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Conversion Kit Instructions

John Deere AMT 600 and AMT 622

Kawasaki Engine Kit

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Write your sales invoice number here

This number is required for technical assistance.
For installation assistance e-mail us at
mechanic@smallenginewarehouse.com
or call the toll free number at the top of this page.

Write your engine info here

Model: (e.g. FE250D) _____

Type: (e.g. AS11) _____

Serial #: _____

These numbers are very difficult to obtain after the engine is installed and are required for warranty.



Installation & Safety

Paying attention to the details of the written instructions and the details of the engine removal is critical to installing a new one quickly.

Certain assumptions are included in these written instructions. One of those assumptions is that since you ordered this piece of equipment, you must be qualified to install and operate it, or have made arrangements with qualified persons to do that for you. Should you need assistance, we will attempt to help you over the phone, but there is only so much we can do that way. We urge you to get assistance as needed from a qualified small engine mechanic. You can normally find one locally in your yellow pages under LAWNMOWERS or under ENGINES-GASOLINE.

The installation of an engine into a utility vehicle will require some mechanical ability, but does not necessarily require a mechanic. We sell over 1,500 kits each year for the many various tractors, utility vehicles, and skid loaders. The majority of our buyers do the installation without further help from us. However for those times when assistance is needed, we will try to help out if we can.

CAUTION!

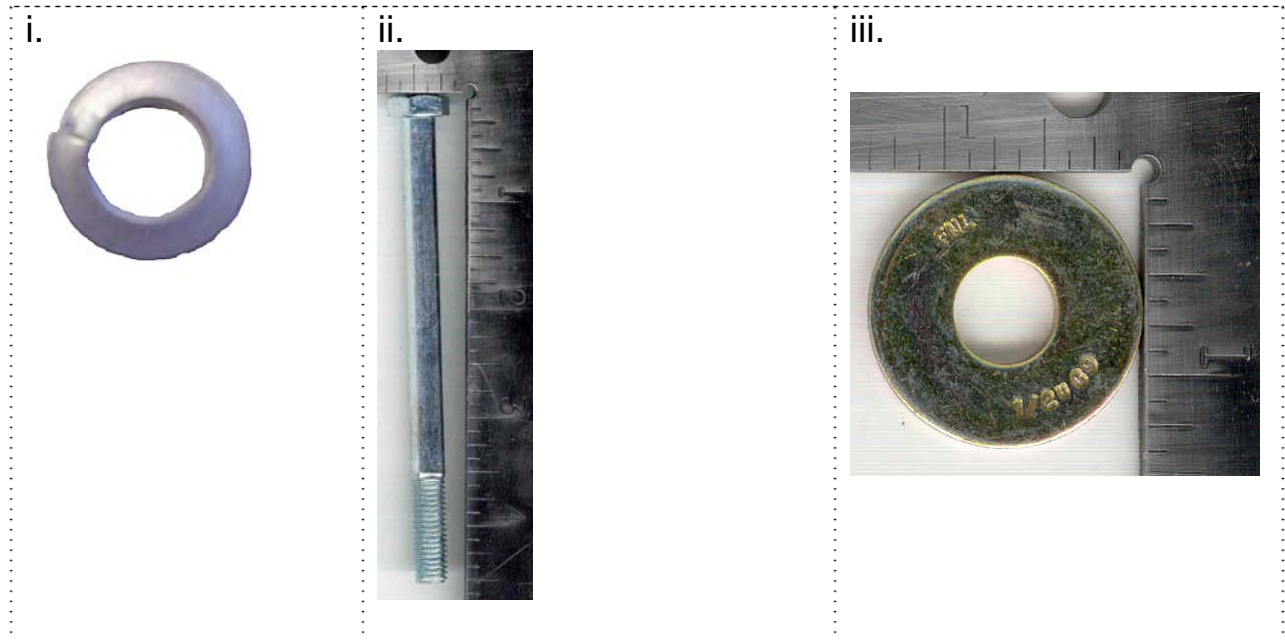
For your own safety, please be careful when working around gasoline engines. There are many hazards to watch out for:

- Gasoline is both flammable and explosive.
- Carbon monoxide in an enclosed garage is just as lethal with a utility vehicle as it would be with a car.
- Many steel engine parts are sharp enough to cause deep cuts.
- Rotating engines can cause injury by catching both hands and clothing.
- Mufflers and surrounding areas take only seconds to get hot enough for severe burns.
- Voltage generated from the battery or the engine coil can cause electrical shock.

THANKS FOR YOUR PURCHASE!

1.1. Verify That You Received All Loose Parts

- a. Most parts required for the conversion are already mounted to the engine.
- b. The parts shipped loose are normally on top of the engine when packed, secured to the engine with cable ties, or inside the plastic bag.
 - i. Wash-.38-Lock
 - ii. Bolt-m8x125m110
 - iii. Wash-.5-Flat-GR9



(Representative Pictures)

2. Remove Your Old Engine

STOP!

Please label the wiring between your utility vehicle and old engine before removing anything.

Most installation problems occur because of modified or unidentified utility vehicle wiring.

We **CANNOT** assist you in identifying your old wiring.

- a. Unbolt and remove seats and console from unit.
- b. Disconnect battery, starter wires, ground wires, and unplug wiring harness.
- c. Disconnect fuel lines, throttle, and choke cables.
- d. Remove your clutch cover and drive belt off of clutch.
- e. Unbolt exhaust and remove pipe and muffler from unit. (*Keep to be reused on new engine.*)
- f. Disconnect air intake filter from carburetor. (*Keep for reuse on new engine.*)
- g. Unbolt (4) main engine bolts and pull out old engine.
- h. Remove clutch guard bracket.



John Deere AMT 622

3. Install New Engine in Utility Vehicle

- a. Set new engine down into place and bolt down.
- b. Reinstall drive belt and air intake filter onto new engine.
- c. Reconnect starter wires, ground wires, and plug in wiring harness.
- d. Reconnect fuel lines, throttle and choke cables.
- e. Rebolt exhaust pipe and muffler to engine.
- f. Rebolt clutch guard onto engine bracket and frame bracket. (*You may have to drill a hole in cover so the bolt in new clutch will not rub cover.*)
- g. Add engine oil as specified in the engine owner's manual.



Oil drain valve may be rotated for the most suitable draining position. Plastic tube and clamp should slide on fully and be routed to the most useful location (easiest done before installing engine).



Kawasaki Engine Kit for JD AMT622

4. Make Final Connections of Wiring and Cables

- a. Reconnect the positive battery cable to the starter solenoid. (*Note: If you have a starter relay connected to your old starter solenoid, you will need to remove it and reinstall it on the new engine solenoid.*)
- b. Reconnect the battery ground cable to the engine base mounting bolt.
- c. Plug in the three prong engine wiring connector to the matching utility vehicle wiring connector. If you have no plug, or your plug does not match, go to the next page titled “Engine Wiring Information”.
- d. Plug in the clutch wiring connector.
- e. Hook up fuel line to the new engine’s fuel filter, located at the base of the air cleaner on the oil filter side of the engine.
- f. Replace the throttle control cable.
- g. Install the replacement choke controls on the tractor instrument panel.
- h. Hook up the **throttle** and **choke** cables to the new engine. Depending on how you choose to route these cables, you may want to shorten them. Adjust as needed.
- i. Reconnect battery cables to battery.
- j. Make sure the gasoline is fresh and fuel valve is opened.



5. Engine Wiring Information

As previously mentioned, we have no way to determine the function of your vehicle wiring over the phone.

The instructions below will help you to splice the vehicle and engine wiring if necessary using the wiring that you identified before removing the old engine.



- | | |
|----------|--|
| 1 | Connects to existing plug on engine |
| 2 | Connects to matching plug on vehicle |
| 3 | Connects to matching plug from vehicle |