



H.D. Power Holster Hitch Kit

Workman Vehicles

Model No. 44209-90001 and Up

Form No. 3352-628

Installation Instructions

Installation

Note: Use the instructions on pages 1 thru 3, when installing the kit on a vehicle with a serial number greater than 240000001.

1. Position vehicle on a level surface, stop engine, engage parking brake and remove key from ignition switch.
2. Secure each side of holster assembly to hitch frame with a holster mounting pin and (2) lynch pins, as shown in figure 1.
3. Secure each hydraulic cylinder to hitch frame with a cylinder mounting pin and pin hair pin cotter (Fig. 1).
4. Secure lift arm locking pins in storage or locking position with (2) lynch pins (Fig. 1, inset).
 - When pins are in locked position, they hold lift arms in a locked position in holster assembly allowing down pressure to be applied to mounting arms of related attachments..
 - When pins are in storage position, they allow attachment arms to freely float in the holster.

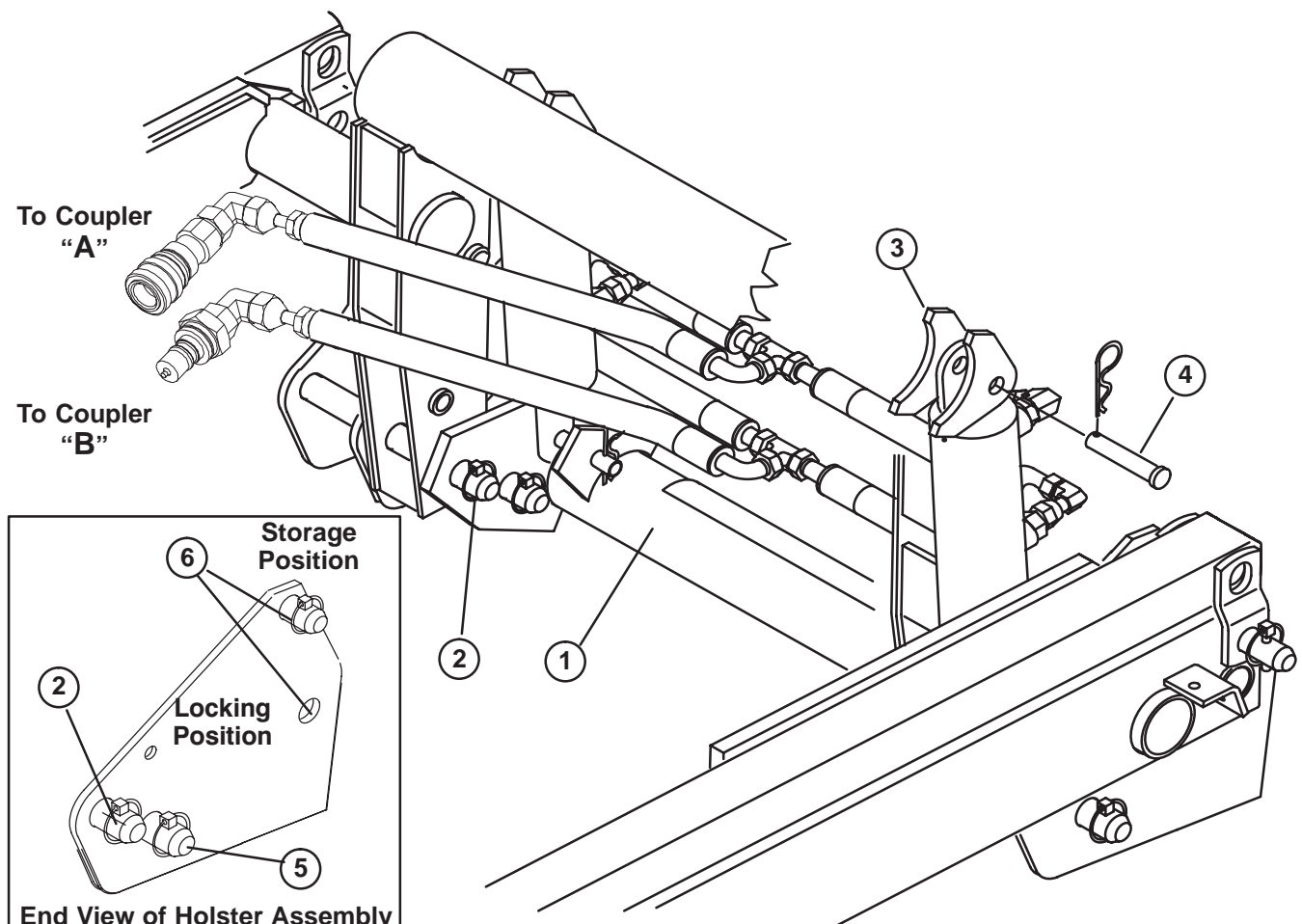


Figure 1

- | | | | |
|-------------------------|--------------------------|--------------------------|---|
| 1. Holster assembly | 3. Hydraulic cylinder | 5. Lift arm mounting pin | 6. Lift arm locking pin (shown in storage position) |
| 2. Holster mounting pin | 4. Cylinder mounting pin | | |

OPERATION

⚠ DANGER		
	CONTACT WITH MOVING PARTS CAN CAUSE SERIOUS INJURY OR DEATH <ul style="list-style-type: none">• KEEP HANDS AND FEET AWAY• KEEP BYSTANDERS AWAY DURING OPERATION• STOP ENGINE, APPLY PARKING BRAKE, REMOVE KEY AND LOWER ATTACHMENT TO GROUND WHEN LEAVING VEHICLE UNATTENDED• READ AND UNDERSTAND OPERATOR'S MANUAL BEFORE INSTALLING REMOVING OR OPERATING THIS ATTACHMENT• NEVER EXCEED MAXIMUM LIFT CAPACITY OF 550 LBS. (249 KG.)	

Quick Coupler Operation

Connection

Important Clean dirt from quick couplers before connecting. Dirty couplers can introduce contamination to hydraulic system.

Pull back locking ring on coupler.

Insert hose nipple into coupler until it snaps into position.

Disconnection

Note: With both the vehicles turned off, move the lift lever back and forth to remove the system pressure and ease the disconnection of the quick couplers.

Pull back locking ring on coupler.

Pull hose firmly from coupler.

Important Clean and install dust plug and dust covers to quick coupler ends when not in use.

Note: When attaching remote equipment to the quick couplers, determine which side requires pressure, then attach that hose to quick coupler "B" which will have pressure when the control lever is pushed forward or locked in the ON position.

Hydraulic Fluid

Dexron III automatic transmission fluid.

Control Lever Positions

Off Position

This is the normal position for the control valve when it is not being used. In this position the work ports of the control valve are blocked and any load will be held by the check valves in both directions.

Raise (Quick Coupler "A" Position)

This is the position which will lift the bed, rear hitch attachment or apply pressure to quick coupler "A". This also allows return oil from Quick coupler "B" to flow back into the valve and then out to the reservoir. This is a momentary position and when the lever is released it spring returns to the center off position.

Lower (Quick Coupler "B" Position)

This position will lower the bed, rear hitch attachment or apply pressure to quick coupler "B". This also allows return oil from quick coupler "A" to flow back into the valve and then out to the reservoir. This is a momentary position and when the lever is released it spring returns to the center off position. Momentarily holding and then releasing the control lever in this position will provide flow to quick coupler "B" which provides power down on the rear hitch. When released, it will hold the down pressure on the hitch.

Important If used with a hydraulic cylinder, holding the control lever in the lower position causes the oil flow to go over a relief valve which can damage the hydraulic system.

On Position

This position is similar to Lower (quick coupler "B" position). It also directs oil to quick coupler "B" except that the lever is held in this position by a detent lever in the control panel. This allows oil to flow continuously to equipment that uses a hydraulic motor. This position must only be used on attachments with a hydraulic motor attached.

Important If used with a hydraulic cylinder or no attachment, the On position causes the oil flow to go over a relief valve which can damage the hydraulic system. Use this position only momentarily or with a motor attached.

Important Check hydraulic oil level after installation of attachment. Check operation of attachment by cycling attachment several times to purge air from system, then recheck hydraulic oil level. Attachment cylinder will slightly affect transaxle oil level. Operation of vehicle with low oil level can damage pump, remote hydraulics, power steering and vehicle transaxle.



Caution



Hydraulic fluid escaping under pressure can have sufficient force to penetrate skin and do serious damage. Care must be used when connecting or disconnecting hydraulic quick couplers. Stop engine, apply parking brake, lower attachment and place remote hydraulic valve in float detent position to relieve hydraulic pressure before connecting or disconnecting quick couplers.

Hydraulic Control Trouble Shooting

- Difficulty in connecting or disconnecting quick couplers.
 - Pressure not relieved (Quick coupler under pressure).
- Power steering hard.
 - Hydraulic oil level low.
 - Hydraulic oil hot.
 - Pump not operating.
- Hydraulic leaks.
 - Fittings loose.
 - Fitting missing o-ring.
- Attachment does not function.
 - Quick couplers not fully engaged.
 - Quick couplers are interchanged.
- Squealing noise.
 - Remote valve left in ON detent position causing hydraulic oil to flow over relief valve.

Installation

Note: Use the instructions on pages 4 thru 7, when installing and operating the kit on a vehicle with a serial prior to 239999999. The quick couplers included with this kit are for vehicles with serial numbers greater than 240000001. For installation on vehicles with serial numbers prior to this new adapters and quick couplers must be ordered from your Toro Distributor. The part numbers are listed in your parts catalog.

1. Position vehicle on a level surface, stop engine, engage parking brake and remove key from ignition switch.

2. Secure each side of holster assembly to hitch frame with a holster mounting pin and (2) lynch pins, as shown in figure 1.
3. Secure each hydraulic cylinder to hitch frame with a cylinder mounting pin and pin hair pin cotter (Fig. 1).
4. Secure lift arm locking pins in storage or locking position with (2) lynch pins (Fig. 1, inset).
 - When pins are in locked position, they hold lift arms in a locked position in holster assembly allowing down pressure to be applied to mounting arms of related attachments..
 - When pins are in storage position, they allow attachment arms to freely float in the holster.

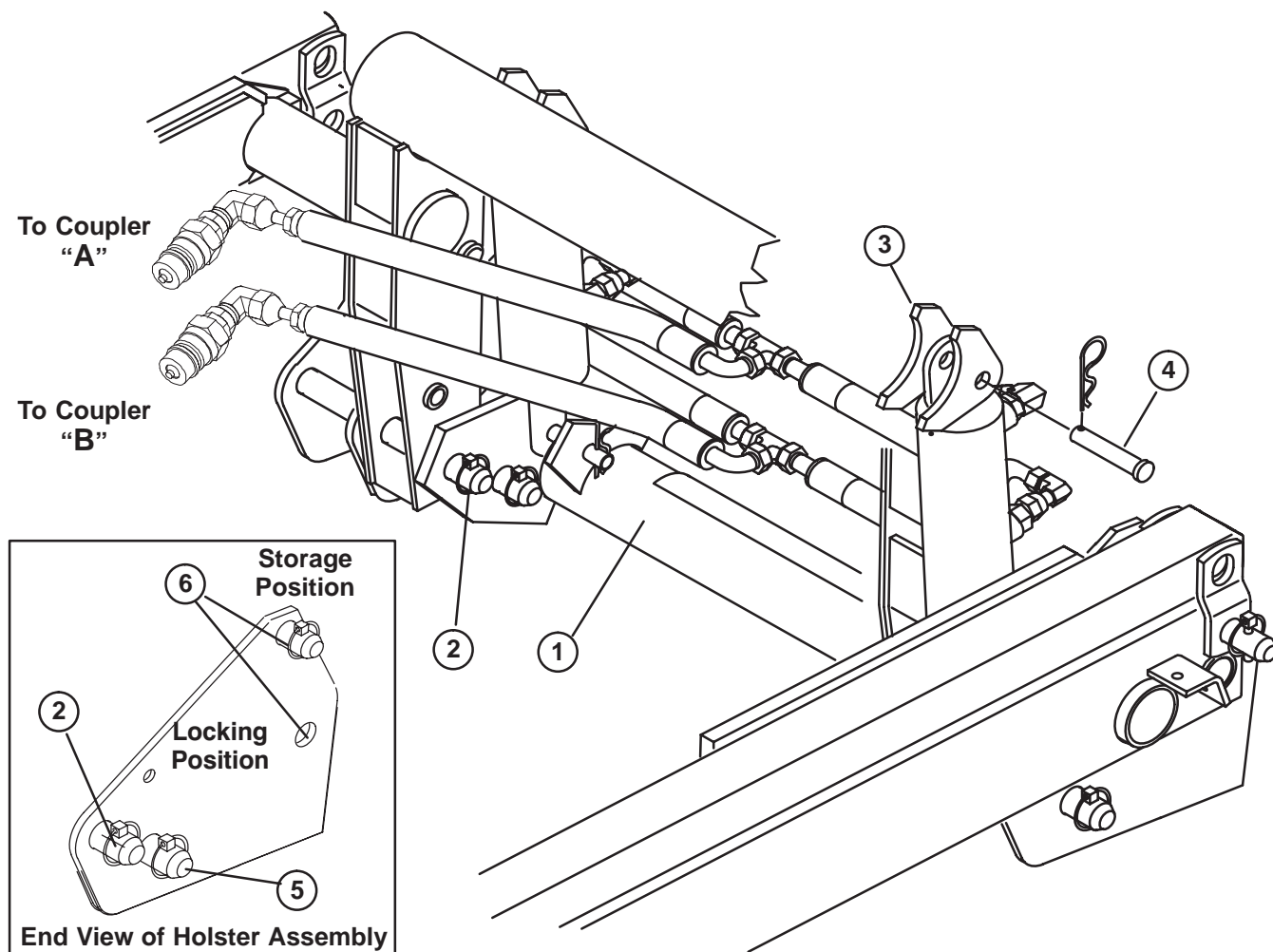


Figure 2

- | | | | |
|-------------------------|--------------------------|--------------------------|---|
| 1. Holster assembly | 3. Hydraulic cylinder | 5. Lift arm mounting pin | 6. Lift arm locking pin (shown in storage position) |
| 2. Holster mounting pin | 4. Cylinder mounting pin | | |

OPERATION

⚠ DANGER		
	CONTACT WITH MOVING PARTS CAN CAUSE SERIOUS INJURY OR DEATH <ul style="list-style-type: none">• KEEP HANDS AND FEET AWAY• KEEP BYSTANDERS AWAY DURING OPERATION• STOP ENGINE, APPLY PARKING BRAKE, REMOVE KEY AND LOWER ATTACHMENT TO GROUND WHEN LEAVING VEHICLE UNATTENDED• READ AND UNDERSTAND OPERATOR'S MANUAL BEFORE INSTALLING REMOVING OR OPERATING THIS ATTACHMENT• NEVER EXCEED MAXIMUM LIFT CAPACITY OF 550 LBS. (249 KG.)	

Quick Coupler Connection

1. Position vehicle on a level surface, STOP engine, ENGAGE parking brake, remove key from ignition switch and place remote hydraulic valve in FLOAT detent position.

Important Clean dirt from quick couplers before connecting. Dirty couplers can introduce contamination to hydraulic system.

2. Insert hose nipple into coupler until it snaps into position (Fig. 2).

Note: When attaching remote hydraulic cylinders to the quick couplers, determine which side of the remote cylinder requires pressure, then attach that hose to quick coupler "B". Only connect double acting cylinders (two hoses).

⚠	Caution	⚠
Hydraulic fluid escaping under pressure can have sufficient force to penetrate skin and do serious damage. Care must be used when connecting or disconnecting hydraulic quick couplers. Stop engine, apply parking brake, lower attachment and place remote hydraulic valve in float detent position to relieve hydraulic pressure before connecting or disconnecting quick couplers.		

Important Check hydraulic oil level after installation of attachment. Check operation of attachment by cycling attachment several times to purge air from system, then recheck hydraulic oil level. Attachment cylinder will slightly affect transaxle oil level. Operation of vehicle with low oil level can damage pump, remote hydraulics, power steering and vehicle transaxle.

Hydraulic Fluid

Dexron III automatic transmission fluid.

Quick Coupler Disconnection

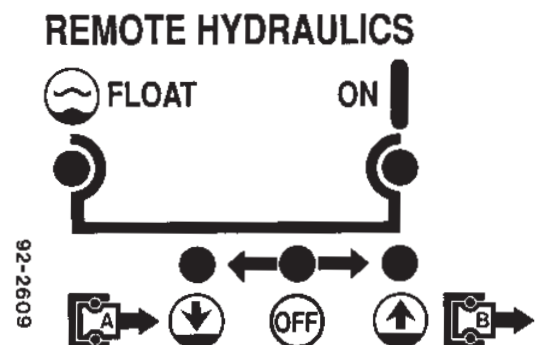
1. Position vehicle on a level surface, STOP engine, ENGAGE parking brake, remove key from ignition switch, lower attachment and place remote hydraulic valve in FLOAT detent position.

2. Pull hose firmly from coupler (Fig. 2).

Important Clean and install dust plug and dust covers to quick coupler ends when not in use.

⚠	Danger	⚠
Contact with moving parts can cause serious injury or death <ul style="list-style-type: none">• Keep hands and feet away• Keep bystanders away during operation• Stop engine, apply parking brake, remove key and lower attachment to the ground when leaving vehicle unattended.• Never exceed maximum lift capacity of 550 lbs.		

Control Lever Positions



Off Position

This is the normal position for the control valve when it is not being used. This position allows the oil leaving the dump valve to flow through the remote hydraulic valve to the power steering circuit. In this position the work ports of the control valve are blocked and any load will be held by the check valves in both directions.

Raise (Quick Coupler "B" Position)

This is the position which will lift the rear hitch attachment or apply pressure to quick coupler "B". This also allows return oil from Quick coupler "A" to flow back into the valve and then out to the power steering circuit. This is a momentary position and when the lever is released it spring returns to the center off position.

Important Use double acting cylinders only. Using a single acting cylinder does not allow return flow of hydraulic oil and makes steering more difficult. Using a single acting cylinder can lower oil level in transaxle and cause damage to hydraulic pump and transaxle.

On Position

This position is similar to Raise (quick coupler "B" position). It also directs oil to quick coupler "B" except that the lever is held in this position by a detent notch in the control panel. This allows oil to flow continuously to equipment that uses a hydraulic motor. This position must only be used on attachments with a hydraulic motor attached and should NEVER be used when holster kit is connected.

Note: If hydraulic motor is used, it may see 1000 psi back pressure.

Important If used with a hydraulic cylinder or no attachment, the Raise or On position causes the oil flow to go over a relief valve which can damage the hydraulic system. Additionally this condition does not allow return flow to supply the power steering circuit, which makes steering more difficult. Use these positions only momentarily or with a motor attached.

Lower (Quick Coupler "A" Position)

This position will lower the rear hitch attachment or apply pressure to quick coupler "A". This also allows return oil from quick coupler "B" to flow back into the valve and then out to the power steering circuit. This is a momentary position and when the lever is released it spring returns to the center off position. Momentarily holding and then releasing the control lever in this position will provide flow to quick coupler "A" which provides power down on the rear hitch. When released, it will hold the down pressure on the hitch.

Important If used with a hydraulic cylinder, holding the control lever in the lower position causes the oil flow to go over a relief valve which can damage the hydraulic system.

Float Position

This valve position allows oil to flow in and out of the work ports and is connected to the inlet and outlet ports at the same time. This allows for attachments as the rear hitch to "float" up and down. The same pressure is applied to both quick couplers due to back pressure from the steering circuit.



Caution



Use caution when moving lever to the float position because it will allow rear implement to lower.

To regulate the drop rate of the hitch, a restrictor valve has been incorporated into each cylinder. Do not remove valves from cylinders because implements could drop unimpeded.

Trouble Shooting

- Difficulty in connecting or disconnecting quick couplers.
 - Pressure not relieved (Quick coupler under pressure).
 - Engine running.
 - Remote hydraulic valve not placed in float.
- Power steering hard.
 - Remote valve not in neutral or float position.
 - Remote hydraulic valve linkage out of adjustment.
 - Hydraulic oil level low.
 - Hydraulic oil hot.
- Hydraulic leaks.
 - Fittings loose.
 - Fitting missing o-ring.
- Attachment does not function.
 - Quick couplers not fully engaged.
 - Quick couplers are interchanged.
- Squealing noise.
 - Remote valve left in ON detent position causing hydraulic oil to flow over relief valve.



The Toro General Commercial Products Warranty

A Two-Year Limited Warranty

Conditions and Products Covered

The Toro Company and its affiliate, Toro Warranty Company, pursuant to an agreement between them, jointly warrant your Toro Commercial Product ("Product") to be free from defects in materials or workmanship for two years or 1500 operational hours*, whichever occurs first. Where a warrantable condition exists, we will repair the Product at no cost to you including diagnosis, labor, parts, and transportation. This warranty begins on the date the Product is delivered to the original retail purchaser.

* Product equipped with hour meter

Instructions for Obtaining Warranty Service

You are responsible for notifying the Commercial Products Distributor or Authorized Commercial Products Dealer from whom you purchased the Product as soon as you believe a warrantable condition exists.

If you need help locating a Commercial Products Distributor or Authorized Dealer, or if you have questions regarding your warranty rights or responsibilities, you may contact us at:

Toro Commercial Products Service Department
Toro Warranty Company
8111 Lyndale Avenue South
Bloomington, MN 55420-1196
952-888-8801 or 800-982-2740
E-mail: commercial.service@toro.com

Owner Responsibilities

As the Product owner, you are responsible for required maintenance and adjustments stated in your operator's manual. Failure to perform required maintenance and adjustments can be grounds for disallowing a warranty claim.

Items and Conditions Not Covered

Not all product failures or malfunctions that occur during the warranty period are defects in materials or workmanship. This express warranty does not cover the following:

- Product failures which result from the use of non-Toro replacement parts, or from installation and use of add-on, modified, or unapproved accessories
- Product failures which result from failure to perform required maintenance and/or adjustments
- Product failures which result from operating the Product in an abusive, negligent or reckless manner
- Parts subject to consumption through use unless found to be defective. Examples of parts which are consumed, or used up, during normal Product operation include, but are not limited to, blades, reels, bedknives, tines, spark plugs, castor wheels, tires, filters, belts, and certain sprayer components such as diaphragms, nozzles, and check valves, etc.

Countries Other than the United States or Canada

Customers who have purchased Toro products exported from the United States or Canada should contact their Toro Distributor (Dealer) to obtain guarantee policies for your country, province, or state. If for any reason you are dissatisfied with your Distributor's service or have difficulty obtaining guarantee information, contact the Toro importer. If all other remedies fail, you may contact us at Toro Warranty Company.

- Failures caused by outside influence. Items considered to be outside influence include, but are not limited to, weather, storage practices, contamination, use of unapproved coolants, lubricants, additives, or chemicals, etc.
- Normal "wear and tear" items. Normal "wear and tear" includes, but is not limited to, damage to seats due to wear or abrasion, worn painted surfaces, scratched decals or windows, etc.

Parts

Parts scheduled for replacement as required maintenance are warranted for the period of time up to the scheduled replacement time for that part.

Parts replaced under this warranty become the property of Toro. Toro will make the final decision whether to repair any existing part or assembly or replace it. Toro may use factory remanufactured parts rather than new parts for some warranty repairs.

General Conditions

Repair by an Authorized Toro Distributor or Dealer is your sole remedy under this warranty.

Neither The Toro Company nor Toro Warranty Company is liable for indirect, incidental or consequential damages in connection with the use of the Toro Products covered by this warranty, including any cost or expense of providing substitute equipment or service during reasonable periods of malfunction or non-use pending completion of repairs under this warranty. Except for the Emissions warranty referenced below, if applicable, there is no other express warranty. All implied warranties of merchantability and fitness for use are limited to the duration of this express warranty.

Some states do not allow exclusions of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions and limitations may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Note regarding engine warranty: The Emissions Control System on your Product may be covered by a separate warranty meeting requirements established by the U.S. Environmental Protection Agency (EPA) and/or the California Air Resources Board (CARB). The hour limitations set forth above do not apply to the Emissions Control System Warranty. Refer to the Engine Emission Control Warranty Statement printed in your operator's manual or contained in the engine manufacturer's documentation for details.