

TORO®

MODEL NO. 30485

INSTALLATION INSTRUCTIONS

CRUISE CONTROL KIT For Groundsmaster 455

1. Remove screws securing steering column cover to steering column frame. Remove cover.
2. Mount coil assembly to right side of center frame member of steering column frame with (4) 1/4-20 x 1/2 lg. capscrews and nuts (Fig. 1). Position coil wire harness toward front of machine.

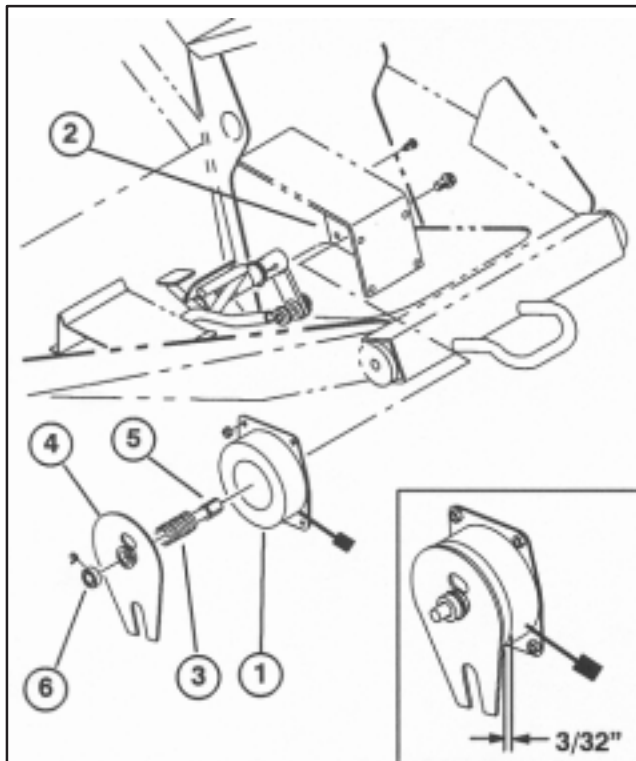


Figure 1

- | | |
|-----------------------|-----------------|
| 1. Coil assembly | 4. Clutch plate |
| 2. Frame member | 5. Clutch shaft |
| 3. Compression spring | 6. Collar |

3. Insert hex end of clutch shaft into coil assembly, aligning hole in end of shaft with hole in frame member. Secure clutch shaft to frame member with a 3/8-16 screw (Fig. 1). Torque screw to 30-35 ft-lb.
4. Insert compression spring onto clutch shaft (Fig. 1).
5. Slide clutch plate onto clutch shaft while aligning spring with bushing flange on coil side of clutch plate (Fig. 1).
6. Install and loosely secure collar to clutch shaft with setscrew (Fig. 1). Push collar onto shaft until clearance between clutch plate and coil is 3/32" (Fig. 1, inset). Tighten set screw.

7. Remove capscrew, (2) washers and locknut securing traction linkage rod ball joint to traction linkage lever (Fig. 2).
8. Remove bushing from lever (Fig. 2).

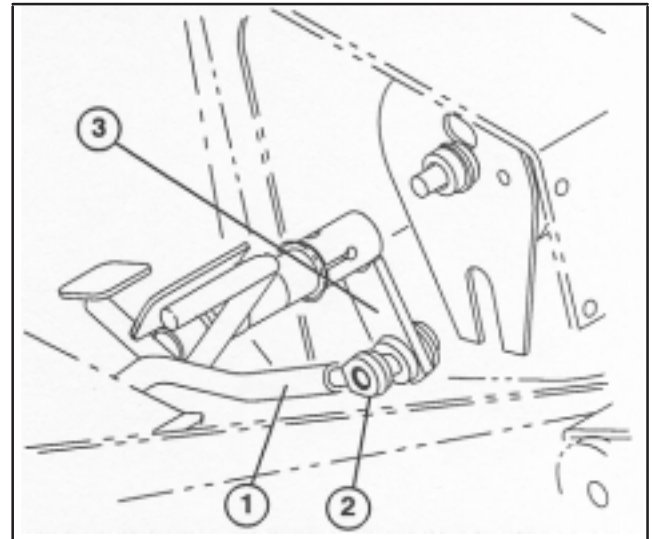


Figure 2

1. Traction linkage rod
2. Ball joint
3. Traction linkage lever

9. Insert nylon sleeve onto cruise nut.
10. Secure cruise nut, sleeve and washer to left side of traction linkage lever and ball joint with previously removed capscrew and new spacer, while positioning components in clutch plate slot as shown in figure 3.

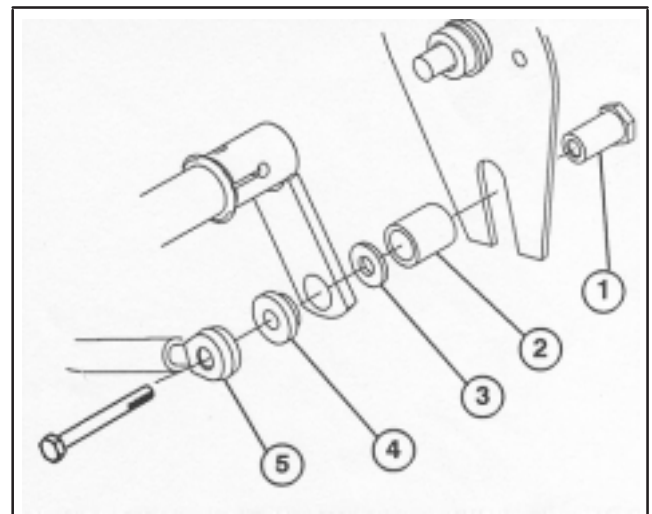


Figure 3

- | | |
|-----------------|---------------|
| 1. Cruise nut | 4. Spacer |
| 2. Nylon washer | 5. Ball joint |
| 3. Washer | |

11. Mount a micro switch to each switch strap with (2) machine screws and nuts. Position switches on left and right straps as shown in figure 4.

12. Loosely secure appropriate switch strap to each side of floor plate with (2) 1/4-20 x 1/2" lg. washer head capscrews. Micro switch buttons should align with rear of brake levers.

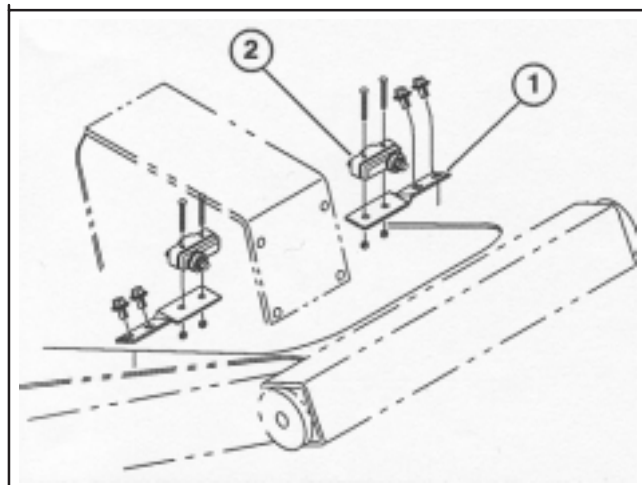


Figure 4

- 1. Switch strap
- 2. Micro switch

Note: On machines with serial numbers prior to 20201, switch strap mounting holes in floor plate are not provided. Use the dimensions shown in figure 5 to locate, mark and drill (2) .219" dia. holes in floor plate, on each side of opening.

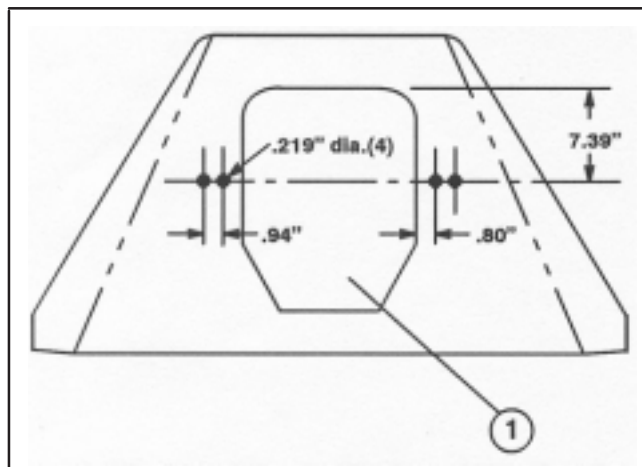


Figure 5

- 1. Opening in floor panel

13. Adjust switches so they are engaged when brake pedals are depressed. Check switch operation with a continuity meter. Tighten screws.

IMPORTANT: Switches may be damaged during operation, if they are installed too close to brake levers.

Note: On machines with serial numbers 39999 & Up, warning light mounting hole is provided. Remove knock out plug from console panel to expose hole.

14. Using a hole saw and dimensions shown in figure 6, locate, mark and drill a .875" dia. hole thru plastic console panel only.

15. At same location drill a .72" dia. hole thru metal console.

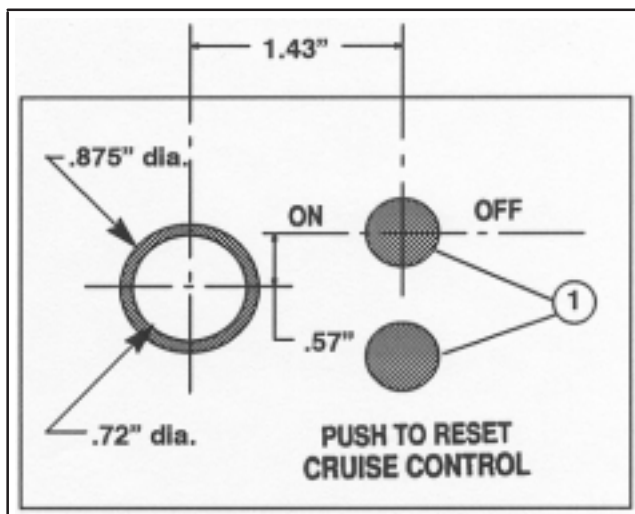


Figure 6

- 1. Knock-out plugs

16. Install warning light into hole and secure with nut (Fig. 6 & 7).

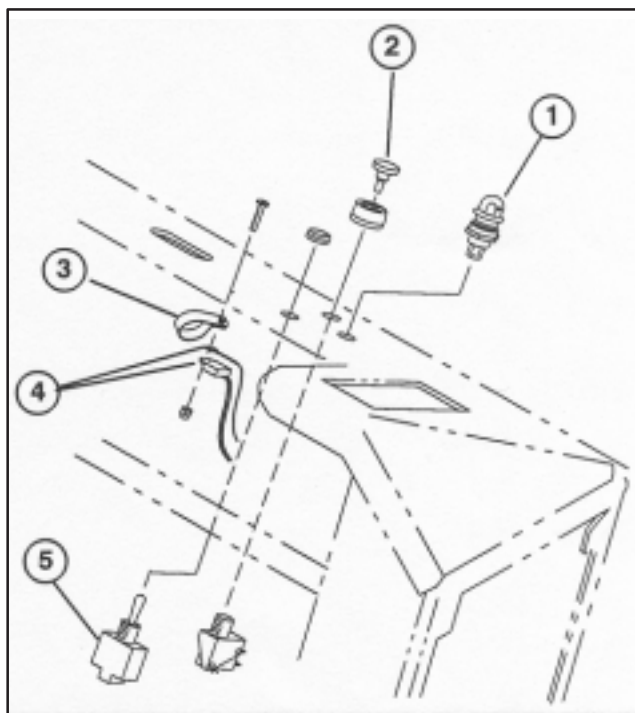


Figure 7

- 1. Warning light
- 2. Push button
- 3. Timer R-clamp
- 4. Green ring terminal wire and multiple wire connector
- 5. ON/OFF Switch

17. Plug green and brown wires from wire harness onto warning light terminals.

18. Remove (2) knock-out plugs from console panel (Fig. 6).

19. Loosen (2) terminal screws on ON/OFF switch body. Secure the (2) red spade terminal wires to switch terminals.

20. Install ON/OFF toggle switch into top hole of console panel and secure with nut (Fig. 7).

21. Plug red harness wire onto #1 terminal of push button body and blue harness wire onto #3 terminal

22. Install Push Button switch into bottom hole of console panel and secure with bezel (Fig. 7). Insert push button into Bezel.

23. Remove capscrew, washer and nut securing timer R—clamp to console.

24. Remount R—clamp, green ring terminal wire and multiple wire connector from harness to console with a M4 x .78 lg. pan head screw and nut (Fig. 7). Ring terminal must be positioned between R—clamp and smooth side of wire connector.

25. Connect remaining long red wire from harness to terminal on fuel gauge which has a red wire connected to it.

28. Remove 5 Amp fuse from front of fuse block and replace with 10 Amp fuse.

27. Route end of wire harness thru opening in bottom of console, under floor panel and up to coil and brake connections.

28. Plug wire from harness into connector from coil.

29. Loosen screws on each set of switch terminals.

30. On R.H. switch, secure black/brown wire from harness to normally open terminal and orange wire to common terminal.

31. On L.H. switch, secure white wire from harness to normally open terminal and orange wire to common terminal.

OPERATION

1. Sit on seat, operate machine in normal matter.
2. Depress traction pedal so machine is traveling at desired ground speed.
3. While holding pedal in positioning, toggle cruise control switch to ON position and depress actuating button.
4. Machine can now be operated with traction pedal held in original set position or operator can reposition pedal by applying an overriding force to the pedal.

To disengage control:

1. Actuate brake pedal; this breaks electrical circuit, allowing normal traction pedal operation.

or:

2. Toggle cruise control switch to OFF position.

Note: Turn control panel switch to OFF position when use of control is not planned and before leaving machine unattended.

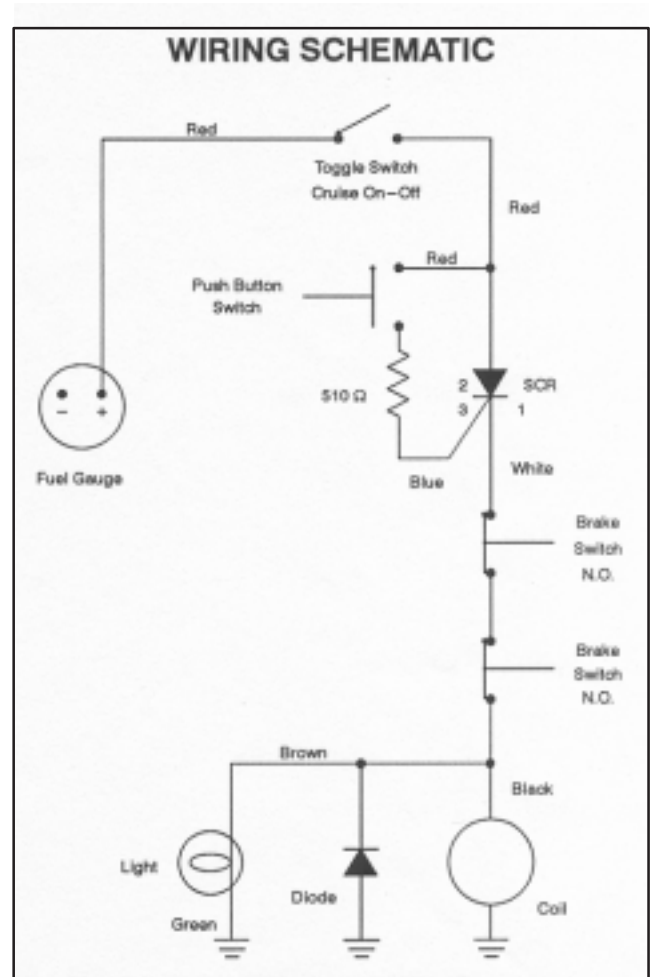


Figure 8

