

# A7A Angled Dual Gun Conversion Kit

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## 1. Introduction

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Refer to Figure 1. The A7A angled dual gun conversion kits allow the user to convert two existing A7A single guns, or one dual gun to an angled model. The angled version provides quick color change and improved coating performance over the existing dual gun.

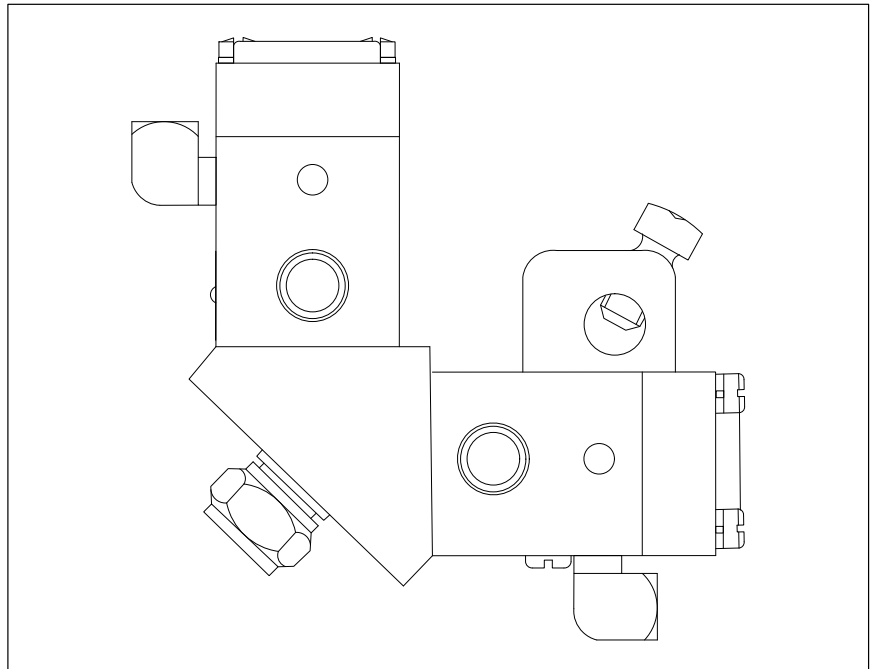


Fig. 1 Angled Dual A7A Gun

**1. Introduction** (contd)

Refer to Table 1 to determine which conversion kit to use.

Table 1 Conversion Kit Selection

Gun Part Number	Gun Model	Conversion Kit Part Number	Conversion Kit Type
153 150	A7A (Qty 2)	160 355	Dual A7A, standard
248 937	Dual chamber	160 355	Dual A7A, standard
153 160	A7A, stainless steel (Qty. 2)	160 060	Dual A7A, stainless steel
149 097	Dual chamber, stainless steel	160 060	Dual A7A, stainless steel

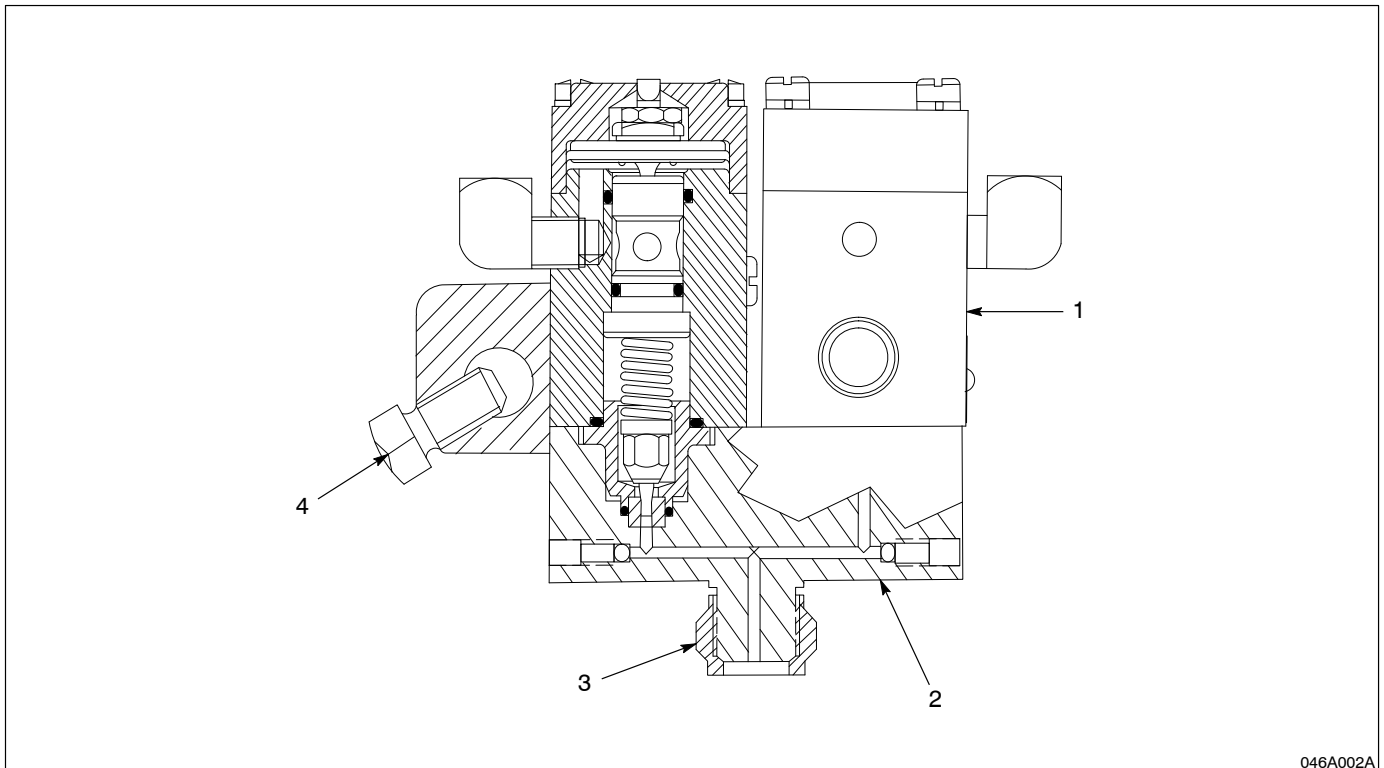
**2. Retrofit Instructions**

Follow these instructions to convert two existing single guns or one dual gun to an angled gun.

**Single/Dual Gun Disassembly**

See Figure 2.

1. Flush the gun with solvent.
2. Relieve system pressure.
3. Disconnect the air tubing and fluid hoses from the gun.
4. Loosen the square-head screw (4) and remove the gun from the mounting bar.
5. Remove the screw attaching the manifold (2) to the gun body (ies) (1).
6. Remove the manifold from the gun body (ies).
7. Remove the nozzle retaining nut (3) and nozzle.



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Fig. 2 Cutaway View, Dual Gun

- |             |                         |                      |
|-------------|-------------------------|----------------------|
| 1. Gun body | 3. Nozzle retaining nut | 4. Square-head screw |
| 2. Manifold |                         |                      |

### ***Angled Dual Gun Assembly***

See Figure 3.

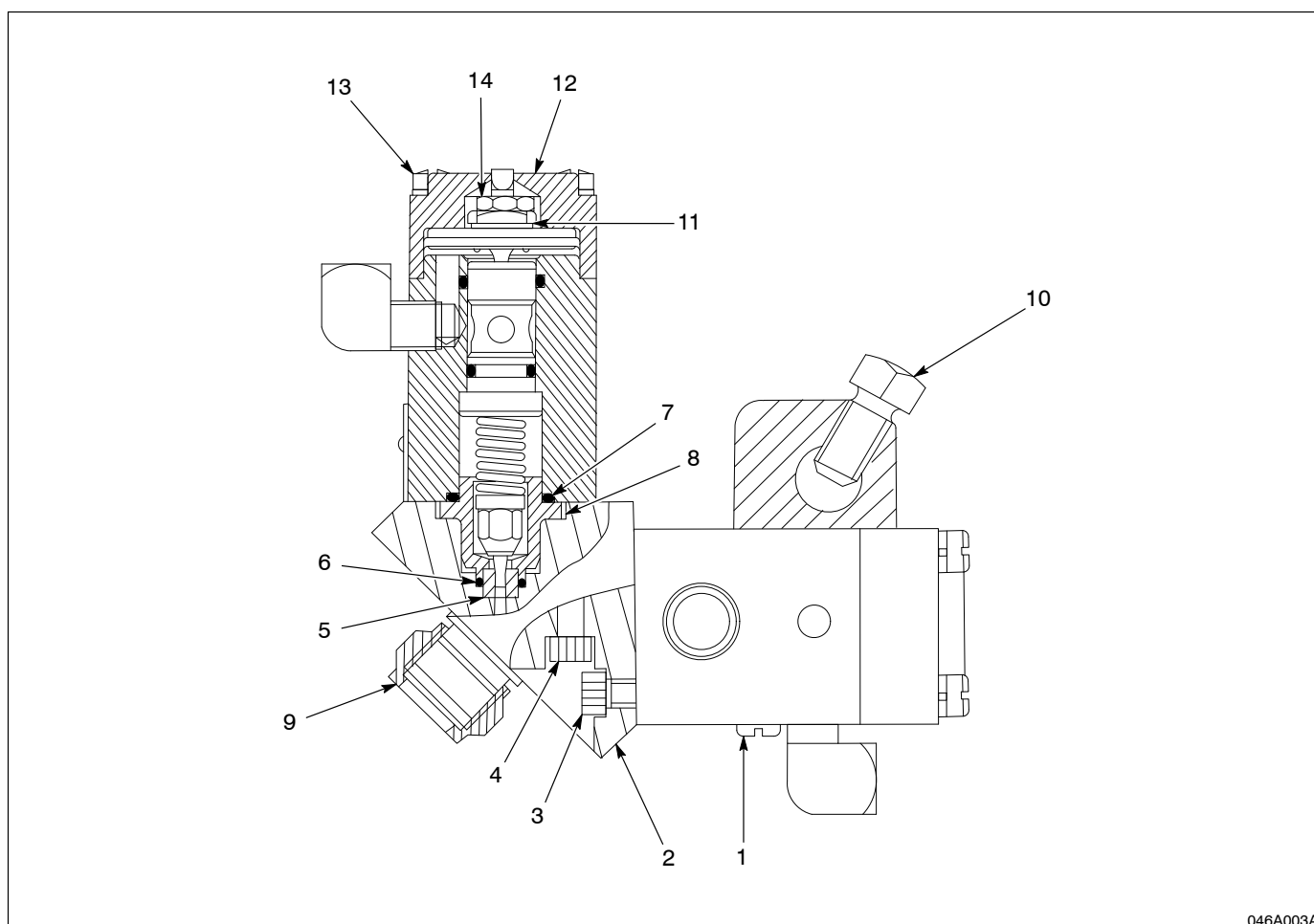
1. Attach the angled manifold (2) to the gun body (ies). Note the position of the longer screws (4).
2. Install the nozzle on the manifold and secure with the retaining nut (9).
3. Install the gun on the mounting bar and secure with the square-head screw (10).
4. Connect the air tubing and fluid hose to the gun.
5. Test the gun for proper operation.

***Replacing the Needle and Seat/Ball and Seat***

A spare needle and seat or ball and seat are included in the conversion kit. When disassembling the gun, replace the needle and seat or ball and seat. Follow the steps below to complete this procedure. Refer to the *A7A Airless Spray Gun* manual for more information.

See Figure 3.

1. Remove the existing needle and seat or ball and seat as described in the *A7A Airless Spray Gun* manual.
2. Install a new needle and seat or ball and seat.
3. Install the seat retainer (8) into the manifold (2).
4. Install the manifold and tighten the screws evenly to compress the packing cartridge spring.
5. Remove the cylinder (12).
6. Using the module adjusting wrenches supplied with the gun, loosen the locknut (14).
7. Turn the seal locknut (11) clockwise until it rests against the gun body. Back the seal locknut out, as follows:
  - Needle and seat:  $1\frac{1}{2}$  turn counterclockwise
  - Ball and seat:  $\frac{3}{4}$  turn counterclockwise
8. Retighten the locknut (14). Reinstall the cylinder (12).



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Fig. 3 Dual A7A Conversion Kit (needle and seat shown)

- |                    |                       |                  |
|--------------------|-----------------------|------------------|
| 1. Screw           | 6. O-ring             | 11. Seal locknut |
| 2. Manifold        | 7. O-ring             | 12. Cylinder     |
| 3. Screw           | 8. Seat retainer      | 13. Cap screw    |
| 4. Screw           | 9. Retaining nut      | 14. Locknut      |
| 5. Needle and seat | 10. Square-head screw |                  |

**NOTE:** Items 9 through 14 in Figure 3 are not included in the conversion kits; they are illustrated for reference only.

**3. Parts**

See Figure 3.

**Dual A7A Conversion Kit  
(Standard)**

Item	Part	Description	Quantity	Note
—	160 355	Conversion kit, dual A7A, standard	1	
1	981 513	• Screw, pan head, #10-32 x 2.00 in.	2	
2	160 061	• Manifold, dual, A7A angled	1	
3	981 893	• Screw, socket, #10-32 x 0.500 in.	4	
4	981 771	• Screw, socket, #10-32 x 1.375 in.	2	
5	-----	• Ball and seat, A7A	2	
6	940 105	• O-ring, PTFE, 0.250 x 0.375 x 0.063 in.	2	
7	940 174	• O-ring, Viton, black, 0.688 x 0.813 x 0.063 in.	2	
8	134 975	• Retainer, seat, A7A	2	
NS	900 755	• Cap, plug, tapered, 0.788 OD	1	
NS: Not Shown				

**Dual A7A Conversion Kit  
(Stainless Steel)**

Item	Part	Description	Quantity	Note
—	160 060	Conversion kit, dual A7A, stainless steel	1	
1	981 513	• Screw, pan head, #10-32 x 2.00 in.	2	
2	160 061	• Manifold, dual, A7A angled	1	
3	981 893	• Screw, socket, #10-32 x 0.500 in.	4	
4	981 771	• Screw, socket, #10-32 x 1.375 in.	2	
5	-----	• Needle and seat, A7A	2	
6	940 105	• O-ring, PTFE, 0.275 x 0.375 x 0.063 in.	2	
7	940 174	• O-ring, Viton, black, 0.688 x 0.813 x 0.063 in.	2	
8	248 933	• Retainer, seat	2	
NS	900 755	• Cap, plug, tapered, 0.788 OD	1	
NS: Not Shown				

**Service Kits**

See Figure 3.

**Ball and Seat**

Order two kits in order to repair both modules of the angled dual A7A gun.

Item	Part	Description	Quantity	Note
—	159 447	Service kit, ball and seat	1	
5	-----	• Ball and seat, A7A	1	
6	940 105	• O-ring, PTFE, 0.250 x 0.375 x 0.063 in.	1	
7	940 174	• O-ring, Viton, black, 0.688 x 0.812 x 0.063 in.	1	

**Ball and Seat with Retainer**

Order two kits in order to repair both modules of the angled dual A7A gun.

Item	Part	Description	Quantity	Note
—	134 972	Service kit, ball and seat, with retainer	1	
5	-----	• Ball and seat, A7A	1	
6	940 105	• O-ring, PTFE, 0.250 x 0.375 x 0.063 in.	1	
7	940 174	• O-ring, Viton, black, 0.688 x 0.812 x 0.063 in.	1	
8	134 975	• Retainer, seat	1	

***Needle and Seat***

Order two kits in order to repair both modules of the angled dual A7A gun.

Item	Part	Description	Quantity	Note
—	106 416	Service kit, needle and seat	1	
5	-----	• Needle and seat, A7A	1	
6	940 105	• O-ring, PTFE, 0.250 x 0.375 x 0.063 in.	1	
7	940 174	• O-ring, Viton, black, 0.688 x 0.812 x 0.063 in.	1	

***Needle and Seat with Retainer***

Order two kits in order to repair both modules of the angled dual A7A gun.

Item	Part	Description	Quantity	Note
—	106 354	Service kit, needle and seat, with retainer	1	
5	-----	• Needle and seat, A7A	1	
6	940 105	• O-ring, PTFE, 0.250 x 0.375 x 0.063 in.	1	
7	940 174	• O-ring, Viton, black, 0.688 x 0.812 x 0.063 in.	1	
8	248 933	• Retainer, seat	1	

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