



S_{12}

RULE-13

IF (S_{12}) Heat exchanger is ineffective

T_{13}

AND (T_{13}) Temperature reading of SW at exit of heat exchanger is low

S_{13}

THEN (S_{13}) Fouled heat exchanger and hence poor heat transfer is responsible for overheat

S_{17}

RULE-18

IF (S_{17}) Loss of coolant occurs in SW loop with pump operating

T_{18}

AND (T_{18}) Pressure gauge reading of SW is high

S_{18}

THEN (S_{18}) SW discharge valve is closed

S_{12}

RULE-14

IF (S_{12}) Heat exchanger is ineffective

T_{14}

AND (T_{14}) Temperature reading of SW at exit of heat exchanger is high

S_{14}

THEN (S_{14}) Loss of coolant occurs in SW loop

S_{17}

RULE-19

IF (S_{17}) Loss of coolant occurs in SW loop with pump operating

T_{19}

AND (T_{19}) Pressure gauge reading at suction valve of SW coolant pump is low

S_{19}

THEN (S_{19}) Blocked strainer or closed suction valve of SW coolant pump is responsible for overheat

S_{14}

RULE-15

IF (S_{14}) Loss of coolant occurs in SW loop

T_{15}

AND (T_{15}) SW control valve is closed

S_{15}

THEN (S_{15}) Closed SW control valve is responsible for overheat

S_{17}

RULE-20

IF (S_{17}) Loss of coolant occurs in SW loop with pump operating

T_{20}

AND (T_{20}) Pressure gauge reading at delivery valve of SW coolant pump is high

S_{20}

THEN (S_{20}) Closed delivery valve of SW coolant pump is responsible for overheat

S_{14}

RULE-16

IF (S_{14}) Loss of coolant occurs in SW loop

T_{16}

AND (T_{16}) SW coolant pump is not operating

S_{16}

THEN (S_{16}) Stoppage in SW coolant pump is responsible for overheat

S_{17}

RULE-21

IF (S_{17}) Loss of Coolant occurs in SW loop with pump operating

T_{21}

AND (T_{21}) Ampere meter reading of motor of SW coolant pump is abnormal

S_{21}

THEN (S_{21}) Power decrease of motor of SW coolant pump is responsible for overheat

S_{14}

RULE-17

IF (S_{14}) Loss of coolant occurs in SW loop

T_{17}

AND (T_{17}) SW coolant pump is operating

S_{17}

THEN (S_{17}) Loss of coolant occurs in SW loop with pump operating

S_{17}

RULE-22

IF (S_{17}) Loss of coolant occurs in SW loop with pump operating

$T_{22.1}$

AND ($T_{22.1}$) Pressure gauge reading at delivery valve of SW coolant pump is low

$T_{22.2}$

AND ($T_{22.2}$) Pressure gauge reading at suction valve of SW coolant pump is normal

S_{22}

THEN (S_{22}) Impeller damage in SW coolant pump is responsible for overheat