



Spark Arresters User's Guide

APPLICATION

Western Tydens' Spark Arresters have been type tested in accordance with relevant standards for arresting incandescent carbon particles, sparks, from the exhaust gas discharge of diesel engines. (They are not suitable for any other type of spark suppression applications) The user must ensure that the spark arrester is suitable for its intended application, and that it is correctly sized to the engine specification and power rating, if necessary noise levels, back pressure and temperature requirements must be assessed. Reference should be made to product data sheets available through the company's web site or check with Western Tydens (W.T) or their representative. *N.B* The operation of an engine in a hazardous environment may require additional safety precautions.

INSTALLATION

1. Refer to product I.D. plate for type and see product data sheet to ensure suitability for engine size and power.
2. Ensure that the Spark Arrester is installed with the gas flow in the direction of the arrow.
3. Fit the Spark Arrester into the exhaust pipe at a convenient point, as close to the end of the system as practical, preferably after any other devices. Attention should be paid to the vent position of the tail pipe.
4. Ensure unit is adequately supported; extra brackets may be required, fit flexible joints as appropriate.
5. Ensure the joints are gas tight (if necessary use a proprietary exhaust system sealant).
6. Where surface temperature may form a hazard, consideration must be given to suitable positioning and/or guarding
7. Test run engine, in a safe environment, examine the exhaust discharge in darkness for any sparks. . (If running in an enclosed space adequate precautions must be taken to avoid carbon monoxide poisoning).

MAINTENANCE

1. Western Tydens spark arresters contain no serviceable parts, and require minimal maintenance.
2. Spark Arresters should be examined daily whilst in use, for any signs of damage, ensure that the outer case is intact with no cracks, holes, dents or evidence of corrosion.
3. In normal conditions the Spark Arrester is self-cleaning. However, after prolonged use, particularly if the engine spends a long time idling, or is sooty the unit may be cleaned by bringing the engine to full operating temperature, then whilst running at high revs. The spark arrester case should be lightly tapped with a soft hammer to loosen any accumulated carbon; this will then be blown out by the exhaust.
4. Normally the first sign of deterioration in the Spark Arrester will be visible externally, however, but we recommend that approximately every 1000 hours it is removed and examined for damage, tap with a soft hammer as above and shake out any deposits and check for loose internal baffles. Reinstall and run a spark check as above.

Defective, Damaged or Suspect Spark Arrester must be removed from service and replaced. If in doubt consult W.T.

ATEX Installations

In order to fully comply with the directive, the Spark Arrester must be suitable for its intended purpose and shall be included in the temperature assessment of the completed engine prior to commissioning, in accordance with the following clauses as appropriate to the particular application. (Please check the standard)

EN 1834-1:2000, clause 5.3 / EN 1834-2:2000, clause 5.2 / EN 1834-3:2000, clause 5.1

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