



MARINE SYSTEMS, INC.

801 NW 42nd St. Suite 211

Seattle, WA 98107

Tel: 206-784-3302

Fax: 206-784-3358

To: Petersburg Municipal Power and Light
P.O. Box 329
11 South Nordic Drive
Petersburg, AK. 99833

Dear: Bob Ziemke
E-mail: bziemke@petersburgak.gov
RE: Unit 7

Marine Systems, Inc. appreciates the opportunity to provide you with the following estimate for service work on Unit # 7 20-645-E7 at Petersburg Power Plant in Petersburg, AK.

As an authorized EMD distributor, MSI provides genuine OEM parts and service. All rebuilt components conform to EMD dimensions, tolerances and specifications.

GENERATOR ENGINE RESEAL

- Disassemble and remove (20) HLP power assemblies and related engine components.
- Inspect crankcases, cam segments. **Note: Any deficiencies with camshafts, will require a CFR for repairs**
- Clean and inspect reusable engine components for power assemblies
- Reseal heads and change O-rings on cylinders
- Reinstall HLPs and install all reusable materials and torque all fasteners to specifications. Check "P" pipe alignment.
- Wash down top deck area and oil pans, hand wipe oil pan and ensure cleanliness before oil is installed.
- Verify flywheel timing pointer, adjust injector and valve timing; adjust fuel racks.

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ESTIMATE # 6219814
ISSUE DATE: 5/6/20
EXPIRATION DATE: 8/6/20
MSLF.720-018
03/01/2017



- Measure and record cylinder head to piston clearance.
- Fill engines with cooling water and fuel. Check for fuel and water leaks.
- Test run engines for 1, 3, and 7minute bearing checks.
- Load Test engine

Scope of Supplies

160	EA	ST LABOR-WCT	STRAIGHT TIME: WEST COST FIELD SERVICE LA	155.00	\$ 24,800.00
104	EA	OT LABOR-WCT	OVERTIME: WEST COAST FIELD SERVICE LABO	233.00	\$ 24,232.00
24	EA	SN LABOR-WCT	SUNDAY TIME FIELD SERVICE LABOR	310.00	\$ 7,440.00
4	EA	EXP-AIR	FS AIR TRAVEL EXPENSE	562.50	\$ 2,250.00
12	EA	EXP-CAR	FS CAR RENTAL EXPENSE	150.00	\$ 1,800.00
24	EA	EXP-LODGE	FS LODGING EXPENSE	187.50	\$ 4,500.00
1	EA	EXP-MISC	FS MISCELLANEOUS EXPENSE	2500.00	\$ 2,500.00
24	EA	EXP-PARK	FS PARKING EXPENSE	25.00	\$ 600.00
24	EA	EXP-PRDIEM	FS PER DIEM EXPENSE	97.50	\$ 2,340.00
1	EA	FREIGHT	FS FREIGHT EXPENSE	7500.00	\$ 7,500.00
20	EA	40099569	GASKET, CYLINDER HEAD	54.37	\$ 1,087.40
20	EA	9583686	KIT, POWER PACK INSTALLATION	20.92	\$ 418.40
2	EA	RAGS	RAGS, COTTON, 25LB	50.06	\$ 100.12
24	EA	BD1535-1	BRAKE CLEANER	9.60	\$ 230.40
4	EA	PERMATEX-2-3OZ	FORM-A-GASKET, NO.2, 3.0OZ TUBE(RPLS PEI	8.37	\$ 33.48
24	EA	KNITGLOVE	GLOVE, WORK, KNIT	0.52	\$ 12.48
12	EA	COVERALLS-3XL	SUIT, DISPOSABLE, XXXL (#121319)	9.94	\$ 119.28
25	EA	07485	BUFFING PAD	4.32	\$ 108.00
20	EA	9581924	RING, HEAD SEAT (VITON) (OPT RPL FOR 8415	66.53	\$ 1,330.60
20	EA	40102453	WASHER, PISTON THRUST	48.98	\$ 979.60
20	EA	8059699	RING, CARRIER SNAP	10.71	\$ 214.20

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ESTIMATED COST OF PARTS.....\$4,633.96
ESTIMATED LABOR COST.....\$56,472.00
ESTIMATED COST OF EXPENSES.....\$21,490.00

Total Estimated cost to make outlined repairs on Unit \$82,595.96

- *Performing out lined repairs with the assistance of plant personnel 2 Tecs, 10 ,12-hour days*
- *1 Day travel to Petersburg, AK*
- *1 Day Travel from Petersburg, AK.*

Marine Systems, Inc. Standard Terms and Conditions are an integral part of this quote. They are included herein by reference and are available at http://www.kirbycorp.com/4 kes/msi/msi_business.cfm

Please review T&C's and reference your company's acceptance in all Purchase Orders issued to MSI.

CUSTOMER RESPONSIBILITIES

The Customer is responsible for the following:

1. Providing a safe work environment for our service personnel.
2. Providing crane services and/or services to facilitate material movement at the job site.
3. Providing adequate space and working conditions to effectively execute the scope of work.
4. Delays not the fault of Marine Systems, Inc.
5. Delays due to plant orientation and safety classes.
6. Providing adequate ventilation, compressed air for tooling, and lighting.
7. Providing diesel fuel oil for cleaning.
8. Removing and disposing of waste material and fluids associated with the engine services.
9. Removing and replacing any interferences.

NOTE: Marine Systems will not be responsible for removal or replacement of any fluids (oil or coolant)

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COMMENTS

1. ***All items cleaned, inspected, and reused are not covered by warranty**
2. The customer is responsible for all applicable sales and use taxes related to this order.

PAYMENT TERMS

The payment is due thirty (30) days after receipt of invoice unless otherwise mutually agreeable payment terms are negotiated.

Thank you for giving us the opportunity to serve you. Should you have any questions or require further information, please contact me at your convenience.

Sincerely,

Chris Strahan

MSI West Coast - Service
(206) 788-2132



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