



# CA Tech AutoCat A100C Spray Gun



# CLICK-N-PICK SPARE PARTS CUTSHEET

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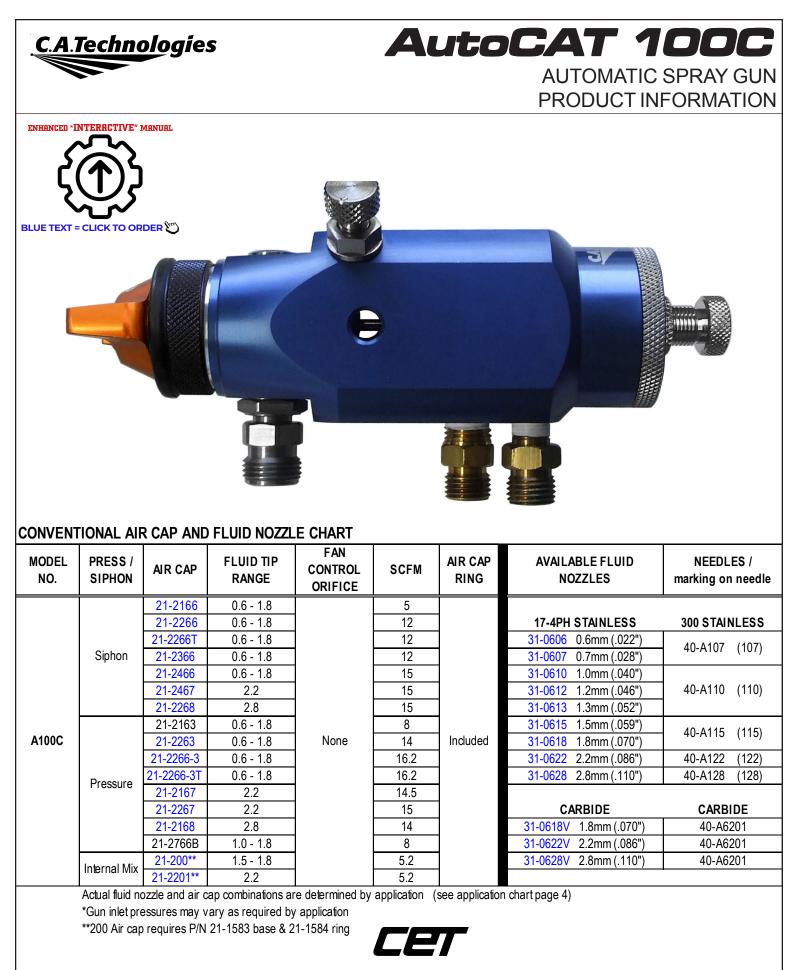












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### Operation and Maintenance Instructions for A100C Spray Guns

#### **Gun Mounting**

A 1/2" dia. x 5" lg. rod is provided for mounting. The gun can be mounted from the left or right side or from the bottom. Thread the mounting rod (9) into one of the three holes that best suit the mounting location for the application. Tighten the locknut (10) to secure the gun in the position desired. Do not plug the remaining holes as they are used as drain holes in the event of a needle seal leak.

#### **Operation: Connections and Adjustments**

The automatic gun requires two separate regulated air supply lines.

- 1. Connect one air line to the fitting marked "CYL", this actuates the gun on and off and is usually connected through an air solenoid.
- 2. Connect the second air line to the fitting marked "ATM", this provides atomizing and fan air.
- 3. Connect a pressurized fluid supply to the gun fluid inlet.
- 4. Fluid flow can be controlled using the fluid control knob, this restricts flow by limiting needle travel. It is best to control fluid flow by proper selection of fluid orifice size and use the fluid control knob to "fine tune flow rate".
- 5. Fan width can be adjusted using the fan control knob. Turning the knob clockwise narrows the fan.

#### Maintenance: Needle Seal Replacement

IMPORTANT! Routine cleaning and maintenance is essential to insure proper gun operation.

Before beginning needle seal replacement, it is recommended kit no. 10-107 be on hand.

- Several states prohibit spraying solvent into the atmosphere and require the use of covered gun cleaner.
- 1. Remove fluid control knob (36), needle return spring (34), and needle assembly (33).
- 2. Remove end cap (32) and piston return spring (31).
- 3. Piston (29) can be removed with pliers by carefully gripping the hub on the rear of the piston.
- 4. Remove the air control spool (22) using an 11/16" socket to unscrew it from the body.
- 5. The needle seal can be removed using a 7/16" socket with a short extension. Install a new needle seal and torque to approx. 2 ft.-lbs.
- 6. It is recommended that the o-rings on the air control spool (22) and piston (29) be replaced and lubricated before reassembling the gun.

#### NOTE: Gun head disassembly is not recommended for normal cleaning and maintenance.

#### Gun head disassembly and reassembly instructions:

Have repair kit # 10-107 available before gun disassembly.

#### Gun head disassembly

To remove the nozzle carrier (6) and air cap adapter (7):

- 1. Remove the air cap (1), fluid nozzle tip (3), fluid nozzle body (4), and needle (33).
- 2. Remove the needle seal cartridge (18) as described above.
- 3. Loosen the locknut (26) using 11/16" wrench and remove fluid inlet (27) using a 5/8" open-end wrench.
- 4. The nozzle carrier (6) and air cap adapter (7) will now slide forward from the gun body (11).

#### Gun head reassembly

- 1. Install a new o-ring (8) on the air cap adapter (7).
- 2. Install gasket (5) into the air cap adapter (7).
- 3. Install the thread locknut (26) onto the fluid inlet (27) as far as possible.
- 4. Install a new fluid inlet seal (25) into the recess area on the nozzle carrier (6) inlet port.
- 5. Slide the nozzle carrier (6) into air cap adapter (7) and insert into the gun body (11) as far as possible. Be sure the nozzle carrier (6) extends into the hole at the back of the gun head. Install the needle seal (18) but do not tighten.
- 6. Rotate the nozzle carrier (6) until the fluid inlet port in the nozzle carrier (6) is aligned with the threaded hole in the body. While in this position, insert the fluid inlet (27) and tighten firmly.
- 7. Tighten the needle seal (18) to approx. 12 ft.-lb. torque.
- 8. Tighten the fluid inlet (27) to approx. 25 ft.-lb. torque.
- 9. Tighten the locknut (26) to approx. 33 ft.-lb. torque.

|  |  | DESCRIPTION   | ITEM NO.   | PART NO.  | DESCRIPTION  |  |  |  |
|--|--|---|--|---|--|--|--|--|
| ITEM NO.   | PART NO.   | DESCITAT FIGHT  |  |   |  |  |  |  |
| 1 <b>TEM NO.</b>   | PART NO.<br>See Air Cap Chart  | Air Cap**   | 21   | 98-7006   | O-Ring (Viton) 2 Required*   |  |  |  |
|  |  |   |  | 98-7006<br>60-603   | O-Ring (Viton) 2 Required*<br>Air Control Spool  |  |  |  |
| 1  | See Air Cap Chart<br>See Air Cap Chart<br>31-2201  | Air Cap**<br>Fluid Tip**<br>Fluid Nozzle Body   | 21   | 60-603<br>98-7014   | Air Control Spool<br>O-Ring (Viton) 2 Required*  |  |  |  |
| 1<br>3   | See Air Cap Chart<br>See Air Cap Chart<br>31-2201<br>61-1005   | Air Cap**<br>Fluid Tip**<br>Fluid Nozzle Body<br>Seal*  | 21<br>22   | 60-603<br>98-7014<br>98-7027  | Air Control Spool<br>O-Ring (Viton) 2 Required*<br>O-Ring (Viton) 2 Required*  |  |  |  |
| 1<br>3<br>4<br>5<br>6  | See Air Cap Chart<br>See Air Cap Chart<br>31-2201<br>61-1005<br>60-L11C  | Air Cap**<br>Fluid Tip**<br>Fluid Nozzle Body<br>Seal*<br>Nozzle Body Carrier   | 21<br>22<br>23<br>24<br>25   | 60-603 98-7014   98-7027 60-124   | Air Control Spool<br>O-Ring (Viton) 2 Required*  |  |  |  |
| 1<br>3<br>4<br>5<br>6<br>7   | See Air Cap Chart<br>See Air Cap Chart<br>31-2201<br>61-1005<br>60-L11C<br>60-12C  | Air Cap**   Fluid Tip**   Fluid Nozzle Body   Seal*   Nozzle Body Carrier   Air Cap Adapter   | 21<br>22<br>23<br>24<br>25<br>26   | 60-603 98-7014   98-7027 60-124   60-128 60-128   | Air Control Spool<br>O-Ring (Viton) 2 Required*<br>O-Ring (Viton) 2 Required*<br>Seal*<br>Locknut  |  |  |  |
| 1<br>3<br>4<br>5<br>6<br>7<br>8  | See Air Cap Chart<br>See Air Cap Chart<br>31-2201<br>61-1005<br>60-L11C<br>60-12C<br>60-131  | Air Cap**Fluid Tip**Fluid Nozzle BodySeal*Nozzle Body CarrierAir Cap AdapterO-Ring (Teflon)*  | 21<br>22<br>23<br>24<br>25<br>26<br>27   | 60-603   98-7014   98-7027   60-124   60-128   60-126   | Air Control Spool<br>O-Ring (Viton) 2 Required*<br>O-Ring (Viton) 2 Required*<br>Seal*<br>Locknut<br>Fluid Inlet   |  |  |  |
| 1<br>3<br>4<br>5<br>6<br>7<br>8<br>9   | See Air Cap Chart<br>See Air Cap Chart<br>31-2201<br>61-1005<br>60-L11C<br>60-12C<br>60-131<br>60-614  | Air Cap**Fluid Tip**Fluid Nozzle BodySeal*Nozzle Body CarrierAir Cap AdapterO-Ring (Teflon)*Mounting Rod  | 21<br>22<br>23<br>24<br>25<br>26<br>27<br>28   | 60-603   98-7014   98-7027   60-124   60-128   60-126   98-8010   | Air Control Spool<br>O-Ring (Viton) 2 Required*<br>O-Ring (Viton) 2 Required*<br>Seal*<br>Locknut<br>Fluid Inlet<br>O-Ring (Teflon)*   |  |  |  |
| 1<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10                                     | See Air Cap Chart<br>See Air Cap Chart<br>31-2201<br>61-1005<br>60-L11C<br>60-12C<br>60-131<br>60-614<br>98-0115   | Air Cap**Fluid Tip**Fluid Nozzle BodySeal*Nozzle Body CarrierAir Cap AdapterO-Ring (Teflon)*Mounting RodLocknut (3/8-16)  | 21<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29   | 60-603   98-7014   98-7027   60-124   60-128   60-126   98-8010   60-602  | Air Control Spool   O-Ring (Viton) 2 Required*   O-Ring (Viton) 2 Required*   Seal*   Locknut   Fluid Inlet   O-Ring (Teflon)*   |  |  |  |
| 1<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11                               | See Air Cap Chart<br>See Air Cap Chart<br>31-2201<br>61-1005<br>60-L11C<br>60-12C<br>60-131<br>60-614<br>98-0115<br>60-622   | Air Cap**Fluid Tip**Fluid Nozzle BodySeal*Nozzle Body CarrierAir Cap AdapterO-Ring (Teflon)*Mounting RodLocknut (3/8-16)AutoCAT Gun Body Conventional   | 21<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29<br>30                                     | 60-603   98-7014   98-7027   60-124   60-128   60-126   98-8010   60-602   98-7217  | Air Control Spool<br>O-Ring (Viton) 2 Required*<br>O-Ring (Viton) 2 Required*<br>Seal*<br>Locknut<br>Fluid Inlet<br>O-Ring (Teflon)*<br>Piston<br>O-Ring (Viton)*  |  |  |  |
| 1<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12                         | See Air Cap Chart<br>See Air Cap Chart<br>31-2201<br>61-1005<br>60-L11C<br>60-12C<br>60-131<br>60-614<br>98-0115<br>60-622<br>60-136   | Air Cap**   Fluid Tip**   Fluid Nozzle Body   Seal*   Nozzle Body Carrier   Air Cap Adapter   O-Ring (Teflon)*   Mounting Rod   Locknut (3/8-16)   AutoCAT Gun Body Conventional   Plug                             | 21<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29<br>30<br>31                               | 60-603   98-7014   98-7027   60-124   60-128   60-126   98-8010   60-602   98-7217   66-246                                       | Air Control SpoolO-Ring (Viton) 2 Required*O-Ring (Viton) 2 Required*Seal*LocknutFluid InletO-Ring (Teflon)*PistonO-Ring (Viton)*Piston Return Spring  |  |  |  |
| 1<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>11<br>12<br>13             | See Air Cap Chart<br>See Air Cap Chart<br>31-2201<br>61-1005<br>60-L11C<br>60-12C<br>60-131<br>60-614<br>98-0115<br>60-622<br>60-136<br>98-8108  | Air Cap**Fluid Tip**Fluid Nozzle BodySeal*Nozzle Body CarrierAir Cap AdapterO-Ring (Teflon)*Mounting RodLocknut (3/8-16)AutoCAT Gun Body ConventionalPlugO-Ring (Teflon)*   | 21<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29<br>30<br>31<br>32                         | 60-603   98-7014   98-7027   60-124   60-128   60-126   98-8010   60-602   98-7217   66-246   60-601                              | Air Control SpoolO-Ring (Viton) 2 Required*O-Ring (Viton) 2 Required*Seal*LocknutFluid InletO-Ring (Teflon)*PistonO-Ring (Viton)*Piston Return SpringEnd Cap   |  |  |  |
| 1<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14             | See Air Cap Chart<br>See Air Cap Chart<br>31-2201<br>61-1005<br>60-L11C<br>60-12C<br>60-131<br>60-614<br>98-0115<br>60-622<br>60-136<br>98-8108<br>98-0108                                   | Air Cap**Fluid Tip**Fluid Nozzle BodySeal*Nozzle Body CarrierAir Cap AdapterO-Ring (Teflon)*Mounting RodLocknut (3/8-16)AutoCAT Gun Body ConventionalPlugO-Ring (Teflon)*Circlip                                    | 21<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29<br>30<br>31<br>31<br>32<br>33             | 60-603   98-7014   98-7027   60-124   60-128   60-126   98-8010   60-602   98-7217   66-246   60-601   See Air Cap Chart          | Air Control SpoolO-Ring (Viton) 2 Required*O-Ring (Viton) 2 Required*Seal*LocknutFluid InletO-Ring (Teflon)*PistonO-Ring (Viton)*Piston Return SpringEnd CapNeedle Assembly  |  |  |  |
| 1<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15       | See Air Cap Chart<br>See Air Cap Chart<br>31-2201<br>61-1005<br>60-L11C<br>60-12C<br>60-131<br>60-614<br>98-0115<br>60-622<br>60-136<br>98-8108<br>98-0108<br>60-605                         | Air Cap**Fluid Tip**Fluid Nozzle BodySeal*Nozzle Body CarrierAir Cap AdapterO-Ring (Teflon)*Mounting RodLocknut (3/8-16)AutoCAT Gun Body ConventionalPlugO-Ring (Teflon)*CirclipFan Control Housing                 | 21<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29<br>30<br>30<br>31<br>32<br>33<br>33<br>34 | 60-603   98-7014   98-7027   60-124   60-128   60-126   98-8010   60-602   98-7217   66-246   60-601   See Air Cap Chart   60-613 | Air Control SpoolO-Ring (Viton) 2 Required*O-Ring (Viton) 2 Required*Seal*LocknutFluid InletO-Ring (Teflon)*PistonO-Ring (Viton)*Piston Return SpringEnd CapNeedle AssemblyNeedle Return Spring  |  |  |  |
| 1<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15<br>16 | See Air Cap Chart     See Air Cap Chart     31-2201     61-1005     60-L11C     60-12C     60-131     60-614     98-0115     60-622     60-136     98-8108     98-0108     60-605     60-606 | Air Cap**Fluid Tip**Fluid Nozzle BodySeal*Nozzle Body CarrierAir Cap AdapterO-Ring (Teflon)*Mounting RodLocknut (3/8-16)AutoCAT Gun Body ConventionalPlugO-Ring (Teflon)*CirclipFan Control HousingFan Control Stem | 21<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29<br>30<br>31<br>31<br>32<br>33<br>34<br>35 | 60-603   98-7014   98-7027   60-124   60-128   60-126   98-8010   60-602   98-7217   66-246   60-601   See Air Cap Chart   60-612 | Air Control Spool   O-Ring (Viton) 2 Required*   O-Ring (Viton) 2 Required*   Seal*   Locknut   Fluid Inlet   O-Ring (Teflon)*   Piston   O-Ring (Viton)*   Piston Return Spring   End Cap   Needle Assembly   Needle Return Spring   Locknut - Fluid Control Knob |  |  |  |
| 1<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15       | See Air Cap Chart<br>See Air Cap Chart<br>31-2201<br>61-1005<br>60-L11C<br>60-12C<br>60-131<br>60-614<br>98-0115<br>60-622<br>60-136<br>98-8108<br>98-0108<br>60-605                         | Air Cap**Fluid Tip**Fluid Nozzle BodySeal*Nozzle Body CarrierAir Cap AdapterO-Ring (Teflon)*Mounting RodLocknut (3/8-16)AutoCAT Gun Body ConventionalPlugO-Ring (Teflon)*CirclipFan Control Housing                 | 21<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29<br>30<br>30<br>31<br>32<br>33<br>33<br>34 | 60-603   98-7014   98-7027   60-124   60-128   60-126   98-8010   60-602   98-7217   66-246   60-601   See Air Cap Chart   60-613 | Air Control SpoolO-Ring (Viton) 2 Required*O-Ring (Viton) 2 Required*Seal*LocknutFluid InletO-Ring (Teflon)*PistonO-Ring (Viton)*Piston Return SpringEnd CapNeedle AssemblyNeedle Return Spring  |  |  |  |

\*\*See air cap selection chart on page 1

\*\*\*Air inlet fittings are available in 90 degree elbow . 90 degree elbow tubing "push on" style fittings

P/N 53-520 1/8 NPT x 1/4" OD Tube

P/N 53-521 1/4 NPT x 3/8" OD Tube

## FLUID NOZZLE / AIR CAP SELECTION CHARTS

AUTOCAT Series 100C - Pressure / Siphon Feed Guns

### A100C CONVENTIONAL AUTOMATIC SPRAY GUN

| MATERIAL TYPE                               | FLUID ORIFICE x<br>AIR CAP     | MAXIMUM<br>PATTERN WIDTH | PRESS. / SIPHON |
|---|--------------------------------|--------------------------|-----------------|
| Very Thin                                   | 0.6, 0.7 mm x 2163             | 8                        | Р               |
| less than 16 sec. Zahn #2                   | 0.6, 0.7 mm x 2166             | 9                        | S               |
| inks , dyes,<br>solvents, stains            | 0.6, 0.7 mm x 2266             | 12                       | S               |
| Thin  | 0.6, 0.7, 1.0 mm x 2163        | 8                        | Р               |
| 16 to 20 sec. Zahn #2                       | 0.6, 0.7, 1.0 mm x 2366        | 14                       | S               |
| lacquers, enamels,<br>primers, sealers      | 0.6, 0.7, 1.0 mm x 2466        | 13                       | S               |
| Medium                                      |                                |                          |                 |
| 21 to 30 sec. Zahn #2                       | 1.2, 1.3, 1.5, 1.8 mm x 2263   | 14                       | Р               |
| automotive base coat                        | 1.2, 1.3, 1.5, 1.8 mm x 2266   | 10                       | S               |
| enamels, primers                            | 1.2, 1.3, 1.5, 1.8 mm x 2266-3 | 15                       | S               |
| epoxies, urethanes                          | 1.2, 1.3, 1.5, 1.8 mm x 2466   | 13                       | S               |
| automotive clear coat                       |                                |                          |                 |
| Heavy                                       |                                |                          |                 |
| over 30 sec. Zahn #2                        | 1.5, 1.8mm x 2466              | 13                       | S               |
| heavy body primers                          | 2.2 mm x 2167                  | 12                       | Р               |
| high solid enamels                          | 2.2 mm x 2267                  | 15                       | Р               |
| high solid automotive coatings<br>adhesives | 2.8 mm x 2168                  | 12                       | Р               |