

CHAPTER 4

SHOP SUPPLY

INTRODUCTION

Shop supply is defined as the element of a maintenance unit that provides the repair parts, assemblies, components, and maintenance materials needed by the unit shops to accomplish the maintenance mission.

At the GSM level, shop supply is one of the most important, and most critical, elements of the company mission. Normally, GS maintenance units have no supply responsibilities to using units. Generally, they repair items for return to the supply system. Exceptions to this rule are GSM units that have an assigned limited DS mission because of peculiar operational requirements.

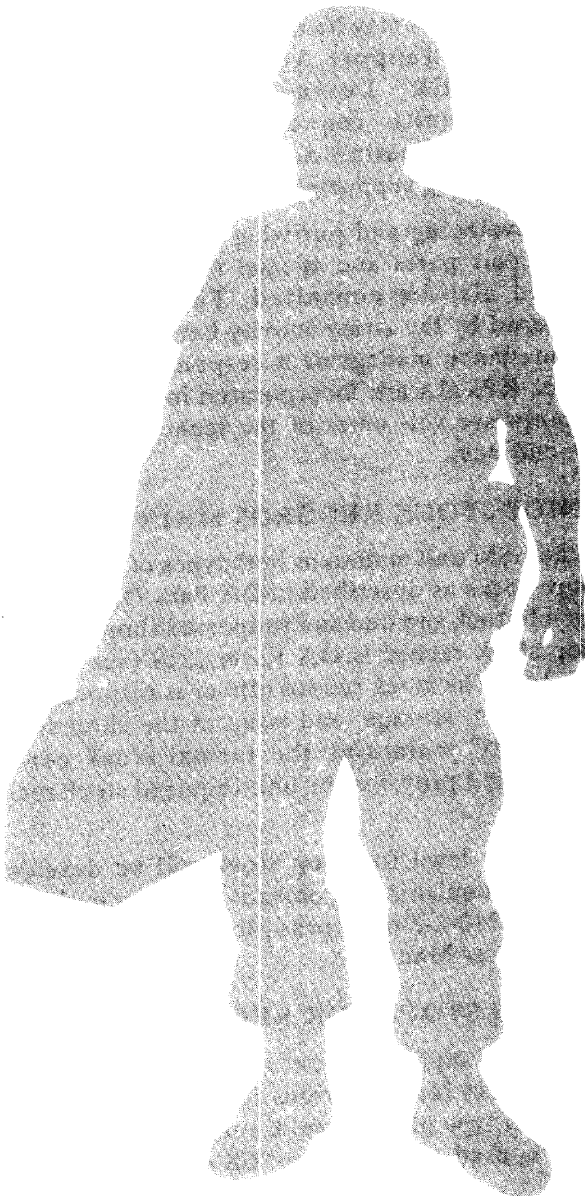
Examples are marine and rail GSM units performing DS maintenance and supply roles in addition to their basic GS support missions, and certain missile maintenance units. The entire maintenance mission of a GSM unit hinges on how well it performs its shop supply functions; therefore, this aspect of unit operations requires command emphasis as well as precise management.

Each of the units discussed in this manual has an organic element to perform shop supply functions. In the light equipment and heavy equipment GS maintenance companies, this element is identified as a supply section. Since GS maintenance units normally do not supply repair parts to outside customers, their supply sections exist only to provide repair parts and maintenance supplies to their shops and to support the internal RX requirements.

SHOP SUPPLY FUNCTIONS

Shop supply at the GS level performs the following functions:

- Develops and maintains the unit's shop stock list of repair parts and maintenance supplies.



- Requisitions, stores, and issues the parts needed by the shop to accomplish the mission.
- Provides necessary support for the unit's RX requirements.
- Assists in the development of parts requirements to support planned maintenance operations (when this is not done at the MMC or other higher headquarters); orders, receives, and stores these parts; and issues them to the repair sections when needed.

Though the basic functions are the same, shop supply functions vary a great deal among units. This wide variance is caused by the difference in missions. Some GSM units may specialize in the overhaul of specific items, while others may have a overflow direct support maintenance (DSM) mission. Each of these differences will affect the size of the unit's repair parts stockage and may impact on the unit's bench stock requirements. In addition, the number of individual parts requested will vary significantly, depending on the type of work the unit does: production-line operations, job or bay shop operations.

When the density of supported units does not justify assignment of a DSM unit, the theater or area support command may assign the DS mission on an exception basis to a GS unit. These GS units would maintain a larger stockage of repair parts and supplies because they provide repair parts support to customer units. In this case, Class IX supply at the GS level functions much like the supply support activities at DS level.

ESTABLISHING MAINTENANCE SHOP STOCKS

The GS unit repair parts stockage is maintained IAW AR 710-2 and DA Pam 710-2-2, as well as the Automated System User Manuals.

As in other categories, repair parts authorizations at the GS level are based on usage data. Initial stockage is based on essential needs, as supported by historical consumption (demand data) of similar units maintaining the same equipment (NSN), modified by local mission requirements and/or other information furnished by the commodity commands and the units MMC.

When a unit is setting up its initial stockage list, it should first ask for help from the MMC. The MMC may have records which show what types and quan-

ties of parts are stocked in similar units. This listing can then be adjusted to fit the particular unit. For example, if the sample stockage list is based on the production-line repair of a large quantity of tank engines and the new unit will not have this mission, parts peculiar to this job should be deleted from the listing.

If the MMC is not able to give assistance, the GS unit can still try to locate a similar unit and get a copy of its stock age list. If there is one, the list must again be adjusted by experienced supply and maintenance personnel as soon as sufficient demand information is accumulated to provide for a more realistic stockage objective.

When valid consumption data is not available from the above sources for the preparation of stockage lists, such a list may be requested from the Materiel Readiness Support Activity (MRSA) ATTN: AMXMD-ER, Lexington, KY 40511-5101. However, units requesting such listings must provide information on the type and density of materiel being supported.

In developing and purifying stockage lists, essential repair parts and special tools lists (RPSTLs) should also be consulted. These RPSTLs are prepared by the Army activity having national level maintenance management responsibilities for end items. RPSTLs are incorporated in or published as appropriate volumes of the technical manual for the end item.

SHOP STOCK RECORDS MAINTENANCE

The GSM unit maintains both types of maintenance shop stocks as described in DA Pam 710-2-2. These are job stock and demand supported shop stock. The shop stock record is DA Form 3318 (see DA Pam 710-2-2). The stock record officer is responsible for the receipt, storage, and issue of the shop supply. The MMC maintains the formal stock control records and provides the unit required stock record support.

Stockage level for shop stock will be developed from the requisitioning objective table as outlined in DA Pam 710-2-2 or as prescribed in the Automated System User Manuals.

BENCH STOCK FOR REPAIR ELEMENTS

The shop supply element of the GS unit provides bench stocks for the various repair elements. Bench stock is a type of shop stock authorized by AR 710-7 and is used extensively by GS maintenance units.

Bench stock is low-cost, bulk-type supplies which are used at unpredictable rates. Examples of items include: common hardware, rope, wire, glass, welding rods, gasket materiel, and minor electrical components such as resistors and capacitors. Bench stocks are further explained in AR 710-2-2.

PARTS REQUIREMENTS FOR MAINTENANCE REQUESTS ON INDIVIDUAL ITEMS

GS maintenance units receive many work requests for individual items. Most of these come from DS units for work beyond their capacity or capability. The supply system also submits individual job orders for the repair and issue of excess turn-ins.

These job orders for individual items usually require repair parts. When the equipment enters the shop, it will be inspected and the appropriate forms annotated by the inspectors. Shop supply will order all parts requested.

Parts bins should be set up for separating the parts received for each work request. These bins are marked to show the work control number for which the parts have been ordered. When the repair parts are received, they are stored in these bins until all the items needed for the particular job are on hand. Large items that cannot be stored in bins are normally placed in a central location. They should also be marked in some manner to show the job for which they were requisitioned.

Each time a part is received for a work request, shop supply notes the receipt in the document register and on the maintenance request for a job. The shop supply section immediately notifies the maintenance control section so that it can schedule the equipment into the shop. Shop supply continues to store the parts.

Due-out reconciliation and follow-ups on outstanding supply requests are made as described in DA Pam 710-2-2 or as presented in the Automated System User Manuals.

PARTS REQUIREMENTS FOR PRODUCTION-LINE MAINTENANCE (PROGRAM STOCK)

GSM units may have to obtain and store large quantities of repair parts in preparation for production-line operations. This type of stock is often called "program stock."

The MMC will normally assist in forecasting such parts requirements and take action to assure provision of the items before production-line operations begin.

The company (with assistance from the battalion materiel office) may have to forecast requirements. If the MMC is unable to provide such repair parts, requirement forecasts, or historical data, guidance can be obtained in AR 710-2.

SUPPLY OPERATIONS

Supply service in the shop is planned to satisfy the peculiar requirements of each type operation when the shop layout is originally created. Adjustments are made as experience indicates and when the shop plan is altered. Distances which mechanics must move to pick up reparable assemblies, dispose of repaired assemblies, and obtain parts must be reduced to the minimum. The following general rules are applied in the type operation described.

Specifically designated supply personnel deliver reparable items to bins or pallets placed beside the various stations on the line. Other supply personnel pick up repaired items from the adjacent bins or pallets reserved for completed items. Careful tallies are kept of deliveries of assemblies to the line for repair and of deliveries of repaired assemblies to storage or shipping locations. This information is turned in to the supply section for posting of records.

Parts stocks in bins placed beside the line are replenished as required by supply handlers assigned to that duty. The work load of each individual is adjusted so that bins may be checked frequently enough to prevent out-of-stock conditions. Each delivery of parts to a bin is recorded on the tag attached to the bin. At the time each replenishment is made, the stock remaining in the bin is counted.

The total of remaining quantity and the quantity placed in the bin are entered on the bin card. If the facility is operated at night, it is preferable to restock bins at this time, with stockage based on the next day's predicted requirements (plus a 10-percent safety factor).

To keep the line inactive for the shortest possible time between completion of one run and the start of another, sufficient storage space is provided beside the line to permit "stocking up" for the next run while stocks for the current run are being phased out. This is particularly important when the duration of the average job accomplished in the shop is limited to a few days.

REPAIR PARTS SUPPORT FOR UNIT EQUIPMENT

Like any unit possessing organic equipment requiring unit and support maintenance, GSM units must have a source of repair parts required for this repair. Many of the items required for this maintenance are the same as those required for the DSM. Further, the GSM unit obtains replenishment of its mission stocks of repair parts supply units as DSM. Thus, when such commonality exists, requirements for maintenance on unit vehicles are combined with parts requirements for the GSM mission and are obtained from the GS supply source.

The above procedure does not apply in all cases. For example, the marine and rail maintenance units will still have to obtain support for such items as vehicles, armament, and communications equipment from the DS units charged with providing DSM of such items.

Procedures for establishing and maintaining a prescribed load list (PLL) of repair parts to support unit maintenance requirements are described in AR 710-2.

PUBLICATIONS AND REGULATIONS

Shop supply must have the publications required to operate efficiently. Catalogs of national stock numbers (NSNs) are a necessity, as are ARs 710-2, 735-5, and DA Pam 710-2-2, contained in Unit Supply Update 11. Shop supply also has in its library those technical publications for the items it supports and operates.

Publications that describe operating procedures, including local SOP, command directives, and regulations are also needed. DA Pam 25-30 lists regulations for general supply operations and maintenance policies and procedures. Technical manuals for determining parts authorizations and maintenance levels are listed in DA Pam 25-30.

CONTROL OF SPECIAL TOOLS

Depending on the desires of the commander, the shop supply element may be required to operate a tool room for the activity it supports. If the tool room is operated within the maintenance shop proper, the same general procedures apply.

Tool rooms are used to ensure the availability and security of tools which are not issued to mechanics on an individual basis. An inspection system that will ensure tools are being maintained should be developed for each tool room operation. Special

tools such as drill motors, sanders, valve grinders, and special wrenches are stored on racks or boards in the tool room.

- Tool rooms must be centrally located since they support many mechanics working in widely scattered areas. Therefore, a tool room that supports substantial and widespread operations frequently requires an accountability system for each tool checked out. See DA Pam, 710-2-1 for further reference on this subject.
- Tool chits are perhaps the most widely used means of controlling tools issued to mechanics on a temporary basis. A tool chit is a small metal or hard paper disk with a hole punched so that it can be conveniently hung on a hook or nail. Each chit is numbered and assigned to the personnel who will use the tool. The mechanic must turn in a chit for each tool he receives from the toolroom. The toolroom keeper then places the chit wherever the tool was stored. The toolroom keeper then knows exactly who has each tool.
- Special tools, test, and other support equipment designed and developed to perform a specific maintenance operation on specific assemblies or subassemblies will be found on the RPSTL.

TEST, MEASUREMENT, AND DIAGNOSTIC EQUIPMENT

TMDE calibration and repair support program will be established in each unit. The Program objective is to ensure maximum availability of accurate and serviceable TMDE for use in test, measurement, and diagnostic operations. Each unit will have a TMDE coordinator who will be the central point of contact for TMDE matters.

Each unit is required to maintain an instrument master record file. DA Label 80 (U.S. Army Calibrated Instrument), DA Label 163 (U.S. Army Limited or Special Calibration), and DA Form 2417 (U.S. Army Unserviceable or Limited Use Tag) will be used by each unit.

All instruments that require calibration and are available for use must show evidence that they have been calibrated and were within the specified tolerances at the time of calibration. Instruments will be calibrated at the specified intervals IAW TB 43-180.