WFC PROJECT 423 DA

DUAL LASER DISTRIBUTOR
(INTERCHANGEABLE WITH
HYBRID LASER DISTRIBUTOR)

CONSTANT DISPLACEMENT
WATER PUMP

DIFFERENTIAL
SOLENOID GATE CONTROLS

BUTTERFLY AIR GATE

GAS PROCESSOR

WATER FUEL INJECTORS ®
(SPARK PLUG REPLACEMENT)

WATER INJECT
GATE CONTROL

WATER FUEL INJECTION SYSTEM ®

Retrofit Kit
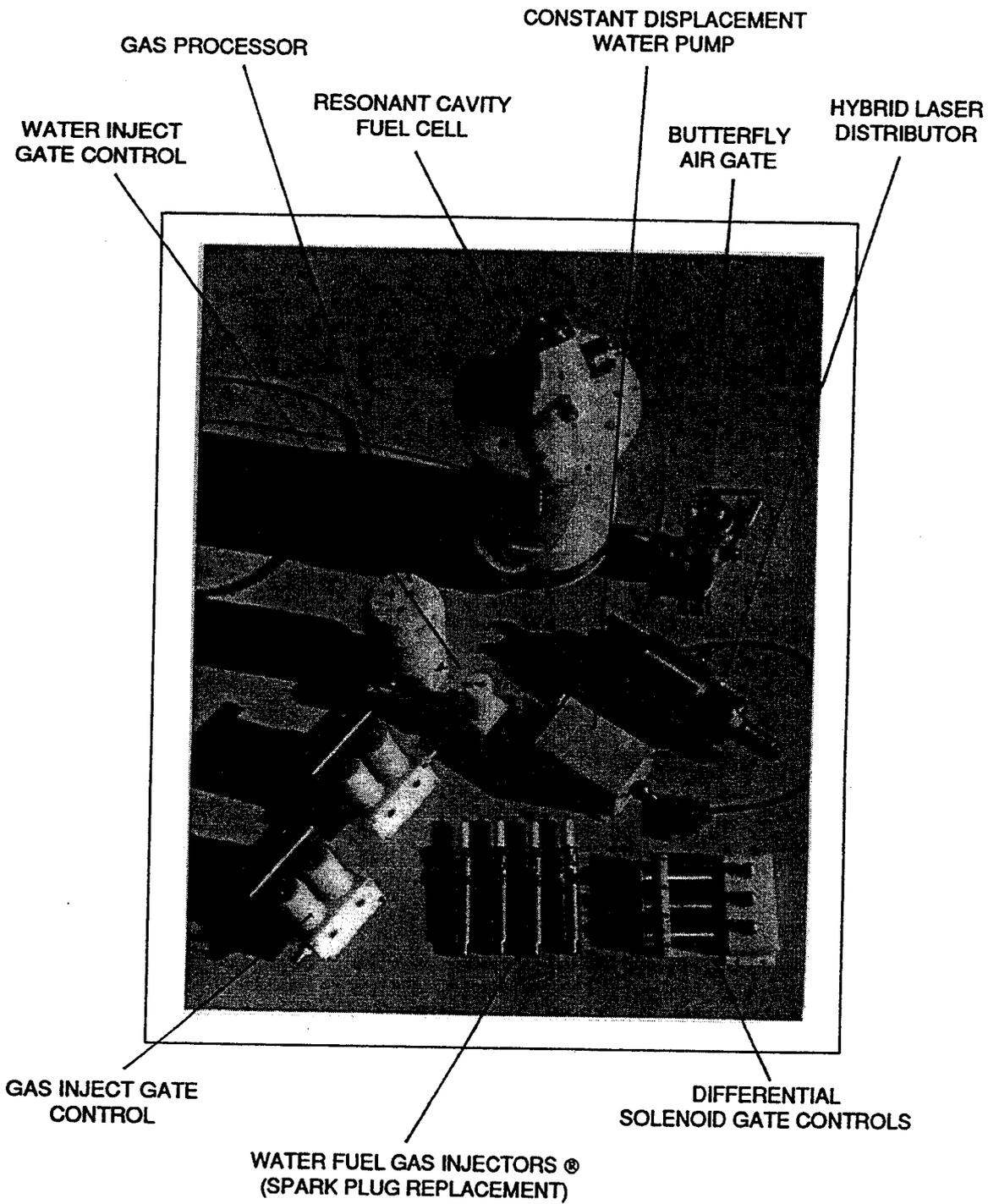
GAS PROCESSOR

CONSTANT DISPLACEMENT
WATER PUMP

RESONANT CAVITY
FUEL CELL

HYBRID LASER
DISTRIBUTOR

WATER INJECT
GATE CONTROL

BUTTERFLY
AIR GATE

GAS INJECT GATE
CONTROL

DIFFERENTIAL
SOLENOID GATE CONTROLS

WATER FUEL GAS INJECTORS ®
(SPARK PLUG REPLACEMENT)

WATER FUEL GAS INJECTION SYSTEM ®

Exhaust Cooler

Quenching Tube

Water Fuel Cell
(Resonant Cavity submerged in Water)

Steam Resonator (Sec. 11)

Water Level Control (Sec. 10)

Water Tank (Sec. 8)

Gas Processor
(Boost Control)

Air Management System
(Sec. 3)

Gas Inject Control (Sec. 9)

Laser Distributor (Sec. 5)
(Single Stage)
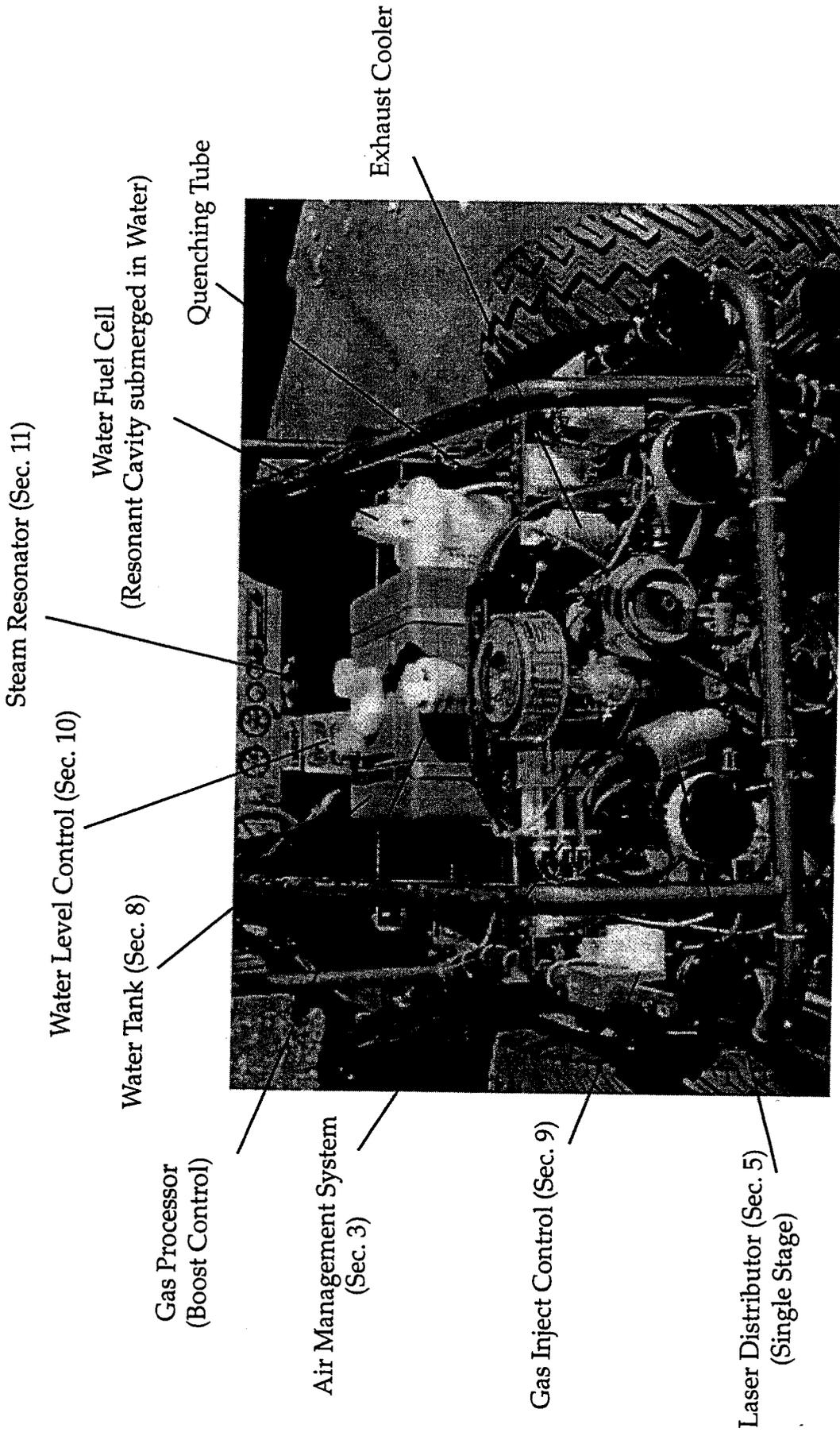
Water Fuel-Gas Injection System
(Component Placement prior to debugging stage)
Dune Buggy: Rear View

Water Fuel Cell

Water Fuel Injection System ®

Water Fuel Injector System ® processes and converts water into a useful hydrogen fuel on demand at the point of gas ignition.

The Water Injector System ® is design variable to be retrofitted by replacing fossil-fuel injectors-ports affixed to conventional jet engines, heating system, rocket engines, even replacing internal combustion engine spark plugs.

The Water Fuel Management (WFMS) System is a digital computer logic control system which systematically activates the Water Fuel Injection System ® in the following way ... using water as fuel.

Section 4

WATER FUEL MANAGEMENT (WFMS) SYSTEM MODULE

LASER ACCELERATOR CONTROL MODULE

WATER TANK

GAS PROCESSOR

WATER FUEL INJECTORS (SPARK PLUG REPLACEMENT)
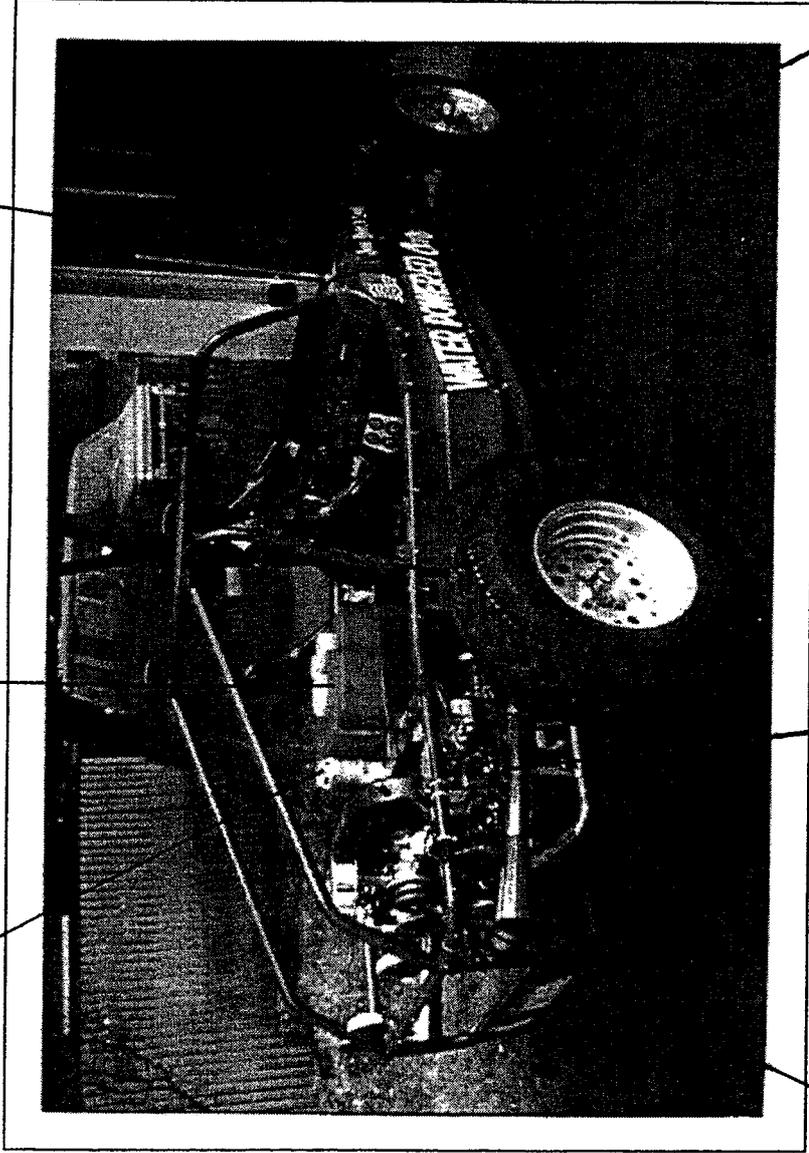
STANDARD 1600CC I.C. ENGINE

WATER FUEL INJECTION SYSTEM ®
(Component Placement prior to debugging stage)

Dune Buggy: Rear Side View
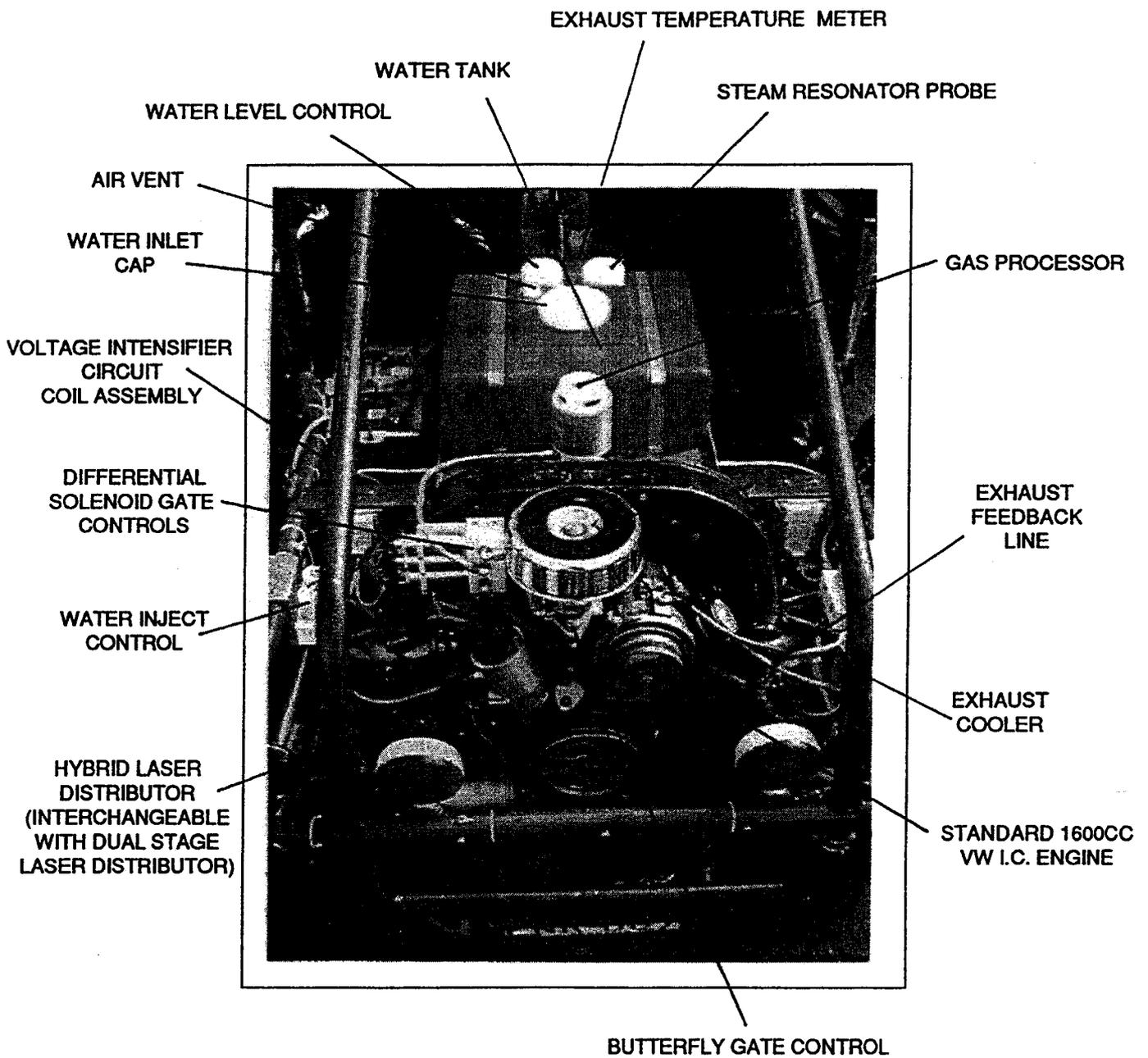
EXHAUST TEMPERATURE METER

WATER TANK

WATER LEVEL CONTROL

STEAM RESONATOR PROBE

AIR VENT

WATER INLET CAP

GAS PROCESSOR

VOLTAGE INTENSIFIER CIRCUIT COIL ASSEMBLY

DIFFERENTIAL SOLENOID GATE CONTROLS

EXHAUST FEEDBACK LINE

WATER INJECT CONTROL

EXHAUST COOLER

HYBRID LASER DISTRIBUTOR (INTERCHANGEABLE WITH DUAL STAGE LASER DISTRIBUTOR)

STANDARD 1600CC VW I.C. ENGINE

BUTTERFLY GATE CONTROL

WATER FUEL INJECTION SYSTEM ®
(Component Placement prior to debugging stage)

Dune Buggy: Rear View

HYBRID LASER
DISTRIBUTOR
(INTERCHANGEABLE
WITH DUAL STAGE
LASER DISTRIBUTOR)

WATER INJECT
CONTROL

DIFFERENTIAL
SOLENOID GATE
CONTROLS

VOLTAGE INTENSIFIER
CIRCUIT
COIL ASSEMBLY

WATER FUEL INJECTORS
(SPARK PLUG REPLACEMENT)

WATER FUEL INJECTION SYSTEM ®
(Component Placement prior to debugging stage)

Dune Buggy: I.C. Engine Side View

Water Fuel Injection System ®

WFC Hydrogen Gas Management System is ideally suited as a retrofit energy system to both reciprocating (rotary piston engine) and turbine jet engines associated with the aviation industry ... but in different ways: Reciprocating WFC fuel-kits can be similar to car design (340) of Figure (3-38) of WFC (422 DA); Whereas, Water Fuel Injector Kit (10) of Figure (4-1) can be alternately be used as a self-contained Fuel-unit having no pressurized vessel which converts water directly into thermal explosive energy (gtnt) on demand, as illustrated (10) of Figure (4-1) as to Figure (40) of Figure (4-2).

Operationally, Water Fuel injector assembly (10) of Figure (4-1) as to (40) of Figure (4-2) performs several function simultaneously to produce thermal explosive energy-yield (gtnt) (16) on demand:

First water mist (47) of Figure (4-4) is injected into fuel-mixing chamber (35) of Figure (45) by way of water spray ports (41a xxx 41n) of Figure (4-4); Secondly, ionized air gases (46a xxx 46n) of Figure (4-4) (laser primed ambient air gases having missing electrons) produced by Ambient Air Ionizer (80) of Figure (4-6) as to Figure (4-1) and non-combustible gases (45) of Figure (4-4) are intermixed with expelling water mist (47a xxx47n) to form Water-fuel mixture (48) by way of gas mixing disc (34) of Figure (4-5) as to (30) of Figure (4-2); thirdly, the resultant moving Water-Fuel mixture (48) of Figure (4-5) enters into Voltage Igniter Stage (180) of Figure (4-5) and exposed to hjgh intensity voltage fields (33/36) (typically 2,000 volts or above @ 10 Khz or above) of opposite electrical polarity (E7 / E8) ... which, in turn, not only performs electrical polarization process (160) of Figure (3-26) undergoing Dielectric Resonant (240) of Figure (3-31); but, also, sets up and triggers Hydrogen Fracturing Process (390) of Figure (3-42) as to Figure (3-6) under control state (on demand) via electrical-static spark ignition (49/51) of Figure (4-5) .... releasing thermal explosive energy (gtnt) (16) passing beyond gas exit port (32) of Figure (4-5), as further illustrated in Figure (4-2) as to Figure (4-1).

To ensure proper energy-flame projection and subsequent energy-flame stability, constant displacement water pump (170) causes and allows ionized ambient air gases (46), noncombustible gases (45), and water (47) to be displaced under static pressure up to and beyond 125 lbs psi, respectively.

Energy-Flame density is enhanced and sustained by causing ionized gases (46a xxx 46n) of spray port (42) to be deflected into liquid spray path (41), together water mist (47) and ionized air gas (46) are, now, directed toward and deflected through non-combustible gas spray path (43) ... producing uniformed water-fuel mixture (48), as illustrated in Figure (4-5).

Energy-Flame temperature is regulated by controlling the volume flow-rate of each fluid-mediums (47 *1 451* 46) in direct relationship to applied voltage intensity (33 *136),* as further illustrated in Figure (4-2) as to Figure (4-5). To elevate Energy-flame-temperature still further, simply increase fluid-displacement *(46/47)* while maintaining or reducing the volume flow rate of non-combustible gases (45) during an increase of applied voltage amplitude (V 0 xxx Vo) of Figure (4-2) as to Voltage Intensifier Circuit (110) of Figure (4-9) and Electron Extraction Circuit (120) of Figure (4-10). To lower Energy-flame temperature simply increase the amount of non-combustible gases (45a xxx) or reduced the fluid flow rate (45 *146/47))* uniformly while lowering pulse voltage amplitude (xxx VO). To establish a predetermined or given Energy-flame temperature adjust fluid-medium (45 *1* 46 *1* 47)) and applied voltage amplitude (V 0 xxx) independent of each other to obtain the desired results.

The resultant energy-flame pattern is further maintained by allowing the ignited, compressed, and moving gases (29) of Figure (4-5) to be projected to, pass through and beyond nozzle-port (32) under pressure due to gas expansion caused by thermal gas ignition.

Voltage Igniter Stage (180) of Figure (4-5) as to Voltage Intensifier Circuit (110) Figure (49) as to Extraction Circuit (1:?0) of Figure (4-10) performs several functions simultaneously to initiate and trigger thermal explosive energy-yield (gtnt) (16) beyond normal gas burning levels:

Water droplets (28a xxx 28n) escaping from spray-mist (47) and exposed to high intensity voltage fields of opposite polarity *33/36)* are stimulated to undergo Electrical Polarization Process (160) of Figure (3-26) ... which not only separates and splits the unlike atoms of the water molecule but also causes the unlike atoms (hydrogen atoms 77a /77b and oxygen atom 76) to experience electron ejection (230) of Figure (3-30) as to (71) of Figure (4-10) since voltage intensifier circuit (110) of Figure (4-9) inhibits and prevents electron flow to enter into gas ignition process (180), as further illustrated in Figure (4-8).

The newly liberated water molecule atoms (oxygen <u>76</u> and hydrogen atoms <u>77a/77b</u>) immediately interact with laser primed ionized ambient air gases (7a xxx 7n of Figure <u>1-15)</u> (see WFC memo 420) to cause the resultant highly energized and mass destabilized combustible gas atoms (93a xxx 93n) of Figure (4-10) to perform Hydrogen Fracturing Process (80) of Figure (49) when electrostatic force (14/16) thermally ignites (kinetic agitation) destabilized water-fuel mixture (93a xxx 93n) under gas compression ... preventing the formation of the water molecule during thermal gas ignition…satisfying Energy Gas Detonation Equation.

<div align="right">(Eq 18)</div>

$$E_{in} \underset{det}{\overset{gas}{=}} M_d C^2 \quad \text{Thermal Explosive Energy (gtnt)}$$

Which states

That, whenever the mass-size of a combustible gas atom is decreased (Md), thermal explosive energy-yield (gtnt) is increased (Ein) during thennal gas combustion (Gas // Detonation.), as so illustrated in (100) Figure (4-8) as to (90) of Figure (4-7).

Incoming ambient air gases (5a xxx 5n) become laser primed and ionized when passing through Ambient Air Ionizer (Gas Processor) (80) of Figure (4-6) as to (10) of Figure (4-1) since electron extraction circuit (120) of Figure (4-10) not only captures and consumes ejected electrons (7a xx 7n) of Figure (4-8); but, also prevents electron flow into destabilizing gas process (180), as so illustrated in Figure (4-5).

In terms of performance reliability and safety, ionized air gases (46a xxx 46n) and liquid water (47a xxx 47n) do not become energy activated (volatile) until water-fuel mixture (48) reaches voltage Igniter Stage (180). Injected non-combustible gases (45a xxx 45n) retards and controls the combustion rate of the Hydrogen Fracturing Process (100) of Figure (4-8) during gas-ignition.

In other or alternate applications, laser primed ionized liquid oxygen (68) of Figure (1-21) (see WFC memo 420) and laser primed liquid hydrogen (69) of Figure (1-21) stored in separate fuel-tanks can be used in place of fuel-mixture (48); or, liquefied ambient air gases (6) alone with water-source (8) can, also, be substituted as a fuel-source (48) to trigger Hydrogen Fracturing Process (100). Additional WFC Injector Assemblies (20) of Figure (4-1) are arranged in cluster

array (20a xxx 2On) to increase energy-yield output (16a xxx 16n) of Figure (4-12/4-13/4-14).

WFC injector assembly (10) of Figure (4-1) as to (30) of Figure (4-2) is design variable to be retrofitable by replacing fossil-fuel injector ports affixed to jet engines (see Figure 4-13), heating systems (Figure 4-12), rockets engines (Figure 4-14), or even car spark plugs (130) of Figure (4-11) which simply uses Water Fuel management (WFMS) system fluid- metering system (40) to control gas ignition (16), as illustrated in (40) of Figure (4-2). Sequential pulsing of Water Fuel Injector (20/30) of Figure (4-1) as to (40) of Figure (4-2) is system activated by Pulse Gate Valve (190) of Figure (4-1) to further control a predetermined energy-flame (16).

In essence, then, the Water Fuel Injector system (40) simply processes and converts water into a useful hydrogen fuel on demand at the point of gas ignition ... thereby, co-equally or superseding fossil-fuel safety standards ... especially when ionized ambient air gases (400 xxx 46n) and non-combustible gases (45a xxx 45n) are intermixed with water supply (47) prior to entering Water Fuel Injector Plug (20/30), as illustrated in (40) of Figure (4-2) as to (10) of Figure (4-1).
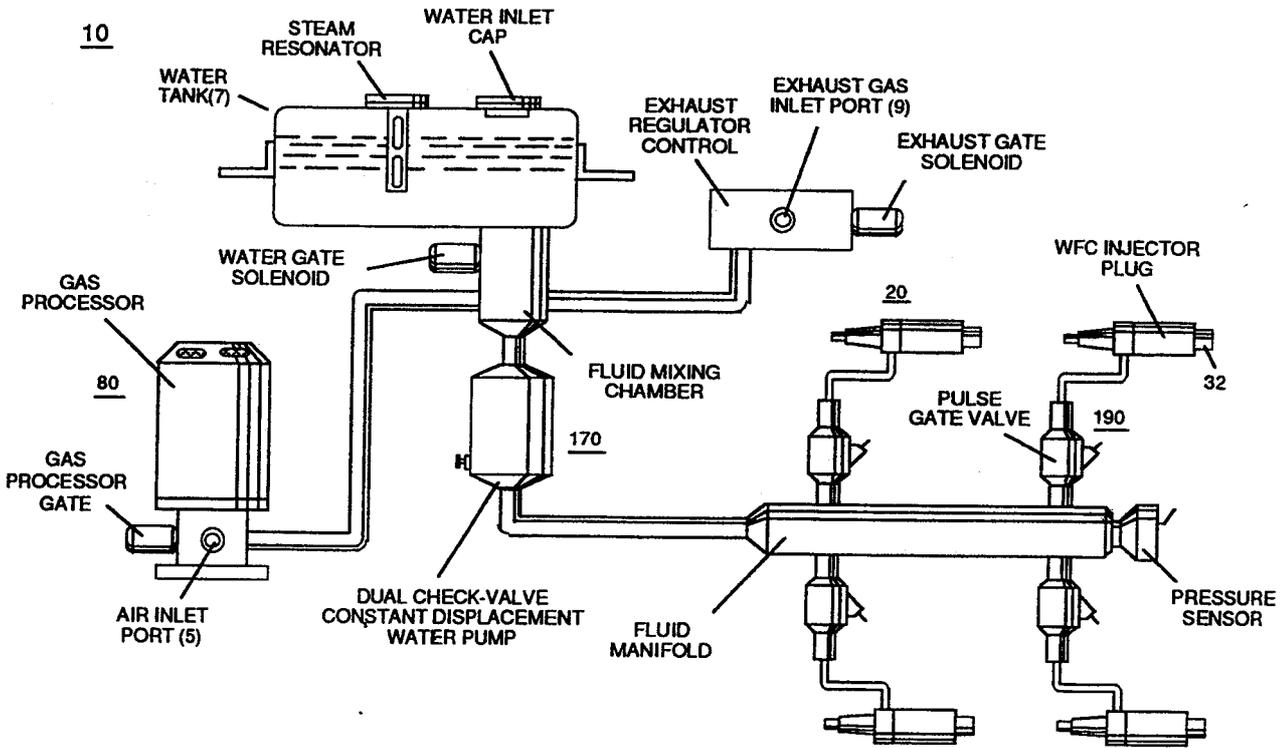
FIGURE 4-1: WATER FUEL INJECTOR SYSTEM
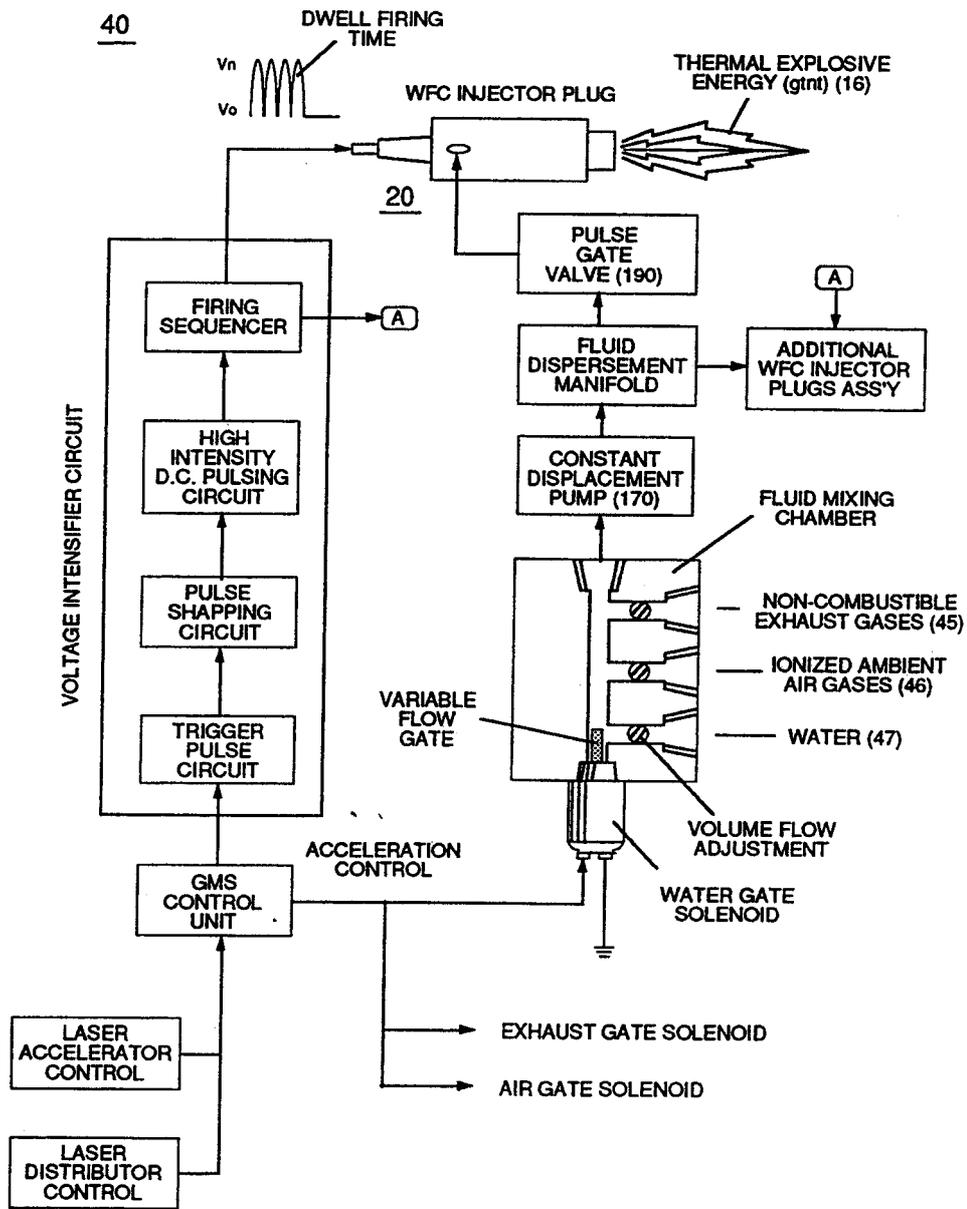
FIGURE 4-2: WATER FUEL MANAGEMENT (WFIS) SYSTEM

FIGURE 4-3: SPRAY DISTRIBUTION DISC


FIGURE 4-4: SPRAY PATTERN

70

* NON-COMBUSTIBLE
GASES (45)

* IONIZED
GASES (46)

* WATER
(47)

DISTRIBUTION DISC
ASS'Y (34)

MIXING
CHAMBER (35)

WATER
FUEL (48)

* LASER PRIMED

RESONANT
CHARGING CHOKE COIL

B –

NEGATIVE
VOLTAGE FIELD (51)

36

16

32

33

POSITIVE
VOLTAGE FIELD (49)

B +

RESONANT CHARGING
CHOKE COIL
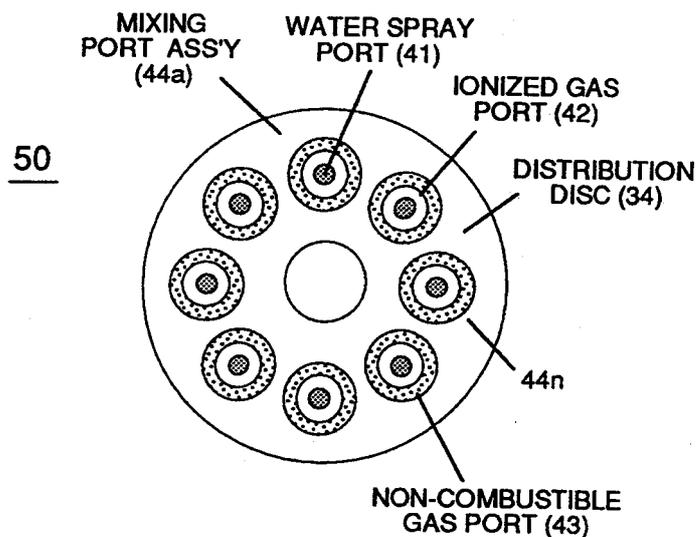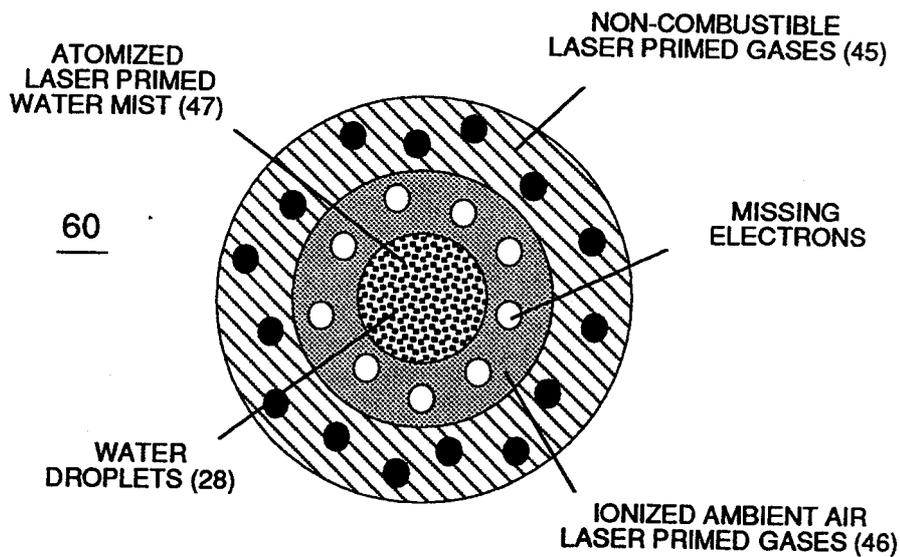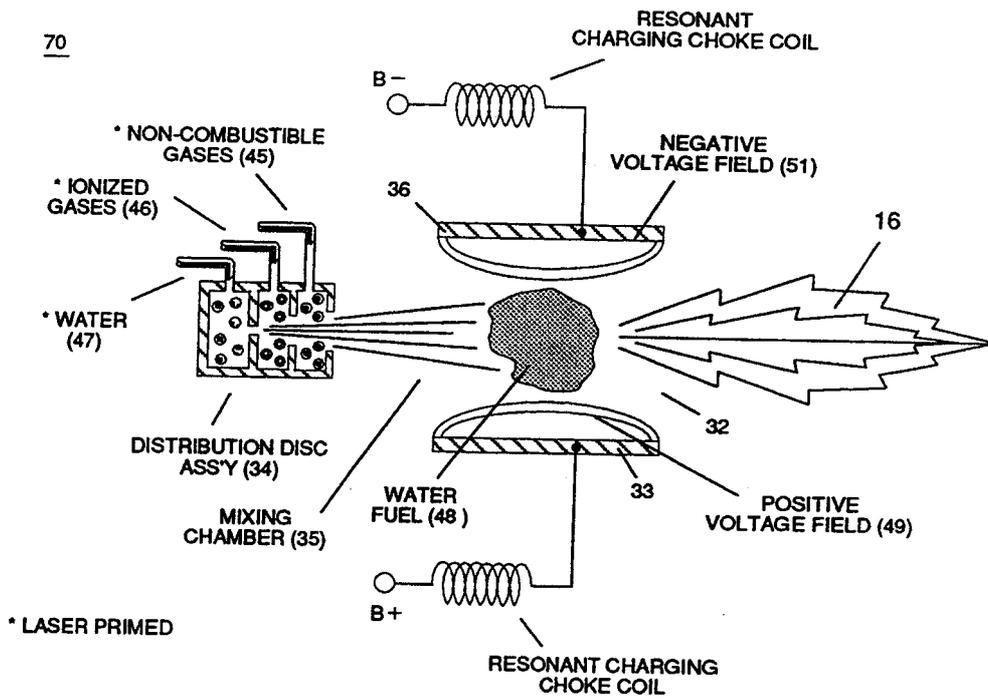
FIGURE 4-5: VOLTAGE TRIGGERING

80

POSITIVE VOLTAGE
ZONE

NEGATIVE
VOLTAGE
ZONE (107)

410

E4

SOLID STATE
LASERS

118a

420

118n

PRINTED CIRCUIT
BOARD (119)

116a

116n

LIBERATED
ELECTRON S

117a

X   X'

X   X'

X   X'

OPPOSITE ELECTRICAL
ATTRACTION FORCE

117b

NEGATIVE CHARGED
ORBITAL
ELECTRONS (124)

ABSORBED
LASER
ENERGY(122)

Y'   Y

POSITIVE CHARGED
NUCLEUS (108)

IONIZED AMBIENT
AIR GASES (46)

OPTICAL
LENS (121)

E3
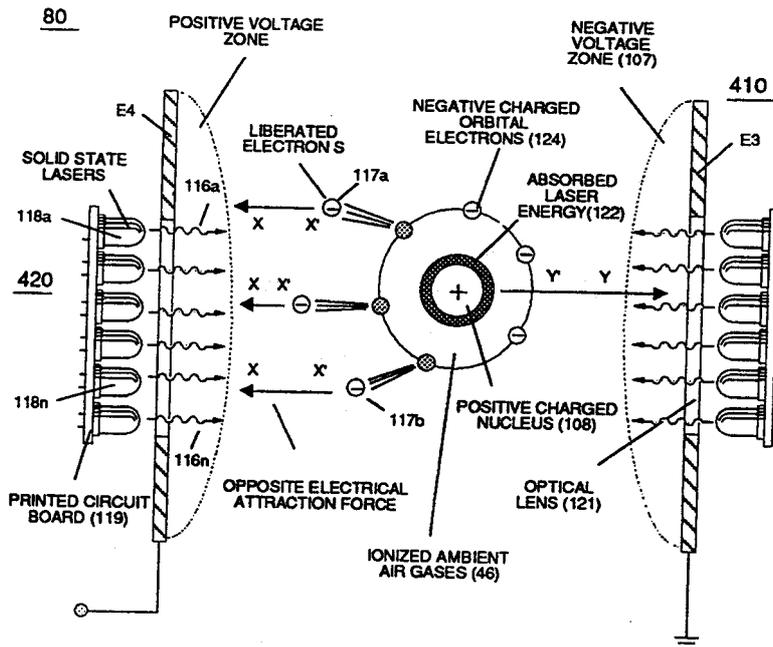
FIGURE 4-6: AMBIENT AIR IONIZER

90

$$E_{in} \overset{GAS}{=\!=} M_d C^2$$

ELECTRON
ENTRAPMENT (44)

LIBERATED
ELECTRONS (7)

HIGH ENERGY LEVEL

PHOTON ENERGY
INJECTION (41)

ENERGY
DISCHARGE (43)

ELECTRON
DEFLECTION

THERMAL EXPLOSIVE
ENERGY (GTNT) (16)

LOW ENERGY LEVEL

AMBIENT AIR
GAS IONS (42)

GAS RESONANT
CAVITY (180)

E7

E8

HIGHLY
ENERGIZED
COMBUSTIBLE
GAS IONS (46)

RESONANT
CHARGING
CHOKE

RESONANT
CHARGING
CHOKE

WATER
FUEL (43)

WATER SPRAY
MIST (47)

HIGH PULSE VOLTAGE
FREQUENCY INPUT (46)

FIGURE 4-7: VOLTAGE IGNITER STAGE

100

MISSING
ELECTRONS (8)

$$E_{in} \frac{GAS}{DET} M_d C^2$$

LIBERATED
ELECTRONS (7)

WATER FUEL (43)

WATER SPRAY
MIST (47)

180

THERMAL EXPLOSIVE
ENERGY (gtnt)

NON-COMBUSTIBLE
GASES (45)

IONIZED
AIR GASES (46)
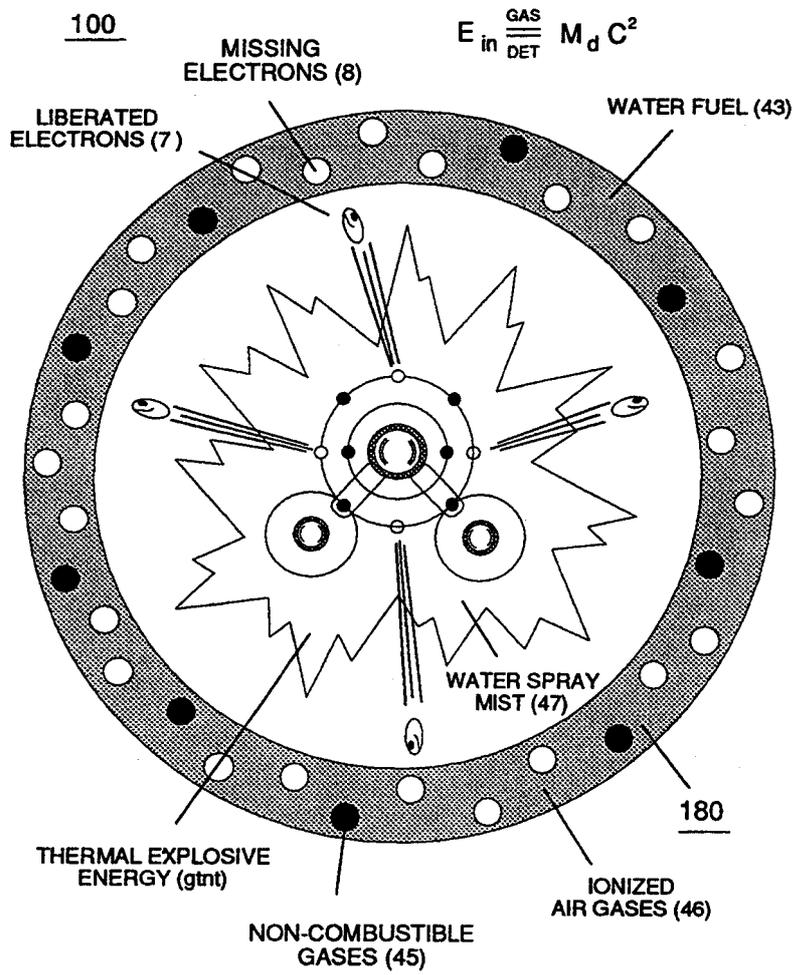
FIGURE 4-8: GAS IGNITION STAGE

110

SWITCHING DIODE (52)

RESONANT CHARGING CHOKE (49)

46a xxx 46n

RESONANT CONTROLLED THERMAL EXPLOSIVE ENERGY (GTNT) (16)

54a xxx 54n

VOLTAGE IGNITOR CAVITY (180)

E7

STEP UP PULSING TRANSFORMER (53)

E8

RESONANT CHARGING CHOKE (51)

PROCESSED WATER FUEL (45/46/47)
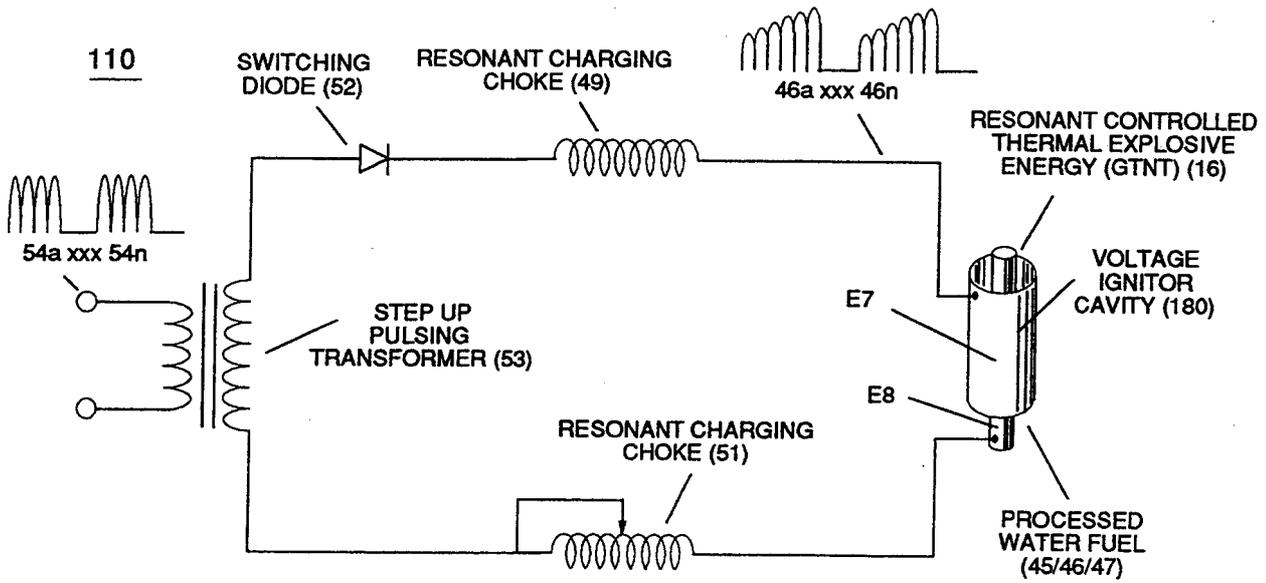
FIGURE 4-9: VOLTAGE INTENSIFIER CIRCUIT

120

SWITCHING DIODE (58)

62a xxx 62n

AMP CONSUMING DEVISE (44)

RESONANT CONTROLLED THERMAL EXPLOSIVE ENERGY (GTNT) (16)

61a xxx 61n

RESONANT CHARGING CHOKE (56)

VOLTAGE IGNITOR CAVITY (180)

E7

STEP UP PULSING TRANSFORMER (59)

E8

LASER INJECTION (55)

RESONANT CHARGING CHOKE (57)

PROCESSED WATER FUEL (45/46/47)
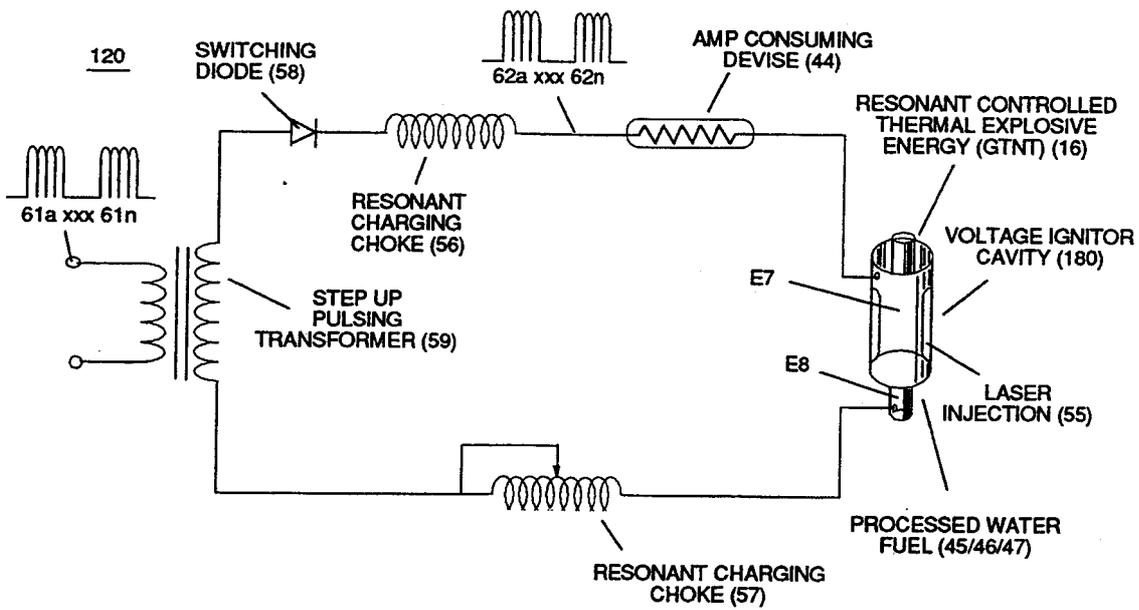
FIGURE 4-10: ELECTRON EXTRACTION CIRCUIT
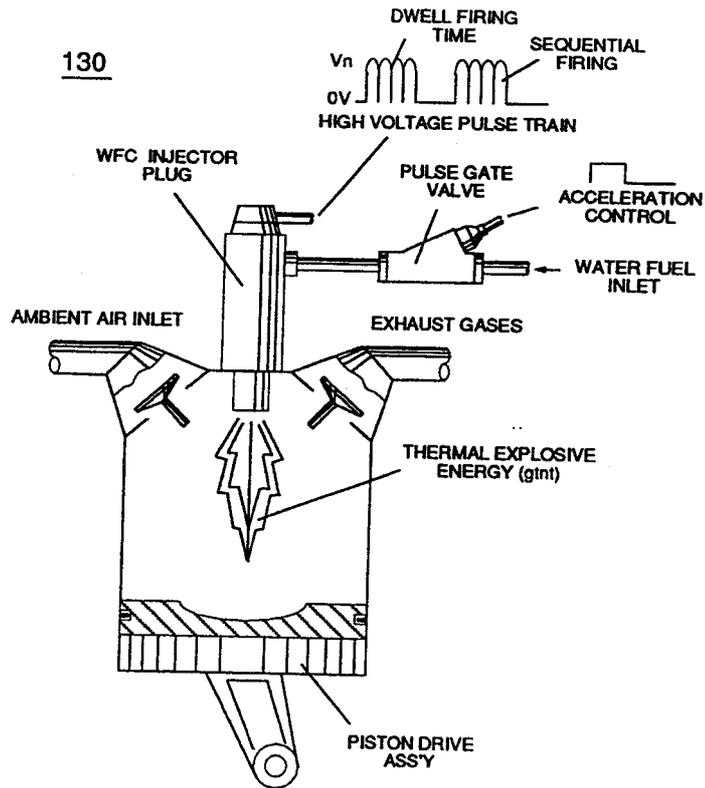
FIGURE 4-11: INTERNAL COMBUSTION ENGINE RETROFIT
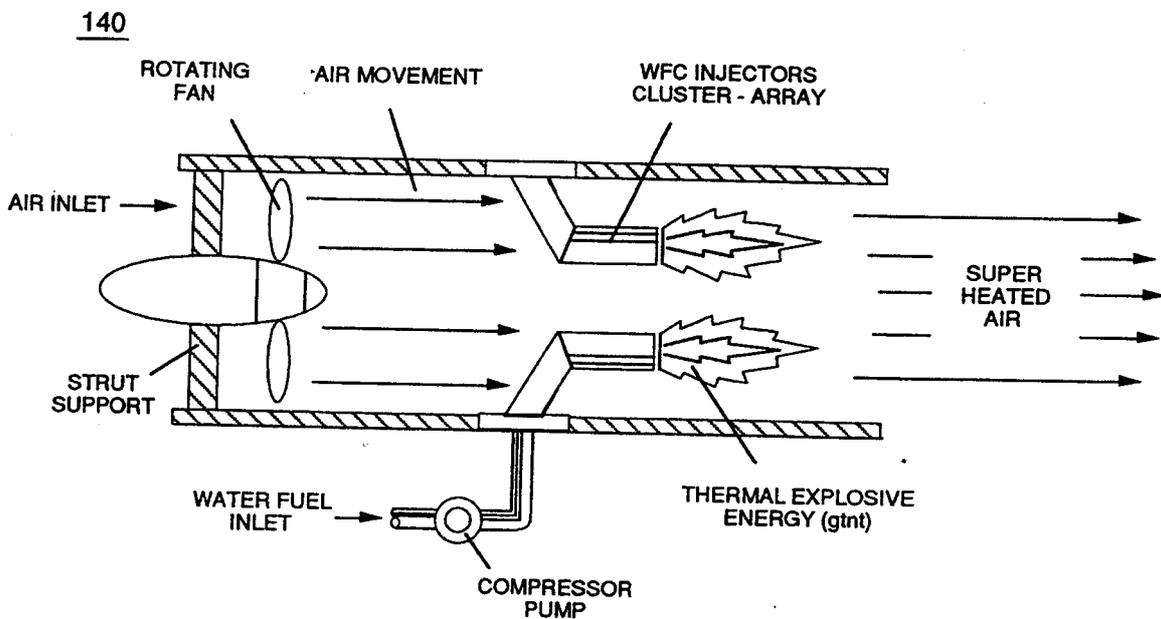

FIGURE 4-12: FURNACE RETROFIT

150
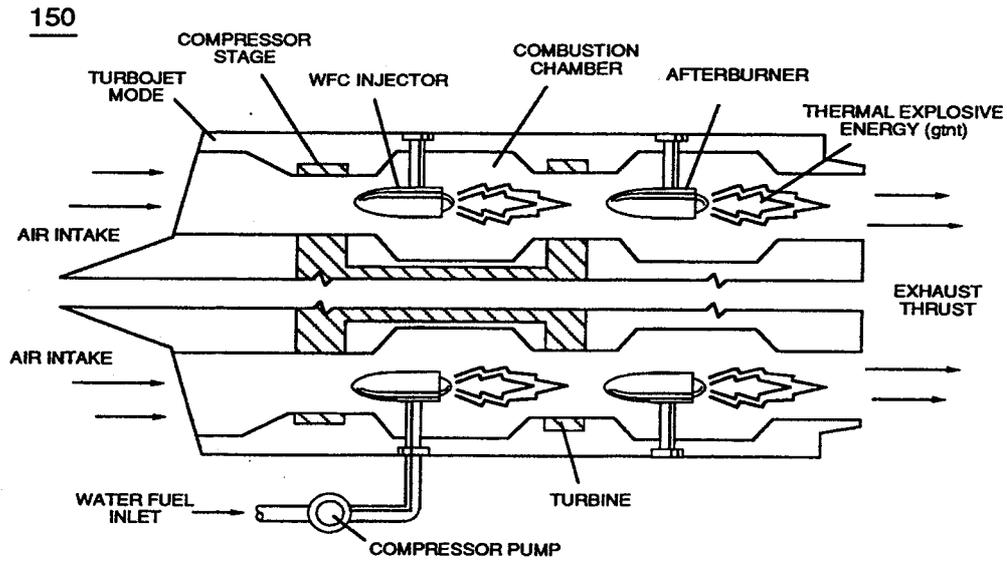
FIGURE 4-13: JET ENGINE RETROFIT

160
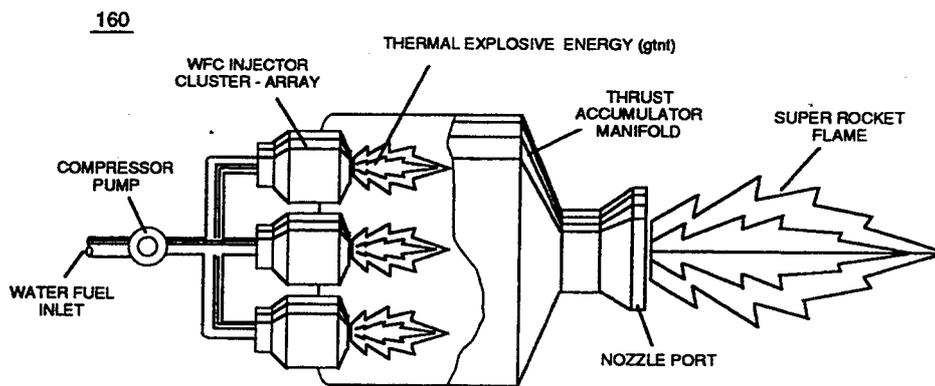
FIGURE 4-14: ROCKET ENGINE RETROFIT