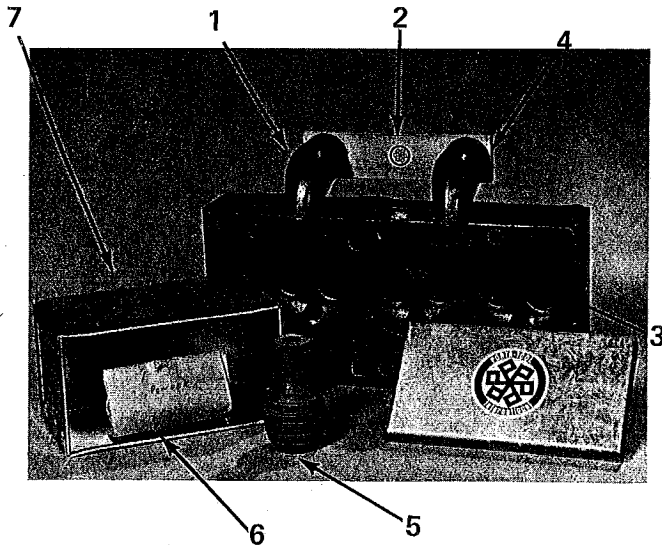


Instructions for use of

PF-100 PORTA-FLUX KIT (ST-1166)

READ CAREFULLY BEFORE USING THIS MACHINE

The "PF-100" PORTA-FLUX KIT
is used to determine if there are cracks in the counterbore ledge.



DET. #	PART #	PART DESCRIPTION	AMT.
6			
1	PF-1	North Pole Magnet	1
2	PF-2	Base	1
3	PF-3	Wear Plate	2
(NS)	PF-4	C'sk Soc. Set Scr.	2
(NS)	PF-5	Soc. Hd. Cap Scr.	2
4	PF-6	South Pole Magnet	1
5	PF-7	Powder Spray Bulb	1
6	PF-8	Powder	1 lb.
7	PF-9	Steel Box	1

1. Cracks which break out into the coolant cavities in the general area just beneath the counterbore ledge have not been successfully salvaged.

2. Blocks cracked in a horizontal direction through the wall between the push tube cavity and cylinder liner bore (1/2 to 1 1/2 inches below counterbore ledge) in the cylinder head cap screw boss area, have not been successfully salvaged.

3. MAGNETIC INSPECTION:

- Area of the block to be inspected must be clean.
- Place the magnet straddling the area to be checked.
- Fill the green bulb 1/3 full of powder.
- Spray powder lightly on the area to be checked.
- Gently blow off excess. Powder will remain in crack if present and show up as a white line:

EXAMPLES OF USAGE . . .

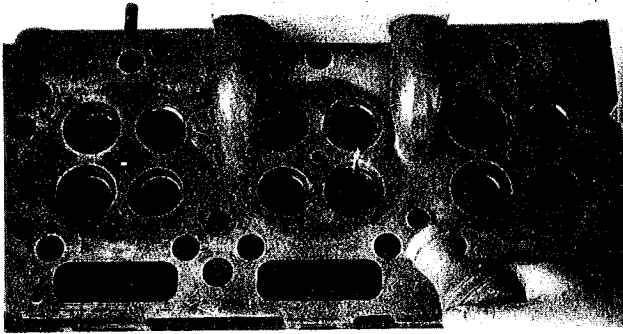


Figure 1. Place tool as shown above. Fill bulb one-third full of powder. You are now checking for cracks that run across the cylinder head (in line with the poles). Spray powder lightly into combustion chamber. Gently blow off excess. Powder will remain in crack.

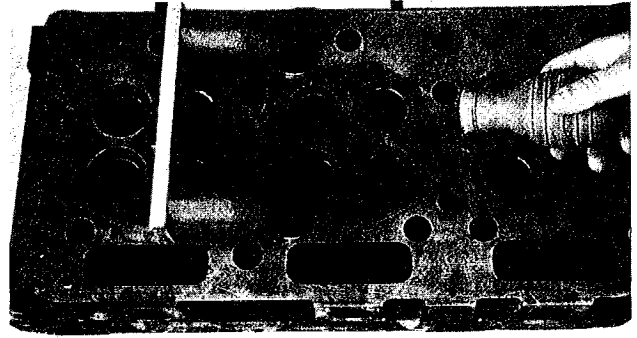


Figure 2. Place tool as shown above. Repeat procedure as outlined in Figure 1. You are now checking for cracks running lengthwise of the cylinder head.

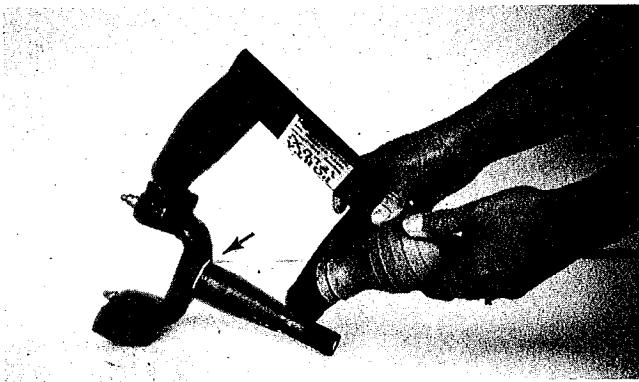


Figure 3. Parts are easy to check. Any cracks will show up as a white line.

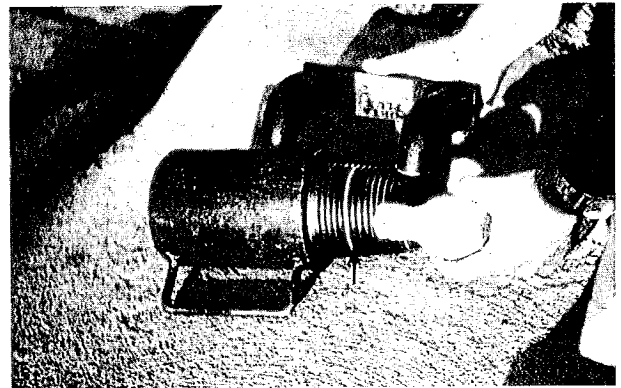


Figure 4. This photo illustrates how tool has disclosed crack in threads on oil tool joint.

NOTE: When dispensing powder always hold thumb partially over spray head to keep it from blowing off.