

BOSTON WHALER FABRICATION
AND EQUIPMENT LIST

9 October 1968

BOSTON WHALER FABRICATION SEQUENCE.

STEP A.

1. Hull Preparation for Painting.
 - a. Sand Hull.
 - b. Prime Entire Hull (Allow to dry.).
 - c. Paint Entire Hull (Allow to dry).

STEP B.

1. Fabrication of Consoles.
 - a. Cut Aluminum to Required Shapes.
 - b. Fit-up and Weld Console.
 - c. Apply Aluminum Primer to Console (Allow to dry).
 - d. Paint Aluminum Console.
2. Battery Box Fabrication.
 - a. Cut Plate to Required Shapes.
 - b. Fit-up and Weld Battery Box.
 - c. Apply Aluminum Primer to Battery Box (Allow to dry).
 - d. Paint Battery Box.
3. Apply two (2) Heavy Coats of Paint to Tempo Fuel Tanks.
4. Fabricate, Prime and Paint Throttle Control Bracket.

STEP C.

1. Install Outboard Motors on Transoms.
2. Fit-up and Install Steering System Tie-bar on Outboard Motors.
3. Install Wing Fuel Tanks. Connect to Outboard Motors.
4. Install Console.
5. Install Throttle Control Bracket.
6. Install Aluminum Battery Box.

STEP D.

1. Install Ride-Guide Steering.
2. Install Throttle Controls.
3. Install Tachometers.
4. Install Ritchie Compass.
5. Install Batteries in Aluminum Battery Box.

STEP E.

1. Complete all Electrical Wiring (Batteries, Tachometers, Compass Light, Engines, etc.).
2. Install Aluminum Gun Mount Forward.
3. Install Fiberglass "Bucket Seats".
4. Touch-up Paint on Hull Where Required.

STEP F.

1. Break in Outboard Motors (8 hours).
2. Remove Boat from Water using its trailer, and clean both for shipment.
3. Transfer Boat, Trailer, Contingency Package (Repair Parts, Spare Parts, Safety Equipment, Tools, Mooring & Berthing Items, Lifting Slings, Towing Bridle, etc) to Central Depot for overseas deployment.

STEP G.

1. During Steps A through E., all equipment associated with the above mentioned contingency package will be procured, packed, and crated for shipment.

BOSTON WHALER CONTINGENCY LIST.

ITEMS INSTALLED IN OR WITH BOAT.

(1 boat)

1. 1 ea. Trailer with Heavy Duty Roll-around Jack.
2. 2 ea. 55 H. P. Johnson, Long Shaft, Electric Start
Outboard Motors.
3. 2 ea. 11 ft. Control Cables.
4. 2 ea. 12 ft. Control Cables.
5. 2 ea. Batteries, 12-volt, dry charged.
6. 2 ea. Plastic Battery Boxes (Inside Aluminum Battery Box).
7. 2 ea. 12-gallon Gas Tanks, with hose (Wing Tanks).
8. 1 ea. Ride-Guide Steering with 13 ft. Cable.
9. 2 ea. Paddles, Wood.
10. 1 ea. Boat Hook.
11. 1 ea. Gun Mount.
12. 2 ea. Bucket Seats.
13. 1 ea. Aluminum Battery Box.
14. 1 ea. Aluminum Console.

*1 trailer/boat
2/boat + 2 spares*

Boat Covers,



ITEMS CONTAINED IN CONTINGENCY BOX.

1. 1 ea. Axel Roll-Type Jack.
2. 1 ea. Trailer Lug Wrench.
3. 2 ea. Boat Plugs.
4. 1 ea. Danforth Anchor (14 lb.).
5. 2 ea. Aluminum Propellers.
6. 1 ea. Anchor Leader Chain with Shackle.
7. 1 ea. Anchor Line - 1/2" Nylon - 50 ft.
8. 1 ea. Dry Chemical Fire Extinguisher, 2-1/2 lb.
9. 2 ea. Bow & Stern Lines, 18 ft., 1/2" Nylon, with Eye.
10. 2 ea. Boat Fenders.
11. 1 ea. 3" Magnetic Compass, "Ritchie Explorer".
12. 1 ea. DynaLite (6-cell Flashlight).
13. 1 ea. First Aid Kit.
14. 1 ea. 3-Leg Wire Sling.
15. 4 ea. Life Jackets.
16. 1 set Outboard Spares (See Field Outboard Parts List).
17. 1 set Tools (See Field Tool List).
18. 2 ea. Fiberglass Repair Kits.

for 1 boat

8 October 1968

ITEMS TO BE PROCURED FOR BOAT MODIFICATION.GAS TANKS.

1. 20 ea. Gas Tank, Tempo BMTT-12-F, 12-Gallon Capacity, Long, with 621TCI Tank Cradle.
2. 20 ea. Fill Pipe Plug, Tempo 128-FPP.
3. 20 ea. Gas Tank Vent #8707, Size 1.
4. 40 ea. Fuel Line Clamps #422FLC, 3/8" ID.
5. 20 ea. Universal Fuel Connector, Tempo #401-T15.
6. 20 ea. Eye Straps, Brass, 1-1/2" ID.
7. 10 ft. Sash Chain.

10 bracketsBATTERY BOX.

1. 20 ft. Piano Hinge, stainless steel, 4" wide, .178 thick.
2. 20 ft. StanPro Trim - White.
3. 20 ea. Battery Boxes, Rubber Maid.

*10 boxes*HULL FITTINGS.

1. 10 ea. Bow Chock, 4" Straight, Bronze.
2. 10 pair Hatch Hinges; 4-1/8" open, 1-1/8" wide, Bronze.
3. 12 ea. Hatch Fasteners (or Windshield Keepers), Bronze.
4. 10 ea. DynaLights, 6-cell. (for Contingency Packages).
5. 10 ea. Cole Herse Push-Pull Waterproof Switches, #M-606.
6. 10 ea. Small Electrical Terminals (Jones Board).
7. 20 ea. Boat Plugs (Transom Bailers).
8. 2 gross Blind Rivets, Monel #MM65D.
9. 1 ea. Rivet Gun for above (Heavy Duty).
10. 20 ea. Bow Eyes, Bronze, Size #2.
11. 10 ea. Ritchie Compass.


brackets

BASE TOOL LIST FOR JOHNSON OUTBOARD MOTORS.

METERS (1 each)

- | | | |
|----|-------------------------|--------------|
| 1. | Triplett Volt OHM Meter | Model 310 |
| 2. | Marquette Timing Light | Model 43-100 |
| 3. | Stevens Coil Tester | Model MA-75 |
| 4. | Stevens Tester | Model AT-100 |
| 5. | Stevens Tester | Model S-28 |
- Armature Growler.

JOHNSON OUTBOARD SPECIAL TOOLS.

- | | | |
|-----|--------|-------------------------|
| 1. | 378103 | Flywheel Puller. |
| 2. | 307429 | Truarc Pliers #4. |
| 3. | 378104 | Adaptor Kit |
| 4. | 303857 | Truarc Pliers #1 |
| 5. | 308867 | Ring Compressor |
| 6. | 380658 | Coil Remover Assembly |
| 7. | 311879 | Truarc Pliers |
| 8. | 312752 | Shaft Holding Socket |
| 9. | 380657 | Cup Remover |
| 10. | 380659 | Seal Remover |
| 11. | 311885 | Bearing Remover |
| 12. | 311880 | Handle |
| 13. | 311877 | Seal Installer |
| 14. | 311869 | Seal Installer |
| 15. | 311872 | Cup Installer |
| 16. | 380691 | Lead Assembly Installer |
| 17. | 311759 | Guide Plate |
| 18. | 311876 | Bearing Installer |
| 19. | 380759 | Race Remover |
| 20. | 380758 | Bearing Installer |
| 21. | 311897 | Ring Pliers |
| 22. | 379664 | Jet Screw Driver |
| 23. | 308479 | Ring Compressor |
| 24. | 314641 | Bearing Installer |
| 25. | 383173 | Bearing Installer |
| 26. | 314642 | Bearing Installer |
| 27. | 314643 | Seal Installer |
| 28. | 314640 | Seal Driver |
- 

BASE TOOL LIST FOR JOHNSON OUTBOARD MOTORS (Continued)REGULAR HAND TOOLS.

1. 1/4" Drive Socket Set
2. 3/8" Drive Socket Set
3. 13/16 Spark Plug Socket, 3/8" Drive.
4. Deep Socket Set, 3/8" Drive - Flexible Socket Set.
5. Pliers:
 - a. Diagonal Cutting, 5" - 7"
 - b. Needle Nose 6-1/2"
 - c. Chanel Lock 9-1/2"
 - d. Regular 6-3/4"
 - e. Vise Grip 7-1/2"
6. Set, Small Chisels.
7. Set Punches - Drift
8. Rolling Wedge Bar, 16"
9. Hacksaw and Blades
10. Magnetic Pickup Tool
11. Feeler Gage
12. Spark Plug Gage
13. Set, Allen Wrenches
14. Set Open End Wrenches, 3/8" to 1-1/16"
15. Set Combination Wrenches, 3/8" to 1-1/16"
16. Set Box Wrenches, 3/8" to 1-1/16"
17. Set Screw Drivers - Stub - 4" - 6" - 8" - 10" - 12"
18. Set Phillips Screw Drivers 4" - 6" - 8"
19. Pocket Knife
20. Cresnet Wrenches; 4" - 6" - 8" - 10"
21. Ball Pean Hammer; 4 - 6 - 12 Oz.
22. Plastic Mallet, 8 - 16 oz.
23. Off-set Screw Driver
24. Putty Knife
25. Ignition Wrench Set
26. Neon Spark Tester

*Base kit
by*

BASE LIST OF ELECTRICAL HAND TOOLS AND OTHER SPECIAL ITEMS

1. 1 ea 1/4" Electric Drill
2. 1 ea 3/8" Electric Drill
3. 1 ea Small Electric Bench Grinder
4. 1 set High Speed Drill Bits; 1/16" to 1/2" by 1/64ths
5. 1 set High Speed Drill Bits; No. 1 through 60
6. 1 set Tap & Die Set, National Coarse, 1/4" to 3/4"
7. 1 set Tap & Die Set, National Fine, 1/4" to 3/4"
8. 1 set Tap & Die Set 4 to 12 MS
9. 1 ea Berns-O-Matic Torch
10. 6 ea Extra Gas Bottles for above Torch
11. 1 ea Battery Charger, 12-Volt
12. 2 ea Extension Cords, 100 ft. length
13. 4 ea Extension Cords, 25 ft. length
14. 4 ea Drop Lights
15. 1 ea Black & Decker Finishing Sander, U-341
16. 6 pks Garnet Paper (80 1/0)
17. 12 rolls Plastic Tape
18. 2 set Spintite Set #3400B7
19. 1 set Easy Outs
20. 1 ea Pop Rivet Gun (Heavy Duty)
21. 2 gross Pop Rivets, Monel #MM65D
22. 2 ea Hydrometer
23. 1 ea Battery Cell Tester
24. 6 sets Battery Jumper Cables
25. 4 cases Spray Nine
26. 2 cases 666
27. 24 ea Fiberglass Patching Kits
28. 2 ea Battery Lifting Strap
29. 2 ea. KD Tools #207
30. 2 ea. Battery Service Kit
31. Beldon Solderless Connectors:
 - 500 ea No. 7477 - Male
 - 500 ea No. 7478 - Female
32. 2 ea Vaco Crimping Tool, No. 1900
33. 1 ea. 3/4-Ton Chain Jack
34. 6 ea 1-7/8" Trailer Hitch Ball
35. 6 ea Flashlight
36. 2 cases Flashlight Batteries
37. 1 ea. Pressure Grease Gun
38. 5 lb. All Purpose Grease
39. 4 cases Gear Oil, OMC Type C
40. 1 case Perfect Seal #4
41. 5 lb. ~~Lubriplate~~ LubriPlate

Base list

BASE -- 55 H.P. JOHNSON OUTBOARD
MOTOR PARTS LIST

log order

JOHNSON 55 hp. 1968

REF. No.	PART NO.	NAME OF PART	QTY
Motor Cover Group			
35	552062	Screw, Latch to handle	4
36	379123	Strap Assy., Front door	2
37	312185	Latch, Motor Cover rear	2
38	313219	Washer, Front & rear latch	4
40	308532	Bushing, Latch handle f & r	4
41	382645	Handle & Shaft Assy. f & r latch	4
*	382758	Owners Manual	4
Lower Motor Cover Group			
1	313334	Motor Cover, lower	1
2	313638	Hook, Rear motor cover	1
3	306487	Screw, Hook motor cover	3
5	313888	Retainer, Throttle cable	2
6	306418	Screw, Bracket to cylinder & crk.	6
7	308995	Screw, Mount motor cover	4
8	302407	Washer, Mount, large	4
9	306482	Washer, Mount	4
12	300646	Screw	10
14	376154	Body Assembly, Fuel Connector	2
15	306488	Washer	2
16	306419	Screw, Fuel conn.	2
17	307151	Screw, Cover cable	4
18	311219	Clamp, Cable	2
19	314091	Guide, Front	2
20	313840	Bracket, Motor cover, stbd.	2
21	313839	Bracket, Motor cover, port	2
22	314130	Support, Starboard, rear	2
23	551706	Screw, retainer	4
Fuel Pump Group			
1	382872	Fuel Pump Assembly	4
2	312679	Gasket, Fuel pump	4
3	312675	Screen, Filter	4
4	312678	Cap, fuel filter	4
5	312677	Screw, Filter cap	4
6	314190	Hose, Fuel pump to connector	4
7	305700	Hose, Fuel pump to carburetor	4
8	552199	Hose Clamp, large	12
9	314189	Hose, Pump to crankcase	4
10	314687	Spring, hose	4
11	309523	Hose Clamp, small	12
12	308777	Screw, Fuel pump to motor cover	6

REF. NO.	PART	NAME OF PART	QTY
	Electric Starter Group		
*	382306	Starter Motor Assembly	4
1	383195	Drive Assembly	2
2	306375	Nut, thru bolt, hex, $\frac{1}{4}$ -20	6
3	306482	Washer, Thru bolt	6
4	379966	Head Assembly, Commutator end	2
5	383199	Thrust Washer Package Assembly	2
6	383194	Armature Assembly	2
7	383196	Frame & Field Assembly, complete	2
8	379991	Brush & Terminal set	2
9	311128	Spring, Brush	2
10	379967	Brush Plate & Holder set	2
11	383198	Thru Bolt Package Assembly	6
12	306488	Lockwasher, Thru bolt, slipproof $\frac{1}{4}$	6
13	383197	Head Assembly, Drive end	2
14	314693	Bearing	2
15	302479	Screw, Starter to crankcase	6
15	306423	Screw, starter to crankcase long	6
16	306325	Lockwasher	6
17	311129	Nut, Lock, hex	6
	Distributor Group		
*	382475	Distributor Base Assembly comp.	2
1	382752	Base Plate Assembly	2
2	382655	Breaker Assembly	4
3	203363	Retainer	2
4	315062	Clip, Contact retainer	2
5	315069	Nut, Breaker	2
6	313585	Clip, Oiler wick	2
7	303737	Screw, Clip, oiler wick	2
8	580692	Lead Assembly	2
9	306158	Screw, Clamp to base	4
10	313733	Clamp, Lead	2
11	382495	Contact & Insulator Assembly	2
12	307466	Screw, Reverse cut off	2
13	314471	Screw	2
14	580691	Lead Assembly	2
15	314474	Screw	2
16	580694	Lead Assembly, ground	2
17	580693	Lead Assembly, primary	2
18	312811	Screw, Breaker base	8
19	510377	Oiler Wick	2
20	382479	Distributor cap & screw assembly	2
21	382583	Vent Housing Assembly	4
22	382670	Lead Assy., Spark plug to distributor (#1 & #3)	2
23	580339	Cover & Terminal	4
24	313586	Cover, H.T. lead	4
25	551426	Grommet	2
26	382669	Lead Assy., Spark Plug to distributor (#2)	2
27	580339	Cover & Terminal	2
28	313586	Cover, H.T. Lead	2
29	551426	Grommet	2

REF. NO.	PART NO.	NAME OF PART	QTY.
	CONT.		
30	313837	Bracket, Amplifier	2
31	383572	Amplifier Assy.	2
32	310572	Housing	2
33	310860	Terminal	2
34	313113	Housing	2
35	510541	Terminal	6
36	310493	Clamp	4
37	311218	Clamp, Starter solenoid to bracket	2
38	310440	Clamp, Amplifier cable to yoke	2
39	309846	Clamp, Instrument cable to brak.	2
40	303311	Screw, Starter Solenoid to brak.	6
41	304607	Screw, Rectifier & Amplifier to bracket	10
42	580711	Lead Assy. Rectifier to powerhead	2
43	580698	Housing, Rectifier & lead assy.	2
44	309433	Terminal	6
45	309474	Housing, Terminal	2
46	313727	Clip, Screw to coil & Yoke assy.	4
47	380095	Solenoid assy.	2
48	311349	Nut, Solenoid	2
49	580731	Lead, Start solenoid to start mo.	2
50	510761	Grommet	2
51	306325	Lockwasher, Nut solenoid	2
52	314495	Clamp, Distributor base	6
53	204027	Screw, Change Dist. base	6
54	313743	Ring, Reverse cut off	2
55	313666	Retainer, Dist. base	2
56	313667	Spring Washer, Flywheel to rotor	2
57	580726	Stator Assy. 9 amp.	2
58	313740	Screw, Stator & distributor to cylinder	2
59	580686	Flywheel & Ring Gear assy.	2
60	314209	Nut, Flywheel to crankshaft	2
61	551705	Screw, Coil & Yoke assy.	6
62	311349	Nut, Terminal	4
63	306325	Washer, Terminal	4
64	120052	Washer	4
65	302556	Nut	4
66	306470	Washer, Bracket to motor cover	4
67	302479	Screw, Bracket to motor cover	4
68	580730	Coil & Yoke assy.	2
69	311217	Sleeve, Starter solenoid to clamp	2
70	382424	Rotor Assy.	2

4.

REF. NO.	PART. NO.	NAME OF PART	QTY.
		Carburetor Group	
*	382316	Carburetor Assy. complete, u & l	4
*	382317	Carburetor Assy. Complete, middle	2
1	383628	Carburetor Body Assy.	2
1	383627	Carburetor Body Assy.	2
2	304201	Lead Shot	2
3	313365	Throttle Valve	2
4	307542	Core Plug	2
5	306442	Core Plug	2
6	314513	Nipple, Fuel	2
7	312852	Screw, Valves	8
8	313357	Spring, Throttle	2
9	313359	Choke Valve	2
10	303261	Roll Pin	4
10A	314575	Roll Pin	2
11	313358	Choke Shaft	2
11	382368	Choke Shaft & Lever Assy.	2
12	313362	Throttle Shaft	2
12	382369	Throttle Shaft Pin & Arm Assy.	2
13	315074	Bow Washer	2
14	300803	Washer, Screw	2
15	302812	Screw, Cam follower	2
16	313973	Retainer	2
17	307382	Shoulder Screw	2
18	308199	Roller, Cam follower	2
19	313396	Washer, Shoulder screw	2
20	382370	Lever Arm & Pin assy.	2
21	314592	Spring, Override	2
22	382905	Lever & Pin Assy.	2
23	314301	Pin, Detent	2
24	307175	Screw, Float bowl	8
25	378895	Float Valve & Seat Assy.	2
26	301996	Washer, Float valve	2
27	307596	Washer, Throttle Shaft	2
28	314166	Bearing, Needle Valve	2
29	313364	Retainer, Valve	2
30	313360	Needle Valve, Slow speed.	2
31	382363	Float and Arm Assy.	2
32	302661	Pin, Float hinge	2
33	383319	Float Chamber Assy.	2
34	309781	Plug, Fuel passage	8
35	314819	Orifice Plug	2
36	307832	Screw Plug	2
37	313363	Gasket, Float bowl	2
38	303630	Washer, Screw plug	2

REF? NO.	PART NO.	NAME OF PART	QTY.
		Intake Manifold and Carburetor Group	
1	302471	Washer, Screw manifold	48
2	302030	Screw, Manifold to crankcase	48
3	313422	Gasket, Base to crankcase	2
4	313423	Base, Leaf plate	2
5	313424	Gasket, Manifold to base	2
6	307609	Screw, Plate to base	12
7	382442	Leaf Plate Assy.	6
8	307129	Screw, Leaf plate assy.	48
9	314115	Gasket, Air silencer	2
10	314322	Gasket, Base to cover	2
11	383057	Cover Assy.	2
12	314496	Screw, Base (air silencer) to carburetor	12
13	314326	Screw, Rear cover to base	2
14	314739	Spring, Solenoid plunger to solenoid	2
15	378984	Throttle & Choke Shaft Arms	8
16	313329	Retainer, Throttle & Choke	16
17	313695	Link, Carburetor throttle	4
18	314310	Link, Carburetor choke	4
19	382982	Solenoid Assy.	2
20	510684	Sleeve	2
21	314424	Housing, Conn.	2
22	313636	Plunger, Choke solenoid	2
23	314193	Spring, Choke solenoid	2
24	308762	Screw, Clamp to manifold	4
25	314327	Clamp, Choke solenoid	2
26	310441	Clamp, Motor cable	2
27	313958	Cover, Air silencer, rear	2
29	314513	Nipple, Hose	2
28	383082	Base and nipple assy	2
30	314477	Gasket, Carburetor	6
31	306320	Nut, Carburetor to stud	12
32	314576	Screw, Base air silencer, cover to base	12
33	306799	Washer, Carburetor to stud	12
34	383193	Manifold, Nipple and Stud Assy.	2
35	314497	Stud, Carburetor to manifold	12
36	314513	Nipple, Manifold	2
37	314021	Bumper, Ring gear guard	4
38	314119	Link, Slow speed adjust	2
39	313791	Arm, Slow speed adjust, middle	2
40	313792	Arm, Slow speed adjust, u & l	4
41	313790	Lever, Slow speed adjust, carb.	2
42	302647	Clamp, Fuel hose to carburetor	12
43	313537	Tee, Fuel line	2
44	314512	Hose, Tee to carb. u & l	4
45	314191	Hose, Tee to carburetor, middle	2
46	307529	Retaining Ring, Solenoid spring to choke arm	2

6.

REF. NO.	PART NO.	NAME OF PART	QTY.
CONT.			
47	306418	Screw, Guard to manifold	4
48	313996	Guard, Ring gear	2
49	552613	Hose, Air silencer to manifold	2
50	306493	Screw, Guard to manifold	2
51	314807	Spring, Throttle lever positive open choke	2
52	382316	Carburetor Assy, u. & l.	4
53	382317	Carburetor Assy. middle	2
Crankshaft Group			
1	314478	Wrist Pin	2
2	308876	"O" Ring, Crankcase head, lower	2
3	305132	Ring, Retainer, Lower bearing to crankshaft	2
4.	379258	Bearing Assy. Crankshaft, lower	2
5	313754	"O" Ring, Upper bearing	2
6	382596	Roller Bearing & Seal Assy.	2
7	313507	Seal, Crankcase, upper	2
8	313303	Crankshaft	2
9	381496	Piston Ring Set, standard	2
10	382274	Piston Assy. standard	6
9	593429	Piston Ring Set, (.020) O.S	2
10	383144	Piston Assembly (.020) O.S	6
11	382457	Crankcase Head & Seal Assy., low.	2
12	313398	Seal Bearing Head	2
13	302577	Retaining Ring	4
14	378251	Needle Bearing Assy.	2
15	382275	Connecting Rod Assy	2
16	308186	Screw	4
17	378528	Retainer, Conn. rod bearing	6
18	378515	Needle, Conn. rod bearing	6
19	310433	Split Sleeve, Center bearing	4
20	378252	Retainer & Needle Assy, Center B.	4
21	307480	Key, Crankshaft	2
22	551793	Screw, Crankcase head, lower	8
23	303360	"O" Ring	2

7.

REF. NO.	PART NO.	NAME OF PART	QTY.
		Powerhead Group	
*	382502	Cylinder & C/Case Assy..	1
1	304178	Dowel Pin, Bearings & cyl.	3
2	304517	Stud, Cylinder	2
3	305070	Taper Pin	4
4	307544	Plug, Cylinder	2
5	300646	Screw, Seal retainer	12
6	131794	Screw, Crankcase to cyl.	8
7	313538	Stud, Crankcase to cyl.	4
8	306319	Nut, Crankcase to cyl.	4
9	300343	Washer, C/case to cyl.	12
10	307776	Screw, Lower main bearing	4
11	306418	Screw, Bracket to cyl.	12
12	306778	Screw	4
13	313412	Cylinder Head	2
14	313414	Gasket, Cover to cyl. head	4
15	313415	Cover, Cylinder head	2
16	309322	Clamp	4
17	310441	Clamp, Thermo leads	4
18	306778	Screw, Cylinder head cover	24
19	309041	Clamp, Cable to cyl. head	4
20	305027	Screw, Cylinder head	24
21	381992	Spark Plug, Champion L-19V	300
22	314907	Screw, Cover	6
23	302471	Washer, Cyl. head cover	24
24	313418	Cover, Thermostat head	2
25	382385	Thermostat Assy. Cyl. head	2
26	313416	Gasket, Thermostat	2
27	313417	Gasket, Thermostat Cover	2
28	313404	Gasket, Exhaust cover	2
29	313406	Cover, Exhaust, inner	2
30	313405	Gasket, Exh. cover, inner	2
31	313407	Cover, Exhaust, outer	2
32	302471	Washer, Screw exh. cover	24
33	309322	Clamp, Exhaust cover	4
34	315071	Screw	2
35	306493	Screw, Exhaust cover	24
36	--	Seal, Cylinder to c/case	2
37	302388	Screw, Bracket	4
38	314113	Bracket, Idle adjust	2
39	308993	Spring, Idle adjust	2
40	203688	Nut, Idle adjust	2
41	312812	Screw, Idle adjust	2
42	310493	Clamp	2
43	314092	Lever, Spark advance	2
44	313700	Socket, Spark linkage	4
45	313703	Ball, Socket	4
46	314165	Link, Spark advance	2
47	382776	Throttle Cam & Pin Assy	2
48	314442	Nut, Link, throttle lever	2
49	305650	Cotter Pin	2

8;

REF. NO.	PART NO.	NAME OF PART	QTY.
CONT.			
50	310524	Yoke, Throttle cam	2
51	314093	Lever, Throttle	2
52	305513	Screw, Throttle lever	2
53	314002	Bushing	2
54	314099	Washer, Screw	2
55	314003	Bushing, Spark lever	2
56	314098	Washer, Throttle lever	2
57	314094	Spring, Throttle lever	2
58	314133	Link, Throttle lever to cam	2
59	314136	Screw, Throttle cam	2
60	314137	Bushing, Throttle cam	2
61	204445	Washer, Throttle cam	2
62	204757	Washer, Wave	2
63	302474	Washer, Link	2
64	306488	Washer, Bolt	6
65	311328	Bolt, Double end	4
66	310445	Retainer	4
67	305650	Cotter Pin	4
68	302474	Washer	4
69	204757	Wave Washer	2
70	314125	Bushing, Link	2
71	313413	Gasket, Cylinder head	2
72	313773	Retainer, #2 Lead & coil	2
73	313771	Retainer (#1 & #3)	2
74	378176	Temperature Switch	2
75	312050	Lift Ring, Cylinder	2
76	303806	Tubing, Installation	2
77	376349	Ground Strap	2
78	306555	Screw, Lift ring	4
79	307029	Screw	2
80	383034	Vacuum Switch Assy	4
81	314855	Retainer Valve	2
82	310523	Terminal	4
83	510684	Housing, Connector	2
84	314786	Sleeve	2
85	314237	Diaphragm, Vacuum switch	2
86	314241	Contact, Washer	2
87	309330	Screw, Vacuum switch	4
88	314499	Deflector, Exhaust cover inner	2
89	383252	Support & Seal Assy	2
90	313485	Seal, Support	4
91	382700	Thermo Switch Assy	2
92	310680	Terminal	4
93	310440	Clamp	2
94	314415	Screw, Spark advance	2
95	314416	Bumper, Spark advance	2
96	130728	Nut, Spark advance	2
97	510684	Housing, Thermo switchleads	2
98	379542	Safety Switch & Washer Assy	4

REF. NO.	PART NO.	NAME OF PART	QTY
CONT.			
99	310498	Washer, Switch Screw	2
100	307922	Screw, Bracket to safety switch	4
101	309322	Clamp #2, Lead	2
102	307608	Screw, Safety switch bracket	2
103	314000	Bracket, Safety switch	4
104	302103	Nut, Battery cable	2
105	314235	Gasket, Vacuum switch	2
106	315204	Nut, Stud powerhead	2
107	310493	Clamp	6
108	552062	Screw, Motor cable	2
109	309040	Clamp	2
110	310142	Clamp, High tension lead	2
*	383306	Powerhead Gasket set	4
Exhaust Cover Group			
1	383147	Swevel Bracket, long	2
*	381836	Transom Mount Kit	2
15	313820	Thrust Washer, Stern Bracket to swivel	2
16	307226	Bolt, tilting	2
17	383568	Thrust Rod & Retainer	2
18	313763	Gasket, Adapter powerhead	2
19	315085	Washer, KStop link	4
20	307068	Spring, Thrust rod	2
21	382652	Shaft & Lever Assy	2
22	313818	Locking Lever	2
23	313824	Stern Bracket, port	2
24	313825	Stern Bracket, starboard	2
25	313650	Nut, Tilting shaft	2
26	313699	Screw, stern bracket, port to stbd.	4
27	313848	Screw, Stop link	4
28	314031	Spring Washer, Stopping link	4
29	313838	Nut, Stop link screw	4
30	313822	Pin, link	4
31	313819	Link, Reverse lock	4
32	313816	Spring, Retainer	4
33	313817	Spring, Reverse lock	4
34	314007	Cup, Reverse lock spring	4
35	313821	Rod, Link to swivel	4
36	302858	Cotter Pin	12
37	313895	Rod, Manual release	2
38	313838	Nut, Stop link	4
39	313877	Stopping Link, stern bracket, stbd.	2
40	313878	Stopping link, Stern bracket, port	2
41	313849	Screw, Stop link	4
42	313823	Spring, Link, swivel bracket	4
43	382386	Steering Arm & Pivot Shaft assy.	1 2
44	313351	Cover, Exhaust housing, rear	2
45	313350	Cover, Exhaust housing, front	2
46	383369	Exhaust Hsg. Outer, ###.long	2

REF. NO.	PART NO.	NAME OF PART	QTY
CONT.			
47	301185	Stud	4
48	33022	Screw	6
49	305486	Washer	6
50	314024	Seal Housing, Outer	2
51	306470	Lockwasher	12
52	313699	Screw	12
53	306422	Nut, Stud	4
54	302510	Screw	4
55	302290	Lockwasher	4
56	313428	Mount Bracket	2
57	313784	Cover, Mount brkt. lower	4
58	313785	Grommet	6
59	314245	Screw	6
60	313429	Nut, Mount bracket to pivot shaft	2
61	314399	Bracket, Remote steering	2
62	314878	Screw, bracket	4
63	313427	Thrust Washer, Pivot shaft	2
64	314246	Bushing	2
65	313887	Bellcrank, Reverse lock	2
66	303715	Washer, Bellcrank	2
67	204708	Retainer, Release rod to bellcrank	2
68	306376	Cotter Pin	6
69	306470	Lockwasher	4
70	314898	Nut, Screw	4
71	382472	Rubber Mount Assy	4
72	313581	Bumper, Upper mount screw	4
73	313546	Ret. Washer, Mount screw	4
74	313580	Washer, Upper mount	4
75	311391	Screw, Rubber mount	4
76	313403	Adapter, Exhaust housing	2
77	306423	Screw	8
78	306470	Lockwasher	8
79	302290	Lockwasher	12
80	302510	Screw	12
81	314077	Water Tube, inlet long	4
82	314079	Water Tube return, long	4
83	313402	Exhaust Hsg. Inner, long	2
84	313764	Gasket, Exhaust to adapter	2
85	313582	Cover, Check valve	2
86	313583	Check Valve, Cover	2
87	313584	Spring, Check Valve, cover	2
88	306446	Screw, Cover to adapter ck. valve	12
89	382388	Thrust Mount Assy. Lower exh. hou.	2
91	382387	Rubber Mount	4
90	314059	Seal, Adapter to cover	2
92	120255	Lockwasher, Exhaust hou. to pw.h.	12
93	305745	Screw, Lower motor cover f & r	8
94	305145	Grommet	4

REF. NO.	PART NO.	NAME OF PART	QTY.
		Gearcase Group	
*	383132	Gearcase Assy. complete, long	2
1	382998	Gearcase & bearing assy.	2
2	382343	Bearing, pinion	2
3	383104	Screen & Retainer	2
4	314492	Screw, screen to housing	2
5	383060	Oil Pump Assy.	2
6	382956	Valve Housing assy.	2
7	202136	Pin, Housing	2
8	307175	Screw, Housing	8
9	314033	Guide, Pump housing	2
10	314034	Spring, Pump housing	2
11	314035	Ball, Pump housing	2
12	314491	"O" Ring, Valve housing	2
13	120052	Lockwasher, Valve hsg.	8
14	382407	Needle Bearing Assy	2
15	314081	Guide, Water tube short	8
16	313447	Thrust Washer, Forward & rev.gear	4
17	382408	Thrust Bearing Assy. f & r gear	4
18	382310	Gear & Bushing Assy	2
19	307079	Thrust Washer, Shifter dog	4
20	313522	Shifter, Clutch dog	2
21	313448	Pin, Clutch dog	2
22	313454	Spring, Clutch dog pin	2
23	382584	Propeller Shaft Assy.	2
24	382309	Gear & Bushing Assy reverse	2
25	313453	Retainer Plate, bearing housing	2
26	313445	Retaining Ring	4
27	313446	"O" Ring, Propeller shaft	2
28	383120	Bearing Housing & Seal Assy.	2
29	382407	Needle Bearing Assy	2
30	377135	Needle Bearing Assy	2
31	310599	Oil Retainer	4
32	313291	Screw	8
33	307853	Seal, Screw	2
34	314195	Screen, Housing	2
35	313339	Nut, Piston to driveshaft	2
36	313343	Pinion	2
37	382342	Thrust Bearing, Pinion	2
38	313344	Thrust Washer, Pinion	2
39	382362	Driveshaft Assy, long	
40	383105	Screen Assy. Pump hsg.	2
41	313340	"O" Ring, Drive shaft brg.	2
42	383119	Bearing Housing & Seal Assy.	2
43	313337	Oil Retainer, Driveshaft	4
44	304027	Screw, Housing to gearcase	12
45	307551	Plug, Fill & drain	4
46	311598	Washer, Nylon.	2
47	314022	Trim Tab, Gearcase	2
48	313715	Screw, Trim tab	2
49	383616	Solenoid, Cable and cover assy.	2

12.

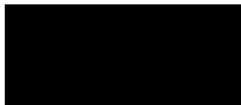
REF. NO	PART NO	NAME OF PART	QTY.
CONT.			
50	314083	Cover, Solenoid	2
51	314090	Retainer	2
52	382753	Cable Assy.	2
53	379645	Connector Kit	2
54	580723	Solenoid Assy.	2
55	313959	Spring, upper	2
56	510800	Spring, lower	2
57	510801	Sleeve	2
58	315072	Splice	2
59	315073	Tube, Heat shrink	2
60	313511	Retaining Ring, Pump hsg	2
61	314020	Spring, Prop. shaft	2
62	313510	Piston	2
63	313449	Retainer, Clutch dog	2
64	314175	Screen, Water intake	2
65	314126	Wave Washer, Solenoid	2
66	313655	Seal, Gearcase inner exh.	2
67	314082	Gasket, Solenoid to gearcase	2
68	307151	Screw, Solenoid cover	12
69	313765	Gasket, Gearcase to hsg.	2
70	313815	Impeller Hsg., Gearcase	2
71	308820	Screw, Impeller housing	12
72	310441	Clamp, Shift cable	2
73	383952	Cover, Impeller housing	2
74	313337	Seal, Impeller housing	2
75	305760	Grommet, Water tube, impeller	2
76	553127	"O" Ring, Driveshaft to crankcase	2
77	308928	Key, Driveshaft to impeller	2
78	204027	Screw, Cover to impeller	6
79	314489	Ext. Water tube, Imp. hsg.	2
80	313925	Thrust Washer, Prop	2 12
81	382355	Thrust Bushing & Sleeve assy., prop	2 12
82	314504	Spacer, Prop. nut	2 12
83	314503	Nut, Prop.	2 12
84	314502	Cotter Pin, Prop nut	2 12
85	307708	Lockwasher	6
86	552968	Screw, Gearcase to exh. hsg	6
87	306314	Lockwasher, Screw, long	2
88	313697	Screw, Gearcase to exh. hsg.	2
89	306470	Lockwasher, Screw, short	2
90	306503	Screw, Gearcase to hsg. short	2
91	313766	Plate, Impeller housing	6
92	382547	Impeller Assy.	6
93	314008	Grommet, Water tube	6
94	382764	Propeller, 13- $\frac{1}{4}$ x 17	24
94	382765	Propeller, 13 x 19	48
	383682	Water Pump Kit	6
	171741	Universal Tach.1	6

REF. NO.	PART NO.	NAME OF PART	QTY.
		Instrument and Cable Group	
*	382681	Instruments & Cable Assy.	4
4	378238	Switch Assy. Ignition	1
9	306559	Screw, Ignition switch	12
10	975257	Switch Assy. choke	4
11	900185	Nut, Choke switch	4
12	900696	Washer, Choke switch	4
15	378321	Indicating Light, Ignition"on"	2
16	308165	Bulb #1445-R	12
18	381626	Lead Assy., Ignition to choke sw.	2
21	381629	Indicating Light, temperature	2
22	311980	Bulb, #1895-R	12
24	382641	Cable Assy. instrument	2
29	304980	Fuse, SFE 20 amp.	24
50	382640	Cable Assy. Motor	2
		Remote Control Group	
*	379657	Remote Control Asy. Less Throttle & Switch Cable	2
48	382661	Switch & Cable Assy.	2
51		Throttle Cable Assy., 5' thru 50'	1

FIELD TOOL LIST.

1. 1/4" Drive Socket Set
2. 3/8" Drive Socket Set
3. 13/16 Spark Plug Socket, 3/8 Drive
4. Pliers:
 - a. Diagonal Cutting 5" - 7"
 - b. Needle Nose 6-1/2"
 - c. Chanel Lock 9-1/2"
 - d. Regular 6-3/4"
 - e. Vise Grip 7-1/2"
5. Set, Puches - Drift
6. Rolling Wedge Bar, 16"
7. Hacksaw and Blades
8. Magnetic Pick-up Tool
9. Set, Open End Wrenches, 3/8" to 1-1/16"
10. Set, Combination Wrenches, 3/8" to 1-1/16y
11. Set, Screw Drivers - Stub - 4" - 6" - 8" - 10" - 12"
12. Cresnet Wrenches, 6" and 8"
13. Ball Pean Hammer, 8 oz.

25X1A8a



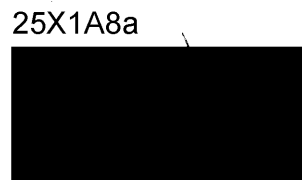
FIELD -- 55 H. P. JOHNSON OUTBOARD

MOTOR PARTS LIST

(Per Boat)

FIELD -- 55 H. P. JOHNSON OUTBOARD MOTOR PARTS LIST.

Ref. No.	Part No.	Name of Part	Quantity Per Boat
<u>Motor Cover Group.</u>			
*	382758	Owners Manual.	1
<u>Fuel Pump Broup.</u>			
1	382872	Fuel Pump Assembly.	1
2	312679	Gasket, Fuel Pump.	1
3	312675	Screen, Filter.	1
6	314190	Hose, Fuel Pump to Connector.	1
7	305700	Hose, Fuel Pump to Carburetor.	1
8	552199	Hose Clamp, Large.	2
9	314189	Hose, Pump to Crankcase.	1
11	309523	Hose Clamp, Small.	2
12	308777	Screw, Fuel pump to motor cover.	2
<u>Distributor Group.</u>			
22	382670	Lead Assy., Spark plug to distributor (#1 and #3).	1
26	382669	Lead Assy., Spark Plut to distributor (#2).	1
<u>Powerhead Group.</u>			
21	381992	Spark Plug, Champion, L-19W.	10
<u>Gearcase Group.</u>			
80	313925	Thrust Washer, Prop.	2
81	382355	Thrust Bushing & Sleeve Assy, Prop.	2
82	314504	Spacer, Prop. Nut.	2
83	314503	Nut, Prop.	2
84	314502	Cotter Pin, Prop Nut.	2
*	383682	Water Pump Kit.	1
94	382764	Propeller - 13-1/4 x 17	2
94	382765	Propeller - 13 x 19	2



TRANSOM PLUG ASSEMBLY

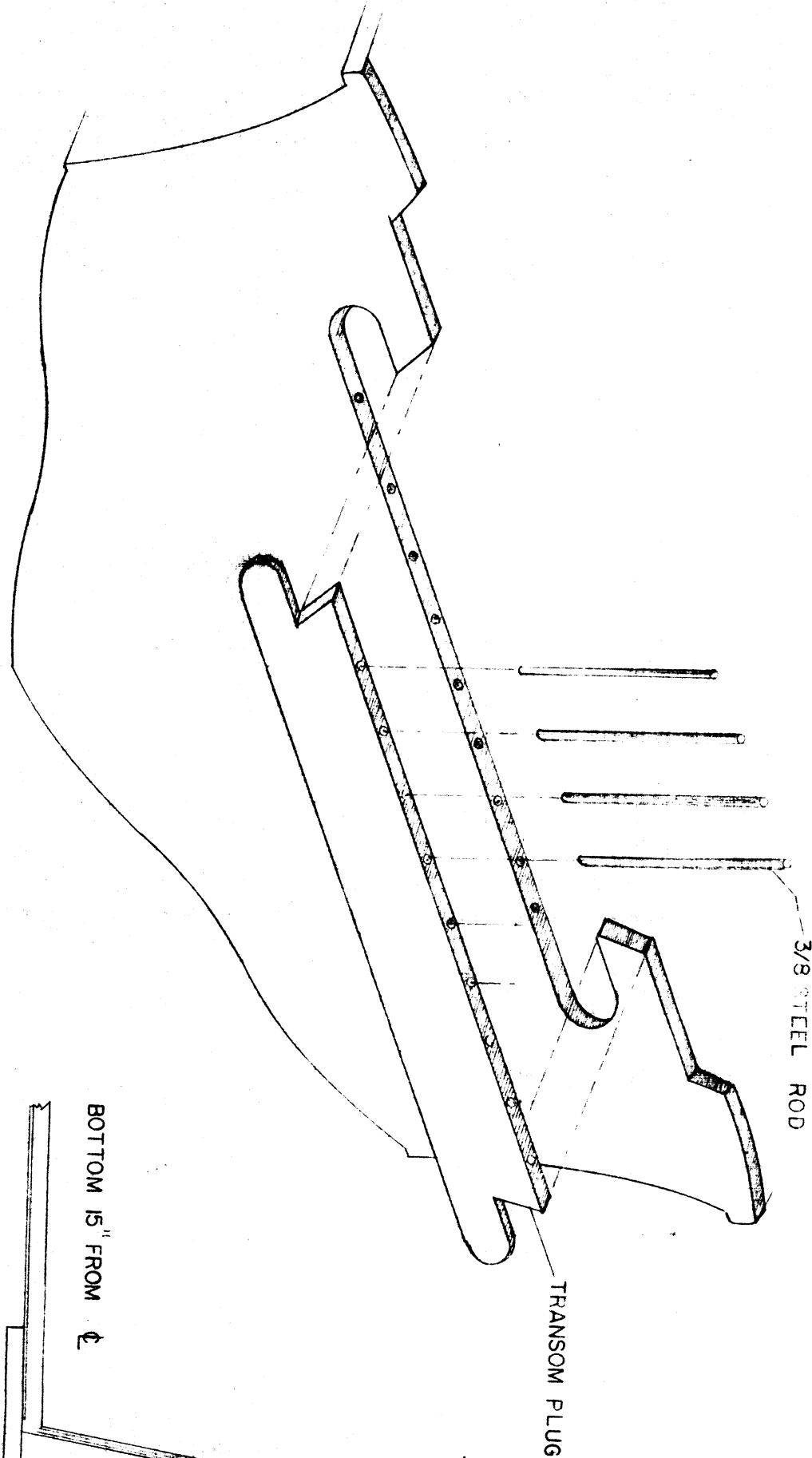


FIG 2

20 1/2"

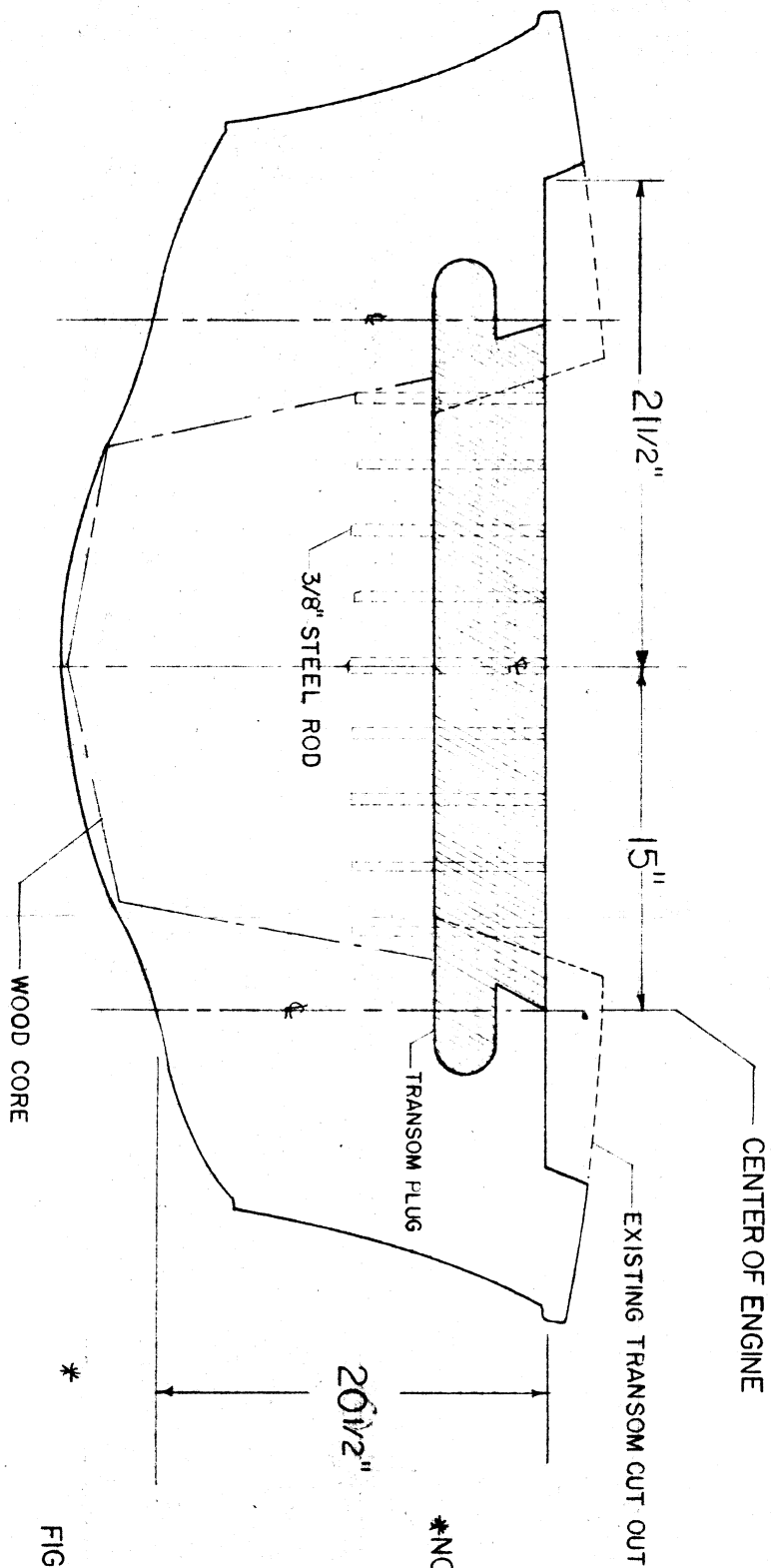


FIG 1