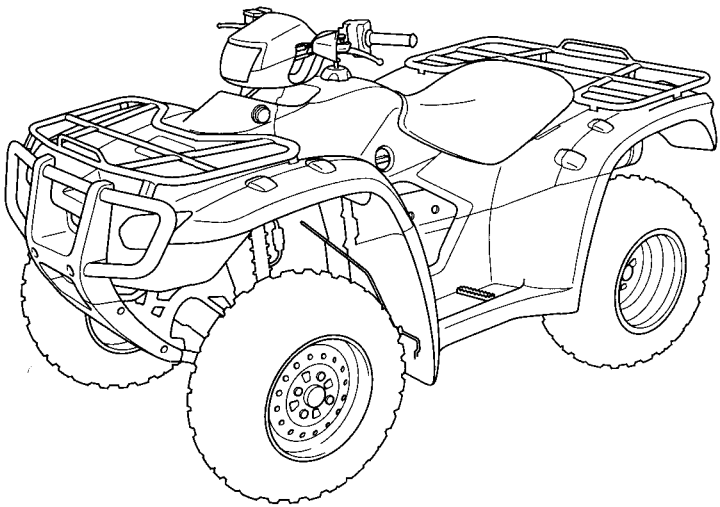
2007
Honda TRX500FE/FPE
FOURTRAX FOREMAN 4×4 ES/with Power Steering
OWNER'S MANUAL



FOR OFF-ROAD USE ONLY

This vehicle is designed and manufactured for off-road use only.
USA only:
It conforms to US EPA Noise Emission regulations, but does not conform to Federal Motor Vehicle Safety Standards or US EPA On Highway Exhaust Emission regulations, and operation on public streets, roads, or highways is illegal. The vehicle is equipped with a USDA qualified spark arrester. Obey local laws and regulations.
It conforms to US EPA and California exhaust emission regulations for ATVs.

Important Safety Information

Ride Off-Road Only
Your ATV is designed and manufactured for off-road use only. The tires are not made for pavement, and the ATV does not have turn signals and other features required for use on public roads. If you need to cross a paved or public road, get off and walk your ATV across.

Take Time to Learn & Practice
Even if you have ridden other ATVs, take time to become familiar with how this ATV works and handles. Practice in a safe area until you build your skills and get accustomed to the ATV's size and weight.

Because many accidents involve inexperienced or untrained riders, we urge all riders to take a training course approved by the ATV Safety Institute (ASI). See page 50.
Contact an authorized ATV dealer or call 1-800-887-2887 (USA only) to find out about the training courses nearest you.

Be Alert for Off-Road Hazards
The terrain can present a variety of challenges when you ride off-road. Continually "read" the terrain for unexpected turns, drop-offs, rocks, ruts, and other hazards. Always keep your speed low enough to allow time to see and react to hazards.

Lamp Check

The high oil temperature indicator, neutral indicator, 4WD indicator and reverse indicator come on for a few seconds and then go off when you turn the ignition switch ON (I).

TRX500FPE only:

The PS (Electric Power Steering) indicator comes on when you turn the ignition switch ON (I) so you can check that it is working.

The indicator remains on until the engine is started.

These indicators are identified in the table on pages 16 – 17 with the words: *Lamp Check.*

When applicable, the reverse or neutral indicators come on when you turn the ignition switch ON (I) and remain on until you shift out of reverse or neutral.

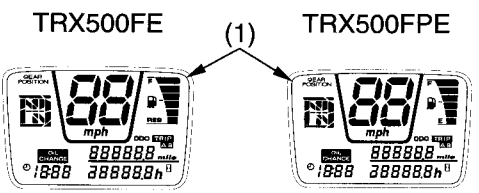
If one of these indicators does not come on when it should, have your Honda dealer check for problems.

Display Check

When the ignition switch is turned ON (I), the multi-function display (1) will temporarily show all the modes and digital segments so you can make sure the liquid crystal display is functioning properly.

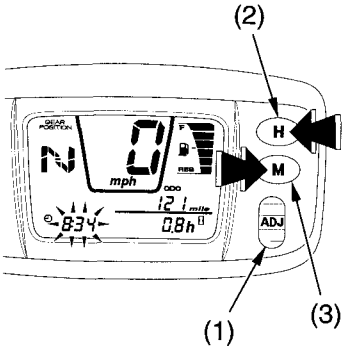
The displays are identified in the table on page 17 with the words: *Display Check.*

If any part of these displays does not come on when it should, have your Honda dealer check for problems.



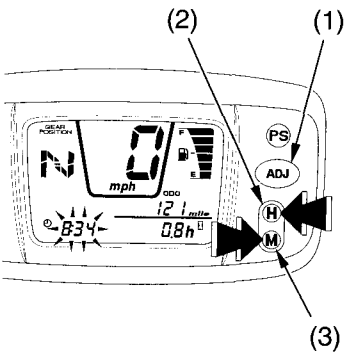
(1) multi-function display

TRX500FE



(1) adjust button
(2) hour select button

TRX500FPE

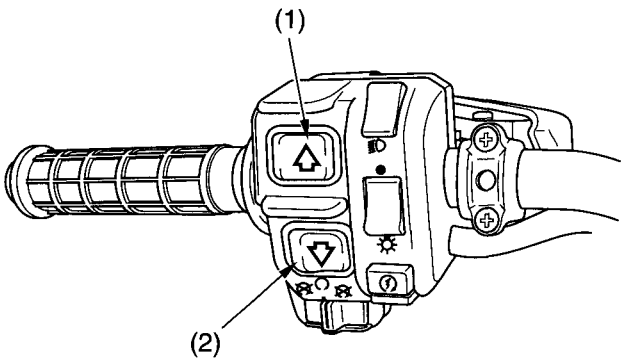


(3) minute select button

Gearshift Switch

These switches are used to select the next higher or lower gear in the transmission. To operate, press the upshift switch (1) to engage the next higher gear or press the downshift switch (2) to engage the next lower gear.
See *Shifting Gears,* page 74 .

LEFT HANDLEBAR



(1) upshift switch
(2) downshift switch

PS (Electric Power Steering) (TRX500FPE only)

This ATV is equipped with an electronically-controlled, electric-power-assisted steering system.

While the engine running, the PS (Electric Power Steering) system provides power from the electric motor, which helps you to turn ATV's handlebar more easily.

Under extreme conditions, the PS system reduces power that helps easily steer the handlebar. This can prevent the system from overheating caused by either continuously turning the handlebar at low speed or continuously applying high torque to the steering shaft. Under such conditions, you may feel the handlebar heavier, but it is not a malfunction.

The PS indicator should light when the ignition switch turned ON (I) and remain on until the engine is started.

The PS indicator also lights when there is any abnormality in the PS system. If this occurs, the electric power assist for turning will not be available, but the manual steering system will perform as usual.

If the PS indicator lights at any time while riding, reduce speed and take your ATV to a Honda dealer as soon as possible. Continuing to ride with a PS system problem can cause system damage.

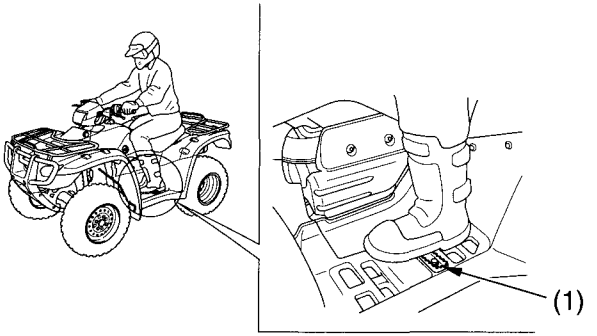
Do not modify your Electric Power Steering system. In case of a malfunction, take your ATV to a Honda dealer.

Cargo	Check that all cargo is secure.

Check these items after you get on the ATV:

Throttle	Check the freeplay and adjust if needed. Press the throttle to make sure it moves smoothly without sticking, and snaps shut automatically when it is released, in all steering positions (page 133).
Brakes	Squeeze the front and rear brake levers and step on the rear brake pedal to check that the controls operate normally. Check for proper freeplay (pages 149 , 151). Make sure there is no brake fluid leakage.
Reverse Assist Lever	Check the freeplay and adjust if needed (page 137). Make sure the lever operates smoothly without sticking.
Headlight and Headlight Dimmer Switch	Check for proper function (page 32).
Engine Stop Switch	Check for proper function (page 31).
Steering	Check that the wheels turn properly as you steer the handlebar. Move the handlebar right and left and check that there is no excessive backlash.

Remember, be sure to take care of any problem you find, or have your Honda dealer correct it before you ride.



(1) footpeg

Control Speed

Riding at excessive speed increases the chance of an accident. In choosing a proper speed, you need to consider the capability of your vehicle, the terrain, visibility and other operating conditions, plus your own skills and experience.

⚠ WARNING

Operating this ATV at excessive speeds increases your chances of losing control of the ATV, which can result in an accident.

Always go at a speed that is proper for your vehicle, the terrain, visibility and other operating conditions, and your experience.

3. Release the rear brake lever and increase engine speed by gradually opening the throttle.
4. When speed increases, release the throttle and shift to 2nd gear by pressing the upshift switch once.
5. Repeat this sequence to progressively upshift to 3rd, 4th and 5th (top) gear.
6. To downshift, press the downshift switch once. Remember to close the throttle each time you shift to the next lower gear.

The transmission cannot be upshifted from neutral to 1st gear when the engine speed is above 3,000 rpm or the ground speed is above 7 mph (11 km/h).

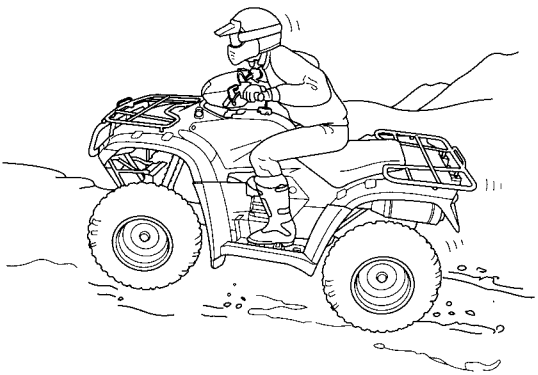
The transmission cannot be downshifted from 1st gear to neutral when the ground speed is above 2 mph (3 km/h).

If the electric shift system malfunctions, the transmission cannot be shifted by pressing the gearshift switches. See your Honda dealer. (In an emergency, a gear may be selected manually so you may move the vehicle. See *Emergency Gear Selection & Operation,* page 192).

Learning when to shift gears comes with experience. Keep the following tips in mind:

- As a general rule, shift while moving in a straight line.
- Close the throttle completely before shifting. Improper shifting may damage the engine, transmission, and drive train.
- Upshift to a higher gear or reduce throttle before engine rpm (speed) gets too high. Learn the relationship between engine sound and the normal shifting points.

(cont'd)



Shift weight forward when climbing hills.

- Always check the terrain carefully before you start up any hill.
- Never climb hills with excessively slippery or loose surfaces.
- To climb a hill, take a running start in an appropriate gear and speed for the conditions. Maintain a steady speed as you ascend the hill.
- Never open the throttle suddenly or make sudden gear changes. The ATV could flip over backward.
- Never go over the top of any hill at high speed. An obstacle, a sharp drop, or another vehicle or person could be on the other side of the hill.

Servicing Your Honda

To help keep your ATV in good shape, this section includes a Maintenance Schedule for required service and step-by-step instructions for specific maintenance tasks. You'll also find important safety precautions, information on fuels and oils, and tips for keeping your Honda looking good.

For information about replacing fuses, see page 198 .

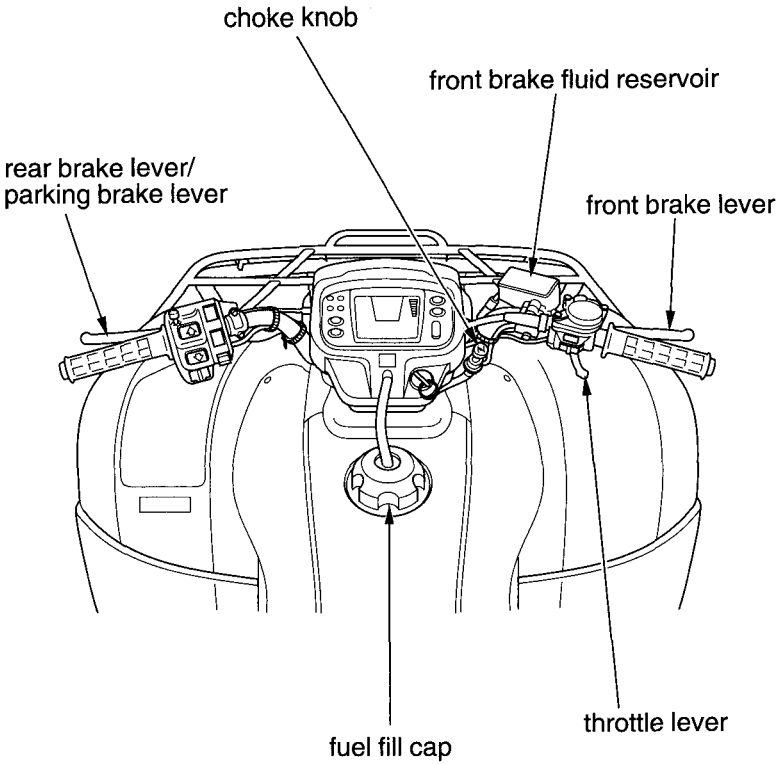
For information about the exhaust emission and noise requirements of the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB), see page 216.

USA Only

Maintenance, replacement or repair of the emission control devices and systems may be performed by any ATV repair establishment or individual using parts that are "certified" to EPA standards.

(cont'd)

Maintenance Component Locations

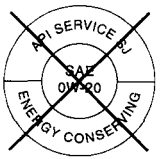


Oil Recommendation

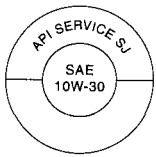
API classification	SG or higher except oils labeled as energy conserving on the circular API service label
viscosity (weight)	SAE 10W-30
JASO T 903 standard	MA
suggested oil*	Pro Honda GN4 4-stroke oil (USA & Canada), or Honda 4-stroke oil (Canada only), or an equivalent motorcycle oil.

* Suggested oils are equal in performance to SJ oils that are not labeled as energy conserving on the circular API service label.

- Your ATV does not need oil additives. Use the recommended oil.
- Do not use oils with graphite or molybdenum additives. They may adversely affect clutch operation.
- Do not use API SH or higher oils displaying a circular API "energy conserving" service label on the container. They may affect lubrication and clutch performance.



NOT RECOMMENDED



OK

- Do not use non-detergent, vegetable, or castor based racing oils.

Differential Oil

Oil Recommendation

type	hypoid gear oil
viscosity (weight)	SAE 80
suggested oil	Honda shaft drive oil or equivalent

Changing Oil

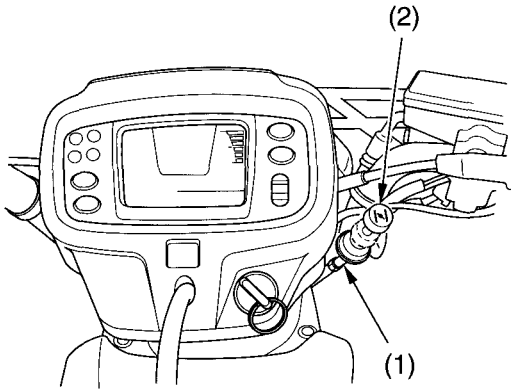
Refer to *Safety Precautions* on page 99 .

Change the oil with the differential at normal operating temperature to assure complete and rapid draining.

Carburetor Choke Cable & Knob

Refer to *Safety Precautions* on page 99 .

CENTER OF HANDLEBAR



(1) choke cable (2) choke knob

1. Check the condition of the choke cable (1).
2. Check the operation of the choke knob (2).
   If the cable is damaged or kinked, have it replaced by your Honda dealer.

Brakes

The hydraulic disc brakes (front) and single mechanical drum brake (rear) on your ATV dissipate heat generated by the friction of the brake pads on the disc (front) and the brake shoes on the drums (rear) as the wheels are slowed.

Hydraulic Disc Front Brake

As the front brake pads wear, brake fluid level will drop. A leak in the system will also cause the level to drop.

There are no adjustments to perform, but fluid level and pad wear must be inspected periodically. The system must be inspected frequently to ensure there are no fluid leaks.

If the right brake lever freeplay does not feel within the normal range while riding, check the brake pads for wear (page 148).
Worn pads should be replaced. If the pads are not worn beyond the recommended limit, there is probably air in the brake system. See your Honda dealer to have the air bled from the system.

Mechanical Drum Rear Brake

If the rear brake lever/parking brake lever or brake pedal freeplay does not feel within the normal range while riding, check the brake shoes for wear (page 153).

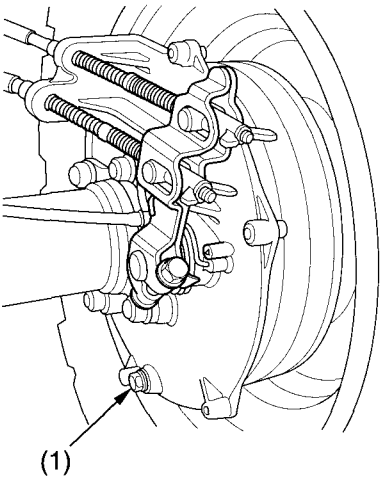
Brake Fluid Recommendation

brake fluid	Honda DOT 4 Brake Fluid

The recommended brake fluid is Honda DOT 4 Brake Fluid, or any brake fluid of equal quality and performance. Use fresh brake fluid from a sealed container. Be sure to read the label before opening the sealed container. An opened container may be contaminated or may have absorbed moisture from the air.

Draining Water from Brakes

Refer to *Safety Precautions* on page 99 .



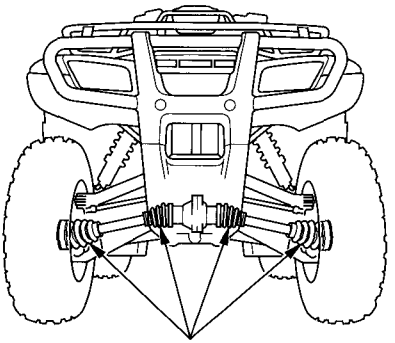
(1) rear brake drain bolt

1. Make sure the engine is off and the parking brake is set.
2. Remove the rear brake drain bolt (1) from the bottom of the rear brake panel.
   If any water drains, the brake seals must be replaced by your Honda dealer as soon as possible.

Driveshaft Boots

Refer to *Safety Precautions* on page 99.

FRONT



(1) rubber driveshaft boots

Check the rubber driveshaft boots (1) for damage or leaking grease. If necessary, have your Honda dealer replace them.

Tips

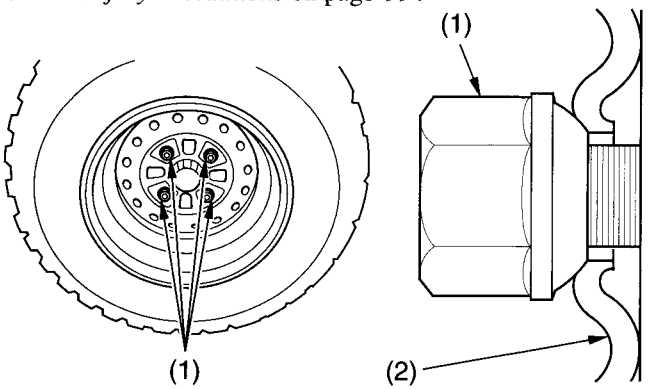
Here's helpful advice on how to prepare for an off-road adventure, how to transport and store your Honda, and how to be an environmentally responsible ATV owner.

Taking Care of the Unexpected

With all the challenges you can encounter off-road, there's a chance that sometime something may go wrong. This section gives practical advice to help you deal with a wide range of problems. Take time to read this section before you ride. Also review the tips in *Preparing for a Ride* (page 176).

Emergency Wheel Removal/Installation

Refer to *Safety Precautions* on page 99 .



(1) wheel nuts (2) wheel rim

Removal

1. Park your ATV on a firm, level surface.
2. Raise the front (or rear) wheels off the ground and place a support block under the vehicle.
3. Remove the wheel nuts (1).
4. Remove the wheel.
   - Avoid getting grease, oil, or dirt on the disc or pad surfaces when removing and installing each wheel. Any contamination can cause poor brake performance or rapid pad wear after reassembly.

If a Component Fails

The brake levers or pedal, control cables, and other components can be damaged as you ride in dense brush or over rocky terrain. Making a trailside repair depends on how serious the damage is and what tools and supplies you have with you.

- If any component of the brake system is damaged, you may be able to ride carefully back to your base using the other brake components for slowing or stopping.
- If you damage a throttle cable or other critical component, your ATV may be unsafe to ride. Carefully assess the damage and make any repairs that you can. But if there is any doubt, it's best to be conservative and safe.

High Altitude Carburetor Adjustment

At high altitude, the standard carburetor air-fuel mixture will be too rich. Performance will decrease, and fuel consumption will increase. A very rich mixture will also foul the spark plug and cause hard starting. Operation at an altitude that differs from that at which this engine was certified, for extended periods of time, may increase emissions.

High altitude performance can be improved by specific modifications to the carburetor. If you always operate your engine at altitudes above 6,500 feet (2,000 meters), have your servicing dealer perform this carburetor modification. This engine, when operated at high altitude with the carburetor modifications for high altitude use, will meet each emission standard throughout its useful life.

Even with carburetor modification, engine horsepower will decrease about 3.5% for each 1,000-foot (300-meter) increase in altitude. The effect of altitude on horsepower will be greater than this if no carburetor modification is made.

NOTICE

When the carburetor has been modified for high altitude operation, the air-fuel mixture will be too lean for low altitude use. Operation at altitudes below 5,000 feet (1,500 meters) with a modified carburetor may cause the engine to overheat and result in serious engine damage. For use at low altitudes, have your servicing dealer return the carburetor to original factory specifications.

Order On-Line: www.helminc.com

Order Toll Free: 1-888-CYCLE93 (1-888-292-5393)

(NOTE: For Credit Card Orders Only)

Monday – Friday 8:00 AM – 6:00 PM EST

OR

By completing this form you can order the materials desired. You can pay by check or money order, or charge to your credit card. Mail to Helm, Inc. at the address shown on the back of this order form (USA only).

Canada: See your Honda dealer to order authorized manuals.

Publication Item No.	Item Description	Qty.	Price Each*	Total Price
		Sub Total		
*Prices are subject to change without notice and without incurring obligation. Orders are mailed within 10 days. Please allow adequate time for delivery.		Purchaser's Sales Tax Mich. Add 6 % Calif. Add 8.25 %		
		Handling Charge		$5.00
		Grand Total		

Table of Contents

(cont'd)

N

O