

TITAN

I N D U S T R I A L[®]

**P.O. Box 791 • Travelers Rest, SC 29690 • Phone: (864) 834-7212 • Fax: (864) 834-5127
Service/Replacement Parts: (800) 845-4141 • www.titanindustrial.net**



OWNER'S MANUAL MODEL TPW-2200 COMMERCIAL PRESSURE WASHER

The Emission Control System for this compressor is warranted for standards set by the Environment Protection Agency.

IMPORTANT!

It is extremely important to read and understand the entire contents of this Owner's Manual for the Titan Industrial Commercial Model TPW-2200 before attempting to operate the pressure washer. This is a gasoline engine powered, commercial strength, washer. The gasoline engine and the pressure washer are both potentially hazardous and could cause physical injury or even death if improperly used.

WARNING!

Do Not Operate Equipment until reading & understanding Owner's Manual!

SAFETY GUIDELINES

The information in this manual is provided for your safety and to protect your equipment. It is very important to read and understand the contents of this manual before attempting to operate this equipment. Please observe the following symbols to help recognize this information.



This symbol indicates extremely hazardous situations that could cause serious injury or death!



This symbol indicates potentially hazardous situations that could cause serious injury or death!



This symbol indicates potentially hazardous situations that could cause moderate or minor injuries!



This symbol indicates important information that could cause damage to the equipment !

DESCRIPTION

Your Titan industrial Commercial Pressure Washer, Model TPW-2200 is a gasoline operated device that converts a water source flow into extremely high pressure. The unit is portable and mobile. The gasoline engine makes it possible to use the unit in remote areas that are void of electrical power if needed.

Soaps or cleaning solvents can be mixed into the pressurized stream to make the cleaning even more powerful.

The powerful spray is capable of causing damage to wooden surfaces, glass, automobile paint and trim, and delicate objects such as flowers or shrubs. Check the item to be cleaned before directing the pressurized spray. Adjust the stream to accommodate the subject to be washed.



NEVER DIRECT THE STREAM ON ANY PERSON OR ANIMAL

Liquid under high pressure is capable of penetrating the skin and could cause serious injury or blindness. The potential is increased if the stream includes soaps or cleaning solvents.

DISCLAIMER

TITAN INDUSTRIAL HEREBY DISCLAIMS ANY RESPONSIBILITY OF ANY LIABILITY WHATSOEVER FOR ANY LOSS, PERSONAL INJURY OR DAMAGE RESULTING FROM IMPROPER USE OF THE PRESSURE WASHER.

SAFETY GUIDELINES

GENERAL SAFETY

The following safety precautions must be observed at all times because the pressure washer and components make up a high pressure system.

A. Follow all codes for the safe operation of this equipment both local and federal (United States Occupational Safety and Health OSHA)

B. Only people that are well acquainted with the rules of safe operation should use the unit.

C. Read and understand all manuals and instructions included with the pressure washer before attempting to use it.

D. KEEP CHILDREN AWAY FROM THE UNIT.

E. Wear safety glasses while operating the unit.

F. Do not stand on the unit or attempt to use it as a hand hold.

G. Do not make adjustments to washer while engine is running

GENERAL SAFETY

H. Inspect the entire system for leakage, weaknesses, damage or deterioration before each use.

I. Replace or repair any defective parts before using.

J. Check all fasteners regularly.

K. Do not touch hot surfaces.

L. Shut off the pressure washer immediately if it begins to vibrate excessively.

M. Do not fill the gas tank indoors and be sure to wipe off any spilled gas before attempting to start the pressure washer.

N. Stop engine before leaving the area. Never leave a running unit unattended.

O. Remove spark plug wire while inspecting unit to keep it from inadvertently restarting.

P. Allow unit to cool before storing.

Q. DO NOT OPERATE WASHER WITHOUT PROPER WATER SUPPLY

1. Water in-take

2. Pressure out-line

3. Soap intake

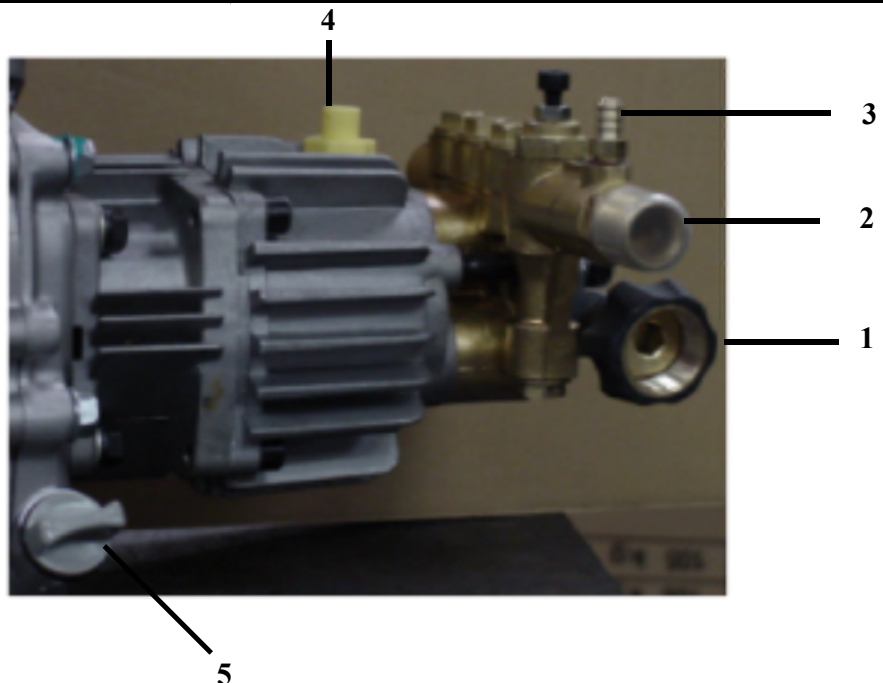
4. Oil Fill\Breather

5. Oil fill plug for Engine

* Pump Styles may vary

*Pump requires 5oz. of

SAE30 non-detergent



ASSEMBLY & OPERATION

OPERATION

OPERATION



WARNING

UNPACKING

Inspect your pressure washer carefully for any damage that may have occurred during transit. Be sure to inspect and tighten all bolts, screws, and fittings before attempting to start the unit.

Do not attempt to operate a damaged unit. It may cause serious injury or property damage!

ASSEMBLY

LUBRICATION (see page11)

The pressure washer is not shipped with oil installed. Do not over fill the engine when changing oil.

Use only **single viscosity, (SAE30), non-detergent oil in the pump itself.**

HANDLE

The handle is provided to move the pressure washer.

START-UP

- A. Properly fill engine with gas and oil. (See page 8)
- B. Fill the pump with oil. Use only 30 weight, non-detergent oil.
- C. Connect the water supply to the water in-take.
- D. Connect the wand hose to the high pressure out line fitting.
- E. If desired, connect the soap line to the soap intake connection and place hose end in soap supply.

STARTING THE ENGINE (see Page 8)

CHECKING ENGINE OIL (see Page 11)

CHANGING ENGINE OIL (see Page12)

Maintenance Schedule

	DAILY	EVERY MONTH/ 30 HRS	EVERY 3 MONTHS/ 100 HRS	EVERY 6 MONTHS/ 500 HRS
Check Oil Levels	X			
Check Air Filter	X			
Check For Oil Leaks	X			
Replace Air Filter			X	
Change Oil		X		

MOST FREQUENTLY ASKED QUESTIONS

WHAT KIND OF OIL SHOULD I USE?

The pump requires pressure washer pump non-detergent oil. Use 30W non-detergent oil in the engine.

THE UNIT WILL NOT START.

Check gasoline supply. Check spark plug, Check engine oil.

HOW CAN I APPLY SOAP OR CHEMICALS?

The wand must be in the low pressure setting. Chemical hose must be attached to the pump and fully submerged in the chemical supply. ***See Page 6**

I AM NOT GETTING ENOUGH PRESSURE?

Water supply must provide a minimum of 5 gallons per minute at 20 p.s.i. Check all hoses for kinks or leaks. The spray nozzle could be blocked or partially obstructed.

WHAT SOAPS OR CHEMICALS CAN I USE?

Only products designed for pressure washer use. Do not use caustic materials.

HOW CAN I SAFELY FILL THE FUEL TANK?

Only add gasoline to a cool engine. If the unit has been in operation, it should be allowed to sufficiently cool down because hot engine parts could ignite the gasoline and cause a serious explosion (**engine exhaust must be cool to the touch**). Be sure the unit is out of doors with plenty of ventilation.

WHAT SHOULD I DO IF SPRAY PENETRATES MY SKIN?

Do not treat it as a simple cut. Amputation, blindness or other serious injury could result. Consult a physician immediately. Be sure to inform the physician if soap or a chemical solution was used. Take the label on the chemical solution to the physician if possible to aid in proper diagnosis.



WARNING

KEEP WATER FLOWING WHILE THE WASHER IS RUNNING

Operating the unit with the water supply turned off may result in equipment damage. Never allow the unit to run more than one (1) minute without pulling the trigger for water to flow through the pump and eject heated water from the pump.



CAUTION

Engine and pressure washer parts may be hot even if the unit is not running.

MAINTENANCE



WARNING

Carbon Monoxide gas is poisonous. It is produced by combustion in the gasoline engine and emitted from the exhaust system on the unit. Never operate this unit inside a closed building or in a poorly ventilated area.



WARNING

This unit may cause electrical arcs that could ignite flammable gas or vapor. Keep flammable items away from the compressor and keep the pressure washer away from flammable conditions.



WARNING

Release all pressure from the system before attempting to perform any maintenance!

BEFORE EACH USE

Check the engine oil level, the pump oil level, and the gasoline supply. Check all hose connections before attempting to start the engine. Do not run the engine or pump on low oil.

STORAGE

Allow engine and pump parts to cool. Clean and wipe down entire unit.

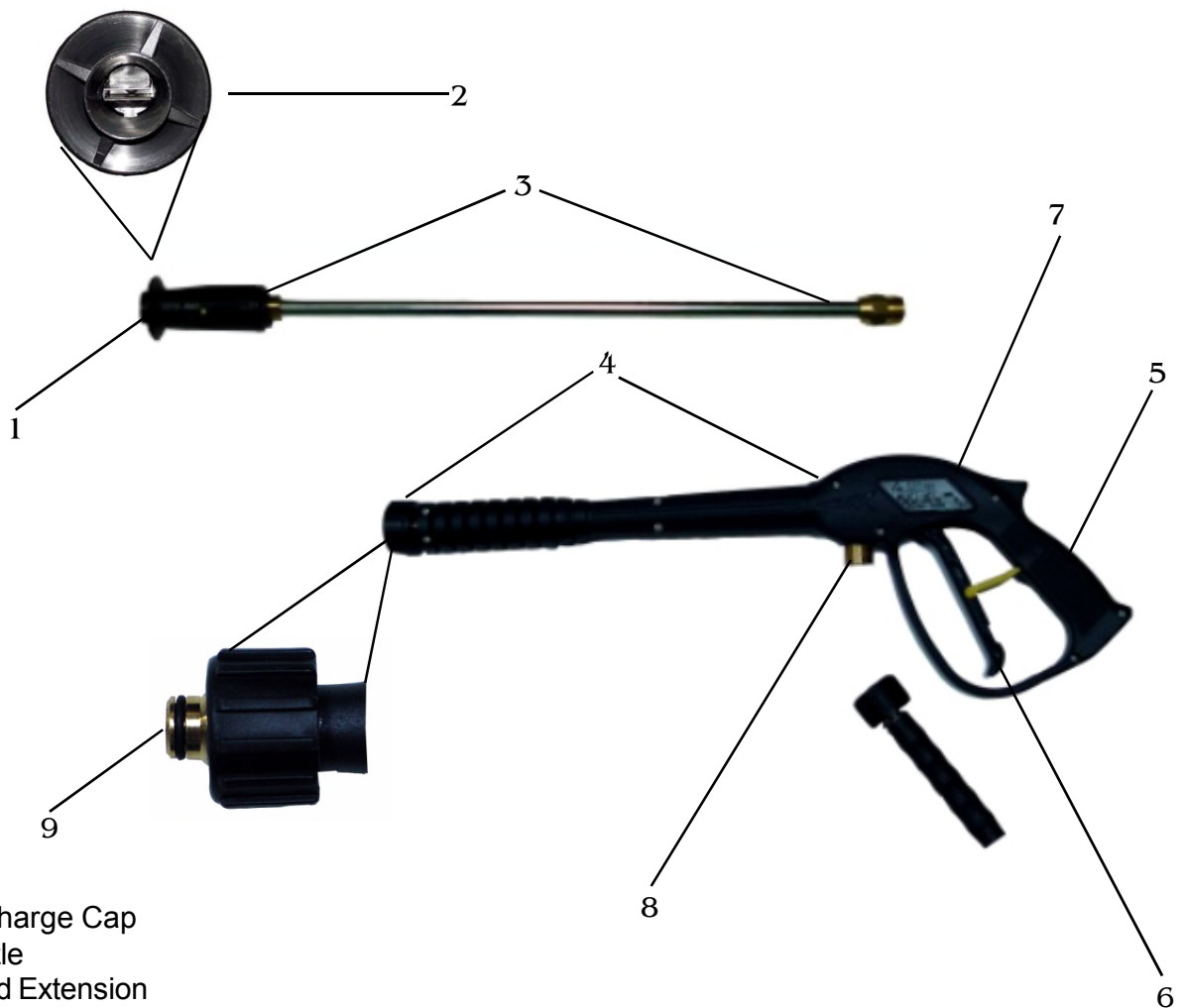
Disconnect hose and wand and hang with open end down to allow liquid to drain.

Never store in a place where there is a chance that the pump could freeze!!!

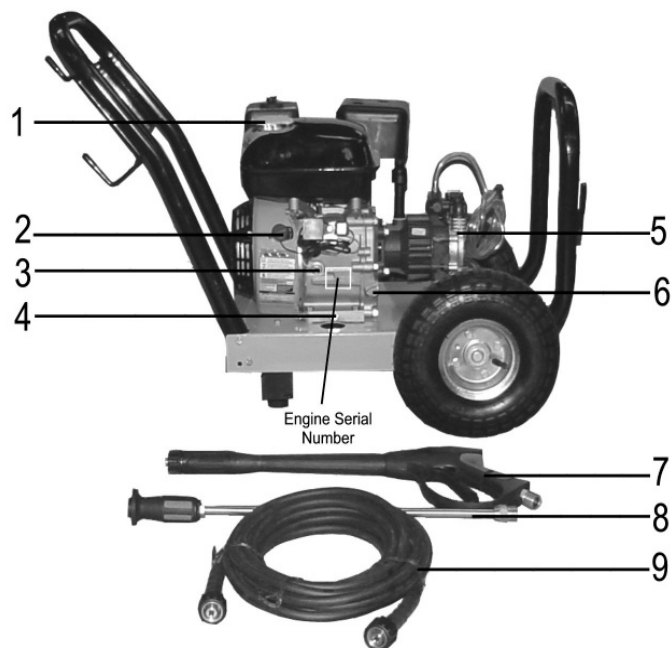
Soap application

To activate your Titan Pressure Washer for cleaning purposes you must have your unit in the Low position. Low position is obtained by first locating the discharge cap (see figure #1). On the discharge cap there is an arrow that has two settings on it, low and high. Set your discharge cap to the low position and you are ready for soap application.

* Your soap application will only work in the low position*



1. Discharge Cap
2. Nozzle
3. Wand Extension
4. Wand
5. Handle
6. Trigger
7. Trigger Lock
8. High Pressure Hose Connection
9. "O" Ring



1. Fuel Cap
2. On/Off Switch
3. Oil Sensor
4. Oil Drain
5. Pump
6. Oil Fill Cap
7. Pressure Washer Gun
8. Pressure Washer Wand/Lance
9. High Pressure Hose

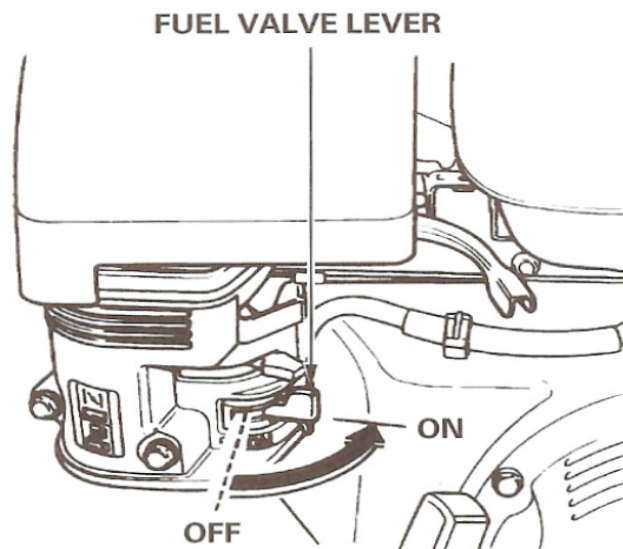
10. Exhaust Muffler
11. Air Filter
12. Idle Control Lever
13. Choke Lever
14. Fuel Valve On/Off
15. Oil Fill Cap
16. Oil Drain
17. Serial Number
18. Pull Start (Recoil)



Review the instructions provided with the equipment powered by this engine for any safety precautions that should be observed in conjunction with engine startup, shutdown, or operation.

STARTING THE ENGINE

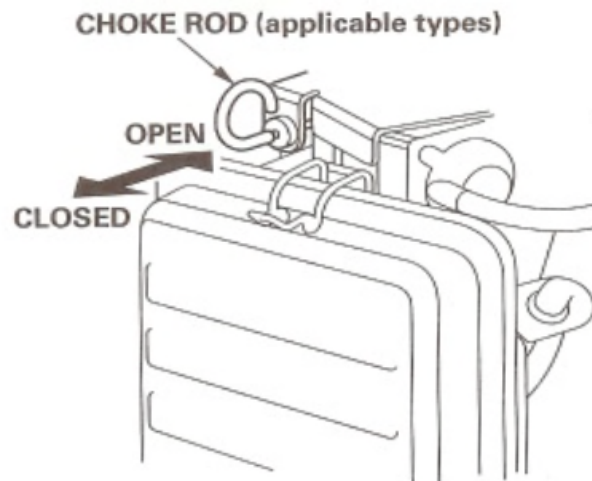
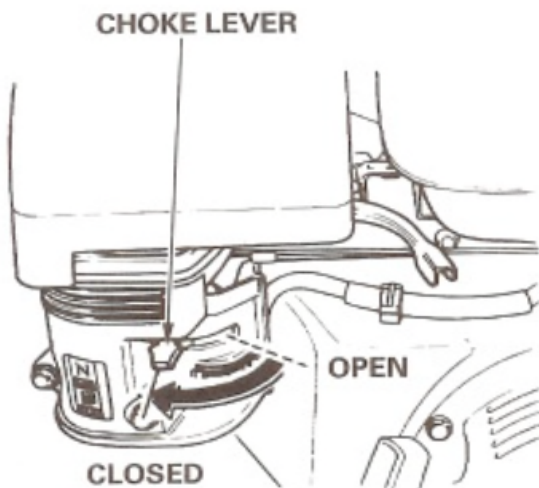
1. Move the fuel valve lever to the ON position.



2. To start a cold engine, move the choke lever or choke rod (applicable types) to the CLOSED position.

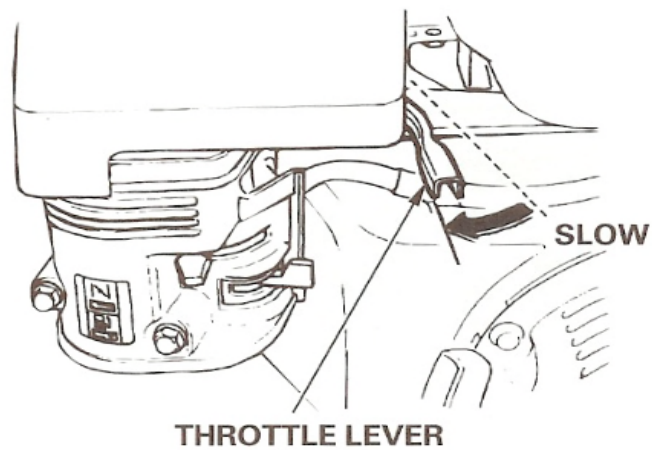
To restart a warm engine, leave the choke lever in the OPEN position.

Some engine applications use a remote-mounted choke control rather than the engine-mounted choke lever shown here.

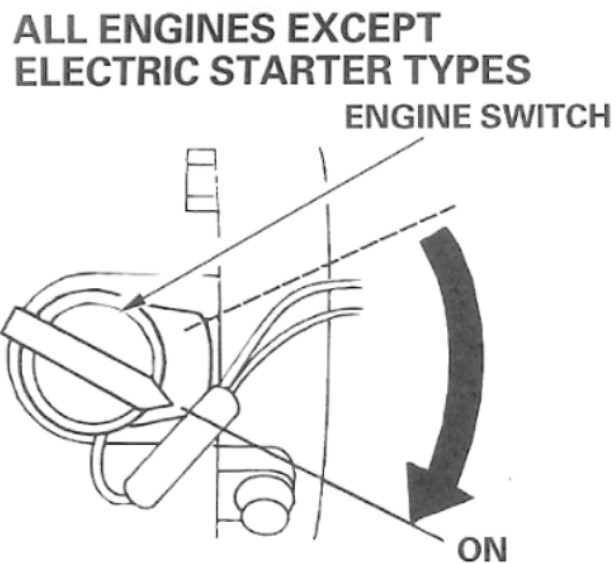


3. Move the throttle lever away from the SLOW position, about 1/3 of the way toward the FAST position.

Some engine applications use a remote-mounted throttle control rather than the engine-mounted throttle lever shown here.



4. Turn the engine switch to the ON position.



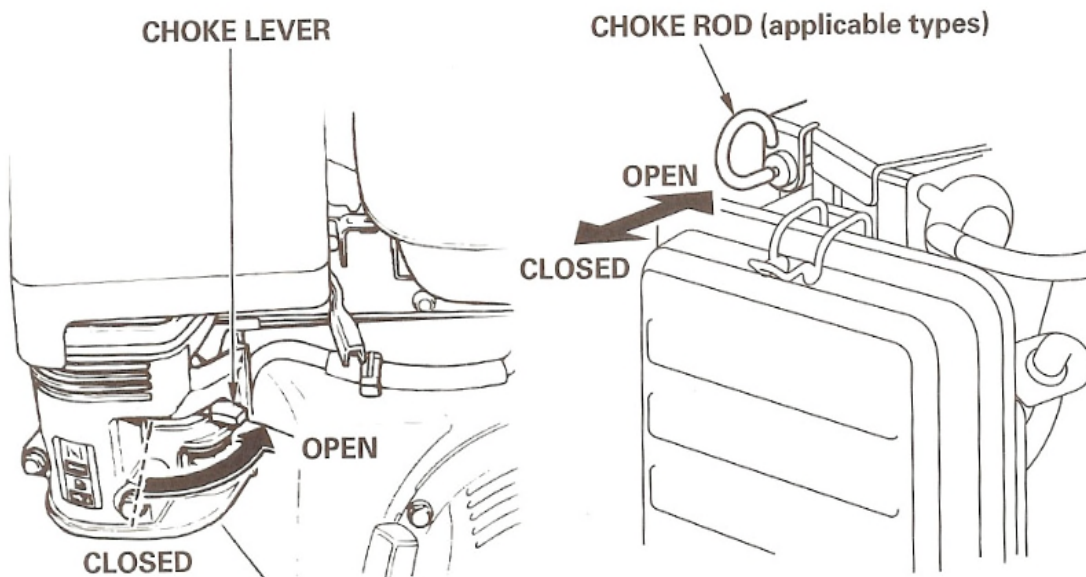
5. Operate the starter.

RECOIL STARTER (all engine types):

Pull the starter grip lightly until you feel resistance, then pull briskly. Return the starter grip gently.



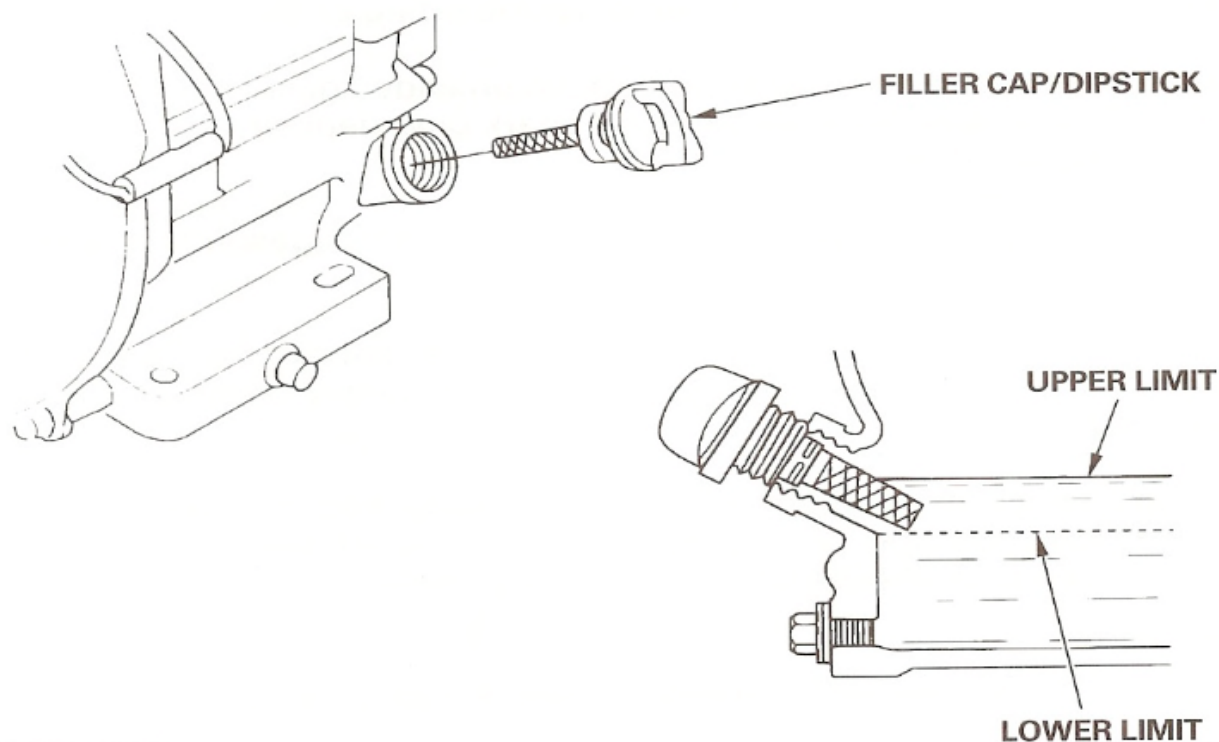
6. If the choke lever or choke rod (applicable types) has been moved to the **CLOSED** position to start the engine, gradually move it to the **OPEN** position as the engine warms up.



ENGINE OIL LEVEL CHECK

Check the engine oil level with the engine stopped and in a level position.

1. Remove the filler cap/dipstick and wipe it clean.
2. Insert and remove the dipstick without screwing it into the filler neck. Check the oil level shown on the dipstick.
3. If the oil level is low, fill to the edge of the oil filler hole with the recommended oil
4. Screw in the filler cap/dipstick securely.



NOTICE

Running the engine with a low oil level can cause engine damage.

The Oil Alert® system (applicable engine types) will automatically stop the engine before the oil level falls below safe limit. However, to avoid the inconvenience of an unexpected shutdown, always check the engine oil level before startup.

ENGINE OIL CHANGE

Drain the used oil while the engine is warm. Warm oil drains quickly and completely.

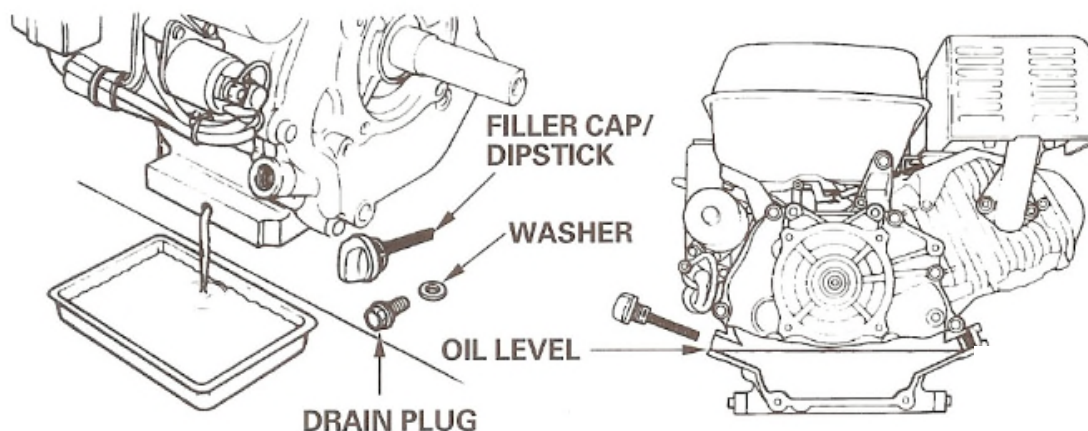
1. Place a suitable container below the engine to catch the used oil, then remove the filler cap/dipstick, drain plug, and washer.
2. Allow the used oil to drain completely, then reinstall the drain plug, washer, and tighten drain plug securely.
3. Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take used oil in a sealed container to your local recycling center or service station for reclamation. Do not throw it in the trash, pour it on the ground, or down a drain.
4. With the engine in a level position, fill to the outer edge of the oil filler hole with the recommended oil

NOTICE

Running the engine with a low oil level can cause engine damage.

The Oil Alert® system (applicable engine types) will automatically stop the engine before the oil level falls below the safe limit. However, to avoid the inconvenience of an unexpected shutdown, fill to the upper limit, and check the oil level regularly.

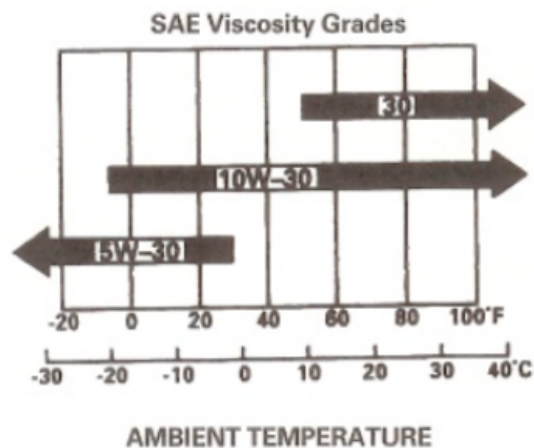
5. Screw in the filler cap/dipstick securely.



ENGINE OIL RECOMMENDATIONS

Oil is a major factor affecting performance and service life. Use 4-stroke automotive detergent oil.

SAE 10W-30 is recommended for general use. Other viscosities shown in the chart may be used when the average temperature in your area is within the recommended range.



The SAE oil viscosity and service classification are in the API label on the oil container.

QUICK REFERENCE INFORMATION

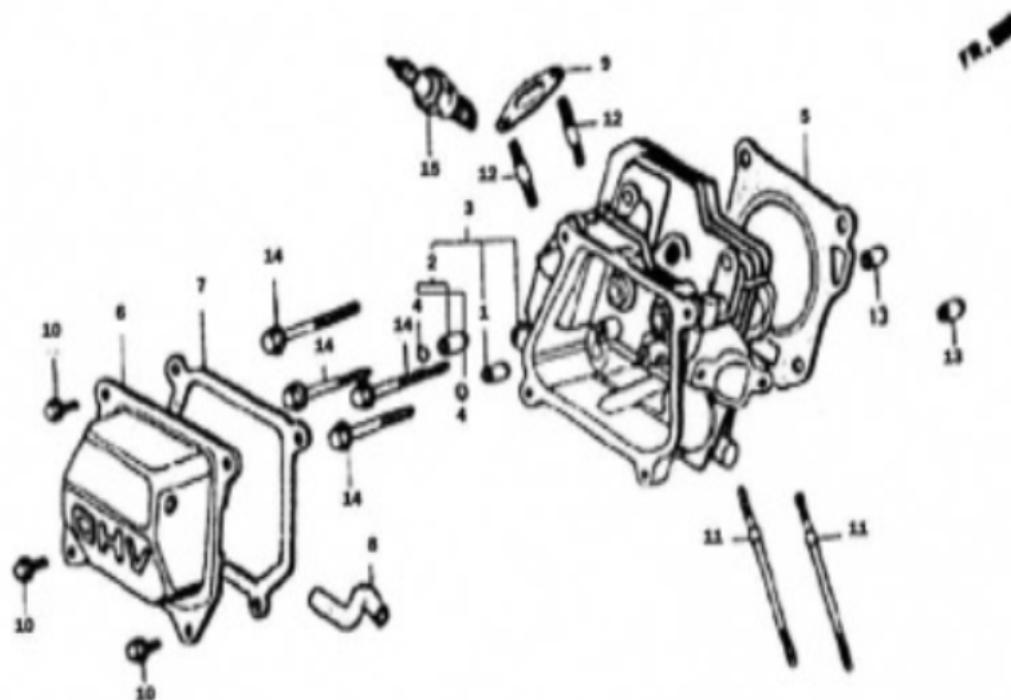
Fuel	Type	Unleaded gasoline with a pump octane rating of 86 or higher
Engine Oil	Type	SAE 10W-30, API SJ or SL, for general use
Spark Plug	Type	NGK: BPR6ES , DENSO: W20EPR-U
	Gap	0.028—0.031 in (0.70—0.80 mm)
Carburetor	Idle speed	1,400 ± 150 rpm
Maintenance	Before each use	Check engine oil level. Check transmission oil level if applicable. Check air filter.
	First 20 hours	Change engine oil. Change transmission oil if applicable.
	Subsequent	Refer to the maintenance schedule on _____



Parts Catalog

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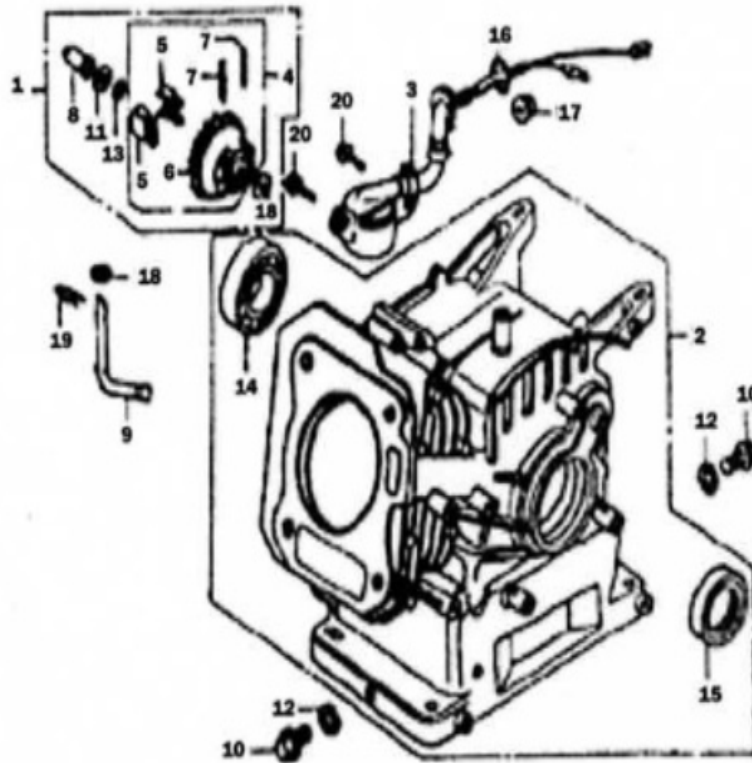
1. Cylinder Head



Part Name	Titan Part #	Part Name	Titan Part #
1. Intake Valve Guide Seal	TI 5.5-17	9. Exhaust Gasket	TI 5.5-21A
2. Exhaust Valve Guide Seal	TI 5.5-17	10. Flange Bolt M6 x 12	N/A
3. Complete Head Assembly	TI 5.5-17	11. Stud M6 x 94	TI 5.5-03C
4. Valve Guide Clip	TI 5.5-17	12. Stud M6 x 32	TI 5.5-21C
5. Cylinder Head Gasket	TI 5.5-17A	13. Dowel Pin 10 x 16	N/A
6. Valve Cover	TI 5.5-16B	14. Flange Bolt M8 x 60	TI 5.5-17B
7. Valve Cover Gasket	TI 5.5-16A	15. Spark Plug	TI 5.5-29
8. Breather Pipe	TI 5.5-28		

SOME PARTS SOLD AS ASSEMBLIES

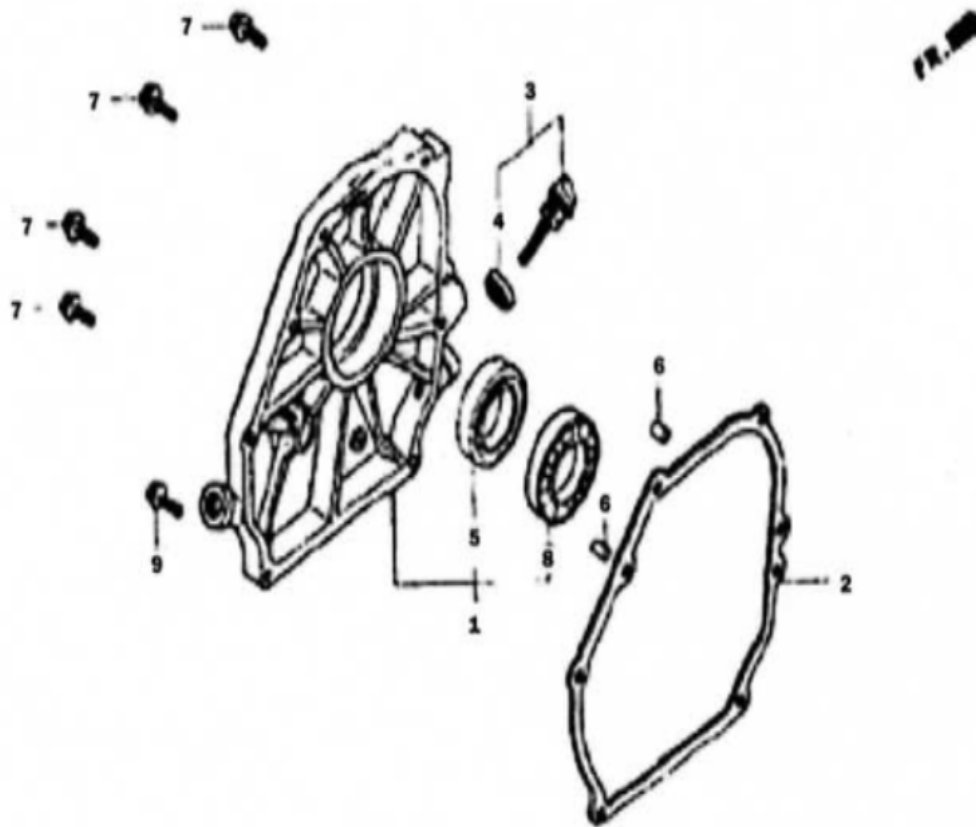
2. Crankcase Assembly



Part Name	Titan Part #	Part Name	Titan Part #
1. Complete Governor Gear Assy	TI 5.5-14	11. Thrust Washer 6mm	TI 5.5-14
2. Engine Block	TI 5.5-25	12. Drain Bolt Washer 10.2mm	TI 5.5-09A
3. Oil Sensor	TI 5.5-08	13. Governor Holder Kit	TI 5.5-14
4. Governor Gear Assy	TI 5.5-14	14. Crank Shaft Bearing	TI 5.5-30
5. Governor Weight	TI 5.5-14	15. Main Seal	TI 5.5-32
6. Slave Gear Governor	TI 5.5-14	16. O-Ring	TI 5.5-08
7. Governor Pin Weight	TI 5.5-14	17. Flange Nut 10mm	N/A
8. Governor Arm	TI 5.5-14	18. Washer 6mm	TI 5.5-15
9. Governor Arm	TI 5.5-08	19. Lock Pin 8mm	TI 5.5-15
10. Drain Bolt	TI 5.5-09A	20. Flange Bolt M6 x 12M	N/A

SOME PARTS SOLD AS ASSEMBLIES

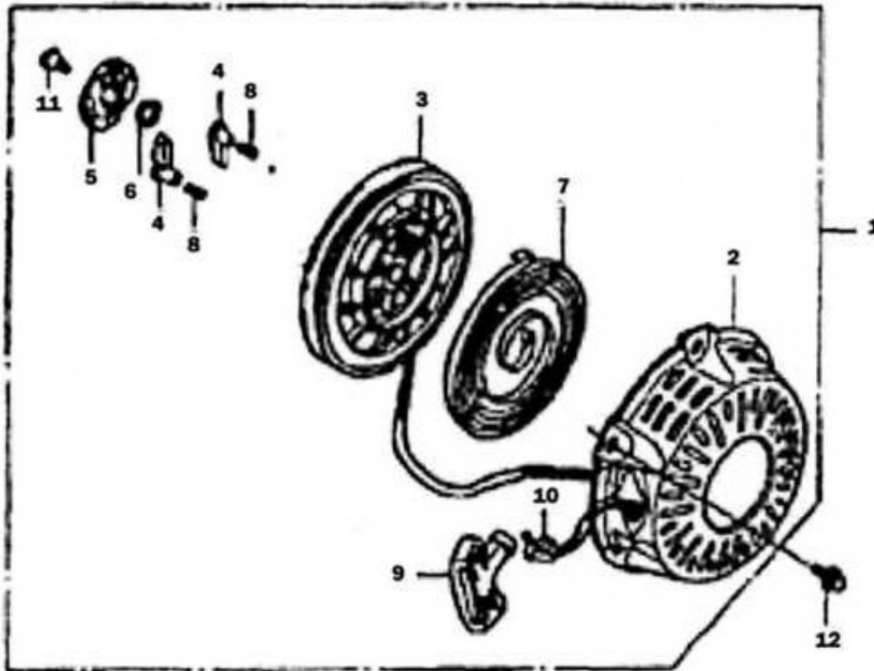
3. Crankcase Cover - PTO Side



Part Name	Titan Part #
1. Crank Case Cover	TI 5.5-12
2. Crank Case Cover Gasket	TI 5.5-13
3. Oil Fill Plug w/Dipstick	TI 5.5-09B
4. Oil Fill Plug Gasket	TI 5.5-09B
5. PTO Seal	TI 5.5-32
6. Dowel Pin 8 x 14	N/A
7. Flange Bolt M8 x 32	N/A
8. Bearing	TI 5.5-30
9. Oil Fill Plug	TI 5.5-09B

SOME PARTS SOLD AS ASSEMBLIES

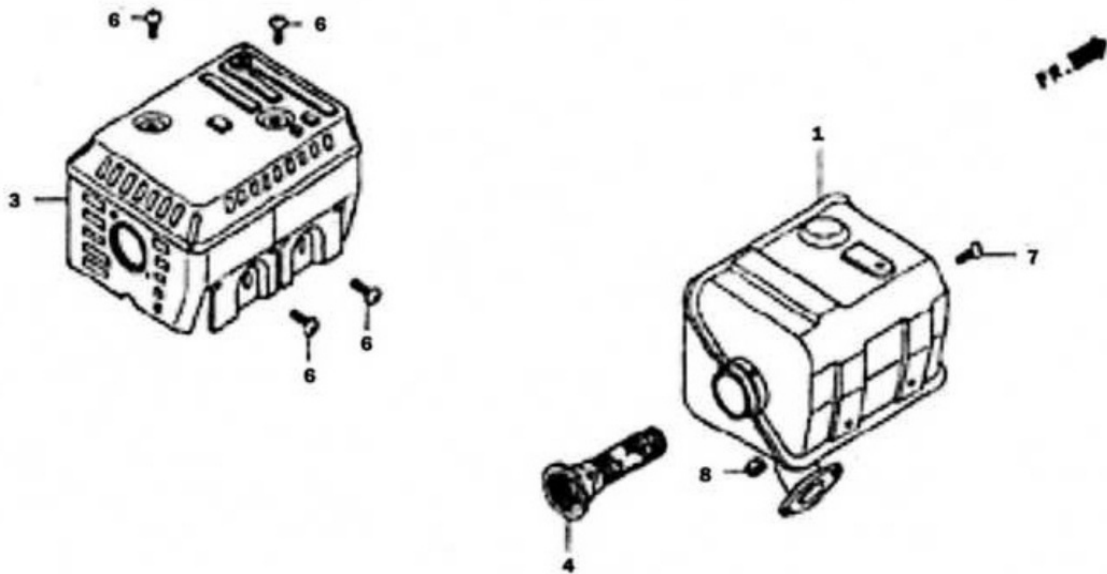
4. Recoil Starter



Part Name	Titan Part #
1. Recoil Starter Assy	TI 5.5-05
2. Recoil Starter Case Comp	TI 5.5-05
3. Recoil Starter Reel	TI 5.5-05
4. Starter Ratchet	TI 5.5-05
5. Ratchet Guide	TI 5.5-05
6. Friction Spring	TI 5.5-05
7. Recoil Starter Spring	TI 5.5-05
8. Return Spring	TI 5.5-05
9. Recoil Starter Knob	TI 5.5-05
10. Recoil Starter Rope	TI 5.5-05
11. Setting Screw	TI 5.5-05
12. Flange Bolt M6 x 6	TI 5.5-05

SOME PARTS SOLD AS ASSEMBLIES

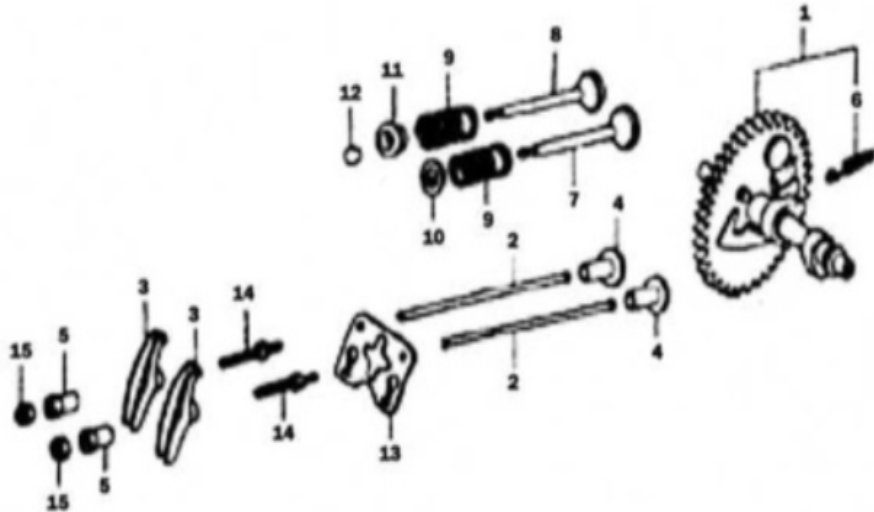
5. Muffler Component



<u>Part Name</u>	<u>Titan Part #</u>
1. Muffler Component	TI 5.5-23
3. Muffler Protector	TI 5.5-23
4. Spark Arrestor	TI 5.5-23
6. Tapping Screw M5 x 8	TI 5.5-23
7. Tapping Screw M4 x 6	TI 5.5-23
8. Hex Nut 8mm	TI 5.5-23

SOME PARTS SOLD AS ASSEMBLIES

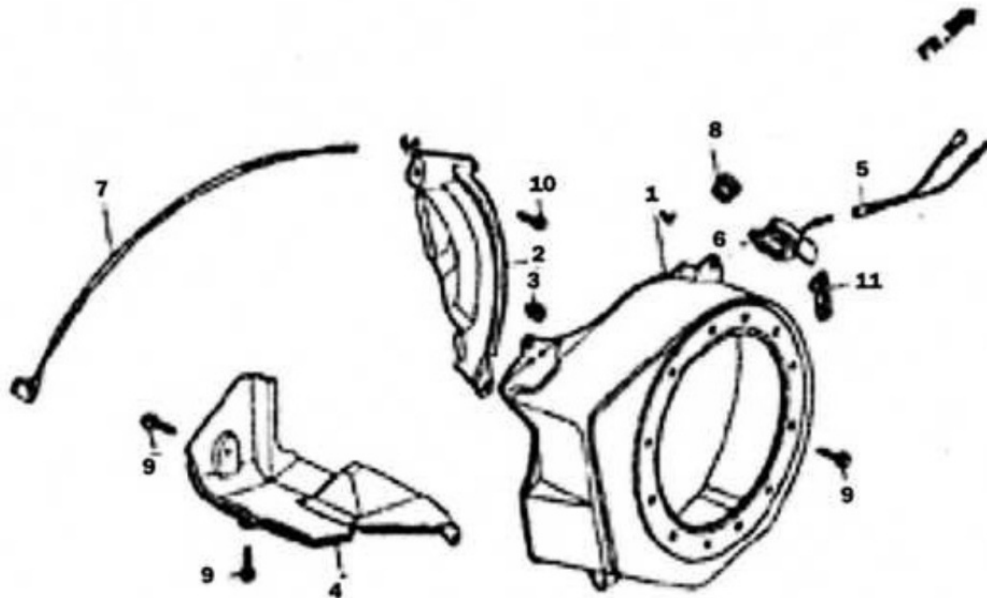
6. Camshaft



Part Name	Titan Part #
1. Cam Shaft Assembly	TI 5.5-20
2. Push Rod	TI 5.5-19
3. Valve Rocker Arms	TI 5.5-18A
4. Valve Lifter	TI 5.5-19
5. Rocker Pivot	TI 5.5-18A
6. Weight Return Spring	TI 5.5-20
7. Intake Valve	TI 5.5-16
8. Exhaust Valve	TI 5.5-16
9. Valve Spring	TI 5.5-16
10. Intake Keeper	TI 5.5-16
11. Exhaust Keeper	TI 5.5-16
12. Valve Rotator	TI 5.5-16
13. Push Rod Guide Plate	TI 5.5-21
14. Pivot Bolt M8 x 1	TI 5.5-18A
15. Pivot Adjusting Nut	TI 5.5-18A

SOME PARTS SOLD AS ASSEMBLIES

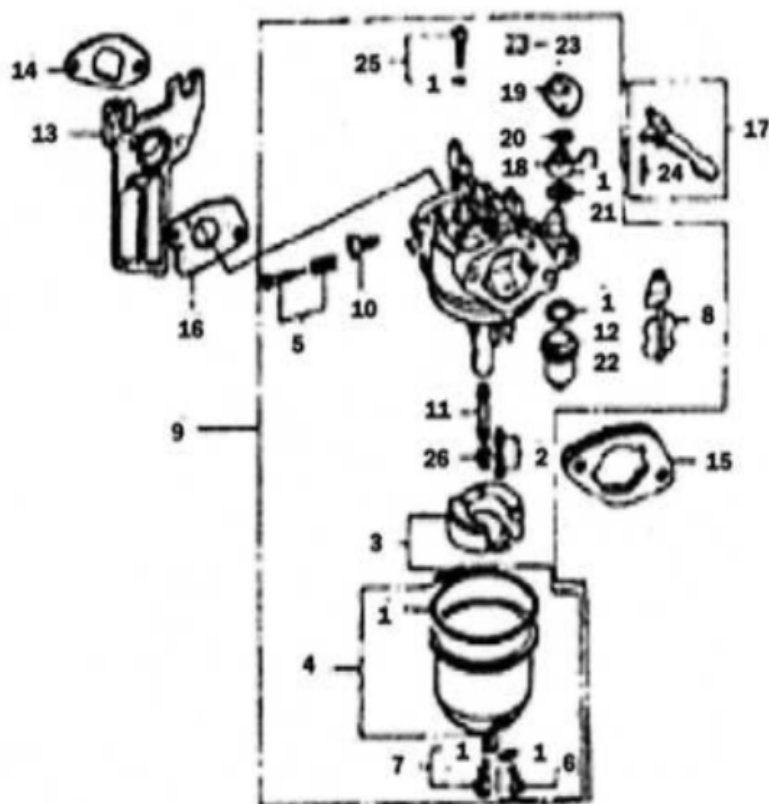
7. Fan Cover



Part Name	Titan Part #
1. Blower Housing	TI 5.5-06
2. Side Plate	N/A
3. Cord Clamp	N/A
4. Heat Shroud Component	N/A
5. On/Off Switch Wires	TI 5.5-07
6. On/Off Switch	TI 5.5-07
7. Ignition Ground Wire	TI 5.5-26
8. Replacement	N/A
9. Flange Bolt M6 x 12	N/A
10. Flange Bolt M 6 x 20	N/A
11. Wire Harness Tie	N/A

SOME PARTS SOLD AS ASSEMBLIES

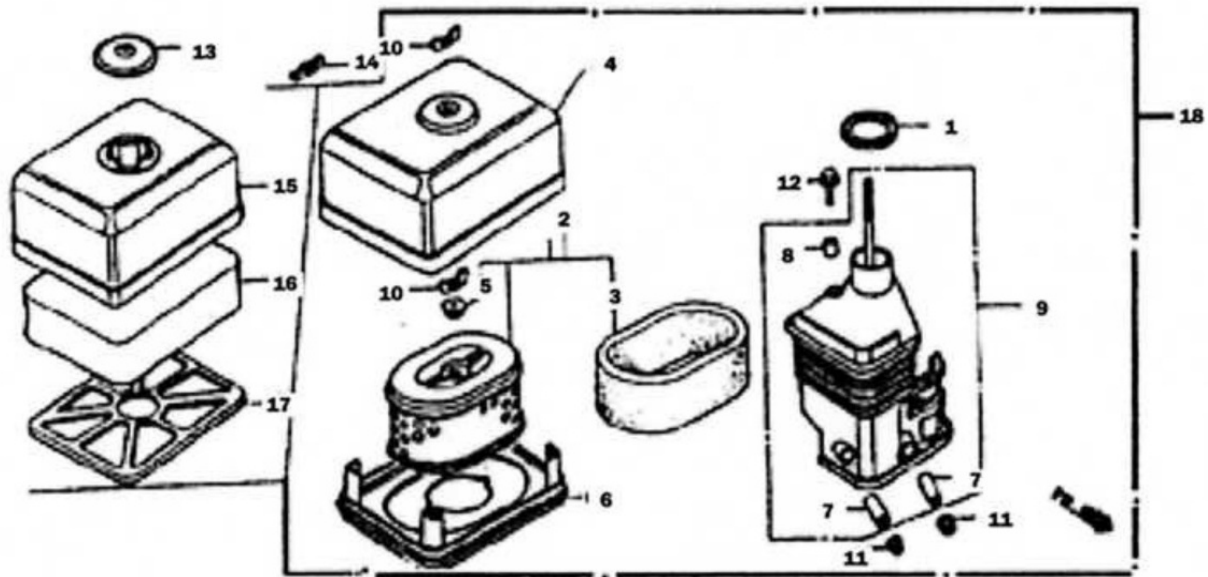
8. Carburetor



Part Name	Titan Part #	Part Name	Titan Part #
1. Gaskets	TI 5.5-03	14. Insulator Packing	TI 5.5-03A
2. Float Valve Set	TI 5.5-03	15. Carburetor Spacer Comp.	TI 5.5-03A
3. Float Set	TI 5.5-03	16. Carburetor Packing	TI 5.5-03A
4. Float Chamber Set	TI 5.5-03	17. Choke Lever	TI 5.5-03
5. Pilot Screw Set	TI 5.5-03	18. Cock Lever	TI 5.5-03
6. Drain Screw Set	TI 5.5-03	19. Lever Setting Plate	TI 5.5-03
7. Screw Set	TI 5.5-03	20. Choke Lever	TI 5.5-03
8. Choke Set	TI 5.5-03	21. Fuel Cock Packing	TI 5.5-03
9. Carburetor Assembly	TI 5.5-03	22. Fuel Strainer Cup	TI 5.5-03
10. Throttle Adjusting Screw	TI 5.5-03	23. span Screw M3 x 8	TI 5.5-03
11. Main Nozzle	TI 5.5-03	24. Spring Pin M2 x 12	TI 5.5-03
12. Fuel Strainer Cup Packing	TI 5.5-03	25. Main Jet #65, 68, 70	TI 5.5-03
13. Carburetor Insulator	TI 5.5-03D	26. Pilot Jet #38	TI 5.5-03

SOME PARTS SOLD AS ASSEMBLIES

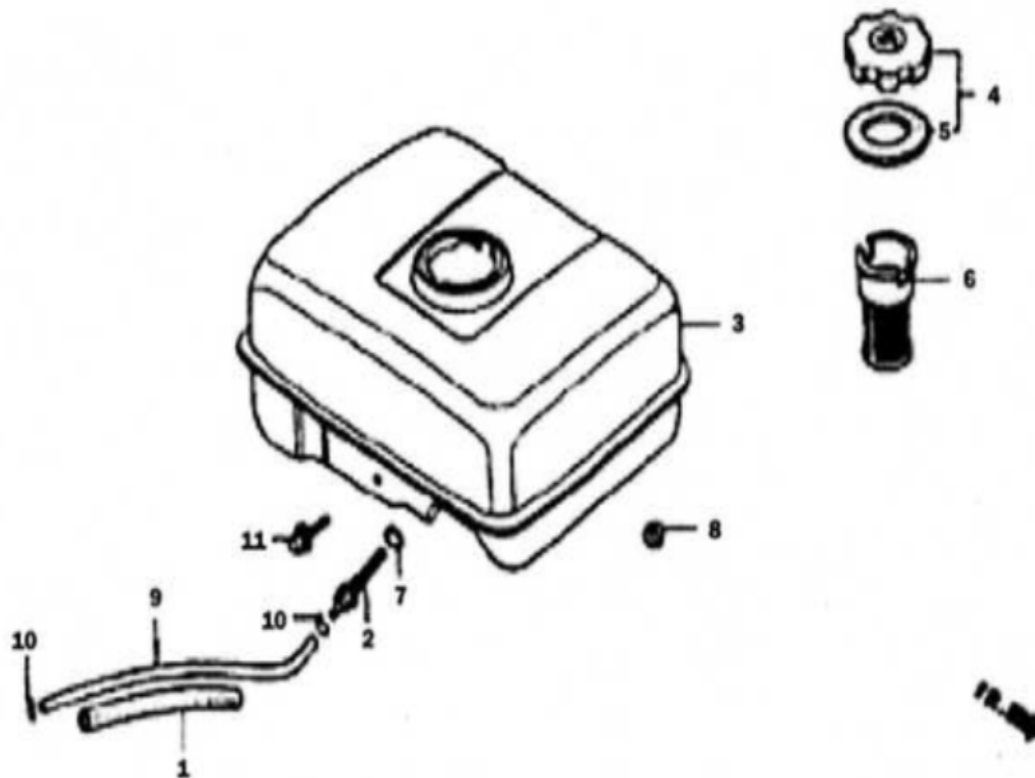
9. Air Cleaner



Part Name	Titan Part #	Part Name	Titan Part #
1. Gasket	TI 5.5-24	10. Wing Nut	TI 5.5-24
2. Air Filter	TI 5.5-23A	11. Flange Nut M6	TI 5.5-24
3. Pre Filter	TI 5.5-23A	12. Flange Nut M6 x 20	TI 5.5-24
4. Air Filter Cover	TI 5.5-24	13. Washers	TI 5.5-24
5. Grommet	TI 5.5-24	14. Wing Nut	TI 5.5-24
6. Air Filter Plate	TI 5.5-24	15. Air Filter Cover	TI 5.5-24
7. Air Filter Collar	TI 5.5-24	16. Air Filter	TI 5.5-23A
8. Air Filter Collar (b)	TI 5.5-24	17. Air Filter Plate	TI 5.5-24
9. Air Filter Elbow Component	TI 5.5-24	18. Air Filter Assembly	TI 5.5-24

SOME PARTS SOLD AS ASSEMBLIES

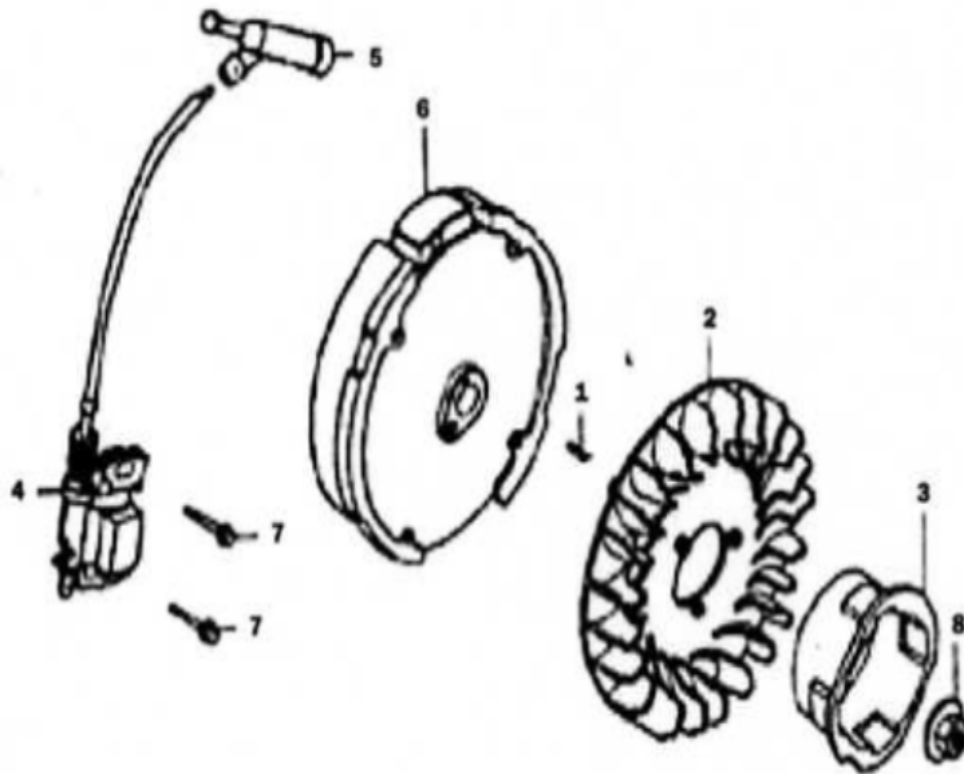
10. Fuel Tank



Part Name	Titan Part #
1. Protective Rubber Hose	TI 5.5-04
2. Fuel Filter	TI 5.5-02A
3. Fuel Tank	TI 5.5-02
4. Fuel Cap	Part# Pending on Size
5. Fuel Cap Gasket	Part# Pending on Size
6. Fuel Cap Screen	Part# Pending on Size
7. Fuel Filter O-Ring	TI 5.5-02B
8. Flange Nut M6	N/A
9. Fuel line	TI 5.5-04
10. Clamp	TI 5.5-04
11. Flange Bolt M6 x 25	N/A

SOME PARTS SOLD AS ASSEMBLIES

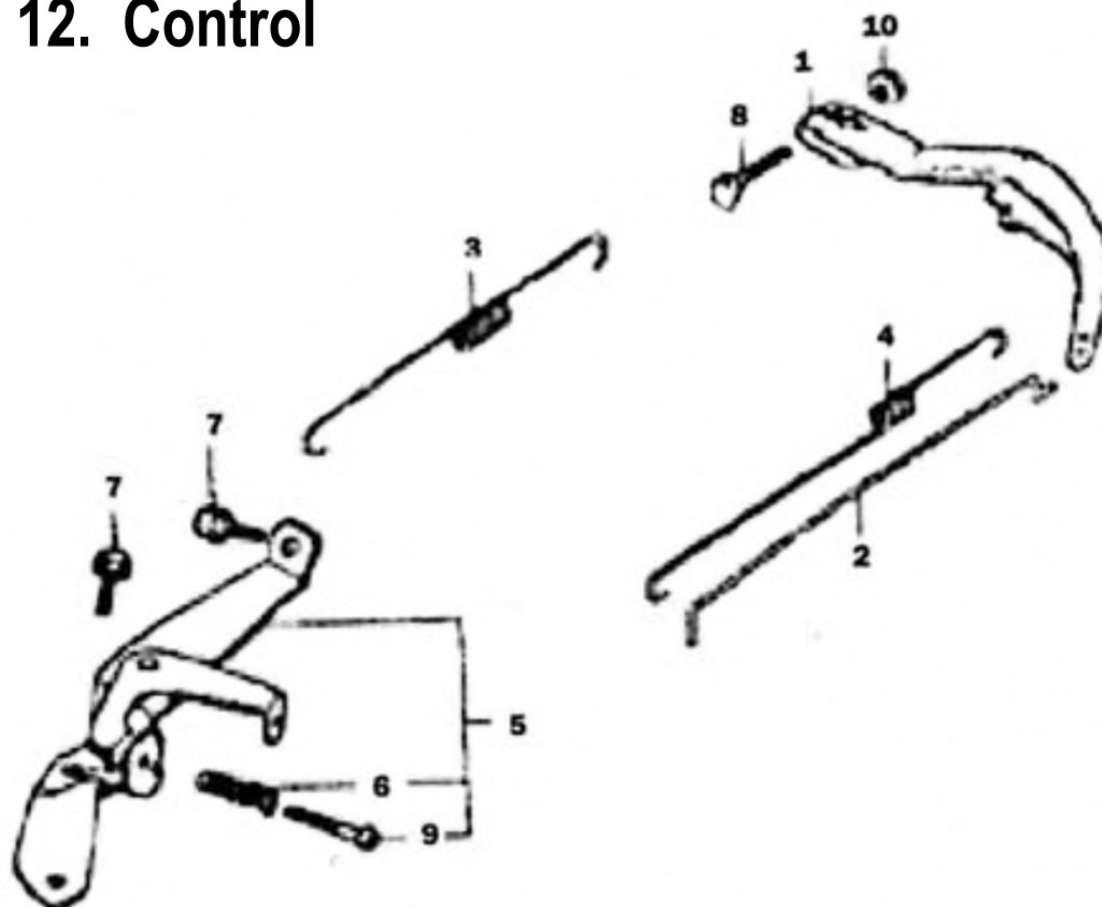
11. Flywheel



Part Name	Titan Part #
1. Woodruff Key	N/A
2. Cooling Fan	TI 5.5-27A
3. Recoil Cup	TI 5.5-05A
4. Ignition Coil	TI 5.5-26
5. Spark Plug Cap	TI 5.5-26
6. Flywheel	TI 5.5-27
7. Flange Bolt M6 x 25	N/A
8. Special Nut M14	N/A

SOME PARTS SOLD AS ASSEMBLIES

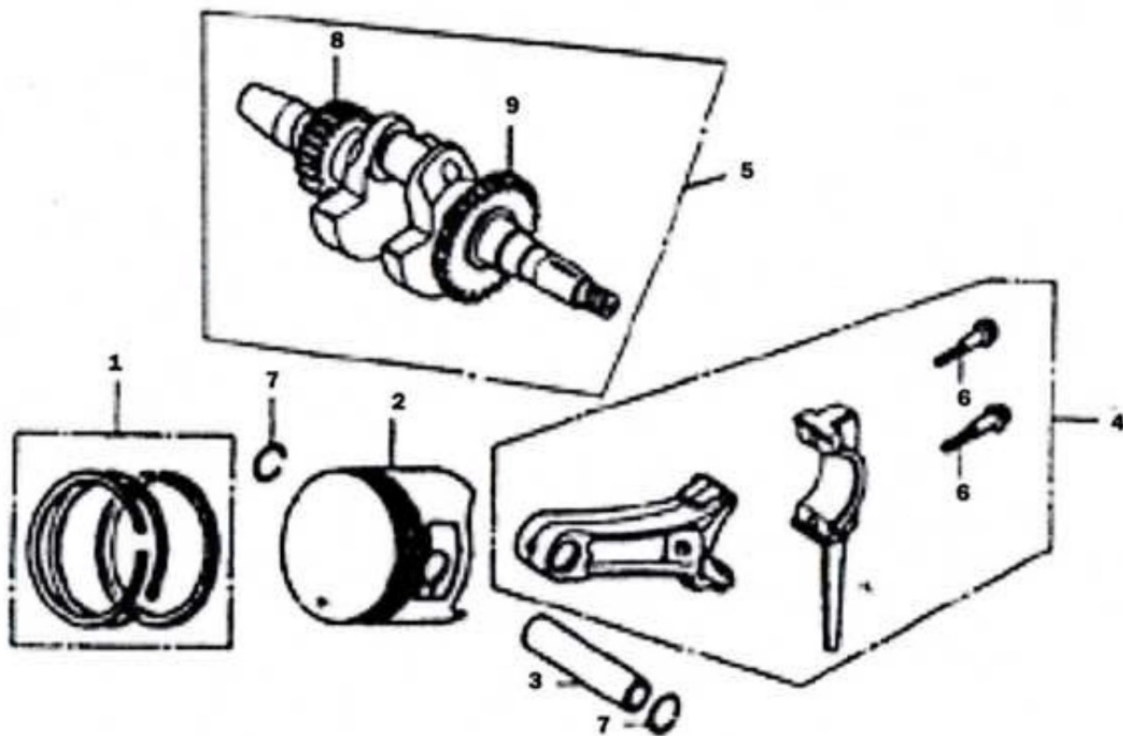
12. Control



<u>Part Name</u>	<u>Titan Part #</u>
1. Governor Arm	TI 5.5-15
2. Governor Rod	TI 5.5-15
3. Governor Spring	TI 5.5-15
4. Throttle Return Spring	TI 5.5-15
5. Control Assembly	TI 5.5-33
6. Spring	TI 5.5-33
7. Flange Bolt M6 x 12	N/A
8. Governor Arm Bolt	N/A
9. Control Bolt	TI 5.5-33
10. Flange Bolt M6	N/A

SOME PARTS SOLD AS ASSEMBLIES

13. Crankshaft - Piston



Part Name	Titan Part #
1. First, Second, Third Ring Set, Piston	TI 5.5-18
2. Piston	TI 5.5-18
3. Piston Pin	TI 5.5-18
4. Connecting Rod Assembly	TI 5.5-18
5. Crankshaft Comp	TI 5.5-10
6. Connecting Rod Bolt	TI 5.5-18
7. Piston Pin Clip 18mm	TI 5.5-18
8. Timing Master Gear	TI 5.5-10
9. Speed Regulating Drive Gear	TI 5.5-10

SOME PARTS SOLD AS ASSEMBLIES

Titan Industrial® Commercial Pressure Washer TPW 2200



Pump

PSI	Gallons Per Minute	Soap Pickup
2200 PSI @ 3500 RPM	2.5 Gallons/Minute @ 30# Inlet	Suction-Side

Engine

Engine Type	Titan
Horse Power	5.5 HP
RPM	3500 RPM
Fuel	Low Octane Gas
Fuel Capacity	2.3 Gallons
Ignition System	Pull Start
Hours of Operation @ Half Load	4.3 Hours
Dimensions (inches)	L-15" W-12 1/4" H-14"
Net Weight	76 LBS
Warranty	90 Days

**P.O. Box 791 • Travelers Rest, SC 29690 • Phone: (864) 834-7212 • Fax: (864) 834-5127
Service/Replacement Parts: (800) 845-4141 • www.titanindustrial.net**