



Dixie Canner Company

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Worldwide Dependability ————— Can Packaging & Processing Equipment —————

OPERATOR'S MANUAL DIRECT DRIVE DIXIE DOUBLE SEAMER Model 25D

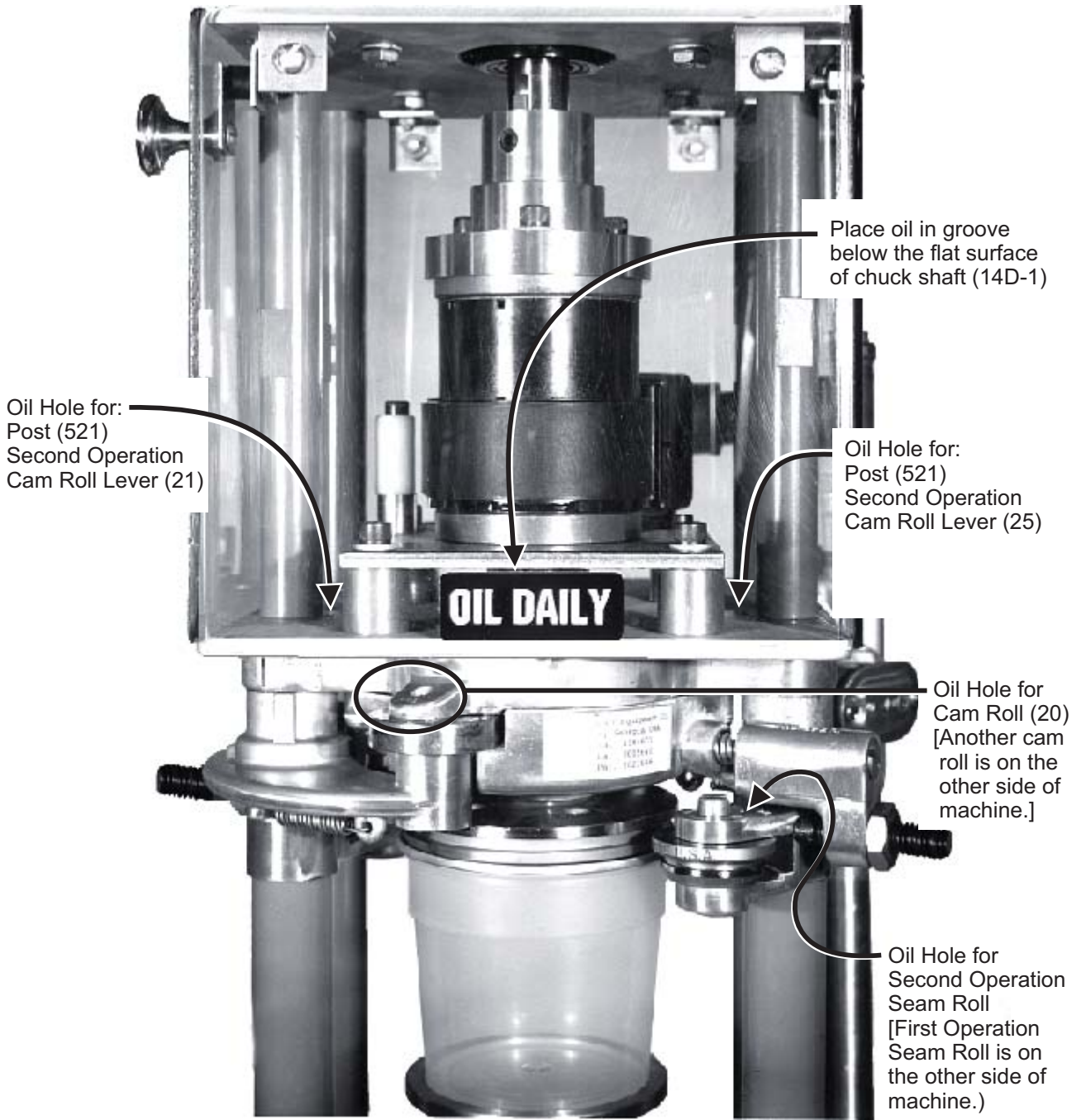
LUBRICATE DAILY:

- A. Gears inside gear housing at chuck shaft (1) – Oil
- B. Seam rolls and cam rolls (4) - Oil
- C. Seam roll levers through gear housing cover plate (2) – Oil
- D. Base plate stem and plunger (2) – Grease
- E. Can lift lever and wear plate (2) – Grease

Wipe off excess. Experience will help you determine the correct amount of oil or grease to use.



If you are not experienced with your seamer, please read and understand this manual before operating the machine. If you have a question discuss it with your supervisor or contact Dixie Canner Company.



Apply light coat of grease to shaft of base plate and a few drops of oil inside the plunger (29) and plunger housing (30). Excessive grease to the base plate shaft interferes with its free rotation during the seaming cycle. A little oil may also be applied directly to the base plate shaft. A few drops of oil inside the plunger (29) will help prevent wear of the base plate adjusting screw (57).

Base Plate
 Plunger (29)
 Plunger Housing (30)
 Can Raising Lever (23)

OILING LOCATIONS

INTRODUCTION

Dixie Model 25D series of double seamers are adaptable for containers up to 4¼" diameter and 6" tall. At time of fabrication, extension posts may be used to accommodate containers taller than 6".

OPERATION

With base plate in lower position, place filled can with top in place on the baseplate. Lower the hand lever to raise can into position with the chuck; the machine seals the can automatically then stops. Raise the hand lever, remove the can and repeat the operation.

CAUTION

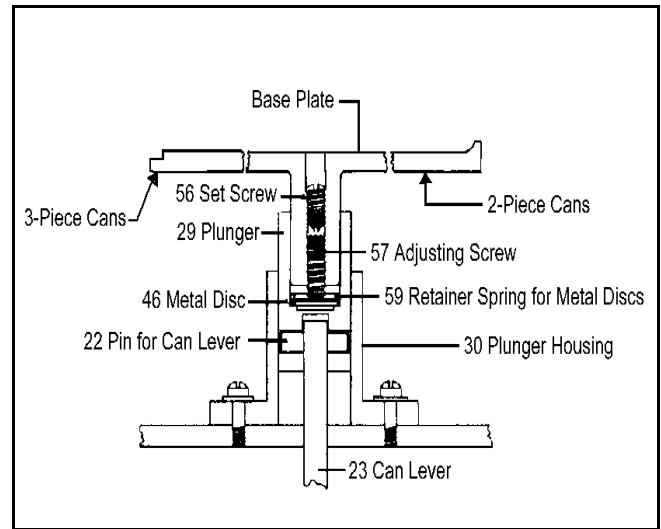
Before operating your Dixie Double Seamer, review this manual thoroughly. Also make certain that:

1. The machine is bolted securely to your table or counter top and is properly connected to your electrical supply.
2. All moving parts are oiled and operate freely.
3. The machine is properly adjusted.
4. If this machine is used occasionally or is inactive for more than a few days, give special attention to servicing before and after storage.

BASE PLATE PRESSURE ADJUSTMENTS

Proper base plate pressure is required to produce essential body hook and prevent slipping of can during the seaming cycle. Each base plate has an adjusting screw (57) and set screw (56) in its stem for making minute base plate adjustments as follows:

1. Lift base plate out of plunger (29) and inspect the metal discs (46). Replace metal discs if there is any sign of undue wear or breakage. To replace the metal discs, first remove the plunger housing (30) and disassemble. Through the hole in the bottom of the plunger (29), insert a nail or punch and knock out the metal discs (46) and retainer spring (59). Replace with new discs and reassemble, making certain that the retainer spring and metal discs are properly seated and that the entire assembly is adequately lubricated (oiled).



SECTIONAL VIEW OF BASE PLATE ASSEMBLY

2. Insert screwdriver in the hole in the top of the base plate and loosen set screw (56) by turning counter clockwise.
3. Turn adjusting screw (57) in the proper direction to lengthen or shorten effective height of the base plate, as may be required for proper tension (pressure). If you find it necessary to use pliers to turn the adjusting screw, be very careful not to damage threads.
4. Tighten set screw snugly. It may be necessary to hold the end of the adjusting screw firmly while tightening the set screw.
5. Make certain that the base plate assembly is properly lubricated and replace the base plate in the plunger.

NEUTRAL POSITION

The machine is in a neutral position when both cam rolls (20) are in their innermost position and both seaming rolls are in their outermost position.

SEAMING ROLL ADJUSTMENTS:

There are ten (10) revolutions per seaming cycle, five (5) for each seaming roll. The function of the first operation seam roll is to curl the cover hook and body hook into proper position. The function of the second operation seam roll is to complete the sealing of the can.

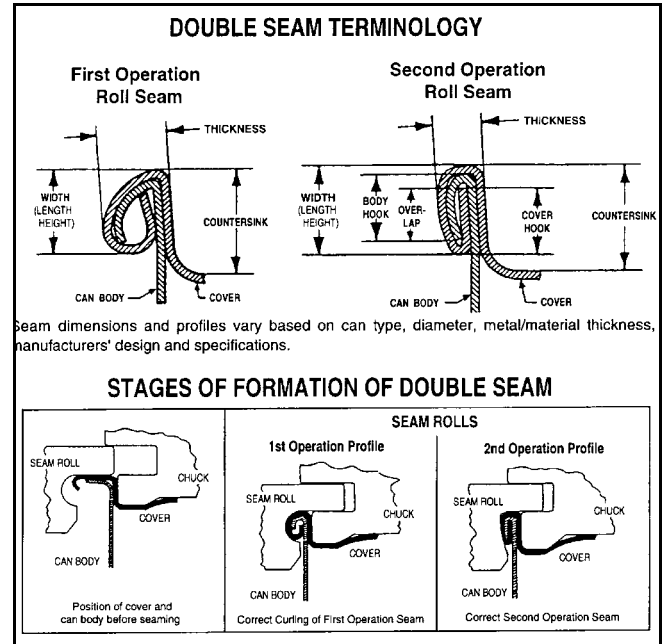
FIRST OPERATION

1. Put machine in neutral position.
2. With power ON, press and release the actuator on the clutch/brake assembly four (4) times. Turn machine OFF, then press the actuator ONE more time to release the clutch brake. Then manually turn the clutch ONE HALF revolution. Grasp the collar (508) by hand, OR, use a wrench to turn the chuck shaft, to turn the assembly in a clockwise direction. These 4½ revolutions of the clutch/brake assembly places the first operation seam roll in its innermost position with the chuck.
3. While power to machine remains OFF, loosen lock nut (16) and adjust set screw (17-A) until the first operation seam roll is snugly in position with the chuck. While holding the first operation gauge wire (40) in position between the chuck lip and the ground profile of the first operation seam roll, tighten the lock nut. The larger diameter gauge wire (40) is the approximate THICKNESS of the first operation seam. Final adjustments may be made after a can is closed and the double seam inspected.

SECOND OPERATION

1. Turn power to machine ON which will automatically complete the fifth revolution. Press and release the actuator FOUR times and turn power to machine OFF. This is a total of nine (9) revolutions from the beginning and puts the second operation seam roll into its innermost position with the chuck.
2. Using your wrench and socket head wrench, adjust the second operation seam roll into position. Use the second operation gauge wire (41) to fit the seam roll snugly in position with the chuck then tighten the lock nut. The small diameter gauge wire (41) represents the approximate THICKNESS of the second roll seam. Final adjustments may be made after a can is closed and the double seam inspected.
3. Press the actuator ONE time and turn power to machine ON to complete the 10th revolution and cycle. This will return the machine to its neutral position.

4. Close a can, tear down and inspect the double seam. Make final adjustments of the seaming rolls and base plate pressure to produce essential body hook, cover hook, overlap and tightness recommended by the container manufacturer or for a hermetically sealed can. NOTE: If you are unable to obtain the essential measurements recommended or a hermetically sealed container, you may need seam rolls with different profiles.



CHANGING FROM ONE SIZE CAN TO ANOTHER:

Change parts consisting of a chuck, a base plate and a height spacer may be required for each different can diameter, top or style. Also, a different set of seaming rolls may be required for each. Your can manufacturer or supplier may recommend the seam roll profiles for your cans. Dixie stocks or may be able to furnish the seam roll profile needed. Therefore, make sure you have the correct change parts available when changing your machine from one can size to another, then proceed as follows:

1. Put seam rolls in neutral position.
2. Loosen lock nuts (16) and set screws (17-A) until both seaming roll levers (12) are back as far as they will go. If needed, change seaming rolls.
3. Change chucks. **CAUTION:** Use an open end wrench at the flat surface on the chuck shaft and the chuck wrench while loosening or tightening the chuck. Otherwise, the clutch/brake unit may be damaged.

To remove the chuck, hold the chuck shaft with a 5/8" wrench on the cut side of the shaft, located above the top support plate under the gear housing. Then place the two pins of the 44 chuck wrench (provided with your seamer) into two of the four holes located on the bottom of the chuck. [The pins of the chuck wrench will fit into either diagonal or adjacent holes depending on the diameter of the chuck.] To loosen, turn the chuck to the left. Finish removing the chuck by hand.

To install a new chuck, hold the chuck shaft with a 5/8" wrench, as described above, while using your hand to thread the chuck onto the lower end of the chuck shaft. Turn to the right to thread the chuck onto the chuck shaft. Use the chuck wrench, as described above, to tighten snugly. Make certain that the new chuck is properly tightened into position against the shoulder of the chuck shaft.

4. Install the proper base plate and height spacer for the can to be closed. Adjust the base pressure and seaming rolls as outlined above.

TIMING THE MACHINE

The machine is properly timed (or in neutral position) when both cam rolls (20) are at their innermost position and both seaming rolls (1st and 2nd) are at their outermost position. There are ten (10) revolutions per seaming cycle. Therefore, with power to the machine ON, by pressing the actuator on the clutch/brake assembly to turn the clutch/brake assembly one revolution at a time, the machine will have been "timed" by or before the 9th revolution.

If it should be necessary to turn the clutch/brake assembly less than a full revolution, proceed as follows. Turn power to machine OFF. Press the actuator one time to release the clutch brake. Grasp the collar (508) by hand, OR, use a wrench to turn the chuck shaft, to turn the assembly in a clockwise direction as needed. Turn power to machine ON and verify that the machine is now in time.

Alternatively, the Model 25D may be timed by simply pressing the switch (631) located on the top center front of the base of the machine. **CAUTION:** Do not perform this operation when a can is in position on the base plate.

NOTE: Should the clutch/brake assembly continue to turn without stopping in neutral position, check the positioning of the switch (632) located directly behind the cam roll (20) on the rear of the machine. The switch (632) should be positioned close enough to the cam roll so that the cam roll rides over the bronze prong of the switch sufficiently to fully activate the switch. With the machine ON, the switch will produce an audible "click" when the positioning is correct, and the clutch assembly will stop in neutral position.

CHANGE PARTS AND REPAIR PARTS

When ordering parts, always furnish both the part number and the name of the part. When ordering change parts for cans, always send six (6) loose tops and can bodies of the size can(s) to be closed.

REPAIR PARTS AND SERVICE

A complete stock of parts is maintained by Dixie Canner Company. Parts may be ordered as needed to replace worn or damaged parts.

For factory service or repair, ship the seamer prepaid to:
Dixie Canner Company
786 East Broad Street
Athens, GA 30601

Repair or service is provided for the cost of labor plus parts needed. When returning a seamer, please observe the following:

1. Send the complete seamer with change parts and include six (6) cans and ends of the exact size and type to be closed. Package the machine and cans for safe delivery.
2. Enclose a letter authorizing repair or specifying if an estimate is required prior to repair. Mention any particular problem with the seamer. Provide contact information and instructions regarding return shipment, urgency and other relevant information.

TROUBLESHOOTING

Until the operator is familiar with the mechanics of your can closing machine and learns to recognize irregularities in the essential requirements of the double seam, the following outline is intended to help notice obvious defects and list some causes that may serve as a guide in correcting minor troubles.

MECHANICAL DEFECTS & COMMON CAUSES

- A. Can slips or will not turn during seaming operation
 - 1. Damage or lack of oil in the base plate, height spacer, or plunger assembly
 - 2. Missing or broken metal discs/retainer spring in plunger
 - 3. Insufficient base plate pressure
 - 4. Worn or wrong size chuck
 - 5. Seaming rolls binding on pins
 - 6. Wear plate worn
- B. Machine operates with undue noise or "locks"
 - 1. Machine not properly timed
- C. Unusually loose seaming rolls
 - 1. Seaming rolls or pins worn
 - 2. Bushings are worn. Replace bushings or entire seaming rolls.
- D. Seaming rolls do not return to neutral position
 - 1. Seaming roll levers binding
 - 2. Seaming lever spring weak or broken
 - 3. Machine not properly timed
- E. Machine seems to "labor" or freeze tight
 - 1. Needs oil.
 - 2. Too much base plate pressure
 - 3. Seaming rolls too tight
 - 4. Misalignment of moving parts
- F. Clutch/brake assembly continues to turn without stopping in neutral position
 - 1. 632 Switch positioned improperly. The switch should be positioned close enough to the cam roll (20) so that the cam roll rides over the bronze prong of the switch sufficiently to fully activate the switch. With the machine ON, the switch will produce an audible "click" when the positioning is correct, and the clutch assembly will stop in neutral position.
 - 2. 632 Switch needs to be replaced
- C. Droop or lap in double seam at or near can body side seam
 - 1. Too much base pressure
 - 2. 1st operation seam roll set too loose
 - 3. Worn 1st operation seam roll
- D. Excessive countersink depth
 - 1. Too much base pressure
 - 2. 1st operation seam roll set too loose
 - 3. Chuck not properly seated in can top
 - 4. Chuck groove worn
- E. False seam. Body hook and cover hook do not overlap
 - 1. Can top not properly seated on can
 - 2. Damaged can flange or can top curl
 - 3. Too little base plate pressure
 - 4. Seam rolls set too loose
- F. Long body hook
 - 1. Too much base pressure
 - 2. Seam rolls set too tight
- G. Long cover hook
 - 1. 1st operation seam roll set too tight
- H. Short body hook
 - 1. Insufficient base pressure
 - 2. 1st operation seam roll set too tight
 - 3. 2nd operation seam roll set too loose
- I. Short cover hook
 - 1. Too much base pressure
 - 2. 1st operation seam roll set too loose
 - 3. Worn 1st operation seam roll
 - 4. Excessive countersink depth
- J. Cover hook or body hook not uniform
 - 1. Base plate or plunger worn
 - 2. Chuck or seam rolls out of alignment
- K. Droops, vees, wrinkles
 - 1. Excessive base pressure
 - 2. 1st operation seam roll too loose or worn
 - 3. 2nd operation seam roll too tight
 - 4. Defects in can body or top
 - 5. Incorrect seam roll profiles

DOUBLE SEAM DEFECTS & COMMON CAUSES

- A. Cut over. Unusually sharp edge at top inside edge of seam
 - 1. 1st or 2nd operation seam roll set too tight
 - 2. Worn seam rolls or worn chuck
 - 3. Excessive base plate pressure
- B. Cut or fractured seam
 - 1. Seam rolls set too tight
 - 2. Seam rolls damaged
 - 3. Excessive base plate pressure
 - 4. Seam roll set screw too tight

