ADDITIONAL

Service Manual

PIONEER

Q07

ORDER NO.
ARP-492-0

FM/AM DIGITAL SYNTHESIZED TUNER

TX-301 HEZ

TX-905 HEZ

- TX-301/HEZ and TX-905/HEZ differ from TX-950/KU in style design.

	TX-950/KU	TX-301/HEZ, TX-905/HEZ
Power requirement	AC 120V only	AC220V (240V)*
Destination	U.S.A.	West Germany

* Change the primary wiring of the power transformer.

The basic performance of the model TX-301/HEZ and TX-905/HEZ are the same as the model TX-950/KU. Please refer to the TX-950/KU service manual (ARP-472) with the exception of this service manual. This additional service manual is applicable to the TX-301/HEZ and TX-905/HEZ.

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1. PARTS LIST

NOTES:

- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*
  Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).
  560Ω 56 × 10¹ 561 ..... RD¼PS 5 6 1 J
  47kΩ 47 × 10³ 473 ..... RD¼PS 4 7 3 J
  0.5Ω 0R5 ..... RN2H 0 R 5 K
  1Ω 010 ..... RS1P 0 1 0 K
  Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).
  5.62kΩ 562 × 10¹ 5621 .... RN¼SR 5 6 2 1 F
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *For your Parts Stock Control, the fast moving items are indicated with the marks ★★ and ★ .*
  ★★ GENERALLY MOVES FASTER THAN ★
  This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.

The TX-301/HEZ and TX-905/HEZ are the same as the TX-950/KU with the exception of the following sections.

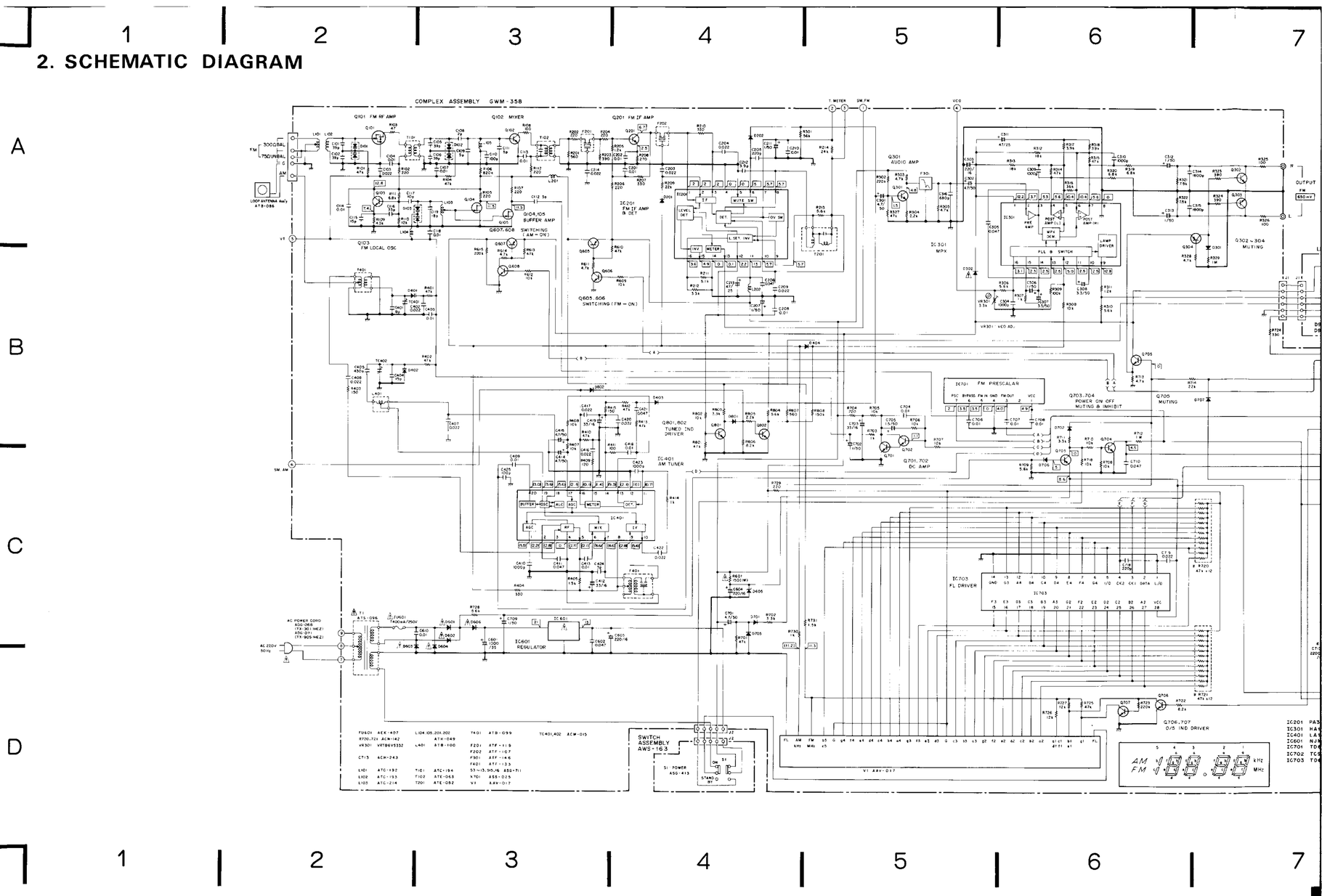
Mark	Symbol & Description	Part No.			Remarks
		TX-950/KU type	TX-301/HEZ type	TX-905/HEZ type	
	Complex assembly	GWM-346	GWM-358	GWM-358	
⚠ ★★	FU601 Fuse (0.8A/125V)	AEK-118	...	...	
⚠ ★★	FU601 Fuse (T400mA/250V)	...	AEK-407	AEK-407	
	Front panel assembly	ANM-602	ANM-658	ANM-715	
	Bonnet case	ANE-475	ANE-474	ANE-475	
	Operating Instructions (English)	ARB-602	...	...	
	Operating Instructions (English, French, German, Italian)	...	ARE-106	ARE-101	
	Leg assembly	AEC-903	AEP-016	AEC-903	
	Packing case	AHE-332	AHE-356	AHE-342	
⚠	AC power cord	ADG-073	ADG-068	ADG-071	

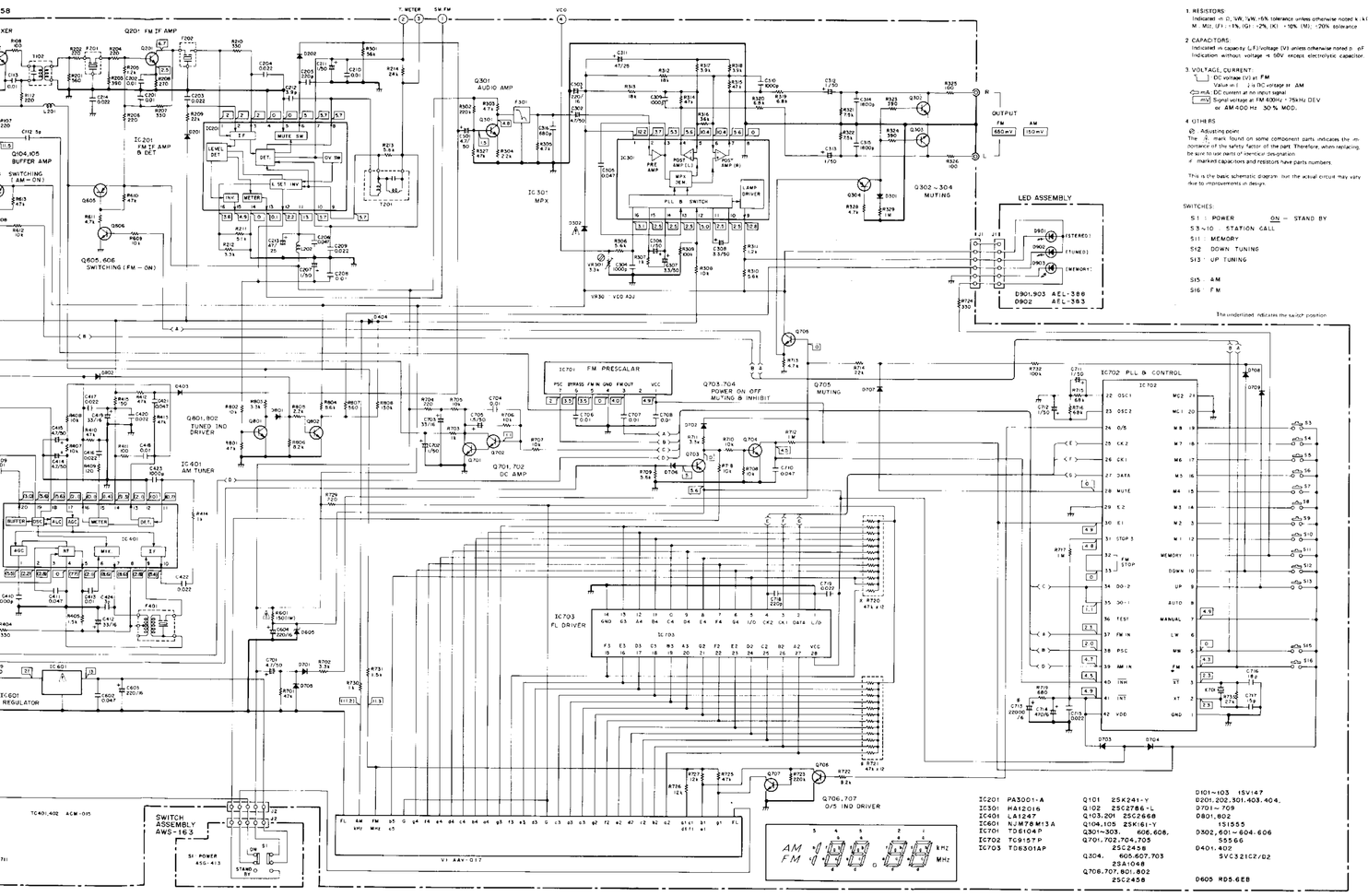
Complex Assembly (GWM-358)

The complex assembly GWM-358 (for HEZ type) is the same as the GWM-346 (for KU type) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		GWM-346	GWM-358	
★★	Q305, Q306	2SK246	...	
⚠ ★	T1 Power transformer	ATS-095	ATS-096	
★★	S17 Slide switch	ASH-034	...	
	C317, C318	CKDYB561K50	...	
⚠	R616 Carbon composition	ACN-140	...	
	R330, R331	RD1/8PM □□□J	...	
	Terminal (ANTENNA)	AKA-017	AKA-018	

2. SCHEMATIC DIAGRAM





1. RESISTORS
Indicated in Ω, W; ¼W, ±5% tolerance unless otherwise noted k: kΩ, M: MΩ; (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% tolerance

2. CAPACITORS
Indicated in capacity (μF) voltage (V) unless otherwise noted p: pF
Indication without voltage is 50V except electrolytic capacitor.

3. VOLTAGE, CURRENT
DC voltage (V) at FM
Value in ( ) is DC voltage at AM
mA DC current at no input signal
mV Signal voltage at FM 400Hz ±75kHz DEV
at AM 400 Hz 30% MOD.

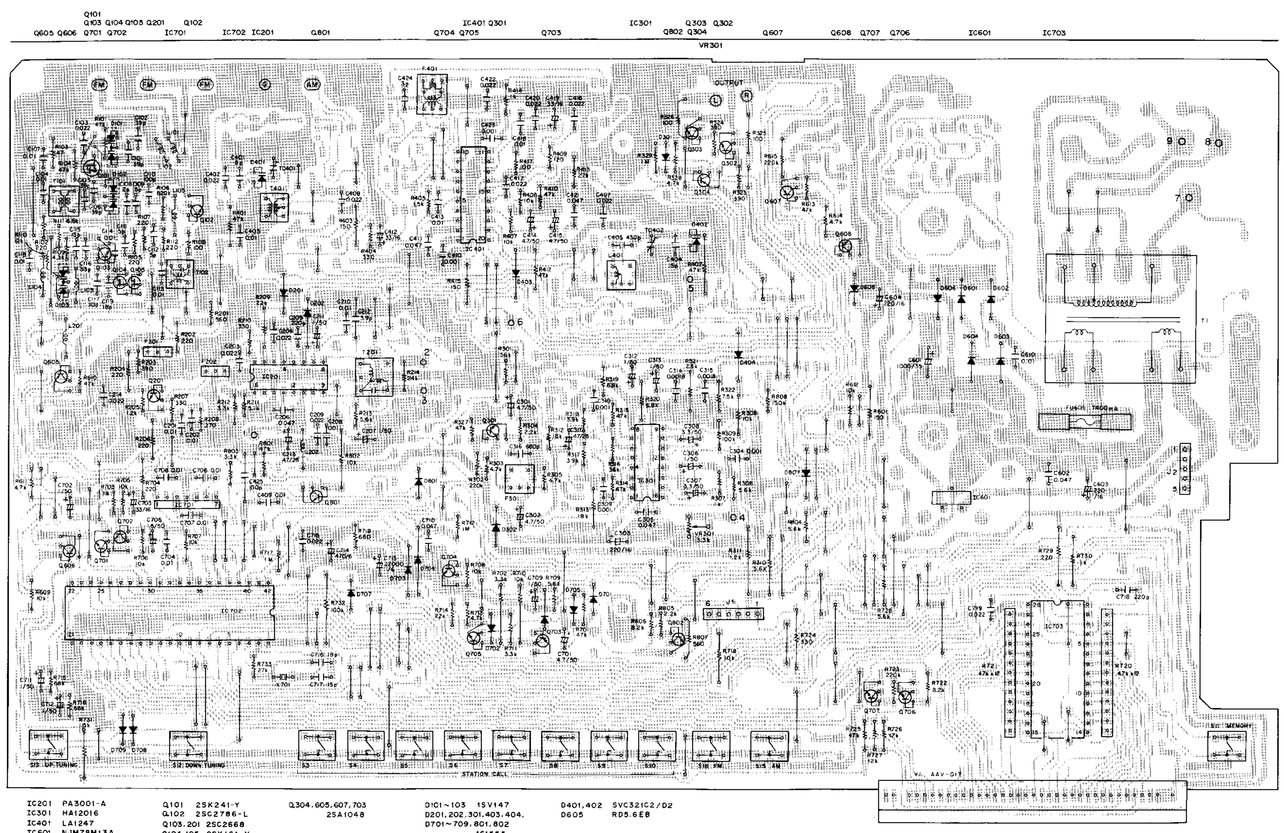
4. OTHERS
Adjusting point
The ☆ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
marked capacitors and resistors have parts numbers.

This is the basic schematic diagram but the actual circuit may vary due to improvements in design.

SWITCHES:
S1 : POWER ON — STAND BY
S3~10 : STATION CALL
S11 : MEMORY
S12 : DOWN TUNING
S13 : UP TUNING
S15 : AM
S16 : FM

The underlined indicates the switch position

3. COMPLEX ASSEMBLY (GWM-358)



IC201	PA3001-A	Q101	2SK241-Y	Q304,605,607,703	D101~103	1SV147	D401,402	SVC321C2/D2
IC301	HA12016	Q102	2SC2786-L	2SA1048	D201,202,301,403,404,		D605	RD5.6EB
IC401	LA1247	Q103,201	2SC2668		D701~709,801,802			
IC601	NJM78M13A	Q104,105	2SK161-Y		1S1555			
IC701	TD6104P	Q301~303,606,608,		Q706,707,801,802	D302,601~604,606			
IC702	TC9157P	Q701,702,704,705		2SC2458	5S566			
IC703	TD6301AP	2SC2458						