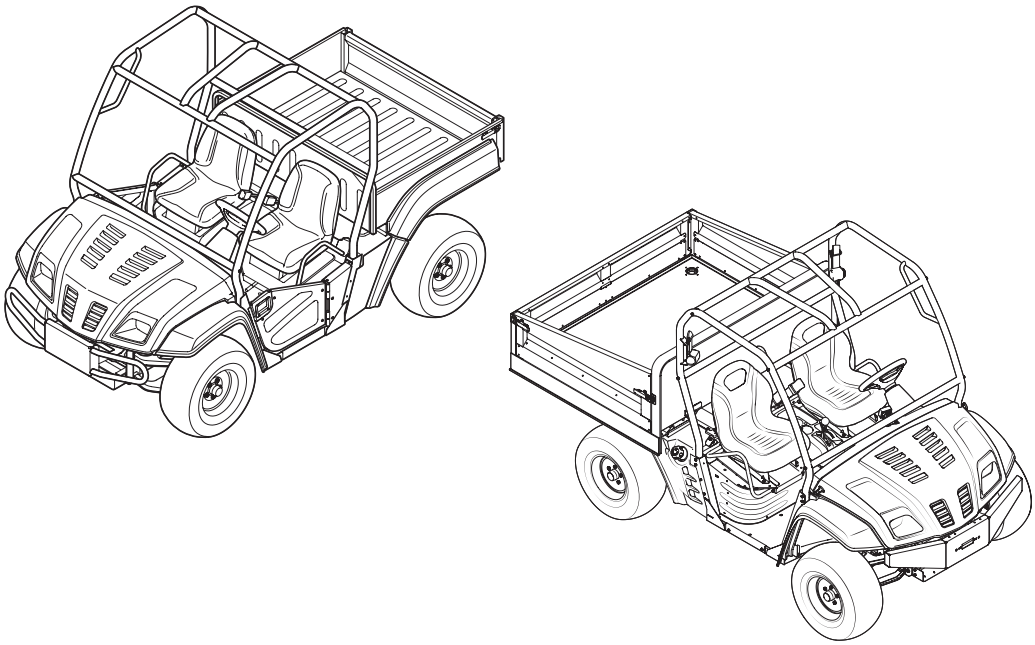
Safe Operation Practices • Set-Up • Operation • Maintenance • Service • Troubleshooting • Warranty

Cub Cadet®

OPERATOR'S MANUAL



Utility Vehicle — Volunteer & Volunteer WT

⚠ WARNING

READ AND FOLLOW ALL SAFETY RULES AND INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE THIS MACHINE.
FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY.

NOTE: This Operator's Manual covers several models. Utility Vehicle features may vary by model. Not all features in this manual are applicable to all Utility Vehicle models and the Utility Vehicle depicted may differ from yours.

CUB CADET LLC, P.O. BOX 361131 CLEVELAND, OHIO 44136-0019

Printed In USA

Form No. 769-06325H
(July 10, 2015)

To The Owner

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Thank You

Thank you for purchasing your product. It was carefully engineered to provide excellent performance when properly operated and maintained.

Please read this entire manual prior to operating the equipment. It instructs you how to safely and easily set up, operate and maintain your machine. Please be sure that you, and any other persons who will operate the machine, carefully follow the recommended safety practices at all times. Failure to do so could result in personal injury or property damage.

All information in this manual is relative to the most recent product information available at the time of printing. Review this manual frequently to familiarize yourself with the machine, its features and operation. Please be aware that this Operator's Manual may cover a range of product specifications for various models. Characteristics and features discussed and/or illustrated in this manual may not be applicable to all models. We reserve the right to change product specifications, designs and equipment without notice and without incurring obligation.

If applicable, the power testing information used to establish the power rating of the engine equipped on this machine can be found at www.opei.org or the engine manufacturer's web site.

If you have any problems or questions concerning the machine, phone your local Cub Cadet dealer or contact us directly. Cub Cadet's Customer Support telephone numbers, website address and mailing address can be found on this page. We want to ensure your complete satisfaction at all times.

Throughout this manual, all references to *right* and *left* side of the machine are observed from the operating position.

Table of Contents

Record Product Information

Before setting up and operating your new equipment, please locate the model plate on the equipment and record the information in the provided area to the right. You can locate the model plate under the operator's seat. Flip the seat forward to view the model plate. This information will be necessary, should you seek technical support via our web site or with your local Cub Cadet dealer.

Model Number

☐☐☐☐☐☐☐☐☐☐☐☐☐

Serial Number

☐☐☐☐☐☐☐☐☐☐☐☐☐

Product Registration and Customer Support

Please do NOT return the machine to the retailer or dealer without first contacting the Customer Support Department

If you have difficulty assembling this product, have questions regarding the controls, operation, or maintenance of this machine, want to order parts/attachments/accessories, or want to view an online How-To video; you can seek help from the experts. Have your full model number and serial number ready. Choose from the options below:

- *Web:* **www.cubcadet.com/equipment/cubcadet/service-and-parts**
- *Phone:* (800) 965-4CUB
- *Mail:* Cub Cadet LLC • P.O. Box 361131 • Cleveland, OH • 44136-0019

Important Safe Operation Practices

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WARNING: This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in personal injury.
When you see this symbol. **HEED ITS WARNING!**

CALIFORNIA PROPOSITION 65

WARNING: Engine Exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to State of California to cause cancer and birth defects or other reproductive harm.

WARNING: Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. *Wash hands after handling*

DANGER: This machine was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. Failure to observe the following safety instructions could result in serious injury or death.

Operation

General Operation

1. Read, understand, and follow all instructions on the vehicle and in the manual before attempting to operate or service vehicle. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. This is an off-road utility vehicle and it should not be operated on public highways. Know and comply with all laws and regulations governing the use of off-highway vehicles in your area.
3. This vehicle handles and maneuvers differently than a normal passenger car. Sharp high speed turns and abrupt maneuvers can cause vehicle to roll over or go out of control. Slow down when turning and avoid abrupt maneuvers.
4. Handling and maneuvering characteristics of vehicle change depending upon cargo load. Heavy loads affect steering, braking, stability, and overall handling of vehicle.
5. Be familiar with all instructions and controls and their proper operation before starting vehicle.
6. Never allow adults to operate this vehicle without proper instruction.
7. Never allow children under 16 years old to operate this vehicle. Children 16 years old and over should read and understand the operation instructions and safety rules in this manual and should be trained and supervised by a parent.
8. Watch for traffic when operating near or crossing roadways. This vehicle is not intended for use on any public roadway.
9. Do not operate this vehicle while under the influence of alcohol or drugs.
10. Never carry more than one passenger. This vehicle is designed to carry the driver and one passenger only. No riders are allowed in cargo box or anywhere else on vehicle, except in the driver and passenger seats.
11. Keep all body parts (i.e. head, arms, hands, legs, feet) inside vehicle when vehicle is in motion.
12. Always remain seated and keep both hands on the steering wheel when driving the vehicle.
13. Sit on the center of the seat and keep both feet within the foot platform perimeter. Clean foot platform if dirty and remove any debris from around foot controls, e.g. brake pedal.
14. Do not misuse the utility vehicle. It is an utility vehicle, not a recreation vehicle or toy. Recreational riding can lead to accidents, severe bodily injury or death.

15. Inspect area around vehicle before moving, especially in reverse. Back up slowly. Always look down and behind before and while backing to avoid a back-over accident. Keep bystanders out of area.
16. Avoid driving through water, since loss of control may occur. Drive belt may slip if exposed to water thus reducing vehicle pulling power and stopping vehicle entirely.
17. Always use vehicle lights while operating in low light situations.
18. Do not mount or leave vehicle while it is in motion or in actual operation.
19. Avoid sudden starts, stops, or turns and always use a level turn-around area.
20. Never leave vehicle unattended with the key in the ignition. Always turn key to the "Stop" position, set the parking brake and remove key.
21. Check overhead clearances carefully before driving under low hanging tree branches, wires, power lines, bridges, before entering or leaving buildings, or in any other situation where the operator and/or operator protective structure (OPS) may be struck, which could result in serious injury.
22. Use the operator protective structure (OPS) and seat belt for safe operation. Overturning the utility vehicle without a operator protective structure (OPS), or with a operator protective structure (OPS) and the seat belt unfastened, can result in death or injury.
23. Always use the seat belt, except if the operator protective structure (OPS) has been removed.
24. The doors are designed to assist in keeping the operator and passenger inside the vehicle during operation. Do not operate vehicle without doors in place.
25. Improper use of the vehicle or failure to properly maintain it could result in decreased vehicle performance or personal injury.
26. Engine must be stopped when cleaning, servicing, adjusting, repairing, or installing attachments on utility vehicle.
27. After striking foreign objects, stop the unit and shut off the engine. Inspect for damage and repair the damage before restarting and operating equipment.
28. Do not start or operate vehicle in an inside area, unless it is adequately ventilated. Engine exhaust contains carbon monoxide fumes, which are very poisonous and can be deadly.
29. Do not change engine governor setting or over speed the engine. The governor is set at the factory for safe operating speed.
30. Assure safety interlock switch is adjusted correctly so engine cannot be started unless gearshift is in the neutral position.
31. Do not touch engine or muffler while engine is running or soon after it is stopped. They will be hot and can cause a burn.
32. Always inspect your vehicle each time you use it to make sure it is in safe operating condition. Always follow the inspection and maintenance procedures and schedules described in this manual.
33. If situations occur which are not covered in this manual, use care and good judgement. Contact your local service center or call toll free 1-877-282-8684 for the name of your nearest service center.

Occupant Size and Capacity

1. Make sure operators are at least 16 years old and have a valid driver's license.
2. Each occupant should be able to sit with their back against the seat, feet flat on the floor, and hands on the steering wheel or handholds.
3. The operator should be tall enough to wear the seat belt properly and reach all controls.
4. Passengers should also be tall enough for the seat belt to fit properly and be able to brace themselves, as necessary, by placing both feet firmly on the floor while gripping the handholds. Keep all body parts completely inside the vehicle.

Dress Properly

1. Proper clothing can reduce the severity of injury in the event of an accident.
2. Always wear appropriate eye protection and protective clothing. It is also recommended that you wear a properly fitting D.O.T. approved helmet.

Slope Operation

Slopes are a major factor related to loss of control and rollover accidents, which can result in severe injury or death. If a slope is steeper than a 15° incline, do not operate this unit on that area. Exercise extreme caution while operating on slopes.

Do:

1. Travel straight up and down slopes, not across. Exercise extreme caution when changing direction on slopes.
2. Travel slowly while on a slope. Always keep the forward speed limited when going down slopes to take advantage of the motor braking action.
3. Keep all movement on the slopes slow and gradual. Avoid starting or stopping on a slope.
4. Avoid slopes with slippery, loose, or bumpy surfaces as they are especially hazardous.
5. Use extra care while carrying cargo. It may affect the stability of the vehicle. Spread the load evenly or tie down.

Do Not:

1. Do not travel near drop-offs, ditches or embankments. The vehicle could suddenly turn over if a wheel is over the edge of a cliff, ditch, or if an edge caves in.
2. Do not stop or start suddenly when going uphill or downhill. Be especially cautious when changing direction on slopes.
3. Do not turn sideways to the hill. The vehicle may roll over. If

you must turn, go slow and do so carefully and gradually.

4. Do not carry cargo on steep slopes or tow loads.

Towing

1. Always use an approved hitch and hitch point provided on the utility vehicle.
2. Do not tow more than 1400 lbs. (635 kg) rolling weight (i.e. trailer plus cargo).
3. Never load more than 140 lbs. (63.5 kg) tongue weight on tow bracket provided.
4. Go slow and use extra care when towing a trailer. Allow for increased braking distance. Load trailer properly.
5. Do not tow heavy loads on slopes greater than 5° incline. When going downhill or turning, the extra weight tends to push the tow vehicle and may cause you to loose control (i.e. braking and steering ability are reduced, towed equipment may jack-knife and cause utility vehicle to overturn).

Cargo Box Loading/Operation

1. Do not exceed vehicle's Total Load Capacity rating of 1,400 lbs. (635 kg) This includes operator, passenger, accessories, and cargo.
2. Do not exceed 1000 lbs. (453 kg) load in cargo box (steel cargo box) or 1200 lbs. (544 kg) (aluminum cargo box).
3. Spread load evenly and secure to prevent movement.
4. Do not load above height of cargo box front panel. Load could shift forward and injure driver or passenger.
5. Avoid loads which exceed the physical dimensions of cargo box.
6. Go slow. Heavy loads will affect steering, braking, stability, and overall handling of the vehicle. Limit loads to those that can be safely controlled.
7. Avoid sudden starts, stops, and turns which could cause load to shift.

Cargo Box Lift

1. Stop vehicle on level ground and set Parking Brake before raising cargo box.
2. On manual lift units, unload cargo box before raising cargo box.
3. Do not operate vehicle with cargo box in raised position.
4. Do not operate vehicle with cargo box latch unlatched. Always re-latch upon manually lowering cargo box.

When using optional electric lift:

a. Stay in driver's seat.

b. Keep body parts away from cargo box and keep all bystanders away.

c. Do not allow rear wheels to hang over the edge of a drop-off when raising cargo box. The load in the cargo box may shift causing the vehicle to tip over backwards.

Safety Frame (OPS)

1. Your vehicle is equipped with a operator protective structure (OPS) which must be maintained in a fully functional condition. Use care when driving through doorways or spaces with a low overhead.

   a. Never modify the OPS in any way.

   b. Never attempt to straighten or reweld any part of the main frame or retaining brackets that have been damaged. Doing so may weaken the structure and endanger your safety.

   c. Never secure any parts other than Cub Cadet approved accessories on the main frame or attach the safety frame with anything other than the special fasteners specified.

   d. Never attach ropes, chains, or cables to the OPS for pulling purposes.

   e. Although the OPS, when used with a properly secured seat belt, provides a crush-protective environment in the event of a tip-over or rollover, never take unnecessary risks.

Children

1. Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the vehicle. They do not understand the dangers. Never assume that children will remain where you last saw them. Avoid run over accidents.

   a. Keep children out of the immediate area of the vehicle and in watchful care of a responsible adult other than the operator.

   b. Be alert and turn the vehicle off if a child enters the area.

   c. Before and while backing, look behind and down for small children.

   d. Never carry small children, they may fall off and be seriously injured or interfere with safe vehicle operation.

   e. Use extreme care while approaching blind corners, doorways, shrubs, trees or other objects that may block your vision of a child who may run into the path of the vehicle.

   f. Remove key when vehicle is unattended to prevent unauthorized operation.

2. Never allow children under 16 years old to operate this vehicle. Children 16 years old and over should read and understand the operation instructions and safety rules in this manual and should be trained and supervised by a parent.
3. Do not let children ride in the cargo box, in the driver's or passenger's lap or anywhere other than the passenger seat. Never give small children a ride; not even in the passenger seat. They may fall off.

Service

Safe Handling Of Fuel:

1. To avoid personal injury or property damage use extreme care in handling fuel. Fuel is extremely flammable and the vapors are explosive. Serious personal injury can occur when fuel is spilled on yourself or your clothes which can ignite. Wash your skin and change clothes immediately.
    a. Use only an approved fuel container.
    b. Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground away from your vehicle before filling.
    c. When practical, remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment on a trailer with a portable container, rather than from a fuel dispenser nozzle.
    d. Keep the nozzle in contact with the rim of the fuel tank or container opening at all times until fueling is complete. Do not use a nozzle lock-open device.
    e. Extinguish all cigarettes, cigars, pipes and other sources of ignition.
    f. Never fuel machine indoors.
    g. Never remove gas cap or add fuel while the engine is hot or running. Allow engine to cool at least two minutes before refueling.
    h. Never over fill fuel tank. Fill tank to no more than ½ inch below bottom of filler neck to allow space for fuel expansion.
    i. Replace fuel cap and tighten securely.
    j. If fuel is spilled, wipe it off the equipment. Move unit to another area. Wait 5 minutes before starting the engine.
    k. To reduce fire hazards, keep engine compartment and exhaust system free of grass, leaves, or other debris build-up. Clean up oil or fuel spillage and remove any fuel soaked debris.
    l. Never store the machine or fuel container inside where there is an open flame, spark or pilot light as on a water heater, space heater, furnace, clothes dryer or other gas appliances.

General Service

1. Never run an engine indoors or in a poorly ventilated area. Engine exhaust contains carbon monoxide, an odorless, and deadly gas.
2. Before cleaning, repairing, or inspecting, make certain all moving parts have stopped. Disconnect the spark plug wires and ground against the engine to prevent unintended starting.
3. Check brake operation frequently as it is subjected to wear during normal operation. Adjust and service as required.
4. If equipped, the cooling system is under pressure. Never remove the radiator cap when the system is hot. Slowly turn the cap to the first stop to release pressure before removing the cap.
5. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
6. Never tamper with the safety interlock system or other safety devices. Check their proper operation regularly.
7. Never attempt to make adjustments or repairs to the machine while the engine is running.
8. Do not change the engine governor settings or over-speed the engine. The governor controls the maximum safe operating speed of the engine.
9. Maintain or replace safety and instruction labels, as necessary.
10. According to the Consumer Products Safety Commission (CPSC) and the U.S. Environmental Protection Agency (EPA), units in this product category have an Average Useful Life of seven (7) years, or approximately 400 hours of operation. To extend the life of your unit, and specifically after (7) years of ownership or at 400 hours of operation, have the unit inspected annually by an authorized service dealer to ensure that all mechanical and safety systems are working properly and not worn excessively. Failure to do so can result in accidents, injuries or death. See Section 5 of this Operators Manual for Maintenance and Service schedules.
11. Observe proper disposal laws and regulations for gas, oil, etc. to protect the environment.
12. Prior to disposal, determine the proper method to dispose of waste from your local Environmental Protection Agency. Recycling centers are established to properly dispose of materials in an environmentally safe fashion.
13. Use proper containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them. Properly dispose of the containers immediately following the draining of fluids.
14. DO NOT pour oil or other fluids into the ground, down a drain or into a stream, pond, lake or other body of water. Observe Environmental Protection Agency regulations when disposing of oil, fuel, coolant, brake fluid, filters, batteries, tires and other harmful waste.
15. We do not recommend the use of a pressure washer or garden hose to clean your unit. They may cause damage to electrical components; wheel spindles; pulleys; bearings; or the engine. The use of water will result in shortened life and reduce serviceability.

Do not modify engine

To avoid serious injury or death, do not modify engine in any way. Tampering with the governor setting can lead to a runaway engine and cause it to operate at unsafe speeds. Never tamper with factory setting of engine governor.

Notice Regarding Emissions

Where applicable, this vehicle is certified to federal EPA and California Air Resources Board (CARB) emissions standards for Off-Highway Recreational Vehicles (OHRV). The engine owner's manual is supplied by the engine manufacturer, and provides additional information relating to the emission system, warranty, and maintenance of the engine in accordance with EPA and/or CARB regulations. Consult your engine manual for the fuel requirements for your engine.

Gasoline powered products may be equipped with the following emission control systems: Engine Modification (EM), Oxidizing Catalyst (OC), Oxygen Sensor (O2S), Multi-port Fuel Injection (MFI), Electronic Control Module (ECM), Secondary Air Injection (SAI) and Three Way Catalyst (TWC). When required, models are equipped with low permeation fuel lines and fuel tanks for evaporative emission control. Please contact Customer Support for information regarding the evaporative emission control configuration for your model.

Spark Arrestor

WARNING: This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrestor meeting applicable local or state laws (if any).

If a spark arrestor is used, it should be maintained in effective working order by the operator. In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands.
A spark arrestor for the muffler is available through your nearest engine authorized service dealer or contact the service department, P.O. Box 361131 Cleveland, Ohio 44136-0019.

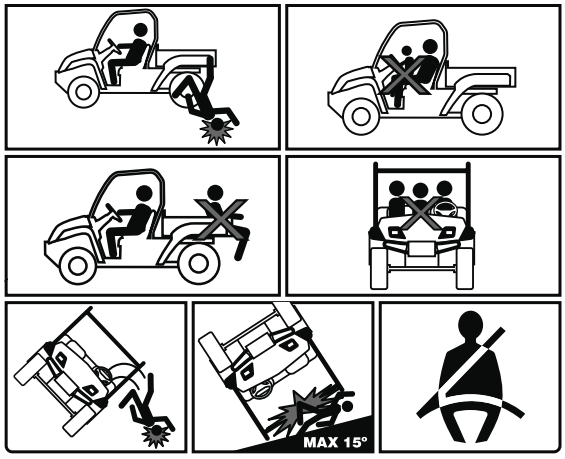
Safety Labels

Safety labels that may appear on the product are reproduced on the following pages. Read, understand, and follow all instructions on the machine before attempting to assemble and operate.

⚠ WARNING

RIDERS CAN FALL OFF AND BE SERIOUSLY INJURED OR KILLED

- **Only one person in each seat. Two people only one Driver and one Passenger.**
- **No riders in the cargo box or anywhere other than seats.**
- **Always wear the seat belt when operating the utility vehicle equipped with a OPS. However, if the OPS is not present or has been removed, the seat belt must not be used.**



⚠ WARNING

- **This is an off-road utility vehicle. Do not operate on public highways. It handles and maneuvers differently than a normal passenger car. Sharp, high speed turns or abrupt maneuvers can cause vehicle to roll over or go out of control.**
- **Handling and maneuvering characteristics of vehicle change depending upon cargo load. Heavy loads will affect steering, braking, stability and overall handling of vehicle.**
- **Read and understand operator's manual before operating vehicle.**

FALLING OFF OR ROLLOVER MAY CAUSE SERIOUS INJURY OR DEATH

- **Only one person in each seat. Two people only one Driver and one Passenger.**
- **Always wear the seat belt when operating the utility vehicle equipped with a OPS. However, if the OPS is not present or has been removed, the seat belt must not be used.**
- **Keep hands and feet inside vehicle during operation.**
- **Do not operate on slopes greater than 15º.**
- **Drive slowly when turning, on rough ground, or carrying a cargo load.**
- **Spread load evenly in cargo box. Do not exceed load capacity specified on cargo box label.**
- **Secure load to prevent movement.**

⚠ WARNING

To Avoid An Accident And Injury

- **Do not tow more than 1400 Lb. rolling weight (i.e., trailer plus cargo).**
- **Spread load evenly. Never exceed 140 lb. tongue weight.**
- **Go slow and use extra care when towing. Allow for increased braking distance.**
- **Do not tow heavy loads on slopes over a 5° incline.**

⚠ WARNING

CARGO BOX LOAD CAPACITY: MAX 1000 Lb.

- Spread load evenly. Secure load to prevent movement.
- Go slow. Avoid sudden starts and stops which could cause load to shift.
- Do not load above height of this panel. Load could shift forward injuring driver or passenger.

- Avoid Injury From Explosion. Do Not Place Gas Container Inside Cargo Box When Fueling.

- No riders in cargo box or anywhere other than seats.

TO OPERATE BED LATCH

- PULL LEVER UP TO RELEASE LATCH.
- LIFT BED UP.
- ALWAYS CHECK TO SEE BED IS LATCHED BEFORE OPERATION OF VEHICLE.
- WHEN LOWERING BED KEEP FINGERS CLEAR OF LATCH AND BED.

⚠ WARNING

- Always re-latch cargo box latch upon manually lowering cargo box.
- Do not operate or load vehicle with cargo box latch unlatched.

AVOID INJURY WHEN USING CARGO BOX LIFT

- Read and understand operator's manual for lifting, loading and unloading instructions.
- Stop vehicle on level ground and set parking brake before operating lift.
- When using optional electric lift stay in seat and keep hands away from cargo box.

⚠ WARNING

Do not attempt to remove, modify or repair the Operator Protective Structure. If damaged replace it.

S35594

⚠ WARNING

DRIVER MUST BE AT LEAST 16 YEARS OLD.

Unless Driver Has Obtained A State-Issued Motor Vehicle License. Young Drivers May Not Be Able To Safely Control Vehicle Increasing The Chance Of Injury Or Death.

DO NOT OPERATE VEHICLE UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.

Units Equipped with an Aluminum Cargo Box

⚠ WARNING

CARGO BOX LOAD CAPACITY: MAX 1200 lb.

- Spread load evenly. Secure load to prevent movement.
- Go slow. Avoid sudden starts and stops which could cause load to shift.
- Do not load above height of this panel. Load could shift forward injuring driver or passenger.

NO RIDERS IN CARGO BOX or anywhere other than seats.

Avoid injury from explosion. DO NOT place gas container Inside cargo bed when fueling.

S35626

⚠ WARNING

DRIVER MUST BE AT LEAST 16 YEARS OLD

Unless driver has obtained a state-issued motor vehicle license. Young drivers may not be able to safely control vehicle increasing the chance of injury or death.

DO NOT OPERATE VEHICLE UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.

Operating Weight: 1,600 lb Gross Vehicle Weight (GVW): 3,000 lb
GVW (3,000 lb) minus Operating Weight (1,600 lb) = Load Capacity (1,400 lb)
Load Capacity includes occupants, cargo loads, accessories and attachments.
Cargo Box Capacity = Max. 1,000 lb

DO NOT EXCEED GVW, LOAD CAPACITY AND CARGO BOX CAPACITY RATINGS.

WARNING: Your Responsibility—Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.

SAVE THESE INSTRUCTIONS!

Controls & Features

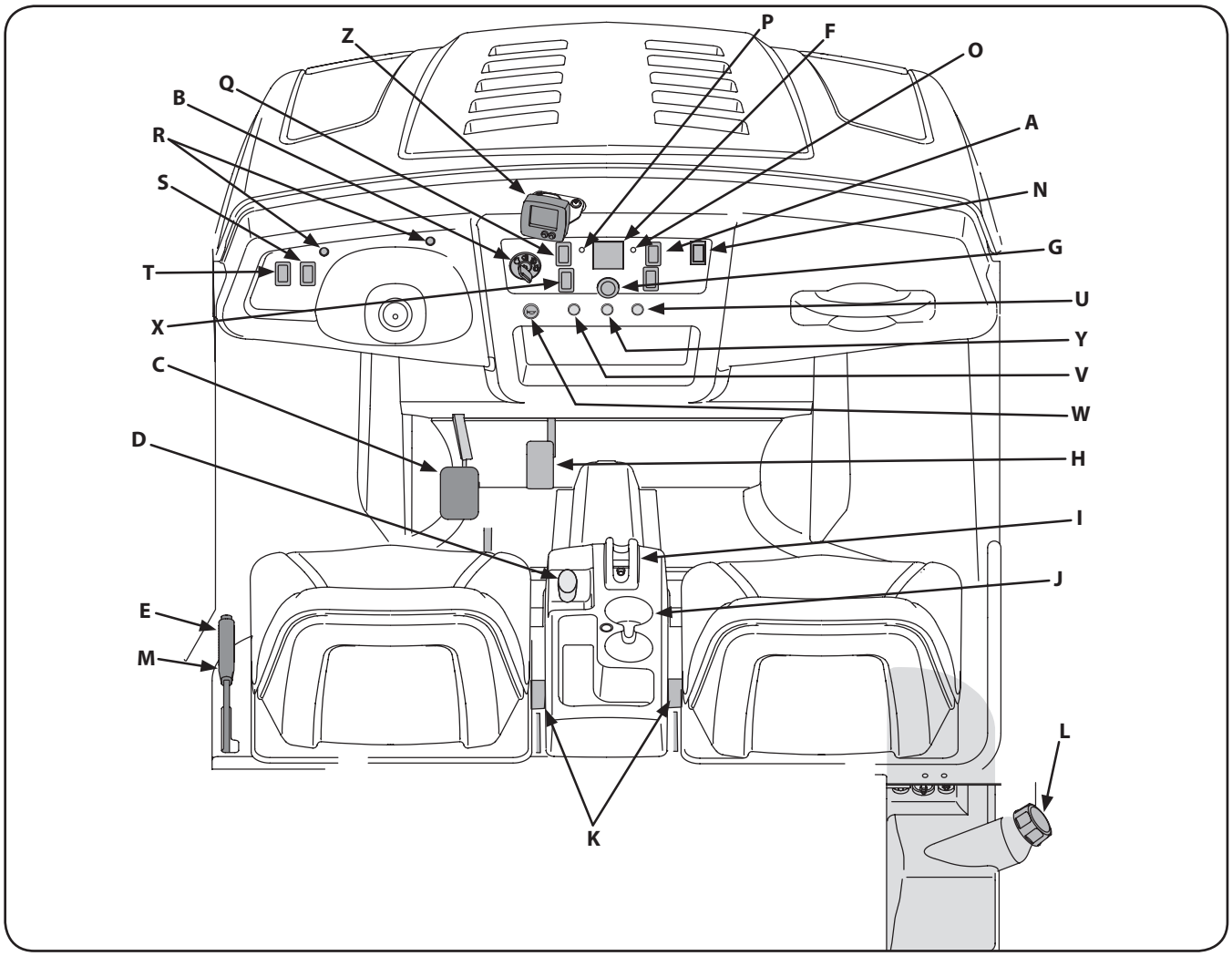


Figure 3-1

A	4x4 Switch (All 4x4 Models Only)	O	Engine Over-Temp Light (Liquid Cooled Models Only)
B	Ignition Switch	P	Check Engine Light (EFI Models Only)
C	Brake Pedal		Glow Plug Light (Diesel Models Only)
D	Differential Lock Lever	Q	Master Light Switch (If Equipped)
E	Parking Brake Lever	R	Turn Signal Indicators (If Equipped)
F	Warning Light Cluster	S	Hazard Switch (If Equipped)
G	12V Power Outlet	T	Turn Signal Switch (If equipped)
H	Accelerator Pedal	U	EPS Indicator Light (If Equipped)
I	Shift Lever	V	Utility Vehicle Lighting Indicator (If Equipped)
J	Cup Holders (If Equipped)	W	Horn (If Equipped)
K	Seat Belt Latches	X	Cargo Box Electric Lift Switch (If Equipped)
L	Fuel Tank	Y	Trailer Light Indicator (If Equipped)
M	Choke Knob (Air-Cooled, Gas Models Only)	Z	Gauge Accessory (If Equipped)
N	Seat Belt Warning Indicator		

Read the Operator's Manual, safety symbols, and operating instructions on the Utility Vehicle (UV) before operating. Compare the illustrations in this manual with your UV to familiarize yourself with the location of various controls and adjustments. Reference to the *right* or *left* hand side of UV is observed from the operating position. Save this manual for future reference.

IMPORTANT: Refer to the Engine Operator's Manual before operating this UV to familiarize yourself with the engine controls and adjustments.

Accelerator Pedal

The accelerator pedal is located on the right side of the floor beneath the dash panel. Depressing the accelerator pedal will move the UV in the direction selected on the gearshift. As the pedal is depressed, speed will increase to the maximum selected range. Releasing the pedal reduces the speed, but does not stop the UV. The brake must be applied to stop UV.

Brake Pedal

The brake pedal is located on the left side of the floor beneath the dash panel. Remove foot from accelerator pedal and apply pressure to the brake pedal evenly until UV slows down and stops.

Parking Brake Lever

The parking lever is located to the left of the driver's seat. It holds the brake in the engaged position for parking.

To engage the parking lever, pull up on the parking brake lever, and the parking brake light on the dash will come ON to indicate the parking brake is engaged.

To release parking brake, push down on brake pedal, depress button on top of parking brake lever, and move lever to OFF position.

NOTE: The engine will stall when the parking brake is engaged and the UV is not in NEUTRAL.

Choke Knob (Air-Cooled, Gas Models Only)

The choke knob is located to the left of the driver's seat. The choke is used when starting a cold engine. It enriches the fuel mixture for cold weather starting.

Shift Lever

The shift lever is located in the center console between the seats. The 4x4 model has four positions: FORWARD, LOW, NEUTRAL, and REVERSE. The 4x2 model has three positions: FORWARD, NEUTRAL, and REVERSE. The brake pedal must be depressed and the UV must not be in motion when moving the shift lever.

NOTE: To shift into LOW, move the shift lever from NEUTRAL towards the passenger seat and then forward.

IMPORTANT: Never force the shift lever. Doing so may result in serious damage to the UV's transmission.

Differential Lock Lever

The differential lock lever is located in the center console between the seats. When engaged, the differential lever locks the rear differential so both rear wheels will pull equally.

Check Engine Light (EFI Models Only)

The check engine light (green) is located on the dash panel on the left side of the warning light cluster. When lit, take UV to your Cub Cadet dealer for a diagnostic test.

Engine Over-Temp Light (Liquid Cooled Models Only)

The engine over-temp light (red) is located on the dash panel on the right side of the warning light cluster. When lit, this indicates that the engine is running too hot, and MUST be immediately shut OFF and allowed to cool.

Ignition Switch

WARNING: Never leave a running UV unattended. Always set parking brake, stop engine and remove key to prevent unintended starting.

The ignition switch is located to the right of the steering wheel on the left side of the dash panel. To start the engine, insert the key into the ignition switch and turn clockwise to the START position. Release the key into the RUN position once engine has fired.

Refer to Starting Engine on page 13 for detailed starting instructions.

Warning Light Cluster

The warning light cluster is located in the middle of the dash panel. There are four warning lights: battery light, parking brake light, engine oil pressure light, and low fuel light. See Figure 3-2.

The engine oil pressure light activates when engine has low oil pressure. The battery light will indicate that the battery is low on power. The low fuel light activates when fuel is low in the tank. The parking light indicates that the parking brake is engaged.

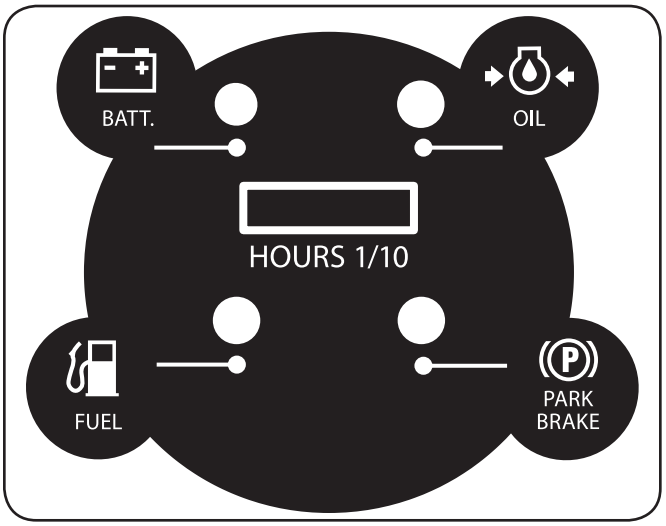


Figure 3-2

Hour Meter

The hour meter is located in the center of the warning light cluster. It reads the elapsed time when key is in the Run or Accessory position. See Figure 3-2.

NOTE: Every 50 hours a "change oil" message will flash on the display for two minutes every time the UV is started. This message will repeat for the first two minutes after each 50 hour interval. The oil pressure indicator light will also flash when this display is active. Before the interval expires, change the crankcase oil as instructed in the Engine Operator's Manual.

4x4 Switch (All 4x4 Models Only)

The 4x4 switch is located on the right side of the dash panel. Push in top/bottom of switch to activate or deactivate 4x4 capability.

12V Power Outlet

The 12V power outlet is located in the center of the dash panel. It is used for the convenience of plugging in accessories that require a power source with a maximum load of 5A at 12V.

Cup Holders (If Equipped)

The cup holders are located between the seats. They are designed for the use of non-alcoholic beverages.

WARNING: Never operate this UV while under the influence of alcohol or drugs. Doing so can result in serious personal injury or death.

Seats

The driver seat has a tool box underneath it, which can be easily accessed by lifting the seat. This box may be removed by turning the two 1/4-turn fasteners securing it to the frame for easy access to battery, etc.

Seat Adjustment

The seats can be adjusted by removing the bolts securing them to the seat pan. Move the seat to the desired holes in the seat pan, and reattach the seat using the bolts removed earlier. See Figure 3-3.

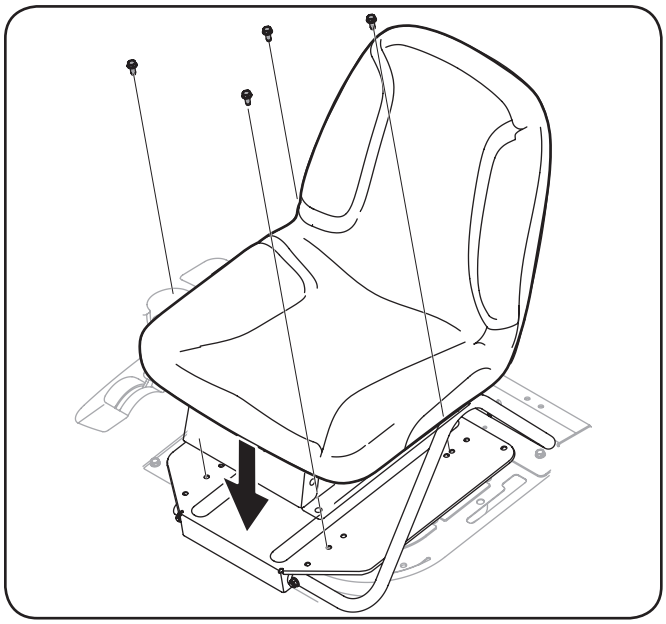


Figure 3-3

Seat Belts

The seat belts are located on the outside of the driver and passenger seats. When used together with the OPS (Rollover Protective Structure) they are effective in reducing injuries to the operator and passenger in the event of an accidental rollover.

Seat belt latches are located on the inside of the driver and passenger seats.

WARNING: Always wear the seat belt when operating the UV.

The position of the lap belt portion of the seat belt should be adjusted for both the operator and the passenger before driving. Although having the belt at 30º is typical for many people, it will not accommodate all body sizes and shapes. Make sure the seat belt is adjusted to the lowest possible lap position before driving.

To adjust the position of the seat belts:

1. Loosen the seat belt mounting bolts.
2. Reposition both the buckle and retractor.
3. Tighten the mounting bolts.

Seat Belt Warning Indicator

The seat belt warning indicator will flash for 10 seconds once the key is turned to the ON position to remind the operator and passenger to fasten seat belt.

Cargo Box Electric Lift Switch (If Equipped)

The cargo box electric lift switch is located on the dash panel. It activates lift to raise and lower cargo box.

Auxiliary Light Switch (Limited Edition Only)

The auxiliary light switch is located on the left side of the dash panel. It turns power ON and OFF for the fog lights and light bar.

NOTE: If you are running the fog lights in addition to all the other lights included with the Limited Edition UV, i.e., headlights, light bar, more than 50% of the time, we recommend you purchase the Heavy Duty Alternator Kit to prevent excessive drain of the battery.

Rear Power Outlet Switch (If Equipped)

The rear power outlet switch is located on the left side of the dash panel. It turns power ON and OFF for the rear outlet.

Cargo Box

The cargo box is raised by a gas spring. Manually remove the contents of the cargo box before lifting the cargo box. Pull up on the release latch located behind the driver's seat and lift up the cargo box. Once the cargo box is in the raised position, access to the engine is possible. If equipped with a electrical lift, the cargo box can be raised to dump cargo.

IMPORTANT: Do not exceed the UV's Total Load Capacity of 1,400 lb, which includes driver, passenger, accessories, and cargo. Do not exceed 1000 lb in the cargo box.

Half Doors (If Equipped)

The doors are designed to assist in keeping the operator and passenger inside the UV during operation. Do not operate UV without doors in place.

To open the half doors on the UV, pull the handle outward to release the latch. To close, gently, but firmly, close door.

WARNING: Doors are not to be removed. The only exception is when installing a hard cab with hard doors.

Fuel Tank

The fuel tank is located behind the passenger seat on the right side of the UV and is equipped with a cap specifying the proper fuel type for the UV.

Master Light Switch (If Equipped)

The master light switch is used to switch the UV clearance lights ON and OFF when the ignition is switched ON.

Turn Signal Indicators (If Equipped)

The turn signal indicators will function when the turn signal switch is actuated and when the hazard switch is switched ON. There are indicators on the front of the unit and on the rear of the unit.

Hazard Switch (If Equipped)

The hazard switch turns the warning indicator ON and OFF.

Turn Signal Switch (If Equipped)

The turn signal switch controls the direction of the turn signal indicators. Flip the switch up to indicate you are turning left and flip the switch down to indicate you are turning right.

Tail Lights (If Equipped)

The tail lights will function when the master light switch is turned on. See Figure 3-4.

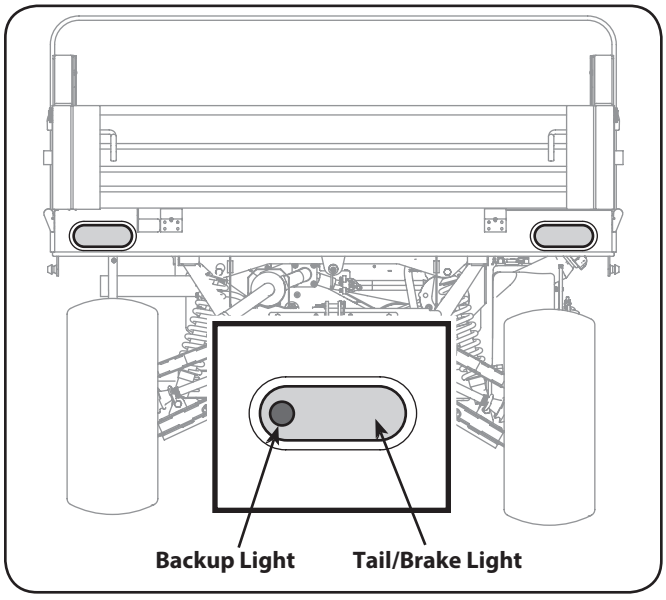


Figure 3-4

Backup Lights (If Equipped)

The backup light will function when the UV is shifted into reverse and the backup buzzer will be activated. See Figure 3-4.

Brake Lights (If Equipped)

The brake lights will function when the brake pedal is applied. See Figure 3-4.

EPS Indicator Light (If Equipped)

The EPS indicator light illuminates briefly when the key is turned to the ON position. If the light remains ON, the EPS system is inoperative. See your authorized Cub Cadet Dealer for service.

Electronic Power Steering (EPS) engages when the ignition key is turned to the ON position. EPS remains engaged whether the UV is moving or idle. To conserve battery power, the EPS will shut down five minutes after the engine is stopped if the key remains in the ON position. The EPS warning indicator will illuminate to indicate the EPS has shut down. Turn the key OFF and ON to reset the UV.

Utility Vehicle Lighting Indicator (If Equipped)

The UV lighting indicator is lit when the ignition is switched ON. When the UV is running the clearance lights are ON.

Horn (If Equipped)

Press horn to generate an acoustic warning signal.

Trailer Light Indicator (If Equipped)

The trailer light indicator is lit when there is a defective bulb in the trailer lighting.

Gauge Accessory (If Equipped)

The gauge accessory displays the speed of the vehicle, the level of fuel in the fuel tank, odometer and tripometer.

The fuel symbol display range is 16 levels. The fuel reserve symbol begins to flash if only three grids are left. The Speedometer display range is 0-360 km/hr or 0-223 mph. Display unit km/hr or mph. Hold down the set button and then press the mode button one time to switch between km/hr and mph. The odometer display range is 0-99999 km (mile), reset after 99999 km (mile). Display unit 1 km (mile). The tripometer display range is 0-999.9 km (mile), reset after 999.9 km (mile). Display unit 0.1 km (mile). Hold down the set button to reset the trip.

IMPORTANT: If you change the size of your tires, then you will need to reacalibrate the speedometer. See Recalibrating the Speedometer on page 22.

Cab Enclosure (If Equipped)

For features and operation, see seperate Cab Manual.

Operation

4

Filling Fuel Tank

1. Stop UV on a level surface and apply parking brake.
2. Turn the ignition key to the STOP position and remove the key.
3. Allow engine to cool several minutes before you add fuel.
4. Clean area around fuel cap and remove cap.
5. Fill tank with fresh, unleaded, regular grade fuel only to bottom of filler neck. Use a minimum of 87 octane.
6. After refueling, make sure that the fuel cap is closed securely. The fuel cap should click three times when tightening to confirm proper closure.

Starting Engine

WARNING: This is an off-road UV and it should not be operated on public highways. Know and comply with all laws and regulations governing the use of off-highway vehicles in your area.

IMPORTANT: Before starting the engine, read this manual and the Engine Operator's Manual thoroughly to understand all instructions.

WARNING: Do not run an engine in an enclosed area. Move the UV to an outside area before running the engine.

IMPORTANT: Tires are shipped over-inflated. Reduce inflation pressure in all tires to approximately 14-18 psi.

1. Sit in the operator's seat and position key switch in STOP position.
2. Put into NEUTRAL.
3. Lock parking brake.

   NOTE: Engine will stop when the parking brake is engaged and the UV is not in NEUTRAL.
4. On air-cooled, gas powered UV, pull out the choke knob if engine is cold.

   On diesel UVs only, turn the ignition key clockwise to the "RUN-PREHEAT" position, and observe the glow plug indicator light on the instrument panel. Wait until the glow plug indicator light turns OFF before cranking the engine.

   NOTE: Preheating may not be necessary if the engine has been running and is warm.
5. Turn key to the START position.
6. Release key to the RUN position when engine starts.
7. If engine does not start, wait a few seconds and repeat steps 5-6.
8. After engine starts, push in choke knob.
9. Release parking brake.

   IMPORTANT: DO NOT run the starter continuously for more than five seconds, otherwise the battery may discharge quickly.

   NOTE: On air-cooled, gas powered models, if the engine surges after starting while idling or driving at a low speed, apply choke as needed until the engine has warmed up.

   IMPORTANT: Do not operate the engine under full load until the engine has warmed up.

Stopping Engine

1. To stop UV, release accelerator pedal and depress brake pedal until UV comes to a complete stop.
2. Move shifter into NEUTRAL.
3. Set parking brake and turn key switch to STOP position.
4. Remove the key when not in use.

WARNING: The UV will roll if the parking brake is not engaged and locked.

Safety Interlock System

To verify the operation of the shift interlock:

1. Set the parking brake.
2. Place the shift lever into NEUTRAL position and start the engine.
3. Keep your foot on the brake pedal during this process.
4. Move the shift lever to the FORWARD position; the engine should shut OFF.
5. Repeat steps 1-3, with the shift lever in REVERSE. The engine should shut OFF.

Driving Utility Vehicle

1. Adjust the operator's seat *(bucket seat models only)* to the most comfortable position that allows you to operate all controls and pedals. See Seat Adjustment on page 11.
2. Adjust the seat belt to fit snugly but comfortably around your lap, then buckle the seat belt. See Seat Belts on page 11.

WARNING: DO NOT operate the UV without the OPS and seatbelt.

3. Make sure front wheels are turned to the desired direction.
4. Pull up the parking brake lever to release parking brake.
5. Move the shift lever in the center console to the desired setting. To avoid damaging transmission, depress brake pedal fully and make sure UV is completely stopped before shifting into FORWARD, LOW, or REVERSE.

   NOTE: Use the FORWARD range when travelling on level and stable surfaces. Use the LOW FORWARD range when climbing or descending slopes or on unstable surfaces.

WARNING: Do not stop or start suddenly when going uphill or downhill. Be cautious when changing direction on slopes. Apply brakes when going down slopes to maintain control of UV.

6. Release brake pedal and apply pressure to the accelerator pedal.
7. Release accelerator and apply brake pedal evenly and firmly to slow down or stop.

Engaging 4x4 (If Equipped)

The 4x4 switch is located on the right side of the dash panel. See 4x4 Switch *(4x4 Models Only)* on page 11.

1. To engage; stop or slow vehicle speed, push up on the switch. All four wheels will now continue to have power.

   IMPORTANT: Engage the 4x4 feature as the first option when stuck in mud or similar situation where two wheel drive is ineffective at moving UV.
2. If still unable to move UV with the 4x4 engaged, disengage 4x4 by pushing down on the switch and engaging the differential lock as described below.

Engaging Differential Lock

The differential lock lever is located in the center console between the seats *(bucket seat models Only)*. See Controls and Features on page 9.

1. To engage; stop UV, place into NEUTRAL, and pull the lever rearward. The differential will then lock and remain so until it is disengaged, giving continuous power to both rear wheels.

IMPORTANT: Engage the differential as the last option when stuck in mud or similar situation or when the left and right side wheels are turning at slightly different speeds.

WARNING: To avoid transmission damage, injury, or turf damage, drive slow when operating UV with differential lock engaged as steering response is noticeably reduced. Also, do not drive the UV with the differential lock engaged on concrete, asphalt or any high traction surfaces.

Disengaging Differential Lock

1. To disengage the differential lock; stop the UV, place in NEUTRAL, and push the lever forward.

Raising & Lowering Cargo Box

WARNING: To prevent the possibility of bodily injury from unintentional lowering of the cargo box, be sure UV is on a level and stable surface and parking brake is locked before raising cargo box.

Manual Lift

1. Park the UV safely on level ground and set parking brake.
2. Empty cargo by hand and unlatch cargo box by pulling up on the cargo latch.
3. While holding the latch up, lift the cargo box.
4. Lower and allow cargo box to re-latch before operating UV.

Electric Lift (Optional)

1. Park the UV safely and turn key to the RUN position.
2. Raise cargo box by pressing and holding top of electric lift switch. Release switch when box is at desired dump height or when maximum height is reached.

   NOTE: A ratcheting noise will indicate cargo box is at full extension. The same noise will also be heard when cargo box is at the full down position. If lift capacity of the power lift is exceeded, a ratcheting will also be heard.
3. To lower cargo box, push on bottom of electric lift switch. Turn ignition switch to the STOP position.

Dumping Load from Cargo Box

1. Back up the UV to the dump site and apply parking brake.
2. Unlatch the tailgate from the steel cargo box. See Figure 4-1.

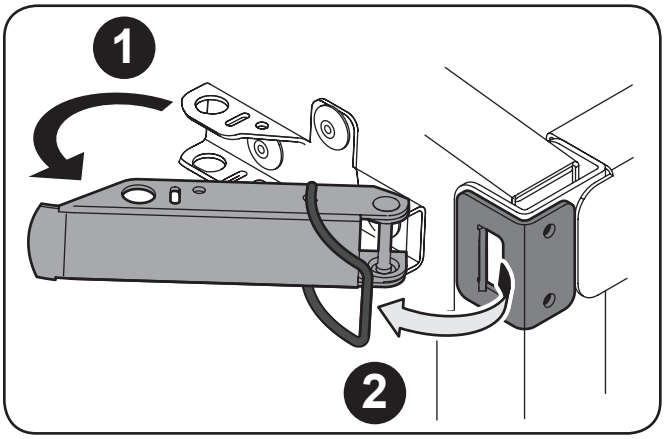


Figure 4-1

3. If equipped with an aluminum cargo box, unlatch the tailgate from the cargo box. See Figure 4-2.

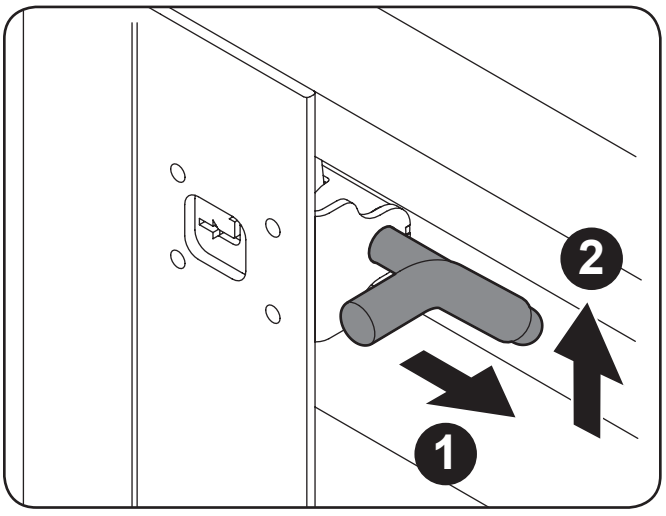


Figure 4-2

4. If using an electric lift, raise cargo box to dump load and lower box when empty.

WARNING: The center of gravity changes as a loaded cargo box is raised. Do not allow rear wheel to hang over the edge of a loading dock or ravine. The cargo box weight may shift over center and UV could tip over backwards.

WARNING: A loaded cargo box can be very heavy. Do not attempt to dump a loaded cargo box unless UV is equipped with an electric lift option.

IMPORTANT: If dumping by electric lift, stop immediately if actuator clutch slippage occurs. Lower cargo box completely and remove excess load by hand before dumping.

4. Relatch the tailgate to the cargo box. Do not drive the UV with cargo box in the raised position.

Flat Bed Operation

(If Equipped with Aluminum Cargo Box)

Fold Down Option

1. Remove latches from the tailgate and sides. See Figure 4-2.
2. Secure the tailgate and sides in the down position with pin and socket. See Figure 4-3.

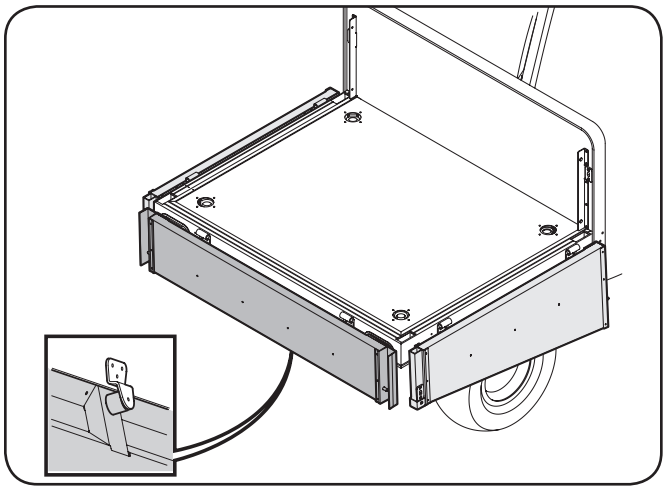


Figure 4-3

Removal Option

1. Remove wing knob, bolt and retaining bracket from the sides and the tailgate. See Figure 4-4.

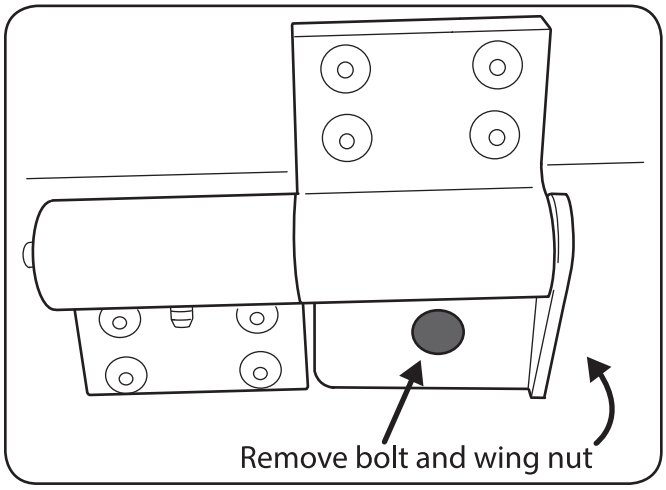


Figure 4-4

2. Remove latches from the tailgate and sides. See Figure 4-2.
3. Slide the tailgate and sides out of the hinges.
4. Reverse order to reattach.

Loading the Cargo Box

WARNING: The UV may become unstable if the cargo box is loaded incorrectly. Avoid loose and shifting loads or uneven loading of material.

1. Verify cargo box is latched before loading.
2. Securely anchor all loads in cargo box and do not load beyond maximum capacity.
3. The maximum box capacity is 1,000 lb (452 kg) for steel cargo box or 1,200 lb (544 kg) for aluminum cargo box.
4. When loading objects into UV, be sure load is securely anchored and evenly distributed in cargo box.
5. Do not load above height of cargo box front panel. Load could shift forward striking driver or passenger or cause driver to lose control of UV.
6. Avoid loads which exceed physical dimensions of cargo box.
7. Avoid concentrated loads at rear or side of cargo box. Be sure load is distributed evenly.
8. Reduce load and ground speed when operating over rough or hilly terrain. DO NOT overload UV. Limit loads to those that can be safely controlled.

Towing Loads

WARNING: To help prevent personal injury due to loss of control or tipping, always tow a load slow enough to maintain control.

1. Do not tow a load that exceeds 1,400 lb (635 kg) rolling weight (i.e. trailer plus cargo) and never exceed 140 lb (63.5 kg) tongue weight.
2. Go slow when towing a heavy load. Allow for increased braking distance. Tow load at a speed slow enough to maintain control.
3. Do not tow on slopes greater than 5°.
4. Be particularly cautious when towing or turning, even down a gradual slope. The extra weight tends to push the tow vehicle and may cause you to lose control (braking and steering ability are reduced; towed equipment may jack-knife).

   IMPORTANT: Extreme angles such as high railroad crossings can place high bending loads on hitch connection. If traversing terrain where these conditions exist, use of a ball or pintle type hitch is recommended.
5. Always use approved hitch and hitch point provided for the UV. Do not modify the hitch in any way.

Engine

Air Filter (Air-Cooled, Gas Powered Units Only)

The engine air filter should be changed every 50 hours. Change more frequently if operated in extremely dusty conditions.

1. The air filter is located on top of the engine. To access, simply remove wing nut securing plastic cover, remove wing nut securing filter, inspect and replace if excessively dirty or damaged. See your Engine Operator's Manual for more detailed instructions.
2. Reattach cover and secure with latch.

See the Engine Operator's Manual for any other service or maintenance information pertaining to the engine.

Air Filter (EFI & Diesel Powered Units Only)

The engine air filter should be changed every 50 hours. Change more frequently if operated in extremely dusty conditions.

3. Pull up on latch and turn counter-clockwise to release air cleaner cover. See Figure 5-1.

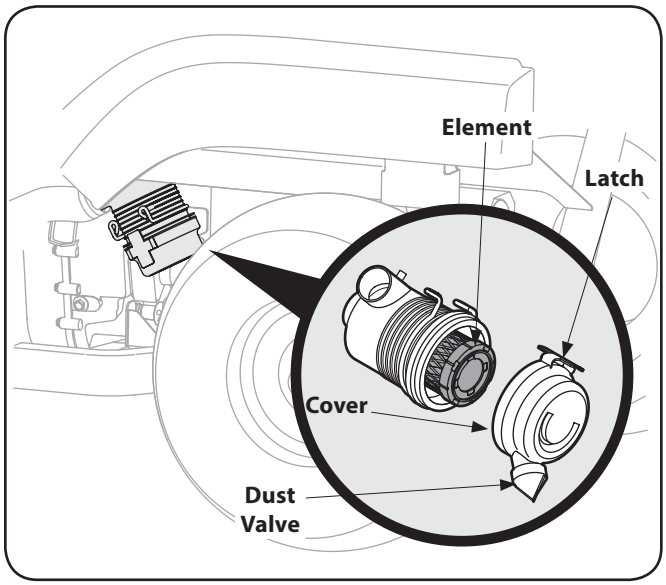


Figure 5-1

4. Remove cover. Remove and inspect air cleaner element. If excessively dirty or damaged, replace element.
5. Reattach cover and secure with latch.

   IMPORTANT: When reattaching cover, make certain that dust valve is pointing downward. See Figure 5-1 inset.

See the Engine Operator's Manual for any service or maintenance information pertaining to the engine.

Engine Coolant

Checking Engine Coolant Level (EFI & Diesel Powered Units Only)

Before each use, the engine coolant level in the overflow reservoir should be checked to ensure it is within the operating range. Engine coolant absorbs heat from the engine and transfers the heat to the air flowing through the radiator. If the coolant level becomes low, the engine may overheat and could cause severe damage to the engine.

Use a permanent type antifreeze containing corrosion and rust inhibitors. Dilute the antifreeze with water at a 1:1 ratio to mix the coolant solution (50% antifreeze : 50% water).

NOTE: Distilled water is recommended for the coolant solution IF your tap water has a high mineral content. Minerals cause scaling in the engine and the radiator coolant passages. System efficiency will be greatly reduced over time and severe engine damage may result. Refer to the antifreeze manufacturer's instructions for additional information on dilution procedures.

1. Check the coolant level when the engine is cold and the UV is on a level surface.
2. Raise the hood and check the coolant level in the overflow reservoir on the right side of the radiator.
3. If the coolant level is below the "LOW" mark, remove the cap from the reservoir and add coolant solution to the "FULL" mark. Refer to Figure 5-2.

NOTE: The cooling system is a closed type. Normally, to prevent air from entering the system, the radiator cap should not be removed.

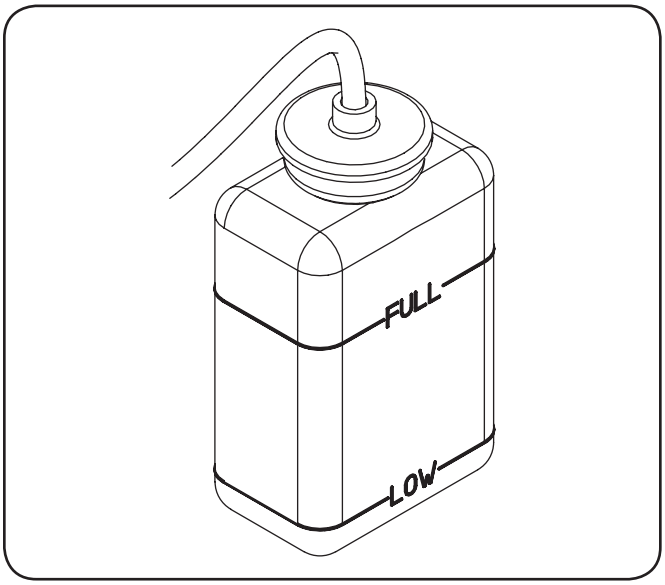


Figure 5-2

If the overflow reservoir is empty, the radiator cap should be removed and the coolant level in the radiator checked before adding coolant to the reservoir. If necessary, first refill the system through the radiator filler neck as follows:

WARNING: It is dangerous to remove the radiator cap when the system is hot. Allow the system to cool before removing the radiator cap.

1. Turn the radiator cap counter-clockwise to the first stop to release any pressure.
2. Push downward on the cap and turn counter-clockwise until the cap stops then lift cap OFF.
3. Slowly pour coolant into the filler neck until the level reaches the bottom of the filler neck overflow flange.
4. Wait a few minutes to allow as much air as possible to escape through the filler neck, then reinstall the radiator cap.
5. Fill the overflow reservoir to the "FULL" mark.
6. Start the engine and allow it to run for a short period. Stop the engine.
7. Recheck the coolant level in the overflow reservoir and refill as needed. Reinstall the reservoir cap.
8. If engine over-temp light comes ON or stays ON after filling radiator and reservoir, see your Cub Cadet service dealer to bleed air from system.

Changing the Engine Coolant (EFI & Diesel Powered Models Only)

The engine coolant should be drained and replaced with new coolant solution every two years or 500 hours. See your Cub Cadet service dealer to have the engine coolant changed.

Cooling System Hoses (EFI & Diesel Powered Models Only)

Check the cooling system hoses and water pump belt for any cracks or deterioration after every 100 hours of operation. Check for loose hose connections. Replace any damaged hoses and tighten any loose connections. Replace a worn or damaged water pump belt.

Servicing the Fuel Filter (Diesel Models Only)

WARNING: Do not service the fuel filter when tractor is hot or near any source of ignition. Allow the tractor to cool.

The UV is equipped with an in-line fuel filter and water separator located on the right side of the UV underneath the passenger seat.

WARNING: Diesel fuel is a toxic substance. Dispose of in an environmentally safe manner. Contact your area EPA office for proper disposal methods and recycling center locations.

Draining the Fuel Filter

The fuel filter is equipped with a valve to drain condensate (water) that has separated from the diesel fuel and settled at the bottom of the filter.

Drain the condensate from the fuel filter before each use. You can access the fuel filter beneath the passenger seat. Refer to Figure 5-3.

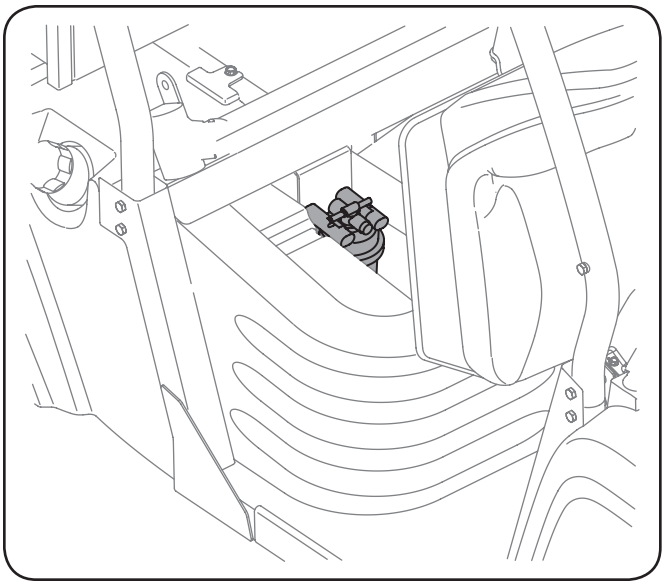


Figure 5-3

1. Stop the engine and raise the passenger seat by removing the wing nut securing it to the frame.
2. Place a suitable container beneath the filter drain valve.
3. Turn the filter drain counter-clockwise to open. Allow the water at the bottom of the filter to drain until only pure diesel fuel drains from the valve. See Figure 5-4.

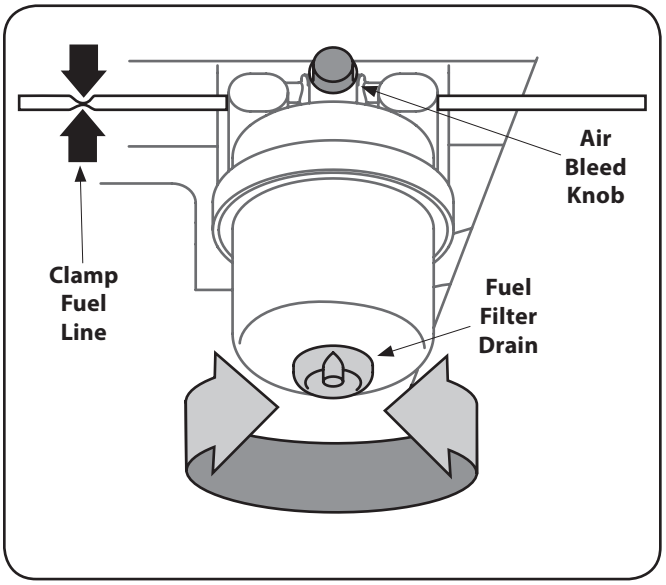


Figure 5-4

4. Turn the filter drain clockwise to close.
5. Slowly turn the air bleed knob counter-clockwise until fuel begins to seeps out around the bleed knob. Turn air bleed knob clockwise to close. Refer to Figure 5-4.

Changing the Fuel Filter

Replace the fuel filter cartridge after every 500 hours of operation.

NOTE: There is no shut off valve in the fuel system. To stop the flow of fuel while replacing the filter, it will be necessary to carefully clamp the fuel line between the fuel tank and the filter.

1. Place a suitable container beneath the filter drain.
2. Clamp the fuel line just to the rear of the fuel filter. See Figure 5-4.
3. Open the filter drain and drain the filter into the container below. Close the filter drain.
4. Turn the filter approximately 1/4-turn counter-clockwise (as viewed from bottom) to align the unlock icons.
5. Pull the filter cartridge straight downward to remove from the filter body.
6. Align the unlock icons of the new filter cartridge and filter body, and push the new filter cartridge fully up into the filter body.
7. Turn the new filter cartridge approximately 1/4-turn clockwise to lock.

   NOTE: The lock icons on the body and cartridge should be aligned or nearly aligned.
8. Remove the clamp from the fuel line. The filter should begin to fill with diesel fuel.
9. Slowly turn the air bleed knob counter-clockwise until fuel begins to seep out around the bleed knob. Turn the air bleed knob clockwise to close.
10. Remove the catch container and properly dispose of the diesel fuel.
11. Start and run the UV's engine for a short period to fully bleed any residual air from the filter, fuel lines, and injection pump.

Engine Breather Service (Diesel Models Only)

The engine breather should be changed after every 2000 hours of engine operation. Contact your Cub Cadet dealer.

Fuel Injector Nozzle Service (Diesel Models Only)

The fuel injector nozzles should be checked and serviced after every 2000 hours of engine operation. Contact your Cub dealer.

Transfer Case Oil (All Models)

WARNING: The fluid for your transmission has been specially formulated to ensure the safe and proper operation of your UV. When changing the transmission fluid replace it with Shell Spirax 80W-90 GL5 (Part No. 737-04158). Failure to use Shell Spirax 80W-90 GL5 oil may result in a failure of the drive system which could result in property damage or personal injury. DO NOT substitute.

Check the transfer case oil every 100 hours or yearly and change it at the first 50 hours and then again at 500 hours.

1. Park UV on level surface, place shift lever in NEUTRAL, and apply parking brake.
2. Allow transmission sufficient time to cool before attempting any maintenance or repairs.
3. Raise and secure cargo box, if manual lift.
4. Access drain plug through slot on underside of UV and remove plug. See Figure 5-5.

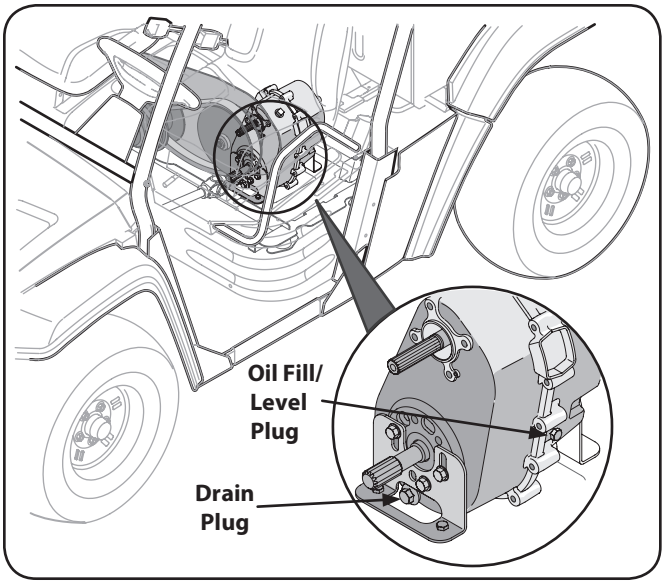


Figure 5-5

5. Allow oil to drain into a suitable container.
6. Check o-ring on drain plug and replace if missing or in poor condition.
7. Add approximately 64 oz of Shell Spirax 80W-90 GL5 oil (Part No. 737-04158) through the oil fill/level plug port. When oil begins coming out of opening, the transmission is full.
8. Install and tighten oil fill/level plug.
9. Lower and latch cargo box.

Differential Case Oil (Rear)

WARNING: The fluid for the differential has been specially formulated to ensure the safe and proper operation of your UV. When changing the differential oil replace it with Shell Spirax 80W-90 GL5 (Part No. 737-04158). Failure to use Shell Spirax 80W-90 GL5 may result in a failure of the drive system which could result in property damage or personal injury. DO NOT substitute.

Check the differential case oil every 100 hours or yearly and change it at the first 50 hours and then again at 500 hours.

1. Park UV on level surface, place shift lever in NEUTRAL, and apply parking brake.
2. Allow the UV sufficient time to cool before attempting any maintenance or repairs.
3. Locate the differential below the cargo box in the rear of the UV.

4. Locate the oil fill/level plug. See Figure 5-6. Remove the plug and oil should begin to seep out. If no oil seeps out, slowly add oil through the oil fill/level port until oil begins to seep through the oil fill/level plug port.

   Note: This UV also has an oil fill/level plug on the front side of the differential as well. Use this plug when checking the differential oil on UVs with an electric bedlift.

5. Install and tighten the oil fill/level plug.

Changing the Differential Case Oil

1. Locate the drain plug on the bottom, front side of the differential, through a cut-out in the skid plate. Remove the drain plug. See Figure 5-6.
2. Allow oil to drain into a suitable container.
3. Check o-ring on drain plug and replace if missing or in poor condition. Reinstall the drain plug and tighten.
4. Add approximately 22 oz dry (dry – a fluid change may require less). Or refill to bottom of either front or rear level check plug. Use Shell Spirax 80W-90 GL5 (Part No. 737-04158) oil through the oil fill/level plug port. When oil begins coming out of one of the two oil fill/level plug ports, the differential is full.
5. Install and tighten the oio fill/level plug(s).

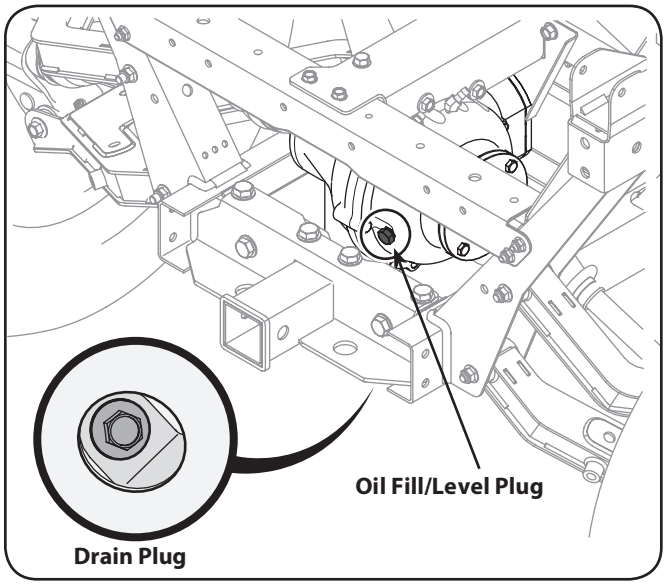


Figure 5-6

CFD (Centralized Front Drive)

Change the oil in front CFD (centralized front drive) every 100 hours. Use only 10W Hy-tran or 10W-40 hy-tran oil (6 oz) Cub Cadet (Part No. 737-3120).

Changing the CFD Oil

1. Remove the oil drain plug located on the bottom of the gearcase using a 5/16" hex key wrench.
2. Let all of the oil drain out of the UV. Catch and discard the oil properly.
3. Be sure to clean off any debris on the drain plug and reinstall. Torque the oil drain plug to 10 ft-lb.
4. Remove the oil fill plug using a 5/16" hex key wrench.
5. Add 180 ml (6 oz) of 10W Hy-tran or 10W-40 hy-tran oil (6 oz) (Part No. 737-3120).

   Note: Do not use any other type of oil in this system or the four wheel drive will not operate properly!)

6. Reassemble the oil fill plug into the gearcase and torque to 10 ft/lb.

Battery

WARNING: The battery produces a flammable and explosive gas. Do not smoke near battery. Wear eye protection and gloves when handling the battery. Do not allow direct metal contact across battery posts. The battery is sealed and is maintenance free. Acid levels cannot be checked and fluid can not be added.

WARNING: California Proposition 65 Warning: Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

IMPORTANT: If removing the battery for any reason, disconnect the NEGATIVE (Black) wire from it's terminal first, followed by the POSITIVE (Red) wire. When re-installing the battery, always connect the POSITIVE (Red) wire to its terminal first, followed by the NEGATIVE (Black) wire. Be certain that the wires are connected to the correct terminals; reversing them could change the polarity and cause damage to your engine's alternating system.

Cleaning Battery and Terminals

1. Remove battery from UV. Always remove negative cable first when disconnecting.
2. Wash battery with solution of four tablespoons of baking soda to one gallon of water.
3. Rinse the battery with plain water and dry.
4. Clean terminals and battery cable ends with wire brush until bright.
5. Apply petroleum jelly or silicone spray to terminals to prevent corrosion.
6. Install battery. Always install negative cable last when connecting.

Jumping Battery

WARNING: Do not attempt to jump start a frozen battery. Warm to 60°F (16°C). Do not smoke near battery and wear eye protection and gloves when handling battery.

WARNING: ON EFI UNITS ONLY, do not attempt to jump start the battery. Engine damage will occur to the fuel injection computer.

1. Connect positive (+) jumper cable to booster battery positive (+) post (A). See Figure 5-7.

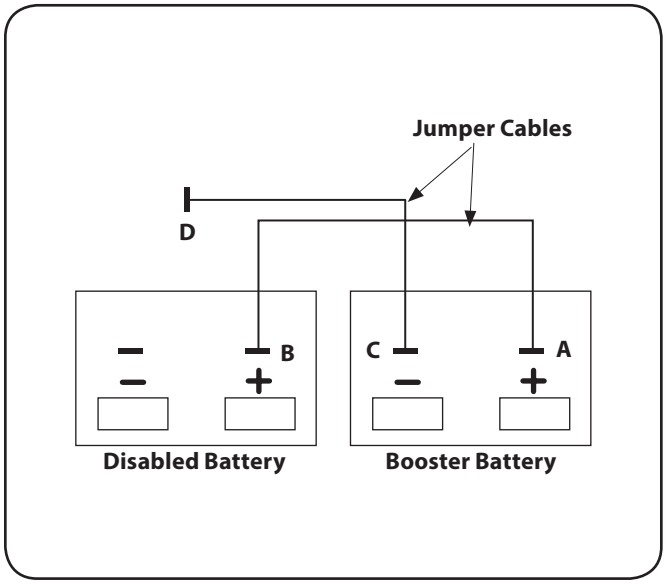


Figure 5-7

2. Connect the other end of positive (+) jumper cable to the disabled UV battery positive (+) post (B).
3. Connect negative (-) jumper cable to booster battery negative (-) post (C).
4. Connect the other end (D) of negative (-) jumper cable to a metal part of the disabled UV frame away from battery.
5. Start the engine of the disabled UV and run engine for several minutes.
6. Carefully disconnect the jumper cables in the exact reverse order: negative (-) cable first and then the positive (+) cable.

IMPORTANT: Alternator will not charge unless battery has minimum of 11V. UV will not run if battery is below 11V.

Charging Battery

WARNING: Charge battery in a well ventilated area and keep away from an open flame or pilot light as on a water heater, space heater, furnace, clothes dryer or other gas appliances.

If the UV has not been put into use for an extended period of time, charge the battery with an automotive type 12V charger for a minimum of one hour at 6A.

Tire Pressure

WARNING: Explosive separation of tire and rim parts is possible when they are serviced incorrectly. Do not stand in front or over tire assembly when inflating.

The recommended operating tire pressure is approximately 14-18 psi for all tires. Overinflating above recommended tire pressure can reduce the life of the tire. Check tire pressure before driving the UV.

Operator Protective Structure (OPS)

Periodically (at least every six months), visually inspect the OPS and seat belts. It is important that these features be inspected for damage and proper function before each use, or daily. Contact your Cub Cadet dealer and replace the belt assembly if any damage is found.

If an accident has occurred which may have damaged the OPS, have the OPS thoroughly inspected by your Cub Cadet dealer.

WARNING: To ensure the structural integrity of the OPS to provide operator protection, do not attempt to straighten or weld the OPS. A damaged OPS should be replaced.

If the OPS is removed for any reason, make sure the proper hardware is used to reinstall it, and that the recommended torque values are applied to the fasteners.

If you are not installing new bolts when replacing or reinstalling the OPS, apply Loctite ® 242 to the threads of the bolts that were removed. Torque the bolts to 50 to 55 ft-lb.

Front and Rear Shocks

Inspect the front and rear shocks every 100 hours or once a year for oil leakage. See Figure 5-8. If excessive oil leakage appears, have shocks repaired or replaced by your local Cub Cadet dealer.

CV Boots

Inspect CV boots (two on each CV axle, eight total) for tears every 50 hours. See Figure 5-8. If tears or excessive wear appear, have boots replaced by your local Cub Cadet dealer.

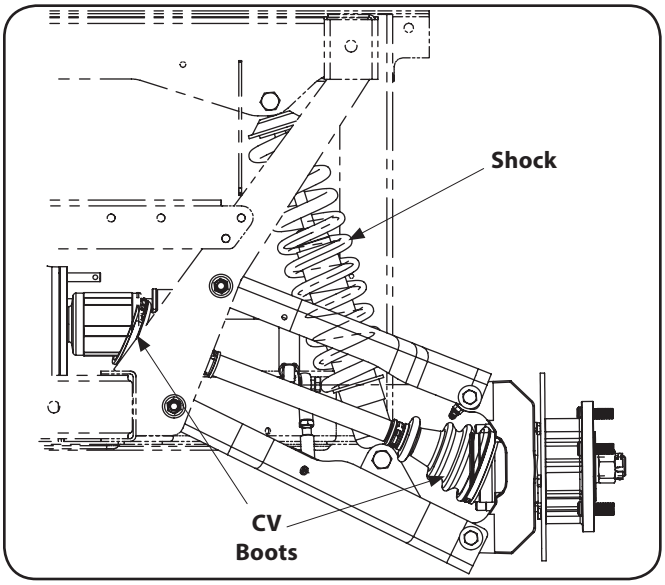


Figure 5-8

Ball Joints

Inspect the upper and lower front A-arm ball joints on each side of the UV and the two tie rod ends for wear every 100 hours or once a year. See Figure 5-9. If excessive wear appears, have ball joints or tie rod ends replaced by your local Cub Cadet dealer.

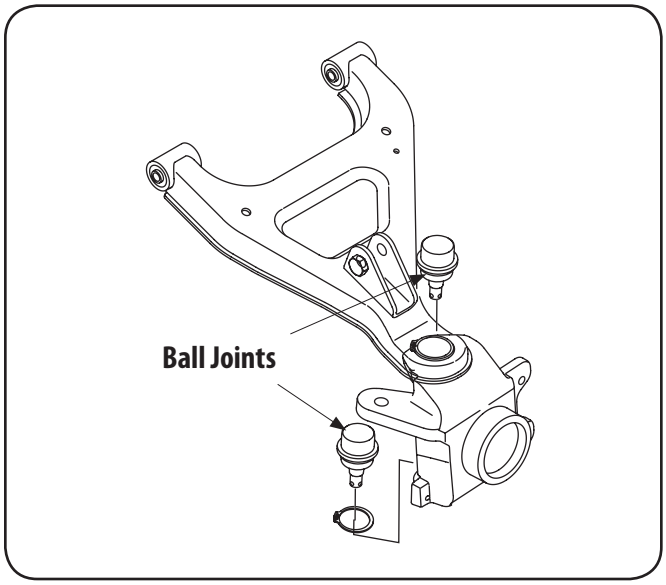


Figure 5-9

Rear Knuckles

Lubricate two grease fittings on each axle with two or three shots of grease every 50 hours or after each use if consistently running UV in water deeper than axle. See Figure 5-10.

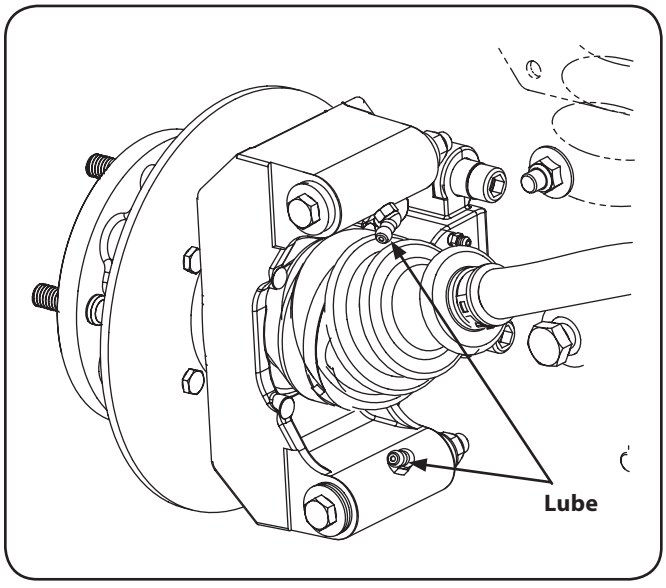


Figure 5-10

Draining CVT Cover

Drain CVT cover every 50 hours or after driving UV through more than 12" of water.

1. Remove CVT cover drain plug. See Figure 5-11.
2. Allow water to completely drain out.
3. Reinstall drain plug, and tighten securely.

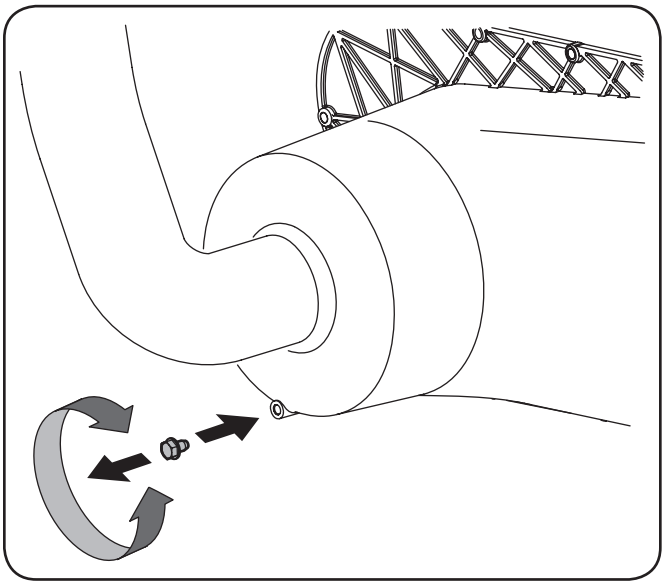


Figure 5-11

Cleaning

The body panels are scratch and impact resistant automotive quality ABS plastic. The use of standard car wash soap and non-abrasive car wax is acceptable for cleaning the body panels. Avoid any abrasive cleaner or rubbing compounds for these will damage the body panels. Dry thoroughly to avoid water spots.

WARNING: DO NOT use a pressure washer. Damage may occur if direct hose spray comes in contact with intake openings, or any other electrical components, i.e. at instrument cluster or under dash.

CVT Inlet Filter

A CVT Inlet Filter (751-12642) is installed in the inlet pipe of the CVT located under the passenger seat. This filter will prevent large objects from entering the CVT inlet tube and causing damage to the fan blades, clutch, belt etc. It is necessary to clean this filter after ever 20 hours of use or more often under dusty conditions.

To clean the CVT inlet filter, follow these steps:

1. Pivot the passenger seat forward to gain access to the CVT inlet filter.
2. Pull the filter out of the CVT inlet tube, shown in Figure 5-12, and wash with soapy water.
3. Fully rinse the filter and allow it to dry completely, either on its own, or by flattening it between two paper towels, or blowing it out gently with compressed air. Reinstall filter into the CVT inlet tube. Never wring the filter out to dry.

IMPORTANT: Do not use any filter oil on the CVT inlet filter. Only wash with soapy water, rinse, dry and reinstall. Replace the filter when it becomes worn or damaged.

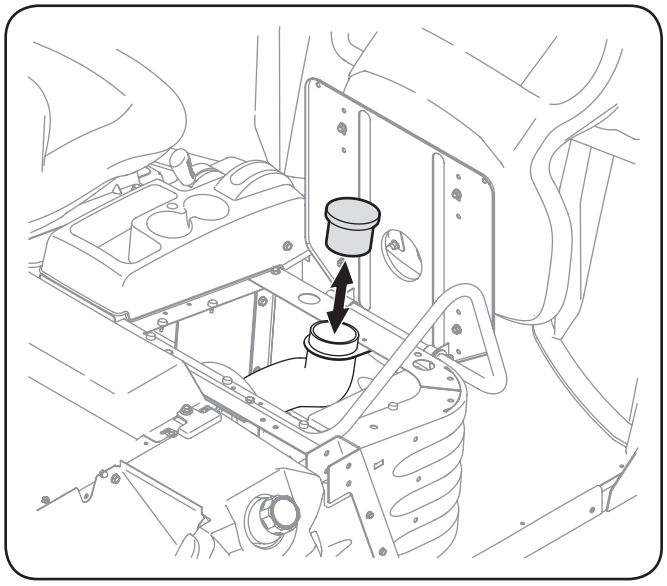


Figure 5-12

Adjusting the Throttle Cable (Gas Powered Units Only)

An adjustment is provided in the throttle cable, should such an action be necessary. To locate the cable adjustment, pivot the passenger seat forward and locate the adjustment in the throttle cable running along the right side of the UV below the passenger seat. See Figure 5-13.

1. Loosen the locking nut and thread the adjustment nut inward or outward in order to maintain at minimum 1/16" play in the cable when the pedal is in a fully released (idle) position.
2. Once adjustment is complete, retighten the locking nut.

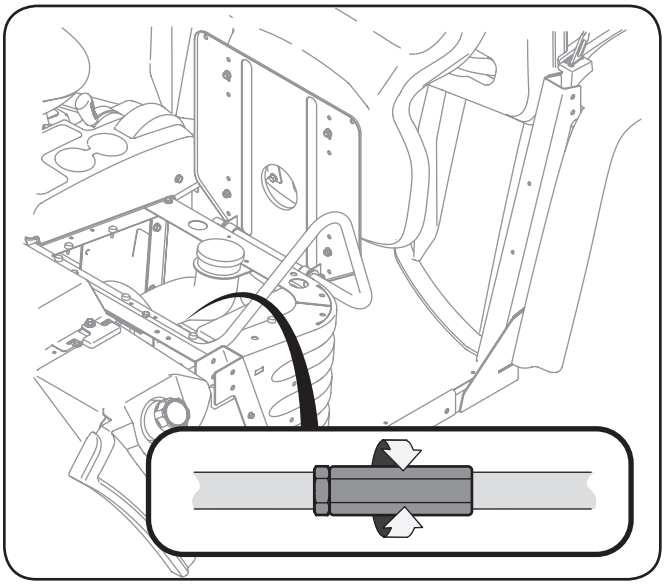


Figure 5-13

Recalibrating the Speedometer

Measuring the Tire Circumference

NOTE: The "Point Setting" is the number of magnets read for one revolution. With this setup, the input into the gauge is two.

1. The circumference of the standard trail tire at 16 psi is 76.25". The formula for figuring out the input into the gauge is as follows:

Tire Circ.	x	Conversion Factor	=	Tire Circ. in mm
76.25"	x	7.551	=	575.8

2. In this instance you would round the result (575.8) up to 576 and input that number into the gauge under Tire Circumference.
3. If the tire pressure or size of your tire is different, the circumference of your tire must be measured to ensure that the speedometer remains accurate.

4. To measure the new tire circumference, mark the ground with the tire valve stem at the bottom. Roll the UV forward until the tire makes one full rotation and mark the ground again; measure the distance between the marks to get the tire circumference. See Figure 5-14.

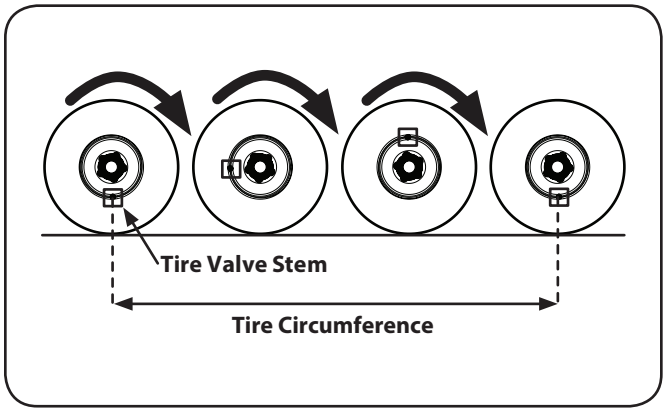


Figure 5-14

5. Replace the 76.25" circumference in the formula with the new measurement, compute the new circumference and input the distance into the Gauge Accessory.

Tire Circumference and Sensor Point Setting

Refer to Figure 5-15 for the following steps.

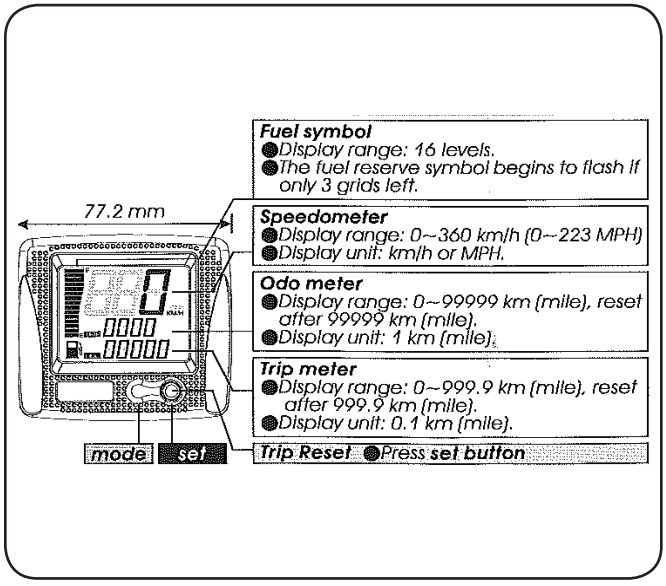


Figure 5-15

1. In the main screen, press down the mode button for three seconds to enter the circumference setting.
2. Example; Now the tire circumference is 1300 m/m. In setting screen, press the set button to move to the digit you want to set.
3. Press the mode button to make the setting.
4. Press the set button to enter the sensor point setting.
5. Press the mode button to make the setting.
6. Press the set button to return to the main screen.

Headlight Bulbs

1. Raise hood to get access to the headlight assembly.
2. Turn the bulb/socket assembly approximately a 1/4-turn counter-clockwise to align its tabs with the notches of the reflector, then remove from the reflector. See Figure 6-1.

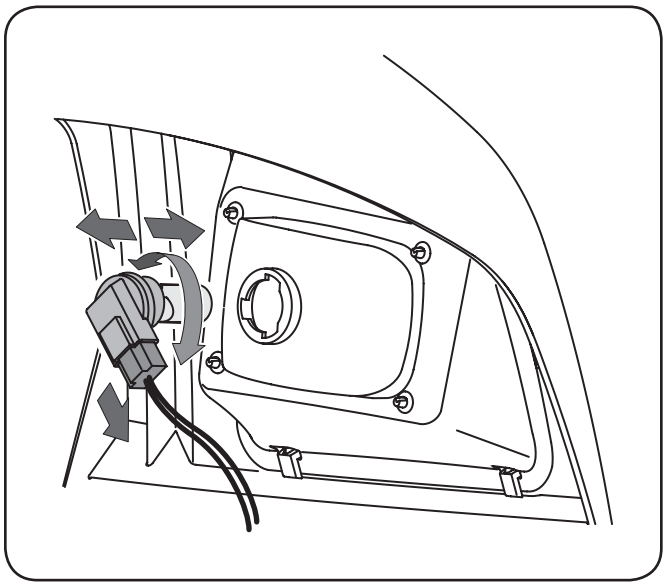


Figure 6-1

3. Unplug the wire harness from the bulb/socket assembly.
4. Plug the new bulb/socket assembly into the wire harness.
5. Align the tabs of the new bulb/socket assembly with the notches of the reflector and insert the bulb. Turn the bulb/socket assembly clockwise to lock in place.
6. Lower and secure hood.

Fuses

1. Unlatch and lift hood forward to get access to under the dash panel.
2. Remove fuse holder cover. See Figure 6-2.

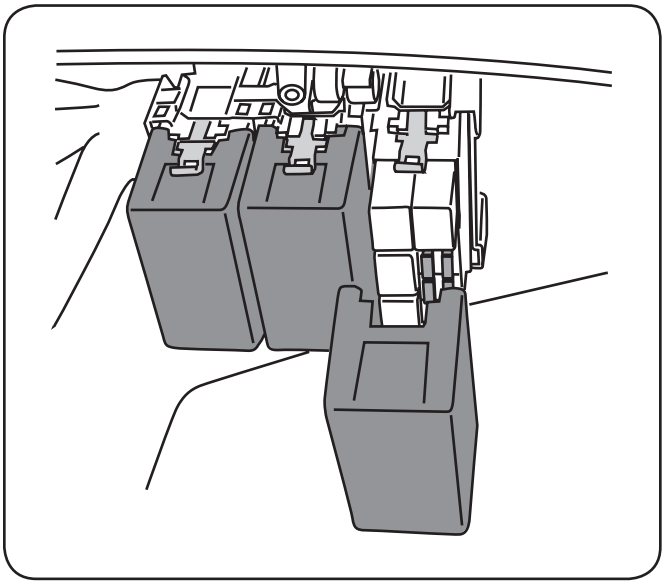


Figure 6-2

3. Remove the appropriate electrical fuse and replace with proper amperage fuse.
4. Lower and secure hood.

Wheels

WARNING: Using an unstable lifting device and UV support may result in bodily injury. Use a safe lifting device and supports to work on raised UV.

1. Stop the UV on a level surface and apply parking brake.
2. Turn the ignition key to the STOP position and remove the key.
3. Loosen but do not remove the five lug nuts from the axle hub. See Figure 6-3.

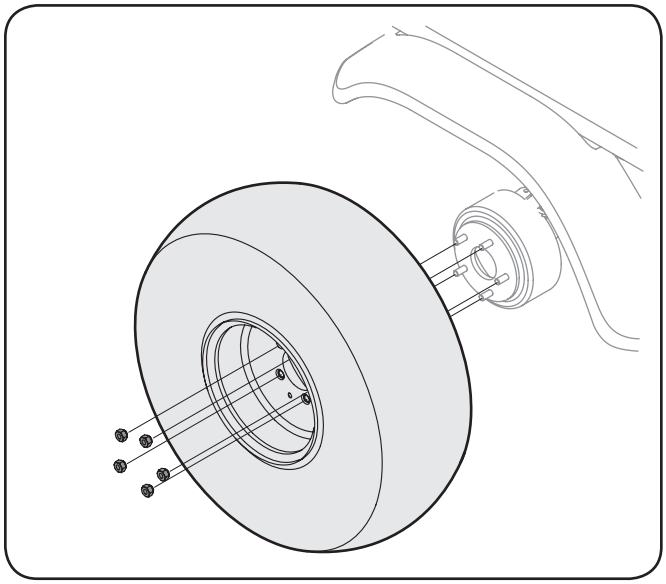


Figure 6-3

4. Raise rear/front of UV with a safe lifting device and place support stands under UV frame.

WARNING: When lifting the rear of the UV for any reason, DO NOT engage the rear wheels. Even if the 4x4 switch is in the OFF position, there is a possibility that the front wheels may engage if the rear wheels are spinning fast enough.

5. Remove the five lug nuts and the wheel. Place new wheel on the axle hub and secure with nuts.
6. Tighten nuts diagonally until snug.
7. Remove support stands and lower UV.
8. Finish tightening the nuts to 65-75 ft-lb using a torque wrench.

Changing Brake Pads

WARNING: Using an unstable lifting device and UV support may result in bodily injury. Use a safe lifting device and supports to work on raised UV.

To gain access to the brake pads, remove the wheel as described in the Wheels section. If less than .030" of material remains on the pad, replace.

NOTE: Brake pads must be replaced as a set, i.e., right rear and left rear.

To change the brake pads, follow the steps below and refer to Figure 6-4.

1. Remove mounting bolts securing caliper and brake pads to brake disc.
2. Remove brake caliper assembly from brake disc.
3. Clean lube slide pins.
4. Remove brake pads from caliper and replace with new pads.
5. Press in brake piston and place caliper and new brake pads into place, making sure brake disc is between the two brake pads.

   IMPORTANT: When pressing in brake piston, ensure not to damage rubber piston seal.
6. Secure caliper and brake pads with mounting bolts removed in step 1. Torque the mounting bolts to 22 to 26 ft-lb.
7. Replace wheel as described in Wheels section.

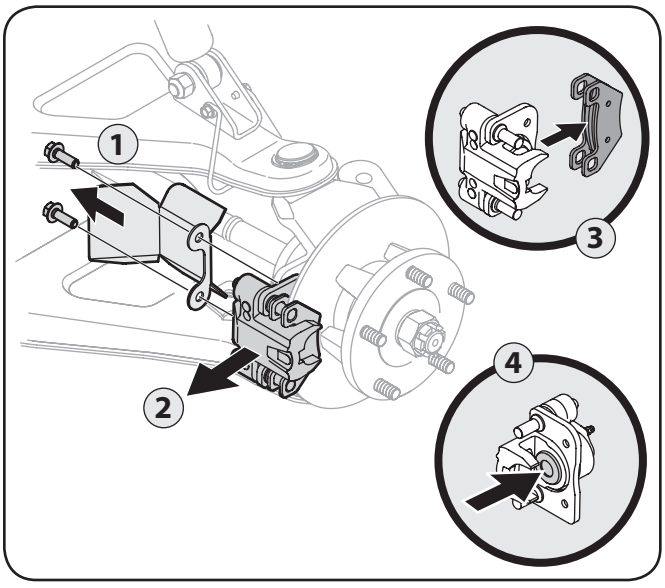


Figure 6-4

Drive Belt

IMPORTANT: See your Cub Cadet Dealer to have your belts replaced.

Maintenance Chart

	Before Each Use	First 10 Hours	Every 20 Hours/2 Months	Every 50 Hours	Every 100 Hours or Yearly	Every 500 Hours or 2 Years	Service Dates
Check Transfer Case Oil					✓		
Change Transfer Case Oil*				✓		✓	
Check Differential Case Oil					✓		
Change Differential Case Oil*				✓		✓	
CFD (Centralized Front Drive)					✓		
Tighten Wheel Bolts		✓					
Change Air Filter^	Inspect			✓			
Check Engine Coolant Level *(EFI & Diesel Units Only)*	✓						
Change Engine Coolant *(EFI & Diesel Units Only)*						✓	
Inspect Cooling System Hoses *(EFI & Diesel Units Only)*					✓		
Drain Fuel Filter *(Diesel Units Only)*					✓		
Change Fuel Filter *(EFI & Diesel Units Only)*						✓	
Inspect OPS and Seat Belts	✓						
Inspect Front and Rear Shocks					✓		
Inspect Ball Joints					✓		
Lubricate Rear Knuckles †					✓		
Inspect CV Boots				✓			
Inspect Tires	✓						
Inspect Safety Interlock System	✓						
Inspect Brakes			✓				
Clean CVT Filter			✓				
Drain CVT Cover † †				✓		✓	
Clean/Lubricate/Adjust 1/2 Doors	Inspect			✓			

* Change at the first 50 hours, then again at 500 hours.

^ Change more frequently if unit is operated in extremely dusty conditions.

† Lubricate after each use if unit is run through water deeper than axle.

†† Drain after a deep water crossing (more than 12").

NOTE: For information regarding engine service, see the separate Engine Owner's Manual included with your unit.

Accessories

8

NOTE: For parts or accessories, contact your local Cub Cadet dealer. To locate the dealer nearest you call (800) 965-4CUB or log onto www.cubcadet.com/equipment/cubcadet/service-and-parts.

Description	Description
Horn	Gadget/Grab Bar
Acrylic Windshield	AM/FM CD Radio
14" Aluminum Rims & Off-Road Tires (Set of 4)	12" Aluminum Rims (Set of 4)
Electric Bed Lift	Raised Bed Gates
Signals & Brake Lights	Bench Seat
Heavy Duty Bed Liner	Poly Canopy
Soft Roof w/Rear Window	Gun Boot & Mount
Reverse Back-up Alarm	Dual Purpose Tires & Black Steel Rims (Set of 4)
Soft Doors	Turf Tires & Black Steel Rims (Set of 4)
Heavy Duty Alternator * (Kohler Engines)	Digital Speedometer & Fuel Gauge
Light Bar	Warn 4000 lb Winch
Hood Rack	22 ft^3 Dump Cart
Electrical Accessory Harness	Warn Winch Kit (HD Winch)
Front Receiver	Buss Bar**
72" Super Duty Blade (Manual Angle)	Electric Angle (Requires 72" Super Duty Blade)
Fog Light Kit	Integrated Light Bar
Rear View Mirror	Tip-Out Glass Windshield & Mirror (Deluxe Cab Component)
Rear Panel & Head Rests	Hard Roof & Rear Windshield (Deluxe Cab Component)
Bed Mat	Hard Doors (Deluxe Cab Component)
Floor Mats (Set of 2)	Electric Wiper & Lights (Deluxe Cab Component)

***** Recommended for installing electrical attachments on 18 hp & 20 hp units

****** Recommended for installing multiple electrical attachments

NOTE: Availability of these accessories are subject to change. Please see your local Cub Cadet service dealer for the latest information regarding accessories for your UV.

Specifications

Kohler Command® V-Twin OHV Models

NOTE: Specifications subject to change without notice.

Engine/Electrical	
Make	4x2 - 18 hp* Kohler Command® V-Twin OHV
	4x4 - 20 hp* Kohler Command® V-Twin OHV
Type/ Cylinders	4 Cycle Gas/ 2 Cylinders
Displacement	38.0 in^3 (624cc)
Maximum Torque	32.6 ft-lb @ 2600 rpm
Ignition	Transistor Controlled
Lubrication	Full Pressure w/ Filter
Speed (No Load)	1300 rpm (idle)/ 3850 rpm (fast)
Cooling System	Air
Air Cleaner	Replaceable, dual element
Battery	450 CCA
Alternator	12V-15A Regulated
Headlights	Two, 27W Halo
Wiring	Automotive - Style Fused Control System
Suspension	Front & Rear - Fully Independent Dual A-Arms with Coil Over Shocks

Transmission	
Type	Continuously Variable (CVT - w/ CVT Cover)
Differential Lock	Rear - Standard Hand Operated Front - Flip Switch in Dash (4x4 Only)
Drive Chain	N/A
Ground Speed	0-25 mph
Transaxle	Fully Enclosed, Oil Bath
Gear Selection	Forward Hi-Low (4x4 Only), Neutral, Reverse
Overall Reduction Ratio	Low 23.8:1 (4x4 Only)/ High 13.4:1
Rear Axle Housing	Cast Iron

Features	
Rear Hitch	Standard 2″ Rear Receiver
Dual Cup Holders	Standard
Additional Storage	Dash Box
Power Port	12V, Dash Mounted
Front Bumper	Standard
Front Brush Guard	Standard
Electric Bed Lift	Optional
Rubber Floor Mats	Optional
Horn	Optional

Dimensions	
Length/ Width	119″ x 63.5″
Tread Center	F: 52″/ R: 50″
Height (Overall)	78″
Wheelbase	78″
Weight (Including Fuel & Fluids)	1,650 lb
Ground Clearance (Under Transaxle)	9″
Ground Clearance (Under Footboard)	10.5″
Turn Clearance Circle	22.0 ft
Cargo Box	51.625″ L x 42″ W x 11.5″ H

Operation	
Brake Type	Four Wheel 8″ Hydraulic Disc
Parking Brake	Hand Operated Mechanical Disc
Steering	Rack & Pinion

Fuel System	
Capacity	6 gal
Low Fuel Indicator	Dash Mounted Indicator Light

Capacity	
Volume - Cargo Box	14.4 ft^3
Cargo Box Capacity	1,000 lb
Seating - Capacity/Type	2/ Professional High Back
Towing Capacity	1,400 lb
Payload Capacity**	1,400 lb

Ground Pressure	(Max.)
w/200 lb. Operator Only	N/A (Trail Tires)
Fully Loaded UV	N/A (Trail Tires)

Cargo Box	
Material	14-Gauge Steel
Attachment	Rubber Isolated

Tires	
Trail Front	25″ x 10″ - 12″ *(All Four Tires on 4x2)*
Trail Rear	25″ x 11″ - 12″

* As rated by engine manufacturer.

** Includes 200 lb operator, 200 lb passenger, and maximum box capacity.

Kohler® Aegis EFI Models

NOTE: Specifications subject to change without notice.

Engine/Electrical	
Make	31 hp* Kohler® Aegis EFI
Type/ Cylinders	4 Cycle Gas/ 2 Cylinders
Displacement	748cc
Maximum Torque	47.7 ft-lb at 2400 rpm
Ignition	Mechanically Controlled
Lubrication	Full Pressure w/ Filter
Speed (No Load)	1000 rpm (idle)/ 4200 rpm (fast)
Cooling System	Liquid
Air Cleaner	Heavy-duty replaceable, remote dual element
Battery	450 CCA
Alternator	12V-60A Regulated, 65A
Headlights	Two: 27W Halo
Wiring	Automotive - Style Fused Control System
Suspension	Front & Rear - Fully Independent Dual A-Arms with Coil Over Shocks

Transmission	
Type	Continuously Variable (CVT)
Differential Lock	Rear - Standard Hand Operated Front - Flip Switch in Dash
Drive Chain	N/A
Ground Speed	0-25 mph
Transaxle	Fully Enclosed, Oil Bath
Gear Selection	Forward HIGH, LOW, NEUTRAL, REVERSE
Overall Reduction Ratio	Low 29.2:1/ High 16.4:1
Rear Axle Housing	Cast Iron

Features	
Rear Hitch	Standard 2″ Rear Receiver
Dual Cup Holders	Standard
Additional Storage	Dash Box
Power Port	12V, Dash Mounted
Front Bumper	Standard
Front Brush Guard	Standard
Electric Bed Lift	Steel: Optional Aluminum: Standard
Rubber Floor Mats	Optional
Horn	Optional

Dimensions	
Length/ Width	Steel: 119″ x 63.5″ Aluminum: 129″ x 67″
Tread Center	F: 52″ / R: 50″
Height (Overall)	78″
Wheelbase	78″
Weight (Including Fuel & Fluids)	Steel: 1,650 lb Aluminum: 1,685 lb
Ground Clearance (Under Transaxle)	9″
Ground Clearance (Under Footboard)	11″
Turn Clearance Circle	22.0 ft
Cargo Box	Steel: 51.625″ L x 42″ W x 11.5″ H Aluminum: 48.5″ L x 59.5″ W x 15.5″ H

Operation	
Brake Type	Four Wheel 8″ Hydraulic Disc
Parking Brake	Hand Operated Mechanical Disc
Steering	Rack & Pinion

Fuel System	
Capacity	6 gal
Low Fuel Indicator	Steel: Dash Mounted Indicator Light Aluminum: Fuel Gauge

Capacity	
Volume - Cargo Box	Steel: 14.4 ft^3 Aluminum: 25.8 ft^3
Cargo Box Capacity	Steel: 1,000 lb Aluminum: 1,200 lb
Seating - Capacity/Type	2/ Sport
Towing Capacity	1,400 lb
Payload Capacity**	Steel: 1,400 lb Aluminum: 1,600 lb

Ground Pressure	(Max.)
w/200 lb. Operator Only	N/A (Trail Tires)
Fully Loaded UV	N/A (Trail Tires)

Cargo Box	
Material	14-Gauge Steel
Attachment	Rubber Isolated

Tires	
Trail Front	Steel: 26″ x 10″ - 12″ Aluminum: 25″ x 10.5″ - 12″
Trail Rear	Steel: 26″ x 11″ - 12″ Aluminum: 25″ x 10.5″ - 12″

* As rated by engine manufacturer.

** Includes 200 lb operator, 200 lb passenger, and maximum box capacity.

Yanmar Diesel Models

NOTE: Specifications subject to change without notice.

Engine/Electrical	
Make	21.9 hp* Yanmar®
Type/ Cylinders	4 Cycle Diesel/ 3 Cylinders
Displacement	854cc
Maximum Torque	36.9 ft-lb @ 2400 rpm
Ignition	Mechanically Controlled
Lubrication	Full Pressure w/ Filter
Speed (No Load)	1000 rpm (idle)/ 3800 rpm (fast)
Cooling System	Liquid
Air Cleaner	Heavy-duty replaceable, remote dual element
Battery	450 CCA
Alternator	12V-60A Regulated, 65A
Headlights	Two, 27W Halo
Wiring	Automotive - Style Fused Control System
Suspension	Front & Rear - Fully Independent Dual A-Arms with Coil Over Shocks

Transmission	
Type	Continuously Variable (CVT)
Differential Lock	Rear - Standard Hand Operated Front - Flip Switch in Dash
Drive Chain	N/A
Ground Speed	0-25 mph
Transaxle	Fully Enclosed, Oil Bath
Gear Selection	Forward Hi-Low, Neutral, Reverse
Overall Reduction Ratio	Low 29.2:1/ High 16.4:1
Rear Axle Housing	Cast Iron

Features	
Rear Hitch	Standard 2″ Rear Receiver
Dual Cup Holders	Standard
Additional Storage	Dash Box
Power Port	12V, Dash Mounted
Front Bumper	Standard
Front Brush Guard	Standard
Electric Bed Lift	Optional
Rubber Floor Mats	Optional
Horn	Optional

Dimensions	
Length/ Width	119″ x 63.5″
Tread Center	F: 52″/ R: 50″
Height (Overall)	73″
Wheelbase	78″
Weight (Including Fuel & Fluids)	1,700 lb
Ground Clearance (Under Transaxle)	9″
Ground Clearance (Under Footboard)	11″
Turn Clearance Circle	22.0 ft
Cargo Box	51.625″ L x 42″ W x 11.5″ H

Operation	
Brake Type	Four Wheel 8″ Hydraulic Disc
Parking Brake	Hand Operated Mechanical Disc
Steering	Rack & Pinion

Fuel System	
Capacity	7 gal
Low Fuel Indicator	Dash Mounted Indicator Light

Capacity	
Volume - Cargo Box	14.4 ft^3
Cargo Box Capacity	1,000 lb
Seating - Capacity/Type	2/ Sport
Towing Capacity	1,400 lb
Payload Capacity**	1,400 lb

Ground Pressure	(Max.)
w/200 lb. Operator Only	N/A (Trail Tires)
Fully Loaded UV	N/A (Trail Tires)

Cargo Box	
Material	14-Gauge Steel
Attachment	Rubber Isolated

Tires	
Trail Front	25″ x 10″ - 12″
Trail Rear	25″ x 11″ - 12″

* As rated by engine manufacturer.

** Includes 200 lb operator, 200 lb passenger, and maximum box capacity.

Troubleshooting

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Problem	Cause(s)
Engine will not start	1. Battery has low voltage. 2. Loose or corroded battery connections. 3. Fuse is blown. 4. Spark plug wire is loose or disconnected. *(Gas Powered Units Only)* 5. Faulty spark plug or coil. *(Gas Powered Units Only)* 6. Air or water is in the fuel system. Pump the manual prime on the fuel pump. *(Diesel Units Only)* 7. In Winter, oil viscosity increases, and engine revolution is slow. *(Diesel Units Only)* 8. No fuel or improper fuel. 9. Plugged fuel filter. 10. Defective starter solenoid. 11. Open-circuit in wiring.
Engine is difficult to start	1. Engine is cold. 2. Plugged fuel filter. 3. Carburetor not adjusted properly or dirty. *(Air-Cooled, Gas Powered Units Only)* 4. Engine oil viscosity too heavy. 5. Spark plug is fouled. *(Gas Powered Units Only)* 6. Faulty spark plug or wire. *(Gas Powered Units Only)* 7. Loose or corroded electrical connections. 8. Stale or improper fuel. 9. Choke *(if equipped)* not being used or adjusted properly. *(Air-Cooled Units Only)*
Engine misses under load	1. Faulty spark plug. *(Gas Powered Units Only)* 2. Stale or dirty fuel. 3. Plugged fuel filter. 4. Faulty coil or wire. *(Gas Powered Units Only)*
Engine vapor locks	1. Poor quality fuel. 2. Very hot weather conditions. 3. Fuel tank vent plugged. 4. Dirt in fuel filter.

Continued on next page

Problem	Cause(s)
Engine runs unevenly	1. Loose electrical connections. 2. Choke (if equipped) or throttle cable sticking. 3. Fuel line or fuel filter plugged. 4. Stale or dirty fuel. 5. Improper fuel. 6. Air cleaner element plugged. 7. Carburetor not adjusted correctly. *(Air-Cooled Units Only)* 8. Spark plug is fouled. *(Gas Powered Units Only)*
Engine overheats	1. Air cleaner element missing or plugged. 2. Carburetor air intake tube plugged. *(Air-Cooled Units Only)* 3. Engine oil low. 4. Engine operated too long at slow engine speed. *(Gas Powered Units Only)*
Engine knocks	1. Low engine speed. *(Gas Powered Units Only)* 2. Stale or low octane fuel. *(Gas Powered Units Only)* 3. Engine overloaded. *(Gas Powered Units Only)*
Engine fumes are colored (Black) *(Diesel Units Only)*	1. Fuel quality is poor. 2. Too much oil. 3. The air cleaner is clogged.
Engine fumes are colored (Blue white) *(Diesel Units Only)*	1. The inside of the exhaust muffler may contain fuel. 2. Injection nozzle trouble. 3. Poor quality fuel.
Engine overheats *(Diesel Units Only)*	1. Engine overloaded. 2. Low coolant level. 3. Dirty radiator core or grille screen. 4. Coolant flow route corroded. 5. Air cleaner element missing or plugged. 6. Engine oil low. 7. Engine operated too long at slow engine speed.
Engine loses power	1. Engine overheating. 2. Too much oil in engine. 3. Faulty spark plug. *(Gas Powered Units Only)* 4. Fuel supply being restricted. 5. Fuel filter plugged. 6. Fuel line pinched or kinked. 7. Fuel pump output not adjusted to specification. *(Gas Powered Units Only)* 8. Improper fuel. *(Gas Powered Units Only)* 9. Insufficient or dirty fuel. *(Diesel Units Only)* 10. Air cleaner element plugged.

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Problem	Cause(s)
Starter does not work	1. Loose or corroded connections. 2. Low battery output. 3. Sulfate or worn-out battery. 4. Faulty starter.
Starter cranks slowly	1. Low battery output. 2. Sulfated or worn-out battery. 3. Engine oil too heavy. 4. Loose or corroded connections.
Entire electrical system does not work	1. Blown fuse. 2. Loose or corroded connections. 3. Sulfated or worn-out battery.
Dead battery	1. Shorted starter solenoid. 2. Key switch not turned to STOP position. 3. Sulfated or worn-out battery.
Battery light comes ON when engine is running	1. Low engine speed. 2. Faulty voltage regulator. 3. Faulty battery. 4. Faulty alternator or loose alternator belt. 5. Grounded wire in circuit.
Indicator lights do not come ON when key switch is in START position	1. Faulty bulb. 2. Faulty wiring. 3. Faulty sensor.
Battery will not take a charge	1. Dead battery. 2. Loose or corroded connections. 3. Sulfated or worn-out battery. 4. Fluid level low.
Difficult to shift	1. Gears not lined up. Tap throttle and let it return to idle. If still hard to shift, contact your nearest Cub Cadet dealer.
No Power Steering (If Equipped)	1. Unit may be overheated. Allow unit to cool. If still no power steering, contact your nearest Cub cadet dealer.

FEDERAL and/or CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT
YOUR WARRANTY RIGHTS AND OBLIGATIONS

MTD Consumer Group Inc, the United States Environmental Protection Agency (EPA), and for those products certified for sale in the state of California, the California Air Resources Board (CARB) are pleased to explain the evaporative emission control system (ECS) warranty on your 2014-2015 small off-road equipment (outdoor equipment). In California, new outdoor equipment must be designed, built and equipped to meet the State's stringent anti-smog standards (in other states, outdoor equipment must be designed, built, and equipped to meet the U.S. EPA small off-road spark ignition engine regulations). MTD Consumer Group Inc must warrant the ECS on your outdoor equipment for the period of time listed below, provided there has been no abuse, neglect, or improper maintenance of the outdoor equipment.

Your ECS may include parts such as fuel tanks, fuel lines, fuel caps, valves, canisters, filters, vapor hoses, clamps, connectors, and other associated emission-related components.

Where a warrantable condition exists, MTD Consumer Group Inc will repair your outdoor equipment at no cost to you including diagnosis, parts, and labor.

MANUFACTURER'S WARRANTY COVERAGE:

This emission control system is warranted for two years. If any emission-related part on your outdoor equipment is defective, the part will be repaired or replaced by MTD Consumer Group Inc.

OWNER'S WARRANTY RESPONSIBILITIES:

As the outdoor equipment owner, you are responsible for performance of the required maintenance listed in your owner's manual. MTD Consumer Group Inc recommends that you retain all receipts covering maintenance on your outdoor equipment, but MTD Consumer Group Inc cannot deny warranty solely for the lack of receipts.

As the outdoor equipment owner, you should however be aware that MTD Consumer Group Inc may deny you warranty coverage if your outdoor equipment or a part has failed due to abuse, neglect, improper maintenance, or unapproved modifications.

You are responsible for presenting your outdoor equipment to MTD Consumer Group Inc's distribution center or service center as soon as the problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. If you have a question regarding your warranty coverage, you should contact the MTD Consumer Group Inc Service Department at 1-800-800-7310 or at http://support.mtdproducts.com.

GENERAL EMISSIONS WARRANTY COVERAGE:

MTD Consumer Group Inc warrants to the ultimate purchaser and each subsequent purchaser that the outdoor equipment is: (1) designed, built, and equipped so as to conform with all applicable regulations; and (2) free from defects in materials and workmanship that cause the failure of a warranted part for a period of two years.

The warranty period begins on the date the outdoor equipment is delivered to an ultimate purchaser or first placed into service.

Subject to certain conditions and exclusions as stated below, the warranty on emission-related parts is as follows:

1. Any warranted part that is not scheduled for replacement as required maintenance in the written instructions supplied is warranted for the warranty period stated above. If the part fails during the period of warranty coverage, the part will be repaired or replaced by MTD Consumer Group Inc according to subsection (4) below. Any such part repaired or replaced under warranty will be warranted for the remainder of the period.
2. Any warranted part that is scheduled only for regular inspection in the written instructions supplied is warranted for the warranty period stated above. Any such part repaired or replaced under warranty will be warranted for the remaining warranty period.
3. Any warranted part that is scheduled for replacement as required maintenance in the written instructions supplied is warranted for the period of time before the first scheduled replacement date for that part. If the part fails before the first scheduled replacement, the part will be repaired or replaced by MTD Consumer Group Inc according to subsection (4) below. Any such part repaired or replaced under warranty will be warranted for the remainder of the period prior to the first scheduled replacement point for the part.
4. Repair or replacement of any warranted part under the warranty provisions herein must be performed at a warranty station at no charge to the owner.
5. Notwithstanding the provisions herein, warranty services or repairs will be provided at all of our distribution centers that are franchised to service the subject engines or equipment.
6. The outdoor equipment owner will not be charged for diagnostic labor that is directly associated with diagnosis of a defective, emission-related warranted part, provided that such diagnostic work is performed at a warranty station.
7. MTD Consumer Group Inc is liable for damages to other engine or equipment components proximately caused by a failure under warranty of any warranted part.
8. Throughout the off-road engine and equipment warranty period stated above, MTD Consumer Group Inc will maintain a supply of warranted parts sufficient to meet the expected demand for such parts.
9. Any replacement part may be used in the performance of any warranty maintenance or repairs and must be provided without charge to the owner. Such use will not reduce the warranty obligations of MTD Consumer Group Inc.
10. Add-on or modified parts that are not exempted by the Air Resources Board may not be used. The use of any non-exempted add-on or modified parts by the ultimate purchaser will be grounds for disallowing a warranty claim. MTD Consumer Group Inc will not be liable to warrant failures of warranted parts caused by the use of a non-exempted add-on or modified part.

WARRANTED PARTS:

The repair or replacement of any warranted part otherwise eligible for warranty coverage may be excluded from such warranty coverage if MTD Consumer Group Inc demonstrates that the outdoor equipment has been abused, neglected, or improperly maintained, and that such abuse, neglect, or improper maintenance was the direct cause of the need for repair or replacement of the part. That notwithstanding, any adjustment of a component that has a factory installed, and properly operating, adjustment limiting device is still eligible for warranty coverage. Further, the coverage under this warranty extends only to parts that were present on the off-road equipment purchased.

The following emission warranty parts are covered (if applicable):

1. Fuel Metering System
    - Fuel pump
    - Fuel tank
2. Evaporative Control
    - Fuel hose
    - Fuel hose clamps
    - Tethered fuel cap
    - Carbon canister
    - Vapor lines

CUB CADET LLC
MANUFACTURER'S LIMITED WARRANTY FOR
UTILITY VEHICLES

The limited warranty set forth below is given by Cub Cadet LLC with respect to new merchandise purchased and used in the United States, its possessions and territories, and by MTD Products Limited with respect to new merchandise purchased and used in Canada and/or its territories and possessions.

This warranty is in addition to any applicable emissions warranty provided with your product.

For non-commercial use: Cub Cadet warrants this product (excluding *Batteries*, as described below) against defects in material and workmanship for a period of one (1) year from the date of original retail purchase or lease.

For commercial uses and applications: Cub Cadet warrants this product (excluding Batteries, as described below) against defects in material and workmanship for a period of six (6) months from the date of original retail purchase or lease.

"Cub Cadet" will, at its option, repair or replace, free of charge, any part found to be defective in materials or workmanship. This limited warranty shall only apply if this product has been operated and maintained in accordance with the Operator's Manual furnished with the product, and has not been subject to misuse, abuse, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water, or damage because of other peril or natural disaster. Damage resulting from the installation or use of any part, accessory or attachment not approved by Cub Cadet for use with the product(s) covered by this manual will void your warranty as to any resulting damage.

Batteries have a one-year prorated limited warranty against defects in material and workmanship, with 100% replacement during the first three months. After three months, the battery replacement credit is based on the months remaining in the twelve (12) month period dating back to the original date of original sale or lease. Any replacement battery will be warranted only for the remainder of the original warranty period.

Attachments — Cub Cadet warrants its approved attachments against defects in material and workmanship for a period of one (1) year, commencing on the date of the attachment's original purchase or lease. Attachments include, but are not limited to items such as: Electric Winch, Dozer Blade and Windshield.

HOW TO OBTAIN SERVICE: Warranty service is available, WITH PROOF OF PURCHASE, through your local authorized service dealer. To locate the dealer in your area:

In the U.S.A.

To locate the dealer in your area, check your Yellow Pages, or contact Cub Cadet LLC at P.O. Box 361131, Cleveland, Ohio 44136-0019, or call 1-877-282-8684, or log on to our Web site at www.cubcadet.com.

In Canada

Contact MTD Products Limited, Kitchener, ON N2G 4J1, or call 1-800-668-1238 or log on to our Web site at www.mtdcanada.com.

This limited warranty does **not** provide coverage in the following cases:

a. The engine or component parts thereof. These items may carry a separate manufacturer's warranty. Refer to applicable manufacturer's warranty for terms and conditions.

b. Routine maintenance items such as lubricants, filters, tune-ups, brake adjustments, clutch adjustments and normal deterioration of the exterior finish due to use or exposure.

c. Cub Cadet does not extend any warranty for products sold or exported outside of the United States and/or Canada, and their respective possessions and territories, except those sold through Cub Cadet's authorized channels of export distribution.

d. Replacement parts that are not genuine Cub Cadet parts.

e. Service completed by someone other than an authorized service dealer.

f. Transportation charges and service calls.

No implied warranty, including any implied warranty of merchantability of fitness for a particular purpose, applies after the applicable period of express written warranty above as to the parts as identified. No other express warranty, whether written or oral, except as mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product, shall bind Cub Cadet. During the period of the warranty, the exclusive remedy is repair or replacement of the product as set forth above.

The provisions as set forth in this warranty provide the sole and exclusive remedy arising from the sale. Cub Cadet shall not be liable for incidental or consequential loss or damage including, without limitation, expenses incurred for substitute or replacement lawn care services or for rental expenses to temporarily replace a warranted product.

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

In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. **Alteration of safety features of the product shall void this warranty.** You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the misuse or inability to use the product.

This limited warranty shall not extend to anyone other than the original purchaser or to the person for whom it was purchased as a gift.

HOW STATE LAW RELATES TO THIS WARRANTY: This limited warranty gives you specific legal rights, and you may also have other rights that vary in different jurisdictions.

IMPORTANT: Owner must present Original Proof of Purchase to obtain warranty coverage.

Cub Cadet LLC, P.O. BOX 361131 CLEVELAND, OHIO 44136-0019; Phone: 1-877-282-8684
MTD Canada Limited - KITCHENER, ON N2G 4J1; Phone 1-800-668-1238

GDOC-100094 REV. C