



HOLZMANN MASCHINEN GmbH

Marktplatz 4 · A-4170 Haslach

Tel. +43 7289 71 562-0

info@holzmann-maschinen.at

www.holzmann-maschinen.at

Originalfassung

DE BETRIEBSANLEITUNG

Übersetzung / Translation

EN USER MANUAL

ES INSTRUCCIONES DE SERVICIO

FR MODE D'EMPLOI

CZ NÁVOD K POUŽITÍ

FORMATKREISSÄGE

PANEL SAW

ESCUADRADORA

SCIE CIRCULAIRE À FORMAT

FORMÁTOVACÍ PILA



FKS305V32TOP_400V



**YOUR
JOB.
OUR
TOOLS.**



2 SICHERHEITSZEICHEN / SAFETY SIGNS SEÑALES DE SEGURIDAD / SYMBOLES DE SÉCURITÉ / BEZPEČNOSTNÍ SYMBOLY

DE	SICHERHEITSZEICHEN BEDEUTUNG DER SYMBOLE	EN	SAFETY SIGNS DEFINITION OF SYMBOLS	CZ	VÝZNAM BEZPEČNOSTNÍCH SYMBOLŮ
ES	SEÑALES DE SEGURIDAD SIGNIFICADO DE LOS SÍMBOLOS	FR	SYMBOLES DE SÉCURITÉ SIGNIFICATION DES SYMBOLES		



DE CE-KONFORM: Dieses Produkt entspricht den EU-Richtlinien.

EN EC-CONFORM: This product complies with the EC-directives.

ES CONFORMIDAD CE: Este producto cumple con las directivas de la UE.

FR CONFORMITÉ CE : Ce produit répond aux directives CE.

CZ CE-SHODNÉ: Tento výrobek odpovídá směrnici ES.

DE BETRIEBSANLEITUNG LESEN! Lesen Sie die Betriebs- und Wartungsanleitung Ihrer Maschine aufmerksam durch und machen Sie sich mit den Bedienelementen der Maschine gut vertraut, um die Maschine ordnungsgemäß zu bedienen und so Schäden an Mensch und Maschine vorzubeugen.

EN READ THE MANUAL! Read the user and maintenance carefully and get familiar with the controls in order to use the machine correctly and to avoid injuries and machine defects.
¡LEER LAS INSTRUCCIONES DE SERVICIO! Lea atentamente las instrucciones de servicio y de mantenimiento de su máquina y familiarícese con los elementos de mando de la misma para manejarla correctamente y, de este modo, evitar que se produzcan daños personales y en la máquina.

FR LIRE LE MODE D'EMPLOI ! Veuillez lire le manuel d'exploitation et de maintenance de votre machine avec assiduité en vous familiarisant bien avec les organes de commande de la machine pour l'utiliser correctement et prévenir ainsi des blessures corporelles et des dégâts sur la machine.

CZ PŘEČTĚTE SI NÁVOD K OBSLUZE! Přečtěte si řádně návod na obsluhu a údržbu Vašeho stroje a dobře se seznámte s ovládacími prvky stroje, aby byl tento řádně obsluhován a předešlo se ke škodám na stroji a zraněním osob.

DE WARNUNG! Beachten Sie die Sicherheitssymbole! Die Nichtbeachtung der Vorschriften und Hinweise zum Einsatz der Maschine kann zu schweren Personenschäden und tödliche Gefahren mit sich bringen.

EN ATTENTION! Ignoring the safety signs and warnings applied on the machine as well as ignoring the security and operating instructions can cause serious injuries and even lead to death.

ES ¡ADVERTENCIA! ¡Observe los símbolos de seguridad! El incumplimiento de las normas e indicaciones para utilizar la máquina puede dar lugar a daños personales de carácter grave y a peligros mortales.

FR AVERTISSEMENT ! Observer les symboles de sécurité ! Le non-respect des réglementations et des consignes d'utilisation de la machine peut entraîner des blessures corporelles graves et des risques mortels.

CZ VAROVÁNÍ! Dodržujte bezpečnostní symboly! Nedodržování předpisů a pokynů pro používání stroje může vést k vážnému zranění osob a smrtelnému nebezpečí.

DE Schutzausrüstung tragen!

EN Wear protective equipment!

ES ¡Use el equipo de protección!

FR Porter un équipement de protection !

CZ Používejte osobní ochranné pomůcky!

DE Maschine vor Wartung und Pausen ausschalten und Netzstecker ziehen!

EN Stop and pull out the power plug before any break and engine maintenance!

ES ¡Pare la máquina y desconéctela de la red eléctrica antes de llevar a cabo trabajos de mantenimiento y antes de las pausas!

FR Éteindre la machine avant la maintenance et les pauses et débrancher la fiche secteur !





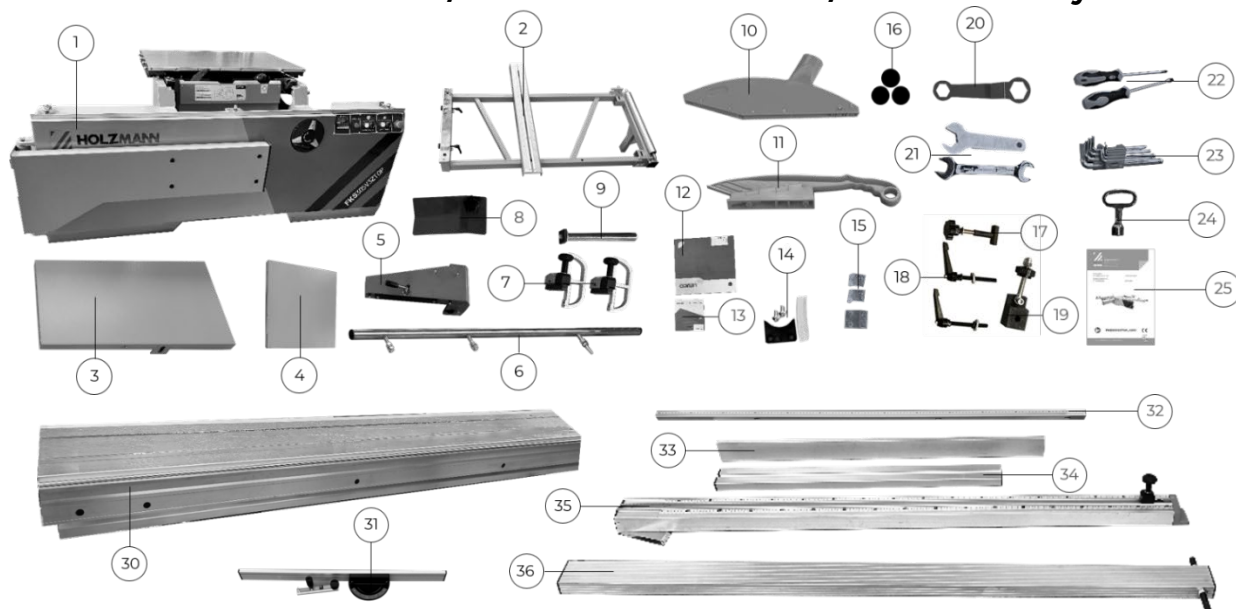
- CZ** Před údržbou a přestávkami stroj vypněte a odpojte od sítě!
DE Warnung vor Schnittverletzungen!
EN Warning of crush injuries!
ES ¡Advertencia de sufrir lesiones producidas por cortes!
FR Attention aux coupures !
CZ Varování před řeznými poraněními!
DE Benutzen von Handschuhen verboten!
EN Do not use gloves!
ES ¡Prohibido utilizar guantes!
FR Défense utilisait des gants !
CZ Používání rukavic zakázáno!

- DE** **Warnschilder und/oder Aufkleber an der Maschine, die unleserlich sind oder entfernt wurden, sind umgehend zu erneuern.**
- EN** **Missing or non-readable security stickers have to be replaced immediately.**
- ES** **¡Deben sustituirse inmediatamente los letreros de advertencia y/o las etiquetas que haya en la máquina, que se hayan vuelto ilegibles o se hayan retirado!**
- FR** **Les panneaux d'avertissement et/ou autocollants d'avertissement illisibles ou retirés sur la machine doivent être remplacés immédiatement.**
- CZ** **Výstražné značky a/nebo nálepky na stroji, které jsou nečitelné nebo byly odstraněny, musí být okamžitě vyměněny!**



3 TECHNIK / TECHNICS TÉCNICA / TECHNIQUE / TECHNIKA

3.1 Lieferumfang / Delivery content Volumen de suministro / Contenu de la livraison / Obsah dodávky

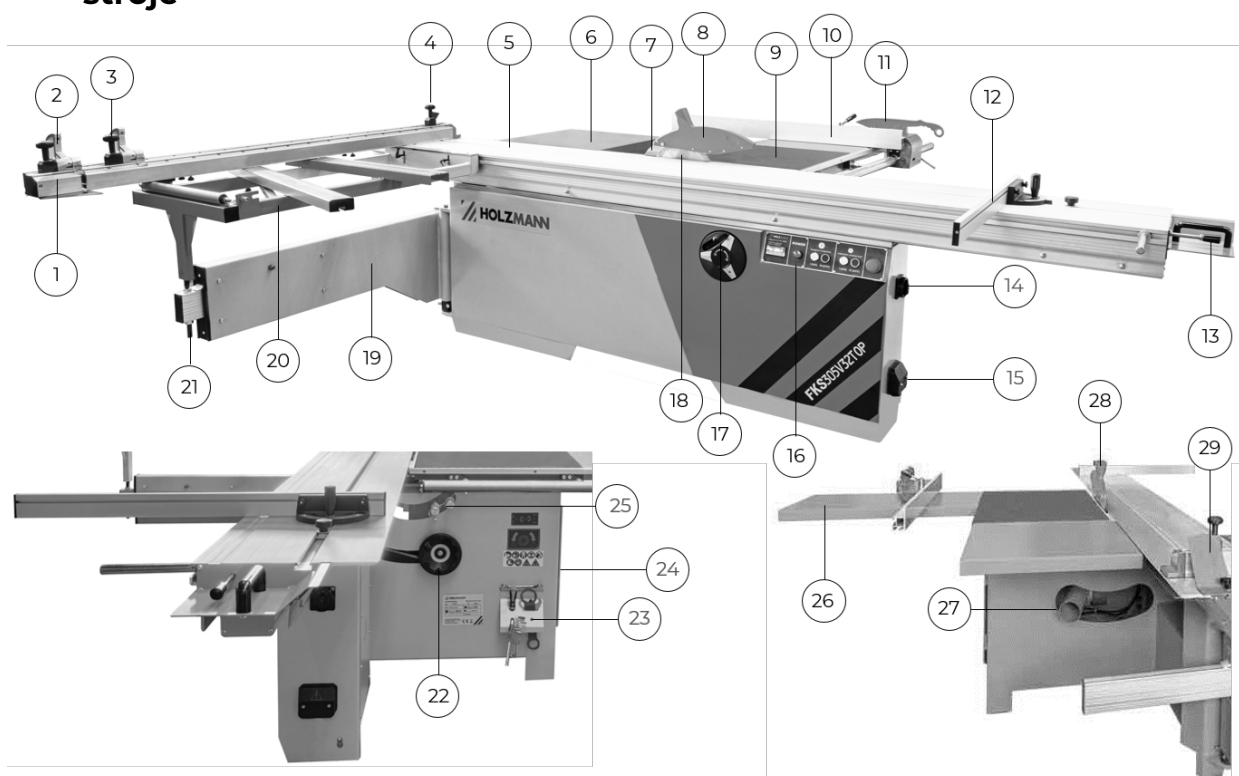


#	Beschreibung / Description	Qty
1	Maschine / machine / Máquina / Machine / Stroj	1
2	Auslegertisch / outrigger table / Carro de bandera / Console de table / Podpěrný rám	1
3	Tischverbreiterung / table widening / Ancheamiento de la mesa / Élargissement de table / Rozšíření stolu	1
4	Tischverlängerung / table extension / Extensión de la mesa / Extension de table / Prodloužení stolu	1
5	Halterung Parallelanschlag / bracket rip fence / Soporte del tope paralelo / Support de fixation de la butée parallèle / Držák podélného pravítka	1
6	Führungsschiene Parallelanschlag / rip fence guide / Guidera tope paralelo / Rail de guidage de guide longitudinal / Vodící tyč podélného pravítka	1
7	Kippanschlag / flip stop / Tope abatible / Butée basculante / Překlápňý doraz	2
8	Besäumschuh / edging shoe / Calza de canteado / Talon de délignage / Sámovací patka	1
9	Handriff Formatschiebetisch / handle sliding table / Mango carro desplazable de formatos / Poignée de la table de format coulissante / Držadlo posuvného stolu	1
10	Sägeblattschutz / saw blade guard / Protección de la hoja de la sierra / Protection de la lame de scie / Kryt pilového kotouče	1
11	Schiebestock / push stick / Bastón de corredera / Bâton d'insertion / Podavač	1
12	Sägeblatt Ø 300 x Ø 30 x 2,2-3,2mm Z: 72 / saw blade Ø 300 x Ø 30 x 2,2-3,2mm T: 72 / Hoja de sierra Ø 300 x Ø 30 x 2,2-3,2 mm dt: 72 / Lame de scie Ø 300 x Ø 30 x 2,2-3,2 mm Z: 72 / Pilový kotouč Ø 300 x Ø 30 x 2,2-3,2mm Z: 72	1
13	Vorritzer Ø 120 x Ø 20 x 3,1-2,2mm Z: 24 / scoring saw blade Ø 120 x Ø 20 x 3,1-2,2mm T: 24 / Incisor Ø 120 x Ø 20 x 3,1-2,2 mm dt: 24 / Lame diviseuse Ø 120 x Ø 20 x 3,1-2,2 mm Z: 24 / Předřezový kotouč Ø 120 x Ø 20 x 3,1-2,2mm Z: 24	1
14	Schmutzabstreifer / dirt wiper / Rascador de suciedad / Racleur de saleté / Škrabka na nečistoty	1
15	Lupe / magnifier / Lupa / Loupe / Lupa	3
16	Abdeckkappe / cover cap / Tapón de la cubierta / Capuchon de recouvrement / Krytka	3
17	Auflagenfixierung / support fixing / Fijación de la repisa / Fixation des supports / Zajištění podpěry	1
18	Klemmhebel / clamping lever / Palanca de sujeción / Levier de blocage / Zajišťovací páčka	2
19	Klemmung 90° / clamping 90° / Sujeción 90° / Serrage 90° / Doraz 90°	1
20	Sägeblattschlüssel / saw blade wrench / Llave para hoja de sierra / Clé de la lame de scie / Klíč na pilový kotouč	1
21	Gabelschlüsselset / wrench set / Juego de llaves fijas / Jeu de clés à fourche / Sada plochých klíčů	1



22	Schraubendreher-set / screw driver set / Juego de destornilladores / Jeu de tournevis / Sada šroubováků	1
23	Inbusschlüssel-set / Allen key set / Juego de llaves Allen / Set de clés Allen / Sada imbusů	1
24	Wartungstürschlüssel / key maintenance door / Llave de mantenimiento / Clé de la porte de maintenance / Klíč na servisní dvířka	1
25	Betriebsanleitung / user manual / Instrucciones de servicio / Mode d'emploi / Návod k použití	1
Colli II:		
30	Formatschiebetisch / sliding table / Carro desplazable de formatos / Table de format coulissante / Formátovací stůl	1
31	Gehrungsanschlag / mitre gauge / Tope de ingletes / Butée à onglet / Úhlové pravítko	1
32	Lineal Parallelanschlag / ruler rip fence / Lineal tope paralelo / Règle de butée parallèle / Teleskopické úhlové pravítko	1
33	Parallelanschlag / rip fence / Tope paralelo / Guide longitudinal / Podélné pravítko	1
34	Auflage / support / Repisa / Support / Podpěra	1
35	Ablänganschlag / cross-cut fence / Tope de acorte / Butée de coupe / Úhlové pravítko	1
36	Schwenkarm / swivel arm / Brazo pivotante / Bras orientable / Podpěrné rameno	1

3.2 Komponenten / Components / Componentes / Composants / Části stroje



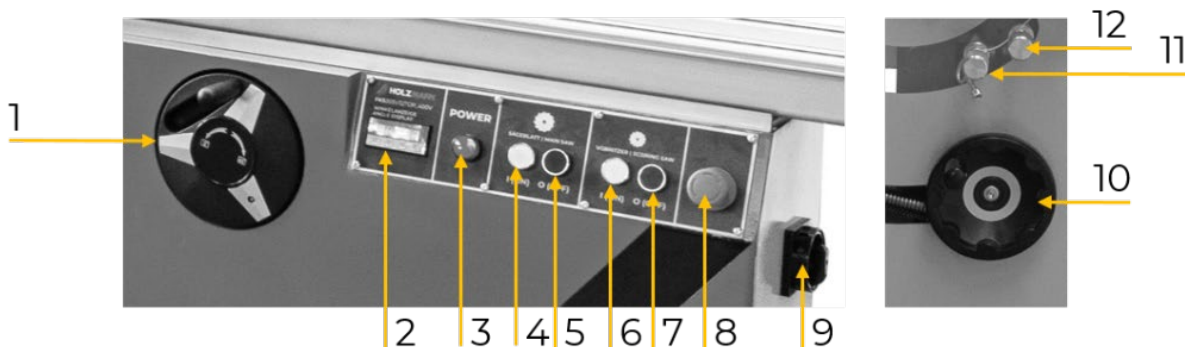
#	Beschreibung / Description
1	Ablänganschlag (ausziehbar) / cross-cut fence (extendable) / Tope de acorte (extraíble) / Butée de coupe (amovible) / Úhlové pravítko (teleskopické)
2	Anschlag Ablänganschlag (Kippanschlag) / flip stop / Tope, tope de acorte (tope abatible) / Butée de la butée de coupe (butée basculante) / Překlopný doraz
3	Klemmung Kippanschlag / clamping flip stop / Sujeción tope abatible / Serrage de la butée basculante / Zajištění dorazu
4	Fixierknopf Ablänganschlag / fixing knob length cross-cut fence / Botón de fijación tope de acorte / Bouton de blocage de la butée de coupe / Fixace úhlového pravítka
5	Formatschiebetisch / sliding table / Carro desplazable de formatos / Table de format coulissante / Formátovací posuvný stůl
6	Tischverlängerung / table extension / Extensión de la mesa / Extension de table / Prodloužení stolu
7	Spaltkeil / riving knife / Cuña de separación / Couteau diviseur / Rozvírací klín
8	Sägeblattschutz / saw blade guard / Protección de la hoja de la sierra / Protection de la lame de scie / Kryt pilového kotouče
9	Arbeitstisch / work table / Mesa de trabajo / Table de travail / Pracovní stůl



10	Parallelanschlag / rip fence / Tope paralelo / Guide longitudinal / Podélné pravítko
11	Schiebstock / push stick / Bastón de corredera / Barre de poussée / Podavač materiálu
12	Gehrungsanschlag / mitre gauge / Tope de ingletes / Butée à onglet / Úhlové pravítko
13	Verriegelungshebel Formatschiebetisch / locking lever sliding table / Palanca de anclaje carro desplazable de formatos / Levier de verrouillage de la table de format coulissante / Zajišťovací páka formátovacího stolu
14	Hauptschalter / main switch / Interruptor principal / Interrupteur principal / Hlavní vypínač
15	Anschlussdose / junction box / Caja de conexión / Boîte de raccordement / Rozvodná krabice
16	Bedienpult / control panel / Pupitre de mando / Pupitre de command / Ovládací pult
17	Handrad Sägeblattneigung / handwheel saw blade tilt / Rueda manual inclinación de la hoja de la sierra / Volant d'inclinaison de la lame de scie / Ruční kolo náklonu pilového kotouče
18	Sägeblatt und Vorritzer / saw blade and scoring saw blade / Hoja de la sierra e incisor / Lame de scie et lame diviseuse / Pilový a předřezový kotouč
19	Schwenkarm / swivel arm / Brazo pivotante / Bras orientable / Podpěrné rameno
20	Auslegertisch / outrigger table / Carro de bandera / Console de table / Podpěrný rám
21	Schwenkarmstütze / swivel arm support / Soporte de brazo pivotante / Support de bras orientable / Podpěra rámu
22	Handrad Sägeblatthöhe / handwheel saw blade height / Rueda manual altura de la hoja de la sierra / Volant de la hauteur de la lame de scie / Ruční kolo nastavení výšky kotouče
23	Werkzeugablage / tool tray / Bandeja de herramientas / Support d'outil / Polička na nářadí
24	Wartungstür / maintenance door / Puerta de mantenimiento / Porte de maintenance / Servisní dvířka
25	Einstellung Vorritzer / adjustment scoring blade / Ajustes del incisor / Réglage de la lame diviseuse / Nastavení předřezu
26	Tischverbreiterung / table widening / Ancheamiento de la mesa / Élargissement de table / Rozšíření stolu
27	Absauganschluss Sägeeinheit Ø 100 mm / dust collector port saw unit Ø 100 mm / Conexión del sistema de aspiración unidad de la sierra Ø 100 mm / Raccord d'aspiration de l'unité de sciage Ø 100 mm / Odsávací hrdlo Ø 100 mm
28	Absauganschluss Sägeblattschutz / dust collector port saw blade guard / Conexión del sistema de aspiración protección de la hoja de la sierra / Raccord d'aspiration de la protection de la lame de scie / Odsávací hrdlo krytu kotouče
29	Besäumschuh / edging shoe / Calza de canteado / Talon de délignage / Sámovací patka

3.2.1 Bedienelemente / control elements /

Elementos de mando / Éléments de commande / Ovládací prvky stroje



#	Beschreibung / Description
1	Handrad Sägeblattneigung / handwheel saw blade tilt / Rueda manual inclinación de la hoja de la sierra / Volant d'inclinaison de la lame de scie / Ruční kolo náklonu pily
2	Winkelanzeige Sägeblattneigung / display saw blade tilt angle / Indicador de ángulo de la inclinación de la hoja de la sierra / Affichage de l'angle d'inclinaison de la lame de scie / Ukazatel náklonu pily
3	Betriebskontrollleuchte / power indicator light / Piloto de funcionamiento / Lampe témoin de service / Kontrolky provozu
4	Taster Sägeblatt EIN / button saw blade ON / Pulsador hoja de la sierra ON / Bouton MARCHE de la lame de scie / Tlačítko zapnutí pily
5	Taster Sägeblatt und Vorritzer AUS / button saw blade and scoring saw blade OFF / Pulsador hoja de la sierra e incisor OFF / Bouton d'ARRÊT de la lame de scie et de la lame diviseuse / Tlačítko vypnutí pily a předřezu



6	Taster Vorritzer EIN / button scoring saw blade ON / Pulsador incisor ON / Bouton de MARCHÉ de la lame diviseuse / Tlačítko zapnutí předřezu
7	Taster Vorritzer AUS / button scoring saw blade OFF / Pulsador incisor OFF / Bouton d'ARRÊT de la lame diviseuse / Tlačítko vypnutí předřezu
8	Not-Halt Schalter / emergency stop / Interruptor de parada de emergencia / Interrupteur d'arrêt d'urgence / Nouzové vypnutí stroje
9	Hauptschalter für Spannungsversorgung EIN-AUS / main switch für power supply ON-OFF / Interruptor principal para alimentación eléctrica ON-OFF / Interrupteur principal MARCHÉ-ARRÊT d'alimentation électrique / Hlavní vypínač napájecího napětí
10	Handrad Sägeblatthöhe / handwheel saw blade height / Rueda manual altura de la hoja de la sierra / Volant de la hauteur de la lame de scie / Ruční kolo ovládání výšky kotouče
11	Einstellrad Vorritzerhöhe / setting wheel height scoring blade / Rueda de ajuste altura del incisor / Molette de réglage de la hauteur de la lame diviseuse / Nastavení výšky předřezu
12	Einstellrad Vorritzer links-rechts / setting wheel scoring blade left-right / Rueda de ajuste incisor izquierda-derecha / Molette de réglage de la lame diviseuse gauche-droite / Nastavení polohy předřezu vlevo/vpravo

3.3 Technische Daten / Technical data Datos técnicos / Données techniques / Technická data

Spezifikation / Specification	
Spannung / voltage / Tensión / Tension / Napájení	400 V / 50 Hz / 3Ph
Motorleistung Sägeblatmotor / motor power sawblade motor / Potencia del motor de la hoja de la sierra / Puissance du moteur de la lame de scie / Výkon motoru pily	5,5 kW
Arbeitstischgröße / worktable size / Tamaño de la mesa de trabajo / Taille de la table de travail / Rozměry pracovního stolu	935 x 620 mm
Formatschiebetisch / sliding table / Carro desplazable de formatos / Table de format coulissante / Formátovací stůl	3200 x 360 mm
Tischverbreiterung / table widening / Ancheamiento de la mesa / Élargissement de table / Rozšíření stolu	900 x 500 mm
Tischverlängerung / table extension / Extensión de la mesa / Extension de table / Prodloužení stolu	610 x 600 mm
Arbeitstisch Höhe / work table height / Mesa de trabajo altura / Hauteur de la table de travail / Výška stolu	890 mm
Auslegertisch / outrigger table / Carro de bandera / Console de table / Podpěrný rám	1220 x 540 mm
Ablänganschlag / cross-cut fence / Tope de acorte / Butée de coupe / Úhlové pravítko	1950 – 3300 mm
Sägeblattdimension / saw blade dimension / Dimensiones de la hoja de la sierra / Dimension de lame de scie / Rozměry pilového kotouče	Ø 250-315 x 30 x 3,4/2,4 mm
Drehzahl Sägeblatt / saw blade speed / Velocidad de la hoja de la sierra / Vitesse de rotation de la lame de scie / Otáčky pilového kotouče	(I): 4000 min ⁻¹ (II): 6000 min ⁻¹
Sägeblatt Neigung / saw blade tilt / Inclinação hoja de la sierra / Inclinaison de la lame de scie / Náklon pilového kotouče	0 – 45°
Schnitthöhe bei 90° / cutting height at 90° / Altura de corte a 90° / Hauteur de coupe à 90° / Výška řezu při 90°	80 mm (Ø 300mm)
Schnitthöhe bei 45° / cutting height at 45° / Altura de corte a 45° / Hauteur de coupe à 45° / Výška řezu při 45°	55 mm (Ø 300mm)
Vorritzersägeblattdimension / scoring saw blade dimension / Dimensión de la hoja de sierra del incisor / Dimension de la lame diviseuse / Rozměry předřezového kotouče	Ø120 x 20 x 3,1/2,2 mm
Motorleistung Vorritzer / scoring unit power / Potencia del motor incisor / Puissance du moteur de la lame diviseuse / Výkon motoru předřezu	750 W
Vorritzersägeblattgeschw. / scoring saw blade speed / Velocidad de la hoja de sierra del incisor / Vitesse de la lame diviseuse / Otáčky předřezového kotouče.	8000 min ⁻¹
Max. Schnittbreite am Parallelanschlag / max. cutting width at rip fence / Ancho máx. de corte en el tope paralelo / Largeur de coupe max. sur la butée parallèle / Max. šířka řezu k podélnému pravítku	1250 mm
Absauganschluss / dust collector port / Conexión del sistema de aspiración / Raccord d'aspiration / Průměr odsávacích hrdel	Ø 100 mm
Absauganschluss Sägeblattschutz / dust collector port saw blade guard / Conexión del sistema de aspiración protección de la hoja de la sierra / Raccord d'aspiration de la protection de la lame de scie / Odsávací hrdlo krytu kotouče	Ø 60 mm



notwendiger Luftvolumenstrom Absauganlage / necessary air volume / Volumen de aire necesario para el sistema de aspiración / Débit d'air nécessaire de l'installation d'aspiration / Požadovaný objem odsávaného vzduchu	2000 m ³ /h
notwendiger Unterdruck Absauganlage / vacuum dust collector / Presión negativa necesaria del sistema de aspiración / Dépression nécessaire de l'installation d'aspiration / Požadovaný podtlak odsávání	1000 Pa
Maschinenmaße (LxBxH) / machine dimensions (LxWxH) / Dimensiones de la máquina (LxAxH) / Dimensions de la machine (LxIxH) / Rozměry stroje (LxBxH)	4760 x 4680 x 1120 mm
Verpackungsmaße (LxBxH) / packaging dimensions (LxWxH) / Dimensiones del embalaje (LxAxH) / Dimensions d'emballage (LxIxH) / Rozměry balení (LxBxH)	Colli I: 2200 x 1150 x 1150 mm Colli II: 3450 x 440 x 240 mm
Gewicht Brutto / weight gross / Peso bruto / Poids brute / Hmotnost brutto	810 kg
Gewicht Netto / weight net / Peso neto / Poids net / Hmotnost netto	645 kg
Schallleistungspegel L_{WA} / sound power level L_{WA} / Nivel de potencia sonora L_{WA} / Niveau de puissance sonore L_{WA} / Akustický výkon L_{WA}	90 dB(A).....k: 4 dB(A)
Schalldruckpegel L_{PA} / sound pressure level L_{PA} / Nivel de presión sonora L_{PA} / Niveau de pression acoustique L_{PA} / Akustický tlak L_{PA}	88,2 dB(A).....k: 4 dB(A)

(DE) Hinweis Geräuschangaben: Die angegebenen Werte sind Emissionswerte und müssen damit nicht zugleich auch sichere Arbeitsplatzwerte darstellen. Obwohl es eine Korrelation zwischen Emissions- und Immissionspegeln gibt, kann daraus nicht zuverlässig abgeleitet werden, ob zusätzliche Vorsichtsmaßnahmen notwendig sind oder nicht. Faktoren, welche den am Arbeitsplatz tatsächlich vorhandenen Immissionspegel beeinflussen, beinhalten die Eigenart des Arbeitsraumes und andere Geräuschquellen, d. h. die Zahl der Maschinen und anderer benachbarter Arbeitsvorgänge. Die zulässigen Arbeitsplatzwerte können ebenso von Land zu Land variieren. Diese Information soll jedoch den Anwender befähigen, eine bessere Abschätzung von Gefährdung und Risiko vorzunehmen.

(EN) Notice noise emission: The values given are emission values and therefore do not have to represent safe workplace values at the same time. Although there is a correlation between emission and immission levels, it cannot be reliably deduced whether additional precautions are necessary or not. Factors influencing the actual immission level at the workplace include the nature of the workspace and other noise sources, i.e. the number of machines and other adjacent operations. The permissible workplace values may also vary from country to country. However, this information should enable the user to make a better assessment of hazard and risk.

(ES) Aviso sobre los valores de ruido: Los valores indicados son valores de emisión y, por lo tanto, no representan necesariamente al mismo tiempo valores seguros en el lugar de trabajo. Aunque hay una correlación entre los niveles de emisión y los de immisión, no se puede deducir con certeza si es necesario adoptar medidas de precaución adicionales o no. Entre los factores que influyen en el nivel de immisión real en el lugar de trabajo, se encuentran la naturaleza del espacio de trabajo y otras fuentes de ruido, es decir, el número de máquinas y otros procesos de trabajo adyacentes. Asimismo, los valores admisibles en el lugar de trabajo pueden variar de un país a otro. No obstante, esta información debe capacitar al usuario a evaluar mejor los peligros y los riesgos.

(FR) Avis Données sur le bruit : Les valeurs indiquées sont des valeurs d'émission et ne représentent donc pas nécessairement des valeurs de sécurité sur le lieu de travail. Bien qu'il existe une corrélation entre les niveaux d'émission et d'immission, il est impossible de déduire de manière fiable si des mesures de précaution supplémentaires sont nécessaires ou non. Les facteurs influençant le niveau d'immission réellement présent sur le lieu de travail comprennent les caractéristiques de la salle de travail et d'autres sources de bruit, c'est-à-dire le nombre de machines et d'autres processus de travail adjacents. Les valeurs autorisées sur le lieu de travail peuvent également varier d'un pays à l'autre. Toutefois, ces informations devraient permettre à l'utilisateur de mieux évaluer le danger et le risque.

(CZ) Poznámka k emisím hluku: Uvedené hodnoty jsou emisní hodnoty, a proto nemusí být nutně bezpečnými hodnotami na pracovišti. Ačkoli existuje korelace mezi úrovní emisí a imisí, nelze spolehlivě odvodit, zda jsou nutná dodatečná preventivní opatření nebo nikoliv. Mezi faktory, které ovlivňují úroveň imisí skutečně přítomných na pracovišti, patří povaha pracovního prostoru a další zdroje hluku; tj. počet strojů a dalších pracovních procesů. Povolené hodnoty na pracovišti se mohou v jednotlivých zemích lišit. Tyto informace by však měly uživateli umožnit lepší odhad nebezpečí a rizik.



11 PREFACE (EN)

Dear Customer!

This manual contains information and important notes for safe commissioning and handling of the panel saw FKS305V32TOP_400V, hereinafter referred to as “machine” in this document.



This manual is part of the machine and must not be removed. Save it for later reference and if you let other people use the machine, add this manual to the machine.

Please pay special attention to the chapter safety!

Adhere to the safety and danger instructions. Failure to do so may result in serious injury.

Due to constant advancements in product design, construction, illustrations and contents may deviate slightly. If you notice any errors, please inform us.

We reserve the right to make technical changes!

Check the goods immediately after receipt and note any complaints on the consignment note when taking over the goods from the deliverer!

Transport damage must be reported to us separately to us within 24 hours.

HOLZMANN MASCHINEN GmbH cannot accept any liability for transport damage that has not been reported.

Copyright

© 2023

This documentation is protected by copyright. All rights reserved! In particular, the reprint, translation and extraction of photos and illustrations will be prosecuted.

The place of jurisdiction is the regional court Linz or the court responsible for 4170 Haslach is valid.

Customer service contact

HOLZMANN MASCHINEN GmbH

4170 Haslach, Marktplatz 4
AUSTRIA

Tel +43 7289 71562 – 0
info@holzmann-maschinen.at



12 SAFETY

This section contains information and important notes on the safe commissioning and handling of the machine.



For your safety, read this manual carefully before commissioning. This will enable you to handle the machine safely and thus prevent misunderstandings as well as personal injury and damage to property. Pay special attention to the symbols and pictograms used on the machine as well as the safety information and danger warnings!

12.1 Intended use of the machine

The machine is designed exclusively for the following activities:

Lengthwise and crosswise cutting of wood and materials with similar physical properties to wood using an effective suction device according to technical specifications and within the technical limits.

NOTE



HOLZMANN MASCHINEN GmbH assumes no responsibility or warranty for any other use or use beyond this and for any resulting damage to property or injury.

12.1.1 Technical restrictions

The machine is designed for the work under the following conditions:

Relative humidity	max. 65 %
Temperature (operation)	+5 °C to +40 °C
Temperature (storage, transport)	-20 °C to +55 °C

12.1.2 Prohibited applications /Dangerous misuse

- Operating the machine outdoors.
- Operating the machine without adequate physical and mental fitness.
- Operating the machine without knowledge of the manual.
- Modifying the machine design.
- Operating the machine in an explosive environment (machine can generate ignition sparks during operation).
- Operating the machine in closed rooms without chip and dust collection system (a normal household Hoover is not suitable as a dust collection system).
- Operating the machine outside the technical limits specified in this manual.
- Machining materials with dimensions outside the limits specified in these instructions.
- Removing of the safety markings attached to the machine.
- Modifying, circumventing or disabling the safety devices of the machine.
- Using tools that do not comply with the safety requirements to the standard for machine tools for woodworking (EN847-1).

The non-intended use or the disregard of the explanations and instructions described in this manual will result in the expiration of all warranty claims and compensation claims for damages against HOLZMANN MASCHINEN GmbH.

12.2 User requirements

The machine is designed to be operated by one person. The prerequisites for operating the machine are physical and mental fitness as well as knowledge and understanding of the operating instructions. Persons who, due to their physical, sensory or mental capabilities, inexperience or lack of knowledge, are unable to operate the machine safely must not use the machine without supervision or instruction by a responsible person.

Basic knowledge of woodworking especially the knowledge of the relationship between wood, tools, saw blade, cutting speeds and rotational speeds.



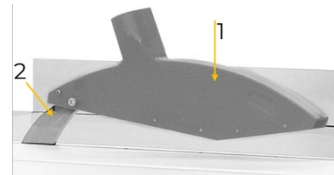
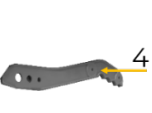
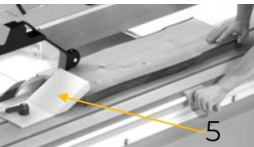
Please note that locally applicable laws and regulations determine the minimum age of the operator and may restrict the use of this machine!

Work on electrical components or equipment may only be carried out by a qualified electrician or under the guidance and supervision of a qualified electrician.

Put on your personal protective equipment before working on the machine.

12.3 Safety devices

The machine is equipped with the following safety devices:

	A self-locking Emergency Stop on the control panel and on the machine backside to stop dangerous movements at any time.
	Safety guard (adjustable): Saw blade guard (1), to cover the saw unit. Riving knife (2), to reduce the risk of wedging the workpiece. The setting is in horizontal and vertical direction opposite to the saw blade.
	Push stick (4): For cutting operations where less than 120mm is cut, i.e. less than 120mm distance to the right of the saw blade to the rip fence. Do not feed the wood by hand, but with the push stick.
	Safety device for longitudinal cuts. Press the workpiece against the edging shoe (5). This prevents the workpiece from jumping up.
	Interlocking movable guard: Safety cover of the saw blade (equipped with a safety switch) This safety switch interrupts the power supply immediately when the cover is opened.
	Interlocking movable guard: Maintenance door (equipped with a safety switch) This safety switch interrupts the power supply immediately when the cover is opened.

12.4 General safety instructions

To avoid malfunctions, damage and health impairments when working with the machine, the following points must be observed in addition to the general rules for safe working:

- Check the machine for completeness and function before starting. Only use the machine if the separating and other non-separating protective devices required for machining have are fitted.
- Make sure that the guards are in good working order and properly maintained.
- Select a level, vibration-free surface as the installation area.
- Ensure sufficient space around the machine.
- Ensure that the machine is on a firm footing.
- Ensure sufficient lighting conditions at the workplace to avoid stroboscopic effects.
- Ensure a clean working environment.
- Keep the area around the machine free of obstacles (e.g. dust, chips, cut-off workpiece parts, etc.).
- Only use tools that are in perfect condition and free of cracks and other defects (e.g. deformations).
- Remove tool keys and other setting tools before switching on the machine.
- Check the machine's connections for strength before each use.



- Never leave the running machine unattended. Switch off the machine before leaving the working area and secure it against unintentional or unauthorized restarting.
- The machine may only be operated, maintained or repaired by persons who are familiar and who have been informed about the dangers arising from this work.
- Ensure that unauthorized persons keep a safety distance from the machine and keep children away from the machine.
- Always work with care and the necessary caution and never use excessive force.
- Do not overload the machine.
- Hide long hair under hair protection.
- Wear close fitting protective work clothing and suitable protective equipment (eye protection, dust mask, ear protection, safety-shoes, and work gloves only when handling tools).
- Never wear loose jewellery, loose clothing or accessories (e.g. tie, scarf).
- Do not work on the machine if you are tired, not concentrated or under the influence of medication, alcohol or drugs!
- Connect the machine to a suitable dust collection system.
- Do not use the machine in areas where vapours of paints, solvents or flammable liquids represent a potential danger (danger of fire or explosion!).
- Do not smoke in the immediate vicinity of the machine (fire hazard).
- Shut down the machine and disconnect it from the power supply, before adjustment, changeover, cleaning, maintenance or repair work, etc. Before starting work on the machine, wait until all tools or machine parts have come to a complete standstill and secure the machine against unintentional restart.
- Warning signs and/or stickers on the machine that are illegible or have been removed must be replaced immediately!

12.5 Electrical safety

- Make sure that the machine is grounded.
- Only use suitable extension cables.
- A damaged or tangled cable increases the risk of electric shock. Handle the cable with care. Never use the cable to carry, pull or disconnect the power tool. Keep the cable away from heat, oil, sharp edges or moving parts.
- Proper plugs and outlets reduce the risk of electric shock.
- Water entry into the machine increases the risk of electric shock. Do not expose the machine to rain or moisture.
- The machine may only be used if the power supply is protected by a residual current circuit breaker.
- Before connecting the machine always make sure that the main switch is switches off.
- Use the machine only when the ON-OFF switch is in good working order.

12.6 Special safety instructions for this machine

- Working with gloves on rotating parts is not permitted.
- Wood dust is generated when operating the machine. Therefore, connect the machine to a suitable dust and chip collection system when installing it.
- Always switch on the dust collection system before you start machining the workpiece.
- Never remove sections or other parts of the workpiece from the cutting area while the motor is running.
- When using milling tools with a diameter ≥ 16 mm and circular saw blades, they must comply with EN 847-1:2013 and EN 847-2:2013; tool carriers must comply with EN 847-3:2013.
- Wear hearing protection certified to health and safety regulations to limit noise exposure.
- Replace cracked and deformed saw blades immediately; they cannot be repaired.
- Use a push stick for cutting operations where less than 120 mm is cut.
- Select the number of teeth of the saw blade so that at least 2-3 teeth cut through the workpiece at the same time. A lower number of teeth leads on the one hand to an unclean cut and on the other hand increases the risk of vibrations and noise pollution due to increased kickback.
- Never try to cut freehand. If the workpiece is not guided exactly parallel to the saw blade, kickback is to be expected.
- Always use the rip fence or crosscut fence to support the workpiece.



12.7 Hazard warnings

12.7.1 Residual risks

Despite intended use, certain residual risk factors remain.

- Risk of injury to fingers and hands from rotating saw blade if the workpiece is not guided properly.
- Risk of injury from the workpiece being flung away if not properly held or guided, such as working without a fence. Risk of kickback!
- Danger to health from wood dust or wood chips. It is essential to wear personal protective equipment such as eye protection and a dust mask and to use a dust collection system.
- Risk of injury from breakage or ejection of the saw blade or parts of it, especially in the event of overloading or incorrect direction of rotation.
- Risk of injury to the eye from flying parts, even with protective goggles.
- Hearing damage if hearing protection is not used.
- Injuries caused by a defective saw blade.
- Risk of electric shock, if improper electrical connections are used.

12.7.2 Hazardous situations

Due to the structure and construction of the machine, hazardous situations may occur which are identified in these operating instructions as follows:

DANGER



A safety instruction designed in this way indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING



A safety instruction designed in this way indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION



A safety instruction designed in this way indicates a possibly hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTE

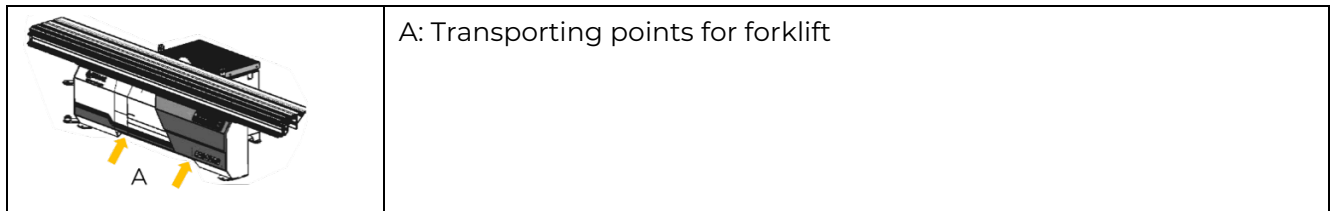


A safety notice designed in this way indicates a potentially hazardous situation which, if not avoided, may result in property damage.

Regardless of all safety regulations, your common sense and your appropriate technical aptitude/training are and remain the most important safety factor in the error-free operation of the machine. **Safe working depends on you!**

13 TRANSPORT

Transport the machine in its packaging to the installation site. To manoeuvre the machine in its packaging, e.g. a crane, pallet truck or forklift with appropriate lifting capacity and a fork length of at least 1200 mm can be used. The specifications can be found in the chapter Technical data. For proper transport, observe the instructions and information on the transport packaging regarding centre of gravity, lifting points, weight, means of transport to be used as well as the prescribed transport position etc. Make sure that the selected lifting equipment (crane, forklift, lift truck, load sling etc.) is in perfect condition. Only use tested transport and lifting devices that correspond to the weight and dimensions of the machine!



14 ASSEMBLY

14.1 Preparation

14.1.1 Check delivery content

Check the delivery immediately for transport damage and missing parts. Report any damage or missing parts to your dealer or the shipping company immediately. Visible transport damage must also be noted immediately on the delivery note in accordance with the provisions of the warranty, otherwise the goods are deemed to have been properly accepted.

14.1.2 Requirements for the installation site

The chosen installation site must have a suitable connection to the power supply and a connection to a dust collection system. Observe the safety requirements and the dimensions of the machine. Place the machine on a level, solid surface that can support the weight of the machine. The chosen installation site of the machine must comply with the local safety regulations as well as the ergonomic requirements for a workplace with sufficient lighting conditions.

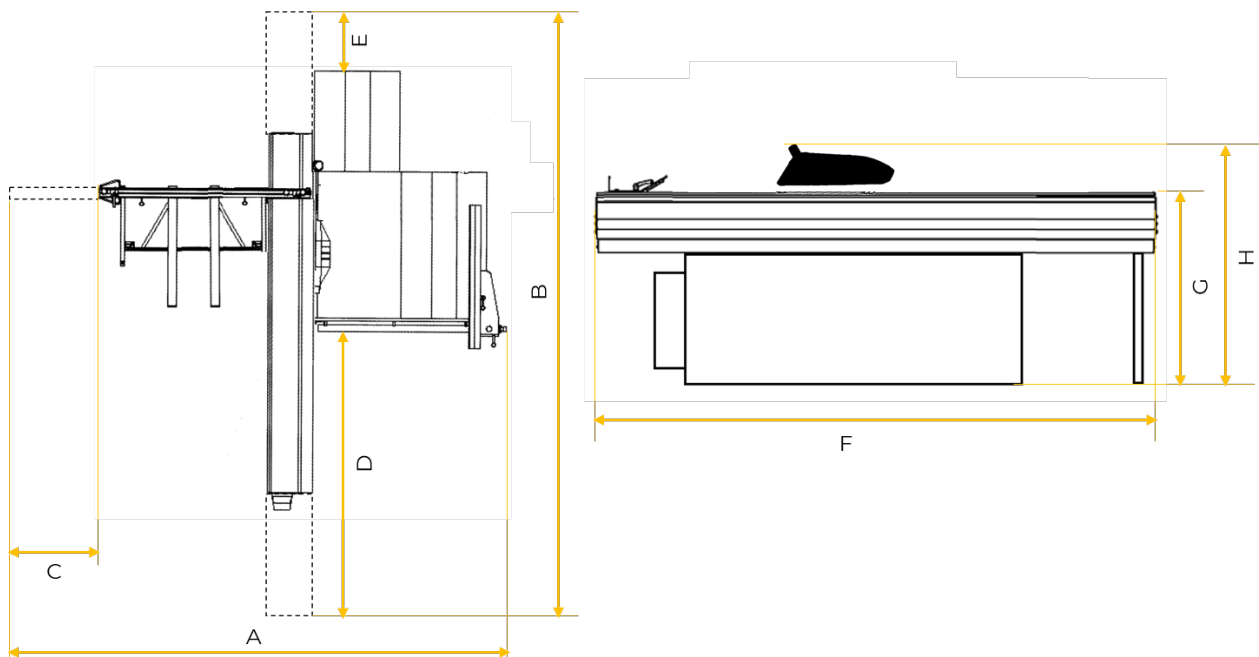
NOTE



The floor at the installation site must be able to bear the load of the machine!

When dimensioning the required space, take into account that the operation, maintenance and repair of the machine must be possible without restrictions at all times. Also take into account the working areas of neighbouring machines.

The base of the machine has fixing holes by means of which the machine is firmly connected to the floor. This improves the stability of the machine.



	A	B	C	D	E	F	G	H
mm	4910	6565	1350	3060	2220	3200	890	1120



14.1.3 Preparation of the surfaces

Before putting the machine into operation, carefully remove the corrosion protection or grease residues from the bare metal parts. This can be done with the usual solvents. Under no circumstances should you use nitro thinners or other cleaning agents, as these can attack the machine's finish.

NOTE



The use of paint thinners, petrol, aggressive chemicals or scouring agents will damage the surfaces!
Therefore: Use only mild cleaning agents!

14.2 Assemble

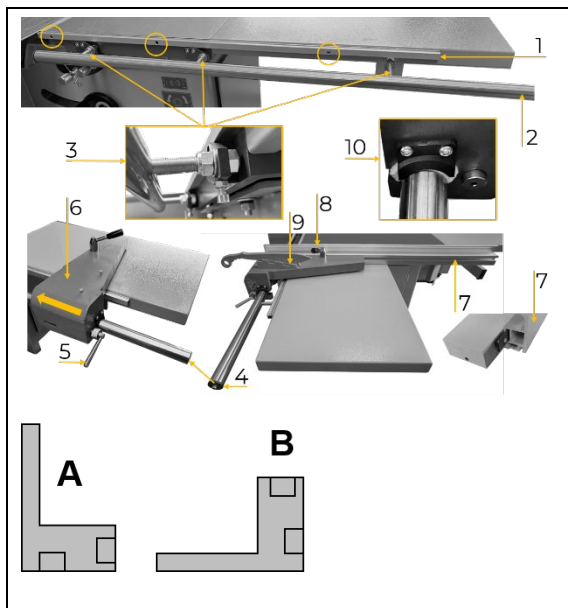
NOTE



- The machine and machine parts are heavy!
- At least 2 people are required to set up the machine.

The machine has been disassembled for transport and must be reassembled before use.

	1. Sliding table - Place the sliding table (1) on the machine and fix it at the fixing points (2) using the before removed screws, spring washers and washers (3). Do not tighten the screws before adjusting of the sliding table is finished. - Level the edge of the sliding table with that of the work table (using a spirit level) until it is horizontally aligned without gaps. NOTE: Over the entire length, the distance between the two table edges must be within 12mm. Furthermore, it should be aligned exactly to the rip fence / saw blade. - Then tighten the screws and insert the cover caps (4) into the mounting holes.
	2. Table extension / table widening - Remove the screws, spring washers and washers (1) from the threads (2) in the worktable - Position the table extension (3) and table widening (3a) on the worktable as shown - Fix screws, spring washers and washers - Check alignment and adjust table if necessary Table settings: - Loosen the screws (1) slightly - Adjust and fix plane and horizontal alignment with set screws (4) - Tighten the screws firmly.



3. Rip fence

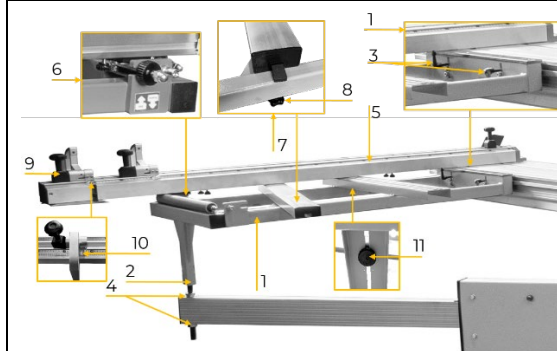
- Mount the ruler (1) and rip fence guide (2) as shown
- Adjust parallelism with screws and nuts (3)
- Disassemble the end stop (4)
- Set clamping lever (5) to position not fixed and slide the fence bracket (6) on the fence guide.
- Remount the end stop
- Slide the rip fence (7) on the guidance of the bracket.

NOTE: 2 possible positions.

Position A: for straight cuts

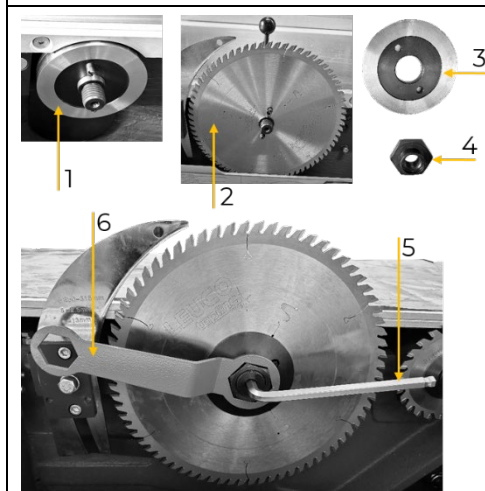
Position B: for angle cuts

- Fix the rip fence with the clamping lever (8) on desired position
- Mount the holder with the push stick (9)
- Mount the dirt wiper (10) as shown



4. Outrigger table

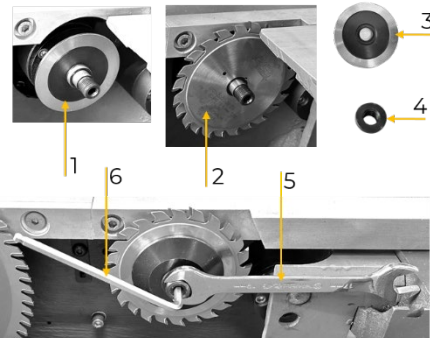
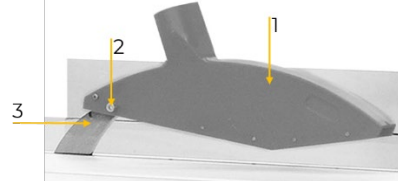
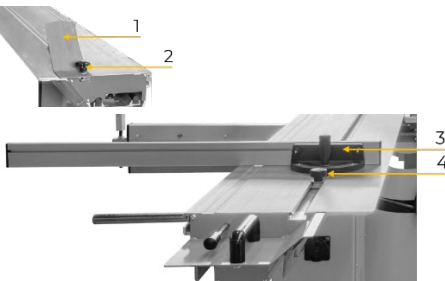
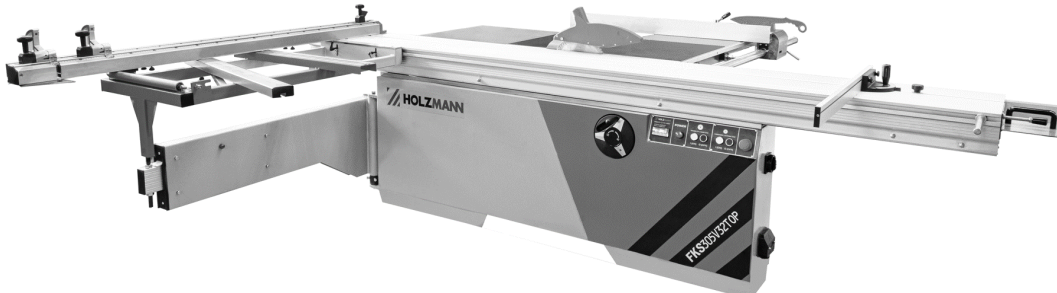
- Push the groove stone of the outrigger table (1) into the groove of the sliding table.
- Place the holder of the outrigger table on the swivel arm support (2).
- Tighten the clamping levers (3) of the outrigger table to fix the position.
- Adjust the horizontal alignment with the adjusting screws (4).
- Insert the pivot mount of the crosscut fence (5) into the front or rear hole of the outrigger table and fix it with clamping 90° (6)
- Insert the groove stone of the support fixing into the opening, push the groove stone into the groove of the support (7) and fix it in the desired position with the fixing screw (8).
- Push the flip stops (9) into the groove of the cross cut fence
- Fix the magnifiers (10) with screws
- Secure the crosscut fence in desired angle position with clamping screw (11)



5. Saw blade

- Adjust the cutting height to the maximum possible level.
- Push the sliding table all the way forward.
- Open the saw blade guard.
- Fix the drive shaft with the supplied Allen key (5) and loosen the flange nut (4) with the saw blade wrench (6) (left-hand thread!)
- Remove flange nut (4) and flange (3)
- Place the well cleaned shaft flange (1), saw blade (2), flange (3) and flange nut (4) on the drive shaft
- Fix the drive shaft with the supplied Allen key (5).
- Tighten the flange nut with the saw blade wrench (6) (left-hand thread!)



	NOTE: min. tightening torque: 50 Nm - Close the saw blade guard.
	6. Scoring saw blade - Adjust the cutting height to the maximum possible level - Push the sliding table all the way forward. - Open the saw blade guard - Fix the drive shaft with the supplied Allen screw (6) and loosen the flange nut (4) with the wrench (6) (right-hand thread!) - Remove flange nut (4) and flange (3) - Place the well cleaned shaft flange (1), saw blade (2), flange (3) and flange nut (4) on the drive shaft - Fix the drive shaft with the supplied Allen screw (6). - Tighten the flange nut with the saw blade wrench (5) (right-hand thread!) NOTE: min. tightening torque: 25 Nm - Close the saw blade guard.
	7. Saw blade guard - Fix the saw blade guard (1) to the riveting knife (3) with the locking screw (2). NOTE: The saw blade guard should be positioned as close as possible to the workpiece.
	8. Edging shoe - Insert the edging shoe (1) into the groove of the sliding table and fix it in the desired position with star screw (2). 9. Mitre gauge - Insert the mitre gauge (3) into the groove of the sliding table and fix it in the desired position with the knurled screw (4).
	

14.3 Electrical connection

WARNING



Dangerous electrical voltage!

- The machine may only be connected to the mains supply and the associated checks carried out by a qualified electrician or under the instruction and supervision of a qualified electrician!

- Check, whether the neutral connection (if existing) and the protective grounding function properly.



- Check, whether the supply voltage and the frequency correspond to the specifications of the machine.

NOTE



Deviation of the supply voltage and frequency!

A deviation from the value of the supply voltage of $\pm 5\%$ is permissible.
A short-circuit fuse must be provided in the power supply system of the machine!

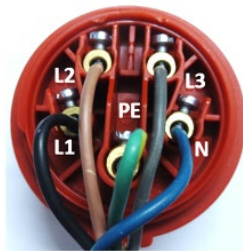
- Use a supply cable that fulfils the electrical requirements (e.g. H07RN, H05RN) and take the required cross-section of the supply cable from a current carrying capacity table. Pay attention to the measures for protection against mechanical damage.
- Make sure that the power supply is protected by a residual current circuit breaker.
- Connect the device only to a properly grounded outlet.
- When using an extension cable, make sure that the dimension matches the connected load of the machine. The connection power can be found in the technical data, the correlation of cable cross-section and cable lengths can be found in the technical literature or obtain information from a specialist electrician.
- A damaged cable must be replaced immediately.

14.3.1 Setting up a 400 V machine

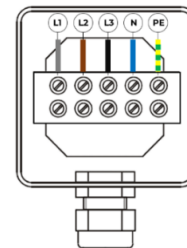
- The grounding conductor is yellow-green.
- Connect the supply cable to the corresponding terminals in the input box (L1, L2, L3, N and PE), see the figure below. If a CEE plug is available, the connection to the power supply is made through an appropriately powered CEE coupling (L1, L2, L3, N and PE).

Plug connection 400 V:

5-wire: **with** N-conductor



Input box:



- After the electrical connection, check the correct running direction. If the machine runs in the wrong direction, swap two conductive phases, e.g. L1 and L2, at the connection plug.

NOTE



→ Operation is only permitted with residual current device (RCD) with maximum residual current of 30 mA.

14.4 Connection to a dust collection system

The machine must be connected to a dust collection system for dust and chips. The dust collection system must start up at the same time as the machine's engine. The air speed at the suction connection and in the exhaust air lines must be at least 20 m/s for materials with a moisture $<12\%$ (at least 28 m/s for moist chips with a moisture $>12\%$). The hoses used must be flame-retardant (DIN4102 B1) and permanently antistatic (or earthed on both sides) and comply with the relevant safety regulations. For information on air volume flow, negative pressure and suction connection, please refer to the technical specifications.



14.5 Settings

WARNING



Danger due to electrical voltage!

Handling the machine while it is connected to the power supply can lead to serious injuries or death.

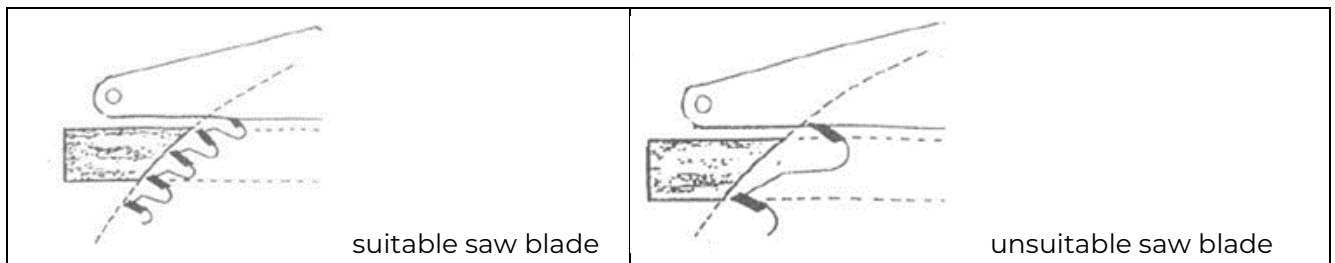
- Always disconnect the machine from the power supply before carrying out adjustment or maintenance work and secure it against reconnection.

14.5.1 Saw blade

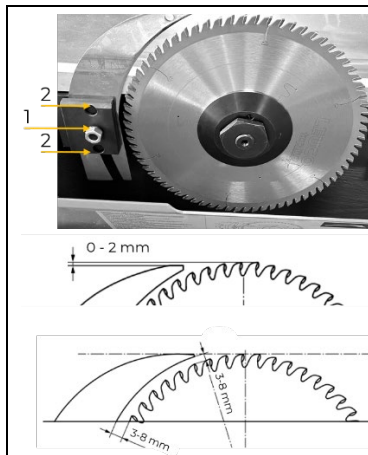
The material of the workpiece and the saw blade teeth are important criteria for a precise cutting result. Both the number of teeth and their shape, arrangement and position are associated with a specific function.

To improve the quality of the cut, always make sure that several teeth (at least 2-3) cut through the workpiece at the same time. If only one tooth is working, the result is a poor machining surface and the risk of kickback, vibrations and sound pollution increase.

Only work with a well ground saw blade!



14.5.2 Riving knife



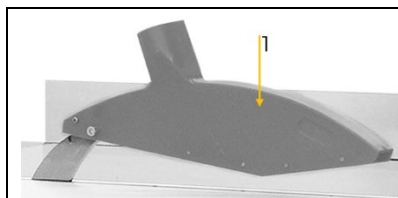
Adjust the distance and parallelism between the riving knife and the saw blade with the setting screws

- To do this, loosen the nut (1) slightly
- Make adjustments with setting screws (2)
- Retighten the nut

NOTE: The distance between the saw blade and the top of the riving knife must be within 0-2 mm.

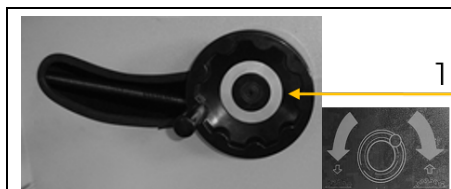
NOTE: The distance between the saw blade and the riving knife must be always within 3-8 mm.

14.5.3 Saw blade guard



Adjust the saw blade guard (1) so that the saw blade is protected. The distance between the saw blade guard and the workpiece should be max. 5 mm.

14.5.4 Saw blade height adjustment



Turn the hand wheel (1) clockwise to lift the saw blade upwards. Turn the hand wheel counterclockwise to lower the saw blade. The height of the saw blade must be adjusted so that the teeth hit the top of the workpiece.



14.5.5 Adjustment of the saw blade tilt



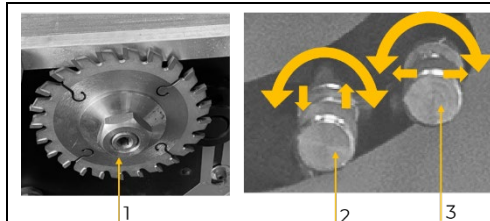
Turn the hand wheel (1) clockwise to tilt the saw blade. Turn the hand wheel counterclockwise to move the saw blade in a vertical position again. The saw blade can be tilted from 0° to 45°. The current position can be seen on the display (2).

NOTE



After adjusting the saw blade tilt, adapt the rip fence and/or the cross-cut fence so that they do not become contact with the tilted saw blade.

14.5.6 Scoring saw blade



Height of the scoring saw blade (1)

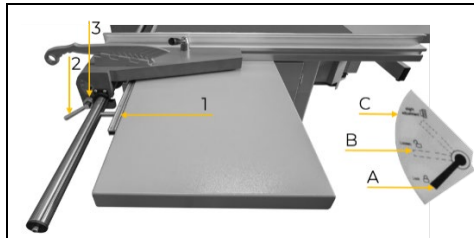
- Turning the setting wheel (2) to the left ↓.
- Turning the setting wheel (2) to the right ↑.

Lateral adjustment of the scoring saw blade (1)

- Turning the setting wheel (3) to the left ←.
- Turning the setting wheel (3) to the right →.

NOTE: When using the scoring blade, the height must be adjusted so that it cuts a slot with a depth of 1.5 – 2 mm.

14.5.7 Adjustment of the cutting width at rip fence



The cutting width can be adjusted on the rip fence and can be read off the ruler (1).

- Clamping lever (2) in position A:

Rip fence locked

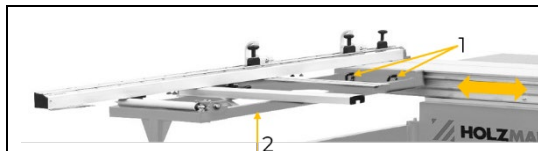
- Clamping lever (2) in position B:

rip fence unlocked and moveable

- Clamping lever (2) in position C:

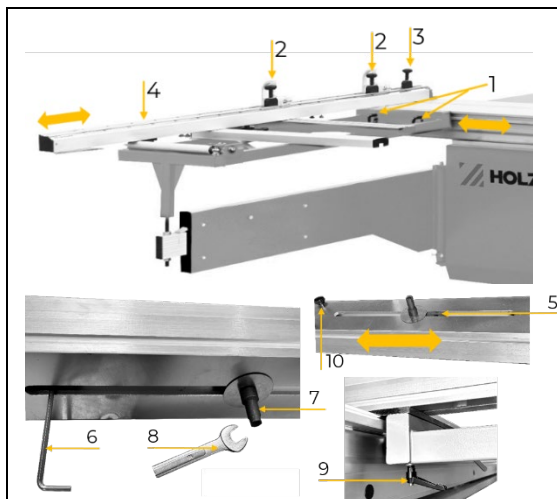
Make fine adjustment using knurled screw (3)

14.5.8 Adjustment outrigger table



After losing the clamping levers (1), the outrigger table (2) can be moved along the slot in the sliding table. After reaching the desired position, tighten the clamping levers again.

14.5.9 Cross cut fence



- Position the outrigger table by loosening the clamping levers (1) and pushing the outrigger table into position.
- Adjust the crosscut fence by loosening the clamping screws (2) and moving the flip stops.
- Read off the set measurement from the scale (4).
- Extend the cross-cut fence by loosening the locking knob (3) and pulling out the.
- Tighten the locking knob again.

NOTE: If the workpiece extends more than 1950 mm to the left beyond the saw blade, the cross-cut fence must be extended.

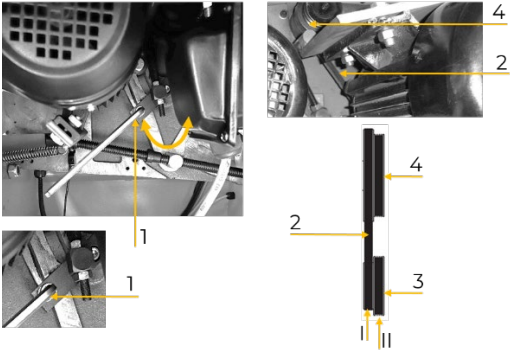
Adjusting the distance to the saw blade:

- Remove crosscut fence
- Loosen groove stone (5) and pivot mount (7) with Allen key (6) and wrench (8).

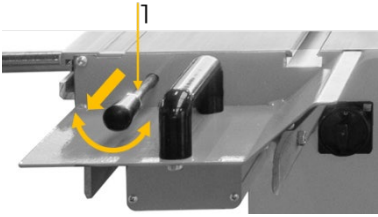


	- Reassemble crosscut fence and fix in desired position with clamping lever (9). NOTE: The groove stone can be fixed to define a specific position - Adapt scales to the distance after loosening the fixing screws (10)
--	--

14.5.10 Saw blade speed

	- Open the maintenance door - Insert Allen key into motor tensioning screw (1), push tensioner to the left to release belt tension - Position drive belt (2) on corresponding motor belt pulley (3) and drive belt pulley (4) Position I: see techn. data Position II: see techn. data - Push the motor tensioner back to the right - Check belt tension and adjust if necessary - Close the maintenance door
---	--

14.5.11 Lock of sliding table

	The sliding table is secured against accidental movement. To loosen the locking, pull the lever out of the fixation and turn it for appr. 90°.
--	---

15 OPERATION

Only operate the machine when it is in a perfect condition. Before each operation, a visual inspection of the machine must be carried out. Safety devices, electrical cables and operating elements must be checked carefully. Check screw connections for damage and tight fit.

15.1 Operating instructions

- Make sure that the saw blade used matches the set speed of the machine and that the diameter of the saw blade is compatible with the machine.
- Cracked and deformed saw blades cannot be repaired. They must be replaced immediately with new saw blades.
- Make sure that the machine works without vibrations.
- Always use the riving knife and the saw blade guard. Make sure that the riving knife, the saw blade guard and the height of the saw blade are positioned correctly. The riving knife must always be aligned with the workpiece. Otherwise there is a risk that the workpiece will stick and cause kickback.
- Make sure that the workpiece is in a stable position on the table and is supported by either the rip fence or the outrigger table during cutting.
- Make sure that the work table and the sliding table are parallel to the saw blade.
- Never stand in the direct cutting line of the saw blade, do not hold any parts of your body in the cutting line. Keep the side of the saw blade whenever cutting.
- Never reach over or behind the saw blade with your hand while cutting.
- Avoid awkward operations and hand positions where a sudden slip could cause your hand to get caught in the rotating saw blade.
- When using the cross-cut fence, the workpiece should not touch the rip fence at the same time as cutting.
- Use the push stick if the distance between the saw blade and the ruler of the rip fence is less than 120 mm.
- Use the downholder to secure the workpiece.



- Guide the workpiece smoothly until the end of cutting.
- Avoid jerky movements and changing direction.

15.2 Types of cut

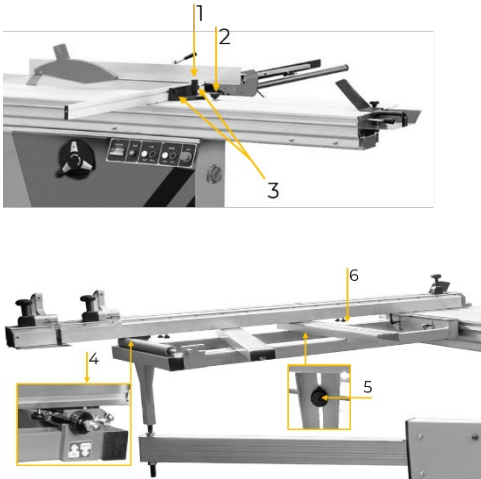
15.2.1 Workpiece size

Larger workpieces are moved by pushing the sliding table with little effort. Smaller workpieces can be pushed over the stationary table top, as with a table saw.

 Symbolpicture	Large workpieces - Adjust the rip fence or the cross-cut fence. If necessary, pull out the cross-cut fence. - Use the downholder to fix the workpiece. - Use the sliding table to move the workpiece. - For removal widths less than 120 mm, use the push stick. - Angle: Adjust the angle with the cross-cut fence.
 Symbolpicture	Smaller workpieces - For smaller workpieces, use the mitre gauge. Set the mitre gauge to 90° to the saw blade and place the workpiece against it. The rip fence can be used to support this. - Use the pushing stick. - Push the workpiece evenly with the pushing stick. - Angle: Set the angle with the mitre gauge. You can fix the angle stop in the groove of the worktable or the sliding table.

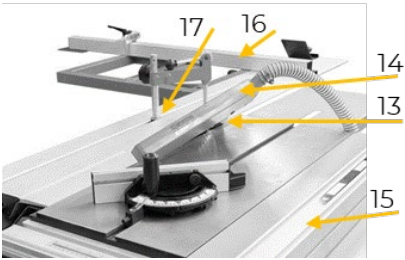
15.2.2 Mitre cuts

Depending on the workpiece size, set the desired angle on the mitre fence or on the cross-cut fence.

	Mitre gauge - Loosen the locking screw (1) and set the desired angle. Fix the locking screw again. - Loosen the knurled screw (2) and position the mitre gauge. Tighten the knurled screw again. - If necessary, loosen the clamping screws (3) and move the fence. Tighten the clamping screws again. Cross cut fence - Depending on the workpiece size and angle, select a rotation point in the outrigger table and fix the cross-cut fence. - Loosen clamping 90° (4) and clamping screw (5). - Adjust the angle of the cross cut fence - Read off the set angle on the scale (6). - Fix clamping screw (5). - Fix the workpiece. - Use the sliding table to move the workpiece evenly.
---	---



15.2.3 Angled cuts with inclined saw blade

 Symbolpicture	- Adjust the desired inclination of the saw blade (13). - Adjust the saw blade guard (14). - Adjust the rip fence (15) or the cross-cut fence (16). - Fix the workpiece with the downholder (17).
--	--

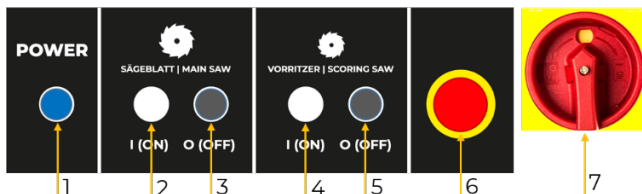
15.2.4 Longitudinal cut of boards

Use the down holder for cutting and fixing boards and avoiding a kickback.

	- Mount the down holder (1) in the groove of the sliding table. - Set the desired dimension with the rip fence or the cross-cut fence.
---	---

15.3 Operating

15.3.1 Switch the machine on and off



Switch on the machine:

1. Turn main switch (7) to position I (ON).

NOTE: Power indicator light (1) lights on.

2. The main saw blade starts after pushing the button (2) I (ON).

3. The scoring saw blade starts after pushing the button (4) I (ON) (and can be switched off by pushing button (5) 0 (OFF)).

NOTE: The scoring saw blade can only be started when the main saw blade is activated.

Switch off the machine:

Normal switch-off:

1. After finishing cutting, switch off the saw by pushing the 0 (OFF) button (3).

2. After finishing work, turn the main switch (7) to position 0 (OFF).

Switching off in emergency situations:

Press the emergency stop (6).

CAUTION: The emergency stop button (6) can only be unlocked after the emergency situation has been eliminated.

15.3.2 Cutting

- Operating instructions read and followed.
- Type of cut and appropriate machine setting selected.
- Switch on the machine.
- Wait until saw blade has reached full speed (approx. 10 sec.).



- Carry out cut(s).
- Switch off the machine.
- Wait until the machine has come to a complete standstill before moving any bodypart into the danger area (saw blade) or moving away from the machine.

15.3.3 End operation

NOTE



When the work is finished, the machine must be switched off.

- Lower the complete saw blade and the scoring saw blade
- Switch-off the main switch to disconnect the machine from the power supply.

16 CLEANING, MAINTENANCE, STORAGE, DISPOSAL

WARNING



Danger due to electrical voltage!

Handling the machine with connected power supply may result in serious injury or death.

- Always disconnect the machine from the power supply before cleaning, maintenance or repair work and secure it against unintentional reconnection.

CAUTION



- Wear protective cutting gloves when handling the saw blade and scoring blade to reduce the risk of injury!

16.1 Cleaning

Regular cleaning guarantees the long service life of your machine and is a prerequisite for its safe operation.

NOTE



Incorrect cleaning products can attack the finish of the machine. Do not use any solvents, nitro thinners or other cleaning products that could damage the machine's finish.

Observe the specifications and instructions of the cleaning agent manufacturer.

- After each work shift, clean the machine and all its parts thoroughly.
- Vacuum the wood chips and sawdust. Wipe off any remaining dust with a dry cloth.
- Use a resin-dissolving cleaner for resin build-up.
- Prepare the surfaces and lubricate the bare machine parts with an acid-free lubricating oil (e.g. WD40 rust inhibitor).

16.2 Maintenance

The machine is low-maintenance and only a few parts need to be serviced. Malfunctions or defects that could affect your safety must be repaired immediately!

- Before each operation, check the perfect condition of the safety devices.
- Check the condition and tight fit of the saw blade and the saw blade guard before every operation.
- Regularly check the perfect and legible condition of the warning and safety labels of the machine.
- Use only proper and suitable tools.
- Use only original spare parts recommended by the manufacturer.
- Repair work may only be carried out by qualified personnel.



16.2.1 Maintenance plan

The type and degree of machine wear depends to a large extent on the operating conditions. The following intervals apply when the machine is used within the technical limits:

Interval	Components	Action
Before usage	• Machine	• Clean
	• Loose fixing bolts, screws	• Check for tight fit, tighten if necessary
	• Control panel	• Check for function, replace if necessary
Once a week	• Guide track and roller guide of sliding table and rip fence	• Clean, blow out
	• Moving parts	• Lubricate
Once a month	• Maintenance room	• Vacuum chips • Clean the motor housing
If necessary	• Saw blade, scoring saw blade	• Change
	• V-belt	• Change

16.2.2 Assembly / exchange saw blade

- Adjust the cutting height to the maximum possible level.
- Set the saw blade to 90°.
- Push the sliding table all the way forward.
- Open the saw blade guard (7).
- Fix the drive shaft with an Allen key (5).
- Loosen the flange nut (4) with the saw blade wrench (6) (left-hand thread!)
- Remove flange nut (4), flange (3) and saw blade (2) from the drive shaft.
- Clean the drive shaft, shaft flange (1) and all parts thoroughly from impurities
- Replace the old saw blade with a new one.
- Make sure that the new saw blade is undamaged and not dirty.
- Place the saw blade (2), flange (3) and flange nut (4) on the drive shaft.
- Fix the drive shaft with an Allen key (5).
- Tighten the flange nut with the saw blade wrench (6) (left-hand thread!)

NOTE: Retighten the flangenut tightly to prevent the nut from loosening during operation. (tightening torque: 50 Nm)

- Close the saw blade guard.
- Bring the sliding table back into position.

NOTE



Adjust the riving knife and the saw blade guard after each saw blade change.



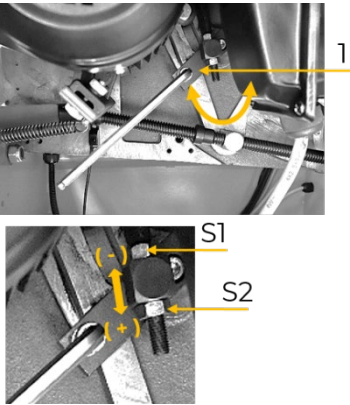
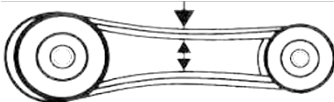
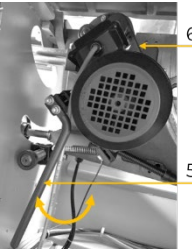
16.2.3 Assembly / exchange / adjustments scoring saw blade

	• Adjust the cutting height to the maximum possible level. • Set the saw blade to 90°. • Push the sliding table all the way forward. • Open the saw blade guard (7). • Fix the drive shaft with the supplied Allen key (6). • Loosen the flange nut (4) with the saw blade wrench (5) (right-hand thread!) • Remove flange nut (4), flange (3) and scoring saw blade (2) from the drive shaft. • Clean the drive shaft, the shaft flange (1) and all parts thoroughly from impurities. • Replace the old scoring saw blade with a new one. • Make sure that the new scoring saw blade is undamaged and not dirty. • Place the scoring saw blade (2), flange (3) and flange nut (4) on the drive shaft. • Fix the drive shaft with the supplied Allen key (6). • Tighten the flange nut with the saw blade wrench (5) (right-hand thread!). NOTE: Retighten the flange nut tightly to prevent the nut from loosening during operation. (tightening torque: 25 Nm). • Close the saw blade guard. • Bring the sliding table back into position.
	NOTE: The height of the scoring blade must be adjusted so that it cuts a slot of a depth of 1.5 – 2 mm. The scoring saw blade has to be oriented exactly to the main saw blade. Adjustments: • Adjust main saw blade to 90° Height of the scoring saw blade (1) - Turning the setting wheel (2) to the left ↓. - Turning the setting wheel (2) to the right ↑. Lateral adjustment of the scoring saw blade (1) - Turning the setting wheel (3) to the left ←. - Turning the setting wheel (3) to the right →.

16.2.4 Checking / adjusting / replacing belt

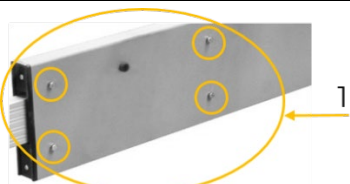
For optimum power transmission, the belt must be free of cracks and frays and have optimum tension. Check the condition of the belt at least every 3 months, more frequently if used daily. Broken or frayed belts must be replaced. To check/adjust or replace the belt, open the maintenance door.



	NOTE ! Do not over-tension the belt! Tension the belt only until sufficient power transmission is ensured. max. 2-5mm 
Increase belt tension: Loosen nut (S1) and unscrew slightly. With the nut (S2) the motor can now be shifted in the direction (+) of more belt tension. When correct tension is reached. Tighten the nut (S1) firmly again.	Decrease belt-tension: Loosen nut (S2) and unscrew slightly. With the nut (S1) the motor can now be shifted in the direction (-) of less belt tension. When correct tension is reached. Tighten the nut (S2) firmly again.
For changing the belt insert Allen key into motor tensioning screw (1), push tensioner to the left to release belt tension completely, pull the belt over the pulleys and insert new belt. Push the motor tensioner back to the right and establish correct belt tension again.	
	Scoring saw blade: • Lift the motor (5) • Replace the old belt (6) with a new one. • Position new belt

After completion, close the maintenance door.

16.2.5 Swivel arm guide rollers

	Cleand swivel arm By turning the 4 screws (1) you can close or move away the eccentric guide rollers and adjust a smooth running
---	--

16.3 Storage

Store the machine in a dry, frost-proof and lockable place when not in use. Disconnect the machine from the power supply. Make sure that unauthorised persons and especially children do not have access to the machine.

NOTE	
	Improper storage can damage and destroy important components. Only store packed or already unpacked parts under the intended ambient conditions!



16.4 Disposal



Observe the national waste disposal regulations. Never dispose of the machine, machine components or operating equipment in the residual waste. If necessary, contact your local authorities for information regarding available disposal options.

If you purchase a new machine or equivalent equipment from your specialist dealer, he is obliged in certain countries to dispose of your old machine properly.

17 TROUBLESHOOTING

WARNING



Danger due to electrical voltage!

Handling the machine with connected power supply may result in serious injury or death.

- Disconnect the machine from the power supply before starting work to eliminate defects!

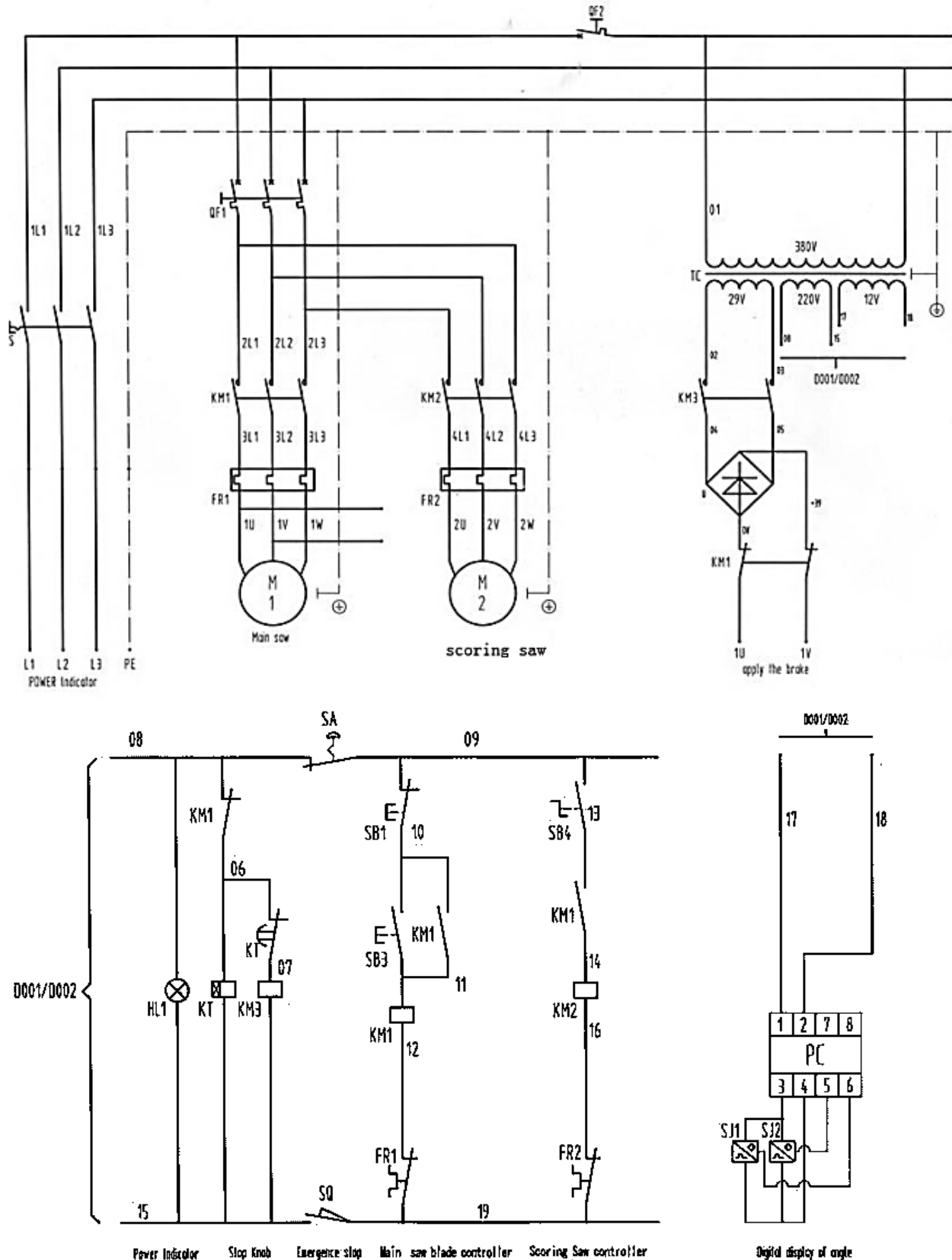
Many possible sources of error can be eliminated in advance if the machine is properly connected to the power supply.

If you are unable to carry out the necessary repairs properly and/or do not have the required training, always consult a specialist to solve the problem.

Trouble	Possible cause	Solution
Motor does not run	• Switch defective • Saw blade guard not completely closed – limit switch • Electrical system defective • Emergency stop is activated	• Repair switch • Close the saw blade guard well so that the limit switch is activated • Check main cable, plug and motor; repair or replace, if necessary • Check fuse • Deactivate the emergency stop
Burn marks on the workpiece	• Blunt saw blade	• Change saw blade
Finished dimension of the workpiece does not correspond to the cutting width set on the rip fence	• Dimension scale for the cutting width misaligned	• Reset the zero point of the rip fence
Workpiece clamps when being pushed forward	• Blunt saw blade • Riving knife does not match to the saw blade used	• Change saw blade • Riving knife thickness must be equal to or greater than saw blade thickness
Loud, repetitive noises from the machine	• Set screws or keys are loose • Motor fan hits cover • V-belt defective	• Tighten or replace set screws or keys • Tighten motor fan and cover • Replace V-belt
Machine slows down during operation	• Too much pressure to the workpiece • Loose V-belt	• Feed the workpiece more slowly • Tension V-belt
Saw blade is not square or fence is not square to saw blade	• Table top or fence are not aligned parallel	• Align table parallel to saw blade
Scoring blade does not start	• Main saw blade is not started • V-belt defective	• Start main saw blade • Check V-belt and change if necessary



39 ELEKTRISCHER SCHALTPLAN / WIRING DIAGRAM DIAGRAMA ELÉCTRICO / SCHEMA ELECTRIQUE / ELEKTRICKÉ SCHÉMA





40 ERSATZTEILE / SPARE PARTS

PIEZAS DE RECAMBIO / PIÈCES DE RECHANGE / NÁHRADNÍ DÍLY

40.1 Ersatzteilbestellung / Spare parts order

Pedido de piezas / Commande de pièces détachées / Objednávky náhradních dílů

(DE) Mit HOLZMANN-Ersatzteilen verwenden Sie Ersatzteile, die ideal aufeinander abgestimmt sind. Die optimale Passgenauigkeit der Teile verkürzen die Einbauzeiten und erhöhen die Lebensdauer.

HINWEIS



Der Einbau von anderen als Originalersatzteilen führt zum Verlust der Garantie! Daher gilt: Beim Tausch von Komponenten/Teile nur vom Hersteller empfohlene Ersatzteile verwenden.

Bestellen Sie die Ersatzteile direkt auf unserer Homepage – Kategorie ERSATZTEILE oder kontaktieren Sie unseren Kundendienst

- über unsere Homepage – Kategorie SERVICE – ERSATZTEILANFORDERUNG,
- per Mail an service@holzmann-maschinen.at.

Geben Sie stets Maschinentype, Ersatzteilnummer sowie Bezeichnung an. Um Missverständnissen vorzubeugen, empfehlen wir, mit der Ersatzteilbestellung eine Kopie der Ersatzteilzeichnung beizulegen, auf der die benötigten Ersatzteile eindeutig markiert sind, falls Sie nicht über den Online-Ersatzteilkatalog anfragen.

(EN) With original HOLZMANN spare parts you use parts that are attuned to each other shorten the installation time and elongate your products lifespan.

NOTE



The installation of parts other than original spare parts leads to the loss of the guarantee! Therefore: When replacing components/parts, only use spare parts recommended by the manufacturer.

Order the spare parts directly on our homepage – category SPARE PARTS or contact our customer service

- via our Homepage – category SERVICE – SPARE PARTS REQUEST,
- by e-mail to service@holzmann-maschinen.at.

Always state the machine type, spare part number and designation. To prevent misunderstandings, we recommend that you add a copy of the spare parts drawing with the spare parts order, on which the required spare parts are clearly marked, especially when not using the online-spare-part catalogue.

(ES) Con las piezas de recambio de HOLZMANN, utiliza piezas de recambio que se ajustan perfectamente entre sí. El ajuste óptimo de los componentes acorta el tiempo de instalación y aumenta la vida útil.

AVISO



¡La instalación de piezas de recambio no originales lleva a la pérdida de garantía! Por lo tanto: Al llevar a cabo la sustitución de componentes/piezas, utilice únicamente piezas de recambio recomendadas por el fabricante.

Pida las piezas de recambio directamente en nuestra página web: Categoría PIEZAS DE RECAMBIO. o póngase en contacto con nuestro servicio de atención al cliente

- en nuestra página web: Categoría SERVICIO – SOLICITUD DE PIEZAS DE RECAMBIO,
- por correo electrónico a service@holzmann-maschinen.at.

Indique siempre el tipo de máquina, la referencia de la pieza de recambio y la denominación. Para evitar malentendidos, se recomienda adjuntar al pedido una copia del esquema de piezas de recambio en el que se marque claramente las piezas de recambio necesarias, cuando no se solicitan con el catálogo en línea de piezas de recambio.

(FR) Les pièces de rechange HOLZMANN sont conçues pour correspondre idéalement. La précision d'ajustage optimale des pièces réduisent les temps de pose et augmente la durée de vie.

AVIS



Le montage de pièces autres que les pièces de rechange d'origine entraîne la perte de la garantie ! Par conséquent, la règle est la suivante : Utiliser uniquement des pièces de rechange recommandées par le fabricant pour le remplacement des composants/pièces.

Commandez les pièces de rechange directement sur notre page d'accueil – catégorie PIÈCES DE RECHANGE. ou contactez notre service client

- via notre page d'accueil – Catégorie SERVICE – DEMANDE DE PIECES DE RECHANGE,
- par e-mail à l'adresse service@holzmann-maschinen.at.

Toujours indiquer le type de machine, le numéro de pièce de rechange et la désignation. Afin d'éviter tout malentendu, nous vous recommandons de joindre une copie du plan des pièces détachées à la commande de pièces détachées, sur laquelle les pièces détachées requises sont clairement indiquées, si vous ne faites pas la demande via le catalogue de pièces de rechange en ligne.

(CZ) V podobě náhradních dílů HOLZMANN používáte náhradní díly, které jsou vzájemně zkoordinovány. Optimální přesnost lícování dílů zkracuje dobu montáže a prodlužuje životnost.



OZNÁMENÍ



Montáž jiných než originálních náhradních dílů způsobí ztrátu záruky! Proto platí: Při výměně komponent/dílů používejte jen výrobcem doporučené náhradní díly.

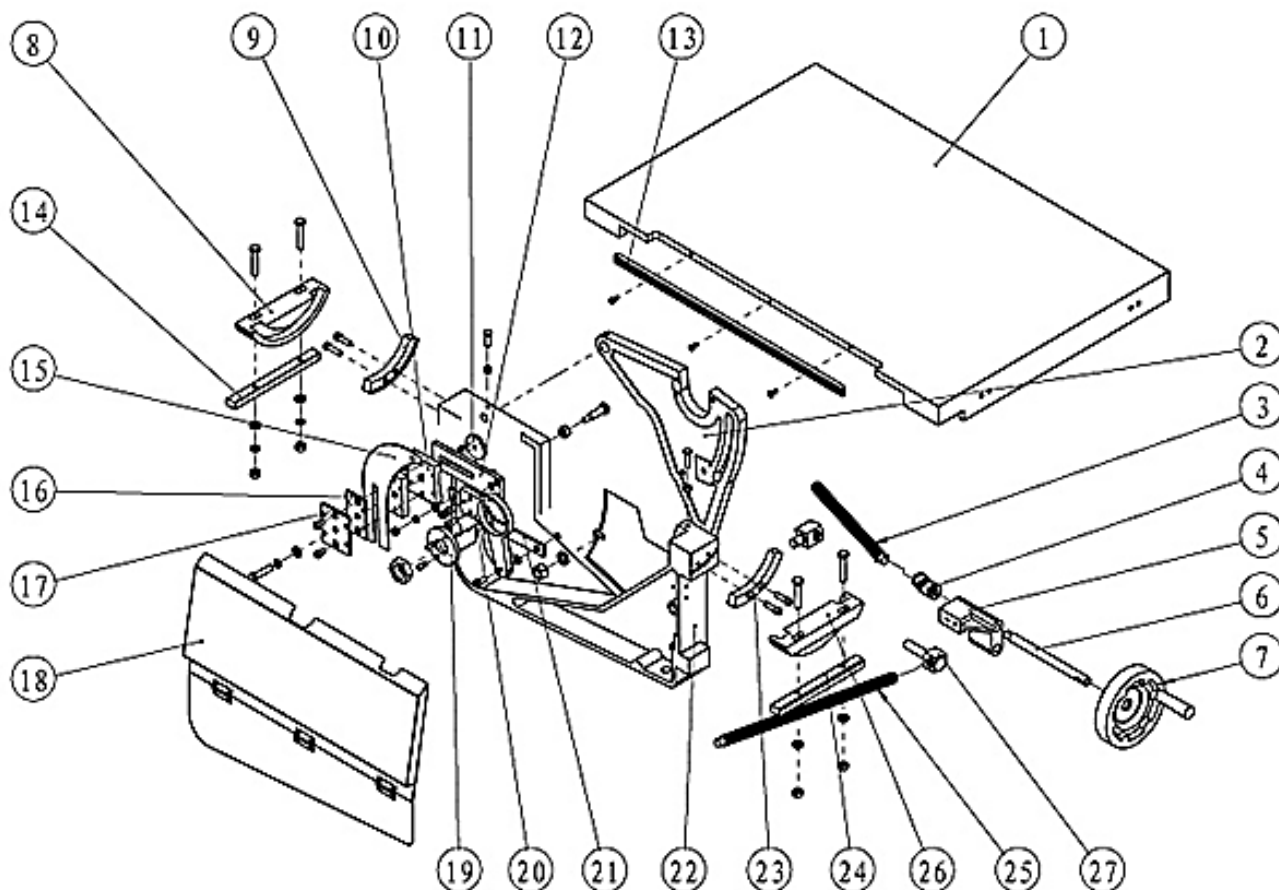
Náhradní díly objednávejte přímo na naší domovské stránce – kategorie NÁHRADNÍ DÍLY.
nebo kontaktujte náš zákaznický servis

- přes naši domovskou stránku – kategorie SERVIS – POŽADAVEK NÁHRADNÍCH DÍLŮ,
- e-mailem na service@holzmann-maschinen.at.

Vždy uveďte typ stroje, číslo náhradního dílu a označení. Abychom předešli nedorozumění, doporučujeme přiložit k objednávce náhradních dílů kopii výkresu náhradních dílů, na které jsou potřebné náhradní díly jasně označeny, pokud neprovádíte poptávku pomocí internetového katalogu náhradních dílů.

40.2 Explosionszeichnung / Exploded view Vista de despiece / Vue éclatée / Výkras náhradních dílů

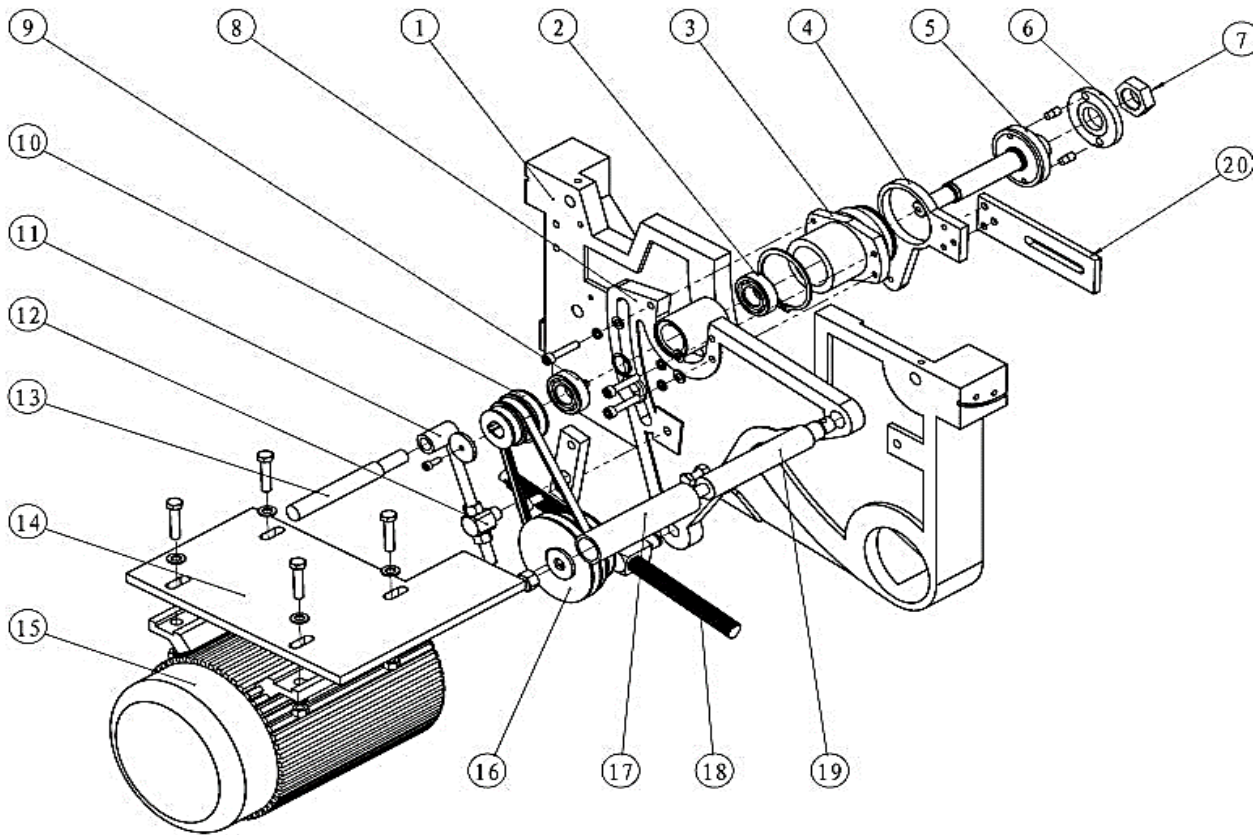
Fixed table and supporting and adjustment mechanism



No.	Description	No.	Description
1	Fixed table	10	Fix board
2	Lift board	11	Adjusting circle cushion
3	Lift spindle	12	Connection board
4	Gimbal	13	Protection board
5	Fix base	14	Fix board
6	Gimbal spindle	15	Longitudinal cutting knife
7	Handwheel	16	Pressure board
8	Circumgyrating base	17	Fix board
9	Left guide track	18	The cover of anti-dust
		19	Saw nipping plate
		20	Flowing action board
		21	Pulling board
		22	Connection board
		23	Right guide track
		24	Gusset plate
		25	Adjusting spindle
		26	Circumgyrating base
		27	Adjusting nut



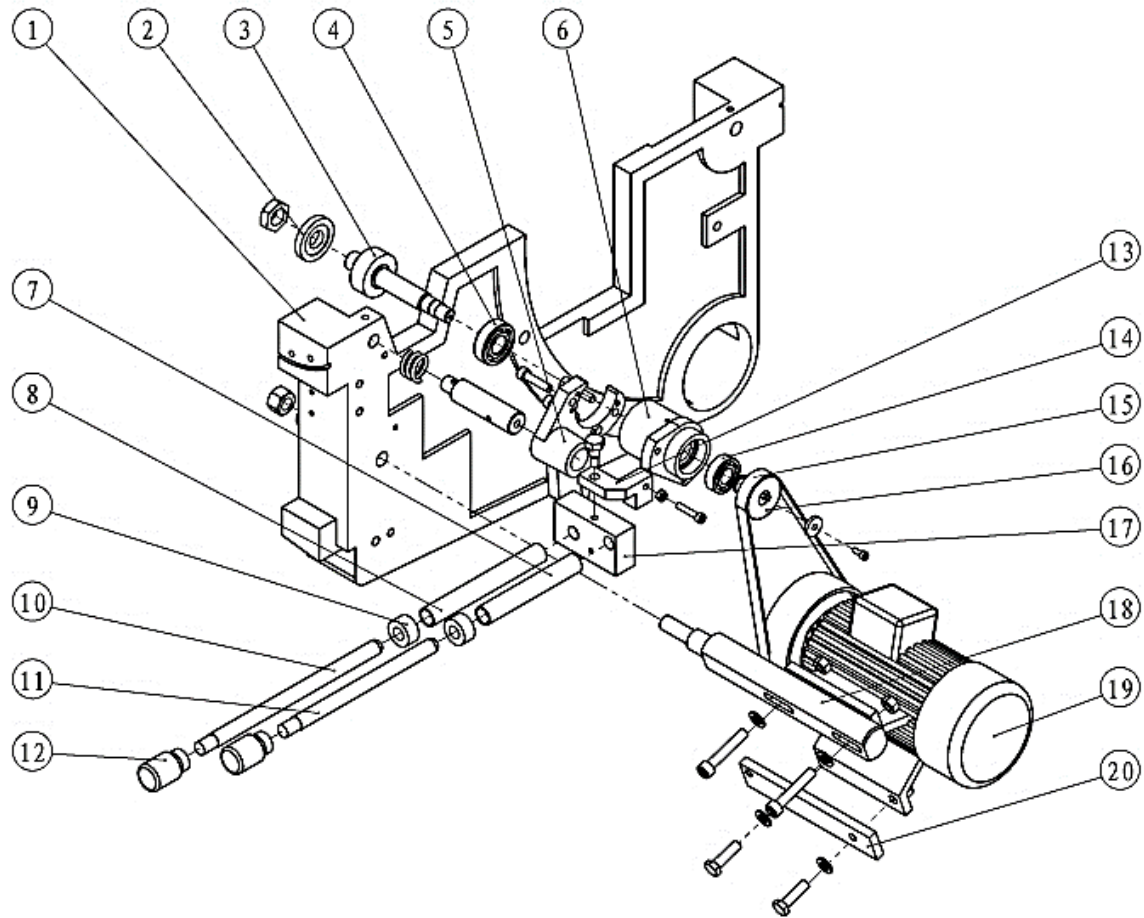
Main saw



No.	Description	No.	Description
1	Connection board	11	Main motor spindle
2	Bearing	12	Connection block
3	Main spindle sheath	13	Main motor base spindle
4	Flowing action board	14	Main motor base
5	Main saw spindle	15	Main motor
6	Saw nipping plate	16	Main saw motor wheel
7	Main saw spindle nut	17	Main motor base spindle sheath
8	Lift board	18	Lift spindle
9	Bearing	19	Main motor base spindle
10	Main spindle wheel	20	Connection board



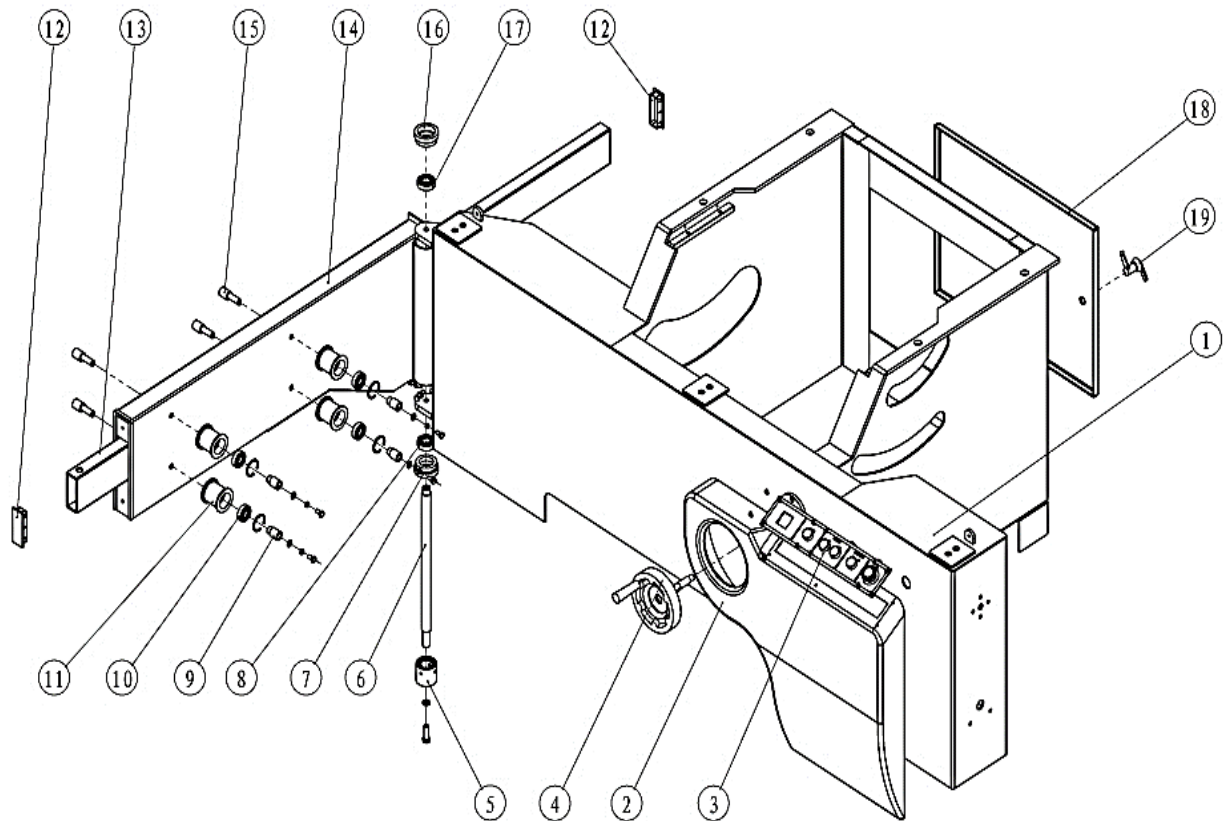
Scoring saw



No.	Description	No.	Description
1	Connection board	11	Inching spindle B
2	Saw nipping plate	12	Inching handle
3	Scoring saw spindle	13	Feeding block
4	Bearing	14	Bearing
5	Scoring saw turning base	15	Driving belt
6	Scoring saw sheath	16	Scoring saw wheel
7	Fixed sheath B	17	Fixed base
8	Fixed sheath A	18	Motor base spindle
9	Locking nut	19	Scoring saw motor
10	Inching spindle A	20	Motor base



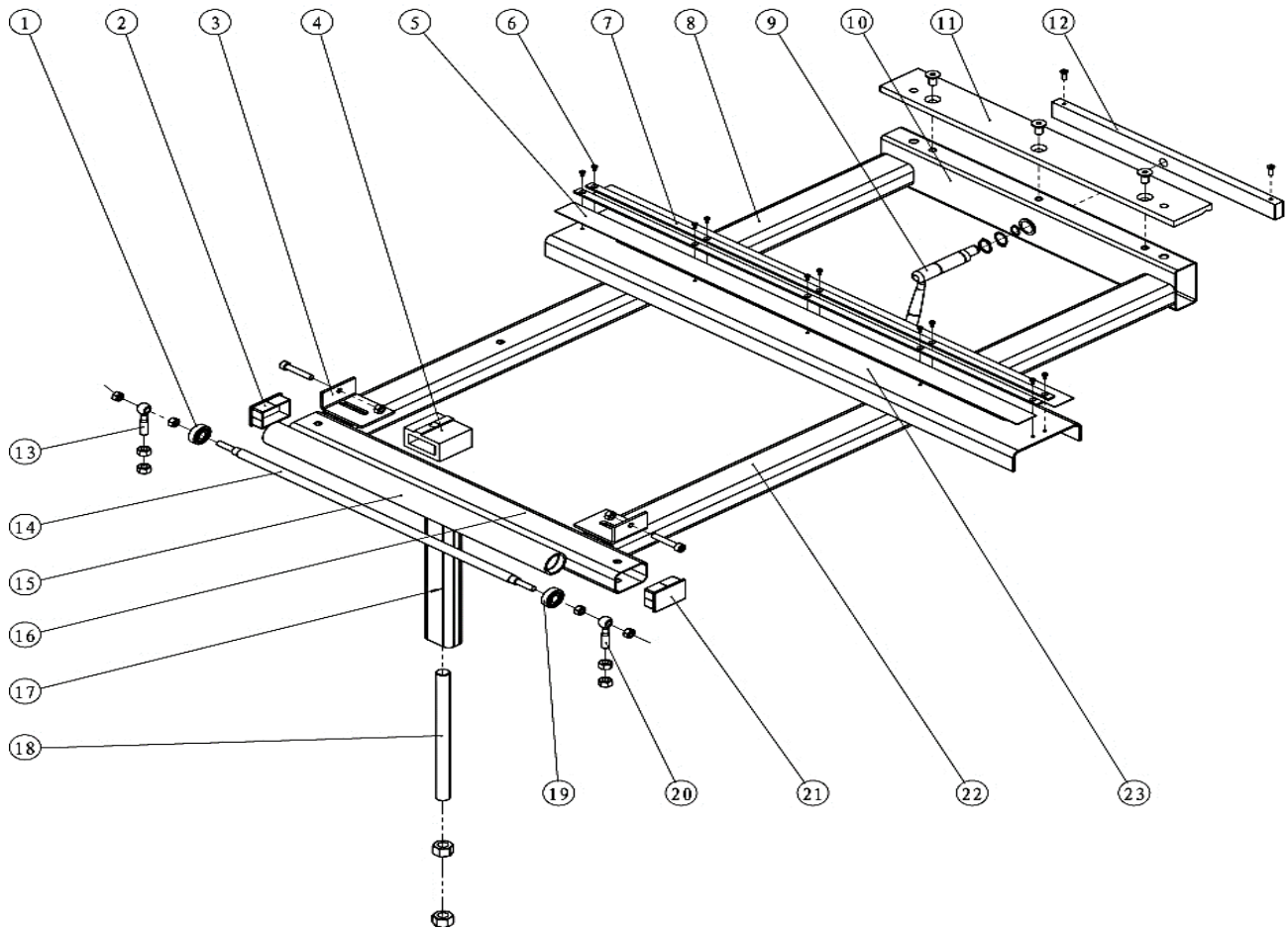
Machine body and turning arm



No.	Description	No.	Description
1	Machine body	11	Roller wheel
2	Door cover	12	Stop head
3	Control panel	13	Sliding arm
4	Handle wheel	14	Turning arm
5	Turning arm base	15	Eccentric spindle
6	Spindle of turning arm	16	Turning arm spindle sheath
7	Spindle sheath of turning arm	17	Bearing
8	Bearing	18	Back door
9	Bolt	19	Back door handle
10	Bearing		



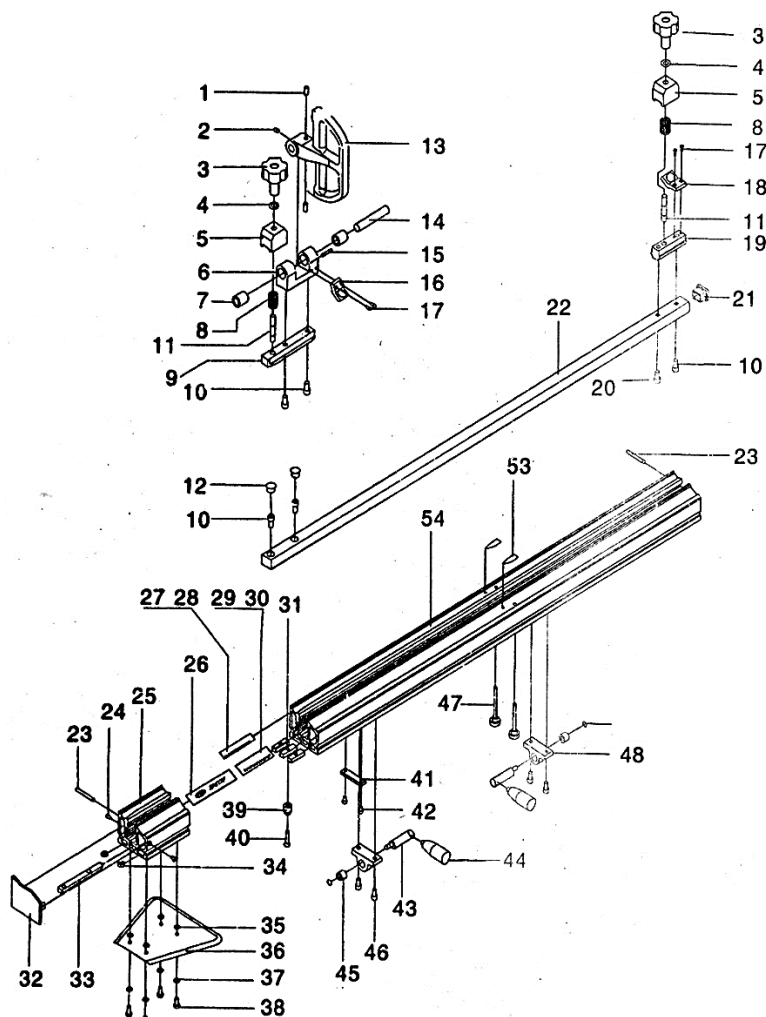
Outtrigger table



No.	Description	No.	Description
1	Bearing	13	Support bolt
2	Plug	14	Shaft
3	Carriage roller seat board	15	Carriage roller
4	Cushion block	16	Back fix square tube
5	Wide meter ruler	17	Down support square tube
6	Bolt	18	Adjusting bolt
7	Aluminum strips	19	Bearing
8	Bracket	20	Support bolt
9	Eccentric shaft	21	Cap
10	Square tube	22	Across support frame
11	V-groove	23	Angle scale seat
12	Lock block		



Crosscut guide plate

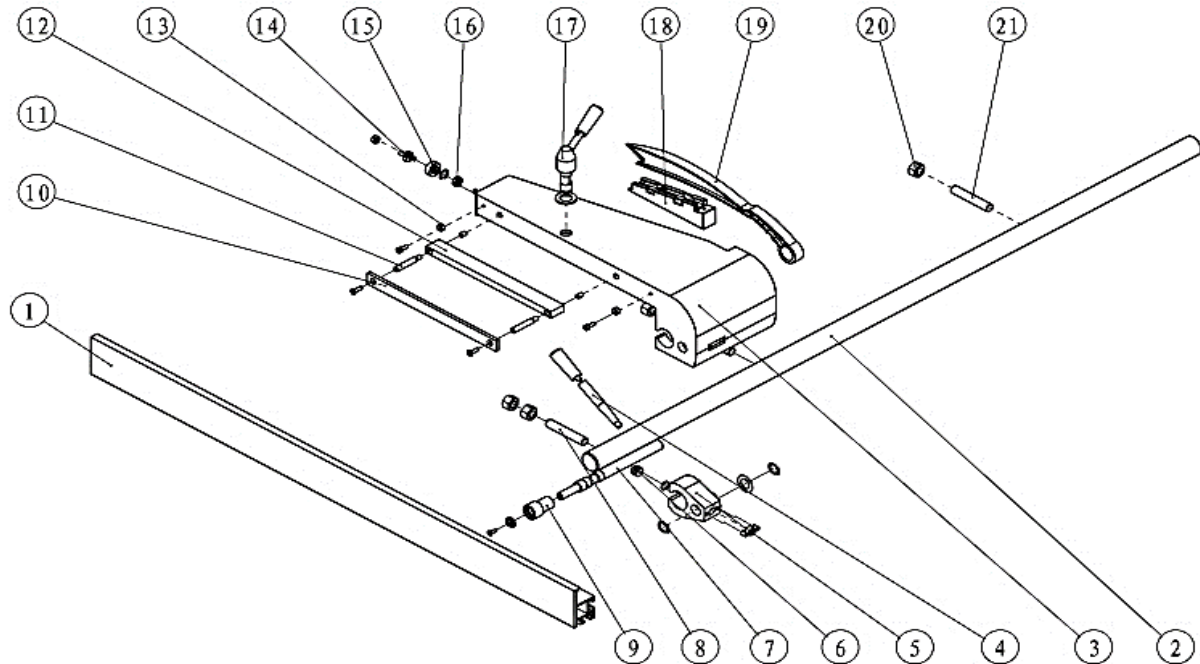


No.	Description	No.	Description
1	Adjustment bole	26	Plate
2	Fixing bolt	27	Ruler
3	Locking handle	28	Ruler
4	Pad	29	Ruler
5	Handle seat	30	Ruler
6	Baffle seat	31	Fixing block
7	Copper sleeve	32	Plug
8	Spring	33	Fixing block
9	Fixing block	34	Nut
10	Screw bolt	35	Pad
11	Shaft	36	Holding plate
12	Plug	37	Pad
13	Stop board	38	Screw
14	Shaft	39	Sleeve
15	Screw	40	Screw
16	Magnifier	41	Board
17	Screw	42	Screw
18	Magnifier	43	Eccentric shaft
19	Fixing block	44	Handle
20	Screw bolt	45	Sleeve
21	Plug	46	Screw



22	Draw rod	47	Hand screw
23	Stabilizer nail	48	Lug
24	Screw	53	Plate
25	Extension ruler	54	Ruler table

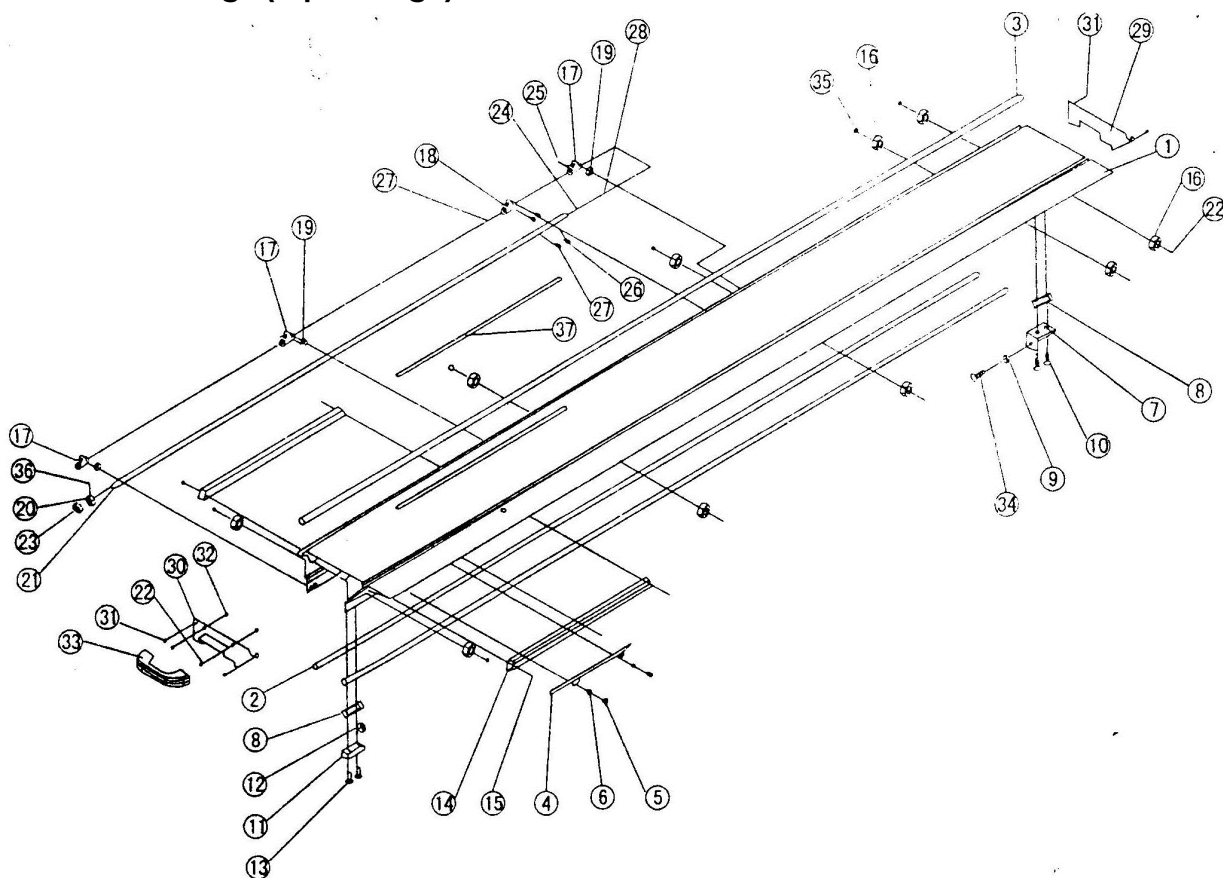
Straight-cut guide plate



No.	Description	No.	Description
1	Straight-cut guide plate	12	Board
2	Cam axle (guide shaft axle)	13	Eccentric sleeve
3	Cam seat (guide plate seat)	14	Nylon roller eccentric spindle
4	Locking handle	15	Nylon roller
5	Locking sliding block	16	Bearing
6	Up spindle	17	Eccentric spindle
7	Eccentric shaft	18	Push handle seat
8	Short bolt	19	Push handle
9	Adjusting handle	20	Screw
10	Lock plate	21	Long bolt
11	Screw		



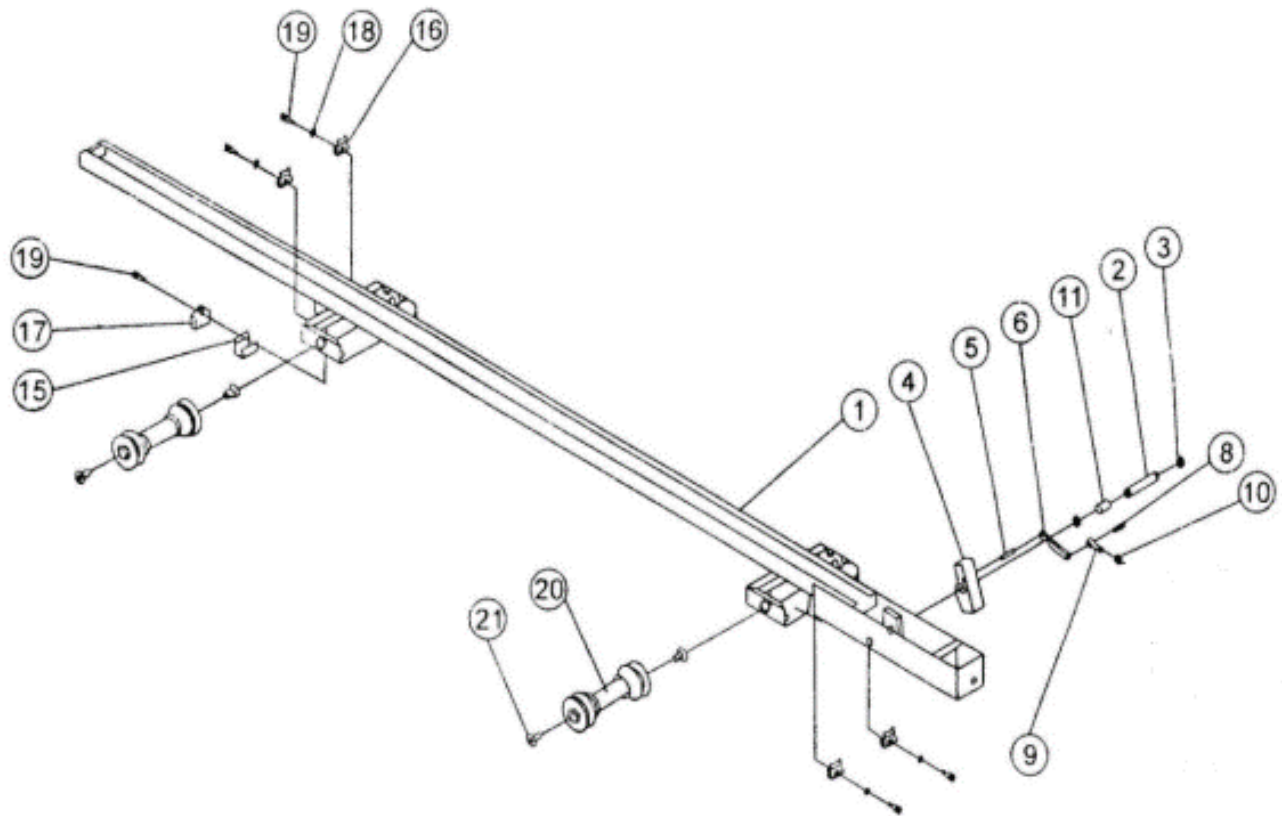
Double roller carriage (top carriage)



No.	Description	No.	Description
1	Top carriage 3200mm	20	Set collar
2	Round bar	21	Tube
3	Round bar	22	Hexagonal
4	Switching flag	23	Star grip screw
5	Cheese head screw	24	Slotted spring pin
6	Washer	25	Slotted spring pin
7	Stop	26	Parallel pin
8	Inlay	27	Slotted spring pin
9	Hexagonal nut	28	Tension spring
10	Cheese head screw	29	Cap cover right
11	Stop	30	Cap cover left with grip
12	Bumper	31	Button head socket screw
13	Counter sunk screw	32	Counter sunk screw
14	Fuller	33	Grip
15	Tapping screw	34	Hexagonal screw
16	Underflow roll	35	Nut
17	Holder bolt	36	Set screw
18	Holder bolt	37	Scale
19	Cheese head screw		



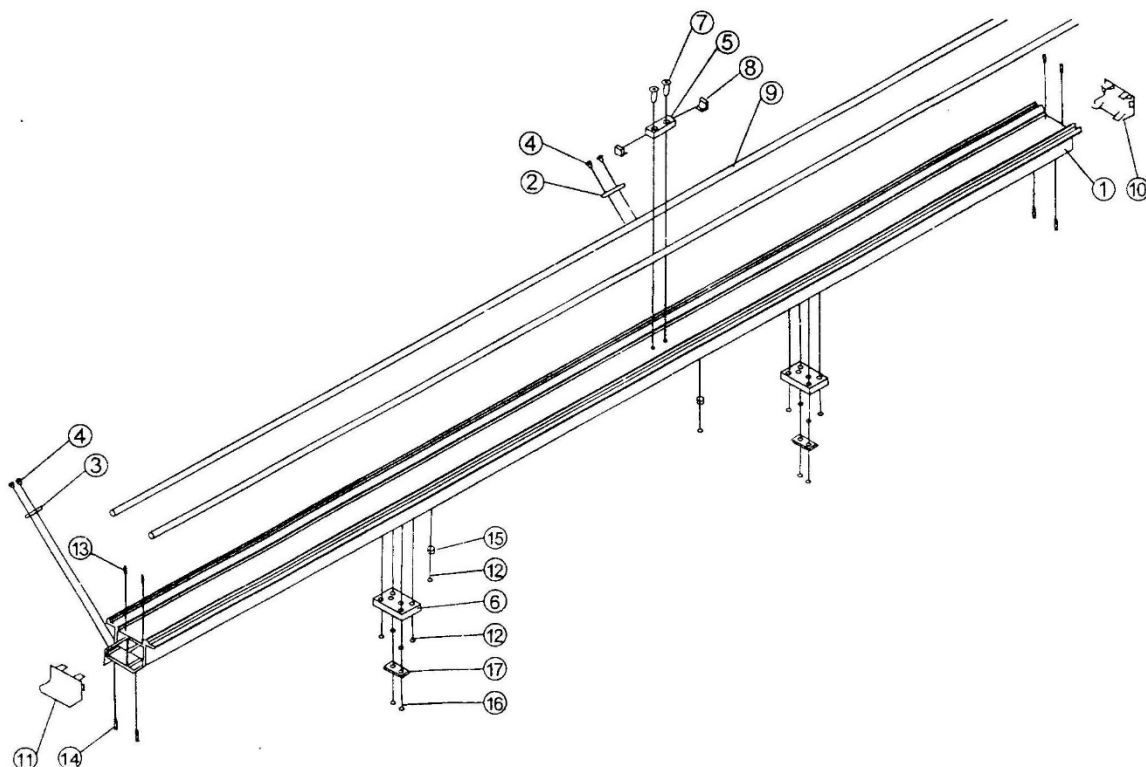
Double roller carriage (middle carriage)



No.	Description	No.	Description
1	Middle carriage	11	Bush
2	Axle stop	15	Angle bracket
3	Retaining ring	16	Wiper
4	Stop	17	Bumper
5	Slotted spring pin	18	Washer
6	Connection piece	19	Cheese head screw
8	Slotted spring pin	20	Double roller
9	Eye bolt	21	Countersunk screw
10	Hexagonal nut		



Double roller carriage (bottom carriage)



No.	Description	No.	Description
1	Bottom carriage	10	Cap cover left
2	Middle locking	11	Cap cover right
3	End locking	12	Cheese head screw
4	Counter sunk screw	13	Blind rivet
5	Stop	14	Blind rivet
6	Base	15	Distance bush
7	Counter sunk screw	16	Cheese head screw
8	Bumper	17	Plate
9	Round bar		

41 ZUBEHÖR / ACCESSORIES / ACCESORIOS / ACCESSOIRES

(DE) Optionales Zubehör finden Sie online auf der Produktseite, Kategorie EMPFOHLENES ZUBEHÖR ZUM PRODUKT.

(EN) Optional accessories can be found online on the product page, category RECOMMENDED PRODUCT ACCESSORIES.

(ES) Los accesorios opcionales se encuentran en la página del producto en internet, en la categoría ACCESORIOS RECOMENDADOS PARA EL PRODUCTO.

(FR) Des accessoires en option sont disponibles en ligne sur la page produit, catégorie ACCESSOIRES RECOMMANDÉS POUR LE PRODUIT.

(CZ) Volitelné příslušenství naleznete online na stránce produktu v kategorii DOPORUČENÉ PŘÍSLUŠENSTVÍ PRO.