

7E & 7Ex Consumables & Repair Parts List

KEYPAD	
Part #	Description
NOP-2907	Keypad Assy (7E/ 7EA only)
NOP-94559	Keypad Cable (7E/7EA/7Ex)
NOP-29200	Keypad (7Ex Only)

WIRING/BOARDS	
Part #	Description
NOP-94535	50 Pin Cable
NOP-2901	Size Interface Card
NOP-94537	Wire – size interface to chuck interface
NOP-2902	Chuck/Axis Interface card – electric chuck
NOP-2903	Chuck/Axis Interface – air chuck
NOP-94609	Service Jumper
NOP-94569	Main Wiring Harness (7E Only)
NOP-94665	Main Wiring Harness (7Ex Only)

MOTION CONTROL	
Part #	Description
Sizing Assembly	
NOP-90543	Size Leadscrew (Full assembly)
NOP-28261	Size Leadscrew Nut Assembly (no bearings/ blocks)
NOP-70186	Bearing (Front-size lead-screw)
NOP-70311	Bearing (Rear-size lead-screw)
NOP-28257	Rail – size short
NOP-28255	Rail – size long
NOP-70153	Bearing Insert Replacements
NOP-55323	Servo Motor
NOP-65520	Coupler – Servo
NOP-29103	Home Switch Vane
NOP-48338	Size Home Switch Kit (Required when replacing switch on 7E)
NOP-91009	Home Switch (Only)
NOP-29142	Home Switch Bracket
NOP-29434	Home Switch Plate
NOP-22100153	Screws 4-40 x 1/4 SHCS (4 required)

Axis	
NOP-55323	Servo Motor
NOP-65520	Coupler – Servo
NOP-28333	Axis Gearbox – hmsw style (Bearing) v2
NOP-28332	Axis Gearbox – encoder style (Bearing) v2
NOP-65168	Shim .002
NOP-65169	Shim .001
NOP-65171	Shim .003
NOP-29147	Cover - Axis Gearbox

Bevel	
NOP-90548	Bevel Leadscrew (Full Assembly)
NOP-28211	Bevel Leadscrew Nut Assembly (No bearings/ blocks)
NOP-70186	Bearing (Left-bevel lead-screw)
NOP-70311	Bearing (Right-bevel lead-screw)

NOP-28205	Rails Bevel (Need 2)
NOP-70153	Bearing Insert Replacements
NOP-55323	Servo Motor
NOP-65520	Coupler – Servo
NOP-29103	Home Switch Vane
NOP-48337	Size Home Switch Kit (Required when replacing switch on 7E)
NOP-91009	Home Switch (Only)
NOP-29142	Home Switch Bracket
NOP-29434	Home Switch Plate
NOP-22100153	Screws 4-40 x 1/4 SHCS (4 required)

CUTTER MOTOR	
Part #	Description
NOP-80733	Cutter Motor – no break
NOP-90601	Motor Controller (Universal) 115 (7E Only)
NOP-77320	Fuse (universal Controller) – 15 Amp
NOP-90604	Motor Controller Dynamic Breaking (7Ex Only)
NOP-77336	Fuse (Controller 7Ex) – 6.3 Amp (slow blow)
NOP-77292	Wall – Switch – Motor (7E Only)
NOP-90900	Relay (Main) – Vacuum/Cutter Motor

DISPLAY	
Part #	Description
NOP-90975	Monitor/Display (7E / 7EA Only)
NOP-90899	Backlight Inverter Board-90975 Display REPLACEMENT KIT for 2914 board)
NOP-90974	Backlight Inverter Kit-90907 Display 2913 board
NOP-2906	Display Interface Board (Inside machine lid) 7E all lines
NOP-29424	Display Assembly 7Ex
NOP-94426	Display Cable 7Ex
NOP-29290	Hinge Block Right (Display 7Ex)
NOP-29292	Hinge Block Left (Display 7Ex)
NOP-22100121	Longer Screw for Hinge Block 7Ex – 8-32 x 1/2 button head cap screw

PROBING	
Part #	Description
NOP-90895	Probe Assembly (7E Only)
NOP-90922	C-Body assembly
NOP-29430	Probe Assembly (7Ex Only)
NOP-27092	Probe Tips
NOP-87246	Step Calibration Disk

POWER SUPPLY	
Part #	Description
NOP-3406	5V Power Supply
NOP-90919	24V Power Supply

7E & 7Ex Consumables & Repair Parts List

NOP-90920	Power Supply Plate Assy
NOP-77339	Power Supply Fuse (2.5A sub miniature)
NOP-77205	On/off switch 7E
NOP-94520	Wire (AC input to switch) white
NOP-94521	Wire (AC input to switch) black
NOP-94522	Wire (Switch to line filter) white
NOP-94523	Wire (Switch to line filter) black
NOP-77099	Power Cord 7E
NOP-87445	Non-Conductive Screw Driver
NOP-77361	Power Receptacle AC (rear of machine)

VACUUM

Part #	Description
NOP-87181	Vacuum 12 Gallon (C-19 Plug) 115V
NOP-90153	Vacuum Motor Replacement Kit (Red Canister) 115V
NOP-80215	Vacuum Brushes "open style" (Black head – red canister vac)
NOP-29043	Replacement Motor Kit (Silver can vacuum) 115V
NOP-80214	Replacement Brush (Silver can vacuum) - need 2
NOP-90140	Vacuum Bag Set (25 count)
NOP-90145	Vacuum Bag Set (10 count)
NOP-87150	Foam Filter Sleeve
NOP-87170	Vacuum Spring Clip
NOP-87175	Vacuum Crevice Tool
NOP-87155	Vacuum Hose 1.5" x 12'
NOP-87164	Vacuum Hose 2.5" x 6'
NOP-90500	Static Discharge Hose Assembly
NOP-87169	Inlet Deflector, Vacuum
NOP-94504	Adapter (Standard Vac to C-19)
NOP-90900	Relay (Main) – vacuum/cutter motor
NOP-90913	Vac Switch Assy – 3 position
NOP-77371	Vacuum Receptacle (New Style – C-19 vacuum)

CHUCK MOTOR / CLAMPING

Part #	Description
NOP-90537	Chuck Motor Full Assembly (7E/7Ex product lines)
NOP-90539	Clamp Arm Replacement Kit
NOP-90369	Force Gauge Assy Kit (With instructions)
NOP-87433	Chuck Alignment Tool
NOP-90089	Right Side Clamp – Vario 22mm (Short white)
NOP-90043	Right Side Clamp – Vario 19mm (Short white)
NOP-90083	Right Side Clamp – Vario 17mm (Short white)
NOP-90077	Right Side Clamp – Standard 22mm (Long black)
NOP-90044	Right Side Clamp – Standard 19mm (long black)
NOP-90076	Right Side Clamp – Standard 17mm (long black)
NOP-90177	Taper Plug (6 pk) 22mm
NOP-90178	Taper Plug (6 pk) 17mm
NOP-73162	Taper Plug (individual) 19mm

ELECTRONICS ENCLOSURE

Part #	Description
NOP-29500	Card Cage, USB – 7E 115V Only
NOP-2985	Interface Board – front of cage (Configured 7E Only)
NOP-77920	I/O Board (interior left)
NOP-29504	Card Cage, USB – 7Ex (115V or 230V)
NOP-2894	Interface Board – front of cage (Configured 7Ex Only)
NOP-77920	I/O Board (interior left)
NOP-95519	System Update & Backup – (USB cage only)
NOP-94631	USB TO DISK DRIVE
NOP-77341	Fuse – Drill Rotation / 1.25 A

COOLANT & CHIP CHUTE

Part #	Description
NOP-28471	Coolant Bottle Assy Internal
NOP-90767	Water Solenoid – internal coolant bottle
NOP-90938	Coolant Bottle Assy External
NOP-90946	Water Solenoid – external bottle
NOP-94604	Cable Assy External Bottle
NOP-90694	Filter Assy – coolant bottle
NOP-75158	Filter element
NOP-94598	Coolant Interface Board Assy – wired
NOP-77339	Fuse – coolant – 2.5 amp
NOP-29104	Sponge – 7E/7Ex (pack of 10)
NOP-75170	Tri – Cool (quart)
NOP-74241	Blue Water Line
NOP-90901	Chip Chute Assy
NOP-29106	Chip Chute Top (Clear part only)
NOP-90531	Chip Chute Top Assy (With manifold)
NOP-73061	Spring (chip chute)
NOP-28456	Hinge – chip chute cover
NOP-90373	Solenoid Assembly (Chip chute cover lift)
NOP-94509	Solenoid Wiring Warness

CUTTER BODY

Part #	Description
NOP-90833	Cutter Body Assy – hi luster
NOP-93148	Cutter Clamp – long
NOP-65232	Torx Screws – cutter clamp
NOP-87256	Torx Driver
NOP-93930	Groove Wheel – large
NOP-93410	Groove Wheel – small
NOP-90812	Multi Flute Cutter Assy
NOP-93131	Cutter Clamp – short/multi-flute
NOP-93148	Cutter Clamp – long (Main cutter)
NOP-65232	Torx Screws – cutter clamp
NOP-93072	Carbide Cutter (10 pk)
NOP-93074	Coated Carbide Cutter

7E & 7Ex Consumables & Repair Parts List

DRILL LIMIT SWITCHES (7Ex needs only switch; 7E needs all with switch*)

Part #	Description
NOP-90013	Upper Limit Switch – Drill
NOP-90014	Lower Limit Switch
NOP-29044	Bracket, Switch Drill 7Ex (need 1 if 7E)*
NOP-22100542	Screw 2-56x5/16 Button Head Cap Screw (7E needs 4)*
NOP-22100018	Screw 6-32x1/4 Socket Set Screw, Cup Point (7E needs 2)*
NOP-22100089	Screw 4-40x3/8 Button Head Cap Screw (7E needs 2)*
NOP-22100156	Screw 4-40x3/8 Socket Head Cap Screw (7E needs 2)*

DRILL

Part #	Description
NOP-90908	Drill Assy (7E Only)
NOP-90909	Drill Spindle Assy (7E Only)
NOP-90972	Groove Assy Upgrade Kit (7E Only)
NOP-90944	Groove Assy – no jumper – drill
NOP-94624	Drill – reverse direction jumper (7E groove)
NOP-29468	Drill Upgrade Kit (7Ex) – if no drill in machine contains drill & accessories
NOP-29195	Combo Drill Assembly (7Ex) – full drill
NOP-91004	Drill Spindle – combo drill (7Ex)
NOP-29209	Drill Bit – left hand – long life
NOP-29218	Drill Bit – long life – standard
NOP-93936	Groove Blade – drill
NOP-90915	Motor – spindle
NOP-90916	Motor – pivot
NOP-29207	Belt – drill
NOP-90692	Pin Gauge – 1.4 mm
NOP-77341	Fuse – Drill rotation/ 1.25 A
NOP-22100207	Screw 8/32 by 1/2 shcs ss (Drill screws to base of machine)

DOOR / CASE TOP

Part #	Description
7E Door	
NOP-90942	Door Replacement Kit (7E Only)
Individual Components	
NOP-90904	Door Roller Assy, pinned “shaft with o-rings” (7E)
NOP-29481	Door Motor Assembly (7E)
NOP-29126	Bracket Mount Door Switch “need 2” (7E)
NOP-90903	Door Assembly “Door with Bushings” (7E)
NOP-22100161	Bracket Screw (Door switch)- 4/40 by 5/8 shcs
NOP-90910	Door Switch (Single)
NOP-90981	Door Switch (Double)
NOP-22100077	Screw – (Door switch to bracket) 2/56 by 3/8 bhcs
NOP-29154	Door Bushings (Clear door)

NOP-73184	Door O-Rings
NOP-94595	Door Cable Harness (7E)

7Ex Door Components

NOP-90079	Door Assembly 7Ex ONLY
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INDIVIDUAL COMPONENTS

Part #	Description
NOP-29154	Door Bushings (Clear door)*
NOP-77820	Magnetic Safety Switch “Pilz” (7Ex)
NOP-77825	Cable Magnetic Safety Switch (7Ex)
NOP-29483	Door Roller Assembly , pinned “shaft & o-rings” (7Ex)
NOP-29482	Door Motor Assembly, Pinned (7Ex)
NOP-29270	Bracket Mount, Switch – upper/door closed (7Ex)
NOP-29271	Bracket Mount, Switch – lower/door open (7Ex)
NOP-22100161	Screw (bracket mount to machine) 4-40 x 5/8 SHCS
NOP-90910	Door Switch (Single)
NOP-73184	Door o-rings
NOP-22100077	Screw – (Door switch to bracket) 2/56 by 3/8 bhcs
NOP-29154	Door Bushings (Clear door)
NOP-94666	Door Cable Harness (7Ex)

OTHER CASE TOP COMPONENTS

Part #	Description
NOP-90911	Fan Assembly “115V” (7E Only)
NOP-90121	Fan Assembly “24V” (7Ex Only)
NOP-77221	E-Stop (7Ex)
NOP-94692	E-Stop Wiring Harness (7Ex)
NOP-82225	Lid Support Lift Cylinder
NOP-82227	Ball Socket – lift cylinder (Need 2)

SAFETY RELAYS & SWITCHES (7Ex)

Part #	Description
NOP-77221	E-Stop (7Ex)
NOP-94692	E-Stop Wiring Harness (7Ex)
NOP-77820	Magnetic Safety Switch “Pilz” (7Ex)
NOP-77825	Cable Magnetic Safety Switch (7Ex)
NOP-77397	Pilz Relay – (Same for both in 7Ex)
NOP-94690	AC Pilz Relay Cable
NOP-94691	Cable Pilz – interface to card cage

7E & 7Ex Consumables & Repair Parts List

ACCESSORIES & CONSUMABLES	
Part #	Description
NOP-87605	Pattern Blanks (ST109-C)
NOP-88501	6 Base x 3mm Test Poly Lenses (Use this until in stock NOP-92010571)
NOP-94504	Cheater Cord – stand vac to c-19
NOP-65411	Cleaning Wheel
NOP-87400	Dial Caliper
NOP-87450	3/16 – Long Handle Ball Driver
NOP-87452	3/16 – Tee Handle Wrench (Allen)
NOP-87462	3/32 – Tee Handle Wrench (Allen)
NOP-87256	Torx Driver
NOP-87445	Non Conductive Screw Driver (Adjusting power supply)
NOP-87501	Pin Extractor Tool
NOP-87179	Hex Key Set – 1/16 to 1/4 – L shape Allen
NOP-87410	Multi-Meter/ Volt Meter
NOP-90140	Vacuum Bag Set (25 count)
NOP-90145	Vacuum Bag Set (10 count)
NOP-77339	Fuse – Coolant – 2.5 amp
NOP-77341	Fuse – Drill Rotation/ 1.25 A
NOP-77320	Fuse (Universal Controller-7E) – 15 Amp
NOP-77336	Fuse (Controller 7Ex) – 6.3 Amp (Slow blow)
NOP-90177	Taper Plug (6 pk) 22mm
NOP-90178	Taper Plug (6 pk) 17mm
NOP-73168	Taper Plug (Individual) 17mm
NOP-73162	Taper Plug (Individual) 19mm
NOP-73166	Taper Plug (Individual) 22mm
NOP-27092	Probe Yips
NOP-73184	Door O-Rings
NOP-29154	Door Bushings (Clear door)
NOP-29104	Sponge – 7E/7Ex (Pack of 10)
NOP-90694	Filter Assy – coolant bottle
NOP-75158	Filter Element
NOP-75170	Tri-Cool (quart)
NOP-93936	Groove Blade – drill
NOP-93930	Groove Wheel – large (Dual polish)
NOP-93410	Groove Wheel – small (Dual polish)
NOP-93072	Carbide Cutter (10 pk)
NOP-93074	Coated Carbide Cutter
NOP-65232	Torx Screws – cutter clamp
NOP-29209	Drill Bit – left hand – long life
NOP-29218	Drill Bit – long life – standard
NOP-50060	Barcode Scanner (Serial)
NOP-87342-11	User Manual 7E
NOP-87607-11	User Manual 7Ex
NOP-85031	Dust Cover (7E)