

# INTERNATIONAL<sup>®</sup> ENGINES

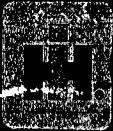
**UC-221 AND UC-263  
ENGINE  
AND  
ATTACHMENTS  
FORM  
PU-52E**

AUGUST, 1973

(Supersedes FORM PU-52D)

## PARTS CATALOG

INTERNATIONAL HARVESTER COMPANY  
401 NORTH MICHIGAN AVENUE  
CHICAGO, ILLINOIS 60611, U.S.A.



Due to a continuous program of research and development, some procedures, specifications and parts may be altered in a constant effort to improve machines.

Periodic revisions may be made to this publication and mailed automatically to distributors. It is recommended that customers contact their distributor or dealer for information on the latest revision.

**UC-221 AND UC-263  
ENGINE  
AND  
ATTACHMENTS  
FORM  
PU-52E**

**AUGUST, 1973**

*(Supersedes FORM PU-52D)*

*See Last Page for "New and Displaced Parts List"*

# The Importance of **ADEQUATE PARTS and SERVICE**

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The wise purchaser of a new machine gives consideration to the following factors:

1. *Original quality*
2. *Availability of service parts*
3. *Availability of adequate service facilities*

In many cases the machine becomes the only means of performing certain tasks that must be done in a limited period of time. Wear is to be expected and under extreme conditions even breakage of parts may occur. However, the user can still be assured of getting his work done on time if service parts and adequate service facilities are available.

Foresighted International Harvester distributors and dealers make every effort to provide good service and maintain a completely adequate stock of service parts.

When in need of parts, always give your authorized International Engine distributor or dealer your Chassis and Engine serial numbers. We suggest that you write these serial numbers in the spaces provided below, for ready reference when parts are required.

Chassis Serial No. \_\_\_\_\_  
(Stamped on plate on left side of flywheel housing)

Engine Serial No. \_\_\_\_\_  
(Stamped on left side of engine crankcase just below the distributor)

## INSTRUCTIONS FOR ORDERING PARTS

- (a) All parts orders should be sent to parts depot when so instructed. Give complete address, state the county and railroad station (when shipping point is different than post office), also whether shipment is to go by parcel post, express, truck, or freight.
- (b) When ordering parts, give the IH part number, including suffix or prefix letters. To facilitate identification of these parts, "Complete Serial Numbers" (including letters and numerals) assigned to machines, if any, should be furnished.
- (c) Parts should be ordered on the standard parts order blank. The parts should be arranged in sequence by part numbers to facilitate service on orders at the parts depot.
- (d) Claims for shortage or error in the handling of an order for parts must be made upon receipt of goods.

*It is the policy of International Harvester Company to improve its products whenever it is possible and practical to do so.*

*We reserve the right to make changes or add improvements in the design or construction of parts at any time without incurring the obligation to install such changes on products previously delivered.*

## INTRODUCTION

This catalog contains a list of service parts for the UC-221 and UC-263 engines and attachments. The UC-221 has a 3-9/16 x 3-11/16 inch six-cylinder carbureted engine and the UC-263 has a 3-9/16 x 4.390 six-cylinder carbureted engine.

Following is a brief summary of the system used in compiling this catalog. It is to your advantage to carefully study this summary.

This catalog is printed in a double column page format, and is divided into four sections --- Introductory Pages, Indexes to Units, Illustrations and Parts Lists, and Numerical Index.

(1) INDEXES. Two types of indexes are used. The index to units alphabetically lists all of the units by page number. The numerical index at the back of the catalog lists all part numbers (excluding standard fasteners) giving the page number where the part is listed.

NOTE - Refer frequently to the Index to Units to save time in locating the proper unit.

(2) ILLUSTRATIONS. Parts in this catalog are illustrated by the "exploded view" method. Individual parts in each illustration are shown where they belong in relation to one another. Reference numbers only are shown in each illustration. These numbers correspond with numbers in the Reference Number column in the accompanying list of parts. Parts in illustrations without reference numbers are the same as duplicate parts with reference numbers.

CAUTION: Reference numbers should not be used when ordering parts. Always use IH part numbers or description when ordering.

(3) METHOD OF LISTING. The parts list of each classification is divided into units. Parts are listed in order according to reference number shown in the illustration, followed by a full description based upon the "noun first" method --- i.e., the noun name of the parts is listed first then the modifying descriptive information which serves to specifically identify the item. For example, SHAFT w/two PLUGS, valve lever. Parts not shown in illustrations appear at end of list in alphabetical sequence by noun name. Parts listed will work on all units covered in this catalog unless a serial number or other qualifying designation is given for purpose of identification.

Throughout this catalog the term "Front" indicates the radiator end. Whenever the terms "Right" or "Left" are used it should be understood to mean from a rear position looking toward the radiator end.

(4) NUMBER REQUIRED. In this new double-column catalog format the single "No. Req'd." column is eliminated and the quantity used of each item is shown in parenthesis (4) following the description of the item. Where no quantity is indicated it should be understood to mean that only one (1) is required.

In many parts lists it is possible to include more than one assembly or attachment. The assemblies or attachments are listed at the beginning of the parts lists with the letters A, B, C, etc., preceding the part number of the assembly or attachment. The number required information is shown in parenthesis following the description of the parts. When letters (A, B, C, etc.,) are shown without a quantity it should be understood to mean only one (1) is required. Parts without letters after the description indicate the part is used for all assemblies or attachments listed in the heading.

(5) ASSEMBLIES AND ATTACHMENTS. Wherever possible the component parts of assemblies or attachments are shown in the "exploded views" by use of boxes, brackets or arrows. Component parts of assemblies or attachments are listed by one of the following methods.

(a) The listings are fully covered by descriptions for simple assemblies and attachments.

(b) When four or more parts are contained in the assemblies or attachments the listing of components immediately follows the description with the wording "(Composed of -)".

(c) Assemblies or attachments consisting of many parts shows the assembly or attachment number at the beginning of the unit list, followed by the listing of the components.

Exceptions to the above methods are explained by footnotes in the text.

Individual parts of an assembly which are not available for service are marked with a symbol §. In some instances, such parts are listed with a notation giving the information which is to be used for ordering.

(6) REVISIONS. Due to a continuous program of research and development, some procedures, specifications and parts may be altered in a constant effort to improve machines.

Periodic revisions may be made to this publication and mailed automatically to distributors. It is recommended that customers contact their distributor or dealer for information on the latest revision.

(7) MISCELLANEOUS PARTS. Standard bolts, screws, nuts, etc. --- are not identified by a reference number. These parts are known as COMMON HARDWARE items and appear in abbreviated nomenclature and are shown indented under the major items with which they are used. They should be ordered as listed, since they are not component parts of the pieces they attach. Hardware parts identified with part numbers have been designed for a specific usage. Standard hardware parts should not be substituted for them.

WARNING: Attaching parts especially made for their location should never be substituted with regular standard parts.

The following rules are established to govern the listing of attaching parts:

All Carriage, Machine and Plow BOLTS; NUTS; Cap, Machine and Set SCREWS, will be considered furnished with National Course Thread unless otherwise specified. The number of threads per inch will be eliminated.

All NUTS will be considered "hex" unless otherwise specified.

All WASHERS will be considered "Plain" unless otherwise specified. The "ID", "OD" and "No." identity will be eliminated. The inside dimension will be listed first, followed by the outside diameter and the thickness.

All lock WASHERS will be considered "Medium" type unless specified as "Light" or "Heavy".

All cotter PINS will be considered "Extended Prong" type unless otherwise specified.

All groove PINS will be considered "Standard Groove" unless otherwise specified.

All common RIVETS will be considered "Annealed" unless otherwise specified.

All countersunk-head tubular RIVETS will be considered "Copper-Plated Steel" unless otherwise specified.

All oval-head tubular RIVETS will be considered "Brass".

Standard bolts used in International Harvester Products are manufactured under standards known as Unified National Coarse Thread (U.N.C. and Unified National Fine Thread (U.N.F.) with the number of threads per inch for various diameters as follows:

## INTRODUCTION

Diameter of Bolt	No. of Threads per inch (U.N.C.)	No. of Threads per inch (U.N.F.)
1/4"	20	28
5/16"	18	24
3/8"	16	24
7/16"	14	20
1/2"	13	20
9/16"	12	18
5/8"	11	18
3/4"	10	16
7/8"	9	14
1"	8	14
1-1/8"	7	12
1-1/4"	7	12
1-3/8"	6	12
1-1/2"	6	12

(8) ABBREVIATIONS. The abbreviations used in this catalog are explained in the list of abbreviations on page 3.

(9) SERIAL NUMBERS.

<u>Models</u>	<u>Starting Engine Serial Number</u>	<u>Starting Chassis Serial Number</u>
UC-221	C-221 6093	UC-221 501
UC-263	C-263 6682	UC-263 501

The engine serial numbers for the UC-221 and UC-263 are stamped on a pad on the left side of the engine crankcase just below the distributor.

The chassis serial numbers for these units are stamped on a name plate on the left side of the flywheel housing.

## LIST OF ABBREVIATIONS

A period after the abbreviation is used only when the abbreviation form spells a common English word.

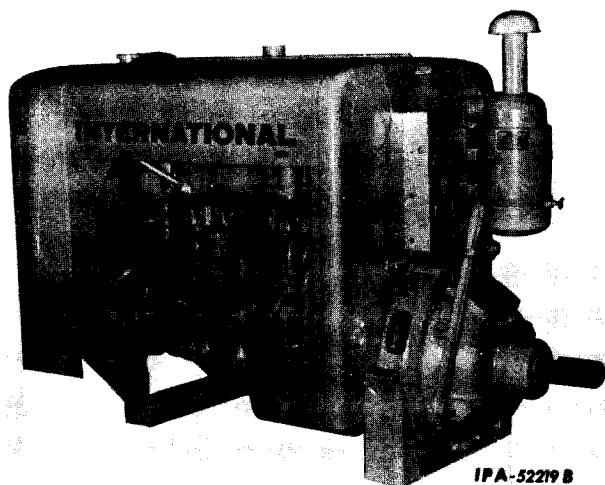
adj.	adjustable	int.	internal
al.	aluminum	lb.	pound, pounds
aly-stl.	alloy steel	lentil-hd.	lentil head
amp.	ampere, amperes	LH.	left hand
anl.	annealed	lkg.	locking
approx.	approximately	LP Gas	Liquified Petroleum Gas
assy.	assembly	lub.	lubrication
att.	attachment	mach.	machine
bd-hd	binding head	med.	medium
b-hd	button head	MI	malleable iron
brg.	bearing	NC	National Coarse Thread
brs.	brass	NF	National Fine Thread
brz.	bronze	ni.	
cd-pltd	cadmium plated	ni-pltd-stl.	nickel plated steel
cd-pltd-stl	cadmium plated steel	No.	number
cr-pltd	chromium plated	NPT	National pipe thread
cr-pltd-stl	chromium plated steel	OC	outside circumference
CI	cast iron	OD	outside diameter
csk.	countersunk	O/S	oversize
csk-hd	countersunk head	ov-hd	oval head
cl-rec-hd	clutch recess head	oz.	ounce
com.	common	parkerized-stl.	parkerized steel
cone-pt	cone point	pkg.	package
contd.	continued	pltd	plated
cop.	copper	pt.	point
cop-pltd	copper plated	PTO	power take-off
cot.	cotter	rd-end	round end
c-pin	cotter pin	rd-hd	round head
cres.	corrosion-resistant-steel (stainless)	rd-pt	round point
cr-rec-hd	cross recess head	reg.	regular
cre.	corrosion resisting	RH	right hand
crg.	carriage	RPM	revolutions per minute
cup-pt	cup point	SAE	Society of Automotive Engineers
cyl.	cylinder, cylinders	sf.	semi-finished
deg.	degree	slt.	slotted
dia.	diameter	slt-hd.	slotted head
dld.	drilled	slt-bd-hd.	slotted binding head
dld-f c-pin	drilled for cotter pin	slt-fil-hd.	slotted fillister head
dld-f lkg-wire	drilled for locking wire	slt-f-hd.	slotted flat head
dog-pt.	dog point	slt-hex-hd.	slotted hexagon head
ext.	external	slt-pan-hd.	slotted pan head
f.	for	slt-rd-hd.	slotted round head
fem.	female	slt-truss-hd.	slotted truss head
fil-hd.	fillister head	sq.	square
fin-nk.	fin neck	sq-hd.	square head
f-csk-hd	flat countersunk head	sq-nk.	square neck
f-fil-hd	flat fillister head	std.	standard
f-hd.	flat head	std-hd.	standard head
f-pt.	flat-point	stl.	steel
flex.	flexible	str.	straight
fltd.	fluted	T	teeth
ft.	foot (or feet)	tap.	tapping
ga.	gauge	thd.	thread
hd.	head	U/S	undersize
hdls.	headless	unfin.	unfinished
hex.	hexagon	wagon-box-hd.	wagon box head
hex-hd.	hexagonal-head	w/.	with
hex-soc-hd	hexagon socket head	w/brz.	with bronze
hp.	horsepower	w/hex.	with hexagon
hv.	heavy	w/o.	without
hyd.	hydraulic	zn.	zinc
ID.	inside diameter	zn-ct.	zinc coated
in.	inch or inches	zn-pltd.	zinc plated

## INTRODUCTION

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Right front view of the UC-221 and UC-263  
Engine with Hood and Dash, Radiator Grille, Front  
and Rear Support and Air Cleaner Attachments.



Left front view of the UC-221 and UC-263  
Engine with Hood and Dash, Front and Rear Support  
Fan, Fan Guard, Instrument Panel, Power Take-Off,  
Engine Controls and Air Cleaner Attachments.

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**QUICK REFERENCE**  
**FILTER ELEMENT AND BELTS**  
**FOR**  
**UC-221 AND UC-263**  
**ENGINES**

FILTER ELEMENTS	PART NO.
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CARBURETED ENGINE

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SERVICE ENGINES

SKELETON SERVICE ENGINES

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374 245 R93	Gasoline Burning Engine (See NOTE) (UC-263) C-263 501 to 56635
374 247 R93	L.P. Gas and Natural Gas Burning Engine (See NOTE) (UC-263) C-263 501 to 56635
394 241 R93	Gasoline Engine (See NOTE) (UC-263) C-263 56636 Up

The above engines consist of -

Crankcase Assembly w/ Sleeves	Fuel Pump Mounting Pad Cover and Gasket
Crankshaft w/Bearings	Rear Bearing Cap Filler Plugs
Gear and Seals	Oil Pump
Connecting Rods w/Bearings	Oil Filler Tube
Pistons w/Pins and Rings	Tappets
Camshaft w/Gear and Bearings	

NOTE - When Ordering A Service Engine, Give Complete  
Serial Number (Including Letters And Numbers)  
Shown On Crankcase Of Engine To Be Replaced.

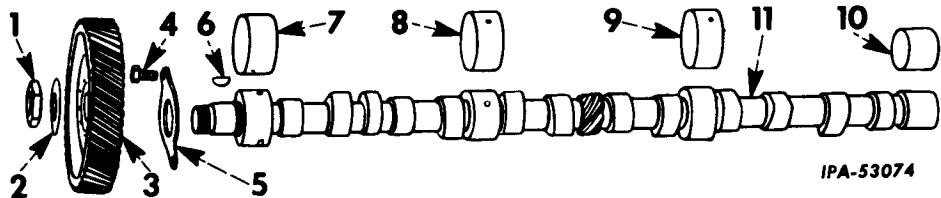
**MEMORANDA**

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## ENGINE

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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### CAMSHAFT AND RELATED PARTS



IPA-53074

1	16 026 DB	NUT, camshaft gear	8	70 260 R1	BEARING, camshaft intermediate front
2	16 025 D	LOCK, camshaft gear nut	9	70 261 R2	BEARING, camshaft intermediate rear
3	312 500 R1	GEAR, camshaft (*)	10	70 262 R1	BEARING, camshaft rear
3	367 240 R1	GEAR, camshaft (not *)	11	367 229 R1	CAMSHAFT
4	70 425 R1	BOLT, camshaft thrust plate (2)			
5	35 650 HA	PLATE, camshaft thrust			
6	127 559	KEY, camshaft gear (Woodruff No. 90)			
7	70 259 R2	BEARING, camshaft front (will work for 367 514 R1)			

(\*) - Used with Hydraulic Pump

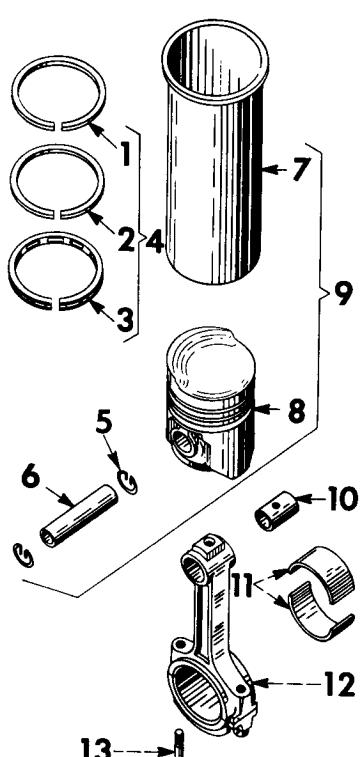
## ENGINE

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CONNECTING RODS, SLEEVES AND PISTONS</b> (For use w/Sleeved Engines) C-221 501 to 43020 C-263 501 to 56635					
<p style="text-align: center;"><b>PA-53075A</b></p>					
1		RING, piston barrel compression (top groove) (Not furnished separately) (6)	6	278 326 R1	PIN, piston (.005" oversize) (6) C-221 34718 Up (6) C-263 36028 Up
2		RING, piston taper face compression (second groove) (Not furnished separately) (6)	7		SLEEVE, cylinder (order sleeve assembly cylinder w/piston and rings) (6)
3		RING, piston oil regulating (third groove) (Not furnished separately)	8		PISTON (order sleeve assembly cylinder with piston and rings) (6)
4	539 379 R1	RING SET, piston (Replacement) (consists of two compression RINGS and 1 oil regulating ring) (6)	9	367 638 R94	SLEEVE w/PISTON and RINGS ASSY, cylinder (UC-221) (gasoline standard altitude) (6)
OR			9	367 640 R94	SLEEVE w/PISTON and RINGS ASSY, cylinder (UC-263) (gasoline standard altitude) (6)
4	367 649 R92	RING SET, piston (replacement) (consists of six chrome compression rings, six plain compression and six oil regulating rings) (6)	9	367 637 R94	SLEEVE SET, cylinder (consists of six SLEEVES w/PISTONS and RINGS, 367 638 R92) (UC-221) (gasoline standard altitude)
5	19 517 D	RING, piston pin retainer (12)	9	367 639 R94	SLEEVE SET, cylinder (consists of six SLEEVES w/PISTONS and RINGS, 367 640 R92) (UC-263) (gasoline standard altitude)
6	70 014 R1	PIN, piston (standard) (6) C-221 501 to 34717 (6) C-263 501 to 36027	9	371 091 R92	SLEEVEw/PISTON and RINGS ASSY, cylinder (UC-221) (L. P. gas and natural gas) (6)
6	278 271 R1	PIN, piston (standard) (6) C-221 34718 Up (6) C-263 36028 Up	9	371 092 R92	SLEEVE w/PISTON and RINGS ASSY, cylinder (UC-263) (L. P. gas and natural gas) (6)
6	70 015 R1	PIN, piston (.005" oversize) (6) C-221 501 to 34717 (6) C-263 501 to 36027	9	371 089 R92	SLEEVE SET, crankcase (consists of six SLEEVES w/PISTONS and RINGS, 371 091 R92) (UC-221) (L. P. gas and natural gas)
			9	371 090 R92	SLEEVE SET, crankcase (consists of six SLEEVE w/PISTONS and RINGS, 371 092 R92) (UC-263) (L. P. gas and natural gas)
			9	371 829 R94	SLEEVE SET, crankcase (consists of six SLEEVES w/PISTONS and RINGS, 372 082 R92) (UC-221) gasoline-high altitude)
			9	372 082 R94	SLEEVES w/PISTONS and RINGS ASSY (UC-221) (gasoline-high altitude) (6)
			9	371 833 R92	SLEEVE SET, crankcase (consists of six SLEEVES w/PISTONS and RINGS, 372 084 R92) (UC-263) gasoline-high altitude)
			9	372 084 R92	SLEEVES w/PISTONS and RINGS ASSY, cylinder (UC-263) (gasoline-high altitude) (6)
			10	364 913 R1	BUSHING, piston pin (6)
			11	367 408 R11	BEARING, connecting rod (2 halves) (std) (6)
			11	367 632 R11	BEARING, connecting rod (2 halves) (.002" undersize) (6)
			11	376 666 R11	BEARING, connecting rod (2 halves) (.010" undersize) (6)

**ENGINE**

REF. NO.	PART NUMBER	DESCRIPTION
CONNECTING RODS, SLEEVES AND PISTONS - Continued		
(For use w/Sleeved Engines)		
C-221 501 to 43020		
C-263 501 to 56635		
11	376 668 R11	BEARING, connecting rod (2 Halves) (.020" undersize) (6)
11	367 631 R11	BEARING, connecting rod (2 halves) (.020" undersize) (6)
11	367 630 R91	BEARING SET, connecting rod (consists of six BEARING, 367 408 R11) (standard)
11	377 285 R91	BEARING SET, connecting rod (consists of six BEARING, 3 367 632 R11) (.002" undersize)
11	376 665 R91	BEARING SET, connecting rod (consists of six BEARING, 376 666 R11) (.010" undersize)
11	376 667 R91	BEARING SET, connecting rod (consists of six BEARING, 376 668 R11) (.020" undersize)
11	372 443 R91	BEARING SET, connecting rod (consists of six BEARING, 367 631 R11) (.030" undersize)
12	367 406 R21	ROD w/two BOLTS, 316 366 R1 and BUSHING, 364 913 R1, connecting (6)
13	280 318 C1	BOLT, connecting rod (12)

## ENGINE

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CONNECTING RODS, SLEEVES AND PISTONS</b> (For use w/Sleeved Engines)					
C-221 43021 to 53360 C-263 56636 to 93942					
 <p>The diagram illustrates the assembly of engine components. At the top left, three piston rings are shown with callouts 1, 2, and 3 pointing to them. To the right is a cylinder sleeve with callout 7 pointing to it. Below the cylinder is a piston with callout 8 pointing to it. To the left of the piston is a piston pin with callout 6 pointing to it. At the bottom left is a connecting rod with callout 13 pointing to it. Callout 10 points to a bearing cap. Callout 11 points to a connecting rod bearing. Callout 12 points to the small end of the connecting rod. A callout labeled 'CEA-83821' points to the bottom center of the diagram.</p>					
1		RING, piston barrel compression (top groove) (6)	7		SLEEVE, cylinder (order sleeve assembly cylinder w/piston and rings) (6)
2		RING, piston taper face compression (Second groove) (6)	8		PISTON (order sleeve assembly cylinder w/piston and rings) (6)
3		RING, piston oil regulating (third groove) (6)	9	378 601 R97	SLEEVE w/PISTON and RING ASSY, cylinder (UC-221) (gasoline standard altitude) (6)
4	367 649 R92	RING SET, piston (replacement) (consists of six chrome compression rings, six plain compression and six oil regulating rings)	9	378 604 R97	SLEEVE w/PISTON and RINGS ASSY, cylinder (UC-263) (gasoline standard altitude) (6)
4	539 379 R1	RING SET, piston (replacement) (consists of two compression rings and one oil regulating ring) (6)	9	378 600 R97	SLEEVE SET, cylinder (consists of six sleeves w/PISTONS and RINGS, 378 601 R93) (UC-221) (gasoline standard Altitude)
5	19 517 D	RING, piston pin retainer (12)	9	378 603 R97	SLEEVE SET, cylinder (consists of six sleeves w/PISTONS and RINGS, 378 604 R94) (UC-263) (gasoline standard altitude)
6	278 271 R1	PIN, piston (standard) (6)	9	380 647 R97	SLEEVE w/PISTON and RING ASSY, cylinder (UC-221) (L. P. gas, natural gas, and gasoline high altitude) (6)
6	278 326 R1	PIN, piston (.005" oversize) (6)	9	380 649 R97	SLEEVE w/PISTON and RING ASSY, cylinder (UC-263) (L. P. gas, natural gas and gasoline-high altitude) (6)
			9	380 646 R97	SLEEVE SET, crankcase (consists of six SLEEVES w/PISTONS and RINGS, 380 647 R94) (UC-221) (L. P. gas, natural gas and gasoline -high altitude)
			9	380 648 R97	SLEEVE SET, crankcase (consists of six SLEEVES w/PISTONS and RINGS, 380 649 R95) (UC-263) (L. P. gas, natural gas and gasoline - high altitude)
			10	364 913 R1	BUSHING, piston pin (6)
			11	367 408 R11	BEARING, connecting rod (2 halves) (standard) (6)
			11	367 632 R11	BEARING, connecting rod (2 halves) (.002" undersize) (6)
			11	376 666 R11	BEARING, connecting rod (2 halves) (.010" undersize) (6)
			11	376 668 R11	BEARING, connecting rod (2 halves) (.020" undersize) (6)
			11	367 631 R11	BEARING, connecting rod (2 halves) (.030" undersize) (6)
			11	367 630 R91	BEARING SET, connecting rod (consists of six BEARING, 367 408 R11) (standard)
			11	377 285 R91	BEARING SET, connecting rod (consists of six BEARING, 367 632 R11) (.002" undersize)
			11	376 665 R91	BEARING SET, connecting rod (consists of six BEARING, 376 666 R11) (.010" undersize)

## ENGINE

REF. NO.	PART NUMBER	DESCRIPTION
CONNECTING RODS, SLEEVES AND PISTONS - Continued		
(For use w/Sleeved Engines)		
C-221 43021 to 53360		
C-263 56636 to 93942		
11	376 667 R91	BEARING SET, connecting rod (consists of six BEARING, 376 668 R11) (.020" undersize)
11	372 443 R91	BEARING SET, connecting rod (consists of six BEARING, 367 631 R11) (.030" undersize)
12	367 406 R21	ROD w/two BOLTS, 316 366 R1 and BUSHING, 364 913 R1, con- necting (6)
13	280 318 C1	BOLT, connecting rod (12)

ENGINE

(x) - As Required.

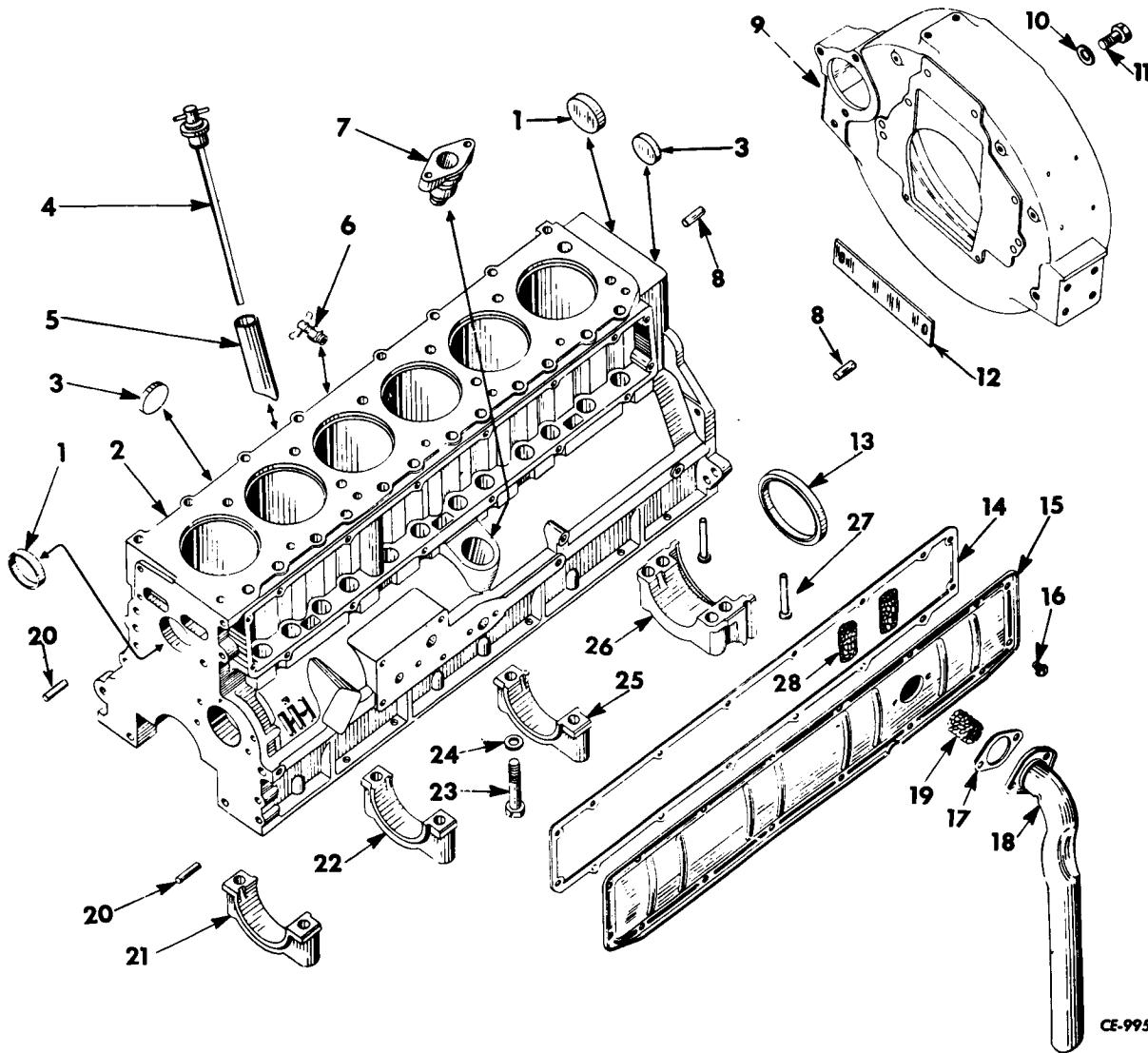
**ENGINE**

REF. NO.	PART NUMBER	DESCRIPTION
CONNECTING RODS AND PISTONS - Continued		
(For use w/Sleeveless Engines)		
(UC-221 53361 and up)		
(UC-263 93943 and up)		
8	364 913 R1	BUSHING, piston pin (6)
9	367 408 R11	BEARING, connecting rod (2 halves) (standard) (6)
9	367 632 R11	BEARING, connecting rod (2 halves) (.002 u/s) (6)
9	376 666 R11	BEARING, connecting rod (2 halves) (.010 u/s) (6)
9	376 668 R11	BEARING, connecting rod (2 halves) (.020 u/s) (6)
9	367 631 R11	BEARING, connecting rod (2 halves) (.030 u/s) (6)
9	367 630 R91	BEARING SET, connecting rod (standard) (consists of six BEAR- INGS, 367 408 R11)
9	377 285 R91	BEARING SET, connecting rod (.002 u/s) (consists of six BEAR- INGS, 367 632 R11)
9	376 665 R91	BEARING SET, connecting rod (.010 u/s) (consists of six BEAR- INGS, 376 666 R11)
9	376 667 R91	BEARING SET, connecting rod (.002 u/s) (consists of six BEAR- INGS, 376 668 R11)
9	372 443 R91	BEARING SET, connecting rod (.030 u/s) (consists of six BEAR- INGS, 367 631 R11)
10	367 406 R21	ROD w/two BOLTS, 316 366 R1 and BUSHING, 364 913 R1, connecting (6)
11	280 318 C1	BOLT, connecting rod (12)

# ENGINE

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**CRANKCASE AND RELATED PARTS**  
(UC-221 and UC-263)



CE-99577

1	20 840 R1	PLUG, core hole (2)	2	DOWEL	371 699 R2
2	402 896 R91	CRANKCASE ASSEMBLY (Will work for CRANKCASE ASSY, 367 512 R95) (UC-221) (Composed of -	2	DOWEL	376 353 R1
		1 ADAPTER 367 513 R1	1	GASKET	532 496 R1
		§ 4 BUSHING	4	NUT	102 637
		4 BOLT 19 992 R1	6	PIN	278 271 R1
		10 BOLT 70 133 R1	§ 6	PISTON	
		1 CAP 306 671 R1	1	PLUG	444 618
		1 CAP 306 672 R1	2	PLUG	444 782
		1 CAP 306 673 R1	3	PLUG	444 854
		1 CAP 306 674 R1	6	PLUG	379 278 C1
		1 COVER 356 243 R1	2	PLUG	20 840 R1
	§ 1	CRANKCASE	12	RETAINER	19 517 D
	2	DOWEL 141 285	§ 18	RING	
			2	SCREW	179 814
			§ 6	SLEEVE	
			1	TUBE	378 102 R1
			2	WASHER	103 320
			4	WASHER	103 323
			10	WASHER	58 516 H )

§ - Not Furnished Separately.

## ENGINE

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CRANKCASE AND RELATED PARTS - Continued</b> (UC-221 and UC-263)					
2	402 897 R92	CRANKCASE ASSEMBLY (Will work for CRANKCASE ASSY, 367 512 C95) (UC-263) (Composed of - 1 ADAPTER 367 513 R1 § 4 BUSHING 4 BOLT 19 992 R1 10 BOLT 70 133 R1 1 CAP 306 671 R1 1 CAP 306 672 R1 1 CAP 306 673 R1 1 CAP 306 674 R1 1 COVER 356 243 R1 § 1 CRANKCASE 2 DOWEL 141 285 2 DOWEL 371 699 R2 2 DOWEL 376 353 R1 1 GASKET 532 496 R1 4 NUT 102 637 6 PIN 278 271 R1 § 6 PISTON 1 PLUG 444 618 2 PLUG 444 782 3 PLUG 444 854 6 PLUG 379 278 C1 2 PLUG 20 840 R1 12 RETAINER 19 517 D \$18 RING 2 SCREW 179 814 § 6 SLEEVE 1 TUBE 378 120 R1 2 WASHER 103 320 4 WASHER 103 323 10 WASHER 58 516 H )	6	103 647 OR 6	COCK, 1/4"BRS Type C drain (UC-221) COCK, 1/4"BRS Type B, drain (UC-221) PLUG, 1/4" Auto hex-hd pipe (UC-263) ADAPTER, distributor mounting DOWEL, engine rear support (standard) (2) DOWEL, engine rear support (.030 o/s) (2) HOUSING, flywheel (part of Flywheel Housing Attachment, 318 441 R91) WASHER, 1/2" lock (6) SCREW, 1/2 x 1-1/4" hex-hd cap (2) SEAL, engine rear support dust (part of Flywheel Housing Attachment 318 441 R91) NUT, 1/2" (4) SCREW, 5/16 x 5/8" hex-hd cap (2) SCREW, 1/2 x 2-1/4" hex-hd cap (4) WASHER, 11/32 x 11/16" x 18 ga. (2)
	102 637 444 852 444 854 444 782 179 814 103 320 103 323	NUT, 1/2" hex-hd (4) PLUG, 1/8" auto hex-soc pipe (3) PLUG, 1/8" auto hex-soc drain PLUG, 3/8" short sq-soc pipe (2) SCREW, 5/16 x 5/8" hex-hd cap (2) WASHER, 5/16" medium lock (2) WASHER, 1/2" medium lock (4)	13	538 983 R1	SEAL, crankshaft rear oil
3	379 278 C1	PLUG, core hole (2)	14	369 982 R1	GASKET, push rod cover
4	312 051 R91	GAUGE, oil level (for Magneto Ignition) C-221-501 to 43020 C-263-501 to 56635	15	315 970 R91	COVER, valve push rod
4	368 986 R91	GAUGE, oil level (for Distributor Ignition) C-221-501 to 42020 C-263-501 to 56635	16	375 612 R91	SCREW, valve push rod (16)
4	387 347 R91	GAUGE, oil level (for Distributor Ignition) C-221-43021 Up C-263-56636 Up	17	369 981 R1	GASKET, breather pipe
5	312 052 R1	TUBE, oil filler (for Magneto Ignition) C-221-501 to 43020 C-263-501 to 56635	18	368 429 R31 374 587 R91	PIPE, w/FLANGE, breather SCREW w/WASHER, 1/4 x 1/2" slt rd hd (2)
4	368 986 R91	GAUGE, oil level (for Distributor Ignition) C-221-501 to 42020 C-263-501 to 56635	19	369 442 R1	ELEMENT, breather pipe (If equipped)
5	368 985 R2	TUBE, oil filler (for Distributor Ignition) C-221-501 to 43020 C-263-501 to 56635	20	141 285	PIN, 1/2 x 1-1/4" dowel, crankcase front plate and cover (2)
4	387 347 R91	GAUGE, oil level (for Distributor Ignition) C-221-43021 Up C-263-56636 Up	21	306 671 R1	CAP, crankshaft front bearing
5	312 052 R1	TUBE, oil filler (for Magneto Ignition) C-221-501 to 43020 C-263-501 to 56635	22	306 672 R1	CAP, crankshaft front intermediate
5	368 985 R2	TUBE, oil filler (for Distributor Ignition) C-221-501 to 43020 C-263-501 to 56635	23	70 133 R1	BOLT, crankshaft bearing cap (10)
5	378 102 R1	TUBE, oil filler (for Distributor Ignition) C-221 43021 Up C-263 56636 Up	24	58 516 H	WASHER, crankshaft bearing cap (10)
			25	306 673 R1	CAP, crankshaft rear bearing intermediate bearing
			26	306 674 R1	CAP, crankshaft rear bearing
			27	310 665 R1	PLUG, rear bearing cap filler (2)

§ - Not Furnished Separately.

## ENGINE

REF. NO.	PART NUMBER	DESCRIPTION
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**CRANKCASE AND RELATED PARTS - Continued**  
(UC-221 and UC-263)

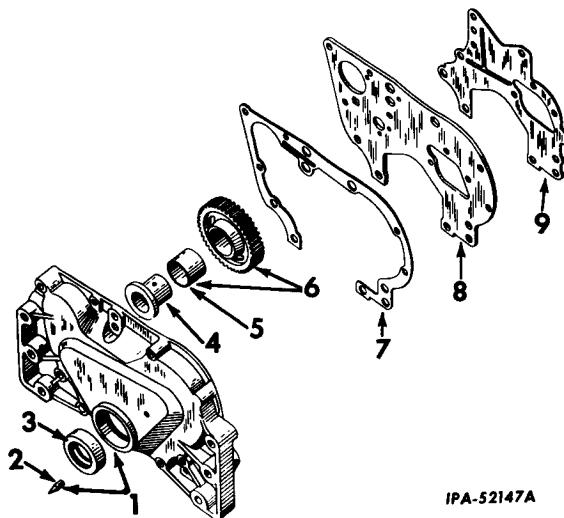
28	315 849 R1	ELEMENT, breather pipe (2)
	318 441 R91	ATTACHMENT, flywheel housing (*)
	356 243 R1	COVER, fuel pump pad (Used with Hydraulic Pump)
	371 699 R2	DOWEL, engine rear support
46 923 D	DOWEL, engine rear support	
19 992 R1	SCREW, 1/2 x 2-1/4" hex-hd cap (4)	
102 637	NUT, 1/2" (4)	
141 285	DOWEL, crankcase front plate and cover (2)	
532 496 R1	GASKET, fuel pump cover (Used w/Hydraulic Pump)	
278 271 R1	PIN, piston (Also listed and illustrated with "Connecting Rods and Pistons") (6)	
19 517 D	RETAINER, piston pin (Also listed and illustrated with "Connecting Rods and Pistons") (12)	

(\*) - Attachment no longer available.  
Service Parts will be furnished.

## ENGINE

REF. NO.	PART NUMBER	DESCRIPTION
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CRANKCASE FRONT COVER AND IDLER GEAR



IPA-52147A

1	372 499 R11 179 892 103 323	COVER w/POINTER, 367 572 R1 crankcase front (not *) SCREW, 1/2 x 3" hex hd cap (6) WASHER, 1/2" lock (6)
1	312 505 R31 16 081 R1 103 028 179 883 103 323	COVER w/POINTER, 367 572 R1 crankcase front (*) BOLT, 1/2 x 3-1/8" (6) NUT, 1/2NF (3) SCREW, 1/2 x 1-1/4" hex hd cap WASHER, 1/2" lock
2	367 572 R1	POINTER, timing
3	357 672 R91	OIL SEAL, crankshaft used w/ DAMPER, 372 203 R2)
3	391 976 R91	OIL SEAL, crankshaft (used w/ PULLEY, 371 574 R2 or DAMPER, 338 952 R91)
4	530 973 R1 179 887 615 090 R1	HUB, idler gear SCREW, 1/2 x 2-1/4" hex hd cap WASHER, 17/32 x 2" x 11 ga.
5	398 034 R1	BUSHING, idler gear
6	398 032 R1	GEAR w/BUSHING, 398 034 R1, idler
7	312 506 R1 367 574 R1	GASKET, crankcase front cover (*) GASKET, crankcase front cover (not *)
8	316 155 R11 367 524 R2 179 836 103 321	PLATE, crankcase front (*) PLATE, crankcase front (not *) SCREW, 3/8 x 1" hex hd cap (6) WASHER, 3/8" lock (6)
9	316 156 R1 398 024 R1	GASKET, crankcase front plate (*) GASKET, crankcase front plate (not *)
	278 269 R1 179 814 103 320	COVER, governor gear (*) SCREW, 5/16 x 5/8" hex hd cap (5) WASHER, 5/16" lock (5)
	278 270 R1	GASKET, governor gear cover (*)

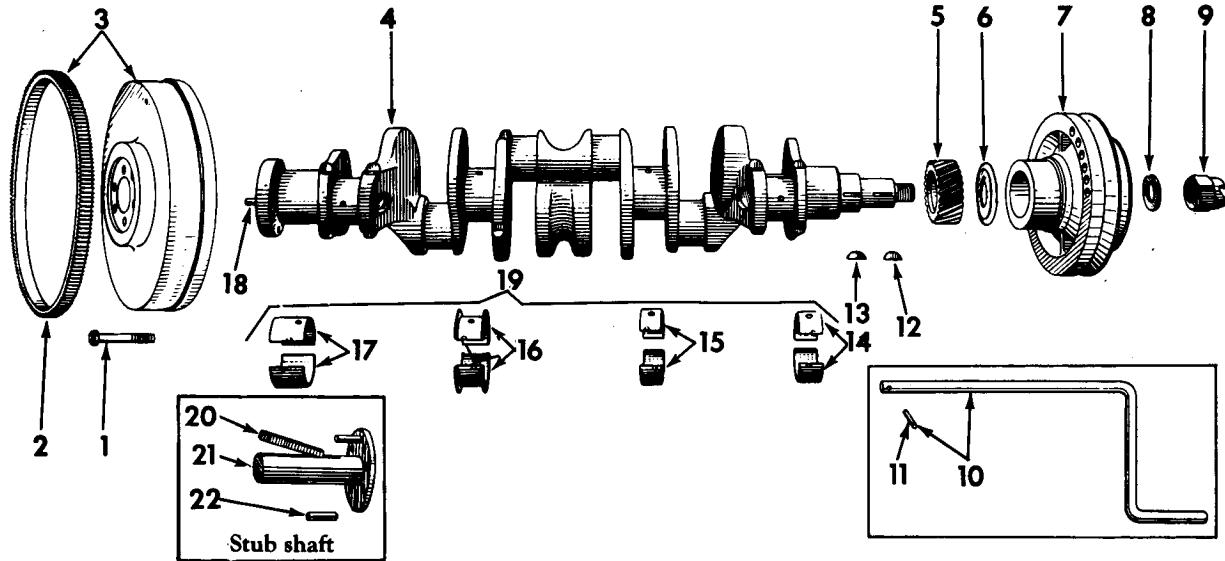
(\*) - Used with Hydraulic Pump

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## ENGINE

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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CRANKSHAFT, FLYWHEEL, BEARINGS, STUB SHAFT  
AND STARTING CRANK



IPB-10356 B

1	19 466 R1	BOLT, flywheel to crankshaft (Used with ATTACHMENTS, 305 189 R91, 312 571 R91 and 305 190 R91) (6)	1	BEARING SET § 1 CRANKSHAFT 1 PIN 82 970 R1 )
1	9 409 049	BOLT, flywheel to crankshaft (Used with flywheel ATTACHMENT, 312 729 R91)	4	367 269 R91 CRANKSHAFT ASSY (standard) (UC-263) C-263 501 to 36693 (Composed of - 1 BEARING 367 630 R91 1 BEARING 382 357 R91 § 1 CRANKSHAFT 1 PIN 82 970 R1 )
2	372 568 R1	GEAR, flywheel ring (159T)		
3	312 563 R92	FLYWHEEL w/GEAR, 372 568 R1 (Used with flywheel ATTACHMENT, 312 571 R91)		
3	312 728 R11	FLYWHEEL w/GEAR, 372 568 R1 (Used with flywheel ATTACHMENT, 312 729 R91)	4	382 356 R91 CRANKSHAFT ASSY (standard) (UC-263) C-263 36694 Up (Composed of - 1 BEARING 367 630 R91 1 BEARING 367 630 R91 § 1 CRANKSHAFT 1 PIN 82 970 R1 )
3	318 053 R91	FLYWHEEL w/GEAR, 372 568 R1 (Used with flywheel ATTACHMENT, 318 051 R91)		
3	372 567 R91	FLYWHEEL w/GEAR, 372 568 R1 (Used with flywheel ATTACHMENT, 305 189 R91)		
3	372 569 R91	FLYWHEEL w/GEAR, 372 568 R1 (Used with ATTACHMENT, 305 190 305 190 R91)	4	367 270 R92 PACKAGE, crankshaft w/BEARINGS, field service (renewal) (undersize) (UC-221) (Consists of six connecting rod BEARINGS, four crankshaft BEARINGS, CRANKSHAFT and PIN, 82 970 R1)
4	367 268 R91	CRANKSHAFT ASSY (standard) (UC-221) C-221 501 to 35093 (Composed of - 1 BEARING 367 630 R91 SET 1 BEARING 367 275 R91 SET § 1 CRANKSHAFT 1 PIN 82 970 R1)	4	367 271 R92 PACKAGE, crankshaft w/BEARINGS, field service (renewal) (undersize) (UC-263) (Consists of six connecting rod BEARINGS, four crankshaft BEARINGS, CRANKSHAFT and PIN, 82 970 R1)
4	382 355 R91	CRANKSHAFT ASSY (standard) (UC-221) C-221 35094 Up (Composed of - 1 BEARING 367 630 R91 SET	5	367 272 R1 GEAR, crankshaft
			6	71 763 R2 SLINGER, crankshaft oil

§ - Not Furnished Separately

**ENGINE**

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
CRANKSHAFT, FLYWHEEL, BEARINGS, STUB SHAFT AND STARTING CRANK - Continued					
7	371 573 R2	PULLEY, fan drive (UC-221)	16	332 270 R91	BEARING, crankshaft intermediate (2 halves) (.030" undersize) C-221 35094 Up C-263 36694 Up
7	338 949 R91	DAMPER (standard on UC-263)	17	367 285 R91	BEARING, crankshaft rear (2 halves) (standard)
8	70 109 R1	WASHER, starting crank nut	17	367 309 R91	BEARING, crankshaft rear (2 halves) (.002" undersize)
9	219 755	NUT, crankshaft	17	376 679 R91	BEARING, crankshaft rear (2 halves) (.010" Undersize)
10	271 705 R91	CRANK w/PIN, 15 204 D, starting	17	376 692 R91	BEARING, crankshaft rear (2 halves) (.020" undersize)
11	15 204 D	PIN, starting crank	17	367 297 R91	BEARING, crankshaft rear (2 halves) (.030" undersize)
12	117 984	KEY, 5/16 x 1-3/8" (Woodruff No. 23)	18	82 970 R1	PIN, flywheel to crankshaft dowel
13	103 462	KEY, 3/16 x 1" (Woodruff No. 13) crankshaft gear)	19	367 275 R91	BEARING SET, crankshaft C-221 501 to 35093 C-263 501 to 36693
14	367 276 R91	BEARING, crankshaft front (2 halves) (standard)	19	382 357 R91	BEARING SET, crankshaft C-221 35094 Up C-263 36694 Up
14	367 300 R91	BEARING, crankshaft front (2 halves) (.002" undersize)	19	382 359 R91	BEARING SET, crankshaft (.002" undersize)
14	376 670 R91	BEARING, crankshaft front (2 halves) (.010" undersize)	19	382 360 R91	BEARING SET, crankshaft (.010" undersize)
14	376 683 R91	BEARING, crankshaft front (2 halves) (.020" undersize)	19	382 361 R91	BEARING SET, crankshaft (.020" undersize)
14	367 288 R91	BEARING, crankshaft front (2 halves) (.030" undersize)	19	372 444 R91	BEARING SET, crankshaft (.030" undersize) C-221 501 to 35093 C-263 501 to 36693
15	367 279 R91	BEARING, crankshaft intermediate front (2 halves) (standard)	19	382 358 R91	BEARING SET, crankshaft (.030" undersize) C-221 35094 Up C-263 36694 Up
15	367 303 R91	BEARING, crankshaft intermediate front (2 halves) (.002" undersize)	312 729 R91	ATTACHMENT, flywheel (for use with light duty power take-off ATTACHMENTS, 273 020 R91 and 273 021 R91 and with 8" single plate overcenter drive ring type clutch (Rockford or Twin Disc)(UC-221) (see NOTES 1 and 3)(Consists of six BOLT, 9 409 049 and one FLY-WHEEL, 312 728 R11)	
15	376 673 R91	BEARING, crankshaft intermediate front (2 halves) (.010" undersize)	305 189 R91	ATTACHMENT, flywheel (for use with light duty power take-off ATTACHMENTS, 273 017 R91 and 273 018 R91 and with 10" single plate overcenter drive ring type clutch (Rockford or Twin-Disc) (UC-263) (see NOTES 1 and 3) (Consists of six BOLT, 19 466 R1 and one FLYWHEEL, 372 567 R91)	
15	367 686 R91	BEARING, crankshaft intermediate front (2 halves) (.020" undersize)			
15	367 291 R91	BEARING, crankshaft intermediate front (2 halves) (.030" undersize)			
16	367 282 R91	BEARING, crankshaft intermediate rear (standard) (2 halves) C-221 501 to 35093 C-263 501 to 36693			
16	332 267 R91	BEARING, crankshaft intermediate rear (standard) (2 halves) C-221 35094 Up C-263 36694 Up			
16	367 306 R91	BEARING, crankshaft intermediate (.002" undersize) (2 halves) C-221 501 to 35093 C-263 501 to 36693			
16	332 273 R91	BEARING, crankshaft intermediate (.002" undersize) (2 halves) C-221 35094 Up C-263 36694 Up			
16	332 276 R91	BEARING, crankshaft intermediate rear (2 halves) (.010" undersize)			
16	332 279 R91	BEARING, crankshaft intermediate rear (2 halves) (.020" undersize)			
16	367 294 R91	BEARING, crankshaft intermediate (2 halves) (.030" undersize) C-221 501 to 35093 C-263 501 to 36693			
NOTE 1 - Factory Application - Order On Machine Order Form.					
NOTE 3 - Field Application - Order Through Regular Service Parts Channels.					

## ENGINE

REF. NO.	PART NUMBER	DESCRIPTION
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CRANKSHAFT, FLYWHEEL, BEARINGS, STUB SHAFT  
AND STARTING CRANK - Continued

318 051 R91	ATTACHMENT, flywheel (for use with Funk Model TRC-D16A-T9 Torque Converter) (*)  (Consists of - 1 BUSHING 318 049 R1 1 SPACER 312 562 R1 8 SPACER 318 050 R1 1 FLYWHEEL 318 053 R91)
312 571 R91	ATTACHMENT, flywheel (for use with 12" clutch and controls ATTACHMENT, 312 837 R91 and transmission ATTACHMENT, 312 838 R91 or 312 839 R91)(see NOTES 1 and 3) (Consists of six BOLT, 19 466 R1 one FLYWHEEL, 312 563 R91 and one SPACER, 312 562 R2)
305 190 R91	ATTACHMENT, flywheel (for use with 11-1/2" single plate over-center drive ring type clutch (Rockford or Twin-Disc)(UC-263) (See NOTES1 and 3) (Consists of six BOLTS, 19 466 R1 and one FLYWHEEL, 372 569 R91)
318 049 R1	BUSHING, torque converter pilot (use with ATTACHMENT, 318 051 R91)
312 562 R2	SPACER, cranking motor (used with ATTACHMENTS, 318 051 R91 and 312 571 R91) SCREW, 3/8 x 2" hex hd cap (3) WASHER, 3/8" lock (3)
318 050 R1	SPACER, mounting strap (used with ATTACHMENT, 318 051 R91) (8)

### DIRECT CONNECTED STUB SHAFT ATTACHMENT

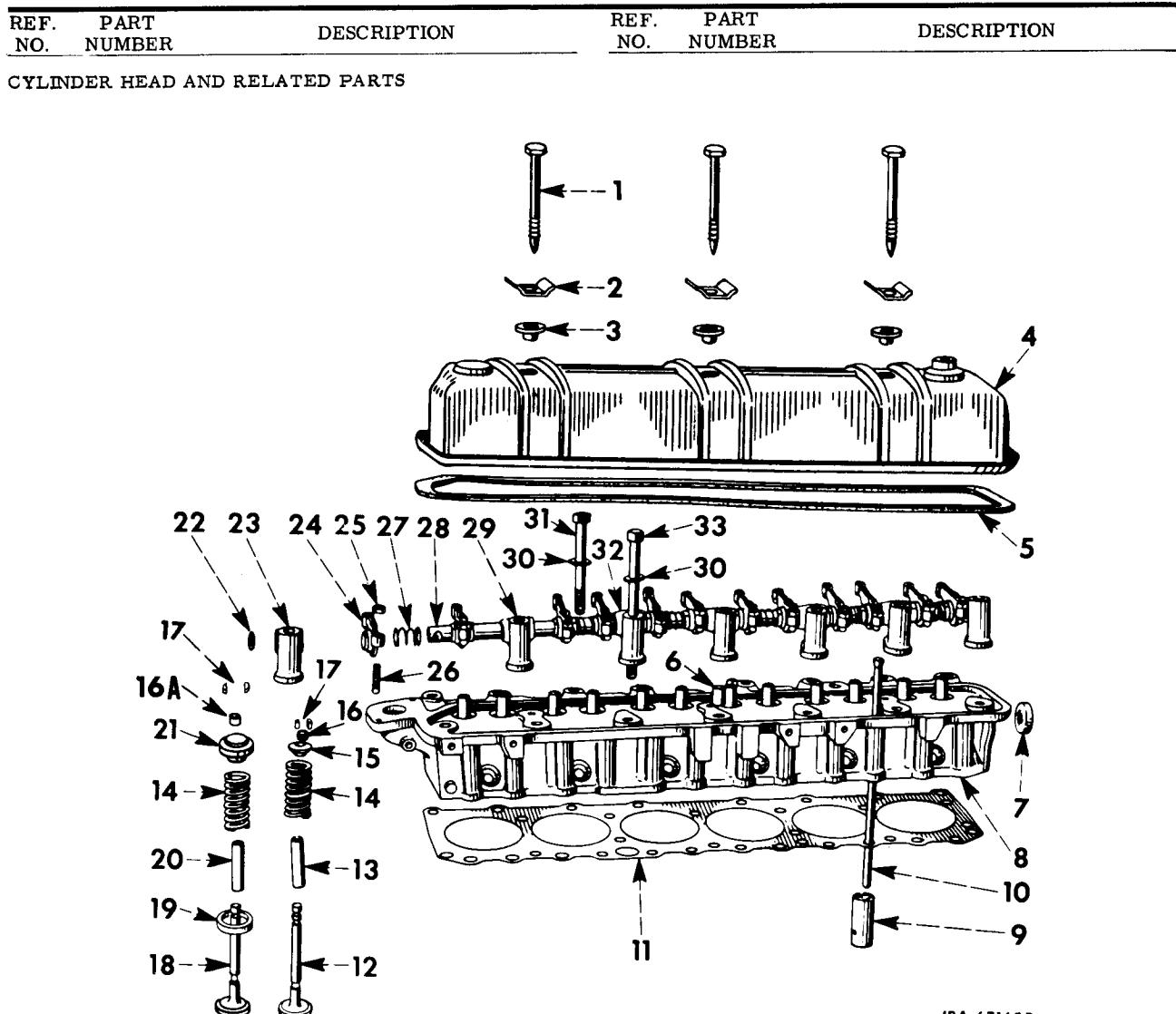
305 698 R91	ATTACHMENT, stub shaft (direct connected) (see NOTES 1 and 3)
20 29 308 D	KEY, belt pulley
21 305 699 R91 18 646 R1	SHAFT w/DOWEL, 305 700 R1 stub BOLT, 7/16NF x 2-1/4" (type AA hex lock) (6)
22 305 700 R1	DOWEL, stub shaft

(\*) - Attachment no longer available.  
Service parts will be furnished.

NOTE 1 - Factory Application -  
Order On Machine Order  
Form.

NOTE 3 - Field Application - Order  
Through Regular Service  
Parts Channels.

## ENGINE

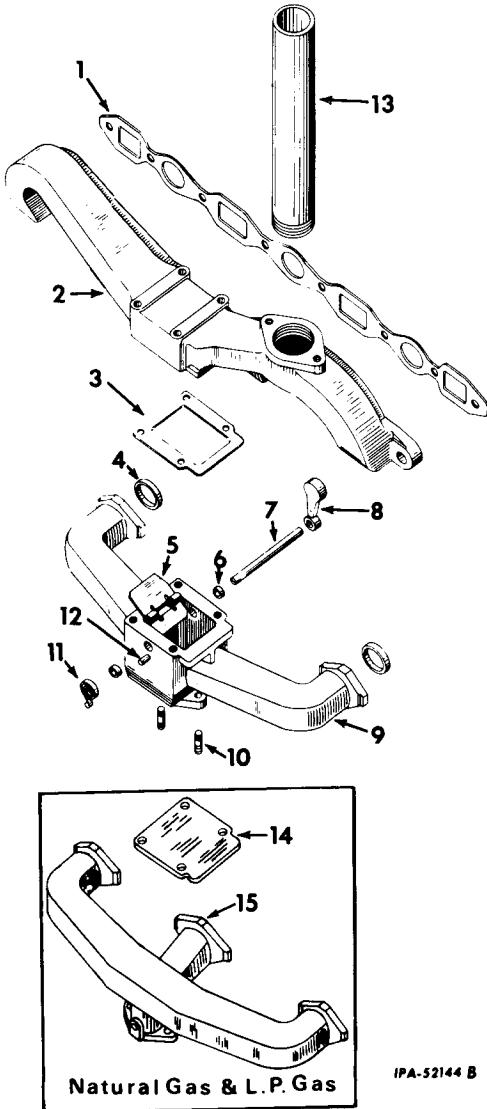


1	168 144 R1	BOLT, valve cover (3)	6	ROTO-COIL 375 604 R91
2	370 208 R1	STIFFENER, valve cover (3)	12	SEAL 866 834 R1
3	164 420 R1 Q 399	GROMMET, valve cover (3) WASHER, 11/32 x 1" x 16 ga. flat (3)	12	SPRING 367 192 R1
4	378 617 R91 103 866	COVER w/PLUG, 103 866 valve PLUG, 1/4" sq-hd pipe	6	VALVE 234 275 R1
5	369 983 R2	GASKET, valve cover	6	VALVE 372 699 R2 )
6	69 500 R1	DOWEL, valve lever shaft intermediate No. 2, No. 4 and No. 6 bracket (3)	8	373 423 R21 HEAD ASSY, w/o VALVES, cylinder C-221 501 to 43020 C-263 501 to 56635 (Composed of - § 1 HEAD 12 GUIDE 237 248 R1 1 PLUG 70 128 R1 1 PLUG 126 045 1 PLUG 103 874 6 SEAT 126 373 R1 )
7	70 128 R1 444 782 179 812	PLUG, core hole PLUG, 3/8" Auto-sq-soc. pipe slt. SCREW, 5/16 x 1/2" hex hd cap(2)	179 812	SCREW, 5/16 x 1/2" hex hd cap(2)
8	372 615 R94	HEAD ASSY w/VALVES, cylinder (Will work for 367 189 R93) C-221 501 to 43020 C-263 501 to 56635 (Composed of - 1 HEAD 373 423 R21 24 KEY 41 339 D 6 RETAINER 151 167 R3	8	383 665 R95 HEAD w/o VALVE ASSY, cylinder (will work for cylinder head w/VALVES 382 098 R92) C-221 43021 Up C-263 56636 Up (Composed of - 6 GUIDE 237 248 R1 6 GUIDE 535 229 R1 § - Not Furnished Separately

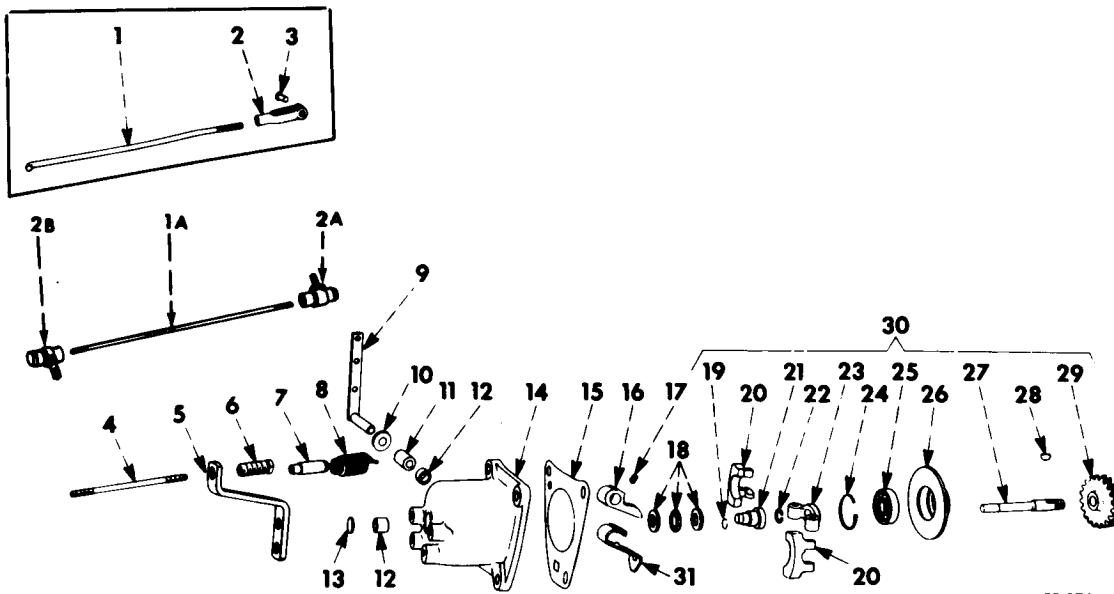
## ENGINE

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
CYLINDER HEAD AND RELATED PARTS - Continued					
		§ 1 HEAD 1 PLUG                      70 128 R1 6 SEAT                      112 508 R1 )	21	375 604 R91	ROTOCOIL, exhaust valve (Gasoline) (6)
179 852		SCREW, 7/16 x 1 1/2" hex-hd cap (3)	21	76 950 R2	RETAINER, valve spring (L. P. Gas and Natural Gas) (6)
9	75 524 R3 OR 9	TAPPET, valve (12)	22	109 544 R1	PLUG, rocker arm (2)
9	911 776 R3	TAPPET, valve (12)	23	164 422 R1	BRACKET, valve lever shaft front and rear (2)
10	164 436 R91	ROD, valve push (12)	24	164 432 R91	LEVER w/SCREW, 16 067 DA and NUT, 133 093 R1, valve (12)
11	164 418 R2	GASKET, cylinder head	25	133 093 R1	NUT, valve lever adjusting screw (12)
12	234 275 R1	VALVE, intake (Together with SEAL, 866 834 R1, will work for VALVE, 127 201 R1) (6) C-221 501 to 43020 (6) C-263 501 to 56635	26	16 067 DA	SCREW, valve lever adjusting (12)
			27	35 619 H	SPRING, valve lever (6)
			28	76 953 R3 17 244 R1	SHAFT, valve lever (2) PIN, 5/16 x 1-1/4" roll (Optional with 19 790 R1) (2) PIN, 5/16 x 1-1/4" roll (Optional with 17 244 R1) (2)
12	234 276 R1	VALVE, intake (6) C-221 43021 Up (6) C-263 56636 Up	19 790 R1		
13	237 248 R1	GUIDE, intake valve stem (6) C-221 501 to 53643 (6) C-263 501 to 95245	29	164 423 R11	BRACKET w/DOWEL, 69 500 R1, valve lever shaft intermediate No. 2, No. 4 and No. 6 (3)
13	535 229 R1	GUIDE, intake valve stem (6) C-221 53644 Up (6) C-263 95246 Up	30	58 516 H	WASHER, cylinder head bolt (15)
14	367 192 R1	SPRING, valve (12)	31	69 722 R1	BOLT, cylinder head (short) (8)
15	151 167 R3	RETAINER, valve spring (6)	32	164 425 R1	BRACKET, valve lever shaft, intermediate No. 3 and No. 5 (2)
16	866 834 R1	SEAL, intake valve stem (6) C-221 501 to 53643 (6) C-263 501 to 95245	33	367 190 R1	BOLT, cylinder head (long) (7)
16	535 166 R1	SEAL, intake valve stem (6) C-221 53644 Up (6) C-263 95246 Up	444 782 444 664	PLUG, 3/8" sq-soc pipe PLUG, 1/2" sq-soc pipe	
16A	866 834 R1	SEAL, exhaust valve stem (6)	111 024 R1	SEAL, intake valve stem (Used with VALVE, 127 201 R1) (6)	
17	41 339 D	KEY, valve spring retainer (24)			
18	367 191 R1	VALVE, exhaust (gasoline) (6)			
18	372 699 R3	VALVE, exhaust (Stellite faced) (Natural Gas and L. P. Gas) (See NOTE) (6)			
19	126 373 R1	SEAT, exhaust valve (Gasoline) (6)			
19	112 508 R1	SEAT, exhaust valve (Natural Gas and L. P. Gas) (6)			
19	126 231 R1	SEAT, exhaust valve (.015" o/s) (Gasoline) (6)			
19	126 229 R1	SEAT, exhaust valve (.015" o/s) (Natural Gas and L. P. Gas) (6)			§ - Not Furnished Separately.
19	83 488 R2	SEAT, exhaust valve (.030" o/s) (Gasoline) (6)			NOTE - Also Available for Service On Gasoline Engines if Desired.
19	112 509 R1	SEAT, exhaust valve (.030" o/s) (Natural Gas and L. P. Gas) (6)			
20	237 248 R1	GUIDE, exhaust valve stem (6)			

## ENGINE

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>INTAKE AND EXHAUST MANIFOLDS</b>					
					
		IPA-52144 B			
1	400 878 R1	GASKET, intake and exhaust manifold	7	82 959 R1	SHAFT, manifold heat control valve
2	368 550 R11	MANIFOLD w/PLUG, 103 317, exhaust	8	85 699 R1	WEIGHT, manifold heat control
	399 446 R1	PIN, 3/16 x 1/2" taper groove	9	318 445 R91	MANIFOLD ASSY, intake (gasoline)(*) C-221 501 to 43020 C-263 501 to 56635
	399 447 R1	SCREW, 3/8 x 3" hex hd cap (4)		(Composed of -	
	400 877 R1	SCREW, 3/8 x 1-1/4" Hex hd cap (6)	2	BUSHING	69 443 R1
3	85 868 R1	WASHER, 13/32 x 7/8" x 7 ga. (8)	1	PLUG	445 671
4	98 573 HA	GASKET, intake to exhaust manifold	1	PIN	141 159
		PILOT, intake manifold	1	SHAFT	82 959 R1
		(2) C-221 501 to 43020	1	SPRING	82 958 R2
		(2) C-263 501 to 56635	2	STUD	57 714 D
4	138 733 R1	VALVE, manifold heat control	1	VALVE	85 700 R1
5	85 700 R1	BUSHING, manifold heat control (2)	1	WEIGHT	85 699 R1 )
9	367 261 R11	MANIFOLD ASSY, intake (gasoline) (not *)		(Composed of -	
		C-221 501 to 43020 C-263 501 to 56635	2	BUSHING	69 443 R1
			1	PLUG	445 671
			1	PIN	141 159
			1	SHAFT	82 959 R1
			1	SPRING	82 958 R2
			2	STUD	57 714 D
			1	VALVE	85 700 R1
			1	WEIGHT	85 699 R1 )
10	277 016 R1	STUD, carburetor (liquefied petro- leum gas) (natural gas)(combination natural gas and gasoline) (2)			
10	12 215 D	STUD, carburetor (2)			
10	57 714 D	STUD, carburetor (part of carburetor adapter attachment) 312 057 R91(2)			
11	82 958 R2	SPRING, thermostat heat control valve			
12	141 159	PIN, 3/16 x 1" dowel			
13		PIPE, exhaust (2" standard black steel pipe 13" lg. obtain locally)			
14	371 098 R1	COVER, exhaust manifold (L. P. gas) (natural gas) (combination natural gas and gasoline)			
	102 635	NUT, 3/8" (4)			
	186 282	SCREW, 3/8 x 3-1/4" hex hd cap (4)			
15	371 097 R11	MANIFOLD w/PLUG, intake (L. P. gas) (combination natural gas and gasoline) (for use w/sleeved engines)			
15	383 377 R11	MANIFOLD w/PLUG, intake (natural gas and LPG) (for use w/sleeveless engines)			
	445 671	PLUG, 1/8" sq hd C.I. PIPE (optional with 445 864)			
	445 864	PLUG, 1/8" sq hd (optional with 445 671)			
	107 317	PLUG, exhaust manifold drain hole			
		(*) - For Use with Heavy Duty Magneto.			

# ENGINE

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>GOVERNOR AND RELATED PARTS (I.H.) (For use with distributor ignition)</b>					
					
1	368 335 R1 137 130	ROD, governor to carburetor PIN, 1/16 x 7/16" cotter C-221 501 to 48022 C-263 501 to 77319	8	376 592 R2	SPRING, governor (1500 to 1800 RPM when used w/GOVERNOR ASSY, 612 320 C91) (2000 to 2200 RPM when used w/ATTACHMENT, 612 321 C91) C-221 * Up C-263 * Up
1A	306 013 R1 103 024 103 319	ROD, governor to carburetor NUT, 1/4" (3) WASHER, 1/4" lock (2) C-221 48023 Up C-263 77320 Up	8	372 709 R2	SPRING, governor (2000 to 2200 RPM) (furnished as part of ATTACHMENT, 612 321 C91) (used w/GOVERNOR, 376 589 C91) C-221 501 to * C-263 501 to *
2	104 036 103 024	FORK, governor to carburetor rod NUT, 1/4" C-221 501 to 48022 C-263 501 to 77319	9	367 656 R12	LEVER w/ROCKSHAFT
2A	276 835 R91	JOINT, 1/4" C-Z ball C-221 48023 Up C-263 77320 Up	10	361 123 R91	OIL SEAL, governor rockshaft
2B	304 164 R91	JOINT, 1/4" snap-in ball C-221 48023 Up C-263 77320 Up	11	369 593 R1	BEARING, governor
3		PIN, 1/4 x 51/64" rod end (governor to carburetor rod fork) PIN, 1/16 x 7/16" cotter C-221 501 to 48022 C-263 501 to 77319	12	369 594 R1	BEARING, governor (2)
4	367 659 R1 103 024	ROD, governor spring retainer NUT, 1/4"NF	13	172 530	PLUG, 11/16" type No. 1 expansion
5	367 742 R1 179 818 103 320	BRACKET, governor spring SCREW, 5/16 x 1" hex hd cap (2) WASHER, 5/16" lock (2)	14	376 590 R11	HOUSING ASSY, governor (used w/ GOVERNOR ASSY, 376 589 R92 and 612 320 C91) (Composed of - 2 BEARING 369 594 R1 1 BEARING 369 593 R1 § 1 HOUSING 1 PLUG 172 530 1 OIL SEAL 361 123 R91 )
6	367 660 R1 114 496	ADJUSTER, governor spring NUT, 1/2"NF jam			
7	367 740 R1	RETAINER, governor spring			
					* - Serial No. Not Available
					§ - Not Furnished Separately

## ENGINE

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>GOVERNOR AND RELATED PARTS - Continued</b> (I.H.) (For use with distributor ignition)					
14	367 651 R21	HOUSING ASSY, governor (used w/ GOVERNOR ASSY, 372 708 R93) (Composed of - 2 BEARING     369 594 R1 1 BEARING     369 593 R1 § 1 HOUSING 1 PLUG        172 530 1 OIL SEAL    361 123 R91)	372 708 R93	GOVERNOR ASSY (order 376 589 R92) C-221 501 to 48022 C-263 501 to 77319	
179 843		SCREW, 3/8 x 1-1/2" hex hd cap (3)	376 589 R92	GOVERNOR ASSY C-221 48023 Up C-263 77320 Up (Composed of - 1 BEARING     393 405 R1 1 FORK        367 653 R1 1 GEAR w/ WEIGHT        368 939 R93 1 HOUSING     376 590 R11 1 LEVER       367 656 R12 1 SCREW        368 938 R1 1 SLEEVE      387 878 R1 1 SPRING      374 795 R1 )	
103 321		WASHER, 3/8" lock (3)			
181 319		SCREW, 1/4NF x 1-1/2" slt. rd. hd. machine			
114 492		NUT, 1/4"NF jam			
15	367 669 R1	GASKET, governor housing			
16	367 653 R1	FORK, governor thrust	612 320 C91	GOVERNOR ASSY (furnished as part of ATTACHMENT, 612 319 C91) (Composed of - 1 BEARING     393 405 R91 1 FORK        367 653 R1 1 GEAR & WEIGHT        378 128 R92 1 HOUSING     376 590 R11 1 LEVER       367 656 R12 1 SCREW SET   368 938 R1 368 1 SLEEVE      387 878 R1 1 SPRING      374 795 R1 )	
17	368 938 R1	SCREW, governor thrust fork set			
18	43 481 D	BALL BEARING, governor thrust C-221 501 to 19944 C-263 501 to 19080			
18	393 405 R91	BALL BEARING, governor thrust (together w/SLEEVE, 387 878 R1 will work for 374 794 R91) C-221 19945 Up C-263 19081 Up			
19	251 460 R1	RING, governor sleeve stop C-221 501 to 39301 C-263 501 to 53276	612 319 C91	ATTACHMENT, mechanical governor (Consists of GOVERNOR ASSY, 612 320 C91 and SPRING, 376 592 R2) (w/ or w/o Hydraulic Pump) (1500 to 1800 RPM) (10% regulation wide open throttle) (5% regulation 3/4 load) (See NOTES 1 and 3)	
20	378 129 R1	WEIGHT, governor (2)(used w/ GOVERNOR, 612 320 C91)			
20	367 741 R1	WEIGHT, governor (2) (used w/ GOVERNOR, 372 708 R93 or 376 589 R92) 17 053 R1      PIN, 1/4 x 3/8" Esna roll (2)	612 321 C91	ATTACHMENT, mechanical governor (Consists of SPRING 376 592 R2) (w/ or w/o Hydraulic Pump) (2000 to 2200 RPM) (10% regulation wide open throttle) (5% regulation 3/4 load) (See NOTES 1 and 3)	
21	387 878 R1	SLEEVE, governor thrust (together with BALL BEARING, 393 405 R91 will work for 367 668 R2)	19 983 R1	NUT, nylon (Used on Gasoline engines equipped w/Hydraulic Pump)	
22	369 477 R1	RING, snap			
23	367 726 R1	CARRIER, governor weight	376 591 R1	TUBE, governor lubrication (Use on Gasoline engines equipped w/ Hydraulic Pump)	
24	281 907 C1	RING, governor shaft bearing snap			
25	ST 552	BALL BEARING, governor shaft	386 010 R91	PACKAGE, governor field service (use w/GOVERNOR, 376 589 R92) (Composed of - 1 BEARING     369 593 R1 2 BEARING     369 594 R1 1 BEARING     ST 552 1 BEARING     393 405 R91 1 FORK        367 653 R1 1 GASKET      367 656 R12 1 LEVER       367 656 R12 1 PLUG        172 530 2 PIN         17 053 R1 1 RING        281 907 C1 1 SCREW       368 938 R1 1 SLEEVE      387 878 R1 1 SPRING      374 795 R1 1 SEAL        361 123 R91 2 WEIGHT      367 741 R1 )	
26	367 666 R1	RETAINER, governor bearing			
27	367 665 R1	SHAFT, governor			
28	452 560	KEY, governor gear (Woodruff No. 211)			
29	367 664 R1 272 614	GEAR, governor NUT, 7/16" lock (Type LLJ)			
30	368 939 R93	GEAR w/WEIGHT ASSY, governor (Part of GOVERNOR ASSY, 372 708 R93 and 376 589 R92)			
30	378 128 R92	GEAR w/WEIGHT ASSY, governor (Part of GOVERNOR ASSY, 612 320 C91)			
31	374 795 R1	SPRING, bumper			§ - Not Furnished Separately
	32 468 H	BODY, elbow (Used on Gasoline engines equipped w/Hydraulic Pump)			NOTE 1 - Factory Application Order On Machine Order Form.
					NOTE 3 - Field Application - Order Through Regular Service Parts Channels.

**ENGINE**

REF. NO.	PART NUMBER	DESCRIPTION
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**GOVERNOR AND RELATED PARTS - Continued**  
(I. H.) (For use with distributor ignition)

- 444 852 PLUG, 1/8 Auto hex. soc. hd.  
drain (optional w/444 853 or  
444 854) (used w/GOVERNOR  
ASSY, 376 589 R92 and 612 320 C91)
- 444 854 PLUG, 1/8 Auto hex. soc. hd drain  
(optional w/444 852 or 444 853)  
(used w/GOVERNOR ASSY,  
376 589 R92 and 612 320 C91)
- 444 853 PLUG, 1/8 Auto hex. soc. hd.  
drain (optional w/444 852 or  
444 854) (used w/GOVERNOR  
ASSY, 376 589 R92 and 612 320 C91)

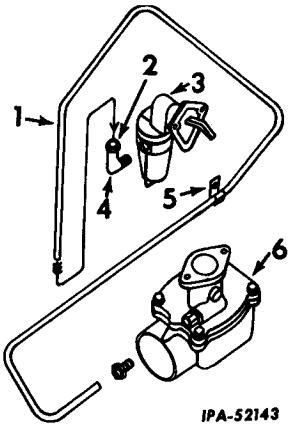
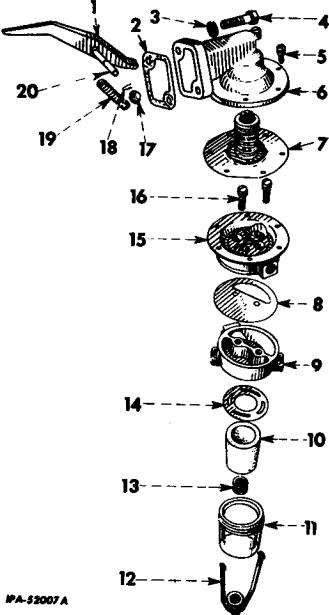
## ENGINE

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>MECHANICAL GOVERNOR</b> (Novi)					
A		Service parts for mechanical governor For use with medium duty magneto ignition on gasoline, natural gas, LPG and combination gas - gasoline For use with heavy duty magneto ignition on natural gas, LPG and combination gas - gasoline Gasoline 1800 RPM to 2400 RPM - 10% regulation Natural Gas, LPG and combination gas - gasoline 1800 RPM to 2200 RPM - 10% regulation 2400 RPM - 5% and 10% regulation	H		Service parts for mechanical governor Not used with hydraulic pump Gasoline 1200 RPM to 1600 RPM - 10% regulation 1800 RPM - 5% regulation
B		Service parts for mechanical governor For use with heavy duty magneto ignition on gasoline 1800 RPM to 2400 RPM - 10% regulation	J		Service parts for mechanical governor Not used with hydraulic pump Gasoline 1200 RPM to 1600 RPM - 10% regulation 1800 RPM - 5% regulation
C		Service parts for mechanical governor For use with medium duty magneto ignition on gasoline, natural gas, LPG and combination gas-gasoline For use with heavy duty magneto ignition on natural gas, LPG and combination gas-gasoline 1200 RPM to 1600 RPM - 10% regulation 1800 RPM - 5% regulation Natural gas, LPG and combination gas - gasoline 1200 RPM and 1400 RPM - 10% regulation 1600 RPM - 5% and 10% regulation 1800 RPM - 5% regulation	K		Service parts for mechanical governor Not used with hydraulic pump Gasoline 1200 RPM to 1600 RPM - 10% regulation 1800 RPM - 5% regulation
D		Service parts for mechanical governor For use with medium duty magneto ignition Gasoline 2400 RPM - 5% regulation	L		Service parts for mechanical governor Not used with hydraulic pump Gasoline 2400 RPM - 5% regulation
<b>FOR USE WITH MAGNETO IGNITION -</b> Continued					
E		<b>IPA-60665</b>	F		Service parts for mechanical governor For use with heavy duty magneto ignition Gasoline 1200 RPM to 1600 RPM - 10% regulation 1800 RPM - 5% regulation
F			G		Service parts for mechanical governor For use with heavy duty magneto ignition Gasoline 2400 RPM - 5% regulation
<b>FOR USE WITH DISTRIBUTOR IGNITION</b>					
G		Service parts for mechanical governor Not used with hydraulic pump Gasoline 1800 RPM to 2400 RPM - 10% regulation Natural gas, LPG and combination gas - gasoline 1800 RPM to 2200 RPM - 10% regulation 2400 RPM - 5% and 10% regulation	H		Service parts for mechanical governor For use with hydraulic pump Gasoline 1800 RPM to 2400 RPM - 10% regulation
I			J		Service parts for mechanical governor Not used with hydraulic pump Gasoline 1200 RPM to 1600 RPM - 10% regulation 1800 RPM - 5% regulation
K			L		Service parts for mechanical governor Not used with hydraulic pump Gasoline 1200 RPM to 1600 RPM - 10% regulation 1800 RPM - 5% regulation
M			N		Service parts for mechanical governor Not used with hydraulic pump Gasoline 2400 RPM - 5% regulation
1	313 998 R1	COUPLING	1	313 998 R1	COUPLING
2	443 013	PIN, 1/8 x 5/8" groove (2)	2	443 013	PIN, 1/8 x 5/8" groove (2)
3	277 161 R1	FORK	3	277 161 R1	FORK
4	277 162 R1	SPRING, bumper	4	277 162 R1	SPRING, bumper
5	313 996 R91	LEVER w/BUSHING	5	313 996 R91	LEVER w/BUSHING

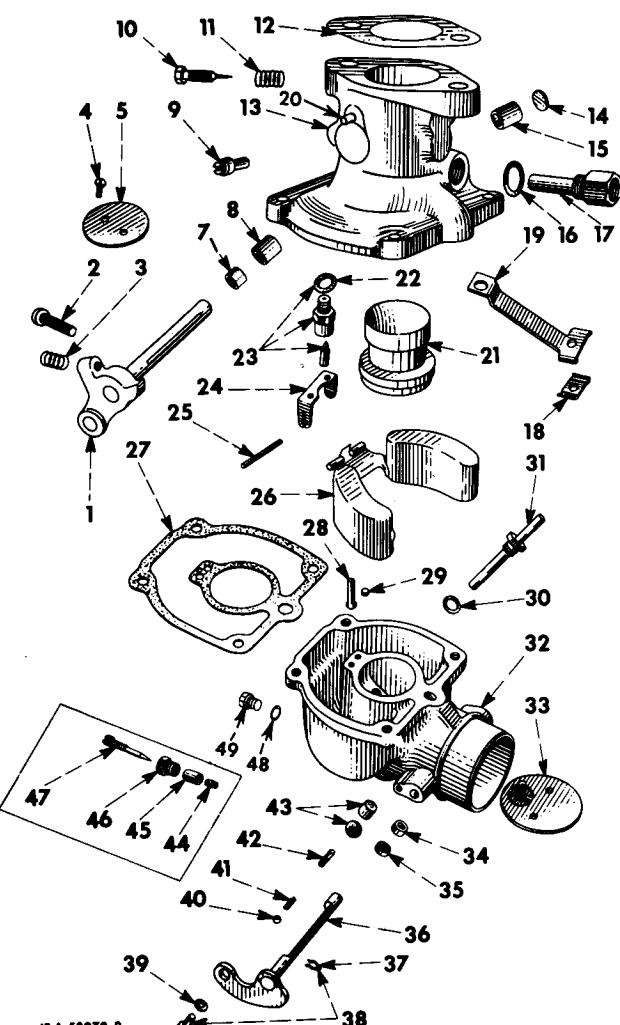
## ENGINE

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>MECHANICAL GOVERNOR - Continued</b>					
(Novi)					
6	103 883	PLUG, 1/8" headless sltd pipe (2)	310 840 R91		GOVERNOR ASSY (Mechanical Governor A, B, G and H) (Composed of -
7	313 984 R91	BODY w/two PLUG, 103 883 and SCREW, 313 988 R1			1 BODY 313 983 R91 § 1 CENTRIFUGAL UNIT
8	367 669 R1	GASKET, governor housing			1 COUPLING 313 998 R1
9	452 560	KEY, 1/16 x 3/8" Woodruff			1 KEY 452 560 ) SCREW, 3/8 x 1-1/4" hex hd cap (3)
10		CENTRIFUGAL UNIT (Not Furnished Separately) NUT, 3/8"NF WASHER, 3/8" lock	338 343 R92		WASHER, 3/8" lock (3) GOVERNOR ASSY (Mechanical Governor C, E, J and K) SCREW, 3/8 x 1-1/4" hex hd cap (3) WASHER, 3/8" lock (3)
11	313 989 R91	LEVER	338 344 R91		GOVERNOR ASSY (Mechanical Governor D, F, L and M) SCREW, 3/8 x 1-1/4" hex hd cap (3) WASHER, 3/8" lock (3)
12	313 992 R1	SPRING, governor			
13	313 990 R1	PLUNGER, spring	19 984 R1		NUT, governor lubrication tube (2 for Mechanical Governor H and M)
14	313 991 R1	SCREW, adjusting	306 013 R1		ROD, governor connecting
15		NUT, 1/4"NF (3)	312 066 R1		ROD, governor connecting (Mechanical Governor B, E and F)
16	313 995 R1	LEVER, manual			SCREW, No. 8 x 1/4" pan hd. slt. tapping
17	277 169 R1	WASHER, manual lever	995 061 R1		TUBE, governor lubrication (13" lg. copper 1/4" OD #) (Mechanical Governor H and M)
18	277 170 R1	CLIP, lever shaft			
19		NUT, 3/8"NF			
20	313 988 R1	SCREW, adjusting			
21		WASHER, 3/8" lock			
22	313 994 R1	SCREW, stop			
	313 983 R91	BODY ASSEMBLY (Composed of -			
		1 BODY 313 984 R91 1 CLIP 277 170 R1 1 FORK 277 161 R1 1 LEVER 313 989 R91 1 LEVER 313 995 R1 1 LEVER w/ BUSHING 313 996 R91 2 PIN 443 013 1 PLUNGER 313 990 R1 1 SCREW 313 991 R1 1 SCREW 313 994 R1 1 SPRING 313 992 R1 1 SPRING 277 162 R1 1 WASHER 277 169 R1)			
109 415		BALL, joint governor connecting rod (2) NUT, 1/4"NF (2) WASHER, 1/4" lock (4)			
29 901 D		CONNECTOR, governor lubrication tube (in governor) (Mechanical Governor H and M)			
272 497 R1		COVER, magneto mounting (Mechanical Governor C, H, J, K, L and M) SCREW, 3/8 x 7/8" hex hd cap SCREW, 3/8 x 1-1/4" hex hd cap WASHER, 13/32 x 13/16" x 16 ga. WASHER, 3/8" lock			
313 492 R1		ELBOW, governor lubrication tube (Mechanical Governor H and M)			§ - Not Furnished Separately
					(#) - Part Number and Price Covers One Foot of Tubing - Furnished Only in 50 Foot Rolls.

## FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL PIPE AND CONNECTIONS</b> (Not used with Hydraulic Pump)			<b>FUEL PUMP</b> (Not used with Hydraulic Pump)		
 <p style="text-align: center;">IPA-52143</p>			 <p style="text-align: center;">IPA-52007A</p>		
1	372 498 R11	PIPE, fuel	84 838 R94		PUMP ASSEMBLY, fuel (Consists of the following parts -
2	19 885 R1	NUT, coupling (2)	1		LEVER, cam (Not furnished separately)
3	84 838 R93	PUMP ASSY, fuel (for components see list of parts under details of "Fuel Pump")	2	532 496 R1	GASKET, pump to crankcase
4	24 847 H	ELBOW (at fuel pump)	3	103 320	WASHER, 5/16" lock (2)
5	263 555 R1	CLIP, fuel pipe	4	179 820	SCREW, 5/16 x 1-1/4" hex-hd cap (2)
6		CARBURETOR ASSY (for components see list of parts under details of "Carburetor")	5		SCREW w/WASHER (Not furnished separately)
16 445 D		CLIP, fuel pipe (felt)	6		HOUSING, valve (Not furnished separately) (Order 84 838 R94)
			7		DIAPHRAGM (Not furnished separately)
			8		DIAPHRAGM, air dome (Not furnished separately)
			9		COVER, filter and valve housing (Not furnished separately)
			10	967 640 R21	ELEMENT, filter, paper
			11		BOWL w/GASKET, 90 600 R1 (Not furnished separately)
			12		RETAINER w/SCREW (Not furnished separately)
			13		SPRING, filter (Not furnished separately)
			14		GASKET, filter bowl (Not furnished separately)
			15	121 759 R91	HOUSING, valve
			16		SCREW w/WASHER, valve housing to filter cover (Not furnished separately)
			17		PLUG, cam lever shaft seal (Not furnished separately)
			18		PIN, spring cam lever pin retainer (Not furnished separately)
			19		SPRING, cam lever return (Not furnished separately)
			20		PIN, cam lever WASHER, filter bowl retainer (Not furnished separately)

## FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CARBURETOR (Gasoline)</b>					
			4	47 392 D	SCREW, throttle butterfly (2)
			5	370 862 R1	BUTTERFLY, throttle (Units A, B and C)
			5	54 489 D	BUTTERFLY, throttle (Units D and E)
			7	379 598 R1	SEAL, throttle shaft dust (Units C, D and E)
			8	47 390 D	BUSHING, throttle shaft
			9	368 142 R1	PLUG, idle passage
			10	362 528 R1	SCREW, idle adjusting
			11	351 959 R1	SPRING, idle adjustment screw retainer
			12	530 681 R1	GASKET, carburetor (not furnished as part of carburetor ASSEMBLY)
			13	368 147 R21	BODY ASSY, throttle (Units A, B and C) (Composed of - 2 BUSHING 47 390 D 1 PIN 45 110 D 1 PLUG 57 956 D 1 SEAL 379 598 R1)
			13	373 501 R21	BODY ASSY, throttle (Units D and E) (Composed of - 2 BUSHING 47 390 D 1 PIN 45 110 D 1 PLUG 57 956 D 1 SEAL 379 598 R1 )
			14	57 956 D	PLUG, throttle shaft expansion
			15	47 390 D	BUSHING, throttle shaft
			16	18 377 D	GASKET, strainer screen retainer
			17	29 902 DX	RETAINER, strainer screen
			18	32 596 D 131 963 120 611 120 217	CLAMP, starting shutter control SCREW, No. 10NF x 5/8" fil. hd. mach. (cd. or an-pltd.) NUT, No. 10NF (cd. or zn-pltd.) WASHER, No. 10 lock (cd. or zn-pltd.)
A	367 258 R92	CARBURETOR ASSY, 1-1/4" I.H. updraft (order 374 325 R95)(UC-221)	19	368 146 R11	BRACKET w/CLAMP, 32 596 D, starting shutter control
B	367 259 R92	CARBURETOR ASSY, 1-3/8" I.H. updraft (order 379 813 R95)(UC-263)	20	45 110 D	PIN, throttle stop
C	374 325 R95	CARBURETOR ASSY, 1-1/4" I.H. updraft (will work for 367 258 R91) (UC-221)	21	368 143 R1	VENTURI, double (Units B and C)
D	372 723 R92 103 026 103 321	CARBURETOR ASSY, 1-3/8" I.H. updraft (order 379 813 R95)(UC-263) NUT, 3/8"NF (2) WASHER, 3/8" lock (2)	21	368 148 R1	VENTURI, double (Unit A)
			21	372 722 R1	VENTURI, double (Unit D)
			21	47 407 R93	VENTURI, single (Unit E)
E	379 813 R95	CARBURETOR ASSY, 1-3/8" I.H. updraft (will work for 372 723 R92) (UC-263)	22	25 948 D	GASKET, needle valve cage
			23	47 396 DAX40	CAGE w/GASKET, 25 948 D, needle valve
1	368 139 R91 18 609	SHAFT and LEVER w/PIN, 18 609 R1, and RETAINER, 24 484 D, throttle PIN, 3/32 x 11/16" Esna roll	24	47 394 D 132 631 131 043	SUPPORT, float lever pivot SCREW, No. 4 x 5/16" slt. rd. hd. mach. (cd or zn-pltd.) (2) WASHER, No. 4 lock (cd or zn-pltd.) (2)
2		SCREW, throttle shaft adjusting			
3	25 484 D	SPRING, idle throttle adjustment retainer	25	47 395 D	PIVOT, float lever

## FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CARBURETOR - Continued</b> (Gasoline)					
26	47 398 DX	FLOAT, and LEVER	42	142 484	PIN, starting shutter stop (optional with 351 588 R1)
27	47 388 DA	GASKET, fuel bowl	43	60 947 D	PACKAGE, drip hole filler replacement
28	49 798 D75	JET, idle metering No. 75	44	56 611 DA	SEAT, fuel adjustment screw .046" (Unit A)
29	35 606 D55	BLEED, main air (No. 55) (Unit A)	44	355 003 R1	SEAT, fuel adjustment screw .051" (Unit B)
29	35 606 D54	BLEED, main air (No. 54) (Unit B)	44	374 331 R1	SEAT, fuel adjustment screw .051" (Unit C)
29	35 606 D52	BLEED, main air (No. 52) (Units C, D and E)	44	374 330 R1	SEAT, fuel adjustment screw .060" (Unit D)
30	251 583 R1	GASKET, metering nozzle	44	380 500 R1	SEAT, fuel adjustment screw .063" (Unit E)
31	368 150 R1	NOZZLE, metering (Unit A)	45	24 703 DA	PACKING, fuel adjusting screw - (optional with 67 266 DX) (Units A and B) (*)
31	370 863 R1	NOZZLE, metering (Unit B)	45	67 266 DX	PACKING, fuel adjusting screw (optional with 24 703 DA) (Units A and B) (*)
31	374 328 R1	NOZZLE, metering (Units C and D)	46	24 687 DA	NUT, fuel adjusting screw packing (Units A and B)
31	379 065 R1	NOZZLE, metering (Unit E)	47	47 404 DA	SCREW, fuel adjusting (Units A and B)
32	368 149 R91	BOWL ASSY, fuel (Unit A) (Composed of - 1 BLEED 35 606 D55 1 PIN 351 588 R1 1 PLUG 32 611 D 1 RETAINER 45 148 D 1 SEAT 56 611 DA 1 SEAT 45 149 DA)	48	362 526 R1	GASKET, fuel adjusting plug (Units C, D and E) (*)
32	368 144 R91	BOWL ASSY, fuel (Unit B) (Composed of - 1 BLEED 35 606 D54 1 PIN 351 588 R1 1 PLUG 32 611 D 1 RETAINER 45 148 D 1 SEAL 45 149 DA 1 SEAT 355 003 R1 )	49	362 525 R1	PLUG, fuel adjusting (Units C, D and E) (*)
32	372 720 R21	BOWL w/PIN, 351 588 R1, RETAINER, 45 148 D and SEAL, 45 149 DA, fuel (Units C, D and E) 180 021 SCREW, 1/4 x 7/8" hex hd cap 120 380 WASHER, 1/4" lock 117 243 PLUG, 1/8" sq hd stl. pipe (cd. or zn-pltd.)	387 454 R92	PACKAGE, carburetor gasket (Units C, D and E) (Consists of - 1 GASKET 31 336 D 1 GASKET 18 377 D 1 GASKET 25 948 D 1 GASKET 47 388 D 1 GASKET 251 583 R1 1 GASKET 381 955 R1 1 "O" RING 384 820 R1 1 PACKAGE 60 947 D 1 PACKING 24 703 DA 1 SEAL 45 149 DA 1 SEAL 379 598 R1 )	
33	357 002 R12 132 688 131 044	SHUTTER, starting SCREW, No. 6 x 1/4" slt rd hd. mach. (cd or zn-pltd.) (2) WASHER, No. 6 lock (cd. or zn-pltd.) (2)	387 455 R92	PACKAGE, carburetor overhaul field service (Units C and D) (Consists of - 1 BALL 52 791 R1 2 BUSHING 47 390 D 1 CAGE 47 369 DAX40 1 INSTRUCTIONS installing 1 014 457 R1 1 PIN 351 558 R1 1 PIVOT 47 395 D 1 PLUG 57 956 D 1 RETAINER 25 484 D 1 RETAINER 29 902 DX 1 RETAINER 45 148 D 2 SCREW 47 392 D 1 SCREW 362 528 R1 1 SCREW 374 327 R1 1 SHAFT w/ LEVER 368 139 R91 1 SPRING 46 059 D 1 SPRING 351 959 R1 )	
34	45 149 DA	SEAL, butterfly dust			
35	45 148 D	RETAINER, dust seal			
36	352 642 R91	SHAFT w/LEVER starting shutter			
37	363 881 R1 131 963	RETAINER, starting shutter lever swivel SCREW, No. 10NF x 5/8" fil. hd. machine (cd or zn-pltd.)			
38	64 283 DBX	SWIVEL w/RETAINER, 363 881 R1, starting shutter lever			
39	32 592 D	WASHER, starting shutter lever swivel			
40	52 791 R1	BALL, friction spring			
41	46 059 D	SPRING, starting shutter friction			
42	351 588 R1	PIN, starting shutter stop (optional with 142 484)			* - Used only on Carburetors w/o fuel shut-off.

## FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION
CARBURETOR - Continued (Gasoline)		
387 458 R92 PACKAGE, carburetor overhaul (Unit E) (Consists of -		
1	BALL	52 791 R1
1	BUSHING	47 390 D
1	CAGE	47 396 DAX40
1	FLOAT	47 398 D
1	PIN	351 588 R1
1	PIVOT	47 395 D
1	PLUG	57 956 D
1	RETAINER	29 902 DX
1	RETAINER	45 148 D
1	SCREW	132 128
1	SCREW	47 392 D
1	SCREW	362 528 R1
1	SCREW	374 327 R1
1	SPRING	25 484 D
1	SHAFT	368 139 R91
1	SPRING	351 959 R1
1	SPRING	46 059 D )
368 137 R1	RETAINER, dust seal (Units A, B and C)	
312 066 R1	ROD, governor connecting (Units A and B)	
312 065 R1	SPACER, carburetor (for use with heavy duty magneto) C-221 501 to 43020 C-263 501 to 56635	

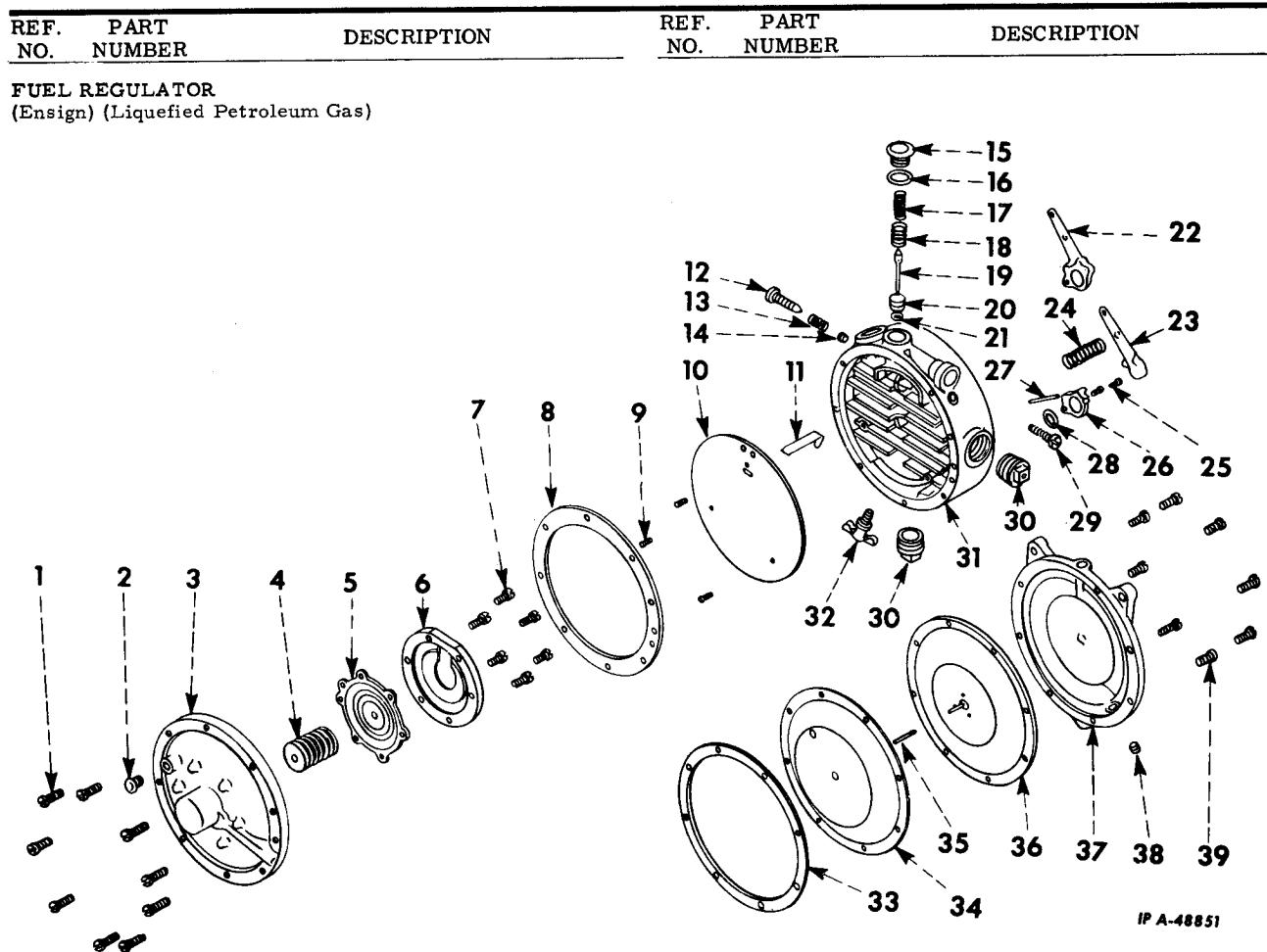
## FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CARBURETOR</b> (American Bosch Arma Corp.) (Liquefied Petroleum Gas and Natural Gas) (For use w/Sleeved Engines)					
1	309 592 R91	CARBURETOR ASSY, (Model No. 1-1/4" XG) (order CARBURETOR, 371 088 R92)	2	359 623 R1	COVER, economizer SCREW, No. 8 x 5/8" slt. fil. hd cd-pltd. mach. (5) WASHER, No. 8 cd-pltd. lock (5)
2	359 622 R1	SPRING, economizer	3	113 504 R1	DIAPHRAGM, economizer
3	359 621 R91	DIAPHRAGM ASSY, economizer	4	373 189 R1	SCREW, economizer bleed (not part of 359 618 R91)
4	373 189 R1	SCREW, economizer bleed (not part of 359 618 R91)	5	56 430 D	NUT, fuel adjusting screw lock
5	56 429 D	SCREW, fuel adjusting	6	359 620 R1	SCREW, starting adjusting
6	113 506 R1	NUT, starting adjusting screw lock	7	307 977 R91	BODY, gas inlet and economizer SCREW, No. 12 x 7/8" slt. fil. hd, cd-pltd. mach. (4) WASHER, No. 12 cd-pltd. light lock (4)
7	19 272 R1	TEE, 1/8 x 90° two-way (for 3/16" tube)	8	371 215 R1	NUT, coupling (3)
8	32 468 H	ELBOW, 1/8 x 90° (for 3/16" tube)	9	359 624 R1	GASKET, inlet and economizer
9	47 856 H	PLUG, 1/2" brs. expansion	10	37 024 D	BUSHING, throttle bearing
IPA-56352B					
PRINTED IN UNITED STATES OF AMERICA					

## FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CARBURETOR - Continued</b>					
(American Bosch Arma Corp.) (Liquefied Petroleum Gas) (For use w/Sleeved Engines)					
19	374 862 R91	BODY and THROTTLE ASSY, partial (Composed of - 2 BUSHING      37 024 D 1 DISC      359 611 R1 1 NOZZLE      64 835 D 1 PLUG      13 123 D 1 PLUG      47 856 H 2 SCREW      56 370 D 1 SEAL      64 837 D 1 SHAFT & STOP      373 187 R91 )	606 859 C91		CARBURETOR (Impco Model No. 100 1-1/2 x 2-5/16") (Service parts will be furnished in next revision)
20	64 837 D	OIL SEAL, throttle shaft		383 376 R1	GASKET, carburetor
21	373 187 R91	SHAFT & STOP ASSY, throttle No. 10NF x 5/8" slt. fil. hd. cd-pltd. SCREW, No. 10NF x 5/8" slt. fil. hd. cd-pltd. machine			
22	56 370 D	SCREW, throttle shaft			
23	359 611 R1	DISC, throttle			
24	58 899 D	WASHER, dust			
25	359 616 R1	PIN, valve lever			
26	359 613 R91	DISC ASSY, spring loaded choke			
27	359 612 R1	SHAFT, choke			
28	56 365 D	SCREW, choke shaft			
29	58 889 D	SUPPORT w/CLAMP, 56 389 D, ASSEMBLY, choke tube SCREW, No. 8 x 1/4" slt. binding hd-cd-plts. mach. (2)			
30	56 389 D	CLAMP, choke tube NUT, No. 10NF SCREW, No. 10 x 3/8" slt. fil. hd. cd-pltd. mach.			
31	275 583 R91	LEVER w/SET SCREW, 36 756 D ASSEMBLY, choke SCREW, No. 10NF x 1/2" hex hd machine			
32	36 756 D	SCREW, choke lever set			
33	373 939 R1	VENTURI SCREW, No. 12 x 3/4" slt. fil. hd. cd-pltd. mach. WASHER, No. 12 cd-pltd. light lock			
34	359 627 R1	GASKET, air intake elbow			
35	373 190 R1	ELBOW, air intake SCREW, No. 12 x 5/8" slt. fil. hd. cd-pltd. mach (4) WASHER, No. 12 cd-pltd. light lock (4)			
36	13 123 D	PLUG, 3/16" brs. expansion			
37	359 614 R1	LEVER, valve			
38	359 615 R1	WASHER, spring			
39	37 183 D	WASHER, valve lever			
	268 169 R1	SCREW, bleed			
40	530 681 R1	GASKET, carburetor (not furnished as part of Carburetor Assembly)			
	64 835 D	NOZZLE, balance tube			

## FUEL SYSTEM



IP A-48851

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL REGULATOR (Ensign) (Liquefied Petroleum Gas)</b>					
1	19 270 R1	SCREW, No. 10NF x 5/8" slt fil hd. cd-pltd. mach. w/lock WASHER (6)	15	277 353 R1	RETAINER, high pressure valve spring
2	444 814	PLUG, 1/8" pipe (in vaporizer cover)	16	277 354 R1	GASKET, high pressure valve spring retainer
3	277 195 R91	COVER, w/PLUG, 13 017 R1 vaporizer	17	277 355 R1	SPRING, high pressure valve
4	277 196 R91	SPRING ASSY, high pressure	18	277 356 R1	SPRING, high pressure valve seat retainer
5	277 370 R91	DIAPHRAGM, high pressure	19	277 357 R1	VALVE, high pressure
6	277 197 R1	COVER, high pressure diaphragm	20	277 358 R91	SEAT w/SEAL, 359 600 R1, high pressure valve
7	19 270 R1	SCREW, No. 10NF x 5/8" slt fil hd. cd-pltd. mach. w/lock WASHER (6)	21	359 600 R1	SEAL, high pressure valve
8	277 198 R1	GASKET, vaporizer cover	22		VALVE ASSY, low pressure (not serviced separately - order 277 369 R91)
9	277 199 R1	SCREW, vaporizer partition plate (3)	23	113 443 R91	LEVER, low pressure valve
10	277 350 R1	PLATE, vaporizer partition	24	277 360 R1	SPRING, low pressure valve
11	277 351 R1	LEVER, high pressure valve	25	19 271 R91	SCREW w/lock WASHER, low pressure valve
12	37 179 D	SCREW, idle adjusting	26	277 361 R1	SEAT, low pressure valve
13	14 526 D	SPRING, idle adjusting screw retainer	27	277 362 R1	PIN, pivot
14	277 352 R1	SCREW, bleed, "B"	28	352 221 R1	SEAL, low pressure valve
			29	113 434 R91	STRAINER, fuel inlet
			30	113 186	PLUG, 3/4" pipe

§ - Not Furnished Separately

## FUEL SYSTEM

REF.	PART NO.	NUMBER	DESCRIPTION
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FUEL REGULATOR - Continued  
(Ensign) (Liquified Petroleum Gas)

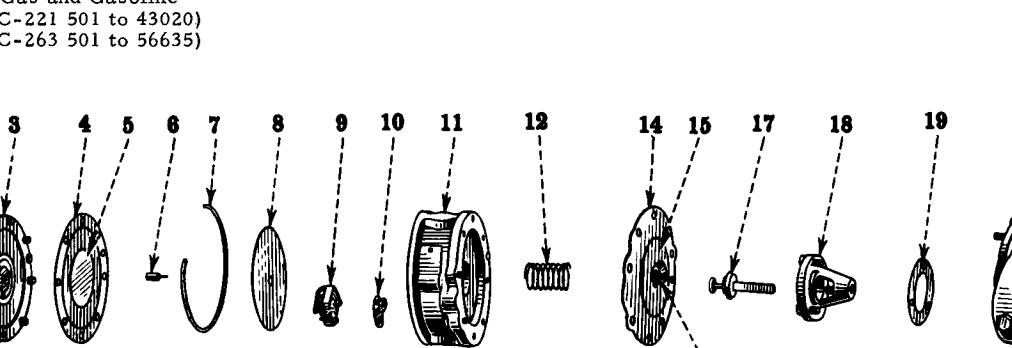
BODY, regulator (Not Furnished Separately)

VALVE, drain  
PIPE, 3/8" pipeGASKET, low pressure partition  
PLATE, platePLATE, low pressure partition  
PIN, diaphragm pushDIAPHRAGM w/PIN, 277 366 R1,  
low pressurePLATE, support  
PIPE, 1/8" slit hd., pipeSCRWF, No. 10NF x 5/8" slit fl. hd.  
cd-ptd. mach. (support plate) (8)COMPENSATOR ASSMBLY  
KIT, fuel regulator overhaul

(Composed of -

- 373 173 R1 RING, retaining  
I VALVE 277 357 R1  
I STRAINER 113 434 R1  
I SPRING 277 360 R1  
I SPRING 277 356 R1  
I SPRING 277 196 R1  
2 SCREW 19 271 R1  
23 SCREW 19 270 R1  
3 SCREW 277 199 R1  
1 SCREW 37 179 D  
1 SEAL 277 358 R91  
1 SEAL 359 600 R1  
1 LEVER 277 351 R1  
1 GASKET 277 198 R1  
1 DIAPHRAGM 277 370 R91  
1 DIAPHRAGM 277 367 R91

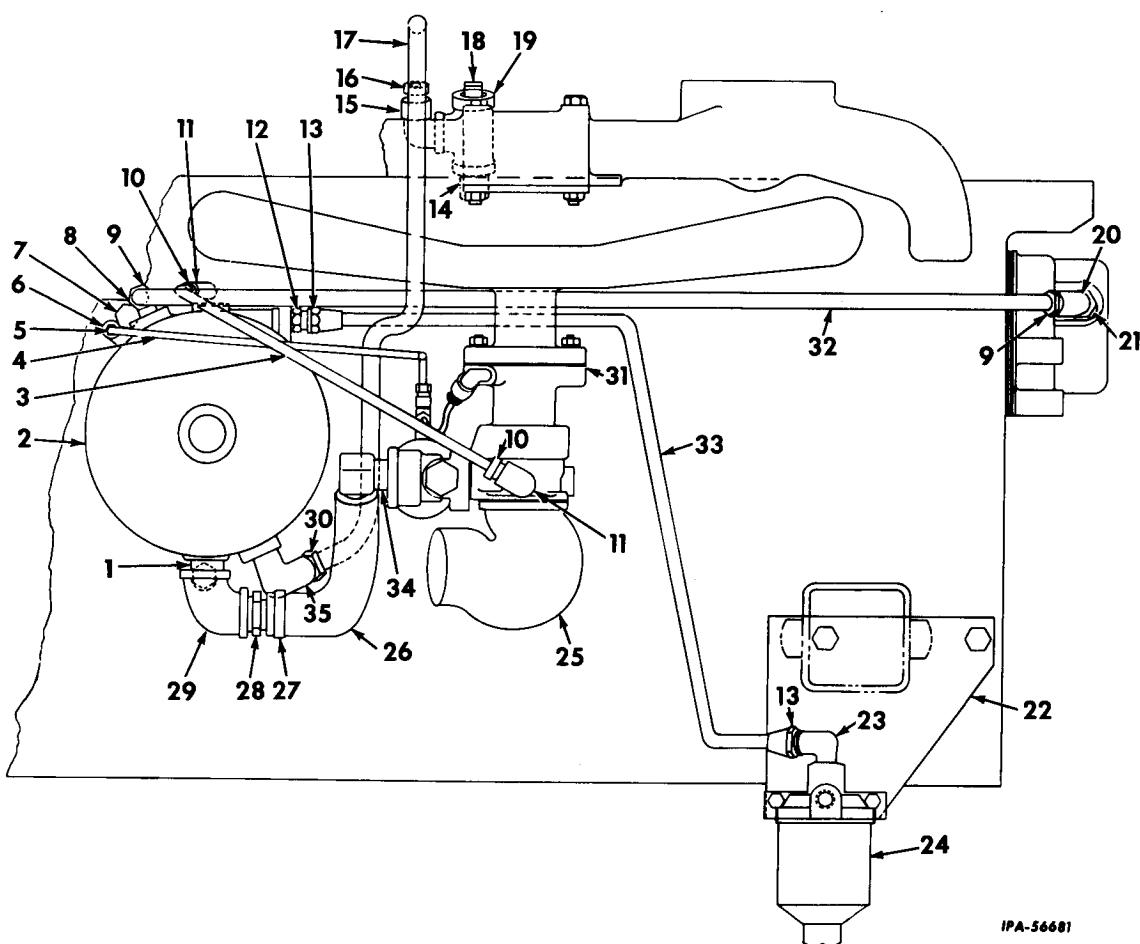
## **FUEL SYSTEM**

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
		<b>REGULATOR UNIT (AMERICAN BOSCH)</b> Natural Gas (C-221 501 Up) (C-263 501 Up) Combination Gas and Gasoline (C-221 501 to 43020) (C-263 501 to 56635)			
					
					IPA-3177A
	35 816 D	REGULATOR UNIT (Model 1" Type B) SCREW, 5/16 x 3/4" hex hd cap (2) WASHER, 5/16" lock (2)	12	37 010 D	SPRING, lower diaphragm
1	37 011 D	SCREW, idle adjusting	14	324 797 R1	DIAPHRAGM, lower
2	36 758 D	SPRING, idle adjusting screw retainer	15	42 331 D	DIAPHRAGM, 324 797 R1 and PLATE 42 333 D, lower
3		COVER, bowl (Not Furnished Separately) SCREW, No. 10NF x 1/2" mach. fil hd, cd-pltd. (8) WASHER, No. 10 lock (8)	17	36 897 D	PLATE, lower diaphragm (2)
4	37 012 D	GASKET, upper diaphragm	18	36 896 D	VALVE
5	36 909 D	DIAPHRAGM w/GASKET, 37 012 D, upper	19	36 895 D	SEAT, valve
6	36 907 D	ROD, valve lever push	20		SCREW, No. 10-32NF x 9/16" fil hd, cd-pltd. mach. (3)
7	36 910 D	WIRE, partition plate, locking			BODY, regulator (Not Furnished Separately)
8	36 911 D	PLATE, partition	22	37 009 D	SCREW, No. 10-32NF x 1/2" fil. hd, cd-pltd. mach. (8)
9	36 902 D	VALVE w/GASKET, 36 903 D, pilot SCREW, No. 6 x 7/16" fil hd. cd-pltd. mach. (3) WASHER, No. 6 lock (3)	23	42 334 D	WASHER, No. 10 lock (8)
10	36 903 D	GASKET, valve lever support		118 831	PLUG, 1/8" balance tube
11	268 201 R91	BOWL		37 009 D	SCREW w/PLATE, 268 207 R1
					diaphragm
					PLUG, 1/8" pipe
					PLUG, 1/8" pipe (pressure test hole plug)
					PLATE, diaphragm screw head

## FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL PIPING AND CONNECTIONS</b> (Liquefied Petroleum Gas) (For use w/Sleeved Engines)					
1	128 067	NIPPLE (3/4 x 1-1/2" pipe)	14	144 610	NIPPLE, 1/2 x 1-3/8" close pipe
2	371 100 R91	REGULATOR ASSY, fuel (for components see list of parts under details of "Regulator")	15	68 134 D	ELBOW, 90° water inlet
3	371 103 R1	LINE, regulator to carburetor balance	16	19 987 R1	NUT, (in cylinder head)
4	371 104 R1	LINE, regulator to carburetor idle	17	371 105 R1	TUBE, regulator water inlet (regulator to cylinder head)
5	19 983 R1	NUT, idle line (regulator end)	18	219 199	PLUG, 1/2" sq. hd. pipe
6	32 468 H	BODY, idle line (regulator end)	19	138 105	TEE, 1/2" pipe water inlet tube (in cylinder head)
7	86 224 H	SPACER, fuel regulator (2)	20	19 502 R1	ELBOW, 45° (in water pump)
8	68 134 D	ELBOW, 90° water inlet tube (in regulator)	21	142 269	BUSHING, 3/8 x 1/2" reducing pipe (in water pump)
9	19 987 R1	NUT, coupling water inlet tube (in regulator) (2)	22	308 322 R1	BRACKET, fuel filter and voltage regulator mounting
10	19 985 R1	NUT, coupling balance line (2)	23	118 755	ELBOW, 3/8" tube x 1/4" pipe (in filter)
11	24 847 H	ELBOW, regulator to carburetor balance line (2)	24	346 818 R91	FILTER ASSEMBLY (for components see list of parts under details of "Fuel Filter")
12	118 755	ELBOW, 3/8" tube x 1/4" pipe			
13	121 758	NUT, 3/8" fuel filter tube (2)			

IPA-56681



## FUEL SYSTEM

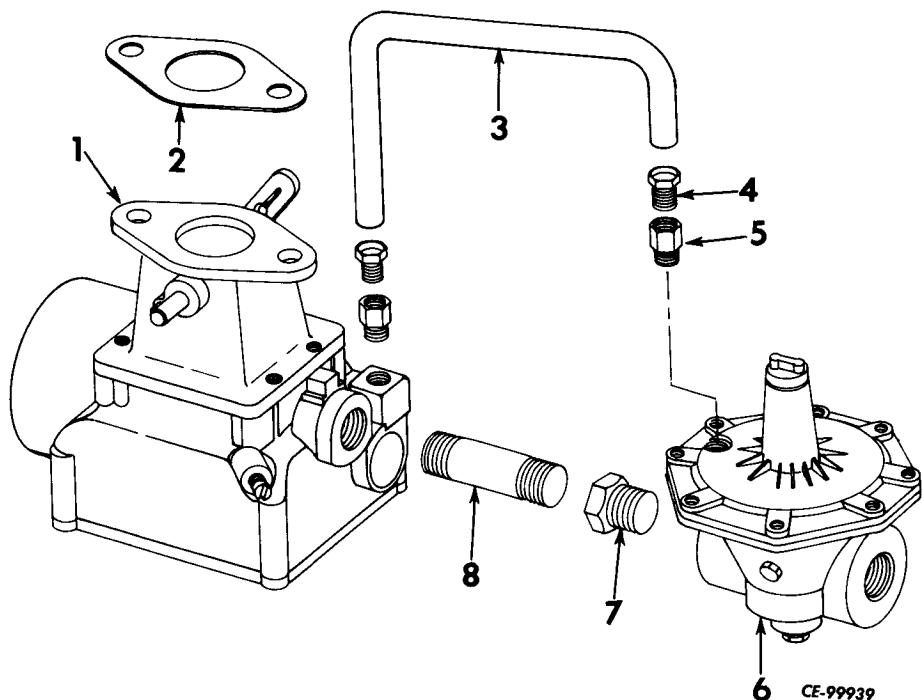
REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL PIPING AND CONNECTIONS</b> (Liquefied Petroleum Gas) (For use w/Sleeved Engines)		
25	371 088 R92	CARBURETOR ASSY, (for components see list of parts under details of "Carburetor")
26	.371 102 R1	HOSE, fuel line
27	274 085 R91	CLAMP, fuel hose (2)
28	188 902 R1	NIPPLE (7/8 x 2-5/16") regulator end fuel hose
29	119 099	ELBOW, 3/4" x 90° pipe
30	19 987 R1	NUT, coupling water outlet (in regulator)
31	31 336 D	GASKET, carburetor (will work for 21 632 D)
32	371 106 R2	LINE, regulator water outlet (regulator to water pump)
33	308 335 R11	TUBE, w/two NUTS, 121 758 fuel filter to regulator
34	188 897 R1	ELBOW, 7/8 x 1-3/4 x 1-3/8"
35	68 134 D	ELBOW, 90° water outlet tube (in regulator)
266 199 R1	COVER, fuel pump opening SCREW, 5/16 x 1/2" hex hd cap (2)	
76 950 R2	VALVE, spring retainer (6)	
33 700 DA	WIRE, choke control	

## FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL PIPING AND CONNECTIONS</b> (Liquified Petroleum Gas) (For use w/Sleeveless Engines)					
CE-102026					
1	606 859 C91	CARBURETOR (Impco Model No. 100 1-1/2 x 2-5/16")	14	119 928	BUSHING, reducer (in tee)
179 841 102 635 103 321		BOLT, 3/8 x 1-1/4" hex hd. (2)	15	141 615	VALVE, reducer (in tee)
		NUT, 3/8" (2)	16	40 876 D	ELBOW, outlet tube (in vaporizer)
		WASHER, 3/8" lock (2)	17	678 160 C1	TUBE, water outlet
2	383 376 R1	GASKET, carburetor	18	37 288 H	NUT, outlet tube (2)
3	673 362 C91	VAPORIZER, LPG fuel	19	58 986 D	ELBOW, 45° outlet tube (in water pump)
4	192 078	NIPPLE, 1/2NPT x 3" (vaporizer to carburetor)	20	346 547 R91	FILTER w/ELEMENT, 630 422 C1 and "O" RING, 21 056 R1, fuel BOLT, 1/4 x 1" hex hd. (2)
5	37 167 D	ELBOW, balance tube (in carburetor)		18 655 R1	NUT, 1/4" (2)
6	678 158 C1	TUBE, balance		120 375	WASHER, 1/4" lock (2)
7	37 165 D	NUT, balance tube (2)	21	678 161 C1	BRACKET, fuel filter
8	39 854 D	CONNECTOR, balance tube (in regulator)		20 299 R1	BOLT, 5/8 x 3-3/4" hex hd. (2)
9	444 136 or 9 444 244 or 9 444 542	TEE, automotive pipe (in vaporizer)		124 589	NUT, 5/8" (2)
		TEE, automotive pipe (in vaporizer)		121 574	WASHER, 5/8" lock (2)
10	42 409 D	CONNECTOR, inlet tube (in tee)	22	678 157 C91	TUBE w/two NUT, 121 758, filter to regulator
11	678 159 C1	TUBE, water inlet	23	121 758	NUT, 3/8" flared (2)
12	37 288 H	NUT, inlet tube (2)	24	118 755	ELBOW, 1/4"NPT x 90° flared tube (2)
13	18 506 R1	CONNECTOR, inlet tube (in cylinder head)	445 673		PLUG, water pump and thermostat housing (2)
			630 422 C1		ELEMENT w/FILTER, 346 547 R91
			21 056		"O" RING w/FILTER, 346 547 R91

## FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL PIPING AND CONNECTIONS</b> (Natural Gas) (For use w/Sleeveless Engines)					

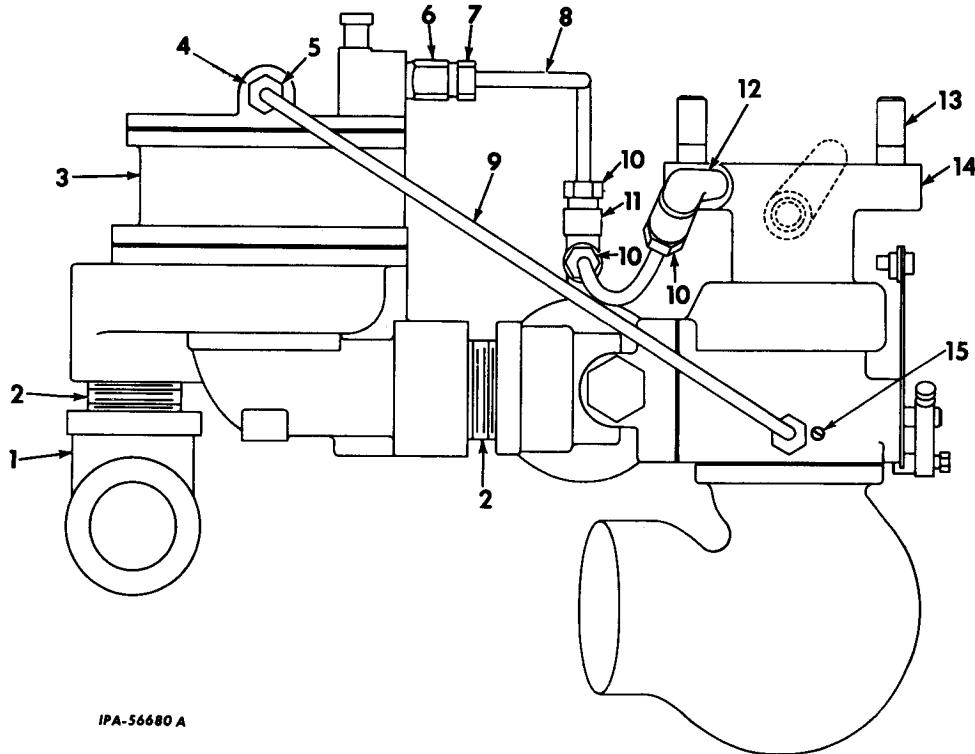


1	606 859 C91	CARBURETOR (Impco Model No. 100) 1-1/2 x 2-5/16"	4	37 165 D	NUT, tube (2)
	179 841	BOLT, 3/8 x 1-1/4" hex hd. (2)	5	39 854 D	CONNECTOR, tube (2)
	102 635	NUT, 3/8" (2)	6	673 356 C91	VALVE, pressure
	103 321	WASHER, 3/8" lock (2)	7	23 174 R1	REDUCER, 3/4 to 1/2"NPT (in valve)
2	383 376 R1	GASKET, carburetor	8	140 807	NIPPLE, 1/2NPT x 3"
3	678 162 C1	TUBE, balance			

## FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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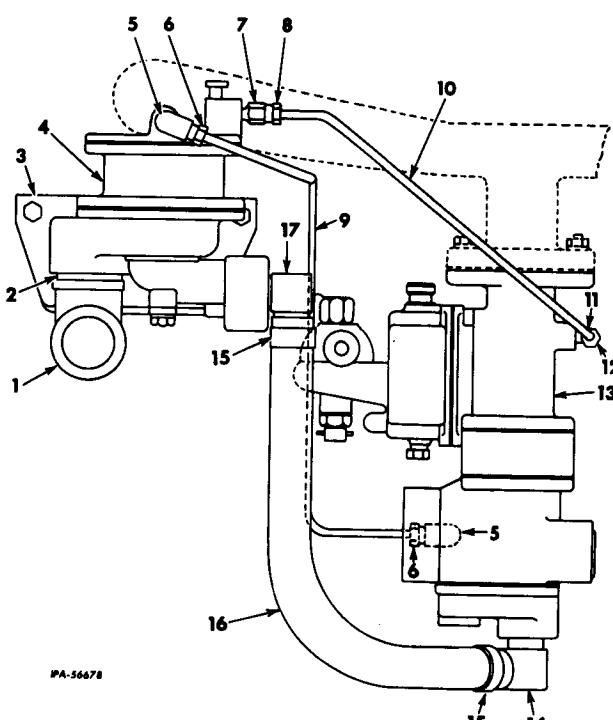
**FUEL PIPING AND CONNECTIONS**  
(Natural Gas) (For use w/ Sleeved Engines)



IPA-56680 A

1	119 100	ELBOW, 1" x 90° pipe	13	12 215 D	STUD, carburetor (used w/CARBURETOR, 371 088 R92) (2) NUT, 3/8" (2) WASHER, 3/8" lock (2)
2	127 874	NIPPLE, 1 x 1-1/2" pipe (2)	14	309 592 R91	CARBURETOR (Model 1-1/4" XG) (Ensign XC 9174) (order CARBURETOR, 371 088 R92)
3	35 816 D	REGULATOR ASSY. (Model "B" Ensign 5069) fuel (for components see list of parts under details of "Regulator") SCREW, 5/16 x 3/4" hex hd cap (2) WASHER, 5/16" lock (2)	14	371 088 R92	CARBURETOR w/BLEED SCREW, 268 169 R1 (Model CBX-125-A-136) (American Bosch Arma Corp) (for components see list of parts under "CARBURETOR") (will work for CARBURETOR, 309 592 R91)
4	36 521 D	CONNECTOR, balance tube	15	268 169 R1	SCREW, bleed (used with CARBURETOR, 371 088 R92)
5	19 983 R1	NUT, coupling balance tube	308 325 R1		BRACKET, fuel regulator support SCREW, 5/16 x 3/4" hex hd cap WASHER, 5/16" lock
6	36 521 D	CONNECTOR, idle tube	530 681 R1		GASKET, carburetor (will work for 21 632 D)
7	19 983 R1	NUT, coupling idle tube	76 950 R2		VALVE, spring retainer (6)
8	308 326 R1	TUBE, idle			
9	308 327 R1	TUBE, balance			
10		NUT, coupling idle tube (furnished with CARBURETOR, 309 592 R91) (3)			
11		TEE, (furnished with CARBURETOR, 309 592 R91)			
12		ELBOW (furnished with CARBURETOR, 309 592 R91)			
13	277 016 R1	STUD, carburetor (used w/CARBURETOR, 309 592 R91) (2)			

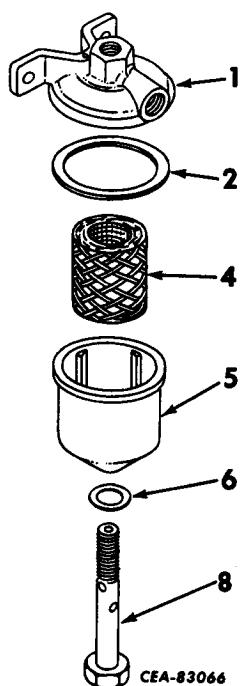
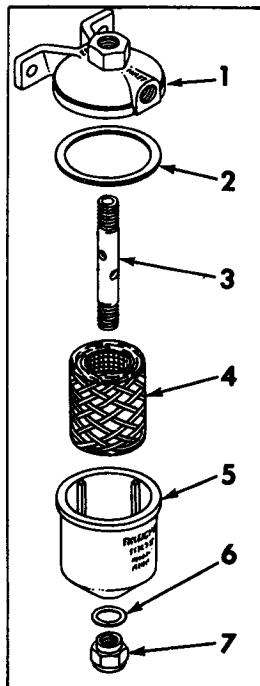
## FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL PIPING AND CONNECTIONS - Continued</b> (Combination Natural Gas and Gasoline) C-221 501 to 43020 C-263 501 to 53635					
 <p style="text-align: center;">IPA-56678</p>					
<b>15</b> 274 085 R91 CLAMP, hose (2) <b>16</b> 305 836 R1 HOSE, fuel inlet (regulator to carburetor) <b>17</b> 171 817 R1 ELBOW, 1 x 1 x 1-3/8" x 90° hose (at regulator) <b>11</b> 177 V GASKET, strainer cage <b>36</b> 997 V GASKET, cover plate <b>321</b> 005 R1 GASKET, fuel bowl <b>321</b> 006 R1 GASKET, air horn <b>321</b> 004 R91 PACKAGE, carburetor field service (includes Jets, Valves, Pins and Miscellaneous Parts to service CARBURETOR, 309 593 R91) <b>64</b> 837 D SEAL, dust <b>76</b> 950 R2 VALVE, spring retainer (6)					
<b>1</b>	119 100	ELBOW, 1" x 90° pipe	<b>5</b>	32 468 H	BODY, balance tube (2)
<b>2</b>	127 874	NIPPLE, 1 x 1-1/2" pipe	<b>6</b>	371 215 R1	NUT, coupling balance tube (2)
<b>3</b>	308 331 R11	BRACKET, fuel regulator mounting SCREW, 5/16 x 3/4" hex hd cap (2) WASHER, 5/16" lock (2)	<b>7</b>	36 521 D	BODY, (fuel regulator end)
<b>4</b>	35 816 D	REGULATOR ASSY, (Model "B" Ensign 5069) (for components see list of parts under details of "Regulator") SCREW, 5/16 x 3/4" hex hd cap (2) WASHER, 5/16" lock (2)	<b>8</b>	371 215 R1	NUT, coupling idle
<b>9</b>	308 334 R1	TUBE, balance	<b>10</b>	308 333 R1	TUBE, idle
<b>10</b>	308 333 R1		<b>11</b>	32 468 H	BODY, idle (carburetor end)
<b>11</b>	32 468 H		<b>12</b>	371 215 R1	NUT, coupling
<b>13</b>	309 593 R91	CARBURETOR ASSY (Model 1-1/4" KGNI) NUT, 3/8"NF (2) WASHER, 3/8" lock (2)	<b>14</b>	171 815 R1	ELBOW, 3/4 x 1 x 1-3/8" x 90° hose (at carburetor)

## FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION
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**FUEL FILTER**  
 (Liquefied Petroleum Gas)  
 (For use w/Sleeved Engines)



CEA-83066

- |   |             |   |
|---|-------------|---|
| A | 64 147 D    | FILTER ASSY, fuel (order 346 818 R91)                           |
| B | 346 818 R91 | FILTER ASSY, fuel (will work for<br>64 147 D)                   |
| 1 |             | TOP, filler (order 346 818 R91)                                 |
| 2 | 64 399 D    | GASKET, filler top to filter bottom                             |
| 3 | 64 402 D    | STUD, filter (Filter A)   |
| 4 | 64 400 DC   | ELEMENT w/GASKET, 64 399 D and<br>GASKET, 64 401 D ASSY, filter |
| 5 |             | BOWL, filter (order 346 818 R91)                                |
| 6 | 64 401 D    | GASKET, filter bowl   |
| 7 | 64 403 D    | NUT, filter stud (Filter A)                                     |
| 8 |             | BOLT, filter bowl (order 346 818 R91)<br>(Filter B)             |

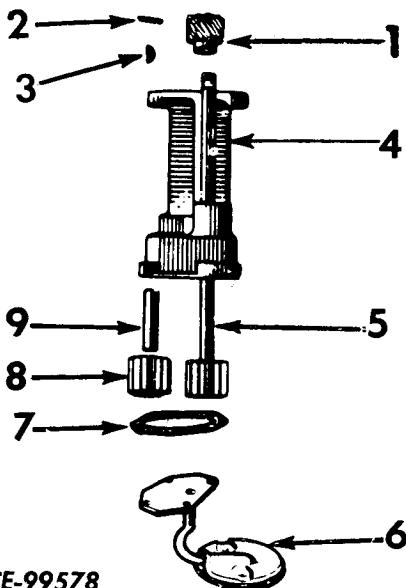
## COOLING SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>WATER PUMP, THERMOSTAT AND RELATED PARTS</b>					
			17	169 192 R1	ELBOW, water by-pass
			18	108 120 R92	THERMOSTAT, 167-172 degree opening temperature
			19	368 505 R1	GASKET, water outlet
			20	368 504 R1 179 860 179 868 103 322	OUTLET, water SCREW, 7/16 x 1-1/4" hex hd cap SCREW, 7/16 x 2-1/2" hex hd cap WASHER, 7/16" lock (2)
			374 544 R94	PACKAGE, field service, water pump (Composed of - 1 GASKET 69 674 R1 1 GASKET 69 676 R1 1 IMPELLER 387 931 R1 1 RETAINER 102 069 H 1 RETAINER & SEAL 265 164 C91 1 SEAL 73 296 R93 1 SHAFT & BEARING ST 680 )	
1	69 676 R1	GASKET, water pump			
2	69 675 R1 181 309	PLATE, water pump SCREW, 1/4 x 1-1/2" rd hd slt mach. (cd or zn-pltd) (3)			
3	103 319	WASHER, 1/4" lock (3)			
3	69 674 R1	GASKET, water pump plate			
4	387 931 R1	IMPELLER, water pump (together with SEAL, 265 164 R91, will work for 332 117 R1)			
5	73 296 R93	SEAL, water pump			
6	318 118 R21	BODY w/three PLUG, 438 159 water pump			
7	438 159	PLUG, 1/2" sq hd CI pipe (3)			
8	71 351 R1	SLINGER, water pump			
9	ST 680	SHAFT and BEARING w/SLINGER, 71 351 R1, water pump			
10	102 069 H	RETAINER, bearing			
11	368 501 R2	HUB, pulley			
12	601 816 C91 179 848 179 849 103 321	PUMP ASSEMBLY, water SCREW, 3/8 x 2-1/4" hex hd cap SCREW, 3/8 x 2-1/2" hex hd cap (2) WASHER, 3/8" lock (3)			
13	304 435 R1	PULLEY, water pump (*)			
13	368 502 R1 181 309 103 319	PULLEY, water pump (not *) SCREW, 1/4NF x 1/2" hex hd cap WASHER, 1/4" lock (4)			
14	265 164 C91	RETAINER and SEAL ASSY, water pump			
15	169 193 R1	NIPPLE, water by-pass (2)			(*) - Used With Hydraulic Pump
16	240 369 R91	CLAMP, hose (2)			

## LUBRICATION SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION
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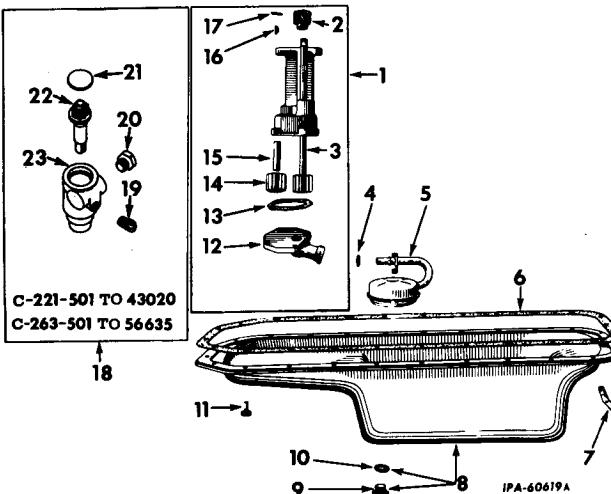
OIL PUMP



**CE-99578**

379 138 R91	PUMP ASSY w/screen OIL (will work for OIL PUMP, 230 421 R91)
179 818	SCREW, 5/16 x 1" hex hd cap (2)
103 320	WASHER, 5/16" lock (2)
1	69 608 R3 GEAR, oil pump drive
2	112 011 PIN, 1/8 x 7/8" sq. end straight
3	103 905 KEY, 1/8 x 5/8" Woodruff No. 5
4	BODY, oil pump (Not Furnished Separately)
5	230 409 R91 SHAFT and GEAR ASSY, oil pump drive
6	379 139 R91 COVER and SCREEN ASSY, oil pump 179 817 SCREW, 5/16 x 7/8" hex hd cap (4) 103 320 WASHER, 5/16" medium lock (4)
7	69 607 R1 GASKET, oil pump cover
8	227 713 R1 GEAR, pump body driven
9	35 647 H SHAFT, idler gear

## LUBRICATION SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CRANKCASE OIL PAN AND OIL PUMP</b>					
					
1	230 421 R91	PUMP ASSY, oil (less screen) (will work for 367 811 R91) (order PUMP, 379 138 R91) (Composed of - § 1 BODY 1 COVER 169 679 R1 1 GASKET 69 607 R1 1 GEAR 69 608 R1 1 GEAR 277 713 R1 1 KEY 103 905 1 PIN 112 011 1 SHAFT 35 647 H 1 SHAFT & GEAR 230 409 R91) 179 818 SCREW, 5/16 x 1" hex hd. cap (2) 103 320 WASHER, 5/16" lock (2)	12	169 679 R1 179 818 103 320	COVER, oil pump body SCREW, 5/16 x 1" hex hd cap (4) WASHER, 5/16" lock (4)
2	69 608 R1	GEAR, oil pump drive	13	69 607 R1	GASKET, oil pump cover
3	69 606 R11	SHAFT w/GEAR, oil pump drive C-263 501 to 15879 C-261 501 to 14944	14	35 631 H	GEAR, pump body driven C-263 501 to 15879 C-261 501 to 14944
3	230 409 R91	SHAFT w/GEAR, oil pump drive C-263 15880 Up C-261 14945 Up	14	277 713 R1	GEAR, pump body driven C-263 15880 Up C-261 14945 Up
4	169 240 R1	"O" RING, 3/32 x 9/16 x 3/4" oil pump screen	15	35 647 H	SHAFT, idler gear
5	367 812 R91 103 386	SCREEN, oil pump PIN, 1/8 x 1-1/4" cotter (phosphate coated)	16	103 905	KEY, oil pump drive gear (Woodruff No. 5)
6	369 984 R1	GASKET, crankcase pan	17	112 011	PIN, 1/8 x 7/8" sq. end straight
7	114 869 R1	REINFORCEMENT, crankcase oil pan C-263 501 to 14924 C-221 501 to 14469	18	312 157 R91	SUPPORT ASSY, oil pump shaft (will work for 278 375 R91) C-221 501 to 43020 C-263 501 to 56635 (Composed of - 1 FITTING 271 284 1 HOUSING 312 158 R1 1 PLATE 312 162 R1 1 PLUG 172 557 1 PLUG 369 013 R91 1 SHAFT 312 159 R11 )
8	367 575 R92	PAN ASSY w/GASKET, 3 405 H and PLUG, 445 096 crankcase oil	19	271 284	FITTING, lubrication (Alemite No. 1612B) (optional with 109 460) C-221 501 to 43020 C-263 501 to 56635
9	445 096	PLUG, crankcase oil pan drain	19	109 460	FITTING, lubrication (Lincoln No. 5300) (optional with 271 284) C-221 501 to 43020 C-263 501 to 56635
10	3 405 H	GASKET, oil pan drain plug	20	369 013 R1	PLUG, distributor housing C-221 501 to 43020 C-263 501 to 56635
11	179 816 103 320 103 340	SCREW, 5/16 x 3/4" hex hd cap (25) WASHER, 5/16" lock (20) WASHER, 11/32 x 11/16" x 16 ga. (5)	21	312 162 R1	PLATE, thrust C-221 501 to 43020 C-263 501 to 56635
			22	312 159 R11	SHAFT w/GEAR and WATER, support C-221 501 to 43020 C-263 501 to 56635
			23	312 158 R1	HOUSING, oil pump shaft support C-221 501 to 43020 C-263 501 to 56635
			353 937 R1	179 817 103 320	CLAMP, oil pump shaft support (used with SUPPORT, 278 375 R91) (2) SCREW, 5/16 x 7/8" hex hd cap (2) WASHER, 5/16" lock (2)
			353 936 R2	143 992	GASKET, oil pump shaft support (used with SUPPORT, 278 375 R91)
			172 577	172 577	PLUG, 1/4" stl. hd. pipe PLUG, 1-3/16" x .083" housing expansion C-221 501 to 43020 C-263 501 to 56635

§ - Not Furnished Separately

## LUBRICATION SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
OIL FILTER (For use w/Sleeved Engines)					
C-221	501 to 43020		371 236 R91		FILTER ASSY, oil (consists of the following parts)
C-263	501 to 56635		1	304 005 R91	TUBE w/PIN, 17 141 R1; SPRING, 304 009 R1 and VALVE, 304 008 R1, oil filter center
			2	17 141 R1	PIN, by-pass valve and spring retainer (5/32 x 1" Esna)
			3	304 008 R1	VALVE, oil filter by-pass
			4	304 009 R1	SPRING, oil filter by-pass valve
			5	304 012 R1	GASKET, center tube
			6	103 364	PIN, 1/16 x 1-1/4" cotter
			7	303 998 R1	CASE, oil filter
			8	304 011 R1	SPRING, oil filter element retaining
			9	304 010 R1	WASHER, oil filter element retaining spring
			10	304 854 R1	GASKET, oil filter case (will work for 193 527 R1)
			11		ELEMENT, oil filter (Not Furnished Separately)(order PACKAGE, 323 827 R91)
			12	61 261 VA	VALVE, oil pressure relief
			13	49 946 HA	SPRING, oil pressure relief valve
			14	3 405 H	GASKET, oil pressure relief valve cap
			15	61 263 VA	CAP, oil pressure relief valve
			16	371 237 R11	BASE ASSEMBLY, oil filter (Composed of - § 1 BASE 1 CAP 61 263 VA 1 GASKET 3 405 H 1 PLUG 444 576 1 SPRING 49 946 HA 1 VALVE 61 261 VA ) SCREW, 5/16 x 1-5/8" hex hd cap (2) 179 823 179 858 179 864 103 322 SCREW, 7/16 x 1" hex hd .cap SCREW, 7/16 x 1-3/4" hex hd cap WASHER, 7/16" lock (2)
			17	371 238 R1	GASKET, oil filter base (not furnished as part of 371 236 R91)
				444 576	PLUG, 1/4" hex hd pipe drain
				323 827 R91	PACKAGE, field service filter (consists of ELEMENT, 279 994 R91 and GASKET, 304 854 R1)

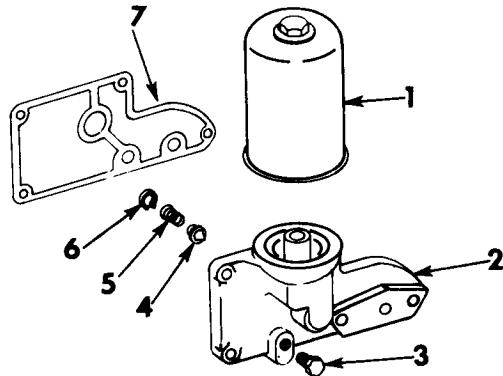
IPB-10346 C

§ - Not Furnished Separately

## LUBRICATION SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION
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OIL FILTER (For Sleeveless Engines)  
 (Spin-On)  
 (C-221 - 53360 Up)  
 (C-263 - 93943 Up)

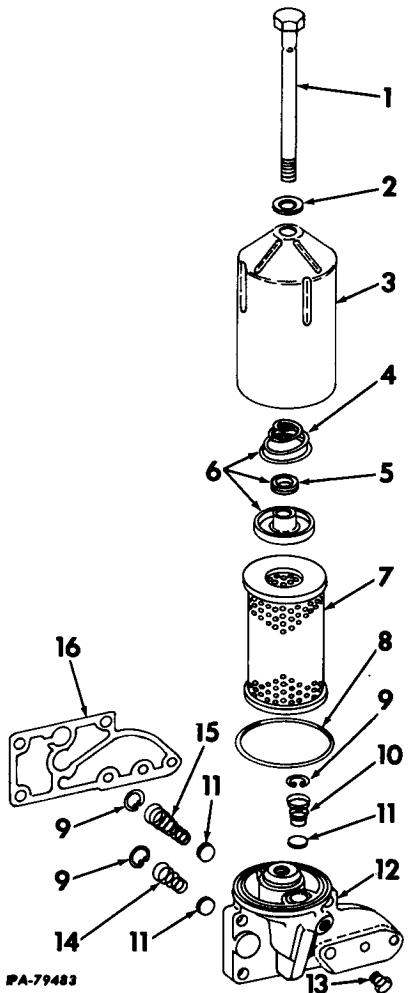


CE-99579

534 178 R91 FILTER ASSEMBLY, oil  
 (Consists of the following parts)

- |   |            |   |
|---|------------|---|
| 1 | 398 080 R2 | ELEMENT, spin-on oil filter                                     |
| 2 | 179 822    | BASE w/INSERT, oil filter (Not<br>Furnished Separately)         |
|   | 179 860    | SCREW, 5/16 x 1-1/2" hex hd.<br>cap (2)                         |
|   | 179 862    | SCREW, 7/16 x 1-1/4" hex hd.<br>cap (3)                         |
|   | 103 320    | SCREW, 7/16 x 1-1/2" Hex hd. cap<br>WASHER, 5/16" med. lock (2) |
| 3 | 397 299 R1 | PLUG, oil filter base   |
| 4 | 534 180 R1 | VALVE, pressure regulating                                      |
| 5 | 384 526 R2 | SPRING, pressure regulating                                     |
| 6 | 303 322 R1 | RING, spring snap   |
| 7 | 534 196 R1 | GASKET, oil filter base   |

## LUBRICATION SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>OIL FILTER</b> (For Sleeved Engines) (C-221 43021 Up) (C-263 56636 Up)					
				8	304 854 R1 GASKET, oil filter case
				9	303 322 R1 RING, snap
				10	384 525 R1 SPRING, check valve
				11	384 528 R2 VALVE, lubricating oil filter base (3)
				12	384 523 R12 BASE ASSY, oil filter (order FILTER ASSY, 534 178 R91 and one base GASKET, 534 196 R1) (Composed of -
					§ 1 BASE 1 PLUG 397 299 R1 3 RING 303 322 R1 1 SPRING 384 525 R1 1 SPRING 384 526 R2 1 SPRING 384 527 R1 3 VALVE 384 528 R2
					179 822 SCREW, 5/16 x 1-1/2" hex hd cap (2)
					179 860 SCREW, 7/16 x 1-1/4" hex hd cap (3)
					179 862 SCREW, 7/16 x 1-1/2" hex hd cap 103 320 WASHER, 5/16" lock (2)
				13	397 299 R1 PLUG, oil filter base (will work for 444 618)
				14	384 526 R2 SPRING, pressure regulating
				15	384 527 R1 SPRING, element by-pass
				16	384 537 R2 GASKET, oil filter base
					323 827 R91 PACKAGE, field service filter (Consists of ELEMENT, 279 994 R91 and GASKET, 304 854 R1)

384 522 R92 FILTER ASSY, oil  
(Consists of the following parts)

- 1 384 530 R11 TUBE, oil filter center
- 2 384 532 R1 GASKET, center tube
- 3 384 529 R1 CASE, lubricating oil filter
- 4 384 526 R2 SPRING, element hold-down
- 5 384 535 R1 GROMMET, element retaining washer
- 6 384 533 R91 RETAINER ASSY, element (consists of GROMMET, 384 535 R1, SPRING, 384 536 R1 and WASHER)
- 7 ELEMENT, oil filter (Not Furnished Separately) (order PACKAGE, 323 827 R91)

§ - Not Furnished Separately

## MISCELLANEOUS

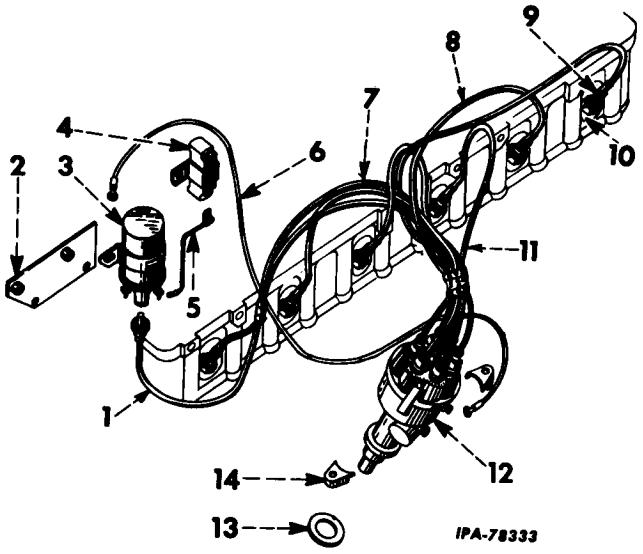
REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>ASSORTED GASKET SETS</b> (Engine)					<b>ASSORTED GASKET SETS - Continued</b> (Engine)
372 770 R95		GASKET SET, valve grinding includes 8 gaskets as follows -	310 665 R1		PLUG, rear bearing cap (2)
530 681 R1		GASKET, carburetor	352 221 R1		SEAL, oil pump screen "O" ring
164 418 R2		GASKET, cylinder head	535 166 R1		SEAL, intake valve stem C-221 - 53646 Up (6) C-263 - 95246 Up (6)
400 878 R1		GASKET, intake and exhaust manifold	866 834 R1		SEAL, intake valve stem C-221 - 501 to 53643 (6) C-263 - 501 to 95245 (6)
85 868 R1		GASKET, intake to exhaust manifold			
369 983 R2		GASKET, valve cover	866 834 R1		SEAL, exhaust valve stem (6)
368 505 R1		GASKET, water outlet			
164 420 R1		GROMMET, valve cover (3)			
111 024 R1		SEAL, intake valve stem (6)			
535 166 R1		SEAL, intake valve stem (6)			
866 834 R1		DEFLECTOR, intake and exhaust valve stem oil (12)			
400 899 R92		GASKET SET, engine includes 23 gaskets as follows -			
369 981 R1		GASKET, breather pipe			
378 237 R1		GASKET, crankcase front cover			
367 574 R1		GASKET, crankcase front cover			
398 024 R1		GASKET, crankcase front plate			
369 984 R1		GASKET, crankcase pan			
353 936 R2		GASKET, distributor			
42 965 V		GASKET, filter drain plug	2 752 477 R1		PRODUCT GRAPHIC, air cleaner instructions
532 496 R1		GASKET, fuel pump	2 751 188 R1		PRODUCT GRAPHIC, air cleaner instructions
367 669 R1		GASKET, governor housing	1 001 071 R2		PRODUCT GRAPHIC, generator warning
632 851 R1		GASKET, hydraulic pump flange	2 752 048 R1		PRODUCT GRAPHIC, engine shutdown
371 238 R1		GASKET, oil filter base (for iron base)	2 751 259 R1		PRODUCT GRAPHIC, "International" (2)
384 537 R2		GASKET, oil filter base (for Aluminum base)	2 754 371 R1		PRODUCT GRAPHIC, "I. H. C. of Canada, Ltd."
534 196 R1		GASKET, oil filter base	2 751 533 R1		PRODUCT GRAPHIC, flo-matic
304 854 R1		GASKET, oil filter case	2 752 445 R1		PRODUCT GRAPHIC, control switch escutcheon
384 532 R1		GASKET, oil filter center tube	2 753 190 R1		PRODUCT GRAPHIC, "Made in the United States of America"
3 405 H		GASKET, oil pan drain plug	2 751 470 R1		PRODUCT GRAPHIC, model symbol "UC-221" (2)
3 405 H		GASKET, oil pressure relief valve cap	2 751 476 R1		PRODUCT GRAPHIC, model symbol "UC-263" (2)
69 607 R1		GASKET, oil pump cover (2)			
369 982 R1		GASKET, valve push rod cover			
69 674 R1		GASKET, water pump plate			
69 676 R1		GASKET, water pump			
384 535 R1		GROMMET, element retainer washer			
352 221 R1		"O" RING, oil pump screen seal			
320 273 R91		PACKAGE, oil filter center tube gasket			
103 364		PIN, retaining spring washer PIN, 1/16 x 1-1/4" cotter			

### PRODUCT GRAPHICS

The following identification and instructional Product Graphics are available for the UC-221 and UC-263 Engines:

2 752 477 R1	PRODUCT GRAPHIC, air cleaner instructions
2 751 188 R1	PRODUCT GRAPHIC, air cleaner instructions
1 001 071 R2	PRODUCT GRAPHIC, generator warning
2 752 048 R1	PRODUCT GRAPHIC, engine shutdown
2 751 259 R1	PRODUCT GRAPHIC, "International" (2)
2 754 371 R1	PRODUCT GRAPHIC, "I. H. C. of Canada, Ltd."
2 751 533 R1	PRODUCT GRAPHIC, flo-matic
2 752 445 R1	PRODUCT GRAPHIC, control switch escutcheon
2 753 190 R1	PRODUCT GRAPHIC, "Made in the United States of America"
2 751 470 R1	PRODUCT GRAPHIC, model symbol "UC-221" (2)
2 751 476 R1	PRODUCT GRAPHIC, model symbol "UC-263" (2)

## ELECTRICAL SYSTEM

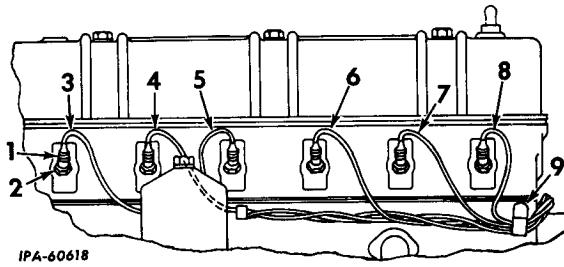
REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
		SPARK PLUGS, COIL, CABLES AND DISTRIBUTOR (Battery Ignition)			SPARK PLUGS, COIL, CABLES AND DISTRIBUTOR - Continued (Battery Ignition)
					
1	66 711 R92	CABLE, coil to distributor (High tension) (For use with COIL, Delco-Remy No. 1115098)	9		SPARK PLUG w/GASKET, 37 762 H (normal service) (Champion D-15Y) (6) (%)
2	312 118 R11 179 814 103 320 115 308	BRACKET, ignition coil (For use with COIL, Delco-Remy No. 1115098) SCREW, 5/16 x 5/8" hex-hd cap (2) WASHER, 5/16" lock (2) WASHER, 11/32" copper (2) SCREW, 7/16 x 1 1/2" hex-hd cap (3) (Assembled in left front of cylinder head)	9		SPARK PLUG (Champion D-6) (Heavy service) (*) (6)
3	395 330 R92 179 814 103 320 179 816	COIL, w/CLAMP, 533 977 R1, ignition SCREW, 5/16 x 5/8" hex-hd cap WASHER, 5/16" lock (2) SCREW, 5/16 x 3/4" hex-hd cap	10	37 762 H	SPARK PLUG (AC-C81) (Extreme severe service) (*) (6)
4		RESISTOR, ignition coil (Delco-Remy No. 1957154) (Together with SPACER, 31 987 D) (Will work for resistor, Delco-Remy No. 1928016)	11	318 056 R91	GASKET, spark plug (No. 3 and 4) (2)
5	404 392 R1	CABLE, coil to resistor	12		DISTRIBUTOR ASSY (For components see list of parts under details of "Distributor")
6	69 700 R91	CABLE, coil to distributor primary	13		GASKET, distributor
7	312 354 R91	CABLE, spark plug (No. 1 and 6) (2)	14	353 937 R1 179 817	CLAMP, distributor (2) SCREW, 5/16 x 7/8" hex-hd cap (2) WASHER, 5/16" lock (2)
8	266 263 R91	CABLE, spark plug (No. 2 and 5) (2)	103 320		WASHER, 5/16" lock (2)
9		SPARK PLUG (Champion D-18Y) (Light or moderate service) (*) (6)	533 977 R1 177 056		CLAMP, ignition coil SCREW, No. 10 x 1-1/2" slt-rd-hd tap
9		SPARK PLUG (Prestolite 18-82) (Light or moderate service) (*) (6)	187 902 R1		INSULATOR, spark plug terminal (6)
9		SPARK PLUG (Prestolite 18-81) (Intermediate service) (*) (6)	251 553 R1		NIPPLE, distributor cap terminal (7)
9		SPARK PLUG (AC-85) (Normal service) (*) (6)	372 875 R1		NIPPLE, ignition coil
			324 460 R1		RETAINER, spark plug wire (2)
			31 987 D		SPACER (For use with resistor Delco-Remy No. 1957154 only)
					<p>(*) - For Use with Gasoline and Combination Gas or Gasoline Engines.</p> <p>(%) - For Use with Natural Gas and Liquified Petroleum Gas Engines.</p>

## **ELECTRICAL SYSTEM**

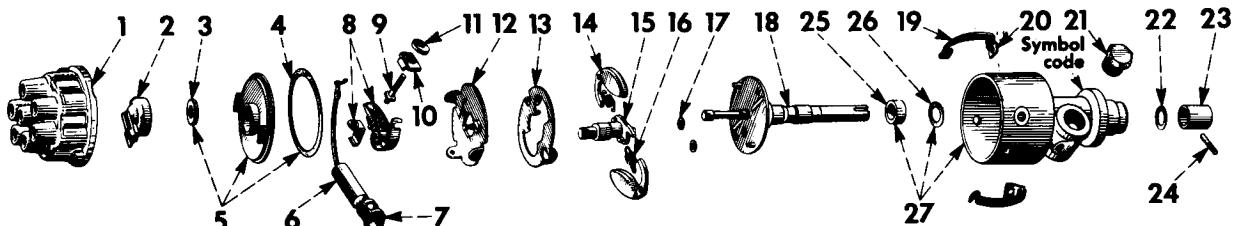
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**MEMORANDA**

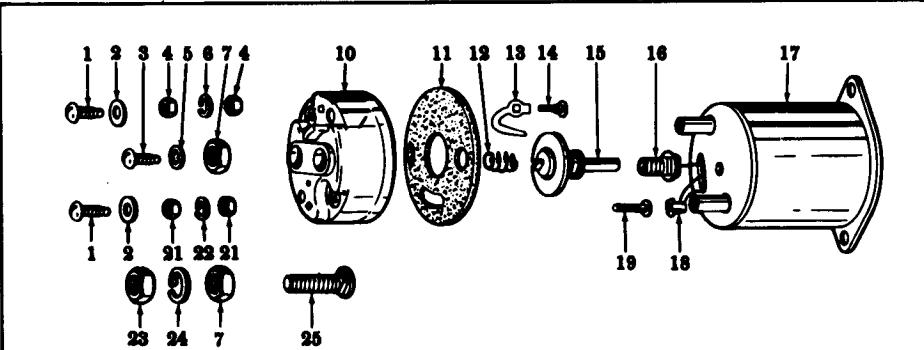
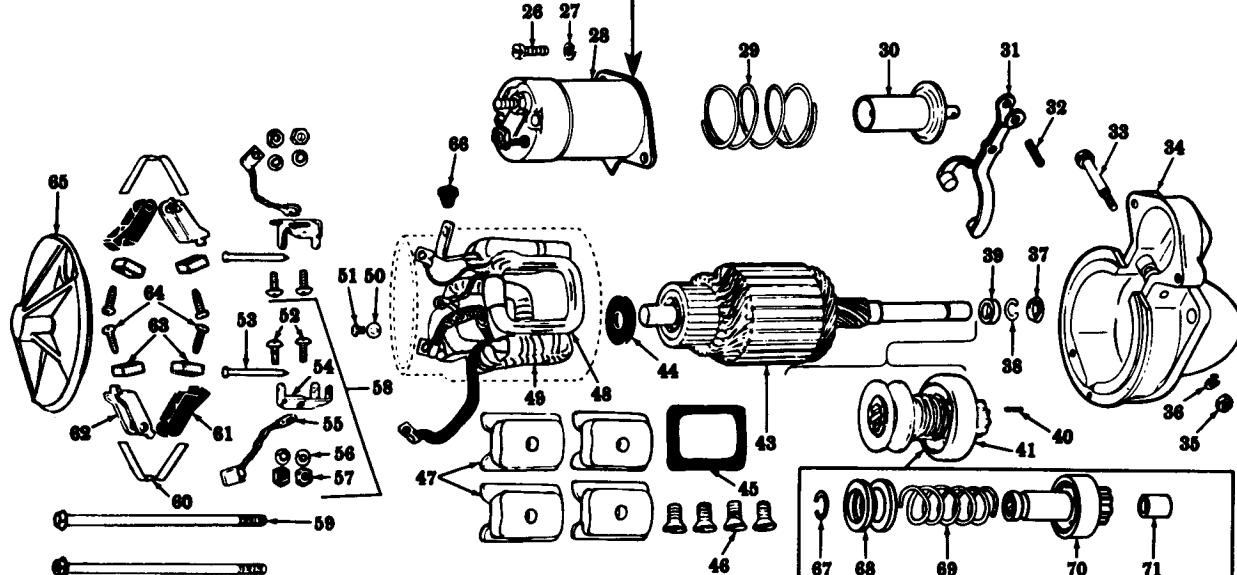
## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>SPARK PLUGS AND CABLES</b>					
(Magneto Ignition)					
C-221 501 to 43020					
C-263 501 to 56635					
					
1	SPARK PLUG (Champion D-23) (light or moderate service) (*) (6)		3	310 964 R91	CABLE, magneto high tension (cylinder No. 1)
1	SPARK PLUG (AC-88S com.) (light or moderate service) (*) (6)		4	310 965 R91	CABLE, magneto high tension (cylinder No. 2)
1	SPARK PLUG (Auto-Lite BT-10) (light or moderate service) (*) (6)		5	310 966 R91	CABLE, magneto high tension (cylinder No. 3)
1	SPARK PLUG (Champion D-16) (intermediate service) (*) (6)		6	310 967 R91	CABLE, magneto high tension (cylinder No. 4)
1	SPARK PLUG (Champion 8 com.) (normal service) (*) (6)		7	310 968 R91	CABLE, magneto high tension (cylinder No. 5)
1	SPARK PLUG (AC-85S) (normal service) (*) (6)		8	310 969 R91	CABLE, magneto high tension (cylinder No. 6)
1	SPARK PLUG (Auto-Lite BT-8) (normal service) (*) (6)		9	308 579 R1	CLIP, spark plug cable (2) SCREW, 5/16 x 5/8" hex hd cap WASHER, 5/16" lock
1	SPARK PLUG (Champion 5 com.) (severe service) (*) (6)				
1	SPARK PLUG (AC-83S com.) (severe service) (*) (6)				
1	SPARK PLUG (Auto-Lite BT-4) (severe service) (*) (6)				
1	SPARK PLUG (Champion 4 com.) (extreme severe service) (*) (6)				
1	SPARK PLUG (Ac-81S com.) (extreme severe service) (*) (6)				
1	SPARK PLUG (auto-Lite BT-3) (extreme severe service) (*) (6)				
1	SPARK PLUG (B.G. Corp RB-485) (long life) (%) (6)				
1	SPARK PLUG (Champion D-6) (long life) (%) (6)				
1	SPARK PLUG (AC-C-81) (long Life) (%) (6)				(*) - For Use with Gasoline and Combination Gas or Gasoline Engines.
1	SPARK PLUG (Auto-Lite BT-3) (long life) (%) (6)				(%) - For Use with Natural Gas and Liquefied Petroleum Gas Engines.
2	37 762 H	GASKET, spark plug (6)			

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>DISTRIBUTOR</b>					
					
		<b>IP S-12004A</b>			
367 839 R92	DISTRIBUTOR ASSY (order 372 867 R92) C-221 501 to 43020 C-263 501 to 56635		13	353 920 R1	GUARD, governor weight SCREW, No. 8 x 3/16" slt. fil. hd. mach. (2) WASHER, No. 8 lock (2)
372 867 R92	DISTRIBUTOR ASSY (will work for 367 839 R92) C-221 501 to 43020 C-263 501 to 56635		14	353 917 R91	ARM, weight (2)
383 177 R91	DISTRIBUTOR ASSY C-221 43021 Up		15	356 192 R91	CAM
388 592 R91	DISTRIBUTOR ASSY C-263 56636 Up		16	368 102 R91	SPRING, governor (set of two) (used with DISTRIBUTOR, 367 839 R92)
1	368 062 R91	CAP, distributor	16	373 331 R91	SPRING, governor (set of two) (used with DISTRIBUTOR, 372 867 R92)
2	353 896 R91	ROTOR, distributor	16	373 963 R91	SPRING, governor (set of two) (used with DISTRIBUTOR, 388 592 R91)
3	353 901 R2	SEAL, breaker cover felt	17	352 293 R1	SPACER, weight arm (4)
4	384 830 R1	GASKET, cover	18	368 059 R91	SHAFT, distributor (used with DISTRIBUTOR, 367 839 R92 and 372 867 R92)
5	384 831 R11	COVER w/SEAL, 353 901 R2 and GASKET, 384 830 R1, BREAKER	18	388 593 R91	SHAFT, distributor (used with DISTRIBUTOR, 388 592 R91)
6	353 903 R92	CONDENSER	18	383 178 R91	SHAFT, distributor (used with DISTRIBUTOR, 383 177 R91)
7	353 905 R1	CLAMP, condenser SCREW, No. 8 x 3/16" slt. fil. hd. mach. WASHER, No. 8 lock	19	368 096 R1	SPRING, distributor cap (2)
8	353 172 R91	POINT SET, breaker arm and stationary (used with DISTRIBUTOR, 367 839 R92)	20	353 895 R1	SUPPORT, distributor cap spring (2) SCREW, No. 8 x 3/8" slt. rd. hd. mach. (2) WASHER, No. 8 lock (2)
8	372 951 R91	POINT SET, breaker arm and stationary (used with DISTRIBUTOR, 372 867 R92, 383 177 R91 and 388 592 R91) SCREW, No. 8 x 3/16" slt. pan hd. mach. WASHER, stationary point terminal	21	369 013 R1	PLUG, distributor housing (not used with TACHOURMETER ATTACH- MENT)
21 394 D			22	368 054 R1	WASHER, distributor thrust lower
9	353 907 R1	SCREW, terminal	23	368 053 R1	COLLAR, distributor shaft
10	353 906 R1	INSULATOR, spring anchor terminal	24	354 552 R1	PIN, distributor shaft collar
11	251 538 R1	WASHER, terminal insulating NUT, No. 8 type "F" (3) WASHER, No. 8 lock (3)	25	368 057 R91	OIL SEAL, distributor shaft
12	352 277 R11	PLATE, breaker (used with DISTRIBUTOR, 367 839 R92)	26	368 055 R1	WASHER, distributor thrust upper
12	372 868 R11	PLATE, breaker (used with DISTRIBUTOR, 372 867 R92, 383 177 R91 and 388 592 R91) SCREW, No. 8 x 3/8" rd. hd. slt. mach. WASHER, No. 8 lock	27	368 051 R11	HOUSING w/WASHER, 368 055 R1, and OIL SEAL, 368 057 R91, distributor PLUG, 1/8" slt hds. pipe
			125 947		
			355 460 R1	FELT, cam oil hole	
			21 372 D	TUBE, of distributor grease	

## ELECTRICAL SYSTEM

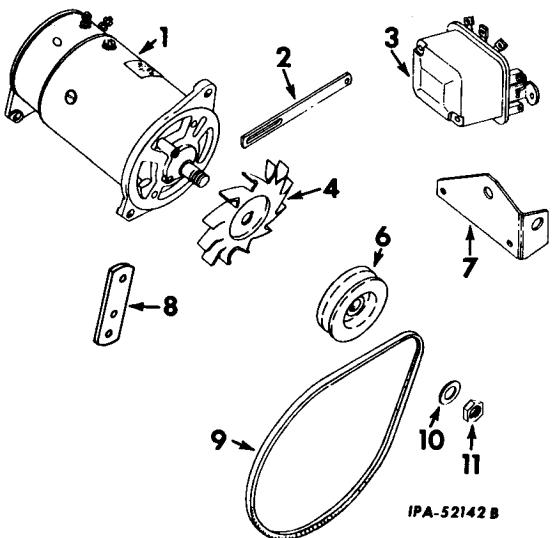
REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
CRANKING MOTOR ASSEMBLY (Delco-Remy)					
					
					
		<b>IPA-78339</b>			
A 1 107 350	MOTOR ASSY, cranking (For use with sleeved engines) (Order CRANKING MOTOR, 1 108 438)		4 453 433	NUT, #10NF ("R" terminal) (2)	
B 1 107 308	MOTOR ASSY, cranking (For use with sleeveless engines)		5 456 319	WASHER, #10 internal lock	
C 1 108 438	MOTOR ASSY, cranking (For use with sleeved engines) (Will work for CRANKING MOTOR, 1 107 350)		6 1 946 143	WASHER, lock	
120 377	NUT, 3/8"		7 134 566	NUT, 3/8" (2)	
120 622	NUT, #8		10 1 963 525	COVER, switch	
120 614	NUT, #10NF		11 1 966 034	INSULATOR, cover	
179 841	SCREW, 3/8 x 1-1/4" hex-hd cap (3)		12 1 853 342	SPRING contact return	
103 321	WASHER, 3/8" lock (cd or zn-pltd) (3)		13 1 935 645	CONTACT ("R" terminal)	
120 382	WASHER, 3/8" lock (cd or zn-pltd)		14 1 950 069	STUD ("R" terminal) #10NF	
121 841	WASHER, #8 lock (cd or zn-pltd)		15 1 956 226	CONTACT w/PUSH ROD	
120 217	WASHER, #10 lock (cd or zn-pltd)		16 1 955 499	STUD, 3/8" terminal	
			17	Not Furnished Separately	
1 453 468	SCREW, #10NF x 7/16" slt. rd. hd. (2)		18 1 949 538	CLIP ("S" terminal)	
2 1 923 935	WASHER, cover attaching screw (2)		19 1 950 069	STUD, ("S" terminal)	
3 9 413 474	SCREW, field lead attaching		Always Give Cranking Motor Number When Ordering Parts.		

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
CRANKING MOTOR ASSY - Continued (Delco-Remy)					
21	453 433	NUT, #10NF ("S" terminal) (2)	46	1 968 396	SCREW, pole shoe (For cranking motor assy "C") (4)
22	1 946 143	WASHER, lock	47	1 931 129	SHOE, pole shoe (4)
23	1 904 419	NUT, 3/8" (2)	48	1 935 131	COIL, field shunt (For use w/ Cranking Motor Assy "A" and "C")
24	9 421 425	WASHER, 3/8" lock	49	1 935 128	COIL, field (3 coils) (Part of Cranking Motor Assy "A" and "C")
25	1 960 244	STUD, 3/8" terminal	49	1 967 968	COIL, field (3 coils) (Part of Cranking Motor Assy "B")
26	132 255	SCREW, 1/4 x 1 1/2" slt-rd-hd (2)	50	1 962 276	WASHER, lock (center bearing attaching) (2)
27	9 421 423	WASHER, 1/4" lock (2)	51	132 900	SCREW, center bearing attaching (2)
28	1 114 356	SWITCH ASSEMBLY	52	274 738	SCREW, brush holder support attaching (4)
29	1 958 679	SPRING, plunger return	53	1 938 058	PIN, support attaching (Part of Cranking Motor Assy "A") (2)
30	1 941 113	PLUNGER, solenoid switch	53	1 966 923	PIN, support attaching (Part of Cranking Motor Assy "B" and "C") (2)
31	1 951 567	LEVER, shift	54		SUPPORT (Not furnished separately)
32	455 106	PIN, shift lever	55	1 926 605	LEAD, brush ground (For Cranking Motor Assy "A" and "B") (2)
33	1 932 197	STUD, shift lever	55	1 960 864	LEAD, brush ground (For Cranking Motor Assy "C") (2)
34	1 966 914	HOUSING w/BUSHING, 1 862 383, drive (For Cranking Motor Assy, "A")	56	453 435	WASHER, #10 lock (4)
	1 862 383	BUSHING, drive end (For Cranking Motor Assy. "A")	57	120 361	NUT, #10 (4)
34	1 962 932	HOUSING w/BUSHING, 1 839 345 drive (For Cranking Motor Assy, "B")	58	1 928 015	KIT, brush holder support (2)
	1 839 345	BUSHING, drive end (For Cranking Motor Assy "B")	59	1 939 970	BOLT, thru (2)
34	1 969 568	HOUSING w/BUSHING, 1 862 383, drive (For Cranking Motor Assy, "C")	60	1 926 622	SPRING, brush (2)
	1 862 383	BUSHING, drive end (For Cranking Motor Assy "C")	61	1 926 618	HOLDER, brush insulated (2)
35	1 926 640	NUT, shift lever stud	62	1 940 477	HOLDER, brush ground (2)
36	1 953 479	WASHER, shift lever stud (For Cranking Motor Assy "A" and "B")	63	1 906 945	BRUSH
36	9 421 424	WASHER, shift lever stud (For Cranking Motor Assy "C")	64	1 967 747	SCREW, brush attaching (For Cranking Motor Assy "A" and "B") (4)
37	1 838 568	COLLAR, drive end spacing	64	443 527	SCREW, brush attaching (For Cranking Motor Assy "C") (2)
38	1 928 022	RING, pinion stop retainer (Drive end)	65	1 928 966	FRAME, commutator end
39	1 928 021	COLLAR, pinion stop (Drive end)	66	1 966 391	GROMMET, lead (In field frame)
40	809 593	PIN, dowel (Drive end)	67	1 904 436	RING, snap
41	1 952 410	DRIVE ASSY, motor	68		COLLAR, motor drive (Not furnished separately)
43	1 950 307	ARMATURE	69	801 198	SPRING, motor drive
44	1 914 842	WASHER, commutator end spacing (Part of Cranking Motor Assy "A" and "C")	70		GEAR (Not furnished separately)
44	818 265	WASHER, commutator end spacing (Part of Cranking Motor Assy "B")	71	1 873 796	BUSHING, oilless
45	1 927 853	INSULATION, field coil (4)			Always Give Cranking Motor Number When Ordering Parts.
46	1 913 960	SCREW, pole shoe (For Cranking Motor Assy "A" and "B") (4)			

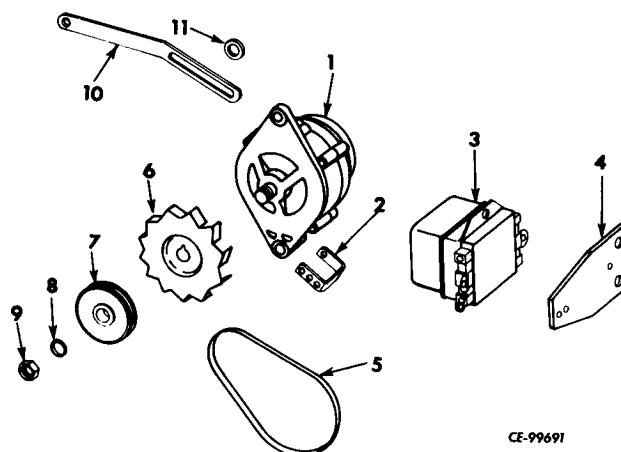
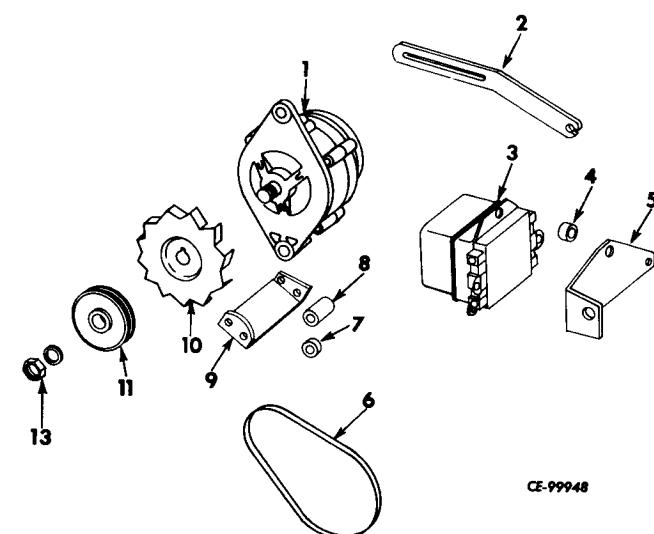
## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CRANKING MOTOR ASSEMBLY - Continued</b> (Delco-Remy)					
1 962 606	BUSHING, center bearing (For Cranking Motor Assy "B")		3		REGULATOR, voltage (Delco-Remy No. 1118999) (12 volt) (for components see list of parts under details of "Voltage Regulator")
820 148	BUSHING, center bearing (For Cranking Motor Assy "C")				NUT, 1/4"NF (2)
1 962 602	PLATE, center bearing (For Cranking Motor Assy "B")				SCREW, 1/4"NF x 3/4" hex hd cap (2)
820 149	PLATE, center bearing (For Cranking Motor Assy "A" and "C")		4		WASHER, 1/4" lock (2)
821 453	WASHER (between center bearing and motor drive)		6		FAN, generator (Delco-Remy No. 1944437)
1 916 439	WICK (drive end) (For Cranking Motor Assy "A" and "C")		7	315 722 R1	PULLEY, generator (Delco-Remy No. 1946716)
9 427 815	SCREW, field lead attaching to switch (For Cranking Motor Assy "C")				BRACKET, regulator (*)
9 427 882	PIPE, plug (Drive end) (For Cranking Motor Assy "C")				SCREW, 1/2 x 1-3/8" hex hd cap (2)
Always Give Cranking Motor Number When Ordering Parts.					WASHER, 1/2" lock (2)
<b>GENERATOR, VOLTAGE REGULATOR AND CONNECTIONS (For use w/Sleeved Engines)</b>					



1	GENERATOR ASSY (Delco-Remy No. 1102034) (12 volt) (for components see list of parts under details of "Generator") (*)	263 515 R91	CLIP, harness
2	312 514 R1	265 191 R91	HARNESS, generator to regulator
2	312 068 R1 61 252 H		(*) - Used On Units Equipped with Hydraulic Pump. (%) - Attachment no longer available. Service parts will be furnished.
	STRAP, generator adjusting (not *) SPACER, generator adjusting SCREW, 7/16 x 3/4" hex hd cap WASHER, 7/16" lock		

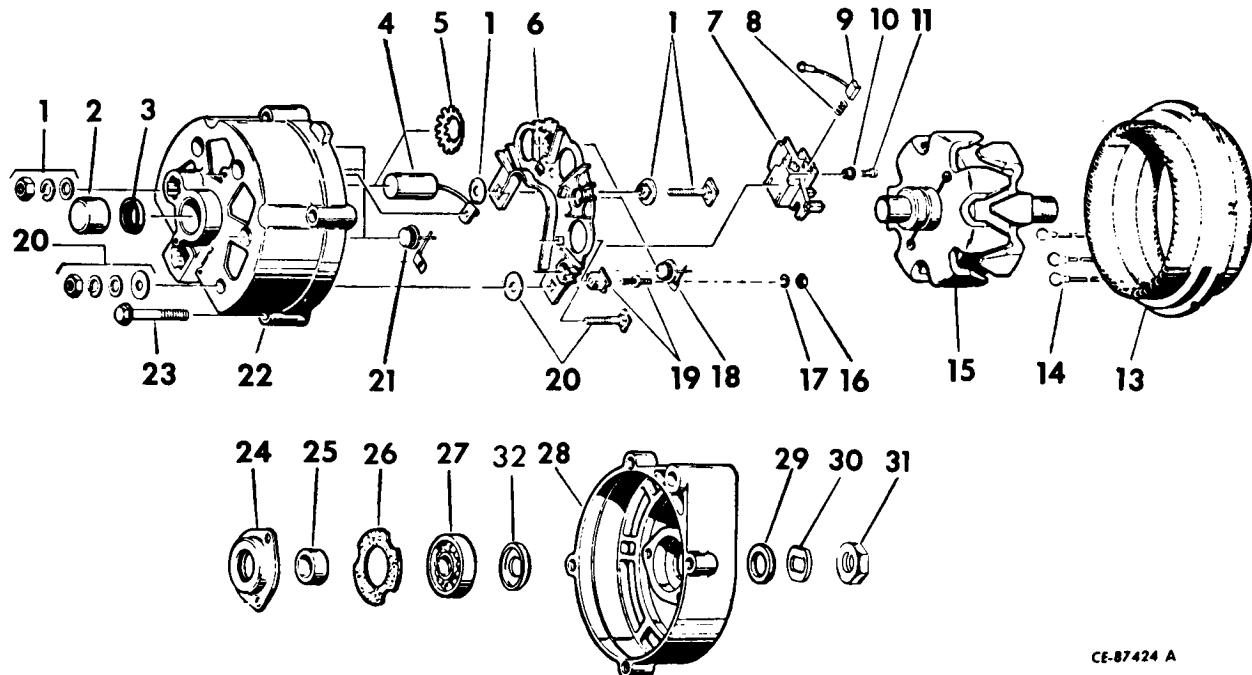
## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
ALTERNATOR, VOLTAGE REGULATOR AND RELATED PARTS (For Sleeveless engines w/Hydraulic Pump)			ALTERNATOR, VOLTAGE REGULATOR AND RELATED PARTS (For Sleeveless Engines w/o Hydraulic Pump)		
 <p>CE-99691</p>			 <p>CE-99948</p>		
1	186 282 102 635 103 321	ALTERNATOR ASSY (12 volt-32 amp negative ground) (for components see list of parts under details of "Alternator") BOLT, 3/8 x 3" hex hd. NUT, 3/8" WASHER, 3/8" lock	1	186 314 144 419 H	ALTERNATOR ASSY (12 volt 32 amp negative ground) (for components see list of parts under details of "Alternator") BOLT, 3/8 x 4-1/4" hex hd. NUT, 3/8" Esna stop
2	384 995 R1 179 824 179 845 384 996 R1 103 320 103 321	BRACKET, alternator BOLT, 5/16 x 1-3/4" hex hd. BOLT, 3/8 x 1-3/4" hex hd. SPACER, alternator WASHER, 5/16" lock WASHER, 3/8" lock	2	680 957 C1 179 819 179 860 61 252 H 280 185 R1 103 320 103 322	BRACE, alternator adjusting BOLT, 5/16 x 1-1/8" hex hd. BOLT, 7/16 x 1-1/4" hex hd. SPACER (at water outlet) SPACER, brace (at alternator) WASHER, 5/16" lock WASHER, 7/16" lock
3	180 020 120 375 174 916	REGULATOR, voltage (12 volt) (for components see list of parts under details of "Voltage Regulator") BOLT, 1/4 x 3-3/4" hex hd. (2) NUT, 1/4" (2) WASHER, 1/4" lock (2)	3	277 006 R1	REGULATOR, voltage (12 volt) (for components see list of parts under details of "Voltage Regulator")
4	315 722 R2 179 884 103 323	BRACKET, voltage regulator mtg. BOLT, 1/2 x 1-3/8" hex hd. (2) WASHER, 1/2" lock (2)	5	312 069 R2 179 883 271 552 103 323 103 325	BRACKET, voltage regulator mtg. BOLT, 1/2 x 1-1/4" hex hd. BOLT, 5/8 x 3/4" hex hd. WASHER, 1/2" lock WASHER, 5/8" lock
5	385 674 R1	BELT, alternator	6	275 301 C2	BELT, fan
6	221 425 R1	FAN, alternator	7	384 992 R1	SPACER, bracket mounting
7		PULLEY, alternator (Delco-Remy No. 1961261)	8	384 993 R1	SPACER, alternator mounting
8		WASHER, alternator drive shaft lock	9	384 991 R1 179 821 103 320	BRACKET, alternator BOLT, 5/16 x 1-3/8" hex hd. WASHER, 5/16" lock
9		NUT, alternator drive shaft	10	221 425 R1	FAN, alternator
10	384 997 R1 199 860 179 819 61 252 H 103 320	BRACE, alternator adjusting BOLT, 7/16 x 1-1/4" Hex hd. BOLT, 5/16 x 1-1/8" hex hd. SPACER, (at water outlet) WASHER, 5/16" lock	11		PULLEY, alternator
11	280 185 R1 179 858 103 322	SPACER, brace BOLT, 7/16 x 1" hex hd. WASHER, 7/16" lock	12		WASHER, alternator drive shaft lock
	263 515 R91	CLIP, cable (on upper regulator mounting bolt)	13		NUT, alternator drive shaft

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**ALTERNATOR**  
(Delco-Remy)  
(For use w/Sleeveless Engines)

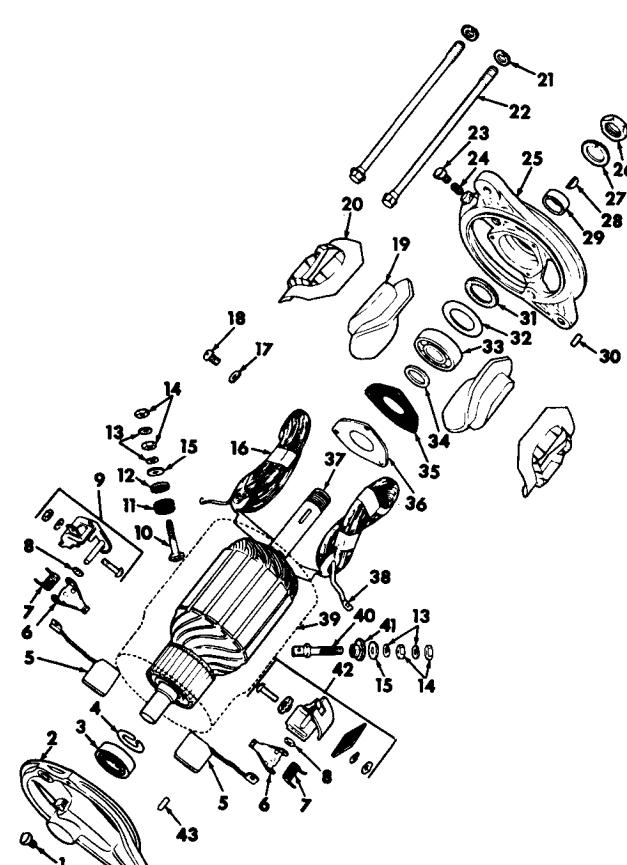


CE-87424 A

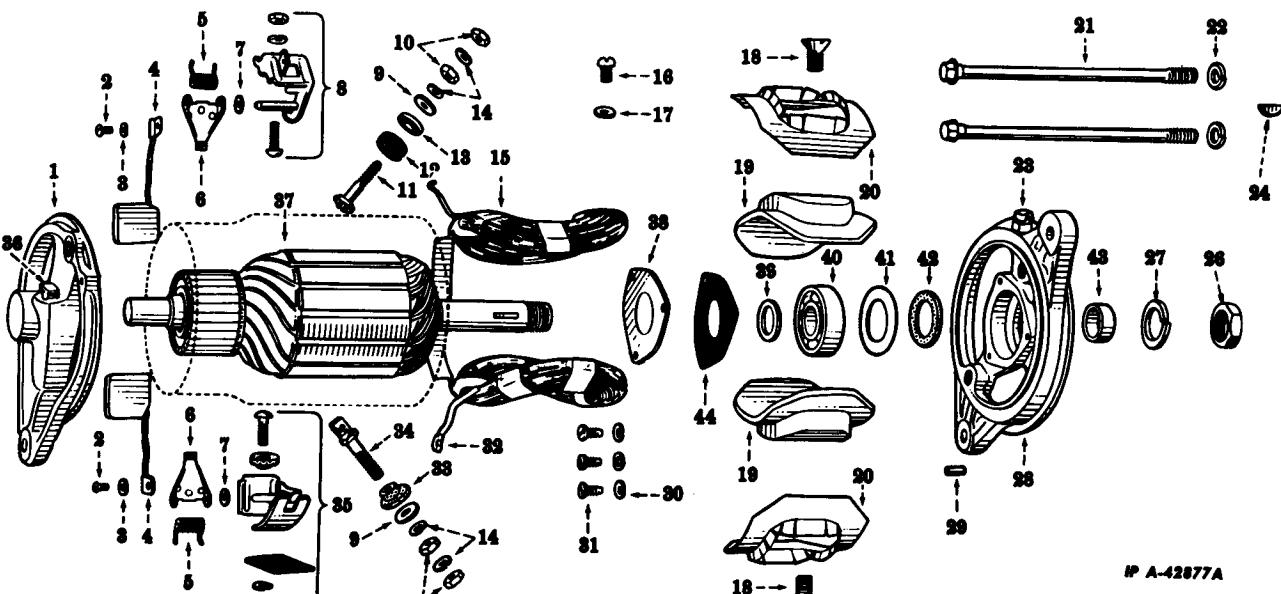
1 100 805	ALTERNATOR ASSY (includes Ref. Nos. 1 thru 31)	19 1 959 834	TERMINAL, diode junction (package) (3)
1 1 959 833	TERMINAL, ground (package)	20 1 959 832	TERMINAL battery (package)
2 7 451 763	BEARING, slip ring end roller	21 1 964 354	DIODE, negative (package) (3)
3 1 961 323	RETAINER w/FELT, slip ring end	22 1 969 329	FRAME w/negative DIODE, BEARING, RETAINER and CONDENSER
4 1 959 455	CONDENSER	23 1 956 975	BOLT, thru (4)
5 1 960 750	SPRING, condenser retaining	24 1 955 494	PLATE, drive end ball bearing retainer
6 1 959 828	HEAT SINK w/positive DIODE	1 965 104	SCREW, attaching (3)
1 959 389	INSULATOR, heat sink screw		
1 959 523	INSULATOR, heat sink washer		
132 768	SCREW, heat sink	25 1 963 139	COLLAR, drive end inside spacer
9 419 392	WASHER, heat sink lock	26 1 912 008	GASKET, bearing retainer plate
815 540	WASHER, heat sink		
7 1 964 682	HOLDER, brush (includes Ref. 9)	27 908 019	BEARING, drive end ball
8 1 964 117	SPRING, brush (2)	28 1 970 525	FRAME, drive end
9	BRUSH, (order HOLDER 1 964 682)	29 1 959 991	COLLAR, drive end outside spacer
10 9 419 392	WASHER, brush holder screw lock(2)	30 1 941 978	WASHER, drive end shaft
11 1 957 501	SCREW, brush holder attaching (2)	31 1 915 172	NUT, drive end shaft
13 1 959 381	STATOR w/CLIPS	32 800 832	FLINGER, grease
14 1 959 532	CLIP, stator terminal (3)		
15 1 958 565	ROTOR ASSY		
16	NUT, hex No. 8NC (3)		
17 9 419 392	WASHER, lock No. 8 spring (3)		
18 1 964 353	DIODE, positive (package) (3)		

Always Give Alternator Number  
When Ordering Parts.

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>GENERATOR</b> (Part of ATTACHMENT, 318 434 R91) (Delco-Remy) (12 Volt) (Used with Hydraulic Pump) (For use w/Sleeved Engines)					
					
IPA-60101					
1102034      GENERATOR ASSY (12 volt)					
NUT, 5/16"					
SCREW, 5/16 x 3/4" hex hd cap					
SCREW, 5/16 x 1" hex hd cap					
SCREW, 5/16 x 1-1/4" hex hd cap					
WASHER, 5/16" lock (3)					
WASHER, 11/32 x 11/16" x 16 ga. (2)					
1    125 609	OILER, commutator end		37    1 940 161	ARMATURE	
2    1 925 204	FRAME, commutator end		38    200 382	CLIP, terminal to brush	
3    904 751	BEARING, commutator end ball		39	CASE (Not Furnished Separately)	
4    1 929 959	RING, commutator end bearing		40    1 923 284	STUD ("A" terminal)	
5    1 923 295	BRUSH (2)		41    1 921 362	BUSHING, insulating ("A")	
	SCREW, No. 6 x 1/4" rd. hd cap		42    1 925 379	HOLDER, insulated brush (package)	
1 904 377	WASHER, lock		43    809 062	PIN, commutator end dowel	
6    1 944 373	ARM, brush (2)				
7    1 916 324	SPRING, brush (2)				
8    1 857 412	WASHER, space (2)				
9    1 925 378	HOLDER, ground brush (package)				
10    1 858 749	STUD, "F" terminal				
11    1 885 090	BUSHING, insulating ("F" terminal)				
Always Give Generator Number When Ordering Parts.					

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>GENERATOR</b> (Delco-Remy) (Not used with Hydraulic Pump) (For use w/Sleeved Engines)					
					
<b>IP A-42877A</b>					
A 1 100 305	GENERATOR ASSY (12 volt) (order Delco-Remy No. 1100374)		12 1 885 090	BUSHING, "F" terminal insulating	
B 1 100 374	GENERATOR ASSY (12 volt) (will work for Delco-Remy No. 1100305) NUT, 5/16" SCREW, 5/16 x 1" hex hd cap SCREW, 5/16 x 9/16" hex hd cap SCREW, 5/16 x 1-1/8" hex hd cap WASHER, 11/32 x 11/16 x 16 ga. WASHER, 5/16" lock (3)		13 1 858 753	WASHER, field terminal stud in insulating	
1 1 939 857	FRAME w/OILER, 125 609, PIN and 809 062, commutator end (Unit B)		14 1 904 661	WASHER, terminal stud lock (4)	
1 1 927 451	FRAME w/OILER, 1 880 635, PIN, 809 062, and WICK, 804 080 (commutator end) (Unit A)		15 1 923 625	COIL w/CLIP, 200 382, field (Unit A)	
2 132 688	SCREW, brush lead attaching (2)		15 1 953 879	COIL w/CLIP, 200 382, field (Unit B)	
3 1 904 377	WASHER, brush lead attaching lock (2)		16 225 577	SCREW, field frame ground (Unit B)	
4 1 923 295	BRUSH w/LEAD (2)		17 120 380	WASHER, field frame ground lock (Unit B)	
5 1 916 324	SPRING, brush (2 for Unit A)		18 1 843 646	SCREW, pole shoe (2)	
5 1 908 829	SPRING, brush (2 for Unit B)		19 1 914 618	SHOE, pole (2)	
6 1 878 183	ARM, brush (2)		20 1 914 491	INSULATOR, field coil (2)	
7 1 904 368	WASHER, brush arm space (2 for Unit A)		21 815 018	BOLT, thur (2)	
7 1 857 412	WASHER, brush arm space (2 for Unit B)		22	WASHER, 5/16" thru bolt, lock	
8 1 922 288	HOLDER, ground brush		23 1 880 641	OILER (drive end)	
9 1 881 409	WASHER, terminal stud plain (2)		24 124 545	KEY, 1/8 x 5/8" (drive end) (Woodruff No. 5)	
10 121 743	NUT, No. 12 terminal (4)		25	WASHER, 5/16" thru bolt lock	
11 1 921 860	STUD, "F" terminal		26 806 915	NUT, shaft(drive end)(Unit A)	
			26 1 911 324	NUT, shaft(drive)	
			26 806 915	NUT, shaft (drive end) (Unit A)	
			26 1 911 324	NUT, shaft (drive end) (Unit B)	
			Always Give Generator Number When Ordering Parts.		

## ELECTRICAL SYSTEM

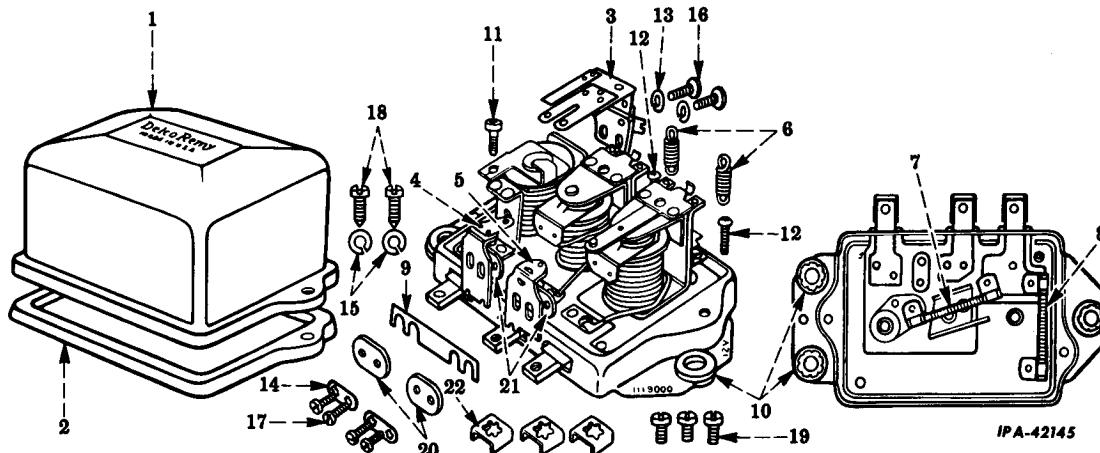
REF. NO.	PART NUMBER	DESCRIPTION
<b>GENERATOR - Continued</b>		
(Delco-Remy) (Not used with Hydraulic Pump)		
(For use w/Sleeved Engines)		
27	804 000	WASHER, shaft nut lock (drive end) (Unit A)
27	1 888 439	WASHER, shaft nut lock (drive end) (Unit B)
28	1 910 404	FRAME w/OILER, 1 880 641 (drive end) (Unit A)
28	1 871 693	FRAME w/OILER, 1 880 641 (drive end) (Unit B)
29	809 593	PIN, dowel (drive end)
30	1 880 781	WASHER, retainer plate lock (3)
31	1 904 370	SCREW, retainer plate (3)
32	200 382	CLIP, terminal (to brush)
33	1 921 362	BUSHING, "A" terminal insulating
34	1 921 369	STUD, "A" terminal
35	1 922 289	HOLDER, insulated brush
36	1 880 635	OILER (commutator end) (Unit A)
36	125 609	OILER (commutator end) (Unit B)
37	1 946 903	ARMATURE (Unit B)
37	817 807	ARMATURE (Unit A)
38	1 911 263	PLATE, retainer (drive end)
39	809 945	WASHER, inside space (drive end)
40	954 378	BEARING, ball(drive end)
41	819 104	PLATE, felt retainer (drive end)
42	809 961	WASHER, felt (drive end)
43	1 858 603	COLLAR, space (drive end)
44	1 912 008	GASKET, bearing retainer
	904 751	BEARING, ball (commutator end) (Unit B)
1	927 448	CUP, felt retainer (commutator end) (Unit A)
1	948 326	PLUG, bearing well (commutator end) (Unit B)
	809 062	PIN, dowel (commutator end)
1	929 959	RING, bearing clamp (commutator end) (Unit B)
1	927 447	WASHER, felt (commutator end) (Unit A)
	804 080	WICK, oil (commutator end)(Unit A)
	823 551	WICK, oil (drive end)

Always Give Generator Number  
When Ordering Parts.

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**VOLTAGE REGULATOR**  
(Delco-Remy)  
(For use with Negative Grounded Battery)  
(For Use w/Generator)



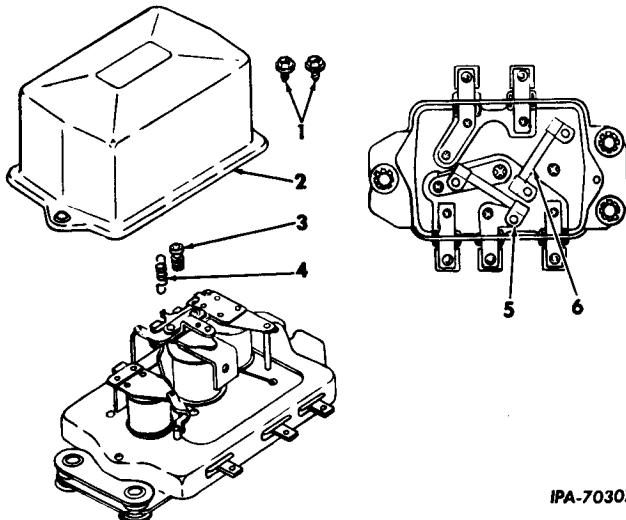
1 118 999	REGULATOR, voltage NUT, 1/4"NF (2) SCREW, 1/4NF x 1/2" hex hd cap (2) WASHER, 1/4" lock (2)	19 1 864 099	SCREW, terminal (3)
1 1927 980	COVER	20 1 922 599	INSULATOR, regulator contact attaching screw (2)
2 1 953 902	GASKET, cover	21 1 878 507	WASHER, insulator regulator con- tact attaching screw (2)
3 1 939 646	ARMATURE, relay	22 1 868 137	CLAMP, terminal (3)
4	NOT USED		
5 1 878 493	CONTACT and SUPPORT, voltage regulator		
6 1 912 176	SPRING, regulator armature (2)		
7	NOT USED		
8 1 910 174	RESISTOR, "F" terminal to ground		
9	NOT USED		
10	NOT USED		
11 1 912 159	SCREW, adjusting relay armature		
12 1 944 590	SCREW, regulator armature adjusting (2)		
13	NOT USED		
14 1 878 505	WASHER, regulator contact attaching screw lock (2)		
15 1 935 031	WASHER, cover screw lock (2)		
16 1 924 764	SCREW, relay armature attaching (2)		
17 1 878 516	SCREW, regulator contact attaching (2)		
18 1 927 982	SCREW, cover (2)		

Always Give Voltage Regulator  
Number When Ordering Parts

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION
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VOLTAGE REGULATOR  
(Delco-Remy)  
(For use with Alternator)



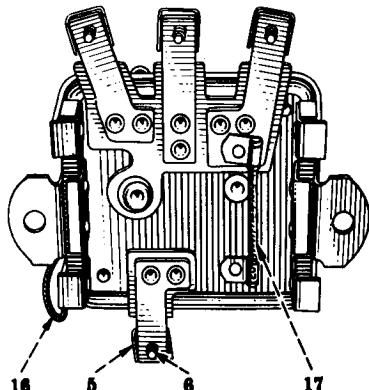
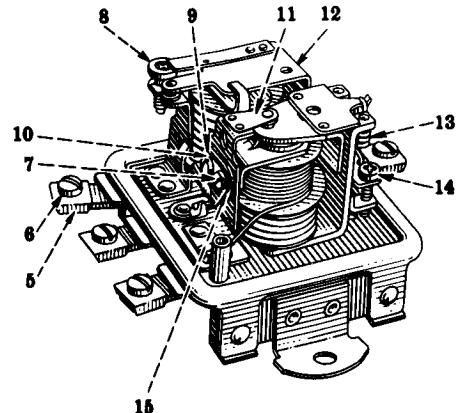
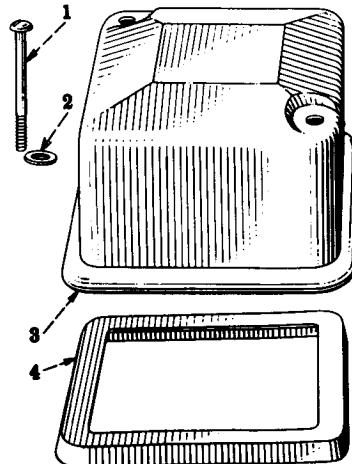
IPA-70307

1 119 513	REGULATOR w/SHOCK BRACKET, voltage (Composed of - 1 PACKAGE 1 962 629 1 REGULATOR 1 119 507 3 SCREW 454 669 3 WASHER 9 421 423 SCREW, 1/4 x 3/4" hex hd cap (2) WASHER, 1/4" lock (2) NUT, 1/4" (2))
1 119 507	REGULATOR ASSY, voltage (Consists of Ref. Nos. 1 thru 6) (furnished as part of REGULATOR, 1 119 513)
1 1 943 386	SCREW, cover attaching (2)
2 1 958 151	COVER, regulator
3 1 958 148	SCREW, adjusting
4 1 958 137	SPRING, adjusting screw
5 1 941 431	RESISTOR
6 1 960 347	RESISTOR
1 962 629	PACKAGE, shock bracket
454 669	SCREW, terminal (3)
9 421 423	WASHER, terminal screw lock (3)

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**VOLTAGE REGULATOR**  
(Delco Remy)  
(For use with Positive Grounded Battery)  
(For use with Generator)

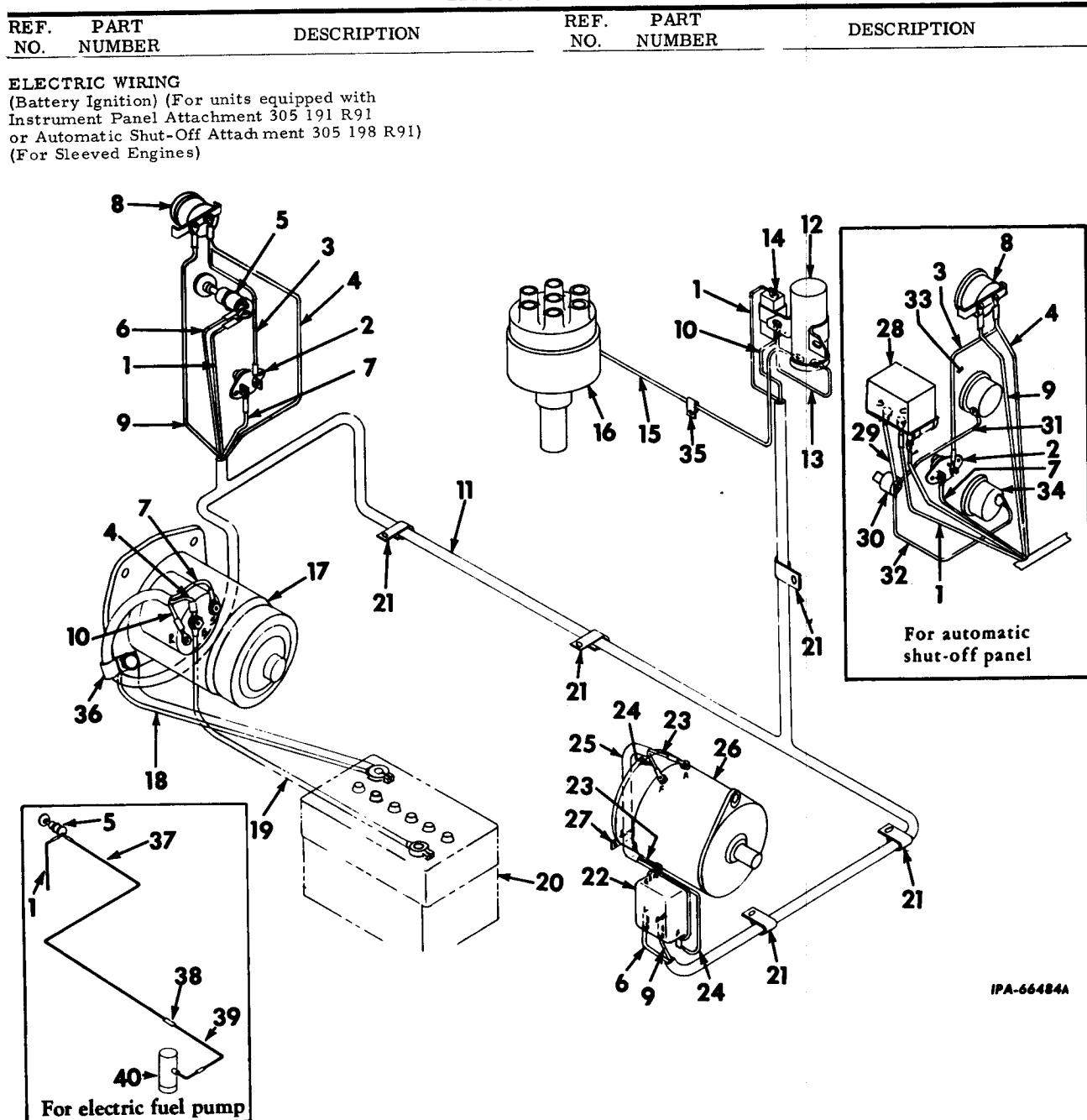


**IPA-33775**

1 118 779	REGULATOR, voltage NUT, 1/4"NF (2) SCREW, 1/4NF x 1/2" hex hd cap (2) WASHER, 1/4" lock (2)	9 1 878 507	WASHER, insulating regulator con- tact attaching screw (2)
1 1 927 982	SCREW, cover attaching (2)	11 1 878 517	CONTACT and SUPPORT, regulator
2 1 922 996	WASHER, insulating cover attaching screw (2)	12 1 878 780 454 431 1 904 377	ARMATURE, relay SCREW, relay armature (2) WASHER, relay armature attach- ing screw lock (2)
3 1 927 980	COVER	13 1 912 176	SPRING, regulator armature
4 1 927 981	GASKET, cover	14 1 922 408	SCREW, regulator armature adjusting
5 1 868 137	CLAMP, terminal (4)	15 1 922 599	INSULATOR, regulator contact attaching screw
6 1 864 099	SCREW, terminal (4)	16 1 927 975	LEAD, ground
7 1 878 516	SCREW, regulator contact attaching (2)	17 1 910 174	RESISTOR, "F" terminal to ground
8 1 912 159	SCREW, adjusting relay armature		

Always Give Voltage Regulator  
Number When Ordering Parts.

## ELECTRICAL SYSTEM



IPA-66484A

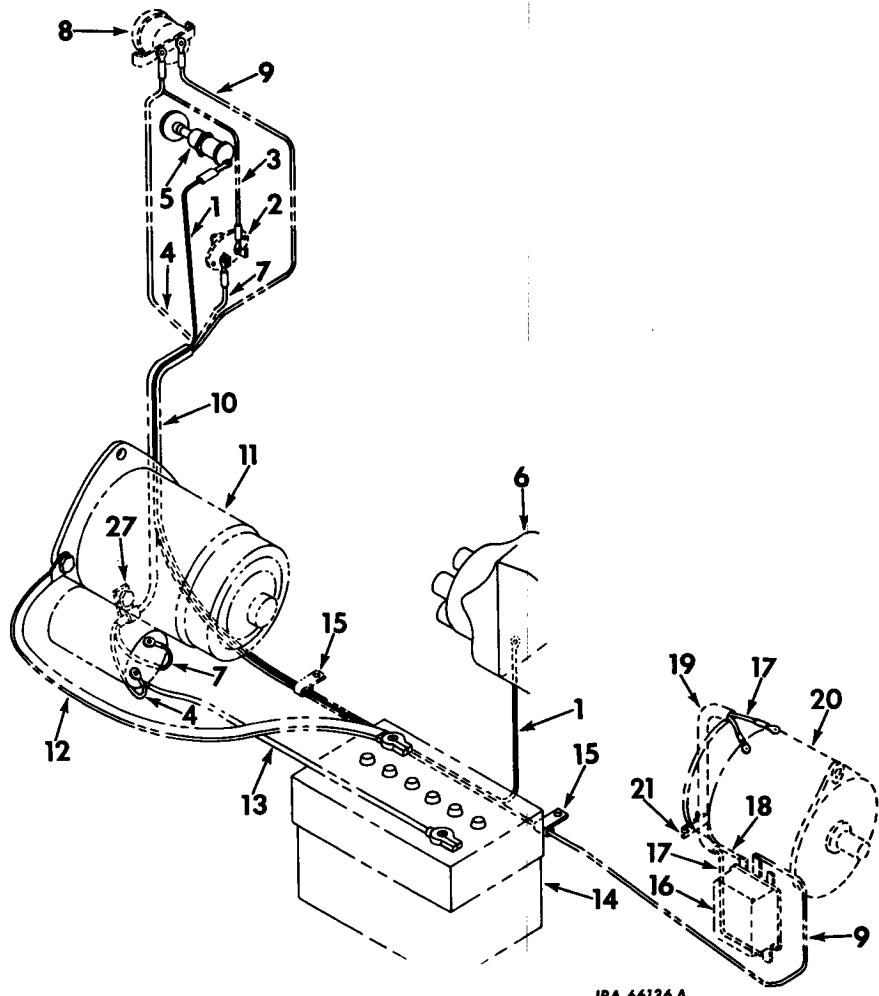
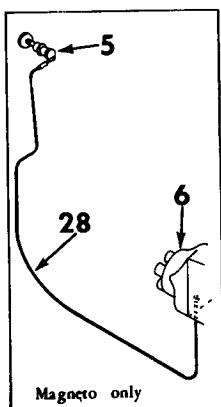
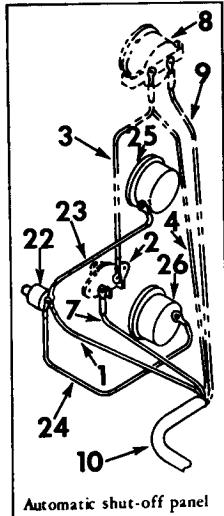
1	CABLE, ignition switch to resistor (orange) (order 305 192 R91) (+)	4	CABLE, minus (-) on ammeter to "B" on solenoid (positive ground) or plus (+) on ammeter to "B" on solenoid (negative ground) (red) (order 305 192 R91) (+) (#)
1	CABLE, "C" on relay to resistor (orange) (order 305 192 R91) (#)	5	62 801 DC SWITCH, ignition (+)
2	366 317 R93 SWITCH, starting (+)(#) NUT, No. 10NF (2) SCREW, No. 10NF x 7/16" slt rd. hd. (2) WASHER, No. 10 lock (2)	6	CABLE, ignition switch to "L" on voltage regulator (yellow) (Order 305 192 R91) (+)
3	CABLE, minus (-) on ammeter to starting switch (positive ground) or plus (+) on ammeter to starting switch (negative ground) (red) (order 305 192 R91) (+) (#)		(+) - Part of Instrument Panel Attachment, 305 191 R92 (#) - Part of Automatic Safety Shut- Off Attachment, 305 198 R91

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>ELECTRIC WIRING - Continued</b> (Battery Ignition) (For units equipped with Instrument Panel Attachment 305 191 R91 or Automatic Shut-Off Attachment 305 198 R91) (For Sleeved Engines)					
6		CABLE, "B" on relay to "L" on voltage regulator (yellow) (order 305 192 R91) (#)	25	265 191 R91	HARNESS, generator to regulator cable (*)
7		CABLE, starting switch to "S" on solenoid (green) (order 305 192 R91) (+) (#)	25	264 637 R93	HARNESS, generator to regulator cable (not *)
8	702 283 C91	AMMETER (+) (#)	26		GENERATOR (for components see list of parts under details of "Generator")
9		CABLE, positive (+) on ammeter to "B" on voltage regulator (positive ground) or minus (-) on ammeter to "B" on voltage regulator (negative ground) (blue) (order 305 192 R91) (+) (#)	27	263 515 R91	CLIP, generator cable
			28	265 470 R91	RELAY (#)
10		CABLE, "R" on solenoid to resistor (brown) (order 305 192 R91) (+) (#)	29		CABLE, "S" on relay to stop switch (furnished as part of SWITCH, 265 471 R91)
11	305 192 R91	HA RNESS, cable (#)	30	265 471 R91	SWITCH, stop (#)
12		COIL, ignition (also illustrated with "Spark Plugs, Coil Cables and Distributor")	31		CABLE, stop switch to oil pressure indicator (furnished as part of 268 542 R91)
13	404 392 R1	CABLE, minus (-) on coil to resistor (positive ground) or plus (+) on coil to resistor (negative ground) (also listed with "Spark Plugs, Coil, Cables and Distributor")	32		CABLE, stop switch to water temperature gauge (furnished as part of 256 502 R91)
14		RESISTOR (also listed with "Spark Plugs", Coil Cables and Distributor")	33	268 542 R91	INDICATOR w/WIRE, oil pressure (#)
15	368 267 R91	CABLE, plus (+) on coil to distributor (positive ground) or minus (-) on coil to distributor (negative ground) (also listed with "Spark Plugs, Coil, Cables and Distributor")	34	256 502 R91	INDICATOR w/WIRE, water temperature (#)
16		DISTRIBUTOR, assembly (for components see list of parts under details of "Distributor")	35	370 535 R1	CLIP, coil to distributor cable
17		MOTOR, cranking (for components see list of parts under details of "Cranking Motor")	36	362 120 R1	CLIP, cranking motor harness
18		CABLE, battery to ground (not furnished with power unit) (see "Battery and Cables")	37		CABLE, ignition switch to fuel pump (black) (**)
19		CABLE, battery to cranking motor (not furnished with power unit) (see "Battery and Cables")	38		CONNECTOR (furnished as part of ignition switch to fuel pump cable) (**)
20		BATTERY (12 volt) - dry charged (not furnished with power unit) (see Battery and Cables)	39		CABLE, fuel pump to connector (furnished as part of fuel pump)(**)
21	264 164 R91	CLIP, cable (+) (#) (3)	40		PUMP, fuel (for components see list of parts under details of "Electric Fuel Pump") (**)
22		REGULATOR, voltage (for components see list of parts under details of "Voltage Regulator")			
23		CABLE, generator "A" to "Gen" on voltage regulator (red w/black tracer) (order 264 637 R93)			(+) - Part of Instrument Panel Attachment, 305 191 R92 (#) - Part of Automatic Safety Shut-Off Attachment, 305 198 R91
24		CABLE, generator "F" to "F" on voltage regulator (black w/red tracer) (order 264 637 R93)			(*) - Used on Units Equipped with Hydraulic Pump (**) - Part of Electric Fuel Pump Attachment, 316 151 R91

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>ELECTRIC WIRING</b>					
(Magneto Ignition) (For units equipped with Instrument Panel Attachments 312 062 R91 and 312 063 R91 or Automatic Shut-Off Attachments 312 059 R91 and 312 060 R91 (For Sleeved Engines) C-221 501 to 43020 C-263 501 to 56635					



1	CABLE, ignition switch to magneto (orange) (order 312 061 R91) (+)	6	310 962 R91	MAGNETO (American Bosch MRD-6A302) high tension (medium duty-tungsten points) (for compo- nents see list of parts under details of "Magneto")
1	CABLE, stop switch to magneto (orange) (order 312 061 R91) (*)	6	310 963 R91	MAGNETO (American Bosch MRD-6A302) (high tension) (heavy duty - tungsten points) (for com- ponents see list of parts under details of "Magneto")
2	366 317 R93	SWITCH, starting (+) (*)		
3	CABLE, minus (-) on ammeter to starting switch (positive ground) or positive (+) on ammeter to starting switch (negative ground) (red) (order 312 061 R91) (+) (*)			
4	CABLE, minus (-) on ammeter to "B" on solenoid (positive ground) or positive (+) on ammeter to "B" on solenoid (negative ground) (red) (order 312 061 R91) (+) (*)			(+) - Part of Instrument Panel Attachments 312 062 R91 and 312 063 R91.
5	54 207 DB	SWITCH, magneto (*)		(*) - Part of Automatic Safety Shut- off Attachments, 312 059 R91 and 312 060 R91

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>ELECTRIC WIRING - Continued</b>					
(Magneto Ignition) (For units equipped with Instrument Panel Attachments 312 062 R91 and 312 063 R91 or Automatic Shut-Off Attachments 312 059 R91 and 312 060 R91 (For Sleeved Engines) C-221 501 to 43020 C-263 501 to 56635					
6	313 698 R91	MAGNETO (American Bosch MRF-6A332) (high tension) (heavy duty-platinum points) (for components see list of parts under details of "magneto")	26	265 468 R91	INDICATOR w/WIRE, heat gauge (*)
7		CABLE, starting switch to "S" on solenoid (green) (order 312 061 R91) (+) (*)	27	362 120 R1	CLIP, cable harness
8	702 283 C91	AMMETER (+) (*)	28	62 862 D	CABLE, ignition switch to magneto (not used with electric starting)
9		CABLE, positive (+) on ammeter to "B" on voltage regulator (positive ground) (or negative (-) on ammeter to "B" on voltage regulator (negative ground) (blue) (order 312 061 R91) (+) (*)	312 055 R1	ARM, idler pulley adjusting (also listed and illustrated with "Fan Belt, Idler Pulley and Arm") SCREW, 3/8 x 1" hex hd cap WASHER, 13/32 x 13/16 x 1/16"ga. WASHER, 3/8" lock	
10	312 061 R91	HARNESS, cable (used with Electric Starting) (+) (*)	ST 633		BEARING, idler pulley shaft (also listed and illustrated with "Fan Belt, Idler Pulley and Arm")
11		MOTOR, cranking (for components see list of parts under details of "Cranking Motor")	305 177 R1		BELT, water pump and generator fan (also listed and illustrated with "Fan Belt, Idler Pulley and Arm")
12		CABLE, battery to ground (not furnished with power unit) (see "Battery and Cables")	310 964 R91		CABLE, magneto high tension (cylinder No. 1)(also listed and illustrated with "Spark Plugs and Cables")
13		CABLE, battery to cranking motor (not furnished with power unit) (see "Battery and Cables")	310 965 R91		CABLE, magneto high tension (cylinder No. 2)(also listed and illustrated with "Spark Plugs and Cables")
14		BATTERY (12 volt) - dry charged (not furnished with power unit) (see "Battery and Cables")	310 966 R91		CABLE, magneto high tension (cylinder No. 3) (also listed and illustrated with "Spark Plugs and Cables")
15	264 164 R91	CLIP, cable (+) (*) (3)	310 967 R91		CABLE, magneto high tension (cylinder No. 4) (also listed and illustrated with "Spark Plugs and Cables")
16		REGULATOR, voltage (for components see list of parts under details of "Voltage Regulator")	310 968 R91		CABLE, magneto high tension (cylinder No. 5) (also listed and illustrated with "Spark Plugs and Cables")
17		CABLE, generator "A" to "GEN" on voltage regulator (red w/black tracer) (order 264 637 R93)	310 969 R91		CABLE, magneto high tension (cylinder No. 6) (also listed and illustrated with "Spark Plugs and Cables")
18		CABLE, generator "F" to "F" on voltage regulator (black w/red tracer) (order 264 637 R93)	308 579 R1		CLIP, spark plug cable (also listed and illustrated with "Spark Plugs and Cables") (2) SCREW, 5/16 x 5/8" hex hd cap WASHER, 5/16" lock
19	264 637 R93	HARNESS, generator to regulator cable	109 461		FITTING, 1/8" lubrication (Lincoln 5000) (optional with 138 322 H)
20		GENERATOR (for components see list of parts under details of "Generator")	138 322 H		FITTING, 1/8" lubrication (Alemite 1610BL) (optional with 109 461)
21	263 515 R91	CLIP, generator cable			
22	265 471 R91	SWITCH, stop (*)			
23		CABLE, stop switch to oil pressure indicator (furnished as part of 313 067 R91)			
24		CABLE, stop switch to heat indicator (furnished as part of 265 468 R91)			(*) - Part of Instrument Panel Attachments 132 062 R91 and 312 063 R91
25	313 067 R91	INDICATOR w/WIRE, oil pressure gauge (*)			(*) - Part of Automatic Safety Shut-off Attachments, 312 059 R91 and 132 060 R91

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>ELECTRIC WIRING - Continued</b>					
(Magneto Ignition) (For units equipped with Instrument Panel Attachments 312 062 R91 and 312 063 R91 or Automatic Shut-Off Attachments 312 059 R91 and 312 060 R91 (For Sleeved Engines) C-221 501 to 43020 C-263 501 to 56635					
353 936 R2		GASKET, oil pump shaft support (also listed and illustrated with "Crankcase Oil Pan and Oil Pump")			
312 051 R91		GAUGE, oil level			
312 054 R1		PULLEY, idler (also listed and illustrated with "Fan Belt, Idler Pulley and Arm")			
143 992		PLUG, 1/4" slt. hd pipe (also listed and illustrated with "Crankcase Oil Pan and Oil Pump")			
133 502 R1		RING, snap (also listed and illustrated with "Fan Belt, Idler Pulley and Arm") (2)			
312 056 R1		SUPPORT, idler pulley adjusting arm (also listed and illustrated with "Fan Belt, Idler Pulley and Arm") WASHER, 13/32 x 13/16 x 1/16"ga. (2)			
312 157 R91		SUPPORT, oil pump shaft (also listed and illustrated with "Crank- case Oil Pan and Oil Pump")			
312 052 R1		TUBE, oil filler			
		SCREW, 5/16 x 1" hex hd cap (at front WASHER, 5/16" lock cover)			

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>ELECTRIC WIRING</b> (Battery Ignition) For units with instruments and instrument panel (safety gauges) (For Sleeved Engines)					
<b>REGULAR SYSTEM</b>					
1	702 283 C1	AMMETER (part of instrument and instrument panel)	11		DISTRIBUTOR ASSY (for components see list of parts under details of "Distributor")
2		CABLE, plus (+) on ammeter to "B" on solenoid (order 349 128 R91)	12		CABLE, minus on coil to distributor
3		CABLE, "R" on solenoid to resistor (order 349 129 R91)	13		RESISTOR, ignition coil (also listed and illustrated with "Spark Plugs, Coil, Cables and Distributor")
4		CABLE, "S" on solenoid to "SOL" on ignition and starter switch (order 349 128 R91)	14		CABLE, resistor to "IGN" on ignition and starter switch (order 349 129 R91)
5		SOLENOID (furnished as part of "Cranking Motor")	15		COIL w/CLAMP, ignition (also listed and illustrated with "Spark Plugs, Coil, Cables and Distributor")
6		CONNECTOR, cranking motor to "M" on solenoid (furnished as part of "Cranking Motor")	16	370 594 R91	CABLE, plus (+) on coil to resistor (also listed and illustrated with "Spark Plugs, Coil , Cables and Distributor")
7		MOTOR ASSY, cranking (for components see list of parts under details of "Cranking Motor")	17		CABLE, "B" on regulator to minus (-) on ammeter (order 349 130 R91)
8		CABLE, cranking motor to battery (not furnished with power unit) (see "Battery and Cables")	18		CABLE, "L" on regulator to "BAT" on ignition and starter switch (order 349 130 R91)
9		BATTERY (12 volt) (not furnished with power unit) (See "Battery and Cables")	19		CABLE, "G" on regulator to "A" on generator (order 264 637 R93)
10		CABLE, battery to ground (not furnished with power unit) (See "Battery and Cables")	20		GENERATOR ASSY (for components see list of parts under details of "Generator")

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION
ELECTRIC WIRING - Continued		
(Battery Ignition)		
(For units with instruments and instrument panel		
(Safety gauges) (For Sleeved Engines)		
21		CABLE, "F" on regulator to "F" on generator (order 264 637 R93)
22		REGULATOR, voltage (12 volt) (for components see list of parts under details of "Voltage Regulator")
23	337 354 R3	PANEL, instrument (part of instrument and instrument panel)
24		NOT USED
25	327 144 R91	SWITCH, ignition and starter (part of instrument and instrument panel)
26		CABLE, tachourmometer to "ACC" on ignition and starter switch (furnished as part of hourmeter or tachourmometer)
27	338 595 R91	TACHOURMETER (part of ATTACHMENT, 349 134 R92)
27		HOURMETER, electric (part of ATTACHMENT, 349 136 R91)
28		CABLE, tachourmometer to ground (furnished as part of hourmeter or tachourmometer)
349 128 R91		HARNESS, cranking motor cable (part of instrument and instrument panel)
349 129 R91		HARNESS, ignition cable (part of instrument and instrument panel)
349 130 R91		HARNESS, regulator cable (part of instrument and instrument panel)
264 637 R93		HARNESS, generator to regulator

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>ELECTRIC WIRING</b> (Battery Ignition) For units with instruments and instrument panel (Safety gauges)(For Sleeved Engines)					
<b>SAFETY SHUT-OFF SYSTEM</b>					
CEA-83242 B					
1	347 604 R91	INDICATOR, safety oil pressure (see instruments and instrument panel)	9		SOLENOID (furnished as part of "Cranking Motor")
2	42 915 D	BLOCK, junction (see instruments and instrument panel)	10		MOTOR ASSY, cranking (for components see list of parts under details of "Cranking Motor")
2	42 917 D	BLOCK w/BLOCK, 42 915 D and BRACKET, 42 916 D, junction (optional with 352 110 R91) (see instruments and instrument panel)	11		CABLE, cranking motor to battery (not furnished with power unit)(see "Battery and Cables")
2	352 110 R91	BLOCK w/BLOCK, 42 915 D and BRACKET, 42 916 D, junction (optional with 42 917 D) (see instruments and instrument panel)	12		BATTERY (12 volt) (not furnished with power unit)(see "Battery and Cables")
120 622 102 635 179 833 138 530 103 321		NUT, No. 8NF (cd or zn-pltd) NUT, 3/8"	13		CABLE, battery to ground (not furnished with power unit) (see "Battery and Cables")
		SCREW, 3/8 x 1/2" hex hd cap	14		DISTRIBUTOR ASSY (for components see list of parts under details of "Distributor")
		WASHER, No. 8 int. tooth lock	15		CABLE, minus on coil to distributor
		WASHER, 3/8" lock	16		RESISTOR, ignition coil (also listed and illustrated with "Spark Plugs, Coil, Cables and Distributor")
3		CABLE, "B" on regulator to minus (-) on ammeter (order 349 130 R91)	17		CABLE, resistor to "IGN" on ignition and starter switch (order 349 129 R91)
4	702 283 C1	AMMETER (see instruments and instrument panel)	18		COIL w/CLAMP, ignition (also listed and illustrated with "Spark Plugs, Coil, Cables and Distributor")
5		CABLE, plus (+) on ammeter to "B" on solenoid (order 349 128 R91)	19	370 594 R91	CABLE, plus (+) on coil to resistor (also listed and illustrated with "Spark Plugs, Coil, Cables and Distributor")
6		CABLE, "R" on solenoid to resistor (order 349 129 R91)			
7		CABLE, "S" on solenoid to "SOL" on ignition and starter switch (order 349 128 R91)			
8		CONNECTOR, cranking motor to "M" on solenoid (furnished as part of "Cranking Motor")			

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>ELECTRIC WIRING - Continued</b>					
(Battery Ignition)					
For units with instruments and instrument panel					
(Safety Gauges) (For Sleeved Engines)					
20		GENERATOR ASSY (for components see list of parts under details of "Generator")	43		CABLE, tachourmeter to junction block (furnished as part of hourmeter or tachourmeter)
21		CABLE, "F" on regulator to "F" on generator (order 264 637 R93)	42 916 D		BRACKET, junction block (part of instrument and instrument panel)
22		CABLE, "G" on regulator to "A" on generator (order 264 637 R93)			NUT, No. 10
23		REGULATOR, voltage (12 volt) (for components see list of parts under details of "Voltage Regulator")	264 637 R93		SCREW, No. 10 x 1/2" slt. hd. mach.
24		CABLE, "L" on regulator to "BAT" on ignition and starter switch (order 349 130 R91)	349 128 R91		WASHER, No. 10 lock
25	337 354 R3	PANEL, instrument (part of instrument and instrument panel)	349 129 R91		HARNESS, generator to regulator
26	327 144 R91	SWITCH, ignition and starter (part of instrument and instrument panel)	349 130 R91		HARNESS, cranking motor cable (part of instrument and instrument panel)
27	63 713 DA	CABLE, "BAT" on relay to "IGN" on ignition and starter switch (part of instrument and instrument panel)			HARNESS, ignition cable (part of instrument and instrument panel)
28	670 382 C91	CABLE, ground			HARNESS, regulator cable (part of instrument and instrument panel)
29		NOT USED			
30		NOT USED			
31	678 132 C91	RELAY, automatic shut-off (part of instrument and instrument panel)			
32	274 747 R91	CABLE, safety control toggle switch to "Switch" on relay (part of instrument and instrument panel)			
33	702 544 C1	INDICATOR, safety heat (part of instrument and instrument panel)			
34		CABLE, heat indicator to relay (order 702 544 C1)			
35	274 747 R91	CABLE, safety control toggle switch to junction block (part of instrument and instrument panel)			
36		CABLE, safety oil pressure indicator to junction block (order 347 604 R91)			
37	253 818 R91	SWITCH, safety control toggle (optional with 603 884 C91) (part of instrument and instrument panel)			
37	603 884 C91	SWITCH, safety control toggle (optional with 253 818 R91) (part of instrument and instrument panel)			
38		NOT USED			
39		NOT USED			
40		NOT USED			
41		CABLE, tachourmeter to ground (furnished as part of hourmeter or tachourmeter)			
42		TACHOURMETER (part of ATTACHMENT, 349 134 R92)			
42		HOURMETER, electric (part of ATTACHMENT, 349 136 R91)			

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>ELECTRIC WIRING</b> (Battery Ignition) (For units with instruments and instrument panel) (Regular Gauges) (For Sleeveless Engines)					
<p>The diagram illustrates the electrical system for a battery ignition system. It shows the connection from the battery (14) through a resistor (13) to the ignition coil (12). The coil is connected to the distributor (11) and the cranking motor (10). The distributor is connected to the hourmeter (3) and the ammeter (9). The hourmeter is also connected to the cable assembly (21). The ignition switch (23) is connected to the solenoid (22), which is part of the cranking motor assembly. The system also includes a voltage regulator (33) and a fuse holder (32).</p>					

CE-102071 A

- |   |  |   |    |             |   |
|---|--|---|----|-------------|---|
| 1 |  | CABLE, hourmeter to ground<br>(furnished as part of Hourmeter)  | 10 |             | DISTRIBUTOR ASSY (for components<br>see list of parts under details of<br>"Distributor")  |
| 2 |  | CABLE, hourmeter (furnished as<br>part of Hourmeter)  | 11 | 368 267 R91 | CABLE, minus (-) on rail to dis-<br>tributor (also listed and illustrated<br>with "Spark Plugs, Coil, Cables and<br>Distributor")           |
| 3 | 621 657 C91<br>132 705<br>131 044<br>103 091 | HOURMETER, electric<br>SCREW, No. 6 x 1/2" rd. hd. (3)<br>WASHER, No. 6 lock (3)<br>NUT, No. 6 (3)        | 12 |             | CABLE, resistor to "IGN" on ignition<br>and starter switch (part of HARNESS,<br>349 129 R91)  |
| 4 |  | CABLE, hourmeter to cable for<br>"ACC" on ignition and starter switch<br>(Furnished as part of hourmeter) | 13 |             | COIL w/CLAMP, ignition (also listed<br>and illustrated with "Spark Plugs,<br>Coil, Cables and Distributor")                                 |
| 5 |  | CABLE, plus (+) on ammeter to "B"<br>on solenoid (part of HARNESS,<br>349 128 R91)                        | 14 |             | CABLE, plus (+) terminal on coil to<br>resistor (also listed and illustrated<br>with "Spark Plugs, Coil, Cables<br>and Distributor")        |
| 6 |  | CABLE, "R" on solenoid to resistor<br>(part of HARNESS, 349 129 R91)                                      | 15 |             | CABLE, voltage regulator No. 3<br>terminal to plus (+) terminal on<br>ammeter (part of HARNESS,<br>601 269 C92)                             |
| 7 |  | SOLENOID (furnished as part of<br>"Cranking Motor")   | 16 |             | RESISTOR, ignition coil (Delco-Remy<br>No. 1957154) (also listed and illus-<br>trated with "Sprak Plugs, Coil,<br>Cables, and Distributor") |
| 8 | 53 023 DA                                    | CABLE, battery to cranking motor<br>(not furnished with power unit)(see<br>"Battery and Cables")          | 21 |             |   |
| 9 |  | BATTERY ( 12 volt) (not furnished<br>with power unit) (see "Battery and<br>Cables")                       | 22 |             |   |
|   |  |   | 23 |             |   |
|   |  |   | 24 |             |   |
|   |  |   | 25 |             |   |
|   |  |   | 26 |             |   |
|   |  |   | 27 |             |   |
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|   |  |   | 29 |             |   |
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|   |  |   | 32 |             |   |
|   |  |   | 33 |             |   |

## ELECTRICAL SYSTEM

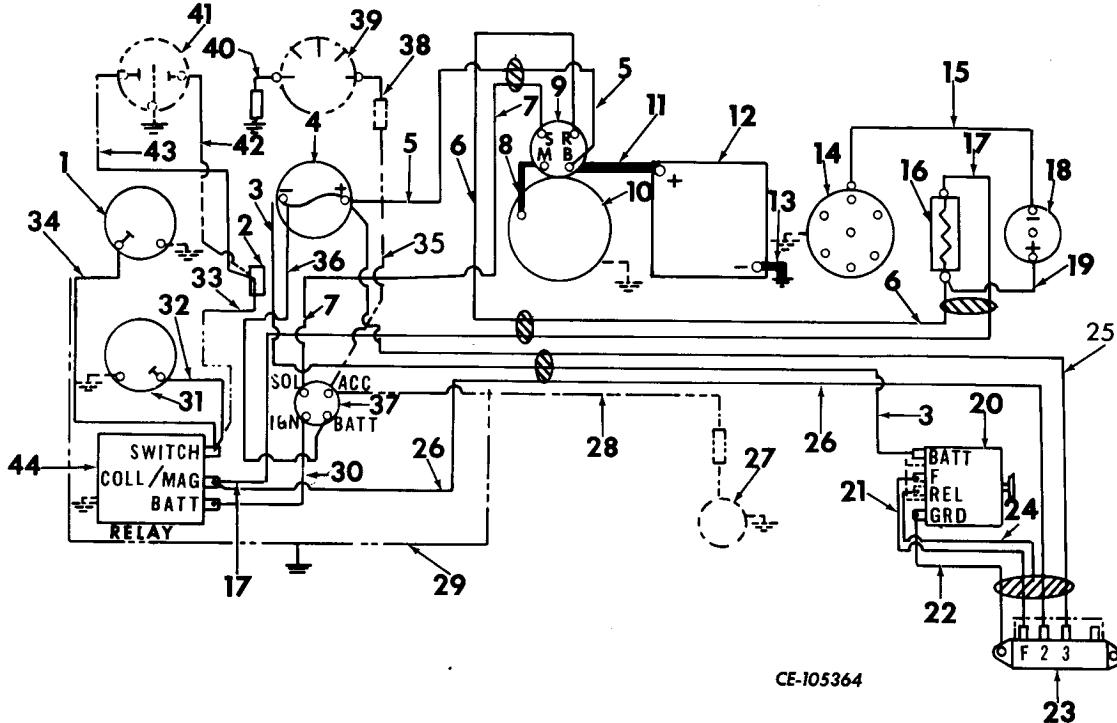
REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>ELECTRIC WIRING - Continued</b>					
(Battery Ignition)					
(For units with instruments and instrument panel)					
(Regular Gauges) (For Sleeveless Engines)					
17	30 668 DB 120 394 178 551	CABLE, battery to ground (not furnished with power unit) (see "Battery and Cables") WASHER, 13/32" WASHER, 3/8" int-ext lock	349 128 R91	Harness, cranking motor cable (part of instruments and instrument panel) (Consists of Ref. Nos. 5, 22)	
18		MOTOR ASSY, cranking (for components see list of parts under details of "Cranking Motor")	349 129 R91	Harness, ignition cable (part of instruments and instrument panel) (Consists of Ref. Nos. 6, 12)	
19		CABLE, cranking motor to "M" terminal on solenoid (furnished as part of "Cranking Motor")	601 269 C92	Harness, alternator cable (Polarized Connector) (part of instruments and instrument panel) (Consists of Ref. Nos. 15, 27, 28, 30, 31, 32)	
20	702 283 C1	AMMETER (part of instruments and instrument panel)			
21	678 253 C1	CABLE, minus (-) on ammeter to "BAT" terminal on ignition and starter switch			
22		CABLE, "S" terminal on solenoid to "SOL" terminal on ignition and starter switch (part of HARNESS, 349 128 R91)			
23	327 144 R91	SWITCH, ignition and starter (part of instrument and instrument panel)			
24	337 354 R3 336 419 R91 127 651 120 217	PANEL, instrument (part of instruments and instrument panel) MOUNT, vibration (4) SCREW, No. 10 x 3/4" hex hd cap (4) WASHER, No. 10 lock			
25	267 806 R91	CABLE, fuel pump to "ACC" terminal on starting and ignition switch			
26	631 259 R91 179 793 103 319 109 084	PUMP, electric fuel (also listed and illustrated with "Electric Fuel Transfer Pump") SCREW, 1/4 x 5/8" hex hd cap (2) WASHER, 1/4" lock (2) NUT, 1/4" (2)			
27		CABLE, No. 2 terminal on voltage regulator to "IGN" terminal on ignition switch (part of HARNESS, 601 269 C92)			
28		CABLE, ammeter minus (-) terminal to "BAT" terminal on alternator (part of HARNESS, 601 269 C92)			
29	702 337 C91	ALTERNATOR (for components see list of parts under details of "Alternator")			
30		CABLE, "F" terminal on regulator to "F" terminal on alternator (part of HARNESS, 601 269 C92)			
31		CABLE, dummy lead (black) (part of HARNESS, 601 269 C92)			
32		CABLE, alternator "GRD" terminal to voltage mtg. bolt (part of HARNESS, 601 269 C92)			
33		REGULATOR ASSY, voltage (12 volt) (for components see list of parts under details of "Voltage Regulator")			
34	271 066 R92	CABLE, hourmeter to "ACC" on starting switch			

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**ELECTRIC WIRING - Continued**

(Battery Ignition)

 For units with instruments and instrument panel  
 (Safety Gauges) (For Sleeveless Engines)


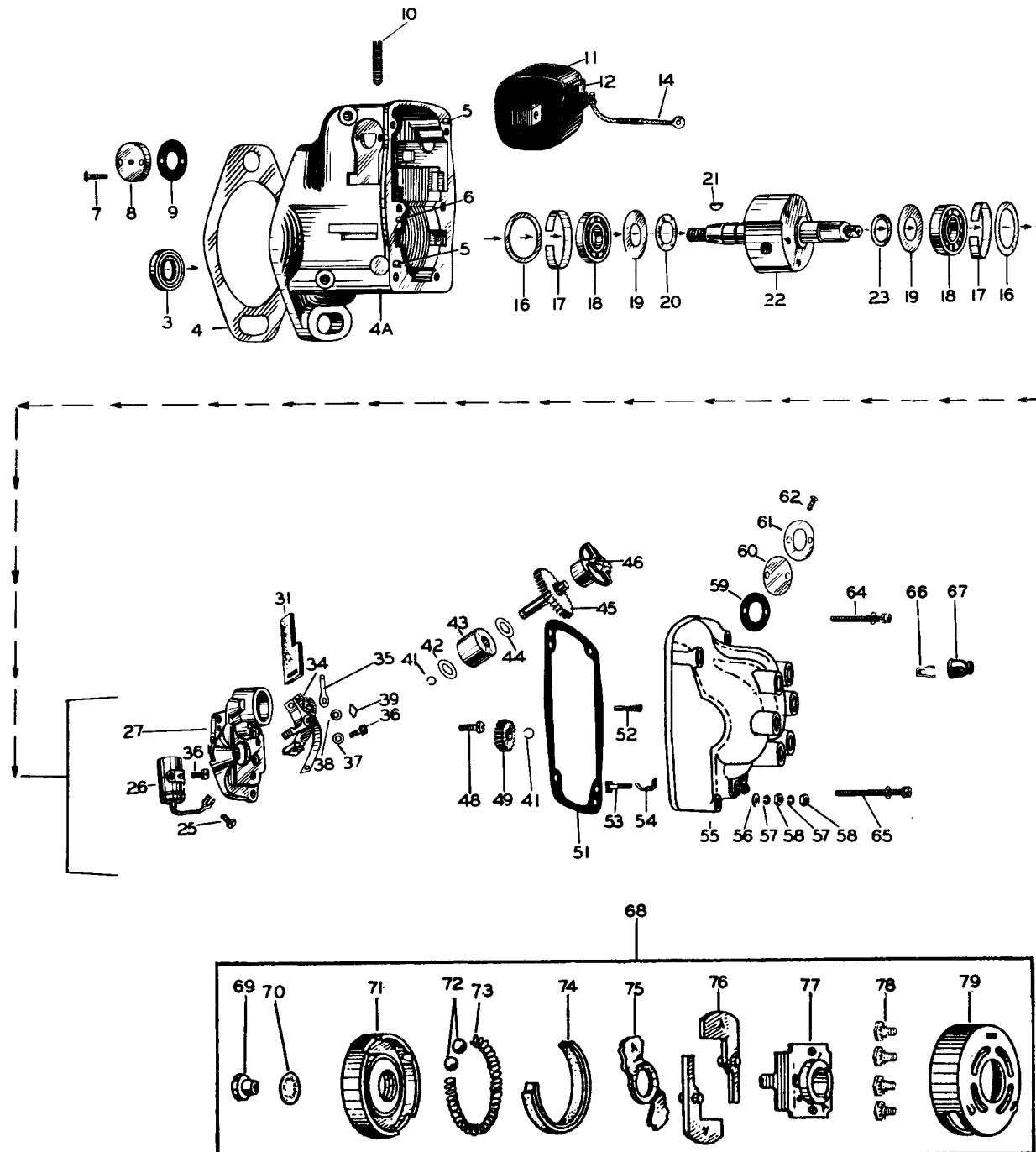
1	347 604 R91	INDICATOR, oil pressure-safety (part of instruments and instrument panel)	8		CABLE, cranking motor to "M" terminal on solenoid (furnished as part of "Cranking Motor")
2	42 917 D	BLOCK, junction (optional with 352 110 R91) (part of instruments and instrument panel)	9		SOLENOID (furnished as part of "Cranking Motor")
2	352 110 R91	BLOCK, junction w/BRACKET, 42 916 D (optional with 42 917 D) part of instruments and instrument panel)	10		MOTOR ASSY, cranking (for components see list of parts under details of "Cranking Motor")
	179 833 103 321 102 635 138 530 120 622	SCREW, 3/8 x 1/2" hex hd cap WASHER, 3/8" lock NUT, 3/8" WASHER, No. 8 int-tooth lock NUT, No. 8NF cad or zn-pltd hex	11	53 023 DA	CABLE, battery to cranking motor (not furnished with power unit) (see "Battery and Cables")
3		CABLE, ammeter minus (-) terminal to "BAT" terminal on alternator (part of HARNESS, 601 269 C92)	12		BATTERY (12 volt) (not furnished with power unit) (see "Battery and Cables")
4	702 283 C1	AMMETER (part of instruments and instrument panel)	13	30 668 DB	CABLE, battery to ground (not furnished with power unit) (See "Battery and Cables")
5		CABLE, plus (+) terminal on ammeter to "B" terminal on solenoid (part of HARNESS, 349 128 R91)	120 394 178 551		WASHER, 13/32" WASHER, 3/8" int-ext lock
6		CABLE, "R" on solenoid to resistor (part of HARNESS, 349 129 R91)	14		DISTRIBUTOR ASSY (for components see list of parts under details of "Distributor")
7		CABLE, "S" terminal on solenoid to "SOL" terminal on ignition and starter switch (part of HARNESS 349 128 R91)	15	368 267 R91	CABLE, minus (-) terminal on coil to distributor (also listed and illustrated with "Spark Plugs, Coil, Cables and Distributor")

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>ELECTRIC WIRING - Continued</b>					
(Battery Ignition)					
(For units with instruments and instrument panel)					
(Safety Gauges) (For Sleeveless Engines)					
16		RESISTOR, ignition coil (Delco-Remy No. 1957154)(also listed and illustrated with "Spark Plugs, Coil, Cables and Distributor")	34		CABLE, safety oil pressure indicator to junction block (order 347 604 R91)
17		CABLE, resistor to coil magneto on ignition relay switch (Part of HARNESS, 349 129 R1)	35	253 818 R91	SWITCH, safety control toggle (optional with 253 818 R91)
18		COIL w/CLAMP, ignition (also listed and illustrated with "Spark Plugs, Coil, Cables and Distributor")	36	678 253 C1	CABLE, minus (-) terminal on ammeter to "BAT" terminal on ignition and starter switch
19		CABLE, plus (+) terminal on coil to resistor (also listed and illustrated with "Spark Plugs, Coil, Cables, and Distributors")	37	327 144 R91	SWITCH, ignition and starter (part of instruments and instrument panel)
20	702 337 C91	ALTERNATOR (for components see list of parts under details of "Alternator")	38		CABLE, hourmeter to "ACC" cable for ignition and starter switch (furnished as part of Hourmeter)
21		CABLE, "F" terminal on regulator to "F" terminal on alternator (part of HARNESS 601 269 C92)	39	621 657 C91 132 705 131 044 103 091	HOURMETER, electric SCREW, No. 6 x 1/2" rd hd (3) WASHER, No. 6 lock (3) NUT, No. 6 (3)
22		CABLE, alternator "GRD" terminal to voltage regulator mtg. bolts (part of HARNESS, 601 269 C92)	40		CABLE, hourmeter to ground (order HOURMETER, 621 657 C91)
23		REGULATOR ASSY, voltage (12 volt) (for components see list of parts under details of "Voltage Regulator")	41		NOT USED
24		CABLE, dummy lead (black) (part of HARNESS 601 269 C92)	42		NOT USED
25		CABLE, voltage regulator No. 3 terminal to plus (+) terminal on ammeter (part of HARNESS, 601 269 C92)	43		NOT USED
26		CABLE, NO. 2 terminal on voltage regulator to coil magneto terminal on relay switch (part of HARNESS, 601 269 C92)	44	678 132 C91	SWITCH, relay (part of instruments and instrument panel)
27	631 259 R91 179 793 103 319 109 084	PUMP, electric fuel SCREW, 1/4 x 5/8" hex hd cap (2) WASHER, 1/4" lock (2) NUT, 1/4" (2)	349 128 R91		HARNESS, cranking motor cable (part of instruments and instrument panel) (Consists of Ref. Nos. 5, 7)
28	267 806 R91	CABLE, fuel pump to "ACC" terminal on starting and ignition switch	349 129 R91		HARNESS, ignition cable (part of instruments and instrument panel) (Consists of Ref. Nos. 6, 17)
29	337 354 R3 336 419 R91 127 651 120 217	PANEL, instrument (part of instruments and instrument panel) MOUNT, vibration (4) SCREW, No. 10 x /34" hex hd cap (4) WASHER, No. 10 lock (4)	601 269 C92		HARNESS, alternator cable (polarized Connector) (part of instruments and instrument panel) (Consists of Ref. Nos. 3, 21, 22, 24, 25, 26)
30	637 130 A	CABLE, "BAT" terminal on relay switch to "IGN" terminal on starter and ignition switch.			
31		CABLE, plus (+) terminal on heat indicator to "S" terminal on relay switch (order 702 544 C1)			
32	702 544 C1	INDICATOR, heat safety			
33	274 747 R91	CABLE, safety control toggle switch to junction block			

## ELECTRICAL SYSTEM

**MAGNETO**  
 (Bosch) (High Tension)  
 C-221 501 to 43020  
 C-263 501 to 56635

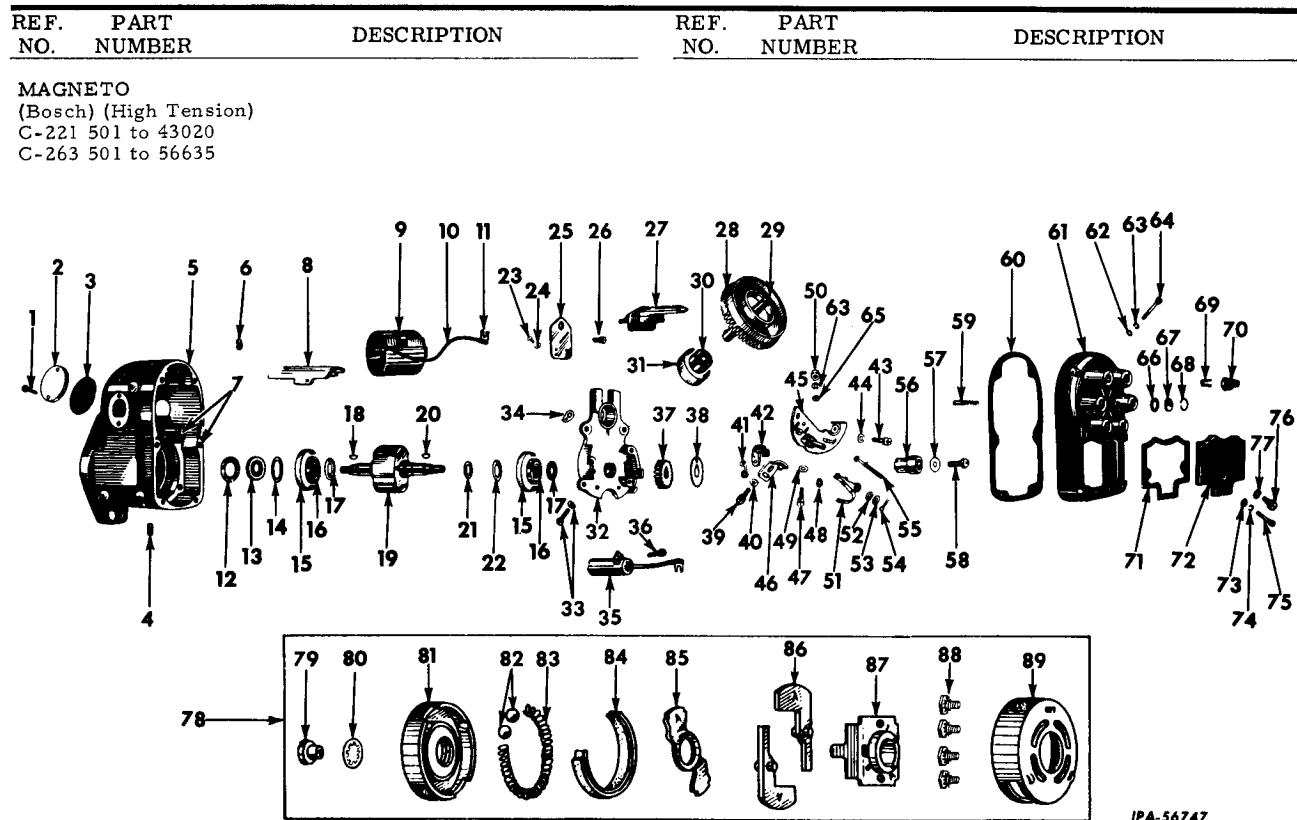


IPA-66134

## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>MAGNETO - Continued</b>					
(Bosch) (High Tension)					
C-221 501 to 43020					
C-263 501 to 56635					
310 962 R91	MAGNETO, high tension (Bosch MRD-6A-302)(medium duty- tungsten points)	43			BEARING (NFS)
	SCREW, 3/8 x 1-1/38" hex hd cap	44			WASHER (NFS)
	SCREW, 3/8 x 1-1/4" hex hd cap	45			GEAR (NFS)
	WASHER, 3/8" lock (2)	46			ROTOR (NFS)
127 507 H	WASHER, magneto screw (2)				
3	SEAL (NFS)	48			*SCREW and LOCKWASHER
4	*GASKET	49			*GEAR (NFS)
5	PIN (NFS)	51			*GASKET
6	PIN (NFS)	52			*BRUSH w/SPRING
7	SCREW (NFS)	53			STUD (NFS)
8	COVER (NFS)	54			SPRING (NFS)
9	*GASKET	55			DISTRIBUTOR, plate assembly (includes Ref. Nos. 53, 54 and 56 to 62 (NFS))
10	SCREW (NFS)				
11	COIL, includes Ref. No. 12 and 14 (NFS)	56			WASHER (NFS)
		57			WASHER (NFS)
12	SPRING (NFS)	58			NUT (NFS)
14	CABLE (NFS)	59			*GASKET
16	* WASHER	60			WINDOW (NFS)
17	*STRIP	61			WASHER (NFS)
18	BEARING (NFS)	62			SCREW (NFS)
19	*WASHER	64			*SCREW
20	*WASHER	65			*SCREW and lock WASHER
21	KEY (NFS)	66			CLIP (NFS)
22	ROTOR (NFS)	67			NIPPLE (NFS)
23	*WASHER (.012" thick)	68			IMPULSE COUPLING ASSY - Includes Ref. Nos. 69 to 79 (NFS)
23	*WASHER (.007" thick)				
23	*WASHER (.004" thick)	69			NUT (NFS)
23	*WASHER (.002" thick)	70			WASHER (NFS)
25	* SCREW and lock WASHER	71			HOUSING (NFS)
26	*CONDENSER	72			BALL (NFS)
27	PLATE (NFS)	73			SPRING (NFS)
31	WICK (NFS)	74			WICK (NFS)
34	*BRACKET ASSEMBLY - includes Ref. No. 38 and 39	75			CAM (NFS)
		76			WEIGHT (NFS)
35	CLIP (NFS)	77			HUB (NFS)
36	*SCREW and lock WASHER	78			SCREW and WASHER (NFS)
37	*WASHER	79			PLATE (NFS)
38	*WASHER		317 835 R91		*PACKAGE, magneto field service
39	*RING				* - Furnished As Part Of Magneto Field Service Package 317 835 R91
41	*RING				
42	WASHER (NFS)				NFS - Not Furnished Separately

## ELECTRICAL SYSTEM



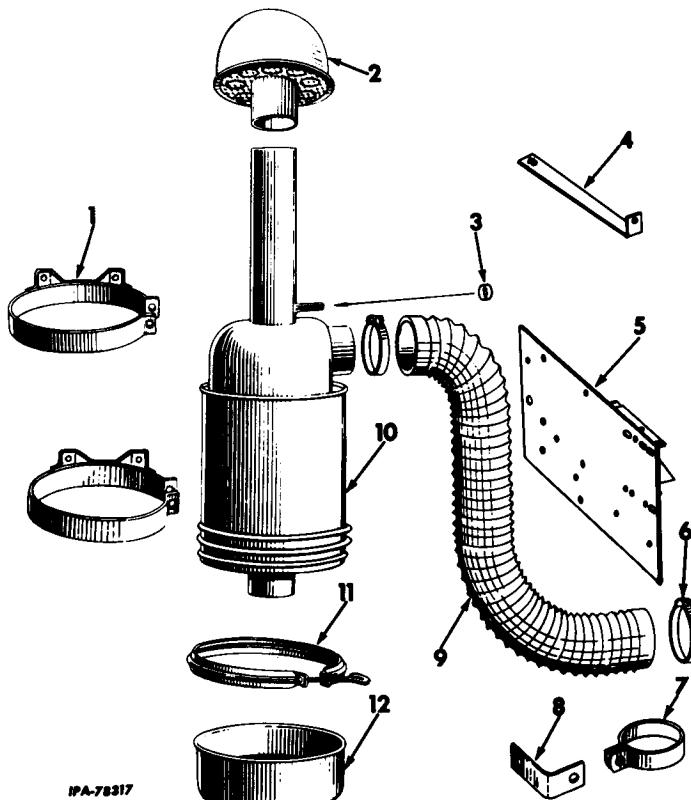
313 698 R91	MAGNETO, high tension (Bosch MRF-6A-332) (heavy duty-platinum points)	16	BEARING (NFS)
310 963 R91	MAGNETO, high tension (Bosch MRF-6A-302) (heavy duty-tungsten points) SCREW, 3/8 x 1-3/8" hex hd cap SCREW 3/8 x 1-1/4" hex hd cap WASHER, 3/8 " lock (2) WASHER, magneto screw (2)	17	WASHER (NFS)
127 507 H		18	KEY (NFS)
1	* SCREW and lock WASHER	19	ROTOR (NFS)
2	COVER (NFS)	20	KEY (NFS)
3	SCREW (NFS)	21	* WASHER (.012" thick)
4	SCREW (NFS)	21	* WASHER (.007" thick)
5	HOUSING (NFS)	21	* WASHER (.004" thick)
6	SCREW (NFS)	22	* WASHER
7	PIN (NFS)	23	SCREW (NFS)
8	INSULATION (NFS)	24	WASHER (NFS)
9	COIL (NFS)	25	INSULATION (NFS)
10	CABLE (NFS)	26	SCREW and lock WASHER (NFS)
11	TERMINAL (NFS)	27	CONDUCTOR (NFS)
12	* WASHER	28	GEAR AND ROTOR (NFS)
13	* SEAL	29	ROTOR (NFS)
14	* WASHER	30	BEARING (NFS)
15	* STRIP (.009 thick)	31	SPACER (NFS)
15	* STRIP (.008 thick)		* - Furnished as Part of Magneto Field Service Package 317 834 R91

NFS - Not Furnished Separately

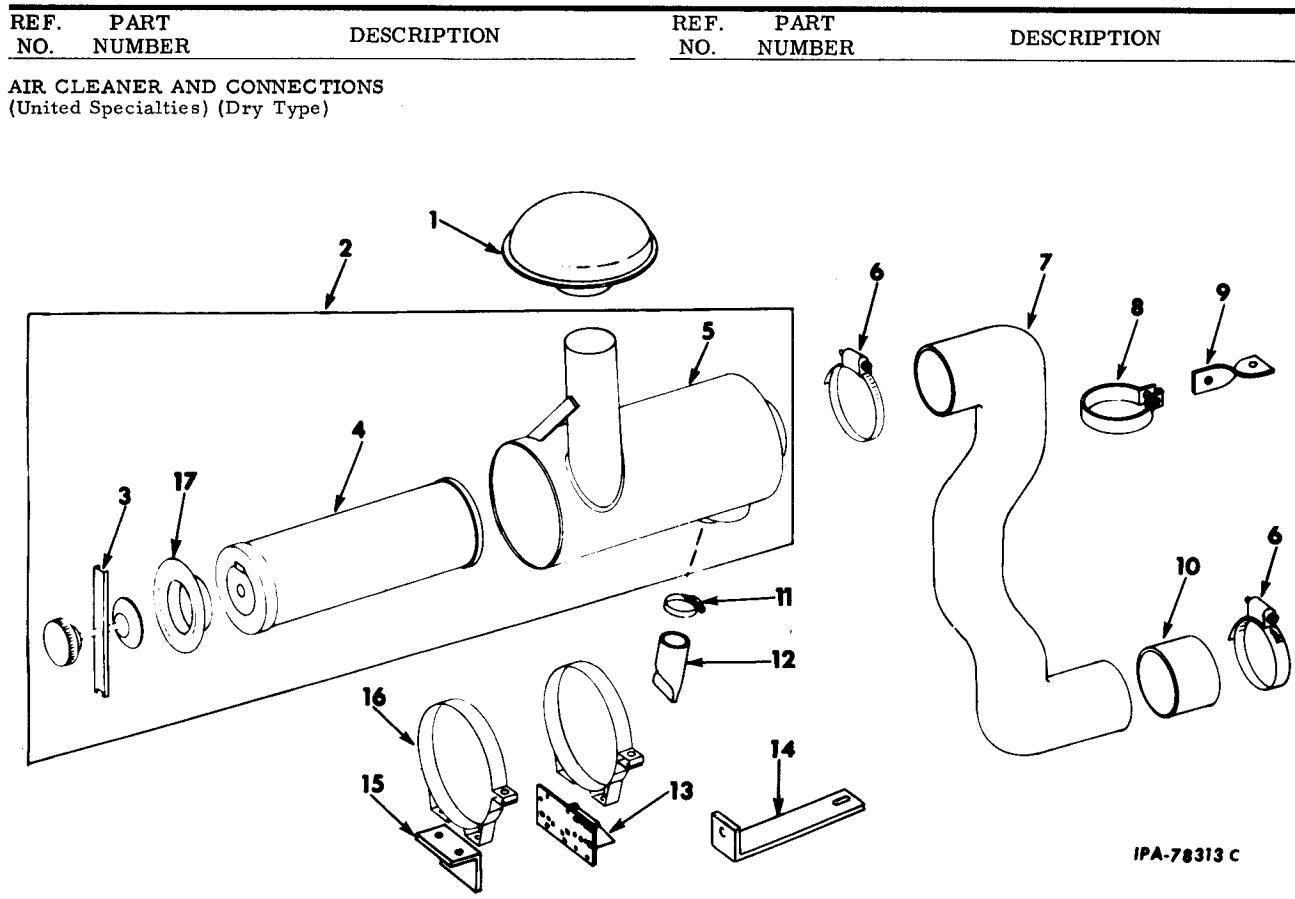
## ELECTRICAL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>MAGNETO - Continued</b>					
	(Bosch) (High Tension)				
C-221	501 to 43020				
C-263	501 to 56635				
32	BRACKET (NFS)		71	* GASKET	
33	SCREW and lock WASHER (NFS)		72	CAP (NFS)	
34	CLIP (NFS)		73	* WASHER	
35	* CONDENSER		74	* WASHER	
36	SCREW and lock WASHER (NFS)		75	SCREW (NFS)	
37	GEAR (NFS)		76	* SCREW	
38	WASHER (NFS)		77	WASHER (NFS)	
39	SCREW and lock WASHER (NFS)		78	IMPULSE COUPLING ASSY-includes Ref. Nos. 79 to 89 (NFS)	
40	WASHER (NFS)		79	NUT (NFS)	
41	HOOK (NFS)		80	WASHER (NFS)	
42	WICK (NFS)		81	HOUSING (NFS)	
43	SCREW and lock WASHER (NFS)		82	BALL (NFS)	
44	WASHER (NFS)		83	SPRING (NFS)	
45	BREAKER PLATE (NFS)		84	WICK (NFS)	
46	* BRACKET		85	CAM (NFS)	
47	SCREW and lock WASHER (NFS)		86	WEIGHT (NFS)	
48	WASHER (NFS)		87	HUB (NFS)	
49	WASHER (NFS)		88	SCREW and WASHER (NFS)	
50	NUT (NFS)		89	PLATE (NFS) PLATE (NFS) PLATE (NFS)	
51	* LEVER			* GASKET	
52	* WASHER				
53	WASHER (NFS)		317 834 R91	* PACKAGE, magneto field service	
54	PIN (NFS)			* - Furnished as Part of Magneto Field Service Package 317 834 R91	
55	* BRUSH			NFS - Not Furnished Separately	
56	CAM (NFS)				
57	WASHER (NFS)				
58	SCREW w/lock WASHER (NFS)				
59	* BRUSH w/SPRING				
60	* GASKET		356 062 R91	BATTERY, dry charged (12 volt) (Auto-Lite 12H-70-3)	
61	PLATE		30 668 DB	BOLT, battery terminal (X)	
62	* WASHER		53 023 DA	CABLE, battery to cranking motor (positive grounded battery)	
63	* WASHER		263 518 R91	CABLE, battery to cranking motor (negative grounded battery)	
64	* SCREW		30 668 DB	CABLE, battery to ground (positive grounded battery)	
65	WASHER			CABLE, battery to ground (negative grounded battery)	
66	GASKET (NFS)			WASHER, 13/32 x 13/16 x No. 16 ga.	
67	WINDOW (NFS)			WASHER, 3/8" internal-external tooth lock	
68	RING (NFS)				
69	TERMINAL (NFS)				
70	NIPPLE (NFS)				
					(X) - As Required

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>AIR CLEANER</b> (Donaldson) (Oil Bath Type)					
					
A	305 180 R91	ATTACHMENT, air cleaner (+)	7	31 790 DA	BRACKET, air hose support
B	349 144 R91	ATTACHMENT, air cleaner (+)			NUT, 3/8"
					SCREW, 3/8 x 1" hex hd cap
					WASHER, 3/8" lock
1	55 804 DX	BRACKET, air cleaner (2 for Attachment A) NUT, 5/16" (2) NUT, 3/8" (4) SCREW, 5/16 x 1-1/4" slt fil hd mach. (2) SCREW, 3/8 x 7/8" hex hd cap SCREW, 3/8 x 1-1/8" hex hd cap WASHER, 5/16" lock (2) WASHER, 3/8" lock (4) WASHER, 13/32 x 13/16" x 1/16"	8	305 886 R1	ANGLE, air hose support
			9	305 885 R1	PIPE, air
			10		BODY, (Not Furnished Separately)
			10	357 659 R92	CLEANER w/BODY, CLAMP, 54 269 D, CUP, 355 444 R92, ASSY, air (7") (Attach. A)
1	55 804 DX	BRACKET, air cleaner (2 for Attachment B) NUT, 3/8" (4) SCREW, 3/8 x 7/8" hex hd cap (2) SCREW 3/8 x 1-1/8" hex hd cap (2) WASHER, 3/8" lock (4)	10	305 626 R91	CLEANER w/BODY, CLAMP, 54 269 D, CUP, 355 444 R92, ASSY, air (7") (Attach. B)
			11	54 269 D	CLAMP, oil cup retaining
			12	355 444 R92	CUP, oil
2	353 018 R92	CAP, air intake			(+) - Attachment No Longer Available Service Parts Only Will be Furnished
3	265 331 R1	CAP, vent tube			
4	318 140 R1	BRACE, air cleaner support (Attachment A)			
5	305 181 R13	SUPPORT, air cleaner (Attach. A)			
5	349 138 R91	SUPPORT, air cleaner (Attach. B)			
6	274 088 R91	CLAMP, air pipe hose (2)			

## ATTACHMENTS



IPA-78313 C

	349 137 R91	ATTACHMENT, air cleaner and connections (+)	15	349 142 R1 102 635 179 839 103 321	BRACKET, air cleaner NUT, 3/8" (4) SCREW, 3/8 x 1" hex hd cap (4) WASHER, 3/8" lock (4)
1	313 625 R91	CAP, weather	16	341 373 R91 102 635 179 837 103 321	BRACKET, air cleaner mtg. (2) NUT, 3/8" (4) SCREW, 3/8 x /34" hexhd cap (4) WASHER, 3/8" lock (4)
2	338 887 R91	CLEANER, air	17	603 824 C1	GASKET, end cap seal
3	313 965 R91	RETAINER, air cleaner element			
4	317 702 R91	ELEMENT, air cleaner			
5		BODY, air cleaner (Not Furnished Separately)			
6	274 088 R91	CLAMP, air pipe (2)			
7	347 598 R1	PIPE, air			
8	112 030 H 102 635 179 840 103 321	CLAMP, air pipe support NUT, 3/8" SCREW, 3/8 x 1-1/8" hex hd cap WASHER, 3/8" lock			
9	349 143 R1	SUPPORT, air pipe SCREW, 3/8 x 3-1/4" hex hd cap			
10	347 599 R1	SLEEVE, air pipe hose			
11	122 316 R91	CLAMP, dust unloader			
12	324 194 R1	UNLOADER, dust			
13	349 138 R91	SUPPORT, air cleaner			
14	349 141 R1	BRACE, air cleaner support SCREW, 3/8 x 3-1/4" hex hd cap			

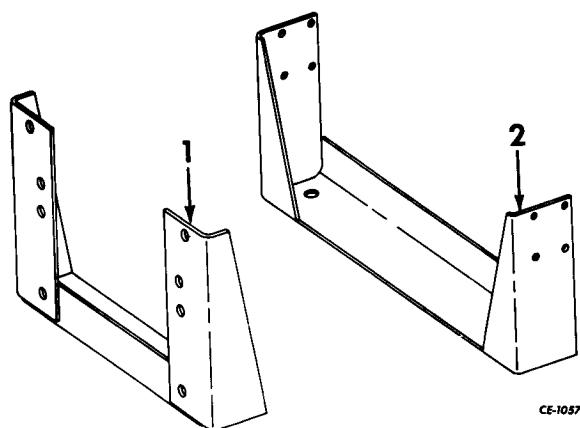
(+) - Attachment no longer Available. Service Parts Only Will be Furnished

## **ATTACHMENTS**

(+) - Attachment No Longer Available  
Service Parts Only Will be  
Furnished

## ATTACHMENTS

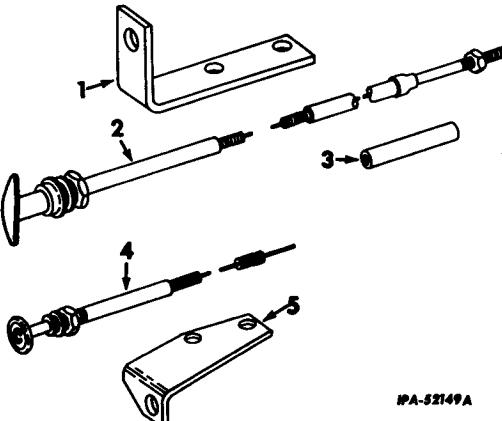
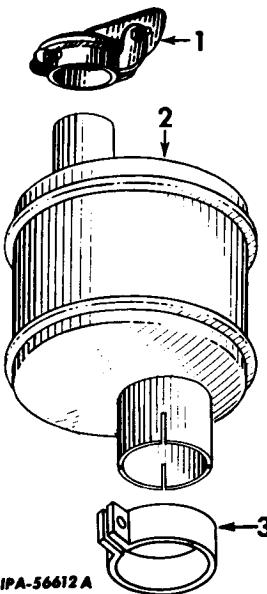
REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>AUTOMATIC SAFETY SHUT-OFF - Continued</b> (Murphy Panel) (Not used on units equipped with instruments and panel attachments 305 191 R92, 312 062 R91 and 312 063 R91)					
16	346 598 R1	ADAPTER, heat indicator			SUPPORTS
	62 862 D	CABLE, ignition switch to magneto (Unit C)			
	29 901 D	CONNECTOR, oil pressure indicator tube (in crankcase)			
	264 164 R91	CLIP, cable harness (illustrated with "Electric Starting") (3 for Units A and B) (Unit C)			
	362 120 R1	CLIP, cable harness (Illustrated with "Electric Starting") (Units B and C)			
	305 192 R91	HARNESS, cable (illustrated with "Electric Starting") (Unit A)			
	312 061 R91	HARNESS, cable (illustrated with "Electric Starting") (Unit B)			
			A	305 296 R91	ATTACHMENT, front support (%)
			B	305 297 R91	ATTACHMENT, rear support (%)
			1	304 546 R12	SUPPORT, front (Unit A) NUT, 5/8" (4) SCREW, 5/8 x 3-3/4" hex hd cap (4) WASHER, 5/8" lock (4)
			2	304 543 R11	SUPPORT, rear (Unit B) SCREW, 1/2 x 1" hex hd cap (8) WASHER, 1/2" lock (8)



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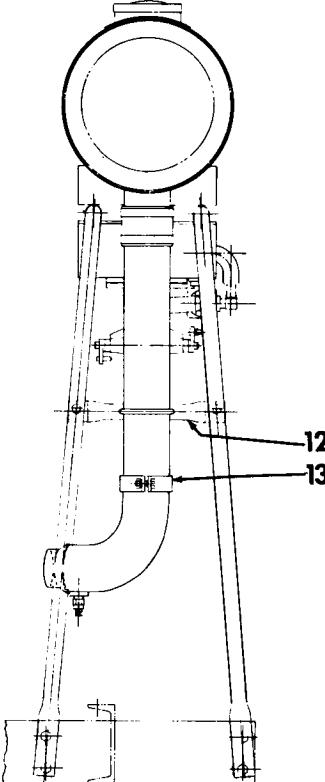
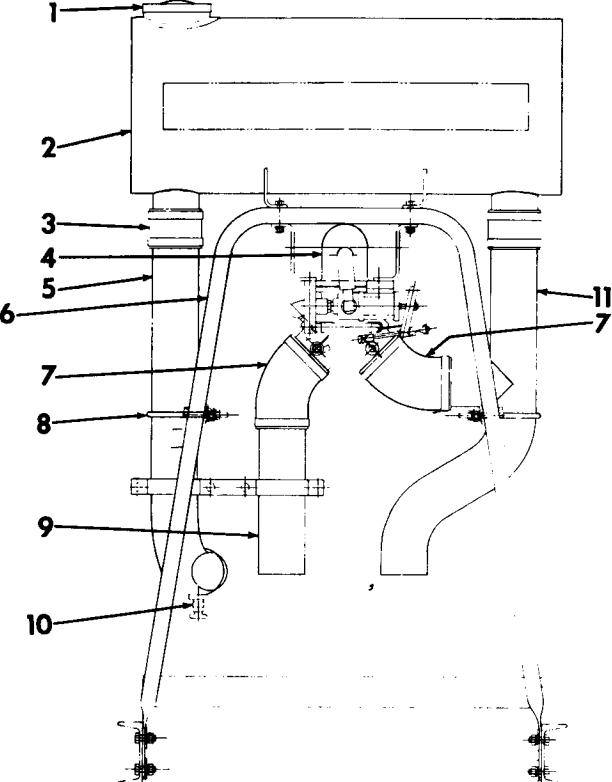
{%} - Attachment no longer available.  
Service parts will be furnished.

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>ENGINE CONTROLS</b> (For engines with Mechanical Governor)			<b>EXHAUST MUFFLER AND RAIN CAP</b> (Nelson Muffler Co.)		
 <p style="text-align: center;">IPA-52149A</p>			 <p style="text-align: center;">IPA-56612A</p>		
A	607 473 C91	ATTACHMENT, engine controls (for units equipped with Natural Gas, LPG and Combination Gas and gasoline engines and IH mechanical governor) (*)	332 516 R91	ATTACHMENT, exhaust rain cap (*)	
B	312 064 R91	ATTACHMENT, engine controls (for units equipped with Natural Gas, LPG and combination gas and gasoline engines and Novi mechanical governor) (*)	276 250 R91	ATTACHMENT, exhaust muffler (*)	
C	323 826 R91	ATTACHMENT, engine controls (for units equipped with gasoline engines and Novi mechanical governor) (*)	1	281 424 R91	CAP, exhaust rain (not used with units equipped with exhaust muffler)
D	323 862 R91	ATTACHMENT, engine controls (for units equipped with gasoline engines and I.H. mechanical governor) (*)	2	313 847 R91	MUFFLER, exhaust (T6965) (Part of ATTACHMENT, 276 250 R91)
1	349 148 R1	BRACKET, governor control cable SCREW, 3/8 x 7/8" hex hd cap (2) WASHER, 3/8" lock (2)	3	31 790 DA 102 634 179 841 103 321	CLAMP, exhaust muffler (part of ATTACHMENT, 276 250 R91) NUT, 3/8" SCREW, 3/8 x 1-1/4" hex hd cap WASHER, 3/8" lock
2	305 114 R92	CABLE, governor control (Attachments A and D)			
2	313 069 R93	CABLE, governor control (Attachments B and C)			
3	332 077 R1	COUPLING, governor control cable (Attachments A and D) NUT, 1/4"NF			
4	312 428 R91	WIRE, choke control (Attachments A and B)			
4	312 199 R91	WIRE, choke control (Attachments C and D)			
5	349 147 R1	BRACKET, choke control wire			
109 415		BALL JOINT, governor control cable (Attachments B and C) NUT, 1/4"NF (2) WASHER, 1/4" lock			
35 758 D		CLIP, governor control cable (mount on center oil pan bolt) (Attachments B and C) NUT, 1/4"NF SCREW, 1/4"NF x 1/2"hex hd cap WASHER, 1/4" lock WASHER, 11/32 x 11/16 x 1/16"			

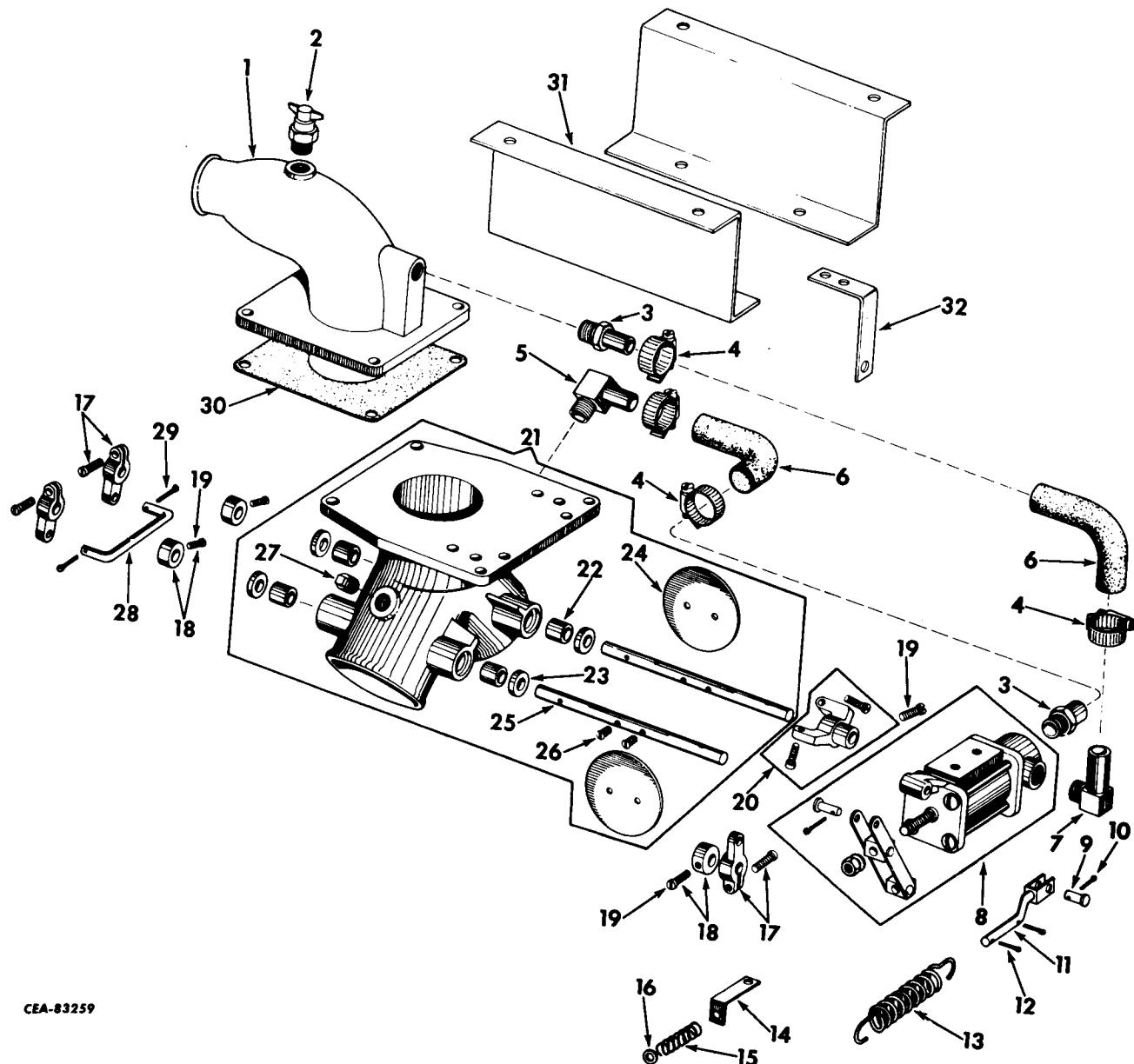
(\*) - Attachment No Longer Available  
Service Parts Will be Furnished

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>EXPANSION TANK AND CONNECTIONS</b>					
					 PB-10496 A
312 181 R91		ATTACHMENT, expansion tank and connections (For use with flo-matic valve attachment and engine support attachment) (%)	9	316 059 R1	TUBE, water return
1	317 654 R91	CAP, tank filler	10	31 729 D	VALVE, drain
2	316 029 R93	TANK w/PLUG, 103 874, water expansion 102 634 179 824 SCREW, 5/16 x 1-3/4" hex hd cap (4) 103 320 103 874 WASHER, 5/16" lock PLUG, 1/2" pipe	11	316 037 R11	TUBE, water inlet
3	346 611 R1 279 029 R91	HOSE, 3"ID x 2-1/2" long inlet and outlet tube connectro (*) (2) CLAMP, hose (4)	12	316 036 R1 102 634 179 824 103 320 103 340	SUPPORT, tube (2) NUT, 5/16" (4) SCREW, 5/16 x 1-3/4" hex hd cap (4) WASHER, 5/16" lock (4) WASHER, 11/32 x 11/16" x No. 16 ga. (4)
4		VALVE, flo-matic (Not Furnished as part of "Expansion Tank and Connections Attachments") (for components see list of parts under details of "Flo-Matic Valve")	13	316 060 R1 102 634 179 818 103 320	SUPPORT, water return tube (2) NUT, 5/16" (4) SCREW, 5/16 x 1" hex hd cap (4) WASHER, 5/16" lock (4)
5	316 040 R11	TUBE, water outlet	332 182 R1		ELBOW, engine water outlet
6	316 035 R1 102 635 179 839 103 321 128 145	SUPPORT, expansion tank (2) NUT, 3/8" (8) SCREW, 3/8 x 1" Hex hd cap (8) WASHER, 3/8" lock (8) WASHER, 7/16" lock (8)	332 183 R1		ELBOW, engine water inlet
7	316 058 R2 279 029 R91	ELBOW, by-pass valve body (2) CLAMP, hose (5)	279 026 R91		CLAMP, hose (3)
8	316 039 R1 102 634 103 320 103 340	"U" BOLT, water tube (2) NUT, 5/16" (6) WASHER, 5/16" lock (4) WASHER, 11/32 x 11/16" x No. 16 ga. (4)	(%) - Attachment no longer available. Service Parts will be furnished.		
			* - Make from Bulk Stock. Bulk Stock Furnished In 3 Foot Lengths. Part No. Is for 1 Foot of Hose Only.		

## ATTACHMENTS

FLO-MATIC VALVE



CEA-83259

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FLO-MATIC VALVE - Continued</b>					
	332 184 R91	ATTACHMENT, flo-matic valve (*)	31	323 847 R1 102 634 179 822 179 820	SUPPORT, flo-matic valve (2) NUT, 5/16" (4) SCREW, 5/16 x 1-1/2" hex hd cap SCREW, 5/16 x 1-1/4" hex hd cap (3) WASHER, 5/16" lock (4)
1	316 253 R2	INLET, flo-matic valve		103 320	
2	31 729 D	VALVE, 3/8" vent			
3	171 819 R1	NIPPLE, 5/8 x 3/8" hose (2)	32	323 850 R1 102 634 179 817 103 320	BRACKET, return spring NUT, 5/16" SCREW, 5/16 x 7/8" hex hd cap WASHER, 5/16" lock
4	274 085 R91	CLAMP, hose (4)			
5	171 807 R1	ELBOW, 5/8 x 3/8" x 90° hose (short)		323 849 R92	VALVE ASSY, flo-matic (Composed of -
6	169 192 R1	ELBOW, 90° x 5/8" rubber hose (2)		1	BODY 316 046 R42
7	120 879 R1	ELBOW, 5/8 x 3/8" x 90° hose (long)		1	BRACKET 323 850 R1
8	346 637 R91 181 311 103 319	CONTROL, vernatherm SCREW, 1/4 x 5/8" hex hd cap (2) WASHER, 1/4" lock (2)		2	CLAMP 274 085 R91
9	102 776 H	PIN, rod end		1	CLIP 316 065 R1
10	107 761	PIN, 1/16 x 3/4" cotter		3	COLLAR 268 296 R91
11	316 063 R11	ROD w/CLEVIS, overtravel		1	CONTROL 346 637 R91
12	103 373	PIN, 3/32 x 3/4" cotter (2)		1	ELBOW 169 192 R1
13	61 635 D	SPRING, return		1	ELBOW 171 807 R1
14	316 065 R1	CLIP, return spring		3	LEVER 317 554 R91
15	300 415 R1	SPRING, overtravel		1	LINK 316 049 R1
16	103 339	WASHER, 9/32 x 5/8" x 16 ga. (2)		2	NIPPLE 171 819 R1
17	317 554 R91	LEVER ASSY, throttle shaft (3)		1	PIN 102 776 H
18	268 296 R91	COLLAR w/SCREW, 36 756 D, throttle shaft (3)		4	PIN 103 373
19	36 756 D	SCREW, set (4)		1	PIN 107 761
20	332 488 R91 11 189 V	STOP w/two SCREW, 11 189 V, throttle shaft SCREW, throttle stop adjusting (2)		1	PLUG 445 686
21	316 046 R42	BODY ASSY, flo-matic valve (composed of - § 1 BODY 4 BUSHING 347 001 R1 § 2 DISC 2 SHAFT 612 179 C1 4 SCREW 4 WASHER )		1	ROD 316 063 R11
22	347 001 R1	BUSHING, throttle shaft (4)		1	SCREW 36 756 D
23	321 881 R91	SEAL, water (4)		4	SEAL 321 881 R91
24		DISC, throttle (Not Furnished Separately)		1	SPRING 61 635 D
25	612 179 C1	SHAFT, flo-matic valve (2)		1	SPRING 300 415 R1
26	224 536 111 041	SCREW, No. 6 x 7/16" slt. fil hd (4) WASHER, No. 6 lock (4)		1	STOP 332 488 R91
27	445 686	PLUG, 3/8" sq hd pipe		§ - Not Furnished Separately	
28	316 049 R1	LINK, throttle shaft lever		(*) - Attachment no longer available. Service parts will be furnished.	
29	103 373 103 339	PIN, 3/32 x 3/4" cotter (2) WASHER, 9/32 x 5/8" x 16 ga. (2)			
30	316 048 R1	GASKET, flo-matic valve			

## **ATTACHMENTS**

(\*) - Attachment no longer available.  
Service parts will be furnished.

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
		FAN BELT IDLER (Not used with Generator)			ENGINE SUPPORT (Box Type Base)
		<p style="text-align: center;">IPA-66137</p>			<p style="text-align: right;">CEA-83817</p>
1	312 056 R1	SUPPORT, idler pulley adjusting arm WASHER, 13/32 x 13/16 x 1/16" ga. (2)	1	320 015 R93	BASE, box type
2	312 055 R1	ARM, idler pulley adjusting SCREW, 3/8 x 1" hex hd cap SCREW, 5/16 x 1" hex hd cap WASHER, 13/32 x 13/16 x 1/16" ga. WASHER, 3/8" lock WASHER, 5/16" lock	2	332 191 R11	SUPPORT, front 102 637 NUT, 1/2" (2) 102 639 NUT, 5/8" (4) 271 572 SCREW, 5/8 x 4-1/2" hex hd cap (4) 179 887 SCREW, 1/2 x 1-3/4" hex hd cap (2) WASHER, 1/2" lock (2) WASHER, 5/8" lock (4)
3	133 502 R1	RING, snap	3	332 180 R1	SPACER, rear support (2) 220 081 NUT, 3/4" (2) 271 612 SCREW, 3/4 x 2-1/4" hex hd cap (2) 103 326 WASHER, 3/4" lock (2)
4	ST 633	BEARING, idler pulley shaft	4	304 543 R11	SUPPORT, rear 179 881 SCREW, 1/2 x 1" hex hd cap (8) 103 323 WASHER, 1/2" lock (8)
5	312 054 R1	PULLEY, idler			
6	305 177 R1	BELT, water pump and generator fan			

(%) - Attachment no longer available.  
Service parts will be furnished.

NOTE 1 - Factory Application -  
Order On Machine Order  
Form.

NOTE 3 - Field Application - Order  
Through Regular Service  
Parts Channels.

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
		HOOD SIDE DOOR			HOURMETER
1	678 252 C1	DOOR, hood side (2)	A	305 202 R91	ATTACHMENT, hourmeter (for units equipped with dash) (+)
2	268 230 R11 102 635 179 837 103 321	SHEET, hood side (2) NUT, 3/8" (8) SCREW, 3/8 x 3/4" hex hd cap (8) WASHER, 3/8" lock	B	305 203 R91	ATTACHMENT, hourmeter (for units not equipped with dash) (+)
3	353 443 R91 113 277	LATCH, hood side door (4) RIVET, 3/16 x 5/16" f-hd. (8)	C	349 136 R91	ATTACHMENT, hourmeter (for use with instrument and panel ATTACHMENTS, 349 132 R91 and 349 133 R91) (+)
			1	621 657 C91	HOURMETER, SCREW, No. 6 x 5/16" slt rd. hd mach. (3) WASHER, No. 6 lock (3)
			2	264 674 R91	DAMPER, hourmeter vibration (Attachments A and B) SCREW, No. 6 x 1/2" slt rd hd mach (3) WASHER, No. 6 lock (3)
			3	305 201 R1	PLATE, hourmeter mtg. (Attachment B) NUT, 3/8" SCREW, 3/8 x 1" hex hd cap WASHER, 3/8" lock
			4	305 199 R91	CABLE, hourmeter to ignition switch (Attachments A and B)
			4	271 066 R92	CABLE, hourmeter (Attachment C)
			5	267 807 R91	CABLE, hourmeter to ground screw 3/8" internal tooth loc WASHER, 3/8" internal-tooth lock (Attachments A and B)

NOTE 1 - Factory Application -  
Order On Machine Order  
Form.

(+) Attachments No Longer Available. Service Parts Only Will Be Furnished.

NOTE 3 - Field Application - Order  
Through Regular Service  
Parts Channels.

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>TACHOMETER AND TACHOURMETER</b>					
<p style="text-align: center;"><b>IPA-52225B</b></p>					
A	306 686 R91	ATTACHMENT, tachometer (mechanical) (for units equipped with dash) (order 349 134 R92) (+)	8	281 801 R11	PLATE w/three GROMMET, 281 802 R91, tachometer mtg. (Attachments A and B)
B	306 687 R91	ATTACHMENT, tachometer (mechanical) (for units not equipped with dash) (order 349 134 R92) (+)			NUT, No. 8 (3)
C	349 134 R92	ATTACHMENT, tachourmeter (mechanical) (combination tachourmeter and service meter with correction factor dial) (for use with Novi mechanical governor and instrument and instrument panel ATTACHMENTS, 349 132 R92 and 349 133 R93) (see NOTES 1 and 3)	10	281 802 R91	SCREW, No. 8 x 1" slt rd. hd mach. (3)
1	368 245 R12	GEAR, tachometer or tachourmeter drive			WASHER, No. 8 lock (3)
2	368 246 R1	HOUSING, tachometer or tachourmeter connection	11	338 595 R91	WASHER, 11/64 x 13/32" x 18 ga. (6)
3	63 364 H	ADAPTER, box type (1.440 ratio)			GROMMET, tachometer mtg. (3 for attachments A and B)
4	306 394 R91	CABLE, tachometer or tachourmeter drive (optional with 306 398 R91)			RIVET, 1/8 x 1/4" rd. hd solid (6)
4	306 398 R91	CABLE, tachometer or tachourmeter (optional with 306 394 R91)			TACHOURMETER
5	73 163 H 109 084 179 791 103 319	CLIP, tachometer or tachourmeter drive cable NUT, 1/4" SCREW, 1/4 x 1/2" hex hd cap WASHER, 1/4" lock	263 297 R2 103 088 106 497		CLAMP, tachometer or tachourmeter NUT, No. 10 (2)
6	56 787 R1	EXTENSION, tachometer or tachourmeter drive cable clip			WASHER, No. 10 lock (2)
7	328 637 R1	BRACKET, tachometer mounting plate (attachment B) NUT, 3/8" (2) SCREW, 3/8 x 1" hex hd cap (2) WASHER, 3/8" lock (2)			(+) - Attachment No Longer Available. Service Parts Only Will Be Furnished.
					NOTE 1 - Factory Application - Order On Machine Order Form.
					NOTE 3 - Field Application - Order Through Regular Service Parts Channels.

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>INSTRUMENTS AND PANEL</b> (Not used with units equipped with Automatic Safety Shut-Off) (For Sleeved Engines)					
					<i>IPA-52145 A</i>
A	305 191 R92	ATTACHMENT, instruments and panel (Battery Ignition) (for units not equipped with Hydraulic Pump) (+)	4	269 103 R91	AMMETER (also listed with "Electric Starting") (Units A, B and D)
B	312 062 R91	ATTACHMENT, instruments and panel (Magneto Ignition) (for units equipped with cranking motor and generator) (+)	5	432 577	PLUG, instrument panel button (2 for Units A, B and D) (3 for Unit C)
C	312 063 R91	ATTACHMENT, instruments and panel (Magneto Ignition) (for units not equipped with cranking motor and generator) (+)	6	304 587 R1	TUBE, oil pressure indicator
D		Service parts for instruments and panel (Battery Ignition) (for units equipped with Hydraulic Pump)	7	369 987 R1	TUBE, oil pressure indicator
1	304 585 R11	BRACKET, instrument panel mtg. (2) NUT, 3/8" (2) SCREW, 3/8 x 3/4" hex hd cap (4) WASHER, 3/8" lock (4)	8	67 869 D	ELBOW, oil pressure indicator tube (in gauge)
2	304 586 R1	HOUSING, instrument panel	9	62 801 DC	SWITCH, ignition (also listed with "Electric Starting") (Units A and D)
3	278 597 R2	PANEL, instrument SCREW, 1/4 x 1/2" rd hd (4) WASHER, 1/4" lock (4)	9	54 207 DB	SWITCH, ignition (magneto) (also listed with "Electric Starting") (Units B and C)
			10	702 027 C1	GAUGE, oil pressure (Units A, B and C)
			10	313 177 R91	INDICATOR, oil pressure (Unit D)
(+) - Attachment No Longer Available Service Parts Only Will Be Furnished					

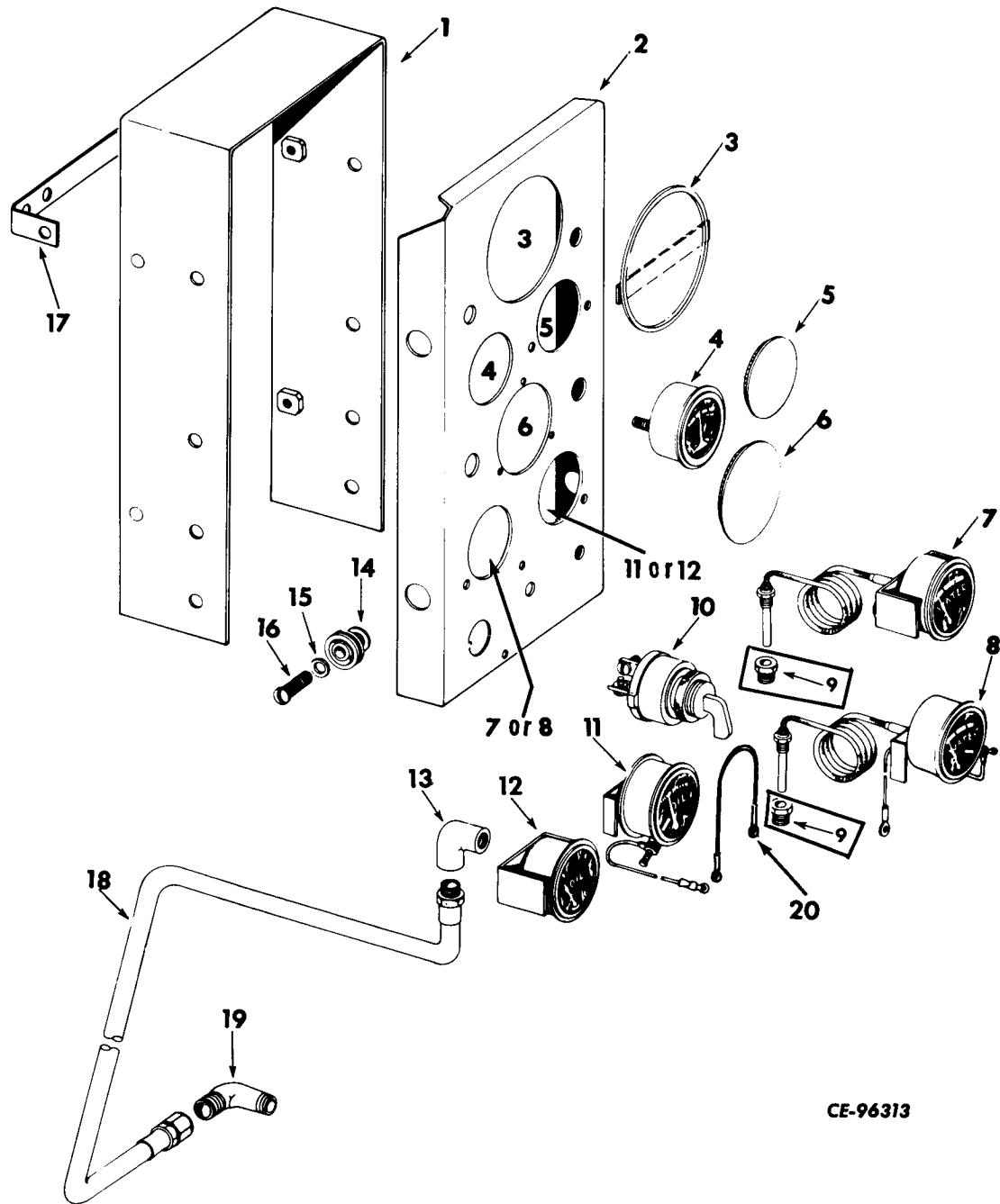
## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION
<b>INSTRUMENT AND PANEL - Continued</b> (Not used with units equipped with Automatic Safety Shut-Off) (For Sleeved Engines)		
11	59 109 D	SPACER, ignition switch
12	26 242 D	FELT, heat indicator cable clip (Units B, C and D)
13	254 275 R1	CLIP, heat indicator cable (Units B, C and D) NUT, 3/8" SCREW 3/8 x 3/4" hex hd cap WASHER, 3/8" lock
14	273 602 R91	INDICATOR, heat (Units A, B and C)
14	702 219 C1	INDICATOR, heat (Unit D)
15	366 317 R93	SWITCH, starting (also listed with "Electric Starting") NUT, No. 10NF sq. SCREW, No. 10NF x 7/16" rd. hd. sstd. mach. WASHER, No. 10 lock (2)
	62 862 D	CABLE, ignition switch to magneto (also listed with "Electric Starting")
	264 164 R91	CLIP, cable harness (also listed with
	264 164 R91	CLIP, cable harness (also listed with "Electric Starting") (2)
	29 901 D	CONNECTOR, oil pressure indicator tube (in crankcase)
	305 192 R91	HARNESS, cable (Illustrated with "Electric Starting") (Unit A)
	312 061 R91	HARNESS, cable (Illustrated with "Electric Starting") (Unit B)
	316 160 R91	HARNESS, cable (Unit D)

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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INSTRUMENTS, INSTRUMENT PANEL AND  
INSTRUMENT PANEL MOUNTING



CE-96313

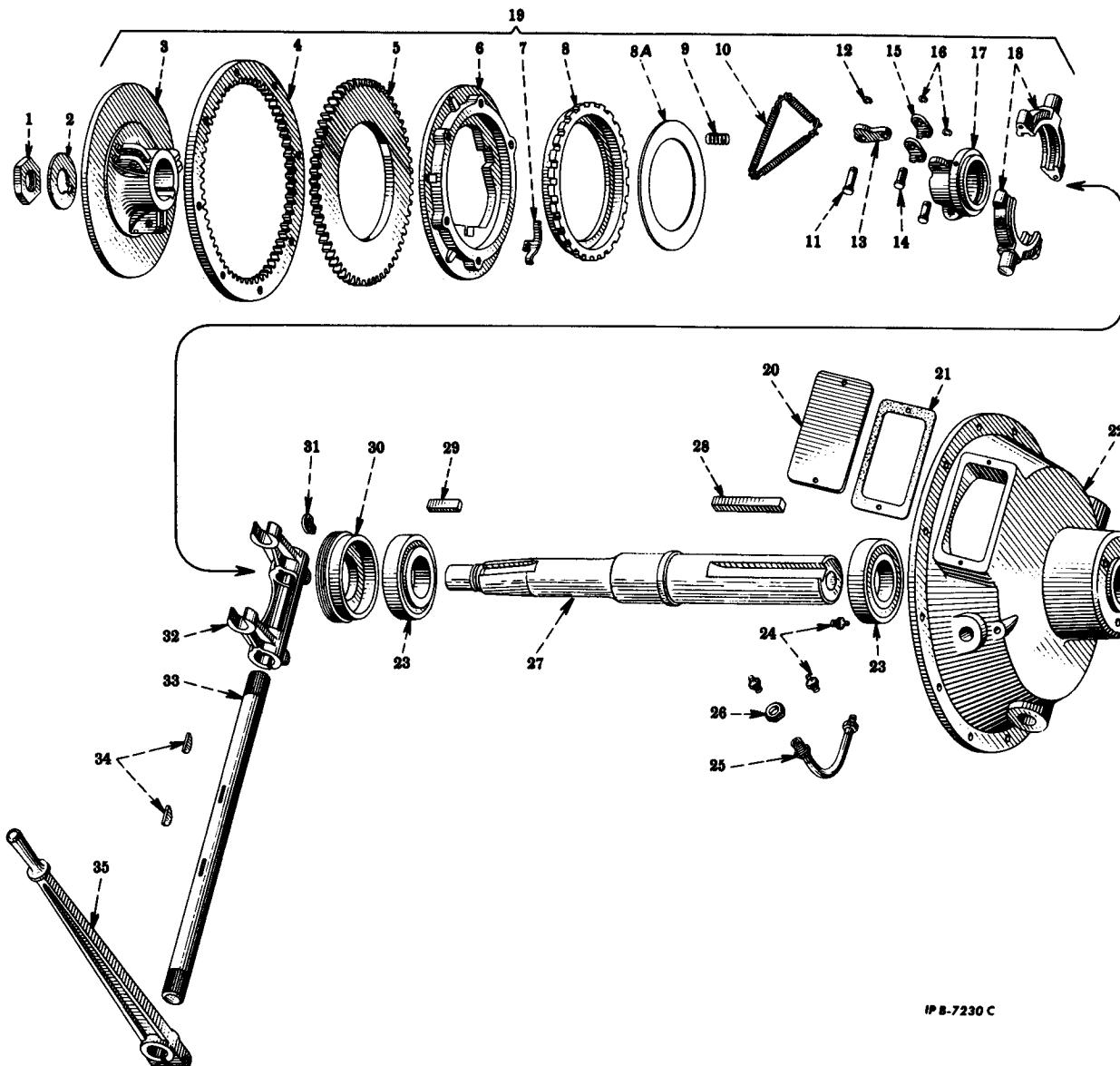
## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>INSTRUMENTS, INSTRUMENT PANEL AND INSTRUMENT PANEL MOUNTING - Continued</b>					
A		Service parts for instruments and instrument panel (regular gauges) (for use on units equipped with instrument panel mounting, tachometer or hourmeter)	19	118 753	ELBOW, 1/4" x 90° oil pressure hose (C)
B		Service parts for instruments and instrument panel (safety gauges) (for use on units equipped with instrument panel mounting, tachometer or hourmeter)	20	670 382 C91	CABLE, ground (B)
				42 915 D	BLOCK, junction (B) (%)
B				42 917 D	BLOCK w/BLOCK, 42 915 D and BRACKET, 42 916 D, junction (optional with 352 110 R91) (%) (B) UC-221 - 2879 and below (B) UC-263 - 4563 and below
C		Service parts for instrument panel mounting (for use with sleeved engines) equipped with instruments and instrument panel	352 110 R91		BLOCK w/BLOCK, 42 915 D and BRACKET 42 916 D, junction (optional with 42 917 D) (%) (B) UC-221 - 2879 and below (B) UC-263 - 4563 and below
D		Service parts for instruments and instrument panel (for use w/sleeveless engines) (used on units equipped w/alternator instruments and instrument panel)	102 622		NUT, No. 8 NF (CD or ZN-PLTD)
			102 635		NUT, 3/8"
			179 833		SCREW, 3/8 x 1/2" hex-hd cap
			138 530		WASHER, No. 8 int-tooth lock
			103 321		WASHER, 3/8" lock
1	337 113 R11	FRAME, instrument panel (C)	42 916 D		BRACKET, junction block (B) (%)
	102 635	NUT, 3/8" (4)	110 633		NUT, No. 10
	179 837	SCREW, 3/8 x 3/4" hes-hd cap (4)	110 500		SCREW, No. 10 x 1/2" slt-hd mach.
	103 321	WASHER, 3/8" lock (4)	106 797		WASHER, No. 10 lock
2	337 354 R3	PANEL, instrument (A and B)	63 713 DA		CABLE, relay to ignition switch (B) (%)
3	370 940 R11	COVER, tachometer opening (A and B) (not used with Tachourmometer attachment)	274 747 R91		CABLE, safety control to junction block (%) (B) UC-221 - 2879 and below (B) UC-263 - 4563 and below
4	702 283 C91	AMMETER (A and B)	274 747 R91		CABLE, relay to safety control switch (%) (B) UC-221 - 2879 and below (B) UC-263 - 4563 and below
5	432 577	PLUG, 2-3/32" button (A and B)	264 164 R1		CLIP, regulator cable (3) (D)
6	432 582	PLUG, 2-1/4" button (A and B)	327 071 R1		CLIP, capillary tube (D)
7	702 220 C91	INDICATOR, heat (A) (Will work for 346 597 R91)	263 308 R1		CLIP, cranking motor cable harness
8	702 544 C1	INDICATOR, safety heat (B) (Will work for 347 602 R91)	362 120 R1		CLIP, cranking motor cable harness (D)
9	347 601 R1	ADAPTER, heat indicator (C) (for use w/heat INDICATOR, 346 597 R91 and 347 602 R91)	370 535 R1		CLIP, ignition cable (C)
10	327 144 R91	SWITCH, ignition and starting (A and B)	187 954		GROMMET, oil press hose (D)
11	347 604 R91	GAUGE, safety oil pressure (%) (B) UC-221 - 2880 and up (B) UC-263 - 4564 and up	349 128 R91		HARNESS, cranking motor cable (C) (*) and (D)
12	702 027 C1	GAUGE, engine oil pressure (A)	349 129 R91		HARNESS, ignition cable (C) (*)
13	9 409 923	ELBOW, 1/8" x 90° (A and B)	601 269 C92		HARNESS, alternate cable (part of D)
14	336 419 R91	MOUNT, vibration (4 for A and B)	349 130 R91		HARNESS, regulator cable (C) (*)
15	120 217	WASHER, No. 10 lock (4 for A and B)	2 752 445 R1		PRODUCT GRAPHIC, safety control switch escutcheon (B) UC-221 - 2879 and below (B) UC-263 - 4563 and below
16	127 651	SCREW, No. 10 x 3/4" rd-hd-mach (4 for A and B)	678 132 C91		RELAY, ignition coutout (for use w/Battery Ignition only) (%)
17	337 112 R2	BRACKET, instrument panel (2 for C)	253 818 R91		SWITCH, safety control toggle (optional with 603 884 C91) (%) (B) UC-221 - 2879 and below (B) UC-263 - 4563 and below
	102 635	NUT, 3/8" (4)	603 884 C91		SWITCH, safety control toggle (Optional with 253 818 R91) (%) (B) UC-221 - 2879 and below (B) UC-263 - 4563 and below
	179 837	SCREW, 3/8 x 3/4" hex-hd cap (4)			(%) - Also listed and illustrated with "Electric Wiring (Safety Gauges)"
	103 321	WASHER, 3/8" lock			(*) - Also listed and illustrated with "Electric Wiring (Regular Gauges)"
18	346 592 R91	HOSE w/two FITTING, oil pressure indicator (HOSE, 19"ID x 17" long including FITTINGS) (C)			

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**POWER TAKE-OFF**  
(Rockford)  
(UC-221 Regular Duty) (Uc-263 Light Duty)



IP B-7230 C

273 017 R91	ATTACHMENT, power take-off, 319 503 R91 w/BEARING, 305 861 R91 (UC-221 regular duty) (UC-263 light duty) (with 10" single plate over-center drive ring type clutch) (*)	7	268 869 R1	LOCK, adjusting	
1	273 231 R1	NUT, hex	8	347 871 R1	NUT, adjusting
2	273 230 R1	WASHER, lock	8A	347 872 R1	PLATE, adjusting ring
3	273 233 R1	BODY, clutch	9	266 704 R1	SPRING, separator (3)
4	255 663 R1	RING, driving	10	268 865 R91	SPRING, lever
5	266 682 R1	FACING, clutch			
6	268 958 R91	PLATE w/LOCK, 268 869 R1, pressure			

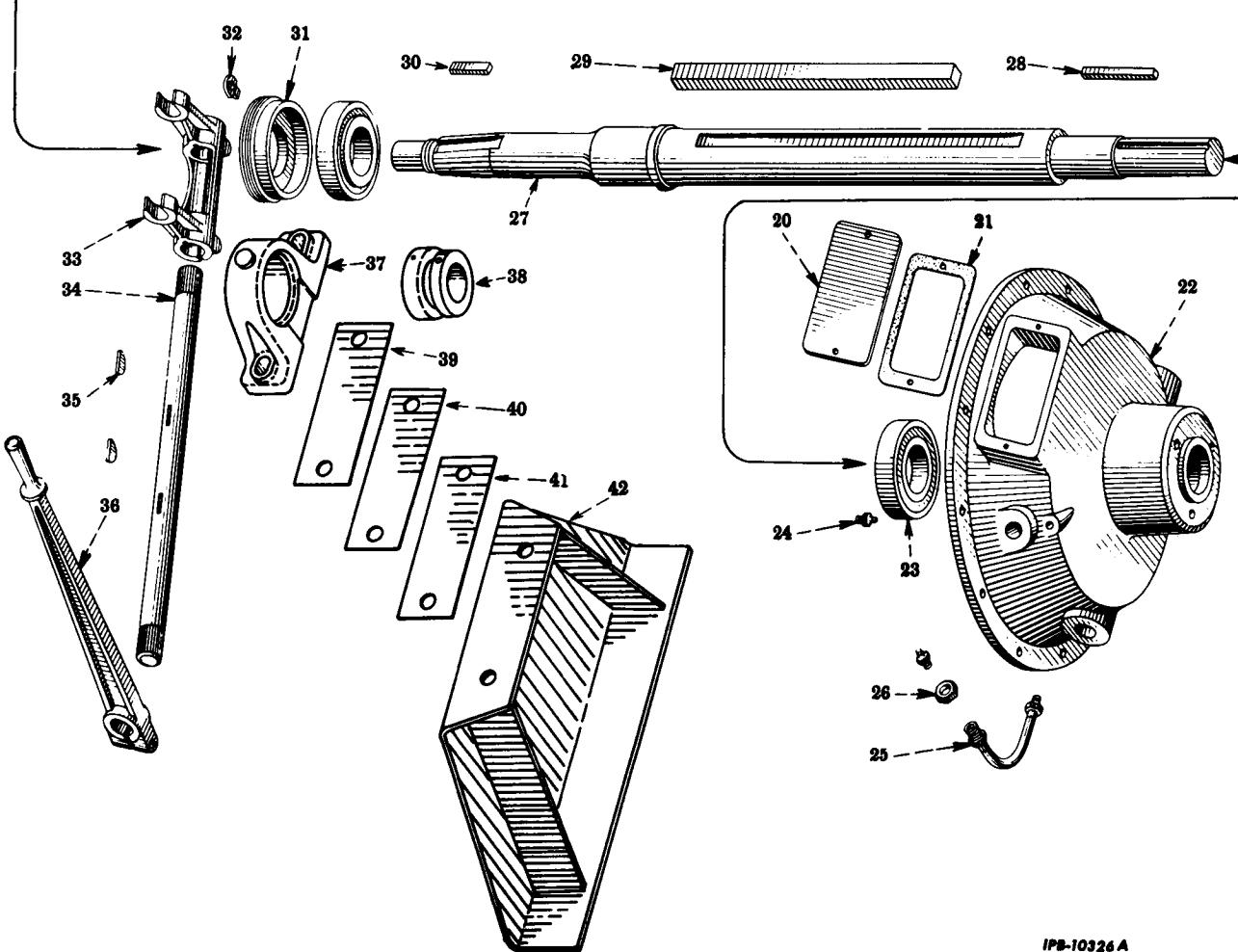
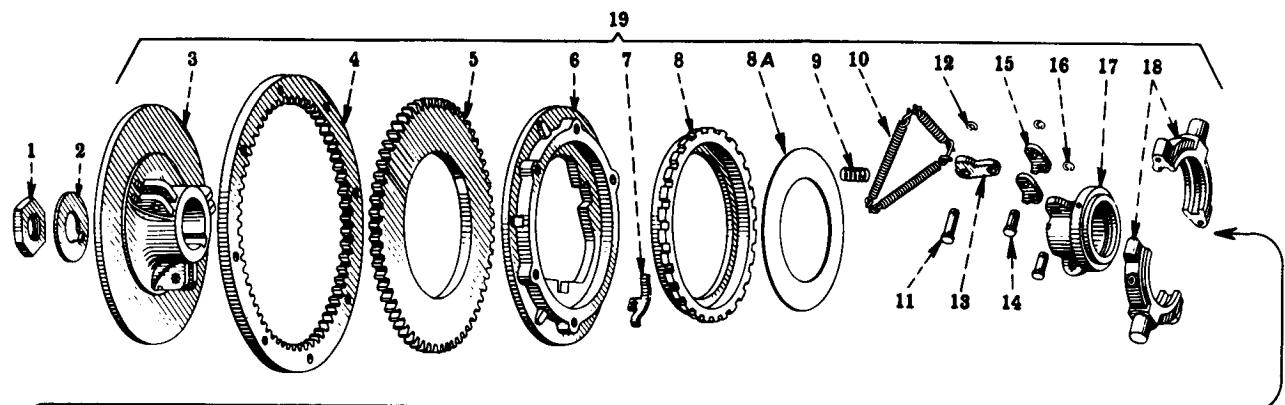
(\*) - Attachment no longer available.  
Service parts will be furnished.

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION	
<b>POWER TAKE-OFF - Continued</b> (Rockford) (UC-221 Regular Duty) (UC-263 Light Duty)						
11	266 697 R1	PIN, clevis (6)	338 543 R91	BEARING, clutch pilot (option with 305 861 R91)		
12	266 698 R1	RING, retaining (6)	273 255	FITTING, lubrication (2)		
13	268 866 R1	LEVER (3)	258 370 R1	NUT, 5/16"NF elastic stop		
14	266 694 R1	PIN, clevis (3)	319 531 R1	LOCK, positive		
15	266 696 R1	LINK, connecting (6)	319 503 R91	POWER TAKE-OFF w/10" over-center clutch assembly (will work for 273 015 R91)		
16	255 395 R1	RING, retaining (3)	(Composed of -			
17	273 235 R1	SLEEVE, release	1	CLUTCH	273 232 R91	
18	273 236 R91	BEARING, w/two NUT, 258 370 R1 and PLUG, 103 883, release	2	CONE	29 215 H	
19	273 232 R91	CLUTCH ASSY, 10" (Composed of -	2	CUP	29 214 H	
		1 BODY 273 233 R1	3	FITTING	109 461	
		1 FACING 266 682 R1	2	FITTING	273 255	
		3 LEVER 268 866 R1	1	GASKET	266 656 R1	
		1 LOCK 319 531 R1	1	HOUSING	273 238 R1	
		6 LINK 266 696 R1	2	KEY	124 553	
		1 NUT 347 871 R1	1	KEY	266 668 R1	
		3 PIN 266 694 R1	1	KEY	266 678 R1	
		6 PIN 266 697 R1	1	LEVER	266 666 R1	
		1 PLATE 268 958 R91	1	NUT	273 231 R1	
		1 PLATE 347 872 R1	1	PLATE	266 661 R1	
		3 RING 255 395 R1	1	PLATE	321 481 R1	
		1 RING 255 663 R1	1	RETAINER	266 660 R1	
		6 RING 266 698 R1	1	SHAFT	266 662 R1	
		1 SCREW 19 559 R1	1	SHAFT	319 536 R1	
		1 SLEEVE w/ BEARING 273 234 R91	1	TUBE	266 667 R91	
		3 SPRING 266 704 R91	1	WASHER	273 230 R1	
		1 SPRING 268 865 R91)	1	YODE	266 665 R91 )	
				SCREW, 3/8 x 1-1/8" hex hd.cap (12)		
				SCREW, 3/8 x 1-1/2" hex hd. cap (8)		
				WASHER, 3/8" lock (20)		
20	321 481 R1	PLATE, instruction				
21	266 656 R1	GASKET, cover	103 883	PLUG, 1/8" slt hd pipe		
22	273 238 R1	HOUSING, clutch		SCREW, 1/4 x 3/8" rd hd mach (2)		
23	29 215 H	CONE, tapered roller bearing (2)		SCREW, 1/4 x 3/8" fil hd.		
23	29 214 H	CUP, tapered roller bearing (2)		SCREW, 3/8 x 1-1/4" hex hd cap (2)		
24	109 461	FITTING, 1/8" plug pipe (3)		SCREW, 5/16 x 1/2" hex hd cap		
25	266 667 R91	TUBE, flexible		SCREW, 1/2 x 1-3/4" hex hd cap		
26		NUT, 5/8"NF		SCREW, 5/16NF x 1-3/4" hex hd cap (2)		
27	319 536 R1 103 883	SHAFT, drive PLUG, 1/8" pipe		SCREW, 5/16 x 1/4" f-pt. set		
28	266 668 R1	KEY	19 559 R1	SCREW, 1/4 x 3/8" hex hd cap		
29	266 678 R1	KEY	273 234 R91	SLEEVE, 273 235 R1, w/release BEARING, 273 236 R91		
30	266 660 R1	RETAINER, bearing		WASHER, 5/16" lock		
31	266 661 R1	PLATE, lock		WASHER, 3/8" lock (2)		
32	266 665 R91	YODE, clutch		WASHER, 1/2" lock		
33	266 662 R1	SHAFT, yoke		WASHER, 1/4" (Shakeproof)		
34	124 553	KEY, (Woodruff, No. 15) (2)				
35	266 666 R91	LEVER, shifting				
	305 861 R91	BEARING, clutch pilot (optional with 338 543 R91)				

## ATTACHMENTS

POWER TAKE-OFF WITH EXTENDED SHAFT  
(Rockford)



IPB-10326 A

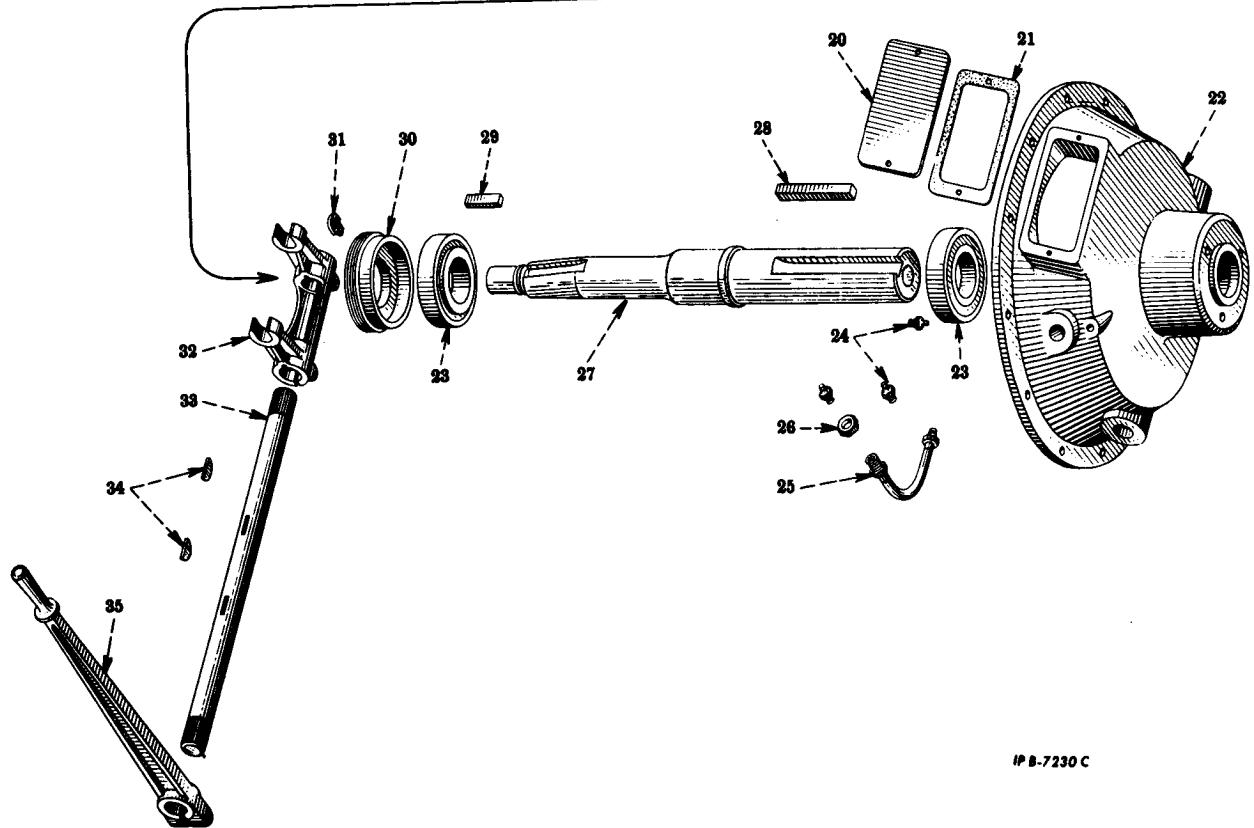
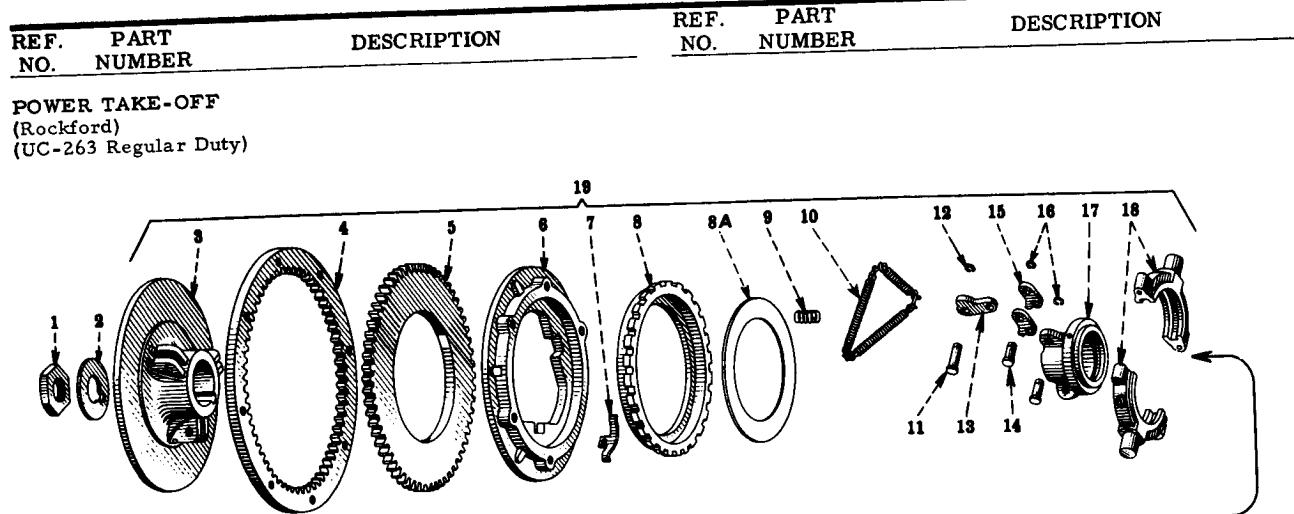
**ATTACHMENTS**

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>POWER TAKE-OFF WITH EXTENDED SHAFT</b>					
- Continued (Rockford)					
304 535 R91		ATTACHMENT, power take-off w/ extended shaft (11-1/2" overcenter drive ring type clutch) (*)  (Composed of - 1 BEARING 305 861 R91 1 BLOCK 304 485 R91 1 BRACKET 304 573 R11 1 POWER TAKE-OFF 319 519 R91 1 SPACER 265 636 R1 1 SHIM 304 539 R1 1 SHIM 304 540 R1 1 SHIM 304 541 R1 )	20	321 481 R1	PLATE, instruction
			21	266 656 R1	GASKET, cover
			22	273 240 R1	HOUSING, clutch
			23	13 396 DC	CONE, tapered roller bearing (2)
			23	13 390 D	CUP, tapered roller bearing (2)
			24	109 461	FITTING, lubrication (3)
			25	266 667 R91	TUBE, flexible
			26		NUT, 5/8"NF
1	266 681 R1	NUT, drive shaft	27	273 209 R1	SHAFT, drive
2	273 212 R1	WASHER, drive shaft lock	28	268 864 R1	KEY, 3/8 x 3/8 x 3-1/2"
3	273 214 R1	BODY, clutch	29	268 863 R1	KEY, 5/8 x 5/8 x 11-1/2"
4	267 065 R1	RING, driving	30	273 211 R1	KEY, 3/8 x 3/8 x 2-1/4"
5	338 903 R1	FACING, clutch	31	266 660 R1	RETAINER, bearing
6	268 861 R91	PLATE w/LOCK, 319 531 R1, pressure	32	266 661 R1	PLATE, lock
7	319 531 R1	LOCK, positive	33	273 210 R91	YODE, clutch
8	347 871 R1	NUT, adjusting	34	266 663 R1	SHAFT, yoke
8A	347 872 R1	PLATE, adjusting ring	35	124 553	KEY (2)
9	266 704 R1	SPRING, separator (3)	36	266 666 R91	LEVER, shifting
10	268 865 R1	SPRING, lever	37	304 485 R91	BLOCK w/BEARING, 305 166 R91 and FITTING, 109 461, outboard bearing pillow (optional with 304 486 R91)
11	266 697 R1	PIN, clevis			
12	266 698 R1	RING, retaining (6)	37	304 486 R91	BLOCK w/BEARING, 305 167 R91, outboard bearing pillow (optional with 304 485 R91) NUT, 1/2" (2) SCREW, 1/2 x 2" hex hd cap (2) WASHER, 1/2" lock (2) WASHER, 17/32 x 1-11/16" x 13 ga. (2)
13	268 866 R1	LEVER (3)			
14	266 694 R1	PIN, clevis (3)			
15	266 696 R1	LINK, connecting (6)			
16	255 395 R1	RING, retaining (3)			
17	273 217 R1	SLEEVE, release	38	305 166 R91	BEARING w/locking COLLAR
17	273 216 R91	SLEEVE, 273 217 R1 w/BEARING 273 218 R91)	38	305 167 R91	BEARING w/locking COLLAR
18	273 218 R91	BEARING w/two NUT, 19 503 R1 and one PLUG, 103 883, release	39	304 539 R1	SHIM, outboard bearing (heavy)
19	273 219 R91	CLUTCH ASSY. (11-1/2") (composed of - 1 BODY 273 214 R1 1 FACING 338 903 R1 3 LEVER 268 866 R1 6 LINK 266 696 R1 1 NUT 347 871 R1 3 PIN 266 694 R1 6 PIN 266 697 R1 1 PLATE 268 861 R91 1 PLATE 347 872 R1 3 RING 255 395 R1 6 RING 266 698 R1 1 RING 267 065 R1 1 SLEEVE w/ BEARING 273 216 R91 3 SPRING 266 704 R1 1 SPRING 268 865 R91 )	40	304 540 R1	SHIM, outboard bearing (med.) (2)
			41	304 541 R1	SHIM, outboard bearing (light) (x)
			42	304 537 R11	BRACKET, outboard bearing
				305 861 R91	BEARING, clutch pilot (optional with 338 543 R91)
(*) - Attachment no longer available. Service parts will be furnished.					
x - Four or More As Required					

# ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION
<b>POWER TAKE-OFF WITH EXTENDED SHAFT</b>		
- Continued (Rockford)		
338 543 R91	BEARING, clutch pilot (optional with 305 861 R91)	
273 355	FITTING, hydraulic lubricator (1/4" drive type) (2)	
19 503 R1	NUT, 5/16"NF elastic stop (2)	
319 519 R91	POWER TAKE-OFF w/extended SHAFT ASSY. (will work for 304 493 R91) (Composed of	
	1 CLUTCH 273 215 R91	
	2 CONE 13 396 DC	
	2 CUP 13 390 D	
	3 FITTING 109 461	
	2 FITTING 273 355	
	1 GASKET 266 656 R1	
	1 HOUSING 273 240 R1	
	1 KEY 268 863 R1	
	2 KEY 124 553	
	1 KEY 268 864 R1	
	1 KEY 273 211 R1	
	1 LEVER 266 666 R91	
	1 NUT 266 681 R1	
	1 PLATE 321 481 R1	
	1 PLATE 266 661 R1	
	1 RETAINER 266 660 R1	
	1 SHAFT 273 209 R1	
	1 SHAFT 266 663 R1	
	1 TUBE 266 667 R91	
	1 WASHER 273 212 R1	
	1 YOKE 273 210 R91 )	
	SCREW, 3/8 x 1-1/8" hex hd cap (12)	
	SCREW, 3/8 x 1-1/2" hex hd cap (8)	
	WASHER, 3/8" lock (20)	
103 103 883	PLUG, 1/8" slt hd slt pipe (release bearing)	
	SCREW, 5/16NF x 2" hex hd cap (release bearing) (2)	
	SCREW, 3/8 x 1-1/4" hex hd cap (clutch yoke) (2)	
	SCREW, 1/4 x 3/8" fil hd mach (pressure plate)	
	SCREW, 5/16 x 1/4" fl pt set (clutch housing)	
	SCREW, 1/4 x 3/8" rd hd mach (instruction plate) (2)	
	SCREW, 5/16 x 1/2" hex hd cap (lock plate)	
	SCREW, 3/8 x 1-1/2" hex hd cap (shifting lever)	
265 636 R1	SPACER, clutch pilot bearing	
	WASHER, 3/8" lock (clutch yoke) (3)	
	WASHER, 1/4" (Shakeproof) (pressure plate)	
	WASHER, 5/16" lock (Lock plate)	

## ATTACHMENTS



IP B-7230 C

273 019 R92	ATTACHMENT, power take-off, 319 524 R91, w/BEARING, 305 305 861 R91 and SPACER, 265 265-636 R1 (UC-263 Regular duty) (with 11-1/2" single plate over- center drive ring type clutch operating at 2200 RPM or below) (*)	6    268 861 R91    PLATE w/LOCK, 319 531 R1 pressure
1    266 681 R1	NUT, 2-3/16-12 hex	9    266 704 R1    SPRING, separator (3)
2    273 212 R1	WASHER, lock	
3    273 214 R1	BODY, clutch	
4    267 065 R1	RING, driving	
5    338 903 R1	FACING, clutch	

(\*) - Attachment no longer available  
Service parts will be furnished

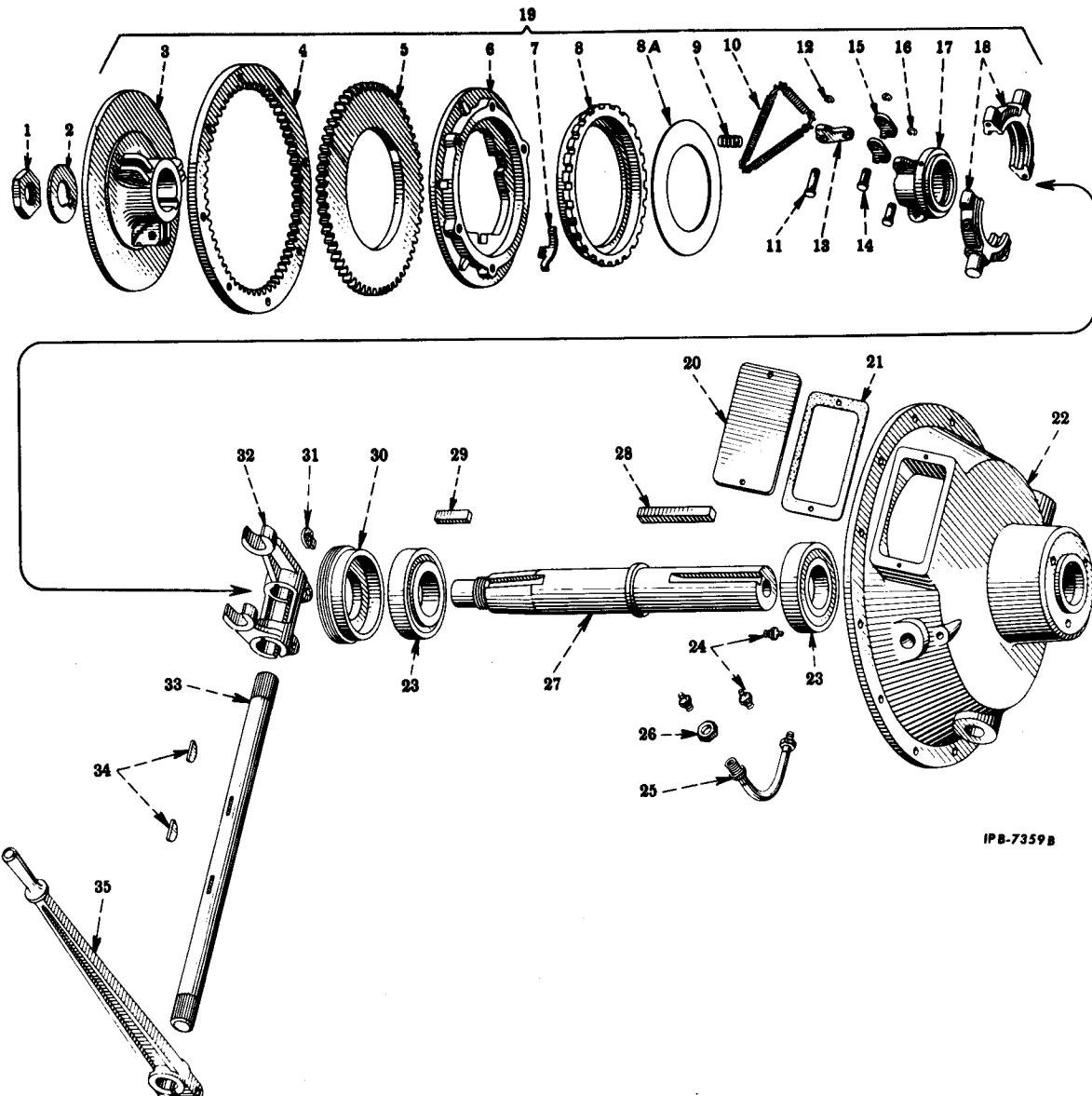
# ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>POWER TAKE-OFF - Continued</b> (Rockford) (UC-263 Regular Duty)					
10	268 865 R91	SPRING, lever	19 503 R1		NUT, 5/16"NF elastic stop (2)
11	266 697 R1	PIN, clevis (6)	319 524 R91		POWER TAKE-OFF, w/11-1/2" over-center clutch assembly (will work for 273 016 R91) (Composed of -
12	266 698 R1	RING, retaining (6)		1	CLUTCH 273 215 R91
13	268 866 R1	LEVER (3)		2	CONE 13 396 DC
14	266 694 R1	PIN, clevis (3)		2	CUP 13 390 D
15	266 696 R1	LINK, connecting (6)		3	FITTING 109 461
16	255 395 R1	RING, retaining (3)		1	GASKET 266 656 R1
17	273 217 R1	SLEEVE, release		1	HOUSING 273 240 R1
18	273 218 R91	BEARING, w/two NUT, 258 370 R1 and PLUG, 103 883, release		2	KEY 124 553
19	273 215 R91	CLUTCH ASSY (11-1/2") (Composed of -		1	KEY 267 060 R1
	1	BODY 273 214 R1		1	KEY 273 211 R1
	1	FACING 338 903 R1		1	LEVER 266 666 R91
	3	LEVER 268 866 R1		1	NUT 266 681 R1
	6	LINK 266 696 R1		1	PLATE 266 661 R1
	1	NUT 347 871 R1		1	PLATE 321 481 R1
	3	PIN 266 694 R1		1	RETAINER 266 660 R1
	6	PIN 266 697 R1		1	SHAFT 266 663 R1
	1	PLATE 268 861 R91		1	SHAFT 319 946 R1
	1	PLATE 347 872 R1		1	TUBE 266 667 R91
	3	RING 255 395 R1		1	WASHER 273 212 R1
	6	RING 266 698 R1		1	YOKE 273 210 R91
	1	RING 267 065 R1		SCREW, 3/8 x 1-1/8" hex hd cap (12)	
	1	SLEEVE w/ BEARING 273 216 R91		SCREW, 3/8 x 1-1/2" hex hd cap (8)	
	3	SPRING 266 704 R1		WASHER, 3/8" lock (20)	
	1	SPRING 268 865 R91 )	103 883	PLUG, 1/8" slt hd pipe (steel)	
20	321 481 R1	PLATE, instruction		SCREW, 1/4 x 3/8" rd. hd mach. (2)	
21	266 656 R1	GASKET, cover		SCREW, 1/4 x 3/8" fil hd	
22	273 240 R1	HOUSING, clutch		SCREW, 3/8 x 1-1/4" hex hd cap (2)	
23	13 396 DC	CONE, tapered roller bearing (2)		SCREW, 5/16 x 1/2" hex hd cap	
23	13 390 D	CUP, tapered roller bearing (2)		SCREW, 1/2 x 1-3/4" hex hd cap	
24	109 461	FITTING, 1/8" pipe plug		SCREW, 5/16NF x 2" hex hd cap (2)	
25	266 667 R91	TUBE, flexible	273 216 R91	SCREW, 5/16 x 5/16" f-pt. set	
26		NUT, 5/8"NF		SLEEVE, 273 217 R1, w/release	
27	319 946 R1	SHAFT, drive		BEARING, 273 218 R91, release	
28	267 060 R1	KEY (PT-780)	265 636 R1	SPACER, clutch pilot bearing	
29	273 211 R1	KEY, 1/2 x 1-7/8"		WASHER, 5/16" lock	
30	266 660 R1	RETAINER, bearing		WASHER, 3/8" lock (2)	
31	266 661 R1	PLATE, lock		WASHER, 1/2" lock	
32	273 210 R91	YOKE, clutch		WASHER, 1/4" (Shakeproof)	
33	266 663 R1	SHAFT, voke			
34	124 553	KEY, (Woodruff No. 15) (2)			
35	266 666 R91	LEVER, shifting			
36	305 861 R91	BEARING, clutch pilot (optional with 338 543 R91)			
37	338 543 R91	BEARING, clutch pilot (optional with 305 861 R91)			

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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POWER TAKE-OFF  
(Rockford) (UC-221 Light Duty)



IPB-7359B

273 020 R91	ATTACHMENT, power take-off 319 500 R91, w/BEARING, ST 301 (with 8" single plate over-center drive ring type clutch) (UC-221 light duty) (used with flywheel ATTACHMENT, 312 729 R91) (*)	7	266 690 R1	LOCK, adjusting	
1	258 671 R1	NUT, hex	8	347 766 R1	NUT, adjusting (together with PLATE, 347 767 R1) (will work for 266 689 R1).
2	258 670 R1	WASHER, lock	8A	347 767 R1	PLATE, adjusting ring (together with NUT, 347 766 R1) (will work for 266 689 R1)
3	269 110 R1	BODY, clutch	9	266 687 R1	SPRING, separator (3)
4	266 699 R1	RING, driving			
5	266 686 R1	FACING, clutch			
6	266 688 R1	PLATE			

(\*) - Attachment no longer available.  
Service parts will be furnished.

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>POWER TAKE-OFF - Continued</b> (Rockford) (UC-221 Light Duty)					
10	269 109 R91	SPRING, lever	35	266 666 R91	LEVER, shifting
11	266 697 R1	PIN, clevis (6)	ST 301		BEARING, clutch pilot
12	266 698 R1	RING, retaining (6)	319 500 R91		POWER TAKE-OFF w/8" over-center clutch assembly (will work for 265 814 R92) (Composed of -
13	268 866 R1	LEVER (3)		1 CLUTCH	266 683 R92
14	266 694 R1	PIN, clevis (3)		2 CONE	62 923 R91
15	266 696 R1	LINK, connecting (6)		2 CUP	ST 977
16	255 395 R1	RING, retaining (3)		3 FITTING	271 409
17	266 700 R1	SLEEVE, release		2 FITTING	145 692
18	266 701 R91	BEARING w/two NUT, 19 503 R1 release		1 GASKET	266 656 R1
	19 503 R1	NUT, 5/16"NF elastic stop (2) SCREW, 5/16NF x 1-3/4" hex hd cap (2)		1 HOUSING	266 654 R2
19	266 683 R92	CLUTCH ASSEMBLY, 8" (Composed of -		2 KEY	124 553
		1 BODY 269 110 R1		1 KEY	266 669 R1
		1 FACING 266 686 R1		1 LEVER	266 678 R1
		3 LEVER 268 866 R1		1 NUT	258 671 R1
		6 LINK 266 696 R1		1 PLATE	266 661 R1
		1 LOCK 266 690 R1		1 PLATE	321 481 R1
		1 NUT 347 766 R1		1 RETAINER	266 659 R1
		3 PIN 266 694 R1		1 SHAFT	266 662 R1
		6 PIN 266 697 R1		1 SHAFT	319 534 R1
		1 PLATE 266 688 R1		1 TUBE	266 667 R91
		1 PLATE 347 767 R1		1 WASHER	258 670 R1
		3 RING 255 395 R1		1 YOKE	266 665 R91)
		1 RING 266 699 R1		SCREW, 3/8 x 1-1/8" hex hd cap (12)	
		6 RING 266 698 R1		SCREW, 3/8 x 1-3/8" hex hd cap (6)	
		1 SLEEVE w/ BEARING 266 691 R91		WASHER, 3/8" lock (18)	
		3 SPRING 266 687 R1	103 883		
		1 SPRING 269 109 R91)		PLUG, 1/8" sltd hd pipe	
20	321 481 R1	PLATE, instruction			SCREW, 1/4 x 3/8" rd. hd mach (2)
21	266 656 R1	GASKET, cover			SCREW, 1/4 x 3/8" fil hd
22	266 654 R2	HOUSING, clutch			SCREW, 3/8 x 1-1/4" hex hd cap (2)
23	62 923 R91	CONE, tapered roller bearing (2)	266 691 R91		SCREW, 5/16 x 1/2" hexhd cap
23	ST 977	CUP, tapered roller bearing (2)			SCREW, 1/2 x 1-3/4" hex hd cap
24	271 409	FITTING, 1/8" plug pipe (3)			SCREW, 5/16 x 1/4" f-pt set
25	266 667 R91	TUBE, flexible			SLEEVE, 266 700 R1, w/release
26		NUT, 5/8"NF			BEARING, 266 701 R1
27	319 534 R1 103 881	SHAFT, drive PLUG, 1/8" pipe			WASHER, 5/16" lock
28	266 669 R1	KEY			WASHER, 3/8" lock (2)
29	266 678 R1	KEY (1/4 x 1/4 x 2")			WASHER, 1/2" lock
30	266 659 R1	RETAINER, bearing			WASHER, 1/4" (Shakeproof)
31	266 661 R1	PLATE, lock			
32	266 665 R91	YOKE, clutch			
33	266 662 R1	SHAFT, yoke			
34	124 553	KEY (Woodruff, No. 15) (2)			

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>POWER TAKE-OFF</b> (Twin Disc)					
A	266 818 R92	ATTACHMENT, power take-off w/standard shaft (11-1/2" single plate overcenter drive ring type clutch) (for light duty and sideload applications w/PTO speeds of 2200 rpm or below) (see NOTES 1 and 3)	304 537 R11	BRACKET, outboard bearing (Attachment B)	
B	304 536 R91	ATTACHMENT, power take-off w/extended shaft (11-1/2" over-center drive ring type clutch) (+)	345 347 R91	CABLE, temperature switch to junction block (Attachment D)	
C	345 345 R91	ATTACHMENT, high speed power take-off w/11-1/2" single plate over-center drive ring clutch, 2-1/4" dia. shaft w/sealed for life cartridge type pilot bearing - P. T. O. shaft has no rifle drill (for heavy duty clutch and side load applications w/P. T. O. speeds above 2200 rpm)(UC-263) (+)	366 460 R1	CLIP, cable (mount on power take-off bolts) (2 for Attachment D)	
D	345 346 R91	ATTACHMENT, high speed power take-off s/11-1/2" single plate overcenter drive ring clutch, 2-1/4" dia. shaft w/sealed for life cartridge type pilot bearing - P. T. O. shaft has no rifle drill (for heavy duty clutch and side load applications w/P. T. O. speeds above 2200 rpm) (includes safety shut-off) (+)	60 610 D	KEY, belt pulley short (Attach. B)	
E	273 018 R91	ATTACHMENT, power take-off 321 054 R91 w/bearing, 305 861 R91 (UC-221 regular duty) (UC263 light duty) (with 10" single plate over-center drive ring type clutch)(see NOTES 1 and 3)	60 614 D	KEY, belt pulley long (Attachment B)	
F	273 021 R91	ATTACHMENT, power take-off, 321 052 R91 w/BEARING, ST-301 (with 8" single plate overcenter drive ring type clutch) (UC-221 light duty) (Used with flywheel attachment 312 759 R91) (+)	321 054 R91	POWER TAKE-OFF w/STANDARD SHIFT ASSY (will work for 265 817 R91) (Attachment E) (*)	
	305 861 R91	BEARING, clutch pilot (optional with 338 543 R91) (Attachments A thru E)	321 052 R91	POWER TAKE-OFF-w/STANDARD shaft assy (will work for 265 816 R91) (Attachment F) (*)	
	338 543 R91	BEARING, clutch pilot (optional with 305 861 R91) (Attachments A thru E)	103 321	POWER TAKE-OFF w/extended shaft Assy (Attachment B) (*)	
	ST 301	BEARING, clutch pilot (Attachment F)	321 057 R91	POWER TAKE-OFF w/standard shaft Assy (Attachment A) (*)	
	308 610 R91	BLOCK w/BEARING, 305 167 R91, outboard bearing pillow (optional with 304 486 R91) (Attachment B)	346 882 R91	POWER TAKE-OFF w/standard shaft Assy (Attachments C and D) (*)	
	304 486 R91	BLOCK w/BEARING, 305 167 R91, outboard bearing pillow (optional with 308 610 R91) (Attachment B)	179 840	SCREW, 3/8 x 1-1/8" hex hd cap (12)	
102 637		NUT, 1/2" (2)	179 843	SCREW, 3/8 x 1-1/2" hex hd cap (8)	
179 889		SCREW, 1/2 x 2" hex-hd cap (2)	103 323	WASHER, 3/8" lock (20)	
103 323		WASHER, 1/2" lock (2)	103 343	SHIM, outboard bearing heavy (Attachment B)	
103 343		WASHER, 17/32 x 1-11/16" x 13 ga. (2)	103 321	SHIM, outboard bearing medium (2 for Attachment B)	

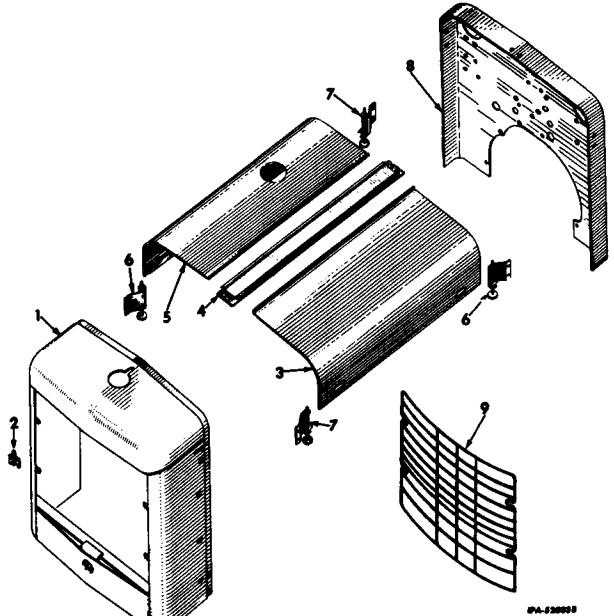
(+) - Attachment No Longer Available Service Parts will Be Furnished

(\*) - Order Detail Service Parts From Nearest Twin-Disc Distributor.

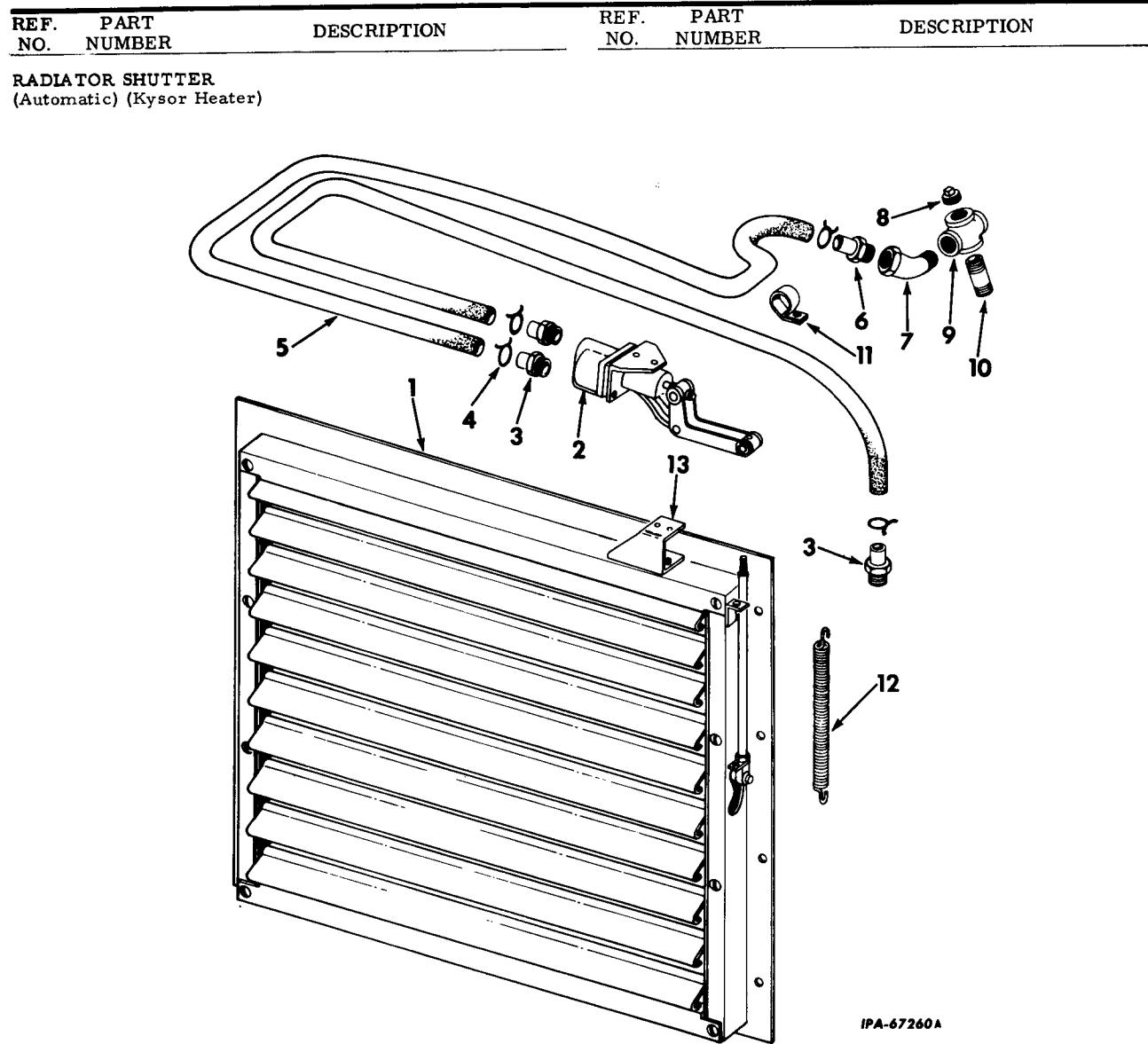
NOTE 1 - Factory Application - Order On Machine Order Form.

NOTE 3 - Field Application - Order Through Regular Service Parts Channels.

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
GRILLE, HOOD AND DASH					
					
A	304 581 R91	ATTACHMENT, hood and dash (+)	7	265 585 R91 179 812 103 320	HOOK, LH hood clamp (2 for Attachments A and D) SCREW, 5/16 x 1/2" hex hd cap (4) WASHER, 5/16" lock (4)
B	320 136 R91	ATTACHMENT, hi-flow radiator grille (not for use with radiator shutter) (see NOTES 1 and 3)	8	304 583 R2	DASH (Attachment A)
C	320 137 R91	ATTACHMENT, hi-flow radiator grille (for use with radiator shutter) (+)	8	349 146 R1 179 837 103 321 179 835	DASH (Attachment D) SCREW, 3/8 x 3/4" hex hd cap (5 for Attachment A) WASHER, 3/8" lock (5 for Attachment A, 4 for Attach, D) SCREW, 3/8 x 5/8" hex hd cap (4 for Attachment D) WASHER, 13/32 x 13/16" x 16 ga. (2 for Attachment A)
D	349 145 R91	ATTACHMENT, hood and dash (+)	9	320 139 R1 321 719 R91 354 837 R1	GRILLE, hi-flow (Attachments B and C) BOLT, grille (4) WASHER, flat (4)
1	320 138 R11	HOUSING, radiator grille (Attachment B)	9	304 600 R91 144 229 320 149 R1	GRILLE, radiator (order PACKAGE, 320 149 R91 or 320 163 R91) GROMMET (Attachment A) PACKAGE, radiator grille field service (for units without radiator shutter)
1	320 140 R91 179 812 103 320	HOUSING, radiator grille (Attachment C) SCREW, 5/16 x 1/2" hex hd cap (8) WASHER, 5/16" lock (8)	320 163 R91	(Conists of - 4 BOLT 321 719 R91 1 GRILLE 320 139 R1 1 HOUSING 320 138 R11 4 WASHER 354 837 R1 ) PACKAGE, radiator grille field service (for units with radiator shutter)	(Conists of - 4 BOLT 321 719 R91 1 GRILLE 320 139 R1 1 HOUSING 320 140 R91 4 WASHER 354 837 R1 )
2	275 194 R91 363 284 R2	EMBLEM, "IH" (Attachments B and C) FASTENER, "IH" emblem (2)			NUT, 3/8" (+) (2 for Attachment D) SCREW, 3/8 x 3/4" hex hd cap (+) (2 for Attachment D)
3	265 581 R1	HOOD, LH engine (Attachments A and D)			SCREW, 3/8 x 3/8" hex hd cap (+) (2 for attachment D)
4	268 390 R11 102 635 179 835 103 321	STRIP, hood center (Attachments A and D) NUT, 3/8" (4) SCREW 3/8 x 5/8" hex hd cap (4) WASHER, 3/8" lock (4)	670 305 C1	SHIM, radiator housing (Attachment B) WASHER, 3/8" lock (+) (4 for Attachment D)	
5	304 582 R1	HOOD, RH engine (Attachments A and D)			
6	265 586 R91 179 812 103 320	HOOK, RH hood clamp (2 for Attachments A and D) SCREW, 5/16 x 1/2" hex hd cap (4) WASHER, 5/16" lock (4)			(+) - For Use With Dash When Instrument and Panel Attachment is Not Rear Mounted.
					NOTE 1 - Factory Application - Order On Machine Order Form.
					NOTE 3 - Field Application - Order Through Regular Service Parts Channels.

## ATTACHMENTS



IPA-67260A

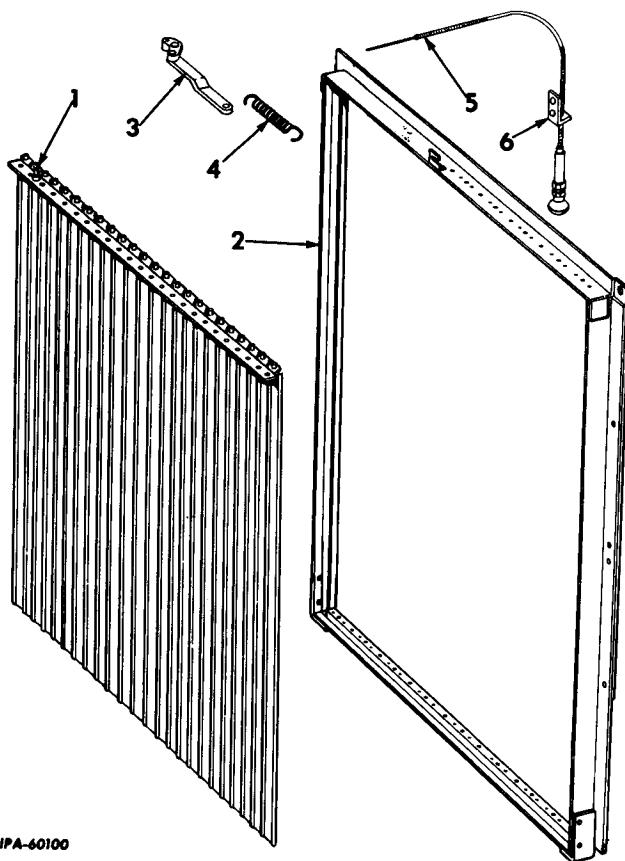
	318 021 R91	ATTACHMENT, radiator shutter (+)	9	142 340	CROSS, 1/2" pipe
1	313 326 R91	SHUTTER w/CONTROL, 615 236 C91, BRACKET, 615 237 C1 and SPRING 317 785 R1, radiator SCREW, 5/16 x 1/2" hex hd cap (8) WASHER, 5/16" lock (8)	10	144 610	NIPPLE, 1/2 x 1-3/8" pipe
			11	301 819 R1	CLIP, hose
			12	317 785 R1	SPRING, control rod
2	615 236 C91	CONTROL, vernatherm SCREW, 1/4NF x 1/2" hex hd cap (cd-pltd) (4) WASHER, 1/4" lock (4)	13	615 237 C1	BRACKET, control
				445 673	PLUG, 3/8" pipe
3	171 819 R1	NIPPLE, hose (3)			WASHER, 5/16 x 3/4 x .065" (cd- pltd)
4	112 700 R1	CLAMP, hose (4)			PIN, 3/32 x 1/2" cotter
5	312 278 R1	HOSE, radiator to vernatherm (5/8 x 5/16 x 49") (2)			
6	171 820 R1	NIPPLE, hose			
7	137 894	ELBOW, 1/2 x 45° street			
8	438 159	PLUG, 1/2" pipe			

(+) - Attachment No Longer Available Service Parts Will Be Furnished

# ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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RADIATOR SHUTTER  
(Manual) (Hardy Mfg. Corp.)



IPA-60100

120 514	NUT, No. 10
431 586	SCREW, No. 10 x 9/16" rd hd mach
121 801	WASHER, No. 10 internal tooth lock
352 627 R1	WASHER, .325 x 5/8" flat
137 159	PIN, 3/32 x 5/8" cotter

312 184 R91 ATTACHMENT, radiator shutter  
(%)

1 317 781 R91 SHUTTER w/operating BAR  
131 395 NUT, 1/4" (4)  
120 583 SCREW, 1/4 x 5/8" slt rd hd  
mach. (4)  
115 109 WASHER, 1/4" lock (4)

2 FRAME (Not Furnished Separately)

3 317 680 R91 BELLCRANK w/operating LINK

4 47 530 D SPRING, bellcrank

5 313 224 R91 CONTROL, vernier  
138 647 SCREW, 1/4NF x 1/2" ov-pt hex  
soc hd set  
103 024 NUT, 1/4"NF

6 312 185 R1 BRACKET, shutter control  
179 839 SCREW, 3/8 x 1" hex hd cap

313 225 R91 SHUTTER ASSY, manual  
(Composed of -

1 BELLCRANK

w/LINK 317 680 R91

1 FRAME

1 SHUTTER w/

BAR 317 781 R91

1 SPRING 47 530 D

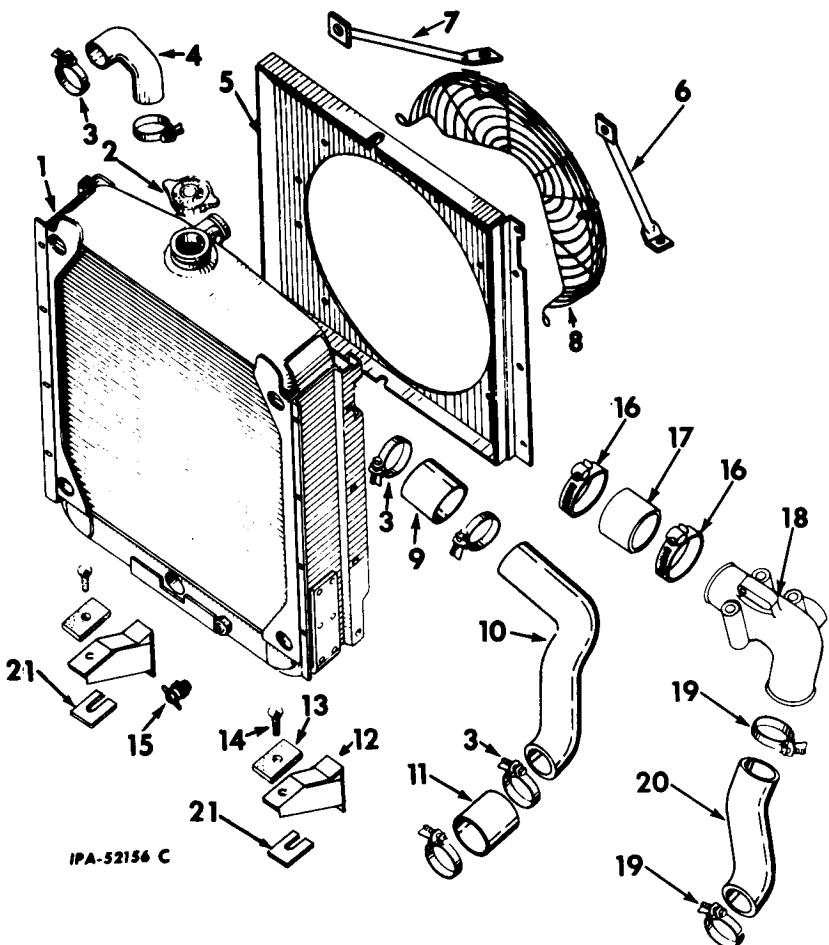
1 WASHER 352 627 R1 )

179 812 SCREW, 5/16 x 1/2" hex hd cap (8)  
103 320 WASHER, 5/16" lock (8)

(%) - Attachment no longer available.  
Service parts will be furnished.

## ATTACHMENTS

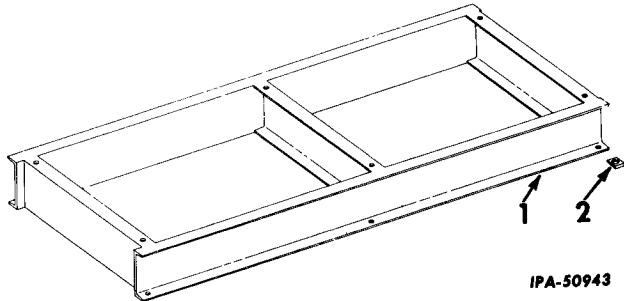
REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
RADIATOR AND CONNECTIONS AND FAN GUARD					



A	304 577 R91	ATTACHMENT, fan guard (UC-221) and (UC-263) (see NOTES 1 and 3)	5	612 292 C11	SHROUD, fan (Unit B) SCREW, 5/16 x 1/2" hex hd cap (4)
B	609 106 C91	ATTACHMENT, radiator and connections (for units equipped with Hydraulic Pump) (See NOTES 1 and 3)			SCREW, 5/16 x 3/4" hex hd cap (2) WASHER, 5/16" lock (6) SCREW, 3/8 x 1/2" hex hd cap (2) WASHER, 3/8" lock (2)
C	305 193 R92	ATTACHMENT, radiator and connections (for units not equipped with Hydraulic Pump) (UC-263) (see NOTES 1 and 3)	5	304 590 R11	SHEET, fan housing (Units C, D and E) SCREW, 5/16 x 1/2" hex hd cap (6) WASHER, 5/16" lock (6)
D		Service parts for radiator and connections (for units equipped with Hydraulic Pump) (UC-221)	6	601 712 C1	BRACE, radiator LH (Units B, C, D and E) SCREW, 3/8 x 3/4" hex hd cap
E		Service parts for radiator and connections (for units equipped with Hydraulic Pump) (UC-263)	7	601 713 C1	BRACE, radiator RH (Units B, C, D and E)
1	265 595 R93	RADIATOR (will work for 304 608 R93)			NOTE 1 - Factory Application - Order On Machine Order Form.
2	361 705 R91	CAP, radiator (Units B, C, D and E)			NOTE 3 - Field Application - Order Through Regular Service Parts Channels.
3	274 088 R91	CLAMP, radiator elbow (4 for Unit B and 6 for Unit C; 2 for Units D and E)			
4	304 596 R2	ELBOW, radiator inlet (Units B, C, D and E)			

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
		RADIATOR AND CONNECTIONS AND FAN GUARD - Continued			SUB-BASE (For UC-263 Power Units equipped with Extended Shaft and Outboard Bearing Attachment)
8	304 578 R91	GUARD, fan (Unit A) SCREW, 5/16 x 1 1/2" hex hd cap (4) WASHER, 5/16" lock (4) WASHER, 11/32 x 11/16 x 16 ga. (4)			
9	407 008 R1	HOSE, upper radiator outlet elbow (2 x 2-3/16 x 2-1/4" long) (Units B and C) (*)			
10	305 197 R1	ELBOW, radiator outlet (Units B and C)			
11	407 009 R1	HOSE, lower radiator outlet elbow (2-1/8 x 2-5/16 x 1-7/8" long) (Units B and C) (*)			
12	310 336 R21	SUPPORT, radiator (2 for Units B, C, D and E) NUT, 5/8" (4) SCREW, 5/8 x 1-1/4" hex hd cap (2) SCREW, 5/8 x 1-1/2" hex hd cap (2) WASHER, 5/8" lock (4)	304 605 R91		ATTACHMENT, sub-base (UC-263) (See NOTES 1 and 3) (Consists of the following parts -
13	265 597 R1	PAD, radiator (2 for Units B, C, D and E)	1	304 602 R91 102 639 271 560 103 323	SUB-BASE NUT, 5/8" (6) SCREW, 5/8 x 1-3/4" hex hd cap (6) WASHER, 5/8" lock (6)
14	15 024 R1	BOLT, radiator mounting (2 for Units B, C, D and E) NUT, 7/16" (2) WASHER, 7/16" lock (2) WASHER, 15/32 x 59/64" x 16 ga. (2)	2	51 811 D	WASHER, bevel (6)
15	31 729 D	VALVE, radiator drain (Units B, C, D and E)			
16	279 038 R1	CLAMP, hose (2 for Units D and E)			
17	278 281 R1	HOSE, water inlet (2 x 2-3/8 x 1-3/4") (Units D and E)			
18	278 278 R2	ELBOW, water inlet (Units D and E) SCREW, 3/8 x 2-3/4" hex hd cap (3) WASHER, 3/8" lock (3)			
19	274 088 R91	CLAMP, radiator outlet elbow hose (2 for Units D and E)			
20	304 597 R1	ELBOW, radiator outlet (Units D and E)			
21	670 670 C1	SHIM (used with radiator SUPPORT, 310 336 R21) (X)			
444 782		PLUG, water inlet (for condenser) (Unit C)			
445 673		PLUG, water inlet (for condenser) (Unit C)			



IPA-50943

(X) - As Required

(\*) - Make From Bulk Stock.  
Bulk Stock Furnished In 3  
Foot Lengths. Part No. Is  
For 1 Foot Of Hose Only.

NOTE 1 - Factory Application -  
Order On Machine Order  
FORM.

NOTE 3 - Field Application - Order  
Through Regular Service  
Parts Channels.

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION
<b>AUXILIARY DRIVE PULLEY</b>		
318 001 R91		ATTACHMENT, auxiliary drive pulley, (6.75" OD single "A" sheave) (for use with suction fan ATTACHMENT, 320 165 R91, 320 166 R91 or blower fan ATTACHMENT, 323 768 R91) (+)
318 002 R91		ATTACHMENT, auxiliary drive pulley (6.75" OD single "B" sheave) (for use with suction fan ATTACHMENT, 320 166 R91 or blower fan ATTACHMENT, 323 768 R91) (18-1/2" dia. 5 blade w/1.62" spacer) (See NOTES 1 and 3)
318 003 R91		ATTACHMENT, auxiliary drive pulley (5.02" OD single "A" sheave (for use with suction fan ATTACHMENT, 320 165 R91, 320 166 R91 or blower fan ATTACHMENT, 323 768 R91) (+)
284 358 R1 9 409 030		PULLEY, auxiliary drive (part of ATTACHMENT, 318 001 R91) BOLT, 3/8 x 1-1/4" (Type "AA" lock) (4)
318 007 R1 9 409 231		PULLEY, auxiliary drive (part of ATTACHMENT, 318 002 R91) BOLT, 3/8 x 1-1/2" (Type "AA" lock) (4)
338 952 R91		PULLEY, auxiliary drive (part of ATTACHMENT, 318 003 R91)

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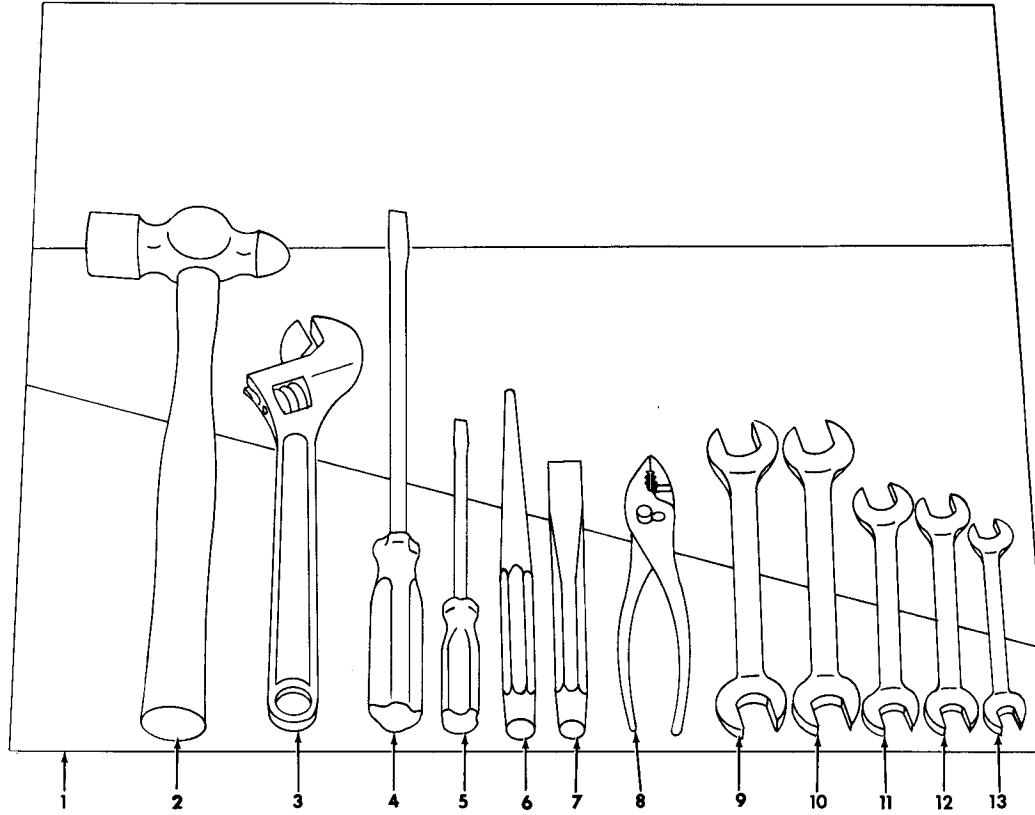
## FLEXIBLE COUPLING

318 004 R91	ATTACHMENT, flexible coupling (front power take-off (48 H.P. capacity) (for use with suction fan ATTACHMENT, 316 170 R91) 18" dia 6 blade w/1.38" spacer) or blower fan ATTACHMENT, 316 168 R91 (18" dia. 6 blade w/ 1.00" spacer) (See NOTES 1 and 3)
318 005 R91	ATTACHMENT, flexible coupling (front power take-off)(20 H.P. capacity) (for use with blower fan ATTACHMENT, 304 549 R91, and 320 166 R91) suction fan ATTACHMENT, 320 165 R91) (See NOTES 1 and 3)
319 650 R91	COUPLING, flexible (part of ATTACHMENT, 318 005 R91)
319 651 R91	COUPLING, flexible (part of ATTACHMENT, 318 004 R91) SCREW, 3/8 x 7/8" soc hd cap (4)
	NUT, 1"NF crankshaft jam
	(+) - Attachment no longer available. Service parts will be furnished.
	NOTE 1 - Factory Application - Order On Machine Order Form.
	NOTE 3 - Field Application - Order Through Regular Service Parts Channels

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**TOOLS**  
(Service Tools)

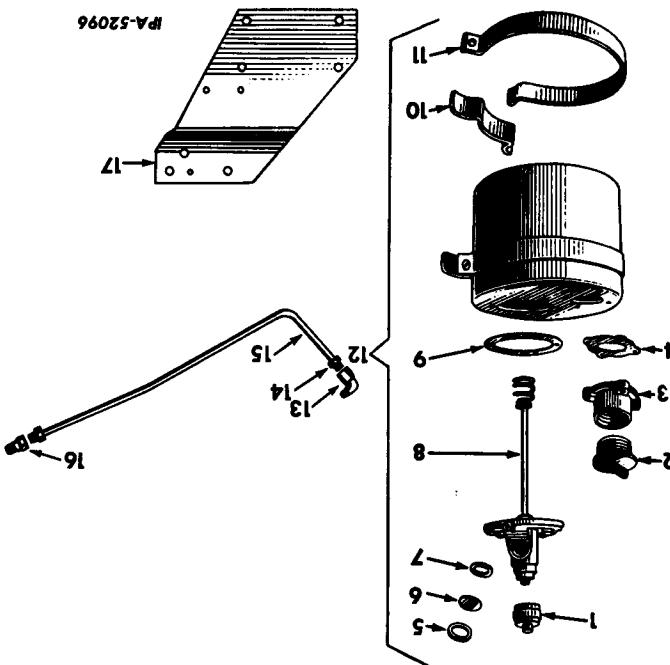


**IPA-43351A**

TOOL SET (I.H. Part No. 276 822 R91) (Order through regular service parts channels) (See NOTE)		6	TP-24	PUNCH (10" long)	
1	ED-1133	ROLL, tool (leatherette)	7	CC-24	CHISEL (8" long)
2	BP-32	HAMMER (2-lb. - ball peen)	8	712-A	PLIER (Slip joint - 8" long)
3	DA-12	WRENCH (Adjustable - 12" long)	9	E-2426	WRENCH, end (3/4 x 13/16")
4	SS-123	SCREWDRIVER (3/8" shank)	10	E-2628	WRENCH, end (13/16 x 7/8")
5	SS-83	SCREWDRIVER (1/4" shank)	11	E-2022	WRENCH, end (5/8 x 11/16")
			12	E-1820	WRENCH, end (9/16 x 5/8")
			13	E-1416	WRENCH, end (7/16 x 1/2")

NOTE - Order Individual Tools and  
Complete Tool Sets from:  
Service Tools, Inc.  
1901 South Indiana Avenue  
Chicago, Illinois 60616

REF.	PART NUMBER	DESCRIPTION	NO.	NUMBER	DESCRIPTION	ATTACHMENTS
1	38 976 D	CAP, head	15	305 884 R1	TUBE, top cylinder oiler	(*)
2	261 518 R1	PLUG, filter	16	59 939 D	CONNECTOR, male top cylinder oiler tube (at manifold)	
3	261 517 R1	BODY, filter	17	305 708 R1	SUPPORT, top cylinder oiler	
4	38 974 D	GASKET, filter body	445 671		SCREW, No. 8 x 5/8" Slit fl. hd (4)	
5	39 824 D	PLUG, 1/8" sq. hd steel pipe (optional) with 445 684 (assembly in tee)	445 684		SCREW, No. 8 x 5/8" Slit fl. hd (4)	
6	39 822 D	GLASS, sight (plasticale)	444 236		SCREW, 8 x 5/8" ft fl. hd (6)	
7	39 823 D	GASKET, sight glass	444 238		HEAD	
8	38 970 D	TE, 1/8-27 automotive pipe (CI) (optional with 445 236 and 445 132) (assembly in intake manifold)	444 132		SCREW, No. 8 x 5/8" ft fl. hd (6)	
9	38 975 D	GASKET, head to tank	444 238		SCREW, No. 8 x 5/8" ft fl. hd (4)	
10	38 972 D	SADDLE (2)	444 132		SCREW, No. 10 slt fl. hd (4)	
11	38 971 D	STRAP (2)			NUT, "Marvel Inversee" Oilier (Model "TUV")	
12	36 087 DA	OILER, top cylinder (Emeryl Co.)			NUT, No. 10 slt fl. hd (4)	
13	36 637 D	ELBOW, top cylinder oiler tube			SCREW, No. 10 slt fl. hd (4)	
14	36 092 D	NUT, top cylinder oiler tube			WASHER, No. 10 lock (2)	

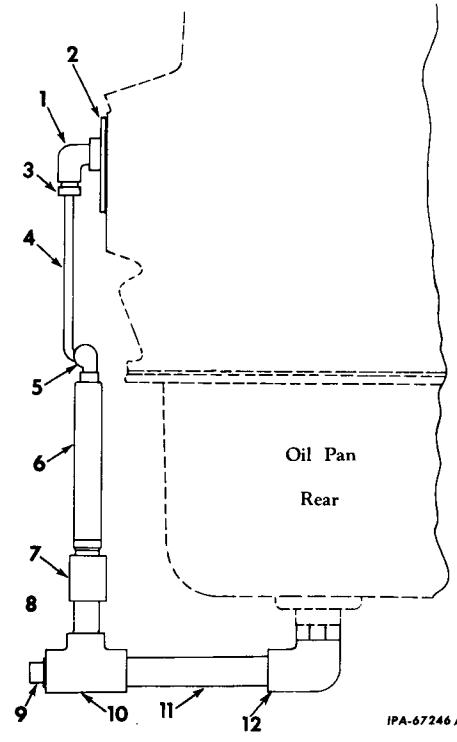
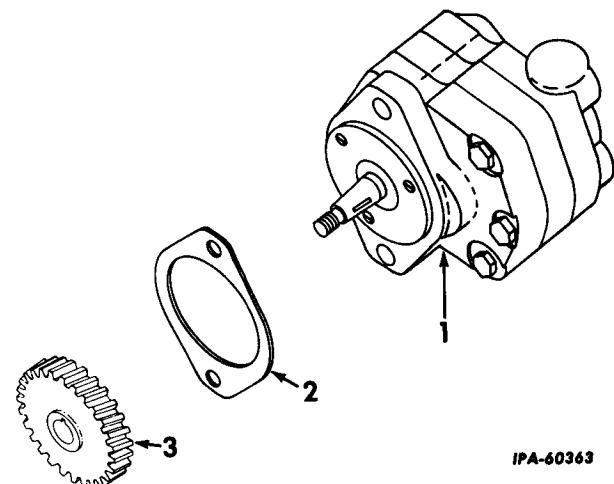


(Emeryl Manufacturing Company's Marvel Oilier)

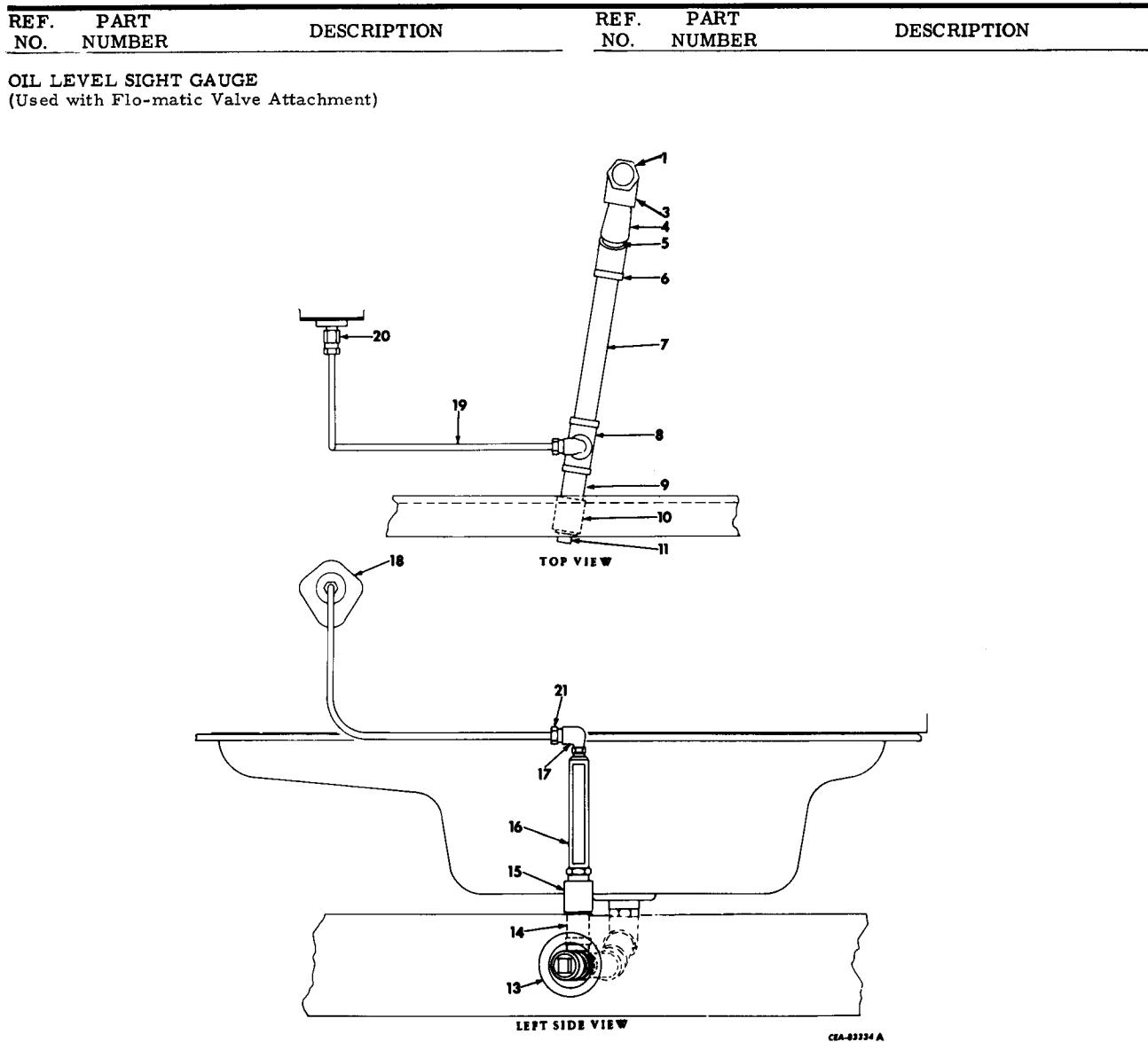
**ATTACHMENTS**

REF.	PART NUMBER	DESCRIPTION	NO.	NUMBER	DESCRIPTION
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## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION			
OIL LEVEL SIGHT GAUGE					HYDRAULIC PUMPS AND RELATED PARTS			
								
					IPA-60363			
312 998 R93	ATTACHMENT, oil level sight gauge (for use on Natural Gas, Liquefied Petroleum Gas and Combination Gas or Gasoline engines) (Not used On Units Equipped with Flo-Matic Valve Attachment) (**)			A	Service parts for Hydraulic Pump (15 G. P. M.) (Gasoline engines)(*)			
1	252 374 R1	ELBOW, 90° vent tube	1	588 368 R91	PUMP, hydraulic (Unit C) (+)			
2	312 948 R11	COVER, fuel pump pad	1	588 371 R92	PUMP, hydraulic (Unit A) (+)			
3	369 987 R1	NUT, 1/4" coupling (2)	1	588 370 R91	PUMP, hydraulic (Unit D) (+)			
4	312 999 R1	TUBE, vent	1	317 528 R91	PUMP, hydraulic (Unit B) (+)			
5	30 402 D	ELBOW, vent tube	179 839	SCREW, 3/8 x 1" hex hd cap				
6	279 689 R91	GAUGE, oil level	179 842	SCREW, 3/8 x 1-3/8" hex hd cap				
7	120 755	COUPLING, 3/8" pipe	103 321	WASHER, 3/8" lock (2)				
8	120 207	NIPPLE, 3/8 x 1" pipe UC221 501 to # UC263 501 to #	2	312 453 R1	GASKET, hydraulic pump			
8	109 421	NIPPLE, 3/8 x 1-1/2" pipe UC221 501 # Up UC263 501 # Up	3	312 452 R1	GEAR, hydraulic pump (27 T) NUT, 1/2"NF WASHER, 1/2" int-ext. tooth lock			
9	103 868	PLUG, 1/2" pipe						
10	143 166	TEE, 1/2 x 1/2 x 3/8" oil level gauge						
11	190 702	NIPPLE, 1/2 x 5" pipe UC221 501 to # UC263 501 to #						
11	219 334	NIPPLE, 1/2 x 5-1/2" pipe UC221 501 # Up UC263 501 # Up						
12	702 598 C1	ELBOW, adjustable (will work for BOLT, 332 174 R1 and UNION, 332 173 R1)						
3 405 H	GASKET, oil pan drain (used with BOLT, 332 174 R1 and UNION, 332 173 R1) (2)							
(*) - For Use with Electric Fuel Pump, 317 696 R91, Generator (Delco-Remy) No. 11102034) Mechanical Governor, Novi, 310 840 R91, Instrument Panel, 278 597 R2, Radiator 265 595 R92 and Fan, Attachment 304 576 R91.								
(+) - For Components See List Of Parts Under Details of "Hydraulic Pump".								
(**) - Attachment no longer available. Service parts will be furnished.								
(#) - Serial Numbers not Available.								

## ATTACHMENTS



	332 471 R92	ATTACHMENT, oil level sight gauge (for use on natural gas, liquefied petroleum gas and combination gas or gasoline engines) (for use with Flo-Matic Valve Attachment) (+)	10	187 397	COUPLING, 1/2" pipe
1	702 598 C1	ELBOW, adjustable (will work for BOLT, 332 174 R1 and UNION, 332 173 R1)	11	444 587	PLUG, 1/2" pipe
3	261 505 R1	WIRE, bulk lokcing (16 ga.) (customer must specify length required)	13	317 623 R1	GROMMET
4	137 894	ELBOW, 1/2" x 45° street (2)	14	173 001	NIPPLE, 3/8 x 1-3/4" pipe UC221 501 to UC263 501 to
5	144 610	NIPPLE, 1/2 x 1-3/8" pipe	14	120 278	NIPPLE, 3/8 x 2" pipe UC221 501 Up UC263 501 Up
6	119 094	ELBOW, 1/2 x 45° pipe	15	120 755	COUPLING, 3/8" pipe
7	187 249	NIPPLE, 1/2 x 7" pipe	16	279 689 R91	GAUGE, oil level sight
8	143 166	TEE, 1/2 x 1/2 x 3/8" pipe			(+ ) - Attachment no longer available. Service parts will be furnished.
9	140 537	NIPPLE, 1/2 x 2" pipe			

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION
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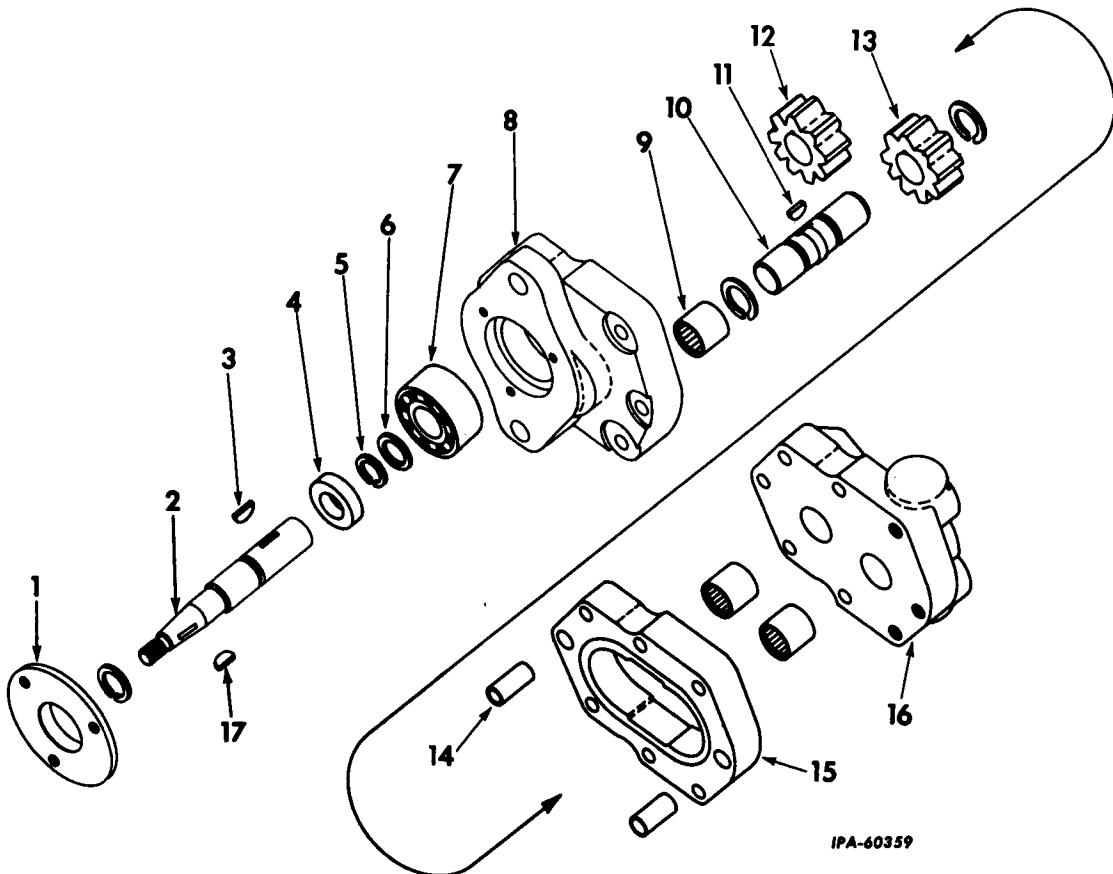
**OIL LEVEL SIGHT GAUGE - Continued**  
(Used with Flo-matic Valve Attachment)

- |    |            |   |
|----|------------|---|
| 17 | 30 402 D   | ELBOW, vent tube  |
| 18 | 312 948 R1 | COVER, fuel pump pad  |
| 19 | 995 061 R1 | TUBE, vent (19-1/2" long, copper<br>1/4" OD (#))                                  |
| 20 | 59 730 H   | CONNECTOR, vent tube  |
| 21 | 19 984 R1  | NUT, 1/4" (2)   |
|    | 3 405 H    | GASKET, oil pan drain (used with<br>BOLT, 332 174 R1 and UNION<br>332 173 R1) (2) |

(#) - Part Number and Price Covers  
One Foot of Tubing. Furnished  
Only in 50 Foot Rolls.

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>HYDRAULIC PUMP (Webster Electric)</b>					



IPA-60359

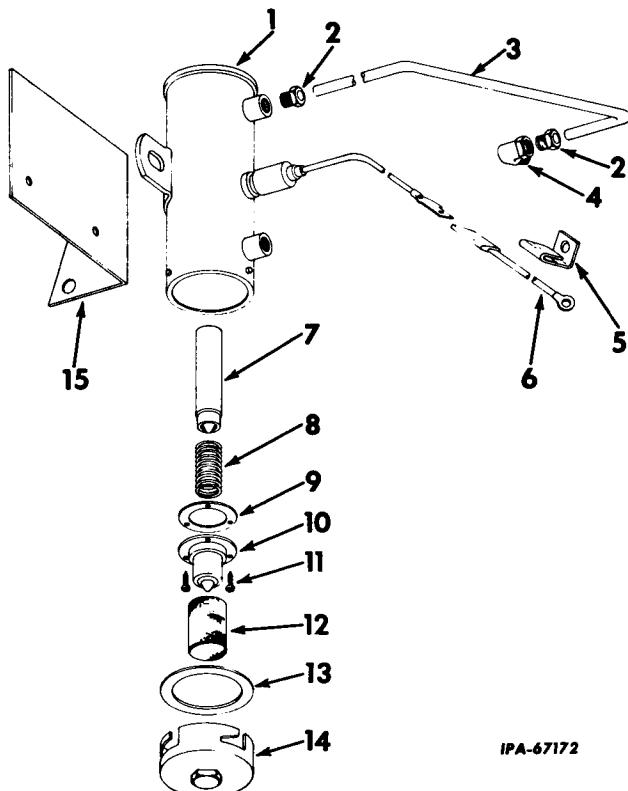
A	588 371 R92	PUMP, hydraulic (15 G.P.M.)	8	588 391 R1	BODY, pump (Units A, C and D) SCREW, 1/4 x 2" hex hd cap (2)
B	317 528 R91	PUMP, hydraulic (18 G.P.M.)			SCREW, 1/4 x 2-1/4" hex hd cap (Unit A and D)
C	588 368 R91	PUMP, hydraulic (7 G.P.M.)			SCREW, 5/16 x 1-5/8" hex hd cap (2 for Unit C)
D	588 370 R91	PUMP, hydraulic (11 G.P.M.)			WASHER, 1/4" lock WASHER, 5/16" lock (2)
1	588 394 R1 110 532	PLATE, pilot SCREW, No. 10 x 5/8" f-hd mach. (3)	8	303 495 R91	BODY w/BEARING, 276 574 R91 pump (Unit B) SCREW, 1/4 x 2" hex hd cap
2	588 389 R1	SHAFT, drive (Unit C)			SCREW, 5/16 x 2" hex hd cap (2) WASHER, 1/4" lock
2	588 397 R1	SHAFT, drive (Unit D)			WASHER, 5/16" lock (2)
2	588 396 R1	SHAFT, drive (Unit A)	9	276 574 R91	BEARING, needle (3)
2	303 494 R1	SHAFT, drive (Unit B)	10	303 100 R1	SHAFT, idler (Unit B)
3	103 646	KEY, 1/8 x 3/4" (Units A, B and D)	10	572 082 R1	SHAF T, idler (Unit D)
3	427 261	KEY, 1/8 x 3/8" (Unit C)	10	572 964 R1	SHAFT, idler (Unit C)
4	586 201 R91	OIL SEAL	10	573 661 R1	SHAFT, idler (Unit A)
5	276 575 R1	RING, retaining (4)	11	427 261	KEY, 1/8 x 3/8"
6	276 569 R1	WASHER, 49/64 x 59/64 x .030" flat (2)	12	276 579 R1	GEAR, drive (8 T) (Unit D)
7	8 521 T	BEARING, ball	12	303 102 R1	GEAR, drive (8 T) (Unit B)
			12	572 959 R1	GEAR, drive (8 T) (Unit C)

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>HYDRAULIC PUMP - Continued</b> (Webster Electric)					
12	573 693 R1	GEAR, drive (8 T) (Unit A)			
13	276 570 R1	GEAR, idler (8 T) (Unit D)			
13	303 074 R1	GEAR, idler (8 T) (Unit B)			
13	572 960 R1	GEAR, idler (8 T) (Unit C)			
13	573 694 R1	GEAR, idler (8 T) (Unit A)			
14	276 566 R1	PIN, dowel (2 for Unit D)			
14	303 073 R1	PIN, dowel (2 for Unit B)			
14	572 937 R1	PIN, dowel (2 for Unit C)			
14	573 657 R1	PIN, dowel (2 for Unit A)			
15	303 072 R1	PLATE, gear (Unit B)			
15	588 388 R1	PLATE, gear (Unit C)			
15	588 393 R1	PLATE, gear (Unit A)			
15	588 395 R1	PLATE, gear (Unit D)			
16	317 670 R91	COVER w/two BEARING, 276 574 R91 pump (Unit B) SCREW, 1/4 x 2-1/2" hex hd cap SCREW, 5/16 x 2-1/4" hex hd cap (4) WASHER, 1/4" lock WASHER, 5/16" lock (4)			
16	588 392 R1	COVER, pump (Units A, C and D) SCREW, 1/4 x 2" hex hd cap SCREW, 1/4 x 2-1/4" hex hd cap SCREW, 5/16 x 1-5/8" hex hd cap (4 for Unit C) SCREW, 5/16 x 2" hex hd cap (4 for Units A and D) WASHER, 1/4" lock WASHER, 5/16" lock (4)			
17	124 548	KEY, 5/32 x 3/4"			
	364 145 R1	"O" RING, 2-1/8 x 2-5/16 x 3/32"			

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>ELECTRIC FUEL TRANSFER PUMP</b> (12 Volt) (Eclipse Bendix) (Used with Hydraulic Pump)					
10	317 965 R91	CUP, plunger	11	19 714 R1	SCREW, No. 4 x 1/4" pan hd (3)
12	317 963 R1	SCREEN, filter	13	317 962 R1	GASKET, sediment cover
14	936 492 R91	COVER w/GASKET, 317 962 R1	15	316 158 R1	BRACKET, pump mounting



316 151 R91 ATTACHMENT, electric fuel pump  
(+)

631 259 R91 PUMP ASSY, electric fuel transfer  
(Composed of -  
§ 1 BODY  
1 COVER 936 492 R91  
1 CUP 317 965 R91  
1 GASKET 317 962 R1  
1 GASKET 317 964 R1  
1 PLUNGER 317 967 R91  
1 SCREEN 317 963 R1  
3 SCREW 19 714 R1  
1 SPRING 936 493 R1 )  
NUT, 1/4" (2)  
SCREW, 1/4 x 5/8" hex hd cap(2)  
WASHER, 1/4" lock

- 1 BODY (order 317 696 R91)
- 2 369 989 R1 NUT, carburetor to pump tube (3)
- 3 316 159 R11 TUBE w/two NUT, 369 989 R1,  
carburetor to pump
- 4 24 847 H ELBOW, carburetor to pump tube
- 5 263 515 R91 CLIP, cable (on oil pan bolt)
- 6 267 806 R91 CABLE, fuel pump
- 7 317 967 R91 PLUNGER, pump
- 8 936 493 R1 SPRING, plunger
- 9 317 964 R1 GASKET, spring cup

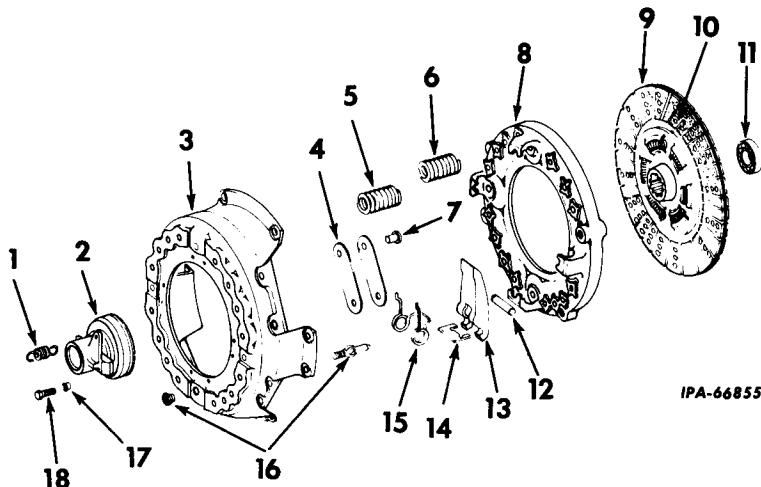
§ - Not Furnished Separately

(+) - Attachment no longer available.  
Service parts will be furnished.

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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CLUTCH (BORG AND BECK) AND CONTROLS

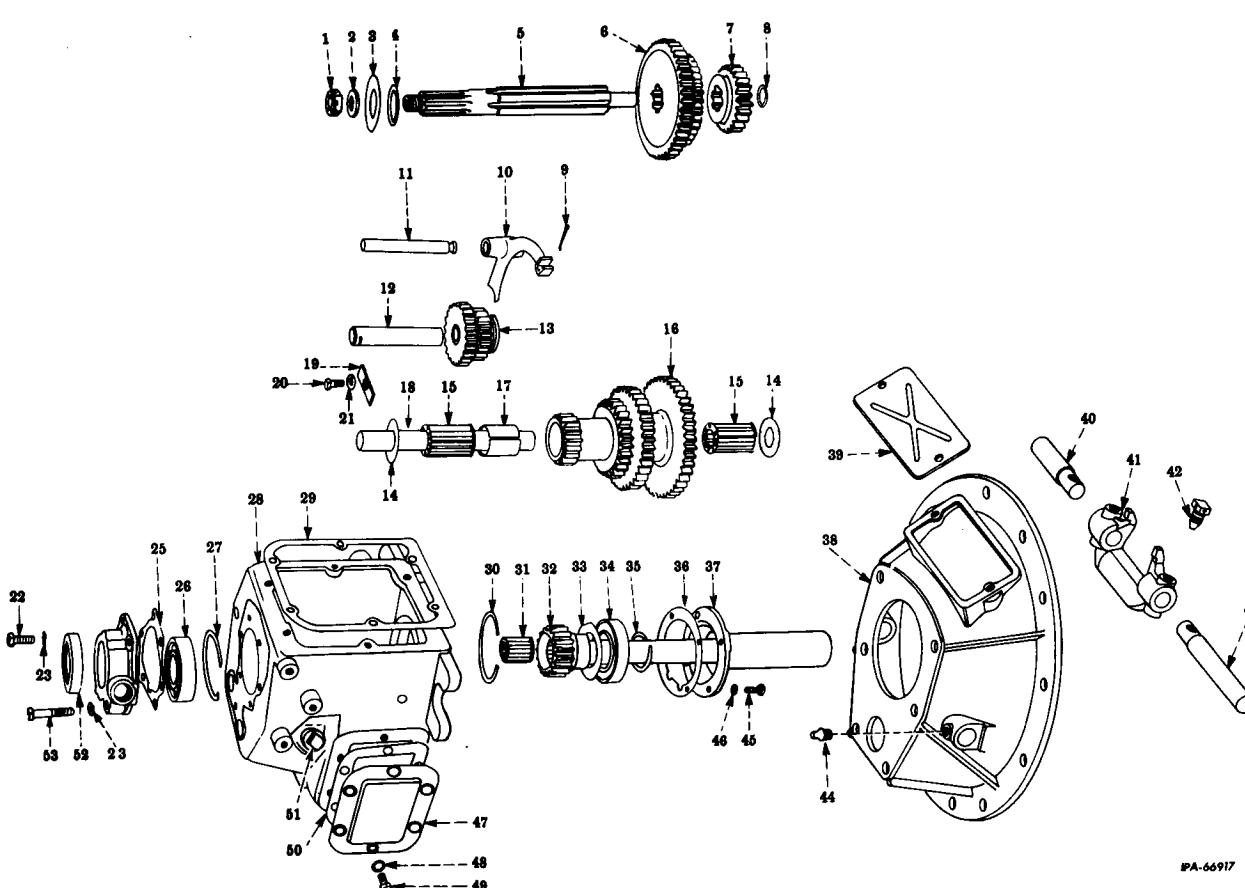


312 837 R91		ATTACHMENT, clutch and controls (See NOTES 1 and 3)	313 772 R91		COVER, clutch (Composed of -
1	57 287 D	SPRING, clutch release sleeve return	1	COVER and STRAP	110 886 H1
2	267 814 R91	SLEEVE, clutch release	4	EYEBOLT and NUT	110 887 H1
3	110 886 H1	COVER w/four RIVET, 317 535 R1 and eight STRAP, 317 534 R1	4	FERRULE	110 890 H1
4	317 534 R1	STRAP, driving (8)	4	LEVER	110 891 H1
5	317 542 R1	SPRING (8)	4	PIN	317 538 R1
6	317 541 R1	SPRING (8)	1	PLATE	110 889 H1
7	317 535 R1	RIVET, driving strap (4)	4	SCREW	317 544 R1
8	110 889 H1	PLATE, pressure	4	SPRING	317 536 R1
9	313 771 R91	MEMBER w/FACING, 317 546 R91 driven	8	SPRING	317 541 R1
10	317 546 R91	PACKAGE, facing	8	SPRING	317 542 R1
11	ST 208 B	BEARING, clutch pilot ball	4	STRUT	317 539 R1 )
12	317 538 R1	PIN, eyebolt (4)	73 092 R2	SCREW, clutch cover mounting (8)	
13	110 891 H1	LEVER, release (4)		WASHER, 3/8" lock (8)	
14	317 539 R1	STRUT, release lever (4)			
15	317 536 R1	SPRING, anti-rattle (4)			
16	110 887 H1	EYEBOLT, and NUT (4)			
17	110 890 H1	FERRULE, driving strap (4)			
18	317 544 R1	SCREW, driving strap (4)			

NOTE 1 - Factory Application - Order On Machine Order Form.

NOTE 3 - Field Application - Order Through Regular Service Parts Channels.

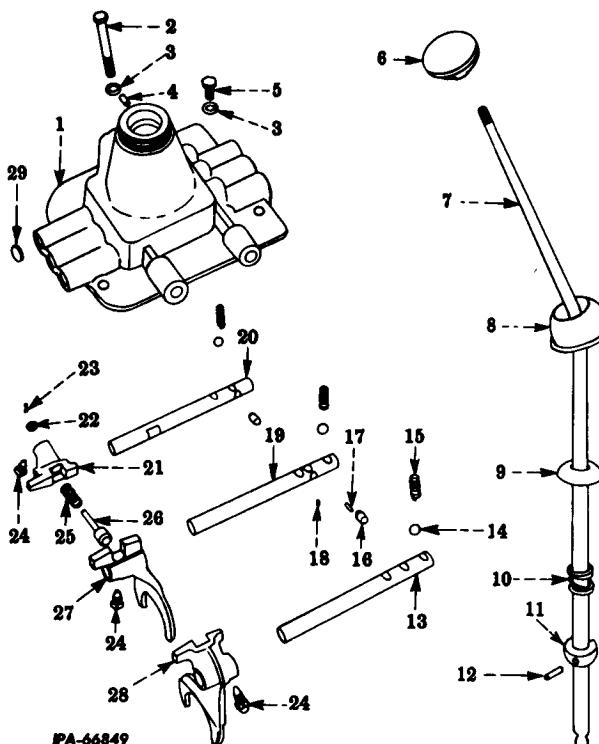
## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>TRANSMISSION ATTACHMENTS</b>					
312 838 R91		ATTACHMENT, transmission (four speed sliding gear) (+) (Consists of all parts listed under "TRANSMISSION (Four Speed Sliding Gear) (Warner)") (For use with 12" spring loaded clutch and controls ATTACHMENT, 312 837 R91 and FLYWHEEL, 312 563 R91) (UC-221)	312 839 R91		ATTACHMENT, transmission (four speed synchromesh) (+) (Consists of all parts listed under "TRANSMISSION (Four Speed Synchromesh) (Warner)") (For use with 12" spring loaded clutch and controls ATTACHMENT, 312 837 R91 and FLYWHEEL, 312 563 R91)
(+) - Attachment no longer available. Service parts will be furnished.					
<hr/>					
<b>TRANSMISSION</b> (Four Speed Sliding Gear) (Warner)					
TRANSMISSION CASE, GEARS, CLUTCH HOUSING AND RELATED PARTS					
					
PA-66917					
313 740 R91		TRANSMISSION ASSY (part of ATTACHMENT, 312 838 R91) SCREW, 3/8 x 1-1/8" hex hd cap (12) WASHER, 3/8" lock (12)	3	27 090 H	WASHER, mainshaft rear bearing oil
1	106 058 H	NUT, main shaft	4	27 088 H	WASHER, mainshaft rear bearing thrust
2	60 192 H	WASHER, companion flange	5	27 069 HB	SHAFT, main
			6	72 975 H	GEAR, mainshaft first and second

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>TRANSMISSION - Continued</b> (Four Speed Sliding Gear) (Warner)					
TRANSMISSION CASE, GEARS, CLUTCH HOUSING AND RELATED PARTS - Continued					
7	62 899 H	GEAR, mainshaft third and direct	40	317 635 R1	SHAFT, throw out (short)
8	27 087 H	RING, mainshaft pilot bearing spacer	41	317 637 R1	YOKE, throw out
9		PIN, 1/8 x 1-1/4" cotter	42	317 638 R1	SCREW, lock
10	27 118 H	FORK, reverse speed shift	43	317 636 R1	SHAFT, throw out (long)
11	27 083 H	RAILS, reverse speed shift fork	44	271 285	FITTING, 1/8" x 90° lubrication (optional with 109 462) (2) (not part of Transmission, 313 740 R91)
12	27 079 H	SHAFT, reverse idler gear	44	109 462	FITTING, 1/8" x 90° lubrication (optional with 271 285) (2) (not part of Transmission, 313 740 R91)
13	62 902 H	GEAR, reverse idler	45		SCREW, 5/16 x 3/4" hex hd cap (4)
14	95 854 H	WASHER, countershaft gear thrust (2)	46		WASHER, 5/16" external lock (4)
15	23 172 H	BEARING, countershaft gear roller (2)	47	23 045 H	COVER, power take-off opening
16	72 976 H	GEAR, countershaft	48		WASHER, 3/8" lock (6)
17	27 091 H	SPACER, countershaft gear bearing	49		SCREW, 3/8 x 3/4" hex hd cap (6)
18	27 069 H	SHAFT, counter	50	111 082 R1	GASKET, power take-off opening cover
19	27 082 H	PLATE, reverse idler gear and countershaft lock	51	143 968	PLUG, 3/4" sq. soc. pipe (cd-pltd)
20		SCREW, 3/8 x 3/4" hex hd cap	52	382 868 C91	OIL SEAL, mainshaft
21		WASHER, 3/8" lock	53		SCREW, 3/8 x 2" hex hd cap
22		SCREW, 3/8 x 1" hex hd cap (4)	115 617 H		BOLT, 3/8 x 3/4" (3)
23		WASHER, 3/8" lock (5)	2 750 059 R1		DECALCOMANIA, shifting diagram (not part of Transmission, 313 740 R91)
24	321 811 R1	RETAINER, mainshaft rear bearing			SCREW, 1/2 x 1-1/4" hex hd cap (6)
25	27 116 HA	GASKET, mainshaft rear bearing retainer			WASHER, 1/2" lock (6)
26	ST 200	BEARING, mainshaft rear			
27	27 073 H	RING, mainshaft rear bearing snap			
28	317 659 R1	CASE, transmission			
29	27 122 H	GASKET, control lever mounting			
30	27 071 H	RING, main drive gear bearing snap (inner)			
31	27 009 H	BEARING, mainshaft pilot roller			
32	317 663 R1	GEAR, main drive			
33	27 089 H	WASHER, main drive gear oil retainer			
34	ST 201	BEARING, main drive gear			
35	27 086 H	RING, main drive gear bearing snap (outer)			
36	27 110 H	GASKET, main drive gear bearing retainer			
37	317 662 R1	RETAINER, main drive gear bearing			
38	317 666 R1	HOUSING, clutch			
39	317 634 R1	COVER, hand hole SCREW, 5/16 x 5/8" fil hd (2) WASHER, 5/16" lock (2)			

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>TRANSMISSION - Continued</b> (Four Speed Sliding Gear)(Warner)					
TRANSMISSION CONTROL HOUSING AND LEVER					
					
20	27 121 HA	RAIL, reverse shift			
21	62 894 HB	END, reverse shift rail			
22		NUT, 1/4"NF slt			
23		PIN, 1/16 x 1/2" cotter			
24	23 079 H	SCREW, shift fork set (3)			
25	62 892 HC	SPRING, reverse shift end plunger			
26	62 893 H	PLUNGER, reverse shift end			
27	27 111 HA	FORK, shift (third and direct)			
28	27 112 HA	FORK, shift (first and second)			
29	103 892	PLUG, expansion (3)			
	30 443 V	PLUG, speedometer opening (not part of Transmission, 313 740 R91)			

- 1 317 665 R1 HOUSING, control lever
- 2 SCREW, 3/8 x 2-7/8" hex hd cap
- 3 WASHER, 3/8" lock (6)
- 4 27 085 HA PIN, control lever locating
- 5 SCREW, 3/8 x 7/8" hex hd cap (5)
- 6 16 780 H BALL, control lever hand
- 7 82 717 R11 LEVER, control
- 8 72 218 H CAP, control lever
- 9 72 219 H WASHER, control lever spring
- 10 27 098 HA SPRING, control lever
- 11 83 780 R1 BALL, fulcrum
- 12 113 163 PIN, fulcrum ball
- 13 27 119 HA RAIL, shift (first and second)
- 14 16 012 R1 BALL, 3/8" shift bar poppet (3)
- 15 23 074 H SPRING, shift bar poppet (3)
- 16 27 096 H PLUNGER, shift bar interlock (2)
- 17 27 104 H PIN, shift bar interlock plunger
- 18 27 105 H STOP, shift bar interlock plunger pin
- 19 27 120 HAX RAIL w/PIN, shift (third and direct)

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
TRANSMISSION - Continued (Four Speed Synchromesh) (Warner)					
TRANSMISSION CASE, GEARS, CLUTCH HOUSING AND RELATED PARTS					
313 739 R91	TRANSMISSION ASSY (with CONTROL HOUSING (part of ATTACHMENT, 312 839 R91))		12	82 079 R1	SPACER, mainshaft second speed gear
179 840	SCREW, 3/8 x 1-1/8" hex hd cap (12)		13	71 834 R2	SHAFT, main
103 321	WASHER, 3/8" lock (12)		14	71 846 R1	ROLLER, mainshaft second speed bearing (34)
2	59 585 R1	NUT, mainshaft	15	71 842 R1	WASHER, mainshaft second speed gear thrust
3	317 627 R1	SPACER, speedometer drive gear	16	154 076 R11	GEAR w/BUSHING, 72 202 R1, mainshaft third speed
4	77 945 R1	RING, mainshaft snap	17	71 840 R1	RING, third and high speed synchronizer blocking (2)
5	ST 236	BEARING, main drive gear	18	71 835 R91	SYNCHRONIZER, mainshaft third and high speed clutch
6	71 843 R1	RING, mainshaft second speed gear snap	19	71 841 R1	RING, third and high speed synchronizer hub snap
7	82 092 R91	SYNCHRONIZER, low and second speed	20	91 092 R1	RING, reverse idler gear snap (2)
8	73 298 R1	SPRING, low and second speed synchronizer (3)	21	91 091 R1	WASHER, reverse idler gear thrust (2)
9	16 012 R1	BALL, 3/8" low and second speed synchronizer (3)	22	91 094 R1	ROLLER, reverse idler gear bearing (74)
10	71 847 R1	RING, second speed synchronizer blocking	23	91 089 R11	GEAR ASSY, reverse idler
11	154 075 R1	GEAR, mainshaft second speed			

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>TRANSMISSION - Continued</b> (Four Speed Synchromesh) (Warner)					
TRANSMISSION CASE, GEARS, CLUTCH HOUSING AND RELATED PARTS - Continued					
24	91 095 R1	SLEEVE, reverse idler gear bearing	55	179 839	SCREW, 3/8 x 1" hex hd cap (4)
25	91 093 R1	SPACER, reverse idler gear bearing	56	59 586 R91	OIL SEAL, mainshaft
26	59 423 R1	SHAFT, reverse idler gear	57	-	SCREW, 3/8 x 2" hex hd cap
27	317 628 R1	PLATE, countershaft reverse idler gear shift lock	58		GASKET, mainshaft rear bearing retainer
28	179 837 114 606	SCREW, 3/8 x 3/4" hex hd cap (2) WASHER, 3/8" lock (2)	80 225 R1 80 226 R1 80 227 R1 80 228 R1		.010" thick .015" thick .020" thick .025" thick
29	71 860 R1	COUNTERSHAFT	60	20 969 R1	PLUG, 3/4" sq. hd pipe (Steel) (optional with 219 301) (2)
30	71 859 R1	WASHER, countershaft rear thrust (outer)	60	219 301	PLUG, 3/4" sq. hd pipe (malleable iron) (optional with 20 969 R1)
31	154 078 R1	WASHER, countershaft rear thrust (inner)	61	179 883	SCREW, 3/8 x 5/8" hex hd cap (6)
32	59 572 R1	WASHER, countershaft bearing spacer (6)	62	103 323	WASHER, 3/8" external lock (6)
33	59 574 R1	ROLLER, countershaft gear bearing (88)	63	23 045 H	COVER, power take-off opening
34	95 363 R1	SPACER, countershaft gear bearing	64	111 082 R1	GASKET, power take-off opening cover
35	154 077 R1	GEAR, countershaft	65	317 626 R1	CASE, transmission
36	71 857 R1	WASHER, countershaft thrust	69		WASHER, 5/16" external lock (4)
37	91 090 R1	SHOE, reverse shifting	70		SCREW, 5/16 x 7/8" hex hd cap (4)
38	147 922 R1	ARM, reverse shifting	71	317 631 R1	RETAINER, main drive gear bearing
39	82 084 R1	WASHER, "C" shifting shoe	72	147 920 R1	OIL SEAL, pivot pin
40		GASKET, main drive gear bearing retainer	73	317 633 R1	HOUSING, clutch
	77 946 R1	.009" thick	74	317 634 R1	COVER, hand hole
	77 947 R1	.0135" thick	117 290		SCREW, 5/16 x 5/8" fil hd (2)
	77 948 R1	.018" thick	108 590		WASHER, 5/16" lock (2)
	77 949 R1	.0225" thick	75	317 635 R1	SHAFT, throwout (short)
42		RING, drive gear bearing snap (small)	76	317 637 R1	YOKE, throwout
	137 244 R1	.117" thick	77	HA-644	SCREW, lock (2)
	137 245 R1	.120" thick	78	317 636 R1	SHAFT, throwout (long)
	137 246 R1	.123" thick	79	271 285	FITTING, 1/8 x 90° lubrication (optional with 109 462) (2) (not part of Transmission ASSY, 313 739 R91)
	137 247 R1	.127" thick			
43	77 945 R1	RING, main drive gear bearing snap (large)			
44	82 076 R1	RING, main drive gear bearing spacer	79	109 462	FITTING, 1/8 x 90° lubrication (optional with 271 285) (2) (not part of Transmission ASSY, 313 739 R91)
45	ST 236	BEARING, main drive gear ball			
46	80 175 R1	BAFFLE, main drive gear oil	115 617 H		BOLT, 3/8 x 3/4" (2)
47	619 522 C1	GEAR, main drive	72 202 R1		BUSHING, mainshaft third speed gear
48	59 579 R1	ROLLER, mainshaft bearing (16)	2 751 156 R1		DECALCOMANIA, shifting diagram (not part of Transmission ASSY, 313 739 R91)
50	103 565	PIN, reverse shifting arm screw			
51	147 921 R1	PIN, reverse shifting arm pivot	82 082 R1		RING, shift plate retaining
52	71 855 R1	GASKET, control lever housing			SCREW, 1/2 x 1-1/4" hex hd cap (6)
53	80 224 R11	RETAINER w/SLEEVE, 26 905 H			WASHER, 1/2" lock (6)
54	114 606	WASHER, 3/8" external lock (5)	26 905 H		SLEEVE, speedometer drive gear

## ATTACHMENTS

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
TRANSMISSION - Continued (Four Speed Synchromesh) (Warner)					
TRANSMISSION CONTROL HOUSING AND LEVER					
1	71 877 R1	HOUSING, control lever	16	82 077 R1	SPRING, reverse speed shift end plunger poppet
2	82 075 R91	BREATHER	17	108 630	PIN, 1/8 x 1" cotter
3		NOT USED	18	62 892 HC	SPRING, reverse speed shift end plunger
4	103 736	PIN, control housing	19	82 086 R1	PLUNGER, reverse speed shift end
5	103 892	PLUG, expansion (6)	20	71 881 R1	FORK, third and direct speed shift
6	59 412 R1	PIN, shift bar interlock plunger	21	71 883 R1	END, low and second speed shift
7	71 879 R1	RAIL, third and direct speed shift	22	71 880 R1	RAIL, low and second speed shift
8	27 096 H	PLUNGER, shift bar interlock (2)	23	71 882 R1	FORK, low and second speed shift
9	16 012 R1	BALL, 3/8" shift bar poppet (3)	24	16 780 H	BALL, control lever
10	23 074 H	SPRING, shift bar poppet (3)	25	317 623 R1	LEVER, control
11	71 884 R1	RAIL, reverse speed shaft	26	82 078 R1	CAP, control housing
12	82 090 R1	END, reverse speed shift	27	32 192 R1	WASHER, control lever spring
13	82 083 R1	WASHER, "C" reverse speed plunger	28	27 098 HA	SPRING, control lever
14	23 079 H	SCREW, shift fork set (4)	29		WASHER, 3/8" lock (6)
15	16 008 R1	BALL, 1/4" reverse speed shift end plunger poppet	30		SCREW, 3/8 x 7/8" hex hd cap (6)
				83 780 R1	BALL, fulcrum
				30 443 V	PLUG, speedometer opening (not part of transmission ASSY, 313 739 R91)

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332 488 R91	85	349 143 R1	79	364 913 R1	7	367 726 R1	19
332 516 R91	82	349 144 R91	78	366 317 R93	61	367 740 R1	18
336 419 R91	71	349 145 R91	104	366 317 R93	63	367 741 R1	19
336 419 R91	73	349 146 R1	104	366 317 R93	80	367 742 R1	18
336 419 R91	93	349 147 R1	82	366 317 R93	91	367 812 R91	41
337 112 R2	93	349 148 R1	82	366 460 R1	103	367 839 R92	49
337 113 R11	93	351 588 R1	25	367 190 R1	16	368 051 R11	49
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337 354 R3	69	352 110 R91	68	367 192 R1	16	368 054 R1	49
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337 354 R3	93	352 221 R1	29	367 240 R1	1	368 059 R91	49
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338 343 R92	22	352 277 R11	49	367 259 R92	24	368 096 R1	49
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338 543 R91	98	352 642 R91	25	367 269 R91	12	368 139 R91	24
338 543 R91	100	353 018 R92	78	367 270 R92	12	368 142 R1	24
338 543 R91	103	353 172 R91	49	367 271 R92	12	368 143 R1	24
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338 903 R1	99	353 903 R92	49	367 282 R91	13	368 149 R91	25
338 949 R91	13	353 905 R1	49	367 285 R91	13	368 150 R1	25
338 952 R91	109	353 906 R1	49	367 288 R91	13	368 245 R12	89
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368 429 R31	9	372 567 R91	12	379 598 R1	24	388 593 R91	49
368 501 R2	39	372 568 R1	12	379 813 R95	24	389 751 R1	6
368 502 R1	39	372 569 R91	12	379 817 R95	6	391 976 R91	11
368 504 R1	39	372 615 R94	15	379 818 R95	6	393 405 R91	19
368 505 R1	39	372 699 R3	16	379 819 R95	6	395 330 R92	46
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368 550 R11	17	372 709 R2	18	379 821 R95	6	397 299 R1	44
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368 939 R93	19	372 722 R1	24	379 823 R95	6	398 024 R1	45
368 985 R2	9	372 723 R92	24	379 824 R95	6	398 032 R1	11
368 986 R91	9	372 770 R95	45	379 825 R95	6	398 034 R1	11
369 013 R1	41	372 867 R92	49	379 826 R95	6	398 080 R2	43
369 013 R1	49	372 868 R11	49	380 500 R1	25	399 441 R1	6
369 442 R1	9	372 875 R1	46	380 646 R97	4	399 446 R1	17
369 477 R1	19	372 951 R91	49	380 647 R97	4	399 447 R1	17
369 593 R1	18	372 963 R91	49	380 648 R97	4	400 877 R1	17
369 594 R1	18	373 173 R1	30	380 649 R97	4	400 878 R1	17
369 981 R1	9	373 174 R91	30	382 355 R91	12	400 878 R1	45
369 981 R1	45	373 187 R91	28	382 356 R91	12	400 899 R92	45
369 982 R1	9	373 189 R1	27	382 357 R91	13	402 896 R91	8
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369 987 R1	80	373 963 R91	49	383 178 R91	49	530 681 R1	24
369 987 R1	90	374 325 R95	24	383 376 R1	28	530 681 R1	28
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370 594 R91	66	374 795 R1	19	384 523 R12	44	532 496 R1	45
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370 862 R1	24	375 604 R91	16	384 526 R2	43	534 178 R91	43
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370 940 R11	93	376 353 R1	9	384 527 R1	44	534 196 R1	43
371 088 R92	27	376 589 R92	19	384 528 R2	44	534 196 R1	45
371 088 R92	33	376 590 R11	18	384 529 R1	44	535 166 R1	16
371 088 R92	36	376 591 R1	19	384 530 R11	44	535 166 R1	45
371 089 R92	2	376 592 R2	18	384 532 R1	44	535 229 R1	16
371 090 R92	2	376 665 R91	3	384 532 R1	45	538 983 R1	9
371 091 R92	2	376 665 R91	4	384 533 R91	44	539 379 R1	2
371 092 R92	2	376 665 R91	7	384 535 R1	44	539 379 R1	4
371 097 R11	17	376 666 R11	2	384 535 R1	45	539 379 R1	6
371 098 R1	17	376 666 R11	4	384 537 R2	44	539 380 R1	6
371 100 R91	29	376 666 R11	7	384 537 R2	45	539 381 R1	6
371 100 R91	32	376 667 R91	3	384 830 R1	49	539 382 R1	6
371 102 R1	33	376 667 R91	5	384 831 R11	49	572 082 R1	115
371 103 R1	32	376 667 R91	7	384 991 R1	53	572 937 R1	116
371 104 R1	32	376 668 R11	3	384 992 R1	53	572 959 R1	115
371 105 R1	32	376 668 R11	4	384 993 R1	53	572 960 R1	116
371 106 R2	33	376 668 R11	7	384 995 R1	53	572 964 R1	115
371 215 R1	27	376 670 R91	13	384 996 R1	53	573 657 R1	116
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371 833 R92	2	378 237 R1	45	388 046 R92	6	588 371 R92	115
372 082 R94	2	378 600 R97	4	388 047 R92	6	588 388 R1	116
372 084 R92	2	378 601 R97	4	388 048 R92	6	588 389 R1	115
372 443 R91	3	378 603 R97	4	388 049 R92	6	588 391 R1	115
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**NEW AND DISPLACED PARTS LIST**

**NOTE:** This list is prepared to assist distributor parts personnel in keeping their inventory records current.

The information on this sheet will not be covered in future revisions, so you may want to retain this copy. Future revisions will include new and displaced parts information for that revision only.

New and displaced parts listed below are new and displaced parts for applications shown on pages listed for this machine, not necessarily new and displaced for other applications for this machine or in the IH system.

The following is a list of new and displaced parts for the Model UC-221, UC-263 Parts Catalog, Form PU-52E released since PU-52D dated May, 1971.

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	-----	398 751 R1		538 983 R1	403 066 R91
	-----	388 355 R1		368 429 R31	368 429 R21
	539 379 R1	400 366 R91		306 671 R1	-----
15	280 318 C1	316 366 R1		306 672 R1	-----
16	-----	389 747 R1		306 673 R1	-----
	-----	398 751		306 674 R1	-----
	-----	388 355 R1	25	-----	318 441 R1
	-----	399 441 R1		19 992 R1	179 890
	539 379 R1	400 366 R91		141 285	-----
17	280 318 C1	316 366 R1		532 496 R1	532 456 R1
18	-----	389 747 R1		278 271 R1	-----
	-----	389 748 R1		19 517 D	-----
	-----	389 749 R1		539 379 R1	-----
	-----	389 750 R1		70 133 R1	-----
	-----	389 752 R1		58 516 H	-----
	-----	389 753 R1	26	615 090 R1	614 090 R1
	-----	389 754 R1	29	911 776 R3	911 776 R2
	-----	400 363 R1		126 373 R1	112 508 R1
	-----	400 364 R1		112 508 R1	-----
	-----	400 364 R1		126 229 R1	-----
	-----	400 365 R1		112 509 R1	-----
	539 379 R1	400 366 R1	33	372 709 R2	367 739 R2
	539 380 R1	400 367 R1	38	16 445 D	-----
	539 381 R1	400 368 R1		84 838 R94	84 838 R93
	539 382 R1	400 369 R1		-----	90 623 R1
	388 045 R92	-----		-----	90 610 R91
	379 817 R95	-----		-----	90 625 R91
	388 046 R92	-----		-----	90 626 R1
	379 818 R95	-----		-----	109 313 R11
	388 047 R92	-----		-----	109 317 R1
	379 819 R95	-----		-----	109 315 R91
	388 048 R95	-----		-----	90 606 R1
	379 820 R95	-----		-----	90 598 R1
	388 049 R92	-----		-----	90 619 R1
	379 821 R95	-----		-----	90 603 R1
22	280 318 C1	316 366 R1		-----	90 618 R1
				-----	109 318 R1

\* - For ordering procedure for displaced part shown, refer to this catalog.

# - Detail parts for this assembly or attachment are all new and are listed on the page shown in this revision.

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The following is a list of new and displaced parts for the Model UC-221, UC-263 Parts Catalog.  
 Form PU-52E released since PU-52D dated May, 1971.

PAGE NO.	NEW PART NUMBER	DISPLACED PART NUMBER	PAGE No.	NEW PART NUMBER	DISPLACED PART NUMBER
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	535 166 R1	-----		-----	404 392 R1
	866 834 R1	-----		271 066 R92	264 164 R91
63	-----	318 437 R91	88	-----	370 535 R1
	-----	370 534 R11		-----	362 120 R1
	395 330 R92	-----		-----	395 330 R2
64	-----	368 267 R1	90	-----	404 392 R1
	187 902 R1	-----		-----	264 164 R91
	251 553 R1	-----		-----	370 535 R1
	372 575 R1	-----		-----	362 120 R1
	533 977 R1	-----		271 066 R92	-----
	177 056	-----		603 884 C91	-----
	-----	370 535 R1		-----	349 144 R91
64	-----	353 936 R2	93	-----	313 625 R91
67	1 108 438	-----	96	-----	353 018 R92
68	1 969 568	-----	98	-----	2 751 188 R1
	9 421 424	-----	99	-----	305 185 R92
	1 968 396	-----		-----	332 516 R91
	1 966 923	-----	105	678 252 C1	276 250 R91
	1 960 864	-----	127	278 278 R2	268 228 R11
	443 527	-----	134	276 575 R1	312 501 R1
	820 148	-----	135	276 566	188 287 R1
	9 427 815	-----			573 655 R1
	9 427 882	-----			
69	-----	318 434 R91			
71	908 019	904 751			
	1 970 525	1 959 917			
	800 832	-----			
72	1 944 373	1 978 183			
	1 916 324	1 908 829			
	1 925 378	1 922 288			
	1 858 749	1 921 860			
	1 939 902	1 912 725			
	1 914 580	1 905 370			
	1 940 161	1 925 210			
	1 923 284	1 921 369			
	1 925 379	192 289			

\* - For ordering procedure for displaced part shown, refer to this catalog.

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