

Owner's Manual & Safety Instructions

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

PITTSBURGH[®] AUTOMOTIVE

ITEM 60278

Jumper Cables with Inline Battery Tester



Visit our website at: <http://www.harborfreight.com>
Email our technical support at: tech@harborfreight.com

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-800-444-3353 as soon as possible.

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No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools. Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein. Tools required for assembly and service may not be included.

⚠ WARNING

**Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.**

Safety Warnings

1. Shield eyes and face from batteries at all times. Wear ANSI-approved safety goggles and heavy-duty work gloves during use. Batteries produce explosive gasses.
2. Use only as intended.
3. Be sure vent caps are tight and level. Place damp cloth over any vent caps on both batteries. Handle cloth carefully - do not allow cloth to come in contact with eyes, skin or clothing.
4. Do not allow red and black cable clamps to touch each other or same metal object during use.
5. Be sure vehicles do not touch and both electrical systems are off and the same voltage.
6. Be careful to avoid moving fan blades.
7. Check polarity of battery posts.
POSITIVE (POS, P, +) battery post usually has larger diameter than **NEGATIVE (NEG, N, -)** post.
8. Inspect before every use; do not use if parts loose or damaged.
9. Consult Automobile Owner's Manual and Follow All Instructions.

Specifications

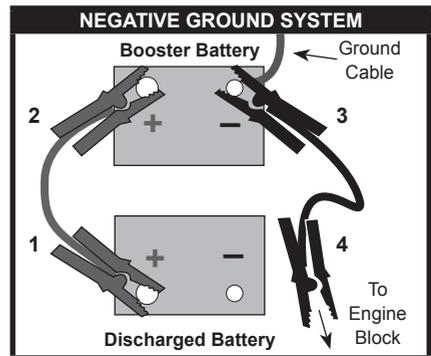
Capacity	220 Amp
Cable	12 FT. 8 AWG

Instructions

Vehicle batteries may be negative or positive post grounded. Consult your automobile owner's manual before selecting the method to follow for cable connections.

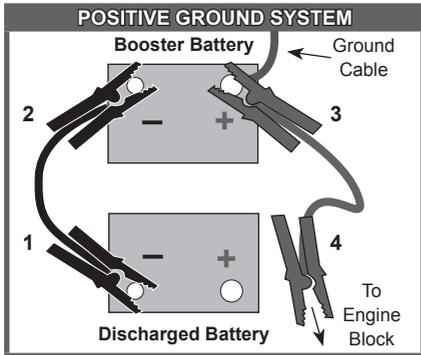
Note: The vast majority of modern vehicles use a negative ground system.

Negative Ground System



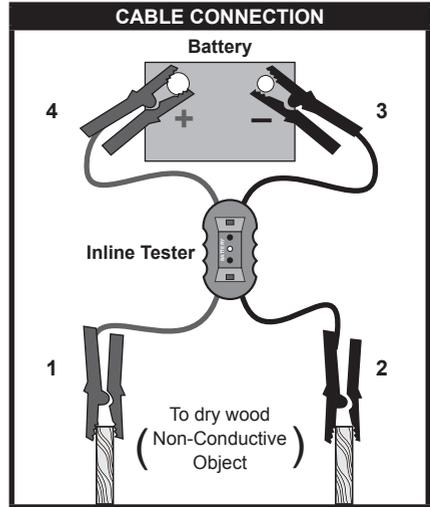
1. Connect **positive (+) cable to positive (+) terminal** of discharged battery wired to starter or solenoid.
2. Connect other end of **positive cable to positive terminal** of booster battery.
3. Connect second cable (negative) to other terminal (negative) of booster battery.
4. **MAKE FINAL CONNECTION ON ENGINE BLOCK OF STALLED VEHICLE (NOT TO NEGATIVE POST) AWAY FROM BATTERY.**
5. **STAND BACK.**
6. Start vehicle and remove cables in reverse order of connection, disconnecting from engine block first.

Positive Ground System



1. Connect **negative (-) cable to negative (-) terminal** of discharged battery wired to starter or solenoid.
2. Connect other end of **negative cable to negative terminal** of booster battery.
3. Connect second cable (positive) to other terminal (positive) of booster battery.
4. **MAKE FINAL CONNECTION ON ENGINE BLOCK OF STALLED VEHICLE (NOT TO POSITIVE POST) AWAY FROM BATTERY.**
5. **STAND BACK.**
6. Start vehicle and remove cables in reverse order of connection by disconnecting engine block connection first.

Testing Battery/Alternator



1. Insulate a RED/POSITIVE (+) cable clamp by connecting it to a non-conductive object, such as a piece of dry wood.
2. Insulate a BLACK/NEGATIVE (-) cable clamp by connecting it to a non-conductive object, such as a piece of dry wood.
3. Connect the remaining RED/POSITIVE (+) cable clamp to POSITIVE (+) terminal of vehicle battery.
4. Connect the remaining BLACK/NEGATIVE (-) cable clamp to NEGATIVE (-) terminal of vehicle battery.
5. Observe the LED display lights to determine the condition of the battery.
6. Start vehicle and observe the LED display light to determine the condition of the alternator.
7. When finished, turn off the vehicle engine, remove cables from battery and non-conductive objects. Store Cables in a clean, dry, safe location out of reach of children.

INLINE TESTER INDICATORS

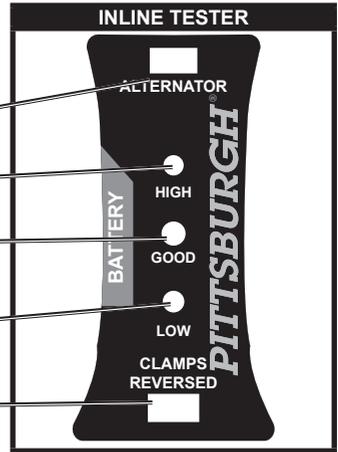
Alternator - RED lights up if working correctly.

Battery - GREEN lights up if fully charged.

Battery - YELLOW lights up if battery is in good condition.

Battery - RED lights up if battery is low.

Reverse - RED lights up when cable is not connected properly.



Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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