PERIODIC MAINTENANCE

H40.00-52.00XM-16CH [F117];

HYSTER

PART NO. 1616443

8000 SRM 1237

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(More Content includes: Brake system, Capacities, and specifications, Frame, Hydraulic, System, Industrial battery, Main control, Valve, Mast repair, Fasteners, Schematics diagrams, Steering axle, Steering system, Wire harness repair And more)

General

This section contains a Maintenance Schedule and the instructions for maintenance and inspection.

The Maintenance Schedule has time intervals for inspection, lubrication, and maintenance for your lift truck.

The recommendation for the time intervals are for 8 hours of operation per day. The time intervals must be decreased from the recommendations in the Maintenance Schedule for the following conditions:
- If the lift truck is used more than 8 hours per day.
- If the lift truck must work in dirty operating conditions.

Your dealer for Hyster lift trucks has the equipment and trained personnel to do a complete program of inspection, lubrication, and maintenance. A regular program of inspection, lubrication, and maintenance will help your lift truck give more efficient performance and operate for a longer period of time.

WARNING

Do not make repairs or adjustments unless you have both authorization and training. Repairs and adjustments made on a lift truck by people without authorization and training can make a dangerous operating condition.

Do not operate a lift truck that needs repairs. Report the need for repairs immediately. If repair is necessary, put a DO NOT OPERATE tag in the operators area. Remove the key from the key switch.

Some users have service personnel and equipment to do the inspection, lubrication and maintenance shown in the Maintenance Schedule. Service Manuals are available from your dealer for Hyster lift trucks to help users who do their own maintenance.

SERIAL NUMBER DATA

The serial number for the lift truck is on the nameplate and also on the right hand frame rail, near the counterweight. The serial number indicates the design series, manufacturing plant, and the year manufactured.

Example:	F117	E	4369	A
	(1)	(2)	(3)	(4)

(1) The first letter and number of the serial number indicates the design series and the model number of the lift truck.

(2) The second letter identifies the manufacturing plant.

Examples:

D = Danville, IL U.S.A.

E = Nijmegen, The Netherlands

(3) The number series indicates the sequence of manufacture where the lift truck was made.

(4) The letter indicates the year of manufacture starting with A=2003. The letter B=2004 and so on.

HOW TO MOVE DISABLED LIFT TRUCK

The service brake system requires hydraulic pressure to operate. The park brake will automatically apply when hydraulic pressure drops. If there is no hydraulic pressure to release the parking brake, the parking brake caliper must be manually released. Put blocks on both sides (front and back) of the drive tires to prevent movement of the lift truck. The parking brake caliper is installed at the back of the differential housing. To manually release the parking brake, remove cotter pin from bolt in caliper. Tighten nut to compress spring that applies brake.

NOTE: If there is no hydraulic pressure to release the parking brake, the parking brake caliper must be manually released. Put blocks on both sides, front and rear, of the drive tires to prevent movement of the lift truck. To manually release the parking brake, remove the cotter pin and tighten the nut to compress the spring that applies the brake.

How to Tow Lift Truck

WARNING

Use extra caution when moving a lift truck if any of the following conditions exist:
- **Brakes do not operate correctly.**
- **Steering does not operate correctly.**
- **Tires are damaged.**
- **Traction conditions are bad.**
- **The lift truck must be towed on a slope.**

If the engine cannot run, there is no power assist available for the steering and service brakes. This can make the control of the lift truck difficult. Poor traction can cause the disabled lift truck or towing vehicle to slide. Steep grades will increase the required brake effort.

Never lift and move a disabled lift truck unless the disabled lift truck MUST be moved and cannot be towed. A lift truck used to move a disabled lift truck MUST have a capacity rating equal to or greater than the weight of the disabled lift truck. The capacity of the lift truck used to move a disabled lift truck must have a load center equal to half the width of the disabled lift truck. See the nameplate of the disabled lift truck for the approximate total weight. The forks must extend the full width of the disabled lift truck. Put the weight center of the disabled lift truck on load center of the forks. Be careful to not damage the under side of the lift truck.

1. The towed lift truck must have an operator.
2. Tow the lift truck slowly.
3. Using a lift truck or a lifting device that can be attached to the mast (I.E. come-a-long), raise the carriage and forks approximately 30 cm (12 in.) from surface. Install a chain around the mast crossmember and the carriage, to prevent carriage and mast channels from moving.
4. If another lift truck is used to tow the disabled lift truck, that lift truck must have an equal or larger capacity than the disabled lift truck. Install an approximate half-capacity load on the forks of the lift truck that is being used to tow the disabled lift truck. This half-capacity load will increase the traction of the lift truck. Keep the load as low as possible.
5. Use a towing link made of steel that attaches to the tow pins in the counterweights of both lift trucks.

HOW TO PUT LIFT TRUCK ON BLOCKS

How to Raise Drive Tires

WARNING

The lift truck must be put on blocks for some types of maintenance and repair. The removal of the following assemblies will cause large changes in the center of gravity: drive axle, engine and transmission, and the counterweight. When the lift truck is put on blocks, put additional blocks in the following positions to maintain stability:
a. **Before removing the mast and drive axle, put blocks under the counterweight so that the lift truck cannot fall backward.**
b. **Before removing the counterweight, put blocks under the mast assembly so that the lift truck cannot fall forward.**

The surface must be solid, even, and level when the lift truck is put on blocks. Verify that any blocks used to support the lift truck are solid, one piece units. Put a steel plate on top of the block.

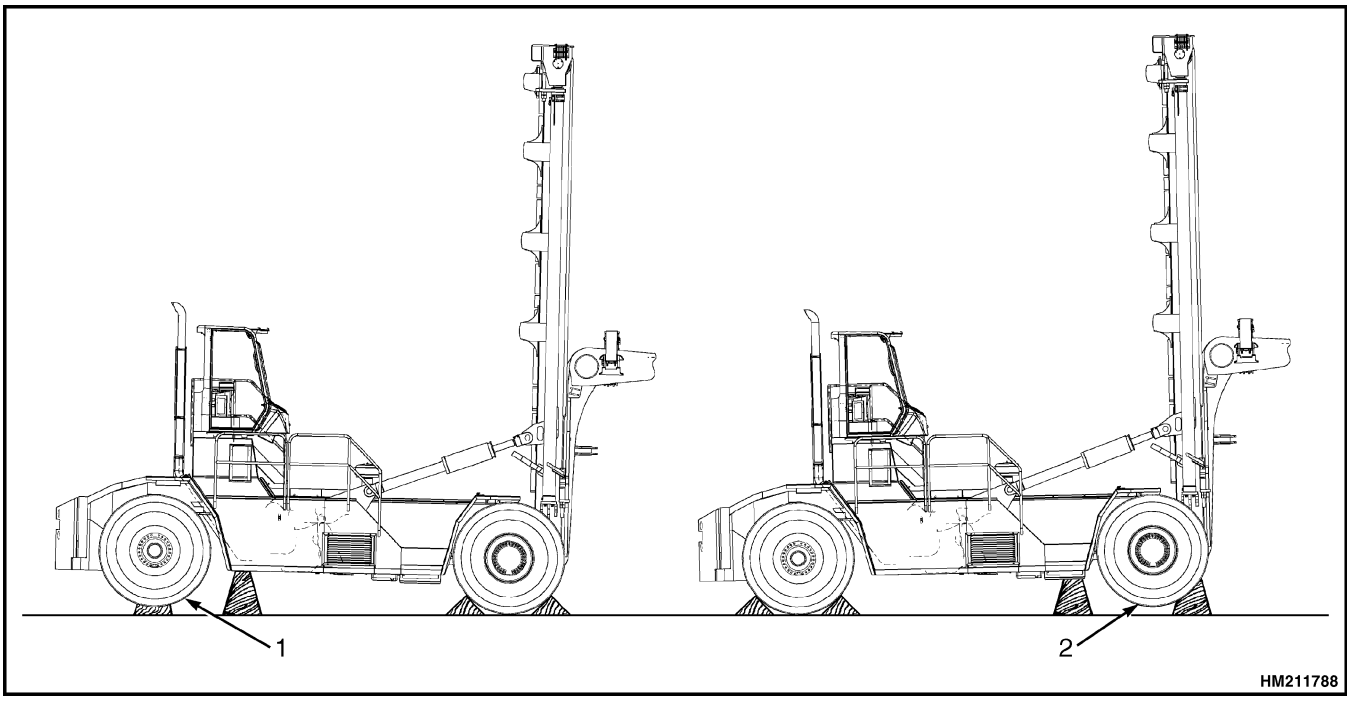
NOTE: Some lift trucks have lifting eyes. These lift points can be used to raise the lift truck so that blocks can be installed.

NOTE: The lifting eyes of the counterweight are for lifting of the counterweight only. Never use the lifting eyes or the counterweight to lift the truck.

1. Put blocks on each side (front and back) of the steering tires to prevent movement of the lift truck. See Figure 1 and Figure 2.
2. Put the mast in a vertical position. Put a block under each outer mast channel.
3. Tilt the mast fully forward until the drive tires are raised from the surface.
4. Put additional blocks under the frame behind the drive tires.
5. If the hydraulic system will not operate, use a hydraulic jack under the side of the frame near the drive axle. Verify that the jack has a capacity of at least half the weight of the lift truck. See the nameplate.

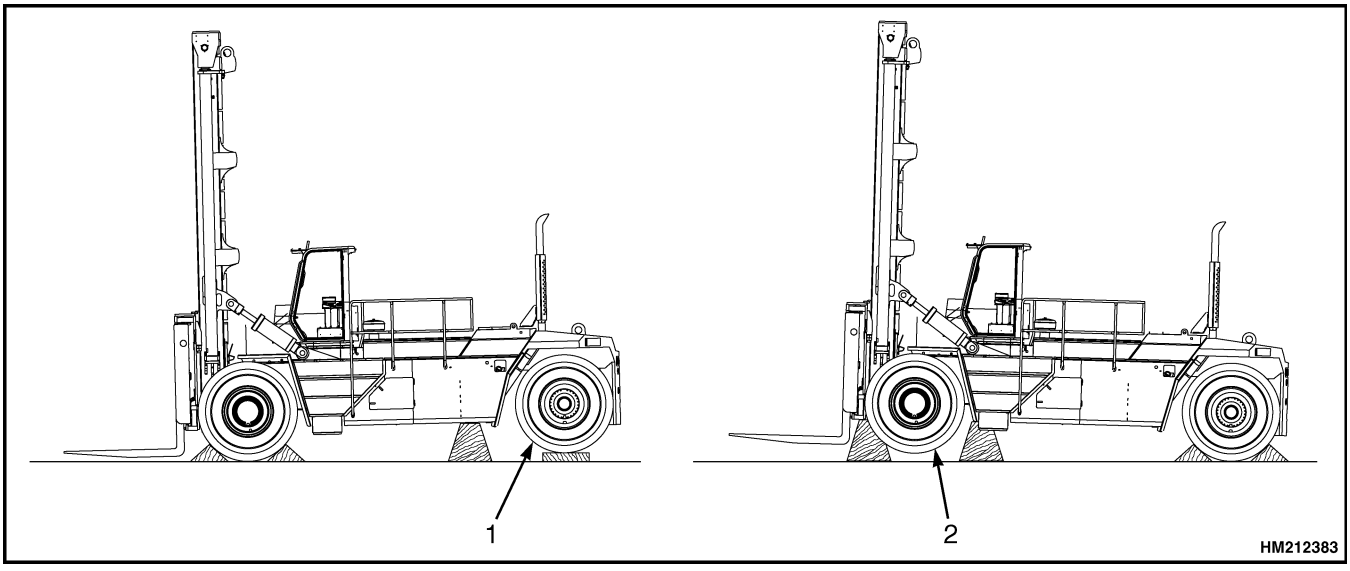
How to Raise Steering Tires

1. Apply the parking brake. Put blocks on both sides (front and back) of the drive tires to prevent movement of the lift truck. See Figure 1 and Figure 2.
2. Use a hydraulic jack to raise the steering tires. Verify that the jack has a capacity of at least 2/3 of the weight of the lift truck. See the nameplate.
3. Put the jack under the steering axle or frame to raise the lift truck. Put blocks under the frame to support the lift truck.



1. STEER AXLE/STEER TIRES
2. DRIVE AXLE/DRIVE TIRES

Figure 1. Put Lift Truck on Blocks (F117)



1. STEER AXLE/STEER TIRES
2. DRIVE AXLE/DRIVE TIRES

Figure 2. Put Lift Truck on Blocks (A917)

Maintenance Schedule

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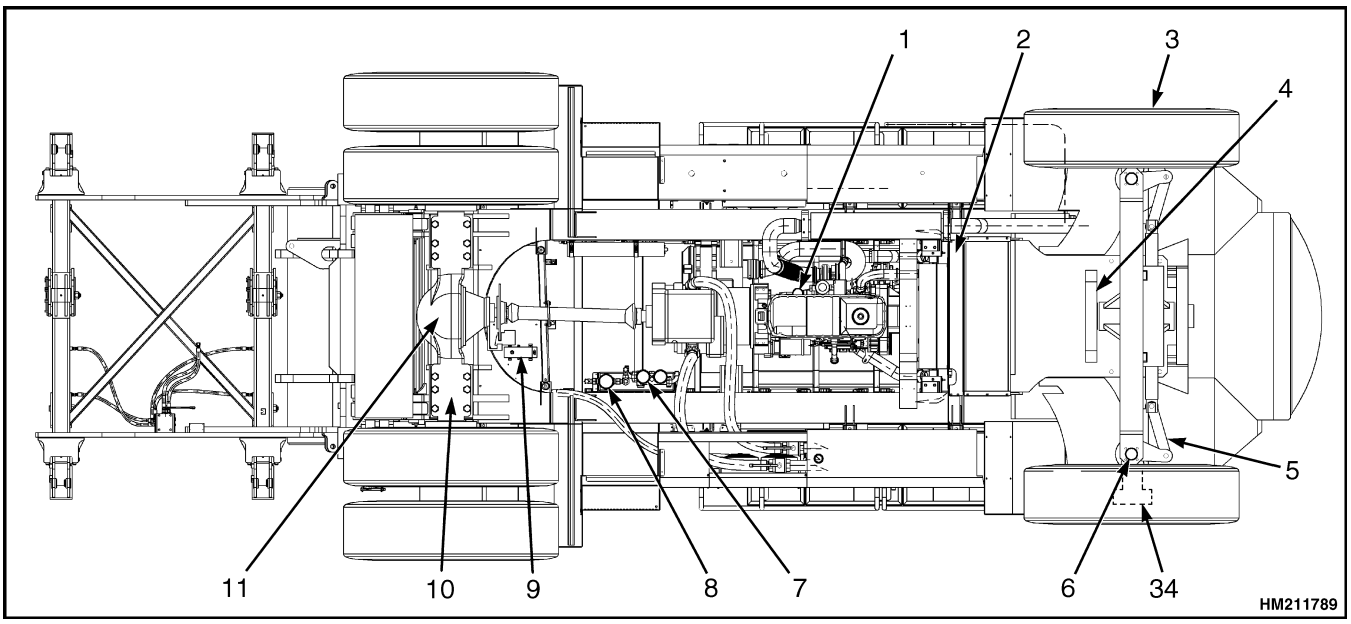

Figure 3. Maintenance Points (F117) (Sheet 1 of 2)

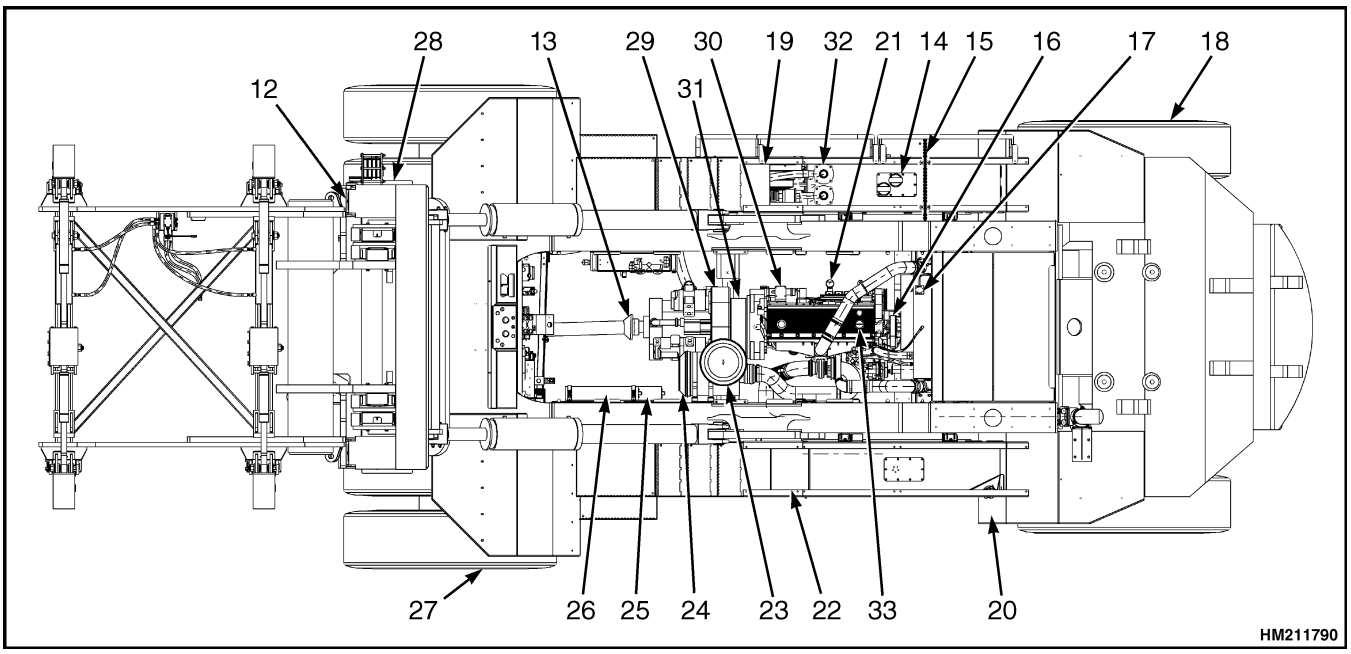

Figure 3. Maintenance Points (F117) (Sheet 2 of 2)

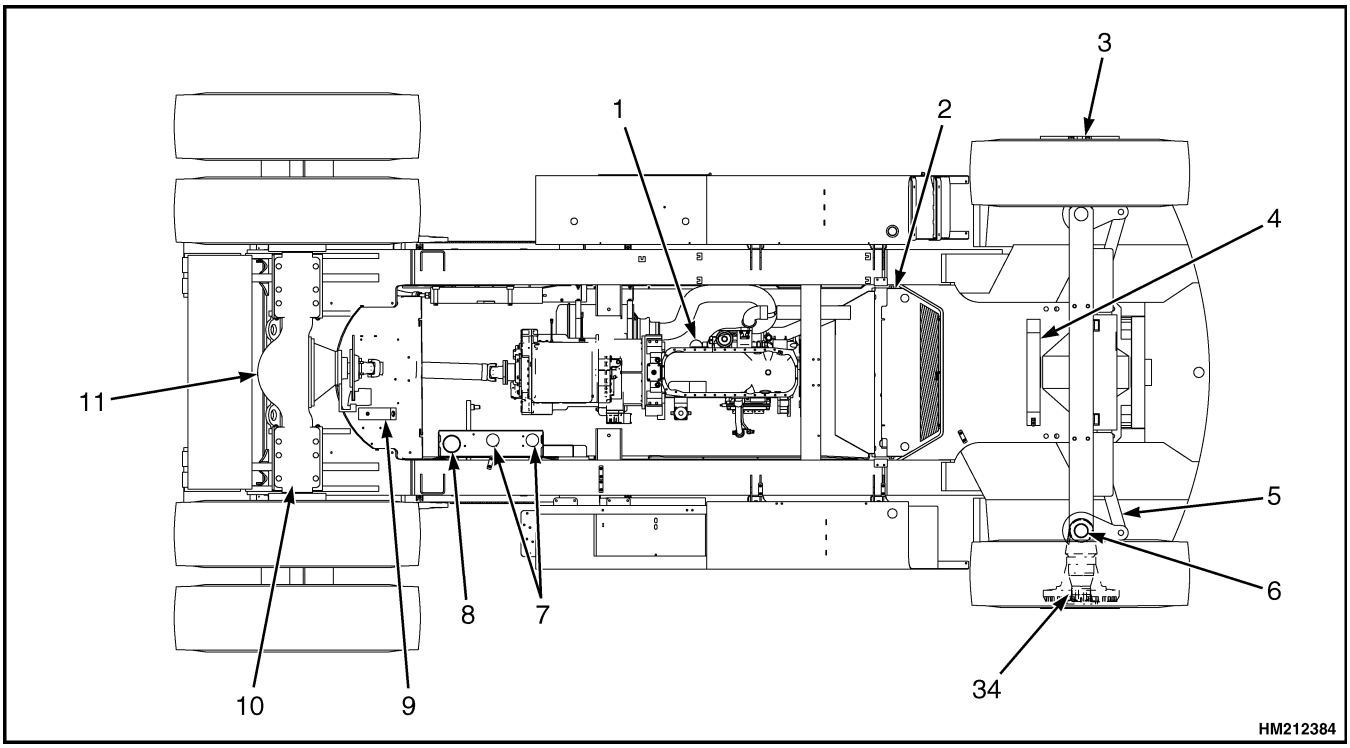

Figure 4. Maintenance Points (A917) (Sheet 1 of 2)

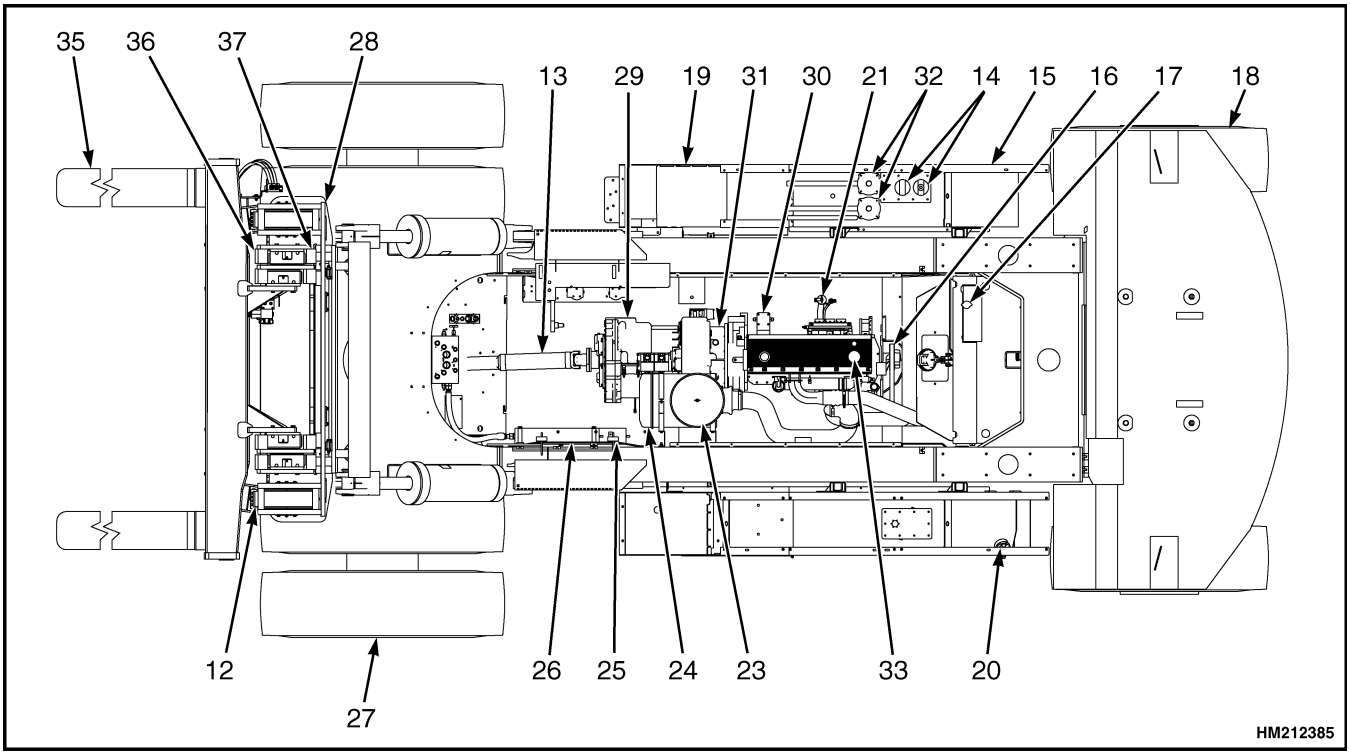

Figure 4. Maintenance Points (A917) (Sheet 2 of 2)