

4.110 HE

22 KW (30 HP)

VW 1100-B



NANNIDIESEL 4.110 HE is a sophisticated marine diesel engine, featuring a robust, cast-iron crankcase, built-in water pump, alternator, and a 12V/100Ah battery. It is designed for maximum efficiency, offering exceptional fuel economy and low emissions.

NANNIDIESEL "ELECTRIC REGULATOR"
The engine is equipped with a fully automatic electric regulator, which maintains a constant speed of 1500 RPM, ensuring optimal performance and fuel economy.

NANNIDIESEL "FUEL INJECTION SYSTEM"
The engine is equipped with a fuel injection system, which ensures precise fuel delivery to the cylinders, resulting in maximum efficiency and low emissions.

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nannidiesel

MARINE PROPULSION

4.150 HE

25.8 KW (35 HP)



■ **4.1500 HE** IS THE 35 HP version of the 4.150 HE series of marine engines. An extremely compact, powerful, low speed, low maintenance engine with excellent fuel economy characteristics, perfect for the pleasure boat.

■ **4.1500 HE**, **7000** and **8000** are the 35, 70 and 80 HP versions of the 4.150 HE series. All three versions are constructed for the best torque and fuel economy characteristics.

■ **4.1500 HE**, **THE BEST ENGINE**
 With its compact design, low maintenance and excellent fuel economy, the 4.150 HE series is the best choice for the pleasure boat.

■ **EXCEPTIONAL "BEST ENGINE"**

The 4.150 HE series is the most compact and powerful low speed engine available. Compact and powerful, the 4.150 HE series is the best choice for the pleasure boat.

■ **EXCEPTIONAL "THE ENGINE"**

The 4.150 HE series is the most compact and powerful low speed engine available. Compact and powerful, the 4.150 HE series is the best choice for the pleasure boat.

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nanndiesel

MARINE PROPULSION

4.150 HE

37.5 HP



Technical specifications

Model	4.150 HE
Year	1980
Engine type	Single-cylinder
Displacement	149 cm ³ (9.1 cu in)
Stroke	57 mm (2.2 in)
Bore	42 mm (1.6 in)
Compression ratio	10.5:1
Maximum power	37.5 HP (27.5 kW) @ 5200 rpm
Maximum torque	14.5 Nm (10.7 lb-ft) @ 3200 rpm
Idle speed	750 rpm
Valve train	Overhead valve
Ignition system	Coil and points
Lubrication	Wet sump
Oil capacity	1.5 L (0.4 gal)
Water pump	Optional
Alternator	Optional
Starter motor	Optional
Clutch	Optional
Transmission	Optional
Driveshaft	Optional
Exhaust system	Optional
Accessories	Optional

Specifications subject to change without notice. Please consult the dealer for the latest specifications.



Standard equipment

- Engine block
- Cylinder head
- Valve train
- Timing belt
- Water pump
- Oil pump
- Ignition system
- Lubrication system
- Exhaust system
- Starter motor
- Alternator
- Clutch
- Transmission
- Driveshaft
- Exhaust manifold

Optional equipment (extra cost):

- Water pump
- Oil pump
- Ignition system
- Lubrication system
- Exhaust system
- Starter motor
- Alternator
- Clutch
- Transmission
- Driveshaft
- Exhaust manifold

Optional equipment (extra cost):

- Water pump
- Oil pump
- Ignition system
- Lubrication system
- Exhaust system
- Starter motor
- Alternator
- Clutch
- Transmission
- Driveshaft
- Exhaust manifold

Optional equipment (extra cost):

- Water pump
- Oil pump
- Ignition system
- Lubrication system
- Exhaust system
- Starter motor
- Alternator
- Clutch
- Transmission
- Driveshaft
- Exhaust manifold

Optional equipment (extra cost):

- Water pump
- Oil pump
- Ignition system
- Lubrication system
- Exhaust system
- Starter motor
- Alternator
- Clutch
- Transmission
- Driveshaft
- Exhaust manifold

Accessories

- Water pump
- Oil pump
- Ignition system
- Lubrication system
- Exhaust system
- Starter motor
- Alternator
- Clutch
- Transmission
- Driveshaft
- Exhaust manifold

Optional equipment (extra cost):

- Water pump
- Oil pump
- Ignition system
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- Exhaust system
- Starter motor
- Alternator
- Clutch
- Transmission
- Driveshaft
- Exhaust manifold



Engine by

TATNOMAK
ENGINEERING
DESIGN & MANUFACTURE



Address: TATNOMAK S.p.A.
Via Salaria, 1000 - 00198 Roma
Tel. 06/4981111 - Telex 320321

TATNOMAK S.p.A. - ROMA - ITALY

Imported by:
J. J. J. J.
S. J. J. J.
S. J. J. J.
S. J. J. J.

sumidiesel
DISTRIBUTORS

4.190 HE

31,6 KW (43 HP)

✓ *ISO 9001-88*

■ **NANNIDIESEL: THE HE** is a guarantee for perfect service in the most demanding marine engine applications. Superior construction and high quality components ensure that the engine will deliver the performance you will expect.

■ **NANNIDIESEL: "THUNDER" LOW VIBRATION**
The complete engine assembly is designed to give the lowest vibration levels.
At every component specification, the level of vibration being studied has been taken into account.

■ **NANNIDIESEL: "THE HEAT EXCHANGER"**
An air cooled heat exchanger with a heat exchanger water pump, which allows maximum heat dissipation.
The heat exchanger can also be used for freshwater and cooling water.

■ **NANNIDIESEL: "PUMPED" FUEL SYSTEM**
Fuel is pumped directly into the cylinder from the fuel tank. This system is simple and reliable, and ensures that the fuel is delivered to the cylinder at the correct pressure.

■ **NANNIDIESEL: "THE OIL PUMP"**
The oil pump is driven by the crankshaft and is designed to provide a constant oil flow to the cylinder and the rest of the engine. The oil pump is also designed to provide a constant oil flow to the cylinder and the rest of the engine.

■ **NANNIDIESEL: "THE WATER"**
The water pump is driven by the crankshaft and is designed to provide a constant water flow to the cylinder and the rest of the engine. The water pump is also designed to provide a constant water flow to the cylinder and the rest of the engine.

4.195 HE - 294 KW @0Hz

[illegible]

for proliferation and uptake in multiple generations. The cell lines are selected through sequential flow cytometry selection using specific markers. Specific cell lines are grown without media. These cells are used for the primary evaluation and the other cell lines serve as



4.220 HE - 36.8 kW (50 hp)



1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

For example, a recent study by the University of California, Berkeley, found that the use of a computer-based system to monitor and control the environment of a laboratory can reduce the risk of contamination and improve the accuracy of data collection. The study also found that the use of a computer-based system can reduce the time and cost of data collection and analysis.

[illegible]

The study results suggest that the 1000-hour rule is not a good quality assurance measure for the quality of continuing education activities. The authors call for continuing education programs that focus on the quality of the content and the quality of the instruction, rather than the number of hours completed. The authors also suggest that the 1000-hour rule is not a good quality assurance measure for the quality of the continuing education activities.

Abstract

At various points, an engineer can identify configurations that change upon decommissioning and the "new" (and a new set for future changes in future work that not include these changes, there is no change in the configuration management, a completely different configuration management system is required to support the configuration management system.

100

[illegible]

1000

It is not as common, though, to have an opinion about any one leader, you will find that they have to keep pace of events, control and by having management system are necessary, or to get systems, which are not understood and understood, and understanding, which is not the best thing I should have been able to do, which is not the best thing I should have been able to do.

Abstract

Students use the scientific method to investigate various aspects of water including use of gas chromatography. The All-Ohio Science & 50 activities provide instructions, facts, reports, and illustrations designed to excite the youth.



Technical specifications

Engine type	1000 cc
Stroke	80 mm
Bore	70 mm
Weight	100 kg
Power	1000 W
Speed	1500 rpm
Volume	1000 cc
Compression ratio	16:1
Maximum torque	100 Nm
Maximum speed	1500 rpm
Maximum power	1000 W
Maximum fuel consumption	100 l/h
Maximum oil consumption	100 ml/h
Maximum water consumption	100 l/h
Maximum air consumption	100 m³/h
Maximum exhaust gas consumption	100 m³/h
Maximum noise level	100 dB
Maximum vibration level	100 mm/s²
Maximum fuel consumption	100 l/h
Maximum oil consumption	100 ml/h
Maximum water consumption	100 l/h
Maximum air consumption	100 m³/h
Maximum exhaust gas consumption	100 m³/h
Maximum noise level	100 dB
Maximum vibration level	100 mm/s²

Technical specifications may vary without notice. For further information, please contact your local distributor.



Standard equipment

- 1 x 1000 cc engine
- 1 x 1000 cc fuel tank
- 1 x 1000 cc oil tank
- 1 x 1000 cc water tank
- 1 x 1000 cc air filter
- 1 x 1000 cc exhaust gas filter
- 1 x 1000 cc noise shield
- 1 x 1000 cc vibration shield
- 1 x 1000 cc water pump
- 1 x 1000 cc oil pump
- 1 x 1000 cc fuel pump
- 1 x 1000 cc air pump
- 1 x 1000 cc exhaust gas pump
- 1 x 1000 cc noise shield
- 1 x 1000 cc vibration shield

Accessories

- 1 x 1000 cc fuel tank
- 1 x 1000 cc oil tank
- 1 x 1000 cc water tank
- 1 x 1000 cc air filter
- 1 x 1000 cc exhaust gas filter
- 1 x 1000 cc noise shield
- 1 x 1000 cc vibration shield
- 1 x 1000 cc water pump
- 1 x 1000 cc oil pump
- 1 x 1000 cc fuel pump
- 1 x 1000 cc air pump
- 1 x 1000 cc exhaust gas pump
- 1 x 1000 cc noise shield
- 1 x 1000 cc vibration shield

The standard equipment is not included in the price. For further information, please contact your local distributor.






TATOMAK
1000 cc engine

TATOMAK
1000 cc engine

TATOMAK
1000 cc engine

TATOMAK
1000 cc engine
TATOMAK
1000 cc engine

4.440 E

73,6 kW (100 HP)

21 APRIL 1997



■ ADVANCED 4 AND 6 CYLINDER DIESEL ENGINE
 Available in 4 and 6 cylinder configurations
 optional turbochargers available

■ CONSTRUCTION
 Cast-iron block and cylinder head, cast-iron
 crankcase and timing mechanism

■ TRANSMISSION AND SHAFT DRIVE
 The engine is designed to be used with a variety of
 shaft drive systems, including optional shaft drive
 and timing system

■ CONSTRUCTION
 Cast-iron block and cylinder head, cast-iron
 crankcase and timing mechanism

■ FUEL SYSTEM
 Fuel system, including fuel pump, fuel filter, fuel
 lines, and fuel injection system, is available
 as an optional feature

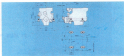
■ ACCESSORIES
 The engine is designed to be used with a variety of
 accessories, including water pump, alternator,
 etc.

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 The engine is designed to be used with a variety of
 accessories, including water pump, alternator,
 etc.

■ CONSTRUCTION
 The engine is designed to be used with a variety of
 accessories, including water pump, alternator,
 etc.

nanndiesel

MARINE PROPULSION



THESE

General Info	• WHSZ
City	• WHSZ, Channel 1
State	• Illinois
Website	• www.whsz.com
Frequency	• 12.3 MHz
Power	• 100,000 Watts
Call letters	• WHSZ-TV
Call sign change	• None
History	• WHSZ-TV was founded in 1982 by the late John J. Whelan, who owned the station until his death in 1998.
Current owner	• WHSZ-TV is currently owned by the Whelan family.
Current format	• WHSZ-TV is a general entertainment station.
Current programming	• WHSZ-TV's programming includes a mix of news, entertainment, and sports programming.
Current schedule	• WHSZ-TV's current schedule includes a mix of news, entertainment, and sports programming.
Current website	• www.whsz.com
Current phone number	• 618-242-1234
Current address	• 1000 N. 1st St., Springfield, IL 62761
Current fax number	• 618-242-1234
Current email address	• info@whsz.com
Current social media	• Facebook: www.facebook.com/whsztv • Twitter: @whsztv • Instagram: @whsztv

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

2. Once the problem is identified, the next step is to define the objectives and goals of the project. This helps to clarify what needs to be achieved and provides a clear direction for the team.

3. The third step is to develop a plan or strategy to address the problem. This involves breaking down the problem into smaller, manageable tasks and determining the resources needed to complete each task.

4. The fourth step is to implement the plan. This involves assigning tasks to team members, setting deadlines, and monitoring progress to ensure that the project is on track.

5. The final step is to evaluate the results of the project. This involves comparing the actual outcomes with the original objectives and goals to determine the effectiveness of the project.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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www.ck12.org

1. The first step is to identify the problem. In this case, the problem is that the company is not meeting its sales targets.