

REPLACES: Please discard ATV 03-04 dated 12/12/03

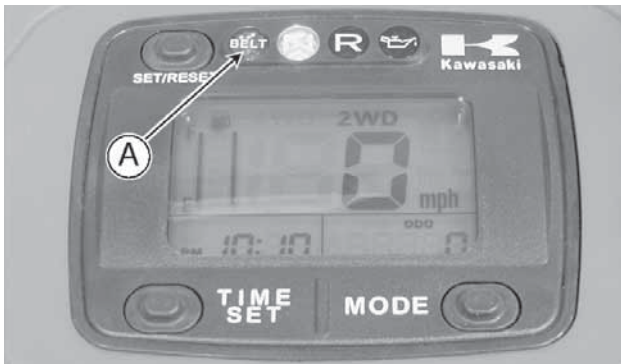
MODEL: PRAIRIE® 360 4X4 (KVF360-A/C), PRAIRIE® 360 2X4 (KVF360-B), PRAIRIE® 650 4X4 (KVF650-A/B), PRAIRIE® 700 4X4 (KVF700-A/B/D), KFX700 (KSV700-A/B/C), BRUTE FORCE™ 650 4X4i (KVF650-D/E/F/G), BRUTE FORCE™ 750 4X4i (KVF750-A/B/C),

TITLE: DRIVE BELT CHECK/DRIVE BELT FAILURE DETECTION SYSTEM MEMORY CLEARING PROCEDURE

SERVICE INFORMATION

Subject

Unfamiliarity with the Drive Belt Check and Drive Belt Failure Detection systems on Prairie, Brute Force and KFX700 ATV models is causing non-faulty igniters to be replaced instead of the memory being cleared. Read this bulletin for a thorough understanding of these systems to avoid unnecessary igniter replacement.



A. DRIVE BELT CHECK INDICATOR LIGHT

Components

Drive Belt Check System:

The Drive Belt Check system consists of an hour meter that records key ON or engine running time depending on model. If 100 hours accumulate in the hour meter, the Belt Check Indicator light in the dash will illuminate and stay on indicating the drive belt should be inspected and replaced if necessary.

Drive Belt Failure Detection System:

The Drive Belt Failure Detection system consists of a switch mounted in the CVT cover that can be tripped by a worn or damaged belt. If the Drive Belt Failure Detection switch is tripped, the Belt Check Indicator light will flash and the vehicle will enter "slow mode." In slow mode, the vehicle is limited to 3600 rpm, and the vehicle will not enter 4WD.

Applicable Vehicles

Model	Components Included (Symptom)	
	Drive Belt Check (Light Stays On after 100 hours)	Drive Belt Failure Detection Switch (Light or LCD Flashes)
2WD	KVF360-B	*NOTE: 1
	KSV700-A/B	•
4WD	KVF360-A/C	•
	KVF650-A1/B1	**NOTE: 2
	KVF650-A2/B2/D/E/F/G/H	•
	KVF700-A/B/D	•
	KVF750-A/B/C	•

*NOTE: 1
The KVF360-B does not have a Belt Check indicator light. An hour meter recording key on time is provided under the seat for assistance in following the Periodic Maintenance Chart. The meter cannot be reset.

**NOTE: 2
The 2002 KVF650-A1/B1 is not equipped with a Belt Check Indicator light. The Reverse indicator light and LCD meter will flash indicating the Drive Belt Failure Detection switch has been tripped.

Other Conditions

The Drive Belt Failure Detection system can be activated due to sudden changes in voltage. Several common conditions that can activate the system:

- Disconnecting/connecting the battery with the key in the ON position, this is common for new units during initial setup.
- Use of accessories that have a significant draw on the battery.

The Drive Belt Failure Detection switch sends voltage to the igniter. If the battery is connected or disconnected when the key is in the ON position, the igniter reads the sudden change in voltage as the switch being tripped.

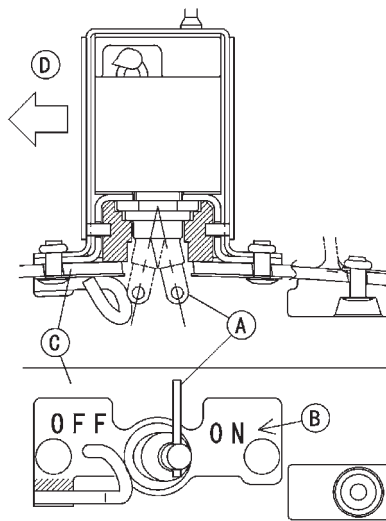
File behind the "ATV" tab in your Kawasaki "Service and Warranty" binder

Kawasaki ships ATVs with the key in the ignition switch in the ON position so that the key cannot fall out. If the battery is charged and installed with the key in the ON position, the sudden increase in voltage can trigger the igniter to illuminate the Belt Check Indicator light.

Accessories, such as a winch, that create a large voltage draw on the battery can also trigger the igniter to illuminate the Belt Check Indicator light.

If battery voltage is drawn down significantly during use of the accessory and the accessory is turned off or disconnected, the sudden jump in voltage may cause the indicator light to flash.

Occasionally the Belt Failure Toggle Switch inside the CVT can become defective. Even while in the ON position, there could be no continuity



- A. SWITCH
- B. ON POSITION
- C. CVT COVER
- D. FORWARD (OFF POSITION)

(open circuit), especially when riding in rough terrain. To check, tap on the CVT cover near the switch while the engine is idling. If the tapping causes the Belt Check Indicator Light to flash, the CVT cover needs to be replaced.

Resetting Procedure

If the Belt Check Indicator light is illuminated or blinking, first check the condition of the belt. Following the procedures in the appropriate Service Manual, inspect and replace the drive belt as necessary.

Service Manuals

MODEL	PART NUMBER
KVF360-A/C	99924-1285-06
KVF360-B	99924-1302-04
KVF650-A/B	99924-1261-04
KVF650-D/E	99924-1348-03
KVF650-F/G/H	99924-1363-01
KSV700-A/B	99924-1315-05
KVF700-A/B	99924-1319-04
KVF750-A/B/C	99924-1334-04

Once the drive belt has been inspected, the Belt Check/Drive Belt Failure Detection system must be reset. Use the instructions that follow to reset the system.

Warranty Information

This bulletin is service information only not warranty authorization.

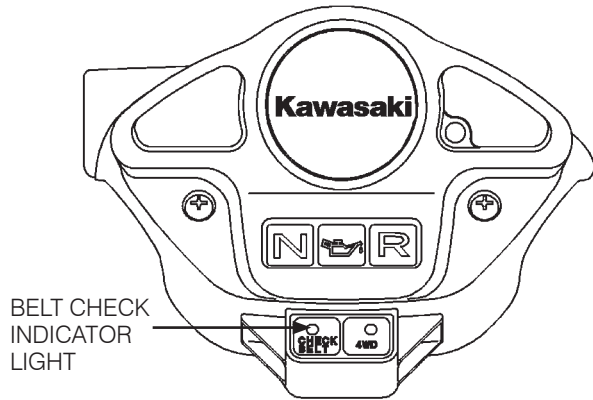
If the Belt Check Indicator light stays on after completing the resetting procedure two or three times, the igniter may need to be replaced. A study of igniters replaced under warranty has concluded that actual failure rate of the igniters is extremely low, however.

Confirm that the Drive Belt Failure Detection switch is ON and complete the resetting procedure two or three times prior to requesting warranty on any KVF360-A/C, KVF650-A/B/D/E/F/G/H, KVF700-A/B/D, KSV700-A/B, and KVF750-A/B/C igniters to make sure the unit is actually malfunctioning. As of the original publication date of this bulletin, any igniters replaced under warranty for these models will be called back to Kawasaki and tested. If the igniter is working properly after resetting the Belt Check/Drive Belt Failure Detection system, the dealer will be charged back for the igniter and labor.

All KVF Models (Except KVF650-A1/B1):

KVF360-A/C, KVF650-A/B/D/E/F/G/H, KVF700-A/B/D, and KVF750-A/B/C models have both an hour meter feature and a Drive Belt Failure Detection switch.

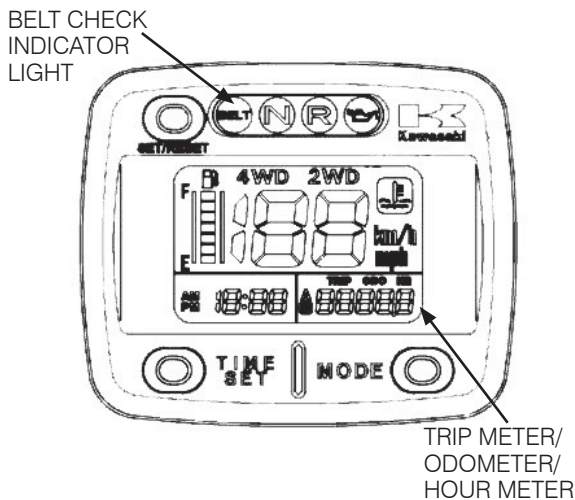
KVF360-A/C



NOTE:

- o On KVF360-A/C models, the Belt Check Indicator light is illuminated after 100 hours has accumulated.

KVF650-A/B/D/E/F/G/H, KVF700-A/B/D, and KVF750-A/B/C



NOTE:

- o KVF650-A/B/D/E/F/G/H, KVF700-A/B/D, and KVF750-A/B/C models have a Belt Check Indicator light and a viewable hour meter in the LCD meter.

If 100 hours has accumulated, the Belt Check Indicator light will come on and stay on. If the Drive Belt Failure Detection switch is tripped, the Belt Check Indicator light will flash and go into slow mode. If the light is flashing, the switch must be placed back into the ON position prior

to completing the resetting procedure. To reset both the Belt Check system indicator and the Drive Belt Failure Detection system, follow these procedures:

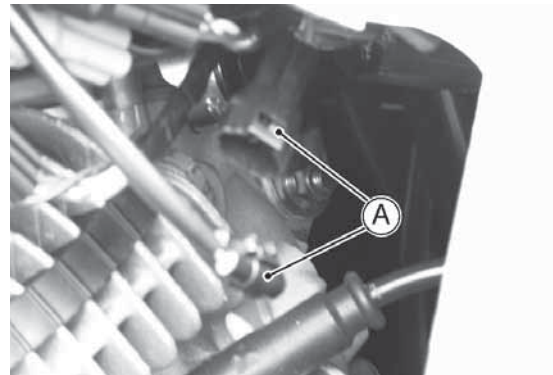
KVF360-A/C, KVF650-A2/B2/D/E/F/G/H, KVF700-A/B/D:

If the Belt Check indicator light is illuminated or blinking, first check the condition of the belt. Following the procedures in the Service Manual applicable to the model being serviced, inspect and replace the drive belt as necessary.

Once the drive belt has been inspected, the Belt Check/Drive Belt Failure Detection system must be reset. Use the instructions that follow to reset the system.

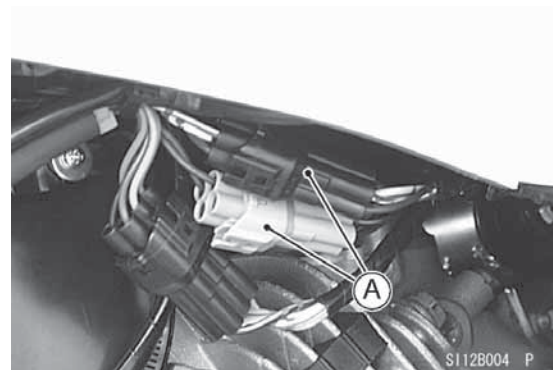
NOTE:

- o The belt switch (toggle) inside the CVT cover must be at the "ON" position before performing this procedure.
1. Turn ignition key to the OFF position.
 2. Disconnect the 2-wire small black connector [A] by the right-front side of the engine.



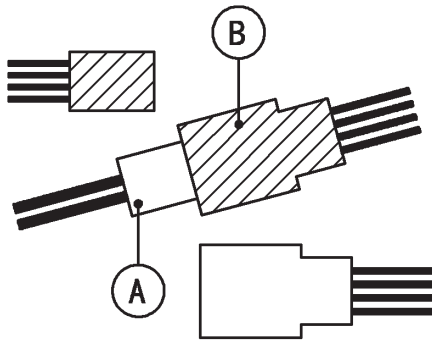
KVF360 shown.

3. Disconnect both black and gray 4-wire connectors [A] in the same vicinity (under the seat on KVF750 models).



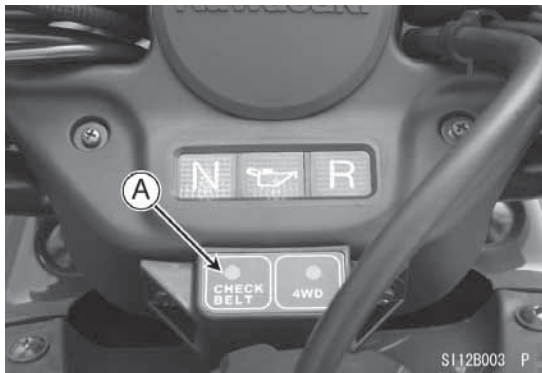
KVF360 shown.

- Reconnect the gray plug (male) connector [A] to the black receptacle (female) connector [B].



NOTE:

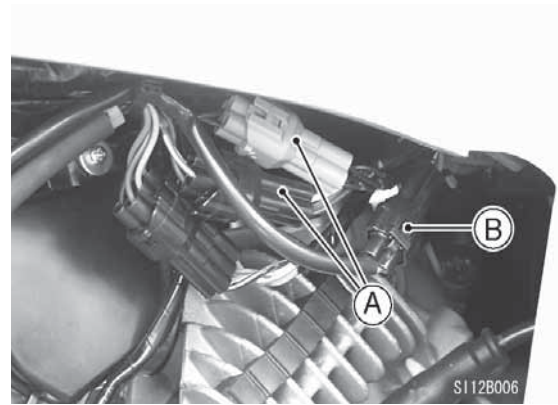
- Do not connect the gray receptacle (female) connector to the black plug (male) connector or the procedure will not work.
- Turn the ignition key to the ON position.
 - Make sure that the belt light [A] flashes fast 5 times at an approximately 0.4-second interval, then slowly at an approximately 1-second interval.



KVF360 shown.

- Wait two seconds or longer while the light flashes at a 1-second interval.
- Turn the ignition key OFF.
- Reconnect both gray and black connectors to their correct matching colored connectors.

- Reconnect the 2-wire small black connector [B].



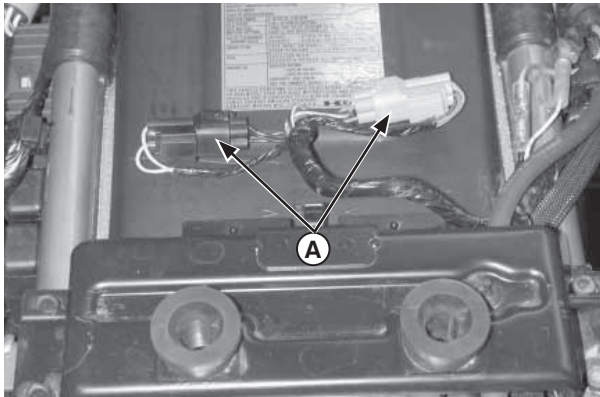
KVF360 shown.

- Turn the ignition key to the ON position.
- Confirm the belt light is OFF.

KSV700-A/B/C:

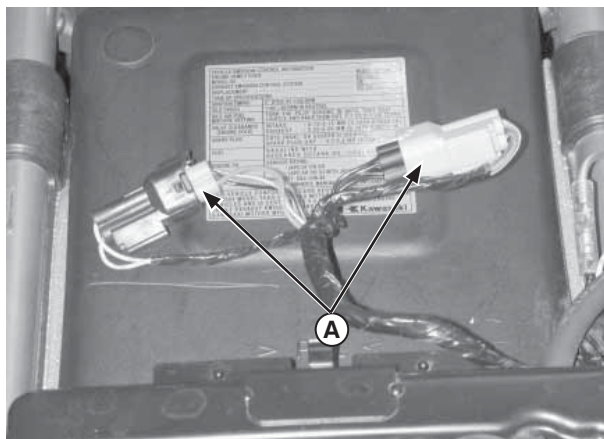
KFX700 models store engine running time in the igniter and the Belt Check Indicator light is illuminated after 100 hours of engine running time. When the Belt Check Indicator light comes on, follow these procedures to reset the hour meter:

1. Turn the ignition switch OFF.
2. Inspect and replace the drive belt as necessary according to the Service Manual (P/N 99924-1315-05).
3. Remove the seat.
4. Locate the two, 4-pin connectors (A) under the seat. One connection is black and the other is gray.



4-PIN CONNECTORS

5. Disconnect both sets of 4-pin connectors, and reconnect the 4-pin connectors to their opposite color, i.e., gray-to-black and black-to-gray.

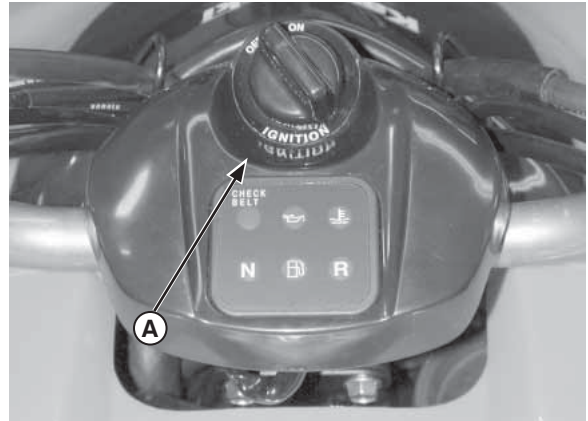


A. GRAY-TO-BLACK; BLACK-TO-GRAY

6. Turn on the ignition switch.

NOTE:

- o *The hour meter resets immediately when the key is turned ON.*



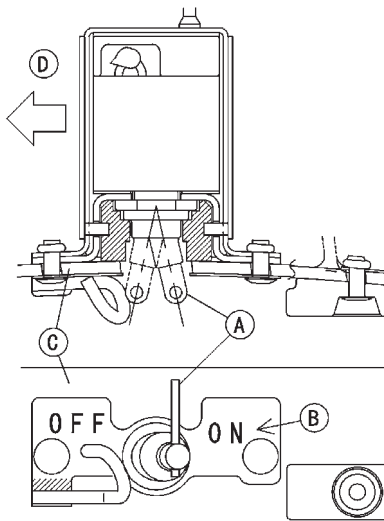
A. BELT CHECK INDICATOR LIGHT

7. The Belt Check Indicator light should be flashing.
8. Turn off the ignition switch.
9. Disconnect the mismatched 4-pin connector sets and reconnect them normally (black-to-black, gray-to-gray).
10. Turn on the ignition switch and confirm that the indicator light is no longer on.

KVF650-A1/B1:

2002 KVF650 models have a Drive Belt Failure Detection Switch located in the CVT cover and an hour meter in the LCD meter. If the switch is tripped, the LCD meter and indicator lights in the dash will all flash rapidly. If the LCD meter and lights are flashing, return the switch to the ON position.

1. Turn off the ignition switch.
2. Remove the CVT cover.
3. Inspect and replace the drive belt as necessary according to the Service Manual (P/N 99924-1261-04).
4. Reset the Drive Belt Failure Detection switch to the ON position.



- A. SWITCH
- B. ON POSITION
- C. CVT COVER
- D. FORWARD (OFF POSITION)

5. Turn the key to the ON position and confirm that the LCD meter and lights are no longer flashing.

DRIVE BELT WARNING LIGHT CLEARING PROCEDURES

2002 KVF650-A1/B1	2004-2007 KSV700-A/B/C	ALL KVF MODELS (Except KVF650-A1/B1)
1. Turn the ignition switch OFF.	1. Turn the ignition switch OFF.	1. Turn the ignition switch OFF.
2. Remove the CVT cover.	2. Inspect and replace the drive belt as necessary according to the Service Manual (P/N 99924-1315-05).	2. Disconnect the 2-wire small black connector by the right-front side of the engine.
3. Inspect and replace the drive belt as necessary according to the Service Manual (P/N 99924-1261-04).	3. Remove the seat.	3. Disconnect both black and gray 4-wire connectors in the same vicinity (under the seat on KVF750 models)..
4. Reset the Drive Belt Failure Detection switch to the ON position.	4. Locate the two, 4-pin connectors under the seat. One connection is black and the other is gray.	4. Reconnect the gray plug (male) connector to the black receptacle (female) connector. NOTE: o Do not connect the gray receptacle (female) connector to the black plug (male connector) or the procedure will not work.
5. Turn the key to the ON position and confirm that the LCD meter and lights are no longer flashing.	5. Disconnect both sets of 4-pin connectors, and reconnect the 4-pin connectors to their opposite color, i.e., gray-to-black and black-to-gray.	5. Turn the ignition switch ON.
	6. Turn the ignition switch ON. NOTE: o The hour meter resets immediately when the key is turned ON.	6. Make sure that the belt light flashes fast 5 times at an approximately 0.4-second interval, then slowly at an approximately 1-second interval.
	7. The Belt Check Indicator light should be flashing.	7. Wait two seconds or longer while the light flashes at a 1-second interval.
	8. Turn the ignition switch OFF.	8. Turn the ignition switch OFF.
	9. Disconnect the mismatched 4-pin connector sets and reconnect them normally (black-to-black, gray-to-gray).	9. Reconnect both gray and black connectors to their correct matching colored connectors.
	10. Turn the ignition switch ON and confirm that the indicator light is no longer on.	10. Reconnect the 2-wire small black connector.
		11. Turn the ignition switch ON.
		12. Confirm the belt light is OFF.