

OPERATING AND SAFETY INSTRUCTION MANUAL

RAMMER BTR60H – BTR76H – BTR78Y



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Beton Trowel NV thank you for purchasing our Rammer.

We know you will be very satisfied with the superior quality and performance. Best manufacturing and precision machining process combined with detailed and strict quality control procedures of every component ensure that the Rammer will provide a long service life.

To ensure a trouble free and extended life of your machine please follow the operating, safety and service instructions laid out in this manual.

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1.1. SPECIFICATION

Table 1: Tamping Rammer Specification

Model	BTR60H	BTR76H	BTR78Y
Overall Dimension (mm)	680L x 650B x 1030H	720L x 412B x 1043H	720L x 412B x 1043H
Shoe Size (mm)	250 x 300	280 x 330	280 x 330
Blows/Minute	600~695	640~680	640~680
Impact Force (kg)	Up to 1,000~1,200	Up to 1,600~1,800	Up to 1,600~1,800
Jump Stroke (mm)	30 to 80	55 to 85	55 to 85
Travel speed(m/min)	12	12	12
Fuel Tank Capacity (L)	2.0	2.0	2.5
Clutch	Automatic Centrifugal	Automatic Centrifugal	Automatic Centrifugal
Weight (kg)	60	76	80

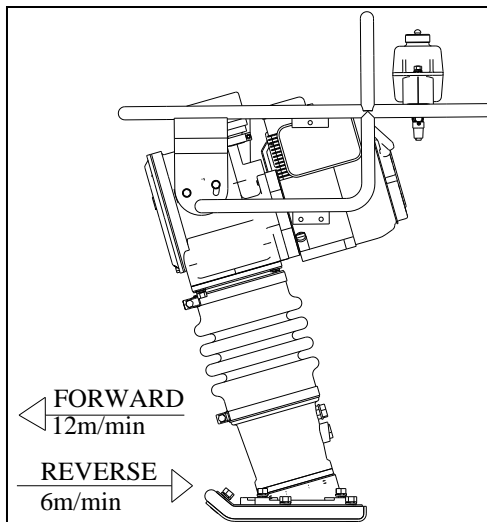
Table 2: Engine Specification

Model	Honda GX100	Honda GXR120	Yanmar L48AE
Type	Air-cooled, 4 stroke (OHV) single cylinder, gasoline engine	Air-cooled, 4 stroke (OHV) single cylinder, gasoline engine	Air-cooled, 4 stroke (OHV) single cylinder, diesel engine
Piston Displacement	98cm ³	121cm ³	121cm ³
Continuous Output	1.8kW/3600min ⁻¹ (2.4HP/3600rpm)	2.1kW/3600min ⁻¹ (2.8HP/3600rpm)	2.5kW/3600min ⁻¹ (3.4HP/3600rpm)
Maximum Output	2.1kW/3600min ⁻¹ (3.0HP/3600rpm)	2.6kW/3600min ⁻¹ (3.5HP/3600rpm)	3.1kW/3600min ⁻¹ (4.2HP/3600rpm)
Direction of Rotation	Counterclockwise, facing P.T.O. Shaft	Counterclockwise, facing P.T.O. Shaft	Counterclockwise, facing P.T.O. Shaft
Lubricant	Class SE, SF or higher grade, SAE #20, #30, #40 or multi-grade engine oil	Class SE, SF or higher grade, SAE #20, #30, #40 or multi-grade engine oil	Class SE, SF or higher grade, SAE #20, #30, #40 or multi-grade engine oil
Fuel	Automobile Gasoline (unleaded)	Automobile Gasoline (unleaded)	Automobile Diesel
Spark Plug	NGK B6ES (CHAMPION N4C)	NGK B6ES (CHAMPION N4C)	N/A
Starting System	Recoil Starter	Recoil Starter	Recoil Starter
Dry Weight	10.6kg	10.4kg	15.9kg
Dimension Length x Width x Height	283mm x 330mm x 334mm	283mm x 330mm x 334mm	283mm x 330mm x 334mm
Spark Plug Max Output	2.1kw(3.0PS)	2.6kw(3.5PS)	N/A


Table 3: Sound Power Level

Model	Power source	Measured sound power level (dB)	Guaranteed sound power level (dB)	Max. Sound Pressure level (dB)
BTR60H	Honda GX100	109.4	109	98.5
BTR76H	Honda GXR120	109.4	109	98.5
BTR78Y	Yanma L48AE	109.4	109	98.5

Note: - The test for sound power is conducted in conformance to prEN 500-4:2001
 - The test for vibration is conducted in conformance to prEN 500-4:2001 with the test complying with BS EN 1033:1996



The recommended speed of advance or reverse while using this machine is 12m/min and 6m/min respectively

 **CAUTION**

Do exercise caution while handling the machine as too fast in advancing or reversing the machine might result in injury to foot.

1.2. SAFETY INSTRUCTION

This section outlines the basic things to take note when BETON TROWEL tamping rammer is to be used for work. It is a powerful and productive machine, henceforth safety and care must be taken seriously while handling it or serious injury (which in some case might cause death), property damage, or both may result.

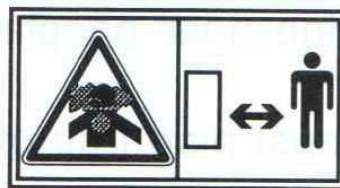


safety alert symbol identifies important safety message throughout this manual.

Please read carefully and follow instruction when symbol appear in any of the paragraph.

1.3. SAFETY SYMBOL FOUND ON MACHINE

Decal can be found on the machine itself. All decal indicate important safety instruction and reminder that the user must follow before handling the machine. But following the safety instruction of the decal is not sufficient, it is still necessary for the user to read through the user manual and go through proper training before handling the machine. Below are the safety symbols that one can find on the machine itself.



CAUTION

- READ OWNER'S SERVICE MANUAL BEFORE OPERATING OR SERVICING THIS MACHINE
- ALWAYS KEEP UNAUTHORIZED, INEXPERIENCED, UNTRAINED PEOPLE AWAY FROM THIS MACHINE
- MAKE SURE ALL SAFETY DEVICES ARE OPERATIONAL BEFORE THIS MACHINE IS STARTED. MAKE SURE ENGINE IS TURNED OFF AND SPARK PLUG WIRE DISCONNECTED BEFORE SERVICING THE MACHINE OR COMING IN CONTACT WITH ANY MOVING PART. IF EQUIPMENT IS POWERED BY AN ELECTRIC MOTOR, DISCONNECT ELECTRICAL PLUG.
- NEVER LEAVE MACHINE UNATTENDED WHEN OPERATING. ALWAYS STOP ENGINE AND ALLOW ENGINE TO COOL BEFORE ADDING FUEL OR OIL.



▲ CAUTION
▲ ATTENZIONE
▲ ATENÇÃO
▲ PRECAUCION

- Read operator's manual carefully before use.
- Lire le manuel attentivement avant utilisation.
- Bittelesen Sie vor Inbetriebnahme der Maschine die Bedienungsanleitung sorgfältig durch.
- Prima dell'uso leggere attentamente il manuale.
- Lee comatenção o manualde instruções antes de usar.
- Leer detenidamente el manual de instrucciones antes de usar la máquina.

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1.4. OPERATOR QUALIFICATIONS

Carefully read and understand this entire manual before operating machine. Inexperience in operating any machine or attachment can be hazardous and may cause injury or even death in some cases. Trial and error is not the way to become familiar with a piece of equipment and this can be dangerous, expensive, reduce equipment life and create machine downtime. Whenever possible, an experienced operator should be the best person to operate this machine. If new operator is to handle this machine, it is best that training and supervision is to be given by experienced user before letting new operator to operate it on his/her own.

1.5. GENERAL SAFETY



CAUTION:

Protection is required while handling equipment. Wear a hardhat, shatterproof glass; steel toed boots (non skid sole), earplug, gloves and other protective devices as required by job conditions. Avoid wearing jewelry or loose fitting clothing that may snag on controls or moving parts and cause serious injury. It is best that operator keep his/her hair short or tie and bun up if possible.

1.6. STARTING SAFETY

Start and operate only in well-ventilated environment as exhaust fumes contain poisonous gas e.g. carbon monoxide that can cause loss of consciousness, injury or death if excessive of it is inhaled.

1.7. OPERATION SAFETY

It is essential that the user take extra precaution in handling the machine because he is not only responsible for his own safety but also to the surrounding people and environment. Extra care need to be exercise in-order to ensure safe and quality work is achieve at ease. Here is some safety tips:



Safety Tips in Handling Machine

- Know how to stop the engine quickly and understand how to operate all of the controls. Never permit anyone to operate the machine without proper instruction.
- Do not operate under influence of alcohol and or on medication that cause drowsiness.
- Keep children and pets away from the machine when it is in operation.
- Stay away from rotating and moving parts while the engine is running.
- A spark arrester is provided as an optional part for this engine. It is illegal in some areas to operate the engine without a spark arrester. Check local law and regulations before operating the engine.
- Work according to the rules and regulation of the work area.
- Work behind a safety and comfortable distance from the Foot Plate.

1.8. SERVICING SAFETY

It is necessary to service and maintain your machine regularly so as to ensure safe usage of the machine. Regular service and maintenance can help to prolong machine lifespan so that you can reduce the machine cost in your project and profit from your investment. Below are points to take note while servicing the machine:



Preventing Fires

- Never add fuel to the fuel tank while the engine is running.
- Wipe away all fuel spills with a clean cloth. Keep gasoline, kerosene, matches and other explosive and inflammables away from the engine, because the temperature around the exhaust muffler is very high during operation.
- Operate the engine on a level surface as much as possible. The allowable inclination of the engine for continuous use is 20 degrees. There may be fuel spillage and/or lube oil pressure problems if the engine is tilted beyond that limit.
- Do not put the engine or the engine-mounted machinery indoors while the engine is still hot.



Preventing Burns

- Never touch the muffler, muffler cover or engine body while engine is running or hot.



Preventing Injury

- Use the correct tools and equipment
- Adopt correct posture while carrying heavy load or lifting the machine.
- Adopt correct position to service the machine.
- Dispose or contain the waste engine and rammer lube properly. Wipe clean the work area if lube is spill on the ground. Slippery work area is dangerous.

1.9. ENGINE

Please refer to Honda GX100 engine, Honda GXR120 engine, or Yanmar L48AE operation manual.

1.10. SHUTDOWN

EMERGENCY SHUTDOWN:

An 'ON' 'OFF' switch can be found on the engine. To stop the machine immediately, toggle the switch from 'ON' position to 'OFF' position.

NORMAL SHUTDOWN:

Move throttle quickly from OPERATION position to IDLE position and run engine for 3 to 5 minute at low speed to allow it to cool. After engine cool, the user can exercise 2 ways to off the engine and they are

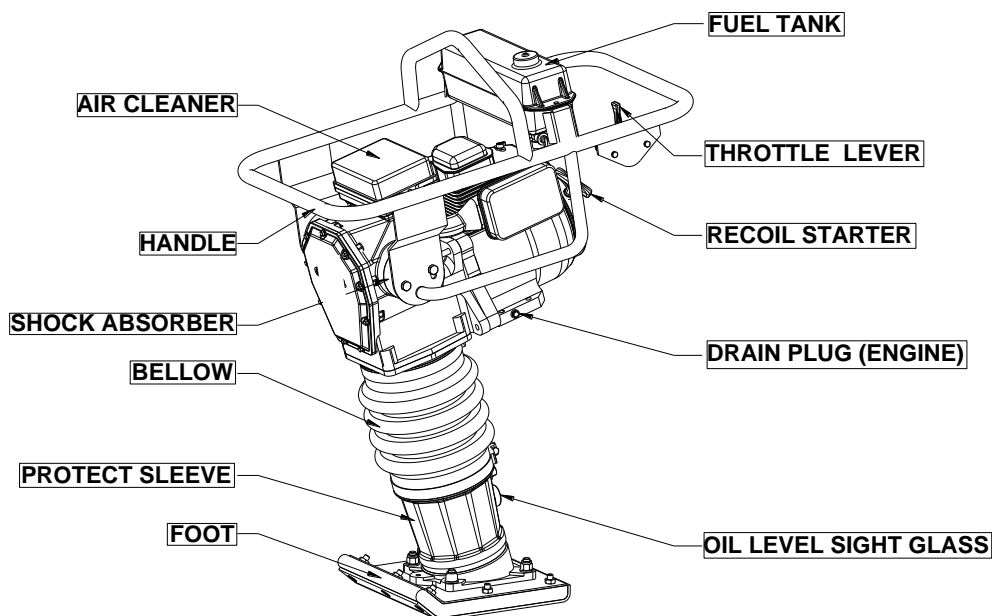
- a. Toggle the switch of the engine to 'OFF' position
- b. Close the fuel cock.

2.0. RAMMER OPERATING PROCEDURE

It is necessary to familiar with the procedure of operating BETON TROWEL tamping rammer before handling the machine. The procedure is as follows:

- i. Pre-Check
- ii. Starting
- iii. Operating
- iv. Stopping
- v.

Below is a diagram that gives a general introduction to the machine parts



The diagram shows all the essential parts that the user must be familiar with before operating the rammer. Identify the controls of the rammer. The throttle lever, engine lubrication oil, oil fill plug, oil lever sight glass and recoil starter handle.

2.1. PRE-CHECK

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Before starting up the rammer, it is necessary to do a pre-check of the machine.

Below is a list of items place in order to check before starting:


i. Rammer Gearbox and Spring Cylinder


Gearbox and spring cylinder uses oil bath lubrication system. Check the oil level through oil level sight gauge at the rear of the foot. If oil is not visible, add SAE CF class or higher 10W40

ii. Engine and Fuel Tank

Use only automobile gasoline fuel. For first time usage of the machine, ensure that the fuel pipeline is filled with gasoline and it passes through the carburetor to have smooth start of the engine. Ensure cap is close tight after filling fuel tank with gasoline.

Check the engine oil regularly before starting the engine. Move the engine to a vertical position and check the oil level from the oil level gauge (engine). Make sure that the oil level is about 800cc. Use only SE, SF (API classification or higher grade oil) for engine oil. Please refer to section 1.6 Table 2.

 **CAUTION:**

-  • Do not smoke or allow flames or sparks in the area where engine is refueled or where gasoline is stored.
- Do not overfill the fuel tank. If any fuel is spilled, make sure that the area is dry before starting the engine
- The engine may be damaged if operated with insufficient lube oil. It is also dangerous to supply too much lube oil to the engine because a sudden increase in engine rpm could be caused by its combustion and the oil temperature will become dangerously high. Always check the lube oil level before starting the engine and refill, if necessary

iii. Fasteners

Check all nuts, bolts and fasteners for tightness. Retighten if necessary. Operating such high impact machine with loose joint can cause oil leakage, excessive wear, damage part(s) and hence shorten life span of the machine.

iv. Cleanliness


Check for leakage of lube oil from the engine and protective sleeve. Wipe clean and start running for a few minute. If problem persist refer to troubleshooting section. Clean the recoil starter and foot so that it is dirt free. Wipe the entire unit clean before operating.

v. Missing part

Check for missing part(s) and replace it. If part(s) are excessive worn replace it with a new one. Replace any missing or damage Safety/Operation decals.

2.2. STARTING

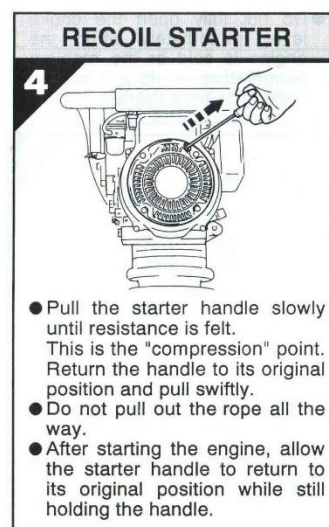
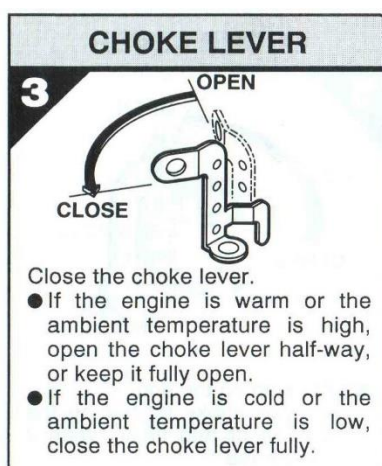
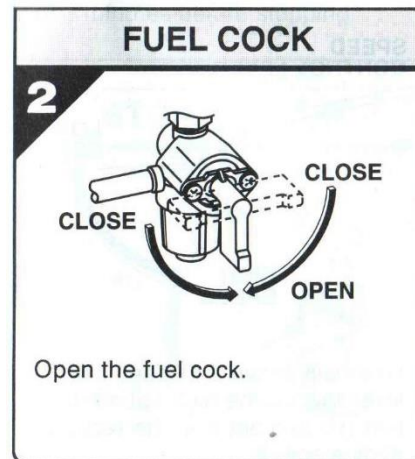
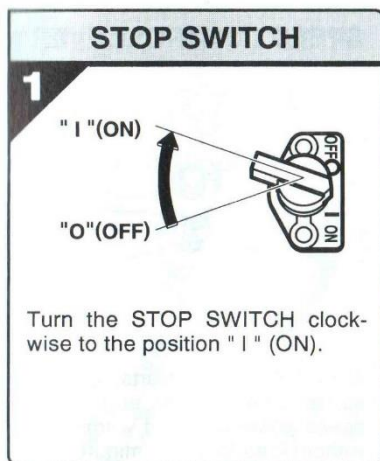
Starting the rammer require a few simple step. To start the rammer, read the below procedure;

 **CAUTION**

- Engine parts are hot after operation. If need to restart the machine immediately after stopping, do wear glove to turn on the switch to prevent burn.

- a. Lower the fuel cock lever to let fuel flow. To start, switch must be in the “ON” position. (Diagram 1 and Diagram 2)
- b. With carburetor choke lever closed, set throttle lever (Speed Control Lever) to IDEL position. In cold weather, choke should be closed fully, while in summer season or if engine is warm, make it half open or full open. In case the engine failed to start, leaving the choke lever fully closed causes excessive fuel intake. Therefore, it should be returned to the half open position. (Diagram 3)
- c. Grip the recoil starter and pull it a little to feel a slight resistance. Then pull it powerfully from there. If engine fail to start, repeat the action. Once engine start, don not release the handle immediately as this will cause the handle to have a snap back action and damage the starter coil case. Release the handle slowly to the starter case. (Diagram 4)

- d. If the engine has started, while listening to explosion sounds, return the choke lever slowly to full open position. Be sure to perform a warm up run for a period of 3 to 5 minutes at low speed, while paying attention to gas leakage or abnormal sound.
- e. If it is difficult to start the engine by repeatedly pulling the starter rope, remove ignition plug and check the sparking performance. If the plug is wet due excessive fuel intake or soiled, replace the plug or clean sufficiently to its internals. With the ignition plug removed, pull the recoil starter handle 2 to 3 times to discharge excessive blended gas.

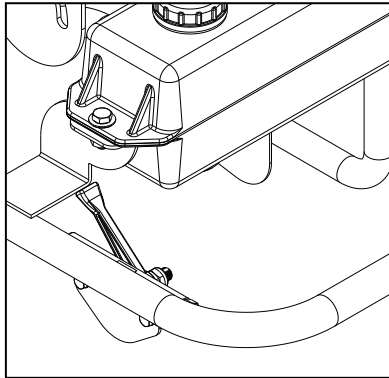


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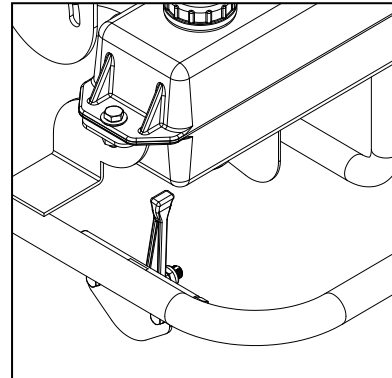
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2.3. OPERATING



Throttle lever in idle position




Throttle lever in operating position



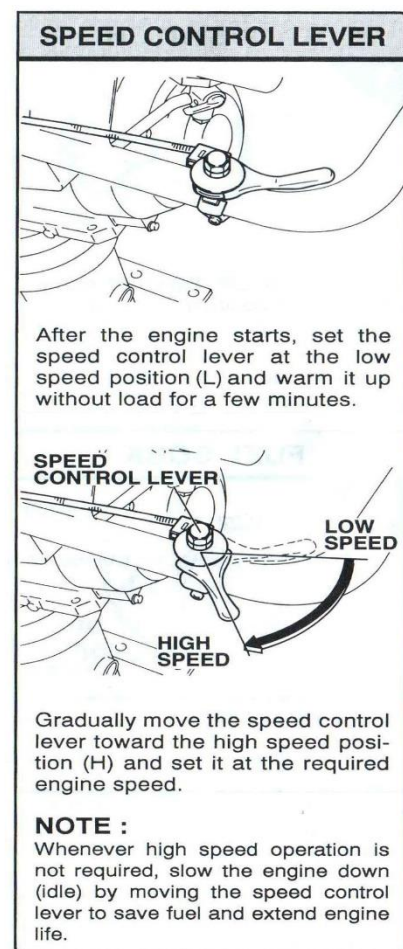
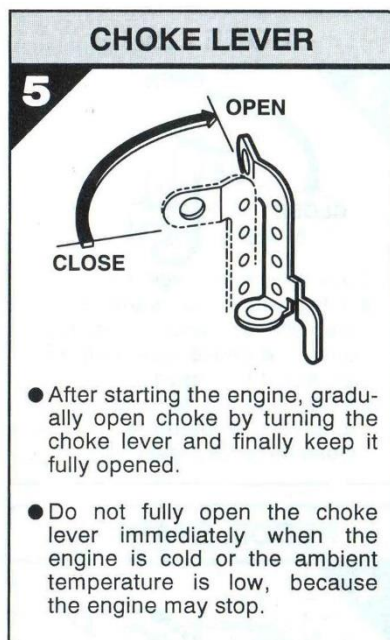
Safety tips

- Do wear a pair of gloves while operating machine to reduce fatigue cause by vibration

Follow the below steps while operating the rammer and refer to Diagram 5.

- Move the throttle lever quickly from IDLE to Operation position to start tamping action.  **DO NOT** move the throttle lever **slowly** as this may **cause damage** to the clutch or spring and unstable performance of the rammer may result.
- After starting the tamping action, adjust the jumping stroke motion to suit particular soil condition by lightly controlling the throttle lever. When the engine speed fall between the set values shown on the engine, your work can be carried out at the best efficiency and effectiveness.
- The tamping rammer is design to tamp the ground at 600 to 700 times per minute for tamping rammer at an engine speed of 3250rpm~3350rpm. Increasing the speed above the recommended rpm will not increase the rammer effectiveness. Impact will actually decrease because a resonance is create rather than increasing the tamping effect, thus damage to the unit can result.

- d. Under cold weather, the oil in the machine being viscous, resistance at reciprocating part is greater causing tamping rammer to perform somewhat irregular movement. Therefore, it is recommended to perform a warm up run by moving the throttle lever from OPERATION to IDLE position quickly and continuously for several times before entering the work.
- e. Soil contacting surface of the foot is lined with heat-treated metal sheet for extra strength. However, for compacting cobblestone, use the filling-up soil for example so that the foot hits the soil uniformly.
- f. The machine is design to travel forward while tamping. To increase the travel speed, a slight back pull to the handle is necessary so that the rear of the foot shall contact the soil first, thus giving the extra forward trust to the rammer.
- g. To stop tamping action, quickly move the throttle lever from OPERATION to IDLE position. Do not move the lever slowly as irregular action and damage may result.



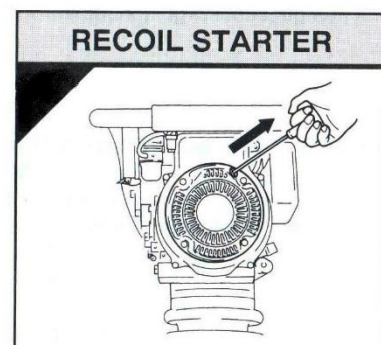
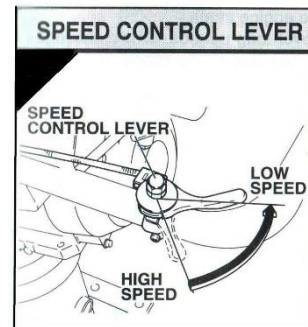
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2.4. STOPPING

- Let the engine run for three minute at idle speed to allow proper cool down of the engine. This will prevent improper cylinder lubrication, which can be caused by overheated engine.
- After the engine is cooled down, toggle the switch to OFF position or close the Fuel Cock.
- Pull the starter handle slowly and return the handle to its original position when resistance is felt. This action is necessary to prevent outside moist air from intruding into the carburetor chamber.



3.0. SERVICE TRANSPORT & STORAGE

 CAUTION:

Flammable liquid is used for this machine. No naked flames are allowed within 6m radius of machine. Fire or explosion could result from flame or sparks or if fuel is spilled on a hot engine.

Moving parts is hazardous. Shut down the engine before performing any service or maintenance to the machine. Contact with moving parts can cause unwanted and serious injury.

High temperature of machine after operation. Allow machine and engine to cool before performing service or maintenance function. Contact with hot component can cause serious burns.

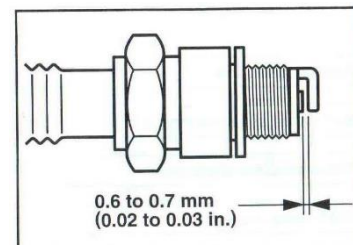
It is essential to do regular maintenance to the machine for safe usage and prolong its life span of the machine. Even the world best machine will fail or shorten life span if it is not serviced and maintained regularly and properly. Below is the breakdown of the service and maintenance procedure:

a. Daily

- Remove oil and dirt thoroughly from the engine and control area.
- Clean or replace cleaner as necessary
- Check and retighten all fasteners as necessary.
- Check protective sleeve, bellow and engine for oil leaks. Repair as needed.
- Remove element from pre-cleaner at the top of crankcase and clean it by air.

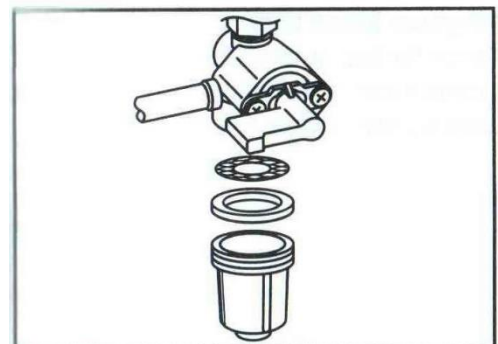
b. Weekly (every 25 hours)

- Clean air cleaner cover.
- Clean off carbon deposits on the spark plug electrode using a plug cleaner or wire brush
- Adjust spark plug gap to 0.02-0.3 inch (0.6-0.7mm).



c. Monthly (every 200 hours)

- Remove fuel filter cap and inspect for rough particle. Clean fuel tank and fuel filter.
- Inspect fuel strainer for water and dirt. Close the fuel cock and remove strainer cup to remove water and dirt. Clean it with gasoline and reinstall securely to prevent leakage

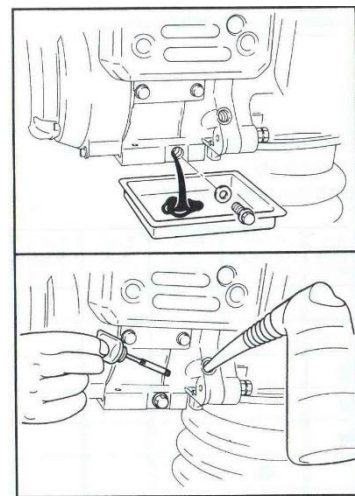


d. Replacement of lubricant (BODY)

- Remove the drain plug at the rear of the rammer foot and drain dirty oil. Refill with clean oil to the middle of the sight glass. Oil bath contains approx 800cc for BTR76H/BTR78Y. Oil should be midway in sight glass.
- The interval oil change is 50hours after first operation and subsequent 200hours after each and every operation of rammer.

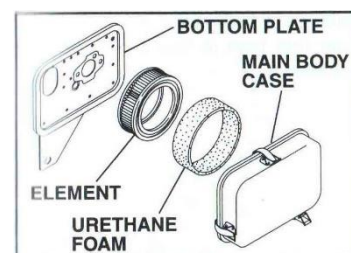
e. Replacement of lubricant (ENGINE)

- For quick discharging, remove the drain plug while engine is still warm. It is advisable to take off the oil gauge. Replace the drain plug and refill lubricant thru engine crankcase.
- The interval of oil change is 20hours after first operation and subsequent 50hours after each and every operation of engine.



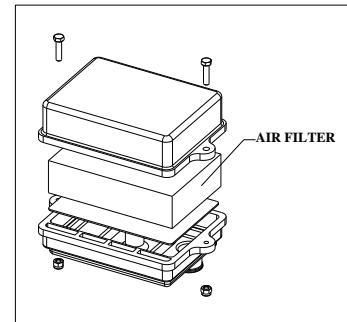
f. Cleaning Robin Engine Air Cleaner

- Clean the urethane foam using gasoline.
- Wash the element in kerosene or diesel fuel. Saturate it in a mixture of 3 parts of kerosene or diesel fuel and 1 part of engine oil. Shake off excessive oil and reinstall
- If an oil bath or special air cleaner with pre-cleaner is used, clean the oil pan, fill oil to the required level or clean the dust pan



g. Cleaning the Rammer Air Cleaner Element

- Perform cleaning of air cleaner as needed.
- Remove air filter element from the top of crankcase
- Wash the element in detergent solution.
- Shake out excess moisture and dry the element.



h. Cleaning the Oil Filter

- Drain oil filter every 100 hours of operation. Replace it after every 1000 hours of operation.

i. Fuel Pipe & Oil Pipe

- Check fuel line regularly for damage. Ensure clamp is tightly fit and hold to the attached parts.
- Replace fuel line every two years to maintain original performance.

Below is added on table showing the necessary service of the product

Table 4: Service Chart (Petrol Rammer)

Duration Service area	Daily before starting	After First 5 hours	Every week or 25 hours	Every month or 100 hours	Every 3 months or 300 hours	Every Year
Check Fuel level	✓					
Check Engine oil level	✓					
Check air filter indicator. Replace as needed	✓					
Check ramming system oil level in sightglass	✓					
Check fuel line and fittings for cracks or leaks. Replace as needed	●					
Tighten ramming shoe hardware		●	●			
Check engine cylinder screws		●	●			
Check external hardware		✓	✓			
Clean engine cooling fins			✓			
Clean and check spark plug gap			●			
Replace spark plug				●		
Clean recoil starter					✓	
Change ramming system oil*					●	
Clean engine muffler and exhaust port					●	
Inspect lifting cable for wear, damage, or abuse					●	
Inspect fuel filter						✓

* Perform initially after first 50 hours of operation.

Note: If engine performance is poor, check, clean, and replace air filter elements as needed.

Table 5: Service Chart (Diesel Rammer)

Duration Service area	Daily before starting	After First 5 hours	Every week or 25 hours	Every month or 100 hours	Every 3 months or 300 hours	Every Year
Check Fuel level	✓					
Check Engine oil level	✓					
Check air filter indicator. Replace as needed	✓					
Check ramming system oil level in sightglass	✓					
Check fuel line and fittings for cracks or leaks. Replace as needed	✓					
Check bellows for damage and fit.	✓					
Tighten ramming shoe hardware		●	●			
Check external hardware		✓	✓			
Clean engine cooling fins			✓			
Change engine oil*				●		
Change engine oil filter*					●	
Clean recoil starter					●	
Change ramming system oil*					●	
Inspect lifting cable for wear, damage, or abuse					●	
Check and adjust valve clearance**			●			●
Replace engine oil filter						●
Check fuel filter, clean or replace						●

* Perform initially after first 50 hours of operation.

Note: If engine performance is poor, check, clean, and replace air filter elements as needed.

** Perform initially after first 25 hours of operations.

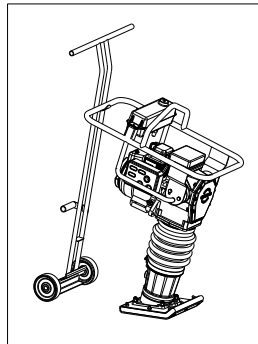
3.1. TRANSPORTATION

Transport rammer in upright position. If machine must be laid down for transportation, gasoline fuel must be drained out of the fuel tank and machine shall be lay with the side where muffler is placed.



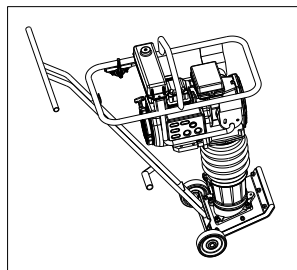
The fuel filter is installed at the bottom of fuel tank. Should the rammer be laid down, dirt from the fuel filter may invade into the injection nozzle and fuel pump, thus causing damage.

A transport dolly is an additional accessory that is use to transport the rammer for a short distance.



Hook the handle to the dolly's top hook.

Push the dolly forward and place the rammer's footplate onto the dolly base plate.



3.2. STORAGE

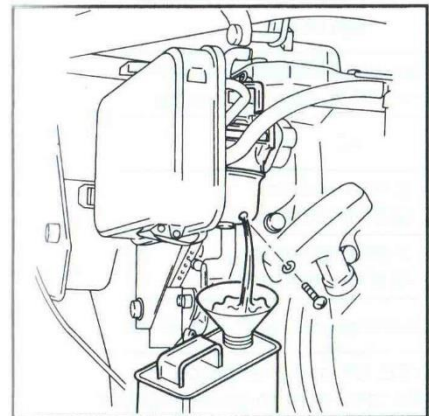
Storage of rammer is distinct into two types, the short term and the long term. The method of storage is described below:

Short Term (2 to 3 days)

Rammer should be store in such position as it is placed on a level ground. After engine and machine have been cooled down, be sure to secure the rammer as and when necessary to avoid accidental knocking down. If rammer has to be laid down inevitably, tighten fuel tank cap and engine oil plug securely and wait until engine and machine are cooled down. After lying down, make sure that there is no leak of fuel or oil. (If fuel leak, drain the tank)

Long term (above 3 days)

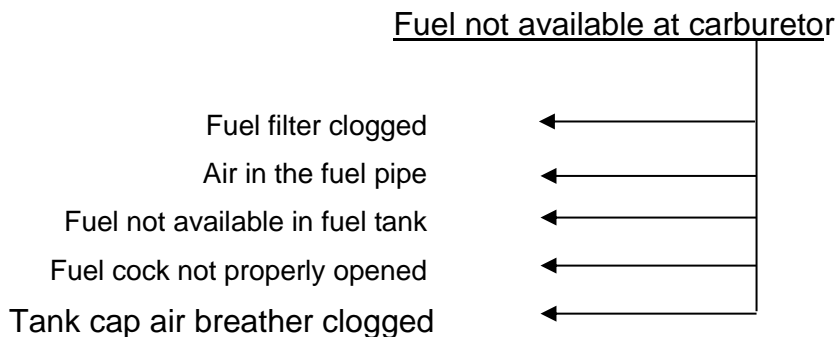
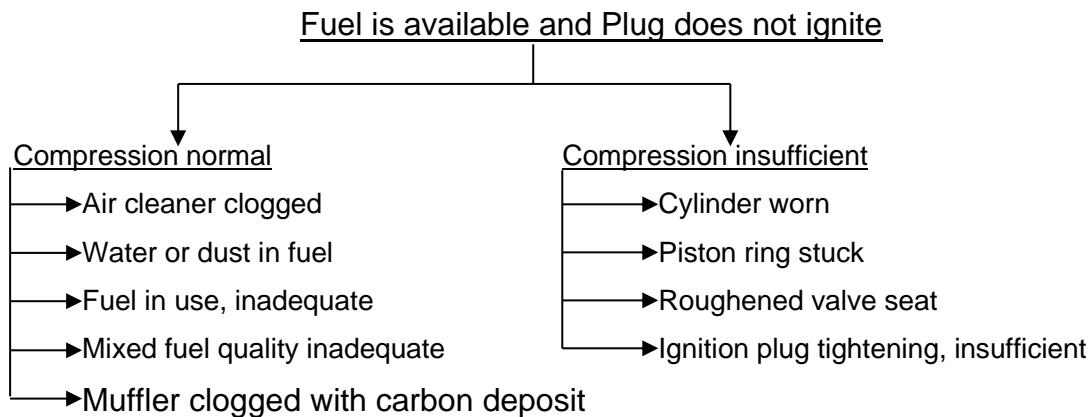
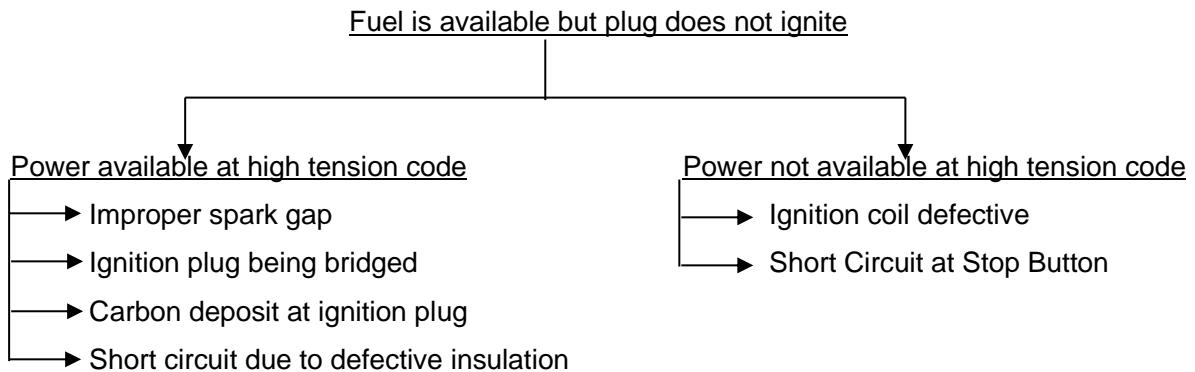
Long term storage: Drain fuel from tank, fuel line and carburetor. Remove spark plug and pour a few drops of motor oil into cylinder. Crank engine 3 or 4 times so that oil reaches all internal parts. Clean exterior with a cloth soaked in clean oil. Store unit cover with plastic sheet in a moisture free and dust free location out of direct sunlight.



4.0. TROUBLESHOOTING

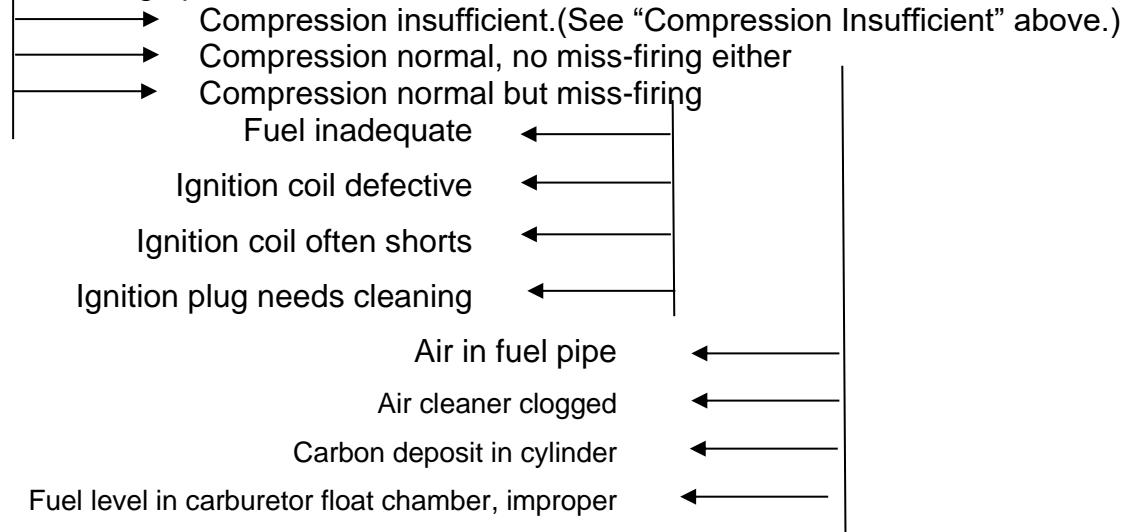
a. Engine

i. Difficult to start

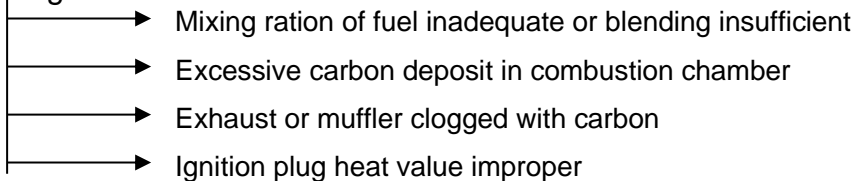


ii. Operation not satisfactory

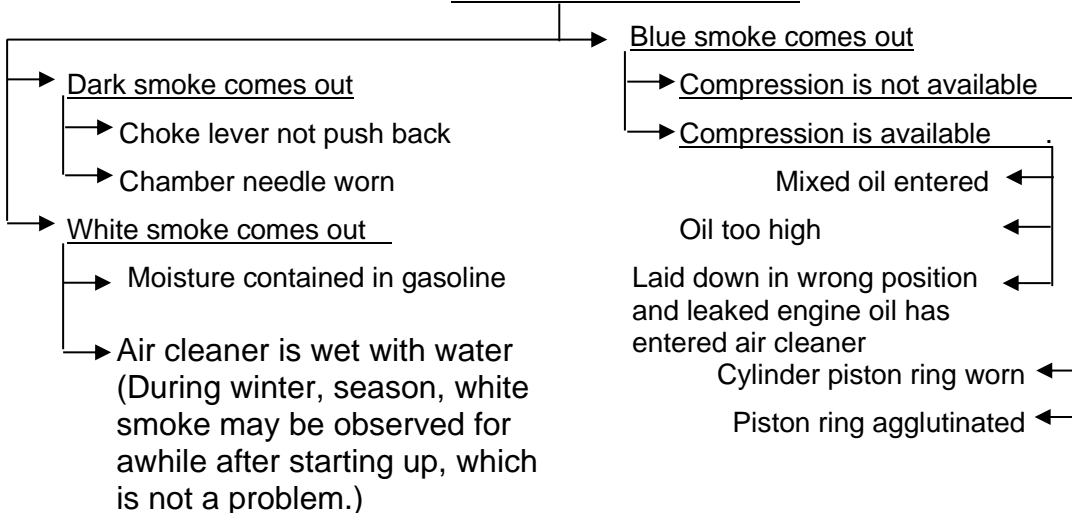
Not enough power available



Engine overheats



Smoke comes out of muffler



Rotational speed fluctuates

- Governor adjustment improper
- Governor spring defective
- Fuel flow defective
- Air taken in through suction line

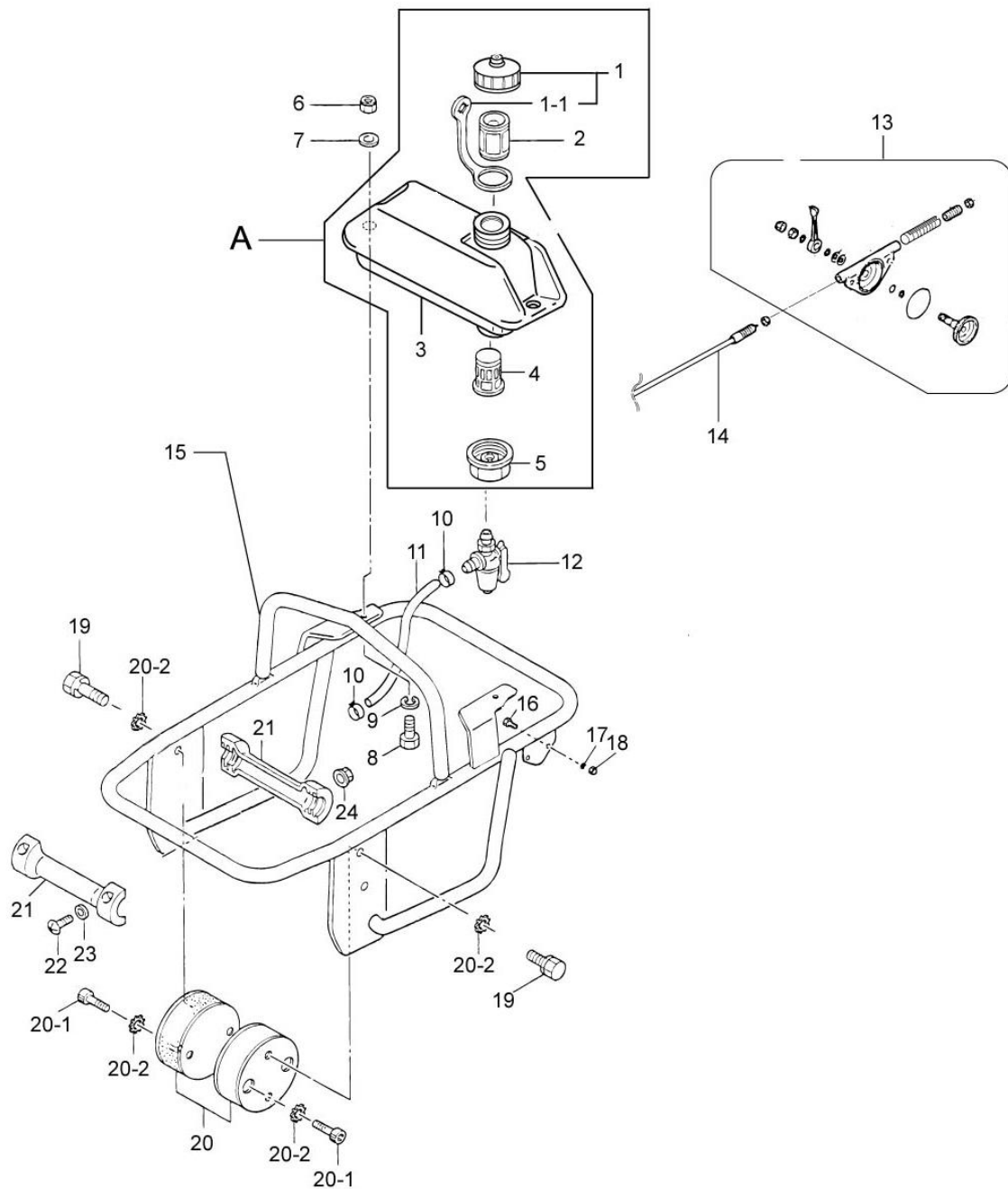
- iii. Recoil starter does not operate smoothly
- Dust in rotating part
 - Spiral spring failure

b. Rammer itself

Engine rotate but amplitude not uniform, or does not strike

- ← Clutch slip
- ← Oil in excess
- ← Spring failure
- ← Set speed of engine improper
- ← Operating speed throttle lever too slow

5.0. PARTS LIST Tank and handle BTR60H



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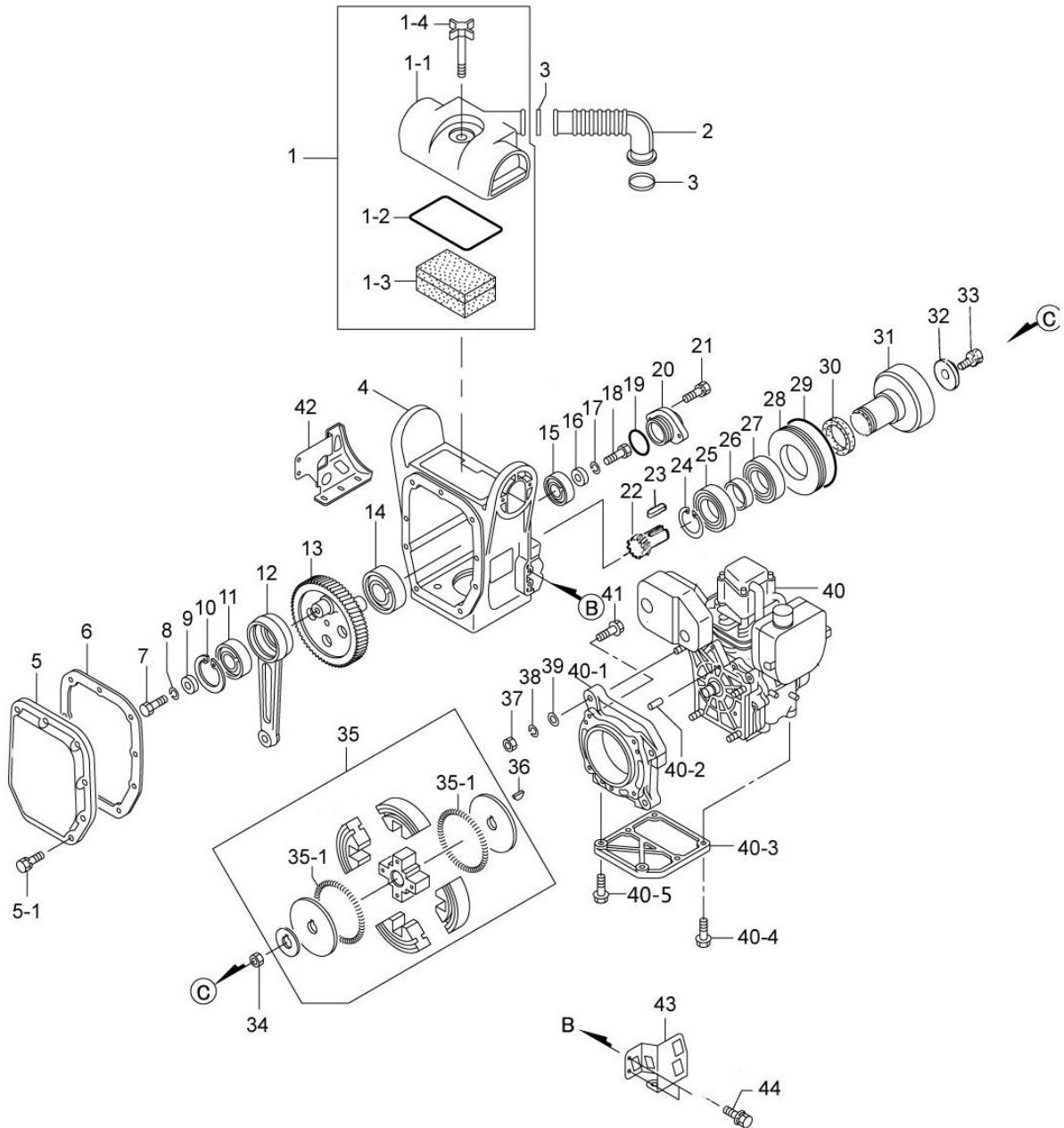
S/NO	PART NO	DESCRIPTION	QTY	REMARK
A	BTR60H-A	FUEL TANK ASSEMBLY	1	
1	BTR60H-1A	TANK CAP AY	1	
1-1	BTR60H-1-1A	STRAP, OIL TANK	1	
2	BTR60H-2A	FILTER, TANK	1	
3	BTR60H-3A	FUEL TANK	1	
4	BTR60H-4A	STRAINER	1	
5	BTR60H-5A	HOLDER, COCK	1	
6	BTR60H-6A	NYLON NUT M8	3	
7	BTR60H-7A	WASHER 8.5X22X3	6	
8	BTR60H-8A	BOLT M8X30T	3	
9	BTR60H-9A	SW M8	3	
10	BTR60H-10A	HOSE BAND	2	
11	BTR60H-11A	FUEL HOSE	1	
12	BTR60H-12A	FUEL COCK AY	1	
13	BTR60H-13A	THROTTLE LEVER AY	1	
14	BTR60H-14A	THROTTLE WIRE	1	
15	BTR60H-15A	HANDLE	1	
16	BTR60H-16A	BOLT M6X20T	2	
17	BTR60H-17A	SW M6	2	
18	BTR60H-18A	CAP NUT M6	2	
19	BTR60H-19A	BOLT M10X20	4	
20	BTR60H-20A	SHOCK ABSORBER	2	
20-1	BTR60H-20-1A	SOCKET HEAD BOLT M10X20T	4	
20-2	BTR60H-20-2A	SW M10	8	
21	BTR60H-21A	ROLLER	2	
22	BTR60H-22A	SCREW M5X25	4	
23	BTR60H-23A	WASHER M5	4	
24	BTR60H-24A	FLANGE NUT M5	4	
25	BTR60H-25A	PLASTIC COVER	1	
26	BTR60H-26A	BOLT	2	
27	BTR60H-27A	SW	4	
28	BTR60H-28A	WASHER	4	
29	BTR60H-29A	NUT	2	
30	BTR60H-30A	WASHER	2	
31	BTR60H-31A	SW	2	
32	BTR60H-32A	WING BOLT	2	

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Crank Case Assy BTR60H



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S/NO	PART NO	DESCRIPTION	QTY	REMARK
1	BTR60H-1B	AIR CLEANER AY	1	
1-1	BTR60H-1-1B	COVER CP, AIR CLEANER	1	
1-2	BTR60H-1-2B	PACKING, AIR CLEANER	1	
1-3	BTR60H-1-3B	ELEMENT CP, AIR CLEANER	1	
1-4	BTR60H-1-4B	GRIP BOLT CP, AIR CLEANER	1	
2	BTR60H-2B	INTAKE PIPE	1	
3	BTR60H-3B	CLAMP	2	
4	BTR60H-4B	CRANK CASE	1	
5	BTR60H-5B	FRONT COVER	1	
5-1	BTR60H-5-1B	BOLT M6X20T	9	
6	BTR60H-6B	PACKING, FRONT COVER	1	
7	BTR60H-7B	BOLT M8X25T	1	
8	BTR60H-8B	SW M8	1	
9	BTR60H-9B	WASHER 9X30X4	1	
10	BTR60H-10B	STOP RING R-52	1	
11	BTR60H-11B	BEARING 6304	1	
12	BTR60H-12B	CONNECTING ROD	1	
13	BTR60H-13B	CRANK GEAR	1	
14	BTR60H-14B	BEARING 6305	1	
15	BTR60H-15B	BEARING 6203	1	
16	BTR60H-16B	WASHER 8.5X22X3	1	
17	BTR60H-17B	SW M8	1	
18	BTR60H-18B	BOLT M8X25T	1	
19	BTR60H-19B	O-RING G-35	1	
20	BTR60H-20B	BEARING COVER	1	
21	BTR60H-21B	BOLT M6X20T	2	
22	BTR60H-22B	PINION	1	
23	BTR60H-23B	KEY 5X5X19R	1	
24	BTR60H-24B	STOP RING S-35	1	
25	BTR60H-25B	BEARING 6007	1	
26	BTR60H-26B	SPACER 35.4-42.7-10	1	
27	BTR60H-27B	BEARING 6007Z	1	
28	BTR60H-28B	SPACER, CLUTCH DRUM	1	
29	BTR60H-29B	O-RING S-90	1	
30	BTR60H-30B	OIL SEAL TC-40528	1	
31	BTR60H-31B	CLUTCH DRUM	1	
32	BTR60H-32B	LOCK WASHER	1	

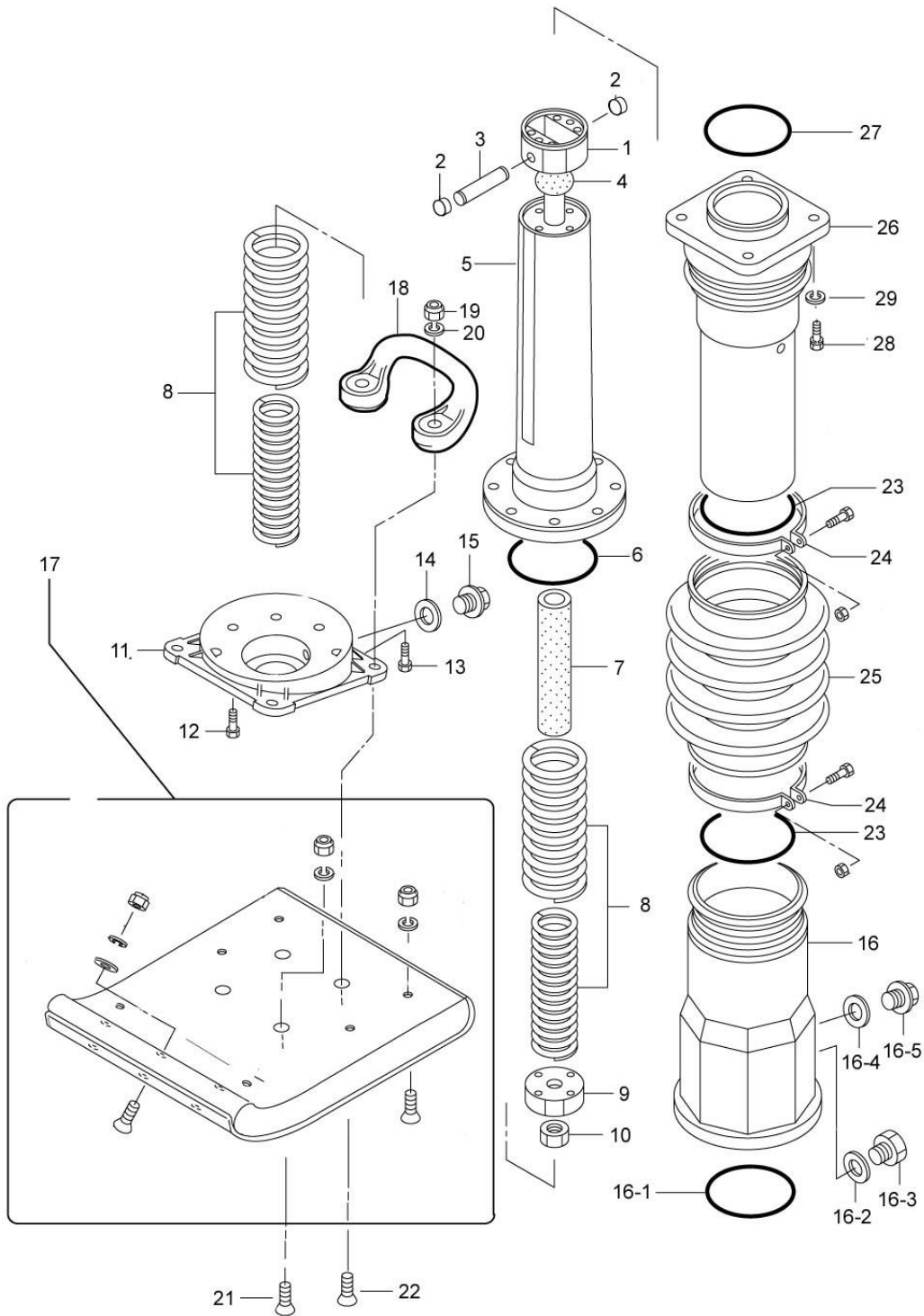
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33	BTR60H-33B	BOLT M8X20T	1	
34	BTR60H-34B	LOCK NUT	1	
35	BTR60H-35B	CLUTCH AY	1	
35-1	BTR60H-35-1B	CLUTCH SPRING	2	
36	BTR60H-36B	WOODRUFF KEY	1	
37	BTR60H-37B	NUT M8	4	
38	BTR60H-38B	SW M8	4	
39	BTR60H-39B	WASHER M8	4	
40	BTR60H-40B	ENGINE	1	
40-1	BTR60H-40-1B	ADAPTER, FLANGE	1	
40-2	BTR60H-40-2B	DOWEL PIN	2	
40-3	BTR60H-40-3B	STIFFENER	1	
40-4	BTR60H-40-4B	BOLT M8X25T	2	
40-5	BTR60H-40-5B	BOLT M8X20T	4	
41	BTR60H-41B	BOLT M8X30T	4	
42	BTR60H-42B	OIL GAUGE PROTECTOR	1	
43	BTR60H-43B	LINK PROTECTOR	1	
44	BTR60H-44B	BOLT M8X20T	4	

Cylinder & foot assy BTR60H



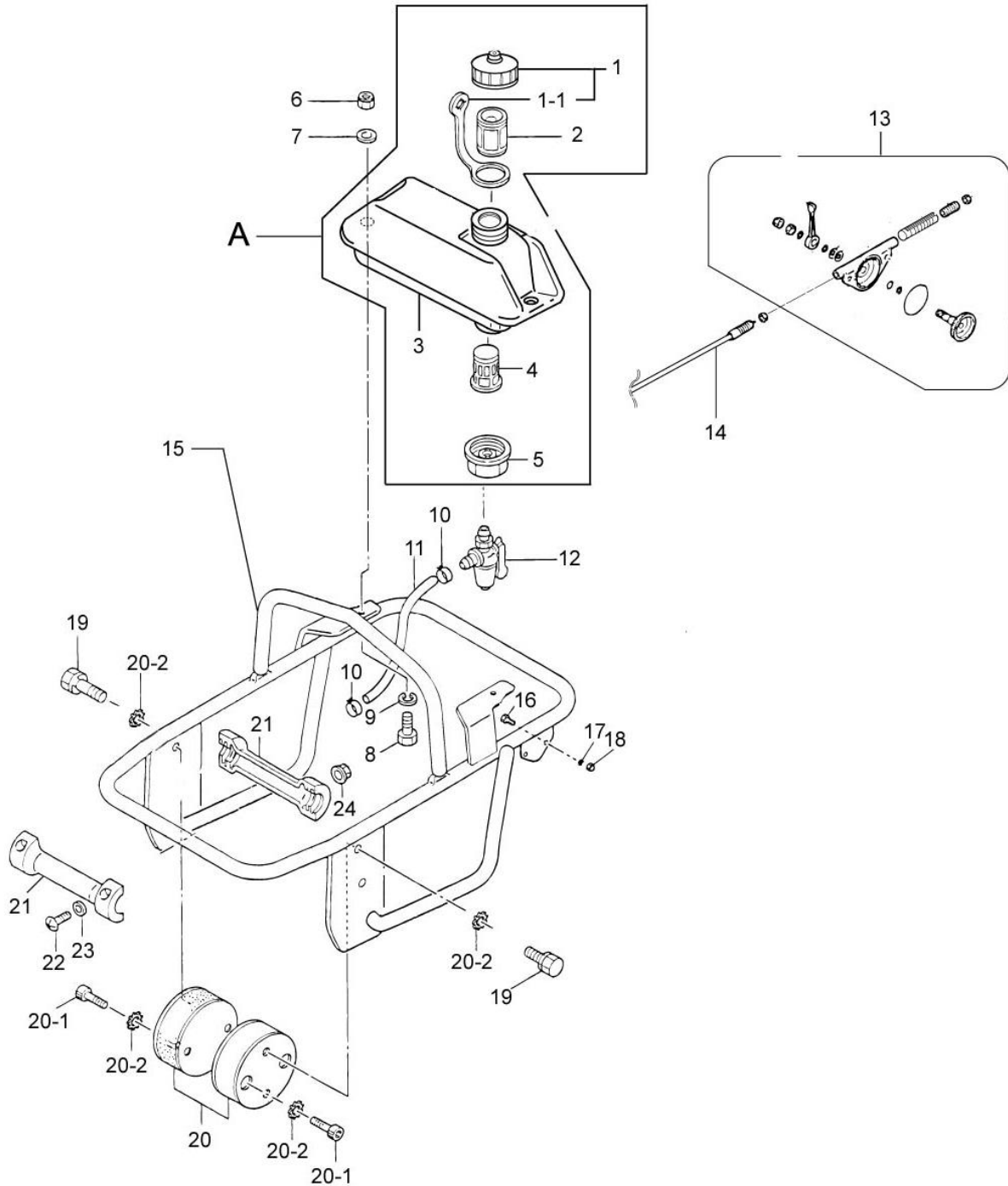
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S/NO	PART NO	DESCRIPTION	QTY	REMARK
1	BTR60H-1C	PISTON ROD	1	
2	BTR60H-2C	PLUG	2	
3	BTR60H-3C	PISTON PIN	1	
4	BTR60H-4C	STOPPER, UPPER	1	
5	BTR60H-5C	SPRING CYLINDER	1	
6	BTR60H-6C	O-RING G-75	1	
7	BTR60H-7C	STOPPER, LOWER	1	
8	BTR60H-8C	MAIN SPRING	2	
9	BTR60H-9C	PISTON END	1	
10	BTR60H-10C	NUT M16	1	
11	BTR60H-11C	FOOT PLATE	1	
12	BTR60H-12C	SOCKET HEAD BOLT M10X35T	4	
13	BTR60H-13C	SOCKET HEAD BOLT M10X25T	4	
14	BTR60H-14C	PACKING M10 (AL)	1	
15	BTR60H-15C	PLUG M10X1.0X10	1	
16	BTR60H-16C	PROTECTION SLEEVE	1	
16-1	BTR60H-16-1C	O-RING JAS02085	1	
16-2	BTR60H-16-2C	PACKING M20	1	
16-3	BTR60H-16-3C	OIL LEVEL GAUGE G1/2	1	
16-4	BTR60H-16-4C	PACKING M16	1	
16-5	BTR60H-16-5C	PLUG M16X1.5X10	1	
17	BTR60H-17C	FOOT AY	1	
18	BTR60H-18C	GRIP HANDLEBAR	1	
19	BTR60H-19C	NYLON NUT M12	4	
20	BTR60H-20C	SW M12	4	
21	BTR60H-21C	SUNK HEAD BOLT M12X65T	2	
22	BTR60H-22C	SUNK HEAD BOLT M12X70T	2	
23	BTR60H-23C	O-RING G-95	2	
24	BTR60H-24C	BELLOW CLAMP	2	
25	BTR60H-25C	BELLOW	1	
26	BTR60H-26C	GUIDE CYLINDER	1	
27	BTR60H-27C	O-RING G-80	1	
28	BTR60H-28C	BOLT M10X40	4	
29	BTR60H-29C	SW M10	4	

Tank and handle BTR76H



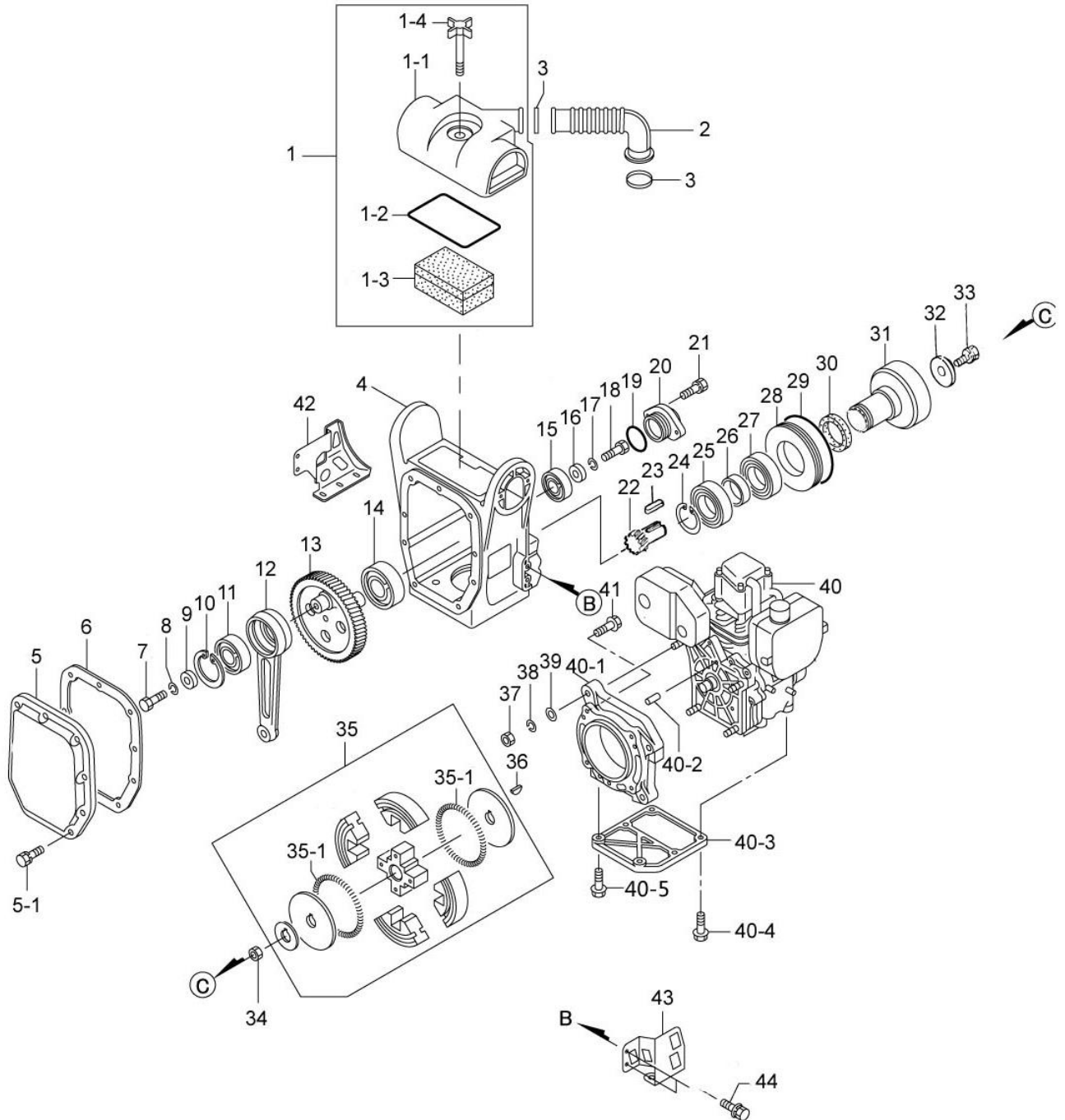
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S/NO	PART NO	DESCRIPTION	QTY	REMARK
A	BTR76H-A	FUEL TANK ASSEMBLY	1	
1	BTR76H-01A	TANK CAP AY	1	
1-1	BTR76H-01-1A	STRAP, OIL TANK	1	
2	BTR76H-02A	FILTER, TANK	1	
3	BTR76H-03A	FUEL TANK	1	
4	BTR76H-04A	STRAINER	1	
5	BTR76H-05A	HOLDER, COCK	1	
6	BTR76H-06A	NYLON NUT M8	2	
7	BTR76H-07A	WASHER 8.5X22X3	2	
8	BTR76H-08A	BOLT M8X30T	2	
9	BTR76H-09A	SW M8	2	
10	BTR76H-10A	HOSE BAND	2	
11	BTR76H-11A	FUEL HOSE	1	
12	BTR76H-12A	FUEL COCK AY	1	
13	BTR76H-13A	THROTTLE LEVER AY	1	
14	BTR76H-14A	THROTTLE WIRE	1	
15	BTR76H-15A	HANDLE	1	
16	BTR76H-16A	BOLT M6X20T	2	
17	BTR76H-17A	SW M6	2	
18	BTR76H-18A	CAP NUT M6	2	
19	BTR76H-19A	BOLT M10X20	4	
20	BTR76H-20A	SHOCK ABSORBER	2	
20-1	BTR76H-20-1A	SOCKET HEAD BOLT M10X20T	4	
20-2	BTR76H-20-2A	SW M10	8	
21	BTR76H-21A	ROLLER	2	
22	BTR76H-22A	SCREW M5X25	4	
23	BTR76H-23A	WASHER M5	4	
24	BTR76H-24A	FLANGE NUT M5	4	

Crank Case Assy BTR76H



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S/NO	PART NO	DESCRIPTION	QTY	REMARK
1	BTR76H-01B	AIR CLEANER AY	1	
1-1	BTR76H-01-1B	COVER CP, AIR CLEANER	1	
1-2	BTR76H-01-2B	PACKING, AIR CLEANER	1	
1-3	BTR76H-01-3B	ELEMENT CP, AIR CLEANER	1	
1-4	BTR76H-01-4B	GRIP BOLT CP, AIR CLEANER	1	
2	BTR76H-02B	INTAKE PIPE	1	
3	BTR76H-03B	CLAMP	2	
4	BTR76H-04B	CRANK CASE	1	
5	BTR76H-05B	FRONT COVER	1	
5-1	BTR76H-05-1B	BOLT M6X20T	9	
6	BTR76H-06B	PACKING, FRONT COVER	1	
7	BTR76H-07B	BOLT M8X25T	1	
8	BTR76H-08B	SW M8	1	
9	BTR76H-09B	WASHER 9X30X4	1	
10	BTR76H-10B	STOP RING R-52	1	
11	BTR76H-11B	BEARING 6304	1	
12	BTR76H-12B	CONNEECTING ROD	1	
13	BTR76H-13B	CRANK GEAR	1	
14	BTR76H-14B	BEARING 6305	1	
15	BTR76H-15B	BEARING 6203	1	
16	BTR76H-16B	WASHER 8.5X22X3	1	
17	BTR76H-17B	SW M8	1	
18	BTR76H-18B	BOLT M8X25T	1	
19	BTR76H-19B	O-RING G-35	1	
20	BTR76H-20B	BEARING COVER	1	
21	BTR76H-21B	BOLT M6X20T	2	
22	BTR76H-22B	PINION	1	
23	BTR76H-23B	KEY 5X5X19R	1	
24	BTR76H-24B	STOP RING S-35	1	
25	BTR76H-25B	BEARING 6007	1	
26	BTR76H-26B	SPACER 35.4-42.7-10	1	
27	BTR76H-27B	BEARING 6007Z	1	
28	BTR76H-28B	SPACER, CLUTCH DRUM	1	
29	BTR76H-29B	O-RING S-90	1	
30	BTR76H-30B	OIL SEAL TC-40528	1	
31	BTR76H-31B	CLUTCH DRUM	1	
32	BTR76H-32B	LOCK WASHER	1	

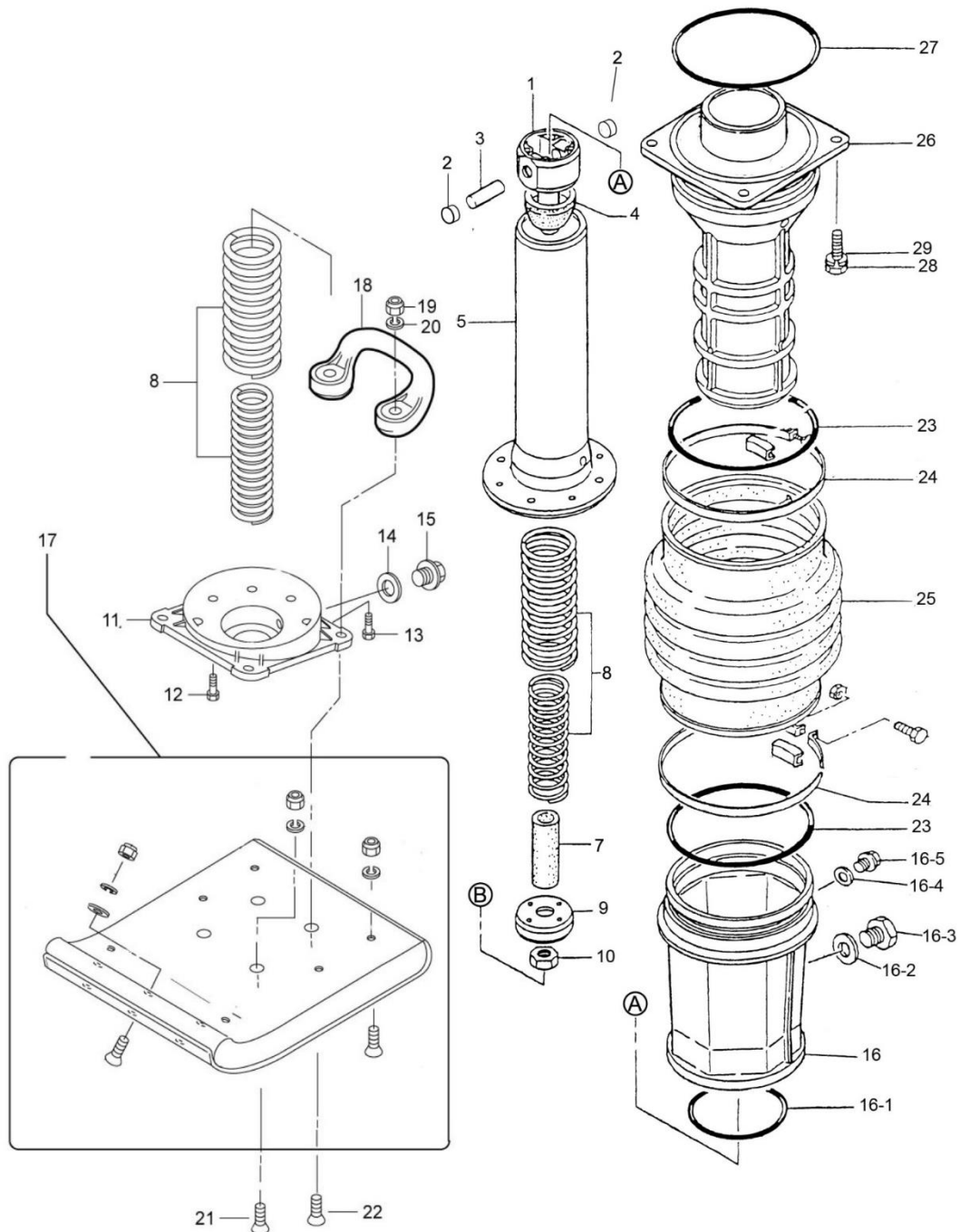
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33	BTR76H-33B	BOLT M8X20T	1	
34	BTR76H-34B	LOCK NUT	1	
35	BTR76H-35B	CLUTCH AY	1	
35-1	BTR76H-35-1B	CLUTCH SPRING	2	
36	BTR76H-36B	WOODRUFF KEY	1	
37	BTR76H-37B	NUT M8	4	
38	BTR76H-38B	SW M8	4	
39	BTR76H-39B	WASHER M8	4	
40	BTR76H-40B	ENGINE	1	
40-1	BTR76H-40-1B	ADAPTER, FLANGE	1	
40-2	BTR76H-40-2B	DOWEL PIN	2	
40-3	BTR76H-40-3B	STIFFENER	1	
40-4	BTR76H-40-4B	BOLT M8X25T	2	
40-5	BTR76H-40-5B	BOLT M8X20T	4	
41	BTR76H-41B	BOLT M8X30T	4	
42	BTR76H-42B	OIL GAUGE PROTEECTOR	1	
43	BTR76H-43B	LINK PROTEECTOR	1	
44	BTR76H-44B	BOLT M8X20T	4	

Cylinder & foot assy BTR76H



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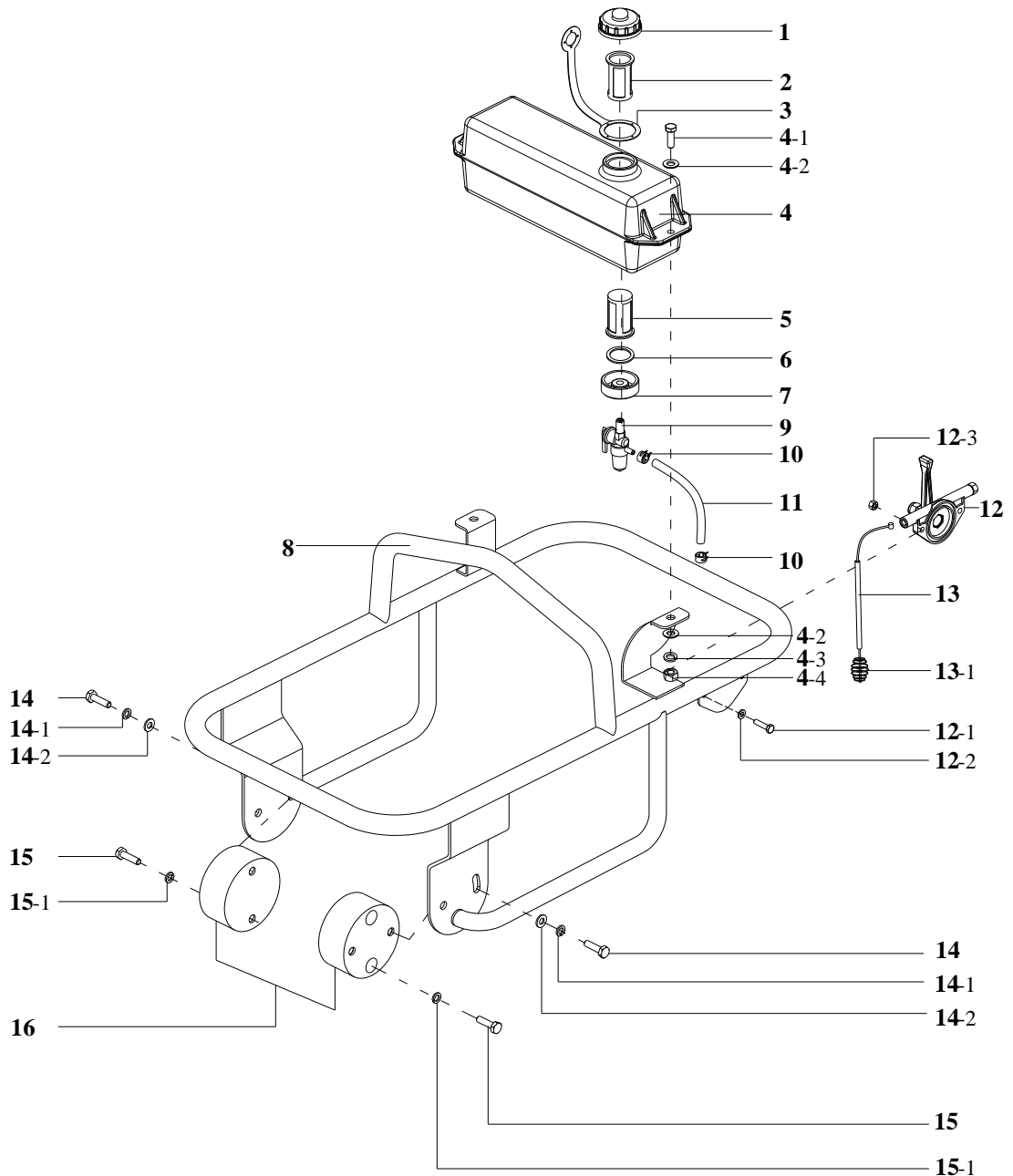
S/NO	PART NO	DESCRIPTION	QTY	REMARK
1	BTR76H-01C	PISTON ROD	1	
2	BTR76H-02C	PLUG	2	
3	BTR76H-03C	PISTON PIN	1	
4	BTR76H-04C	STOPPER, UPPER	1	
5	BTR76H-05C	SPRING CYLINDER	1	
6	BTR76H-06C	O-RING G-75	1	
7	BTR76H-07C	STOPPER, LOWER	1	
8	BTR76H-08C	MAIN SPRING	2	
9	BTR76H-09C	PISTON END	1	
10	BTR76H-10C	NUT M16	1	
11	BTR76H-11C	FOOT PLATE	1	
12	BTR76H-12C	SOCKET HEAD BOLT M10X35T	4	
13	BTR76H-13C	SOCKET HEAD BOLT M10X25T	4	
14	BTR76H-14C	PACKING M10 (AL)	1	
15	BTR76H-15C	PLUG M10X1.0X10	1	
16	BTR76H-16C	PROTECTION SLEEVE	1	
16-1	BTR76H-16-1C	O-RING JAS02085	1	
16-2	BTR76H-16-2C	PACKING M20	1	
16-3	BTR76H-16-3C	OIL LEVEL GAUGE G1/2	1	
16-4	BTR76H-16-4C	PACKING M16	1	
16-5	BTR76H-16-5C	PLUG M16X1.5X10	1	
17	BTR76H-17C	FOOT AY	1	
18	BTR76H-18C	GRIP HANDLEBAR	1	
19	BTR76H-19C	NYLON NUT M12	4	
20	BTR76H-20C	SW M12	4	
21	BTR76H-21C	SUNK HEAD BOLT M12X65T	2	
22	BTR76H-22C	SUNK HEAD BOLT M12X70T	2	
23	BTR76H-23C	O-RING G-95	2	
24	BTR76H-24C	BELLOW CLAMP	2	
25	BTR76H-25C	BELLOW	1	
26	BTR76H-26C	GUIDE CYLINDER	1	
27	BTR76H-27C	O-RING G-80	1	
28	BTR76H-28C	BOLT M10X40	4	
29	BTR76H-29C	SW M10	4	

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Tank and handle BTR76Y



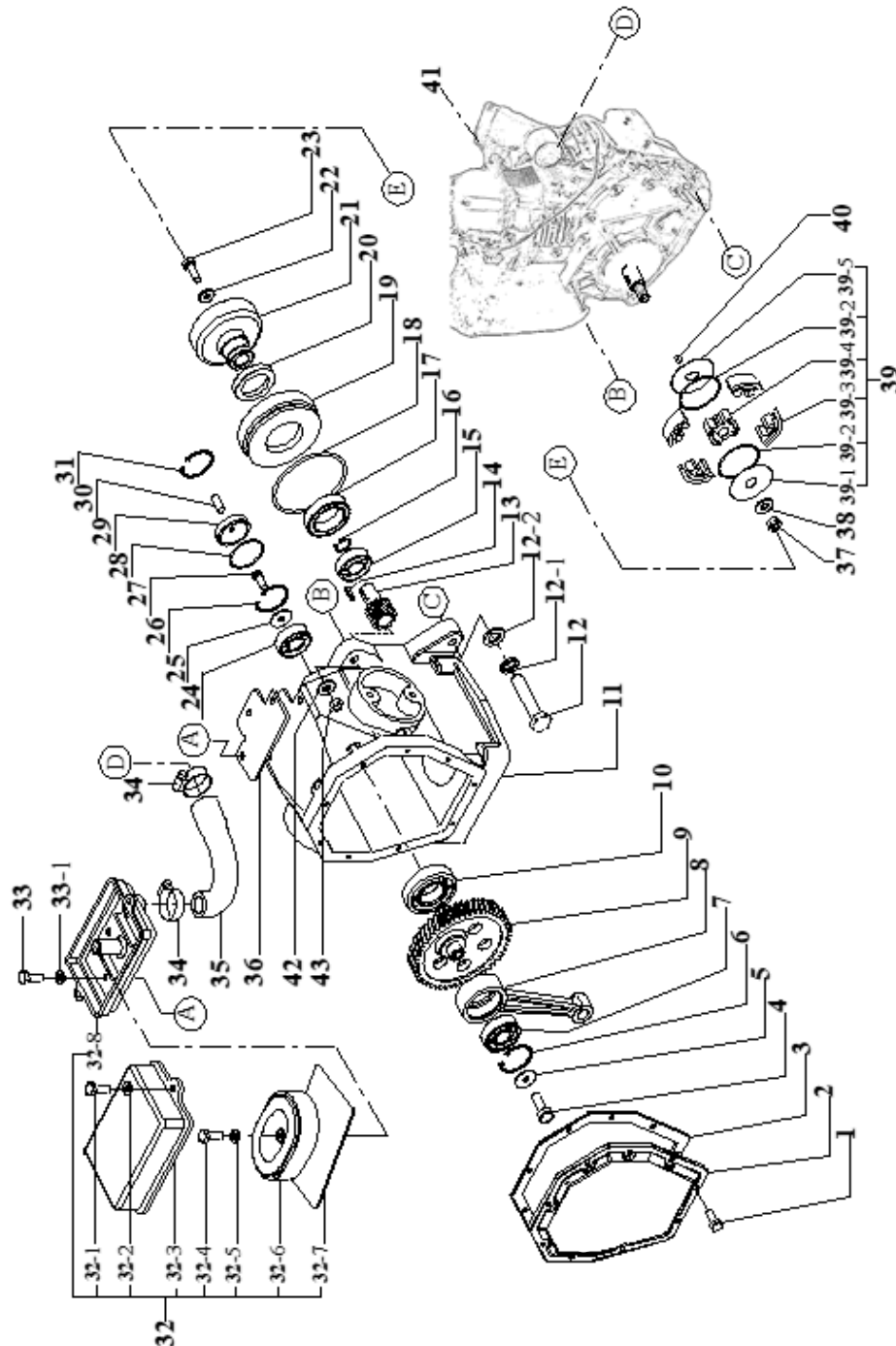
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S/NO	PART NO	DESCRIPTION	QTY	REMARKS
1	BTR76Y-01A	TANK CAP AY	1	
2	BTR76Y-02A	FILTER, TANK	1	
3	BTR76Y-03A	STRAP, OIL TANK	1	
4	BTR76Y-04A	FUEL TANK	1	
4-1	BTR76Y-04-1A	BOLT M8x25T	2	
4-2	BTR76Y-04-2A	WASHER 8.5x17x2	4	
4-3	BTR76Y-04-3A	SW M8	2	
4-4	BTR76Y-04-4A	NUT M8	2	
5	BTR76Y-05A	STRAINER ASSY, FUEL	1	
6	BTR76Y-06A	PACKIN, COCK HOLDER	1	
7	BTR76Y-07A	HOLDER, COCK	1	
8	BTR76Y-08A	HANDLE	1	
9	BTR76Y-09A	FUEL COCK, PETROL /73P	1	
10	BTR76Y-10A	HOSE BAND 9.5D	2	
11	BTR76Y-11A	FUEL HOSE B-220	1	
12	BTR76Y-12A	THROTTLE LEVER ASSY, PETROL	1	
12-1	BTR76Y-12-1A	BOLT M6x25T	2	
12-2	BTR76Y-12-2A	WASHER 6.5x12x1.5	4	
12-3t	BTR76Y-12-3A	NYLON NUT M6	2	
13	BTR76Y-13A	THROTTLE WIRE	1	
13-1	BTR76Y-13-1A	RETURN SPRING, ROBIN	1	
14	BTR76Y-14A	BOLT 10x25T	4	
14-1	BTR76Y-14-1A	SW M10	4	
14-2	BTR76Y-14-1A	WASHER 11.5x20x2	4	
15	BTR76Y-15A	S-HALLEN KEY BOLT 10x25T	4	
15-1	BTR76Y-15-1A	SW M10	4	
16	BTR76Y-16A	SHOCK ABSORBER	2	

Crank Case Assy BTR76Y



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S/NO	PART NO	DESCRIPTION	QTY	REMARKS
1	BTR76Y-01B	BOLT M6x20	9	
2	BTR76Y-02B	FRONT COVER	1	
3	BTR76Y-03B	PACKING FRONT COVER	1	
4	BTR76Y-04B	BOLT M8x20 H, SW	1	
5	BTR76Y-05B	WASHER 9304	1	
6	BTR76Y-06B	STOP RING R-52	1	
7	BTR76Y-07B	BEARING 6304	1	
8	BTR76Y-08B	CONNECTING ROD	1	
9	BTR76Y-09B	CRANK GEAR	1	
10	BTR76Y-10B	BEARING 6207	1	
11	BTR76Y-11B	CRANK CASE	1	
12	BTR76Y-12B	BOLT M10x50T	2	
12/jan	BTR76Y-12-1B	SW M10	2	
12/feb	BTR76Y-12-2B	WASHER M10	2	
13	BTR76Y-13B	PINION	1	
14	BTR76Y-14B	KEY 5x5x19R	1	
15	BTR76Y-15B	BEARING 6204	1	
16	BTR76Y-16B	STOP RING S-35	1	
17	BTR76Y-17B	BEARING 6007Z	1	
18	BTR76Y-18B	O-RING G-100	1	
19	BTR76Y-19B	SPACER	1	
20	BTR76Y-20B	OIL SEAL TC-40528	1	
21	BTR76Y-21B	CLUTCH DRUM	1	
22	BTR76Y-22B	LOCK WASHER	1	
23	BTR76Y-23B	BOLT M8x20 T	1	
24	BTR76Y-24B	BEARING 6204	1	
25	BTR76Y-25B	WASHER 9304	1	
26	BTR76Y-26B	STOP RING-R48	1	
27	BTR76Y-27B	BOLT M8x20 T	1	
28	BTR76Y-28B	O-RING R-48	1	
29	BTR76Y-29B	BEARING COVER	1	
30	BTR76Y-30B	BOLT M8x10 T	1	
31	BTR76Y-31B	STOP RING-R48	1	
32	BTR76Y-32B	AIR CLEANER ASSEMBLY	1	

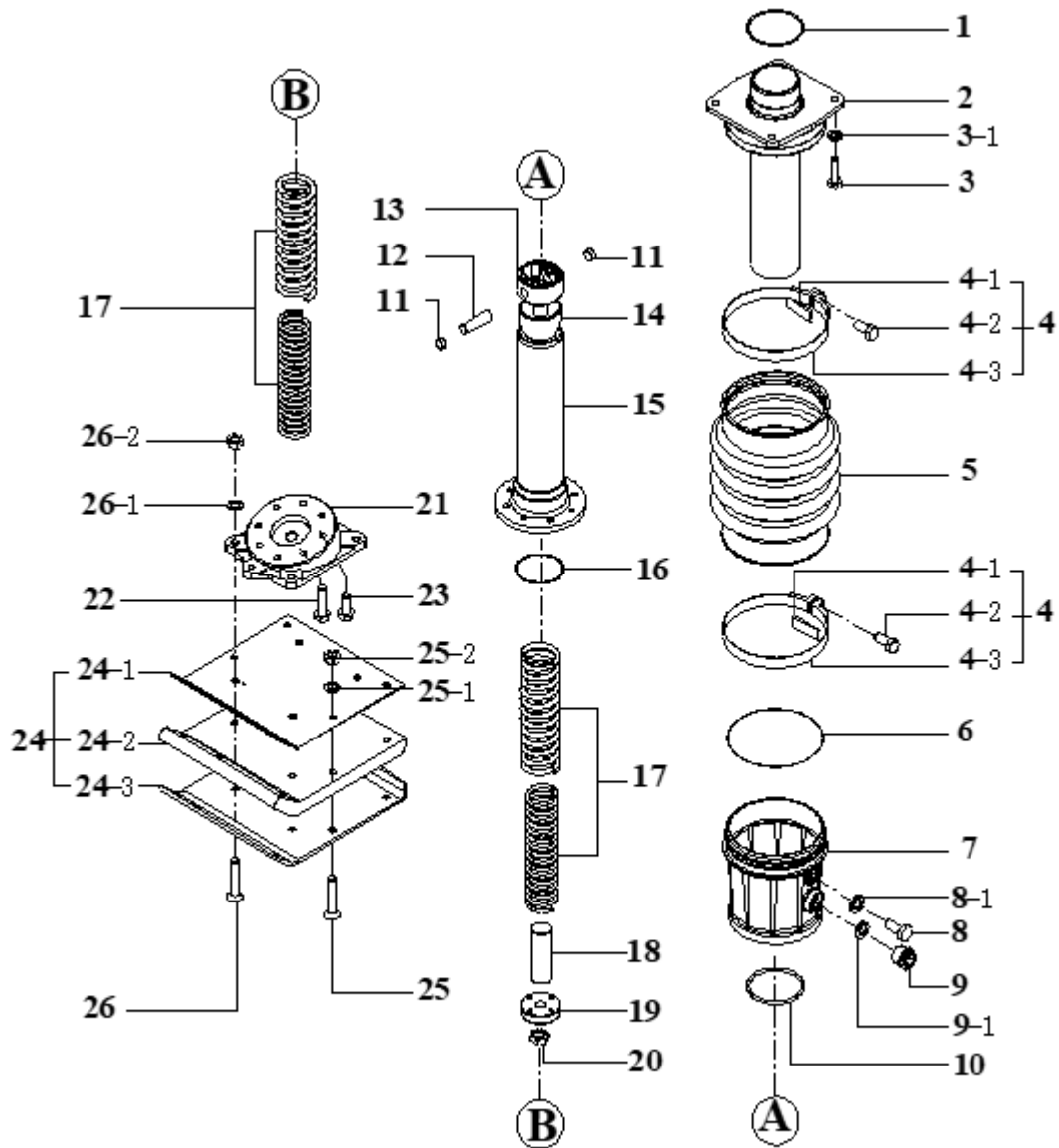
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32-1	BTR76Y-32-1B	BOLT M8x25 T	2	
32-2	BTR76Y-32-2B	WASHER M6	2	
32-3	BTR76Y-32-3B	BODY CP AIR CLEANER	1	
32-4	BTR76Y-32-4B	BOLT 8x20 T	1	
32-5	BTR76Y-32-5B	WASHER M8	1	
32-6	BTR76Y-32-6B	COLANDER	1	
32-7	BTR76Y-32-7B	SEAT, AIR CLEANER	1	
33	BTR76Y-33B	BOLT M8x20 T	2	
33-1	BTR76Y-33-1B	WASHER M8	2	
34	BTR76Y-34B	HOSE BANK 35-50	2	
35	BTR76Y-35B	INTAKE PIPE	1	
36	BTR76Y-36B	DAMPING CUSHION	1	
37	BTR76Y-37B	NUT M12 (P1.25-B17)	1	
38	BTR76Y-38B	LOCK WASHER CLUTCH	1	
39	BTR76Y-39B	CLUTCH ASSEMBLY	1	
39-1	BTR76Y-39-1B	CLUTCH GUIDE	1	
39-2	BTR76Y-39-2B	CLUTCH SPRING C812	2	
39-3	BTR76Y-39-3B	CLUTCH SHOE C812	4	
39-4	BTR76Y-39-4B	CLUTCH BOSS C812	1	
39-5	BTR76Y-39-5B	CLUTCH GUIDE	1	
40	BTR76Y-40B	FLAT KEY 4x14	1	
41	BTR76Y-41B	CIMAR DIESEL ENGINE AY F210	1	
42	BTR76Y-42B	SW M10	2	
43	BTR76Y-43B	LOCKNUT M10	2	

Cylinder & foot assy BTR76Y



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S/NO	PART NO	DESCRIPTION	QTY	REMARKS
1	BTR76Y-01C	O-RING P-108	1	
2	BTR76Y-02C	GUIDE CYLINDER,	1	
3	BTR76Y-03C	BOLT 10x35T	4	
3-1	BTR76Y-03-1C	SW M10	4	
4	BTR76Y-04C	BELLOWS CLAMP ASSEMBLY	2	
4-1	BTR76Y-04-1C	BAND GUIDE BELLOWS	2	
4-2	BTR76Y-04-2C	BOLT 8x35T	2	
4-3	BTR76Y-04-3C	BELLOWS CLAMP	2	
5	BTR76Y-05C	BELLOWS, YELLOW	1	
6	BTR76Y-06C	O-RING JAS03150	1	
7	BTR76Y-07C	PROTECTIVE SLEEVE	1	
8	BTR76Y-08C	PLUG 16x13 13T	1	
8-1	BTR76Y-08-1C	O-RING G-16	1	
9	BTR76Y-09C	SIGHT GLASS W/GASKET 10T	1	
9-1	BTR76Y-09-1C	O-RING G-20	1	
10	BTR76Y-10C	O-RING G-95	1	
11	BTR76Y-11C	PLUG	2	
12	BTR76Y-12C	PISTON PIN	1	
13	BTR76Y-13C	PISTON ROD	1	
14	BTR76Y-14C	STOPPER, UPPER	1	
15	BTR76Y-15C	SPRING CYLINDER	1	
16	BTR76Y-16C	O-RING G-97	1	
17	BTR76Y-17C	MAIN SPRING	2	
18	BTR76Y-18C	STOPPER, LOWER	1	
19	BTR76Y-19C	PISTON END	1	
20	BTR76Y-20C	NUT M20 P1.5	1	
21	BTR76Y-21C	FOOT PLATE	1	
22	BTR76Y-22C	SOCKET HEAD BOLT M10x40T	4	
23	BTR76Y-23C	SOCKET HEAD BOLT M10x25T	4	
24	BTR76Y-24C	FOOT ASSEMBLY	1	
24-1	BTR76Y-24-1C	FOOT COVER	1	
24-2	BTR76Y-24-2C	FOOT	1	
24-3	BTR76Y-24-3C	METAL SHEET	1	
25	BTR76Y-25C	SUNK HEAD BOLT M12x50	7	

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25-1	BTR76Y-25-1C	SW M10	7	
25-2	BTR76Y-25-2C	LOCKNUT M10	7	
26	BTR76Y-26C	SUNK HEAD BOLT M12x70T	4	
26-1	BTR76Y-26-1C	SW M12	4	
26-2	BTR76Y-26-2C	LOCKNUT M12	4	

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6.0. DECLARATION OF CONFORMITY

Declaration of Conformity / Certificat de conformite / Gelijkvormigheidscertificaat / Declaracion de Conformidad / Declaracao de Concormidade / Dichiarazione Di Conformita

Model : BTR60H – BTR76H – BTR78Y

We Beton Trowel NV

Declare under our sole responsibility that the product to which this declaration relates is in conformity with the following standards or other normative documents.

Declarons sous notre responsabilite que le produit cette declaration est conforme aux norms suivantes ou d'autres documents habituels.

Verklaren onder onze verantwoordelijkheid dat het product naar welke de verklaring verwijst conform de volgende standards of anders gebruikelijke documenten is.

Declaramos bajo nuestra unica responsabilidad que el producto en lo que esta declaracion concierne, es conforme con la siguiente normative u otros documentos.


Declara sob sua responsabilidade que o produto a quem esta declaracao interessar, esta em comformidade com os seguintes documentos legais ou normas directivas.

Dichiariamo sotto la ns. Unica responsibilita che il prodotto al quale questa dichiarazione si riferisce, e fabbricato in conformita ai seguenti standard e documenti di normative.

EN 349:1993	Safety of Machinery - Minimum gaps to avoid crushing of parts of the human body.
EN 418:1993	Safety of Machinery - Emergency stop equipment, functional aspects – Principles for design
EN 12100-1:2003	Safety of Machinery - Basic Concepts, general principles for design - Part 1: Basic Terminology, methodology
EN 12100-2:2003	Safety of Machinery - Basic Concepts, general principles for design - Part 2: Technical Principles
EN ISO 4872:1978	Acoustics - Measurement of Airborne noise emitted by construction equipment intended for outdoor use - Method for determining compliance with noise limits.
EN ISO 5349-1:2001	Mechanical vibration. Measurement and evaluation of human exposure to handtransmitted vibration. General requirements
EN ISO 5349-2:2001	Mechanical vibration. Measurement and assessment of human exposure to handtransmitted vibration. Practical guidance for measurement at the workplace.

Following the provisions of Directives / Suivant les directives determines / Volgens de vastgestelde richtlijnen:
Siguiendo las directivas / No sequimento das clausulas da Directivas / Seguendo quanto indicato dalla Direttivas:

2006/42/EC Machinery Directive
2000/14/EC Noise Directive
2001/95/EC General Product Safety Directive
2002/95/EC Reduction of Hazardous Waste Directive



**Responsible Technical File : Chris Livingston for
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Tel 0032 52315350 - Fax0032 52315359**