

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-444  
Relating to Certification of New Motor Vehicles

GENERAL MOTORS CORPORATION

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1989 model-year General Motors Corporation exhaust emission control systems are certified as described below for gasoline-powered light-duty trucks and medium-duty vehicles:

<u>Engine Family</u>	<u>Displacement</u> <u>Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems</u> <u>(Special Features)</u>
K3G4.3T5TAA1	4.3	(262)	Air Injection - Pump (some models) Exhaust Gas Recirculation Oxygen Sensor Three-Way Catalyst (On-Board Diagnostics) (Central Fuel Injection)

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The following are the emission standards for this engine family:

<u>Loaded Vehicle</u> <u>Weight(lbs.)</u>	<u>Hydrocarbons</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(Grams per Mile)</u>
3751-5750	0.50	9.0	1.0

The following are the certification emission values for this engine family:

<u>Loaded Vehicle</u> <u>Weight(lbs.)</u>	<u>Hydrocarbons</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(Grams per Mile)</u>
3751-5750	0.34	5.6	0.8

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" (Title 13, California Administrative Code, Section 2290) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the vehicle models listed also comply with the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s]..." (Title 13, California Administrative Code, Section 1968) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2035 et seq.).

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this 16<sup>th</sup> day of February, 1988.

  
K. D. Drachand, Chief  
Mobile Source Division

17-K3G4.3T5TAA1-1A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: General Motors Corporation

Executive Order No.: A-6-444

Engine Family: K3G4.3T5TAA1

Evaporative Family: KFO-3B

Engine Displacement Liters (Cubic Inches) - Type: 4.3 (262)

Exhaust Emission Control System (Special Features): AIP, EGR, TWC, OS (OBD) (CFI) and  
EGR, TWC, OS (OBD)(CFI)

ABBREVIATIONS:

Ignition System

CA-Centrifugal Advance  
ECU-Electronic Control Unit  
EI-Electronic Ignition  
ESAC-Electronic Spark Advance Control  
VA-Vacuum Advance  
VR-Vacuum Retard

Fuel System

I, DID, DIP, EPFI, HOS, MPFI, OS, SFI  
WV-nVenturi Carburetor  
VV-Variable Venturi

Other Abbreviations

A/C-Air Conditioning  
CID Cubic Inch Displacement  
ETW-Equivalent Test Weight  
FC-Forward Control  
HD-Heavy Duty  
RI-Rail & Injector  
RWD-Rear Wheel Drive  
FWD-Front Wheel Drive  
4WD-Four Wheel Drive  
TBI-Throttle Body Injection  
4x2-Two Wheel Drive  
4x4-Four Wheel Drive  
6x4-Four Wheel Drive

Exhaust Emission Control System

AIP-Air Injection Pump  
AIV-Air Injection Valve  
EGR-Exhaust Gas Recirculation  
EIC-Electronic Injection Control (Diesel Only)  
EM-Engine Modification  
DBC-Dual Bed Catalyst  
HOS-Heated Oxygen Sensor  
OC-Oxidation Catalyst  
OS-Oxygen Sensor  
SPL-Smoke Puff Limiter or Throttle Delay  
TOC-Trap Oxidizer, Continual  
TOP-Trap Oxidizer, Periodical  
TWC-Three-Way Catalyst  
WUOC-Warm-up Oxidation Catalyst  
WUTWC-Warm-up Three-Way Catalyst

Special Features

CCV-Combustion Chamber Valve  
CFI-Central Fuel Injection or Throttle  
Body Injection  
DID-Diesel Injection-Direct  
DIP-Diesel Injection-Prechamber  
EPFI-Electronic Port Fuel Injection  
IC-Intercooler/Aftercooler  
MPFI-Mechanical Port Fuel Injection  
OBD-On-Board Diagnostics  
SC-Supercharger  
SFI-Sequential Fuel Injection  
TC-Turbocharger

Engine: Front (All Vehicles)

Drive: See Chassis Type (Page 3A), all 4 X 2 Vehicles are RWD

ISSUED: 01-15-88

REV. NO.: 001

U173V/11V

17-K3G4.3T5TAA1-Index 1A

(For CARB Use Only)

(1989)

SUPPLEMENTAL DATA AND CERTIFICATION REVIEW SHEETS

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17-K3G4.3T5TAA1-Index 1A	006	Table of Contents
17-K3G4.3T5TAA1-1A	001	Supplemental Data Sheet
17-K3G4.3T5TAA1-3A	01-15-88	Supplemental Data Sheet
17-K3G4.3T5TAA1-4A	006	Supplemental Data Sheet
17-K3G4.3T5TAA1-5A	006	Supplemental Data Sheet
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17-K3G4.3T5TAA1-6A	006	Supplemental Data Sheet
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17-K3G4.3T5TAA1-8A	006	Supplemental Data Sheet
17-K3G4.3T5TAA1-9A	005	Supplemental Data Sheet
17-K3G4.3T5TAA1-10A	006	Supplemental Data Sheet
17-K3G4.3T5TAA1-11A	001	Certification Review Sheet

NOTES:

- (1) See page one for abbreviations and family information.
- (2) Please refer to manufacturer's HP lists for correct dyno test HP settings based on model and equipment.
- (3) If two test weights are listed, the lower weight will be used for testing.
- (4) Letter derivative codes are the same as corresponding numeric codes except as indicated.

ISSUED: 01-15-88

REV. NO.: 001  
002  
003  
004 (RC K3-067)

005  
006 (RC K3-121)

PW008-3

(For CARB Use Only)

(1989)

## AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: General Motors Corporation                      Executive Order No.: A-6-444  
 Engine Family: K3G4.3T5TAA1                                      Evaporative Family: KFO-3B  
 Engine Displacement Liters (Cubic Inches) - Type: 4.3 (262)  
 Exhaust Emission Control System (Special Features): EGR, TWC, OS (OBD) (CFI)

## ABBREVIATIONS:

Ignition System

CA-Centrifugal Advance  
 ECU-Electronic Control Unit  
 EI-Electronic Ignition  
 ESAC-Electronic Spark Advance Control  
 VA-Vacuum Advance  
 VR-Vacuum Retard

Fuel System

CFI, DID, DIP, EPFI, HOS, MPFI, OS, SFI  
 Venturi Carburetor  
 Variable Venturi

Other Abbreviations

A/C-Air Conditioning  
 CID Cubic Inch Displacement  
 ETW-Equivalent Test Weight  
 FC-Forward Control  
 HD-Heavy Duty  
 RI-Rail & Injector  
 RWD-Rear Wheel Drive  
 FWD-Front Wheel Drive  
 4WD-Four Wheel Drive  
 TBI-Throttle Body Injection  
 4x2-Two Wheel Drive  
 4x4-Four Wheel Drive  
 6x4-Four Wheel Drive

Exhaust Emission Control System

AIP-Air Injection Pump  
 AIV-Air Injection Valve  
 EGR-Exhaust Gas Recirculation  
 EIC-Electronic Injection Control (Diesel Only)  
 EM-Engine Modification  
 DBC-Dual Bed Catalyst  
 HOS-Heated Oxygen Sensor  
 OC-Oxidation Catalyst  
 OS-Oxygen Sensor  
 SPL-Smoke Puff Limiter or Throttle Delay  
 TOC-Trap Oxidizer, Continual  
 TOP-Trap Oxidizer, Periodical  
 TWC-Three-Way Catalyst  
 WUOC-Warm-up Oxidation Catalyst  
 WUTWC-Warm-up Three-Way Catalyst

Special Features

CCV-Combustion Chamber Valve  
 CFI-Central Fuel Injection or Throttle  
   Body Injection  
 DID-Diesel Injection-Direct  
 DIP-Diesel Injection-Prechamber  
 EPFI-Electronic Port Fuel Injection  
 IC-Intercooler/Aftercooler  
 MPFI-Mechanical Port Fuel Injection  
 OBD-On-Board Diagnostics  
 SC-Supercharger  
 SFI-Sequential Fuel Injection  
 TC-Turbocharger

Engine: Front (All Vehicles)  
 Drive: See Chassis Type (Page 3A)

ISSUED: 01-15-88

REV. NO.:

(For CARB Use Only)  
(1989)AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
LIGHT DUTY TRUCKS AND MEDIUM DUTY VEHICLES

Executive Order No. A-6-444

## VEHICLE MODELS:

C C 1 0 7 0 3 + E 6 3 (EXAMPLE)

Digit 1  
Selling DivisionC-Chevrolet  
T-GMC TruckDigit 2  
Chassis TypeC-Conventional 4x2  
G-Forward Control 4x2  
(Body Frame Integral)  
K-Conventional 4x4  
M-Forward Control 4x2  
(Body Frame Integral)  
P-Forward Control 4x2  
(Conventional)  
R-Conventional 4x2  
S-S10/15 4x2  
10/15 4x4  
Conventional 4x4Digit 3  
Series/GVWR Range1-3400 to 7300 lbs  
2-6400 to 8600 lbs  
3-7400 to 14500 lbsDigits 4 & 5  
CA Dimension/Model Type05-Blazer/Jimmy, Step-Van/  
Valve Van  
06-S10/15  
07-42"/Pickup, Chassis-Cab  
08-FC or Motor Home Chassis,  
Step-Van/Value Van  
09-56"/Suburban, Chassis-  
Cab, Pickup  
10-60" FC Chassis, Chevy  
Van/Vandura, Sportvan/  
Rally, Chassis-Cab,  
Step-Van/Value Van  
11-Motor Home Chassis  
13-Chevy Van/Vandura,  
Sportvan/Rally, Cutaway  
Van/Vandura Special,  
Hi-Cube Van/Magnavan  
14-84"/FC or Motor Home,  
Chassis, Chassis-Cab,  
Step-Van/Value Van  
16-Cutaway Van/Vandura  
Special, Hi-Cube Van/  
Magnavan  
18-Motor Home ChassisDigits 6 & 7  
Cab or Body Style03-Conventional Cab  
(S10/15, C-K, R-V  
Models)  
-Cutaway Van/Vandura  
Special, Hi-Cube Van/  
Magnavan (G Models)  
05-Chevy Van/Vandura  
06-Suburban/Sportvan/  
Rally with Panel Rear  
Doors  
16-Blazer/Jimmy  
32-Motor Home Chassis  
42-Forward Control  
Chassis, Step-Van/  
Value Van  
43-Bonus Cab, Crew Cab  
53-Extended Cab  
(S10/15 Models)Digits 8, 9 & 10  
Body Ordering CodeZM9-Base Body  
C6P-HD Chassis; 8600 lb GVWR  
C7C-HD Chassis; 10500 lb GVWR  
C7E-HD Chassis; 11000 lb GVWR  
E31-Hi-Cube Van (10' Steel 96" Wide)  
E32-Step-Van/Value Van (Steel)  
E33-Step-Van/Value Van (Aluminum)E34-Hi-Cube Van (10' Steel 82" Wide)  
E36-Hi-Cube Van/Magnavan (10' Aluminum)  
E37-Utility Box (Aluminum)  
E38-Hi-Cube Van/Magnavan (12' Steel)  
E39-Hi-Cube Van/Magnavan (12' Aluminum)  
E62-Stepside/Fenderside Pickup  
E63-Fleetwide/Wideside PickupEngine Location: Front (All Vehicles)  
Drive Axle Location: See Chassis Type; All 4x2 Vehicles are RWD

ISSUED: 01-15-88

REV. NO.:

17-K3G4.3T5TAA1-4A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS\_\_\_ LIGHT DUTY TRUCKS X MEDIUM DUTY VEHICLES\_\_\_ GAS X DIESEL\_\_\_

Liters (CID): 4.3 (262)

Type: V6

Executive Order No. A-6-444

Exhaust Emission Control System (Special Features): AIP, EGR, TWC, OS (OBD) (CFI)

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (TBI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
51	CC10703+E62 CC10703+E63 CC10903+E63 CC10953+E63 CC10753+E63	A4	4000 4250 4500	16083541	17087162, 17087090	17087026	25104275, 25103272
52	CC10703+E62 CC10703+E63 CC10903+E63 CC10953+E63 CC10753+E63		4000 4250 4500				
53	CK10703+E62 CK10703+E63 CK10903+E63		4500 4750			17087192	
54	CK10703+E62 CK10703+E63 CK10903+E63		4500 4750				
55	CG11005 CG11305		4250	16083061	17089027	17087026	25104273, 25103276
56	CG11005 CG11305						

(1) Vehicle models, although shown as Chevrolet, refer to both Chevrolet and GMC models.

ISSUED: 01-15-88

REV. NO.: 001, 004, 006

PW008-3

17-K3G4.3T5TAA1-5A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS\_\_\_ LIGHT DUTY TRUCKS X MEDIUM DUTY VEHICLES\_\_\_ GAS X DIESEL\_\_\_

Liters (CID): 4.3 (262)

Type: V6

Executive Order No. A-6-444

Exhaust Emission Control System (Special Features): EGR, TWC, OS (OBD) (CFI)

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (TBI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
57	CM10905 CM10906	A4	3750 4250	16083061	17089027	17087026	25104273, 25103276
58	CM10905 CM10906		3875 4250				

ISSUED: 01-15-88

REV. NO.: 001, 006

PW008-3



17-K3G4.3T5TAA1-5B

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS\_\_\_ LIGHT DUTY TRUCKS\_X MEDIUM DUTY VEHICLES\_\_\_ GAS\_X DIESEL\_\_\_

Liters (CID): 4.3 (262)

Type: V6

Executive Order No. A-6-444

Exhaust Emission Control System (Special Features): AIP, EGR, TWC, OS (OBD) (CFI)

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (TBI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
59	CC10903+E63 CC10953+E63 CC10753+E63		4250 4500	16083531	17087162, 17087090	17087025	25104275, 25103272
60	CC10903+E63 CC10953+E63 CC10753+E63  CK10703+E62 CK10703+E63 CK10903+E63		4250 4750 4500  4750			17087026	
62	CK10703+E62 CK10703+E63 CK10903+E63		4500 4750				

ISSUED: 001

REV. NO.: 004, 005, 006

PW008-3

17-K3G4.3T5TAA1-6A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS\_\_\_ LIGHT DUTY TRUCKS\_X MEDIUM DUTY VEHICLES\_\_\_ GAS\_X DIESEL\_\_\_

Liters (CID): 4.3 (262) Type: V6 Executive Order No. A-6-444

Exhaust Emission Control System (Special Features): AIP, EGR, TWC, OS (OBD) (CFI)

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM	FUEL SYSTEM	EGR VALVE PART NO.	CATALYST PART NO.
				(ECU) PART NO.	(TBI) PART NO.		
65	CG11005 CG11305	M4	4250	16083571	17089027	17087026	25104273, 25103276
66	CG11005 CG11305		4500				
67	CC10703+E62 CC10703+E63 CC10903+E63 CC10953+E63 CC10753+E63	M5	4000  4250 4500	16083551	17087162, 17087090	17087025	25104275, 25103272
68	CC10703+E62 CC10703+E63 CC10903+E63 CC10953+E63 CC10753+E63		4000  4250 4500				

ISSUED: 01-15-88

REV. NO.: 001, 004, 006

PW008-3

17-K3G4.3T5TAA1-7A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS\_\_\_ LIGHT DUTY TRUCKS X MEDIUM DUTY VEHICLES\_\_\_ GAS X DIESEL\_\_\_

Liters (CID): 4.3 (262) Type: V6 Executive Order No. A-6-444

Exhaust Emission Control System (Special Features): AIP, EGR, TWC, OS (OBD) (CFI)

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (TBI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
69	CK10703+E62 CK10703+E63 CK10903+E63	M5	4500	16083551	17087162, 17087090	17087026	25104275, 25103272
70	CK10703+E62 CK10703+E63 CK10903+E63		4750				
73	CM10905 CM10906		3750 4250	16083571	17089027	17087025	25104273, 25103276
74	CM10905 CM10906		3875 4250				

ISSUED: 01-15-88

REV. NO.: 001, 005, 006

PW008-3

17-K3G4.3T5TAA1-8A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS\_\_\_ LIGHT DUTY TRUCKS\_\_\_ MEDIUM DUTY VEHICLES\_X GAS\_X DIESEL\_\_\_

Liters (CID): 4.3 (262)

Type: V6

Executive Order No. A-6-444

Exhaust Emission Control System (Special Features): AIP, EGR, TWC, OS (OBD) (CFI)

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (TBI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
53	CC20903+E63 CC20953+E63 CC20753+E63 CK10953+E63 CK10753+E63 CK20903+E63 CK20753+E63 CK20953+E63	A4	4250 4500  5000   5250	16083541	17087162, 17087090	17087192	25104275, 25103272
54	CC20903+E63 CC20953+E63 CC20753+E63 CK10953+E63 CK10753+E63 CK20903+E63 CK20953+E63 CK20753+E63		4250 4500  5250 5000  5250 5000				
55	CG21005 CG21305 CG21306		4250 4500 4750	16083061	17089027	17087026	25104273, 25103276
56	CG21005 CG21305 CG21306		4250 4500 4750				

ISSUED: 01-15-88

REV. NO.: 001, 002, 004, 005, 006

PW008-3

17-K3G4.3T5TAA1-9A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS\_\_\_ LIGHT DUTY TRUCKS\_\_\_ MEDIUM DUTY VEHICLES X GAS X DIESEL\_\_\_

Liters (CID): 4.3 (262)

Type: V6

Executive Order No. A-6-444

Exhaust Emission Control System (Special Features): AIP, EGR, TWC, OS (OBD) (CFI)

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (TBI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
61	CC20903+E63 CC20953+E63 CC20753+E63 CK10953+E63 CK10753+E63	M4	4500 4750 4500 5250 5000	16083531	17087162, 17087090	17087026	25104275, 25103272
62	CC20903+E63 CC20953+E63 CC20753+E63 CK10953+E63 CK10753+E63		4500 4750 4500 5250 5000				
63	CK20903+E63 CK20953+E63 CK20753+E63		5000 5250 5000			17087192	
64	CK20903+E63 CK20953+E63 CK20753+E63		5000 5250				
65	CG21005 CG21305 CG21306		4250 4500 4750	16083571	17089027	17087026	25104273, 25103276
66	CG21005 CG21305 CG21306		4250 4500 4750				

ISSUED: 01-15-88

REV. NO.: 001  
002  
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004  
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PW008-3

17-K3G4.3T5TAA1-10A

(For CARB Use Only)

(1989)

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS\_\_\_ LIGHT DUTY TRUCKS\_\_\_ MEDIUM DUTY VEHICLES\_X GAS\_X DIESEL\_\_\_

Liters (CID): 4.3 (262)

Type: V6

Executive Order No. A-6-444

Exhaust Emission Control System (Special Features): AIP, EGR, TWC, OS (OBD) (CFI)

ENG CODE	VEH MODELS	TRANS TYPE	ETW	IGN SYSTEM (ECU) PART NO.	FUEL SYSTEM (TBI) PART NO.	EGR VALVE PART NO.	CATALYST PART NO.
69	CC20903+E63 CC20953+E63 CC20753+E63 CK10953+E63 CK10753+E63	M5	4250 4500  5000	16083551	17087162, 17087090	17087026	25104275, 25103272
70	CC20903+E63 CC20953+E63 CC20753+E63 CK10953+E63 CK10753+E63		4250 4500  5000				
71	CK20903+E63 CK20953+E63 CK20753+E63		4750 5250 5000			17087192	
72	CK20903+E63 CK20953+E63 CK20753+E63		5250 5000				

ISSUED: 01-15-88

REV. NO.: 001, 004, 005, 006

PW008-3