



# Road and Asphalt Repair Patchers

\* Patchers shown with optional equipment

**COMBINE THE PROVEN BENEFITS OF SPRAY PATCHING WITH THE LATEST TECHNOLOGY:**



**ONE PERSON OPERATION  
TO REDUCE LABOR COST**



**ASPHALT OR CONCRETE  
REPAIR YEAR-ROUND**



**90%+ COMPACTION RATE  
WITHOUT USE OF COMPACTOR**



**IMMEDIATE TRAFFIC FLOW TO  
KEEP DELAYS TO A MINIMUM**

Your Schwarze Dealer.

**CIE** *Carolina  
Industrial  
Equipment LLC*  
A Bortek COMPANY

☎ 800.476.2434

🌐 [cieequipment.com](http://cieequipment.com)

📍 4315 Taggart Creek Road  
Charlotte, NC 28208

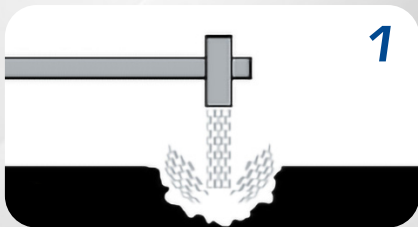
The U.S. Department of Transportation's National Research Council's Strategic Highway Research Program (SHRP) Report deems spray injection patching as "the most economical and longest lasting method of pothole repair." This is primarily due to the benefit of having a single operator and the average patch lasting 4-7 years.





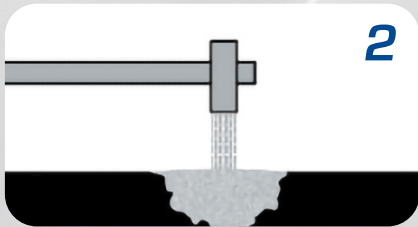
A recent report by the Minnesota Department of Transportation conducted a present worth analysis of spray patching vs. traditional "throw and roll" and found the cost of spray patching to be 1/3 the cost [\$2.31 per patch vs. \$7.17 per patch], again due to lower labor and the fact that spray injection lasted 4 years compared to throw and roll patches having to be refilled annually due to wash out from weather.

## 4-Step Spray Injection Patching Process



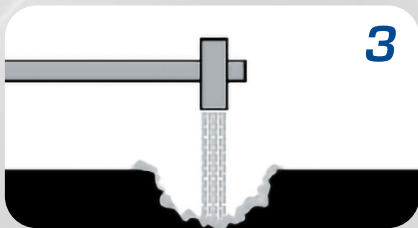
1

**Cleaning** – Dust and debris is blown from the pothole by a high velocity blower. The Operator is located in the cab eliminating being exposed to traffic and reducing the risk of potential personal injury.



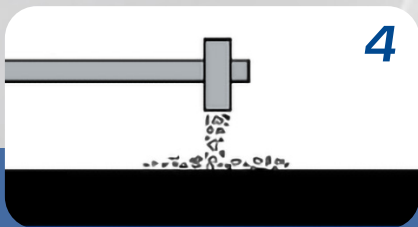
2

**Tacking** – Asphalt emulsion is sprayed to seal the surface and create a binder for the repair. A nozzle tilt allows for more efficient movement of rock when cleaning the repair and reduces rock bounce.



3

**Filling** – Asphalt emulsion and aggregate are combined to create a quality and durable high density repair. With a 90% compaction rate based on the Strategic Highway Initiative Testing without the use of compactors.



4

**Dry coating** – The repair is topped off with aggregate to allow immediate traffic on the new surface.

Once familiarized with the spray patching process and controls, one single operator can put down approximately 9 tons of material a day.

By utilizing spray patching for repairs, Municipalities can extend the lifespan of marginal roadways and focus on roads that are "worst-case scenarios."

Spray injection patching can be used to repair potholes, alligator cracking, cup cracking as well as perform other road maintenance functions.





## Superior Spray Patch System

Spray injection patching is a specialized repair process that combines hot asphalt emulsion and crushed aggregate using forced air. Spray injection patching is very versatile in the types of repairs that can be done! It is not only an exceptional repair method for potholes, you can repair alligator cracks, cupped cracks, areas that are raveling, high iron and any other type of repair where you would use traditional asphalt. This type of repair can easily be used on concrete as well.

## What Equipment Do I Need?

Schwarze spray patch equipment consists of an aggregate hopper, hot asphalt emulsion tank and a high volume blower which is all mounted on the same piece of equipment. There are two types of machines: Trailer mounted and Truck mounted. The trailer mounted machine takes a 2 to 3 person crew to operate the equipment; the truck mounted machine needs only one person to operate the equipment.

## Are There Cost Savings?

The cost savings is apparent right from the start, 2 men is all that you need to place approximately 8 tons of material with the trailer patcher while 1 man can place 12 tons of material with the truck. Besides labor, cost savings are realized by the longevity of the repair. The average spray patch lasts 4-7 years.

## What About The Weather?

Spray patching can be done year round as long as you have a supply of aggregate and RS-2 emulsion. Cold weather is also when the cost savings really start to add up. The repaired area will withstand the freeze-thaw movement of pavement. It does not deteriorate or break out. There are not hard edges for the snow plows to catch the patch and it will stay in place. Even when the temperature is below freezing, you will not have to go back time and time again to the same pothole.

## What About Safety?

If safety for your work force is a concern, the truck mounted unit is the answer! One person can work from the safety of the cab and still place approximately 12 tons of "HOT" material. The trucks are equipped with their own arrow-board and a crash cushion can be easily added.



For More Information Visit  
[WWW.SCHWARZE.COM/SURFACE-REPAIR](http://WWW.SCHWARZE.COM/SURFACE-REPAIR)

Repairs:			
<ul style="list-style-type: none"> <li>• Potholes</li> <li>• Alligator Cracks</li> <li>• Utility Cuts</li> <li>• Shoulder Work</li> <li>• Depressions</li> <li>• Edge Raveling</li> </ul>	<b>Roadpatcher™</b>  Mounts on various cabover chassis to meet requirements	<b>Spray Patcher Street Max</b>  Fed from a standard dump body with pintle hitch	<b>Spray Patcher Load King</b>  Self contained unit carries its own aggregate and emulsion, and can be towed with a one-ton pickup
<b>AUXILIARY ENGINE</b>			
Manufacturer	Perkins T4F	Deutz T4F	Perkins T4F
Model	404F-E22TA	TD2.9	404F-E22TA
Horsepower	67 HP @ 2600 rpm	74 HP @ 2600 rpm	67 HP @ 2600 rpm
Starting system	Electric	Electric	Electric
Charging system	12 volt; 85 amp	12 volt; 85 amp	12 volt; 85 amp
Battery	12 volt; 550 cca	12 volt; 550 cca	12 volt; 550 cca
Fuel tank	40 gallon	40 gallon	40 gallon
<b>BLOWER SYSTEM</b>			
Type	Lobe-Type Air Blower	Lobe-Type Air Blower	Lobe-Type Air Blower
Drive	Direct Drive	Direct Drive	Direct Drive
Output	435 cfm	670 cfm (18.97 cubic meters per minute) @ 2200 RPM	435 cfm
Dimensions	4 in x 6 in (102 mm x 152.4 mm)	5 in x 5 in (127 mm x 127 mm)	4 in x 6 in (102 mm x 152.4 mm)
<b>AGGR. DELIVERY HOSE</b>			
Type	Rubber lined, abrasion resistant, spiral reinforced, non-kinking	Wire reinforced, flexible, gum lined tri-folding system	Rubber lined, abrasion resistant, spiral reinforced, non-kinking
Inner diameter	2 1/2 in (63 mm)	4 in (101.6 mm)	3 1/2 in
Hose length	35 ft	19 ft	19 ft
Maximum flow	150 lbs per minute	150 lbs per minute	125 lbs per minute
<b>AGGREGATE HOPPER BODY</b>			
Capacity	6.5 cu yd	2 cu ft	2 cu yd
Cover	n/a	n/a	Nylon/Hinged Metal Doors
Conveyance	Conveyer to air lock air flow system	Venturi air flow system	Gravity fed with vibration assist; Venturi air flow system
Construction	10 gauge Steel	10 gauge Steel	10 gauge Steel
Fill opening	9'10" x 6'10"	n/a	5'3" x 5'3"
<b>EMULS. STORAGE &amp; DEL.</b>			
Emulsion capacity	300 to 400 gallon	300 gallon	100 gallon
Compressor	18 cfm	12 cfm	12 cfm
Delivery pressure	70psi	70psi	70psi
Heating element	110 volt, 2000 watt; thermostatically controlled	110 volt, 2000 watt; thermostatically controlled	110 volt, 2000 watt; thermostatically controlled
Nozzle temp	160°F	160°F	160°F
Flush Tank Capacity	30 gallon	30 gallon	30 gallon
Tank Insulation	Polyurethane Foam	Polyurethane Foam	Polyurethane Foam
Insulation R-Value	20	20	20
<b>SAFETY EQUIPMENT</b>			
Lighting	Amber LED strobe light;	Amber LED strobe light;	Amber LED strobe light;
Signage	Slow moving vehicle emblem; warning triangle; optional directional arrow board	Slow moving vehicle emblem; warning triangle; optional directional arrow board	Slow moving vehicle emblem; warning triangle; optional directional arrow board
Alarm	Backup alarm	Backup alarm	Backup alarm
Fire	5 lb fire extinguisher	5 lb fire extinguisher	5 lb fire extinguisher
<b>PAINT</b>			
Application	One coat sealer/primer; two coats polyurethane	One coat sealer/primer; two coats polyurethane	One coat sealer/primer; two coats polyurethane
Brand	Axalta Imron Elite	Axalta Imron Elite	Axalta Imron Elite
Color	Standard white	Standard yellow	Standard yellow

Note: Design and specifications subject to change without notice.

Sourcewell

Awarded Contract

Contract # 093021-SWZ



800.476.2434  
ciequipment.com



© 2021 Schwarze Industries  
1055 Jordan Road  
Huntsville, AL 35811

An Alamo-Group Company