

System Code	# of Repairs Performed	Externally	Total	
Air Conditioning & Heat	78	0	78	
Air System	29	0	29	
Brakes	112	0	112	
Cab and Chassis Systems	93	1	94	
Drive Train	42	2	44	
Electrical System	288	10	298	
Emission System	20	3	23	
Engine	207	4	211	
Hydraulics	84	1	85	
Inspection	6	0	6	
Implements	162	1	163	
Steering and Suspension	39	0	39	
Tires	490	11	501	
Tracks & Cleats	1	0	1	
Welding & Fab	2	1	3	
Chainsaw	38	0	38	
Cooling System	43	0	43	
Cranking System	1	0	1	
Decals	15	11	26	
Front End Alignment	2	4	6	
Fuel System	52	1	53	
Glass	30	24	54	
Hitches	6	0	6	
Hoses	14	0	14	
Lights and Reflectors	174	0	174	
Lubrication System	7	0	7	
Misc Other	95	0	95	
Mud Flaps	27	0	27	
Paint	1	0	1	
Tank	3	0	3	
Tarp Repair	39	0	39	
Towing	0	11	11	
Wheels & Rims	22	0	22	
Wipers/Washers	38	0	38	
PMA	240	339	579	
PMB	134	1	135	
PMC	81	0	81	
PMQ	299	0	299	
MVI	271	0	271	
Make Ready	292	35	327	
Totals	3577	460	4037	CY17 Totals

Denotes that we have the option to outsource

Although Public Works prefers to perform PMAs internally, a "quick lube and oil" vendor was contracted to provide more choices in the interest of convenience and practicality. Some vehicles operate 24/7 and the drivers may choose to schedule an oil change after the E.S. shop closes at 3:30pm or on the weekend. Despite this, most PM "A"s have been performed internally throughout 2018. Of the 166 total oil changes this year, 157 were completed internally by E.S. Techs. Equipment Services encourages internal PM "A"s whenever possible because of the lower cost and it allows Techs to address any other issues noticed while servicing the vehicle.

Air Conditioning & Heat

- Charging A/C systems, replace compressors, condensers, driers, evaporators, expansion valves, orifice tubes, etc.

Air System

- Compressor repair, air lines, air dryers, etc.

Brakes

- Brake pads, rotors, calipers, pedals, drums, shoes, parking brakes, master cylinders, etc.

Cab and Chassis Systems

- Pop dents, sub-frame repairs, bumpers, tailgates, seats, molding and trim pieces, seat belts, spray bars, spray heads, gravity feed bars, conveyor belts, valves.

Drive Train

- Transmissions, transfer case, rear differential, clutches, etc.

Electrical System

- Gauges, sensors, backup camera systems, MDC computers, radios, cencom controllers, flashers, relays, fuses, specialized K9 equipment, power windows/locks, sirens, trailer lighting, radars, in-car camera systems, GPS installs, etc.

Emission System

- Mufflers, catalytic convertors, emissions sensors, etc.

Engine

- Belts, air intake housing, camshafts, crank case, cylinder head, engine mounts, pistons, turbo chargers, pulleys, rocker arms, valve covers, spark plugs, glow plugs, ignition coils, etc.

Hydraulics

- Hydraulic lines, hydraulic cylinders, motors, pumps, etc.

Inspection

- Inspect and diagnose problems that are reported on vehicles (grinding, whining, clicking noises). Usually ends up in the repair of one of the other listed systems.

Implements

- Repair of implements assigned to equipment (buckets, sweepers, jack hammers, forks, etc.)

Steering and Suspension

- Axles, tie rods, ball joints, springs, struts, control arms, strut mounts, sway bars, leaf springs, etc.

Tires

- Replace and patch tires, balance and rotate tires.
- Tires on heavy pieces of machinery and contracted out, because we do not have the equipment to perform these repairs or replacements in the field.

Tracks & Cleats

- Replace tracks and cleats, adjust tension on tracks and cleats.

Welding & Fab

- Utilize welding equipment to perform repairs to equipment and fabricate special equipment for vehicles.

Chainsaw

- Perform repairs to chainsaws.

Cooling System

- Radiators, hoses, fans, fan clutches, water pumps, thermostats, etc.

Cranking System

- Batteries, battery cables, ignition, neutral safety switches, relays, starters, etc.

Decals

- Install decals and numbers on County vehicles and equipment.
- The decal process for emergency vehicles (patrol vehicles, constable vehicles, fire marshal vehicles, etc.) is contracted out.

Front End Alignment

- Front end alignments are contracted out, due to the cost of the equipment and the lack of space for the equipment in the shop.

Fuel System

- Carburetors, EGR valves, fuel filter, fuel injectors, fuel lines, fuel pumps, fuel rail, fuel tanks, fuel water separators, intake manifolds, throttle bodies etc.)

Glass

- There are some types of glass that we can replace (mainly the passenger windows).
- Front windshields and rear glass are examples of glass items that are contracted out.

Hitches

- Maintain and repair pull behind hitches, gooseneck hitches, fifth wheel hitches on both trucks and trailers.

Hoses

- Water hoses, air hoses, cooling system hoses, etc.

Lights and Reflectors

- This can be anything from replacing a headlight on a vehicle or a reflector on a trailer. But, often times consists of repairs to emergency vehicle lights.

Lubrication System

- Repair and maintain auto lube systems on heavy equipment, grease heavy equipment, grease suspension components on vehicles, repair and clean grease points.

Misc. Other

- Prisoner cages, prisoner seats, consoles, cargo boxes,

Mud Flaps

- Replace mud flaps/repair debris deterrent devices, such as quarter fenders.

Paint

- Apply touch up paint when needed.

Tank

- Tank maintenance and repairs to large tanks used to haul water, dust control oil, and asphalt emulsion.

Tarp Repair

- Repair/replace tarp components, which are required by law, on trucks that haul trash, debris, and aggregate.

Towing

- Towing services are contracted out.

Wheels & Rims

- Replace wheels that are damaged due to road debris, potholes, curbs, etc. Usually requires additional repairs to suspension components.

Wipers/Washers

- Replace/repair windshield wipers and components. Washer fluid reservoirs, pumps, lines, nozzles.

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Preventative Maintenance

- PMA, PMB, PMC, PMQ, etc.

MVI

- Motor vehicle inspections.

Make Ready

- Check vehicles/equipment in when they are delivered.
- Make vehicle ready for service.
- Install emergency vehicle equipment/lights
- Prepare vehicle/equipment for auction.