RESERVOIR UNIT PARTS (continued)

TRECEIT ON TARTO (continued)				
Key No.	Part Number	Qnty Used	Part Name or Description of Item	
F	ollowing P	arts are	e Common to all Reservoir Units	
06 07 08 09 10	NUT-062 RGO-060 OUT-010 FIT-058 NUT-161	1 1 1 1	NUT, Jam: 3/4-16 UNF RING, Seal: "O" type OUTLET, Drain: reservoir FITTING, Plug: 3/8" pipe NUT, Special: jam	
11 12 13 14 15	RGO-056 OUT-040 FIT-057 FIL-018 NUT-058	1 1 2 1 2	RING, Seal: "O" type OUTLET, Fluid: reservoir FITTING, Elbow: barbed FILTER, Fluid: NUT, Hexagon: 3/8-24 UNF	
16 17 18 19 20	RGO-030 INL-026 RGO-013 OUT-009 RGO-034	2 1 2 1	RING, Seal: "O" type INLET, Sight: top RING, Seal: "O" type OUTLET, Sight: bottom RING, Seal: "O" type	
21 22 23 24 25	PLG-026 BRK-072 RGO-017 WAS-003 NUT-051	1 4 4 6 4	PLUG, Sight: bottom BRACKET, Threaded: RING, Seal: "O" type WASHER, Flat: 1/4" NUT, Hexagon: 1/4-28 UNF	
26 27 28 29 30	NUT-104 BRK-039 ADP-073 NUT-063 SCR-075	4 1 1 1 2	NUT, Hexagon: self lock BRACKET, Mounting: air inlet ADAPTER, Fitting: air inlet NUT, Special: jam SCREW, Cap: 1/4-20	

Key	Part	Qnty	Part Name
No.	Number	Used	or Description of Item
31	FIT-112	1	FITTING, Elbow
32	FIT-036	1	FITTING, Nipple
33	REG013	1	REGULATOR, Air
34	GAU-001	1	GAUGE, Air
35	FIT-111	2	FITTING, Adapter: 1/4" NPTx3/8" Push In
36	BLK-005	A/R	TUBING, Plastic: 3/8" O.D.
37	FIT-108	2	FITTING, Adapter: 1/4 NPT" X 1/2" OD Tub
38	BLK-002	A/R	TUBING, Bulk: 1/2" O.D.
39	WAS-001	6	WASHER, Lock
40	SCR-105	2	SCREW, Cap: 10-24
41	SCR-108	4	SCREW, Cap: 10-24
42	VAL-009	1	AIR, Mechanical
43	FIT-107	2	FITTING, Adaptor: 1/8" NPTx3/8 Push In
44	VAL-008	1	VALVE, Solenoid
45	ZCN-013	1	CONNECTOR VALVE, 3 Prong
46	SCR-107	2	SCREW, Button Hd #8
47	WAS-024	2	WASHER, Lock
48	FIT-103	2	FITTING, Connector: 1/8" NPT X 1/4" Tube
49	BLK-001	A/R	TUBING, Bulk: 1/4" O.D.
50	TUB-017	1	TUBING, Plastic; 1/2" I.D.
51	FIT-086	1	FITTING, Barb
52	FIT-109	1	FITTING, Elbow: 1/8" (M)(F)
"C"	FC-7310	1	Transfer Pump: see NOTE below

NOTE:

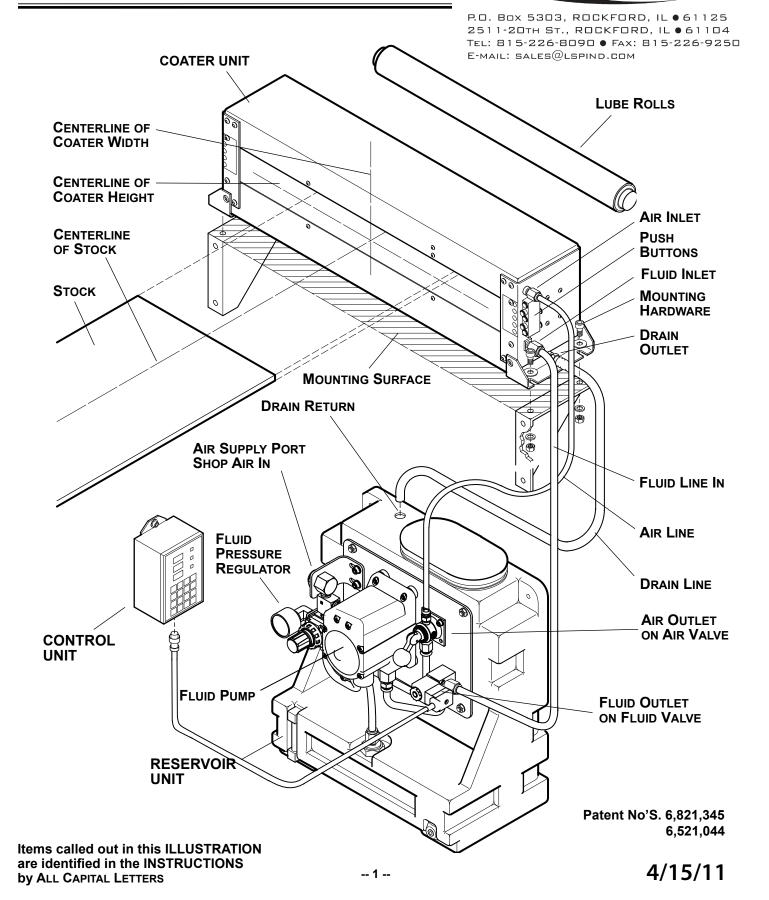
See the supplemental **INSTRUCTION BOOKLET** supplied for the "FC-7310" Pump (key # "C" above). It provides detailed information on the pump's usage, and includes an exploded view and parts listing.

TROUBLESHOOTING INSTRUCTIONS **PROBLEMS SOLUTIONS** No lubricant to any of the rolls. A. Check the controller. 1. Hold hand on solenoid to feel actuation when controller receives a signal. If solenoid does not receive a signal. a. Solenoid may be bad b. Proximity switch may be misaligned or broken. c. Controller may be broken and not receiving or sending a signal. B. Check the diaphragm pump. 1. Air pressure may have been lost. 2. Diaphragm pump may be hung up. II. The coil stock is coming out or the A. One of the manifolds is plugged. FloaterCoater with dry stripes. 1. Remove the tube from the manifold. 2. Remove the fitting from the manifold. 3. Blow air in the reverse direction that the lubricant flows. 4. Check and make sure that the hole is free and reassemble the lines. III. Lubricant continues to flow A. Check the solenoid to see if it has to be replaced. in between cycles & in the rest mode B. Check the controller to see if it is broken and in the open position. IV. Lubricant has become gummy in A. Remove rolls, clean and purge the FloaterCoater with water or solvent. the FloaterCoater. B. Clean the rolls and reassemble the FloaterCoater. This is caused when changing from oils or water solubles to synthetics. To avoid this problem, purge the system prior to filling with lubricants that are incompatible. V. Not enough lubricant being A. Is the controller set to stay open long enough to get a complete coating on each cycle of the feeder. dispersed onto the coil stock. B. Smooth rolls give the finest coating, A course roll will leave a much heavier coating. A. If large quantities of lubricant is being returned to reservoir, the open time on the VI. Too much lubricant being dispersed controls is ope for too long a time. on the coil stock. B, Try a smooth roll to reduce the amount of lubricant transferred to the coil stock.

INSTALLATION, OPERATION, and TROUBLESHOOTING

with REPLACEMENT PARTS LISTING for FloaterCoater Model Nos. FC-1130, -1136 & -1148 Reservoir Model Nos. FC-7314, -7318, & -7320





INSTALLATION INSTRUCTIONS

A. Locating the COATER UNIT

The **COATER UNIT** should be located so the **STOCK** to be coated will pass through the centers (both width and height) of its opening. The **COATER UNIT** must be oriented so the **STOCK** enters its front side (that side labeled with instructions and logo).

Good results may be had with the **STOCK** somewhat off-center in this opening. However, the closer the centering, the better will be the performance. Very narrow and thick stock will require closer centering in the width of the **COATER** for an even coating. The **LUBE ROLLs** float up/down, so the **STOCK** may be off-center in the height of the opening to a limited degree.

To have a **Mounting Surface** on which the **COATER** can be placed at the proper height usually requires some fabrication. This **Surface**, and any bracketing used, must give solid support. The **Surface** need not be one continuos flat, but may be two separate pads. This **Surface** (**Surfaces**) should be in one plane, and be as parallel to the **Stock** to be lubricated as practical.

B. Mounting the COATER UNIT

The **COATER UNIT** is mounted by having its feet bolted to the **MOUNTING SURFACE**. Use 3/8" bolts with heavy flat washers to do this. If the **SURFACE** is 3/8" or more thick, you may drill and tap for 3/8" thread and bolt into it. If this **SURFACE** is less than 3/8", drill 13/32" holes through it and use a lockwasher and nut on the underside.

C. Locating the RESERVOIR UNIT

The **RESERVOIR UNIT** may be set in place on its feet, or mounted on a wall using the holes provided. When deciding on a location for this **UNIT**, consider the following:

- **1.** The lubricant tank will require filling. Make sure its location will allow this to be done without hindrance and encumbrance.
- 2. AIR/FLUID/DRAIN LINES will need to be routed to the COATER UNIT and attached (see para. D below). Make sure these lines are long enough to reach from this UNIT to the COATER. Longer LINES are available from L.S.P. if needed.
- An AIR SUPPLY will need to be connected to the RES-ERVOIR UNIT (see para. E. below). Make sure the location of this UNIT allows this done without difficulty.
- **4.** Make sure the routing of any of the **LINES** above will not cross passage ways, will not ensnare, and will not interfere with operations.
- NOTE: The RESERVOIR UNITs are available in various capacities. Make sure you can identify the UNIT you are installing should you need to use the REPLACE-MENT PARTS listing later.

D. Attaching the AIR/FLUID/DRAIN LINES

An AIR LINE, FLUID LINE, AND DRAIN LINE will need to be routed between the RESERVOIR and COATER UNITs, and have their respective connections made. If these LINEs are too long, they may be cut to appropriate lengths; however, always leave enough slack to prevent sharp bends that might cause the LINEs to kink. Using the front illustration as example, make the following connections:

- Connect the 1/4" O.D. AIR LINE at the AIR INLET on the COATER UNIT, and at the AIR OUTLET on the RESER-VOIR UNIT.
- Connect the 1/4" O.D. FLUID LINE at the FLUID INLET on the COATER UNIT, and at the FLUID OUTLET on the RESERVOIR UNIT.
- Connect one end of the 5/8" O.D. DRAIN LINE to the DRAIN OUTLET on the COATER UNIT, and insert the other end into the DRAIN RETURN hole in the top of the RESERVOIR UNIT.

NOTE: Use a thread sealant on all the pipe connections to insure against air and fluid leakage.

E. Attaching the AIR SUPPLY

Connect an AIR SUPPLY of at least 70 PSI at the AIR SUPPLY PORT on the RESERVOIR UNIT. It is advised that you make this connection with a quick-disconnect fitting to allow shutting down the UNIT should an AIR OR FLUID LINE to the COATER become loose or severed. For the best performance, it is also advised that this AIR SUPPLY be filtered, regulated, and lubricated.

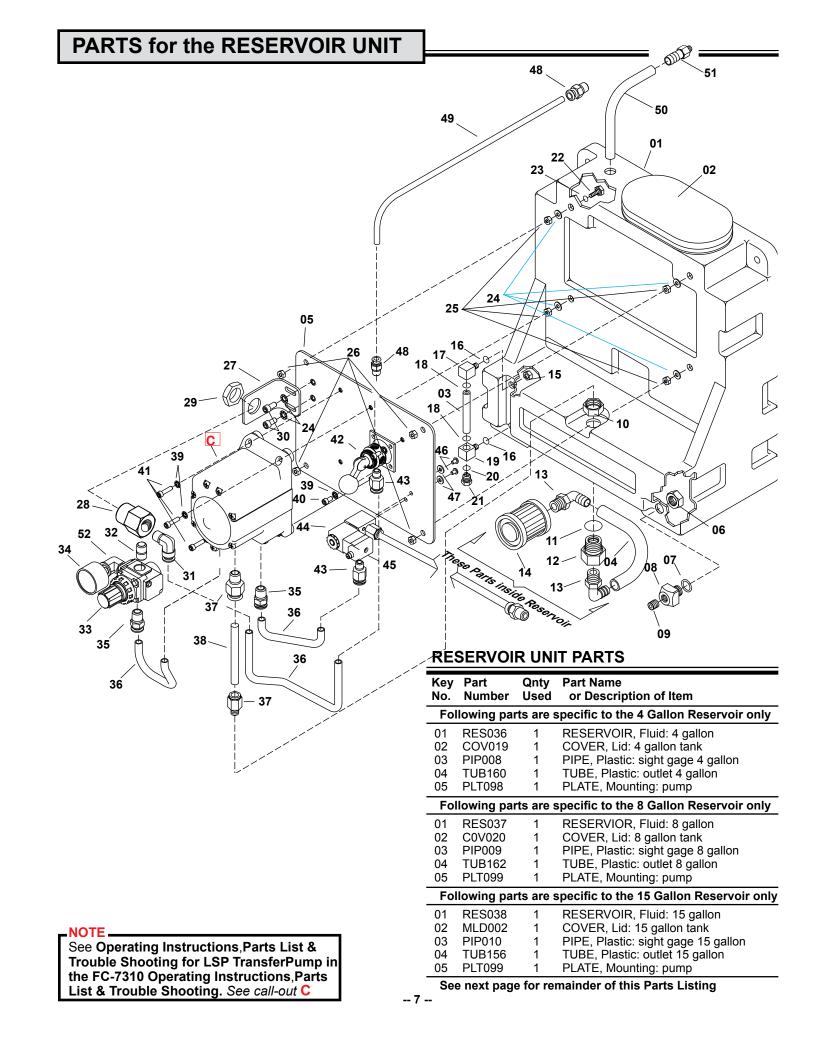
F. Installing the LUBE ROLLS

The **Lube Rolls** are shipped separately to prevent damage to their support bearings. There is no distinction between the two **Rolls** (they are identical). Install the **Rolls** as described below and shown in Figure #1.

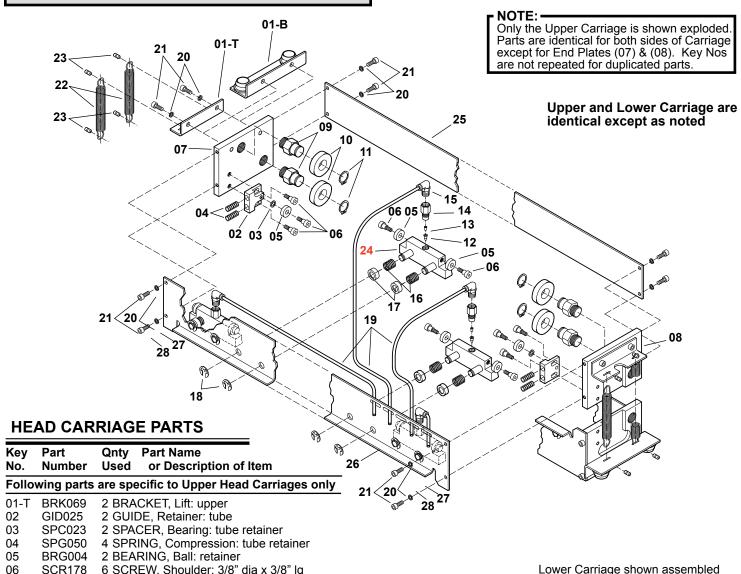
- **1.** Open the **ROLL CARRIAGEs** using the **AIR VALVE** found on the **RESERVOIR UNIT** for this purpose.
- 2. Install the lower **Lube Roll** by simply setting it in its place. Make sure it is centered and resting level on its support bearings.
- 3. WARNING Before installing the upper LUBE ROLL SET SCREWS, (28) AND JAM NUT, (27) MUST BE REMOVED to allow ROLL to be installed. These Jam Nuts and Set Screws hold the SPRING LOADED RETAINERS in place.
- **4.** Install the upper **LUBE ROLL** by forcing it upwards past its spring loaded retainers until it snaps into place. Before applying force, make sure the **ROLL** is centered and is in contact with its support bearings at both ends.
- 5. Insert **SET SCREWS**, (28), at both ends until they gently touch the **SPRING LOADED RETAINERS**.
- **6.** Apply the **JAM NUTS**, **(27)**, to the **SET SCREW**, **(28)**, and lock in place.
- 4. Close ROLL CARRIAGES using the AIR VALVE.

G. Installing the CONTROL UNIT

Various methods may be used to control the dispensing of the lubricant applied. If using an L.S.P. CONTROLLER, see the INSTRUCTIONS supplied with it for installation. If using the P.L.C. (Programmable Logic Control) on your machine, see para. E. under OPERATING INSTRUCTIONS for directions.



PARTS for the HEAD CARRIAGE



-- 6 --

Following parts are specific to Lower Head Carriages only

01-B BRK068 2 BRACKET, Lift: lower

Following parts are common to all the Head CarriageS

07	PLT089	2 PLATE, Head: left side
80	PLT090	2 PLATE, Head: right side
09	AXL002	8 AXIAL, Bearing: roll support
10	BRG003	8 BEARING, Ball: roll support
11	RGR028	8 RING, Retaining: std external
20	WAS021	24 WASHER, Lock: 1/4" int tooth
21	SCR096	24 SCREW, Cap: 1/4 UNF x 5/8" lg
22	SPG047	4 SPRING, Extension: head
23	PIN007	4 PIN, Retainer: spring
27	NUT-065	2 NUT: Jam, 8-36
28	SCR-111	2 SCREW: Set, cup point, 8-36

Qnty Used for the following is the number required for each OUTLET, Dispenser: (Key # 24) used in the given Coater.

05	BRG004	2 BEARING, Ball: dispensor
06	SCR178	2 SCREW, Shoulder: 3/8" dia x 3/8" lg
12	CHK016	1 CHECK, Fluid: dispensor
13	EYE006	1 EYELET, Insert: dispenser
14	INL045	1 INLET, Fluid: dispensor
15	FIT102	1 FITTING, Elbow: 5/32" tube x 1/8 NPT
16	SPG051	2 SPRING, Compression: dispensor
17	SPC024	2 SPACER, Spring: dispensor
18	RGR029	2 RING, Retaining: E type
19	BLK013	A/R TUBING, Plastic: 5/32" O.D.

Lower Carriage shown assembled and attached to Upper Carriage with the Extension Springs.

Differences between Upper and lower Carriage

Upper Carriage uses Upper Bracket at (01), and uses Roll Retainer parts (02) thru (06)

Lower Carraige uses Lower Bracket at (01), and has no Roll Retainer parts.

24 430OUT02 14 OUTLET, Dispensor: 36" head 25 PLT084 2 PLATE, Back: 36" head 26 PLT087 2 PLATE, Front: 36" head Following parts are specific to a 48" Head Carriage of		ey Part Qnty o. Number Used	
25 PLT083 2 PLATE, Back: 30" head 26 PLT086 2 PLATE, Front: 30" head Following parts are specific to a 36" Head Carriage of the specific to a 36" Head Carriage of the specific to a 36" head 24 4300UT02 14 OUTLET, Dispensor: 36" head 25 PLT084 2 PLATE, Back: 36" head 26 PLT087 2 PLATE, Front: 36" head Following parts are specific to a 48" Head Carriage of the specif	ge only	ollowing parts are	
24 430OUT02 14 OUTLET, Dispensor: 36" head 25 PLT084 2 PLATE, Back: 36" head 26 PLT087 2 PLATE, Front: 36" head Following parts are specific to a 48" Head Carriage of	ıd	5 PLT083 2	
25 PLT084 2 PLATE, Back: 36" head 26 PLT087 2 PLATE, Front: 36" head Following parts are specific to a 48" Head Carriage of	Following parts are specific to a 36" Head Carriage only		
	ıd	5 PLT084 2	
	Following parts are specific to a 48" Head Carriage only		
24 430OUT03 14 OUTLET, Dispensor: 48" head 25 PLT085 2 PLATE, Back: 48" head 26 PLT088 2 PLATE, Front: 48" head	ıd	5 PLT085 2	

OPERATING INSTRUCTIONS

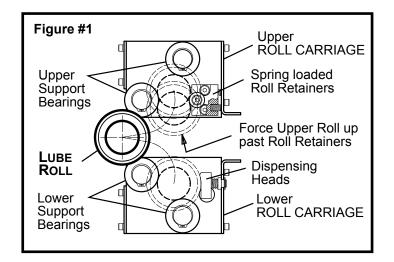
A. Inserting the STOCK

At times, STOCK will have to be fed through the COATER UNIT and into the press. This is to be done as follows:

- 1. The ROLL CARRIAGEs must be opened before feeding STOCK through the UNIT or there may be damage done to the LUBE ROLLS. This is done using the AIR VALVE on the RESERVOIR UNIT.
- 2. Once opened, feed the STOCK through the UNIT.
- 3. Close the ROLL CARRIAGES with the AIR VALVE.

B. Priming the Fluid System

At startup (or if the fluid tank is left to run dry) the FLUID LINE will contain only air. Before beginning (continuing) operation, these LINES should be filled (refilled) with lubricant. This is done by having the CONTROL UNIT cycle until the system is filled and lubricant is being applied at the LUBE ROLLS.



C. Selecting the Area to be Lubricated

If lubricant is only required on a portion of the LUBE ROLL'S width, that area not needing lubricant can be left dry. This is done by using the two sets of PUSH BUTTONS located at the sides of the COATER UNIT. One set controls application to the upper LUBE ROLL, the other controls application to the lower LUBE ROLL.

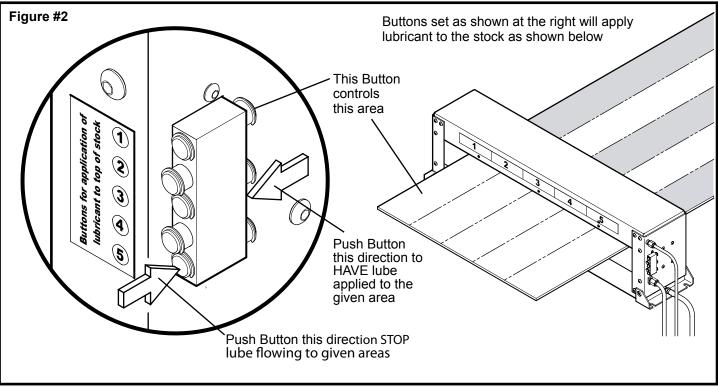
The **PUSH BUTTONS** are ends of valve spools. Pulling a **BUTTON** in from the front side of the **COATER** allows lubricant to go to its respective area on the **LUBE ROLL**. Pushing that **BUTTON** in from the back side stops lubricant flow to that area. See Figure #2 for illustration.

These **Buttons**, control the lube to respective areas on the **Lube Roll**. The labels on the **Valve Manifold** aid in making your selection.

D. Removing the LUBE ROLLS

Use the following instructions and Fig. #1 for direction.

- 1. Open ROLL CARRIAGE using the 3-Way Air Valve.
- 2. Remove STOCK from COATER UNIT.
- Lift out the lower LUBE ROLL. This ROLL is removed by simply lifting it out of its ROLL CARRIAGE.
- 4. WARNING, The top ROLL is held in place with SPRING LOADED RETAINERS plus a SET SCREW (28) and JAM NUT (27) at both ends. Loosen the JAM NUTS at both ends and completely remove the SET SCREWS, so that the SPRING LOADED RETAINERS are unlocked and unrestricted. Place a screw driver shank under the cover and on top of the roll at one end. Wedge the handle up so that the shank forces the roll down, dislodging it from its spring loaded retainers. If possible offer some support to the roll so that it does not fall down with force and damage the bottom bearings.
- **5.** See para. F. under **INSTALLATION INSTRUCTIONS** for re-installing the **ROLLS**.



-- 3 --

OPERATING INSTRUCTIONS (continued)

E. Using the CONTROL UNIT

The CONTROL UNIT governs dispensing the lubricant by controlling the FLUID VALVE on the RESERVOIR UNIT. The lubricant in the RESERVOIR UNIT is pressurized by the FLUID PUMP and is held in check by the FLUID VALVE. When activated (opened) by the CONTROL UNIT, the FLUID VALVE allows the lubricant to flow to the dispensing heads and wet the LUBE ROLLS. This is done as the STOCK is being fed out. As the feed-out drives the wetted ROLLS, the lubricant is deposited onto the STOCK.

Any device that can be programmed to provide the proper functions may be used as the CONTROL UNIT. It might be a UNIT supplied by L.S.P. or other source, or the controller (P.L.C.) on your machine if one is provided.

The basic functions to be programmed are a Trigger-Point and an On-Time. The Trigger-Point being set to begin the On-Time (usually at the beginning of stock feed-out). On-Time being set for that amount of time the FLUID VALVE is to be activated to dispense lubricant (usually for the duration of the feed-out).

To enhance performance or adapt to special situations, other functions may be desired of the CONTROL UNIT. For example: With very long feed-outs (or roll forming) applying the lubricant in a series of short pulses will allow more control of the application. With very short feed-outs applying a pulse of lubricant every third, fifth, or tenth stroke may be best. If you think your application might require some extended functions, call L.S.P. or our representative for advice.

F. Using the Fluid Pressure Regulator

The FLUID PRESSURE REGULATOR on the RESERVOIR UNIT sets the pressure at which the lube is supplied to the dispensing heads. Turning its knob counter-clockwise will reduce the amount of lubricant dispensed; clockwise will increase the amount. This control is usually adjusted during operation until the desired amount of lubricant coating is attained.

HOW TO REPLACE THE FELT SLEEVES.

The **F**ELT **R**OLLERS consist of a metal tube with end caps and a FELT SLEEVE. The metal tube and end caps will need to be replaced very infrequently whereas the FELT **S**LEEVE will see a periodic replacement due to wear. Replacing the Felt Sleeve is an easy item to replace.

- 1. Remove the Felt Rollers from the FloaterCoater by lifting out the bottom one and prying the top one loose.
- 2 Cut the Felt Sleeve from the Roller.
- 3. Slide new Felt Sleeve over the Roller. The end caps protrude a little higher than the roll and may require a little extra effort to slide the Sleeve over the end cap piece.
- 4. Soak in warm water until saturated then remove and allow to dry overnight.
- 5. Reassemble and FLOATERCOATER is ready for use.

WARNING

Always disconnect the air supply whenever the FloaterCoater has to be disassembled.

FloaterCoater PARTS LISTING

Key	Part #	Qty	Part Name		
Fol	Following parts are specific to the 30" Coater				
01	•	2	SELECT ROLLS FROM CATALOG		
04	COV-045	1	COVER, Frame: 30"		
05	BAS-017	1	BASE, Frame: 30"		
06	BRK-083	1	BRACKET, Frame: left		
07	BRK-084	1	BRACKET, Frame: right		
09	BRK-080	4	BRACKET, Tube: mounting		
10	SCR-089	4	SCREW, Button Hd: 8-32X1/4"		
23	HSG-224	2	HOUSING, Valve: fluid, 3 port		
28	FIT-102	10	FITTING, Elbow: 5/32" tube x 1/8 NPT		
29	SPL-034	10	SPOOL, Valve: fluid		
30	RGR-027	20	RING, Retaining: cresent type		
31	RGO-010	30	RING, Seal: "O" type		
39	WAS-024	2	WASHER, Flat: #8		

Following parts are specific to the 36" Coater

01		2	SELECT ROLLS FROM CATALOG
04	COV-046	1	COVER, Frame: 36"
05	BAS-018	1	BASE, Frame: 36"
06	BRK-087	1	BRACKET, Frame: left
07	BRK-088	1	BRACKET, Frame: right
09	BRK-080	5	BRACKET, Tube: mounting
10	SCR-089	5	SCREW, Button Hd: 8-32X1/4"
23	HSG-225	2	HOUSING, Valve: fluid, 5 port
28	FIT-102	14	FITTING, Elbow: 5/32" tube x 1/8 NPT
29	SPL-034	14	SPOOL, Valve: fluid
30	RGR-027	28	RING, Retaining: cresent type
31	RGO-010	42	RING, Seal: "O" type
39	WAS-024	3	WASHER Flat: #8

Following parts are specific to the 48" Coater

01		2	SELECT ROLLS FROM CATALOG
04	COV-047	1	COVER, Frame: 48"
05	BAS-019	1	BASE, Frame: 48"
06	BRK-087	1	BRACKET, Frame: left
07	BRK-088	1	BRACKET, Frame: right
09	BRK-080	5	BRACKET, Tube: mounting
10	SCR-089	5	SCREW, Button Hd: 8-32X1/4"
23	HSG-225	2	HOUSING, Valve: fluid, 5 port
28	FIT-102	14	FITTING, Elbow: 5/32" tube x 1/8 NPT
29	SPL-034	14	SPOOL, Valve: fluid
30	RGO-010	42	RING, Seal: "O" type
31	RGR-037	28	RING, Retaining
39	WAS-024	3	WASHER, Flat: #8

Foll	owing parts	are c	ommon to all three Coaters
02	WAS-102	4	WASHER, Retaining
03	RGR-040	4	RING, Retaining
80	BRK-082	2	BRACKET, Foot: left and right
11	WAS-001	7	WASHER, Flat: #10 internal tooth
12	SPG-048	4	SPRING, Compression
13	FIT-104	1	FITTING, Union: Y type
14	WAS-004	24	WASHER, Lock: 5/16 internal tooth
15	SCR-098	2	SCREW, Button Hd: 10-32X1/2"
16	BLK-001	A/R	TUBING, Plastic: 1/4" O.D.
17	CYL-050	2	CYLINDER, Air: lift
18	RGO-085	4	RING: Seal: "O" type
19	PIS-028	2	PISTON, Air: lower lift
20	PIS-029	2	PISTON, Air: upper lift
21	FIT-105	3	FITTING, Elbow: 1/4" tube x 1/8 NPT
22	SCR-097	8	SCREW, Button Hd: 5/16-24X1/2"
24	FIT-003	2	FITTING, Plug: 1/8 NPT
25	FIT-035	1	FITTING, Nipple: short 1/8 NPT
26	BHD-002	1	BULKHEAD, Block: fluid inlet
27	GID-026	2	GUIDE, Head
32	SCR-103	5	SCREWS, Button Hd:10-32X3/8"
33	SCR-099	16	SCREWS, Button Hd: 5/16-24X1/2"
34	WAS-002	8	WASHER, Lock: 1/4" internal tooth
35	420-FIT-01	1	FITTING, ASSEMBLY: air inlet
36	SCR-026	8	SCREW, Button Hd: 1/4-28X1/2"
37	FIT-103	1	FITTING, Adapter; 1/4 tubeX1/8 NPT

BLK-013 A/R TUBING, Plastic: 5/32" O.D.

