

Tinvymai Tyokame (Plasma Drives)



The *Poku Saeruo Degonjo* uses plasma drives for propelling their ships.

The plasma drive consists of two sections; ram scoop, and thruster section. They are capable of propelling their ships to speeds up to .35c depending on class and ship size.

Plasma drives are normally mounted in groups of 2, 3, or 4. This is done to ensure the ship has maximum maneuverability.

Matrix						
Engine Class						
Ship Class	2A	3A	2B	3B	2C	3C
Ark	-	-	-	-	-	.05c
Blade	.20c	.35c	-	-	-	-
Gatherer	.15c	.20c	.225c	.25c	-	-
Harvester	.20c	.225c	.25c	.275c	.3c	.325
Hunter	-	-	.25c	.275c	.3c	.35c
Messengers	.25c	.275c	.3c	.325c	.35c	-
Sword	-	-	-	-	-	.3c
Class A drives = 5% of ship						
Class B drives = 7% of ship						
Class C drives = 10% of ship						

Components

Electro-magnetic Hydrogen Ram Scoop

The forward section of the engines is a hydrogen ram scoop. It generates a large electro-magnetic field to draw hydrogen into the scoop intakes. The scoops engage when the ship is moving and all the hydrogen is stored in containers for use by the thrusters or by the fusion reactors on the ship.

Thruster section

This section consists of a group of  [Electrodeless plasma thrusters](#) which provide the propulsive force.

They are normally clustered with a large central thruster and eight directional thrusters.

Neutral gas is first ionized by electromagnetic waves and then transferred to another chamber where it is accelerated by an oscillating electric and magnetic field, also known as the ponderomotive force. This separation of the ionization and acceleration stage give the engine the ability to throttle the speed of propellant flow, which then changes the thrust magnitude and specific impulse values. [plasma thruster](#)

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