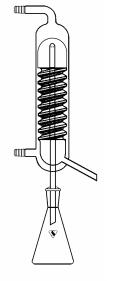


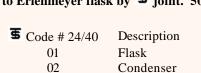
07-1000: DISTILLATION APPARATUS, CYANIDE - For use in determination of cyanide in water in accordance with ASTM D2036

Code #	Description
01	Complete as shown
02	Flask 1000ml
03	Inlet tube
04	Cold finger jacket
05	Cold finger
06	Absorber tube with coarse fritted disc
07	Absorber jacket



07-1020: DISTILLING APPARATUS - Inverted Friedrich spiral condenser with holes in the top for vapors to exit. Connected to Erlenmeyer flask by $^{\Xi}$ joint 500ml flask. Vapors are cooled and condensed descending the spiral and exit the side arm.

Description
Flask
Condenser
Complete



03

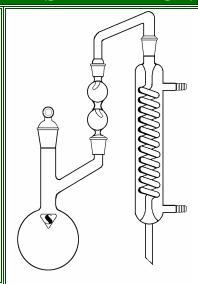
07-1040: DISTILLING APPARATUS - Standard Friedrich Condenser connected to Erlenmeyer flask by \blacksquare joint. 5000ml flask.

To Order, Call Specialty Glass, Inc. Toll Free 1-800-899-2137

Complete

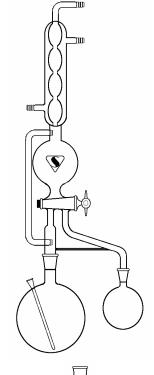
07-1060: DISTILLATION APPARATUS - For general purpose distillations.

Code #	Joint	Description
01	24/40	Trap
02	24/40	1000ml Flask
03	24/40	3000ml Flask
04	24/40	5000ml Flask
05	24/40	300mm Condenser
06	24/40	400mm Condenser
07	24/40	500mm Condenser
08	24/40	Connecting Adapter



07-1080: DISTILLATION APPARATUS - Solvent re-purification. For use in distillation, reflux, storage and dispensation of solvents. Double oblique Teflon® stopcock allows for reflux, sample take-off, or storage of solvent. All joints are $24/40\,\Xi$.

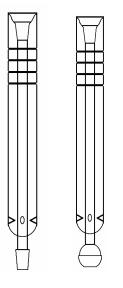
Code #	Description	Flask Size
01	Distilling head only	
02	Boiling flask with thermo-well	1000ml
03	Boiling flask with thermo-well	2000ml
04	Boiling flask with thermo-well	3000ml
05	Dispensing flask	500ml
06	Dispensing flask	1000ml



07-1100: DISTILLATION COLUMN, HEMPELL - **5** joints form the ends of this plain column. The bottom has small indentations for use as support for packing material. Length of column is measured from the bottom of the top joint to the top of the indentions.

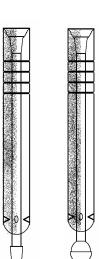
Column Length mm	ID 12.5mm Code 24/40 ■	ID 19mm Code 24/40 \$	ID 25mm Code 29/42 ■
300	01	05	10
400	02	06	11
500	03	07	12
600	04	08	13
900		09	14





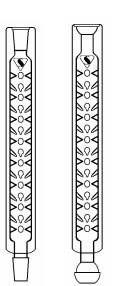
07-1120: DISTILLATION COLUMN, HEMPEL, VACUUM JACKETED – The jacket allows the column to be used as a condenser. With indentations to support packing material.

Column Length mm	ID 12.5mm 5 Code 24/40	ID 19mm ■ Code 24/40	ID 25mm ■ Code 29/42	ID 19mm \$ Code 35/25
300	01	05	10	15
400	02	06	11	16
500	03	07	12	17
600	04	08	13	18
900		09	14	19



07-1140: DIS TILLATION COLUMN, HEMPEL, VACUUM JACKETED, SILVERED - Same as 07-1120, except column is silvered.

Column Length mm	ID 12.5mm 5 Code 24/40	ID 19mm 5 Code 24/40	ID 25mm ■ Code 29/42	ID 19mm 5 Code 35/25
300	01	05	10	15
400	02	06	11	16
500	03	07	12	17
600	04	08	13	18
900		09	14	19

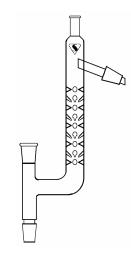


07-1180: DISTILLATION COLUMN, VIGREUX - Vacuum jacketed Vigreux style column with indentations that run the entire length of the column for improved vapor-liquid contact. Column length refers to the effective length, measured from the lowest to highest indent in the column.

Column Length mm 150 200 300 450 600 900	Overall Length mm 300 350 450 600 750 1050	ID 19mm 24/40 \$ 01 02 03 04 05 06	ID 25mm 29/42 \$ 09 10 11 12 13 14	ID 25mm 35/25 \$ 17 18 19 20 21 22
1500	1650	08	16	24

07-1200: DISTILLING HEAD, VIGREUX-CLAISEN - Claisen-type head with a Vigreux column as a side arm. The top is a $10/30^{\frac{1}{5}}$ which will accommodate a 3" immersion thermometer.

Code #	Joint Size	Column Height mm	Height X Width mm
01	14/20	100	250 x 110
02	14/20	200	350 x 110
03	24/40	200	435 x 180
04	24/40	250	475 x 180
05	24/40	300	525 x 180
06	29/42	200	440 x 195
07	29/42	250	490 x 195
08	29/42	300	540 x 195



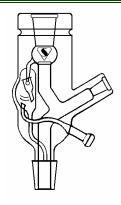
07-1220: DISTILLING COLUMN, OLDERSHAW, PERFORATED PLATE - Plain, without jacket. Column consists of a series of sealed-in perforated plates, each with a weir to maintain the liquid level and a downcomer which directs the reflux to the next lower plate. Ascending vapors pass through the perforations to form uniform bubbles in a constant depth of liquid flowing across each plate. With \$\frac{1}{5}\$ joints.

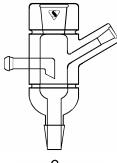
Code #	# of Plates	Plate Diameter	▼ Joint
01	5	28	29/42
02	10	28	29/42
03	15	28	29/42
04	20	28	29/42
05	30	28	29/42
06	40	28	29/42
07	5	50	55/50
08	10	50	55/50
09	15	50	55/50
10	20	50	55/50
11	30	50	55/50
12	40	50	55/50

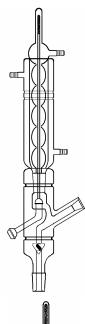
07-1240: DISTILLING COLUMN, OLDERSHAW, PERFORATED PLATE - Plain, without jacket. Same as 07-1220 except with \$\frac{1}{2}\$ joints.

Code #	# of Plates	Plate Diameter	≸ Joint
01	5	28	28/12
02	10	28	28/12
03	15	28	28/12
04	20	28	28/12
05	30	28	28/12
06	40	28	28/12
07	5	50	50/30
08	10	50	50/30
09	15	50	50/30
10	20	50	50/30
11	30	50	50/30
12	40	50	50/30











07-1280: LIQUID DIVIDING HEAD, SHELL DESIGN - Magnetically controlled tilting bucket type. Top and bottom $\overline{\$}$ joints are available in either $\overline{\$}$ 29/42 or $\overline{\$}$ 50/50. Take-off tube is $\overline{\$}$ 18/9 and thermometer well is $\overline{\$}$ 10/30. Vacuum jacketed and silvered to minimize heat loss. Jacket is internally bellowed to allow for expansion.

Code#	ቜ Joint
01	29/42
02	50/50

07-1300: COLUMN FEED ADAPTER - For use in providing a feed entrance between two distilling columns. Inlet tube as an 18/9 ball joint. Top and bottom joints are **5**. Thermometer well is **5** 10/30. Vacuum jacketed and silvered.

Code #	Joint
01	29/42
02	50/50

07-1320: VAPOR DIVIDING HEAD, SHELL DESIGN - Incorporates a reversed socket dividing valve that prevents distillate being taken off when valve is closed during reflux cycle. Vapor head is vacuum jacketed and silvered. Allihn type high efficiency condenser is vacuum jacketed. The standard head has a \$\frac{1}{3}\$ 29/42 column joint, a \$\frac{1}{3}\$ 10/30 thermometer joint and \$\frac{1}{3}\$ 18/9 ball joint on side arm. Furnished with valve rod.

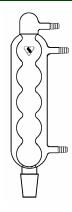
Code #	Description
01	Complete Assembly as Shown - 29/42 1" ID
02	Complete Assembly 5 50/50 – 2" ID
03	Condenser Only 5 29/42
04	Condenser Only 5 50/50
05	Vapor Head 5 29/42
06	Vapor Head 5 50/50

07-1340: CONDENSER, HIGH CAPACITY - For use with .07-1320 Vapor Dividing Head. Condenser has an extra cooling coil in addition to the cooling jacket. Vacuum jacketed.

Code #	Description
01	5 29/42
02	s 50/50

 $07\text{-}1360\colon$ REFLUX CONDENSER, ALLIHN - For use with 07-1280 or 07-1320 distilling heads.

Code #	Description
01	s 29/42
02	雪 50/50



No Drawing Available

07-1350: DC POWER SUPPLY

07-1380 FLEXOPULSE TIMER

A synchronous motor-driven repeat cycle timer used with 07-1400A or 07-1400B electromagnet. Setting range from .5 seconds to 120 seconds max. 115VAC. 60hz.



07-1400-A ELECTROMAGNET

For use with dividing head 07-1320 or 07-1340. 115VAC. 60hz.



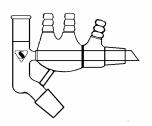
07-1400-B ELECTROMAGNET

Donut style electromagnet for use with dividing head 07-1280. 35VDC.



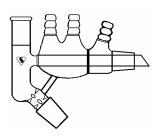
07-1420 DISTILLING HEAD, SHORT PATH: For small quantity distillations. Side and lower joints are the same size. Top thermometer joint is $\frac{1}{5}$ 14/20.

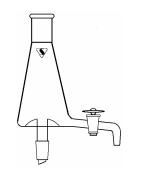
Description
5 24/40
s 29/42
s 14/20
5 19/22

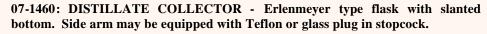


07-1440: DISTILLING HEAD, SHORT PATH, VIGREAUX: For small quantity distillations. Side and lower joints are the same size. Top thermometer joint is \$\overline{\mathbf{5}}\$ 14/20. With Vigreaux indentations for increased surface area.

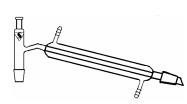
Code #	Description
01	5 24/40
02	5 29/42
03	s 14/20
04	s 19/22





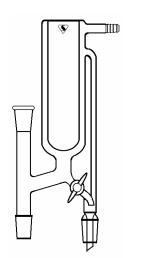


Code #	Stopcock	s Joint
01	Glass	24/40
02	Glass	29/42
03	Teflon	24/40
04	Teflon	29/42
05	Glass	
06	Teflon	



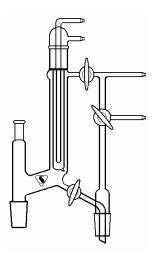
07-1480: DISTILLING HEAD – Simple distillation head with a condenser sealed to the adapter at a 75° angle. The top outer joint on the 14/20 size can be converted to a 10/18 thermometer joint by using a bushing adapter. The side arm is sealed at a height for use with a 1" immersion thermometer. The inner drip tip joint on the condenser and inner joint on the uptake tube are the same size.

Code #	s Joint	Code #	≸ Joint
01	24/40	03	28/12
02	29/42	04	35/25



07-1520: DISTILLING HEAD – Dewar style distillation head for use with low boiling point solvents providing a rapid return of condensed liquid. The reservoir can be charged with dry ice/acetone or liquid nitrogen. Head has a drop counter on the receiver tube and a 10/30 outer joint for use with a 3" immersion thermometer joint. Reservoir has a cooling capacity of approximately 250ml. Available with glass or Teflon stopcocks. Volume of reservoir approximately 500ml.

Code # 01 02 03 04	Stopcock Glass Glass Teflon Teflon	5 Joint 24/40 29/42 24/40 29/42	∌ Joint
05	Glass	23142	35/25
06	Teflon		35/25



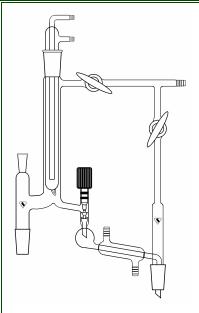
07-1540: DISTILLING HEAD, VACUUM TYPE – The position of the cold finger condenser allows an adjustment of the reflux ratio. Removal of distillate or a receiver change is possible without interrupting the distillation process due to the positioning of the stopcocks. The addition of a 0-4mm metering valve in the receiver arm allows for the regulation of distillate flow. A short water condenser is sealed into the distillate arm. Stopcocks are all 4mm bore Teflon.

Code #	Stopcock	s Joint
01	Glass	24/40
02	Glass	29/42
03	Teflon	24/40
04	Teflon	29/42

Replacement Components	Glass Code#	Teflon Code #
Distilling Head Only, Stopcocks, 24/40	05	09
Distilling Head Only, Stopcocks 29/42	06	10
Cold Finger Condenser Only, 29/42	07	11
Replacement 4mm Plug	08	12

07-1560: DISTILLING HEAD, VARIABLE REFLUX – The position of the cold finger condenser allows an adjustment of the reflux ratio. Removal of distillate or a receiver change is possible without interrupting the distillation process due to the positioning of stopcocks. The addition of a 0-4mm metering valve in the receiver arm allows for the regulation of distillate flow. A short water condenser is sealed onto the distillate arm. Stopcocks are all 4mm bore Teflon.

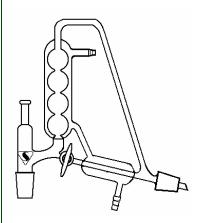
Code #	Column and Receiver Inner Joint Size	Approx. Height x Width mm
01	24/40	470 x 290
02	29/42	475 x 290
03 04	Replacement 0-4mm Metering Plug Replacement 4mm Teflon Plug	



07-1580: DISTILLING HEAD, VARIABLE REFLUX - \blacksquare joint at top allows usage of 3" immersion thermometer. A glass stopcock allows the varying of the reflux ratio.

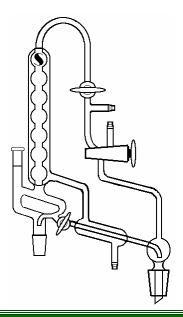
Code #	s Joint
01	24/40
02	29/42
03	35.25

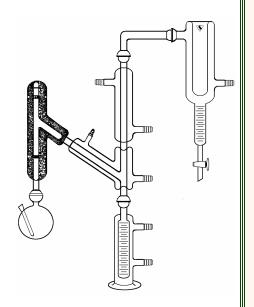
Please specify either **5** or **9** joints.



07-1600: DISTILLING HEAD - **5** 10/30 joint allows usage of a 3" immersion thermometer. Stopcocks, either glass or Teflon, permits control of reflux ratio and vacuum. May be operated at either atmospheric or vacuum.

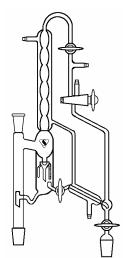
Code #	Stopcock	s Joint
01	Glass	24/40
02	Glass	29/42
03	Teflon	24/40
04	Teflon	29/42
05	Glass	24/40
06	Teflon	29/42







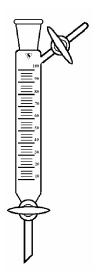
Code #	Description
01	Complete Assembly
02	Flask, 500ml, Quartz, T/well
03	Flask, 500ml, Pyrex, T/well
04	Receiver, 200ml, Graduated
05	Receiver, 1000ml, Graduated
06	Elbow Adapter
07	Cold Trap, 15ml Graduated
08	Cold Trap, 15ml Graduated with Glass Stopcock.
09	Thermocouple
10	Column/Condenser, Silvered, Vacuum Jacketed.



07-1640: DISTILLING HEAD, MAGNETIC CONTROL - Use of an electromagnetic coil positioning the funnel allows distillate to be taken off into the receiver or returned to the flask. Stopcock, either glass or Teflon®, in the discharge tube allows receivers to be changed without interruption of procedure.

Code #	Stopcock	▼ Joint
01	Glass	24/40
02	Glass	29/42
03	Teflon	24/40
04	Teflon	29/42
05	Glass	24/40
06	Teflon	29/42

Uses 07-1400B Electromagnet

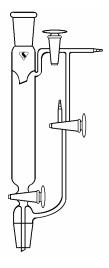


07-1660: DISTILLING RECEIVER, GRADUATED - Supplied with either glass or Teflon® stopcocks and **⋾** or **⋾** joints. The vacuum connection is above the graduations and slanted upward.

		G	lass Code	#	Te	eflon Code	#
Capacity ml	Sub- Division ml	\$ Joint 35/25	5 Joint 248/40	5 Joint 29/42	≸ Joint 35/25	5 Joint 24/40	5 Joint 29/42
50ml	1	01	06	11	16	21	26
100ml	1	02	07	12	17	22	27
250ml	2	03	08	13	18	23	28
500ml	5	04	09	14	19	24	29
1000ml	10	05	10	15	20	25	30

07-1680: DISTILLING RECEIVER - Supplied with either glass or Teflon® stopcocks and \$\overline{\sigma}\$ or \$\overline{\sigma}\$ joints. An all purpose receiver enables the user to take contents of receiver without disturbing the vacuum of the system.

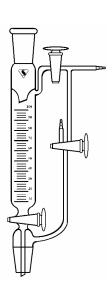
		Glass Code #		T	eflon Code #	#
Capacity	≸ Joint	■ Joint	s Joint	≸ Joint	≸ Joint	s Joint
ml	35/25	24/40	29/42	35/25	24/40	29/42
50ml	01	04	07	10	13	16
100ml	02	05	08	11	14	17
250ml	03	06	09	12	15	18

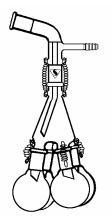


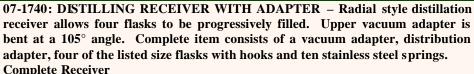
07-1700: DISTILLING RECEIVER, GRADUATED - Supplied with either glass or Teflon® stopcocks and \blacksquare or \blacksquare joints. An all purpose receiver enables the user to take contents of receiver without disturbing the vacuum of the system.

		Glass Code #		Teflon Code #		#	
Capacity	Sub- Division	≸ Joint	s Joint	s Joint	≸ Joint	s Joint	s Joint
ml	ml	35/25	248/40	29/42	35/25	24/40	29/42
50ml	1	01	04	07	10	13	16
100ml	1	02	05	08	11	14	17
250ml	5	03	06	09	12	15	18

Please specify joint type.





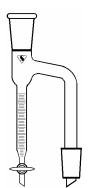


Complete Receiver		
Code #	Joint Size	Receiver Capacity ml
01	14/20	15
02	19/22	15
03	24/40	50
Replacement Compon	ents for 14/20 Size	
Code #	Description	Joint Size
04	Vacuum Adapter Only	14/20
05	Distribution Adapter Only	14/20
06	Receiving Flasks, 15ml	14/20
07	Springs – Pkg. of 10	
Replacement Compon	ents for 19/22 Size	
Code #	Description	Joint Size
08	Vacuum Adapter Only	19/22
09	Distribution Adapter Only	19/22
10	Receiving Flasks, 15ml	19/22
11	Springs – Pkg. of 10	
Replacement Compon	ents for 24/40 Size	
Code #	Description	Joint Size
12	Vacuum Adapter Only	24/40
13	Distribution Adapter Only	24/40
14	Receiving Flasks, 15ml	24/40
15	Springs – Pkg. of 10	



07-1880: DISTILLING RECEIVER WITH ADAPTER – Radial style distillation receiver allows four flasks to be progressively filled. Upper vacuum adapter is vertical and hose connection has been replaced by a stopcock. Complete item consists of a vacuum adapter, distribution adapter, four of the listed size flasks with hooks and ten stainless steel springs.

Adapter Joints	Vacuum Adapter	Distributing Flask	Complete
	Code #	Code #	Code #
24/40	01	02	03
29/42	04	05	06
	Please Specify Glass	s or Teflon Stopcock.	

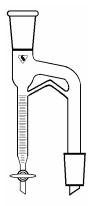


07-1820: DISTILLING RECEIVER, MOISTURE TEST, BARRETT – Barrett style distilling receiver used to determine the water content in petroleum or bituminous material. Receiver is made according to ASTM specifications, with the addition of the top outer standard taper joint and lower stopcock. The 2ml has subdivisions of 0.02mL; the 5ml has subdivisions of 0.20mL; the 10ml has subdivisions of 0.1mL; the 20mL has subdivisions of 0.2 from 0 to 3mL and 0.5 from 3 to 20mL. Please specify glass or Teflon stopcocks.

Code #	Joint Size	Capacity ml
01	14/20	2
02	14/20	5
03	14/20	10
04	24/40	10
05	24/40	20

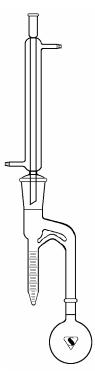
07-1840: DISTILLING RECEIVER, MOISTURE TEST, BARRETT - Same as 07-1820 except with overflow tube. Please specify glass or Teflon stopcocks.

Code #	Joint Size	Capacity ml
01	14/20	2
02	14/20	5
03	14/20	10
04	24/40	10
05	24/40	20



07-1760: WATER DETERMINATION APPARATUS -- For use in the determination of water in petroleum bituminous materials in accordance with ASTM D95. Consists of one short neck flask, one Liebig condenser, and one trap. All pieces furnished with \$\frac{1}{5}\$ 24/40 joints.

Code #	Description
01	Complete Assembly
02	Flask, 500ml
03	Flask, 1000ml
04	Condenser, 400mm Jacket
05	Trap, 10ml, graduated: 0-10 in 1/10.



07-1940: DISTILLING RECEIVER - WATER JACKETED

Capacity ml	■ 24/40 Code	■ 29/42 Code	≸ 35/25 Code
50	01	04	07
100	02	05	08
250	03	06	09

