOT PIN R
H-038A	24	5/16-18X3"HH CAP SCW
M-2000-11	25	PIVOT PIN L
H-031C	26	1/4"X2"SPRING TENSION PIN
M-2000-13	27	PIPE SUPORT BRACKET
M-0193	28	1" I.D. COLLAR
M-2000-14	29	PIVOT BRACKET
H-045	30	1/4-20X1 3/4"HH CAP SCW
M-2000-20	31	HORIZONTAL SUPPORT
H-059C	32	1/4-20X1" "U" BOLT 5121
H-082	33	1/4-20 HEX NUT PLATED
M-2000-15	34	BRACE
M-2000-16	35	WALL PIVOT BRACKET
P-2000-03	36	STOPPER
H-072-20	37	#8X1 1/4RH SOCK WOOD SCW
M-2000-17	38	PIVOT PIN D
H-068-7	39	5/16X18 LAG SCREW
E-F48	41	FIXTURE 48" (OPTIONAL)
E-F48T	42	TUBE 48" (OPTIONAL)
E-562-9	43	CORD SET 9' (OPTIONAL)
Z-462	44	4"X21" MENDES DECALQUE BLK

MATERIAL LIST
STANDARD SCREEN

Q88-2000

<u>CODE NO</u>	<u>INDEX</u>	<u>DESCRIPTION</u>
Z-470-1	45	NUMBER 1
Z-470-2	45	NUMBER 2
Z-470-3	45	NUMBER 3
Z-470-4	45	NUMBER 4
Z-470-5	45	NUMBER 5
Z-470-6	45	NUMBER 6 OR 9
Z-470-7	45	NUMBER 7
Z-470-8	45	NUMBER 8
Z-470-0	45	NUMBER 0
M-2000-22	46	E-569 2"X4" BLANK COVER



Québec
Canada

DESCRIPTION :

SEATING MENDES FUTURA
3 SEATS - 1 TABLE

SPÉCIFICATIONS

PAR :

PARTIE No.

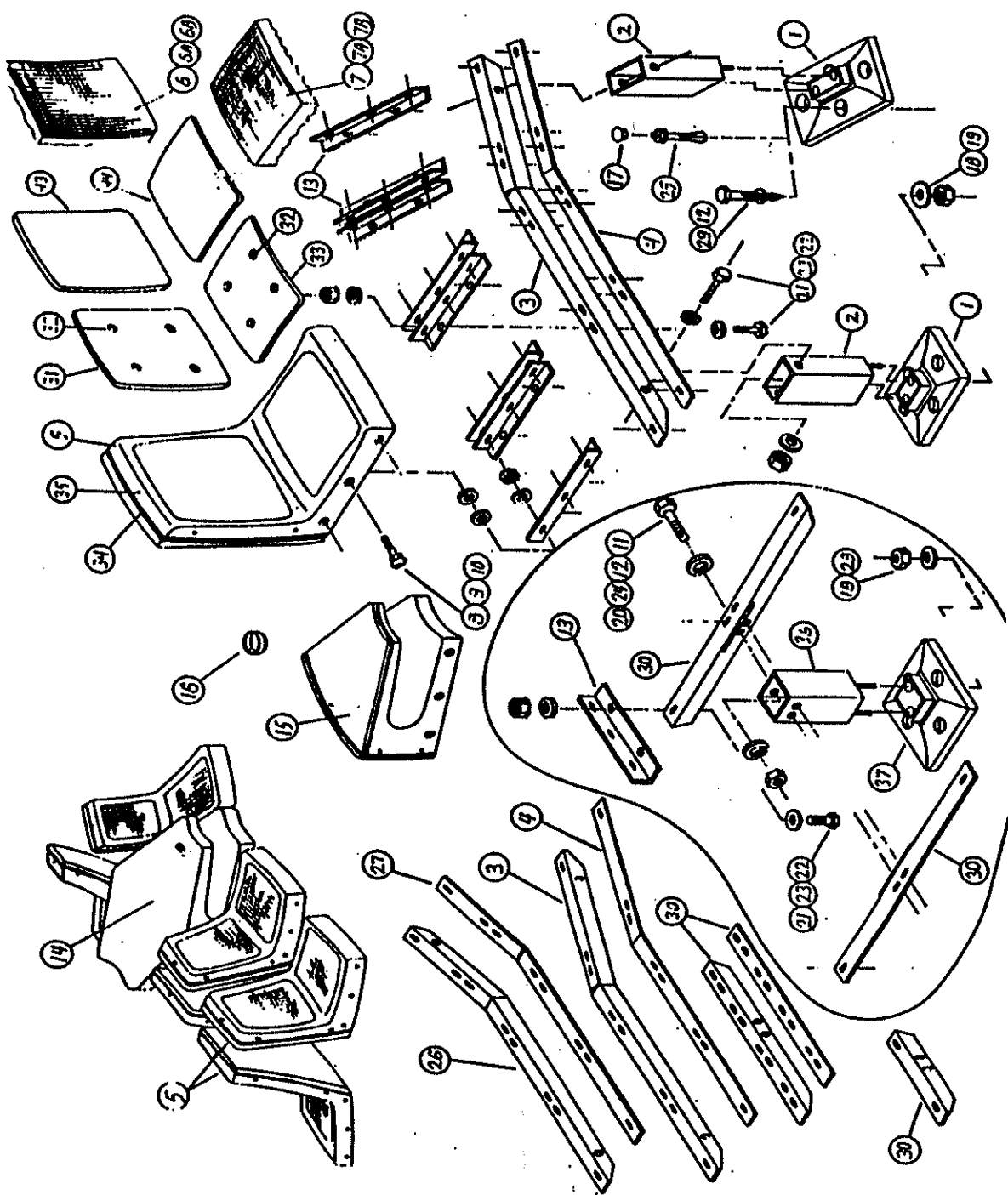
QBB-1000-3

ÉCHELLE :

VÉR. :

APPR. : *MR*

DATE : 6-88



MATERIAL LIST

SEATING MENDES FUTURA 3 SEATS & 1 TABLE

Q88-1000-3

<u>CODE NO</u>	<u>INDEX</u>	<u>DESCRIPTION</u>
M-1000-01	1	CHAIR BASE
M-1000-02	2	PEDESTAL CHAIR BASE
M-1000-04	3	REAR RIGHT ANGLE 3C+T
M-1000-06	4	FRONT RIGHT ANGLE 3C+T
Q-1000-05	5	COMP. CHAIR ASSEMBLY
SB-1040-10	6	BURGUNDY SEAT PAD
SB-1050-11	6A	TURQUOISE SEAT PAD
SB-1060-12	6B	BLUE SEAT PAD
SB-1040-05	7	BURGUNDY BC. PAD
SB-1050-06	7A	TURQUOISE BC. PAD
SB-1060-07	7B	BLUE BC. PAD
H-057G	8	1/4-20X 1'' CARRIAGE BOLT
H-023	9	1/4'' FLAT WASHER
H-082-5	10	1/4''-20 HEX KEP NUT
H-037L	11	3/8"-24 X 1" H.H. CAP SCW
H-021	12	3/8" FLAT WASHER
M-1000-14	13	CHAIR BRACKET
Q-1000-20	14	1/2 TABLE DOUBLE
Q-1000-25	15	TABLE SINGLE
Q-1000-30	16	ASHTRY FUTURA
P-1000-01	17	HOLE PLUG BLACK
H-078	18	1/2-20 HEX NUT PLATED
H-020	19	1/2" FLAT WASHER
H-077-3	20	3/8-24 HEX NUT PLATED
H-042B	21	5/16-18X1" H.H. CAP SCW
H-080-5	22	5/16-18 HEX KEP NUT
M-0166	23	FLAT WASHER
H-099	24	3/8'' LOCK WASHER
H-062-16	25	3/8"-16X3 1/2"SLEEVE 7414
M-1000-10	26	FRONT LEFT ANGLE 3C+T
M-1000-12	27	REAR LEFT ANGLE 3C+T
H-098	28	1/2 LOCK WASHER
H-067A	29	5/16-18X2 1/2 LAG SCREW
M-2900-04	30	ANGLE 2 CHAIRS
M-2900-05	30	ANGLE 3 CHAIRS
M-2900-06	30	ANGLE 4 CHAIRS
M-2900-07	30	ANGLE 1 CHAIR
30W-1000-05	31	SEAT PLYWOOD
H-080-C	32	1/4''-20 TEE NUT
30W-1000-10	33	BACK SEAT PLYWOOD 5/16''
ABC-1000-01	34	PLASTIC JOINT
H-035C-10	35	1/8X 5/8 POP RIVET
M-2900-10	36	BASE-CHAISE-TAB.MARQUEUR
M-2900-02	37	SUPPORT-CHAISE-T.MARQUEUR
ME-1000-05	38	CHAIR BOX
ME-1000-20	39	TABLE BOX
ME-1000-01	40	BASE CHAIR BOX
ME-1000-02	41	PEDESTAL BOX

MATERIAL LIST

SEATING MENDES FUTURA 3 SEATS & 1 TABLE

Q88-1000-3

<u>CODE NO</u>	<u>INDEX</u>	<u>DESCRIPTION</u>
ME-1000-30	42	1/2 TABLE BOX
ME-410	43	PAD BOX
P-1000-05	43	FOAM SEAT PAD
P-1000-10	44	FOAM BC PAD



Québec
Canada

DESCRIPTION :

2 SEATS CHAIR ASSEMBLY

VÉR. :

APPR. :

DATE : 6-88

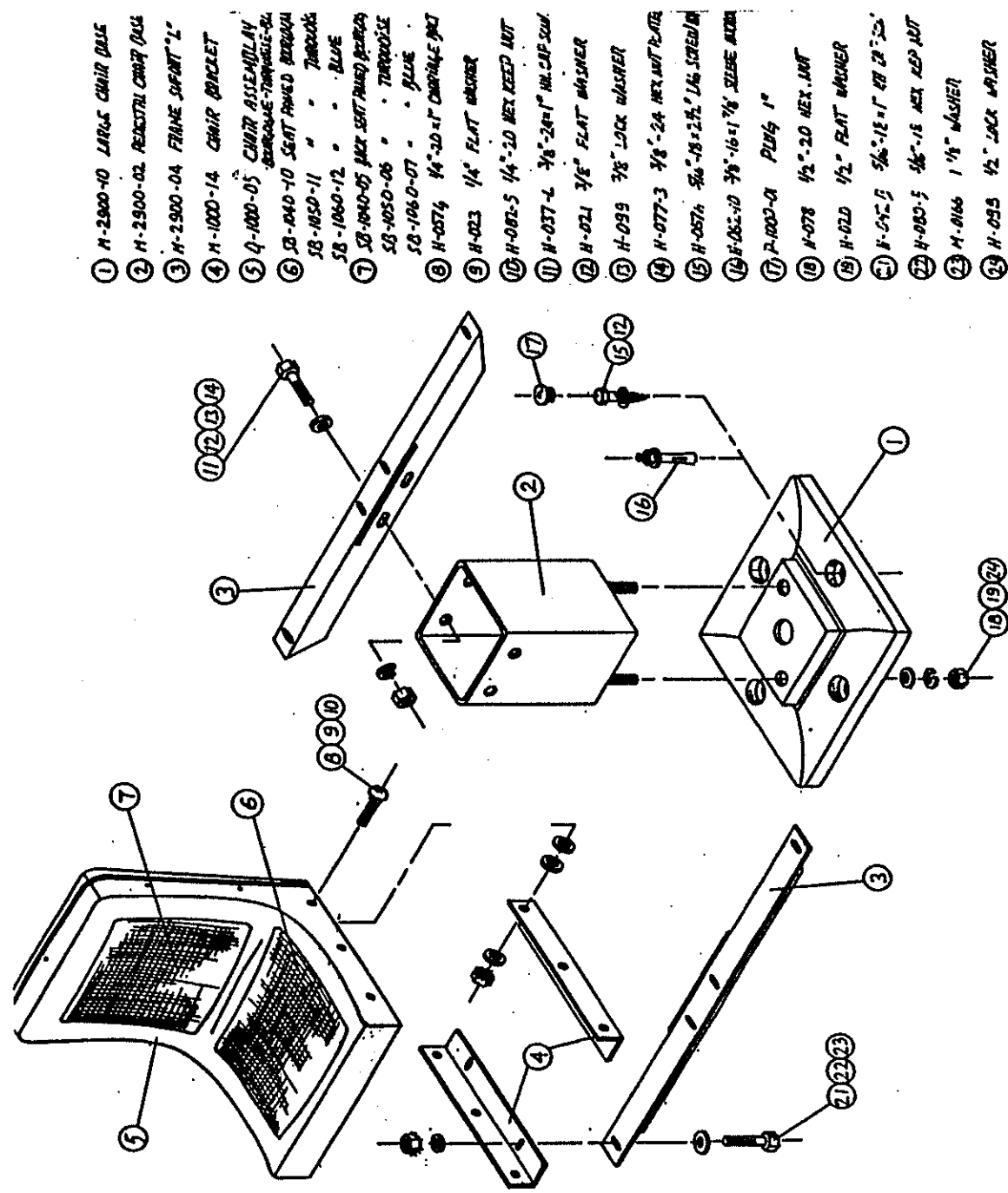
SPÉCIFICATIONS

PAR :

ÉCHELLE :

PARTIE NO.

Q88-1100-2



- 1 H-2900-10 LARGE CHAIR BASE
- 2 H-2900-02 REDUCED CHAIR BASE
- 3 H-2900-04 FRAME SPACER 1"
- 4 H-1000-14 CHAIR PINCHER
- 5 Q-1000-05 CHAIR ASSEMBLY
- 6 SB-1040-10 SEAT PIVOT
- 7 SB-1050-11 " " TURNABLE
- 8 SB-1060-12 " " BLADE
- 9 SB-1040-05 SEAT PIVOT
- 10 SB-1050-06 " " TURNABLE
- 11 SB-1060-07 " " BLADE
- 12 H-0574 1/4" 20 x 1" CHAIR PINCHER
- 13 H-023 1/4" FLAT WASHER
- 14 H-082-5 1/4" 20 HEX HEAD NUT
- 15 H-037-2 3/8" 24 x 1" HEX CAP SCREW
- 16 H-021 3/8" FLAT WASHER
- 17 H-099 3/8" LOCK WASHER
- 18 H-077-3 3/8" 24 HEX HEAD NUT
- 19 H-0574 1/4" 20 x 1" CHAIR PINCHER
- 20 H-0574 1/4" 20 x 1" CHAIR PINCHER
- 21 H-0574 1/4" 20 x 1" CHAIR PINCHER
- 22 H-0574 1/4" 20 x 1" CHAIR PINCHER
- 23 H-0574 1/4" 20 x 1" CHAIR PINCHER
- 24 H-0574 1/4" 20 x 1" CHAIR PINCHER