

Operator's Manual

LOG SPLITTER TAILLIGHT KIT

**Model Number
290-004-000
824-00265**

Important: Read instructions carefully

IMPORTANT

RULES FOR SAFE OPERATION



THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED, COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE INSTALLING THE LIGHT KIT. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY. WHEN YOU SEE THIS SYMBOL  HEED ITS WARNING.



DANGER

Your log splitter was built to be operated and towed according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. If you violate any of these rules, you may cause serious injury to yourself or others.



TOWING

1. This unit should not be towed on any street, highway or public road without checking the existing federal, local or state requirements. Such information may be obtained by calling your state or local bureau of motor vehicles. Any licensing or modifications needed to comply with federal, local or state vehicle requirements is the sole responsibility of the purchaser.*
2. Before plugging log splitter lights into tow vehicle, make sure the tow vehicle is wired the same as the log splitter (e.g. ground to ground, left turn to left turn, etc.). Refer to Figure 9 in this Owner's Guide. Failure to wire unit correctly may cause the tow vehicle wiring to overheat and/or the log splitter lights to operate incorrectly. It may be necessary to replace the turn signal flasher unit in your tow vehicle if it is not capable of operating the additional lights on the log splitter.
3. Before towing the log splitter on a street, highway or public road, verify that all lights are functioning properly and the yellow side reflectors are in position. Replace bulbs if they are burnt out.
4. Before towing, always check to be certain the log splitter is correctly and securely attached to the tow vehicle, and safety chains are in place. Leave slack in chains for turning allowance.
5. Use a class I or higher hitch with a 1-7/8" ball. Keep ball socket and clamp face lubricated with chassis grease.
6. Be sure the coupler is secured to the hitch ball and the lock lever is down tight and locked.
7. Check vehicle hitch, ball and coupler for signs of wear or damage. Replace any parts that are worn or damaged before towing.
8. The coupler must be secured to the log splitter tongue tube with the original equipment bolts and nuts. See your authorized service dealer for replacement parts. Coupler nuts should be tightened securely (20 foot pounds).
9. Make sure beam assembly is securely latched in the horizontal position and jack stand (if provided) is pivoted and secured in the up position before towing log splitter. Never tow with the beam in vertical position.
10. Do not tow the log splitter faster than 45 MPH. Higher speeds may damage log splitter. Excessive high speeds may cause the log splitter to operate or otherwise become unstable.

11. Check the tire pressure on the log splitter tires. It must be 15 p.s.i. for highway travel.
12. When parking, storing or using your log splitter, keep the coupler off the ground so dirt will not build up in the ball socket.
13. Do not allow anyone to sit or ride on your log splitter. They can easily fall off and be seriously injured.



TRAINING

1. Before operating this splitter, read and understand this manual completely. Become familiar with it for your own safety. To fail to do so may cause serious injury. Do not allow anyone to operate your splitter who has not read this manual. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. Never use your splitter for any other purpose than splitting wood. It is designed for this use and any other use may cause an injury. Your log splitter is a precision piece of power equipment, not a toy. Therefore, exercise extreme caution at all times.
3. Never allow children to operate your log splitter. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your log splitter.
4. Only the operator is to be near your log splitter during use. Keep all others, including pets and children, a minimum of 20 feet away from your work zone. Flying wood can be hazardous. If a helper is assisting in loading logs, never activate the control until the helper is clear of the area. More accidents occur when more than one person operates the log splitter than at any other time.
5. No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions. A clear mind is essential for safety. Never allow a person who is tired or otherwise not alert to use your splitter.



PREPARATION

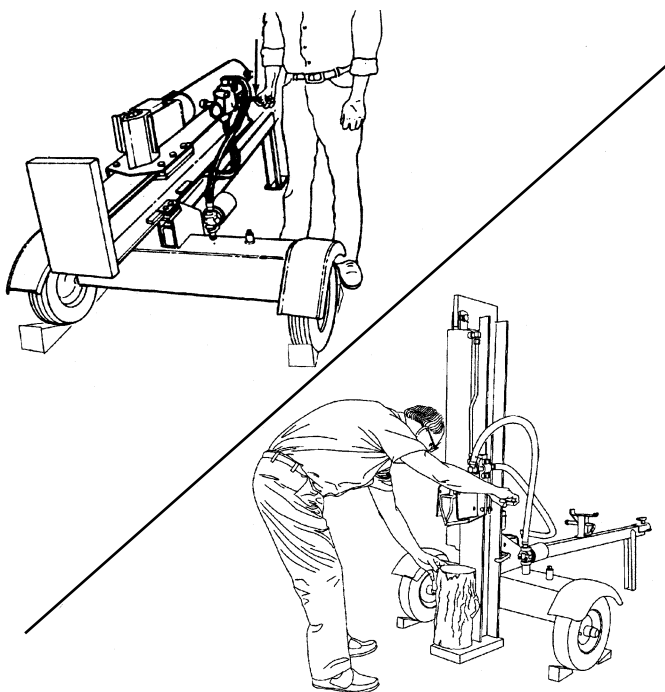
1. Never wear loose clothing or jewelry that can be caught by moving parts of your log splitter and pull you into it. Keep clothing away from all moving parts of your log splitter.

*** If a Statement of Origin is required in your state, contact your nearest service dealer and request one.**

2. Wear proper head gear to keep hair away from moving parts.
3. Always wear safety shoes. A dropped log can seriously injure your foot.
4. Always wear safety glasses or goggles while operating your splitter. A piece of splitting log could fly off and hit your eyes.
5. Wear leather work gloves. Be sure they are tight fitting without loose cuffs or draw strings.
6. Use your log splitter in daylight, or under good artificial light.
7. Never operate your splitter on slippery, wet, muddy or icy surfaces. Safe footing is essential in preventing accidents.
8. Only operate your splitter on level ground and not on the side of a hill. It could tip, or rolling logs or poor footing could cause an accident. Operating the splitter on level ground also prevents the spillage of gasoline from the fuel tank.
9. Never attempt to move the log splitter over hilly or uneven terrain without a tow vehicle or adequate help.
10. Always block the wheels to prevent movement of log splitter while in operation.
11. Check the fuel before starting the engine. Gasoline is an extremely flammable fuel. Do not fill the gasoline tank indoors, when the engine is running, or while the engine is still hot. Replace gasoline cap securely and wipe off any spilled gasoline before starting the engine as it may cause a fire or explosion.
12. Both ends of each log must be cut as square as possible to help prevent the log from riding out of the splitter during operation.
4. Do not straddle the splitter when using it. A slip in any position could result in a serious injury.
5. Do not step over your log splitter when the engine is running. You may trip or accidentally activate the splitting wedge if you step over. If you need to get to the other side, walk around.
6. Never try to split two logs on top of each other. One may fly out and injure you.
7. When loading the log splitter, place your hands on the side of the log, not at the ends. Never attempt to load your splitter while the splitting wedge is in motion. You may get caught by the wedge and injured.
8. Only use your hand to operate the splitting wedge or control lever. Never use your foot or a rope or any other extension device. This could result in your inability to stop your splitter quickly enough to avoid injury.
9. Always keep fingers away from any cracks that open in the log during splitting operation. They can quickly close and pinch or amputate your fingers.
10. Never attempt to split woods across the grain. Some types of wood may burst or fly out of your splitter and result in injury to you or a bystander.
11. For logs that are not cut square, the longest portion of the log should be rotated down and the most square end placed against the splitting wedge.
12. Keep your work area clean. Immediately remove split wood around your splitter so that you do not stumble over it. Clean chips and dirt off end plate (wood platform) after each log is split, or whenever necessary to maintain flat contact between wood and end plate (platform).

OPERATION

1. **Vertical Operating Position:** Stand in front of the log splitter.
Horizontal Operating Position: Stand behind the reservoir tank.
 See illustrations.



2. Know how to stop the unit and disengage the controls.
3. Never place hands or feet between log and splitting wedge or between log and end plate during forward or reverse stroke. To do so may result in crushed or amputated fingers or toes, or worse, you may lose an arm or foot.

13. Never move the log splitter while the engine is running.
14. Never leave your log splitter unattended with the engine running. Shut off the engine if you are leaving your splitter, even for a short period of time. Someone could accidentally activate the splitting wedge and be injured.
15. Do not run engine in an enclosed area. Exhaust gases contain carbon monoxide. This odorless gas can be deadly when inhaled.
16. Be careful not to touch the muffler after the engine has been running. It will be HOT!
17. If the equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
18. When cleaning, repairing or inspecting, make certain all moving parts have stopped. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.

CUSTOMER RESPONSIBILITIES

1. Do not operate your splitter in poor mechanical condition or when in need of repair.
2. Periodically check that all nuts, bolts, screws, hose clamps and hydraulic fittings are tight to be sure equipment is in safe working condition. Where appropriate, check all safety guards and shields to be sure they are in the proper position. Never operate your splitter with safety guards, shields or other protective features removed. These safety devices are for your protection.
3. Replace all damaged or worn parts such as hydraulic hoses and fittings immediately with manufacturer approved replacement parts.

4. Do not change the engine governor settings or overspeed the engine. This increases the hazard of personal injury. The maximum engine speed is preset by the manufacturer and is within safety limits.
5. Do not alter your splitter in any manner such as attaching a rope or extension to the control lever or adding to the width or height of the wedge. Such alterations may cause your splitter to be unsafe.
6. Perform all recommended maintenance procedures before you use your splitter.
7. Do not service or repair your log splitter without disconnecting the spark plug wire and moving it away from the spark plug.
8. Never store the equipment with gasoline in the tank inside of a building where ignition sources are present, such as hot water and space heaters, clothes dryers and the like. Allow the engine to cool before storing in any enclosure.
9. Always store gasoline in an approved, tightly sealed container. Store the container in a cool, dry place. Do not store in a building where ignition sources are present.
10. To reduce fire hazard, keep engine free of grass, leaves, wood chips, and excessive grease and oil.
11. The hydraulic system of your log splitter requires careful inspection, along with the mechanical parts. Be sure to replace frayed, kinked, or otherwise damaged hydraulic components.
12. Fluid escaping from a very small hole can be almost invisible. Do not check for leaks with your hand. Escaping fluid under pressure can have sufficient force to penetrate skin, causing serious personal injury. Leaks can be located by passing a piece of cardboard or wood over the suspected leak and looking for discoloration.
13. Should it become necessary to loosen or remove any hydraulic fitting or line, be sure to relieve all pressure by shutting off the engine and moving the control handle back and forth several times.
14. Do not remove the cap from the hydraulic tank or reservoir while your log splitter is running. Hot oil under pressure could cause injury.
15. The pressure relief valve on your splitter is preset at the factory. Do not adjust the valve. Only a qualified service technician should perform this adjustment.
16. Completely drain fuel tank prior to storage. This guards against accumulation of fuel fumes which could result in a fire hazard.
17. Never store log splitter outside without a waterproof cover. Rain will cause rust on the inside of the cylinder.



EYE PROTECTION

YOU MUST USE EYE PROTECTION WITH SIDE SHIELDS WHILE PERFORMING ANY SERVICE ON THE HYDRAULIC SYSTEM INCLUDING THE PROCEDURES LISTED IN STEPS 11 THROUGH 14.

ASSEMBLY INSTRUCTIONS

HARDWARE PACK. Remove parts from the package and identify as listed below.

QTY.	PART NO.	DESCRIPTION
4	710-0157	Hex Bolts 5/16-24 x .75" Long
4	712-0123	Hex Nuts 5/16-24 Thread
4	736-0119	Lock Washers 5/16" I.D.
2	712-0292	Speed Nuts 1/4-20 Thread
1	731-0757	Plastic Convuluted Conduit 28" Long
1	712-3008	Hex Jam Nut 3/8-16 Thread
2	777-2738	"Do Not Step" Label
1	781-0624	Taillight Bracket
1	681-0074	Taillight Bracket w/License Plate Bracket
1	625-0009	Light Kit Taillight (1) Taillight w/Clear Lens for License Plate (1) Mounting Screws (4) Nuts (4) Lock Washers (4) Wire Harness (1) Reflectors (2) Electrical Fasteners (5)

- Mount the two taillight brackets to the log splitter fender braces using the (4) 5/16-24 x .75" long hex bolts, (4) 5/16" lock washers and (4) 5/16-18 hex nuts. Stick the "Do Not Step" labels on top of the taillight brackets.

The taillight bracket with the extended arm for the license plate mounts on the left fender brace.

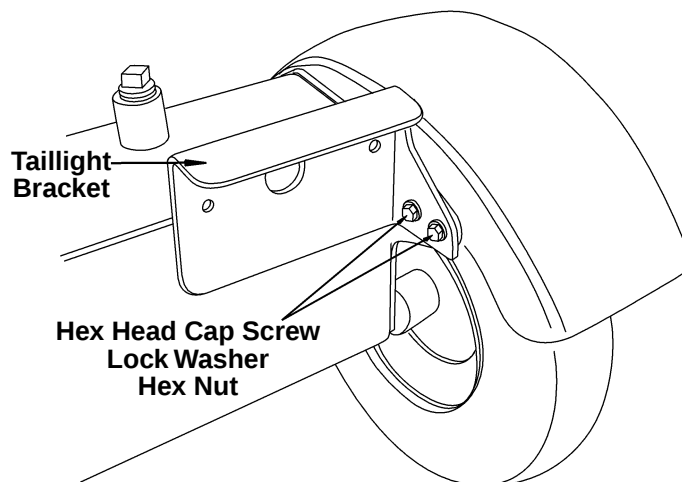


FIGURE 2.

The right and left side of the log splitter is determined from standing behind the log splitter when it is in the towing position. See figure 7.

- Remove the rear fender mounting hardware and discard.

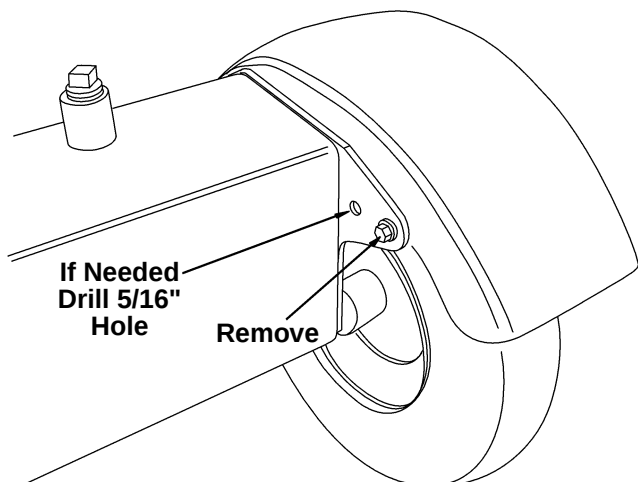


FIGURE 1.

NOTE: If your log splitter does not have the front hole for the taillight brackets in the fender brace, use the taillight bracket as a template and drill out the hole with a 5/16" drill bit.

CAUTION: Place a piece of wood between the fender and tire to prevent the drill bit from piercing the tire.

- Snap the two 1/4-20 speed nuts on the taillight bracket which has the license plate arm.

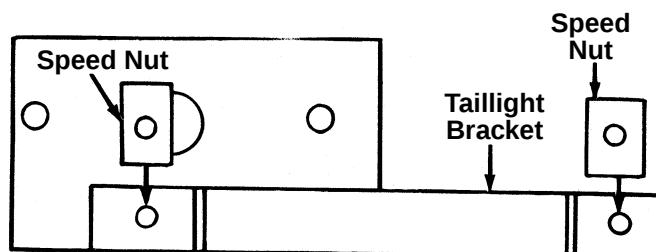


FIGURE 3.

4. Assemble the taillights to the taillight brackets using the mounting screws, lock washers and nuts packed with the lights.

NOTE: The taillight with the clear lens on the bottom mounts to the left taillight bracket, with the clear lens facing down.

5. Thread the taillight wires through the large center hole in the taillight brackets. Place the ring terminal on the black wire over either mounting bolt and secure with the lock washer and nut. See figure 4.

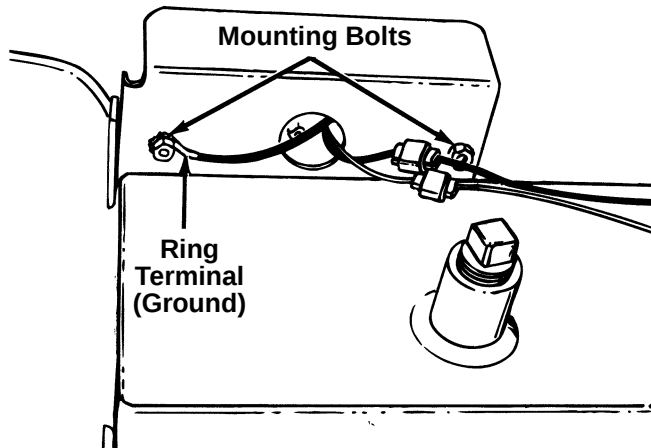


FIGURE 4.

6. Place the beam in the vertical position. Refer to the log splitter's owner's manual for instructions.

Thread the end opposite the black plug on the wire harness through the beam, running the length of the log splitter.

7. Fasten the right terminal on the white wire to the FRONT ball hitch mounting screws.

DO NOT REMOVE THE NUT HOLDING THE BALL HITCH TO THE FRAME. Place the ring over the threaded end of the bolt and secure with the 3/8-16 hex jam nut. See figure 5.

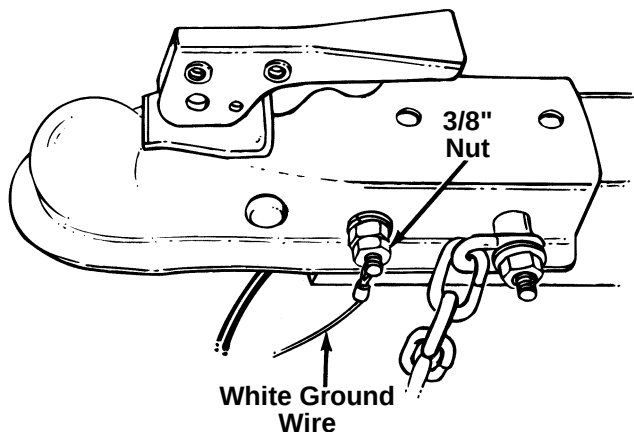


FIGURE 5.

8. Pull the yellow wire through the hole in the right side of the beam, and crimp it to the red wire coming from the right taillight using the connector provided. To make certain you have a good connection, place the exposed end of the wire into the connector. Squeeze the metal in the center of the connector with pliers. Snap the cover shut to prevent shorting of the connector to the frame of the log splitter.
9. Pull the green wire through the hole in the left side of the beam, and crimp it to the red wire coming from the right taillight using the connector provided.

10. With wire cutters, cut 36" off the end of the brown wire.
11. Push the 36" long brown wire through the connector so it is centered. Place the end of the brown wire from the wire harness into the connector. See figure 6.

NOTE: Examine the connector. You will notice that one hole goes completely through the connector. This is for the 36" long brown wire. The other hole is a "blind" hole for the wire from the wire harness.

12. Squeeze the metal in the center of the connector with pliers. Snap the cover shut to prevent shorting of the connector to the frame of the log splitter.

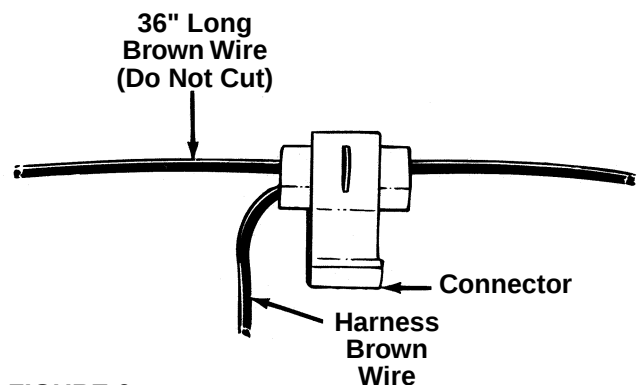
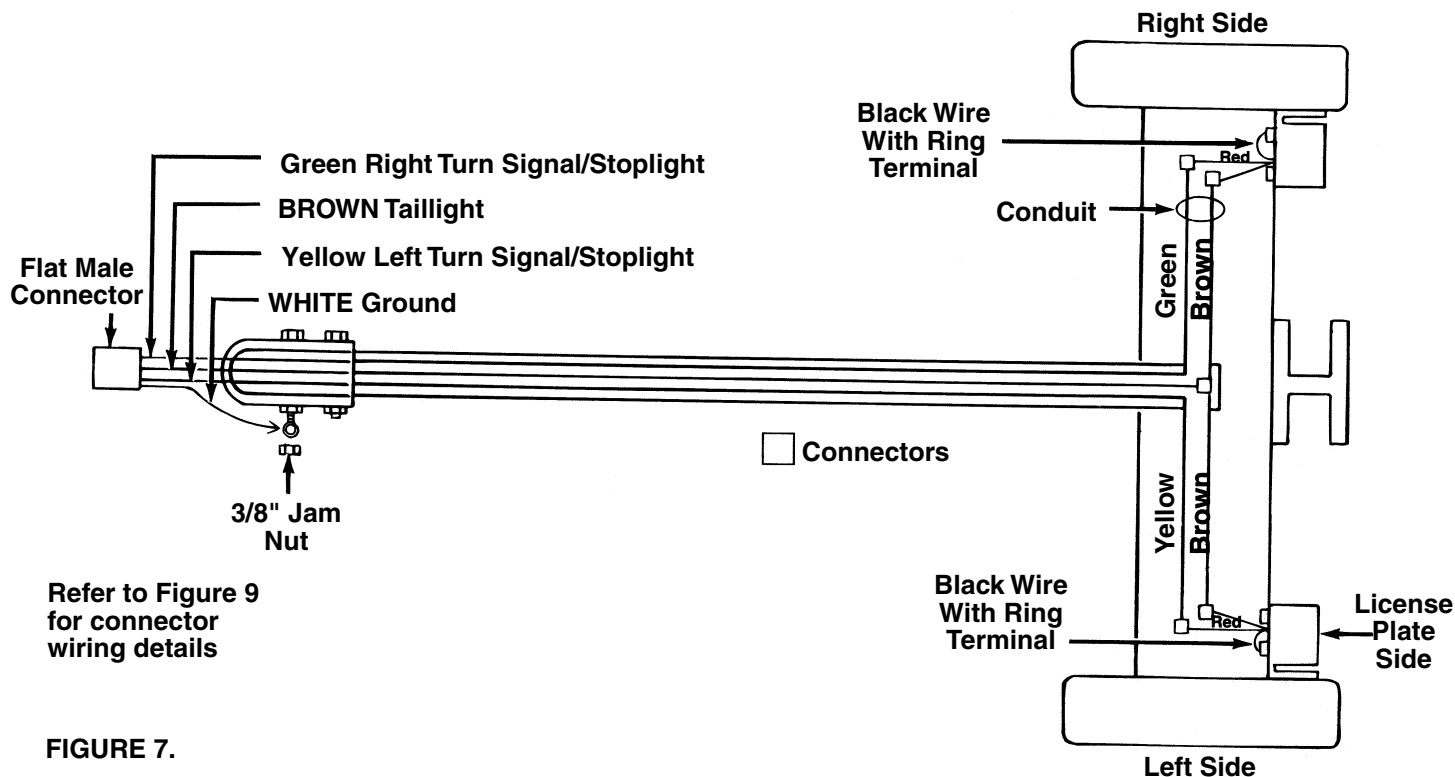


FIGURE 6.

13. Using the other two connectors, crimp the ends of the brown wire to the brown wire from the taillights.
14. Cover the wires from the beam to the taillights with the plastic conduit. The conduit will pass through the hole in the beam. **Do not** cut it in half.



Refer to Figure 9
for connector
wiring details

FIGURE 7.

15. Attach the yellow reflex reflectors to a clean surface on the beam of the log splitter as far forward as possible on each side. See Figure 8.

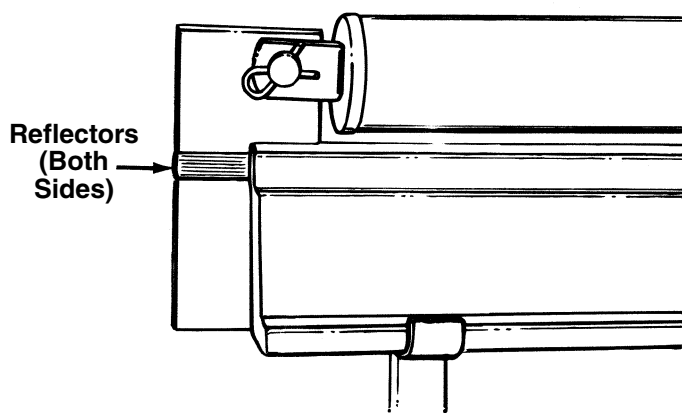
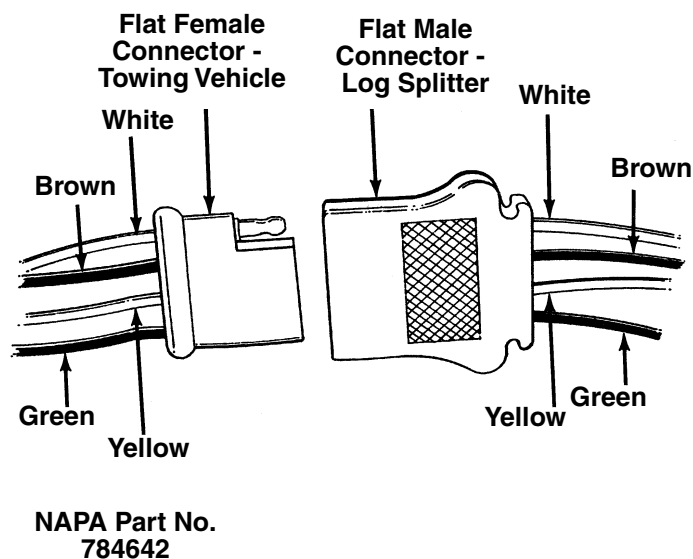


FIGURE 8.

16. A four wire flat female connector must be installed on your towing vehicle in order to plug in the wiring harness from the log splitter. See Figure 9.
(Use NAPA part number 784642 18" flat female connector or similar part that can be purchased from a local automotive parts store.)

17. Crimping type connectors similar to the one shown in Figure 6 can be purchased that can be used to attach the wires from the towing vehicle's wiring harness to the log splitter wiring harness.

IMPORTANT: Before towing the log splitter, check the operation of all lights (taillights, stoplight and both turn signals).



NAPA Part No.
784642

FIGURE 9.

For Replacement Parts, Contact:
SERVICE DEPARTMENT • P.O. BOX 361131 • CLEVELAND, OHIO 44136-0019