



Wake Transit Plan

Equipment Assessment

TASK 4.2 – EQUIPMENT ASSESSMENT

1	PURPOSE	1
2	INTRODUCTION	4.1-1
3	GORALEIGH EQUIPMENT ASSESSMENT	4.1-2
	Overview	4.1-2
	Maintenance Bays.....	4.1-2
	Workshops	4.1-2
	Parts Storage	4.1-3
	Fuel Island.....	4.1-3
	Wash Building.....	4.1-3
	Overall Score	4.1-3
	Table 1.....	4.1-4
4	GORALEIGH/GOWAKE ACCESS EQUIPMENT ASSESSMENT	4.1-7
	Overview.....	4.1-7
	Maintenance Bays.....	4.1-7
	Workshops	4.1-7
	Storage Areas	4.1-8
	Maintenance Support Areas	4.1-8
	Wash Bay	4.1-9
	Overall Score	4.1-9
	Table 2.....	4.1-10
5	GOTRIANGLE EQUIPMENT ASSESSMENT	4.1-13
	Overview.....	4.1-13
	Maintenance Bays.....	4.1-13
	Workshops	4.1-13
	Storage Areas	4.1-14
	Maintenance Support Areas	4.1-15
	Wash Area.....	4.1-15
	Fuel Lane.....	4.1-15
	Overall Score	4.1-15
	Table 3.....	4.1-16
5	GOCARY EQUIPMENT ASSESSMENT	4.1-20
	Overview.....	4.1-20
	Maintenance Bays.....	4.1-20
	Workshops	4.1-20
	Storage.....	4.1-20
	Wash Area.....	4.1-21
	Overall Score	4.1-21
	Table 4.....	4.1-22



Task 4.2 – Equipment Assessment

PURPOSE

This document reviews the condition of the existing equipment utilized by each of the Transit Partners in the Wake County Transit Plan. This assessment identifies the overall condition of the shop, storage and service equipment in the maintenance, storage, and service areas of each facility. Any observed deficiencies specifically related to equipment are documented in this section.

INTRODUCTION

Staff from HDR | Maintenance Design Group conducted tours of the GoRaleigh, GoRaleigh/GoWake Access, GoTriangle, and GoCary maintenance facilities on March 19th and 20th, 2018 to collect data and photo document the condition of all equipment used to support each Transit Partner. The assessment team performed an in-depth condition assessment of equipment, identifying any apparent functional issues or deficiencies.

To facilitate an effective evaluation, each facility was broken down into areas based on use and function: Maintenance Bays, Workshops, Equipment Storage Areas, Parts Storage Areas, and Service Areas. Individual assessment evaluations are made based on the condition of equipment in each area. Based on the observations and assessments, a condition score is determined for each area based on a scale of 1 to 5:

- 1: Equipment is out of operation; Life Expectancy: 0 years
- 2: Equipment is old/out dated with several apparent functional issues; Life Expectancy: 1-3 years
- 3: Equipment works properly with minor issues; Life Expectancy 3-7 years
- 4: Equipment was recently purchased and has been well maintained. Slight cleaning may be required; Life Expectancy 7-15 years
- 5: Equipment was recently installed or purchased; Life Expectancy 15+ years

Using data from the equipment condition and area scores, an overall assessment score was developed to represent a comprehensive overall condition of equipment for each facility. The following documents the findings at each facility. Photos taken during the assessments/evaluations associated with each facility are located in Appendix A: Equipment Assessment Photo Documentation.



GORALEIGH EQUIPMENT ASSESSMENT

Overview

Since the GoRaleigh facility was constructed in 2013, all of the equipment is in good condition as all items were purchased for the new facility. The following assessment documents the findings and overall score of the equipment at the GoRaleigh facility. Table 1.A presents the individual equipment with a description, observation, recommendation, and score. Item numbers have been assigned for each equipment item to be referenced with the photos in Appendix A: Equipment Assessment Photo Documentation.

Maintenance Bays

All equipment used to support the Maintenance Bays is in excellent shape and have been well maintained since the facility opened. The portable lifts and in-ground lifts all function properly with no visible damage or apparent functional issues. The motor operated exhaust reels are used correctly and have no apparent functional issues. All fluid distribution components and compressed air equipment work properly with no functional problems. Since the equipment is a few years old and has been well maintained, the overall score for the Maintenance Bays is 5.

Lower Level Work Area (LLWA)

All equipment in the LLWA is in excellent shape, giving the area an overall equipment condition score of 5. However, the LLWA is seldom used as the technicians prefer to work on the vehicle lifts or on the ground. Filling the LLWA and inserting lifts in the bays has been discussed. If this occurs, all equipment could be sold.

Workshops

Tire Shop

The majority of the equipment in the Tire Shop has been well maintained since the facility opened. All tire equipment functions properly with no apparent functional issues. An adequate amount of tire racks and equipment is supplied in this area. There is no overrun of tire storage. Due to the cosmetic state of certain equipment, the overall equipment condition score drops slightly to a 4.8

Brake Shop

The brake drum lathe is the only equipment item that impacts the score because the system has become obsolete. With the advancement in technology, it has become more efficient for large transit agencies to replace drums instead of machining them. The unit itself is not well maintained and could potentially see some functional issues if not maintained properly. Due to this issue, the overall condition score of Brake Shop equipment is 4.7.



Common Work Area/Portable Equipment Storage (CWA/PES)

All shop equipment in the CWA and portable equipment in the PES is in near excellent condition, with only minor cleaning of equipment needed. Functionally, all of the equipment works properly. The overall equipment condition score for the CWA/PES is 4.7.

Paint & Body Repair Shop

All equipment utilized to support the Paint and Body Repair Shop has been well maintained since the facility opened. The paint booth is in excellent condition, as is the paint mixing room, the suspended crane, and other miscellaneous equipment used to support the Paint and Body Repair Shop. The overall equipment condition score in this area is a 5.

Parts Storage

All storage equipment in the Parts Storage Room and on the Mezzanine is in excellent condition. None of the shelving, racks, cabinets, or other storage items are damaged from being overloaded. The parts lift is in excellent condition and has been well maintained. There is adequate storage equipment supplied in these areas. One change that was made after moving into the building was the purchase of a smaller forklift to maneuver through the Parts Room. The overall equipment condition score in the Parts Storage area is a 5.

Fuel Island

The fuel dispensers, fuel tramway, mobile fare collection vault, and vacuum pedestals are major equipment items that support the Fuel Island. All equipment is in excellent condition, giving the area an equipment condition score of 5. There are currently two fuel lanes, with expansion opportunities for three lanes as the fleet grows.

Wash Building

Two automated drive through washers are provided for daily washing of the fleet. The washers have been well maintained and should have a sustained lifespan if service recommended by the manufacturer continues to be performed. The chassis wash bay needs to have a protective coating applied to the walls to reduce stains, and the platform lift needs to be recoated for traction. Because of these minor needs, the equipment condition score for the Wash Building is a 4.5.

Total Facility Equipment Assessment Score

The overall score applied to the shop, storage, and service equipment at the GoRaleigh facility is a 4.9. The high score can be expected because the equipment is only a few years old and has been well maintained. There is an adequate amount of equipment provided for each function to operate efficiently and effectively. Table 1 presents the score for each area and the total facility equipment assessment score.



Equipment Assessment | Task 4.2
Wake Transit Plan – Wake Transit Bus Plan

Table 1: Equipment Assessment Summary

Area	Score
Maintenance Bays	5
Lower Level Work Area (LLWA)	5
Tire Shop	4.8
Brake Shop	4.7
Common Work Area/Portable Equipment Storage (CWA/PES)	4.7
Paint & Body Repair Shop	5
Parts Storage	5
Fuel Island	5
Wash Building	4.5
TOTAL FACILITY EQUIPMENT ASSESSMENT SCORE	4.9



Table 1.A: Equipment Assessment

Item Number	Element	Description	Observation	Recommendation	Score
Maintenance Bays					5
GR.001	Portable Vehicle Lifts	Rotary 18,000 pound capacity, wireless portable lifts	All portable lifts were installed when the facility was constructed and function properly.	Clean weekly and store the lifts properly when not in use to maintain the integrity of the lifts.	5
GR.002	In-ground Vehicle Lifts	Rotary MOD 30 two-post lift, 60,000 pound capacity	All in-ground lifts were installed when the facility was constructed and function properly.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GR.003	Lubrication Reel Banks	Graco fluid reel banks for distribution of lubricants to the repair bays	No visible damage or leaks from dispensers. Piping was not installed properly around the lighting.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GR.004	Vehicle Exhaust Reels	Motor operated vehicle exhaust reels individually ducted to the exterior	No visible damage to the reel or hose. Exhaust port adapter units were purchased for different port designs.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GR.005	Fluid Evacuation Pumps	Waste Oil and Waste Coolant pumps to send waste fluid to the waste fluid tanks	No visible damage to the pumps, hoses, or fittings.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GR.006	Oil Filter Crusher	Oil filter crusher to compact large oil filters after buses are serviced	No visible damage to the unit.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
Lower Level Work Area (LLWA)					5
GR.007	Mobile Man Lift	Portable scissor lift on a track for accessing the bottom of a bus/vehicle when being serviced	No visible damage or apparent functional issues. Equipment is rarely used.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
Tire Shop					4.8
GR.008	Automated Wheel Polisher	VIS Service Automation Automated Wheel Polisher	No visible damage to the unit.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GR.009	Tire Inflation Cage	Branick 5 loop tire inflation cage	Warning labels are scratched off. No automated tire inflation monitor.	Purchase the tire inflation monitor (new software) for safer inflation.	4
GR.010	Tire Mounter/Demounter	Coats heavy duty tire mounter for large bus tires and rims	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GR.011	Heavy Duty Tire Racks	Martin Industries stackable tire racks with ramps	No visible damage to the units.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GR.012	Heavy Duty Tire Balancer	CEMB heavy duty tire balancer with wheel lift	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5



Brake Shop					4.7
GR.013	Brake Drum/Rotor Lathe	Star drum/rotor lathe set up for dual machining of brake drums and rotors	Unit functions properly but is covered in brake dust. Over time, the excessive dust can damage the unit.	Clean the unit to protect against future damage. Consider removing the machine and switch to replacing drums.	4
GR.014	Diesel Particulate Filter Cleaning System	PGX Diesel Particulate Filter Cleaner	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GR.015	Dust Collection Hood	Dust/chip collection hood to catch debris while machining drums.	No visible damage to the unit or hoses and no apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
Common Work Area/Portable Equipment Storage (CWA/PES)					4.7
GR.016	Buffer/Grinder	Cincinnati buffer/grinder unit with dust collection	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GR.017	Portable MIG Welder	Millermatic 252 MIG welder	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GR.018	Transmission Jack(s)	Large and medium duty jacks for removing transmissions from buses or paratransit vehicles	All jacks work properly with no leaks in the hydraulic cylinders.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GR.019	Engine Hoist	2 Ton engine hoist for removing engines from paratransit vehicles	Older style unit most likely relocated to this facility. Legs are slightly damaged but the unit is intact.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	4
GR.020	Hydraulic Press	100 Ton OTC Hydraulic Press with power unit	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GR.021	Abrasive Blast Cabinet	Abrasive blast cabinet for removing paint and rust from metal parts before being welded or painted	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GR.022	Automated Parts Washer	Front loaded Spray Master parts washer for deep cleaning of parts removed from a vehicle	No functional damage, just slight cosmetic issues such as the paint peeling.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	4
Paint & Body Repair Shop					5
GR.023	Suspended Crane	Gorbel 250 pound capacity suspended crane for removing light roof top components from buses	The structure is intact with no visible damage or apparent functional issues in the hoist.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GR.024	Paint Booth	Cross draft paint booth designed to accommodate articulated buses	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
Parts Storage					5



GR.025	Shelving/Drawer Units	Heavy duty shelving with drawers	All drawers open easily and all shelves are in excellent condition.	Do not overload the shelves or drawers to ensure the life expectancy.	5
GR.026	Flammable Cabinets	Fire rated cabinets for flammable materials	All doors open easily and all shelves are in excellent condition.	Do not overload the shelves to ensure the life expectancy.	5
GR.027	Drawer Units	5-drawer units with a stainless steel top for parts sorting	All drawers are in excellent condition.	Do not overload the shelves or drawers to ensure the life expectancy.	5
GR.028	Parts Lift	P-Flow 2,000 capacity parts lift to move parts and materials to the mezzanine	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GR.029	Heavy Duty Racks	Large racks with metal decking for miscellaneous storage of larger items	All racks are in excellent shape; no warping or bent elements.	Do not overload the shelves to ensure the life expectancy.	5
GR.030	Pallet Racks	Heavy duty pallet racks with wire decking for large or palletized items	All racks are in excellent shape; no warping or bent elements.	Do not overload the shelves to ensure the life expectancy.	5
Fuel Island					5
GR.031	Fare Collection Vault	Island vault with interior mobile bin unit for collecting fares from buses while fueling	No visible damage to the unit.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GR.032	Interior Cleaning Vacuum	Pedestal mounted vacuum hose reels	No visible damage to the pedestal or hoses and no apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
Wash Building					4.5
GR.033	Automated Drive Through Washer	(2) Automated Drive Through Washers designed for large buses	No visible damage to the components and no apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GR.034	Platform Lift	Lift to clean the undercarriage of a bus	Platforms need traction recoated.	Recoat platform lift with traction material.	4
OVERALL SCORE					4.9



GORALEIGH/GOWAKE ACCESS EQUIPMENT ASSESSMENT

Overview

The equipment in the GoRaleigh/GoWake Access facility is split between new equipment and equipment that was installed when the original facility was constructed for the use of GoRaleigh. If a new facility is constructed, a majority of the equipment could potentially be relocated if continued to be maintained properly. Table 2.A presents the individual equipment with a description, observation, recommendation, and score. Item numbers have been assigned for each equipment item to be referenced with the photos in Appendix A: Equipment Assessment Photo Documentation.

Maintenance Bays

Hydraulic in-ground lifts are still installed in the maintenance bays although they have been decommissioned since GoRaleigh moved to their new facility. Other equipment that is no longer used is the lubrication reel banks and the vehicle exhaust reels. Fluids are stored in 55 gallon drums with hands pumps. To maintain the paratransit vehicles, three four-post surface mounted lifts have been installed. Miscellaneous storage equipment, such as bin storage units and flammable cabinets, have been installed recently but are stored in the maintenance area due to the lack of space allotted for parts storage. The overall condition score of equipment in the Maintenance Bays is a 3 due to the existing equipment in the building.

Workshops

Tire Repair Area

All equipment used to mount, balance, and repair tires is new and has been well maintained. Ideally, the equipment would be in a dedicated shop area, however since the facility is limited in space the Tire Repair Area is along the wall in the Maintenance Bay area. Since the equipment is new, the overall equipment condition score is a 5.

Paint Room/Booth

The overall equipment condition score of the paint booth is a 1 because the booth is no longer operational and has become unused space. Converting the area into office space has been discussed as a temporary solution.

Facilities Maintenance/Common Workshop

Similar to the Maintenance Bays, the equipment in the Facilities Maintenance/Common Workshop is divided between new and unused equipment. The area is used more as a common work and portable equipment storage area, which do not require fluid distribution, vehicle exhaust, and in-ground lifts that are in place from the original construction. All portable equipment is either new or has been well maintained since GoRaleigh/GoWake Access overtook



the facility. Due to the nonoperational equipment, the overall condition score of the equipment is a 2.3.

Storage Areas

Parts Storage

The Parts Storage Room is limited in space for storage equipment with most of the area located on the mezzanine. The condition of the shelving and storage racks is poor. The majority of the shelving units are missing shelves or are damaged from being overloaded. Because of the poor condition of storage equipment, the overall equipment condition score is 2.5. The need for storage equipment is not a great necessity at the moment because all parts are ordered as needed from local parts stores.

Tire Storage

Tire Storage is lacking racks specifically designed for tires. There is a total of two storage racks for a storage need of 50 tires. Most of the tires are on the ground, and there is no separation between new and used tire storage. The overall equipment condition score is 2 because the storage systems in place are poor approach for tire storage.

Battery Storage/Charging

The Battery Charging/Storage area does not utilize specialty equipment typically supplied for charging batteries. Instead of using battery benches, batteries are stored on unsecure ply wood that is rested on CMU block. The charger is in good condition, however the charging bar is not securely fastened to the wall. The overall condition of equipment is scored as a 3 for the Battery Storage/Charging room.

Maintenance Support Areas

Compressor Room

There are two compressors in the facility on the mezzanine level. One of the compressors has been decommissioned since it was originally used for the automated washer which is no longer in the facility. The other is a duplex compressor that has been serviced since the reopening of the facility. Overall, the equipment condition score is a 3 based on the usefulness of the compressors.

Fluid Storage

The bulk of fluid storage is in 55 gallon drums with hand pumps, not utilizing a dedicated lubrication storage room. The overall equipment condition score is a 4 because there is minimal equipment to assess. The oil filter crusher and windshield washer fluid dispenser tank are both in adequate shape, and the used fluid pumps and tanks work properly. However, in a new facility none of the fluid would be distributed and handled as it is at the GoRaleigh/GoWake Access facility.



Wash Bay

The original wash bay for GoRaleigh used an automated drive through washer for daily cleaning of the fleet. The washer has been removed and a hot water, high pressure washer with a wand is now used to wash vehicles. The wash unit is in excellent condition, the only flaw is there is no holder provided for the wand. Service staff leave the wand on the ground, leaving it vulnerable to damage. The overall equipment condition score of wash equipment is a 4.

Fuel Lane

No fueling occurs on-site since the GoRaleigh operation moved. Because the tanks and dispensers are still in place but have been decommissioned, the overall score of equipment is a 1.

Total Facility Equipment Assessment

The overall equipment condition score for the GoRaleigh/GoWake Access Facility is a 2.8. Although the majority of equipment that is used is in good condition, the decommissioned equipment that has not been operational since GoRaleigh moved lowers the overall equipment condition score. Table 2 presents the score for each area and the total facility equipment assessment score.

Table 2: Equipment Assessment Summary

Area	Score
Maintenance Bays	3
Tire Repair Area	5
Paint Booth	1
Facilities Maintenance/Common Workshop	2.3
Parts Storage	2.5
Tire Storage	2
Compressor Room	3
Fluid Storage	4
Battery Storage/Charging	3
Wash Bay	4
Fuel Lane	1
TOTAL FACILITY EQUIPMENT ASSESSMENT SCORE	2.8



Table 2.A: Equipment Assessment

Item Number	Element	Description	Observation	Recommendation	Score
Maintenance Bays					3
GW.001	Four Post Lifts	Rotary four-post surface mounted lifts, 18,000 pound capacity	All surface mounted lifts were recently installed in replacement of the in-ground lifts.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GW.002	In-Ground Lifts	Hydraulic powered in-ground lifts	All in-ground lifts have been decommissioned.	Remove and fill voids.	1
GW.003	Lubrication Reel Banks	Fluid reel banks for distribution of lubricants to the repair bays	Reel banks are not used. Technicians only use the air reel. All fluids are stored in 55 gallon drums.	Replace with a fluid distribution system and new reel banks.	1
GW.004	Vehicle Exhaust Reels	Spring operated vehicle exhaust reels	Exhaust reels are from the original building design for fixed route buses. Reels are unused by WCTS.	Remove and replace with new exhaust reels with modern design features.	1
GW.005	Miscellaneous Storage	Small storage units including wire spoil racks, bin storage units, flammable cabinets, hose storage, and a technicians computer station	Equipment is new and in excellent condition.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
Tire Repair Area					5
GW.006	Tire Balancer	Coats tire balancer for standard vehicle tires	Excellent condition; recently purchased. No heavy duty tires are balanced therefore no wheel lift is equipped.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GW.007	Tire Mounter	Coats 60X tire mounter for standard vehicle tires	Excellent condition; recently purchased.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
Paint Room/Booth					1
GW.008	Paint Room	Building room with explosion proof lighting and a specialized exhaust system used as a Paint Booth.	No paint or body repair functions occur on-site. It was discussed to convert the area into office space.	Remove.	1
Facilities Maintenance/Common Workshop					2.3
GW.009	Brake Lathe	Star drum/rotor combination brake lathe.	Lathe is not used by WTCS. Drums are replaced when needed instead of machined.	Remove.	1
GW.010	Lubrication Reel Banks	Fluid reel bank	Reel bank is used on occasion to accommodate overflow service needs on vehicles from the maintenance shop. Small leaks from dispensers and air reel at connector.	Repair/replace as needed; do not relocate.	2



GW.011	In-Ground Lifts	Hydraulic powered in-ground lifts	All in-ground lifts have been decommissioned.	Remove and fill void.	1
GW.012	Portable Equipment	Portable equipment includes: jack stands, floor jacks, engine hoist, transmission jacks, oxyacetylene torch, refrigerant recovery unit, etc.	All portable equipment is either new or in excellent condition.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
Parts Storage					2.5
GW.013	Shelving Units	Standard shelving for miscellaneous small parts	Majority of the shelving is missing shelves or are in poor condition.	Replace damaged shelves; do not relocate.	2
GW.014	Parts Storage Racks	Bulk storage racks with wood decking for large parts	Wood decking is damaged in some areas. Wood decking does not last as long as metal decking and can easily be overloaded.	Replace shelves as needed with metal decking; do not relocate.	3
Tire Storage					2
GW.015	Tire Storage Racks	Light duty rack systems used as tire storage racks	Racks are not specifically designed for tire storage. Not an adequate amount of racking for tires.	Replace with racks designed for light tire storage.	2
Compressor Room					3
GW.016	Air Compressors	Duplex air compressors for building supply.	Compressors are from the original facility, having been serviced for when the building was repurposed.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	3
Fluid Storage					4
GW.017	Oil Filter Crusher	B.J. Enterprises oil filter crusher for compacting used oil filters after vehicles are serviced	In good condition; well maintained.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GW.018	Windshield Washer Fluid Tank	Polyethylene tank for storing windshield washer fluid with a dispenser	In good condition with proper signage. Could be dispensed through a fluid reel bank.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GW.019	Fluid Evacuation pumps	Used fluid pumps for engine oil and coolant	No visible damage or apparent functional issues; older style pumps.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	3
GW.020	Floor drain table	Drain table for floor drains to be emptied into with a pump to the used oil tank	No visible damage; difficult to access,	Perform recommended service as required by the manufacturer to ensure the life expectancy.	4
GW.021	Used Fluid Tanks	Bulk storage tanks for used oil and coolant	Old tanks; not located in a dedicated room.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	3



Battery Storage/Charging					3
GW.022	Battery Tables	Dedicated areas for batteries to be charged	Battery benches are not effective. Constructed of plywood across CMU block.	Replace with benches deigned for battery storage/charging.	2
GW.023	Battery Charger	Battery charger with a bar for charging multiple batteries	Charger is new but not installed properly. The battery bar is not securely fastened to the wall.	Install correctly. Perform recommended service as required by the manufacturer to ensure the life expectancy.	4
Wash Bay					4
GW.024	High Pressure Washer	Landa hot water, high pressure washer for manual washing of vehicles	No visible damage or apparent functional issues to the wash unit. No holder for the wand; hose and wand is on the ground between washes.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	4
Fuel Lane					1
GW.025	Fuel Lane	Old fuel lane from GoRaleigh operations	None of the fuel equipment is used. In-ground tanks have been emptied and decommissioned.	Leave tanks in place to reduce project cost and environmental concerns associated with tank removal.	1
OVERALL SCORE					2.8



GOTRIANGLE EQUIPMENT ASSESSMENT

Overview

A majority of the equipment used to support the GoTriangle facility is in excellent condition. GoTriangle has the ability to replace equipment as needed, increasing the overall conditions score. Table 3.A presents the individual equipment with a description, observation, recommendation, and score. Item numbers have been assigned for each equipment item to be referenced with the photos in Appendix A: Equipment Assessment Photo Documentation.

Maintenance Bays

The condition of the equipment in the Maintenance Bays are in decent shape, though there are deficiencies due to the age of some equipment. Due to the outdated design of the exhaust reels, they are not used by the technicians most of the time. Also, as the fleet has changed, the exhaust ports no longer fit on the buses. The current fall protection system does not give technicians full access to the roofs of buses. A new system should be installed and centrally located over the repair bays. The used oil tank is located in the center of the maintenance shop, whereas it is typically located in the lube room and utilizes a fluid evacuation system. The maintenance bays' in ground lift and reels are new, however the portable lifts can be replaced as needed. New technology allows for portable lifts to be battery powered with no communication cables required. Other than minor cosmetic damage, the portable equipment is in good condition. Overall, the equipment condition score for the Maintenance Bays is 3.4.

Workshops

Van Pool Repair

The equipment in the Van Pool Repair area is in excellent shape, giving the area an overall equipment condition score of 5. All equipment was installed recently and functions properly. The only recommendation for this workshop is to keep up service required by the manufacturer to sustain the lifespan of the equipment.

Common Work Area

The equipment located within the Common Work Area is in near excellent shape, with an equipment condition score of 4.5. Other than minor cleaning of some equipment, the only maintenance needed is standard service recommended by the manufacturer to sustain the lifespan of the equipment.

Tire Repair Area

All equipment in the Tire Repair Area is in excellent shape, giving the area an overall equipment score of 5. The equipment within this area has been installed recently and functions properly. The only recommendation for the equipment within this area is to perform regularly scheduled service required by the manufacturer to withhold the integrity of the equipment.



Vault Room

The equipment located within the Vault Room is in excellent condition, giving the area an overall equipment score of 5. Both the portable audit vault and stationary vault function properly with no visible damage. The recommendation for this area is to perform regularly scheduled service required by the manufacturer to sustain the lifespan of the equipment.

Engine Steam Area

Due to the insufficient amount of space provided for engine cleaning, two portable lifts are used to access the undercarriage, limiting the cleaning efficiency. By using a platform lift, the entire undercarriage could be accessed at one time, increasing efficiency. It is also recommended that the portable pressure washer be replaced with a stationary unit and plumbed to a reel and wand in the steam cleaning area. The benefit of plumbing a reel and wand from a stationary unit in a separate room to the wash bay is to keep the equipment out of a wet area and away from debris. Overall, the Engine Steam Area was given an equipment condition score of 3.

Storage Areas

Portable Equipment Storage

Other than minor cosmetic damage to the elevating work platform, the equipment stored in the Portable Equipment Storage area is in excellent shape. No equipment is in need of replacement. It is recommended that routine maintenance is performed to sustain the lifespan of the equipment. The overall equipment condition score of the Portable Equipment Storage is 4.5.

Battery Storage/Charging

The overall score for the condition of equipment in the Battery Storage and Charging area is 3. The score is directly related to the lack of space provided in the facility. Typically, batteries are stored and charged in a secure room with specialty battery benches and charging equipment. Currently, the batteries are charged and stored in an explosive resistant casing on a small workbench. It would be ideal to provide a secure room and equipment dedicated for charging and storing batteries.

Tire Storage

Although the equipment within the Tire Storage area is in good condition, there is an inadequate amount of storage racks for the volume of tires that need to be stored to support the GoTriangle fleet. A possible storage solution would be utilizing more stackable tire racks. The use of stackable tire racks would be more efficient and would open up a considerable amount of space in the facility. The overall equipment condition score of the Tire Storage area is 3.

Parts Storage

Overall, the equipment in the Parts Storage area is in good condition but is lacking storage space. The majority of the storage units is for small parts and materials. There is minimal space provided for pallet racks to store large items. The lateral glass storage rack does not fully protect



the windshields and should be replaced with a protective glass storage rack to prevent damage. The equipment condition score for the Parts Storage area is 4.

Storage Room

The equipment within the Storage Room is in excellent shape, giving the area an equipment condition score of 5. The tire storage racks, compressed air equipment, automatic wheel polisher, and diesel particulate filter cleaner within the storage room is new and show no signs of malfunction. The recommendation for this workshop is to perform regularly scheduled service required by the manufacturer to sustain the lifespan of the equipment.

Maintenance Support Areas

Lube/Compressor Room

The equipment condition score of the Lube and Compressor is 4.5, partly due to the outdated single-lined bulk storage tanks. The new industry standard is to utilize double-wall tanks that eliminate the need for a containment curb. Overall, the equipment is rated highly and only requires maintenance as needed.

Wash Bay

The equipment located within the Wash bay is now in excellent condition, due to the replacement of the automated drive through washer with a new automated Gantry bus washer. A new DEF distribution system and storage tank was also recently installed. Due to these upgrades, the overall equipment score for the Wash Bay is 5. The recommendation for this area is to perform regularly scheduled service required by the manufacturer to sustain the lifespan of the equipment.

Fuel Lane

The dispensers and fuel tanks are the two major equipment items that support the Fuel Lane. These items are in good condition, however the dispensers are an older design. Because of this, the equipment condition score of the Fuel Lane is a 4.5.

Total Facility Equipment Assessment

The overall equipment condition score for the GoTriangle Facility is a 4.2. The high score is driven by the amount of new and well maintained equipment. Overall, there is an adequate amount of equipment that satisfies the needs of the facility, other than a few mentioned deficiencies. Table 3 presents the score for each area and the total facility equipment assessment score.



Table 3: Equipment Assessment Summary

Area	Score
Maintenance Bays	3.4
Paratransit Repair	5
Common Work Area	4.5
Tire Repair Area	5
Portable Equipment Storage	4.5
Battery Storage/Charging	3
Tire Storage	3
Lube/Compressor Room	4.5
Parts Storage	4
Storage Room	5
Vault Room	5
Wash Bay	5
Engine Steam Area	3
Fuel Lane	4.5
TOTAL FACILITY EQUIPMENT ASSESSMENT SCORE	4.2



Table 3.A: Equipment Assessment

Item Number	Element	Description	Observation	Recommendation	Score
Maintenance Bays					3.4
GT.001	Portable Vehicle Lifts	Stertil Koni 18,000 pound capacity mobile column lifts	No visible damage or apparent functional issues. Columns are corded, not battery powered or wireless.	New technology has provided fully wireless lifts. Replace as needed with new wireless lifts.	3
GT.002	In-Ground Scissor Vehicle Lift	Stertil Koni ECO 90 in-ground scissor lifts	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GT.003	Lubrication Reel Banks	Fluid reel banks for distribution of lubricants to the repair bays	No visible damage or leaks from dispensers.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GT.004	Exhaust Reels	Centrally ventilated spring operated exhaust reels	Exhaust reels are rarely used by technicians due to the old design and port connection.	Replace with new reels. Vehicle exhaust ventilation is required while buses are running in the building.	2
GT.005	Fall protection	Safety harness carabineer for roof top maintenance	Fall protection is installed on a building support beam, not parallel with the bay for full roof access.	Install adequate fall protection systems.	2
GT.006	Used Fluid Tank	Bulk fluid storage tank for used oil	Oil is drained directly into tank – no fluid evacuation. The setup works for WCTS but is not a recommended solution for used fluid.	Move to lube storage room and install fluid evacuation system.	3
GT.007	Portable Equipment	Equipment includes: floor jacks, jack stands, transmission jack, etc.	All portable equipment functions properly with minor cosmetic damage expected over time.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	4
Van Pool Repair					5
GT.008	Four Post Vehicle Lift	Rotary 18,000 pound capacity surface mounted four post lift	Lift was installed recently. No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GT.009	Two Post Surface Mounted Vehicle Lift	Rotary 18,000 pound capacity surface mounted two post lift	Lift was installed recently. No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GT.010	Battery Powered Portable Vehicle Lifts	Rotary 13,000 pound capacity battery powered, wireless lifts	Lift were purchased recently. No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GT.011	Brake Lathe	Hunter precision brake lathe for machining rotors	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5



GT.012	Jack stands	Light and heavy duty jack stands	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
Common Work Area					4.5
GT.013	Hydraulic Press	5 ton air powered hydraulic press	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GT.014	Horizontal Band Saw	Jet horizontal band saw for precise metal cutting	No visible damage or apparent functional issues. Unit needs to be cleaned.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	4
Tire Repair Area					5
GT.015	Tire Inflation Cage	Branick tire inflation cage with digital air monitor	New equipment. No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GT.016	Tire Balancer	Coats heavy duty tire balancer with a wheel lift	New equipment. No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GT.017	Tire Mounter	Coats light duty tire mounter	New equipment. No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GT.018	Heavy Duty Tire Mounter	Coats heavy duty tire mounter	New equipment. No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
Portable Equipment Storage					4.5
GT.019	Portable Frame Lift	OTC 10 ton frame activating air lift	New equipment. No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GT.020	Elevating Work Platform	Cotterman single person man lift for facilities maintenance	No apparent functional issues with minor cosmetic damage expected over time.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	4
Battery Storage/Charging					3
GT.021	Battery Charging Booth	Explosive resistant booth and table for charging batteries.	Temporary solution for charging batteries due to the lack of space in the facility.	Batteries are typically charged in a secure room using specialty battery benches.	3
Tire Storage					3
GT.022	Tire Rack with Hoist	Heavy duty rack with a dedicated hoist for stacking mounted tires	No apparent functional issues with minor cosmetic damage expected over time. Not sufficient storage.	Better solutions are available, such as stackable tire racks.	3



Lube/Compressor Room					4.5
GT.023	Bulk Storage Tank	Bulk storage tanks for motor oil and automatic transmission fluid	Tanks are not double wall, but are recessed into the slab serving as a containment curb.	Modern designs utilize double wall tanks to eliminate the containment curb.	4
GT.024	Windshield Washer Fluid Tank	Fill station for gallons of windshield washer fluid	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
Parts Storage					4
GT.025	Drawer Units	7-drawer units for storage of small parts	All drawers function properly with no damage.	Do not overload the shelves or drawers to ensure the life expectancy.	5
GT.026	Pallet Racks	Heavy duty pallet racks with wire decking	Insufficient amount of pallet storage. No room for growth of the parts room.	Do not overload the shelves or drawers to ensure the life expectancy. Add racks as possible.	4
GT.027	Glass Storage	Lateral stack system for windshield storage	Glass is not fully protected from damage.	Replace with a protective glass storage rack.	3
Storage Room					5
GT.029	Tire Storage Racks	Stackable tire racks for large tires	No visible damage or apparent functional issues. Need more racks for tires stored on ground.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GT.030	Compressed Air Equipment	Compressed air equipment containing two compressors, one receiver, and a single dryer	All compressed air equipment is new with no visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GT.031	Automatic Wheel Polisher	Aluminum wheel polishing machine	New equipment with no visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GT.032	Diesel Particulate Filter Cleaner	PGX Diesel Particulate Filter Cleaner	New equipment with no visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
Vault Room					5
GT.033	Portable Audit Fare Vault	Portable fare collection box	Unit is used as a spare for if there is an issue with the stationary vault	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GT.034	Stationary Fare Vault	Through-wall fare collection vault	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5



Wash Bay					5
GT.035	Gantry Bus Washer	NS Nautica 4M automated gantry washer	Washer was recently installed to replace the old driver through system.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GT.036	DEF Distribution System	DEF dispensing system with storage tank	Tank and system was recently installed.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
Engine Steam Area					3
GT.037	Portable Lifts	Stertil Koni 13,000 pound capacity portable lifts	Older lifts that are still corded. Lifts are not cleaned after used.	Replace with a platform lift for more efficient cleaning.	3
GT.038	Portable Pressure Washer	Landa hot water, high pressure, portable pressure washer with wand and reel	Pressure washer is covered in grease because it is not in a separate area and plumbed to a reel in the bay.	Move to a separate area or replace with a stationary unit and plumb to the steam cleaning area	3
Fuel Lane					4.5
GT.039	Fuel Tanks	10,000 gallon above ground fuel storage tanks with dispensers at fuel island.	Tanks are in good condition and meet regulations.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	5
GT.040	Fuel Dispensers	Unleaded and Diesel dispensers at the fuel island	Dispensers are an older design but still function properly.	Perform recommended service as required by the manufacturer to ensure the life expectancy.	4
OVERALL SCORE					4.2



GOCARY EQUIPMENT ASSESSMENT

Overview

The majority of the equipment in the GoCary Facility is in need of replacement or removal. When a new facility is constructed, only a small portion of the equipment used by GoCary is worth relocating. Table 4.A presents the individual equipment with a description, observation, recommendation, and score. Item numbers have been assigned for each item to be referenced with the photos in Appendix A: Equipment Assessment Photo Documentation.

Maintenance Bays

Because GoCary operates in a facility originally constructed for heavy equipment, certain equipment in place is unused and will not be required for the new facility. The equipment items that are not needed and have been decommissioned are the Jib Crane and the Bridge Crane. Although the surface mounted lifts are in good condition, they are inefficient for performing maintenance on some cutaways. This is mostly noticeable when a vehicle has a deflated air bag. GoCary has purchased new portable lifts to assist in maintaining the fleet. The floor drain table should be replaced with a manufactured table specifically designed for emptying floor drains if service is still performed on the ground at the new facility. The overall equipment condition score of the Maintenance Bays is 2.8.

Workshops

Tire Repair Area

The heavy duty tire mounter is the only piece of equipment in the Tire Repair area that is not in need of replacing. Due to the limited weight and adapter storage, the tire balancer needs replacing. The tire inflation cage needs to be replaced with a larger 5 bar cage to protect the technicians when inflating large tires. The tire storage rack can to be relocated with and additional racks are needed for light and heavy duty lines. Overall, the Tire Repair area received an equipment condition score of 3.5.

Storage

Portable Equipment Storage

The equipment within Portable Equipment Storage received an overall equipment condition score of 3. The two pieces of equipment that could be replaced are the engine hoist and the MIG welder. The MIG welder is outdated and the manufacturer no longer exists. Upgrading to a new MIG welder that uses gas would increase efficiency. The engine hoist should be replaced with a new hoist with the capability of being folded up when not in use. This decreases the amount of storage space needed for portable equipment.



Lube/Compressor Storage

The used fluid tank currently being utilized in the GoCary facility is old. It is suggested that a new, double-wall tank be provided in a dedicated lube room and a new fluid evacuation system be installed. Oil is currently stored in the repurposed fuel storage tanks. The air compressor can be relocated if it has adequate power and capacity to support the new facility. Overall, the equipment condition score for the Lube and Compressor Storage area is 2.7.

Parts Storage

The overall equipment in the Parts Storage area received an equipment condition score of 3.7. It is recommended that all of the current storage systems be replaced with new equipment. New shelving units, bulk storage racks, cabinets, and pallet racks would significantly increase the storage capacity for GoCary.

Wash Area

Overall, the Wash Area equipment condition score is 2, simply because it still functions. The existing wash system including the water softener, high pressure washer, and detergent tank will not be relocated. The equipment currently located at the facility is in poor condition and is outdated. An automated drive through washer would be provided for a new facility.

Total Facility Equipment Assessment

The overall equipment condition score for the GoCary Facility is a 3. The lower score is due to the poor condition of the equipment and equipment that has been decommissioned. There are select equipment items that could potentially be relocated, however, most of the equipment will need to be replaced. Table 4 presents the score for each area and the total facility equipment assessment score.

Table 4: Equipment Assessment Summary

Area	Score
Maintenance Bays	2.8
Tire Repair Area	3.5
Portable Equipment Storage	3
Lube/Compressor Storage	2.7
Parts Storage	3.7
Wash Area	2
TOTAL FACILITY EQUIPMENT ASSESSMENT SCORE	3



Table 4.A: Equipment Assessment

Item Number	Element	Description	Observation	Recommendation	Score
Maintenance Bays					2.8
GC.001	Surface Mounted Four Post Lift	Rotary 18,000 pound capacity four post, surface mounted lift	No visible damage or apparent functional issues. Traction coating is wearing off as expected over time.	Clean and recoat traction on the platform. Cutaways don't clear, so it could be replaced with a flush mount lift.	4
GC.002	Portable Lifts	Stertil Koni 18,500 pound capacity battery powered, wireless lifts	Lifts were purchased recently. No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy. Relocate.	5
GC.003	Lubrication Reels	Fluid reels for distributing oil to the maintenance areas	Installed upside down. Hoses should be free hanging not bent as installed.	Install properly. Equipment can be relocated or replaced.	4
GC.004	Floor Drain Table	Drain table for emptying floor drains	Table was fabricated as a solution for emptying floor drains. Debris can get mixed in with the used fluids.	Replace with a designed and manufactured table for emptying floor drains or eliminate the need for floor drains by providing lifts and portable used fluid drains.	2
GC.005	Jib Crane	Abell Howe 3 Ton foundation mounted jib crane	Crane is unused and has been decommissioned.	No requirement for a jib crane.	1
GC.006	Bridge Crane	7 ½ ton top running bridge crane	Crane is unused and has been decommissioned.	No requirement for a bridge crane.	1
Tire Repair Area					3.5
GC.007	Heavy Duty Tire Mounter	Heavy duty tire mounter for mounting large bus tires	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy. Relocate.	5
GC.008	Heavy Duty Tire Balancer	Mac Tools wheel balancer with a wheel lift	No visible damage or apparent functional issues. Limited weight and adapter storage.	Replace with a new heavy duty tire balancer when a new facility is constructed.	3
GC.009	Tire Inflation Cage	3-bar tire inflation cage	No visible damage. 5 bars are required for large tires so they are fully protected. No automated air inflation.	Replace with a 5 bar inflation cage with automated air inflation.	3
GC.010	Tire Storage Rack	Standard tire rack	Insufficient tire storage. No large tire storage racks.	Rack can be relocated. Additional racks needed for large tires.	3
Portable Equipment Storage					3
GC.011	Engine Hoist	2 Ton engine hoist	No visible damage or apparent functional issues other than cosmetic damage expected overtime. New engine hoist have the ability to fold up, requiring less storage space.	Replace with a new engine hoist when a new facility is constructed.	3


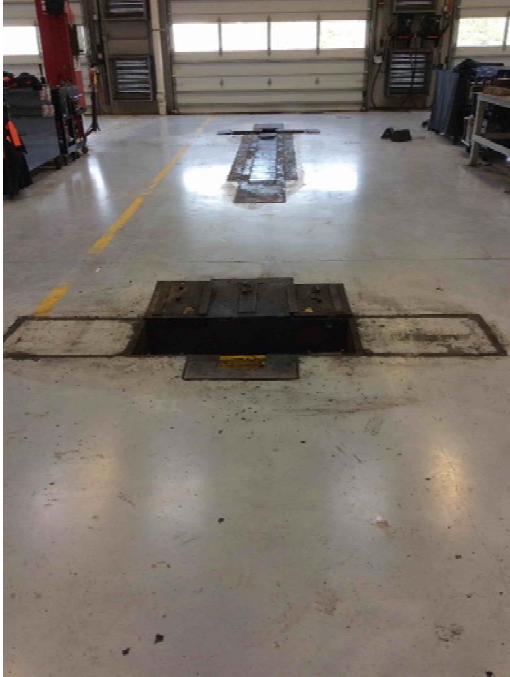

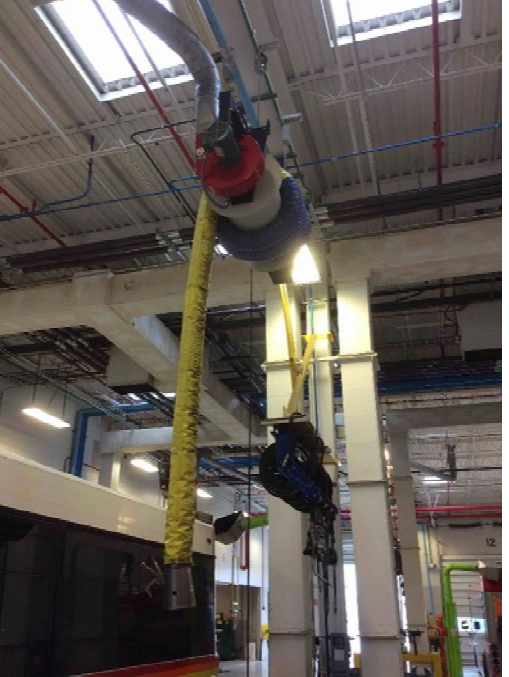






GC.012	MIG Welder	Marquette MIG portable MIG welder	Old MIG welding equipment. Manufacturer is not in business anymore.	Replace with a new portable MIG welder with gas for more welding opportunities.	2
GC.013	Jack Stands	Heavy duty portable jack stands	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy. Relocate.	4
Lube/Compressor Storage					2.7
GC.014	Used Fluid Tanks	1,000 gallon bulk storage tanks for used oils	Old tanks located outside with no cover.	Replace with new double wall tanks located in a dedicated room in the new facility.	2
GC.015	Bulk Fluid Storage Tanks	Vertical bulk fluid tanks	Old fuel tanks repurposed for oil.	Replace with new double wall tanks located in a dedicated room in the new facility.	2
GC.016	Air Compressor	Ingersoll Rand 10 HP compressor with 120 gallon vertical receiver	No visible damage or apparent functional issues. Located outside under a small covered area.	Unit can be relocated if sufficient capacity for the new facility.	4
Parts Storage					3.7
GC.017	Bulk Shelving Units	Light duty bulk storage racks with wood decking	Wood decking will not last a long period of time. Metal decking is preferred for parts storage.	Replace with new storage systems including small shelving, standard racks, and pallet racking.	3
GC.018	Hydraulic Press	20 ton hydraulic press	No visible damage or apparent functional issues.	Perform recommended service as required by the manufacturer to ensure the life expectancy. Relocate.	5
GC.019	Storage Cabinets	Standard shop storage cabinets	Doors are damaged and locks malfunction.	Replace with new cabinets.	3
Wash Area					2
GC.020	Water Softener	Water softener to support the high pressure washer	Old system. Tanks, pipes, and fittings are worn.	Replace with automated washer. New system will include new wash equipment.	2
GC.021	High Pressure Washer	Landa high pressure wash system	Old system. Visible damage and occasional malfunctions.	Replace with automated washer. New system will include new wash equipment.	2
GC.022	Detergent Tanks	Polyethylene tanks for detergent/soap storage	One tank has been replaced recently.	Replace with automated washer. New system will include new wash equipment.	2
OVERALL SCORE					3



Wake Transit Plan




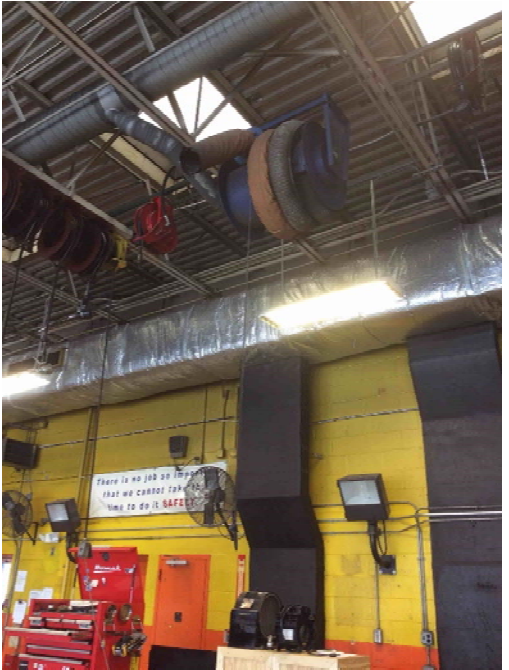

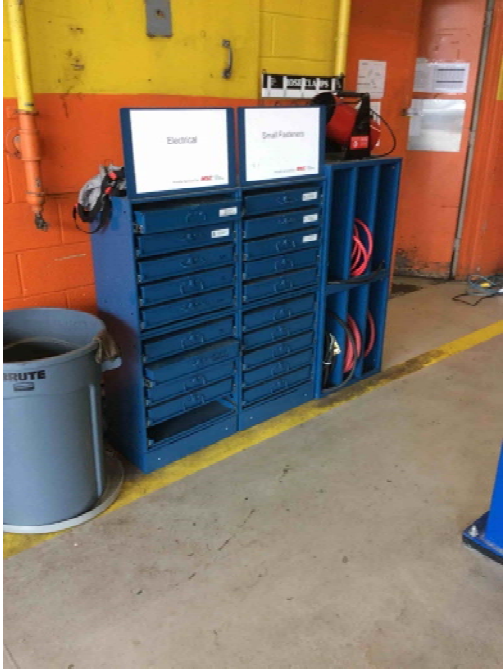


Appendix 4.2A: Equipment
Assessment Photo Documentation

			
<p>GR.001 – Portable Lifts</p>	<p>GR.002 – In-Ground Lifts</p>	<p>GR.003 – Lubrication Reel Banks</p>	<p>GR.004 Vehicle Exhaust Reels</p>
			
<p>GR.005 – Fluid Evacuation Pumps</p>	<p>GR.006 – Oil Filter Crusher</p>	<p>GR.007 – Scissor Lift</p>	<p>GR.008 – Automated Wheel Polisher</p>

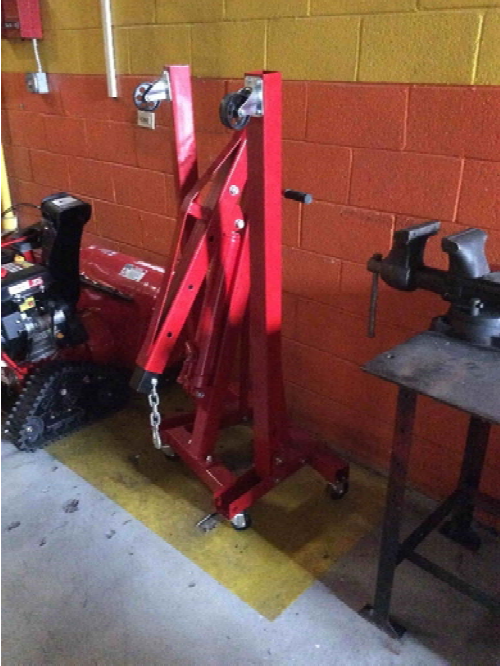







			
<p>GR.009 – Inflation Cage</p>	<p>GR.010 – Tire Mounter</p>	<p>GR.011 – Heavy Duty Tire Racks</p>	<p>GR.012 – Heavy Duty Tire Balancer</p>
			
<p>GR.013 – Drum Refinishing Machine</p>	<p>GR.014 – Diesel Particulate Filter Cleaning System</p>	<p>GR.015 – Dust Collection Hood</p>	<p>GR.016 – Buffer/Grinder</p>



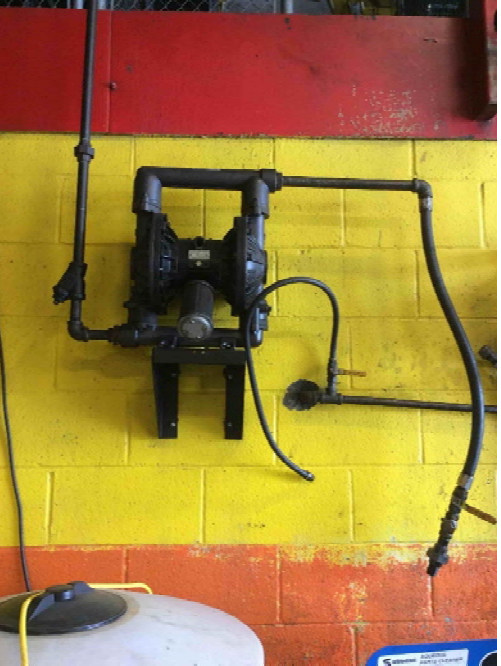



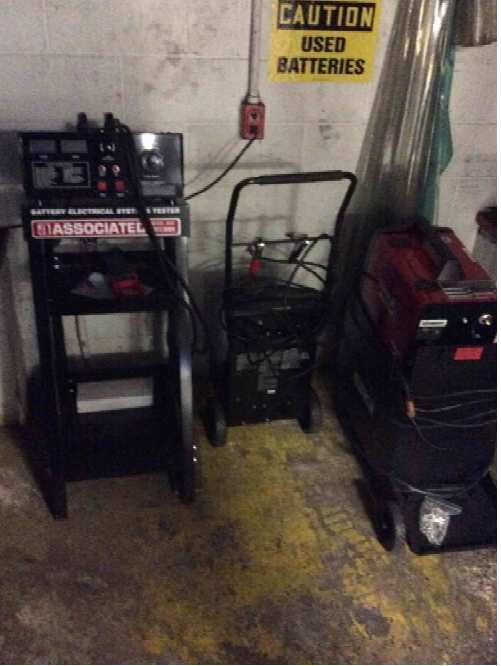

			
<p>GR.017 – MIG Welder</p>	<p>GR.018 – Transmission Jack</p>	<p>GR.019 – Engine Hoist</p>	<p>GR.020 – Hydraulic Press</p>
			
<p>GR.021 – Abrasive Cabinet</p>	<p>GR.022 – Automated Parts Washer</p>	<p>GR.023 – Suspended Crane</p>	<p>GR.024 – Paint Booth</p>



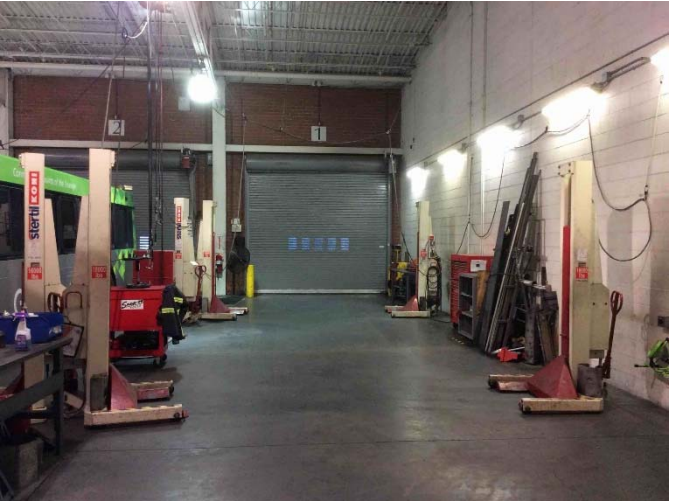
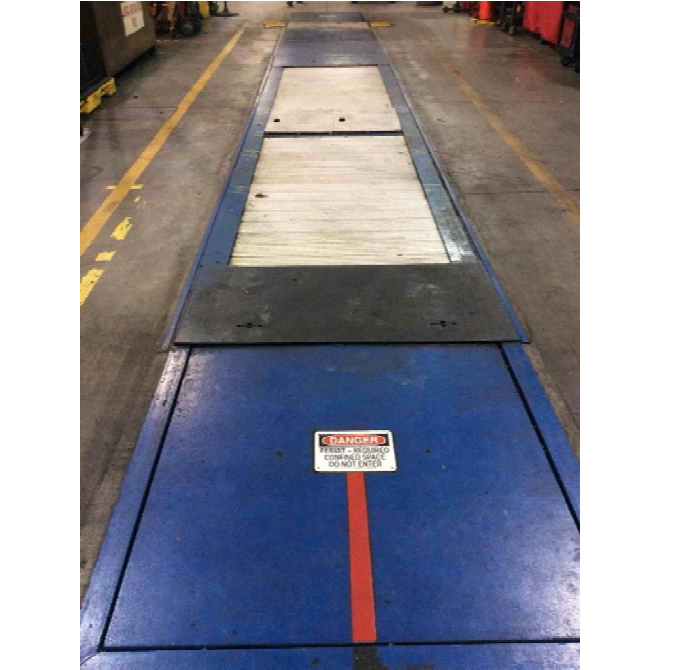
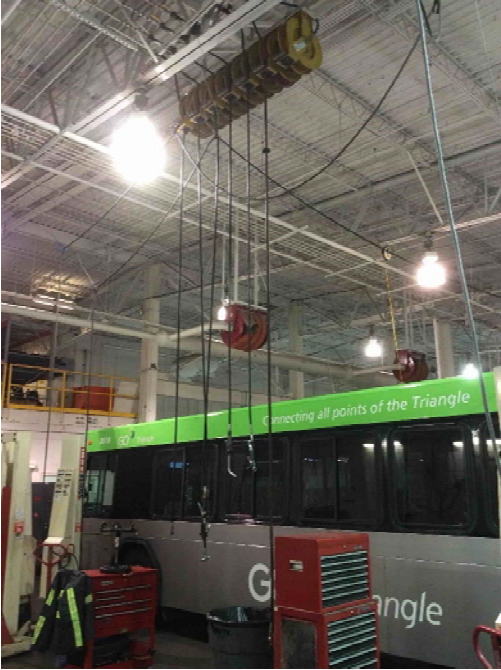



			
<p>GR.025 – Flammable Cabinets</p>	<p>GR.027 – Drawer Units</p>	<p>GR.028 – Parts Lift</p>	<p>GR.029 – Heavy Duty Racks</p>
			
<p>GR.030 – Pallet Racks</p>	<p>GR.031 – Collection Vault</p>	<p>GR.032 – Vacuum</p>	<p>GR.033 – Automated Drive Through Washer</p>

			
<p>GR.034 – Platform Lift</p>	<p>GW.001 – Four Post Lifts</p>	<p>GW.002 – In-Ground Lifts</p>	<p>GW.003 – Lubrication Reel Banks</p>
			
<p>GW.004 – Vehicle Exhaust Reels</p>	<p>GW.005 – Hose Storage</p>	<p>GW.005 – Bin Storage Unit</p>	<p>GW.005 – Technician Computer Station</p>

<p>GW.006 – Tire Balancer</p>	<p>GW.007 – Tire Mounter</p>	<p>GW.008 – Paint Booth</p>	<p>GW.009 – Brake Lathe</p>
<p>GW.010 – Lubrication Reel Banks</p>	<p>GW.011 – In-Ground Lifts</p>	<p>GW.012 – Oxyacetylene Torch</p>	<p>GW.012 – Refrigerant Recovery</p>

			
<p>GW.012 – Engine Hoist</p>	<p>GW.012 – Heavy Duty Jack Stands</p>	<p>GW.012 – Jack Stands</p>	<p>GW.012 – Floor Jacks</p>
			
<p>GW.013 – Shelving Units</p>	<p>GW.014 – Parts Storage Racks</p>	<p>GW.015 – Tire Storage Racks</p>	<p>GW.016 – Air Compressors</p>

			
<p>GW.017 – Oil Filter Crusher</p>	<p>GW.018 – Windshield Washer Fluid Tank</p>	<p>GW.019 – Fluid Evacuation Pumps</p>	<p>GW.020 – Floor Drain Table</p>
			
<p>GW.021 – Used Fluid Tanks</p>	<p>GW.022 – Battery Tables</p>	<p>GW.023 – Battery Charger</p>	<p>GW.024 – High Pressure Washer</p>

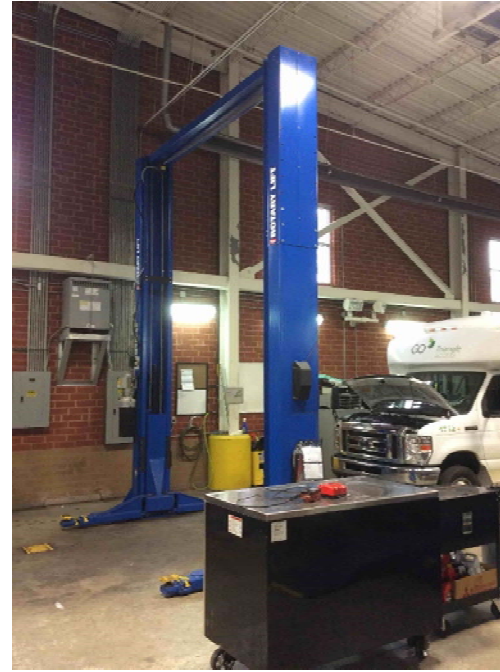
			
<p>GW.024 – High Pressure Washer</p>	<p>GW.025 – Fuel Lane</p>	<p>GT.001 – Portable Lifts</p>	<p>GT.002 – In-Ground Scissor Lift</p>
			
<p>GT.003 – Lubrication Reel Banks</p>	<p>GT.004 – Exhaust Reels</p>	<p>GT.005 – Fall Protection</p>	<p>GT.006 – Used Fluid Tank</p>



GT.007 – Portable Equipment



GT.008 – Four Post Lift



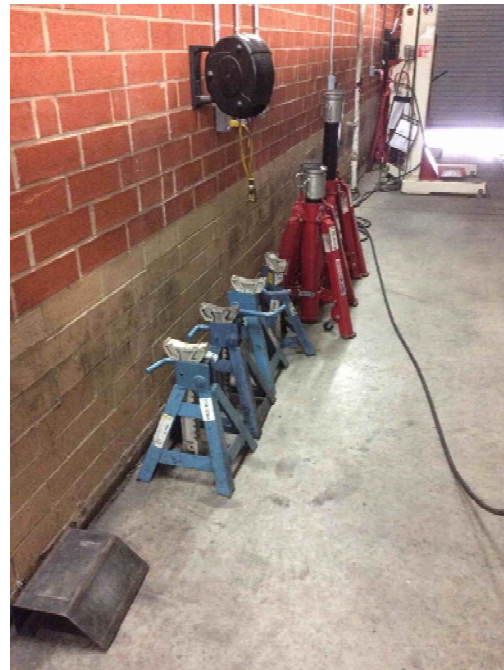
GT.009 – Two Post Surface Mounted Lift



GT.010 – Battery Powered Portable Lifts



GT.011 – Brake Lathe



GT.012 – Jack Stands



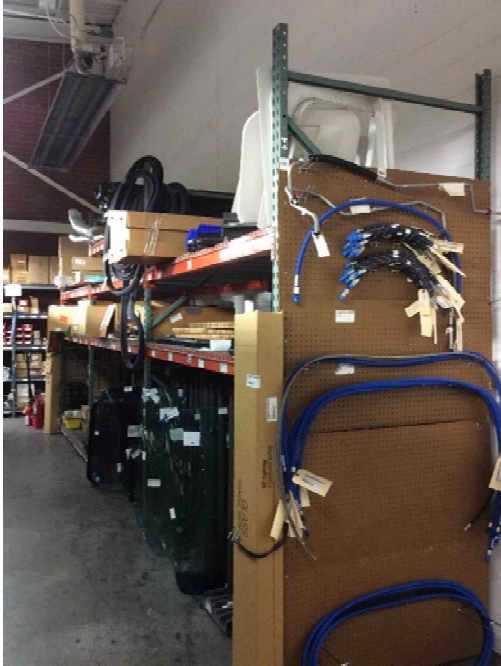







GT.013 – Hydraulic Press



GT.014 – Horizontal Band Saw

<p>GT.015 – Tire Inflation Cage</p>	<p>GT.016 – Tire Balancer</p>	<p>GT.017 – Tire Mounter</p>	<p>GT.018 – Heavy Duty Tire Mounter</p>
<p>GT.019 – Portable Frame Lift</p>	<p>GT.020 – Elevating Work Platform</p>	<p>GT.021 – Battery Charging Booth</p>	<p>GT.022 – Tire Rack with Hoist</p>

			
<p>GT.024 – Windshield Washer Fluid Tank</p>	<p>GT.025 – Drawer Units</p>	<p>GT.026 – Pallet Racks</p>	<p>GT.027 – Glass Storage</p>
			
<p>GT.028 – Storage Racks</p>	<p>GT.029 – Tire Storage Racks</p>	<p>GT.030 – Compressed Air Equipment</p>	<p>GT.031 – Automatic Wheel Polisher</p>



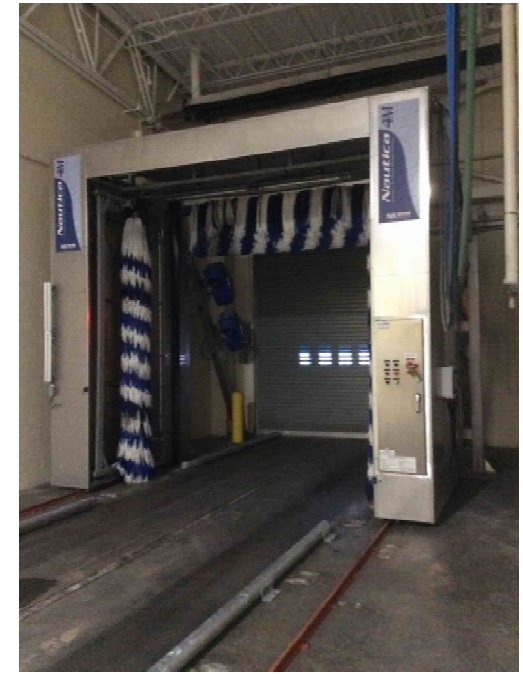
GT.032 – Diesel Particulate Filter Cleaner



GT.033 – Portable Audit Vault



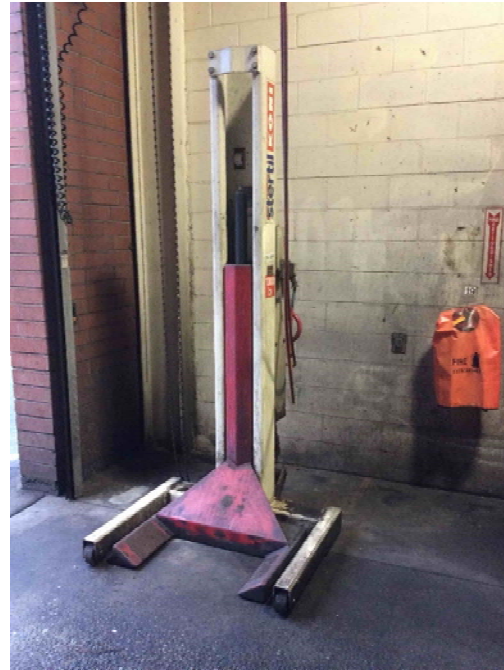
GT.034 – Stationary Vault



GT.035 – Gantry Bus Washer



GT.036 – DEF Distribution System







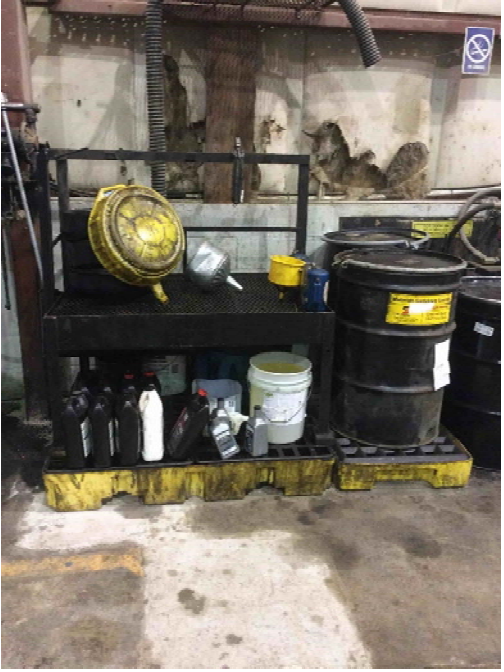

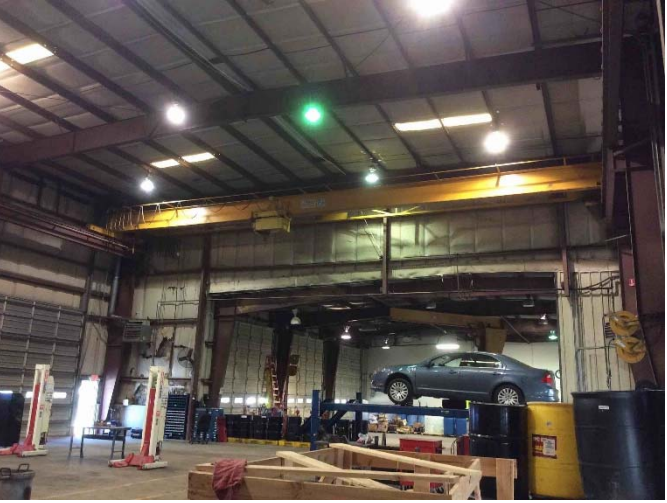
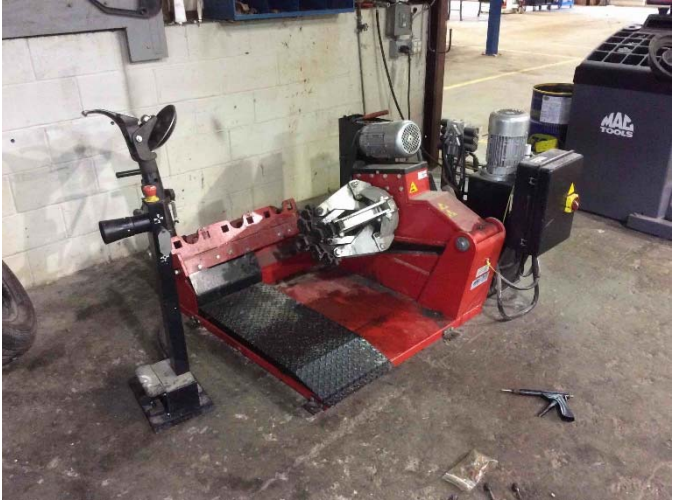
GT.037 Portable Lifts











GT.038 Portable Pressure Washer



GT.039 – Fuel Tanks

			
<p>GT.040 – Fuel Dispensers</p>	<p>GC.001 – Surface Mounted Four Post Lift</p>	<p>GC.002 – Portable Lifts</p>	<p>GC.003 – Lubrication Reels</p>
			
<p>GC.004 – Floor Drain Table</p>	<p>GC.005 – Jib Crane</p>	<p>GC.006 – Bridge Crane</p>	<p>GC.007 – Heavy Duty Tire Mounter</p>

			
<p>GC.008 – Heavy Duty Tire Balancer</p>	<p>GC.009 – Tire Inflation Cage</p>	<p>GC.010 – Tire Storage Rack</p>	<p>GC.011 – Engine Hoist</p>
			
<p>GC.012 – MIG Welder</p>	<p>GC.013 – Jack Stands</p>	<p>GC.014 – Used Fluid Tank</p>	<p>GC.015 – Bulk Fluid Storage Tanks</p>

			
<p>GC.016 – Air Compressor</p>	<p>GC.017 – Bulk Shelving Units</p>	<p>GC.018 – Hydraulic Press</p>	<p>GC.019 – Storage Cabinets</p>
			
<p>GC.020 – Water Softener</p>	<p>GC.021 – High Pressure Washer</p>	<p>GC.022 – Detergent Tanks</p>	