

MAINTENANCE PLANNING GUIDELINES

2006

ACTIVITY: Asphalt Pavement Repair
(R312)

ACTION: Blade, Box & Lay Down Machine
Patching (TN)

MINOR

DEFINITION -- The time and expenses incurred for continuous surface treatment with cold and hot mix bituminous material furnished by MoDOT or contractor. Includes all costs for hauling material and laying material. Includes maintenance leveling course operations with contractor furnished hot mix delivered to the roadway. Includes all costs for receiving material on the roadway and laying it. This includes costs for tacking, blade or box laying, and compacting of surface patches. Includes wedging at bridge ends.

PURPOSE: To correct large surface failures and settlements by blade or machine repair.

SCHEDULING: As needed when temperature is warm. Repairs should be made as priorities allow. Major Routes will take priority over Minor Routes.

J	F	M	A	M	J	J	A	S	O	N	D
A	E	A	P	A	U	U	U	E	C	O	E
N	B	R	R	Y	N	L	G	P	T	V	C

RECOMMENDED EQUIPMENT:

- Motor Grader, Pull Paver or Self Propelled Paver
- Roto-Mill (If needed)
- Rumble Strip Mill (if needed)
- Sweeper
- Asphalt Distributor
- Roller
- Dump Trucks
- Traffic Control Equipment;
(See EPG 616.23 [Traffic Control for Field Operations](#))

RECOMMENDED MATERIAL:

- Liquid Asphalt (tacking grade)
- Premixed Bituminous Material
- Hot Mix Asphalt
- Recycled Millings

RECOMMENDED PROCEDURE:

1. Place traffic control devices as required.
2. Mill out failed area (minimum of 2”) if needed.
3. Clean thoroughly
4. Shoot tack in area to be patched.
5. Spread material on tacked area.
6. Roll patch.
7. Allow hot mix to cool before opening to traffic.
8. Mill in Rumble Strip if obliterating more than 200 feet.
9. Install and maintain temporary pavement marking until permanent marking is installed.
10. Remove traffic control devices.
11. Add required signs, as needed.

SAFETY: Flaggers should warn motorists of fresh tack, fresh asphalt mix, moving equipment, windrow of materials, and correct lane to drive in ahead. Reference the [Safety Policies, Rules & Regulations – Employee Handbook](#).

OTHER CONSIDERATIONS: Tacking edges of milled area, or sealing the cold joint after patch has been rolled is helpful to ensuring longevity of patch. Subgrade failure may require base reconstruction.

REFERENCES: Missouri Standard Specifications for Highway Construction Section 401 (or equivalent), 1002, 1015.

R312 – Asphalt Pavement Repair (Self Propelled Paving)



(1) Asphalt Pavement Repair



(2) Self Propelled Paver



(3) Hand Raking as needed



(4) Roller