

CHAPTER 9

PARTS

GENERAL

This chapter contains parts considered replaceable during field service. It includes assemblies, subassemblies and piece parts.

NOTE: *The following is a breakdown description for the MT3505 serial numbers.*

Serial Number Location Back Panel bottom left hand corner on the Serial Plate.

Example 1194A0102

 11 Month Manufactured
 94 Year Manufactured
 A Serial Revision
 0102 Number of Unit Off Production Line

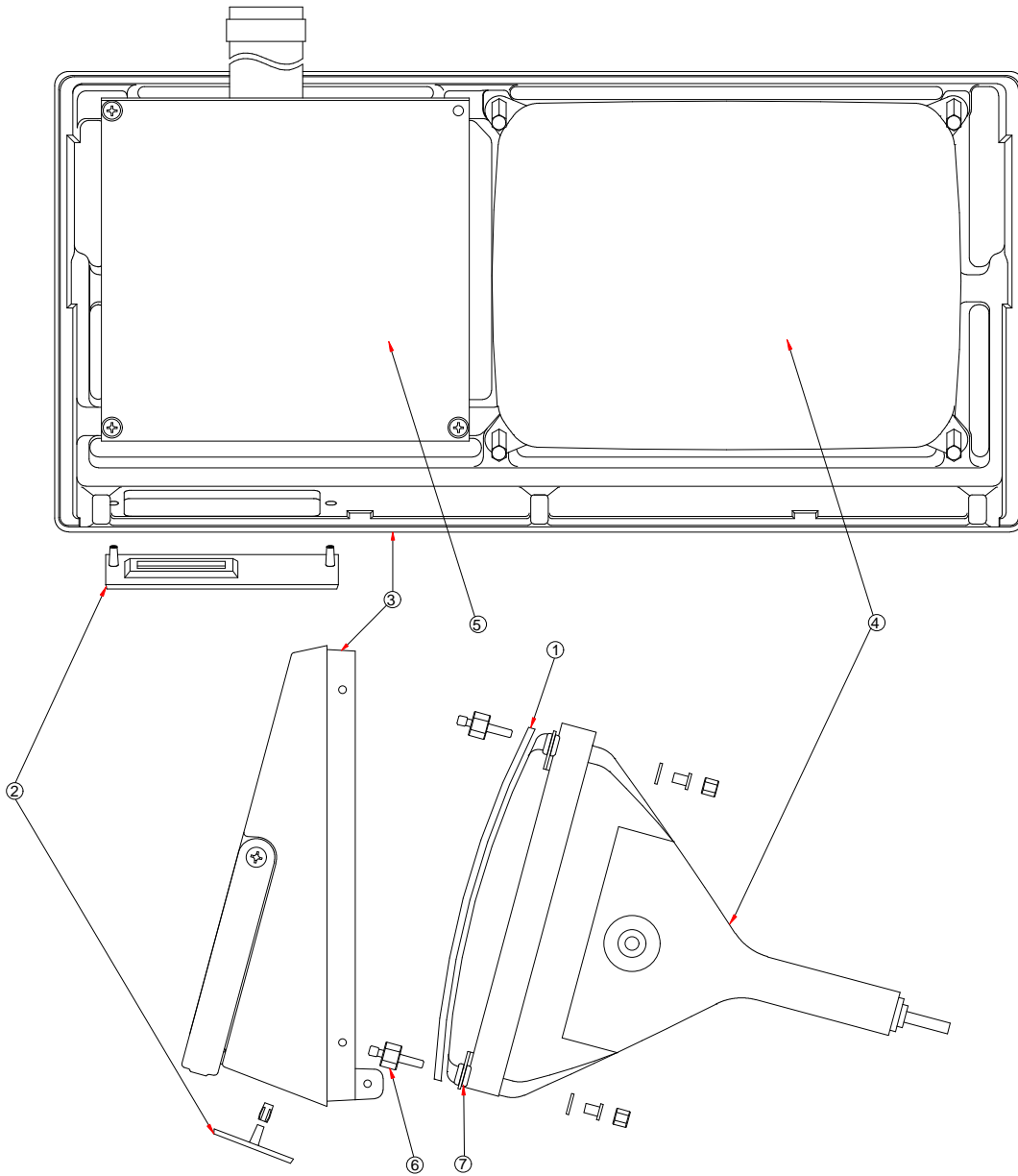
Example A95030102

 A Serial Revision
 95 Year Manufactured
 03 Week Manufactured
 0102 Number of Unit Off Production Line

PARTS BY PICTORIAL

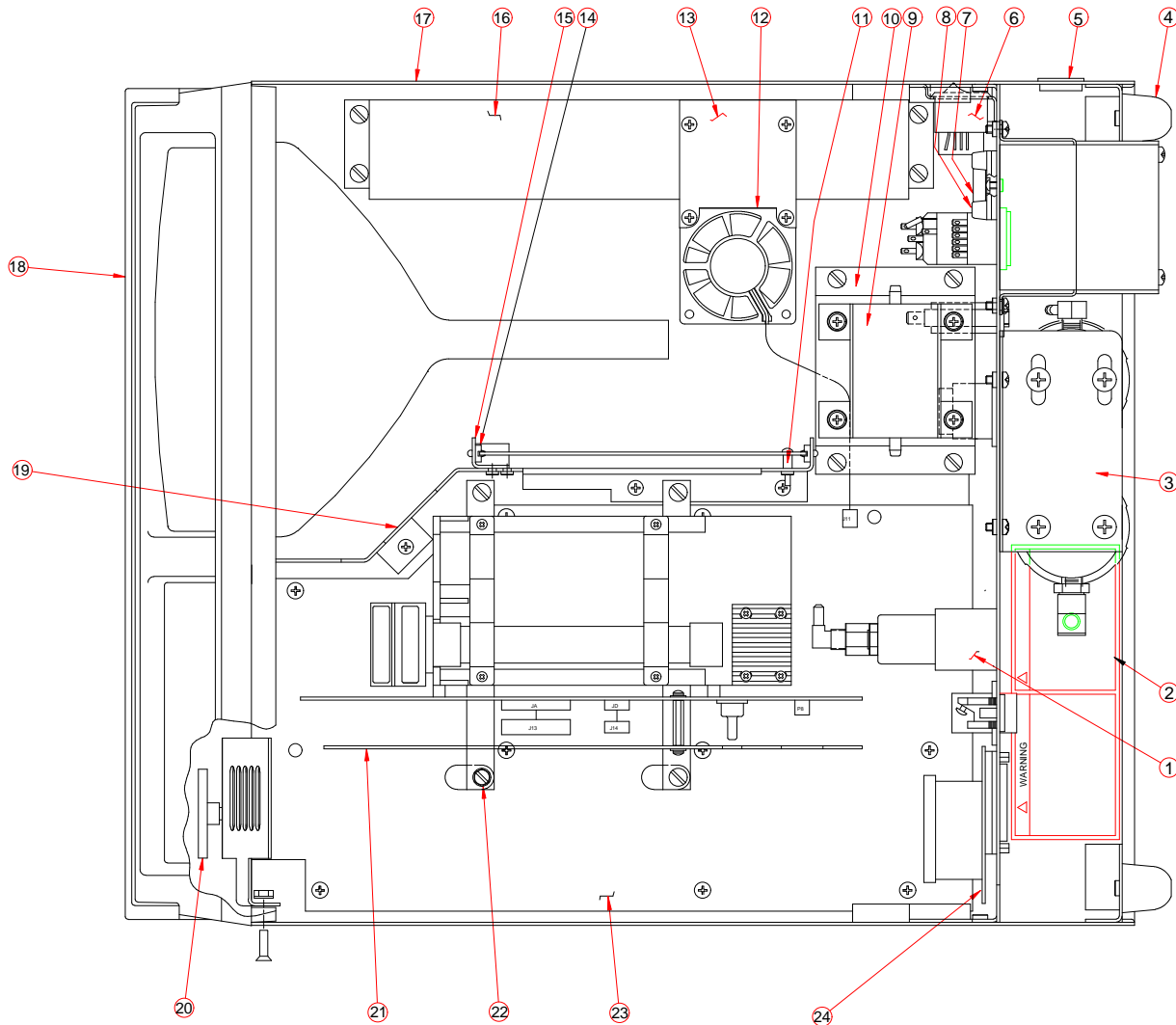
The following section is a list of parts in pictorial form.

FRONT BEZEL VIEW



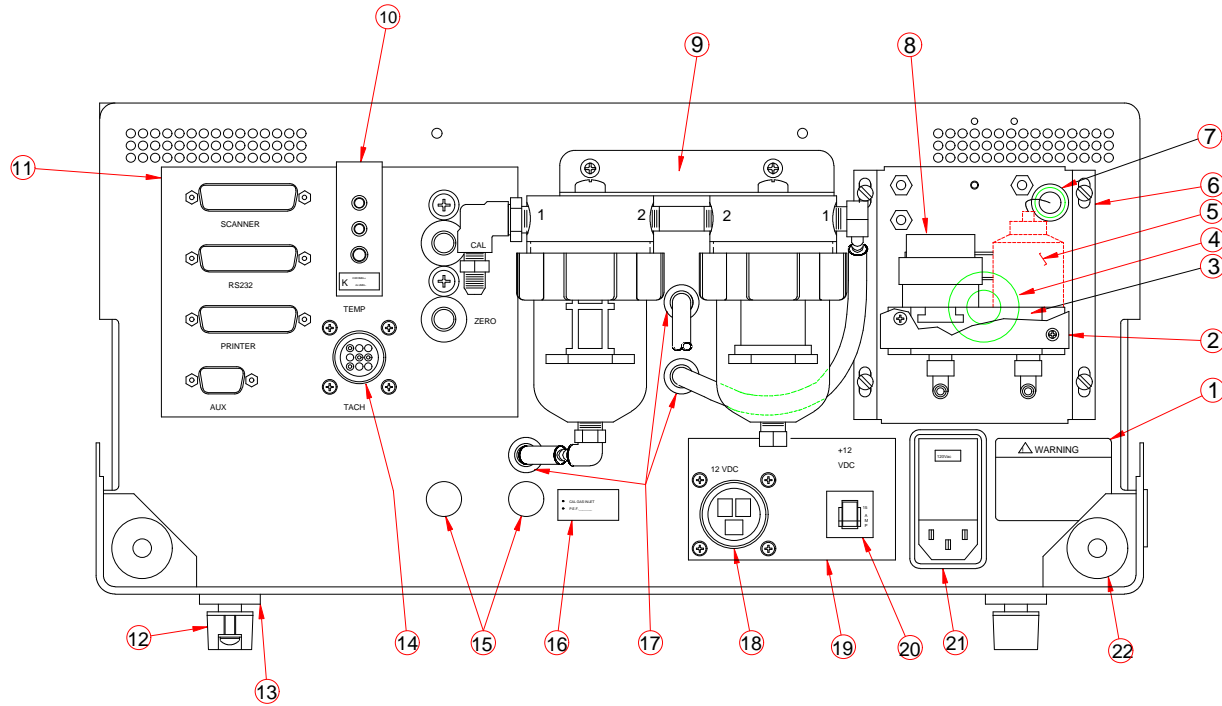
ITEM	DESCRIPTION	PART NUMBER	ITEM	DESCRIPTION	PART NUMBER
1	Gasket, CRT	MT16651013	4	Monitor	MT3500320
2	Escutcheon	MT3500301	5	Keyboard	MT3500A330
3	Bezel w/ Handle	MT3500310	6	Standoff	15061
			7	Grommet	85216

INSIDE VIEW



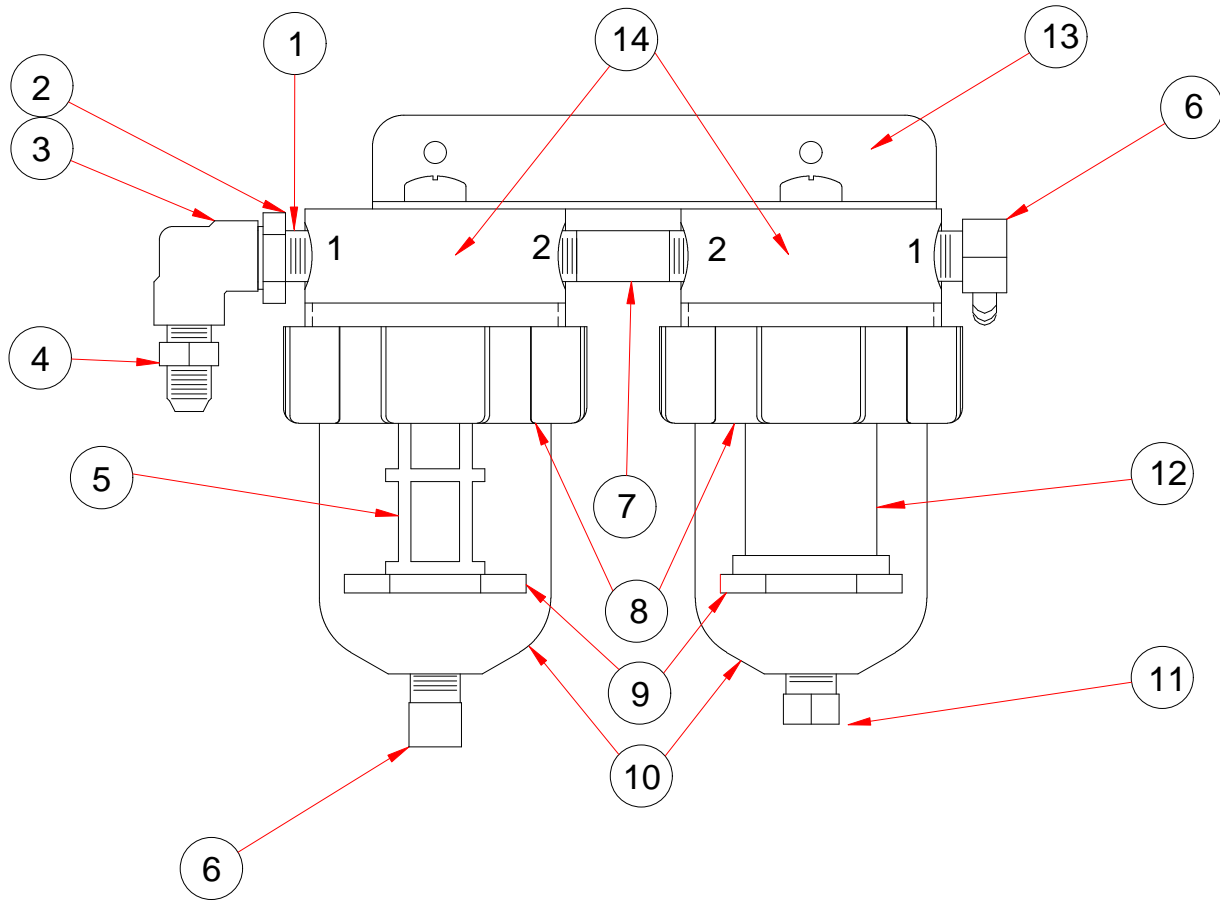
ITEM	DESCRIPTION	PART NUMBER	ITEM	DESCRIPTION	PART NUMBER
1	Manifold Ass. Solenoid	24437	13	Bracket, Fan	MT3500A7
2	Label, English / French	MT3000A37A	14	Guide, Circuit Card	22066
3	Filter Assembly	See Page 9-5	15	Bracket, Monitor	MT3500A6
4	Bumper, Rubber	8518	16	Power Supply Assy.	MT3500A500
5	Grommet, Blk Plastic	85716	17	Chassis Subassembly	MT3500A600B
6	Switch On / Off	28658	18	Bezel, w/handle	MT3500310
7	Fuse, 20A, 32V	210551	19	Shield, Monitor	MT3500A340
8	Fuse Holder	210951	20	Knob	86330
9	Pump, Sample	MT3500A21	21	Bench	7049012901
10	Bracket, Pump	MT3500A25	22	Standoff	15861
11	Spacer	04010354	23	Board, Main CPU	EAP0041C00A
12	Fan	MT3500A60	24	Board, Connector	MT3500A200

BACK PANEL VIEW



ITEM	DESCRIPTION	PART NUMBER	ITEM	DESCRIPTION	PART NUMBER
1	Label, Warning	MT16704A	12	Bumper, Rubber	84918
2	Cover, NO and O ₂	EASP0034C00A	13	Foot	MT3500A8
3	Manifold Block NO O ₂	EAA0031C02A	14	Harness, Internal Tach	MT3500A10
4	Channel, NO and O ₂	07200002	15	Plug, Black Plastic	13740031
5	O ₂ Sensor	7049000401	16	Label, Warning	MT35004
6	Plate, NO and O ₂	EASP033C00A	17	Grommet, Blk Plastic	85816
7	Grommet	05010003	18	Harness, Internal DC	MT3500A50
8	NO Cell	7049013001	19	Label	MT35005
9	Filter Assembly	See Page 9-5	20	Breaker, Circuit	28851
10	Conn, Thermocouple	214348	21	Filter, AC Line	210751
11	Label, RS232, Printer.	MT35002	22	Bumper, Rubber	8518

FILTER ASSEMBLY



ITEM	DESCRIPTION	PART NUMBER	ITEM	DESCRIPTION	PART NUMBER
1	Fitting, Brass Nipple	0647030101	8	Nut, Filter Bowl	0301094801
2	Nut, Brass Seal	0647030201	9	Nut, Filter Retaining	0301094601
3	Fitting, Brass Elbow	0647030301	10	Bowl, Filter	0301094701
4	Fitting, Male Brass	113380	11	Plug, Filter	06470138
5	Element, Primary Filter	0301094401	12	Element, Sec. Filter	0301094501
6	Fitting, Brass Elbow	113680	13	Bracket, Filter	MT3500A9
7	Fitting, Brass Nipple	113480	14	Head, Filter	0301094201

PARTS IN ALPHABETICAL ORDER

<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>COMMENTS</u>
Adapter, Inductive Pickup	MT350090	From Back Panel to Inductive Pickup Harness
AntiDilution Exhaust Probe	MT310019	
Battery, External NO Cell	EAA0030C01A	Below NO, O ₂ Interface Bd.
Bench	7049012901	Andros, 5 Gas
Bezel, w/ handle	MT3500310	Front Panel Bezel with handle
Board, Connector	MT3500A200	Contains 6049D0039901 Ribbon Cable
Board, Main CPU	EAP0041C00A	With Speaker and Speaker Bracket
Board, NO, O ₂ Interface	EAA0030C03A	Behind NO and O ₂ Cell
Bowl, Filter	0301094701	Primary and Secondary
Bracket, Bench Support	MT3500A410	Sheet Metal
Bracket, CRT Board	MT3500A6	Sheet Metal
Bracket, Fan	MT3500A7	Sheet Metal
Bracket, Filter Mounting	MT3500A9	Sheet Metal
Bracket, Pump Support	MT3500A25	Sheet Metal
Bracket, Speaker	MT3500A125	Sheet Metal
Breaker, Circuit	28851	15 Amp
Bumper, Rubber	8518	Back of Analyzer
Bumper, Rubber	84918	Bottom of Analyzer
Cable, 20 Pin Ribbon	6047D0149901	From Monitor PCB to Main PCB J9
Cable, 5 Pin Ribbon	6057D0049901	From IR Bench to Main PCB J14
Cable, 9 Pin Ribbon	6058D0049901	From IR Bench to Main PCB J13
Cable, 9 Pin Ribbon	6058D0169901	From Power Supply P2 to Main PCB J4
Cable, O ₂ and NO Cell	EAA0030C02A	From
Cap, Needle Adapter	MT310033	For Leak Check
Cap, Sample Probe	MT310032	For Leak Check
Case, Top	MT3500A700	Sheet Metal
Channel, O ₂ and NO	07200002	
Chassis, Subassembly	MT3500A600B	Back and Bottom Sheet Metal Panels For Case
Clamp, Cable	25857	Gray Plastic Wiring Harness Hold Down
Clamp, Hose	11582	Internal Tubing Clamp
Connector, Thermocouple	214348	Back Panel Thermocouple Connector
Cord, Power	62421	
Cover, O ₂ and NO Cell	EASP034C00A	Sheet Metal Cover Over Both Sensors
CRT	MT3500326	
Element, Primary Filter	0301094401	75 Micron Filter
Element, Secondary Filter	0301094501	8 Micron Filter
Escutcheon	MT3500301	Black Plate around Monitor Brightness Control
Fan	MT3500A60	
Filter, AC Line	210751	Input Filter / Fuse Assembly
Filter, Assembly	EAA0031C01A	Complete Pri. & Sec. Filter Assembly
Fitting, Brass Elbow	0647030301	90° Elbow to Exhaust Sample Hose
Fitting, Brass Elbow	113680	90° Elbow off Secondary Filter Housing and Bottom of Primary Filter Bowl
Fitting, Brass Nipple	113480	Between Primary and Secondary Filter
Fitting, Brass Nipple	0647030101	Between Primary Filter and 90° adapter
Fitting, Male Brass	113380	Primary Filter Housing to 90° adapter
Fitting, Plastic	15680	For Back Panel Gas Calibration Port
Fitting, Plastic Tee	06470102	
Foot	MT3500A8	Bottom Rubber Bumper Screws into it
Fuse	07390040	1 Amp, Slo Blo
Fuse	27551	1 Amp, 250 Volt for 240 Volt Testers
Fuse	210351	2 Amp, 250 Volt Fast Blow (AC input Connector)
Fuse	210551	20 Amp, 32 Volt
Fuse Holder	210951	Holds 20A Fuse Above Power in Conn.
Gasket, CRT	MT16651013	Gasket around front of CRT
Grommet	05010003	O ₂ Harness runs through this on Manifold Sheet Metal

Grommet	85216	4 attached to corners of CRT
Grommet, Black Plastic	85716	Side of unit by Power Switch (qty 1)
Grommet, Black Plastic	85816	On Back Panel (qty 4)
Grommet, Strip	51441	On CRT sheet metal for Power Supply Wiring Harness
Guide, Circuit Card	22066	
Handle, Sample Probe	MT310047	Without Flexible Probe Tip
Harness, Internal AC	MT3500A40	With AC Power Line Filter
Harness, Internal DC	MT3500A50	Includes Back Panel Conn. & Harnesses
Harness, Internal Tach.	MT3500A10	Back Panel Tach Connector and Internal Harness
Harness, Int. Thermocouple	6105G004ADED	1 wire Internal Thermocouple Harness
Harness, Int. Thermocouple	6031C0099901	2 wire Internal Thermocouple Harness
Head, Filter	0301094201	Primary and Secondary Filter
Hose Assembly, Exhaust	MT310017	Exhaust Hose, Handle, and Flexible Probe
Hose, Exhaust	MT310020	25 Feet Replacement Sample Hose (No Probe)
Keyboard, Subassembly	MT3500A330	
Knob	86330	Brightness Adjustment Knob
Label	MT35002	Scanner, RS232, Printer, etc...
Label	MT35005	DC / AC Power Connector
Label, Line Cord Fuse	810262	On AC Power Cord Connector
Label, Model	EAL0062C00A	MT3505 Front Panel Adhesive Label
Label, Warning	EAL0061C00A	Exhaust Probe Warning Label on Handle
Label, Warning	MT16704A	Electrical Shock Label next to AC Power Input Conn.
Label, Warning	MT3000A37A	English / French Electrical Shock Label
Label, Warning	MT35003A	Warning on top of Filter Assembly
Label, Warning	MT35004	Warning below Tach. input connector
Leadset, DC Power	MT3000210A	
Manifold Assembly, Solenoid	24437	Might Break This Down into smaller Part
Manifold Block, O ₂ and NO	EAA0031C02A	
Monitor	MT3500320	Monitor and Monitor Bd. (mounted on Monitor Shield)
NO Cell	7049013001	
Nut, Brass Seal	0647030201	Between Primary Filter Bowl and 90° Adapter
Nut, Filter Bowl	0301094801	Primary and Secondary Filter Bowl Nut
Nut, Filter Element Retaining	0301094601	Primary and Secondary Element Retaining Nut
ORing, Filter	0301094301	Primary and Secondary Filter Bowls
O ₂ Sensor	7049000401	
Pickup, Trigger	MT60A08A	Inductive Trigger Pickup with Cable
Plate, O ₂ and NO Mounting	EASP033C00A	Sheet Metal
Plug, Black Plastic	13740031	2 Plugs Below Cal and Zero Ports on Back Panel
Plug, Filter	06470138	Bottom of Secondary Filter Bowl
Power Supply Assembly	MT3500A500	Sheet Metal and Board
Probe, Exhaust	MT310018	Flexible Sample Hose with Probe Tip
Pump, Sample	MT3500A21	
Restrictor	12779	In Pneumatics going to Barometric Pressure Transducer
Shield, Monitor	MT3500A340	
Spacer	04010354	Holds CRT PCB to Sheet Metal
Speaker	MT3500A110	with wiring harness
Standoff, Bench	15861	
Standoff, CRT	15061	4 between Bezel and Monitor
Standoff, NO/O ₂ Interface Bd.	0429003802	Between Interface Bd. and Sheet Metal
Strip, Optional AC Power	EAW0029C00A	To Plug In Optional Accessories (printer...)
Switch, On / OFF	28658	
Valve, Check	12981	

PARTS IN NUMERICAL ORDER

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>COMMENTS</u>
EAA0030C01A	Battery, External NO Cell	Below NO, O ₂ Interface Bd.
EAA0030C02A	Cable, O ₂ and NO Cell	From
EAA0030C03A	Board, NO, O ₂ Interface	Behind NO and O ₂ Cell
EAA0031C01A	Filter, Assembly	Complete Pri. & Sec. Filter Assembly
EAA0031C02A	Manifold Block, O ₂ and NO	
EAL0061C00A	Label, Warning	Exhaust Probe Warning Label on Handle
EAL0062C00A	Label, Model	MT3505 Front Panel Adhesive Label
EAP0041C00A	Board, Main CPU	With Speaker and Speaker Bracket
EASP033C00A	Plate, O ₂ and NO Mounting	Sheet Metal
EASP034C00A	Cover, O ₂ and NO Cell	Sheet Metal Cover Over Both Sensors
EAW0029C00A	Strip, Optional AC Power	To Plug In Optional Accessories (printer...)
MT16651013	Gasket, CRT	Gasket around front of CRT
MT16704A	Label, Warning	Electrical Shock Label next to AC Power Input Conn.
MT3000210A	Leadset, DC Power	
MT3000A37A	Label, Warning	English / French Electrical Shock Label
MT310012	Screen, Water Filter	
MT310013	Screen, Gas Filter	
MT310017	Hose Assembly, Exhaust	Exhaust Hose, Handle, and Flexible Probe
MT310018	Probe, Exhaust	Flexible Sample Hose with Probe Tip
MT310019	AntiDilution Exhaust Probe	
MT310020	Hose, Exhaust	25 Feet Replacement Sample Hose (No Probe)
MT310032	Cap, Sample Probe	For Leak Check
MT310033	Cap, Needle Adapter	For Leak Check
MT310047	Handle, Sample Probe	Without Flexible Probe Tip
MT35002	Label	Scanner, RS232, Printer, etc...
MT3500301	Escutcheon	Black Plate around Monitor Brightness Control
MT3500320	Monitor	Monitor and Monitor Bd. (mounted on Monitor Shield)
MT3500326	CRT	
MT35003A	Label, Warning	Warning on top of Filter Assembly
MT35004	Label, Warning	Warning below Tach. input connector
MT35005	Label	DC / AC Power Connector
MT350090	Adapter, Inductive Pickup	From Back Panel to Inductive Pickup Harness
MT3500310	Bezel, w/ handle	Front Panel Bezel with handle
MT3500A10	Harness, Internal Tach.	Back Panel Tach Connector and Internal Harness
MT3500A110	Speaker	with wiring harness
MT3500A125	Bracket, Speaker	Sheet Metal
MT3500A200	Board, Connector	Contains 6049D0039901 Ribbon Cable
MT3500A21	Pump, Sample	
MT3500A25	Bracket, Pump Support	Sheet Metal
MT3500A330	Keyboard, Subassembly	
MT3500A340	Shield, Monitor	
MT3500A40	Harness, Internal AC	With AC Power Line Filter
MT3500A410	Bracket, Bench Support	Sheet Metal
MT3500A50	Harness, Internal DC	Includes Back Panel Conn. & Harnesses
MT3500A500	Power Supply Assembly	Sheet Metal and Board
MT3500A6	Bracket, CRT Board	Sheet Metal
MT3500A60	Fan	
MT3500A600B	Chassis, Subassembly	Back and Bottom Sheet Metal Panels For Case
MT3500A7	Bracket, Fan	Sheet Metal
MT3500A700	Case, Top	Sheet Metal
MT3500A8	Foot	Bottom Rubber Bumper Screws into it
MT3500A9	Bracket, Filter Mounting	Sheet Metal
MT60A08A	Pickup, Trigger	Inductive Trigger Pickup with Cable
6031C0099901	Harness, Int. Thermocouple	2 wire Internal Thermocouple Harness
6047D0149901	Cable, 20 Pin Ribbon	From Monitor PCB to Main PCB J9
6057D0049901	Cable, 5 Pin Ribbon	From IR Bench to Main PCB J14

6058D0049901	Cable, 9 Pin Ribbon	From IR Bench to Main PCB J13
6058D0169901	Cable, 9 Pin Ribbon	From Power Supply P2 to Main PCB J4
6105G004ADED	Harness, Int. Thermocouple	1 wire Internal Thermocouple Harness
8518	Bumper, Rubber	Back of Analyzer
11582	Clamp, Hose	Internal Tubing Clamp
12779	Restrictor	In Pneumatics going to Barometric Pressure Transducer
12981	Valve, Check	
15061	Standoff, CRT	4 between Bezel and Monitor
15680	Fitting, Plastic	For Back Panel Gas Calibration Port
15861	Standoff, Bench	
214348	Connector, Thermocouple	Back Panel Thermocouple Connector
22066	Guide, Circuit Card	
24437	Manifold Assembly, Solenoid	Might Break This Down into smaller Part
25857	Clamp, Cable	Gray Plastic Wiring Harness Hold Down
27551	Fuse	1 Amp, 250 Volt for 240 Volt Testers
28658	Switch, On / OFF	
28851	Breaker, Circuit	15 Amp
51441	Grommet, Strip	On CRT sheet metal for Power Supply Wiring Harness
62421	Cord, Power	
84918	Bumper, Rubber	Bottom of Analyzer
85216	Grommet	4 attached to corners of CRT
85716	Grommet, Black Plastic	Side of unit by Power Switch (qty 1)
85816	Grommet, Black Plastic	On Back Panel (qty 4)
86330	Knob	Brightness Adjustment Knob
113380	Fitting, Male Brass	Primary Filter Housing to 90° adapter
113480	Fitting, Brass Nipple	Between Primary and Secondary Filter
113680	Fitting, Brass Elbow	90° Elbow off Secondary Filter Housing and Bottom of Primary Filter Bowl
210351	Fuse	2 Amp, 250 Volt Fast Blow (AC input Connector)
210551	Fuse	20 Amp, 32 Volt
210751	Filter, AC Line	Input Filter / Fuse Assembly
210951	Fuse Holder	Holds 20A Fuse Above Power in Conn.
810262	Label, Line Cord Fuse	On AC Power Cord Connector
04010354	Spacer	Holds CRT PCB to Sheet Metal
05010003	Grommet	O ₂ Harness runs through this on Manifold Sheet Metal
06470102	Fitting, Plastic Tee	
06470138	Plug, Filter	Bottom of Secondary Filter Bowl
07200002	Channel, O ₂ and NO	
07390040	Fuse	1 Amp, Slo Blo
13740031	Plug, Black Plastic	2 Plugs Below Cal and Zero Ports on Back Panel
0301094201	Head, Filter	Primary and Secondary Filter
0301094301	ORing, Filter	Primary and Secondary Filter Bowls
0301094401	Element, Primary Filter	75 Micron Filter
0301094501	Element, Secondary Filter	8 Micron Filter
0301094601	Nut, Filter Element Retaining	Primary and Secondary Element Retaining Nut
0301094701	Bowl, Filter	Primary and Secondary
0301094801	Nut, Filter Bowl	Primary and Secondary Filter Bowl Nut
0429003802	Standoff, NO/O ₂ Interface Bd.	Between Interface Bd. and Sheet Metal
0647030101	Fitting, Brass Nipple	Between Primary Filter and 90° adapter
0647030201	Nut, Brass Seal	Between Primary Filter Bowl and 90° Adapter
0647030301	Fitting, Brass Elbow	90° Elbow to Exhaust Sample Hose
7049000401	O ₂ Sensor	
7049012901	Bench	Andros, 5 Gas
7049013001	NO Cell	

NOTES: