

Barry Lawrence Ruderman Antique Maps Inc.

7407 La Jolla Boulevard La Jolla, CA 92037

www.raremaps.com

(858) 551-8500 blr@raremaps.com

[Inspecting the Lunar Rover]

Stock#: 67572 **Map Maker:** NASA

Date: 1971 circa

Place: n.p.
Color: Color
Condition: VG+

Size: 8 x 7.5 inches

Price: SOLD



Description:

Presented is an image of the lunar rover taken at its design or testing facility. This rover appears to be newly completed and in mint condition. In the background, several scientists, engineers, and management personal are inspecting the rover. This was a test module, as the non-flight insignia above the heading on the control panel reveals (visible on other photos of the same rover).

Three lunar roving vehicles would be made for Apollo missions 15-17, and they were named simply LVR-1, 2, and 3. Each vehicle was a near-duplicate of the others, although LRV-2 had a new seatbelt design and LRV-3 added an electrical cable to conduct surface electrical property experiments and made a few subtle design changes to the control panel. In addition to these flight rovers, several additional non-flight models were made so that astronauts and engineers could test the machines on earth prior to the flight.

These battery-operated machines allowed for much greater distances to be covered on the moon. Design and construction were completed in just 17 months, a rapid turn around for the Apollo program. They were instrumental in the succession of the J-type missions which focused on scientific advancement and discovery.

The NASA handbook on rover operation says that: "The LRV is deceptive in appearance. It looks like a simple, familiar vehicle. In reality, it is a specialized spacecraft designed to function safely in space conditions of vacuum, wide temperature variances and over difficult terrain. It has been built to the exacting specifications of all Apollo program hardware, and has been subjected to a rigorous test program to qualify it as a manned spacecraft."



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Visible on the control panel pictured are many instruments, which manuals and other photographs help to decode. On the left side (black, outside the main panel) is an attitude indicator, indicating steepness of terrain. To the right of that is the Integrated Position Indicator which shows heading, bearing, range and distance covered. Due to the lack of magnetic field on the moon, this navigational system would have needed to use gyroscopes, similar to those used in flight. This would have been calibrated by the sun shadow device, located just to the right of the IPI. In addition to navigational devices, a plethora of switches and steering devices are included on the control panel.

Which part of the inspection or assembly is taking place is difficult to understand. Everyone is watching as an engineer in a blue coat lowers something into the front of the vehicle while wearing thick insulating gloves. Other photos show additional components added to the vehicle, supporting the idea that this image shows the assembly phase. Cross-referencing this part of the rover with a manual for the vehicle, it could either be part of the power system, navigational equipment, or payload interface. A battery component would explain the need for insulating gloves.

Provenance

From the collection of a veteran of Boeing's Public Relations and Advertising Department who joined the company in 1961.

Detailed Condition:

Blue ink mark in the center left. Easily coverable with frame.