

Government of India
Ministry of Railways
Research, Designs & Standards Organisation
Manak Nagar, Lucknow - 226 011

No. EL/2.2.2/J-6

Dated 16.10.87
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SPECIAL MAINTENANCE INSTRUCTION NO. RDSO/ELRS/SMI/133

Dismantling instructions of isolator rod part No. 6031 from isolator blade head part No. 6001 of DBTF circuit Breaker

1. OBJECT

Railways have reported a few cases of breakage of isolator blade (6031) of circuit breaker. It is observed during investigation that these breakages are mainly due to any of the following reasons:

- (i) Step formation on the isolator blade (6031),
- (ii) Overshooting of the isolator blade,
- (iii) Improper damping of isolator drive (2400)
- (iv) Generally removal of isolator rods are being done with the help of wedge which causes permanent set of parallel groove of isolator head (6000) in widened condition. Further clamping of isolator rod will not be proper resulting in breakage of isolator rod.
- (v) Material defect.

2. INSTRUCTIONS

For (1) , (II) and (III) refer RDSO/ELRS/SMI/130 and this office letter No.EL/2.2.2/J-6 dated 1/5.5.87.

For preventing breakage of isolator blade due to item (iv), the following procedure can be adopted for the removal of isolator rod from the isolator blade head whenever required.

Remove isolator head complete (6000) from the breaker. Dismantle all of its assembled components from the isolator blade head assembly, except isolator blade.

- Hold the isolator blade head with isolator rod in the fixture as shown in SK. EL. 3921. Hold the fixture in vice and rotate the end Hex Nut with the help of spanner. The isolator rod will come out from the isolator blade head. Afterwards insert new isolator rod with the help of nylon hammer. Once again assemble all removed parts of the isolator blade head.

For (v) above, material of isolator rod has been changed to Berillium copper from breaker No. IB 039625 by M/s HBB.

3. **REFERENCE**

HBB Instruction No. SWT 5113 in two sheets.

4. **INSTRUCTION DRAWING**

RDSO Drawing No. SK.EL/3921.

5. **APPLICATION**

Electric locomotives and EMUs fitted with air blast circuit breaker type DBTF 30i250 of M/s HBB.

6. **AGENCY FOR IMPLEMENTATION**

All electric loco sheds and EMU car sheds, POH workshops.

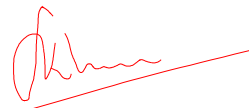
7. **PERIODICITY OF IMPLEMENTATION**

Sheds : AOH/POH

Workshops : POH

8. **DISTRIBUTION**

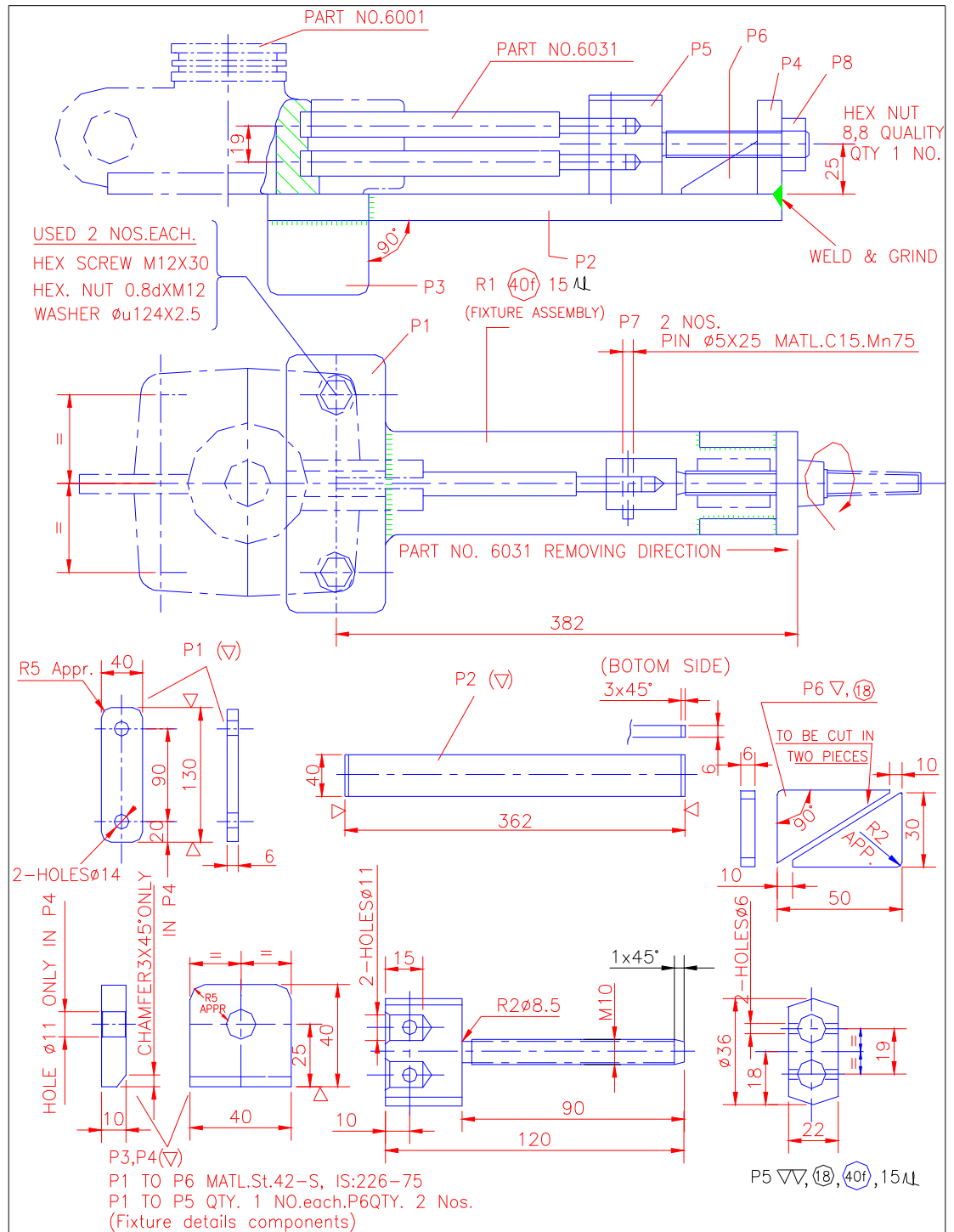
As per the list attached.



(S.S. KHURANA)

For Director General/Electrical.

DA: Two.



REF:- H.B.B. DRG.NO.SWT 5113

SCALE:- NTS

APPROVED BY:-

Sd

FIXTURE FOR DISMANTLING THE ISOLATOR ROD
(Pt6031)FROM ISOLATOR BLADE HEAD(Pt 6001)OF DJ

RDSO. ELEC. DTE.

SKEL 3921

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