

**PENNTEX IDLE CONTROLLER
FORD 7.3L DI TD E350**

INSTALLATION:

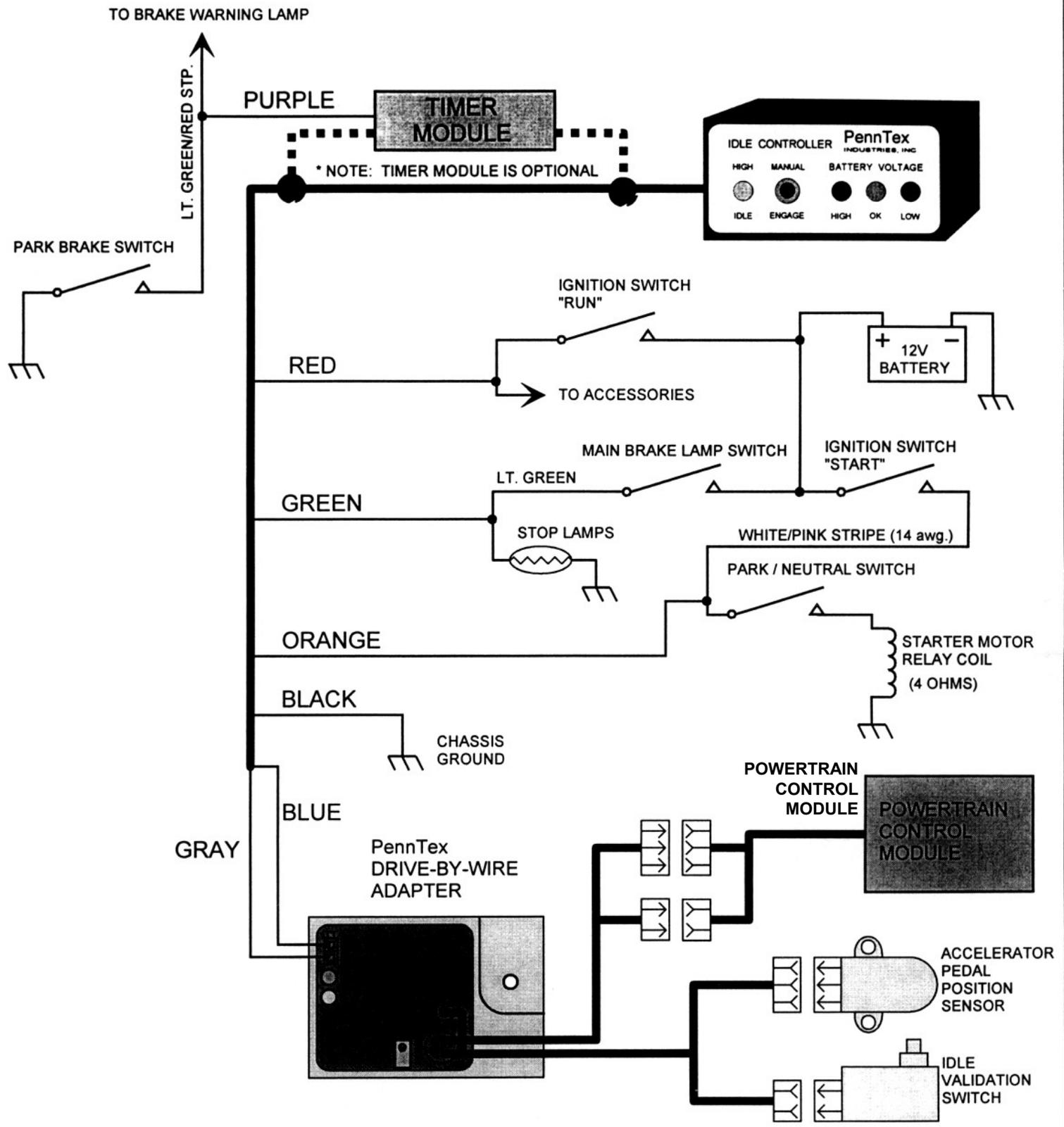
Idle controller may be mounted in locations other than the one listed in these instructions. Controller extension harnesses are available.

- 1) Using 7mm socket, remove mid-dash trim pieces and knee panel.
- 2) Using template, drill two 11/64" holes in knee panel.
- 3) Mount idle controller with supplied screws, washers and nuts as shown in fig. 1.
- 4) Reinstall knee panel and trim pieces.
- 5) Route idler harness over large factory harness and plug into idle controller.
- 6) Connect the red wire from idler to a purple w/orange stripe wire (18 AWG) in large factory harness (fig. 2-A). This wire should be +12v when the ignition switch is in run position (Fuse #5, 15A)
- 7) Connect the orange wire from the idler to a white w/pink stripe wire (14 AWG) in large factory harness (fig. 2-A). This wire will pull to ground through the park/neutral switch and the starter relay when the gearshift is in park or neutral.
- 8) Connect the green wire from the idler to a light green wire (18 AWG) in large factory harness (fig. 2-A). This wire will be +12v when the brake pedal is pressed.
- 9) Tape and tie any loose wires or harnesses away from sharp edges and moving parts, as shown in fig. 3.
- 10) Using a T-15 Torx screwdriver, remove the screw from the idle validation switch on the accelerator pedal assembly (fig. 4-A) and carefully remove switch from pedal bracket.
- 11) Unplug the 2-wire connector from the idle validation switch. This connector has 2 locks that must simultaneously be released (fig. 4-B).
- 12) Carefully re-align idle validation switch and re-install mounting screw.
- 13) Unplug 3-wire connector from the accelerator pedal position sensor (fig. 4-C), push harness retainer rivet through hole in bracket and pull harness from behind assembly.

- 14) Using an 8mm socket, remove dash support bolt found above engine compartment cover clamp (fig. 5-A).
- 15) Insert bolt through ground connector of wiring harness and mount idle adapter (fig.6-A).
- 16) Connect PCM harness and accelerator pedal to idle adapter module and zip tie loose harnesses away from sharp edges and steering linkage.

TESTING AND ADJUSTMENT:

- 1) Turn ignition switch to run position but **do not start**. The "LOW" battery voltage indicator (red) should be lit. After 10 seconds the "HIGH IDLE" indicator (yellow) should light up. The yellow LED on the adapter should also be on. This is a redundant indicator of the controller's "HIGH IDLE" indicator used for diagnostics.
- 2) Press the brake pedal. The "HIGH IDLE" indicator (yellow) should turn off. Release the brake and it should come back on with no delay.
- 3) Put the emergency brake on. Press the brake pedal and move the gearshift to "DRIVE". Release the brake pedal. The "HIGH IDLE" indicator (yellow) should not be lit. Put the shifter in "NEUTRAL". The "HIGH IDLE" indicator should light. Put the shifter in "PARK".
- 4) Start engine and press the "MANUAL ENGAGE" button. Allow engine to warm up. Turn on all possible engine and electrical loads. Adjust engine RPM with the setscrew on the idler adapter to a level adequate to maintain battery voltage above 12.75 volts (1000-1500 RPM). Alternator may take a few minutes to recharge batteries before voltage can rise. Alternator must also be capable of putting out more current than vehicle draws at a given RPM.
- 5) Press and release gas pedal quickly. Red LED on the adapter should light for 5 seconds during which time the engine will idle at a normal speed. After 5 seconds the red light will extinguish and RPM will return to its elevated level.
- 6) Installation complete.



**PENNTEx
INDUSTRIES INC.**

FT. WORTH, TX DOVER, PA

PART NAME

7.3L T.D. Drive-By-Wire High Idler
Electrical Connection Schematic

PART #

SHEET #

1 OF 1

NOTES

This is a generic wiring schematic for the Ford 7.3L turbo diesel idlers that have drive-by-wire or electronic throttle control. This is not specific to any certain model. For simplicity some details such as fuses were omitted from the schematic.

REV. A

DWN BY

RICK WYLIE