

















In-Block

Direct Immersion Heaters

Note: In-block heaters are complete with 2-wire w/ground 6 foot HPN cord and plug. For cord replacements or "Y" thermocord energy saver, please reference page 56.



| Engine Model | Part Number 120 Volts | Part Number 240 Volts | Watts | Product Image | Application Information | Heat Shield Required | Oil Heater Thread Size* |
|--|-------------------------------------|-------------------------------------|---------------------|---|---|-------------------------|----------------------------|
| Allis Chalmers | | | | | | | |
| 670T & I 685T & I 6138LT, T & I 25000 (844 CID) | AC-101 CATV-151 | AC-102 CATV-152 | 1000 1500 |  | Replaces 1" thread-in plug on the oil cooler at rear of the engine on the right side. Note that not all of the engines have this opening. | | |
| Case/IH – Agricultural | | | | | | | |
| ALL 4 CYL 390 ALL 6 CYL 590 | CUB-751FP CUB-101FP CUB-151FP | CUB-752FP CUB-102FP CUB-152FP | 750 1000 1500 |  | Inserts in any of the freeze plugs right side of engine | | 22mm |
| ALL 6 CYL 830 | CUC-151FP | CUC-152FP | 1500 |  | Inserts in the freeze plug right rear of the block | | 22mm |
| Caterpillar | | | | | | | |
| C-10 C-12 | TF121-000 | TF122-000 | 1250 |  | Replaces the 1" threaded plug in the oil cooler bonnet | YES | 1" NPT |
| C-9 Non ACERT C-15 Non ACERT C-16 Non ACERT | CATV-151 | CATV-152 | 1500 |  | C-9 Only: Mount in rear face of block C-15, C-16: Mount in rear oil cooler bonnet from the back end | | 1" NPT |
| C7 ACERT 3126 | FP101-001 FP151-001 | FP102-001 FP152-001 | 1000 1500 |  | Replace 44mm frost plug on right hand side of engine just below the turbo charger. | YES | |
| C7 ACERT rear port | TL101-000 | TL102-000 | |  | Replace 1-1/16" plug in the rear of the block | | |
| C9 ACERT | CATV-151 | CATV-152 | 1500 |  | Replace 1" NPT plug in the right rear of the engine block | | |
| C11 ACERT C13 ACERT | TF151-008 | TF152-008 | 1500 |  | Replace any of the 1-5/16" plugs in rear of oil cooler on the right hand side of the engine | Check Exhaust Routing | 1 5/16" STOR |
| C15 ACERT w/o breaksaver | TF151-009 | TF152-009 | 1500 |  | Replace 1-3/16" plug in rear of the oil cooler on the right hand side of the engine | | |
| C15 ACERT with breaksaver | TF151-008 | TF152-008 | 1500 |  | Replace 1-5/16" plug in the oil cooler on the right hand side of engine | | |
| C9 2007 ACERT C13 2007 ACERT C15 2007 ACERT | TF151-012 | TF152-012 | 1500 |  | Replace 1-3/16" plug in the rear of the oil cooler on the right hand side of the engine | | |
| 1674 | CATB-151 | CATB-152 | 1500 |  | Replaces the 1-1/2" thread-in plug on the right side of the engine | | |
| 1693 & D343 | CATC-151 | CATC-152 | 1500 |  | Replaces water jacket access plate on the left side of the engine | | |
| 1693T & 1693TA | CATC-151-S | CATC-152-S | 1500 |  | Replaces water jacket access plate on the left side of the engine | | |
| 3013 1.5L 3014 2.0L | FP531-003 | FP532-003 | 530 |  | Replaces 40mm core plug on the front, left side of the engine | | |

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| Engine Model | Part Number 120 Volts | Part Number 240 Volts | Watts | Product Image | Application Information | Heat Shield Required | Oil Heater Thread Size* |
|--|--|--|------------------------------|---------------|---|-------------------------|----------------------------|
| Caterpillar — Continued | | | | | | | |
| 3024 2.22L | FP531-003 | FP532-003 | 530 | | Replaces 40mm core plug on the front, left side of the engine | | |
| 3034 2.95L | FP531-001 | FP532-001 | 530 | | Replaces 50mm core plug located at back of head | | |
| 3044 3.3L | PF531-001 | PF532-001 | 530 | | Mounts in "football shaped" opening on the right of the engine | | |
| 3046 5.0L | PF531-000 | PF532-000 | 530 | | Replaces 35mm core plug located at rear of engine, left side | | |
| 3054 3.99L 3054B 4.23L | PER-751FP PER-101FP | PER-752FP PER-102FP | 750 1000 | | Mounts in the 1-1/4" freeze plug opening on the left side of the engine | | |
| 3054C | PER-751FP | PER-752FP | 750 | | Mounts in 1-1/4" freeze plug at left rear of engine | | |
| 3056 6.0L | PER-151FP | PER-152FP | 1500 | | Mounts in the 1-1/2" freeze plug on the right side of the engine | | |
| 3114 3116 | FP101-001 FP151-001 | FP102-001 FP152-001 | 1000 1500 | | Replaces the core plug on the right side of the engine just below the turbocharger | YES | 11/16"X12 |
| 3176 10.3L through 1995 | DD8L-101 CAT-12015 TF151-001 | DD8L-102 CAT-12023 TF152-001 | 1000 1250 1500 | | Replaces the 3/4" plug on the right side of the engine just below the head. | | 1" NPT |
| 3176 10.3L 1996 and later | TF121-000 | TF122-000 | 1250 | | Replaces the 1" threaded plug in the oil cooler bonnet | YES | 11/16"X12 |
| 3196 12.0L | TF121-000 | TF122-000 | 1250 | | Replaces 1" threaded plug in oil cooler bonnet | YES | 11/16"X12 |
| 3204 all 1100 series | CATX-751 CATX-101 | CATX-752 CATX-102 | 750 1000 | | Replaces the core plug on the right side of the engine just below the turbocharger | | 22mm |
| 3208 — 2 heaters with a single cord | CATX-2-751-Y | CATX-2-752-Y | 1500 total | | Use on industrial engines when clear access is available. Replaces any core plug - one on each side of the engine | | |
| 3208 Recommended Aftermarket Installation | JD3/4-101IN JD1-101IN JD3/4-151IN JD1-151IN | JD3/4-102IN JD1-102IN JD3/4-152IN JD1-152IN | 1000 1000 1500 1500 | | Replaces any of the 3/4" or 1" plugs on the water transfer casting (right front of the engine). 3/4" use JD3/4 — 1" use JD1 | | |
| 3304 3306 | DD8L-101 CAT-12015 TF151-001 | DD8L-102 CAT-12023 TF152-001 | 1000 1250 1500 | | Replaces the 3/4" plug on the left side of the engine | | |
| 3406C/E 14.6L | AC-101 CATV-151 | AC-102 CATV-152 | 1000 1500 | | Replaces 1" thread-in plug in the rear of the oil cooler bonnet on the right side of the engine | | 1" NPT |










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| Engine Model | Part Number 120 Volts | Part Number 240 Volts | Watts | Product Image | Application Information | Heat Shield Required | Oil Heater Thread Size* |
|---|--------------------------|---|--------------|---|---|-------------------------|----------------------------|
| Caterpillar — Continued | | | | | | | |
| 3406 & 3408 except 1998 ADEM 2 | AC-101 CATV-151 | AC-102 CATV-152 | 1000 1500 |  | Replaces 1" thread-in plug in the rear of the oil cooler bonnet on the right side of the engine | | 1" NPT |
| 3406E 1998 ADEM 2 engines only | TF151-002 | TF152-002 | 1500 |  | Replaces the 1" threaded plug that points downward on the top of the rear of the oil cooler bonnet | YES | 1" NPT |
| 3406E ADEM 3 and ADEM 2000 engines | AC-101 CATV-151 | AC-102 CATV-152 | 1000 1500 |  | Replaces 1" thread-in plug in the rear of the oil cooler bonnet on the right side of the engine | | 1" NPT |
| 3456 15.8L | AC-101 CATV-151 | AC-102 CATV-152 | 1000 1500 |  | Replaces 1" thread-in plug in the rear of the oil cooler bonnet on the right side of the engine | | 1" NPT |
| Chevrolet/GMC (Small Truck) | | | | | | | |
| 5.7L V8 (350 CID) | FC601-501 | NONE | 600 |  | Mounts in the freeze plug in the engine's block No replacement cord available | | |
| 6.2L V8 Diesel 6.5L V8 Diesel | FC601-PY2 | | | | | | |
| Cummins | | | | | | | |
| 6 Cylinder Engines: H, NT, NH, N Family 743 CID, 855 CID, 927 CID, "N14" 1. Cummins engines are often referred to by their horsepower rating "i.e. 350 Cummins" 2. Cummins engines are often referred to as Big Cam, Big Cam2, 3, 4, full flow cooling, etc. All refer to engines of 855 CID Size – listed below | | | | | | | |
| Group I | | | | | | | |
| Flat plate design | CUN-151B | CUN-152B | 1500 |  | 6 bolt flat plate on the right side of the engine. May use either the forward or rear opening depending on clearance. | | 1" NPT |
| Flat plate design when the 1/2" NPT opening is used | CUN-151BH | CUN-152BH | 1500 |  | | | 1" NPT |
| Group II | | | | | | | |
| When an external oil cooler is used.. | | Note: When a 4 bolt flat plate element design is encountered, remove the next two bolts on the casting, remove the whole casting, and replace the casting and element with either CNT-151B/CNT-152B OR CNT151B90/CNT152B90 | | | | | |
| When connection is 1 1/2" rubber hose Engines produced Aug. 1975 thru June 1982 | CNT-151B-90 | CNT-152B-90 | 1500 |  | 6 bolt, flat plate design with an elbow that will rotate 360 degrees to connect with any hose or casting | | 1" NPT |
| Uses an "O" ring for the 1 1/4" water tube connection Engines produced prior to August '75 | CNT-151B | CNT-152B | 1500 |  | 6 bolt, flat plate design with an elbow that will rotate 360 degrees to connect with any hose or casting | | 1" NPT |

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| Engine Model | Part Number 120 Volts | Part Number 240 Volts | Watts | Product Image | Application Information | Heat Shield Required | Oil Heater Thread Size* |
|---|-------------------------------------|-------------------------------------|---------------------|---------------|--|-------------------------|----------------------------|
| Cummins — Continued | | | | | | | |
| Group III | | | | | | | |
| For industrial engines with hole pattern reversed | CUN-151BREV | CUN-152BREV | 1500 | | Six bolt flat plate on the right side of the block | | 1" NPT |
| Group IV | | | | | | | |
| 1998 and later N14 Industrial | PF151-002 | PF152-002 | 1500 | | Six bolt flat plate on the right side of the block | | 1" NPT |
| Additional Cummins Engine Models | | | | | | | |
| Cummins A 4 cyl & 6 cyl | CUA-101F | CUA-102F | 1000 | | Inserts in any of the freeze plugs on right side of engine. Element points down. | | |
| ISC/QSC 8.3L ISL/QSL 9.0L | DD8L-101 | DD8L-102 | 1000 | | 3/4" NPT threaded plug in the right rear side of engine | | 22mm |
| L10, M11 ISM | CUL-151 | CUL-152 | 1500 | | Inserts in the forward opening of the heater casting on the right rear of block | | 1" NPT |
| QSB 3.9L, 5.9L ISB 5.9 | TF751-002 | TF752-002 | 750 | | 3/4" NPT threaded plug in the front of the oil cooler casting | | 22mm |
| ISM/QSM 11.0L Flat Plate Design | PF151-003 | PF152-003 | 1500 | | Right rear. Replaces plate. | | 1" NPT |
| QSX, ISX Signature 600 | PF151-004 | PF152-004 | 1500 | | Mounts in the "football shaped" plate on the right side of the block | | 27mm |
| 4BT 3.9L | CUB-751FP CUB-101FP | CUB-752FP CUB-102FP | 750 1000 | | Inserts in any of the freeze plugs right side of engine | Check Exhaust Routing | 22mm |
| 6BT 5.9L | CUB-751FP CUB-101FP CUB-151FP | CUB-752FP CUB-102FP CUB-152FP | 750 1000 1500 | | Inserts in any of the freeze plugs right side of engine | Check Exhaust Routing | 22mm |
| 6CT 8.3L | CUC-151FP | CUC-152FP | 1500 | | Inserts in the freeze plug right rear of the block | | 22mm |
| Detroit Diesel | | | | | | | |
| SERIES 10 4 cylinder Phaser engines | PER-751FP PER-101FP | PER-752FP PER-102FP | 750 1000 | | Mounts in the 1-1/4" freeze plug opening on either side of the engine | | |
| SERIES 10 6 cylinder Phaser engines | PER-151FP | PER-152FP | 1500 | | Mounts in the 1-1/2" freeze plug on the right side of the engine | | |
| SERIES 30 | DD8L-101 | DD8L-102 | 1000 | | Mounts in the 3/4" NPT opening in the block | | |

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| Engine Model | Part Number 120 Volts | Part Number 240 Volts | Watts | Product Image | Application Information | Heat Shield Required | Oil Heater Thread Size* |
|---|--|------------------------------------|---------------------|---------------|--|-------------------------|----------------------------|
| Detroit Diesel – continued | | | | | | | |
| SERIES 40 all versions | PER-751FP INTA-121 FR151-001 | PER-752FP INTA-122 FR152-001 | 750 1250 1500 | | Mounts in the frost plug opening on the left side of the engine | | |
| SERIES 50 SERIES 60 | AC-101 CATV-151 | AC-102 CATV-152 | 1000 1500 | | Mounts in the 1" NPT opening in either water pick up pipe (up to 1991) or in the 1" NPT opening on the oil cooler housing after 1991 | yes on 1991 and later | 3/4" NPT |
| SERIES 55 | PF151-000 | PF152-000 | 1500 | | Mounts in the triangle plate on the side of the block | | |
| 3-53, 4-53, 3-71, 4-71 with water cooled air compressor | DD-751-S | DD-752-S | 750 | | Mounts in the "football shaped" plate on the block. Check clearance. | | |
| 3-53, 4-53, 3-71, 4-71 without water cooled air compressor | DD-751 | DD-752 | 750 | | Mounts in the "football shaped" plate on the block. Check clearance. | | |
| 6-71 with water cooled air compressor | DD-151-S | DD-152-S | 1500 | | Mounts in the "football shaped" plate on the block. Check clearance. | | |
| 6-71 without water cooled air compressor | DD-151 | DD-152 | 1500 | | Mounts in the "football shaped" plate on the block. Check clearance. | | |
| 8.2 L V-8 Diesel | DD8L-101 | DD8L-102 | 1000 | | Threads into the 3/4" NPT opening on the block | | |
| 6V-53 with water cooled air compressor | DD6V-751-S | DD6V-752-S | 750 | | Mounts in the "football shaped" plate on the block. Check clearance. | | |
| 6V-53 without water cooled air compressor | DD6V-751 | DD6V-752 | 750 | | Mounts in the "football shaped" plate on the block. Check clearance. | | |
| 6V71 & 8V71 Alternate location | AC-101 CATV-151 | AC-102 CATV-152 | 1000 1500 | | Threads into 1" NPT plug in the front face of the block | | |
| 6V-71 & 8V-71 6V-92 & 8V-92 except GMC General models | DDV-151B | DDV-152B | 1500 | | Mounts in the square plate on the block | | |
| 6V92 & 8V92 alternate location - threads into oil cooler. | DD8L-101 | DD8L-102 | 1000 | | Threads into the 3/4" NPT opening in the oil cooler housing. Note - not all engines have this opening | | |
| Deutz | | | | | | | |
| BF4L913 BF6L913 F3L912 F3L913 F6L913 1011 SERIES oil cooled engines | OLT221515 plus A22M48M (adapter) | n/a | 150 | | Use adapter kit to mount the 22MM heater in the 48MM opening | | 22MM or 48MM |

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|--|----------------------------|----------------------------|--------------|---------------|--|--------------------------|----------------------------|
| Deutz – continued | | | | | | | |
| 1012 — 4 & 6 cyl 1013 — 4 cyl | PF751-000 | PF752-000 | 750 | | Mounts in the "football shaped" plate opening on the oil cooler casting | | |
| 1013 6 cyl | PF121-001 | PF122-001 | 1250 | | Mounts in the "football shaped" plate opening on the oil cooler casting | | |
| 1015 6 & 8 cyl | TL151-004 | TL152-004 | 1500 | | Mounts in 30MM plug in water elbow on front of the engine | | |
| 2012 — 4 & 6 cyl | PF751-002 | PF752-002 | 750 | | Mounts in the "football shaped" plate opening on the oil cooler casting | | |
| Ford | | | | | | | |
| 6.9L & 7.3L V-8 diesels through 1993 | FC101-PY1 | None | 1000 | | Mounts in a freeze plug on the engine's block. No replacement cord available. | | |
| 7.3L V-8 diesels from 1994 on | TF751-002 DD8L-101 | TF752-002 DD8L-102 | 750 1000 | | Mounts in the 3/4" NPT plug in the engine's block | | |
| Hino | | | | | | | |
| 3.8L, 5.8L, 6.0L, 6.4L, 6.7L, W04C-T, W06E, H06C-T, H07C-B | DD8L-101 | DD8L-102 | 1000 | | Threads into 3/4" NPT opening in the block | YES | |
| Isuzu | | | | | | | |
| 4BD1 6HE1 6BD1 6SA1 6BG1 | TF401-501 | NONE | 400 | | Replaces 1" NPT plug in left rear of engine | | |
| Iveco | | | | | | | |
| NEF 4cyl NEF 6 cyl | PF751-001 | PF752-001 | 750 | | Mount in either front or rear opening on right side of engine block | | |
| John Deere | | | | | | | |
| With 3/4" plug in the back of the block | JD3/4-101IN JD3/4-151IN | JD3/4-102IN JD3/4-152IN | 1000 1500 | | 3/4" NPT opening in the rear face of the block | check Exhaust routing | |
| With 1" plug in the back of the block | JD1-101IN JD1-151IN | JD1-102IN JD1-152IN | 1000 1500 | | 1" NPT opening in the rear face of the block | | |
| With 1 5/8" opening on the side of the water jacket | JDS-101 | JDS-102 | 1000 | | 1-5/8" threaded opening on the side of the block in the water distribution channel | | |

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|--|--------------------------|--------------------------|--------------|---------------|--|-------------------------|----------------------------|
| John Deere – continued | | | | | | | |
| 6105 (10.5L) 6125 (12.5L) | AC-101 CATV-151 | AC-102 CATV-152 | 1000 1500 | | 1" NPT opening in the oil cooler casting | | |
| Komatsu | | | | | | | |
| L10 (10L) M11(11L) | CUL-151 | CUL-152 | 1500 | | Inserts in the forward opening of the heater casting on the right rear of the block | | |
| SA6D125 | MA-151 | MA-152 | 1500 | | Threads into the freeze plug opening in the block | | |
| Kubota | | | | | | | |
| M, B, L Series D905 V1205 D1005 V1305 D1105 V1505 D3000B V4000B D3200B V4300B DH905 VH1205 DH1005 VH1305 | TF401-501 | N/A | 400 | | Replaces 1" NPT plug in left front of engine | | |
| Mack | | | | | | | |
| Mid liner E3 MS200 & MS250 | MAM-101 | MAM-102 | 1000 | | Mounts in rear face of block | | |
| Mid liner E5 MS300 | MAM-151 | MAM-152 | 1500 | | Mounts in the oil cooler bonnet | | |
| E6 engines "smooth bore" from 1981 on | MASB-151 | MASB-152 | 1500 | | Mounts in the freeze plug opening. Smooth opening design. | | |
| E6 engines threaded freeze plug opening not produced after '81 END 465, 711, EN438, 504, 707, 673, 675, 676 (1957 through 1981) | MA-151 | MA-152 | 1500 | | Mounts in any threaded freeze plug opening | | |
| E7 Engines Except E-Tech water pump mount | PF151-001 | PF152-001 | 1500 | | Mounts in the plate in either the front or rear face of the block in the water jacket passage. For 2002 engine – mounts in rear face of block. | | |
| E9, ENDT865, 866 and 1000 series V8 engines Use two heaters | DD8L-101 | DD8L-102 | 2000 total | | Threads into the 3/4" NPT opening on each side of the block | | |

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|---|------------------------------------|------------------------------------|---------------------|---------------|--|-------------------------|----------------------------|
| MAN | | | | | | | |
| D2840 D2842 D2848 | PF121-003 | PF122-003 | 1250 | | Replace "football shaped" plate in lower water pipe on right side of engine | | |
| D2866 D2876 | PF151-006 | PF152-006 | 1500 | | Replace 3 bolt plate on left side of engine. May require adapter if 3 bolt opening is not available on engine. Consult customer service. | | |
| Mercedes Benz | | | | | | | |
| MBE904 MBE906 | PF101-001 | PF102-001 | 1000 | | Replace frost plug in rear of engine on right side | YES | |
| Massey Ferguson | | | | | | | |
| 3 cylinder 4 cylinder 6 cylinder | PER-751FP PER-101FP | PER-752FP PER-102FP | 750 1000 | | Mounts in any of the 1-1/4" freeze plug openings in the engine | | |
| Navistar/International | | | | | | | |
| V800 (796 CID) | AC-101 CATV-151 | AC-102 CATV-152 | 1000 1500 | | Threads into a 1" NPT opening in the oil cooler bonnet | | |
| INLINE 6 CYLINDER — all series — 312, 360, 414, 436, 466 & 530 | PER-751FP INTA-121 FR151-001 | PER-752FP INTA-122 FR152-001 | 750 1250 1500 | | Mounts in the frost plug on the left side of the engine. Fits all series of these engines. | | |
| 6.9L & 7.3L V8 diesels through 1993 | FC101-PY1 or FC601-501 | None | 1000 600 | | No replacement cord available. Mounts in a freeze plug above starter | | |
| 7.3L & T444 all series | DD8L-101 | DD8L-102 | 1000 | | 3/4" NPT threaded opening in the block | | |
| 9.0L — V8 diesel | INT9-101F | INT9-102F | 1000 | | Mounts in a freeze plug | | |
| Oliver | | | | | | | |
| ALL EXCEPT 1265, 1365 & 1900 | TF751-002 DD8L-101 | TF752-002 DD8L-102 | 750 1000 | | Threads into a 3/4" NPT opening in the block | | |
| Onan — See Cummins "A" Series | | | | | | | |
| Perkins | | | | | | | |
| 3.152 4.236 6.354 | PER-751FP PER-101FP | PER-752FP PER-102FP | 750 1000 | | Mounts in the 1-1/4" freeze plug opening on the right side of the engine | | |
| 103.15 104.22 404.22 | FP531-003 | FP532-003 | 530 | | Mounts in left front freeze plug | | |

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|--|-------------------------------------|-------------------------------------|---------------------|---|--|-------------------------|----------------------------|
| Perkins – continued | | | | | | | |
| 700 Series 704.30 | FP531-001 | FP532-001 | 530 |  | Mounts in freeze plug in rear of head | | |
| 800 Series | PF531-001 | PF532-001 | 530 |  | Mounts in football shaped plate on the left front of the block | | |
| 1004 (right side) | FR751-002 FR101-000 PER-151FP | FR752-002 FR102-000 PER-152FP | 750 1000 1500 |  | Mounts in the 1-1/2" freeze plug opening on the right side of the engine | | |
| 1004 (left side) | PER-751FP PER-101FP | PER-752FP PER-102FP | 750 1000 |  | Mounts in the 1-1/4" freeze plug opening on the left side of the engine | | |
| 1006 (6 Cyl) A & B | PER-151FP | PER-152FP | 1500 |  | Mounts in the 1-1/2" freeze plug on the right side of the engine | | |
| 1103C | FR531-000 | FR532-000 | 530 |  | Replaces 1-1/4" freeze plug on right rear of engine. Element should point towards 10 o'clock position. | | |
| 1104 (4 Cyl) C | PER-751FP PER-101FP | PER-752FP PER-102FP | 750 1000 |  | Mounts in 1-1/4" freeze plug opening on right rear of engine with element straight up in 12 o'clock position | | |
| Volvo | | | | | | | |
| D9 | PF151-007 | PF152-007 | 1500 |  | Mounts in the "football shaped" plate on the front, right side of the engine | | |
| D12C Prior to Serial # 250502 | PF151-005 | PF152-005 | 1500 |  | Mounts below turbo charger on right center of engine | YES | |
| D12C After Serial # 250502 | PF121-002 | PF122-002 | 1250 |  | | YES | |
| TD60, TD61, TD70, TD71, TD100, TD101, VE10, TD120, TD121 | VT6-101 | VT6-102 | 1000 |  | Mounts into threaded opening (44mm) in the front of the engine | | |
| Yanmar | | | | | | | |
| 3T72HLE 4TN82E D4T YYDXL4.41 | TF401-501 | N/A | 400 |  | 1" NPT No replacement cord available | | |

NOTE: The only replacement parts for the direct immersion heaters is the power cord. Please see the power cord section on page 56 for the proper replacement cord set.

For thermostat control of in-block direct immersion heaters, see page 56. The energy saver Thermocord is available in various temperature ranges.

Supplemental heat for engines using in-block heaters can be achieved by the installation of oil pan heaters in the lube-oil. Reference pages 26 and 27 of this catalog or consult factory.

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