FORM NO. 3316–962

TORO®

MODEL NO. 03776–60001 & UP

INSTALLATION INSTRUCTIONS

LIGHT KIT
REELMASTER® 4500D

Note: Light kit to be used on traction unit models 03702, 03703, 03704, 03704 TE & 03705

RECOMMENDED LIGHTS

IMPORTANT: Lights are not included with kit. Use the following list as a guide to determine recommended lights required for operation.

Note: An auxiliary light kit, which includes all of the lights listed below, except for registration plate light*, is available from your Authorized Toro Distributor.

Auxiliary Light Kit (1)–
Toro Part No. 93–1426

Headlights (Qty. 2) –
Hella Part No. 012492 or Model 530 Part No. 73701
Ring Automotive Part No. RL 023

Front Marker / **Turn Signal Lights** (Qty. 2) –
Hella No. 2 BE 003 014–251

Rear Tail / **Turn Signal Lights** (Qty. 1 ea.) –
Left–Hella No. 2 SE 003–182–011 or 12493
Right–Hella No. 2 SE 003–182–021 or 12494

Registration Plate Light* (Qty. 2) –
Hella Part No. 2KA 003–389–061
Toro Part No. 60–2400
Britax Part No. 840.01
* Not included in auxiliary light kit.

Rear Red Deflectors (Qty. 2) –
Hella Part No. 8 RA 003–326–001 or 012496

IMPORTANT: Two Wheel Drive Models 03702 and 03703 are not furnished with rear bumpers. The rear bumper is required for installation of the light kit and must be purchased from an Authorized Toro Distributor.

The following is a list of required parts for bumper installation:

PART NO.	DESCRIPTION	QTY
92–6052	Rear Bumper	1
92–6051	Bumper Bracket	2
323–19	Capscrew–3/8–16 x 1–5/8”	4
3256–24	Flat washer	4
3296–39	Lock nut	12
3231–25	Carriage bolt – 3/8–16 x 1–1/2”	8

INSTALLATION

CAUTION

Before servicing or making adjustments to the machine, stop engine and remove key from the switch.

IMPORTANT: Before working on the machine, disconnect cables from the battery to prevent damage to electrical system.

Note: Holes described in steps 1 & 2 may already be in machine.

1. Using dimensions shown in figure 1. locate, mark and drill a 1.00” dia. hole in each rear bumper bracket.

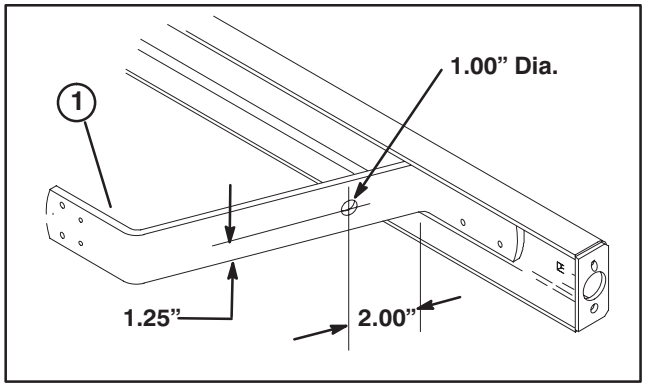


Figure 1
1. L.H. Rear bumper bracket

2. Using dimensions shown in figure 2. locate, mark and drill a .750” dia. hole in carrier on front of traction unit (Fig. 3).

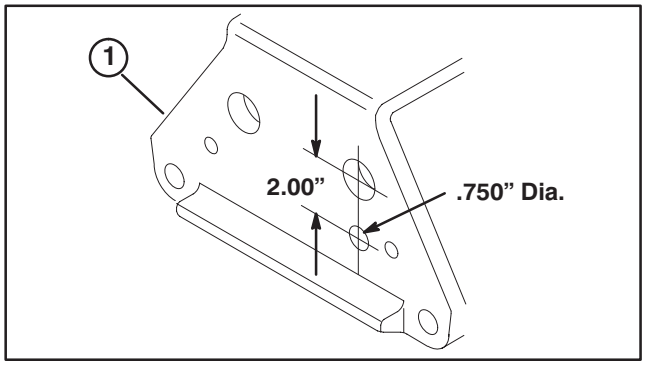


Figure 2
1. Carrier

3. Insert appropriate size grommet into each drilled hole (Fig. 3 & 4).

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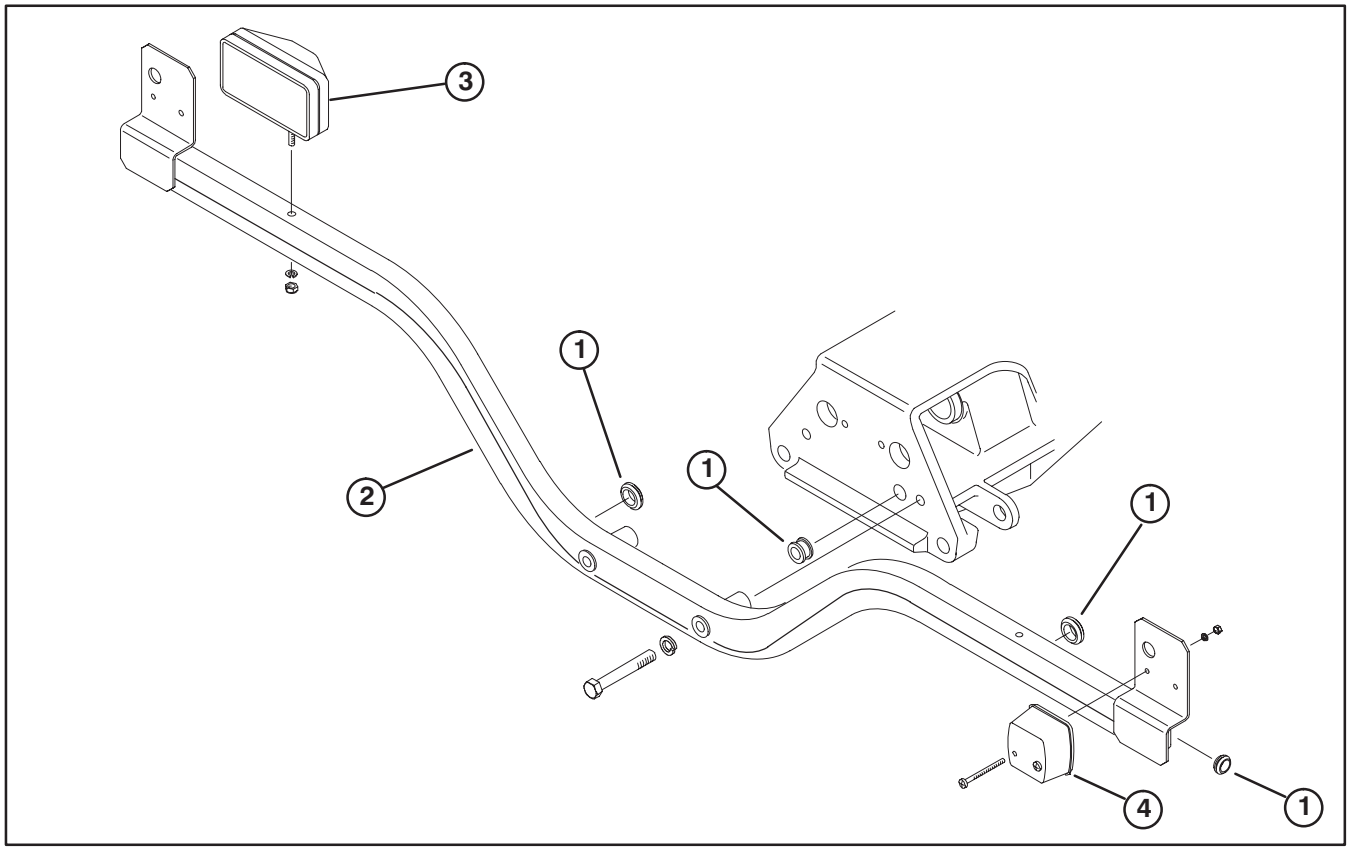


Figure 3

1. Grommet
2. Front bracket
3. Driving light
4. Turn signal

Steps 4 and 5 Two Wheel Drive Models Only

4. Two Wheel Drive Models Only – Mount bumper bracket to rear of traction unit with (4) 3/8–16 x 1–5/8" lg. capscrews, flat washers and locknuts (Fig. 4).

5. Mount bumper to bracket with (8) 3/8–16 x 1–1/2" lg. carriage bolts and locknuts (Fig. 4).

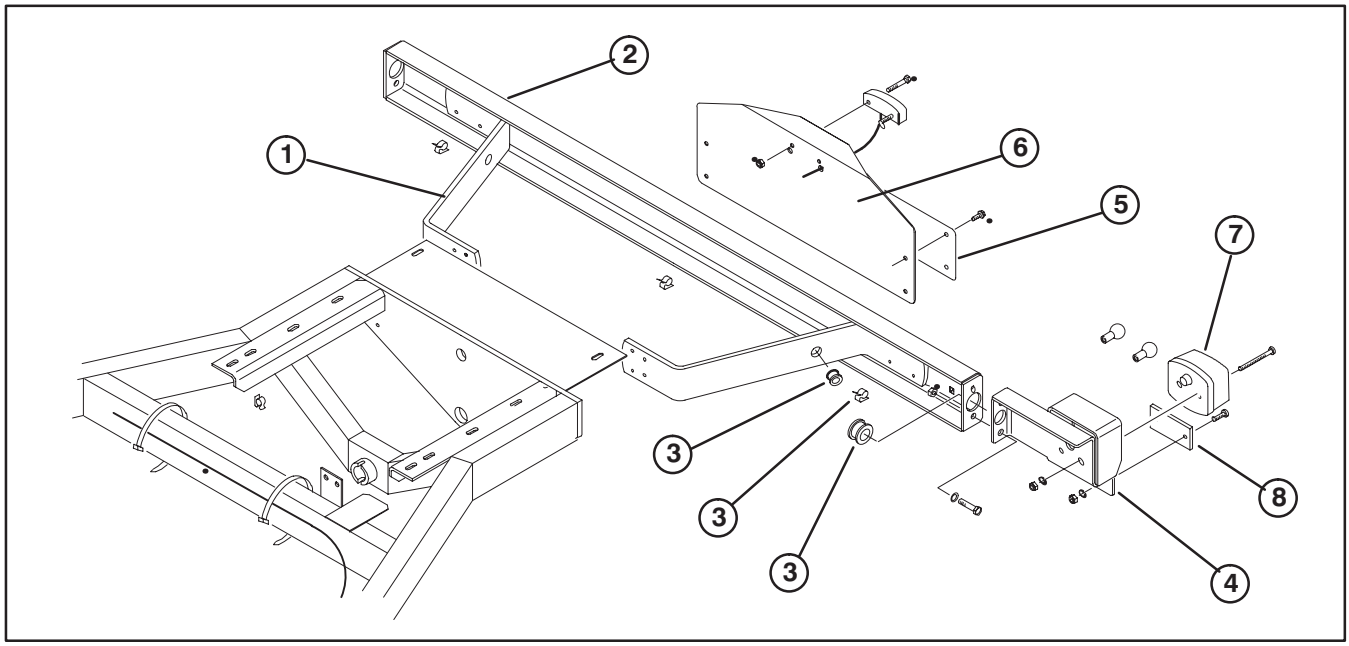


Figure 4

1. Bumper bracket
2. Bumper
3. Grommet
4. Rear bracket, L.H.
5. Registration plate
6. Rear bumper plate
7. Turn signal
8. Reflector

6. Insert an appropriate size grommet into each of the (4) 1.00” dia. holes in front bracket (Fig. 3). Also, insert an appropriate size grommet into each .75” dia. hole in each end of bracket.

7. Insert ends on front wire harness into holes next to mounting bosses in front bracket. Longer wire of harness goes in R.H. hole. Route wires thru bracket until they come out holes in back and ends of tube.

8. Mount bracket to front carrier with (2) 1/2—13 x 3—1/2” lg. capscrews and lockwashers as shown in figure 3.

9. Mount R.H. and L.H. rear brackets to appropriate end of rear bumper with (2) 3/8—16 x 1.00” lg. capscrews, flatwashers and locknuts (Fig. 4).

10. Insert appropriate size grommet into holes between each end of bumper and rear brackets (Fig. 4). Grommet should fit around inside of bracket and bumper.

Steps 11 thru 13 used only if registration plate is required

11. If registration plate is required, use it as a template to locate, mark and drill required holes in rear bumper plate (Fig. 4).

12. Mount registration plate to rear bumper plate with fasteners supplied with registration plate (Fig. 4).

13. Mount registration plate to bumper with (4) M6 self tapping screws (Fig. 4).

14. Locate (2) .31” dia. holes in top of front bracket. Using these holes, mount driving lights to bracket with fasteners supplied with lights (Fig. 3).

15. Remove lens covers from front and rear turn signal lights. Front covers snap off and rear covers are screwed on.

16. Mount each front turn signal base plates to front bracket mounting plates with (2) M5 nuts, lockwashers and studs supplied with lights (Fig. 3).

17. Mount R.H. & L.H. rear turn signal base plates to rear mounting brackets with (2) M5—8 x 16 mm capscrews, lockwashers and M5 nuts supplied with lights (Fig. 4).

Note: Rear base plates are to be mounted so the amber side of lens faces toward outside of traction unit.

18. Mount a reflector to each rear mounting bracket with (2) M4 pan head screws, lockwashers and nuts (Fig. 4).

19. Remove front shroud from steering tower to gain access to wiring in steering tower (Fig. 5).

20. Loosen (4) flangehead capscrews securing foot pad (behind steering tower) to floor. Remove foot pad.

21. Remove screws securing steering tower cover to tower.

22. Inside steering tower, locate rearward hole in right side of steering tower. Mount relay and flasher R—clamp to steering tower with a M6 self tapping screw (Fig. 5).

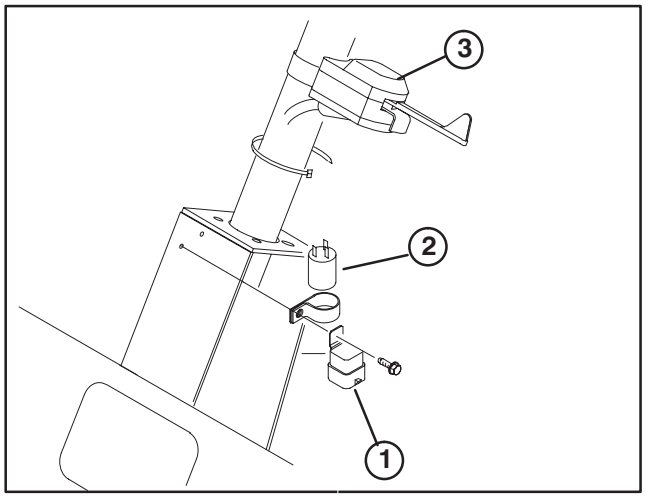


Figure 5
1. **Relay**
2. **Flasher**
3. **Signal control**

23. Using dimensions shown in figure 6. locate, mark and drill (3) .50” dia. holes in steering tower cover.

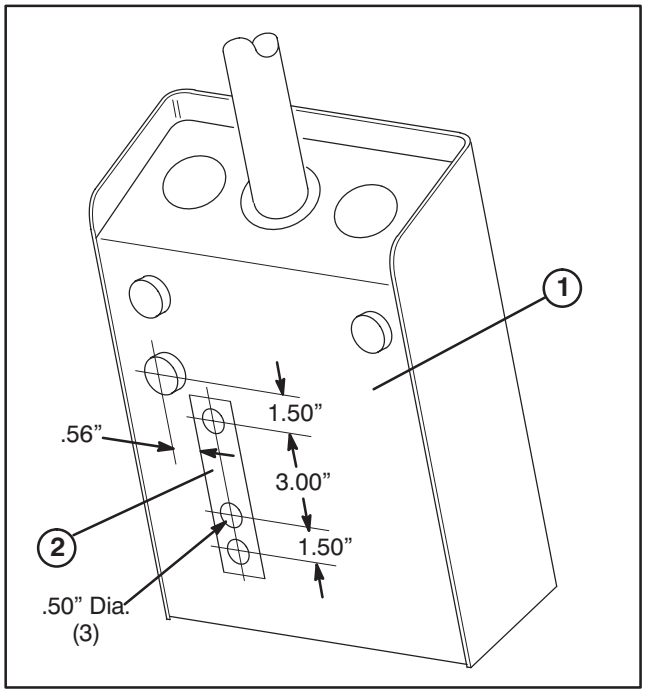


Figure 6
1. **Steering tower cover**

Note: Use caution when drilling holes not to damage components inside steering tower.

24. Affix decal over drilled holes on steering tower cover (Fig. 6).

25. Mount light switch to top hole in steering tower cover with fasteners supplied with switch.

26. Mount fuse holder to remaining holes with fasteners supplied. Install appropriate size fuse into holders.

27. Loosely secure signal control to steering column (Fig. 5). Position control on right or left side of column and adjust to desired operating height. Tighten screw when desired operating height is attained.

28. Insert signal control wire harness thru grommet in steering column hole and into control tower.

29. Secure wire harness to steering column with a cable tie (Fig. 5).

30. Install light bulbs (auxiliary light kit) into light bases as follows:

Front Turn Signal Lights –
Amber–Toro Part No. 93–1427 Hella No. 78186
White–Toro Part No. 93–1428 Hella No. 78203

Note: Mount front bulbs according to color of cover.

Rear Turn Signal Lights –
Amber–Toro Part No. 93–1427 Hella No. 78186
Red–Toro Part No. 93–1429 Hella No. 78235

Note: One red light socket is not used in rear lights.

31. Using electrical schematic (page 5) and wire harness figure (page 6) connect wire harness.

32. If registration plate is used, remove cover plate from light, connect wires to harness, re–install cover and secure light to registration plate with (2) M5 x 12mm screws and nuts.

Note: Plug for main power source from traction unit is located on right hand base over steering tower. Route harness along right rear frame rail, frame behind engine and left front frame rail.

33. Secure harness to frame with cable ties and to rear bumper with edge clips. Make sure harness does not contact any hot or moving parts.

34. Re–install lens cover to remaining lights.

35. Re–install steering tower components and connect battery cables.

36. Check operation of lights.

OPERATION

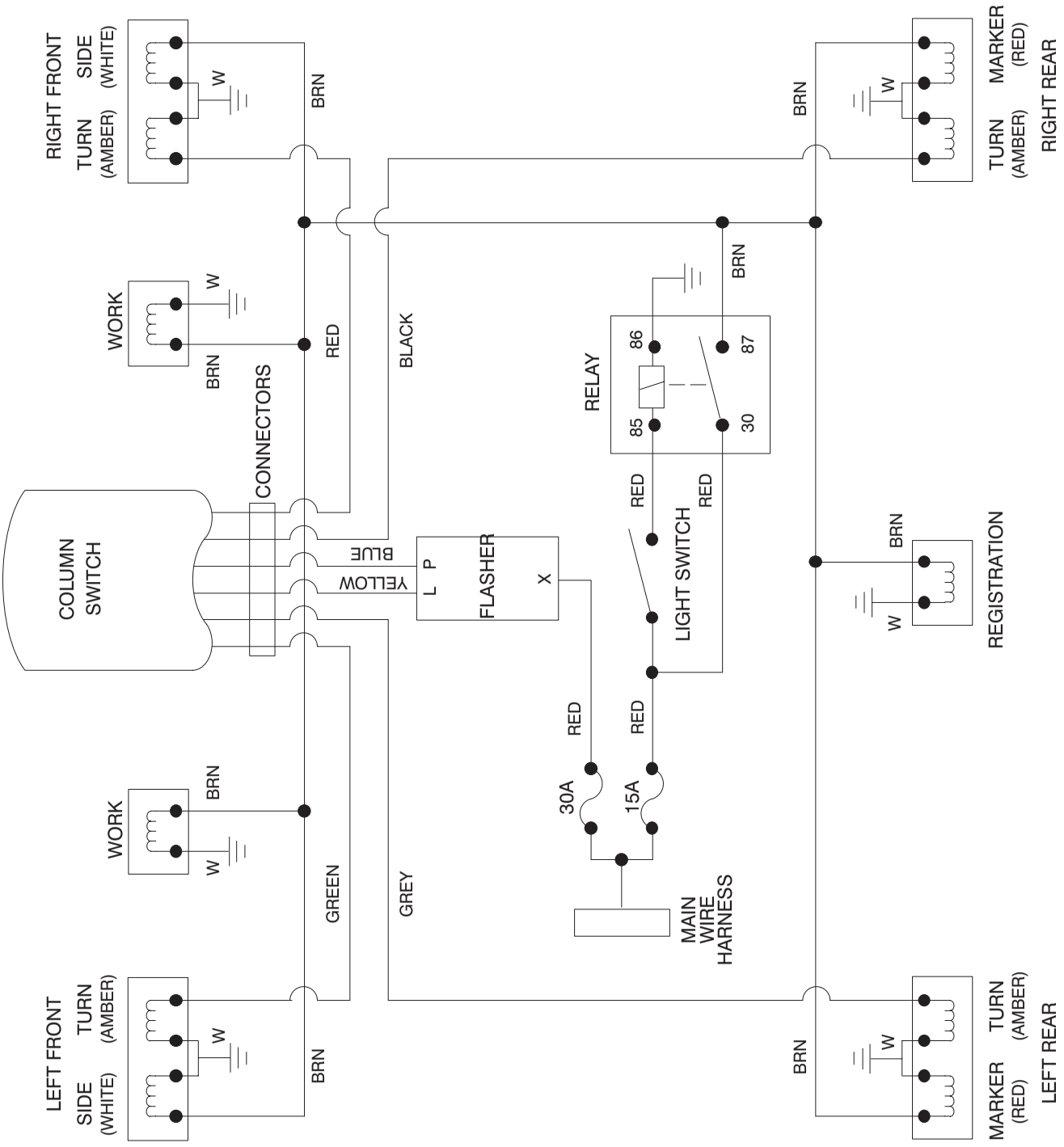
1. To use headlights:
Move light switch forward

2. To signal turns:
Move control lever in direction of turn

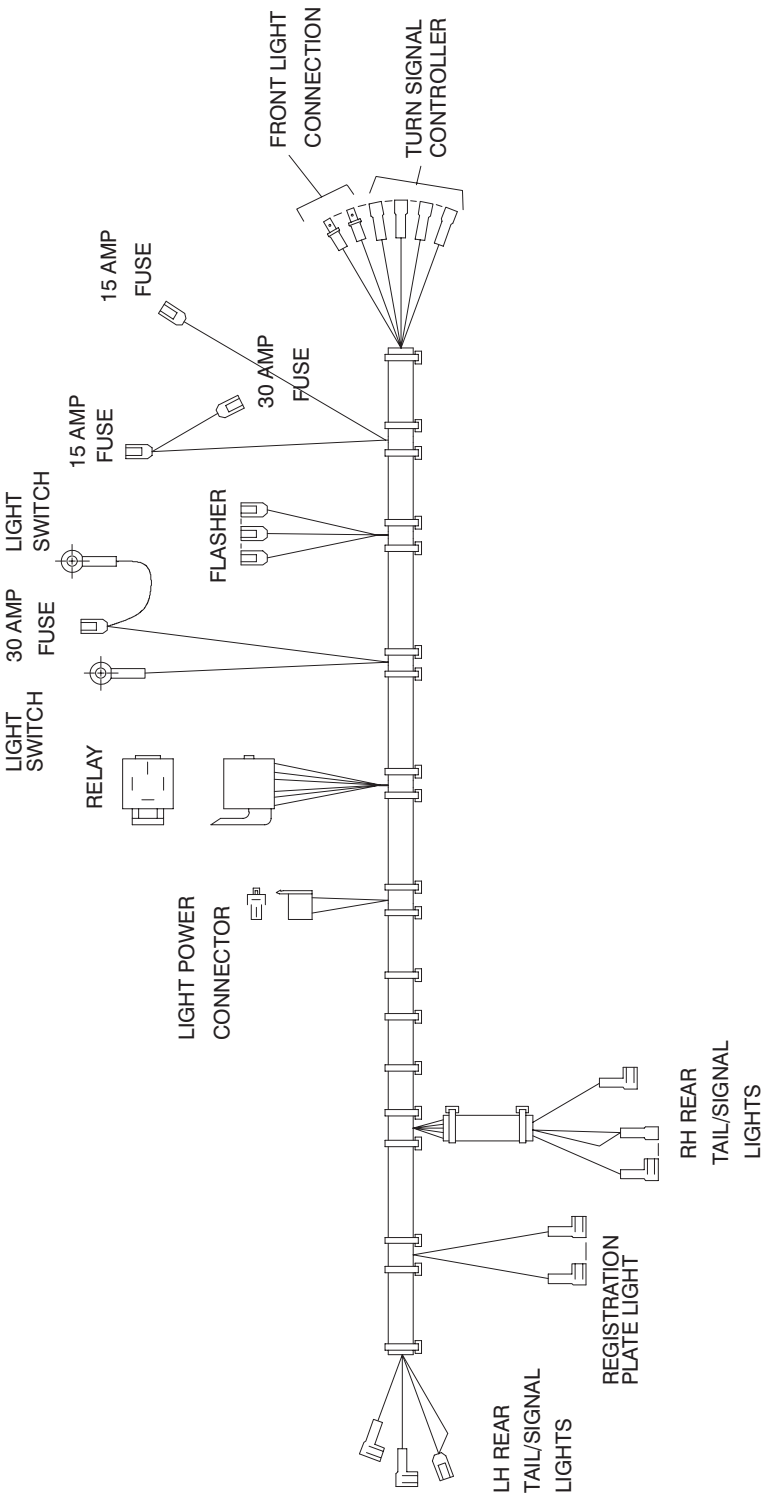
3. To operate emergency flashers:
With control lever in neutral position, pull flasher switch out All signal lamps will flash for all around vehicle protection.

4. To release emergency flashers:
Move control lever left or right. Flasher will release automatically. Return lever to neutral positron.

ELECTRICAL SCHEMATIC



WIRE HARNESS




TORO®