



11367 Higgins Airport Way • Burlington, WA 98233

Phone: (360) 757-8847 Fax: (360) 757-8831

VESSEL DATA

IDENTIFICATION DATA / CONTACT INFORMATION

42-22

VESSEL:	Delivery Date: 3/1/2000
Model:	Nordic 42' Cruise Tug
Boat Number:	NTK42022B000
Manufacturer:	Nordic Tugs Inc.
	11367 Higgins Airport Way Burlington, WA 98233 Phone# 360-757-8847
Dealer:	SkipperCress Yacht Sales & Services, Inc
	P O Box 726 Anacortes WA 98221 Phone# 800-996-9991
Boat Colors:	Ivory Hull & Deck w/ Red Inset and Boot Stripe
	Hull & Deck: Ivory #953-IA-264 Inset & Boot Stripe: Red # 953-RA-420
	If you would like to order additional gel coat or gel coat patch for your boat, call Spectrum Color at 800-754-5516 and give the color name and number.
ENGINE:	Cummins Northwest: Mod.# MTA11-M SN.# 34958796 Hp: 635 @ 2300
Engine Dealer:	Cummins Northwest P.O.Box 9811 Renton, WA 98057
Contact:	Mike Jorgeson Phone# 800-274-0336
Coolant:	Fleetguard COMPLEAT EG (Precharged w/ DCA4)
Fuel filter/water sep:	Racor mod. 900FG-S/S, Element: #2040SM-OR
Engine Oil:	Chevron DELO 400 15-40 wt or equivalent; Cap: 15 qts.
Engine Filters:	Oil - LF9001, Fuel - FS1009 AIR - 301974 (per Mike J 11-15-99)
GENERATOR:	Northern Lights: Mod.# M753K-8KW SN.# 7532-23248C
GEAR:	Twin Disk: Mod.#MG-5114-A Sn.# 5FT 106
	Ratio:2.476:1 oil weight, type & color Red SAE 30
SEA TRIAL REPORT:	
Speed:	21.2 kts @ 2300 rpms 21.31 kts @ WOT (2346) GPS
	Idle set at 600 rpms Max eng rpms under load: 2346
Sound:	Pilot House levels; 1400 rpms=71 db's; 2000 rpms=82 db's; 2400 rpms=82 db's
Weight:	32,000 pounds. Includes approx 2200 lbs. Of fuel, water, tools, and gear.
Ballast:	Thwartship trim requires 600 lbs of moveable ballast on stbd side.
	Note: Temporary ballast may be placed in the lazarette to attain athwartship trim at sea trials. Owner's additional stores and added equipment may change the boats trim. Move (or remove) the ballast as required to achieve proper trim.
TANK CAPACITIES:	Fuel - 500 gal Water -200 gal Waste - 45 gal
DIMENSIONS:	L.O.A: 42'2" Beam: 13'10" Draft:48"
DRIVE TRAIN:	
Propeller:	Michigan Size: 30 x 28 Serial# PP00066
Shaft:	2" x 128" Dripless Shaft Seal Installed
Owner is responsible for completing & mailing all warranty information	

Sea Trials on Tug #42-22 2/24/00

Experienced management personnel inspect each Nordic Tug for mechanical and cosmetic defects. All factory installed systems, mechanical, electrical, plumbing, -- are started and checked to ensure they operate within specifications. All wiring and cable terminals, hose clamps, and key mounting hardware are checked for proper tightness. All wires, cables, and hoses are visually checked for potential chafing problems. Fiberglass components are checked for proper bonding and cosmetic finish appearance. After this preliminary work at the factory, the boat is taken to the water for sea trials, where all systems are run and tested to the engineering parameters, for proper strength and integrity. Careful instrument readings and notes are made throughout this final test phase and a thorough report is prepared and placed in the boat's permanent file at the factory. Should a rare problem subsequently develop, our engineering staff refers to the original report for assistance to determine a remedy or offer advice.

<u>COMPONENT:</u>	<u>MAKE</u>	<u>MODEL</u>	<u>SERIAL NO.</u>	<u>NOTES</u>
Hull	Nordic	42' Cruise	NTK42022B000	Ivory Hull & Deck, Red Trim
Engine	Cummins	MTA11-M	34958796	635hp @ 2300 rpm
Gear	Twin Disc	MG-5114-A	5FT106	Ratio: 1.92-1, Oil - SAE 40 CD
Propeller	Michigan	Dyna Quad	PP00029	30"x 28" w/ tuna edge Type "S"
Bow Thruster	Sleipner	ART. 8112	none	7 hp, twin screw
Generator	NorthernLights	M753K-8KW	7532-23248C	8 Kw

WEIGHT: 30,000 pounds. Includes approx 2200 lbs. of fuel, water, tools, and gear.

TRIM BALLAST: thwartship trim requires pounds of moveable ballast on port side.

PERFORMANCE:

<u>> Engine:</u>	<u>RPMS</u>	<u>Boat Speed:</u>
Idle set at:	750	@ 750 rpm = 5.0 kts (per GPS reciprocal course)
Max, no load	2996	@ 2800 rpm = 17.1 kts (timed recip. 3.12 nm course)
Max under load	2729	@ 2729 rpm = 17.6 kts (per GPS reciprocal course)

Engine instruments typical reading:

Hr Meter = 2.27 hrs: Tach = 2600 rpms: Oil Pres. = 60 psi: Temp. = 172° Volts = 13.9 Time = 10:07 am

Propeller: this pitch allowed 2729 engine rpms max; appropriate for this engine.

Sound: Pilot House sound levels: 1800 rpms = 66 dB; 2000 rpms = 69 dB, 2400 rpms = 77 dB

Steering: Number of turns, lock to lock = 4 ¾ (variable)

Shaft coupler alignment: Less than 2/1000" at 4 positions, through 180° rotation.

INSPECTIONS:

Plumbing fittings tight ✓

Toilet operated through several cycles ✓

Shower & Drain operated, (Hot on left) ✓

Head sink faucet & drain operated (Hot on left) ✓

Galley sink faucet & drain operated (Hot on left) ✓

Generator: performed to specifications ✓

Refrigerator started and became cold in short order; sound was normal ✓

Espar furnace heated well ✓

HeaterCraft heater ran at various speeds; produced heat ✓

Propane system: none installed

Electric stove: operated normally ✓

Upholstery: carpet & upholstery visually checked for fit & finish ✓

All lights operated, wipers & defrosters functioned fine ✓

Windows & screens were in place and inspected ✓

Doors & hatches inspected ✓

Wood work and all trim ✓

Thruster and windlass checked ✓

DRIVE TRAINS AND ENGINES

11/15/99

Nordic Tug size	26'	6' w/ hull e	32'	32'	37'	42'	42'	42'
Engine Make & Model	Yanmar 4JH2-UTE	Yanmar 4LH-DTE	Cummins 6BT 5.9M	Cummins 6BT A M1 5.9M	Cummins 6BTA 5.9M 330	Cummins 6BTA M2 5.9M	Cummins 6CTA M2-1 8.3M	Cummins MTA 11-M 11-M <i>QSM 11-M</i>
Horsepower	100	170	220	270	330	330	450	635
Displacement in liters/ meters	1.817 Liters	3.455 Liters	5.9 Liters	5.9 Liters	5.9 Liters	5.9 Liters	8.3 Liters	10.8 Liters
Weight w/ gear (lbs)	545	895	1275	1275	1275	1275	1975	2930
Rated max rpm	3600	3300	2600	2600	2800	2800	2600	2300
Reductn gear ⁽²⁾	K / KB21	K / KM5A	MG 5050	MG 5050	MG 5050	MG 5050	MF 507-1	MG 5114-A
Make/Model/Red.	2.62:1	2.57:1	2.04:1	2.04:1	2.45:1	2.45:1	2.54:1	2.50:1
Engine Filters								
oil	129150-351	127695-351	LF3349	LF3349	LF3349	LF3349	3318853	LF9001
fuel	129574-557	41650-5023	FF5052	FF5052	FF5052	FF5052	FF5052	FS1009
air	129470-123	XN199611	AH19003	AH19002	AH19003	AH19002	3924541	301974
coolant							WF 2071	WF 2071
Watr pmp implr	129470-425	127610-422	3908220	3916720	3908220	3916852	3802444	4019403
Recommended Oil								
Engine (Chevron or equivalent)	Delo 400 15-40wt	Delo 400 15-40wt	Delo 400 15-40wt	Delo 400 15-40wt	Delo 400 15-40wt	Delo 400 15-40wt	Delo 400 15-40wt	Delo 400 15-40wt
Capacity			15 qts	15 qts	15 qts	15 qts		9 Gal-Full 8 Gal-Add
Transmission	Dexron ATF	Dexron ATF	Dexron II ATF	SAE 30wt	SAE 30wt	SAE 30wt	SAE 30wt	SAE 40wt
Capacity			0.8 gal		1.2 gal			2.7 gal +oil cooler
Propeller Shaft (Aquamet 19)	1½" x 10'6"	1½" x 10'5"	1 3/4"x157.75"	1 3/4"x157.75"	2" x 151.5"	2" x 128"	2" x 128"	3" x 118"
	21x17 3b RH	22x17 3b RH	24"x20" 4b LH	24x22 4b LH	28x24LH 4b	28x23LH 4b	28 x 28	30" x 29"
Rpm/Speed(Kts)/ Gph/Nmpg			1000/6.75/ .8333/8.1					
			1800/10.5/ 4.197/2.5					
			2200/13.2/ 7.66/1.72					
			2600/15.85/ 10.845/1.46					