



INSTRUCTION BULLETIN

No. 340716
Machine: 800/810
Published: 06-2005
Rev. 00

NOTE: DO NOT DISCARD the Parts List from the Instruction Bulletin. Place the Parts List in the appropriate place in the machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save the cost of ordering an entire kit.

NOTE: Numbers in parenthesis () are reference numbers for parts listed in Bill of Materials.

Installation instructions for **kit number 374198**

SYNOPSIS / PROBLEM:

This kit contains the parts needed to install a start timer onto 800/810 machines with Ford 2.5 LPG engines.

Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 2 hours)

PREPARATION:

1. Park the machine on a clean level surface.
2. Raise the hopper and secure with hopper support bar.



**WARNING: Raised hopper may fall.
Engage hopper support bar.**

3. Turn off machine, remove key, and set parking brake.

FOR SAFETY: Before leaving or servicing machine, stop on level surface, set parking brake, turn off machine, and remove key.

4. Disconnect the battery cables from the batteries.



WARNING: Always disconnect battery cables from machine before working on electrical components.

INSTALLATION:

1. Remove the instrument panel from the dash. Refer to Fig. 1.

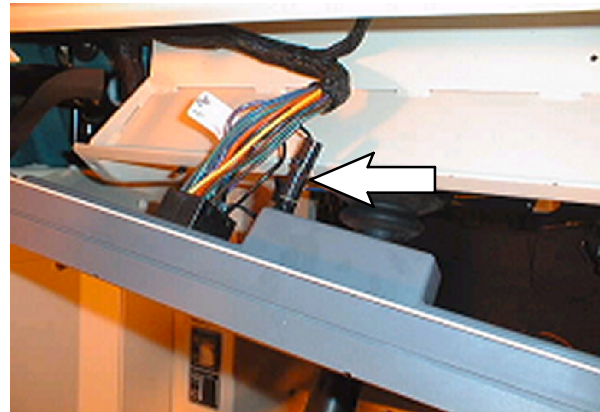


FIG. 1

2. Disconnect the Weather Pack connector. Refer to Fig. 1.
3. Connect the wires labeled 13RA and 13SA on the timer start harness (1) to the connectors located behind the instrument control panel. Refer to Fig. 6 and Fig. 7.

4. Use a hex screw (4), hex nut (5), and washer (6) to mount the timer (2) to an existing hole in the back wall of the Instrument panel compartment. Do not overtighten the hardware since doing so could damage the timer.
5. Connect wires labeled 1, 2, 3, and 6 on the timer start harness (1) to the appropriate terminals on the timer (2). Refer to Fig. 2, Fig. 6, and Fig. 7.

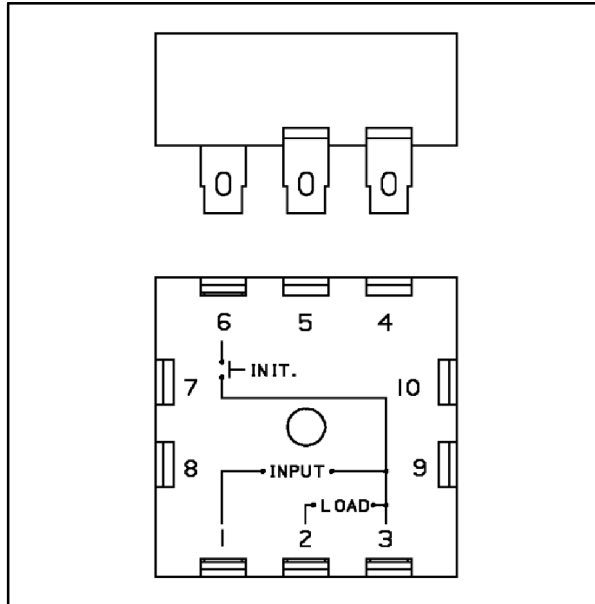


FIG. 2

6. Connect the wire labeled KSW-17 on the timer start harness (1) to terminal 17 on the key switch containing wire 17/ORA from the main harness. Refer to Fig. 3, Fig. 6, and Fig. 7.

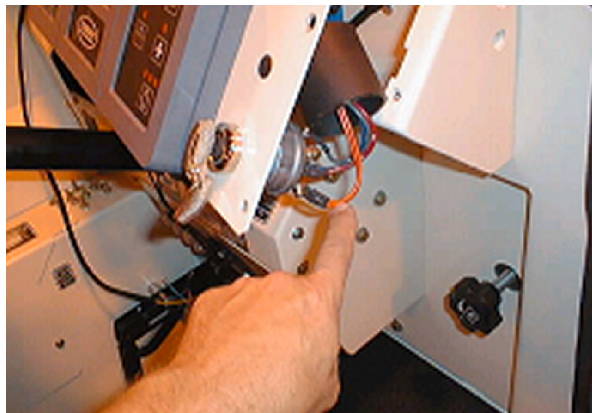


FIG. 3

7. Route the loose end of the harness out through the left side of the instrument panel and down to the relay panel.

8. Remove the relay cover (A) from the relay panel. Refer to Fig. 4.

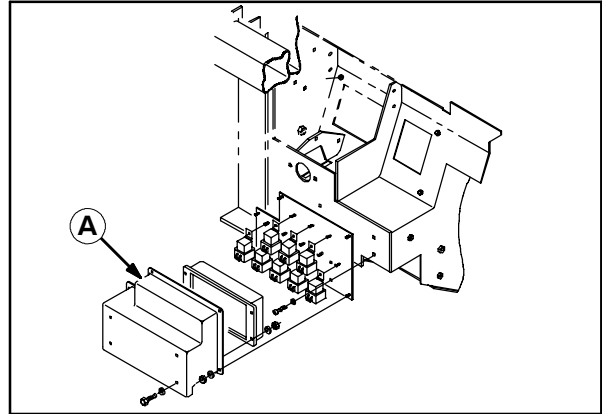


FIG. 4

9. Use the crimp splices and the heat shrink from the timer start harness (1) kit to splice the wires labeled 15AB, 15AA, and 18V into the main harness wires of relay 12. Refer to Fig. 6 and Fig. 7.

NOTE: Follow the polarity for the diode plug wires as indicated on the wire labels.

10. Plug the diode (3) into the diode key switch harness attached to the timer start harness (1). Refer to Fig. 5.

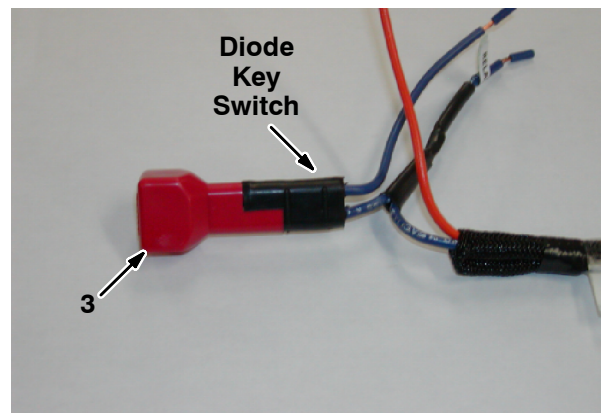


FIG. 5

11. Bundle the wires together and use the wire ties included with the timer start harness (1) kit to secure them together.
12. Reinstall the relay cover (A) back onto the relay panel and the instrument panel into the dash.
13. Reconnect the battery cables to the batteries.
14. Disengage the hopper support bar and lower the hopper.
15. Start the engine to test the starting response.

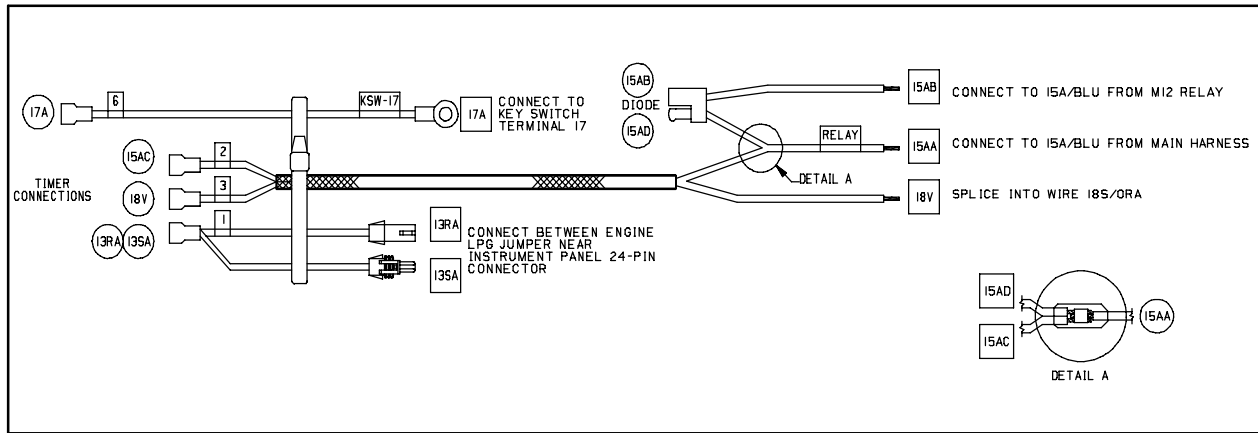


FIG. 7

Bill of Materials for Timer Kit, Start, LPG, CI [800] 374198

Ref.	Tennant Part No.	Description	Qty.
▽	374198	Timer Kit, Start, LPG, CI [800]	1
▲▽ 1	374232	Harness, Start, Timer, LPG, [800]	1
▲▲	370156	Harness, Switch, Key, Diode, [515]	1
▲▲	78266	Tube, Heatshrink, .25ID 01.0L	5
▲▲	60455	Connector, Splice [12GA]	5
▲▲	49263	Tie, Cable, Nyl, 11.4L .19W 3.0 Max D	5
▲ 2	379656	Timer, 12VDC, 10 Sec	1
▲ 3	222290	Diode, Ele, Plug	1
▲ 4	07805	Screw, Hex, M6 X 1.0 X 35, SS (not shown)	1
▲ 5	08708	Nut, Hex, Lock, M6 X 1.0, NL (not shown)	1
▲ 6	19066	Washer, Flat, #10 (not shown)	1

TENNANT COMPANY
P. O. Box 1452
Minneapolis, MN 55440-1452