

**D/DT-239  
DIESEL ENGINES  
FOR CONSTRUCTION EQUIPMENT  
APPLICATIONS  
FORM  
EPC-239-4**

**JUNE, 1980**

**(Includes Partial Rev. No. 3 Dated 12-83)**

**(Supersedes Form EPC-239-3)**

**NOTE: Industrial Product Applications Were Formerly  
Listed in Form ENG-4.**

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

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



# SECTION INDEX

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The black tabs shown on the right-hand side of this page line up with the corresponding tabs in the catalog. Tabs are quickly located by bending the catalog.

TO THE OWNER

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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 AT ANY TIME WITHOUT INCURRING ANY OBLIGATION TO INSTALL SUCH CHANGES ON PRODUCTS PREVIOUSLY SOLD.

When ordering parts, always give the following information.

1. The IH Part number, including suffix or prefix letters, the name of the part and the quantity needed. Do not include the illustration reference number.
2. The complete engine serial number of the machine, including the serial sequence number and suffix letter code. (Refer to "SERIAL NUMBERS" in "INTRODUCTION".)

We suggest that you write the engine serial number in the space provided below, for ready reference when parts are needed.

ENGINE \_\_\_\_\_

(Stamped on the right hand side of the engine crankcase behind the oil filler or above the valve tappet cover.)

This catalog contains a list of service parts for the D and DT-239 Diesel Engines used in the following applications. (See NOTE):

<u>ENGINE</u>	<u>APPLICATION</u>
D-239	2500A, 2500B, 2544 and 3500A Tractors 2505B, 2510B, 3514 and 260A Loader Tractors 2514B Loader Backhoe Tractor 100E PAYloader TD-7E PAYdozer 250A PAYhoe 250A PAYloader 250A PAYtractor 260A PAYhoe 260A PAYloader
DT-239	125E PAYloader TD-8E PAYdozer

NOTE: For D-239 engine used in the TD-8C and 125C applications, refer to chassis parts catalog.

The D-239 is a four cylinder 3.875 x 5.060 inch naturally aspirated diesel engine. The DT-239 is a four cylinder 3.875 x 5.060 inch turbocharged diesel engine.

This catalog is divided into major sections which, in turn, are sub-divided into units. A listing of the major sections is shown on the flyleaf prefacing this publication. The tabs on the right hand side of the first page of each of these indexes correspond to the tabs shown on the flyleaf. A numerical index at the back of the catalog contains a listing of part numbers showing the section and page number where each part is listed and described.

Illustrations, in the form of exploded views, are provided to aid in locating and identifying parts. Parts illustrated are of typical parts and not necessarily detailed drawing. Reference numbers in the illustration tie-in each simple part, assembly or group of parts with a list of parts following each illustration. Parts are listed in reference number order as shown in the illustration, followed by the noun name of the part with the modifying descriptive information which serves to specifically identify the item. Parts not shown in the illustrations appear at the end of the unit list affected. Parts listed are for all applications. When parts are not common to all applications, the reference number will be followed by the phrase "See individual engine variations."

Locate your specific applications under heading "ENGINE VARIATIONS" located at end of unit parts list.

ASSEMBLIES. Wherever possible the component parts of assemblies are shown in the "exploded views" by use of boxes, brackets or arrows. When assemblies can not be shown as mentioned they will be listed by one of the following methods.

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

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

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

The quantity of each item is shown following the description of the item. Where no quantity is shown, this indicates that only "-1-" is required.

Individual parts of an assembly not available for service are shown with the symbol (§). In these cases, the complete assembly must be ordered for service.

In many parts lists, it is possible to include more than one assembly. The assemblies are listed at the beginning of the parts lists with the letters A, B, C, etc., preceding the part number of the assembly. 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 (1) is required. Parts without letters after the description indicate the part is used for all assemblies listed in the heading.

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

## 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.

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 Coarse Thread unless otherwise specified. The number of threads per inch will be eliminated.

Hardware sizes will only be shown when more than one size is used to mount a part. Only one dimension will be shown to differentiate hardware.

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 Bolts	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

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."

WHEN ORDERING PARTS, ALWAYS USE INTERNATIONAL HARVESTER PART NUMBERS AND DESCRIPTIONS SHOWN IN THE PARTS LIST.

### SERIAL NUMBERS

<u>MODEL</u>	<u>ENGINE SERIAL NUMBER (+)</u>
3514 } 2544 }	239DT2D (*)
TD-7E	239DCDO50000
100E	239DCDO50000
TD-8E	239TC2D001000
125E	239TC2D001000

### GEAR DRIVE (SM) TRANSMISSION

250A	239DT2D640000
2500A } 2500B } 2505B } 2510B } 2514B } 3500A }	239DT2D060000

### HYDROSTATIC (HS) TRANSMISSION

250A	239DT2D646000
260A	239DT2D652000
2500A } 2500B } 2505B } 2510B } 2514B }	239DT2D440000
3500A	239DT2D180000

### TORQUE CONVERTER (TC) TRANSMISSION

250A	239DT2D700000
260A	239DT2D705000

(\*) - Starting sequence number not available at time of printing.

(+) - Only the sequence number of the complete engine serial number is listed in this catalog to identify parts except the following:

Some models were built with the following engine serial number designations and will be listed in this catalog:

<u>MODEL</u>	<u>ENGINE SERIAL NUMBER DESIGNATION</u>
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2544 (GEAR DRIVE)	44
2544 (HYDROSTATIC)	45
3514 (GEAR DRIVE)	46
3514 (HYDROSTATIC)	47

The engine serial number is stamped on the right hand side of the crankcase behind the oil filler or above the valve tappet cover.

A Suffix Letter Code, as outlined below, is added to the Engine Serial Number as a means of identifying tractors with special features, thus facilitating servicing. This code applies primarily to special features that replace standard parts or units used internally, but also may be used to identify tractors equipped with one of two or more optional parts where identification of said optional parts is deemed necessary to proper servicing. Each suffix letter used is stamped in the blank space following the serial number on the Engine Block following the Engine Serial Number.

Attachments that do not affect replacement of standard parts or units have not been coded.

## SUFFIX LETTER ON ENGINE BLOCK

U HIGH-ALTITUDE ATTACHMENT

Customers should be urged to supply the complete engine serial number when ordering parts. No attempt is made at the factory to have the engine and chassis serial numbers correspond.

## DESIGNATION OF PARTS

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

REFER TO SECTION TWO FOR "QUICK REFERENCE LIST FOR FILTERS, FILTER ELEMENTS AND BELTS."

**ALPHABETICAL INDEX**

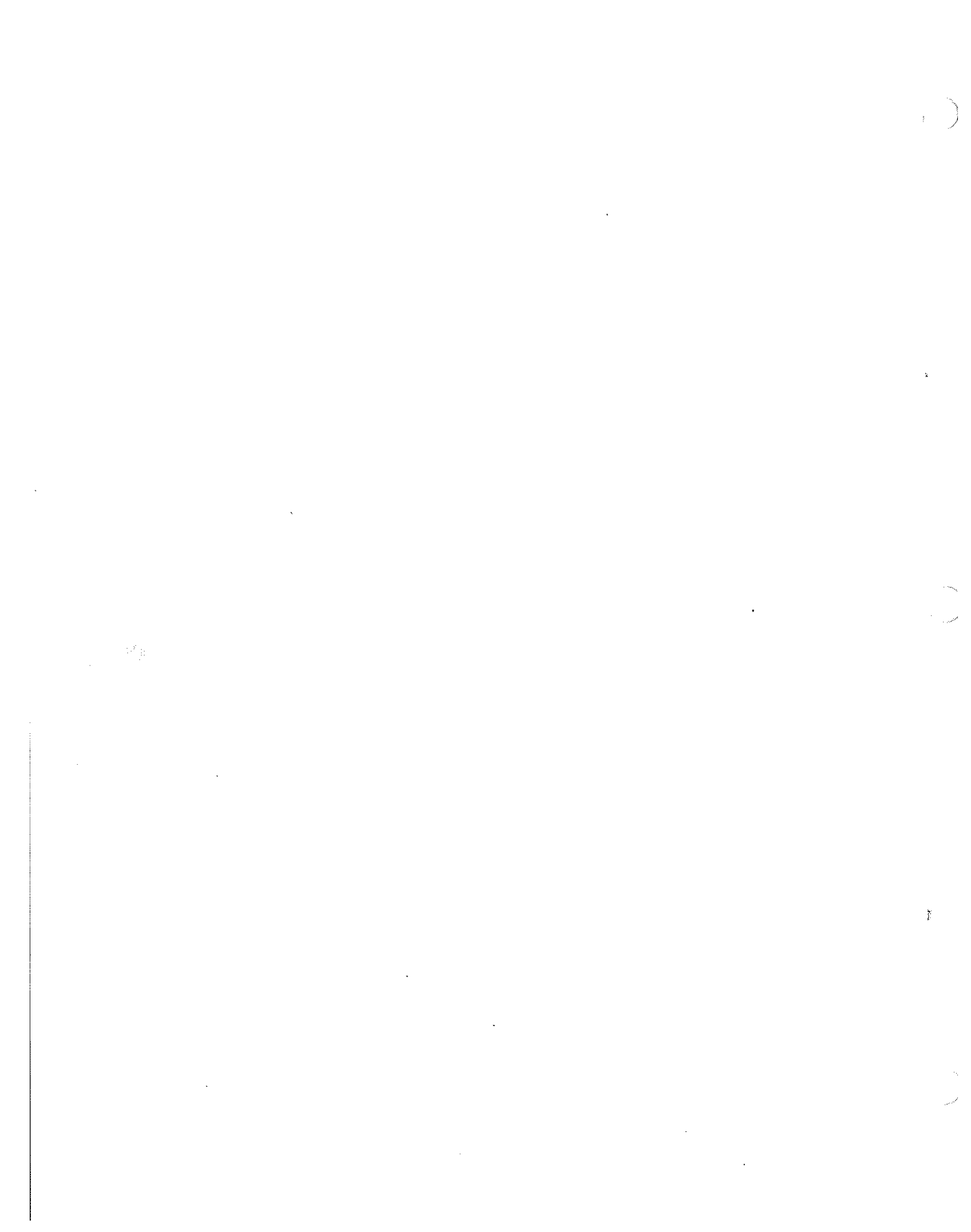
DESCRIPTION	PAGE	FICHE	DESCRIPTION	PAGE	FICHE
<u>A</u>			Lubricating Oil .....	13-2, 13-3, 13-4	
Alternator (Not furnished with Replacement Service Engine) .....	(%)		Flywheel! .....	7-2	
Adapter, engine .....	10-2		Flywheel Housing .....	10-3	
<u>B</u>			Fuel Injection Pump .....	11-18, 11-24, 11-29	
Balancer .....	7-4, 7-5		<u>G</u>		
Bearings			Gauge, oil pressure .....	13-8	
Camshaft .....	6-3		Gears		
Connecting Rod .....	4-2		Camshaft .....	3-2	
Crankshaft .....	7-3		Idler .....	6-3	
Belt, water pump and alternator (Not furnished with Replacement Service Engine) .....	(%)		Flywheel Ring .....	7-4	
Blade, fan .....	(%)		<u>H</u>		
Brackets			Head, cylinder .....	8-2, 8-5	
Alternator .....	9-2		Housing, flywheel .....	10-3	
Air Cleaner .....	10-3		<u>I</u>		
Breather .....	6-4, 8-4		Idler Gear .....	6-3	
<u>C</u>			<u>K</u>		
Camshaft .....	3-2		Kit, crankshaft bearing cap .....	6-3	
Connecting Rods .....	4-2		<u>M</u>		
Cooler, lubricating oil .....	13-4		Manifold, exhaust and intake .....	14-2, 14-3	
Connections			Muffler, exhaust (Not furnished w/Replacement Service Engine) ..	(%)	
Fuel Injection Pump .....	11-2		<u>N</u>		
Fuel Feed Pump .....	11-17		Nozzle and Nozzle Holder .....	11-34, 11-35	
Turbocharger .....	15-2		Nozzle Mounting Crab .....	8-3	
Covers			<u>P</u>		
Crankcase front .....	6-8, 6-11		Packages, service .....	2-3	
Valve housing .....	8-4, 8-5		Pan, crankcase oil .....	6-6	
Crankcase .....	6-2		Pistons .....	4-2	
Cranking Motor (Not furnished w/Replacement Service Engine) .....	(%)		Pumps		
Crankshaft .....	7-2		Fuel Injection .....	11-18, 11-24, 11-29	
Cylinder Head .....	8-2, 8-5		Fuel Feed .....	11-33	
<u>D</u>			Lubricating Oil .....	13-6, 13-7	
Damper, vibration .....	7-2		Water .....	5-2, 5-5	
<u>E</u>			Pulley, water pump .....	5-2, 5-5	
Engine			Push Rods .....	3-2	
Ready-to-Run .....	1-2		(%) Refer to Chassis Parts Catalog.		
Skeleton .....	1-2				
Support .....	10-2				
Exhaust, manifold .....	14-2, 14-3				
<u>F</u>					
Fan .....	(%)				
Filters					
Fuel .....	11-36, 11-37				



# ALPHABETICAL INDEX

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DESCRIPTION	PAGE	FICHE		DESCRIPTION	PAGE	FICHE
<u>Q</u>						
Quick Reference for Filter Elements and Belts .....	2-2					
<u>R</u>						
Rods						
Connecting .....	4-2					
Valve push. ....	3-2					
Rocker Arms. ....	8-3, 8-6					
Rings, piston .....	4-2					
<u>S</u>						
Sleeve, cylinder .....	4-2					
Switch, oil pressure .....	13-8					
<u>T</u>						
Tappet, valve .....	3-2					
Thermostat .....	5-2, 5-5					
Turbocharger .....	15-3					
<u>V</u>						
Valves						
Exhaust. ....	8-3, 8-6					
Intake .....	8-3, 8-6					
Vibration Damper .....	7-2					
<u>W</u>						
Water pump. ....	5-2, 5-5					



**REFER TO ALPHABETICAL INDEX  
FOR COMPLETE LISTING OF PARTS**

# ENGINES

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>REPLACEMENT SERVICE ENGINE</b> (See NOTE A)			<b>SKELETON SERVICE ENGINE</b> (See NOTE A)		
3 136 263 R94		ENGINE, replacement service (For 2500A, 2500B, 2505B, 2510B, and 2514 with Synchromesh Transmission) (See NOTE C)	3 144 170 R91		ENGINE, skeleton service (For ALL Models except TD-8E and 125E) (Consists of - Camshaft w/Gear and Bearings Connecting Rods w/Bearings Crankcase Assembly Crankshaft w/Bearings Piston w/Pins, Sleeves and Rings Balancer )
3 144 470 R93		ENGINE, replacement service (For 2500A, 2500B, 2505B, 2510B, and 2514B with Hydrostatic Transmission) (See NOTE B)			
3 139 190 R95		ENGINE, replacement service (For 3500A Synchromesh and Hydrostatic Transmission, also order PUMP, 546 599 R93) (See NOTE C)	3 144 825 R91		ENGINE, skeleton service (For TD-8E and 125E) (Consists of - Camshaft w/Gear and Bearings Connecting Rods w/Bearing Crankcase Assembly Crankshaft w/Bearings Piston w/Pins, Sleeves and Rings Balancer )
3 144 617 R92		ENGINE, replacement service (For TD-7E and 100E) (See NOTE B)			
3 144 619 R92		ENGINE, replacement service (For TD-8E and 125E) (See NOTE B)			
3 218 750 R92		ENGINE, replacement service (For 250A w/Synchromesh Transmission) (See NOTE C)			
3 218 760 R92		ENGINE, replacement service (For 250A w/Hydrostatic Transmission) (See NOTE C)			
3 218 560 R92		ENGINE, replacement service (For 250A w/Torque Converter Transmission) (See NOTE C)			
3 218 086 R93		ENGINE, replacement service (For 260A w/Hydrostatic Transmission) (See NOTE C)			
3 218 570 R93		ENGINE, replacement service (For 260A w/Torque Converter Transmission) (See NOTE C)			

NOTE A: When ordering a Service Engine, give complete serial number (including letters and numerals) shown on crankcase of engine to be replaced.

NOTE B: Includes all current parts listed throughout this catalog for this particular engine variation, except as noted. Optional parts, packages and (X) - As required parts listed in Section 2 thru 17 are not included.

NOTE C: Engine no longer available. Service parts will be furnished throughout this catalog. Skeleton engine is available for service.

REFER TO ALPHABETICAL INDEX  
FOR COMPLETE LISTING OF PARTS

**MISCELLANEOUS**

**QUICK REFERENCE  
FOR  
FILTER ELEMENTS AND BELTS**

Engine	Model	Fuel Filters	Lubrication Filters	Belts — Fan, Water Pump and Alternator
D-239	2500A, 2500B, 2505B, 2510B, 2514B, 2544, 3500A, 3514 250A TC 250A SM 250A HS	3 144 477 R92  700551 and below 640237 and below 646363 and below	3 136 046 R93 or 398 080 R2	Refer to Chassis Parts Catalog
	250 ATC 250A SM 250A HS	3 132 428 R2 700552 and up 640237 and up 646363 and up		
D-239	260A	3 132 428 R2	3 132 737 R93	
D-239	TD-7E and 100E	3 144 477 R92 051516 and below  3 132 428 R2 051517 and up		
DT-239	TD-8E and 125E	3 144 477 R92 003048 and below  3 132 428 R2 003049 and up	3 132 737 R93	

# MISCELLANEOUS

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REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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## PACKAGES AND KITS

NOTE: For detail list of parts, refer to page indicated.

SECTION	Page
<b>SECTION 4 – CONNECTING ROD AND PISTON</b>	
3 059 263 R93 SET, piston ring (For four ring pistons) (All models) . . . . .	4-2
3 138 670 R92 SET, piston ring (For four ring pistons) (All models) . . . . .	4-2
3 139 594 R91 SET, piston ring (For three ring pistons) (TD-7E and 100E) . . . . .	4-3, 4-4
3 144 518 R92 SET, piston ring (For three ring pistons) (TD-8E and 125E) . . . . .	4-4
3 218 416 R91 SET, piston ring (For three ring pistons) (All Models, except TD-7E, TD-8E, 100E and 125E) . . . . .	4-4
3 144 452 R92 SET, piston ring (For three ring pistons) (All Models, except TD-7E, TD-8E, 100E and 125E) . . . . .	4-4
<b>SECTION 5 – COOLING</b>	
3 055 285 R93 PACKAGE, water pump reconditioning (For all models) . . . . .	5-2, 5-5
3 218 768 R91 PACKAGE, water pump body reconditioning (For TD-7E, TD-8E, 100E and 125E) . . . . .	5-6
3 218 771 R91 PACKAGE, water pump bearing reconditioning (For TD-7E, TD-8E, 100E and 125E) . . . . .	5-6
<b>SECTION 6 – CRANKCASE</b>	
3 144 434 R91 KIT, crankshaft bearing cap (rear) . . . . .	6-3
3 144 440 R91 KIT, crankshaft bearing cap (intermediate) . . . . .	6-3
3 228 431 R91 PACKAGE, crankcase gasket (For TD-7E, TD-8E, 100E and 125E) . . . . .	6-3
3 136 813 R99 PACKAGE, crankcase gasket (For all Models, except TD-7E, TD-8E, 100E and 125E) . . . . .	6-4
<b>SECTION 7 – CRANKSHAFT</b>	
3 228 133 R93 PACKAGE, crankshaft oil seal service . . . . .	7-3
<b>SECTION 8 – CYLINDER HEAD</b>	
3 132 292 R92 PACKAGE, intake rocker arm . . . . .	8-3, 8-6
3 132 293 R92 PACKAGE, exhaust rocker arm . . . . .	8-3, 8-6
3 136 799 R99 PACKAGE, cylinder head gasket (For all Models, except TD-7E, TD-8E, 100E and 125E) . . . . .	8-4
3 144 786 R92 PACKAGE, valve housing cover breather field improvement . . . . .	8-4
3 136 800 R98 PACKAGE, cylinder head gasket (For TD-7E and 100E) . . . . .	8-7
3 144 826 R94 PACKAGE, cylinder head gasket (For TD-8E and 125E) . . . . .	8-7
3 228 677 R91 PACKAGE, valve seals service . . . . .	8-4, 8-6
<b>SECTION 11 – FUEL SYSTEM</b>	
3 144 477 R92 PACKAGE, filter service . . . . .	11-36
3 078 526 R91 PACKAGE, fueling pump gasket . . . . .	11-28, 11-31
3 132 290 R91 PACKAGE, fueling pump shim service . . . . .	11-21
3 059 093 R91 SET, fuel pump gasket – external . . . . .	11-22
3 059 094 R93 SET, fuel pump gasket – internal . . . . .	11-23
3 218 819 R91 PACKAGE, fuel pump support . . . . .	11-28
3 136 002 R91 PACKAGE, fuel feed pump repair . . . . .	11-33
<b>SECTION 13 – LUBRICATION</b>	
3 132 305 R92 PACKAGE, piston relief valve service (For 2544, 3500, 3514 and 260A) . . . . .	13-7
3 132 503 R91 SET, oil pump gear (For all Models, except 2544, 3500, 3514 and 260A) . . . . .	13-6
3 136 450 R91 SET, oil pump gear (For 2544, 3500, 3514 and 260A) . . . . .	13-7
<b>SECTION 15 – TURBOCHARGER</b>	
3 078 878 R91 PACKAGE, turbocharger reconditioning . . . . .	15-4

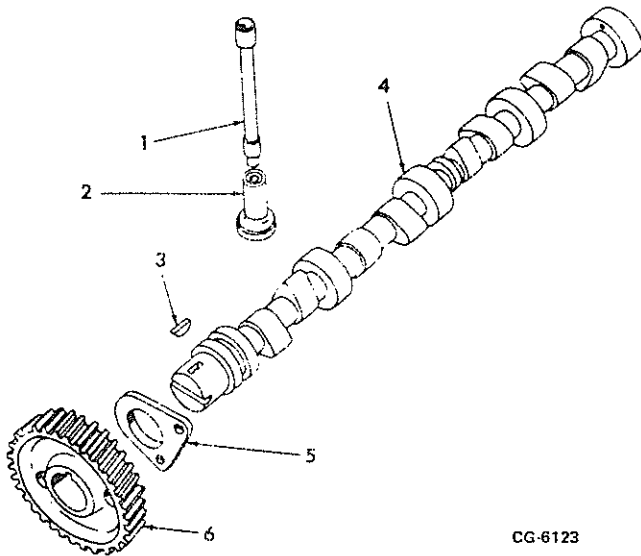




**REFER TO ALPHABETICAL INDEX  
FOR COMPLETE LISTING OF PARTS**

**CAMSHAFT**

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

CG-6123

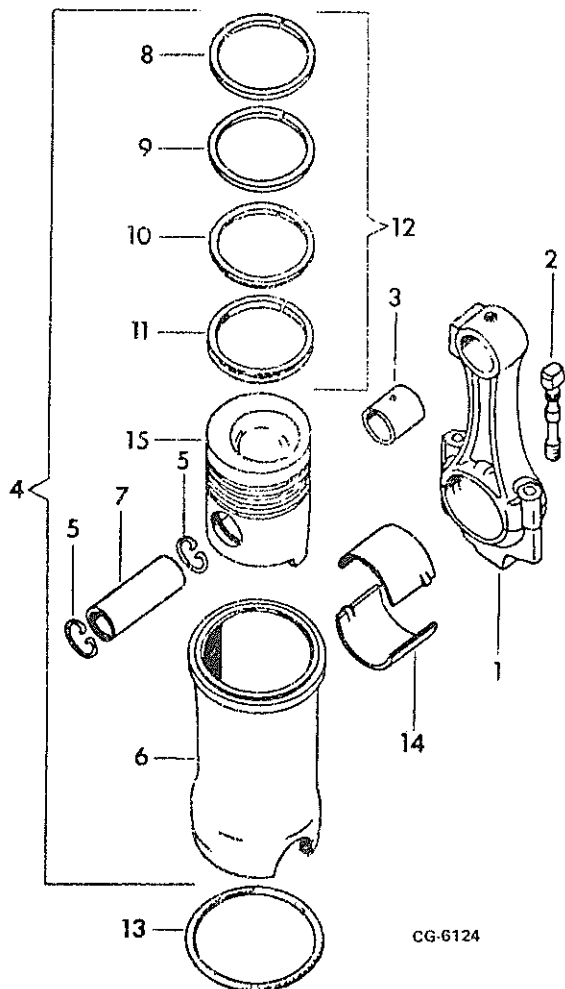
1	3 144 341 R1	ROD, valve push (8)
2	3 055 052 R1	TAPPET, valve (8)
3	124 551	KEY, Woodruff (replaces 112 139)
4	3 055 046 R3	CAMSHAFT
5	3 055 051 R2	PLATE, camshaft thrust
	OR	
5	3 218 896 R1	PLATE, camshaft thrust
	179 816	SCREW, hex-hd cap (2)
	3 050 129 R1	WASHER, lock (2)
6	3 055 176 R1	GEAR, camshaft (66 teeth)

**REFER TO ALPHABETICAL INDEX  
FOR COMPLETE LISTING OF PARTS**

## CONNECTING ROD AND PISTON

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REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CONNECTING RODS, PISTONS AND SLEEVES (4-Ring Pistons)</b>					
			3 218 539 R1		SHIM, cylinder sleeve counterbore (.10 mm) (X)
			3 218 540 R1		SHIM, cylinder sleeve counterbore (.25 mm) (X)
			3 218 541 R1		SHIM, cylinder sleeve counterbore (.50 mm) (X)
			3 218 542 R1		SHIM, cylinder sleeve counterbore (.80 mm) (X)
			7	3 055 217 R2	PIN, piston (4)
			8		RING, piston compression (First) (Not Furnished Separately) (4)
			9		RING, piston compression (Second) (Not Furnished Separately) (4)
			10		RING, piston compression (Third) (Not Furnished Separately) (4)
			11		RING, piston oil (Not Furnished Separately) (4)
			12	3 059 263 R93	SET, piston ring (Consists of three compression and one oil ring) (4)
			12	3 138 670 R92	SET, piston ring (Heavy duty and industrial, all chrome rings) (Consists of three compression and one oil ring) (4)
			13	3 228 344 R1	RING, cylinder sleeve packing
			14	3 055 351 R91	BEARING ASSY, connecting rod (Standard) (4)
			14	3 056 834 R11	BEARING ASSY, connecting rod (0.250 mm U/S) (4)
			14	3 056 879 R11	BEARING ASSY, connecting rod (0.500 mm U/S) (4)
			14	3 055 781 R11	BEARING ASSY, connecting rod (0.750 mm U/S) (No longer available) (4)
			15		PISTON (Order 3 ring type PISTON w/SLEEVE)
1	3 055 030 R24	ROD ASSY w/two BOLT, 3 055 033 R11, BUSHING 3 132 018 R2 and two NUT, connecting (Will work for ROD ASSY, 3 132 996 R91) (4)			
2	3 055 033 R11	BOLT w/NUT, connecting rod (8)			
3	3 132 018 R2	BUSHING, piston pin (4)			
4	3 138 882 R92	PISTON ASSY w/SLEEVES (Order 3 ring type PISTON w/SLEEVE) (4)			
5	933 327 R1	RING, piston pin retainer (8)			
6	3 139 592 R4	SLEEVE, cylinder			
	3 218 538 R1	SHIM, cylinder sleeve counterbore (.05 mm) (X)			



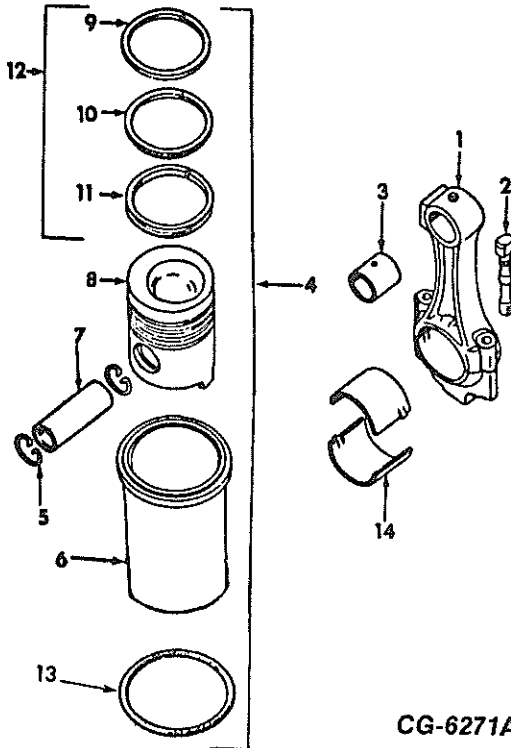
(X) - As Required.

## CONNECTING ROD AND PISTON

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**CONNECTING RODS, PISTONS AND SLEEVES  
(3-Ring Pistons)**



1	(See Individual Engine Variation)	
2	3 055 033 R11	BOLT, w/nut connecting (8)
3	(See Individual Engine Variation)	
4	(See Individual Engine Variation)	
5	(See Individual Engine Variation)	
6	3 139 592 R4	SLEEVE, cylinder (4)
	3 218 538 R1	SHIM, cylinder sleeve counterbore (.05 mm) (X)
	3 218 539 R1	SHIM, cylinder sleeve counterbore (.10 mm) (X)
	3 218 540 R1	SHIM, cylinder sleeve counterbore (.25 mm) (X)
	3 218 541 R1	SHIM, cylinder sleeve counterbore (.50 mm) (X)
	3 218 542 R1	SHIM, cylinder sleeve counterbore (.80 mm) (X)
7	(See Individual Engine Variation)	
8		PISTON (Not furnished separately) (4)
9		RING, piston compression (First) (Not furnished separately) (4)
10		RING, piston compression (Second) (Not furnished separately) (4)

11		RING, piston oil (Not furnished separately) (4)
12		(See individual Engine Variations)
13	3 228 348 R1	RING, cylinder sleeve packing (Replaces 3 055 021 R2) (4) 3500 HS - 182013 and up TD-7E/100E - 53693 and up TD-8E/125E - 5989 and up 260A HS - 653714 and up 260A TC - 706837 and up 250A TC - 700612 and up 250A HS - 646362 and up 250A SM - 640236 and up 2500A, 2500B, 2505B, 2510B, 2514 SM and HS - + and up
13	3 228 344 R1	RING, cylinder sleeve packing (4) 3500 HS - 182012 and below TD-7E/100E - 53692 and below TD-8E/125E - 5988 and below 260A HS - 653713 and below 260A TC - 706836 and below 250A TC - 700611 and below 250A HS - 646361 and below 250A SM - 640235 and below 2500A, 2500B, 2505B, 2510B, 2514 SM and HS - + and below
14	3 055 351 R91	BEARING ASSY, connecting rod (Standard) (4)
14	3 056 834 R11	BEARING ASSY, connecting rod (0.250 mm Undersize) (4)
14	3 056 879 R11	BEARING ASSY, connecting rod (0.500 mm Undersize) (4)
14	3 055 781 R11	BEARING ASSY, connecting rod (0.750 mm Undersize) (No longer available) (4)

ENGINE VARIATIONS

(TD-7E and 100E)

1	3 055 030 R24	ROD ASSY w/two BOLT, 3 055 033 R11, two NUT and BUSHING, 3 132 018 R2, connecting (4)
3	3 132 018 R2	BUSHING, piston pin (4)
4	3 139 591 R96	PISTON ASSY w/SLEEVE (4)
5	933 327 R1	RING, piston pin retainer (8)
	or	
5	3 228 245 R1	RING, piston pin retainer (8)
7	3 055 217 R2	PIN, piston (4)
12	3 139 594 R91	SET, piston ring (4) (replaces 687 014 C91)

(+) - Serial number not available.  
(X) - As Required.

## CONNECTING ROD AND PISTON

EPC-239-4

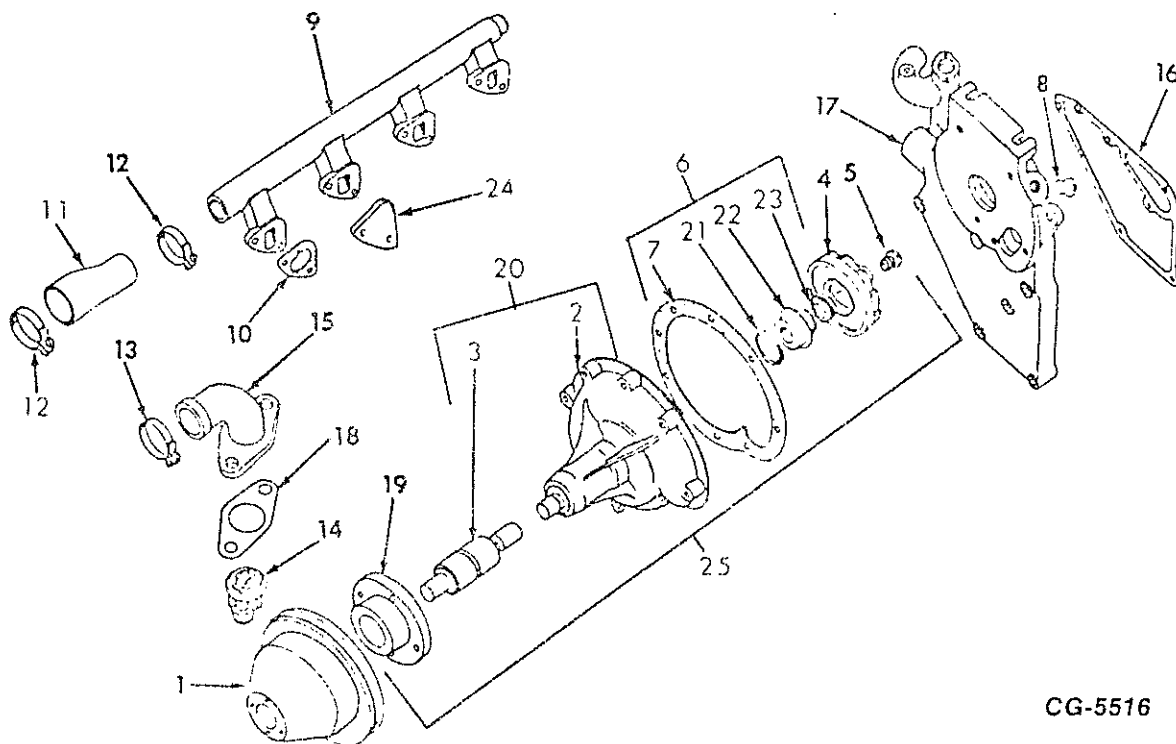
REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
CONNECTING RODS, PISTONS AND SLEEVES - Continued (3-Ring Pistons)			4	3 139 591 R96	PISTON ASSY w/SLEEVE (4) 250A w/Hydrostatic Transmission 646394 and up 250A w/Synchromesh Transmission 640277 and up 250A w/Torque Converter Trans- mission 700638 and up 2500A, 2500B, 2510B and 2514B w/Hydrostatic Transmission 476076 and up 260A w/Hydrostatic Transmission 653715 and up 260A w/Torque Converter Trans- mission 725095 and up
<u>ENGINE VARIATIONS - Continued</u>					
<u>(TD-8E and 125E)</u>					
1	3 144 741 R91	ROD ASSY w/two BOLT, 3 055 033 R11, two NUT, and BUSHING, 3 132 018 R2, connecting (4)			
3	3 144 740 R2	BUSHING, piston pin (4)			
4	3 144 516 R97	PISTON ASSY w/SLEEVE (4)	5	933 327 R1	RING, piston pin retainer (8)
5	3 228 422 R1	RING, piston pin retainer (8) (Replaces 934 592 R1)	5	3 228 245 R1	RING, piston pin retainer (8)
7	3 132 039 R2	PIN, piston (4)	7	3 055 217 R2	PIN, piston (4)
12	3 144 518 R92	SET, piston ring (4) (Replaces 3 139 594 R92, 687 014 R91)	12	3 218 416 R91	SET, piston ring (4) 2500A, 2500B, 2505B, 2510B, 2514B w/Synchromesh Trans- mission 2544 and 3514 3500A Synchromesh and Hydro- static Transmission 250A w/Hydrostatic Transmission 646393 and below 250A w/Synchromesh Transmission 640276 and below 250A w/Torque Converter Trans- mission 700637 and below 2500A, 2500B, 2505B, 2510B and 2514B w/Hydrostatic Transmission 476075 and below 260A w/Hydrostatic Transmission 653714 and below 260A w/Torque Converter Trans- mission 725094 and below
<u>(All Models except TD-7E, TD-8E, 100E and 125E)</u>					
1	3 055 030 R24	ROD ASSY w/two BOLT, 3 055 033 R11, two NUT, and BUSHING, 3 132 018 R2, connecting (4)			
3	3 132 018 R2	BUSHING, piston pin (4)			
4	3 218 759 R95	PISTON ASSY w/SLEEVE (4) (replaces 3 144 257 R93) 2500A, 2500B, 2505B, 2510B, 2514B w/Synchromesh transmission 2544 and 3514 3500A Synchromesh and Hydrostatic transmission 250A w/Hydrostatic Transmission 646393 and below 250A w/Synchromesh Transmission 640276 and below 250A w/Torque Converter Trans- mission 700 637 and below 2500A, 2500B, 2505B, 2510B and 2514B w/Hydrostatic Transmission 476075 and below 260A w/Hydrostatic Transmission 653714 and below 260A w/Torque Converter Trans- mission 725094 and below			
			12	3 144 452 R92	SET, piston ring (4) optional for 2500A, 2500B, 2505B, 2514B, 250A SM 640276 and below 250A HS 646393 and below 250A TC 700637 and below
			12	3 139 594 R91	SET, piston ring (4) 250A w/Hydrostatic Transmission 646394 and up 250A w/Synchromesh Transmission 640277 and up 250A w/Torque Converter Trans- mission 700638 and up 2500A, 2500B, 2505B, 2510B and 2514B w/Hydrostatic Transmission 476076 and up 260A w/Hydrostatic Transmission 653715 and up 260A w/Torque Converter Trans- mission 725095 and up

REFER TO ALPHABETICAL INDEX  
FOR COMPLETE LISTING OF PARTS

## COOLING

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**WATER PUMP, THERMOSTAT, THERMOSTAT BY-PASS AND RELATED PARTS**  
 (For 3514, 2544, 2500A, 2500B, 2505B, 2510B, 2514B, 3500A, 250A and 260A)



CG-5516

1	PULLEY, water pump (refer to Chassis Parts Catalog)	10	3 055 306 R1	GASKET, water collecting pipe (4) (See Individual Engine Variation)
2	HOUSING (Not Furnished separately)	11		(See Individual Engine Variation)
3	3 055 192 R91 BEARING, pump (replaces 3 144 445 R1)	12		(See Individual Engine Variation)
4	(See Individual Engine Variation)	13		(See Individual Engine Variation)
5	3 055 308 R1 PLUG, closing	14	3 228 046 R1	THERMOSTAT (180° to 203°) (Replaces 3 059 676 R91)
6	3 055 285 R93 PACKAGE, water pump recondition- ing	15		(See Individual Engine Variation)
7	3 055 177 R1 GASKET, water pump	16	3 055 999 R1	GASKET, water pump carrier
8	444 630 PLUG, 3/8" pipe	17		(See Individual Engine Variation)
9	(See Individual Engine Variation)	18	3 132 143 R1	GASKET, water outlet
		19	3 132 146 R1	HUB, water pump pulley
			OR	
		19	3 132 148 R1	HUB, water pump pulley
		20	3 132 677 R31	BODY ASSY, water pump



## COOLING

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REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>WATER PUMP, THERMOSTAT, THERMOSTAT BY-PASS, AND RELATED PARTS - Continued</b> (3514, 2544, 2500A, 2500B, 2505B, 2510B, 2514B, 3500A, 250A and 260A)			<u>(2500A, 2500B, 2505B, 2510B, 2514B, and 3500A)</u>		
21		RING, sealing (Not furnished separately)	4	3 055 211 R2	IMPELLER, water pump
22		RING, retainer with seal (Not Furnished separately)	9	3 055 255 R1	PIPE, water collecting 2500A, 2500B, 2505B, 2510B, 2514B - 98821 and below 3500A (SM) - 161329 and below 3500A (HS) - 181857 and below
23		RING, sealing (Not Furnished separately)		103 025	NUT, hex (8)
24	3 132 721 R1	PLATE, cover (2)		933 570 R1	WASHER, spring (7)
	103 025	SCREW, hex-hd (4)		712 616 R1	PLUG, hex-hd
	103 320	WASHER, lock (4)		933 610 R1	RING, packing
25		(See Individual Engine Variation)		3 136 506 R1	RING, packing
<b><u>ENGINE VARIATIONS</u></b>					
<b><u>2544 and 3514</u></b>					
4	787 579 R2	IMPELLER, water pump		103 025	NUT, hex (8)
9	3 055 255 R1	PIPE, water collecting		3 055 574 R1	WASHER, spring (3)
	103 025	NUT, hex (8)		103 320	WASHER, lock (4)
	3 218 395 R1	DISC, spring (7)		444 667	PLUG (2)
	933 610 R1	RING, packing		3 136 506 R1	RING, packing
	3 136 506 R1	RING, packing	11	3 132 144 R1	HOSE, pipe to carrier 2500A, 2500B, 2505B, 2510B, 2514B - 98821 and below 3500A (SM) - 161329 and below 3500A (HS) - 181857 and below
	712 616 R1	PLUG, hex-hd			
11	3 132 144 R1	HOSE, pipe to carrier			
12	3 218 259 R1	CLAMP, hose (2)			
13	3 136 499 R1	CLAMP, water pipe to thermostat	11	3 144 028 R1	HOSE, pipe to carrier 2500A, 2500B, 2505B, 2510B, 2514B - 98822 and up 3500A (SM) - 161330 and up 3500A (HS) - 181858 and up
15	3 132 352 R1	ELBOW, water outlet (For 2544)			
15	3 132 142 R2	FLANGE, water outlet (For 3514)	12	3 218 259 R1	CLAMP, hose (2) 2500A, 2500B, 2505B, 2510B, 2514B - 98821 and below 3500A (SM) - 161329 and below 3500A (HS) - 181857 and below
	179 840	SCREW, hex-hd cap (2)			
	103 321	WASHER, lock (2)			
17	3 136 678 R2	CARRIER, water pump (Replaces 3 132 141 R1)	12	3 144 921 R1	CLAMP, hose (2) 2500A, 2500B, 2505B, 2510B, 2514B - 98822 and up 3500A (SM) - 161330 and up 3500A (HS) - 181858 and up
	102 634	NUT, hex (2)			
	3 218 395 R1	DISC, spring (2)			
	445 686	PLUG, pipe			
	179 830	SCREW, 3" long hex-hd cap			
	186 270	SCREW, 3-1/2" long hex-hd cap (2)			
	103 320	WASHER, lock (4)			
25	3 132 739 R92	PUMP ASSY, water (Does not include item 7)	15	3 132 142 R2	FLANGE, water outlet
	179 822	SCREW, hex-hd cap (8)		179 840	SCREW, hex-hd cap (2)
	103 320	WASHER, lock (8)		3 050 221 R1	WASHER, lock (2)

## COOLING

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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WATER PUMP, THERMOSTAT, THERMOSTAT BY-PASS,  
AND RELATED PARTS - Continued  
(3514, 2544, 2500A, 2500B, 2505B, 2510B, 2514B,  
3500A, 250A and 260A)

ENGINE VARIATIONS - Continued

(2500A, 2500B, 2505B, 2510B, 2514B,  
and 3500A) - Continued

17	3 136 678 R2	CARRIER, water pump			
	179 830	SCREW (2 except 3500A)			
	186 270	SCREW (1 except 3 For 3500A)			
	186 272	SCREW, 4" hex-hd			
	102 634	NUT, hex (2)			
	445 686	PLUG, 1/2" pipe			
	3 050 129 R1	WASHER, lock (5)			
	3 055 574 R1	WASHER (1 For 3500A)			
25	3 136 053 R92	PUMP ASSY, water (Does not include item 7)			
	179 822	SCREW, 1-1/2" hex-hd cap (7)			
	3 050 129 R1	WASHER, lock (8)			
	28 301 R1	SCREW, 1-3/8" hex-hd cap			

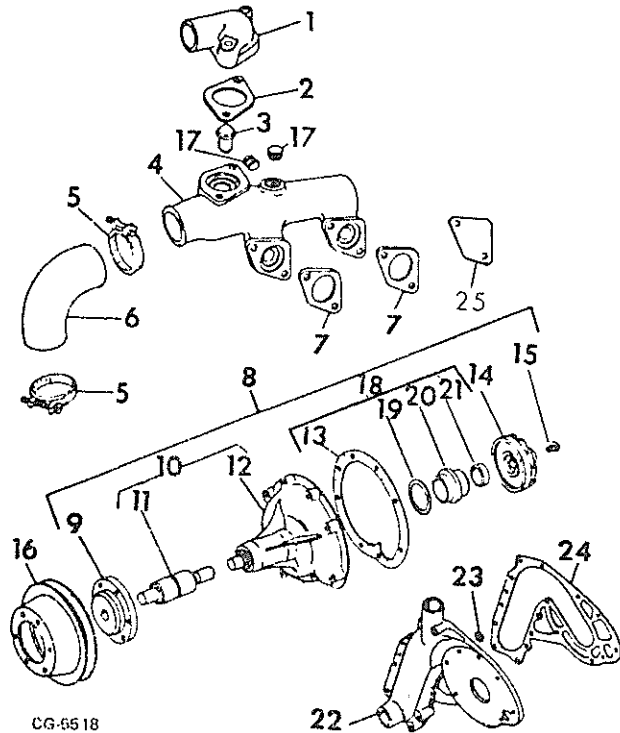
(250A and 260A)

4	3 055 211 R2	IMPELLER, water pump			
9	3 218 034 R1	PIPE, water collecting			
	103 025	NUT, hex (8)			
	3 055 574 R1	WASHER, spring (3)			
	103 320	WASHER, lock (4)			
	444 637	PLUG, pipe (2)			
	3 136 506 R1	RING, packing			
11	3 144 028 R1	HOSE, pipe to carrier			
12	3 218 259 R1	CLAMP, hose (Replaces 3 144 921 R1) (2)			
15	3 132 142 R2	ELBOW, water outlet			
	179 840	SCREW, hex-hd cap (2)			
	3 050 221 R1	WASHER, lock (2)			
17	3 136 678 R2	CARRIER, water pump			
	179 830	SCREW, 3" hex-hd (2)			
	186 276	SCREW, 3-1/2" hex-hd (3)			
	186 272	SCREW, 4" hex-hd (1)			
	102 634	NUT (2)			
	3 050 129 R1	WASHER, lock (5)			
	445 686	PLUG, 1/2" pipe			
	3 055 574 R1	WASHER			
25	3 136 053 R92	PUMP ASSY, water (Does not include item 7)			
	179 822	SCREW, 1-1/2" hex-hd cap (7)			
	3 050 129 R1	WASHER, lock (8)			
	28 301 R1	SCREW, 1-3/8" hex-hd cap			

# COOLING

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**WATER PUMP, THERMOSTAT, THERMOSTAT BY-PASS AND RELATED PARTS**  
(TD-7E, TD-8E, 100E and 125E)



CG-65 18

1	3 132 718 R1 179 847 103 321	ELBOW, water outlet SCREW, hex-hd cap (2) WASHER, lock (2)
2	3 132 143 R1	GASKET, water outlet elbow
3	3 228 046 R1	THERMOSTAT (180 to 203 Deg.) (Replaces 3 138 683 R1)
4	3 132 727 R2 103 025 103 320	MANIFOLD, water collecting NUT, hex (8) WASHER, lock (8)
5	3 218 259 R1	STRAP, clamping (2)
6	3 132 720 R1	HOSE, elbow to manifold
7	3 055 306 R1	GASKET, water collecting manifold (4)
8	3 144 456 R93 186 270 102 634 3 050 129 R1 28 300 R1	PUMP ASSY, water (Less Ref 13) SCREW, 3-1/2" hex-hd cap (3) NUT, hex (4) WASHER, lock (8) SCREW, 3-3/8" hex-hd cap

REF. NO.	PART NUMBER	DESCRIPTION
9	3 055 188 R1	HUB, pulley TD-7E 52678 and below TD-8E 4306 and below 100E 41065 and below 125E 41692 and below
9	3 218 766 R1	HUB, pulley TD-7E 52679 and up TD-8E 4307 and up 100E 41066 and up 125E 41693 and up
10	3 144 662 R92	BODY ASSY, pump (Order PACKAGE 3 218 768 R91) TD-7E 52678 and below TD-8E 4306 and below 100E 41065 and below 125E 41692 and below
10	3 218 769 R1	BODY ASSY, pump TD-7E 52679 and up TD-8E 4307 and up 100E 41066 and up 125E 41693 and up
11	3 144 445 R1	BEARING, pump (Order PACKAGE 3 218 771 R91) TD-7E 52678 and below TD-8E 4306 and below 100E 41065 and below 125E 41692 and below
11	3 218 765 R91	BEARING, pump TD-7E 52679 and up TD-8E 4307 and up 100E 41066 and up 125E 41693 and up
12		HOUSING, pump (Not furnished separately)
13	3 055 177 R1	GASKET, pump (Not part of PUMP ASSY)
14	787 579 R2	IMPELLER, pump
15	3 055 308 R1	PLUG, closing
16	3 055 178 R1 179 814 103 320	PULLEY, fan and pump SCREW, hex-hd cap (6) WASHER, lock (6)
17	444 667	PLUG, 1/2"NPTF pipe (3)
18	3 055 285 R93	PACKAGE, water pump reconditioning
19		RING, sealing (Not furnished separately)
20		RING, retainer with seal (Not furnished separately)
21		RING, seal (Not furnished separately)

## COOLING

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
WATER PUMP, THERMOSTAT, THERMOSTAT BY-PASS AND RELATED PARTS - Continued (TD-7E, TD-8E, 100E and 125E)					
22	3 138 524 R1	CHANNEL, water			
	179 818	SCREW, 1" long hex-hd cap (3)			
	179 825	SCREW, 1-7/8" long hex-hd cap			
	179 826	SCREW, 2" long hex-hd cap			
	426 444	SCREW, 3-1/4" long hex-hd cap (5)			
	102 634	NUT, hex (7)			
	933 570 R1	SPRING WASHER (5)			
	3 050 129 R1	WASHER, lock (5)			
23	3 055 246 R1	GASKET, water channel			
24	3 136 766 R2	GASKET, water channel			
25	3 132 721 R1	PLATE, cover			
	103 025	SCREW, hex-hd cap (2)			
	103 320	WASHER, lock (2)			
	3 218 768 R91	PACKAGE, water pump body reconditioning (Consists of			
		1 BODY w/			
		BEARING	3 218 769 R91		
		1 HUB	3 218 766 R1		
	3 218 771 R91	PACKAGE, water pump bearing reconditioning (Consists of			
		1 BEARING	3 218 765 R91		
		1 HUB	3 218 766 R1		

**REFER TO ALPHABETICAL INDEX  
FOR COMPLETE LISTING OF PARTS**

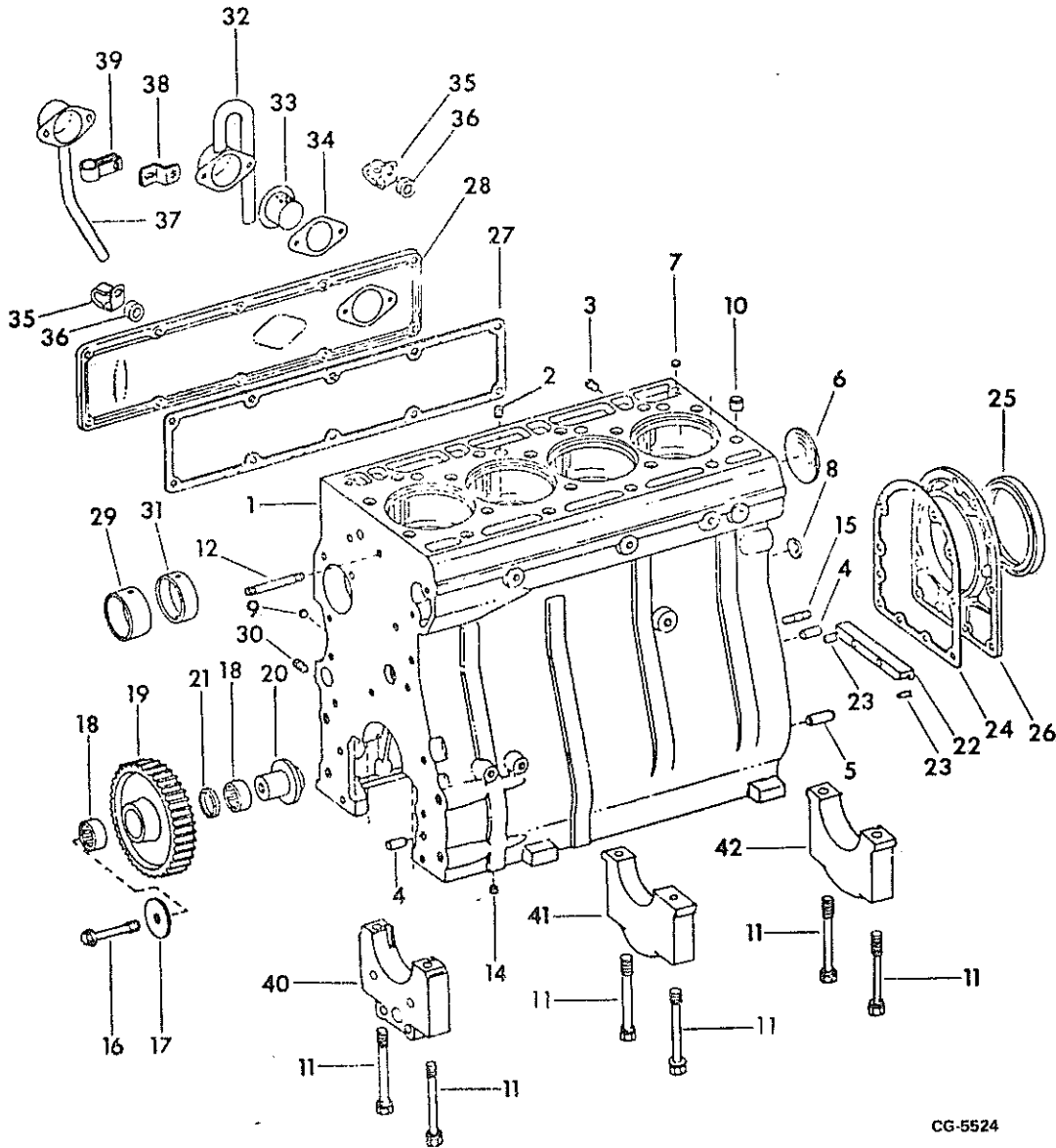
**CRANKCASE**

**6**

# CRANKCASE

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



CG-5524

1	3 228 620 R91	CRANKCASE ASSY (Will work for 3 132 154 R91 or 3 055 611 R94) (Replaces 3 136 316 R21) (Consists of -			
	1	PLUG	103 883		
	4	PLUG	3 144 520 R1		
	4	PIN	141 242		
	2	PIN	141 284		
	1	PLUG	172 602		
	2	COVER	933 537 R1	20 990 R1	
	2	PLUG	3 136 004 R1		
	10	SCREW	3 138 885 R1	2	103 883
	1	PLUG	3 055 173 R1		
				1	STUD
				1	BEARING
				2	BEARING
				2	BUSHING
				§	2 CAP
				§	1 CAP
				§	3 CAP
				§	1 CAP
				§	1 CRANKCASE PLUG, hex-hd
					PLUG, pipe

§ - Not Furnished Separately.

## CRANKCASE

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CRANKCASE AND RELATED PARTS – Continued</b>			31	3 055 009 R2 3 228 562 R1	BEARING, camshaft (2) PIN, camshaft bearing
3	3 144 520 R1	PLUG, pipe (Replaces 103 884) (4)	32		(See Individual Engine Variation)
4	141 242	PIN, dowel (4)	33		(See Individual Engine Variation)
5	141 284	PIN, dowel (2)	34		(See Individual Engine Variation)
6	172 602	PLUG, expansion	35		(See Individual Engine Variation)
7	3 136 004 R1	PLUG, cup	36		(See Individual Engine Variation)
8	933 537 R1	COVER, closing (2)	37		(See Individual Engine Variation)
9	3 136 004 R1	PLUG, cup	38		(See Individual Engine Variation)
10	3 055 007 R1	BUSHING, dowel (2)	39		(See Individual Engine Variation)
11	3 138 580 R1	SCREW, crankshaft bearing cap (Used w/CRANKCASE, 3 132 154 R91 and 3 055 611 R94) (8)	40		CAP, crankshaft bearing front (Order CRANKCASE ASSY, 3 136 316 R13)
11	3 138 885 R1	SCREW, crankshaft bearing cap (Used w/CRANKCASE, 3 136 316 R13) (10)	41		CAP, crankshaft bearing intermediate (Order KIT, 3 144 440 R91) (3)
12		(See Individual Engine Variation)	42		CAP, crankshaft bearing rear (Order KIT, 3 144 434 R91)
13		NOT USED	3 144 434 R91		KIT, crankshaft bearing cap rear (Consists of – § 1 CAP 2 SCREW 3 136 320 R3)
14	3 055 173 R1	PLUG	3 144 440 R91		KIT, crankshaft bearing cap Nos. 2, 3 and 4 (Consists of – § 1 CAP § 2 SCREW
15	3 055 270 R1	STUD, rear (Left hand thread)	3 228 431 R91		PACKAGE, crankcase gasket service (For TD-7E, TD-8E, 100E and 125E) (Replaces 3 136 812 R95 and 3 136 811 R99) (Consists of –
16	3 055 374 R2	BOLT, idler gear carrier	3 132 869 R1		"O" RING (2)
17	3 055 372 R1	RING, anti-wear idler gear	172 602		PLUG, expansion
18	3 058 816 R91 OR	RETAINER, needle bearing (2)	380 839 R1		"O" RING
18	3 136 515 R91	RETAINER, needle bearing (2)	710 097 R2		RING, packing
19	3 055 043 R3	GEAR, idler	713 778 R1		"O" RING
20	3 055 373 R1	CARRIER, idler gear	714 868 R1		STRIP, sealing (2)
21	787 656 R1	RING, distance	717 222 R1		"O" RING
22	3 055 214 R1	STRIP, crankcase sealing	933 087 R2		RING, packing
23	714 868 R1	STRIP, sealing (2)	933 608 R1		RING, packing
24	3 055 215 R1	GASKET, crankshaft seal retainer	3 138 687 R1		RING, packing (2)
25	3 138 701 R91	SEAL, rear oil	3 052 295 R91		RING, tachometer drive seal
26	3 055 216 R1	RETAINER, rear oil seal	or		
	179 816	SCREW, hex-hd cap (8)	784 162 R91		RING, tachometer drive seal
	102 634	NUT, hex	3 138 640 R1		GASKET, injection pump cover
	3 218 395 R1	DISK, spring (9)	3 055 161 R1		GASKET, oil pan
27	3 055 393 R3	GASKET, side cover	3 055 177 R1		GASKET, water pump
28		(See Individual Engine Variation)	3 228 577 R1		"O" RING, oil suction pipe (9)
29	3 055 008 R1	BEARING, camshaft front	3 055 215 R1		GASKET, crankshaft seal retainer
30	103 884	PLUG (3)	3 055 237 R1		GASKET, oil filter base
			3 055 239 R1		GASKET, front plate
			3 138 639 R1		GASKET, crankcase breather
			3 055 384 R1		GASKET, fuel injection pump
			934 005 R1		RING, packing

(Continued on next page)  
§ - Not Furnished Separately.

**CRANKCASE**

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CRANKCASE AND RELATED PARTS - Continued</b>					
			<u>ENGINE VARIATIONS</u>		
			<u>(3500A AND 3514)</u>		
3 228 431 R91		PACKAGE crankcase gasket service (For TD 7E, TD-8E, 100E and 125E) (Replaces 3 136 812 R95 and 3 136 811 R99) (Consists of -	12	3 055 989 R1	STUD, front
3 055 393 R3		GASKET, side cover	28	3 055 315 R21 179 814	COVER, crankcase side SCREW, hex-hd cap (8)
3 141 072 R2		GASKET, front cover	3 050 574 R1		WASHER, flat (8)
933 610 R1		RING, packing (8)	3 050 129 R1		WASHER, lock (8)
713 245 R1		RING, packing (3)	32	3 132 639 R11 179 816	BREATHER, crankcase SCREW, hex-hd cap (2)
3 136 468 R1		GASKET, cover	3 138 687 R1		RING, packing (2)
3 055 143 R1		GASKET, hydraulic pump cover	33	3 055 324 R92	ELEMENT, breather filter
3 055 240 R1		GASKET, crankcase front cover	34	3 138 639 R1	GASKET, breather
3 136 766 R2		GASKET, water channel	35	365 584 R1	CLIP, cable (2)
3 055 245 R1		GASKET, water channel	36	3 136 366 R1	SPACER (2 used for 3514 only)
3 055 397 R2		GASKET, hydraulic pump flange	<u>(2544)</u>		
933 155 R1		RING, packing oil filter base	12	3 055 989 R1	STUD, front
3 136 404 R1		GASKET, oil cooler manifold	28	3 132 155 R1 3 055 574 R1	COVER, crankcase side WASHER, flat (8)
3 058 431 R1		GASKET, plug	36	3 132 366 R1	SPACER (2)
3 055 389 R2		"O" RING	<u>(260A)</u>		
787 811 R1		GASKET, closing sheet	12	3 055 989 R1	STUD, front
350 684 R1		"O" RING (2)	28	3 132 155 R1 3 055 574 R1	COVER, crankcase side WASHER, flat (8)
3 136 813 R99		PACKAGE, crankcase gasket (For all Models except TD-7E, TD-8E, 100E and 125E) (Consists of -	36	3 132 366 R1	SPACER (2)
3 132 863 R1		"O" RING (2)	<u>(2500A, 2500B, 2505B, 2510B, AND 2514B)</u>		
933 155 R1		RING, packing	12	3 055 989 R1	STUD, front
172 602		PLUG, expansion	28	3 055 315 R21 179 814	COVER, crankcase side SCREW, hex-hd cap (8)
380 839 R1		"O" RING	3 050 129 R1		WASHER, lock (8)
710 097 R2		RING, packing	3 055 574 R1		WASHER, flat (8)
713 778 R1		"O" RING	32	3 132 639 R11 179 816	BREATHER, crankcase SCREW, hex-hd cap (2)
714 868 R1		STRIP, sealing (2)	3 138 687 R1		RING, packing (2)
717 222 R1		"O" RING	33	3 055 324 R92	ELEMENT, breather filter
933 087 R2		RING, packing	34	3 138 639 R1	GASKET, breather
933 608 R1		RING, packing			
3 138 687 R1		RING, packing (2)			
3 052 295 R91		RING, tachometer drive seal			
or					
784 162 R91		RING, tachometer drive seal	12	3 055 989 R1	STUD, front
3 138 640 R1		GASKET, injection pump cover	28	3 055 314 R11 179 814	COVER, crankcase side SCREW, hex-hd cap (10)
3 055 161 R1		GASKET, oil pan	3 050 129 R1		WASHER, lock (10)
3 055 177 R1		GASKET, water pump	3 055 574 R1		WASHER, flat (10)
3 228 577 R1		"O" RING, oil suction pump (9)	33	3 055 324 R92	ELEMENT, breather filter
3 055 215 R1		GASKET, crankshaft seal retainer	34	3 138 639 R1	GASKET, breather
3 055 237 R1		GASKET, oil filter base			
3 055 239 R1		GASKET, front plate			
3 138 639 R1		GASKET, crankcase breather	12	3 055 989 R1	STUD, front
3 055 384 R1		GASKET, fuel injection pump	28	3 055 314 R11 179 814	COVER, crankcase side SCREW, hex-hd cap (10)
934 005 R1		RING, packing	3 050 129 R1		WASHER, lock (10)
3 055 393 R3		GASKET, side cover	3 055 574 R1		WASHER, flat (10)
3 055 952 R2		RING, oil pump sealing (2)	33	3 055 324 R92	ELEMENT, breather filter
3 055 961 R1		GASKET, oil pump	34	3 138 639 R1	GASKET, breather
3 055 994 R1		GASKET, crankcase front cover	37	3 144 020 R91 179 816	BREATHER, crankcase (Will work for BREATHER, 3 055 319 R11) SCREW, hex-hd cap (2)
3 055 999 R1		GASKET, water pump carrier	3 138 687 R1		RING, packing (2)
3 132 541 R1		GASKET, closing cover	38	3 144 022 R1 179 900	LINK, fixing SCREW, hex-hd cap
933 610 R1		RING, packing (8)	103 324		WASHER, lock
713 845 R1		RING, packing (3)			
3 136 406 R1		GASKET, cover			
3 055 389 R2		"O" RING			



# CRANKCASE

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**CRANKCASE AND RELATED PARTS - Continued**

ENGINE VARIATIONS - Continued

(2500A, 2500B, 2505B, 2510B and 2514B) - Continued

39	3 144 023 R1	CLAMP
	179 816	SCREW, hex-hd cap
	103 320	WASHER, lock
	102 634	NUT, hex

(TD-7E, TD-8E, 100E and 125E)

12	3 055 065 R1	STUD, front
28	3 132 155 R1	COVER, crankcase side
	179 814	SCREW, 2-5/8" long hex-hd cap (9)
	3 050 129 R1	WASHER, lock (10)
	3 055 574 R1	WASHER, flat (11)
	179 816	SCREW, 2-3/4" long hex-hd cap

(250A)

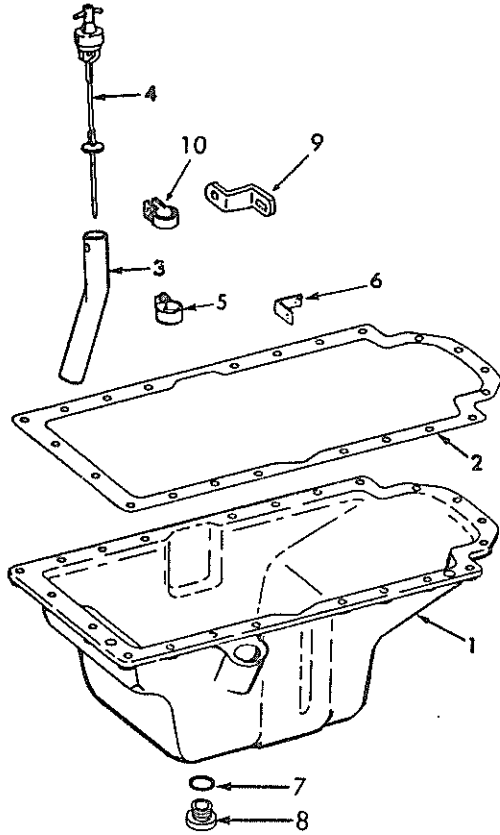
12	3 055 989 R1	STUD, front
28	3 055 314 R11	COVER, crankcase side
	179 814	SCREW, hex-hd cap (10)
	3 050 129 R1	WASHER, lock (10)
	3 055 574 R1	WASHER, flat (10)
32	3 144 020 R91	BREATHER, crankcase
	179 816	SCREW, hex-hd cap (2)
	3 138 687 R1	RING, packing (2)
33	3 055 324 R92	ELEMENT, breather filter
34	3 138 639 R1	GASKET, breather

# CRANKCASE

REF. NO.	PART NUMBER	DESCRIPTION
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REF. NO.	PART NUMBER	DESCRIPTION
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**CRANKCASE OIL PAN, OIL LEVEL GAUGE AND RELATED PARTS**



CG-5528

- 1 (See Individual Engine Variation)
- 2 3 055 161 R1 GASKET, oil pan
- 3 (See Individual Engine Variation)
- 4 (See Individual Engine Variation)
- 5 (See Individual Engine Variation)
- 6 (See Individual Engine Variation)
- 7 (See Individual Engine Variation)
- 8 (See Individual Engine Variation)
- 9 (See Individual Engine Variation)
- 10 (See Individual Engine Variation)

**ENGINE VARIATIONS**

(2500A, 2500B, 2505B, 2510B and 2514B)

1	3 136 055 R94	PAN, oil
	179 818	SCREW, 1" long hex-hd cap (14)
	179 817	SCREW, 7/8" long hex-hd cap(2)
	179 819	SCREW, 1-1/8" long hex-hd cap (4)
	3 050 129 R1	WASHER, lock (18)
	3 218 395 R1	DISC, spring (4)
	179 830	SCREW, 3" long hex-hd cap (2)
3	538 267 R1	EXTENSION, oil filler tube
4	3 136 242 R2	GAUGE, oil level
5	376 355 R1	CLAMP
	179 797	SCREW, hex-hd
	109 084	NUT, hex
7	933 608 R1	RING, sealing
8	3 132 544 R2	PLUG, drain

(2544 and 3514)

1	3 132 151 R11	PAN, oil
	179 818	SCREW, 1" long hex-hd cap (14)
	179 819	SCREW, 1-1/8" long hex-hd cap (4)
	179 817	SCREW, 7/8" long hex-hd cap (2)
	186 270	SCREW, 3-1/2" long hex-hd cap (2)
	103 320	WASHER, lock (18)
	3 218 395 R1	DISC, spring (4)
3	3 132 152 R1	PIPE, oil filling
4	3 132 153 R91	COVER w/GAUGE
7	933 609 R1	RING, sealing
8	3 131 883 R2	PLUG, drain

(260A)

1	3 139 193 R21	PAN ASSY w/TUBE, 3 139 192 R1, oil
	179 818	SCREW, 1" long hex-hd cap (14)
	179 817	SCREW, 7/8" long hex-hd cap (2)
	179 819	SCREW, 1-1/8" long hex-hd cap (4)
	186 270	SCREW, 3-1/2" long hex-hd cap (2)
	3 050 129 R1	WASHER, lock (18)
	3 218 395 R1	DISC, spring (4)
3	3 139 192 R1	PIPE, oil filling
4	3 139 196 R1	GAUGE, oil level

# CRANKCASE

EPC-239-4

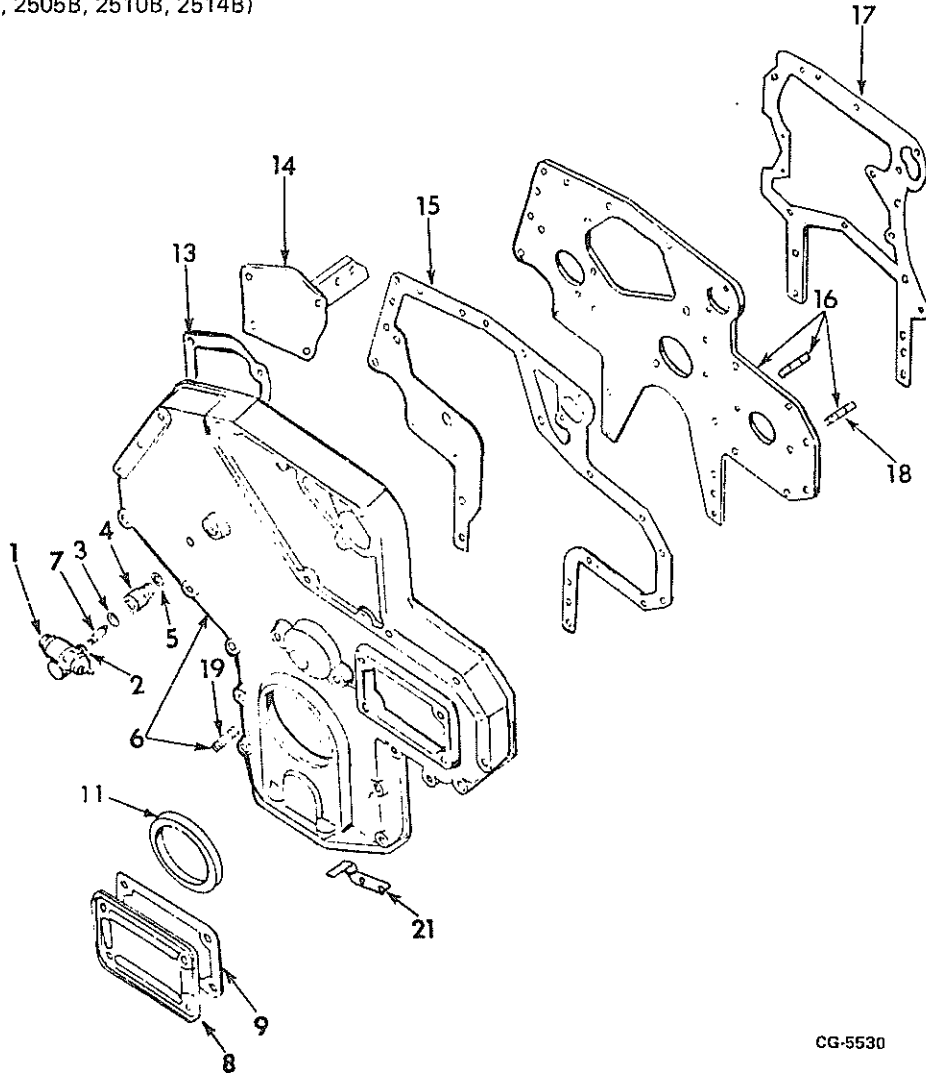
REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CRANKCASE OIL PAN, OIL LEVEL GAUGE AND RELATED PARTS - Continued</b>			<b>(TD-8E AND 125 E)</b>		
<b>ENGINE VARIATIONS - Continued</b>					
<b>(260A) - Continued</b>					
5	3 132 818 R1 179 795 103 319 109 084 934 850 R1	CLAMP, filler tube SCREW, hex-hd cap WASHER, lock NUT WASHER	1	3 144 622 R91 864 459 R1 179 818 179 817 179 819 3 218 395 R1 3 050 129 R1	PAN ASSY w/ELBOW, 864 459 R1, oil ELBOW SCREW, 1" long hex-hd cap (16) SCREW, 7/8" long hex-hd cap (2) SCREW, 1-1/8" long hex-hd cap (4) SPRING, disc (4) WASHER, lock (18)
6	3 139 195 R1	BRACE, filler tube	3		PIPE, oil filling (Refer to CHASSIS PARTS CATALOG)
7	933 608 R1	RING, sealing	4		COVER w/GAUGE (Refer to CHASSIS PARTS CATALOG)
8	3 132 544 R2	PLUG, drain	7	933 608 R1	RING, sealing
<b>(3500A)</b>			8	3 132 544 R2 444 667	PLUG, drain PLUG, sq-hd socket pipe
1	3 139 193 R21 179 818 179 817 179 819 186 270 3 050 129 R1 933 570 R1	PAN ASSY w/TUBE, 3 139 192 R1, oil SCREW, 1" long hex-hd cap (14) SCREW, 7/8" long hex-hd cap (2) SCREW, 1-1/8" long hex-hd cap (4) SCREW, 3-1/2" long hex-hd cap (2) WASHER, lock (18) DISC, spring (4)	<b>(250A)</b>		
3	3 139 192 R1	PIPE, oil filling	1	3 218 561 R91 179 818 179 817 179 819 179 830 3 050 129 R1 3 218 395 R1	PAN ASSY w/TUBE, oil SCREW, 1" long hex-hd cap (14) SCREW, 7/8" long hex-hd cap (2) SCREW, 1-1/8" long hex-hd cap (4) SCREW, 3" long hex-hd cap (2) WASHER, lock (18) WASHER (4)
4	3 139 196 R1	GAUGE, oil level	3		TUBE, oil filling (Not furnished separately)
5	3 132 818 R1	CLAMP, filler tube	4	3 218 554 R1	GAUGE, oil level
6	3 139 195 R1 179 793 103 319 109 084	BRACE, filler tube SCREW, hex-hd cap WASHER, spring lock NUT, hex	5	3 132 818 R1 179 795 103 319 109 084 934 850 R1	CLAMP, filler tube SCREW, hex-hd cap WASHER, lock NUT WASHER
7	933 608 R1	RING, sealing	6	3 218 553 R1	SUPPORT
8	3 132 544 R2	PLUG, drain	7	933 608 R1	RING, sealing
<b>(TD-7E and 100E)</b>			8	3 132 544 R2	PLUG, drain
1	3 136 278 R2 179 818 179 817 179 819 3 050 129 R1 3 218 395 R1	PAN, oil SCREW, 1" long hex-hd cap (16) SCREW, 7/8" long hex-hd cap (2) SCREW, 1-1/8" long hex-hd cap (4) WASHER, lock (18) WASHER (4)	9	3 144 022 R1 179 900 103 324	LINK, fixing SCREW, hex-hd cap WASHER, lock
3		PIPE, oil filling (Refer to CHASSIS PARTS CATALOG)	10	3 144 023 R1 179 816 103 320 102 634	CLAMP SCREW, hex-hd cap WASHER, lock NUT
4		COVER, w/GAUGE (Refer to CHASSIS PARTS CATALOG)			
7	933 608 R1	RING, sealing			
8	3 132 544 R2 444 667	PLUG, drain PLUG, sq-hd socket pipe			

# CRANKCASE

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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## CRANKCASE FRONT COVER AND RELATED PARTS

(3514) (2544)  
 (2500A, 2500B, 2505B, 2510B, 2514B)  
 (3500A)  
 (250A)  
 (260A)



CG-5530

1	(See Individual Engine Variation)	9	3 138 640 R1 933 223 R1	GASKET, injection pump cover SCREW, locking
2	(See Individual Engine Variation)	11		SEAL, front oil (Order PACKAGE, 3 136 724 R94) (Refer to "Crank- shaft, Vibration Damper and Flywheel")
3	(See Individual Engine Variation)	12		NOT USED
4	(See Individual Engine Variation)	13		(See Individual Engine Variation)
5	3 051 337 R1	14		(See Individual Engine Variation)
6	(See Individual Engine Variation)	15	3 055 994 R1	GASKET, crankcase front cover
7	(See Individual Engine Variation)	16		(See Individual Engine Variation)
8	3 055 140 R1 120 214 102 634 131 402 H	17	3 055 239 R1	GASKET, front plate
	COVER, injection pump WASHER, lock (4) NUT, hex (4) WASHER, flat (4)			

# CRANKCASE

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CRANKCASE FRONT COVER AND RELATED PARTS - Continued</b> <b>(3514) (2544)</b> <b>(2500A, 2500B, 2505B, 2510B, 2514B)</b> <b>(3500A) (250A) (260A)</b>			6	3 136 057 R14	COVER ASSY w/four STUD, 3 055 242 R1, crankcase front (Will work for COVER ASSY, 3 136 244 R91)
18	3 055 065 R1 102 634	STUD (2) NUT, hex (2)		179 826 179 827 179 828 103 320 102 634	SCREW, 2" long hex-hd cap (9) SCREW, 2-1/4" long hex-hd cap (2) SCREW, 2-1/2" long hex-hd cap (2) WASHER, lock (2) NUT, hex (7)
19	3 055 242 R1	STUD (4)		3 050 129 R1 3 218 395 R1	WASHER, lock (5) WASHER (6)
20		NOT USED			
21		(See Individual Engine Variation)	7	3 056 986 R1	SHAFT, angle drive extension
<b><u>ENGINE VARIATIONS</u></b>			13	3 132 541 R1	GASKET, closing cover
<b><u>(2544 and 3514)</u></b>			14	3 136 061 R92	COVER ASSY 2500A, 2500B, 2505B, 2510B, 2514B 250A TC - 700551 and below 250A SM - 640236 and below 250A HS - 646362 and below
1	3 055 982 R93	DRIVE ASSY w/NUT, 3 132 116 R1, angle	14	3 228 003 R1	COVER ASSY 250A TC - 700552 and up 250A SM - 640237 and up 250A HS - 646367 and up
2	3 132 116 R1	NUT, hex		179 827 103 320 102 634	SCREW, hex-hd cap (4) WASHER, lock (4) NUT, hex (4)
3	3 052 295 R91	RING, seal			
3	784 162 R91	RING, seal			
4	3 055 983 R1	SPACER			
6	3 132 149 R15	COVER ASSY w/four STUD, 3 055 242 R1 front (Will work for COVER ASSY, 3 136 245 R91)	16	3 055 996 R11	PLATE ASSY w/STUD 3 055 065 R1 and NUT, 102 634, crankcase front
	179 826 179 827 103 320 102 634 3 218 375 R1	SCREW, 2" long hex-hd cap (9) SCREW, 2-1/4" long hex-hd cap (2) WASHER, lock (4) NUT, hex (5) DISC, spring (7)		179 814 3 050 129 R1 20 990 R1	SCREW, hex-hd cap (7) WASHER, lock (7) PLUG, pipe
7	3 056 986 R1	COUPLING, drive angle	21	3 136 040 R21	INDICATOR, timing (Will work for INDICATOR, 3 136 252 R11)
16	3 132 012 R11	PLATE ASSY w/STUD, 3 055 065 R1 and NUT, 102 634, crankcase front			<b><u>(260A)</u></b>
	179 814 103 320 3 132 013 R1 20 990 R1	SCREW, hex-hd cap (7) WASHER, lock (7) SHIM (2) PLUG, pipe	4	933 223 R1	PLUG, hex-hd
21	3 132 150 R1 933 982 R1	POINTER, timing WASHER, timing pointer lock	6	3 136 057 R14	COVER ASSY w/four STUD, 3 055 242 R1, crankcase front
<b><u>(2500A, 2500B, 2505B, 2510B, 2514B and 250A)</u></b>				3 218 375 R1 102 634 179 826 179 827 103 320 179 828 3 050 129 R1 3 218 395 R1	DISC, spring (7) NUT, hex (7) SCREW, 2" long hex-hd cap (9) SCREW, 2-1/4" long hex-hd cap (2) WASHER, lock (2) SCREW, 2-1/2" long hex-hd cap (2) WASHER, lock (5) WASHER (6)
1	3 055 982 R93	DRIVE ASSY w/NUT, 3 132 116 R1, angle	16	3 055 996 R11	PLATE ASSY w/STUD, 3 055 065 R1 and NUT, 102 634, crankcase front
2	3 132 116 R1	NUT, hex		179 814 3 050 129 R1 20 990 R1	SCREW, hex-hd cap (7) WASHER, lock (7) PLUG, pipe
3	3 052 295 R91	RING, seal			
3	784 162 R91	RING, seal			
4	3 055 983 R1	SPACER	21	3 136 040 R21	INDICATOR, timing

**CRANKCASE**

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**CRANKCASE FRONT COVER AND RELATED PARTS -**

Continued

(3514) (2544)

(2500A, 2500B, 2505B, 2510B, 2514B)

(3500A) (250A) (260A)

ENGINE VARIATIONS - Continued(3500A)

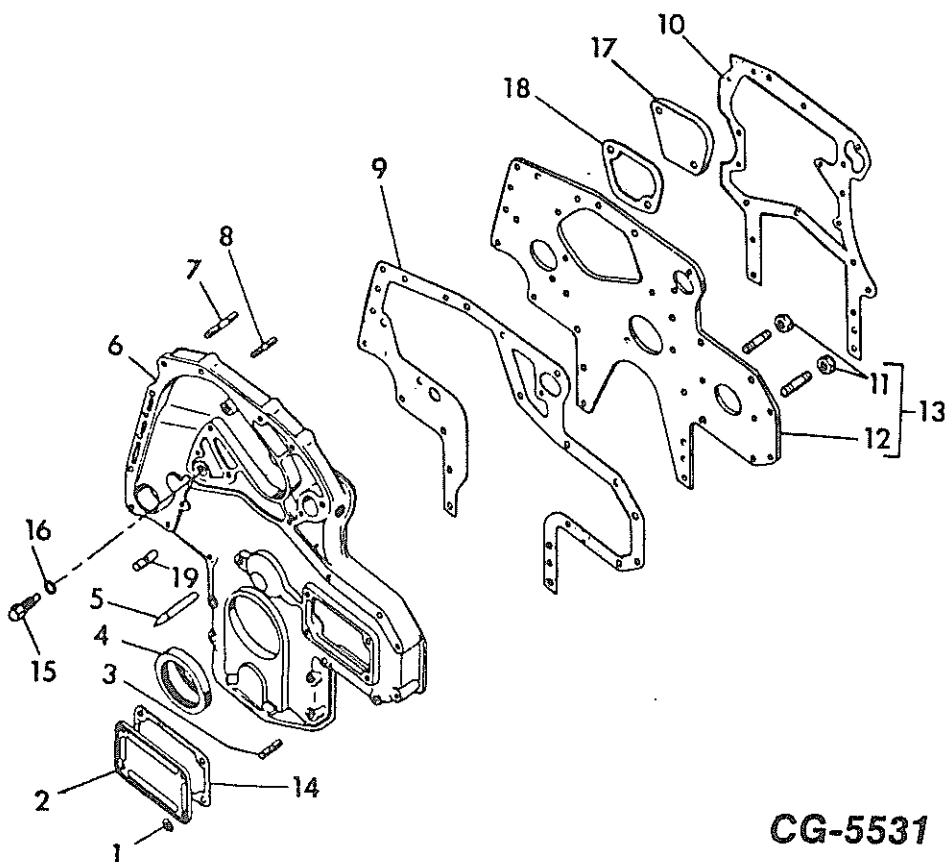
1	3 055 982 R93	DRIVE ASSY w/NUT, 3 132 116 R1			
2	3 132 116 R1	NUT, hex			
3	3 052 295 R91	RING, radial seal			
	or				
3	784 162 R91	RING, seal			
4	3 055 983 R1	SPACER			
6	3 136 057 R14	COVER ASSY w/four STUD, 3 055 242 R1, crankcase front (Will work for COVER ASSY, 3 136 244 R91)			
	179 826	SCREW, 2" long hex-hd cap (9)			
	179 827	SCREW, 2-1/4" long hex-hd cap (2)			
	179 828	SCREW, 2-1/2" long hex-hd cap (2)			
	103 320	WASHER, lock (2)			
	102 634	NUT, hex (7)			
	933 570 R1	DISC, spring (6)			
	3 050 129 R1	WASHER, lock (5)			
7	3 056 986 R1	SHAFT, angle drive extension			
16	3 055 996 R11	PLATE ASSY w/STUD, 3 055 065 R1 and NUT, 102 634			
	179 814	SCREW, hex-hd cap (7)			
	3 050 129 R1	WASHER, lock (7)			
	20 990 R1	PLUG, pipe			
21	3 136 040 R21	INDICATOR, timing			

# CRANKCASE

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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## CRANKCASE FRONT COVER AND RELATED PARTS (TD-7E, TD-8E, 100E and 125E)



### CG-5531

1	131 402 H	WASHER, 11/32" x 9/16" x .054" (4)	6	3 144 623 R91	COVER ASSY, front TD-7E and 100E - + and below TD-8E and 125E - + and below (Composed of - § 1 COVER 1 POINTER 3 136 277 R1 1 STUD 3 136 275 R1 4 STUD 3 055 242 R1)
2	3 055 140 R1 102 634 120 214	COVER, injection pump NUT, hex (4) WASHER, lock (4)(replaces 3 055 129 R1)	6	3 218 328 R91	COVER ASSY, front TD-7E and 100E - + to 051658 TD-8E and 125E - + and up (Composed of - § 1 COVER 1 POINTER 3 136 277 R1 4 STUD 3 055 242 R1)
	131 402 H	WASHER, flat (4)			
3	3 055 242 R1	STUD (4)			
4		SEAL, crankcase front oil (Order PACKAGE, 3 136 724 R94) (Refer to "Crankshaft, Vibration Damper and Flywheel")			
5	3 136 277 R1	POINTER, timing (Used w/COVER ASSYS, 3 144 623 R91 and 3 218 328 R91) TD-7E and 100E - 51658 and below TD-8E and 125E - 1000 and up			
5	3 056 855 R1	POINTER, timing (Used w/COVER ASSY, 3 144 806 R92 and 3 218 494 R91) TD-7E and 100E - 51659 and up			

+ - Serial Number Not Available.  
§ - Not Furnished Separately.

## CRANKCASE

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
CRANKCASE FRONT COVER AND RELATED PARTS - Continued (TD-7E, TD-8E, 100E and 125E)					
6	3 218 494 R91	COVER ASSY, front (Replaces 3 144 806 R92) TD-7E and 100E - 51659 and up (Composed of - § 1 COVER 1 POINTER 3 056 855 R1 4 STUD 3 055 242 R1)			
	102 634	NUT, hex (6)			
	3 218 395 R1	DISC, spring (7)			
	179 817	SCREW, 7/8" hex-hd cap			
	179 825	SCREW, 1-7/8" hex-hd cap (5)			
	179 826	SCREW, 2" hex-hd cap (4)			
	179 827	SCREW, 2-1/4" hex-hd cap (4)			
	3 050 129 R1	WASHER, lock (6)			
	444 667	PLUG, Front cover			
7	3 055 244 R1	STUD			
8	3 055 243 R1	STUD (2)			
9	3 144 072 R2	GASKET, front cover			
10	3 055 239 R1	GASKET, plate			
11	102 634	NUT, hex (2)			
12		PLATE, crankcase front (Order PLATE ASSY, 3 055 064 R11)			
13	3 055 064 R11	PLATE ASSY, w/two STUD 3 055 065 R1 and two NUT, 102 634			
	179 814	SCREW, hex-hd cap (7)			
	3 050 129 R1	WASHER, lock (7)			
	3 055 065 R1	STUD (2)			
14	3 138 640 R1	GASKET, pump cover			
15	933 223 R1	PLUG, hex-hd			
16	3 051 337 R1	RING, packing (Replaces 933 222 R1)			
17	3 055 142 R1	COVER, hydraulic pump			
	179 839	SCREW, 1" long hex-hd cap			
	186 284	SCREW, 3-3/4" long hex-hd cap			
	102 635	NUT, hex (2)			
	3 050 221 R1	WASHER, lock (2)			
18	3 055 143 R1	GASKET, hydraulic pump cover			
19	3 136 275 R1	STUD (Used w/COVER ASSY, 3 144 623 R91)			
19	3 136 782 R1	STUD (Used w/COVER ASSY, 3 218 328 R91)			
	444 667	PLUG, front cover			

§ - Not Furnished Separately.



**REFER TO ALPHABETICAL INDEX  
FOR COMPLETE LISTING OF PARTS**

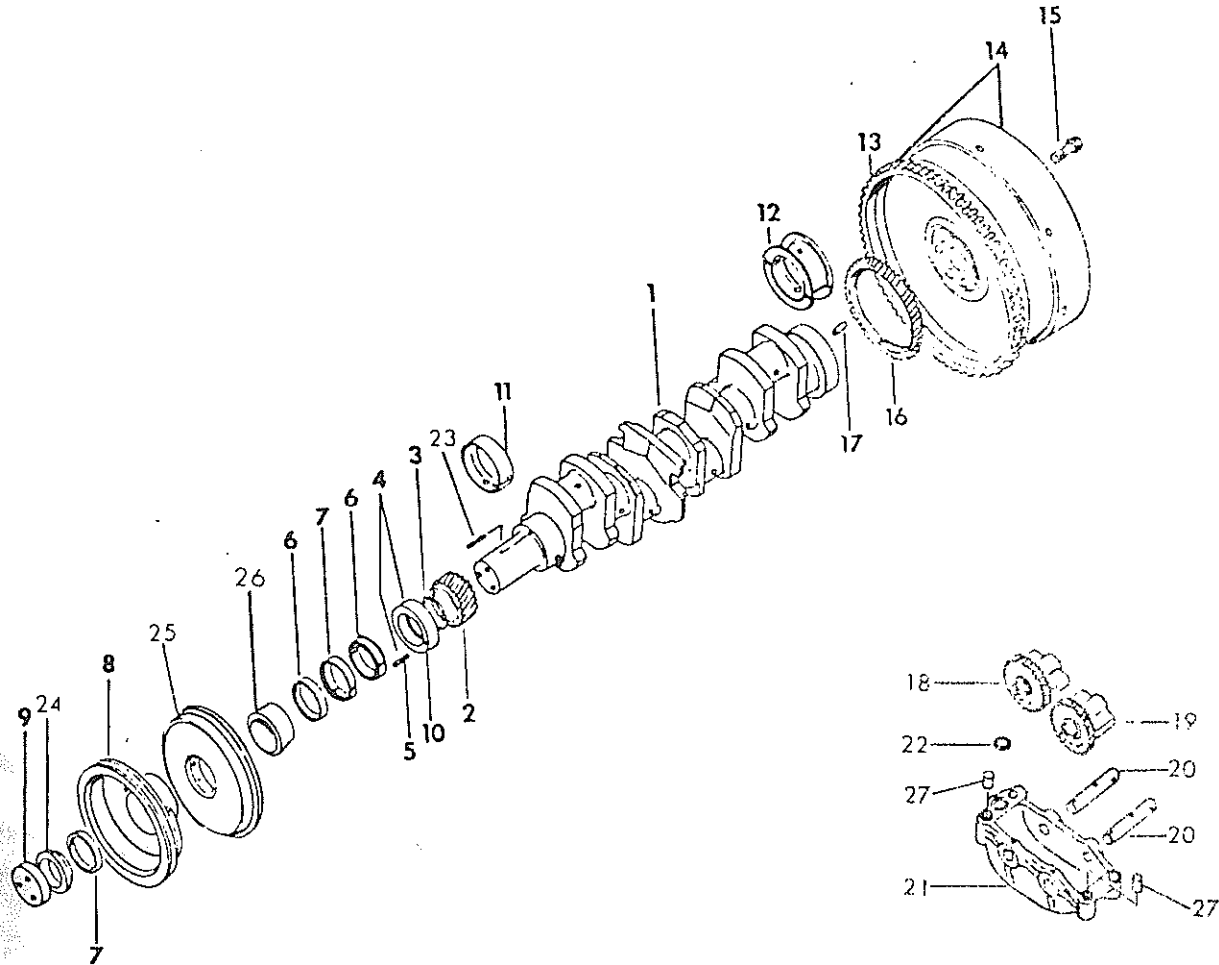
**CRANKSHAFT**

**7**

# CRANKSHAFT

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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## CRANKSHAFT, VIBRATION DAMPER, FLYWHEEL AND RELATED PARTS



CG-5532

1	3 144 626 R92	CRANKSHAFT w/BEARINGS (std.) (Will work For 3 055 790 R91 and 3 132 982 R94) (Composed of — 1 BEARING 3 055 129 R21 4 BEARING 3 055 130 R21 4 BEARING 3 055 351 R91 § 1 CRANKSHAFT 1 GEAR 3 136 237 R1 1 PIN 141 242 1 PIN 932 169 R1 1 PINION 3 055 028 R1)	4	RING ASSY, distance (Order PACKAGE, 3 136 724-R94)
			5	932 681 R1 PIN, dowel 24 mm (0.945 in.)
			5	932 652 R1 PIN, dowel 28 mm (1.102 in.)
			5	932 224 R1 PIN, dowel 32 mm (1.260 in.)
			6	(See individual engine variation)
			7	(See individual engine variation)
			8	(See individual engine variation)
2	3 055 028 R1	GEAR, crankshaft pinion		
3	712 778 R1	O-RING		

CRANKSHAFT w/BEARINGS UNDERSIZE ARE AVAILABLE FOR CERTAIN APPLICATIONS ONLY. REFER TO INDIVIDUAL ENGINE VARIATIONS.

§ - Not furnished separately

# CRANKSHAFT

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CRANKSHAFT, VIBRATION DAMPER, FLYWHEEL AND RELATED PARTS - Continued</b>			25		(See individual engine variation)
			26		(See individual engine variation)
9	3 055 154 R1 308 464 R1	WASHER, pressure SCREW, hex-hd cap (3)	27	3 055 174 R1	BUSHING, dowel (2)
10		RING (Order PACKAGE, 3 136 724 R94)	3 228 133 R93		PACKAGE, crankcase oil seal service (Replaces Package 3 136 724 R91) (Consists of - § 1 RING 1 PIN 932 681 R1 1 PIN 932 652 R1 1 PIN 932 224 R1 § 1 SEAL 1 "O" RING 713 778 R1)
11	3 055 130 R21	BEARING ASSY, main (Std.) (4)	<b>ENGINE VARIATIONS</b>		
11	3 056 832 R21	BEARING ASSY, main (0.250 mm U/S) (4)	<b>(2500A, 2500B, 2505B, 2510B, 2514B and 3500A)</b>		
11	3 056 877 R22	BEARING ASSY, main (0.500 mm U/S) (4)	1	3 218 861 R91	CRANKSHAFT w/BEARINGS (0.250 mm U/S) (Will work for CRANKSHAFT, 3 059 555 R91 and 3 132 983 R93) (3500A ONLY) (Composed of - 1 BEARING 3 056 820 R11 4 BEARING 3 056 832 R21 4 BEARING 3 056 834 R11 § 1 CRANKSHAFT 1 GEAR 3 136 237 R1 1 PIN 932 169 R1 1 PIN 141 242 1 PINION 3 055 028 R1)
11	3 055 779 R21	BEARING ASSY, main (0.750 mm U/S) (4)	1	3 218 864 R91	CRANKSHAFT w/BEARINGS (0.500 mm U/S) (Will work for CRANKSHAFT, 3 059 987 R91 and 3 132 985 R93) (3500A ONLY) (Composed of - 1 BEARING 3 056 875 R11 4 BEARING 3 056 877 R22 4 BEARING 3 056 879 R91 § 1 CRANKSHAFT 1 GEAR 3 136 237 R1 1 PIN 932 169 R1 1 PIN 141 242 1 PINION 3 055 028 R1)
12	3 055 129 R21	BEARING ASSY, rear (Standard)	1	3 132 987 R93	CRANKSHAFT w/BEARINGS (0.750 mm U/S) (No longer available) (3500A ONLY) (Composed of - 1 BEARING 3 055 776 R11 4 BEARING 3 055 779 R21 4 BEARING 3 055 781 R11 § 1 CRANKSHAFT 1 GEAR 3 136 237 R1 1 PIN 932 169 R1 1 PIN 141 242 1 PINION 3 055 028 R1)
12	3 056 820 R11	BEARING ASSY, rear (0.250 mm U/S)			
12	3 056 875 R11	BEARING ASSY, rear (0.500 mm U/S)			
12	3 055 776 R11	BEARING ASSY, rear (0.750 mm U/S) (No longer available)			
13		(See individual engine variation)			
14		(See individual engine variation)			
15		(See individual engine variation)			
16	3 055 145 R1	GEAR, balancer drive (Engine Serial No. 44-P-95 and below, 46-P-55 and below, 47-P-91 and below, and Engines w/SERIES PREFIX No. 44, 45, 46 or 47 mid-letter N or O)			
16	3 132 753 R2	GEAR, balancer drive (Engine Serial No. 44-P-96 to 44-P-152, 46-P-56 to 46-P-93, 47-P-92 to 47-P-153)			
16	3 136 237 R1	GEAR, balancer drive (Engine Serial No. 44-P-153 and above 45-O-6, 46-P-94 and above, 47-P-154 and above and crawlers)			
17	141 242	PIN, dowel (Replaces 141 244)			
18		(See individual engine variation)			
19		(See individual engine variation)			
20		(See individual engine variation)			
21		(See individual engine variation)			
22		(See individual engine variation)			
23	932 169 R1	PIN			
24		(See individual engine variation)			

§ - Not furnished separately.

## CRANKSHAFT

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
CRANKSHAFT, VIBRATION DAMPER, FLYWHEEL AND RELATED PARTS - Continued			14	3 138 596 R11	FLYWHEEL ASSY, (w/Hydrostatic Transmission)
<u>ENGINE VARIATIONS - Continued</u>			15	3 132 159 R2	BOLT, flywheel (Used w/FLY-WHEEL, 3 132 157 R11) (7)
<u>(2500A, 2500B, 2505B, 2510B, 2514B and 3500A) - Continued</u>			15	3 055 156 R2	BOLT, flywheel (Used w/FLY-WHEEL, 3 138 596 R11) (7)
8	3 138 838 R2	PULLEY, crankshaft (Will work for PULLEY, 3 136 043 R1 by also ordering RING, 3 138 874 R1)	18	3 055 502 R11	WEIGHT ASSY, idler
13	60 883 H	GEAR (Used w/FLYWHEEL 3 136 044 R31)	19	3 055 505 R11	WEIGHT ASSY, drive
14	3 136 044 R41	FLYWHEEL ASSY (Also order seven bolts, 3 218 037 R1)	20	3 055 503 R21	SHAFT ASSY, weight (2)
15	3 218 037 R1	BOLT, flywheel (Used w/FLY-WHEEL, 3 136 044 R31) (7)	21	3 055 504 R31	HOUSING ASSY w/two BUSHING, 3 055 174 R1
15	3 132 159 R2	BOLT, flywheel (Used w/FLY-WHEEL, 3 136 044 R11) (7)	22	3 058 907 R1	O-RING
18	3 132 877 R11	WEIGHT ASSY, idler	<u>(TD-7E, TD-8E, 100E and 125E)</u>		
19	3 132 876 R11	WEIGHT ASSY, drive	6	3 055 152 R91	ELEMENT, spring tightener (Optional w/locking ELEMENT, 3 218 394 R1) (2)
20	3 132 878 R11	SHAFT ASSY, weight (2)	7	3 055 153 R1	RING, pressure (Optional w/locking ELEMENT, 3 218 394 R1)
21	3 132 875 R31	HOUSING ASSY w/two BUSHING, 3 055 174 R1	8	3 136 282 R11	PULLEY w/PIN, 932 338 R1, crankshaft
	932 229 R1	PIN, roll (2)		932 338 R1	PIN, dowel
	932 299 R1	PIN, roll (2)			(TD-7E and 100E - 051658 and below)
	179 866	SCREW, 2" long hex-hd cap			(TD-8E and 125E - 001000 and up)
	179 867	SCREW, 2-1/4" long hex-hd cap	8	3 055 409 R2	PULLEY, crankshaft
	3 218 543 R1	WASHER, lock			(TD-7E and 100E - 051659 and up)
	179 869	SCREW, 2-3/4" long hex-hd cap (all except 3500A)	13	304 439 R1	GEAR
22	380 839 R1	O-RING	14	3 136 285 R11	FLYWHEEL ASSY
24	3 138 874 R1	RING, clamping (Used w/PULLEY, 3 138 838 R2)	15	3 055 156 R2	BOLT, flywheel (7)
<u>(2544 AND 3514)</u>			18	3 132 877 R11	WEIGHT ASSY, idler
6	3 055 152 R91	ELEMENT, spring tightener (2)	19	3 132 876 R11	WEIGHT ASSY, drive
7	3 055 153 R1	RING, pressure (2)	20	3 132 878 R11	SHAFT, weight (2)
8	3 132 156 R1	PULLEY, crankshaft		932 229 R1	PIN, roll (2)
13	3 132 158 R1	GEAR, (Used w/FLYWHEEL, 3 132 157 R11)		932 299 R1	PIN, roll (2)
	OR			179 867	SCREW, 2-1/4" hex-hd cap
13	367 042 R1	GEAR, (Used w/FLYWHEEL, 3 132 157 R11)		179 866	SCREW, 2" hex-hd cap
13	3 132 411 R1	GEAR, (Used w/FLYWHEEL, 3 138 596 R11)		3 218 543 R1	WASHER, lock (3)
14	3 132 157 R11	FLYWHEEL ASSY, (w/Synchromesh Transmission)		179 869	SCREW, 2-3/4" long hex-hd cap
			21	3 132 875 R11	HOUSING ASSY w/two BUSHING, 3 055 174 R1
			22	380 839 R1	"O" RING

# CRANKSHAFT

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CRANKSHAFT, VIBRATION DAMPER, FLYWHEEL AND RELATED PARTS - Continued</b>					
<b>ENGINE VARIATIONS - Continued</b> <b>(TD-7E, TD-8E, 100E and 125E) - Continued</b>					
25	3 136 283 R1	DAMPER, vibration (TD-7E and 100E — 051658 and below) (TD-8E and 125E — 001000 and up)			
	179 835 R1	SCREW, hex-hd cap (6)			
	933 806 R1	WASHER, spring (6)			
26	3 218 394 R1	ELEMENT, locking - one piece (Consists of element and ring) (Optional w/two locking ELEMENT, 3 055 152 R91 and two pressure RING, 3 055 153 R1)			
<b>(250A)</b>					
8	3 138 838 R2	PULLEY, crankshaft			
13	60 883 H	GEAR			
14	3 136 044 R41	FLYWHEEL ASSY w/GEAR, 60 883 H (250A-SM, 250A-HS)			
14	3 218 556 R92	FLYWHEEL ASSY w/GEAR, 60 883 H (250A-TC)			
15	3 218 037 R1	BOLT, flywheel (7) (250A-SM, 250A-HS)			
15	3 218 558 R1	BOLTS, flywheel (7) (250A-TC)			
18	3 132 877 R11	WEIGHT ASSY, idler			
19	3 132 876 R11	WEIGHT ASSY, drive			
20	3 132 878 R11	SHAFT ASSY, weight (2)			
21	3 132 875 R31	HOUSING ASSY w/two BUSHING, 3 055 174 R1			
	932 229 R1	PIN, roll (2)			
	932 299 R1	PIN, roll (2)			
	179 867	SCREW, 2-1/4" long hex-hd cap			
	179 866	SCREW, 2" long hex-hd cap			
	3 218 543 R1	WASHER, lock (3)			
	179 869	SCREW, 2-3/4" long hex-hd cap			
22	380 839 R1	"O" RING			
24	3 138 874 R1	RING, clamping			
			<b>(260A)</b>		
1	3 218 861 R91	CRANKSHAFT w/BEARINGS (0.250 mm U/S) (Will work For CRANKSHAFT, 3 059 555 R91 and 3 132 983 R93) (Composed of — 1 BEARING 3 056 820 R11 4 BEARING 3 056 832 R21 4 BEARING 3 056 834 R11 § 1 CRANKSHAFT 1 GEAR 3 136 237 R1 1 PIN 932 169 R1 1 PIN 141 242 1 PINION 3 055 028 R1)			
1	3 218 864 R91	CRANKSHAFT w/BEARINGS (0.500 mm U/S) (Will work For CRANKSHAFT, 3 059 987 R91 and 3 132 985 R93) (Composed of — 1 BEARING 3 056 875 R11 4 BEARING 3 056 877 R22 4 BEARING 3 056 879 R91 § 1 CRANKSHAFT 1 GEAR 3 136 237 R1 1 PIN 932 169 R1 1 PIN 141 242 1 PINION 3 055 028 R1)			
1	3 132 987 R93	CRANKSHAFT w/BEARINGS (0.750 mm U/S) (No longer available) (Composed of — 1 BEARING 3 055 776 R11 4 BEARING 3 055 779 R21 4 BEARING 3 055 781 R11 § 1 CRANKSHAFT 1 GEAR 3 136 237 R1 1 PIN 932 169 R1 1 PIN 141 242 1 PINION 3 055 028 R1)			
8	3 138 838 R2	PULLEY, crankshaft			
13	60 883 H	GEAR			
14	3 218 556 R92	FLYWHEEL ASSY w/GEAR, 60 883 H (260A-TC)			
14	3 136 044 R41	FLYWHEEL ASSY w/GEAR, 60 883 H (260A-HS)			
15	3 218 558 R1	BOLT, flywheel (7) (260A-TC)			
15	3 218 037 R1	BOLT, flywheel (7) (260A-HS)			
18	3 132 877 R11	WEIGHT ASSY, idler			
19	3 132 876 R11	WEIGHT ASSY, drive			
20	3 132 878 R11	SHAFT ASSY, weight (2)			

§ - Not furnished separately

**CRANKSHAFT**

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**CRANKSHAFT, VIBRATION DAMPER, FLYWHEEL AND  
RELATED PARTS - Continued**

**ENGINE VARIATIONS - Continued**

**(260A) - Continued**

21	3 132 875 R31	HOUSING ASSY w/two BUSHING, 3 055 174 R1			
	932 229 R1	PIN, roll (2)			
	932 299 R1	PIN, roll (2)			
	179 867	SCREW, 2-1/4" long hex-hd cap			
	179 866	SCREW, 2" long hex-hd cap			
	3 218 543 R1	WASHER, lock (2)			
22	380 839 R1	"O" RING			
24	3 138 874 R1	RING, clamping			

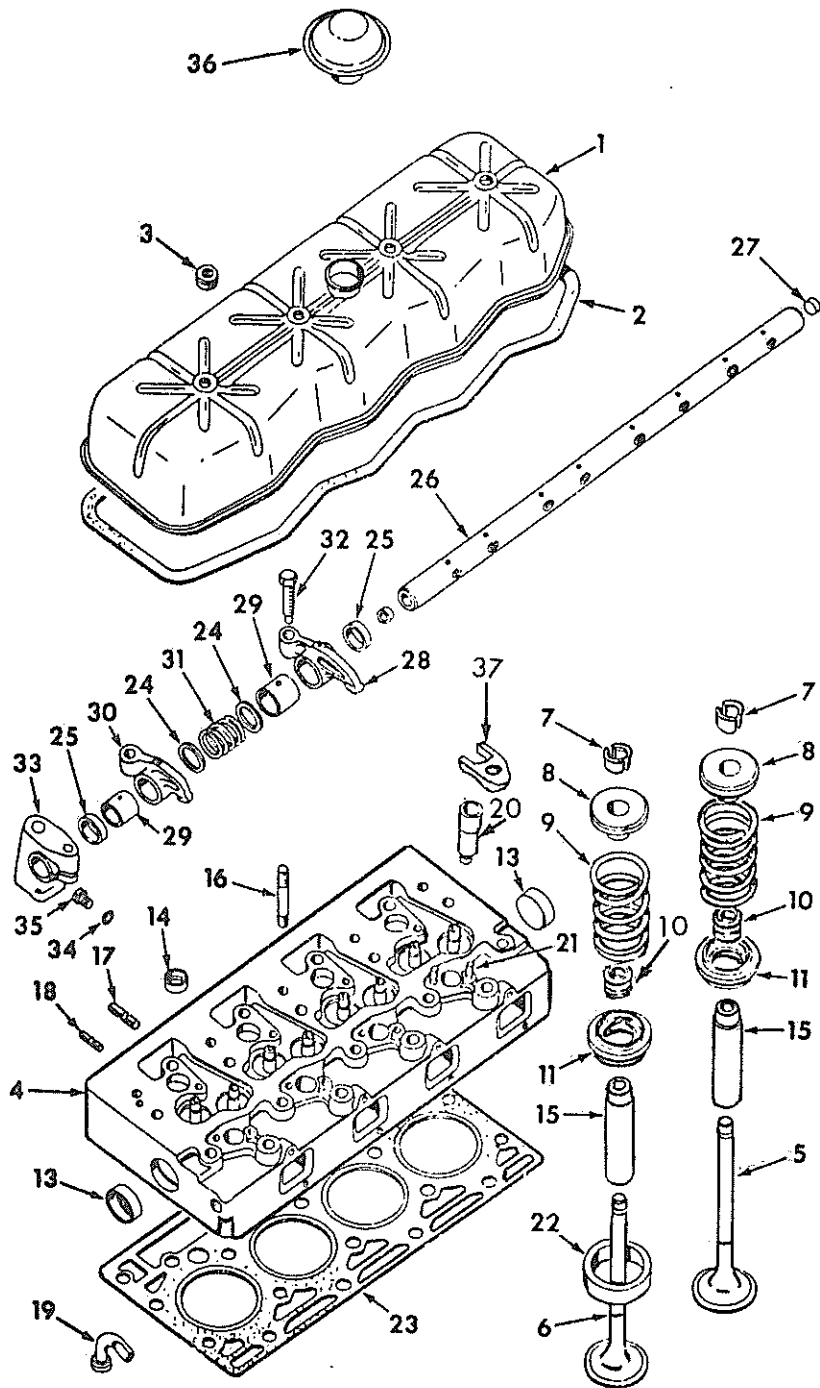
**REFER TO ALPHABETICAL INDEX  
FOR COMPLETE LISTING OF PARTS**

**CYLINDER HEAD**

**8**

# CYLINDER HEAD

CYLINDER HEAD AND RELATED PARTS  
(3514) (2544)  
(2500A, 2500B, 2505B, 2510B, 2514B)  
(3500A) (250A) (260A)



CG-5534



# CYLINDER HEAD

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CYLINDER HEAD AND RELATED PARTS – Continued</b> (3514) (2544) (2500A, 2500B, 2505B, 2514B) (3500A) (250A) (260A)			22	3 132 361 R1	INSERT, exhaust valve seat (0.40 mm O/S) (4)
1		(See Individual Engine Variation)	22	3 132 362 R1	INSERT, exhaust valve seat (0.15 mm O/S) (4)
2	3 138 642 R1	GASKET, valve housing cover	23	3 228 362 R1	GASKET, cylinder head (Replaces 3 138 959 R3)
3	3 138 638 R1	GASKET, valve housing cover washer (4)	24	3 055 669 R1	WASHER, thrust rocker arm (8)
	3 138 637 R1	WASHER, valve housing cover (4)	25	3 055 068 R1	BUSHING, distance (7)
4	3 055 367 R97	HEAD ASSY, cylinder (Replaces 3 132 160 R96) (Composed of -	26	3 055 070 R31	SHAFT w/TWO PLUGS, 933 565 R1, rocker arm
		8 GUIDE 3 055 022 R2	27	933 565 R1	PLUG, expansion (2)
		§ 1 HEAD	28		ARM ASSY w/BUSHING, 3 132 019 R1, intake rocker (Order PACKAGE, 3 132 292 R91)(4)
		4 INSERT 3 055 344 R1			
		4 PLUG 933 537 R1			
		2 PLUG 934 003 R1			
		§ 4 SEAT	29	3 132 019 R1	BUSHING (8) All engines except 2500A, 2500B, 2505B, 2510B and 2514B with hydrostatic transmission – 480 698 and up.
	3 138 747 R1	BOLT, 5" long hex-hd (8)			
	3 138 748 R1	BOLT, 5-3/4" long hex-hd (10)	30		ARM ASSY w/BUSHING, 3 132 019 R1, exhaust rocker (Order PACKAGE, 3 132 293 R91)(4)
5	3 055 055 R2	VALVE, intake (4)	31	3 055 075 R2	SPRING, rocker arm (4)
6	3 055 056 R2	VALVE, exhaust (4)	32	3 132 137 R1	SCREW, rocker arm adjusting (8)
7	3 055 057 R91	CONE ASSY, spring lock valve (16)		3 132 138 R1	NUT, rocker arm shaft (8)
8	3 055 058 R2	CAP, valve spring retainer (8)	33	3 055 077 R6	BRACKET, rocker arm shaft (5)
9	3 055 060 R1	SPRING, valve (8)		103 028	NUT, hex (5) All engines except 2500A, 2500B, 2505B, 2510B and 2514B with hydrostatic transmission – 480271 and up.
10		SEAL, valve stem (Order PACKAGE, 3 218 399 R91) (8)		179 894	BOLT, 1/2 x 13-2x3-1/4, hex-hd (5) 2500A, 2500B, 2505B, 2510B and 2514B with hydrostatic transmission – 480271 and up.
11	3 055 059 R91	ROTO CAP, lower valve spring (8) (Replaces 3 218 069 R1)		3 050 129 R1	WASHER, lock 95)
13		(See Individual Engine Variation)		179 822	SCREW, hex-hd cap (5)
14	933 537 R1	PLUG, expansion (32 mm) (4) (Replaces 933 750 R1)	34	718 743 R1	RING, packing
	OR		35	934 259 R1	PLUG
14	934 804 R1	PLUG, expansion (34 mm) (X)	36		(See Individual Engine Variation)
15	3 055 022 R2	GUIDE, valve stem (8)	37	3 218 128 R1	CRAB, injector nozzle mounting 250A - SM 640000 and up 250A - HS 646000 and up 250A - TC 700000 and up 260A - TD 705000 and up 260A - HS 652071 and up 2500 Series - 92393 and up 3500 Series - 181797 and up
16		NOT USED		24 477 R1	SCREW, hex-hd cap (4)
17	3 055 663 R1	STUD, exhaust manifold (8)		3 218 129 R1	WASHER, lock (4)
18	3 055 221 R1	STUD, water collecting pipe (8) All engines except 2500A, 2500B, 2505B, 2510B and 2514B with hydrostatic transmission – 480271 and up.		3 055 369 R1	SHACKLE, engine mtg. RH § - Not Furnished Separately.
19	3 055 370 R1	SHACKLE, engine mtg. front			
	271 604	SCREW, hex-hd cap			
20	3 055 344 R1	INSERT, nozzle holder (4)			
21	3 055 412 R1	STUD, nozzle holder (8) 260A - HS 652071 and below 2500 - 92392 and below 3500 - 181796 and below			

## CYLINDER HEAD

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CYLINDER HEAD AND RELATED PARTS – Continued</b> <b>(3514) (2544)</b> <b>(2500A, 2500B, 2505B, 2510B, 2514B)</b> <b>(3500A) (250A) (260A)</b>			<b>(2500A, 2500B, 2505B, 2510B, 2514B AND 3500A)</b>		
3	132 292 R92	PACKAGE, intake rocker arm (Includes reference Nos. 28, 32 and attaching hardware)	1	3 055 181 R1 103 025	COVER, valve housing NUT (4) (+) and below
3	132 293 R92	PACKAGE, exhaust rocker arm (Includes reference Nos. 30, 32 and attaching hardware)	3	055 223 R1 187 953	STUD, valve housing cover (4) BOLT (+) and below
3	228 677 R91	PACKAGE, valve seals (Replaces 3 218 399 R91) (Consists of - § 8 SEAL 1 SLEEVE	13	933 574 R1	PLUG, expansion (1.97) (Engine Serial No. 105018 and below, 61160 and below, 44-S-1 and below, 45-S-1 and below, 46-S-1 and below and 47-S-1 and below) (2)
3	136 799 R99	PACKAGE, cylinder head gasket (Consists of - 717 203 R1 O-RING, injection nozzle (4) 3 053 133 R1 RING, packing (8) 3 138 642 R1 GASKET, valve housing cover 3 055 398 R1 GASKET, intake manifold 3 055 306 R1 GASKET, water collecting pipe (4) 3 138 638 R1 GASKET, disc valve housing cover (4) 3 056 941 R1 RING, packing (4) 3 132 143 R1 GASKET, water outlet 3 228 362 R1 GASKET, cylinder head 3 132 434 R1 GASKET, exhaust manifold (4) )	13	934 003 R1	PLUG, expansion (2.05) (Engine Serial No. 105019 and above, 61161 and above, 44-S-2 and above, 45-S-2 and above, 46-S-2 and above and 47-S-2 and above) (2)
3	144 786 R92	PACKAGE, valve housing cover breather field improvement (Used to avoid oil loss through crankcase breather during tractor operation with extreme sloping positions) (Consists of - 3 144 117 R93 CAP, breather 3 144 120 R1 CLAMP 3 144 789 R1 COVER, closing 3 144 788 R2 COVER, valve housing 3 138 639 R1 GASKET, breather 3 138 642 R1 GASKET, valve cover 3 070 232 R1 O-RING 3 138 638 R1 RING, valve cover (4)	1	3 055 181 R1 3 055 223 R1	COVER, valve housing STUD, cylinder head cover (4) (+) and below
				103 025	NUT (4) (+) and below
				187 953	BOLT (+) and up
			13	934 003 R1	PLUG, expansion (2.05) (2)
			13	934 003 R1	PLUG, expansion (2.05) (2)
					<b>(250A and 260A)</b>
					<b>(3514)</b>
			1	3 055 181 R1	COVER, valve housing
			13	933 574 R1	PLUG, expansion (1.97) (Engine Serial No. 105018 and below, 61160 and below, 44-S-1 and below, 45-S-1 and below, 46-S-1 and below and 47-S-1 and below) (2)
			13	934 033 R1	PLUG, expansion (2.05) (Engine Serial No. 105019 and above, 61161 and above, 44-S-2 and above, 45-S-2 and above, 46-S-2 and above and 47-S-2 and above) (2)
<b>ENGINE VARIATIONS</b> <b>(2544)</b>					
1	3 059 219 R21	COVER ASSY, valve housing			
13	933 574 R1	PLUG, expansion (1.97) (Engine Serial No. 105018 and below, 61160 and below, 44-S-1 and below, 45-S-1 and below, 46-S-1 and below and 47-S-1 and below) (2)			
13	934 003 R1	PLUG, expansion (2.05) (Engine Serial No. 105019 and above, 61161 and above, 44-S-2 and above, 45-S-2 and above, 46-S-2 and above and 47-S-2 and above) (2)			
36	3 132 821 R92	CAP, breather			

(+) - Serial No. Not Available.

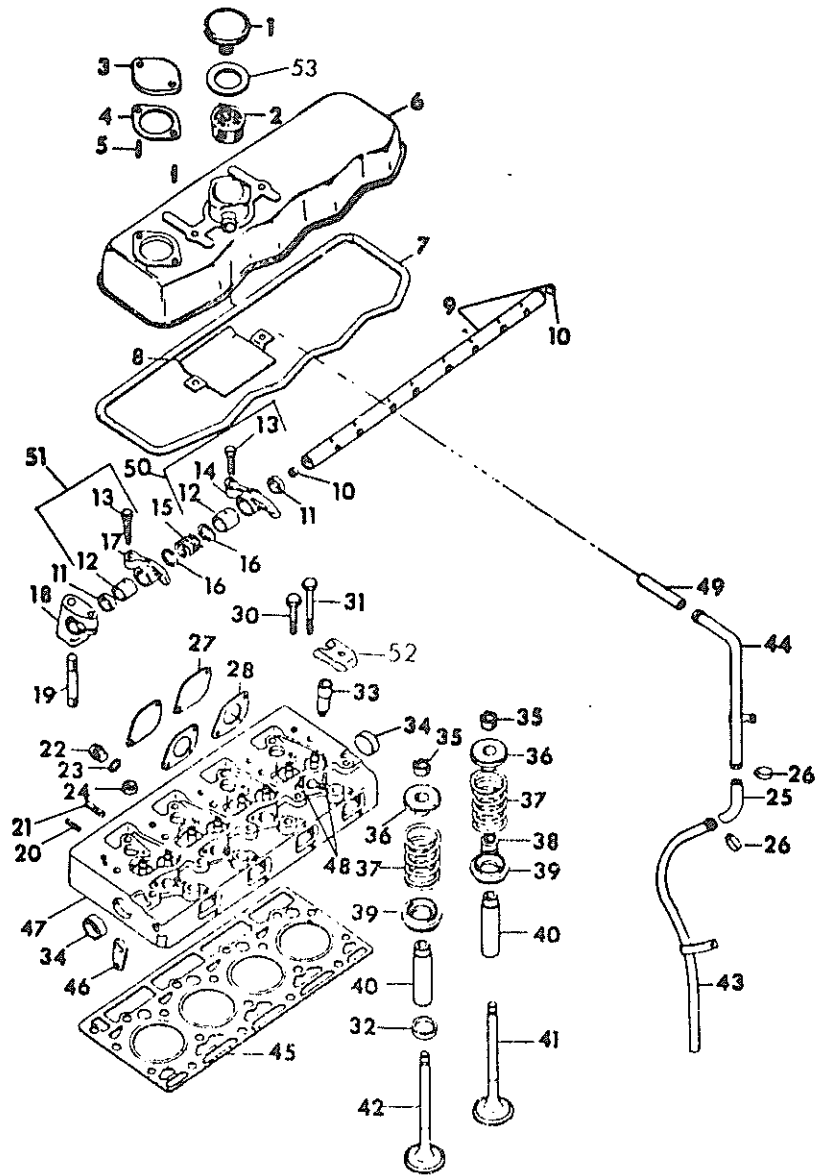
§ - Not Furnished Separately.

# CYLINDER HEAD

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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## CYLINDER HEAD AND RELATED PARTS (TD-7E, TD-8E, 100E and 125E)



### CG-5535

1	3 136 337 R91	CAP, breather w/GASKET 3 136 338 R1	6	3 136 400 R13 426 444	COVER w/TWO STUD, 710 936 R1 SCREW, hex-hd cap (4) (+) and below
2	3 136 336 R1	STRAINER, insert-breather	186 274		BOLT (+) and up
3	3 136 405 R1 102 635 103 321	COVER, closing NUT, hex (2) WASHER, lock (2)	3 136 506 R1		RING, packing (4)
4	3 136 406 R1	GASKET, closing cover	7	3 136 768 R1	GASKET
5	710 936 R1	STUD, valve housing cover (2)	8	3 136 401 R3 179 789 103 319	PLATE, screening SCREW, hex-hd cap (2) WASHER, lock (2)

(+) - Serial No. Not Available.

## CYLINDER HEAD

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CYLINDER HEAD AND RELATED PARTS A-- Continued (TD-7E, TD-8E, 100E and 125E)</b>			31	3 138 748 R1	BOLT, cylinder head (Long) (146 mm) (10)
9	3 055 070 R31	SHAFT w/two PLUGS, 933 565 R1, rocker arm	32	3 132 362 R1	RING, exhaust valve seat (.15 mm O/S)
10	933 565 R1	PLUG, expansion (2)	32	3 132 361 R1	RING, exhaust valve seat (.40 mm O/S)
11	3 055 068 R1	BUSHING, spacer (7)	33	3 055 344 R1	INSERT, nozzle holder (4)
12	3 132 019 R1	BUSHING, valve lever (8) TD-7E and 100E -- 54028 and below TD-8E and 125E -- 6345 and below	34	934 003 R1	PLUG, expansion (2)
13	3 132 137 R1 3 132 138 R1	SCREW, adjusting (8) NUT, adjusting screw (8)	35	3 055 057 R91	CONE, valve spring (16)
14		ARM ASSY, valve intake (Order PACKAGE, 3 132 292 R91) (4)	36	3 055 058 R2	CAP, retainer alve spring (8)
15	3 055 075 R2	SPRING, rocker arm (4)	37	3 136 000 R1	SPRING, valve (8)
16	3 055 669 R1	WASHER, valve lever thrust (8)	38		SEAL, valve stem (Order PACKAGE, 3 218 399 R91)
17		ARM ASSY, valve exhaust (Order PACKAGE, 3 132 293 R91) (4)	39	3 055 059 R91	ROTATOR, valve mechanism (8)
18	3 055 077 R6 179 822 3 050 129 R1 103 028  179 894	BRACKET, valve lever shaft (5) SCREW, hexh-d cap (5) WASHER, lock (5) NUT (5) 7E and 100E -- 54021 and below 8E and 125E -- 6345 and below BOLT, 1/2 x 13-2X3--1/4, hex-hd (5) 7E and 100E -- 54022 and up 8E and 125E -- 6346 and up	40	3 055 022 R2	GUIDE, valve stem (8)
19		NOT USED	41	3 055 055 R2	VALVE, intake (4)
20	3 055 221 R1	STUD, 5/16-24" x 5/16-18" x 1-5/32" water collecting pipe (8) TD-7E and 100E -- 54028 and below TD-8E and 125E -- 6345 and below	42	3 136 915 R2	VALVE, exhaust (4)
21	3 055 663 R1	STUD, 3/8-24" x 3/8-16" x 1-15/32" exhaust pipe (38 mm) (8)	43	3 136 343 R21	TUBE, lower breather
22	934 259 R1	PLUG, mid	44	3 136 341 R12 3 055 574 R1	TUBE, upper breather WASHER
23	718 743 R1	RING, packing	45	3 228 362 R1	GASKET, cylinder head (Replaces 3 138 959 R3)
24	933 537 R1  OR 934 804 R1 3 132 764 R1	PLUG, expansion (32 mm) (4) (Replaces 933 750 R1)  PLUG, expansion (34 mm) (X) ADAPTER (4) (+) and below	46	3 055 370 R1 271 604	PLATE, engine lifting front SCREW, hex-hd cap
25	3 138 650 R1	HOSE, breather tube	47	3 055 367 R97	HEAD ASSY, cylinder (Composed of - 8 GUIDE 3 055 022 R2 § 1 HEAD 4 INSERT 3 055 344 R1 4 PLUG 933 537 R1 2 PLUG 934 003 R1 § 4 SEAT )
26	897 116 H1	CLAMP, hose (2)	48	3 055 412 R1	STUD, nozzle holder (8) TD-7E and 100E -- 51435 and below TD-8E and 125E -- 3048 and below
27	3 132 721 R1 103 025 103 320	COVER (2) NUT, hex (4) WASHER, reg lock (4)	49	3 136 339 R1	HOSE, plastic
28	3 055 306 R1	GASKET, cover (2)	50	3 132 292 R92	PACKAGE, intake rocker arm
30	3 138 747 R1	BOLT, cylinder head (Short) (123 mm) (8)	51	3 132 293 R92	PACKAGE, exhaust rocker arm
			52	3 218 128 R1  24 477 R1 3 218 129 R1	HOLDER, injector (4) TD-7E and 100E -- 51436 & up TD-8E and 125E -- 3049 & up SCREW, hex-hd cap (4) WASHER, lock (4)
			53	3 136 338 R1	GASKET, breather

§ - Not furnished separately.  
(+) - Serial No. Not Available.  
(X) - As Required.

# CYLINDER HEAD

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>CYLINDER HEAD AND RELATED PARTS — Continued</b> (TD-7E, TD-8E, 100E and 125E)					
3 228 677 R91		PACKAGE, valve seals service (Replaces 3 218 399 R91) (Consists of - § 8 SEAL 1 SLEEVE      3 132 420 R1 )			
3 136 800 R98		PACKAGE, cylinder head gasket service (TD-7E and 100E) (x) (Consists of -			
3 228 362 R1		GASKET, cylinder head			
3 132 434 R1		GASKET, exhaust manifold (4)			
3 055 398 R1		GASKET, intake manifold			
3 136 768 R1		GASKET, valve cover			
3 055 306 R1		GASKET, water collecting pipe (4)			
3 132 143 R1		GASKET, water outlet			
717 203 R1		"O" RING, injection nozzle (4)			
3 136 506 R1		RING, packing (4)			
3 053 133 R1		RING, packing leak line (8)			
3 055 941 R1		RING, packing injection nozzle inlet (4) )			
3 144 826 R94		PACKAGE, cylinder head gasket service (TD-8E and 125E) (x) (Consists of -			
3 228 362 R1		GASKET, cylinder head			
3 132 434 R1		GASKET, exhaust manifold (4)			
3 055 398 R1		GASKET, intake manifold			
3 144 628 R1		GASKET, turbocharger			
3 136 768 R1		GASKET, valve cover			
3 055 306 R1		GASKET, water collecting pipe (4)			
3 132 143 R1		GASKET, water outlet			
717 203 R1		"O" RING, injection nozzle (4)			
3 136 506 R1		RING, packing (4)			
3 053 133 R1		RING, packing leak line (8)			
3 055 941 R1		RING, packing injection nozzle inlet (4)			
3 136 248 R1		GASKET, adapter			
3 132 060 R1		GASKET, turbo inlet			
3 144 359 R1		GASKET, turbo drain )			

(x) - As Required.



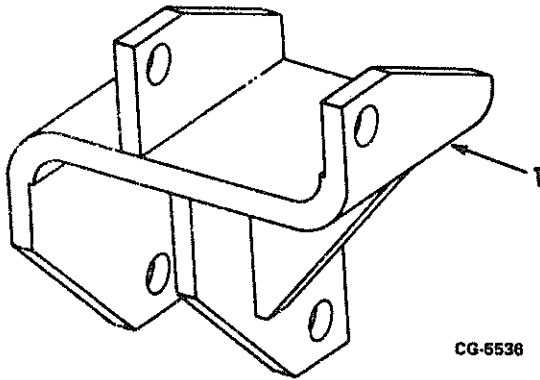
**REFER TO ALPHABETICAL INDEX  
FOR COMPLETE LISTING OF PARTS**

**ELECTRICAL**

**9**

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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ALTERNATOR BRACKET (\*)  
(3514) (2544)



1	3 139 173 R91	BRACKET, alternator (Replaces 3 132 268 R12)
	179 828	SCREW, hex-hd cap (2)
	102 634	NUT, hex (2)
	103 320	WASHER, lock (2 used with 2544 and 5 used with 3514) (2)
	3 218 375 R1	DISC, spring
	3 399 801 R1	WASHER (Used w/3514) (2)
	30 183 R1	WASHER, flat (Used w/3514)
	426 444	SCREW, hex-hd cap (Used w/3514)

(\*) - All Models Except 3514 and 2544,  
refer to CHASSIS PARTS CATALOG.



**REFER TO ALPHABETICAL INDEX  
FOR COMPLETE LISTING OF PARTS**

**ENGINE MOUNTING**

**10**

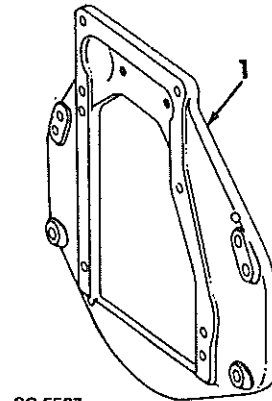
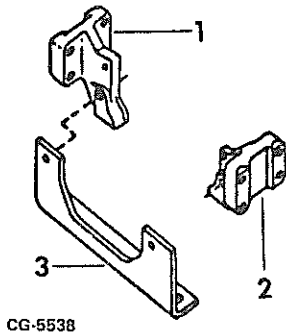
# ENGINE MOUNTING

REF. NO.	PART NUMBER	DESCRIPTION
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REF. NO.	PART NUMBER	DESCRIPTION
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**ENGINE SUPPORTS (2544)**

**ENGINE ADAPTER (2544 AND 3514)**

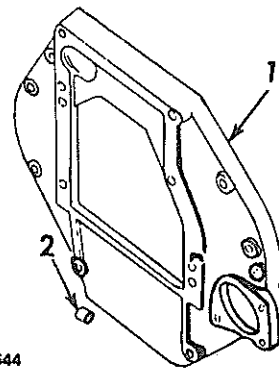
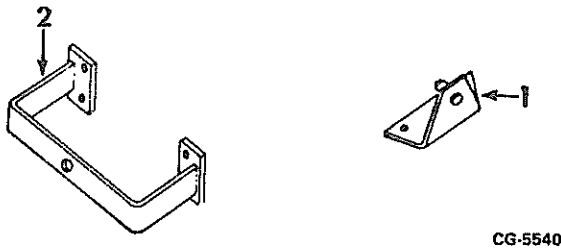


- 1 400 380 R1 SUPPORT, engine front LH  
570 879 R1 SCREW, hex-hd cap
- 2 400 381 R1 SUPPORT, front engine RH  
570 879 R1 SCREW, hex-hd cap
- 3 396 805 R1 SUPPORT, engine mounting bracket  
396 804 R1 BOLT, engine mounting bracket (2)  
103 325 WASHER, lock (2)

- 1 3 132 162 R1 ADAPTER, engine  
179 886 SCREW, hex-hd cap (2)  
179 884 SCREW, hex-hd cap (4)  
103 323 WASHER, lock (6)

**ENGINE SUPPORT AND BRACKET (3514)**

**FLYWHEEL PLATE (2500A, 2500B, 2505B, 2510B, 2514B, 3500A, 250A and 260A)**



- 1 404 321 R1 BRACKET, engine support  
179 884 SCREW, hex-hd cap (2)  
103 323 WASHER, lock (2)
- 2 404 326 R1 YOKE, engine support  
271 548 SCREW, hex-hd cap (4)

- 1 3 136 059 R22 PLATE, w/two BUSHING  
3 136 060 R2, flywheel  
179 885 SCREW, hex-hd cap (4)  
3 050 128 R1 WASHER, lock (4)
- 2 3 136 060 R2 BUSHING (2)

# ENGINE MOUNTING

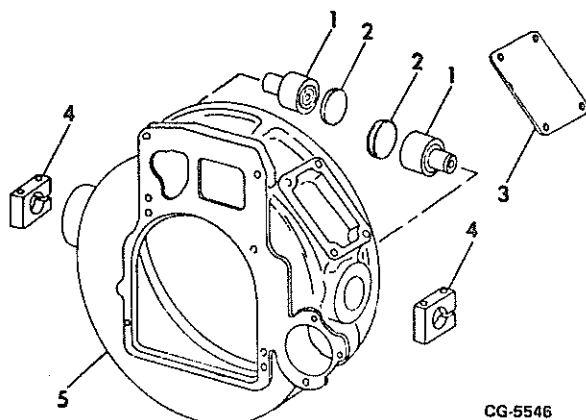
EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION
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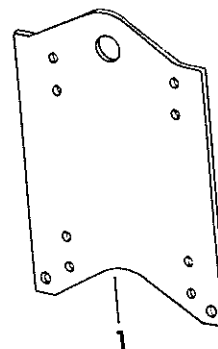
REF. NO.	PART NUMBER	DESCRIPTION
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## FLYWHEEL HOUSING, COVER AND RELATED PARTS (TD-7E, TD-8E, 100E AND 125E)

## AIR CLEANER BRACKET (TD-7E, TD-8E, 100E AND 125E)



CG-5546



CG-5548

- |   |               |  |
|---|---------------|--|
| 1 | 3 136 287 R2  | SHAFT, trunnion mounting (2)   |
| 2 | 3 136 465 R1  | PLUG, (2)  |
| 3 |               | COVER, flywheel housing inspection<br>(Refer to CHASSIS PARTS CATALOG)       |
| 4 |               | BLOCK, rear mounting (Refer to CHASSIS PARTS CATALOG) (2)                    |
| 5 | 3 136 288 R12 | HOUSING w/TWO PLUG,<br>3 136 465 R1 and TWO SHAFT,<br>3 136 287 R2, flywheel |
|   | 179 884       | SCREW, hex-hd cap (4)  |
|   | 179 886       | SCREW, hex-hd cap (2)  |
|   | 3 050 128 R1  | WASHER, lock (6)   |

- |   |               |  |
|---|---------------|--|
| 1 | 3 136 272 R31 | BRACKET, air cleaner w/SIX NUTS,<br>271 500 (Replaces 3 144 621 R92) |
|   | 179 890       | SCREW, hex-hd cap (2)  |
|   | 3 050 128 R1  | WASHER, lock (2)   |
|   | 42 296        | SPACER, pipe (2)   |
|   | 271 500       | NUT, hex (6)   |



**REFER TO ALPHABETICAL INDEX  
FOR COMPLETE LISTING OF PARTS**

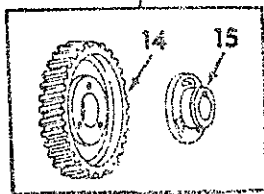
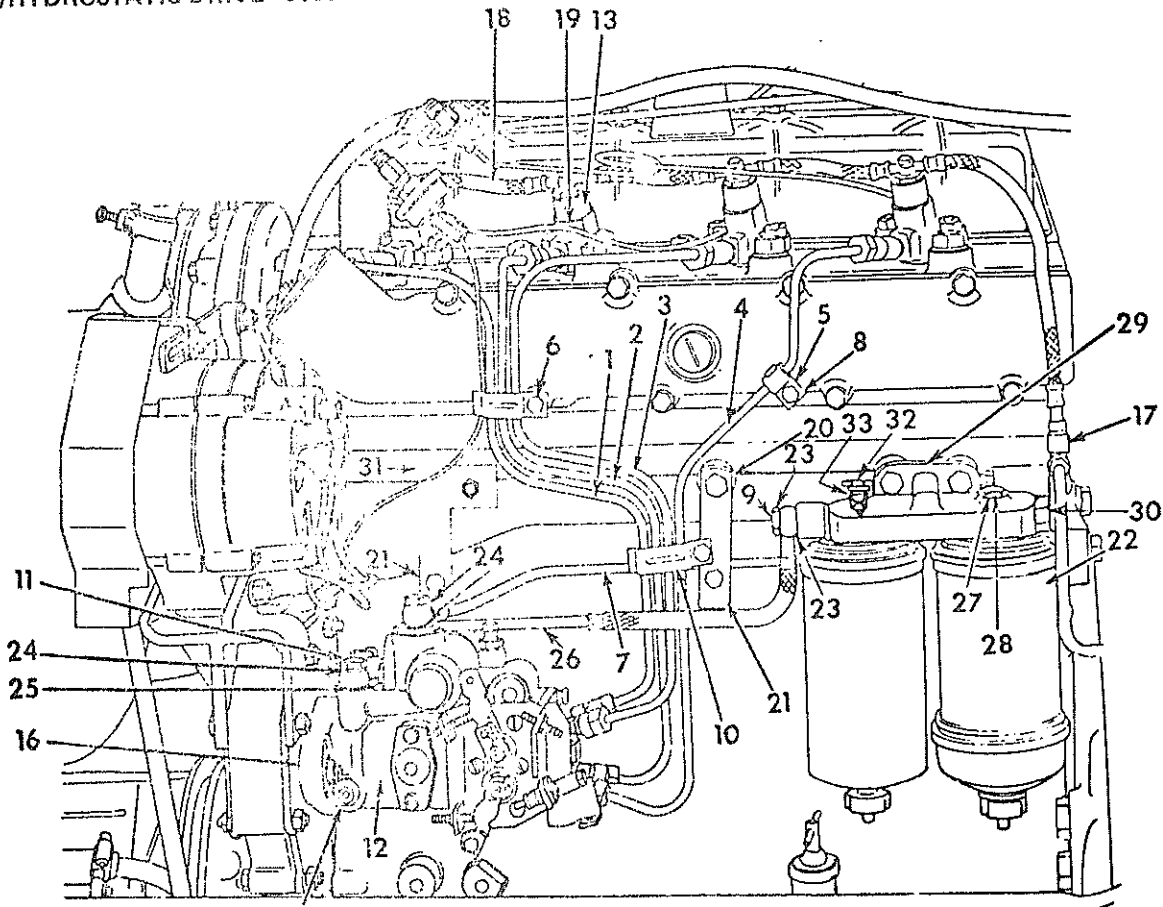
**FUEL SYSTEM**

**11**

### FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**FUEL INJECTION PUMP CONNECTIONS**  
 (3514 and 2544 w/SYNCHROMESH TRANSMISSION -  
 10144 and below)  
 (2544 w/HYDROSTATIC DRIVE - 30591 and below)



1	3 132 164 R11	PIPE ASSY, injection No. 1	9	710 098 R2	SCREW, hollow
2	3 132 165 R11	PIPE ASSY, injection No. 2	10	3 132 768 R1	CLAMP, pipe (Will work for lower CLAMP, 3 055 478 R1 and upper CLAMP, 3 055 479 R1)
3	3 132 166 R11	PIPE ASSY, injection No. 3	10	or 3 218 243 R1	CLAMP, pipe
4	3 132 167 R11	PIPE ASSY, injection No. 4		179 791	SCREW, 1/2" long hex-hd cap
5	3 055 480 R1	PIPE		179 793	SCREW, 5/8" long hex-hd cap
6	3 132 766 R1	CLAMP, pipe (Will work for lower CLAMP, 3 055 470 R1 and upper CLAMP, 3 055 471 R1)		179 800	SCREW, 1-3/8" long hex-hd cap
7	3 055 609 R91	LINE, overflow		109 084	NUT, hex
8	3 132 767 R1	CLAMP, pipe (Will work for upper CLAMP, 3 055 476 R1 and lower CLAMP, 3 055 477 R1)		103 319	WASHER, lock (3)
			11	717 200 R1	SCREW, hollow
			12		PUMP ASSY, fuel injection (Refer to "FUEL INJECTION PUMP")
				102 634	NUT, hex (2)
				103 320	WASHER, lock (2)
				3 055 574 R1	WASHER, .335 x .748 x .098 (2)

## FUEL SYSTEM

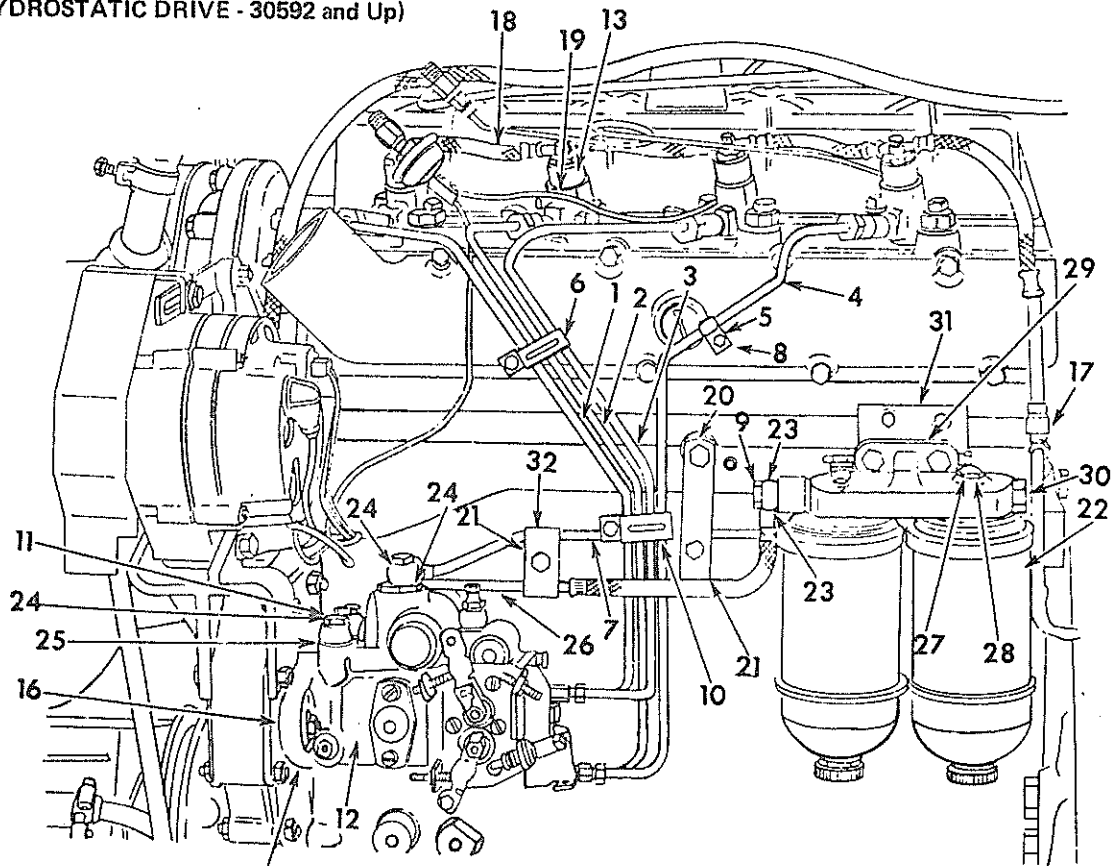
EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL INJECTION PUMP CONNECTIONS - Continued</b> (3514 and 2544 w/SYNCHROMESH TRANSMISSION - 10144 and below) (2544 w/HYDROSTATIC DRIVE - 30591 and below)					
13		NOZZLE and HOLDER ASSY, injection (Refer to "NOZZLE and NOZZLE HOLDER") (4)			
	103 025	NUT, hex (8)			
14	3 056 885 R3	GEAR, injection pump (66 Teeth)			
15	3 055 067 R2	HUB, injection pump gear			
	25 228 R1	SCREW, hex-hd cap (3)			
	30 183 R1	WASHER, .335 x .748 x .098 (3)			
16	3 055 384 R1	GASKET, fuel injection pump			
17	3 055 739 R1	UNION, special tee			
	3 056 137 P1	NUT, coupling (2)			
	3 056 136 R1	RING, compression (2)			
18	3 055 606 R91	LINE, leak			
19	717 203 R1	O-RING, injection nozzle sealing (4)			
20	3 132 174 R1	LINK, fuel line fixing			
	179 835	SCREW, hex-hd cap			
	103 321	WASHER, lock			
21	3 059 647 R1	CLIP, fuel line (2)			
	179 793	SCREW, hex-hd cap			
	103 319	WASHER, lock			
22		FILTER, two stage fuel (Refer to "FUEL FILTER")			
	179 838	SCREW, hex-hd cap (2)			
	103 321	WASHER, lock (2)			
23	933 610 R1	RING, packing (2)			
24	713 845 R1	RING, packing (3)			
25	3 055 390 R1	RING, packing			
26	3 132 596 R1	LINE, filter injection pump fuel			
27	933 610 R1	RING, packing			
28	3 056 600 R1	ADAPTER			
29	3 059 289 R1	PLATE, thrust			
30	933 766 R1	PLUG, closing			
31	3 055 678 R1	LINK, fuel line fixing			
	179 835	SCREW, hex-hd cap			
	103 321	WASHER, lock			
32	933 610 R1	RING, packing			
33	712 616 R1	PLUG, filler			

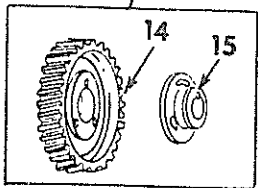
# FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**FUEL INJECTION PUMP CONNECTIONS**  
 (2544 w/SYNCHROMESH TRANSMISSION - 10145 and Up)  
 (2544 w/HYDROSTATIC DRIVE - 30592 and Up)



CG-5554



1	3 144 237 R91	PIPE ASSY, injection No. 1	10	3 132 768 R1	CLAMP, pipe
2	3 144 215 R91	PIPE ASSY, injection No. 2	10	3 218 243 R1	CLAMP, pipe
3	3 144 217 R91	PIPE ASSY, injection No. 3		179 791	SCREW, 1/2" long hex-hd cap
4	3 144 219 R91	PIPE ASSY, injection No. 4		179 793	SCREW, 5/8" long hex-hd cap
5	3 055 480 R1	SPACER, pipe clamp		179 800	SCREW, 1-3/8" long hex-hd cap
6	3 132 766 R1	CLAMP, pipe		109 084	NUT, hex
7	3 144 214 R91	LINE, overflow		103 319	WASHER, lock (3)
8	3 132 770 R1	CLAMP, pipe	11	717 200 R1	SCREW, hollow
8	3 218 241 R1	CLAMP, pipe	12		PUMP ASSY, fuel injection (Refer to "FUEL INJECTION PUMP")
9	710 098 R2	SCREW, hollow		933 981 R1	NUT, drive shaft
				933 834 R1	WASHER, spring lock
				102 634	NUT, 5/16-18" hex (2)
				103 320	WASHER, 5/16" med lock (2)
				3 055 574 R1	WASHER, .335 x .748 x .098 (2)



## FUEL SYSTEM

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL INJECTION PUMP CONNECTIONS - Continued</b> (2544 w/SYNCHROMESH TRANSMISSION - 10145 and Up) (2544 w/HYDROSTATIC DRIVE - 30592 and Up)					
13		NOZZLE and HOLDER ASSY, injection (Refer to "NOZZLE and NOZZLE HOLDER") (4)			
	103 025	NUT, 5/16-24" hex (8)			
14	3 056 885 R3	GEAR, injection pump (66 Teeth)			
15	3 055 067 R2	HUB, injection pump gear			
	25 228 R1	SCREW, hex-hd cap (3)			
	30 183 R1	WASHER, .335 x .748 x .098 (3)			
16	3 055 384 R1	GASKET, fuel injection pump			
17	3 055 739 R1	UNION, special tee			
	3 056 137 R1	NUT, coupling (2)			
	3 056 136 R1	RING, compression (2)			
18	3 055 606 R91	LINE, leak			
19	717 203 R1	O-RING, injection nozzle sealing (4)			
20	3 132 174 R1	LINE, fuel line fixing			
	179 835	SCREW, hex-hd cap			
	103 321	WASHER, lock			
21	3 055 386 R1	CLIP, fuel line (2)			
	179 793	SCREW, hex-hd cap			
	103 319	WASHER, lock			
22		FILTER, two stage fuel (Refer to "FUEL FILTER")			
	179 841	SCREW, hex-hd cap (2)			
	933 620 R1	DISC, spring (2)			
23	933 610 R1	RING, packing (2)			
24	713 845 R1	RING, packing (3)			
25	3 055 390 R1	RING, packing			
26	3 144 226 R1	LINE, filter injection pump fuel			
27	933 610 R1	RING, packing			
28	3 056 600 R1	ADAPTER			
29	3 059 289 R1	PLATE, thrust			
30	712 616 R1	PLUG, closing			
31	3 144 225 R1	PLATE, mounting			
	179 838	SCREW, hex-hd cap (2)			
	103 321	WASHER, 3/8" med lock (2)			
32	3 132 318 R1	PLATE, counter			

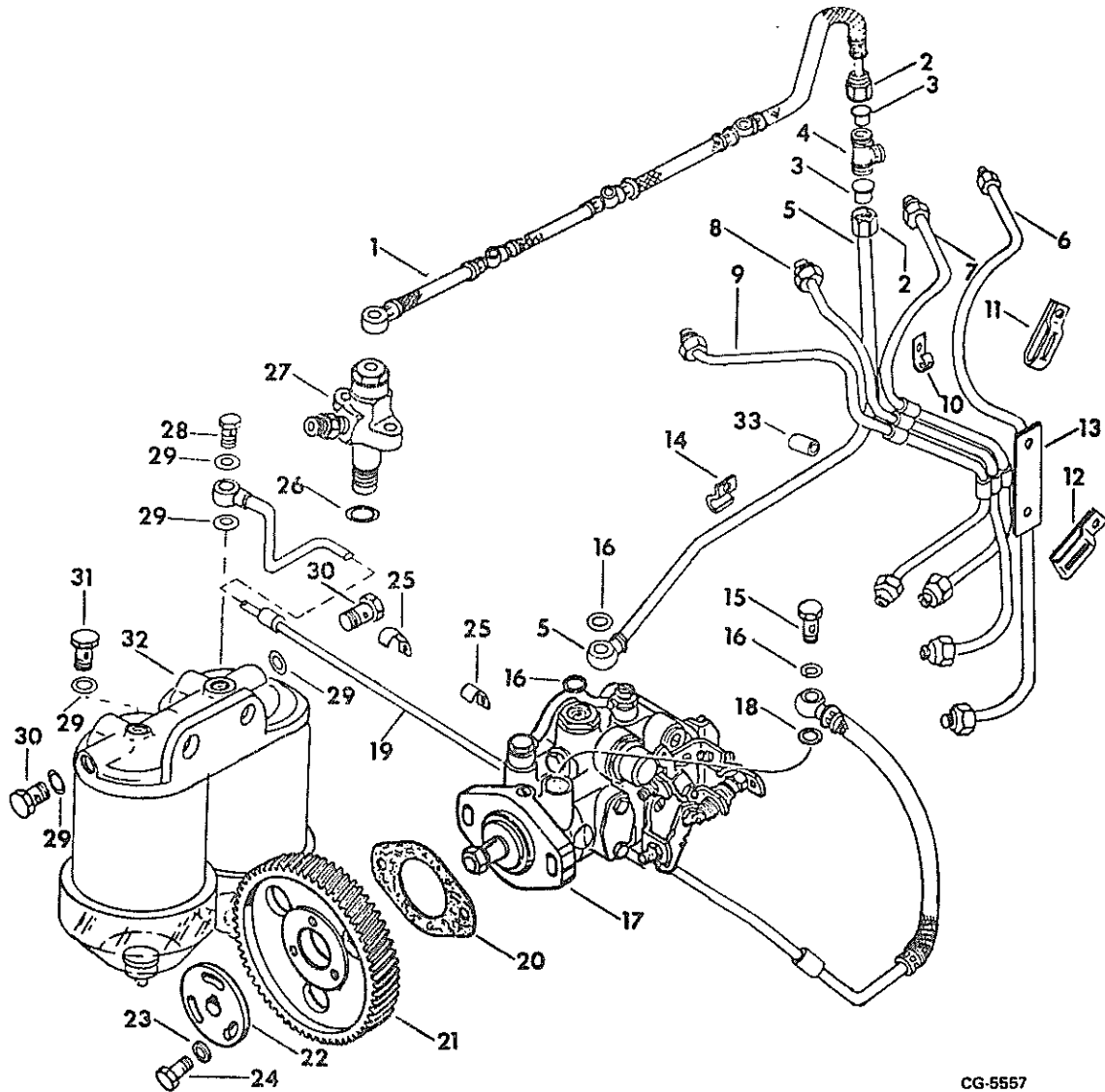
**FUEL SYSTEM**

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**FUEL INJECTION PUMP CONNECTIONS**

(2500A w/SYNCHROMESH TRANSMISSION - 069907 and below)

(2500 w/HYDROSTATIC DRIVE - 105487 and below)



CG-5557

1	3 055 606 R91	LINE, leak	8	3 132 165 R11	PIPE ASSY, injection No. 2
2	3 056 137 R1	NUT, coupling (2)	9	3 132 164 R11	PIPE ASSY, injection No. 1
3	3 056 136 R1	RING, compression (2)	10	3 132 767 R1	CLAMP, pipe
4	3 055 739 R1	UNION, special tee	11	3 132 766 R1	CLAMP, pipe
5	3 138 685 R1	LINE, overflow	12	3 132 768 R1	CLAMP, pipe
6	3 132 167 R11	PIPE ASSY, injection No. 4	12	3 218 243 R1	CLAMP, pipe
7	3 132 166 R11	PIPE ASSY, injection No. 3		179 791	SCREW, hex-hd cap
				179 793	SCREW, hex-hd cap
				179 800	SCREW, hex-hd cap
				109 084	NUT, hex.
				103 319	WASHER, lock (3)

## FUEL SYSTEM

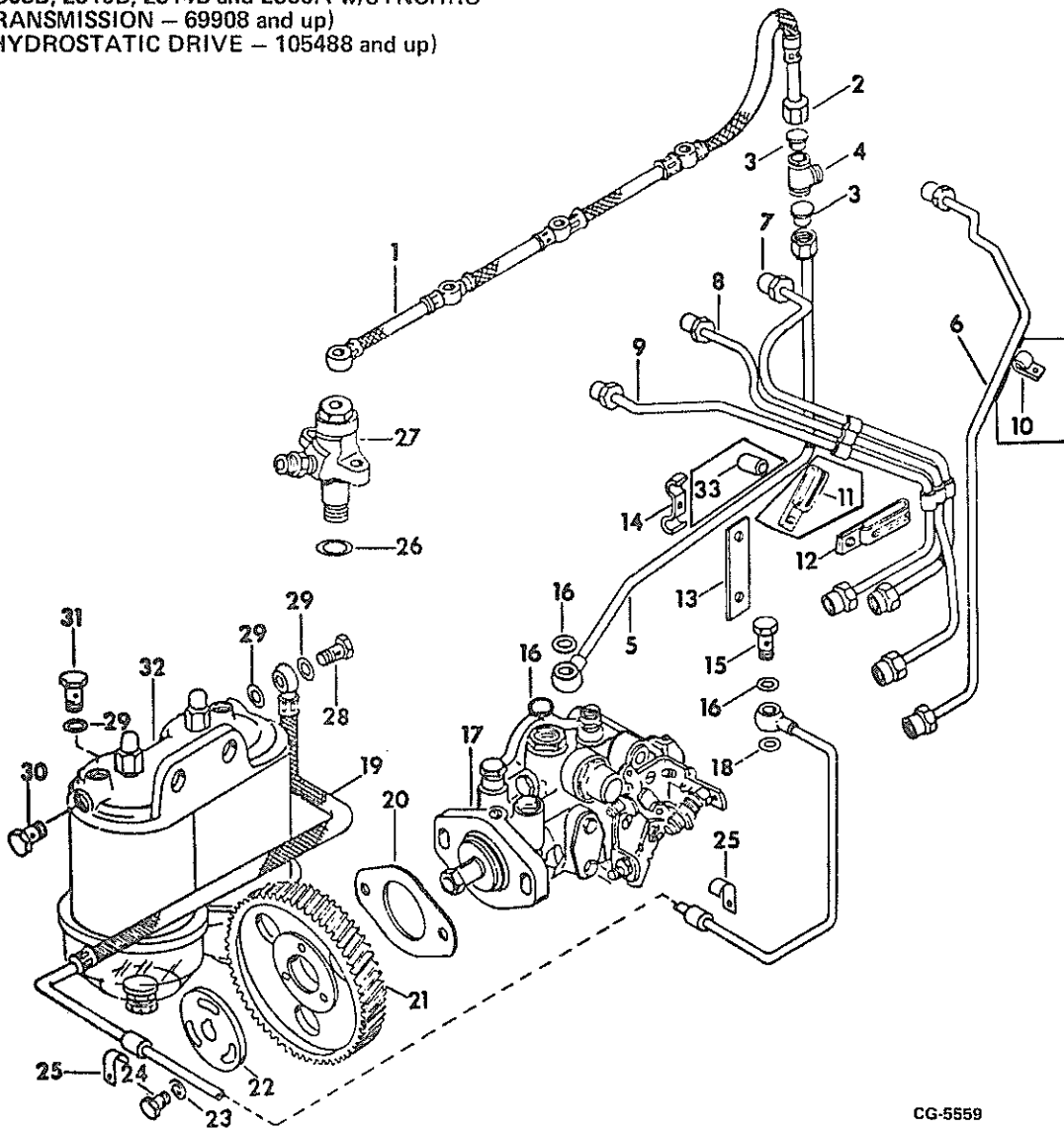
EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL INJECTION PUMP CONNECTIONS - Continued</b> (2500A w/SYNCHROMESH TRANSMISSION - 69907 and below) (2500 w/HYDROSTATIC DRIVE - 105487 and below)					
13	3 132 174 R1	LINK, fuel line fixing (2)			
	179 835	SCREW, hex-hd cap			
	103 321	WASHER, lock			
14	3 059 647 R1	CLIP, fuel line			
	179 793	SCREW, hex-hd cap (2)			
	103 319	WASHER, lock (2)			
15	717 200 R1	SCREW, hollow			
16	713 845 R1	RING, packing (3)			
17		PUMP ASSY, fuel injection (Refer to "FUEL INJECTION PUMP")			
18	3 055 390 R1	RING, packing			
19	3 136 077 R2	LINE, filter injection pump fuel			
20	3 055 384 R1	GASKET, fuel injection pump			
21	3 056 885 R3	GEAR, injection pump (66 Teeth)			
22	3 055 067 R2	HUB, injection pump gear			
23	30 183 R1	WASHER, .335 x .748 x .098 (3)			
24	25 228 R1	SCREW, 5/16-18" x 3/4" hex-hd cap (3)			
25	3 132 052 R1	CLIP, fuel line (2)			
26	717 203 R1	O-RING, injection nozzle sealing (4)			
27		NOZZLE and HOLDER ASSY, injection (Refer to "NOZZLE and NOZZLE HOLDER") (4)			
	103 025	NUT, 5/16-24" hex (8)			
28	710 098 R2	SCREW, hollow			
29	933 610 R1	RING, packing (5)			
30	712 616 R1	PLUG, filler (2)			
31	3 056 600 R1	ADAPTER			
32		FILTER, two stage fuel (Refer to "FUEL FILTER")			
33	3 055 480 R1	PIPE			

# FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**FUEL INJECTION PUMP CONNECTIONS**  
 2500B, 2505B, 2510B, 2514B and 2500A w/SYNCHRO-MESH TRANSMISSION – 69908 and up)  
 2500 w/HYDROSTATIC DRIVE – 105488 and up)



CG-5559

1	3 055 606 R91	LINE, leak 2500 SM – 69908 to 92392 2500 HS – 105488 to 459875	6	3 144 219 R91	PIPE, injection No. 4 2500 SM – 69908 to 92392 2500 HS – 105488 to 459875
1	3 218 124 R1	LINE, leak 2500 SM – 92393 and up 2500 HS – 459876 and up	6	3 218 157 R1	PIPE, injection No. 4 2500 SM – 92393 and up 2500 HS – 459876 and up
	3 218 130 R1	SCREW, hex-hd cap (4)	7	3 144 217 R91	PIPE, injection No. 3 2500 SM – 69908 to 92392 2500 HS – 105488 to 459875
	933 696 R1	RING, sealing (8)	7	3 218 156 R1	PIPE, injection No. 3 2500 SM – 92393 and up 2500 HS – 459876 and up
2	3 056 137 R1	NUT, coupling (2)			
3	3 056 136 R1	RING, compression (2)			
4	3 055 739 R1	UNION, special tee			
5	3 144 382 R1	LINE, overflow			

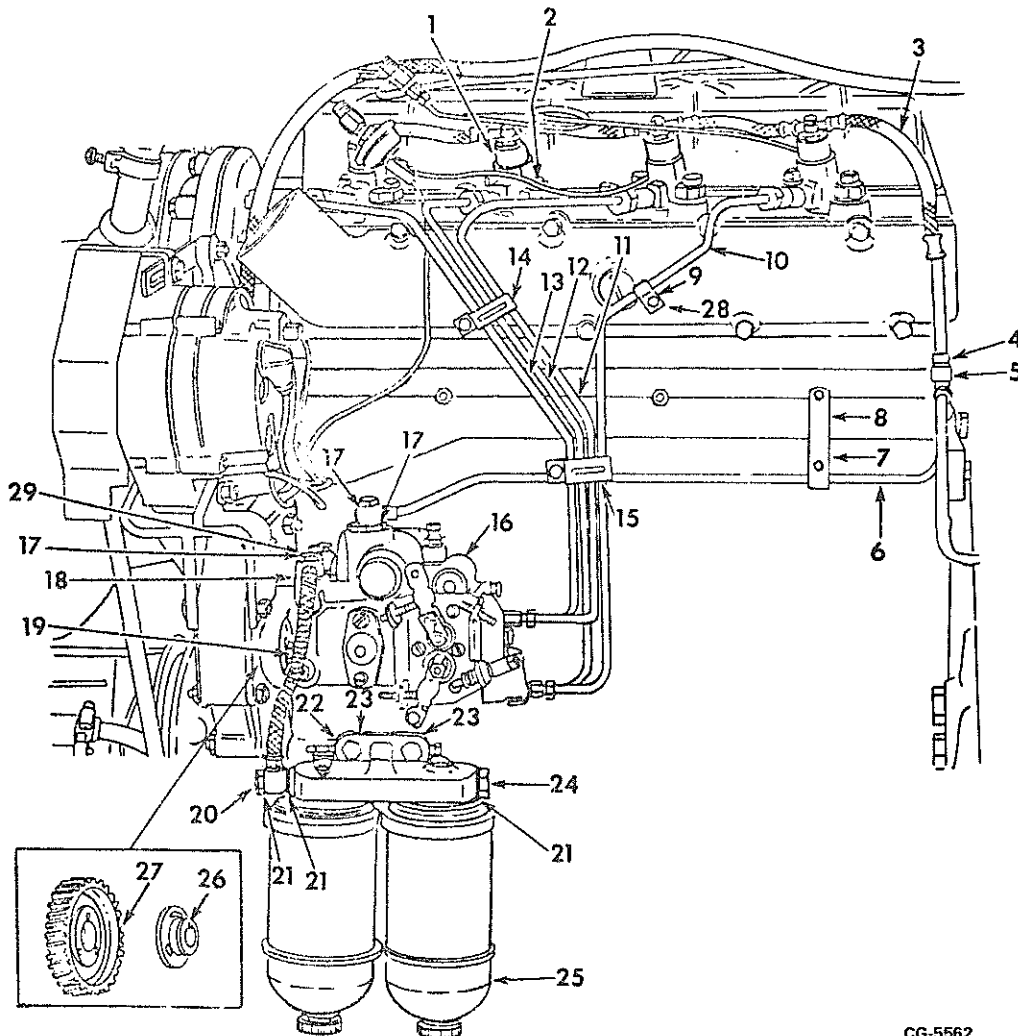
## FUEL SYSTEM

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL INJECTION PUMP CONNECTIONS - Continued</b> <b>(2500B, 2505B, 2510B, 2514B and 2500A w/SYNCHRO-</b> <b>MESH TRANSMISSION - 69908 and up)</b> <b>(2500 w/HYDROSTATIC DRIVE - 105488 and up)</b>			22	3 055 067 R2	HUB, injection pump gear
			23	30 183 R1	WASHER, .335 x .748 x .098 (3)
			24	25 228 R1	SCREW, 5/16-18" x 3/4" hex-hd cap (3)
8	3 144 215 R91	PIPE, injection No. 2 2500 SM -- 69908 to 92392 2500 HS -- 105488 to 459875	25	3 132 052 R1	CLIP, fuel line (2)
8	3 218 155 R1	PIPE, injection No. 2 2500 SM -- 92393 and up 2500 HS -- 459876 and up	26	717 203 R1	O-RING, injection nozzle sealing (4)
9	3 144 237 R91	PIPE, injection No. 1 2500 SM -- 69908 to 92392 2500 HS -- 105488 to 459875	27		NOZZLE and HOLDER ASSY, injection (Refer to "NOZZLE and NOZZLE HOLDER") (4)
				103 025	NUT, 5/16-24" hex (8)
9	3 218 154 R1	PIPE, injection No. 1 2500 SM -- 92393 and up 2500 HS -- 459876 and up	28	710 098 R2	SCREW, hollow
			29	933 610 R1	RING, packing (3)
10	3 132 767 R1	CLAMP, pipe 2500 SM -- 69908 to 92392 2500 HS -- 105488 to 459875	30	712 616 R1	PLUG, filler
11	3 132 766 R1	CLAMP, pipe 2500 SM -- 69908 to 92392 2500 HS -- 105488 to 459875	31	3 056 600 R1	ADAPTER
			32		FILTER, two stage fuel (Refer to "FUEL FILTER")
				179 841	SCREW, cap (2)
				933 620 R1	DISC, spring (2)
12	3 132 770 R1 OR	CLAMP, pipe (upper) (2)	33	3 055 480 R1	PIPE
12	3 218 241 R1	CLAMP, pipe (upper) (2)			2500 SM -- 92392 and below 2500 HS -- 459875 and below
12	3 132 768 R1 OR	CLAMP, pipe (lower)			
12	3 218 243 R1 933 988 R1 931 330 R1	CLAMP, pipe (lower) NUT, hex (3) SCREW, pan-hd sltd (3)			
13	3 132 174 R1 179 835 103 321	LINK, fuel line fixing (2) SCREW, hex-hd cap WASHER, lock			
14	3 055 386 R1 179 793 3 052 189 R1	CLIP, fuel line (2) SCREW, hex hdl cap (2) WASHER, lock (2)			
15	717 200 R1	SCREW, hollow			
16	713 845 R1	RING, packing			
17		PUMP ASSY, fuel injection (Refer to "FUEL INJECTION PUMP")			
	102 634	NUT, hex (2)			
	3 050 129 R1	WASHER, lock (2)			
	3 055 574 R1	WASHER, .335 x .748 x .098 (2)			
	933 981 R1	NUT, drive shaft			
	933 834 R1	WASHER, spring lock			
18	934 005 R1	RING, sealing			
19	3 136 077 R2	LINE, filter injection pump fuel			
20	3 055 384 R1	GASKET, fuel injection pump			
21	3 056 885 R3	GEAR, injection pump (66 Teeth)			

## FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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FUEL INJECTION PUMP CONNECTIONS  
(3500A)

CG-5562

1	103 025	NOZZLE and HOLDER ASSY, injection (Refer to "Nozzle and Nozzle Holder") (4) NUT, hex (2)	6	3 138 685 R1 3 056 137 R1 3 056 136 R1	LINE, overflow NUT (2) SLEEVE (2) 181796 and below
2	717 203 R1	"O" RING, injection nozzle sealing (4)	7	3 055 386 R1	CLIP, fuel line 180115 and up
3	3 218 124 R1	LINE, leak 181797 and up	7	3 059 647 R1 179 793 103 319	CLIP, fuel line 180114 and below SCREW, hex-hd cap WASHER, lock
3	3 055 606 R91 3 218 130 R1 933 696 R1	LINE, leak 181796 and below SCREW, hex-hd cap (4) RING, sealing (8)	8	3 132 174 R1 179 835 103 321	LINE, fuel line fixing SCREW, hex-hd cap WASHER, lock
4	3 056 137 R1 3 056 136 R1	NUT, coupling (2) RING, compression (2)	9	3 132 767 R1	CLAMP, pipe 181796 and below
5	3 055 739 R1	UNION, special tee		179 800 103 319	SCREW, hex-hd cap WASHER, lock
6	3 144 382 R1	LINE, overflow 181797 and up			

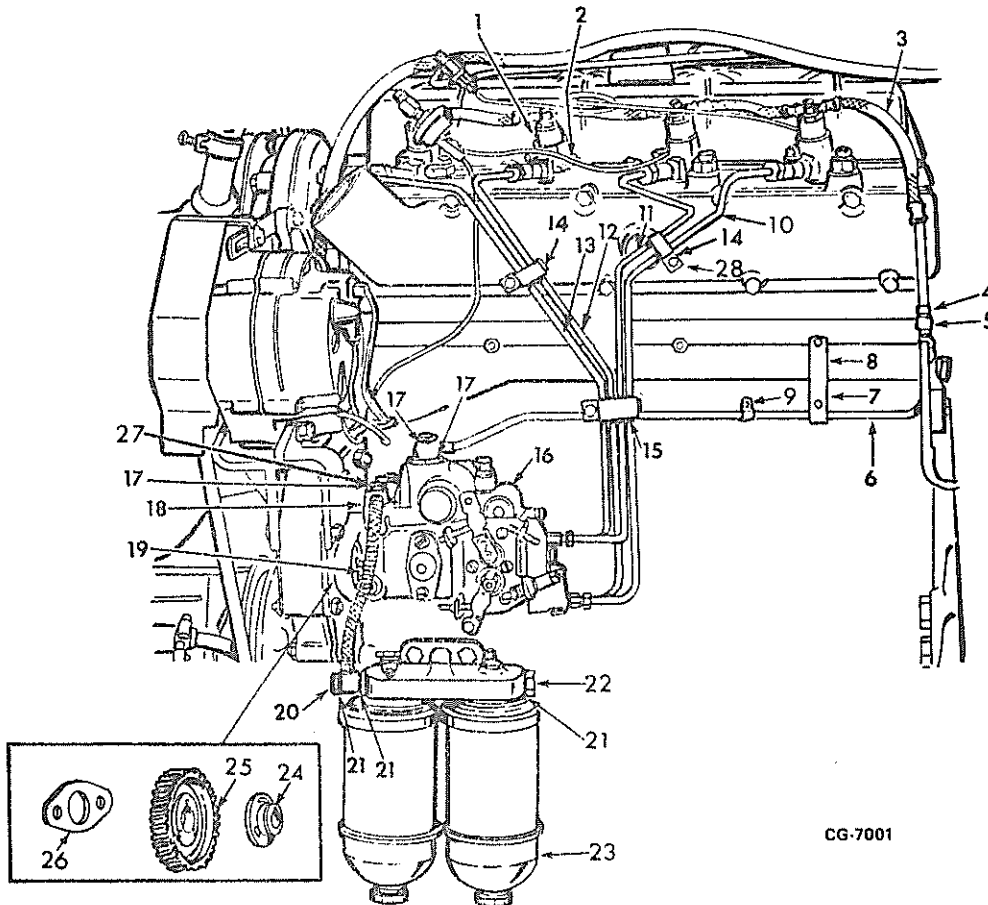
## FUEL SYSTEM

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL INJECTION PUMP CONNECTIONS - Continued (3500A)</b>			18	934 005 R1	RING, packing (replaces 3 055 390 R1)
10	3 218 157 R1	PIPE, injection No. 4 181797 and up	19	3 132 324 R1	LINE, filter injection pump fuel 180115 and above
10	3 144 219 R91	PIPE ASSY, injection No. 4 180115 to 181796	19	3 144 620 R2	LINE, filter injection pump fuel 180114 and below
10	3 132 167 R11	PIPE ASSY, injection No. 4 180114 and below	20	710 098 R2	SCREW, hollow 180115 and above
11	3 218 156 R1	PIPE, injection No. 3 181797 and up	20	717 200 R1	SCREW, hollow 180114 and below
11	3 144 217 R91	PIPE ASSY, injection No. 3 180115 to 181796	21	933 610 R1	RING, packing (3)
11	3 132 166 R11	PIPE ASSY, injection No. 3 180114 and below	22	3 059 289 R1	PLATE, thrust 180115 and above
12	3 218 155 R1	PIPE, injection No. 2 181797 and up	22	3 139 197 R1	PLATE, fuel filter 180114 and below
12	3 144 215 R91	PIPE ASSY, injection No. 2 180115 to 181796		179 839 103 321	SCREW, hex-hd cap (2) WASHER, lock (2)
12	3 132 165 R11	PIPE ASSY, injection No. 2 180114 and below	23	3 144 444 R1	SPACER, fuel filter (2) 180115 and above
13	3 218 154 R1	PIPE, injection No. 1 181797 and up	23	3 139 198 R1	PLATE, fuel filter 180114 and below
13	3 144 237 R91	PIPE ASSY, injection No. 1 180115 to 181796	24	3 056 600 R1	ADAPTER
13	3 132 164 R11	PIPE ASSY, injection No. 1 180114 and below	25		FILTER, two stage fuel (Refer to "Fuel Filter")
14	3 132 766 R1	CLAMP, pipe 181796 and below		179 841	SCREW, 3/8-16" x 1-1/4" hex-hd cap (2)
	179 793	SCREW, hex-hd cap		933 620 R1	DISC, spring (2)
	103 319	WASHER, lock	26	3 055 067 R2	HUB, injection pump gear
15	3 132 770 R1	CLAMP, pipe (Upper) (2)		25 228 R1	SCREW, hex-hd cap (3)
OR				30 183 R1	WASHER, .335 x .748 x .098" (3)
15	3 218 241 R1	CLAMP, pipe (Upper) (2)	27	3 056 885 R3	GEAR, injection pump (66 Teeth)
15	3 132 768 R1	CLAMP, pipe (Lower)	28	3 055 480 R1	PIPE 181796 and below
OR			29	717 200 R1	SCREW, hollow
15	3 218 243 R1	CLAMP, pipe (Lower)			
	933 988 R1	NUT, hex (3)			
	931 330 R1	SCREW, pan-hd sltd (3)			
16		PUMP ASSY, fuel injection (Refer to "Fuel Injection Pump")			
	102 634	NUT, hex (2)			
	3 050 129 R1	WASHER, 5/16" med lock (2)			
	3 055 574 R1	WASHER, .335 x .748 x .098" (2)			
	3 055 384 R1	GASKET, fuel injection pump			
	933 981 R1	NUT, drive shaft			
	933 834 R1	WASHER, spring lock			
17	713 845 R1	RING, packing (3)			

**FUEL SYSTEM**

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**FUEL INJECTION PUMP CONNECTIONS  
(250A)**

CG-7001

1		NOZZLE and HOLDER ASSY, injection (Refer to "Nozzle and Nozzle Holder") (4)	10	3 218 157 R1	PIPE, injection No. 4
2	717 203 R1	"O" RING, injection nozzle sealing (4)	11	3 218 156 R1	PIPE, injection No. 3
3	3 218 124 R1 3 218 130 R1 933 696 R1	LINE, leak SCREW, hex-hd cap (4) RING, sealing (8)	12	3 218 155 R1	PIPE, injection No. 2
4	3 056 137 R1 3 056 136 R1	NUT, coupling (2) RING, compression (2)	13	3 218 154 R1	PIPE, injection No. 1
5	3 055 739 R1	UNION, special tee	14	3 218 341 R1 OR 3 132 770 R1	CLAMP, pipe (2) SCREW, hex-hd cap (2) NUT, (2)
6	3 144 382 R1	LINE, overflow	14	931 330 R1 933 988 R1	CLAMP, pipe SCREW, hex-hd cap NUT, hex
7	3 055 386 R1 179 793 3 052 189 R1	CLIP, fuel line (2) SCREW, hex-hd cap (2) WASHER, lock (2)	15	3 218 243 R1 OR 3 132 768 R1	CLAMP, pipe SCREW, hex-hd cap NUT, hex
8	3 132 174 R1 179 835 103 321	LINE, fuel line fixing SCREW, hex-hd cap WASHER, lock	15	931 330 R1 933 988 R1	CLAMP, pipe SCREW, hex-hd cap NUT, hex
9	3 132 052 R1	CLIP, fuel line	16	102 634 3 050 129 R1 3 055 574 R1 933 981 R1 933 834 R1	PUMP ASSY, fuel injection (Refer to "Fuel Injection Pump") NUT, hex (2) WASHER, 5/16" med lock (2) WASHER, flat (2) NUT, pump drive shaft WASHER, pump drive shaft



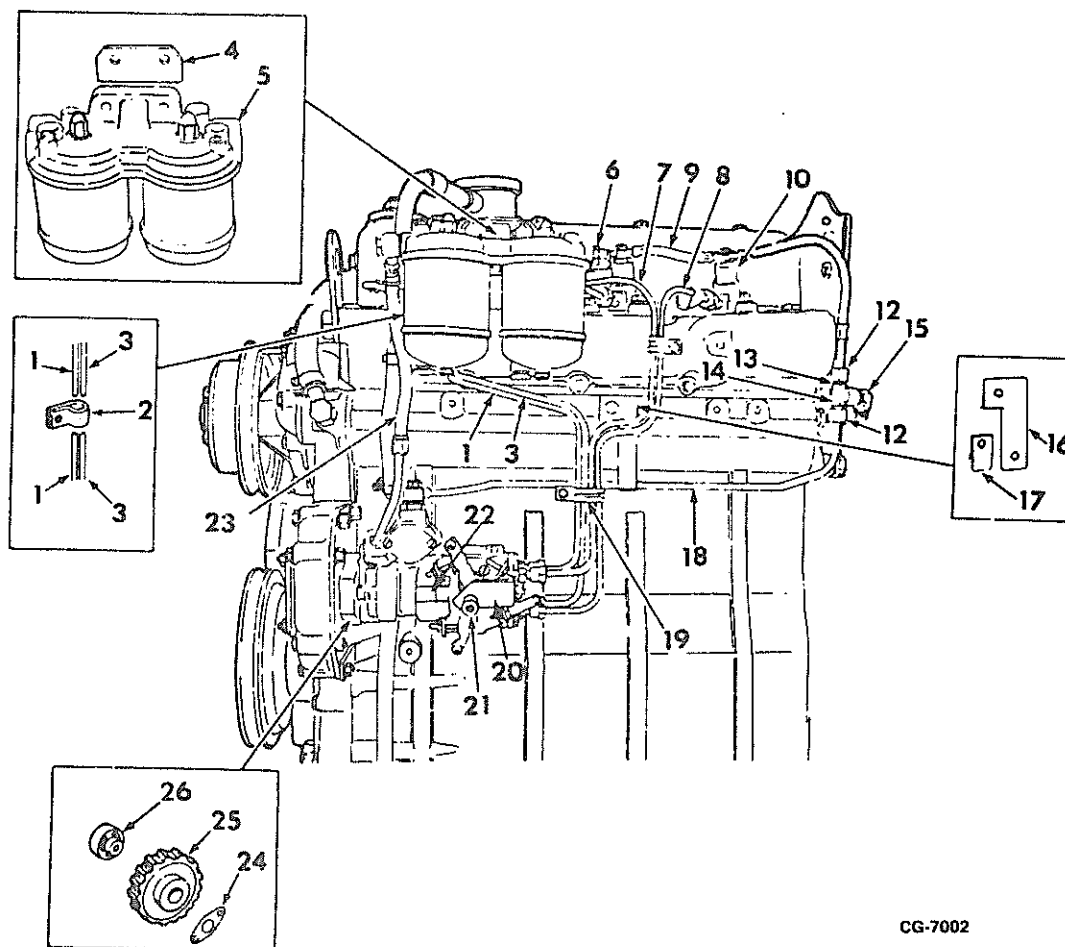
## FUEL SYSTEM

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL INJECTION PUMP CONNECTIONS - Continued (250A)</b>					
17	713 845 R1	RING, packing (3)			
18	934 005 R1	RING, packing			
19	3 136 077 R2	LINE, filter injection pump fuel 250A TC - 700551 and below 250A SM - 640236 and below 250A HS - 646362 and below			
19	3 228 005 R1	LINE, filter injection pump fuel 250A TC - 700552 and up 250A SM - 640237 and up 250A HS - 646363 and up			
20	710 098 R2	SCREW, hollow (2)			
21	933 610 R1	RING, packing (3)			
22	3 056 600 R1	ADAPTER 250A TC - 700551 and below 250A SM - 640236 and below 250A HS - 646362 and below			
22	3 228 006 R1	FITTING 250A TC - 700552 and up 250A SM - 640237 and up 250A HS - 646363 and up			
23		FILTER, two stage fuel (Refer to "Fuel Filter")			
	179 841	SCREW, hex-hd cap (2) 250A TC - 700551 and below 250A SM - 640236 and below 250A HS - 646362 and below			
	933 620 R1	DISC, spring (2)			
	179 838	SCREW, hex-hd (2) 250A TC - 700552 and up 250A SM - 640237 and up 250A HS - 646363 and up			
24	3 055 067 R2	HUB, injection pump gear			
	25 228 R1	SCREW, hex-hd cap (3)			
	30 183 R1	WASHER, flat (3)			
25	3 056 885 R3	GEAR, injection pump (66 Teeth)			
26	3 055 384 R1	GASKET, fuel injection pump			
27	717 200 R1	SCREW, hollow			

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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### FUEL INJECTION PUMP CONNECTIONS (TD-7E, TD-8E, 100E and 125E)



CG-7002

1	3 144 129 R91	PIPE, injection No. 1 TD-7E and 100E – 51435 and below TD-8E and 125E – 3048 and below	3	3 218 170 R1	PIPE, injection No. 2 TD-7E and 100E – 51436 and up TD-8E and 125E – 3049 and up		
1	3 218 169 R1	PIPE, injection No. 1 TD-7E and 100E – 51436 and up TD-8E and 125E – 3049 and up	4	3 059 289 R1	PLATE, support TD-7E and 100E – 3048 and below TD-8E and 125E – 51516 and below		
2	3 218 241 R1	CLAMP, pipe (2)	5	179 842	FILTER ASSY, fuel (Refer to "Fuel Filter")		
2	3 132 770 R1	CLAMP, pipe (2) TD-7E and 100E – 51435 and below TD-8E and 125E – 3048 and below				3 050 221 R1	SCREW, hex-hd cap (2)
	931 330 R1	SCREW, hex-hd cap (2)				102 635	WASHER, lock (2)
	933 988 R1	NUT (2)				712 616 R1	NUT (2)
3	3 144 131 R91	PIPE, injection No. 2 TD-7E and 100E – 51435 and below TD-8E and 125E – 3048 and below		933 610 R1	PLUG, closing		
			6	886 125 C1	RING, packing (2)		
					ADAPTER, fuel filter		

## FUEL SYSTEM

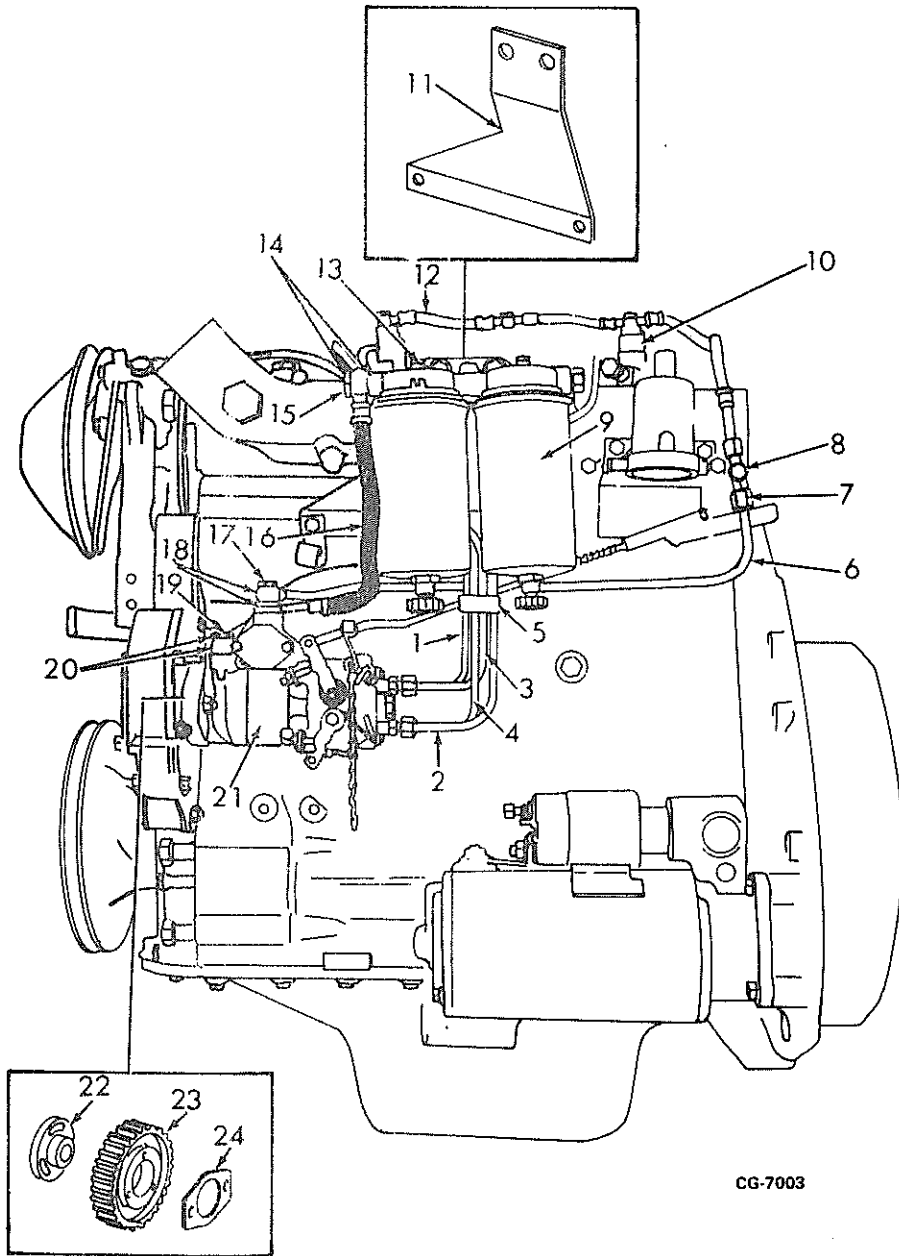
EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL INJECTION PUMP CONNECTIONS - Continued (TD-7E, TD-8E, 100E and 125E)</b>			17	3 055 386 R1 179 793 3 052 189 R1	CLIP, fuel lines SCREW, hex-hd cap WASHER, lock
7	3 144 133 R91	PIPE, injection No. 3 TD-7E and 100E - 51435 and below TD-8E and 125E - 3048 and below	18	3 144 138 R1 713 845 R1	TUBE, fuel overflow RING, sealing (2)
7	3 218 171 R1	PIPE, injection No. 3 TD-7E and 100E - 51436 and up TD-8E and 125E - 3049 and up	19	3 218 243 R1 OR 3 132 768 R1 3 055 521 R1 931 330 R1 933 988 R1 3 052 189 R1	CLAMP, pipe CLAMP, pipe SPACER SCREW, hex-hd cap NUT, hex WASHER, lock
8	3 144 135 R91	PIPE, injection No. 4 TD-7E and 100E - 51435 and below TD-8E and 125E - 3048 and below	20	3 144 368 R92	BRACKET w/PIN, 3 136 374 R1
8	3 218 172 R1	PIPE, injection No. 4 TD-7E and 100E - 51436 and up TD-8E and 125E - 3049 and up	21	3 136 374 R1	PIN, bracket
9	3 055 606 R91	LINE, leak TD-7E and 100E - 51435 and below TD-8E and 125E - 3048 and below	22		PUMP ASSY, fuel injection (Refer to "Fuel Injection Pump") NUT, pump drive shaft NUT, hex (2) WASHER, flat (2) WASHER, lock (2) WASHER, pump drive shaft
9	3 218 124 R1	LINE, leak TD-7E and 100E - 51436 and up TD-8E and 125E - 3049 and up	23	3 144 824 R1 3 144 896 R1	HOSE, fuel filter to injection pump CONNECTOR
	3 218 130 R1	SCREW, inlet union (At injectors) (4)	24	3 055 384 R1	GASKET, fuel injection pump
	933 696 R1	RING, sealing (At injectors) (8)	25	3 056 885 R3	GEAR, injection pump
10		HOLDER ASSY, injection nozzle (Refer to "Nozzle and Nozzle Holder") (4)	26	3 055 067 R2 25 228 R1 30 183 R1 710 098 R2 933 610 R1 934 005 R1	HUB, injection pump gear SCREW, hex-hd cap (3) WASHER, flat (3) SCREW, hollow (2) RING, packing (4) RING, packing
	717 203 R1	"O" RING, injection nozzle sealing (4)			
12	3 056 137 R1	NUT, coupling (2)			
13	3 056 136 R1	RING, cutting (2)			
14	3 136 305 R1	UNION, special tee TD-7E and 100E - 52811 and below TD-8E and 125E - 4598 and below			
14	3 218 895 R1	TEE, Fuel Fitting TD-7E and 100E - 52812 and up TD-8E and 125E - 4599 and up			
15	606 845 C1	ELBOW, Fuel return tee union TD-7E and 100E - 52811 and below TD-8E and 125E - 4598 and below			
16	3 055 678 R1 179 835 3 050 221 R1	LINK, fixing fuel lines SCREW, hex-hd cap WASHER, lock			

**FUEL SYSTEM**

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**FUEL INJECTION PUMP CONNECTIONS  
(260A)**



CG-7003

1	3 144 237 R91	PIPE, injection No. 1 HS 652071 and below	3	3 144 217 R91	PIPE, injection No. 3 HS 652071 and below
1	3 218 332 R2	PIPE, injection No. HS 652072 and up TC 705000 and up	3	3 218 156 R1	PIPE, injection No. 3 HS 652072 and up TC 705000 and up
2	3 144 215 R91	PIPE, injection No. 2 HS 652071 and below	4	3 144 219 R91	PIPE, injection No. 4 HS 652071 and below
2	3 218 333 R2	PIPE, injection No. 2 HS 652072 and up TC 705000 and up	4	3 218 157 R1	PIPE, injection No. 4 HS 652072 and up TC 705000 and up

## FUEL SYSTEM

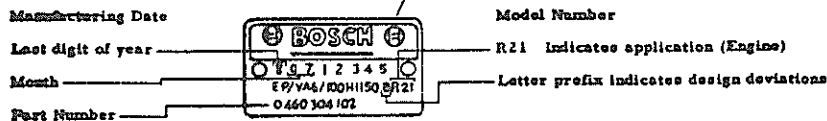
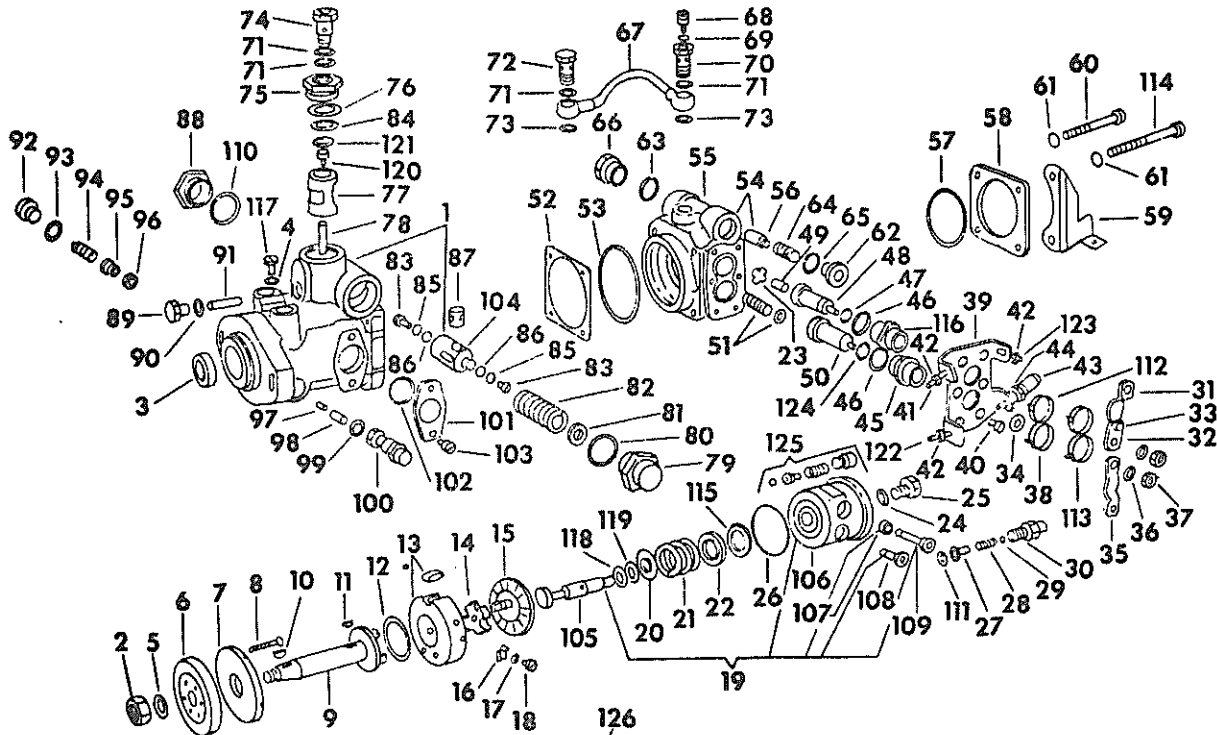
EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL INJECTION PUMP CONNECTIONS - Continued (260A)</b>			21		PUMP ASSY, fuel injection (Refer to "Fuel Injection Pump")
				102 634	NUT, 5/16" hex (2)
5	3 132 770 R1	CLAMP, pipe (Upper) (2)		933 981 R1	NUT, pump drive shaft
	OR			933 834 R1	WASHER, pump drive shaft
5	3 218 241 R1	CLAMP, pipe (Upper) (2)		3 050 129 R1	WASHER, lock (2)
				3 055 574 R1	WASHER, flat (2)
5	3 132 768 R1	CLAMP, pipe (lower)	22	3 055 067 R2	HUB, injection pump gear
	OR			25 228 R1	SCREW, hex-hd cap (3)
5	3 218 243 R1	CLAMP, pipe (lower)		30 183 R1	WASHER, flat (3)
	933 988 R1	NUT, hex (3)			
	931 330 R1	SCREW, pan-hd sltd (3)	23	3 056 885 R3	GEAR, injection pump
6	3 144 382 R1	TUBE, overflow	24	3 055 384 R1	GASKET, injection pump
7	3 056 137 R1	NUT (2)			
	3 056 136 R1	SLEEVE, ferrule (2)			
8	3 055 739 R1	TEE, union			
9		FILTER ASSY, two-stage spin-on fuel (Refer to "Fuel Filter")			
	102 635	NUT, hex (2)			
	179 841	SCREW, hex-hd cap (2)			
	120 382	WASHER, lock (2)			
10		NOZZLE and HOLDER ASSY, injection (Refer to "Nozzle and Nozzle Holder") (4)			
	103 025	NUT, hex (8)			
	717 203 R1	"O" RING, injection nozzle sealing (4)			
11	3 218 105 R2	SUPPORT, fuel filter			
	179 838	SCREW, 7/8" long hex-hd cap (2)			
	179 817	SCREW, 5/16" dia. hex-hd cap			
	120 382	WASHER, 3/8" lock (2)			
	120 214	WASHER, 5/16" lock			
12	3 055 606 R91	LINE, leak HS 652071 and below			
12	3 218 124 R1	LINE, leak HS 652072 and up TC 702000 and up			
	3 218 130 R1	SCREW, inlet union (4)			
	933 696 R1	RING, sealing (8)			
13	3 056 600 R1	ADAPTER			
	933 610 R1	RING, sealing			
14	933 610 R1	RING, sealing (2)			
15	710 098 R2	SCREW, inlet union			
16	3 144 906 R1	HOSE, filter to injection pump			
17	710 098 R2	SCREW, inlet union			
18	713 845 R1	RING, sealing (3)			
19	717 200 R1	SCREW, inlet union			
20	934 005 R1	RING, sealing			

# FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**FUEL INJECTION PUMP**  
 (3514 and 2544 w/SYNCHROMESH TRANSMISSION - 10144 and below)  
 (2544 w/HYDROSTATIC DRIVE - 30591 and below)  
 (2500A w/SYNCHROMESH TRANSMISSION - 69907 and below)  
 (3500A - 180114 and below)



CG-6291

Parts without letters after the description indicate the part is used for all Pump Assemblies.

- |  |  |
|--|--|
| <p>A 3 132 168 R93 PUMP ASSY, fuel injection (Model No. EP/VA4/100H 1100 AR12-2) (3514 and 2544 with Synchromesh Transmission - 10144 and below) (See NOTES A and B)</p> <p>B 3 132 168 R93 PUMP ASSY, fuel injection (Model No. EP6VA4/100H 1100 BR12-2) (3514 and 2544 with Synchromesh Transmission - 10144 and below) (See NOTE A)</p> | <p>C 3 132 169 R93 PUMP ASSY, fuel injection (Model No. EP/VA4/100 1200 AR12-1) (2544 with Hydrostatic Transmission - 030591 and below) (See NOTES A and C)</p> <p>NOTE A - To determine the service parts it is necessary to know the Bosch Model Number and in some cases in addition the manufacturing date. This information is indicated on the Bosch Name Plate (see example in illustration) of the Injection Pump.</p> <p>NOTE B - The AR12-2 pump versions bearing the suffix letter X are AR12-2 pumps converted to the BR12-2 housing.</p> <p>NOTE C - The AR12-1 pump versions bearing the suffix letter X are AR12-1 pumps converted to the BR12-1 housing.</p> |
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## FUEL SYSTEM

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL INJECTION PUMP — Continued</b>			19	3 078 816 R91	HEAD w/PLUNGER and CONTROL PISTON (E)
<b>(3514 and 2544 w/SYNCHROMESH TRANSMISSION - 10144 and below)</b>			20	3 132 262 R1	SEAT, plunger return spring front .197 in./5.00 mm (A and C)
<b>(2544 w/HYDROSTATIC DRIVE - 30591 and below)</b>			20	3 132 263 R1	SEAT, .205 in./5.20 mm (A and C)
<b>(2500A w/SYNCHROMESH TRANSMISSION - 69907 and below)</b>			20	3 132 264 R2	SEAT, .213 in./5.40 mm (A and C)
<b>(3500A - 180114 and below)</b>			20	3 132 265 R1	SEAT, .220 in./5.60 mm (A and C)
D	3 132 169 R93	PUMP ASSY, fuel injection (Model No. EP/VA4/100 1200 BR12-1) (2544 with Hydrostatic Transmission -30591 and below) (See NOTE A)	20	3 132 266 R1	SEAT, .228 in./5.80 mm (A and C)
E	3 136 323 R92	PUMP ASSY, fuel injection (Model No. EP/VA4/100H 1100 BR12-6) (w/Syncromesh Transmission - 2500A with - 69907 and below) (3500A - 180114 and below) (See NOTE A)	20	3 132 267 R2	SEAT, .236 in./6.00 mm (A and C)
F	3 138 686 R91	PUMP ASSY, fuel injection (Model No. EP/VA4/100H 1200 BR12-9) (w/Hydrostatic Transmission - 2500A - 105487 and below) (3500A - 180114 and below) (See NOTE A)	20	3 132 236 R1	SEAT, .244 in./6.20 mm (A and C)
1	3 136 259 R91	HOUSING w/TIMING ADV. PISTON, pump	20	3 136 092 R1	SEAT, plunger return spring front .197 in./5.00 mm (B, D, E and F)
2	933 981 R1	NUT, drive shaft	20	3 136 093 R1	SEAT, .205 in./5.20 mm (B, D, E and F)
3	3 078 355 R2	OIL SEAL, drive shaft	20	3 136 094 R1	SEAT, .213 in./5.40 mm (B, D, E and F)
4		NOT FURNISHED SEPARATELY (Order SET, 3 059 093 R91)	20	3 136 095 R1	SEAT, .220 in./5.60 mm (B, D, E and F)
5	933 996 R1	WASHER, 1/2" med lock	20	3 136 096 R1	SEAT, 228 in./5.80 mm (B, D, E and F)
6	3 059 003 R91	ROTOR ASSY, charging pump	20	3 136 097 R1	SEAT, 236 in./6.00 mm (B, D, E and F)
7	3 059 004 R1	RING, retainer support	21	3 132 257 R1	SPRING, plunger return
8	3 132 364 R1	SCREW, retainer support ring (4)	22	3 132 379 R1	SEAT, plunger return spring rear (A and C)
9	3 059 001 R1	SHAFT, drive	22	3 136 098 R1	SEAT, plunger return spring rear (B, D, E and F)
10	3 079 101 R1	KEY, drive shaft (replaces 3 078 371 R1)	23	3 132 584 R1	DISC, throttle shaft
11	3 132 395 R1	KEY, charging pump woodruff	24	3 132 407 R1	O-RING, pump plunger plug
12	3 059 006 R1	WASHER, drive shaft thrust	25	3 059 063 R2	PLUG, distributor head
13	3 078 346 R91	RING ASSY, roller retainer	26	3 078 361 R1	PACKING RING, distributor head
14	3 059 007 R1	COUPLING, drive shaft flexible			
15	3 059 008 R2	CAM, face			
16	3 132 598 R1	POINTER, timing (Will work for 3 059 090 R1)			
17	933 982 R1	WASHER, timing pointer			
18	931 326 R1	SCREW, timing pointer			
19	3 078 808 R91	HEAD w/PLUNGER and CONTROL PISTON (A, B, C, D and F)			

NOTE A - To determine the service parts it is necessary to know the Bosch Model Number and in some cases in addition the manufacturing date. This information is indicated on the Bosch Name Plate (see example in illustration) of the Injection Pump.

## FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
FUEL INJECTION PUMP - Continued (3514 and 2544 w/SYNCHROMESH TRANSMISSION - 10144 and below) (2544 w/HYDROSTATIC DRIVE - 30591 and below) (2500A w/SYNCHROMESH TRANSMISSION - 69907 and below)			50	3 132 260 R2	SHAFT ASSY, shut-off control plunger
			51	3 132 586 R1	SERVICE PACKAGE, control plunger
			52	3 132 377 R1	SHIM, pump and intermediate housing (.009 in./23 mm)
27	3 136 357 R1	VALVE ASSY, delivery (4) (A, B and E)	52	3 132 378 R1	SHIM, (.011 in./28 mm)
27	3 136 356 R1	VALVE ASSY, delivery (4) (C, D and F)	52	3 059 040 R1	SHIM, (.008 in./20 mm)
28	3 132 408 R1	SPRING, delivery valve (4)	52	3 059 041 R1	SHIM, (.010 in./25 mm)
29	3 059 066 R1	WASHER, delivery valve spring (4)	52	3 059 042 R1	SHIM, (.012 in./30 mm)
30	3 059 067 R2	HOLDER, delivery valve (4)	52	3 059 043 R1	SHIM, (.020 in./51 mm)
31	3 132 590 R1	LEVER, speed control	52	3 059 044 R1	SHIM, (.024 in./61 mm)
	OR		52	3 059 045 R1	SHIM, (.039 in./1.00 mm)
31	3 132 591 R1	LEVER, speed control	53	3 078 360 R1	PACKING RING, housing
32		NOT USED IN THIS APPLICATION	54	3 132 402 R1	HOUSING w/ACCUMULATOR PISTON
33		NOT USED IN THIS APPLICATION	55		HOUSING, intermediate (Order HOUSING w/ACCUMULATOR PISTON 3 132 402 R1)
34	3 059 076 R1	SPACER, shut-off control	56		PISTON, accumulator (Order HOUSING w/ACCUMULATOR PISTON 3 132 402 R1)
35	3 059 077 R1	LEVER, shut-off control (Optional w/3 059 078 R1)	57	3 078 364 R1	PACKING RING, intermediate housing plate
35	3 059 078 R1	LEVER, shut-off control (Optional w/3 059 077 R1)	58	3 059 083 R1	FLANGE, intermediate housing
36	933 987 R1	WASHER, 1/4" med lock (2)	59	3 078 570 R1	BRACKET, injection pump (A, B, C and D)
37	933 988 R1	NUT, hex throttle lever (2)	59	3 078 549 R1	BRACKET, injection pump (E and F)
38	3 132 589 R1	SPRING, speed control torsion	60	931 324 R1	SCREW, intermediate housing mounting (2)
39	3 136 110 R1	PLATE, stop (Will work for 3 059 073 R1)	61	933 987 R1	WASHER, 1/4" med lock (4)
40	931 320 R1	SCREW, stop plate (6)	62	3 136 107 R1	PLUG, accumulator spring
41	3 132 885 R1	SCREW, stop plate adjusting (A and C)	63	785 602 R1	O-RING, plug accumulator piston
41	3 136 136 R1	SCREW, stop plate adjusting (B, D, E and F)	64	3 132 277 R1	SPRING, accumulator piston
42	933 988 R1	NUT, stop plate adjusting screw (3)	65	785 602 R1	O-RING, plug accumulator piston
43	3 132 251 R1	STOP, shut-off control plunger	66	3 059 052 R1	PLUG, accumulator piston
44	3 079 141 R1	NUT, shut-off control plunger stop (Replaces 3 059 096 R1, 3 079 120 R1)	67	3 059 085 R91	TUBE, fuel supply
45	3 059 072 R1	BUSHING, control shaft	68	3 132 383 R1	SCREW, vent
46	785 602 R1	O-RING, control plunger and throttle shaft (2)	69	933 696 R1	PACKING RING, vent screw, intermediate housing
47	3 078 354 R1	O-RING, throttle shaft	70	3 136 149 R1	SCREW, inlet union
48	3 132 583 R1	SHAFT ASSY, speed control			
49	3 132 256 R1	SPRING, speed control shaft			



## FUEL SYSTEM

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REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL INJECTION PUMP – Continued</b> (3514 and 2544 w/SYNCHROMESH TRANSMISSION - 10144 and below) (2544 w/HYDROSTATIC DRIVE - 30591 and below) (2500A w/SYNCHROMESH TRANSMISSION - 69907 and below) (3500A - 180114 and below)			84	933 845 R1	WASHER, rotating member lock (A and C w/No. 80100000 and above and B, D, E and F)
			85	933 986 R1	WASHER, No. 12 med lock (2) (A and C)
71	934 005 R1	O-RING, packing (4)	86	3 132 290 R91	PACKAGE, shim service (A and C) (Consists of –
72	3 132 880 R1	SCREW, housing inlet union (A and C up to 70099999)			2 SHIM 3 059 016 R1 (.008 in./ .20 mm) (x)
72	3 059 086 R1	SCREW, housing inlet union (A and C 71000000 and since and B, D, E and F)			2 SHIM 3 059 017 R1 (.012 in./ .30 mm) (x)
73	934 005 R1	O-RING, packing (2)			2 SHIM 3 059 018 R1 (.020 in./ .50 mm) (x)
74	3 132 412 R1	VALVE, overflow			1 SHIM 3 059 019 R1 (.039 in./1.00 mm) (x)
75	3 059 014 R1	UNION, adapter	87	3 132 259 R1	BUSHING, advance piston connecting
76	3 078 356 R1	O-RING, union adapter adjusting housing	88	3 059 020 R1	PLUG, advance piston
77	3 132 400 R1	PIN ADJUSTING AUTOMATIC ADVANCE (A, B, C, D and F)	89	3 059 015 R1	PLUG, advance linkage (A and C up to 71299999)
77	3 132 960 R1	PIN ADJUSTING AUTOMATIC ADVANCE (E)	89	3 132 578 R1	PLUG, advance linkage (A and C 80100000 and since B, D, E and F)
78	3 059 010 R1	PIN, timing adjusting connecting short	90	933 087 R2	PACKING RING, plug advance housing
79	3 059 021 R1	PLUG, advance piston spring (A and C w/out LETTER SUFFIX)	91	3 132 925 R1	PIN, timing advance connecting long (A and C up to 71299999)
79	3 136 087 R1	PLUG, advance piston spring (A and C w/LETTER SUFFIX - X) (B, D and F)	91	3 132 576 R1	PIN, timing advance connecting long (A and C 80100000 and since and B, D and F)
79	3 136 131 R1	PLUG, advance piston spring (E)	91	3 132 961 R1	PIN, timing advance connecting long (E)
80	3 078 357 R1	O-RING, advance housing plug	92	3 059 038 R1	PLUG, regulator valve spring
81	3 059 023 R1	SHIM, advance piston spring .016 in./40 mm (A and C w/out LETTER SUFFIX)	93	3 078 358 R1	O-RING, carrier and plug regulator valve
81	3 059 024 R1	SHIM, .012 in./ .30 mm (A and C w/out LETTER SUFFIX)	94	3 132 280 R1	SPRING, regulator valve
81	3 136 111 R1	SHIM, .039 in./1.00 mm (A and C w/SUFFIX - X and B, D, E and F)	95	3 132 246 R1	STOP, regulator piston
81	790 783 R1	SHIM, .020 in./ .51 mm (A and C w/SUFFIX - X and B, D, E and F)	96	3 078 359 R1	O-RING, bushing regulator valve
81	3 078 460 R1	SHIM, advance piston spring (A and C w/SUFFIX - X and B, D, E and F)	97	3 059 026 R1	PISTON, regulator valve (.348 in./8.84 mm)
82	3 059 022 R1	SPRING, advance piston (A and C w/out LETTER SUFFIX)	97	3 059 027 R1	PISTON, regulator valve (.350 in./8.90 mm)
82	3 136 085 R1	SPRING, advance piston (A and C w/SUFFIX - X and B, D, E and F)	97	3 059 028 R1	PISTON, regulator valve (.352 in./8.94 mm)
83	931 322 R1	SCREW, advance piston stop (A and C) (2)	97	3 059 029 R1	PISTON, regulator valve (.354 in./9.00 mm)
			97	3 059 030 R1	PISTON, regulator valve (.356 in./9.04 mm)

(x) - As Required.

## FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
FUEL INJECTION PUMP – Continued (3514 and 2544 w/SYNCHROMESH TRANSMISSION - 10144 and below) (2544 w/HYDROSTATIC DRIVE - 30591 and below) (2500A w/SYNCHROMESH TRANSMISSION - 69907 and below) (3500A - 180114 and below)			106		NOT FURNISHED SEPARATELY
			107		NOT FURNISHED SEPARATELY
			108		NOT FURNISHED SEPARATELY
97	3 059 031 R1	PISTON, regulator valve (.358 in./9.09 mm)	109		NOT FURNISHED SEPARATELY
97	3 059 032 R1	PISTON, regulator valve (.360 in./9.14 mm)	110	3 078 357 R1	O-RING, plug advance housing
97	3 059 033 R1	PISTON, regulator valve (.362 in./9.19 mm)	111	3 078 362 R1	WASHER, delivery valve (4)
97	3 059 034 R1	PISTON, regulator valve (.364 in./9.24 mm)	112	3 132 588 R1	SPRING, speed control torsion
			113		NOT USED IN THIS APPLICATION
97	3 132 366 R1	PISTON, regulator valve (.342 in./8.69 mm)	114	931 325 R1	SCREW, intermediate housing mounting (2)
97	3 132 367 R1	PISTON, regulator valve (.344 in./8.73 mm)	115		NOT USED IN THIS APPLICATION
97	3 132 368 R1	PISTON, regulator valve (.347 in./8.81 mm)	116	3 132 587 R1	BUSHING, control plunger shaft
			117		NOT USED IN THIS APPLICATION
97	3 132 369 R1	PISTON, regulator valve (.366 in./9.30 mm)	118	3 132 387 R1	SHIM, pump plunger (A and C)
97	3 132 370 R1	PISTON, regulator valve (.368 in./9.35 mm)	118	3 136 090 R1	SHIM, pump plunger (B, D, E and F)
97	3 132 371 R1	PISTON, regulator valve (.370 in./9.40 mm)	119	3 136 091 R2	SHIM, pump plunger
97	3 132 373 R1	PISTON, regulator valve (.374 in./9.50 mm) (No longer available)	120	3 132 883 R1	PIN, timing advance rotating member (A and C w/No. 80100000 and above and B, D, E and F)
97	3 132 374 R1	PISTON, regulator valve (.376 in./9.55 mm) (No longer available)	121	3 132 884 R1	WASHER, timing advance rotating member (A and C w/No. 80100000 and above and B, D, E and F)
97	3 132 375 R1	PISTON, regulator valve (.378 in./9.60 mm)	122	3 059 074 R1	SCREW, stop plate adjusting
98	3 132 255 R1	SPRING, regulator piston	123	3 132 885 R1	SCREW, stop plate adjusting
99	3 078 358 R1	O-RING, carrier and plug regulator valve	124	3 078 363 R1	O-RING, control plunger shaft
100	3 059 099 R91	CARRIER, regulator valve	125	3 078 365 R1	SET, relief valve
101	3 059 091 R1	COVER, timing window	126	3 136 147 R1	NAMEPLATE
102	3 054 854 R1	O-RING, timing window		3 059 093 R91	SET, gasket external (Consists of –
103	931 327 R1	SCREW, timing window cover (2)			1 O-RING 3 132 407 R1
104		NOT FURNISHED SEPARATELY			2 O-RING 785 602 R1
					1 RING 933 696 R1
					5 O-RING 934 005 R1
					1 O-RING 3 078 356 R1
					2 O-RING 3 078 357 R1
					2 O-RING 3 078 358 R1
					1 RING 933 087 R2
					1 O-RING 3 054 854 R1
					1 O-RING 3 078 357 R1
					4 WASHER 3 078 362 R1 )

# FUEL SYSTEM

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REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**FUEL INJECTION PUMP – Continued**  
 (3514 and 2544 w/SYNCHROMESH TRANSMISSION -  
 10144 and below)  
 (2544 w/HYDROSTATIC DRIVE - 30591 and below)  
 (2500A w/SYNCHROMESH TRANSMISSION - 69907 and  
 below)  
 (3500A - 180114 and below)

3 059 094 R93	SET, gasket internal (Consists of –	
	1 RING	3 078 361 R1
	1 RING	3 078 360 R1
	1 O-RING	3 078 359 R1
	2 O-RING	3 078 363 R1)

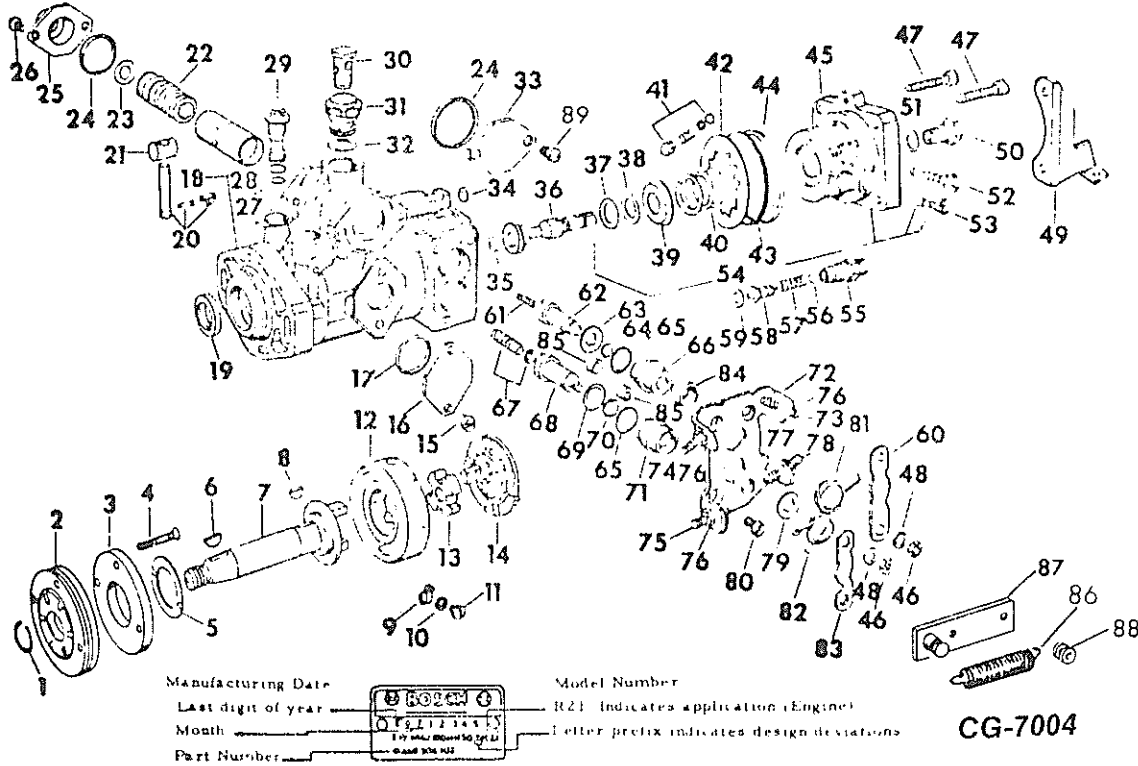
- NOTE A -** To determine the service parts it is necessary to know the Bosch Model Number and in some cases in addition the manufacturing date. This information is indicated on the Bosch Name Plate (see example in illustration) of the Injection Pump.
- NOTE B -** The AR12-2 pump versions bearing the suffix letter X are AR12-2 pumps converted to the BR12-2 housing.
- NOTE C -** The AR12-1 pump versions bearing the suffix letter X are AR12-1 pumps converted to the BR12-1 housing.

# FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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## FUEL INJECTION PUMP

(2544 w/SYNCHROMESH TRANSMISSION - 10145 and up)  
 (2544 w/HYDROSTATIC DRIVE - 30592 and up)  
 (2500B, 2505B, 2510B - 69908 and up)  
 (3500A - 180115 and up)  
 (TD-7E, TD-8E, 100E and 125E)  
 (250A)



CG-7004

Parts without letters after the description indicate the part is used for all Pump Assemblies.

			D 3 144 496 R91	PUMP ASSY, fuel injection (Model No. VA4/10H 1200 CR 12-12) (2500B, 2505B, 2510B and 2514B w/Hydrostatic Transmission) (2500A tractors w/Hydrostatic Transmission - 105488 and up) (3500A tractors w/Hydrostatic Transmission - 180115 and up) (250A w/Hydrostatic Transmission and 250A w/Torque Converter Transmission) (See NOTE A)
A	3 144 221 R92	PUMP ASSY, fuel injection (Model No. EP/VA4/100H 1200 CR12-1) (2544 with Hydrostatic Transmission - 30592 and up) (See NOTE A)		
B	3 144 379 R91	PUMP ASSY, fuel injection (Model No. EP/VA4/100H 1100 CRV 3353-1) (2544 with Synchromesh Transmission - 10145 and up) (See NOTE A)		
C	3 144 381 R91	PUMP ASSY, fuel injection (Model No. EP/VA4/100H 100 CRV 3267-1) (With Synchromesh Transmission - 2500B, 2505B, 2510B, 2514B and 2500A w/Engine Serial No. 69908 and up, 3500A - 180115 and up) (250A w/Synchromesh Transmission) (See NOTE A)	E 3 144 367 R92	PUMP ASSY, fuel injection (Order PUMP ASSY, 3 144 784 R91) (Model No. EP/VA4/100H 1250 CR67-1) (TD-7E and 100E) (See NOTE A)
		NOTE A -		To determine the service parts it is necessary to know the Bosch Model number and in some cases in addition the manufacturing date. This information is indicated on the Bosch name plate (see example in illustration) of the injection pump.

## FUEL SYSTEM

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REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL INJECTION PUMP - Continued</b>			20	3 078 481 R1	PIN, automatic advance connecting
<b>(2544 w/SYNCHROMESH TRANSMISSION - 10145 and up)</b>			21	3 078 482 R1	SLIDER, advance piston
<b>(2544 w/HYDROSTATIC DRIVE - 30592 and up)</b>			22	3 078 579 R1	SPRING, advance piston (A and D)
<b>(2500B, 2505B, 2510B - 69908 and up)</b>			22	3 078 673 R1	SPRING, advance piston (B)
<b>(3500A - 180115 and up)</b>			22	3 078 613 R1	SPRING, advance piston (C)
<b>(TD-7E, TD-8E, 100E and 125E) (250A)</b>			22	3 078 565 R1	SPRING, advance piston (E, F and G)
F	3 144 367 R92	PUMP ASSY, fuel injection (Order PUMP ASSY, 3 144 784 R91) (Model No. EP/VA4/100H 1250 CR-89) (TD-7E and 100E) (See NOTE A)	22	3 078 552 R1	SPRING, advance piston (H)
G	3 144 784 R91	PUMP ASSY, fuel injection (Will work for PUMP ASSY, 3 144 367 R91) (Model No. VA4/10H 1250 CR 89/1) (TD-7E and 100E) (See NOTE A)	23	3 078 528 R1	WASHER, thrust (.024 in./ .61 mm) (x)
H	3 144 634 R91	PUMP ASSY, fuel injection (Model No. VA4/10H 1250 CR 90) (TD-8E and 125E) (See NOTE A)	23	3 078 529 R1	WASHER, thrust (.031 in./ .79 mm)(x)
1	3 078 474 R1	RING, retaining	23	3 078 520 R1	WASHER, thrust (.039 in./ .99 mm)(x)
2	3 078 475 R91	PUMP, charge	23	3 078 531 R1	WASHER, thrust (.047 in./ 1.19 mm) (x)
3	3 078 476 R1	RING, charge pump support	23	3 078 532 R1	WASHER, thrust (.055 in./ 1.40 mm) (x)
4	3 078 477 R1	SCREW, retaining support ring (2)	23	3 078 533 R1	WASHER, thrust (.118 in./ 3.00 mm) (x)
5	3 078 479 R1	WASHER, roller retainer thrust	24	3 078 488 R1	O-RING, advance housing (2)
6	3 079 101 R1	KEY, drive shaft woodruff (replaces 3 078 371 R1)	25	3 078 489 R1	PLATE, advance housing right hand
7	3 078 473 R1	SHAFT, drive	26	931 585 R1	SCREW, advance housing plate (2)
8	3 132 395 R1	KEY, charging pump woodruff	27	3 078 535 R1	O-RING, regulator valve
9	3 132 598 R1	POINTER, timing	28	3 078 358 R1	O-RING, regulator valve
10	933 982 R1	WASHER, lock	29	3 078 614 R91	VALVE, regulator (A, D, E, F and G)
11	931 326 R1	SCREW, pan head	29	3 078 614 R91	VALVE, regulator (A, D, E, F, G, and H)
12	3 078 478 R91	RING ASSY, roller retainer	30	3 059 086 R1	SCREW, inlet union
13	3 059 007 R1	DISC, cross type cam face	31	3 078 484 R1	VALVE, overflow
14	3 078 480 R1	CAM, face	32	3 078 483 R1	O-RING, union adapter adjusting housing
15	931 330 R1	SCREW, window cover (2)	33	3 078 486 R1	PLATE, advance housing left hand
16	3 078 486 R1	COVER, timing window	34	3 078 487 R1	O-RING
17	3 078 485 R1	PACKING RING, window cover	35	3 078 761 R2	WASHER, plunger (.071 in./ 1.80 mm) (x)
18	3 078 598 R91	HOUSING w/TIMING ADVANCE PISTON, PUMP (A, B, and D)	35	3 078 763 R2	WASHER, plunger (.072 in./ 1.83 mm) (x)
18	3 078 564 R91	HOUSING w/TIMING ADVANCE PISTON, PUMP (C)	35	3 078 765 R2	WASHER, plunger (.074 in./ 1.88 mm) (x)
18	3 078 607 R91	HOUSING TIMING ADVANCE PISTON, PUMP (E, F, G and H)			(x) - As Required.
19	3 078 355 R2	OIL SEAL, drive shaft			

NOTE A -

To determine the service parts it is necessary to know the Bosch Model number and in some cases in addition the manufacturing date. This information is indicated on the Bosch name plate (see example in illustration) of the injection pump.

## FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
FUEL INJECTION PUMP - Continued (2544 w/SYNCHROMESH TRANSMISSION - 10145 and up) (2544 w/HYDROSTATIC DRIVE - 30592 and up) (2500B, 2505B, 2510B - 69908 and up) (3500A - 180115 and up) (TD-7E, TD-8E, 100E and 125E) (250A)			35	3 078 809 R2	WASHER, plunger (.109 in./2.77 mm) (x)
			35	3 078 811 R2	WASHER, plunger (.110 in./2.79 mm) (x)
35	3 078 767 R2	WASHER, plunger (.076 in./1.93 mm) (x)	35	3 078 813 R3	WASHER, plunger (.112 in./2.84 mm) (x)
35	3 078 769 R2	WASHER, plunger (.077 in./1.96 mm) (x)	35	3 078 815 R3	WASHER, plunger (.113 in./2.87 mm) (x)
35	3 078 771 R2	WASHER, plunger (.078 in./1.98 mm) (x)	36		NOT FURNISHED SEPARATELY
35	3 078 773 R2	WASHER, plunger (.080 in./2.03 mm) (x)	37	3 078 540 R1	WASHER, plunger (.053 in./1.35 mm) (x)
35	3 078 775 R2	WASHER, plunger (.082 in./2.08 mm) (x)	37	3 078 541 R1	WASHER, plunger (.063 in./1.60 mm) (x)
35	3 078 777 R2	WASHER, plunger (.083 in./2.10 mm) (x)	37	3 078 542 R1	WASHER, plunger (.073 in./1.85 mm) (x)
35	3 078 779 R2	WASHER, plunger (.085 in./2.16 mm) (x)	38	3 078 537 R1	WASHER, plunger (.065 in./1.65 mm) (x)
35	3 078 781 R2	WASHER, plunger (.087 in./2.21 mm) (x)	38	3 078 571 R1	WASHER, plunger (.092 in./2.34 mm) (x)
35	3 078 783 R2	WASHER, plunger (.088 in./2.24 mm) (x)	39	3 078 516 R1	SEAT, plunger spring
35	3 078 785 R2	WASHER, plunger (.090 in./2.29 mm) (x)	40	3 078 515 R1	SPRING, plunger
35	3 078 787 R2	WASHER, plunger (.091 in./2.31 mm) (x)	41	3 078 365 R91	SET, relief valve
35	3 078 789 R2	WASHER, plunger (.093 in./2.36 mm) (x)	42	3 078 576 R1	WASHER, spring
35	3 078 791 R2	WASHER, plunger (.092 in./2.34 mm) (x)	43	3 078 578 R1	FILTER
35	3 078 793 R2	WASHER, plunger (.096 in./2.44 mm) (x)	44	3 078 366 R1	O-RING, distributor head
35	3 078 795 R2	WASHER, plunger (.098 in./2.49 mm) (x)	45		NOT FURNISHED SEPARATELY
35	3 078 797 R2	WASHER, plunger (.099 in./2.51 mm) (x)	46	933 988 R1	NUT, throttle and control hex (2)
35	3 078 799 R2	WASHER, plunger (.101 in./2.57 mm) (x)	47	3 078 600 R1	SCREW, pump to distributor head (A, B, C and D) (4)
35	3 078 801 R2	WASHER, plunger (.102 in./2.59 mm) (x)	47	931 498 R1	SCREW, pump to distributor (E, F, G and H) (4)
35	3 078 803 R2	WASHER, plunger (.104 in./2.64 mm) (x)	48	933 987 R1	WASHER, throttle and control lock (2)
35	3 078 805 R2	WASHER, plunger (.106 in./2.69 mm) (x)	49	3 078 570 R1	BRACKET, injection pump (A and B)
35	3 078 807 R2	WASHER, plunger (.107 in./2.72 mm) (x)	49	3 078 549 R1	BRACKET, injection pump (C and D)
			49	3 144 368 R92	BRACKET, injection pump (E, F, G and H)
			50	3 078 514 R1	PLUG, distributor head
			51	132 407 R1	RING, packing distributor head plug
			52		NOT FURNISHED SEPARATELY
			53		NOT FURNISHED SEPARATELY
			54	3 078 760 R91	HEAD w/PLUNGER AND CONTROL PISTON (A)

(x) - As Required.

## FUEL SYSTEM

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REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL INJECTION PUMP — Continued</b> (2544 w/SYNCHROMESH TRANSMISSION - 10145 and up) (2544 w/HYDROSTATIC DRIVE - 30592 and up) (2500B, 2505B, 2510B - 69908 and up) (3500A - 180115 and up) (TD-7E, TD-8E, 100E and 125E) (250A)			62	3 078 819 R1	SHAFT, throttle (E, F, G and H)
			63	3 078 519 R1	WASHER, throttle shaft (A, B, C and D)
			63	3 078 523 R1	WASHER, throttle shaft (E, F, G and H)
54	3 078 851 R91	HEAD w/PLUNGER AND CONTROL PISTON (B)	64	3 078 354 R1	O-RING, throttle shaft (A, B, C and D)
54	3 078 898 R91	HEAD w/PLUNGER AND CONTROL PISTON (C)	64	3 078-363 R1	O-RING, throttle shaft (E, F, G and H)
54	3 078 904 R91	HEAD w/PLUNGER AND CONTROL PISTON (D)	65	785 602 R1	O-RING, control plunger and throttle (2)
54	3 078 818 R91	HEAD w/PLUNGER AND CONTROL PISTON (E, F and G)	66	3 078 556 R1	BUSHING, throttle shaft (A, B, C and D)
54	3 078 951 R91	HEAD w/PLUNGER AND CONTROL PISTON (H)	66	3 078 820 R1	BUSHING, throttle shaft (E, F and G)
55	3 059 067 R2	HOLDER, delivery valve (4)	66	3 078 821 R1	BUSHING, throttle shaft (H)
56	3 059 066 R1	WASHER, delivery valve (A through G) (4)	67	3 078 522 R91	SERVICE PACKAGE, control plunger (A, C, E and F)
56	3 078 952 R1	WASHER, delivery valve (H) (4)	67	3 078 563 R91	SERVICE PACKAGE, control plunger (B and H)
57	3 132 408 R1	SPRING, delivery valve (A through G) (4)	67	3 078 700 R91	SERVICE PACKAGE, control plunger (D)
57	3 132 382 R1	SPRING, delivery valve (H) (4)	67	3 078 610 R91	SERVICE PACKAGE, control plunger (G)
58	3 136 356 R1	VALVE, delivery (A) (4)	68	3 078 521 R1	SHAFT, control plunger (A, B, C and D)
58	3 078 852 R1	VALVE, delivery (B) (4)	68	3 136 122 R1	SHAFT, control plunger (E, F, G and H)
58	3 136 357 R1	VALVE, delivery (C) (4)	69	3 078 523 R1	WASHER, control plunger shaft
58	3 078 905 R1	VALVE, delivery (D) (4)	70	3 078 363 R1	O-RING, control plunger shaft
58	3 076 798 R1	VALVE, delivery (E, F, G and H) (4)	71	3 078 524 R1	BUSHING, control plunger shaft (A, B, C and D)
59	3 078 362 R1	WASHER, delivery valve (4)	71	3 078 821 R1	BUSHING, control plunger shaft (E, F and G)
60	3 132 590 R1	LEVER, throttle (A, B, C and D)	71	3 078 820 R1	BUSHING, control plunger shaft (H)
60	OR 3 132 591 R1	LEVER, throttle (A, B, C and D)	72	3 078 557 R1	PLATE, stop
60	3 136 140 R1	LEVER, throttle (E)	73	3 132 885 R1	SCREW, stop
60	OR 3 136 141 R1	LEVER, throttle (E)	74	3 136 136 R1	SCREW, stop
60	3 218 798 R1	LEVER, throttle (F, G and H) (together with PACKAGE 3 218 819 R91 will work for LEVER 3 078 953 R1)	75	3 059 074 R1	SCREW, stop
60	OR 3 218 799 R1	LEVER, throttle (F, G and H) (together with PACKAGE 3 218 819 R91 will work for LEVER 3 078 954 R1)	76	933 988 R1	NUT, hex stop screw (3)
61	3 078 555 R1	SPRING, throttle	77	3 079 141 R1	NUT, hex (replaces 3 059 096 R1, 3 079 120 R1)
62	3 078 517 R1	SHAFT, throttle (A, B, C and D)			

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REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
FUEL INJECTION PUMP — Continued (2544 w/SYNCHROMESH TRANSMISSION - 10145 and up (2544 w/HYDROSTATIC DRIVE - 30592 and up) (2500B, 2505B, 2510B - 69908 and up) (3500A - 180115 and up) (TD-7E, TD-8E, 100E and 125E) (250A)			3 078 526 R91	PACKAGE, fuel injection pump gasket (Consists of -	
				2 "O" RING	785 602 R1
				1 "O" RING	3 078 354 R1
				1 "O" RING	3 078 358 R1
				1 "O" RING	3 078 363 R1
				1 "O" RING	3 078 366 R1
				1 "O" RING	3 078 483 R1
				1 RING	3 078 485 R1
				1 RING	3 078 487 R1
				2 RING	3 078 488 R1
				1 "O" RING	3 078 535 R1
				1 "O" RING	3 078 559 R1
78	3 132 251 R1	SCREW, stop (A, B, C and D)	3 218 819 R91	PACKAGE, support (Consists of -	
78	3 136 124 R1	SCREW, stop (E, F, G and H)		1 SPRING	3 218 796 R1
79	3 059 076 R1	WASHER, plunger shaft control (A, B, C and D)		1 SUPPORT	3 218 797 R1
80	931 320 R1	SCREW, countersunk stop plate (4)		1 ROLLER	3 218 818 R1
81	3 132 588 R1	SPRING, throttle shaft torsion (A, B, C and D)		1 RING	30 338 R1
81	3 136 125 R2	SPRING, throttle torsion (E)			
82	3 132 589 R1	SPRING, control plunger torsion (A, B, C and D)			
82	3 136 133 R1	SPRING, control plunger torsion (E, F, G and H)			
83	3 059 077 R1	LEVER, control plunger (A, B, C and D)			
	OR				
83	3 059 078 R1	LEVER, control plunger (A, B, C and D)			
83	3 136 138 R1	LEVER, control plunger (E, F, G and H)			
	OR				
83	3 136 139 R1	LEVER, control plunger (E, F, G and H)			
84	3 136 143 R1	SLEEVE, throttle shaft (E)			
85	3 136 142 R1	SEAL, ring (E, F, G and H)			
86	3 218 796 R1	SPRING (F, G and H) (replaces 3 078 955 R1)			
87	3 218 797 R1	SUPPORT (F, G and H) (when replacing SUPPORT 3 078 956 R1, order PACKAGE 3 218 819 R91)			
88	3 218 818 R1 30 338 R1	ROLLER, throttle lever (F, G and H) RING, lock			
89	931 585 R1	SCREW, advance housing plate (2) (A, B, C, D and E)			
89	934 275 R1	SCREW, advance housing plate (2) (F, G and H)			

NOTE A - To determine the service parts it is necessary to know the Bosch Model number and in some cases in addition the manufacturing date. This information is indicated on the Bosch name plate (see example in illustration) of the injection pump.

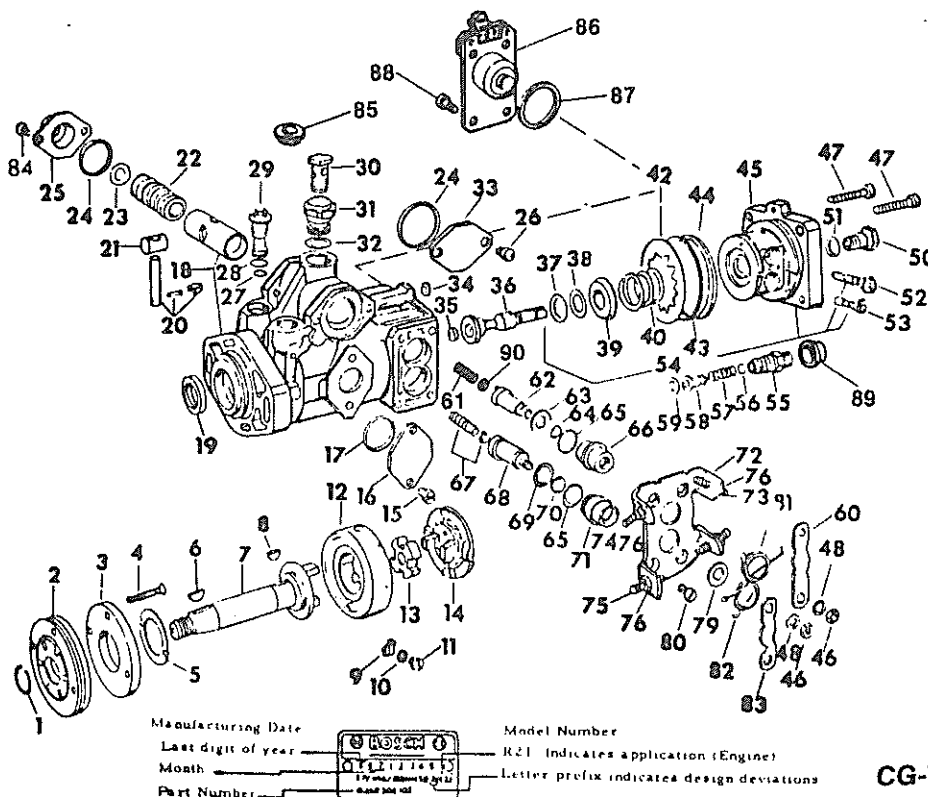


# FUEL SYSTEM

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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## FUEL INJECTION PUMP (260A)



3	218 109 R91	PUMP ASSY, fuel injection (Model No. EP/VA4/10H 1200 CR 187) (See NOTE A)	15	931 330 R1	SCREW, window cover (2)
1	3 078 474 R1	RING, retaining	16	3 078 486 R1	COVER, timing window
2	3 078 475 R91	PUMP, charge	17	3 078 485 R1	PACKING RING, window cover
3	3 078 476 R1	RING, charge pump support	18	3 078 472 R91	HOUSING w/timing advance PISTON
4	3 078 477 R1	SCREW, retaining support ring (2)	19	3 078 355 R2	OIL SEAL, drive shaft
5	3 078 479 R1	WASHER, roller retainer thrust	20	3 078 481 R1	PIN, automatic advance connecting
6	3 079 101 R1	KEY, drive shaft woodruff (replaces 3 078 371 R1)	21	3 078 482 R1	SLIDER, advance piston
7	3 078 473 R1	SHAFT, drive	22	3 078 579 R1	SPRING, advance piston
8	3 132 395 R1	KEY, charging pump woodruff	23	3 078 528 R1	WASHER, thrust (.024 in/.61 mm) (x)
9	3 132 598 R1	POINTER, timing	23	3 078 529 R1	WASHER, thrust (.031 in/.79 mm) (x)
10	933 982 R1	WASHER, lock			
11	931 326 R1	SCREW, pan head			
12	3 078 478 R91	RING ASSY, roller retainer			
13	3 059 007 R1	DISC, cross type cam face			
14	3 078 480 R1	CAM, face			

**CG-7005**

(x) - As Required.

NOTE A: To determine the service parts, it is necessary to know the Bosch Model number and in some cases in addition, the manufacturing date. This information is indicated on the Bosch name plate (see example in illustration) of the injection pump.

## FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
FUEL INJECTION PUMP - Continued (260A)			35	3 078 781 R1	WASHER, plunger (.087 in/2.21 mm) (x)
23	3 078 530 R1	WASHER, thrust (.039 in/.99 mm) (x)	35	3 078 783 R1	WASHER, plunger (.088 in/2.24 mm) (x)
23	3 078 531 R1	WASHER, thrust (.047 in/1.19 mm) (x)	35	3 078 785 R1	WASHER, plunger (.090 in/2.29 mm) (x)
23	3 078 532 R1	WASHER, thrust (.055 in/1.40 mm) (x)	35	3 078 787 R1	WASHER, plunger (.091 in/2.31 mm) (x)
23	3 078 533 R1	WASHER, thrust (.118 in/3.00 mm) (x)	35	3 078 789 R1	WASHER, plunger (.093 in/2.36 mm) (x)
24	3 078 488 R1	"O" RING, advance housing (2)	35	3 078 791 R1	WASHER, plunger (.092 in/2.34 mm) (x)
25	3 078 489 R1	PLATE, advance housing right hand	35	3 078 793 R1	WASHER, plunger (.096 in/2.44 mm) (x)
26	931 585 R1	SCREW, advance housing plate (2)	35	3 078 795 R1	WASHER, plunger (.098 in/2.49 mm) (x)
27	3 078 535 R1	"O" RING, regulator valve	35	3 078 797 R1	WASHER, plunger (.099 in/2.51 mm) (x)
28	3 078 358 R1	"O" RING, regulator valve	35	3 078 799 R1	WASHER, plunger (.101 in/2.57 mm) (x)
29	3 078 614 R91 3 079 096 R1	VALVE, regulator WASHER (x)	35	3 078 801 R1	WASHER, plunger (.102 in/2.59 mm) (x)
30	3 059 086 R1	SCREW, inlet union	35	3 078 803 R1	WASHER, plunger (.104 in/2.64 mm) (x)
31	3 078 484 R1	VALVE, overflow	35	3 078 805 R1	WASHER, plunger (.106 in/2.69 mm) (x)
32	3 078 483 R1	"O" RING, union adapter adjusting housing	35	3 078 807 R1	WASHER, plunger (.107 in/2.72 mm) (x)
33	3 078 486 R1	PLATE, advance housing left hand	35	3 078 809 R1	WASHER, plunger (.109 in/2.77 mm) (x)
34	3 078 487 R1	"O" RING	35	3 078 811 R1	WASHER, plunger (.110 in/2.79 mm) (x)
35	3 078 761 R1	WASHER, plunger (.071 in/1.80 mm) (B) (x)	35	3 078 813 R1	WASHER, plunger (.112 in/2.84 mm) (x)
35	3 078 763 R1	WASHER, plunger (.072 in/1.83 mm) (B) (x)	35	3 078 815 R1	WASHER, plunger (.113 in/2.87 mm) (x)
35	3 078 765 R1	WASHER, plunger (.074 in/1.88 mm) (B) (x)	36		NOT FURNISHED SEPARATELY
35	3 078 767 R1	WASHER, plunger (.076 in/1.93 mm) (x)	37	3 078 540 R1	WASHER, plunger (.053 in/1.35 mm) (x)
35	3 078 769 R1	WASHER, plunger (.077 in/1.96 mm) (x)	37	3 078 541 R1	WASHER, plunger (.063 in/1.60 mm) (x)
35	3 078 771 R1	WASHER, plunger (.078 in/1.98 mm) (x)	37	3 078 542 R1	WASHER, plunger (.073 in/1.85 mm) (x)
35	3 078 773 R1	WASHER, plunger (.080 in/2.03 mm) (x)			
35	3 078 775 R1	WASHER, plunger (.082 in/2.08 mm) (x)			
35	3 078 777 R1	WASHER, plunger (.083 in/2.10 mm) (x)			
35	3 078 779 R1	WASHER, plunger (.085 in/2.16 mm) (x)			

(x) - As Required.

## FUEL SYSTEM

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REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL INJECTION PUMP - Continued (260A)</b>			66	3 078 556 R1	BUSHING, throttle shaft
			67	3 078 700 R91	SERVICE PACKAGE, control plunger
38	3 078 537 R1	WASHER, plunger (.065 in/1.65 mm) (x)	68	3 078 521 R1	SHAFT, control plunger
38	3 078 571 R1	WASHER, plunger (.092 in/2.34 mm) (x)	69	3 078 523 R1	WASHER, control plunger shaft
39	3 078 516 R1	SEAT, plunger spring	70	3 078 363 R1	"O" RING, control plunger shaft
40	3 078 515 R1	SPRING, plunger	71	3 078 524 R1	BUSHING, control plunger shaft
42	3 078 576 R1	WASHER, spring	72	3 078 557 R1	PLATE, stop
43	3 078 578 R1	FILTER	73	3 132 885 R1	SCREW, stop
44	3 078 366 R1	"O" RING, distributor head	74	3 136 136 R1	SCREW, stop
45		NOT FURNISHED SEPARATELY	75	3 059 074 R1	SCREW, stop
46	933 988 R1	NUT, throttle and control hex (2)	76	933 988 R1	NUT, hex stop screw (2)
47	3 078 600 R1	SCREW, pump to distributor head (4)	79	3 059 076 R1	WASHER, plunger shaft control
48	933 987 R1	WASHER, throttle and control lock (2)	80	931 320 R1	SCREW, countersunk stop plate (4)
50	3 078 514 R1	PLUG, distributor head	81	3 132 588 R1	SPRING, throttle shaft torsion
51	3 132 407 R1	RING, packing distributor head plug	82	3 132 589 R1	SPRING, control plunger torsion
52		NOT FURNISHED SEPARATELY	83	3 059 077 R1	LEVER, control plunger
53		NOT FURNISHED SEPARATELY	83	3 059 078 R1	LEVER, control plunger
54	3 079 094 R91	HEAD w/PLUNGER and CONTROL PISTON	84	439 189 C1	SCREW, advance housing plate (2)
55	3 059 067 R2	HOLDER, delivery valve (4)	85	3 078 942 R1	CLOSING
56	3 059 066 R1	WASHER, delivery valve (4)	86	3 078 527 R1	MAGNETO, shut-off
57	3 132 408 R1	SPRING, delivery valve (4)	87	3 078 559 R1	"O" RING
58	3 078 907 R1	VALVE, delivery (4)	88	931 327 R1	SCREW, pan (4)
59	3 079 378 R1	WASHER, delivery valve (4) (Replaces 3 078 362 R1)	89	3 079 097 R2	CAP, protection (4)
60	3 132 590 R1	LEVER, throttle	90	934 160 R1	WASHER (x)
60	3 132 591 R1	LEVER, throttle	90	3 079 098 R1	WASHER (0.02 mm) (x)
61	3 079 095 R1	SPRING, throttle		3 078 526 R91	PACKAGE, fuel injection pump gasket
62	3 078 517 R1	SHAFT, throttle			(Consists of -
63	3 078 519 R1	WASHER, throttle shaft			2 "O" RING 785 602 R1
64	3 078 354 R1	"O" RING, throttle shaft			1 "O" RING 3 078 354 R1
65	785 602 R1	"O" RING, control plunger and throttle (2)			1 "O" RING 3 078 358 R1
					1 "O" RING 3 078 363 R1
					1 "O" RING 3 078 366 R1
					1 "O" RING 3 078 483 R1
					1 RING 3 078 485 R1
					1 RING 3 078 487 R1
					2 RING 3 078 488 R1
					1 "O" RING 3 078 535 R1
					1 "O" RING 3 078 559 R1

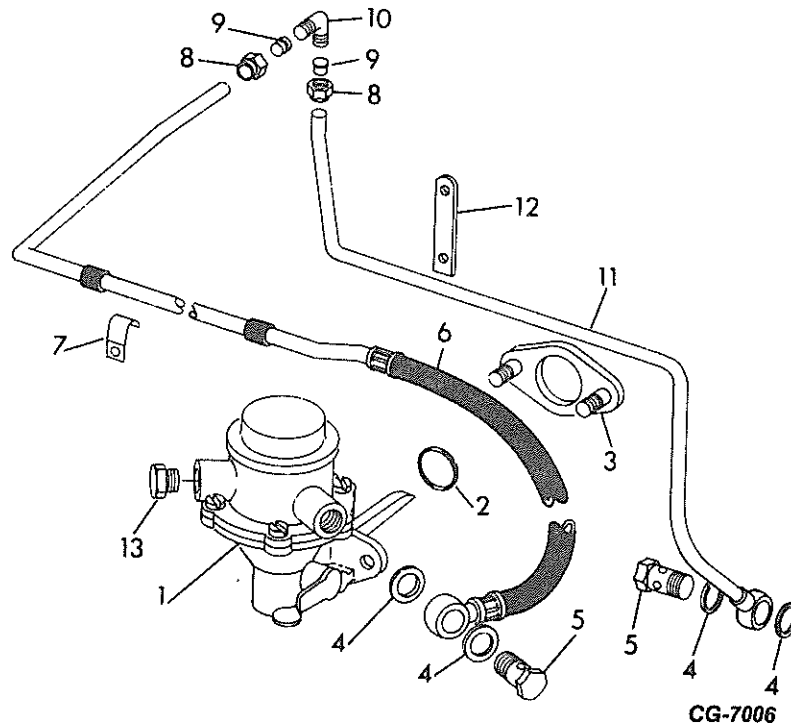
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**FUEL SYSTEM**

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**FUEL FEED PUMP AND CONNECTIONS**

(3500A SM and HS — 180809 and up)  
 (260A TC — 702000 and up)  
 (260A HS — 652000 and up)



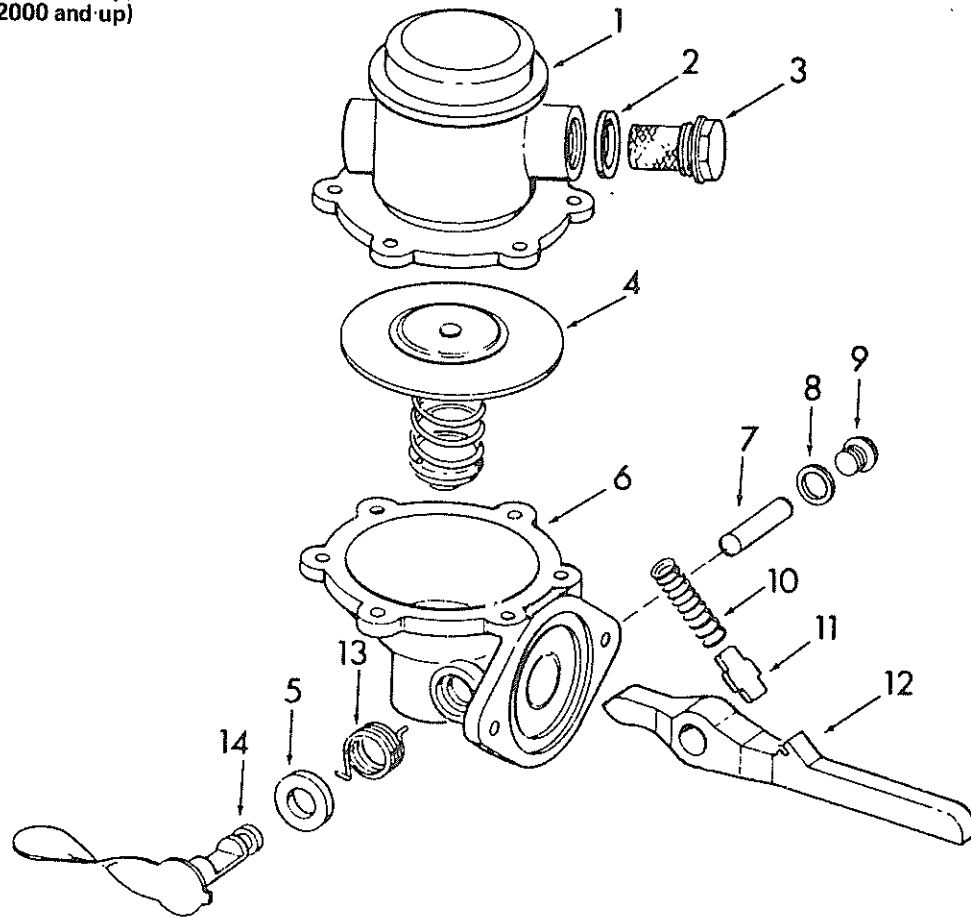
1	PUMP, fuel feed (Refer to "Fuel Feed Pump)	8	3 056 137 R1	NUT, tube (2)
	933 064 R1 NUT (2)	9	3 056 136 R1	SLEEVE, ferrule (2)
	933 682 R1 WASHER, flat (2)	10	3 144 730 R1	ELBOW, fuel line
2	3 055 389 R2 "O" RING	11	3 144 728 R2	TUBE, fuel (Filter to elbow) (For 3500A)
3	3 055 391 R41 FLANGE, feed pump	11	3 218 107 R2	TUBE, fuel (Filter to elbow) (For 260A)
4	933 610 R1 RING, packing (4)	12	3 055 387 R1	LINK, fuel lines fixing
5	710 098 R2 SCREW, hollow (2)		179 835	SCREW, hex-hd cap
6	3 144 729 R1 HOSE w/TUBE, fuel (Elbow to fuel feed pump)		3 050 221 R1	WASHER, lock
7	3 132 052 R1 CLIP, fuel lines (2)		3 055 386 R1	CLIP, fuel line
	179 816 SCREW, hex-hd cap (2)		179 793	SCREW, hex-hd cap
	3 050 129 R1 WASHER, lock (2)		3 052 189 R1	WASHER, lock
	3 055 574 R1 WASHER, flat (4)	13	3 056 600 R1	ADAPTER, fuel inlet

# FUEL SYSTEM

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REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**FUEL FEED PUMP**  
 (3500A SM and HS -- 180809 and up)  
 (260A TC-702000 and up)  
 (260A HS-652000 and up)



CG-6122

3 132 697 R92	PUMP ASSY , fuel feed (Consists of the following parts -	9	PLUG, drain locking (Not furnished separately)
1	HEAD, pump (Not furnished Separately)	10	SPRING, compression (Not furnished separately)
3 132 330 R1	SCREW, fillister (6)	11	SPRING, retainer (Not furnished separately)
2	933 850 R1 RING, sealing	12	HANDLE (Not furnished separately)
3	3 132 797 R1 FILTER, fuel feed pump	13	SPRING, extension (Not furnished separately)
4	3 132 798 R1 DIAPHRAGM, pump	14	LEVER, pump (Not furnished separately)
5	RING (Not Furnished Separately)		
6	UNDERBODY, pump (Not furnished separately) SCREW, oval hd slit (used w/HANDLE) (Not furnished separately)	3 136 002 R91	PACKAGE, fuel feed pump repair (Consists of -
7	AXLE (Not furnished separately)	1	RING 933 850 R1
8	3 132 335 R1 RING, packing	6	SCREW 3 132 330 R1
		1	RING 3 132 335 R1
		1	FILTER 3 132 797 R1
		1	DIAPHRAGM 3 132 798 R1)

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>NOZZLE AND NOZZLE HOLDER</b>			3 055 298 R92	HOLDER ASSY, nozzle (Consists of Reference Nos. 1 thru 11) (A) (4)	
			3 144 677 R91	HOLDER ASSY, nozzle (Consists of Reference Nos. 1 thru 11) (B) (4)	
CG-6294					
Parts without letters after the description indicate the part is used for both Nozzle and Nozzle Holders.					
A	3 055 423 R93	NOZZLE and HOLDER ASSY (4) TD-7E and 100E - 51435 & below 260A HS - 652071 and below 2500 SM - 92392 and below 2500 HS - 459876 and below 3500 - 181796 and below			
B	3 144 633 R91	NOZZLE and HOLDER ASSY (4) TD-8E and 125E - 3048 and below (Consists of the following parts -			
1		BODY, injection nozzle holder (Not Furnished Separately)			
2	3 056 940 R91	CONNECTION, fuel inlet			
3	3 056 941 R1	WASHER, fuel inlet connection			
4	3 056 939 R91	SPINDLE w/GUIDE			
5	759 844 R1	SPRING			
6	787 049 R1	SEAT, spring			
7	3 056 942 R1	CAP, spring (B)			
7	3 132 998 R1	CAP, spring (A)			
8	3 056 943 R1	NUT, nozzle holder cap			
9	710 673 R2	RING, packing (2)			
10	3 056 944 R1	SCREW, hollow			
11	3 133 042 R1	NUT, nozzle cap (A)			
11	3 056 945 R1	NUT, nozzle cap (B)			
12	3 055 428 R92	NOZZLE, injection			

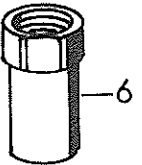
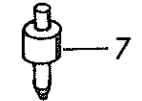
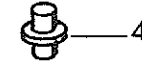
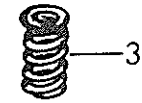
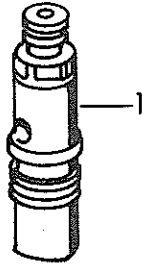
# FUEL SYSTEM

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REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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## NOZZLE AND NOZZLE HOLDER

Parts without letters after the description indicate the part is used for both Nozzle and Nozzle Holders.



CG-6295

A	3 218 250 R93	NOZZLE and HOLDER ASSY (Order NOZZLE, 3 218 251 R2 and HOLDER, 3 218 247 R92) (%) (4) TD-7E and 100E - 51436 and up 250A (SM) - 640000 and up 250A (HS) - 646000 and up 250A (TC) - 700000 and up 260A (HS) - 652072 and up 260A (TC) - 705000 and up 2500 (SM) - 92393 and up 2500 (HS) - 459877 and up 3500A (HS) - 181797 and up			
B	3 218 253 R93	NOZZLE and HOLDER ASSY (Order NOZZLE, 3 218 251 R2 and HOLDER, 3 218 247 R92) (%) (4) TD-8E and 125E - 3049 and up (Consists of the following parts -			
	1	3 218 389 R1	BODY, nozzle holder		
	2	3 218 657 R1	SHIM (0.500 mm) (x)		
	2	3 218 658 R1	SHIM (0.525 mm) (x)		
	2	3 218 659 R1	SHIM (0.550 mm) (x)		
	2	3 218 660 R1	SHIM (0.575 mm) (x)		
	2	3 218 661 R1	SHIM (0.600 mm) (x)		
	2	3 218 662 R1	SHIM (0.700 mm) (x)		
	2	3 218 663 R1	SHIM (0.800 mm) (x)		
	2	3 218 664 R1	SHIM (0.900 mm) (x)		
	3	3 218 385 R2	SPRING, compression		
	4	3 218 386 R2	PIN, pressure		
	5	3 218 387 R1	SPACER		
	6	3 218 388 R1	NUT, cap		
	7	3 218 251 R2	NOZZLE, injection		
		3 218 247 R92	HOLDER ASSY, nozzle (Consists of Ref. Nos. 1 thru 6) (4)		

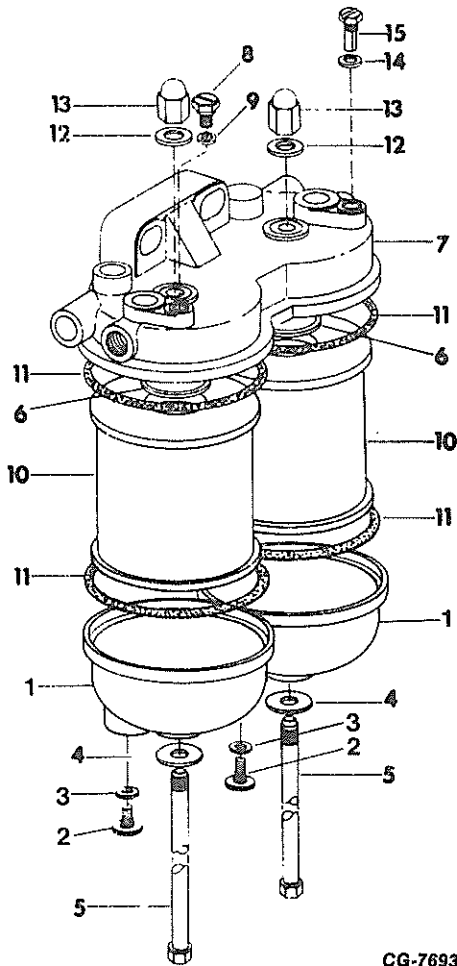
(x) - As Required.

(%) - The difference between Nozzle and Holder Assemblies "A" and "B" is the nozzle opening pressure. Use shims to set opening pressure as follows:  
 Nozzle "A": 22475 - 23440 kPa  
 (3260 - 3400 psi)  
 Nozzle "B": 23165 - 24820 kPa  
 (3360 - 3600 psi)

Refer to Robert Bosch Injection Pump Service Manual.

### FUEL SYSTEM

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
<b>FUEL FILTER</b> (3514) (2544) (2500A, 2500B, 2505B, 2510B, 2514B) (3500A) (250A TC - 700551 and below) (250A SM - 64036 and below) (250 HS - 646362 and below) (TD-7E and 100E - 51516 and below) (TD-8E and 125E - 3048 and below)			Parts without letters after the description indicates the part is used for both Fuel Filters.		
A	3 144 227 R91	FILTER ASSY, (w/Glass Bowl) (Order FILTER ASSY, 3 144 306 R91)	B	3 144 306 R91	FILTER ASSY, fuel (w/Metal Bowl) (Replaces, 3 144 227 R91) (Consists of the following parts -
1	3 144 478 R1	BOWL, glass (A) (Order BOWL, 3 144 481 R1) (2)	1	3 144 481 R1	BOWL, metal (B) (Replaces BOWL, 3 144 478 R1) (2)
2	3 144 475 R1	SCREW, drain (2)	2	3 144 475 R1	SCREW, drain (2)
3	3 144 476 R1	RING, packing (2)	3	3 144 476 R1	RING, packing (2)
4	3 144 480 R1	RING, packing (A) (2)	4	3 144 480 R1	RING, packing (A) (2)
5	3 144 479 R1	SCREW, hollow (A) (Order BOLT, 3 144 482 R1) (2)	5	3 144 479 R1	SCREW, hollow (A) (Order BOLT, 3 144 482 R1) (2)
5	3 144 482 R1	BOLT (B) (Replaces SCREW, 3 144 479 R1) (2)	5	3 144 482 R1	BOLT (B) (Replaces SCREW, 3 144 479 R1) (2)
6	3 144 779 R1	RING, packing (2)	6	3 144 779 R1	RING, packing (2)
7	3 144 484 R1	HEAD	7	3 144 484 R1	HEAD
8	3 144 780 R1	BOLT	8	3 144 780 R1	BOLT
9	757 760 R1	RING, packing	9	757 760 R1	RING, packing
10		ELEMENT, filter (Order FILTER PACKAGE, 3 144 477 R92) (2)	10		ELEMENT, filter (Order FILTER PACKAGE, 3 144 477 R92) (2)
11	3 144 472 R1	RING, packing (4)	11	3 144 472 R1	RING, packing (4)
12	3 144 474 R1	RING, packing (2)	12	3 144 474 R1	RING, packing (2)
13	3 144 473 R1	NUT, crown (2)	13	3 144 473 R1	NUT, crown (2)
14	933 610 R1	RING, packing	14	933 610 R1	RING, packing
15	712 616 R1	SCREW, locking	15	712 616 R1	SCREW, locking
	3 144 477 R92	PACKAGE, filter service (2) (Consists of - § 1 ELEMENT 2 RINGS 3 144 472 R1 1 RING 3 144 779 R1)			



§ - Not Furnished Separately.

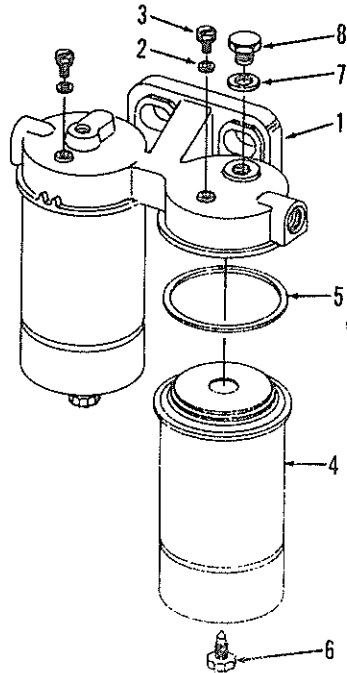


# FUEL SYSTEM

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**FUEL FILTER**  
 (260A TC - 705000 and up)  
 (260A HS - 652000 and up)  
 (TD-7E and 100E - 51517 and up)  
 (TD-8E and 125E - 3409 and up)  
 (250A TC - 700552 and up)  
 (250A SM - 640237 and up)  
 (250A HS - 646363 and up)



CG-7692

	3 228 272 R91	FILTER ASSY (2-Stage Spin-On Type) (Replaces 3 136 300 R92) (Consists of the following parts -
1	3 132 491 R1	HEADER, filter (Replaces 3 218 087 R1)
2	757 760 R1	RING, packing (2)
3	3 144 780 R1	SCREW, air vent (2)
4	3 132 428 R2	FILTER w/RING and PLUG, fuel (Spin-On) (2)
5	3 132 193 R1	RING, packing (2)
6	3 228 407 R1	PLUG, drain (Replaces 3 132 196 R1) (2)
7	933 610 R1	RING, packing (2)
8	712 616 R1	PLUG, filler and drain (2)



**SECTION 12 NOT USED IN  
THIS CATALOG**

**GOVERNOR**

**12**



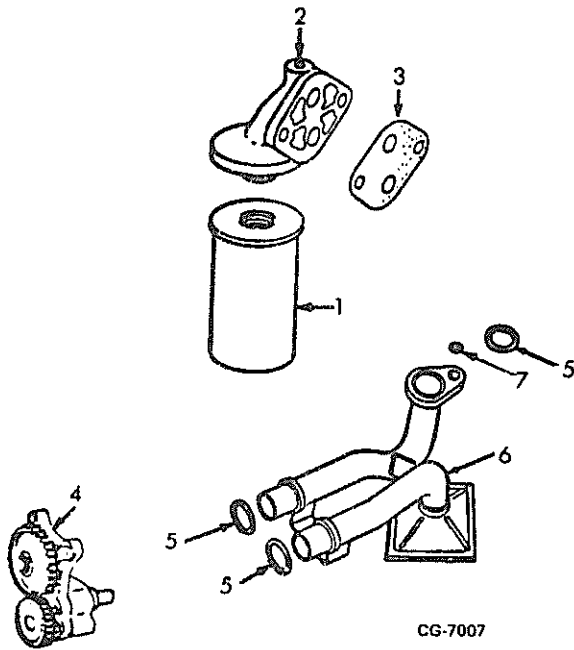
**REFER TO ALPHABETICAL INDEX  
FOR COMPLETE LISTING OF PARTS**

**LUBRICATION**

**13**

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**LUBRICATING OIL PUMP CONNECTIONS AND FILTER AND RELATED PARTS**  
(2500A, 2500B, 2505B, 2510B and 2514B)  
(250A)



CG-7007

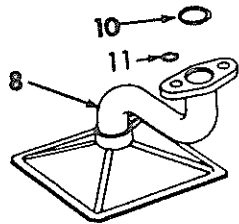
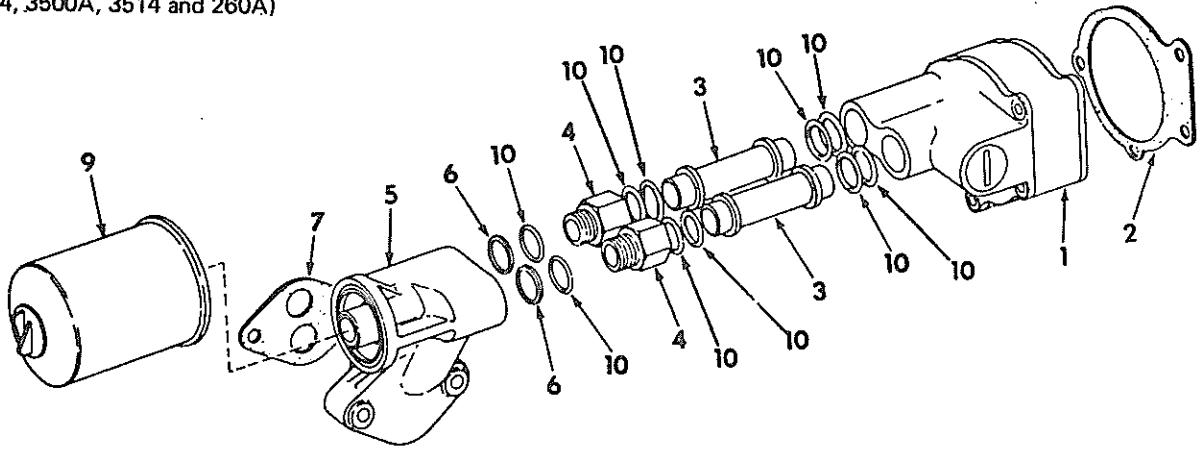
1	3 136 046 R93	FILTER, oil
	OR	
1	398 080 R2	FILTER, oil
2	3 136 047 R1	SOCKET, oil filter
	179 839	SCREW, hex-hd cap (2)
	3 144 513 R1	DISC, spring (2)
3	3 055 237 R1	GASKET, oil filter socket
4		PUMP ASSY, oil (Refer to "Lubricating Oil Pump")
	21 035 R1	SCREW, hex-soc-hd cap (4)
	3 050 129 R1	WASHER, lock (4)
5	3 228 577 R1	O-RING (Replaces 3 055 199 R1)(3)
6	3 132 781 R94	PIPE ASSY, oil pressure and suction
	24 933 R1	SCREW, hex-soc-hd cap
	3 050 129 R1	WASHER, lock
7	717 222 R1	O-RING

# LUBRICATION

EPC-238-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**LUBRICATING OIL PUMP CONNECTIONS, FILTER AND RELATED PARTS**  
(2544, 3500A, 3514 and 260A)



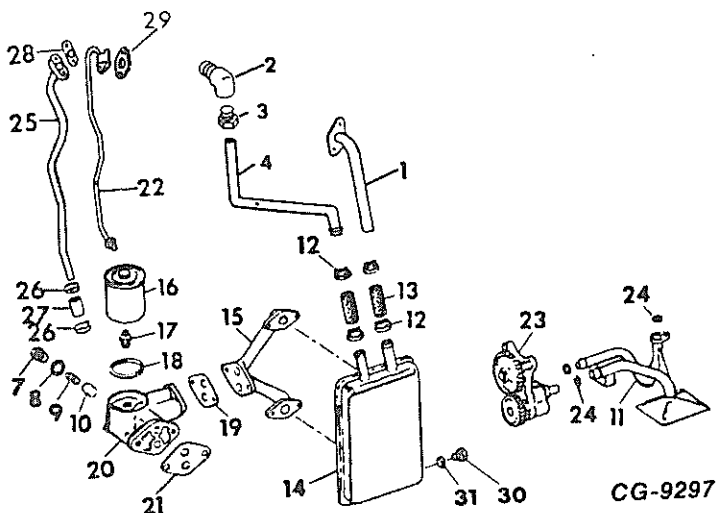
CG-7008

1	PUMP ASSY, oil (Refer to OIL PUMP ASSY)	8	3 132 787 R92	PIPE ASSY, oil suction
			24 933 R1	SCREW, 3-3/4" hex-skt hd cap
3	3 055 950 R1		179 870	SCREW, 3" hex-hd cap
	PIPE ASSY, oil pump (2) (replaces 3 055 950 R11)		3 218 543 R1	WASHER, med lock (2)
3	3 055 950 R11			
	PIPE ASSY, oil pump (2)	9	3 136 046 R93	FILTER, oil (Will work for FILTER, 3 132 183 R91)
4	3 055 949 R2			
	ADAPTER, oil filter socket pipe (2)		OR	
5	3 055 948 R1	9	398 080 R2	FILTER, oil
	SOCKET, oil filter			
	SCREW, hex-hd cap (2)	10	3 228 577 R1	O-RING (Replaces 3 055 199 R1)(11)
	DISC, spring (2)			
6	933 608 R1	11	717 222 R1	O-RING
	RING, packing (2)			
7	3 055 237 R1			
	GASKET, oil filter socket			

# LUBRICATION

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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## LUBRICATING OIL COOLER, FILTER AND PIPING (TD-7E, TD-8E, 100E and 125E)



1	3 144 639 R91	PIPE, oil cooler inlet	17	3 136 308 R1	CONNECTOR, threaded
2	56 445 D	ELBOW, pipe	18	3 051 337 R1	RING, packing
3	56 446 D	NUT, 5/8" tube	19	3 136 404 R2	GASKET
4	3 144 642 R1	PIPE, oil cooler to thermostat housing	20		(See Individual Engine Variation)
7	3 138 581 R1	PLUG, relief valve	21	3 055 237 R1	GASKET, oil filter base
8	3 058 431 R1	GASKET, relief valve plug	22		(See Individual Engine Variation)
9	279 163 R1	SPRING, relief valve	23		PUMP ASSY, lubricating oil (Refer to "Lubricating Oil Pump Assy")
10	251 400 R1	VALVE, oil cooler relief	21 035 R1		SCREW, hex-soc-hd cap (4)
11	3 132 783 R94	TUBE, oil pressure and suction	3 050 129 R1		WASHER, lock (4)
	717 222 R1	RING, packing	24	3 228 577 R1	RING, packing (Replaces 3 055 199 R1) (3)
	179 816	SCREW, hex-hd cap		717 222 R1	"O" RING
	3 050 129 R1	WASHER, lock	25		(See Individual Engine Variation)
	103 883	PLUG, pipe	26		(See Individual Engine Variation)
12	3 143 364 R1	CLAMP, hose (4)	27		(See Individual Engine Variation)
13	3 136 370 R1	HOSE, connecting (2)	28		(See Individual Engine Variation)
14	3 228 132 R1	COOLER, lubricating oil (Replaces 279 212 R92)	29		(See Individual Engine Variation)
	3 218 395 R1	DISC, spring (4)	30	934 259 R1	PLUG, drain
	102 634	NUT, hex (4)	31	933 697 R1	RING, seating
	3 144 520 R1	PLUG, pipe			<b>ENGINE VARIATIONS</b>
15	3 136 403 R1	MANIFOLD, oil cooler			<b>(TD-7E and 100E)</b>
	933 620 R1	DISC, spring (2)	20	3 136 402 R3	BASE, oil filter
	114 503	NUT, jam (2)		3 144 513 R1	DISC, spring (2)
	350 684 R1	"O" RING (2)		3 144 520 R1	PLUG, pipe
	179 842	SCREW, hex-hd cap		186 285	SCREW, hex-hd cap (2)
	102 634	NUT, hex (4)		712 078 R1	STUD (2)
16	3 132 737 R93	FILTER, lubricating oil			



# LUBRICATION

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**LUBRICATING OIL COOLER, FILTER AND PIPING -**

*Continued*

(TD-7E, TD-8E, 100E and 125E)

ENGINE VARIATIONS - Continued

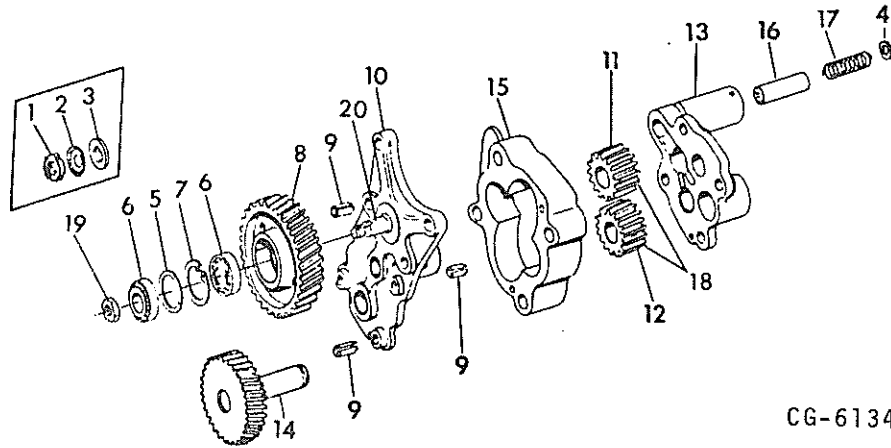
(TD-8E and 125E)

20	3 144 635 R1	BASE, oil filter
	3 144 513 R1	DISC, spring (2)
	606 845 C1	ELBOW
	3 144 520 R1	PLUG, pipe
	186 285	SCREW, hex-hd cap (2)
	712 078 R1	STUD
22	3 144 636 R91	PIPE, turbocharger oil inlet
	24 477 R1	SCREW, hex-hd cap (2)
	103 320	WASHER, lock (2)
25	3 144 637 R1	TUBE, oil drain
	151 629 R1	SCREW, hex-hd cap (2)
	103 321	WASHER, lock (2)
26	333 710 R1	CLAMP, hose (2)
27	3 144 812 R2	HOSE, connecting
28	670 079 C1	GASKET, turbo oil drain
	OR	
28	3 144 359 R1	GASKET, turbo oil drain
29	253 660 R1	GASKET, turbocharger oil inlet pipe
	OR	
29	3 132 062 R1	GASKET, turbocharger oil inlet pipe
	327 071 R1	CLAMP, oil inlet tube
	315 594 R1	CLAMP, oil drain tube
	179 838	SCREW, hex-hd cap
	670 278 C1	WASHER, hardened
	102 635	NUT
	103 321	WASHER, lock
	103 341	WASHER, plain
	OR	
	3 144 903 R1	CLAMP, oil inlet tube
	3 144 904 R1	CLAMP, oil drain tube
	931 364 R1	SCREW, hex-hd cap
	933 187 R1	NUT
	933 844 R1	WASHER, lock

LUBRICATION

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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LUBRICATING OIL PUMP  
 (TD-7E, TD-8E, 100E and 125E)  
 (2500A, 2500B, 2505B, 2510B and 2514B)  
 (250A)



CG-6134B

Parts without letters after the description indicate the part is used for both Pump Assemblies.

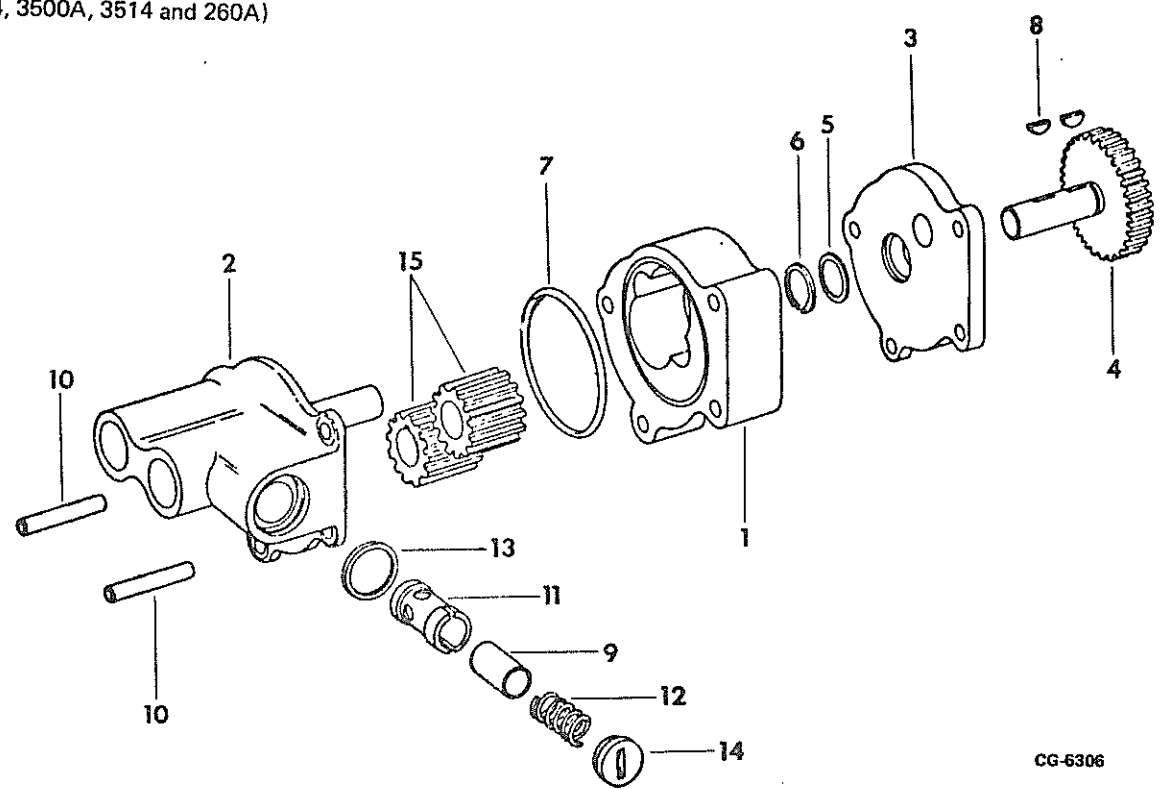
REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
A	3 136 430 R95	PUMP ASSY, lubricating oil (2500A, 2500B, 2505B, 2510B, 2514B and 250A)			(Composed of - 1 AXLE 3 055 297 R5 § 1 COVER 3 PIN 932 597 R1 1 PIN 103 387 1 SPRING 3 136 264 R1 1 VALVE 3 055 202 R2 1 WASHER 3 139 620 R1 § 1 CASE § 1 CARRIER § 1 BUSHING § 1 SHAFT )
B	3 136 431 R95	PUMP ASSY, lubricating oil (TD-7E, TD-8E, 100E and 125E) (Consists of the following parts -			
1	3 055 295 R1	NUT, shaft (Order NUT, 3 228 141 R1)			
2	3 055 296 R1	PLATE, locking (Order NUT, 3 228 141 R1)	11		GEAR, idler (Not furnished separately)
3	3 055 371 R2	WASHER, keyed (Order NUT, 3 228 141 R1)	12		GEAR, oil pump (Not furnished separately)
4	3 139 620 R1	WASHER, flat	13		COVER, oil pump (Order CARRIER ASSY, 3 136 441 R91) PIN, 1/8" x 1-1/2" cotter
5	3 055 292 R1	WASHER		103 387	
6	476 046 R1	CUP, bearing (2)	14	3 136 442 R91	GEAR, drive (A)
6	476 045 R91	CONE, bearing (2)	14	3 136 444 R91	GEAR, drive (B)
6	3 055 294 R1	BEARING, taper roller (2)	15		CASE, oil pump (Order CARRIER ASSY, 3 136 441 R91)
7	933 579 R1	RING, retainer	16	3 055 202 R2	VALVE, piston relief
8	3 055 291 R1	GEAR, oil pump idler (A)	17	3 136 264 R1	SPRING, pressure relief valve
8	3 056 852 R1	GEAR, oil pump idler (B)	18	3 132 503 R91	GEAR SET, oil pump
9	932 597 R1	PIN, roll (3)	19	3 228 141 R1	NUT, lock (Replaces NUT, 3 055 295 R1 PLATE, 3 055 296 R1 and WASHER, 3 055 371 R2)
10	3 136 441 R94 179 827 102 634 3 050 129 R1	CARRIER ASSY, oil pump SCREW, hex-hd cap (4) NUT, hex (4) WASHER (4)	20	3 055 297 R5	AXLE, idler gear § - Not Furnished Separately.

# LUBRICATION

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**LUBRICATING OIL PUMP**  
(2544, 3500A, 3514 and 260A)



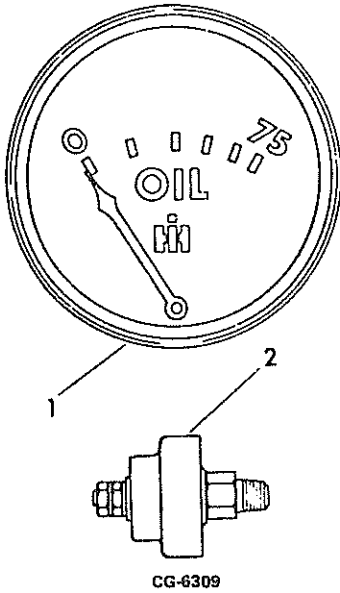
CG-6306

3	136 434 R91	PUMP ASSY, oil (Will work for PUMP ASSY, 3 055 962 R97)	11	3 136 081 R1	VALVE, piston relief
	186 273	SCREW, hex-hd cap (4)	12	3 136 264 R1	SPRING, relief valve pressure
	102 634	NUT, hex (4)	13	710 382 R3	RING, packing
	3 050 129 R1	WASHER, lock (4)	14	3 055 958 R2	PLUG, closing
		(Consists of the following parts -	15	3 136 450 R91	GEAR SET, oil pump (Replaces 538 032 R91)
1		CASE, oil pump gear (Not Furnished Separately, Order PUMP ASSY)		3 132 305 R92	PACKAGE, piston relief valve service (Consists of -
2		COVER ASSY, oil pump (Not Furnished Separately, Order PUMP ASSY)			1 VALVE
3	3 136 453 R11	COVER, oil pump front			3 136 081 R1
4	3 136 454 R91	GEAR ASSY, oil pump drive (Will work for DRIVE GEAR, 3 055 954 R11)			1 PLUG
					3 055 958 R2
					1 VALVE
					3 132 304 R2
					1 RING
					710 382 R3)
5	3 055 205 R1	RING, distance (Used w/DRIVE GEAR, 3 055 954 R11)			
6	933 701 R1	V-RING, shaft seeger (Used w/DRIVE GEAR, 3 055 954 R11)			
7	3 055 952 R2	O-RING (2)			
8	124 546	KEY, woodruff No. 6 (Used w/DRIVE GEAR, 3 055 954 R11) (2)			
9	3 132 304 R2	VALVE, cylinder			
10	932 614 R1	PIN, .394 x 1.968 slt-spring (2)			

## LUBRICATION

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**OIL PRESSURE GAUGE AND SWITCH**  
(2544 and 3514)



- |   |                          |   |
|---|--------------------------|---|
| 1 | 362 039 R94<br>19 715 R1 | GAUGE ASSY, oil pressure (3514)<br>CONNECTOR, 1/8" NPTF fem<br>hi-duty tube fitting |
| 2 | 392 249 R92              | SWITCH ASSY, engine oil pressure<br>(2544)  |

**REFER TO ALPHABETICAL INDEX  
FOR COMPLETE LISTING OF PARTS**

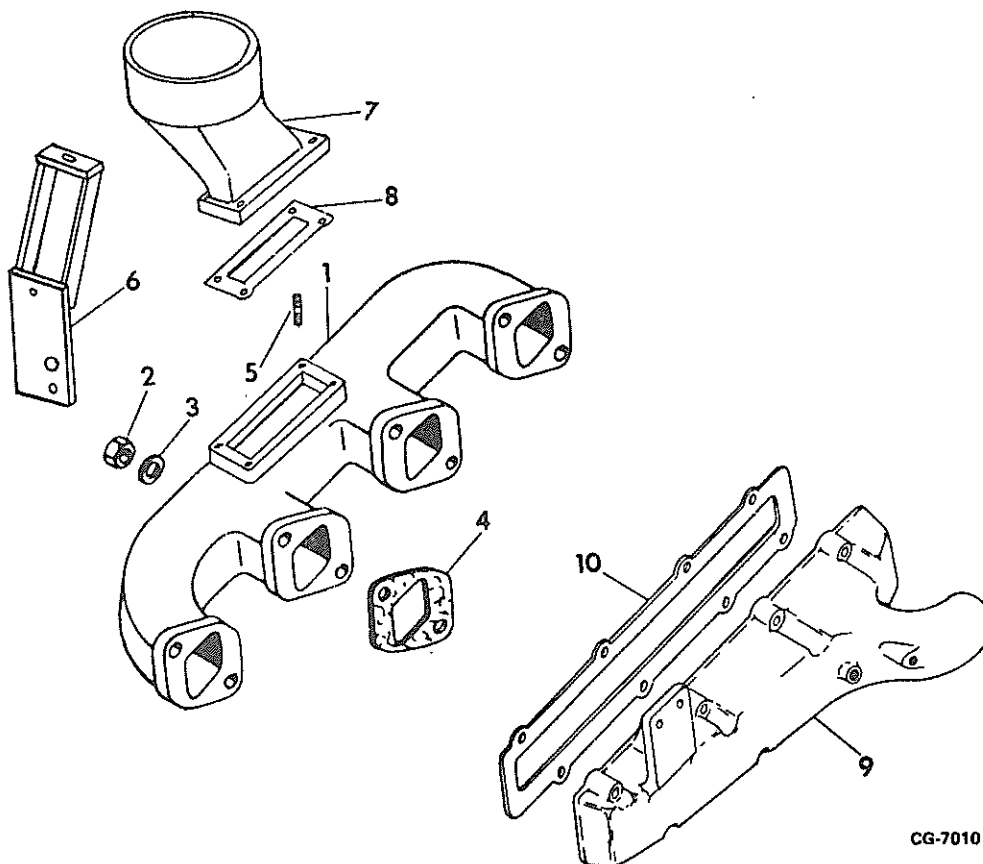
**MANIFOLD**

**14**

# MANIFOLD

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**INTAKE AND EXHAUST MANIFOLD**  
(TD-7E, TD-8E, 100E, 125E, 250A and 260A)



CG-7010

1	(See individual engine variation)
2	103 026 NUT (8)
3	20 285 H WASHER (8)
4	3 132 434 R1 GASKET (4)
5	3 055 663 R1 STUD (4)
6	(See individual engine variation)
7	(See individual engine variation)
8	(See individual engine variation)
9	(See individual engine variation)
10	3 055 398 R1 GASKET, intake manifold (Replaces 3 055 278 R1)

**ENGINE VARIATIONS**

**(TD-7E AND 100E)**

1	3 144 644 R91	MANIFOLD w/four STUD, 3 055 663 R1, exhaust
6	3 144 616 R91	SUPPORT, exhaust manifold
	179 839	SCREW, 1" long hex-hd cap
	179 904	SCREW, 1-1/4" long hex-hd cap
	103 321	WASHER, 3/8" lock
	103 324	WASHER, 9/16" lock
7	3 144 658 R2	FLANGE
	103 026	NUT, hex (4)
	20 285 H	WASHER, flat (4)
8	3 136 248 R1	GASKET, adapter
9	3 136 314 R1	MANIFOLD, intake
	445 684	PLUG, pipe (2)
	179 822	SCREW, 1-1/2" long hex-hd cap (7)
	3 050 129 R1	WASHER, lock (8)
	179 824	SCREW, 1-3/4" long hex-hd cap

# MANIFOLD

EPC-239-4

REF. NO.	PART NUMBER	DESCRIPTION
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REF. NO.	PART NUMBER	DESCRIPTION
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**INTAKE AND EXHAUST MANIFOLD - Continued**  
(TD-7E, TD-8E, 100E, 125E, 250A and 260A)

**INTAKE AND EXHAUST MANIFOLD**  
(2500A, 2500B, 2505B, 2510B, 2514, 2544, 3500A and 3514) (\*)

ENGINE VARIATIONS - Continued

(TD-8E and 125E)

1	3 144 644 R91	MANIFOLD w/four STUD, 3 055 663 R1, exhaust
6	3 144 616 R91	SUPPORT, exhaust manifold 003264 and below
	179 839	SCREW, 1" long hex-hd cap
	179 904	SCREW, 1-1/4" long hex-hd cap
	103 321	WASHER, 3/8" lock
	103 324	WASHER, 9/16" lock
9	3 136 314 R1	MANIFOLD, intake
	179 822	SCREW, 1-1/2" long hex-hd cap (7)
	445 684	PLUG, pipe (2)
	3 050 129 R1	WASHER, lock (8)
	179 824	SCREW, 1-3/4" long hex-hd cap

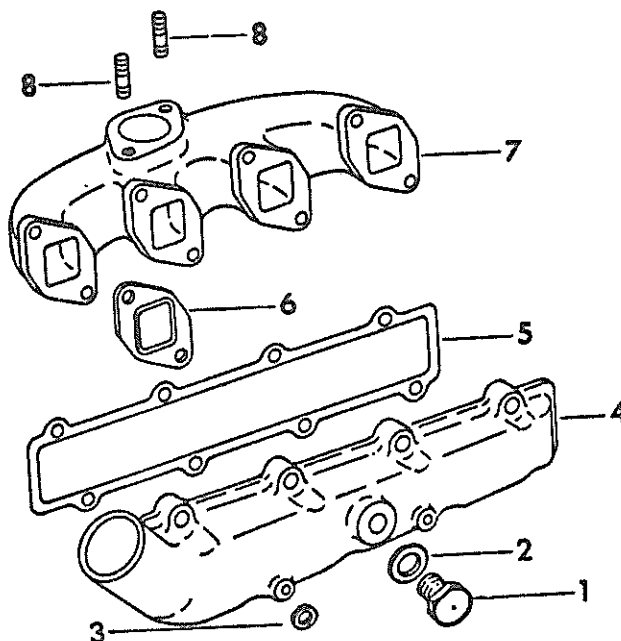
(260A)

1	3 136 066 R12	MANIFOLD w/four STUD, 3 055 663 R1, exhaust
7	3 228 205 R1	ELBOW, exhaust manifold (6 1/2" high) (+) and up
7	3 136 250 R1	ELBOW, exhaust manifold (7 1/2" high) (+) and below
	103 026	NUT, hex (4)
	20 285 H	WASHER, flat (4)
8	3 136 248 R1	GASKET, elbow
9	3 138 825 R1	MANIFOLD, intake
	933 945 R1	RING, packing
	179 822	SCREW, hex-hd cap (8)
	3 218 395 R1	WASHER (8)
	3 136 229 R1	PLUG, closing

(250A)

1		MANIFOLD, exhaust (%)
9	3 138 825 R1	MANIFOLD, intake
	179 822	SCREW, hex-hd cap (8)
	3 218 395 R1	WASHER (8)
	3 136 229 R1	PLUG, closing
	933 945 R1	RING, packing

(%) - Refer to Chassis Parts Catalog.  
(+) - Serial number not available.



1	3 132 229 R1	PLUG
2	933 945 R1	RING, packing
3	3 218 395 R1	WASHER, lock (8)
4		(See individual engine variation)
5	3 055 398 R1	GASKET, intake manifold (Replaces 3 055 278 R1)
6	3 132 434 R1	GASKET, exhaust manifold (4)
7	3 058 003 R12	MANIFOLD w/two STUDS, 3 055 663 R1, exhaust
	103 026	NUT, hex (8)
	20 285 H	WASHER, .406 x .750 x .105 (8)
8	3 055 663 R1	STUD, exhaust manifold (2)

ENGINE VARIATIONS

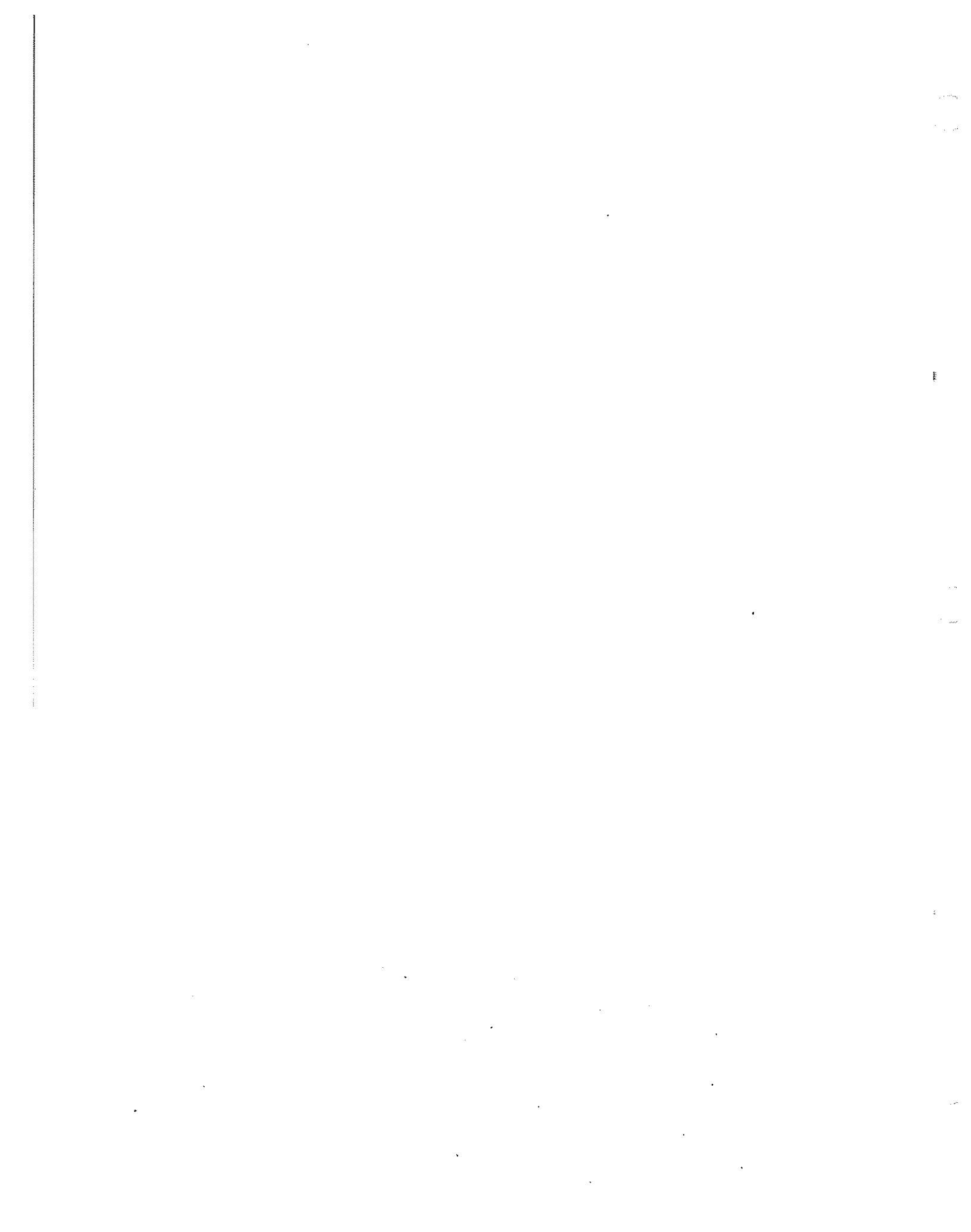
(2500A, 2500B, 2505B, 2510B, 2514, 2544 AND 3500A)

4	3 138 825 R1	MANIFOLD, intake
	179 822	SCREW, hex-hd cap (8)

(3514)

4	3 055 507 R4	MANIFOLD, intake
	179 822	SCREW, hex-hd cap (8)

(\*) For 2500A, 2500B, Underslung and Vertical Exhaust Manifold, refer to Chassis Parts Catalog.





REFER TO ALPHABETICAL INDEX  
FOR COMPLETE LISTING OF PARTS

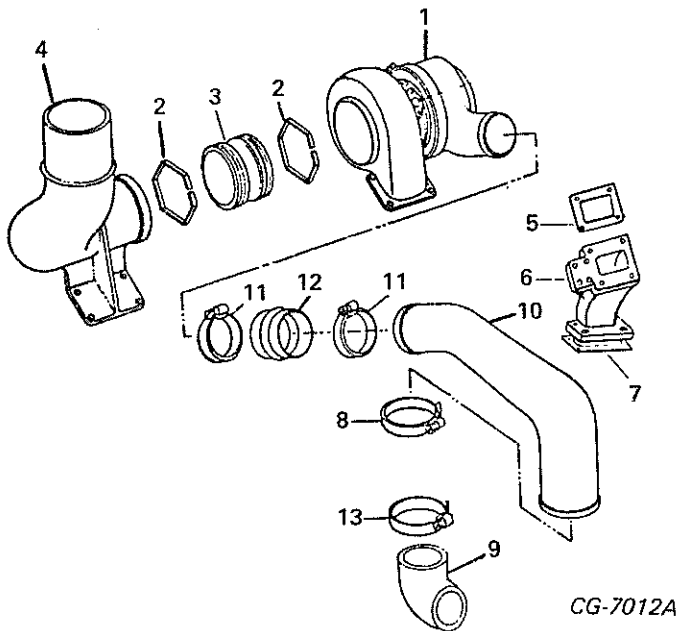
TURBOCHARGER

15

# TURBOCHARGER

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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## TURBOCHARGER CONNECTIONS (TD-8E AND 125E)



1	TURBOCHARGER ASSY (Refer to "Turbocharger")	7	3 136 248 R1	GASKET, adapter to manifold
676 524 C1	NUT, lock (For use with ADAPTER 3 144 629 R1 (+)(4)	8	684 073 C1	CLAMP, hose
22 737 R1	SCREW, hex-hd cap (For use with ADAPTER 3 144 629 R1 (+)(4)	9	3 144 632 R2	ELBOW, intake manifold hose*
9 413 980	NUT, lock (For use with ADAPTER 3 144 629 R3) (4)	9	3 228 544 R1	HOSE, intake manifold**
25 896 R1	WASHER, hardened (For use with ADAPTER 3 144 629 R3) (4)	10	3 228 543 R1	PIPE, turbo air outlet (Replaces 3 144 631 R1)
2	SEAL, flex (2)	11	3 218 259 R1	CLAMP, hose (Replaces 3 144 921 R1) (2)
OR		12	675 723 C1	HOSE, air outlet pipe*
3 144 358 R1	SEAL, flex (2)	OR	3 144 814 R1	HOSE, air outlet pipe
3	SLEEVE, turbo exhaust	12	670 040 C2	HOSE, air outlet pipe**
OR		13	3 144 921 R1	CLAMP, hose
3 144 813 R1	SLEEVE, turbo exhaust			
4	ELBOW, turbo exhaust			
3 144 630 R1	SCREW, hex-hd cap (For use with ADAPTER 3 144 629 R1 (+)			
354 921 R1	WASHER, lock (For use with ADAPTER 3 144 629 R1 (+)(4)			
103 321	NUT, hex (For use with ADAPTER 3 144 629 R1 (+)			
21 070 R1	NUT, lock (For use with ADAPTER 3 144 629 R3) (4)			
9 413 980	WASHER, hardened (For use with ADAPTER 3 144 629 R3) (4)			
25 896				
5	GASKET			
3 144 628 R1				
6	ADAPTER, turbocharger (Replaces 3 228 273 R91)			
3 144 629 R3	NUT, lock (Used w/ADAPTER 3 144 629 R1) (+) (4)			
304 451 R1	PLUG, pipe (2)			
445 684	NUT, lock (4)			
9 413 980	WASHER (4)			
25 896	BOLT (8) (Replaces 3 055 663 R1)			
560 172				

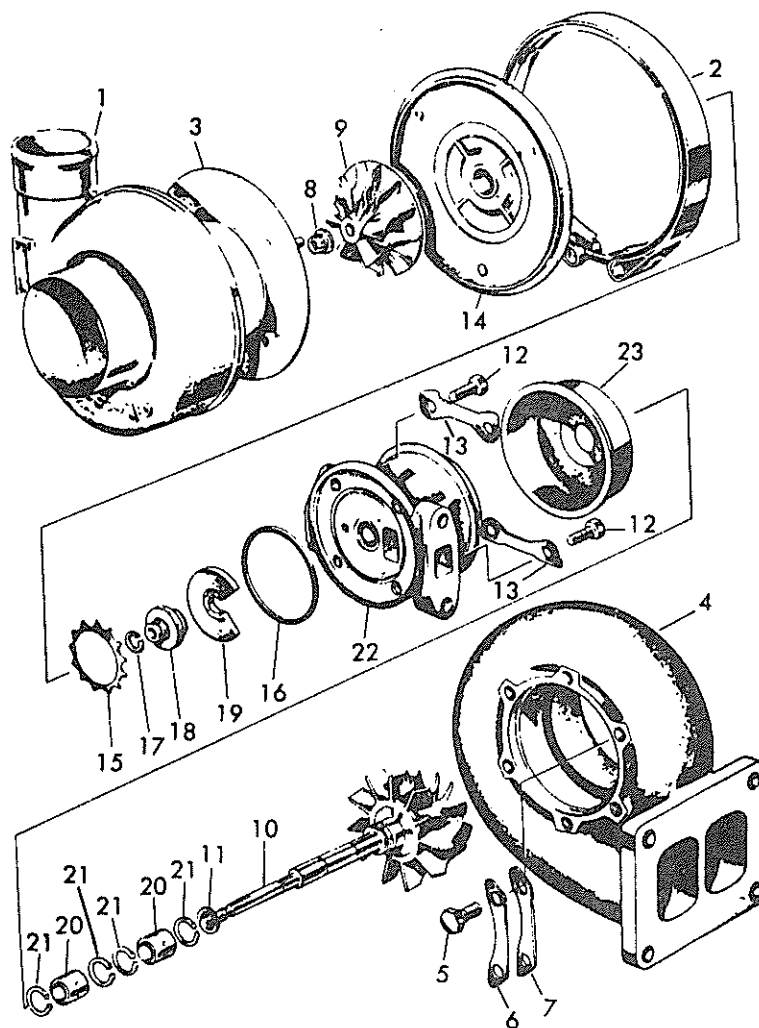
\* For service with older-type aluminum charge air HOSE, 3 144 631 R1 (No longer available)  
 \*\* For service with newer-type cylindrical steel pipe charge air TUBE, 3 228 543 R1  
 (+) No longer available.

# TURBOCHARGER

EPC-239.4

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
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**TURBOCHARGER**  
(Airesearch)  
(TD-8E and 125E)



CG-6137

	3 144 627 R91	TURBOCHARGER ASSY (Model TO4) (Consists of the following parts -		9 3 144 941 R1	IMPELLER
	1 3 144 940 R1	HOUSING, compressor		10 3 144 771 R1	ROTOR w/SHAFT
	2 702 327 C91	CLAMP, "V" band		11 3 078 864 R1	RING, piston (Turbine side)
	3 3 144 775 R1	PLATE, diffuser		12 25 480 R1	SCREW, hex-hd cap (4)
	4 3 144 770 R1	HOUSING, turbine		13 625 675 C1	PLATE, locking (2)
	5 684 246 C1	SCREW, hex-hd cap (6)		14 627 772 C91	PLATE ASSY w/SPRING, 615 747 C1, rear
	6 615 739 C1	PLATE, locking (3)		15 615 747 C1	SPRING, rear plate collar
	7 684 245 C1	CLAMP (3)		16 343 847 R1	RING, sealing
	8 615 741 C1	NUT, locking		17 615 746 C1	RING, piston (Charger side)

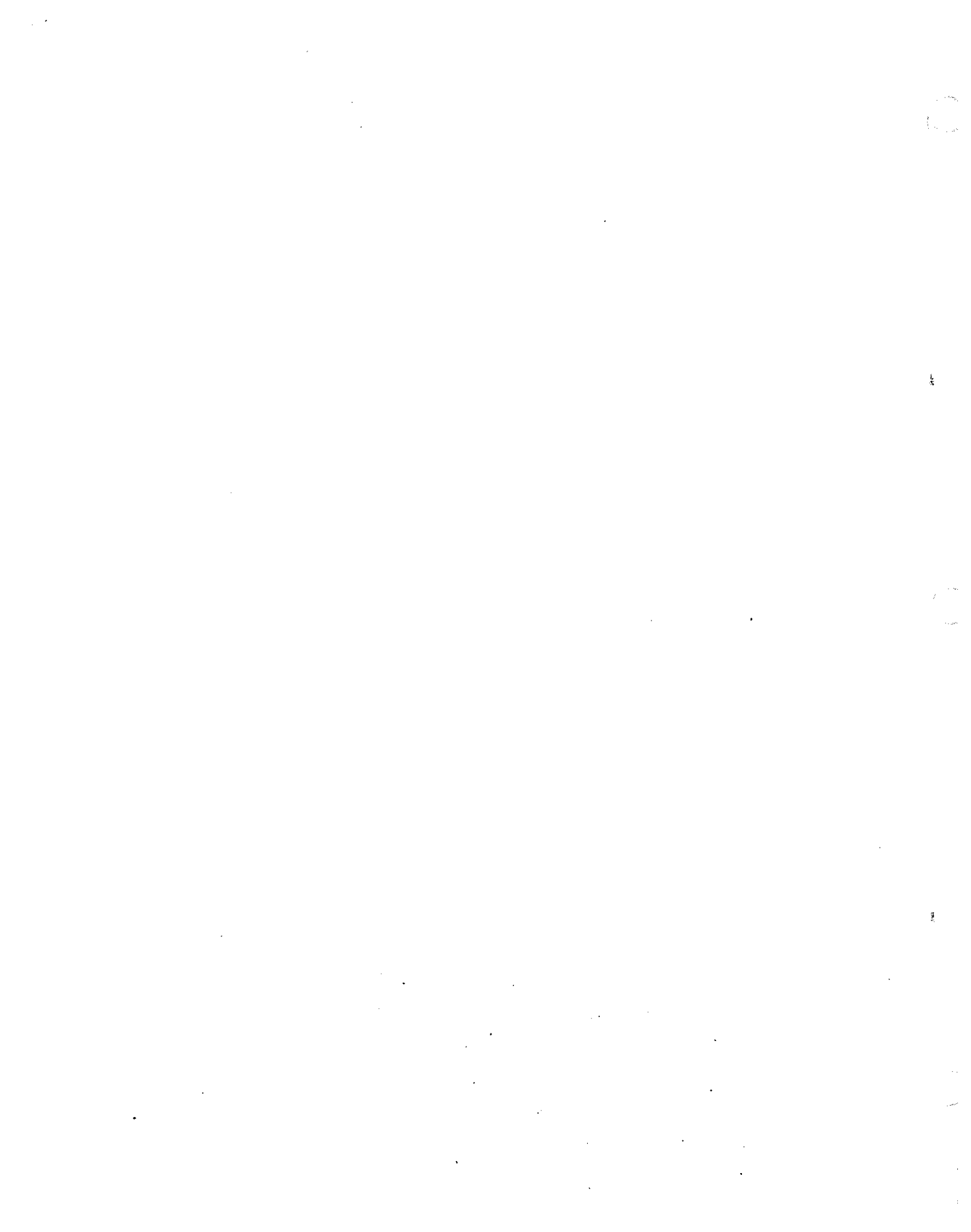
## TURBOCHARGER

REF. NO.	PART NUMBER	DESCRIPTION	REF. NO.	PART NUMBER	DESCRIPTION
TURBOCHARGER - Continued (Airesearch) (TD-8E and 125E)					
18	615 745 C1	RING, thrust collar			
19	627 773 C1	BEARING, thrust			
20	680 444 C1	BEARING, needle (2)			
21	627 774 C1	RING, lock (4)			
22	684 360 C91	HOUSING w/RING, 684 359 C1, intermediate			
23	627 771 C1	HOUSING, protection			
	3 078 878 R91	PACKAGE, turbocharger recondition- ing (Consists of -			
		1 BEARING		627 773 C1	
		2 BEARING		680 444 C1	
		1 NUT		615 741 C1	
		3 PLATE		615 739 C1	
		2 PLATE		625 675 C1	
		1 RING		343 847 R1	
		1 RING		615 746 C1	
		4 RING		627 774 C1	
		1 RING		3 078 864 R1	
		4 SCREW		25 480 R1	
		6 SCREW		179 812	

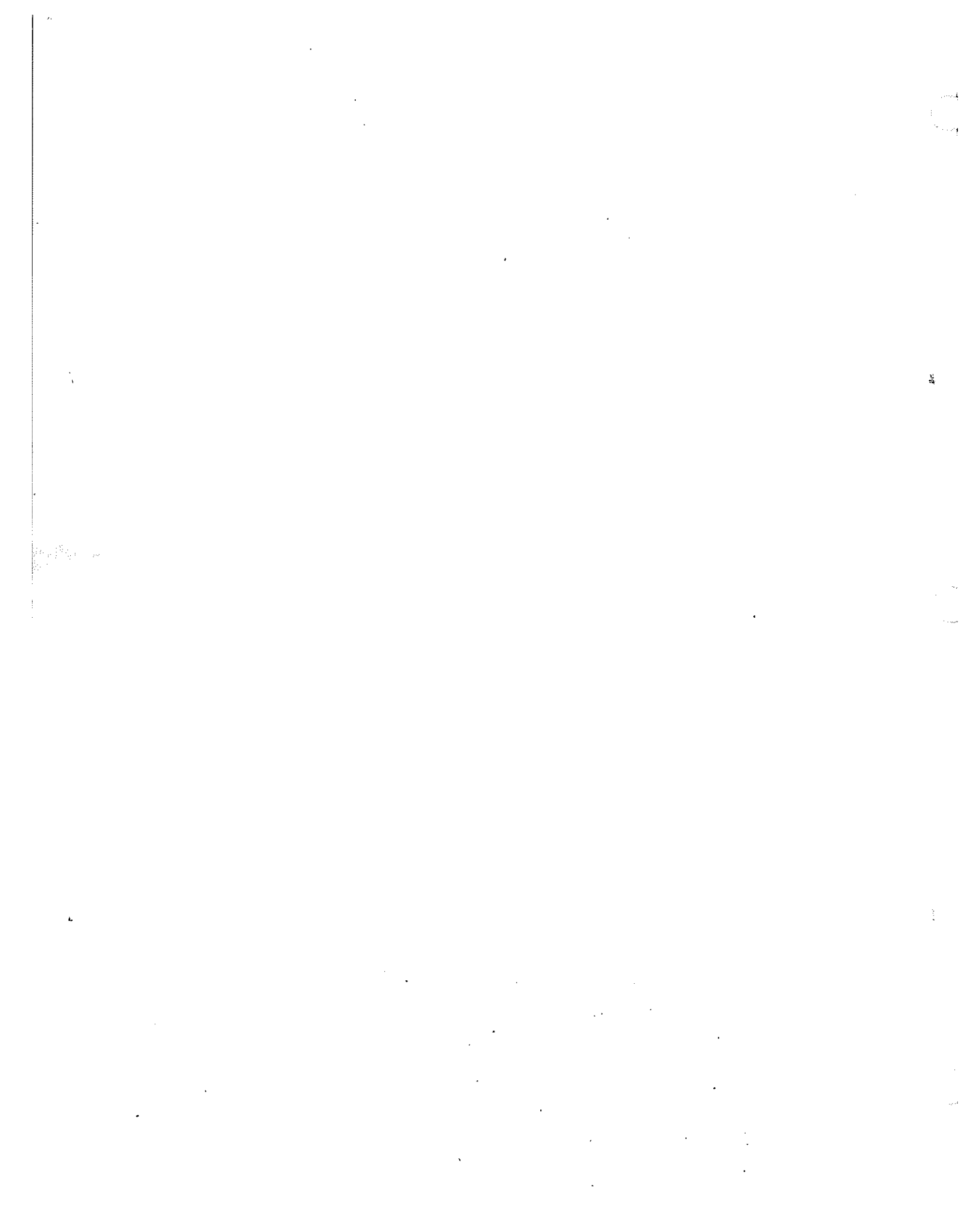
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THIS CATALOG**





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