



OPERATOR'S MANUAL  
CRAWLER DOZER  
650L  
TIER 3

84247253  
(Replaces 84152733)

Issued July 2009

# 650L CRAWLERS TIER 3

## OPERATOR'S MANUAL

### **CASE CONSTRUCTION MANUALS**

Manuals are available from your Dealer for the operation, service, and repair of your machine. For prompt convenient service, contact your Dealer for assistance in obtaining the manuals for your machine.

Your Dealer can expedite your order for Operator's Manuals, Parts Catalogs, Service Manuals, and Maintenance records.

Always give the Machine Name, Model, and P.I.N. (Product Identification Number) or S.N. (Serial Number) of your machine so your Dealer can provide the correct manuals for your machine.

**NOTE:** *CNH America, LLC reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.*

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 **WARNING** 

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*THIS SAFETY ALERT SYMBOL INDICATES IMPORTANT SAFETY MESSAGES IN THIS MANUAL WHEN YOU SEE THIS SYMBOL, CAREFULLY READ THE MESSAGE THAT FOLLOWS AND BE ALERT TO THE POSSIBILITY OF DEATH OR SERIOUS INJURY.*

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Safety Decals on this machine use the words **Danger, Warning, or Caution**, which are defined as follows:

- **DANGER:** Indicates an immediate hazardous situation that, if not avoided, will result in death or serious injury. The color associated with Danger is RED.
- **WARNING:** Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury. The color associated with Warning is ORANGE.
- **CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. The color associated with Caution is YELLOW.

If Safety Decals on this machine are ISO two panel Pictorial, decals are defined as follows:

- The first panel indicates the nature of the hazard.
- The second panel indicates the appropriate avoidance of the hazard.
- Background color is YELLOW.
- Prohibition symbols such as   and  if used, are RED.



IMPROPER OPERATION OF THIS MACHINE CAN CAUSE DEATH OR SERIOUS INJURY. BEFORE USING THIS MACHINE, MAKE CERTAIN THAT EVERY OPERATOR:

- Is instructed in safe and proper use of the machine.
- Reads and understands the Manual(s) pertaining to the machine.
- Reads and understands ALL Safety Decals on the machine.
- Clears the area of other persons.
- Learns and practices safe use of machine controls in a safe, clear area before operating this machine on a job site.

It is your responsibility to observe pertinent laws and regulations and follow CNH Corporation instructions on machine operation and maintenance.

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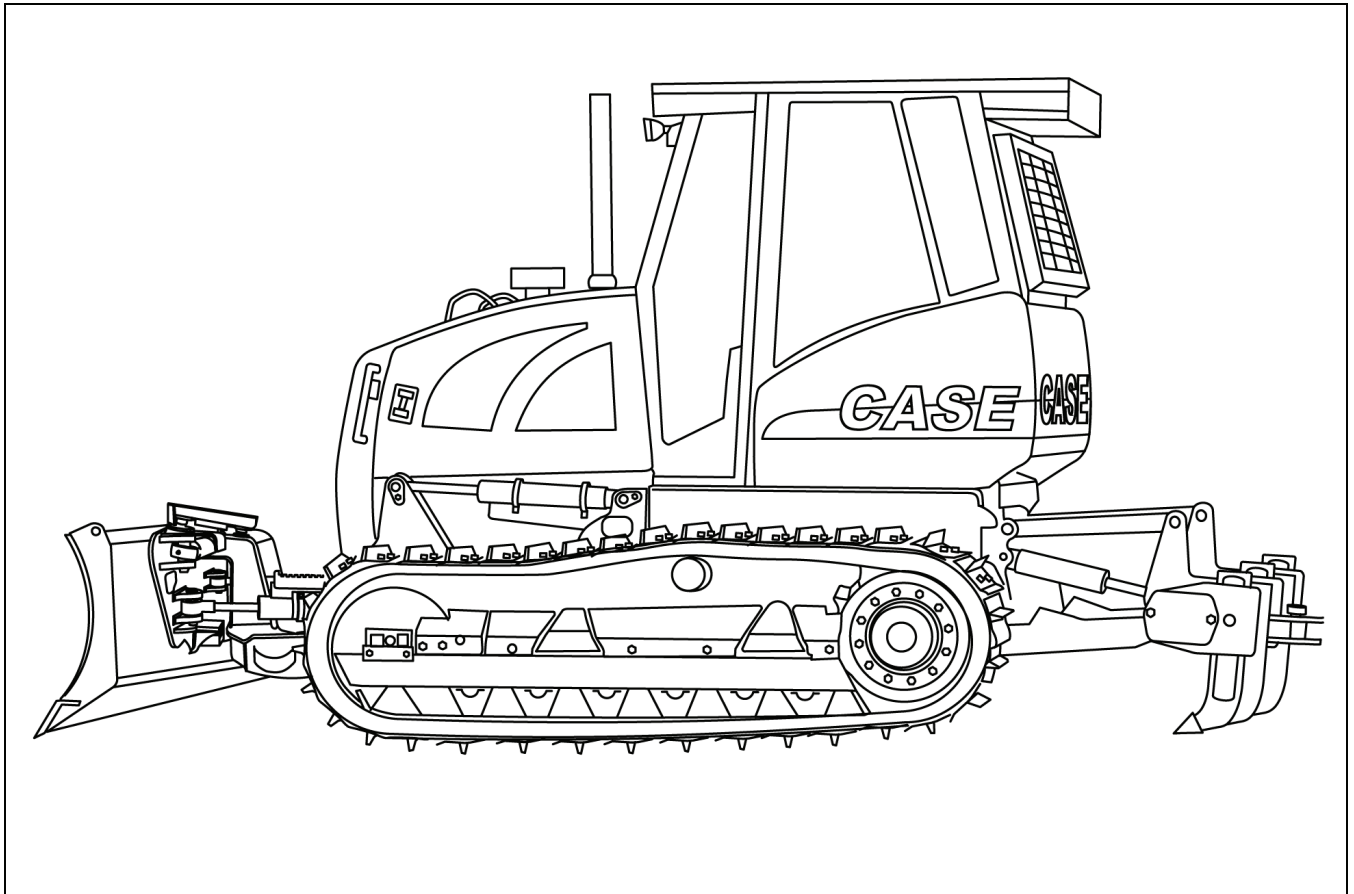
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## Chapter 1 TO THE OWNER



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Figure 1

### 650L SERIES CRAWLER

This manual contains important information about the safe operation, adjustment and maintenance of your Crawler. Refer to the Detail Index at the end of this manual for locating specific items about your machine. The Crawler conforms to current safety regulations.

Use this manual as a guide. Your Crawler will remain a reliable working tool as long as it is kept in good working condition and serviced properly.

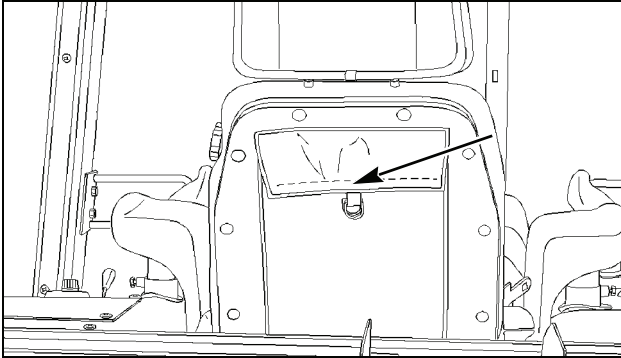
This Crawler, with standard equipment and authorized attachments, is intended to be used for above ground material handling. Use only approved accessories and attachments designed for your machine.

Do Not operate or permit anyone to operate or service this machine until you or the other persons have read and understand the safety, operation and maintenance instructions in this manual. Use only trained operators who have demonstrated the ability to operate and service this machine correctly and safely. All persons who will be operating this machine shall possess a valid local vehicle operating permit and / or other applicable local age work permit.

The information in this manual is provided on the basis of information that was available at the time that the manual was written. Settings, procedures, part numbers, software, and other items can change. These changes can affect the service that is given to the machine. Ensure that you have complete and most current information from your Dealer before you start any machine operation.

**DO NOT** use this machine for any application or purpose other than those described in this manual. Consult an authorized dealer on changes, additions or modifications that can be required for this machine to comply with various country regulations and safety requirements. Unauthorized modifications will cause serious injury or death. Anyone making such unauthorized modifications is responsible for the consequences.

This Operator's Manual is to be stored in the manual compartment equipped on this machine. Make sure this manual is complete and in good condition. Contact your dealer to obtain additional manuals. Contact your dealer for any further information or assistance about your machine. Your dealer has approved service parts. Your dealer has technicians with special training that know the best methods of repair and maintenance for your Crawler.



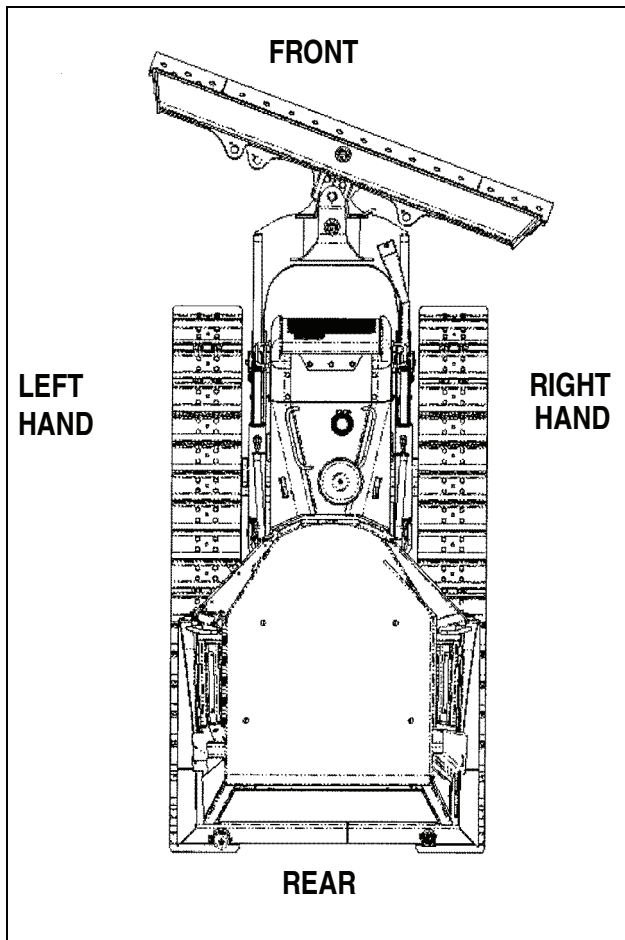
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Figure 2

**OPERATOR'S MANUAL POUCH ATTACHED TO SEAT BACK**

**ATTENTION:** The engine and fuel system on your machine is designed and built to government emissions standards. Tampering by dealers, customers, operators and users is **strictly prohibited by law**. Failure to comply could result in government fines, rework charges, invalid warranty, legal action and possible confiscation of the machine until rework to original condition is completed. Engine service and or repairs must be done by a certified technician only!

**RIGHT, LEFT, FRONT, AND REAR OF THE MACHINE**



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Figure 3

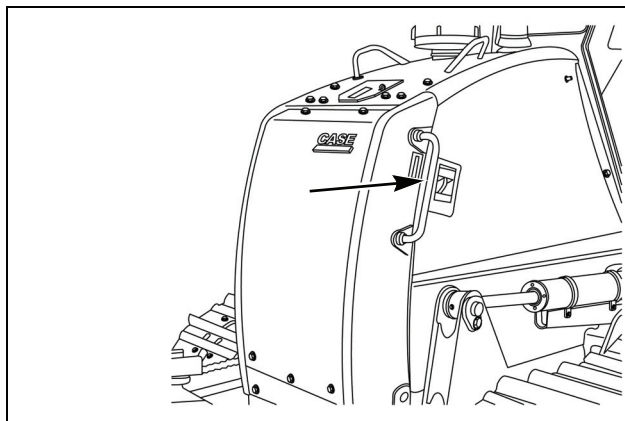
**BASIC MACHINE**

The terms Left-hand, Right-hand, Front, and Rear are used in this manual to indicate the sides as they are seen from the operator's seat.

**IDENTIFICATION NUMBERS AND PLATES**

Write your machine model number, Product Identification Number (P.I.N.) and serial numbers on the lines provided below. Write the various component number plates down also. Always, give these numbers to your dealer when you need parts or information for your machine.

Make a record of the numbers. Keep the record and your Manufacturer's Statement of Origin in a safe place. If the machine is stolen, report the numbers to your local law enforcement agency.

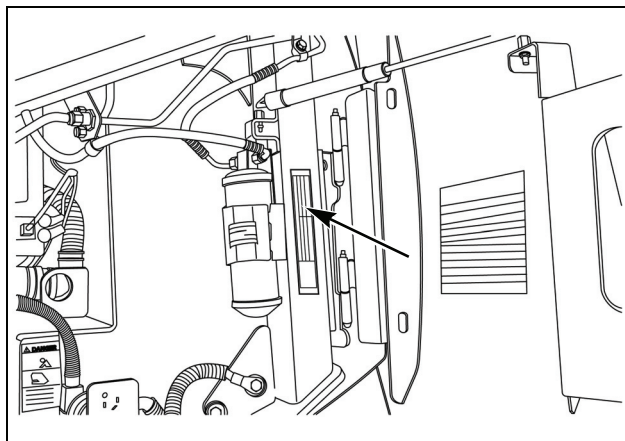


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Figure 4

**PRODUCT IDENTIFICATION NUMBER (P.I.N.) LOCATED ON THE LEFT FRONT RADIATOR SHROUD**

MACHINE P.I.N.



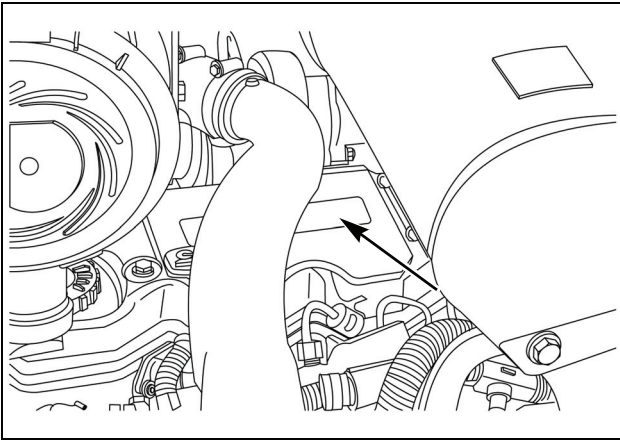
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Figure 5

**ROPS (ROLL OVER PROTECTIVE STRUCTURE) PLATE IS LOCATED ON THE LEFT-HAND SIDE REAR POST**

ROPS PLATE



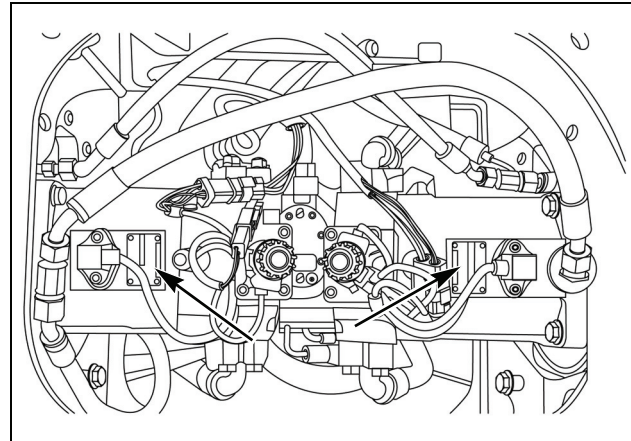


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Figure 6

**650L ENGINE PLATE LOCATED ON THE TOP REAR VALVE COVER**

**ENGINE PLATE**

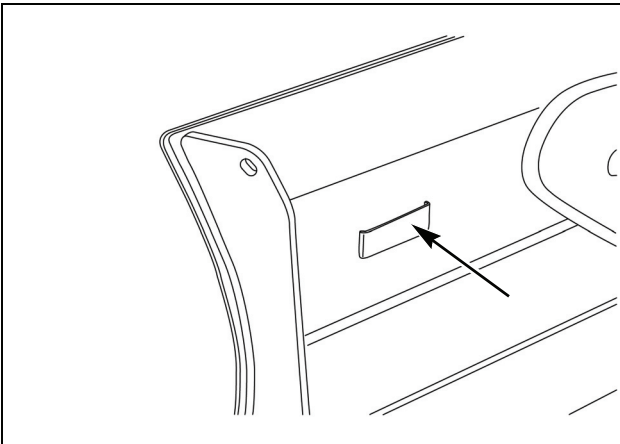


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Figure 9

**HYDROSTATIC MOTORS PLATE LOCATED BEHIND REAR BELLY PAN**

**HYDROSTATIC MOTOR PLATES**

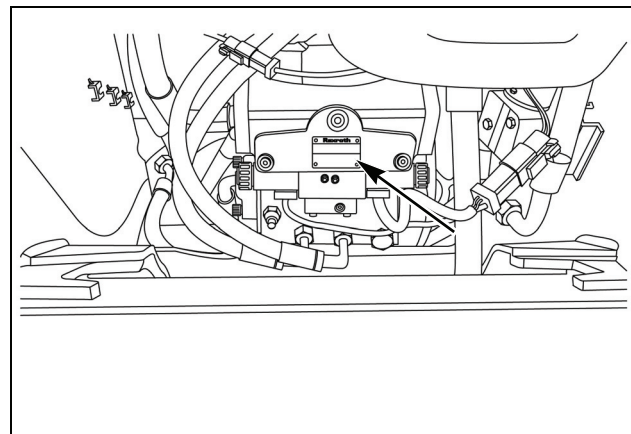


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Figure 7

**DOZER BLADE PLATE LOCATE AT LEFT REAR OF BLADE**

**DOZER BLADE PLATE**

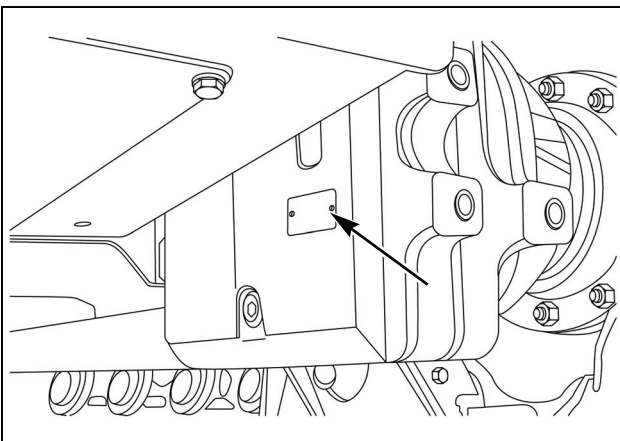


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Figure 10

**HYDROSTATIC PUMP PLATE LOCATED BEHIND BELLY PAN**

**HYDROSTATIC PUMP PLATE**



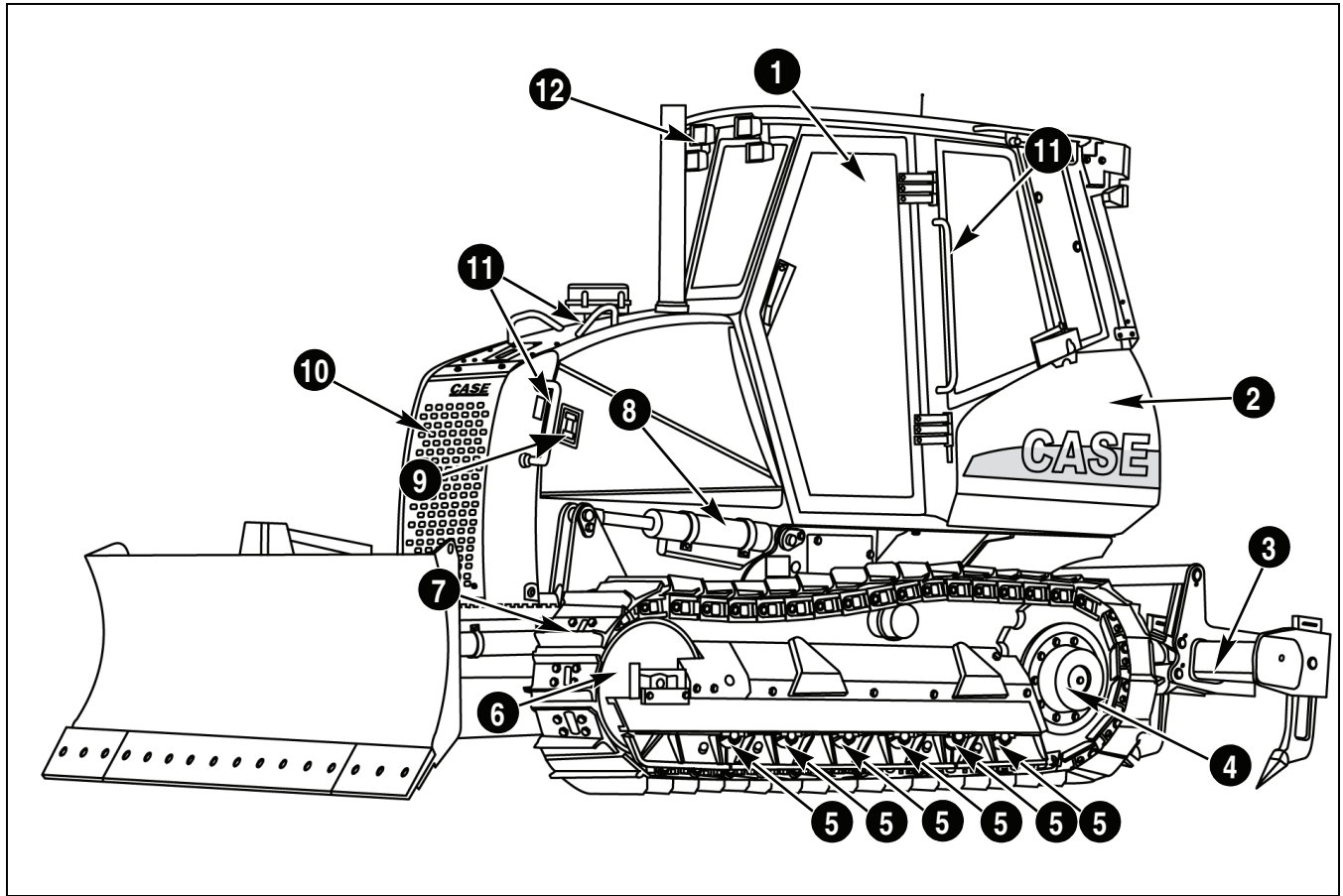
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Figure 8

**FINAL DRIVE LOCATED AT INSIDE REAR OF FINAL DRIVE CASE**

**FINAL DRIVE PLATE**

MACHINE COMPONENTS



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Figure 11

1. Operator ROPS Cab	2. Left Hand Rear Access Door	3. Ripper Attachment
4. Final Drive	5. Track Rollers	6. Idler
7. Track	8. Left Side Lift Cylinder	9. Left Engine Door Handle
10. Tip Out Radiator Shroud	11. Hand Holds	12. Front Work Lights