Operating instructions for the PISCES 27, 40 and 60...
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Service Dealer.

Foreword

We would like to thank you for specifying the

Performance curves

In the event you have further questions or require spare

These Engine exactly as outlined herein. With proper care

The book of Operating Instructions contains the

preventions to be observed when starting

Air bag system

If you require service on your vehicle,

used in the manufacture of the parts, which are purchased

We assume no liability for the transportation of

Do not use a complete recalibration description and Ready-to-Use.

The years of our engineering and practical experience in the

an auxiliary on the market today. The piece is the product of

models.

the finest marine

The piece is the product of

ready to go. Our

We would like to thank you for specifying this

We would like to thank you for specifying the piece.
Operation

Before starting:

1. Check the oil level in reservoir, see Fig. 2.
2. Check the oil level in reservoir, see Fig. 2.

2. Check the oil level in reservoir, see Fig. 2.

Inspect the emission control system on all models. Be sure the oil level is within the MAX level and MIN mark. Also check that the level of oil is within the oil dipstick bowl.

Engine Identification Number

When ordering spare or replacement parts it is important to know the serial number. These numbers are stamped into the fly-

Fig 7. Example of engine's part size.

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Points To Be Checked After Starting Engine:

1. The engine is running as planned.
2. The engine is producing the correct output.
3. The engine is cooling down properly.
4. The engine is running smoothly.
5. The engine is not making any unusual noises.
6. The engine is not producing any unusual vibrations.
7. The engine is not producing any unusual odors.
8. The engine is not producing any unusual smoke.

To Start Engine:

1. Open the fuel valve.
2. Close the exhaust valve.
3. Close the intake valve.
4. Electrical or manual starting device is used.
5. Starter motor engages the engine.

After starting the engine:

1. Check the oil level.
2. Check the coolant level.
3. Check the battery level.
4. Check the fuel level.
5. Check the air filter.
6. Check the spark plugs.
7. Check the exhaust system.
8. Check the cooling system.
9. Check the lubrication system.
10. Check the electrical system.

To idle the engine:

1. Open the fuel valve.
2. Close the exhaust valve.
3. Close the intake valve.
4. Electrical or manual starting device is used.
5. Starter motor engages the engine.
7. Reduce the throttle to idle position.
8. Check the oil level.
9. Check the coolant level.
10. Check the battery level.
11. Check the fuel level.
12. Check the air filter.
13. Check the spark plugs.
14. Check the exhaust system.
15. Check the cooling system.
16. Check the lubrication system.
17. Check the electrical system.
Starting Precautions

1. Freesling of Cooling Water

2. To Be Observed in Cold Weather:

3. To Stop Engine:

Treatment of New Engine:

1. Evacuate the engine of any water that may have entered it during the running-in period.

2. Gradually increase the speed of the engine to its normal operating speed.

3. Allow the engine to run at full throttle for a few minutes before stopping it.

Conditioning:

1. Keep the engine running at full load for at least 10 minutes.

2. Check the oil level and adjust it if necessary.

3. Check the coolant level and add water if needed.

4. Check the battery connection and make sure it is tight.

5. Check the fuel filter and replace it if necessary.

6. Check the air filter and clean it if necessary.

7. Check the spark plugs and replace them if they are dirty.

8. Check the ignition system and adjust it if necessary.

9. Check the exhaust system and make sure it is free of obstructions.

10. Check the transmission and make sure it is in good condition.

11. Check the steering and make sure it is in good condition.

12. Check the suspension and make sure it is in good condition.

13. Check the brakes and make sure they are in good condition.

14. Check the lights and make sure they are working properly.

15. Check the horn and make sure it is working properly.

16. Check the warning lights and make sure they are working properly.

17. Check the steering wheel and make sure it is in good condition.

18. Check the air conditioning and make sure it is working properly.

19. Check the heater and make sure it is working properly.

20. Check the exhaust pipes and make sure they are clear.

21. Check the exhaust system and make sure it is in good condition.

22. Check the exhaust manifold and make sure it is in good condition.

23. Check the exhaust pipe and make sure it is in good condition.

24. Check the exhaust system and make sure it is in good condition.

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63. Check the exhaust system and make sure it is in good condition.

64. Check the exhaust system and make sure it is in good condition.

65. Check the exhaust system and make sure it is in good condition. 
Cooling System:

1. Replacement of Engine Oil

2. Replacement of Water Pump

3. Replacement of Cooling Fluid

4. Inspection of Radiator

5. Inspect the oil dipstick hole with engine oil (see Fig. B).

6. Mechanical Governor

7. If oil in the oil dipstick hole with engine oil (see Fig. B).

8. Inspect the oil dipstick hole with engine oil (see Fig. B).

9. Replace the engine oil filter after the first 5 hours of operation.
Engine Components:

- 1. Cylinder head bolts
- 2. Vacuum cleaner
- 3. Altimeter
- 4. Fuel pump

Operation:

1. Start the engine.
2. Ensure the battery is charged.
3. Connect the battery to the engine.
4. Clean the engine parts.
5. Check the battery connections.
6. Check the oil level.
7. Check the oil filter.
8. Check the oil lines.
9. Check the fuel lines.
10. Check the spark plugs.
11. Check the ignition system.
12. Check the air filter.
13. Check the muffler.

Electrical System:

1. Check the battery.
2. Check the alternator.
3. Check the starter.
4. Check the fuse box.

Warning:

- Do not smoke when working on the engine.
- Use earplugs when working on the engine.
- Wear protective clothing when working on the engine.
- Keep children away from the engine.
- Do not use petrol near the engine.

Note:

- Always wear protective clothing when working on the engine.
- Use earplugs when working on the engine.
- Keep children away from the engine.
- Do not use petrol near the engine.

Preparation:

- Check the battery.
- Check the alternator.
- Check the starter.
- Check the fuse box.

Precautions:

- Always wear protective clothing when working on the engine.
- Use earplugs when working on the engine.
- Keep children away from the engine.
- Do not use petrol near the engine.

Technical Data:

- Engine type: Inline 4
- Power: 220 HP
- RPM: 6000
- Displacement: 2.5L
### Maintenance:

The "Single Lever Control" type is used. See Fig. 36.

The change lever is located to reverse gear should be:

- In neutral position, the transmission should be in the "0" position.
- The reverse gear is engaged when the change lever is moved to the "R" position.

### Operation:

- Before starting, shift the transmission to "N" and engage the "Reverse" gear.
- After starting, shift to the desired gear position.
- When stopping, shift to "N" and apply the handbrake.

### Instructions:

- Keep the transmission in neutral while starting the engine.
- Do not exceed 3,000 RPM.
- Do not tow more than 1000 lbs.

### Table:

#### Piston 50

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<tr>
<th>Cylinder No.</th>
<th>Value Arrangement</th>
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<td>1 2 3 4</td>
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#### Piston 40

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#### Piston 27

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Wiring Diagram, Standard Panel

Fig. 31

Wiring Diagram, Deluxe Panel

Fig. 32
Maintenance Table

Periodic Inspection
The engine must receive a copy of the operator's handbook.

Installation Inspection:

1. Check engine for leakage of oil, fuel or water.
2. Check engine and drive belt tension.
4. Check oil level in governor.
5. Check oil level in governor.
6. Check oil level in governor.
7. Check oil level in governor.
8. Check the throttle and shift controls.
9. Check operation of oil relief valve.
10. Check the oil pressure relief valve.
11. Check oil pressure relief valve.
12. Check oil pressure relief valve.

2. Operate engine for at least 30 minutes.
3. Inspect the customer on the operation of the equipment.
4. Inspect the customer on the operation of the equipment.
5. Inspect the customer on the operation of the equipment.
6. Inspect the customer on the operation of the equipment.
7. Inspect the customer on the operation of the equipment.
8. Inspect the customer on the operation of the equipment.
9. Inspect the customer on the operation of the equipment.
10. Inspect the customer on the operation of the equipment.
11. Inspect the customer on the operation of the equipment.
12. Inspect the customer on the operation of the equipment.
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<td>DATE OF SALE</td>
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<td>ENGINE</td>
<td>REVERSE GEAR</td>
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<tr>
<td>NAME, Owner</td>
<td>SIGNATURE, Customer</td>
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**PISCES Marine Diesels Engine Registration Card**

**Pisces Warranty Agreement**

This agreement is in lieu of all express or implied warranties. In the event of any dispute, the dealer’s obligation is limited to repair or replacement. This warranty is non-transferable and does not cover labor.

Contact: Pisces Marine Diesels
799 West 16th Street
Fiskar Inc.

Please contact: Pisces Marine Diesels for any inquiries or issues regarding this product. This warranty is null and void if the product has been tampered with or altered in any way.