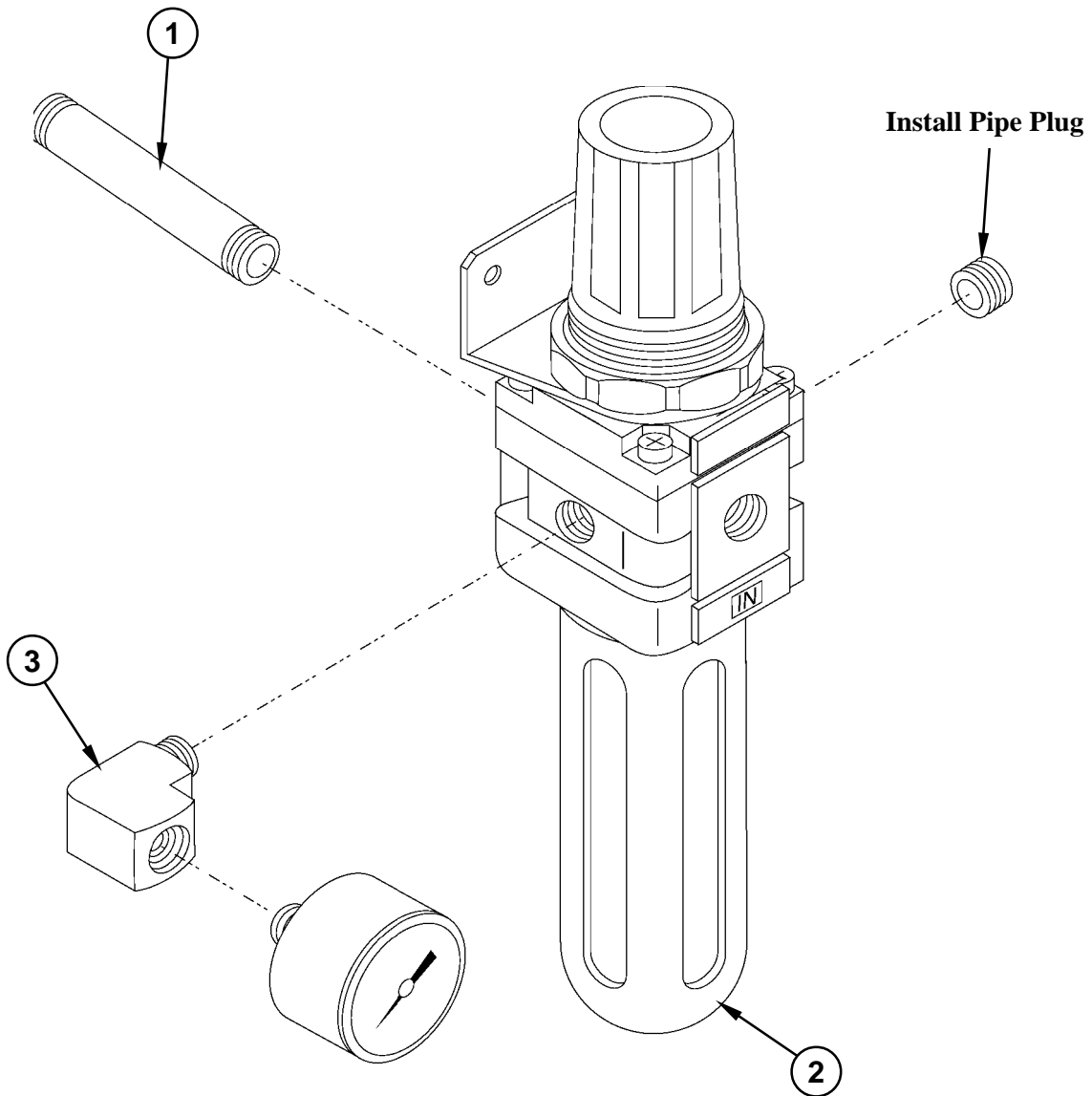


DRS25

Diffuser Regulator - Sub Assembly



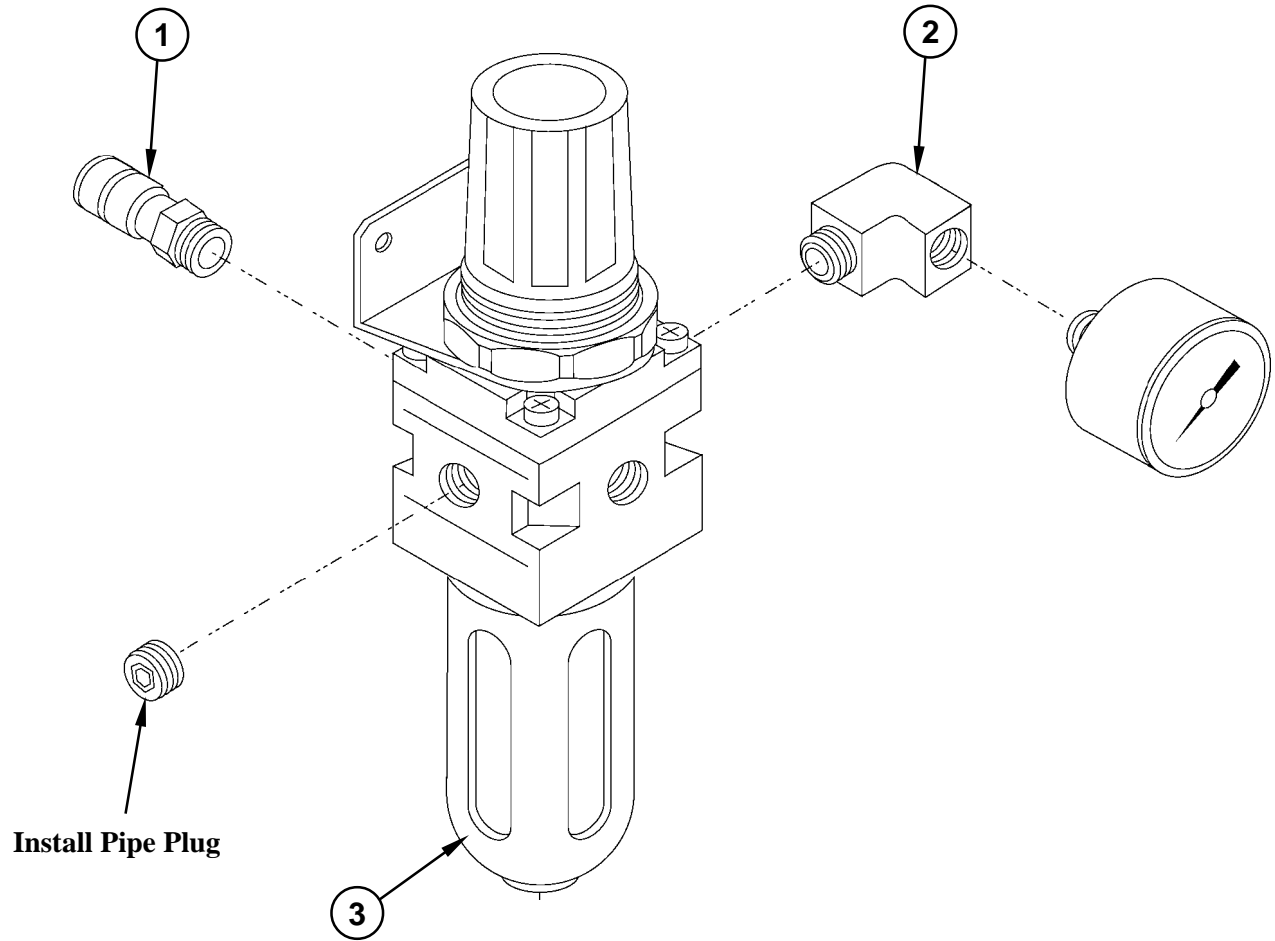
DRS25

Diffuser Regulator Sub Assembly - Parts List

| | <u>Description</u> | <u>Qty.</u> | <u>Location</u> | <u>Part Number</u> |
|----|---|-------------|-----------------|--------------------|
| 1. | 1/4" NPT x 3" Pipe | 1 | 14D130 | 9001.00.173 |
| 2. | Diffuser Regulator with Bracket & Gauge | 1 | 10E9 | 9001.12.004 |
| 3. | 1/8" NPT to 1/8" NPTF Elbow | 1 | 16D78 | TC3-22 |

DRS25

Nozzle Regulator - Sub Assembly

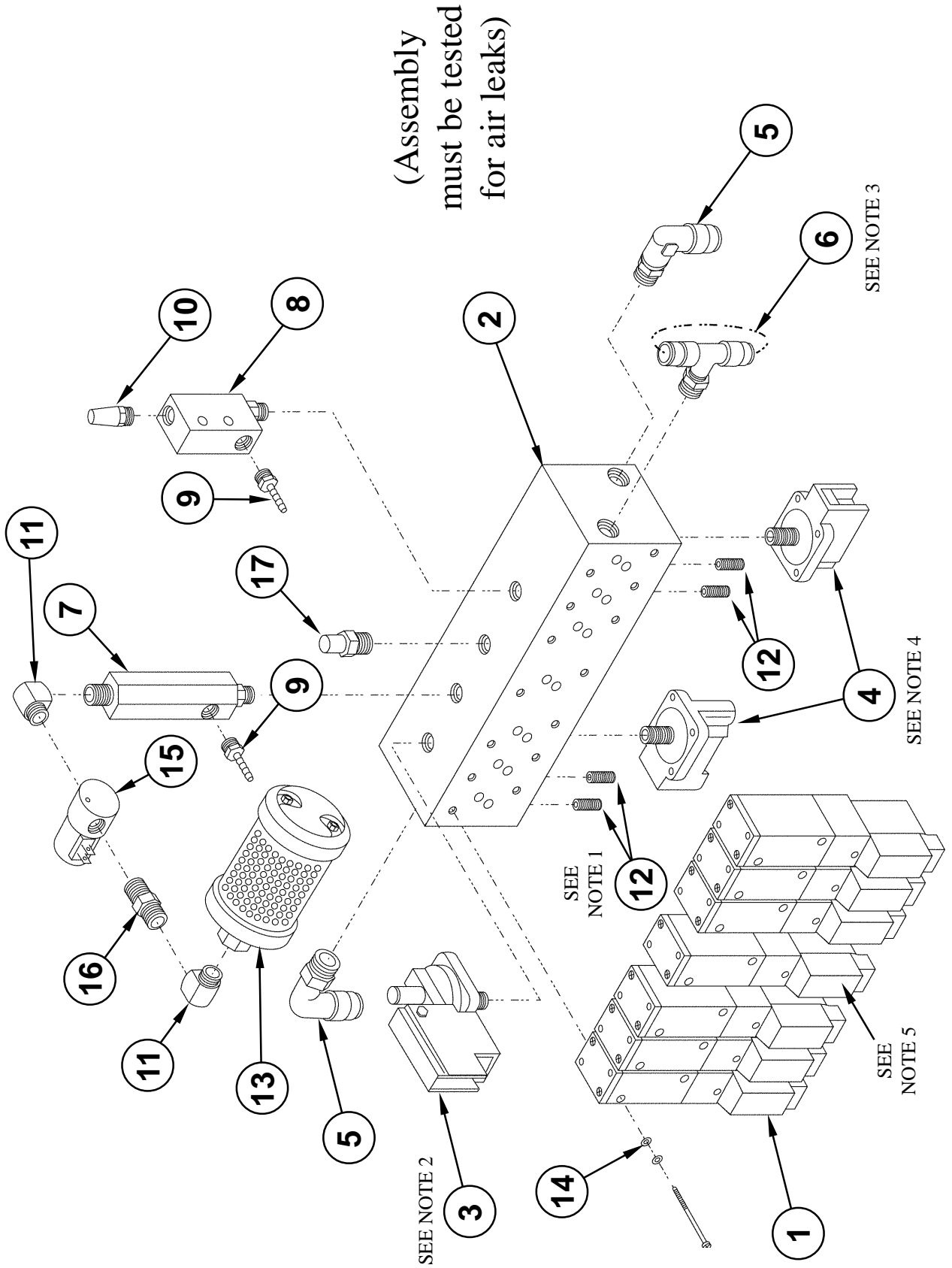


DRS25

Nozzle Regulator Sub Assembly - Parts List

| | <u>Description</u> | <u>Qty.</u> | <u>Location</u> | <u>Part Number</u> |
|----|---------------------------------------|-------------|-----------------|--------------------|
| 1. | 1/8" NPT to 1/4" Straight Fitting | 1 | 14A93 | FLX335 |
| 2. | 1/8" NPT to 1/8" NPTF Elbow | 1 | 16D78 | TC3-22 |
| 3. | Nozzle Regulator with Bracket & Gauge | 1 | 18B116 | 9001.12.003 |
| | - Bracket | | 18B116 | FLX350-2 |
| | - Gauge | | 18B116 | FLX351-2 |

DRS25 Manifold Double Diffuser (0024.20.040) - Sub Assembly



(Assembly must be tested for air leaks)

SEE NOTE 3

SEE NOTE 4

SEE NOTE 5

SEE NOTE 1

SEE NOTE 2

DRS25

Manifold Double Diffuser Sub Assembly - Parts List

| | <u>Description</u> | <u>Qty.</u> | <u>Location</u> | <u>Part Number</u> |
|-----|---|-------------|-----------------|--------------------|
| 1. | Solenoid Valve, 3-Way | 7 | 10E17 | 9001.11.007 |
| 2. | Manifold Block | 1 | 18C73 | 0101.02.108 |
| 3. | Low Pressure Switch (check for test mark) | 1 | 16D29 | TC3-03 |
| 4. | Low Pressure Sensor | 2 | 10A61 | 0100.01.126 |
| 5. | 3/8" Plug to 1/4" NPT Swivel Elbow | 2 | 10E25 | 9001.03.012 |
| 6. | 1/4" NPT Branch-T | 1 | 14A105 | 9001.03.000 |
| 7. | Nozzle Vacuum Pump | 1 | 2B97 | HAV-128 |
| 8. | Probe Vacuum Pump | 1 | | AVR046H |
| 9. | 1/8" NPT to 3/16" Barb | 2 | 5E81 | 9001.00.049 |
| 10. | Nozzle Muffler | 1 | 5D33 | S18 |
| 11. | 1/4" NPT to 1/4" NPTF Elbow | 2 | 12E167 | 9001.00.032 |
| 12. | 1/4" - 20 x 7/8" Set Screws | 4 | 154A | _____ |
| 13. | Muffler | 1 | 5D73 | S147AV |
| 14. | Washer, #5 Lock | 28 | 154B | _____ |
| 15. | Valve, Puff Off | 1 | 18D29 | 0024.91.101 |
| 16. | 1/4" NPT Hex Nipple | 1 | 12E146 | 9001.00.034 |
| 17. | 1/8 NPT to 1/4 Plug Fitting | 1 | 14A93 | FLX335 |

NOTES: Refer To Drawing

- 1. These two screws taped with teflon tape the entire screw. Do not screw in flush, leave 1/4" of screw protruding from manifold.*
- 2. Part #3 must be installed before part #7.*
- 3. Loop air hose here before air test.*
- 4. Part #4 must be installed before part #12.*
- 5. Install these parts last.*

DRS25

PCB Grounding

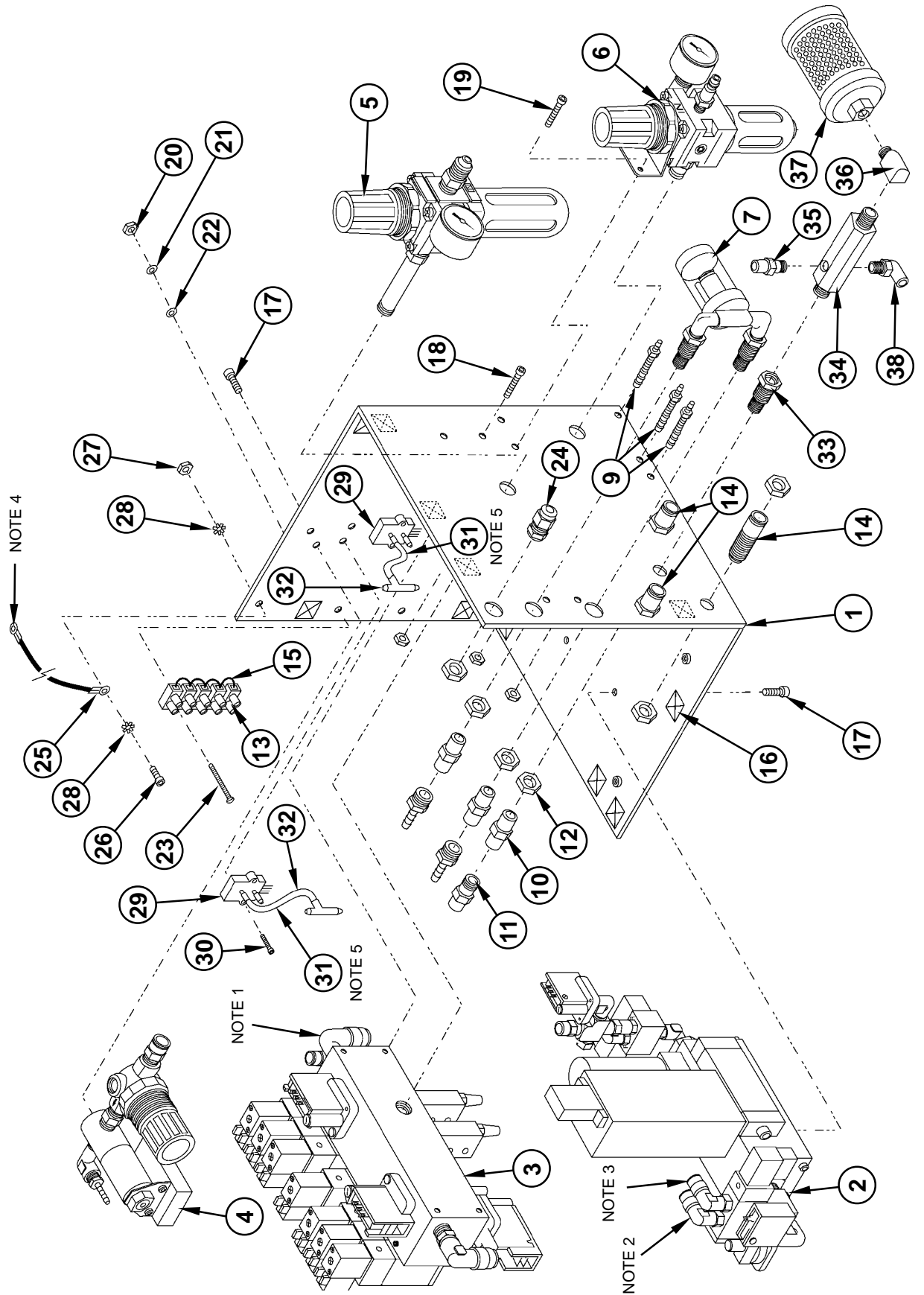
- Plug ground cord into the ground receptical and clip the other end onto the PCB.



Ground Cable 9002.01.065

Ground Receptical

DRS25 Pneumatics Box Assembly (0024.91.010) - Exploded View



DRS25

Pneumatics Box Assembly - Parts List

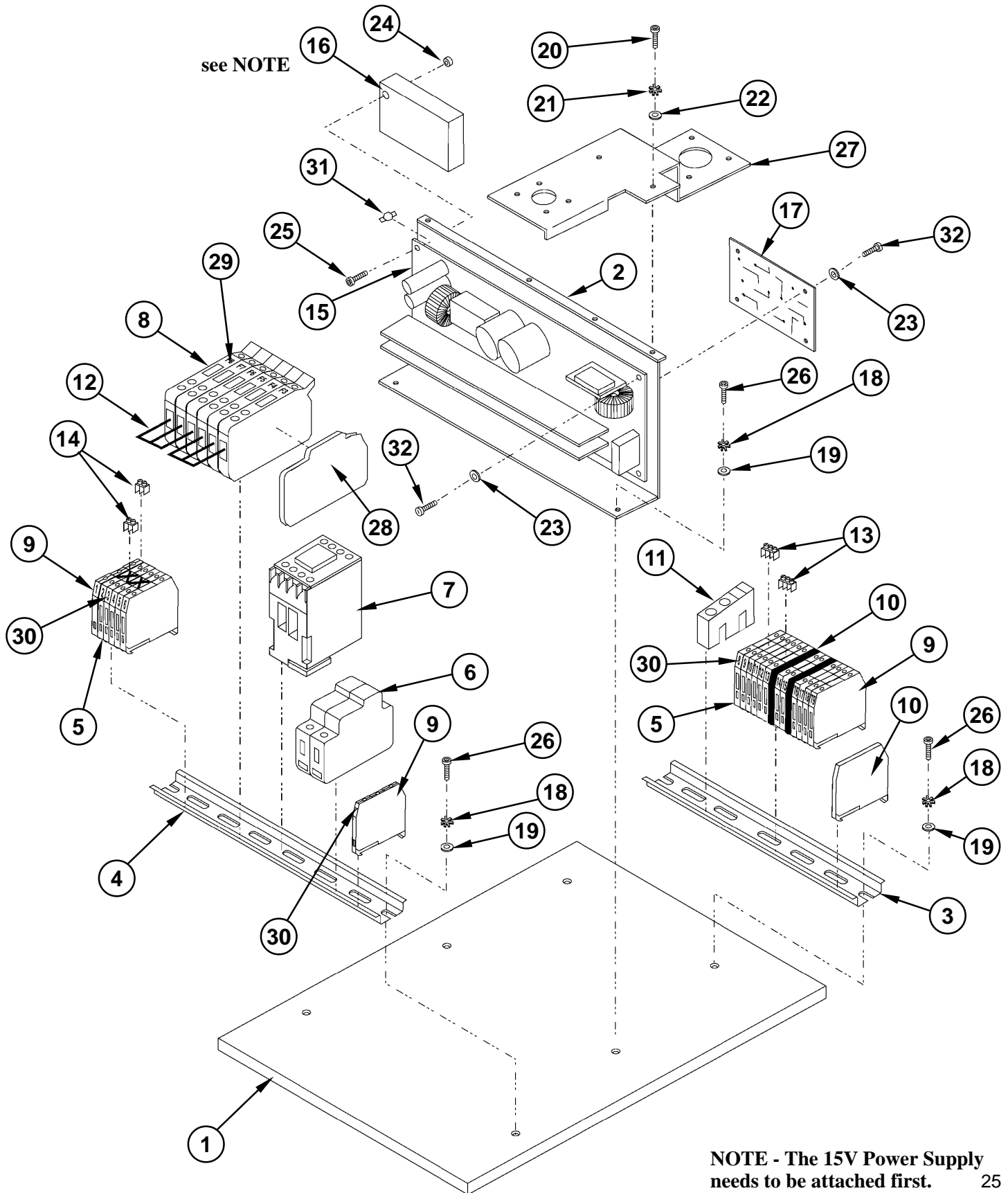
| | <u>Description</u> | <u>Qty.</u> | <u>Location</u> | <u>Part Number</u> |
|-----|--------------------------------------|-------------|-----------------|--------------------|
| 1. | Left Frame - Pneumatics | 1 | 24D81 | 0024.20.080 |
| 2. | Upper Heater Pneumatics Sub Assembly | 1 | 23D73 | 0024.20.048 |
| 3. | Manifold Sub Assembly | 1 | 18B89 | 0024.20.040 |
| 4. | PCOOL Sub Assembly (optional) | 1 | 18B117 | 0024.20.049 |
| 5. | Diffuser Regulator Sub Assembly | 1 | 18B41 | 0024.20.092 |
| 6. | Nozzle Regulator Sub Assembly | 1 | 18B45 | 0024.20.091 |
| 7. | Vacuum Filter Sub Assembly | 1 | 17A82 | 1002.00.010 |
| 9. | Bulkhead Fitting | 3 | 17D21 | 9001.00.056 |
| 10. | 1/8" NPTF Union | 3 | 12E137 | 12761 |
| 11. | 1/8" NPT x 3/16" Barb | 3 | 17A97 | 9001.00.049 |
| 12. | Jam Nut | 3 | 11A57 | 12710-1 |
| 13. | Terminal Strip (6 pos.) | 1 | 14D70 | SS221 |
| 14. | Bulkhead Fitting 3/8" - 3/8" | 2 | 17C54 | 9001.03.020 |
| 15. | Jumper (6 pos) | 1 | 16D073 | TC3-32 |
| 16. | Wire Tie Mount | 11 | 13C21 | 9002.02.012 |
| 17. | Screw, 8-32 x 1/4" Button Head | 2 | 155B | _____ |
| 18. | Screw, M4 x 6mm Button Head | 4 | 54C | _____ |
| 19. | Screw, M4 x 10mm Flat Head | 2 | 56A | _____ |
| 20. | Nut, 6-32 | 2 | 8B | _____ |
| 21. | Washer, Flat #6 | 2 | 9A | _____ |
| 22. | Washer, Star #6 | 2 | 12B | _____ |
| 23. | Screw, 6-32 x 5/8" | 2 | 6A | _____ |
| 24. | Strain Relief & Nut | 1 | 10D62 | 0100.01.124 |
| 25. | Ring Terminal, 10-12g | 2 | 135 | _____ |
| 26. | Screw, 10-32 ButtonHead | 1 | 48A | _____ |
| 27. | Hex Nut, 10-32 | 1 | 26B | _____ |
| 28. | External Star Washer, 10-32 | 2 | 53B | _____ |
| 29. | Vacuum Sensor | 2 | 18D048 | 9002.12.023 |
| 30. | Screw, 6-32 x 5/8 | 4 | 4B | _____ |
| 31. | Silicone Tubing (see note 5) | 24" | 17A005 | 9001.15.018 |
| 32. | Plastic Auto-T 3/16" | 2 | 18D047 | 9001.07.008 |
| 33. | Bulkhead Fitting | 1 | 11A58 | 12710 |
| 34. | Vacuum Pump | 1 | _____ | HAV147HDRS |
| 35. | 1/8 NPT to 3/8 Plug In Fitting | 1 | 17D17 | 9001.03.019 |
| 36. | 1/4 NPT Elbow | 1 | 12E167 | 12760 |
| 37. | Muffler | 1 | 5D59 | S147AV |
| 38. | 10-32 to 1/4 Plug In Elbow | 1 | 8C040 | Proj.DRS.SCS.13 |

NOTES: Refer To Drawing

1. Fitting must face down upon installation
2. Use 8" of tubing
3. Use 9 1/2" of tubing
4. 20" 18AWG green/yellow ground wire
5. 2 pcs. @ 6" ea. and 2 pcs. @ 3" ea.

DRS25

Right Box Sub Plate Assembly (0024.70.075) - Exploded View



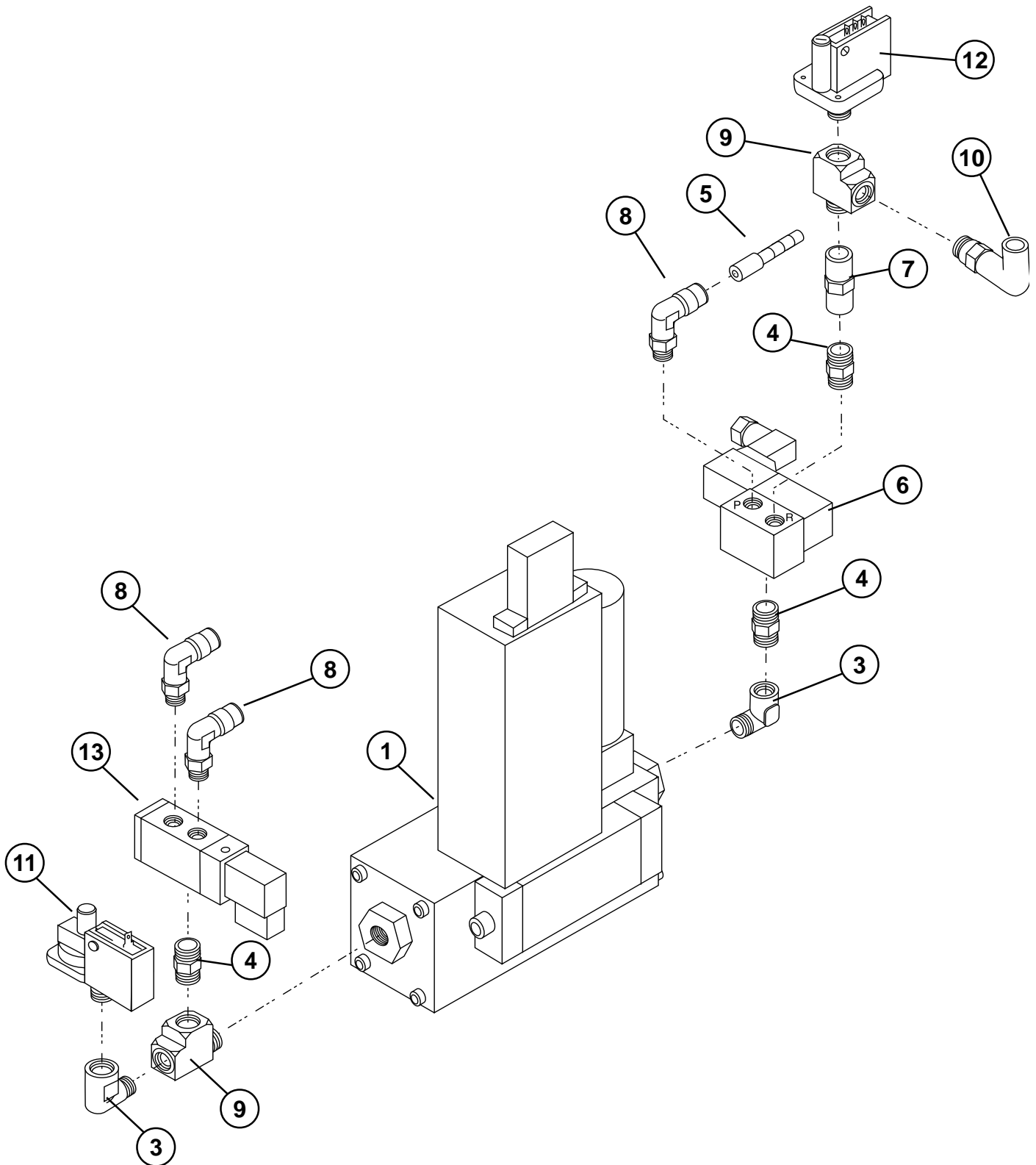
DRS25

Box Plate Assembly - Parts List

| | <u>Description</u> | <u>Qty.</u> | <u>Location</u> | <u>Part Number</u> |
|-----|---------------------------------|-------------|-----------------|--------------------|
| 1. | Mounting Plate - universal | 1 | | 0024.35.105 |
| 2. | Center Bracket - PS Holder | 1 | | 0024.35.111 |
| 3. | Din Rail 6" | 1 | | |
| 4. | Din Rail 9 1/2" | 1 | 18C70 | 0024.20.112 |
| 5. | Terminal Blocks | 16 | 8A53 | 9002.03.000 |
| 6. | Fuse Holder - Main | 1 | 5B34 | 9002.04.074 |
| 7. | Contacto | 1 | 8A81 | 9002.06.001 |
| 8. | Fuse Holder - black | 6 | 8A65 | 9002.04.002 |
| 9. | Ground Terminal | 3 | 8A54 | 9002.03.001 |
| 10. | Divider Terminal Block | 3 | 8A58 | 9002.03.006 |
| 11. | End Stop | 1 | 8A56 | 9002.03.004 |
| 12. | Jumper Bar "Comb" | 1 | 8A57 | 9002.03.005 |
| 13. | 3 Pin Shorting Bar | 2 | 8A55 | 9002.03.002 |
| 14. | 2 Pin Shorting Bar | 2 | 8A60 | 9002.03.008 |
| 15. | Power Supply 24V | 1 | 18C57 | 9002.10.004 |
| 16. | Power Supply 15V-optional MFC | 1 | 18E49 | 9002.10.010 |
| 17. | Power Suply 12V | 1 | 8C75 | PROJ.DRS.SCS108 |
| 18. | Washer, Star #8 | 6 | | 182 |
| 19. | Washer, #8 | 6 | | 45A |
| 20. | Screw, 6-32 x 3/8 SHC | 2 | | 67A |
| 21. | Washer, Star#6 | 2 | | 9B |
| 22. | Washer, #6 | 2 | | 9A |
| 23. | Washer, Star #4 | 6 | | 93A |
| 24. | Nut, 4-40 | 2 | | 18B |
| 25. | Screw, 4 x 40 x 1.0 Button Head | 2 | | 155A |
| 26. | Screw, 8-32 x 1/4 SHC | 6 | | 39A |
| 27. | Bracket, Connector | 1 | | 0024.35.113 |
| 28. | End Section Fuse | 1 | 8A63 | 9002.04.003 |
| 29. | Snap on numbers (fuse) | F3-F8 | 18B25 | 9002.05.057 |
| 30. | Snap on numbers (terminal) | 1-19 | 18B24 | 9002.05.051 |
| 31. | Hex Standoff | 4 | 176A | |
| 32. | Screw, 4 x 40 x 1/4 Slotted Pan | 6 | 15A | |

DRS25

Upper Heater Assembly (0024.70.085)



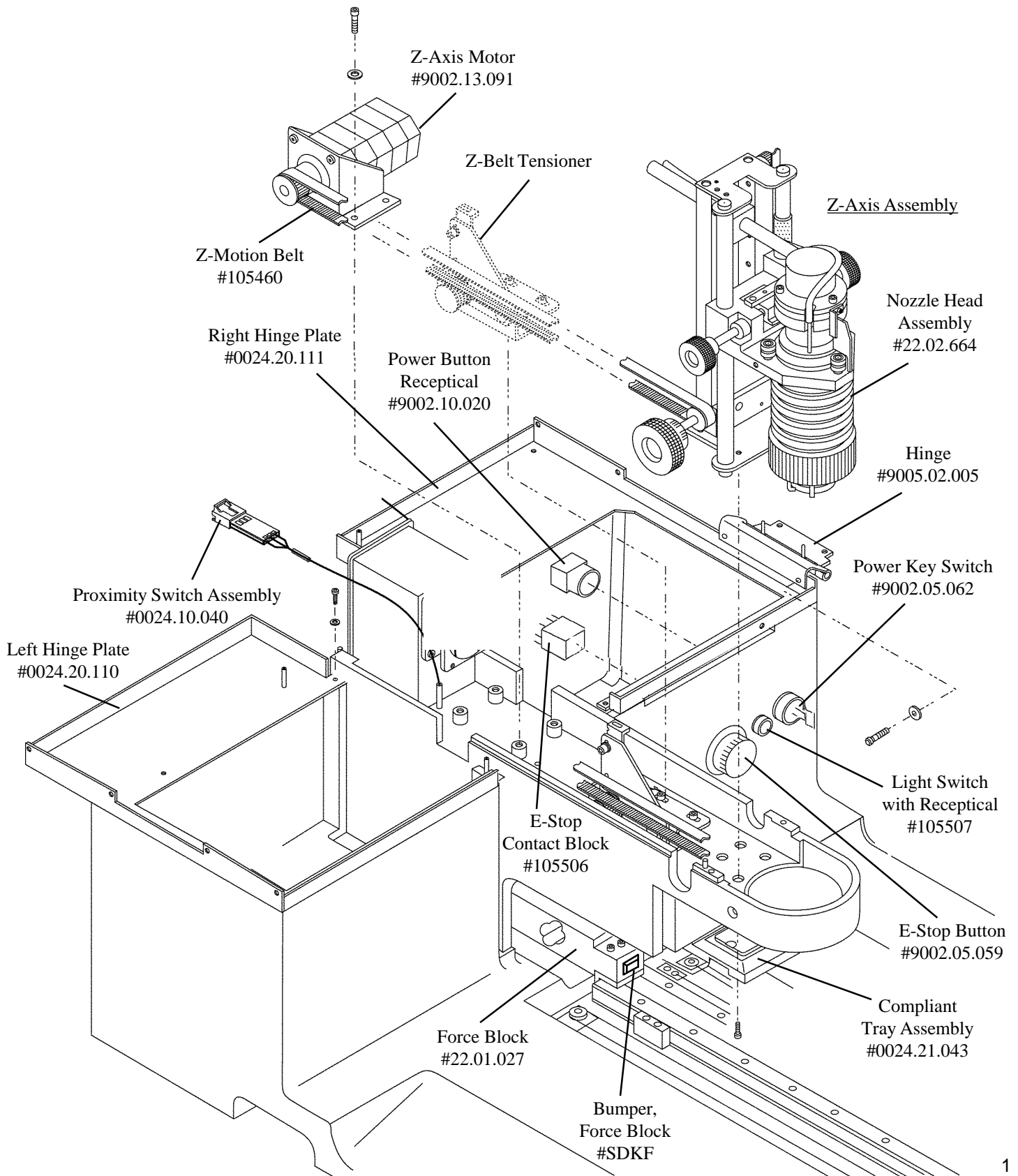
DRS25

Upper Heater Assembly (0024.70.085)

| | <u>Description</u> | <u>Qty.</u> | <u>Location</u> | <u>Part Number</u> |
|-----|--------------------------------|--------------------|------------------------|---------------------------|
| 1. | Mass Flow Controller | 1 | 18B87 | 9001.14.008 |
| 3. | 1/8" NPT to 1/8" NPTF Elbow | 2 | 16D78 | TC3-22 |
| 4. | 1/8" NPT Hex Nipple | 3 | 16D80 | TC3-23 |
| 5. | Flow Restrictor | 1 | 8C68 | 0001.05.107 |
| 6. | Solenoid, Cool Air | 1 | | 9000.11.017 |
| 7. | 1/8" Female Union | 1 | | 9001.00.017 |
| 8. | 1/8" NPT to 1/4" Plug-In Elbow | 3 | 14A94 | FLX335 |
| 9. | 1/8" NPT Street-T | 2 | 16D76 | TC3-21 |
| 10. | 1/8" NPT to 3/8" Plug-In Elbow | 1 | 16C42 | 9001.00.058 |
| 11. | Pressure Switch | 1 | 16D29 | 9002.05.009 |
| 12. | Pressure Switch | 1 | 10A61 | 0100.01.126 |
| 13. | Solenoid Valve, 3-way | 1 | 18C77 | 9001.11.011 |

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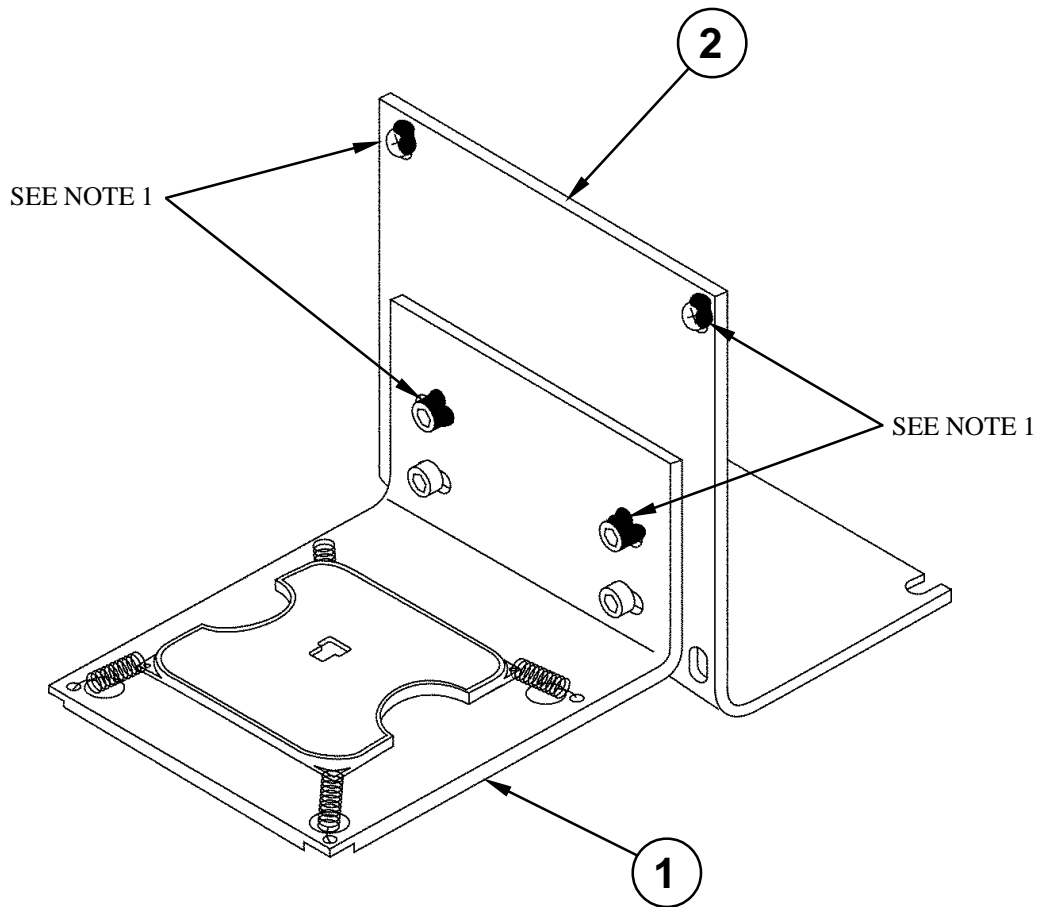
Center Casting Assembly - Exploded View



DRS25

Compliant Simplicity Adaptor (0024.21.043)

- Assembled View



DRS25**Compliant Simplicity Adaptor Assembled View - Parts List**

| | <u>Description</u> | <u>Qty.</u> | <u>Location</u> | <u>Part Number</u> |
|----|----------------------------|--------------------|------------------------|---------------------------|
| 1. | Compliant Adaptor Assembly | 1 | 18E113 | 0024.21.043 |
| 2. | Front Mounting Bracket | 1 | _____ | * |

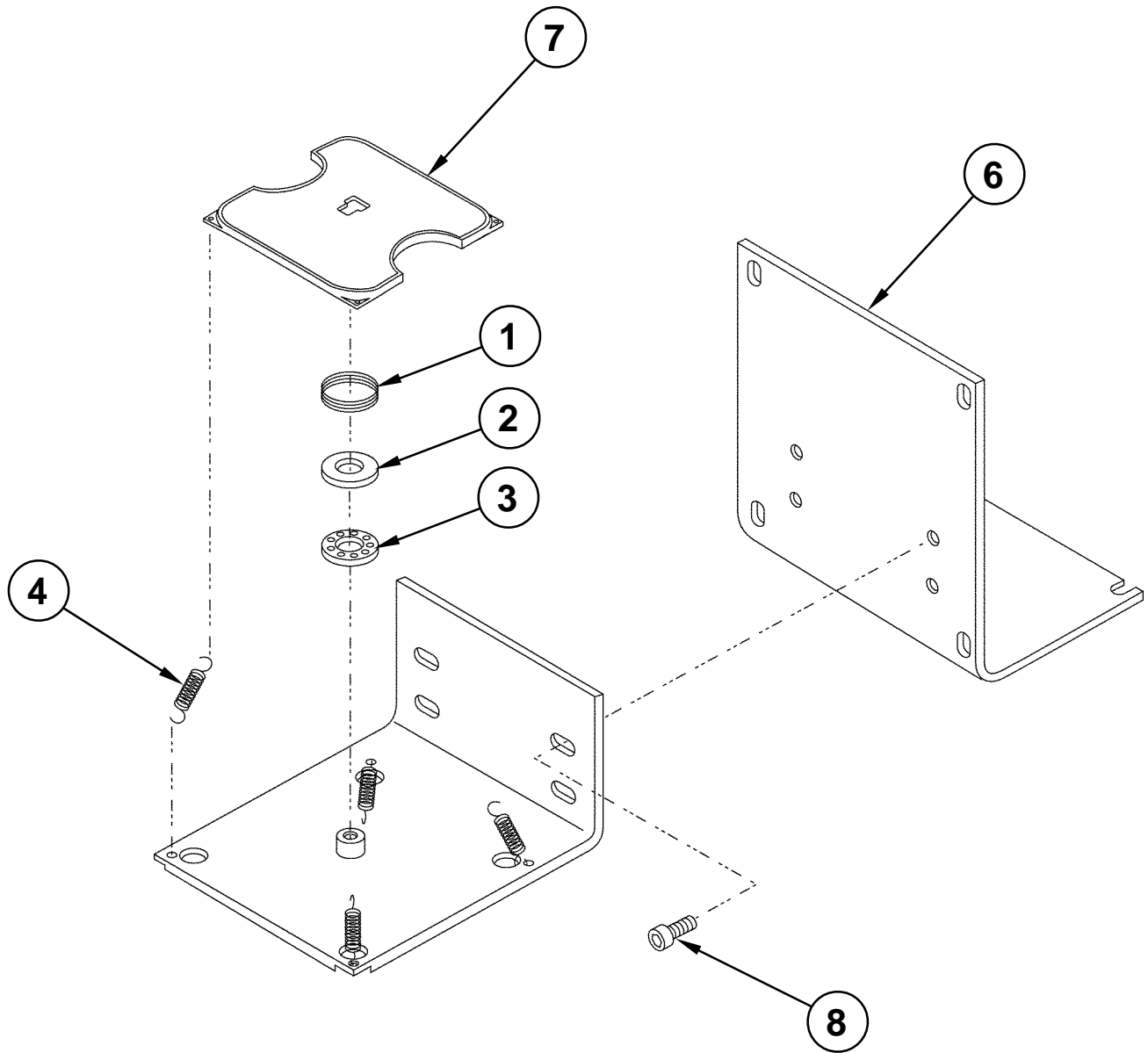
NOTES: Refer To Drawing

- 1. After machine offsets are done, apply nail polish to the 4 screws shown.*
- * B&S part supplied with machines.*

DRS25

Compliant Simplicity Adaptor (0024.21.043)

- Exploded View



DRS25**Compliant Simplicity Adaptor Exploded View - Parts List**

| | <u>Description</u> | <u>Qty.</u> | <u>Location</u> | <u>Part Number</u> |
|----|------------------------------------|--------------------|------------------------|---------------------------|
| 1. | Wave Spring | 1 | 10D90 | 9005.02.001 |
| 2. | Washer Thrust | 1 | 12E86 | 12967-2 |
| 3. | Bearing Thrust | 1 | 12E88 | 12367-1 |
| 4. | Spring Extension Lee Stock Springs | 4 | 18E110 | 9005.02.006 |
| 5. | Compliant Simplicity Plate | 1 | 18E109 | 0024.21.106 |
| 6. | Front Mounting Plate | 1 | _____ | * |
| 7. | Compliant Adaptor top | 1 | 18E111 | 0024.21.102 |
| 8. | Cap Screw, M3 | 4 | _____ | * |

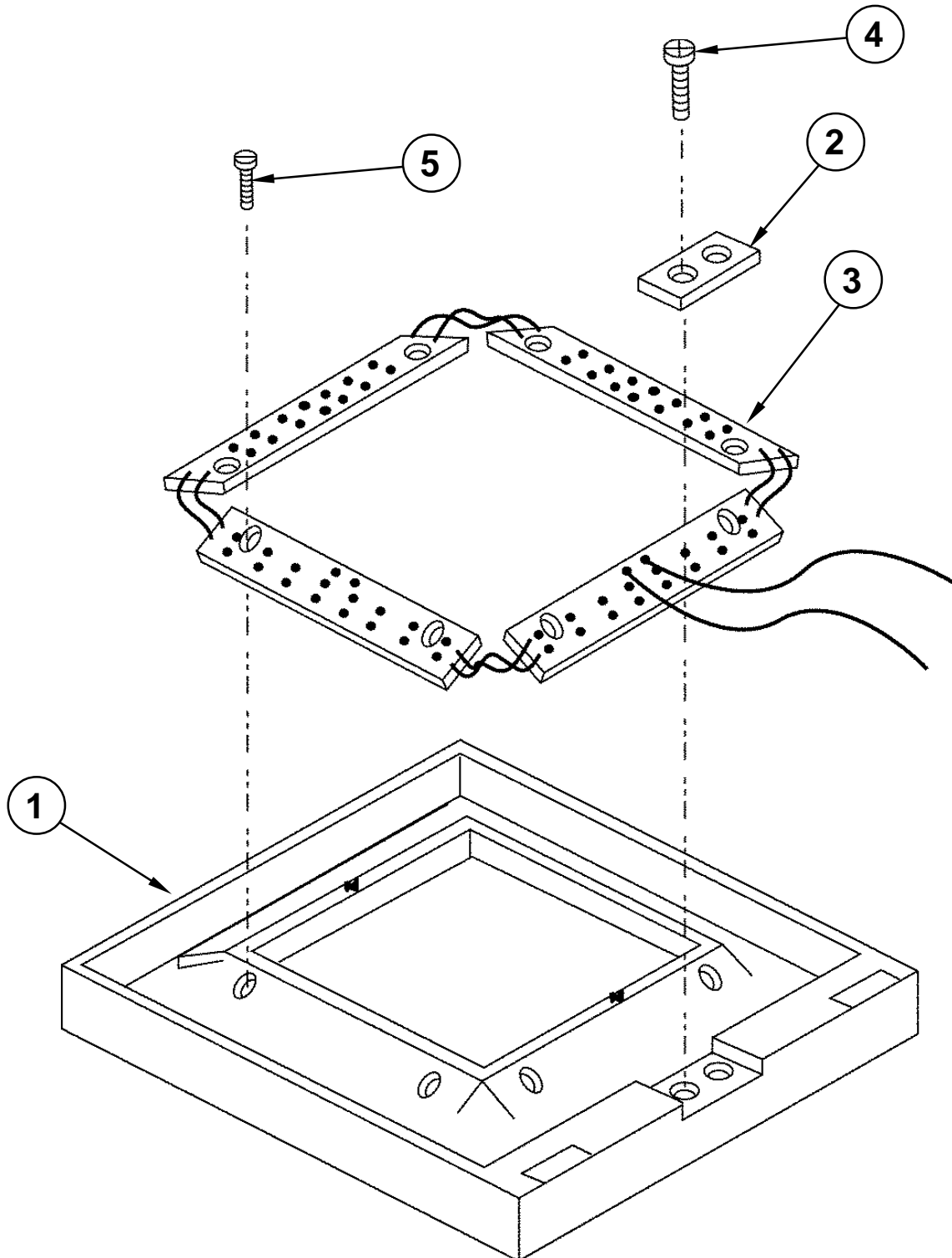
NOTES:

** B&S part supplied with machines.*

DRS25

Top Light Ring Assembly (Fifth Series)

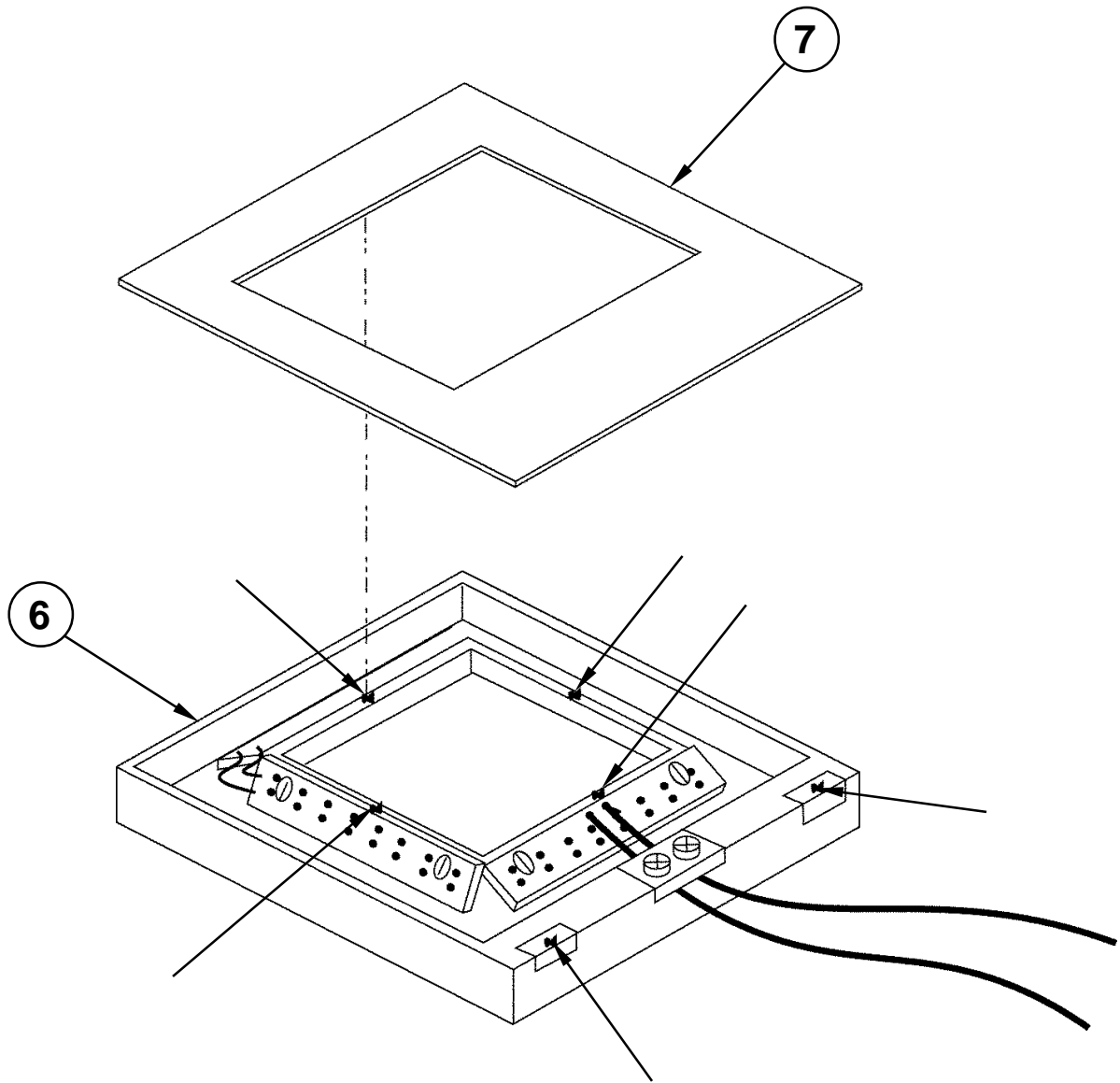
0024.70.045 - Exploded View



DRS25

Top Light Ring Assembly (Fifth Series)

0024.70.045 - Assembled View



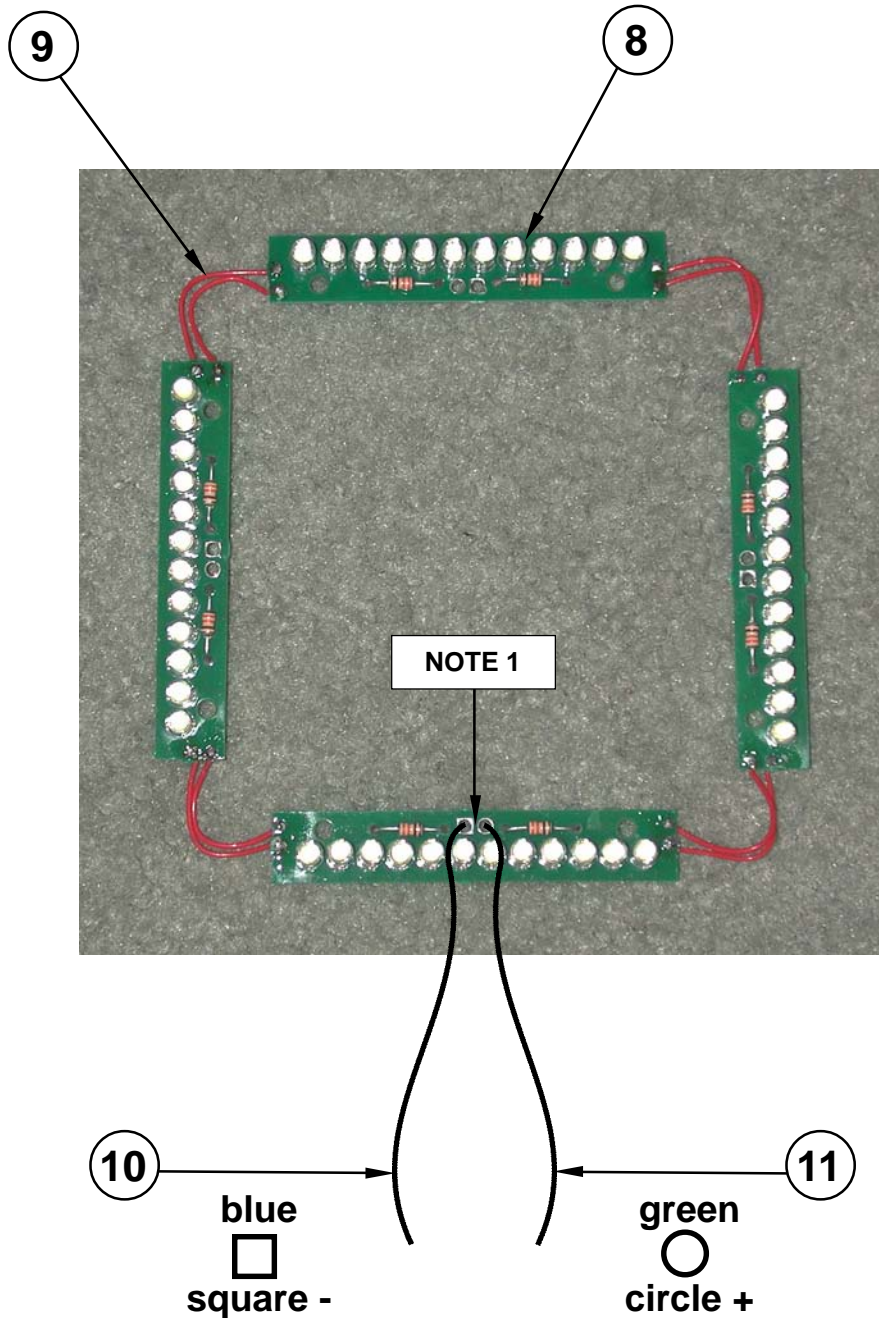
NOTES:

1. Apply silicone to these 6 places to hold cover in place.

DRS25

Top Light Ring LED Assembly (Green) (Fifth Series)

0024.70.045



NOTES:

1. Please note the solder joints are distinguished by a square barrel (negative) and a round barrel (positive) and the color wires noted must be soldered to the correct barrel.

DRS25

Top Light Ring Assembly (Fifth Series)

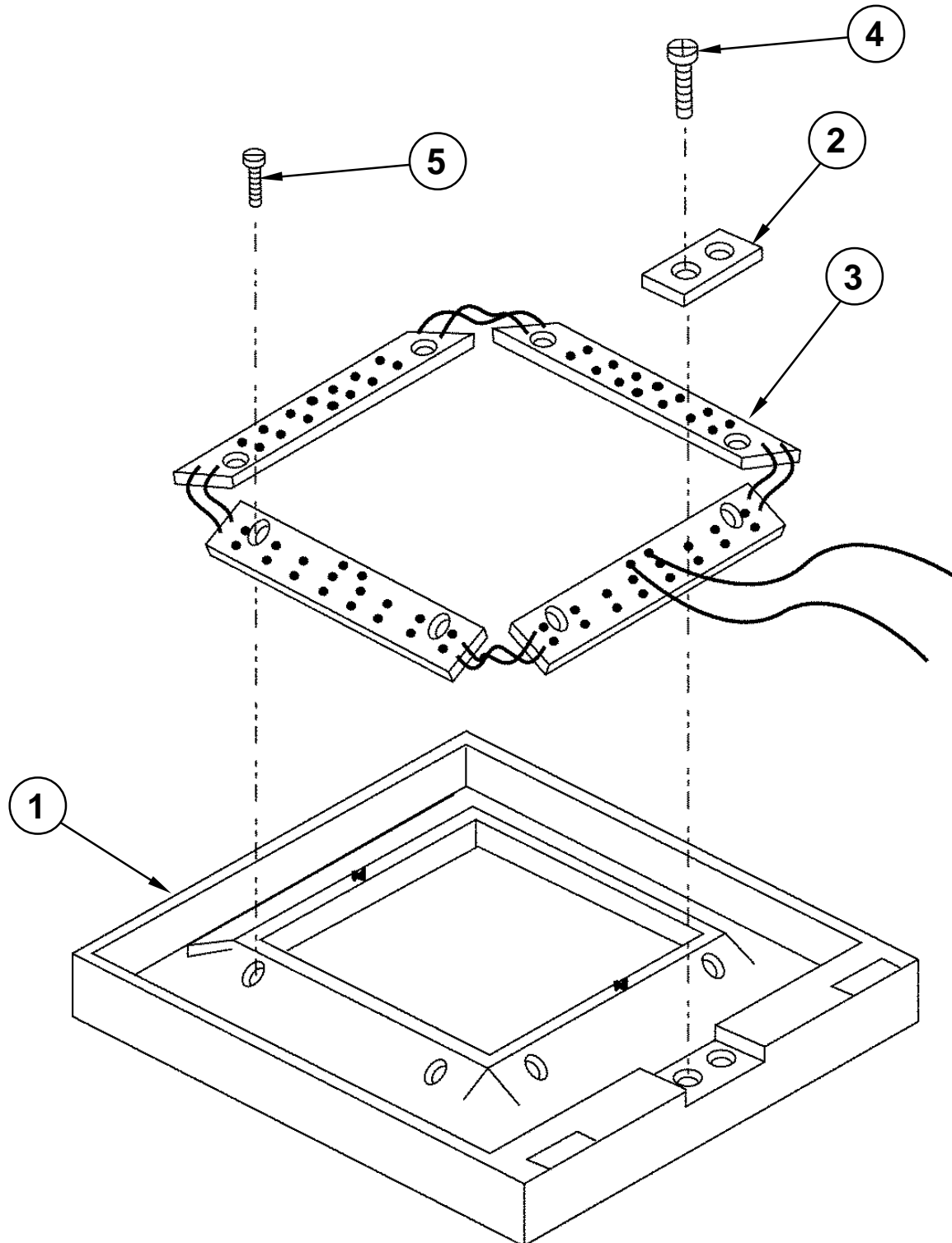
0024.70.045 - Parts List

| | <u>Description</u> | <u>Qty.</u> | <u>Location</u> | <u>Part Number</u> |
|-----|--------------------------------|-------------|-----------------|--------------------|
| 1. | Frame, Light Ring, Top | 1 | 10B25 | 22.02.613 |
| 2. | Strain Relief | 1 | 10B18 | 22.02.616 |
| 3. | LED Assembly, Green | 1 | _____ | _____ |
| 4. | Screw, M2 x 4mm Flat Head | 2 | _____ | 55B |
| 5. | Screw, M2 x 3mm Pan Head Nylon | 8 | _____ | 215A |
| 6. | Frame Assembly | 1 | _____ | _____ |
| 7. | Cover, Frame | 1 | 10B20 | 22.02.615 |
| 8. | LED, PCB Green | 4 | 10B17 | 0024.90.126 |
| 9. | Wire, 30 AWG Yellow Solid | 2"ea. | _____ | 9002.00.158 |
| 10. | Wire, 24 AWG Blue | 8" | _____ | 9002.00.105 |
| 11. | Wire, 24 AWG Green | 8" | _____ | 9002.00.113 |

DRS25

Bottom Light Ring Assembly (Fifth Series)

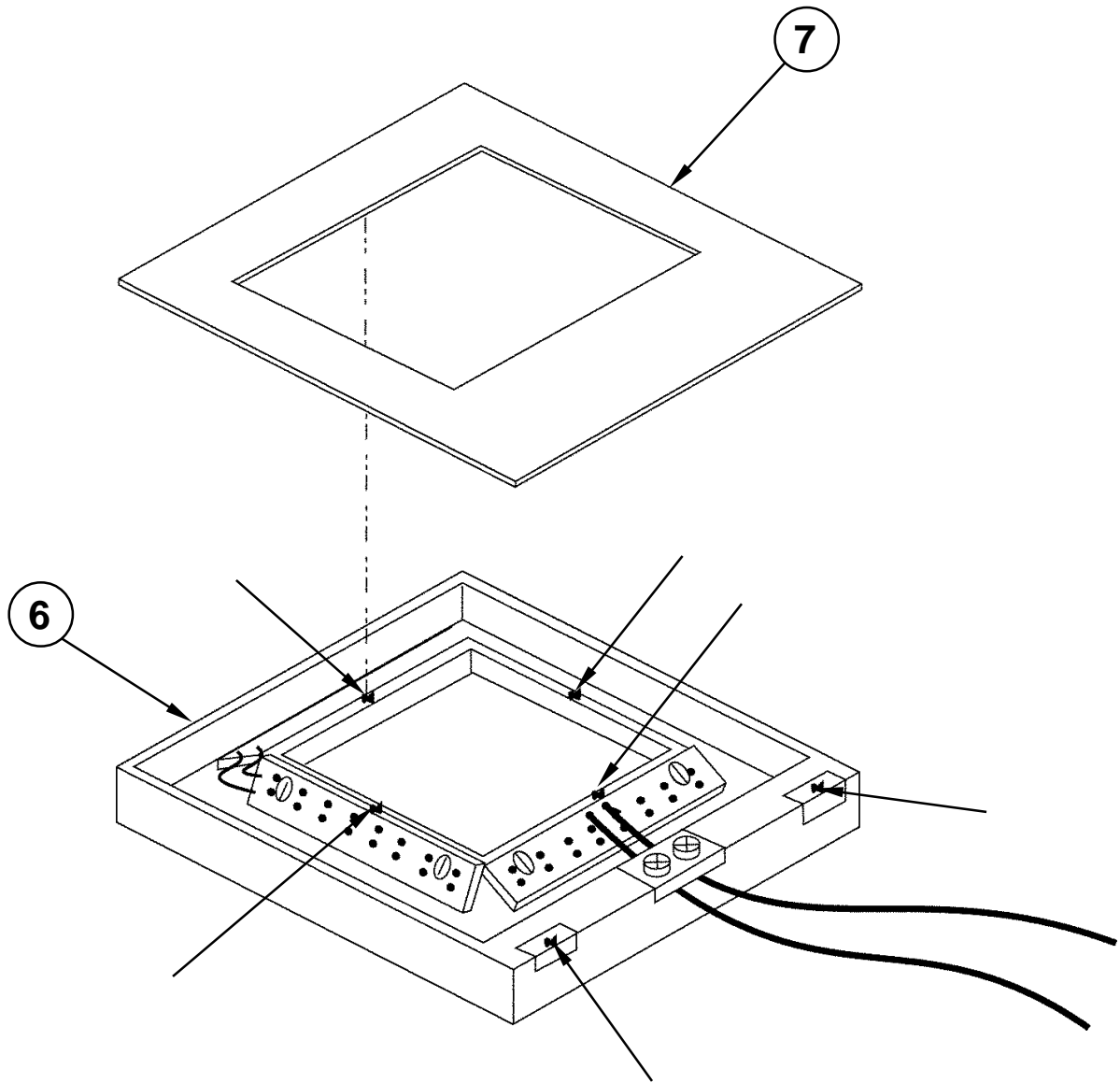
0024.70.040 - Exploded View



DRS25

Bottom Light Ring Assembly (Fifth Series)

0024.70.040 - Assembled View



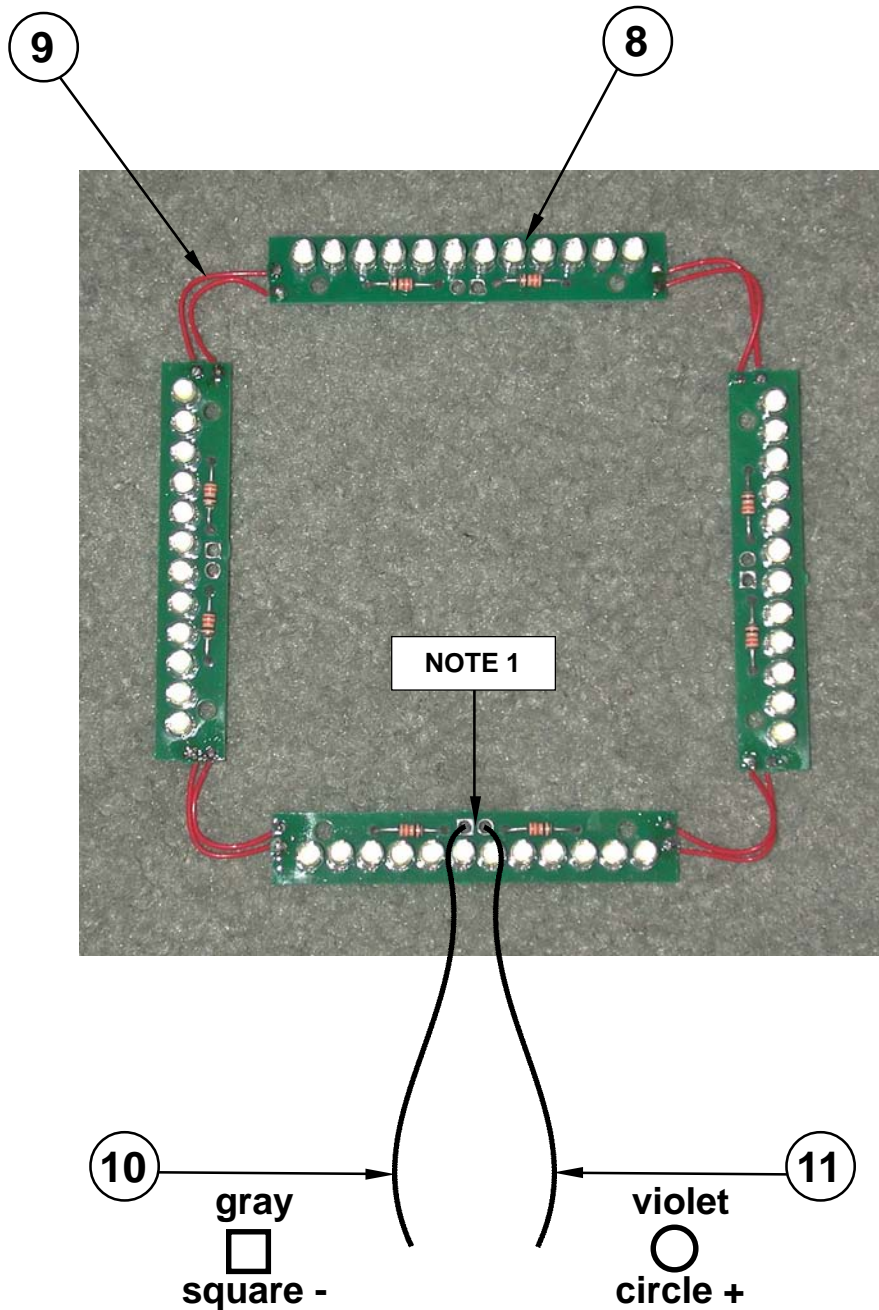
NOTES:

- 1. Apply silicone to these 6 places to hold cover in place.*

DRS25

Bottom Light Ring LED Assembly (White) (Fifth Series)

0024.70.040



NOTES:

1. Please note the solder joints are distinguished by a square barrel (negative) and a round barrel (positive) and the color wires noted must be soldered to the correct barrel.

DRS25

Bottom Light Ring Assembly (Fifth Series)

0024.70.040 - Parts List

| | <u>Description</u> | <u>Qty.</u> | <u>Location</u> | <u>Part Number</u> |
|-----|--------------------------------|--------------------|------------------------|---------------------------|
| 1. | Frame, Light Ring, Bottom | 1 | 10B29 | 22.02.614 |
| 2. | Strain Relief | 1 | 10B18 | 22.02.616 |
| 3. | LED Assembly, White | 1 | _____ | _____ |
| 4. | Screw, M2 x 4mm Flat Head | 2 | _____ | 55B |
| 5. | Screw, M2 x 3mm Pan Head Nylon | 8 | _____ | 215A |
| 6. | Frame Assembly | 1 | _____ | _____ |
| 7. | Cover, Frame | 1 | 10B20 | 22.02.615 |
| 8. | LED, PCB White | 4 | 10B21 | 0024.90.127 |
| 9. | Wire, 30 AWG Yellow Solid | 2"ea. | _____ | 9002.00.158 |
| 10. | Wire, 24 AWG Gray | 8" | _____ | 9002.00.107 |
| 11. | Wire, 24 AWG Violet | 8" | _____ | 9002.00.108 |