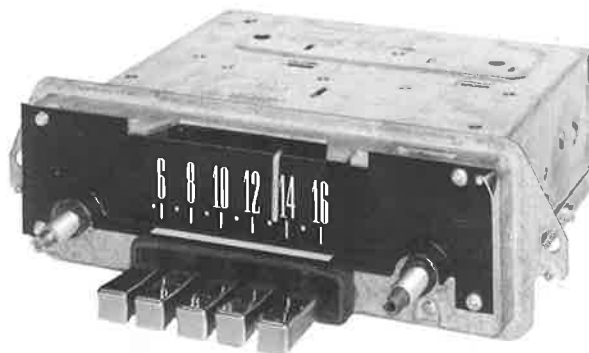




# PHOTOFACT<sup>®</sup> with

# CIRCUITRACE<sup>®</sup>

TRADE NAME : Ford Models 5TMF (1965 Ford Galaxie)  
5TMZ (1965 Ford Mustang)  
SUPPLIER : For Current Address, See Master Index.  
TYPE SET : 5 Transistor AM Receiver  
POWER SUPPLY : 12 Volt Storage Battery  
RATING : .680 Amp. @ 12.6 Volts DC  
TUNING RANGE : BROADCAST 540-1615KC



## ALIGNMENT INSTRUCTIONS

Check for specified source voltage.

Use only enough generator output to provide a usable indication.


Suggested Alignment Tools:

A1 thru A4 GENERAL CEMENT: 8606, 8606L, 8869 WALSCO: 2543, 2544, 2588

A5, A6, A7 GENERAL CEMENT: 8290, 8868, 9087 WALSCO: 2525, 2528, 2587

### PUSH-BUTTON ADJUSTMENT

1. Pull button out.
2. Tune manually to desired station.
3. Press button in firmly.
4. Repeat for remaining buttons.

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	High side thru .1mfd to point  , low side to ground.	262KC (400% Mod.)	High Freq. End Stop.	Output Meter across voice coil.	A1, A2, A3, A4	Adjust for maximum.
2.	Thru dummy (Fig. 1) to antenna receptacle.	1615KC	"	"	A5, A6, A7	"
Step 3 is not necessary unless tuner has been tampered with or associated components have been replaced. IF necessary, back tuning cores (A8, A9, A10) out of coils but not out of forms. Repeat step 2.						
3.	Thru dummy (Fig. 1) to antenna receptacle.	1000KC	Tune to Signal.	Output Meter across voice coil.	A8, A9, A10	Adjust for maximum. Repeat steps 2 & 3 until no further improvement is noted.
With radio installed in car and antenna fully extended, tune in a weak station near 1600KC and adjust A7 for maximum output.						

## REMOVAL INSTRUCTIONS

### RADIO MODEL 5TMZ (1965 Mustang)

1. Pull off knobs.
2. Use 9/16" wrench and remove nuts from control bushings.
3. Models with console: Use phillips screw driver & remove glove box.
4. Disconnect "A", Speaker, Antenna & Pilot Lite leads.
5. Use 7/16" wrench and remove nut from rear brace.
6. Remove radio from under instrument panel. Models with console: Remove thru glove box opening.

### SPEAKER REMOVAL

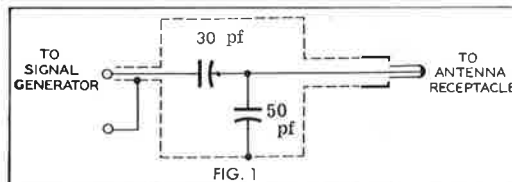
1. Use phillips screw driver and remove speaker grill.
2. Use 5/16" wrench and remove screws from speaker mounting.
3. Remove speaker thru top of instrument panel.

### RADIO MODEL 5TMF (1965 Galaxie)

1. Pull off knobs.
2. Disconnect "A", Speaker and Antenna leads.
3. Use 7/16" wrench to remove nut from rear brace, and 2 bolts holding radio to rear of instrument panel.
4. Remove radio from under instrument panel.

### SPEAKER REMOVAL

1. Use phillips screw driver and remove glove box.
2. Use 5/16" wrench and remove 4 screws from speaker mounting.
3. Remove speaker thru glove box opening.

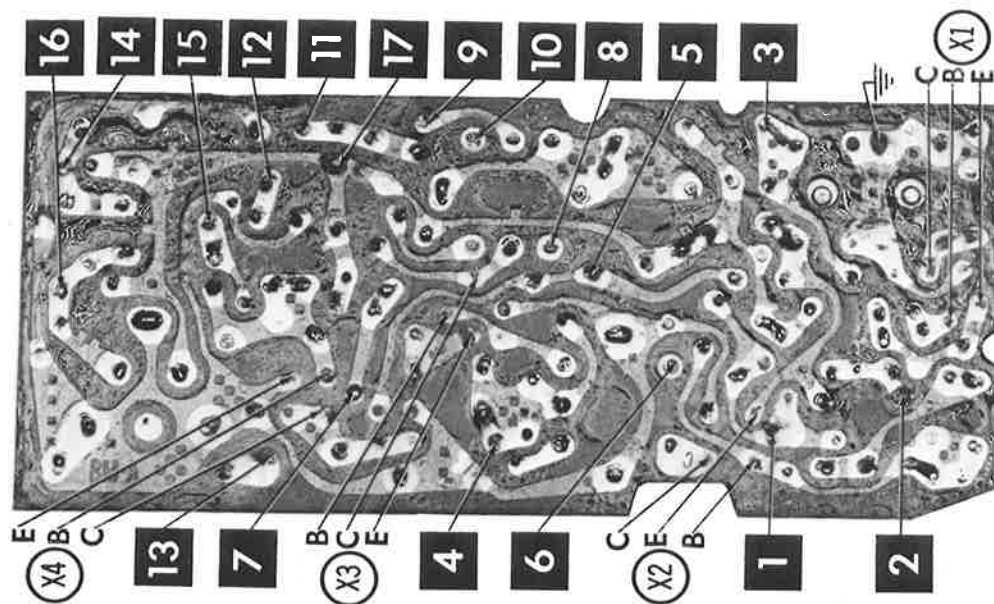
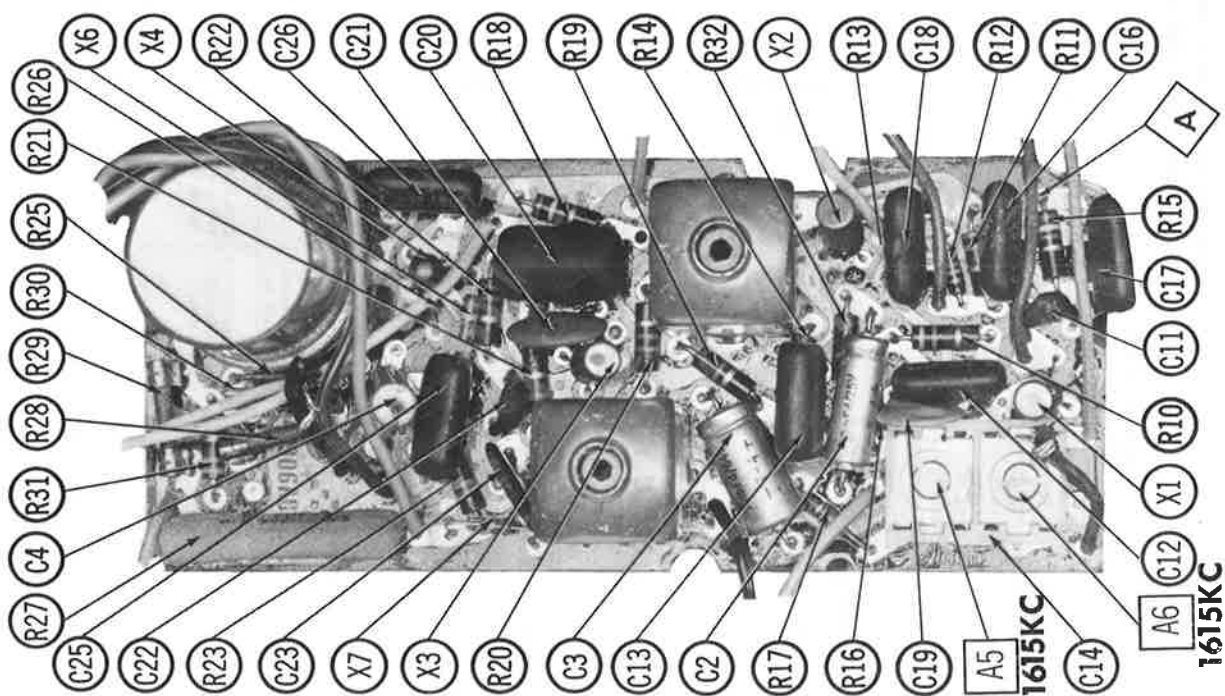


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resistors are 12 watt or less and rated 0% or 20% unless otherwise indicated.

- See parts list for alternate value or application.
- Voltage measurements taken with vacuum tube voltmeter.
- Current measurements taken with milliammeter for normal operation, no signal applied.
- Measured values are in parentheses.
- All terminals viewed from bottom unless otherwise noted.
- Numbers assigned to terminals may not be found on the unit.
- Supply voltage maintained at given value for voltage readings.
- Resistance measurements not given because of the wide variation in internal resistance of transistor.

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## PARTS LIST AND DESCRIPTION

Replacement parts shown may be superseded by the availability of newly introduced replacements.  
Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

### TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
X1	2SA72	RF Amp.	DS-25	GE-9	2N1637	PNP
X2	2SA72	Conv.	DS-25	GE-9	2N1639	PNP
X3	2SA72	IF Amp.	DS-25	GE-9	2N1638	PNP
X4	2SA72	Driver	DS-46	GE-10	2N649	PNP
X5	M576	Output	DS-520	GE-3	2N301	PNP*

\* When replacing, apply silicon grease to both sides of insulator. Tighten mounting screws securely.

### POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS			DIODES
			GENERAL ELECTRIC PART No.	MALLORY PART No.	RCA PART No.	
X6		1N139				1N344S
X7		1N139				1N344S

### ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP.	VOLT.	REPLACEMENT DATA				
			AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1A	#500	16	PWH2-02-40	CC0012	MT1-5	PFP200, 65	PCIS-217*
B	#500	16	CPE607A	NLW10-25	BL1460	TT25X10	TE-1204
C2	10	25	CPE607A	NLW10-100	MLV10-100	TT100X10	TE-1407
C3	10	64	CPE601A	NLW2-50	MT1-1	TT50X2	TL-1201
C4	1.6	25	23C41928A05				

\* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

### FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA				
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	EIMENCO PART No.	SPRAGUE PART No.
C10	110-380	#20C40844A05					
C11	330		DI-330	DD-331	LA10733-C4	CCD-331	10TS-T33
C12	100V		DBE6D5	CPR-5000J	WMF1P1	1DP-1-502	6PS-D50
C13	100V		DBE2P1			1DP-2-104	2PS-P10
C14A	250-390	#20C40254A08					
B	220-330						
C15	180	N750	DBE4S1	CPR-10000Q	C10T1E0	1DP-1-103	10TCU-T18
C16	.01	100V	DBE6D68		WMF1S1	6DP-1-682	4PS-S10
C17	.0008	100V	DBE6D5	CPR-6800J	WMF2D63	PVC4268	6PS-D68
C18	.005	100V	DBE6D5	CPR-5000J	DTN-150	PVC625	6PS-D50
C19	150	N750	N750-D1150		C10T1E0	CNTN-151	10TCU-T15
C20	.22	100V	DBE2P22		DPMS2P22	1DP-3-224	2PS-P22
C21	1	3V	DI-220	UK-105	HCC3105P	CCD-221	HY-185
C22	220		BFD-01	DD-221	LA10722-S3	CCD-103	10TS-T22
C23	.01			DD-103	EYA10S1	CCD-103	HY-S30
C24	.47			UK10-404	HCC10474Z	1DP-2-104	2PS-P10
C25	.1	100V	DBE2P1		WMF1P1	1DP-1-223	2PS-S22
C26	.022	100V	DBE2S22		WMF1S22		

# Motorola Part Number.

### CONTROLS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA			
			Motorola PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.
RLA	Tone	20K	18C42662A01			
B	Volume	10K Tap @ 2200Ω	①			
	Tone	20K	18C42662A02			
	Volume-Switch	10K Tap @ 2200Ω	②			

① Used in Model 5TMZ.

② Used in Model 5TMZ.

### RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	Motorola PART No.			IRC PART No.	WORKMAN PART No.	Motorola PART No.
R27	75Ω 4W PTC			17C40259A01					

### COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		Motorola PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	
L1	Ant. RF	①				① Part of M2, coil & mounting plate assy., (Part #1V42801A14)
L2	Osc.	①				
L3	Input IF	①				
L4	Output IF	①				
L5			BC-638	6555		
			24D40075A15	BC-639		

### FILTER CHOKE

ITEM No.	RATINGS	REPLACEMENT DATA					NOTES
		CURRENT (Measured)	DC RES	INDUCTANCE (1000 ~)	MERIT PART No.	STANCOR PART No.	
L6	.650A .8Ω		11MH		C-4093	TC-2	TY17XT

### TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO	REPLACEMENT DATA				NOTES
		Motorola PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	
T1	16:1					
			25D42045A09			

### TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	REPLACEMENT DATA				NOTES
		Motorola PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	
T2	40Ω Tap @ 8Ω					
			25C41878A01			

## PARTS LIST AND DESCRIPTION (CONTINUED)

Replacement parts shown may be superseded by the availability of newly introduced replacements. Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

### SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		Motorola PART No.	QUAM PART No.	
SP1	4" X 10" PM 832 4" X 10" PM 833	50D42931A01 50D42946A01		Model 5TMF. Model 5TMZ.

### FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA			
			Motorola PART No.	LITTELFUSE PART No.	BUSS PART No.	
M1	SFE SFE	14A 7 $\frac{1}{2}$ A ①	FUSE In Fuse Block In Fuse Block	HOLDER 307014 307017.5	FUSE SFE14 SFE7 $\frac{1}{2}$	HOLDER

① Used in Model 5TMZ.

### MISCELLANEOUS

ITEM No.	PART NAME	Motorola PART No.	NOTES
M2	Tuner	77D42629A01	AT-48"-Model 5TMF.
M3	Tuner	77D42216A04	AT-505-Model 5TMZ.
M4	Spark Plate	64A41668A02	
M4	Spark Plate	64A41668A02	

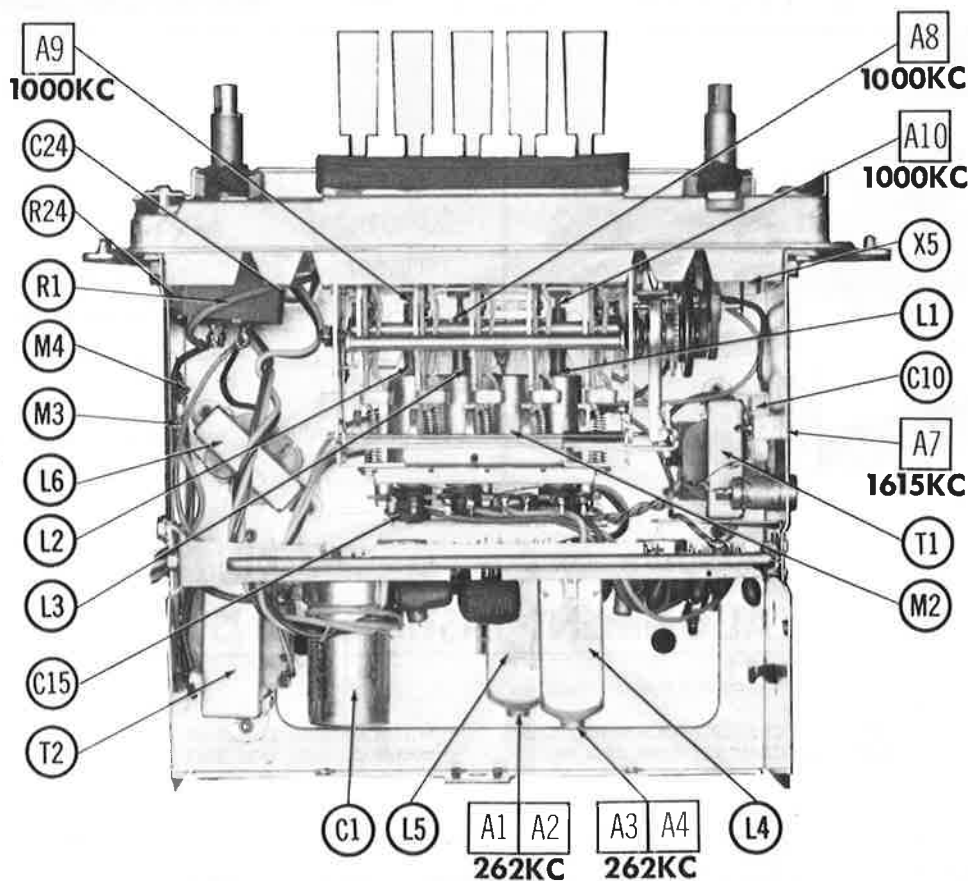
### CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Bezel-Model 5TMZ	1V42601A39	Knob, Tone or Dummy-Model 5TMZ	36C42355A01
Dial Scale-Model 5TMF	34C43321A01	Pushbutton-Model 5TMF	36C42908A01
Dial Scale-Model 5TMZ	34B42072A05	Pushbutton-Model 5TMZ	36B42070A02
Knob, Tuning or Volume-Model 5TMF	36B42932A01	Pointer Assy-Model 5TMF	52C42062A13
Knob, Tuning or Volume-Model 5TMZ	1B42226A01	Pointer Assy-Model 5TMZ	52C42062A03
Knob, Tone or Dummy-Model 5TMF	36C42952A01		

### WIRING DATA

General-use Unshielded Hook-up Wire .....	Use BELDEN No. 8530 (Solid) Available in 12 Colors
Shielded Hook-up Wire .....	8524 (Stranded) Available in 12 Colors
Rear Seat Speaker Extension Cable .....	Use BELDEN No. 8885
Bonding Strap .....	Use BELDEN No. 8782 (Stranded) Coded Parallel Leads
	Use BELDEN No. 8661 (3/8 In.) or 8670 (3/4 In.)



FORD MODELS 5TMF, 5TMZ



# PHOTOFACT<sup>®</sup> with

# CIRCUITRACE<sup>®</sup>



TRADE NAME : Ford Models 5TMS, 5TMSF  
(1965 Thunderbird)  
SUPPLIER : For Current Address, See Master Index.  
TYPE SET : 5 Transistor AM Receiver  
POWER SUPPLY : 12 Volt Storage Battery  
RATING : .680 Amp. @ 12.6 Volts DC  
TUNING RANGE: BROADCAST 540-1615KC

## ALIGNMENT INSTRUCTIONS

Check for specified source voltage.

Use only enough generator output to provide a usable indication.

Suggested Alignment Tools:

A1 thru A4  
A5, A6, A7

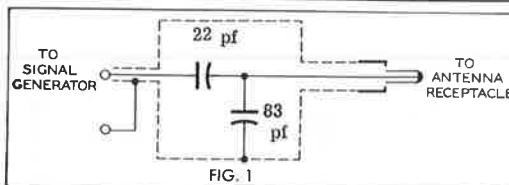
GENERAL CEMENT: 8606, 8606L, 8869  
GENERAL CEMENT: 8290, 8868, 9087

WALSCO: 2543, 2544, 2588  
WALSCO: 2525, 2528, 2587

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	High side thru .1mfd to point A, low side to ground.	262KC (400v Mod.)	High Freq. End Stop.	Output Meter across voice coil.	A1, A2, A3, A4	Adjust for maximum.
2.	Thru dummy (Fig. 1) to antenna receptacle.	1615KC	"	"	A5, A6, A7	"
Step 3 is not necessary unless tuner has been tampered with or associated components have been replaced. IF necessary, back tuning cores (A8, A9, A10) out of coils but not out of forms. Repeat step 2.						
3.	Thru dummy (Fig. 1) to antenna receptacle.	1000KC	Tune to Signal.	Output Meter across voice coil.	A8, A9, A10	Adjust for maximum. Repeat steps 2 & 3 until no further improvement is noted.
With radio installed in car and antenna fully extended, tune in a weak station near 1600KC and adjust A7 for maximum output.						

### PUSH-BUTTON ADJUSTMENT

1. Pull button out.
2. Tune manually to desired station.
3. Press button in firmly.
4. Repeat for remaining buttons.



## REMOVAL INSTRUCTIONS

RADIO 5TMS, 5TMSF (1965 Thunderbird)

1. Pry off the right side console molding. Remove the right console molding retainers.
2. Remove 2 phillips screws from right side instrument panel chrome molding.
3. Remove 4 phillips screws and 2-7/16" bolts from instrument panel. Remove 3 phillips screws from upper finish panel and remove panel.
4. Pull off knobs.
5. Use 9/16" wrench and remove nuts from control bushings.
6. Remove trim plate.

7. Repeat step 5.
8. Use 7/16" wrench and remove bolts from rear braces.
9. Disconnect "A", Antenna and Speaker leads.
10. Remove radio through right side.

### SPEAKER

1. Remove the 4 knobs and 4 phillips screws from clock housing and position the clock housing down and out of the way.
2. Remove 4 wing nuts from speaker mount.
3. Remove speaker through clock opening.

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