

TORO®

MODEL NO. 07436

INSTALLATION INSTRUCTIONS

HAND THROTTLE KIT For Workman 3000 Series

1. Position vehicle on a clean, level surface, stop engine, engage parking brake and remove key from ignition switch. Disconnect positive cable from battery.
2. Mount slotted throttle rod ends to throttle levers with shoulder bolts and locknuts, as shown in figure 1. Make sure rod ends are mounted to sides of levers and bolt shoulders are positioned in rod end slots.

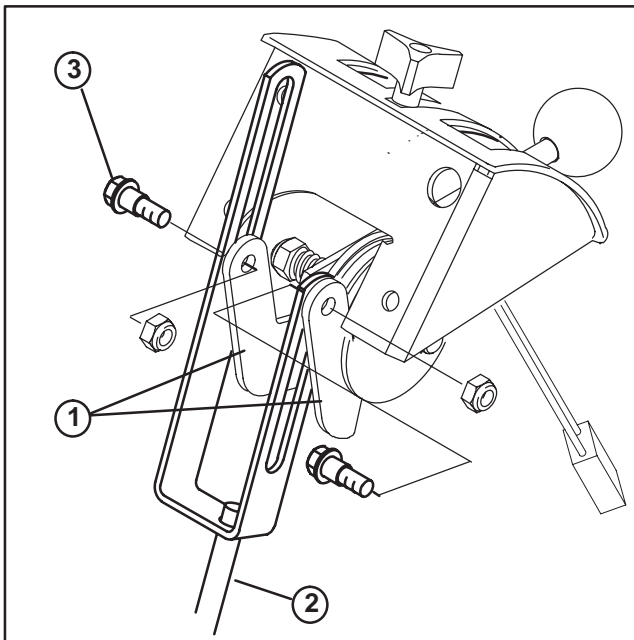


Figure 1

1. Throttle levers
2. Throttle rod
3. Shoulder bolt

3. Locate (2) 1/4-20 x 5/8" lg. button head capscrews and nuts securing dash panel to R.H. pedal support (Right of horn button) (Fig. 2).

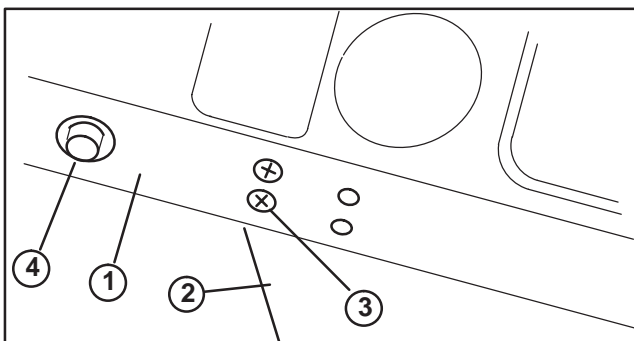


Figure 2

1. Dash panel
2. Pedal support
3. Button head capscrew
4. Horn button

4. Remove lower button head capscrew and nut and discard. Do not remove top capscrew and nut.
5. Align mounting holes in back of hand throttle assembly with (3) holes in dash. Large hole in back of assembly fits over remaining screw head in dash panel.
6. Mount hand throttle assembly to dash and pedal support with (3) 1/4-20 x 3/4" lg. capscrews and flange locknuts supplied in kit (Fig. 3).

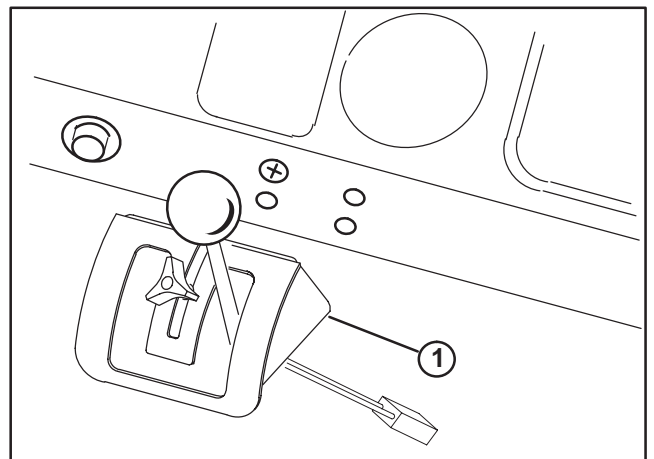


Figure 3

1. Hand throttle assembly

7. Move speed control lever to "hand throttle" side (left slot) and push lever all the way upward (full speed).
8. Push accelerator pedal all the way to the floor and hold or brace it there.

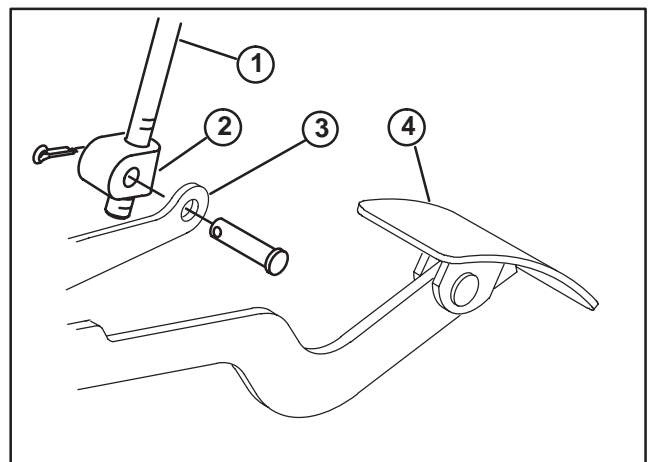


Figure 4

1. Throttle rod
2. Plastic fitting
3. Accelerator arm
4. Accelerator pedal

9. While holding up hand throttle rod, rotate plastic rod fitting, on rod, up or down until holes in fitting align with hole in accelerator arm (Fig. 4). Secure fitting to accelerator arm with clevis pin and cotter pin.

10. Release accelerator pedal and move speed control lever to the "speed limiter" side (right slot) and fully upward to the "OFF" position.

Note: Adjust tension nut, under cover, on left side of assembly if accelerator pedal will not stay at floor when speed control lever is in the FAST position on the "hand throttle" side.

11. Using dimensions shown in figure 5, locate and apply warning decal to left side of center hood mounting bolt.

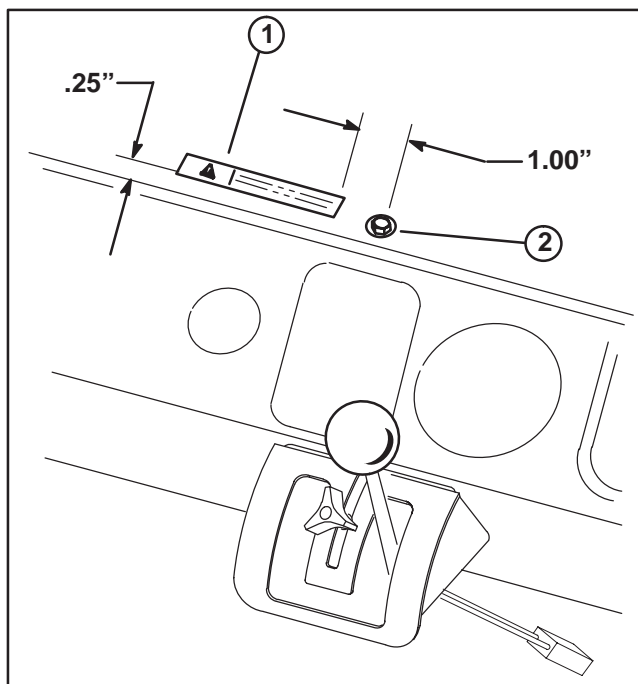


Figure 5

1. Warning decal
2. Center hood mounting bolt

12. Unscrew and remove all knobs from console levers.
 13. Remove (6) screws securing outside edge of center console cover plate to frame and remove cover plate (Fig. 6).

14. Loosen (2) capscrews and locknuts securing front legs of seat frame to sides of vehicle floor (Fig. 6).

15. Remove (2) capscrews and lockwashers securing seat frame brackets to vehicle frame (Fig. 6). Pivot seat frame forward.

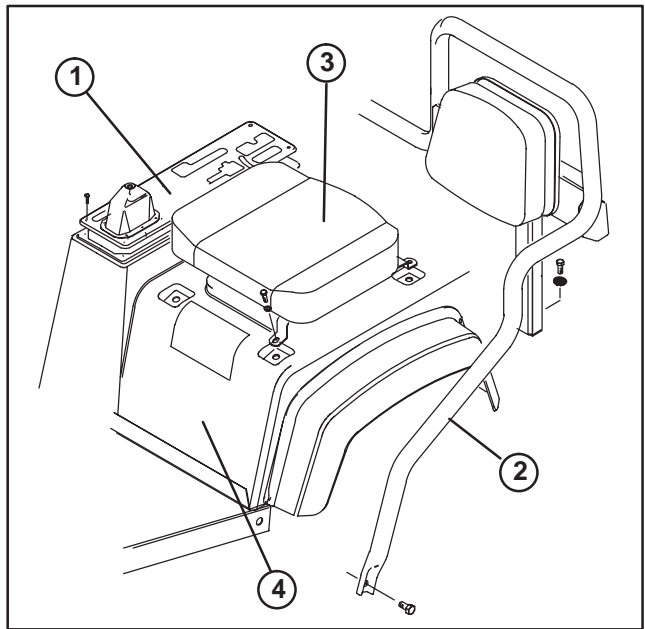


Figure 6

1. Center console cover
2. Seat frame
3. Seat assembly
4. Skirt & fender assembly

16. Loosen hose clamp securing overflow tube to radiator and slide tube off radiator opening (Fig. 7). Plug overflow tube to prevent coolant from escaping.

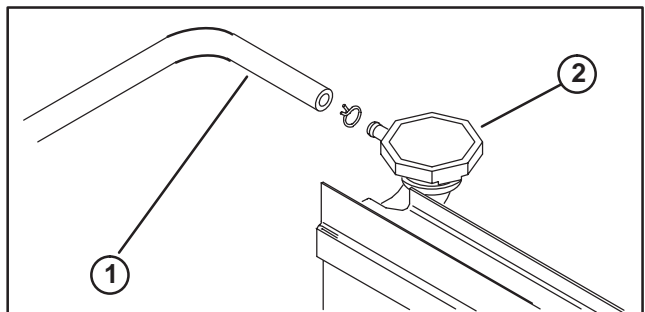


Figure 7

1. Overflow tube
2. Radiator



CAUTION

Pressurized hot coolant escaping can cause serious burns.

- Allow engine to cool enough to touch before removing overflow tube or radiator cap.

17. Remove (4) capscrews and lockwashers securing each set of seat brackets to vehicle frame and remove seat assemblies (Fig. 6). Lift off skirt and fender assembly.

18. Remove head light bulbs from both headlights.

Note: Do not touch bulbs with fingers as oil from hands may lead to early bulb failure.

19. Remove (15) screws and washers securing front hood to vehicle frame and remove hood.

20. Insert end of harness with a male spade terminal, female spade terminal and wetherpak connector on it, up through opening in vehicle floor board, toward dash panel, following vehicle wire harness. Secure harness to vehicle wire harness with (2) cable ties.

21. Locate wire connected to "I" terminal of ignition switch. Remove wire from "I" terminal and plug into appropriate wire harness terminal. Plug remaining harness terminal onto ignition switch "I" terminal.

22. Plug wetherpak connector into connector coming from hand throttle assembly.

23. Remove fasteners securing wire harness cover to under side of vehicle floor and remove cover.

24. Route wire harness rearward to console area. Harness must not interfere with operation of brake pedal return spring or any moving parts.

25. If vehicle is already equipped with a parking brake switch proceed to step 28.

26. Using dimensions shown in figure 8, locate, mark and drill (2) .218"(7/32") dia. holes in vehicle console.

Note: On Vehicles with serial numbers 50001 & Up, holes are provided in console.

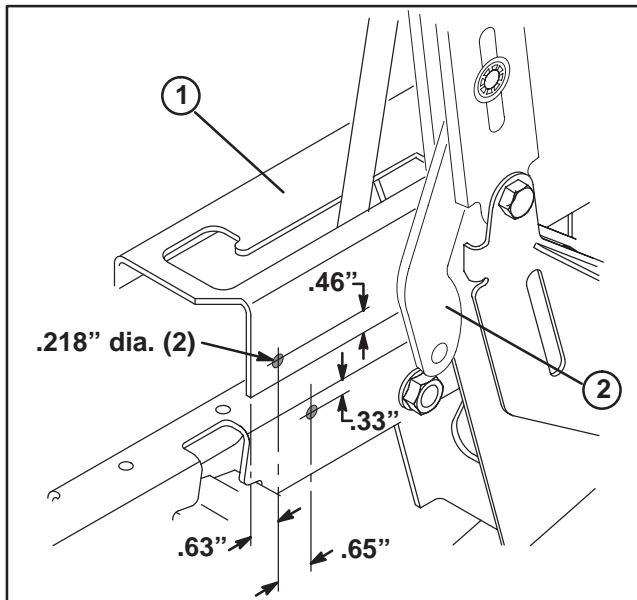


Figure 8
1. Vehicle console
2. Parking brake lever

27. Loosely mount parking brake switch to vehicle console with (2) spacers, #10–24 screws, washers and nuts, as shown in figure 9. Different length spacers and screws are used to mount switch level.

28. Using one of the following procedures, connect harness to parking brake switch or appropriate attachment.

A. If machine is equipped with no other options which use a parking brake switch:

1. Plug appropriate hand throttle harness connector into brake switch (see schematic, page 5).

or

B. If machine is equipped with a generator:

1. Plug appropriate hand throttle wire harness connector into open connector on generator harness (see schematic, page 6).

or

C. If machine is equipped with a 1/3 Platform Lift:

1. Unplug 1/3 Platform Lift wire harness from parking brake switch (see schematic, page 7).
2. Plug appropriate hand throttle harness connector into brake switch.
3. Plug lift wire harness into appropriate hand throttle harness connector.

or

D. If machine is equipped with a 1/3 Platform Lift and a generator:

1. Unplug 1/3 Platform Lift wire harness from parking brake switch (see schematic, page 8).
2. Plug lift wire harness into appropriate hand throttle harness connector.
3. Plug appropriate hand throttle harness connector into brake switch.
4. Plug appropriate hand throttle wire harness connector into open connector on generator harness.

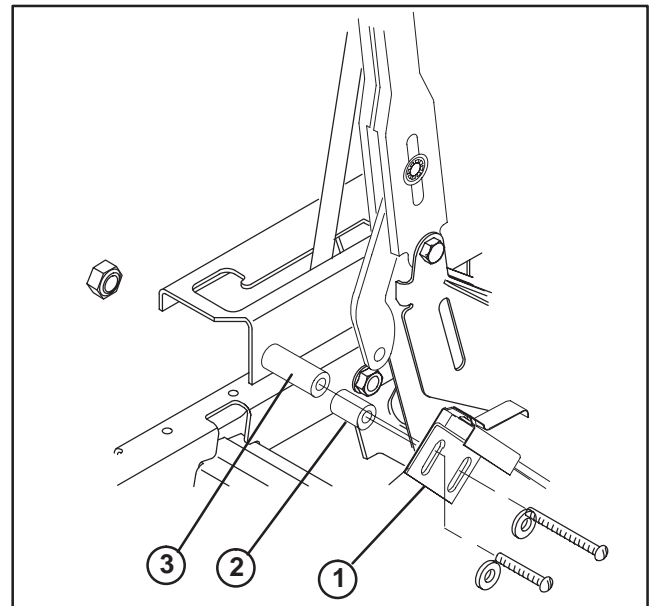


Figure 9
1. Parking brake switch
2. Short spacer
3. Long spacer

29. To assure proper operation of the parking brake switch the parking brake must be properly adjusted. Adjust parking brake as follows:

- Loosen set screw securing knob to end of parking brake lever.
- Rotate knob until a force of 35–45 lbs. is required to actuate lever.
- Tighten set screw after adjustment has been attained.

30. To adjust parking brake switch:

- Disengage parking brake.
- Move switch into parking brake lever until switch is activated, then tighten mounting nuts.
- Slowly engage parking brake to check operation of switch.

IMPORTANT: Do not move switch to close to lever as switch damage may occur.

31. Install wire harness cover over harness' and secure to under side of vehicle with fasteners previously removed.

32. Make sure wiring is clear of all hot or rotating part. Secure with cable ties as required.

33. Reinstall hood to frame with fasteners previously removed.

34. Reinstall light bulbs in head lights.

35. Reinstall skirt, seats, seat frame and console cover plate.

36. Reinstall overflow tube to radiator. Check coolant level and replenish, if required.

37. Reinstall positive battery cable to battery.

38. Slide rubber boot over positive terminal to prevent possible short-out from occurring.

39. Start engine and check hand throttle operation to assure maximum and minimum RPM settings can be achieved. Readjust as required.

NOTE: If hand throttle will be used with attachments such as pumps, compressors, generators, etc., it is recommended that an optional tachometer be installed to accurately regulate engine speed.

OPERATION

Speed Limiter

The speed limiter sets the maximum engine speed (within the preset limits). This allows the engine speed to be varied from idle to the operator set maximum speed. It is very useful to set the desired PTO speed for attachments like sprayers.

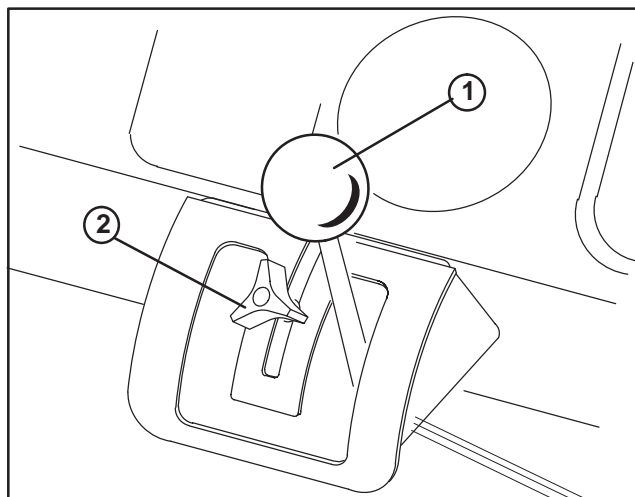


Figure 10

1. Speed limiter and hand throttle
2. Stop knob

- With speed control lever in OFF position, loosen stop knob and move it fully upward.
- Slide speed control lever around stop and downward to SLOW position.
- Depress the accelerator pedal to desired maximum RPM.
- Move stop knob downward until it contacts control lever. Tighten knob.
- Release accelerator pedal, then depress again. Check to assure proper RPM is attained.

To disengage speed limiter, move speed control lever fully up.

Manual Setting

The hand throttle (left) slot is used for manually setting engine speed. This is used for stationary attachments, like the generator, to set a constant engine or PTO RPM.



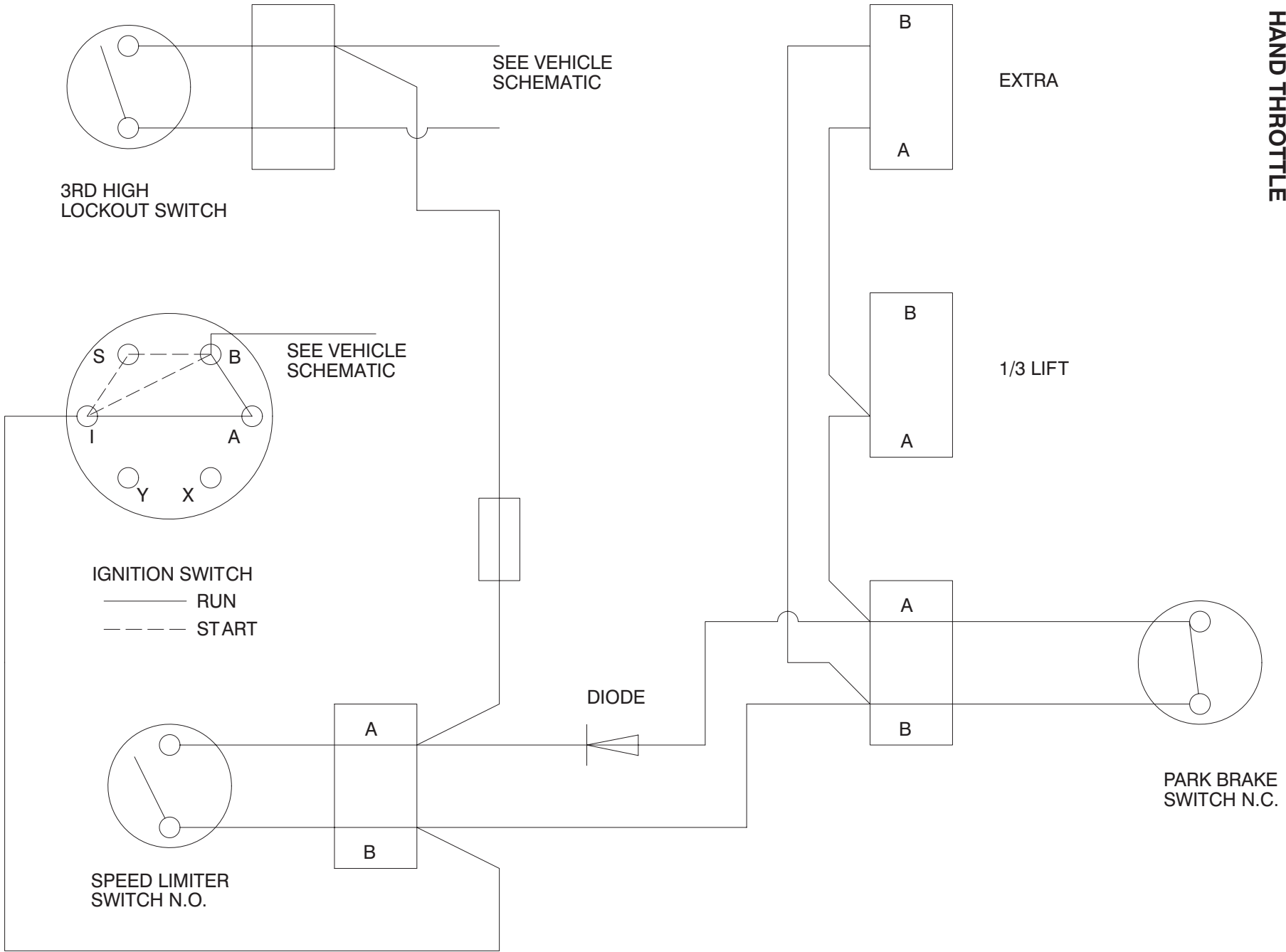
WARNING

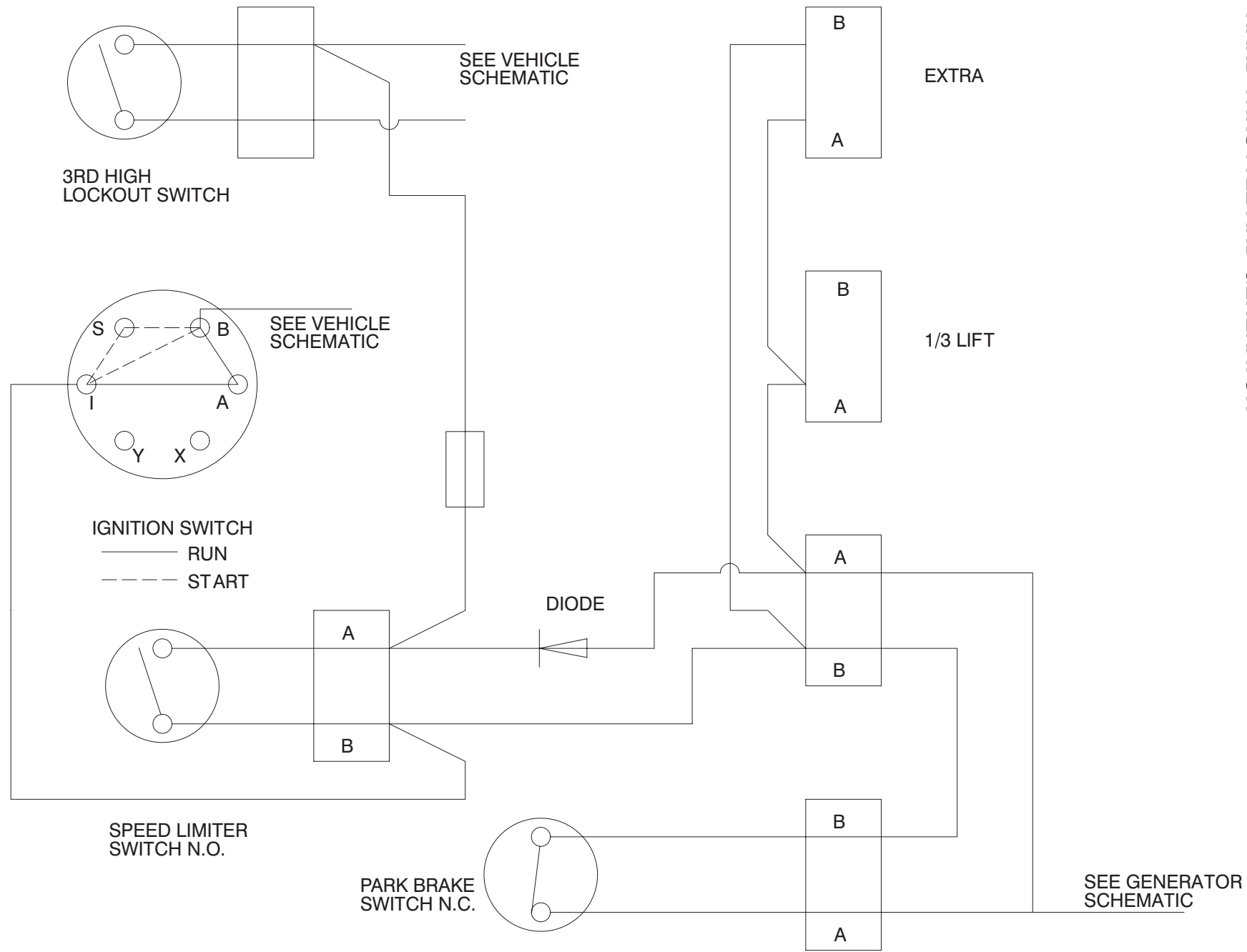
Loss of vehicle control could result from driving vehicle with hand throttle used to control ground speed. The hand throttle also controls the foot throttle, so foot throttle pedal cannot be used to reduce engine and vehicle speed.

- Engage parking brake.
 - Note:** Engine will quit running if speed control lever is moved to ON position and parking brake is not engaged. Engine will crank, but not start until parking brake is engaged and speed control lever is moved to OFF position.
- With speed control lever in OFF position, loosen stop knob and move it fully downward.
- Move speed control lever to left slot and position above stop to achieve desired RPM.
- Move stop knob upward until it contacts control lever. Tighten knob.
- Check to assure proper RPM is attained.

To disengage, move control lever to OFF position.

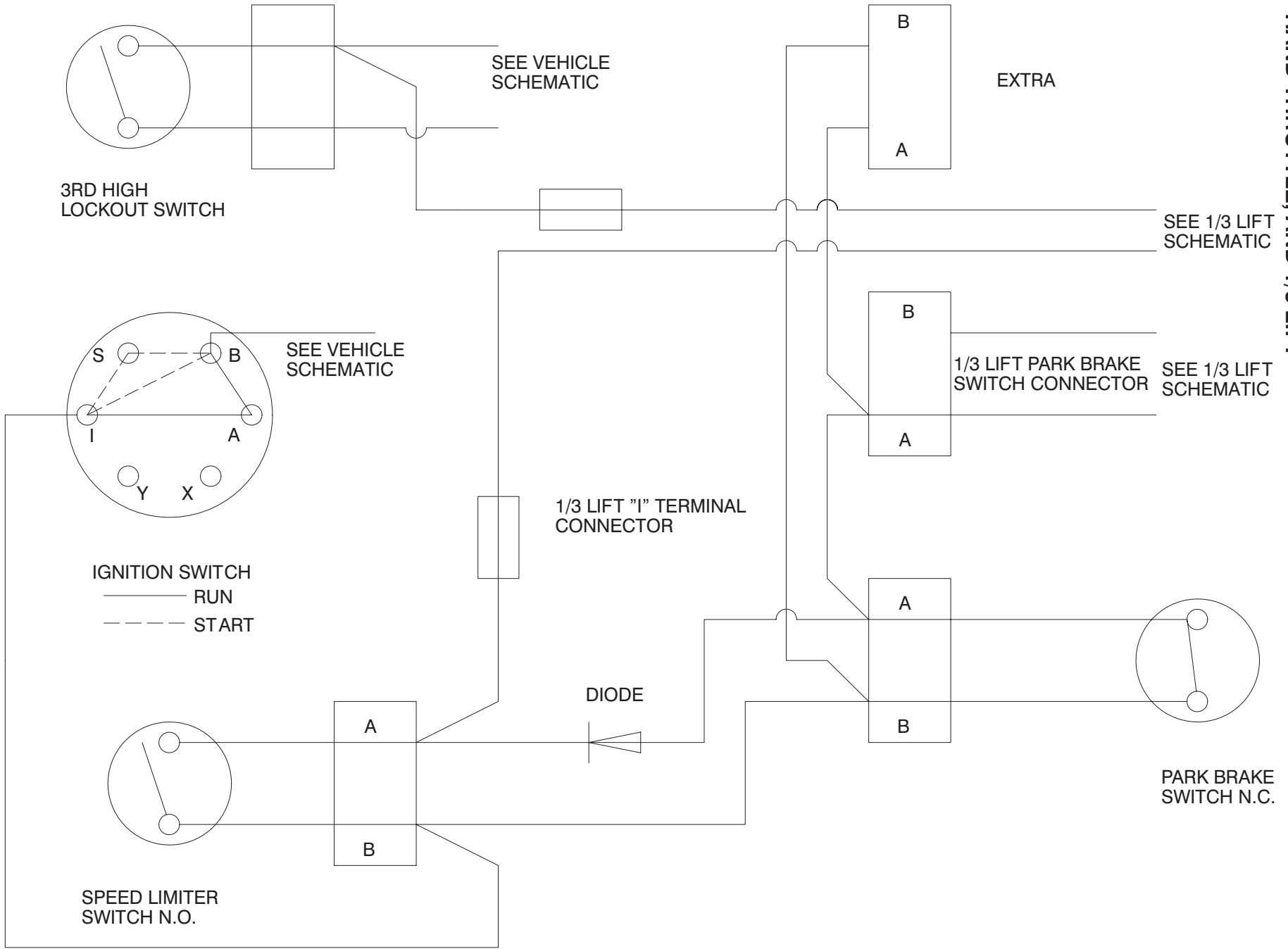
**ELECTRICAL SCHEMATIC FOR
HAND THROTTLE**

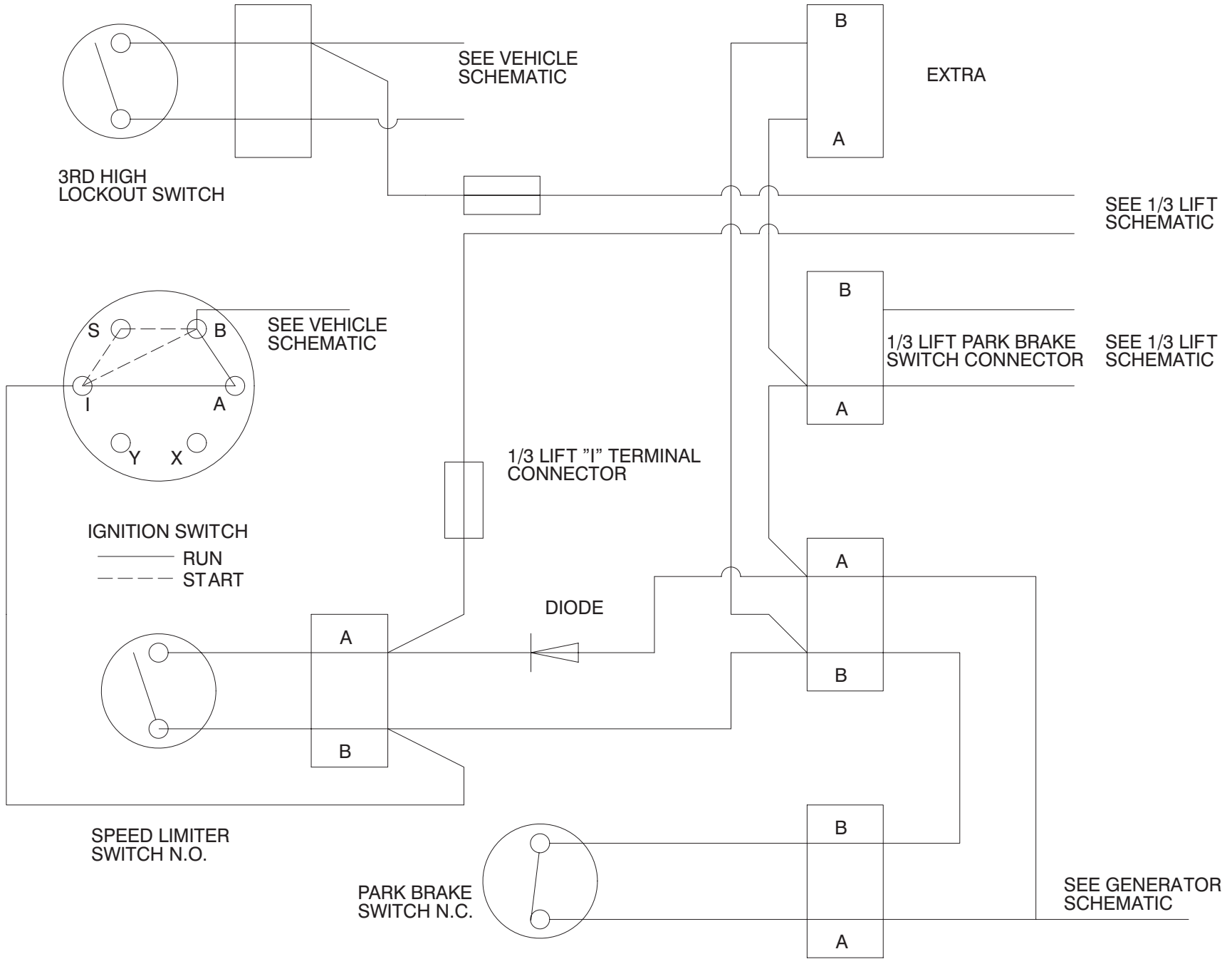




ELECTRICAL SCHEMATIC FOR HAND THROTTLE AND GENERATOR

**ELECTRICAL SCHEMATIC FOR
HAND THROTTLE, AND 1/3 LIFT**





ELECTRICAL SCHEMATIC FOR HAND THROTTLE, GENERATOR AND 1/3 LIFT.