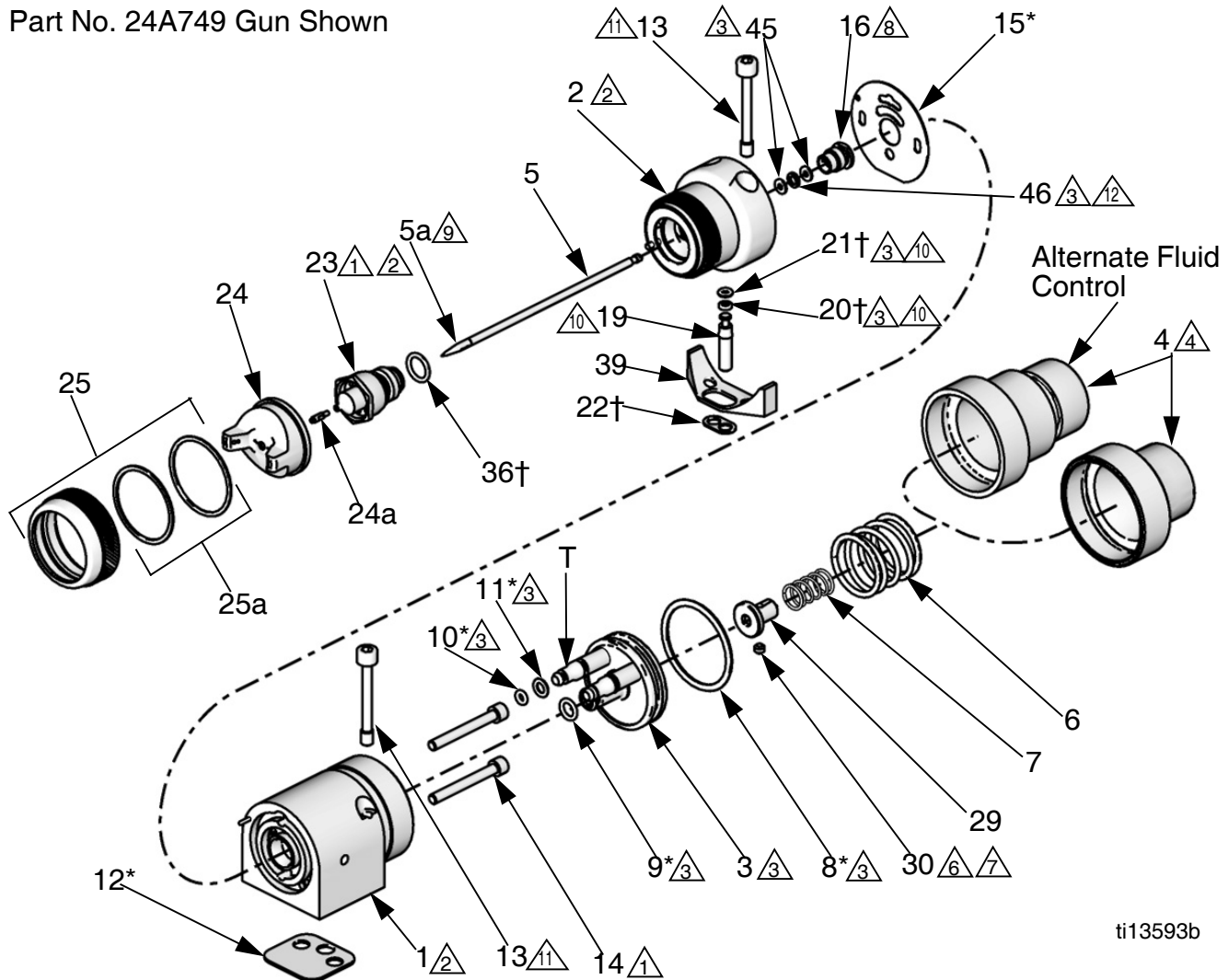


# Parts

Part No. 24A749 Gun Shown



### SERVICE NOTES:

- ① Torque to 35-45 in-lb (4.0-5.1 N•m).
- ② Lubricate threads with anti-seize lubricant.
- ③ Lubricate with light-weight oil.
- ④ Tighten cap (4) until it bottoms out.
- ⑥ Apply semi-permanent anaerobic sealant.
- ⑦ Torque to 6.5-7.5 in-lb (0.73-0.85 N•m).
- ⑧ Torque to 95-105 in-lb (10.7-11.8 N•m).
- ⑨ Apply semi-permanent anaerobic sealant to two threads at end of needle shaft.
- ⑩ Used on non-circulating guns only.
- ⑪ Torque to 65 in-lb (7.3 N•m).
- ⑫ Step in spacer (46) must face into packing nut.

FIG. 21

Ref.	Part	Description	Qty
1	-----	HOUSING, piston	1
2	24B676	HOUSING, fluid	1
3	240895	PISTON, assembly	1
4	See pages 28-29	CAP, piston	1
5	See pages 28-29	NEEDLE, assembly	1
5a	See pages 28-29	TIP, needle	1
6	114139	SPRING, compression	1
7	114138	SPRING, compression	1
8*	115066	O-RING, fluoroelastomer	1
9*	111450	O-RING, fluoroelastomer	1
10*	111504	O-RING, fluoroelastomer	2
11*	112319	O-RING, fluoroelastomer	2
12*	114134	GASKET, polyethylene (bottom)	1
13	15H317	SCREW, mounting manifold (M5)	4
14	15H318	SCREW, SHC	2
15*	15H316	GASKET, polyethylene (front)	1
16	195222	NUT, packing	1
19	192687	PLUG, fluid	1
20†	114340	RING, back-up, PTFE	1
21†	114244	O-RING, fluoroelastomer	1

Ref.	Part	Description	Qty
22†	192443	GASKET, fluid	2
23	See pages 28-29	NOZZLE, fluid, 0.030 in.	1
24	See pages 28-29	CAP, air	1
24a	24B546	PIN, locating, threaded; (pack of 10)	1
25	289079	RETAINER, ring, assembly	1
25a	289791	SEAL KIT, air cap (5 of each) O-RING, PTFE WASHER, UHMW	5 5
29	192452	STOP, needle	1
30	114137	SCREW, set	1
34	114141	WRENCH, hex, not shown	1
36†	111457	O-RING	1
38	-----	PIN, dowel, not shown	1
39	15H702	INSERT, plastic	1
40▲	15K759	LABEL, warning, not shown	1
45†	-----	WASHER, UHMWPE	2
46†	-----	SPACER, stainless steel	1

\* Included in Air Seal Repair Kit 288171.

† Included in Fluid Seal Repair Kit 24B675.

----- Not sold separately.

▲ Replacement Warning labels, signs, tags, and cards are available at no cost.

# Repair Kits

**NOTE:** Alternate nozzle sizes are also available. See **Accessories**, page 34.

## General Metal Applications

Gun Part Number	Spray Type	Nozzle Orifice Size in. (mm)	Needle/Nozzle Kit (Includes Items 5 and 23)	Item 4 Piston Cap	Item 5 Needle Assembly (Includes Needle Tip)	Item 5a Needle Tip (Pack of 5)	Item 23 Nozzle	Item 24 Air Cap (Includes locating pin)	Air Cap (without locating pin)
24B333	Conventional	0.020 (0.5)	24B332	192453	24B331	289350	289061	24B544	289773
24A747	Conventional	0.030 (0.8)	24A687	192453	24A683	288183	289062	24B544	289773
24A748	Conventional	0.042 (1.1)	24A688	192453	24A684	288184	289063	24B544	289773
24A749	Conventional	0.055 (1.4)	24A689	192453	24A685	288185	289064	24B544	289773
24A750	Conventional	0.070 (1.8)	24A690	192453	24A685	288185	289065	24B545	289784
24B334	HVLP	0.020 (0.5)	24B332	192453	24B331	289350	289061	24B539	289041
24A754	HVLP	0.030 (0.8)	24A687	192453	24A683	288183	289062	24B539	289041
24A755	HVLP	0.042 (1.1)	24A688	192453	24A684	288184	289063	24B539	289041
24A756	HVLP	0.055 (1.4)	24A689	192453	24A685	288185	289064	24B539	289041
24A757	HVLP	0.070 (1.8)	24A690	192453	24A685	288185	289065	24B539	289041
24B335	Compliant	0.020 (0.5)	24B332	192453	24B331	289350	289061	24B540	289042
24A761	Compliant	0.030 (0.8)	24A687	192453	24A683	288183	289062	24B540	289042
24A762	Compliant	0.042 (1.1)	24A688	192453	24A684	288184	289063	24B540	289042
24A763	Compliant	0.055 (1.4)	24A689	192453	24A685	288185	289064	24B540	289042
24A764	Compliant	0.070 (1.8)	24A690	192453	24A685	288185	289065	24B540	289042
24A751★	Conventional	0.030 (0.8)	24A687	24A512	24A683	288183	289062	24B544	289773
24A752★	Conventional	0.042 (1.1)	24A688	24A512	24A684	288184	289063	24B544	289773
24A753★	Conventional	0.055 (1.4)	24A689	24A512	24A685	288185	289064	24B544	289773
24A758★	HVLP	0.030 (0.8)	24A687	24A512	24A683	288183	289062	24B539	289041
24A759★	HVLP	0.042 (1.1)	24A688	24A512	24A684	288184	289063	24B539	289041
24A760★	HVLP	0.055 (1.4)	24A689	24A512	24A685	288185	289064	24B539	289041
24A765★	Compliant	0.030 (0.8)	24A687	24A512	24A683	288183	289062	24B540	289042
24A766★	Compliant	0.042 (1.1)	24A688	24A512	24A684	288184	289063	24B540	289042
24A767★	Compliant	0.055 (1.4)	24A689	24A512	24A685	288185	289064	24B540	289042

## High Wear Applications

Gun Part Number	Spray Type	Nozzle Orifice Size in. (mm)	Needle/Nozzle Kit (Includes Items 5 and 23)	Item 4 Piston Cap	Item 5 Needle Assembly (Includes Needle Tip)	Item 5a Needle Tip (Pack of 5)	Item 23 Nozzle	Item 24 Air Cap (Includes locating pin)	Air Cap (without locating pin)
24A774✘	Conventional	0.059 (1.5)	24A693	192453	24A686	N/A	289074	24B537	288861
24A775✘	Conventional	0.070 (1.8)	24A694	192453	24A686	N/A	289075	24B536	289049
24B336✘	Conventional	0.086 (2.2)	24B358	192453	24B357	N/A	289076	24B536	289049
24C316✘	Conventional	0.110 (2.8)	24C142	192453	24C319	N/A	289975	24B536	289049
24A776✘	HVLP	0.059 (1.5)	24A695	192453	24A686	N/A	289331	24B541	289115
24A777✘	HVLP	0.070 (1.8)	24A696	192453	24A686	N/A	289332	24B542	289325
24A778✘	Compliant	0.059 (1.5)	24A695	192453	24A686	N/A	289331	24B538	289050
24A779✘	Compliant	0.070 (1.8)	24A696	192453	24A686	N/A	289332	24B543	289327

## Wood Applications

Gun Part Number	Spray Type	Nozzle Orifice Size in. (mm)	Needle/Nozzle Kit (Includes Items 5 and 23)	Item 4 Piston Cap	Item 5 Needle Assembly (Includes Needle Tip)	Item 5a Needle Tip (Pack of 5)	Item 23 Nozzle	Item 24 Air Cap (Includes locating pin)	Air Cap (without locating pin)
24A768	Conventional	0.030 (0.8)	24A691	192453	24A683	288183	288927	24B533	288862
24A769	Conventional	0.040 (1.0)	24A692	192453	24A684	288184	289112	24B533	288862
26A367	HVLP	0.020 (0.5)	24B332	192453	24B331	289350	288907	24B535	288864
24A770	HVLP	0.030 (0.8)	24A691	192453	24A683	288183	288927	24B535	288864
24A771	HVLP	0.040 (1.0)	24A692	192453	24A684	288184	289112	24B535	288864
24A772	Compliant	0.030 (0.8)	24A691	192453	24A683	288183	288927	24B534	288863
24A773	Compliant	0.040 (1.0)	24A692	192453	24A684	288184	289112	24B534	288863
26C455	Compliant	0.040 (1.0)	24A692	192453	24A680	288184	289112	289807	289772

★ Model has Fluid Control Knob (for fine adjustment of fluid flow).

✘ Needle tip and nozzle exit constructed from tungsten carbide.

**Part No. 288221**

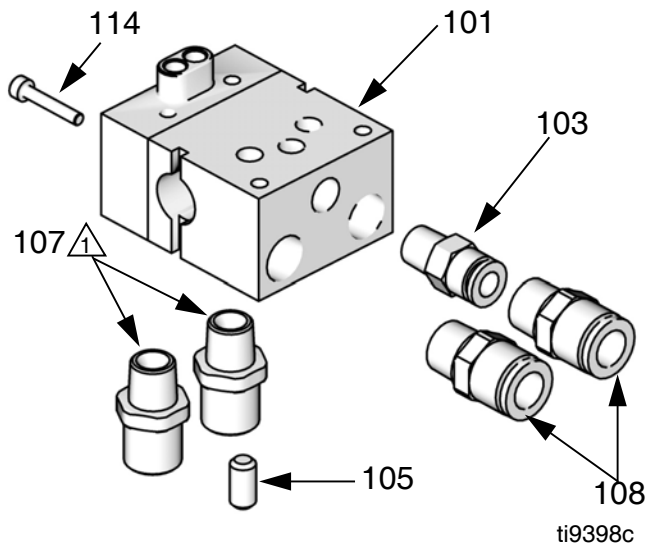
Manifold with bottom fluid ports

Ref. No.	Part No.	Description	Qty
101	-----	MANIFOLD, bottom fluid ports	1
103	120388	FITTING, tube, air inlet; 1/4 in. OD tube x 1/8 npt(m)	1
105	114246	SCREW, set; 5/16, 0.437 in. long	1
107	166846	NIPPLE, SST; 1/4 npsm, straight pipe thread x 1/4 npt	2
108	120389	FITTING, tube, air line; 3/8 in.OD tube x 1/4 npt	2
109*	101970	PLUG, pipe, SST; 1/4-18 ptf, supplied to plug fluid outlet port in non-circulating applications	1
114	120453	SCREW, SHCS, M3 x 18	1

\* Not shown.

----- Not sold separately.

⚠ Apply anti-seize lubricant to threads and mating faces of manifold (101) and any fittings and/or plugs used in fluid ports.



**FIG. 22: Manifold with Bottom Fluid Ports**

**Part No. 288223**

North America Low Pressure Manifold with side fluid ports and fan adjustment valve

**Part No. 24C342**

International Low Pressure Manifold with side fluid ports and fan adjustment valve

Ref. No.	Part No.	Description	Qty.
101	-----	MANIFOLD, fan adjustable	1
102	243949	VALVE, fan, assy.	1
103	120388⊗ 120538◆	FITTING, tube, air inlet; 1/4 in. OD tube x 1/8 npt(m) 6 mm OD tube x 1/8 npt(m)	1
104	120389⊗ 120537◆ 15D916◆*	FITTING, tube, air line; 3/8 in.OD tube x 1/4 npt 8 mm OD tube x 1/4 npt 4 mm OD tube x 1/4 npt; shipped loose	1
107	114246	SCREW, set; 5/16;0.437 in. long	1
108	114342⊗ 114247◆	ELBOW, male 1/4 - 18 npt #5JIC x 1/4-18 npt	2
109*	101970	PLUG, pipe, SST; 1/4-18 ptf, supplied to plug fluid outlet port in non-circulating applications	1
114	120453	SCREW, SCHS, M3 x 18	1

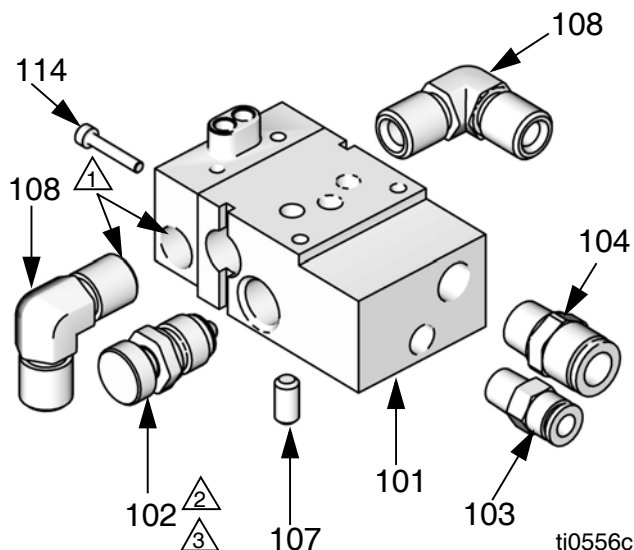
\* Not shown, optional size

----- Not sold separately.

⊗ Part No. 288223 only.

◆ Part No. 24C342 only.

- ① Apply anti-seize lubricant to threads and mating faces of manifold (101) and any fittings and/or plugs used in fluid ports.
- ② Install with valve turned fully counterclockwise to outermost position.
- ③ Torque to 125-135 in-lb (14-15 N•m).



**FIG. 23: Side Fluid Ports and Fan Adjustment Valve**

**Part No. 288217**

North America Manifold with side fluid ports

**Part No. 288218**

International Manifold with side fluid ports

Ref. No.	Part No.	Description	Qty
101	-----	MANIFOLD, side fluid ports	1
103	120388❖ 120538◆	FITTING, tube, air inlet 1/4 in. OD tube x 1/8 npt(m) 6 mm OD tube x 1/8 npt(m)	1
105	114246	SCREW, set; 5/16; 0.437 in. long	1
107	114342❖ 114247◆	ELBOW, male, 1/4-18 npt #5 JIC x 1/4-18 npt	2
108	120389❖ 120537◆ 15D916◆*	FITTING, tube, air line 3/8 in.OD tube x 1/4 npt 8 mm OD tube x 1/4 npt 4 mm OD tube X 1/4 npt; shipped loose	2
109*	101970	PLUG, pipe, SST; 1/4-18 ptf, supplied to plug fluid outlet port in non-circulating applications	1
114	120453	SCREW, SHCS, M3 x 18	1

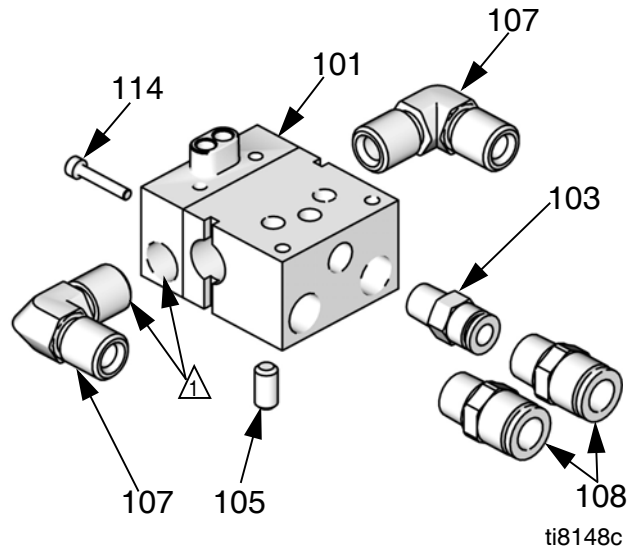
\* Not shown, optional size.

----- Not sold separately.

❖ Part No. 288217 only.

◆ Part No. 288218 only.

⚠ Apply anti-seize lubricant to threads and mating faces of manifold (101) and any fittings and/or plugs used in fluid ports.



**FIG. 24: Manifold with Side Fluid Ports**

**Part No. 288160**

Rear Port Manifold, North America

**Part No. 288211**

Rear Port Manifold, International

Ref. No.	Part No.	Description	Qty.
101	-----	MANIFOLD, aluminum	1
103	15H521❖ 15J003◆	FITTING, fluid path 1/4 npsm #5 JIC	2
105	116475	SCREW, SHCS, M4 x 12	2
106	120353	O-RING, PTFE	2
107	15J077	O-RING, PTFE	2
110	114246	SCREW, set, hex soc	1
111	120389❖ 120537◆ 15D916◆*	FITTING, tube, air line 3/8 in. OD tube x 1/4 npt 8 mm OD tube x 1/4 npt 4 mm OD tube x 1/4 npt; shipped loose	2
112	120388❖ 120538◆	FITTING, tube, air inlet 1/4 in. OD tube x 1/8 npt(m) 6 mm OD tube x 1/8 npt(m)	1
113	103253	SCREW, set	2

\* Not shown, optional size.

----- Not sold separately

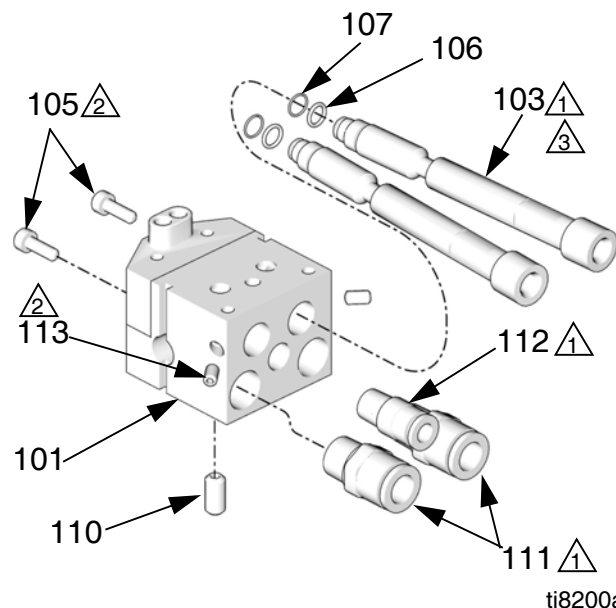
❖ Part No. 288160 only.

◆ Part No. 288211 only.

① Apply sealant to threads and mating faces of manifold (101) and any fittings and/or plugs used in fluid ports.

② Torque to 8-10 in-lb (0.9–1.3 N•m).

③ Torque to 110-130 in-lb (12.3–4.7 N•m).



**FIG. 25: Manifold with Rear Fluid Ports**



# Accessories

## Alternate Nozzle Sizes

Gun Type	Application	Nozzle Orifice in. (mm)	Air Cap (without locating pin)	Nozzle	Needle Tip (Qty. 5)
Conventional	General Metal	0.086 (2.2)	289068	289066	289004
Conventional		0.110 (2.8)	289069	289067	289007
HVLP		0.086 (2.2)	289070	289066	289004
HVLP		0.110 (2.8)	289043	289067	289007
Compliant		0.086 (2.2)	289044	289066	289004
Compliant		0.110 (2.8)	289045	289067	289007
Conventional	Wood	0.020 (0.5)	288862	288907	289350
HVLP		0.020 (0.5)	288864	288907	289350
Compliant		0.020 (0.5)	288863	288907	289350

## Stainless Steel Air Cap Kits

Gun Type	Application	Nozzle Orifice in. (mm)	Air Cap (without locating pin)	Air Cap (with Locating Pin)
Conventional	General Metal	0.020-0.055 (0.5-1.4)	24B671	24B667
Conventional		0.070 (1.8)	24B672	24B668
HVLP		0.020-0.070 (0.5-1.8)	24B669	24B665
Compliant		0.020-0.070 (0.5-1.8)	24B670	24B666

### Cleaning Brush 105749

For use in cleaning gun.

### Lubricant 111265

One 4 oz. (113 gram) tube sanitary (non-silicone) lubricant for fluid seals and wear areas.

### Replacement Gun 24A780

Gun without needle, nozzle, and air cap.

### Fluid Control Knob Repair Kit 288138

Includes spring, ball, and retaining clip.

### Zero Cavity Needle Tip 24G618

1.1 mm needle tip, pack of 5.

### Fluid Hose Parts Breakdown

Part No.	Description
239629	FITTING, assy, swivel
061345	TUBING, 1000 ft. (305 m) roll

### Retrofit Adapter Plate 288197

The retrofit adapter plate enables the manifold to be attached to a variety of bolt patterns. See page 13 and page 42.

### Gun Mounting Bracket (Cefla) Kit 24B609

Includes bracket and screw.