

# PHILCO

**PHILCO**  
**Factory-Supervised**  
**Service**

# SERVICE

## AIR CONDITIONER

### SPECIFICATIONS FOR PHILCO AIR CONDITIONERS MODELS 101-KS AND 101-KSL

| MODEL      | CABINET FINISH | VOLTAGE SUPPLY (60 CYCLES) | POWER CORD | REPLACEMENT UNIT PART NO. |
|------------|----------------|----------------------------|------------|---------------------------|
| 101-KS-11  | Mahogany       | 230                        | 3-wire     | 4010-103                  |
| 101-KSL-11 | Arctic Dawn    | 230                        | 3-wire     | 4010-103                  |
| 101-KS-19  | Mahogany       | 208                        | 3-wire     | 4010-104                  |
| 101-KSL-19 | Arctic Dawn    | 208                        | 3-wire     | 4010-104                  |

Condenser type ..... Air cooled  
Cabinet type ..... Window  
Compressor type ..... Hermetic, reciprocating  
No. of cylinders ..... 2  
Compressor-motor rating (1725 r.p.m.) ..... 1 hp  
Refrigerant ..... Freon F-22  
Total power input ..... 1585 watts  
Time-lag fuse rating (208 volts) ..... 15 amperes  
Time-lag fuse rating (230 volts) ..... 15 amperes  
Fan-motor power input ..... 160 watts  
Fan type, condenser ..... Propeller  
Fan type, evaporator ..... Centrifugal

Maximum outside air intake ..... 100 c.f.m.  
Maximum room air recirculation ..... 310 c.f.m.  
\*Dehumidification ..... 2.7 pts. per hr.  
Air filter ..... 9 1/2" x 16 1/2" x 1 1/2"  
Net shipping weight, air conditioner only ..... 167 lbs.  
Net shipping weight, replacement unit ..... 142 lbs.  
Shipping weight, air conditioner complete ..... 214 lbs.  
Shipping weight, replacement unit ..... 177 lbs.

**\*Based on the following conditions:**

Outside air ..... 95°F., dry bulb; 75°F., wet bulb  
Inside air ..... 80°F., dry bulb; 67°F., wet bulb

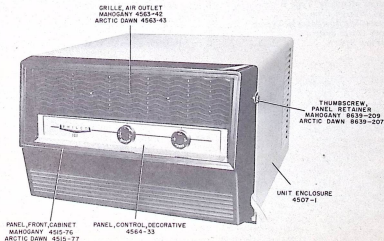


Figure 1. Cabinet and Unit Enclosure Identification

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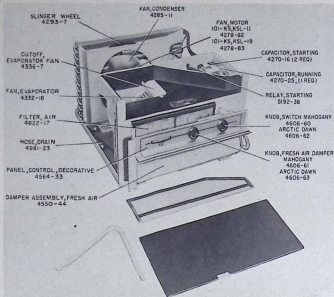


Figure 2. Major Parts Identification

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## INSTRUCTIONS

Information on the following subjects for the models listed on page 1 is given in the General Section of the 1954 Air Conditioner Service Manual (PR-2617) on the pages indicated below.

| Subject                                                              | Page | Subject                                                            | Page |
|----------------------------------------------------------------------|------|--------------------------------------------------------------------|------|
| Installation in Double-Hung Windows, Unit Enclosure Mounting, Type B | 5    | Use of Test Data for Checking Cooling Effect (Use TABLE I, below.) | 32   |
| Starting Relays, Voltage Type                                        | 19   | Power Consumption (Cooling) (Use TABLE II, below.)                 | 32   |
| Removal of Parts—Window Models, Type B                               | 23   | Replacing the Unit—Window Models, Type B                           | 34   |
| Checking Super Power System                                          | 28   |                                                                    |      |
| Cleaning Air-Flow System                                             | 31   |                                                                    |      |



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Figure 3. Condenser Baffle Installed

## NOTE

Before installing the unit in the unit enclosure, insert the bottom edge of the condenser baffle between the bottom pan of the unit and the condenser, and fasten the flanges of the baffle to the condenser end sheets, using one "U" clip at each side. See figure 3.

TABLE I. COOLING RANGE

| EVAPORATOR AIR-INLET TEMP. (D.B., °F.) | 100   | 95          | 90          | 85          | 80          | 75          | 70       |
|----------------------------------------|-------|-------------|-------------|-------------|-------------|-------------|----------|
| EVAPORATOR AIR-INLET TEMP. (W.B., °F.) | 79 75 | 79 75 71 67 | 79 75 71 67 | 79 75 71 67 | 75 71 67 63 | 71 67 63 59 | 67 63 59 |
| MINIMUM DROP (D.B., °F.)               | 22 24 | 19 22 24 27 | 15 19 22 25 | 11 15 19 22 | 10 15 19 22 | 9 14 19 22  | 9 14 18  |
| MAXIMUM DROP (D.B., °F.)               | 25 28 | 22 25 28 30 | 19 22 25 28 | 15 19 22 25 | 14 18 22 25 | 13 18 22 26 | 12 17 22 |

TABLE II. POWER CONSUMPTION (COOLING)

| CONDENSER AIR-INLET TEMPERATURE (D.B., °F.) | 115  | 110  | 105  | 100  | 95   | 90   | 85   | 80   |
|---------------------------------------------|------|------|------|------|------|------|------|------|
| MINIMUM WATTS                               | 1830 | 1725 | 1620 | 1520 | 1415 | 1310 | 1205 | 1100 |
| MAXIMUM WATTS                               | 2180 | 2075 | 1970 | 1870 | 1765 | 1660 | 1555 | 1450 |

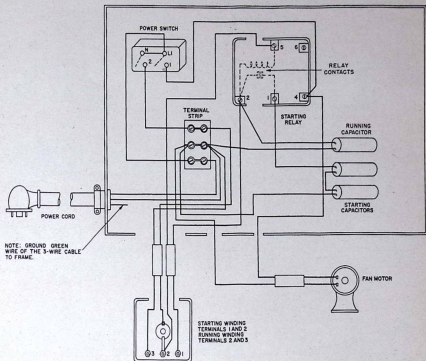
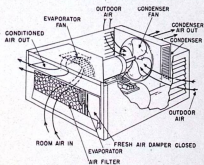


Figure 4. Wiring Diagram for Models 101-K5-11, 101-KSL-11, 101-K5-19 and 101-KSL-19

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TP3-2833A

Figure 5. Air-Flow Paths, Maximum Cooling



Figure 6. Replacing Air Filter

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# REPLACEMENT PARTS LIST

## MODELS 101-KS, KSL

| DESCRIPTION                                  | PART NO. | QUANTITY  |           |            |            |
|----------------------------------------------|----------|-----------|-----------|------------|------------|
|                                              |          | 101-KS-11 | 101-KS-19 | 101-KSL-11 | 101-KSL-19 |
| ELECTRICAL SYSTEM                            |          |           |           |            |            |
| Relay, motor starting .....                  | 5192-38  | 1         | 1         | 1          | 1          |
| Capacitor, starting .....                    | 4270-16  | 2         | 2         | 2          | 2          |
| Retainer .....                               | 4588-54  | 1         | 1         | 1          | 1          |
| Capacitor, running .....                     | 4270-25  | 1         | 1         | 1          | 1          |
| Circuit breaker, compressor .....            | 5198-27  | 1         | 1         | 1          | 1          |
| Fan motor, evap. and cond. ....              | 4278-82  | 1         | 1         | 1          | 1          |
| Switch, power .....                          | 4278-83  | 1         | 1         | 1          | 1          |
| Connector, power cable to terminal box ..... | 4320-13  | 1         | 1         | 1          | 1          |
| Power cord, 3 wire, 100 ft. ....             | 8653-4   | 1         | 1         | 1          | 1          |
| Power-cord plug, for 3-wire cord ..          | 45-1501  | 1         | 1         | 1          | 1          |
| Power-cord cover (light color) .....         | 8611-3   | 1         | 1         | 1          | 1          |
| Terminal strip .....                         | 4316-1   | 1         | 1         | 1          | 1          |
| Terminal strip .....                         | 5182-8   | 1         | 1         | 1          | 1          |
| REPLACEMENT SEALED UNIT ASSEMBLY             |          |           |           |            |            |
| Isolator, rubber .....                       | 4225-8   | 4         | 4         | 4          | 4          |
| CABINET ASSEMBLY                             |          |           |           |            |            |
| Panel, front, cabinet .....                  | 4515-76  | 1         | 1         | 1          | 1          |
| Angle, top .....                             | 4515-77  | 1         | 1         | 1          | 1          |
| Panel, control mounting .....                | 4542-82  | 1         | 1         | 1          | 1          |
| Panel, control, decorative .....             | 4514-3   | 1         | 1         | 1          | 1          |
| Panel, control, decorative .....             | 4564-33  | 1         | 1         | 1          | 1          |
| GRILLES, DAMPERS, AND FILTERS                |          |           |           |            |            |
| Damper ass'y, fresh air .....                | 4550-44  | 1         | 1         | 1          | 1          |
| Lever, damper control .....                  | 4618-8   | 1         | 1         | 1          | 1          |
| Control .....                                | 4551-3   | 1         | 1         | 1          | 1          |
| Grille, air outlet .....                     | 4563-42  | 1         | 1         | 1          | 1          |
| Filter, air .....                            | 4563-43  | 1         | 1         | 1          | 1          |
| Knob, switch .....                           | 4622-17  | 1         | 1         | 1          | 1          |
| Knob, fresh-air damper .....                 | 4606-60  | 1         | 1         | 1          | 1          |
| Knob, fresh-air damper .....                 | 4606-62  | 1         | 1         | 1          | 1          |
| Knob, fresh-air damper .....                 | 4606-63  | 1         | 1         | 1          | 1          |
| INSTALLATION MATERIAL                        |          |           |           |            |            |
| Installation kit .....                       | 4920-40  | 1         | 1         | 1          | 1          |
| Bracket, window support, L.H. ....           | 4920-41  | 1         | 1         | 1          | 1          |
| Bracket, window support, R.H. ....           | 4547-90  | 1         | 1         | 1          | 1          |
| Bracket, window support, R.H. ....           | 4547-91  | 1         | 1         | 1          | 1          |

| DESCRIPTION                                                 | PART NO. | QUANTITY   |           |            |            |
|-------------------------------------------------------------|----------|------------|-----------|------------|------------|
|                                                             |          | 101-KS-11  | 101-KS-19 | 101-KSL-11 | 101-KSL-19 |
| INSTALLATION MATERIAL (Cont.)                               |          |            |           |            |            |
| Channel, window board .....                                 | 4587-114 | 2          | 2         | 2          | 2          |
| Angle ass'y., side channel, L.H. ....                       | 4584-18  | 1          | 1         | 1          | 1          |
| Angle ass'y., side channel, R.H. ....                       | 4584-21  | 1          | 1         | 1          | 1          |
| Thumbscrew, panel retainer .....                            | 8039-209 | 2          | 2         | 2          | 2          |
| Unit enclosure .....                                        | 4507-1   | 1          | 1         | 1          | 1          |
| Bag assembly .....                                          | 952-41   | 1          | 1         | 1          | 1          |
| Board, filler .....                                         | 952-40   | 1          | 1         | 1          | 1          |
| Molding, top (sash seal gasket) .....                       | 4924-22  | 1          | 1         | 1          | 1          |
| Seal, window sash .....                                     | 4925-20  | 1          | 1         | 1          | 1          |
| Plate assembly .....                                        | 4926-184 | 1          | 1         | 1          | 1          |
| Gusset, L.H. ....                                           | 4539-16  | 1          | 1         | 1          | 1          |
| Gusset, R.H. ....                                           | 4539-17  | 1          | 1         | 1          | 1          |
| MISCELLANEOUS PARTS                                         |          |            |           |            |            |
| Fan, condenser .....                                        | 4285-11  | 1          | 1         | 1          | 1          |
| Fan, evaporator (squirrel-cage type) ..                     | 4332-18  | 1          | 1         | 1          | 1          |
| Cut off, evaporator fan .....                               | 4336-7   | 1          | 1         | 1          | 1          |
| Slinger wheel .....                                         | 4293-7   | 1          | 1         | 1          | 1          |
| Dowel pin .....                                             | 1W62177  | 1          | 1         | 1          | 1          |
| Hose, drain .....                                           | 4981-23  | 1          | 1         | 1          | 1          |
| DESCRIPTION                                                 |          |            |           |            |            |
| MISCELLANEOUS HARDWARE                                      |          | PART NO.   |           |            |            |
| Nut, hex, #8-32 .....                                       |          | 1W20519FA3 |           |            |            |
| Nut, hex, #8-20 .....                                       |          | 1W20755FA3 |           |            |            |
| Nut, hex, #8-16 .....                                       |          | 1W19998FA3 |           |            |            |
| Screw, machine, #8-32 x 1/4, rd., cross-recessed hd. ....   |          | 1W14518FA3 |           |            |            |
| Screw, machine, 3/8-16 x 3/4, hex hd. ....                  |          | 1W16198FA3 |           |            |            |
| Screw, sheet metal, #8A x 3/8, rd., cross-recessed hd. .... |          | 1W22389FA3 |           |            |            |
| Screw, sheet metal, #4Z x 1/4, rd., cross-recessed hd. .... |          | 1W23129FA3 |           |            |            |
| Screw, wood, #10 x 1 1/4, slotted rd. hd. ....              |          | 1W24962FA3 |           |            |            |
| Washer, flat, 5/16" .....                                   |          | 1W52793FA3 |           |            |            |
| Washer, flat, 3/8" .....                                    |          | 1W52987FA3 |           |            |            |
| Washer, lock, 3/8" .....                                    |          | 1W24518FA3 |           |            |            |
| Washer, lock, 5/16" .....                                   |          | 1W24263FA3 |           |            |            |
| Washer, lock, #6 .....                                      |          | 1W24265FA3 |           |            |            |
| Washer, lock, #8 .....                                      |          | 1W24514FA3 |           |            |            |
| Washer, lock, #8 .....                                      |          | 1W24515FA3 |           |            |            |
| Washer, lock, #10 .....                                     |          | 1W24516FA3 |           |            |            |