



# Rail saw HC305, HC355 & HC406 K1270R II

APPROVAL SNCF MTP 18131

## USER'S MANUAL

14221031

14221032

14221033

14221034

14221035

14221036

14221037

14221038



42121010 Rev00

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# Foreword

This user’s manual is applicable to following products :

- 14221031 : Abrasive rail saw HC355 / Vignol jaw / Ø355mm disc (14”) Ø25,4mm boring
- 14221032 : Abrasive rail saw HC355 / Universal jaw / Ø355mm disc (14”) Ø25,4mm boring
- 14221033 : Abrasive rail saw HC406 / Vignol jaw / Ø406mm disc (16”) Ø25,4mm boring
- 14221034 : Abrasive rail saw HC406 / Universal jaw / Ø406mm disc (16”) Ø25,4mm boring
- 14221035 : Abrasive rail saw HC355 / Spring vignol jaw / Ø355mm disc (14”) Ø25,4mm boring
- 14221036 : Abrasive rail saw HC305 / Vignol jaw / Ø305mm disc (12”) Ø22,2mm boring
- 14221037 : Abrasive rail saw HC355 / Vignol jaw / Ø355mm disc (14”) Ø22,2mm boring
- 14221038 : Abrasive rail saw HC355 / Universal jaw / Ø355mm disc (14”) Ø22,2mm boring

# Revisions historic

Version	Date	Auteur	Commentaires
00	16.01.2024	RM	Document creation

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# 1. General information

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This user's manual is a translation of the French version. The French version will be decisive in case of litigation.

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User or maintenance personnel must have read and understood these instructions for use.

The instructions must be always accessible and to all people concerned.

## 1.1 About the notice

This user's manual has been drawn up according to the technical data applicable at the time of printing. Minor changes may occur as part of product improvement.

Technical data is given as an information.

The photos are non-contractual (modification of the machine, optional accessory, etc.)

## 1.2 General requirements

Labor laws applicable in the areas of use and the instructions relating to safety must be respected. In the event of non-compliance, the operator will assume full responsibility.

In the event of a discrepancy between the regulations at the operator those of the machine manufacturer and its supplier, the most stringent regulations will apply.

The purchaser is responsible for providing all equipment, consumables, and resources necessary for commissioning the product and training staff. The manufacturer of the product having non influence of the conditions of use and training of personnel, declines all responsibility for the application of the instructions and training received.

However, our After-Sales Service is at your complete disposal to provide consulting, training, and other advisory services.

## 1.3 Receiver of the operating instructions

The instructions for use described in this user's manual enable the product to be used properly.

These instructions are written for the exclusive use of qualified personnel who have proven their ability to handle the product as well as product maintenance personnel.

## 1.4 Exclusion of liability

Any use of the product different from that indicated is non-compliant and endangers the life and health of personnel as well as the surrounding equipment.

PANDROL declines all liability in the event of bodily injury or material damage to the operator or third parties in the following cases:

- When the product is not used in accordance with instructions,

- If these instructions have not been read or understood by the user or the maintenance personnel or if the personnel are not sufficiently qualified.
- If the product has been used for an application other than that intended,
- If the product is used in condition outside the indicated limit values
- If the product is not maintained using original spare parts,
- If components and related element of the product are modified arbitrarily.

## 1.5 Intellectual property

The technical characteristics and construction features of the product constitute the intellectual property of PANDROL.

The copyright on this user's manual belongs to PANDROL. Any reproduction, publication, or any other mode of exploitation for competitive purposes of this user's manual is prohibited. The purchaser and operator of the product is prohibited from communicating its content to persons outside the company.

## 2. Safety labels explanation



Read carefully this user's manual instructions and make sure you understand it before using the machine



Warning! The machine can be dangerous. Careless or incorrect use can result in injury to the operator.



Pay attention to the turning parts of the machine.



Sparks can cause fire in combustible materials such as petrol, wood, dry grass, ...

## 3. General safety instructions

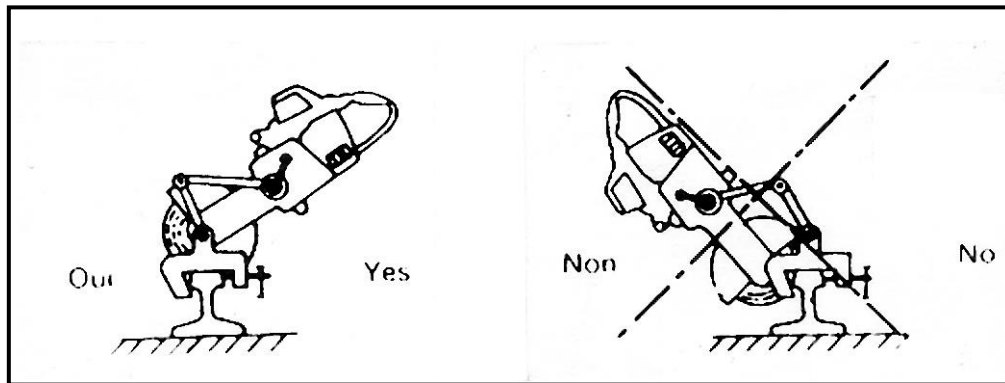
### 3.1 Precautions

**The rail saw machine is specially designed to cut rails and all other uses are excluded. In case of any unauthorized use, PANDROL declines his responsibility.**

- ▶ Never start up the rail saw until you have read and understood the directions for use
- ▶ User must always work with clean equipment
- ▶ Never use the rail saw when you are tired or under influence of medicines, alcohol or substances which can alter your sight, dexterity or appreciation capacity
- ▶ Operator must respect the regulations, procedures and particular applicable orders in effect yard
- ▶ The rail saw unit must be handled by a single one operator and be held with both hands to drive it with accuracy and safety, careless use can turn it into a dangerous tool
- ▶ Use and all maintenance operations must be achieved by qualified staff
- ▶ User must have correct personal protective equipment compliant with grinding or cutting operation: glasses, gloves, gaiters, etc.
- ▶ The operator must ensure that no one can affect his work (people, animals, flammable material, buried cables and wires). Sawing operation can start when the working area is free from any obstacle.
- ▶ Under no circumstances the original design and configuration should be modify without approval from PANDROL
- ▶ To work safely the operator must have a firm foothold and a good balance
- ▶ If sparks are directed (directly or not) towards a flammable material (shrubs, culture...), place a screen stopping any incandescent particles to avoid any fire
- ▶ The personal protective equipment is mandatory (Refer to the manufacturer's manual, "protective equipment" chapter)



**During sawing operation never overturn the rail saw, in this position the safety guard does not protect correctly the operator and sparks are directed upwards.**



► Before each cutting, ensure the cutting wheel has the appropriate characteristics according to the expected type of work and that it does not show any signs of damage (cracks or splits), if the cutting disc does not meet any of these controls it must be rejected

► Safety measures to be taken when filling up with petrol :

- DON'T SMOKE
- DON'T REMAIN NEAR A NAKED FLAME
- DON'T SPILL ANY PETROL OUTSIDE THE TANK

► If some petrol has been spilled, immediately clean the machine and move it by a minimum of 5 meters before any starting up

► If clothes have been damped by petrol, change them immediately

► The petrol mixture must be stored in drums, true to regulations, well closed and labelled

► Warning : When engine stops running, the grinding wheel continues its rotation for several seconds

► Do not use cutting-off wheel which maximum rotation speed stipulated by the supplier would be inferior to the maximum rotation speed of the rail saw itself :

- = 5 380 rpm or 100 m/s for a Ø 355 mm (14 ") cutting off disc
- = 4400 rpm or 100m/s for a Ø 406 mm (16 ") cutting off disc

► Use only strengthened type cutting-off disc

- Resinous binder
- At least 2 layers of strengthenings canvas
- According to NF EN 12413 Norm (Disc approved by the railway network)

► Stop the engine before replacing the disc

► Never use damaged disc

► Every time a new cutting-off wheel is fitted or reassembled, let it run light for 30 seconds. During this test all the staff must be kept at a distance with the exception of the user who must hold the machine in such a way that he is outside the disc rotation area and away from the safety guard opening side

► Measure the disc rotation speed at regular intervals and without fail every time the machine is repaired

► To prevent the disc from slipping during sawing operation check that the flanges are tightened

- ▶ Only use cutting-off disc which show a bore corresponding to the wheel support shaft diameter
- ▶ Check the safety guard good condition, its positioning and tightening before branding the rail saw into operation
- ▶ Replace the safety guard when a wheel has burst
- ▶ Store the cutting-off discs in a dry place as recommended by the manufacturer of discs

## 4. Description

A rail saw in order to work consist of three elements :

- The support arm
- The machine
- The cutting guide

Référence	Désignation	Profil de rail compatible
14221031	HC 355 with vignol jaw	All vignol rails
14221032	HC 355 with universal jaw	All vignol and grooved rails (width rail head < 130mm)
14221033	HC 406 with vignol jaw	All vignol rails
14221034	HC 406 with universal jaw	All vignol and grooved rails (width rail head < 130mm)

**The support arm** is equipped with a tightening jaw ensuring a quick and rigid fixing on the rail. It supports and guides the rail saw to guarantee a good quality of cutting, perfectly perpendicular to the rail.

**The machine** is equipped with a safety device which prevents from sawing operation without a support arm.

The device fixing, reversible on the support arm, enables the rail saw to be positioned either on the inside or the outside of the track without dismantling the tightening jaw.

**The cutting guide** contributes to place the support arm exactly at the right place to realise the cutting.



Rail saw, support arm and cutting guide are paired. These elements cannot be separated because it can affect the cutting geometrical specifications (the series number of the machine is marked on the jaw and the cutting guide).

## 5. Use instructions

### 5.1 Storage

Expose the rail saw in the rain can result in engine ignition problem. For storage longer than two weeks, the fuel tank must be emptied by running the engine out of gas.

### 5.2 Handling

The rail saw in order to work weighs **21 kg**.

Only one person can handle the rail saw by means of the transport handle.



### 5.3 Safety measures to be taken before initial use

- ▶ Read carefully the manuals delivered with the machine
- ▶ The operator must ensure of the Railway Network particular use and security conditions
- ▶ Check the good functioning of the safety device which stops the engine ignition when the rail saw is disconnected from the support arm.
- ▶ Rail saw fitted on the support arm, engine on idle speed, loosen the connecting screw, engine must stop running
- ▶ Check petrol level
- ▶ Imperatively use a TWO STROKE ENGINE MIXTURE, for the petrol type, the oil type and the petrol / oil ratio refer to the prescriptions mentioned in the booklet of the engine manufacturer.

## 5.4 Positioning and fixing the support arm

Bring the positioning cutting guide beveled point on to the cutting mark.



► Position the support arm in contact with the gauge lug so that the rail saw fastening pin is on the gauge side and then tighten up the clamp as tightly as possible.

Support arm vignol jaw Référence : 24221002

Support arm universal jaw Référence : 24221044



Remove the cutting guide.

## 5.5 Fitting and fixing the rail saw on the support arm

The rail saw is firmly fixed to the support arm through a double input socket into which the support arm rod is screwed.



The double input socket enables the rail saw to be positioned either on the inside or the outside of the track.

A safety device at the middle of the socket ensures the opening of the engine ignition circuit and as a consequence it's closing when the rail saw is disconnected from the support arm.

The safety device does not need greasing, it is specially designed to work without grease.

To start up the engine :

- The threaded rod must be completely tightened up
- Both cones (axle + socket) must be in contact

## 5.6 Starting up the engine

To start the K1270R engine (cold or hot engine) and to stop it, refer to the manufacturer's instructions in the chapter "Starting and stopping".

## 5.7 Sawing operation

### 5.7.1 General use

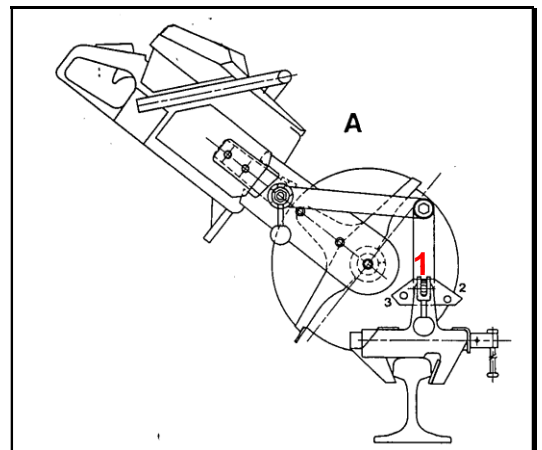
- Rail saw arm preparation on position 1

Unlock the arm by swinging the locking device to horizontal position.

Place the arm inferior part in vertical position and lock it by releasing locking device.

- Sawing operation

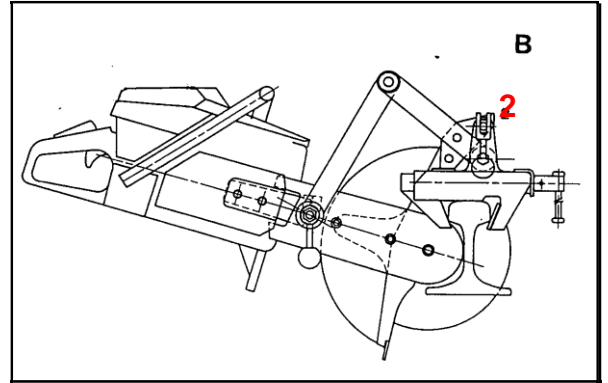
Fix the rail saw on its arm and start up the engine. It is absolutely necessary to fix the machine on the support arm before starting up the engine, safety device cuts off the ignition if the support arm is not used.



Always start the sawing operation on the top of the rail head, one hand on the upper handle of the rail saw, the other on the accelerator control handle.

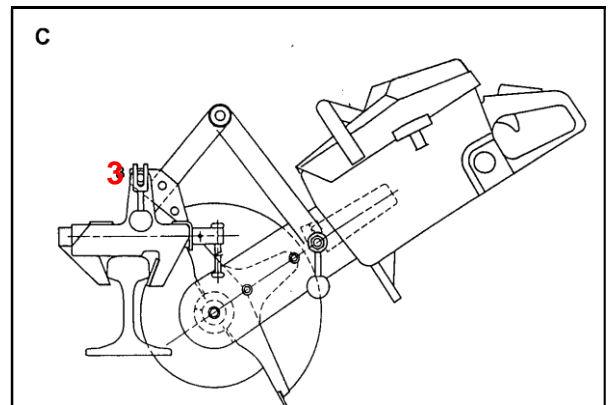
To ensure a straight cut and limit the cutting disc diameter reduction, pivot the engine around of the axle of its support and move the rail saw with a light swinging movement and carry on sawing until the rail foot is reached. The support arm locking system allows the operator to perform an easy cut without any difficulty to hold up the rail saw.

To carry on the sawing, unlock and incline the support arm to the stop, the locking will be automatic (position 2).



When the cutting disc diameter reduction no longer allows the sawing operation, the rail saw must be turned over the support arm :

- ▶ Stop the engine and wait until the cutting disc comes to a total stop
- ▶ Disconnect the rail saw from its support arm
- ▶ Unlock and pivot the support arm to its opposite side on position 3
- ▶ Return the rail saw and screw the support arm on the opposite side of the connecting sleeve
- ▶ Carry on and finish the sawing operation.



### 5.7.2 Special operating process

When the rails' stress may block the cutting disc in the final phase of sawing, it's necessary to proceed in another way :

- ▶ Start the sawing at the rail foot
- ▶ Finish the operation at the rail head
- ▶ In case of blockage, loose the cutting disc by raising the rails ends

## 5.8 Work station

The operating position is marked in the blue area with 4 arrows.



## 6. Maintenance

### 6.1 Maintenance periodicity

Responsibility for maintenance is the responsibility of the owner of the equipment. Maintenance must be carried out at least once a year by a competent and qualified person.

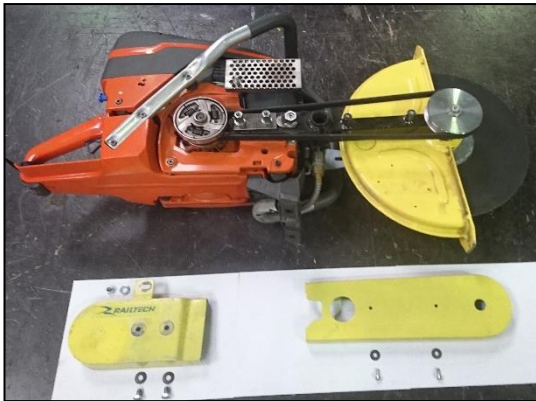
OBJET	NATURE OF THE OPERATION	PERIODICITY				
		Before utiling	After using	1h use	80 cutting	Precense of wear signs or incorrect fonctionning
Complete machine	Inspection of the machine					
Complete machine	Clear the engine using a towel or comprimed air gun to remove the dirtiness					
Filter	Replacement					
4PK Belt	Check belt tension					
	Replacement					
Disc casing	Clean the scale on the disc casing					

### 6.2 Belt Tension

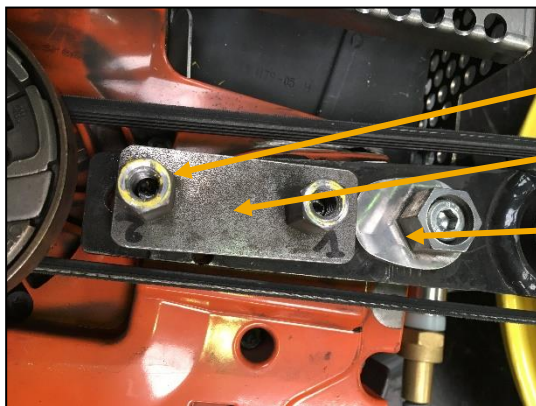
The belt has 2 positions for adjusting the belt :

- Position 1 : The plate in position 1 corresponds to a tensioning of a new belt.
- Position 2 : The plate in position 2 corresponds to a tensioning of a relaxed belt

## Operating procedure :



- ▶ Remove the belt housing and the clutch housing.
- ▶ Tighten the hexagonal spacers and remove them.
- ▶ Turn the cam so that the belt loosens.
- ▶ Turn the belt tension plate back to position 2 and tighten the belt by turning the cam.
- ▶ Tighten the hexagonal spacers.
- ▶ Replace the protective casings.



Hex spacer

Belt tension plate

Cam

NOTA : The belt is properly tensioned if it can be pressed slightly (5 to 10 mm) in the middle between the two grooved pulleys, exerting moderate pressure with the fingers.

## 6.3 Alignment defect correction

Wear, chocks can produce an alignment defect. This defect (e) is created when the rail saw must be turned over the support arm on the double input socket.

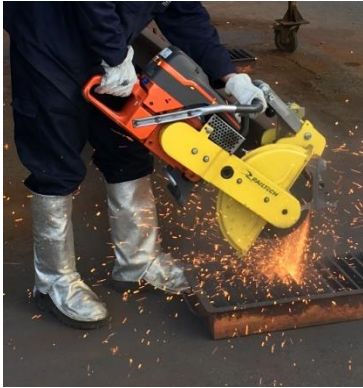
An adjustment must be done periodically as soon as the mark (e) comes near of the geometrical tolerances limits of the railway system.

### Check the defect :

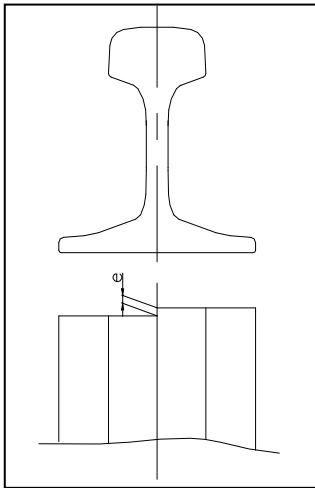
First, cut the head rail half (see photo below).



Make another ½ cut on the other side (see picture below)



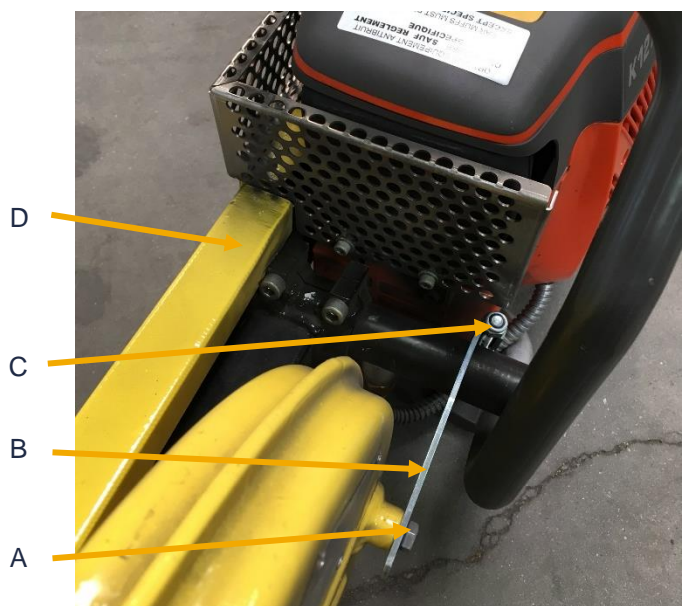
Raise the dimension "E" with a depth gauge



The dimension "e" represents the defect.

#### Procedure :

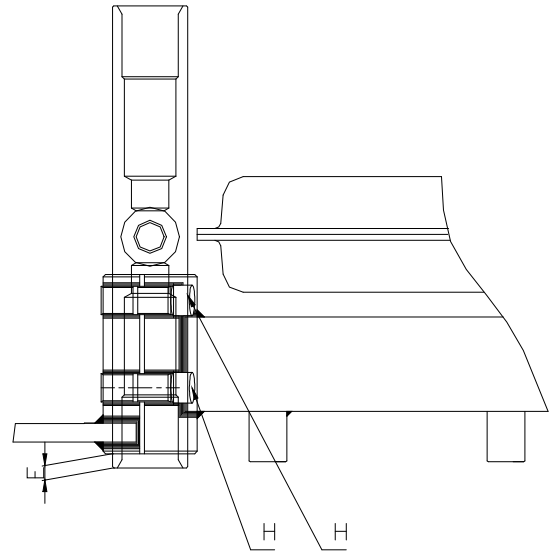
- ▶ Remove the disc guard from the B holding plate by unscrewing the A screw
- ▶ Remove the B holding plate by unscrewing the C nut
- ▶ Remove the D belt housing



► Increase rating E

► Loosen the H screws

► Remove the sleeve by means of rubber mallet value  $X=e/2$  in the direction which tends to the default of zero, then tighten the H screws  
(e : dimension reading with the depth gauge)



For weekly, monthly, annual maintenance:

Refer to the manufacturer's instructions for the K1270R

## 6.4 After-sales service

For all requests for repairs or spare parts, please contact our After-Sales Service at the following email address:

**[contact.sav@pandrol.com](mailto:contact.sav@pandrol.com)**

When making your request, please specify the machine reference, as well as its serial number and year of manufacture.

## 6.5 Environmental protection

For all works carried out with or on the machine, comply with legal obligations to limit and avoid waste. The management of this waste must be done in comply with the environmental protection regulations in force in the country of use.

During repair and maintenance work, materials that may contaminate water such as lubricants and oils, should not contaminate the ground or be poured into pipes.

## 6.6 Elimination

Elimination of the machine and its components or fluids must comply with local disposal regulations.

Due to risk of pollution for the environment, call on a specialized company to dismantle the machine.



## 7. Signalisation

### 7.1 ID Plate

The rail saw is manufactured under a traceability process and identified by a unique serial number.

<b>PANDROL</b> Partners In excellence		CE	F-59590 Raismes
Type :	Réf :		
N° de série :	Année :		
Masse :	Kg	Agrément :	
Outil : $\phi$	mm x Alésage $\phi$	mm	
Vitesse MAXI :	tr/min	m/s	

### 7.2 EN 13977 Label



## 8. Technical Characteristics

- ▶ 2 stroke engine HUSQVARNA K1270RII
  - ▶ Cubic capacity 119 cm<sup>3</sup>
  - ▶ Power 5,8 KW (7,9 Cv) at 8400 rpm.
  - ▶ Safety system which prevents the engine from running if the rail saw is disconnected from the support arm
  - ▶ Effective three-step air filtration with air injection
  - ▶ Housing disc is not flammable and adjustable  $\pm 25^\circ$
  - ▶ Cutting time : < 1min30 for 60E1 rail
  - ▶ Dimensions (L x l x H) : 900 x 250 x 400 mm
  - ▶ Rail saw weight : 21 Kg
  - ▶ Support arm universal jaw weight : 10kg / Support arm vignol jaw weight : 8,2kg
  - ▶ Petrol : unleaded petrol (the lowest octane rate recommended is 90) mixed with oil for two-stroke engine air cooling
- Mixture : refer to manufacturer 's instructions
- ▶ Tank capacity : 1,25 Litre
  - ▶ Consumption : 1 filled up tank for 11 cutting off on 60E1 rail (UIC 60)
  - ▶ Number of cut per disc : mini 3 cuts for HC 355 / 4 cuts for HC 406 (depends of disc type)
  - ▶ Noise level :
    - Acoustic pressure : Lpa104,6 dB
    - Acoustic power : LWA 117 dB
    - Acoustic peak: Lcpk 107,2dB
  - ▶ Vibration level :
    - Engine side handle : 11,55 m/s
    - Disc side handle : 6,08 m/s

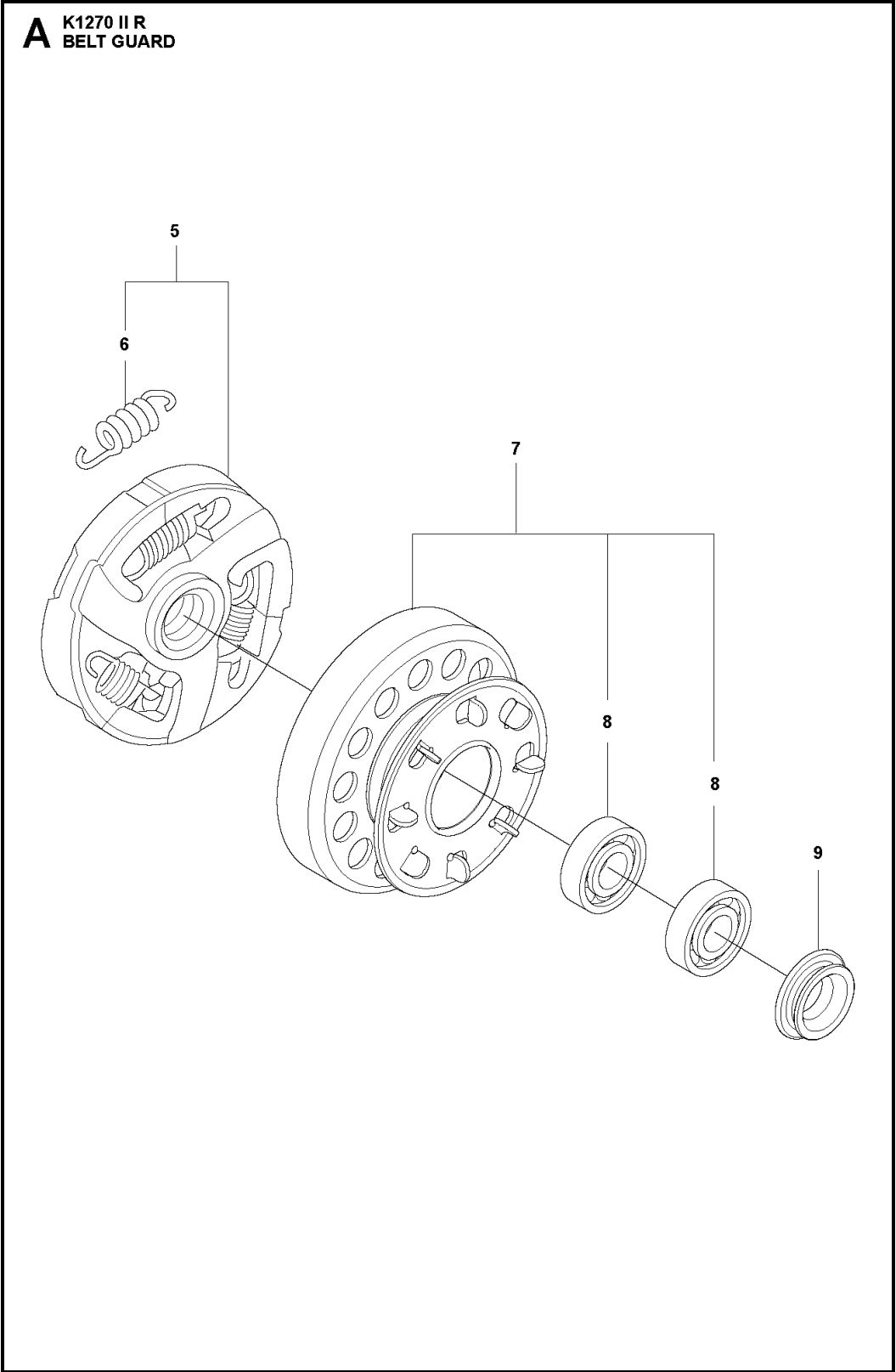
## 9. Spare parts & consummables

### 9.1 Consummables

The machine is compliant with :

Reference	Description	
47901041	Abrasive disc Ø355x4x25.4 Alox	
47901044	Abrasive disc Ø355x4x25.4 Zirconium	
47901042	Abrasive disc Ø406x4.6x25.4	
47901047	Abrasive disc Ø355x4x22.2 Zirconium	
47901028	Abrasive disc Ø305x3.6x22.2	

9.2 Husqvarna K1270R II Engine

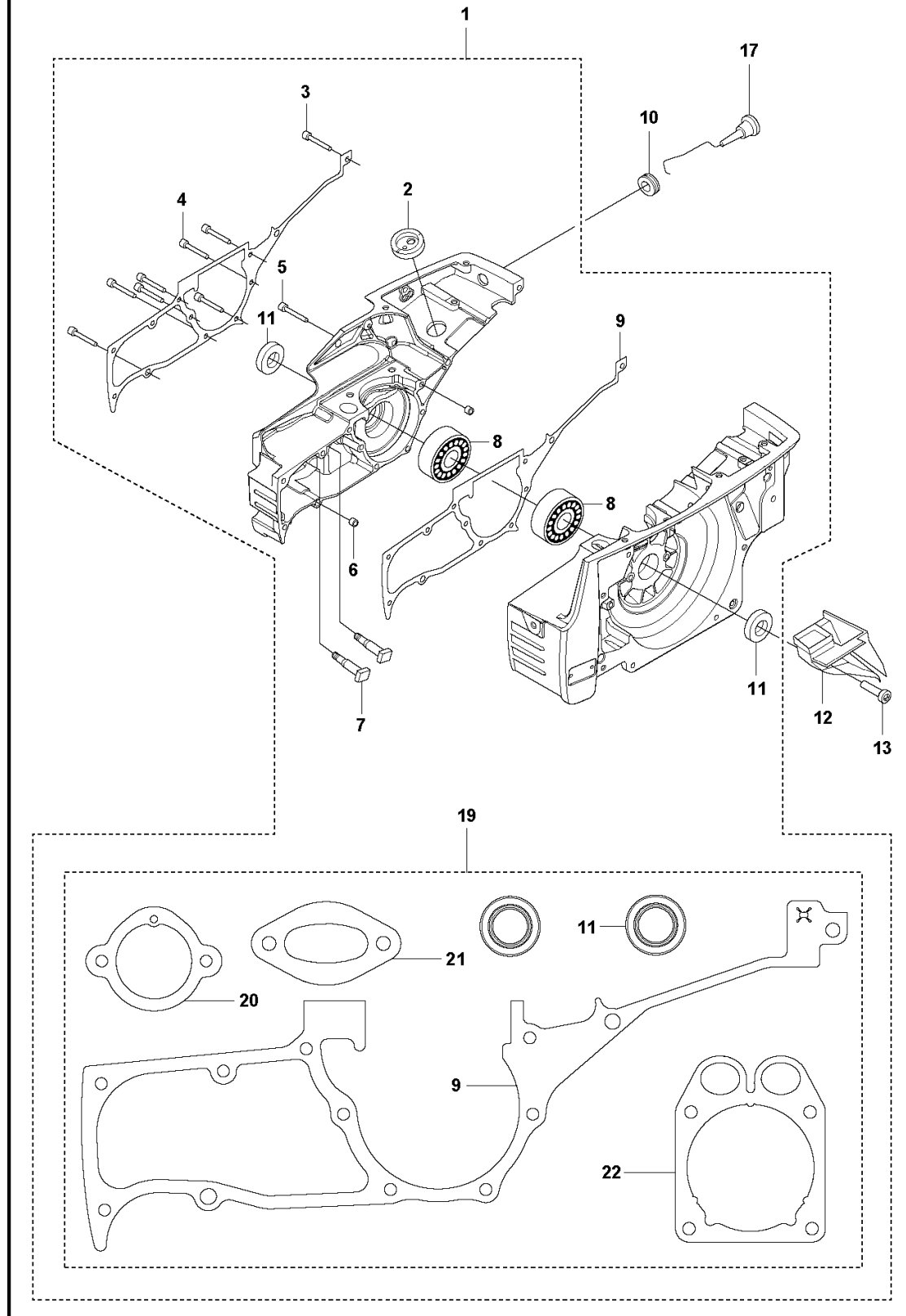


Ref	Part No	Description	Remark	QTY	KIT
5	503 14 49-01	CLUTCH ASSY		1	



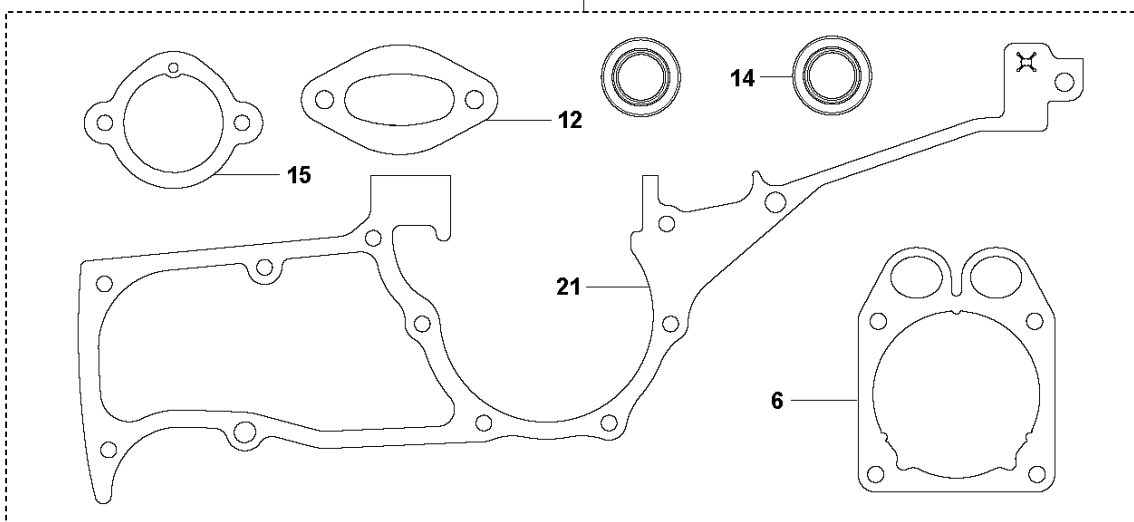
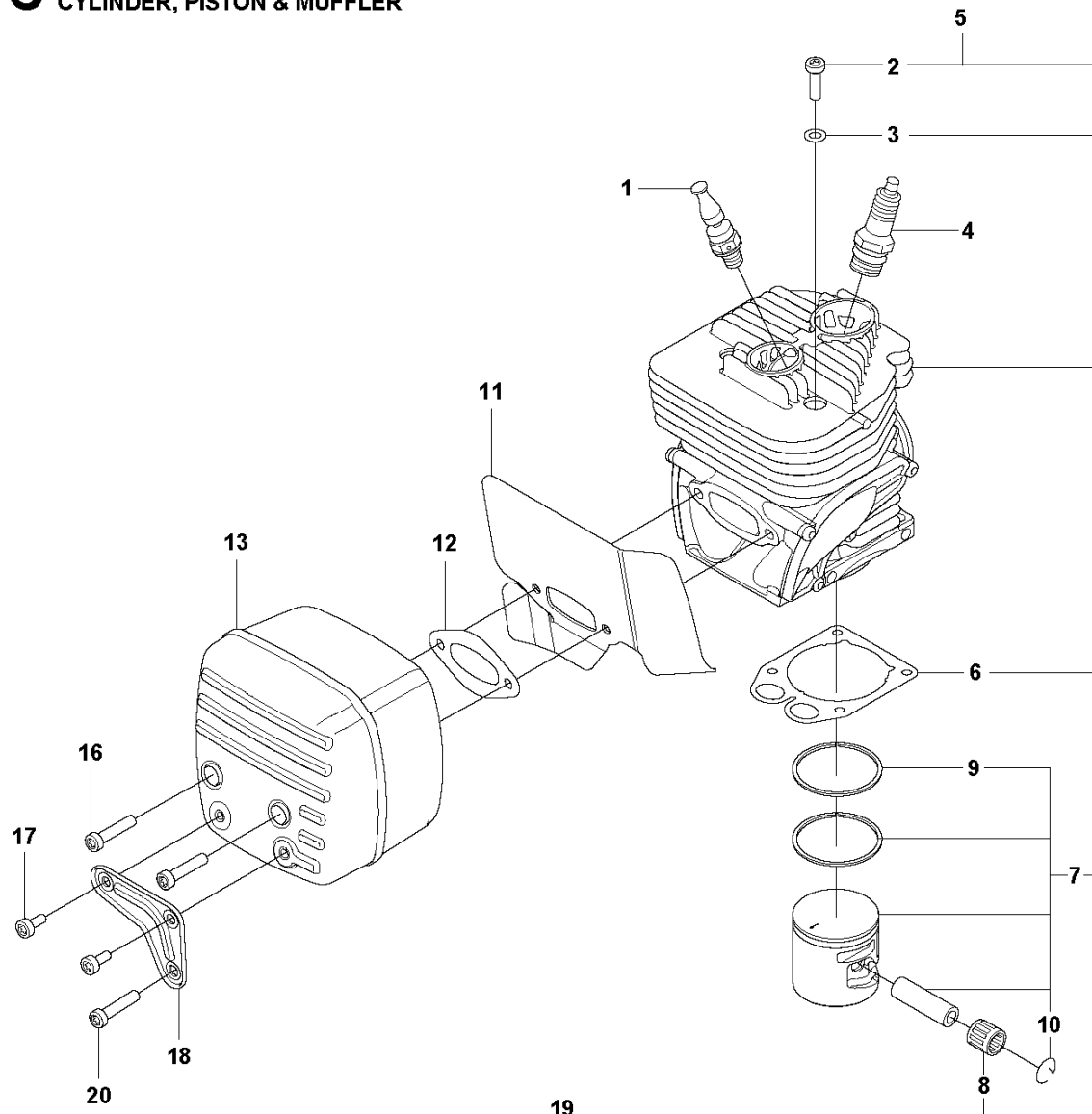
6	503 14 51-01	CLUTCH SPRING		3	5
7	588 80 92-01	DRIVING PULLEY ASSY	"14""	1	
7	588 80 92-02	DRIVING PULLEY ASSY	"16""	1	
8	525 83 18-01	BALL BEARING		2	7
9	587 53 64-01	SPACING SLEEVE		1	

**B K1270 II R  
CRANKCASE**



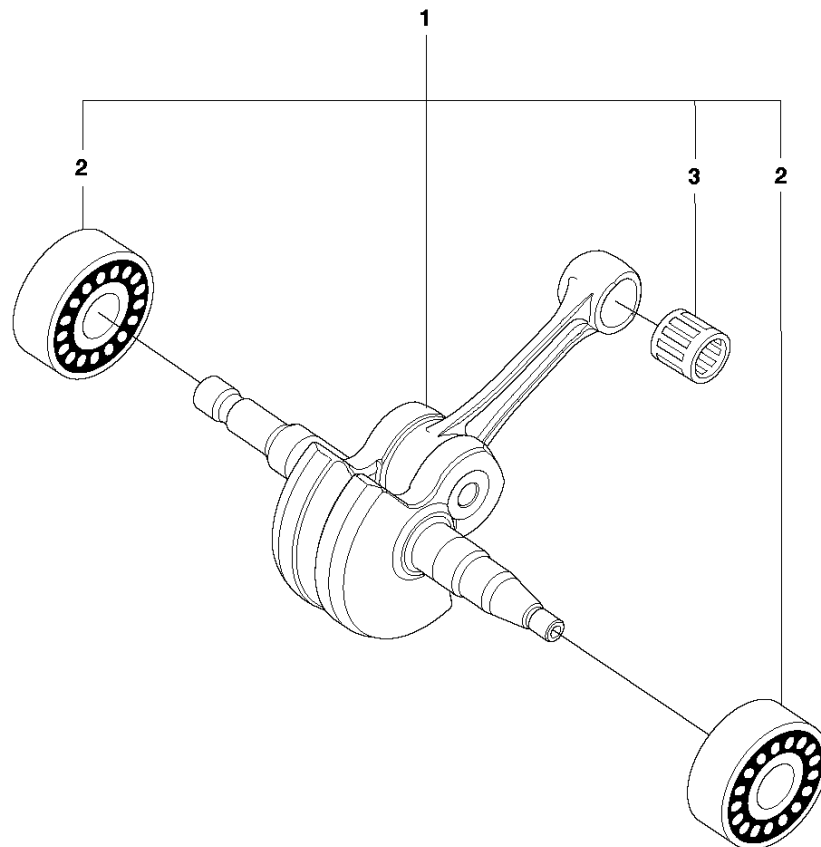
Ref	Part No	Description	Remark	QTY	KIT
1	582 41 50-04	CRANKCASE		1	
2	503 13 20-01	GROMMET		1	1
3	503 21 53-20	SCREW ITXSCM		1	1
4	503 21 53-41	SCREW ITXSCM		7	1
5	544 21 84-20	SCREW ITXSCM		9	1
6	501 27 08-01	GUIDE BUSHING		1	1
7	501 81 57-01	BAR BOLT		4	1
8	503 25 00-02	BALL BEARING		2	1
9	582 35 00-01	GASKET		2	1, 19
10	503 14 54-02	GROMMET		1	
11	503 26 02-05	SEALING RING		1	1, 19
12	506 23 70-01	AIR NOZZLE		2	
13	501 98 10-01	SCREW ITXSCM		1	
17	506 25 43-02	CHOKE CONTROL		2	
19	582 45 48-01	GASKET KIT		1	1
20	579 85 11-01	GASKET		1	1, 19
21	585 28 09-01	GASKET		1	1, 19
22	587 53 62-01	GASKET		1	1, 19

**C K1270 II R**  
**CYLINDER, PISTON & MUFFLER**



Ref	Part No	Description	Remark	QTY	KIT
1	584 91 22-04	DECOMPRESSION VALVE		1	
2	516 00 24-01	SCREW UNC		4	5
3	503 23 00-05	WASHER		4	5
4	503 23 51-11	SPARK PLUG		1	
5	582 58 23-03	CYLINDER ASSY		1	
6	587 53 62-01	GASKET		1	5, 19
7	587 82 98-02	PISTON ASSY		1	5
8	503 13 29-01	NEEDLE HOLDER		1	5
9	587 83 00-01	PISTON RING		2	5, 7
10	737 44 13-00	CIRCLIP		2	5, 7
11	587 53 63-01	HEAT DEFLECTOR		1	
12	585 28 09-01	GASKET		1	19
13	505 41 79-05	MUFFLER ASSY		1	
14	503 26 02-05	SEALING RING		2	19
15	579 85 11-01	GASKET		1	19
16	544 21 84-07	SCREW ITXSCM		2	
17	503 21 53-12	SCREW ITXSCM		2	
18	502 85 08-01	SUPPORT		1	
19	582 45 48-01	GASKET KIT		1	
20	544 21 84-20	SCREW ITXSCM		1	
21	582 35 00-01	GASKET		1	19

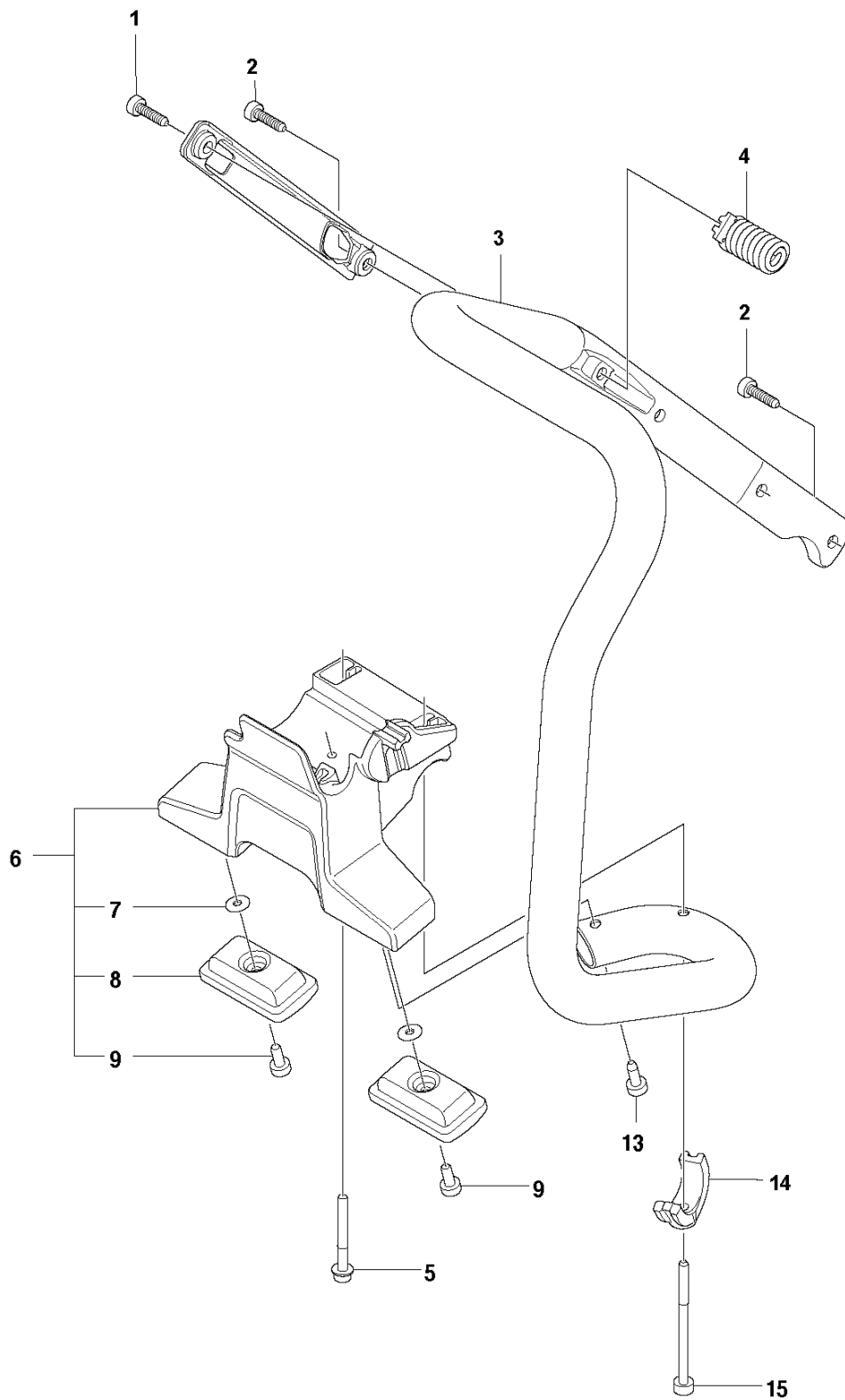
**D** K1270 II R  
CRANKSHAFT





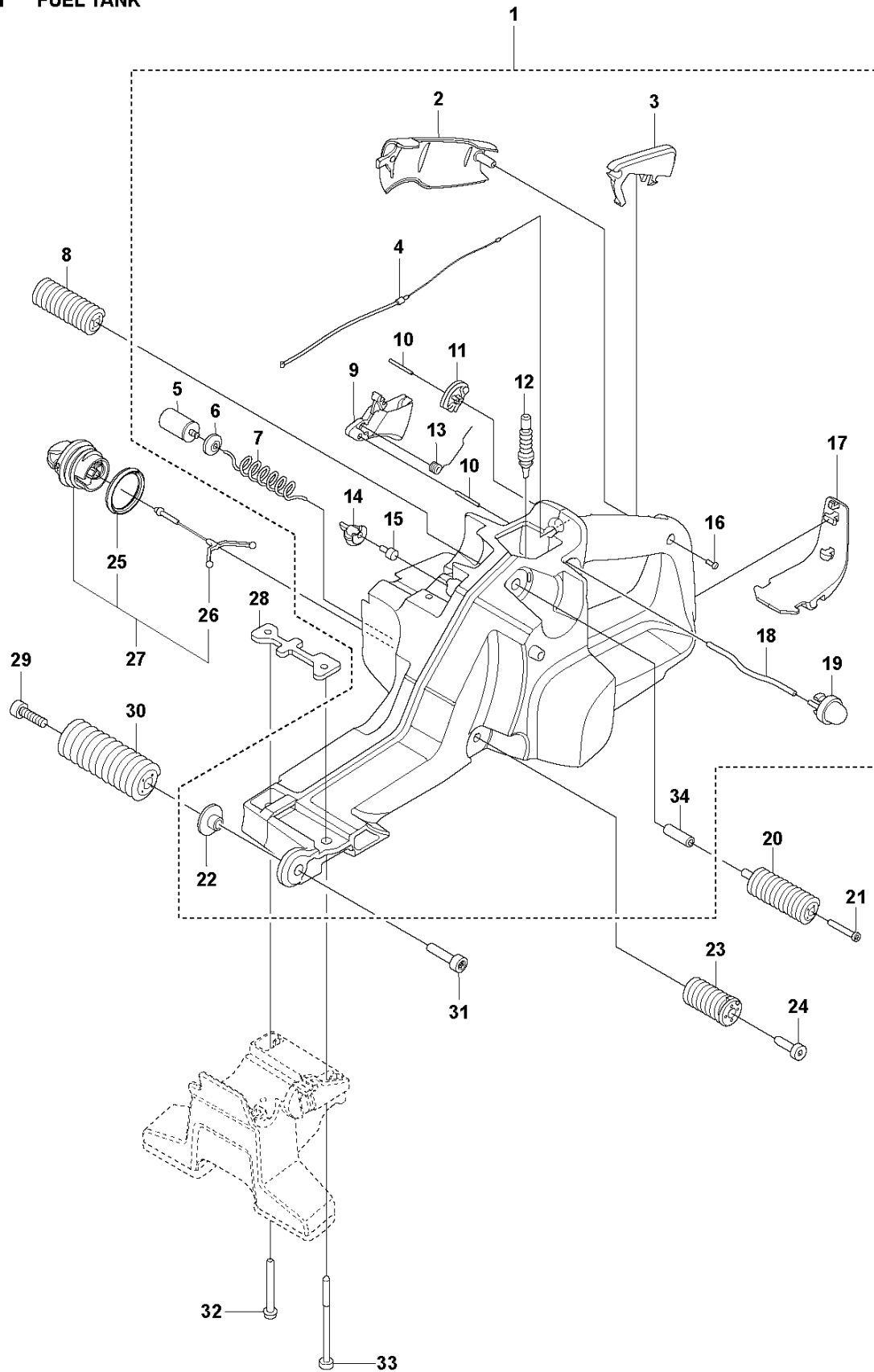
Ref	Part No	Description	Remark	QTY	KIT
1	577 34 38-03	CRANKSHAFT		1	
2	503 25 00-02	BALL BEARING		2	1
3	503 13 29-01	NEEDLE HOLDER		1	1

**E K1270 II R  
HANDLE**



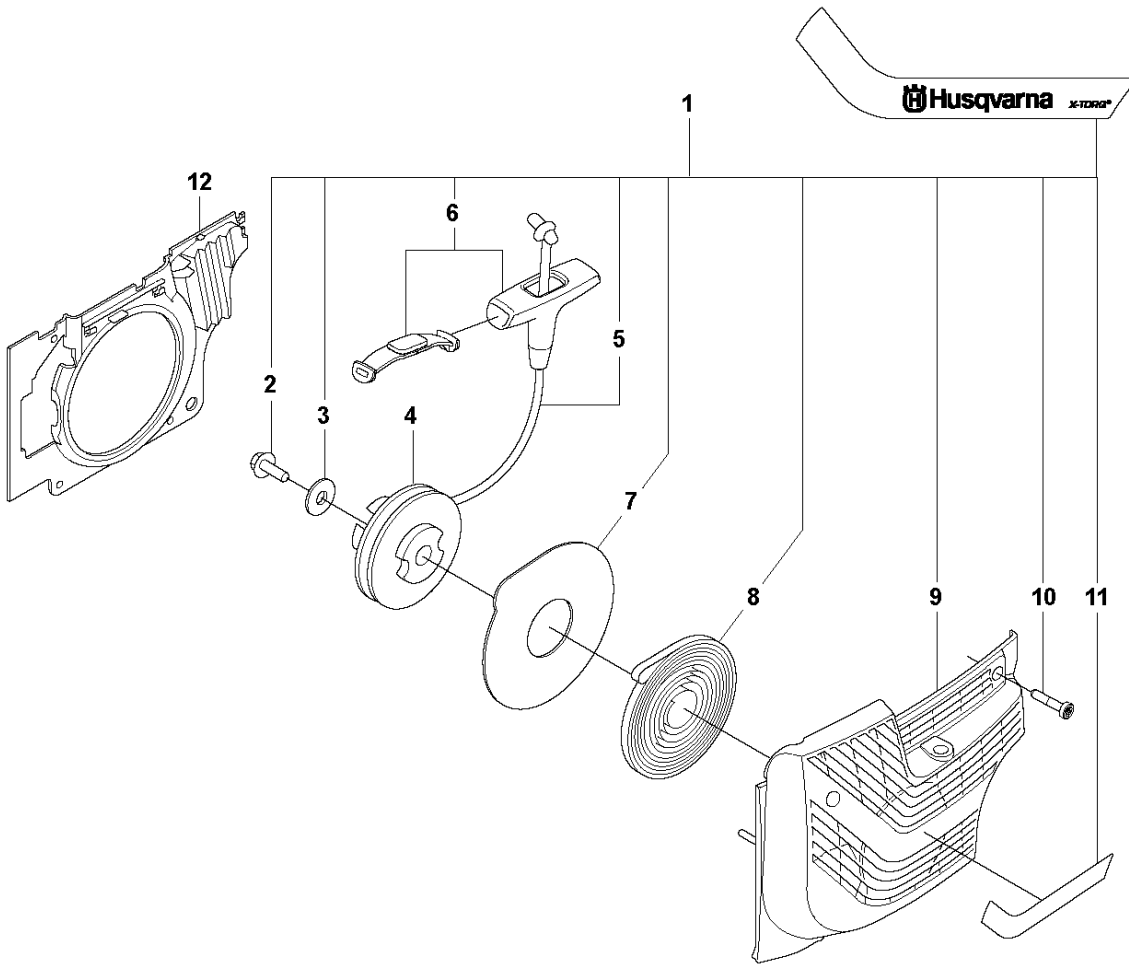
Ref	Part No	Description	Remark	QTY	KIT
1	544 06 12-01	SCREW ITXSCM		1	
2	503 21 54-20	SCREW ITXSCT		2	
3	596 77 93-01	HANDLE		1	
4	585 90 56-01	ANTIVIBRATION ELEMENT		1	
5	525 75 52-04	SCREW ITXSCT		2	
6	525 82 04-02	GROUND SUPPORT		1	
7	734 11 47-41	WASHER		2	6
8	544 81 16-01	BASE		2	6
9	504 90 94-14	SCREW ITXSCT		3	6
13	582 82 08-01	SCREW		3	
14	579 83 27-01	HANDLE BRACKET		1	
15	503 21 53-75	SCREW		1	

# **F K1270 II R FUEL TANK**



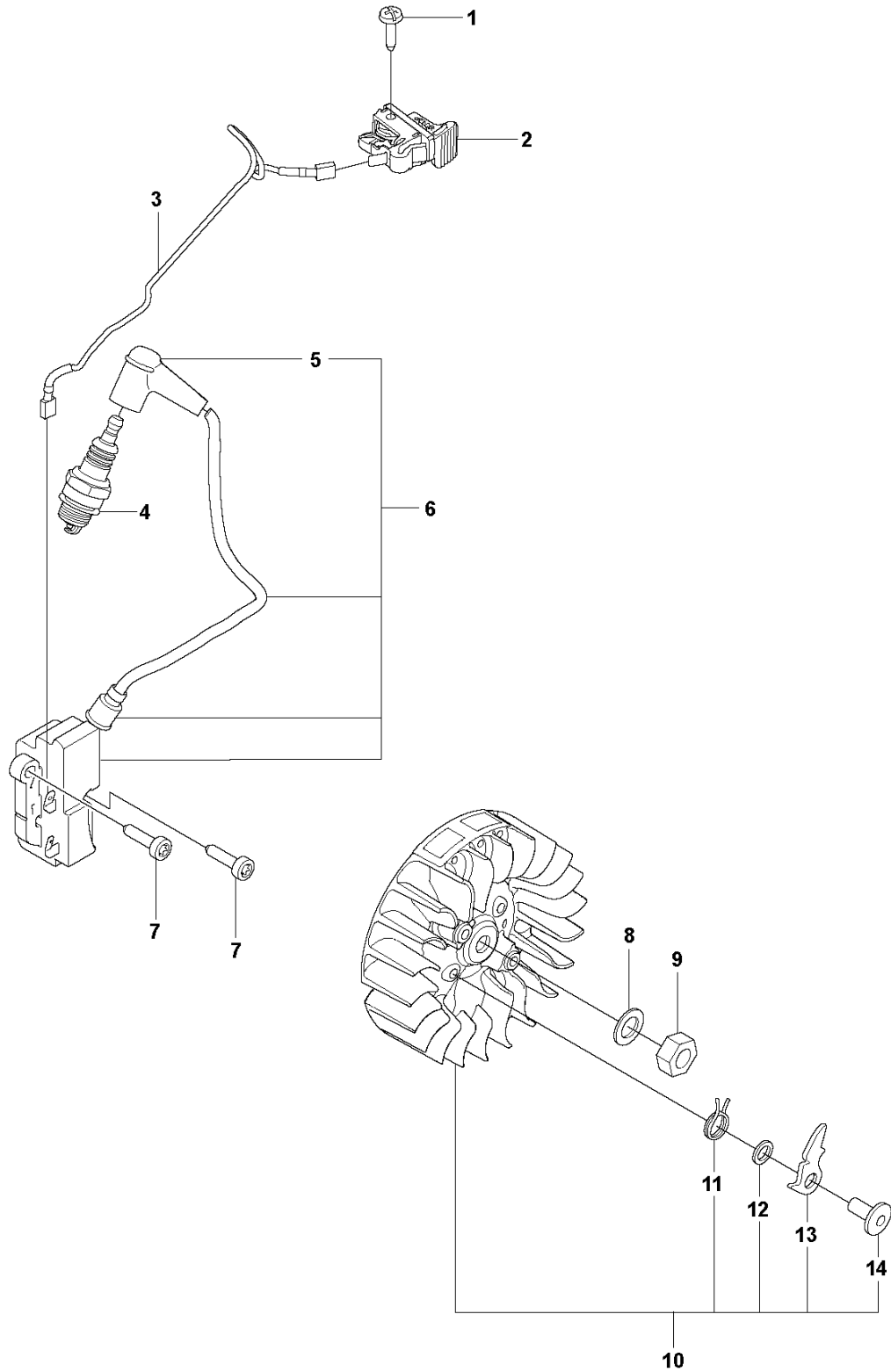
Ref	Part No	Description	Remark	QTY	KIT
1	598 80 64-01	FUEL TANK		1	
2	537 20 56-01	COVER		1	1
3	510 25 52-01	THROTTLE LOCKOUT		1	1
4	596 92 77-01	THROTTLE CABLE ASSY		1	1
5	506 26 41-01	FUEL FILTER		1	1
6	506 27 11-01	HOSE CLAMP		1	1
7	581 75 62-03	FUEL HOSE		1	1
8	585 22 63-01	ANTIVIBRATION ELEMENT		1	
9	502 47 18-01	THROTTLE CONTROL		1	1
10	720 12 40-20	PARALLEL PIN		2	1
11	537 20 85-01	LEVER		1	1
12	576 13 99-01	FUEL HOSE		1	1
13	537 20 98-01	SPRING		1	1
14	577 31 35-01	TANK VENT VALVE ASSY		1	1
15	501 15 29-01	TANK VENT ASSY		1	1
16	525 88 74-02	SCREW CITXPANT		1	1
17	588 19 82-01	GROUND SUPPORT		1	1
18	537 04 24-19	FUEL HOSE		1	1
19	540 05 49-01	AIR CLEANER		1	1
20	585 22 64-01	ANTIVIBRATION ELEMENT		1	
21	544 21 84-20	SCREW ITXSCM		2	
22	503 14 08-01	BUSHING		1	1
23	537 21 03-05	ANTIVIBRATION ELEMENT		1	
24	544 06 12-01	SCREW ITXSCM		2	
25	589 24 11-01	GASKET		1	27
26	503 57 89-01	HOLDER		1	27
27	522 62 00-03	TANK CAP ASSY		1	
28	582 39 57-01	ATTACHMENT PLATE		1	
29	503 21 53-20	SCREW ITXSCM		1	
30	503 13 27-02	ANTIVIBRATION ELEMENT		1	
31	503 21 53-25	SCREW ITXSCM		2	
32	525 75 52-04	SCREW ITXSCFM		1	
33	503 21 53-75	SCREW		1	
34	503 13 49-01	SPACING TUBE		1	1

**G K1270 II R  
STARTER**



Ref	Part No	Description	Remark	QTY	KIT
1	506 27 55-10	STARTER		1	1
2	503 21 49-72	SCREW IHSCFT		1	1
3	503 23 43-02	WASHER		1	1
4	501 89 67-04	STARTER PULLEY		1	1
5	506 33 56-25	STARTER CORD		1	1
5	506 33 56-50	STARTER CORD	50meter	1	1
6	584 25 79-02	STARTER HANDLE ASSY		1	1
7	503 74 36-01	DISC		1	1
8	503 13 50-01	RECOIL SPRING		1	1
9	506 25 58-03	STARTER COVER		1	1
10	501 98 10-05	SCREW ITXSCM		4	1
11	582 14 19-01	DECAL		1	1
12	501 89 59-02	AIR CONDUCTOR		1	1
12	501 89 59-03	AIR CONDUCTOR	Rail stop switch only	1	

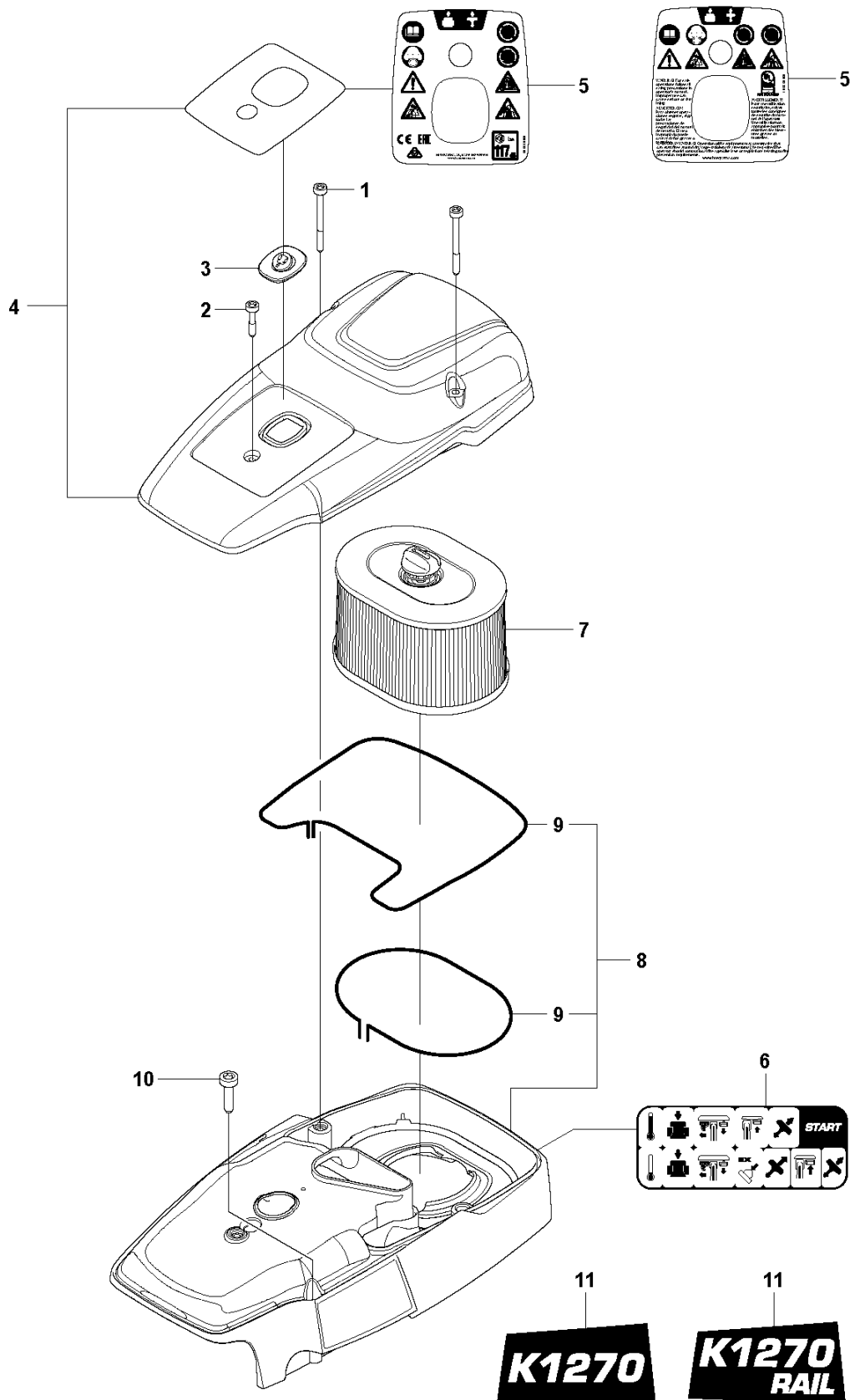
# **H** K1270 II R IGNITION SYSTEM





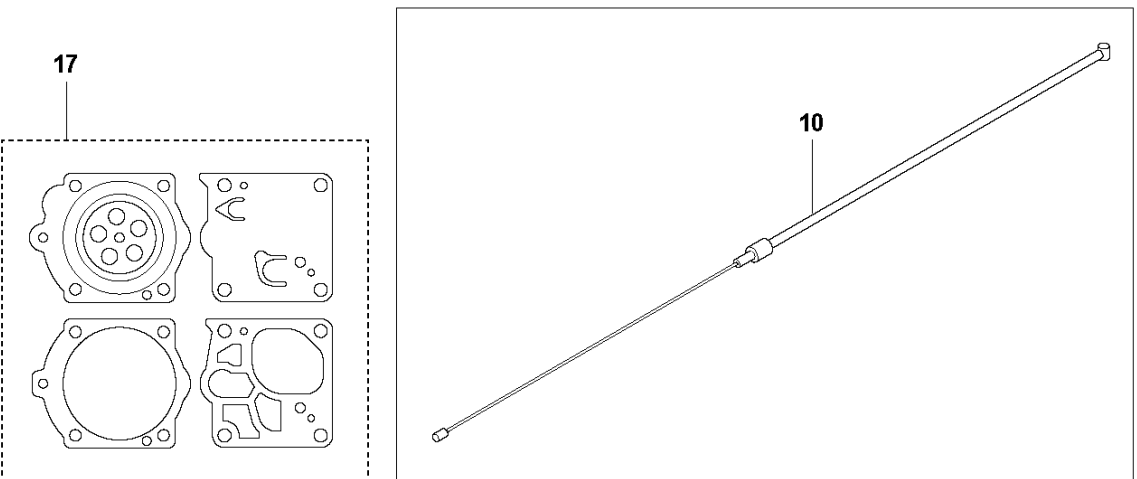
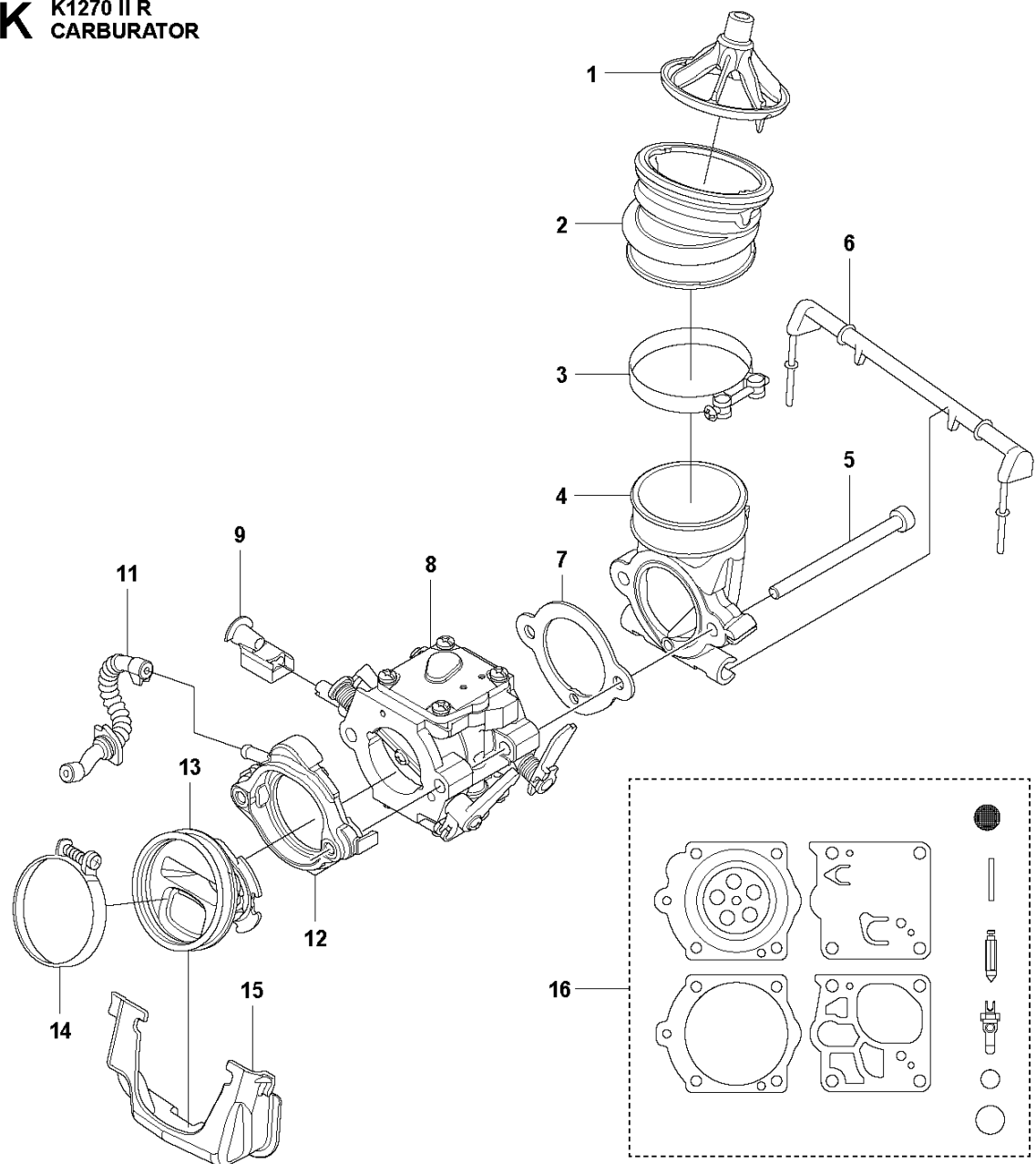
Ref	Part No	Description	Remark	QTY	KIT
1	525 88 74-03	SCREW CITXPANT		1	
2	506 31 86-04	STOP SWITCH		1	
3	501 83 98-03	CABLE		1	
4	503 23 51-11	SPARK PLUG		1	
5	590 50 45-01	SPARK PLUG CAP		1	6
6	580 38 05-07	IGNITION MODULE		1	
7	525 82 49-13	SCREW ITXSCM		2	
8	735 11 73-50	SPRING WASHER		1	
9	503 22 10-11	HEXAGON NUT		1	
10	587 24 88-01	FLYWHEEL ASSY		1	
11	501 63 48-01	SPRING		2	10
12	503 23 00-42	WASHER		2	10
13	501 67 32-03	PAWL		2	10
14	501 81 99-01	SCREW		2	10

# J K1270 II R AIR FILTER



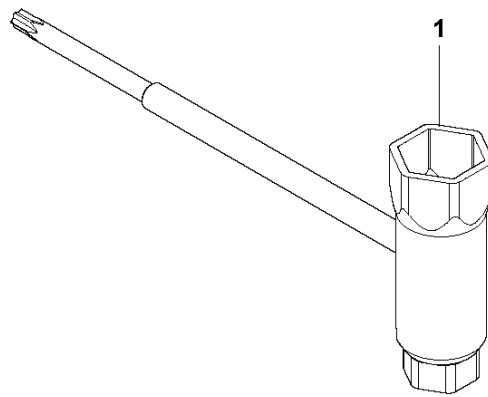
Ref	Part No	Description	Remark	QTY	KIT
1	503 21 53-56	SCREW ITXSCM		2	
2	503 21 53-12	SCREW ITXSCM		1	
3	585 42 83-01	PLUG		1	
4	590 35 78-01	FILTER COVER ASSY		1	
5	589 02 38-04	DECAL	<i>CE</i>	1	4
5	589 02 38-05	DECAL	<i>USA, CANADA, MEXICO</i>	1	4
6	544 87 38-03	LABEL		1	
7	510 24 41-05	AIR FILTER	<i>Rail</i>	1	
7	510 24 41-03	AIR FILTER	<i>Standard</i>	1	
8	576 55 32-03	CYLINDER COVER		1	
9	525 61 70-04	SEALING		2	8
10	503 21 53-30	SCREW ITXSCM		5	
11	525 81 69-03	LABEL	<i>K1270</i>	1	
11	525 81 69-04	LABEL	<i>K1270 Rail</i>	1	

# **K** K1270 II R CARBURATOR



Ref	Part No	Description	Remark	QTY KIT
1	510 24 39-01	FILTER		1
2	510 24 38-02	BELLOWS		1
3	505 28 33-11	HOSE CLAMP		1
4	588 75 07-01	INLET BEND		1
5	503 21 53-65	SCREW ITXSCM		2
6	506 25 04-01	SUPPORT		1
7	579 85 11-01	GASKET		1
8	597 85 70-01	CARBURETTOR		1
9	588 89 20-01	GUIDE SLEEVE		1
10	596 92 77-01	THROTTLE CABLE ASSY		1
11	582 12 57-01	IMPULSE HOSE		1
12	587 53 69-01	FLANGE		1
13	587 53 68-01	INLET PIPE		1
14	505 28 33-16	HOSE CLAMP		1
15	588 63 04-01	INSULATION WALL		1
16	582 60 65-01	REPAIR KIT		1
17	503 59 74-03	GASKET KIT		1

**L** K1270 II R  
TOOLS

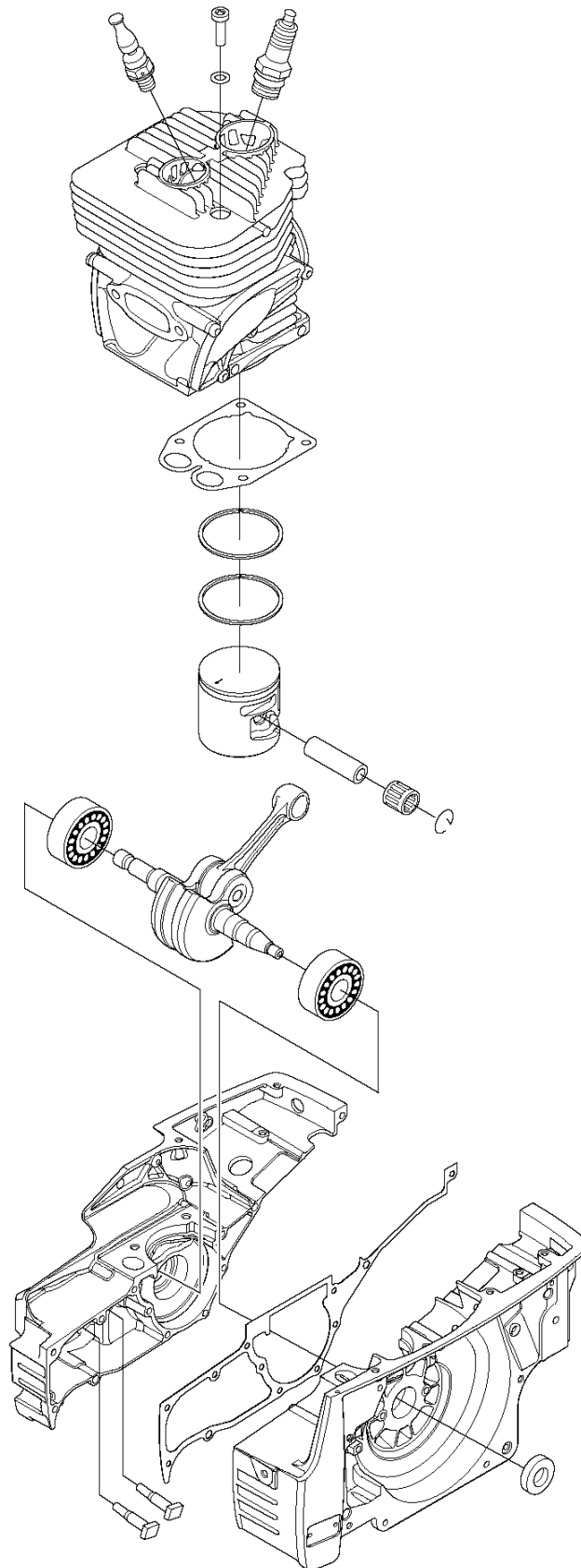




Ref	Part No	Description	Remark	QTY KIT
1	506 38 26-01	TOOL		1

**M** K1270 II R  
ENGINE KIT

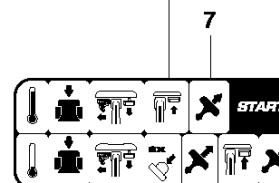
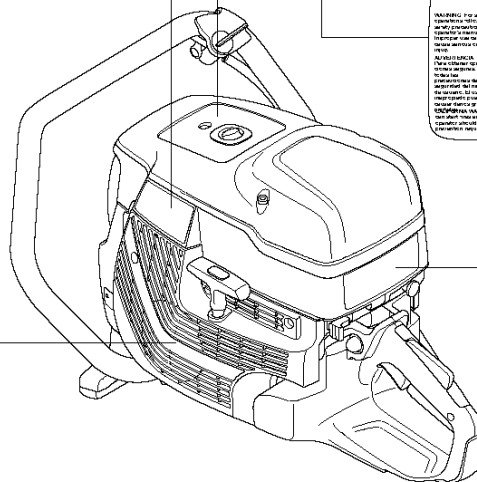
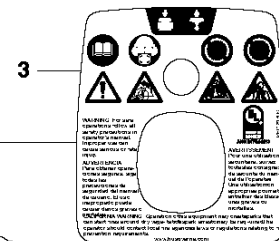
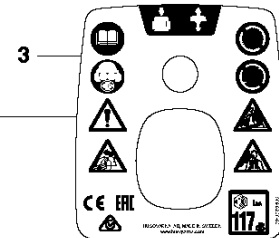
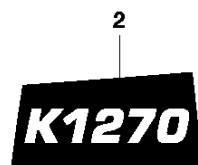
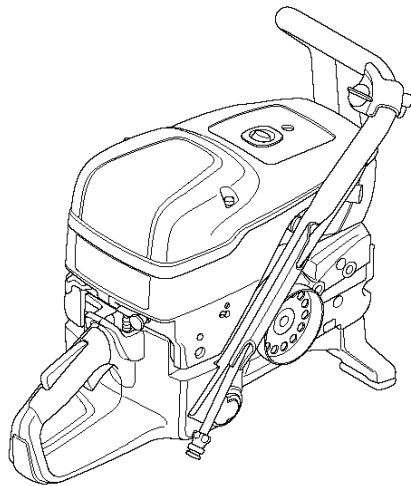
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Ref	Part No	Description	Remark	QTY KIT
1	582 41 50-05	CRANKCASE		1

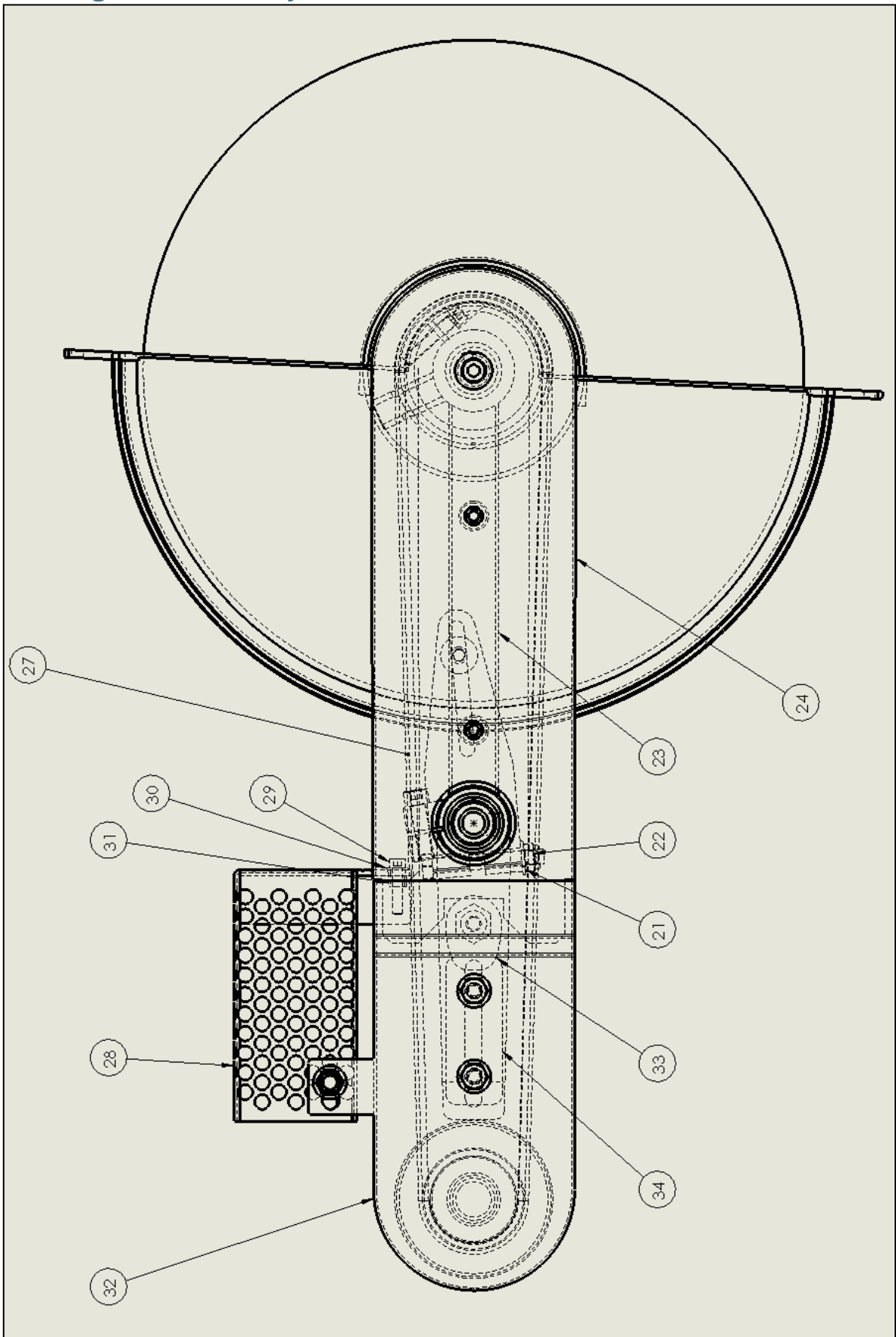
# **N** K1270 II R DECALS

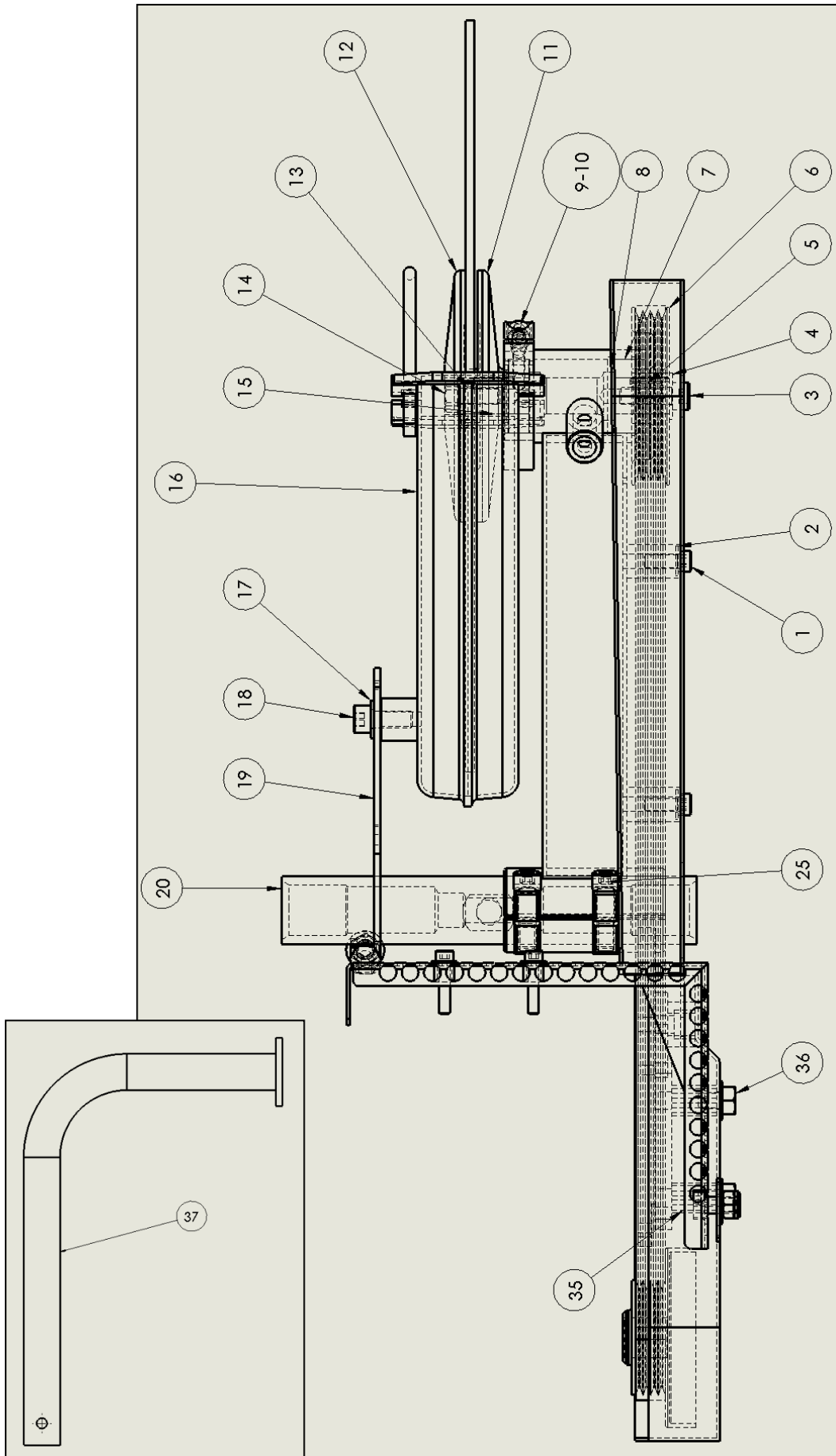


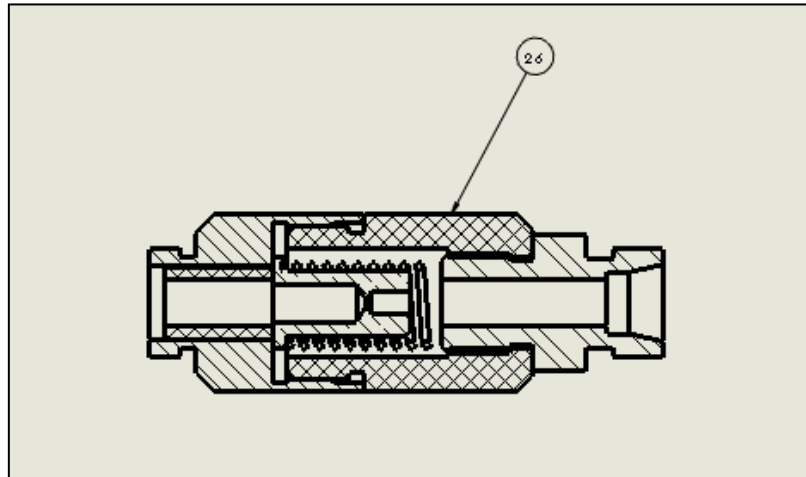


Ref	Part No	Description	Remark	QTY KIT
2	525 81 69-03	LABEL		1
3	589 02 38-04	DECAL		1
3	589 02 38-01	DECAL	<i>USA, CANADA</i>	1
6	582 14 19-01	DECAL		1
7	544 87 38-03	LABEL		1

### 9.3 Sawing arm assembly







COMMON PARTS FOR Ø305 / Ø355 / Ø406 RAIL SAW				
Rep.	Réf.	Qté	Désignation	Description
1	41008011	2	Vis H M8x16	Screw H M8x16
2	41108002	4	Rondelle ressort Ø int 8,2	Washer inner diameter 8,2
3	41008056	1	Vis de serrage et prise de vitesse	Clamping screw
4	31210147	1	Rondelle de serrage	Clamping washer
5	41401002	1	Clavette forme A5 x 5x12	Shaped form A5 x 5 12
7	44010001	2	Roulement 6003-2RS	Ball bearing 6003-2RS
8	41801001	2	Circlips Øint 35	Circlips inner diameter 35
9	41006018	1	Vis CHC M6x25	Screw CHC M6x25
10	41106001	1	Rondelle W6	Washer W6
13	41401010	1	Clavette forme C 5 x 5x16	shaped form C5 x 5 16
14	41008020	1	Vis H M8 x 20 serrage disque	Screw H M8 x 20
15	31110020	1	Axe pour disque	Axis for disc
17	41108002	1	Rondelle ressort Øint 8,2	Washer ressort Øinner 8,2
18	41008020	1	Vis H M8 x 20	Screw H M8 x 20
19	39910028	1	Patte de maintien	Locking bushing
20	31110017	1	Manchon	Sleeve
21	41108001	3	Rondelle M8N	Washer M8N
22	40908001	2	Ecrou nylstop M8	Nut nylstop M8
23	31930046	1	Support avant-bras usiné 16 "	Extension arm support 16"
24	35910511	1	Carter de courroie	Housing for belt
25	41008003	2	Vis CHC M8x30	Screw CHC M8x30
26	24221100	1	Sécurité électrique	Electrical safety device
28	35910514	1	Protection de pot	Silencer guard protector
29	41005005	2	Vis CHC M5x25	Screw CHC M5x25
30	41105001	2	Rondelle M5N	Washer M5N
31	31210470	2	Entretoise	Spacer ring
32	35910512	1	Carter de cloche fixe	Housing clutch fixe
33	31910326	1	Came	Cam
33	41008052	1	Vis CHC M8x16	Screw CHC M8x16
34	31910327	1	Plat tension courroie	Flat belt tension
35	31210488	2	Entretoise hexagonale	hex spacer
36	41008034	2	Vis h M8 x 12	Screw H M8 x 12

### SPECIFIC PARTS FOR Ø305 RAIL SAW / 14221036

Rep.	Réf.	Qté	Désignation	Description
6	31210499	1	Poulie réceptrice Ø81 pour 355	Ø81 type pulley for 355
11	31210131	1	Flasque d'entraînement disque Ø355 alésage 22,2	Inner driving flange disc 14" boring 22,2
12	31210133	1	Flasque extérieur de serrage	Outer clamping flange
16	35910007	1	Carter de disque Ø305	Disc housing 12"
27	44802006	1	Courroie poly "v" 4PK 1080mm	4PK belt 1080 mm

### SPECIFIC PARTS FOR Ø355 RAIL SAW / 14221031 – 14221032 – 14221037 - 14221038

Rep.	Réf.	Qté	Désignation	Description
6	31210499	1	Poulie réceptrice Ø81 pour 355	Ø81 type pulley for 355
11	31210025	1	Flasque d'entraînement disque Ø355 alésage 25,4	Inner driving flange disc 14" boring 25,4
11	31210510	1	Flasque d'entraînement disque Ø355 alésage 22,2	Inner driving flange disc 14" boring 22,2
12	31210026	1	Flasque extérieur de serrage	Outer clamping flange
16	35910006	1	Carter de disque Ø355	Disc housing 14"
27	44802006	1	Courroie poly "v" 4PK 1080mm	4PK belt 1080 mm

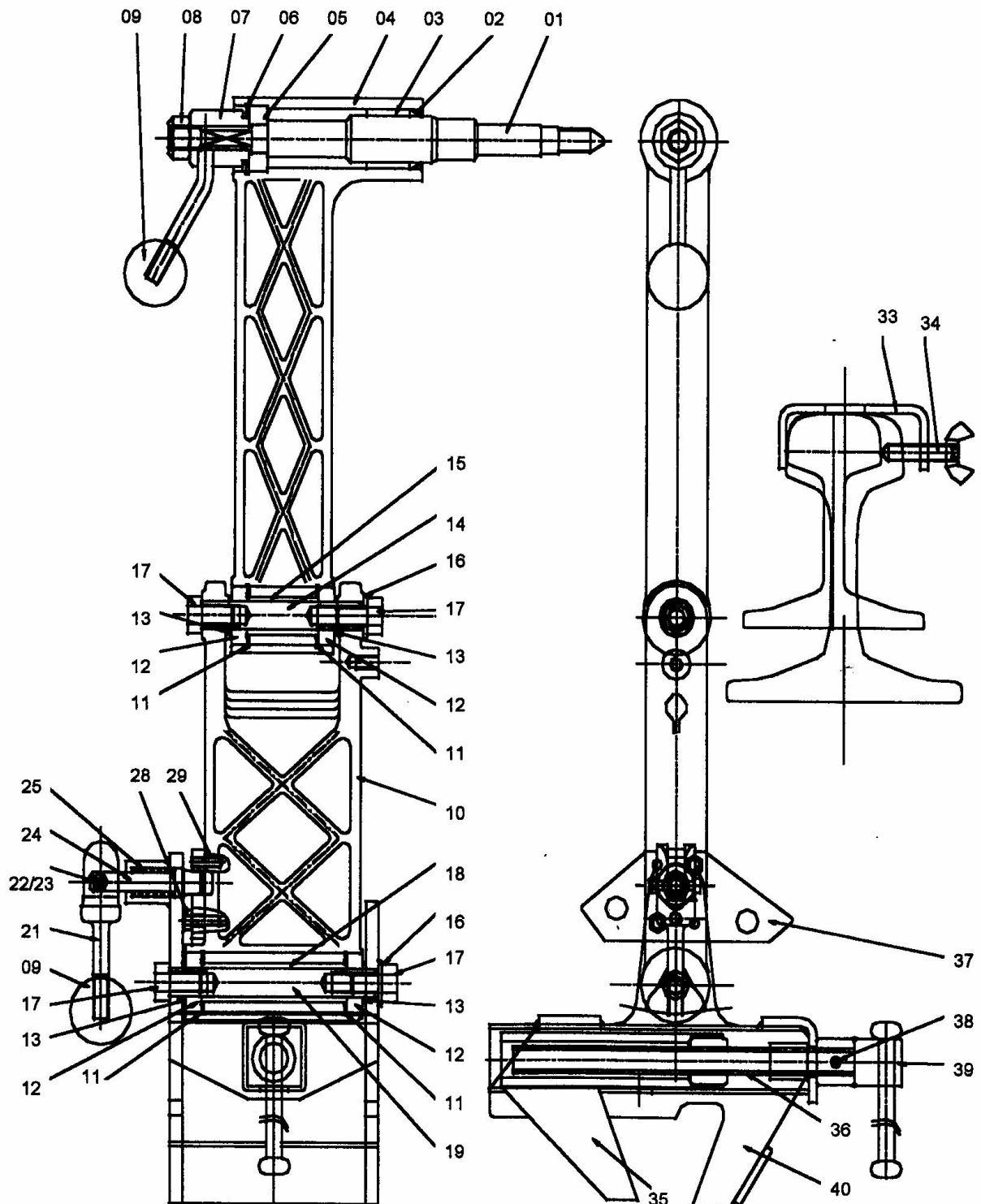
### SPECIFIC PARTS FOR Ø355 RAIL SAW SPRING SUPPORT ARM / 14221035

Rep.	Réf.	Qté	Désignation	Description
6	31210499	1	Poulie réceptrice Ø81 pour 355	Ø91 type pulley for 355
11	31210025	1	Flasque d'entraînement disque Ø355 alésage 25,4	Inner driving flange disc 14" boring 25,4
12	31210026	1	Flasque extérieur de serrage	Outer clamping flange
16	35910006	1	Carter de disque Ø355	Disc housing 14"
27	44802006	1	Courroie poly "v" 4PK 1080mm	4PK belt 1080 mm
37	35910065	1	Bras de manœuvre	Handle

### SPECIFIC PARTS FOR Ø406 RAIL SAW / 14221034

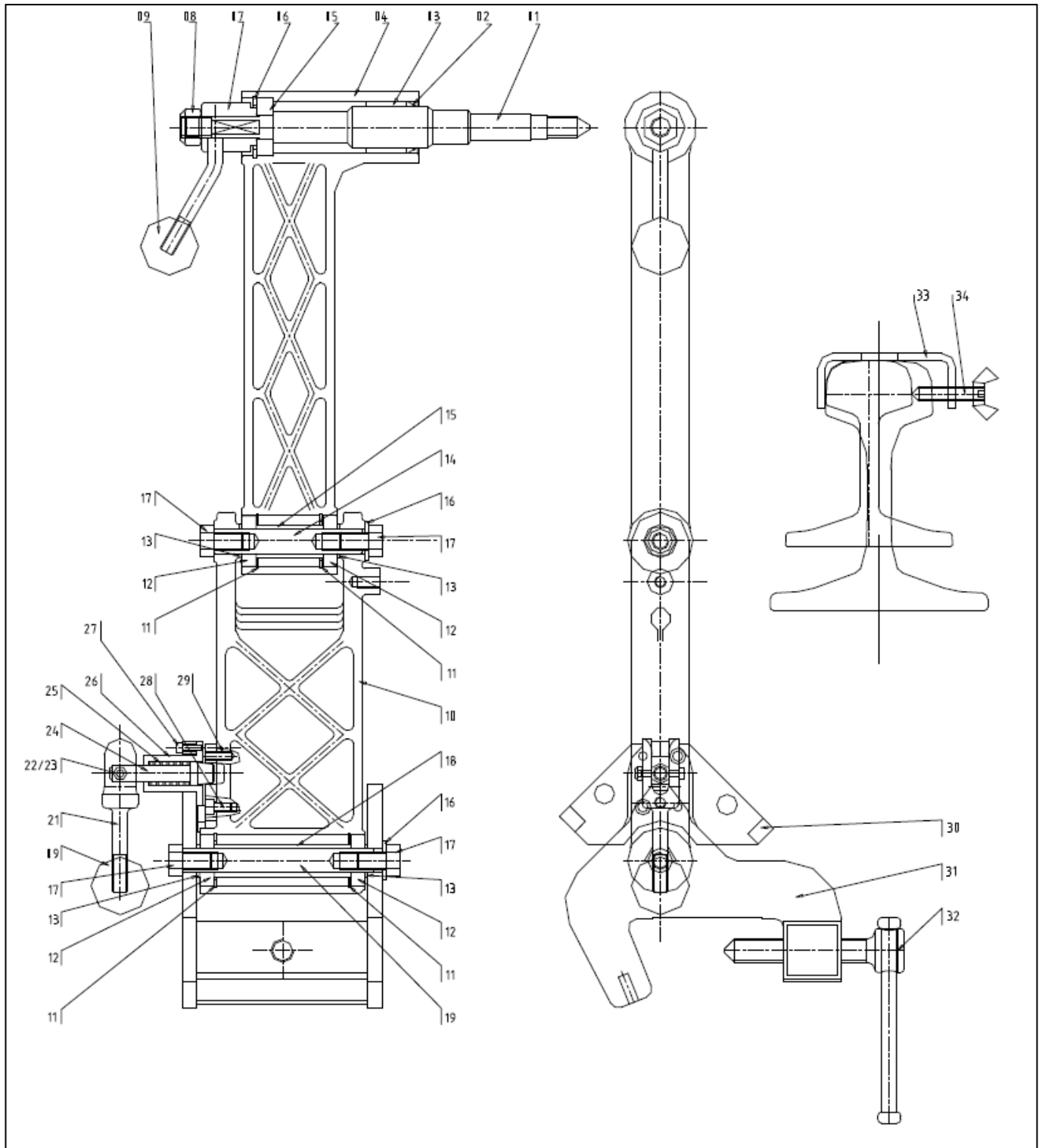
Rep.	Réf.	Qté	Désignation	Description
6	31210489	1	Poulie réceptrice Ø96 pour 406	Ø96 type pulley for 406
11	31210479	1	Flasque d'entraînement disque Ø406 alésage 25,4	Inner driving flange disc 16" boring 25,4
12	31210480	1	Flasque extérieur de serrage	Outer clamping flange
16	35910379	1	Carter de disque Ø406	Disc housing 16"
27	44802007	1	Courroie poly "v" 4PK 1110mm	4PK belt 1110 mm

## 9.4 Support arm with universal jaw



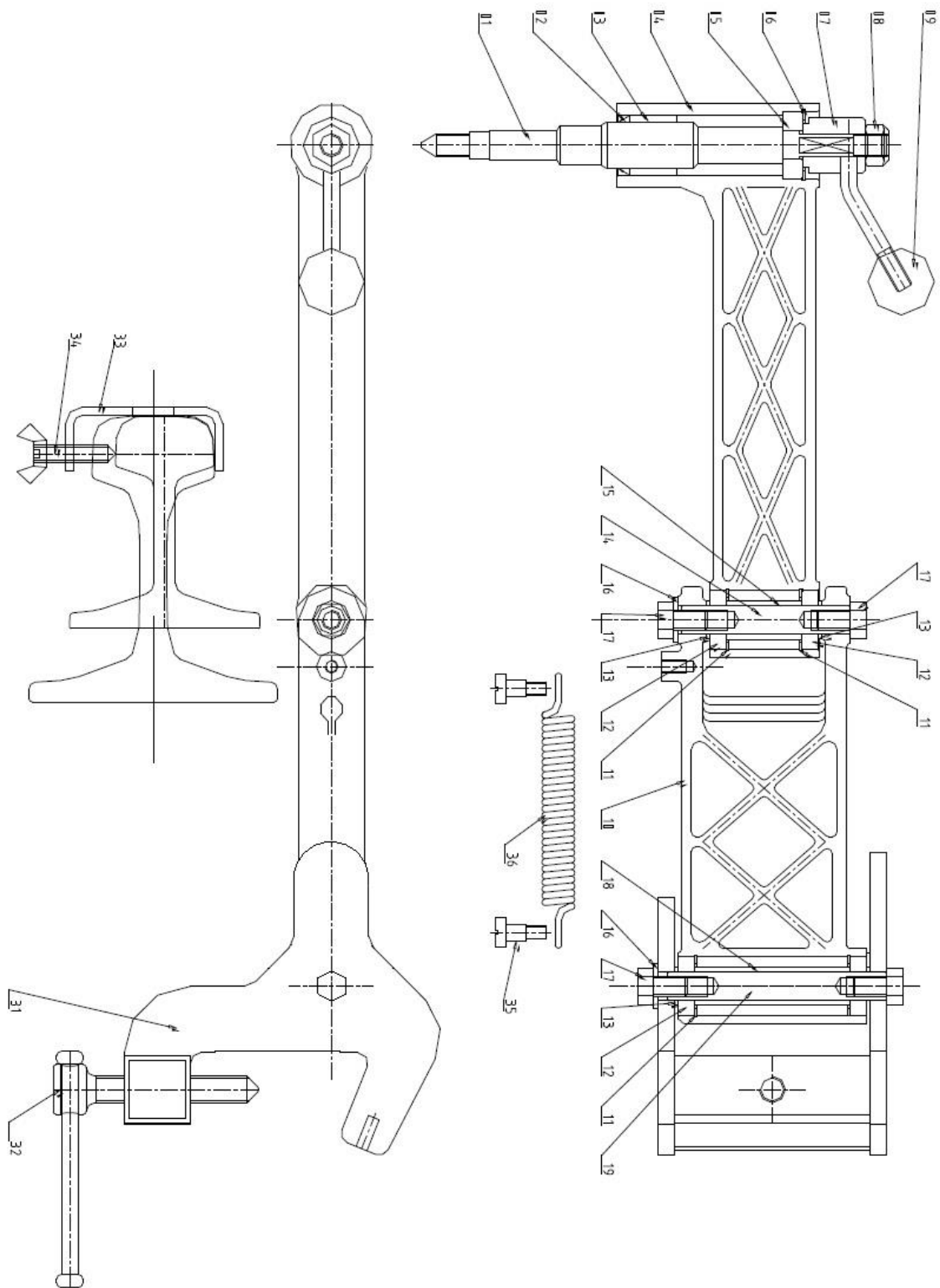
Rep.	Réf.	Qté	Désignation	description
1	31110018	1	Axe de liaison	Connecting pin
2	44201002	1	Joint racleur	Scraping joint
3	45301001	1	Coussinet	Bearing
4	35990001	1	Bras supérieur entraxe Lg 285mm	Superior arm 285mm long
5	44010002	1	Roulement 6203 2Rs	Ball bearing 6203 2Rs
6	41801002	1	Circlips intérieur Ø 40	Inner circlips Ø 40
7	35910023	1	Levier de manoeuvre coudé	Handling elbow lever
8	40914001	1	Ecrou Nylstop M14	Nylstop nut M14
9	47404001	2	Boule bakélite Ø 40	Bakelite ball
10	32930012	1	Bras inférieur	Inferior arm
11	41801001	4	Circlips intérieur diam. 35	Inner circlips Ø. 35
12	44010001	4	Roulement 6003 2Rs	Ball bearing 6003 2Rs
13	31210055	4	Rondelle de centrage	Centering washer
14	31110148	1	Axe de pivot	Swivel-pin axle
15	31210053	1	Entretoise pour axe de pivot	Stretchers for swivel-pin axle
16	41112001	4	Rondelle M12N	M 12N washer
17	41012005	4	Vis H M12 x 20 filetée sous tête	HM12 x 20 threaded screw
18	31210054	1	Entretoise pour axe de mâchoire	Jaw axle stretchers
19	31110149	1	Axe de mâchoire	Jaw axle
21	31110150	1	Levier excentrique	Eccentric lever
22	41005002	1	Vis H M5 x 30	H M5 x 30 screw
23	40905001	1	Ecrou Nylstop M5	Nylstop nut M5
24	31110026	1	Axe de verrou	Lock axle
25	47202001	1	Ressort de verrou	Spring
28	41006055	2	Vis H M6 x 16	H M6 x 16 screw
29	41301001	3	Goupille mécanindus 6 x 18	Mécanindus pin 6 x 18
33	35910061	1	Guide de coupe	Cutting guide
34	31910025	1	Vis à oreilles	Screw
35	35910168	1	Croc mobile	Jaw mobile part
35b	35910208	1	Croc mobile rail piste	Jaw mobile part for Grooved rail
36	31110151	1	Vis de serrage de la mâchoire	Jaw tightening screw
37	31910178	1	Butée	Inferior arm locking device
38	41301016	1	Goupille mécanindus 6 x 30	Mécanindus pin 6 x 30
39	24221034	1	Ensemble bâton/manivelle	Handling set
40	35910169	1	Mâchoire universelle	Universal jaw

## 9.5 Support arm with vignol jaw



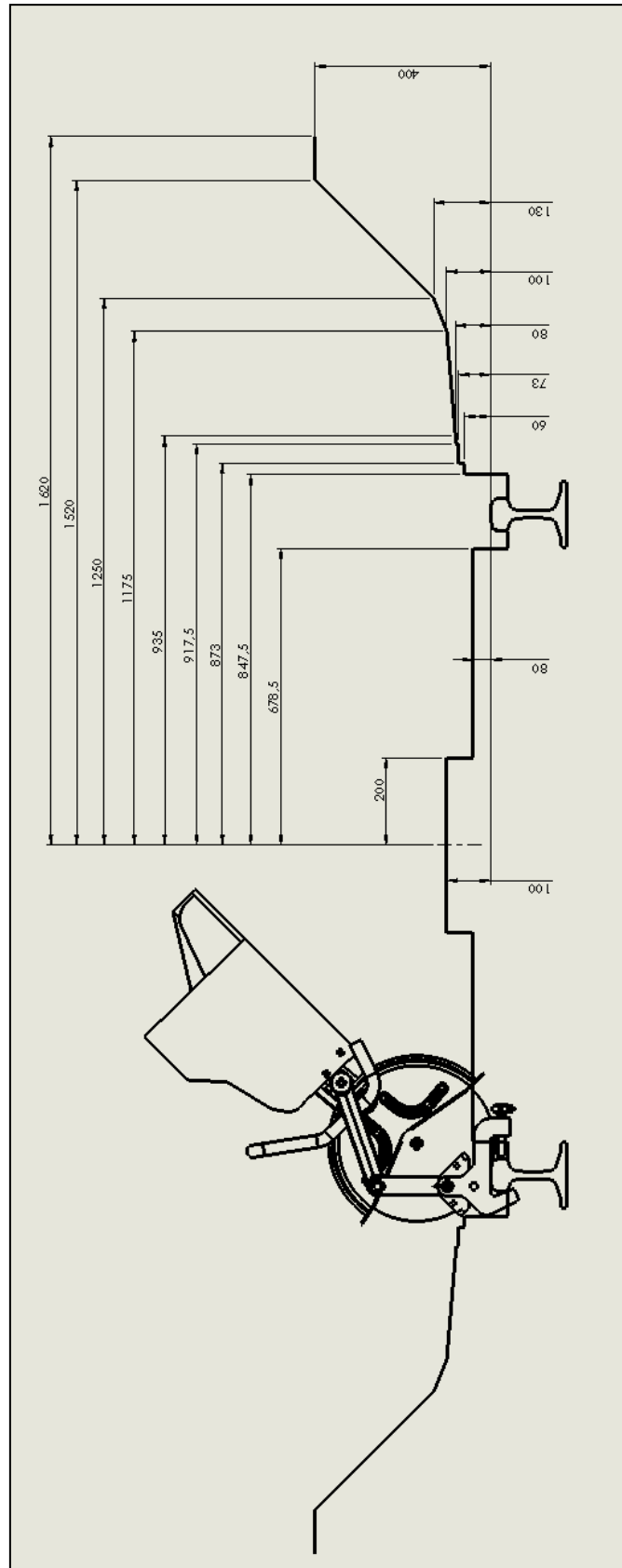
Rep.	Réf.	Qté	Désignation	description
1	31110018	1	Axe de liaison	Connecting pin
2	44201002	1	Joint racleur	Scraping joint
3	45301001	1	Coussinet	Bearing
4	35990001	1	Bras supérieur entraxe Lg 285mm	Superior arm 285mm long
5	44010002	1	Roulement 6203 2Rs	Ball bearing 6203 2Rs
6	41801002	1	Circlips intérieur Ø 40	Inner circlips Ø 40
7	35910023	1	Levier de manoeuvre coudé	Handling elbow lever
8	40914001	1	Ecrou Nylstop M14	Nylstop nut M14
9	47404001	2	Boule bakélite Ø 40	Bakelite ball
10	32930012	1	Bras inférieur	Inferior arm
11	41801001	4	Circlips intérieur diam. 35	Inner circlips Ø. 35
12	44010001	4	Roulement 6003 2Rs	Ball bearing 6003 2Rs
13	31210055	4	Rondelle de centrage	Centering washer
14	31110148	1	Axe de pivot	Swivel-pin axle
15	31210053	1	Entretoise pour axe de pivot	Stretchers for swivel-pin axle
16	41112001	4	Rondelle M12N	M 12N washer
17	41012005	4	Vis H M12 x 20 filetée sous tête	HM12 x 20 threaded screw
18	31210054	1	Entretoise pour axe de mâchoire	Jaw axle stretchers
19	31110149	1	Axe de mâchoire	Jaw axle
21	31110150	1	Levier excentrique	Eccentric lever
22	41005002	1	Vis H M5 x 30	H M5 x 30 screw
23	40905001	1	Ecrou Nylstop M5	Nylstop nut M5
24	31110026	1	Axe de verrou	Lock axle
25	47202001	1	Ressort de verrou	Spring
26	31210050	1	Corps de verrou	Lock body
27	41004001	3	Vis CHC M4x16	Screw CHC M4x16
28	41006002	2	Vis CHC M6x12	CHC M6x12 screw
29	41301032	2	Goupille mécanindus 6 x 20	Mécanindus pin 6 x 20
30	35910024	1	Secteur d'orientation	Orienting device
31	35910149	1	Mâchoire vignole	Vignol jaw
32	24221010	1	Vis étau de serrage	Squeezing jaw screw
33	35910061	1	Guide de coupe	Cutting guide
34	31910025	1	Vis à oreilles	Screw

## 9.6 Support arm with vignol and spring jaw



Rep.	Réf.	Qté	Désignation	description
1	31110018	1	Axe de liaison	Connecting pin
2	44201002	1	Joint racleur	Scraping joint
3	45301001	1	Coussinet	Bearing
4	35990001	1	Bras supérieur entraxe Lg 285mm	Superior arm 285mm long
5	44010002	1	Roulement 6203 2Rs	Ball bearing 6203 2Rs
6	41801002	1	Circlips intérieur Ø 40	Inner circlips Ø 40
7	35910023	1	Levier de manoeuvre coudé	Handling elbow lever
8	40914001	1	Ecrou Nylstop M14	Nylstop nut M14
9	47404001	2	Boule bakélite Ø 40	Bakelite ball
10	32930012	1	Bras inférieur	Inferior arm
11	41801001	4	Circlips intérieur diam. 35	Inner circlips Ø. 35
12	44010001	4	Roulement 6003 2Rs	Ball bearing 6003 2Rs
13	31210055	4	Rondelle de centrage	Centering washer
14	31110148	1	Axe de pivot	Swivel-pin axle
15	31210053	1	Entretoise pour axe de pivot	Stretchers for swivel-pin axle
16	41112001	4	Rondelle M12N	M 12N washer
17	41012005	4	Vis H M12 x 20 filetée sous tête	HM12 x 20 threaded screw
18	31210054	1	Entretoise pour axe de mâchoire	Jaw axle stretchers
19	31110149	1	Axe de mâchoire	Jaw axle
31	35910149	1	Mâchoire vignole	Vignol jaw
32	24221010	1	Vis étau de serrage	Squeezing jaw screw
33	35910061	1	Guide de coupe	Cutting guide
34	31910025	1	Vis à oreilles	Screw
35	47201003	1	Ressort de traction	Spring
36	47008021	2	Vis épaulée M8x24	Screw M8x24

## 10. Plan of control following EN13977





# 11.CE Certificate of conformity

## CERTIFICATE OF CONFORMITY

Le constructeur soussigné (*The undersigned manufacturer*) :

**PANDROL SAS**  
Z.I. DU BAS PRE  
59590 RAISMES

Certifie que le matériel neuf désigné ci-après (*Certify that the under described products*) :

**Tronçonneuse de rails**  
**Vignole / Universelle / Ressort**  
**Moteur Husqvarna K1270R II**

**Rail saw**  
**Vignol / Universal / Spring**  
**Husqvarna K1270R II Engine**

References :

**14221031 / 14221032 / 14221033 / 14221034 / 14221035 / 14221036 / 14221037 / 14221038**

N° de machine (*machine number*) :

Est conforme à (*comply with*) :

- |  |                  |
|--|------------------|
| • Norme Européenne ( <i>European Norm</i> ) :                              | NF EN 13977      |
| • Directive machine ( <i>Machine directive</i> ) :                         | 2006/42/CE       |
| • Procédure d'auto-certification ( <i>self-certification procedure</i> ) : | Article R4313-20 |

La société **PANDROL SAS** est le détenteur du dossier technique.  
(**PANDROL SAS** is the holder of the technical file.)

Petite-Forêt, Janvier 2024

Thibaut Descamps

Directeur BU EMEA / EMEA BU Director

# PANDROL

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