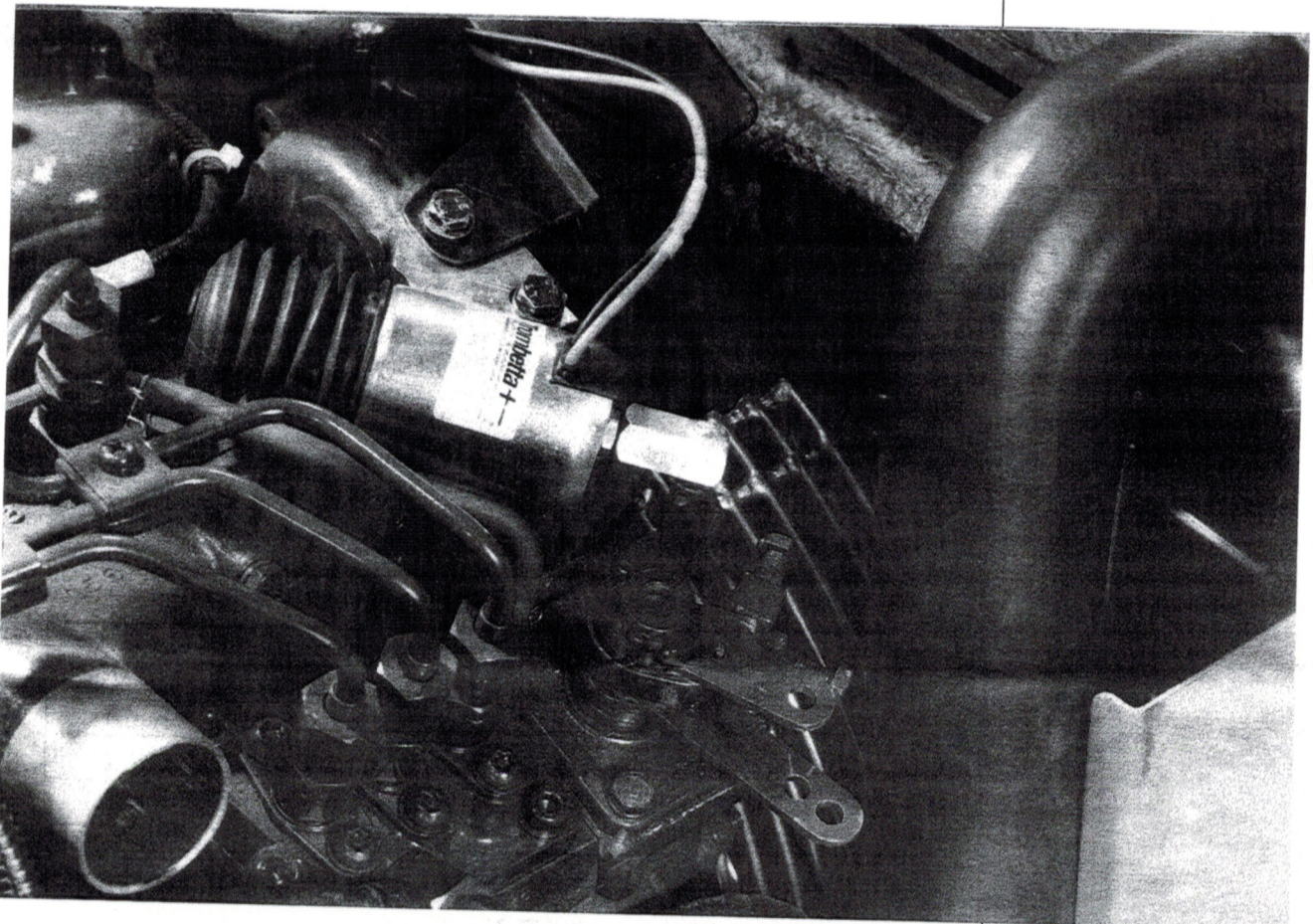


# Fuel Shut-Down Kit INSTALLATION INSTRUCTIONS for KUBOTA SUPER MINI SERIES ENGINES

Trombetta  
Q610 K3V12  
Shut-Down Kit

This kit enables "energize-to-run" operation for Kubota Super Mini Series engines. It must be used with either of two Kubota fuel levers... part #17580-57720 or #16851-57720. Trombetta fuel lever kit #E07723 may also be used.



**PJ Power, Inc.**  
483 NW 68th Ave.  
Ocala, FL 34482

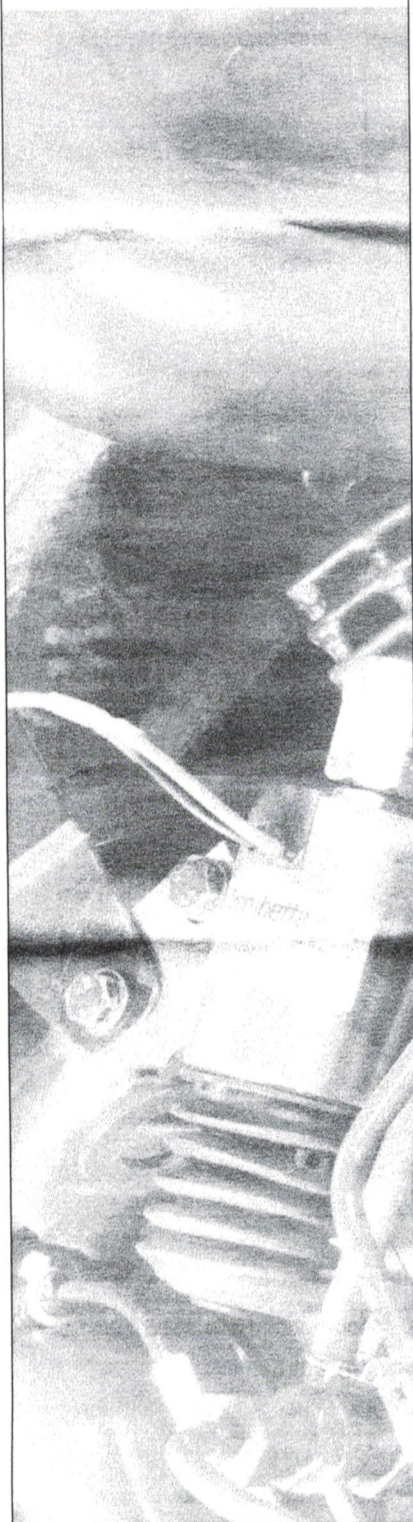
**Trombetta + -**  
ELECTROMAGNETICS

13901 Main Street  
Menomonee Falls, WI 53051  
(414) 251-5454  
FAX: (414) 251-5757  
<http://www.trombetta.com>  
e-mail: [sales@trombetta.com](mailto:sales@trombetta.com)



# Trombetta Q610 K3V12 Shut-Down Kit

## Installation Instructions



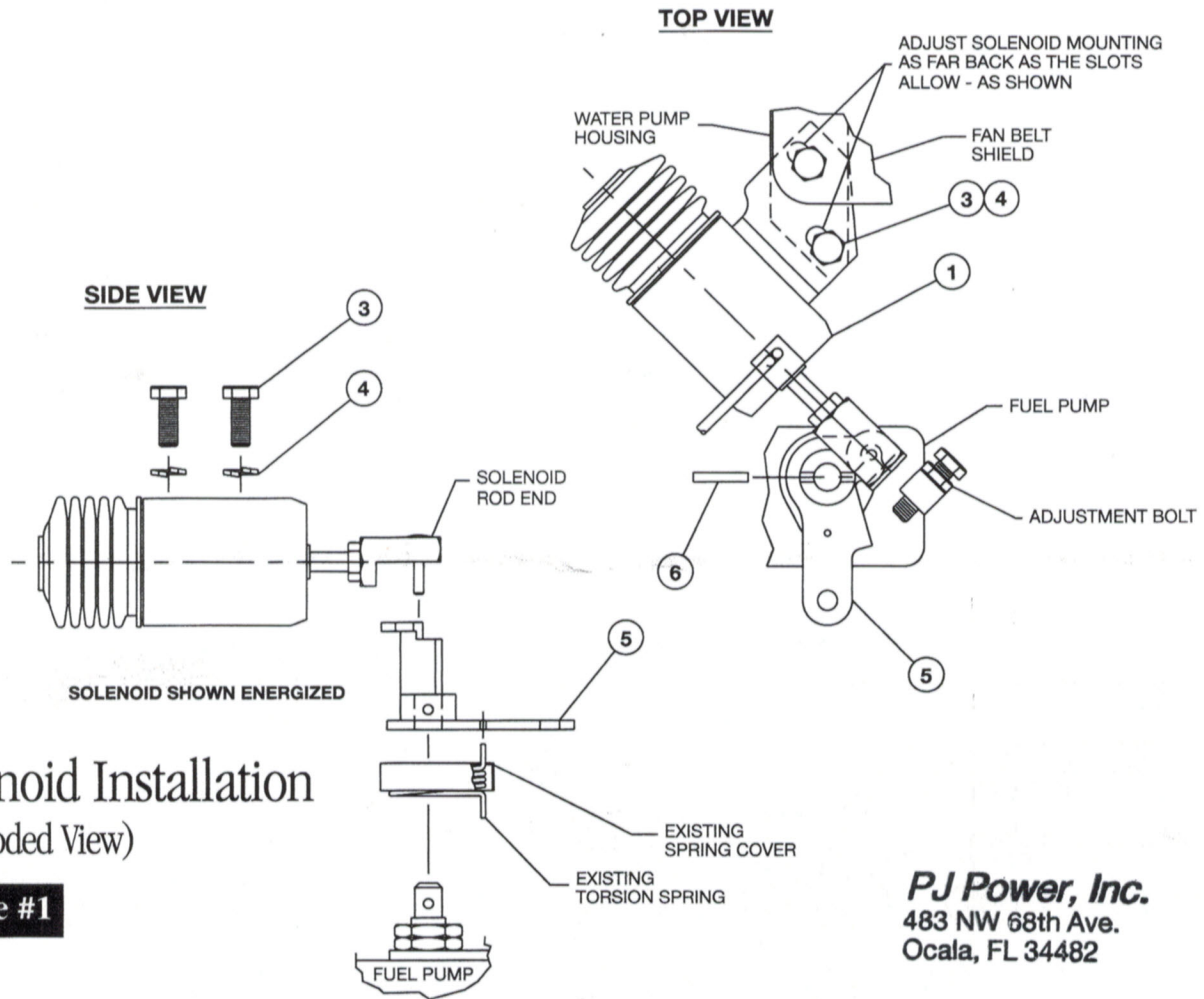
- 1) Refer to Figure 1 to verify contents of the kit.  
**Note:** The fuel shutdown kit must be used with either of two standard Kubota fuel levers, part # 17580-57720 or 16851-57720, or Trombetta fuel lever kit part # E07723. **No fuel lever is included in the Q610 K3V12 kit.**
- 2) Familiarize yourself with the overall installation by carefully reviewing all accompanying illustrations. Refer to Materials List for steps 4-8.
- 3) If the existing fuel lever is not one of the two levers mentioned in item #1 above, then remove this lever by removing the existing roll pin. The torsion spring and spring cover will be reused. Note the location of the torsion spring before removing the lever so that you can re-install the spring in the same position.
- 4) Install the new fuel shutoff lever (5) with new roll pin (6). Use the existing roll pin holes on the lever and fuel pump rod. Reference Figure 1 for proper orientation.
- 5) Place the solenoid assembly (1) into position on the water pump housing. The solenoid mounting tab must be located under the fan belt shield and the solenoid rod end pin located in the slot of the fuel shutoff lever. Loosely attach the solenoid utilizing new bolts (3) and lockwashers (4). Reference Figure 1 for proper orientation.
- 6) Shift the solenoid assembly away from the fuel lever until all adjustment has been taken up in the slotted mounting holes.
- 7) Tighten all mounting hardware. **Note:** Proper torque specs are 3.5 to 5 ft.lbs. (5-7NM).
- 8) Locate and mount the control module (2) within reach of the 18" long solenoid leads. The specific control module location is to be based on your particular application.  
**Note: Do not mount the module on hot engine surfaces.**
- 9) Perform electrical installation by utilizing the wiring diagram in Figure 2. It is recommended that the power wiring connected to the +BATT. and -BATT. terminals of the module be a minimum of #14 gage wire for a total wire run of no more than six feet. (Contact the factory for recommended wire size if the wire run exceeds six feet.)  
The wire connected to the +AUX terminal carries low current and can be #18 or #20 gage wire regardless of the length. If your system is different than presented, please contact the factory for assistance in determining proper system wiring.
- 10) Verify wiring, stroke and tightness of all connections. Adjust if necessary. **Note:** The location of the solenoid rod end is preset at the factory and should not require adjustment. Ensure that the fuel shutoff lever contacts the fuel pump adjustment stop when the solenoid is de-energized.

### Materials List Q610-K3V12 Shut-Down Kit

Item	Part #	Description	Qty
1	Q610-A38V12	Solenoid Assembly	1
2	S500-A60	Module	1
3	H10552	Hex Hd M6X1X16	2
4	H10521	Lockwasher M6	2

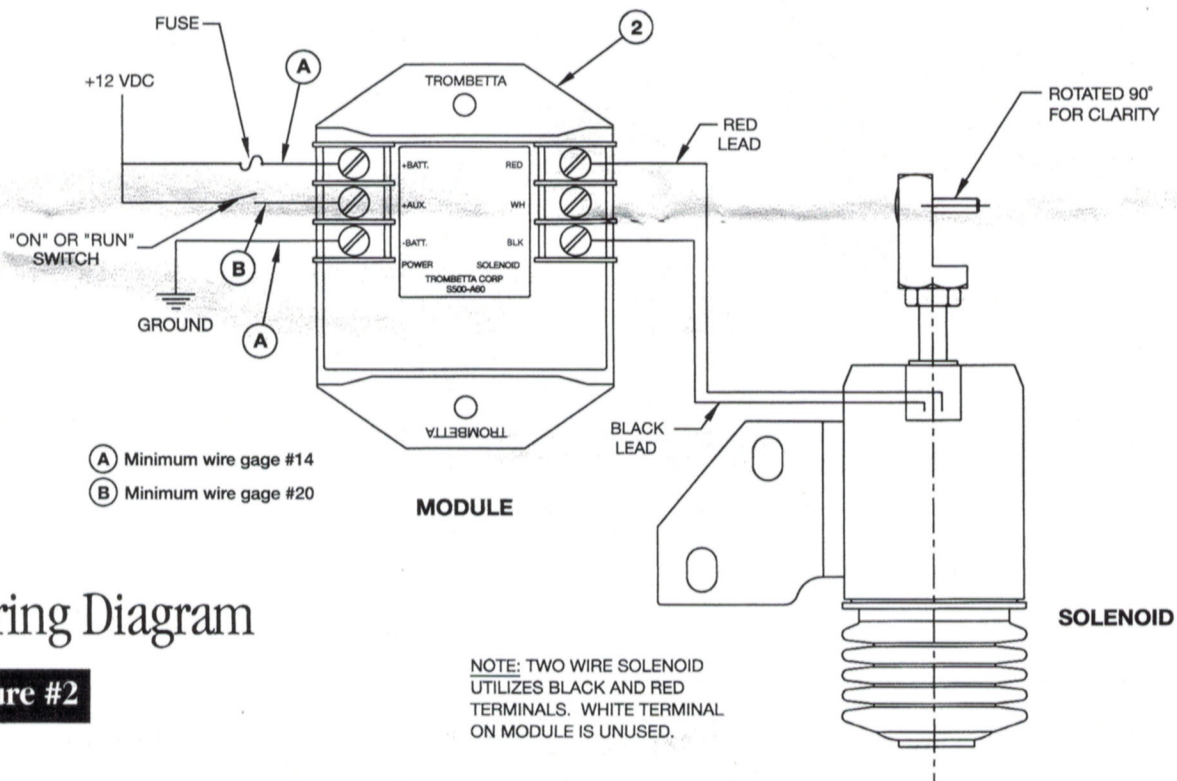
### Materials List E07723 Fuel Shutoff Lever Kit

Item	Part #	Description	Qty
5	H10868	Fuel Shutoff Lever	1
6	H10869	Roll Pin	1



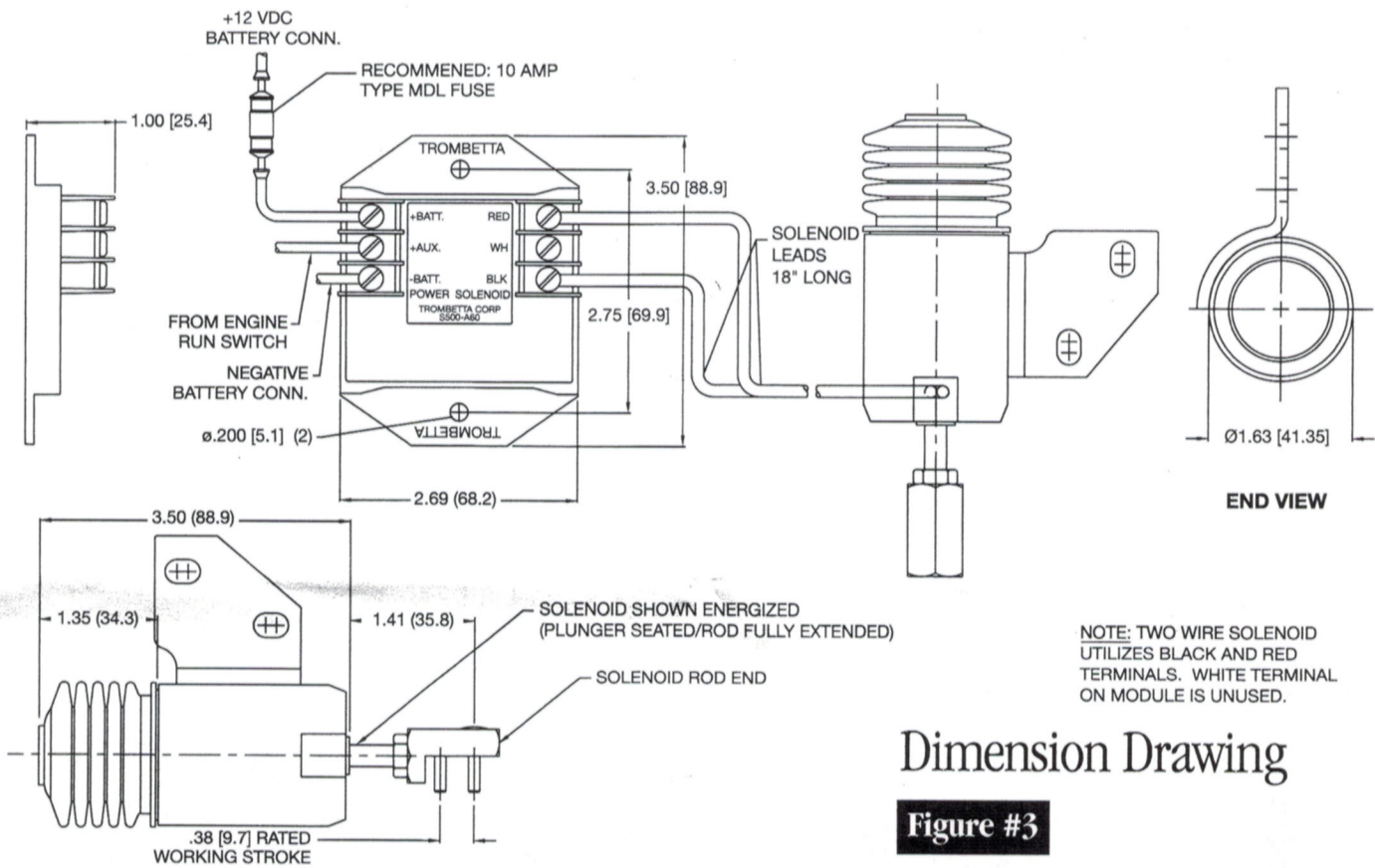
## Solenoid Installation (Exploded View)

**Figure #1**



**Figure #2**





## Dimension Drawing

**Figure #3**

### Nominal Electrical Specifications

Voltage Input, Max (+Batt & Aux inputs)	15 VDC
Voltage Input, Min. <sup>1</sup> (+Batt & Aux inputs)	8.5 VDC @ 25°C
Current draw @ 12VDC input to module	55 Amp for 1/2 Sec Pull, <1 Amp Holding @ 25°C
Storage Temperature	-40°C to + 100° C
Operating Ambient Temperature	-30°C to + 80°C
Pull In Time	0.5 Sec.
Recycle time <sup>2</sup>	0.25 Sec.
Maximum Cycle Rate	6 Cycles/Minute for 1 minute maximum duration
Auxiliary input current requirement	Less than 50 milliamp
Fuse requirement	15 Amp type MDL
Transient voltage protection	Integral 5000 Watt Peak Pulse Power TVS
Connection	#6 screw terminals, Stnls Steel screws tin/brass term

<sup>1</sup> Minimum voltage required to assure full pull-in time is achieved.

<sup>2</sup> Minimum time voltage must be removed from the Aux input in order for the pull in timer to reset for full 0.5 second pull in.

### Solenoid Force Ratings

Hold Force (Plunger Seated)	Push Force @ Rated Working Stroke
Solenoid 41 lbs. →	Solenoid 23 lbs. →
Spring 15 lbs. ←	Spring 10 lbs. ←
Net Force 26 lbs. →	Net Force 13 lbs. →

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