

INDEX

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
	<u>" STANDARD FEATURES "</u>	
1.0	<u>RAW MATERIAL</u>	3
2.0	<u>CONSTRUCTION</u>	
2.1	<u>HOUSING</u>	
2.1.1	DESIGN	3
2.1.2	SIDE PANELS	3
2.1.3	TOP and BOTTOM PANS	3
2.1.4	FRONT FRAME	3
2.1.5	REAR FRAME	3
2.1.6	BASE MEMBERS	4
2.1.7	CLOSURE STRIPS	4
2.1.8	ANCHORING	4
2.2	<u>LOCKING</u>	
2.2.1	DESIGN	4
2.2.2	LOCK CYLINDER	4
2.2.3	LOCK ROD	4
2.2.4	SINGLE DRAWER ACCESS	5
2.2.5	MULTIPLE DRAWER ACCESS	5
2.3	<u>DRAWER</u>	
2.3.1	DESIGN	5
2.3.2	BODY	5
2.3.3	FRONT	6
2.3.4	BACK	6
2.3.5	SIDE RIBS	6
2.3.6	FRONT and BACK RIBS	6
2.3.7	HANDLE	6
2.3.8	RAILS	6
2.4	<u>SUSPENSION</u>	
2.4.1	DESIGN	7
2.4.2	PERFORMANCE	7
2.4.3	GUIDES	7
2.4.4	CARRIER	7
3.0	<u>FINISH</u>	8
4.0	<u>PACKAGING</u>	8

INDEX (Con't)

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
<u><i>"OPTIONAL FEATURES"</i></u>		
5.0	<u>OPTIONS</u>	
5.1	<u>HOUSING OPTIONS</u>	
5.1.1	RETAINER TOP	9
5.1.2	HARDWOOD TOP	9
5.1.3	HOUSING REINFORCEMENT	9
5.1.4	DEDUCT FORKLIFT BASE	9
5.1.5	PALLET TRUCK BASE	9
5.1.6	MOBILE BASE	10
5.1.7	BOTTOM SHELF	10
5.1.8	ADJUSTABLE SHELF	10
5.1.9	ROLL-OUT SHELF	10
5.1.10	KEYED-ALIKE LOCK	11
5.1.11	EXTERNAL LOCKBAR	11
5.1.12	DEDUCT CABINET LOCK	11
5.1.13	MAINTAIN SINGLE DRAWER ACCESS	11
5.1.14	FLUSH SWING DOOR	11
5.1.15	DEDUCT DOOR LOCK	11
5.2	<u>DRAWER OPTIONS</u>	
5.2.1	PARTITION	12
5.2.2	DIVIDER	12
5.2.3	HANGING FILE FRAME	12
5.2.4	PLASTIC BINS and DIVIDERS	12
5.2.5	PLASTIC GROOVE TRAYS and DIVIDERS	12
5.2.6	PLASTIC QUARTER TRAYS	12
5.2.7	INDIVIDUAL LOCK	13
5.2.8	LATCH-IN/LATCH-OUT	13
5.2.9	BOTTOM INSERTS	13
<u><i>"PRODUCT ASSISTANCE"</i></u>		
6.0	<u>TROUBLESHOOTING</u>	
6.1	<u>INITIAL CHECKLIST</u>	14
6.2	<u>CABINET LOCKING</u>	14
6.3	<u>DRAWER OPERATION</u>	14
6.4	<u>DRAWER RECONFIGURATION</u>	14
7.0	<u>PARTS LIST</u>	14-15

1.0 RAW MATERIAL

Unless otherwise noted, all material is either:

(CR) Cold Rolled Steel, High Grade Commercial Quality, Low Carbon, ASTM-A366

(HR) Hot Rolled Pickled & Oiled Steel, High Grade Commercial Quality, Low Carbon, ASTM-A569

(GA) Galvanized G60 Steel, High Grade Commercial Quality, Low Carbon, ASTM-A526/ 7

Material is purchased to stringent quality standards based on dimensional tolerances for sizes, flatness, squareness, burr, and surface appearance.

2.0 CONSTRUCTION

2.1 HOUSING

2.1.1 DESIGN

Six (6) Housing heights are offered as standard. Each height is offered in five (5) standard widths and all Housings are 28-1/4" deep (30 Standard sizes total). Housings are designed to be lifted fully loaded (7500 lbs. max.), by means of standard forklift equipment. Housings can be stacked up to a maximum height of 180", as long as the total load (including cabinet weight), does not exceed 15,000 Lbs. on the top of the bottom cabinet.

2.1.2 SIDE PANELS

18 gauge (0.048") CR panel, one (1) right-hand and one (1) left-hand, with wrap around front flanges to form the front of the Housing case. They feature offset interlocking rear flanges providing for a flush exterior surface. Side Panels are the common element to which all Housing components are resistance-welded. The 36-Wide, 45-Wide and 60-Wide Housings incorporate an additional 18 gauge Filler Panel resistance-welded between Side Panels at the back of the Housing. Side Panels feature pre-punched holes for the mounting of optional Footrests in Workstation applications.

2.1.3 TOP and BOTTOM PANS

14 gauge (0.075") CR pan, one (1) Top and one (1) Bottom, with 1-3/4" flanges and an additional 1/2" return flange on the opening side of the cabinet to form the front of the Housing case. Front and rear corners are wire-welded and ground smooth *after* the housing is resistant-welded to provide for increased strength and improved racking resistance. The front face of the Top Pan features a "DD" hole for the cabinet lock while its top surface features four (4) knock-out holes for use in cabinet stacking and Worksurface installation. The Bottom features pre-punched tool clearance holes for anchoring the units Base Members to the floor.

2.1.4 FRONT FRAME

Two (2), 12 gauge (0.105") CR triple-formed vertical members wire-welded at their corners to two (2), 12 gauge (0.105") CR horizontal angles. Front vertical members incorporate holes that are punched on 20mm (0.7874") centers to accept the screws and locator tabs of Drawer Guides. Horizontal members incorporate radial notches to accept the Lockrod of the Locking Mechanism. This pre-welded frame is resistance and wire-welded to the inside of the front of the Housing case. This design provides the strength, stability, and squareness necessary for the precise operation of the drawers systems.

2.1.5 REAR FRAME

Two (2), 16 gauge (0.060") CR triple-formed vertical members, one resistance-welded to each rear corner of the Side Panel. Rear vertical members incorporate slots that are punched on 20mm (0.7874") centers to accept the rear "tang" of Drawer Guides that precisely match the holes in the front frame. A 12 gauge (0.105") CR horizontal angle is wire-welded to both the Bottom Pan and to the base of each rear vertical member, providing additional strength for cabinet lifting.

2.1.6 BASE MEMBERS

Two (2), 12 gauge (0.105") CR channel-formed members, one wire-welded to each side of the Bottom Pan running front to back on the Housing. Base Members provide the necessary clearance between them for standard forklift access. Base Member "tabs" fit into pre-punched slots in the Bottom Pan for self-locating during the welding process. Base Members feature front and rear "full height" return flanges designed to transfer cabinet loading through to the floor, resulting in additional Housing capacity. Each return flange features a pre-punched hole for the field attachment of the Closure Strip. Base Members feature pre-punched holes for anchoring Housings and for the attachment of Casters. All 45-Wide and 60-Wide Housings feature two (2), 12 gauge (0.105") reinforcing channels running the width of the Housing. These channels are wire-welded to the interior of the Bottom Pan of the Housing.

2.1.7 CLOSURE STRIPS

Two (2), 16 gauge (0.060") CR quadruple-formed channel caps that are field attached to the Base Members with two each plastic "Tree Clips". One strip covers the Base Member at the front and one at the rear.

2.1.8 ANCHORING

An open ended slot is pre-punched into the ends of each Base Member to facilitate floor anchoring of the cabinet utilizing 3/8" fasteners (supplied). Four (4) holes, two (2) on Top Pan and two (2) on Bottom Pan are located on right side, back side, and left side of Housing. These "cabinet to cabinet gang holes" are punched through vertical flanges of the Top and Bottom Pans, but are blocked by the pre-punched "closure tabs" of the Side Panels. Holes are accessed by bending in the closure tabs from inside the Housing and through-bolting cabinets together utilizing the 3/8" fasteners (supplied).

2.2 LOCKING

2.2.1 DESIGN

All cabinets are offered with either "250, Single Drawer Access" or "251, Multiple Drawer Access" as standard. The Single Drawer Access mechanism locks unopened drawers when one drawer is pulled out, preventing accidental cabinet tipping of unanchored cabinets. The Multiple Drawer Access mechanism allows for more than one drawer to be opened at a time, but requires that the cabinet be properly anchored. Both locking mechanisms consist of a key operated Lock Cylinder, a Lock Rod, and a Drawer Engagement System.

2.2.2 LOCK CYLINDER

The heavy-duty Lock Cylinder features a dust shutter, an internal o-ring, and bronze wafers for superior quality and resistance to harsh environments. Two (2), 0.086" thick brass keys are supplied with each Lock Cylinder. The lock is operated by 180 degree rotation and is removable in either the locked or unlocked positions. Key coding is chosen randomly from 250 different combinations (M750 thru M1091, w/ specific numbers missing). The key code number is stamped on the face of the cylinder to aid in identification. This Lock Cylinder is common between "250" and "251" locking mechanisms.

2.2.3 LOCK ROD

9/32" (0.281") diameter "Bright Basic" steel wire, ASTM 1008 that is machined on one end to fit inside the core of the Lock Cylinder and into the radial cutout of the top Horizontal Member. The "250" Lock Rod is machined on its opposing end to fit inside the core of the Interlock Actuator. The "251" Lock Rod is offset formed on its opposing end to fit inside the hole of the Lock Support and into the slot of the Locking Channel.

2.2.4 SINGLE DRAWER ACCESS MECHANISM ("250")

The "250" Locking Mechanism is a unique device that provides for Single Drawer operation. This locking mechanism is pre-engineered and can only be assembled at the factory. It is fastened with #6 self-tapping screws to a 14 gauge (0.075") CR multi-formed channel that is resistance welded vertically to the right-rear corner of the Housing. A 12 gauge (0.105") GA Latch Clip is fastened to the right-rear Zee of each drawer in the cabinet with a 3/16" steel rivet. As a drawer is opened, it is this Clip that interacts with the "pawl" of the interlock mechanism. As this pawl pivots, it forces a ball-bearing between the edges of a series of "bullets" in the mechanism. These bullets become displaced on either side of that particular ball-bearing, forcing them behind the remaining pawls locking them and their respective drawers in place. It is impossible to actuate two pawls simultaneously, making this a true, one-drawer-at-a-time mechanism. When the key of the Lock Cylinder is rotated to the locked position, the Lock Rod rotates the Actuator of the mechanism, displacing the bullets and locking all pawls.

2.2.5 MULTIPLE DRAWER ACCESS MECHANISM ("251")

The "251" Locking Mechanism is a unique device that provides for Multiple Drawer operation. The mechanism consists of a 14 gauge (0.079") GA formed Locking Channel, a variable quantity of 14 gauge (0.079") GA Attachment Plates, and a 14 gauge (0.079") GA channel-formed Lock Support. Attachment Plates are slid into slots along the length of the Locking Bar and both this assembly and the Lock Support are fastened with #6 self-tapping screws to a 14 gauge (0.075") CR multi-formed channel that is resistance welded vertically to the right-rear corner of the Housing. A notch in the right-rear Zee of each drawer in the cabinet interacts with notches in the Locking Channel. When the key of the Lock Cylinder is rotated to the locked position, the Lock Rod rotates to lift the Locking Channel to position flanges behind the notches of each Drawer Zee, locking all drawers.

2.3 DRAWER

2.3.1 DESIGN

Fifteen (15) Drawer heights are offered as standard. Each height is offered in five (5) standard widths and all Drawers feature a clear depth of 25-1/8" (75 Standard sizes total). The perimeter of a typical Drawer features slots for locating Partitions and Dividers to segment the drawers interior into smaller compartments. Segments are on 0.799" centers and all drawers feature 32 segments front to back. 22-Wide Drawers have 23 segments side to side, 30-Wide has 32, 36-Wide has 40, 45-Wide has 50, and 60-Wide Drawers have 69 segments. The Drawer consists of a Body, Front, Back, two Side Ribs, two Front/Back Ribs, a Handle, and two Rails.

NOTE; *Drawers are designed to carry an evenly displaced load of 400 Lbs., with two (2) Partitions fastened to the Body, front to back. However, the specific quantity and location of Partition(s) will vary from application. The determination is identified by maintaining clearance between the middle, underside of Drawer Body and the top of a Carriers' rear Cross Tie.*

2.3.2 BODY

Bodies are offered in four (4) different heights within a specific Drawer width. The Body is an 18 gauge (0.048") CR box-formed pan for 22, 30, & 36-Wide drawers and a 16 gauge (0.060") CR box-formed pan for 45 & 60-Wide drawers. The Body is pre-punched to accept the self-tapping screws for the attachment of Partitions and Dividers. The Body features flanges at front and rear that are resistance-welded to the Front and Back of the Drawer.

2.3 DRAWER (Con't)

2.3.3 FRONT

14 gauge (0.075") CR flat, corner-chamfered plate for 22, 30, & 36-Wide drawers and a 12 gauge (0.105") CR flat, corner-chamfered plate for 45 & 60-Wide drawers. The Front is pre-punched to accept the self-tapping screws of the Drawer Handle and the dimples of the End Caps. The Front is resistance-welded to the front, horizontal and vertical flanges of the Body.

2.3.4 BACK

18 gauge (0.048") CR formed strip for 22, 30, & 36-Wide drawers and a 16 gauge (0.060") CR formed strip for 45 & 60-Wide drawers. The Back is resistance-welded to the rear, horizontal and vertical flanges of the Body.

2.3.5 SIDE RIBS

20 gauge (0.036") CR multi-formed strips that are slotted on 0.799" centers to accept the flanges of Partitions and Dividers. One (1) Side Rib is resistance-welded to each side of the Body, creating a unique "double-wall" construction to provide increased drawer strength.

2.3.6 FRONT and BACK RIBS

20 gauge (0.036") CR multi-formed strips that are slotted on 0.799" centers to accept the flanges of Partitions and Dividers. One (1) Rib is resistance-welded to the Front and one (1) Rib is resistance-welded to the Back.

2.3.7 HANDLE

A clear anodized aluminum extrusion that features a unique "snagless" End Cap design. The Handle without End Caps measures 13-13/16" in length for 22-Wide Drawers and 20-3/8" in length for 30, 36, 45, and 60-Wide Drawers. End Caps are molded from polyethylene material, are handed, and are colored to match the handle. These components interlock as a unit and are pre-assembled to the Front at the factory using three (3), #10 self tapping screws. The right End Cap features a slot through which both a rigid 1" wide, 0.03" thick Paper Label and 0.01" thick Clear Plastic Strip can be inserted. Once fully inserted they drop down and are held in place by a step inside the right End Cap. The Label and Strip are shipped loose in the top drawer of the cabinet and are labeled and inserted by the customer.

2.3.8 RAILS

12 gauge (0.105") Hot-Rolled High Strength Low Alloy Steel, Grade 60, Hardness 80b-90b, ASTM-A1011M-05. Rails are zee-formed members, one (1) right-hand and one (1) left-hand, that travel on the bearings of the Carrier and are resistant-welded to the underside of the Body. The Rail features a unique notching pattern for the proper actuation of the Lockangle, and formed "tangs" that interact with the Carrier to stop the Drawer once it reaches its full travel.

2.4.1 DESIGN

The suspension system is designed to provide for full extension of any drawer at full rated load capacity. Drawer stopping is accomplished by formed "tang" that are located at specific points along the lengths of the Drawer, the Carrier, and the Guides. Drawers and Carriers can be easily removed, without the need of tools, by lifting up on their lead edge at full extension. Along with the Drawer, the suspension consists of a pair of Guides, and a Carrier.

2.4.2 PERFORMANCE

The Drawer Suspension system under a full rated load of 400 pounds will experience 3000 cycles without failure. A cycle is defined as full extension and return with a maximum pull force no greater than 50 pounds or a vertical deflection no greater than 5/8", measured from the floor to the middle of the Drawer Front. Full rated loading is defined as an equally displaced weight on the Drawer Body having two (2) Partitions screwed in place and located front to back.

2.4.3 GUIDES

12 gauge (0.105") Hot-Rolled High Strength Low Alloy Steel, Grade 60, Hardness 80b-90b, ASTM-A1011M-05. Guides are channel-formed members, one (1) right-hand and one (1) left-hand, that feature a pair of formed vertical "tang" that fit securely into the Rear Vertical Member of the Housing. Two (2) front locator "dimples" self-locate the Guide into the hole pattern of the Front Vertical Member. The Guide is held in place with one (1), 1/4" self-tapping screw attached to the Front Vertical Member. Guides can be repositioned at any time within a Housing using a T-20 "Torx" head screwdriver. The lower leg of each Guide also features a formed detent that creates a "ramp" for the floating roller of the Carrier to fall down into. This "ramp" acts as a self-closing feature by allowing gravity to pull the Drawer into the closed position during the last 1" of travel. One pair of Guides will accept any Drawer width or height.

2.4.4 CARRIER

12 gauge (0.115") GA channel-formed "Carrier Channels", one (1) right-hand and one (1) left-hand, are mechanically clinched to two (2), 12 gauge (0.100") GA channel-formed "Cross Ties". This assembly forms a precision "H" frame that ensures squareness and positive alignment. Each Carrier Channel features three (3) Bearing Rollers, one (1) Floating Roller, and one (1) Idler Roller. Bearing Rollers are steel, measure 0.984" in diameter, are 0.335" in width, and contain eleven (11) individual ball bearings each measuring 0.156" in diameter. Floating Rollers are steel, measure 1.062" in diameter, are 0.335" in width, and contain thirteen (13) individual ball-bearing each measuring 0.156" in diameter. Idler Rollers are nylon, measure 0.984" in diameter, are 0.275" in width, and do not feature ball-bearings. The Bearing Rollers and the Floating Rollers feature a "crowned" outer diameter for superior tracking on suspension members. Rollers are attached by mechanically staking their axles to the Carrier Channel. A Carrier will accept any Drawer size within a specific Drawer width (five sizes total). Under normal operating conditions, no additional lubrication is necessary.

3.0 FINISH

PAGE 8

All unfinished components, excluding those that are fabricated from galvanized material, are thoroughly cleaned utilizing a treatment of Rust-Inhibitive Phosphate and Clear Water Rinse, dried to eliminate all moisture, Electro-statically Coated with a Water Reducible Enamel Paint and then Heat Cured. The completed finish will conform to the following requirements;

Dry Film Thickness	0.7 Mil. MIN.
Color	1.0 Delta E MIN.
Gloss	50-60 Degrees
Adhesion	Less than 5% affected (ASTM D3359)
Hardness	H MIN. (ASTM D3363)
Flexibility	Impact 180 Degree over 1/8" mandrel (ASTM D1474)
Chip Resistance	Impact 30 In/Lbs. Rev/Fwd (ASTM D1474)
Salt Spray	1/16" MAX rust creepage @ 5% for 144 Hrs. (ASTM D4585)
Humidity Resistance	1/16" MAX rust creepage @ 100% for 200 Hrs. (ASTM D4585)
Solvent Resistance	50 M.E.K. Rubs (ASTM D4752)

Finishes are available in six (6) standard colors which include; "Dove Grey", "Putty", "Wedgewood Blue", "Cardinal Red", "Forest Green", and "Black". Custom colors are available upon special request. All finishes are formulated to be touched-up with air dry, aerosol paint.

4.0 PACKAGING

(Dwg #SS0764)

The product is shipped under N.M.F.C. Item 39340, defined as "Garage or Shop, Tool or Parts Storage, Steel 18 gauge or thicker, other than wheeled, in packages" and carries a class 70 rating. Packaging construction is based on *Hexacomb's* "Clear-View Pack" to provide superior protection while providing an unobstructed view of the product. Cabinet corners are protected with a full-height, L-shaped *Hexacomb* post, extending laterally 2" in each direction, is 1-1/2" thick, and features 1/2" cellular structure. Posts are coated to prevent abrasion on painted surfaces. An additional *Hexacomb* post is positioned at the front midpoint of the cabinet for drawer handle protection. No clear span between posts will exceed 26" in width. A foam pad is placed on top of the cabinet prior to the attachment of design style Corner Caps made from 275 pound test corrugated fiberboard. A Top Cap of the same material is then placed over the Corner Caps prior to stretch wrapping. The unit is then stretch wrapped to provide no less than 4 mil. of total thickness throughout the finished package. A Product Label and Assembly Sheet is applied to the unit during the stretch wrapping process. All cabinets are nylon banded to an open bottomed style Wood Pallet. Wood Cleats at both edges of the Pallet, running perpendicular to the nylon bands, keep the cabinet located during product transit.

250 units w/ Single Drawer Access are shipped in the un-locked condition.

251 units w/ Multiple Drawer Access are shipped in the locked condition.

5.0 OPTIONS

5.1 HOUSING OPTIONS

5.1.1 RETAINER TOP

A package of components for the application of a flanged cap to the top of any size cabinet. The 12 gauge HR Pan features a 3/4" vertical flange at all four sides. It is attached with four (4), 1/4" fasteners to the top of the cabinet through the knock-out holes in the cabinet top. The Retainer Top is sized to be flush with the edges of the cabinet. A black, "Duraflex" vinyl mat is included to protect the top surface of the Retainer Top.

5.1.2 HARDWOOD TOP

A package of components for the application of a Laminated, Hardwood Panel to the top of any size cabinet. It is attached with four (4), 1/4" lag screws through the knock-out holes in the cabinet top. Pilot holes must be field-drilled into the the Hardwood Top for ease of attachment. The Hardwood Top is 1-3/4" thick, is the same width as the cabinet, is 28" deep, and features 3/16" rounded edges. It is made by laminating hard birch, maple, or beech woods, is then kiln-dried, and finished with two coats of moisture resistant sealer.

5.1.3 HOUSING REINFORCEMENT

Additional welding and reinforcements are applied to a typical Housing (2.1) to increase its stacking capacity from 15,000 lbs. to 28,000 lbs. and from 180" to 240" in overall height. A 14 gauge (0.075") CR hat-formed member is resistant-welded, vertically to the mid-point of both Side Panels of the Housing.

NOTE; *This option is factory installed only.*

5.1.4 DEDUCT FORKLIFT BASE

A Housing without Base Members or Closure Strips (2.1). This option reduces the "overall height" (Dwg #SS0422) of the cabinet by 2-1/8".

NOTE; *This option is factory installed only.*

5.1.5 PALLET TRUCK BASE

A style of base that is applied to a typical Housing in place of the Base Members (2.1.6). This base increases the "overall height", (Dwg #SS0422) of the cabinet by 2". It increases the vertical clearance from the floor to the bottom of the Housing from 2-1/8" to 4-1/8". It also increases the side to side clearance by 5-3/4" ("E" dimension on Dwg #SS0422, Sht 1). A Pallet Truck Base consists of two (2), 12 gauge (0.105") CR triple-formed members, one wire-welded to each side of the Bottom Pan running front to back on the Housing. Base "tabs" fit into pre-punched slots in the Bottom Pan for self-locating during the welding process. Each end of the Base features a wire-welded 12 gauge (0.105") CR channel-formed reinforcement that has a pre-punched hole in it for the field attachment of two (2), 16 gauge (0.060") CR quadruple-formed Closure Strips (included).

NOTE; *This option is factory installed only.*

5.1.6 MOBILE BASE

A package of components to provide the means to convert a Housing into a Mobile unit. Kits are offered with 5" diameter casters (2600Lbs. Load capacity) or 6" diameter casters (2800Lbs. Load capacity). The 5" casters increase the "overall height", (Dwg #SS0422) of the cabinet by 6-1/2". The 6" casters increase the "overall height" of the cabinet by 7-1/2". Each kit consists of two (2) stationary casters, two (2) swivel casters with footbrakes, a Handle, and all necessary hardware for their assembly (All attachment holes are pre-punched into housings). All Casters feature 2" wide, roller bearing, polyolefin wheels and the swivel casters feature a "Tech-Lock" brake. The Handle is constructed from 20 gauge (0.035") CR, 1-1/4" diameter steel tubing, 24" long and is wire-welded to a 12 gauge (0.105") HR, multi-formed Mounting Plate. This Handle Assembly (painted the Housing color) includes black, rubber end caps that are applied to the tube ends.

Mobile kits can also be applied to Housings without Forklift Base (5.1.4). In addition to the items listed above, a pair of 12 gauge (0.105") GA Mounting Plates are supplied and are attached between the casters and the bottom pan of the cabinet.

NOTES; *This option is field installed only.*

Not recommended for Housing heights taller than 37-3/16" (400), due to potential tipping.

If a 251 lock system is specified, all drawers should be outfitted with the LI-LO feature (5.2.8).

5.1.7 BOTTOM SHELF

A package of components for the application of a Bottom Shelf to the inside of any size cabinet. It is a fill-in shelf installed inside the base of a Housing used in Shelf and Swing Door applications. The Shelf is a 16 gauge (0.060") CR multi-formed panel that features a built-in 1" high retainer at both sides and in back. Each kit consists of the Shelf, a pair of Shelf Supports, and the necessary hardware with assembly instructions. Shelf Supports are 12 gauge (0.105") GA angle-formed members that feature a pair of rear "tang" that fit securely into the Rear Vertical Member of the Housing. The front of the Support is attached to the Front Vertical with one (1), 1/4" self-tapping screw. The Bottom Shelf is placed on top of the Supports and held in place by its formed flanges. Once assembled the Shelf is designed to carry an evenly displaced load of 400 Lbs.

5.1.8 ADJUSTABLE SHELF

(Dwg #5163-DA)

A package of components for the application of a Static Shelf to the inside of any size cabinet. Shelves are designed to carry an evenly displaced load of 400 Lbs. and are adjustable on 3/4" centers. Once assembled, Shelves measure 1-1/2" in height and feature a built-in 1" high retainer at both sides and in back. Each kit consists of the Shelf, a pair of Shelf Supports, and the necessary hardware with assembly instructions. The Shelf is a 16 gauge (0.060") CR multi-formed panel that features a 16 gauge (0.060") CR vee-formed reinforcement resistance-welded to its underside running side to side for 22, 30 and 36-Wide cabinets. Two (2), 14 gauge (0.075") CR hat-shaped reinforcements are used for 45 and 60-Wide Shelves. Shelf Supports are 12 gauge (0.105") GA angle-formed members that feature a pair of rear "tang" that fit securely into the Rear Vertical Member of the Housing. The front of the Support is attached to the Front Vertical with one (1), 1/4" self-tapping screw. The Shelf is placed on top of the Supports and held in place by its formed flanges.

5.1.9 ROLL-OUT SHELF

A package of components for the application of a Roll-Out Shelf to the inside of any size cabinet. A Roll-Out Shelf is a "50" series Drawer with a notched Front that features channel reinforcing inserts. Roll-Out Shelves are designed to carry an evenly displaced load of 400 Lbs. and are adjustable on 3/4" centers. Once assembled, Roll-Out Shelves measure 2" in height and feature a built-in 1-5/8" high retainer at both sides and in back. Each kit consists of the Roll-Out Shelf that features four (4), 18 gauge (0.048") GA channel-formed inserts, one (1) Carrier, one (1) right-hand and one (1) left-hand Guide, and the necessary hardware with assembly instructions. The Roll-Out Shelf is assembled to a cabinet like a typical Drawer.

NOTES; *This option cannot be used in conjunction with Flush Swing Doors.*

This option can be positioned at the bottom of a Shelf Cabinet in lieu of a Bottom Shelf.

5.1.10 KEYED-ALIKE LOCK

A Lock Cylinder and a pair of keys that are coded to be interchangeable within a specific group. There are a total of five (5) different key code groups available.

5.1.11 EXTERNAL LOCKBAR

A device that provides a means to lock all Drawers with one, centrally located external padlock (not supplied). This option is recommended for mobile and high-risk applications. The mechanism is specified by the height of the Housing and consists of an 18 gauge (0.048") CR continuous hinge, a 14 gauge (0.075") CR hemmed plate, and a 12 gauge (0.105") CR hasp clip. These components are resistance-welded together and the painted assembly (Housing color) is fastened to the right, outside face of the Housing with #8 self-tapping screws that are concealed when in the locked position.

NOTES; *This option can be fastened to the left side of the Housing, but only if the Latch-in / Latch-out option is not specified.*

5.1.12 DEDUCT CABINET LOCK

A Housing without either the "250" or the "251" locking systems. It consists of a black, plastic plug that is press-fitted into the lock hole of the Top Pan of the Housing.

5.1.13 MAINTAIN SINGLE DRAWER ACCESS

A cabinet featuring the "250" locking system, but without a Lock Cylinder. This option maintains all the features of Single Drawer Access but without a keylock. It consists of a black, plastic plug that is press-fitted into the lock hole of the Top Pan of the Housing.

5.1.14 FLUSH SWING DOOR

A package of components for the application of a Flush Swing Door to any size cabinet. Doors are designed to be flush with the case opening of the Housing. The 22, 30, and 36-Wide units feature a single door that hinges on the right. The 45 and 60-Wide units feature a pair of doors that part in the middle. All Doors feature a two-point (top-bottom) locking system. Each kit consists of a Bottom Shelf (ref. 5.1.7), pre-assembled Door Panel(s), Door Stops with magnet, and the necessary hardware with assembly instructions. The Door Panel Assembly is an 18 gauge (0.048") CR multi-formed panel with a 24 gauge (0.024") CR hat-shaped stiffener resistance-welded vertically at its midpoint. All Doors feature two (2), 18 gauge (0.048") multi-formed lockbar guides that are resistance-welded at its top and bottom jamb corners. An 18 gauge (0.048") CR continuous hinge is resistance-welded to the Door Panel and the assembly is fastened to the Housing using 1/4" self-tapping screws. All Right Door Panels features a black, molded plastic Handle attached with self-tapping screws. The locking mechanism consists of a Lock Cylinder, two (2) 0.086" thick brass keys, a 12 gauge (0.105") GA pivoting cam, two (2)- 20 gauge (0.036") CR formed channel Lockbars, and the necessary hardware for their attachment. The lock is operated by 90 degree key rotation and is removable in either the locked or unlocked positions. Key coding matches cabinet coding which is chosen randomly from 250 different combinations.

NOTE; *This option cannot be used in conjunction with Drawers or a Roll-Out Shelf.*

5.1.15 DEDUCT DOOR LOCK

A Swing Door without the locking system. A black, plastic plug is press-fitted into the lock hole of the Swing Door Panel.

5.2 DRAWER OPTIONS

5.2.1 PARTITION

19 gauge (0.042") GA multi-formed panel that is used for structural support of a loaded drawer, and to sub-divide the Drawer interior into smaller compartments. Partitions are available in five (5) lengths, equivalent to the interior Drawer width and each length is available in four (4) heights, equivalent to the Drawer Body height (20 Standard sizes total). The 30-Wide Partition is also utilized front to back inside any width Drawer. Partitions feature slots that line-up with the slots around the Drawer interior for the installation of Dividers. They are installed by inserting their end flanges into the slots along the Drawer perimeter and fastening their bottom flange into the pre-punched holes of the Drawer bottom with #6 self-tapping screws (supplied).

5.2.2 DIVIDER

20 gauge (0.035") GA flanged plate that is used to sub-divide the Drawer interior into even smaller compartments. They are available in twenty-two (22) lengths of 3 segments through 24 segments and each length is available in four (4) heights equivalent to the Drawer Body height (88 Standard sizes total). Dividers are installed by inserting their end flanges into the slots between the Drawer perimeter and a Partition, or between Partitions. Dividers over 14 segments feature an additional pre-punched bottom flange to be fastened into the pre-punched holes of the Drawer bottom with #6 self-tapping screws (supplied). Dividers feature pre-printed part numbers for ease of customer distinction.

5.2.3 HANGING FILE FRAME

Galvanized framework that is sized to fit the interior dimensions of any width drawer. The frame is designed for the support of standard file folders inside a minimum useable drawer height of 10-1/8" (#140 drawer) or larger.

5.2.4 PLASTIC BINS and DIVIDERS

Three (3) Bin sizes (W x D) are offered as standard each in two different heights (six sizes total). Two (2) Divider sizes are offered as standard each in two different heights (four sizes total). Both Bins & Dividers are offered in either a non-conductive Yellow, high-impact polystyrene plastic or a conductive Black, graphite filled polypropylene plastic used for anti-static applications. Material thicknesses are 0.090" for Bins and 0.100" for Dividers. Bins feature molded-in label holders and interior grooves for locating Dividers. 3"-Width or Depth Bins have a useable measurement of 2-3/4". 6"-Width or Depth Bins have a useable measurement of 5-3/4". 2"-High Bins have a useable dimension of 1-13/16" and 3"-High Bins have a useable dimension of 2-13/16".

5.2.5 PLASTIC GROOVE TRAYS and DIVIDERS

Four (4) styles of Groove Trays and two (2) styles of Dividers are offered as standard. Groove Trays are 0.094" thick and are extruded from Yellow, High-Impact rigid P.V.C. plastic. Trays measure 1" in height, are 3-1/8" in width, and are 25" long. Dividers are 22 gauge (0.028") GA formed channels that are notched to slide along the length of the Groove Tray.

5.2.6 PLASTIC QUARTER TRAYS

Two (2) styles of Quarter Trays are offered as standard. Quarter Trays are 0.030" thick and are vacuum-molded from Yellow, high-impact polystyrene plastic. Trays measure 12-9/16" square and have a useable height of 1-1/4". Each compartment of the 20 Tray has a useable dimension of 2-1/8" by 2-11/16" and each compartment of the 35 Tray has a useable dimension of 2-1/8" by 1-3/8".

5.2.7 INDIVIDUAL LOCK

A device that provides a means of key locking Drawers independently of one another. The lock can be located on either end of the top face of any Drawer (excluding "40" series Drawers). The lock's cam engages a "Security Panel" that is fastened with clips and 1/4" tapping screws to the inside of the Housing, just above the lockable drawer. This panel protects the drawer contents, if the drawer above it were to be removed. This device requires a lock hole to be punched into the Drawer Front. The kit consists of a 16 gauge (0.060") CR multi-formed Security Panel, a Lock Cylinder with a 12 gauge (0.105") GA Cam, and two (2) 0.086" thick brass keys. The lock is operated by 90 degree key rotation and is removable in either the locked or unlocked positions. Key coding matches cabinet coding which is chosen randomly from 250 different combinations. The 45 and 60-Wide Security Panels feature a 14 gauge (0.075") hat-shaped stiffener that is resistance-welded to its underside.

NOTES; *This option is factory installed only.
This option reduces the useable height of the drawer by 1/2".*

5.2.8 LATCH-IN / LATCH-OUT

A device that provides a means to automatically latch individual Drawers in both the closed and fully opened positions. Designed for release by "push-in" fingertip actuation, this option is recommended for non-static applications such as cabinets on casters and for units in ships, vans, and other vehicular equipment. This device can be applied to any width drawer size and consists of an 11 gauge (0.120") GA multi-formed 1/2" wide Actuator Bar with a black vinyl cap, and a pre-assembled Latching Mechanism. The Latching Mechanism is fastened to the left, rear Drawer Rail with one (1), 3/16" rivet and a self-locating "dimple". The Actuator Bar fits through a punched slot in the lower-left face of the Drawer Front. A momentary push-in of the Actuator Bar while opening a Drawer, triggers springs in the mechanism that pivots a 12 gauge (0.105") GA Latch Plate to disengage from a notch in the top rear flange of the Drawer Guide. As the Drawer travels forward, this Latch Plate rides along the length of the Drawer Guide until it engages into its front notch and automatically stops Drawer travel.

NOTE; *This option is only available on the left side of the drawer.
This option is factory installed only.*

5.2.9 BOTTOM INSERTS

Three (3) styles of Bottom Inserts are offered for all drawer sizes. The Green Felt Insert is 3/64" thick, the Black "non-slip" Polyester Mesh Insert is 1/8" thick, and the White High-Impact polystyrene Plastic Insert is 30 mil. thick.

6.0 TROUBLESHOOTING

PAGE 14

6.1 INITIAL CHECKLIST

- CHECK 1: *Insure that the Cabinet is level.*
- CHECK 2: *Insure that the product being stored does not overhang the "useable height" dimensions of the drawers in the cabinet.*
- CHECK 3: *Insure that the product being stored has not fallen out of the drawers and become lodged between the back of the drawer and the lock system of the cabinet. Remove the lower Drawer and its Carrier and with a flashlight, check for fallen material at the base of the locking system.*
- CHECK 4: *Insure that the drawers are not overloaded or distorted (maximum evenly distributed load of 400 Lbs.), and that each Partition is properly screwed to the drawer bottom in two (2) places using the specified #6 x 1/4" long self-tapping screw (102212). If drawers do not open, call Lyon Customer Service.*

6.2 CABINET LOCKING

PROBLEM: DRAWERS CAN NOT BE OPENED.

- STEP 1: *Insure that the cabinet is unlocked (rotate key full, counter-clockwise).*
- STEP 2: *Insure that all drawers are fully closed.*
- STEP 3: *Tip the cabinet on its lock side about 1/2" off the floor and let it drop.*
Try this a few times in an effort to dislodge any stored material that has impeded Lock system operation. If drawers do not open, call Lyon Customer Service.

6.3 DRAWER OPERATION

PROBLEM: EXCESSIVE FORCE IS REQUIRED TO OPERATE A DRAWER

- STEP 1: *Identify whether the Carrier is tight on the Drawer or tight on the Guides of the Cabinet.*
- STEP 2: *Remove Drawer from Cabinet and conduct Carrier adjustments*
Note proper configuration of Carrier during re-installation.

PROBLEM: DRAWER FACE SCRAPES ON SIDES OF CABINET

- STEP 1: *Open specific Drawer about 3" and adjust tabs on side of Carrier.*

6.4 DRAWER RE-CONFIGURATION

PROBLEM: REQUEST TO MODIFY DRAWER CONFIGURATION IN THE FIELD

* DOES NOT APPLY TO CABINETS WITH "250" LOCKING SYSTEMS, CALL LYON CUSTOMER SERVICE FOR DETAILS *

- STEP 1: *Remove all Drawers and their Carriers as matched sets to avoid adjustments.*
- STEP 2: *Remove all Drawer Guides except bottom pair (Note L/R hand marking on channel face)*
Screw removal requires a T20 Torx bit Screwdriver.
- STEP 3: *Relocate Drawer Guides into new locations.*
- STEP 4: *Reinsert Drawers and Carriers into new locations.*
Note proper configuration of Carrier during re-installation.

7.0 PARTS LIST

PAGE 15

<u>USAGE</u>	<u>KEY</u>	<u>DESCRIPTION</u>	<u>PART NUMBER</u>
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HOUSING

H1	<i>Closure Strip Kit, Forklift Base (d)</i>	102213	(22-Wide)
		102214	(30-Wide)
		102561	(36-Wide)
		102215	(45-Wide)
		102216	(60-Wide)
H2	<i>Closure Strip Kit, Pallet Base (d)</i>	103335	(22-Wide)
		103336	(30-Wide)
		103337	(36-Wide)
		103338	(45-Wide)
		101928	

LOCKING

L1	<i>Cabinet Lock Kit (a)</i>	101782	
	<i>Lock Hole Plug</i>	100694	
L2	<i>Lockrod, 250 SDA</i>	103017	
	<i>Lockrod, 251 MDA</i>	103018	
L3	<i>Interlock Assembly, 250 SDA (b)</i>	250LOCKBAR	
L4	<i>Locking Channel, 251 MDA</i>	103150	(270-Height)
		103151	(310-Height)
		103152	(350-Height)
		103153	(400-Height)
		103154	(490-Height)
103155	(680-Height)		
L5	<i>Locking Channel Supports, 251 MDA</i>	103157	
L6	<i>Lock System Mounting Screw</i>	102699	

DRAWER

D1	<i>Handle Kit (e)</i>	102217	(22-Wide)
		102218	(30/36/45/60-Wide)
D2	<i>Handle End Cap, Right</i>	101893	
D3	<i>Handle End Cap, Left</i>	101892	
D4	<i>Cardboard Label</i>	101924	
D5	<i>Plastic Shield</i>	101925	
D6	<i>Handle Screw</i>	102200	
D7	<i>Partition / Divider Screw</i>	102212	

7.0 PARTS LIST (Con't)

PAGE 16

SUSPENSION

S1	<i>Carrier Assembly</i>	103293	(22-Wide)
		103294	(30-Wide)
		103295	(36-Wide)
		103296	(45-Wide)

		103297	(60-Wide)
S2	Drawer Guide Kit (c)	103326	
S3	Drawer Guide Screw	102199	

ACCESSORIES

A1	Cabinet Handle Kit (f)	102244	
A2	Cabinet Handle End Cap	102805	

TROUBLESHOOTING

T1	Lockcylinder Wrench	102601	
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NOTES

- (a) Kit includes Nut and two (2) keys (Specify Key Number, if needed)
- (b) Call Customer Service @ 800-323-0096 (Specify Drawer Heights, Top to Bottom)
- (c) Kit includes both RH & LH Guides, and (2) attachment screws
- (d) Kit includes (2) Tree Clips (Specify Closure Strip color)
- (e) Kit includes both RH & LH End Caps, Label, Shield, and (3) attachment screws
- (f) Kit includes (2) End Caps, (2) bolts, and (2) nuts (Specify Handle color)