



# Parts Manual

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## D8L Tractor Power Shift

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**53Y1-99999 (Machine)**  
**48W13002-99999 (Engine)**  
**2NA1-99999 (Transmission)**  
**4Y1-99999 (Bulldozer)**  
**51M1-99999 (Bulldozer)**  
**74M1-99999 (Bulldozer)**  
**5Y1-99999 (Bulldozer)**  
**6Y1-99999 (Bulldozer)**  
**82M1-99999 (Bulldozer)**  
**88M1-99999 (Ripper)**  
**9N1-99999 (Ripper)**  
**31N1-99999 (Ripper)**  
**83Y1-99999 (Winch)**  
**8XB1-99999 (Winch)**

Powered by 3408 Engine

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**8XB1-99999 (Winch)**



## **MACHINE IDENTIFICATION**

Caterpillar machines are identified with SERIAL NUMBERS and/or PRODUCT IDENTIFICATION NUMBERS (PIN). These numbers are assigned to the chassis and to the engine. The chassis and the engine also carry ARRANGEMENT NUMBERS and in some cases MODIFICATION NUMBERS. These numbers are shown on the SERIAL NUMBER or PIN plates and on the MASTER PLATE in the operator's compartment.

Caterpillar dealers need all of these numbers to determine which components were included on the machine when it was assembled at the factory. This permits accurate identification of replacement part numbers.

## **ORDERING PARTS**

Quality Caterpillar Replacement parts are available from Caterpillar dealers throughout the world. Their parts inventories are up to date and include all parts normally required to protect your investment in Caterpillar machines. Some dealers may offer repair kits, exchange components or remanufactured parts to allow selection of the most effective repair alternative for a specific situation. When ordering parts, your order should specify the quantity, part number, part name and the serial number/product identification number.

## **HOW TO USE THE PARTS MANUAL**

Caterpillar Parts Manuals include illustrations of the groups or assemblies which make up the machine. These illustrations show the standard components and many of the attachments for each machine.

The maintenance part index located in the front of the manual references most frequently used maintenance part numbers with description, quantity, where used and page number. The alphabetical index also located in the front of the manual should be used to determine the page number on which specific illustrations are shown. Reference to those pages will identify each of the individual serviceable parts. A numerical index listing each part number and the corresponding page number (s) appears in the back of the manual.

## **Captions**

The caption under each illustration identifies the part number and name of the group or assembly shown. Part numbers of groups are shown for reference purposes. Your Caterpillar dealer can help you identify the availability of a complete group. If more than one illustration is included for any group, the caption identifies the specific machine serial numbers to which each illustration applies. In some cases it is not possible to determine the specific machine serial numbers to which different illustrations are applicable. In those cases the caption identifies the illustration as "TYPE 1", "TYPE 2", etc. Reference to the actual group or assembly is necessary in those cases to determine which illustration should be used. Captions provide additional information such as page number references to separate illustrations, quantities used and other informational assistance for the user to determine parts needs.

## **Abbreviations and Symbols**

O.D. OUTSIDE DIAMETER  
I.D. INSIDE DIAMETER  
A NOT PART OF THIS GROUP  
B USE AS REQUIRED  
C CHANGE FROM PREVIOUS TYPE  
D ORDER BY THE METER  
E ORDER BY THE CENTIMETER  
F NOT SHOWN  
G ORDER BY THE INCH  
I SEE HOSE FABRICATION GUIDE  
M METRIC PART  
R REMFG PART MAY BE AVAILABLE  
Y SEPARATE ILLUSTRATION  
Z NOT SERVICED SEPARATELY

## **Illustration Reference Letters**

When necessary, illustrations contain reference letters (A, B, C etc.) that are intended to track lines and harnesses from one point to another. They are also used to show where to reconnect illustrations that have been separated.

## **Ref No**

The numbers shown in this column refer to the numbers shown within the illustration. To identify any item within the illustration, first determine its reference number, then refer to the same number in the Ref. No. column for information regarding that part.

## **Part Number**

The identifying number of a part.

## **Qty**

The quantities shown in this column indicate the total number of that item used in this illustration.

## **Part Name**

Information in this column provides the name of the part as well as additional information such as size which further identifies the part.

## **Indented Part Names**

Within each illustration is a parts list identifying each serviceable part. When a part name is indented, it is a part of the item under which it is indented.

## **NOTE:**

Continuing improvement and advancement of product design may cause changes to your machine which may not be included in this publication. Each publication is reviewed and revised as required to update and include these changes in later editions.

Whenever a question arises regarding your Caterpillar product or this publication, please consult your Caterpillar dealer for the latest available information.

## IDENTIFICATION DE LA MACHINE

Toutes les machines Caterpillar portent un NUMÉRO DE SÉRIE et un NUMÉRO D'IDENTIFICATION (PIN). Ces numéros s'appliquent au châssis et au moteur. Le châssis et le moteur peuvent également recevoir des NUMÉROS DE VERSION et, dans certains cas, de MODIFICATION. Ces numéros figurent sur les plaques de série ou d'identification et sur la plaque signalétique principale qui se trouve dans le poste de conduite.

Les concessionnaires Caterpillar doivent connaître tous ces numéros pour savoir quels composants ont été employés lors du montage en usine et trouver plus facilement le numéro des pièces de rechange.

## COMMANDE DE PIÈCES

Les concessionnaires Caterpillar fournissent dans le monde entier des pièces de rechange de qualité Caterpillar. Leurs stocks de pièces sont constamment réapprovisionnés et comptent toutes les pièces nécessaires pour assurer la bonne marche de votre machine Caterpillar. Certains concessionnaires proposent également des kits de réparation, des échanges standard ou des pièces rénovées, ce qui permet de choisir la solution la plus économique dans une situation donnée. Lors des commandes de pièces, mentionner la quantité, le numéro et la désignation des pièces ainsi que le numéro de série.

## UTILISATION DU CATALOGUE DE PIÈCES

Les Catalogues de pièces Caterpillar comportent des illustrations des groupes ou ensembles qui composent la machine. Ces illustrations représentent les composants standard et nombre des accessoires disponibles.

Au début du catalogue figure un index de numéros des pièces plus fréquemment utilisées pour l'entretien, avec leur description, quantité et numéro de page. Un index alphabétique figurant aussi au début du catalogue, renvoie aux pages et illustrations correspondantes. Toutes les pièces du moteur avec leur numéro figurent dans ces pages. Un index numérique de pièces détaillant chaque numéro de pièce avec le numéro de page correspondante se trouve à la fin du catalogue.

## Légendes

Chaque illustration comporte une légende comprenant le numéro de pièce et la désignation du groupe ou celle de l'ensemble. Les numéros de groupe sont donnés à titre de référence. Pour savoir si un groupe complet peut être commandé, s'adresser au concessionnaire. Si à un groupe donné correspondent plusieurs illustrations, la légende indiquera le numéro de série de chaque machine spécifique. Parfois, il n'est pas possible de savoir à quels numéros de série spécifiques de la machine se rapportent les différentes illustrations. Dans ce cas, les légendes comportent la mention "Type 1", "Type 2", etc. Pour déterminer quelles illustrations utiliser, il faudra connaître la référence du groupe ou de l'ensemble correspondant. Les légendes indiquent également les numéros de page des plans des sous-ensembles, les quantités utilisées et autres renseignements destinés à aider l'utilisateur à déterminer quelles sont les pièces nécessaires.

## Abréviations et symboles

O.D.	Diamètre extérieur
I.D.	Diamètre intérieur
A	Ne fait pas partie de ce groupe
B	Utiliser selon besoin
C	Modification
D	Commander par mètre
E	Commander par centimètre
F	Non représenté
G	Commander par pouce
I	Voir "Hose Fabrication Guide"
M	Pièce métrique (y compris fixations)
R	Pièce rénovée éventuellement disponible
X	Echange standard
Y	Illustration séparée
Z	Non fourni séparément

## Lettres de référence des illustrations

Quand il est nécessaire, les illustrations comportent des lettres de référence (A, B, C, etc.) pour montrer le trajet des lignes et faisceaux de câbles d'un point à l'autre. Elles sont utilisées également pour indiquer où relier les illustrations séparées auparavant.

## Ref No (No de réf.)

Les numéros figurant dans cette colonne renvoient aux numéros utilisés dans l'illustration. Pour identifier une pièce quelconque dans l'illustration, déterminer en premier son numéro de référence, puis rechercher les renseignements sur cette pièce dans la colonne de numéro de référence.

## Part Number (No de pièce)

Ces numéros identifient les pièces.

## Qty (Quantité)

Les quantités qui figurent dans cette colonne indiquent le nombre de la pièce concernée utilisée.

## Part Name (Désignation de la pièce)

Les renseignements figurant dans cette colonne indiquent le nom de la pièce ainsi que des renseignements supplémentaires telles par exemple les dimensions, complétant l'identification de la pièce concernée.

## Désignations de pièces en retrait

Chaque illustration comporte la liste des pièces qui la constituent et que l'on peut se procurer. Lorsqu'une désignation de pièce est en retrait, cela veut dire que l'article en regard fait partie de l'ensemble sous lequel il figure.

## NOTA:

En raison du progrès technique et des améliorations continues apportées au matériel, votre machine comporte peut-être des modifications qui n'apparaissent pas dans la présente publication. Les éditions ultérieures seront revues et corrigées en conséquence.

En cas de doute sur un détail de votre machine Caterpillar ou sur le texte de la présente publication, adressez-vous à votre concessionnaire Caterpillar.

## MAQUINAS

Las máquinas Caterpillar se identifican con NUMEROS DE SERIE y/o NUMEROS DE IDENTIFICACION DEL PRODUCTO (PIN). Estos números son asignados al chasis y al motor, respectivamente. El chasis y el motor tienen también NUMEROS DE DISPOSICION, y en algunos casos, NUMEROS DE MODIFICACION. Estos números están en la placa del número de serie del motor o en la placa principal en la cabina del operador.

Los distribuidores Caterpillar necesitan estos números para determinar con qué componentes se armó la máquina en la fábrica. Esto permite una identificación exacta de los números de pieza de repuesto.

## COMO PEDIR REPUESTOS

Piezas de repuesto Caterpillar de calidad están disponibles de los distribuidores Caterpillar en todo el mundo. Sus existencias actualizadas incluyen todas las piezas normalmente requeridas para proteger su inversión en máquinas Caterpillar. Algunos distribuidores pueden tener juegos de reparación, componentes de intercambio o piezas remanufacturadas, para permitir la selección de la mejor alternativa de reparación de un caso en particular. Al pedir piezas de repuesto, especifique en su pedido la cantidad, el número de pieza, el nombre de la pieza y el número de serie. Si tiene duda del número de pieza, déle al distribuidor una descripción completa de la misma.

## COMO USAR ESTE CATALOGO

Los Catálogos de Piezas Caterpillar tienen ilustraciones de los grupos o conjuntos que componen la máquina. Estas ilustraciones muestran los componentes estándar y muchos de los accesorios disponibles para la máquina.

Al frente de este catálogo se encuentra un índice de los números de piezas utilizadas más frecuentemente para el mantenimiento, que incluye descripción, cantidad necesaria y número de página. El índice alfabético, igualmente al frente de este catálogo, se debe usar para determinar el número de página donde se encuentran ilustraciones específicas. Dichas páginas identifican las piezas utilizables. Un índice numérico de piezas con el correspondiente número de página aparece al final de este catálogo.

### Títulos

El título debajo de cada ilustración identifica el número de pieza y el nombre del grupo o del conjunto indicado. Los números de pieza de grupos se muestran para referencia. Su distribuidor Caterpillar puede ayudarle a identificar la disponibilidad de un grupo completo. Si se incluye más de una ilustración de cualquier grupo, el título identifica números de serie de las máquinas correspondientes a cada ilustración. En algunos casos no es posible determinar los números de serie de las máquinas correspondientes a las diferentes ilustraciones. En esos casos, el título identifica la ilustración como "Tipo 1", "Tipo 2", etc. Es necesario referirse al grupo o conjunto en sí para determinar cuál ilustración se debe utilizar. Los títulos proveen información adicional: los números de las páginas en que aparecen las ilustraciones de los subconjuntos, las cantidades utilizadas y demás información para ayudar al usuario a determinar las piezas necesarias.

## Abreviaturas y símbolos

O.D.	Diámetro exterior
I.D.	Diámetro interior
A	No es pieza de este grupo
B	Utilizado según la demanda
C	Indica cambio
D	Se pide por metro
E	Se pide por centímetro
F	No se muestra
G	Se pide por pulgada
I	Ver "Hose Fabrication Guide"
M	Pieza métrica (Incluso tornillería)
R	Puede estar disponible como pieza remanufacturada
X	Puede ser posible el intercambio de Componentes Principales
Y	Ilustración separada
Z	No se suministra por separado

## Letras de referencia de ilustraciones

Las ilustraciones contienen algunas veces letras de referencia (A, B, C, etc.) cuyo propósito es seguir el trayecto de líneas y mazos de cables de un punto a otro. También se utilizan para mostrar dónde volver a unir ilustraciones que se habían separado.

## No. de Referencia

Los números en esta columna se refieren a los números en la ilustración. Para obtener información acerca de una pieza en la ilustración, determine primero el número de referencia y después refiérase al mismo número en la columna "No. de Referencia".

## No. de Pieza

Estos números se utilizan para identificar piezas.

## Cantidad

Las cantidades en esta columna indican el número de esa(s) pieza(s) utilizada(s).

## Nombre de Pieza

La información en esta columna proporciona el nombre de la pieza, tamaño y cualesquiera otra información que ayude a identificar la pieza misma.

## Nombres de Pieza sangrados

En cada ilustración hay una lista de piezas que identifica las piezas utilizables en la ilustración. Cuando el nombre de una pieza está sangrado en esta lista, significa que esta pieza forma parte de la pieza utilizable inmediatamente arriba.

## NOTA:

Las continuas mejoras y adelantos en diseño podrían originar cambios a su máquina que no se incluyan en esta publicación. Cada publicación es analizada y revisada para actualizar e incluir estos cambios en ediciones subsecuentes.

Cuando tenga alguna pregunta acerca de su producto Caterpillar o de esta publicación, consulte al distribuidor Caterpillar para obtener la información más reciente.

## IDENTIFICAÇÃO DA MÁQUINA

As máquinas Caterpillar são identificadas pelos NÚMEROS DE SÉRIE e/ou NÚMERO DE IDENTIFICAÇÃO DO PRODUTO (PIN). Esses números são atribuídos ao chassi e ao motor. O chassi e o motor recebem, também, NÚMEROS DE ARRANJO e, em alguns casos, NÚMEROS DE MODIFICAÇÃO. Esses números aparecem nas placas de NÚMERO DE SÉRIE ou PIN e na PLACA MESTRE no compartimento do operador.

Os revendedores Caterpillar necessitam desses números para determinar quais componentes foram incluídas na máquina durante a montagem na fábrica. Isso permite uma identificação precisa dos números de peça de reposição.

## COMO OBTER PEÇAS

As Peças de Reposição de Qualidade Caterpillar estão disponíveis nos revendedores Caterpillar no mundo inteiro. Seus estoques de peças são atualizados e incluem todas as peças normalmente necessárias para proteger seu investimento nas máquinas Caterpillar. Alguns revendedores podem ter jogos de reparo e peças de troca/remanufaturadas disponíveis, como uma opção. Ao fazer um pedido de peças, especifique a quantidade, o número e o nome da peça, o número de série ou PIN.

## COMO USAR O MANUAL DE PEÇAS

Os Manuais de Peças Caterpillar incluem ilustrações dos grupos ou conjuntos que compõem a máquina. Essas ilustrações mostram os componentes padrão e muitos dos acessórios disponíveis para a máquina.

O índice de peças de manutenção localizado na frente do manual indica os números das peças mais utilizadas com a descrição, quantidade, localização de uso e o número de página. O índice alfabético, no início do catálogo, deve ser usado para determinar o número da página em que se encontra determinada ilustração. Consultando tais páginas, você identificará cada uma das peças disponíveis, individualmente. Existe no fim do livro um índice numérico de cada número de peça e o(s) número(s) correspondente(s) da(s) página(s).

### Legendas

A legenda de cada ilustração identifica o número da peça e o nome do grupo ou do conjunto mostrado. Os números de peças para grupos são indicados para fins de referência. O seu Revendedor Caterpillar pode fornecer assistência para identificar a disponibilidade de um grupo completo. Se for incluída mais de uma ilustração para qualquer grupo, a legenda indicará os números de série da máquina específica a que cada ilustração se aplica. Em alguns casos, não é possível determinar os números de série da máquina específica a que as diferentes ilustrações se aplicam. Em tais casos, a legenda identifica a ilustração como "Tipo 1", "Tipo 2", etc. Será, então, necessário referir-se ao conjunto ou grupo real para determinar qual ilustração deverá ser usada. As legendas fornecem informações adicionais, tais como: números das páginas onde são mostradas as ilustrações de subconjuntos, informações referentes às quantidades usadas e outras informações que se destinam a auxiliar o usuário a determinar as peças necessárias.

### Abreviaturas e Símbolos

O.D.	"Outside Diameter" (Diâmetro Externo)
I.D.	"Inside Diameter" (Diâmetro Interno)
A	Não faz parte deste grupo
B	Use conforme necessário
C	Indica modificação
D	Vendido por metro
E	Vendido por centímetro
F	Não mostrado
G	Vendido por polegada
I	Veja o "Guia de Fabricação de Mangueiras" (Hose Fabrication Guide)
M	Peça métrica (inclusive fixadores)
R	Peça remanufaturada. Pode estar disponível. Consulte o seu Revendedor Caterpillar
X	Intercambio de componentes principais pode estar disponível. Consulte o seu Revendedor Cat
Y	Ilustração separada
Z	Não disponível separadamente

### Letras de Referência nas Ilustrações

Quando necessário, as ilustrações contêm letras de referência (A, B, C, etc.) que são utilizados para seguir tubulações e cabos elétricos de um ponto para um outro. Também foram utilizados para indicar onde se pode reconectar as ilustrações que foram separadas.

### Ref No (Número de Referência)

Os números indicados nesta coluna se referem aos números mostrados na ilustração. Para identificar qualquer item dentro da ilustração, primeiro determine seu No. de Ref., então refere ao mesmo número na coluna para informação referente à peça.

### Part Number (Número de Peça)

Tais números são usados para identificar as peças.

### Qty (Quantidade)

As quantidades indicadas nesta coluna indicam o número de uma determinada peça utilizada.

### Part Name (Nome de Peça)

A informação contida nesta coluna proporciona o nome da peça tanto quanto informação adicional tal como a dimensão, que ajuda identificar a peça.

### Nomes de Peças Desalinhados

Cada ilustração apresenta uma lista de peças que identifica cada peça disponível na ilustração. Quando um nome de peça está desalinhado na lista, significa que tal item é disponível e faz parte do item disponível anterior.

**Nota:** Os contínuos aperfeiçoamentos e avanços no projeto do produto podem ocasionar modificações em sua máquina, que ainda não estejam incluídas nesta publicação. Cada publicação é revisada e corrigida, conforme necessário, para atualizar e incluir essas modificações nas edições mais recentes.

Sempre que surgir uma questão concernente ao seu produto Caterpillar ou a esta publicação, consulte o seu revendedor Caterpillar quanto às mais recentes informações disponíveis.



## GERÄTEKENNZEICHNUNG

Cat-Geräte sind mit SERIAL NUMBERS und/oder PRODUCT IDENTIFICATION NUMBER (PIN) (Serien-Nr. und/oder Produktidentifizierungs-Nr.) gekennzeichnet. Diese Nummern dienen zur Kennzeichnung des Laufwerks und des Motors. Am Laufwerk und am Motor befinden sich außerdem ARRANGEMENT NUMBERS (Ausrüstungsnummern) sowie in einigen Fällen auch MODIFICATION NUMBERS (Änderungsnummern). Sie befinden sich auf den Typen- oder PIN-Schildern sowie auf dem HAUPT-SCHILD im Fahrerhaus.

Die Cat-Händler benötigen alle genannten Nummern, um feststellen zu können, welche Baugruppen bei der Montage des Geräts im Werk eingebaut wurden. Nur mit Hilfe dieser Angaben lassen sich die Bestellnummern der benötigten Ersatzteile genau bestimmen.

## BESTELLEN VON ERSATZTEILEN

Original-Cat-Ersatzteile können bei den Cat-Händlern überall auf der Welt bestellt werden. Ihre umfangreichen Lager enthalten normalerweise alle Teile, die Sie für Ihr Cat-Gerät benötigen. Einige Händler bieten Reparatursätze, Austausch- oder werküberholte Teile an, so daß Sie die Auswahl unter verschiedenen Reparaturmöglichkeiten treffen können. Ihre Bestellung muß folgende Angaben enthalten: Anzahl der benötigten Teile, Bestellnummer, Bezeichnung des Teils; Serien-Nr., Ausrüstungs-Nr. und Änderungs-Nr. des Geräts, für das die Teile benötigt werden. Wenn Sie Zweifel hinsichtlich der richtigen Bestell-Nr. haben, geben Sie dem Händler eine möglichst genaue Beschreibung des benötigten Teils.

## HINWEISE ZUR BENUTZUNG DES PARTS BOOKS

Die Cat-Parts Books enthalten Zeichnungen der Gruppen oder Teile des Geräts. Gezeigt werden die Standardteile sowie verschiedenes Zubehör für die Geräte.

Anhand des Index vorn im Buch können Sie die Nummer der Seite herausfinden, auf der sich die von Ihnen gesuchte Abbildung befindet. Beim Aufschlagen der betreffenden Seite können dann alle gesuchten Teile identifiziert werden. Hinten im Buch befindet sich ein numerischer Index, mit allen Bestell-Nr. und dem Hinweis auf die Seite, auf der sich die entsprechenden Zeichnungen befinden.

### Bildunterschriften

Die Zeilen unter jeder Abbildung enthalten die Bestell-Nr. der gezeigten Baugruppen. Die Nummer wird nur als Referenz aufgeführt. Ihr Cat-Händler kann Ihnen sagen, ob eine Gruppe komplett lieferbar ist. Wenn für eine Gruppe mehrere Zeichnungen vorhanden sind, enthalten die Zeilen unter den Zeichnungen die Seriennummern, denen jede Zeichnung entspricht. In einigen Fällen ist es nicht möglich, die Serien-Nr. anzugeben, auf die sich die Zeichnungen beziehen. In diesem Fall wird lediglich "Typ 1", "Typ 2" usw. angegeben. Hier ist ein Hinweis auf die Baugruppe erforderlich, um anzuzeigen, welche Abbildung verwendet werden muß. Die Zeilen unter den Abbildungen enthalten ferner Angaben über die Seiten, auf denen sich Zeichnungen von Unterbaugruppen und Anzahl der benötigten Teile sowie andere Angaben befinden, die es dem Benutzer des Buchs erleichtern, die gewünschten Teile zu identifizieren.

## Abkürzungen und Symbole

O.D.	Außendurchmesser
I.D.	Innendurchmesser
A	kein Teil dieser Gruppe
B	nach Bedarf verwenden
C	Hinweis auf eine Änderung
D	in Meter-Länge bestellen
E	in Zentimeter-Länge bestellen
F	nicht gezeigt
G	in Zoll-Länge bestellen
I	Siehe "Hose Fabrication Guide"
M	metrisches Teil
R	werküberholtes Teil unter Umständen lieferbar
X	Austauschteil
Y	separate Abbildung
Z	nicht einzeln erhältlich

## Referenzbuchstaben

Falls erforderlich sind in den Zeichnungen Referenzbuchstaben enthalten (z.B. A, B, C, usw.), die Leitungen und Kabelbäume von einem Punkt zum anderen verfolgen. Außerdem geben sie die Stelle an, an der getrennte Zeichnungen fortgesetzt werden.

## Ref No (Referenz-Nr.)

Die in dieser Spalte aufgeführten Nummern beziehen sich auf die in der Zeichnung befindlichen Nummern. Zum Identifizieren eines Teils in der Zeichnung zuerst dessen Referenz-Nr. feststellen und diese dann in der Spalte "Ref No" aufsuchen, um weitere Angaben zum gesuchten Teil zu erhalten.

## Part Number (Bestell-Nr.)

Anhand dieser Nummern lassen sich die Teile identifizieren.

## Qty (Anzahl)

Die Zahlen in dieser Spalte geben an, wieviele der entsprechenden Teile benötigt werden.

## Part Name (Bezeichnung)

In dieser Spalte wird die Bezeichnung der betreffenden Teile zusammen mit zusätzlichen Informationen angegeben, z.B. Größe, die das Identifizieren erleichtern.

## Eingerückte Bezeichnungen

In der zu jeder Abbildung gehörenden Ersatzteilliste sind manche Bezeichnungen eingerückt. Dadurch wird angezeigt, daß das entsprechende Teil zu dem gehört, unter dessen Bezeichnung es eingerückt ist.

## ANMERKUNG:

Ständig vorgenommene Verbesserungen und Weiterentwicklungen an Ihrem Gerät können Änderungen verursachen, die in der vorliegenden Ausgabe noch nicht berücksichtigt sind. Sie werden jedoch in später folgenden Ausgaben erscheinen.

Fragen zu Ihrem Cat-Gerät oder diesem Ersatzteilliste beantwortet Ihr Cat-Händler.

## **REMANUFACTURED COMPONENTS**

As an option when making repairs consider Caterpillar Remanufactured Components. Components that are available through the Caterpillar Remanufactured Program are identified three ways in the parts book:

- with the letter R in the note field of the parts list
- with an R\* at the beginning of the first line of the caption
- with an \*R at the end of the first line of the caption

Typical components included in the Remanufacturing Program include:

**ALTERNATORS  
CONNECTING RODS  
CRANKSHAFTS - UNDERSIZE  
CRANKSHAFTS - UPGRADE TO NEW  
CYLINDER HEADS  
ELECTRONIC CONTROL MODULES (ECM)  
ELECTRONIC SENSORS  
FUEL INJECTORS  
FUEL NOZZLES  
FUEL PUMPS  
GOVERNORS  
OIL PUMPS  
PISTONS  
SHORT BLOCKS  
STARTERS  
TURBOCHARGERS - COMPLETE  
TURBOCHARGER CARTRIDGES  
WATER PUMPS**

Caterpillar Remanufactured engines for many engine arrangements are also available. Check with your local Caterpillar Dealer for the availability of Remanufactured Components.

## SUPPLEMENTAL COOLANT ADDITIVES

**Customer Benefits:** Protects against cavitation, foam, erosion, corrosion, and scale build-up in cooling systems. Provides measured coolant conditioner.

**Description:** Additives deplete from the coolant with normal operation. For this reason, Supplemental Coolant Additives (SCA) must be added to all heavy duty coolants at regular intervals. In addition, when not using a fully formulated, pre-charged antifreeze, like Caterpillar's DEAC, an initial charge of SCA must be added to the cooling system. The amount of SCA added to the system is dependent on the capacity of the system.

The SCA for initial fill is provided as a liquid. SCA's for maintenance intervals are available in liquid form and as a spin-on element.

**Note:** The amount of SCA added at initial fill is not the same as the amount added at the maintenance intervals.

The coolant additive elements can be used with any ethylene or propylene glycol type antifreeze which meet ASTM D4985 or ASTM D5345 Specifications.

**Note:** For use with standard heavy duty coolant only, not for use with Extended Life Coolant.

### Parts Needed

Cooling System Capacity		Liquid SCA at initial Fill	Liquid SCA at Maintenance*	Spin-on SCA Maintenance Element*
Liters	Gallons			
22-30	(6-8)	3P2033 (1)	6V3542 (1)	1112370 (1)
30	(8-10)	3P2044 (1) 6V3542 (1)	1112372 (1)	1112369 (1)
38-49	(10-13)	3P2044 (1) 8T1589 (1)	1112372 (1)	1112369 (1)
49-64	(13-17)	3P2044 (2)	8T1589 (1)	9N3368 (1)
64-83	(17-22)	3P2044 (2) 8T1589 (1)	1112372 (1) 6V3542 (1)	1112371 (1)
83-114	(22-30)	3P2044 (3) 8T1589 (1)	3P2044 (1)	9N3718 (1)
114-163	(30-43)	3P2044 (5)	3P2044 (1) 6V3542 (1)	1112371 (2)
163-242	(43-64)	3P2044 (8)	3P2044 (2)	9N3718 (2)

\* Normal maintenance period is 250 hrs. See your Operation and Maintenance Manual for complete coolant maintenance instructions.

( ) Indicates quantity needed.

# MAINTENANCE PARTS

DESCRIPTION	PART NO.	QTY	WHERE USED	PAGE NO.
BATTERY	9G4232	2	BATTERY & WIRING GP	90Z.31
BATTERY	9G4232	2	BATTERY GP	112C
		2	BATTERY GP	112E
BLADE AS-WIPER	6V5849	4	WIPER GP	309B
		4	WIPER GP	309F
		4	WIPER GP	309J
		4	WIPER GP	309M
	6V5851	1	WIPER GP	309L
	6V5853	1	WIPER GP	309L
BREATHER AS (CRANKCASE)	4N4668	1	BREATHER GP	31
CAP AS	6V9829	2	VALVE GP-CONTROL	203J.04
	9S9272	1	OIL CHANGE GP-HIGH SPEED	36A
CAP AS-FILLER	6N2206	1	FILLER GP-OIL	31A
	6N2985	1	COVER GP-VALVE MECHANISM	16
CAP AS-FUEL TANK	7T2036	1	TANK GP-FUEL	85C
CAP-AIR CONDITIONER	2L1224	2	LINES GP-AIR COMPRESSOR	325B
		2	LINES GP-AIR CONDITIONER	325D.02
CAP-FILLER	7H1447	1	TANK & FILTER GP-HYDRAULIC	197C
CAP-FUEL TANK FILLER	8P0408	1	TANK GP-FUEL	85C
CAP-FUSE HOLDER	7N2867	1	BATTERY & WIRING GP	90Z.33
CAP-RADIATOR	7N5565	1	COVER GP-RADIATOR CAP	37
CAP-TACHOMETER DRIVE	9B2232	1	DRIVE GP-TACHOMETER	63A
CIRCUIT BREAKER AS (10 AMP)	9G9487	1	BATTERY & WIRING GP	90Z.33
CIRCUIT BREAKER AS (15 AMP)	3T2662	1	BATTERY & WIRING GP	90Z.33
	6N8589	2	BATTERY & WIRING GP	90Z.33
ELEMENT AS	6N6444	1	AIR CLEANER GP	58
ELEMENT AS-FUEL FILTER	9M2341	1	FILTER GP-FUEL	80
ELEMENT AS-JACKET WATER				

# MAINTENANCE PARTS

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HEATER	9G6655	2	HEATER GP-JACKET WATER	37
ELEMENT AS-MAINTENANCE	9N3718	1	COOLANT CONDITIONER GP	41F
		1	LINES GP-WATER	45.01
ELEMENT AS-PRECHARGE	1W5518	1	COOLANT CONDITIONER GP	41F
ELEMENT AS-PRIMARY	7W5313	1	AIR CLEANER GP	58
ELEMENT-FILTER	2P5834	1	CONTROL GP-WINCH	286A
	4B5949	2	TANK GP-FUEL	85C
	4T3131	1	FILTER GP-TRANSMISSION	138
		1	FILTER GP-TRANSMISSION	138B
	7J0670	1	TANK & FILTER GP-HYDRAULIC	197C
	9M9740	1	FILTER GP-TRANSMISSION	138
		1	FILTER GP-TRANSMISSION	138B
	9W2932	1	FILTER GP-TRANSMISSION	138
		1	FILTER GP-TRANSMISSION	138B
FILTER	4N5834	1	PUMP GP-WATER	43
		1	PUMP GP-WATER	43.01
FILTER AS	7G8116	3	HEATER GP-CAB	327E
	9P5174	1	HEATER GP-CAB	327E
FILTER AS-ENGINE OIL	2P4005	2	FILTER GP-OIL	36A
FILTER AS-FUEL	1R0749	1	FILTER GP-FUEL	80
FILTER-AIR	8S7374	1	VALVE & CYLINDER GP	348
FITTING-GREASE	3B8489	2	EQUALIZER BAR GP	180.06
		2	CYLINDER GP-LIFT	230.01
		2	MOUNTING GP-CYLINDER	237.01
		2	BRACE GP-BULLDOZER	262.01
		2		262B
		2	BRACE GP-BULLDOZER	262D
		4	FRAME GP-RIPPER	271E
		4	FRAME GP-RIPPER	272C
		6	FAIRLEAD GP-WINCH	295
FUSE-10 AMP (10 AMP)	3K8782	6	BATTERY & WIRING GP	90Z.33
FUSE-15 AMP (15 AMP)	8M8948	1	BATTERY & WIRING GP	90Z.33
GASKET	4N1151	1	PAN GP-OIL	28.01
	8H2778	1	FILTER GP-FUEL	80
KEY	5P8500	2	PROTECTION GP-VANDALISM	29.04
		2	PROTECTION GP-VANDALISM	30.01
		2	COVER GP-RADIATOR CAP	37
		2	TANK GP-FUEL	85C
		2	COVER GP-HYDRAULIC TANK CAP	198

# MAINTENANCE PARTS

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	8H5306	1	SWITCH AS-DISCONNECT	100
LAMP	7N1996	1	INSTRUMENT GP	335P.02
LAMP-MINIATURE	5D0019	3	INSTRUMENT GP	335P.02
	7N5876	2	BATTERY & WIRING GP	90Z.33
LAMP-MINIATURE (24V)	7N9943	1	CAB GP	301F
LAMP-SEALED UNIT	1M5898	1	LAMP GP	114
	6N7987	1	LAMP GP-FLOOD	114.01
PADLOCK GP	5P8502	1	PROTECTION GP-VANDALISM	29.04
		1	PROTECTION GP-VANDALISM	30.01
		1	COVER GP-RADIATOR CAP	37
		1	TANK GP-FUEL	85C
		1	COVER GP-HYDRAULIC TANK CAP	198
		1	GUARD GP-VANDALISM	337B.01
PLUG-O-RING	5P4483	1	CASE & COVERS GP-WINCH	289
REGULATOR-WATER TEMPERATURE	4W4794	2	LINES GP-WATER	45.01
SCREEN-FUEL TANK	6T7774	1	FILTER & LINES GP-FUEL	79F
SEAL-O-RING	2S8439	1	FILTER GP-TRANSMISSION	138
		1	FILTER GP-TRANSMISSION	138B
SEAT BELT GP	7G2998	1	SEAT GP	316A
		1	SEAT GP	316B
	8D6899	1	SEAT GP	316A
		1	SEAT GP	316B
STRAINER-FUEL TANK	9P7121	1	TANK GP-FUEL	85C
V-BELT	1W2934	1	COMPRESSOR GP-REFRIGERANT	332A.01
	4N8221	1	ALTERNATOR GP-CHARGING	101.01
V-BELT SET (INCLUDES 3 BELTS)	4W0752	1	DRIVE GP-FAN	18.01

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