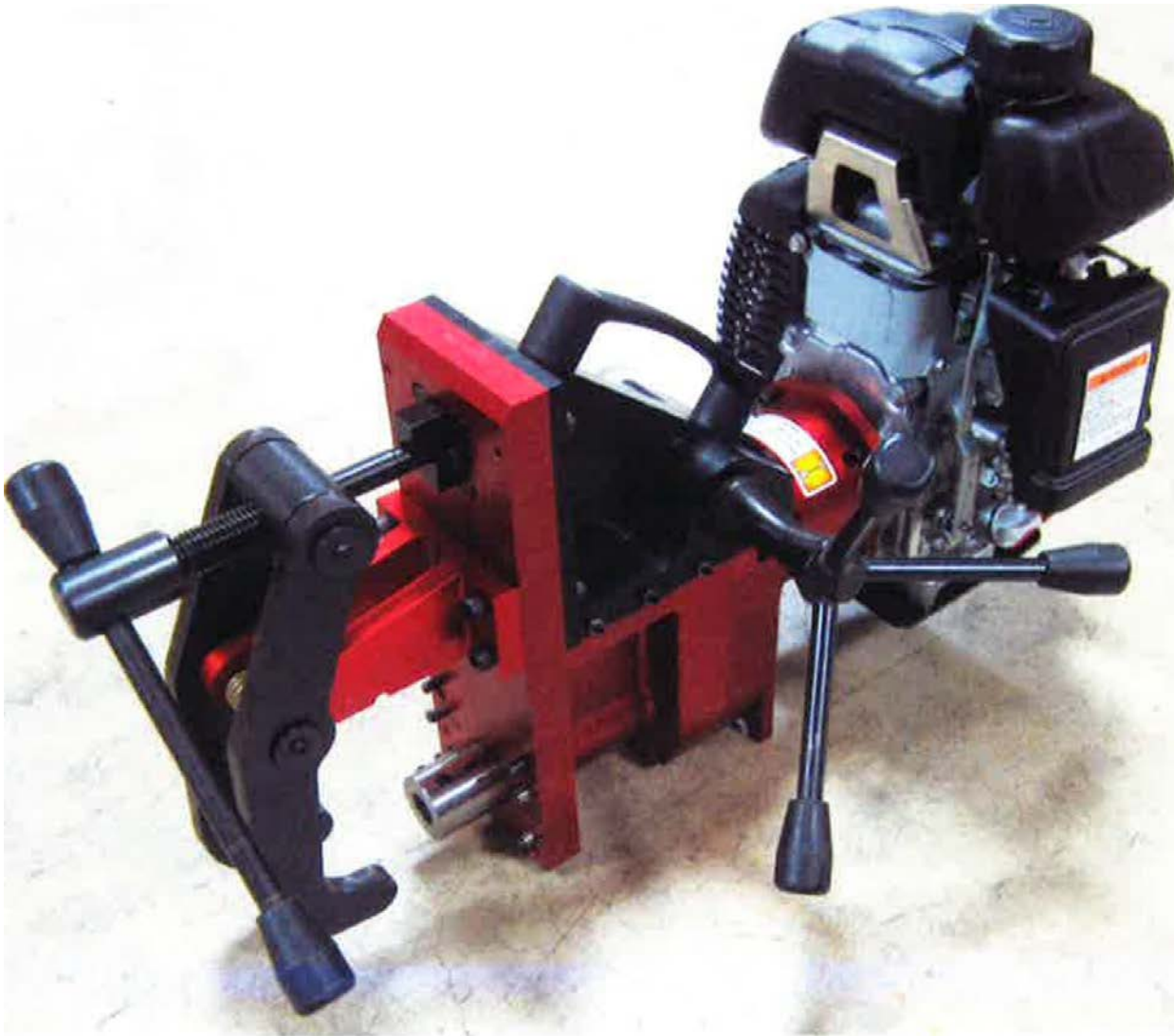


RAIL DRILL - GAS

Operation & Parts Manual

Model # 910068



Manual # 910068 – M 161101



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1.0 Introduction.

Congratulations on choosing your new Multipurpose Lightweight Rail Drill. The drill is a quality product with unique features that make this the perfect solution for your entire rail drilling requirements.

- Easy to use and rugged design makes the rail drill a cost effective solution to drilling clean, accurately positioned holes in rail sections for bonds, and fishplates.
- Powered by a 4-stroke gasoline engine.
- Can drill up to 36mm with annular broaching cutters.
- The new integral arbor support gives guaranteed hole tolerance and ensures no burring of hole.
- The totally enclosed cutter action ensures operator safety.
- The new and unique TOMMY BAR clamping system facilitates clamping in confined spaces such as check rail.
- The hard wearing and tough metal carry case provides protection for your drill in transit. The spacious design leaves enough room for all of your tools and ancillaries.

2.0 Warnings and Safety instructions.

Read these instructions carefully before operating, maintaining or servicing this tool.
Please keep these instructions in a safe accessible place.



Read to fully understand and observe the following safety precautions and warnings. Careless or improper use of this equipment may result in serious or fatal injury.



Always wear eye, head and ear protection equipment, when using this tool



WARNING!

Indicates instant possibility of severe personal injury or loss of life, if instructions are not followed.



CAUTION!

Indications a possibility of personal injury or equipment damage, if instructions are not followed.

Operator Safety

- Always read the instructions carefully so as to avoid any injury or damage when unfamiliar with this equipment.
- Always wear a safety face shield or goggles.
- Wear ear defenders when using this equipment.
- Always wear heavy clothing, boots and gloves. Do not wear loose clothing, short pants, sandals etc. and ensure that long hair is tied up above shoulder length.
- Do not operate this equipment when tired, ill or under the influence of alcohol, drugs or medication.
- Never allow an inexperienced person to operate this equipment.
- Keep all carrying handles and levers free from oil.
- Keep hands away from the cutter when it is rotating. Ensure that it has stopped rotating and that the engine is stalled before touching the cutter.
- Never use a larger diameter cutter than specified for use with this equipment.

Tool Safety

- Inspect the entire piece of equipment before use.
- Replace damaged components, lubricate where necessary and ensure that all fasteners are secure.
- Use only accessories that have been recommended by the manufacturer. Failure to do so could result in damage to the tool and may invalidate the warranty.



WARNING!

Never modify the tooling any way. Do not use your equipment for any job other than for which it is intended.

Maintenance safety

- Maintain according to the manufacturers recommended procedures.
- Ensure that the engine is NOT running before attempting any maintenance.
- Use only genuine replacement components as recommended by the manufacturer.

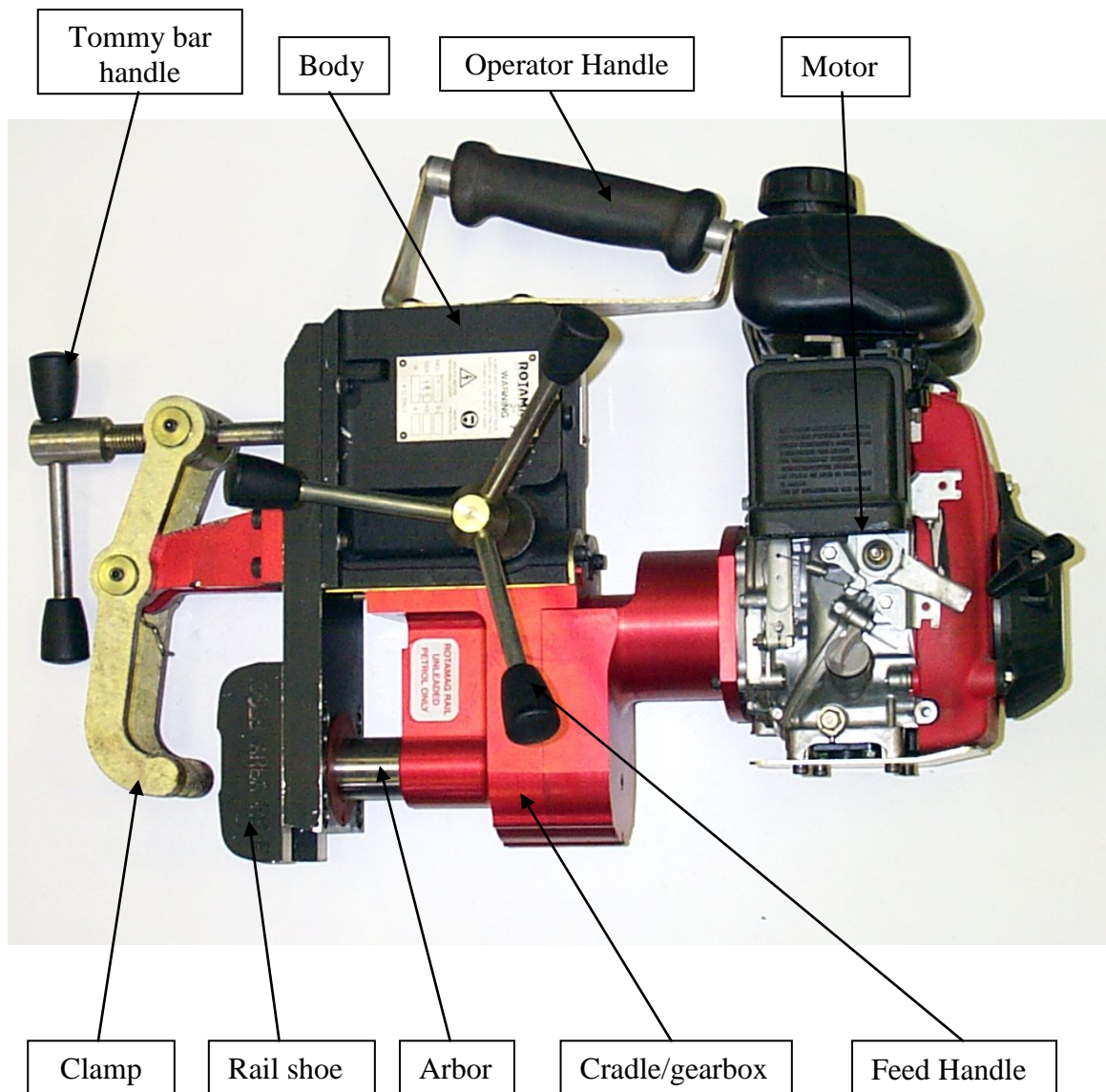
- Ensure that the cutter being used is sharp and free from damage.

Transport and Storage

- Before moving the tool, ensure that the cutter has stopped rotating.
- Carry the tool with the cutter pointing away from the body to avoid laceration.
- After use, clean the equipment and its accessories and store in a dry place.
- Store the equipment along with the maintenance tools in its correct carrying case when not in use.

3.0 Getting to know your rail drill.

Before you use the rail drill, please take the time to familiarize yourself with the controls and features.



4.0 Ancillary components & equipment.

The Coolant Bottle

The Pressurized Coolant System designed to give maximum coolant and lubrication will help to prolong cutter life. As well as ensuring a clean hole every time.

NB. Always use recommended cutting fluid.

Storage Case

This hard wearing and tough metal carry case provides protection for your drill in transit. The spacious design leaves enough room for all of your tools and ancillaries.

Index Drilling Plate

Used to ensure holes are correctly distanced from end of rail and centre to centre, guaranteed to provide complete accuracy.

Rail Shoes

Manufacturing from hardened tool steel, ensuring accuracy and repeatability.

Broaching Cutters

Universal broaching cutters provide an unrivalled quality and accuracy allowing you to drill with confidence.

Chuck Adapter

This Chuck adapter can be used to fit any standard stub drill, giving you the ability to cut any hole up to a maximum of 13mm.

5.0 Operating instructions.

5.1 Fitting and removing a cutter.

To fit a Broaching cutter

Ensure engine is not running.

Insert the pilot pin in the broaching cutter. The main function of the pilot pin is to ensure ejection of the slug at the end of each drilling cycle.

Loosen the grub screws so the shank of the cutter fits neatly into the arbor.

Align the flats of the cutter with the grub screws.

Insert the cutter firmly into the arbor compressing the internal spring until the shoulder of the cutter meets the end of the arbor and tighten the grub screws.

Always have damaged grub screws replaced.



NB. Always make sure the screws clamp onto the flats. Failure to do so could result in the screws standing proud of the arbor and therefore causing damage to the guide bush.

To remove a Broaching cutter

Loosen the grub screws.

The cutter will move out of the arbor under spring pressure.

Remove the cutter from the arbor

NB. It is advisable to store the drill with the grub screws wound in.

5.2 Fitting the chuck adapter.

The chuck adapter is fitted in exactly the same way as a broaching cutter. (See section 4.1)

Using a Twist Drill in the Chuck Adapter

Insert the drill in the chuck.

Tighten the chuck first by hand then using the chuck key provided.



**Chuck Adapter w/key
RRP Part # 467170**

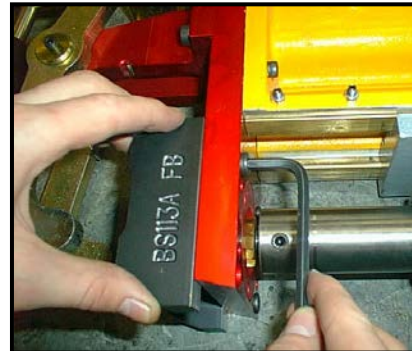
5.3 Fitting and removing rail shoes.

To fit rail shoes

Ensure the ejector grub screw is wound back into the base plate.

Push the shoe firmly onto the locating pins.

Insert the 2 hex cap bolts and tighten.



To remove rail shoes

Loosen and remove the two hex cap bolts.

If the shoe is tight use the ejector grub screw to force the rail shoe off.

Remove the rail shoe.



5.4 Using the coolant system.

Filling the pressurized sprayer bottle

Remove the pump mechanism by turning the handle anticlockwise.

Fill with recommended lubricant.

Replace the pump mechanism and fasten clockwise

Preparing the bottle for use

Ensure the bottle has sufficient lubricant.

Pump the handle 4 to 5 times or until resistance is met.

Depress the handle and turn clockwise to lock.

Attaching the Lubricant to the drill

Push the pipe from the bottle into the coolant adapter.

Turn the valve on the pipe to the 'ON' position to start coolant flow.

Removing the lubricant from the drill

Turn the valve on the pipe to 'OFF' to stop the coolant flow.

Remove the pipe by pressing the release ring on the coolant adapter.

Depressurising the coolant bottle

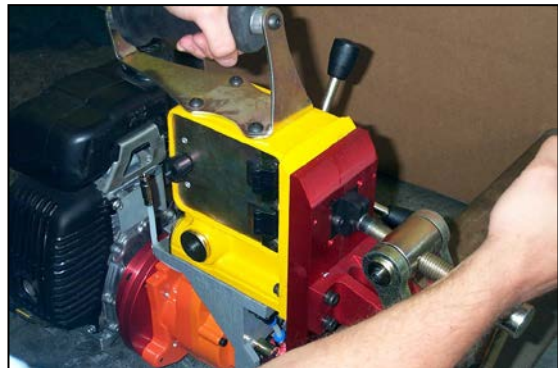
Turn the pressure release valve anticlockwise to release the pressure.

Close the valve by turning it clockwise.



5.5 Using the INDEX plate.

- Fit to rail head.
- Make sure the end stop is to end of rail.
- Tighten locking screw.
- Locate the Clevis arm into the index slot, and clamp the Rail Drill as described in section 5.6.
- Drill the first hole
- Un-clamp the Rail Drill as described in section 5.6.
- Clean between the rail shoes with a hand brush to clear all swarf.
- Repeat above procedure for drilling the second hole.



5.6 Using the rail clamp.

Attaching the drill

Before attaching the rail drill make sure rail surface is free from dirt and swarf from previously drilled holes.

Place the rail drill over the rail section and locate the clevis arm into the first slot of the indexing plate.

Locate the rail shoes correctly in the web of the rail.

Manoeuvre the Tommy bar so that its base sits in the spherical recess at the back of the base plate.

Secure the drill by turning the handle until the locking arm clamps tightly against the rail, ensuring the rail shoes fit squarely into the rail web.

Removing the drill

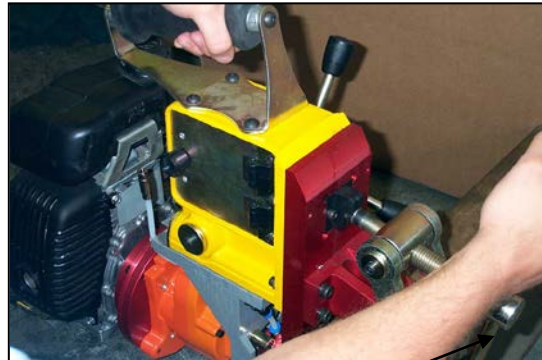
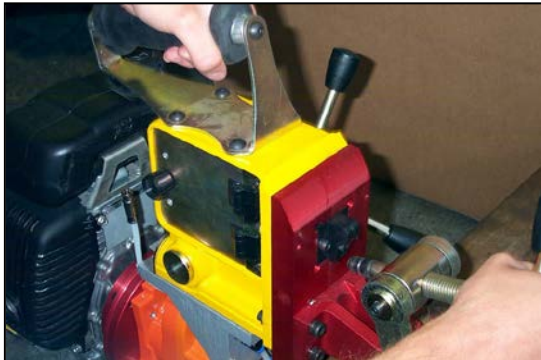
Turn the handle to loosen the clamp.

Pull the Tommy bar away from the recess to release the clamp.

Remove the rail drill from the rail section.

Clear swarf

After every hole is drilled, always make sure that the Nylube Bush is clean from any swarf, as it may cause the bush to wear. If the Arbor starts to wobble the Nylube Bush is ready for replacing.



Tommy bar
& Handle

5.7 Drilling a hole.

- Fit the indexing plate and clamp the machine to the rail, (see section 5.5).
- Ensure the cutter is clear of rail web
- Switch on coolant supply and check that no swarf is restricting the arbor movement through the Nylube bush.
- Start the motor.
- Apply a small amount of drilling pressure until the cutter is engaged in rail web.
- Increase pressure making sure not to overload the engine.
- Check the slug has been ejected at the end of each drilling cycle.
- Retract the cutter making sure the cutter is again clear of rail web.
- Turn off the engine and coolant supply.

5.8 Storing the rail drill.

- Place the drill into the case supplied.
- Put any cutters rail shoes etc into the bottom of the case.
- Place the indexing strips across the top of the drill.
- Finally put the Pressure bottle across the top.



5.9 Adjusting the slide.

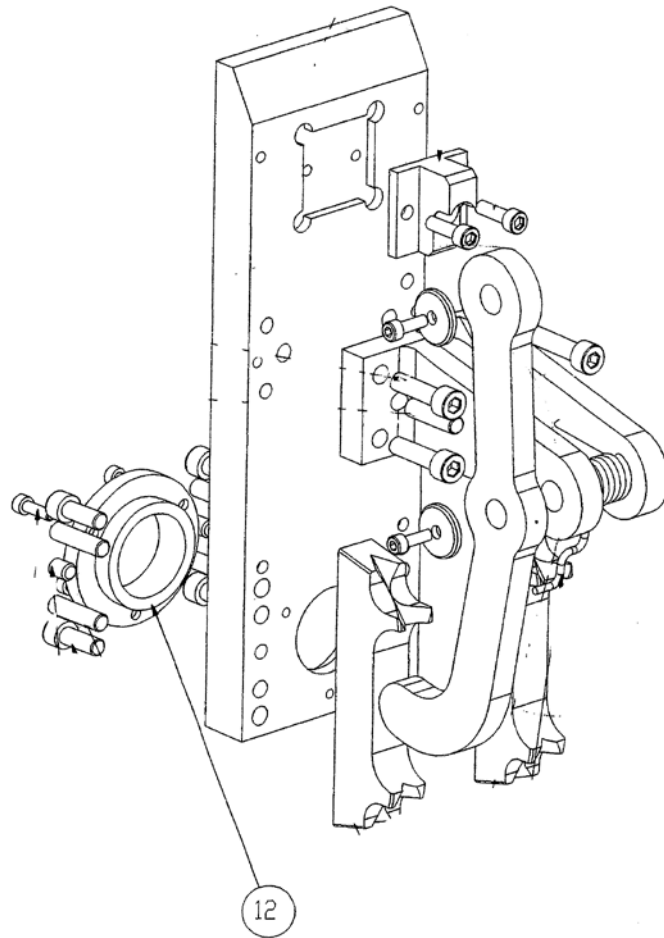
- After repeated use the cradle may become loose and need to be tightened.
- Put 2.5mm Allen Key into head of cradle retaining nuts, using 8mm Spanner undo the locking nuts anti-clockwise holding the Allen key without moving grub screws.
- Using the Allen Key gently tighten screws in series until the cradle moves freely in the slide but does not allow the motor to wobble.
- When adjustment is complete re-tighten locking nuts clockwise.



5.10 NYLUBE BUSHING.

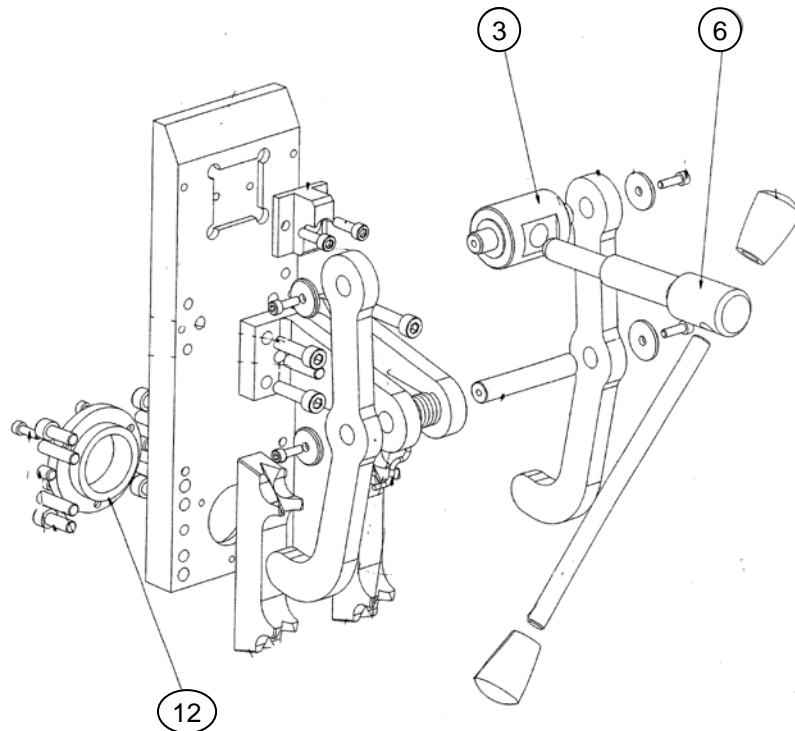
After every hole is drilled, always make sure that the Nylube Bushing (#12) is clean from any swarf, as it may cause the bushing to wear.

If the arbor starts to wobble the Nylube Bushing is ready for replacing.

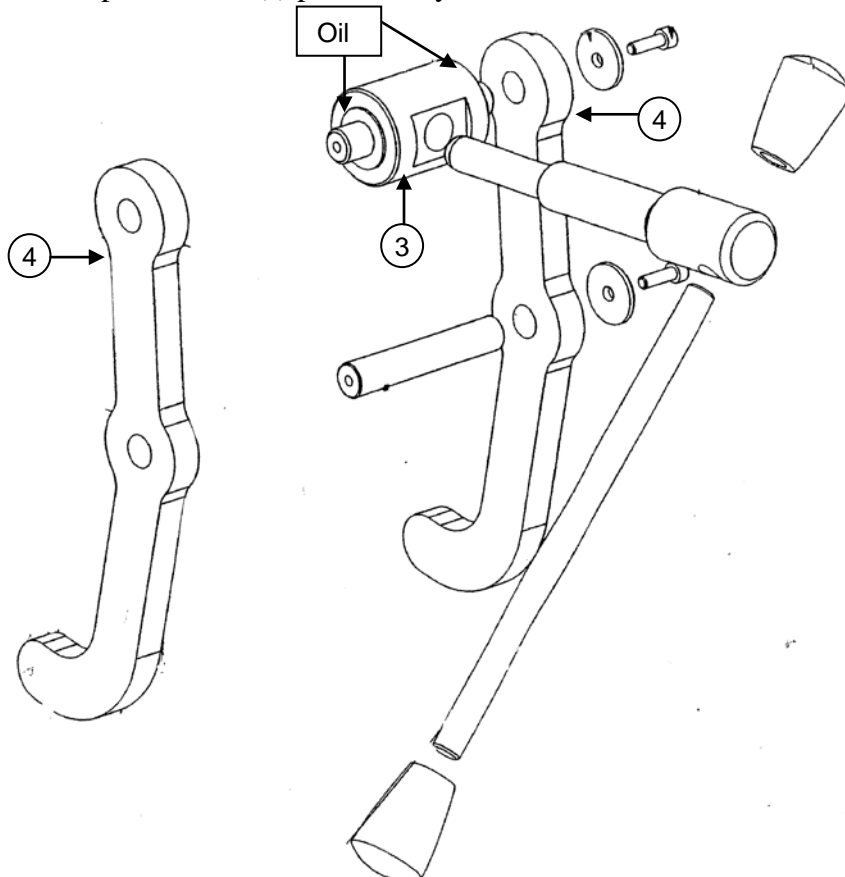


5.11 Clamp Assembly

The threads on Part # 6 (screwed into # 3) of the clamp assembly should be regularly greased to avoid damage to the zinc coating and help prevent corrosion.



Apply oil between part # 3 & 4(s) periodically.

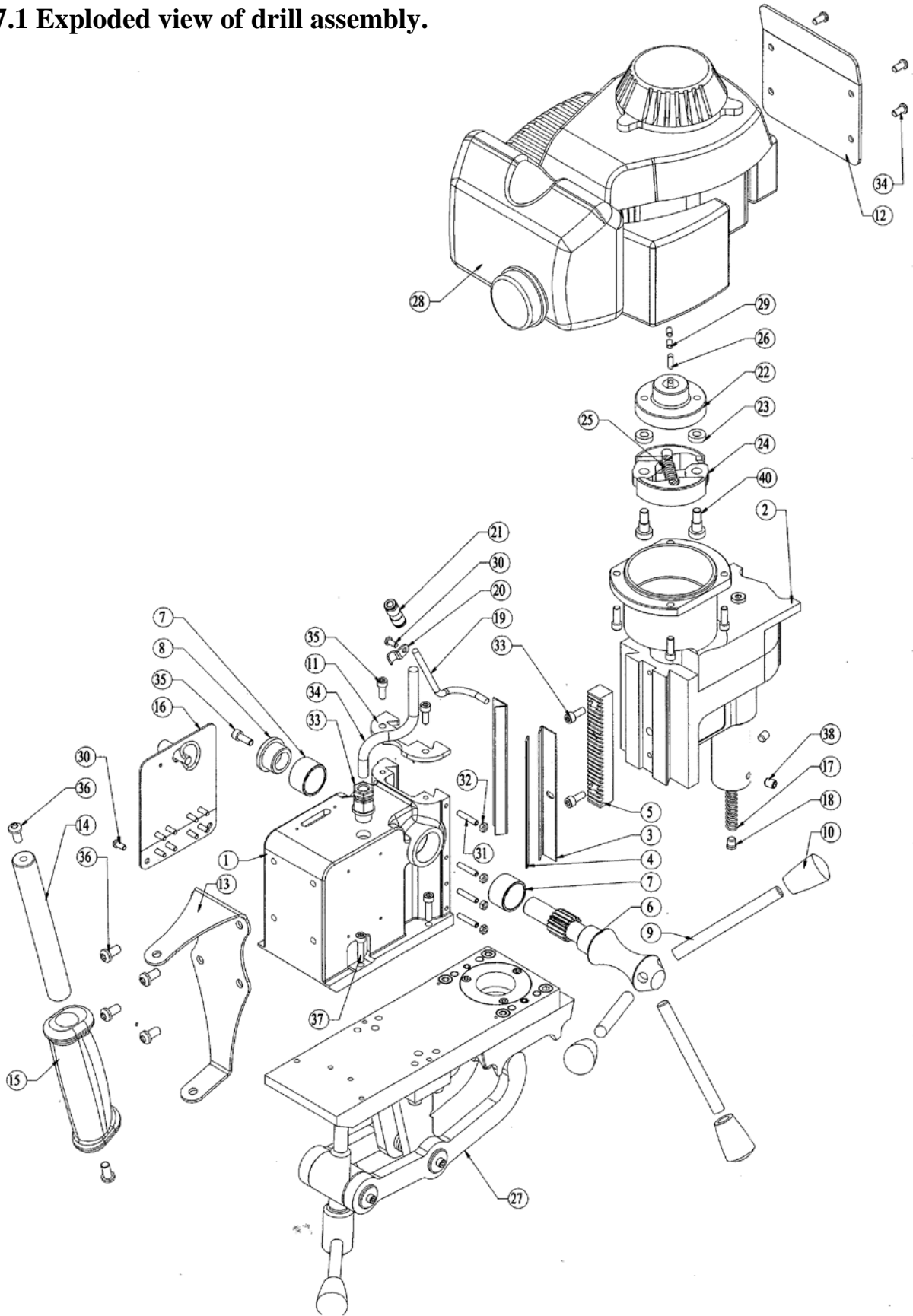


6.0 Do's and Don'ts.

- Do NOT change a cutter with the engine still running.
- Always ensure that 4-stroke fuel is being used.
- Gasoline is highly flammable and explosive. STOP engine before refuelling.
- Do NOT run engine in an enclosed area. Exhaust gas contains CARBON MONOXIDE.
- Do make sure that you have the correct rail shoes fitted for the rail section to be drilled and are using the correct hole positioning indexing plate.
- Do make sure you have installed the correct size cutter for the rail section to be drilled.
- Do make sure the cutter fitted is sharp without any of its cutting edges damaged.
- Do NOT use unnecessary pressure to force the cutter through the rail. This may damage both the machine and the rail. It may also result in personal injury.
- Do always use coolant when drilling holes.
- Do NOT allow other persons into the area in which you are operating the machine.
- Do remember the slug, which is ejected at the end of the drilling process, can cause injury. Keep the area clear at all times.
- Do always wear the correct personal protective equipment. when operating the machine, including safety glasses/goggles.

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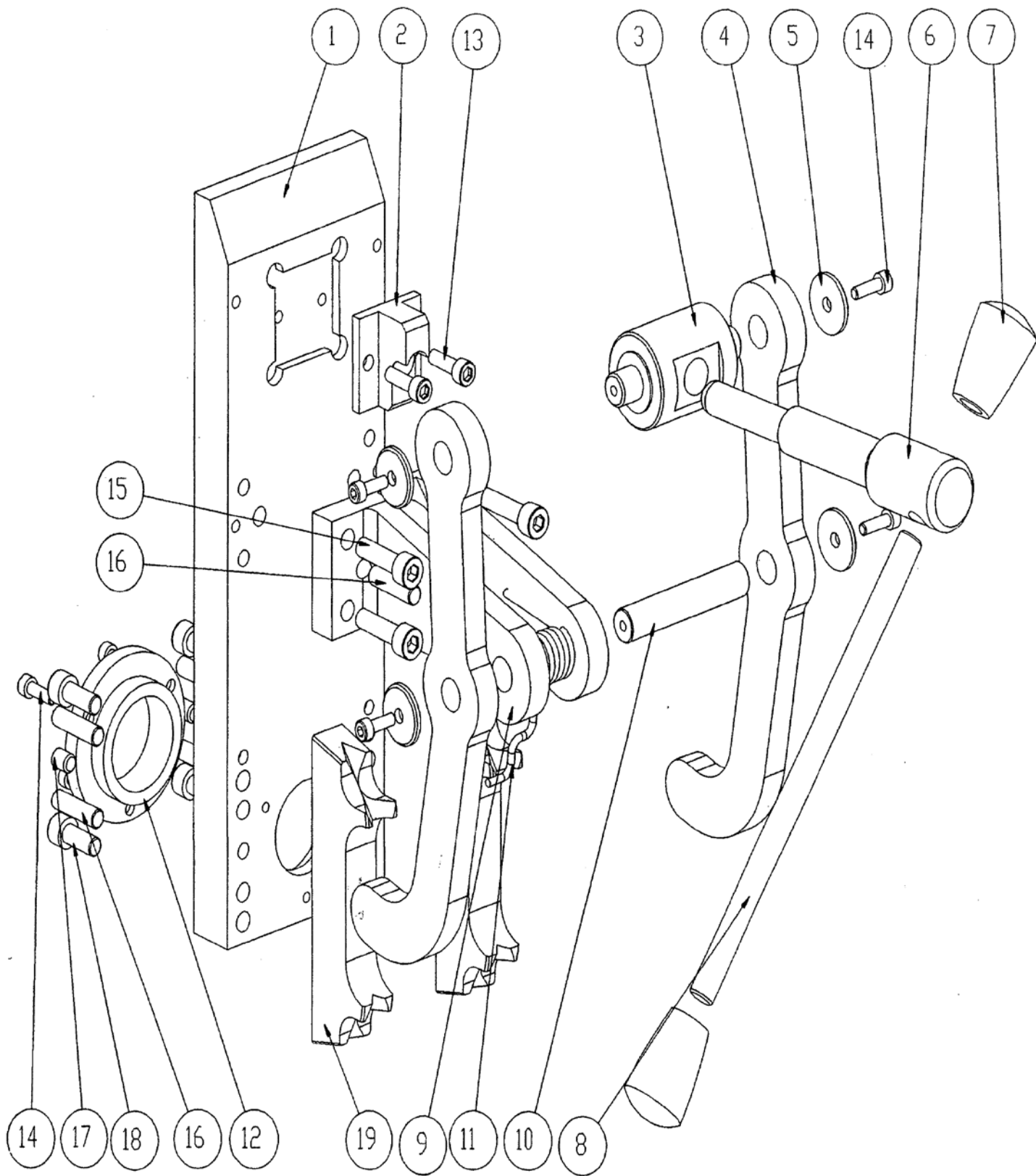
7.1 Exploded view of drill assembly.



7.1 Exploded view of drill assembly. Parts list

ITEM #	PART NO.	DESCRIPTION	QTY
1	465626	Petrol Body	1
2	466171	Integrated Cradle & Gearbox Assembly	1
3	464488	Angled Brass Strip	2
4	465623	G.F.S.	1
5	465771	Rack	1
6	465910	Large Pinion (zinc)	1
7	464494	Bush (pinion)	2
8	464493	Pinion end cap – deep (zinc)	1
9	465624	Handle (zinc)	3
10	464492	Handle knob (12mm knock on)	3
11	464490	Top plate (zinc)	1
12	----	Petrol cover plate	1
13	465787	Handle Bracket	1
14	-----	Handle Shaft	1
15	466388	Carry handle	1
16	466389	Petrol Body Door Assembly	1
17	465776	Arbor spring (m/taper)	1
18	465312	Arbor ejection plug (m/taper)	1
19	467555	6mm Coolant Pipe	1
20	-----	6mm Pipe Clip	1
21	464801	6mm – 6mm straight connector	1
22	466874	Clutch arm boss	1
23	465815	Clutch arm spacer-Racine petrol	2
24	----	Clutch arm – GXH50	2
25	465092	Clutch spring	1
26	462192	Motor drive key (0.186" \times 5/8" Long)	1
27	----	Clamp Assembly	1
28	464673	GXH50 Petrol motor	1
29	500361	M5x10mm grub screw	2
30	465886	M5x10mm button head screw	3
31	500361	M5x25mm grub screw (see maintenance sect.)	4
32	501077	M5 nut (see maintenance sect.)	4
33	467958	Cable Gland (M16)	1
34	----	Conduit (Black)	1
35	500531	M6x16mm capscrew	5
36	466506	M6x16mm button head screw	6
37	----	M6x25mm capscrew	4
38	465752	M8x10mm grub screw	2
39	-----	M8x12 Capscrew	4
40	465816	M8x10 shoulder bolt	2

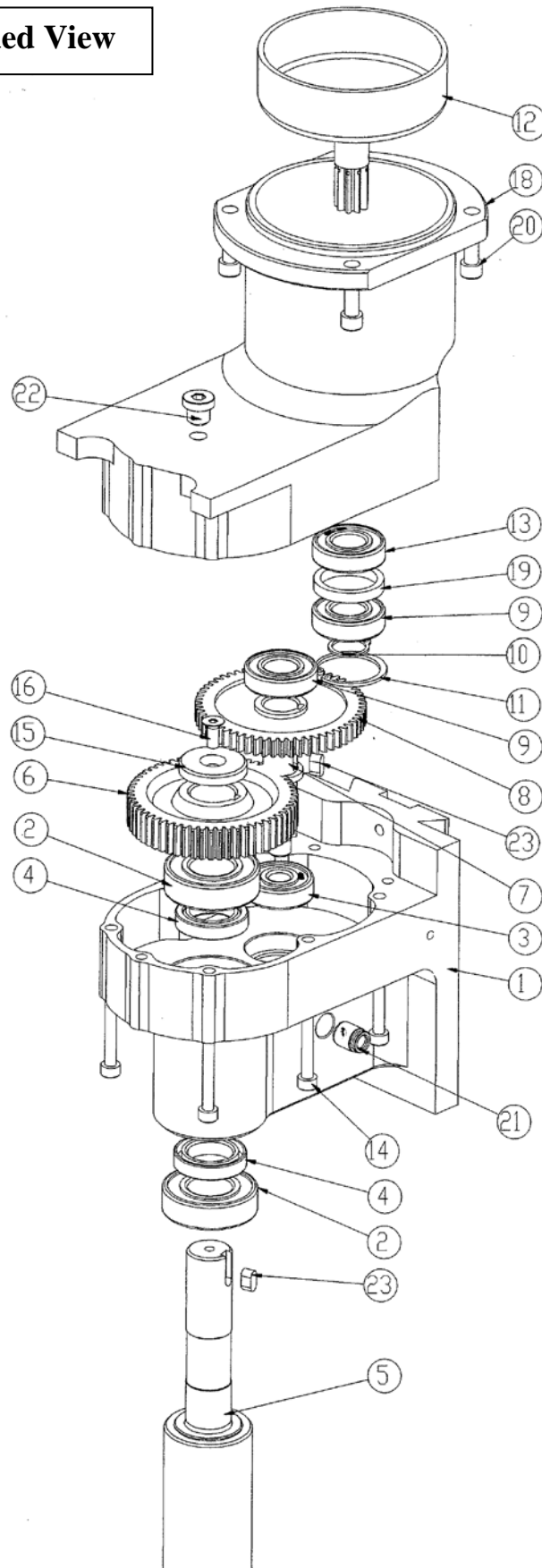
7.3 Exploded view of Clamp Assembly



7.4 Clamp Assembly Parts List

No.	DESCRIPTION	PART NO.	QTY.
1	Petrol Base plate	465511	1
2	Screw clamp locking shoe	465772	1
3	Screw clamp pivot shaft	464949	1
4	Locking Arm	465531	2
5	Cam pin end cap	491538	4
6	Screw clamp locking shaft	464948	1
7	12mm knob	464492	2
8	Ø12 handle	465489	1
9	Locking arm clevis	----	1
10	Cam pivot pin	465773	1
11	Leg Release Spring	465704	1
12	Nylube Bush	465371	1
13	M6x20 Cap Screw	----	2
14	M5x16 Cap Screw	491637	7
15	M8x30 Cap Screw	----	4
16	Ø8x30 Lg Dowel	----	6
17	M8x10 Grub Screw	----	2
18	M8x20 Cap Screw	500550	4
19	Rail shoe	----	2

7.5 Gearbox Exploded View

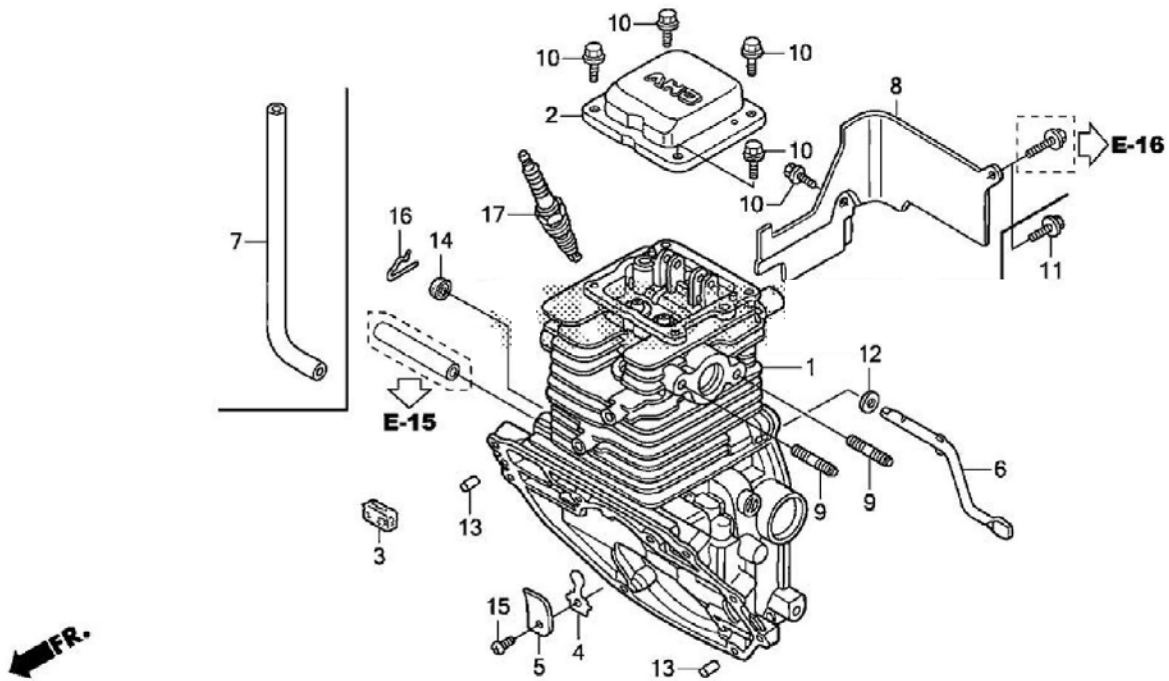


7.6 Gearbox Parts list

ITEM NO.	QTY.	DESCRIPTION	PART NO.
1	1	LOWER GEARBOX HOUSING	467837
2	2	BEARING	465765
3	1	BEARING	466202
4	2	SHAFT SEAL	465766
5	1	TM1000 ARBOR PETROL GEARBOX	465751
6	1	15mm THICK SPUR GEAR	---
7	1	9 TOOTH PINION SHAFT KEYED	466170
8	1	12mm THICK SPUR GEAR	466157
9	2	BEARING	467010
10	1	EXTERNAL CIRCLIP FOR Ø15 SHAFT	467011
11	1	INTERNAL CIRCLIP FOR Ø32 BORE	467012
12	1	9 TOOTH PINION WITH CLUTCH CUP	----
13	1	BEARING	465684
14	6	M5x50 CAPSCREW	----
15	1	GEAR LOCKING CAP	----
16	1	M5x10 COUNTERSUNK SCREW	491845
17	1	MOTOR (NOT SHOWN)	464673
18	1	UPPER GEARBOX HOUSING	467792
19	1	BEARING SPACER RING	467013
20	4	1/4"x3/4" UNF CAPSCREW	----
21	1	FLUSH FIT Ø6 PIPE FITTING	465811
22	1	1/8"BSP PLUG	----
23	2	GEAR DRIVE KEY	465768

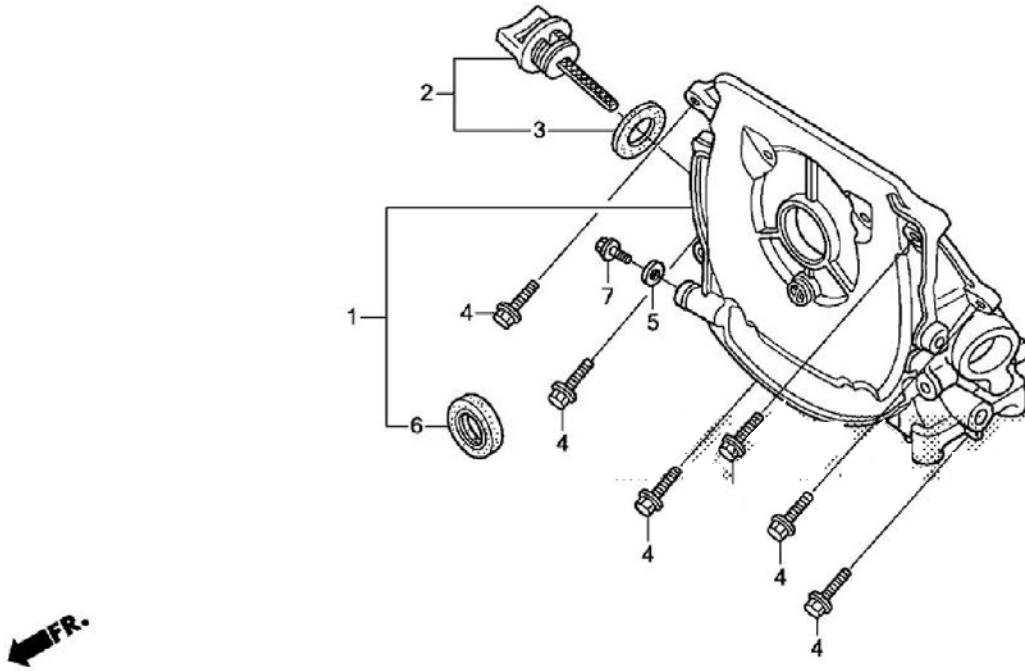
Honda GXH50-QXA
 RRP # 464673

8. 1 Illustration – Cylinder Barrel



Ref. #	Part Number	Part Description	Qty.
001	12100-ZM7-408	CYLINDER	001
002	12311-ZM7-010	COVER, HEAD	001
003	12367-ZM7-000	FILTER, BREATHER	001
004	15571-ZM7-003	VALVE, OIL OUTLET	001
005	15572-ZM7-000	PLATE, STOPPER	001
006	16541-ZM7-000	SHAFT, GOVERNOR ARM	001
008	19631-ZM7-000	SHROUD	001
010	90003-892-000	BOLT, FLANGE (5X12)	005
012	90443-ZC3-000	WASHER (5.2X9)	001
013	91101-Z0G-003	ROLLER (6X14.8)	002
014	91231-ZC3-003	OIL SEAL (5X11X5)	001
015	93500-03005-0A	SCREW, PAN (3X5)	001
016	94251-06000	PIN, LOCK (6MM)	001
017	98056-54757	SPARK PLUG (U14FSR-UB)	(1)
017	98056-54777	SPARK PLUG (CR4HSB)	(1)
017	98056-55757	SPARK PLUG (U16FSR-UB)	001
017	98056-55777	SPARK PLUG (CR5HSB)	001

Honda GXH50-QXA
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8.2 Illustration – Oil Case



Ref. #	Part Number	Part Description	Qty.
001	11300-ZM7-417	CASE ASSY., OIL	001
002	467574	CAP ASSY., OIL FILLER	001
003	468470	GASKET, OIL FILLER CAP	001
004	90006-ZM7-000	BOLT, FLANGE (5X23)	008
005	90471-580-000	GASKET (8MM)	001
006	91202-HC-005	OIL SEAL (17X27X5) (KOYO)	001
007	95701-08012-08	BOLT, FLANGE (8X12)	001

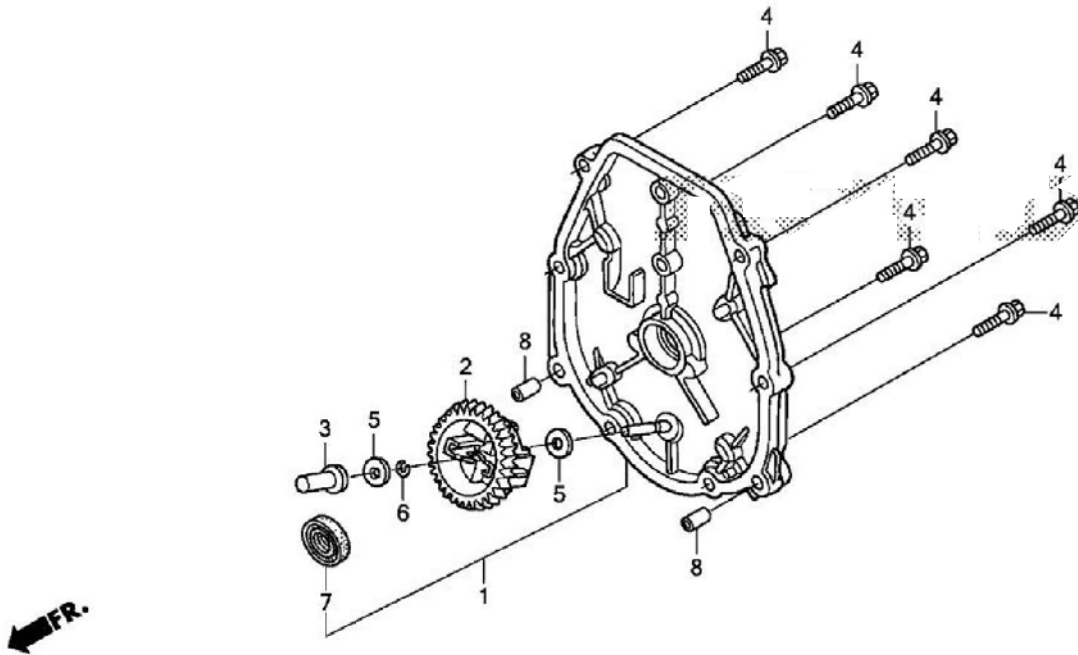
**Cap, Assembly, Oil Filler (002)
 INCLUDES
 RRP Part # 467574 (003)**

<u>Ref. #</u>	<u>Racine Part #</u>
001	467498
002	467574
003	468470

Honda GXH50-QXA

RRP # 464673

8.3 Illustration – Crank Case Side Cover

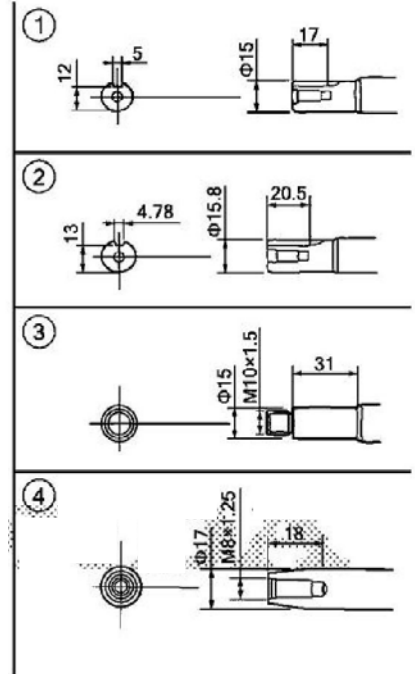
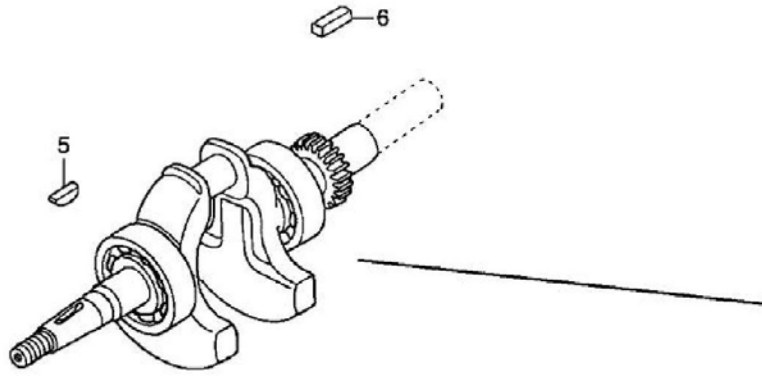


Ref. #	Part Number	Part Description	Qty.
001	11340-ZM7-802	COVER, CRANKCASE SIDE	001
002	16510-ZM7-000	GOVERNOR ASSY.	001
003	16531-ZM7-000	SLIDER, GOVERNOR	001
004	90006-ZM7-000	BOLT, FLANGE (5X23)	006
005	90441-ZM7-000	WASHER (4.2X13)	002
006	90602-ZM7-000	CLIP, GOVERNOR HOLDER	001
007	91202-HC5-005	OIL SEAL (17X27X5) (KOYO)	001
008	94301-06100	PIN, DOWEL (6X10)	002

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8.4 Illustration – Crank Shaft



Ref.	Part Number	Part Description	Qty.
002	13310-ZM7-802	CRANKSHAFT	001
005	13331-ZM7-000	KEY, SPECIAL	001
006	90741-ZM7-000	KEY (4.78MM)	(1)

Honda GXH50-QXA

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8.5 Illustration – Piston & Connecting Rod



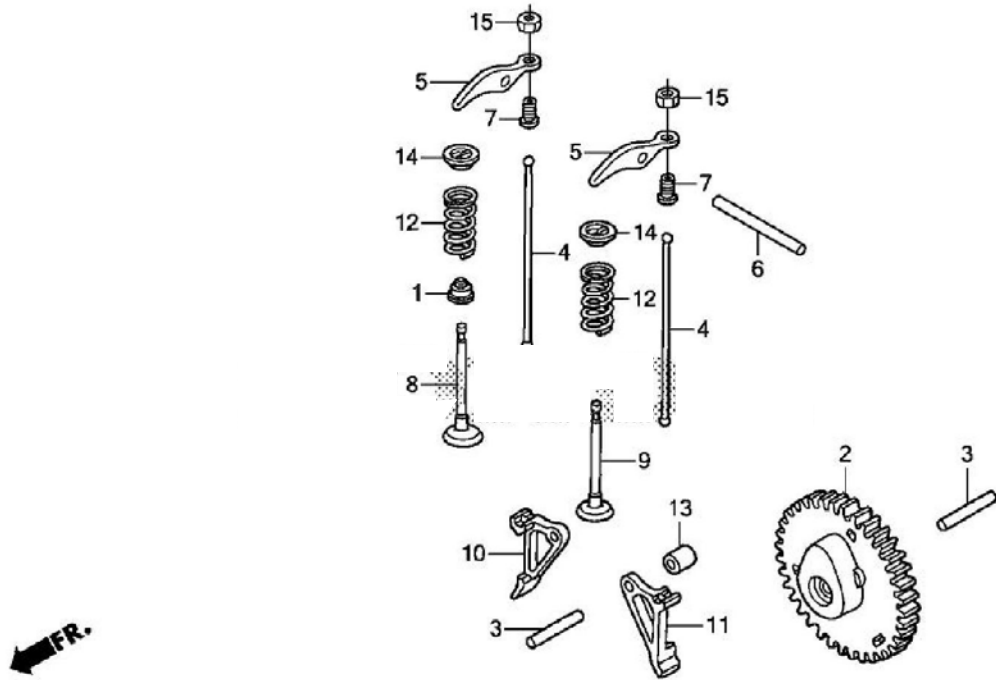
Ref. #	Part Number	Part Description	Qty.
001	13010-ZM7-000	RING SET, PISTON (STD)	001
002	13101-ZM7-010	PISTON (STD)	001
003	13111-GS7-000	PIN, PISTON	001
004	13115-147-000	CLIP, PISTON PIN (10MM)	002
005	469700	ROD ASSY., CONNECTING	001
006	13281-ZM7-010	DIPPER, CONNECTING ROD	001
007	90001-ZM7-000	BOLT, CONNECTING ROD	002

<u>Ref. #</u>	<u>Racine Part #</u>
005	469700

Honda GXH50-QXA

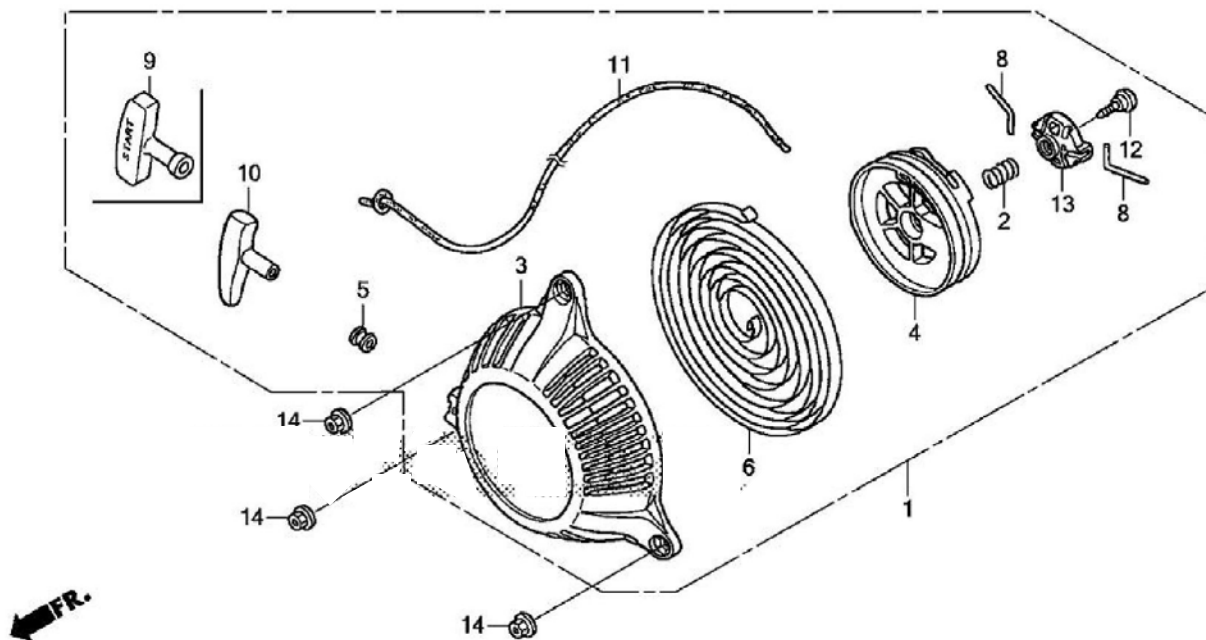
RRP # 464673

8.6 Illustration – Camshaft



Ref. #	Part Number	Part Description	Qty.
001	12209-ZM7-003	SEAL, VALVE STEM	001
002	14100-ZM7-010	CAMSHAFT ASSY.	001
003	14126-Z0G-003	ROLLER (5X29.8)	002
004	14410-ZM7-000	ROD, PUSH	002
005	14431-ZM7-00-	ARM, VALVE ROCKER	002
006	14435-ZM7-003	ROLLER (4X37.8)	001
007	14451-ZM7-000	PIVOT, ROCKER ARM	002
008	14711-ZM7-000	VALVE, IN.	001
008	14711-ZM7-010	VALVE, IN.	001
009	14721-ZM7-000	VALVE, EX.	001
010	14731-ZM7-013	LIFTER, VALVE	001
011	14731-ZM7-013	LIFTER, VALVE	001
012	14751-ZM7-000	SPRING, VALVE	002
013	14754-ZM7-000	COLLAR, LIFTER	001
014	14771-ZM7-010	RETAINER, VALVE SPRING	002
015	90206-KM3-000	NUT, TAPPET ADJUSTING	002

Honda GXH50-QXA
 RRP # 464673
8.7 Illustration – Recoil Starter



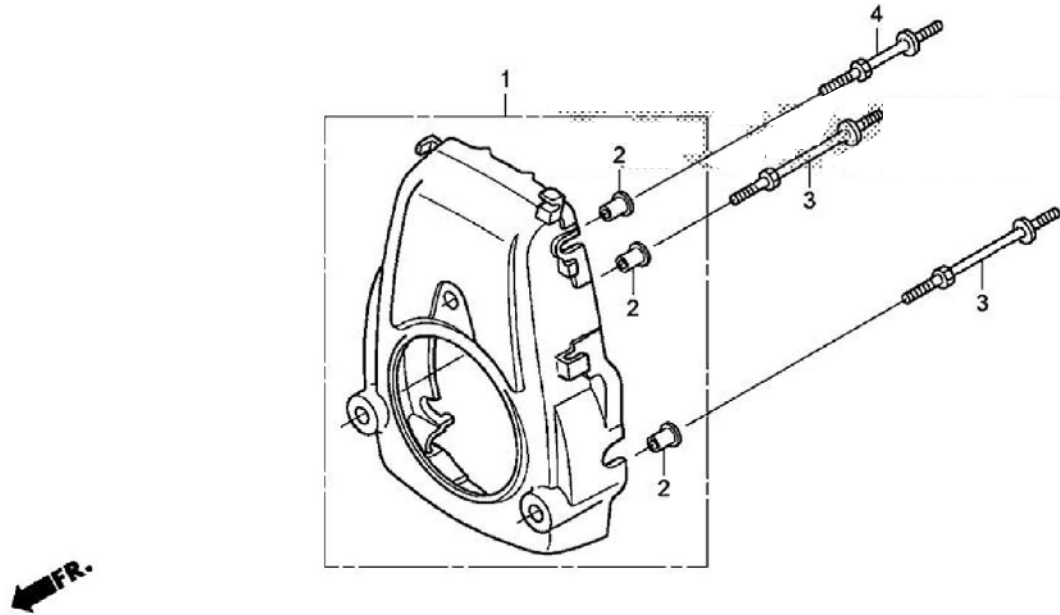
Ref. #	Part Number	Part Description	Qty.
001	28400-ZM7-003	STARTER ASSY., RECOIL	001
002	28404-968-004	SPRING, FRICTION	001
003	469125	CASE, RECOIL STARTER	001
004	28421-ZM7-003	REEL, RECOIL STARTER	001
005	28433-ZM3-003	GUIDE, ROPE	001
006	28442-ZL8-003	SPRING, RECOIL STARTER	001
008	28459-ZM7-003	SWINGARM	002
010	28461-ZM3-003	KNOB, RECOIL STARTER	001
011	28462-ZM7-003	ROPE, RECOIL STARTER	001
012	90012-ZM3-003	SCREW, SETTING	001
013	91504-ZM7-003	COLLAR	001
014	94050-05000	NUT, FLANGE (5MM)	003

Ref. #	Racine Part #
003	469125

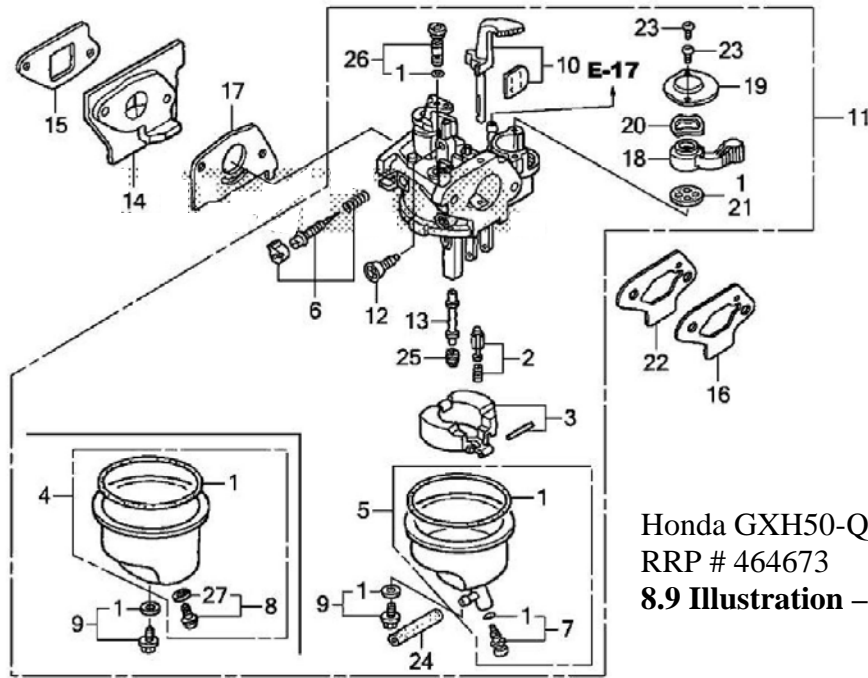
Honda GXH50-QXA

RRP # 464673

8.8 Illustration – Fan Cover



Ref. #	Part Number	Part Description	Qty.
001	19610-ZM7-000ZC	COVER, FAN *R280*(POWER RED)	001
002	19619-ZM7-300	COLLAR, FAN COVER	003
003	90042-ZM7-000	BOLT A, STUD	002
004	90043-ZM7-000	BOLT B, STUD	001



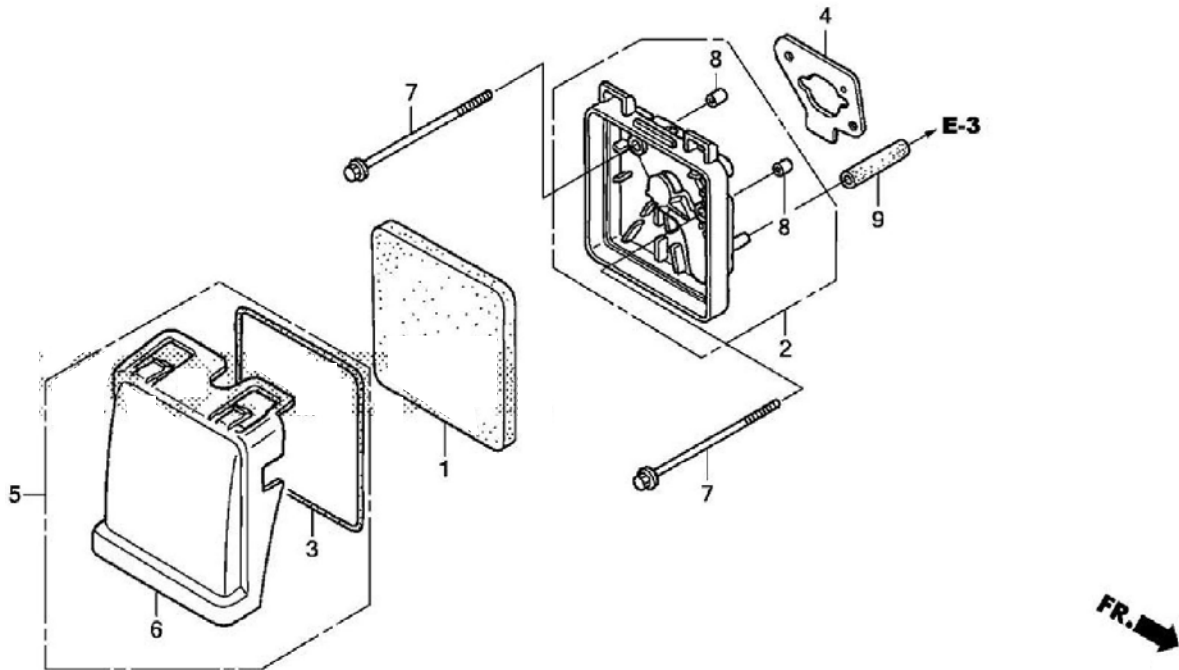
ZDF0E1400A

Ref. #	Part Number	Part Description	Qty.
001	16010-ZG1-015	GASKET SET	001
002	16011-ZE0-005	VALVE SET, FLOAT	(SEAT NOT INCLUDED) 001
003	16013-ZG0-811	FLOAT SET	001
004	16015-ZG0-811	CHAMBER SET, FLOAT	001
006	16016-ZH8-W01	SCREW SET	001
008	16024-ZE1-811	SCREW SET, DRAIN	001
009	16028-ZG0-811	SCREW SET	001
009	16028-ZW6-611	SCREW SET	001
010	16044-ZM7-801	CHOKE SET	001
011	715255	CARBURETOR ASSY. (BF32E G)	001
012	16124-ZE0-005	SCREW, THROTTLE STOP	001
013	16166-ZN4-801	NOZZLE, MAIN	001
014	16211-ZM7-000	INSULATOR, CARBURETOR	001
015	16212-ZM7-000	GASKET, INSULATOR	001
017	16221-ZG0-801	GASKET, CARBURETOR	001
018	16953-ZG0-812	LEVER, PETCOCK	001
019	16954-ZE1-812	PLATE, LEVER SETTING	001
020	16956-ZE1-811	SPRING, PETCOCK LEVER	001
021	16957-ZE1-812	GASKET, PETCOCK	001
022	468799	GASKET, AIR CLEANER	001
023	93500-03006-0H	SCREW, PAN (3X6)	002
025	99101-ZG0-0480	JET, MAIN (#48)	(1)
025	99101-ZG0-0500	JET, MAIN (#50)	(1)
025	99101-ZG0-0520	JET, MAIN (#52)	001
025	467800	JET, MAIN (#55)	001
026	99204-ZE2-0350	JET SET, PILOT (#35)	001

No. 011 Carburetor, Assembly Includes:
Carburetor - RRP Part # 467777
No. 025 - Jet Main - RRP Part # 467800

Ref. #	Racine Part #
011	715255
022	468799
025	467777

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 RRP # 464673
8.10 Illustration – Air Cleaner

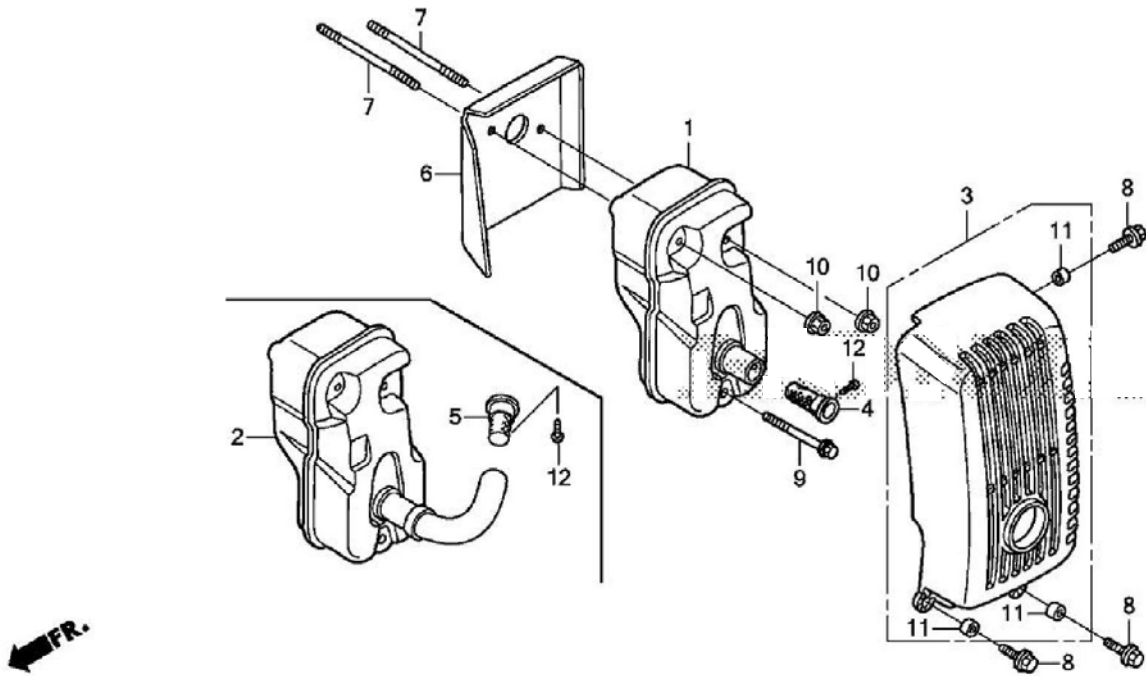


Ref. #	Part Number	Part Description	Qty.
001	17211-ZM7-000	ELEMENT, AIR CLEANER	001
002	17220-ZM7-010	HOUSING, AIR CLEANER	001
003	17227-ZM7-000	SEAL, AIR CLEANER	001
005	17230-ZM7-010	COVER, AIR CLEANER	001
006	17231-ZM7-010	COVER, AIR CLEANER	001
007	90004-ZM7-000	BOLT, FLANGE (5X75)	002
008	91503-ZM7-000	COLLAR, AIR CLEANER	002
009	95005-70003-30M	BULK HOSE, VACUUM (7X3000) OEM CUT SIZE: (7X75)	001

Honda GXH50-QXA

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8.11 Illustration – Muffler

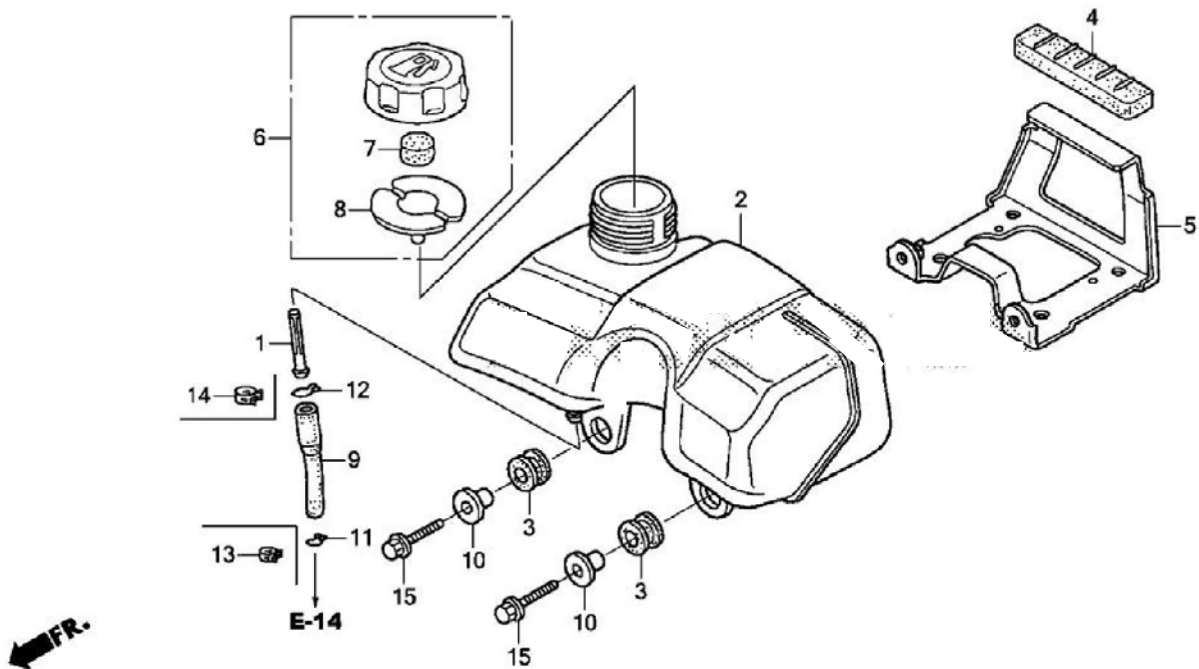


Ref. #	Part Number	Part Description	Qty.
001	18310-ZDF-810	MUFFLER	001
003	18320-ZM7-000	PROTECTOR, MUFFLER	001
004	18350-ZDF-800	ARRESTER, SPARK	(1)
006	18515-ZM7-000	GUIDE, AIR	001
007	90002-ZM7-000	BOLT, STUD (5X55)	002
008	90012-892-000	BOLT, FLANGE (5X16)	003
009	90103-P4V-010	BOLT, FLANGE (5X35)	001
010	90136-SM4-901	NUT, SELF-LOCK (5MM)	002
011	91502-ZM3-000	COLLAR, TOP COVER	003
012	93903-24110	SCREW, TAPPING (4X8)	(1)

Honda GXH50-QXA

RRP # 464673

8.12 Illustration – Fuel Tank

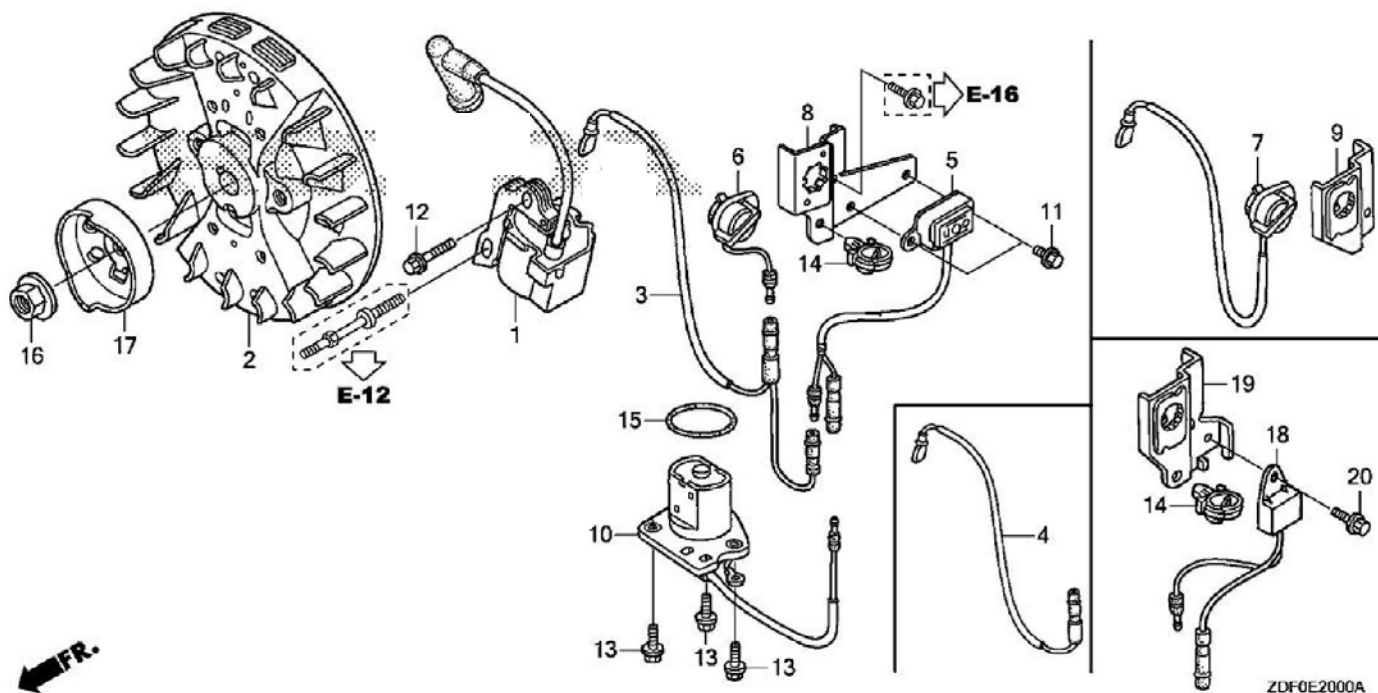


Ref. #	Part Number	Part Description	Qty.
001	16952-ZE6-000	FILTER, FUEL	001
002	17511-Z4C-305	TANK, FUEL (FOR U.S.A.)	001
003	17532-ZM7-000	RUBBER A, TANK MOUNTING	002
004	17533-ZM7-000	RUBBER B, TANK MOUNTING	001
005	17560-ZM7-000	STAY, FUEL TANK	001
006	17620-ZL8-023	CAP ASSY., FUEL TANK	001
007	17622-ZL8-003	SPONGE, FUEL CAP BREATHER	001
008	17624-ZL8-013	GASKET, FUEL CAP	001
009	17701-Z4C-003	TUBE A, FUEL (FKM)	001
010	19052-MB4-880	COLLAR, CANISTER MOUNTING	002
013	95002-40800-08	CLAMP, TUBE (D8)	001
014	95002-41050-08	CLAMP, TUBE (D10.5)	001
015	95701-06020-07	BOLT, FLANGE (6X20)	002

Honda GXH50-QXA

RRP # 464673

8.13 Illustration – Flywheel – Ignition



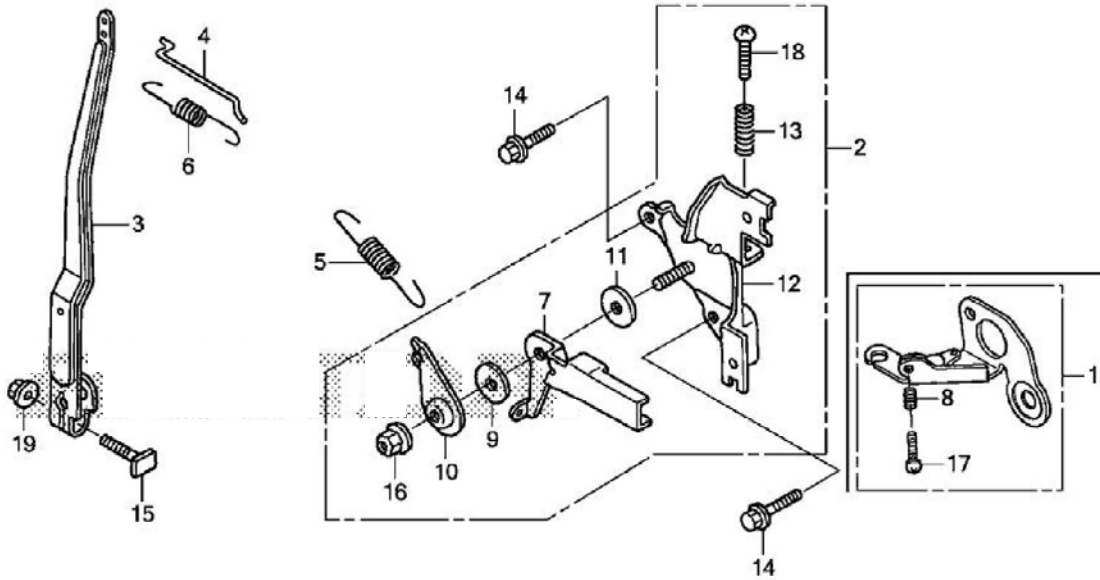
Ref. #	Part Number	Part Description	Qty.
001	468380	COIL ASSY., IGNITION	001
002	31110-ZM7-004	FLYWHEEL	001
003	469681	WIRE, STOP SWITCH	001
006	35120-Z0D-V81	SWITCH ASSY., ENGINE STOP	001
010	35480-ZM7-802	SWITCH ASSY., OIL LEVEL	001
012	90004-ZC3-000	BOLT, FLANGE (5X20)	001
013	90012-896-750	BOLT, FLANGE (5X14)	003
014	469683	CLIP, HARNESS	001
015	467864	O-RING (34.6X2.5)	001
016	94050-10000	NUT, FLANGE (10MM)	001
017	28451-ZM7-003	PULLEY, RECOIL STARTER	001
018	34150-ZH7-023	ALERT UNIT, OIL	001
019	469682	BRACKET, STOP SWITCH	001
020	501202	BOLT, FLANGE (6X8)	001

<u>Ref. #</u>	<u>Racine Part #</u>
001	468380
003	469681
014	469683
015	467864
019	469682
020	501202

Honda GXH50-QXA

RRP # 464673

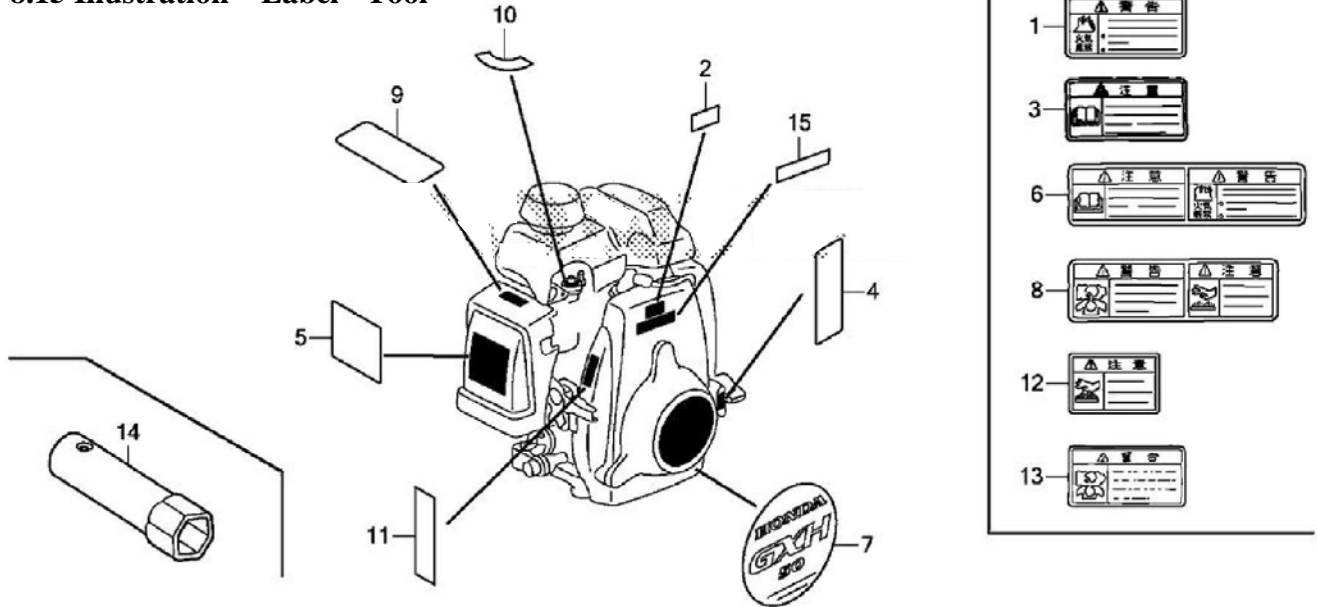
8.14 Illustration – Control



Ref. #	Part Number	Part Description	Qty.
002	16500-ZM7-000	CONTROL ASSY.	001
003	16551-ZM7-000	ARM, GOVERNOR	001
004	16555-ZM7-000	ROD, GOVERNOR	001
005	16561-ZM7-000	SPRING, GOVERNOR	001
006	16562-ZM7-000	SPRING, THROTTLE RETURN	001
007	16571-ZM7-000	LEVER, CONTROL	001
009	16574-ZE1-000	SPRING, LEVER	001
010	16575-ZH8-000	WASHER, CONTROL LEVER	001
011	16578-ZE1-000	SPACER, CONTROL LEVER	001
012	16580-ZM7-000	BASE, CONTROL	001
013	16584-ZE3-790	SPRING, CONTROL ADJUSTING	001
014	90003-892-000	BOLT, FLANGE (5X12)	002
015	90015-Z5T-000	BOLT, GOVERNOR ARM	001
016	90114-SA0-000	NUT, SELF-LOCK (6MM)	001
018	93500-05020-0A	SCREW, PAN (5X20)	001
019	94050-060000	NUT, FLANGE (6MM)	001

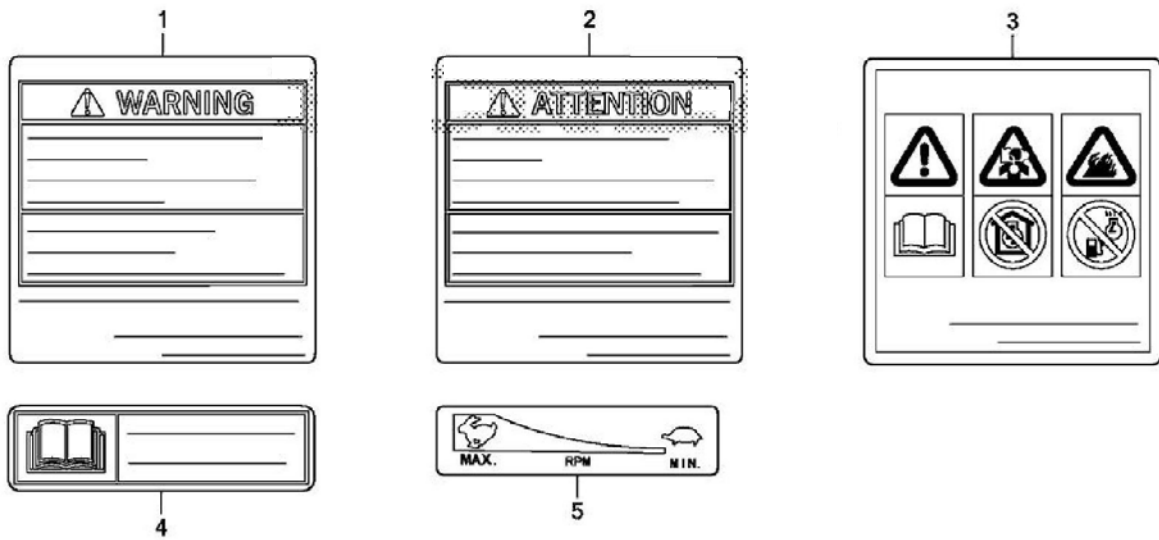
Honda GXH50-QXA RRP #
464673

8.15 Illustration – Label - Tool



Ref. #	Part Number	Part Description	Qty.
005	87516-ZDF-000	MARK, OPERATOR CAUTION (ENGLISH)	001
007	87521-ZDF-000	EMBLEM	001
010	87528-ZG0-W40	MARK, PETCOCK (EXTERNAL)	001
014	89216-045-010	WRENCH, SPARK PLUG	(1)

Honda GXH50-QXA
 RRP # 464673
8.16 Illustration – Label

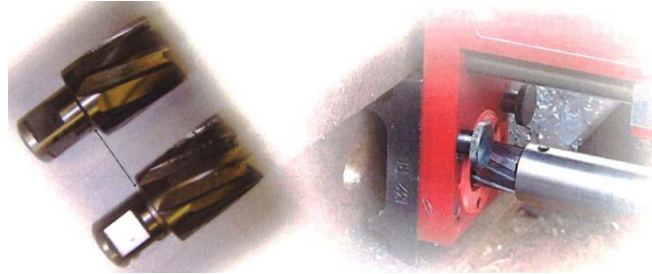


ZDF0E4001A

Ref. #	Part Number	Part Description	Qty.
002	87516-ZDF-800	MARK, OPERATOR CAUTION (FRENCH)	001
003	87519-ZDF-800	MARK, OPERATOR CAUTION (PICTOGRAPH)	001
005	87532-ZH7-000	MARK, THROTTLE INDICATION	001



Broach Cutters



Racine Railroad Products sells new and sharpens your used broach style cutters. Cutters fit all Gas, Hydraulic, Electric and Magnetic high speed drills. New cutter sizes range from 7/8" to 1-3/16" by 1".

CUTTERS & PILOT PINS

464920	7/8" X 1"
464162	1" X 1"
464461	1-1/16" X 1"
464163	1-1/8" X 1" (469173)
464164	1-3/16" X 1" (469174)
464165	1-1/4" X 1" (469107)
464166	1-5/16" X 1" (469175)
464167	1-3/8" X 1"
464168	1-7/16" X 1"
465801	1-1/2" X 1" (469176)
465800	1-3/16" X 2"
464169	1" PILOT PIN (469108)
464754	2" PILOT PIN

DRILL ACCESSORIES

464921	COOLANT 1 GAL UNCUT
464803SK	COOLANT (QTY) 5 GAL
464171	DRILL CARRY CASE
464172	COOLANT BOTTLE COMPLETE
464801	QUICK DISCONNECT FITTINGS



Visit our web site: www.racinerailroad.com
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1955 Norwood Court • Mount Pleasant, Wisconsin 53403

Gas Rail Drill Accessories – Page 2 of 3

ROTAMAG KITS	
792599	KIT, CRANE RAIL CLAMP
792598	KIT, GIRDER RAIL CLAMP
713888SK	3/8" TWIST DRILL ASSY
464796	3/8" TWIST DRILL BIT

INDEX STRIPS	
714007	2-1/2 X 5
714258	2-1/2 X 5 X 5
714117	2-1/2 X 5-1/2 X 5-1/2
714048	2-1/2 X 6 X 6
464539	2-1/2 X 6-1/2 X 6-1/2
714083	2-11/16 X 5-1/2
714124	2-11/16 X 5-1/2 X 5.5
714043	2-15/32 X 5
714000	2-23/32 X 6 X 7
714253	2-3/4 X 5-1/2
714013	2-3/4 X 5-19/32 X 5-19/32
714016	2-3/4 X 6 X 6
714093	2-3/4 X 6 X 7
714113	2-3/4 X 7 X 7
714001	2-3/4 X 7-1/2 X 6
714059	2-5/8 X 5-1/2
714252	2-5/8 X 5-1/2 X 5-1/2
464919	3 X 7-1/2 X 6
714404	3 X 6 X 6
714234	3-1/2 X 3 X 3
715592	3-1/2 X 6 X 6
714002	3-9/16 X 6 X 6
714062	4 X 5 X 6
714211	83MM X 166MM X 166MM

Gas Rail Drill Accessories – Page 3 of 3

ROTAMAG RAIL SHOES	
465756	Shoe, Rail: 60 ASCE
714210	Shoe, Rail: 60 Kg UIC
465075	Shoe, Rail: 70 ASCE
714006	Shoe, Rail: 74 C
464770	Shoe, Rail: 75 ASCE
714055	Shoe, Rail: 75 BSR
714054	Shoe, Rail: 75 BSS
713969	Shoe, Rail: 78 NH
464771	Shoe, Rail: 80 ASCE
464983	Shoe, Rail: 85 ASCE
465076	Shoe, Rail: 85 PRR
465077	Shoe, Rail: 85 PS
464914	Shoe, Rail: 8520
713975	Shoe, Rail: 90 ARA-A
713974	Shoe, Rail: 90 ARA-B
714005	Shoe, Rail: 90 ASCE
464915	Shoe, Rail: 90 GN
465056	Shoe, Rail: 100 ARA-A
465083	Shoe, Rail: 100 ARA-B
465080	Shoe, Rail: 100 ASCE
714095	Shoe, Rail: 100 OH
465081	Shoe, Rail: 100 PS
465056	Shoe, Rail: 100 RA

ROTAMAG RAIL SHOES	
714010	Shoe, Rail: 100 RE
714100	Shoe, Rail: 100 RE Head Free
714057	Shoe, Rail: 104 Crane
714058	Shoe, Rail: 105 Crane
464946	Shoe, Rail: 105 Dudley
714103	Shoe, Rail: 105 OH
714085	Shoe, Rail: 107 NH
714009	Shoe, Rail: 110 AREA
714082	Shoe, Rail: 110 RE
465057	Shoe, Rail: 112 AREA
714064	Shoe, Rail: 115 AREA - 2 5/8" Hole Height
715149	Shoe, Rail: 115 RE - 2 7/8" Hole Height
714246	Shoe, Rail: 115 RE Guard Rail
465348	Shoe, Rail: 122 CB
465082	Shoe, Rail: 127 Dudley
714248	Shoe, Rail: 130 HF
714249	Shoe, Rail: 130 RE
464917	Shoe, Rail: 130 PS
714250	Shoe, Rail: 131 RE
714065SK	Shoe, Rail: 132, 136, 141 RE
714187	Shoe, Rail: 133 AREA
714133	Shoe, Rail: 135 Crane
714287	Shoe, Rail: 140 RE
465074	Shoe, Rail: 149 Girder
714226	Shoe, Rail: 171 Crane
714024	Shoe, Rail: 175 Crane

CRANE RAIL KIT INSTALLATION INSTRUCTUIONS

**How to install a crane rail clamp kit RRP # 792500 onto:
Racine Gas Rail Drill Model # 910068**

Refer to diagram 7.3 exploded view of clamp assembly (page # 21)

1. Remove the Screw Clamp Locking Shoe, item # 2 from the Petro Base Plate, item # 1, by removing the (2) M6 X 20 Cap Screws, item # 13.
2. Remove the Locking Arm Clevis Assembly, item # 9 from the Petro Base Plate, item # 1, by removing the (2) M8 X 30 Cap Screws, item # 15.
3. Install Part # 465072 - Small Square Aluminum Spacer Block (Approximately 1.5" X 1.5" Square) under the Screw Clamp Locking Shoe, item # 2, and re-attach the Petro Base Plate item # 1 by installing (2) Part # 500537 M6-1 X 40 Cap Screws.
4. Install Part # 465072 - Rectangular Aluminum Spacer Block (Approximately 2" X 4") under the Locking Arm Clevis Assembly, item # 9, and re-attach the Petro Base Plate item # 1 by installing (4) Part # 500556 M8-1.25 X 55 Cap Screws.
5. Replace the (2) item # 16 by Installing Part # 491800 (2) dowel pins when installing the rectangular plate.

Note:

There is two sets spacer plates supplied, you may need to use both sets on wider width rail using the longer cap screws supplied in the kit.

NO.	QTY	DESCRIPTION	PART NO.
1	2	SCR, SOC: M6-1 X 40	500537
2	2	PLATE, CLEVIS EXTENSION	465071
3	2	PLATE, LOCK SCREW EXTENSION	465072
4	4	SCR, SOC: M8-1.25 X 55	500556
5	2	PIN, DOWEL: M8 X 32	491800
6	4	SCR, SOC: M8-1.25 X 70	500559
7	2	SCR, SOC BUT: M6-1 X 65	466373
8	1	INSTRUCTIONS, CRANE RAIL CLAMP	800151