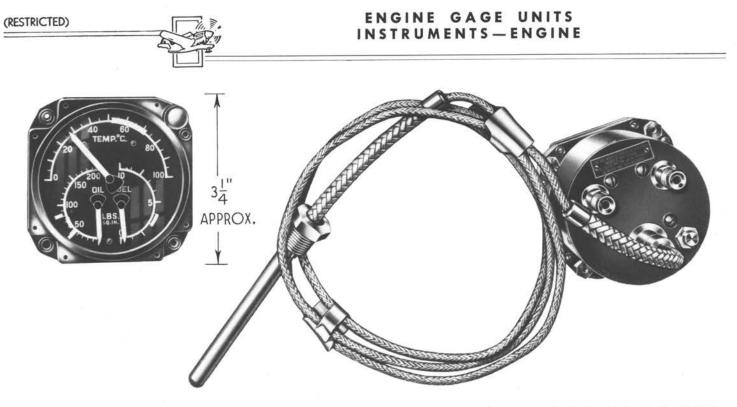
## ENGINE GAGE UNITS

An engine gage unit is an instrument indicating fuel pressure, engine lubricating oil pressure and engine lubricating oil temperature. It consists of a standard Army bakelite case which houses the three activating mechanisms, a dial face which contains three scales, and three pointers.

The engine gage unit is a combination of three gages, each a complete unit within itself. Two general types are available. In one type, the fuel pressure and oil pressure units are Bourdon tubes and the oil thermometer is of the capillary type, with an attached capillary tubing which comes in lengths usually 8, 15, and 22 feet. In the other type, which is more recent, the oil pressure unit is a Bourdon tube, but the fuel pressure unit is an opposed bellows, and the oil thermometer is an electrical ratio meter type used with a resistance thermometer bulb. Each of these mechanisms is described separately under the individual heading.



# GAGE UNIT-ENGINE, 8 - FOOT CAPILLARY ARMY TYPE B-2

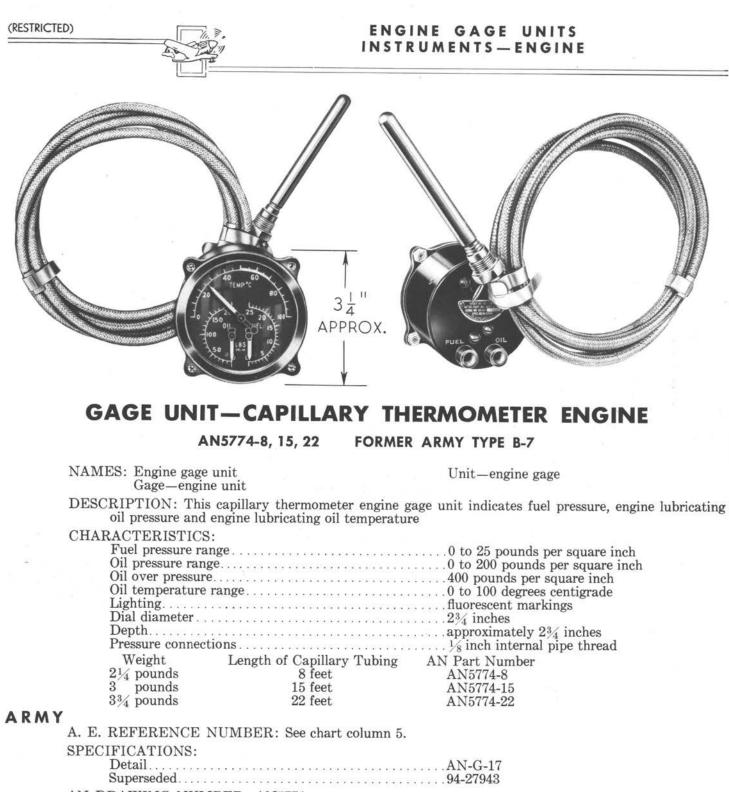
NAMES: Engine gage up	nit. 8-foot capillary	Unit—engine gage (Navy)
Gage-engine	unit. 8-foot capillary	
DESCRIPTION: The A	rmy type B-2 engine gage unit is	a combination fuel pressure, oil pressure and oil
thermometer gage		-
CHARACTERISTICS:		505 (Head) 1028 (Antes - 642) (Head)
Lighting		individual 3-volt rim lamp
Dial markings		radioactive luminescent material
Oil temperature ra	ange	0 to 100 degrees centigrade
Oil pressure range		0 to 200 pounds per square inch
Oil over pressure.		400 pounds per square inch
Fuel pressure rang	<i>ζ</i> e	0 to 10 pounds per square inch
Pressure connectio	on	approximately 21/ pounds
Dial size		23/ inches
Dial Size		approximately 2 <sup>3</sup> / inches
Capillary length		8 feet
ARMY		
A. E. REFERENCE NU	IMBER · 61.2250	
SPECIFICATIONS:	JMDER. 01-3550	
Detail		
Superseded	es este entres ent tres preses par este este	94-27824
TYPE DESIGNATION	1: B-2	
A. S. C. STOCK NUMB		
TECHNICAL ORDER	NUMBER: Refer to chart.	
	JS: Not under procurement for init	tial installation. Superseded by type B-7, A. E. R.
number 61-3650.		
SHIPPING DATA:		approximately 2 pounds
Dimensions of any	••••••••••••••••••••••••••••••••••••••	approximately 5 pounds approximately 7 by 5 by 10 inches
Dimensions of car		approximately 1 by 5 by 10 menes

## NAVY

There is no Navy equivalent for this item.

#### MODELS BELOW ARE INTERCHANGEABLE Models are used in services as noted in column 3 A-Army, N-Navy, B-British, C-Commercial

Manufacturer's Air Service British Army Technical Order Number Manufacturer Part and Drawing Number Command Stock Number Reference Number Used By N-919-8 6100149500 05-75-1 106A/890 Manning, Maxwell & Moore, Inc. A-B AW-23/4-15-8 AW-23/4-17-8 United States Gauge Co. A-B 6100149000 05-75-1 106A/890 С



AN DRAWING NUMBER: AN5774

TYPE DESIGNATION: Former type B-7.

A. S. C. STOCK NUMBER: See chart column 7.

**TECHNICAL ORDER NUMBER: 05-75-1** 

**PRODUCTION STATUS: Under procurement.** 

SHIPPING DATA: Shipped in carton approximately 7 by 5 by 10 inches.

## NAVY

SPECIFICATIONS:

Detail AN-G-17 Superseded BuAer Specs. SQ-76, SQ-77

AN DRAWING NUMBER: AN5774-supersedes BuAer drawing number 6638.

F. S. S. C. STOCK NUMBER: See chart column 6.

PROCUREMENT DATA: Standard. G. F. E.-Order through A. S. O. by F. S. S. C. number.

(Continued on Page 8)

Manufacturer	Manufacturer's Part and Drawing Number	Used By	AN Part Numbers	A. E. Reference Number	F. S. S. C. Number	A. S. C. Stock Number	British Reference Number	Inter- change- ability	Remarks
Moto Meter Gauge & Equipment Division	9543-A-8 9754-A-8 9779-A-8	A-B A-B C	AN5774-8 AN5774-8	61-3650 61-3650		6100153869 6100153866	106A/540 106A/540	* * *	
	10057-A-8 10229-A-8 10281-A-8	A-B A-B N-B	AN 5774-8 AN 5774-8 AN 5774-8	61-3650 61-3650	88-G-1000	6100153867 6100153869-2	106A/540 106A/540 106A/540	* *	
Manning, Maxwell & Moore, Inc.	6546-12A-8 6548-73A-8 6548-96A-8	B-C A-B B-C	AN 5774-8	61-3650		6100143865	106A/540 106A/540	* * *	
United States Gauge Co.	AW-2 3/4-19-L-8 AW-2 3/4-19-T-8 AW-2 3/4-19-Y-8 AW-2 3/4-19-AF-8 AW-2 3/4-19-AF-8 AW-2 3/4-19-AG-8 AW-2 3/4-19-AH-8 AW-2 3/4-19-AD-8	C B-C C C A A-B	AN 5774-8 AN 5774-8	61-3650 61-3650			106A/540 106A/582 106A/540	* * * * * * *	⅔s-20 thread connections. Fuel pressure 0-20 PSI.
Moto Meter Gauge & Equipment Division	9543-A-15 9754-A-15 9779-A-15 10057-A-15 10229-A-15 10281-A-15	A-B A-B C A-B A-B N-B	AN5774-15 AN5774-15 AN5774-15 AN5774-15 AN5774-15	61-3950 61-3950 61-3950 61-3950	88-G-1007	6100153873 6100153874 6100153874-4	106A/720 106A/720 106A/720 106A/720 106A/720	** ** ** ** **	
Manning, Maxwell & Moore, Inc.	6546-12A-15 6548-73-15 6548-73A-15 6548-96A-15	B-C A-B A-B B-C	AN5774-15 AN5774-15 AN5774-15 AN5774-15	61-3950 61-3950		6100153872 6100153872-3	106A/720 106A/720 106A/720 106A/720	** ** ** **	
Jnited States Gauge Co.	AW-2 3/4-19-L-15 AW-2 3/4-19-T-15 AW-2 3/4-19-Y-15 AW-2 3/4-19-AF-15 AW-2 3/4-19-AG-15 AW-2 3/4-19-AH-15 AW-2 3/4-19-AH-15 AW-2 3/4-19-AD-15	C A-B-C B-C C C A-B A-B	AN5774-15 AN5774-15 AN5774-15 AN5774-15	61-3950 61-3950 61-3950		6100153871-6 6100153871-4	106A/720 106A/720 106A/720 106A/720	** ** ** ** **	7∕16-20 thread connections. Fuel pressure 0-20 PSI.
Moto Meter Gauge & Equipment Division	9543-A-22 9754-A-22 9779-A-22 10057-A-22 10229-A-22 10281-A-22	A-B A-B C A-B A-B B-C	AN5774-22 AN5774-22 AN5774-22 AN5774-22	61-4100 61-4100 61-4100 61-4100		6100153876 6100153876-5 6100153876-6	106A/1332 106A/1332 106A/1332 106A/1332	*** *** *** *** ***	
Manning, Maxwell & Moore, Inc.	6546-12A-22 6548-73-22 6548-73A-22 6548-96A-22	B-C A-B A-B B-C	AN5774-22 AN5774-22	61-4100 61-4100		6100153875	106A/1332 106A/1332 106A/1332 106A/1332	*** *** ***	
Jnited States Gauge Co.	AW-2 3/4-19-L-22 AW-2 3/4-19-T-22 AW-2 3/4-19-V-22 AW-2 3/4-19-AF-22 AW-2 3/4-19-AG-22	C A-B-C B-C C C	AN5774-22	61-4100		6100153874-35	106A/1332 106A/1332	*** *** *** *** ***	
	AW-2 3/4-19-AH-22 AW-2 3/4-19-AD-22	A-B A-B	AN5774-22 AB5774-22	61-4100 61-4100		6100153874-3	106A/1332 106A/1332		7/16-20 thread connections. Fuel pressure 0-20 PSI.

INTERCHANGEABILITY AS NOTED BY NUMBERS IN COLUMN 9 Models are used in services as noted in column 3

(RESTRICTED)

(RESTRICTED)

GAGE

UNIT-

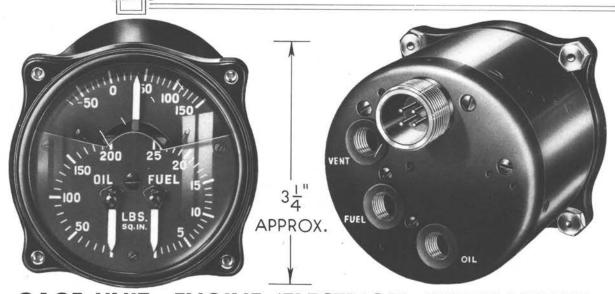
CAPILLARY

THERMOMETER

ENGINE

\*8 foot lengths. All interchangeable within their own group, but not interchangeable with those marked \*\* or \*\*\*, because of length. \*\*15 foot lengths. All interchangeable within their own group, and with those marked \*, but not with those marked \*\*\*, because of length. \*\*\*22 foot lengths. Interchangeable with all within their own group, and, where none of the other groups are available, may be used in place of those marked \* or \*\*.

#### ENGINE GAGE UNITS INSTRUMENTS - ENGINE



## GAGE UNIT—ENGINE (ELECTRICAL THERMOMETER) AN5773-1 FORMER ARMY TYPE B-8 F. S. S. C. NUMBER 88-G-1020

NAMES: Engine (electrical thermometer) gage unit Engine gage unit

Gage—engine unit Unit—engine gage (Navy)

DESCRIPTION: This type AN5773-1 engine gage unit is a combination fuel pressure, lubricating oil pressure and lubricating oil temperature gage.

CHARACTERISTICS:

Markings	fluorescent
Temperature range	$-70^{\circ}$ to $+150^{\circ}$ centigrade
Oil pressure range	.0 to 200 pounds per square inch
Oil over pressure	. 600 pounds per square inch
Fuel pressure range	
Pressure connections	three $\frac{1}{8}$ inch internal pipe thread
Weight	approximately 11/8 pounds
Dial size	$.2\frac{3}{4}$ inches diameter
Depth	approximately 31/2 inches
Thermometer (electrical plug)	AN3106-16S-1S
Thermometer (bulb)	AN5525
Voltage	

RELATIONSHIP OF PARTS: Used with:

Resistance thermometer bulb AN5525-2, A. E. Reference Number 61-8901

## ARMY

A. E. REFERENCE NUMBER: 61-4200 SPECIFICATIONS: Detail......AN-G-18 Superseded.......94-27423 AN DRAWING NUMBER: AN5773 TYPE DESIGNATION: AN5773-1 (former Army type B-8) PRODUCTION STATUS: Under procurement. SHIPPING DATA: Shipped as a complete unit.

#### NAVY

TYPE DESIGNATION: AN5773-1 SPECIFICATIONS: Detail.....AN-G-18 Superseded.....BuAer Spec. SQ-103 AN DRAWING NUMBER: AN5773 F. S. S. C. STOCK NUMBER: 88-G-1020 PROCUREMENT STATUS: Standard. G. E. F. -Order through A. S. O. by F. S. S. C. number.

#### MODELS BELOW ARE INTERCHANGEABLE Models are used in services as noted in column 3 A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer Manufacturer's Drawing Number	
Moto Meter Gauge & Equipment Division	10322-A	A-N
Thomas A. Edison, Inc.	33351	A-N
United States Gauge Co.	AW-2¾-28-F AW-2¾-28-E	A-N C

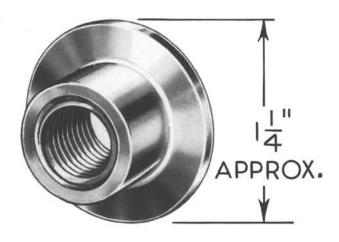
## FUEL MIXTURE INDICATORS

The fuel mixture indicator is an instrument which continuously shows, through analysis of the exhaust gases of the engine, the proportion of gasoline and air in the fuel mixture entering the airplane engine. Through its use the pilot is enabled to set his carburetor mixture controls so that the mixture is not lean enough to injure the engine and not rich enough to cause high fuel consumption.

The assembly consists of an indicator mounted on the instrument panel and an analysis cell mounted in the engine nacelle; there are also sampling tubes mounted in the exhaust pipe and connected by tubing to the analysis cell, to convey the exhaust gas sample. The sampling tubes are threaded into small flanges welded into the engine exhaust stack; one faces upstream and collects samples of gas continuously, the other faces downstream and returns the analyzed gas to the exhaust pipe.

The analysis cell has four sensitive elements, of equal electrical resistance, arranged as a simple Wheatstone bridge. One pair of the elements is exposed to the exhaust gas as it comes from the sampling tube, and the other pair of elements is exposed to air. The thermal conductivity of the exhaust gas varies as the fuel/air ratio varies, and such difference in the thermal conductivity will cause a corresponding change in the electrical resistance of the pair of elements of the Wheatstone bridge which are exposed to the exhaust gas. Hence, when a change occurs in the fuel/air ratio, an unbalance in the Wheatstone bridge results, causing a movement of the pointer in the indicator.

There are indicator assemblies for a single engine and for dual engines. The single engine assembly consists of one analysis cell, one indicator with a single pointer and two sampling tubes. The dual engine assembly has two analysis cells, one dual indicator and four sampling tubes.



FLANGE-MOUNTING

## NAME: Mounting flange

DESCRIPTION: This flange is welded to the exhaust manifold of an airplane engine, and receives the sampling tube of the fuel mixture assembly.

CHARACTERISTICS:

Size  $1\frac{1}{4}$  inches outside diameter,  $\frac{3}{8}$  inch thick

RELATIONSHIP OF PARTS: Used with: Fuel mixture indicator assemblies.

## ARMY

A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete unit.

## NAVY

There is no Navy equivalent for the Army item.

	Army, N-Navy, B-Brit			Army Technical
	Drawing Number	Ву	Stock Number	Order Number
Charles Engelhard, Inc.	H-321	А	6100105350	05-3C-1
Cambridge Instrument Co.	10221	A	6100105300	05-3AB-1 05-3AA-1

#### MODELS BELOW ARE INTERCHANGEABLE Aodels are used in services as noted in column 3 A-Army, N-Navy, B-British, C-Commercial

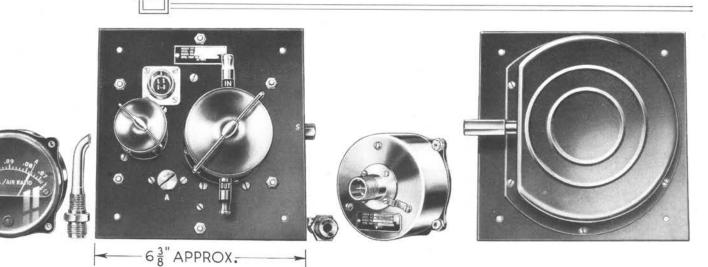
(RESTRICTED)				RE INDICA ENTS — ENG		
	6 <sup>3</sup> TOR ASS			FUEL A		RE
MAMES. Fuel n	nixture indicator assem		2020/07	Analyzer—exhau	st aas	
Exhau DESCRIPTION CHARACTERI	st gas analyzer : This assembly consis STICS: Dimensions:	ts of an indica	itor, an	analysis cell and	two sampling	tubes.
Samph Weight Voltage Markings	P OF PARTS: Used		· · · · · · · · · · · · · · · · · · ·	approximately 3 approximately 4 12 volts, direct c fluorescent mater	pounds urrent ial	acn
ARMY				A. E. Reference	Number 61-49	01
SPECIFICATIO General Detail TYPE DESIGN A. S. C. STOCK TECHNICAL O PRODUCTION indicator	IATION: A-7 NUMBER: Refer to ORDER NUMBER: F STATUS: Not under assembly.	chart. Refer to chart. procurement f	or initia	5		100 000
SHIPPING DA tubes.	TA: Shipped as a com	plete assembl	y includ	ling indicator, an	alysis cell and	i two sampling
	y equivalent for this it	em.				
	ALL MODELS I Models are used	(1997)	is noted	in column 4		
Manufacturer		Manufacturer's Part and	Used	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
-	Consisting of: ASSEMBLY	11606	By A-B	6100214765	05-3AA-1	106A/1445
	Indicator	11622		6100214767		106A/1446

	Dr	awing Number	By	Stock Number	Order Number	Number
	Consisting of: ASSEMBLY	11606	A-B	6100214765	05-3AA-1	106A/1445
	Indicator	11622		6100214767		106A/1446
	Analysis cell	11627		6100046795		106A/1447
Cambridge Instrument Co.	2 sampling tubes	10219		6100458250		+106AH/162
	Consisting of: ASSEMBLY	12661	A-B	6100214755	05-3AA-1	106A/1445
	Indicator	11622-1		6100214767-5		106A/1450
	Analysis cell	11627		6100046795		106A/1447
	2 sampling tubes	10219		6100458250		106AH/162
	Consisting of: ASSEMBLY	102341	A-B	6100214768	05-3C-1	106A/1440 *
Charles Engelhard, Inc.	Indicator	H-376		6100214760		106A/1113
	Analysis cell	R-33		6100046792		106A/1441
	2 sampling tubes	H-323		6100458550		106AN/46

(RESTRICTED)

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## FUEL MIXTURE INDICATORS INSTRUMENTS - ENGINE



#### INDICATOR ASSEMBLY-FUEL MIXTURE ARMY TYPE A-7A

NAMES: Fuel mixture indicator assembly

Analyzer-exhaust gas

Exhaust gas analyzer DESCRIPTION: This assembly consists of an indicator, an analysis cell and two sampling tubes. CHARACTERISTICS: Dimensions:

Indicator										
Indicator		• •		4 4						

Indicator	approximately $3\frac{1}{4}$ by $3\frac{1}{4}$ by $2\frac{7}{8}$ inches
Analysis cell	.approximately $6\frac{3}{8}$ by $6\frac{3}{8}$ by 5 inches
Sampling tube	approximately 3 inches long, each
Weight	approximately 3 <sup>1</sup> / <sub>4</sub> pounds
Voltage	.12 volts, direct current
Markings	fluorescent material
RELATIONSHIP OF PARTS: Used with:	
Two fuel mixture indicator flanges	A. E. Reference Number 61-4901

## ARMY

A. E. REFERE	NCE	NUMBER:	61-4910

SPECIFICATIONS:

General	$\mathbf{C}$
Detail 94-27992-	B
Superseded	A
TYPE DESIGNATION: A-7A	
A. S. C. STOCK NUMBER: Refer to chart.	

TECHNICAL ORDER NUMBER: Refer to chart. PRODUCTION STATUS: Under procurement. Supersedes Army type A-7 assembly.

SHIPPING DATA: Shipped as a complete assembly including an indicator, analysis cell and two sampling tubes.

## NAVY

There is no Navy equivalent for this item.

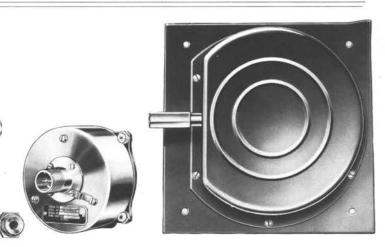
ALL MODELS BELOW ARE INTERCHANGEABLE Models are used in services as noted in column 4 A-Army, N-Navy, B-British, C-Commercial

Manufacturer		Manufacturer's Part and rawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
	Consisting of: ASSEMBLY	13081	A-B	6100214772	05-3AA-1	106A/1424
	Indicator	13077		6100214773		106A/1448
	Analysis cell	13080		6100046850		106A/1449*
	2 sampling tubes	10219		1600458250		106AH/162
Cambridge Instrument Co.	Consisting of: ASSEMBLY	13451	A-B			106A/1424
	Indicator	13439				106A/1451
	Analysis cell	13080		6100046850		106A/1449*
	2 sampling tubes	10219		6100458250		106AH/162
	Consisting of: ASSEMBLY	102341	A-B	6100214768	05-3C-1	106A/1440
	Indicator	H-376		6100214760		106A/1113
Charles Engelhard, Inc.	Analysis cell	R-33		6100046792		106A/1441
	2 sampling tubes	H-323		6100458550		106AN/46

Former A. S. C. Stock Number 6100046025.



## FUEL MIXTURE INDICATORS INSTRUMENTS - ENGINE



63" APPROX.

#### INDICATOR ASSEMBLY-FUEL MIXTURE ARMY TYPE B-5A

NAMES: Fuel mixture indicator assembly

Analyzer-exhaust gas

Exhaust gas analyzer

DESCRIPTION: This assembly consists of an indicator, an analysis cell, and two sampling tubes.

D LIC CAVAA			abberrary	00440
CHARAC	TERIST	TICS:	: Dimensi	ions:

Indicator	oximately $3\frac{1}{4}$ by $3\frac{1}{4}$ by $2\frac{7}{8}$ inches
Analysis cellappr	oximately $6\frac{3}{8}$ by $6\frac{3}{8}$ by 5 inches
Sampling tubeappr	oximately 3 inches long
Weightappr	oximately $3\frac{1}{4}$ pounds
Voltage	olts, direct current
Dial markingsfluor	escent luminescent material
LATIONSHIP OF PARTS: Used with:	

REL Two fuel mixture indicator flanges, A. E. Reference Number 61-4901

## ARMY

A. E. REFERENCE NUMBER: 61-4950

SPECIFICATIONS:

...94-27844-C. General..... Superseded ......94-27932-A.

TYPE DESIGNATION: B-5A A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete unit including indicator, analysis cell and two sampling tubes.

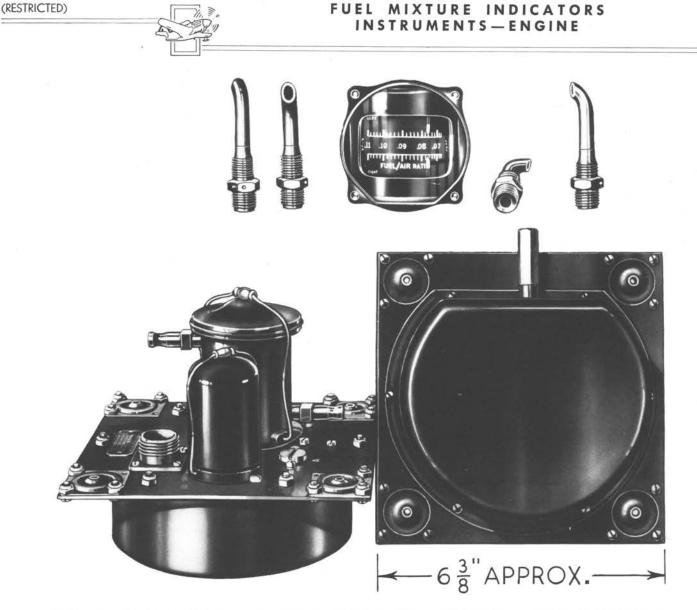
### NAVY

There is no Navy equivalent for this item.

#### ALL MODELS BELOW ARE INTERCHANGEABLE Models are used in services as noted in column 4 A-Army, N-Navy, B-British, C-Commercial

Manufacturer	100	Manufacturer's Part and rawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
	Consisting of: ASSEMBLY	13151	A-B		05-3AA-1	106A/1421
	Indicator	13077		6100214773		106A/1448
	Analysis cell	13079		6100047280		106A/1452
Cambridge Instrument Co.	Sampling tube	10219		6100458250		106AH/162
	Consisting of: ASSEMBLY	13771	A-B			106A/1421
	Indicator	13439				106A/1451
	Analysis cell	13079		6100047280		106A/1452
	Sampling tube	10219		6100458250		106AH/162
	Consisting of: ASSEMBLY	109526	A-B		05-3C-1	106A/1442
Charles Engelhard, Inc.	Indicator	H-403		6100047260		106A/1420
	Analysis cell	R-45				106A/1443
	Sampling tube	H-323		6100458550		106AN/46

\*This instrument, Army type B-5.



## INDICATOR ASSEMBLY-FUEL MIXTURE ARMY TYPE B-6

NAMES: Fuel mixture indicator assembly Exhaust gas analyzer Analyzer-exhaust gas

DESCRIPTION: This instrument consists of a dual indicator assembly, two analysis cells and four sampling tubes for use in a twin engine airplane.

## CHARACTERISTICS:

. approximately $3\frac{1}{4}$ by $3\frac{1}{4}$ by $3\frac{1}{4}$ inches
. approximately $6\frac{1}{2}$ by $6\frac{1}{2}$ by $5\frac{3}{8}$ inches
approximately 3 inches long, each
pproximately $4\frac{3}{4}$ pounds
4 volts, direct current
uorescent material

## **RELATIONSHIP OF PARTS: Used with:**

Four fuel mixture indicator flanges.....A. E. Reference Number 61-4901

(Continued on Page 16)



# INDICATOR ASSEMBLY-FUEL MIXTURE

(Continued from Page 15)

## ARMY

A. E. REFERENCE NUMBER: 61-5050

SPECIFICATIONS:

Detail......94-27933-A.

TYPE DESIGNATION: B-6

A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Not under procurement for initial installation. Superseded by Army type B-6A indicator assembly.

SHIPPING DATA: Shipped as a complete unit including an indicator assembly, two analysis cells and four sampling tubes.

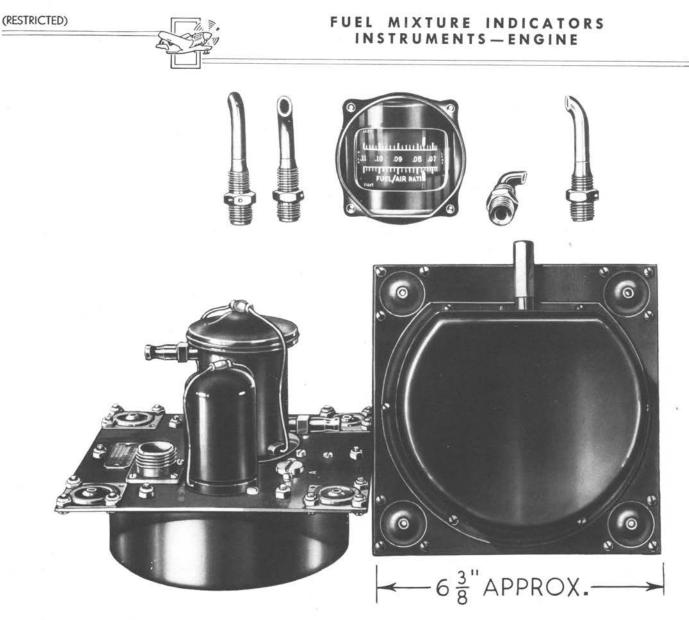
## NAVY

There is no Navy equivalent for this item.

Manufacturer		Manufacturer's Part and rawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
	Consisting of: ASSEMBLY	103094	A-B	6100216289-5	05-3C-1	106A/1188
Charles Engelhard, Inc.	1 indicator	H-378		6100216280		106A/1422
	2 analysis cells	R-34		6100047270		106A/1444
	4 sampling tubes	H-323		6100458550		106AN/46
Cambridge Instrument Co.	Consisting of: ASSEMBLY	11607	A-B	6100216285	05-3AB-1	106A/1453
	1 indicator	11609		6100216287		106A/1454
	2 analysis cells	11627		6100046795		106A/1447
	4 sampling tubes	10219		6100458250		106AH/162
	Consisting of: ASSEMBLY	12656	A-B	6100216289	05-3AB-1	106A/1453
	1 indicator	11609-1		6100216287-5		106A/1455
	2 analysis cells	11627		6100046795		106A/1447
	4 sampling tubes	10219		6100458250		106AH/162

## ALL MODELS BELOW ARE INTERCHANGEABLE Models are used in services as noted in column 4 A-Army, N-Navy, B-British, C-Commercial

\*REMARKS: This assembly is identical with Army Type B-6A indicator assembly made by this manufacturer.



# INDICATOR ASSEMBLY-FUEL MIXTURE

ARMY TYPE B-6A

NAMES: Fuel mixture indicator assembly Exhaust gas analyzer Analyzer—exhaust gas

DESCRIPTION: This assembly consists of a dual indicator, two analysis cells, and four sampling tubes.

## CHARACTERISTICS:

Voltage	
Markings	
Dimensions:	
Indicator	approximately $3\frac{1}{4}$ by $3\frac{1}{4}$ by 4 inches
Analysis cells	approximately $6\frac{1}{2}$ by $6\frac{1}{2}$ by 5 inches, each
Sampling tubes	
Assembly weight	

## **RELATIONSHIP OF PARTS: Used with:**

Four fuel mixture indicator flanges......A. E. Reference Number 61-4901.

(Continued on Page 18)



# INDICATOR ASSEMBLY-FUEL MIXTURE

(Continued from Page 17)

## ARMY

A. E. REFERENCE NUMBER: 61-5060	(j.).
SPECIFICATIONS:	
General	.94-27844-C.
Detail	.94-27933-B.
Superseded	.94-27933-C.

TYPE DESIGNATION: B-6A

A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Under procurement.

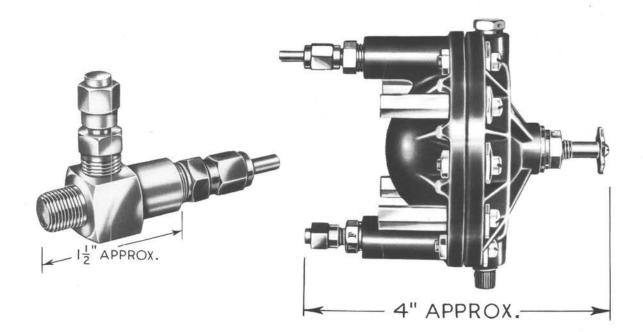
SHIPPING DATA: Shipped as a complete unit, including an indicator, two analysis cells and four sampling tubes.

## NAVY

There is no Navy equivalent for this item.

Manufacturer		Manufacturer's Part and rawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
	Consisting of: ASSEMBLY	13082	A-B	6100216295	05-3AB-1	106A/1423
	1 indicator	13078		6100216300		106A/1456
	2 analysis cells	13079		6100047280		106A/1452
Cambridge Instrument Co.	4 sampling tubes	10219		6100458250		106AH/162
	Consisting of: ASSEMBLY	13552	A-B			106A/1423
	1 indicator	13500				106A/1457
	2 analysis cells	13079		6100047280		106A/1452
	4 sampling tubes	10219		6100458250		106AH/162
	Consisting of: ASSEMBLY	103094	A-B	6100216289-5	05-3C-1	106A/1188
Charles Engelhard, Inc.	1 indicator	H-378		6100216280		106A/1422
	2 analysis cells	R-34		6100047270		106A/1444
	4 sampling tubes	H-323		6100458550		106AN/46

## ALL MODELS BELOW ARE INTERCHANGEABLE Models are used in services as noted in column 4 A-Army, N-Navy, B-British, C-Commercial



# TRANSMITTER ASSEMBLY—FUEL OR OIL PRESSURE AN5765-1 FORMER ARMY TYPE A-1

NAMES: Fuel or oil pressure transmitter assembly Transmi Pressure transmission system

Transmitter-fuel or oil

DESCRIPTION: The type AN5765-1 fuel or oil pressure transmitter, superseding the Army type A-1 hydraulic pressure transmission system, is used in aircraft fuel or oil systems for measuring and indicating pressures, providing remote indication on the instrument panel. The transmitter has a bowl, separated into two chambers by a diaphragm of corrugated, synthetic rubber material which is not affected by the action of oil or fuel.

One chamber is connected directly to the oil or fuel pressure source, and the other is part of a closed system which is connected to the indicating gage. The entire system, including the chamber, gage and connecting lines, is filled with compass liquid.

Changes in the pressure of the fuel or oil system change the position of the diaphragm, thereby transmitting the pressure in the fuel or oil system to the liquid in the sealed system. Changes in pressure are transmitted through the compass liquid to the gage and are indicated on the dial.

The pressure transmitter is installed close to the source of pressure to be measured. It is usually mounted in front of the engine firewall, in an area where the temperature does not exceed 125 degrees centigrade.

Use of this transmitter eliminates the necessity for running fuel and oil lines into the cockpit, and insures operation of gages without the time lag which might be caused by oil congealing in long lines.

#### CHARACTERISTICS:

Transmitter part number	AN5765-2
Range	$\dots \dots 0$ to 600 pounds per square inch
Pressure connections	$\dots 2$ each $\frac{1}{8}$ inch pipe thread
Weight	$\dots$ approximately $1\frac{1}{4}$ pounds
Dimensions	
Gage fitting	
Gage fitting weight	approximately 3 ounces
Gage fitting dimensions	approximately $1^{15}_{32}$ inches by $2^{1}_{2}$ by $^{3}_{4}$ inch

(Continued on Page 20)



# TRANSMITTER ASSEMBLY-FUEL OR OIL PRESSURE

(Continued from Page 19)

## ARMY

A. E. REFERENCE NUMBER: 61-2327

SPECIFICATIONS:

AN OR A. A. F. DRAWING NUMBER: AN5765

AN PART NUMBER: AN5765-1 (assembly); AN5765-2 (transmitter); AN5765-3 (gage fitting)

TYPE DESIGNATION: Former type A-1

A. S. C. STOCK NUMBER: Refer to chart.

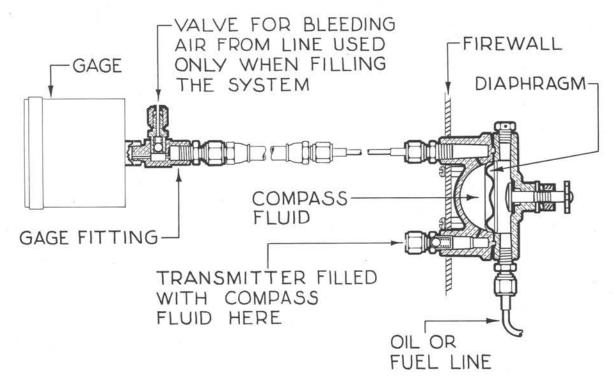
PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete unit, including transmitter and gage fitting. Dimensions of carton approximately 3½ by 3½ by 5% inches. Gross weight approximately 1 pound 6 ounces.

#### NAVY

TYPE DESIGNATION: AN5765-2 SPECIFICATIONS:

PROCUREMENT STATUS: Not yet under procurement for initial installation.



ALL MODELS BELOW ARE INTERCHANGEABLE Models are used in services as noted in column 3 A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Part and Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
King-Seeley Corp.	32600	A-N-B	6100427075	AN05-70-4	106A/1351
Minneapolis Honeywell Regulator Co.	G1000 A4 CA1	A-B		AN05-70-4	106A/1351
	G1000 A2 CA1	A-N-B	6100427675	AN05-70-4	106A/1351
Rochester Manufacturing Co.	2150	A-N-B	6100427070	AN05-70-4	106A/1351