

Laboratory **Accessories**



The World's Most Popular **Laboratory Presses**



High tensile steel with precision threads for parallelism and rapid daylight adjustment

Bolsters

Iron castings for minimum deflection

Hydraulics Heavy duty

cylinder and matched pressure gauge

Carver **laboratory** manual presses provide these benefits

Applications

Catalog No. 3851-0 Model C, 12 ton capacity

> · Materials research: ceramics, composites, construction materials, cosmetics, drugs, pharmaceuticals, powder metals, printed circuit boards, rubber, silicone and other elastomers, soil, thermoplastic resins and thermosets.

ARVER

- Quality and performance testing of physical properties: compression strength, flexural strength, shear strength, flow and color dispersion.
- Laboratory testing: ASTM test plaque or bar molds for polyethylene & polypropylene.
- · Laminating: credit cards, ID cards, plagues and printed circuit boards.
- Other applications: composite molding, compression molding, crushing, encapsulation, extrusion, forming, insert pressing, producing KBr pellets for infrared spectroscopy, metal forming (dimpling), insert molding, oil extraction, pelletizing, specimen preparation, splice molding,

Safety Shield

Standard on all new presses, recommended for all applications

Tie Rod Nuts

Dual nuts for precise daylight and parallel adjustment

Oversize Pressure Release Valve Ease of operation

Extension Handle For easy operation

The international standard For more than 100 years Carver hydraulic presses have been the standard for laboratories around the world. Carver Model C presses alone are in use in more laboratories than any other press. The current Carver line has been expanded and improved with more sizes, options, features, and quality performance than any other line of presses.

The widest choices Standard choices now include two-column and four-column, benchtop and floor standing, and manual and automatic presses with clamping capacities from 12 to 100 tons. Automatic "Auto Series" presses include user-friendly control system and integral safety enclosures. Accessories include new self-contained, electrically operated AutoPak hydraulic power unit for retrofit to existing manual Carver presses.

splitting chilled oils, transfer molding, and vulcanizing rubber stamps.

Specialized applications Special presses dedicated to specific applications include ASTM test plaque or bar molding, pellet making (KBr specimens for infrared and x-ray spectroscopy), laminating and rubber stamp molding.

Custom presses, too In addition to the models shown in this catalog, Carver designs and manufactures a wide variety of custom made presses and accessories to suit your specific application. Please consult the factory for any equipment not specifically listed in this catalog.

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More Choices, More Features, More Performance



How to select the right Carver press for your application:

1.	Determine if you want a general
	laboratory press or one dedicated
	to a special application.

General pages 4, 5, 6, 8, 9 **Special** pages 7, 10, 11

2. Determine clamp force and choose benchtop or floor standing model.

Benchtop

7.5 to 30 tonspages 4, 5, 7, 8, 9, 10, 11

Floor Standing

30 to 100 tonspages 6, 11

3. Decide if heated platens will be needed.

- Refer to specification tables for appropriate work area (platen size) and daylight opening (working height between platens).
- Refer to photos and descriptions to select two- or four-column configuration.
- **6.** Select heat control level desired and platen options on page 12.
- Refer to pages 12 thru 15 to select appropriate accessories for your application.
- **8.** Note the catalog numbers of your selections on your letterhead and fax to 260-563-7625.

Or, contact us for prompt assistance: phone: 260-563-7577 email: carverpress@acscorporate.com

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Cover photo: Carver presses molding medical components.

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Standard Presses

12, 25 and 30 ton capacity

For pelletizing, destructive testing, fluid extraction, pressure forming, etc.













No. 3850

No. 3851

No. 3968

No. 3853

No. 3855 No. 3970

12 TON PRESSES

No. 3850

(Model Mini C) Twelve ton manual, two-column hydraulic press with 6" x 6" square work area. Compact and portable, requiring less bench space than our Model C. This press is ideal for constricted bench space or glove box applications, as well as field work. It features adjustable daylight, steel construction for rigid precision and includes safety shield for operator protection. Easy-to-read dual scale gauge, reading in pounds force and metric tons.

No. 4350

Pellet press with 4" round platen. Available with and without pellet die (see page 10).

No. 3851

(Model C) Twelve ton, manual, two-column hydraulic lab press. Similar to Mini C above, but larger, heavier construction with daylight to 18". Easy-to-read dual scale gauge, reading in pounds force and metric tons.

No. 3968

(Model 12-10) Twelve ton, manual, twocolumn hydraulic press, with 10" x 7" work area. Similar to No. 3851 press described above, but heavier construction with fully guided moving platen and daylight to 16". Easy-to-read dual scale gauge, reading in pounds force and metric tons.

No. 3969

(Model 12-12) Twelve ton, manual, four-column hydraulic press. Fully guided moving platen assures parallelism over 12" x 12" surface. Easy-to-read dual scale gauge, reading in pounds force and metric tons.

25 TON PRESSES

■ No. 3853

(Model M) Twenty-five ton, manual, twocolumn hydraulic press, with a 9" x 9" work area. Daylight opening is adjustable. Rigid cast iron and steel construction for precision and durability. Easy-to-read dual scale gauge, reading in pounds force and metric tons.

No. 3855

(Model 25-12) Twenty-five ton, manual, fourcolumn hydraulic press with a 12" x 12" work area. Easy-to-read dual scale gauge, reading in pounds force and metric tons.

30 TON PRESSES

No. 3970

(Model 30-12) Thirty ton, manual, four-column, hydraulic press with a 12" x 12" work area. Has two-speed pump, first stage for rapid closing and second for pressing mode. Easy-to-read dual scale gauge, reading in pounds force and metric tons.

Note: Existing Carver presses can be automated with an optional AutoPak power package (see back cover).

C € available

NOTE: Standard manual presses come with analog gauge (as shown in pictures). Digital gauges available upon request. Consult factory for details. Information on digital gauges may also be found on page 13.

Specifications

Catalog Number with shield	3850	4350	3851	3968	3969	3853	3855	3970
Model	Mini C	Pellet	Model C	12-10	12-12	Model M	25-12	30-12
Old Press*	3393	3620	2086	3724	2696	2089	2702	2698
Clamping Force Tons (lb)	12 (24,000)	12 (24,000)	12 (24,000)	12 (24,000)	12 (24,000)	25 (50,000)	25 (50,000)	30 (60,000)
Platens (in)	6 x 6	4 round	6 x 6	10 x 7	12 x 12	9 x 9	12 x 12	12 x 12
Ram Stroke (in)	5.1	5.1	5.1	5.1	5.1	6.5	6.5	6
Daylight Opening (in)	.75 to 7	0 to 5.50	.75 to 18	1 to 16	1 to 15	.75 to 16	1 to 14	1 to 17
Footprint w x d (in)	12 x 16	10.25 x 14	15 x 16	17 x 18	21 x 28	19 x 24	21x 28	24 x 27
Height (in)	22	24.4	39	37	37	42	37	43
Weight (lb)	125	115	200	345	560	350	600	625

^{*}Use to refer to old models which are no longer available.

Laboratory Accessories for Carver Presses

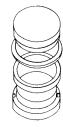
Carver Molds and Dies

See pages 10-11 for information on pellet molds and dies and ASTM specimen molds.



Tile Mold

Plated steel or stainless steel frame with polished steel top and bottom covers. Can be used up to 400°F to form plastic or rubber sheets. Use with Carver heated, or heated and cooled platens.



Color Dispersion Disc Mold

For making plastic film to check color dispersion or clarity. Provides precise film thickness and parallelism. Made of stainless steel or hardened tool steel. Includes die, upper punch, lower punch and 3 spacers for optional film thicknesses.

Molds, Dies and Test Cylinder Specifications

Catalog Number	Description	Sample Dimensions	Sample Thicknesses	Maximum Applied Load
818701D	Tile Mold, 440 Stainless Steel	50mm x 50mm	1mm, 2mm & 5mm	N/A
818702D	Tile Mold, 440 Stainless Steel	100mm x 100mm	1mm, 2mm & 5mm	N/A
818703D	Tile Mold, 440 Stainless Steel	150mm x 150mm	1mm, 2mm & 5mm	N/A
818704C	Color Dispersion, 440 Stainless Steel	50mm diameter	0.1mm, 0.2mm & 0.5mm	N/A
818705C	Color Dispersion, 440 Stainless Steel	100mm diameter	0.1mm, 0.2mm & 0.5mm	N/A
4417	Pellet Die, 440 Stainless Steel	6mm	N/A	3,500 Lbs Max
4946	Pellet Die, 440 Stainless Steel	12mm	N/A	13,000 Lbs Max
3619	Pellet Die, 440 Stainless Steel	13mm	N/A	18,000 Lbs Max
4369	Pellet Die, 440 Stainless Steel	25mm	N/A	47,000 Lbs Max
3902	Pellet Die, 440 Stainless Steel	31mm	N/A	60,000 Lbs Max
3876	Pellet Die, 440 Stainless Steel	40mm	N/A	70,000 Lbs Max
2090-0	Test Cylinder, 440 Stainless Steel	1.125"	N/A	19 US Tons Max
2091-5	Test Cylinder, 440 Stainless Steel	2.25"	N/A	51 US Tons Max
818698D	Tile Mold, 440 Stainless Steel	4" x 4"	1mm, 2mm & 5mm	N/A
818699D	Tile Mold, 440 Stainless Steel	6" x 6"	1mm, 2mm & 5mm	N/A
818700D	Tile Mold, 440 Stainless Steel	10" x 10"	1mm, 2mm & 5mm	N/A

Special Application Test Cylinder (See page 7)

Catalog Number	Description
5456	Proppant Crush Test Cylinder based on ISO 13503-2:2006(E) Including: Cell: 2" ID x 3" tall, Wall thickness > 0.5", Constructed of 4340 alloy Steel with Rockwell-C Hardness of > 43 Piston: 2" diameter x 3" length, Constructed of 4340 alloy Steel with a Rockwell-C hardness of > 43



■ No. 2092 Swivel Bearing

Carver presses are frequently used for crushing and breaking tests of standard 2" x 2" cubes and 2" x 4" cylinders of concrete samples or similar crushing tests. Swivel Bearing Plates adjust slightly to the sample to assure proper application of pressure. **Requires safety shield.**



No. 2096CE & 2096-1CE Two Gauge Manifolds

The 2096CE is for most standard manual presses, except the Mini C. The 2096-1CE is specifically designed for the Mini C Model Press only. These manifolds permit mounting of both high (right) and low (left) range gauges for more precise application of pressure. Hand operated shut-off

valve protects low pressure gauge when using high pressure. Analog Gauges sold separately. (see page 15)



No. 818744C Punch and Die Holder

This punch and die holder permits off-line testing of pellet and tablet samples. It works with standard BB2 production tooling in most Carver presses, including Auto Series presses. The set includes an anodized aluminum holding fixture, steel shims to adjust for various size samples, and an anodized aluminum ejector. (does not includes dies)



No. 6306 Digital Gauge

Optional digital force gauges for manual presses. Available in 10 or 100 pound increments. They are scaled per press model. Approximate accuracy: ±1% of reading between 1,000 lbs up to tonnage maximum of press (12, 25 or 30 tons). Consult factory for press details.

Laboratory Accessories for Carver Presses





FLOOR STANDS - Designed for most vintage models

5 11 18 11 1						
Catalog/Item Number	Description	Dimensions H x W x D	Weight			
223160C	Press Stand AccuStamp presses	30" x 23.5" x 23.5"	150#			
223171D	Press Stand (2 & 4 column presses)	30"x 19" x 19"	125#			
223215C Press Stand (2 & 4 column presses with 6" casters)		30" x 36" x 36"	260#			
Press Stand for Standard 223219D Auto Series presses (excluding 48 ton models)		30" x 47" x 22.5"	280#			
2232290	Press Stand for Standard Auto Series presses with 6" casters (excluding 48 ton models)	30" x 47" x 22.5"	280#			



SAFETY SHIELDS

Catalog/Item	Description (Fits most vintages with			
Number	or without heat)			
3404	Mini "C" Presses			
3295	Model "C" Presses			
3253	Model "M" Presses			
3322	Presses with 10" x 7" Work Area			
3418	Presses with 12" x 12" Work Area			
4427	Presses with 15" x 15" Work Area			



Repair parts for (gray) Carver hydraulic units. Repair kits contain hydraulic oil, seals, gaskets, pins, fittings, valve parts and jack handle bracket for quick maintenance. (restrictions apply, visit carverpress.com for details)

- No. 3729 12 ton hydraulic unit repair kit
- No. 3730 25 ton hydraulic unit repair kit
- No. 319002 pump assembly for 12 & 25 ton jacks

ACCESSORIES

Catalog number cross reference index

HEATING/COOLING

Platens for Model C Presses (also available in deg C upon request)

2101 Set of (2) 6"x 6"

heated, aluminium platens, thermostatically controlled,

150° to 500°F (Specify 115 or 230V)

2102.1 Set of (2) 6" x 6"

heated, steel platens, thermostatically controlled, 150° to 500°F,

(Specify 115 or 230V)

3796 Set of (2) 6" x 6", heated, steel

platens, digitally controlled, 650°F, 115V

4286 Set of (2) 6" x 6", heated, steel platens, digitally

controlled, 650°F, 230V

2103.1 Set of (2) 6" x 6" heated and cooled, steel platens, thermo-

statically controlled, 150° to 500°F with hoses (Specify 115 or 230V)

2104 Set of (2) 6" x 6"

aluminum cooling plates, with valve



3772 Set of (2) 6" x 6" heated & cooled steel platens, digitally controlled, 650°F, 115V

3988 Set of (2) 6" x 6" heated & cooled

steel platens, digitally controlled, 650°F, 230V

2105 Set of (2) 6" x 6"

aluminum steam plates, with insulation and braided hoses

Platens for Model M Presses (also available in deg C upon request)

2107.1 Set of (2) 9" x 9" thermostatically

> heated, steel platens, digitally controlled,

heated, steel platens, controlled, 150° to 500°F, (Specify 115 or 230V) 3973

Set of (2) 9" x 9", 650°F, 230V

6316

2108.1 Set of (2) 9" x 9" heated and cooled,

steel platens, thermostatically controlled, 150° to 500°F with hoses (Specify 115 or 230V)

2109 Set of (2) 9" x 9"

steel steam heating plates, with insulation and braided hoses

3972 Set of (2) 9" x 9", heated and cooled,

steel platens, digitally controlled, 650°F, 230V

Platens for four-column presses (also available in deg C upon request)

> Set of (2) 12" x 12", heated, steel

platens, digitally controlled. 650°F, 230V

3749 Set of (2) 12" x 12" heated and cooled

steel platens, digitally controlled. 650°F, 230V

Set of (2) 15" x 15", heated, steel

platens, digitally controlled, 650°F, 230V

Accessories for Many Applications

MOLDS AND DIES (See page 10 & 13)		4163 (100) 10" x 10" mylar			SAFETY SHIELDS (See page 14)		Two Gauge Manifold (See page 13)	
Test Cylinde and Molds	rs, Pellet Dies,		sheets for 8" x 8" molds	3404	For most Mini C Presses	2096 (€ 2096 (€-1	Two gauge manifold (mini C only)	
2090-0	Test cylinder outfit, 1.125" I.D.	Tile Molds a	and Color Dispersion	3295	For most Model C Presses	2030 ((1	(mini o omy)	
2090-1	Set of 12 filter pads for 1.125" ID TCO's	(See page 1	3) 4" x 4" tile mold,	3253	For most Model M Presses	68		
2091-5	Test cylinder outfit all stainless steel, 2.25" I.D.	020002	1mm, 2mm or 5mm thick, Stainless steel	3322 3418	For most presses with 10" x 7" platens For most presses			
2091-1	Set of 12 filter pads	818699D	6" x 6" tile mold,	3416	with 12" x 12" platens	Dial Thermo	ometers	
	for 2.25" ID TCO's		1mm, 2mm or 5mm thick,	4427	For 3690 and 3693 with 15" x 15"	385001	Dial face	
237005	Stainless steel pan for either TCO size	0407000	Stainless steel		platens		thermometer 150°F to 750°F	
4417	6mm pellet die 440 stainless steel	818700D	10" x 10" tile mold, 1mm, 2mm		ANALOG	385019	Dial face thermometer	
4946	12mm pellet die 440 stainless steel		or 5mm thick, Stainless steel		GAUGES/ THERMOMETERS		50°C to 400°C	
3619	13mm pellet die for KBr pellets	818701D	50mm x 50mm tile mold, 1mm, 2mm or 5mm thick,		(See page 13)	(Specify pres	SS Serial Number)	
4369	25mm pellet die		Stainless steel	Gauges for	Model B/C	3912	12 ton hydraulic unit	
3902	440 stainless steel 31mm pellet die,	818702D	100mm x 100mm tile mold, 1mm,	381005	Gauge normally	3925	25 ton hydraulic unit	
3876	440 stainless steel 40mm pellet die,		2mm or 5mm thick, Stainless steel		furnished with Model C press,	321007	Pump and	
3010	440 stainless steel	818703D	150mm x 150mm tile mold, 1mm,		0 - 24,000 lbs applied force,		reservoir for 30 ton presses	
5456	2" ID Proppant Crush Test Cylinder		2mm or 5mm thick Stainless steel		11 metric tons, 200 lb increments	3467	Hydraulic cylinder for 30 ton presses	
	based on ISO 13503-2:2006(E)	818704C	50mm diameter color dispersion	381042	Model B/C gauge, 0 - 500 lbs,	3729	12 ton repair kit	
0000	Page 7 & 13		disc, .1mm, .2mm or .5mm thick,		.225 metric tons, 5 lb increments	3730	(gray only) 25 ton repair kit	
2092	Swivel bearing plate (Requires safety		Stainless steel	381001	Model B/C gauge,	2170	(gray only) Carver hydraulic fluid	
2095	shield) KBr buffer plate	818705D	100mm diameter color dispersion		0 - 1,000 lbs, .45 metric tons, 10 lb increments		(pint size)	
818744C	Pharmaceutical		disc, .1mm, .2mm or .5mm thick,	381002	Model B/C gauge,	AUTOPAK™ (See page 1	POWER UNITS 6)	
	pellet die holder		Stainless steel		0 - 2,000 lbs, .9 metric tons,	3946NE	AutoPak/12,	
(See page 7		TESTING/PI		204002	20 lb increments		for 12 ton existing manual presses.	
4079	4" x 4" chase	Polished Pla (For laminat	ates ing applications)	381003	Model B/C gauge, 0 - 5,000 lbs,	3947NE	AutoPak/25, for 25 ton existing	
4080	assembly, Teflon 4" x 4" chase	235020	Plate with #8 mirror finish,		2.25 metric tons,50 lb increments		manual presses.	
	assembly, Stainless steel		1 side polished,	381004	Model B/C gauge, 0 -10.000 lbs.	3948NE	AutoPak/30, for 30 ton existing	
4081	4" x 4" chase assembly, Brass	235021	6" x 6" x .03" thick Plate with #8		4.5 metric tons, 100 lb increments		manual presses.	
4082	6" x 6" chase		mirror finish, 1 side polished,	Gauges for		FLOOR STAI (See page 1		
4083	assembly, Teflon 6" x 6" chase	235022	9" x 9" x .03" thick Plate with #8	381008	Gauge normally	223160C	Press stand for	
	assembly, Stainless steel	203022	mirror finish,		furnished with Model M press,	223171D	AccuStamp presses Press stand for	
4084	6" x 6" chase		1 side polished, 9" x 12" x .03" thick		0 - 50,000 lbs applied force,	-	2 column and 4 column presses	
4085	assembly, Brass 8" x 8" chase	235023	Plate with #8 mirror finish.		22.5 metric tons, 500 lb increments	223215C	Press stand for	
	assembly, Teflon		1 side polished, 12" x 12" x .03"	381006	Model K/M Gauge,		2 column and 4 column presses	
4086	8" x 8" chase assembly, Stainless steel		thick		0 - 5,000 lbs, 2.25 metric tons, 50 lb increments	223219D	with casters Press stand for	
4087	8" x 8" chase	Heated Test	•	381007	Model K/M Gauge,		standard Auto Series presses (excluding	
4161	assembly, Brass (100) 6" x 6"	2472	Heating jacket with 1.125" test cylinder		0 - 10,000 lbs, 4.5 metric tons,	000000	48 ton models)	
	mylar sheets for 4"x 4" molds	2417	Heating jacket with 2.25" test cylinder	381176A	100 lb increments Model K/M Gauge,	223229C	Press stand for standard Auto Series	
4162	(100) 8" x 8"			COTTION	0 - 1,000 lbs,		presses with casters (excluding	
	mylar sheets for 6" x 6" molds				.45 metric tons, 10 lb increments		48 ton models)	

Add Power to Existing Manual Presses

AutoPak™ Power Units

- Self contained 1/4 HP hydraulic power unit
- Develops maximum clamping force for most of our 12, 25 and 30 ton manual press models (minimum 1.000 lbs)
- Six feet of hose for connecting to existing Carver hand operated press
- Programmable control system (pressure only)
- Full touch screen interface
- 10 recipe storage capability
- 20 programmable segments of clamp force, cure time per recipe
- Programmable in units of Kg, US Tons, Metric Tons & Pounds
- Automatic bump sequence (can be programmed in any or all segments)
- Two "anti-tie-down" close buttons for operator safety
- Interlocked switch for existing safety shield door included (See page 14 for recommended safety shield)
- Electrical disconnect (non-fused)
- Approximate Dimensions & Weight: 24" L x 20" W x 21" H, 130 Lbs

Catalog No.	Model	Capacity (tons)	Supply Voltage (230V available upon request)
3946-NE	AutoPak/12	0.5 - 12	115V 1-Ph
3947-NE	AutoPak/25	0.5 - 25	115V 1-Ph
3948-NE	AutoPak/30	0.5 - 30	115V 1-Ph

Specify press model and serial number when ordering



Custom Presses

Customized presses can be configured from the many options and accessories listed in this catalog. In addition, Carver engineers will work with you to design special presses for your particular application. Consult the factory for more information. Press shown is a custom designed Auto Series four column press with casters and built in floor stand.



Carver Inc. warrants all equipment we manufacture to be free from defects in workmanship and material when used under recommended conditions. The Company's obligation under this warranty is limited to those parts which within twelve (12) months from delivery of equipment to original purchaser are returned to the factory with transportation prepaid, and upon examination shall disclose them to be defective. Carver neither assumes, nor authorizes any other persons to assume any liability in connection with the sale of its equipment except under the conditions of this warranty.

This warranty does not cover any labor charges for replacement of parts, adjustment, repair or any other work done. This warranty shall not apply to any apparatus which in our opinion has been subjected to misuse, negligence or pressures in excess of limits recommended, or which shall have been repaired or altered outside of the Carver factory.

Replacement of defective material(s) will be FOB the Carver factory. Replacement of component parts not of its manufacture will be limited to the warranty of the manufacturers of such parts.



Carver, Inc. and Wabash MPI are sister companies located in Wabash, Indiana. For over 70 years Wabash MPI has met the challenge of designing and manufacturing standard and special presses for industry worldwide. Parts, service and support information are readily available. Ask to see installations of Carver or Wabash presses performing productively in your area. Consult us to discuss all of your molding requirements.



Wabash manufactures 15 to 1,000 ton molding machines for elastomers and thermoplastics, Compression molding machines, C-Frame presses, Vacuum chamber molding and laminating presses, Die-cut and Trim presses. For more information on any of our presses call, fax or visit our website.









Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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