

## *Important Notice*

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As with any printed data, the information contained in these manuals may not be the most up-to-date available. It is provided as a convenience to our customers and all information should be verified before making repairs to an engine or component.

All service parts are sold through our Distributor Network. Visit our website ([www.wisconsinmotors.com](http://www.wisconsinmotors.com)) to locate a distributor near you.



**Wisconsin  
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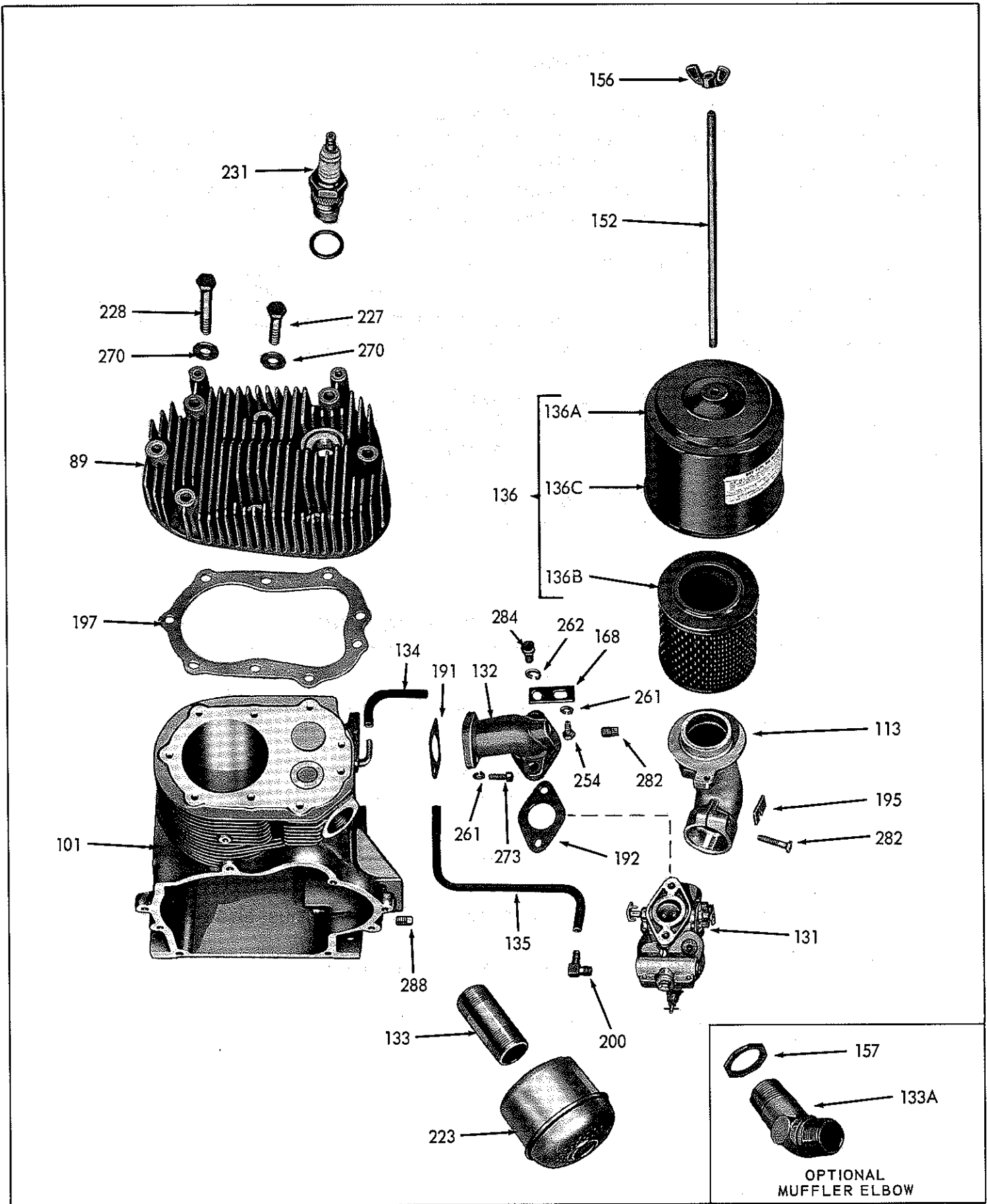
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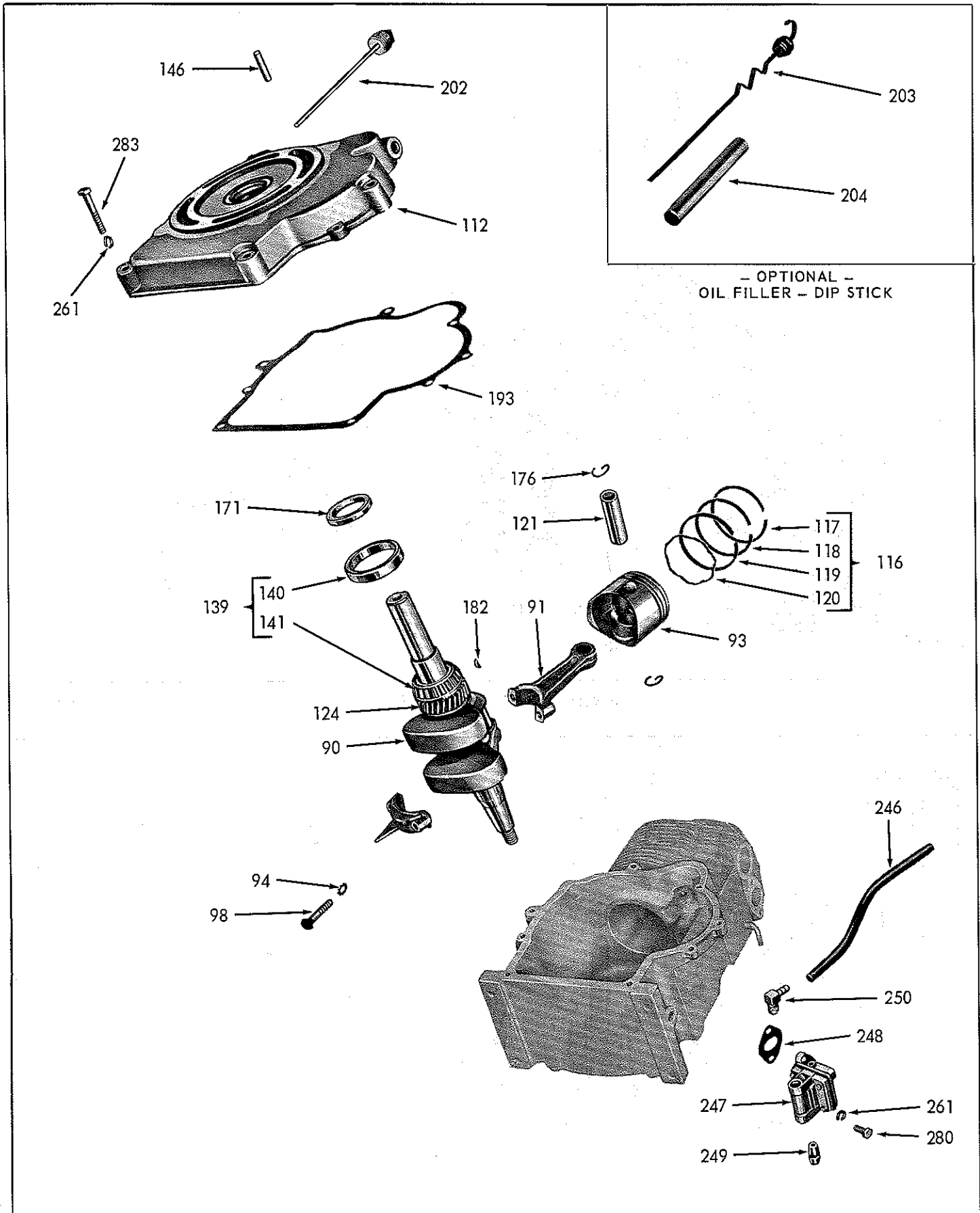
PARTS FOR ENGINE MODELS TRA-10D AND TR-10D



**CRANKCASE, CYLINDER HEAD, CARBURETOR and AIR CLEANER GROUP**

Parts are identified by reference number. See parts list for correct part number.

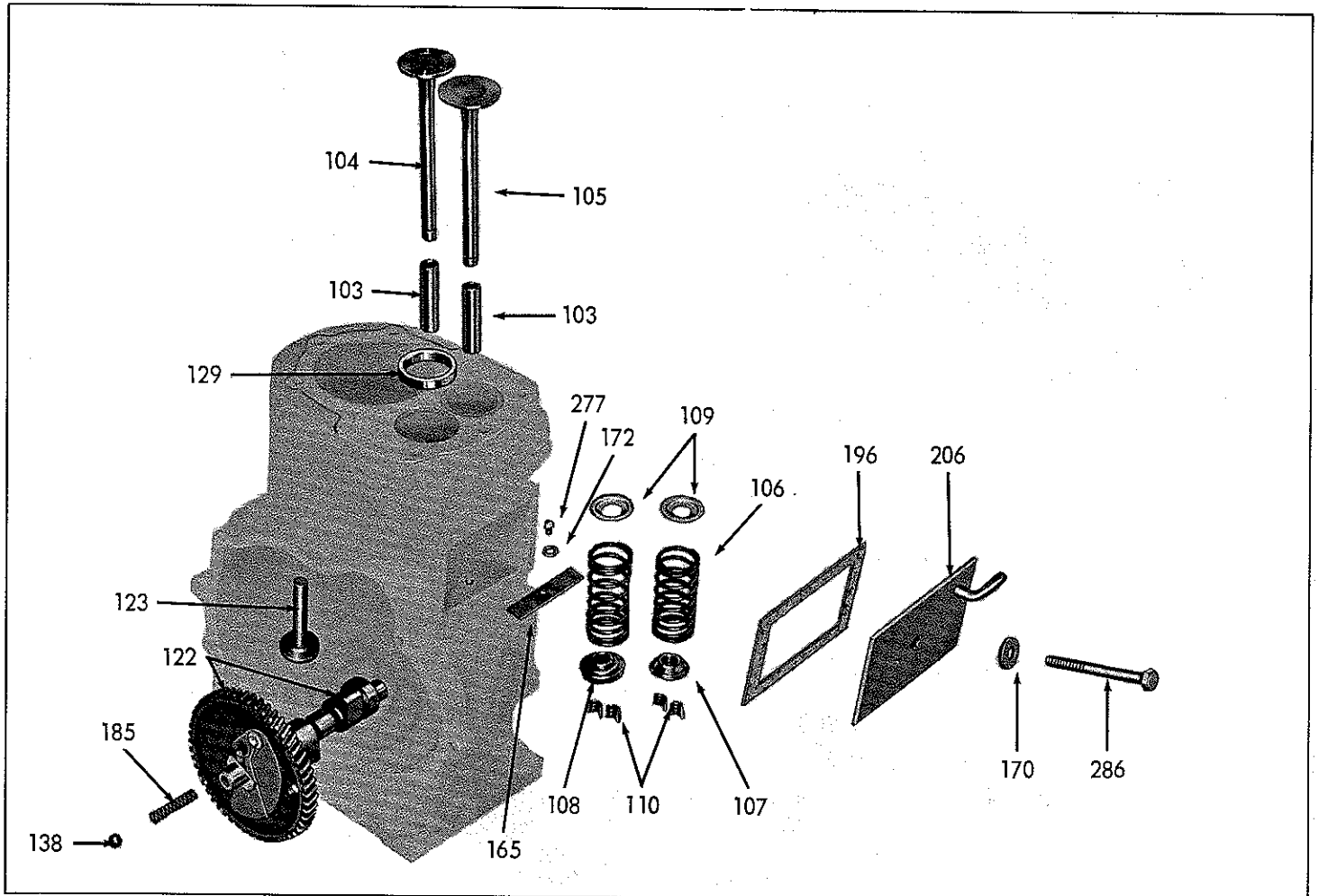
290651C



**GEAR COVER, CRANKSHAFT, PISTON, CONNECTING ROD and FUEL PUMP GROUP**

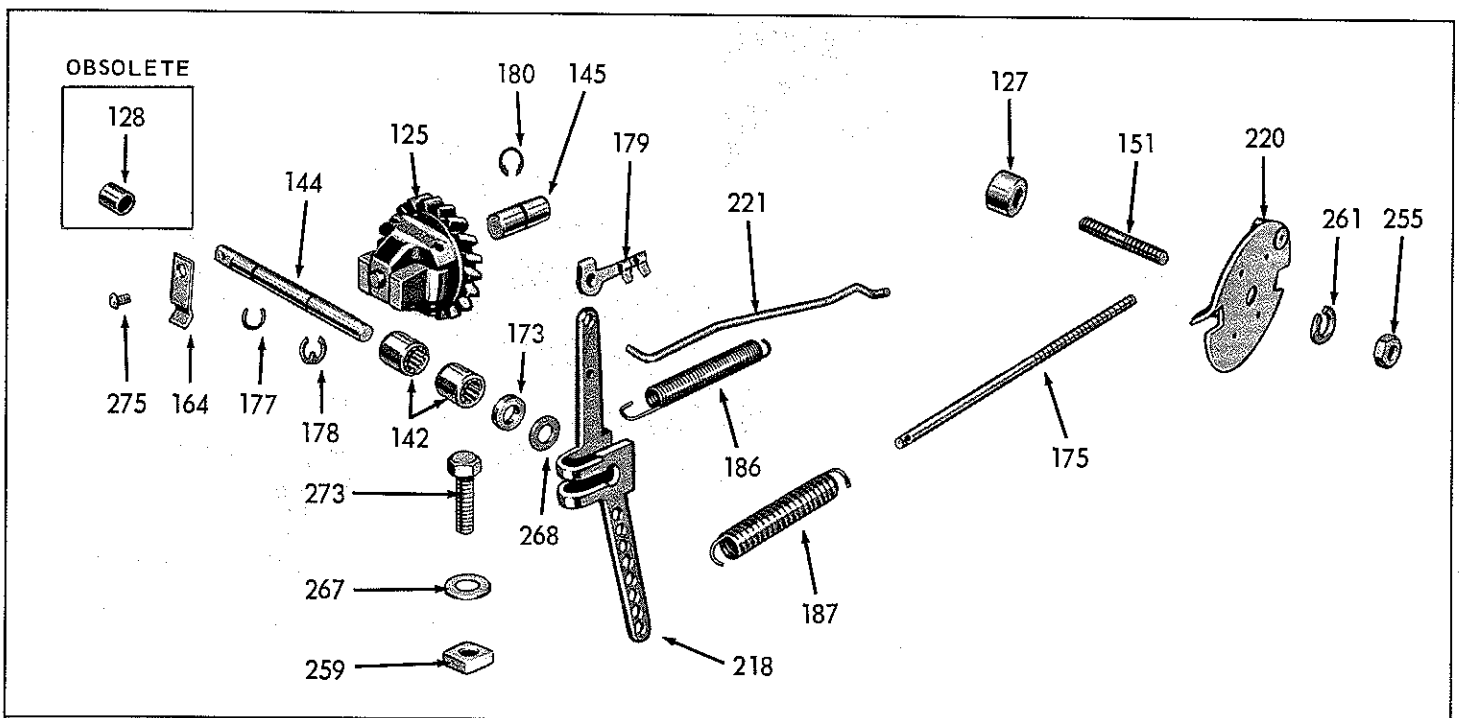
Parts are identified by reference number. See parts list for correct part number.

303972C



VALVES and CAMSHAFT GROUP

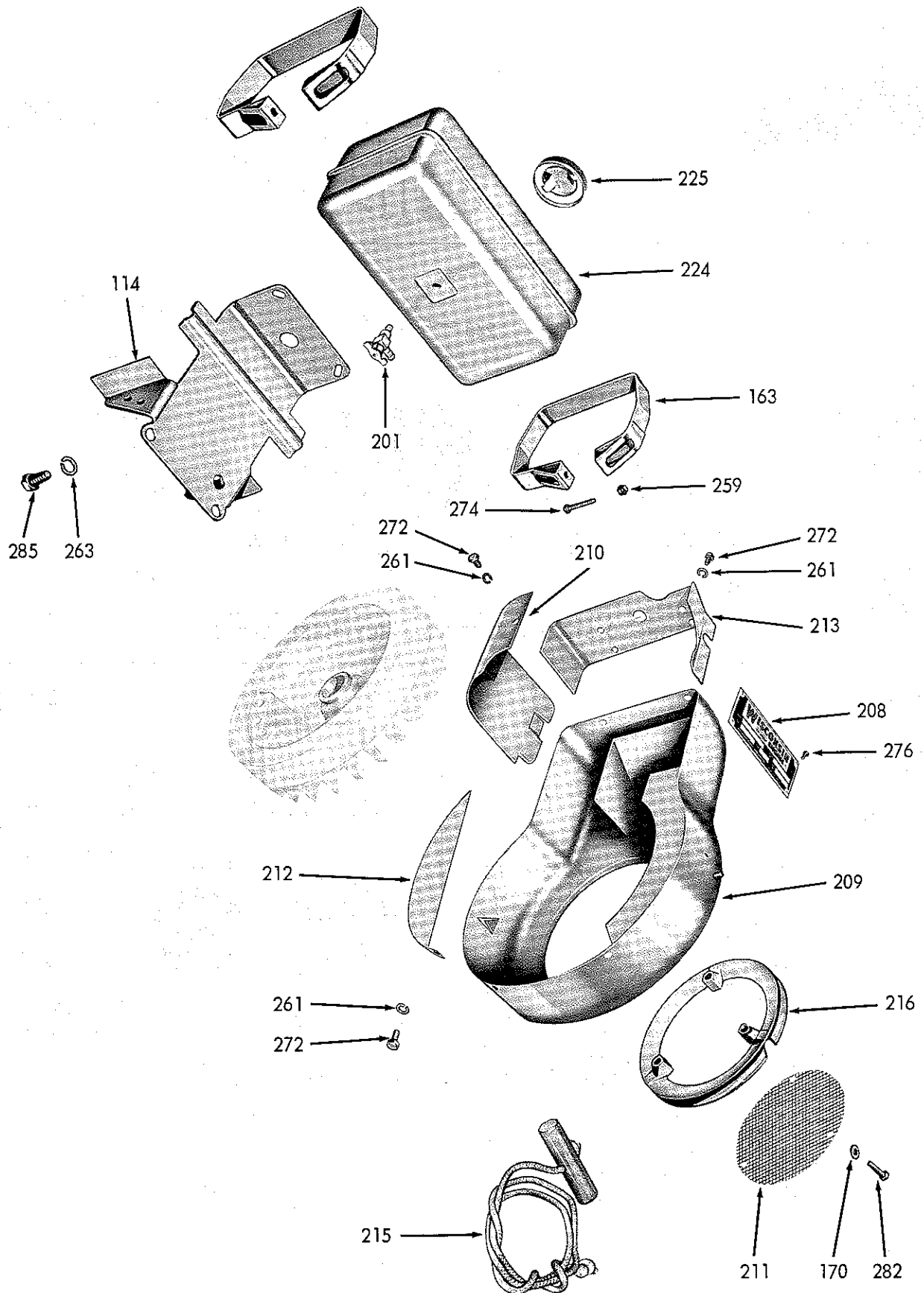
285307C-A



GOVERNOR ASSEMBLY

291042C-1

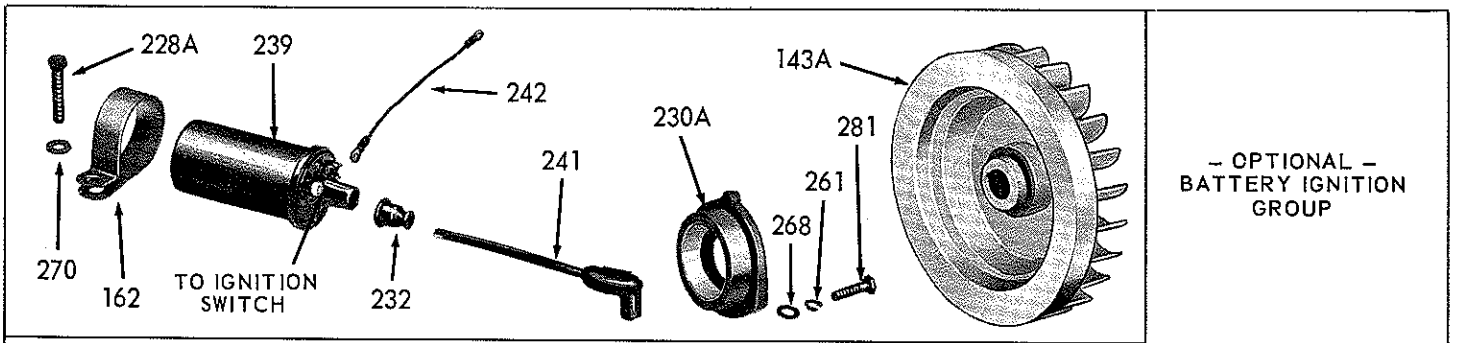
Parts are identified by reference number. See parts list for correct part number.



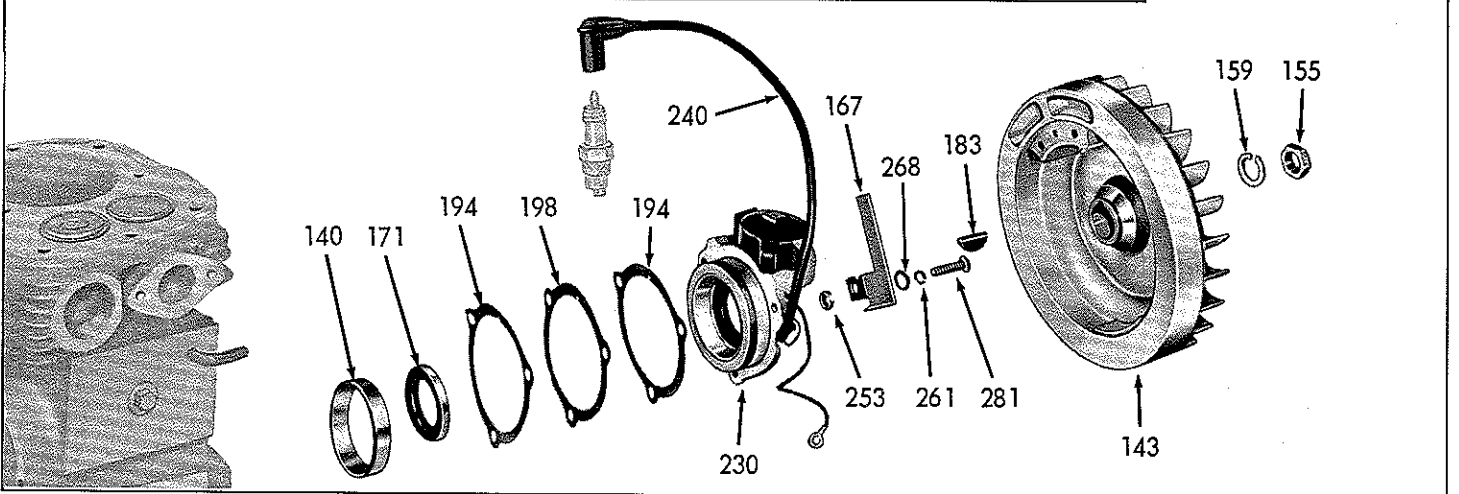
285311C-2

**AIR SHROUDING and FUEL TANK GROUP**

Parts are identified by reference number. See parts list for correct part number.

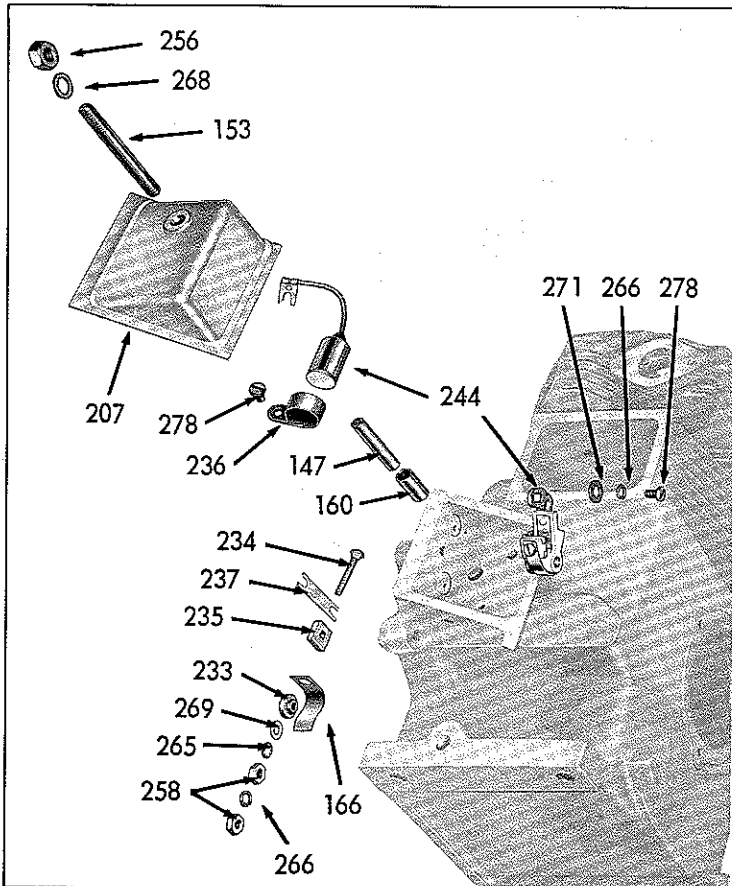


- OPTIONAL -  
BATTERY IGNITION  
GROUP



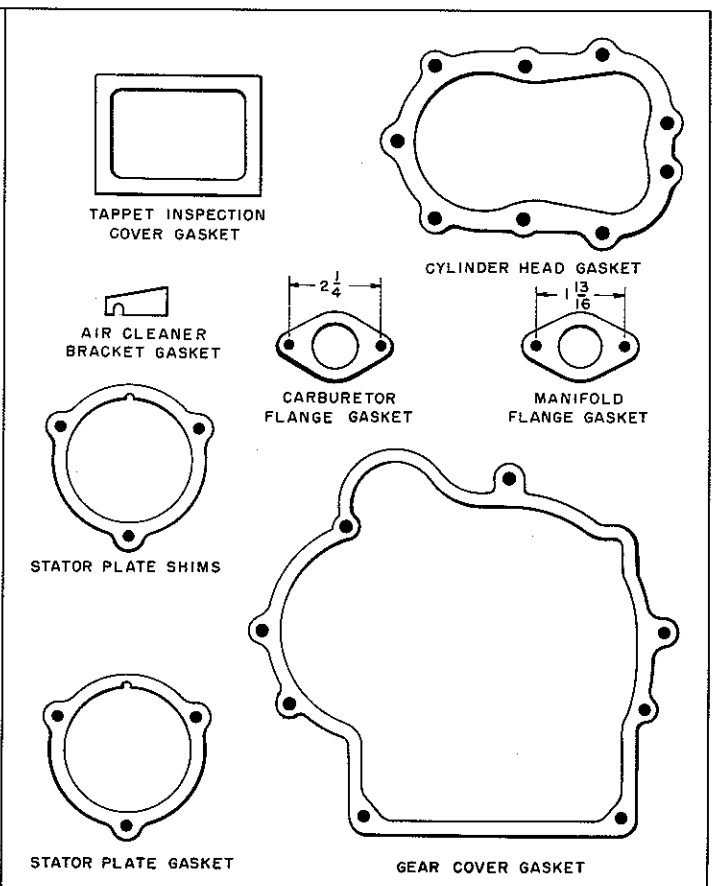
MAGNETO STATOR PLATE and FLYWHEEL GROUP

303973C



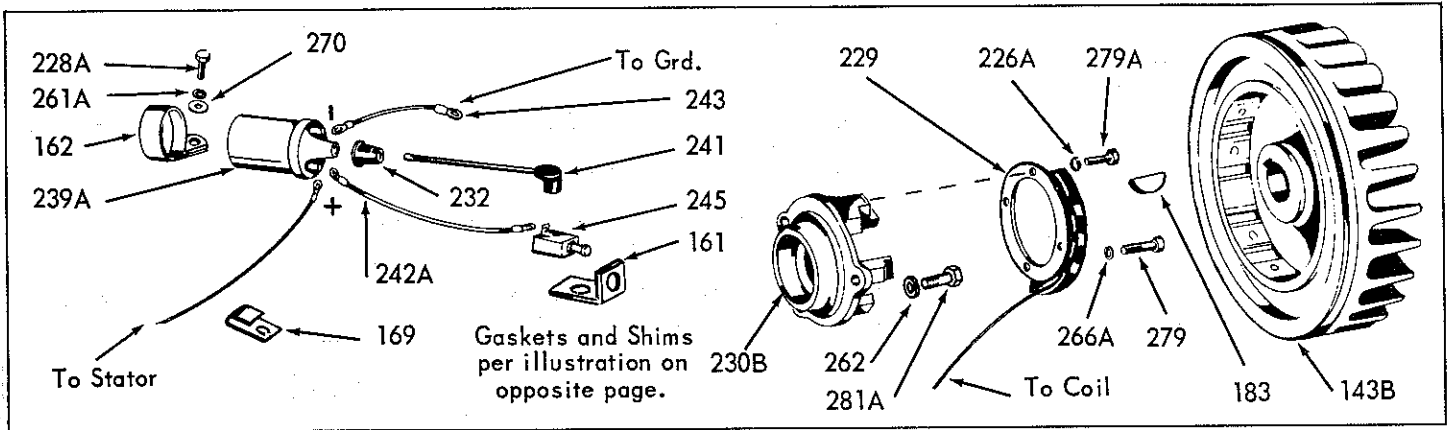
BREAKER POINT GROUP

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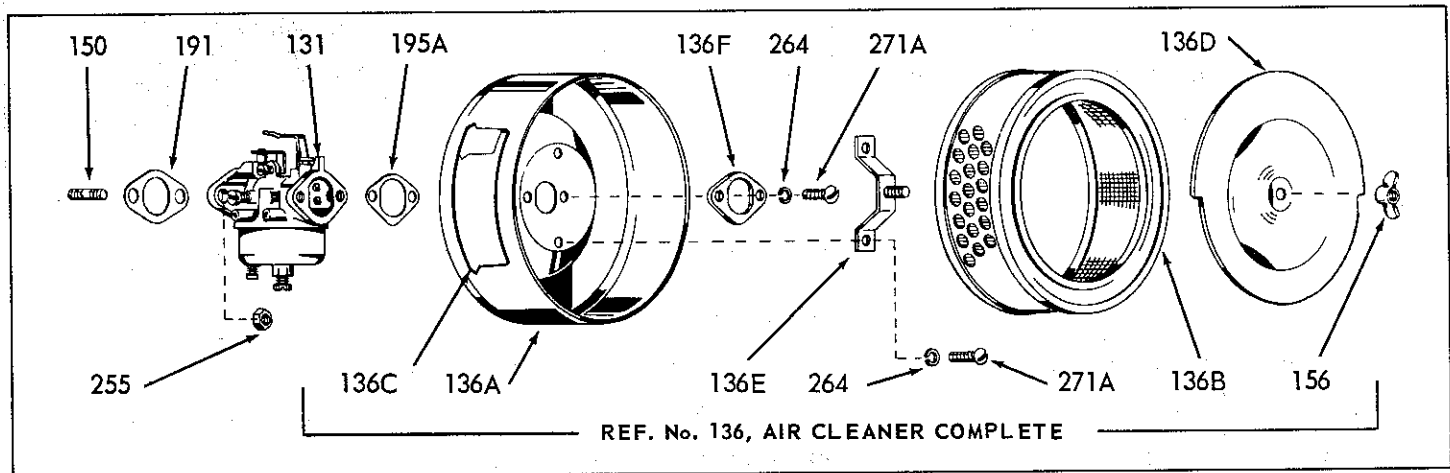


Ref. No. 190, GASKET SET

Parts are identified by reference number. See parts list for correct part number.



**SOLID STATE IGNITION GROUP for model TRA-12D**



**WALBRO CARBURETOR and AIR CLEANER GROUP for model TRA-12D**

**SERVICE PARTS LIST for Models TRA-10D, TR-10D and TRA-12D**  
**NON-INTERCHANGEABLE PARTS**

Ref. No.	Part Number			Description	No. Req.	Net Weight	
	Model TRA-10D	Model TR-10D	Model TRA-12D			Lbs.	Oz.
89	AB-112A-1	AB-112-A	AB-118	CYLINDER HEAD .....	1	2	12
90	CA-84-etc.	CA-82-etc.	CA-84-etc.	CRANKSHAFT ASSEMBLY ..... Includes: 1 GA-45 Gear 2 ME-170 Bearings 1 PL-21 Key	1	9	8
				<p><b>NOTE:</b> The standard and basic engine crankshaft part number, as listed in part number column, can be identified by raised letters on the side of the counter-weight. Dash numbers are added to the basic part number to identify special machining at the take-off end. The dash (-) number will be found stamped on the cheek facing the flywheel end of the shaft, as illustrated in Fig. A. Order by complete part number, (dash number added to basic number), and by giving Model, Specification and Serial Numbers of the engine.</p>			
91	DA-83-S1	DA-83A-S1	DA-83-S1	CONNECTING ROD ASSEMBLY, standard size ..... DA-81-S1, DA-80-S1, DA-77-S1 (TRA-10D, TRA-12D) repl'd. by DA-83-S1. DA-81A-S1, DA-80A-S1, DA-73C-4-S1 (TR-10D) replaced by DA-83A-S1. <b>NOTE:</b> Connecting rods also furnished .010", .020" and .030" undersize.	1		7½
93	DB-230-1	DB-230	DB-234	PISTON, standard size (cam ground) ..... Also furnished .010", .020", .030" oversize.	1		8

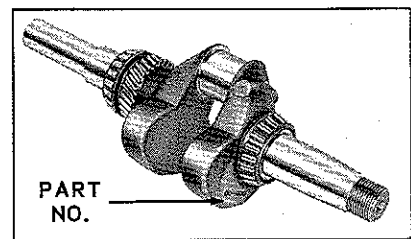
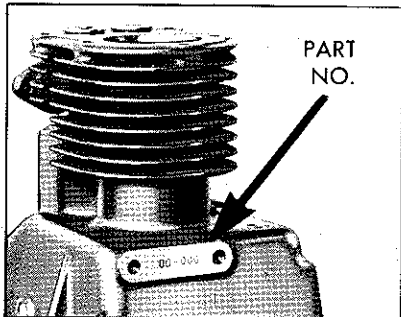


Fig. A 290652C

**IMPORTANT:** Always give Model, Specification and Serial Numbers as shown on name plate.

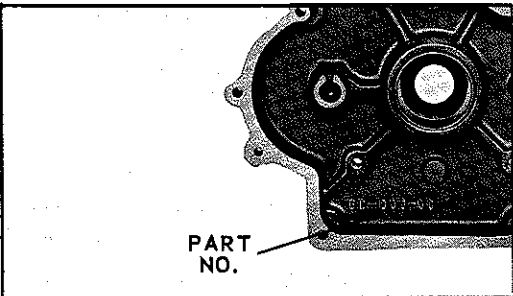
## NON-INTERCHANGEABLE PARTS - Models TRA-10D, TR-10D and TRA-12D

Ref. No.	Part Number			Description	No. Req.	Net Weight	
	Model TRA-10D	Model TR-10D	Model TRA-12D			Lbs.	Oz.
94	PE-114	PE-114	PE-114	SCREW LOCK for connecting rod ..... PE-46 5/16" external tooth lockwasher, replaced by PE-114.	2		1
98	XD-20	XD-20	XD-20	SCREW (special hardness) for connecting rod 5/16"-18 x 1-3/8"lg.hex.hd. XD-22 (1-3/4" long) for obsolete DA-73C-4-S1 rod.	2		1
101	AA-107-etc.	AA-107-etc.	AA-113A-etc.	CYLINDER-CRANKCASE ASSEMBLY complete with valves, springs, seats, locks, insert, guides, cover, governor pin, breather and plug.	1	29	
<p><b>NOTE:</b> The basic and standard cylinder-crankcase part number is AA-107 for Models TRA-10D, TR-10D, and AA-113A for Model TRA-12D. Any special machining is indicated by a number stamped on the case, in the location shown in Fig. B. Add this number to the basic cylinder-crankcase part number. The further addition of an S1, specifies the cylinder-crankcase is complete with valves, springs, seats and etc. Order by this number and by giving the Model, Specification and Serial numbers of the engine.</p> <p>AA-113-etc. cyl-crankcase for TRA-12D previous to engine serial No. 5082396. Replaced by AA-113A-etc. (includes inlet valve with larger valve head).</p>							
							
				Fig. B 90845C			
114	BK-120-B	BK-120-B	BK-125	FUEL TANK BRACKET only (standard) .....	1	2	4
			BK-120-B	Optionally furnished (low tank mounting). BK-120, replaced by BK-120-B.			
	BK-120B-S1	BK-120B-S1	BK-125-S1	TANK-BRACKET assembly with strapping .....		4	8
116	DR-54-A	DR-54-A	DR-62	PISTON RING SET, standard size .....	1		6
				Consisting of:			
117	DC-347	DC-347	DC-340	COMPRESSION RING, top groove .....	1		
118	DC-315	DC-315	DC-339	SCRAPER RING, 2nd groove .....	1		
119	DC-316	DC-316	DC-327	OIL RING, 3rd groove .....	1		
120	DC-317	DC-317	DC-328	EXPANDER for oil ring .....	1		
	DR-55	DR-55	DR-59	TRI CROME RE-RING SET, standard size .....			8
				All ring sets are available .010", .020", .030" oversize.			
121	DE-65	DE-65	DE-79	PISTON PIN .....	1		3
131	L-63AN-S1 (Std.)	L-63AN-S1 (Std.)	L-63AN-S1	CARBURETOR, Zenith No. 12982 (optionally furnished on TRA-12D)	1	1	12
	LQ-33	LQ-33	L-97-S1 (Std.)	CARBURETOR, Walbro No. LME-35 .....	1	1	
			LQ-48	CARBURETOR REPAIR KIT .....			3
<p><b>NOTE:</b> Refer to stamped part number on carburetor for replacement carburetor or parts. See carburetor bulletins in rear of manual for service replacement parts and instructions.</p>							
136	LO-173	LO-173	LO-194	AIR CLEANER, complete .....	1	1	
				Consisting of:			
136A	LO-173-A *	LO-173-A	LO-194-D	HOUSING .....	1		6
136B	LO-173-B *	LO-173-B	LO-194-A	ELEMENT .....	1		3
136C	SD-276	SD-276	SD-308	INSTRUCTION DECAL .....	1		1
136D			LO-194-C	COVER .....	1		3
136E			LO-194-E	BRACKET .....	1		1
136F			QF-119	SPACER .....	1		1
143	N209A1	N109A1	N-106	FLYWHEEL with magnet ring for solid state ignition .....	1	13	8
	N109A1S1	N109A1S1		FLYWHEEL for Wico magneto .....	1	11	10
			N109A1S2	FLYWHEEL for Fairbanks magneto engine .....		9	4
<p><b>NOTE:</b> Flywheels for Fairbanks-Morse and Wico magnetos are not interchangeable with each other, unless the corresponding manufacturers coil-stator plate, (Ref. 230) is used.</p>							
143A	NC-202-2	NC-202-2	NC-202-2	FLYWHEEL (cast iron) for battery ignition engines .....		13	
190	Q-37-A	Q-37-A	Q-42	ENGINE GASKET SET .....	1		8
			Q-43	GASKET SET for bearing plate (1 QF-121, 2 QD-848-2, 2 QD-848A).			
-	T-108-A	T-108-A	T-112	GOVERNOR ASSEMBLY complete (Page 28) .....	1	1	
			T-112-A	GOVERNOR (special) with ZENITH carburetor.			

\* LO-175-B element (4" dia.), and SA-137 cap (in place of LO-173-A), optionally used on TRA-12D with ZENITH carburetor.



**PARTS INTERCHANGEABLE for Models TRA-10D, TR-10D and TRA-12D, except where noted.**

Ref. No.	Part Number	Description	No.			Net Wt.			Ref. No.	Part Number	Description	No.			Net Wt.		
			Req	Lb	Oz	Req	Lb	Oz				Req	Lb	Oz	Req	Lb	Oz
103	AD-41-E	VALVE STEM GUIDE, inlet and exhaust	2		1			123	FA-47	VALVE TAPPET .....	2			2			
104	AE-74-D	EXHAUST VALVE (long life) standard in models TRA-10D, TR-10D. Optionally furnished in TRA-12D.	1		4			124	GA-45	CRANKSHAFT GEAR .....	1			5			
	AE-74-C	Standard in model TRA-12D .....	1		4			125	GD-146-A	GOV. GEAR and FLYWEIGHT assembly GD-137F, replaced by GD-146-A.	1			4			
105	AE-96	INLET VALVE (1-3/8" head dia.) ..... For TRA-10D, TR-10D and previous to serial No. 5082396 in TRA-12D.	1		4					GD-137-E Assembly (not available), used on TR-10D engines to and including serial No. 3909151. For replacement of obsolete GD-137-E, use GD-146A-53 Service Kit.							
	AE-104	INLET VALVE (1-2/2" head dia.) ..... For TRA-12D beginning with engine serial No. 5082396.	1		4			127	HF-52	SPACER for governor control disc .....	1			1			
106	AF-43-B	VALVE SPRING, inlet and exhaust .....	2		2			128	HF-426	SPACER for governor fulcrum shaft ..... (Obsolete) used in TR-10D engines previous to serial No. 3909152. Replace with PK-135 Retaining Ring and PA-395-C Fulcrum Shaft.	1			1			
107	AG-26	SEAT for valve spring, inlet ..... Inlet and exhaust in model TRA-12D ....	1		1			129	HG-201-D	VALVE SEAT INSERT (long life) exh. Standard in models TRA-10D, TR-10D. Optionally furnished in TRA-12D.	1			1			
108	AG-31	ROTO-CAP and SEAT for exhaust valve Standard in models TRA-10D, TR-10D. Optionally furnished in TRA-12D when using AE-74D valve.	1		1				HG-214	EXH. INSERT, std. in model TRA-12D	1			1			
109	AG-34-A	VALVE SPRING LOCATING CUP .....	2		1			131		CARBURETOR -- See Page 32.							
110	AH-9	LOCK for valve spring seat .....	4		1			132	LC-281	INTAKE MANIFOLD, TRA-10D, TR-10D For TRA-12D with ZENITH carburetor.	1			14			
112	See Fig. C	GEAR COVER ASSEMBLY ..... Includes: 1 ME-170-1 Brq. cup 1 PH-529 Oil seal 1 PH-568 Oil seal 2 ME-152 Bearings, for TRA-10D, TR-10D.	1	7	6			133	LJ-158	PIPE NIPPLE, 1" x 3" long ..... Optional For muffler mounting.	1			6			
		<b>NOTE:</b> The standard gear cover part number is BD-111F-9 for models TRA-10D, TR-10D and BD-111-F for model TRA-12D. Any special machining would be indicated by a number stamped behind the basic BD-111-F cast part number. See Fig. C.						133A	LJ-452-A	45° PIPE NIPPLE, 1" x 7" long .....				12			
									XK-140	MUFFLER ELBOW (long) cast .....				13			
									XK-140-1	MUFFLER ELBOW (short) cast .....				8			
								134	LL-178-4	HOSE for breather, TRA-10D, TR-10D ..	1			1			
									LL-178-A	HOSE, 2-5/8" long, for TRA-12D (std.)	1			1			
									LL-178-B	HOSE, 3-1/2" long, for model TRA-12D with ZENITH carburetor .....	1			1			
								135	LL-178-14	HOSE for fuel line, TRA-10D, TR-10D	1			2			
									LL-178-16	FUEL LINE for model TRA-12D .....	1			2			
								-	LK-30	HOSE CLAMP for fuel line (not illust.)	2			1			
								136		AIR CLEANER -- See Page 32.							
								138	ME-37	STEEL BALL for camshaft, 3/8" dia. ..	1			1			
								139	ME-170	MAIN BEARING ASSEMBLY .....	2			8			
										Consisting of:							
								140		1 ME-170-1 Bearing cup *							
								141		1 ME-170-2 Bearing cone *							
										* Not sold separately.							
								142	ME-152	NEEDLE BEARING for governor fulcrum shaft -- models TRA-10D, TR-10D .....	2			1			
								143		FLYWHEEL -- See Page 32.							
								143A									
								144	PA-395-C	FULCRUM SHAFT for needle brg. gov. (.250 dia.) models TRA-10D, TR-10D	1			2			
									PA-395-B	(.246 dia.) for model TRA-12D .....	1			2			
								145	PA-396-A	SHAFT for governor gear .....	1			1			
								146	PA-425	DOWEL PIN for gear cover .....	2			1			
113	BI-375-C-S1	AIR CLEANER BRACKET ASSEMBLY For models TRA-10D, TR-10D. Optionally furnished on TRA-12D. Includes: LL-178-4 Hose PE-3 Washer PE-160 Screw PG-1156 Brace PC-598 Stud QD-647 Gasket PD-147 Nut XD-8 Screw BI-375-A-S1, replaced by BI-375C-S1.	1		1												
114	Refer to Page 32																
121																	
122	EA-130-C	CAMSHAFT ASSEMBLY, includes gear and compression release ..... PM-232 Torsion spring for compression release flyweight ..... EA-123-B Camshaft (less compression release) for Model TR-10D. For replacement use EA-130-A.	1	1	14												

Order parts from nearest **WISCONSIN DISTRIBUTOR** or **SERVICE CENTER.**

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**PARTS INTERCHANGEABLE for Models TRA-10D, TR-10D and TRA-12D, except where noted.**

Ref. No.	Part Number	Description	No. Req.	Net Wt.		Ref. No.	Part Number	Description	No. Req.	Net Wt.	
				Lb	Oz					Lb	Oz
147	PA-428L-S1	<b>PUSH PIN and SPRING ASSEMBLY</b> ..... For breaker points. Field replacement for PA-428-L (standard engine part). Used in models <b>TRA-10D, TR-10D</b> . PA-428E, PA-428K-S1, replaced by PA-428L-S1.	1		1	175	PI-217-1 PI-217-4 PI-217-5 PI-217-3	<b>ADJUSTING SCREW</b> for governor spring 5" long, 3000 to 3600 R.P.M. (TRA-10D) 5 1/4" long, 3000 to 3600 R.P.M. (TRA-12D) 3-5/8" long, thru 2900 R.P.M. (TRA-10D) 5-5/8" long, thru 2900 R.P.M. (TRA-12D)	1		1
150	PC-368	<b>STUD</b> for carburetor mounting <b>TRA-12D</b>	2		1	176	PK-52	<b>PISTON PIN RETAINING RING</b> .....	2		1
151	PC-377	<b>STUD</b> for governor control disc .....	1		1	177	PK-135	<b>RETAINING RING</b> (inner) for governor lever shaft, on engines beginning with Serial No. 3909152 .....	1		1
152	PC-598	<b>STUD</b> for air cleaner, 8-7/8" long .....	1		2	178	PK-144	<b>RETAINING RING</b> .....	1		1
	PC-629	For models <b>TRA-10D, TR-10D</b> . <b>STUD</b> , 9" long, for <b>TRA-12D</b> .....	1		2		179	PK-177	For governor lever shaft (outer).		
		With L.O-175B element cleaner.						<b>CLIP</b> for throttle rod mounting .....	1		1
153	PC-590	<b>STUD</b> , breaker cover, <b>TRA-10D, TR-10D</b>	1		1			PK-160, replaced by PK-177.			
155	PD-137	<b>NUT</b> for flywheel mounting .....	1		1	180	PK-167	<b>SNAP RING</b> for governor gear beginning with Engine No. 3909152 .....	1		1
156	PD-147	<b>WING NUT</b> for air cleaner mounting .....	1		1	182	PL-21	<b>WOODRUFF KEY</b> , No. 3 .....	1		1
157	PD-204	<b>LOCKNUT</b> for muffler elbow .....	1		1			For crank shaft gear mounting.			
159	PE-58	<b>LOCKWASHER</b> for flywheel mounting ....	1		1	183	PL-47	<b>WOODRUFF KEY</b> , No. 18 .....	1		1
160	PF-157	<b>BREAKER BUSHING</b> ..... Ream .2785 - .2790 after assembly. For models <b>TRA-10D, TR-10D</b> .	1		3	185	PM-108	<b>SPRING</b> for camshaft thrust .....	1		1
161	PG-959-1	<b>BRACKET</b> for grd. switch, <b>TRA-12D</b> ....	1		2	186	PM-61-A	<b>IDLE RETURN SPRING</b> (90 coils) .....	1		1
162	PG-556	<b>STRAP</b> for battery ignition or breaker-less ignition coil .....	1		4			For models <b>TRA-10D, TR-10D</b> . For <b>TRA-12D</b> with <b>ZENITH</b> carburetor.			
163	PG-1201	<b>FUEL TANK STRAP</b> ..... PG-733, replaced by PG-1201. <b>NOTE:</b> Steel Binder Strapping and Seal for mounting fuel tank on engines sent out from the factory are not serviceable in the field. Order 2 PG-1201 straps with 2 ea. XA-69 screws and PD-239 nuts.	2		6	187	PM-200-A or PM-166	<b>GOVERNOR SPRING</b> (47 coils) for speeds 3000 to 3600 R.P.M. ( <b>TRA-10D</b> ). For all speeds, model <b>TRA-12D</b> .....	1		1
164	PG-1019-A	<b>GOVERNOR VANE</b> .....	1		1			(88 coils) to and including 2900 R.P.M. load ( <b>TRA-10D, TR-10D</b> ) .....			1
165	PG-1073	<b>REED</b> for crankcase breather .....	1		1			PM-142 (54 coils) for TR-10D engines previous to Serial No. 3909152 .....			1
166	PG-1132	<b>GROUND CLIP</b> for <b>TRA-10D, TR-10D</b> ..	1		1	190		<b>ENGINE GASKET SET</b> , See Page 32.			
167	PG-1144-2 PG-1144-A	<b>CLIP</b> for ign. wires and fuel line support <b>CLIP</b> for model <b>TRA-12D</b> .....	1 1		3 3	191	QC-53	<b>GASKET</b> , manifold flange, <b>TRA-10D, TR-10D</b> . Carburetor flange, <b>TRA-12D</b> ....	1		1
		PG-1144-4, replaced by PG-1144-A.				192	QC-71	<b>GASKET</b> , carburetor flange, <b>TRA-10D, TR-10D</b> , and for <b>TRA-12D</b> with <b>ZENITH</b> carburetor .....	1		1
168	PG-1156	<b>BRACE</b> for air cleaner bracket, on models <b>TRA-10D, TR-10D</b> .....	1		1	193	QD-798-A	<b>GASKET</b> for gear cover .....	1		1
		For <b>TRA-12D</b> with <b>ZENITH</b> carburetor.				194	QD-848 QD-848-A	<b>GASKET</b> for either stator plate or bearing plate, .003 - .004" thick .....	*		1
169	PG-1255	<b>CLIP</b> for stator wire, <b>TRA-12D</b> .....	1		1			QD-799A, replaced by QD-848. <b>GASKET</b> , .006 - .007" thick .....	*		1
170	PH-442	<b>WASHER</b> (rubber faced) .....	1		1			* Use as required with QF-121 Shims to give .001 to .004" crankshaft end play. 2 and 3 furnished in gasket set.			
170	PH-196	For valve inspection cover. <b>WASHER</b> , 1/4" plain steel .....	3		1	195	QD-647	<b>GASKET</b> , air cleaner bracket clamp .....	1		1
		For starter sheave mounting. (Replaces PH-442 rubber faced washer)				195A	QD-849	For models <b>TRA-10D, TR-10D</b> . <b>GASKET</b> , air cleaner to carburetor .....	1		1
171	PH-529	<b>OIL SEAL</b> for crank shaft .....	2		2			For model <b>TRA-12D</b> .			
		1-in gear cover. 1-in stator plate.				196	QD-801	<b>GASKET</b> for tappet inspection cover ....	1		1
172	PH-546	<b>SPRING WASHER</b> for breather reed .....	1		1	197	QD-825	<b>GASKET</b> , cylinder head, <b>TRA-10D, TR-10D</b> .....	1		1
173	PH-568	<b>OIL SEAL</b> for governor lever shaft .....	1		1		QD-850	For model <b>TRA-12D</b> .....	1		1

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**PARTS INTERCHANGEABLE for Models TRA-10D, TR-10D and TRA-12D, except where noted.**

Ref. No.	Part Number	Description	No.		Net Wt.		Ref. No.	Part Number	Description	No.		Net Wt.	
			Req	Lb	Oz	Req				Lb	Oz		
198	QF-121	SHIM (steel) for stator or bearing plate QF-118, QF-114 (plastic), replaced by QF-121. * Use as required to give .001 to .004" crankshaft end play. (3 in gasket set)	*			1							
200	RF-1439	ELBOW in carburetor, for fuel line .....	1			1							
201	RG-41	SHUT-OFF VALVE and STRAINER .....	1			2							
202	RJ-141-5 Optional	DIP STICK (screw in) .....	1			3							
203	RJ-171	DIP STICK (long hook) .....				3							
	RJ-171-D	DIP STICK (short hook) .....				2							
		RJ-171-A, replaced by RJ-171-D.											
204	LJ-438	TUBE (for saber type dip stick) .....	1			2							
206	SA-124	COVER, tappet, for TRA-10D, TR-10D	1			5							
	SA-149	For model TRA-12D (std.) .....	1			5							
	SA-149-A	For model TRA-12D with ZENITH carb.	1			5							
207	SA-130-A	COVER, breaker box, TRA-10D, TR-10D	1			3							
208	SD-312	NAME PLATE .....	1			1							
		Give model, specification and serial numbers for accurate stamping.											
209	SE-270B-S1	FLYWHEEL AIR SHROUD assembly ..	1			2							
210	SE-271	CYLINDER SIDE SHROUD .....	1			4							
211	SE-273	SCREEN for rope sheave .....	1			1							
212	SE-282	BACK PLATE for flywheel shroud .....	1			3							
213	SE-297	CYLINDER HEAD COVER .....	1			6							
215	U-268 (Obsolete)	STARTING ROPE ASSEMBLY .....	1			6							
216	UC-203A (Obsolete)	STARTING SHEAVE (sheet metal) .....	1	1									
		order screen separately UC-203, UC-184 (alum.) - Replaced by UC-203A and 3 XD-150 screws, 3 PH196 washers, 3 PE-3 lockwashers											
		Starter section following Parts List.											
218	VB-234A-S1	GOVERNOR LEVER ASSEMBLY .....	1			2							
		Includes: PD-239 Nut, XA-36 Screw, PH-27-A Washer.											
220	VC-43-A	DISC ASSEMBLY for gov. control rod	1			3							
		Includes: 1 PH-324 Washer 1 VE-814 Swivel block											
221	VE-783-H	THROTTLE ROD, lever to carburetor ..	1			1							
		For models TRA-10D, TR-10D. For TRA-12D with ZENITH carb.											
	VE-844	For std. TRA-12D with WALBRO carb.	1			1							
223	WD-66-A	MUFFLER (less pipe nipple) .....	1	1									
		WD-66A-S1 with LJ-158 pipe nipple.											
224	WE-413-S1	FUEL TANK with RC-122 filler cap ....	1			2							
		WE-409 and WE-411 tank with RC-77 cap, replaced by WE-413-S1.  WE-343-C (small seam tank) for TRA-10D, TR-10D engines previous to Serial No. 4213945, no longer available - for replacement order BK-120B-S1 Assembly (WE-413 Tank, BK-120-B bracket and steel binder strapping).											
		<b>NOTE:</b> Fuel tank is mounted to bracket with steel binder strapping which is not serviceable. When replacing fuel tank only, order replacement straps (Ref. 163).											
225	RC-122	CAP (screw type) for WE-413 tank .....				1							2
		RC-77 cap for obsolete WE-411, WE-409, WE-343 bayonet neck type fuel tanks ....											2
227	XD-21	SCREW (Special hardness) 5/16"-18 thread x 1 1/2" long, hexagon head .....				5							1
		For mounting cylinder head.											
228	XD-140	SCREW (Special hardness) 5/16"-18 thread x 2 1/4" long, hexagon head .....				4							1
		For mounting cylinder head.											
228A	XD-162	SCREW (Special hardness) 5/16"-18 thread x 2 1/2" long, hexagon head .....				1							1
		For cylinder head and ignition coil strap (in place of XD-140).											
229	YB-83	STATOR ASSEMBLY (std.) TRA-12D ....				1							8
		For solid state ignition Beginning with serial No. 5626521. YB-80 previous to above serial number, use YB-83 with YJ-69 Module											
230	Y-137-S1	STATOR ASSEMBLY, TRA-10D, TR-10D	1			1							8
		For Wico magneto. Includes:											
		ME-170-1 Bearing cup .....				1							
		PH-529 Oil seal .....				1							
		90-X13000 Coil assembly .....				1							12
		90-11409 Coil clip .....				1							1
	Y-137-1-S1	STATOR for TRA-12D with magneto ign.				1							8
		Same as Y-130-S1 except 11/32 mtg. holes											
	Y-131-S1	For Fairbanks-Morse magneto TRA-10D				1							8
		Includes: ME-170-1 Bearing cup .....				1							
		PH-529 Oil seal .....				1							
		YM 23 Coil assembly .....				1							12
		YM 24 Coil clip .....				1							1
		<b>NOTE:</b> Fairbanks-Morse and Wico stator plate assemblies are not interchangeable with each other unless the corresponding manufacturers flywheel (Ref. 143) is used.											
230A	BG-334-I-S1	BEARING PLATE ASSEMBLY (fan end)				1							1
		For battery ignition, TRA-10D, TR-10D. Includes: 1 ME-170-1 Brg. cup 1 PH-529 Oil seal											
230B	BG-351-S1	BEARING PLATE ASSEMBLY .....				1							4
		For solid state ignition, TRA-12D.											
231	YD-6-S1	SPARK PLUG, 18mm, Champion #D-16J				1							3
232	YD-20A	RUBBER NIPPLE for coil terminal .....				1							1
233	YD-316	INSULATING WASHER (outer) for ground stud, TRA-10D, TR-10D .....				1							1
234	YD-321	STUD for ground clip, TRA-10D, TR-10D				1							1
235	YD-324	INSULATING WASHER (inner) for ground stud, TRA-10D, TR-10D .....				1							1
236	YD-325	CONDENSER CLAMP, TRA-10D, TR-10D				1							1
237	YD-326	TERMINAL STRIP for breaker arm .....				1							1
		Models TRA-10D, TR-10D.											

Order parts from nearest **WISCONSIN DISTRIBUTOR** or **SERVICE CENTER.**

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**PARTS INTERCHANGEABLE for Models TRA-10D, TR-10D and TRA-12D, except where noted.**

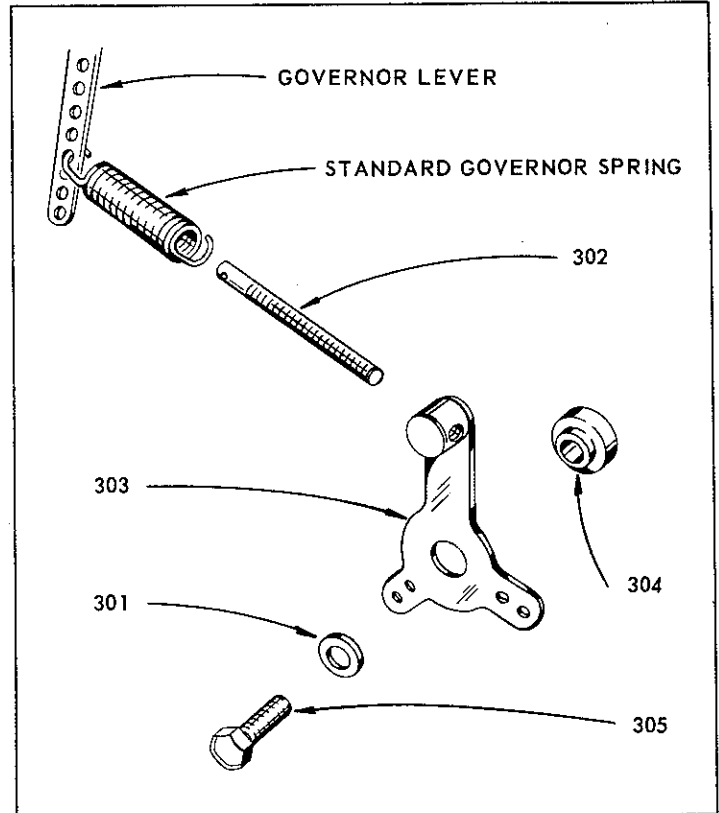
Ref. No.	Part Number	Description	No. Req.	Net Wt.		Ref. No.	Part Number	Description	No. Req.	Net Wt.	
				Lb	Oz					Lb	Oz
239	YF-38-A	COIL (12 volt) for battery ignition .....	1	1	6	258	PD-153-2	NUT, No. 8-32, hexagon steel .....	2		1
239A	YF-37	COIL for breakerless ign., TRA-12D ....	1	1	6			For stud, TRA-10D, TR-10D.			
240	YL-339B-20	HIGH TENSION LEAD for magneto coil	1		2	259	PD-239	NUT, 1/4"-20 thread, square steel .....	3		1
241	YL-339-6	HIGH TENSION LEAD for battery or breakerless ignition coil .....	1		2			1-for governor lever clamp.			
	YL-339-14	For TRA-12D with remote coil mounting	1		3	261	PE-3	LOCKWASHER, 1/4" spring lock .....	23		1
242	YL-352-16	IGNITION WIRE, breaker box to battery ignition coil, TRA-10D, TR-10D .....	1		1			6-for gear cover to crankcase.			
242A	YL-352-5	IGNITION WIRE, coil to switch, TRA-12D	1		1			1-for air cleaner brkt. TRA-10D, TR-10D.			
243	YL-355-8	IGNITION WIRE, coil to grd., TRA-12D	1		1			5-for shrouding.			
244	YQ-12	POINTS and CONDENSER KIT for models TRA-10D, TR-10D .....	1		4	262	PE-4	1-for governor control disc.			
		Consisting of:						2-for fuel pump mounting.			
		1 YD-314-A Point set						2-for mt'g. manifold, TRA-10D, TR-10D.			
		1 YD-315 Condenser						3-for stator plate, TRA-10D, TR-10D.			
		1 YD-326 Terminal strip						3-for starter sheave (not illust.)			
		1 YD-339 Condenser clip				263	PE-5	LOCKWASHER, 5/16" spring lock .....	5		1
245	YC-9-F-51	GROUND SWITCH ASSEMBLY for battery or solid state ignition .....	1		2			2-for carburetor, TRA-10D, TR-10D.			
		Includes: SD-109 Tag, PE-72 L.W.				264	PE-14	LOCKWASHER, 3/8" spring lock .....	2		1
		<b>FUEL PUMP MOUNTING</b> (Not part of standard engine)						For mounting fuel tank bracket.			
246	LL-178-9	FUEL LINE, pump to carburetor .....	1		1	265	PE-72	LOCKWASHER, No. 10, for TRA-12D ..	4		1
	LL-178-18	FUEL LINE, pump to tank .....	1		1			2-for air cleaner housing to carburetor.			
247	LP-62G-S1	FUEL PUMP for engines beginning with serial No. ....	1		10	266	PE-89	2-for air cleaner bracket to housing.			
		LQ-51 Repair Kit for LP-62G-S1 .....	1		4			LOCKWASHER, No. 8 internal .....	1		1
		LP-42N-S1, replaced by LP-62G-S1.						For ground clip, TRA-10D, TR-10D.			
		LQ-28 Repair Kit for LP-42N-S1 pump ..	1		4	266A	PE-113	LOCKWASHER, No. 8, TRA-10D, TR-10D	2		1
		<b>NOTE:</b> Refer to fuel pump bulletin in rear of manual for maintenance and repair.						1-for ground clip.			
248	QD-670	FLANGE GASKET .....	1		1			1-for breaker point bracket.			
249	RF-269	STRAIGHT FITTING for fuel inlet .....	1		1	267	PH-27-A	LOCKWASHER, No. 10 internal tooth for mounting stator plate, TRA-12D .....	4		1
		Models TRA-10D, TR-10D.						PLAIN WASHER, 1/4" I.D. x 9/16" O.D.	1		1
250	RF-1439	ELBOW to pump outlet .....	1		1			For governor lever clamp screw.			
		Inlet and outlet - model TRA-12D.				268	PH-30-A	PLAIN WASHER, 1/4" steel .....	5		1
		<b>STANDARD HARDWARE</b>						3-for coil-stator plate, TRA-10D, TR-10D			
253	HF-390	SPACER, 9/32" I.D. x 5/8" O.D. x 1/8" For F.M. stator plate ignition wire clip.	1		1			1-for breaker cover, TRA-10D, TR-10D.			
254	PB-160	SCREW, 1/4"-28 thread x 1/2" long, hex. hd. For air cleaner brkt. TRA-10D, TR-10D.	1		1			1-for governor fulcrum shaft.			
255	PD-9	NUT, 1/4"-28 thread, hexagon steel .... 1-for governor control disc stud. 2-for carburetor mounting, TRA-12D.	3		1	269	PH-86-B	PLAIN WASHER, 11/64" I.D. x 3/8" O.D. For ground stud, TRA-10D, TR-10D.	1		1
256	PD-77	NUT, 1/4"-20 thread, hexagon steel .... For breaker cover, TRA-10D, TR-10D.	1		1			PLAIN WASHER, 5/16" steel .....	9		1
								For cylinder head mounting.			
						270	PH-209-B	PLAIN WASHER, 13/64" I.D. x 1/2" O.D. For brk'r. point brkt., TRA-10D, TR-10D.	1		1
								SCREW, No. 10-32 thread x 3/8" long round head, for TRA-12D .....	4		1
								2-for air cleaner housing to carburetor.			
								2-for air cleaner bracket to housing.			
						272	XA-34	SCREW, 1/4"-20 x 1/2" long, hex. head 2-for flywheel shroud to crankcase. 2-for flywheel shroud to cylinder head. 1-for cylinder side shroud to crankcase.	5		1
								SCREW, 1/4"-20 thread x 3/4" long indented hexagon head .....	1		1
								For governor lever clamp.			

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Ref. No.	Part Number	Description	No. Req.	Net Wt.	
				Lb	Oz
273	XB-112	SCREW, 1/4"-20 thread x 3/4" long, cap counterbore type ..... For manifold mtg. TRA-10D, TR-10D. For TRA-12D with ZENITH carburetor.	2		1
274	XA-69	SCREW, 1/4"-20 x 2" long, round hd. .. For fuel tank service straps.	2		1
275	XA-66	SCREW, No. 5-40 x 1/4" long, round hd. For governor vane to shaft.	1		1
276	XA-67	SCREW, No. 4 x 1/4" long, sheet metal For name plate to shroud.	4		1
277	XA-126	SCREW, No. 8-32 x 1/2" long, pan head For breather reed mounting. XA-80 (5/16" lg.), repl'd by XA-126.	1		1
278	XA-126	SCREW, No. 8-32 x 1/2" long, pan head 1-for breaker point bracket. 1-for condenser mounting. XA-118 (5/16" lg.), repl'd by XA-126.	2		1
279	XB-113	SCREW, No. 10-32 x 3/4" lg., socket hd. For stator plate-wide flange, TRA-12D.	1		1
279A	XB-115	SCREW, No. 10-32 x 1/2" lg., socket hd. For stator plate mtg., TRA-12D.	3		1
280	XD-6	SCREW, 1/4"-20 x 3/4" long, hex. head For mounting fuel pump.	2		1
281	XD-7	SCREW, 1/4"-20 x 1" long, hex. head .. For coil-stator plate or fan end bearing plate mounting, TRA-10D, TR-10D.	3		1
281A	XB-117	SCREW (Special-Nyloc) 5/16"-18 x 7/8" For bearing plate, TRA-12D. XD-17-E, replaced by XD-177.	3		1
282	XD-5	SCREW, 1/4"-20 x 5/8" long, hex. head For UC-203 starting sheave mounting. XD-8 (1-1/4" long) for obsolete UC-184 starting sheave mounting .....	3		1
282	XD-8	SCREW, 1/4"-20 x 1-1/4" long, hex. hd. For air clean. clamp, TRA-10D, TR-10D.	1		1
283	XD-9	SCREW, 1/4"-20 x 1-1/2" long, hex. hd. For gear cover to crankcase.	6		1
284	XD-16	SCREW, 5/16"-18 x 7/8" long, hex. hd. For mtg. carburetor, TRA-10D, TR-10D.	2		1
285	XD-25	SCREW, 3/8"-16 x 3/4" long, hex. head For mounting fuel tank bracket.	2		1
286	XD-147	SCREW, 1/4"-20 x 2-1/2" long, hex. hd. For valve inspection mounting.	1		1
287	XK-1	PIPE PLUG, 1/8" square head .....	1		1
		For inlet manifold, TRA-10D, TR-10D.			
288	XK-2	PIPE PLUG, 1/4" square head .....	1		2
		For oil drain.			

**TT-94-A  
VARIABLE SPEED GOVERNOR  
CONTROL ASSEMBLY**



Ref. No.	Part Number	Description	No. Req.	Net Wt.	
				Lb	Oz
	TT-94-A	INCLUDES THE FOLLOWING:			
301	PH-84	WASHER, 1/4" I.D. x 1/2" O.D. x 1/16" thick, plain steel ..... For lever mounting screw.	1		1
302	PI-115-B	ADJUSTING SCREW .....	1		2
303	VB-238-A	CONTROL LEVER ASSEMBLY .....	1		2
304	VE-570-A	FULCRUM SPACER for control lever ..	1		1
305	XA-35	SCREW, 1/4"-20 thread x 5/8" long, indented hex. head .....	1		1
		For mounting control lever.			

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