

MODULE 1

SERVICE PARTS FAMILIARIZATION

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A. TYPES OF PARTS

1. Parts

- Consumable Parts
- General Parts

2. Isuzu Genuine Accessories

- LCV Accessories
- CV Accessories

3. Lubricants

- Isuzu Genuine Oil
- Brake Fluid
- Long Life Coolant

4. Others

- Battery
- Tire

A. TYPES OF PARTS

1. Parts

Consumable Parts – parts for maintenance such as regular replacement parts.



Oil Filter



Brake Linings



Air Filter



Fuel Filter



Clutch Disc



Pressure Plate



Wiper Blade



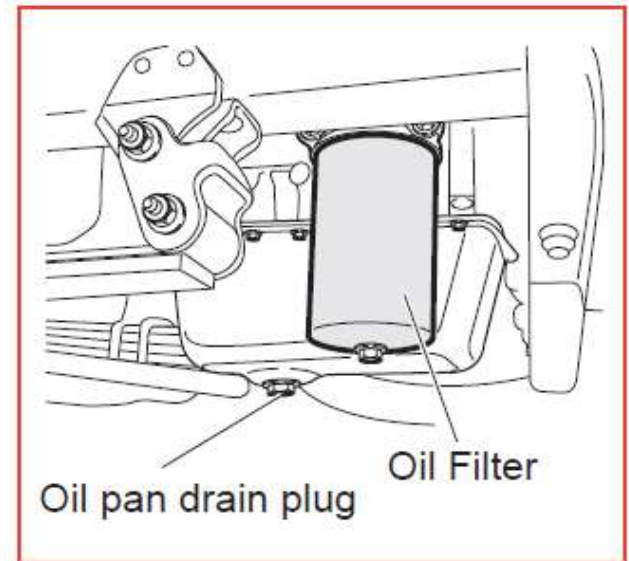
Drive Belt

Consumable Parts

Oil Filter

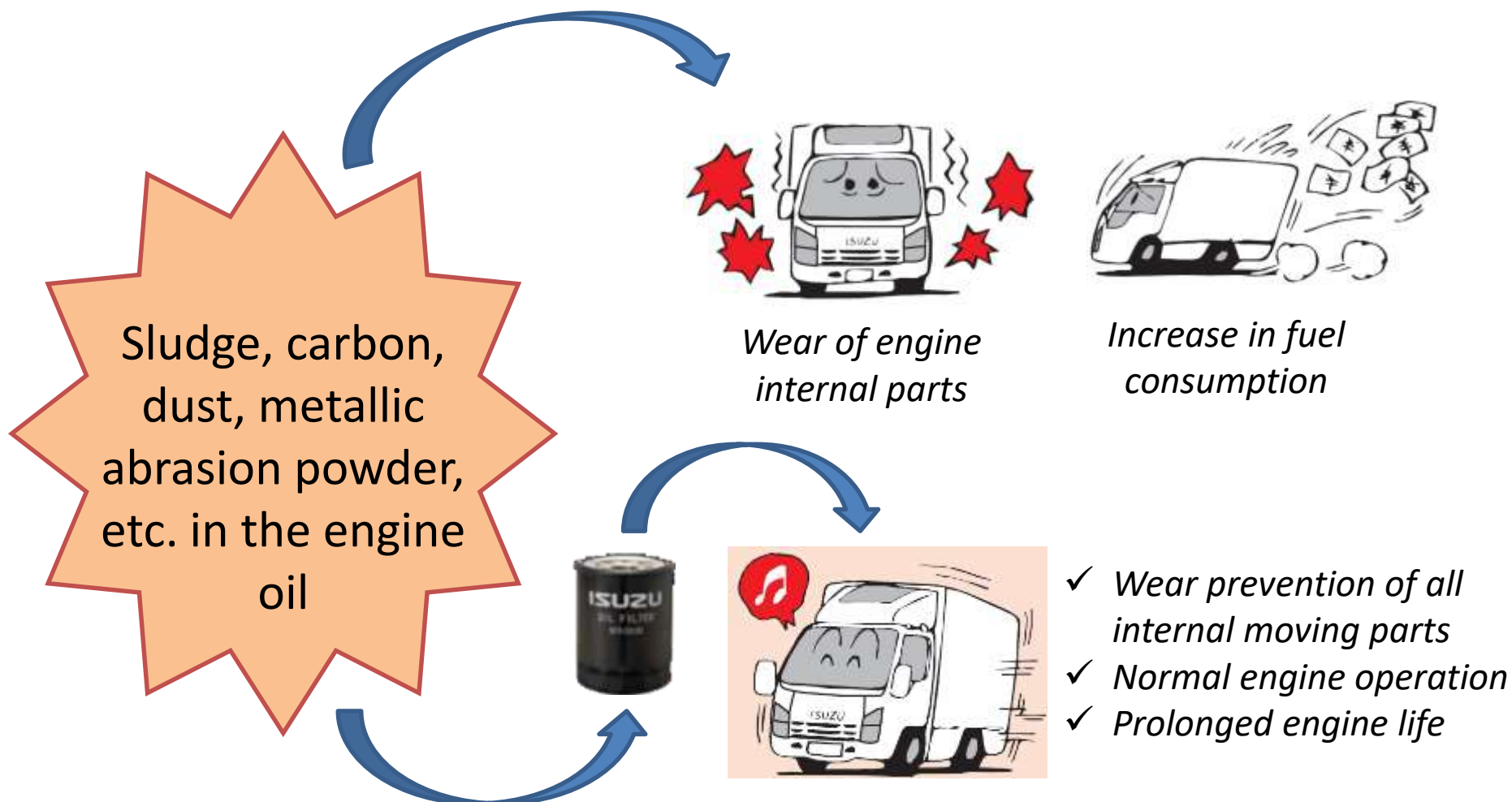
Purpose

The oil filter removes impurities contained in the engine oil through the filter paper, thus, allowing clean oil to lubricate the internal parts of the engine.



Consumable Parts

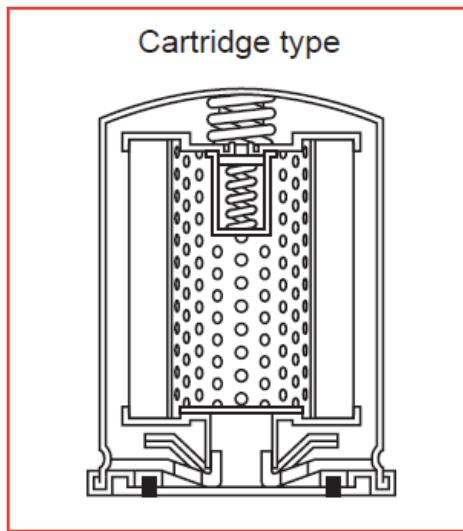
Oil Filter



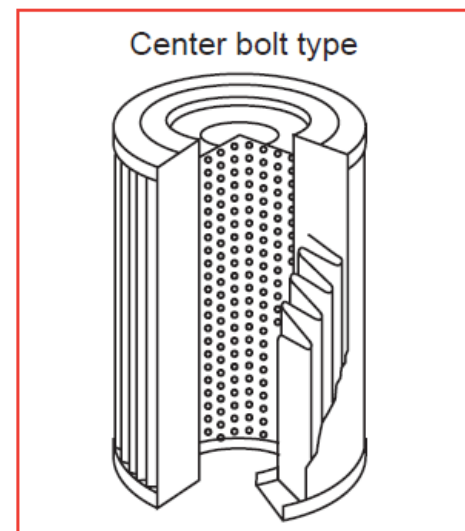
Consumable Parts

Oil Filter

Types of Oil Filter



- ✓ *Replace together with the case*
- ✓ *Easy maintenance*



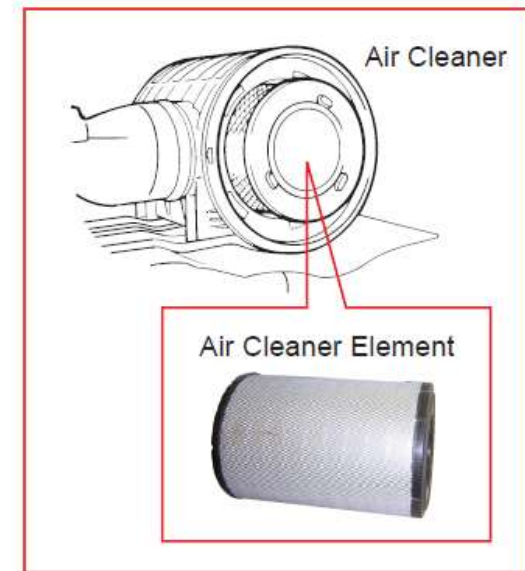
- ✓ *Replace the filter paper only*
- ✓ *Economically good*

Consumable Parts

Air Cleaner Element

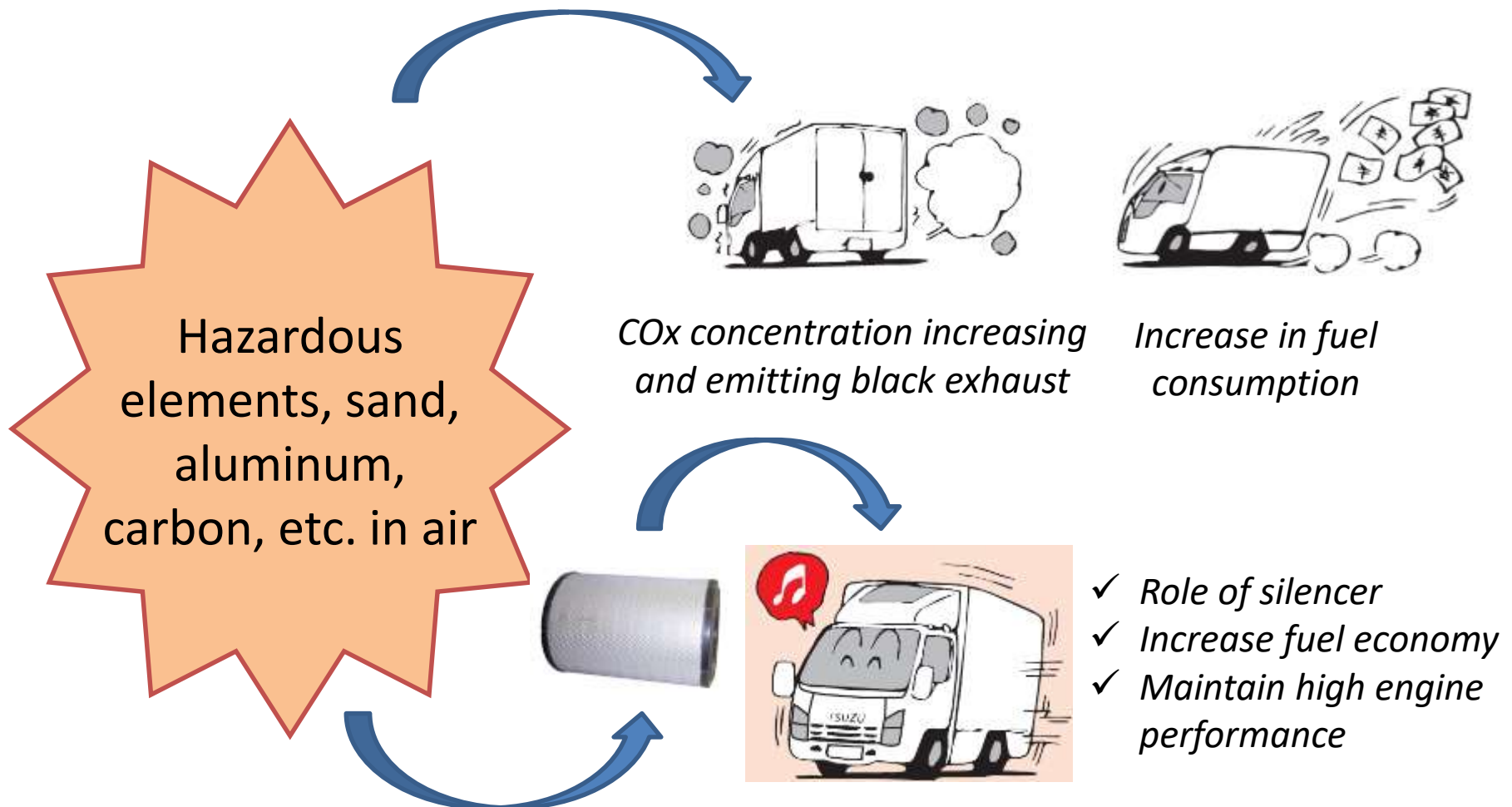
Purpose

Impurities (fine dust and dirt) in air are removed by the filter paper of the air cleaner element to assure that clean air is going inside the engine.



Consumable Parts

Air Cleaner Element



Consumable Parts

Air Cleaner Element

Types of Air Cleaner

DRY TYPE



- ✓ *Dust is captured by the mesh of the entire filter paper*
- ✓ *Possible to re-use by means of cleaning with air*

WET TYPE



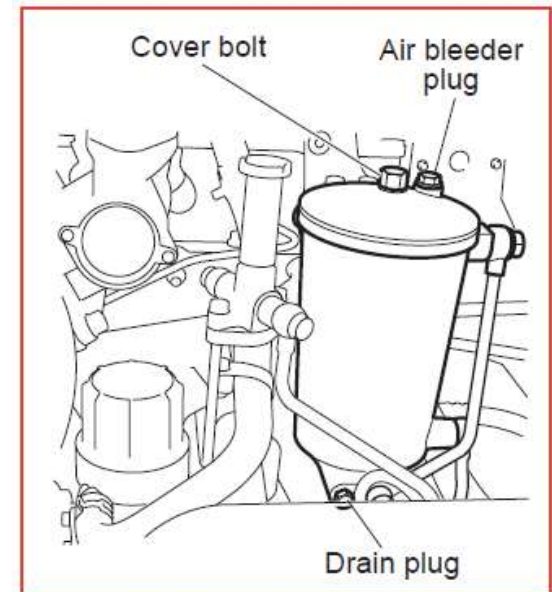
- ✓ *Dust is captured by filter paper surface with adhesive*
- ✓ *Not advisable in cleaning air or washing*

Consumable Parts

Fuel Filter Element / Cartridge

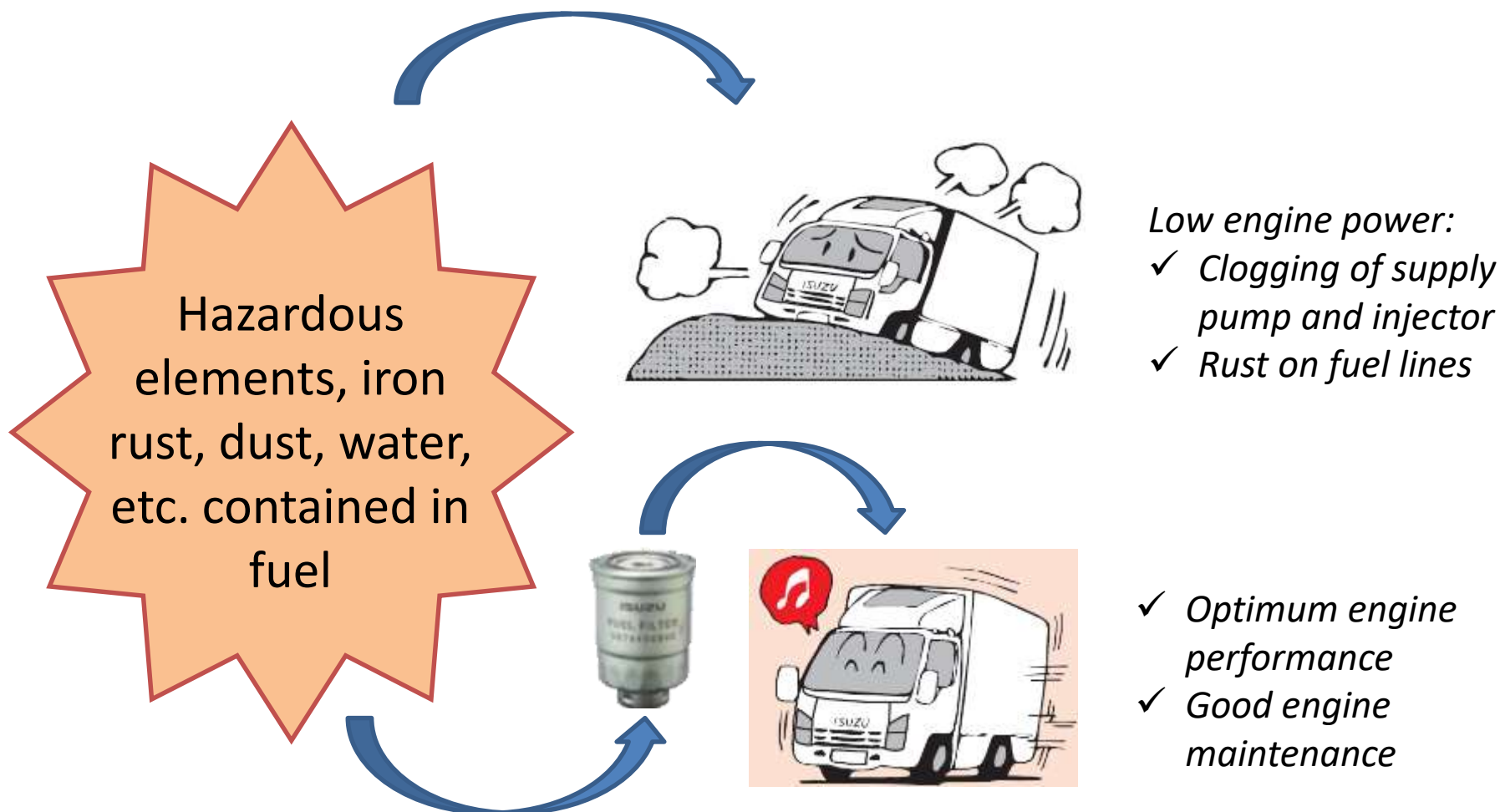
Purpose

Impurities (iron rust, dust and moisture) are removed by fuel filter element to clean the fuel that will be supplied in the engine.



Consumable Parts

Fuel Filter Element / Cartridge



Consumable Parts

Fuel Filter Element / Cartridge

Types of Fuel Filter

CARTRIDGE TYPE



- ✓ *Replace together with the case*
- ✓ *Easy maintenance*

CENTER BOLT (ELEMENT) TYPE



- ✓ *Replace the filter paper only*
- ✓ *Economically good*

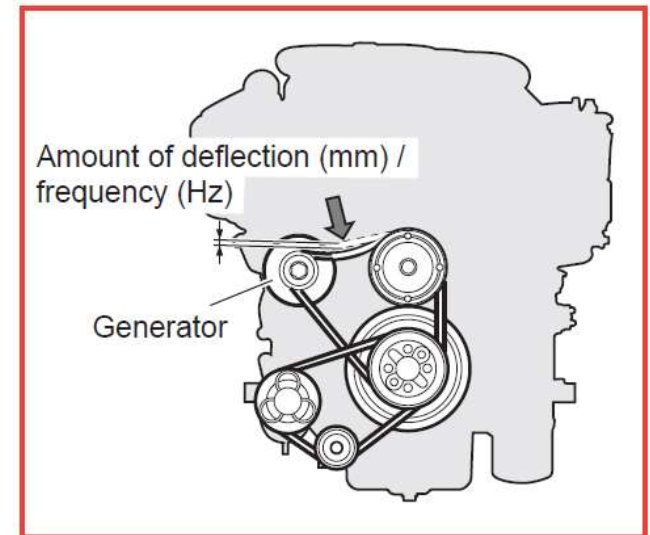
Consumable Parts

Fan Belt

Purpose

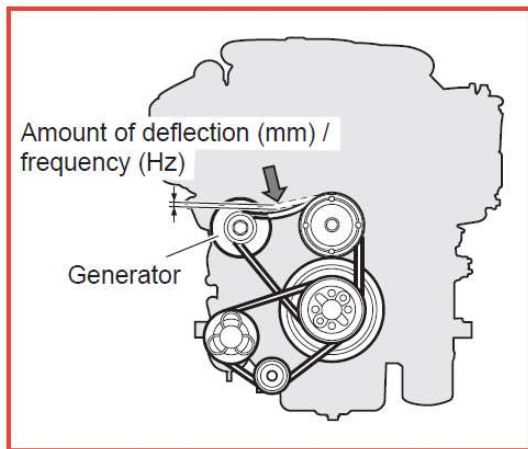
Transmits engine power to several auxiliary devices:

- alternator / generator
- water pump
- cooling fan
- air compressor
- power steering pump



Consumable Parts

Fan Belt



*If not check, adjust
and/or replace*






Overheat



Dead Battery

Consumable Parts

Fan Belt

Type of Belt	Structure	Application / Figure	
<i>Multi-ply Belt</i>	<ul style="list-style-type: none"> Made of special rubber with bias fabric material Less noise because of large grip force 	4JA1	
<i>Cogged Belt</i>	<ul style="list-style-type: none"> Made of special rubber with multiple V-shaped core wires High transmitting power suitable for high speed engines 	<ul style="list-style-type: none"> 4JA1 4JB1-TC 4HG1-T 6HE1 	
<i>V-Ribbed Belt</i>	<ul style="list-style-type: none"> Deliver stable performance due to low energy loss Suitable for high speed rotation 	<ul style="list-style-type: none"> 4JJ1-TC 6HK1 	

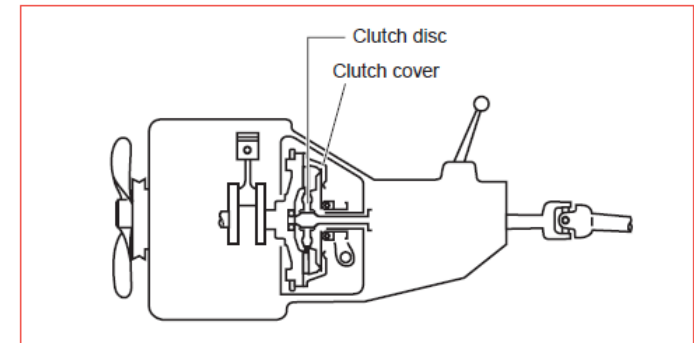
Consumable Parts

Clutch Disc / Clutch Cover

Purpose

Clutch transmits power generated by the engine to the transmission without slipping.

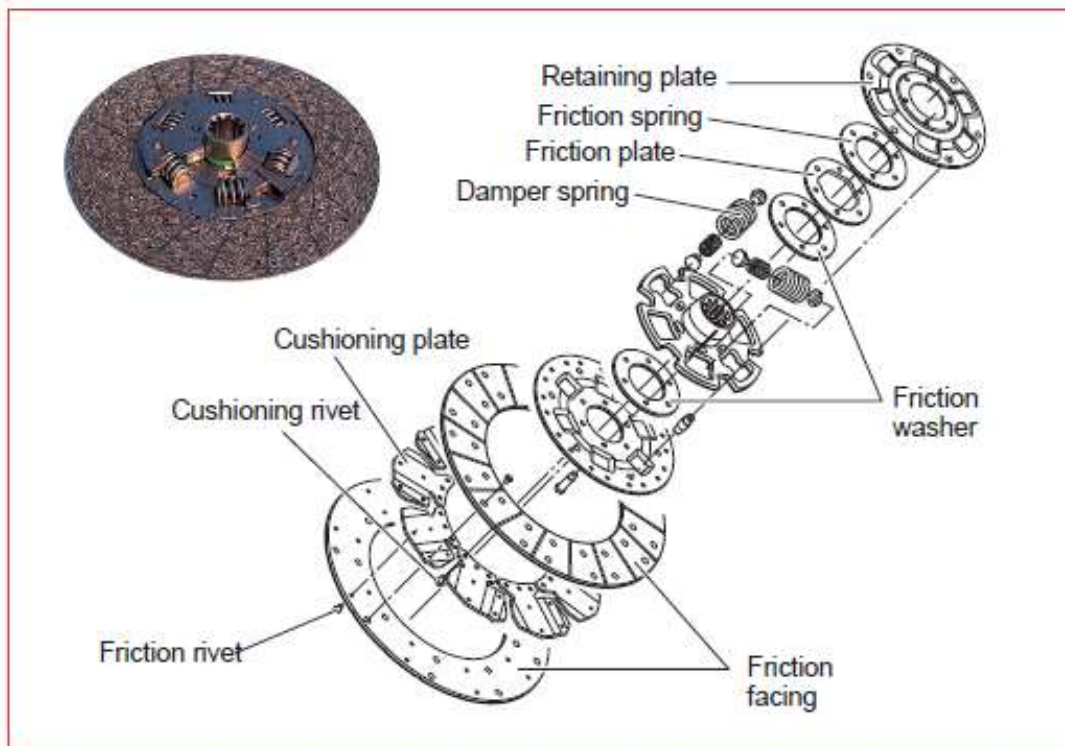
Clutch engage and disengage the engine from the transmission for smooth changing of gears.



Consumable Parts

Clutch Disc

Structure of Clutch Disc

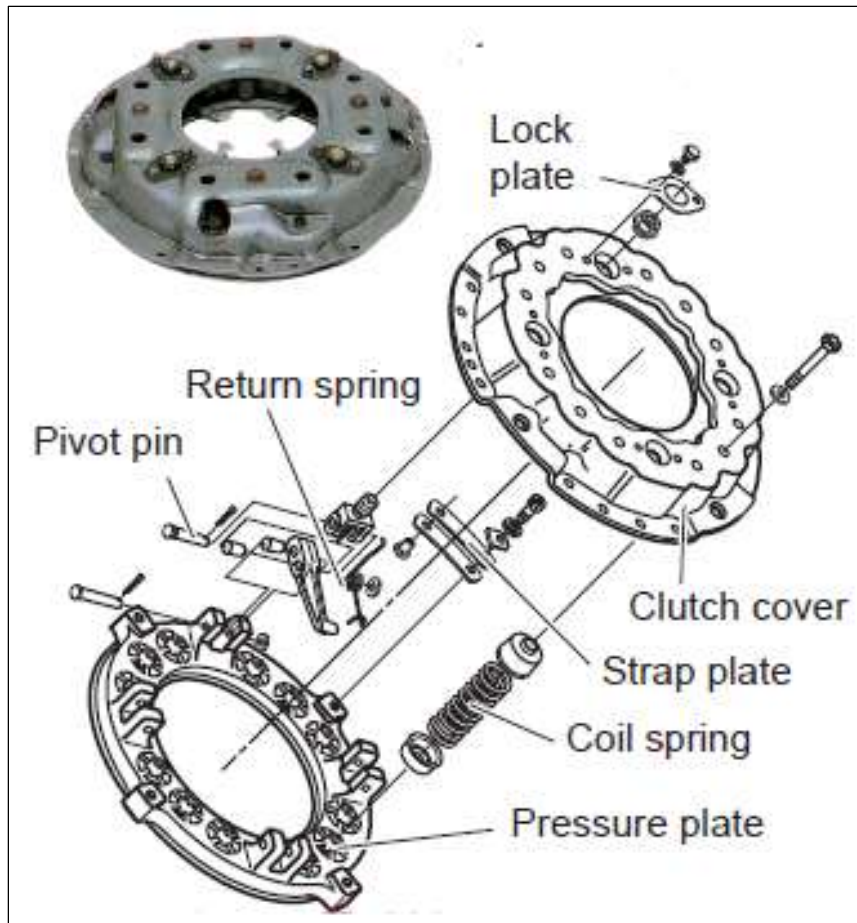


- ✓ *Clutch (friction) facing is riveted to both sides of the clutch plate*
- ✓ *The damper spring and cushion plate are used to ensure smooth clutch engagement and prevent deformation of the clutch plate*

Consumable Parts

Clutch Cover

Types and Structure of Clutch Cover



COIL SPRING TYPE

Characteristics:

- Less pedal vibration
- Suitable for trucks and busses due to large torque capacity

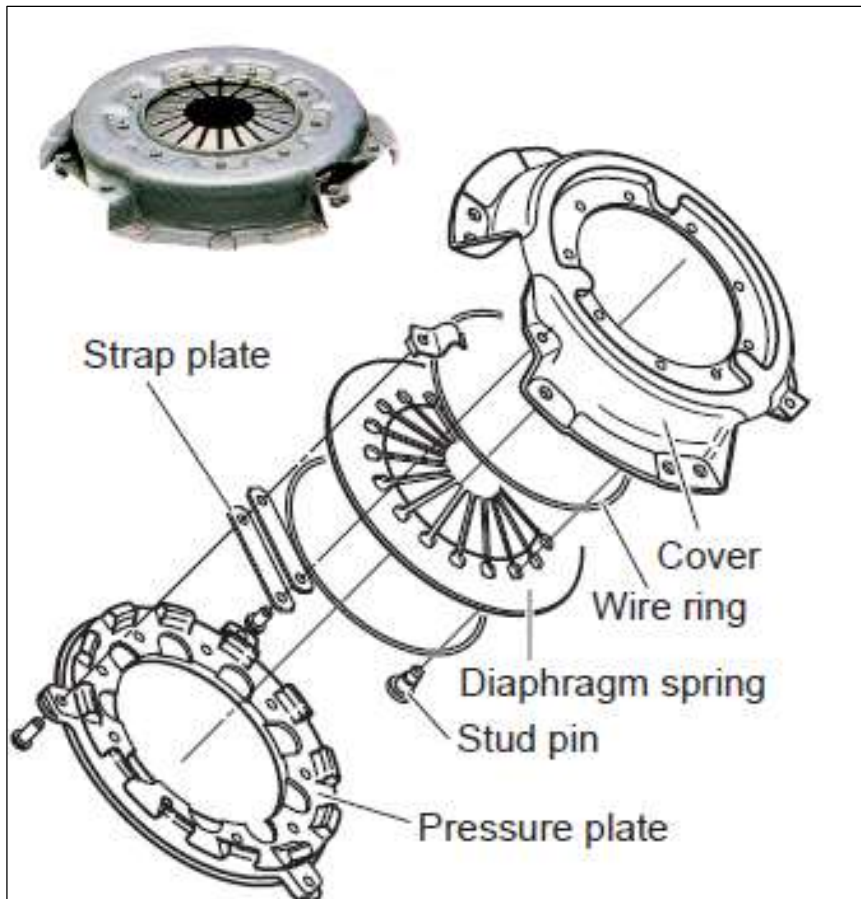
Application:

F-SERIES, C & E SERIES, BUS

Consumable Parts

Clutch Cover

Types and Structure of Clutch Cover



DIAPHRAGM SPRING TYPE

Characteristics:

- Less force on clutch pedal
- Spring is not affected even if facing is worn-out
- Widely used in light duty vehicles and passengers cars

Application:

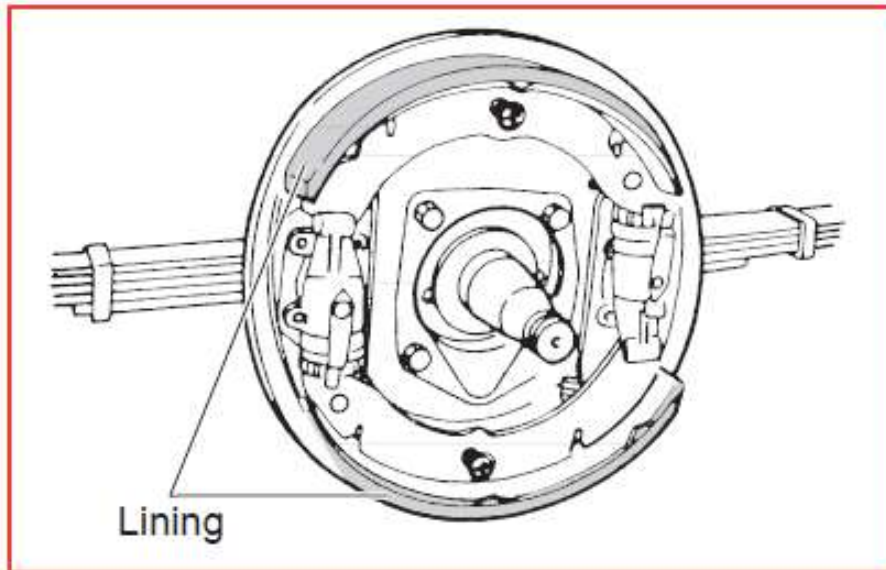
TFR/S, UCR/S, N-SERIES

Consumable Parts

Brake Lining / Shoe

Purpose

The brake lining is a friction material which produces friction by contacting the drum brake in order to decelerate or stop the vehicle.



Characteristics:

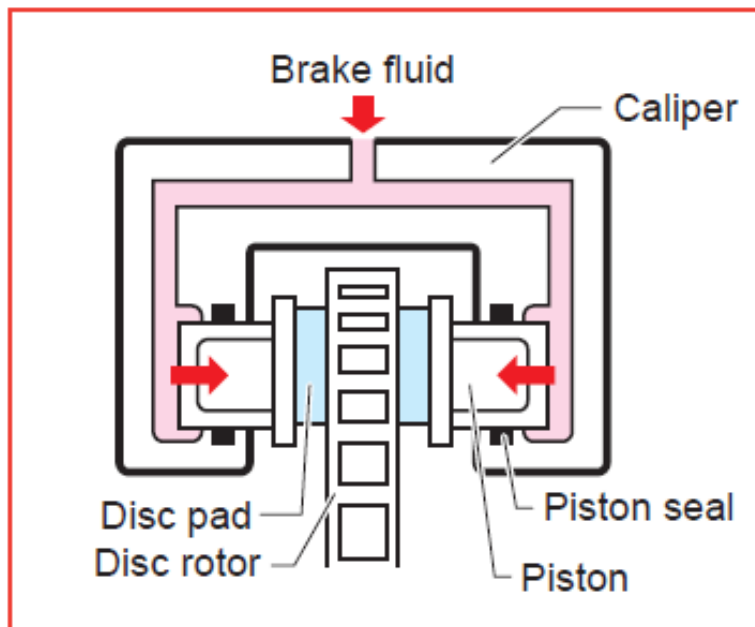
- High thermal resistance
- Mechanical strength and wear resistance
- Frictional coefficient to temperature change, dry, water, etc.

Consumable Parts

Brake Pads

Purpose

The rotor disc rotating together with the wheels are held between disc pads to decelerate or stop the vehicle due to their frictional force.



Characteristics:

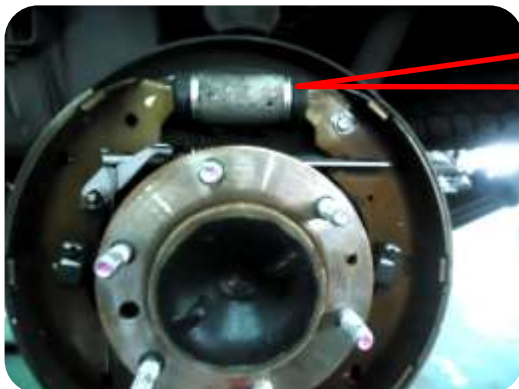
- Good response regardless of the speed of the vehicle
- Ability to withstand early wear and water resistance
- Generate less squealing noise

Consumable Parts

Brake Wheel Cup

Purpose

- The wheel cup plays an important role to completely seal the brake fluid and provide the prescribe internal pressure.
- The boot plays role to prevent dust and water from entering the cylinder



Wheel Cup Set

A. TYPES OF PARTS

1. Parts

- Consumable Parts
- General Parts

2. Isuzu Genuine Accessories

- LCV Accessories
- CV Accessories

3. Lubricants

- Isuzu Genuine Oil
- Brake Fluid
- Long Life Coolant

4. Others

- Battery
- Tire

A. TYPES OF PARTS

1. Parts

General Parts – Parts for repair such as interior and exterior parts including panels and bumpers as well as mechanical and safety related parts.



Panel



Bumper



Shock Absorber



Water Pump



Turbocharger



EGR Valve



Radiator



Clutch Booster

A. TYPES OF PARTS

1. Parts	2. Isuzu Genuine Accessories	3. Lubricants	4. Others
<ul style="list-style-type: none">• Consumable Parts• General Parts	<ul style="list-style-type: none">• LCV Accessories• CV Accessories	<ul style="list-style-type: none">• Isuzu Genuine Oil• Brake Fluid• Long Life Coolant	<ul style="list-style-type: none">• Battery• Tire

A. TYPES OF PARTS

2. Isuzu Genuine Accessories

Genuine accessories are developed specifically for Isuzu vehicles by Isuzu Car Life (ICL). Isuzu supplies genuine accessories for D-Max, mu-X. N-Series, F-Series and C & E Series.



**Light Commercial Vehicle
(LCV) Accessories**



**Commercial Vehicle
(CV) Accessories**

A. TYPES OF PARTS

2. Isuzu Genuine Accessories

Isuzu mu-X



Engine Hood Protector



Head Lamp Garnish



Door Handle Trim



Fog Ring Chrome



Window Visors



Reverse Sensor

A. TYPES OF PARTS

2. Isuzu Genuine Accessories

Isuzu mu-X



Illuminated Rocker Plate



Organizer Box



Welcome Light

A. TYPES OF PARTS

2. Isuzu Genuine Accessories

Isuzu D-Max



Nudge Bar



Roof Rail



Side Step Bar



Cargo Divider



Sports Bar



Cargo Bike Carrier

A. TYPES OF PARTS

2. Isuzu Genuine Accessories

Isuzu D-Max



Cargo Net



Cargo Rail



Cargo Extender



Bed Liner



Rear Combi Lamp Guard



Tail Gate Ornament

A. TYPES OF PARTS

2. Isuzu Genuine Accessories

Isuzu Commercial Vehicles



Air Deflector



Side Steps Skirt Set



Headlight Cover Set

A. TYPES OF PARTS

2. Isuzu Genuine Accessories

Isuzu Commercial Vehicles



Mirror Cover



Upper Mirror



Step Lamp LED

A. TYPES OF PARTS

2. Isuzu Genuine Accessories

Isuzu Commercial Vehicles



Door Visor



Mud Flap



Bull Bar

A. TYPES OF PARTS

2. Isuzu Genuine Accessories

Isuzu Commercial Vehicles



**Chrome Door
Handle Cover Set**



Sunshade



Rear Pocket

A. TYPES OF PARTS

1. Parts	2. Isuzu Genuine Accessories	3. Lubricants	4. Others
<ul style="list-style-type: none">• Consumable Parts• General Parts	<ul style="list-style-type: none">• LCV Accessories• CV Accessories	<ul style="list-style-type: none">• Isuzu Genuine Oil• Brake Fluid• Long Life Coolant	<ul style="list-style-type: none">• Battery• Tire

A. TYPES OF PARTS

3. Lubricants

OIL	FLUID
<p>Main purpose is to lubricate:</p> <ul style="list-style-type: none">• Engine oil• Gear oil• Grease	<p>Main purpose is to operate the system by hydraulic pressure:</p> <ul style="list-style-type: none">• Automatic Transmission Fluid (ATF)• Power Steering Fluid• Brake Fluid• Clutch Fluid• Coolant

A. TYPES OF PARTS

3. Lubricants

SYSTEM	NO.	SPECIFICATION	MODEL
Engine Oil	1	BESCO GENUINE (10W-30)	All Models
	2	IGMO MULTI Z+ (10W-30)	
	3	IGMO "XTRM" (15W-40)	



A. TYPES OF PARTS

3. Lubricants

SYSTEM	NO.	SPECIFICATION	MODEL
Differential	1	DELO GL-5 EP (80W-90), (85W-140)	All Models
Manual Transmission	1	IGMO "XTRM" (15W-40)	N-Series
	2	BESCO TRANSAXLE (5W-30)	D-Max, mu-X, N-Series
	3	DELO GL-5 EP (80W-90), (85W-140)	F-Series, C-Series, E-Series

A. TYPES OF PARTS

3. Lubricants

SYSTEM	NO.	SPECIFICATION	MODEL
Power Steering	1	Texamatic 1888	All Models
Engine Coolant	1	Isuzu Long Life Coolant (LLC) Premix	All Models
Brake / Clutch Fluid	1	DOT 3	All Models
A/T Transmission	1	ENEOS (JX NWS-9638)	mu-X, D-Max
	2	MOBIL ATF AT3309	D-Max

A. TYPES OF PARTS

1. Parts

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- LCV Accessories
- CV Accessories

3. Lubricants

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- Brake Fluid
- Long Life Coolant

4. Others

- Battery

A. TYPES OF PARTS

4. Others




Isuzu Battery



A. TYPES OF PARTS

4. Others




Isuzu Battery

			
Model	N150 4D/145G51L	75D23R/NS50(1SM)	65D23L/NS50 (1SM)
Part No.	9650030300L	9650030250L	9650030260L
Maintenance Free	Low-Maintenance	Maintenance Free	Maintenance Free
Vehicle Model	LV423 / LT134	NKR66/71, NPR66/71, NQR71/75	TBR54
Warranty	6-months (Commercial)	6-months (Commercial)	24-months (Private); 6-months (Commercial)

A. TYPES OF PARTS

4. Others


Isuzu Battery

			
Model	65D23L/NS50(1SM)	95D31R/N70 (3SM REV)	95D31L/N70(3SM)
Part No.	9650030340L	9650030270L	
Maintenance Free	Maintenance Free	Maintenance Free	Maintenance Free
Vehicle Model	NLR/NMR/NPR85, FVR34, FRR90	NHR55 / NKR55	NLR77
Warranty	6-months (Commercial)	6-months (Commercial)	6-months (Commercial)

A. TYPES OF PARTS

4. Others

Isuzu Battery

	
Model	80D26L/N50 (2SM)
Part No.	9650030280L
Maintenance Free	Maintenance Free
Vehicle Model	UC86/85; TFR85 '07, TFR/TFS-86/86 '13, NQR75, QKR77
Warranty	24-months (Private); 6-months (Commercial)

B. TYPES OF SUPPLY MODE

1. Unit Parts

The parts that performs a particular function in the vehicle, such as;



Crankshaft



Valve



Bolt

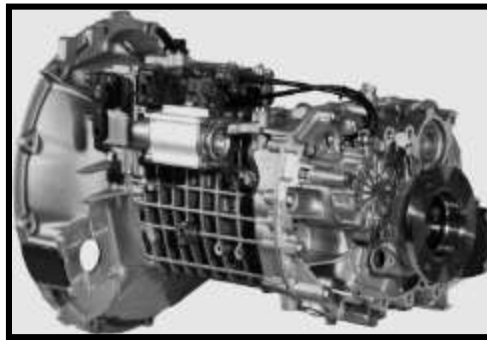
B. TYPES OF SUPPLY MODE

2. Assembly Parts

The assembled parts with more than two (2) unit parts, such as;



Engine



Transmission



Differential

B. TYPES OF SUPPLY MODE

3. Set Parts

More than two (2) pieces of parts are used in the same location of the vehicle, such as;



Brake Shoe



Piston Ring Set

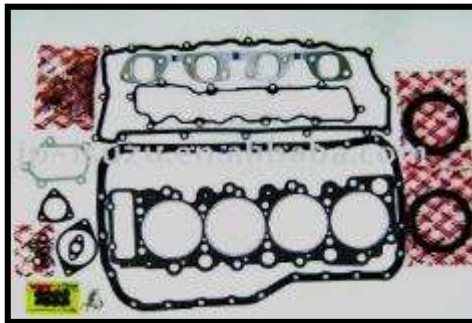


Gear Set

B. TYPES OF SUPPLY MODE

4. Kit Parts

The group of parts containing all necessary parts for repairing some specific function of the vehicle, such as;



Engine
Overhauling Kit



Repair Kit,
Brake



Repair Kit,
Expander

C. ISUZU PARTS LINE-UP



- Parts which have been manufactured based on drawings designed or approved by IML
- Parts which have passed Isuzu quality standard test.
- Parts sold through Isuzu's authorized supply network.



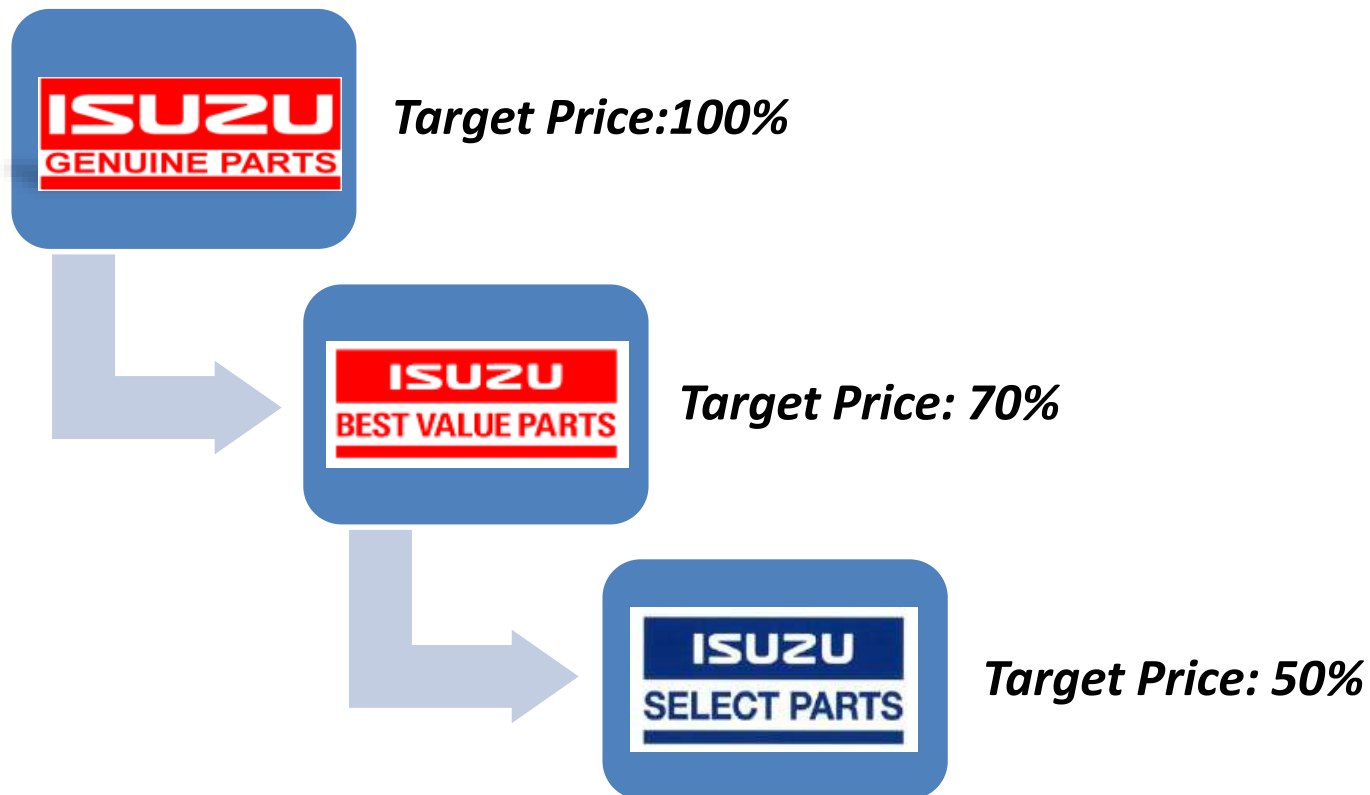
- Parts which have been manufactured based on drawings designed or approved by IML (lower price achieved through appropriating the original drawing)
- Parts which have passed Isuzu quality standard test.
- Parts sold through Isuzu's authorized supply network



- Isuzu carefully selected products made by Japanese OEM and major aftersales manufacturer
- Parts which have passed Isuzu quality standard test.
- Parts sold through Isuzu's authorized supply network




C. ISUZU PARTS LINE-UP

Isuzu Select Parts Brand Positioning



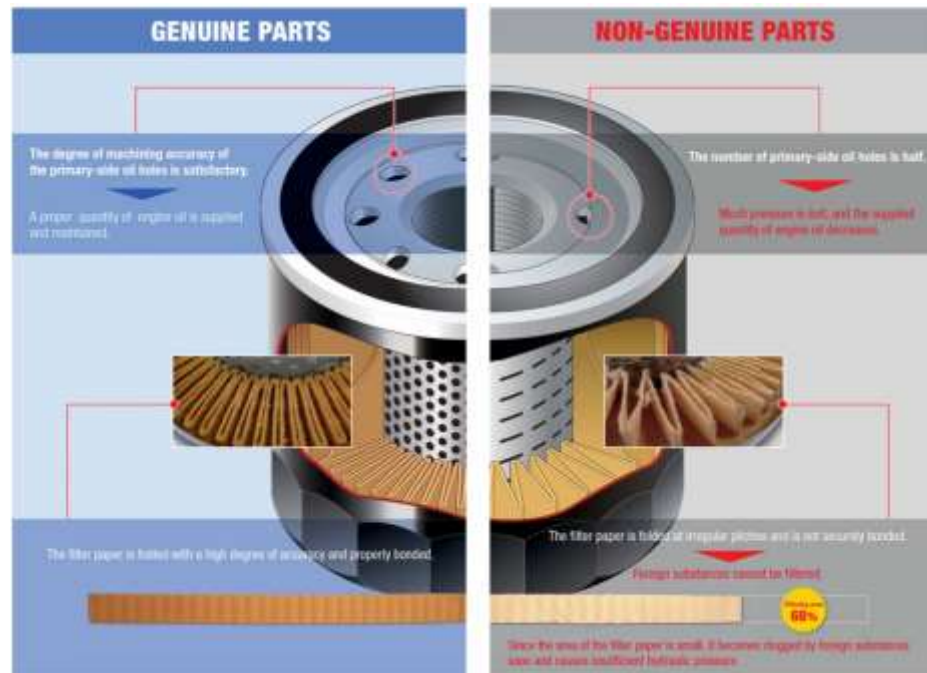
C. ISUZU PARTS LINE-UP

Warranty Coverage

	PARTS CLAIM	PARTS WARRANTY	VEHICLE WARRANTY
Definition	Claim for wrong parts, parts damage, insufficient quantity	Warranty for parts defect caused by its manufacturing or development process	Warranty for vehicle defect caused by its production or development process
Applicable Period	Before parts installation	After parts installation	Basically 2 years from new vehicle purchase
	Applicable	Applicable (3,000kms or 3 months, whichever comes first)	Can be used (The vehicle warranty will not be expired)
	Applicable	Applicable (3,000kms or 3 months, whichever comes first)	Can be used (The vehicle warranty will not be expired)
	Applicable	NOT applicable(*)	Cannot be used during vehicle warranty period

*In case the part clearly has a defect, the part can be considered to be replaced.

D. DISADVANTAGES OF NON-ISUZU PARTS



Quality and performance	<ul style="list-style-type: none"> Problems with fitting and performance, as well as with poorer materials of uncertain quality (e.g. base material usage and heat processing)
Supply stability	<ul style="list-style-type: none"> High-demand parts are only made during high-demand periods
Meeting the customer's needs	<ul style="list-style-type: none"> Up-front cost may appear cheaper compared with genuine parts but they do not meet quality standards