

**3M** Science.  
Applied to Life.™



3M™ Hot Melt Adhesive Systems

**Fast setting adhesives.  
Applied for speed  
and durability.**

# Application Success with 3M™ Hot Melt Adhesives

3M™ Hot Melt Adhesives offer many benefits for success with a variety of assembly and/or closure applications.



Open time or bonding range is the maximum time between applying adhesive and joining the surfaces. With 3M™ Hot Melt Adhesives you have wide latitude in bonding range selection to meet your process needs.



Move assemblies immediately and eliminate clamps, fixturing and drying time and energy. Each adhesive is engineered for efficient application with an easy-to-use 3M portable applicator. Minimal operator training.



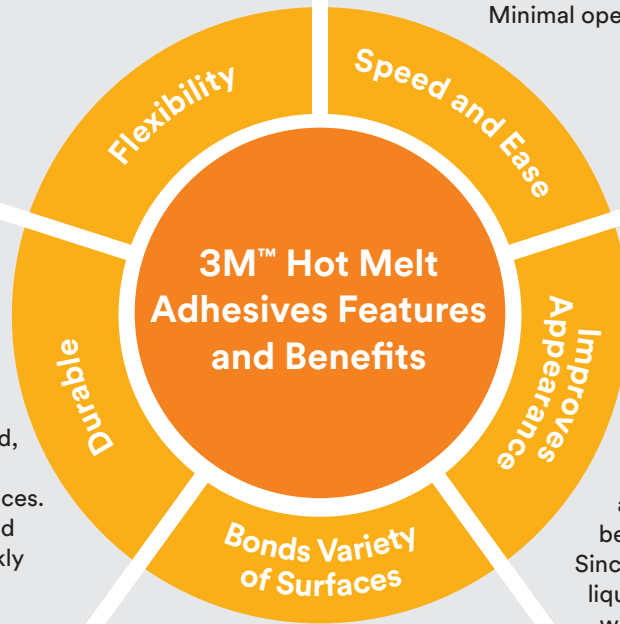
3M™ Hot Melt Adhesives are applied as a molten liquid, so they quickly fill gaps and wet the entire bonding surfaces. As a result, they often exceed 100 psi shear strength, quickly giving your application fast, convenient strength. Select from many options to fit your specific application — including peel resistant or highly heat resistant options.



Unlike mechanical fasteners and sealing tapes, hot melt adhesive is virtually invisible between the mating surfaces. Since hot melts are dispensed as liquids, it is easy to apply exactly where adhesive is needed.



You can combine a wide variety of materials ranging from wood to corrugated cardboard, heat-sensitive foam and even plastics and metals. For heat sensitive materials, low melt adhesives are dispensed at lower temperatures.



# 3M™ Hot Melt Adhesives Selector Guide

## Step 1: Select your assembly type



**Small Joint Assembly**  
Small joints are typically irregularly shaped, but only a few inches of overlap area.



**Large Surface Lamination**  
Two surfaces of similar size, either rigid or flexible, are bonded or laminated together where majority of the surface is covered by adhesive.




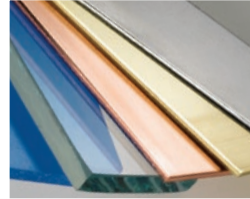
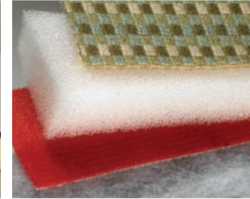







**Mounting and Trim Attachment**  
Small objects are mounted or added to a large surface.



**Sealing, Potting and Encapsulating**  
Adhesive flows over and around a component or fills a chamber to protect and seal components therein.

## Step 2: After selecting your assembly, choose the substrate and identify the adhesive that performs best for your application.

Substrate					
	Wood	Paper	Plastic	Metal / Glass	Fabric / Foam
Lead Adhesive	<p>3M™ Hot Melt Adhesive 3792</p> 	<p>3M™ Hot Melt Adhesive 3762LM</p> 	<p>3M™ Hot Melt Adhesive 3764</p> 	<p>3M™ Hot Melt Adhesive 3747</p> 	<p>3M™ Sprayable Hot Melt Adhesive 6111HT</p> 

Hot Melt Adhesive is dispensed at 350–385°F. Low Melt Adhesive is dispensed at 250–270°F.

**NOTE:** Low Melt (LM) adhesives liquefy at lower operating temperatures for bonding heat sensitive surfaces such as bead board and foams.

**NOTE:** High Temperature (HT) has high temperature resistance.

# Lead Markets and Applications



## Furniture and Woodworking

**Common Assembly: Small Joint Assembly, Large Surface Lamination, Mounting and Trim Attachment**

- Great product performance for various small joint, mounting and trim attachment, and large surface lamination assemblies in furniture, upholstery, cabinetry and more.
- Bonds well to wood, particleboard, MDF, laminate, foam, and fabric. Nearly instant bonding strength speeds up production — eliminating the need for clamping and mechanical fasteners.
- Low melt adhesives are available for lower operating temperatures and bonding heat sensitive surfaces.

**Lead Adhesives**

**3792**

Multi-purpose for wood, fabric and many other substrates with a long open time

**3792LM**

Multi-purpose low melt for heat sensitive surfaces



## Transportation and Electrical

**Common Assembly: Large Surface Lamination, Sealing, Potting and Encapsulating**

- Fast, durable product performance for various small joint, mounting and trim attachment, large surface lamination and potting assemblies for automotive interior and electrical component manufacturing.
- Bonds well to foams, fabrics, non-wovens and difficult surfaces, such as LSE plastics.
- Some products are available as sprayable hot melt. All products can be tested to meet your specification requirements.

**Lead Adhesives**

**3748**

Bonds to plastic with high peel performance; Good thermal shock resistance and non-corrosive to copper; 3748VO is self extinguishing

**6111HT**

Sprayable hot melt with long open time; High temperature resistant



## Packaging and Corrugated Carton Sealing

### Common Assembly: Small Joint Assembly

- Quickly bonds and seals any size of corrugated carton invisibly. Durably bonds coated, printed and waxed surface that may be difficult to seal with tape.
- Low melt adhesives are available for lower operating temperatures and bonding heat sensitive surfaces.

Lead Adhesives	3762	Fast-setting with “hot tack”
	3762LM	General purpose, fast setting with “hot tack”



## Product Assembly

### Common Assembly: Small Joint Assembly, Large Surface Lamination, Mounting and Trim Attachment

- Fast, durable product performance for small joint, mounting and trim attachment, large surface lamination and more.
- Many solutions are available to quickly assemble and attach materials for your design.
- Low melt adhesives are available for lower operating temperatures and bonding heat sensitive surfaces.

Lead Adhesives	3764	Bonds to all plastics, including low surface energy (LSE), flexible at low temp
	3792LM	Multi-purpose low melt for heat sensitive surfaces



## Point-of-Purchase, Displays and Trade Exhibits

### Common Assembly: Small Joint Assembly, Large Surface Lamination, Mounting and Trim Attachment

- Fast, durable product performance for small joint, mounting and trim attachment, large surface lamination and more.
- Bonds well to wood, foam, fabric, and plastics.
- Low melt adhesives are available for worker-friendly temperatures and bonding heat-sensitive surfaces.

Lead Adhesives	3762LM	General purpose, fast setting with “hot tack”
	3792LM	Multi-purpose low melt for heat sensitive surfaces

# 3M™ Hot Melt Adhesives

Product/ Cat #	Color	Features/Application Ideas	Sizes	Stock Number	UPC Number	Case Qty	Billing Unit	
<b>Low Melt Technology: Applied 250–270°F (121–132°C)</b>	<b>3762LM*</b>	Light Amber	Excellent "hot tack", fast setting for corrugated, beadboard, recoupage, repacking chipboard and wood. Economical, general purpose. Use with low melt applicator only.	5/8" x 8" Q 5/8" x 2" TC 1" x 3" PG	62-3720-9132-2 62-3720-9830-1 62-3720-9330-2	0-00-021200-49125-2 0-00-021200-49134-4 0-00-021200-49128-3	11 11 22	LBS
	<b>3776LM</b>	Tan	Bonds variety of plastics, woods and light-gauge metals. Use with low melt applicator only.	5/8" x 8" Q 1" x 3" PG	62-3733-9132-5 62-3733-9330-5	0-00-021200-89499-2 0-00-021200-89501-2	11 22	LBS
	<b>3792LM*</b>	Clear	Clear, multi-purpose for wood, coated paper, polyolefins and other heat-sensitive materials. P.O.P. displays. Use with low melt applicator only.	5/8" x 8" Q 5/8" x 2" TC 1" x 3" PG	62-3760-9132-8 62-3760-9830-7 62-3760-9330-8	0-00-021200-82454-8 0-00-021200-82456-2 0-00-021200-83491-2	11 11 22	LBS
	<b>3798LM*</b>	Light Yellow	Removable "gummy glue" for many substrates. Removes easily without residual tack. Use with low melt applicator only.	5/8" x 2" TC	62-3798-9830-7	0-00-021200-41604-0	11	LBS
<b>Hot Melt Technology: Applied 350–385°F (177–196°C)</b>	<b>3731*</b>	Tan	High heat resistance. Bonds plastics including polyethylene, polypropylene.	5/8" x 8" Q 1" x 3" PG	62-3731-9132-9 62-3731-9330-9	0-00-021200-45271-0 0-00-021200-49139-9	11 22	LBS
	<b>3738*</b>	Tan	High delivery rate and long bonding range. General purpose for foundry sand cores, wood bonding, corrugated, selected plastics and chipboard.	5/8" x 8" Q 5/8" x 2" TC 1" x 3" PG 1/2" x 12" AE	62-3738-9132-4 62-3738-9830-3 62-3738-9330-4 62-3738-9531-7	0-00-021200-65262-2 0-00-021200-82610-8 0-00-021200-82609-2 0-00-021200-82594-1	11 11 22 11	LBS
	<b>3747</b>	Tan	General purpose for wide variety of plastics, wood and lightweight metals.	5/8" x 8" Q 5/8" x 2" TC 1" x 3" PG 1/2" x 12" AE	62-3747-9132-5 62-3747-9830-4 62-3747-9330-5 62-3747-9531-8	0-00-021200-82561-3 0-00-021200-82560-6 0-00-021200-82221-6 0-00-021200-82220-9	11 11 22 11	LBS
	<b>3748*</b>	Off-White	Good thermal shock resistance. Non-corrosive to copper for many electronic applications. Bonds polyolefins.	5/8" x 8" Q 5/8" x 2" TC 1" x 3" PG	62-3748-9132-3 62-3748-9830-2 62-3748-9330-3	0-00-021200-76374-8 0-00-021200-82584-2 0-00-021200-82585-9	11 11 22	LBS
	<b>3748 VO</b>	Light Yellow	Self-extinguishing version of 3748. Meets UL 1410 requirements.	5/8" x 8" Q 5/8" x 2" TC 1" x 3" PG	62-3768-9132-1 62-3768-9830-0 62-3768-9330-1	0-00-021200-85795-9 0-00-021200-85816-1 0-00-021200-85797-3	11 11 22	LBS
	<b>3750</b>	Tan	Low viscosity for high flow rate, increased production. Good hot tack, quick grab for packaging and woodworking.	1/2" x 10" AE	62-3726-9531-2	0-00-051111-91711-4	11	LBS
	<b>3750</b>	Clear	Low viscosity for high flow rate, increased production. Good hot tack, quick grab for packaging and woodworking.	1/2" x 10" AE	62-3729-9531-6	0-00-051111-91712-1	11	LBS
	<b>3762</b>	Tan	Excellent "hot tack", fast setting for corrugated, beadboard, recoupage, repacking chipboard and wood. Economical, general purpose.	5/8" x 8" Q 5/8" x 2" TC 1" x 3" PG	62-3762-9132-4 62-3762-9830-3 62-3762-9330-4	0-00-021200-65261-5 0-00-021200-82615-3 0-00-021200-82614-6	11 11 22	LBS
	<b>3764*</b>	Clear	Bonds variety of plastics including polycarbonate, polyethylene, and polypropylene. Flexible at low temperatures.	5/8" x 8" Q 5/8" x 2" TC 1" x 3" PG 1/2" x 12" AE	62-3764-9132-0 62-3764-9830-9 62-3764-9330-0 62-3764-9531-3	0-00-021200-76054-9 0-00-021200-82599-6 0-00-021200-82598-9 0-00-021200-82597-2	11 11 22 11	LBS
	<b>3779*</b>	Amber	High heat resistance. High strength. Good fuel and oil resistance. Electronics.	5/8" x 8" Q 5/8" x 2" TC 1" x 3" PG	62-3779-9132-8 62-3779-9830-7 62-3779-9330-8	0-00-021200-85799-7 0-00-021200-82603-0 0-00-021200-82602-3	11 11 22	LBS
	<b>3789*</b>	Brown	High performance for plastics. Impact resistant. Bonds vinyl and wood. Good fuel and oil resistance.	5/8" x 8" Q 1" x 3" PG	62-3789-9132-7 62-3789-9330-7	0-00-021200-82369-5 0-00-021200-82371-8	11 22	LBS
	<b>3792*</b>	Clear	Clear, multi-purpose for wood, corrugated, fabric, furniture, upholstery, novelties, and other lightweight materials.	5/8" x 8" Q 5/8" x 2" TC 1" x 3" PG	62-3792-9132-1 62-3792-9830-0 62-3792-9330-1	0-00-021200-65263-9 0-00-021200-82589-7 0-00-021200-82606-1	11 11 22	LBS
	<b>3797</b>	Off-White	High ball and ring. Low viscosity. Good for electrical potting.	1" x 3" PG 5/8" x 2" TC	62-3797-9330-0 62-3797-9830-9	0-00-021200-82592-7 0-00-021200-82593-4	22 11	LBS
<b>Bulk Only</b>	<b>3794 Hi Tack PSA</b>	Light Tan	Sprayable high tack PSA for bonding plastic, paper, metals, die-cut labels.	Bulk chubs	62-3794-6375-5	0-00-051115-81205-7	30	LBS
	<b>6111</b>	Tan	Sprayable 100% solventless adhesive for most foams, fabrics, plastics, particle board and thin metal.	0.75" x 0.75" chips	62-6111-9335-0	0-00-021200-96589-0	22	LBS
	<b>6111HT</b>	Tan, Blue	Similar to 6111 but has higher heat resistance. Available in tan and blue.	0.75" x 0.75" chips	62-6115-9335-1 62-6113-9335-6 62-6113-9339-8 62-6115-9339-3	0-00-021200-49935-7 0-00-021200-43779-3 0-00-021200-56567-0 0-00-021200-56568-7	22 22 850 850	LBS
	<b>6116</b>	Off-White	Similar to 6111 but lower than normal viscosity and mainly used on fabrics.	0.75" x 0.75" chips	62-6116-9335-9	0-00-021200-49924-1	22	LBS

\*Also available in bulk.

1 – Made from components listed as indirect food additives under FDA regulations for adhesives (21 CFR 175.105)      2 – Brookfield Thermosol Viscometer in Centipoise  
 3 – ASTM E-28-6-7      4 – Highest temperature that the adhesive will support a 2 psi dead load      5 – Canvas to Douglas Fir      6 – Douglas Fir to Douglas Fir  
 7 – 1/8" semicircular bead, Douglas Fir to Douglas Fir

	EC Temp Control Modules	Viscosity CPS <sup>2</sup>	Delivery Time for 1" x 3" Cartridge (sec.)	Ball & Ring Melt Point <sup>3</sup> °F (°C)	Heat Resistance <sup>4</sup> °F (°C)	Peel Strength PIW <sup>5</sup> 72°F (22°C)	Shear Strength PSI <sup>6</sup> 72°F (22°C)	Open Time 1/8" Bead <sup>7</sup> (sec.)	FDA Listed <sup>1</sup>	UL 94 Listing
	1	4,000 @ 250°F	45	205 (96)	130 (54)	6	480	25	Yes	n/a
	1	8,250 @ 250°F	47	184 (84)	140 (60)	9	600	40	—	n/a
	1	10,500 @ 250°F	57	178 (81)	140 (60)	13	350	40	Yes	V2
	n/a	9,500 @ 250°F	n/a	191 (88)	120 (49)	n/a	n/a	30	Yes	n/a
	5	12,000 @ 375°F	n/a	315 (157)	265 (130)	22	490	30	—	n/a
	4	2,875 @ 375°F	35	186 (86)	130 (54)	13	375	50	Yes	V2
	4	4,100 @ 375°F	45	220 (104)	145 (63)	20	430	45	Yes	n/a
	4	5,000 @ 375°F	65	292 (144)	175 (79)	18	250	45	Yes	V2
	4	5,000 @ 375°F	65	305 (152)	175 (79)	15	275	30	—	VO
	n/a	1,900 @ 375°F	30–40	200 (93)	125 (52)	6	500	n/a	—	n/a
	n/a	4,800 @ 375°F	35–45	178 (81)	135 (57)	12	250	n/a	—	n/a
	3	1,870 @ 375°F	30	201 (94)	130 (54)	7	545	35	Yes	V2
	4	6,000 @ 375°F	55	190 (88)	140 (60)	14	390	40	Yes	V2
	5	7,000 @ 375°F	75	325 (163)	300 (149)	18	700	25	Yes	VO
	5	5,200 @ 375°F	70	270 (132)	220 (104)	16	570	50	Yes	V2
	4	5,000 @ 375°F	45	179 (81)	140 (60)	13	250	50	Yes	V2
	n/a	2,650 @ 375°F	55	304 (151)	170 (77)	10	350	30	Yes	V2
	n/a	15,000 @ 325°F	n/a	224 (107)	120 (49)	16	n/a	> 60	Yes	n/a
	n/a	3,000–5,000 @ 375°F	n/a	224 (107)	145 (63)	34	n/a	1 surface: 60 2 surface: 360	—	n/a
	n/a	2,500–4,500 @ 375°F	n/a	284 (140)	175 (79)	26	n/a	1 surface: 180 2 surface: 480	—	n/a
	n/a	1,300 @ 375°F	n/a	199 (93)	160 (69)	20	n/a	1 surface: 120 2 surface: 300	—	n/a

Note: The technical information and data on these pages should be considered representative or typical only and should not be used for specification purposes.

# 3M™ Hot Melt Applicator System Guide

3M Hot Melt Applicators Systems are trusted solutions that are engineered to help you improve productivity, lower cost and minimize waste in industrial applications. From high volume to detail work, 3M Hot Melt Applicators are uniquely designed to ensure optimum performance through melt-on-demand or progressive feed technology for your production needs.





# Adhesives Size Selection

3M™ Hot Melt Adhesives are designed and precisely manufactured for use in a 3M Hot Melt Applicator. When paired together, they work as a system, providing optimal performance for your design needs. Use the guide to select the right size for your application.

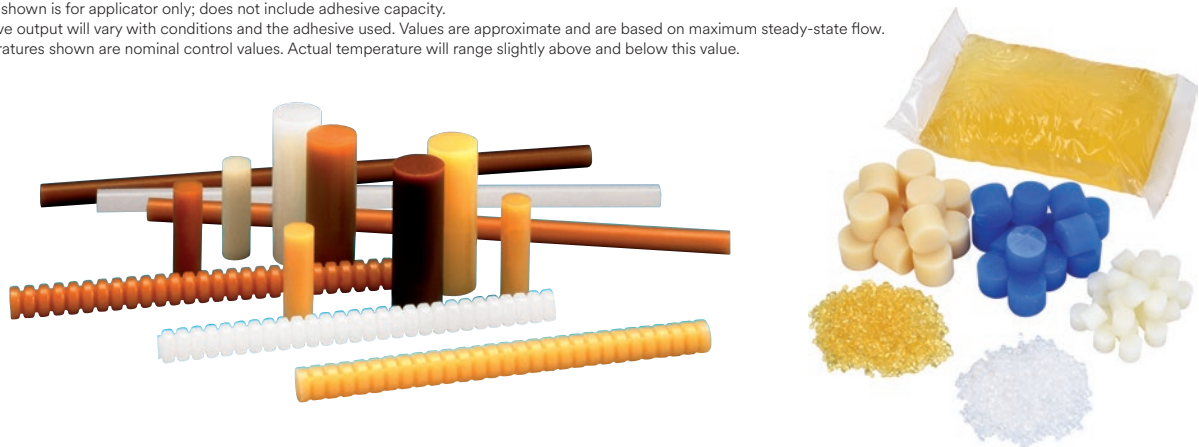
## Select a 3M™ Hot Melt Applicator to fit your needs.

Adhesive Type	Product/Cat #	Weight <sup>1</sup>	Output <sup>2</sup> (lb/hr)	Temperature <sup>3</sup> °F (°C)	Power (120V)	Adhesive Dia. x L (in.)	Sticks per Pound	Linear Feet per Stick	Stock Number	UPC Number	Warranty (Months)
Low Melt	<b>A</b> 3M™ Hot Melt Applicator LT (Low Temp)	10.0 oz.	2.6	265 (129)	150W	5/8 x 2 TC	55	8	62-9281-9930-6	0-00-021200-82245-2	12
	<b>B</b> 3M™ Hot Melt Applicator LT with Quadrack Converter (Low Temp)	13.8 oz.	2.6	265 (129)	150W	5/8 x 8 Q	15	29	62-9281-9950-4	0-00-021200-89447-3	12
	<b>C</b> 3M™ Hot Melt Applicator PGILT (Low Temp)	4.3 lbs.	6.0	265 (129)	500W	1 x 3 PG	12	36	Cartridge Feed* 62-9783-9630-7	Cartridge Feed* 0-00-021200-89395-7	12
Hot Melt	<b>E</b> 3M™ Hot Melt Applicator TC	10.0 oz.	3.5	385 (196)	150W	5/8 x 2 TC	55	8	62-9990-9935-1	0-00-021200-82244-5	12
	<b>F</b> 3M™ Hot Melt Applicator TC with Quadrack Converter	13.8 oz.	3.5	385 (196)	150W	5/8 x 8 Q	15	29	62-9990-9950-0	0-00-021200-89445-9	12
	<b>G</b> 3M™ Hot Melt Applicator PGII	4.3 lbs.	7.5	385 (196)	500W	1 x 3 PG	12	36	Cartridge Feed* 62-9938-9630-7	Cartridge Feed* 0-00-021200-22033-3	12
	<b>H</b> 3M™ Hot Melt Applicator AEII	20.0 oz.	4.0	400 (204)	100W	1/2 x 10 AE 1/2 x 12 AE	19 14	23 30	62-9796-9930-3	0-00-021200-96594-4	6
Low Melt or Hot Melt	<b>I</b> 3M™ Hot Melt Applicator EC	24.0 oz.	5.5	260–450 (127–232)	350W	5/8 x 8 Q	15	29	62-9680-9930-9	0-00-021200-89519-7	12



\* Cartridge Feed holds up to 2 adhesive sticks (1" x 3") and the applicator holds 3 more in the chamber for a total of 5.  
 \*\* Magazine Feed holds up to 9 adhesive sticks (1" x 3") and the applicator holds 3 more in the chamber for a total of 12.

- 1 – Weight shown is for applicator only; does not include adhesive capacity.
- 2 – Adhesive output will vary with conditions and the adhesive used. Values are approximate and are based on maximum steady-state flow.
- 3 – Temperatures shown are nominal control values. Actual temperature will range slightly above and below this value.



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 Note: Repair parts are available. Reference owner manuals for information.

# Accessories to improve productivity.

Product/Cat #		Description	Stock Number	UPC Number	Case Qty	Billing Unit
9725*		.072" Mini Extension Tip	62-9725-9930-2	0-00-021200-21786-9	3	CS
9726*		"T" Tip Assembly	62-9726-9930-0	0-00-021200-64542-6	3	CS
9727*		"L" Tip with Adapter	62-9727-9930-8	0-00-021200-64543-3	3	CS
9729*		High Viscosity Valve (TC, EC, PG II)	62-9729-9930-4	0-00-021200-64840-3	3	CS
9785*		.07" Tapered Aluminum Extension	62-9785-9930-6	0-00-021200-82554-5	3	CS
9913*		2-hole Spreader	62-9913-9930-4	0-00-021200-21830-9	3	CS
9916*		3-hole Spreader	62-9916-9930-7	0-00-021200-21836-1	3	CS
9917*		3-hole 1" Spreader	62-9917-9930-5	0-00-021200-21837-8	3	CS
9921*		.090" Fluted Tip	62-9921-0066-9	0-00-021200-21840-8	3	CS
9922*		.063" Fluted Tip	62-9922-0066-7	0-00-021200-21841-5	3	CS
9940*		.125" Fluted Tip	62-9940-6920-1	0-00-021200-22036-4	3	CS
9946		.072" Brass Extension	62-9946-6980-2	0-00-021200-22040-1	3	CS
9945 PGIIBhSd 3M™ Hot Melt Applicator Heavy Duty Benchstand		For use with PG II and PG II LT	62-9945-9930-6	0-00-021200-22039-5	1	CS
		For use with EC, TC and LT	62-9945-9935-5	0-00-021200-82418-0	1	CS
9276 3M™ Hot Melt Applicator Bench Mount		Includes bench nozzle assembly (Does not include applicator)	62-9276-9930-6	0-00-021200-82277-3	1	CS
9233 3M™ Hot Melt Applicator PGII and PGIILT Bench Mount Assembly		For use with bench mounted applicator	62-9233-2781-1	0-00-021200-21713-5	1	CS
9277 3M™ Hot Melt Applicator Foot Pedal Assembly		For use with bench mounted applicator	62-9277-9930-4	0-00-021200-82278-0	1	CS
9761 3M™ Hot Melt Applicator TC Palm Trigger		For use with Quadrack converter	62-9761-9930-7	0-00-021200-82701-3	10	CS
9275 3M™ Hot Melt Applicator Quadrack Converter		To add Quadrack capability to TC and LT applicators	62-9275-9935-7	0-00-021200-83536-0	10	CS
9234 PG ASSY 3M™ Hot Melt Applicator TC/EC/LT Valve Assembly Kit		Nozzle and valve replacement for TC, EC, LT	62-9234-9930-5	0-00-021200-21714-2	1	CS

\*Tip works with all 3M™ Hot Melt Applicators except 3M™ Hot Melt Applicator AEII.

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Note: Repair parts are available. Reference owner manuals for information.



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**St. Paul, MN 55144-1000**  
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**Fax 877-369-2923**  
**Web 3M.com/adhesives**

**Product Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application. **Warranty, Limited Remedy and Disclaimer:** Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price. **Limitation of Liability:** Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

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