

# Engineering Equipment



*A fan-produced sourcebook for use with the **Prime Directive Modern Roleplaying Game**  
by Amarillo Design Bureau.*

**Engineering Equipment** produced by Morena Shipyards  
[http://games.groups.yahoo.com/group/Morena\\_Shipyards/](http://games.groups.yahoo.com/group/Morena_Shipyards/)

## Section 1: Kits and Specialized Equipment

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### Engineer's Kit, Deluxe

**Size:** Huge

**Weight:** 38 lbs.

**Purchase DC:** 22

**Restriction:** —

**Notes:** This kit fills a good-sized shop cabinet. It includes a broad variety of specialized hand tools and a selection of high-quality power tools. It also contains a number of specialized diagnostic and repair tools as well as thousands of spare parts. It grants a +2 circumstance bonus on Repair skill checks for electrical or electronic devices, and mechanical devices. It also allows a character to make Craft (electronic), Craft (mechanical), or Craft (structural) checks without penalty.

## Engineer's Kit, Standard

**Size:** Large

**Weight:** 18 lbs.

**Purchase DC:** 15

**Restriction:** -

**Notes:** The size of a large tackle box, a standard engineer's kit is a collection of hand tools and small parts used to make repairs to mechanical devices. It also contains fasteners, leads, and wires to make electrical repairs.

A standard engineer's kit allows a character to make a Repair skill check without penalty.

### Equipment:

Adhesive Epoxy

Plasma Torch

Adhesive Plasticene Tape

Pocket Lantern

Hand Calculator

Precision Microwelder

Headband Light

Small-Equipment Energy Cells (6)

Industrial Gloves

Vibrotool Kit

Manual Tool Kit

Orientine Acid (with Compound ED 161)

## Manual Tool Kit

**Size:** Medium

**Weight:** 8 lbs.

**Purchase DC:** 8

**Restriction:** -

**Notes:** A manual tool kit contains one of each of the following manual tools: needle-nosed pliers, standard pliers, driver (with interchangeable heads), hammer, socket wrench (with universal socket), standard wrench (with adjustable head), wire cutter, and file.

## Portable Anti-Grav Unit

**Size:** Small

**Weight:** 0.5 lbs.

**Purchase DC:** 15

**Restriction:** -

**Notes:** A portable anti-grav unit is a small hand-held device with magnetic clamps, or even simple sticky pads capable of lifting up to 250 pounds. Advanced models use molecular adhesion technology to grip the object to which they are attached. Several may be used together to lift heavier objects.

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## Portable Power Supply

**Size:** Medium

**Weight:** 10 lbs.

**Purchase DC:** 18

**Restriction:** -

**Notes:** This backpack-sized microfusion power plant provides power for most items for about 20 weeks without service or replenishment. Adaptors are provided to recharge standard energy cells, but a special adaptor (not included) is required to recharge weapon power packs. The power plant can be integrated into an existing power grid (such as that found at a small outpost capable of housing no more than ten medium-sized humans or humanoids), but it can only provide energy for approximately three weeks (assuming measures are taken to reduce energy consumption).

## Tricorder, Engineering

**Size:** Small

**Weight:** 1 lb.

**Purchase DC:** 25

**Restriction:** License (+1)



**Notes:** An engineering tricorder is similar to a standard tricorder, but it is specialized for engineering use. It contains diagnostic routines which it uses to analyze sensor scans of equipment. It also has additional built-in filters which prevent overloading or damage when scanning intense energy fields.

An engineering tricorder grants a +4 equipment bonus to all Repair skill checks.

An engineering tricorder can scan biosigns at 60 feet, physical objects at 1,500 feet, and energy emissions at ten miles.

## Trident Scanner

**Size:** Medium

**Weight:** 2 lbs.

**Purchase DC:** 25

**Restriction:** License (+1)



**Notes:** Also known as a synchronic meter – and jokingly referred to as the “engineer’s protoplaser” - the trident scanner is used to make small to moderate repairs on advanced electrical and power systems, or to “wire” systems together without invasive repair work. These systems must be designed for compatibility with a trident scanner, and most sizeable, modern-day electrical power systems are so compatible (anything the size of a shuttlecraft’s systems and larger). The trident scanner uses its sensors and onboard processor to run detailed diagnostics on engineering systems. It then uses transtator-based reassembler technology to affect repairs directly on the damaged system– even through access panels and thin bulkheads.

A trident scanner grants the user a +8 equipment bonus to Repair skill rolls when attempting to repair, modify, or alter the Progress Level 9 systems described above. This bonus does not stack with the equipment bonus provided by an Engineering Tricorder.

## Vibrotool Kit

**Size:** Small

**Weight:** 8 lbs.

**Purchase DC:** 10

**Restriction:** -

**Notes:** Vibrotools use pinpoint-focused, ultrasonic energy to create a desired effect, such as a cutting motion, sawing motion, or even a drilling motion. A vibrotool kit contains one each of the following: fine vibro-saw, regular vibro-saw, vibro-knife, and vibro-drill (with adjustable drill aperture).



## Section 2: Kit Components

### Adhesive Epoxy

**Size:** Tiny  
**Weight:** -  
**Purchase DC:** 5  
**Restriction:** —



**Notes:** Adhesive epoxy comes in a liquid or solid form. The liquid form consists of two 10 milliliter tubes of non-adhesive chemicals. When combined, however, the two chemicals form a powerful, fast-drying epoxy seal that will maintain its integrity even when exposed to vacuum. The liquid form comes pre-loaded into a disposable injector and is useful for filling cracks, ruptures, and hard-to-reach areas.

Adhesive epoxy's solid form is a putty. The two chemicals are layered together and react when kneaded together. The putty can be shaped, formed, and even sanded before curing to fit most any dimension. Solid adhesive epoxy is very useful for underwater applications since it is waterproof (liquid adhesive is waterproof also, but is difficult to work with in water.)

Both liquid and solid adhesive epoxy yield enough material (20 milliliters, or 1.22 cubic inches) to create a seal approximately nine inches square and one-quarter (1/4) inch thick, or any variation thereof. The epoxy sets to half-strength in 10 minutes and totally cures within 20 minutes; this timeframe can be sped up or slowed down using specially formulated chemical treatments (available in pre-measured doses sold separately.)

Orientine acid is one of the few solvents that will dissolve a hardened epoxy seal.

## Adhesive Plasticene Tape

**Size:** Tiny

**Weight:** 1 lb.

**Purchase DC:** 6

**Restriction:** —

**Notes:** This tape comes in a variety of widths, lengths, colors, textures, and degrees of transparency. It can be used to “piece together” sections of walls or duralloy beams after they have been broken, penetrated, or compromised. It can also be used to bind objects together. Engineers are notorious for finding uses for adhesive plasticene tape.

Typical engineering-grade adhesive plasticene tape comes in a roll two inches wide by 60 yards in length unrolled.



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## Hand Calculator

**Size:** Tiny

**Weight:** -

**Purchase DC:** 2

**Restriction:** —

**Notes:** A hand calculator is an inexpensive, yet mathematically complex, version of its 20th century Terran equivalent. Its mini-processor employs scores of preprogrammed mathematical subroutines and formulas. They are available in many styles.





## Headband Light

**Size:** Tiny

**Weight:** -

**Purchase DC:** 2

**Restriction:** —

**Notes:** The convenient headband light consists of six small, high-intensity, adjustable lights attached to a headband. The lights are capable of unidirectional (like a flashlight), or semi-directional (like a lantern) illumination, with variable beam intensity. At the high-intensity setting, the flashlight beam will dazzle someone at close range (Vulcans are immune, due to their ocular structure) or will illuminate a 25 feet radius. Some units have color filter caps attached for signaling or other purposes.

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## Industrial Gloves

**Size:** Small

**Weight:** 0.5 lb.

**Purchase DC:** 4

**Restriction:** —

**Notes:** Industrial gloves provide full insulation from high electrical voltages, and resist most chemicals as well. However, their bulk affects an individual's manual dexterity. One size fits all.

*GM's Notes: these gloves increase the time it takes to complete a task while worn. This increase in time should be based on the type of task being attempted. Fine work, such as circuitry repair or precision welding may take almost twice as long, whereas the gloves may add only a few minutes for larger tasks.*

## Orientine Acid

**Size:** Tiny

**Weight:** -

**Purchase DC:** 15

**Restriction:** License (+1)



**Notes:** This volatile chemical easily dissolves alumisteel, duraplastic, thin duralloy, and other common building materials. One vial will create a hole in the aforementioned materials one-half (1/2) inch thick and approximately two feet in diameter in less than one minute.

Orientine acid must be stored in a special vial or flask of resin-compound, one of the few materials that can withstand its effect. The vial has a special spray applicator for applying the acid. After the orientine acid has dissolved an object, the user pours a second chemical (Compound ED 161) over the orientine acid, rendering it totally harmless and safe for contact. A quantity of Compound ED 161 comes with each vial of orientine acid.

Orientine acid is commonly used in large-scale industrial applications, but engineers have found it useful in very small quantities. In these applications, one dose (applied via the spray applicator) is used at a time, and very cautiously indeed.

## Plasma Torch

**Size:** Tiny

**Weight:** 0.5 lb.

**Purchase DC:** 12

**Restriction:** License (+1)

**Notes:** The plasma torch is an all-purpose cutting and welding tool. It emits an oscillating positron beam, compressed and shaped by nickel-rhombium ceramic magnets. In five minutes, a character can bore a hole through alumisteel or duralloy one-half (0.5) inch in diameter and 1.5 feet deep, or make a 1.5 feet-long cut through a plate 0.5 inches thick. A character can weld or cut through welding at twice this rate.

When making large-scale repairs, such as welding breached bulk-heads, repairing piping, etc., the plasma torch gives a +2 equipment bonus to Repair skill checks. This bonus stacks with the bonus given by a deluxe or standard engineer's kit. If used as a weapon, the plasma torch does 1d6 points of damage, but due to the relatively short cutting beam, its range is limited to melee only.

## Pocket Lantern

**Size:** Small

**Weight:** 0.25 lb.

**Purchase DC:** 3

**Restriction:** —

**Notes:** About the size of a pack of Terran playing cards, these rechargeable lanterns can produce continuous, full-power illumination for 24 hours. They are capable of unidirectional (like a flashlight), semi-directional (like a lantern), or omni-directional (like a floodlight) illumination, with variable beam intensity. At the high-intensity setting, the flashlight beam will dazzle someone at close range (Vulcans are immune, due to their ocular structure) or will illuminate a 100 feet radius. Some units have color filter caps attached for signaling or other purposes.

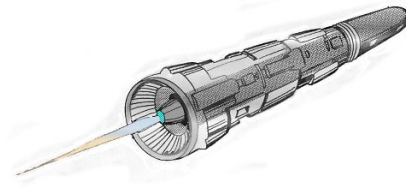
## Precision Microwelder

**Size:** Tiny

**Weight:** -

**Purchase DC:** 8

**Restriction:** License (+1)



**Notes:** This tool aids in engineering and electronic repair by producing a tiny jet of plasma capable of fusing circuitry, or welding small pieces of metal together. It can also be used to cut and pierce relatively thin metal, although a plasma torch is more suited for that role. If used as a weapon, the precision microwelder does 1d2 points of damage, but due to the relatively short plasma jet, its range is limited to melee only.

# Credits

## Images:

Precision microwelder scanned from *Star Fleet Intelligence Manual: Agent's Orientation Sourcebook* by FASA and colorized by Lee A. Wood.

Other images courtesy of Paramount Pictures Corporation and retrieved from various sites across the internet, especially [www.memory-alpha.org](http://www.memory-alpha.org).

## Game Data:

Equipment descriptions frequently copied directly from original source (especially FASA) and in some cases modified; some mechanics adapted to d20.

Original game data compilation and text by Lee A. Wood. Special thanks to Jonathan M. Thompson of Battlefield Press.

## Works Consulted:

Amarillo Design Bureau-

*Prime Directive Modern Core Rulebook*

Decipher-

*Star Trek Roleplaying Game: Player's Guide*

FASA Corporation-

*Star Fleet Intelligence Manual: Agent's Orientation Sourcebook*

*Star Fleet Intelligence Manual: Game Operations Guide*

*Trader Captains and Merchant Princes, 2nd edition*

Last Unicorn Games-

*Star Trek: The Next Generation Roleplaying Game Player's Guide*

Wizards of the Coast-

*D20 Modern Core Rulebook*

*D20 Modern Future*

*D20 Modern Future Tech*

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