

CHAPTER 9

PARTS

GENERAL

The DGA-1000 (Diagnostic Gas Analyzer) is designed to be used as an Emissions Analyzer. This chapter will list all parts that are available for the DGA.

To list all the parts used in this unit would be impractical, therefore we list all the parts needed to repair common failures. The Parts Chapter is divided into three different sections; Parts By: Pictorial, Number, and Description. There also is a Pneumatic Interconnection Diagram that lists all pneumatic components and their associated part numbers.

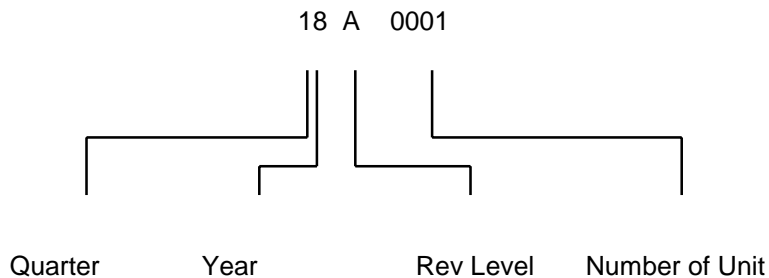
Some of the parts listed in this chapter fall under the category of Production Parts. Production Parts are not normally made available for field orders, but in some cases, they can be obtained. Examples of Production Parts are; sheet metal parts, wiring harnesses, etc. Some of these will be found in the Pictorial Description, and the Interconnection Diagram.

A Production Part will be noted by an "*" following the part number (i.e. Case, Cover 7020E9316-05*). If a Production Part is required, it must be ordered through normal channels, however, the order will be verified before it is built and shipped. **Production Parts will require time for delivery due to the part having to be built before it is shipped.**

NOTE: *The following is a breakdown description of the Serial Number.*

Serial # Location - Back side in front of scale assembly.

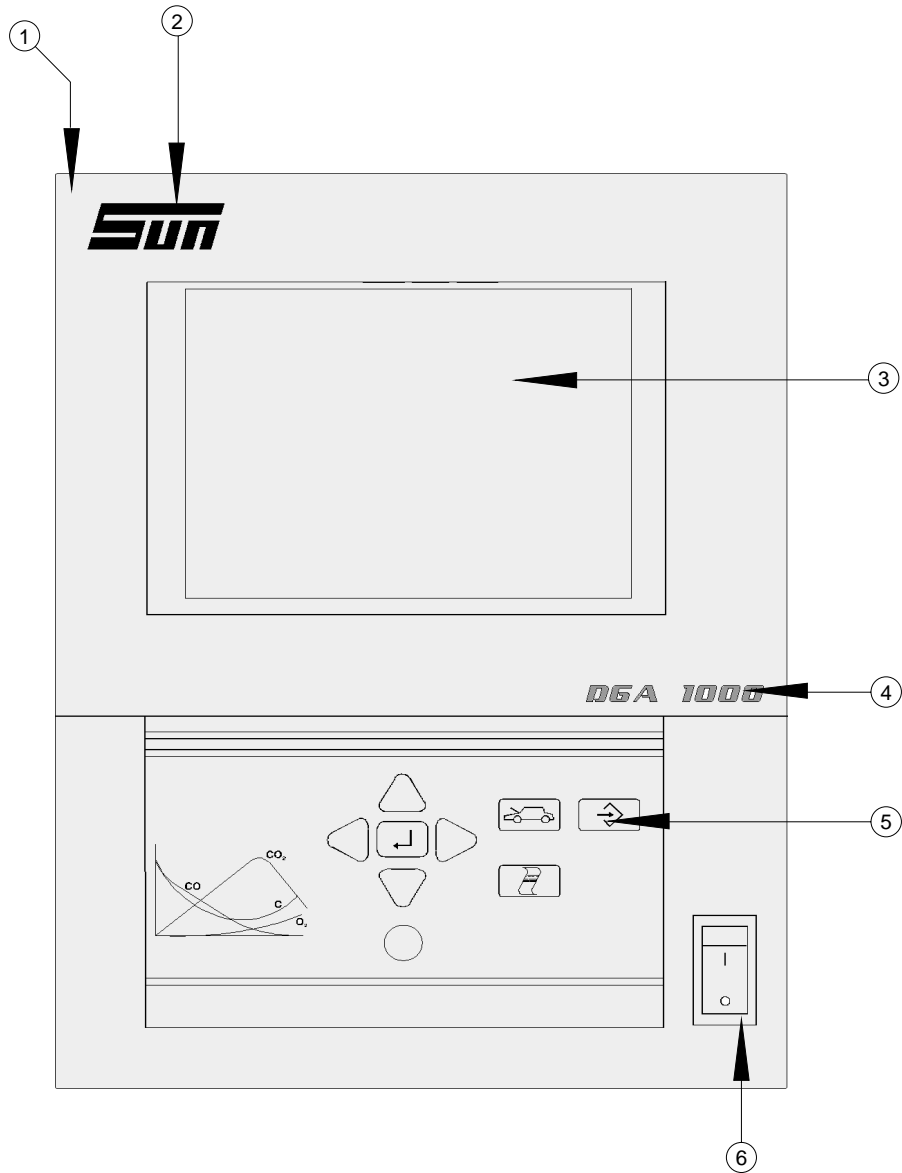
Example:



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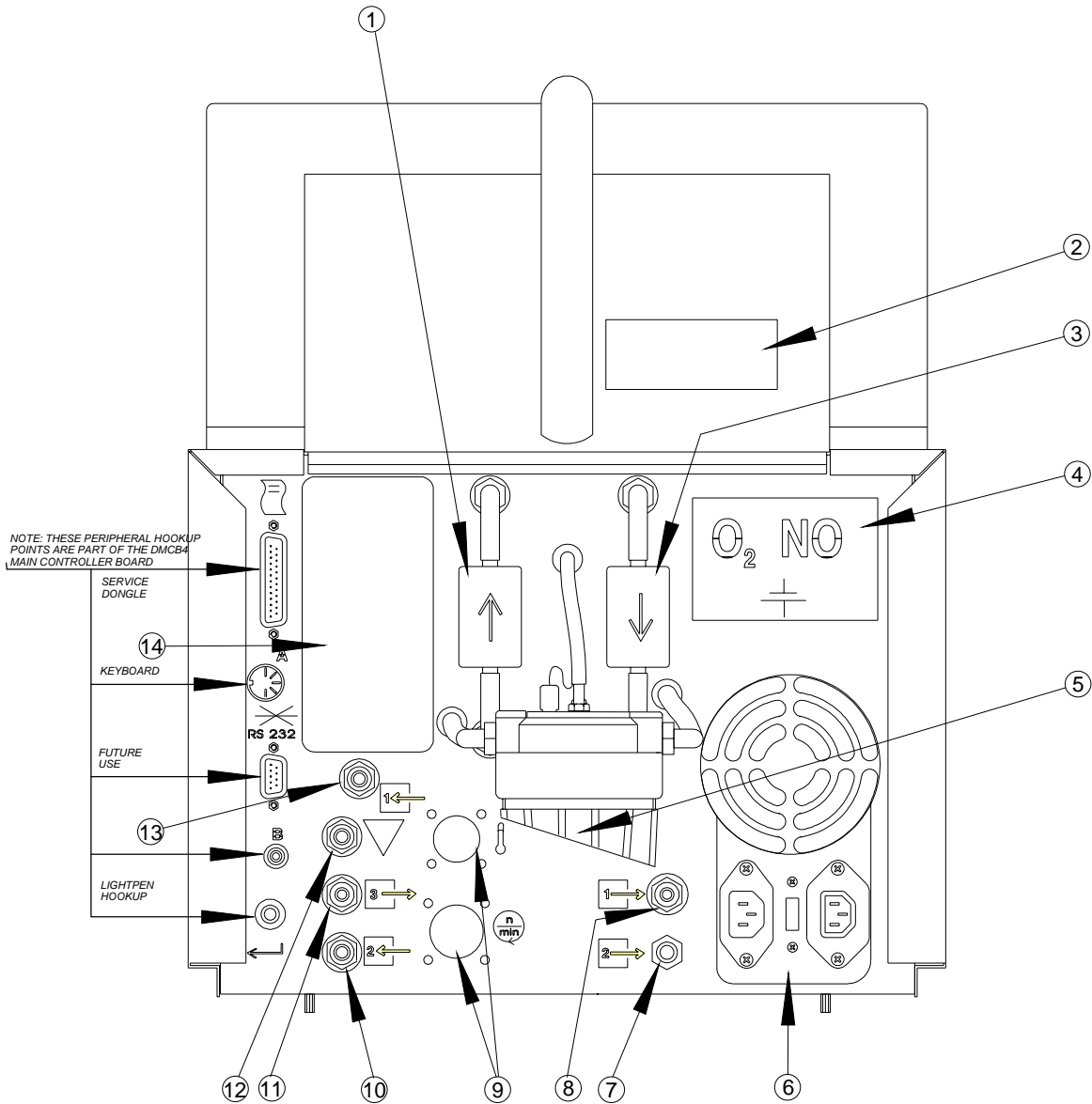
PARTS BY PICTORIAL

FRONT VIEW



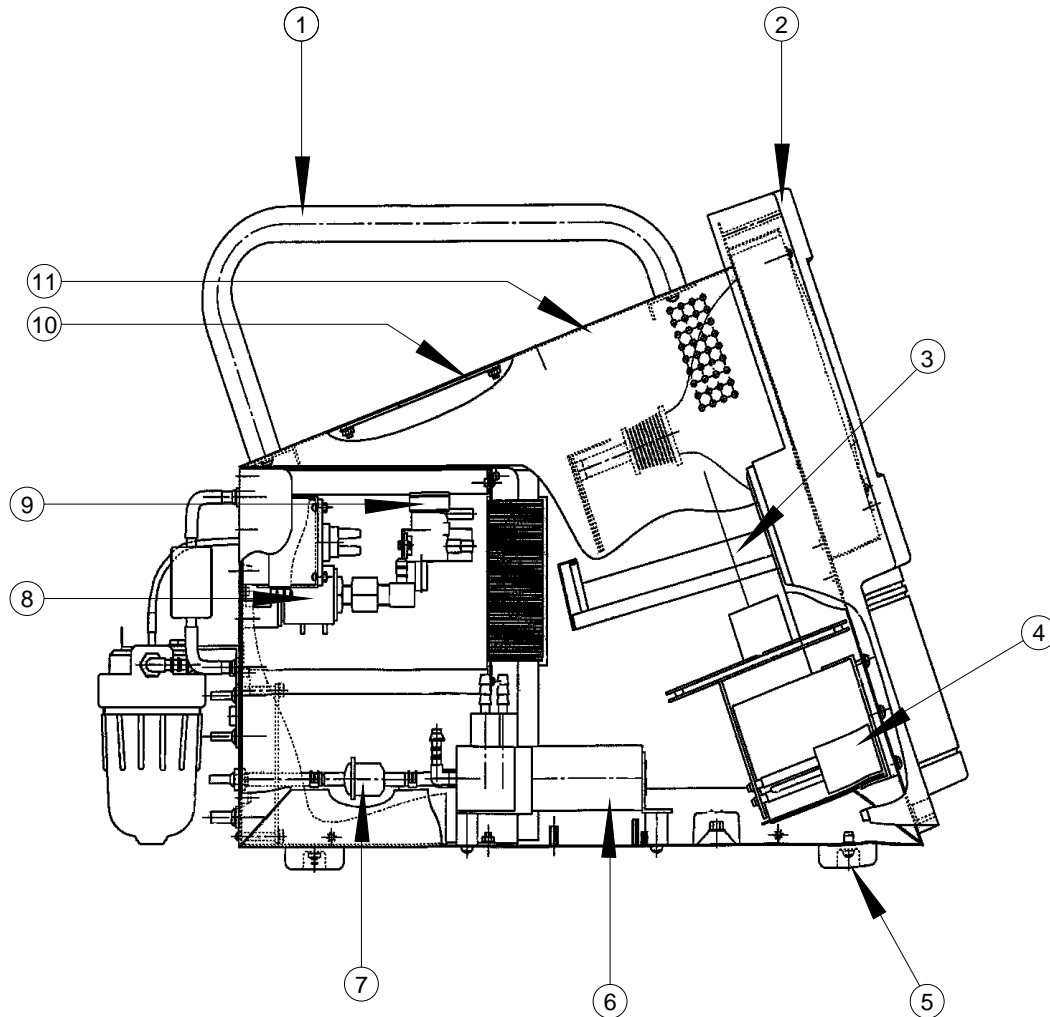
ITEM	DESCRIPTION	PART NUMBER	ITEM	DESCRIPTION	PART NUMBER
1	Bezel, Front	7009E9321-39*	5a	Keypad	7096E9061-48
2	Sticker, SUN	4600E9311-62*	5b	Board, Keypad	7001E9314-16
3	Monitor Assembly	7009E9321-18	6	Switch, Power	29758
4	Sticker, DGA-1000	4600E9311-61*			

REAR VIEW



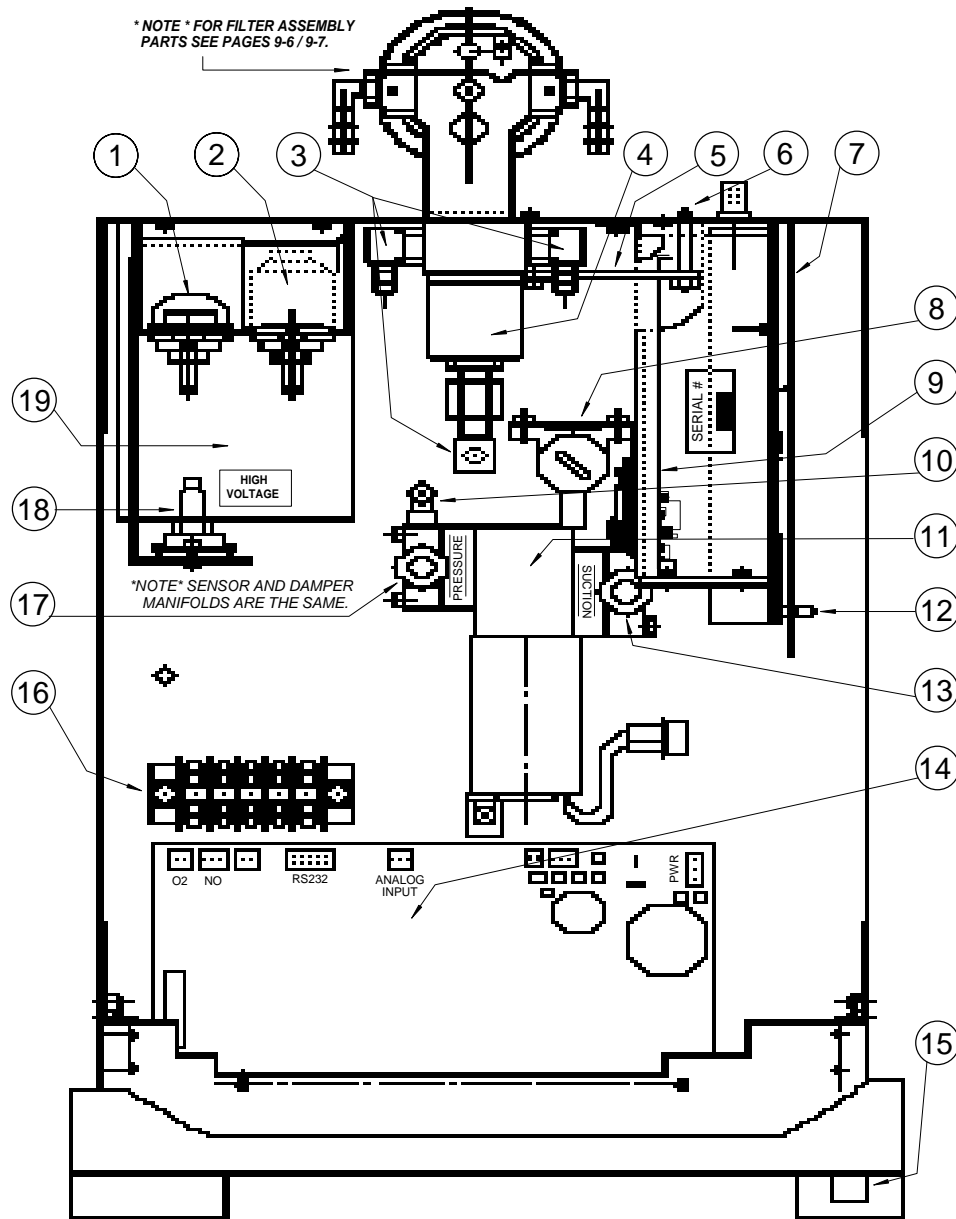
ITEM	DESCRIPTION	PART NUMBER	ITEM	DESCRIPTION	PART NUMBER
1	Filter, Gas, White	7096E9061-03	9a	Board, RPM/Oil Temp.	7001E9313-99
2a	Plate, Cover Printer	7005E9318-14*	9b	Board, RPM/Oil Temp.	7001E9314-79
2b	Printer, Thermal	7096E4060-12	10	Nipple, Hose	7096E9061-55
2c	Printer Assembly	7009E9321-32	11	Nipple, Hose	7096E9061-55
3	Filter, Water, Blue	14281	12	Nipple, Hose	7096E9058-22
4	Plate, Cover O2/NO	7005E9318-15*	13a	Nipple, Hose	7096E9058-22
5	Filter Assembly	See pg.9-6 / 9-7	13b	Filter, Charcoal	7096E9061-54
6	Supply, Power	7009E9321-20	14	Plate, Cover Memory	7005E9318-16
7	Connector, Hose	7016-0005			
8	Nipple, Hose	7096E9061-55			

SIDE VIEW



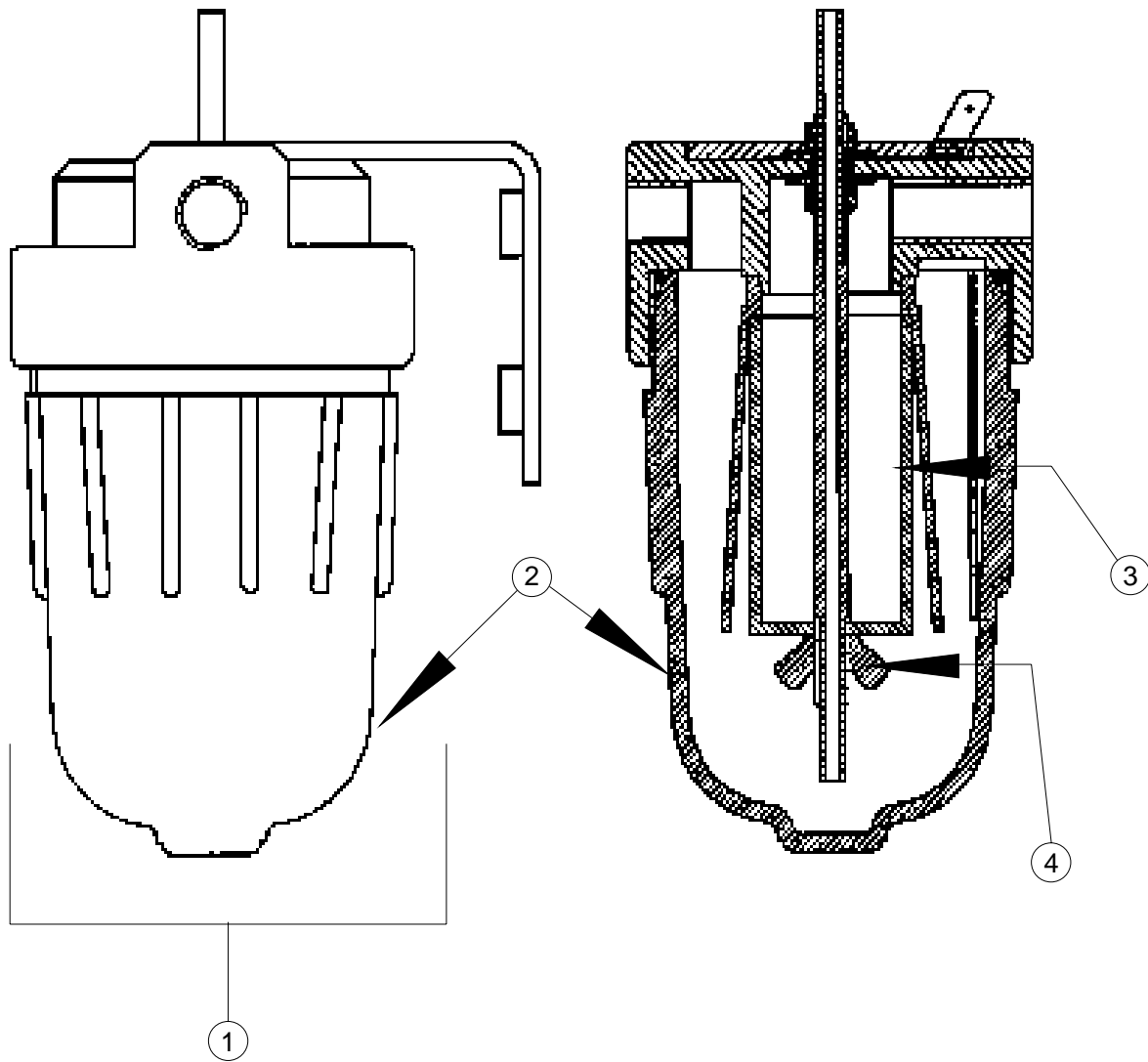
Item	Description	Part Number	Item	Description	Part Number
1	Handle	7020E9016-06*	6e	Valve, Check Pressure	7009E9323-81
2	Bezel, Front	7009E9321-39*	7	Filter, Petrol/Noise	7096E9062-98
3	Monitor Assembly	7009E9321-18	8	Valve, Solenoid	7096E4059-22
4	Bench, Siemens	7096E4060-14	8a	Fitting, Elbow Brass	7096E9058-61
5	Foot, Rubber	87018	9	Trap, Condensation	EAA0267E00A
6a	Pump, 12 Volt	7009E9321-85	10	Plate, Cover Printer	7005E9318-14*
6b	Fitting, Elbow	7096E9061-05	10b	Printer, Thermal	7096E4060-12
6c	Fitting, Straight	7096E9061-06	10c	Printer Assembly	7009E9321-32
6d	Valve, Check Suction	7009E9323-80	11	Case, Cover	7020E9316-05*

TOP VIEW



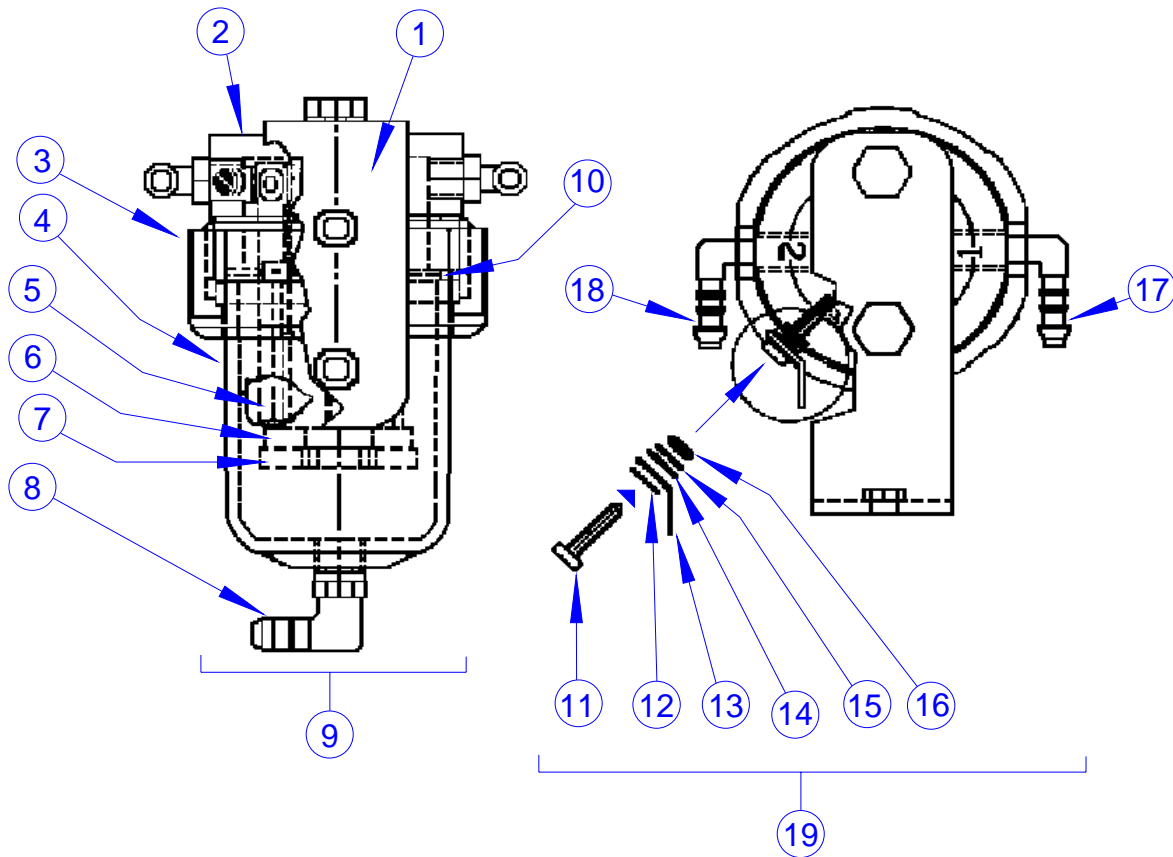
Description	Part Number	Description	Part Number
1 NOx Sensor	7096E4060-20	10a Hose Fitting 90 psi side	7096E9061-05
2 O2 Sensor	7049-0004-01	10b Fitting STR suc side	7096E9060-06
3 Elbow Brass 3/8"	7096E9058-61	11 Pump Sub Assy	7009E9321-85
4 Valve, Solenoid	7096E4059-22	12 Standoff DMCB4 Bd	2-932
5a Rpm/Oil Temp Board	7001E9314-81	13 Check Valve (suc side)	7009E9323-80
5b Rpm/Oil Temp Board	7001E9313-99	14 SIBENCH Assy	7096E4060-14
6a Standoff Screw M3x35	404-0335-533*	15 Switch, Power	29758
6b Washer M3 SPW	400-0300-503*	16 Terminal Block 5 Way	3381-0000
6c Washer M3 SCS	400-0300-303*	17 Check Valve (psi side)	7009E9323-81
6d Spacer M3x23 Brass	401-0323-607*	18a Manifold/Sensor holder	7096E9060-92
6e Barb Nut M3 EXT S/P	408-0300-143*	18b NOx Damper O-Ring	7096E9061-36*
7 DMCB4 PCB Assy	7001E9313-98	18c 35x35mm Rubber Mat	7096E9061-20
8 Condense Trap	EAA0267E00A	19 Power Supply sub assy	7009E9321-20
9 Memory Exp. Board	7001E9314-76		

FILTER ASSEMBLY



Item	Description	Part Number
1	Filter Assembly	7096E4060-21
2	Bowl	Not Available
3	Element, Filter	7096E9061-12
4	Nut, Filter	0301-0935

NEW STYLE FILTER ASSEMBLY

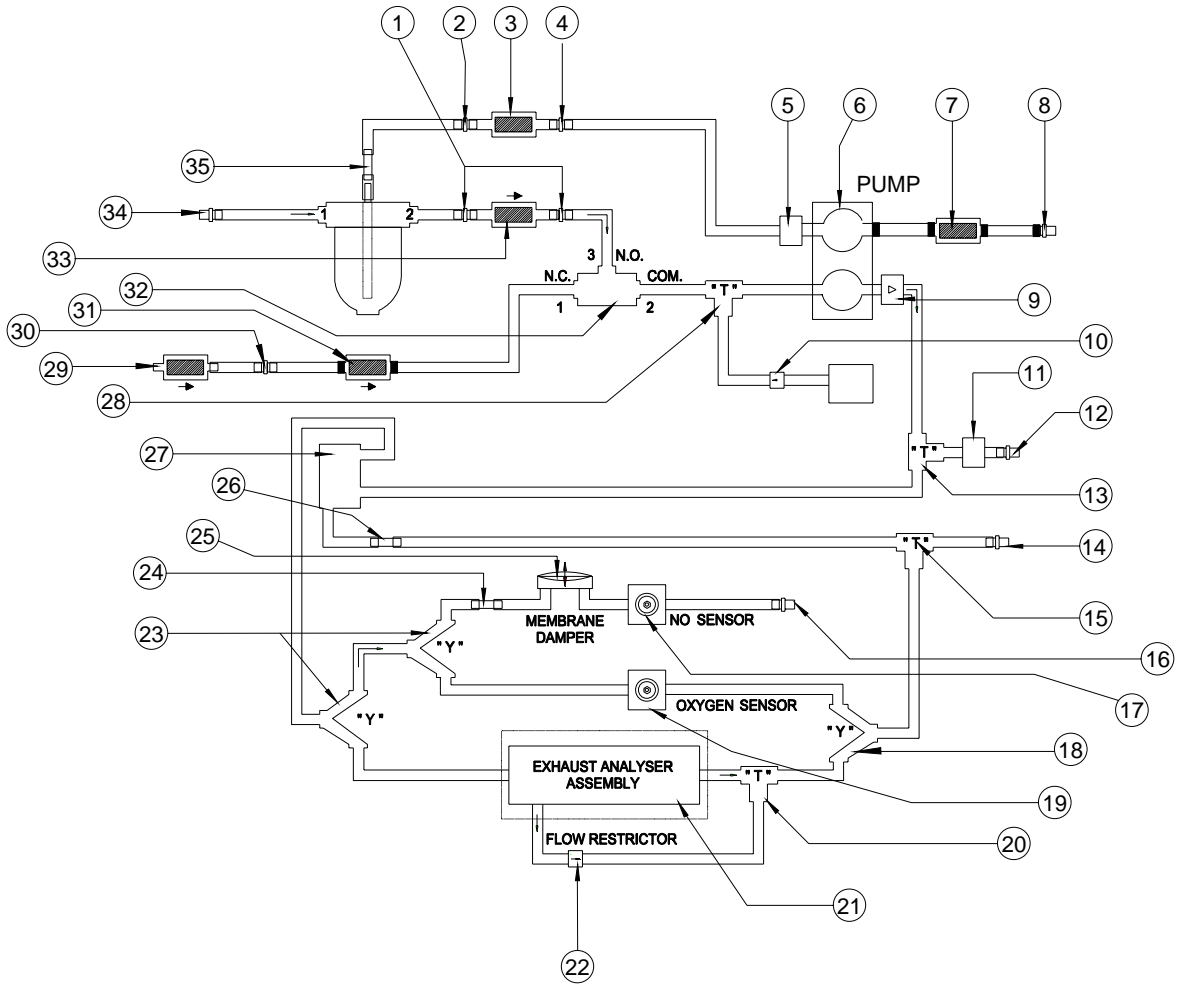


Item	Description	Part Number	Item	Description	Part Number
1a	Filter Bracket new style	7012E9324-90*	10	O-Ring Buna-N	0301-0943-01
1b	Screw 1/4-20x1/2"	0403-1621-08*	11	Screw M3x16 Posi SS	404-0316-530*
1c	Washer 1/4" Split Lock	0604-0014*	12	Washer M3 Plain	400-0300-503*
2	Filter Head, new style	7096E9062-61	13	F/O Tab 250pnl mnt	7096E3065-79*
3	Filter Bowl Nut	0301-0948-01	14	Washer M3 sngl coil	400-0300-303*
4	Filter Bowl, new style	0301-0947-01	15	Washer M3 Plain	400-0300-503*
5	Strip, Water Detection	7096E9062-27*	16	O-Ring 3/32" Viton	7096E9062-28*
6	Element, Filter 5micrn	7096E9062-77	17	Hose Fitting 1/8-3/16	0647-0108
7	Filter Retention Nut	0301-0946-01	18	Hose Fitting 1/8-6mm	7096E9061-05
8	Fitting, Elbow 90 Brass	7096E9062-67	19	Filter Sub-Assy. (see Note 2)	7009E9323-09
9	Filter Assy. (see Note 1)	7009E9323-08			

NOTE 1: Item 9 contains Items 2, 3, 4, 6, 7, & 10 only.

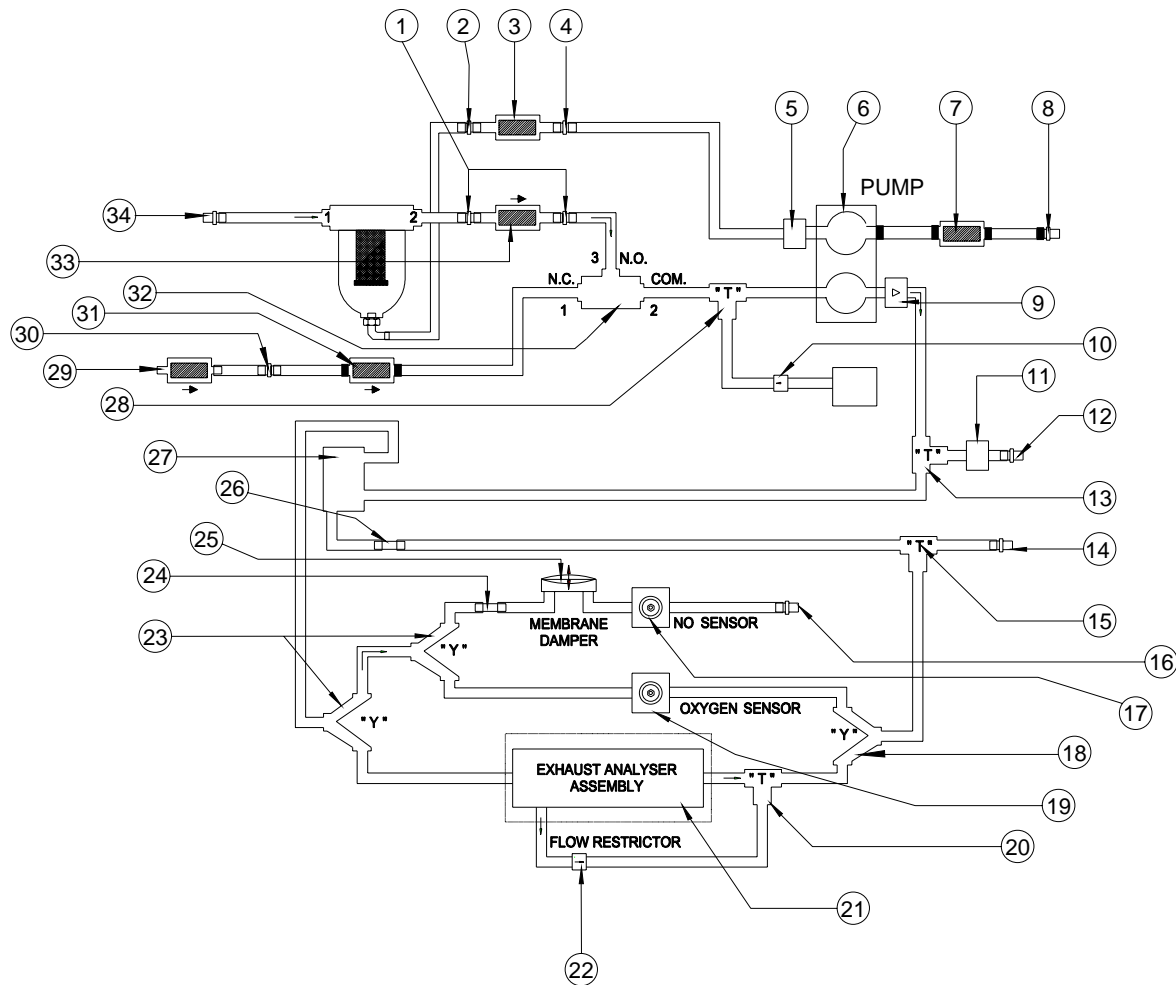
NOTE 2: Item 19 is the complete Filter Sub-Assembly, containing all pieces pictured above.

PNEUMATICS



Item	Description	Part Number	Item	Description	Part Number
1	Nipple, Hose	7096E9058-22	19	Sensor, O2	7049-0004-01
2	Nipple, Hose	7096E9058-22	20	Fitting, T	7096E9060-42
3	Filter, Water Blue	14281	21	Bench, Siemens	7096E4060-14
4	Nipple, Hose	7096E9058-22	22	Restrictor, Flow .005" ID	7096E9060-30
5	Valve, Glued Check Suc.	7009E9323-80	23	Fitting, Y	7096E9061-09
6	Pump, 12 Volt	7009E9321-85	24	Restrictor, Flow .062" ID	7024-0354
7	Filter, Noise/Gas	7096E9062-98	25	Damper, NO entire assy.	7009E9321-28
8	Nipple, Hose	7096E9061-55	26	Restrictor, Flow 2.5mm ID	7096E9061-00
9	Valve, Glued Check Press	7009E9323-81	27	Trap, Condensation	EAA0267E00A
10	Restrictor, Flow .005"ID	7096E9060-30	28	Fitting, T	7096E9060-43
11	Valve, Glued Check	7009E9321-40	29	Filter, Charcoal	7096E9061-54
12	Nipple, hose	7096E9058-22	30	Nipple, hose	7096E9058-22
13	Fitting, T	0647-0107	31	Filter, Petrol/Noise	7096E9062-98
14	Connector, Hose	7016-0005	32	Solenoid	7096E4059-22
15	Fitting, T	7096E9060-46	33	Filter, Gas White	7096E9061-03
16	Nipple, Hose	7096E9061-55	34	Nipple, Hose	7096E9061-55
17	Sensor, NO	7096E4060-20	35	Fitting, Reducing	7096E9058-11
18	Fitting, Y	7096E9061-09			

PNEUMATICS (NEW STYLE FILTER)



Item	Description	Part Number	Item	Description	Part Number
1	Nipple, Hose	7096E9058-22	19	Sensor, O2	7049-0004-01
2	Nipple, Hose	7096E9058-22	20	Fitting, T	7096E9060-42
3	Filter, Water Blue	14281	21	Bench, Siemens	7096E4060-14
4	Nipple, Hose	7096E9058-22	22	Restrictor, Flow .005" ID	7096E9060-30
5	Valve, Check Suction	7009E9323-80	23	Fitting, Y	7096E9061-09
6	Pump, 12 Volt	7009E9321-85	24	Restrictor, Flow .062" ID	7024-0354
7	Filter, Noise/Gas	7096E9062-98	25	Damper, NO entire assy.	7009E9321-28
8	Nipple, Hose	7096E9061-55	26	Restrictor, Flow 2.5mm ID	7096E9061-00
9	Valve, Check Pressure	7009E9323-81	27	Trap, Condensation	EAA0267E00A
10	Restrictor, Flow .005"ID	7096E9060-30	28	Fitting, T	7096E9060-43
11	Valve, Check	7096E9059-33	29	Filter, Charcoal	7096E9061-54
12	Nipple, hose	7096E9058-22	30	Nipple, hose	7096E9058-22
13	Fitting, T	0647-0107	31	Filter, Petrol/Noise	7096E9062-98
14	Connector, Hose	7016-0005	32	Solenoid	7096E4059-22
15	Fitting, T	7096E9060-46	33	Filter, Gas White	7096E9061-03
16	Nipple, Hose	7096E9061-55	34	Nipple, Hose	7096E9061-55
17	Sensor, NO	7096E4060-20			
18	Fitting, Y	7096E9061-09			

LEADS AND ACCESSORIES

ITEM	DESCRIPTION	PART NUMBER
1	Adapter, Primary ECU/RPM	7009E9319-42
2	Pickup, BMW RPM	6004E9312-98
3	Cable, AC Power	6001-0197-01
4	Hanger, Lead	7009E9322-00
5	Hose, Exhaust (See Figure 2 and Note 1 below)	EAH0015L10A
6	Inverter, DC to AC 115V	22650
7	Inverter, DC to AC 230V	7009E9321-29
8	Keyboard	7096E4060-27
9	Keyboard Kit	7009E9321-99
10	Light Pen Kit (includes light pen and installation instructions)	7009E9321-97
11	NOx Sensor Kit	7009E9321-27
12	Nut, Swivel Hose Adapter	7096E9061-87
13	Pickup, Capacitive	6004E9313-19
14	Pickup, Primary/ECU Cable	6004E9312-97
15	Pickup, Trigger Inductive	6004E9312-95
16	Pillar, Hose Adapter for 7009-1869-01 Probe	7096E9061-86
18	Printer Paper Roll, 60mm	7096E4060-13
20	Probe, Exhaust (same as SIS Probe; see Figure 1 & Note 1 below)	7009-1869
21	Probe Tip, Exhaust (same as SIS; see Figure 3 below)	7015-0081
22	Probe, Oil Temperature (Domestic)	6004E9312-99
23	Remote Control	7009E9321-30
24	Stand Assembly (Special Order)	7009E9320-22*
25	Thermal Printer Assembly (W/PCB)	7009E9321-32
26	Vacuum Pump Rebuild Kit	7096E9063-02

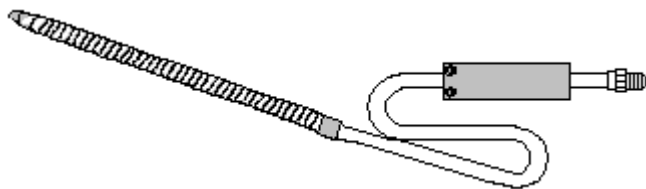


Figure 1.
Exhaust Probe Assembly 7009-1869
(with replaceable Tip)

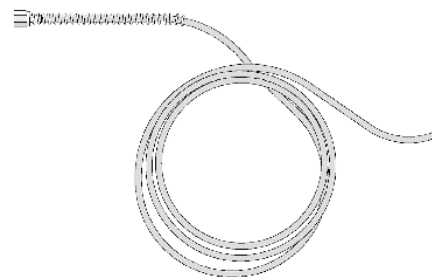


Figure 2.
Exhaust Hose
EAH0015L10A

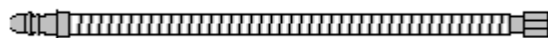


Figure 3. Probe Tip
7015-0081

Note 1: When replacing an exhaust hose or probe on a DGA-1000, always use the probe and hose pictured above, regardless of what was on the equipment originally. If replacing a hose or probe other than the ones pictured above, you must replace them together in order for them to attach together properly.

PARTS IN ALPHABETICAL ORDER

DESCRIPTION	PART NUMBER	COMMENTS
35x35mm Rubber Mat	7096E9061-20	Membrane for NOx Damper
Adapter, Primary RPM	7009E9319-42	See Pg. 9-10
Barb Nut M3 EXT S/P	408-0300-143*	Nut for standoff, RPM/OIL TEMP Board
Bench, Siemens	7096E4060-14	Infrared Gas Bench (Rebuilt Exchange Unit)
Bezel, Front	7009E9321-39*	Unit Front Panel Plastic Frame
Board, DMCB4 Assy.	7001E9313-98	DGA Main Controller Board
Board, Keypad	7001E9314-16	Operator Input Board (Contains IR Receiver Assy)
Board, Memory Expand	7001E9314-76	Add-on Board Used For All Programs
Board, RPM/Oil Temp	7001E9314-81	RPM/Oil Temp. Bd. for Serial D units and Higher
Board, RPM/Oil Temp	7001E9313-99	RPM/Oil Temp Bd. For Serial A – C units
Bowl Nut	0301-0948-01	New Style Filter, See pg. 9-7
Bracket(new style filter)	7012E9324-90*	New Style Filter Bracket
Cable, Power	6001-0197-01	Main Power Cable
Case, Cover	7020E9316-05*	See pg. 9-4
Connector, Hose	7016-0005	See pg. 9-8
Damper NO entire assy.	7009E9321-28	Individual parts available, see pg. 9-5
Element, Filter 5 micron	7096E9061-12	Main Bowl Filter, Old Style Filter
F/O Tab	7096E3065-79*	250 panel mount, 0.130 Diameter
Filter Assembly	7096E4060-21	Entire Filter Assy. (Old Style) Breakdown Pg.9-6
Filter Assy. (new style)	7009E9323-08	New Style Filter Unit, Requires New Filter
Filter Bowl	0301-0947-01	New Style Filter, See pg. 9-7
Filter Head	7096E9062-61	New Style Filter (Modified 0301-0942-01)
Filter Retention Nut	0301-0946-01	New Style, Same as SIS Retention Nut
Filter Sub Assembly	7009E9323-09	New Style, Entire Unit less Bracket
Filter, 5 Micron	7096E9062-77	New Style Filter Element
Filter, Charcoal	7096E9061-54	Ambient Air Port Filter
Filter, Gas White	7096E9061-03	Secondary Filtration of Exhaust Sample
Filter, Petrol/Noise	7096E9062-98	Noise Damper for Pump Water Outlet
Filter, Water Blue	14281	Secondary filtration of System Moisture
Fitting, Elbow	7096E9061-05	Pump Fitting
Fitting, Elbow	7096E9062-67	90 Degree, Brass Nickel Plate
Fitting, Elbow Brass	7096E9058-61	Solenoid Fitting
Fitting, Reducing	7096E9058-11*	Connection Between Filter Assy and Water Filter
Fitting, Straight	7096E9061-06	Pump Fitting
Fitting, T	0647-0107*	See pg. 9-8
Fitting, T	7096E9060-42	See pg. 9-8
Fitting, T	7096E9060-43	See Pg. 9-8
Fitting, T	7096E9060-46	See Pg. 9-8
Fitting, Y	7096E9061-09*	See pg. 9-8
Foot, Rubber	87018	Foot Between Unit and Stand
Handle	7020E9016-06*	Unit Handle
Hanger, Lead	7009E9322-00	Lead Hanger
Hose Fitting	0647-0108	R/A 1/8" NPT x 3/16" Barb
Hose, Exhaust	EAH0015L10A	See Figure 2 and Note 1 on Page 9-10
Inverter 115V Unit	22650	12VDC to 115VAC
Inverter DC to AC	7009E9321-29	230V Unit (There is a 115V unit for U.S.A.)
Keyboard	7096E4060-27	
Keyboard Kit	7009E9321-99	
Keypad, Main Screened	7096E9061-48	Rubber Buttons Between Keyboard Board and Bezel
Light Pen Kit	7009E9321-97	
Manifold/Sensor Holder	7096E9060-92	Used for O2, NOx, and NOx Damper Manifolds
Monitor	7009E9321-18	9" SVGA Monitor
Nipple, Hose	7096E9058-22	See pg. 9-8
Nipple, Hose	7096E9061-55	See pg. 9-8

CHAPTER 9 PARTS

DESCRIPTION	PART NUMBER	COMMENTS
NO Sensor Kit	7009E9321-27	
NOx Damper O-ring	7096E9061-36*	See pg. 9-5
Nut, Filter	0301-0935	Filter Element Retention Wing nut
Nut, Swivel	7096E9061-87	Hose Adapter
O-Ring (new filter bowl)	0301-0943-01	New Style Filter, Buna-N
O-Ring 3/32" Viton	7096E9062-28*	Seal for Water Detection Strip Mounting
Pickup Capacitive	6004E9313-19	See Pg. 9-10
Pickup, BMW RPM	6004E9312-98	See Pg. 9-10
Pickup, Inductive	6004E9312-95	See Pg. 9-10
Pickup, Primary ECU	6004E9312-97	See Pg. 9-10
Pillar, Hose Adapter	7096E9061-86	for 7009-1869 Probe
Plate, Cover Memory	7005E9318-16*	See pg. 9-3
Plate, Cover O2/NO	7005E9318-15*	See pg. 9-3
Plate, Cover Printer	7005E9318-14*	See pg. 9-4
Printer, Assembly	7009E9321-32	Entire Printer Assembly with Driver Board
Printer, Paper	7096E4060-13	Roll, 60mm
Printer, Thermal	7096E4060-12	Does not contain Printer Driver Board
Probe Tip	7015-0081	Same as SIS; See Figure 3 and Note 1 on Page 9-14
Probe, Exhaust	7009-1869	Same as SIS Probe; see Figure 1 & Note 1 on Page 9-14
Probe, Oil Temperature	6004E9312-99	Revision A, B and C models Only
Pump	7009E9321-85	12V. Pump Sub-Assembly
Pump Rebuild Kit	7096E9063-02	Kit to rebuild vacuum pump
Remote Control	7009E9321-30	
Restrictor, Flow .005"	7096E9060-30	See pg. 9-8
Restrictor, Flow .062"	7024-0354	See pg. 9-8
Restrictor, Flow 2.5mm	7096E9061-00	See pg. 9-8
Screw	404-0300-503*	M3 x 16mm, Stainless Steel
Screw M3x16 Posi SS	404-0316-530*	Part of Water Detection Spade Lug
Screw, Filter Bracket	0403-1621-08*	1/4-20*1/2" Hex Head ZP
Sensor, NOx	7096E4060-20	See pg. 9-5
Sensor, O2	7049-0004-01	See pg. 9-5
Spacer M3x23 Brass	401-0323-607*	Standoff Part RPM/OIL TEMP Board
Standoff Screw M3x35	404-0335-533*	Standoff Part RPM/OIL TEMP Board
Standoff, DMCB4 Board	2-932	Nylon Standoff/Main Board
Sticker, DGA-1000	4600E9311-61*	See pg. 9-2
Sticker, SUN	4600E9311-62*	See pg. 9-2
Strip, Water Detection	7096E9062-27*	Metal Strip inside of bowl to detect water
Supply, Power	7009E9321-20	200W Switching Power Supply
Switch, Power	29758	DPST Rocker Switch
Tape	003-3000-724*	Thread Sealant
Terminal Block, 5 Way	3381-0000	See pg. 9-5
Trap, Condensation	EAA0267E00A	See pg. 9-4
Valve, Check	7009E9323-79	Calibration Inlet Check Valve 1/4"
Valve, Check Pressure	7009E9323-81	Pump Check Valve
Valve, Check Suction	7009E9323-80	Pump Check Valve
Valve, Solenoid	7096E4059-22	Gas routing, See pg. 9-5, 9-8
Washer, Filter Bracket	0604-0014*	1/4" Split Lock
Washer, M3 SCS	400-0300-303*	Standoff Part RPM/OIL TEMPERATURE Board
Washer, M3 SPW	400-0300-503*	Standoff Part RPM/OIL TEMPERATURE Board
WH, (W1) Cable, Main Switch	7076E9325-75	From Main Switch To Terminal Block 1
WH, (W10) Printer Com. Cable	7076E9325-84	From PB25 Main Board to P2 on Printer Driver Brd.
WH, (W11) Memory Expansion Data Cable	7076E9325-85	From PB17 Main Board to P1 on Memory Exp. Brd.
WH, (W12) Keypad IR,RC Data Cable	7076E9325-86	From PB7 Main Board to PB1 on Keypad Board
WH, (W2) Gas Bench Com. Cable	7076E9325-76	From PB11 Main Board to RS232 on SIBENCH
WH, (W4) Pump Power	7076E9325-78	From PB15 Main Board to Vacuum Pump

DESCRIPTION	PART NUMBER	COMMENTS
WH, (W5) V1 Power	7076E9325-79	From PB16 Main Board to Solenoid V1
WH, (W6) Rpm/Oil T	7076E9325-80	From PB18 Main Board to PV4 Rpm/Oil Temp Board
WH, (W7) Cable O2 Sensor	7076E9325-81	From O2 Sensor to O2 Input on SIBENCH
WH, (W8) Cable NOx Sensor.	7076E9325-82	From NOx Sensor to NOx Input on SIBENCH
WH, (W9) Cable H2O Detection.	7076E9325-83	From PB21 Main Board to H2O Detector (Filter Assy) Serial A Models Only
WH, (W9) Cable H2O Detection.	7076E9326-49	From PB21 Main Board to H2O Detector (Filter Assy) Serial B Models and Above
Wrench, Filter	7096E9062-23	For Removal of Old Style Filter Bowl

PARTS IN NUMERICAL ORDER

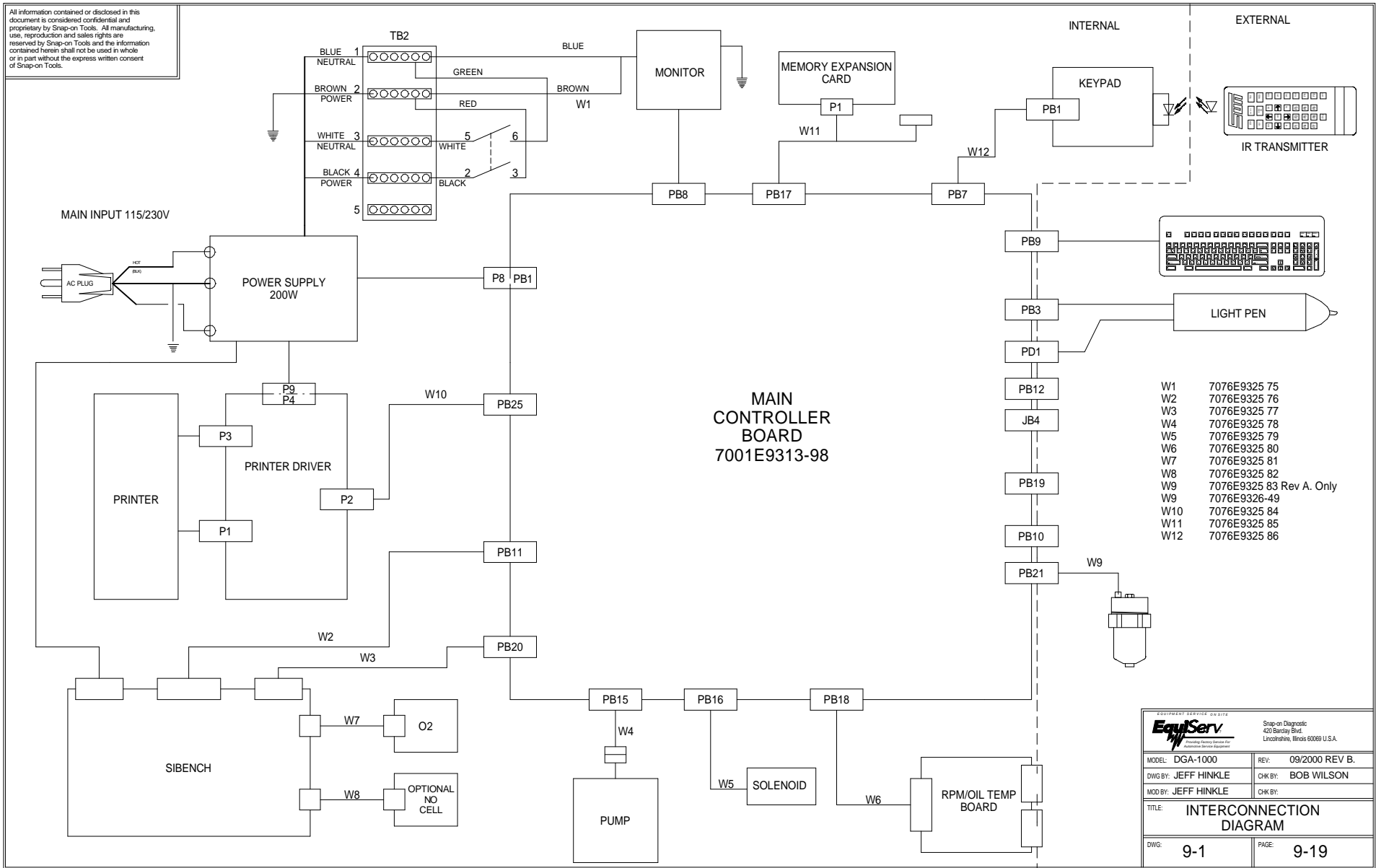
PART NUMBER	DESCRIPTION	COMMENTS
003-3000-724*	Tape	Thread Sealant
0301-0935	Nut, Filter	Filter Element Retention Wing nut
0301-0943-01	O-Ring (new filter bowl)	New Style Filter, Buna-N
0301-0946-01	Filter Retention Nut	New Style, Same as SIS Retention Nut
0301-0947-01	Filter Bowl	New Style Filter, See pg. 9-7
0301-0948-01	Bowl Nut	New Style Filter, See pg. 9-7
0403-1621-08*	Screw, Filter Bracket	1/4-20*1/2" Hex Head ZP
0604-0014*	Washer, Filter Bracket	1/4" Split Lock
0647-0107*	Fitting, T	See pg. 9-8
0647-0108	Hose Fitting	R/A 1/8" NPT x 3/16" Barb
14281	Filter, Water Blue	Secondary filtration of System Moisture
22650	Inverter 115V Unit	12VDC to 115VAC
2-932	Standoff, DMCB4 Board	Nylon Standoff/Main Board
29758	Switch, Power	DPST Rocker Switch
3381-0000	Terminal Block, 5 Way	See pg. 9-5
400-0300-303*	Washer, M3 SCS	Standoff Part RPM/OIL TEMPERATURE Board
400-0300-503*	Washer, M3 SPW	Standoff Part RPM/OIL TEMPERATURE Board
401-0323-607*	Spacer M3x23 Brass	Standoff Part RPM/OIL TEMP Board
404-0300-503*	Screw	M3 x 16mm, Pozidrive, Stainless Steel
404-0316-530*	Screw M3x16 Posi SS	Part of Water Detection Spade Lug
404-0335-533*	Standoff Screw M3x35	Standoff Part RPM/OIL TEMP Board
408-0300-143*	Barb Nut M3 EXT S/P	Nut for standoff, RPM/OIL TEMP Board
4600E9311-61*	Sticker, DGA-1000	See pg. 9-2
4600E9311-62*	Sticker, SUN	See pg. 9-2
6001-0197-01	Cable, Power	Main Power Cable
6004E9312-95	Pickup, Inductive	See Pg. 9-10
6004E9312-97	Pickup, Primary ECU	See Pg. 9-10
6004E9312-98	Pickup, BMW RPM	See Pg. 9-10
6004E9312-99	Probe, Oil Temperature	Revision A, B and C models Only
6004E9313-19	Pickup Capacitive	See Pg. 9-10
7001E9313-98	Board, DMCB4 Assy.	DGA Main Controller Board
7001E9313-99	Board, RPM/Oil Temp	RPM/Oil Temp Bd. For Serial A – C units
7001E9314-16	Board, Keypad	Operator Input Board (Contains IR Receiver Assy)
7001E9314-76	Board, Memory Expand	Add-on Board Used For All Programs
7001E9314-81	Board, RPM/Oil Temp	RPM/Oil Temp. Bd. for Serial D units and Higher
7005E9318-14*	Plate, Cover Printer	See pg. 9-4
7005E9318-15*	Plate, Cover O2/NO	See pg. 9-3
7005E9318-16*	Plate, Cover Memory	See pg. 9-3
7009-1869	Probe, Exhaust	Same as SIS Probe; see Figure 1 & Note 1 on Page 9-14
7009E9319-42	Adapter, Primary RPM	See Pg. 9-10
7009E9321-18	Monitor	9" SVGA Monitor
7009E9321-20	Supply, Power	200W Switching Power Supply
7009E9321-27	NO Sensor Kit	
7009E9321-28	Damper NO entire assy.	Individual parts available, see pg. 9-5
7009E9321-29	Inverter DC to AC	230V Unit (There is a 115V unit for U.S.A.)
7009E9321-30	Remote Control	
7009E9321-32	Printer, Assembly	Entire Printer Assembly with Driver Board
7009E9321-39*	Bezel, Front	Unit Front Panel Plastic Frame
7009E9321-85	Pump	12V. Pump Sub-Assembly
7009E9321-97	Light Pen Kit	
7009E9321-99	Keyboard Kit	
7009E9322-00	Hanger, Lead	Lead Hanger
7009E9323-08	Filter Assy. (new style)	New Style Filter Unit, Requires New Filter
7009E9323-09	Filter Sub Assembly	New Style, Entire Unit less Bracket

CHAPTER 9 PARTS

PART NUMBER	DESCRIPTION	COMMENTS
7009E9323-79	Valve, Check	Calibration Inlet Check Valve 1/4"
7009E9323-80	Valve, Check Suction	Pump Check Valve
7009E9323-81	Valve, Check Pressure	Pump Check Valve
7012E9324-90*	Bracket(new style filter)	New Style Filter Bracket
7015-0081	Probe Tip	Same as SIS; See Figure 3 and Note 1 on Page 9-14
7016-0005	Connector, Hose	See pg. 9-8
7020E9016-06*	Handle	Unit Handle
7020E9316-05*	Case, Cover	See pg. 9-4
7024-0354	Restrictor, Flow .062"	See pg. 9-8
7049-0004-01	Sensor, O2	See pg. 9-5
7076E9325-75	WH, (W1) Cable, Main Switch	From Main Switch To Terminal Block 1
7076E9325-76	WH, (W2) Gas Bench Com. Cable	From PB11 Main Board to RS232 on SIBENCH
7076E9325-77	WH, (W3) Gas Bench Analog Cable	From PB20 Main Board to Analog Input on Bench
7076E9325-78	WH, (W4) Pump Power	From PB15 Main Board to Vacuum Pump
7076E9325-79	WH, (W5) V1 Power	From PB16 Main Board to Solenoid V1
7076E9325-80	WH, (W6) Rpm/Oil T	From PB18 Main Board to PV4 Rpm/Oil Temp Board
7076E9325-81	WH, (W7) Cable O2 Sensor	From O2 Sensor to O2 Input on SIBENCH
7076E9325-82	WH, (W8) Cable NOx Sensor.	From NOx Sensor to NOx Input on SIBENCH
7076E9325-83	WH, (W9) Cable H2O Detection.	From PB21 Main Board to H2O Detector (Filter Assy)
7076E9325-84	WH, (W10) Printer Com. Cable	From PB25 Main Board to P2 on Printer Driver Brd.
7076E9325-85	WH, (W11) Memory Expansion Data Cable	From PB17 Main Board to P1 on Memory Exp. Brd.
7076E9325-86	WH, (W12) Keypad IR,RC Data Cable	From PB7 Main Board to PB1 on Keypad Board
7076E9326-49	WH, (W9) Cable H2O Detection.	From PB21 Main Board to H2O Detector (Filter Assy) Serial B Models and Above
7096E3065-79*	F/O Tab	250 panel mount, 0.130 Diameter
7096E4059-22	Valve, Solenoid	Gas routing, See pg. 9-5, 9-8
7096E4060-12	Printer, Thermal	Does not contain Printer Driver Board
7096E4060-13	Printer, Paper	Roll, 60mm
7096E4060-14	Bench, Siemens	Infrared Gas Bench (Rebuilt Exchange Unit)
7096E4060-20	Sensor, NOx	See pg. 9-5
7096E4060-21	Filter Assembly	Entire Filter Assy. (Old Style) Breakdown Pg.9-6
7096E4060-27	Keyboard	
7096E9058-11*	Fitting, Reducing	Connection Between Filter Assy and Water Filter
7096E9058-22	Nipple, Hose	See pg. 9-8
7096E9058-61	Fitting, Elbow Brass	Solenoid Fitting
7096E9060-30	Restrictor, Flow .005"	See pg. 9-8
7096E9060-42	Fitting, T	See pg. 9-8
7096E9060-43	Fitting, T	See Pg. 9-8
7096E9060-46	Fitting, T	See Pg. 9-8
7096E9060-92	Manifold/Sensor Holder	Used for O2, NOx, and NOx Damper Manifolds
7096E9061-00	Restrictor, Flow 2.5mm	See pg. 9-8
7096E9061-03	Filter, Gas White	Secondary Filtration of Exhaust Sample
7096E9061-05	Fitting, Elbow	Pump Fitting
7096E9061-06	Fitting, Straight	Pump Fitting
7096E9061-09*	Fitting, Y	See pg. 9-8
7096E9061-12	Element, Filter 5 micron	Main Bowl Filter, Old Style Filter
7096E9061-20	35x35mm Rubber Mat	Membrane for NOx Damper
7096E9061-36*	NOx Damper O-ring	See pg. 9-5
7096E9061-48	Keypad, Main Screened	Rubber Buttons Between Keyboard Board and Bezel

PART NUMBER	DESCRIPTION	COMMENTS
7096E9061-54	Filter, Charcoal	Ambient Air Port Filter
7096E9061-55	Nipple, Hose	See pg. 9-8
7096E9061-86	Pillar, Hose Adapter	for 7009-1869 Probe
7096E9061-87	Nut, Swivel	Hose Adapter
7096E9062-23	Wrench, Filter	For Removal of Old Style Filter Bowl
7096E9062-27*	Strip, Water Detection	Metal Strip inside of bowl to detect water
7096E9062-28*	O-Ring 3/32" Viton	Seal for Water Detection Strip Mounting
7096E9062-61	Filter Head	New Style Filter (Modified 0301-0942-01)
7096E9062-67	Fitting, Elbow	90 Degree, Brass Nickel Plate
7096E9062-77	Filter, 5 Micron	New Style Filter Element
7096E9062-98	Filter, Petrol/Noise	Noise Damper for Pump Water Outlet
7096E9063-02	Pump Rebuild Kit	Kit to rebuild vacuum pump
87018	Foot, Rubber	Foot Between Unit and Stand
EAA0267E00A	Trap, Condensation	See pg. 9-4
EAH0015L10A	Hose, Exhaust	See Figure 2 and Note 1 on Page 9-10

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EQUIPMENT SERVICE BY SITE	
EquipServ	
<small>Providing Battery Service for Commercial Service Equipment</small>	
<small>Snap-on Diagnostic 420 Bentley Blvd. Lincolnshire, Illinois 60069 U.S.A.</small>	
MODEL: DGA-1000	REV: 09/2000 REV B.
DWG BY: JEFF HINKLE	CHK BY: BOB WILSON
MOD BY: JEFF HINKLE	CHK BY:
TITLE: INTERCONNECTION DIAGRAM	
DWG: 9-1	PAGE: 9-19

