

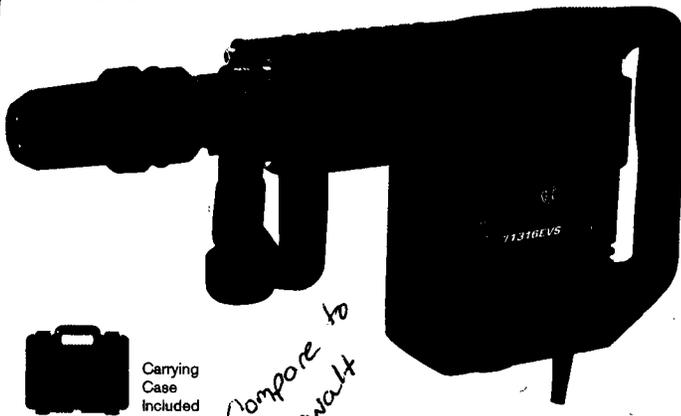
SDS-max® DEMOLITION HAMMERS and accessories

The Hardest Hitting Hammer in its Class!

A powerful 14-amp motor with Constant Response™ Circuitry provides a constant hard-hitting 18.4 ft./lbs. of impact energy. Variable speed control allows users to adjust the impact force to the material being removed. The SDS-max tool holder provides you with the largest assortment of Bosch brand steel accessories for every job.



11316EVS SDS-max® Demolition Hammer



Carrying Case Included

Compare to dewalt

Features

- SDS-max® bit system - tool-free bit changes with automatic bit locking, dust protection and maximum impact energy transfer rate
- Variable-speed dial - for controlled chipping applications
- Constant-Response™ Circuitry
 - Provides soft-start
 - Maintains constant speed under load
 - Provides overload protection
- Service Minder™ light - indicates when preventative maintenance is required
- Vario-Lock™ positioning - rotates and locks chisel into 12 different positions to optimize working angle
- Padded rear handle - absorbs shock for operator comfort
- 360° Auxiliary handle - provides a wide range of movement along with operator comfort
- Double insulated, UL listed, complies to OSHA

Specifications

Rating	120V AC
Amperage	14
Loaded BPM	900-1,890
Impact Energy (ft./lbs.)	4.4-18.4
Length (in.)	22.5
Weight (lbs.)	22.5

Standard Equipment

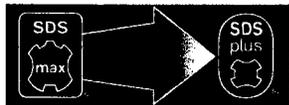
Auxiliary Handle	2 602 025 076
Carrying Case	2 605 438 297

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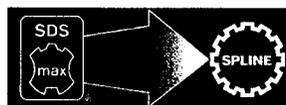
SDS-max® ADAPTERS



• Bosch offers the following adapters to make it easy to move up to SDS-max® while still utilizing your current SDS-plus® and spline accessories.



SDS-max® to SDS-plus® Adapter



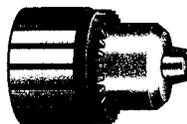
SDS-max® to Spline Adapter



SDS-max® to 3/4" Hex Adapter



SDS-max® to 3 Jaw Chuck Adapter



Heavy-Duty Geared Chuck Kit

Catalog No.	Type
HA1030	SDS-max® to SDS-plus Adapter
HA1031	SDS-max® to Spline Adapter
HA1033	SDS-max® to 3/4" Hex Adapter
HA1032	SDS-max® to 3 Jaw Chuck Adapter 1/2"-20 thread

CKK005

Heavy-Duty Geared Chuck Kit
1/2"-20 mount; for straight drilling in wood, plastic, steel. NOT recommended for hammering

WARNING

Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS**Work Area**

Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.

Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.

Warn by-standers, children, and visitors while operating a power tool. Distractions can cause you to lose control.

Electrical Safety

Only use insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double Insulation indicates the need for the three wire grounded power cord and grounded power supply system. Before plugging in the tool, be sure the outlet voltage supplied is within the range marked on the nameplate. Do not use only rated tools with a DC power supply.

Avoid body contact with grounded surfaces such as pipes, radiators, ranges and electrical generators. There is an increased risk of electric shock if your body is grounded. If operating the power tool in damp locations is unavoidable, a Ground Fault Circuit Interrupter should be used to supply the power to your power tool. Electrician's rubber gloves and footwear further enhance your personal safety.

Do not expose power tools to rain or wet conditions. Water entering a power tool will cause the risk of electric shock.

Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W." These cords are rated for outdoor use and reduce the risk of electric shock. Refer to "Recommended sizes of Extension Cords" in the Accessory section of this manual.

Personal Safety

Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.

Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts. Keep hands dry, clean and free from oil and grease.

Avoid accidental starting. Be sure switch is "OFF" before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch "ON" invites accidents.

Remove adjusting keys or wrenches before turning the tool "ON". A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.

Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.

Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

Tool Use and Care

Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.

Do not force tool. Use the correct tool for your application. The correct tool will do the

job better and safer at the rate for which it is designed.

Do not use tool if switch does not turn it "ON" or "OFF". Any tool that cannot be controlled with the switch is dangerous and must be repaired.

Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.

Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.

Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control. Any alteration or modification is a misuse and may result in a dangerous condition.

Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool

serviced before using. Many accidents are caused by poorly maintained tools. Develop a periodic maintenance schedule for your tool.

Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool, may become hazardous when used on another tool.

Service

Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury. For example: internal wires may be misplaced or pinched, safety guard return springs may be improperly mounted.

When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury. Certain cleaning agents such as gasoline, carbon tetrachloride, ammonia, etc. may damage plastic parts.

Hold tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator. Do not drill, fasten or break into existing walls or other blind areas where electrical wiring may exist. If this situation is unavoidable, disconnect all fuses or circuit breakers feeding this worksite.

Wear ear protectors when using the tool for extended periods. Prolonged exposure to high intensity noise can cause hearing loss.

Use a metal detector to determine if there are gas or water pipes hidden in the work area or call the local utility company for assistance before beginning the operation. Striking or cutting into a gas line will result in explosion. Water entering an electrical device may cause electrocution.

Always wear safety goggles or eye protection when using this tool. Use a dust mask or respirator for applications which generate dust. Safety goggles or eye protection will help deflect fragments of the material that may be thrown toward your face and eyes. Dust generated or gases released from the material you are cutting (i.e. asbestos insulated pipes, radon) may cause respiratory difficulties.

Use thick cushioned gloves and limit the exposure time by taking frequent rest periods. Vibration caused by hammer action may be harmful to your hands and arms.

Do not use dull or damaged bits and accessories. Dull or damaged bits have a greater tendency to bind in the workpiece.

Always use both handles for maximum control over this hammer. Never attempt to operate this tool with one hand. This tool

...ops intense percussive forces during
...ation and you may lose control if
...oting one hand operation.

...ion yourself to avoid being caught
...en the tool or side handle and walls
...sts. Should the bit become bound or
...ed in the work, the reaction of the tool
... crush your hand or leg.

...ot strike the bit with a handheld
...mer or sledge hammer when
...pting to dislodge a bound or jammed
...ragments of metal from the bit could
...ge and strike you or bystanders.

...r place the tool down until the motor
...me to a complete stop.

...removing the bit from the tool avoid
...ct with skin and use proper protective
...s when grasping the bit or accessory.
...sories may be hot after prolonged use.

WARNING Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints,
- Crystalline silica from bricks and cement and other masonry products, and
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

IMPORTANT: Some of the following symbols may be used on your tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

Symbol	Name	Designation/Explanation
V	Volts	Voltage (potential)
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
kg	Kilograms	Weight
min	Minutes	Time
s	Seconds	Time
∅	Diameter	Size of drill bits, grinding wheels, etc.
n ₀	No load speed	Rotational speed, at no load
.../min	Revolutions or reciprocation per minute	Revolutions, strokes, surface speed, orbits etc. per minute
0	Off position	Zero speed, zero torque...
1, 2, 3, ... I, II, III,	Selector settings	Speed, torque or position settings. Higher number means greater speed
	Infinitely variable selector with off	Speed is increasing from 0 setting
	Arrow	Action in the direction of arrow
	Alternating current	Type or a characteristic of current
	Direct current	Type or a characteristic of current
	Alternating or direct current	Type or a characteristic of current
	Class II construction	Designates Double Insulated Construction tools.
	Earthing terminal	Grounding terminal
	Warning symbol	Alerts user to warning messages
	Ni-Cad RBRC seal	Designates Ni-Cad battery recycling program



This symbol designates that this tool is listed by Underwriters Laboratories.



This symbol designates that this tool is listed to Canadian Standards by Underwriters Laboratories.



This symbol designates that this tool is listed by the Canadian Standards Association.



This symbol designates that this tool is listed by Underwriters Laboratories, and listed to Canadian Standards by Underwriters Laboratories.

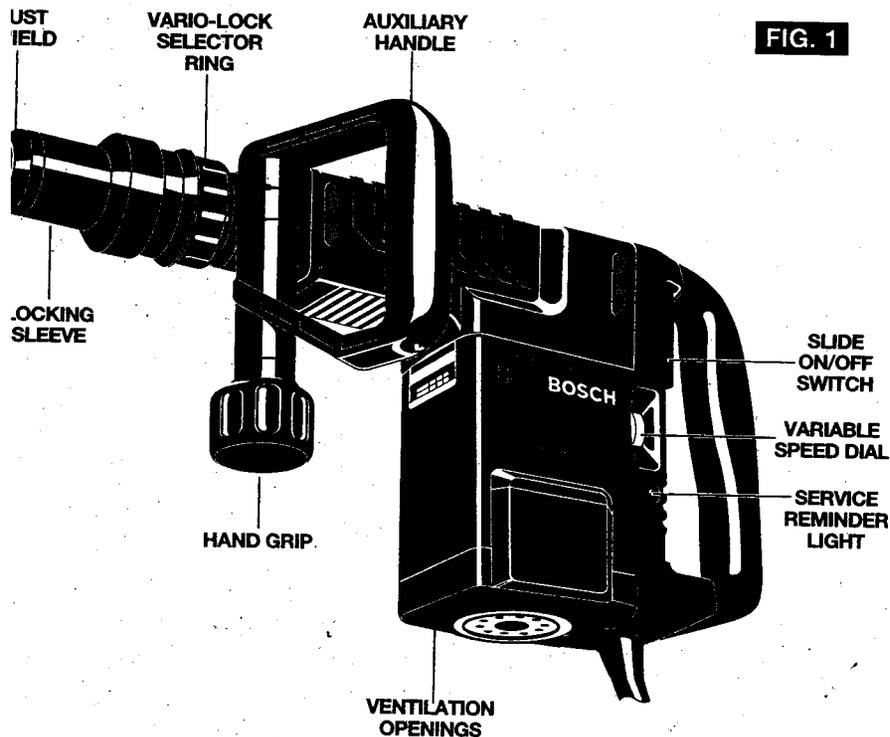


This symbol designates that this tool complies to NOM Mexican Standards.

WARNING

Disconnect the plug from the power source before making any assembly, adjustments or changing accessories. Such preventive safety measures reduce the risk of starting the tool accidentally.

Demolition Hammer

**FIG. 1**

Model number
Shank style

11316EVS
SDS Max

NOTE: For tool specifications refer to the nameplate on your tool.

SLIDE "ON-OFF" SWITCH

The tool is switched "ON" by the slide switch 9 located in the rear handle.

TO TURN THE TOOL "ON" slide the switch to the right.

TO TURN THE TOOL "OFF" slide the switch to the left.

VARIABLE SPEED DIAL

Your tool is equipped with a variable speed dial. The impact rate (BPM) and rotating speed (RPM) can be varied according to the type of work being performed by setting the variable speed dial to the selected setting. The chart below will help you to determine which setting to use for your application. However, a pre-test will determine the best speed setting, as the chart is intended only as a guide. Once the proper setting is determined the impact rate and rotating speed is kept constant by means of the "Electronic Feedback Circuitry". The variable speed dial can be adjusted while the motor is running with the tool free from work, allowing the operator to adjust the impact rate and rotating speed according to the actual application.

Chipping (Demolition)

Area of application	Control setting
Plaster work	1 - 2
Removing tiles	3
Brick work	4
Concrete	5 - 6

ELECTRONIC FEEDBACK CIRCUITRY (EFC)

The internal electronic feedback system provides a "soft start", which will reduce the stresses that occur from a high torque start. The system also helps to keep the pre-selected impact rate and rotating speed virtually constant between no-load and load conditions.

INSTALLING ACCESSORIES

Clean the insert shank end of the accessory to remove any debris, then lightly grease with a light oil or lubricant.

Insert accessory into the tool holder through the dust shield, while twisting and pushing

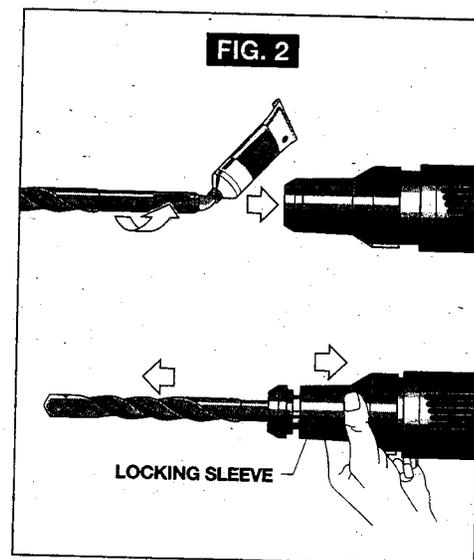
inward until it locks automatically into place. Pull outward on the accessory to be certain it is locked into the tool holder (fig. 2).

NOTE: The high efficiency available from the rotary hammers can only be obtained if sharp and undamaged accessories are used. The "cost" to maintain sharp and undamaged accessories is more than offset by the "time saved" in operating the tool with sharp accessories.

REMOVING ACCESSORIES

WARNING Accessories may be hot after use. Avoid contact with skin and use proper protective gloves or cloth to remove.

To remove an accessory, pull and hold locking sleeve backward and pull bit forward. All accessories should be wiped clean after removing.

**FIG. 2**

"VARIO-LOCK"- SELECTOR RING

The vario-lock selector ring can be set in any one of twelve (30° increments) positions. Choose a position which is best suited for your operation. To adjust, pull the selector ring forward and hold firmly, then turn both the accessory and the selector ring to the desired position. Release the selector ring and turn the accessory slightly until it locks in place.

AUXILIARY HANDLE

tool must be supplied with the auxiliary handle, which can be swiveled. To reposition and/or swivel the handle, in the hand grip, move the handle to the red position along the barrel and rely retighten the hand grip.

"TOOL TIPS"

For the best penetration rates in concrete, use the tool with a steady pressure, but do not use excessive force as this will decrease the efficiency of the tool.

Overheated packed hammers require a short period of time to warm up. Depending on the ambient temperature, this time may vary from

approximately 15 seconds (90°F) to 2 minutes (32°F). A new hammer requires a break-in period before full performance is realized. This period may require up to 5 hours of operation.

An electric hammer is likely to be the most expensive portable tool at the construction job. The long wear and efficient operation of the BOSCH hammers will more than justify the cost for tools of this type. As earlier pointed out, sharp accessories as well as clean air vents are necessary for efficient operation. Establish and follow a set maintenance program.

Service

WARNING Preventive maintenance performed by unauthorized personnel may result in misplacement of internal wires and components which could cause serious hazard. We recommend that all tool service be performed by a Bosch Factory Service Center or Authorized Bosch Service Station.

SERVICE REMINDER LIGHT

When the service reminder light lights up or blinks, this will indicate that the cut-out carbon brushes will switch off the tool in approximately 8 hours. After that period, the light will go off and the tool will stop running. The tool must then be sent to a service center for service.

TOOL LUBRICATION

Your Bosch tool has been properly lubricated and is ready to use. It is recommended that tools with gears be regreased with a special gear lubricant at every brush change.

CARBON BRUSHES

The brushes and commutator in your tool have been engineered for many hours of dependable service. To maintain peak efficiency of the motor, we recommend every two to six months the brushes be examined. Only genuine Bosch replacement

brushes specially designed for your tool should be used.

BEARINGS

Every second brush change, the bearings should be replaced at Bosch Factory Service Center or Authorized Bosch Service Station. Bearings which become noisy (due to heavy load or very abrasive material cutting) should be replaced at once to avoid overheating or motor failure.

Cleaning

WARNING To avoid accidents always disconnect the tool from the power supply before cleaning or performing any maintenance. The tool may be cleaned most effectively with compressed dry air. Always wear safety goggles when cleaning tools with compressed air.

Ventilation openings and switch levers must be kept clean and free of foreign matter. Do not attempt to clean by inserting pointed objects through openings.

CAUTION Certain cleaning agents and solvents damage plastic parts. Some of these are: gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents that contain ammonia.

WARNING If an extension cord is necessary, a cord with adequate size conductors that is capable of carrying the current necessary for your tool must be used. This will prevent excessive voltage drop, loss of power or overheating. Grounded tools must use 3-wire extension cords that have 3-prong plugs and receptacles.

NOTE: The smaller the gauge number, the heavier the cord.

RECOMMENDED SIZES OF EXTENSION CORDS 120 VOLT ALTERNATING CURRENT TOOLS

Tool's Amperes Rating	Cord Size in A.W.G.				Wire Sizes in mm ²			
	Cord Length in Feet				Cord Length in Meters			
	25	50	100	150	15	30	60	120
3-6	18	16	16	14	.75	.75	1.5	2.5
6-8	18	16	14	12	.75	1.0	2.5	4.0
8-10	18	16	14	12	.75	1.0	2.5	4.0
10-12	16	16	14	12	1.0	2.5	4.0	—
12-16	14	12	—	—	—	—	—	—

Auxiliary Handle*
Carrying case*

(* = standard equipment)
(** = optional accessories)