“ECHO”
Californian 38’

"TOP TWELVE THING'S TO REMEMBER”

Before leaving port, study the navigation charts to obtain a clear general idea of your route and the potential dangers you may encounter.

Always have engine in idle before shifting in or out of gear.

Always pause for second or two in neutral when shifting from forward to reverse or from reverse to forward and apply throttle gently.

Monitor the engine gauges and instruments

Do not put anything in the heads (toilets) that you didn't eat.

Always monitor the depth sounder and learn how to use the chart plotter to avoid or if necessary navigate safely through treacherous waters.

Use electrical power conservatively --turn off lights and equipment
when not in use.

THE KEEL IS FOUR FEET DEEP, DON'T FORGET THIS!

SAFETY INFORMATION

The most important goals of Adventure Charters Northwest and the owners of Echo are that you have a safe, enjoyable voyage and perhaps return to charter the Echo another time. To support our commitment to this vision we endeavor to make certain the safety equipment is in good working order. If for any reason you feel that it is not we will do everything in our power to correct any inadequacies.

LIFE JACKETS

There are enough Coast Guard approved life jackets for eight adults and two children. They are stored in the blue bags. We suggest that you and your crew practice putting them on before you begin your trip.

FLARES

There is an orange canister in the shelf next to the chart table. Inside this canister you will find several hand held illuminating and smoke flares. There is also a flare pistol with several illuminating rounds to shoot into the air.

LIFE SLING

The life sling hangs on the stern rail. Please, do not use this device as a recreational toy. Study the sequence of actions shown on the life sling jacket. Note, however, that Echo has a stern boarding area, which should facilitate retrieval of a MOB (Man Over Board) in an emergency. You may still need to employ some kind of mechanical hoisting device to assist in lifting the MOB onto the platform, a dingy dangler is secured on the fordeck, this functions like spinnaker/whisker pole and has a winch capability. An exhausted or semi-conscious person is "dead weight" and could easily pull an "unsecured" rescuer into the water, rather than vice-versa. If a MOB occurs, use common sense, don't panic, and proceed methodically. The life sling might well save a life.

BOAT POLE

There is an aluminum gaff boat pole (familiarly termed a "boat hook") stored under the aft berth as well as lashed to the cabin roof on deck. You should have the aluminum pole

available whenever coming into a docking situation. The pole will float for a few moments if accidentally dropped into the water.

FIRST AID KIT

The First Aid kit is located in next to the chart table on the shelf to the aft. Please let us know if you need to use the kit so we can replace any items used.

SHIPS BELL/FOG HORN

The ships bell is located on the starboard shelf. There is also an aerosol fog horn, which is stored in the cockpit. There is an extra canister under the chart table. Please let us know if you have to use it so we can replace the spent canister.

THE ENGINE ROOM

Access to the engine room is under the aft dinette seating. There are also hatches that can make it easier to access areas in the engine location.

IMPORTANT: DO NOT STORE PROPANE AND/OR FUEL IN THE ENGINE COMPARTMENT.

Failure to follow this precaution may result in a fire or explosion. Since the "Echo" is diesel powered, she does not have the same type of bilge venting provisions people generally associate with gasoline-powered vessels.

Spare engine/transmission oil, engine coolant and other miscellaneous lubricants are stored under the aft berth/

BATTERIES

There are 2 batteries located under the chart table in the lower part of the locker.
The batteries are charged from a battery charger when the Maestrro is hooked to shore power or from the alternator whenever the engine is running.

TOOL BOX

Tools are kept in the Toolbox located under the aft berth. They are there for your use in the unlikely event that you have to make emergency repairs. Since the tools might be a survival necessity for the next charter, please replace any tools lost during your cruise. If you cannot replace lost tools prior to arriving back at Charters North West, be sure to tell your check-in skipper about the loss. In addition, please spray a small amount of WD-40 on any tools that get wet. These tools have been inventoried and if found missing the replacement expenses will be deducted from your damage deposit.

ENGINE

The ECHO has a 24 HP Universal diesel, which is noted for reliability and long life as long as a few precautionary measures are taken.

Checking Oil Level

There is a dipstick on the starboard side of the engine. Proper indication on the dipstick is when the oil level is at the upper mark on the dipstick. The oil level must be checked each morning before you start the engine. If you add oil make sure you do not over fill. Only add oil if you are more than one quart low. There is spare oil under the aft berth. Oil is added to the filler cap on top of the engine. Please wipe off any oil you may spill when adding oil.

Starting and Warming up the engines

MAKE SURE THE TRANSMISSION IS IN NEUTRAL BEFORE STARTING THE ENGINE. IF THE ENGINE WILL NOT TURN OVER CHECK THE SHIFT MECHANISM.

To start the engine, make sure the shift lever is in neutral and the throttle is slightly advanced 2 o'clock position with 12 being straight up. Turn the key to the first position, the engine alarm buzzer will sound. Hold the Glow Plug switch up for at least 1 minute**, really one minute**. Continue to turn the key and the starter will engage. After starting the engine, allow it to warm up at about 1000 RPM for about 5 minutes. You are now ready to put the boat in gear.

ALWAYS MAKE SURE THAT THE ENGINE IS AT IDLE (600-800 RPM) ***BEFORE*** SHIFTING.

FUEL FILTERS

The ECHO has one primary Raycor fuel filter that is located on the aft engine wall These are serviced regularly. Your biggest mechanical concern is water in the fuel. It will immediately show up in the Raycor fuel filter. **IF WATER DOES SHOW UP--ST0P THE ENGINE** AND CALL THE CHARTER SERVICE ON THE RADIO - Water in the fuel will rapidly and permanently damage the four fuel injectors at a cost of $200.00 each. Fuel is fairly clean in the summer because there is a large fuel turnover at the major marinas. You should try and buy your fuel at the larger marinas to reduce the risk of bad fuel.

FUEL TANK AND FUEL CONSUMPTION

The ECHO has a fuel tank with a capacity of 15 gallons. The fuel cap is located on the deck, **port s**tern, and labeled. When refueling be extra careful that water or any other contaminant does not get in the fuel. Keep a spare rag or paper towel handy. Also be

careful, that you do not accidentally put fuel into a water tank inlet, in particular the fill located on the port side of the stern. (Yes, one charter party actually did this!) Should this happen again, a major clean-out of the water system would be required, and the charter party charged for any expenses involved.

When cruising, the engine will consume about o.6 gallons per hour. If you were to push the engine much higher, fuel consumption will go up dramatically but very little speed is gained above cruise. In addition, ENGINE AND DRIVE SHAFT DAMAGE IS PROBABLE AT HIGH RPM. It is equally important to not run at a very low RPM for over one hour at time.

When you do run at low RPM for an extended time; periodically run the engine at a higher RPM for 5 minutes. This procedure will prevent carbon build-up on the engine heads and valves.

OIL GAUGE

Oil pressure should be between 40-80 psi. Low/loss of oil pressure will result in immediate engine failure. Spare engine oil is in the engine compartment.

TEMPERATURE GAGE

The engine water temperature should remain in the 160-185 degree range. SHUT DOWN THE ENGINE IMMEDIATELY IF THE ENGINE WATER TEMPERATURE EXCEEDS 200 DEGREES OR IF THE OIL PRESSURE FALLS BELOW 25 PSI.

High water temperature means that the engine is not getting water for cooling and engine overheating will lead to engine failure. Check for a clogged raw water strainer, broken hose, or water pump impeller (see separate manual on the engine).

AMP GAGE

The ammeter should read 13 or very -slightly to the right of top.

THROTTLE and SHIFT LEVERS

Gentle, positive movements of the throttles and shift levers are required to prevent wear or damage to the mechanisms or engine transmission. Never shift the transmission unless the engine is in idle (throttle lever pulled all the way back: 600-800 RPM). If you shift when the engine is at other than idle RPM, you may lose the prop to the briny deep. This has happened on another boat to one of the owners.

In addition, always pause for a moment at neutral position when shifting from reverse to forward thrust or vice versa. This pause allows the transmission mechanism to follow your shift lever inputs without damage and prevents wear.

DEPTHSOUNDER

The depth sounder read-out is located on the upper left corner of the instrument pod. The depth sounder is one of your most important pieces of electronic equipment. Its proper use will help ensure a safe and trouble-free cruise. Please note that there is about a four to five foot difference between the depth that is displayed and the actual depth under the keel, which is the difference in feet between the location of the transducer and the bottom of the keel. Therefore, if the depth sounder says, for example, that you are in **20 feet** of water, you actually have about **15 feet** under the keel! Be extra careful when you are in less than 15 feet of water.

The depth sounder features both a deep and shallow alarm and a deep and shallow "at anchor" alarm—four alarm functions in all, each of which can be separately turned on or off, using the instrument buttons on the instrument face. Changing the depth at which each alarm is activated is somewhat complicated, and involves entering the "adjust" mode, and will not be covered in this manual. In any case, the alarm depths have been set to reasonable levels by the owners, and should serve. Both shallow and shallow anchor are set at 15 feet, which translates to about 10 feet under the keel. Deep anchor is set at 60 feet, and deep is set at 75 feet. Turning an alarm function on or off is relatively simple. First, practice going through the alarm phases using the "alarm" button. The sequence of functions is shallow, deep, shallow anchor, deep anchor, then back to shallow. The display for a given function will indicate both the alarm depth setting and whether that alarm function is "on" or "off." You can changed the currently displayed function from on to off or vice-versa simply by pressing the reset key for one second. The display will flash back from the alarm setting to the current depth setting after about 8 seconds. You should only set the anchor alarms to "on" when at anchor, unless you plan to cruise at a depth between 15 and 60 for the whole voyage. The whole point of the anchor alarms is to sound a continuous audible signal any time this range is exceeded, for example, because you are dragging anchor out to sea or onto the shore, or the tide goes out farther than you calculated. Note, however, that this function will not be operable if the depth instrument has been turned off at the control panel. The deep alarm (as opposed to deep anchor) behaves somewhat differently. It sounds when the depth is crossed (in either direction), but is easily turned off by pressing "depth," and furthermore, unlike the "shallow" alarm, stays off until the depth is crossed again in the other direction. This alarm can be useful as an "early" warning of entering shallow waters, and get your attention back on monitoring depth. When you are in waters below fifteen feet, the shallow alarm will beep continuously until you press the "depth" button. Unlike the "deep" alarm, the shallow alarm will very soon begin beeping again while you remain in shallow waters of 15 feet or less. It is seldom advisable to turn off the shallow alarm, unless you are very aware of what you are doing. Occasionally, in very deep waters beyond the capability of the

transducer to give a reading, a false shallow reading will appear. In such cases, as long as you know your true depth, it is permissible, perhaps advisable for the sake of your nerves, to hit the resent button for one second, rather than continually having to hit the "depth" button. Be sure to reset back to "on" when your display is again behaving itself.

Before you depart, be sure to check that the shallow depth alarm is both set for a reasonable depth and turned on. A previous charter may have "played" with the shallow depth function. It is recommended that you keep the shallow alarm for 15 feet or deeper, which as previously emphasized corresponds to about 10 feet of water under the keel. This section has gone into considerable detail about the depth alarm and its functions because this instrument is the most important instrument on the navigation console. If you go aground or hit a rock, your dream vacation quickly turns into a nightmare vacation.

COMPASS

The pedestal compass is a quality Ritche compass with minimal deviation error. However, its function has been basically superceeded by the navigation console. Should the console fail for some reason, the compass is there to resume its essential role in navigation.

THE VHF RADIO

There is a VHF radio installed at the electrical panel above the chart table. Please ask your checkout skipper for a demonstration. A handheld VHF is on a charger on the starboard bookshelf. The handheld is for convenience at the helm, and when out on the dinghy.

GROUND TACKLE AND ANCHORING

The ECHO comes with two anchors, two sets of chain, and two coils of anchor rode.

The Bow Anchor, Chain and Rode: There is a danforth style anchor located on the anchor davit with 20 feet of anchor chain and 200 feet of 5/8 inch line located in the forward anchor locker. The anchor must be lowered manually. Ease the anchor carefully off the bow roller so that it does not hit against the hull.

The Stern Anchor, chain and rode: There is a danforth type with 200 ft. of 3/4 inch anchor rode. You will find this stored in the aft lazarette and line in a black bucket in the port lazarette.

Proper anchoring is critical so carefully read the section on anchoring and buoy tie up in this manual. For more detailed information on anchoring, refer to Chapman's "Piloting" book.

DOCKING AND MANEUVERING

GO SLOW--ENGINE IDLE SPEED ONLY IN CLOSE QUARTERS
SUCH AS MARINAS AND HARBORS.

The ECHO weighs over 10,000 pounds and if uncontrolled can do great damage to docks, other boats, herself, the captain and crew, your self-esteem and your vacation.

Anticipating wind, currents, and tide is very important. "ECHO" draws about six feet of water and in the wind the hull can act like a sail. Think about this when coming in and make it work for you and not against you.

JUMPING

TOO MANY TIMES CHARTERS NORTHWEST HAS SEEN PEOPLE JUMP FROM THE BOAT TO THE DOCK. AND TOO MANY TIMES THEY HAVE SEEN VACATIONS END RIGHT THERE WITH STRAINED ANKLES OR BROKEN BONES. OUR STANDING RULE IS THAT:

IF YOU CANNOT STEP FROM THE BOAT TO THE DOCK THEN YOU ARE TOO FAR AWAY. WAIT UNTIL THE BOAT IS NEXT TO THE DOCK BEFORE ANYONE GETS OFF. IT'S OK TO GO AROUND AGAIN. WE DO IT ALL THE TIME. BESIDES ITS GOOD PRACTICE.

PREPARATION

The key ingredients to piloting a large boat are communication. experience. patience, experience, advanced planning. communication and experience!

Prepare for docking by having:

Fenders in position
Lines out and ready
Boat hook at the ready
A crew that knows what is expected of them and where there stations are.
AND only one captain!

This is the time to make sure everyone understands his or her job. If you brief well you can concentrate on the boat and the crew will perform their jobs. A bad briefing could lead to mutiny or crew insurrection. When docking have someone at the bow and someone at the stern other than the helmsman.

THE FENDERS

Fenders are stored in the port lazarette. There are two "jumbo" and three smaller fenders. Fenders can be secured on the stanchions, typically at the lower line. Make certain that the fenders are properly stowed and don't drag in the water when underway. Loose lines can catch on debris in the water and damage the fenders, fender cages, and/or the bow rails.

MANEUVERING

With only a single screw, "ECHO" can be tricky when maneuvering in close quarters. A little practice in open waters, especially in reverse, will be helpful. Remember that it is the stern that moves on a turn, not the bow. "ECHO" turn point is about 2/3 of the way back from the bow.

Always check the wind and especially the currents. We have been in many situations where **tidal** changes have provided greater challenges than winds. Anticipation will allow you to use these to your advantage.

Docking to leeward or windward will be most exciting. Just when you think you are there you will drift away. There is nothing wrong with getting close, throwing your lines and having neighbors pull you in.

Backing Up: Prop rotation will throw the stern slightly to port when backing. You cannot rely on the rudder because steerage is achieved when prop wash travels over its surface. When backing the rudder should be aligned with the centerline of the boat. Limited maneuvering may be achieved using short bursts of powering forward to align or realign your position. This requires a great deal of patience and an awareness to current and wind conditions. Ask your check-out skipper to review techniques for backing up.

ANCHORING

Plan your trip so that you arrive at your destination early. This not only insures a good anchoring spot but also allows you to anchor without an audience. We have found it's always better to be the audience than the entertainment! If you do happen to be a late arrival, proper planning will make you the envy of the anchorage!

PREPARATION

The first rule of anchoring is to review anchoring procedures with the crew. The second rule is to review the tide tables and current tables before selecting a suitable anchoring site. Depths of 25 feet to 35 feet are best. REMEMBER THE TIDAL CHANGES ARE VERY LARGE AT THESE LATITUDES AND IN SOME CHANNELS TIDAL CURRENTS CAN EXCEED 10 KNOTS. Anchoring on mud or gravel bottoms is best. The anchor does not set as well on rocky bottoms. In picking your location to drop anchor, be very aware of "swing." If the wind shifts, could you be blown over a shallow spot where you could touch bottom at low tide?!

DROPPING ANCHOR

As stated above, lowering the anchor is done manually. Once you have selected your anchorage spot and determined the depth; you and your crew will need to determine the amount of rode that will be released according to the following formula:

Good weather: Your depth times 4 is adequate. (Chapman recommends 7, but because of the 100 feet of chain, less is needed.) However, if you are at low tide, let out a little extra to compensate for the later rise in tide.

Example: If your depth is 25 feet you will release approximately 100 feet of line .

Bad Weather: Your depth times 6 or 7

Example: If your depth is 25 feet you will release 150-175 feet of chain and line, unless the proximity of other boats forbids this amount of rode, in which case let out as much as you can providing for swing, and be sure to keep an anchor watch

REMEMBER TO ALLOW FOR TIDAL CHANGES WHEN DECIDING ON HOW MUCH ANCHOR RODE TO SET OUT.

Lower the anchor slowly until it touches the bottom, When the anchor touches the bottom, put the engine in reverse idle and back slowly until the proper amount of chain and rode is put out after which the engine should be put in neutral and let the boat coast to stern. Watch the chain and it should go out at about a 30-degree angle and stop the boat. THIS IS CALLED SETTING THE ANCHOR AND IS VERY IMPORTANT.

If you are not sure that the anchor is set, put the engine in reverse idle and the anchor should hold the boat in position. If it does not hold the boat's position repeat the process. If you feel that you cannot set the anchor, raise it and start all over. When you are successfully anchored secure the anchor rode to the cleat. Now you can turn off the engine and toast your accomplishment!

RAISING ANCHOR

Before lifting the anchor, start the engine and allow it to warm up. While this is happening secure the boat for travel. If the anchor is stuck on the bottom, bring up the rode as far as it will go, the line should be vertical, and power forward slowly. This will normally break the anchor free.

BUOY TIE UP

When tying up to a buoy, tie the mooring line tight and secure to the buoy so the rope will not chafe or saw off due to the rough nature of most buoy rings. Be sure you are firmly positioned on the platform, or when your boat hook catches the buoy ring, you may go for a swim yourself.

VENTILATION-HATCHES/WINDOWS

Be sure all hatches and windows are closed tight while underway. You don't want to get into a wet, cold berth after a long day of cruising.

THE GALLEY

The galley is a very enjoyable and usable workspace. You are chartering "ECHO" bareboat, consequently, there are very limited supplies aboard.

"ECHO" has a Propane Stove. The propane is supplied through an electric valve. The switch for this valve is located back on the counter behind the ice box. This switch must be on before propane will be supplied to the range.

The propane tank is stowed in its aft lazarette in the cockpit. It is advisable to close the screw valve after use of the stove, and turning it on again before the next use.

Each of the top burners is controlled by a single knob for igniting, adjusting the flame and turning it off. Lighting a burner can be a bit tricky after disuse.

To light the Oven pilot: Open the oven door and check for gas smell. Ventilate if you detect residual gas. If ok, turn the oven control knob to any temperature over 140 degrees. Push in "oven safety" button for 5 seconds with one hand. Light the pilot with a match or lighter while holding "oven safety" button in. Pilot is on the right hand side of oven burner. Turn oven control to "pilot" and continue to hold "oven safety" button in for 15 seconds or until the pilot stays lit. Turn the oven control knob to the temperature desired. Check to assure that the oven burner has lighted. The main burner may require up to two minutes to light.

SINK

There are two water supply sources at the sink. The arching faucet is sea water, and is foot pump operated, the regular sink faucets utilize the on-board fresh water supply. Use your water carefully. A couple of tablespoons of Clorox when you fill the tanks will not harm you and keep the water “sweet” for drinking. The 50-foot hose provided with Echo is one that is safe for drinking water. However, you may wish to purchase jug water for drinking.

PLEASE DON'T CLOG THE SINK OR POUR BOILING H0T WATER DOWN THE DRAIN. All fittings, hose, etc., are vinyl or rubber and could be damaged by excessive heat. Gray water from the sink goes directly overboard.

MICROWAVE

The microwave is operable whenever you are connected to 110 V AC shore power and the AC "outlets" breaker is on.

COOKING AND SERVING WARE

The galley is equipped with all of the utensils you will need for cooking and serving six to eight people. Try to store the galley gear where you find it. The galley gear and utensils have been inventoried and if any items are found missing, your damage deposit will be adjusted accordingly.

THE POTABLE WATER SUPPLY

"ECHO" has one fresh water tank holding a total of 40 gallons. This can be filled by removing their respective cap on the deck. It is recommended that you hose the deck down slightly around the filter caps before you open them to keep loose dirt and debris from falling into the tanks.

The fresh water pump switch is located on the DC panel and must be switched "on" for any sink to work. In normal practice, this switch can be left on. A slight pulsing of the water as it comes out of the tap is normal. If however you hear the pulsing sound and all water fixtures are turned off, there is probably a loose or broken water line in the bilge, or you have run out of water. Shut off the fresh water pump (at the DC switch panel) and investigate. The probability of a line breaking is remote.

Water cannot be obtained at every port of call. ALWAYS TASTE THE WATER BEFORE FILLING THE TANK TO PREVENT DISTASTEFUL POTABLE WATER FROM CONTAMINATING THE TANK. To ensure that the water from any source is bacteria free, it is a good idea to add about three teaspoons of "Clorox" to each 100 gallons of water. Three teaspoons of Clorox" will not cause a chlorine taste in the water. A supply of "Clorox" is stored on the galley under the sink.

DINETTE TABLE:

The dinette table does convert into a double bed and one may sleep on the port side settee.

STORAGE AREA:

There is a considerable amount of storage in the drawers, hanging lockers, and under the cushions. Creativity helps.

HEAD

The most important thing to remember is that the heads will clog (or worse) if you try to put anything in them other than "marine" toilet paper and what you have already eaten!

Use of "marine" toilet paper is recommended because it is designed to breakdown quickly and does not clog the system. Do not put items in the head that will plug it. TAMPONS, SANITARY NAPKINS, PAPER TOWELS, OR ANY OTHER HARD TOUGH PAPER WILL CERTAINLY PLUG THE HEAD AND LINES. Use the waste paper basked for these items. NOTHING IS MORE DISGUSTING THAN TO HAVE TO CLEAN A PLUGGED HEAD LINE. If you are careful, the heads are very reliable. If you are not, they will provide you with frustrating and subsequently revolting memories of your cleaning activities.

DO NOT EVEN THINK ABOUT USING A DRAIN CLEANER SUCH AS DRAINO IN THE HEADS. THIS WILL QUICKLY CAUSE THE SEALS TO FAIL AND TOTAL AND COMPLETE SYSTEM FAILURE WILL ENSUE. Forget about your damage deposit!

The head intake seacock must be in the open position.

SANITATION SYSTEM

The "ECHO" is equipped with a sanitation system that is Coast Guard approved. Effluent from the head is routed to the holding tank. Tanks are emptied through the deck waste fittings on the deck outlets, at a pump out station.

If you are in waters that permit direct overboard pumping (know your rules), pumping overboard can be accomplished as follows:

To empty the tank, open the macerator outlet seacock before turning on the macerator. **Make sure the macerator outlet seacock is open, not doing do will ruin the macerator motor.** Seacocks are located under the starboard stern cabin bunk and inside the access door beneath the port forward berth, respectively. All seacocks are labeled as to function. (inlet, outlet, or drain, and for which fixture.) Be sure you have the right one. The switch is located on the DC switch panel. The macerator will make a distinctive noise change when the holding tank is empty. Please be careful. RUNNING THE MACERATOR ON AN EMPTY TANK WILL BURN IT OUT AND CAUSE IT TO FAIL. The macerator outlet seacock must be in an open position during pump out, but should be closed after completing the pump-out. **The seacock must be closed when using a marine pump-out station.**

One final word on pumping overboard; know your local regulations before you do it. You don't want to spend a night in a "Tijuana Jail" and pay a several thousand-dollar fine. In general, all U.S. waters that you're going to be in are off-limits to overboard dumping.

SINKS

Gray water from the sinks goes directly overboard. Be careful not to clog them and don't even think about pouring drain cleaner, etc. down them.

THE DINGHY

"ECHO" has a ten-foot Avon inflatable dinghy, with a hard bottom, which includes two oars and a dinghy painter. Please, only drag the dinghy on shore as little as possible, and never over rocks, oysters, or any sharp objects. This practice will keep the bottom from getting damaged. Thanks! If you choose to utilize the 9.8-HP 2-stroke Nissan outboard, or your own outboard, do not stand the engine upright directly on the white or gray fiberglass decking, since this practice will chip or put holes in the decking. The fuel is to be mixed 50:1, 2 stroke oil is located under the aft berth.

ELECTRICAL

Dock shore facilities come in basically three forms: 50 amp service 30 amp service and 20-amp service. Most US. marinas and docks have 50 or 30 amp service, with 30 amp being far more prevalent. Echo has a 50-foot 30 Amp power cord, plus multiple adapters.

IMPORTANT SAFETY AND CONVENIENCE ISSUES

The following items will help us keep "ECHO" ship-shape and ensure you a safe cruise.

I. ALWAYS USE THE DEPTHSOUNDERS WHEN CRUISING, DOCKING, AND LOOKING FOR AN ANCHORAGE. Proper use might save you a $400 prop or a $1,000 shaft. The San Juans, Channel Islands, Gulf Islands, Sunshine Coast, and Puget Sound have many reefs, rocks, and shoals. Read your charts, use your depth sounder and your chart plotter, and watch for buoys and lights. Your nautical charts combined with the chart plotter are your most important safety devices to avoid running aground. Always examine your nautical charts prior to departing, so that you can have in mind and anticipate impediments and dangers along your planned course, rather than be surprised by them.

2. THE VHF RADIO IS YOUR ONLY COMMUNICATION WITH THE COAST GUARD AND OTHER BOATS. To be able to respond to emergency messages and Coast Guard alerts. THE "FCC RULES FOR RECREATIONAL BOATERS" pamphlet and the "SKIPPERS VHF PROCEDURES GUIDE" are located under the chart table.

3. PICK YOUR ANCHORAGE CAREFULLY. Use CHAPMAN'S "PILOTING" BOOK for reference.

4. ALWAYS WEAR SOFT SOLED SHOES. Please no high heels or cowboy boots. Hard sole shoes scratch and cuff the boat and are very unsafe.

5. TRY TO STOW THE GEAR IN THE APPROPRIATE AREAS as listed on the "Location of Boat Equipment and Gear,, pages at the back of this manual. This will aid you greatly in finding the "stuff" you might need. It will also greatly aid NW CHARTERS personnel during the "end of cruise inventory check out" and expedite your departure.

6. KEEP YOUR SPEED AT IDLE RPM SPEEDS WHENEVER YOU ARE IN HARBOR, MARINAS, AND OTHER CONGESTED AREAS.

7. MONITOR THE MARINE WEATHER STATIONS TO GET PRESENT AND FORECAST WEATHER. The **VHF radio** has preset marine weather channels.

9. DRIVING A BOAT UNDER THE INFLUENCE IS A FELONY.

10. LOOSE SPRING LINES, MOORING LINES, DOCK LINES AND DINGHY LINES MUST BE STOWED TO PREVENT THEM FROM GETTING HOPELESSLY WRAPPED AROUND A TURNING PROP.