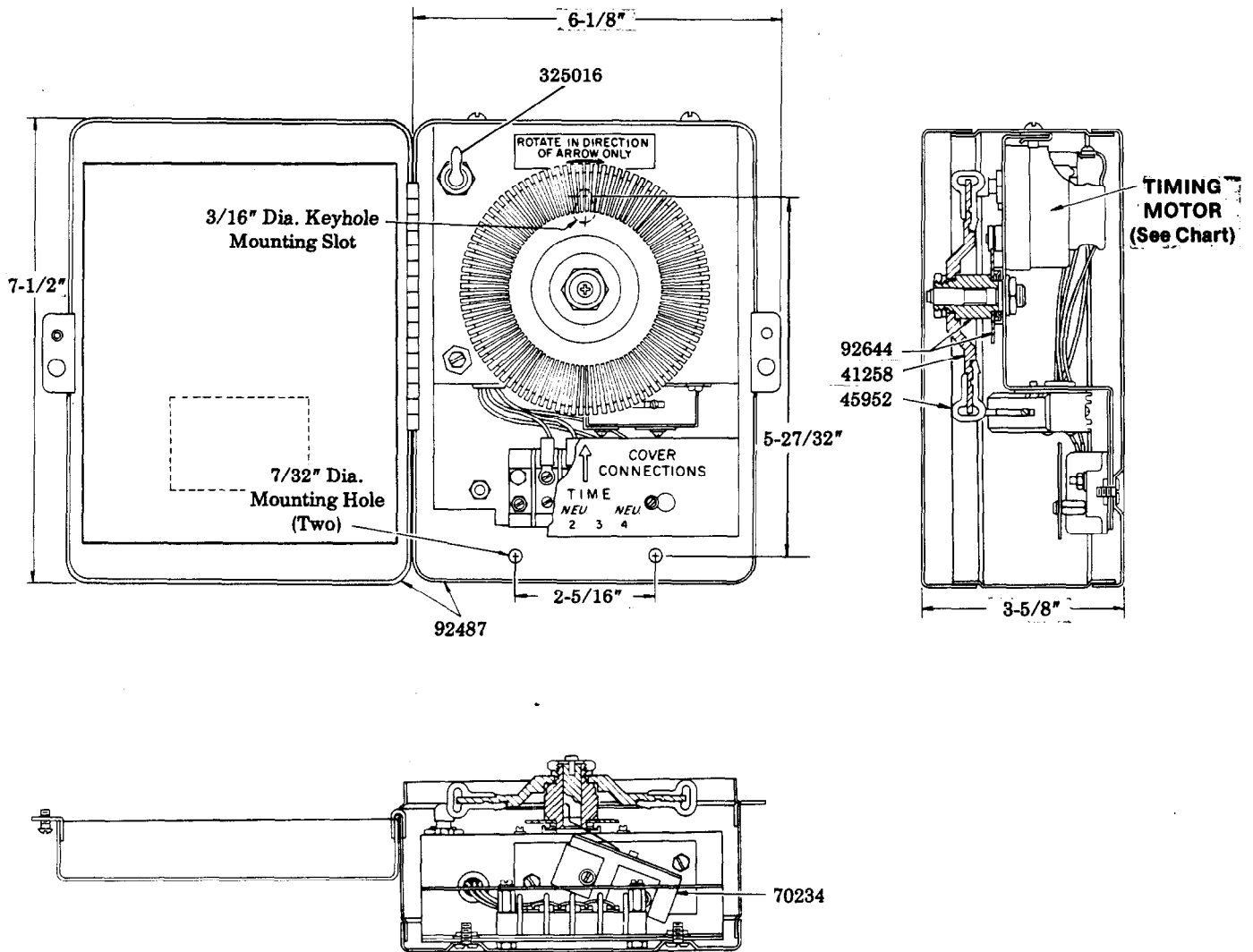


PROGRAM TIMER

84101 & 84102 - U.L. AND C.S.A. LISTED

Models 84101, 84102, 84103, 84104

Series "D"



SERVICE PARTS

| PART | QUAN. | DESCRIPTION |
|--------|-------|------------------|
| 41258 | 1 | Index wheel |
| 45952 | 48 | Clip |
| *70234 | 1 | Timer switch |
| 92487 | 1 | Case assembly |
| 92644 | 1 | Bearing & gear |
| 325016 | 1 | Pushlever switch |

| MODEL | TIMING MOTOR | VOLTAGE | ADJUSTABLE CYCLE TIME |
|-------|--------------|----------------|-----------------------|
| 84101 | *69533 | 115 V., 60 Hz. | 2.5 min. to 4 hrs. |
| 84102 | *69535 | 115 V., 60 Hz. | 15 secs. to 24 min. |
| 84103 | *69599 | 220 V., 50 Hz. | 2.5 min. to 4 hrs. |
| 84104 | *69586 | 220 V., 50 Hz. | 15 secs. to 24 min. |

*Recommended Service Parts Inventory.

LINCOLN

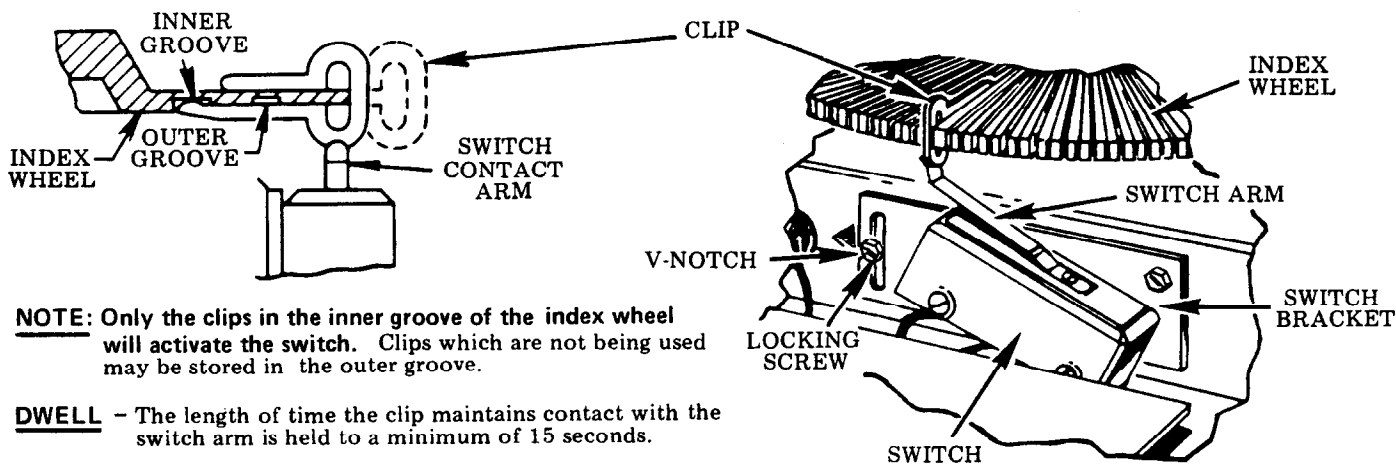
LINCOLN, One Lincoln Way
St. Louis, Missouri 63120-1578
(314) 679-4200 Customer Service, (314) 679-4300

SECTION - C8
PAGE - 136E

OPERATION

Models 84101, 84102, 84103 and 84104 Program Timer are used to program the lubrication cycle frequency of single stroke lubricant pumps.

The electric clockwork runs constantly when current is on. The clips, when pushed into the inner groove of the index wheel, control the time cycle. As the index wheel rotates, the clips depress the arm of a single-throw switch. The closed switch energizes a three-way air solenoid valve (not part of timer) which admits air to the pump air cylinder. As the index wheel rotates further the clip releases the switch arm, de-energizing the air solenoid valve.



NOTE: Only the clips in the inner groove of the index wheel will activate the switch. Clips which are not being used may be stored in the outer groove.

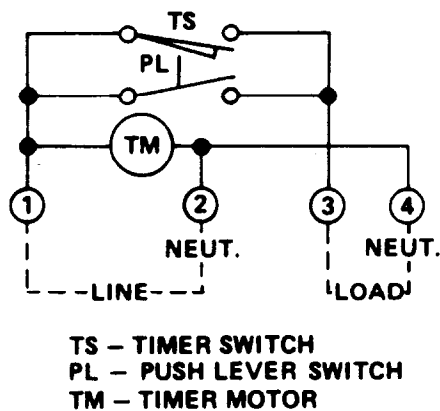
DWELL - The length of time the clip maintains contact with the switch arm is held to a minimum of 15 seconds.

FIG. A

TIME INCREMENTS FOR EQUALLY SPACED CLIPS

| No. of Clips | Cycle Time | | | |
|--------------|------------------------|---------|------------------------|---------|
| | Models 84101 and 84103 | | Models 84102 and 84104 | |
| | Hours | Minutes | Minutes | Seconds |
| 1 | 4 | 00 | 24 | 00 |
| 2 | 2 | 00 | 12 | 00 |
| 3 | 1 | 20 | 8 | 00 |
| 4 | 1 | 00 | 6 | 00 |
| 6 | 0 | 40 | 4 | 00 |
| 8 | 0 | 30 | 3 | 00 |
| 12 | 0 | 20 | 2 | 00 |
| 16 | 0 | 15 | 1 | 30 |
| 24 | 0 | 10 | 1 | 00 |
| 32 | 0 | 8 | 0 | 45 |
| 48 | 0 | 5 | 0 | 30 |
| *96 | 0 | 2.5 | 0 | 15 |

WIRING DIAGRAM



*48 Additional clips must be ordered.

TO ADJUST DWELL TIME (Refer to Fig. A)

Remove unit from case. Loosen the locking screw. Insert a screwdriver into the V-notch in the switch bracket and move the switch either towards the index wheel to increase the dwell or away from the index wheel to decrease the dwell. Tighten the locking screw after making the adjustment.

NOTE: When 96 clips are used, care must be taken to ensure that the switch releases between clips.

IMPORTANT

84102 and 84104 timer (15 seconds minimum, 24 minutes maximum)

The "off" time between lubrication cycles is of short duration so the dwell time must be kept to a minimum of 6 seconds to permit system to vent and injectors to reload.

An insufficient "off" time interval would not permit the injectors to reload and the system would not function properly.

RETAIN THIS INFORMATION FOR FUTURE REFERENCE

When ordering replacement parts, list: Part Number, Description, Model Number, and Series Letter.

LINCOLN ST. LOUIS provides a Distributor Network that stocks equipment and replacement parts. A list of Authorized Service Departments will be furnished upon request.