Honeywell

T4039A,B,D-M,S,V Line Voltage Cooling and Heating-Cooling Thermostats

T4039 Thermostats Control Line Voltage Valves of a fan coil unit in cooling, manual changeover heating-cooling, or automatic changeover heating-cooling systems. One or two valves may be controlled directly by the thermostat. The fan switch (where applicable) controls air circulation.

- 1-, 2-, or 3-speed manual fan control available.
- Positive deadspot separates heating-cooling circuits in automatic models. Remote changeover switch is required to separate circuits in manual changeover heating-cooling models.
- Scale range is approximately 55° F to 95° F [13° to 35° C] in 10° F [6° C] increments from 75° F [24° C] midpoint. Scale is marked COOL-WARM.
- Cooling circuit breaks in FAN-OFF position to reduce condensation problems in the fan coil unit.
- Color-coded leadwires.
- All models can be mounted on standard vertical outlet boxes. Models with manual switching can be mounted on 4 in. square junction boxes or 2-ganged outlet boxes.
- Adjustable range stops limit temperature adjustment or lock at selected setpoint.
- Models available with separate power source for fan and thermostat.

CONTENTS

J. H. • Rev. 10-92 • * Form Number 60-2241—8*

Specifications

MODELS:

System	Manual Switching[a]	Model
Cooling Only	Off-On[b]	T4039A
Cooling Only	Hi-Med-Lo Off-On[b]	T4039B
Heating-Cooling[c]	— Off-On[d]	T4039D
Heating Cooling[c]	Off-Hi-Lo[b] —	T4039E
Heating-Cooling[c]	Hi-Med-Lo Off-On[b]	T4039F
Automatic Heating-Cooling	None	T4039G
Automatic Heating-Cooling	— Off-On[d]	T4039H
Automatic Heating-Cooling	Off-Hi-Lo[b]	T4039J
Automatic Heating-Cooling	Off-Hi-Lo[d] —	T4039K
Automatic Heating-Cooling	Hi-Med-Lo[b] Off-On	T4039L
Autoamtic Heating-Cooling	Hi-Med-Lo Off-On[d]	T4039M
Automatic Heating-Cooling	Hi-Med-Lo Heat-Off-Cool[d]	T4039S
Automatic Heating-Cooling	Hi-Lo Off-On[d]	T4039V

[a] See Fig. 4 for arrangements of switches.
[b] OFF breaks cooling circuit and fan circuit.
[c] Remote changeover switch required.
[d] OFF breaks both heating and cooling circuits and fan circuit.

ELECTRICAL RATINGS:

A. Thermostat (valve load).

	Normal (A)	Inrush (B)
120 Vac	0.32	1.00
240 Vac	0.16	0.50
277 Vac	0.14	0.43

B. Fan Switch

	Full Load (A)	Locked Rotor (A)
120 Vac	5.5	33.0
240 Vac	2.75	16.5
277 Vac	2.4	14.4
10A	Resistive at 125 Vac	
5A	Resistive at 240 Vac	
4.2A	Resistive at 277 Vac	

TEMPERATURE SETTING RANGE: Approximately 55° F to 95° F [13° C to 35° C]; marked COOL-WARM in 10° F [6° C] increments from 75° F [24° C] midpoint.

DIFFERENTIAL: Approximately 2° F [1° C] at mid-scale. On automatic heating-cooling models, the differential from make of one contact to make of the opposite contact is 7° F [4° C] maximum with a positive deadspot.

DIMENSIONS: See Figs. 1 and 2.

Ordering Information

When purchasing replacement and modernization products from your TRADELINE® wholesaler or your distributor, refer to the TRADELINE Catalog or price sheets for complete ordering number, or specify—

1. Model number.

If you have additional questions, need further information, or would like to comment on our products or services, please write or phone:

1. Your local Honeywell Home and Building Control Sales Office (check white pages of your phone directly).
2. Home and Building Control Customer Satisfaction
   Honeywell Inc., 1885 Douglas Drive North
   Minneapolis, Minnesota 55422-4386 (612) 951-1000

In Canada—Honeywell Limited/Honeywell Limitée, 740 Ellesmere Road, Scarborough, Ontario M1P 2V9. International Sales and Service offices in all principal cities of the world. Manufacturing in Australia, Canada, Finland, France, Germany, Japan, Mexico, Netherlands, Spain, Taiwan, United Kingdom, U.S.A.

FINISH: Silver bronze. T4039M is available in white.

MOUNTING: Models without manual switching mount on standard vertical outlet boxes. Models with manual switching mount on 4-in. square junction boxes or 2-ganged outlet boxes. Manual switching models may also mount on a standard vertical outlet box if local codes permit. See Fig. 3.

UNDERWRITERS LABORATORIES, INC. LISTED: File No. E4436, Vol. 2, dated 3-19-73; Guide No. XAPX.

Fig. 1—Mounting dimensions in in. [mm] of T4039 models with manual switching.

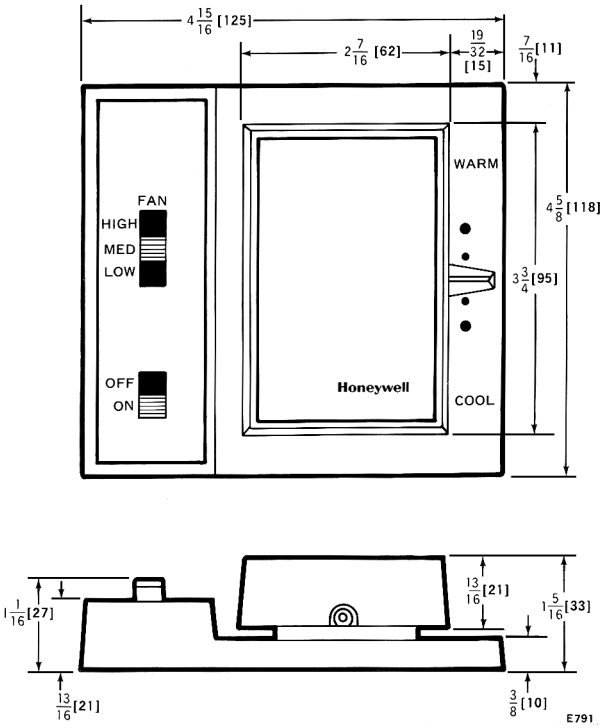


Fig. 2—Mounting dimensions in in. [mm] of T4039 models without manual switching.

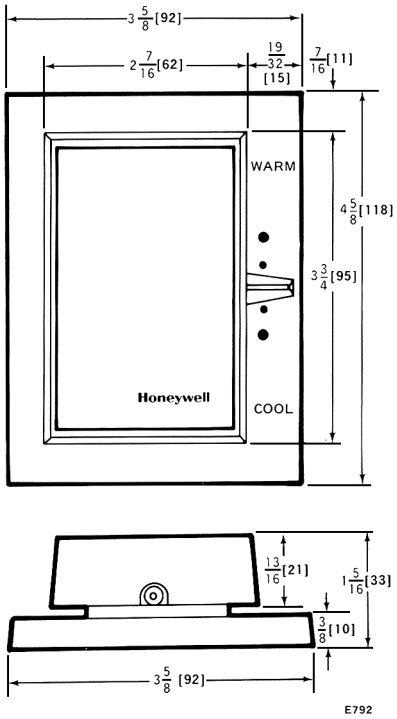
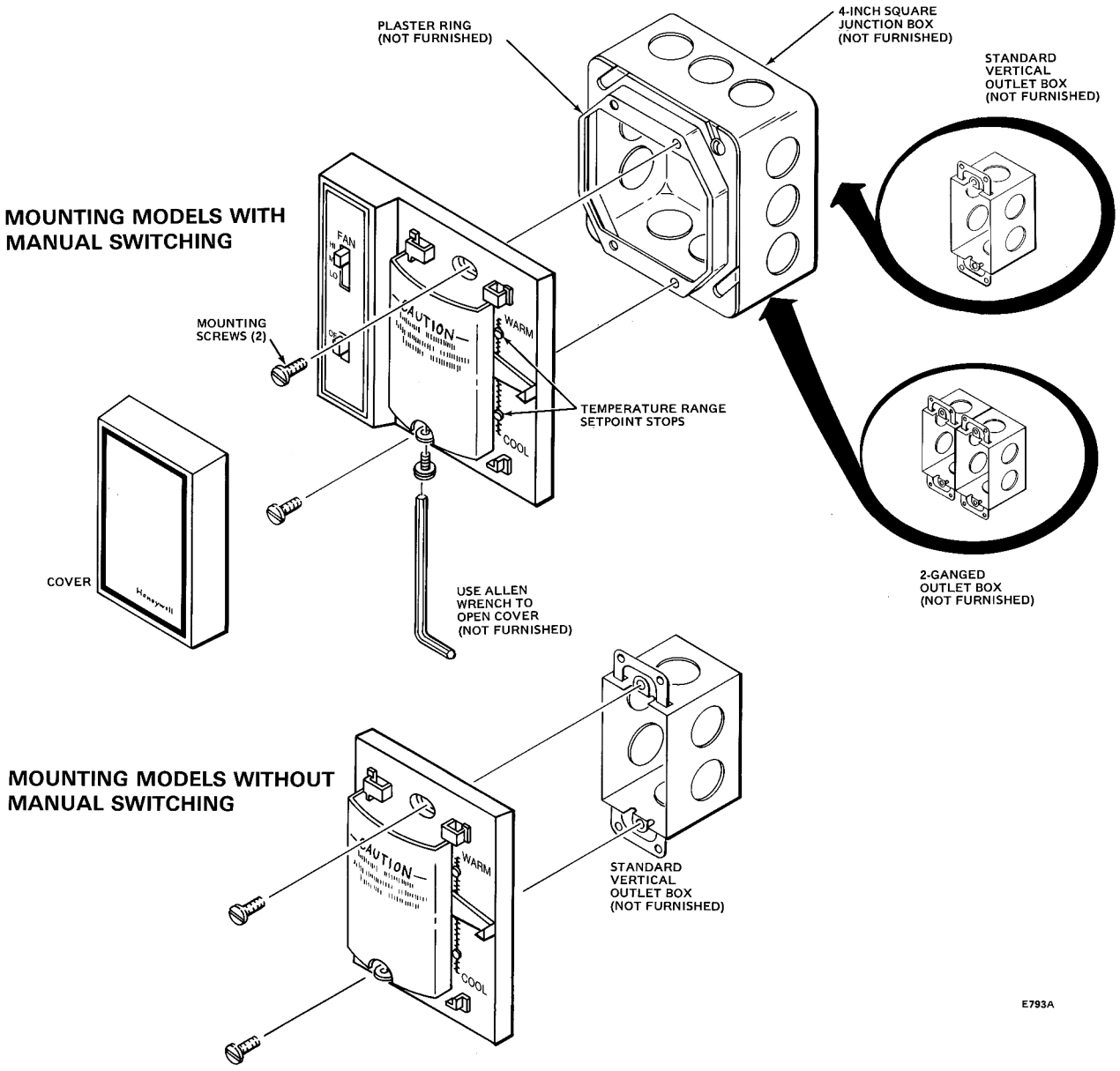


Fig. 3—Mounting T4039.



Installation

WHEN INSTALLING THIS PRODUCT…

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced service technician.
4. After the installation is complete, check out product operation as provided in these instructions.

> ⚠ ***CAUTION***
>
> Disconnect power supply to prevent electrical shock or equipment damage.

Before mounting, be sure to remove cardboard shipping inserts that protect the contacts.

1. Remove T4039 cover by loosening the cover screw with Allen wrench.
2. Open the cardboard inside cover by pressing inward on the left side to release latch. *Do not remove this cover.*
3. Carefully remove the shipping inserts from around the snap contacts.
4. Check contact operation before mounting device.

MOUNTING

Models without manual switching mount on standard vertical outlet boxes. Models with manual switching mount on 4-in. square junction boxes or 2-ganged outlet boxes. Manual switching models can also mount on standard vertical outlet boxes if local electrical codes permit.

Mount thermostat on side wall about 5 ft. [1.5 m] above the floor. Do not mount where thermostat can be affected by drafts, radiant heat from the sun or other sources of heat.

Use Allen wrench to open cover and mount according to Fig. 3. Two mounting screws are provided.

WIRING

Disconnect power supply before beginning installation to avoid electrical shock or equipment damage. All wiring must comply with local codes and ordinances.

Internal schematic and external connections for the T4039 are shown in Fig. 4. Use solderless connectors or other approved methods to wire thermostat into the system. Six-inch color-coded leadwires are provided.

SETTING

The T4039 temperature scale is marked COOL-WARM with approximate scale divisions of 10° F from 75° F [24° C] midpoint. The range is approximately 55° F to 95° F [13° C to 35° C]. Set lever at desired temperature.

To adjust the temperature setpoint range stops, Fig. 3, locate stops at the desired temperature range setpoint and insert.

Fig. 4—Internal schmeatics and external connections for T4039 Thermostats.

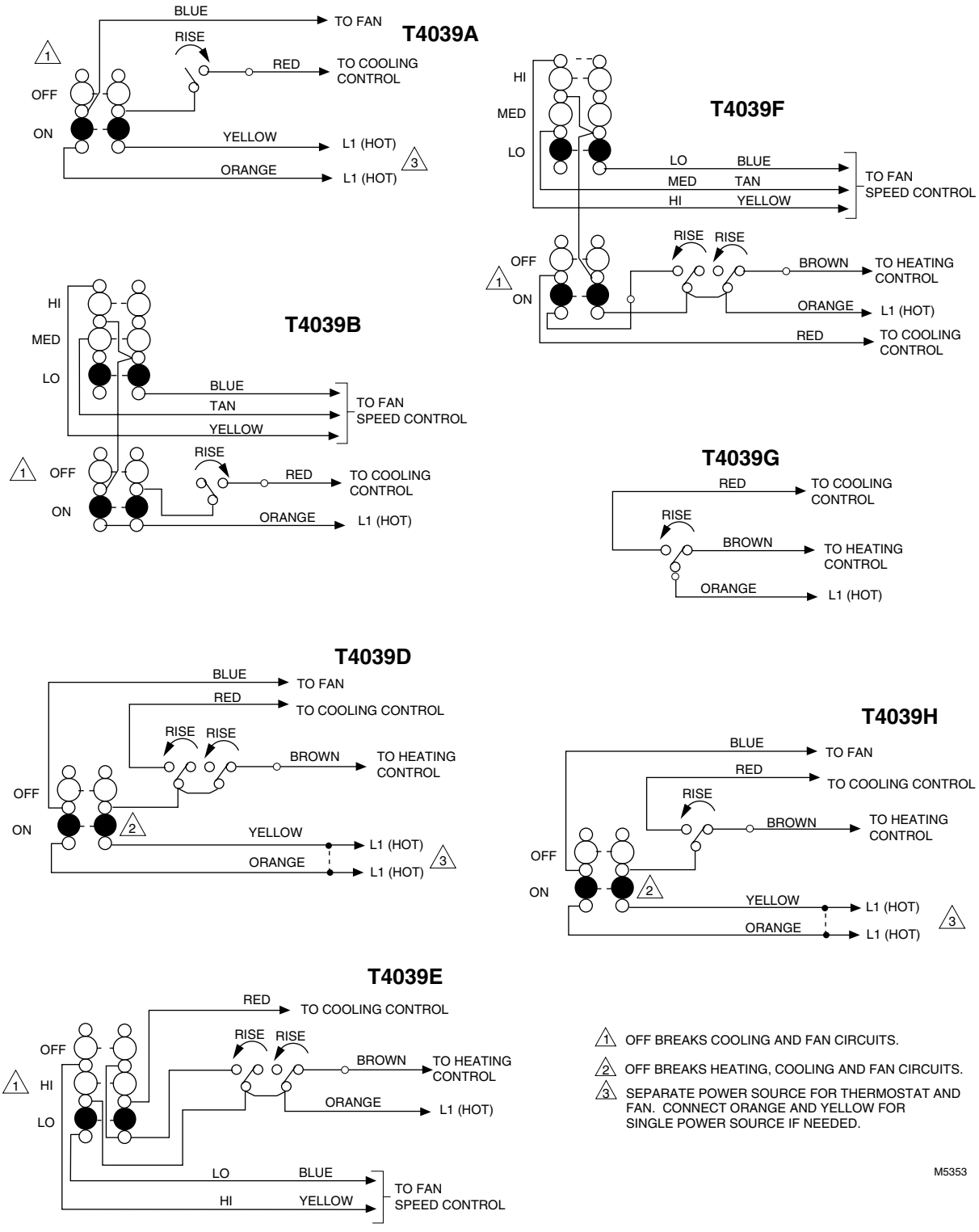
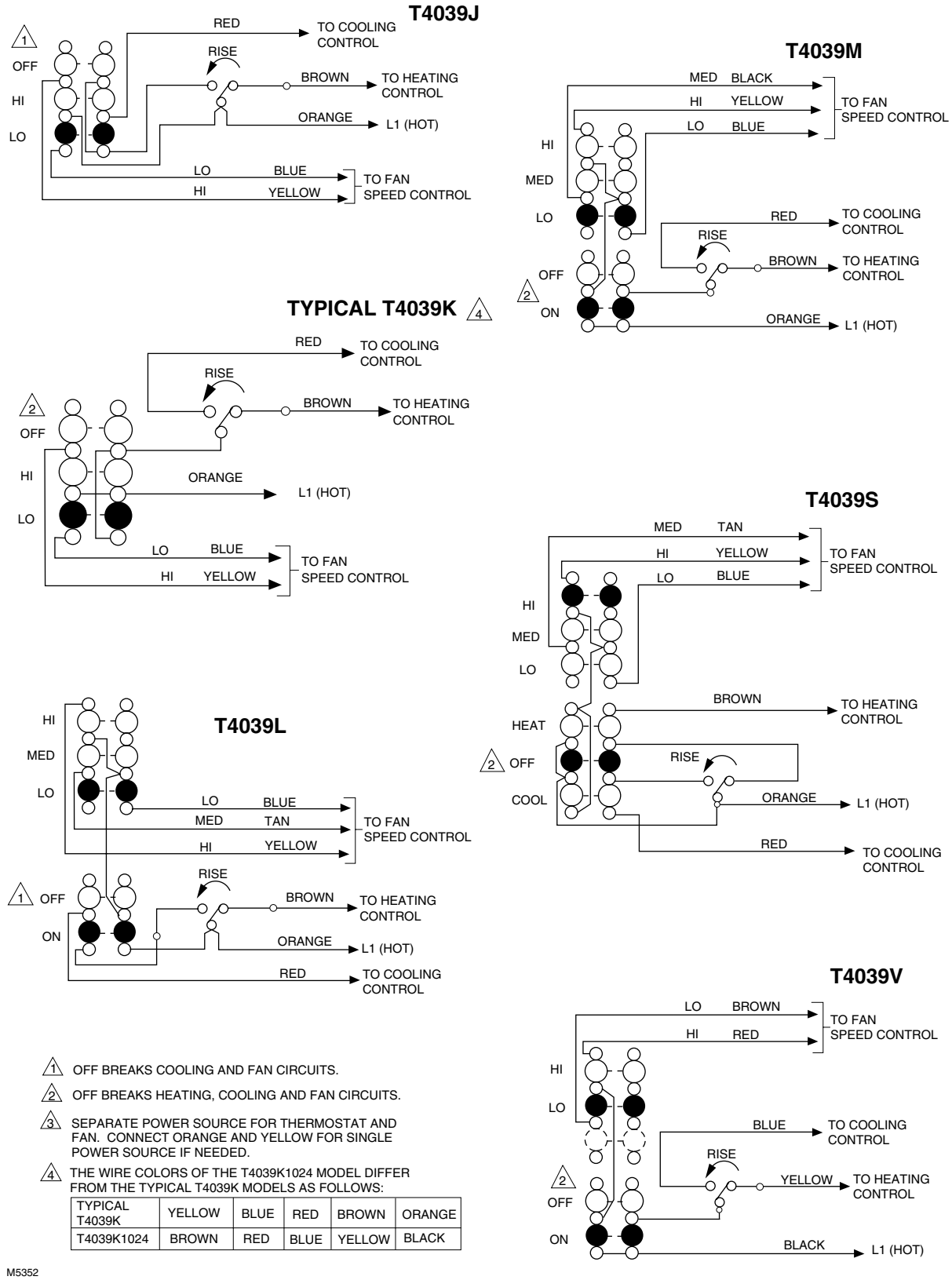


Fig. 4—Internal schmeatics and external connections for T4039 Thermostats *(Continued).*



1 OFF BREAKS COOLING AND FAN CIRCUITS.

2 OFF BREAKS HEATING, COOLING AND FAN CIRCUITS.

3 SEPARATE POWER SOURCE FOR THERMOSTAT AND FAN. CONNECT ORANGE AND YELLOW FOR SINGLE POWER SOURCE IF NEEDED.

4 THE WIRE COLORS OF THE T4039K1024 MODEL DIFFER FROM THE TYPICAL T4039K MODELS AS FOLLOWS:

TYPICAL T4039K	YELLOW	BLUE	RED	BROWN	ORANGE
T4039K1024	BROWN	RED	BLUE	YELLOW	BLACK

M5352

Operation

In heating applications, as the temperature drops, the thermostat heating contacts make to open a valve that allows hot water to flow through the coil. On select models, the speed at which the heat is circulated is controlled manually by the fan switch.

In cooling applications, as the temperature rises, the thermostat cooling contacts close to open a valve that allows cold water to flow through the coil. Cooling mechanism will not operate if manual switch is in the OFF position. Models T4039D,H,K,M,S,V will also turn off the heating valve when the manual switch is in OFF.

In manual changeover heating-cooling models, the thermostat must be used with a remote changeover switch or control to select the proper heating or cooling cycle for the thermostat.

CALIBRATION

The T4039 is accurately calibrated at the factory under controlled conditions. Do not attempt to field calibrate this device.

Checkout

Check the T4039 before leaving the installation. Raise the temperature setting to start the heating cycle or lower the setting to start the cooling cycle. Check both cycles on heating-cooling models.

Honeywell

Home and Building Control
Honeywell International, Inc.
1985 Douglas Drive North
Golden Valley, MN 55422

Home and Building Control
Honeywell Limited—Honeywell Limitée
35 Dynamic Drive
Scarborough, Ontario
M1V 4Z9

Printed in U.S.A. on recycled paper containing at least 10% post-consumer paper fibers.