

MINUTE MAID® FROZEN CONCENTRATE DISPENSER TUNE-UP KIT

PART NUMBER 82-3721

ESCORT III

1. INSTRUCTIONS FOR TUNE-UP

NOTE:

For further reference, see Lancer Installation and Service Manual 28-0003/03.

- 1.1 Check existing brix and water pressures (static and flowing). If necessary, adjust flowing pressure to 28 psig.
- 1.2 Check flow rate at each valve (7.5 oz in 5 seconds).
- 1.3 Flush each concentrate circuit using flush switch.
- 1.4 Remove and disassemble each nozzle and static mixer assembly. Use a Phillips screwdriver to push the static mixer out of the nozzle. Place all nozzles and mixers into a container of approved sanitizing fluid mixed at 100 ppm chlorine. Soak for ten (10) minutes. After soaking, Remove the nozzles and mixers from the sanitizing fluid and lay on a clean towel to dry.
- 1.5 Sanitize each concentrate circuit using approved sanitizing fluid mixed at 100 ppm chlorine.
- 1.6 Turn off water supply to unit and de-pressurize each water circuit. Disconnect unit from power supply.
- 1.7 Check in-line strainer on water inlet line (between regulators). Use a 1 1/8" socket with a 3" extension and a 7/8" back-up wrench on the water inlet to remove the access cap. Clean strainer if necessary. Replace strainer and access cap.
- 1.8 Inspect condenser air filter and clean or replace as necessary.
- 1.9 Remove the dispensing spouts from the pumps by unscrewing the fitting below the pump. Disconnect the pump inlet fittings from each pump (see Figure 1).
- 1.10 Remove each check valve from the concentrate tubes.
- 1.11 Remove the four Phillips screws (save screws for reinstallation) holding the pump body to the motor housing. Grasp the motor housing and pull the pump body straight out off the motor shaft. Repeat for the other two pumps.
- 1.12 For each pump, remove the four thumbscrews (save screws for reinstallation) from the pump end cap and remove the cap to expose the impeller. Remove and discard old impeller and o-ring. Inspect the impeller side of the end cap for wear or damage. Replace as necessary.
- 1.13 Disassemble check valves. Take care not to lose the check ball. Remove and discard all o-rings and replace with new o-rings. Re-assemble check valves (see Figure 2).
- 1.14 Remove and discard o-rings on all inlet and outlet fittings and the dispensing spout and replace with new o-rings (see Figure 1).
- 1.15 Remove and replace the motor shaft seal in rear of pump body as shown in Figure 1 (flat side out). Use Lancer lubricant (PN 95-0163-01) to lubricate the inner and outer surfaces of the shaft seal before insertion into pump body.
- 1.16 Lubricate the motor shafts. Install the pump bodies onto the motor housings, noting that the orientation of the pump inlet (marked "IN") should be pointing up. There is also a protrusion on the back of the pump body that mates to an indentation in the motor housing face to aid in alignment. Replace the four screws removed in Step 1.11 and tighten securely.
- 1.17 Apply a light film of lubricant to all surfaces of the impeller. Apply lubricant to the end of the motor shaft. Install the impeller into the pump body, with the small dots around the hub facing outward. For proper impeller blade orientation, push the impeller against the end of the motor shaft while turning it to the left (counter-clockwise) until the impeller hub fits onto the shaft. Push impeller until it is fully seated onto the bottom of the pump cavity.

LANCER

6655 LANCER BLVD. • SAN ANTONIO, TEXAS 78219 USA • (210) 310-7000

FAX SALES

• NORTH AMERICA – 210-310-7245 • INTERNATIONAL SALES – 210-310-7242 • CUSTOMER SERVICE – 210-310-7242 •

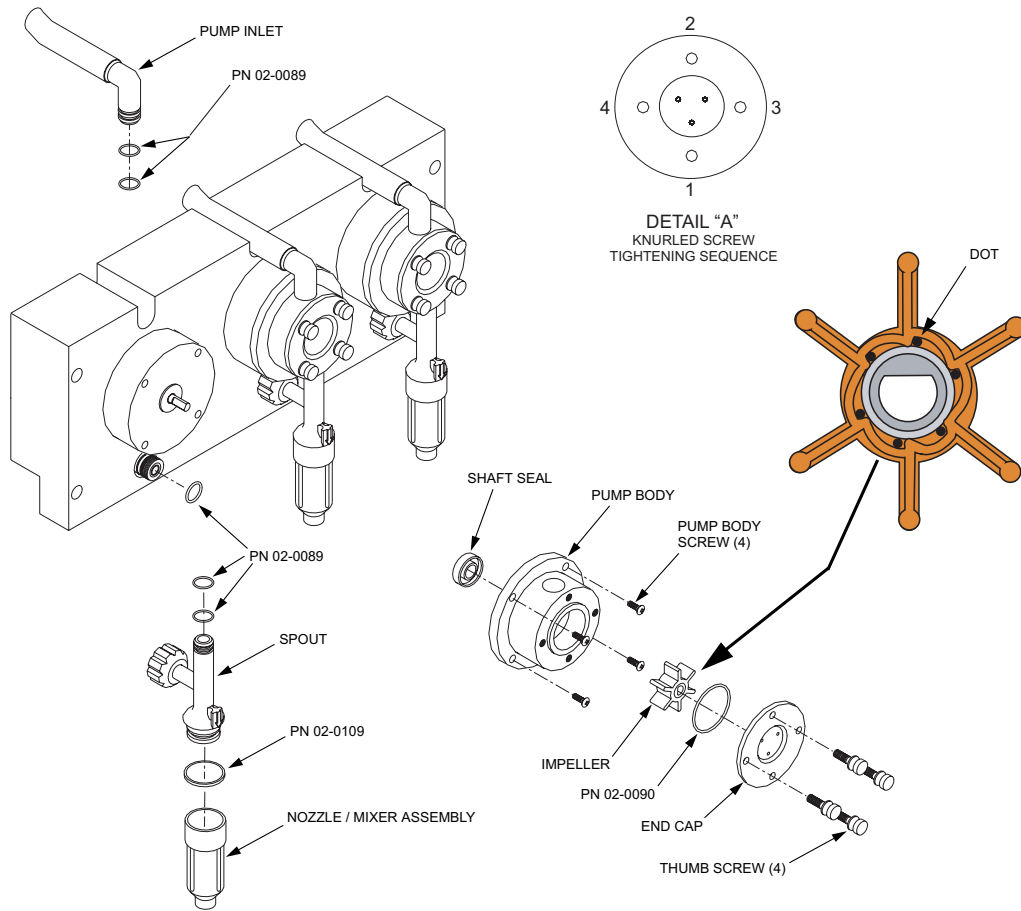
• LATIN AMERICA – 210-310-7245 • EUROPE – 32-2-755-2399 • PACIFIC – 61-8-8268-1978 •

• FAX ENGINEERING: • 210-310-7096 •

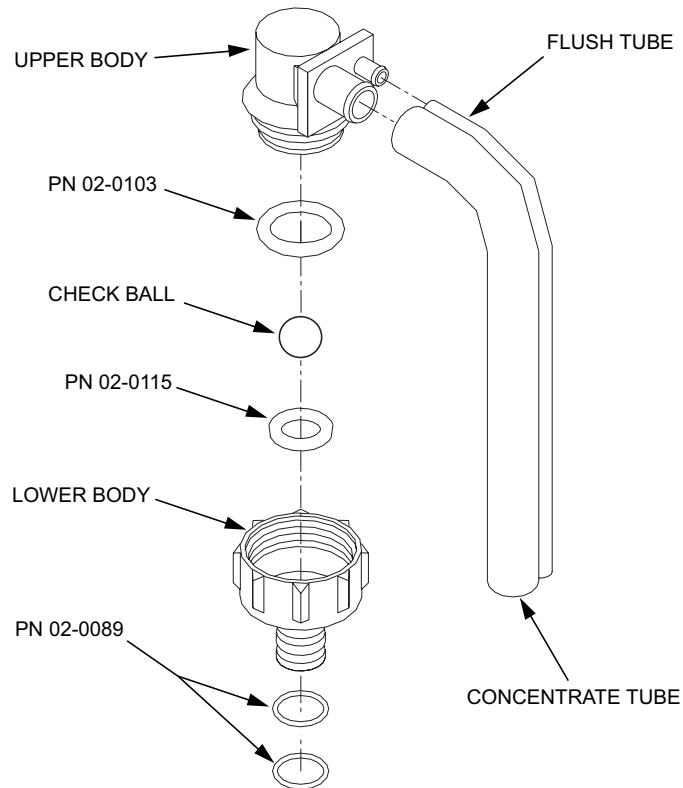
• "Lancer" is the registered trademark of Lancer • Copyright — 2005 by Lancer, all rights reserved •

"Minute Maid" and "Minute Pak" are registered trademarks of The Coca-Cola Company.

DATE:	06/09/05
P.N.	28-0592



Pump Body Assembly and Fittings
Figure 1



Check Valve Assembly
Figure 2

- 1.18 Restore power to the unit. Briefly operate each pump to fully align each impeller.
- 1.19 Apply a light film of lubricant to the end cap o-ring, and to the pump body on the lip above and around the impeller. Install the o-ring into the pump cavity.
- 1.20 Apply a light film of lubricant to the impeller side of the end cap, and install it with the raised portion inside the o-ring, while turning it to the left. When seated, align the holes in the end cap with the threaded inserts in the pump body.
- 1.21 Replace the thumbscrews and tighten *only* until resistance is felt (not even finger tight). Operate the pump, and with the pump running, tighten the screws per the sequence shown in Detail A of Figure 1. Repeat once, following the same sequence, just finger tight. *Over-tightening screws will cause the impeller to bind and the motor to overheat!*
- 1.22 Repeat Steps 1.17 through 1.21 for the other two pumps.
- 1.23 Restore the water supply to the unit. Closely observe the water outlets below the pumps and the flush tubing that joins to the check valve. If water can be seen dripping or running from any of these locations, the respective solenoid plunger for that circuit has failed. If plungers are not available, the entire solenoid must be replaced.
- 1.24 Lubricate all o-rings on the inlet and outlet fittings and spouts and replace all fittings to their respective locations.
- 1.25 Install check valves. If end of flush tube has become enlarged and does not fit tightly onto the fitting, cut 1/8" to 3/16" off from the end and install onto fitting. It may be necessary to pull the tube up slightly so that the flush tube is not pulling on the check valve when installed in the concentrate container. *If the tube is not long enough to perform this modification, it should be replaced.*
- 1.26 Re-assemble mixers and install in nozzles. Replace the nozzles onto the spouts.
- 1.27 Prime each concentrate pump. If the unit is equipped with the new Sold Out device, it may be necessary to press the reset switch.
- 1.28 Adjust brix using refractometer (see BRIX Chart, page 4).

2. Tools and Supplies required for tune-up:

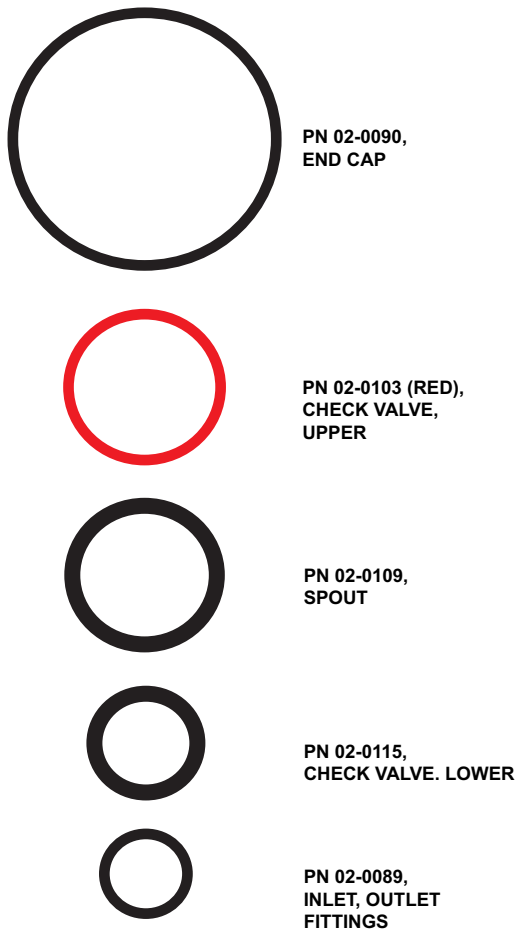
- 1 1/8" socket with 3" extension
- 7/8" wrench
- #2 Phillips screwdriver
- Water pressure gauge with flexible hose and Schrader fitting
- Approved sanitizer
- Refractometer
- Lancer Lubricant, PN 95-0163-01 (14167)
- Tune-up Kit, PN 82-3721 (1070116):

<u>LANCER Part No.</u>	<u>Coca-Cola Part No.</u>	<u>Description</u>	<u>Quantity</u>
04-0166	17969	Shaft Seal	3
05-0132	17686	Impeller	3
02-0090	17426	O-Ring	3
02-0109	17428	O-Ring	3
02-0089	10061	O-Ring	21
02-0103	17430	O-Ring	3
02-0115	17424	O-Ring	3
28-0592	--	Instruction Sheet	1

Part Numbers for Optional Repairs (Not included in Kit):

<u>LANCER Part No.</u>	<u>Coca-Cola Part No.</u>	<u>Description</u>
82-0189	17822	Solenoid Repair Kit
05-0134	18239	Pump End Cap
50-0095	18640	Air Filter
08-0003	16116	Flush Tube, 1.3 Ft/Valve

BRIX CHART	
Product (Minute Pak® or Pure Pak)	Dispensed BRIX
Five Alive	12.0
MM Orange/Straw/Banana	11.9
MM Fruit Punch	11.8
MM Cranberry Beverage	13.4
MM Apple Beverage	11.6
MM Orange Juice	11.9
MM Raspberry Lemonade	11.9
MM Lemonade	10.6
MM Apple Juice	11.6
MM Grapefruit	10.7
MM Grape Beverage	13.3
Hi-C Fruit Punch	12.4
MM Country Style Lemonade	10.6
MM Orange/Guava/Passion Fruit	11.7
MM Ruby Red Grapefruit	12.0
MM Pineapple	12.9



O-Rings
Figure 3