



MARINE INDUSTRY FLAT RATE MANUAL

VERSION
2017

Contents

Acknowledgements.....	7
Introduction.....	9
Accessories.....	11
Aerators	11
Air Conditioning	11
Anchors	12
Arches	14
Auto Float Switches	14
Ballast Systems	14
Bilge	15
Bow Pulpit	17
Bow Thrusters	17
Cabin Fans	17
Cabin Interior	17
Carpet	18
Chart Lighters	18
Cleats	18
Console	19
Covers & Canvas	20
Cruise Control	24
Dock Side	24
Doors	25
Downriggers	25
Drain Plugs	26
Drink Holders	26
Eyes	26
Fenders	27
Fire Extinguishers	27
Flag Poles	27
Floor	28
Fume Detectors	28
Gil Drive	28
Glove Boxes	29
Hatch	29
Heads (Toilets)	29
Heaters	32
Hooks/Locks/Latches	32
Horns	32
Hot Foot	33
Intercoms	34
Interface Systems	34
Jack Plates	34
Keel Protectors	35
Ladders	35
Lightning Protection	36
Lights	36
Live Bait Wells	39
Motor Brackets	40
Motor Install	40
Outriggers	41
Rails	41
Refrigerators	42
Rod Holders/Racks	43
Safety Kits	44
Sail	44
Scuff Plates	45
Seats	45
Ski Mirrors/Tow Bars	47
Stabilizers	49
Storage Boxes	49
Stoves	50

Swim Platforms	50	Wash Down	55
Sync Link	51	Water Heaters	56
Tables	51	Water Systems	56
Telephones & TVs	52	Wave Wackers	57
Tracking Fins	53	Windows	57
Trolling Motors	53	Windshields	58

Electrical63

Alternators	63	Regulators	74
Batteries	64	Rewire	76
Cigarette/Accessories	66	Senders	76
Electrical Systems	66	Starters	76
Ignition Systems	69	Switches	78
Receptacles	74		

Fiberglass & Detail.....83

Bottom Clean/Wash	83	Gunnels	89
Detailing	84	Registration Numbers	90
Fiberglass Repair	88	Sand & Paint	90
Gelcoat Repair	88	Teak	92
Graphics	88	Zincs	92

Fuel Systems95

Carburetors	95	Fuel Systems	106
Electronic Fuel Injection	99	Fuel Tanks	108
Fuel Filters	102	Intake Manifold	109
Fuel Lines	103	Oil Injection	109
Fuel Pumps	104	Primers	112

Instruments.....115

Antennas	115	Plotters	125
Audio Warning	116	Radar	125
Autopilot	116	Radios	126
Compasses	117	Rudder Indicators	130
Depth/Fish Finders	117	Speedometers	130
Gauges	121	Synchronizers	131
GPS/Lorans	122	Tachometers	131
Graphs	124	Transducers	132
Hour Meters	124	Volt Meters	132
Knot Meters	125		

Jet Boats135

<u>Jet Boats General</u>	135	<u>OMC Jet Boats</u>	142
Engines	135	Engines	142
Propulsion	135	Fuel/Oil	142
Seasonal	135	Propulsion	142
Service	135	Steering	142
Trade In Evaluation	136	<u>Sea-Doo Jet Boats</u>	143
<u>Mercury Jet Boats</u>	137	Body/Frame	143
Electrical	137	Electrical	144
Engines	137	Engines	145
Fuel/Oil	138	Fuel/Oil	146
Ignition	139	Ignition	147
Propulsion	139	Propulsion	148
Seasonal	140	Seasonal	148
Service	140	Service	149
Starters	140	Setup	150
Steering	141	Starters	152
		Steering	152
		Trade In Evaluation	152
		<u>Yamaha Jet Boats</u>	153
		Setup	153

Mechanical157

Align Engines	157	Inflatables	190
Bellows	157	Oil & Filter	191
Check Systems	159	Outdrive – Dana	193
Clutch Dogs	162	Outdrive – General	193
Cooling Systems	162	Outdrive – Merc	198
Corrosion Control	164	Outdrive – OMC	203
Couplers	165	Outdrive – Volvo	207
Cutlass Bearings	165	Outdrive – Yamaha	208
Cylinder Heads	166	Pontoons/Deck Boats	209
Decarbon	168	Power Steering	210
Drive Belts	168	Powerhead	211
Drive Shafts	168	Powerhead Gasket	212
Dynos	169	Propellers	213
Engine Rebuild	169	Remote Controls	215
Engine Repower	170	Reverse Lockdown	216
Engine Valves/Lifters	171	Rewind	217
Engines	173	Rudders	217
Estimates	178	Sea Cocks	218
Exhaust	178	Shaft Logs/Struts	218
Frost Plugs	181	Shift	219
Generators	181	Steering Systems	221
Gimbal Assemblies	183	Steering Systems/HYD	224
Governors	184	Swivel Brackets	224
Harmonic Balancers	185	Thermostats	225
Heat Exchangers	185	Throttles	226
Helicoils	185	Timing Belts	227
Hour Checks	185	Trade In Evaluations	227

Transmissions	229	Tune Ups	240
Transoms	230	Universal Joints	244
Trim & Tilt	231	Water Pumps – Ford	244
Trim & Tilt Cylinders	234	Water Pumps – General	245
Trim & Tilt Gauges	235	Water Pumps – GM	246
Trim & Tilt Hoses	235	Water Pumps – Honda	247
Trim & Tilt Motors	236	Water Pumps – Merc	248
Trim & Tilt Pumps	236	Water Pumps – OMC	251
Trim & Tilt Senders	237	Water Pumps – Suzuki	253
Trim & Tilt Switches	238	Water Pumps – Volvo	254
Trim & Tilt Tabs	238	Water Pumps – Yamaha	255
Trim & Tilt Tubes	240		

Personal Water Craft.....259

<u>PWC General</u>	259	<u>Polaris PWC</u>	268
Accessories	259	Electrical	268
Body/Frame	259	Engines	268
Detail	259	Fuel/Oil	269
Electrical	259	Ignition	270
Engines	260	Propulsion	270
Fuel/Oil	261	Starters	270
Ignition	261	<u>Sea-Doo PWC</u>	271
Propulsion	261	Accessories	271
Seasonal	262	Body/Frame	272
Service	263	Detail	288
Setup	263	Electrical	288
Starters	263	Engines	296
Steering	263	Fuel/Oil	313
Trade In Evaluation	264	Ignition	331
<u>Honda PWC</u>	265	Propulsion	335
Propulsion	265	Seasonal	345
Seasonal	265	Service	346
Service	265	Setup	348
Starters	265	Starters	350
<u>Kawasaki PWC</u>	266	Steering	352
Body/Frame	266	Suspension	358
Electrical	266	Trade In Evaluation	359
Engines	266	<u>Yamaha PWC</u>	360
Fuel/Oil	266	Body/Frame	360
Ignition	267	Electrical	360
Propulsion	267	Engines	360
Starters	267	Fuel/Oil	360
Steering	267	Propulsion	361
		Seasonal	361
		Service	361
		Starters	361

Alumacraft	366	Polar Kraft	432
Astro	367	Pontoon Boats	434
Baja	369	Powerquest	435
Bass Boats	370	Princecraft	436
Bayliner	371	Princecraft Deck Boats	440
Bennington	373	Princecraft Pontoons	442
Bentley Pontoons	374	Procraft	443
Boston Whaler	375	Pursuit	444
Caravelle	376	Ranger	447
Carolina Skiff	377	Regal	448
Carver	378	Rinker – Sport Boats	449
Champion	381	Rinker – Sport Cruisers	451
Chaparral	382	Robalo	452
Chris Craft	385	Roughneck	454
Cobalt	387	Runabouts	455
Correct Craft	388	Sea Ark	456
Crest Pontoons	389	Sea Nymph	458
Crestliner	390	Sea Ray – Laguna	459
Crownline	391	Sea Ray – Sport Boats	460
Custom Weld	393	Sea Ray – Sport Cruisers	467
Deck Boats	394	Sea Ray – Sport Yachts	472
Docks & Lifts	395	Sea Ray – Yachts	479
Doral	396	Sea Rayder	480
Fisher Aluminum	397	Silverton	481
Formula	399	Skeeter	484
Fountain	400	Ski Ray	485
Four Winns	401	Smoker Craft	486
Godfrey Pontoons	402	Sprint	487
Harris	405	Starcraft	488
Hurricane Pontoons	406	Starcraft Aluminum	489
Key West Pontoons	407	Stingray	490
Landau	408	Sunbird	491
Larson	409	Supra	493
Lowe	412	Sylvan Aluminum	494
Lund	414	Tahoe Pontoons	496
Malibu	416	Tige	497
Maxum	417	Toyota	498
Meridian	421	Tracker Deep V	499
Mirrocraft	422	Tracker Pontoons	500
Monark	423	Weeres Pontoons	501
Moomba	427	Zodiac	502
Motor Only	428	Trailers	504
Personal Water Craft	430	Used Boats	506
Playbuoy Pontoons	431		

Seasonal.....509

Annual Service	509	Shrink Wrap	512
Haul Outs	509	Summerize	516
Hoist/Launch	511	Winterize	517

Trailers.....529

Assembly	529	Safety Chains	535
Axles	529	Side Guides	535
Bearings	530	Springs	535
Brakes	531	Swap Out Trailers	536
Bunks	532	Tires	536
Check Trailer Load	533	Tongues	536
Fenders	533	Trailer Adjust	537
Friction Blocks	533	Trailer Couplers	537
Hitches	533	Trailer Electrical	537
Inspections	534	Trailer Hydraulics	538
Jacks	534	Trailer Service Check	539
License Plates	534	Transom Saver	539
Motor Supports	534	Walk Boards	539
Paint	534	Wheel Cylinders	539
Rollers	535	Winches	540

Flat Rate Updates545

SUGG FLAT RATE TIME	COMPUTER CODE	OPERATION	DEALER FLAT RATE TIME	LABOR RATE	MATERIALS	TOTAL
		COVERS & CANVAS cont.				
4.0	720320	HALF ENCLOSURE INSTALL				
1.8	650370	INSPECTION COVER INSTALL				
1.0	655280	INSPECTION COVER R&R AND SEAL				
4.0	754050	MOORING COCK PIT COVER INSTALL PONTOON SNAP-ON 18-21 FT				
0.6	707120	MOORING COVER INSTALL ROPE & GROMMET				
2.1	509750	MOORING COVER INSTALL SNAP-ON				
2.0	653570	MOORING COVER INSTALL STINGRAY SNAP-ON 18-25 FT				
0.5	509740	MOORING COVER ROPE INSTALL				
0.5	766540	MOORING COVER VENTS INSTALL (2)				
2.0	664910	MOTOR BOX COVER REPLACE VINYL				
3.0	509800	PLAYPEN COVER INSTALL PONTOON				
1.5	752600	PLAYPEN COVER INSTALL PONTOON GODFREY 18-20 FT				
15.0	703230	SLANT ENCLOSURE INSTALL				
0.07	720340	SNAPS INSTALL (EACH)				
<i>NEW!</i> 0.8	769920	SNAPS INSTALL FOR PLAYPEN COVER PONTOON				
0.5	509840	SNAPS INSTALL IN CANVAS				
0.1	509680	SNAPS INSTALL ON COVER (MULT OF THREE)				
1.0	632630	SNAPS R&R (ALL)				
0.2	758650	SNAPS R&R (EACH)				
0.3	632620	SNAPS R&R ON COVERS 1-10 QT.				
1.3	509850	STERN COVER INSTALL FIBERGLASS SNAP-ON				
1.5	735020	SUN TOP INSTALL				
2.0	720350	TONNEAU COVER INSTALL BAYLINER CHAPARRAL				
<i>NEW!</i> 1.0	769620	TRANSHIELD COVER INSTALL 18 FT				
<i>NEW!</i> 1.0	769620	TRANSHIELD COVER INSTALL 20 FT				
		COVERS & CANVAS continued on next page...				

SUGG FLAT RATE TIME	COMPUTER CODE	OPERATION	DEALER FLAT RATE TIME	LABOR RATE	MATERIALS	TOTAL
		<u>DRIVE SHAFTS cont.</u>				
4.5	577000	DRIVE SHAFT R&R OB 26HP & UP				
8.5	501582	DRIVE SHAFT R&R V-DRIVE CORRECT CRAFT 2007-NEWER				
10.5	501572	DRIVE SHAFT R&R V-DRIVE CORRECT CRAFT PRE-2006				
7.7	501552	DRIVE SHAFT R&R W/STRUT & ALIGNMENT IB SKI BOAT				
6.2	577040	DRIVE SHAFT REPAIR MAJOR MERC UPPER				
<i>NEW!</i> 0.5	769910	DRIVE SHAFT & SPLINES REMOVE BROKEN UPPER MERCUISER				
<i>NEW!</i> 3.6	769500	DRIVE SHAFT COUPLER R&R				
4.5	577060	DRIVE SHAFT HOUSING R&R				
3.8	704160	DRIVE SHAFT HOUSING R&R OB 35-50HP				
4.5	744200	DRIVE SHAFT HOUSING RESEAL IO				
1.5	757820	DRIVE SHAFT SEAL R&R W/FULL DRIVE SERVICE				
<i>NEW!</i> 1.0	769490	DRIVE SHAFT STRUT R&R				
		<u>DYNOS</u>				
0.9	578100	DYNO ADDL TROUBLESHOOTING				
0.8	577900	DYNO SETUP & RUN				
1.0	578000	DYNO SETUP & RUN IN TANK				
1.0	708460	DYNO TEST MERC OPTIMAX 135-150HP				
1.1	704170	DYNO TEST OB 40HP & UP				
		<u>ENGINE REBUILD</u>				
23.0	634230	ENGINE REBUILD FORCE 120HP				
13.0	742850	ENGINE REBUILD GAS VOLVO PENTA 3.0				
15.0	742860	ENGINE REBUILD GAS VOLVO PENTA 4.3				
16.0	742870	ENGINE REBUILD GAS VOLVO PENTA 5.0				
17.0	742880	ENGINE REBUILD GAS VOLVO PENTA 5.8				
12.0	748440	ENGINE REBUILD IB V8				
		ENGINE REBUILD continued on next page...				

MECHANICAL

GODFREY PONTOONS

OPERATION	SP W/PRERIG	SP W/O PRERIG	AP W/PRERIG	AP W/O PRERIG	SW W/PRERIG	SW W/O PRERIG	SW 1880/2080 2086/2286
Unload and Inspect SP848000		2.5		2.5			
Travel Lift / Fork Lift SP848100							
Trailer Setup SP848200	0.5	0.5	0.5	0.5	0.5	0.5	0.85
Rigging SP848300	4.6	7.3	4.6	7.3	5.6	7.1	4.1
Water Test SP848400							
Detail SP848500							
Predelivery Inspection SP848600	1.0	1.4	1.0	1.4	1.0	1.0	0.25
Policy Adjustment / Goodwill SP848700							
Customer Show SP848800	1.0	1.3	1.0	1.3	1.0	1.0	
TOTAL HOURS SP848900	7.1	13.0	7.1	13.0	8.1	9.6	5.2
x Hourly Rate \$							
= Labor Charge (CILC) \$							
Rigging Materials (10% of Labor) \$							
Rigging Total \$							
Yr. Last Updated	04	04	04	04	04	04	NEW!

SUGG FLAT RATE TIME	COMPUTER CODE	OPERATION	DEALER FLAT RATE TIME	LABOR RATE	MATERIALS	TOTAL
		BRAKES				
1.6	658010	BRAKE BACKING PLATES R&R (EACH AXLE)				
0.6	616800	BRAKE CYLINDERS R&R MARTIN				
1.2	616850	BRAKE CYLINDERS R&R MASTER				
<i>NEW!</i> 1.5	769860	BRAKE CYLINDERS R&R & BLEED MASTER ATWOOD				
0.3	751580	BRAKE FLUID CHECK				
3.0	705900	BRAKE FLUSH KIT INSTALL (SINGLE AXLE)				
3.0	745640	BRAKE KIT INSTALL				
0.9	750750	BRAKE LINES FLUSH (SINGLE AXLE)				
1.0	750760	BRAKE LINES FLUSH (TANDEM AXLE)				
0.7	617100	BRAKE SHOES R&R (PER WHEEL)				
0.6	766300	BRAKE SHOES REPLACE W/REPACK (ADDL EACH WHEEL)				
0.9	709620	BRAKES ADJUST (DUAL AXLE)				
0.5	616200	BRAKES ADJUST (EACH AXLE)				
1.0	766510	BRAKES ADJUST & BLEED SYSTEM (SINGLE AXLE)				
1.1	616300	BRAKES ADJUST TONGUE WEIGHT				
1.2	709630	BRAKES BLEED (DUAL AXLE)				
0.7	616600	BRAKES BLEED (EACH AXLE)				
<i>NEW!</i> 2.0	769820	BRAKES CHECK/INSPECT (DUAL AXLE) DISC				
<i>NEW!</i> 2.3	769820	BRAKES CHECK/INSPECT (DUAL AXLE) DRUM				
1.2	616700	BRAKES CHECK/INSPECT (EACH AXLE) DISC				
<i>NEW!</i> 1.5	616700	BRAKES CHECK/INSPECT (EACH AXLE) DRUM				
0.8	766310	BRAKES FILL & BLEED HYD SYSTEM (SINGLE AXLE)				
2.5	705910	BRAKES INSTALL (SECOND AXLE)				
4.9	617000	BRAKES INSTALL (SINGLE AXLE)				
0.3	705920	BRAKES INSTALL BOAT ON TRAILER (ADDL)				
7.0	763380	BRAKES INSTALL DRUM TO DISC W/NEW COUPLER (SINGLE AXLE)				
2.0	705880	BRAKES INSTALL INCL BRAKE AWAY ASSEMBLIES				
		BRAKES continued on next page...				