

SPECIFICATION
OF
MITSUBISHI DIESEL ENGINE
MODEL : S12R-PTA-C
FOR DIESEL GENERATOR SET

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|--|--|--|------|--|------------|--|--|--|---------------------|----------------|
| | | | | | | | | | APPROVED BY | DRAWN BY |
| | | | △ | | | | | | <i>J. Jankowski</i> | <i>H. Yato</i> |
| | | | DATE | | 2012.12.17 | | | | | |

1. GENERAL

| | | |
|-----------------------|---|-----------------------|
| Object and use | : | Diesel generator |
| Color of painting | : | Mansel No. 7.5BG6/1.5 |
| Applicable conditions | | |
| Ambient temperature | : | 5°C ~ 40°C |
| Altitude | : | 1500m above sea level |
| Max ,humidity | : | 85% |
| Place of installation | : | In door |

Shop test

Diesel engine running tests shall be carried out by the following items.

Starting test

| | | |
|-----------|---|-------------------------|
| Load test | : | 1/4, 2/4, 3/4 Load each |
| | : | 4/4 Load |

Governor test

: Governor test should be done along with
respective governor controller

Safety stop device test

Guarantee

The guarantee shall be validated for the period of either 1year or 1000Hr (at Hr counter) after installation, whichever the shorter.

The guarantee shall cover against manufacturer defect, materials and workmanship only, and shall not be applicable to damage sustained through mishandling of the equipment.

Standard

All items, unless otherwise specified, are in accordance with JIS and manufacturer's standards.

2. PRINCIPAL PARTICULARS

| | | |
|--|---|--|
| Model | : | MITSUBISHI S12R-PTA-C |
| Type | : | 4cycle stroke, water cooled diesel engine |
| Combustion chamber | : | Direct injection type |
| Aspiration | : | Turbocharged with after cooler |
| Number of cylinders | : | 12-V |
| Bore × stroke | : | 170mm × 180mm |
| Total displacement | : | 49.03L |
| Compression ratio | : | 14.0 : 1 |
| firing order | : | 1 - 12 - 5 - 8 - 3 - 10 - 6 - 7 - 2 - 11 - 4 - 9 |
| Direction of rotation | : | Counter clockwise as viewed from flywheel side |
| Engine dimensions (Approx.) | : | Length Apx. 2568mm |
| | : | width Apx. 1360mm |
| | : | Height Apx. 1592mm |
| Dry weight (Approx.) | : | 5350kg (without accessories) |
| Fuel oil | : | ASTM D975 No. 2 - D or BS 2869 class A |
| Lubricating oil | : | API service CF class |
| | | SAE No. 15W-40 |
| Output at ISO 3046 standard air conditions (25°C, 100kPa, 30% Humid) | | |
| Stand-by rating | : | 1190kW/1500min ⁻¹ |
| Fuel consumption ratio at Stand-by rating | : | 209g/kW-hr |
| (allowance +5%) | | |
| Lub, oil consumption ratio at Stand-by rating | : | within 0.8g/kW-hr |

3. STANDARD EQUIPMENTS**(1) power line system**

| | |
|----------------------------|--|
| Flywheel | : DWG.NO.37796-21001 SAE J620d 21in, except screw size |
| Flywheel housing | : DWG.NO.37796-21001 SAE J617c No.00, except screw size |
| Engine mounting | : DWG.NO.37796-14001 4 points mounting, C = 250mm |
| Torsional vibration damper | : Viscous type × 1pc |

(2) Air intake system

| | |
|--------------|---|
| Air cleaner | : DWG.NO.37796-30308 loose supply Donaldson FTG13L × 4 pcs Paper element type with screen cap |
| Turbocharger | : MITSUBISHI TD Type Model : TD13L-45QV23.5(55) |
| Air cooler | : Jacket water cooled type Plated element type |
| Air heater | : Not supply |

(3) Exhaust system

| | |
|------------------|--|
| Exhaust manifold | : Air cooled type with heat insulator |
| Muffler | : Not supply |
| Flexible pipe | : DWG.NO.S37-1021 (47910-81400) loose supply JIS 300A, L = 370mm, weight 70kg |
| Companion flange | : Not supply |
| Breather | : DWG.NO.37796-43010 Up side direction type For blow - off to outside of engine room |

(4) Lubricating system

| | | |
|----------------------------------|---|--|
| Oil pump | : | Gear pump type |
| Capacity of oil pump | : | 1500min ⁻¹ : 480 L/min. |
| Lub. oil pressure | : | 0.5~0.65 Mpa |
| Quantity of oil (Approx.) | : | Oil pan full level : 150 L low level : 110 L Others (filter etc.) : 30 L Total : 180 L |
| Lub. oil filter (Full flow) | : | DWG.NO.37796-40001 Paper element cartridge type × 4pcs filter mesh : 20 μ with by - pass alarm switch |
| Lub. oil filter (By - pass flow) | : | DWG.NO.37796-40001 Paper element cartridge type × 1pc filter mesh : 2 μ |
| Lub. oil cooler | : | Water cooled corrugated type with by - pass valve |

(5) Cooling system

| | | |
|------------------------|---|--|
| Water pump | : | Gear drive centrifugal type |
| Capacity of water pump | : | 1500min ⁻¹ : 1650 L/min. |
| Thermostat | : | Wax pellet type × 4pcs Open at 71°C ~ 85°C |
| Fan | : | Pusher type steel fan 1524 diameter, Gear drive Fan speed ratio i = 0.672 |

(6) Fuel system

| | | |
|--|---|---|
| Fuel inlet pipings | : | DWG.NO.37796-62112 loose supply flexible hose (Rc 3/4 joint) |
| Fuel return pipings | : | DWG.NO.37796-61312 loose supply flexible hose (Rc 3/4 joint) |
| Fuel overflow of Inj. Pump and fuel leak - off of Nozzle have to return to fuel tank | | |
| Injection pump | : | Bosch type "PS6" without timer |
| Feed pump | : | Piston type with priming pump |
| Injection Nozzle | : | Hole type 0.325mm×10 holes |
| Fuel filter | : | DWG, No.37796-62002 Paper element cartridge type filter mesh : 5 μ |

(7) Control system

| | |
|------------------|---|
| Governor | : DWG.NO.37796-63005 Electronic speed governor Speed droop : 0 ~ 5% adjustable |
| Actuator | : DWG.NO.S13-1761 Supply voltage : DC24V± 20% Current consumption At starting : 13A Normal operation : 0.5 ~ 2A Min. Supply voltage : DC16V50%ED |
| Controller | : DWG.NO.S13-1042 loose supply Model : XS-400B-03 (04410-33100) Supply voltage : DC24V± 20% |
| Potentiometer | : For low idling speed setting Not supply |
| Potentiometer | : For rated speed setting Not supply |
| Connector | : DWG.NO.S13-1022 loose supply From actuator to controller 5000mm length |
| Magnetic pick up | : DWG.NO.S13-2011 With connector |
| Cable | : DWG.NO.S13-2020 loose supply From magnetic pick up to controller 4300mm length |

(8) Starting system

| | |
|----------------|---|
| Starter switch | : with key, with heat position Not supply |
| Starting motor | : DWG.NO.37796-66001 DC24V, 7.5KW × 2pcs Reduction type with safety relay with 2 poles connector (DWG.NO.S14-0320) |
| Safety relay | : DWG.NO.S10-0150 loose supply For Parallel running of starting motor |

| | |
|------------------------------|---|
| Current of starter | : Rush 1250A Cranking 400A (Ambient temp : 5°C, Lub. oil : SAE No. 30) |
| Alternator | : DWG.NO.S10-0540 DC24V, 30A, with voltage regulator with 2 poles connector (DWG.NO.S10-0550) |
| Recommended battery capacity | : DC24V, 400AH Not supply |
| Battery switch | : Not supply |
| (9) Stopping system | : DWG.NO.37796-87502 |
| Automatic stop | Automatically shut - down by stop solenoid and electronic governor power off simultaneously |
| Stop solenoid | : DWG.NO.S13-0282 Energized to run type DC24V, 30.7A(pull), 0.58A(hold) |
| Manual stop | : By stop lever |
| (10) Safety device | |
| Alarm switches | : DWG.NO.37796-90206 |
| Alarm and trip | |
| Low oil press. switch | : DWG.NO.S11-0796 (04442-45400) Diaphragm type : 0.15 MPa switch on |
| High water temp. switch | : DWG.NO.S11-0551 (04442-34500) Wax type : 98°C switch on |
| Alarm | |
| Oil filter alarm switch | : DWG.NO.S11-1370 Piston type : 0.15 MPa switch on |
| Oil filter alarm lamp | : Not supply |
| Air filter alarm indicator | : DWG.NO.S11-0920 loose supply Mechanical type : 635mmH ₂ O switch on |

(11) Instrument

| | | |
|------------------|---|---|
| Meter and sensor | : | DWG.NO.37796-90119 |
| Tachometer | : | Pulse type for engine speed With electrical hour meter Not supply |
| Magnetic pick up | : | DWG.NO.S13-2011 For tachometer, pin-joint type |
| Cable | : | For magnetic pick up, 4300mm length Not supply |
| Thermometer | : | Electrical type for jacket water and lub. oil temp. Not supply |
| Pressure gage | : | Electrical type for lub. oil press. Not supply With 2 poles connector (DWG.NO.S14-0330) |
| Thermometer | : | For exhaust gas temp. Not supply |

(12) Others

| | | |
|----------------|---|---|
| Turning device | : | DWG.NO. 37796-71001 Gear type, for maintenance |
| Service meter | : | Not supply |
| Tools | : | Not supply |
| Spare parts | : | Not supply |

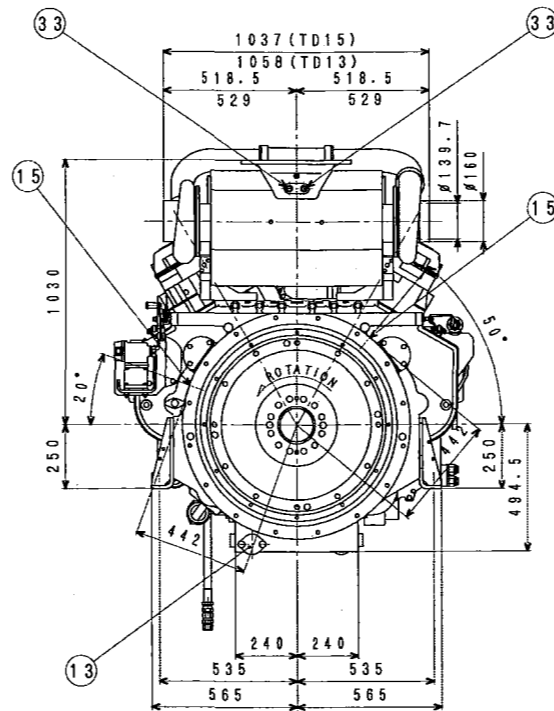
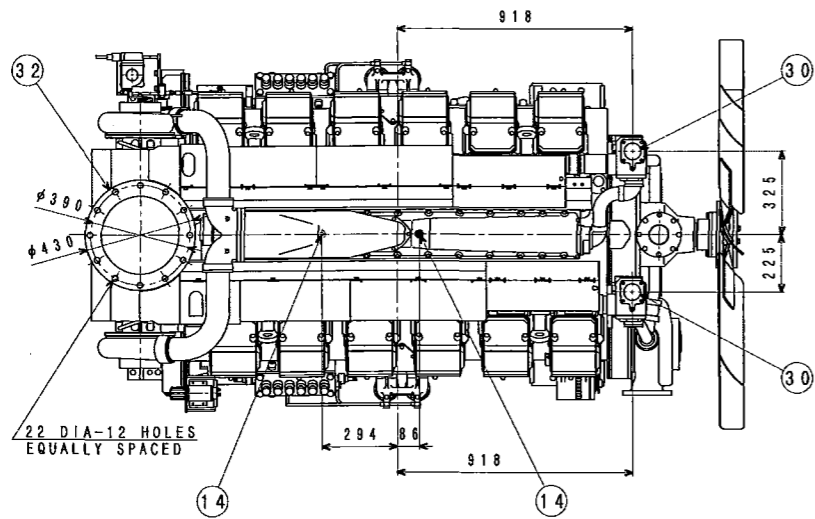
4. ACCESSORIES (Loose supply parts)

| NO. | PARTS NO. | PATRS NAME | Q'TY | DWG.NO. | |
|-----|-------------|----------------------|------|----------|----------------|
| 1 | 47220-26301 | AIR CLEANER ASSY. | 4 | S35-0560 | 37796-30308 |
| 2 | 47220-33200 | CAP, SCREEN | 4 | S35-0660 | |
| 3 | 45R30-71100 | BRACKET, AIR CLEANER | 2 | | |
| 4 | 45R30-71200 | PIPE, AIR | 2 | | |
| 5 | 05317-51801 | CLAMP | 10 | | |
| 6 | 05317-52001 | CLAMP | 2 | | |
| 7 | 47221-16800 | HOSE, AIR | 2 | S35-0751 | |
| 8 | 45741-72900 | HOSE, RUBBER | 4 | S35-0731 | |
| 9 | 47720-39300 | BAND | 8 | S35-0600 | |
| 10 | 47910-81400 | PIPE,FLEXIBLE | 1 | S37-1021 | 37796-43010 |
| 11 | 45955-22160 | HOSE | 1 | | |
| 12 | 05317-51001 | CLAMP | 4 | | |
| 13 | 47510-59300 | PIPE, BREATHER | 1 | | 37796-61312 |
| 14 | 45950-51700 | PIPE,FLEXIBLE | 1 | | |
| 15 | 45950-11300 | CONNECTOR | 1 | | |
| 16 | 45950-51700 | PIPE,FLEXIBLE | 1 | | 37796-62113 |
| 17 | 45950-11300 | CONNECTOR | 1 | | |
| 18 | 04410-33100 | CONTROLLER | 1 | S13-1042 | 37796-63005 |
| 19 | 04410-32902 | CONNECTOR, ACTUATOR | 1 | S13-1022 | |
| 20 | 04410-43500 | CABLE, PICK UP | 1 | S13-2020 | |
| 21 | 04322-40100 | RELAY, SAFETY | 1 | S10-0150 | |
| 22 | F8665-02100 | CONNECTOR | 2 | S14-0320 | for starter |
| 23 | 32B90-00300 | CONNECTOR | 1 | S10-0550 | for alternator |
| 24 | MH052231 | CONNECTOR | 1 | S14-0330 | 37796-90119 |
| 25 | 47220-34401 | INDICATOR | 4 | S11-0920 | 37796-90206 |

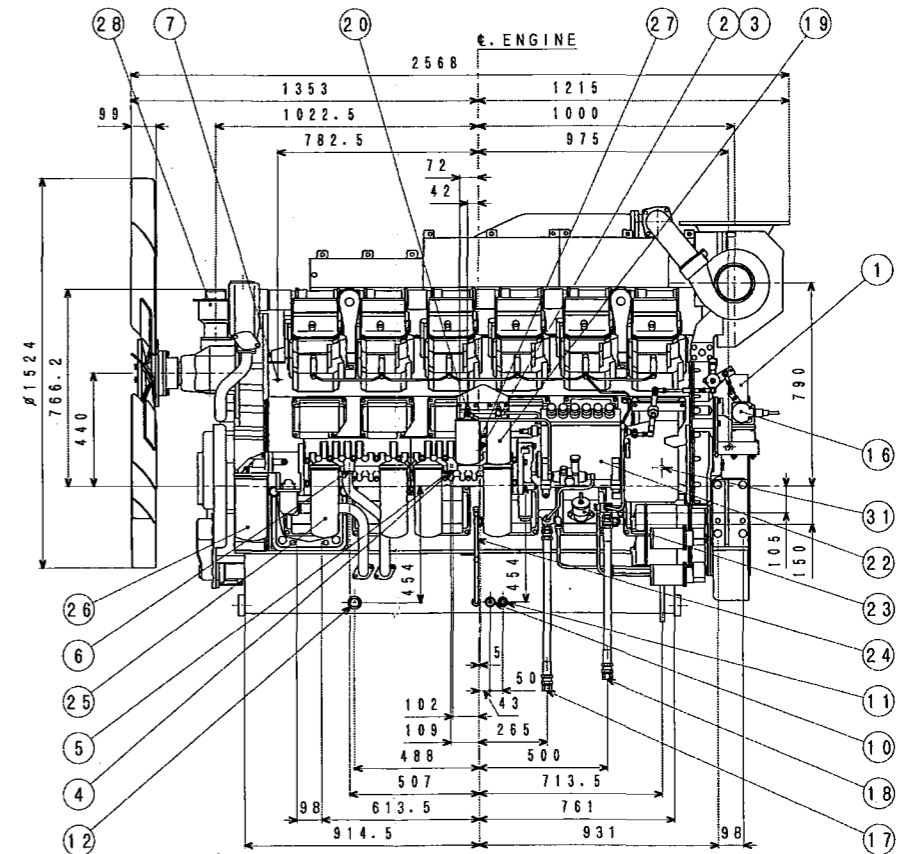
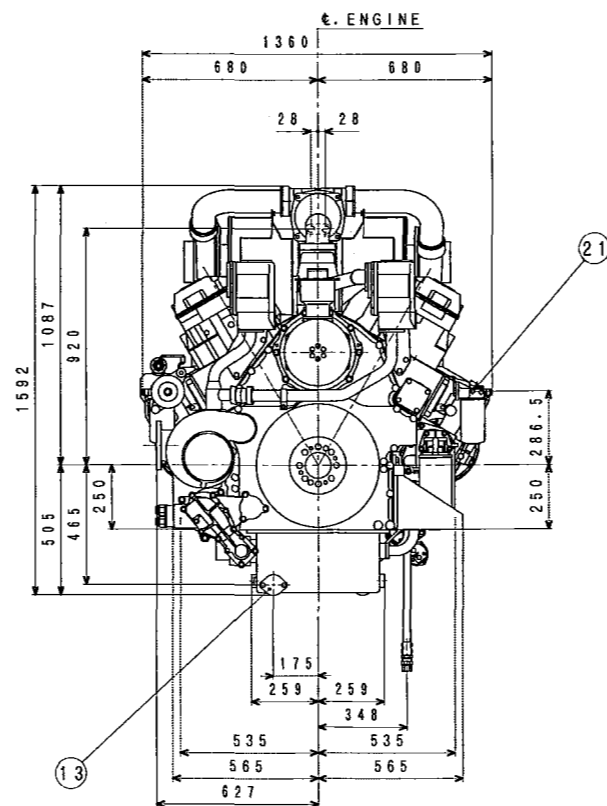
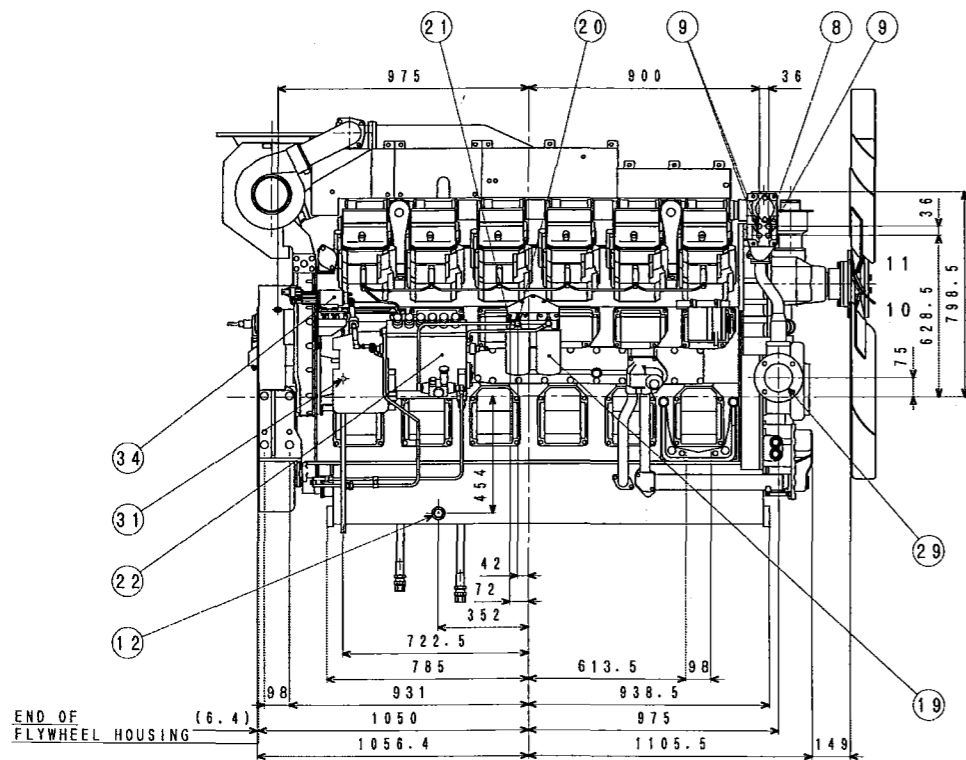
5. DRAWINGS

| NO. | DWG. NO. | DWG. NAME | REV. |
|-----|-------------|---------------------------|------|
| 1 | 37796-00222 | ENGINE OUTLINE | |
| 2 | 37796-01001 | JOINT DETAIL | |
| 3 | 37796-04028 | WIRING DIAGRAM | |
| 4 | 37796-14001 | MOUNTING DETAIL | |
| 5 | 37796-21001 | FLYWHEEL & HOUSING DETAIL | |
| 6 | 37796-30308 | AIR CLEANER | |
| 7 | 37796-40001 | OIL FILTER | |
| 8 | 37796-43010 | BREATHER | |
| 9 | 37796-61312 | FUEL RETURN PIPING | |
| 10 | 37796-62002 | FUEL FILTER | |
| 11 | 37796-62112 | FUEL INLET PIPING | |
| 12 | 37796-63005 | GOVERNOR | |
| 13 | 37796-66001 | STARTING MOTOR | |
| 14 | 37796-71001 | TURNING GEAR | |
| 15 | 37796-87502 | STOP SYSTEM | |
| 16 | 37796-90119 | METER & SENSOR | |
| 17 | 37796-90206 | ALARM SWITCH | |
| 18 | S10-0150 | SAFETY RELAY | |
| 19 | S10-0540 | ALTERNATOR | |
| 20 | S10-0550 | CONNECTOR | |
| 21 | S11-0551 | THERMO SWITCH | |
| 22 | S11-0796 | PRESSURE SWITCH | |
| 23 | S11-0920 | INDICATOR | |
| 24 | S11-1370 | FILTER ALARM SWITCH | |
| 25 | S13-0282 | SOLENOID | |
| 26 | S13-1022 | CONNECTOR | |
| 27 | S13-1042 | CONTROLLER | |
| 28 | S13-1761 | ACTUATOR | |
| 29 | S13-2011 | MAGNETIC PICK UP | |
| 30 | S13-2020 | CABLE, PICK UP | |
| 31 | S14-0320 | CONNECTOR | |
| 32 | S14-0330 | CONNECTOR | |

| NO. | DWG. NO. | DWG. NAME | REV. |
|-----|----------|-------------------|------|
| 33 | S35-0560 | AIR CLEANER ASSY. | |
| 34 | S35-0600 | BAND | |
| 35 | S35-0660 | CAP, INLET | |
| 36 | S35-0731 | HOSE, RUBBER | |
| 37 | S35-0751 | HOSE, AIR | |
| 38 | S37-1021 | FLEXBLE PIPE | |



| NO. | PARTS NAME | SIZE | REFERENCE |
|-----|----------------------------|-----------|-------------|
| 1 | FLYWHEEL & HOUSING | | 37796-21001 |
| 2 | OIL PRESS. GAGE UNIT JOINT | Rc1/8 | 37796-01001 |
| 3 | OIL PRESS. SWITCH JOINT | Rc1/8 | |
| 4 | OIL PRESS. SWITCH JOINT | Rc 1 | |
| 5 | OIL PRESS. SWITCH JOINT | Rc1/2 | |
| 6 | OIL PRESS. SWITCH JOINT | Rc1/2 | |
| 7 | OIL PRESS. SWITCH JOINT | Rc3/8 | |
| 8 | THERMOMETER UNIT JOINT | Rc1/2 | |
| 9 | THERMOSWITCH JOINT | Rc1/2 | |
| 10 | OIL PAN (A) JOINT | M16x1.5 | |
| 11 | OIL PAN (B) JOINT | M20x1.5 | |
| 12 | OIL PAN (C) JOINT | M36x1.5 | |
| 13 | OIL PAN (D) JOINT | | |
| 14 | AIR PRESS. GAGE JOINT | 1/4-18NPT | |
| 15 | PICKUP JOINT | 5/8-18UNF | 37796-01001 |
| 16 | GOVERNOR | | |
| 17 | FUEL INLET PIPE JOINT | Rc3/4 | 37796-01001 |
| 18 | FUEL RETURN PIPE JOINT | Rc3/4 | 37796-01001 |
| 19 | FUEL FILTER | | |
| 20 | FUEL PRESS. SWITCH JOINT | M14x1.5 | 37796-01001 |
| 21 | FUEL PRESS. SWITCH JOINT | Rc3/8 | 37796-01001 |
| 22 | FUEL INJECTION PUMP | | |
| 23 | OIL FILLER | | |
| 24 | OIL LEVEL GAGE | | |
| 25 | OIL FULL-FLOW FILTER | | |
| 26 | OIL BY-PASS FILTER | | |
| 27 | OIL BY-PASS ALARM SWITCH | | 37796-01001 |
| 28 | BREATHER | | |
| 29 | WATER INLET PIPE JOINT | 80A | |
| 30 | WATER OUTLET PIPE JOINT | | 37796-01001 |
| 31 | WATER DRAIN COCK | | |
| 32 | EXHAUST FLANGE | 300A | |
| 33 | THERMOMETER, EX. JOINT | Rp3/4 | 37796-01001 |
| 34 | STOP SOLENOID | | |



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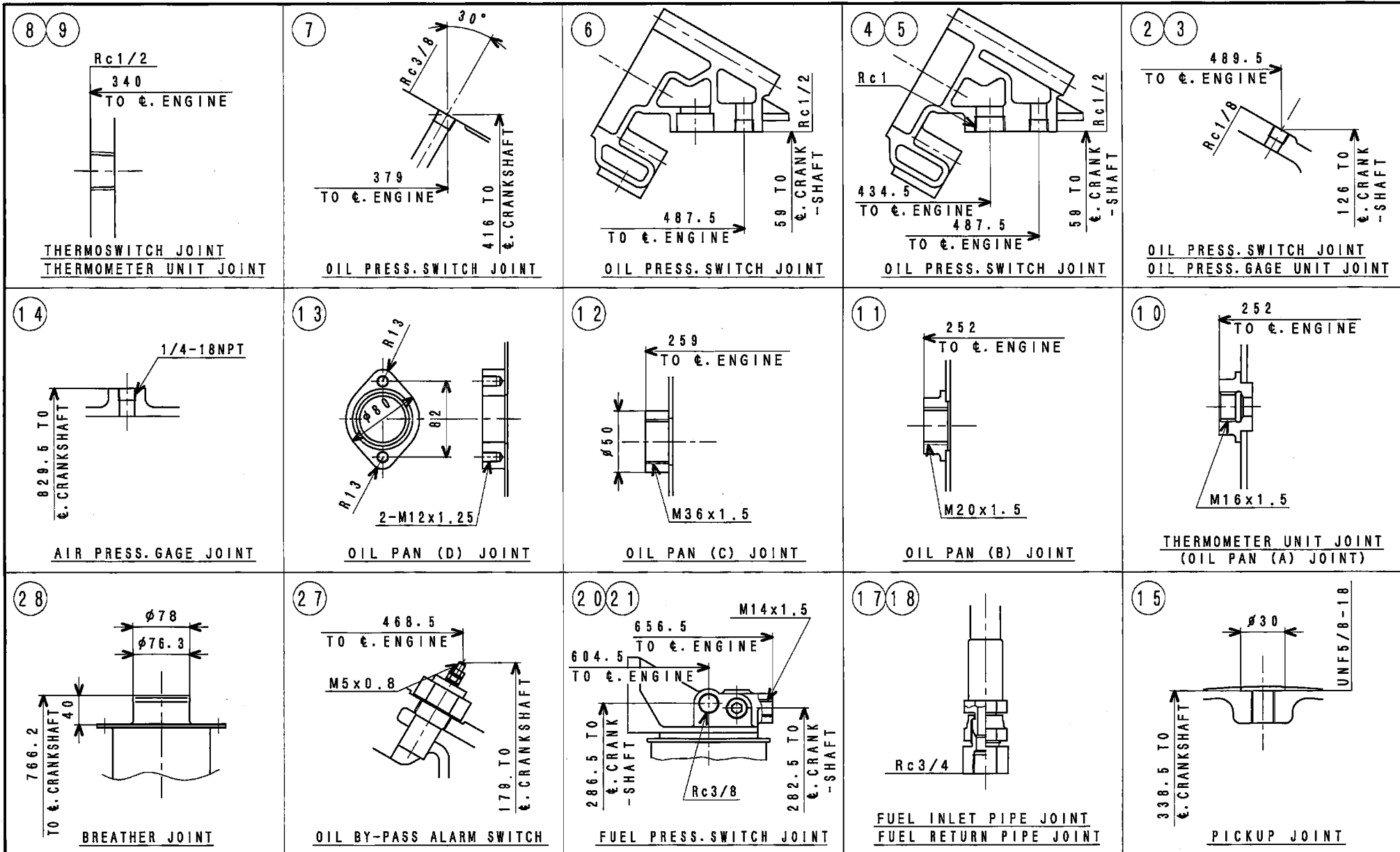
(4) 本図は、マウンティングC=250仕様である。
 (3) 本図のカパナは、電子カパナ仕様である。
 (2) 三菱TD13L/1500rpm, TD15/1800rpmターボ型。
 注 (1) 本図は、S12R-PTA/ファン付標準仕様である。

| | | | |
|-----------|------------|----------|-------------|
| 4590-E888 | | 11.18.3 | 斉藤 |
| DATE | 1993. 3. 7 | FIG. NO. | 37796-00222 |
| 橋 | | 谷 | 川 |
| 口 | | 谷 | 川 |

S12R-PTA (CM-BR)
 DIESEL ENGINE
 三菱重工業株式会社 汎用機・特殊事業本部
 図面番号 37796-00222

旧引
 汽機
 2000
 12.8

FULL-CAD



注記 (1) 本図は、PTA/ファン付用ジョイント詳細図である。

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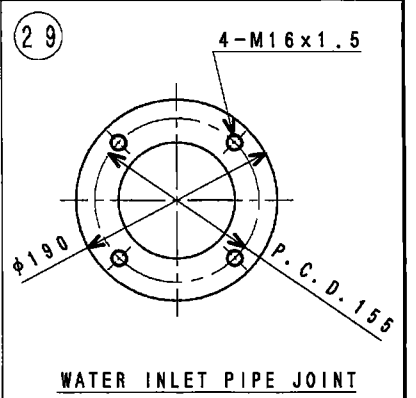
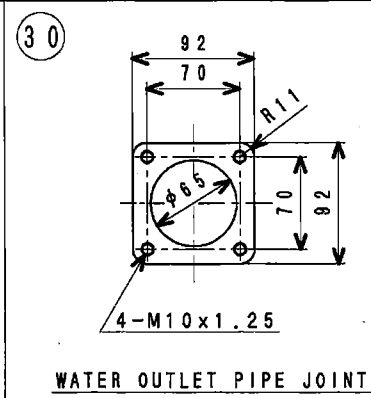
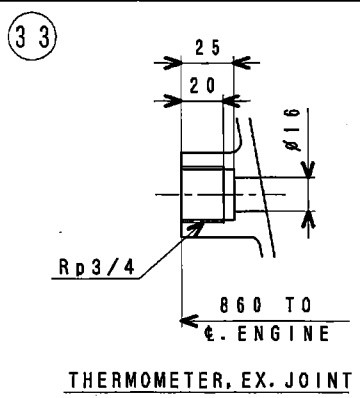
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|------------|-----------|---------------|------------------|---|
| 3 | 4590-E889 | '08.10.3 | 齊藤 | 3rd ANGLE PROJECTION 尺度 SCALE |
| 2 | 4591-0364 | '03.10.27 | 福田 | |
| 1 | 4590-4993 | '99.2.25 | 福田 | |
| CHG | EO-NO | DATE | CHK | |
| 認可 APPO | 仁 尾 | 換 図 CHK | 竹 谷 福 田 | 製 図 DRN 谷 川 勇 樹 1998.6.8 |

S12R
JOINT DETAIL
三菱重工業株式会社 汎用機・特車事業本部
MITSUBISHI HEAVY INDUSTRIES, LTD. GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS.
図面番号 37796-01001 3/2
DRAWING No. 1/2

旧引
汎特
2008
12.8

FULL-CAD

3 折 戻
① 旧引図
4 3
② 組立図
5 切削品
2 鋼鍛造品
3 板金溶接品
4 鋳造品
5 切削品
6 その他(購入品)



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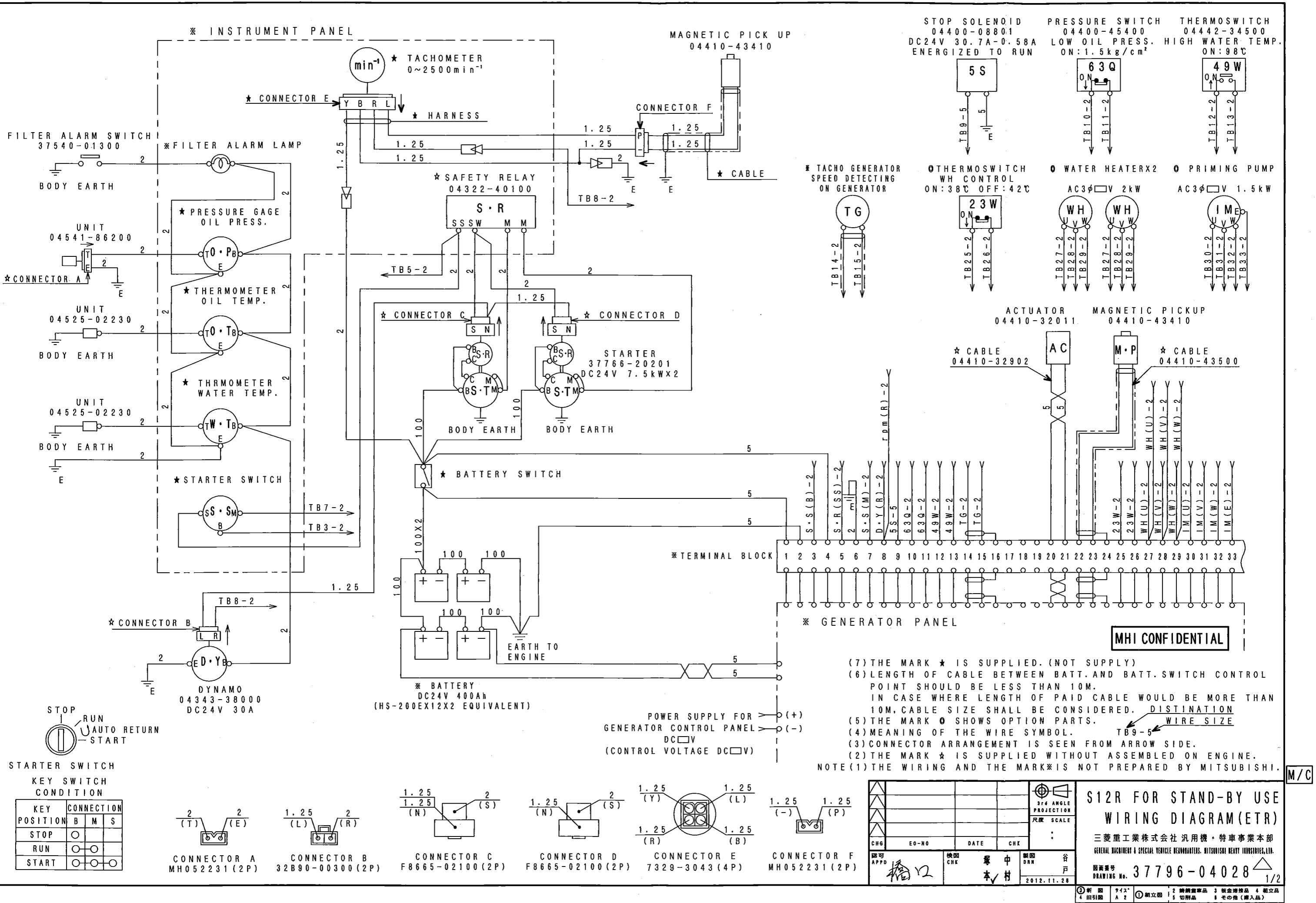
| | | | | |
|---------|-----------|-----------|-------|--|
| 2 | 4591-0364 | '03.10.27 | 福田 | 3rd ANGLE PROJECTION 尺度 SCALE : |
| 1 | 4590-4993 | '99. 2.25 | 福田 | |
| CHG | EO-NO | DATE | CHK | |
| 認可 APPD | 仁尾 | 換図 CHK | 竹谷 福田 | 製図 D/R |
| | | | | 谷 鍋 戸 島 1998. 6. 8 |

S12R
JOINT DETAIL
三菱重工業株式会社汎用機・特車事業本部
MITSUBISHI HEAVY INDUSTRIES, LTD. GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS.
図面番号 37796-01001 2/2
DRAWING No. 2/2

| | | | | | |
|-------|---------|-------|---------|------------|-------|
| 3 新図 | サイズ A 3 | ① 組立図 | 2 線跡塗製品 | 3 板金溶接品 | 4 組立品 |
| ② 旧引図 | | | 5 切削品 | 6 その他(購入品) | |

旧引
汎特
2003
11.4

FULL-CAD



STOP SOLENOID 04400-08801 DC24V 30.7A-0.58A ENERGIZED TO RUN
 PRESSURE SWITCH 04400-45400 LOW OIL PRESS. HIGH WATER TEMP. ON: 1.5kg/cm²
 THERMOSWITCH 04442-34500 ON: 98°C

* TACHO GENERATOR SPEED DETECTING ON GENERATOR (TG)
 THERMOSWITCH WH CONTROL ON: 38°C OFF: 42°C (23W)
 WATER HEATER X2 AC3φ □ V 2kW (WH)
 PRIMING PUMP AC3φ □ V 1.5kW (IME)

ACTUATOR 04410-32011 (AC)
 MAGNETIC PICKUP 04410-43410 (M·P)

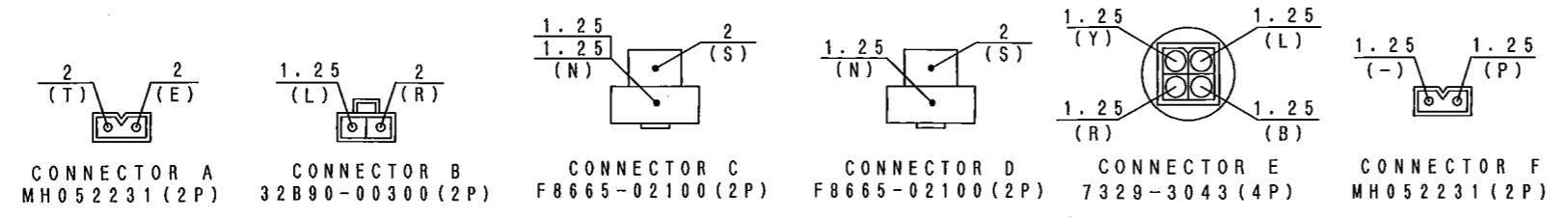
- (7) THE MARK * IS SUPPLIED. (NOT SUPPLY)
 (6) LENGTH OF CABLE BETWEEN BATT. AND BATT. SWITCH CONTROL POINT SHOULD BE LESS THAN 10M. IN CASE WHERE LENGTH OF PAID CABLE WOULD BE MORE THAN 10M, CABLE SIZE SHALL BE CONSIDERED. DISTINATION
 (5) THE MARK ○ SHOWS OPTION PARTS. WIRE SIZE
 (4) MEANING OF THE WIRE SYMBOL. TB9-5
 (3) CONNECTOR ARRANGEMENT IS SEEN FROM ARROW SIDE.
 (2) THE MARK * IS SUPPLIED WITHOUT ASSEMBLED ON ENGINE.
 NOTE (1) THE WIRING AND THE MARK * IS NOT PREPARED BY MITSUBISHI.

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POWER SUPPLY FOR GENERATOR CONTROL PANEL
 (+)
 (-)
 DC □ V
 (CONTROL VOLTAGE DC □ V)

STARTER SWITCH KEY SWITCH CONDITION

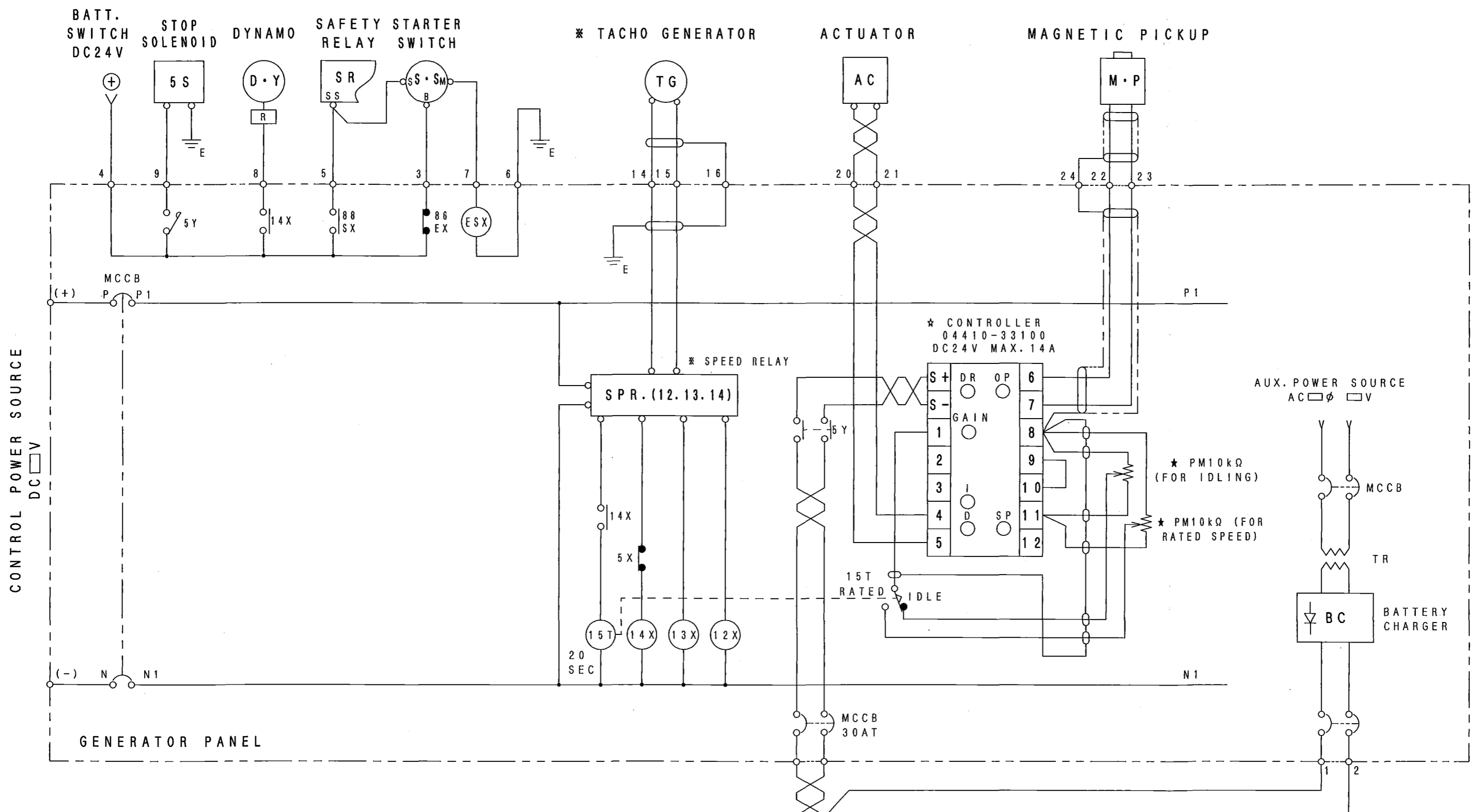
| KEY POSITION | B | M | S |
|--------------|---|---|---|
| STOP | ○ | | |
| RUN | ○ | ○ | |
| START | ○ | ○ | ○ |



| | | | |
|------|-------|------|------------|
| CHG | EO-NO | DATE | CHK |
| APPD | 換回 | 塚中 | 谷 |
| | CHK | 本村 | 戸 |
| | | | 2012.11.28 |

S12R FOR STAND-BY USE WIRING DIAGRAM (ETR)
 三菱重工業株式会社 汎用機・特車事業本部
 GENERAL MACHINERY & SPECIAL VEHICLE DEPARTMENTS, MITSUBISHI HEAVY INDUSTRIES, LTD.
 図面番号 37796-04028
 2012.11.28

M/C



14X : CONTACT IS CLOSED ON ENGINE SPEED ESTABLISHMENT (ABOUT 450 R. P. M.).
 5X : CONTACT IS OPENED ON STOP ORDER.
 86EX : CONTACT IS OPENED ON EMERGENCY STOP ORDER (HEAVY TROUBLE).
 88SX : START ORDER (ENG. CRANKING), CONTACT IS CLOSED ON CRANKING ORDER.
 5Y : RUN SIGNAL FOR STOP SOLENOID & GOVERNOR CONTROLLER.
 (ESX) : TO ACTIVATE OPERATION SIGNAL '5Y' TO GOVERNOR CONTROLLER AND STOP SOLENOID, START-UP CONTACT POINT SIGNAL GIVEN FROM STARTER SWITCH ON MACHINE-SIDE PANEL IS NECESSARY TO THE CIRCUIT FOR START-UP ON GENERATOR PANEL.

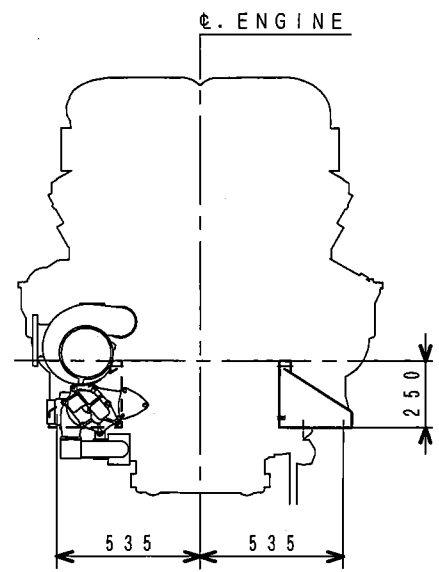
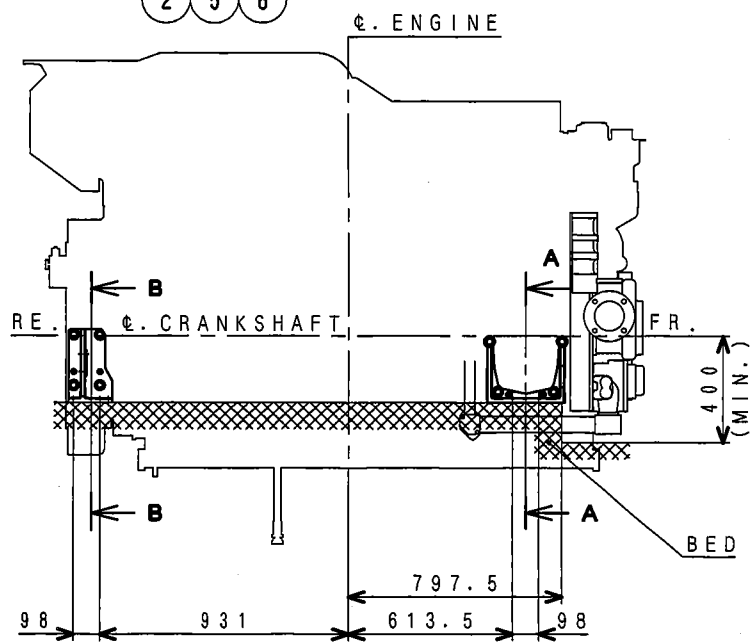
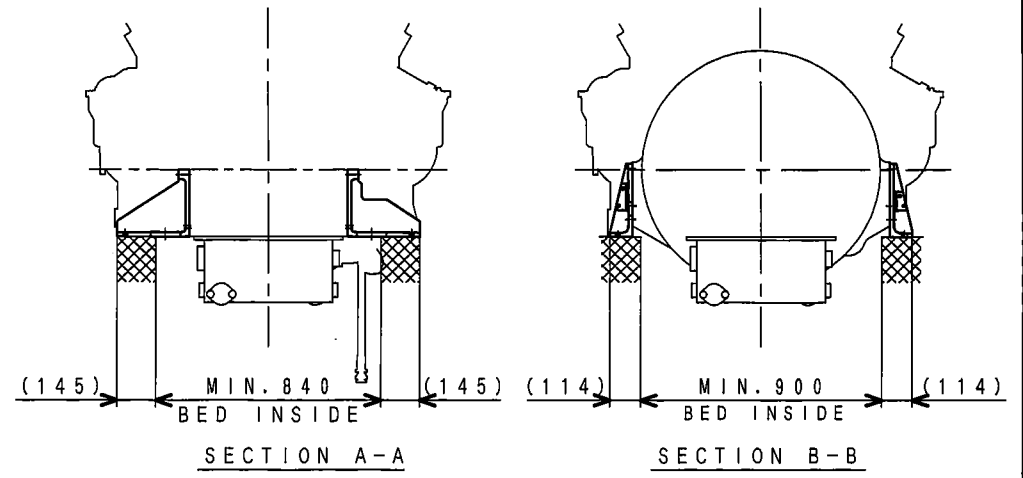
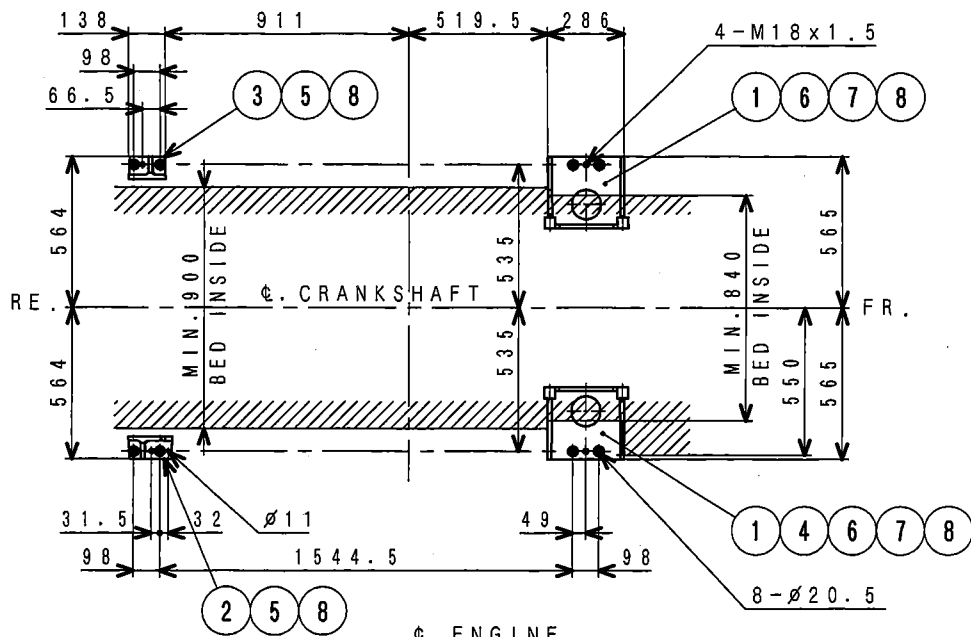
(2) THIS DRAWING IS WIRING DIAGRAM BETWEEN MACHINE SIDE AND THE GENERATOR PANEL. FOR DETAILS, REFER SEQUENCE DIAGRAM (ETR) S25-0200
 NOTE (1) SHALL BE MAKE MORE THAN 40 TURNS PER 1METRE AND LESS THAN 2Ω OF RESISTANCE ON BATTERY LINE AND ACTUATOR LINE TWIST CABLE.

MHI CONFIDENTIAL

| | | | |
|---------|-------|------------|------|
| CHG | E0-NO | DATE | CHK |
| 認可 APPD | 橋口 | 検出 CHK | 塚中 谷 |
| | | 本 | 村 |
| | | 2012.11.28 | |

S12R FOR STAND-BY USE
 WIRING DIAGRAM (ETR)
 三菱重工業株式会社 汎用機・特車事業本部
 GENERAL MACHINERY & SPECIAL VEHICLE DEPARTMENTS, MITSUBISHI HEAVY INDUSTRIES, LTD.
 図面番号 37796-04028
 DRAWING No. 2/2

M/C



| | | | |
|-----|-------------|------------------|------|
| 8 | 33401-02600 | WASHER | 16 |
| 7 | F1035-20075 | BOLT | 4 |
| 6 | F1035-20050 | BOLT | 3 |
| 5 | F1035-20045 | BOLT | 8 |
| 4 | F1035-20035 | BOLT | 1 |
| 3 | 37714-42100 | BRACKET, MTG. L | 1 |
| 2 | 37714-32200 | BRACKET, MTG. R | 1 |
| 1 | 37714-20100 | BRACKET, MTG. FR | 2 |
| No. | PARTS NO. | PARTS NAME | Q'TY |

注記 (1) 本図は、マウンティングセンターハイトC=250用である。

MHI CONFIDENTIAL

| | | | |
|------------|-----------|------------|------------------|
| 3 | 4590-H414 | '12.11.16 | 谷戸 |
| 2 | 4590-E890 | '08.10.3 | 齊藤 |
| 1 | 4590-5475 | '99.8.6 | 福田 |
| CHG | EO-NO | DATE | CHK |
| 認可 APPD | 検出 CHK | 竹 谷 | 福 田 |
| | | 製図 DRN | 谷 銅 戸 島 |
| | | 1997. 8. 4 | |

S12R

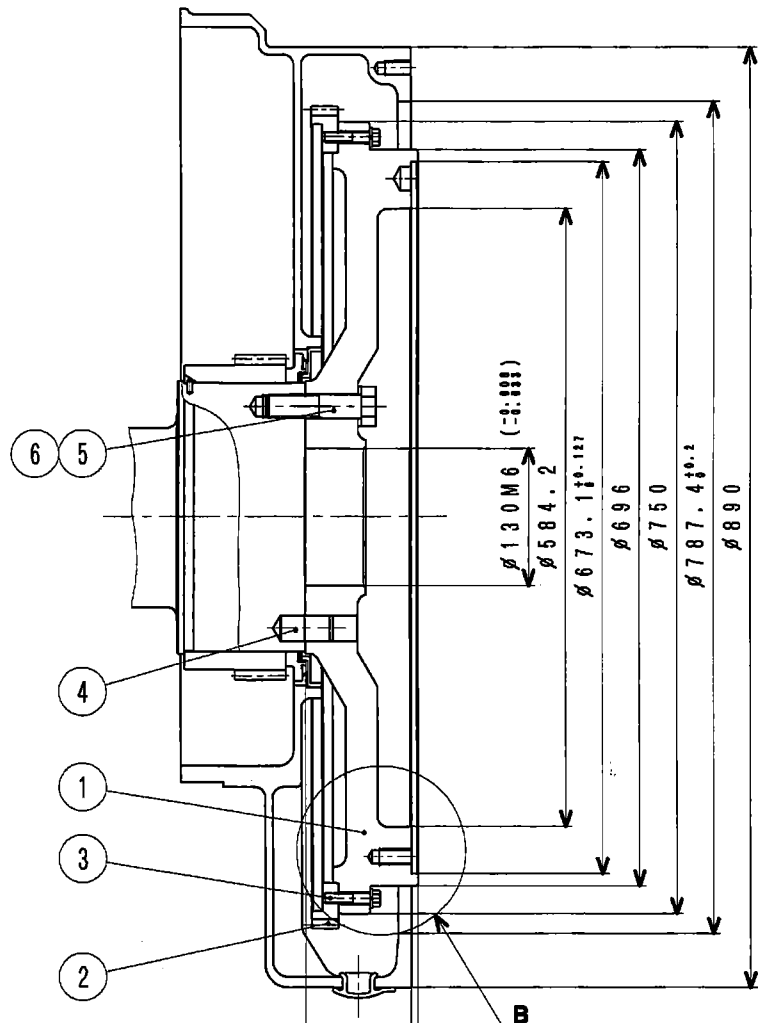
MOUNTING

三菱重工業株式会社 汎用機・特車事業本部
MITSUBISHI HEAVY INDUSTRIES, LTD. GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS.

図面番号
DRAWING No. 37796-14001

3 新図 7/12' 2 納品済部品 3 検査済部品 4 組立品
① 旧引図 A 3 ② 組立図 5 印刷品 6 その他(購入品)

M/C



949.9 TO ϕ . ENGINE 106.5
 1050 TO ϕ . ENGINE 6.4
 1056.4 TO ϕ . ENGINE

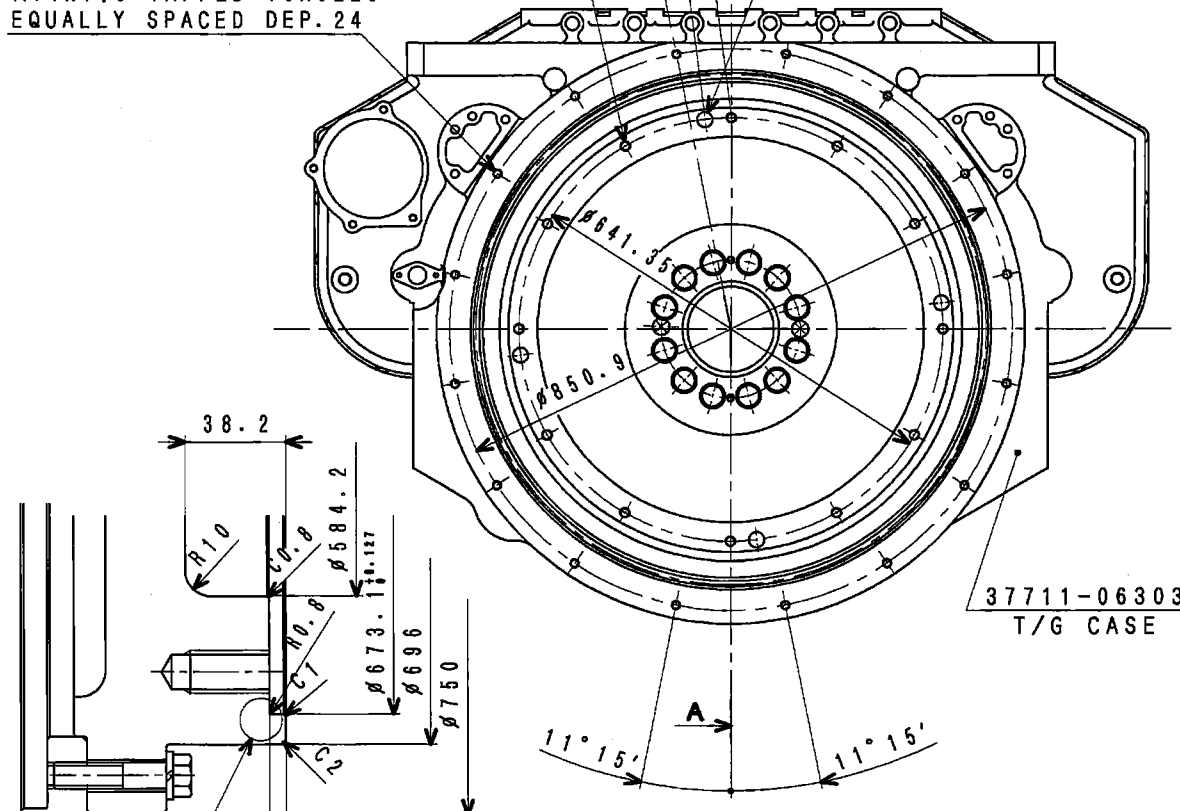
SECTION A-A

MHI CONFIDENTIAL

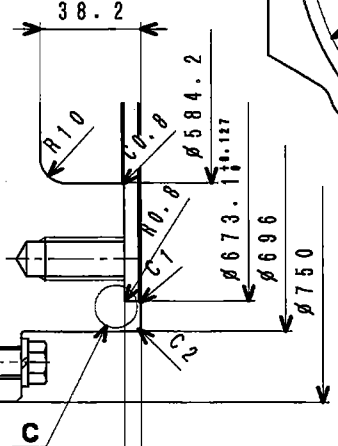
(2) 本図のフライホイールは、部番 37721-00061 F/W ASSY. に含まれる。
 注記 (1) 本図は、標準フライホイール & ハウジングであり、SAE J620c 21in フライホイール及び SAE 617b NO. 00 フライホイールハウジングに準拠する。

M16x1.5 TAPPED 12HOLES
 EQUALLY SPACED DEP. 30
 M14x1.5 TAPPED 16HOLES
 EQUALLY SPACED DEP. 24

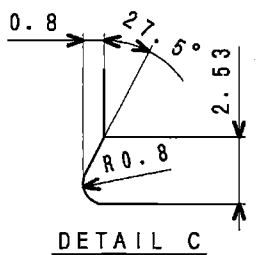
ϕ 23 DRILL 4HOLES
 EQUALLY SPACED DEP. 10



37711-06303
 T/G CASE



DETAIL B



DETAIL C

| 6 | 33707-11701 | WASHER | 12 |
|-----|-------------|------------|----------------------------|
| 5 | F1035-22090 | BOLT | 12 |
| 4 | 33320-04701 | PIN, DOWEL | 2 |
| 3 | F1805-10045 | BOLT | 12 |
| 2 | 37721-20201 | GEAR, RING | 37721-00061 F/W ASSY. 1 |
| 1 | 37721-00601 | FLYWHEEL | 1 |
| No. | PARTS NO. | PARTS NAME | Q'TY |

| | | | | | |
|------------|-----------|------------|------------|-------------------------------------|------------|
| 4 | 4590-D566 | '07. 9. 4 | 齊藤 | 37° ANGLE PROJECTION 尺度 SCALE | |
| 3 | 4590-A708 | '05. 3. 24 | 浅沼 | | |
| 2 | 4591-0260 | '03. 9. 12 | 福田 | | |
| 5 | 4590-G643 | '11. 3. 24 | 齊藤 | | |
| CHG | EO-NO | DATE | CHK | | |
| 認可 APPD | 橋 | 換図 CHK | 竹 福 谷 田 | 製図 DRN | 谷 齊 戸 藤 |
| | | | | 1997. 9. 22 | |

S12R
 FLYWHEEL & HOUSING

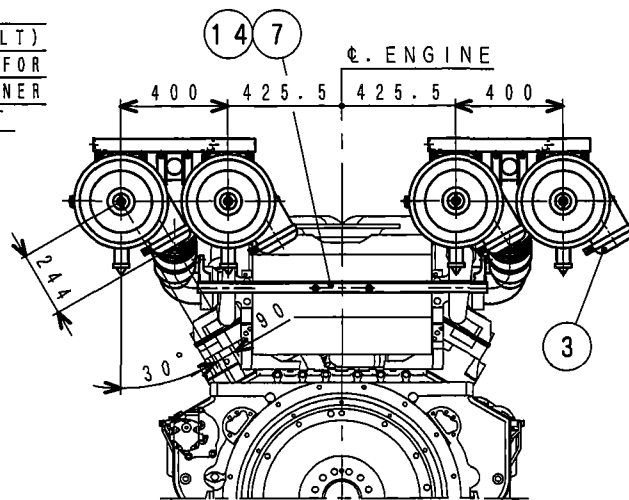
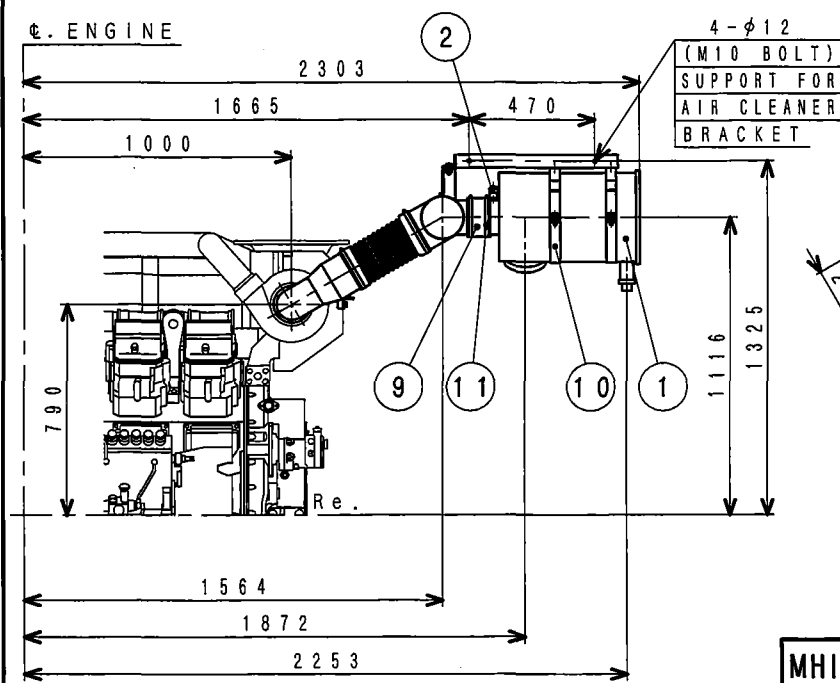
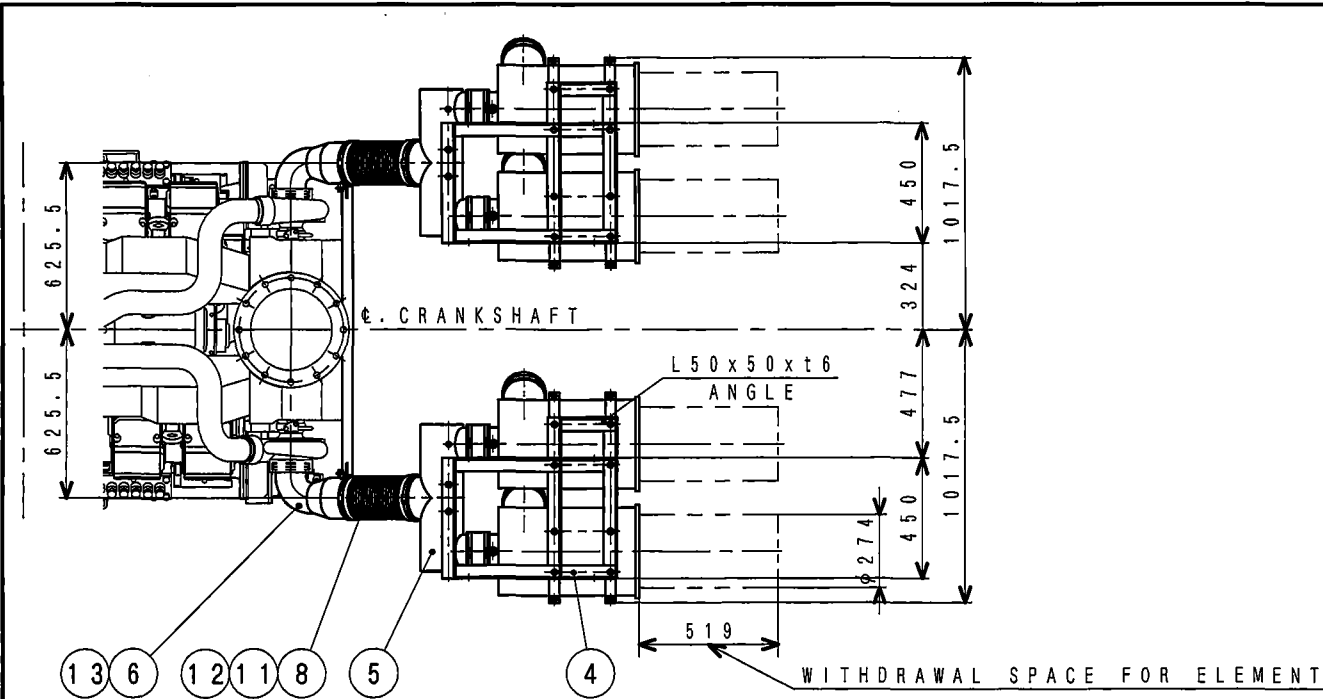
三菱重工業株式会社 汎用機・特車事業本部
 MITSUBISHI HEAVY INDUSTRIES, LTD. GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS.

図面番号
 DRAWING No. 37796-21001

旧引
 汎特
 2011
 5.23

FULL-CAD

3 新図 サイズ
 ④ 旧図引 A 3
 ① 組立図
 2 購買標準品
 6 切削品
 3 板金標準品
 6 その他(購入品)
 4 組立品



NOTE (1) THE ☆ MARKED PARTS ARE LOOSE SUPPLY.

| No. | PARTS NO. | PARTS NAME | Q'TY |
|------|-------------|----------------------|------|
| 14 | F1805-10020 | BOLT | 4 |
| 13 | 32330-09400 | O-RING | 4 |
| ☆ 12 | 05317-52001 | CLAMP | 2 |
| ☆ 11 | 05317-51801 | CLAMP | 10 |
| ☆ 10 | 47220-39300 | BAND | 8 |
| ☆ 9 | 45741-72900 | HOSE, RUBBER | 4 |
| ☆ 8 | 47221-16800 | HOSE, AIR | 2 |
| ☆ 7 | 45R30-70300 | STAY | 1 |
| ☆ 6 | 47510-70301 | PIPE, AIR | 2 |
| ☆ 5 | 45R30-71200 | PIPE, AIR | 2 |
| ☆ 4 | 45R30-71101 | BRACKET, AIR CLEANER | 2 |
| ☆ 3 | 47220-33200 | CAP, INLET | 4 |
| ☆ 2 | 47220-XXXXX | INDICATOR | 4 |
| ☆ 1 | 47220-26301 | CLEANER, AIR | 4 |

MHI CONFIDENTIAL

注記 (1) 本図は、ドナルドソン製FTG13LX4 (別置) エアクリーナバイピング図である。

| | | | |
|------------|-----------|--------|--------|
| CHG | EO-NO | DATE | CHK |
| 認可 APPD | 検図 CHK | 塚 本 | 中 村 |
| 製図 DRN | | 谷 戸 | |
| 2012.11.28 | | | |

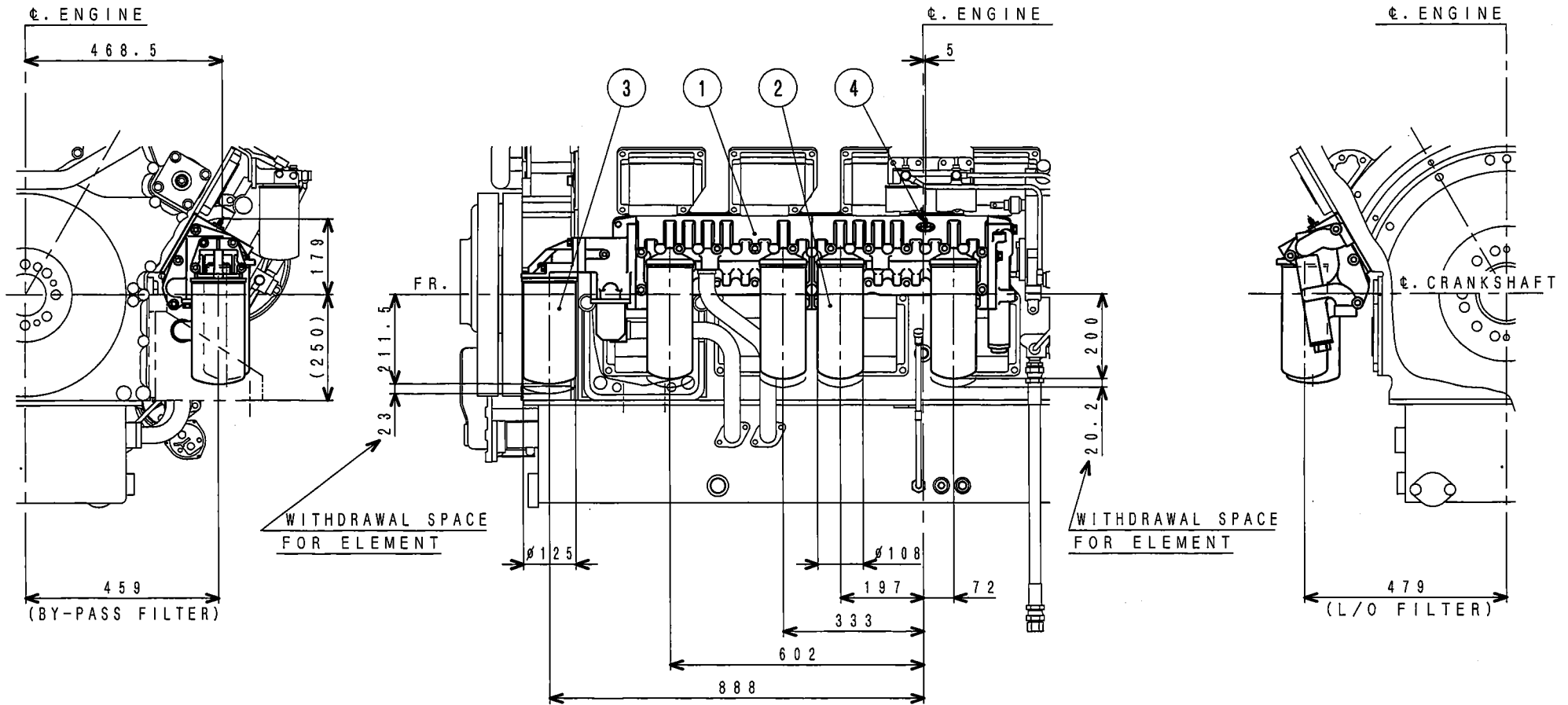
S12R
AIR CLEANER

三菱重工業株式会社 汎用機・特車事業本部
MITSUBISHI HEAVY INDUSTRIES, LTD. GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS.

図面番号 37796-30308

| | | | | | |
|------|-----|------|-----------|-------|------|
| ③新図 | サイズ | ①組立図 | ②副資材部品 | ③板金部品 | ④組立品 |
| ④旧引図 | A 3 | ⑤切附品 | ⑥その他(購入品) | | |

M/C



| | | | |
|-----|-------------|--------------------------|------|
| 4 | 37540-01300 | ALARM, OIL FILTER | 1 |
| 3 | 37540-02100 | BY-PASS FILTER CARTRIDGE | 1 |
| 2 | 37540-11100 | ELEMENT, L/O, CTRG | 1 |
| 1 | 37740-60010 | OIL FILTER ASSY. L.H-P | 1 |
| No. | PARTS NO. | PARTS NAME | Q'TY |

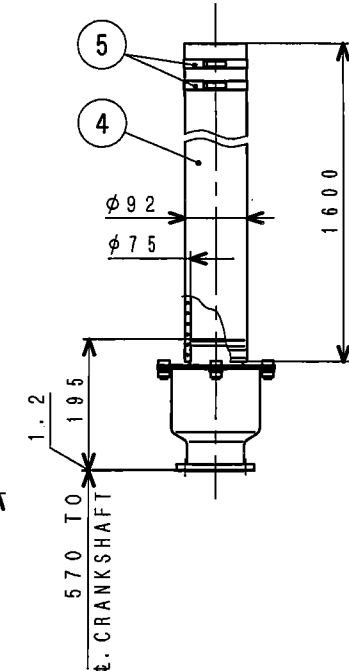
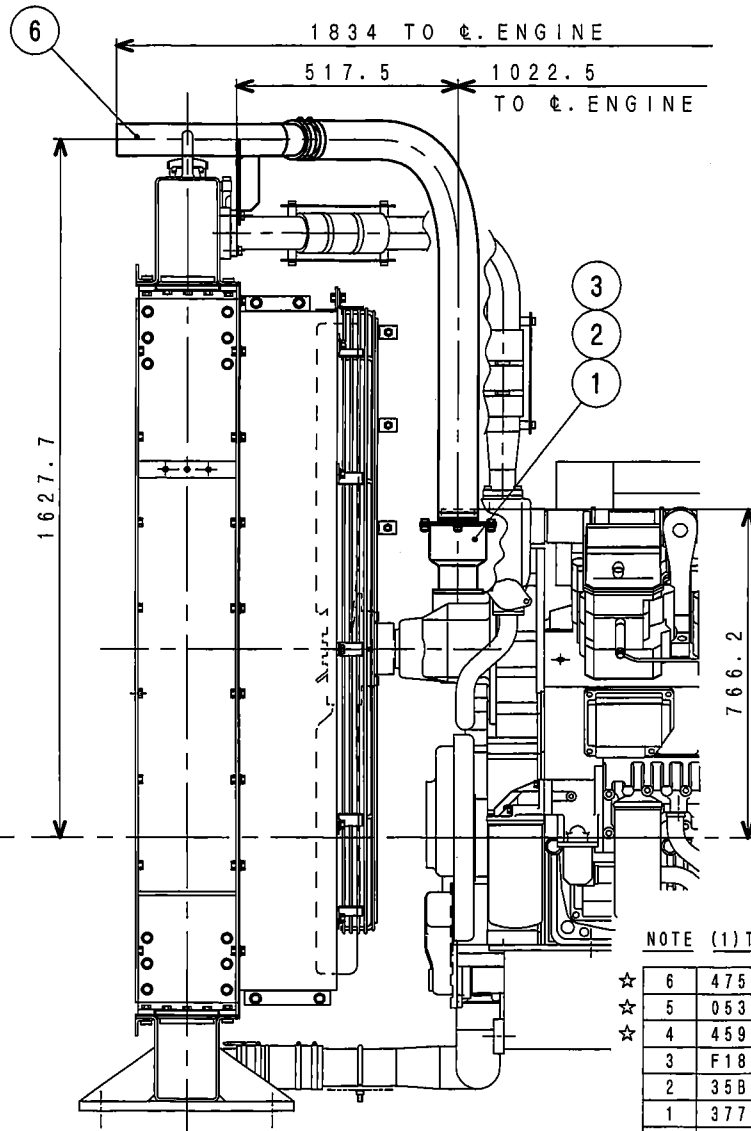
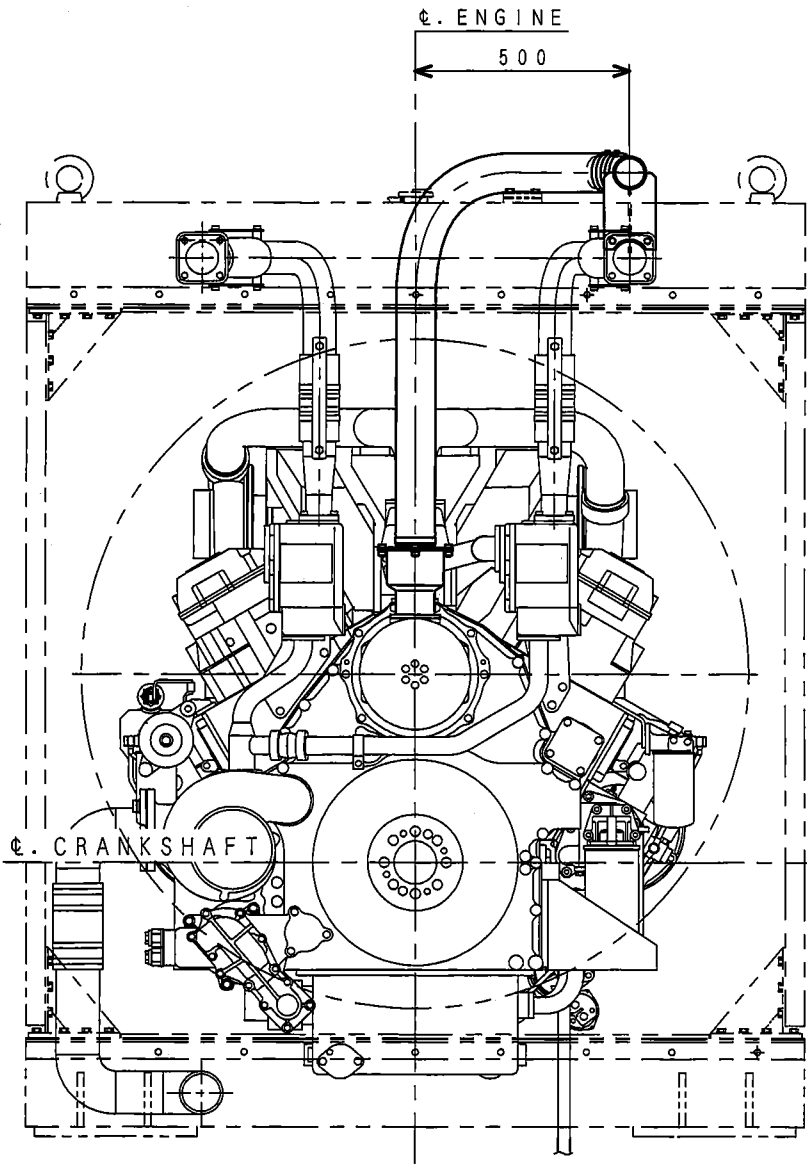
MHI CONFIDENTIAL

| | | | |
|------------|-----------|-----------|------------|
| ④ | 4590-H415 | '12.11.16 | 谷戸 |
| ③ | 4590-E892 | '08.10.3 | 齊藤 |
| ② | 4590-B016 | '05.3.24 | 浅沼 |
| ① | 4590-5321 | '99.6.10 | 福田 |
| CHG | ED-NO | DATE | CHK |
| 認可 APPD | 検図 CHK | 製図 DRN | 承認 CHK |
| 橋口 | 竹谷 | 福田 | 齊藤 |
| | | | 1991.12.13 |

S12R
LUB. OIL FILTER
 三菱重工業株式会社 汎用機・特車事業本部
 MITSUBISHI HEAVY INDUSTRIES, LTD. GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS.
 図面番号 **37796-40001** ④
 DRAWING No.

注記 (1) 本図は、標準4連オイルフィルタ装着図である。

| | | | | | |
|------|-----|-------|------------|--------|-------|
| ① 新図 | サイズ | ① 組立図 | ② 特殊部品 | ③ 板金部品 | ④ 組立品 |
| ② 旧図 | A 3 | ⑤ 切削品 | ⑥ その他(購入品) | | |



DETAIL OF BREATHER

NOTE (1) THE ☆ MARKED PARTS ARE LOOSE SUPPLY.

| No. | PARTS NO. | PARTS NAME | Q' TY |
|-----|-------------|----------------|-------|
| ☆ 6 | 47510-59300 | PIPE, BREATHER | 1 |
| ☆ 5 | 05317-51001 | CLAMP | 4 |
| ☆ 4 | 45955-22160 | HOSE, VINYL | 1 |
| ☆ 3 | F1805-12025 | BOLT | 4 |
| 2 | 35B43-01500 | PACKING | 1 |
| 1 | 37743-00501 | BREATHER ASSY. | 1 |

MHI CONFIDENTIAL

注記 (1) 本図は、オイルフィラ装備前側上向きブリーザ及びパイピング図である。

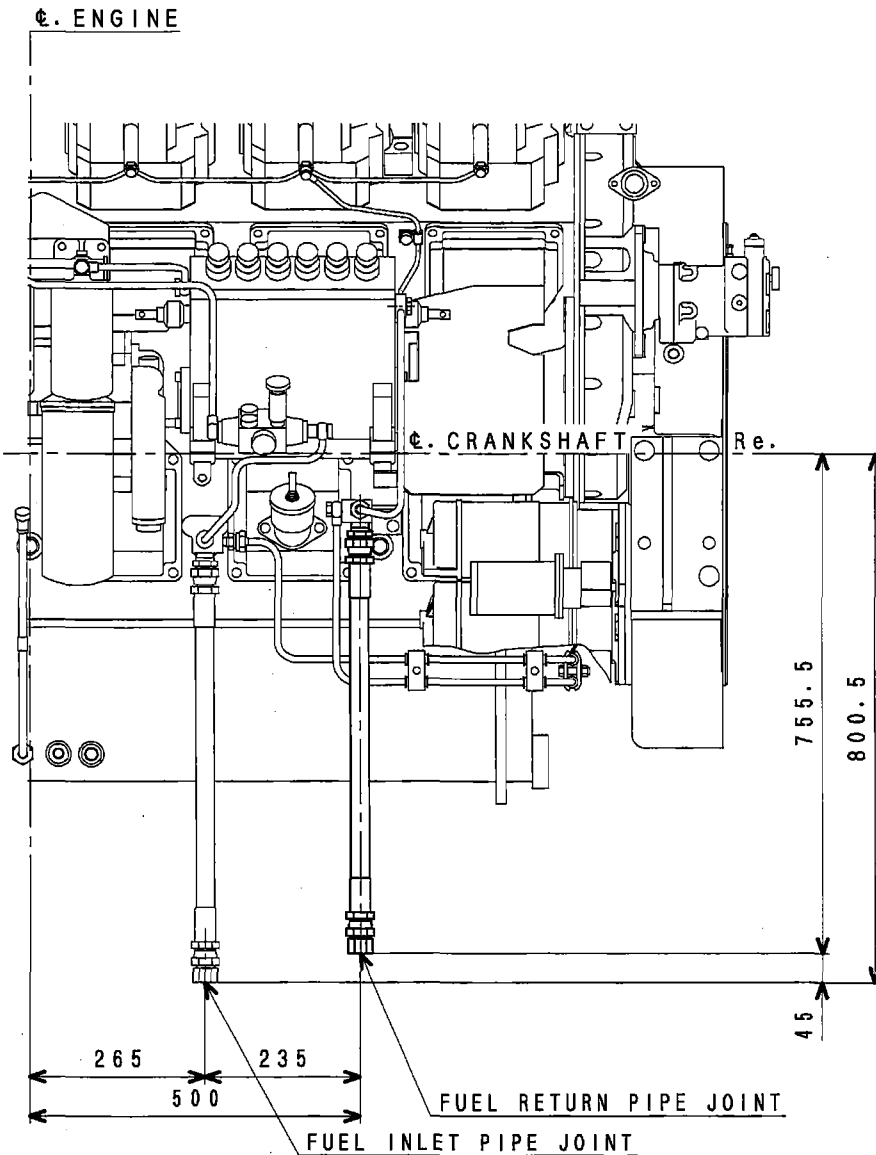
| | | | |
|------------|-----------|--------|--------|
| CHG | EO-NO | DATE | CHK |
| 認可 APPD | 検図 CHK | 塚 本 | 谷 戸 |
| 2012.11.28 | | | |

3rd ANGLE PROJECTION
尺度 SCALE

S12R
BREATHER
三菱重工業株式会社 汎用機・特車事業本部
MITSUBISHI HEAVY INDUSTRIES, LTD. GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS.
図面番号 37796-43010
DRAWING No.

M/C

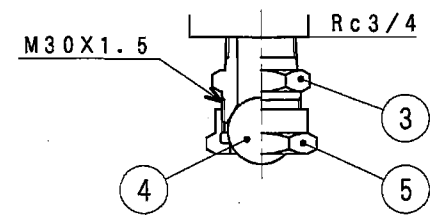
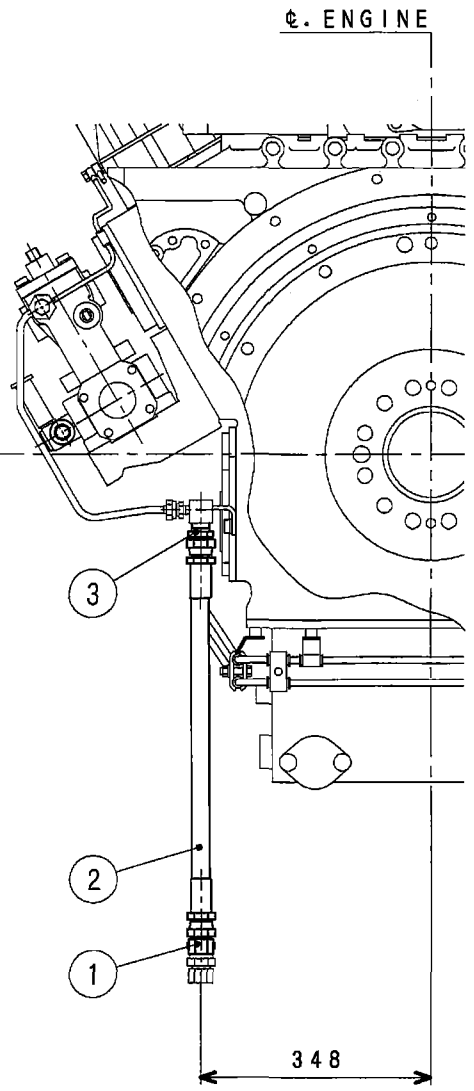
① 新図 ② 訂正 ③ 組立図 ④ 旧引図 ⑤ 別冊書庫品 ⑥ 切削品 ⑦ 板金溶接品 ⑧ 鋳立品 ⑨ その他(購入品)



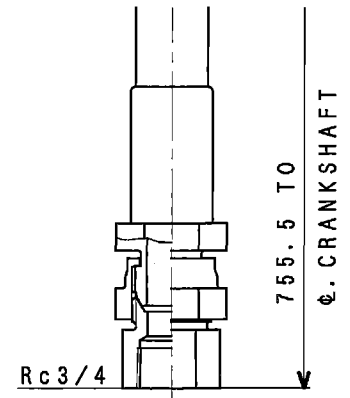
L. H.

MHI CONFIDENTIAL

注記 (1) 本図は、図番37796-61305に対しフレキホース及び先端コネクタを別送品としたものである。
 (2) 本図の符号 ④⑤ は、燃料戻り口盲栓である。(エンジン出荷状態)



FUEL RETURN PIPE JOINT



FUEL RETURN PIPE JOINT

NOTE (1) THE ☆ MARKED PARTS ARE LOOSE SUPPLY.

| NO. | PARTS NO. | PARTS NAME | Q'TY |
|-----|-----------|---------------------------------|------|
| ☆ | 5 | F4521-20000 NUT, UNION | 1 |
| ☆ | 4 | F8000-32000 STEEL BALL, BEARING | 1 |
| | 3 | F4540-20000 CONNECTOR | 1 |
| | 2 | 45950-51700 PIPE, FLEXIBLE | 1 |
| | 1 | 45950-11300 CONNECTOR | 1 |

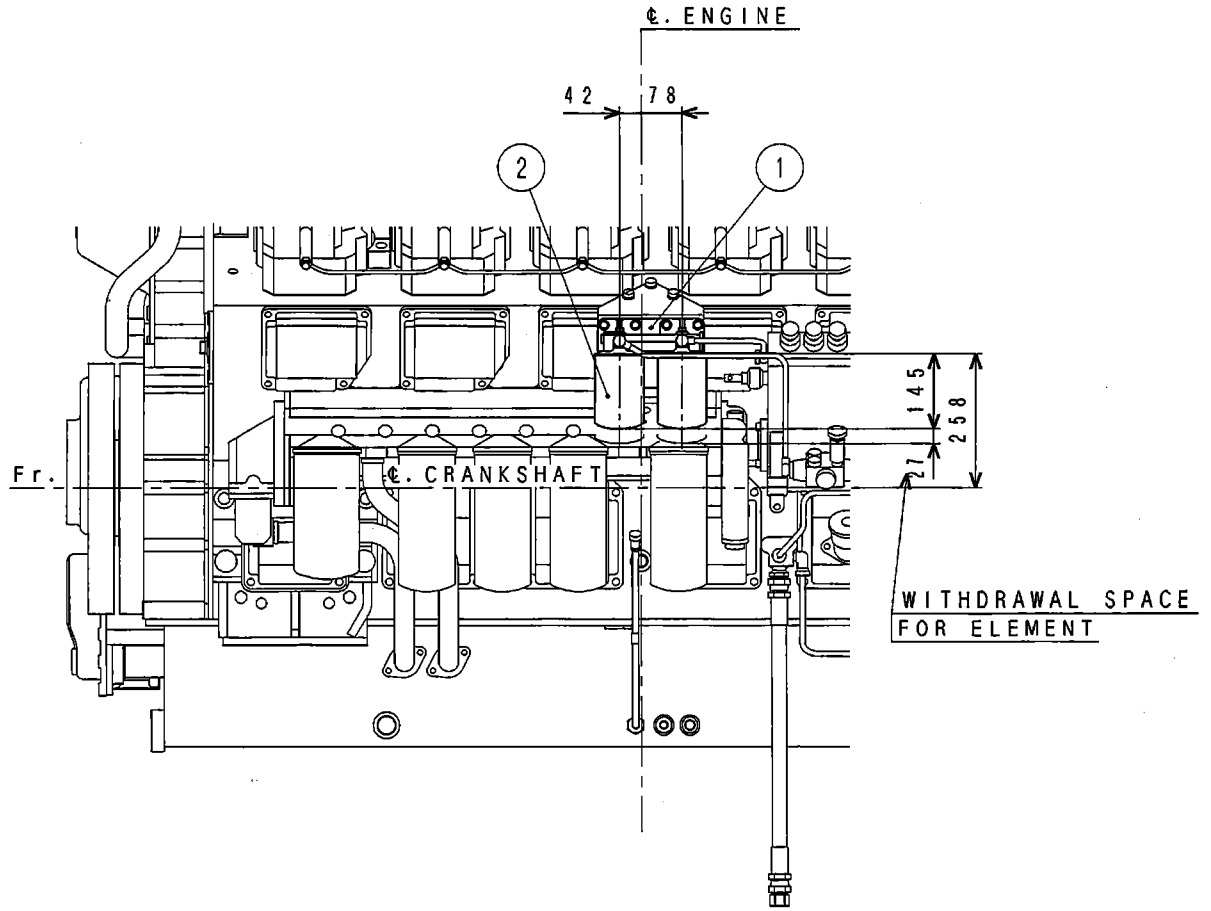
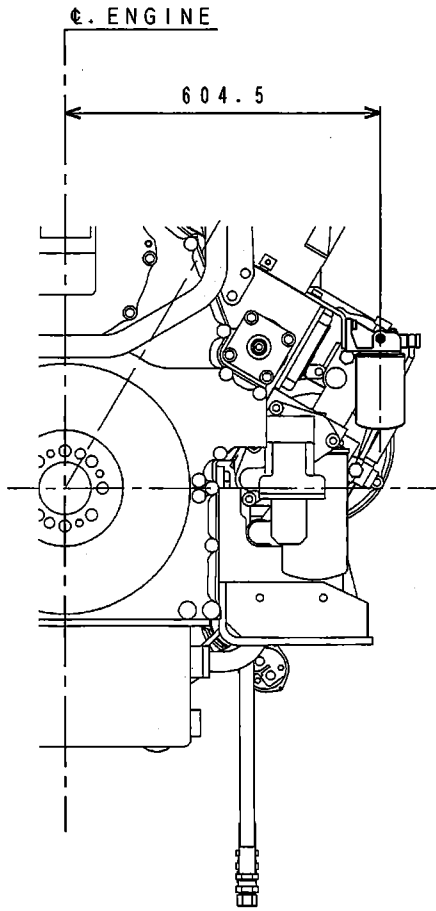
| | | | |
|------------|-------|-----------|----------|
| CHG | EO-NO | DATE | CHK |
| 認可 APPD | 橋 | 換図 CHK | 三谷 上戸 |
| 製図 DRN | | 浅沼 | |
| 2008.12.9 | | | |

S12R
 FUEL RETURN PIPING
 三菱重工業株式会社 汎用機・特車事業本部
 MITSUBISHI HEAVY INDUSTRIES, LTD. GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS.
 図番番号 37796-61312
 DRAWING No.

出図
 汎特
 2008
 12.10

FULL-CAD

③ 新図 サイズ A 3
 ④ 旧引図
 ① 組立図
 ② 鋼線図
 ③ 板金図
 ④ 組立品
 ⑤ 切削品
 ⑥ その他(購入品)



MHI CONFIDENTIAL

| | | | |
|-----|-------------|-------------------|------|
| 2 | 32562-60300 | ELEMENT | (4) |
| 1 | 37562-60100 | F/F ASSY. CTR L.O | 2 |
| No. | PARTS NO. | PARTS NAME | Q'TY |

| | | |
|-----------|-----------|------------|
| 4590-6300 | '00. 4.12 | 福田 |
| CHG | EO-NO | DATE |
| 清国 | 検図 | 竹谷 |
| APPD | CHK | 福田 |
| | | 製図 |
| | | 谷川 |
| | | 1998. 2. 2 |

3rd ANGLE PROJECTION
尺度 SCALE
:

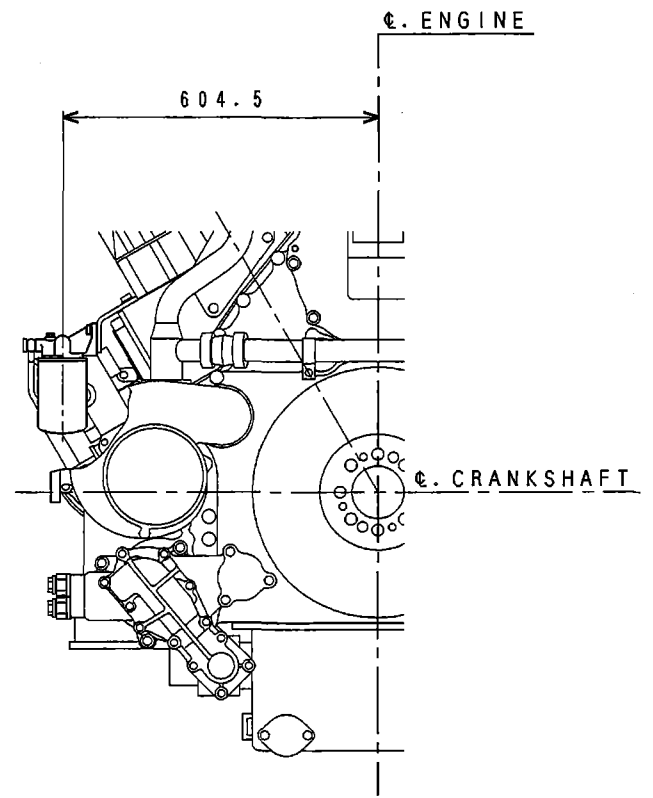
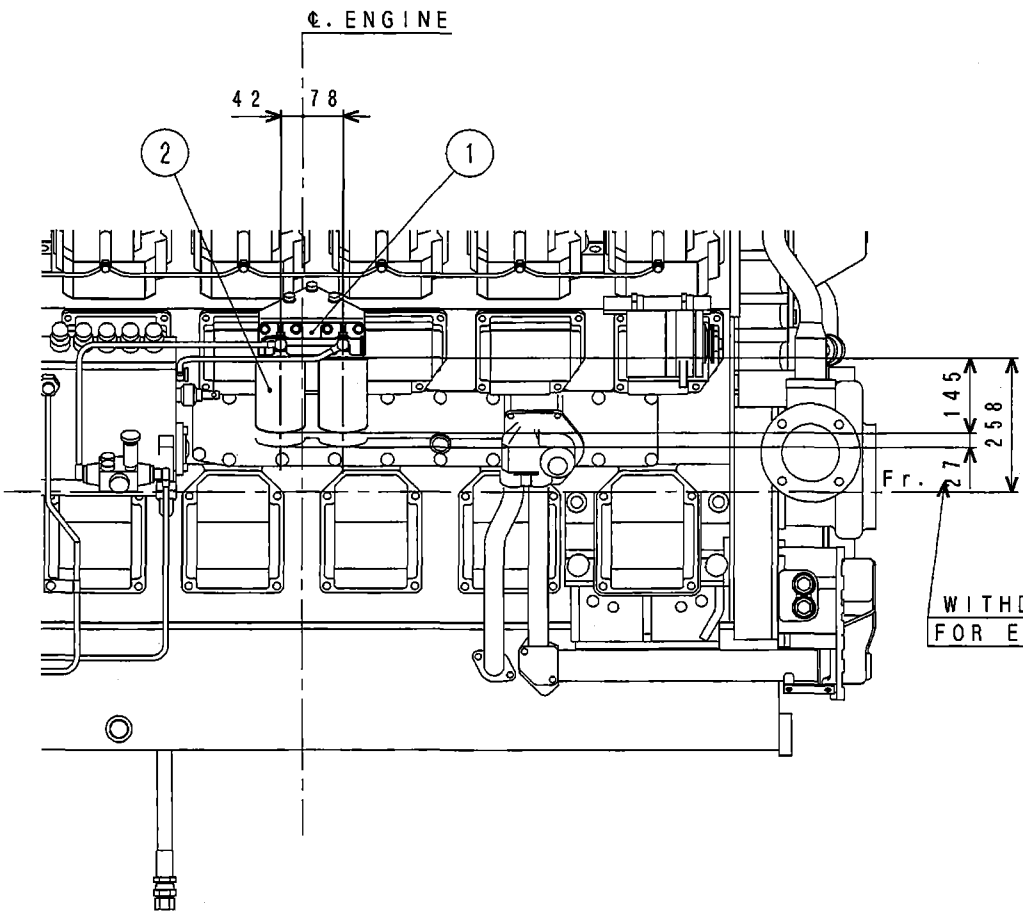
S12R
FUEL FILTER PIPING
三菱重工業株式会社相模原製作所
SAGAMIHARA MACHINERY WORKS, MITSUBISHI HEAVY INDUSTRIES, LTD.
図面番号 37796-62002
DRAWING No. 1/2

注記 (1) 本図のF. Oエレメントは、軽油用である。

旧引
況特
2000
4.28

FULL-CAD

3 新図 4 寸法
① 旧引図 A 3
① 組立図 1 2 脚鍍金部品 3 板金溶接品 4 組立品
5 切削品 6 その他(購入品)



MHI CONFIDENTIAL

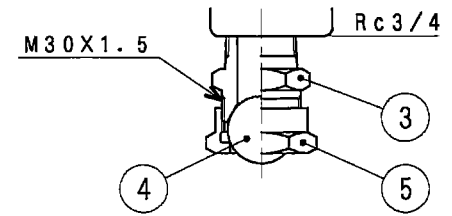
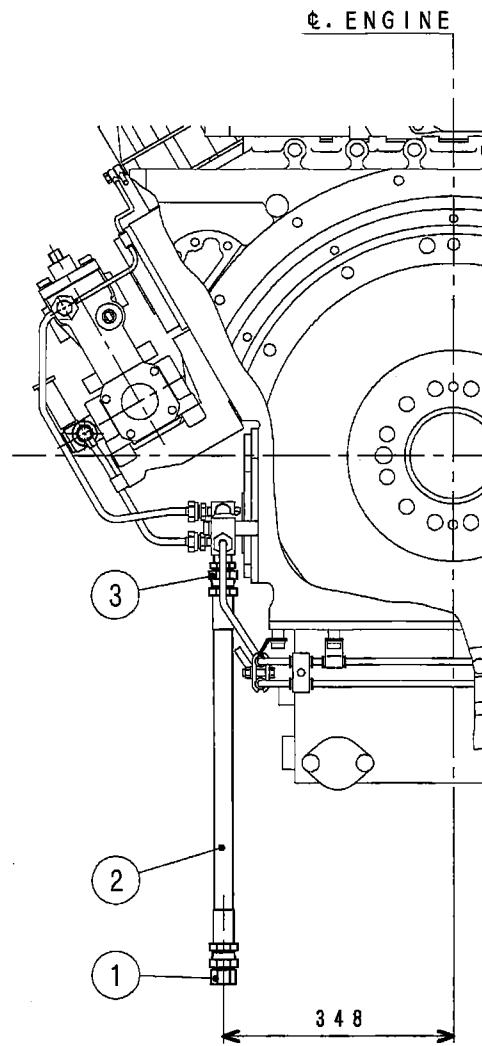
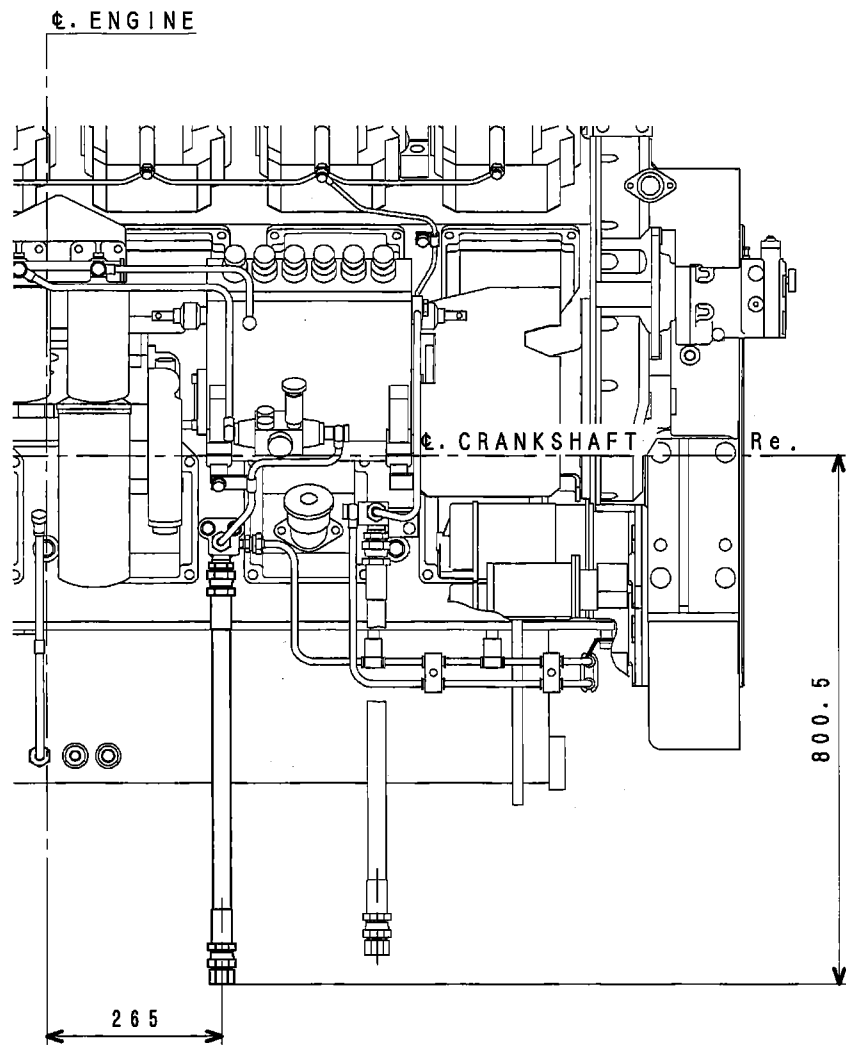
| | | | | | |
|-----------|-------|------------|-------|---|---------|
| | | | | 3rd ANGLE PROJECTION 尺度 SCALE | |
| 4590-6300 | | '00. 4.12 | | 菅田 | |
| CHG | EO-NO | DATE | CHK | | |
| 認可 APPD | 清国 | 検図 CHK | 竹谷 福田 | 製図 DRN | 谷 箱 戸 島 |
| | | 1998. 2. 2 | | S12R FUEL FILTER PIPING 三菱重工業株式会社相模原製作所 SAGAMIHARA MACHINERY WORKS, MITSUBISHI HEAVY INDUSTRIES, LTD. 図番番号 DRAWING No. 37796-62002 2/2 | |

旧引

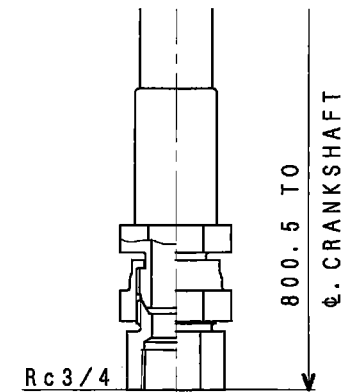
 汎特
 2000
 4.28

FULL-CAD

3 新図 4 訂正
 ① 旧引図 ② 組立図 ③ 納品前製品 ④ 組立品
 ⑤ 切形品 ⑥ その他(購入品)



DETAIL OF INLET PIPE JOINT



DETAIL OF INLET PIPE JOINT

NOTE (1) THE ☆ MARKED PARTS ARE LOOSE SUPPLY.

| NO. | PARTS NO. | PARTS NAME | Q' TY |
|-----|-------------|---------------------|-------|
| 5 | F4521-20000 | NUT, UNION | 1 |
| 4 | F8000-32000 | STEEL BALL, BEARING | 1 |
| 3 | F4540-20000 | CONNECTOR | 1 |
| 2 | 45950-51700 | PIPE, FLEXIBLE | 1 |
| 1 | 45950-11300 | CONNECTOR | 1 |

☆
☆

出図
汎特
2008
12.10

FULL-CAD

MHI CONFIDENTIAL

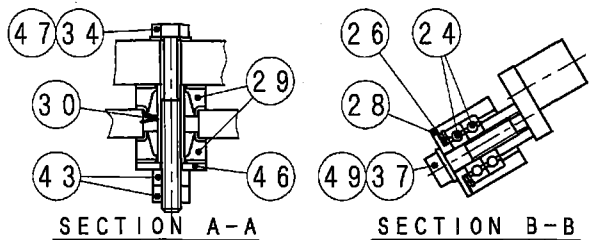
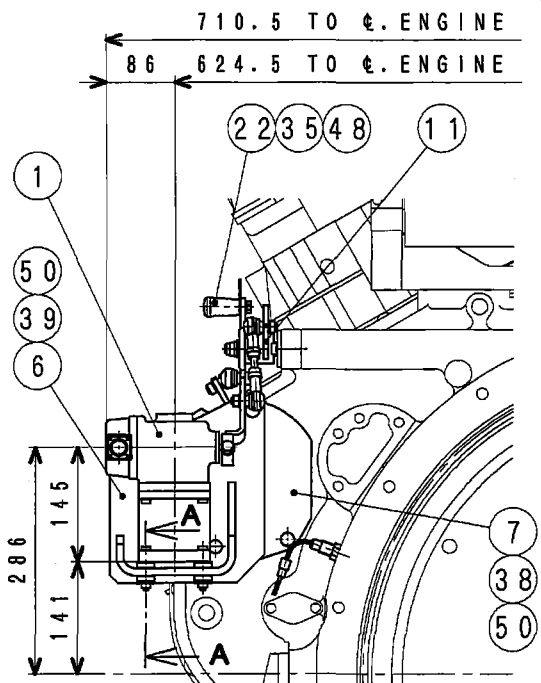
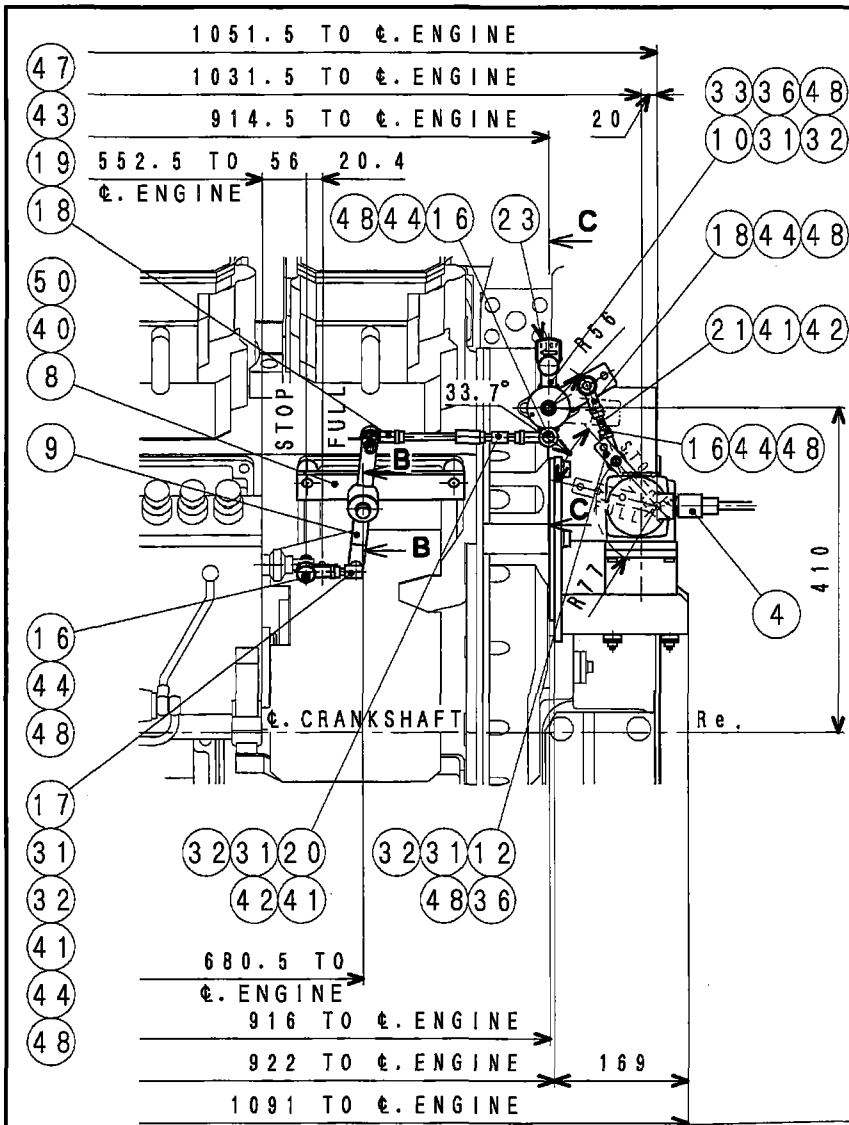
注記 (2) 本図の符号 ④⑤ は、燃料入口盲栓である。(エンジン出符状態)
(1) 本図は、図番 37796-62101 に対しフレキホース及び先端コネクタを別送品としたものである。

| | | | |
|------------|--------|-----------|------------------|
| CHG | EO-NO | DATE | CHK |
| 認可 APPD | 橋 口 | 換図 CHK | 三 谷 上 戸 |
| | | 製図 DRN | 浅 沼 |
| | | | 2008.12.9 |

3rd ANGLE
PROJECTION
尺度 SCALE

S12R
FUEL INLET PIPING
三菱重工業株式会社 汎用機・特車事業本部
MITSUBISHI HEAVY INDUSTRIES, LTD. GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS.
図面番号
DRAWING No. 37796-62112

③ 新図 サイズ A 3 ④ 組立図 2 鋼線鋼線品 3 板金溶接品 4 組立品
④ 旧引図 5 切削品 6 その他(購入品)

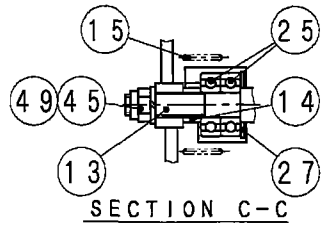
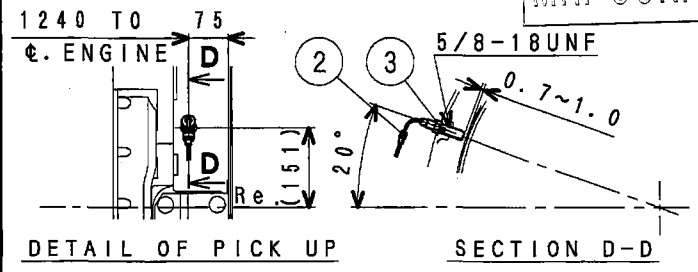


| No. | PARTS NO. | PARTS NAME | Q'TY |
|-----|-------------|----------------------|------|
| 35 | F1035-08020 | BOLT | 1 |
| 34 | F1035-06055 | BOLT | 4 |
| 33 | F2846-06000 | PIN, DOWEL | 1 |
| 32 | 48000-96600 | SEAL | 5 |
| 31 | 34461-07700 | WIRE, SEAL | 5 |
| 30 | 47500-34200 | SPACER | 4 |
| 29 | 47500-34100 | RUBBER | 8 |
| 28 | 32561-18300 | PLATE, END | 1 |
| 27 | F3202-03200 | RING, SNAP | 1 |
| 26 | F3202-03000 | RING, SNAP | 1 |
| 25 | F8007-06201 | BEARING, BALL | 2 |
| 24 | F8007-16200 | BEARING, BALL | 2 |
| 23 | 45940-30101 | PLATE, CAUTION | 1 |
| 22 | 51776-03000 | GRIP | 1 |
| 21 | 45930-18006 | ROD, CONNECTING | 1 |
| 20 | 42061-21800 | ROD | 1 |
| 19 | 37761-26800 | LINK, L. H. | 1 |
| 18 | 35A61-38701 | JOINT, BALL (M8-L) | 1 |
| 17 | 07771-00080 | JOINT, BALL | 1 |
| 16 | 35A61-38601 | JOINT, BALL (M8-R) | 3 |
| 15 | 32561-48600 | SPRING | 1 |
| 14 | 91365-03200 | SPACER | 1 |
| 13 | 37761-27100 | SHAFT, CONTROL | 1 |
| 12 | 47520-31200 | LEVER | 1 |
| 11 | 37763-27300 | LEVER, L. H., B | 1 |
| 10 | 37761-67200 | LEVER, L. H., A | 1 |
| 9 | 37761-27800 | LEVER, LINK, L. H | 1 |
| 8 | 37761-27600 | BRACKET, LEVER, L. H | 1 |
| 7 | 47500-39901 | COVER | 1 |
| 6 | 47520-31101 | BRACKET, ACTUATOR | 1 |
| ☆ 5 | 04410-XXXXX | CONTROLLER | 1 |
| ☆ 4 | 04410-32902 | CONNECTOR | 1 |
| 3 | 04410-43410 | PICK UP | 1 |
| ☆ 2 | 04410-43500 | CONNECTOR | 1 |
| 1 | 04410-32011 | ACTUATOR | 1 |

NOTE (1) THE ☆ MARKED PARTS ARE LOOSE SUPPLY.

| No. | PARTS NO. | PARTS NAME | Q'TY |
|-----|-------------|-------------------|------|
| 50 | F2515-12000 | WASHER, SPRING | 6 |
| 49 | F2515-10000 | WASHER, SPRING | 2 |
| 48 | F2515-08000 | WASHER, SPRING | 9 |
| 47 | F2515-06000 | WASHER, SPRING | 4 |
| 46 | 08302-06000 | WASHER | 4 |
| 45 | F2445-10000 | NUT, SELF LOCKING | 1 |
| 44 | F2300-08000 | NUT | 6 |
| 43 | F2300-06000 | NUT | 8 |
| 42 | 09413-00800 | NUT, LOCK | 2 |
| 41 | 33063-11400 | NUT | 3 |
| 40 | F1035-12065 | BOLT | 2 |
| 39 | F1035-12035 | BOLT | 3 |
| 38 | F1035-12025 | BOLT | 1 |
| 37 | F1035-10040 | BOLT | 1 |
| 36 | F1115-08025 | BOLT | 2 |

MHI CONFIDENTIAL



| CHG | EO-NO | DATE | CHK |
|-----|-----------|----------|-----|
| 4 | 4590-E895 | '08.10.3 | 齊藤 |
| 3 | 4590-B027 | '05.3.25 | 浅沼 |
| 2 | 4591-0108 | '03.7.30 | 福田 |
| 1 | 4590-4984 | '99.3.5 | 福田 |

| | | | | | | |
|------------|--------|-----------|--------|------------|-----------|--------|
| 認可 APPD | 松 下 | 換圖 CHK | 竹 谷 | 福 田 | 製圖 DEN | 谷 鳥 |
| | | | | 1998. 3. 2 | | |

S12R
GOVERNOR

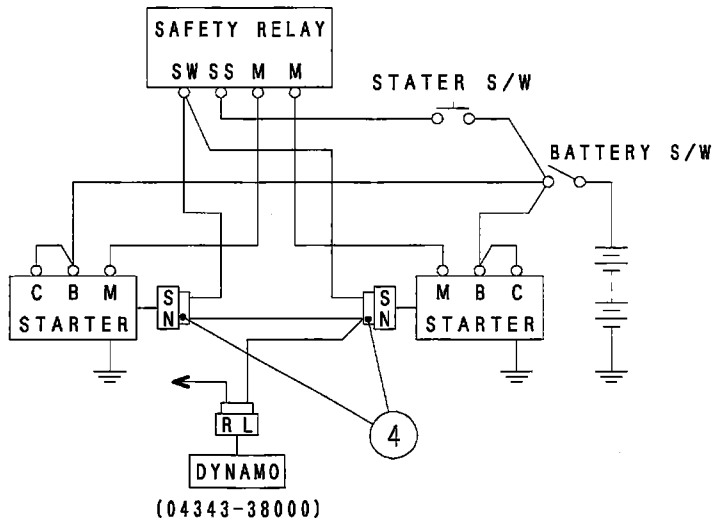
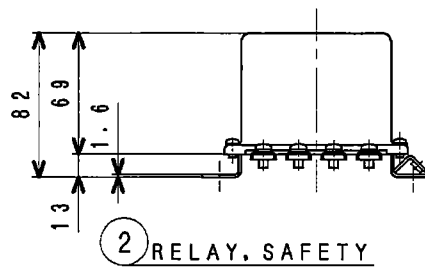
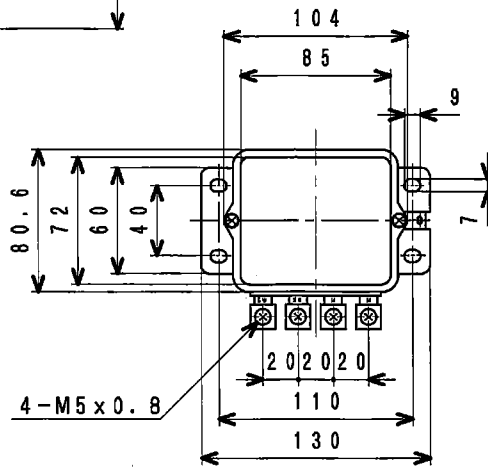
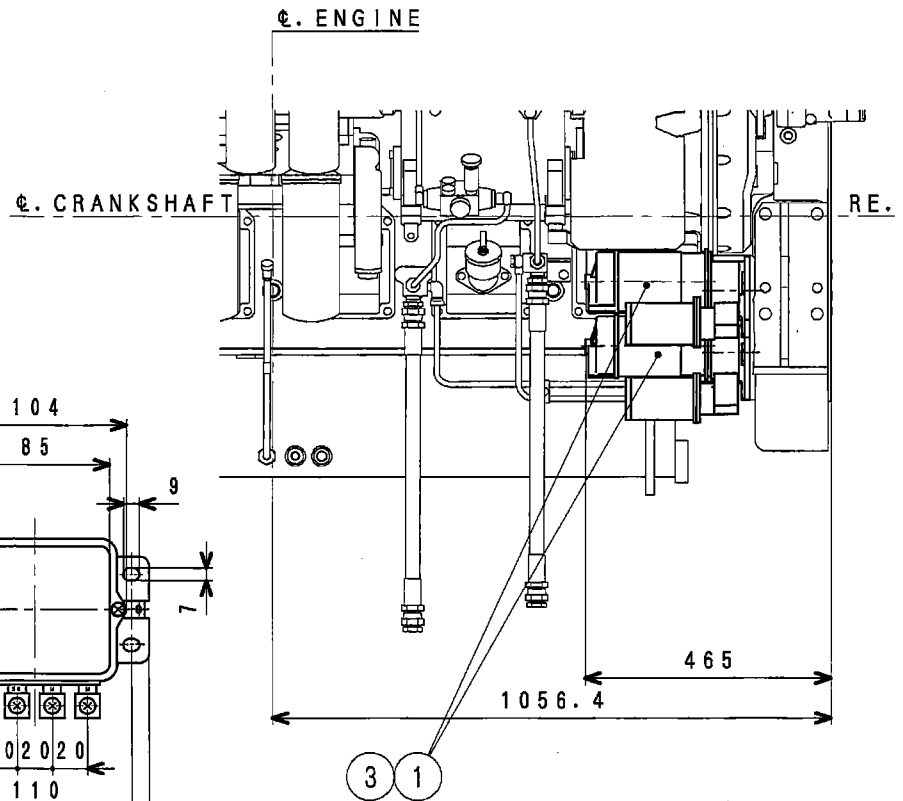
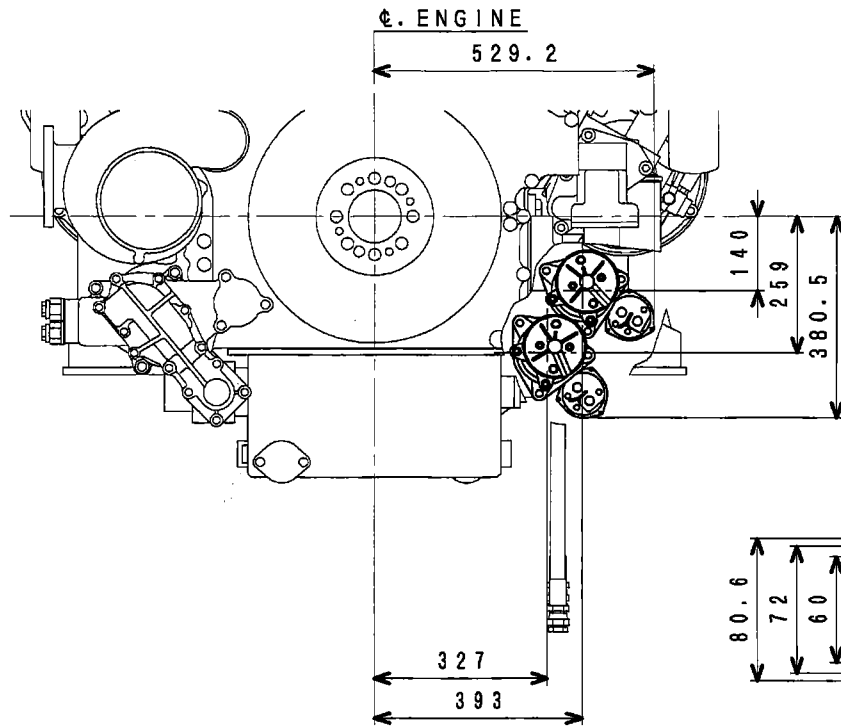
三菱重工業株式会社 汎用機・特車事業本部
MITSUBISHI HEAVY INDUSTRIES, LTD. GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS.

図面番号
DRAWING No. 37796-63005

旧引
汎特
2008
12.8

FULL-CAD

3 新図
① 旧図
サイズ
A 3
組立図
2 諸務標準品
5 切削品
3 板金標準品
4 組立品
6 その他(購入品)



MHI CONFIDENTIAL

NOTE (1) THE ☆ MARKED PARTS ARE LOOSE SUPPLY.

| No. | PARTS NO. | PARTS NAME | Q'TY |
|-----|-------------|---------------|------|
| ☆ 4 | F8665-02100 | CONNECTOR | 2 |
| 3 | F1805-12035 | BOLT | 6 |
| ☆ 2 | 04322-40100 | SAFETY RELAY | 1 |
| 1 | 37766-20201 | STARTER 7.5kW | 2 |

| | | | |
|------------|-----------|------------|------------|
| 3 | 4590-G647 | '11. 3.24 | 斉藤 |
| 2 | 4590-6940 | '00. 8.28 | 福田 |
| 1 | 4590-5023 | '99. 3. 9 | 谷戸 |
| CHG | EO-NO | DATE | CHK |
| 認可 APPD | 橋 | 検図 CHK | 竹 福 谷 田 |
| | | 製図 DRN | 谷 銅 戸 島 |
| | | 1998. 3. 9 | |

S12R
STARTING MOTOR

三菱重工業株式会社 汎用機・特車事業本部
MITSUBISHI HEAVY INDUSTRIES, LTD. GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS.

図面番号 37796-66001
DRAWING No. 3

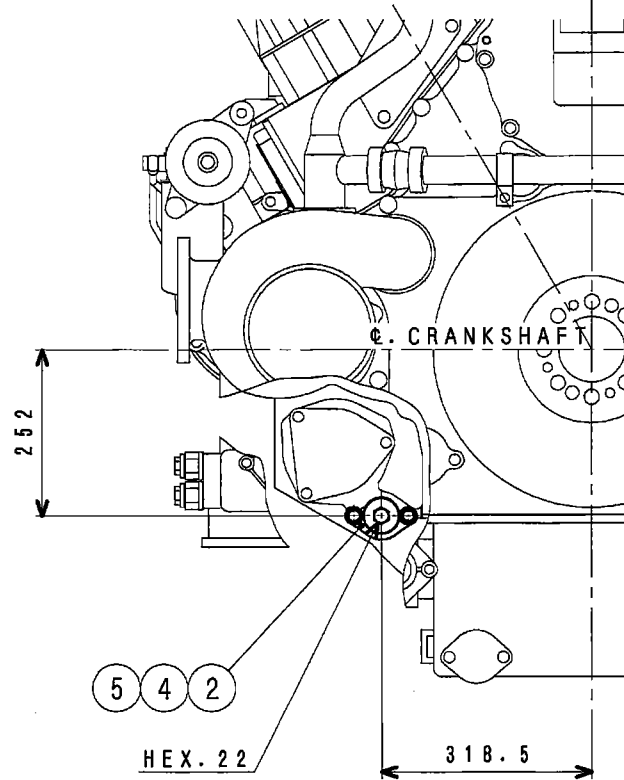
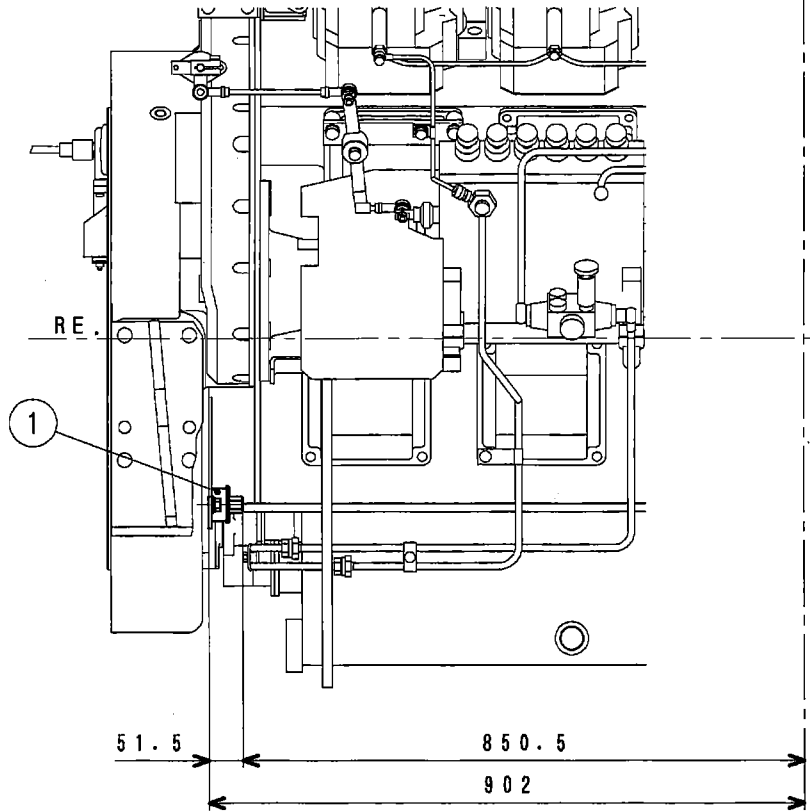
3 新図 サイズ
① 旧図 A 3
② 組立図 2 試験部品 3 板金接合品 4 組立品
5 切削品 6 その他(購入品)

旧引
汎特
2011
5.23

FULL-CAD

☉. ENGINE

☉. ENGINE



MHI CONFIDENTIAL

| 5 | F2500-12000 | WASHER, PLAIN | 2 |
|-----|-------------|----------------|------|
| 4 | F1805-12020 | BOLT | 2 |
| 3 | 37571-01500 | PLATE, CAUTION | 1 |
| 2 | 37571-10300 | FLANGE | 1 |
| 1 | 37771-00102 | GEAR, TURNING | 1 |
| No. | PARTS NO. | PARTS NAME | Q'TY |

| | | | | | |
|------------|--------|-----------|--------|----------------------------------|------------------|
| 4590-G648 | | 11. 3.24 | 齊藤 | 3rd ANGLE PROJECTION 尺度 SCALE | |
| CHG | EO-NO | DATE | CHK | | |
| 認可 APPD | 橋 口 | 換図 CHK | 竹 谷 | 製図 DRN | 谷 川 勇 樹 |
| | | | | 1998. 3.11 | |

S12R
TURNING DEVICE

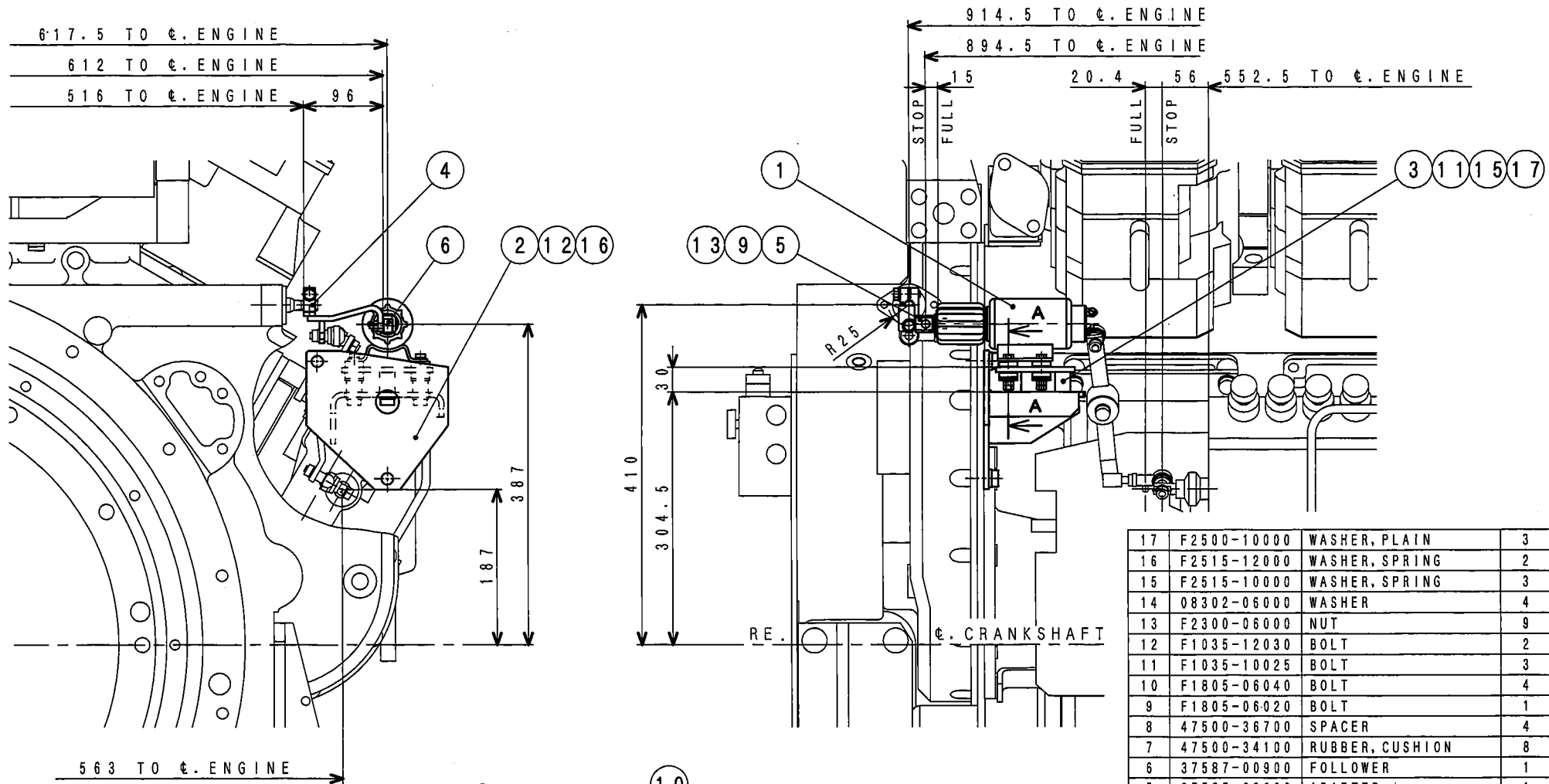
三菱重工業株式会社汎用機・特車事業本部
MITSUBISHI HEAVY INDUSTRIES, LTD. GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS.

図面番号
DRAWING No. 37796-71001

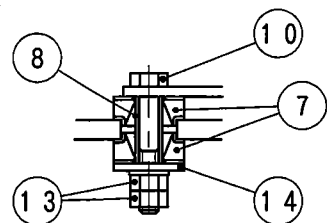
3 折 図 サイズ
④ 旧 引 図 A 3 ① 組 立 図 2 鋼 鉄 機 構 品 3 板 金 溶 接 品 4 組 立 品
5 切 削 品 6 その他 (購 入 品)

旧引
▲
汎特
2011
5.23

FULL-CAD



| | | | |
|-----|-------------|----------------------|------|
| 17 | F2500-10000 | WASHER, PLAIN | 3 |
| 16 | F2515-12000 | WASHER, SPRING | 2 |
| 15 | F2515-10000 | WASHER, SPRING | 3 |
| 14 | 08302-06000 | WASHER | 4 |
| 13 | F2300-06000 | NUT | 9 |
| 12 | F1035-12030 | BOLT | 2 |
| 11 | F1035-10025 | BOLT | 3 |
| 10 | F1805-06040 | BOLT | 4 |
| 9 | F1805-06020 | BOLT | 1 |
| 8 | 47500-36700 | SPACER | 4 |
| 7 | 47500-34100 | RUBBER, CUSHION | 8 |
| 6 | 37587-00900 | FOLLOWER | 1 |
| 5 | 37787-03200 | ADAPTER | 1 |
| 4 | 37761-36902 | LEVER, R. H., RUN-ON | 1 |
| 3 | 47520-25800 | PLATE, SOLENOID | 1 |
| 2 | 37787-03300 | BRACKET, SOLENOID | 1 |
| 1 | 04400-08801 | SOLENOID | 1 |
| No. | PARTS NO. | PARTS NAME | Q'TY |



SECTION A-A

MHI CONFIDENTIAL

| | | | |
|------------|-----------|-----------|------------------|
| 4 | 4590-H417 | '12.11.16 | 谷戸 |
| 3 | 4590-G649 | '11.3.24 | 斉藤 |
| 2 | 4590-D572 | '07.9.4 | 斉藤 |
| 1 | 4590-B021 | '05.3.25 | 谷戸 |
| CHG | EO-NO | DATE | CHK |
| 認可 APPD | 橋 | 校図 CHK | 竹 福 谷 網 谷 戸 島 |
| | | | 製図 DRN |
| | | | 1997.10.30 |

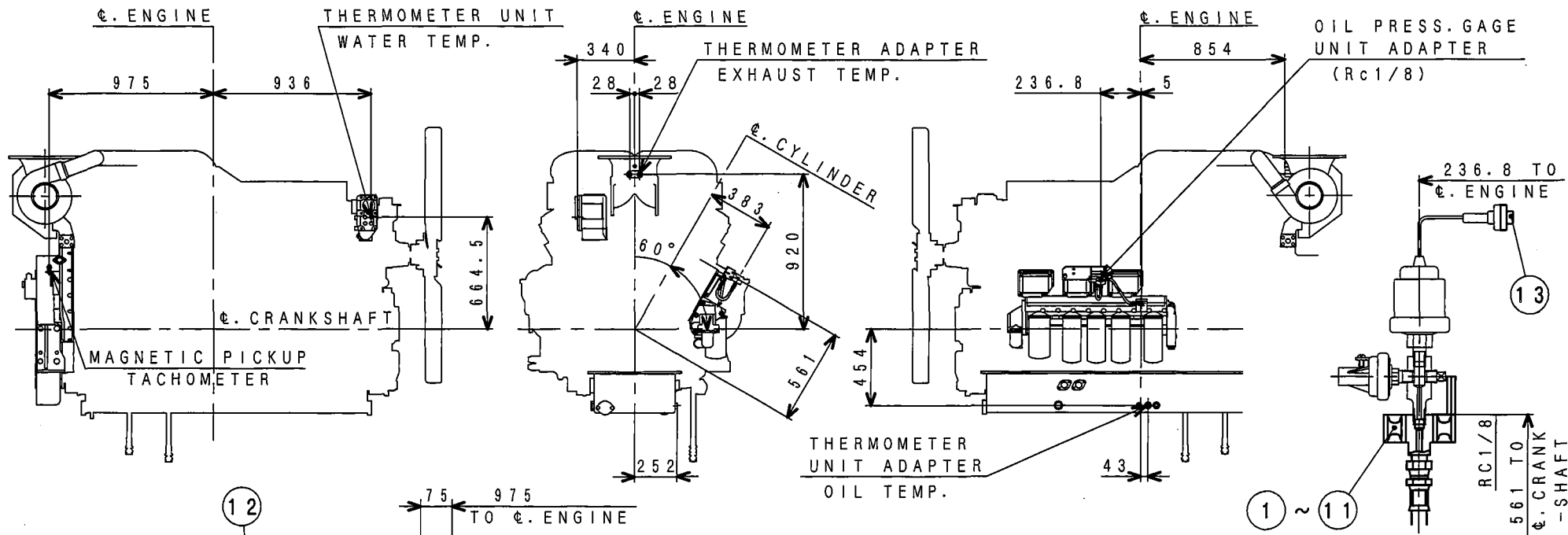
S12R

STOP SOLENOID

三菱重工業株式会社 汎用機・特車事業本部
MITSUBISHI HEAVY INDUSTRIES, LTD. GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS.

図面番号
DRAWING No. 37796-87502

注記 (1) 本図のソレノイドは、シンクロスタート製である。



NOTE (1) THE ☆ MARKED PARTS ARE LOOSE SUPPLY.

| No. | PARTS NO. | PARTS NAME | Q'TY |
|------|-------------|------------------|------|
| ☆ 13 | MH052-231 | CONNECTOR | 1 |
| ☆ 12 | 04410-43410 | PICKUP, MAGNETIC | 1 |
| ☆ 11 | F2515-12000 | WASHER, SPRING | 2 |
| ☆ 10 | F2515-10000 | WASHER, SPRING | 2 |
| ☆ 9 | F1035-12070 | BOLT | 2 |
| ☆ 8 | F1035-10025 | BOLT | 2 |
| ☆ 7 | F4560-06300 | ELBOW | 1 |
| ☆ 6 | F4540-06300 | CONNECTOR | 2 |
| ☆ 5 | F2300-10000 | NUT | 2 |
| ☆ 4 | 45951-04028 | PIPE, FLEXIBLE | 1 |
| ☆ 3 | 45951-04024 | PIPE, FLEXIBLE | 1 |
| ☆ 2 | 45644-47900 | MOUNT | 1 |
| ☆ 1 | 47520-40701 | BRACKET | 1 |

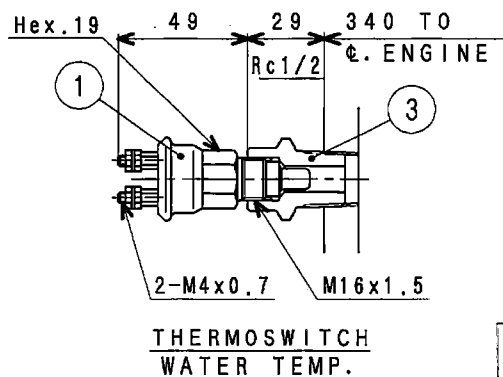
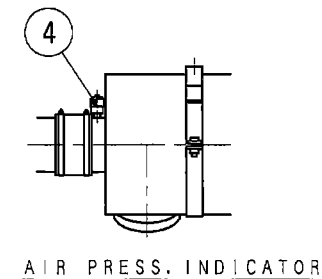
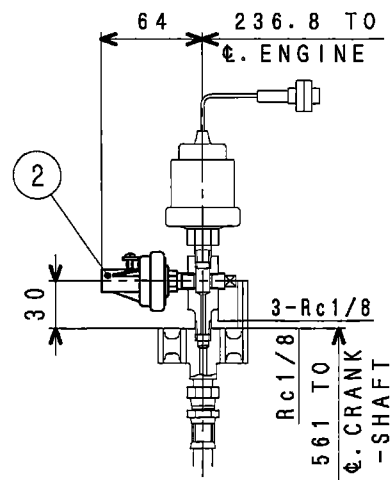
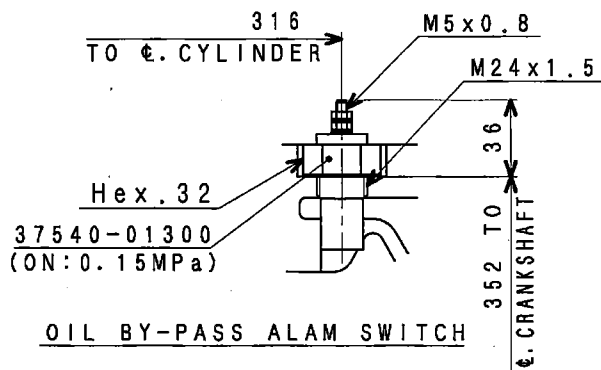
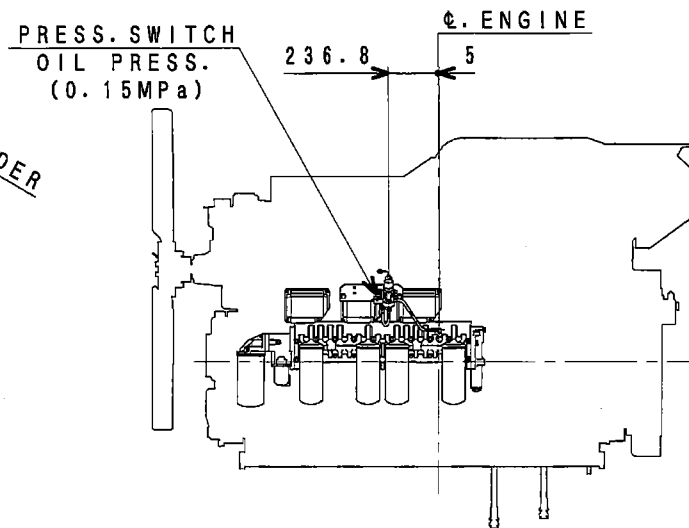
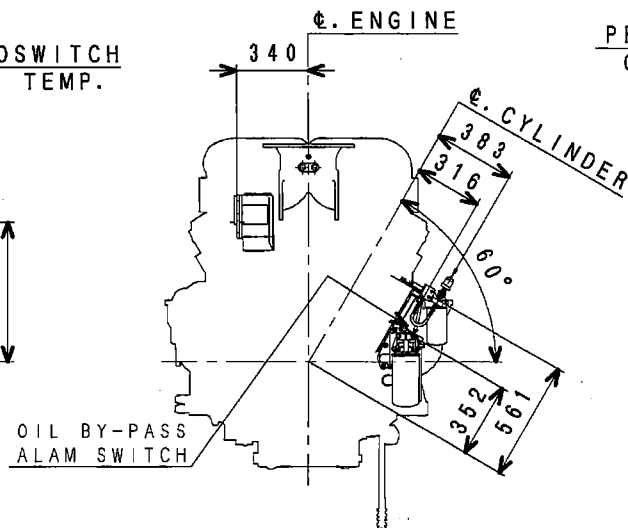
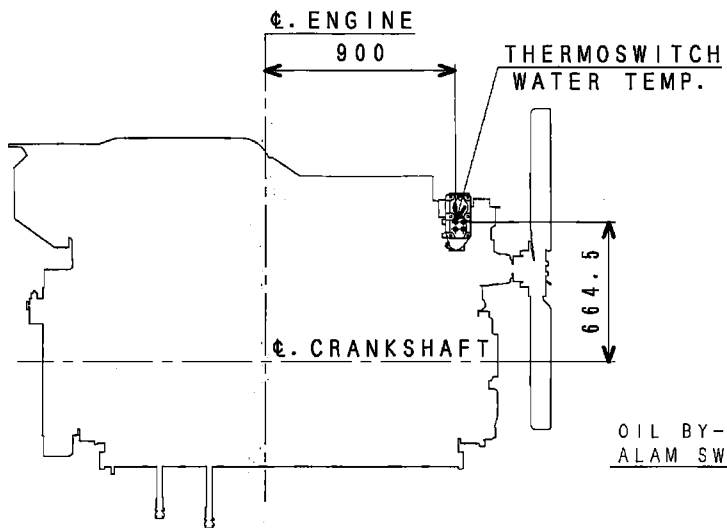
MHI CONFIDENTIAL

| | | | | |
|---------|--------|--------|-----|----------------------------------|
| CHG | EO-NO | DATE | CHK | 3rd ANGLE PROJECTION 尺度 SCALE |
| 認可 APPD | 検図 CHK | 製図 DFN | 谷 戸 | 2012.11.28 |

S12R
METER & SENSOR
 三菱重工業株式会社 汎用機・特車事業本部
 MITSUBISHI HEAVY INDUSTRIES, LTD. GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS.
 四角番号 37796-90119

①新図 ②サイズ ③組立図 ④旧図 A 3 ⑤副立図 ⑥脚継ぎ部品 ⑦板金溶接品 ⑧部立品 ⑨切別品 ⑩その他(購入品)

M/C



PRESS. SWITCH
OIL PRESS.

NOTE (1) THE ☆ MARKED PARTS ARE LOOSE SUPPLY.

| No. | PARTS NO. | PARTS NAME | Q'TY |
|-----|-------------|------------------------------------|------|
| ☆ 4 | 47220-34401 | INDICATOR 635mmH ₂ O ON | 4 |
| ☆ 3 | 45600-42902 | CONNECTOR | 1 |
| ☆ 2 | 04442-45400 | PRESS. SWITCH 0.15MPa ON | 1 |
| ☆ 1 | 04442-34500 | THERMO SWITCH 98°C ON | 1 |

MHI CONFIDENTIAL

| | | | |
|------------|-------|-------------|-----|
| CHG | ED-NO | DATE | CHK |
| 認可 APPD | 橋 | 11. 3.24 | 齊藤 |
| 換圖 CHK | 竹 | 福 | 田 |
| | 谷 | 田 | 島 |
| | | 1997. 10. 8 | |

S12R

ALARM SWITCH

三菱重工業株式会社 汎用機・特車事業本部
MITSUBISHI HEAVY INDUSTRIES, LTD. GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS.

図面番号
DRAWING No. 37796-90206

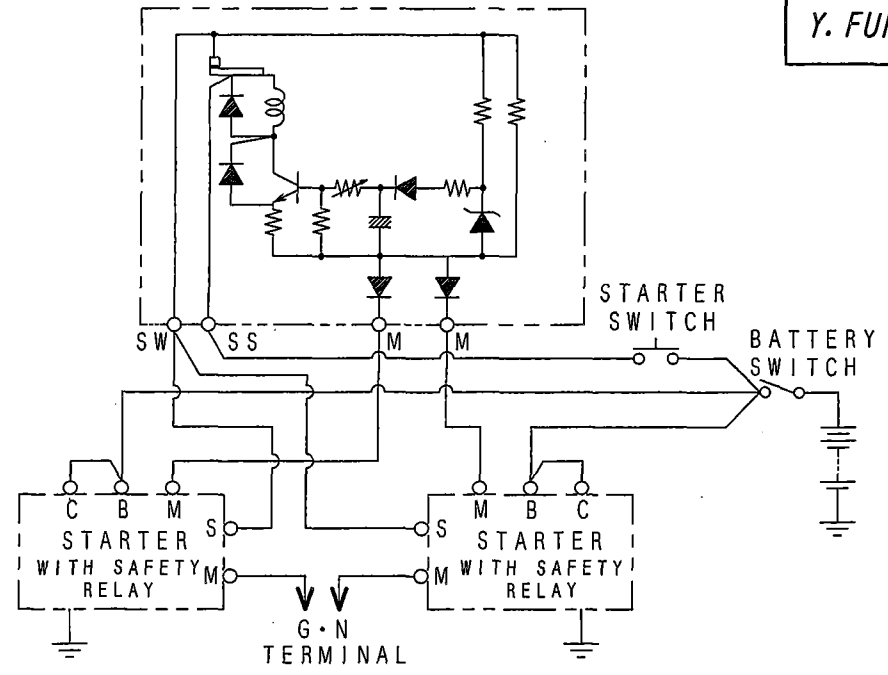
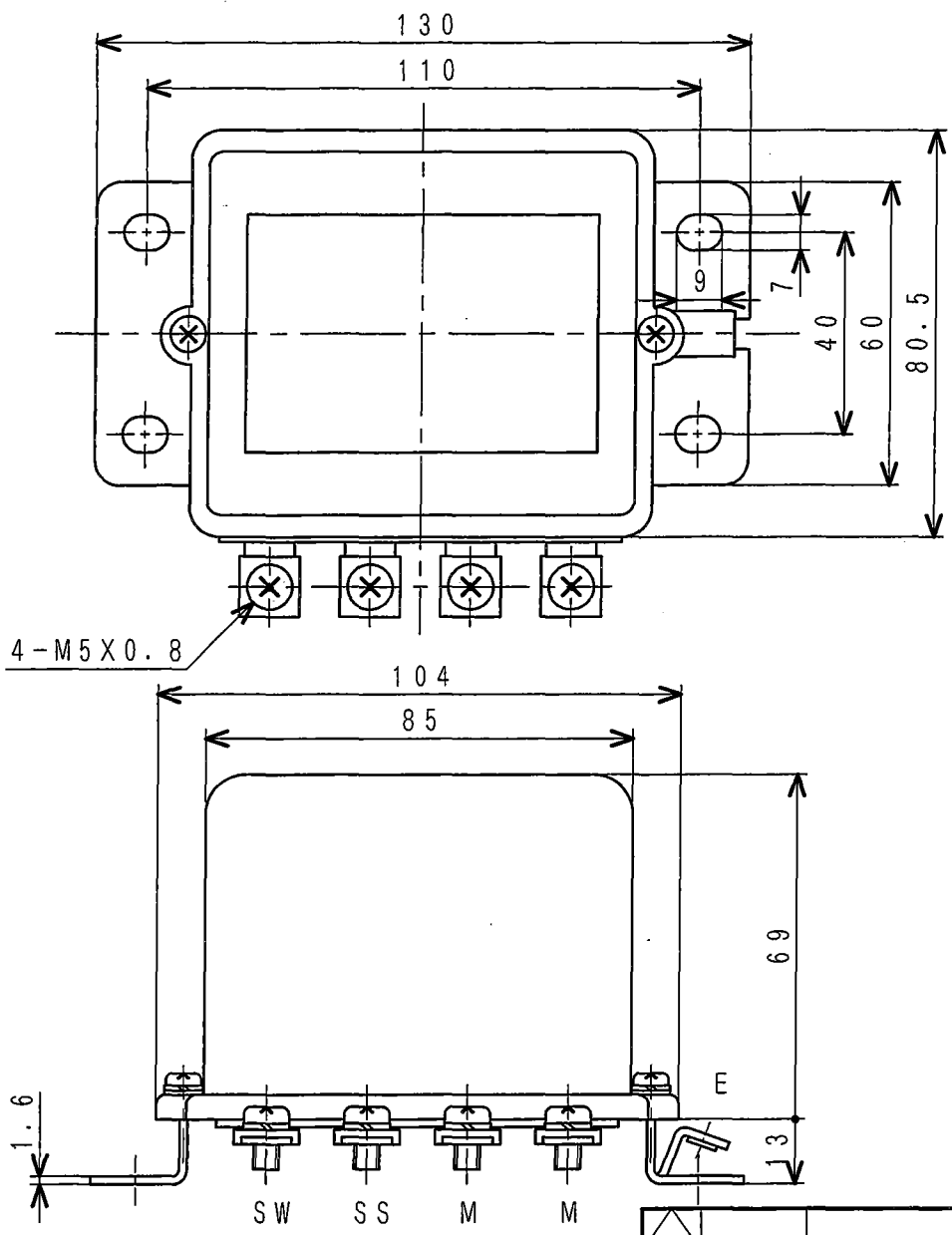
旧引
汎特
2011
5.23

FULL-CAD

3 新図 4 寸法 5 組立図 6 切削品 7 板金溶接品 8 組立品 9 その他(購入品)

CHECKED BY

Y. FUKUDA



WIRING

| 仕 様 | | |
|-------------------|--------------------------|----------------------------------|
| 公称電圧 | 24V | |
| 定 格 | 30秒 | |
| リレ-動作仕様 (25℃時) | 動作電圧 | 8V~24V |
| | 作動同期 (24V) | SS-SW間ON-OFF1サイクル 2.5~3.0 sec |
| 接点要量 | 6A | |
| 耐振性能 | JIS D 1601 3類B種ニヨル(6.8G) | |
| 使用温度 | -20 ~ +50℃ | |
| 保護方式 | 防滴形 | |

MHI CONFIDENTIAL

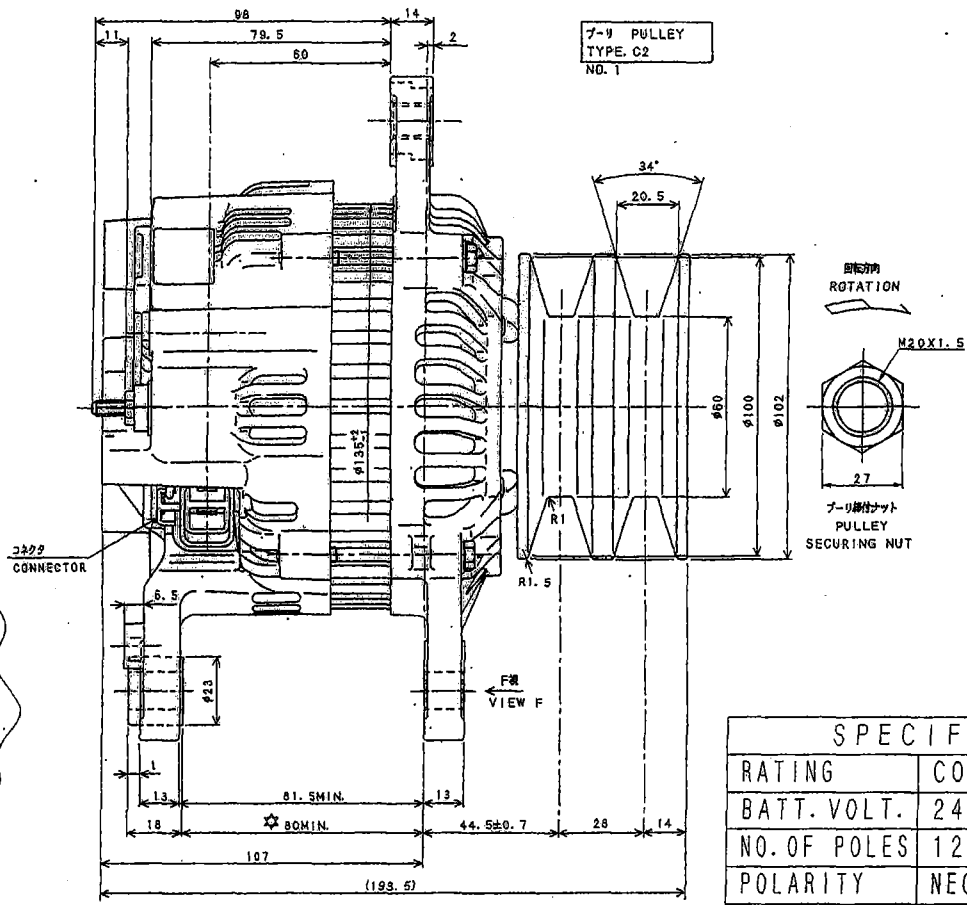
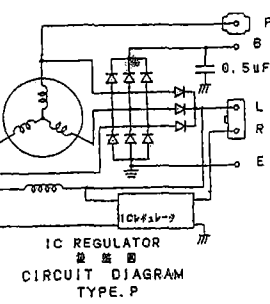
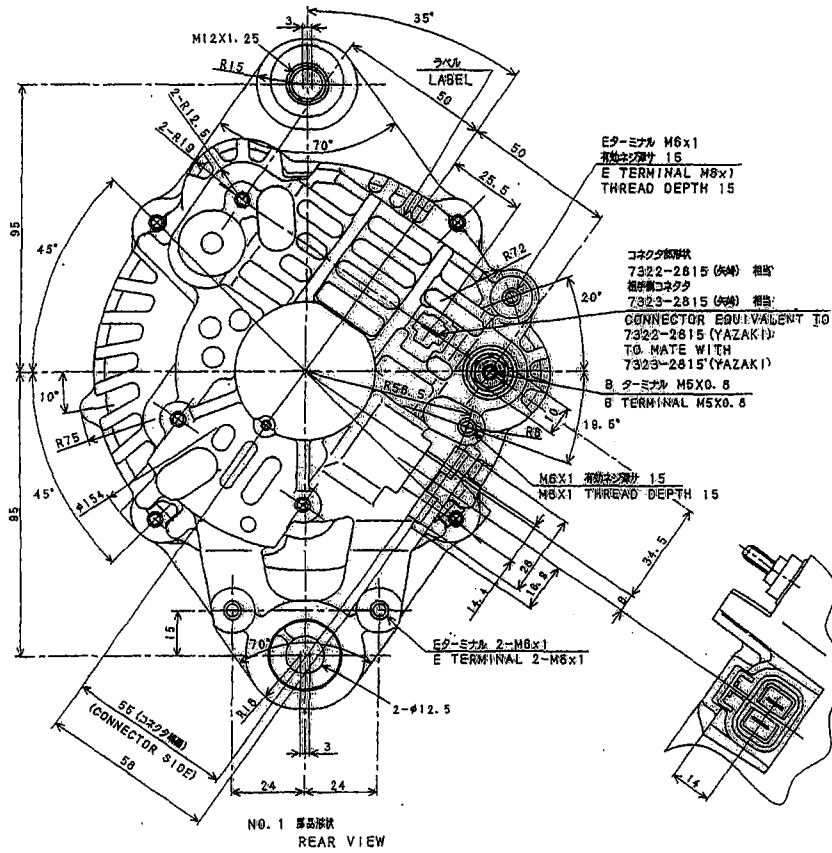
| | |
|------|-----------|
| 2 | '08.11.27 |
| 1 | '93. 2.16 |
| REV. | DATE |

SAFETY RELAY
PART NO. 04322-40100

DWG. NO. S10-0150
 MITSUBISHI HEAVY INDUSTRIES, LTD.
 GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

CHECKED BY

K. YATO



| SPECIFICATION | |
|----------------|--|
| RATING | CONTINUOUS |
| BATT. VOLT. | 24V |
| NO. OF POLES | 12 |
| POLARITY | NEGATIVE GROUND |
| REG. SYSTEM | IC-REG. BUILT-IN |
| REG. SET VOLT. | 28.5±0.5V(AT 5000r/min WITHOUT LESS THAN 5A BATT LOAD MEASURED ON L-E) |

MHI CONFIDENTIAL

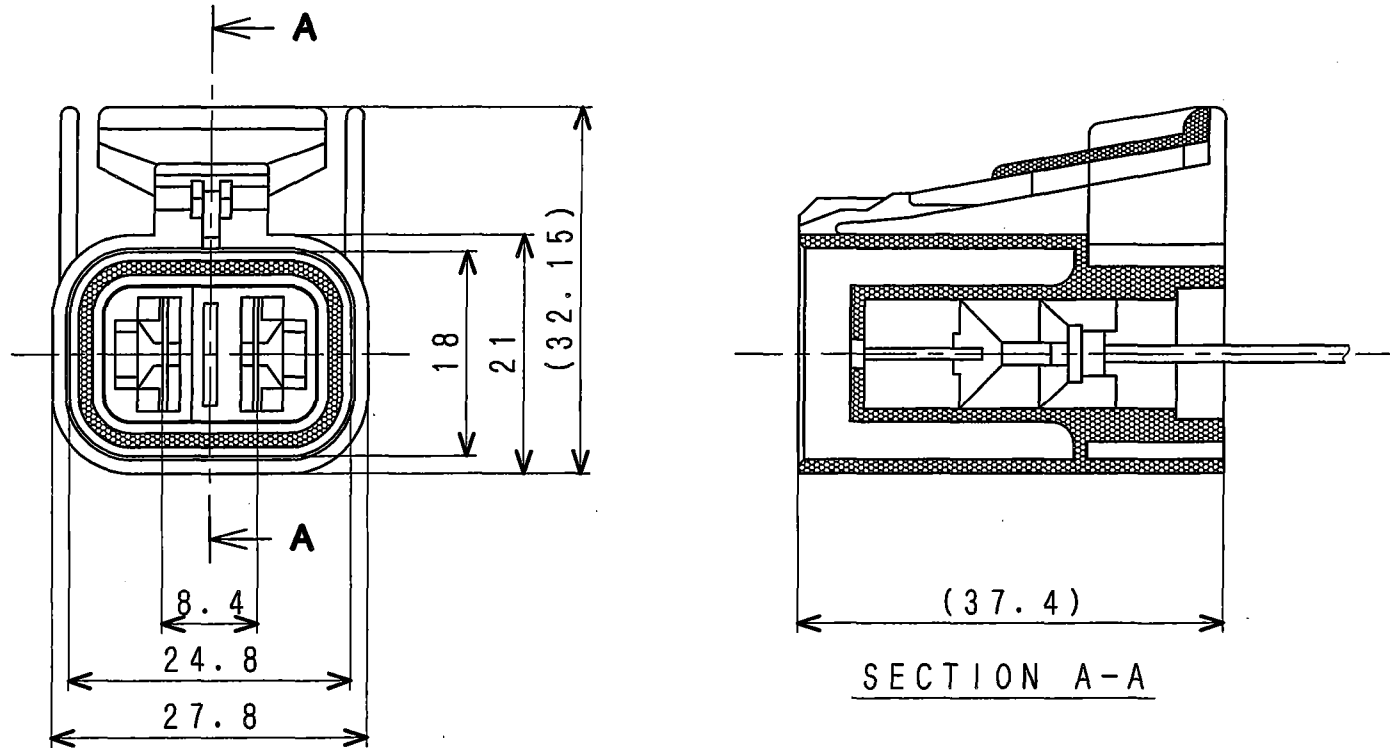
| | |
|------|------|
| | |
| | |
| | |
| REV. | DATE |

ALTERNATOR, W/O EXCIT
PART NO, 04343-38000

DWG. NO. S10-0540
MITSUBISHI HEAVY INDUSTRIES, LTD.
GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

CHECKED BY

Y. FUKUDA



本部品は、矢崎品番7323-6228-30相当品である。

MHI CONFIDENTIAL

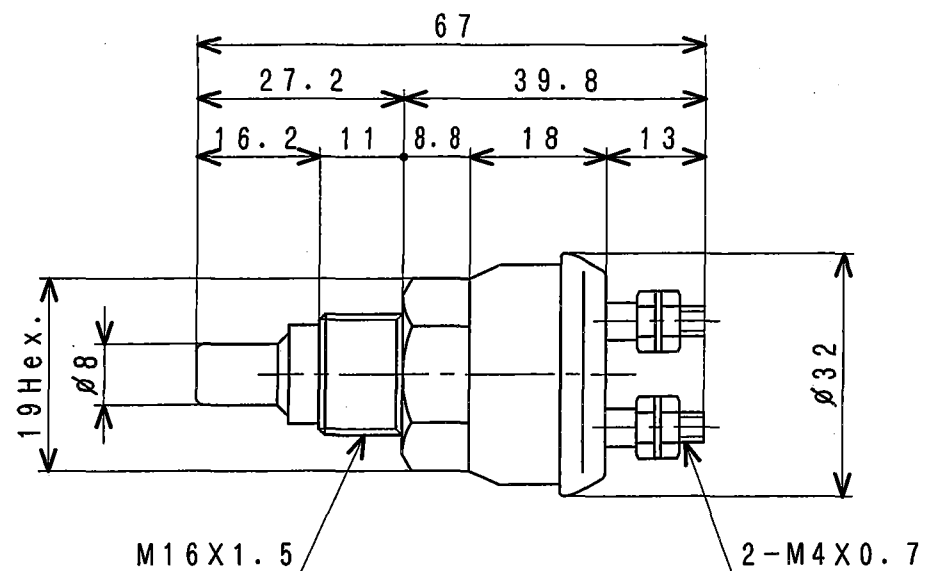
| REV. | DATE |
|------|------|
| | |
| | |
| | |

CONNECTOR
PART NO. 32B90-00300

DWG. NO. S10-0550
MITSUBISHI HEAVY INDUSTRIES, LTD.
GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

CHECKED BY

NAKAMURA



| CONNECTING TYPE | PARTS NO. | SET TEMP. (°C) | | CONTACTOR CAPACITY | WEIGHT |
|-----------------|-------------|--------------------|-------|--|--------|
| | | ON | OFF | | |
| NO (A-CONTACT) | 04442-34300 | 92±2 | 85±2 | DC24V 0.05A~3A DC100V 0.05A~0.4A AC100V 0.05A~1A | 60g |
| NO (A-CONTACT) | 04442-34400 | 95±2 | 88±2 | | |
| NO (A-CONTACT) | 04442-34500 | 98±2 | 91±2 | | |
| NO (A-CONTACT) | 04442-34600 | 110±2 | 103±2 | | |
| NO (A-CONTACT) | 04442-34700 | 105±2 | 98±2 | | |
| NO (A-CONTACT) | 04442-34800 | 101±2 | 94±2 | | |
| NO (A-CONTACT) | 04442-34900 | 88±2 | 81±2 | | |
| NO (A-CONTACT) | 04442-38700 | 115±2 | 108±2 | | |
| NO (A-CONTACT) | 37547-04100 | 101 $\frac{0}{-2}$ | 94±2 | | |

MHI CONFIDENTIAL

| | |
|------|----------|
| 6 | '00.4.26 |
| 8 | '08.6.5 |
| 7 | '06.3.17 |
| REV. | DATE |

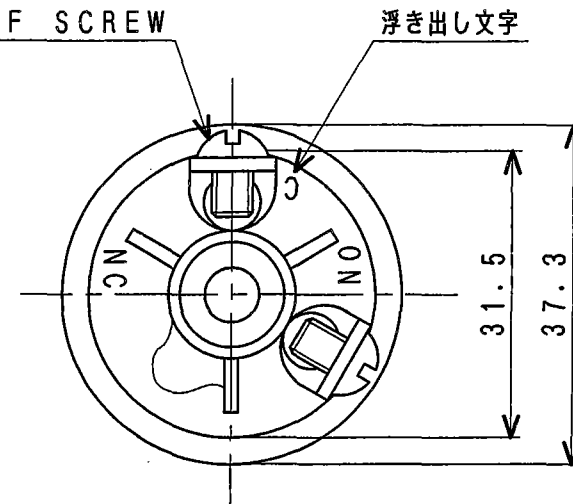
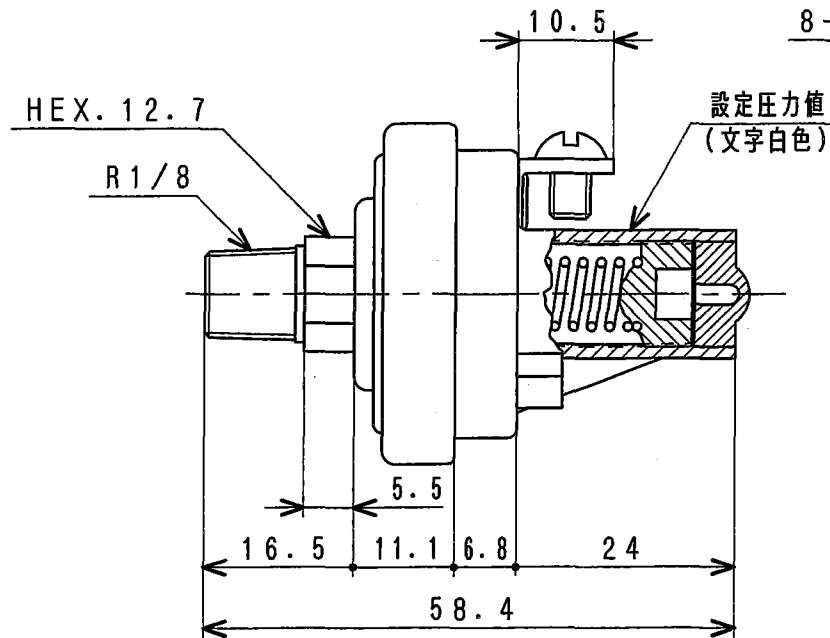
THERMO SWITCH

DWG. NO. S11-0551

MITSUBISHI HEAVY INDUSTRIES, LTD.
GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

CHECKED BY

Y. FUKUDA



| | | | |
|------|-------------|----------------|-----------|
| NO | 04442-46500 | 0.15 | ±0.015 |
| NO | 04442-46400 | 0.10 | ±0.01 |
| NO | 04442-46300 | 0.05 | ±0.005 |
| NC | 04442-46100 | 6.2 KPa | ±0.62 KPa |
| NC | 04442-45900 | 0.40 | ±0.04 |
| NC | 04442-45800 | 0.35 | ±0.035 |
| NC | 04442-45700 | 0.30 | ±0.03 |
| NC | 04442-45600 | 0.25 | ±0.025 |
| NC | 04442-45500 | 0.22 | ±0.022 |
| NC | 04442-45400 | 0.15 | ±0.015 |
| NC | 04442-45300 | 0.10 | ±0.01 |
| NC | 04442-45200 | 0.05 | ±0.005 |
| NC | 04442-45100 | 0.03 | ±0.003 |
| 接点形式 | PARTS NO. | ON | ALLOWANCE |
| | | SET PRESS. MPa | |

5. ON-OFF差 : 5%以内
 4. 接点形式 : (NO) (NC)
 3. 使用温度範囲 : -40.0℃~+120.0℃
 2. 定 格 : 6VDC-15AMP, 12VDC-8AMP, 24VDC-4AMP,
 120VAC-1AMP, 240VAC-0.5AMP
 最小電流値: 0.05A

仕 様 1. 最高許容圧力 : 1.05MPa (設定圧: 0.007~0.17MPa)
 1.75MPa (設定圧: 0.18~1.05MPa)

MHI CONFIDENTIAL

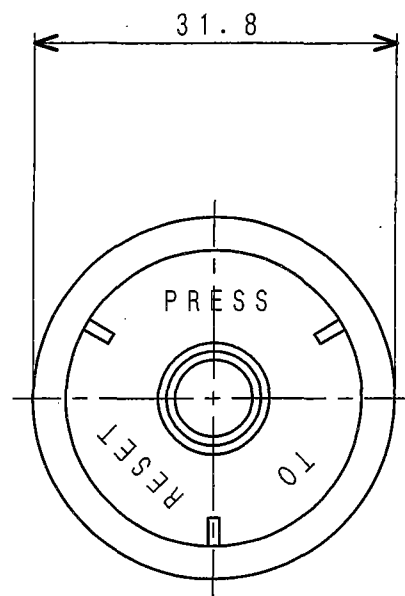
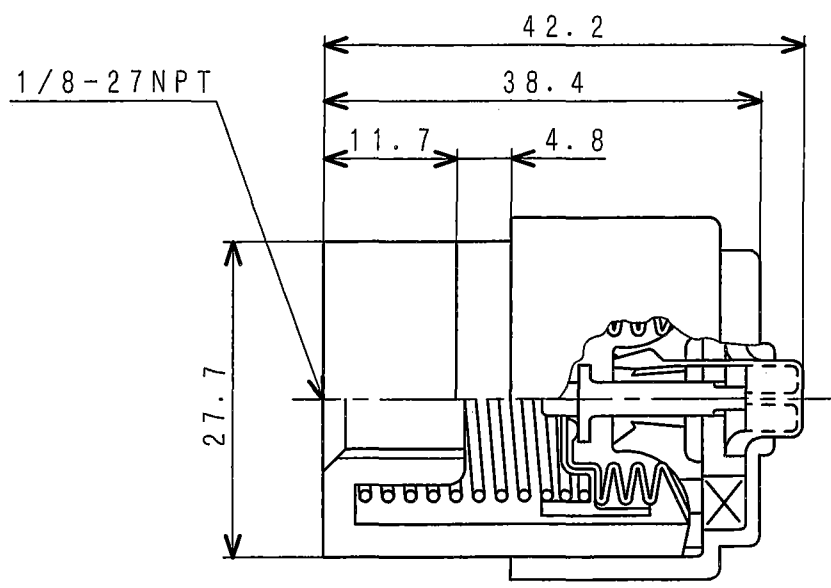
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| 2 | '08.6.5 |
| 1 | '06.3.17 |
| REV. | DATE |

SWITCH, PRESS

DWG. NO. S11-0796

MITSUBISHI HEAVY INDUSTRIES, LTD.
 GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

CHECKED BY
Y. FUKUDA



| PARTS NO. | RESTRICTION (mmH ₂ O) |
|-------------|----------------------------------|
| 47220-30701 | 762±58 |
| 47220-34301 | 508±48 |
| 47220-34401 | 635±58 |

MHI CONFIDENTIAL

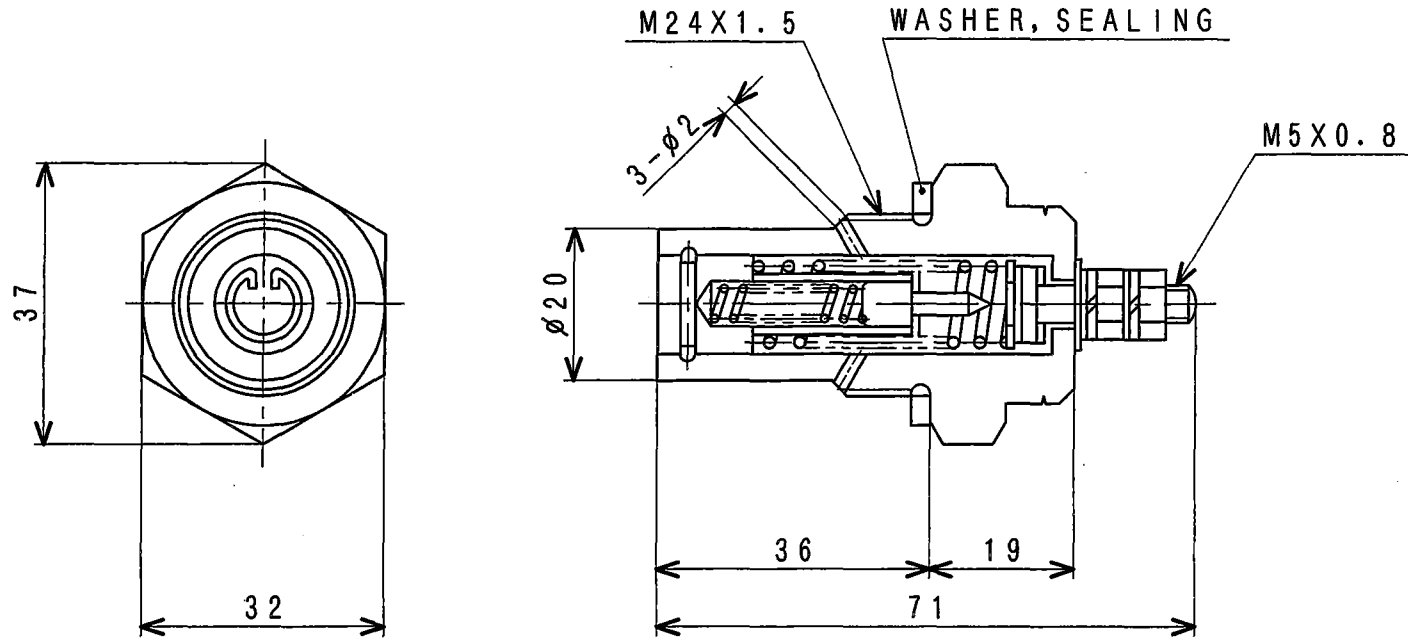
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| △ | 93 2/18 |
| 1 | REV. DATE |

INDICATOR

DWG. NO. S11-0920
MITSUBISHI HEAVY INDUSTRIES, LTD.
 GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

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中村



SET PRESS. 0.15MPa

MHI CONFIDENTIAL

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| 1 | '08.6.6 |
| REV. | DATE |

ALARM, OIL FILTER

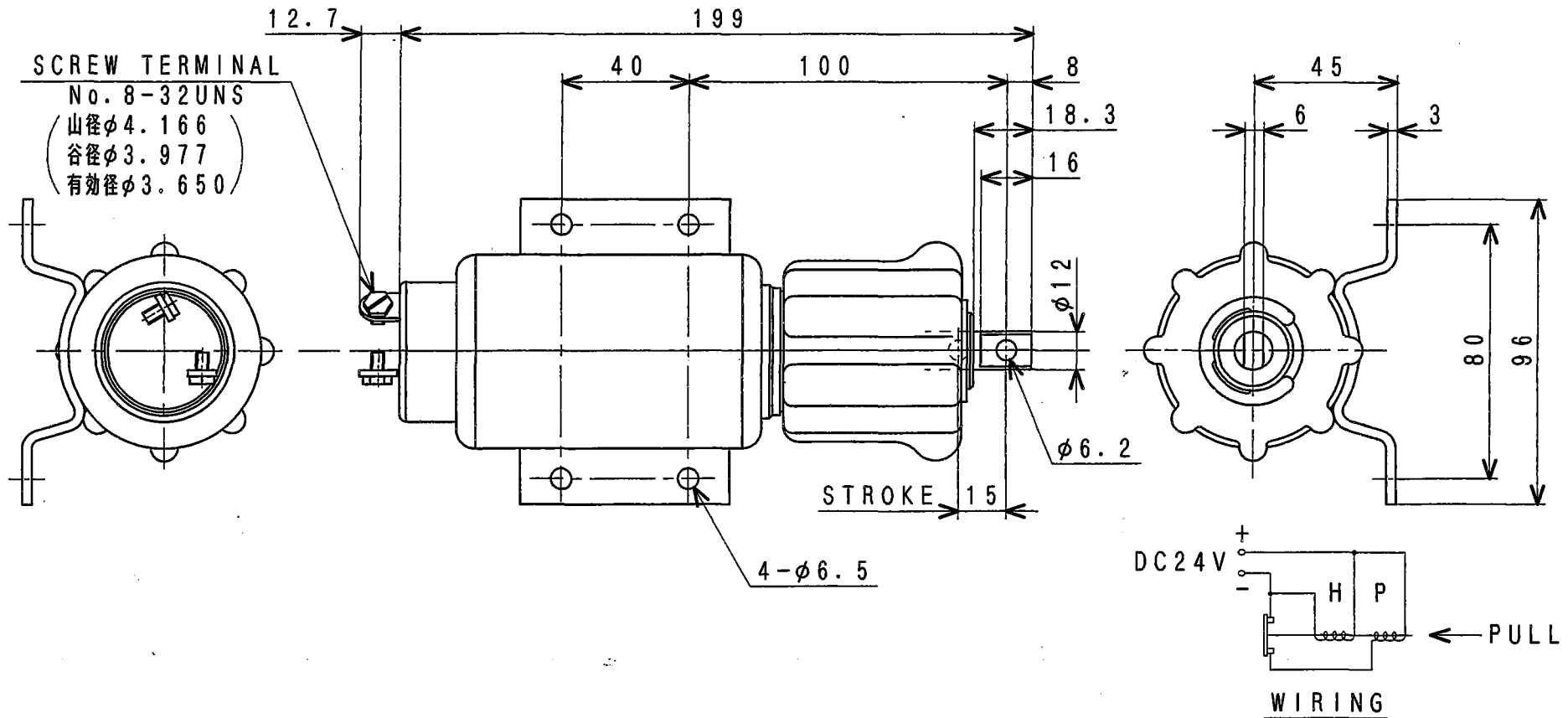
PART NO. 37540-01300

DWG. NO. S11-1370

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GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

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注記 本部品は04400-08800及び04400-08900
に対し下記が異なる。

1. 保持コイルリードワイヤー取出部に太いサイズの皮膜付
リードワイヤーを溶接接続したものである。
2. 吸引、保持コイル切換えスイッチの固定コンタクトの
曲げを平に変更したものである。

| | |
|-------------|----------------------|
| 04400-08901 | 0.2 MPa |
| 04400-08801 | 1.0 MPa |
| PARTS NO. | RETURN SPRING PRESS. |

| SPECIFICATION | |
|---------------|------------------------|
| VOLTAGE | DC24V |
| CURRENT | PULL 30.7A, HOLD 0.58A |
| RATED TIME | CONTINUOUS |

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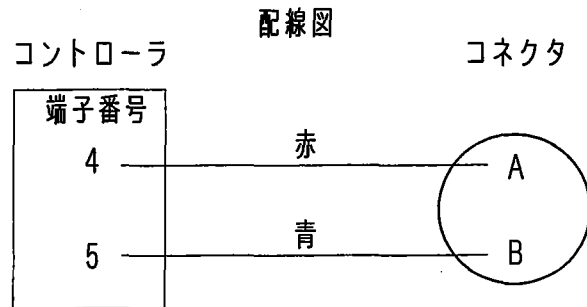
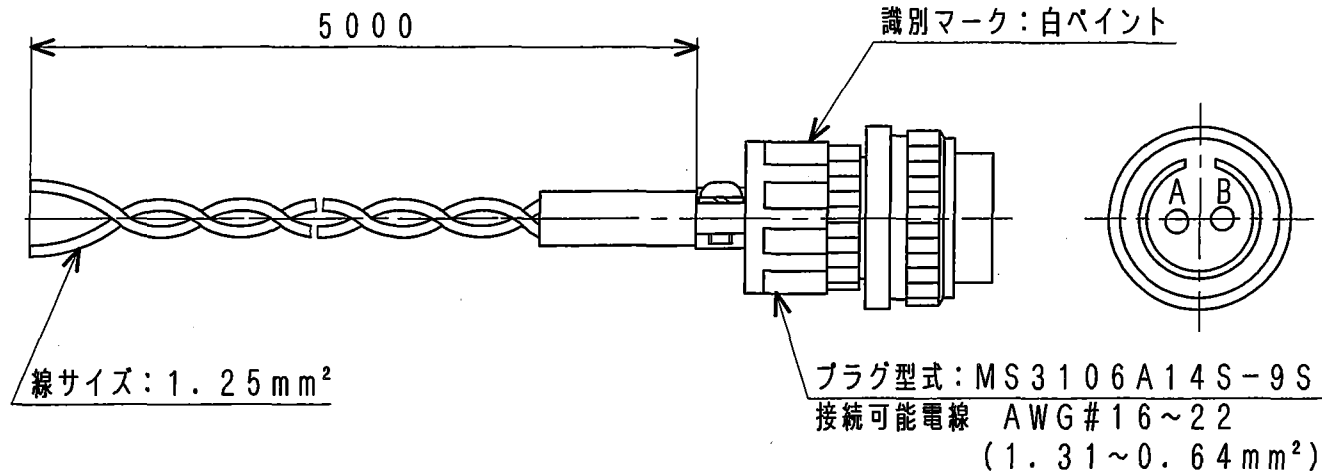
SOLENOID

DWG. NO. S13-0282

MITSUBISHI HEAVY INDUSTRIES, LTD.
GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

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備考 使用先: コントローラ~アクチュエータ間の配線用部品として使用するツイストペアケーブルである。

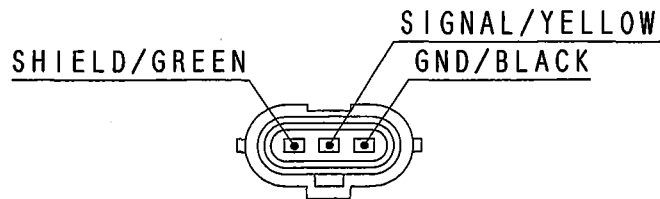
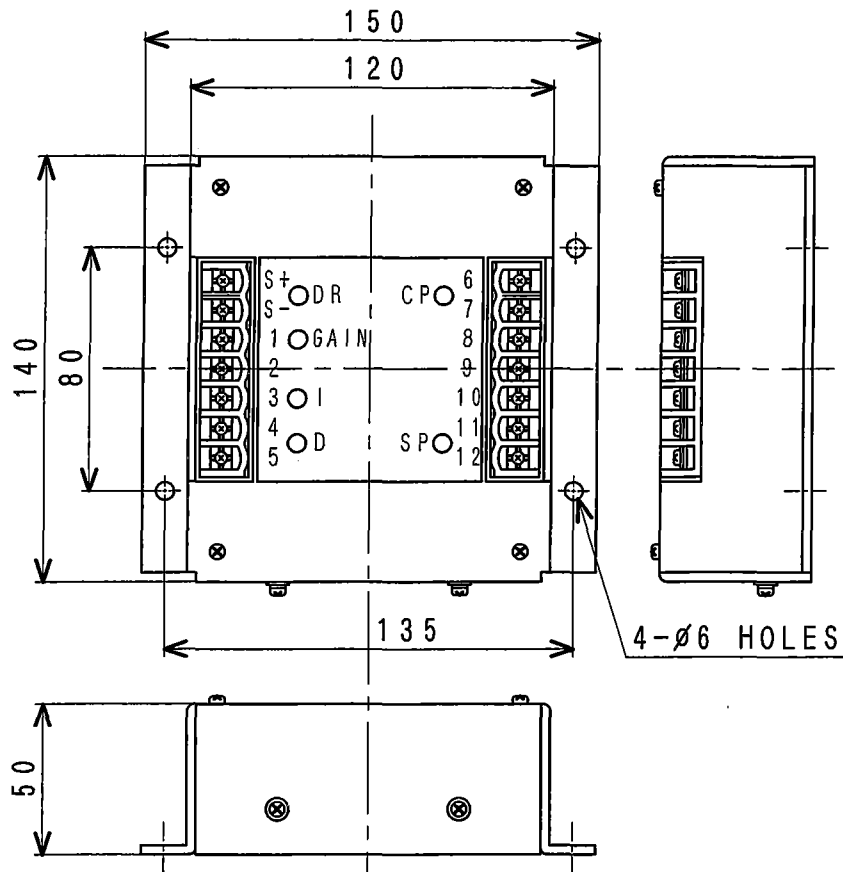
MHI CONFIDENTIAL

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| REV. | DATE |

CONNECTOR
PART NO. 04410-32902

DWG. NO. S13-1022
MITSUBISHI HEAVY INDUSTRIES, LTD.
GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

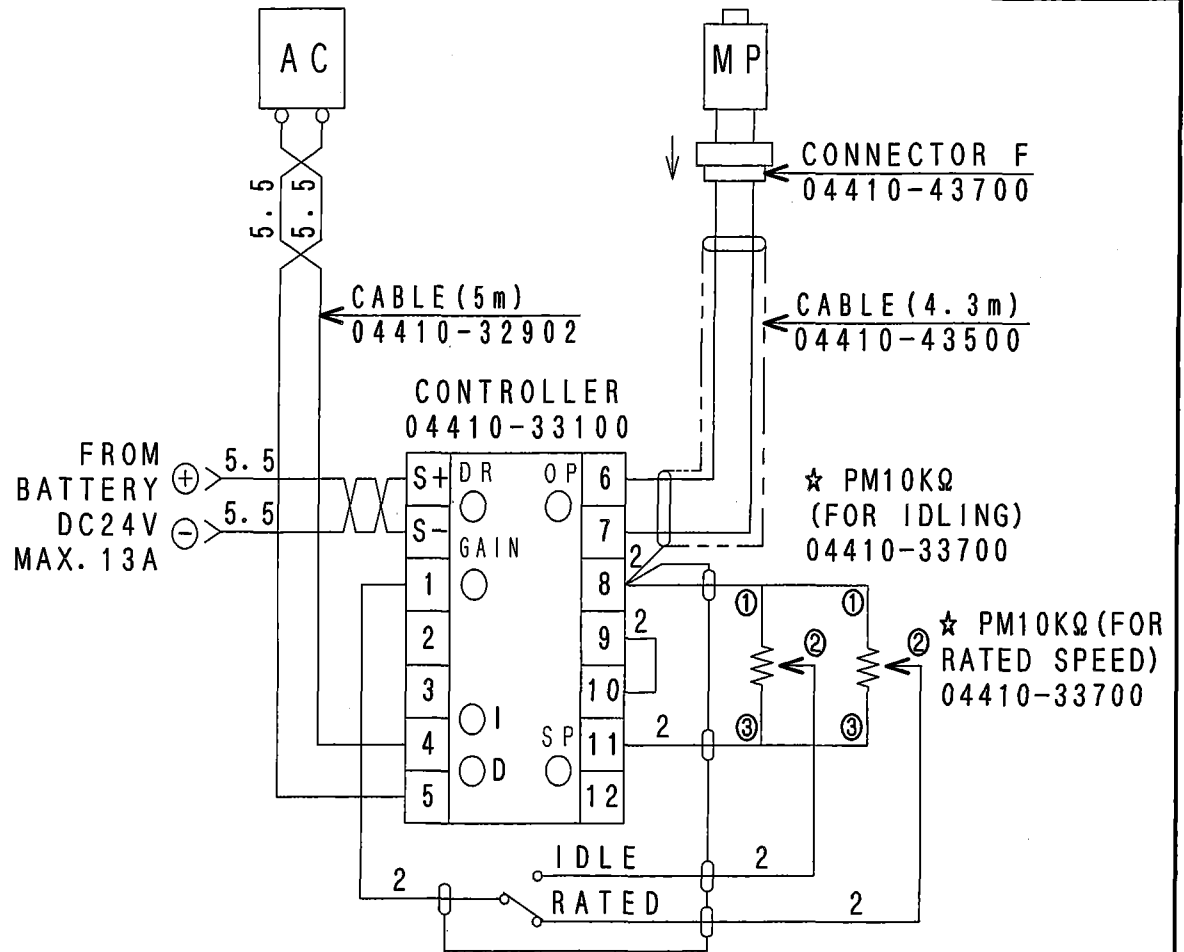
CHECKED BY
Y. FUKUDA



CONNECTOR F
04410-43700

ACTUATOR
04410-32011
04410-37081 (S12H)

MAGNETIC PICKUP
04410-43410



★ MODE CHANGEOVER CONTACTOR
(SHALL BE USE GOLD PLATING CONTACTOR)

WIRING

MHI CONFIDENTIAL

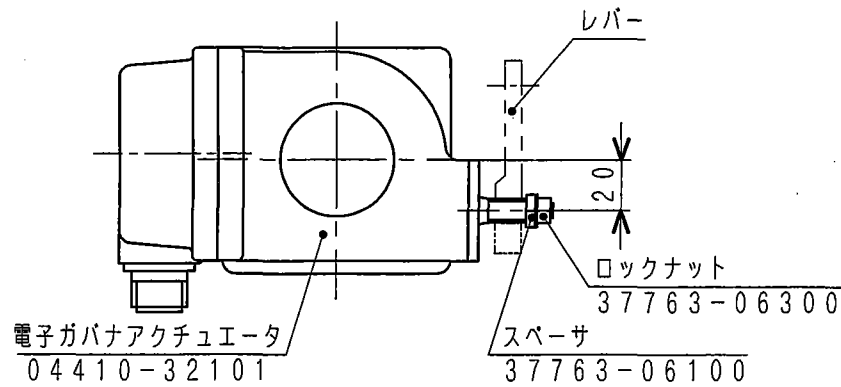
| | |
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| 2 | '11.4.20 |
| 1 | '01.6.29 |
| REV. | DATE |

CONTROLLER SPEED
PART NO. 04410-33100

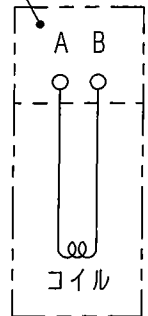
DWG. NO. S13-1042
MITSUBISHI HEAVY INDUSTRIES, LTD.
GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

CHECKED BY

Y. FUKUDA

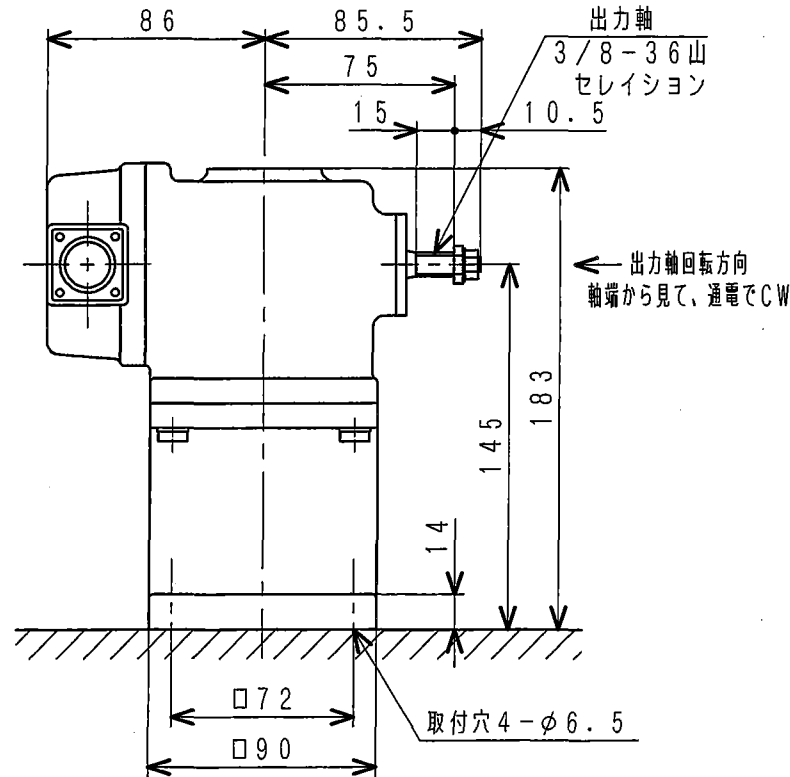
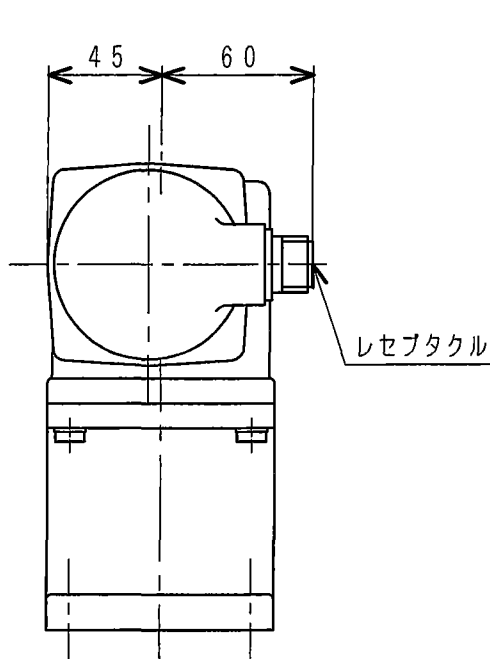


コネクタ用レセプタクル
(キャノンプラグ)



仕様

| | |
|--------|---------------------------------|
| 回転角度 | : MAX 40° |
| トルク | : 0.17 kgf·m 起動時 起動時常温 8A にて |
| 電源 | : DC 24V パルス |
| 起動最低電圧 | : DC 16V 50% ed 以下 |
| 電流 | : MAX 13A |
| 常用電流 | : 軽負荷制御時 0.5A ~ 2A |
| 周囲温度 | : -30°C ~ 100°C |
| 耐震 | : 25G JIS D 1601 |
| 重量 | : 4.7 kgf |



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(2) 本部品は、部番 04410-32010 に対し出力軸の材料を変更したものである。

注記 (1) 本部品は、2線式アクチュエータである。

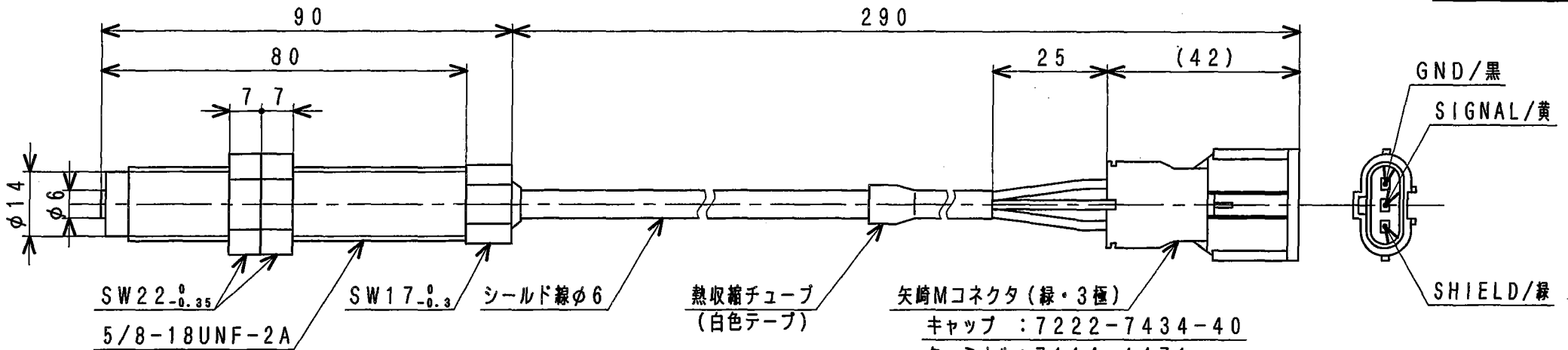
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| REV. | DATE |

ACTUATOR/SG4017BR
PART NO. 04410-32011

DWG. NO. S13-1761
MITSUBISHI HEAVY INDUSTRIES, LTD.
GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

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仕様

1. 電機的特性

出力電圧 : 図1. 測定条件にて4.0Vp-p以上 (at 700Hz)
7.0Vp-p以上 (at 6700Hz)

直流抵抗 : 1.3kΩ~1.6kΩ (at +25℃)

絶縁抵抗 : 1MΩ以上 at DC 500V (コネクタ端子-ハウジング間)

耐電圧 : 50/60Hz AC 500V 1分間 (コネクタ端子-ハウジング間)

2. 機械的特性

コネクタ引き抜け力 : 5N以上

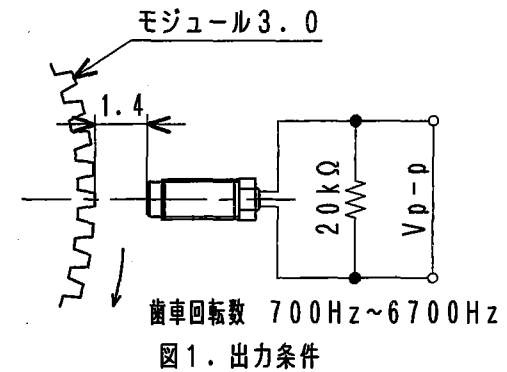
締付け破壊トルク : 5J以上

3. 使用温度範囲

-40℃~+120℃

注記

1. 本部品は日本エアボックス (株) 殿製である。
2. 本部品は04410-43400に対し、コイル保護ラバー (シリコン) を厚塗り品としたものである。
また、識別用として熱収縮チューブに白色テープを追加し、Mコネクタの色を緑←灰にしたものである。



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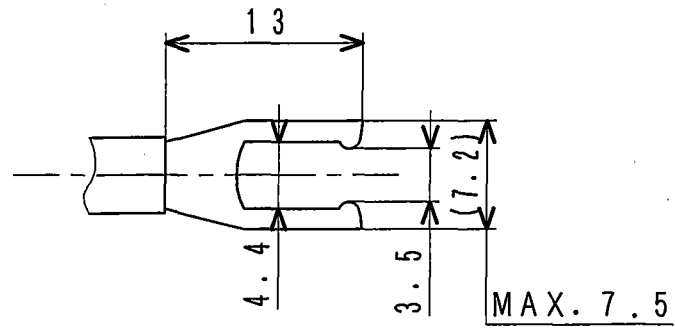
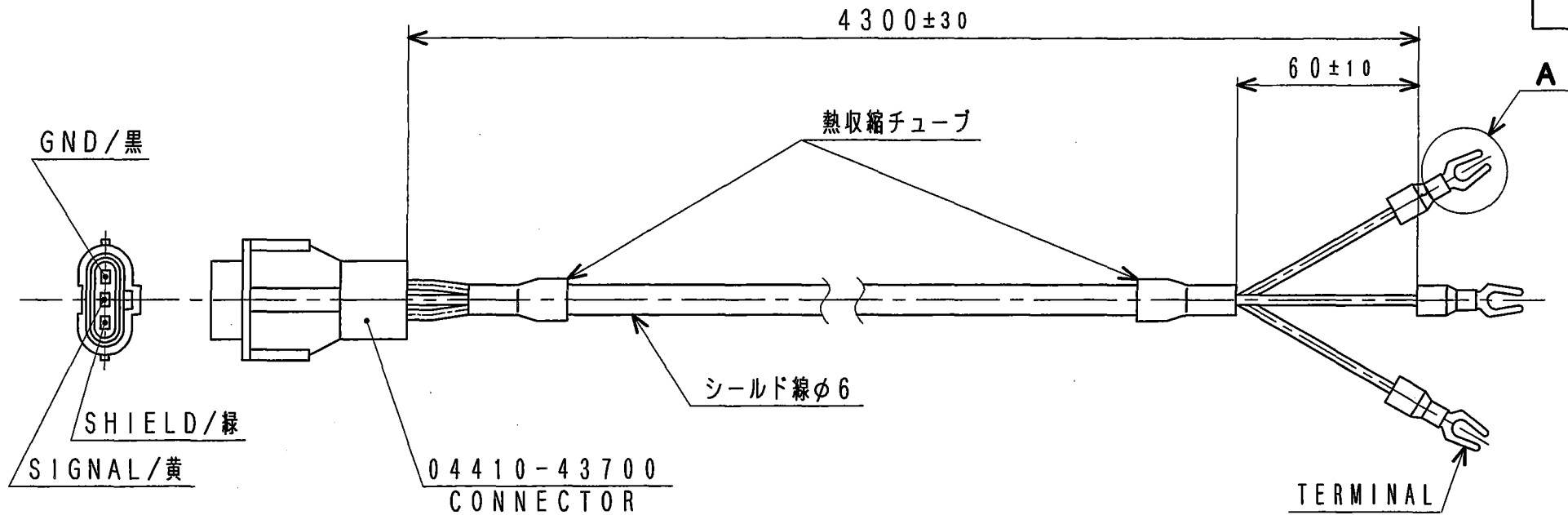
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| REV. | DATE |

PICKUP, MAGNETIC
PART NO. 04410-43410

DWG. NO. S13-2011

MITSUBISHI HEAVY INDUSTRIES, LTD.
GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

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DETAIL A

(3) ターミナル形状は、A図と同等 (M3ネジ用) である。

(2) 配線色は、黒X1, 黄X1 (各々メスピンの接続), 緑X1 (シールドに接続) である。

注記 (1) リード線は、シールド線 (φ6) を使用。

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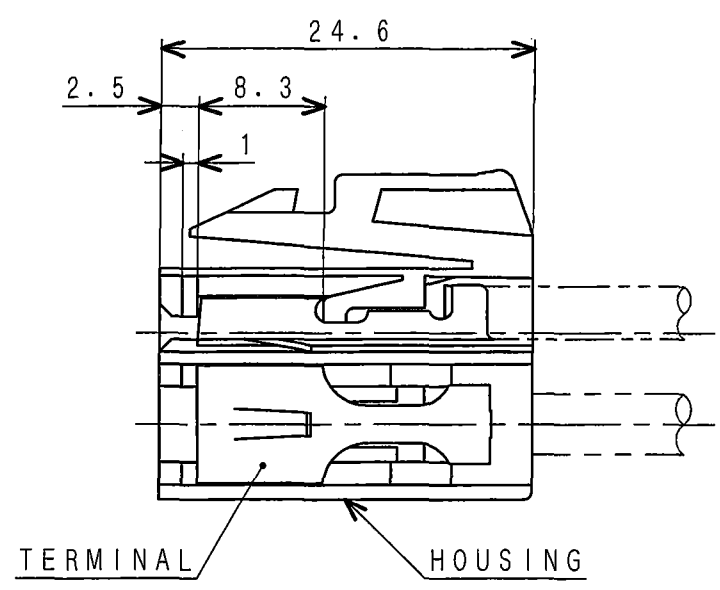
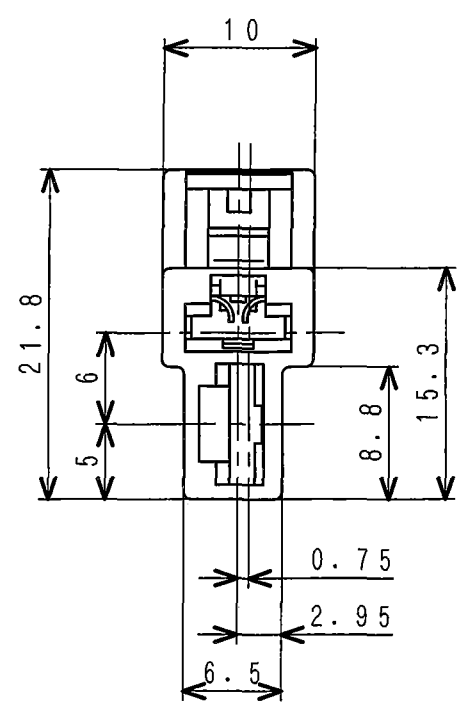
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| REV. | DATE |

CABLE, PICKUP
PART NO. 04410-43500

DWG. NO. S13-2020
MITSUBISHI HEAVY INDUSTRIES, LTD.
GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

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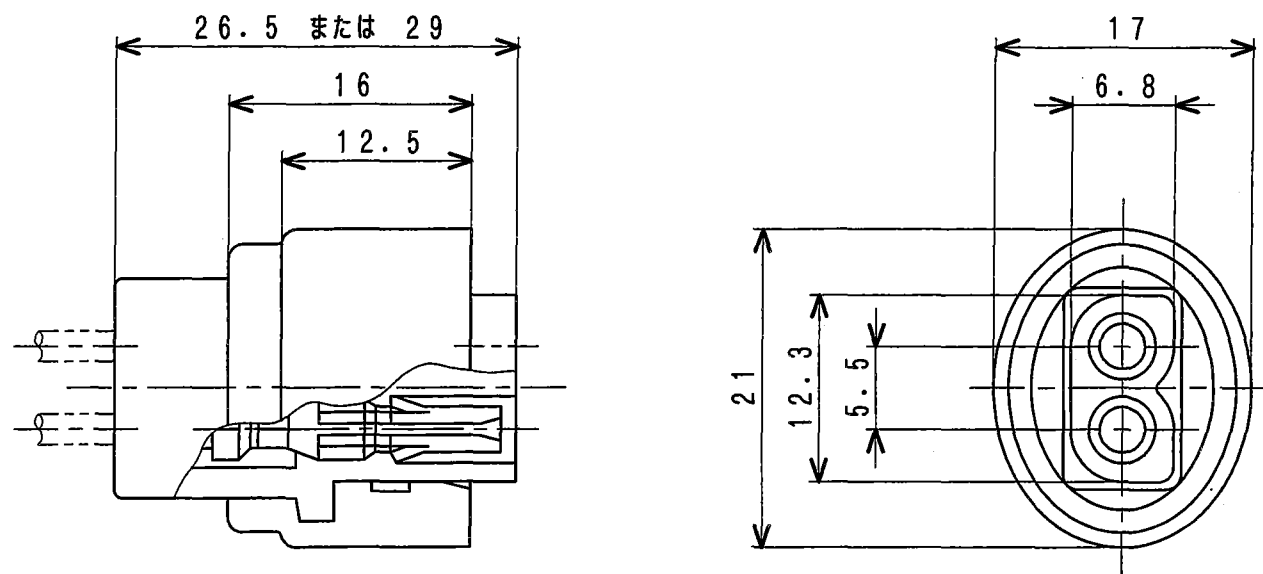
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| 1 | REV. DATE |

CONNECTOR, 2 POLES
PART NO. F8665-02100

DWG. NO. S14-0320
MITSUBISHI HEAVY INDUSTRIES, LTD.
GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

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| REV. | DATE |
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| 2 | '04.3.12 |
| 1 | '93.8.4 |

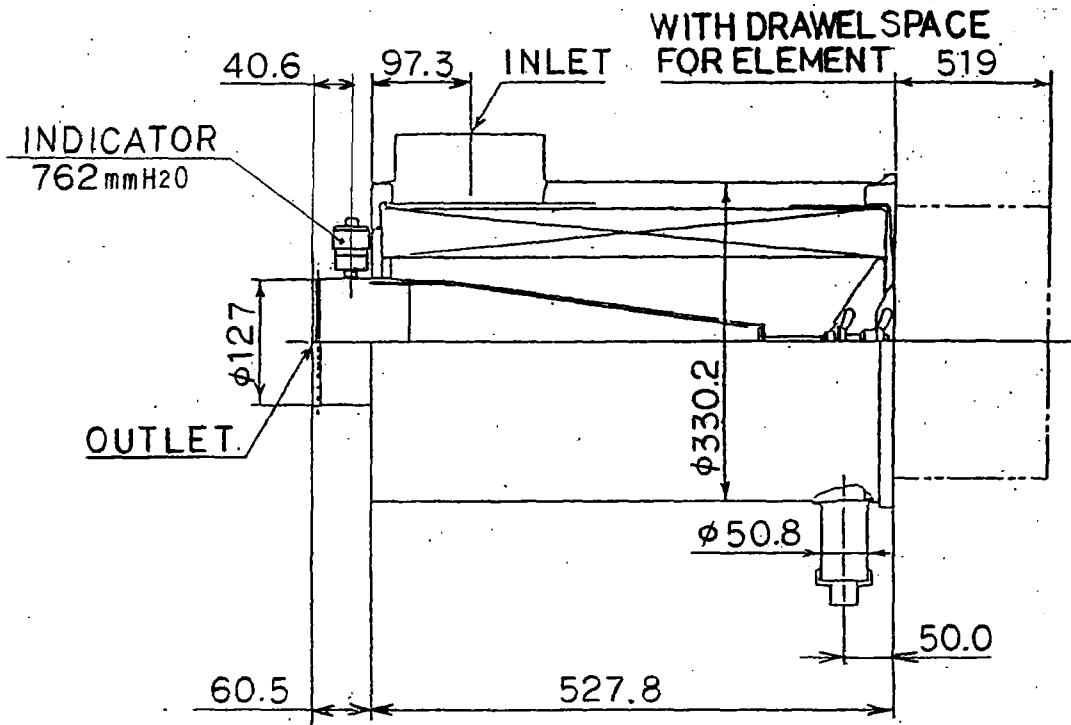
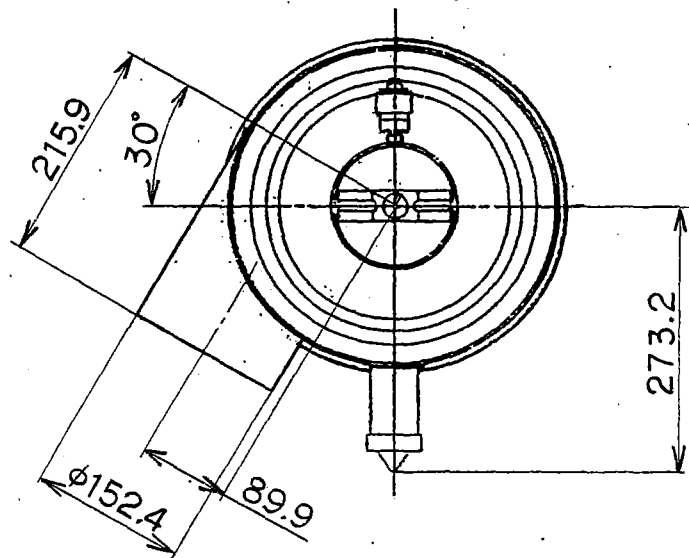
CONNECTOR
PART NO. MH052231

DWG. NO. S14-0330

MITSUBISHI HEAVY INDUSTRIES, LTD.
GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

CHECKED BY

Y. Fukuda




| | |
|-------------------|-------------|
| ELEMENT PARTS No. | 47220-39802 |
| WEIGHT (kg) | 17.5 |
| MODEL No. | FTG13L |

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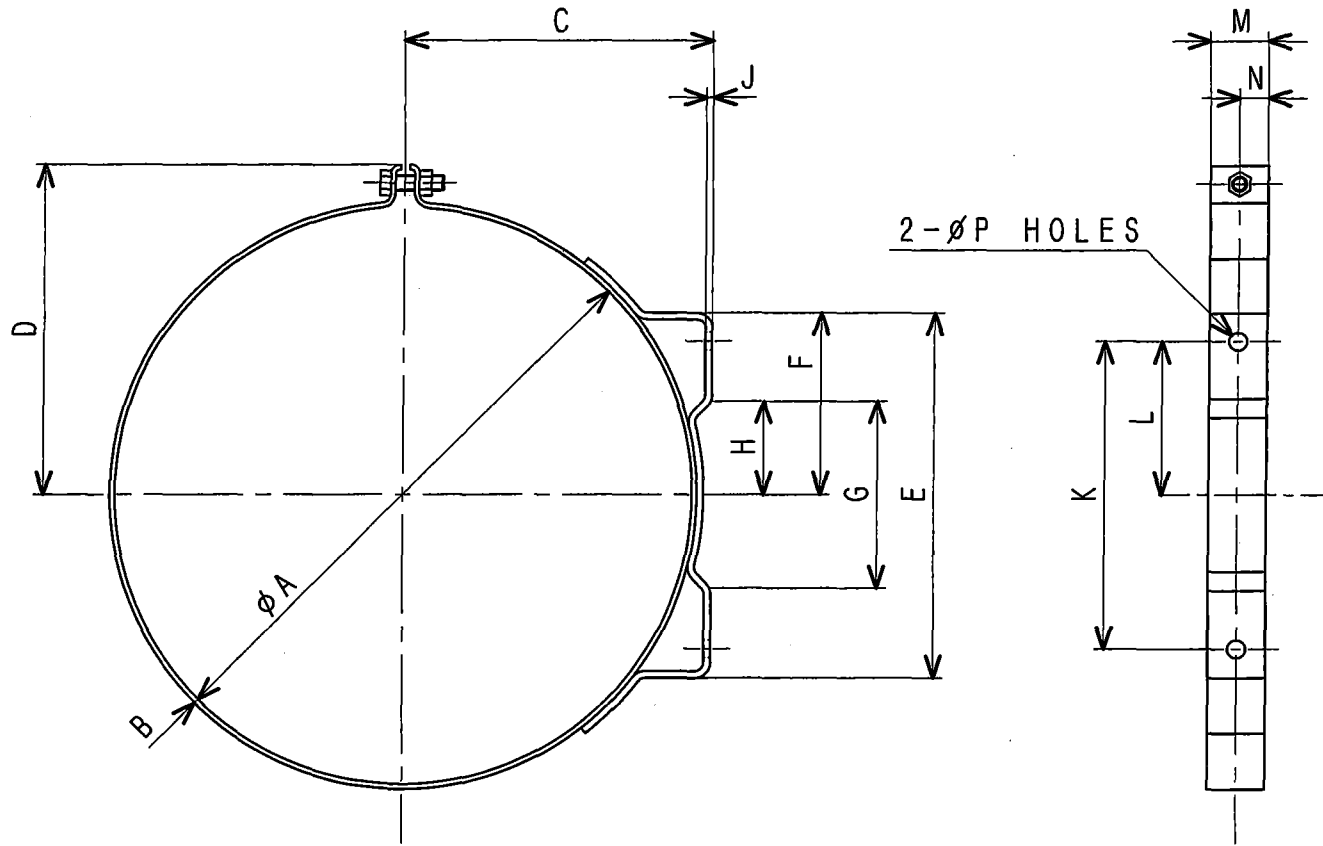
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| REV | DATE |

AIR CLEANER ASSY.
PART NO. 47220-26301

DWG. NO. S35-0560
 MITSUBISHI HEAVY INDUSTRIES, LTD.
 GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

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| | | | | | | | | | | | | | | | | |
|-------------|-----------------|-------|-----|-------|-------|-------|-------|------|------|-----|-------|-------|------|------|---------|---------|
| 47220-30300 | 16' (∅406.4) | 406.4 | 3.0 | 231.6 | 230 | 292 | 146 | 124 | 62 | 5.0 | 254 | 127 | 38 | 19 | 2-∅12 | |
| 47220-38300 | 15' (∅381.0) | 381 | 3.2 | 203.2 | 218 | 241.4 | 120.7 | 127 | 63.5 | 5.0 | 203.2 | 101.6 | 38 | 19 | 2-∅12 | FTG15 |
| 47220-21300 | 14' (∅355.6) | 355.6 | 3.2 | 206.2 | 205.5 | 241.4 | 120.7 | 144 | 72 | 4.5 | 203.2 | 101.6 | 38.2 | 19.1 | 2-∅12 | |
| 47220-39300 | 13' (∅330.2) | 330.2 | 2.6 | 184.2 | 191.9 | 179.4 | 89.7 | 53.8 | 26.9 | 3.2 | 152.4 | 76.2 | 38 | 19 | 2-∅10.3 | FTG13 |
| PARTS NO. | TYPE MEASURE | A | B | C | D | E | F | G | H | J | K | L | M | N | P | REMARKS |

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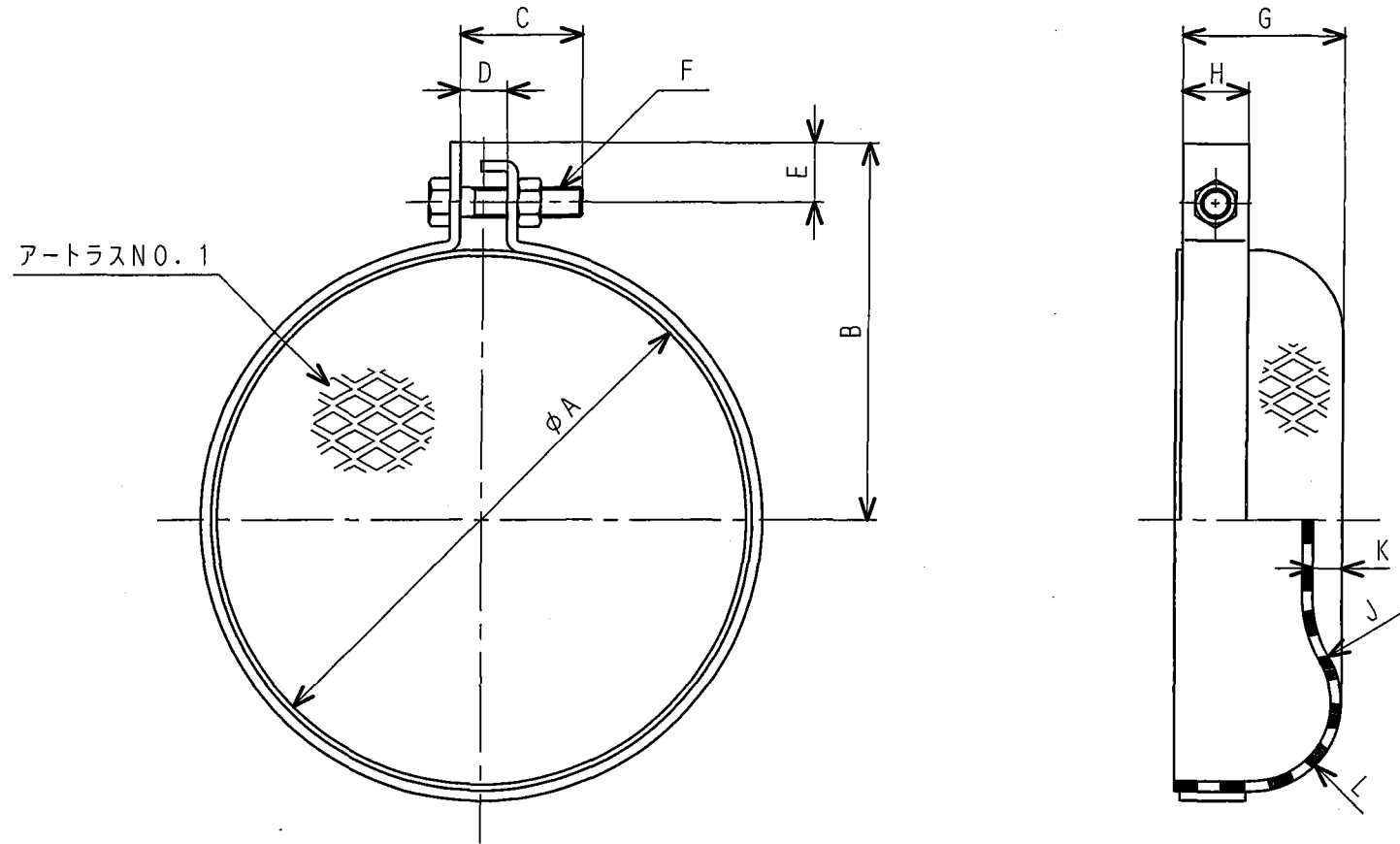
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| 2 | '00.11.7 |
| 1 | '94.3.8 |
| REV. | DATE |

BAND

DWG. NO. S35-0600

MITSUBISHI HEAVY INDUSTRIES, LTD.
GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

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| 47220-32200 | 7' ($\phi 177.8$) | 180 | 128.2 | 45 | | 20.3 | M10X1.25 | 55 | 22.4 | 40 | 10 | 30 |
|-------------|---------------------|-------|-------|----|----|------|---------------|------|------|----|----|----|
| 47220-33200 | 6' ($\phi 152.4$) | 153 | 115 | 45 | 20 | 18 | 3/8-16UNC-2A | 48 | 22 | 33 | 10 | 28 |
| 47220-21200 | 5' ($\phi 127$) | 130.2 | 87.4 | 35 | | 11.1 | M8X1.25 | 36.5 | 19 | | | |
| 47220-14100 | 4' ($\phi 101.6$) | 104.8 | 83 | | | 14 | 5/16-18UNC-2A | 40 | 19 | 35 | 8 | 15 |
| PARTS NO. | TYPE MEASURE | A | B | C | D | E | F | G | H | J | K | L |

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| REV. | DATE |

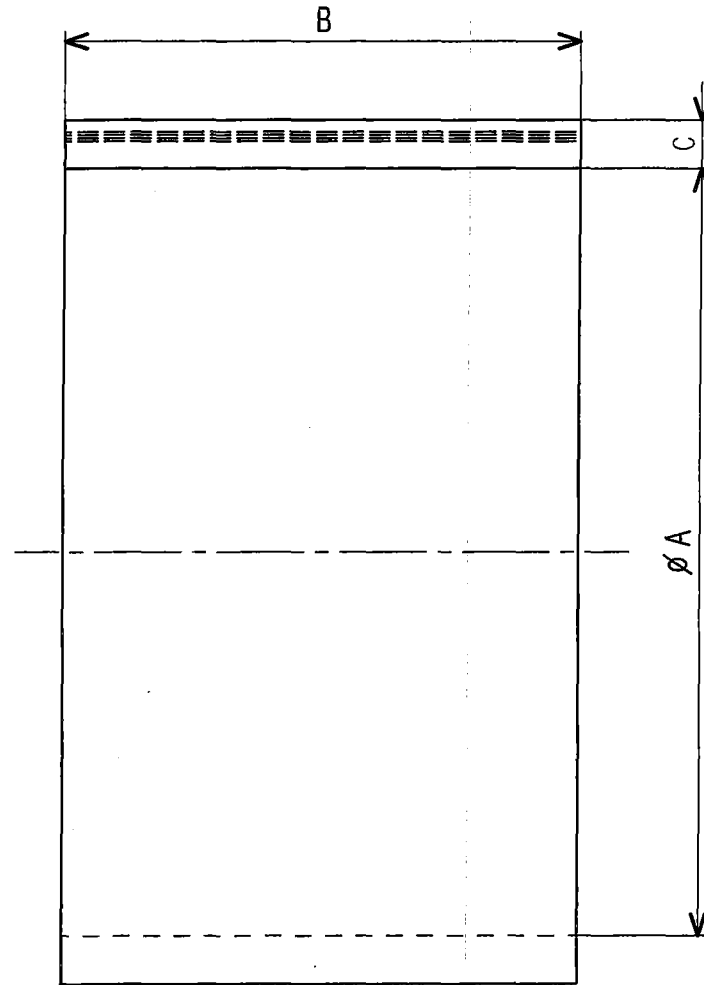
CAP, INLET

DWG. NO. S35-0660

MITSUBISHI HEAVY INDUSTRIES, LTD.
GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

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Y. FUKUDA



| | | | |
|-------------|-----|-----|---|
| 47510-74800 | 160 | 150 | 8 |
| 45735-73400 | 152 | 85 | 8 |
| 45741-72900 | 127 | 85 | 8 |
| PARTS NO. | A | B | C |

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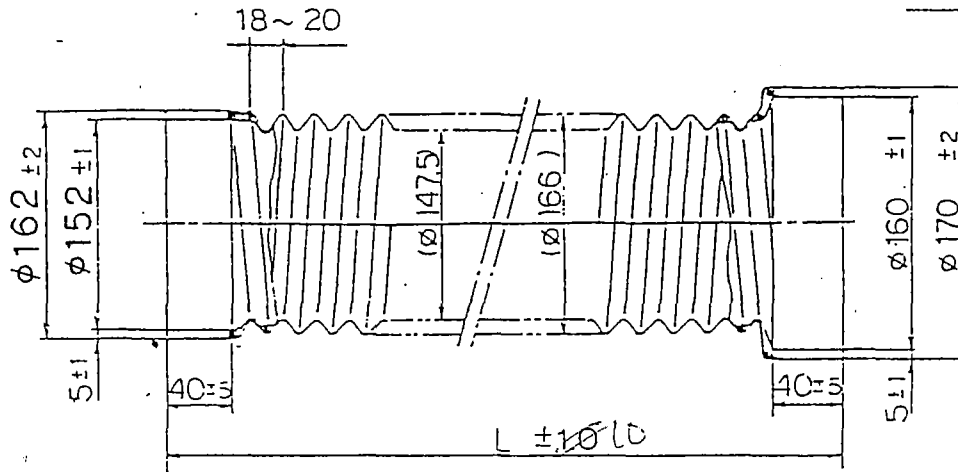
HOSE, RUBBER

DWG. NO. S35-0731

△ MITSUBISHI HEAVY INDUSTRIES, LTD.
GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

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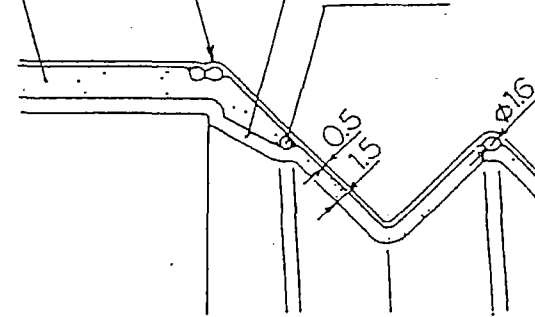
Y. Furukawa



RUBBER

CLOTH

RUBBER WIRE



| | |
|-------------|-------------|
| 47221-16900 | 500 |
| " -16800 | 300 |
| " -16700 | 850 |
| " -16600 | 900 |
| " -15500 | 2700 |
| " -15400 | 1750 |
| " -15300 | 1100 |
| " -15200 | 1000 |
| " -15100 | 700 |
| PARTS NO. | LENGTH (mm) |

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| REV. | DATE |

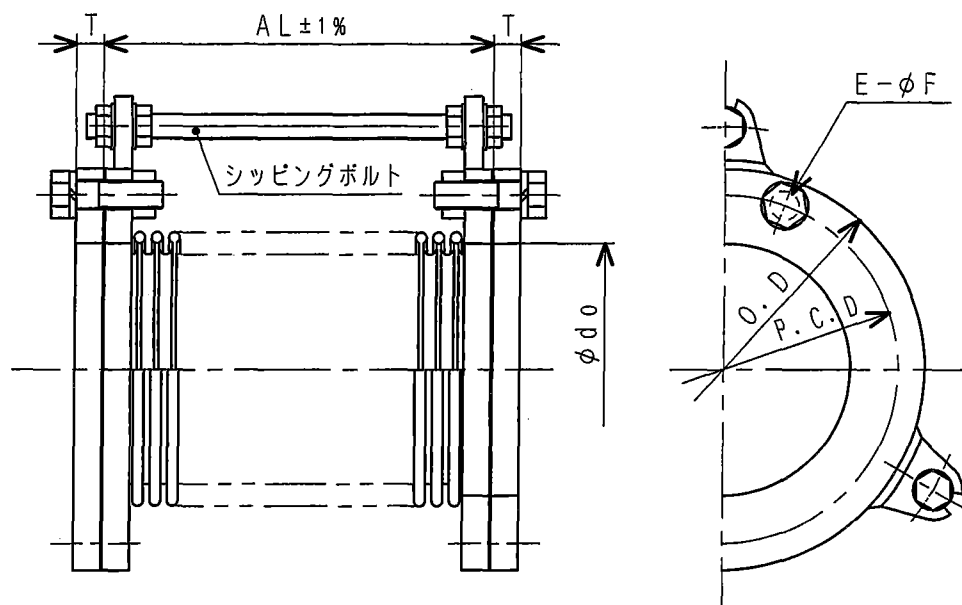
AIR HOSE

DWG. NO. S35-0751

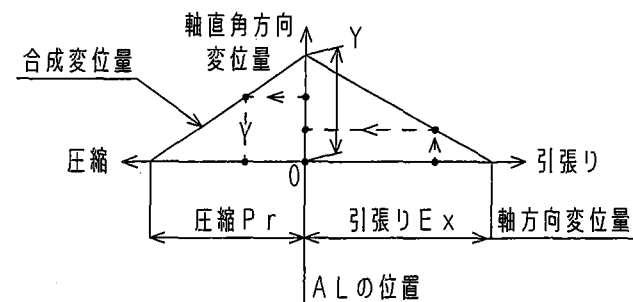
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GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

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- 注記 (1) 許容変位量はAL寸法からの最大圧縮、引張り、及び軸直角変位量を示す。
 (2) 各方向の変位が同時に作用する場合の許容変位量は、下図の合成変位量線を作図して求めた値とします。
 (3) 配管後シッピングボルト、ナットは取外すこと。
 (4) 取付寸法は、AL寸法とすること。



| 部品番号 | サイズ | | 主要寸法 | | | | | | 許容変位量 (mm) | | | ばね定数 (kgf/mm) | | 重量 (kg) |
|-------------|-----|-----|-------|----|-----|-------|-------|-----|------------|----|----|---------------|-------|---------|
| | (A) | (B) | φdo | T | O.D | P.C.D | E-φF | AL | Pr | Ex | Y | 軸方向 | 軸直角方向 | |
| 47910-81100 | 150 | 6 | 166.6 | 18 | 265 | 230 | 8-19 | 210 | 29 | 22 | 16 | 6.4 | 10.3 | 32 |
| 47910-81200 | 200 | 8 | 218.0 | 20 | 320 | 280 | 8-23 | 230 | 33 | 20 | 14 | 6.9 | 14.5 | 46 |
| 47910-81300 | 250 | 10 | 269.5 | 22 | 385 | 345 | 12-23 | 280 | 42 | 13 | 15 | 9.0 | 18.5 | 63 |
| 47910-81400 | 300 | 12 | 321.0 | 22 | 430 | 390 | 12-23 | 370 | 55 | 17 | 23 | 11.3 | 17.6 | 70 |
| 47910-97100 | 350 | 14 | 358.1 | 24 | 480 | 435 | 12-25 | 335 | 60 | 22 | 16 | 18.6 | 27.0 | 87 |
| 47910-97200 | 400 | 16 | 409 | 24 | 540 | 495 | 16-25 | 335 | 60 | 22 | 14 | 21.0 | 39.0 | 105 |
| 47910-97300 | 450 | 18 | 460 | 24 | 605 | 555 | 16-25 | 335 | 60 | 22 | 12 | 23.5 | 54.9 | 125 |
| 47910-97400 | 500 | 20 | 511 | 24 | 655 | 605 | 20-25 | 335 | 60 | 44 | 14 | 17.9 | 154.2 | 143 |
| 47910-97500 | 550 | 22 | 562 | 26 | 720 | 655 | 20-27 | 335 | 60 | 44 | 13 | 19.6 | 202.3 | 182 |
| 47910-97600 | 600 | 24 | 613 | 26 | 770 | 715 | 20-27 | 335 | 60 | 44 | 12 | 21.3 | 259.4 | 193 |
| 47910-97700 | 650 | 26 | 664 | 26 | 825 | 770 | 24-27 | 430 | 105 | 19 | 16 | 15.3 | 143.7 | 217 |
| 47910-97800 | 700 | 28 | 715 | 26 | 875 | 820 | 24-27 | 430 | 105 | 19 | 15 | 16.4 | 177.8 | 228 |

| 仕様 | |
|------|-----------|
| 設計圧力 | 0.05MPa |
| 設計温度 | MAX. 600℃ |
| 用途 | 排気ガス |

| REV. | DATE |
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| | |

FLEXIBLE PIPE

DWG. NO. S37-1021

MITSUBISHI HEAVY INDUSTRIES, LTD.
 GENERAL MACHINERY & SPECIAL VEHICLE HEADQUARTERS

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