MODELS:
PAVER-KIT-TMS
PAVER-KIT-TMS-MSI

PAVER KIT
Control Panel for use with Fire Pits built with Patio Paver Blocks

Installation and Operating Instructions

IF YOU CANNOT READ OR UNDERSTAND THESE INSTALLATION INSTRUCTIONS
DO NOT ATTEMPT TO INSTALL OR OPERATE THIS APPLIANCE

Warning: For Outdoor Use Only

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE
**DESCRIPTION:** The Paver Kit face plate bracket (control panel) is designed to install in conjunction with a typical Patio Block fire pit kit (purchased separately). It installs underneath the fire pit pan or disc in place of one patio block. The control panel itself provides a convenient location to house the gas valve and Piezo ignition (if applicable) then is easily removed for servicing.

**PRECAUTION:** If you are installing the MSI (Manul Spark Ignition) ensure the PAVER-KIT-TMS-MSI control panel is within 40-inches of the 2-probe Piezo ignitor. This will allow enough “play” in the wires to make your connections. See Fig. 9.

This installation instruction covers four (4) separate kits. 1) PAVER-KIT-TMS (Thermocouple Manual Safety) and 2) PAVER-KIT-TMS-MSI kits.

**TOOLS NEEDED:**
(1) Drill/driver, Gas Rated Teflon Tape or Compound, 5/16” Hex head driver, (1) 3/16” Concrete Drill Bit, (2) Adjustable Wrenches, Assorted Open-end Wrenches

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**DIMENSIONS:** The Paver Kit bracket and extension will fit an opening with a maximum of 10.500” wide x 3.500” tall. Without the Bracket Extension plate the maximum width is 8.00” wide. The holes in the Extension Bracket are spaced every .500”.
STEP 1: Determine the best location to install the paver kit control panel per your installation.

STEP 2: Remove one block from your fire pit enclosure then measure the width between the opening. Depending on the block width the control panel can be adjusted to fit various openings. NOTE: When measuring it is recommended but not required to recess the control panel to protect the valve components from weather.

STEP 3: After you have determined the location and measured the width to install the Paver Kit control panel mark the inside of the control panel as shown in figure 4.

STEP 4: Drill the two holes with a 3/16” concrete drill bit and secure the paver kit control panel with concrete screws.

GENERAL INSTRUCTIONS

NOTE: This manual covers two specific models. This section provide a general installation of the Paver Kit control panel. See Table of Contents for specific instruction for your application.

NOTE: Follow the directions from your paver block fire pit kit to build the actual fire pit. Depending on your fire pit pan (flat disc or pan) ensure the Paver Kit control panel is installed underneath the pan or disc.

Be sure the paver patio block kit fits the opening of the fire pit pan or disc before beginning your installation.

PAVER KIT-TMS INSTRUCTIONS

With the paver kit face plate bracket (control panel) installed you are now ready to install the TMS gas valve.

STEP 1: Prepare the 3/8” close nipple and 1/2” OD Flare x 3/8” brass fittings by installing gas rated Teflon tape or compound to the male threads and install them into the TMS valve that came with your fire pit. Ensure the fittings are tight to prevent any gas leaks. The TMS valve comes with a 1/2” OD Flare x 3/8” brass fitting. Ensure you use this fitting to complete the installation. See figure 6 for proper orientation.

NOTE: Ensure to attach the flex connector from gas supply to the inlet side of the gas valve. Hard piping may also be installed in place of the flared connector.

CAUTION: Do not use any Teflon tape or compound on the flared ends of the fittings.
STEP 2: Once the fittings are installed into the TMS valve then install the valve and bracket into Paver Kit control panel as shown in figure 7.

STEP 3: Secure the TMS valve bracket into place using the four black thread cutting screws. See Fig. 8.

STEP 4: Install the flex connector from the burner to outlet side of the gas valve and connect gas supply to the inlet side of the gas valve. Conduct a trial burn test and check for any gas leaks before completing the installation.

See page 7 for lighting instructions.

STEP 5: After burn test is complete, finish the patio paver block installation.

CAUTION: If the fire pit is installed then turn OFF main gas supply and remove all media prior to installation of MSI Kit.

Step 1: Prepare the fire pit pan by first removing the screen cover hood from the ignitor hood. See Fig.9.
Step 2: Remove the five (5) stainless steel thread cutting screws from the ignition hood exposing the rainshield and thermocouple. See Fig. 10.

Step 3: Remove Thermocouple from the back of the gas valve with a 10mm open-end wrench or an a small adjustable wrench. See Fig. 11.

Step 4: Remove the two thread cutting screws from the existing rainshield bracket and carefully lift out the existing Thermocouple, rainshield and rainshield bracket assembly from the rectangular hole and set aside.

Note: The old Thermocouple, rainshield and bracket will no longer be used. Set it aside and save as a replacement part or discard the parts.

Step 5: Remove the two nuts from the new MSI probe assembly/Thermocouple but leave it assembled.

Carefully guide the thermocouple lead and orange ignitor wire through the rectangular hole and insert the screws into the existing holes. NOTE: If the screws and nuts do not install into the existing holes easily you can use the thread cutting screws previously removed. See Fig. 12. Ensure the assembly rests flat against the fire pit pan. Temporarily secure one of the screws with one of the nuts previously removed. See Fig 13.

OPTION: You can use the existing thread cutting screws to secure the assembly or the screw and nut as shown, if necessary.
Step 6: The Ground Tab can be installed over the remaining screw (without the nut) and secure the tab with the other nut (See Fig 14). or choose an existing drain hole in the pan to secure the Ground Tab with a screw and nut. **NOTE:** In all cases, ensure the nut is secured tight against the Ground Tab and fire pit pan because this will serve as the “ground” connection for the ignitor to spark. At the same time secure the other nut from Step 5.

![Fig. 13 Side view of probe installation.](image)

Step 7: Install the ignition hood over top of the probe assembly and install the five thread cutting screws previously removed. See Fig. 10.

Ensure the Thermocouple and ignitor are over top of the notched area of the rainshield as shown in Fig. 15.

![Fig. 14 Ground tab installation.](image)

![Fig. 15 Installing ignition hood back over probe assembly.](image)
**Step 8:** Remove the black plastic plug from the valve mounting plate for preparation of installing the Piezo ignition module. See Fig. 16.

**Step 9:** The Piezo module mounts directly to the TMS valve bracket. Install the Piezo module using the smaller hole with the two notches and slide module into the place until it stops. Using the plastic nut thread it onto the Piezo module to secure into place. Be careful not to turn the nut too tight and crack the plastic. Install the AAA battery as shown and thread the red button cap on the remaining threads of the module. See Fig. 17.

**Step 10:** Connect the 3/16” end of the PIEZO23WH extension wire and 3/16” end of the PIEZO48WH wire into the back side of the spark ignitor module. See Fig. 19 detail.

**Step 11:** Attach the 1/4” end of extension wire (PIEZO23WH) to the orange ignitor wire and attach the 1/4” wire end (PIEZO48WH) wire to ground tab under the burner pan. See figure drawings 14, 19 and 20 for reference.

**Step 12:** Reconnect the thermocouple lead to the gas valve. Install it finger tight plus a quarter turn with a wrench.
Step 13: Test the ignitor by pushing and holding the red button to ensure the 2-probe ignitor is sparking inside the ignition box in the burner pan. The spark should be located directly over top of the burner port hole for proper ignition of the gas as previously discussed. Spacing between the probes should be approximately 1/8” for proper spark. Use Fig. 15, on page 5 for reference.

Note: Fig. 20 show details of the PIEZO48WH wire connection if needed.

Step 14: Install the ignition hood screen. Ensure no media covers hood. See Fig. 30. Install the lava rock/media material according to fire pit install manual then turn the main gas supply back ON.

Installation is now complete.

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LIGHTING INSTRUCTIONS

READ ALL LIGHTING INSTRUCTIONS BEFORE ATTEMPTING TO LIGHT FIRE PIT

CAUTION: ENSURE YOU HAVE LEAK TESTED THE FIRE PIT BEFORE OPERATING.

WARNING: Do not stand over fire pit during ignition or operation due to high surface temperatures.
1. Push and hold the red button on the manual Piezo ignitor and ensure sparking is occurring at the probes inside fire pit.
2. Rotate control knob on gas valve in the counter clockwise to ON position. See Fig. 22.
3. Depress control knob inward and push to light the burner.
4. Gas should ignite within 10 seconds or less. If fire pit does not light within 10 seconds turn OFF the gas supply. Check ignitor probe location (Fig. 15), ensure there is an 1/8” gap between the probes with a good strong spark then repeat steps 2 through 4.
5. Turn gas supply OFF to check probes and battery if fire pit does not light.
6. Repeat steps 1-3.

TURNING OFF FIRE PIT
1. Slight push inward on control knob and turn clock wise until it stops. Fire pit will turn OFF.
2. After cooling off install cover.

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Fig. 20 Wiring diagram for complete system.

Fig. 21 Installing mesh cover on the ignitor shield.

Fig. 22 TMS control knob.
### TMS PAVER KIT REPLACEMENT PARTS

#### Drawings not to Scale

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* Some part quantities will vary depending upon kit used.
Firegear Outdoors warrants the Paver Kit for 12 months from date of purchase or installation to original purchaser to be free from defects in materials and workmanship. Damage to the Paver Kit caused by accident, misuse, abuse, or installation error, whether performed by a contractor, service company, or owner, is not covered by this warranty.

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