

CASE STUDY

VEHICLE SECTOR: COURIER, DELIVERY

INDUSTRY SECTOR: OFFICE SUPPLY & PRODUCTS



1 BUSINESS NEED

Courier and Delivery operation profiles typically include high mileage and occasional heavy loads. This mission profile certainly describes the office supply and products customer. Covering a wide area and routinely hauling many cases of paper put a heavy burden on this Class 1 van.

Near the B50 lifetime for the engine and facing increasing maintenance costs, the owner was interested in the complete remanufacturing service.

Power Train:

At just over 220,000 miles this van was experiencing low power and transmission slipping.

Suspension:

The front and rear shocks and springs were spent. Front end steering and linkages were well worn and sloppy.

Interior:

Normal wear and tear – but, almost all wear confined to the driver side. This is typical of courier and delivery vehicles as the driver is normally the only occupant.

Exterior:

The exterior condition was typical for the mission profile and age except for one side door and one rear door. Other than the doors, there were several dents and dings. The paint was oxidized with a typical number of scratches and patches. The graphics were beginning to fade, roll, crack and peel.

2 SOLUTION

The extensive remanufacturing service replaced not only the power train, but the major assemblies and subassemblies in the list below.

Engine	Miniature Bulbs
Transmission	Leaf spring, added
A/C Kit	Paint job
Radiator, Cap & Hoses	Passenger side seat belt buckle
Ball Joints (Upper, Lower)	Recover driver's seat
Battery	Repaired & adjusted both side doors
Belts, Hoses	Repaired Rear Exhaust
Brake System	Right front fender
Brake, Hydro-boost	Sensor, Camshaft
Bumper, Paint (front & rear)	Sensor, Coolant Temp
Detonation Knock Sensor	Sensor, Crank
Door panels, Recondition	Sensor, O2 (all banks)
Drive Belt Tensioner Assy	Sensor, Speed (in/out)
Driver-side Seat Belt Kit	Sensor, Temperature
Engine & transmission mounts	Serpentine Belt
Fender Extension	Service & inspect rear differential
Floor mat	Shock absorbers
Fluids and filters	Side door entry cover
Front end	Spark plugs and wires
Front end alignment	Steering Wheel
Fuel pump	Thermostat
Gaskets, engine & transmission	Tie Rod End (Inner, Outer)
Halogen headlamps	Tires, 4 each
Headliner	U-joints
Idler Pulley	Water pump
Left rear door	Weather-stripping
	Wheel Bearing & Hub
	Windshield
	Wiper Blades

Body-off remanufacturing exposes the frame to allow for easy access to the power train and suspension. The Body is also processed simultaneously to save time.

3 RESULTS

The replacement power train solved flagging power and acceleration issues. Engine and Transmission now work together with a reset lifetime.

The Suspension work restored like-new ride and feel. Road feel is now coupled to the Steering Wheel through replaced components and steering gear.

Road noise was greatly reduced by replacing the Door Seals and Weather-stripping.

After the original assessment and inconsideration of the unique mission profile of carrying heavy loads of paper, the Leaf Springs were re-arched and supplemented with an additional Leaf Spring. The van now accommodates any paper loading without bottoming out.

Replacing the Air Conditioner system components restored climate control for the hot Texas summers.

The power train was replaced and now carries a 3-year, 75,000-mile warranty.

Door replacements and Body repair made the new paint job reset the factory appearance and served as an excellent base for new company graphics in the form of a partial vehicle wrap.



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